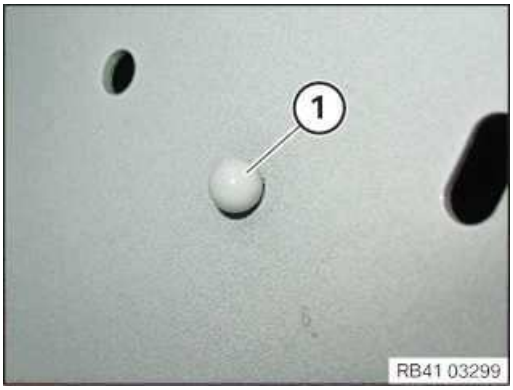
41 00 513 Fix bolts on the new part

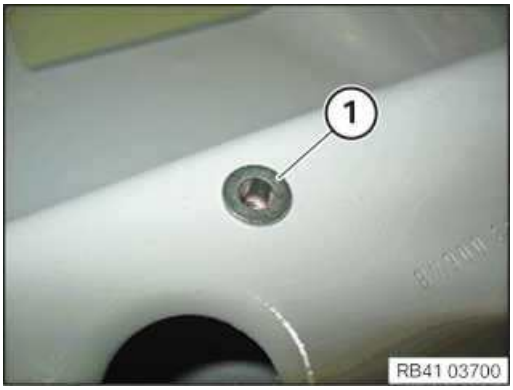
Note: On BMW and MINI bodies, various welded and pushed in bolts are being used.



Single ball/double ball (version 1):

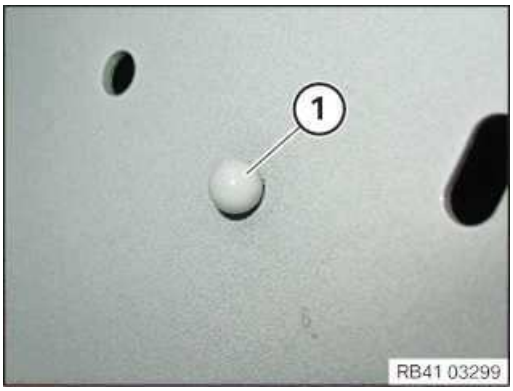
Grind off any residues of the single ball (1), if applicable.

Drill hole with diameter 7 mm.



Set blind rivet nut (1).

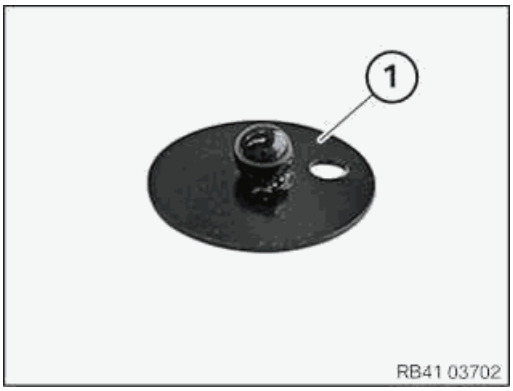
Screw in single ball with thread until a height of 5 mm (double ball 10 mm) is reached.



Single ball/double ball (version 2):

Grind off any residues of the single ball (1), if applicable.

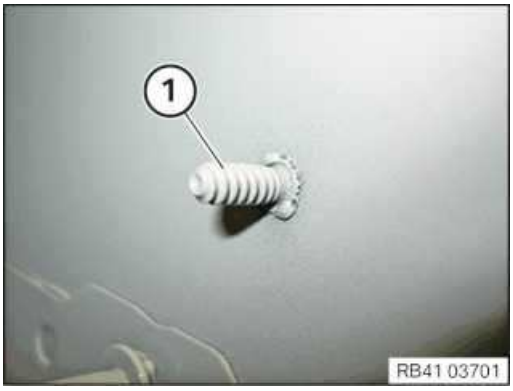
Clean area with solvent cleaner R1.



Clean bonding surface of repair element single ball (1) with solvent cleaner R1.

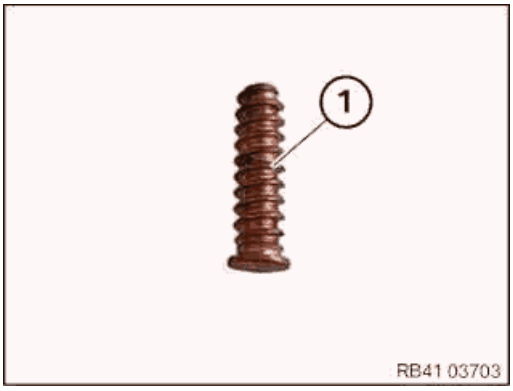
Bond repair element optionally with adhesive K1, K5 or window pane adhesive at the same position.

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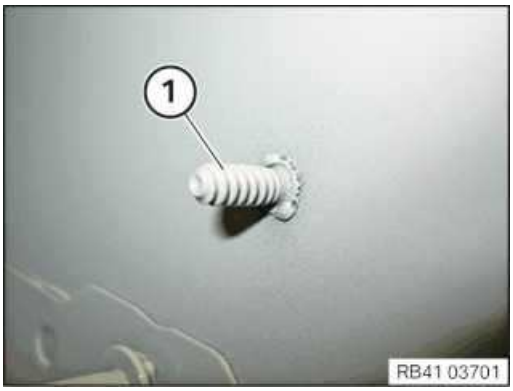


Coarse threaded bolt (version 1):

Grind off any residues of the coarse threaded bolt (1), if applicable.



Spot weld coarse threaded bolt to same position.



Coarse threaded bolt (version 2):

Grind off any residues of the coarse threaded bolt (1), if applicable.

Drill hole with diameter 7 mm.

Set blind rivet coarse threaded bolt using riveting pliers.

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51 00 ... Notes on component bonding with adhesive tape

Unless specified otherwise in vehicle-specific or component-specific instructions, the following notes apply.

Follow repair notes for bonded gaskets for rubber seals.

1. General notes

- Bonding at room and object temperature of >+18 °C.
- Newly painted parts may only be bonded after a drying time of at least 24 hours.
- Optimal bonding/attachment to the background surface is achieved after approx. 48 hours. Components must not be exposed to mechanical strain beforehand (car wash, strength test, etc.).
- Do not touch bonding area.
- It is not the length of time that pressure is applied but rather the force of pressure applied that is crucial.
- Detaching the adhesive tape after pressing destroys the adhesive layer.

2. Auxiliary materials and tools

- Cleaning agent R1 or cleaning agent R2
- Sika Activator 205
- Fluff-free cleaning cloths
- Pressure roller

3. Preparations

- Remove all adhesive residue or clean new part thoroughly
- Clean the areas to be bonded immediately before bonding to remove silicone and grease residues.
- Treat adhesive strips on glass or painted surfaces with Sika activator 205.

Note:

Sika activator 205 **apply extremely thinly. It must not be coated beyond the bonding surface**.

Note: air drying time: ≥ 1 minute

4. Bonding

4.1 Components without preassembled adhesive tape

- Pull off liner* from adhesive tape
- Position adhesive tape on component and stick on
- Press down adhesive tape over entire adhesive area
- Continue with Point 4.2

* Liner is the protective film on the adhesive tape.

4.2 Components with pre-fitted adhesive tape

- Pull off liner* from adhesive side (if adhesive area is large, do not pull off liner completely)
- Align component in correct position on vehicle
- Press down component over entire adhesive area
  Minimum contact pressure ≥ 15 N/cm² (firm thumb pressure reaches approx. 35 N/cm².)

* Liner is the protective film on the adhesive tape.

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51 00 ... Overview of consumables (Electronic Parts Catalogue)

Designation, repair instructions	Designation, Electronic Parts Catalogue	Part number, Electronic Parts Catalogue	Remarks
Cleaning agent R2	Cleaning agent R2	83 19 0 417 324	500 ml
Lubricants G14	Lubricants G14	83 23 2 360 412	900 ml / Notes
Sika Activator 205	Aktivator 205	83 19 0 030 155	250 ml
Yellow plastic adhesive tape	Adhesive tape	83 19 9 410 979	A = 66 mm; B = 50 mm
Double-sided adhesive tape	Adhesive tape	54 11 2 290 978	L = 50 mm/W = 12 mm
Masking tape	Masking tape	81 22 9 400 181	L = 50 mm / W = 19 mm
Masking tape	Masking tape	81 22 9 400 388	L = 50 mm / W = 30 mm
Eraser disk	Scotch Brite eraser disk	51 91 0 402 946	with shaft
Cutting cord	Cutting cord	81 43 2 344 272	Notes
Adhesive set K6	Adhesive set K6	83 19 2 317 925	
Window glass adhesive	Window glass adhesive, cold, 1 hour	83 19 2 289 286	
Profile rubber adhesive		83 19 2 232 322	
Set of felt pads	Set of felt pads	51 45 2 353 024	

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41 00 ... Replacing blind rivets

Special tools required:

- 2 348 128
- 72 1 210

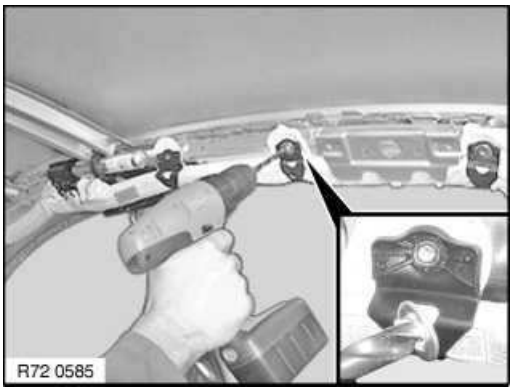


Important!

Lay out protective mats to protect the interior equipment against swarf from the drilled-out rivets and damage.

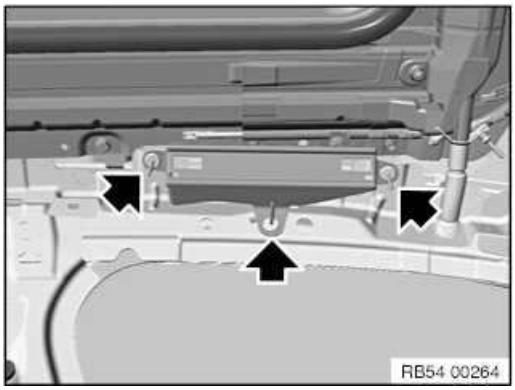
Lay out protective mats in the relevant working area:

- Instrument panel
- Entrance area
- Passenger compartment



Schematic diagram of folding pack holder for head airbag:

Drill off rivet plate down to rivet shank with a 10 mm twist drill bit.



Described for grab handle holder:

Drill off rivet plate down to rivet shank with a 10 mm twist drill bit.

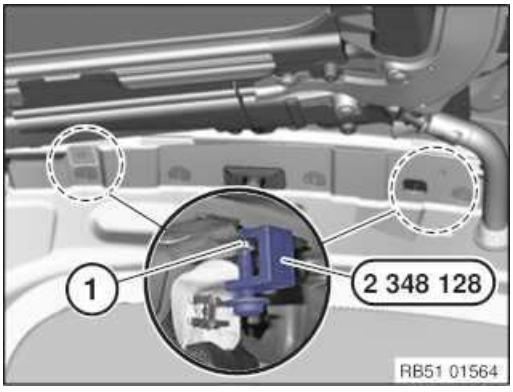
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Drill out all blind rivet protusions (1) up to the body.

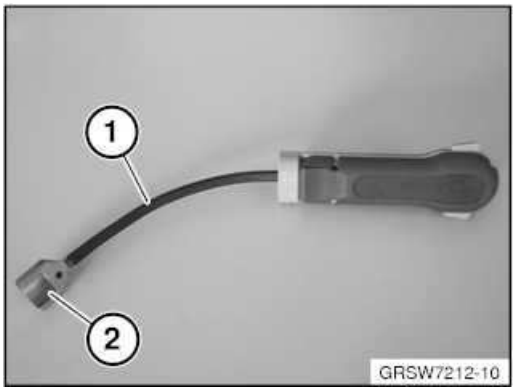
Installation note:
Apply primer to paintwork damages on side frame.
Note:
Depending on accessibility, the rivet heads will have to be removed using special tool 2 348 128 or 72 1 210 .

In areas that cannot be reached using special tools, cavity foam HS3must first be applied around the rivet head before the rivet head is then punched out immediately..



Removal of rivet head with special tool 2 348 128:

Press off rivet heads (1) using special tool 2 348 128 and remove.



Removal of rivet head with special tool 72 1 210:

Shank (1) of special tool 72 1 210 is flexible and can be adapted to the relevant body contours.

Note:
Insert butyl in the collecting tray (2) to secure rivet heads and prevent them from falling out.

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Insert special tool 72 1 210 through bore hole in body next to attachment points.

Position special tool from rear on rivet head in cavity.

Note:
A second person will be needed to help hold the special tool on the rivet head during the driving-out operation.

Make sure collecting tray is correctly fitted on rivet head.

Drive out stem with hammer and 6 mm punch.

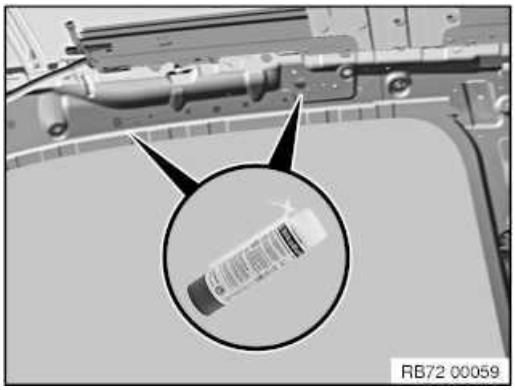
Carefully feed special tool out of body so that rivet head does not fall out of collecting tray.

Note:
If the rivet falls out of the collecting tray into the side frame when the special tool is fed out, this area must be generously filled with foam.

For details of procedure for filling cavities with foam, see further operations.

Use cavity preservation (refer to BMW Group Parts) for foam filling.

Cavity foam (refer to BMW Group Parts) may also be used if required.



Fit tube to foam can.

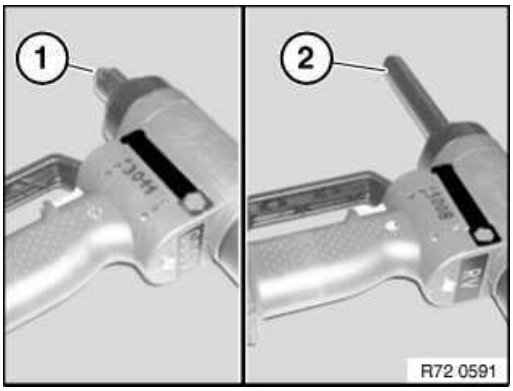
Push the hose in through the pillar holes.

Fill cavity with a filling material.

Warning!

Empty foam can completely onto cardboard and after hardening dispose of foam and can in residual waste.

Can may burst if not completely emptied.



<u>Overview of rivet gun:</u>

Riveting of gas generator housing and holders for folding pack with rivet gun (refer to BMW Workshop Catalogue).

The interchangeable head is changed for the different work operations.

Riveting of gas generator housing with:

1.) 17/36 nosepiece and short shank

Riveting of holders for folding pack:

2.) 17/40 nosepiece and long shank

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00 Safety information for working on vehicles with automatic engine start-stop function (MSA)



Warning!

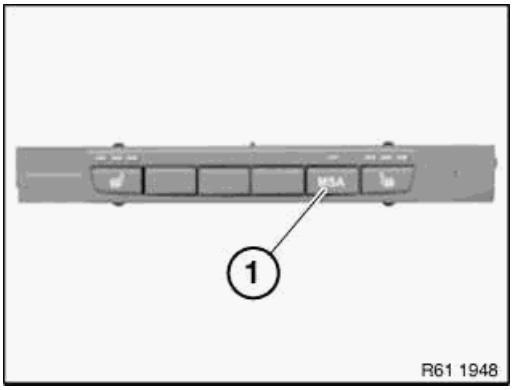
If the engine hood/bonnet contact is pulled upwards (workshop mode), the information "switch closed" is output. The automatic engine start-stop function is active.

An automatic engine start is possible.

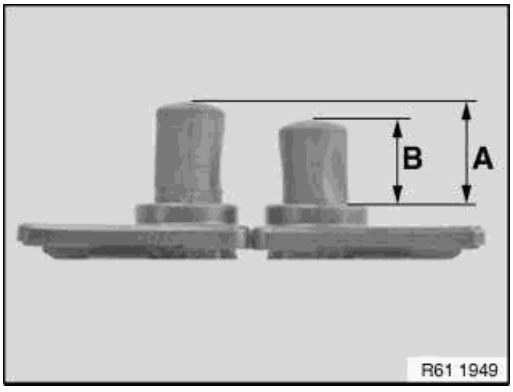
Observe safety precautions when working on MSA vehicles.

Before carrying out practical work on the engine, always ensure that the MSA functionality is deactivated so as to prevent automatic engine starting while work is being carried out in the engine compartment.

MSA function is deactivated by:



- Deactivate MSA by means of button (1) in passenger compartment
- Open seat belt buckle and driver's door



- Open engine bonnet/hood and ensure that engine hood/bonnet contact is not in workshop mode
  - Workshop mode

    A = 10 mm
  - Basic setting (engine hood/bonnet open)

    B = 7 mm

  To make sure that the engine hood/bonnet contact is at the basic setting, if necessary press the hood/bonnet contact up to the limit position before starting work and slowly release.



When working with diagnosis tools:

- Observe instructions in diagnosis tool

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Note:
For further information on automatic engine start-stop function (MSA):

- Refer to the Service Information (bulletin) (for manual transmissions) Service Information (bulletin) 61 01 07 335
- Refer to the Service Information (bulletin) (for automatic transmissions or twin-clutch gearboxes) Service Information (bulletin) 61 01 10 629

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51 00 ... Safety instructions for working on cars with airbag systems



Warning!

If work is carried out in area of airbag systems, e.g. on:

- Door trim panels
- Interior trims
- Instrument panel etc.

the ignition must be turned off in each case.

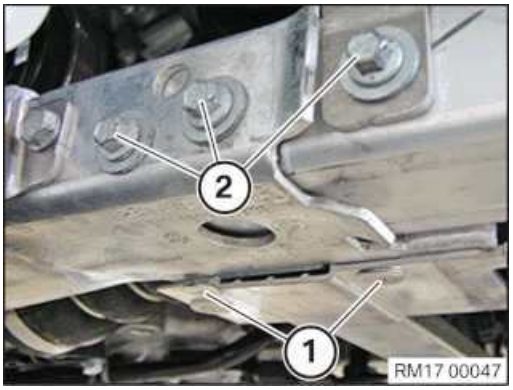
- The ignition must always be off.
- The ignition key must be removed from the ignition lock.

This eliminates the risk of injury.

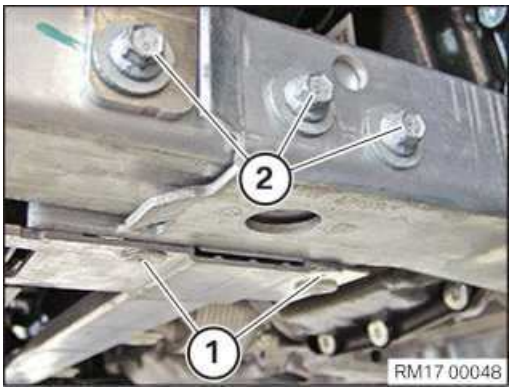
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51 11 980 Additional work: Replace bottom cross connection

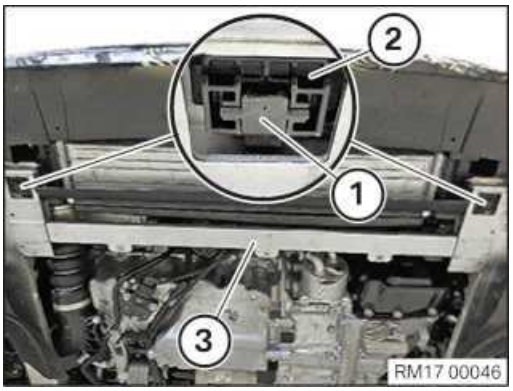
1 – Remove lower cross connection



- Undo screws (2) at front right.
- Drill out blind rivets (1) at front right.

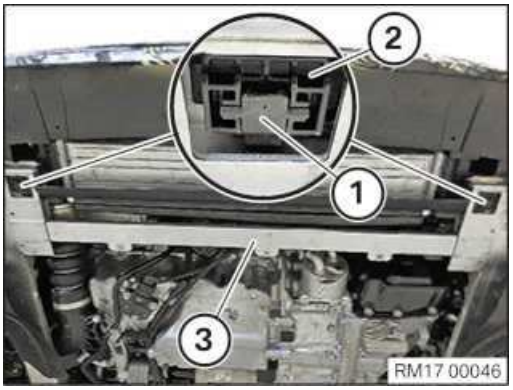


- Undo screws (2) at front left.
- Drill out blind rivets (1) at front left.



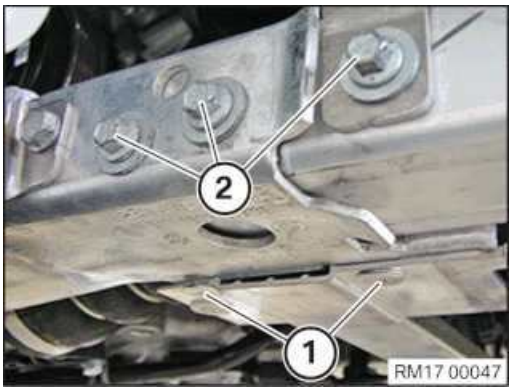
- Pull locking pins (1) down and unlock.
- Thread out and remove locks (2).
- Thread out and remove cross connection (3).

2 – Install the bottom cross connection



- Guide in cross connection (3) and install.
- Guide in locks (2) and install.
- Lock the locking pins (1).
- Ensure that the locking pins (1) audibly engage.

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- Tighten the bolts (2) at the front left.

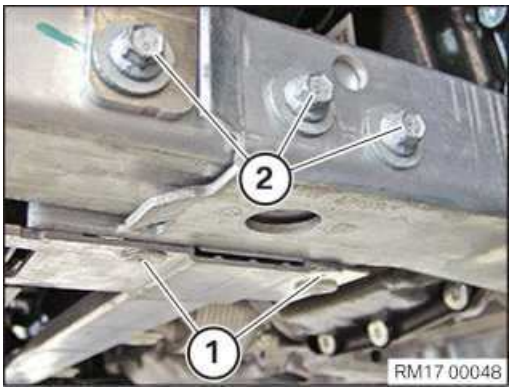
Deformation element to front axle support adapter

Screw		Tightening torque	11,8 Nm

- Renew the blind rivet (1).

  Parts: Blind rivet

- Mount the blind rivet (1) with blind rivet pliers.



- Tighten the bolts (2) at the front right.

Deformation element to front axle support adapter

Screw		Tightening torque	11,8 Nm

- Renew the blind rivet (1).

  Parts: Blind rivet

- Mount the blind rivet (1) with blind rivet pliers.

Additional Information

Overview of Tightening Torques

Deformation element to front axle support adapter Used in step 2

Screw		Tightening torque	11,8 Nm

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51 11 156 Removing and installing front bumper panel

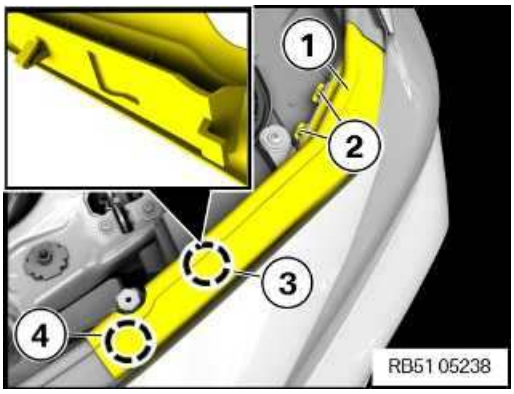
PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

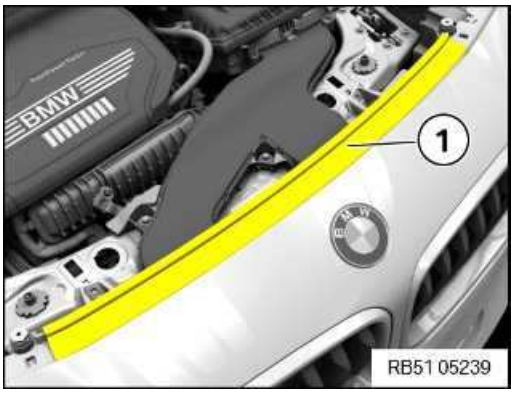
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

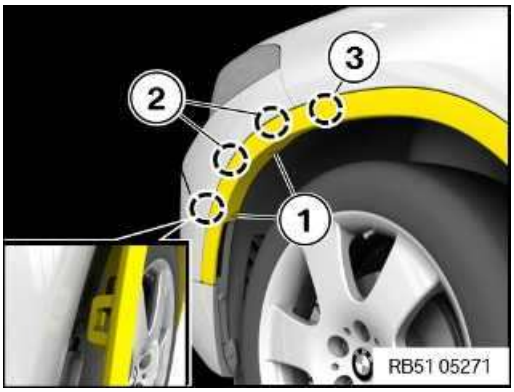
3 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing the front wheel arch trim**

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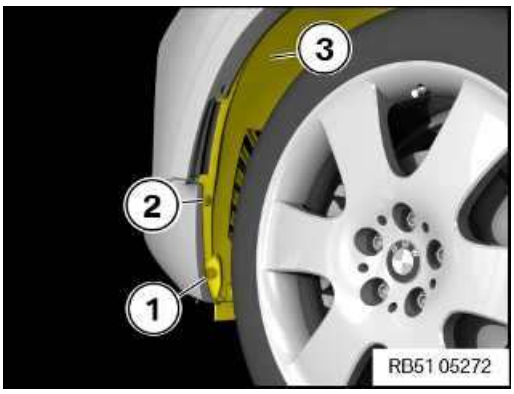
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

4 – Partially remove both front wheel arch covers

NOTICE

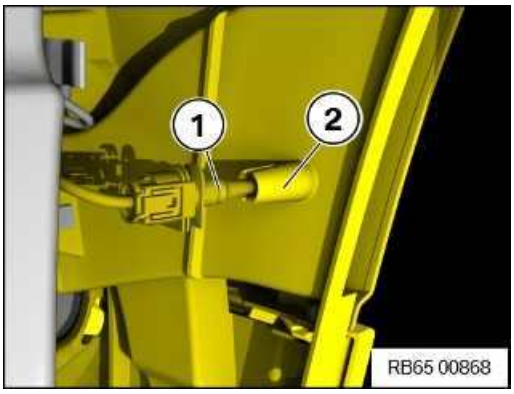
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

5 – Remove temperature sensor

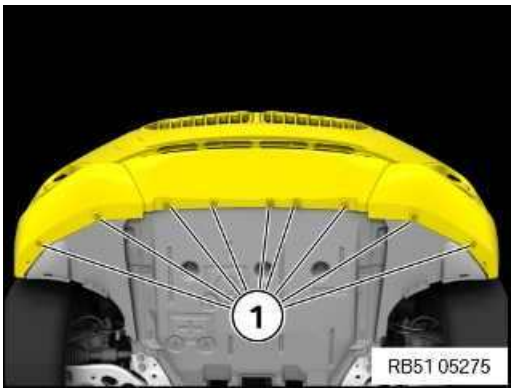


- Unclip temperature sensor (1) from front bumper panel (2).

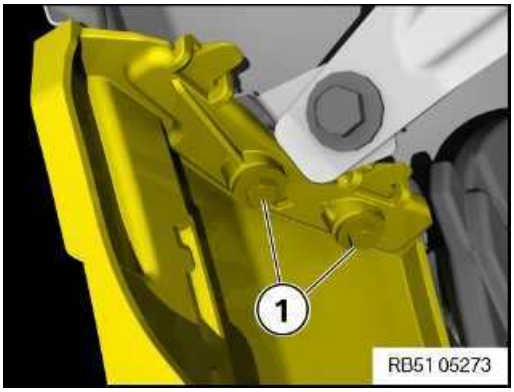
MAIN WORK

6 – Remove front bumper panel

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- Loosen screws (1).



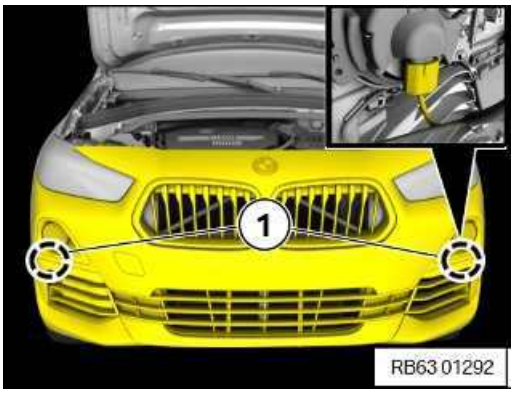
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).

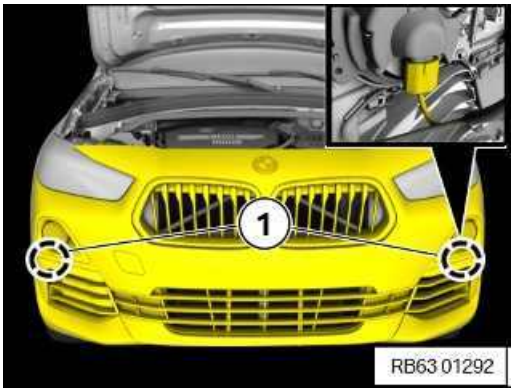


- Loosen screws (1).
- Loosen screws (2).



- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

7 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.

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- Tighten the screws (1).

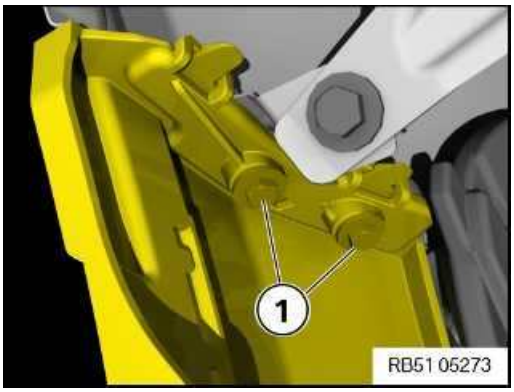
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



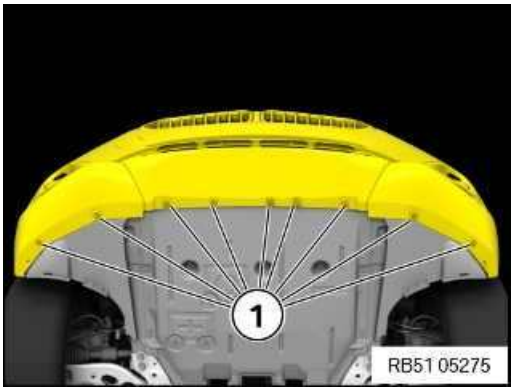
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm



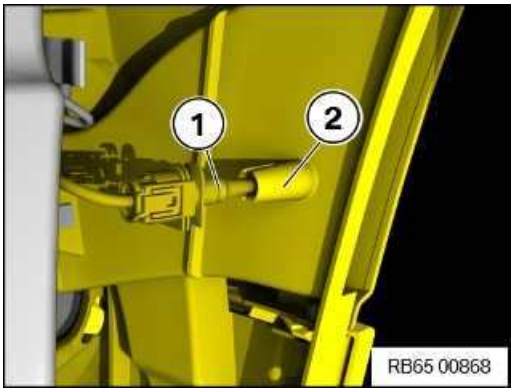
- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

POSTPROCESSES

8 – Install temperature sensor



- Clip temperature sensor (1) into the front bumper panel (2).

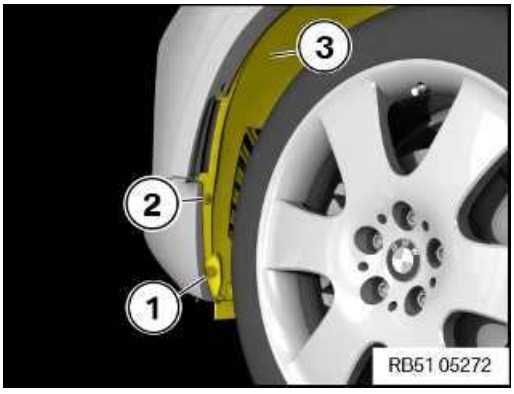
9 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

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▸ **Partially install the front wheel arch cover**



- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

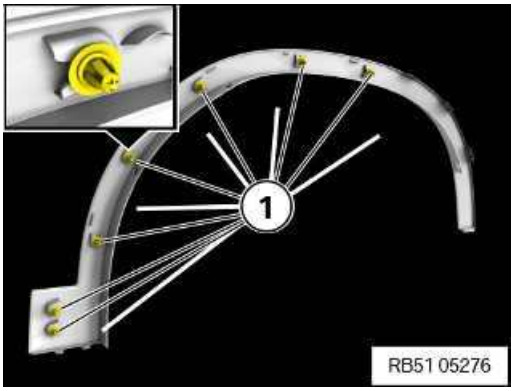
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

10 – Partially install both front wheel arch trims

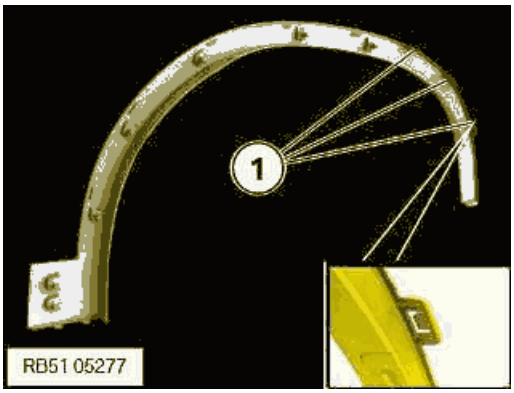
NOTICE

Description is for left component only. Procedure on the right side is identical.

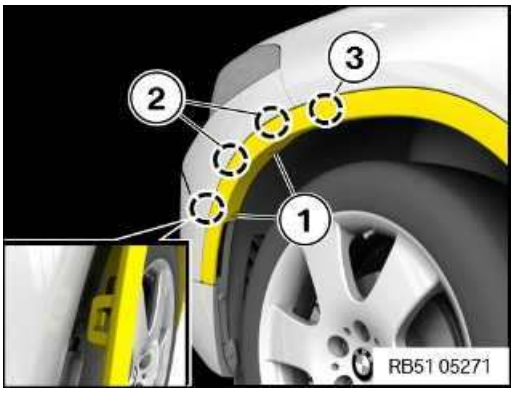
▸ **Partly install the front wheel arch trim**



- Check clips (1) for damage, and replace if necessary.



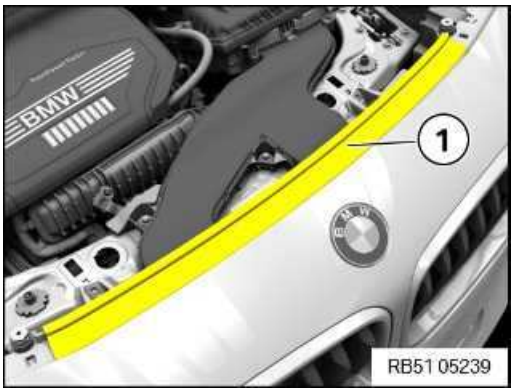
- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

11 – Install the center front bonnet seal

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- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

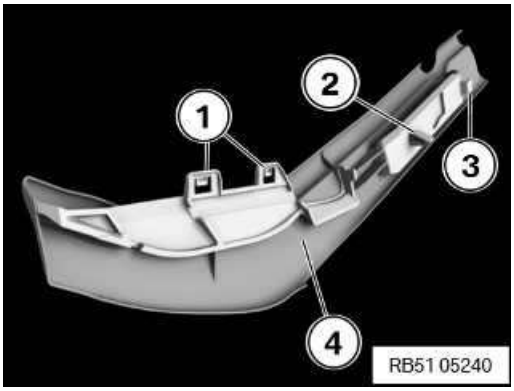
12 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



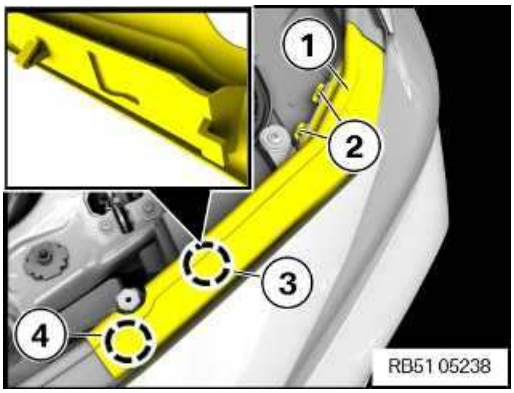
- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

Additional Information

Overview of Tightening Torques

Bumper panel to headlight Used in step 7

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

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Bumper panel to air duct

Used in step 7

Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel

Used in step 7

Screw TS5X35		Tightening torque	3 Nm

Front bumper panel to underbody panelling

Used in step 7

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

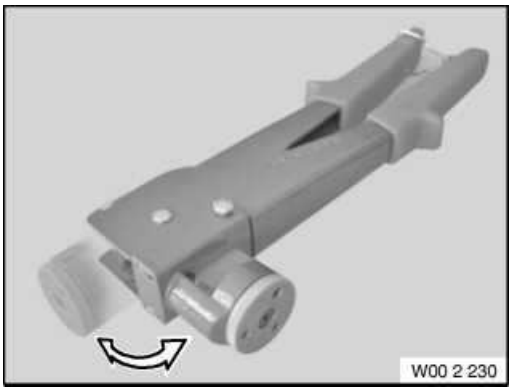
Front wheel arch cover to front bumper panel

Used in step 9

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common

Used in step 9 10

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 11 183 Removing and installing ornamental grille in front bumper panel (side, left or right)

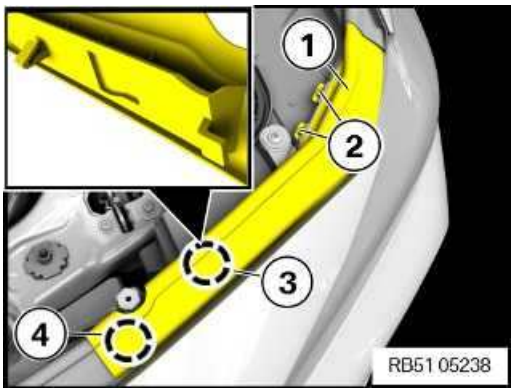
PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

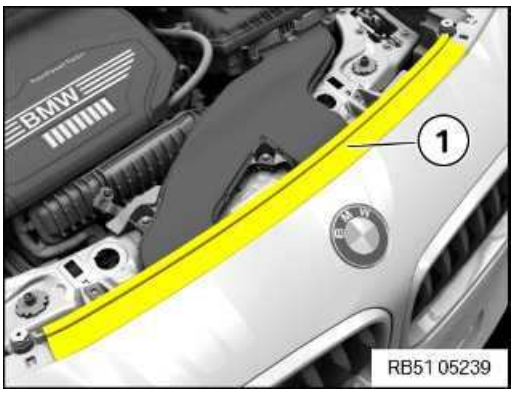
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

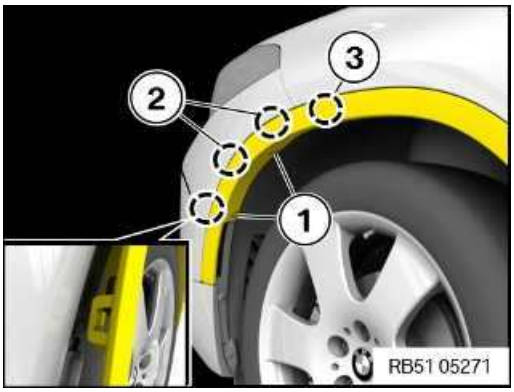
3 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing the front wheel arch trim**

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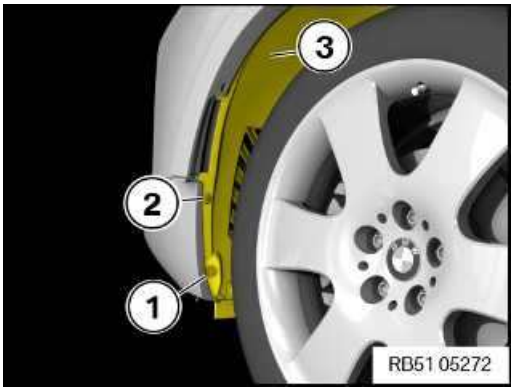
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

4 – Partially remove both front wheel arch covers

NOTICE

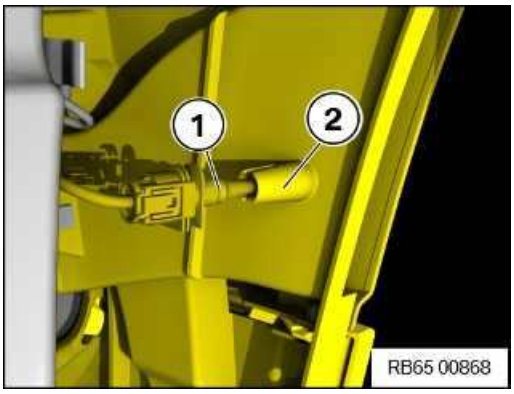
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



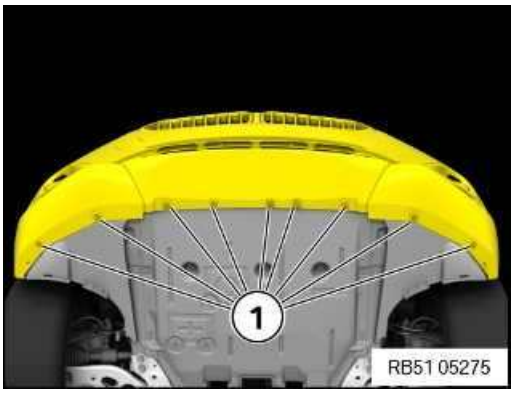
- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

5 – Remove temperature sensor



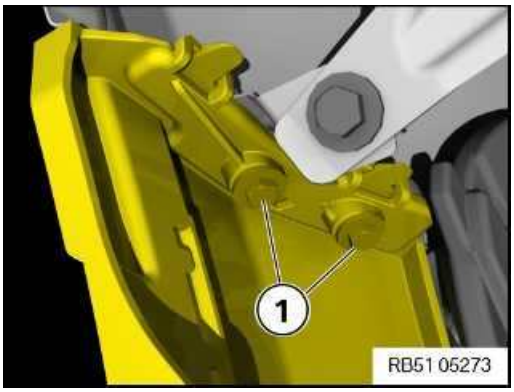
- Unclip temperature sensor (1) from front bumper panel (2).

6 – Remove front bumper panel



- Loosen screws (1).

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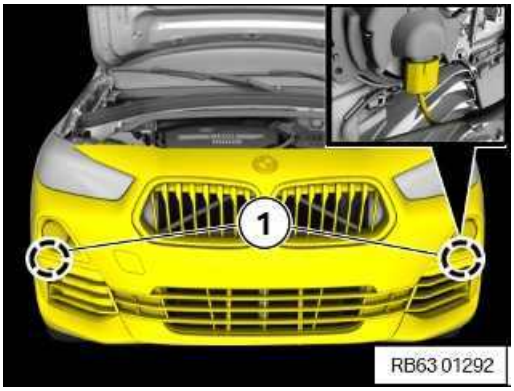
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).



- Loosen screws (1).
- Loosen screws (2).

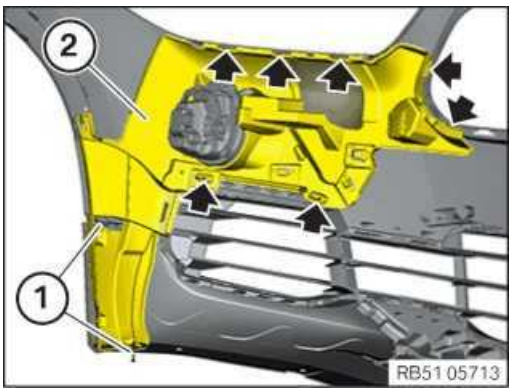


- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

7 – Remove the holder for the fog light

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Loosen the expanding rivet (1).
- Release holder for fog light (2) from latch mechanisms (arrows) and remove.

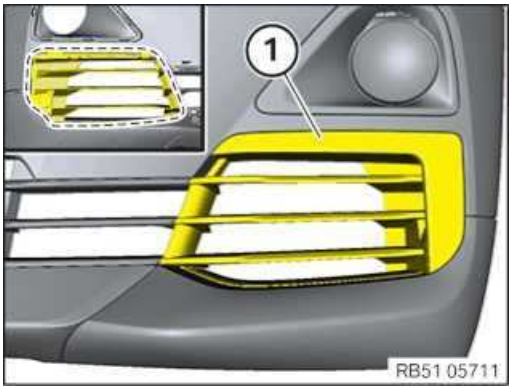
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MAIN WORK

8 – Remove ornamental side grille

NOTICE

Description is for left component only. Procedure on the right side is identical.

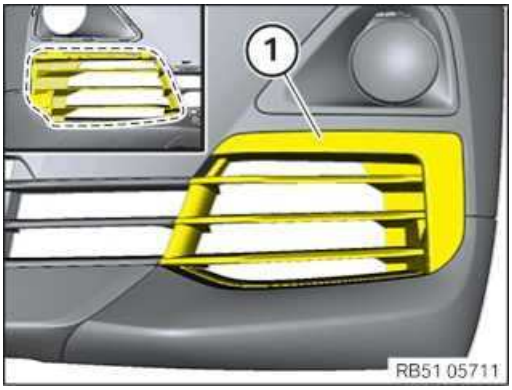


- Release the side ornamental grille (1) along the dotted lines from the latch mechanisms and remove towards the front.

9 – Install the side ornamental grille

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Install the side ornamental grille (1) and engage it along the dashed line at the latch mechanisms.

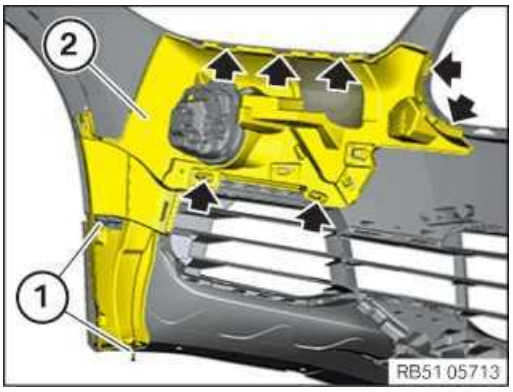
POSTPROCESSES

10 – Install the holder for the fog light

NOTICE

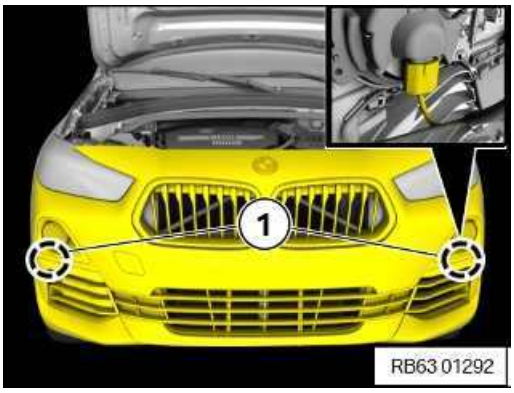
Description is for left component only. Procedure on the right side is identical.

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- Install the holder for the fog light (2) and lock at the latch mechanisms (arrows).
- Mount the expanding rivets (1).

11 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.



- Tighten the screws (1).

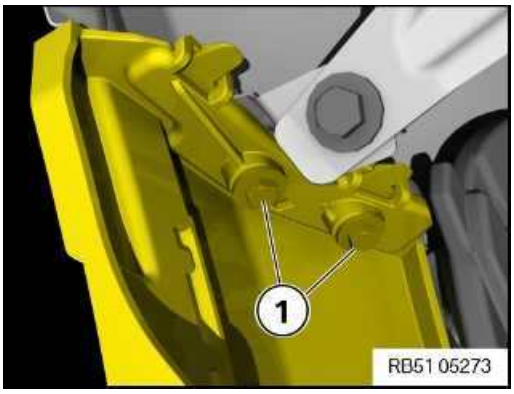
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



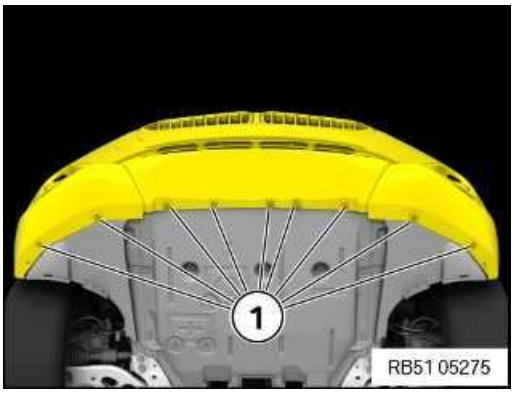
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm



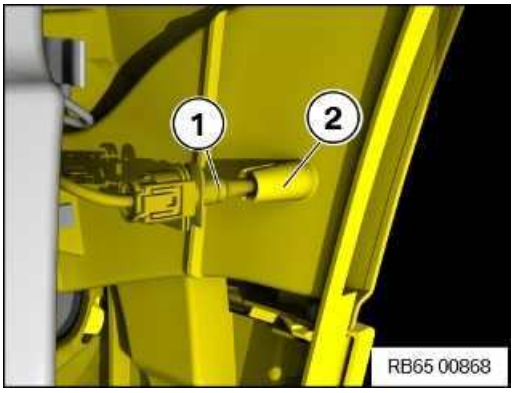
- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

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12 – Install temperature sensor



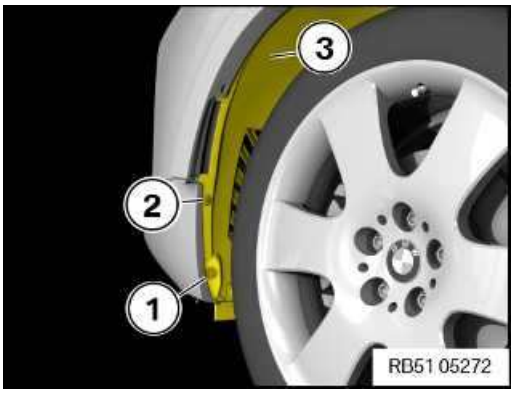
- Clip temperature sensor (1) into the front bumper panel (2).

13 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially install the front wheel arch cover**



- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

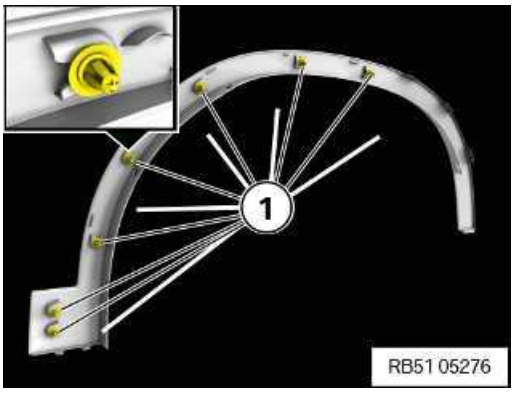
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

14 – Partially install both front wheel arch trims

NOTICE

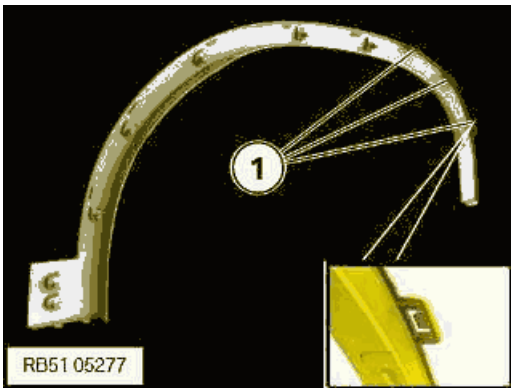
Description is for left component only. Procedure on the right side is identical.

▸ **Partly install the front wheel arch trim**

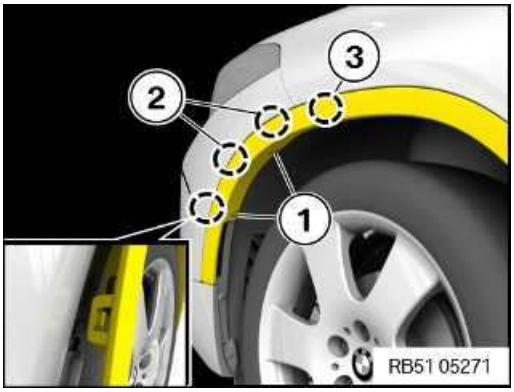


- Check clips (1) for damage, and replace if necessary.

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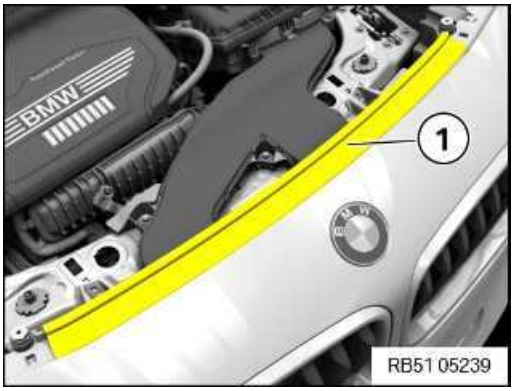


- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

15 – Install the center front bonnet seal



- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

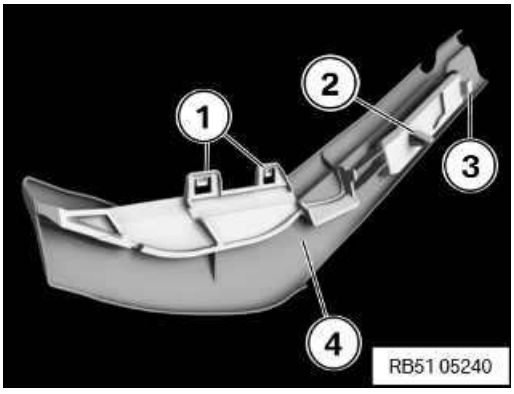
16 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

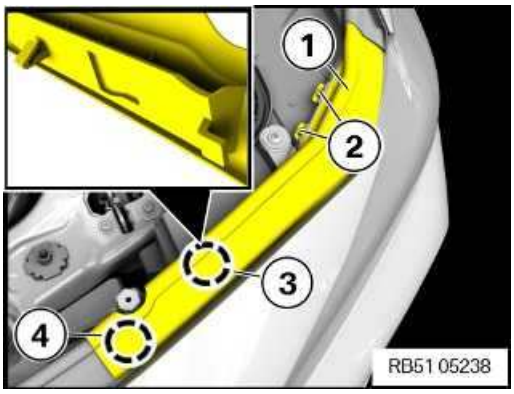
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Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

Additional Information

Overview of Tightening Torques

Bumper panel to headlight — Used in step 11

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

Bumper panel to air duct — Used in step 11

Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel — Used in step 11

Screw TS5X35		Tightening torque	3 Nm

Front bumper panel to underbody panelling — Used in step 11

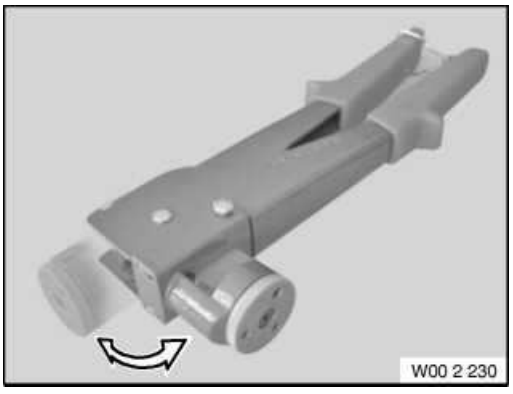
Thermoplastic hexagon screw		Tightening torque	2,5 Nm

Front wheel arch cover to front bumper panel — Used in step 13

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common — Used in step 13 14

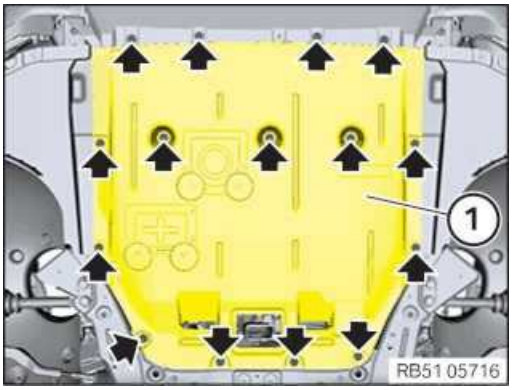
Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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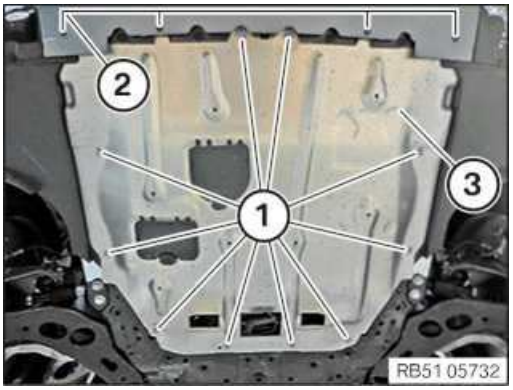
51 11 761 Removing and installing/replacing deformation element on the top right

PRELIMINARY WORK

1 – Removing the front underbody protection

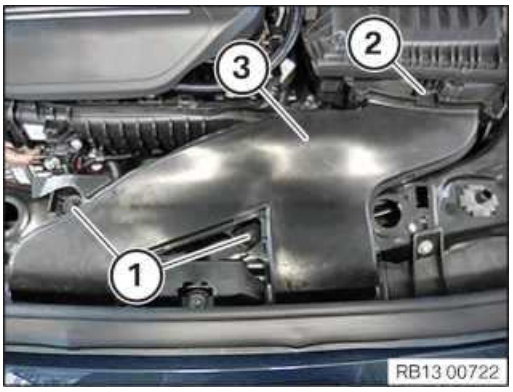


- Remove screws (arrows).
- Thread out and remove the front underbody protection (1) from the bumper panel.



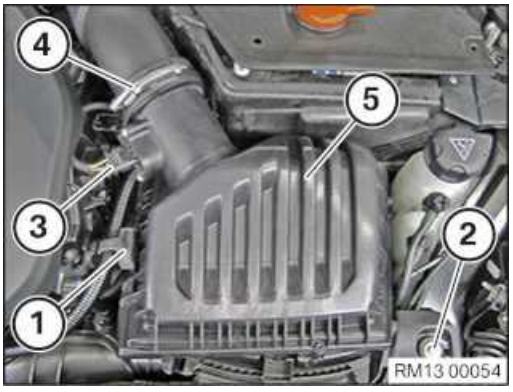
- **Equipment specification with metal underride protection:**
- Loosen screws (1) and (2).
- Thread out and remove the underride protection (3).

2 – Remove the intake neck for intake silencer housing



- Loosen nuts (1).
- Loosen the lock (2).
- Guide the intake neck (3) out and remove it.

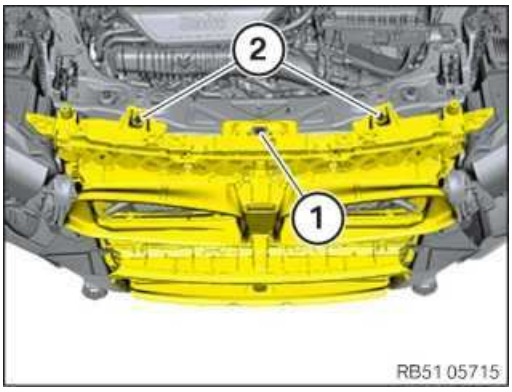
3 – Removing intake silencer housing



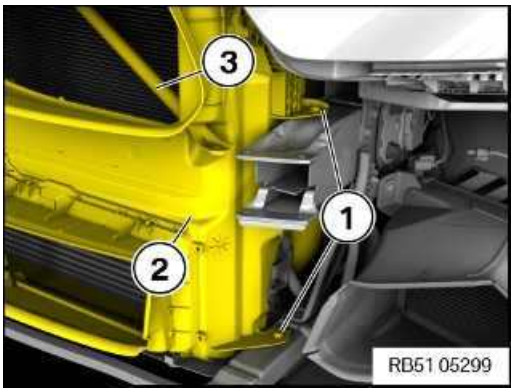
- Loosen the holder (1).
- Loosen screw (2).
- Unlock and loosen connector (3).
- Unfasten clamp (4).
- Pull out and remove the intake silencer housing (5) from the rubber mounts towards the top.

4 – Remove the air duct to the radiator

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- Loosen screw (1).
- Loosen screws (2).

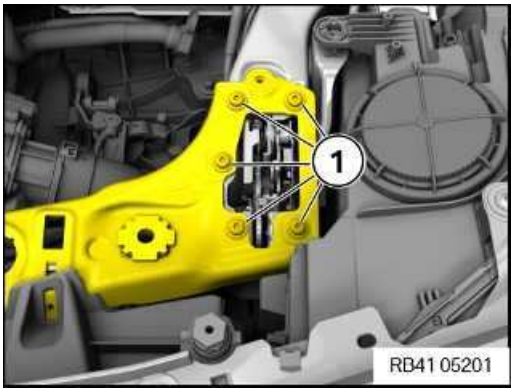


NOTICE

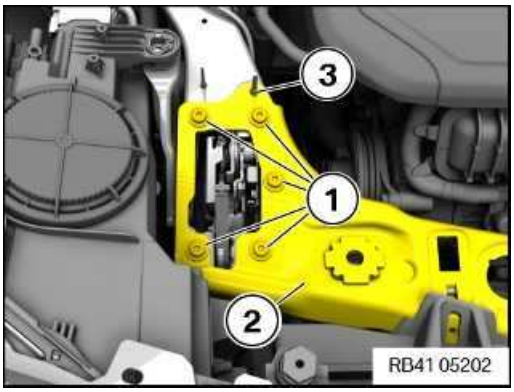
Perform the operations on the left and right side.

- Loosen screws (1).
- Feed out the air duct to the radiator (2) with the bracing strut (3) toward the front and remove.

5 – Remove front cross connection (air duct removed)

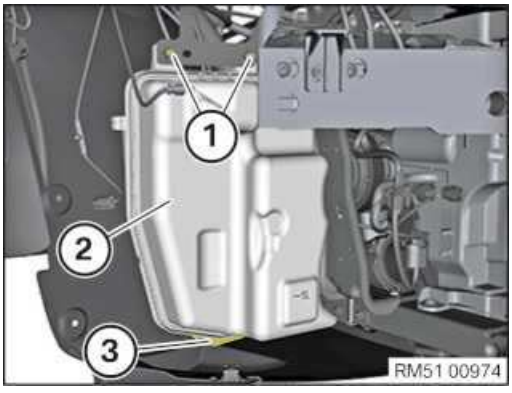


- Loosen screws (1).



- Loosen screws (1).
- Unclip the front cross connection (2) from the rubber retainer (3) and remove it upward.

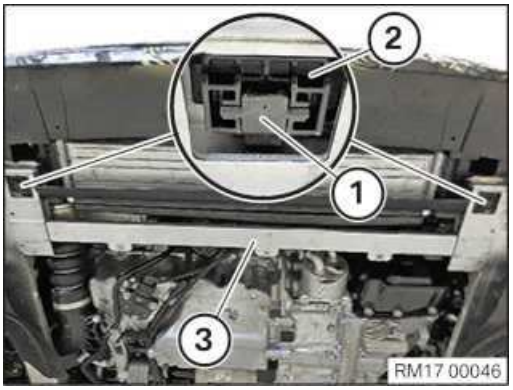
6 – Release washer fluid reservoir



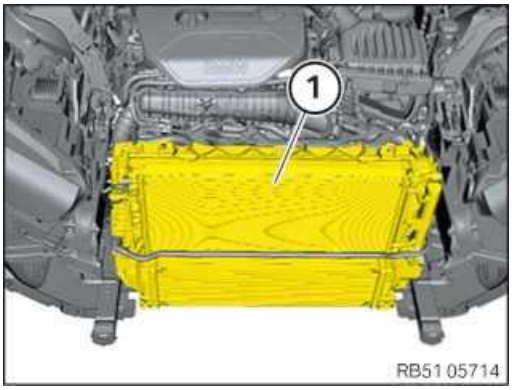
- Loosen screws (1).
- Detach the washer fluid reservoir (2) from the holder (3) in an upward direction.
- Set the washer fluid reservoir (2) slightly to the side.

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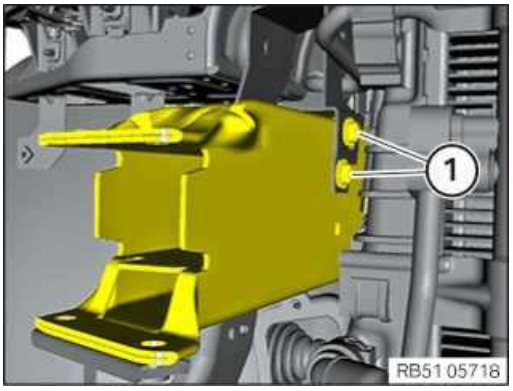
7 – Removing the front right deformation element



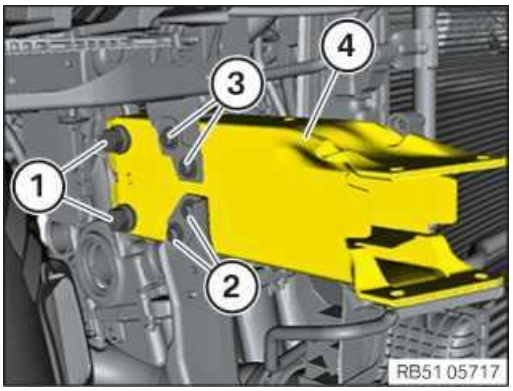
- Unlock locking pins (1) on the cross connection (3) to the bottom.
- Thread out and remove locks (2).



- Lift radiator module (1) from the lower holders and slide slightly to the left.



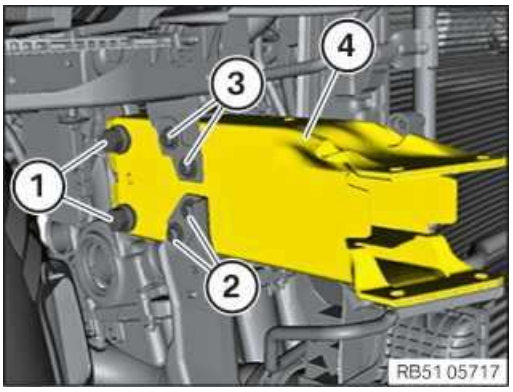
- Release the screws (1) with the special tool **2 463 965**.



- Loosen screws (1).
- Loosen screws (2).
- Loosen screws (3).
- Guide out the front right deformation element (4) toward the front and remove.

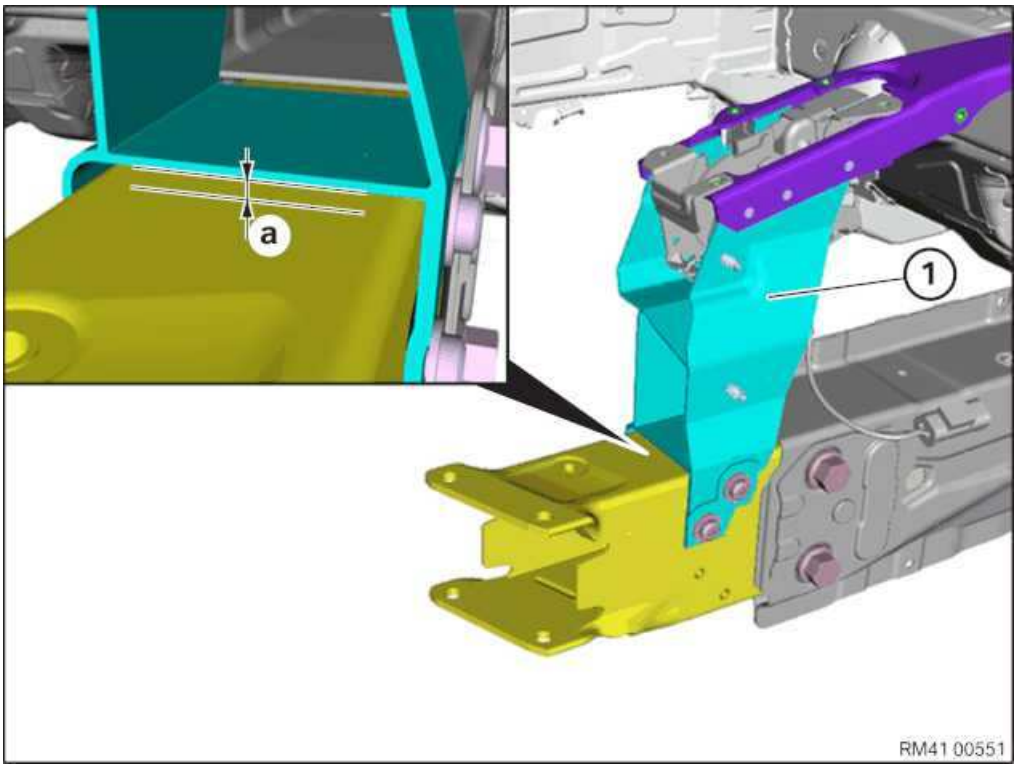
8 – Install the front right deformation element

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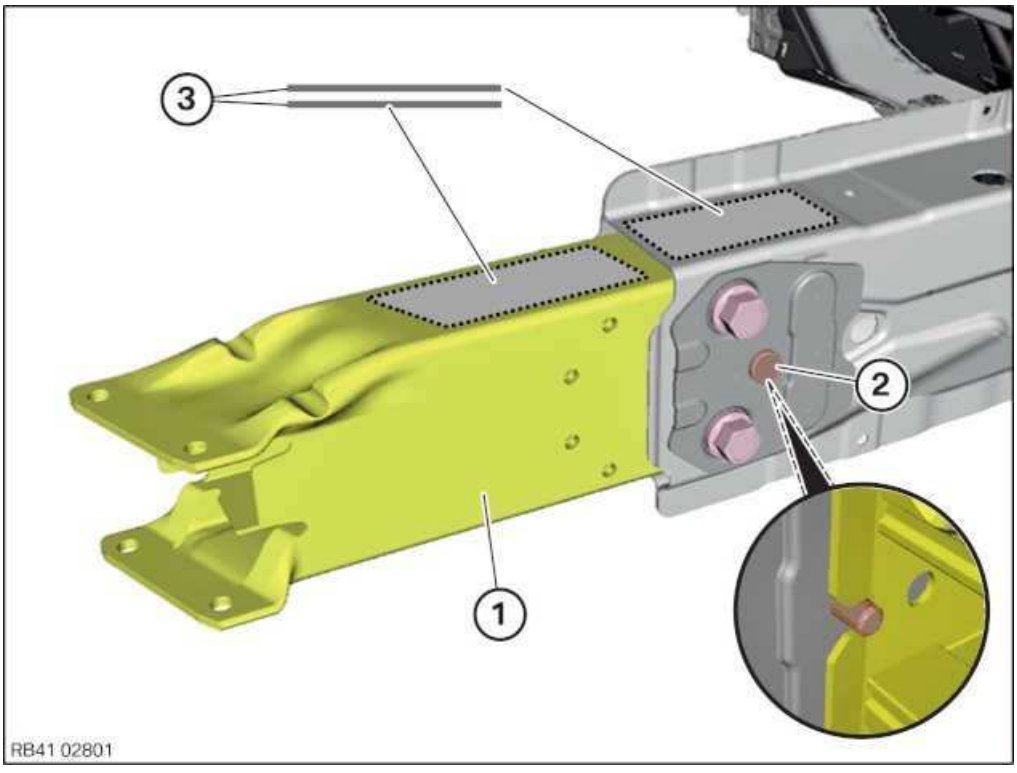
- Feed the deformation element (4) into the engine support from the front.
- Renew screws (1).

  Parts: Bolts
- Join the bolts (2) and screw them in a few turns.
- Join the bolts (3) and screw them in a few turns.



- Adjust the support for the cross connection (1) to the specified dimension.

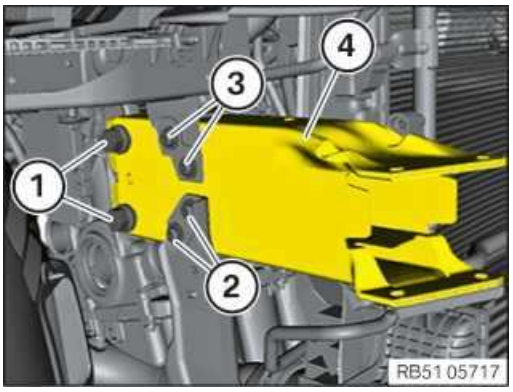
  Dimension (a) = approx. 4 mm
- If the support for the cross connection (1) was removed on only one side of the vehicle, the dimension (a) of the side that was not removed must be used as the setting dimension.



- Adjust the deformation element (1) so that the surfaces (3) are parallel to each other.

  The height of the deformation element (1) cannot be adjusted due to the stop (2).

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- Hold the deformation element at the front right (4) in position.
- Tighten the screws (1).

Deformation element to engine support

Hexagon screw M12x1.5x80	Renew screws.	Tightening torque	100 Nm
		Angle of rotation	180 °

- Tighten the screws (2).

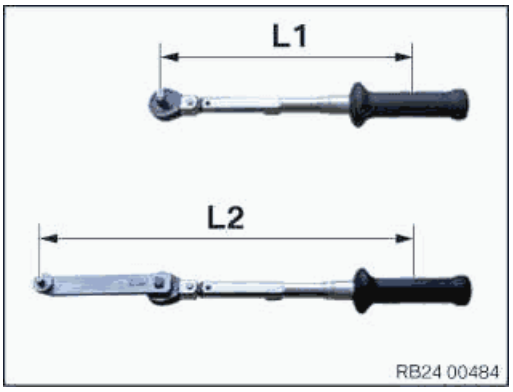
Front vertical connection to deformation element

M6x30 screw		Tightening torque	8 Nm

- Tighten the screws (3).

Support for cross connection to deformation element

M6x20 screw		Tightening torque	11,8 Nm



TECHNICAL INFORMATION

While using the special tool, that extends the lever arm of the torque wrench, the setpoint torque deviates from the torque to be set.

NOTICE

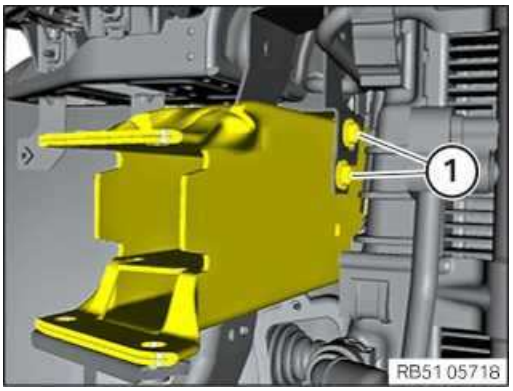
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Converting the setpoint torque into the torque to be set:

  (Setpoint torque x L1) : L2 = Torque to be set

  L1 = Length from the centre of the handle to the reversible ratchet head

  L2 = Length from the centre of the handle to the centre of the ring on the special tool



- Tighten bolts (1) with special tool **2 463 965** and tighten with the torque wrench.

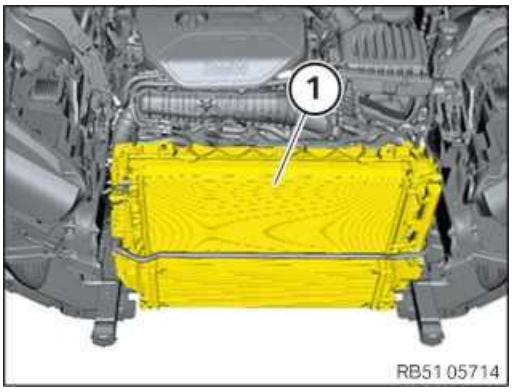
  While doing so, the special tool and the torque wrench must align while tightening.

- Tighten the screws (1).

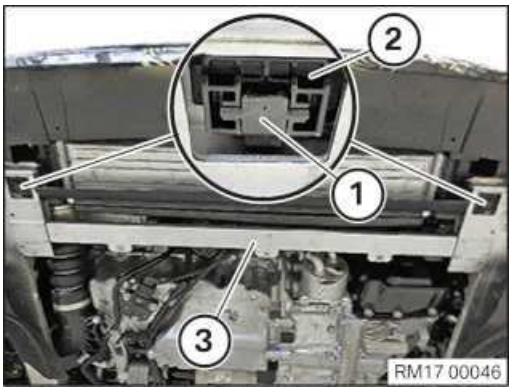
Support for cross connection to deformation element

M6x20 screw		Tightening torque	11,8 Nm

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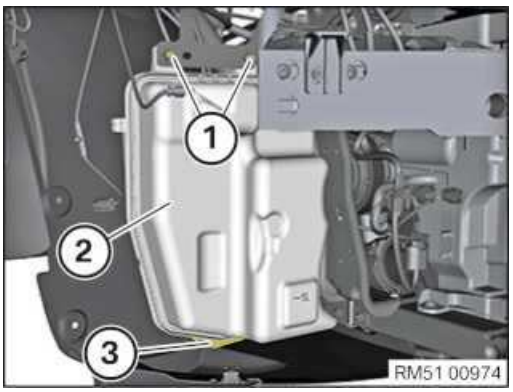
- Fit the radiator module (1) correctly.



- Mount the locks (2) on the cross connection (3).
- Push the locking pins (1) in and lock.

POSTPROCESSES

9 – Fasten the washer fluid reservoir

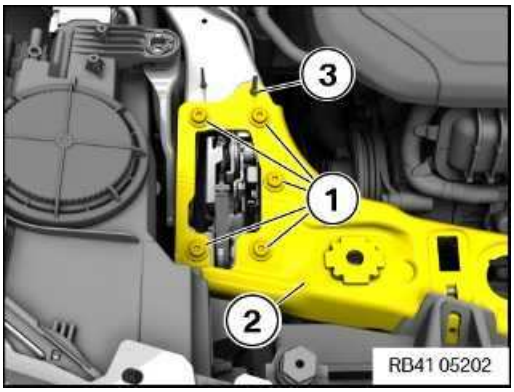


- Insert the washer fluid reservoir (2) in the holder (3).
- Tighten the screws (1).

Washer fluid reservoir to holder

M6x20 screw		Tightening torque	8 Nm

10 – Install front cross connection (air duct removed)

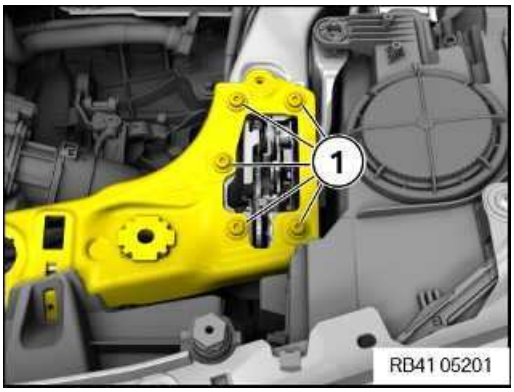


- Correctly position front cross connection (2) and clip front cross connection (2) into the rubber retainer (3) at the same time.
- Tighten the screws (1).

Cross connection to carrier support

Screws M6x20		Tightening torque	11,8 Nm

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- Tighten the screws (1).

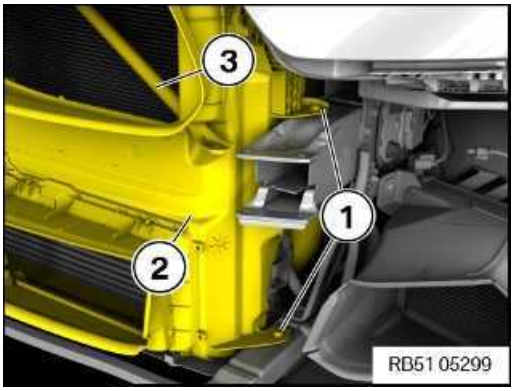
Cross connection to carrier support

Screws M6x20		Tightening torque	11,8 Nm

11 – Installing air duct to radiator

NOTICE

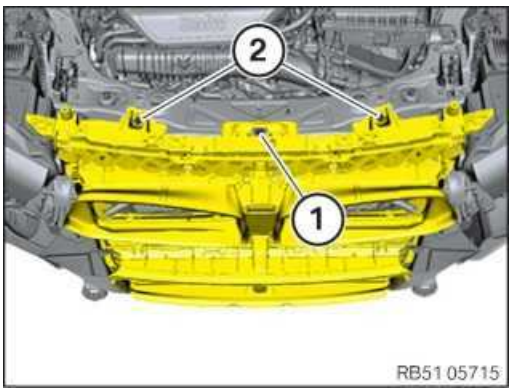
Perform the operations on the left and right side.



- Feed in air duct to radiator (2) with bracing strut (3).
- Tighten the screws (1).

Air duct to deformation element

M6x20 screw		Tightening torque	4,6 Nm



- Tighten down screw (1).

Bracing strut to top front bumper support or to top connection

M6x20 screw		Tightening torque	11,8 Nm

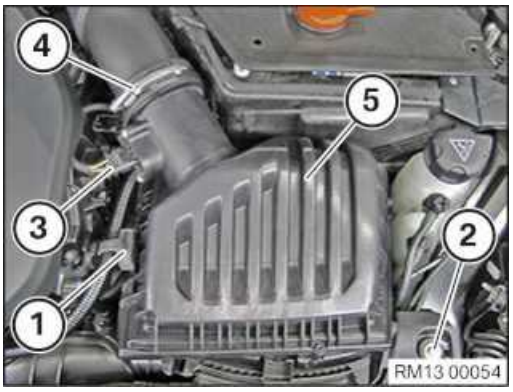
- Tighten down screws (2).

Air duct to upper connection

M6x20 screw		Tightening torque	11,8 Nm

12 – Installing intake silencer housing

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- Insert the intake silencer housing (5) into the rubber mounts and install it.

  Intake filter housing (5) must engage audibly.
- Tighten down screw (2).

Intake silencer housing to lock bridge

M6X30		Tightening torque	8 Nm

- Tighten clamp (4).

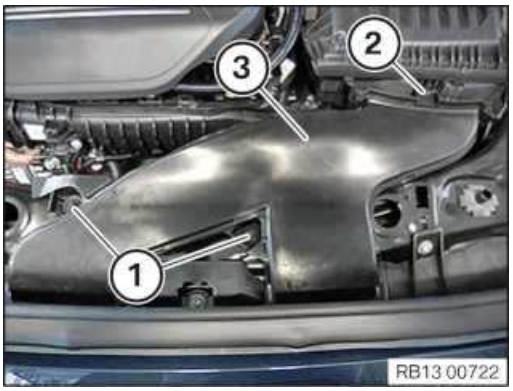
Clean air pipe to intake silencer housing

Clamp		Tightening torque	3 Nm

- Connect and lock the connector (3).

  The connector (3) must engage audibly.
- Insert and install the holder (1).

13 – Install the intake neck for the intake filter housing



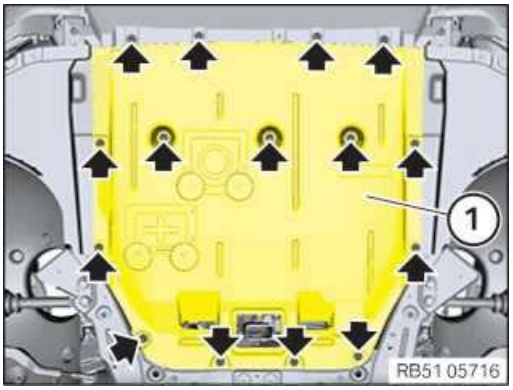
- Insert and install the intake neck (3).

  The lock (2) must audibly engage.
- Tighten nuts (1).

Intake neck to cross connection

M6		Tightening torque	8 Nm

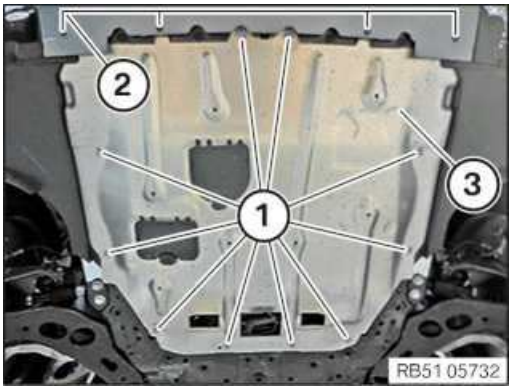
14 – Installing the front underbody protection



- Guide the front underbody protection (1) in under the bumper panel and position it at the screw points.
- Tighten screws (arrows).

Underbody protection front

Screw for thermoplastic plastic		Tightening torque	2,6 Nm
Hexagon screw M6x20		Tightening torque	8 Nm



- **Equipment specification with metal underride guard:**
- Guide in and attach the underride guard (3).
- Tighten down screws (1) and (2).

Underbody protection front

Screw for thermoplastic plastic		Tightening torque	2,6 Nm
Hexagon screw M6x20		Tightening torque	8 Nm

15 – Adjust both headlights

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Adjusting headlights**

TECHNICAL INFORMATION

Notes on headlight adjustment are a fundamental requirement for these repair instructions and must be complied with at all times.

For additional information see: 6310 ... Test prerequisite for adjusting headlights



- Perform the headlight adjustment with the adjusting screws (1) and (2).

  A definite allocation of adjusting screws is not possible.

  Adjusting screw (1) is primarily used for the height adjustment.

  Adjusting screw (2) is primarily used for the lateral adjustment.
- Adjust the height at the adjusting screw (1).
- **US version:** Set the lateral adjustment only if the plug on the adjusting screw for lateral adjustment is missing or damaged.

  If required, remove damaged plug (see additional information).
- Make the lateral adjustment at the adjusting screw (2).
- Perform reference run. Switch the headlights off and on again.
- Check the headlight and adjust if necessary.
- **US version:** If the lateral adjustment has been checked or corrected: Renew the plug and press it into the adjusting screw **without damage** for lateral adjustment.

Additional Information

Overview of Tightening Torques

Deformation element to engine support — Used in step 8

Hexagon screw M12x1.5x80	Renew screws.	Tightening torque	100 Nm
		Angle of rotation	180 °

Front vertical connection to deformation element — Used in step 8

M6x30 screw		Tightening torque	8 Nm

Support for cross connection to deformation element — Used in step 8

M6x20 screw		Tightening torque	11,8 Nm

Washer fluid reservoir to holder — Used in step 9

M6x20 screw		Tightening torque	8 Nm

Cross connection to carrier support — Used in step 10

Screws M6x20		Tightening torque	11,8 Nm

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Air duct to deformation element			Used in step 11
M6x20 screw		Tightening torque	4,6 Nm

Bracing strut to top front bumper support or to top connection			Used in step 11
M6x20 screw		Tightening torque	11,8 Nm

Air duct to upper connection			Used in step 11
M6x20 screw		Tightening torque	11,8 Nm

Intake silencer housing to lock bridge			Used in step 12
M6X30		Tightening torque	8 Nm

Clean air pipe to intake silencer housing			Used in step 12
Clamp		Tightening torque	3 Nm

Intake neck to cross connection			Used in step 13
M6		Tightening torque	8 Nm

Underbody protection front			Used in step 14
Screw for thermoplastic plastic		Tightening torque	2,6 Nm
Hexagon screw M6x20		Tightening torque	8 Nm

Overview of Special Tools

2 463 965 Socket wrench



Common		Used in step 7 8
Usage	with T30, T40 and torx 45	
Included in the tool or work		
Storage location	B6	
Replaced by		
In connection with		
SI-Number	01 07 17 (487)	

Links

General repair instructions	Used in step
63 12 ... US version: Setting the horizontal blocking when headlamp is set	15
63 12 ... US version: Remove the horizontal blocking before adjusting the headlamp	15

Repair instructions	Used in step
63 10 ... Test requirements for headlights vertical aim adjustment	15

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51 11 050 Removing and installing/replacing support for front bumper panel

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



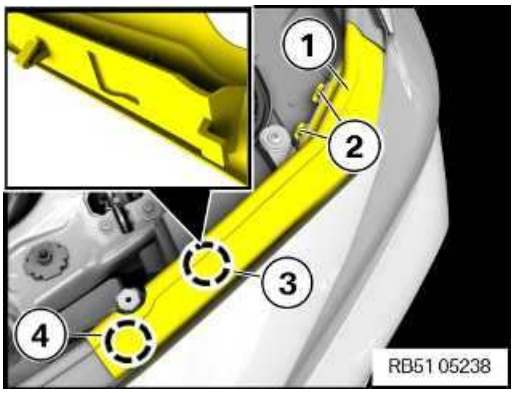
- See additional information.

2 – Remove both bonnet seals on the side

NOTICE

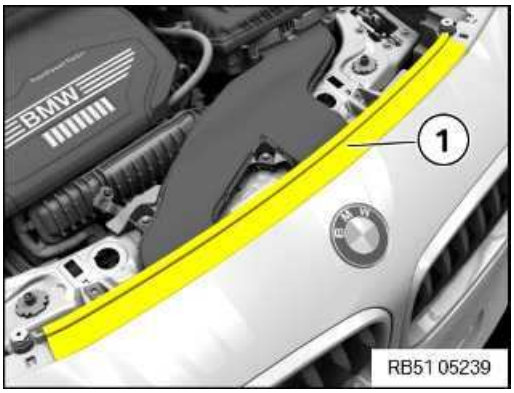
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

3 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

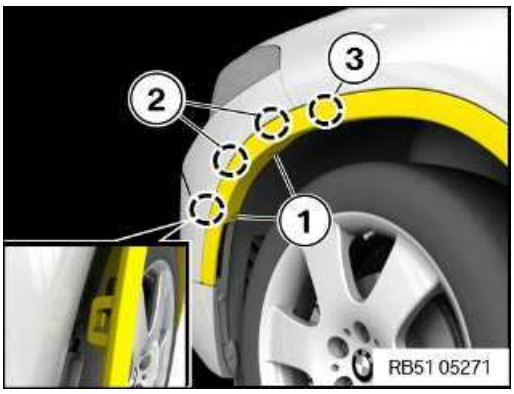
4 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

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▶ **Partially removing the front wheel arch trim**



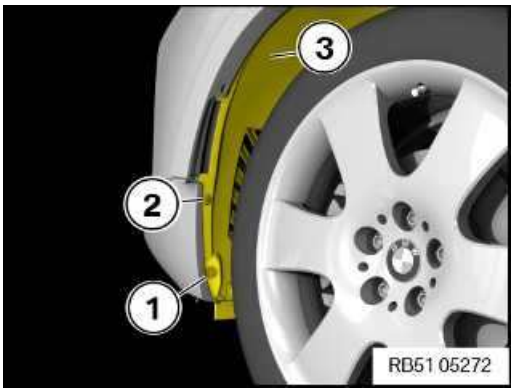
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

5 – Partially remove both front wheel arch covers

NOTICE

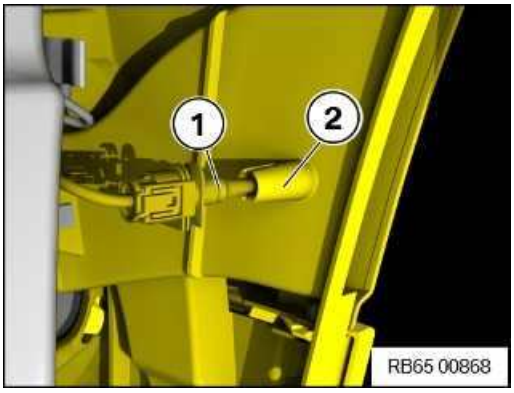
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

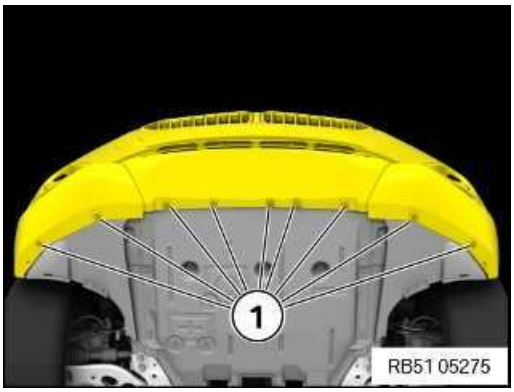
6 – Remove temperature sensor



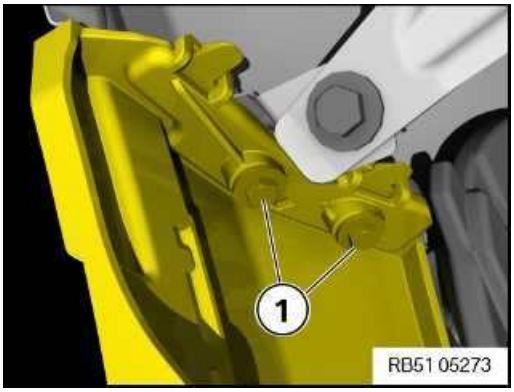
- Unclip temperature sensor (1) from front bumper panel (2).

7 – Remove front bumper panel

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- Loosen screws (1).



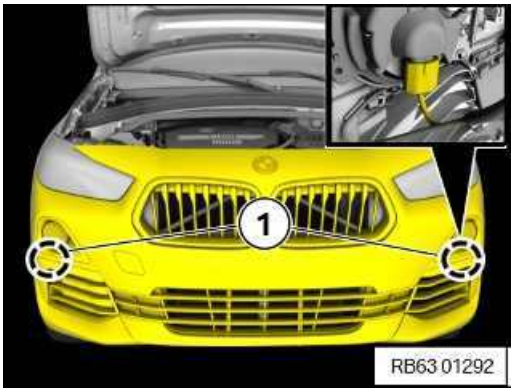
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).

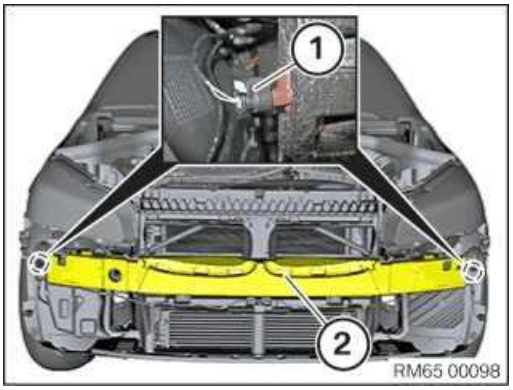


- Loosen screws (1).
- Loosen screws (2).



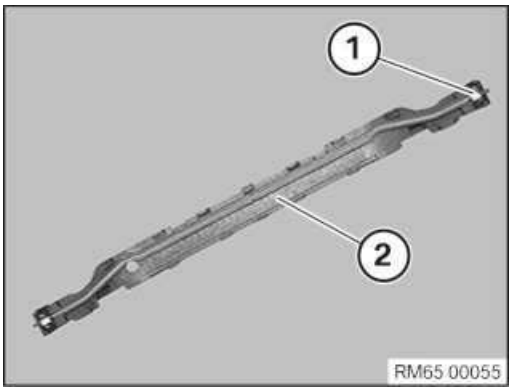
- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

8 – Remove impact absorber



- Unlock and disconnect plug connections (1).
- Remove the impact absorber (2).

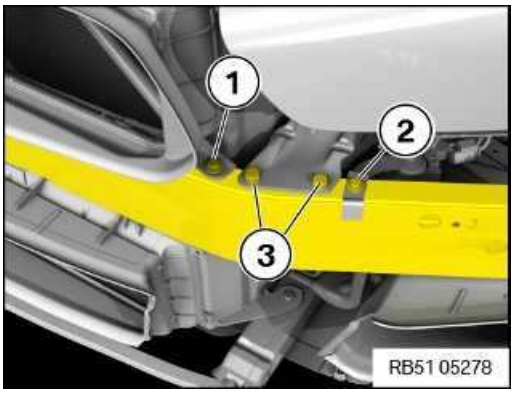
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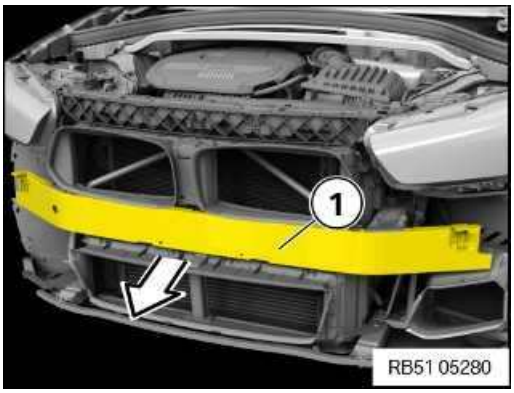
- Detach the pressure hose (1) from the impact absorber (2).

MAIN WORK

9 – Removing top front bumper support

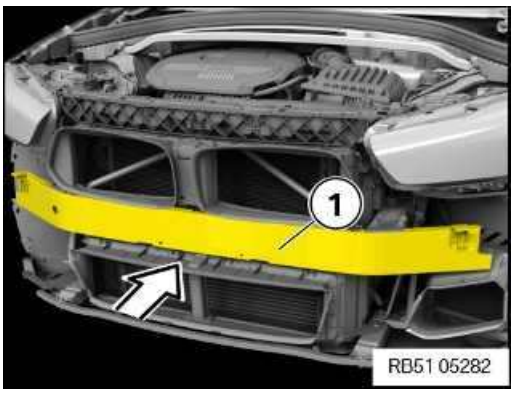


- Loosen screw (1).
- Loosen screw (2).
- Loosen screws (3).



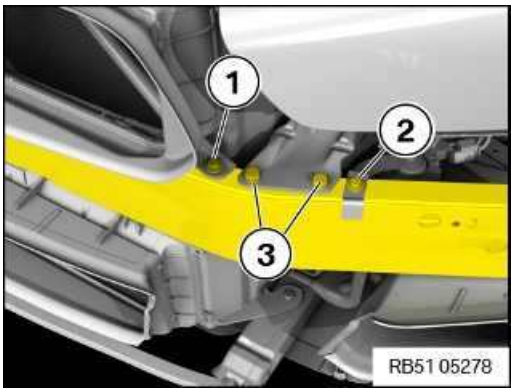
- Guide out and remove the top front bumper support (1) in direction of arrow.

10 – Installing top front bumper support



- Position top front bumper support (1).

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- Tighten down screws (3).

Front top bumper support to top deformation element

Hexagon screw M8x95		Tightening torque	28 Nm

- Tighten down screw (2).

Fanfare to front top bumper support

Hexagon screw		Tightening torque	11,8 Nm

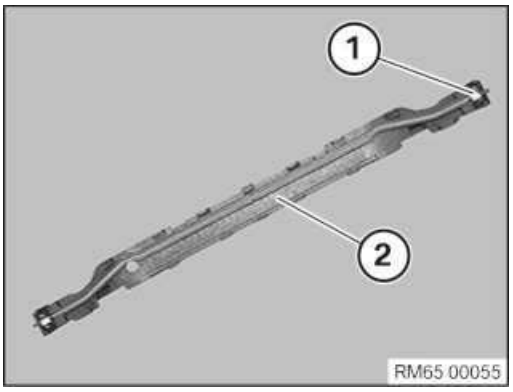
- Tighten down screw (1).

Bracing strut to top front bumper support or to top connection

M6x20 screw		Tightening torque	11,8 Nm

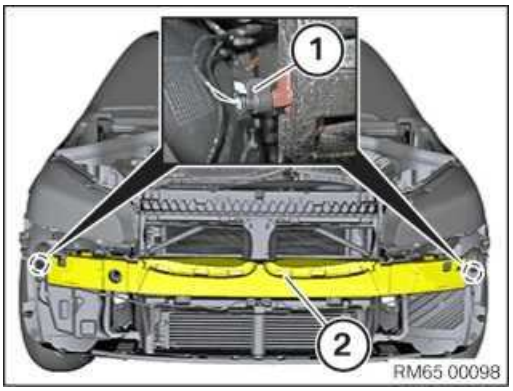
POSTPROCESSES

11 – Installing impact absorber



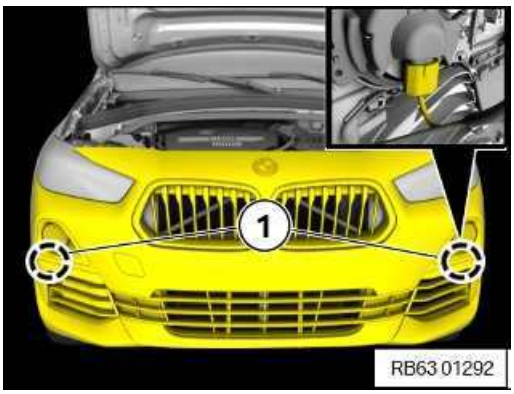
- Renew the impact absorber (2).

  Parts: Impact absorber
- Insert and engage pressure hose (1) in impact absorber (2).



- Attach bottom impact absorber (2) and press upwards.
- Connect connectors (1) and lock.

12 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.

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- Tighten the screws (1).

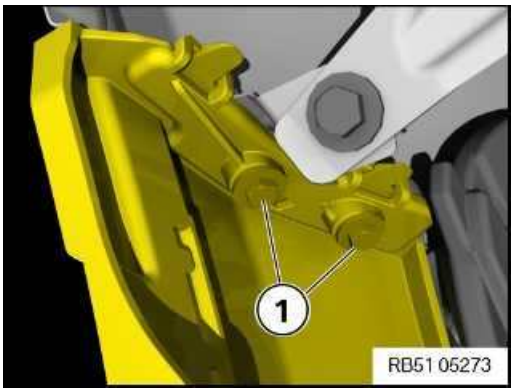
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



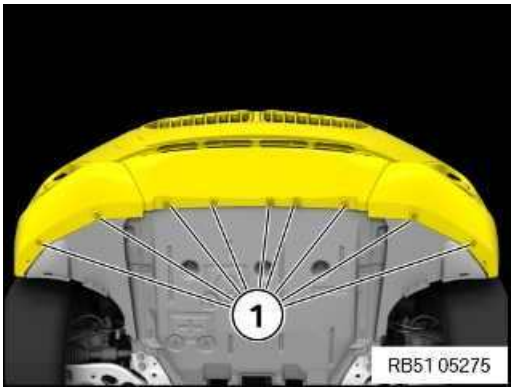
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm

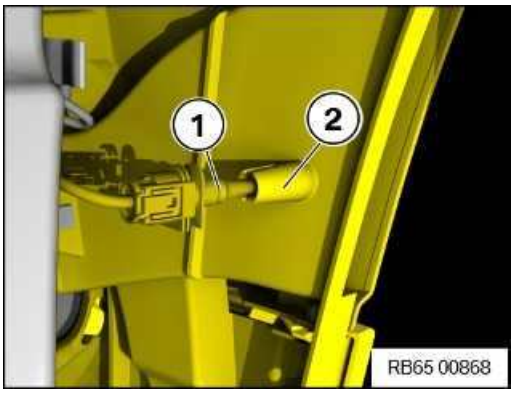


- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

13 – Install temperature sensor



- Clip temperature sensor (1) into the front bumper panel (2).

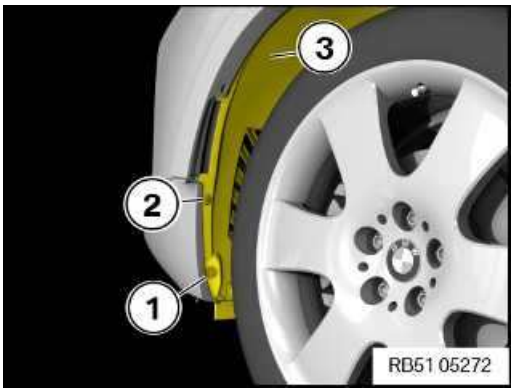
14 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially install the front wheel arch cover**

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- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

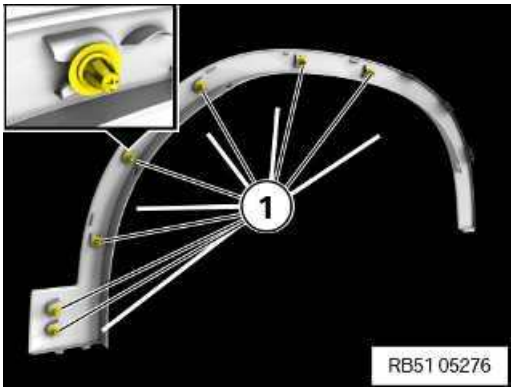
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

15 – Partially install both front wheel arch trims

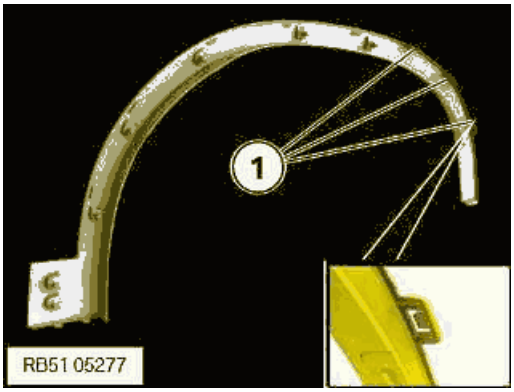
NOTICE

Description is for left component only. Procedure on the right side is identical.

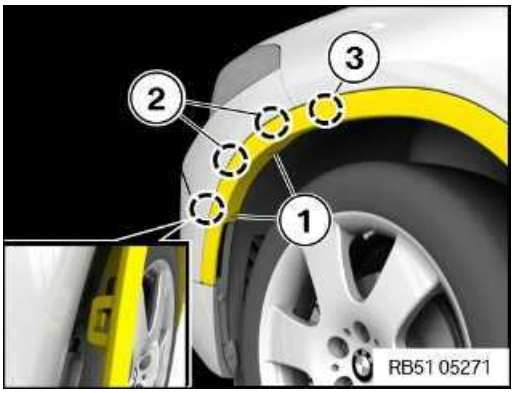
▶ **Partly install the front wheel arch trim**



- Check clips (1) for damage, and replace if necessary.



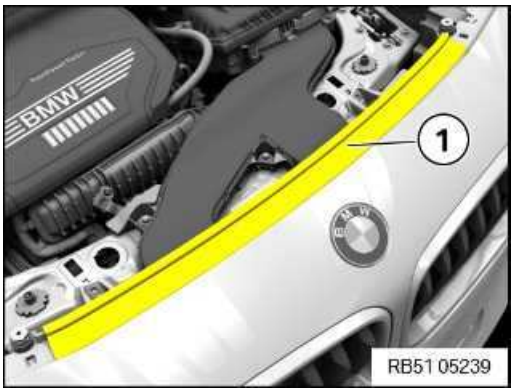
- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

16 – Install the center front bonnet seal

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- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

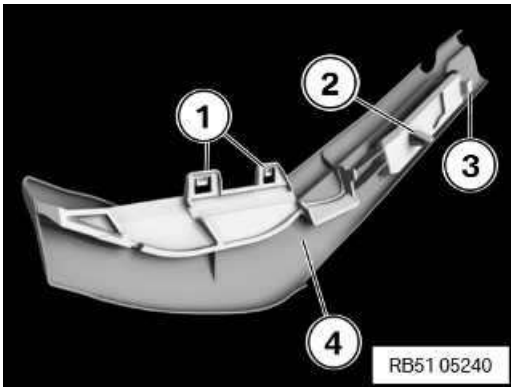
17 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



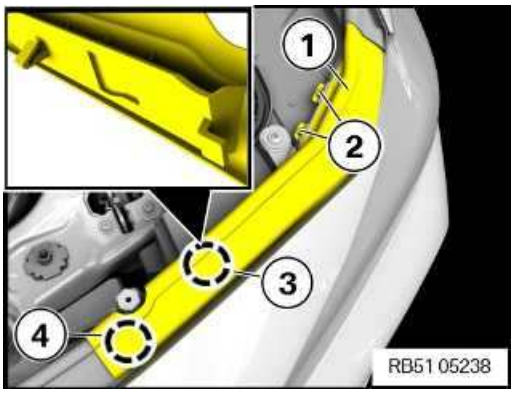
- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

18 – Disconnecting all battery earth leads

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- See additional information.

Additional Information

Overview of Tightening Torques

Front top bumper support to top deformation element			Used in step 10
Hexagon screw M8x95		Tightening torque	28 Nm

Fanfare to front top bumper support			Used in step 10
Hexagon screw		Tightening torque	11,8 Nm

Bracing strut to top front bumper support or to top connection			Used in step 10
M6x20 screw		Tightening torque	11,8 Nm

Bumper panel to headlight			Used in step 12
Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

Bumper panel to air duct			Used in step 12
Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel			Used in step 12
Screw TS5X35		Tightening torque	3 Nm

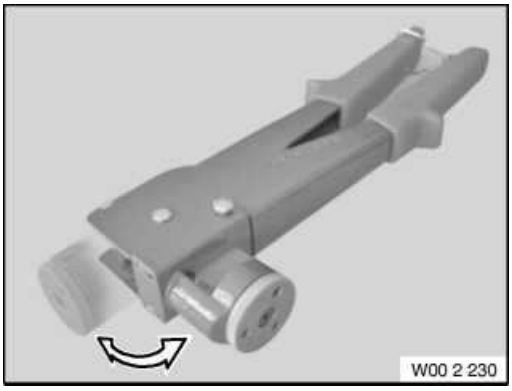
Front bumper panel to underbody panelling			Used in step 12
Thermoplastic hexagon screw		Tightening torque	2,5 Nm

Front wheel arch cover to front bumper panel			Used in step 14
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

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0 496 521 (00 2 230) Pliers



Common	Used in step 14 15
Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 18
61 20 900 Disconnecting and connecting battery earth lead	1 18
61 20 900 Disconnecting and connecting battery earth lead	1 18
61 20 900 Disconnecting and connecting battery earth lead	1 18
61 20 900 Disconnecting and connecting battery earth lead	1 18
61 20 900 Disconnecting and connecting battery earth lead	1 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 18
61 20 900 Disconnecting and connecting battery earth lead	1 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 18
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 18
61 20 900 Disconnecting and connecting battery earth lead	1 18
61 20 900 Disconnecting and connecting battery earth lead	1 18
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61 20 900 Disconnecting and connecting battery earth lead	1	18
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61 20 900 Disconnecting and connecting battery earth lead	1	18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	18
61 20 900 Disconnecting and connecting battery earth lead	1	18
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61 20 900 Disconnecting and connecting battery earth lead	1	18
61 20 900 Disconnecting and connecting battery earth lead	1	18
61 20 900 Disconnecting and connecting battery earth lead	1	18

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51 11 060 Removing and installing/replacing support for front lower bumper panel

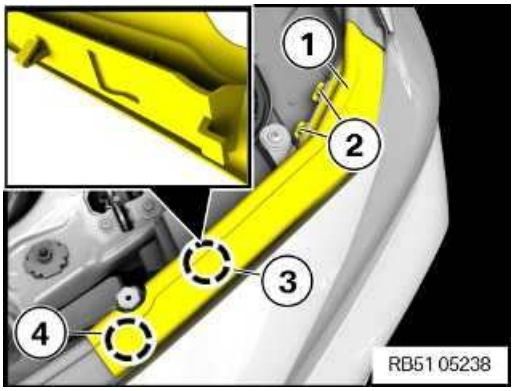
PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

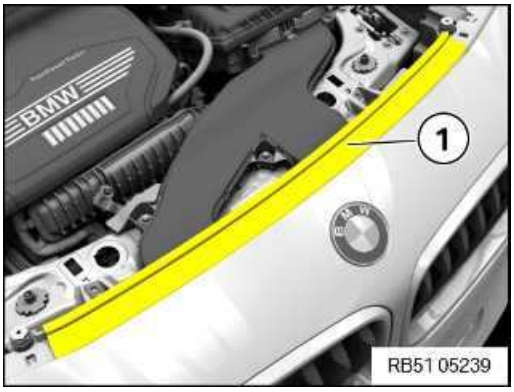
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

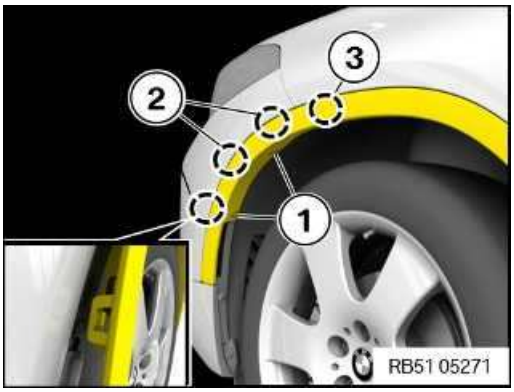
3 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing the front wheel arch trim**

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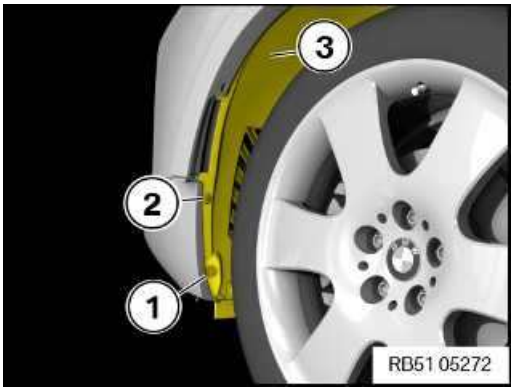
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

4 – Partially remove both front wheel arch covers

NOTICE

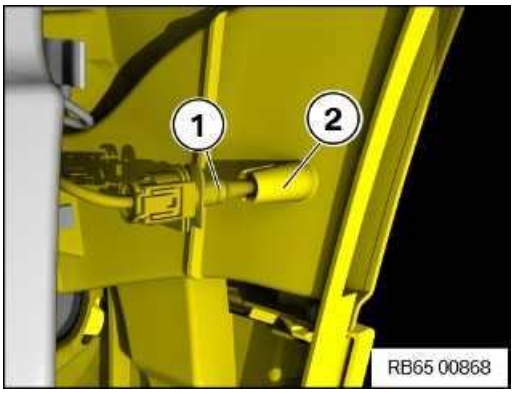
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



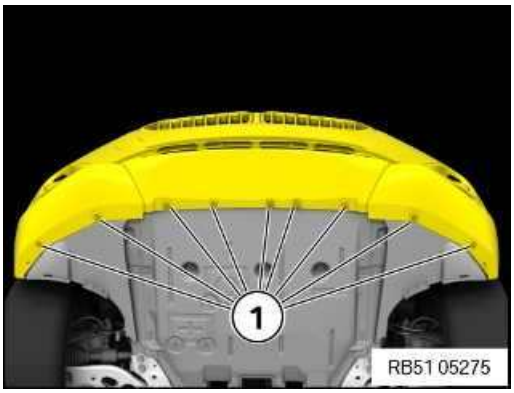
- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

5 – Remove temperature sensor



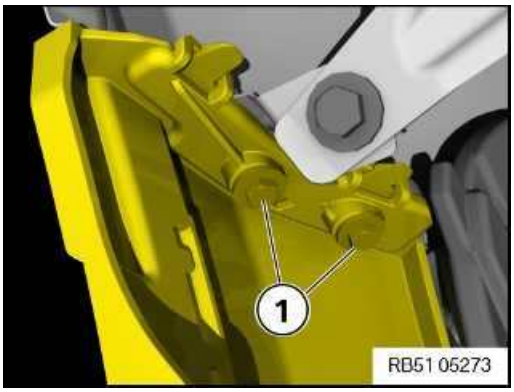
- Unclip temperature sensor (1) from front bumper panel (2).

6 – Remove front bumper panel



- Loosen screws (1).

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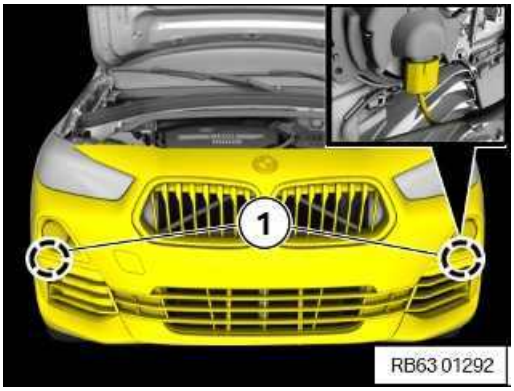
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).



- Loosen screws (1).
- Loosen screws (2).

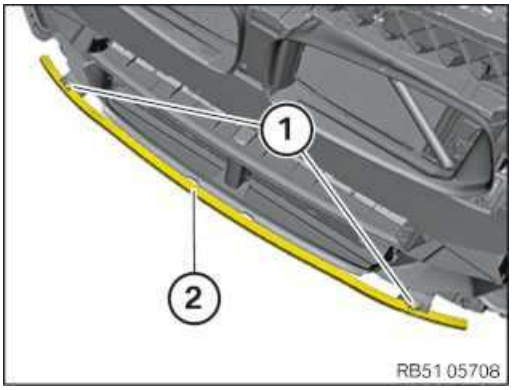


- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

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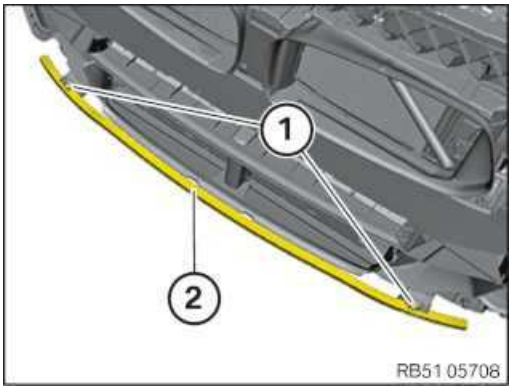
MAIN WORK

7 – Removing the support for the lower front bumper panel



- Loosen screws (1).
- Guide out and remove the support for the bumper panel (2).

8 – Installing the support for the lower front bumper panel



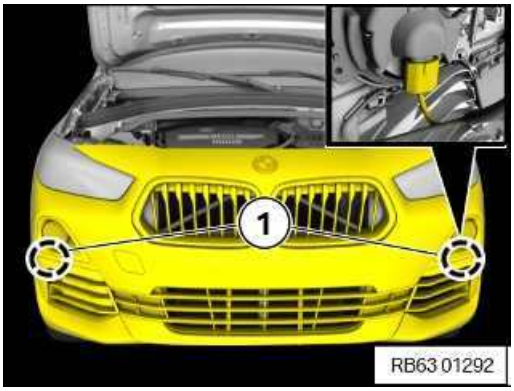
- Thread in support for the bumper panel (2).
- Tighten the screws (1).

Support for the front bottom bumper panel to deformation element

M6x30 screw		Tightening torque	8 Nm

POSTPROCESSES

9 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.

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- Tighten the screws (1).

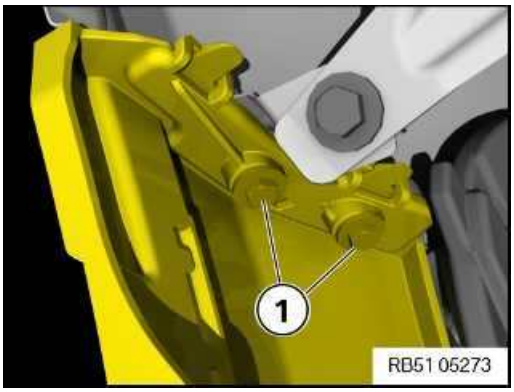
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



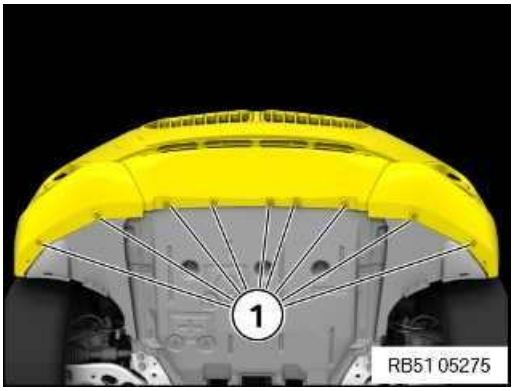
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm

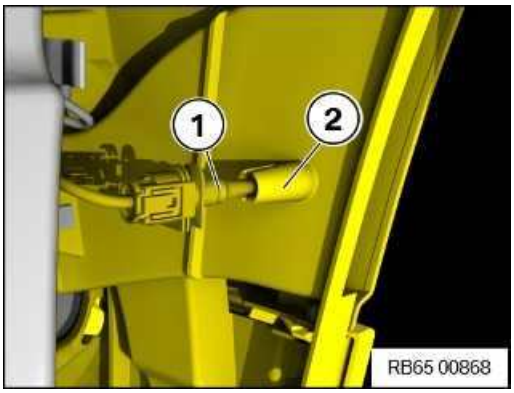


- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

10 – Install temperature sensor



- Clip temperature sensor (1) into the front bumper panel (2).

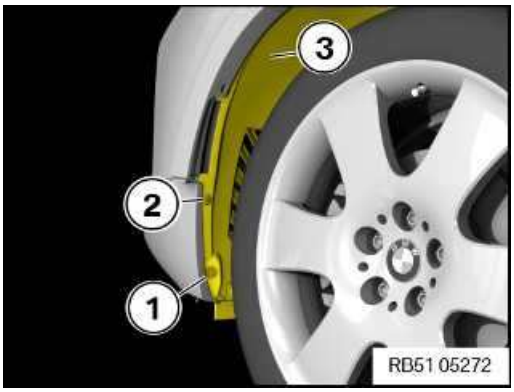
11 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially install the front wheel arch cover**

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- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

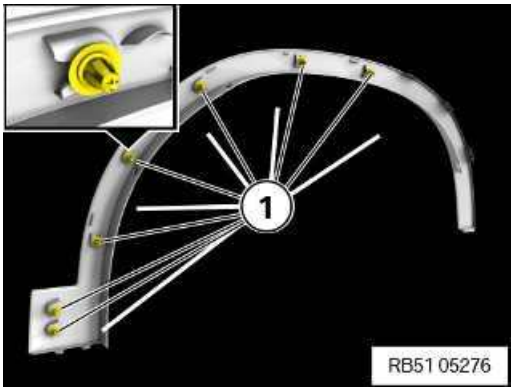
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

12 – Partially install both front wheel arch trims

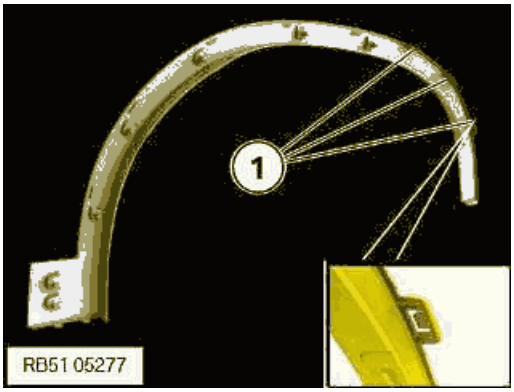
NOTICE

Description is for left component only. Procedure on the right side is identical.

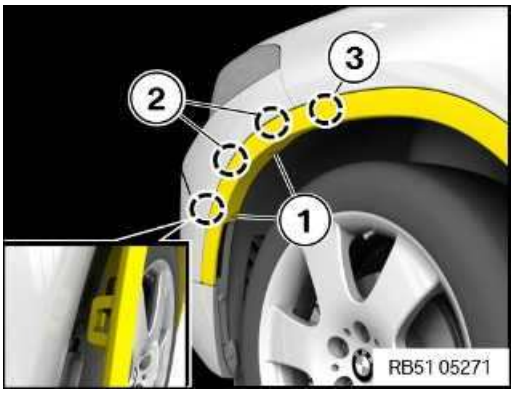
▶ **Partly install the front wheel arch trim**



- Check clips (1) for damage, and replace if necessary.



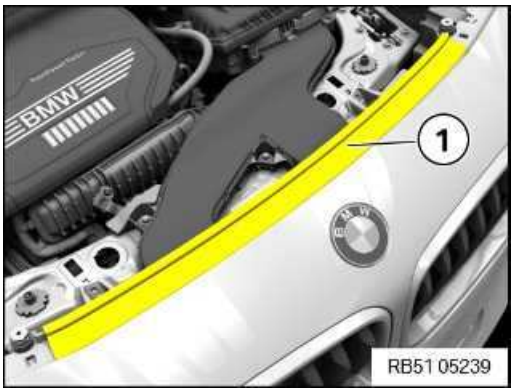
- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

13 – Install the center front bonnet seal

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- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

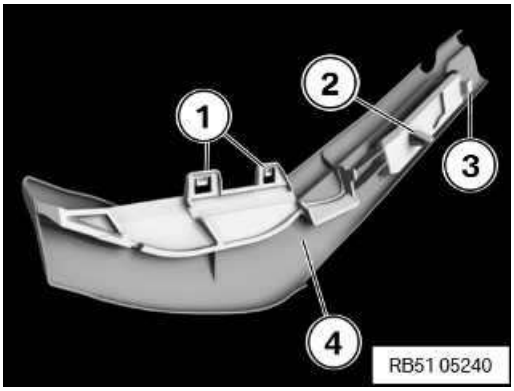
14 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



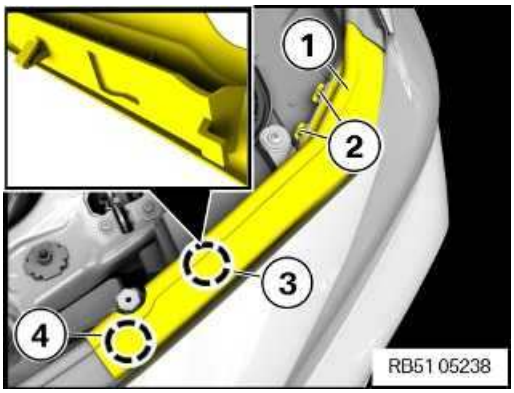
- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

Additional Information

Overview of Tightening Torques

Support for the front bottom bumper panel to deformation element Used in step 8

M6x30 screw		Tightening torque	8 Nm

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Bumper panel to headlight

Used in step 9

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

Bumper panel to air duct

Used in step 9

Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel

Used in step 9

Screw TS5X35		Tightening torque	3 Nm

Front bumper panel to underbody panelling

Used in step 9

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

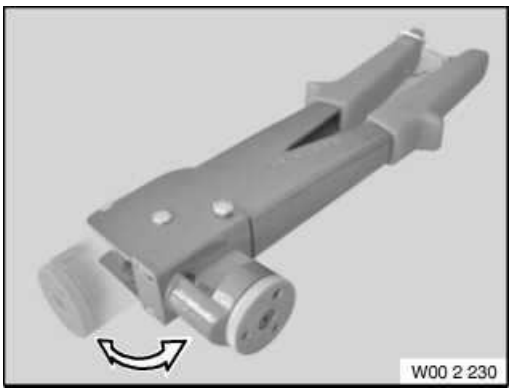
Front wheel arch cover to front bumper panel

Used in step 11

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common Used in step 11 12

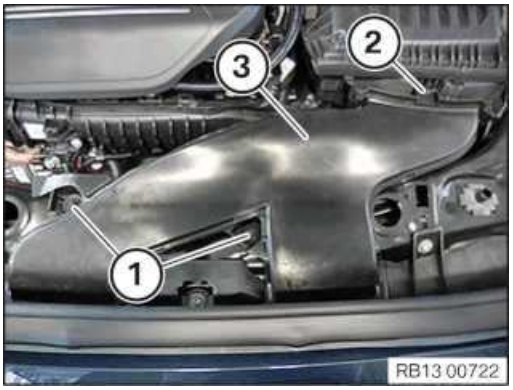
Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 11 760 Removing and installing/replacing the deformation element on the top left

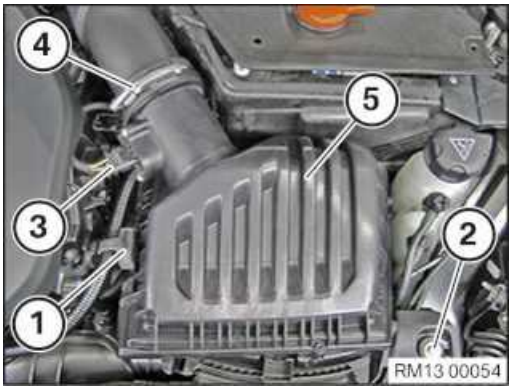
PRELIMINARY WORK

1 – Remove the intake neck for intake silencer housing



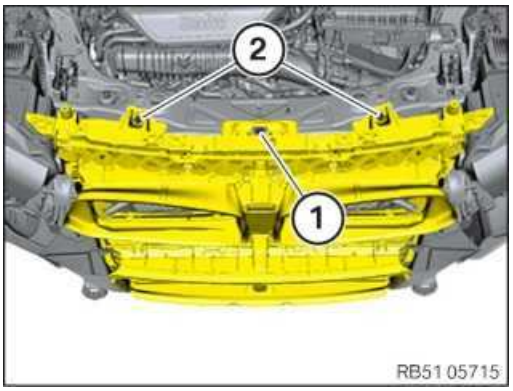
- Loosen nuts (1).
- Loosen the lock (2).
- Guide the intake neck (3) out and remove it.

2 – Removing intake silencer housing

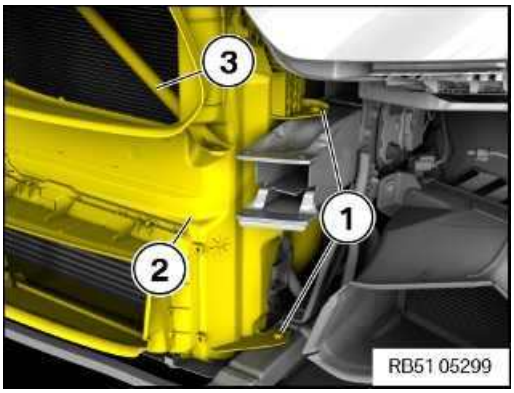


- Loosen the holder (1).
- Loosen screw (2).
- Unlock and loosen connector (3).
- Unfasten clamp (4).
- Pull out and remove the intake silencer housing (5) from the rubber mounts towards the top.

3 – Remove the air duct to the radiator



- Loosen screw (1).
- Loosen screws (2).



NOTICE

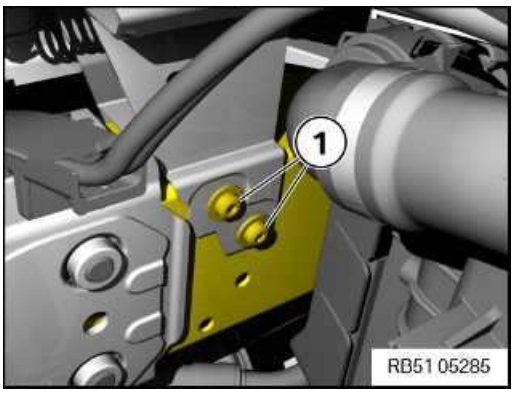
Perform the operations on the left and right side.

- Loosen screws (1).
- Feed out the air duct to the radiator (2) with the bracing strut (3) toward the front and remove.

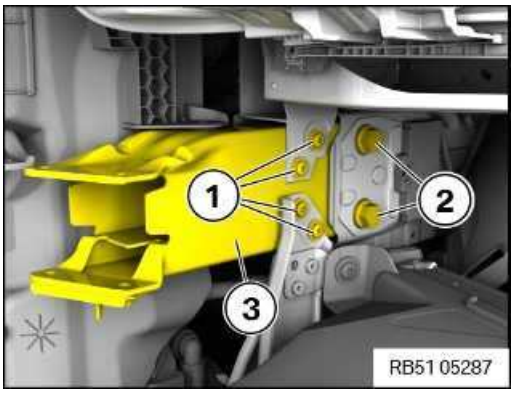
MAIN WORK

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4 – Remove the front left deformation element

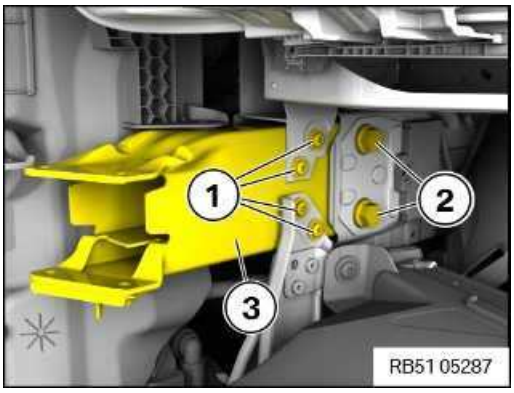


- Loosen screws (1).



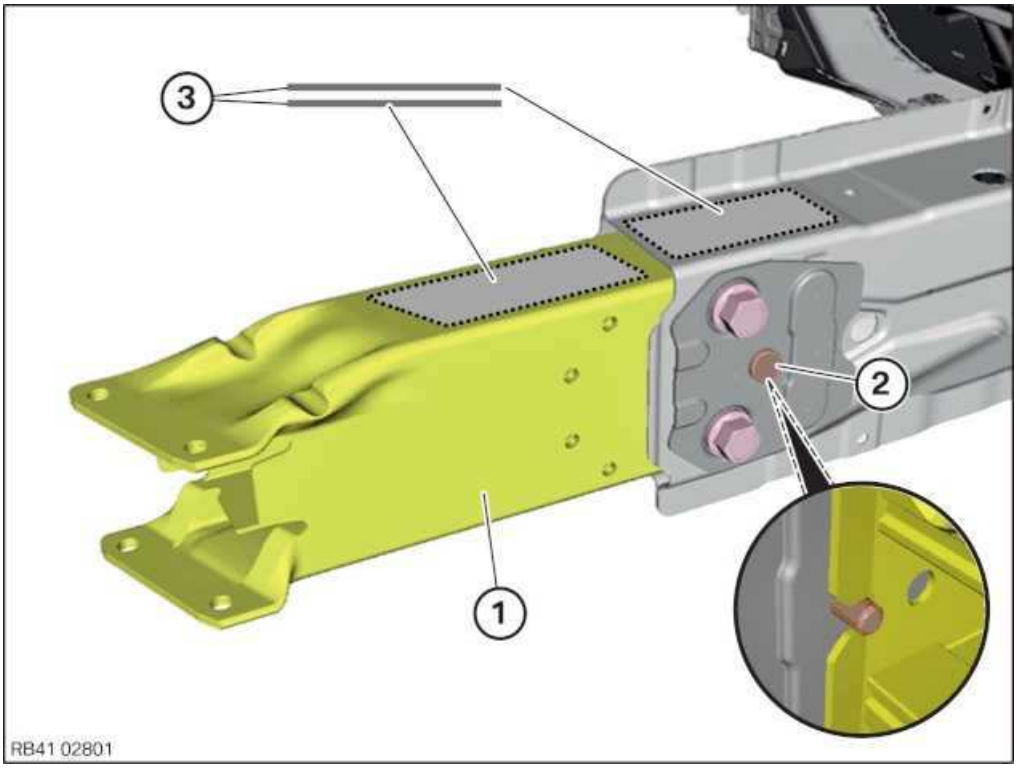
- Loosen screws (1).
- Loosen screws (2).
- Guide out the deformation element (3) toward the front from the engine support and remove.

5 – Install the front left deformation element



- Feed the deformation element (3) into the engine support from the front.
- Renew screws (2).

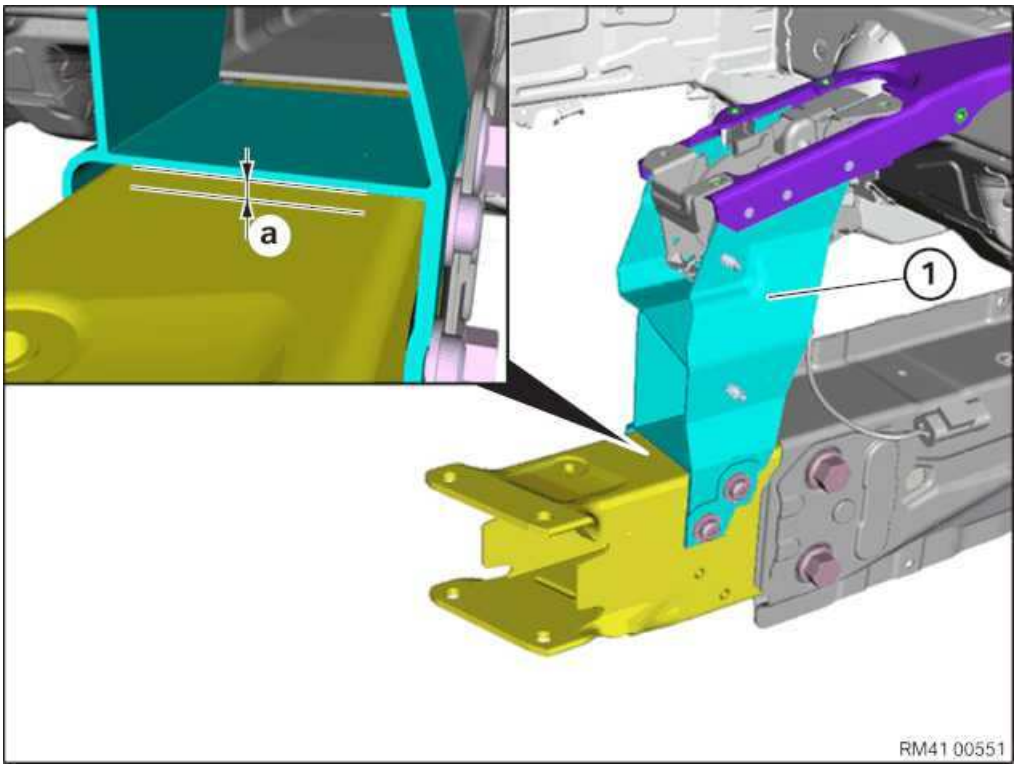
  Parts: Bolts
- Join the bolts (2) and screw them in a few turns.
- Join the bolts (1) and screw them in a few turns.



- Adjust the deformation element (1) so that the surfaces (3) are parallel to each other.

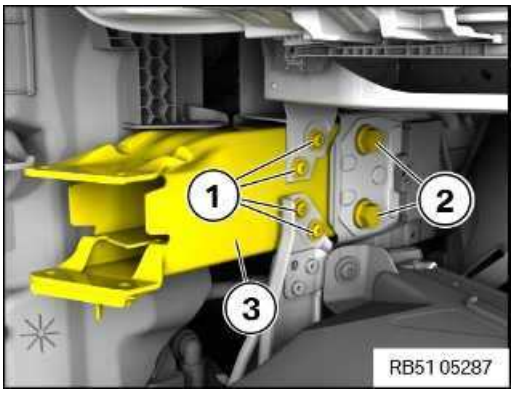
  The height of the deformation element (1) cannot be adjusted due to the stop (2).

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- Adjust the support for the cross connection (1) to the specified dimension.

  Dimension (a) = approximately 4 mm
- If the support for the cross connection (1) was removed on only one side of the vehicle, use the dimension (a) of the side that was not removed as the setting dimension.



- Tighten the screws (2) on the deformation element (3).

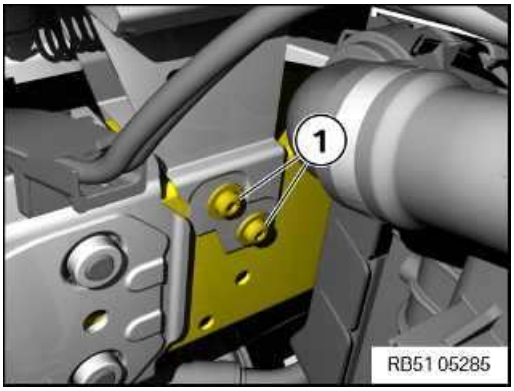
Deformation element to engine support

Hexagon screw M12x1.5x80	Renew screws.	Tightening torque	100 Nm
		Angle of rotation	180 °

- Tighten the screws (1).

Front vertical connection to deformation element

M6x30 screw		Tightening torque	8 Nm



- Tighten the screws (1).

Front vertical connection to deformation element

M6x30 screw		Tightening torque	8 Nm

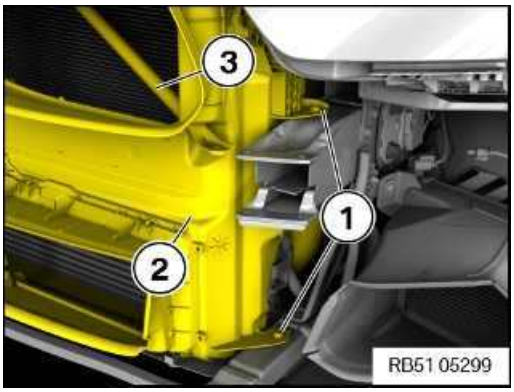
POSTPROCESSES

6 – Installing air duct to radiator

NOTICE

Perform the operations on the left and right side.

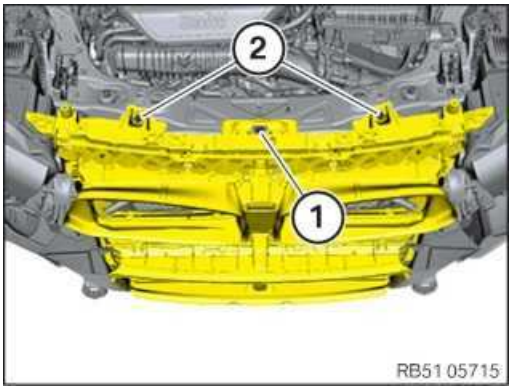
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- Feed in air duct to radiator (2) with bracing strut (3).
- Tighten the screws (1).

Air duct to deformation element

M6x20 screw		Tightening torque	4,6 Nm



- Tighten down screw (1).

Bracing strut to top front bumper support or to top connection

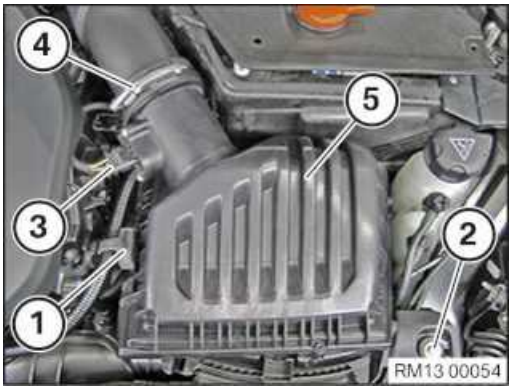
M6x20 screw		Tightening torque	11,8 Nm

- Tighten down screws (2).

Air duct to upper connection

M6x20 screw		Tightening torque	11,8 Nm

7 – Installing intake silencer housing



- Insert the intake silencer housing (5) into the rubber mounts and install it.

  Intake filter housing (5) must engage audibly.
- Tighten down screw (2).

Intake silencer housing to lock bridge

M6X30		Tightening torque	8 Nm

- Tighten clamp (4).

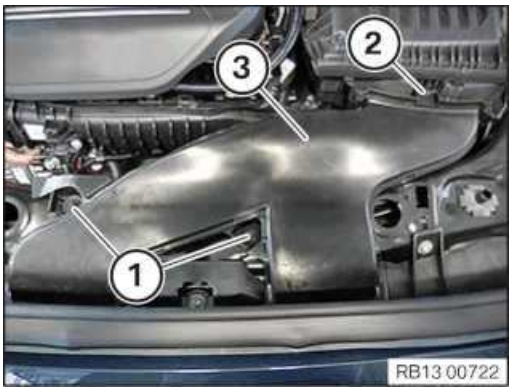
Clean air pipe to intake silencer housing

Clamp		Tightening torque	3 Nm

- Connect and lock the connector (3).

  The connector (3) must engage audibly.
- Insert and install the holder (1).

8 – Install the intake neck for the intake filter housing



- Insert and install the intake neck (3).

  The lock (2) must audibly engage.
- Tighten nuts (1).

Intake neck to cross connection

M6		Tightening torque	8 Nm

9 – Adjust both headlights

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Adjusting headlights**

TECHNICAL INFORMATION

Notes on headlight adjustment are a fundamental requirement for these repair instructions and must be complied with at all times.

For additional information see: 6310 ... Test prerequisite for adjusting headlights



- Perform the headlight adjustment with the adjusting screws (1) and (2).

  A definite allocation of adjusting screws is not possible.

  Adjusting screw (1) is primarily used for the height adjustment.

  Adjusting screw (2) is primarily used for the lateral adjustment.
- Adjust the height at the adjusting screw (1).
- **US version:** Set the lateral adjustment only if the plug on the adjusting screw for lateral adjustment is missing or damaged.

  If required, remove damaged plug (see additional information).
- Make the lateral adjustment at the adjusting screw (2).
- Perform reference run. Switch the headlights off and on again.
- Check the headlight and adjust if necessary.
- **US version:** If the lateral adjustment has been checked or corrected: Renew the plug and press it into the adjusting screw **without damage** for lateral adjustment.

Additional Information

Overview of Tightening Torques

Deformation element to engine support — Used in step 5

Hexagon screw M12x1.5x80	Renew screws.	Tightening torque	100 Nm
		Angle of rotation	180 °

Front vertical connection to deformation element — Used in step 5

M6x30 screw		Tightening torque	8 Nm

Air duct to deformation element — Used in step 6

M6x20 screw		Tightening torque	4,6 Nm

Bracing strut to top front bumper support or to top connection — Used in step 6

M6x20 screw		Tightening torque	11,8 Nm

Air duct to upper connection — Used in step 6

M6x20 screw		Tightening torque	11,8 Nm

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Intake silencer housing to lock bridge Used in step 7

M6X30		Tightening torque	8 Nm

Clean air pipe to intake silencer housing Used in step 7

Clamp		Tightening torque	3 Nm

Intake neck to cross connection Used in step 8

M6		Tightening torque	8 Nm

Links

General repair instructions	Used in step
63 12 ... US version: Setting the horizontal blocking when headlamp is set	9
63 12 ... US version: Remove the horizontal blocking before adjusting the headlamp	9

Repair instructions	Used in step
63 10 ... Test requirements for headlights vertical aim adjustment	9

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51 11 180 Removing and installing/replacing the front ornamental grille in the bumper panel

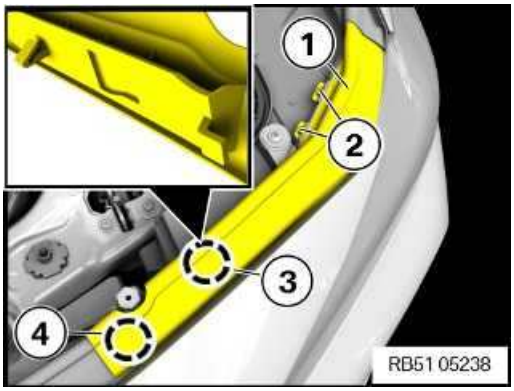
PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

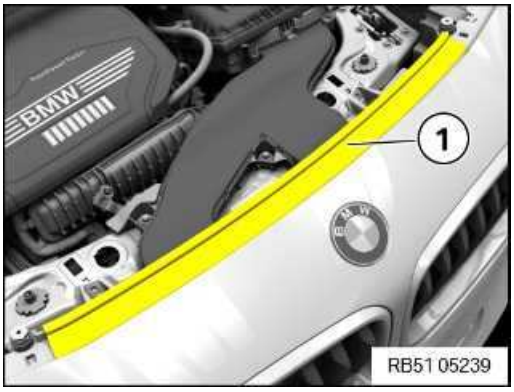
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

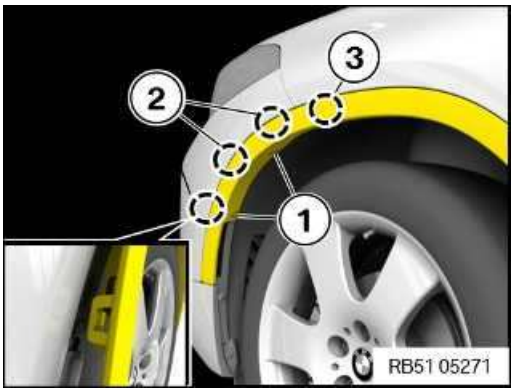
3 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing the front wheel arch trim**

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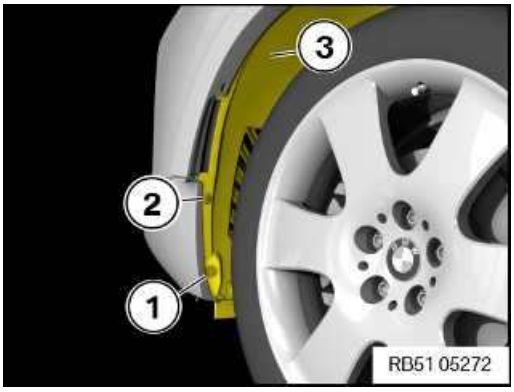
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

4 – Partially remove both front wheel arch covers

NOTICE

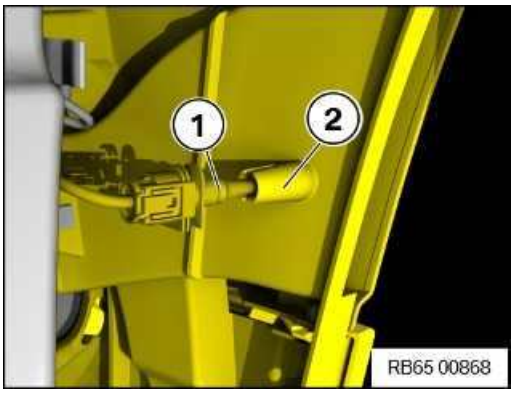
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



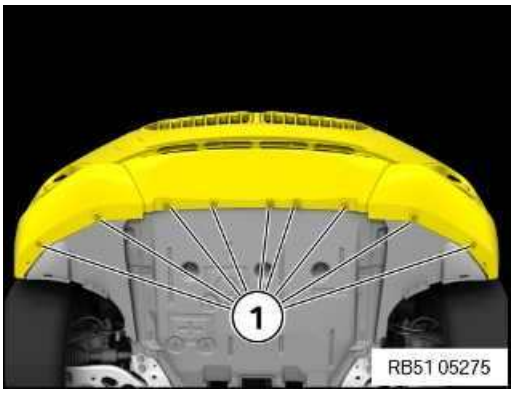
- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

5 – Remove temperature sensor



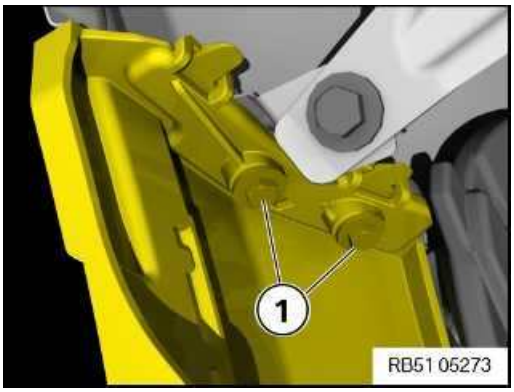
- Unclip temperature sensor (1) from front bumper panel (2).

6 – Remove front bumper panel



- Loosen screws (1).

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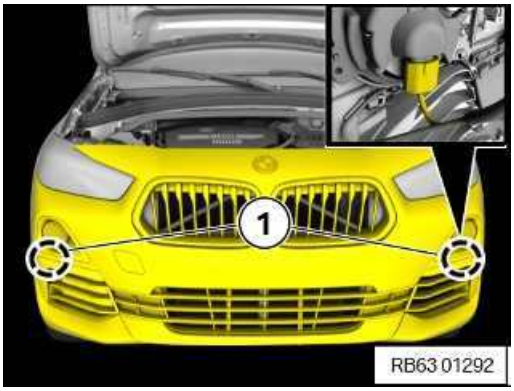
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).



- Loosen screws (1).
- Loosen screws (2).

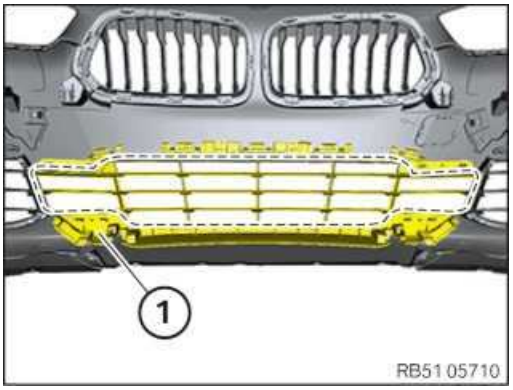


- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

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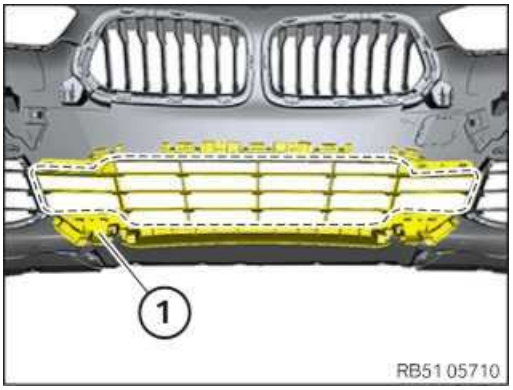
MAIN WORK

7 – Remove middle ornamental grille



- Release centre ornamental grille (1) from the latch mechanisms along the dashed lines and remove in a forwards direction.

8 – Install the ornamental grille centre section

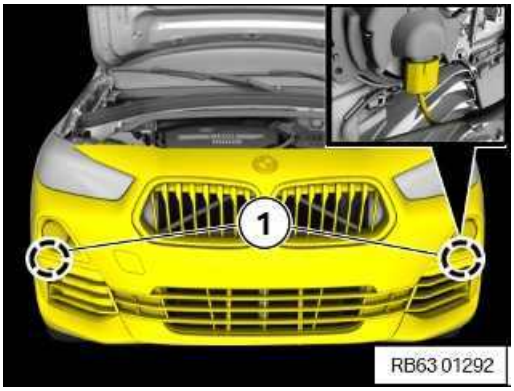


- Install the ornamental grille centre section (1) from the front and engage it along the dashed line on the latch mechanisms.

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POSTPROCESSES

9 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.



- Tighten the screws (1).

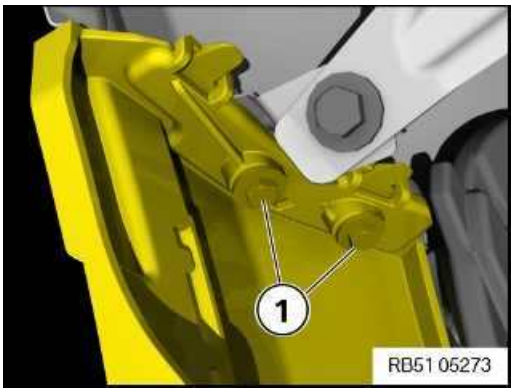
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



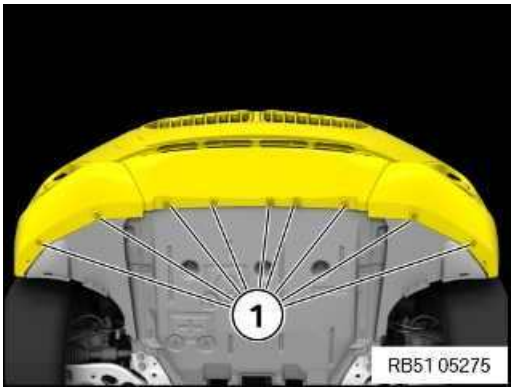
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm

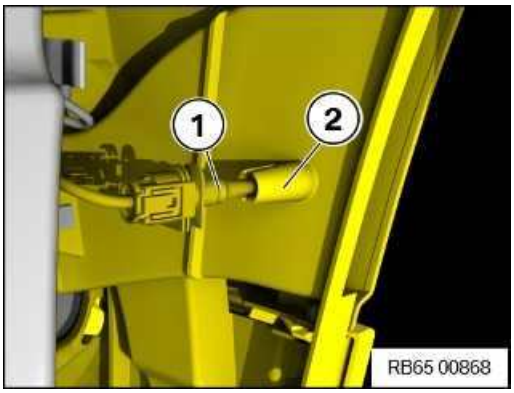


- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

10 – Install temperature sensor



- Clip temperature sensor (1) into the front bumper panel (2).

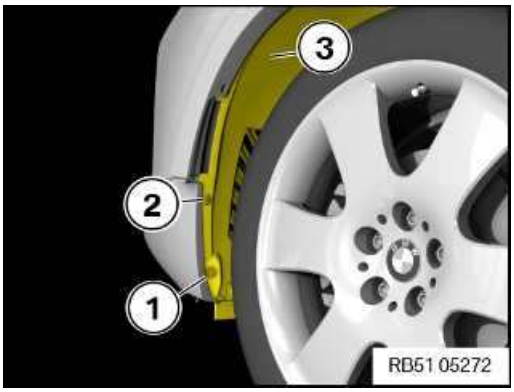
11 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially install the front wheel arch cover**

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- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

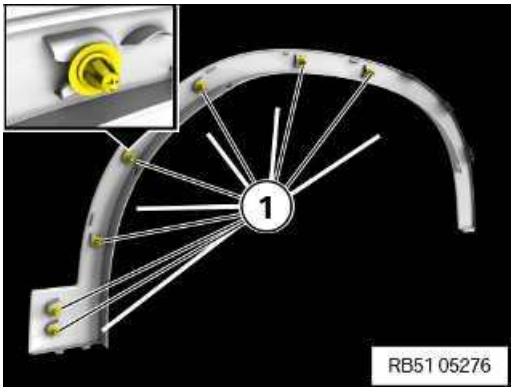
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

12 – Partially install both front wheel arch trims

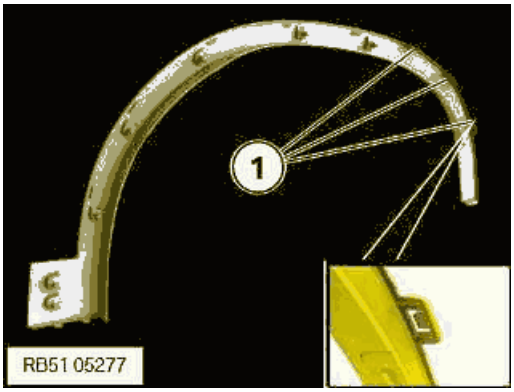
NOTICE

Description is for left component only. Procedure on the right side is identical.

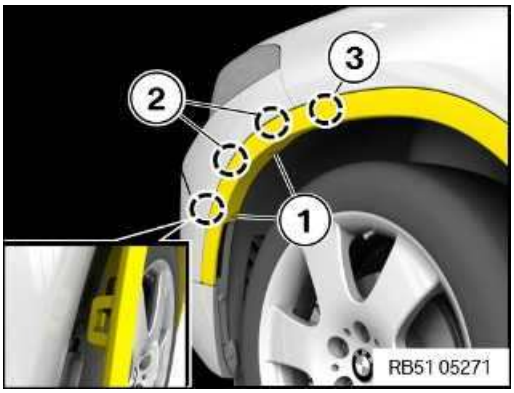
▶ **Partly install the front wheel arch trim**



- Check clips (1) for damage, and replace if necessary.



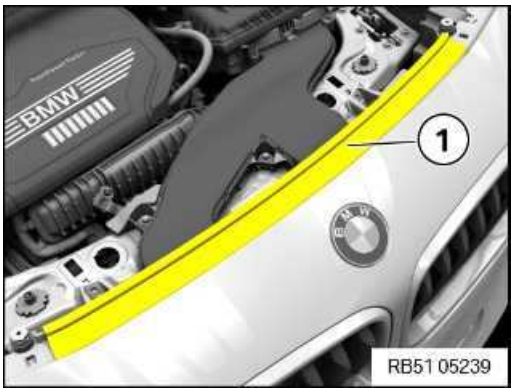
- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

13 – Install the center front bonnet seal

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- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

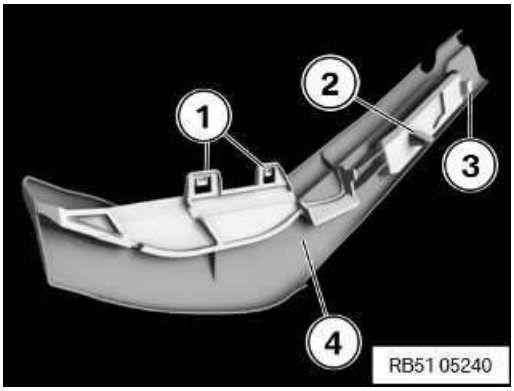
14 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



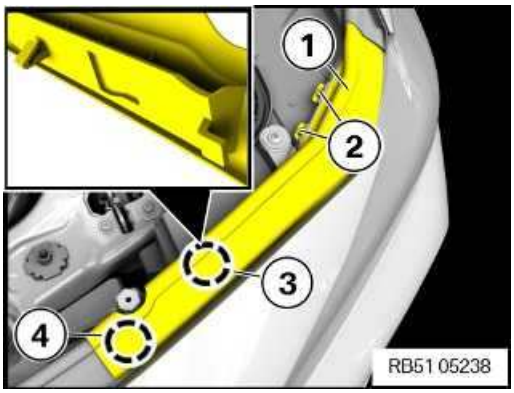
- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

Additional Information

Overview of Tightening Torques

Bumper panel to headlight Used in step 9

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

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Bumper panel to air duct

Used in step 9

Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel

Used in step 9

Screw TS5X35		Tightening torque	3 Nm

Front bumper panel to underbody panelling

Used in step 9

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

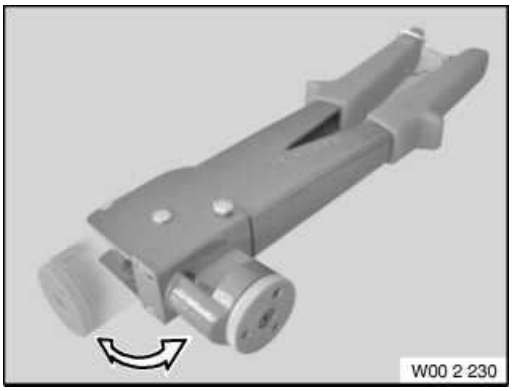
Front wheel arch cover to front bumper panel

Used in step 11

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common

Used in step 11 12

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 11 157 Replace bumper panel, front

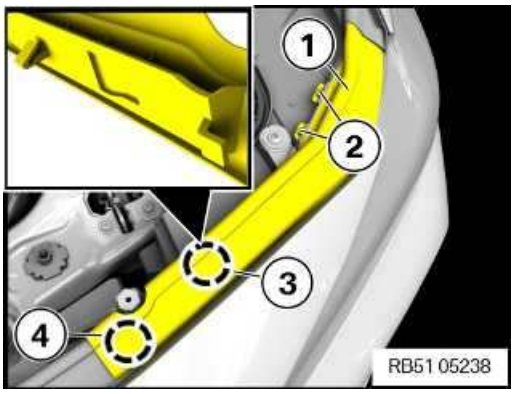
PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

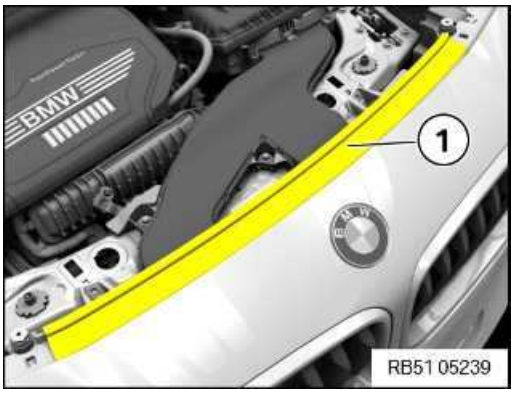
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

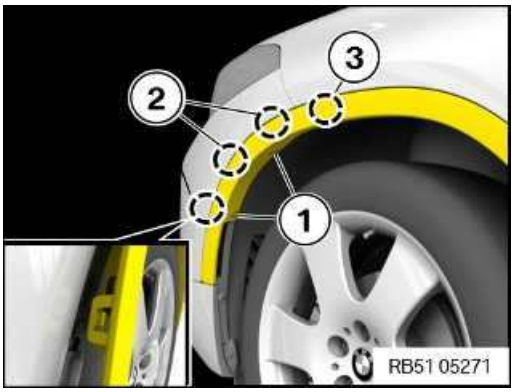
3 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing the front wheel arch trim**

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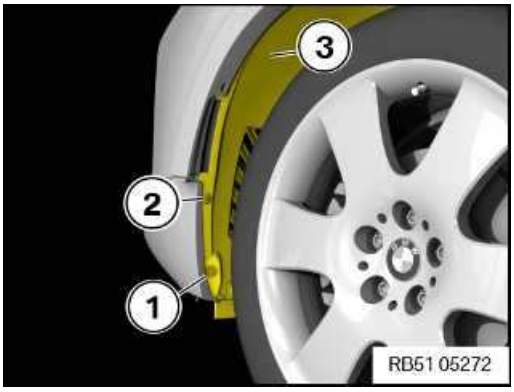
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

4 – Partially remove both front wheel arch covers

NOTICE

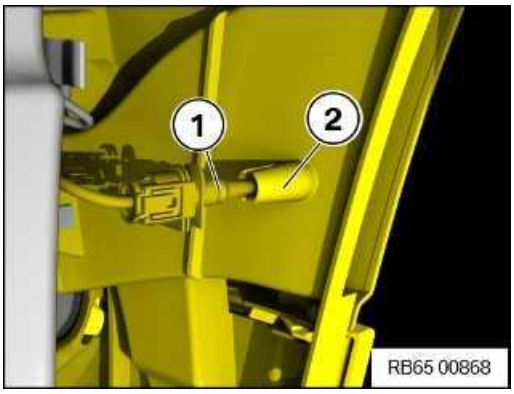
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



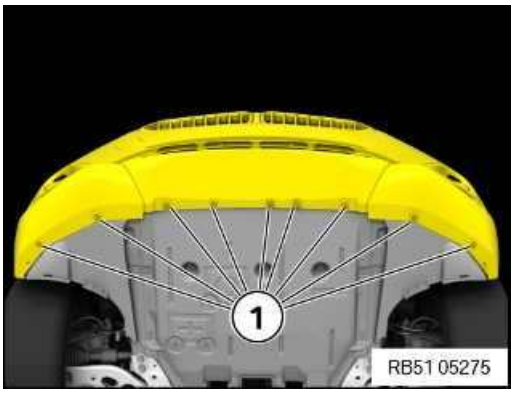
- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

5 – Remove temperature sensor



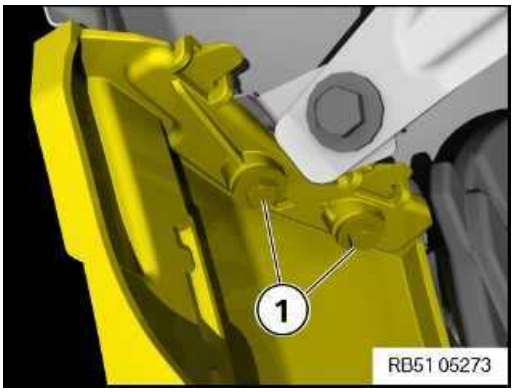
- Unclip temperature sensor (1) from front bumper panel (2).

6 – Remove front bumper panel



- Loosen screws (1).

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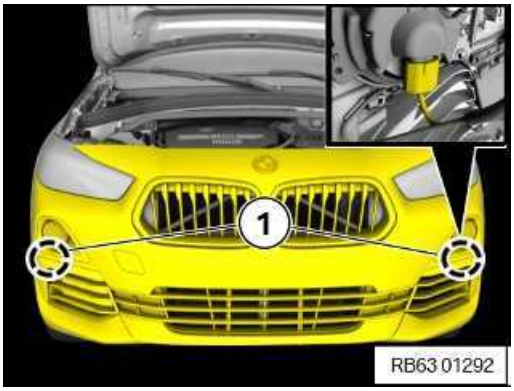
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).



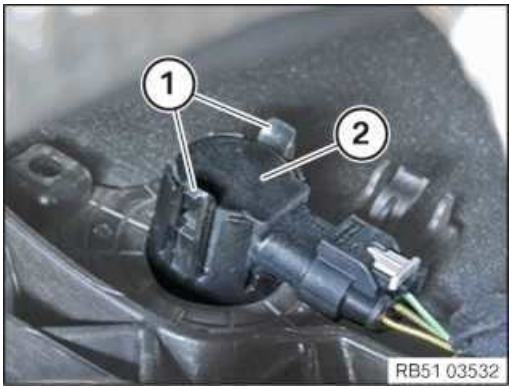
- Loosen screws (1).
- Loosen screws (2).



- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

MAIN WORK

7 – Remount ultrasonic sensors



- Unlock the latch mechanisms (1).
- Remove the ultrasonic sensor (2) towards the top.
- Remove all other ultrasonic sensors together with the wiring harness.
- Engage all ultrasonic sensor with the new bumper.
- Secure wiring harness.

8 – Remove the trims on the fog light

NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Lever out and remove the trim on the fog light (1) from the latch mechanisms with a suitable plastic wedge.

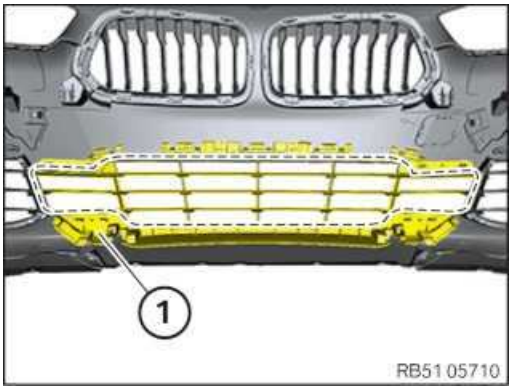
Note: Start levering out at the marked lower edge.

9 – Install the trims on the fog light



- Correctly position the trim on the fog light (1) and engage with the latch mechanisms.

10 – Remove middle ornamental grille

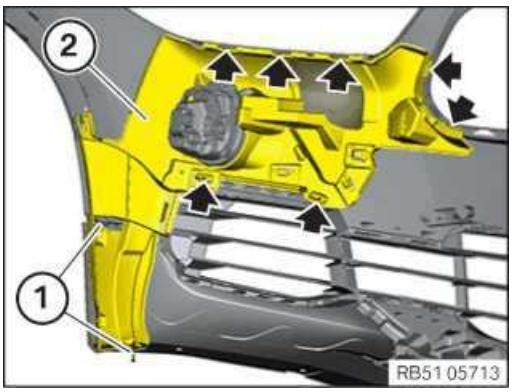


- Release centre ornamental grille (1) from the latch mechanisms along the dashed lines and remove in a forwards direction.

11 – Remove the holder for the fog light

NOTICE

Description is for left component only. Procedure on the right side is identical.



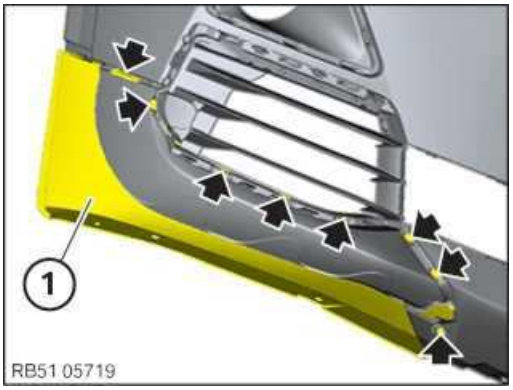
- Loosen the expanding rivet (1).
- Release holder for fog light (2) from latch mechanisms (arrows) and remove.

12 – Removing the trim for the bumper panel at the side

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NOTICE

Description is for left component only. Procedure on the right side is identical.

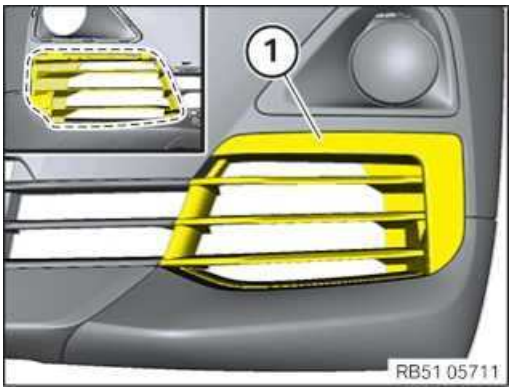


- Release the trim of the side bumper panel (1) at the latch mechanisms (arrows) and remove towards front.

13 – Remove ornamental side grille

NOTICE

Description is for left component only. Procedure on the right side is identical.

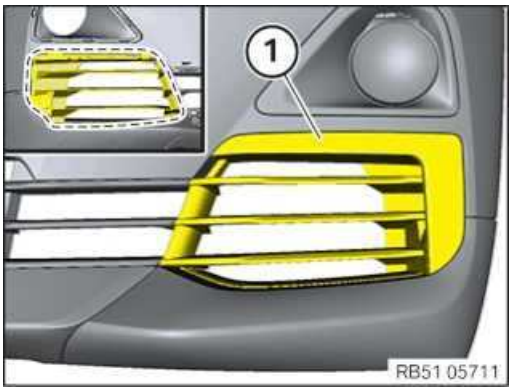


- Release the side ornamental grille (1) along the dotted lines from the latch mechanisms and remove towards the front.

14 – Install the side ornamental grille

NOTICE

Description is for left component only. Procedure on the right side is identical.



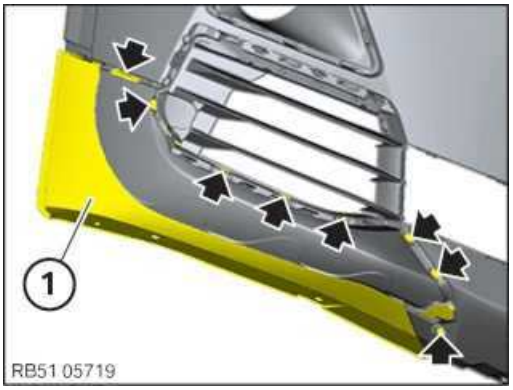
- Install the side ornamental grille (1) and engage it along the dashed line at the latch mechanisms.

15 – Installing the trim for the side bumper panel

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NOTICE

Description is for left component only. Procedure on the right side is identical.

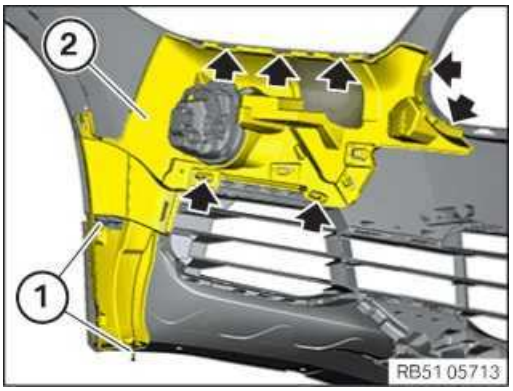


- Attach the side trim of the bumper panel (1) and engage at the latch mechanisms (arrows).

16 – Install the holder for the fog light

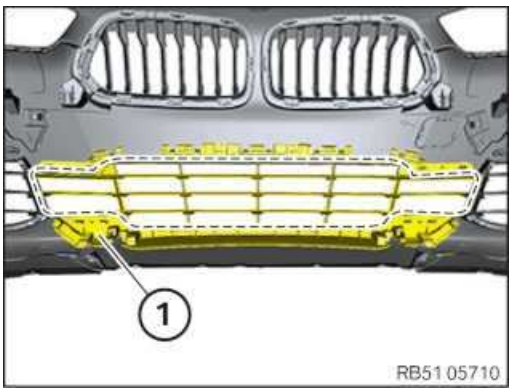
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Install the holder for the fog light (2) and lock at the latch mechanisms (arrows).
- Mount the expanding rivets (1).

17 – Install the ornamental grille centre section

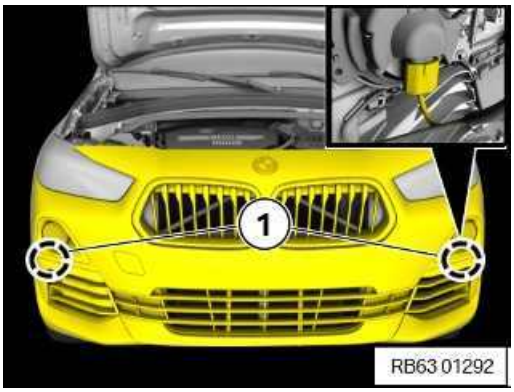


- Install the ornamental grille centre section (1) from the front and engage it along the dashed line on the latch mechanisms.

POSTPROCESSES

18 – Install bumper panel, front

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- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.



- Tighten the screws (1).

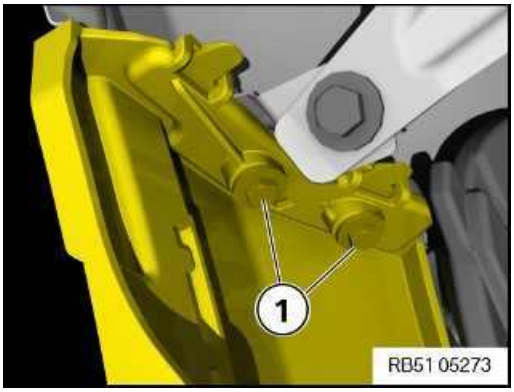
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



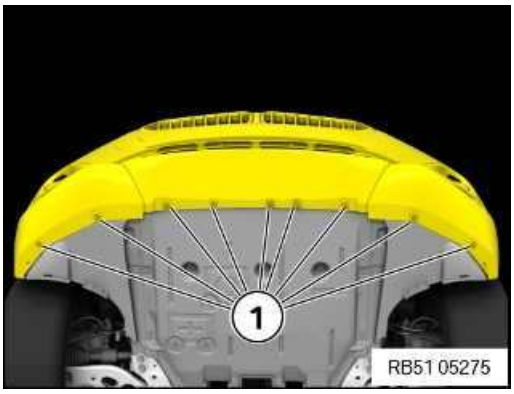
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm

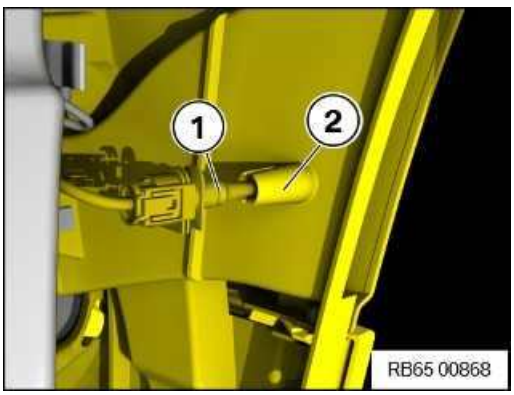


- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

19 – Install temperature sensor



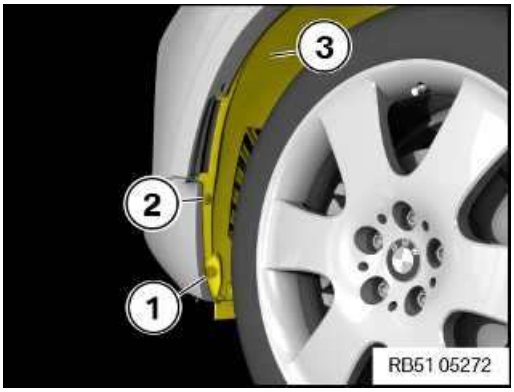
- Clip temperature sensor (1) into the front bumper panel (2).

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20 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Partially install the front wheel arch cover**

- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

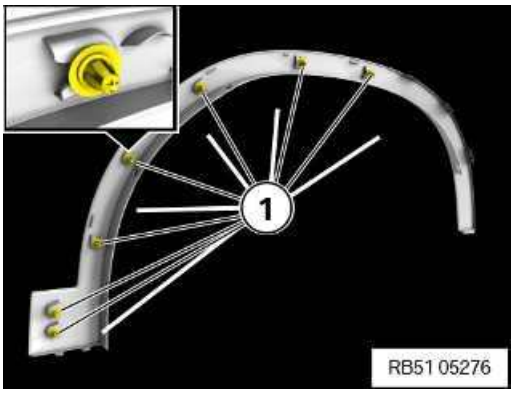
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

21 – Partially install both front wheel arch trims

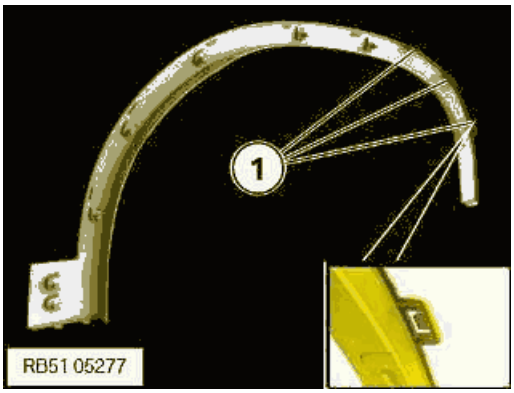
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partly install the front wheel arch trim**

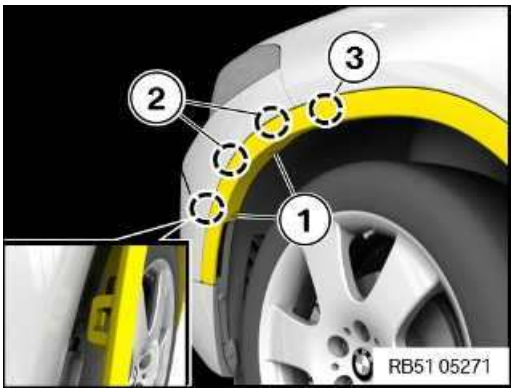


- Check clips (1) for damage, and replace if necessary.



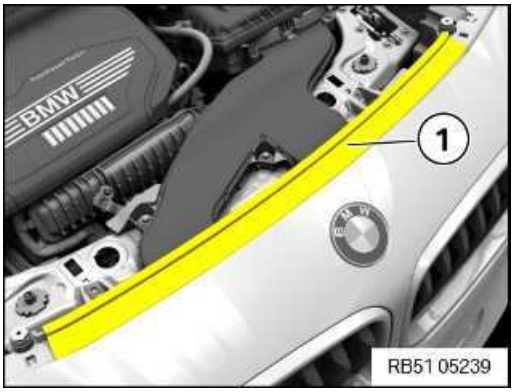
- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.

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- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

22 – Install the center front bonnet seal



- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

23 – Install both bonnet seals on the side

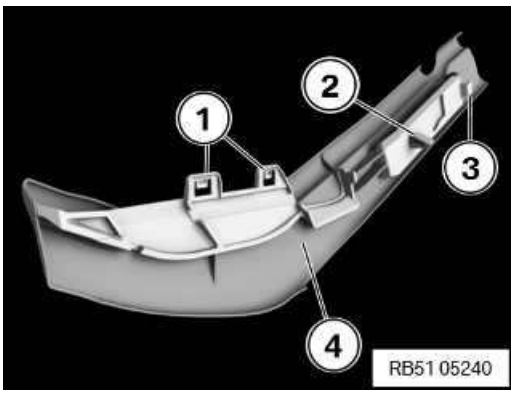
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check

- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.



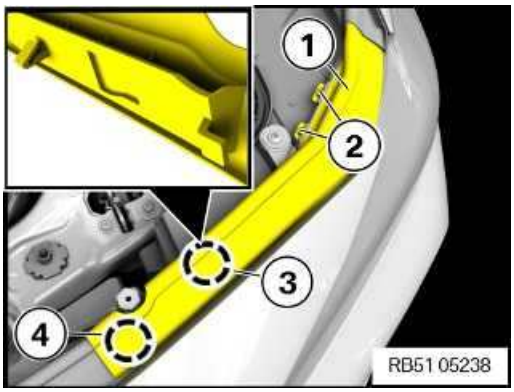
Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).

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- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

Additional Information

Overview of Tightening Torques

Bumper panel to headlight — Used in step 18

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

Bumper panel to air duct — Used in step 18

Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel — Used in step 18

Screw TS5X35		Tightening torque	3 Nm

Front bumper panel to underbody panelling — Used in step 18

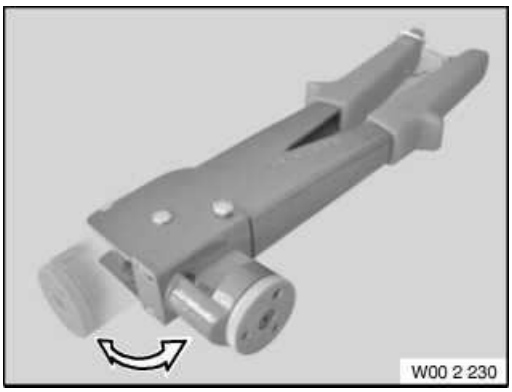
Thermoplastic hexagon screw		Tightening torque	2,5 Nm

Front wheel arch cover to front bumper panel — Used in step 20

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common — Used in step 20 21

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 11 184 Replace ornamental grille in front bumper panel (left or right side)

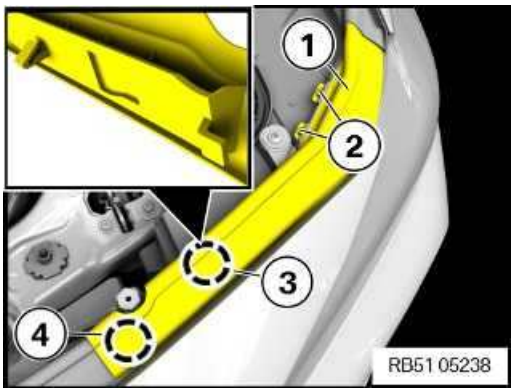
PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

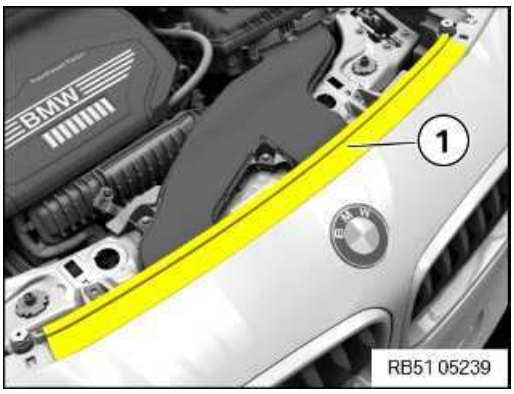
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

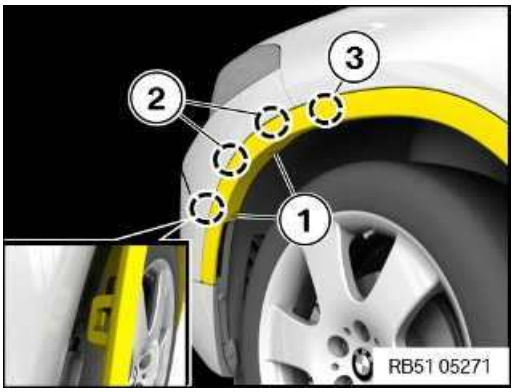
3 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing the front wheel arch trim**

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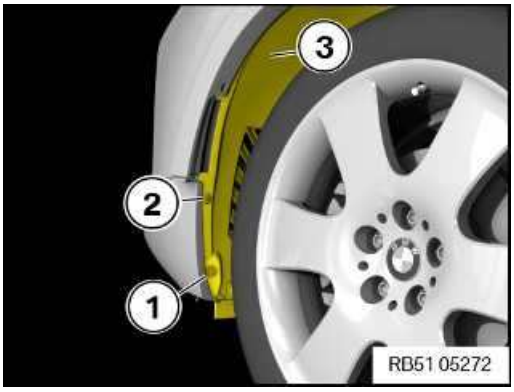
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

4 – Partially remove both front wheel arch covers

NOTICE

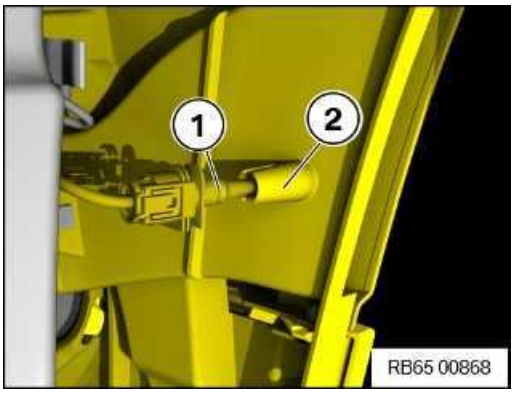
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



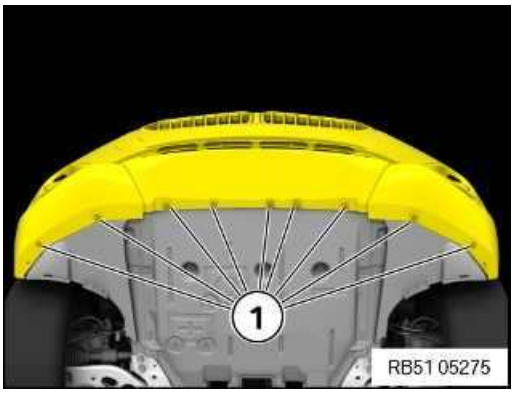
- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

5 – Remove temperature sensor



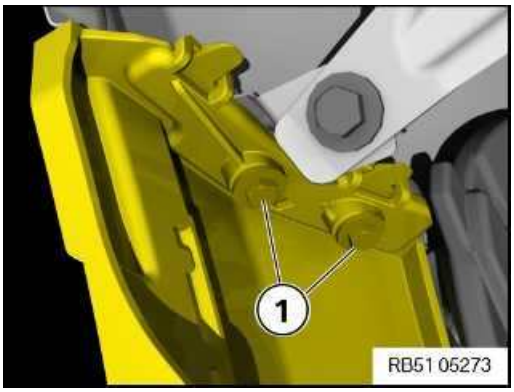
- Unclip temperature sensor (1) from front bumper panel (2).

6 – Remove front bumper panel



- Loosen screws (1).

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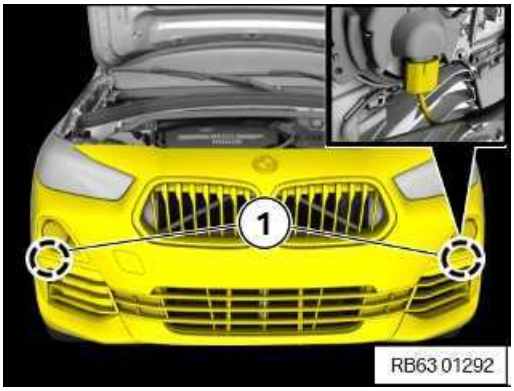
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).



- Loosen screws (1).
- Loosen screws (2).

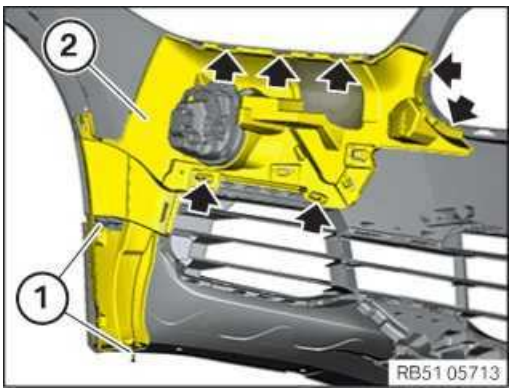


- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

7 – Remove the holder for the fog light

NOTICE

Description is for left component only. Procedure on the right side is identical.



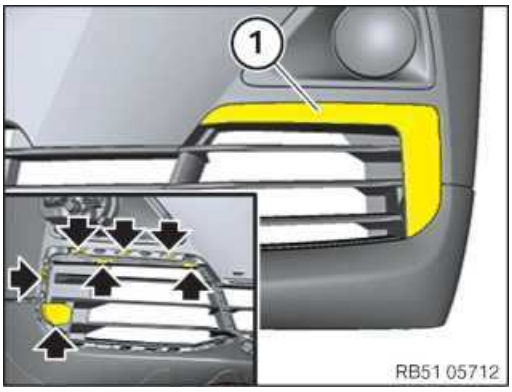
- Loosen the expanding rivet (1).
- Release holder for fog light (2) from latch mechanisms (arrows) and remove.

8 – Remove the side trim

NOTICE

Description is for left component only. Procedure on the right side is identical.

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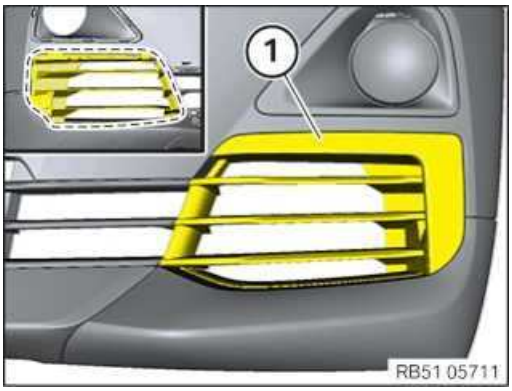
- Detach the side trim (1) at the latch mechanisms (arrows) and remove it to the front.

MAIN WORK

9 – Remove ornamental side grille

NOTICE

Description is for left component only. Procedure on the right side is identical.

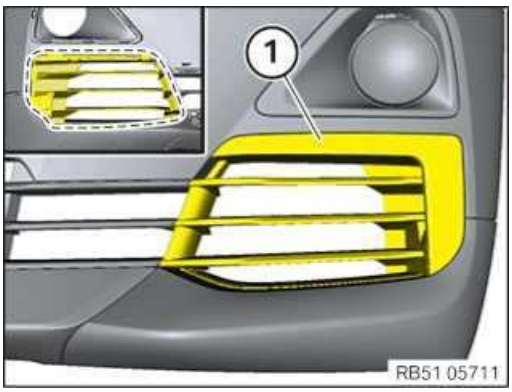


- Release the side ornamental grille (1) along the dotted lines from the latch mechanisms and remove towards the front.

10 – Install the side ornamental grille

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Install the side ornamental grille (1) and engage it along the dashed line at the latch mechanisms.

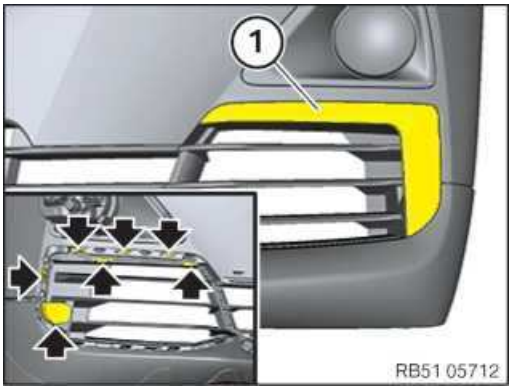
POSTPROCESSES

11 – Install trim at side

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NOTICE

Description is for left component only. Procedure on the right side is identical.

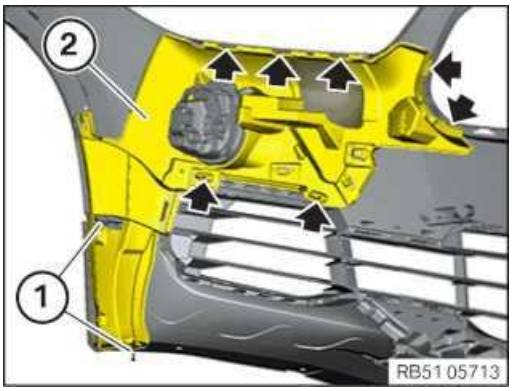


- Install trim (1) at side and lock in the latch mechanisms (arrows).

12 – Install the holder for the fog light

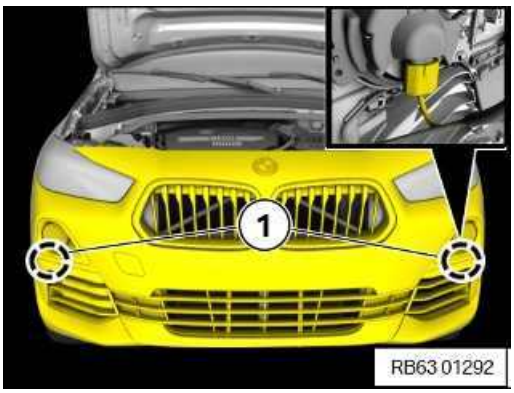
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Install the holder for the fog light (2) and lock at the latch mechanisms (arrows).
- Mount the expanding rivets (1).

13 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.

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- Tighten the screws (1).

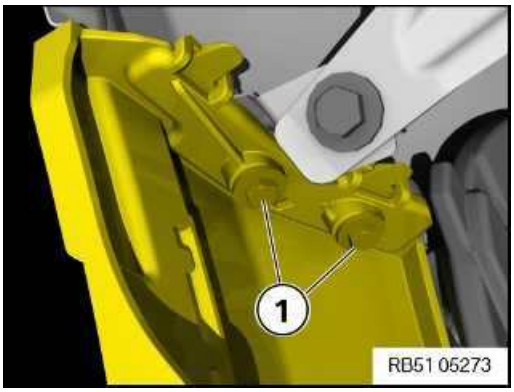
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



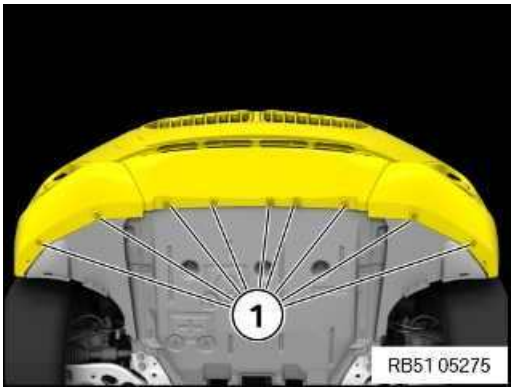
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm

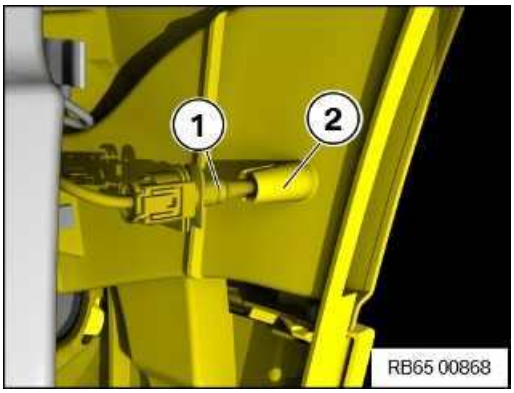


- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

14 – Install temperature sensor



- Clip temperature sensor (1) into the front bumper panel (2).

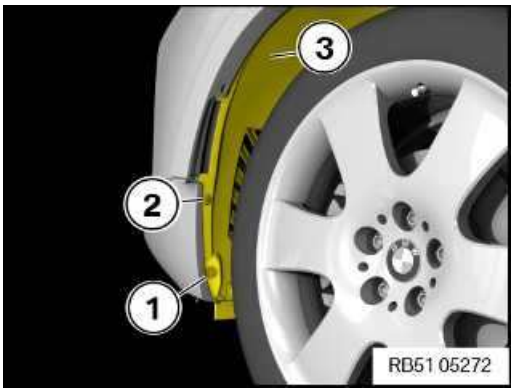
15 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially install the front wheel arch cover**

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- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

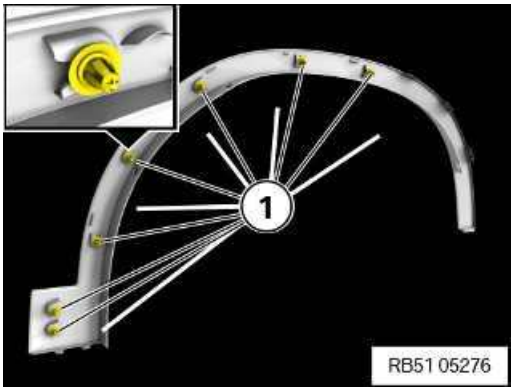
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

16 – Partially install both front wheel arch trims

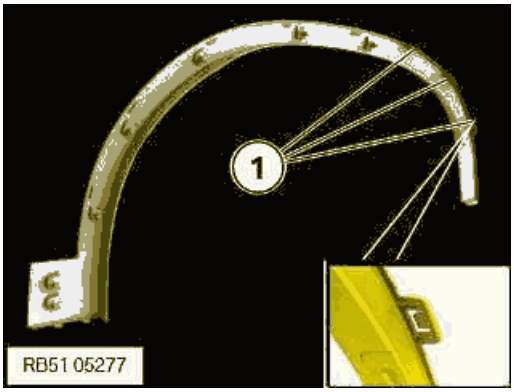
NOTICE

Description is for left component only. Procedure on the right side is identical.

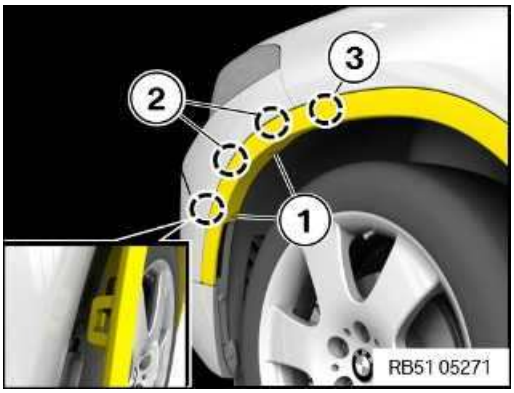
▶ **Partly install the front wheel arch trim**



- Check clips (1) for damage, and replace if necessary.



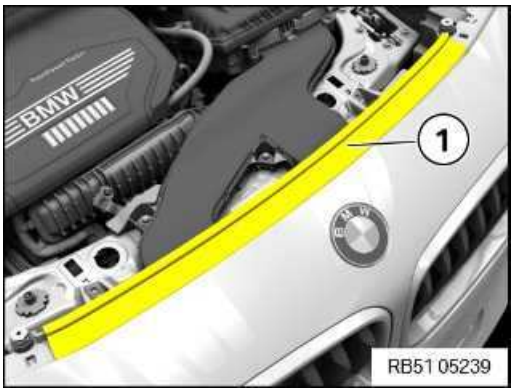
- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

17 – Install the center front bonnet seal

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- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

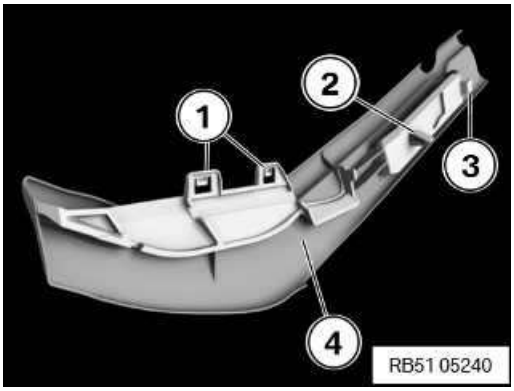
18 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



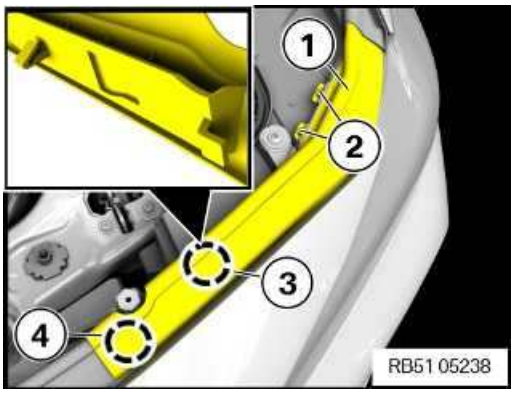
- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

Additional Information

Overview of Tightening Torques

Bumper panel to headlight Used in step 13

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

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Bumper panel to air duct

Used in step 13

Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel

Used in step 13

Screw TS5X35		Tightening torque	3 Nm

Front bumper panel to underbody panelling

Used in step 13

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

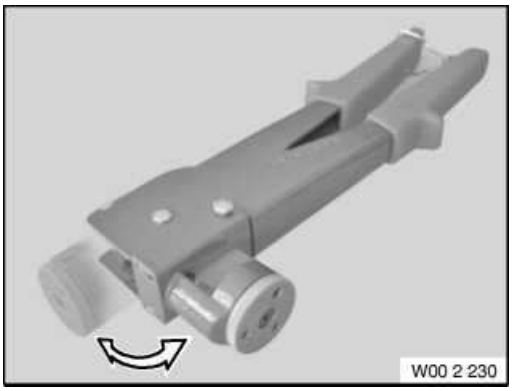
Front wheel arch cover to front bumper panel

Used in step 15

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common

Used in step 15 16

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 11 781 Replace the deformation element on the bottom right

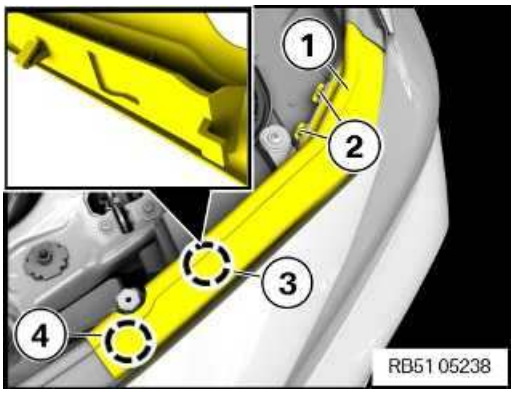
PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

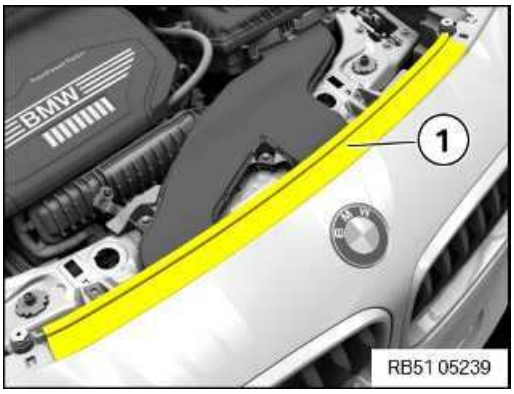
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

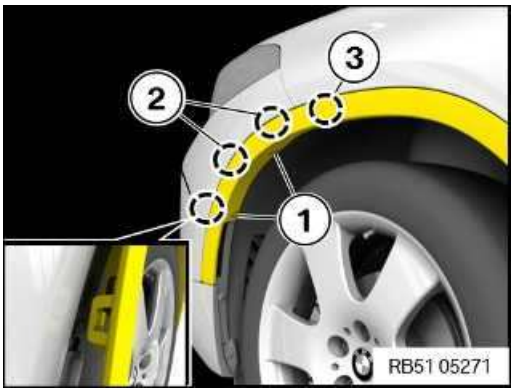
3 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing the front wheel arch trim**

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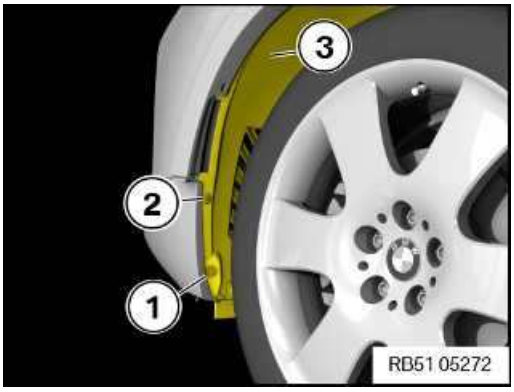
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

4 – Partially remove both front wheel arch covers

NOTICE

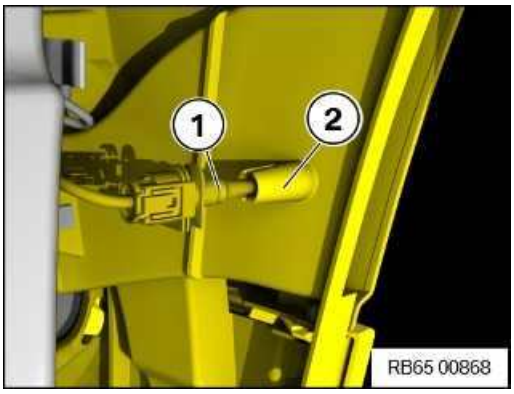
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



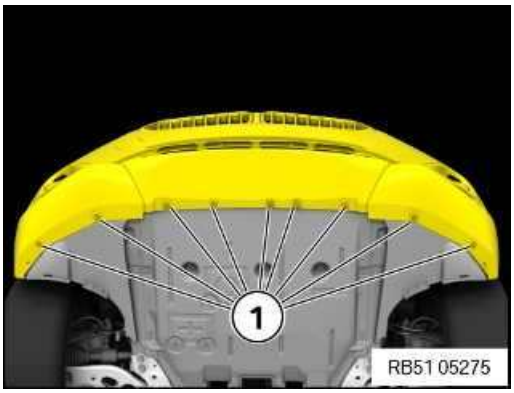
- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

5 – Remove temperature sensor



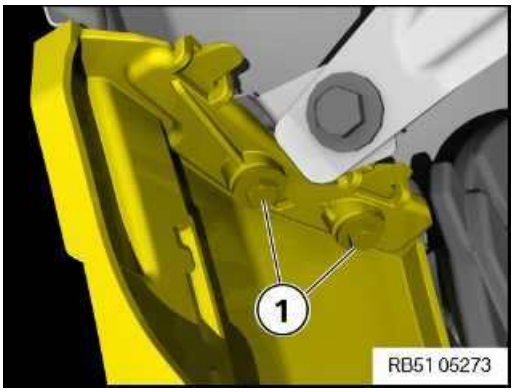
- Unclip temperature sensor (1) from front bumper panel (2).

6 – Remove front bumper panel



- Loosen screws (1).

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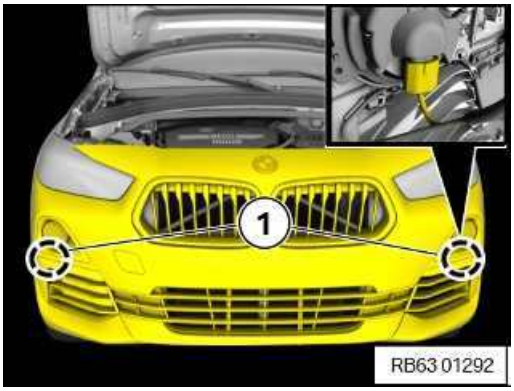
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).

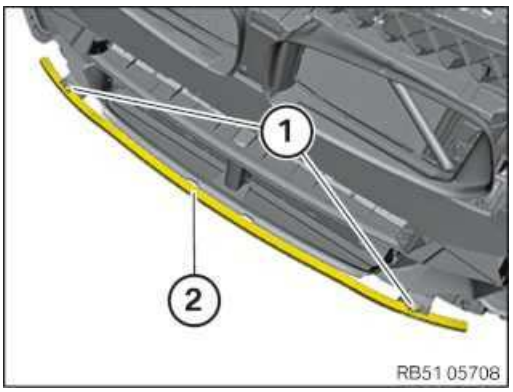


- Loosen screws (1).
- Loosen screws (2).



- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

7 – Removing the support for the lower front bumper panel

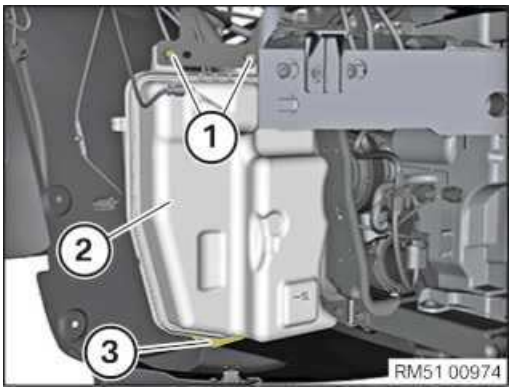


- Loosen screws (1).
- Guide out and remove the support for the bumper panel (2).

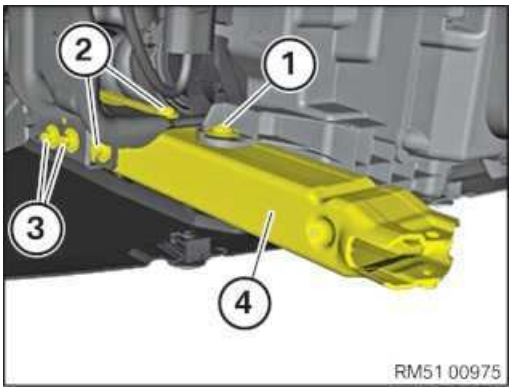
MAIN WORK

8 – Remove the lower right deformation element

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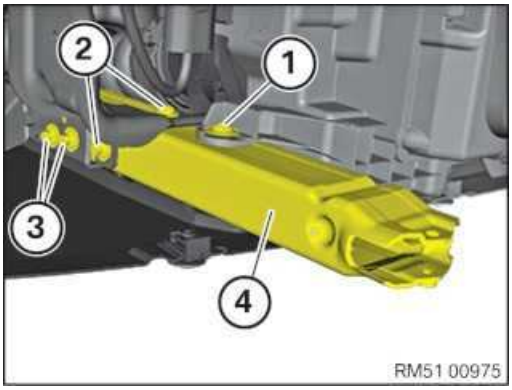


- Loosen screws (1).
- Detach the washer fluid reservoir (2) from the holder (3).
- Set the washer fluid reservoir (2) slightly to the side.



- Loosen screws (1), (2) and (3).
- Remove the deformation element (4).

9 – Install the lower right deformation element



- Insert the deformation element (4).
- Tighten down screws (3).

Deformation element to front axle support adapter

Screw		Tightening torque	11,8 Nm

- Tighten down screws (2).

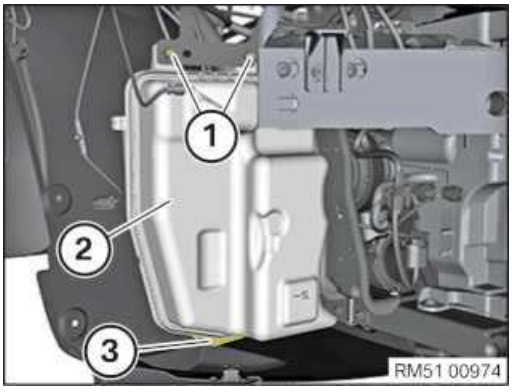
Vertical strut to deformation element

Flat-head screw M6x20		Tightening torque	11,8 Nm
Hexagon screw		Tightening torque	11,8 Nm

- Tighten the screws (1).

Air duct to deformation element, bottom

M6x20 screw	Replace screws	Tightening torque	8 Nm



- Insert the washer fluid reservoir (2) in the holder (3).
- Tighten the screws (1).

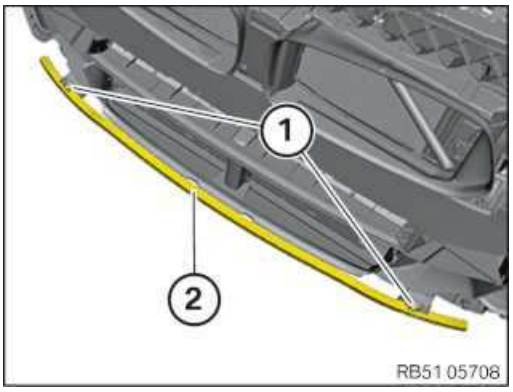
Washer fluid reservoir to holder

M6x20 screw		Tightening torque	8 Nm

POSTPROCESSES

10 – Installing the support for the lower front bumper panel

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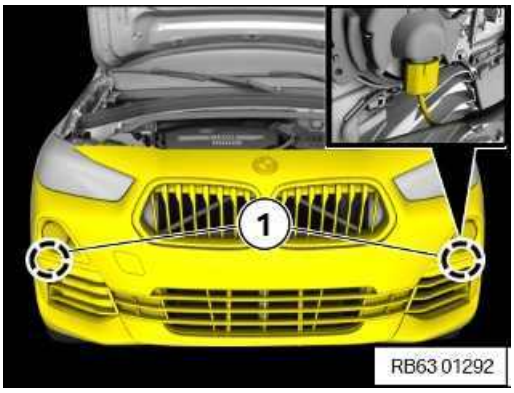


- Thread in support for the bumper panel (2).
- Tighten the screws (1).

Support for the front bottom bumper panel to deformation element

M6x30 screw		Tightening torque	8 Nm

11 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.



- Tighten the screws (1).

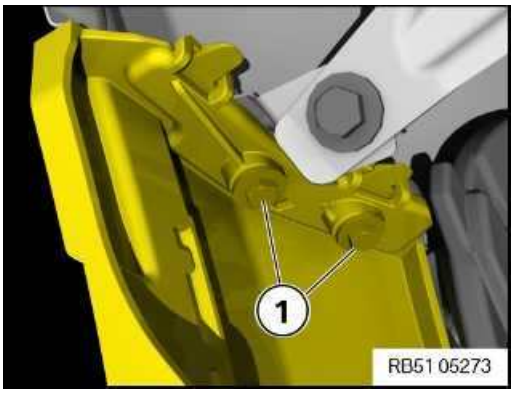
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



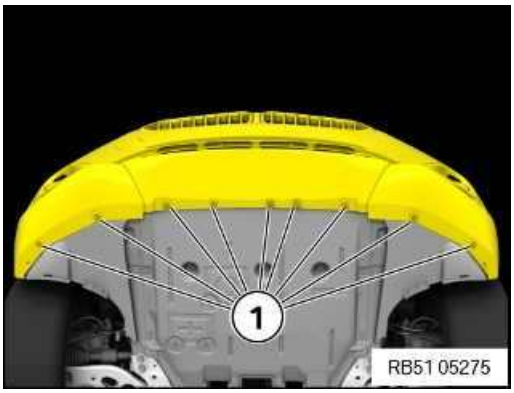
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm



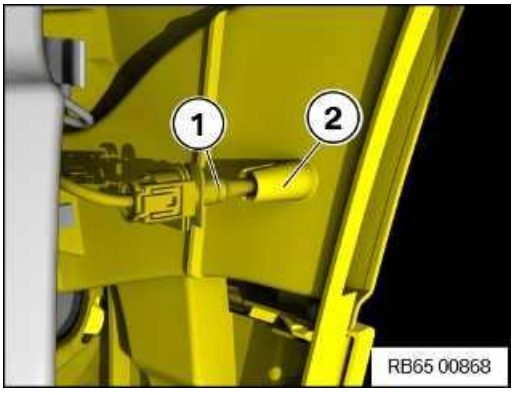
- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

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12 – Install temperature sensor



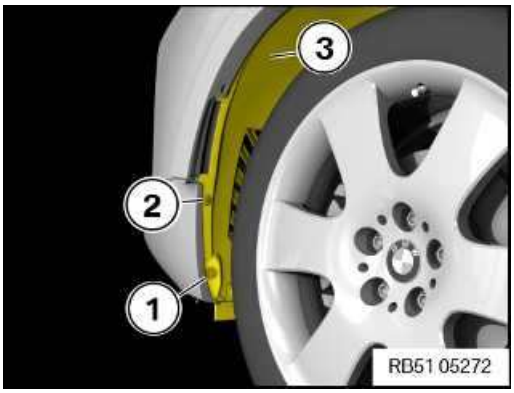
- Clip temperature sensor (1) into the front bumper panel (2).

13 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially install the front wheel arch cover**



- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

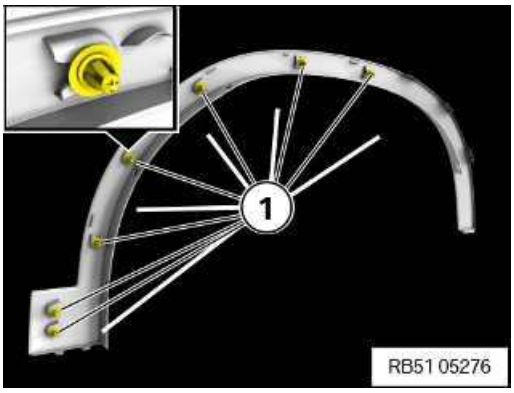
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

14 – Partially install both front wheel arch trims

NOTICE

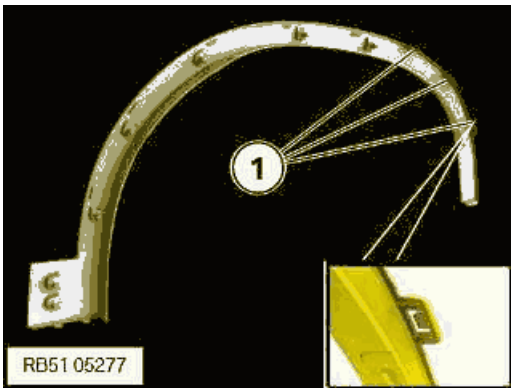
Description is for left component only. Procedure on the right side is identical.

▸ **Partly install the front wheel arch trim**

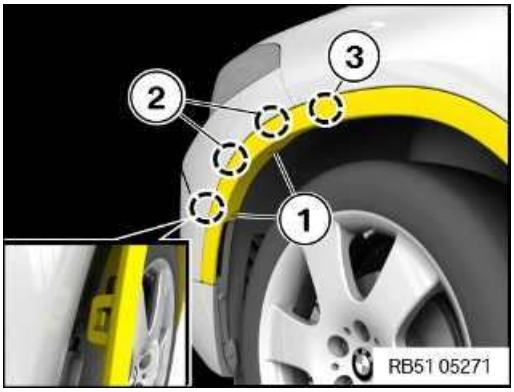


- Check clips (1) for damage, and replace if necessary.

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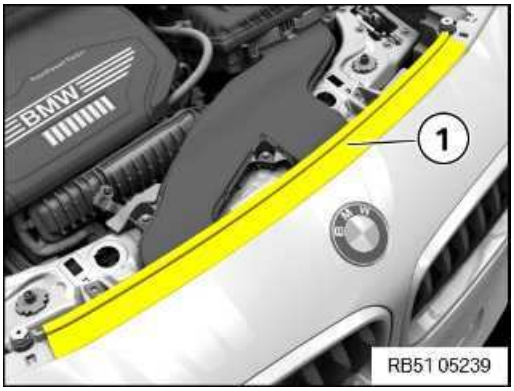


- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

15 – Install the center front bonnet seal



- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

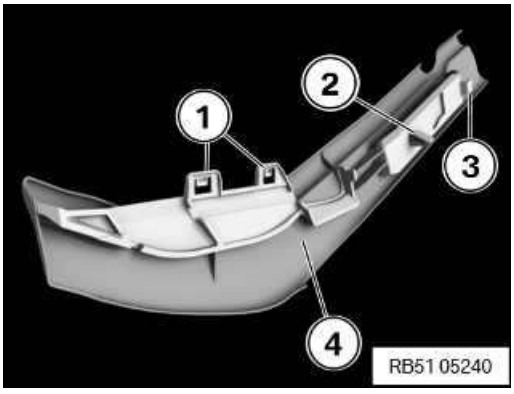
16 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

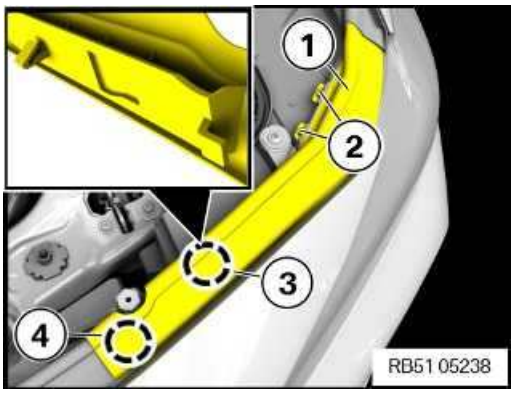
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Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

Additional Information

Overview of Tightening Torques

Deformation element to front axle support adapter — Used in step 9

Screw		Tightening torque	11,8 Nm

Vertical strut to deformation element — Used in step 9

Flat-head screw M6x20		Tightening torque	11,8 Nm
Hexagon screw		Tightening torque	11,8 Nm

Air duct to deformation element, bottom — Used in step 9

M6x20 screw	Replace screws	Tightening torque	8 Nm

Washer fluid reservoir to holder — Used in step 9

M6x20 screw		Tightening torque	8 Nm

Support for the front bottom bumper panel to deformation element — Used in step 10

M6x30 screw		Tightening torque	8 Nm

Bumper panel to headlight — Used in step 11

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

Bumper panel to air duct — Used in step 11

Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel — Used in step 11

Screw TS5X35		Tightening torque	3 Nm

Front bumper panel to underbody panelling — Used in step 11

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

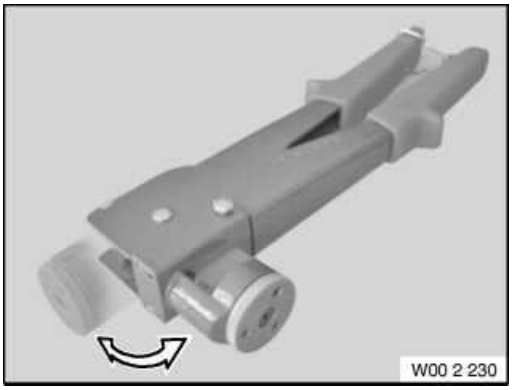
Front wheel arch cover to front bumper panel — Used in step 13

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

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Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common	Used in step 13 14
Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 11 780 Replacing the deformation element on the bottom left

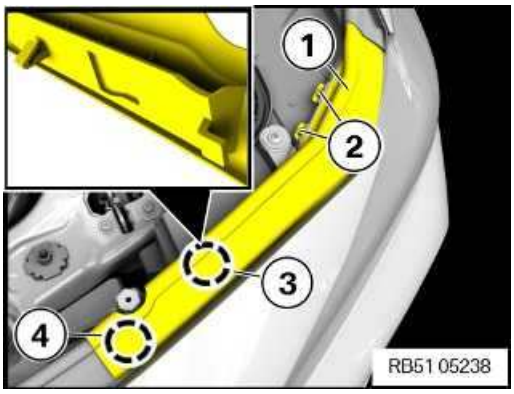
PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

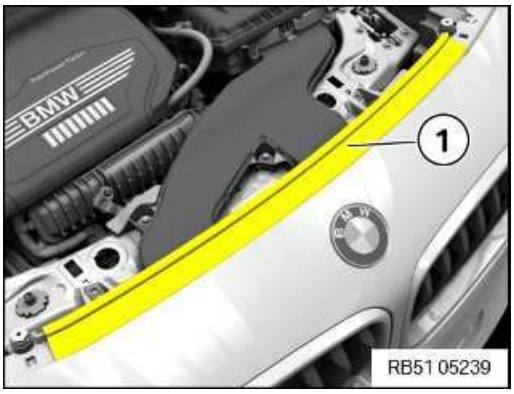
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

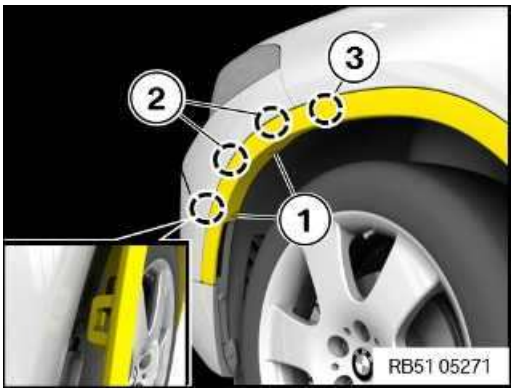
3 – Partially remove both front wheel arch trims

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing the front wheel arch trim**

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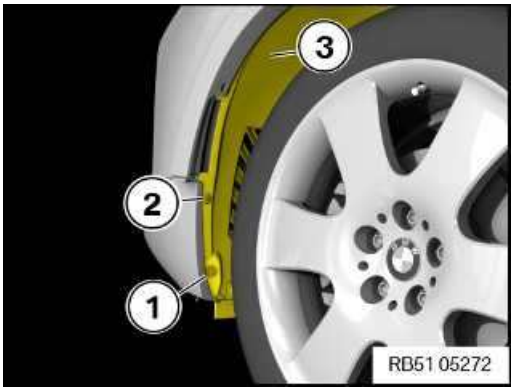
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

4 – Partially remove both front wheel arch covers

NOTICE

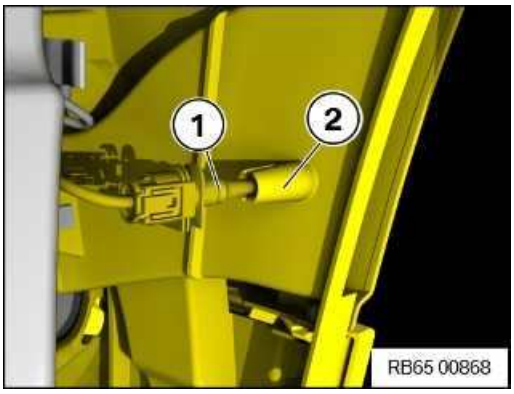
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



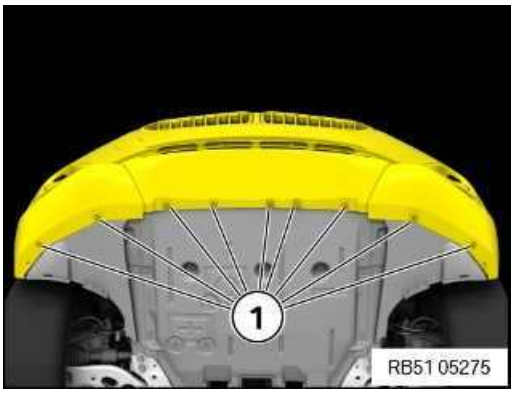
- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

5 – Remove temperature sensor



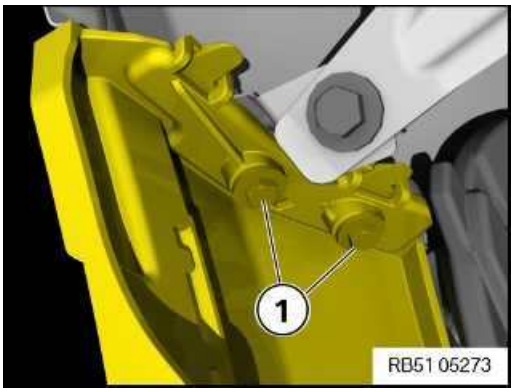
- Unclip temperature sensor (1) from front bumper panel (2).

6 – Remove front bumper panel



- Loosen screws (1).

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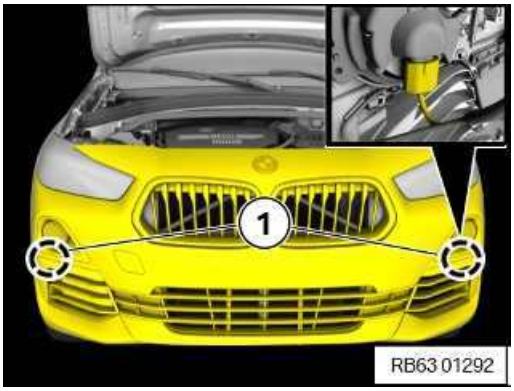
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).

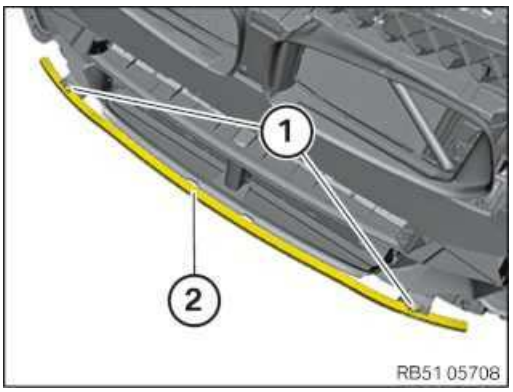


- Loosen screws (1).
- Loosen screws (2).



- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

7 – Removing the support for the lower front bumper panel

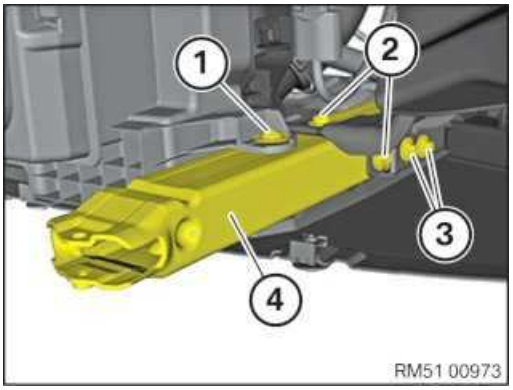


- Loosen screws (1).
- Guide out and remove the support for the bumper panel (2).

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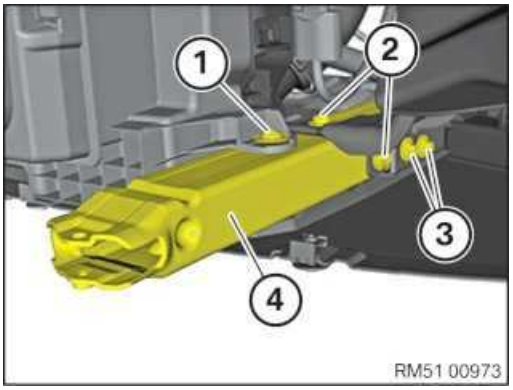
MAIN WORK

8 – Remove the lower left deformation element



- Loosen screws (1), (2) and (3).
- Remove the deformation element (4).

9 – Install the lower left deformation element



- Insert the deformation element (4).
- Tighten down screws (3).

Deformation element to front axle support adapter

Screw		Tightening torque	11,8 Nm

- Tighten down screws (2).

Vertical strut to deformation element

Flat-head screw M6x20		Tightening torque	11,8 Nm
Hexagon screw		Tightening torque	11,8 Nm

- Tighten the screws (1).

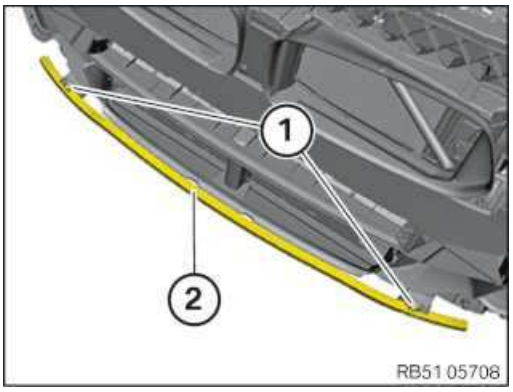
Air duct to deformation element, bottom

M6x20 screw	Replace screws	Tightening torque	8 Nm

POSTPROCESSES

10 – Installing the support for the lower front bumper panel

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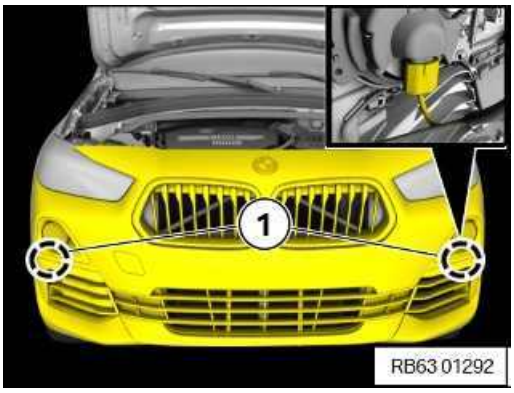


- Thread in support for the bumper panel (2).
- Tighten the screws (1).

Support for the front bottom bumper panel to deformation element

M6x30 screw		Tightening torque	8 Nm

11 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.



- Tighten the screws (1).

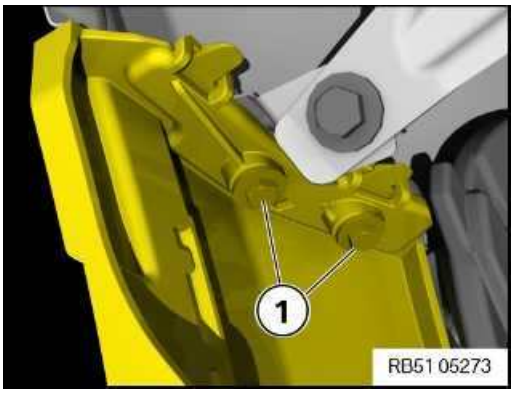
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



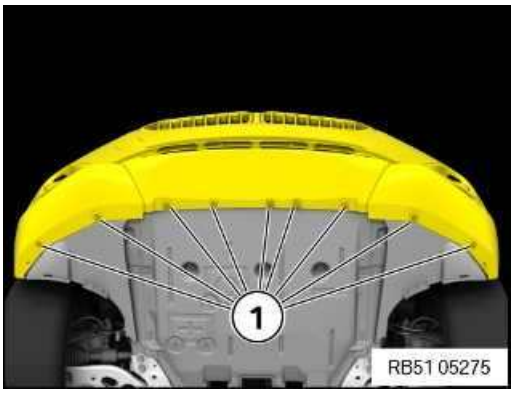
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm



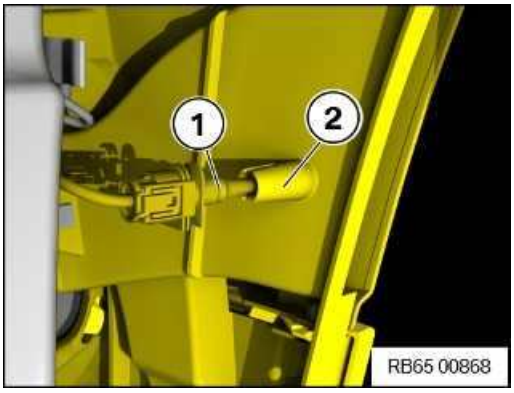
- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

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12 – Install temperature sensor



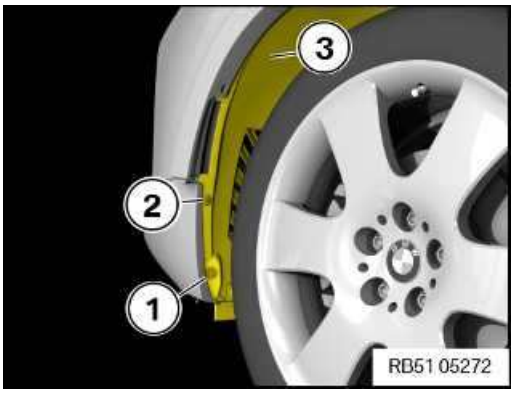
- Clip temperature sensor (1) into the front bumper panel (2).

13 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially install the front wheel arch cover**



- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

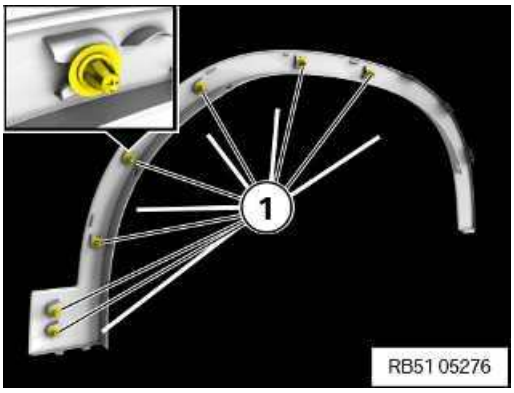
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

14 – Partially install both front wheel arch trims

NOTICE

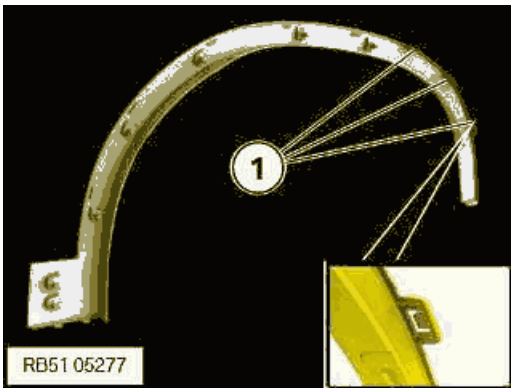
Description is for left component only. Procedure on the right side is identical.

▸ **Partly install the front wheel arch trim**

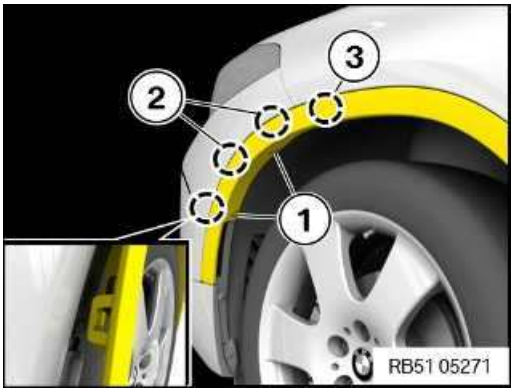


- Check clips (1) for damage, and replace if necessary.

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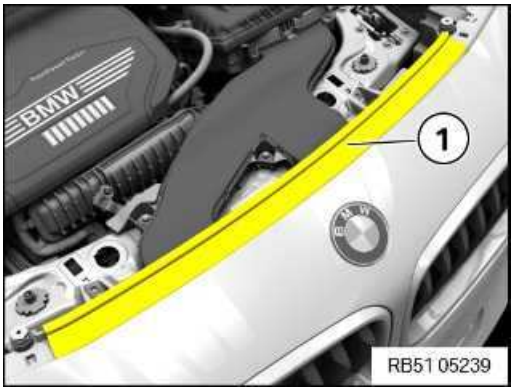


- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

15 – Install the center front bonnet seal



- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

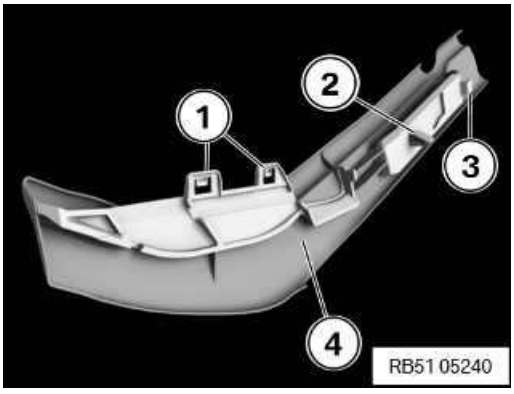
16 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

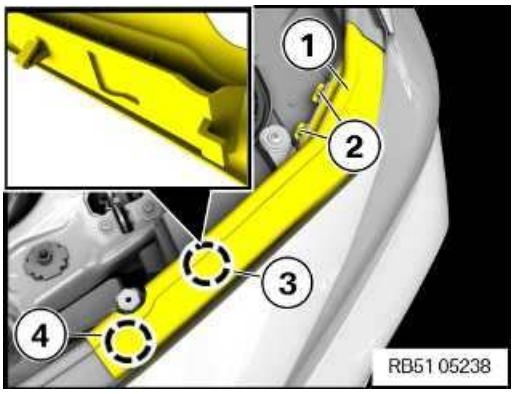
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Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

Additional Information

Overview of Tightening Torques

Deformation element to front axle support adapter			Used in step 9
Screw		Tightening torque	11,8 Nm

Vertical strut to deformation element			Used in step 9
Flat-head screw M6x20		Tightening torque	11,8 Nm
Hexagon screw		Tightening torque	11,8 Nm

Air duct to deformation element, bottom			Used in step 9
M6x20 screw	Replace screws	Tightening torque	8 Nm

Support for the front bottom bumper panel to deformation element			Used in step 10
M6x30 screw		Tightening torque	8 Nm

Bumper panel to headlight			Used in step 11
Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

Bumper panel to air duct			Used in step 11
Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel			Used in step 11
Screw TS5X35		Tightening torque	3 Nm

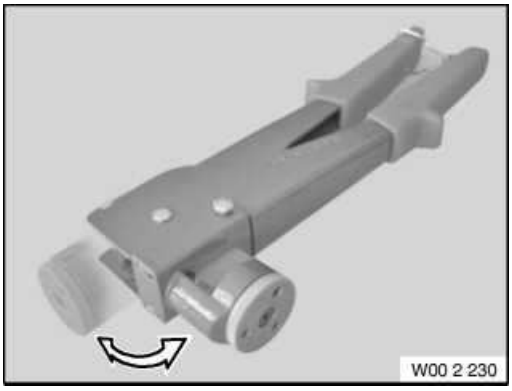
Front bumper panel to underbody panelling			Used in step 11
Thermoplastic hexagon screw		Tightening torque	2,5 Nm

Front wheel arch cover to front bumper panel			Used in step 13
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

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0 496 521 (00 2 230) Pliers



Common

Used in step 13 14

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 11 158 Replacing the number plate baseplate for the number plate

WARNING

Malfunction of the sensors of the driver assistance systems.

Incorrect assembly of the number plate leads to a malfunction of the sensors of the driver assistance systems.

- Fix number plate and number plate baseplate only according to the dimensions specified in the repair instructions.
- Secure number plate and number plate baseplate on the bumper panel **without pre-drilling** , otherwise there is a risk of damage to the underlying cables.
- Only use number plate baseplates that have been approved for the vehicle type.

CAUTION

Laser beam.

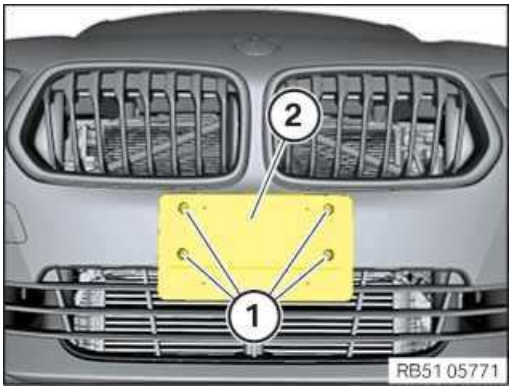
Danger of injury!

- Do not look into the laser beam.

1 – Remove the number plate baseplate for the number plate

TECHNICAL INFORMATION

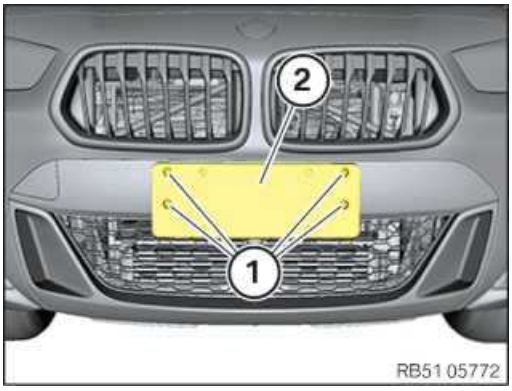
In the European version with basic bumper panel, the number plate is installed without number plate baseplate.



- **For US version and Japanese version:**

  Loosen screws (1).

  Detach and remove the number plate baseplate (2) downward from the guides.



- **For Chinese version:**

  Loosen screws (1).

  Detach and remove the number plate baseplate (2) downward from the guides.

2 – Install the number plate baseplate for the number plate

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WARNING

Malfunction of the sensors of the driver assistance systems.

Incorrect assembly of the number plate leads to a malfunction of the sensors of the driver assistance systems.

- Fix number plate and number plate baseplate only according to the dimensions specified in the repair instructions.
- Secure number plate and number plate baseplate on the bumper panel **without pre-drilling** , otherwise there is a risk of damage to the underlying cables.
- Only use number plate baseplates that have been approved for the vehicle type.

TECHNICAL INFORMATION

The number plate must be precisely mounted on the number plate baseplate and must not protrude on the underside.
The number plate carrier must not be installed on the front bumper.



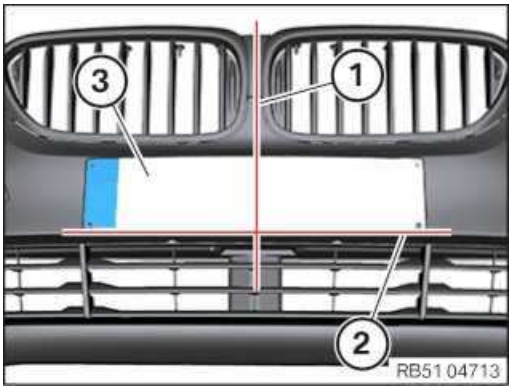
CAUTION

Laser beam.

Danger of injury!

- Do not look into the laser beam.

- Park the vehicle and the special tool **2 407 566** on a flat and even surface.
- Mount the laser on the tripod.
- Switch on laser (Position without automatic level).
- Activate laser horizontally and vertically.



TECHNICAL INFORMATION

In the European version with basic bumper panel, the number plate is installed without number plate baseplate.

- **With European version with bumper panel (Basic):**

  Mark the centre of the number plate (3).

  Position and centre align the special tool for the vehicle.

  Align the vertical laser beam (1) with the centre of the vehicle (e.g. BMW badge).

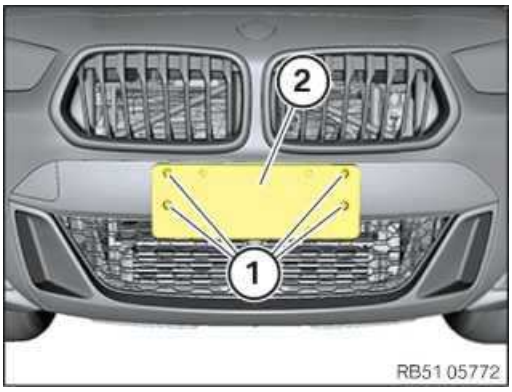
  Align the horizontal laser beam (2) at two symmetrical corners on the vehicle.

  Align the horizontal laser beam (2) with the edge of the bumper panel.

  Align the number plate (3) on both laser beams (1) and (2) and mark the attachment points in all four corners.

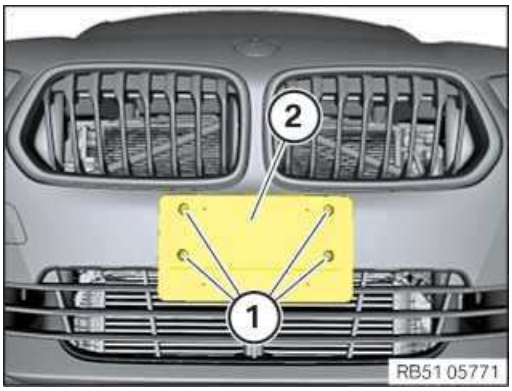
  Screw down the number plate (3) at the marked attachment points **without pre-drilling**. Use only short screws (TS 5x13) for this purpose.

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- **For Chinese version:**
- Attach the number plate baseplate (2) with the guides from the bottom in the bumper panel.
- Align the number plate baseplate (2) on the bumper panel.

  Mark attachment point.
- Screw in the bolts (1)**without pre-drilling** and tighten.



- **For US version and Japanese version:**

  Attach the number plate baseplate (2) with the guides from the bottom in the bumper panel.

  Align the number plate baseplate (2) on the bumper panel.

  Mark attachment point.
- Screw in the bolts (1)**without pre-drilling** and tighten.

Additional Information

Overview of Tightening Torques

Overview of Special Tools

2 407 566 Laser



Common	Used in step 2
Usage	For aligning a number plate or a support for a number plate on the vehicle (front bumper). Delivery specification 1 x Kreuz-laser and 1 x tripod.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	
SI-Number	01 05 15 (235)

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51 00 ... Overview of consumables (Electronic Parts Catalogue)

Designation, repair instructions	Designation, Electronic Parts Catalogue	Part number, Electronic Parts Catalogue	Remarks
Cleaning agent R2	Cleaning agent R2	83 19 0 417 324	500 ml
Lubricants G14	Lubricants G14	83 23 2 360 412	900 ml / Notes
Sika Activator 205	Aktivator 205	83 19 0 030 155	250 ml
Yellow plastic adhesive tape	Adhesive tape	83 19 9 410 979	A = 66 mm; B = 50 mm
Double-sided adhesive tape	Adhesive tape	54 11 2 290 978	L = 50 mm/W = 12 mm
Masking tape	Masking tape	81 22 9 400 181	L = 50 mm / W = 19 mm
Masking tape	Masking tape	81 22 9 400 388	L = 50 mm / W = 30 mm
Eraser disk	Scotch Brite eraser disk	51 91 0 402 946	with shaft
Cutting cord	Cutting cord	81 43 2 344 272	Notes
Adhesive set K6	Adhesive set K6	83 19 2 317 925	
Window glass adhesive	Window glass adhesive, cold, 1 hour	83 19 2 289 286	
Profile rubber adhesive		83 19 2 232 322	
Set of felt pads	Set of felt pads	51 45 2 353 024	

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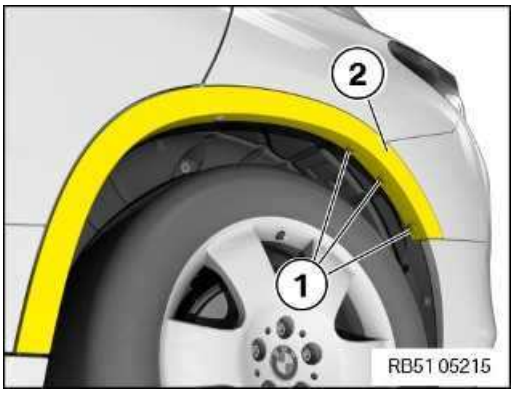
51 12 156 Removing and installing rear bumper panel

PRELIMINARY WORK

1 – Partially removing the rear wheel arch trim

NOTICE

Description is for left component only. Procedure on the right side is identical.



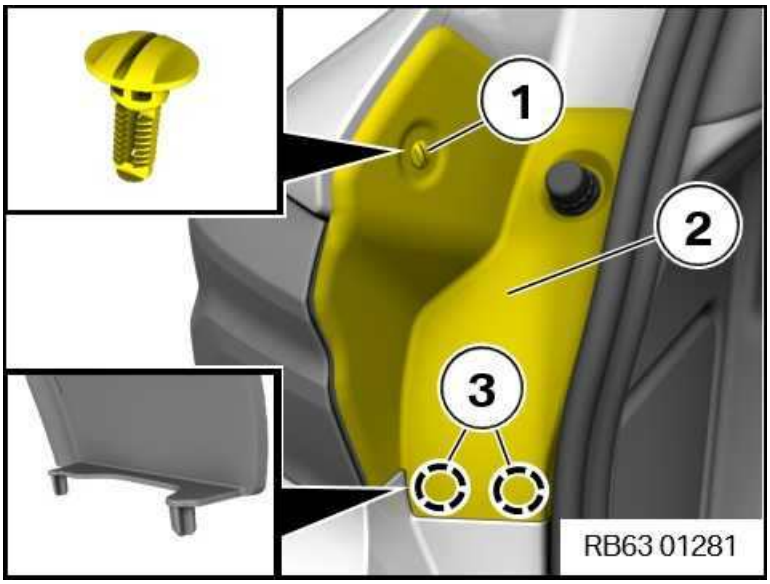
- Remove the expanding rivets (1) and press the wheel arch trim (2) to one side.

2 – Removing both trims for water channel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Removing trim for water channel**



- Detach rotary clip (1).
- Feed out and remove trim for water channel (2) from guides (3).

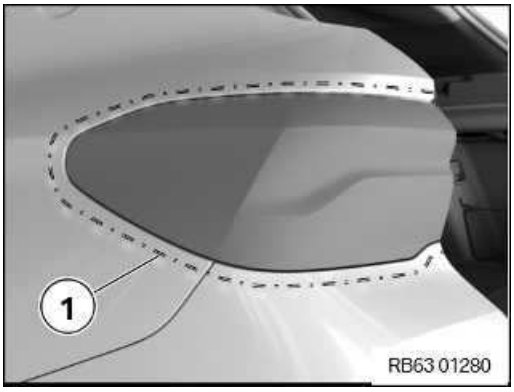
3 – Remove both rear lights from the side panel

NOTICE

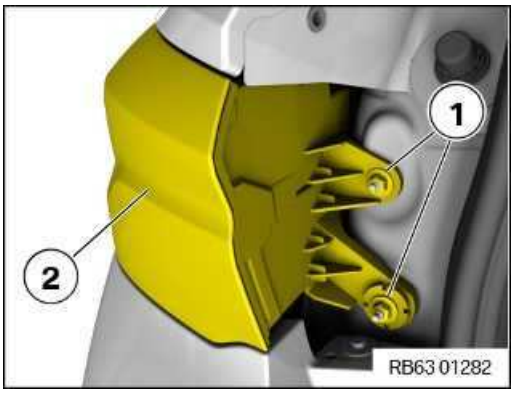
Description is for left component only. Procedure on the right side is identical.

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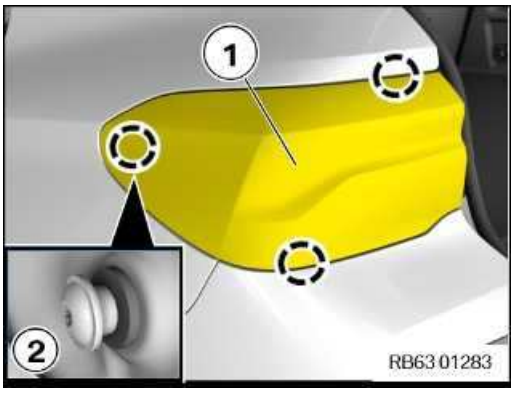
▶ **Remove the rear light on the side panel**



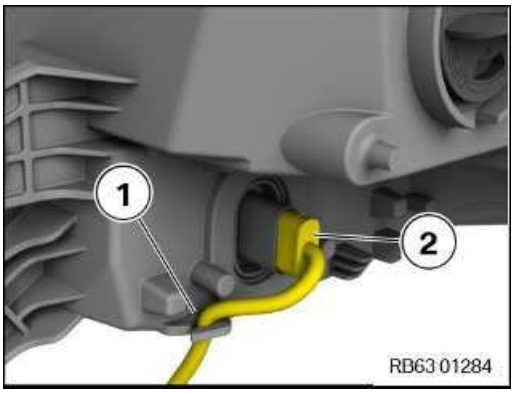
- Mask the body in area (1) with plastic adhesive tape.



- Loosen the nuts (1) on the rear light (2).



- Remove the rear light (1) from the guides (2) towards the rear.

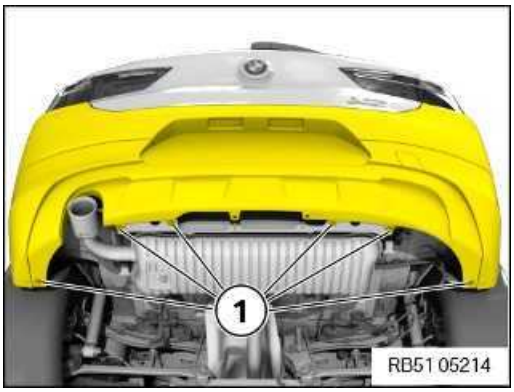


- Detach cable from guide (1).
- Unlock and disconnect the plug connection (2) and remove the rear light .

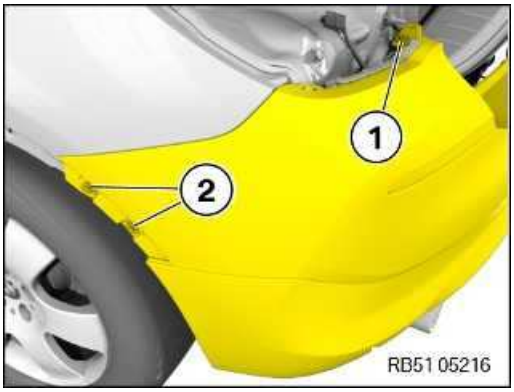
MAIN WORK

4 – Remove rear bumper panel

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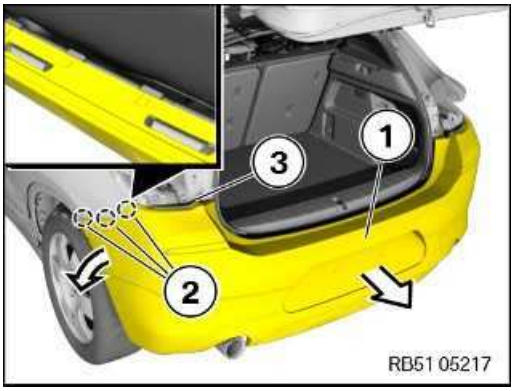
- Loosen screws (1).



NOTICE

Perform the operations on the left and right side.

- Loosen screws (1) and (2).

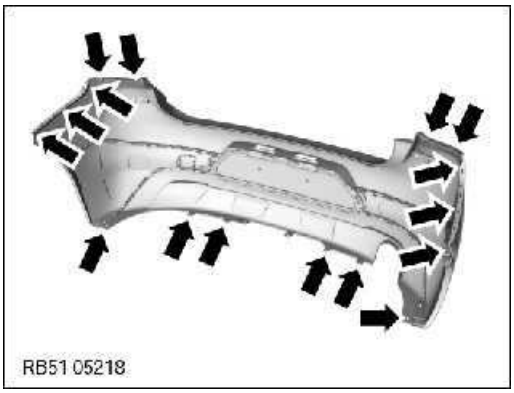


NOTICE

Perform the operations on the left and right side.

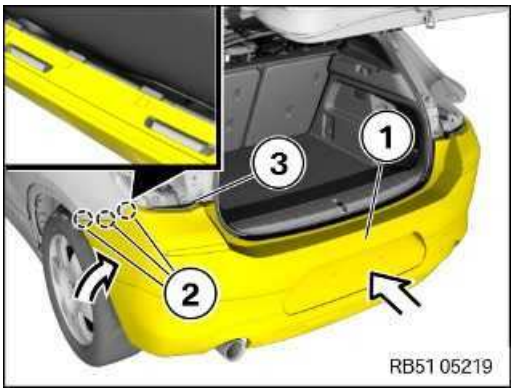
- Carefully detach side latch mechanisms(2) in direction of arrow.
- Carefully detach latch mechanisms in area (3) to the rear.
- Pull the bumper panel (1) straight toward the rear in direction of arrow with an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

5 – Install rear bumper panel



- Check if the latch mechanisms and the guide (arrows) are damaged or missing and replace the bumper panel where required.

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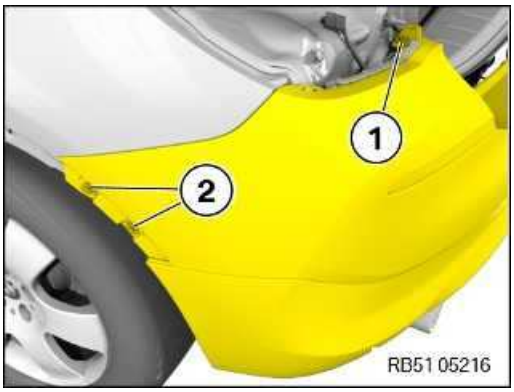


- Position the bumper panel (1) straight with the help of another person.
- Connect all connectors and lock.

NOTICE

Perform the operations on the left and right side.

- Engage the latch mechanisms in the area (3).
- Engage the side latch mechanisms (2) in the direction of the arrow.



NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

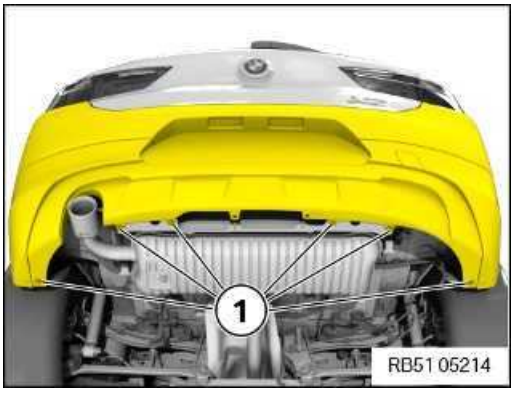
Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

- Tighten down screws (2).

Rear bumper panel to side wall

Screw for thermoplastic plastic		Tightening torque	4,6 Nm



- Tighten the screws (1).

Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

POSTPROCESSES

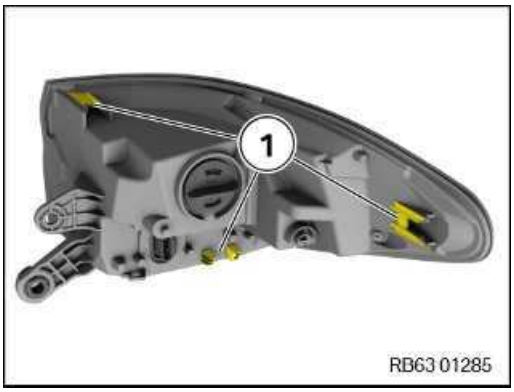
6 – Install both rear lights on the side panel

NOTICE

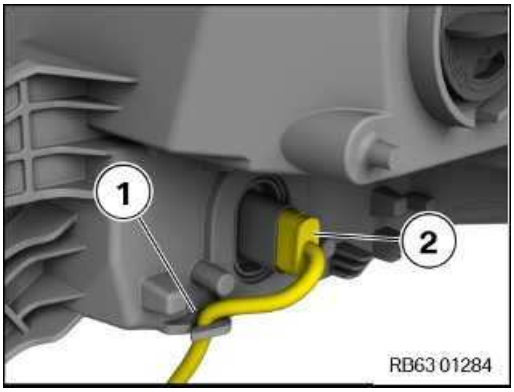
Description is for left component only. Procedure on the right side is identical.

▸ **Install the rear light on the side panel**

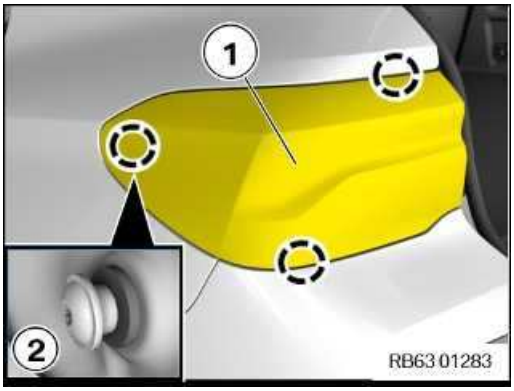
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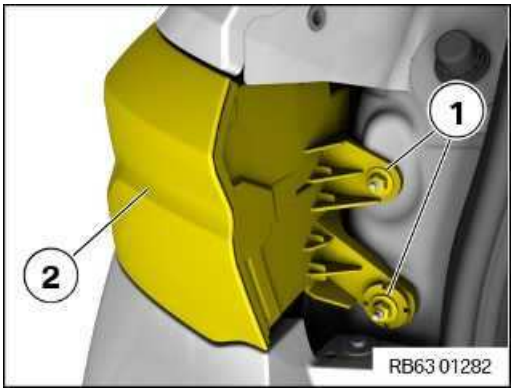
- Make sure that the guides (1) on the rear light are not damaged or missing.



- Connect connectors (2) and lock.
- Attach the cable in the guide (1).



- Position the rear light (1) in the side panel.
- Make sure the rear light (1) is fitted correctly in the guides (2).

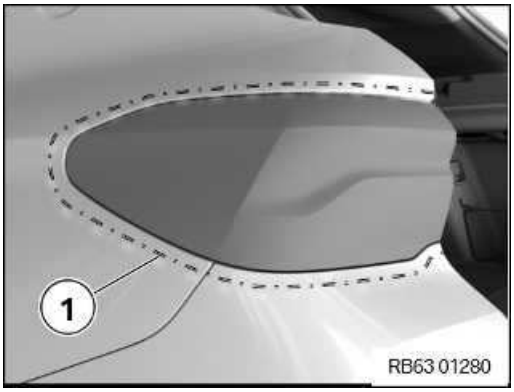


- Replace the nuts (1) on the rear light (2).

  Parts: Nuts
- Tighten nuts (1).

Side panel rear light to body

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm



- Pull off the plastic adhesive tape from the body in the area (1).

7 – Install both trim pieces for the water channel

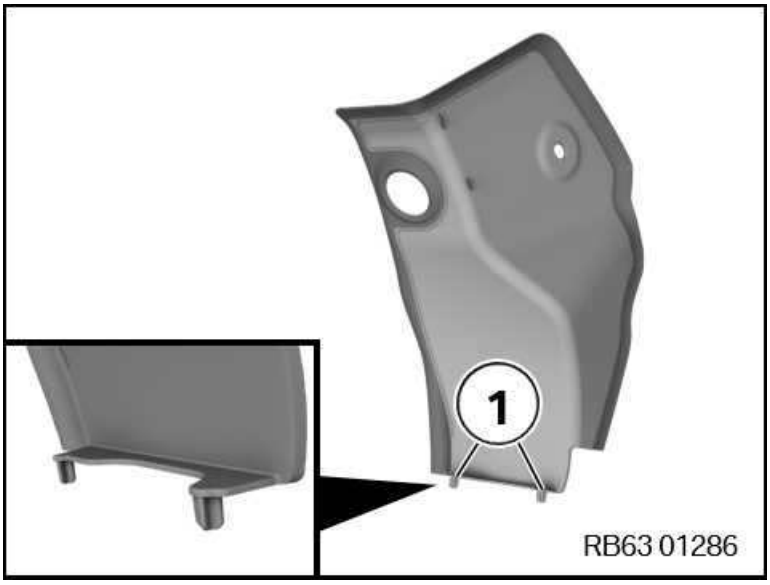
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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the water channel**

Check



- Check the guides (1) for damage.

Result

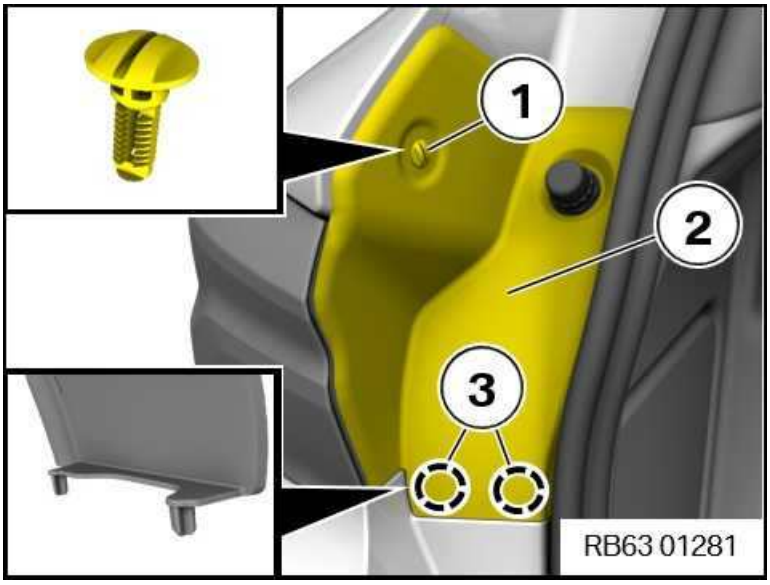
» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.



- Check rotary clip (1) for damage and, if necessary, replace it.



- Insert the trim for water channel (2) with guides (3).
- Fasten the rotary clip (1).

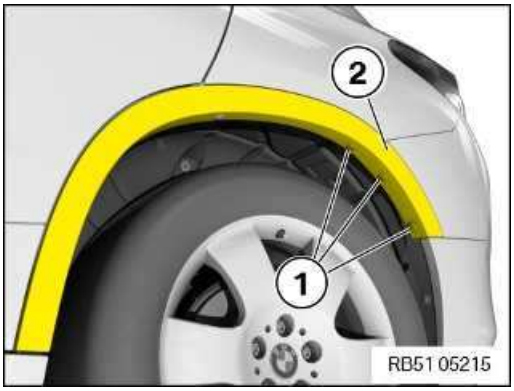
8 Partly installing the rear wheel arch trim

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8 – Partly installing the rear wheel arch trim

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Mount blind rivet (1) using special tool **0 496 521 (00 2 230)** in the wheel arch trim (2).

Additional Information

Overview of Tightening Torques

Rear bumper panel to guides — Used in step 5

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

Rear bumper panel to side wall — Used in step 5

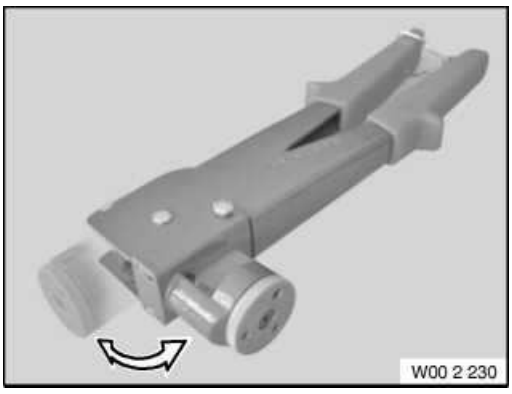
Screw for thermoplastic plastic		Tightening torque	4,6 Nm

Side panel rear light to body — Used in step 6

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common — Used in step 8

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 12 080 Removing and installing/replacing cover on rear bumper panel

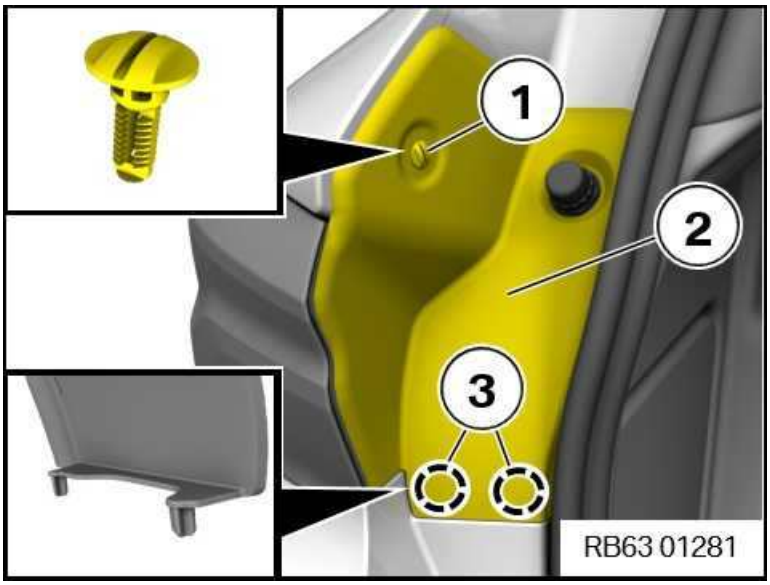
PRELIMINARY WORK

1 – Removing both trims for water channel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Removing trim for water channel**



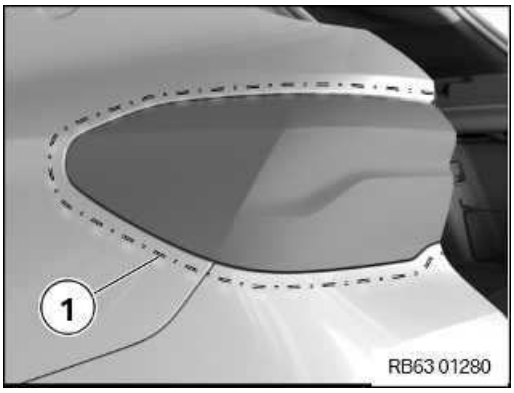
- Detach rotary clip (1).
- Feed out and remove trim for water channel (2) from guides (3).

2 – Remove both rear lights from the side panel

NOTICE

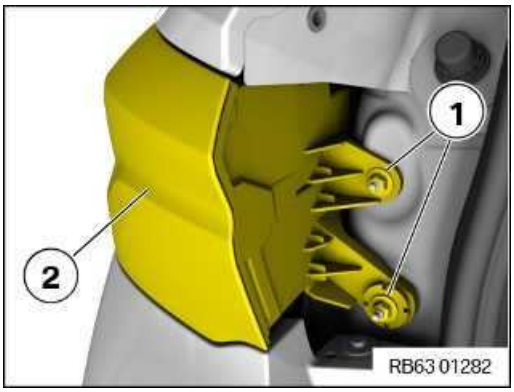
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the rear light on the side panel**

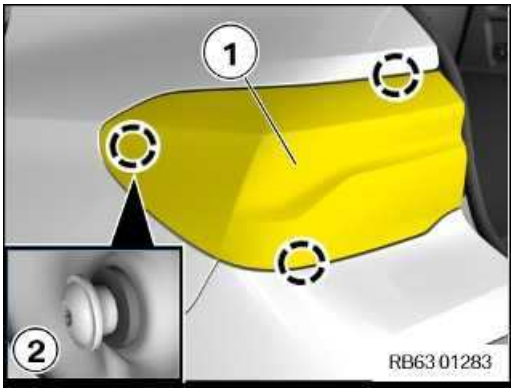


- Mask the body in area (1) with plastic adhesive tape.

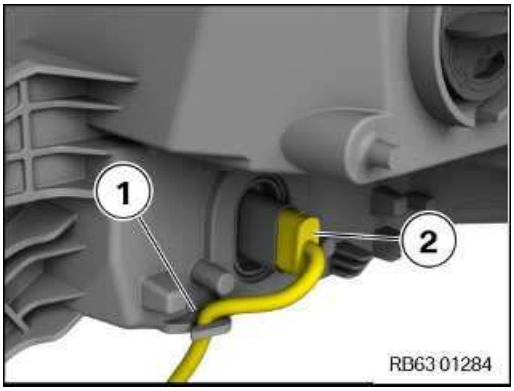
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- Loosen the nuts (1) on the rear light (2).

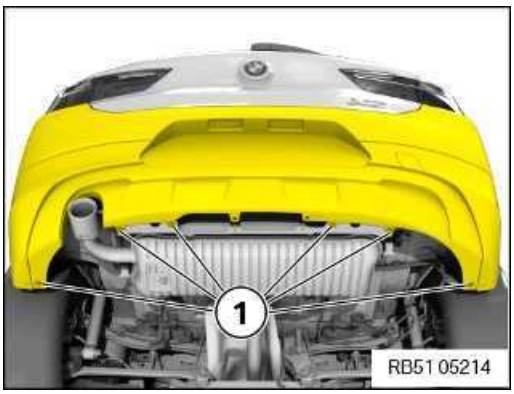


- Remove the rear light (1) from the guides (2) towards the rear.

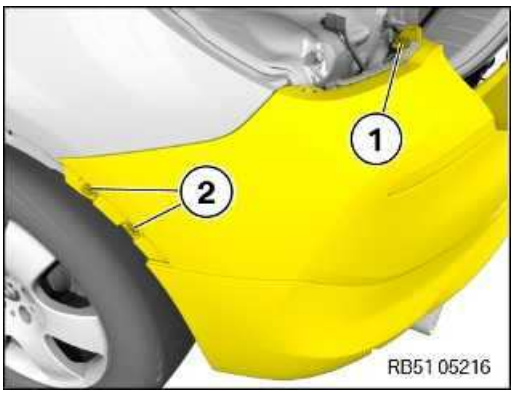


- Detach cable from guide (1).
- Unlock and disconnect the plug connection (2) and remove the rear light .

3 – Remove rear bumper panel



- Loosen screws (1).

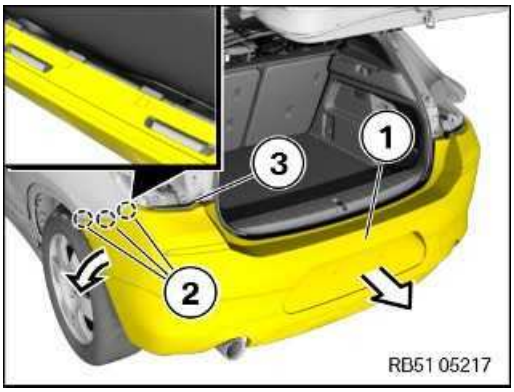


NOTICE

Perform the operations on the left and right side.

- Loosen screws (1) and (2).

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NOTICE

Perform the operations on the left and right side.

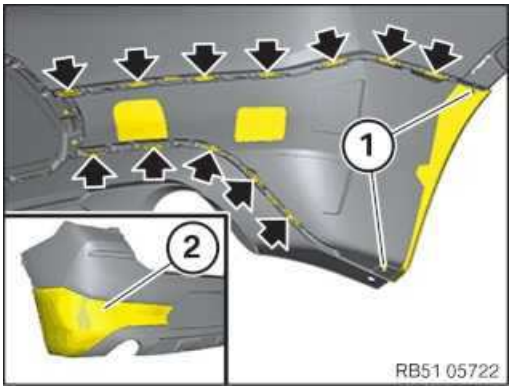
- Carefully detach side latch mechanisms(2) in direction of arrow.
- Carefully detach latch mechanisms in area (3) to the rear.
- Pull the bumper panel (1) straight toward the rear in direction of arrow with an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

MAIN WORK

4 – Removing the trim for the bumper panel at the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

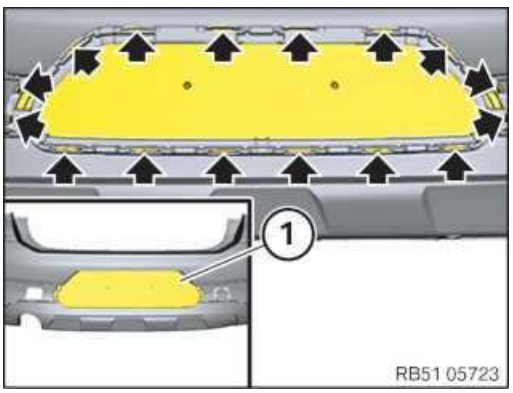


- Loosen the expanding rivet (1).
- Release the trim of the side bumper panel (2) at the latch mechanisms (arrows) and remove towards front.

5 – Remove the trim of the bumper panel centre section

NOTICE

Description is for left component only. Procedure on the right side is identical.



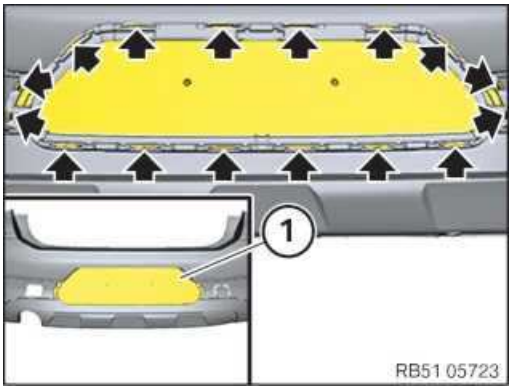
- Release trim of the bumper panel centre section (1) at the latch mechanisms (arrows) and remove to the front.

6 – Install the trim of the bumper panel centre section

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NOTICE

Description is for left component only. Procedure on the right side is identical.

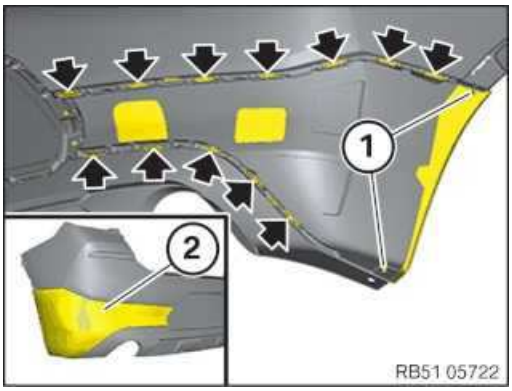


- Attach the trim of the bumper panel centre section (1) and engage it at the latch mechanisms (arrows).

7 – Installing the trim for the side bumper panel

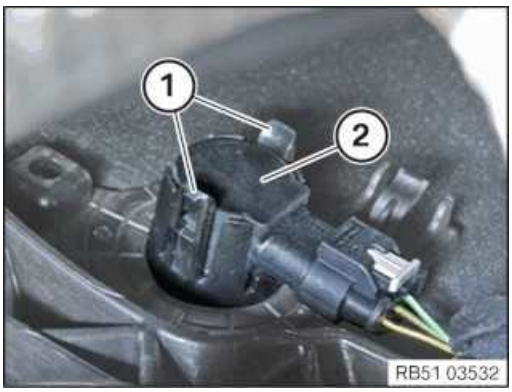
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Install the trim of the side bumper panel (2) and engage on the latch mechanisms (arrows).
- Mount the expanding rivets (1).

8 – Remount ultrasonic sensors

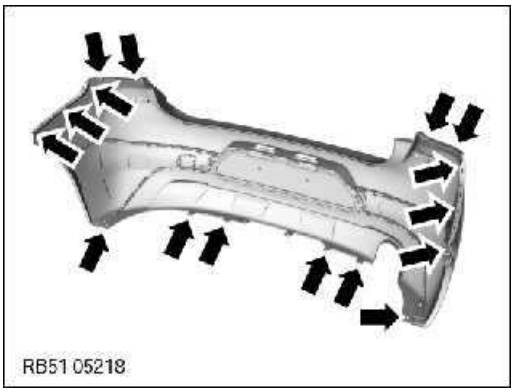


- Unlock the latch mechanisms (1).
- Remove the ultrasonic sensor (2) towards the top.
- Remove all other ultrasonic sensors together with the wiring harness.
- Engage all ultrasonic sensor with the new bumper.
- Secure wiring harness.

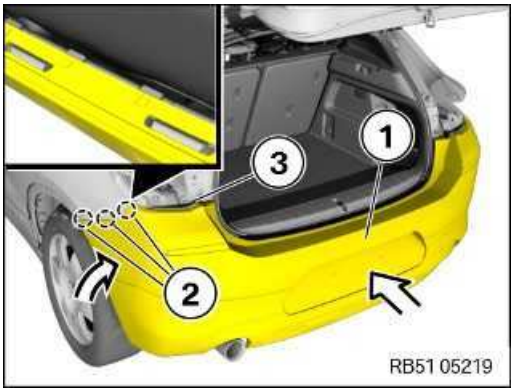
POSTPROCESSES

9 – Install rear bumper panel

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- Check if the latch mechanisms and the guide (arrows) are damaged or missing and replace the bumper panel where required.

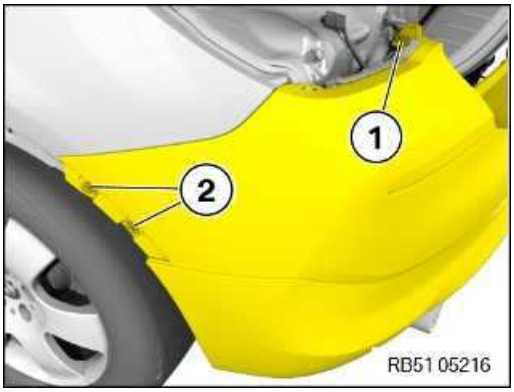


- Position the bumper panel (1) straight with the help of another person.
- Connect all connectors and lock.

NOTICE

Perform the operations on the left and right side.

- Engage the latch mechanisms in the area (3).
- Engage the side latch mechanisms (2) in the direction of the arrow.



NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

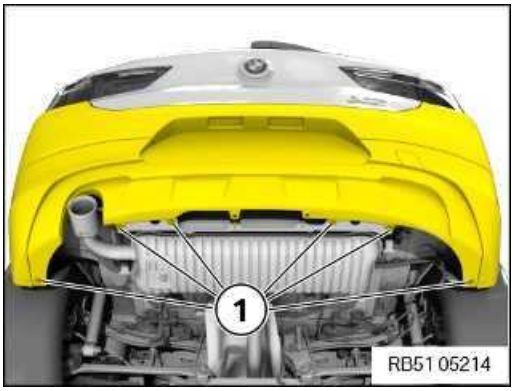
Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

- Tighten down screws (2).

Rear bumper panel to side wall

Screw for thermoplastic plastic		Tightening torque	4,6 Nm



- Tighten the screws (1).

Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

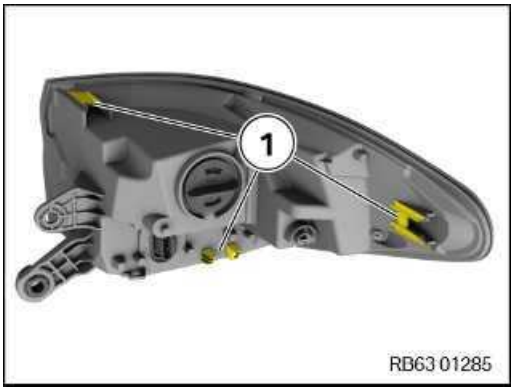
10 – Install both rear lights on the side panel

NOTICE

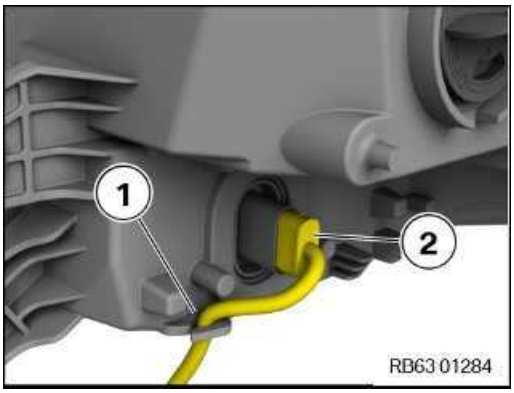
Description is for left component only. Procedure on the right side is identical.

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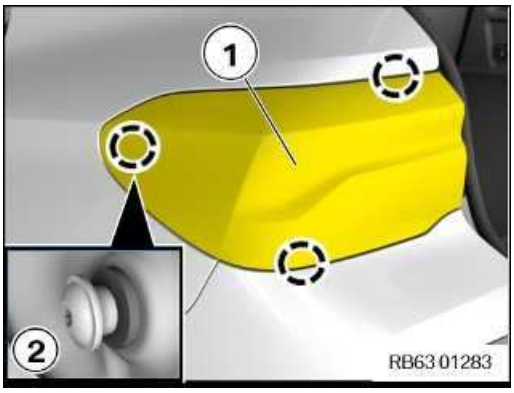
▶ **Install the rear light on the side panel**



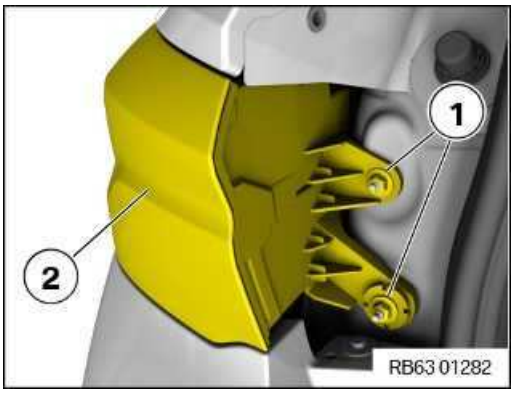
- Make sure that the guides (1) on the rear light are not damaged or missing.



- Connect connectors (2) and lock.
- Attach the cable in the guide (1).



- Position the rear light (1) in the side panel.
- Make sure the rear light (1) is fitted correctly in the guides (2).

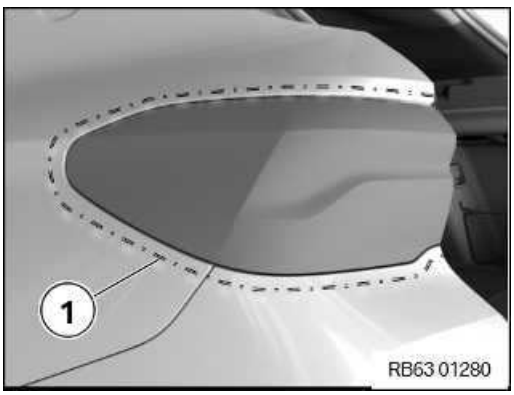


- Replace the nuts (1) on the rear light (2).

  Parts: Nuts
- Tighten nuts (1).

Side panel rear light to body

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm



- Pull off the plastic adhesive tape from the body in the area (1).

11 – Install both trim pieces for the water channel

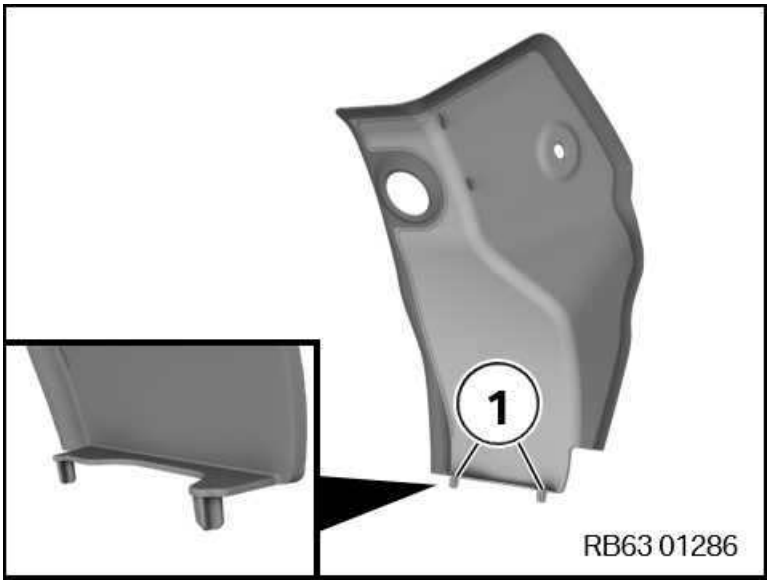
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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the water channel**

Check



- Check the guides (1) for damage.

Result

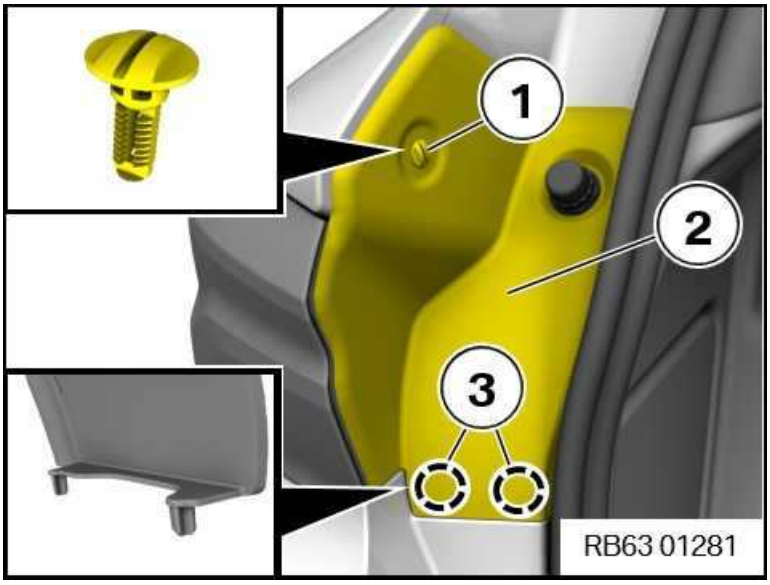
» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.



- Check rotary clip (1) for damage and, if necessary, replace it.



- Insert the trim for water channel (2) with guides (3).
- Fasten the rotary clip (1).

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Additional Information

Overview of Tightening Torques

Rear bumper panel to guides

Used in step 9

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

Rear bumper panel to side wall

Used in step 9

Screw for thermoplastic plastic		Tightening torque	4,6 Nm

Side panel rear light to body

Used in step 10

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm

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51 12 825 Removing and installing/replacing rear centre bumper guide (bumper panel removed)

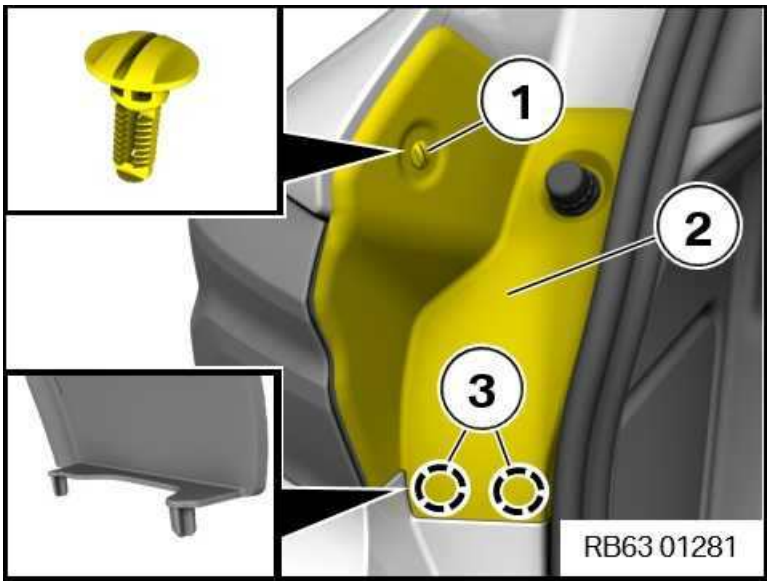
PRELIMINARY WORK

1 – Removing both trims for water channel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Removing trim for water channel**



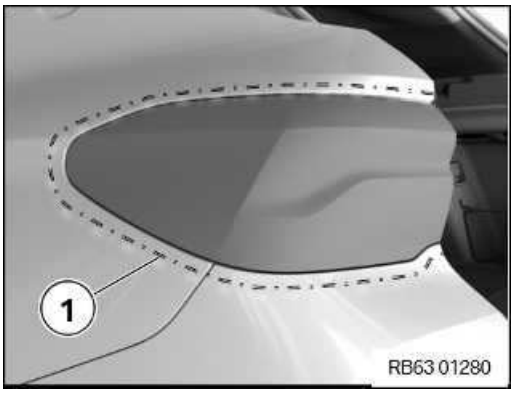
- Detach rotary clip (1).
- Feed out and remove trim for water channel (2) from guides (3).

2 – Remove both rear lights from the side panel

NOTICE

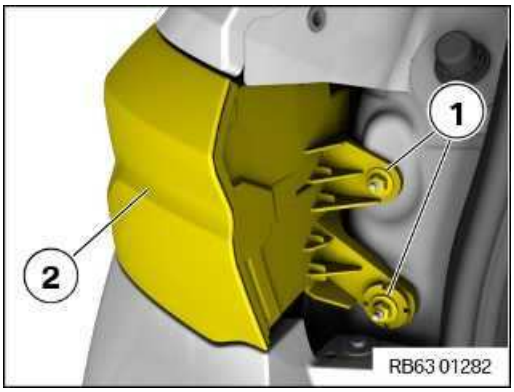
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the rear light on the side panel**

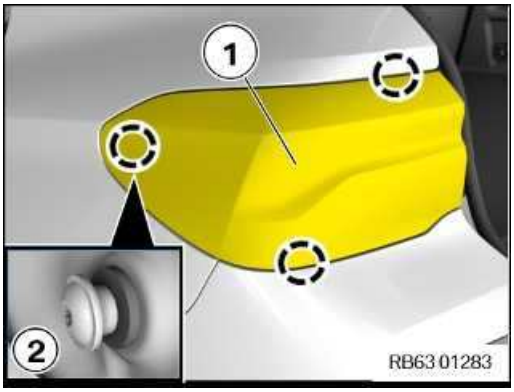


- Mask the body in area (1) with plastic adhesive tape.

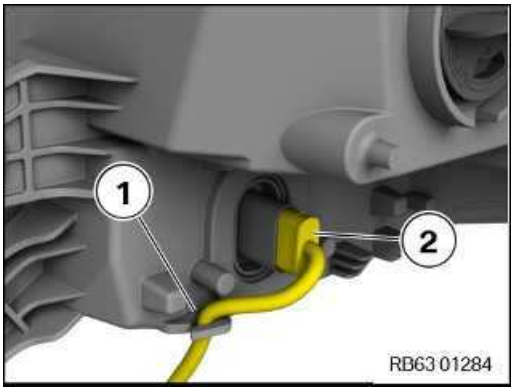
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- Loosen the nuts (1) on the rear light (2).

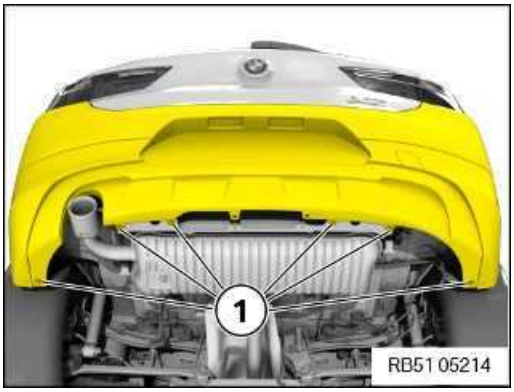


- Remove the rear light (1) from the guides (2) towards the rear.

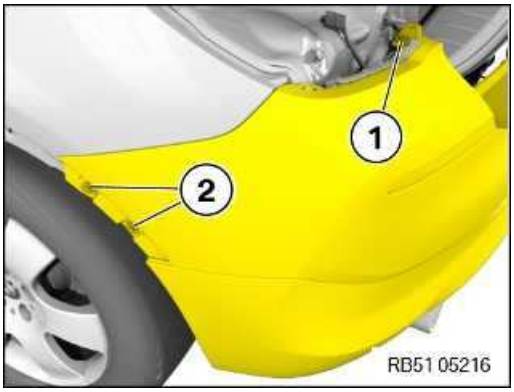


- Detach cable from guide (1).
- Unlock and disconnect the plug connection (2) and remove the rear light .

3 – Remove rear bumper panel



- Loosen screws (1).

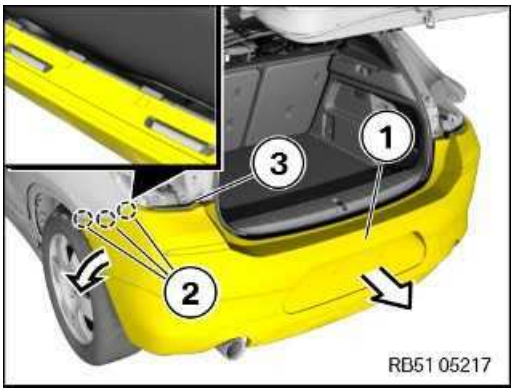


NOTICE

Perform the operations on the left and right side.

- Loosen screws (1) and (2).

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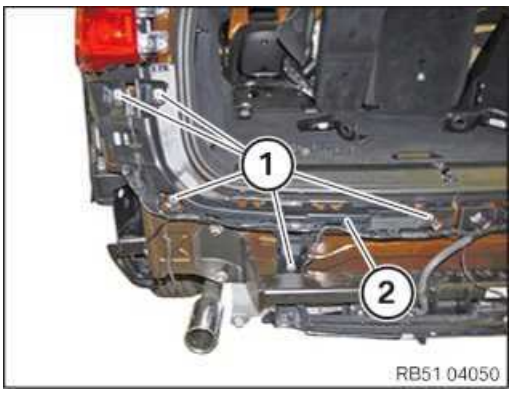
NOTICE

Perform the operations on the left and right side.

- Carefully detach side latch mechanisms(2) in direction of arrow.
- Carefully detach latch mechanisms in area (3) to the rear.
- Pull the bumper panel (1) straight toward the rear in direction of arrow with an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

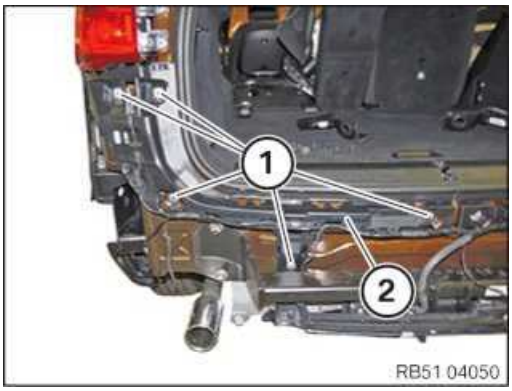
MAIN WORK

4 – Removing guide for rear centre bumper panel



- Unclip the vehicle wiring harness from the holders.
- Loosen nuts (1).
- Feed out the guide (2) toward the top and remove it.

5 – Installing guide for rear centre bumper panel



- Feed in and install the guide (2).
- Tighten nuts (1).

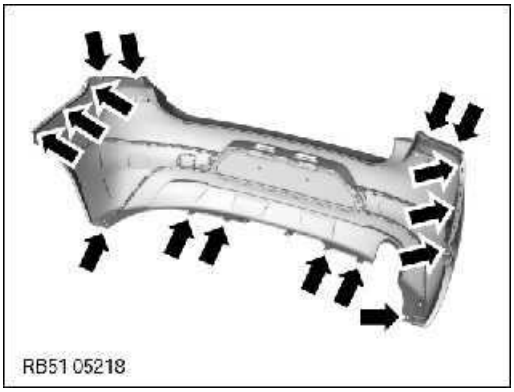
Guide for the bumper panel to body

Screw		Tightening torque	4,6 Nm
Nut		Tightening torque	4,6 Nm

- Clip in the wiring harness into the holder.

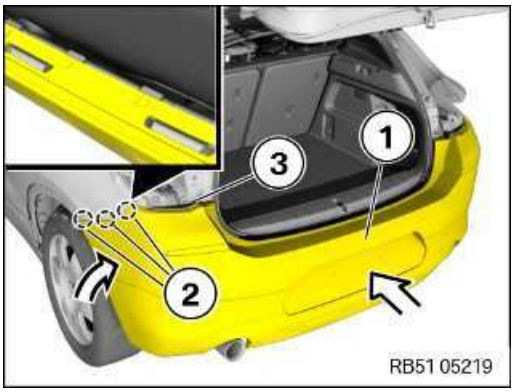
POSTPROCESSES

6 – Install rear bumper panel



- Check if the latch mechanisms and the guide (arrows) are damaged or missing and replace the bumper panel where required.

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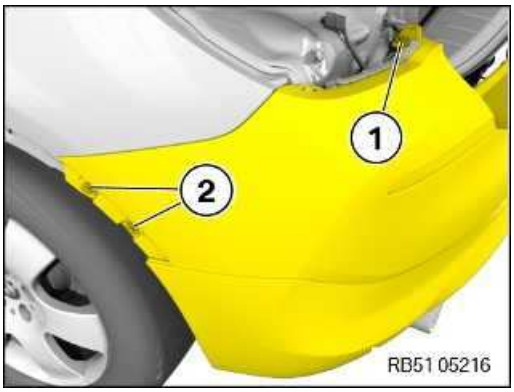


- Position the bumper panel (1) straight with the help of another person.
- Connect all connectors and lock.

NOTICE

Perform the operations on the left and right side.

- Engage the latch mechanisms in the area (3).
- Engage the side latch mechanisms (2) in the direction of the arrow.



NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

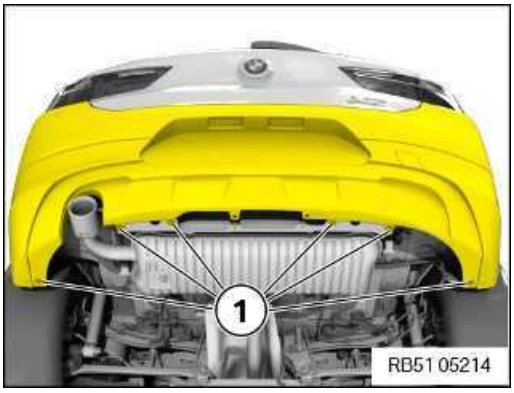
Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

- Tighten down screws (2).

Rear bumper panel to side wall

Screw for thermoplastic plastic		Tightening torque	4,6 Nm



- Tighten the screws (1).

Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

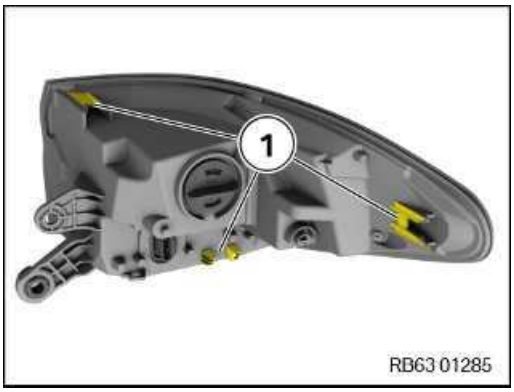
7 – Install both rear lights on the side panel

NOTICE

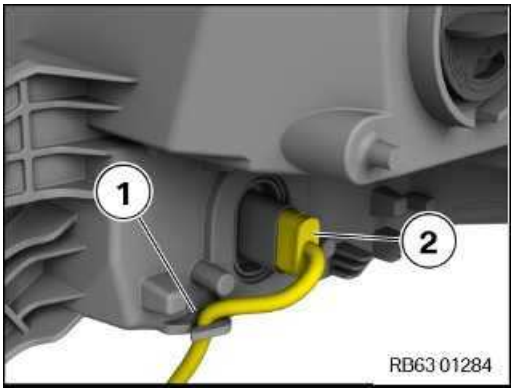
Description is for left component only. Procedure on the right side is identical.

▸ **Install the rear light on the side panel**

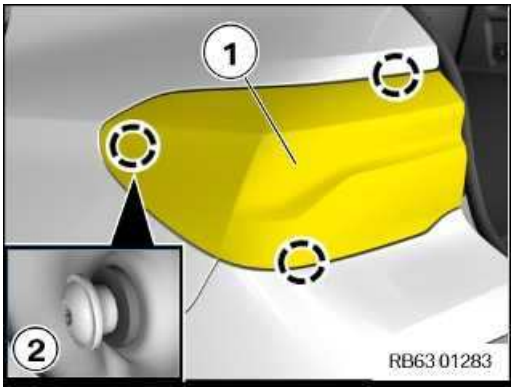
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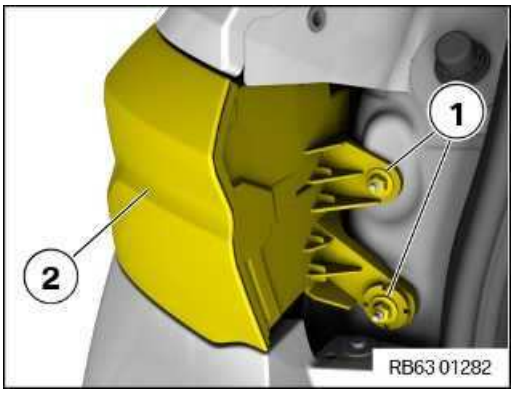
- Make sure that the guides (1) on the rear light are not damaged or missing.



- Connect connectors (2) and lock.
- Attach the cable in the guide (1).



- Position the rear light (1) in the side panel.
- Make sure the rear light (1) is fitted correctly in the guides (2).

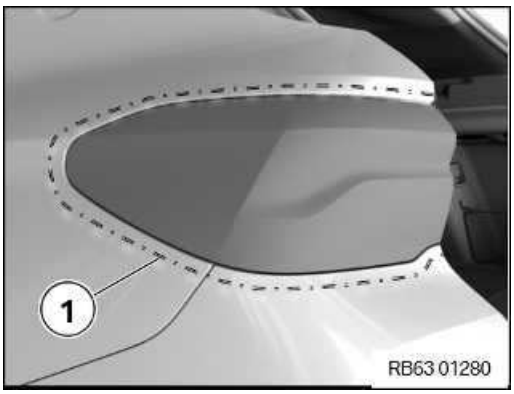


- Replace the nuts (1) on the rear light (2).

  Parts: Nuts
- Tighten nuts (1).

Side panel rear light to body

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm



- Pull off the plastic adhesive tape from the body in the area (1).

8 – Install both trim pieces for the water channel

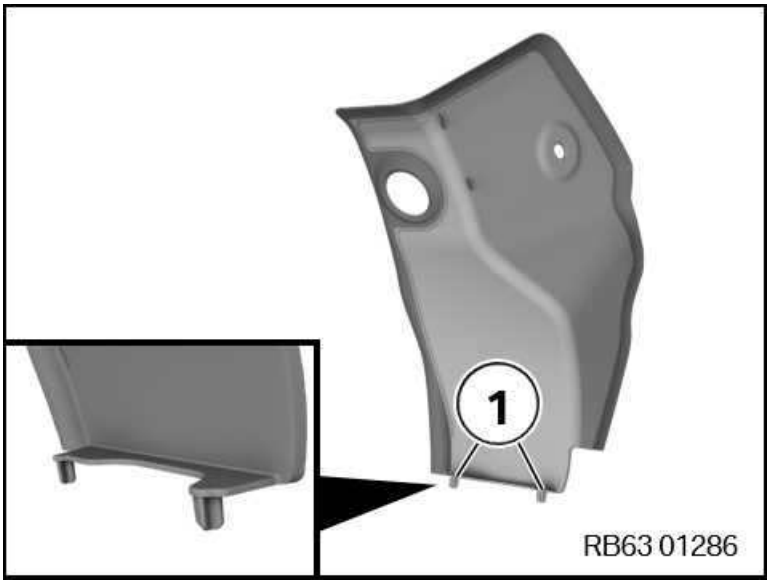
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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the water channel**

Check



- Check the guides (1) for damage.

Result

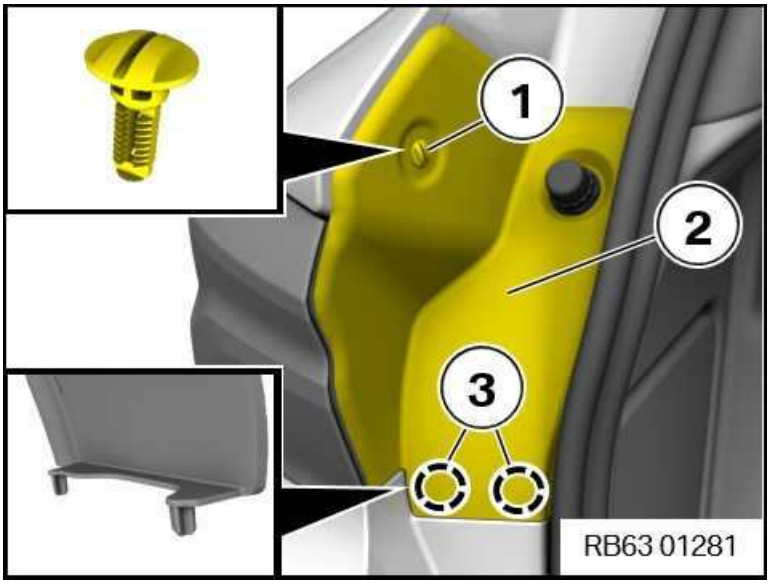
» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.



- Check rotary clip (1) for damage and, if necessary, replace it.



- Insert the trim for water channel (2) with guides (3).
- Fasten the rotary clip (1).

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Additional Information

Overview of Tightening Torques

Guide for the bumper panel to body

Used in step 5

Screw		Tightening torque	4,6 Nm
Nut		Tightening torque	4,6 Nm

Rear bumper panel to guides

Used in step 6

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

Rear bumper panel to side wall

Used in step 6

Screw for thermoplastic plastic		Tightening torque	4,6 Nm

Side panel rear light to body

Used in step 7

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm

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51 12 828 Removing and installing/replacing rear left or right bumper guide (bumper panel removed)

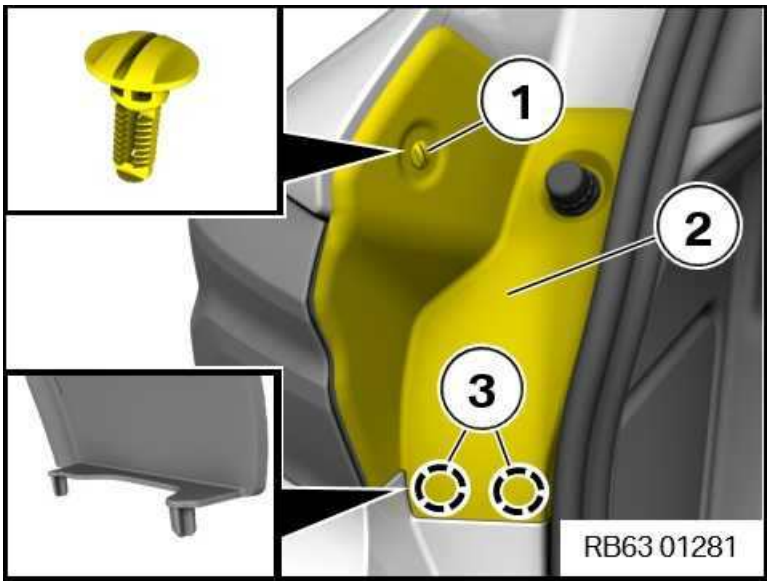
PRELIMINARY WORK

1 – Removing both trims for water channel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Removing trim for water channel**



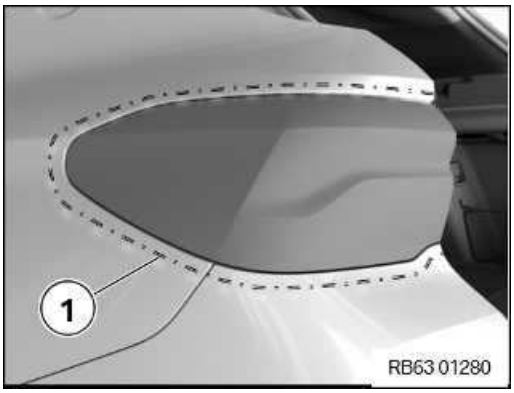
- Detach rotary clip (1).
- Feed out and remove trim for water channel (2) from guides (3).

2 – Remove both rear lights from the side panel

NOTICE

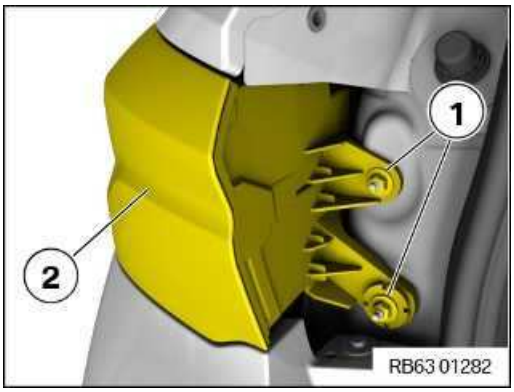
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the rear light on the side panel**

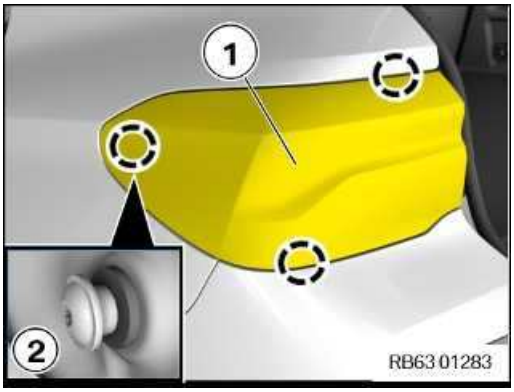


- Mask the body in area (1) with plastic adhesive tape.

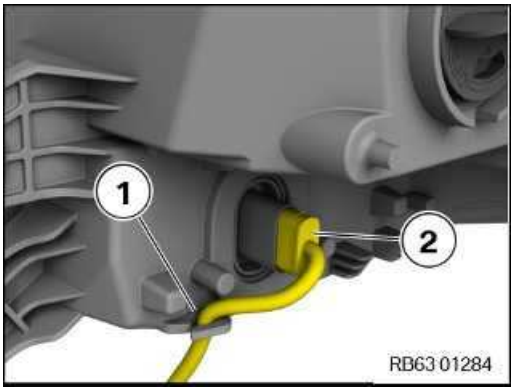
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- Loosen the nuts (1) on the rear light (2).

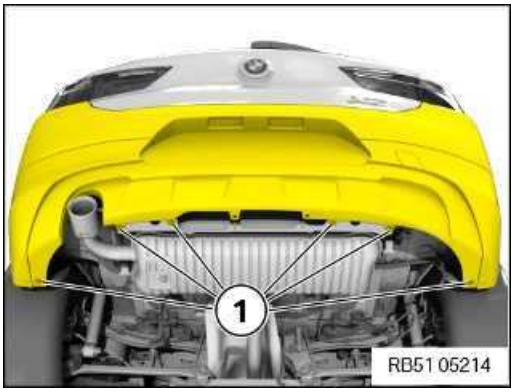


- Remove the rear light (1) from the guides (2) towards the rear.

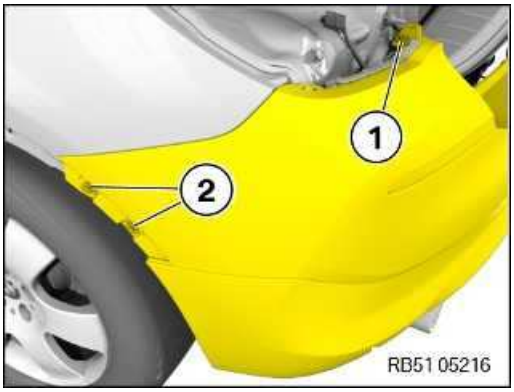


- Detach cable from guide (1).
- Unlock and disconnect the plug connection (2) and remove the rear light .

3 – Remove rear bumper panel



- Loosen screws (1).

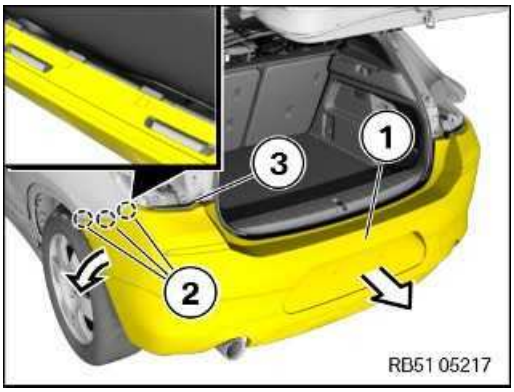


NOTICE

Perform the operations on the left and right side.

- Loosen screws (1) and (2).

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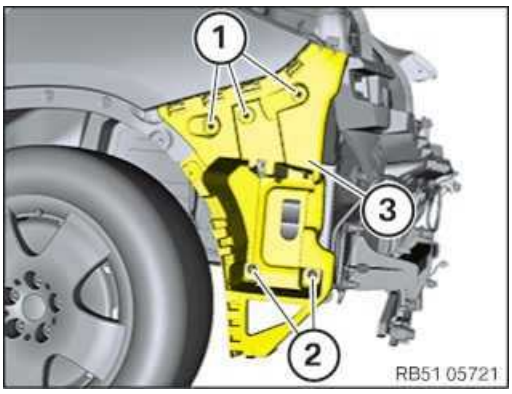
NOTICE

Perform the operations on the left and right side.

- Carefully detach side latch mechanisms(2) in direction of arrow.
- Carefully detach latch mechanisms in area (3) to the rear.
- Pull the bumper panel (1) straight toward the rear in direction of arrow with an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

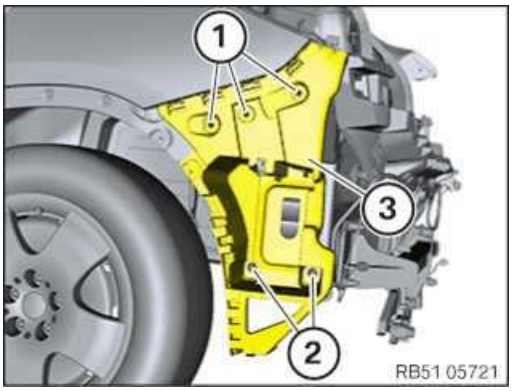
MAIN WORK

4 – Remove the guide for the rear bumper panel



- Loosen screws (1).
- Loosen nuts (2).
- Remove the guide (3).

5 – Install the guide for the rear bumper panel



- Install the guide (3).
- Tighten the screws (1).

Guide for the bumper panel to body

Screw		Tightening torque	4,6 Nm
Nut		Tightening torque	4,6 Nm

- Tighten nuts (2).

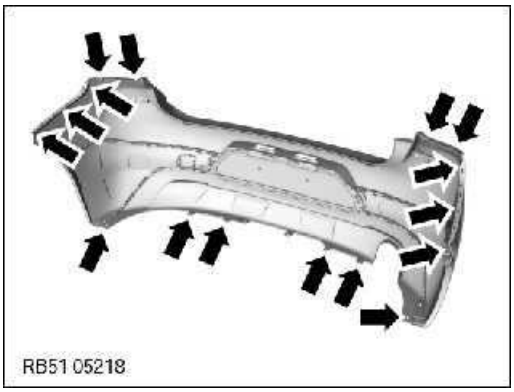
Guide for the bumper panel to body

Screw		Tightening torque	4,6 Nm
Nut		Tightening torque	4,6 Nm

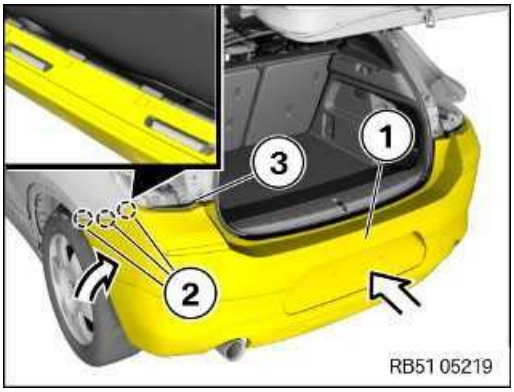
POSTPROCESSES

6 – Install rear bumper panel

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- Check if the latch mechanisms and the guide (arrows) are damaged or missing and replace the bumper panel where required.

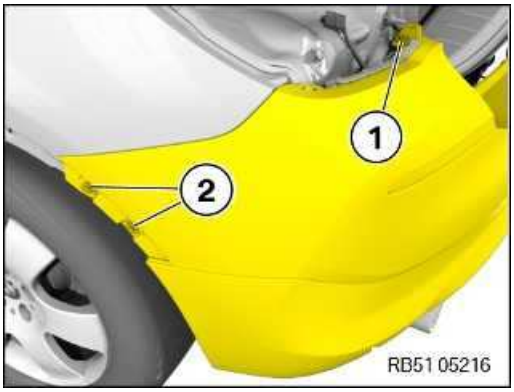


- Position the bumper panel (1) straight with the help of another person.
- Connect all connectors and lock.

NOTICE

Perform the operations on the left and right side.

- Engage the latch mechanisms in the area (3).
- Engage the side latch mechanisms (2) in the direction of the arrow.



NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

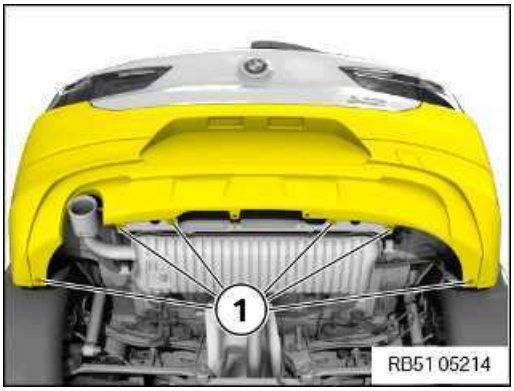
Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

- Tighten down screws (2).

Rear bumper panel to side wall

Screw for thermoplastic plastic		Tightening torque	4,6 Nm



- Tighten the screws (1).

Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

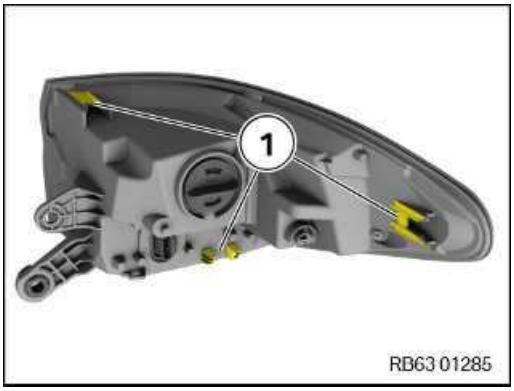
7 – Install both rear lights on the side panel

NOTICE

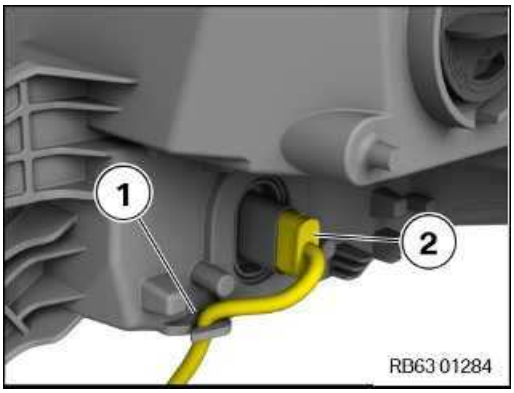
Description is for left component only. Procedure on the right side is identical.

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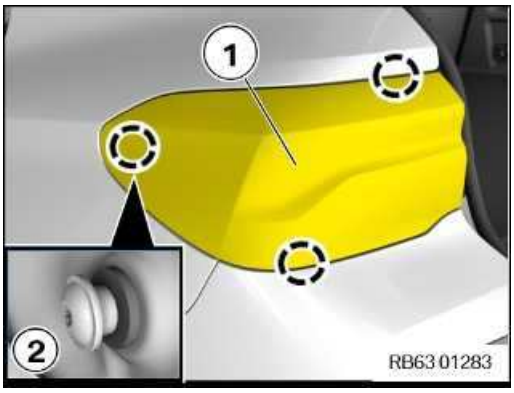
▶ **Install the rear light on the side panel**



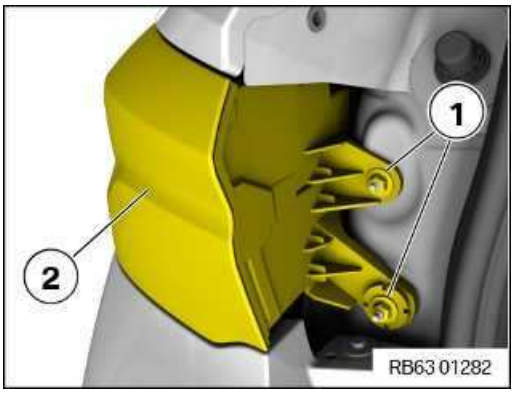
- Make sure that the guides (1) on the rear light are not damaged or missing.



- Connect connectors (2) and lock.
- Attach the cable in the guide (1).



- Position the rear light (1) in the side panel.
- Make sure the rear light (1) is fitted correctly in the guides (2).

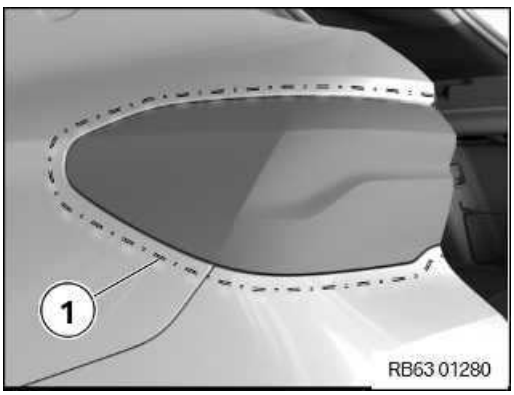


- Replace the nuts (1) on the rear light (2).

  Parts: Nuts
- Tighten nuts (1).

Side panel rear light to body

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm



- Pull off the plastic adhesive tape from the body in the area (1).

8 – Install both trim pieces for the water channel

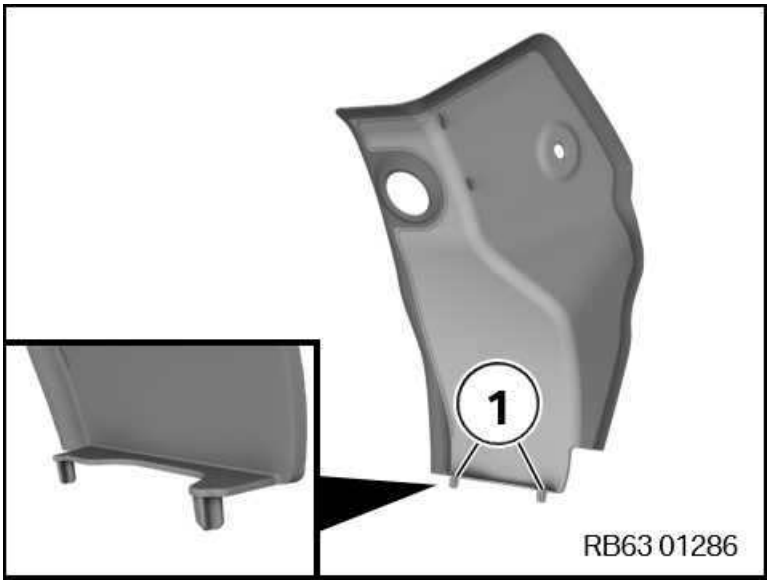
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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the water channel**

Check



- Check the guides (1) for damage.

Result

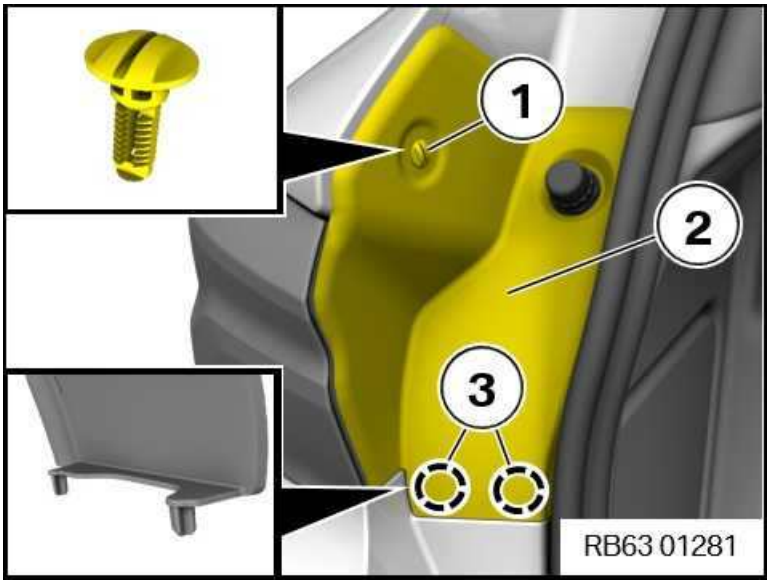
» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.



- Check rotary clip (1) for damage and, if necessary, replace it.



- Insert the trim for water channel (2) with guides (3).
- Fasten the rotary clip (1).

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Additional Information

Overview of Tightening Torques

Guide for the bumper panel to body

Used in step 5

Screw		Tightening torque	4,6 Nm
Nut		Tightening torque	4,6 Nm

Rear bumper panel to guides

Used in step 6

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

Rear bumper panel to side wall

Used in step 6

Screw for thermoplastic plastic		Tightening torque	4,6 Nm

Side panel rear light to body

Used in step 7

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm

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51 12 050 Removing and installing/replacing support for rear bumper panel

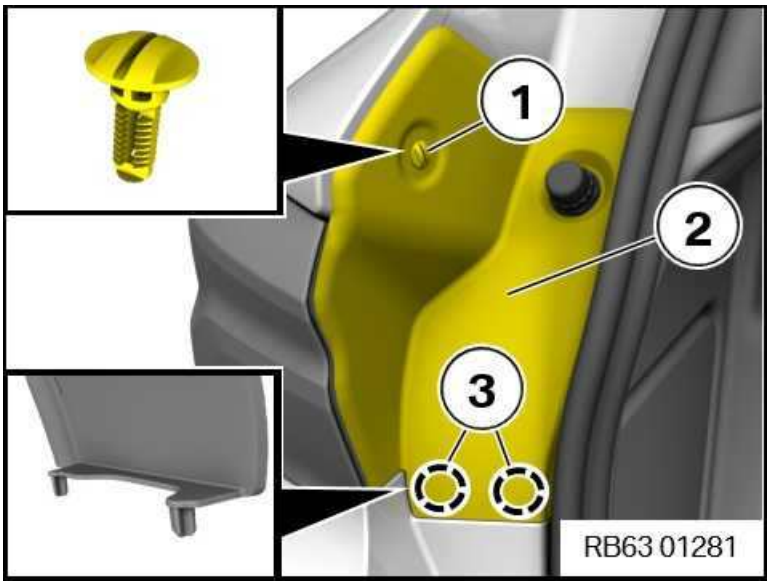
PRELIMINARY WORK

1 – Removing both trims for water channel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Removing trim for water channel**



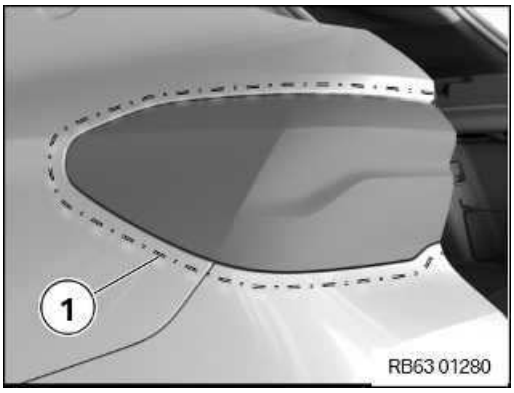
- Detach rotary clip (1).
- Feed out and remove trim for water channel (2) from guides (3).

2 – Remove both rear lights from the side panel

NOTICE

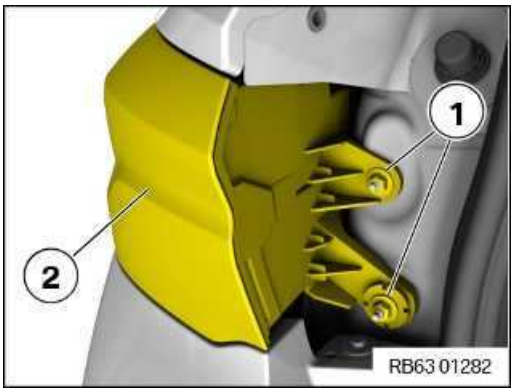
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the rear light on the side panel**

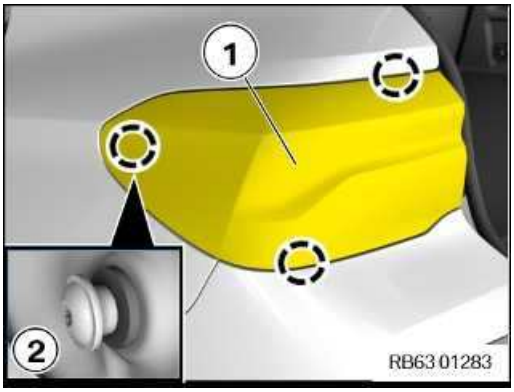


- Mask the body in area (1) with plastic adhesive tape.

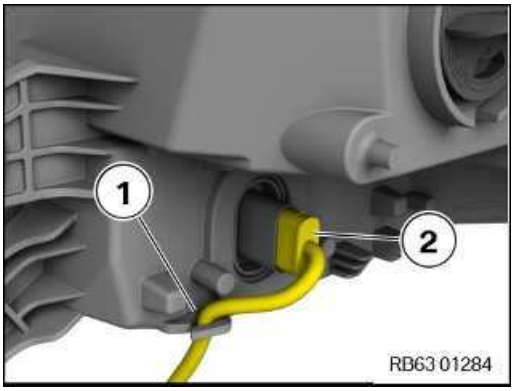
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- Loosen the nuts (1) on the rear light (2).

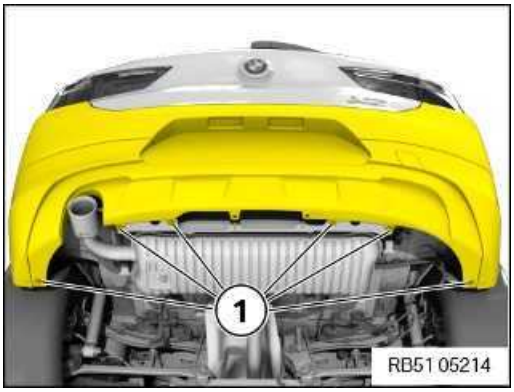


- Remove the rear light (1) from the guides (2) towards the rear.

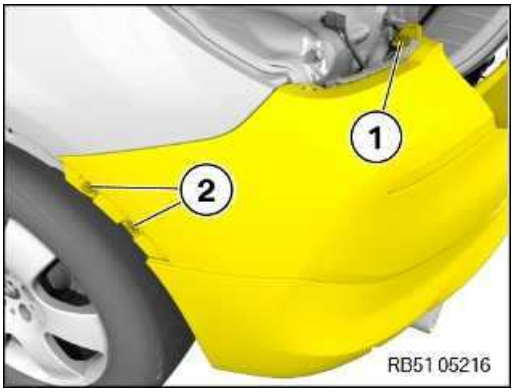


- Detach cable from guide (1).
- Unlock and disconnect the plug connection (2) and remove the rear light .

3 – Remove rear bumper panel



- Loosen screws (1).

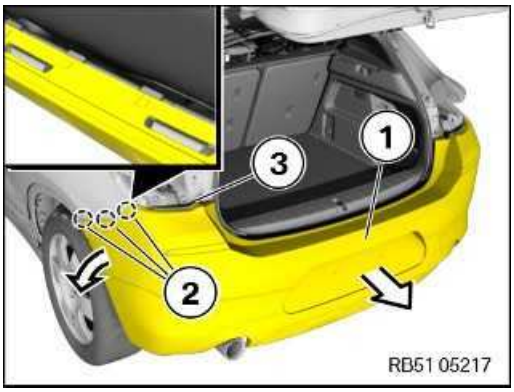


NOTICE

Perform the operations on the left and right side.

- Loosen screws (1) and (2).

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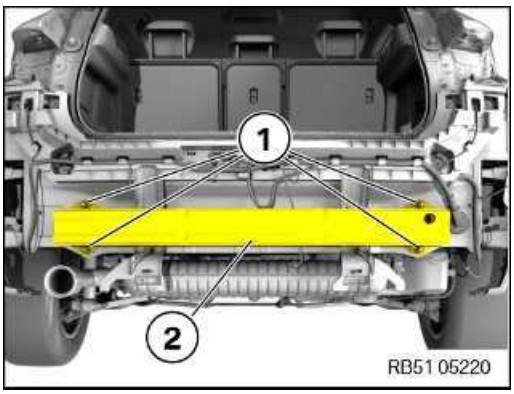
NOTICE

Perform the operations on the left and right side.

- Carefully detach side latch mechanisms(2) in direction of arrow.
- Carefully detach latch mechanisms in area (3) to the rear.
- Pull the bumper panel (1) straight toward the rear in direction of arrow with an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

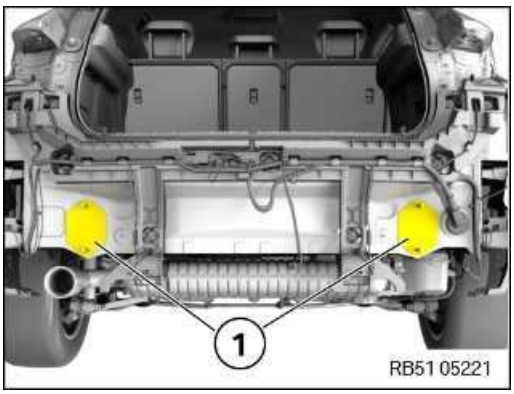
MAIN WORK

4 – Remove the rear bumper support

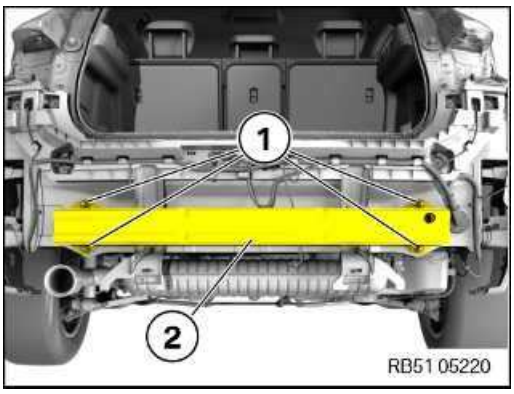


- Unscrew the nuts (1) and remove the bumper support (2).

5 – Install the rear bumper support



- Check the seals (1) for damage and replace if necessary.



- Position the bumper support (2).
- Tighten nuts (1).

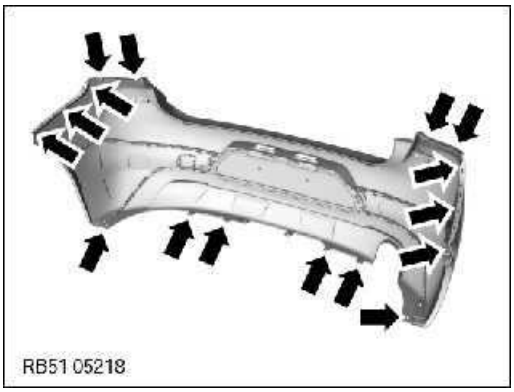
Rear bumper support to tail panel

NutsM12		Tightening torque	108 Nm

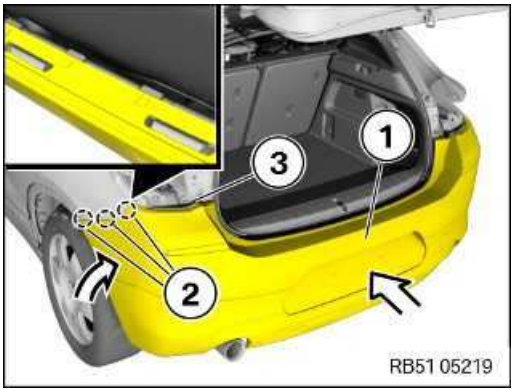
POSTPROCESSES

6 – Install rear bumper panel

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- Check if the latch mechanisms and the guide (arrows) are damaged or missing and replace the bumper panel where required.

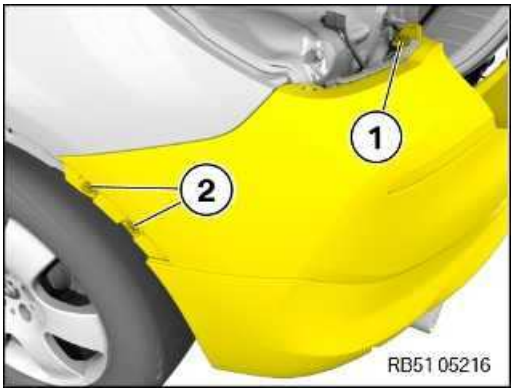


- Position the bumper panel (1) straight with the help of another person.
- Connect all connectors and lock.

NOTICE

Perform the operations on the left and right side.

- Engage the latch mechanisms in the area (3).
- Engage the side latch mechanisms (2) in the direction of the arrow.



NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

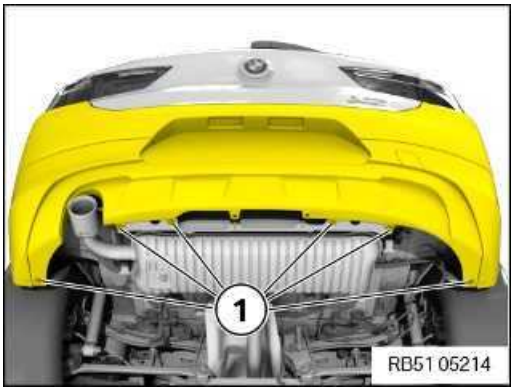
Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

- Tighten down screws (2).

Rear bumper panel to side wall

Screw for thermoplastic plastic		Tightening torque	4,6 Nm



- Tighten the screws (1).

Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

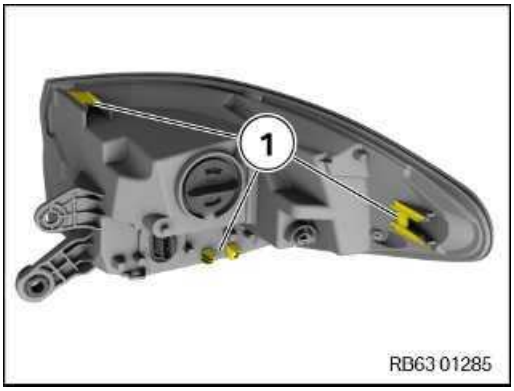
7 – Install both rear lights on the side panel

NOTICE

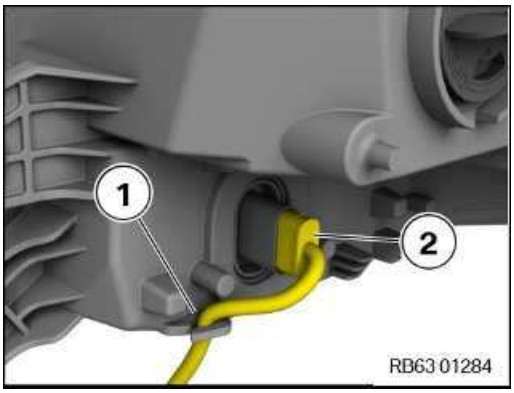
Description is for left component only. Procedure on the right side is identical.

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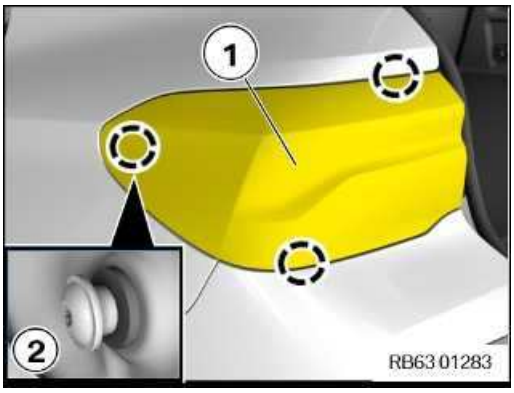
▶ **Install the rear light on the side panel**



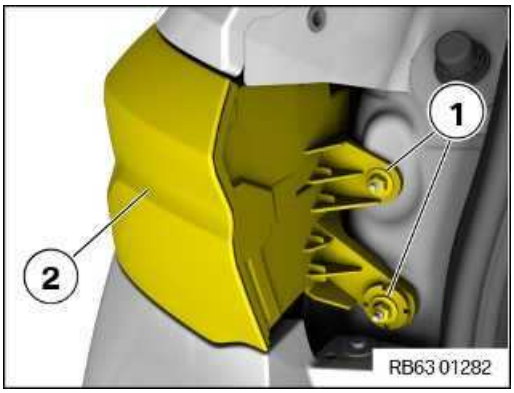
- Make sure that the guides (1) on the rear light are not damaged or missing.



- Connect connectors (2) and lock.
- Attach the cable in the guide (1).



- Position the rear light (1) in the side panel.
- Make sure the rear light (1) is fitted correctly in the guides (2).

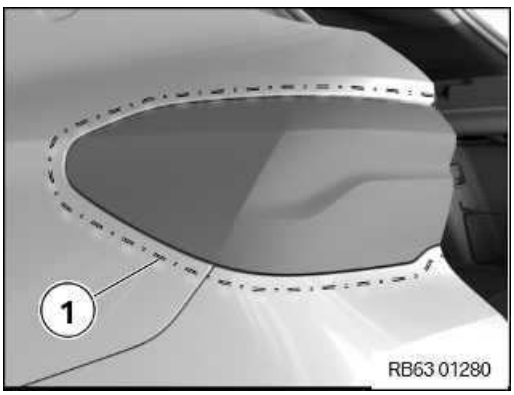


- Replace the nuts (1) on the rear light (2).

  Parts: Nuts
- Tighten nuts (1).

Side panel rear light to body

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm



- Pull off the plastic adhesive tape from the body in the area (1).

8 – Install both trim pieces for the water channel

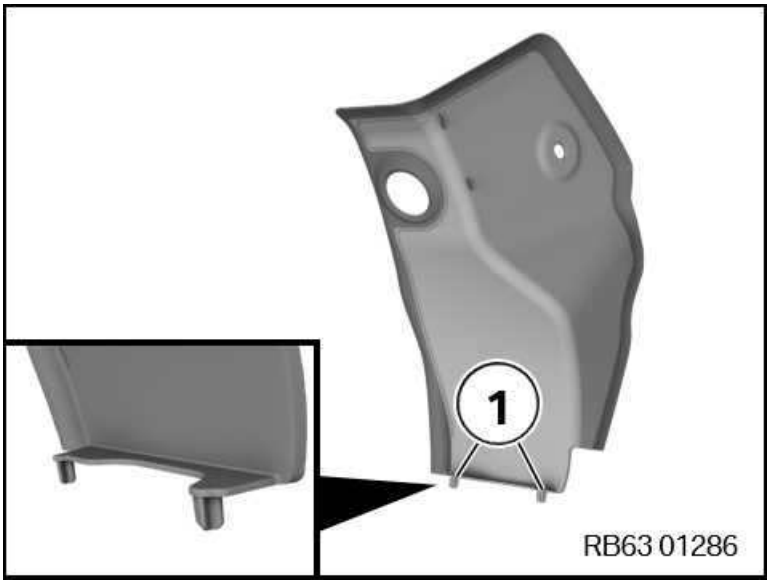
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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the water channel**

Check



- Check the guides (1) for damage.

Result

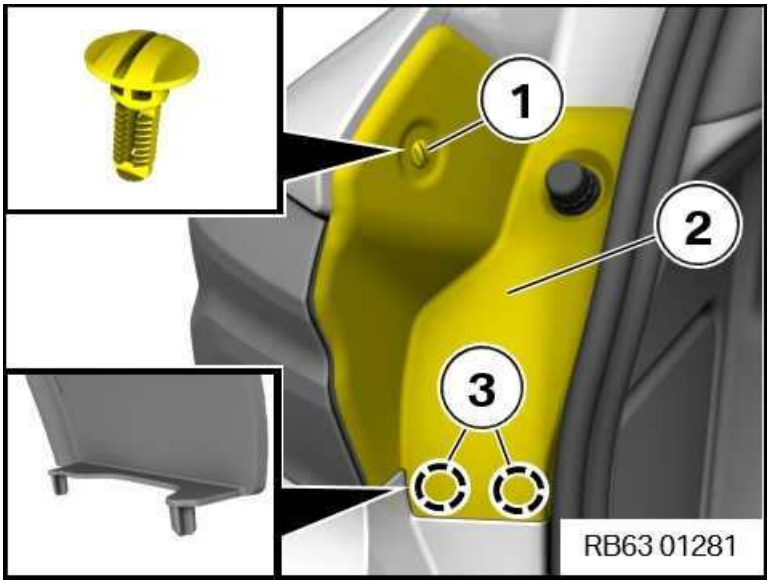
» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.



- Check rotary clip (1) for damage and, if necessary, replace it.



- Insert the trim for water channel (2) with guides (3).
- Fasten the rotary clip (1).

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Additional Information

Overview of Tightening Torques

Rear bumper support to tail panel

Used in step 5

NutsM12		Tightening torque	108 Nm

Rear bumper panel to guides

Used in step 6

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

Rear bumper panel to side wall

Used in step 6

Screw for thermoplastic plastic		Tightening torque	4,6 Nm

Side panel rear light to body

Used in step 7

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm

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51 12 657 Replace rear bumper panel

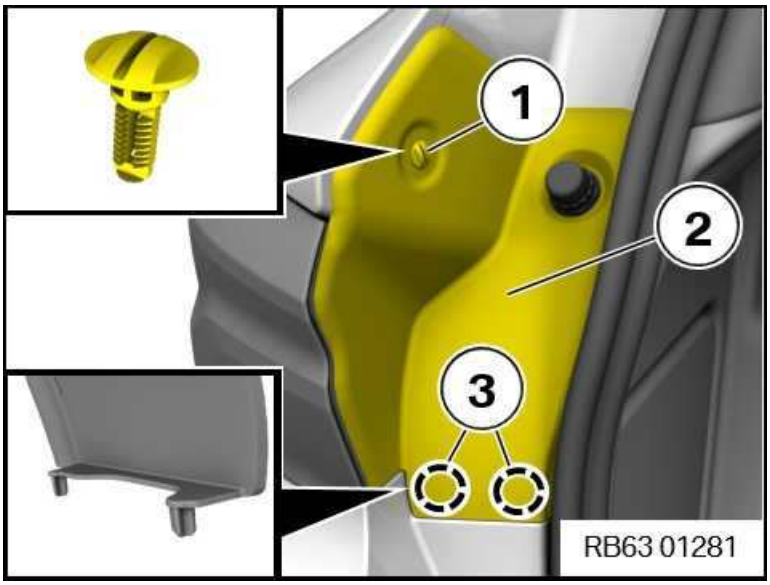
PRELIMINARY WORK

1 – Removing both trims for water channel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Removing trim for water channel**



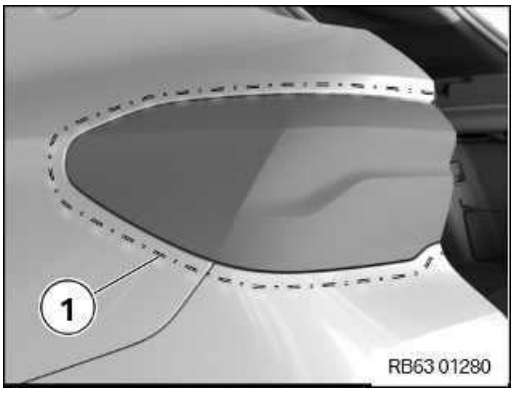
- Detach rotary clip (1).
- Feed out and remove trim for water channel (2) from guides (3).

2 – Remove both rear lights from the side panel

NOTICE

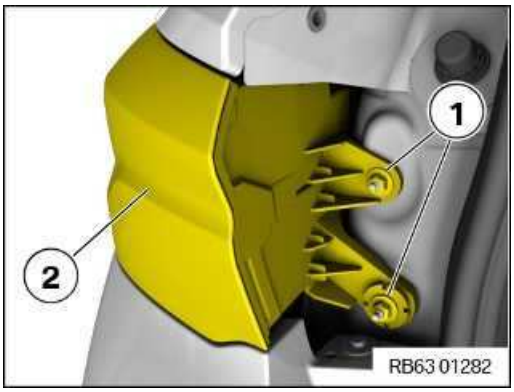
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the rear light on the side panel**

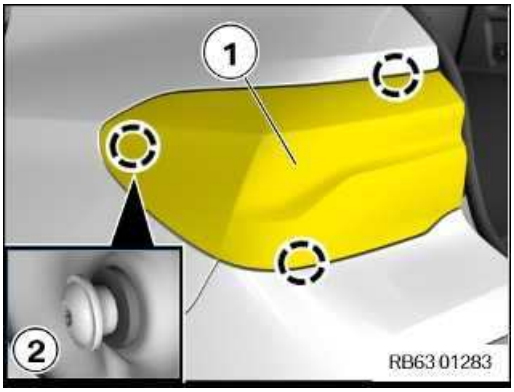


- Mask the body in area (1) with plastic adhesive tape.

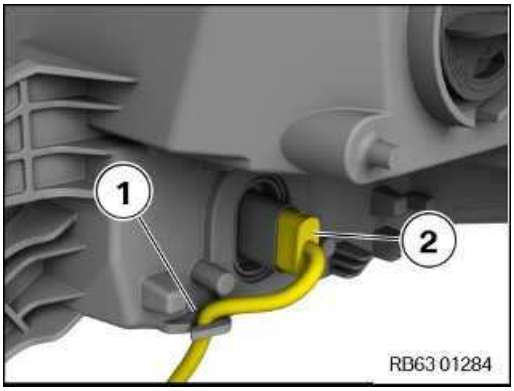
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- Loosen the nuts (1) on the rear light (2).

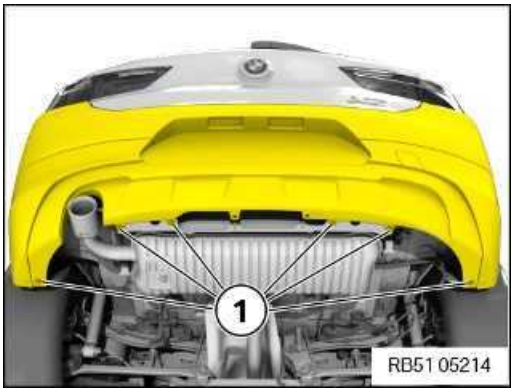


- Remove the rear light (1) from the guides (2) towards the rear.

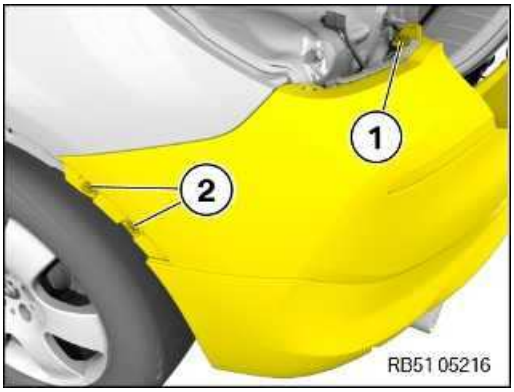


- Detach cable from guide (1).
- Unlock and disconnect the plug connection (2) and remove the rear light .

3 – Remove rear bumper panel



- Loosen screws (1).

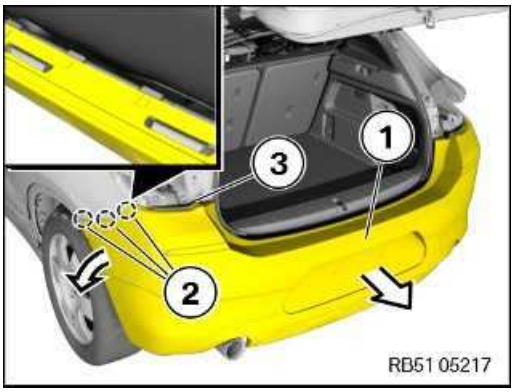


NOTICE

Perform the operations on the left and right side.

- Loosen screws (1) and (2).

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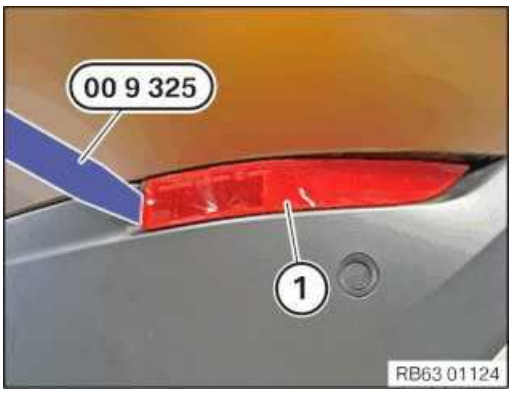
NOTICE

Perform the operations on the left and right side.

- Carefully detach side latch mechanisms(2) in direction of arrow.
- Carefully detach latch mechanisms in area (3) to the rear.
- Pull the bumper panel (1) straight toward the rear in direction of arrow with an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

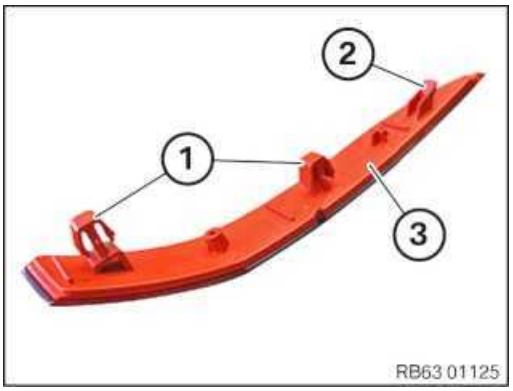
MAIN WORK

4 – Remove rear reflector

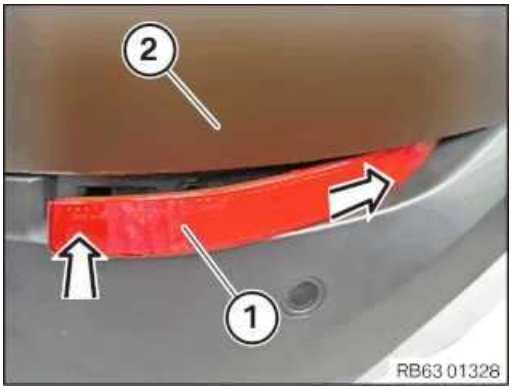


- Lift the rear reflector (1) using the special tool **0 496 569 (00 9 325)** out of the bumper panel.

5 – Installing rear reflector



- Check latch mechanism (1) and guide (2) on the rear reflector (3) for damage.



- Engage the rear reflector (1) in direction of arrow in the bumper panel (2).

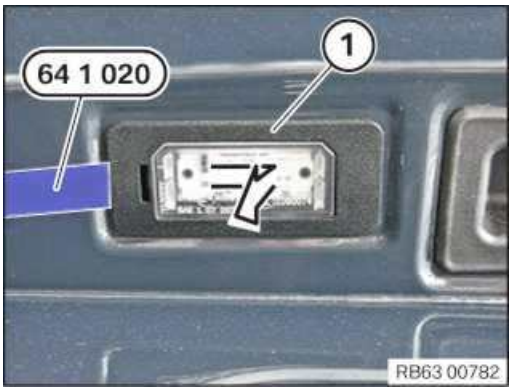
6 – Remove both number plate lights

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove number plate light**



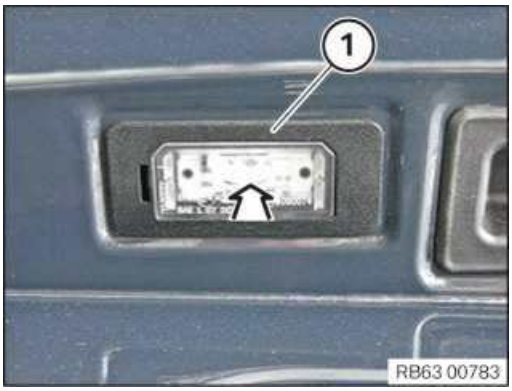
- Release the number plate light (1) with special tool **0 493 681 (64 1 020)** from the tailgate in direction of arrow.
- Disconnect the associated plug connection and remove the number plate light (1).

7 – Install both number plate lights

NOTICE

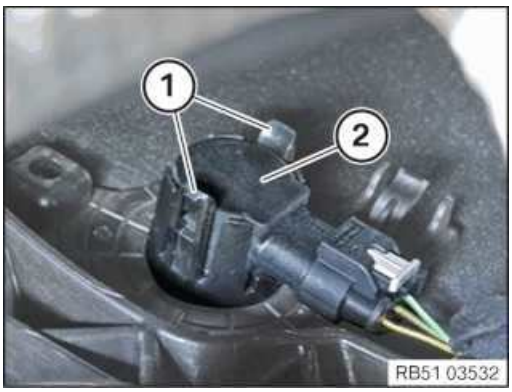
Description is for left component only. Procedure on the right side is identical.

▸ **Installing number plate light**



- Connect the associated connector to the number plate light (1).
- Install the number plate light (1) in the tailgate in direction of arrow.

8 – Remount ultrasonic sensors



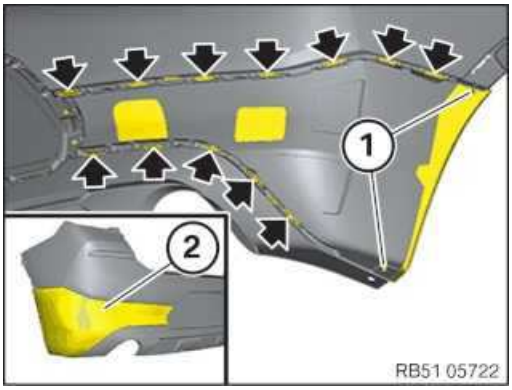
- Unlock the latch mechanisms (1).
- Remove the ultrasonic sensor (2) towards the top.
- Remove all other ultrasonic sensors together with the wiring harness.
- Engage all ultrasonic sensor with the new bumper.
- Secure wiring harness.

9 – Removing the trim for the bumper panel at the side

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NOTICE

Description is for left component only. Procedure on the right side is identical.

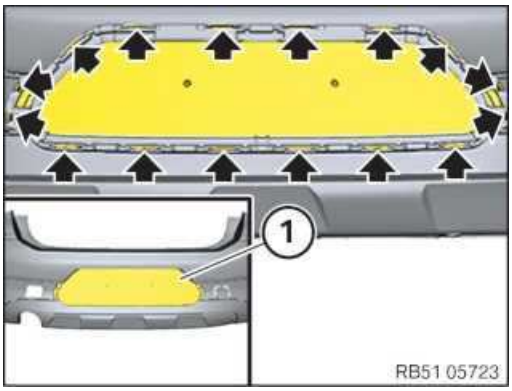


- Loosen the expanding rivet (1).
- Release the trim of the side bumper panel (2) at the latch mechanisms (arrows) and remove towards front.

10 – Remove the trim of the bumper panel centre section

NOTICE

Description is for left component only. Procedure on the right side is identical.

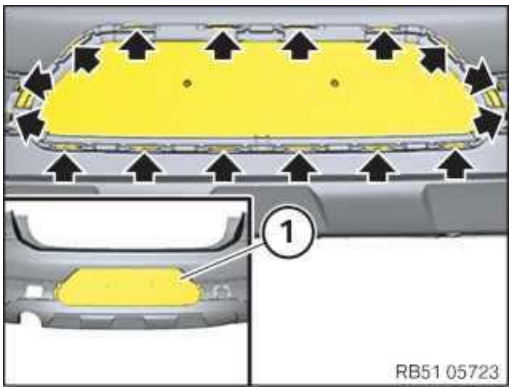


- Release trim of the bumper panel centre section (1) at the latch mechanisms (arrows) and remove to the front.

11 – Install the trim of the bumper panel centre section

NOTICE

Description is for left component only. Procedure on the right side is identical.



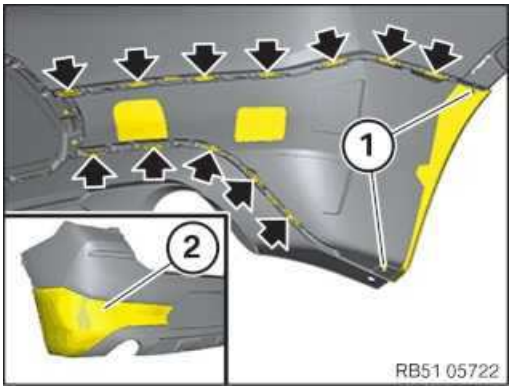
- Attach the trim of the bumper panel centre section (1) and engage it at the latch mechanisms (arrows).

12 – Installing the trim for the side bumper panel

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NOTICE

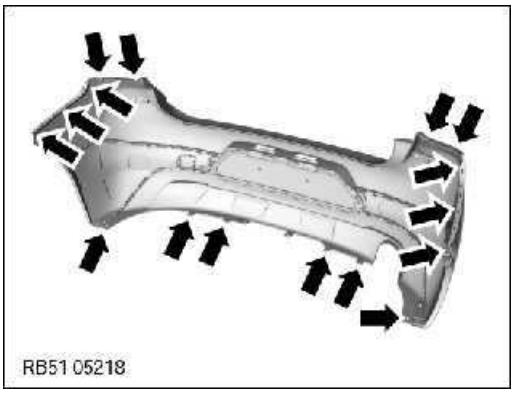
Description is for left component only. Procedure on the right side is identical.



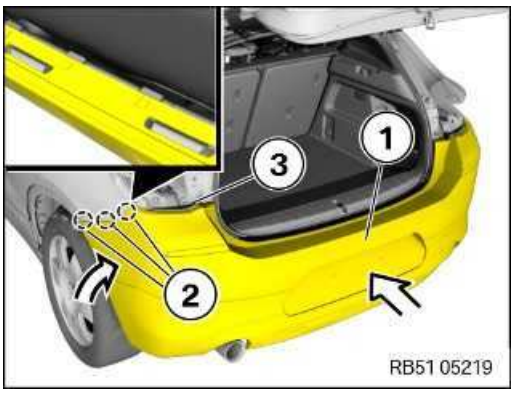
- Install the trim of the side bumper panel (2) and engage on the latch mechanisms (arrows).
- Mount the expanding rivets (1).

POSTPROCESSES

13 – Install rear bumper panel



- Check if the latch mechanisms and the guide (arrows) are damaged or missing and replace the bumper panel where required.



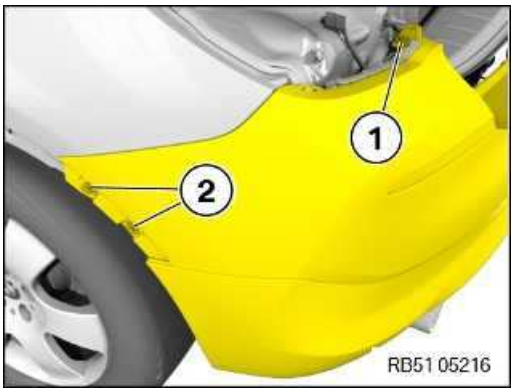
- Position the bumper panel (1) straight with the help of another person.
- Connect all connectors and lock.

NOTICE

Perform the operations on the left and right side.

- Engage the latch mechanisms in the area (3).
- Engage the side latch mechanisms (2) in the direction of the arrow.

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NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

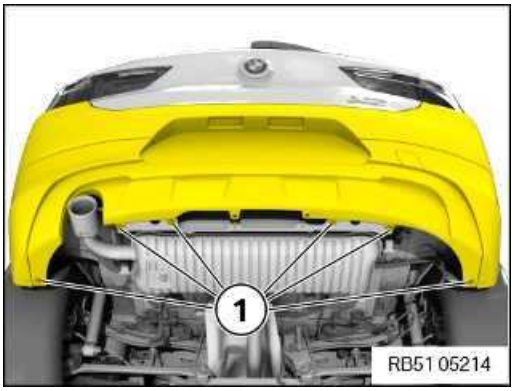
Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

- Tighten down screws (2).

Rear bumper panel to side wall

Screw for thermoplastic plastic		Tightening torque	4,6 Nm



- Tighten the screws (1).

Rear bumper panel to guides

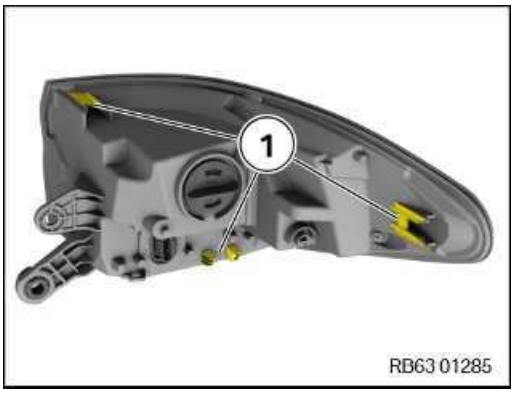
Screw for thermoplastic plastic		Tightening torque	2,5 Nm

14 – Install both rear lights on the side panel

NOTICE

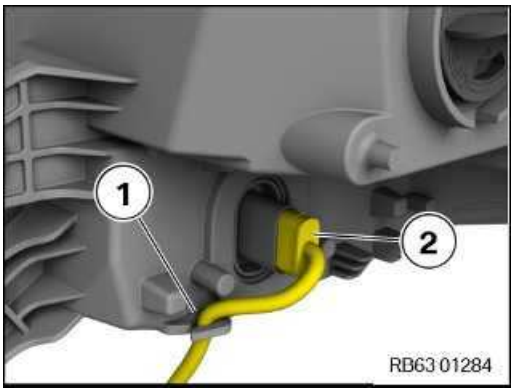
Description is for left component only. Procedure on the right side is identical.

▶ **Install the rear light on the side panel**

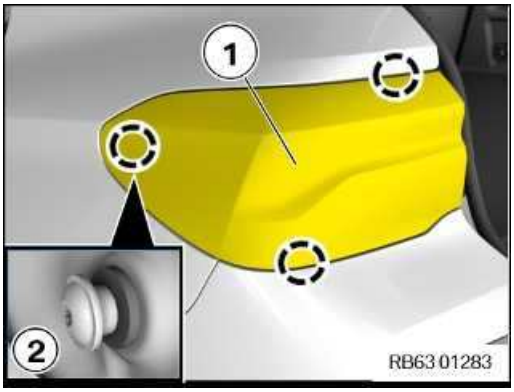


- Make sure that the guides (1) on the rear light are not damaged or missing.

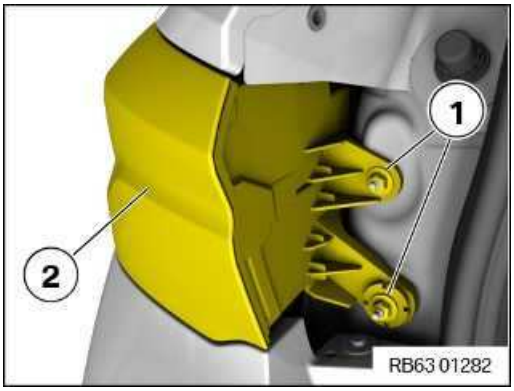
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- Connect connectors (2) and lock.
- Attach the cable in the guide (1).



- Position the rear light (1) in the side panel.
- Make sure the rear light (1) is fitted correctly in the guides (2).

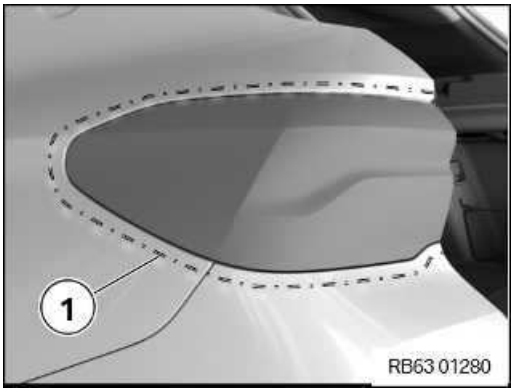


- Replace the nuts (1) on the rear light (2).

  Parts: Nuts
- Tighten nuts (1).

Side panel rear light to body

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm



- Pull off the plastic adhesive tape from the body in the area (1).

15 – Install both trim pieces for the water channel

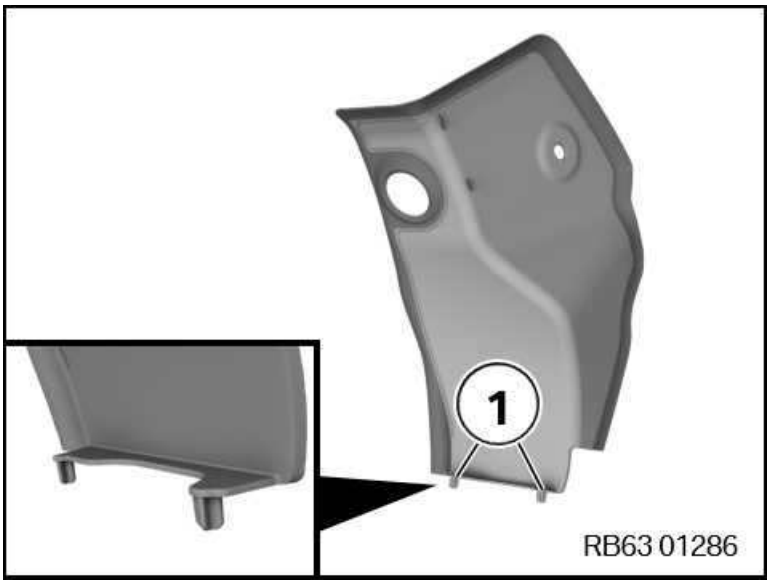
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the water channel**

Check

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- Check the guides (1) for damage.

Result

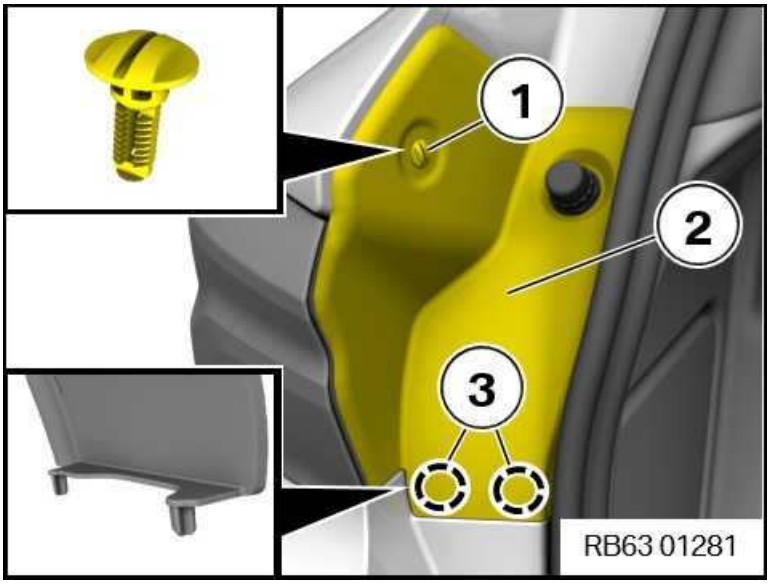
» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.



- Check rotary clip (1) for damage and, if necessary, replace it.



- Insert the trim for water channel (2) with guides (3).
- Fasten the rotary clip (1).

Additional Information

Overview of Tightening Torques

Rear bumper panel to guides Used in step 13

Screw for thermoplastic plastic		Tightening torque	2,5 Nm

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Rear bumper panel to side wall

Used in step 13

Screw for thermoplastic plastic		Tightening torque	4,6 Nm

Side panel rear light to body

Used in step 14

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm

Overview of Special Tools

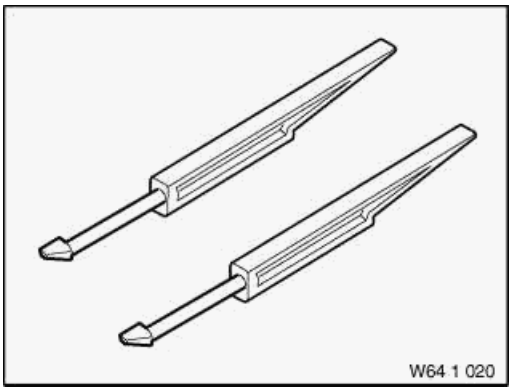
0 496 569 (00 9 325) Wedge



Common Used in step 4

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

0 493 681 (64 1 020) Hook



Common Used in step 6

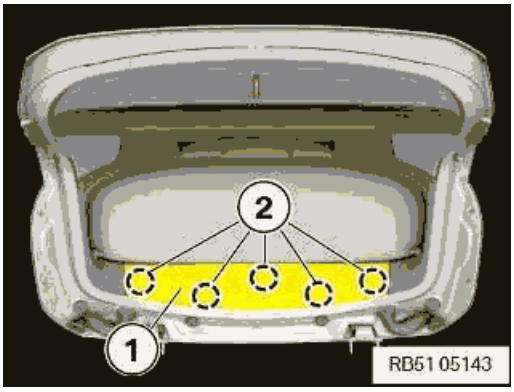
Usage	(release hook) For releasing and removing fresh air grille. For removing various covers.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

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51 13 420 Remove and install the rear trim

PRELIMINARY WORK

1 – Remove the trim for the top rear window frame



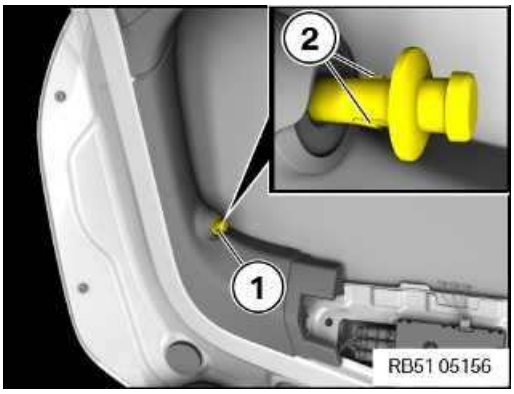
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Remove both trims for the rear window frame on the side

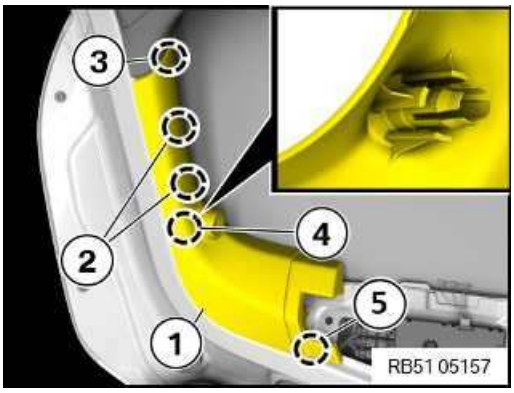
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim for the rear window frame on the side**



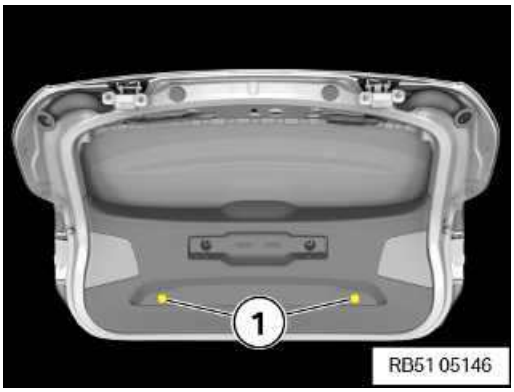
- Detach the mounting button (1) on the latch mechanisms (2) and remove it.



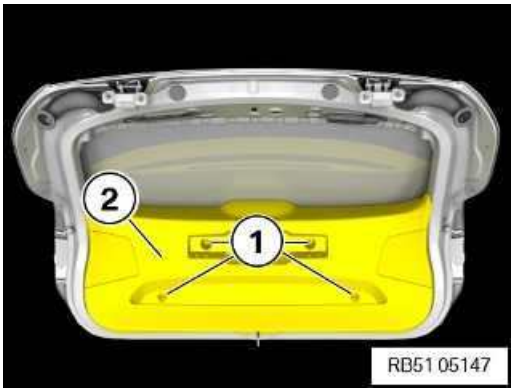
- Unclip the trim for the rear window frame on the side (1) with the clips (2) from the latch mechanisms (3), (4) and (5).

3 – Remove tailgate trim panel

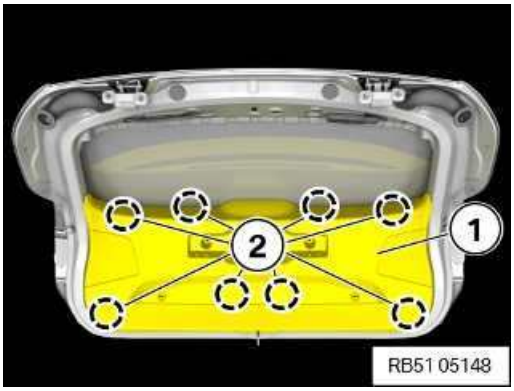
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- Lever out the covers of the screw points (1) with a suitable tool.

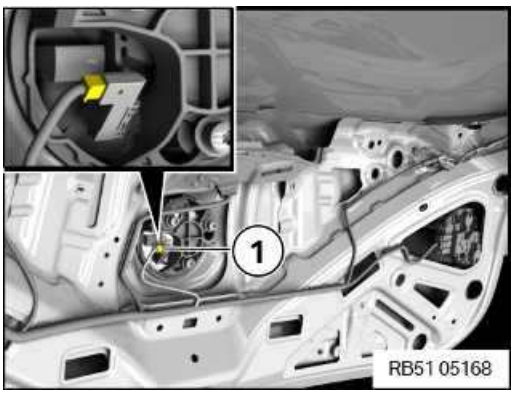


- If applicable, remove the warning triangle from the tailgate trim panel (2).
- Unscrew the bolts (1) at the tailgate trim panel (2).

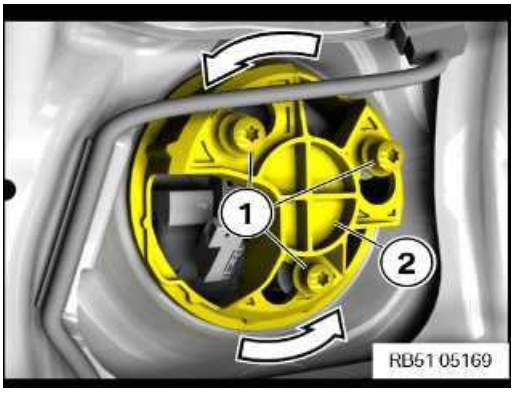


- Unclip the tailgate trim panel (1) at the latch mechanisms (2) and remove.

4 – Remove tailgate pushbutton

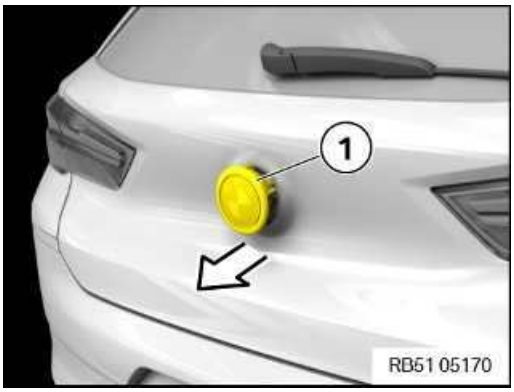


- Unlock plug connection (1) and disconnect.



- Unscrew the bolts (1) until you can turn the retaining ring (2).
- Turn the retaining ring (2) in the direction of the arrow and remove it.

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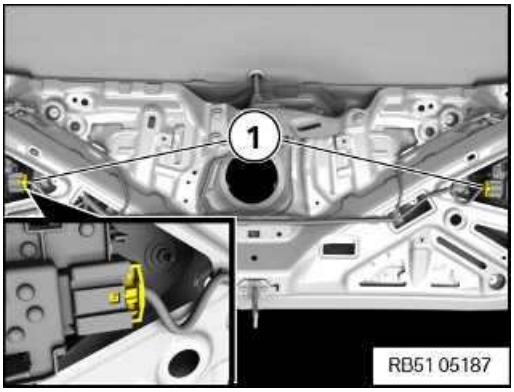


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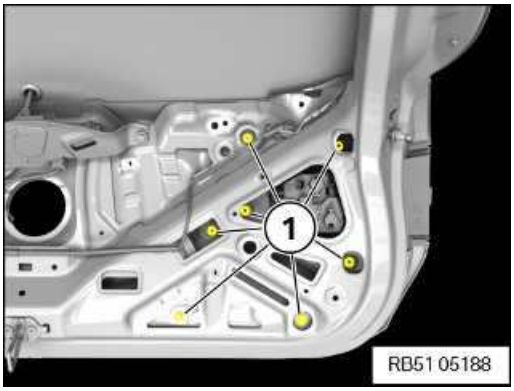
- Remove the tailgate button (1) in the direction of the arrow.

MAIN WORK

5 – Removing the rear trim



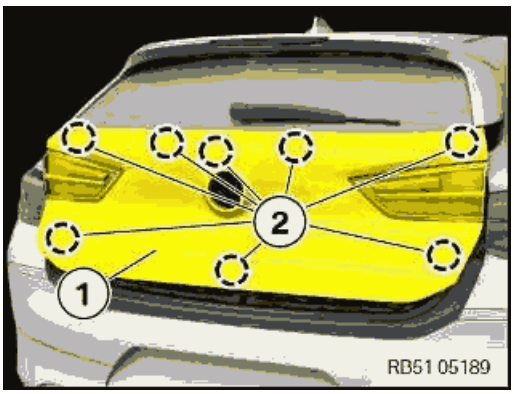
- Unlock and disconnect plug connections (1).



NOTICE

Perform the operations on the left and right side.

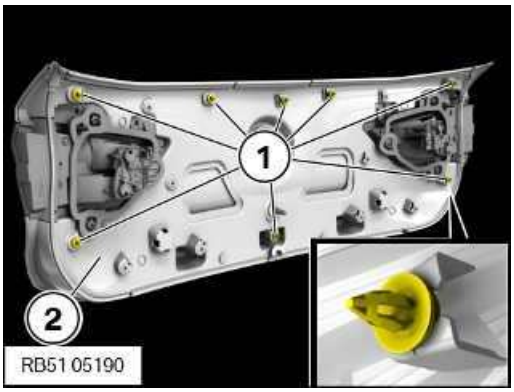
- Loosen nuts (1).



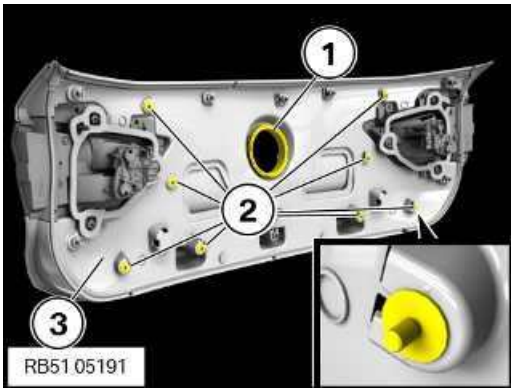
- Unclip the rear trim (1) at the clips (2) and remove toward the rear.

6 – Installing the rear trim

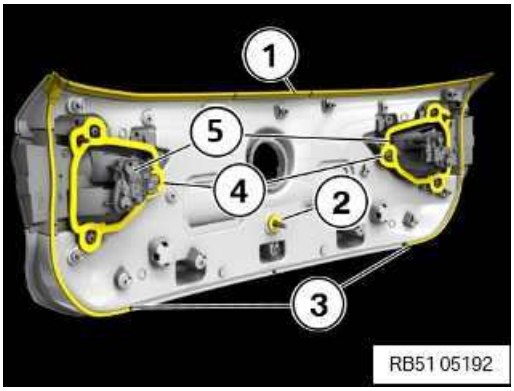
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- Check clips (1) on rear trim (2) for damage and renew them if necessary.

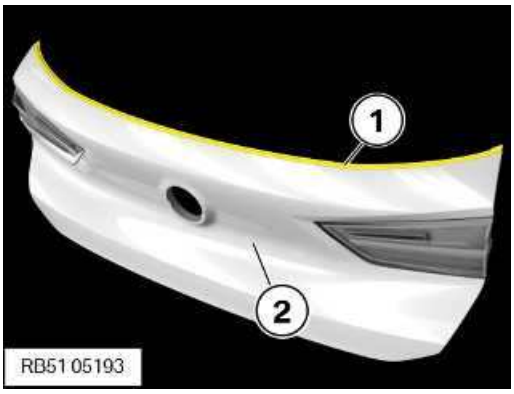


- Check spacer (1) for damage and renew it if necessary.
- Position and engage the spacer (1) correctly in the rear trim (3).
- If necessary, renew missing screws (2) on rear trim (3).

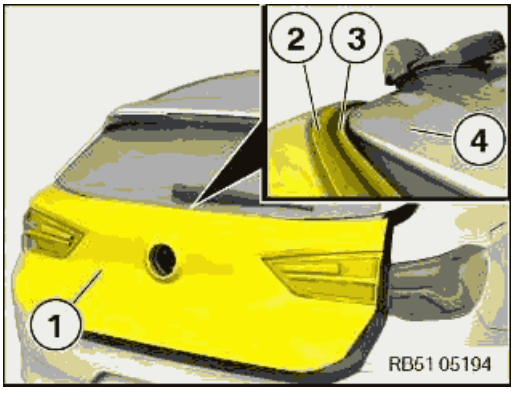


- Check the seals (1) and (2) for damage; renew if necessary.
- Check gutter strips (3) for damage and renew them if necessary.
- Check seals (4) on rear lights (5) on the tailgate for damage and renew them if necessary.

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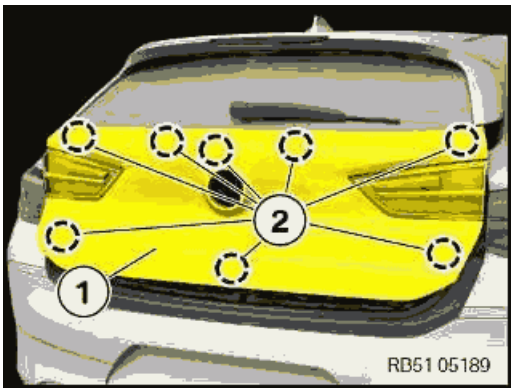


- Coat the seal (1) on the rear trim (2) with a suitable lubricant.

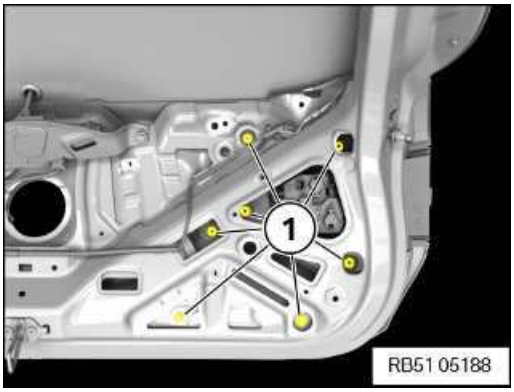


- Open the tailgate slightly.
- Position the rear trim (1) with the seal (2) on the rear window from the bottom.
- Thread the sealing lip (3) of the seal (2) completely under the rear window (4).
- Press on seal (2) with special tool **0 490 538 (00 9 321)**.

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- Clip in the rear trim (1) with the clips (2).



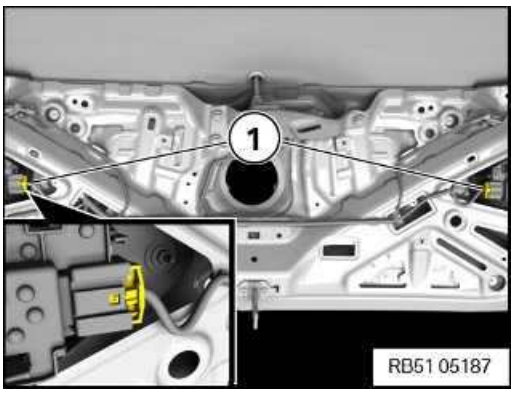
NOTICE

Perform the operations on the left and right side.

- Tighten nuts (1).

Rear trim to tailgate

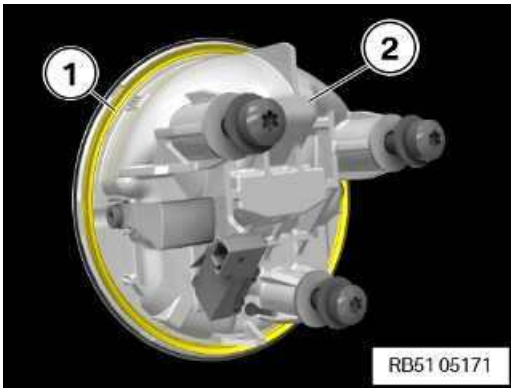
M5 nut		Tightening torque	4,5 Nm



- Connect connectors (1) and lock.

POSTPROCESSES

7 – Install the tailgate button



Check

- Check the seal (1) on the tailgate button (2) for damage.

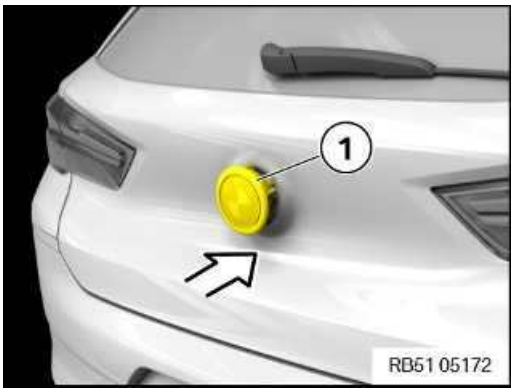
Result

» The seal (1) is damaged.

Measure

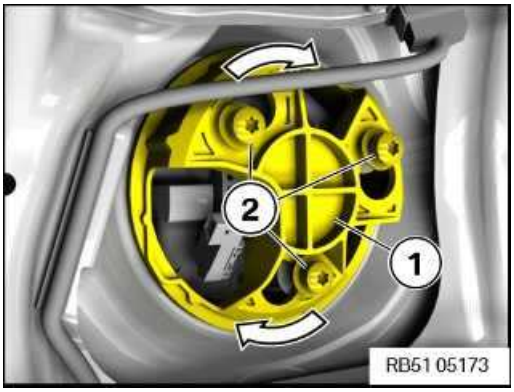
- Replace the tailgate button (2).

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- Insert the tailgate button (1) in the rear trim from the outside in.

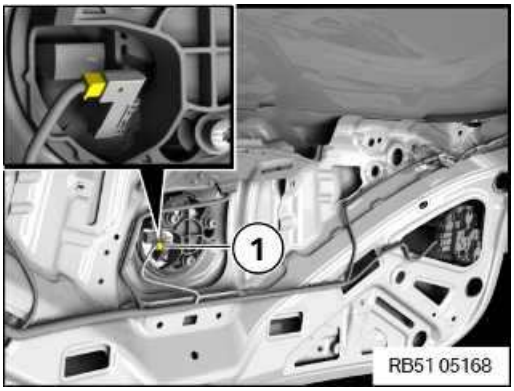
  The BMW badge must be aligned correctly.



- Attach the retaining ring (1) from the inside and turn it in the direction of the arrow to the stop.
- Tighten down screws (2).

Tailgate button

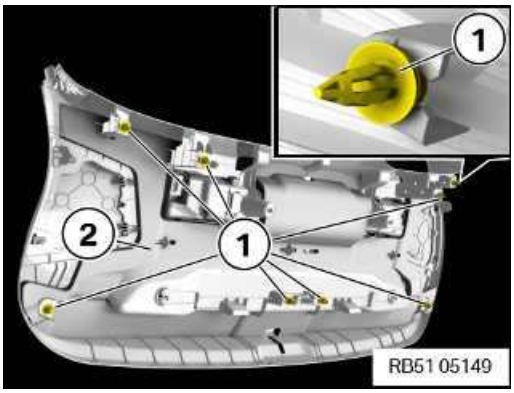
Screw with spring washer and washer M6x20		Tightening torque	8 Nm



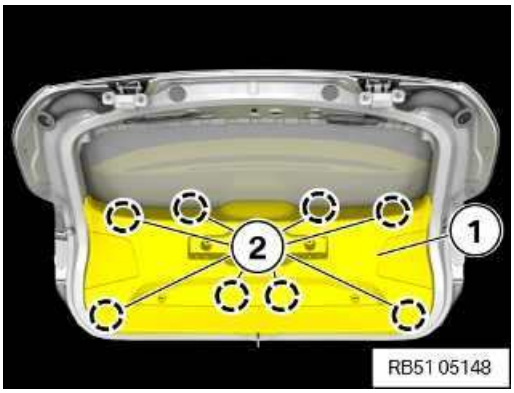
- Connect connectors (1) and lock.

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8 – Installing the tailgate trim panel

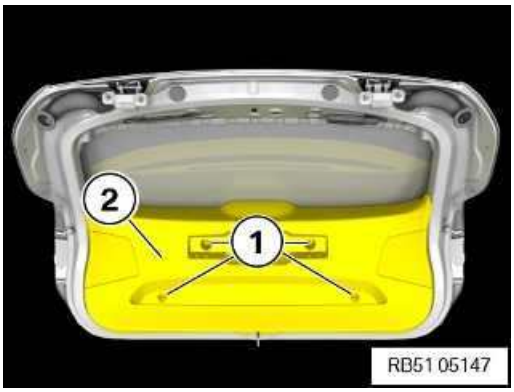


- Check the clips (1) on the tailgate trim panel (2) for damage and replace where required.



- Clip in the tailgate trim panel (1) with the clips (2).

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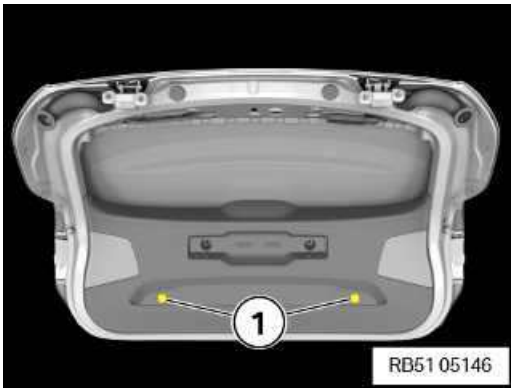


- Tighten the bolts (1) at the tailgate trim panel (2).

Tailgate trim panel

Screw		Tightening torque	1,8 Nm

- If necessary, insert and fasten the warning triangle in the tailgate trim panel (2).



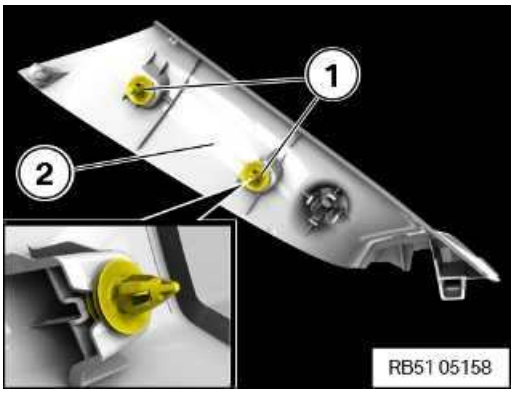
- Insert the covers of the screw points (1).

9 – Mount both trim pieces for the rear window frame on the side

NOTICE

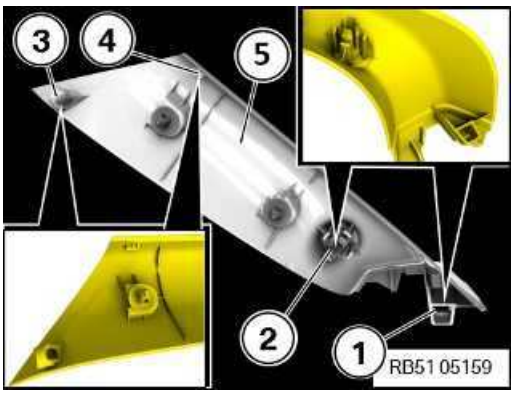
Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the rear window frame on the side**



- Check the clips (1) on the trim for the side rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1), (2), (3) and (4) at the trim for the side rear window frame (5) for damage.

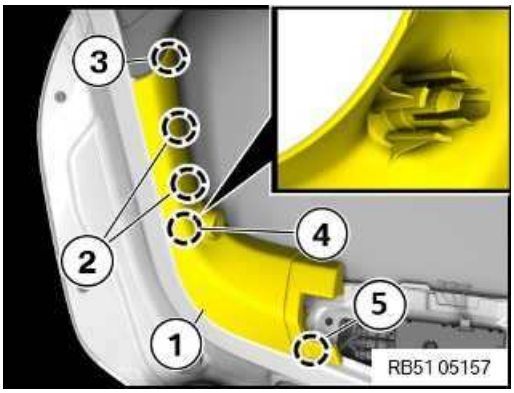
Result

» The latch mechanisms (1), (2), (3) or (4) are damaged.

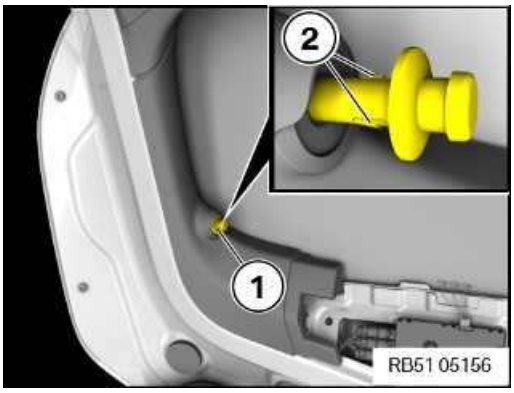
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Measure

- Renew the trim for the side rear window frame (5).

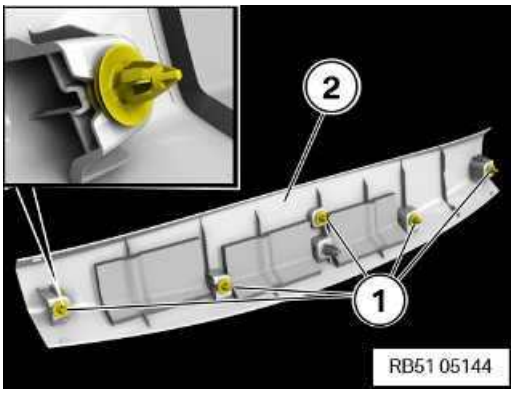


- Clip in the trim for the side rear window frame (1) with the clips (2) and in the latch mechanisms (3), (4) and (5).



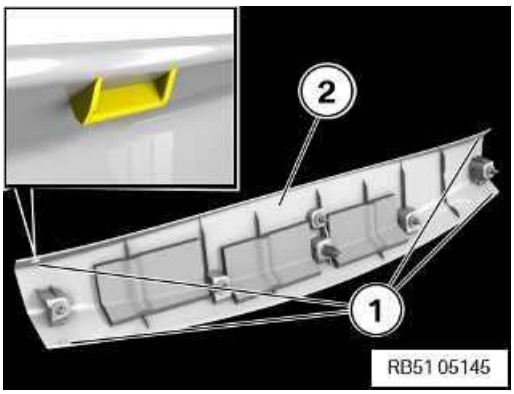
- Clip in the mounting button (1) with the latch mechanisms (2).

10 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

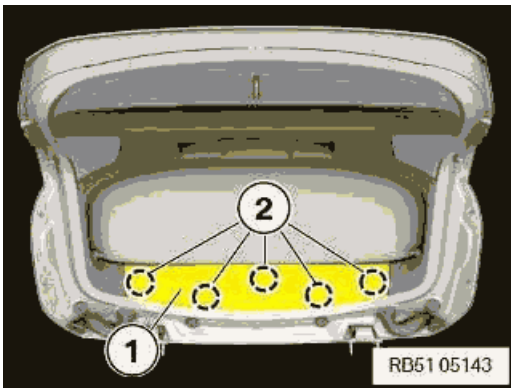
Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).

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- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

Rear trim to tailgate — Used in step 6

M5 nut		Tightening torque	4,5 Nm

Tailgate button — Used in step 7

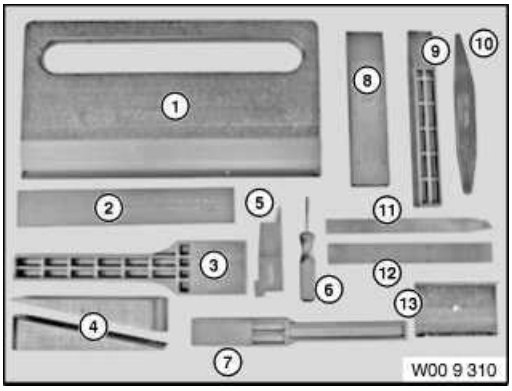
Screw with spring washer and washer M6x20		Tightening torque	8 Nm

Tailgate trim panel — Used in step 8

Screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 490 538 (00 9 321) Folding stick



Common	Used in step 6
Usage	
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 13 307 Remove and install/replace left or right roof rails (for version with panorama glass roof)

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

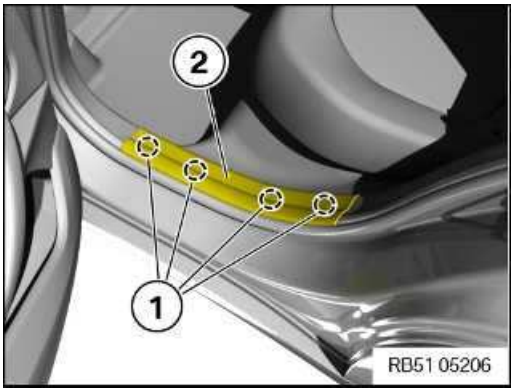
- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Remove the door sill cover strip on the rear left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.



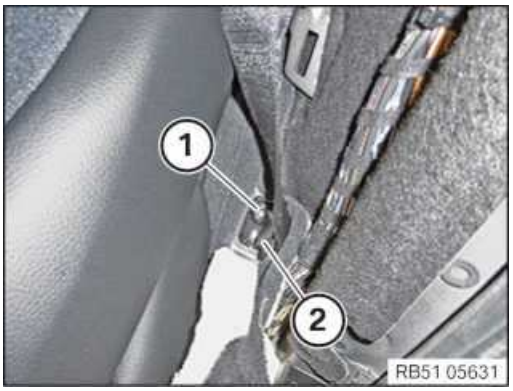
▸ **Remove rear entrance cover strip**

- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Removing the bottom left and right C-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.



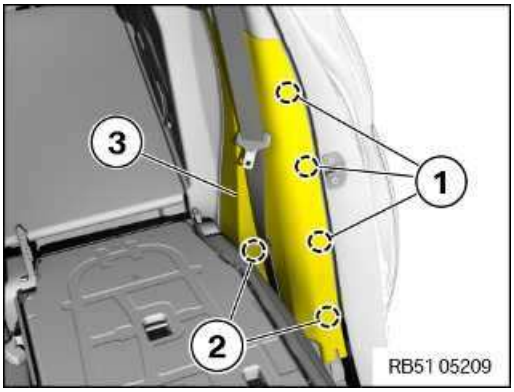
▸ **Remove the bottom C-pillar trim panel**

- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

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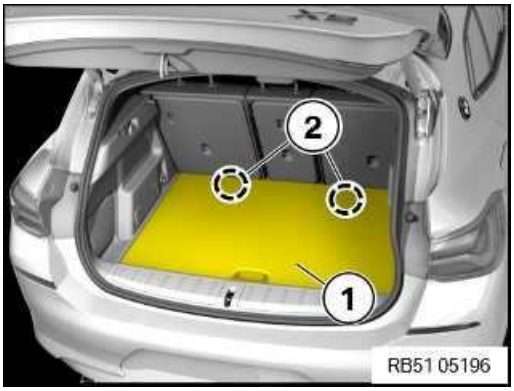


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



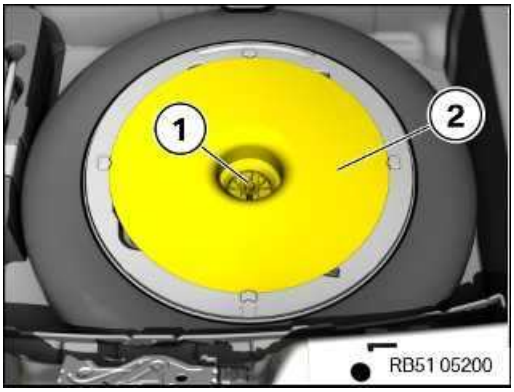
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

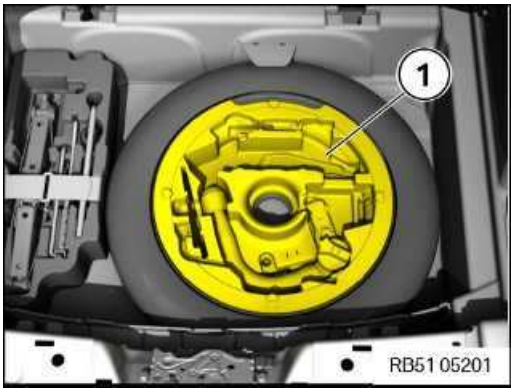


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



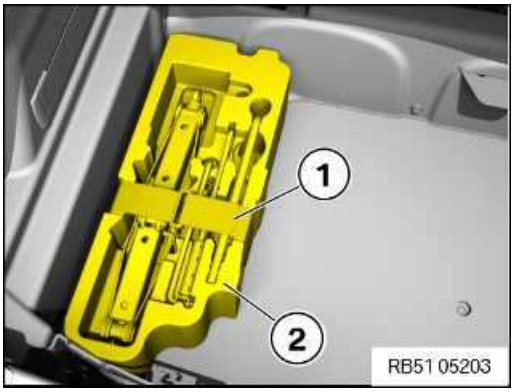
- Remove the oddments tray from the emergency wheel (1).

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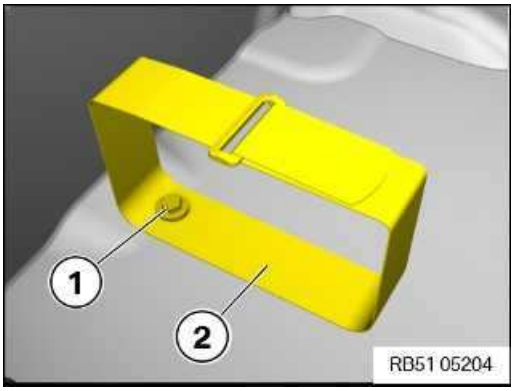
- Remove the emergency wheel (1).

5 – Remove the tool kit



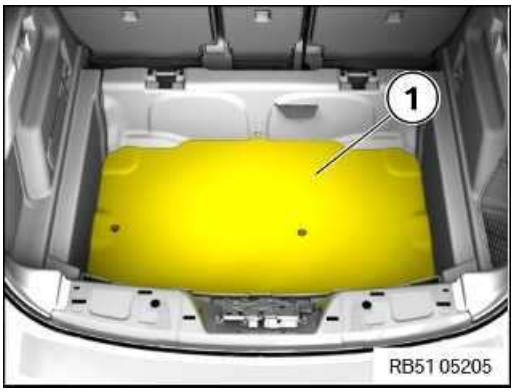
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

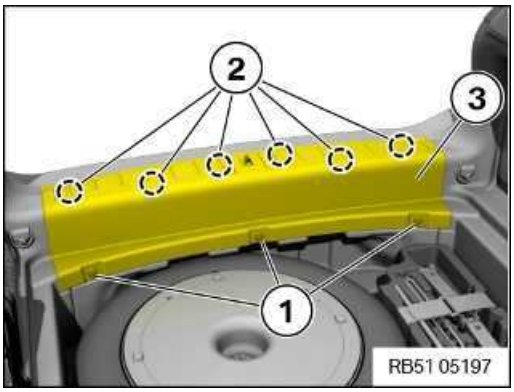
7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

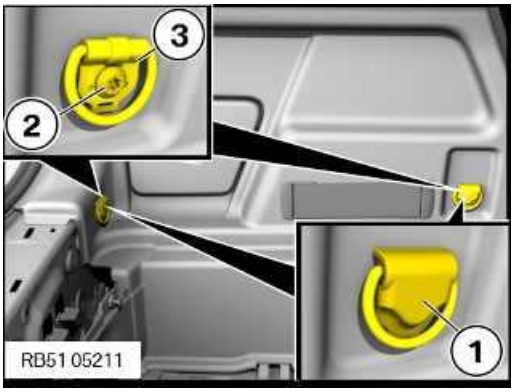
8 – Removing the loading edge trim

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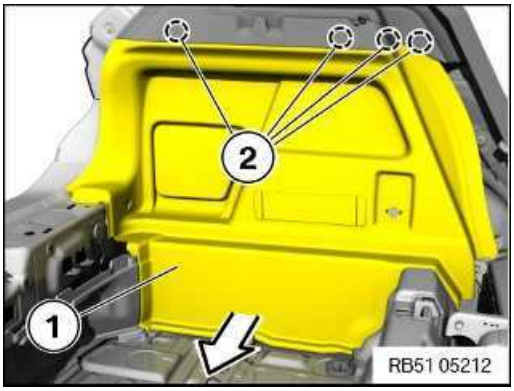


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

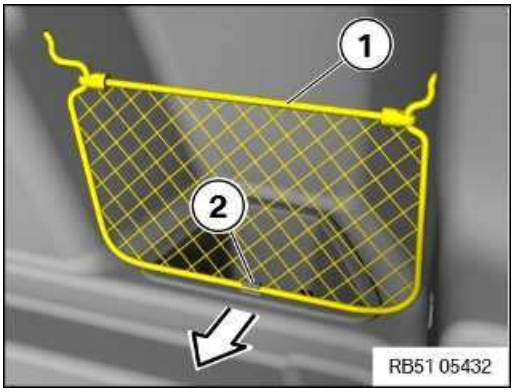


NOTICE

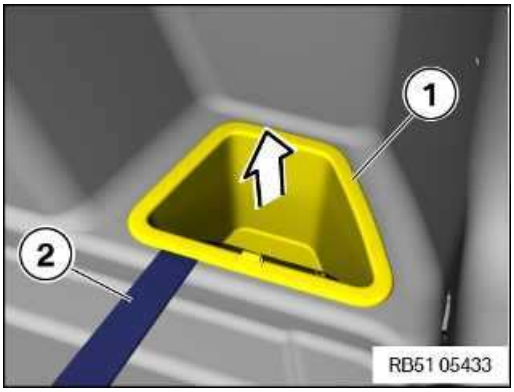
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

10 – Removing right luggage compartment wheel arch trim panel

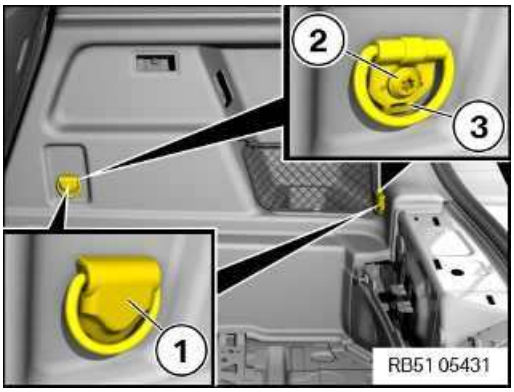


- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.

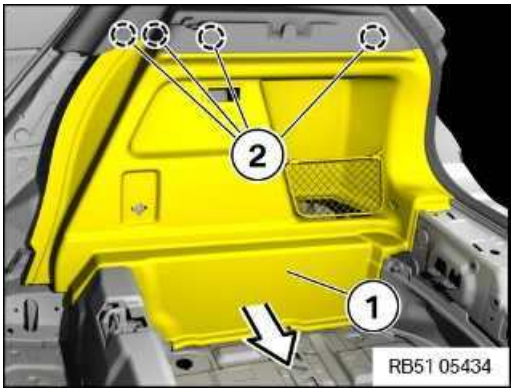


- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).

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- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

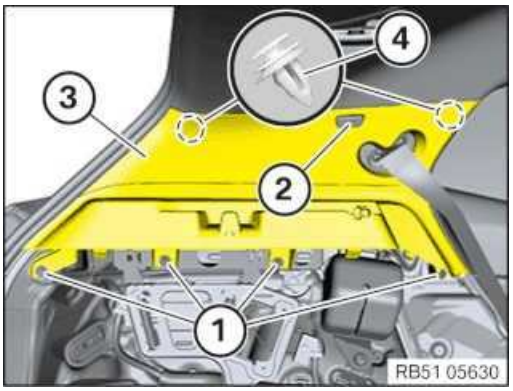
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

11 – Remove the trim panel of the luggage compartment capping on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim panel of the luggage compartment capping**



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

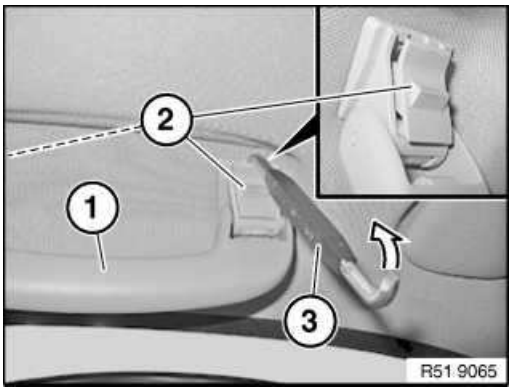
12 – Removing all grab handles

NOTICE

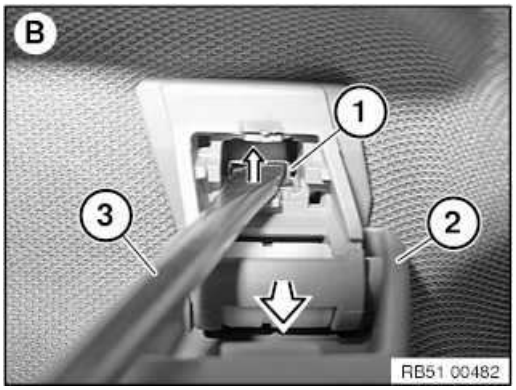
The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**

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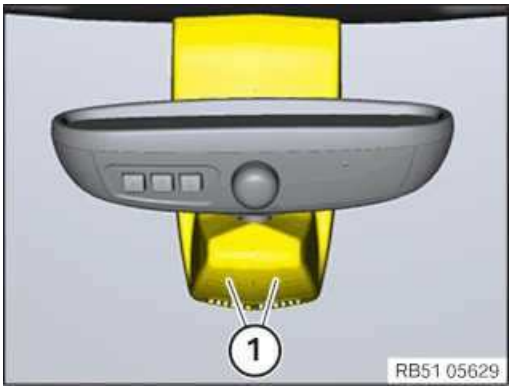


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

13 – Remove the cover on the inside mirror



- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

14 – Remove both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove sun visor**



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

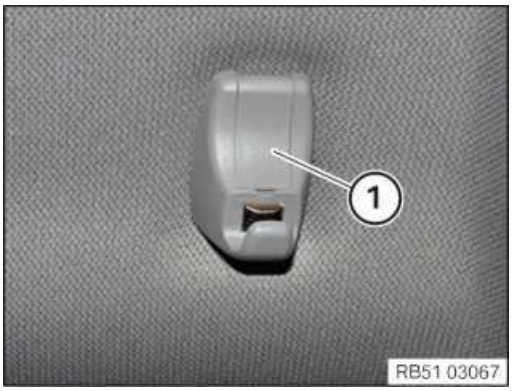
15 – Removing counter supports for sun visor on left and right

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NOTICE

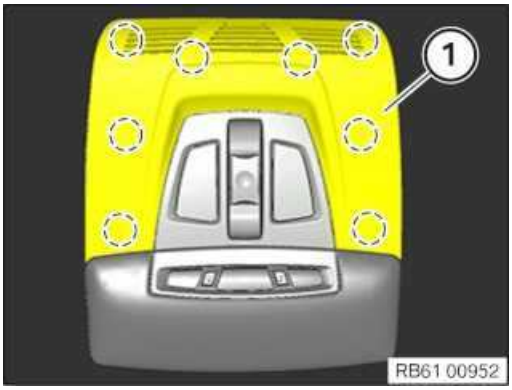
Description is for left component only. Procedure on the right side is identical.

▶ **Remove the counter support for the sun visor**

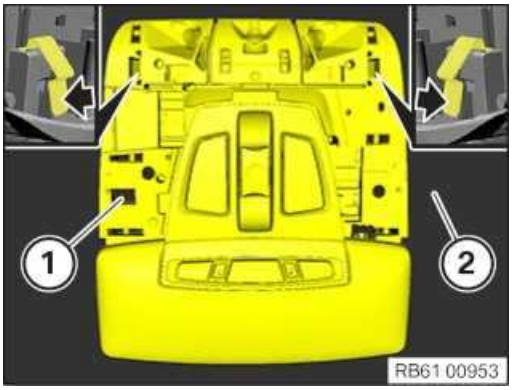


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

16 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

17 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Remove the A-pillar trim panel**

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WARNING

Airbag unit.

Danger! Life-threatening injuries!

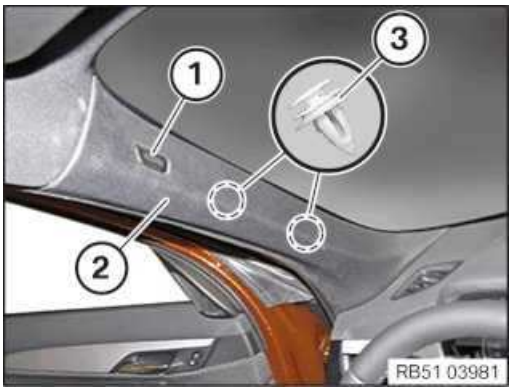
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

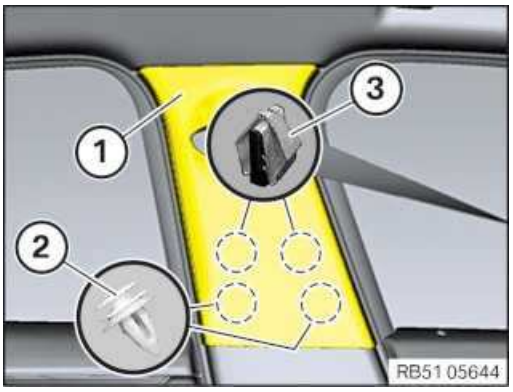


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

18 – Removing the B-pillar trim panels at top left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

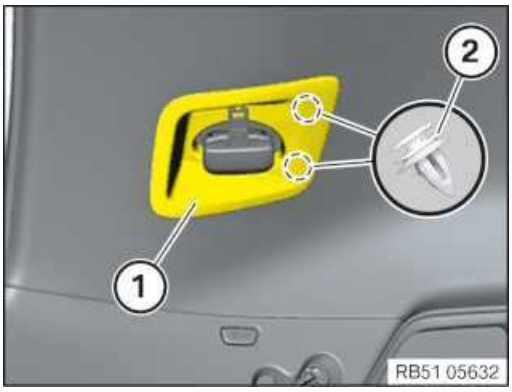


▸ **Partially removing upper B-pillar trim panel**

- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

19 – Remove the belt feed trim

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- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

20 – Lowering the headlining (with panorama glass roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

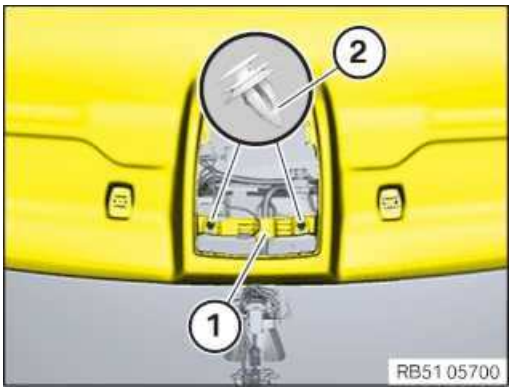
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

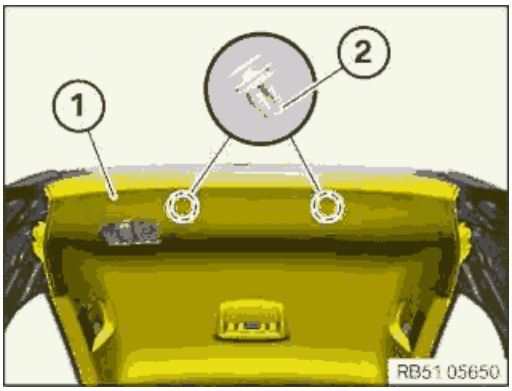
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

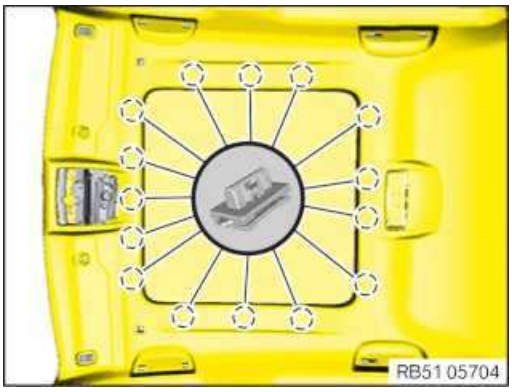


- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).

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- Carefully release the headlining with a suitable plastic wedge from the clamps (1) in a downwards direction.



- Carefully guide out the headlining (1) at the respective edge protection and place it onto the seats in the vehicle.

MAIN WORK

21 – Remove the roof rails

RISK OF DAMAGE

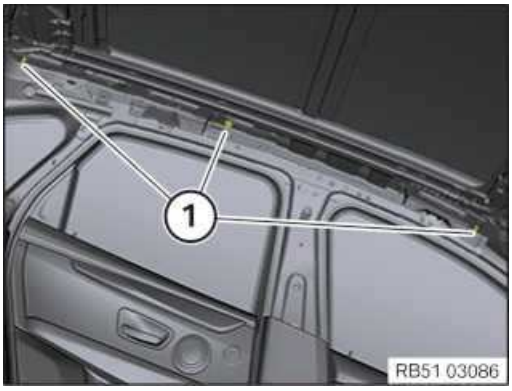
Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

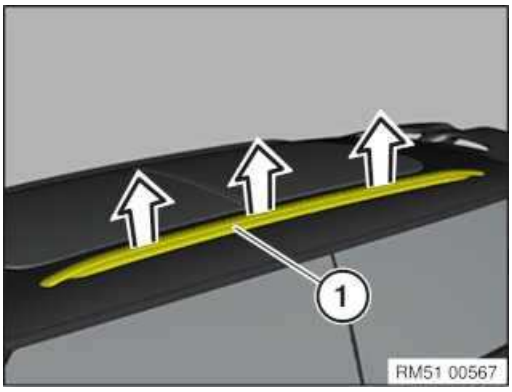
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Loosen nuts (1).

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- Remove the roof rails (1) upwards in the direction of the arrow.

22 – Installing the roof rails

RISK OF DAMAGE

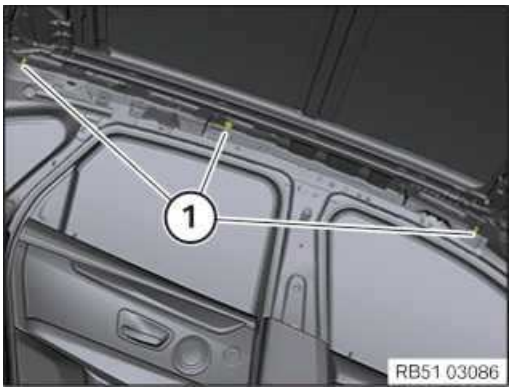
Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the seals and the threaded bolts at the roof rails for damage; if necessary, renew them.

  The seals and the threaded bolts may not be damaged or missing.
- Install the roof rail and correctly position it.
- Renew nuts (1).

  Parts: Nuts
- Tighten nuts (1).

Roof rails on roof

Nut, self-locking	Replace nuts	Tightening torque	21 Nm

POSTPROCESSES

23 – Install the headlining (lowered with panorama roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

The front seat backrests have been fully adjusted towards the rear.

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RISK OF DAMAGE

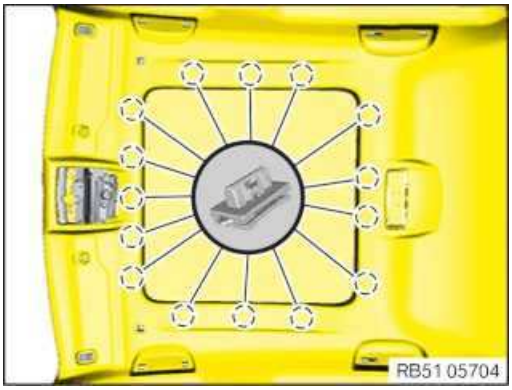
Fold the headlining.

If the headlining is folded, it may have to be replaced.

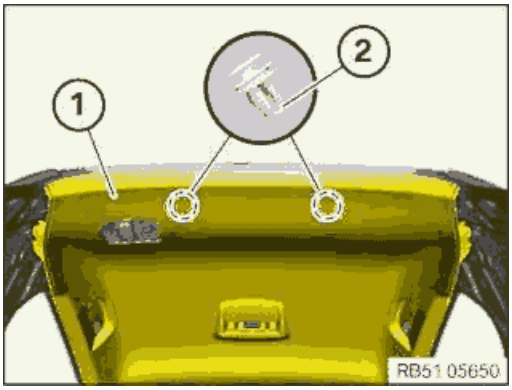
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



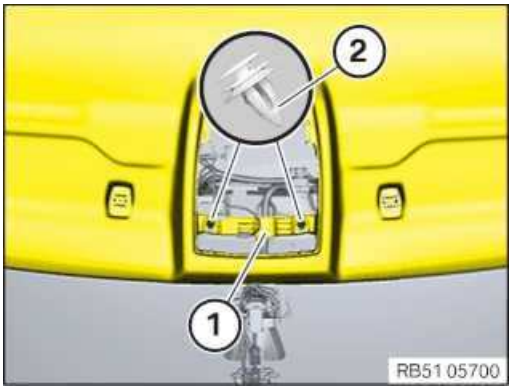
- Install the headlining (1) and carefully insert it at the respective edge protection.



- Carefully engage the headlining on the clamps (1).



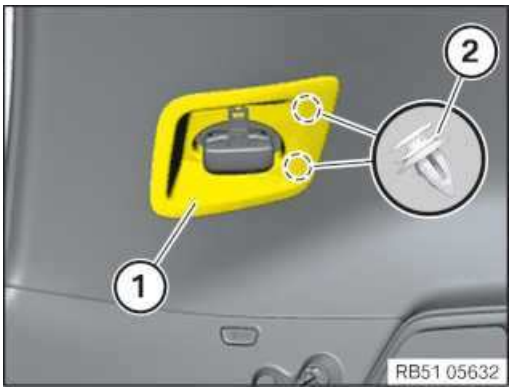
- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

24 – Install the belt feed trim

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- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

25 – Installing the top left and right B-pillar trim panels

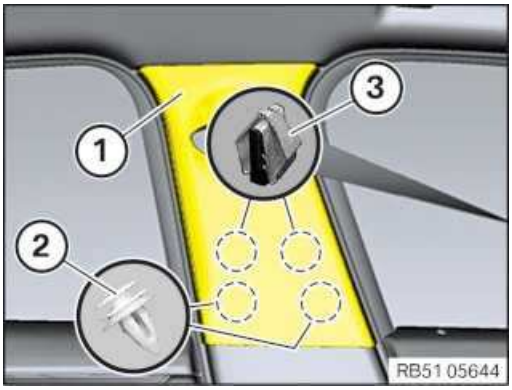
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially installing upper B-pillar trim panel**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

26 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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WARNING

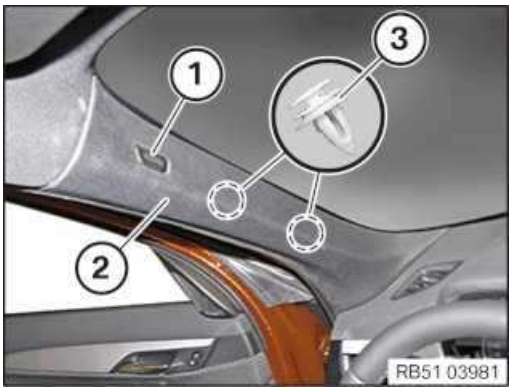
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

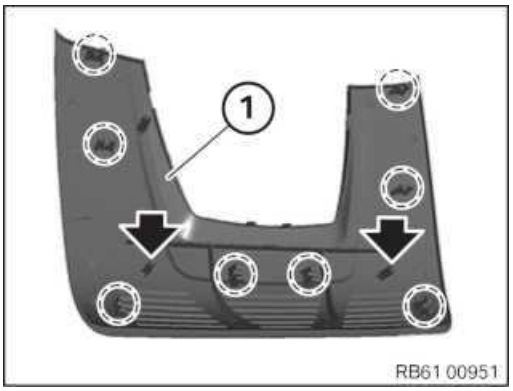
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

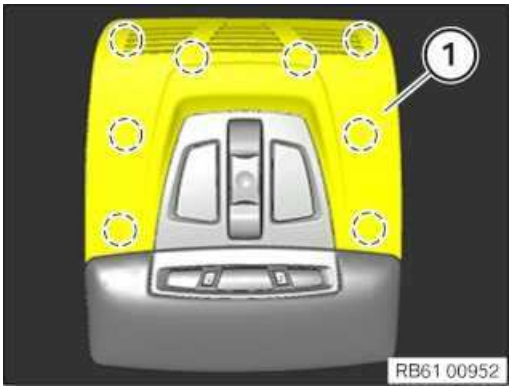
M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

27 – Install the roof function centre

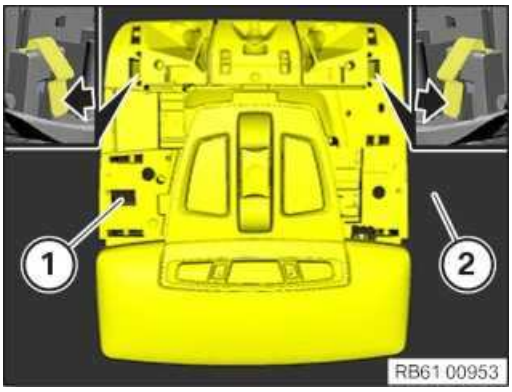


- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.

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NOTICE

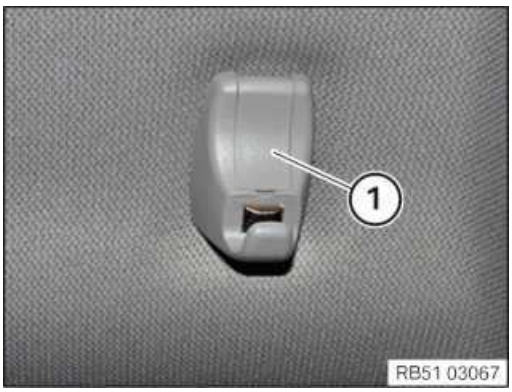
To provide a better overview: Schematic diagram with partially hidden components.

- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

28 – Install the counter supports for the sun visor on left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the counter support for the sun visor**

- Install the counter support.
- Tighten screw and close the cover (1).

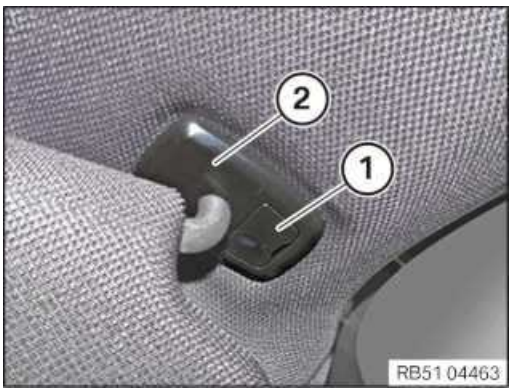
Counter support on body

Screw		Tightening torque	2,5 Nm

29 – Install both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.

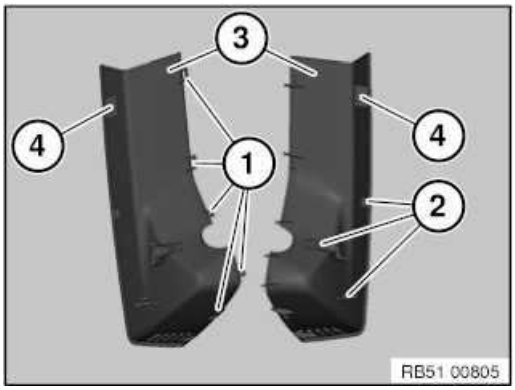


▸ **Install the sun visor**

- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

30 – Install the cover on the inside mirror

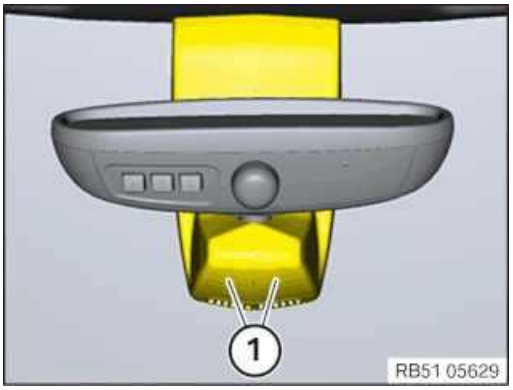
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- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



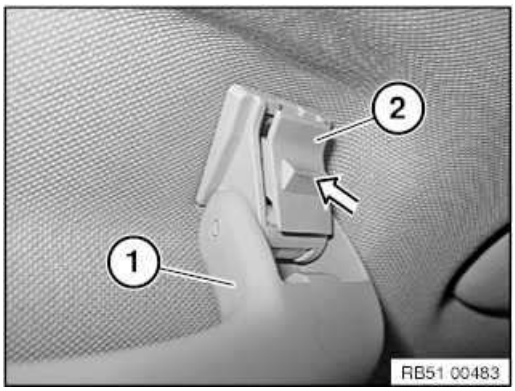
- Install covers on the interior mirror (1) clip together.

31 – Installing all grab handles

NOTICE

The description is for one component only. The procedure is identical for all further components.

▸ **Installing the grab handle**



- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

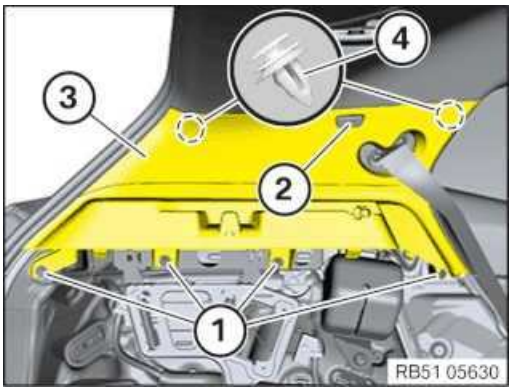
32 – Install the trim panel for left and right the luggage compartment capping

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim panel for the luggage compartment capping**

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- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

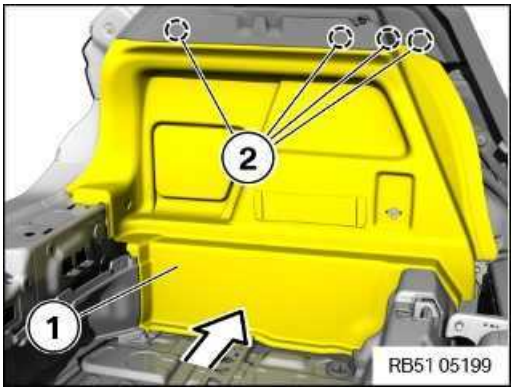
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

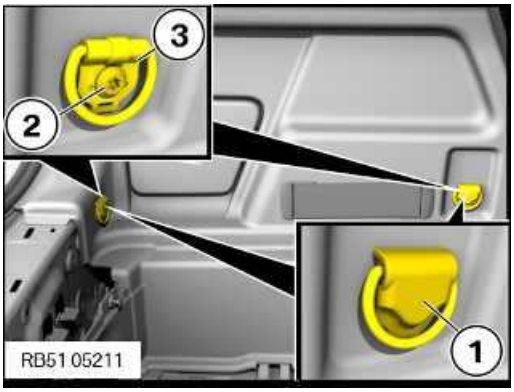
33 – Install luggage compartment wheel arch trim panel at left



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.



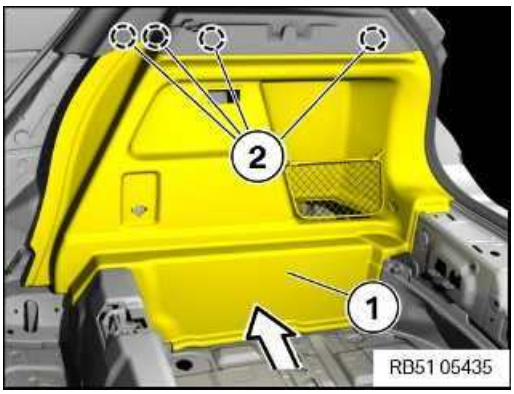
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

34 – Installing the luggage compartment wheel arch trim panel on the right

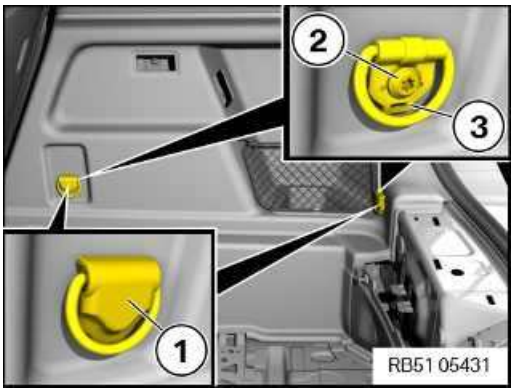


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

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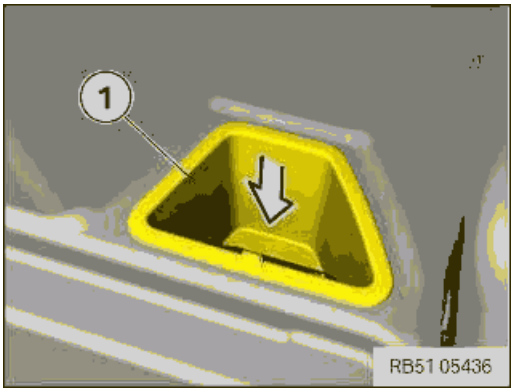


- Position the lashing eyes (3) and tighten the screws (2).

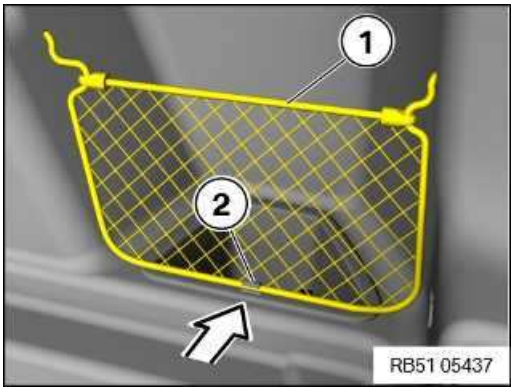
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



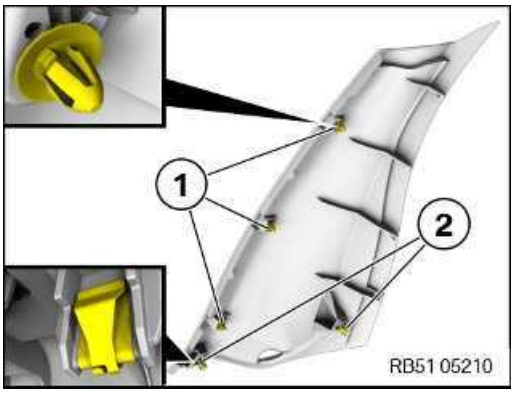
- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

35 – Install C-pillar trim panel at bottom left and right

NOTICE

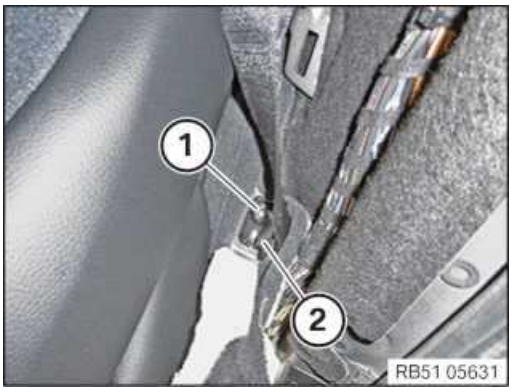
Description is for left component only. Procedure on the right side is identical.

▸ **Install the bottom C-pillar trim panel**



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

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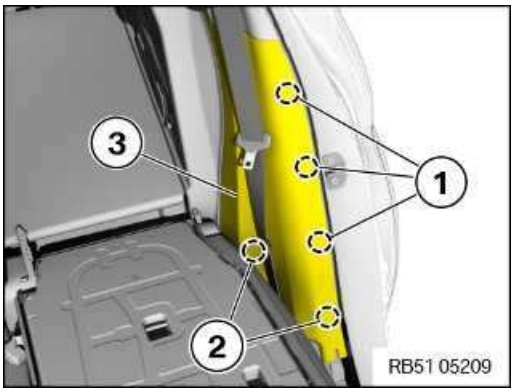


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

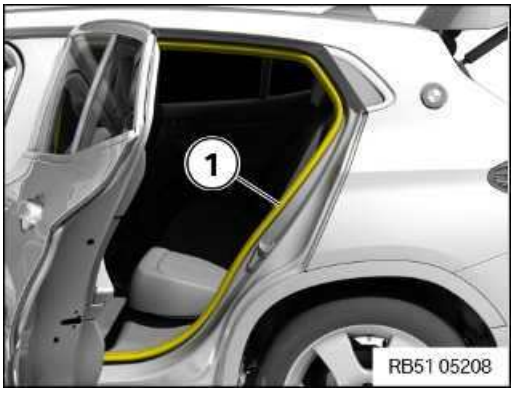
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



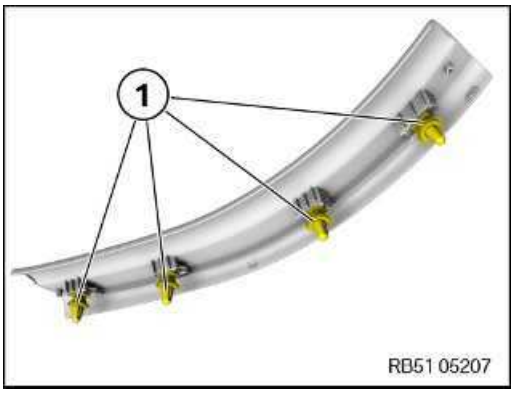
- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

36 – Install the door sill cover strip on the rear left and right

NOTICE

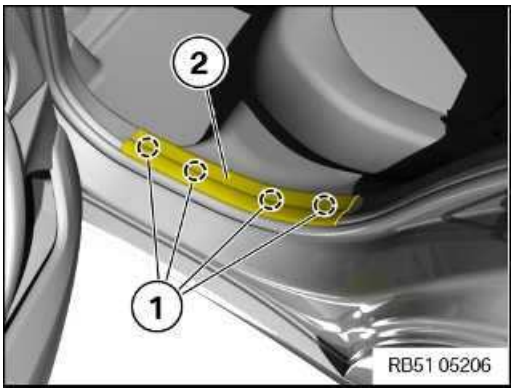
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the rear door sill cover strip**



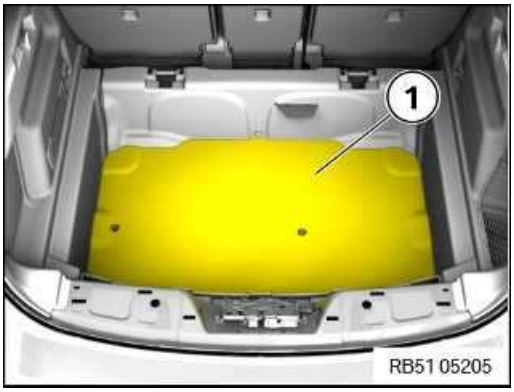
- Check the clips (1) for damage and renew where required.

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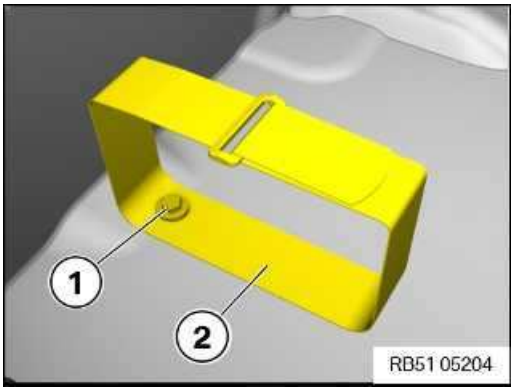
- Clip in the door sill cover strip (2) with the clips (1).

37 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

38 – Inserting the Velcro fastener for the toolkit

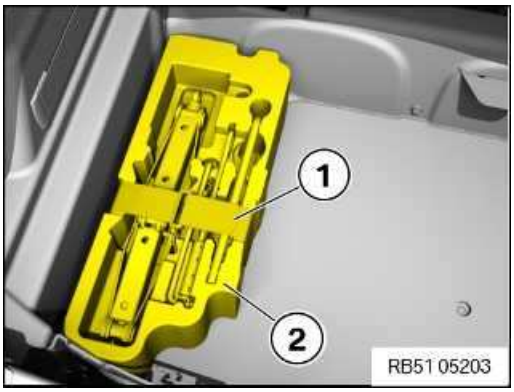


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

39 – Install the tool kit



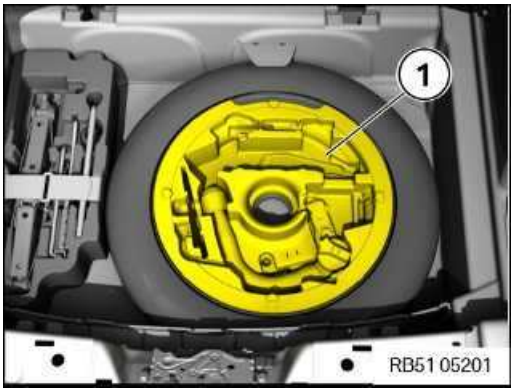
- Install the tool kit (2).
- Close the hook and loop tape (1).

40 – Install the emergency wheel

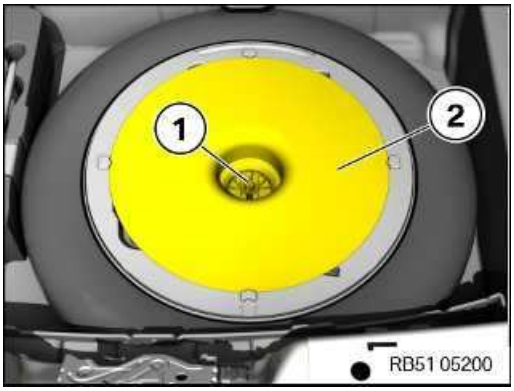
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- Insert compact spare wheel(1).

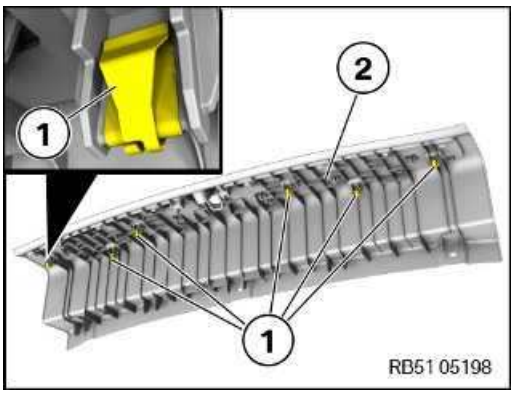


- Insert oddments tray into the compact spare wheel (1).

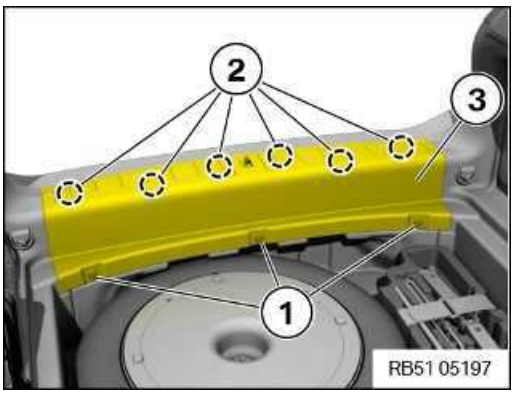


- Insert the lid (2).
- Hand-tighten the bolt (1).

41 – Installing loading edge trim



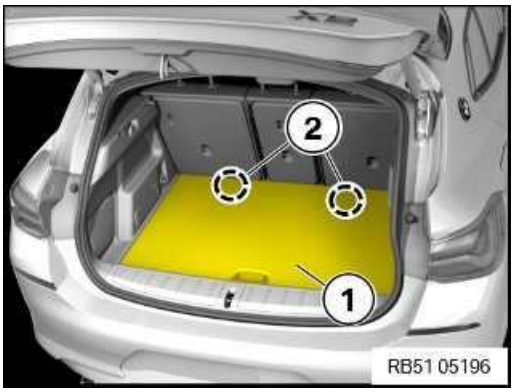
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

42 – Installing the luggage compartment removable panel

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- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

Roof rails on roof — Used in step 22

Nut, self-locking	Replace nuts	Tightening torque	21 Nm

A-pillar trim panel to body — Used in step 26

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Counter support on body — Used in step 28

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 32

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 32

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 33 34

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body — Used in step 35

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body — Used in step 38

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common — Used in step 16 18

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	17 26

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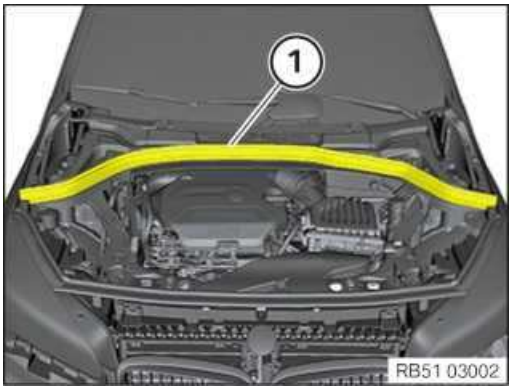
51 13 115 Remove and install/replace the cowl panel cover (front)

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

NOTICE

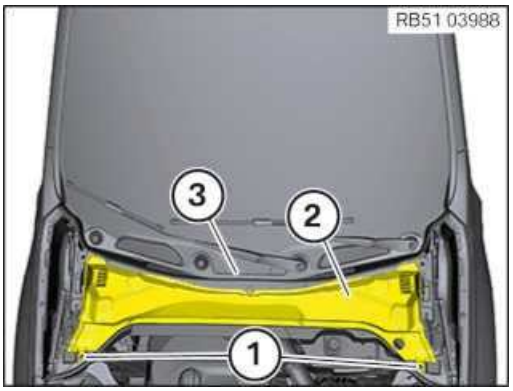
Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

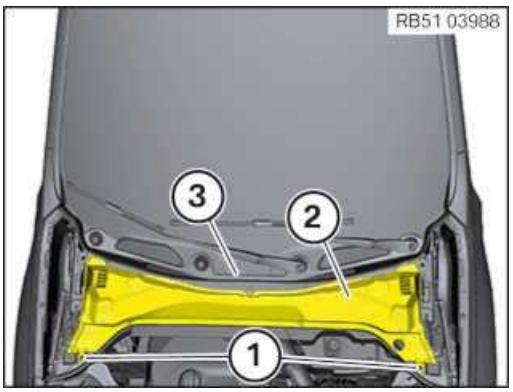
MAIN WORK

2 – Removing front cowl panel cover



- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

3 – Installing front cowl panel cover



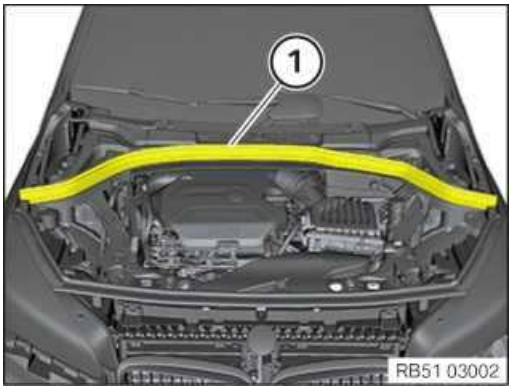
- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

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4 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

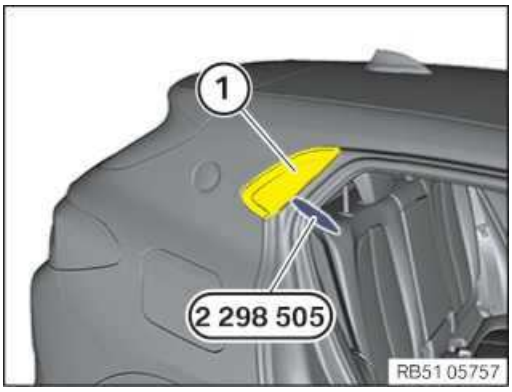
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51 13 377 Remove, install/replace C-pillar cover

NOTICE

Description is for right component only. The procedure on the left side is identical.

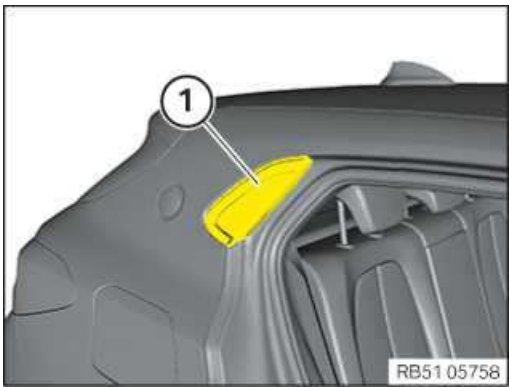
1 – Remove C-pillar trim panel



- Unclip the C-pillar trim panel (1) using the special tool **2 298 505**.

Note: The C-pillar trim panel cannot be removed without damaging it and must be renewed.

2 – Installing C-pillar trim panel



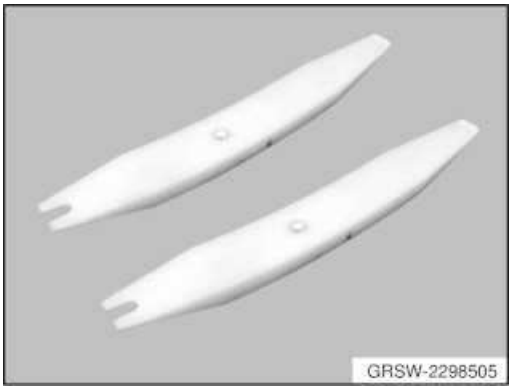
- Renew the C-pillar trim panel (1).

  Parts: C-pillar trim panel
- Position the new D-pillar trim panel (1) and clip it in.

Additional Information

Overview of Special Tools

2 298 505 Wedge



Common	Used in step 1
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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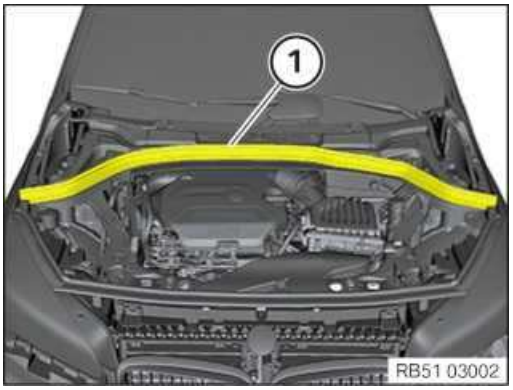
51 13 116 Removing and installing cowl panel cover (rear)

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

2 – Remove the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

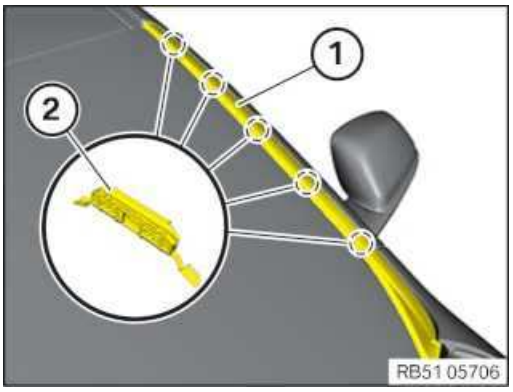
▸ **Remove the gutter strip on the windscreen**

RISK OF DAMAGE

Scratches.

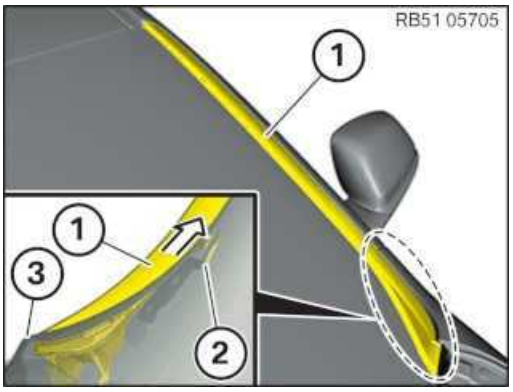
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



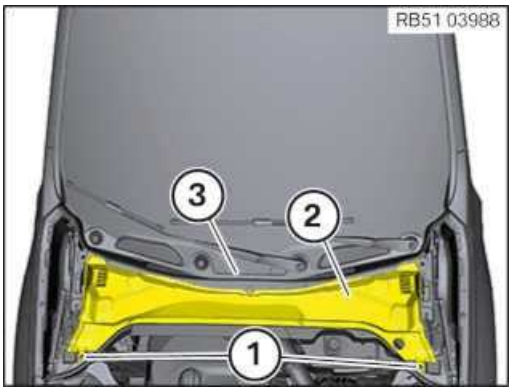
- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.

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- Pull out the gutter strip (1) from the guide (2) in direction of arrow and carefully feed out at the side panel (3).

3 – Removing front cowl panel cover



- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

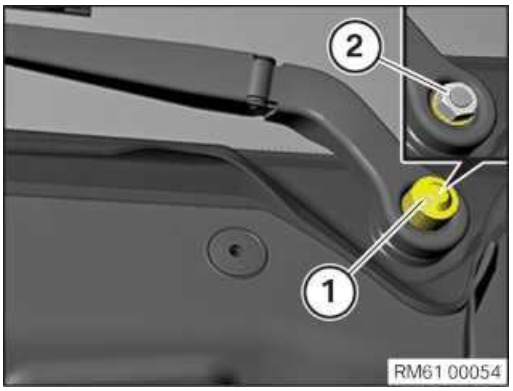
4 – Remove left and right wiper arm

RISK OF DAMAGE

Damage to wiper console

While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do not lift off wiper arm, else the wiper console may break on the predetermined breaking point for the pedestrian protection.



- Pull off the protective cap (1) and release the nut (2) below it.



- Pull off windscreen wiper arm (1)with special tool .

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MAIN WORK

5 – Remove the rear cowl panel



- Pull off the cowl panel cover (1) towards the top, starting from the side and feed out.

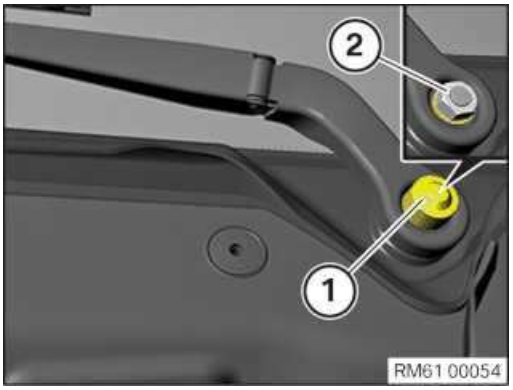
6 – Install the rear cowl panel



- Insert the cowl panel cover (1) and press it into the latch mechanism on the windscreen starting at the side.

POSTPROCESSES

7 – Install left and right wiper arm



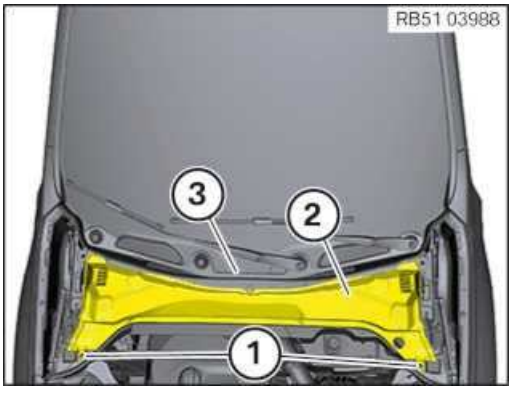
- Join wiper arm and tighten with nut (2).

Windscreen wiper arm

Combination hexagon nut		Tightening torque	35 Nm

- Join the protective cap (1).

8 – Installing front cowl panel cover



- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

9 – Install the gutter strip on the windscreen on the left and right

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the gutter strip on the windscreen**

RISK OF DAMAGE

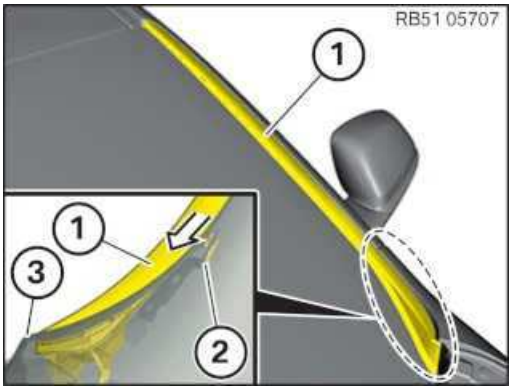
Scratches.

Tools and sharp-edged components can cause scratches.

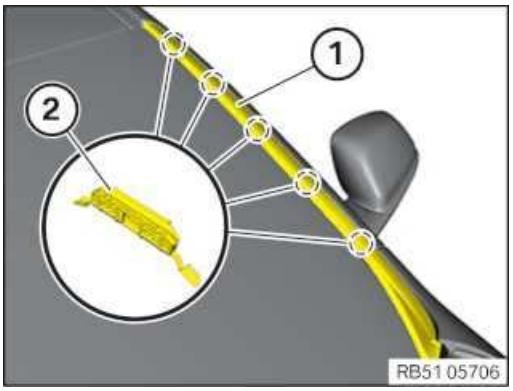
- Protect working area.
- Handle tools and components carefully.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.



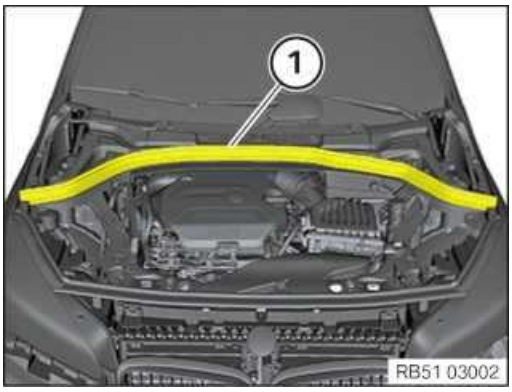
- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

10 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

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- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

Additional Information

Overview of Tightening Torques

Windscreen wiper arm Used in step 7

Combination hexagon nut		Tightening torque	35 Nm

Overview of Special Tools

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51 13 280 Removing and installing left or right roof trim strip

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

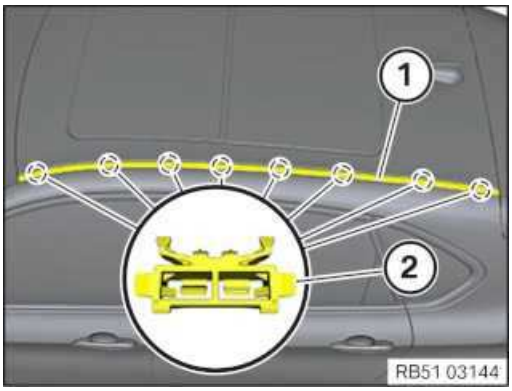
- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

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1 – Remove the roof trim strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the roof trim strip (1) using the special tool **0 490 538 (00 9 321)**, starting from the rear.
- Unclip the roof trim strip (1) upwards from the clamps (2).

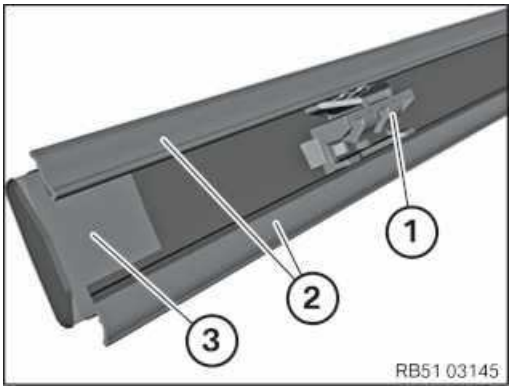
2 – Install the roof trim strip

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

NOTICE

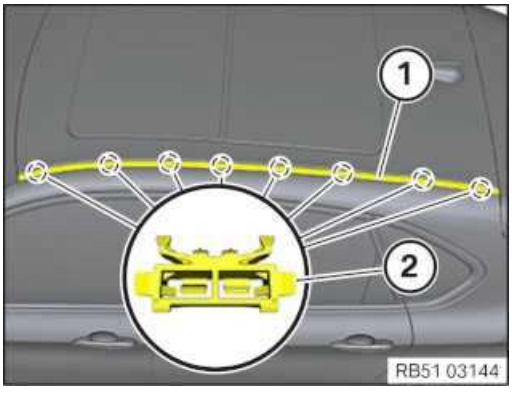
Description is for left component only. Procedure on the right side is identical.



- Check clips (1), seals (2) and supports (3) for damage; renew if necessary.

  Clips (1), seals (2) and supports (3) must not be damaged or missing.
- Position the roof trim strip correctly on the roof.

  The position of the clips must match the tabs on the roof.
- If necessary, adjust the position of the clips (1).



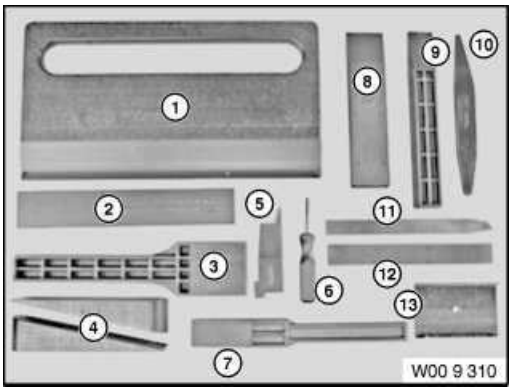
- Position the roof trim strip (1) in front flush with the roof outer skin.
- Clip in the roof trim strip (1) at the clamps (2).

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Additional Information

Overview of Special Tools

0 490 538 (00 9 321) Folding stick



Common	Used in step 1
Usage	
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 13 305 Removing and installing/replacing left or right roof railing

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

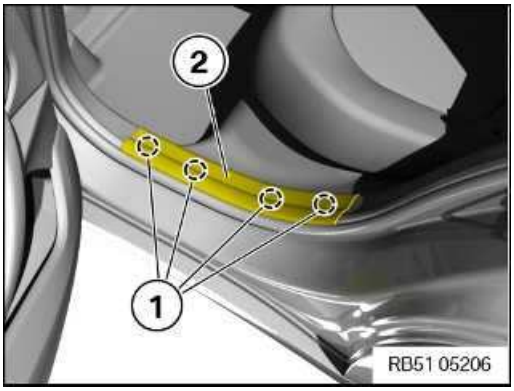
- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Remove the door sill cover strip on the rear left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.



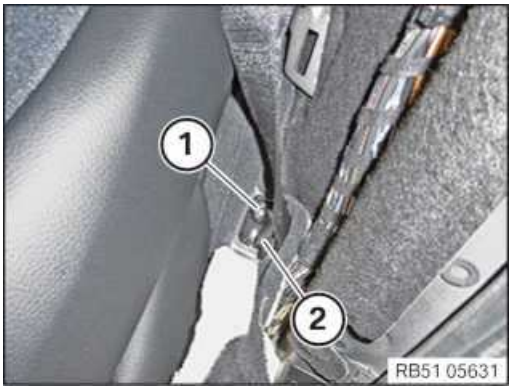
▸ **Remove rear entrance cover strip**

- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Removing the bottom left and right C-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.



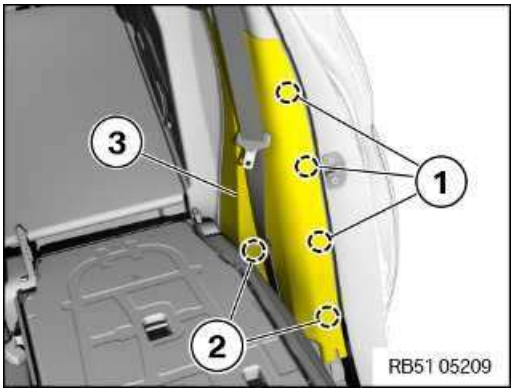
▸ **Remove the bottom C-pillar trim panel**

- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

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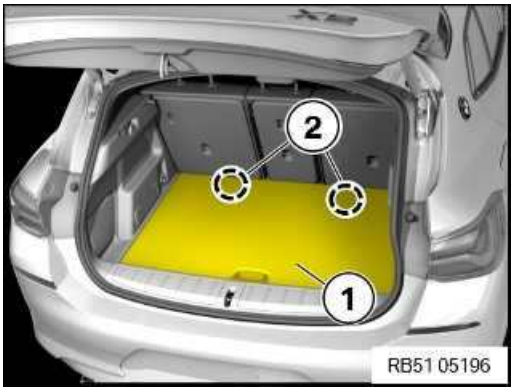


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



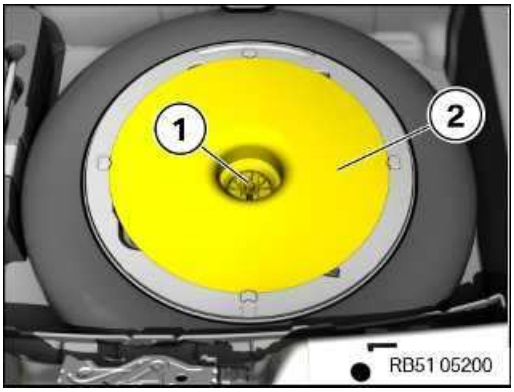
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

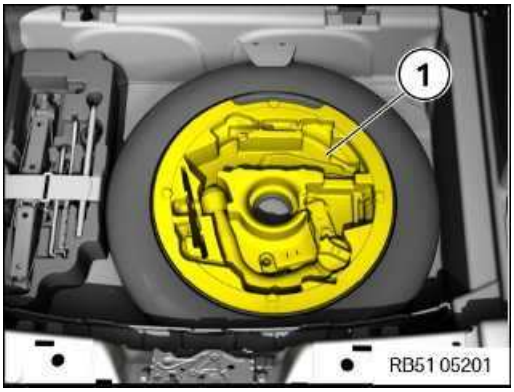


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



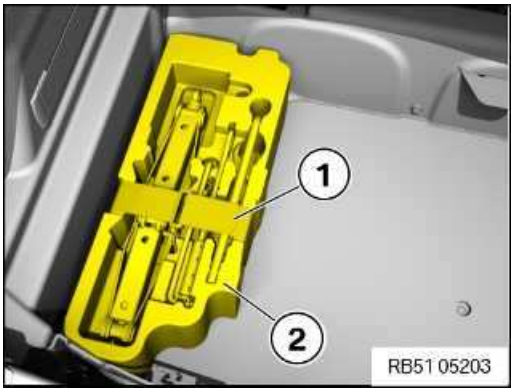
- Remove the oddments tray from the emergency wheel (1).

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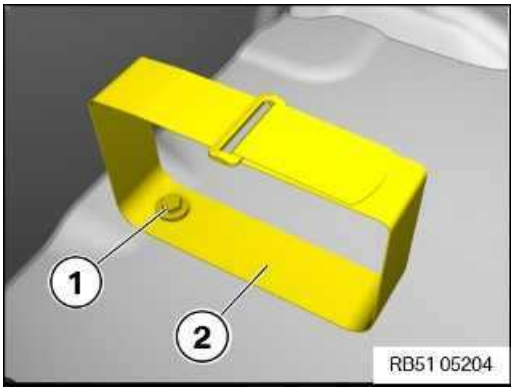
- Remove the emergency wheel (1).

5 – Remove the tool kit



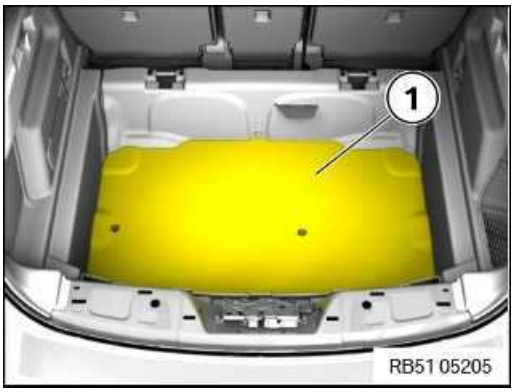
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

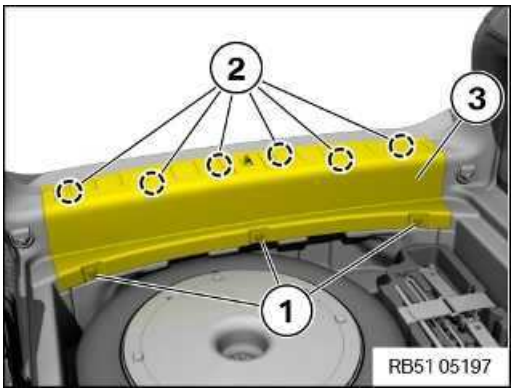
7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

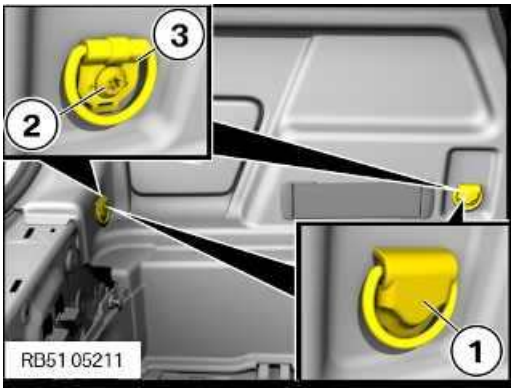
8 – Removing the loading edge trim

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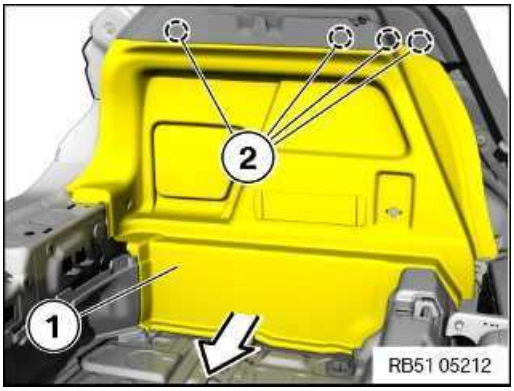


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

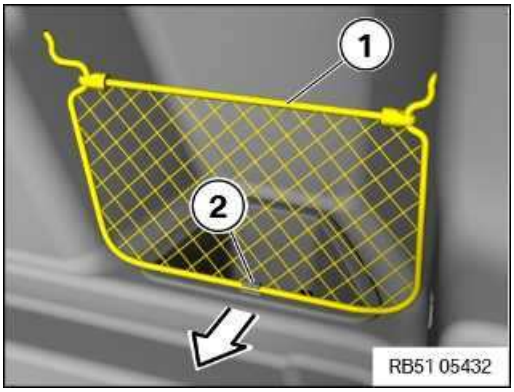


NOTICE

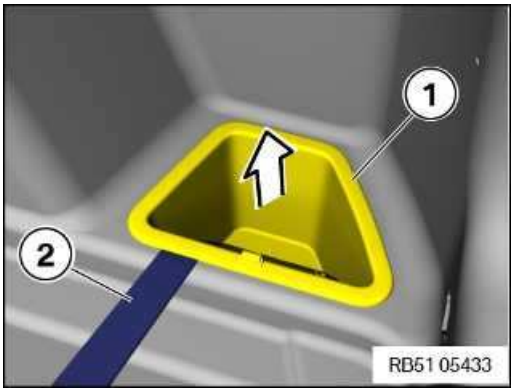
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

10 – Removing right luggage compartment wheel arch trim panel

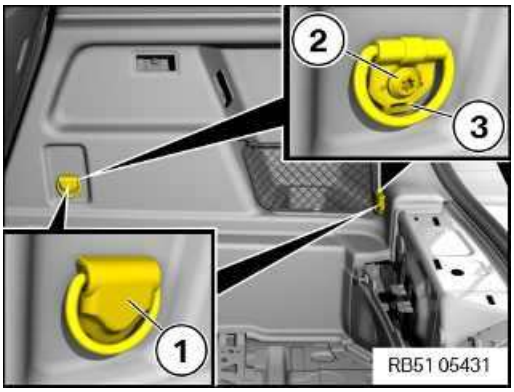


- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.

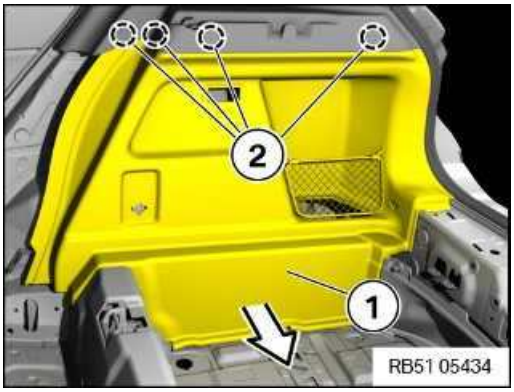


- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).

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- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

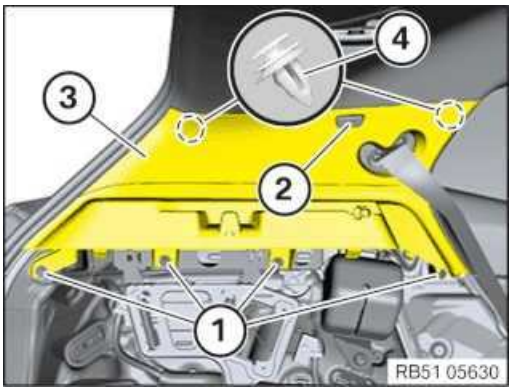
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

11 – Remove the trim panel of the luggage compartment capping on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim panel of the luggage compartment capping**



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

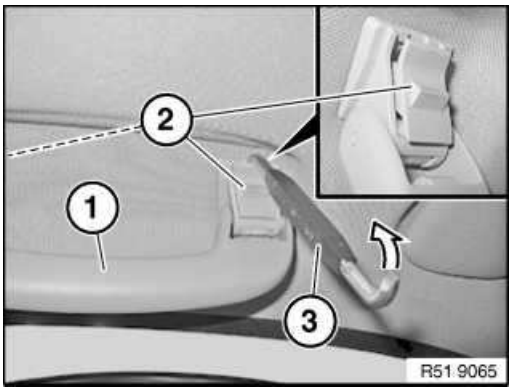
12 – Removing all grab handles

NOTICE

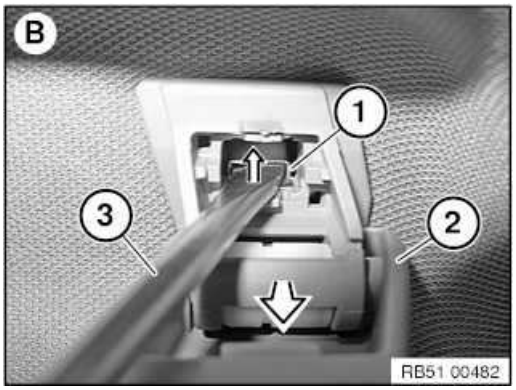
The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**

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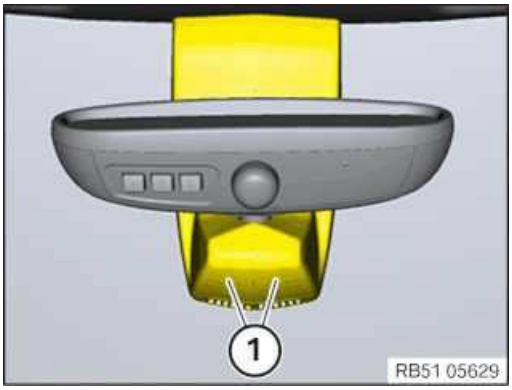


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

13 – Remove the cover on the inside mirror



- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

14 – Remove both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove sun visor**



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

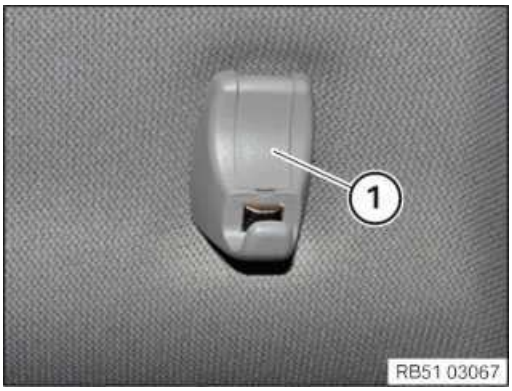
15 – Removing counter supports for sun visor on left and right

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NOTICE

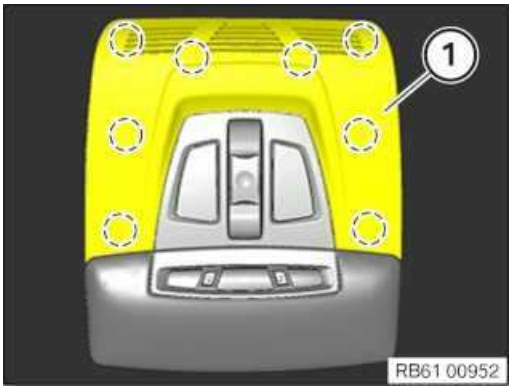
Description is for left component only. Procedure on the right side is identical.

▶ **Remove the counter support for the sun visor**

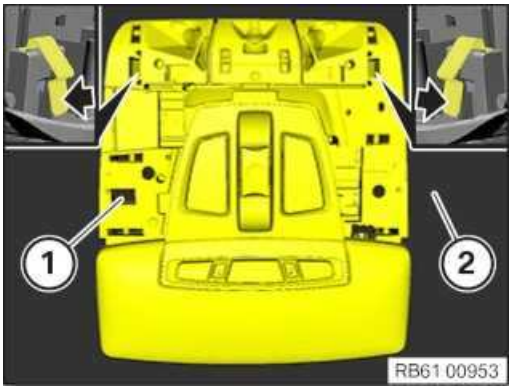


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

16 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

17 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Remove the A-pillar trim panel**

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WARNING

Airbag unit.

Danger! Life-threatening injuries!

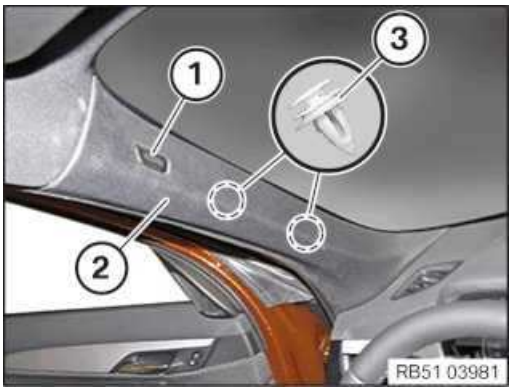
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

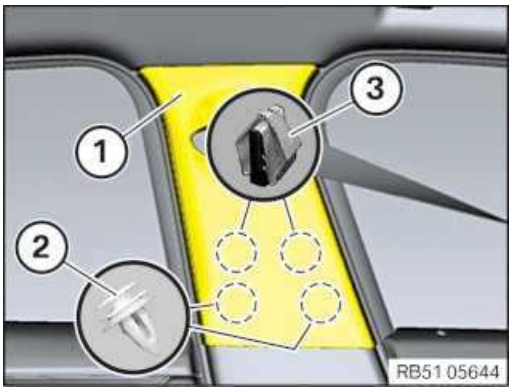


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

18 – Removing the B-pillar trim panels at top left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

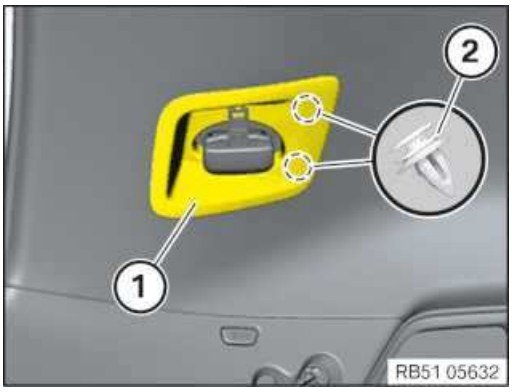


▸ **Partially removing upper B-pillar trim panel**

- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

19 – Remove the belt feed trim

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- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

20 – Lower roofliner

Prerequisite

The front seats have been fully adjusted towards the bottom.

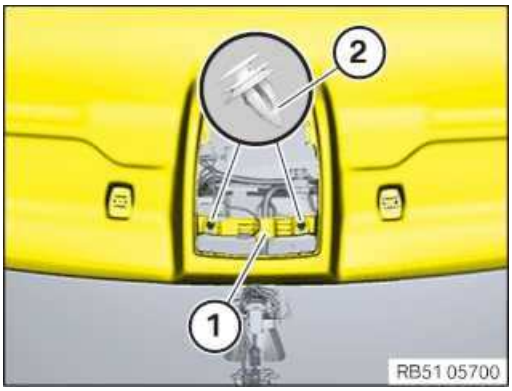
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

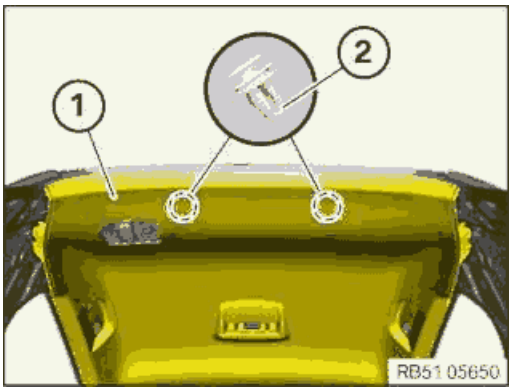
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

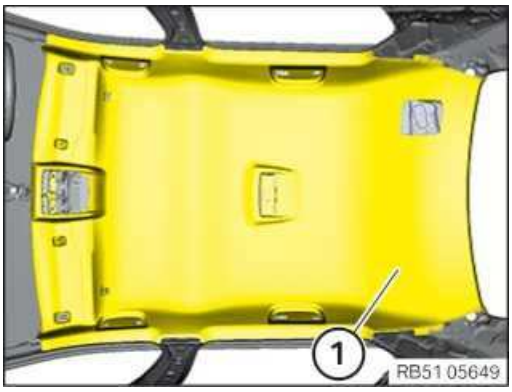


- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).

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- Carefully guide out the headlining (1) at the respective edge protection and place it onto the seats in the vehicle.

MAIN WORK

21 – Remove the roof rails

RISK OF DAMAGE

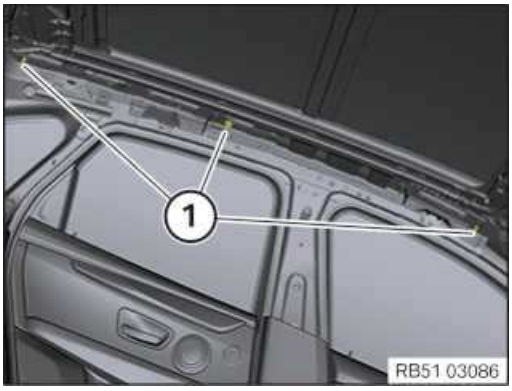
Paint damage.

Mechanical action can lead to paint damage.

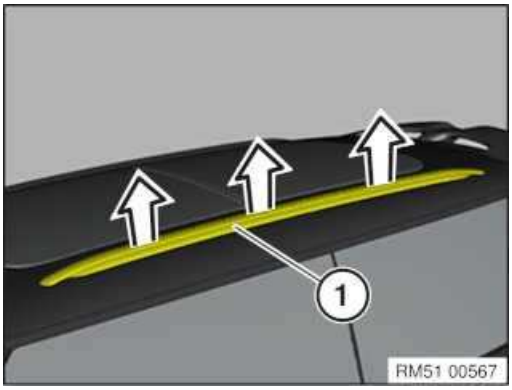
- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Loosen nuts (1).



- Remove the roof rails (1) upwards in the direction of the arrow.

22 – Installing the roof rails

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RISK OF DAMAGE

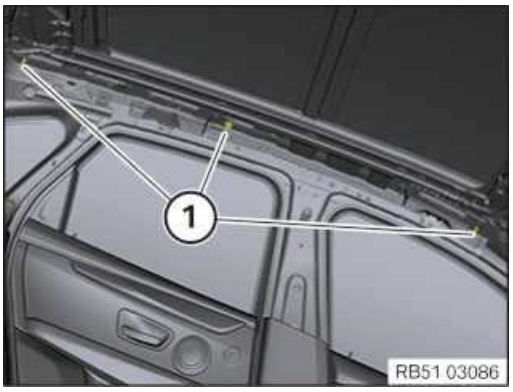
Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the seals and the threaded bolts at the roof rails for damage; if necessary, renew them.

  The seals and the threaded bolts may not be damaged or missing.
- Install the roof rail and correctly position it.
- Renew nuts (1).

  Parts: Nuts
- Tighten nuts (1).

Roof rails on roof

Nut, self-locking	Replace nuts	Tightening torque	21 Nm

POSTPROCESSES

23 – Install the headlining (lowered)

Prerequisite

The front seats have been fully adjusted towards the bottom.

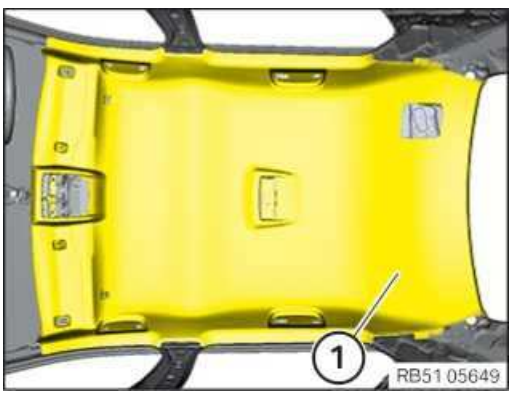
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

Fold the headlining.

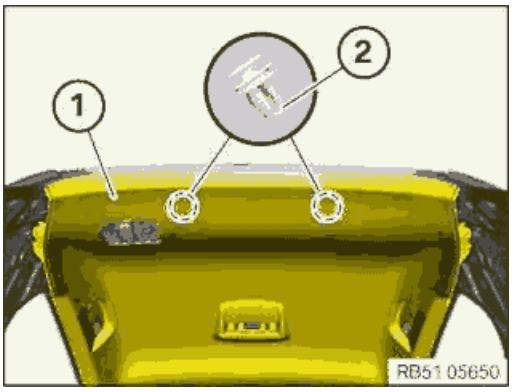
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

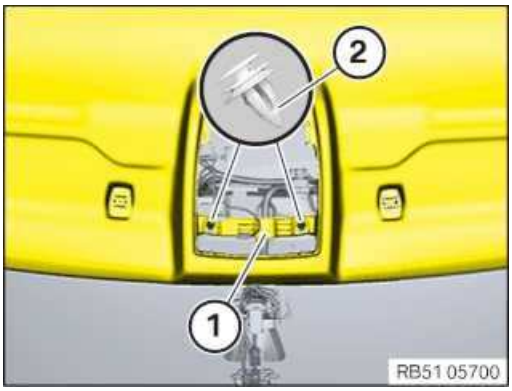


- Install the headlining (1) and carefully insert it at the respective edge protection.

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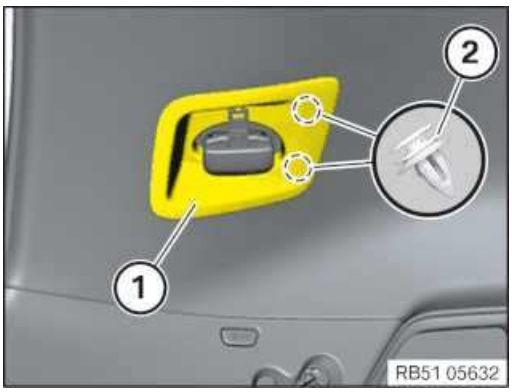


- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

24 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

25 – Installing the top left and right B-pillar trim panels

NOTICE

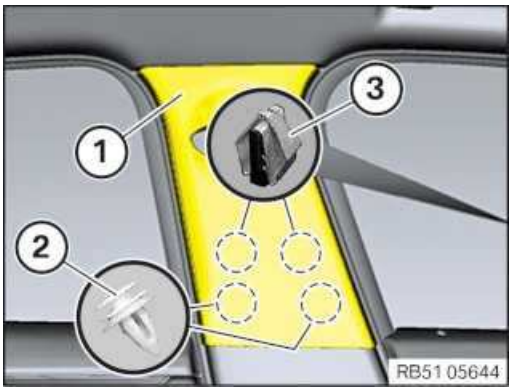
Description is for left component only. Procedure on the right side is identical.

▸ **Partially installing upper B-pillar trim panel**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

26 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

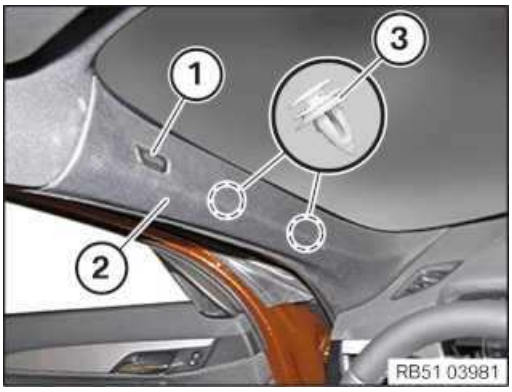
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

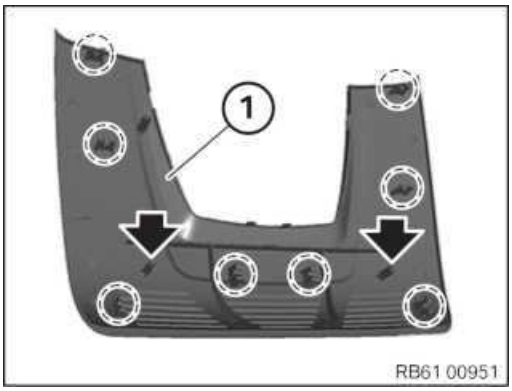
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

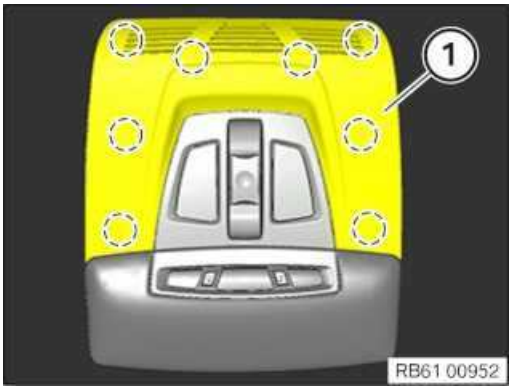
M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

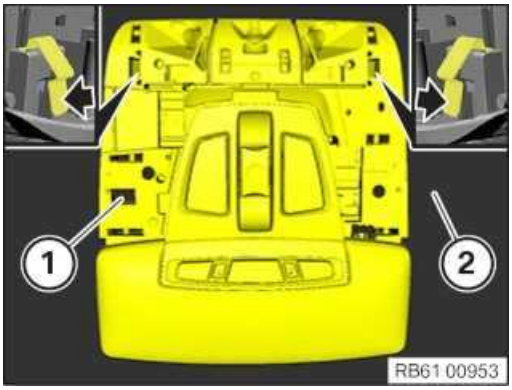
27 – Install the roof function centre



- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.



NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

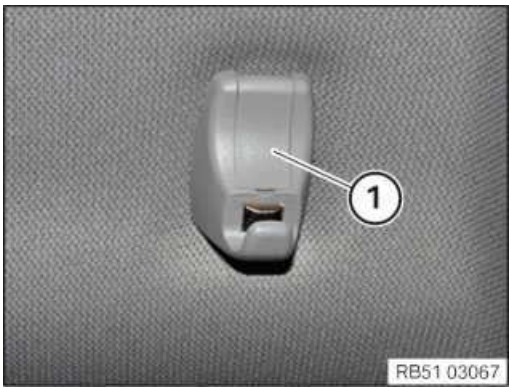
28 – Install the counter supports for the sun visor on left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the counter support for the sun visor**

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- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

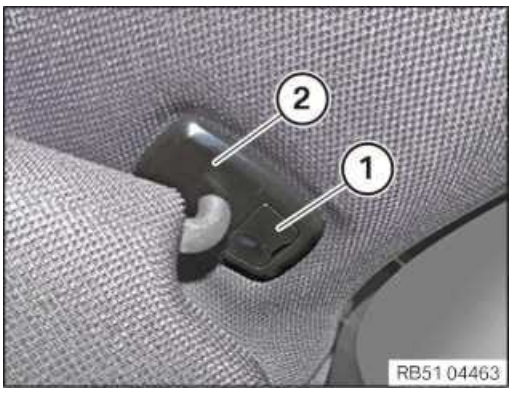
Screw		Tightening torque	2,5 Nm

29 – Install both sun visors

NOTICE

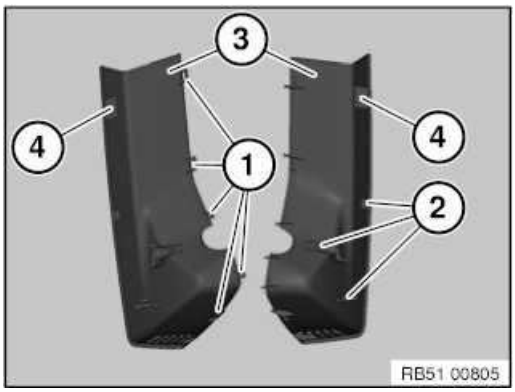
Description is for left component only. Procedure on the right side is identical.

▸ **Install the sun visor**



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

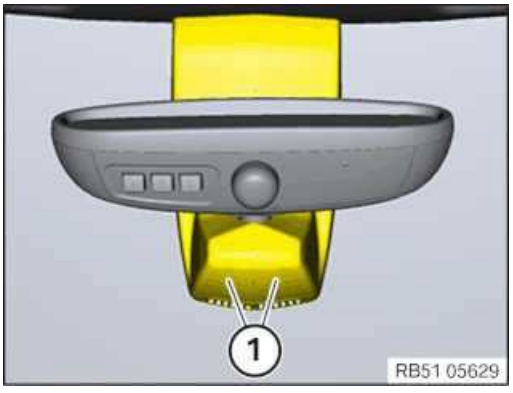
30 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



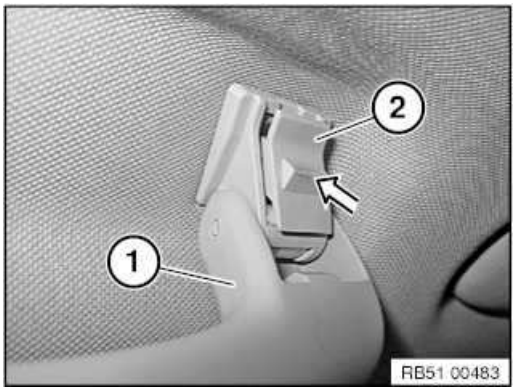
- Install covers on the interior mirror (1) clip together.

31 – Installing all grab handles

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NOTICE

The description is for one component only. The procedure is identical for all further components.



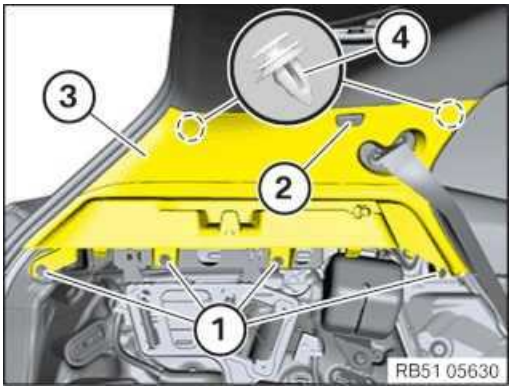
▸ **Installing the grab handle**

- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

32 – Install the trim panel for left and right the luggage compartment capping

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the trim panel for the luggage compartment capping**

- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

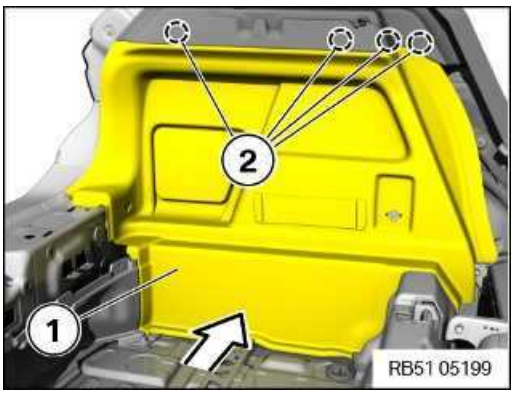
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

33 – Install luggage compartment wheel arch trim panel at left

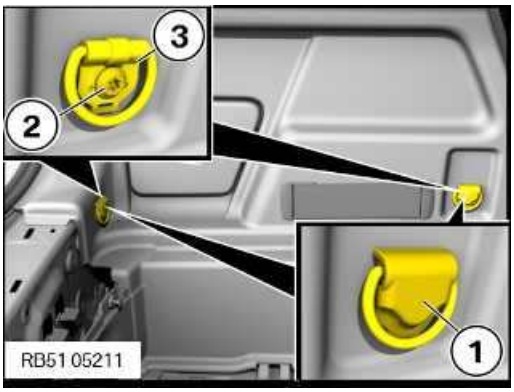


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.

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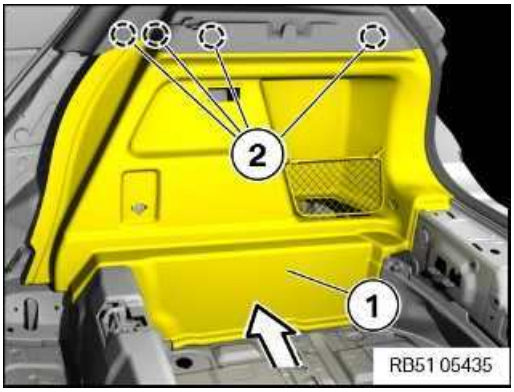
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

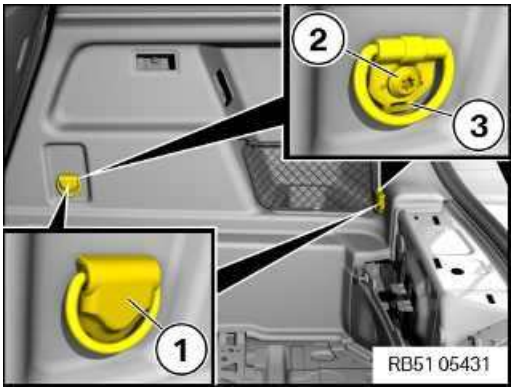
34 – Installing the luggage compartment wheel arch trim panel on the right



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

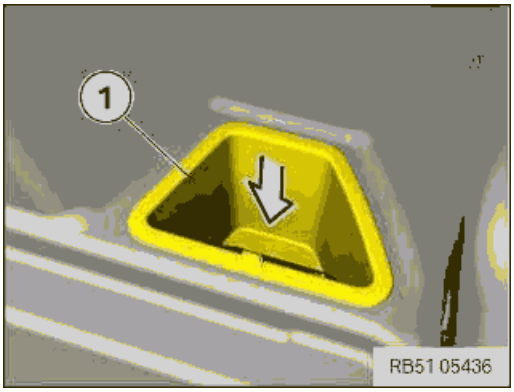


- Position the lashing eyes (3) and tighten the screws (2).

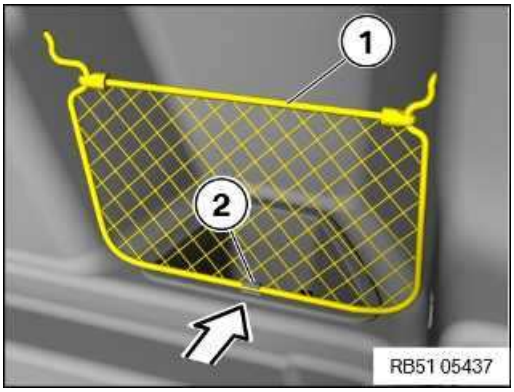
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

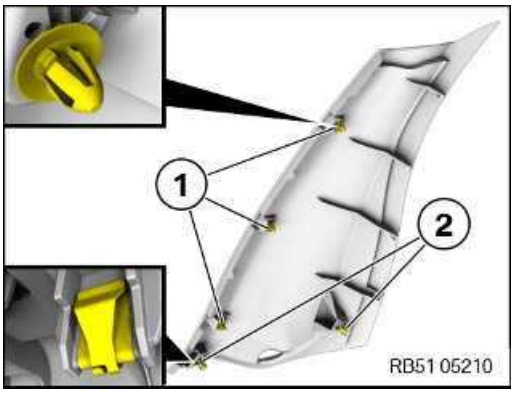
35 – Install C-pillar trim panel at bottom left and right

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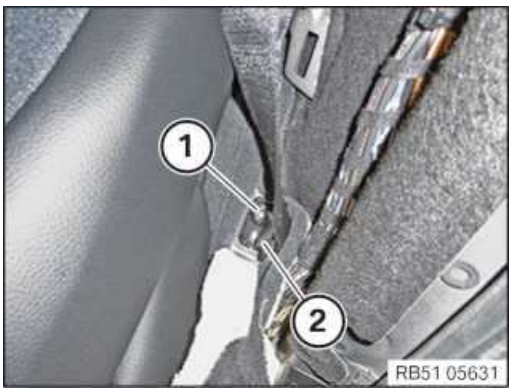
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Install the bottom C-pillar trim panel**



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

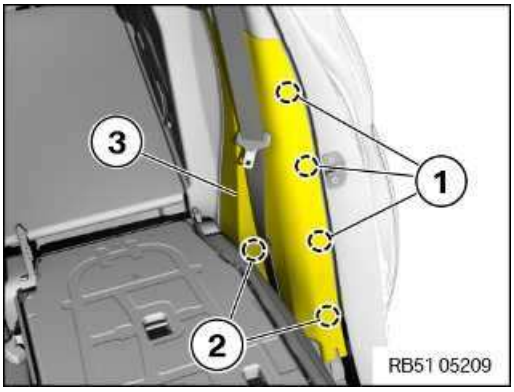


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

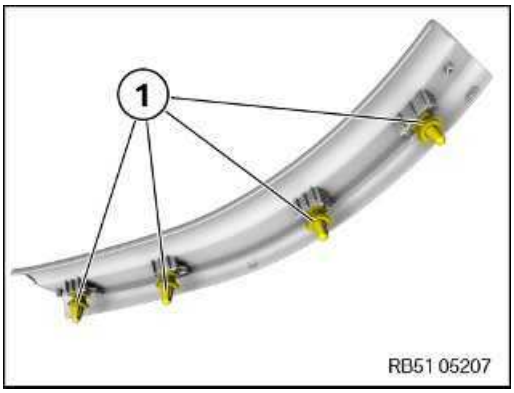
36 – Install the door sill cover strip on the rear left and right

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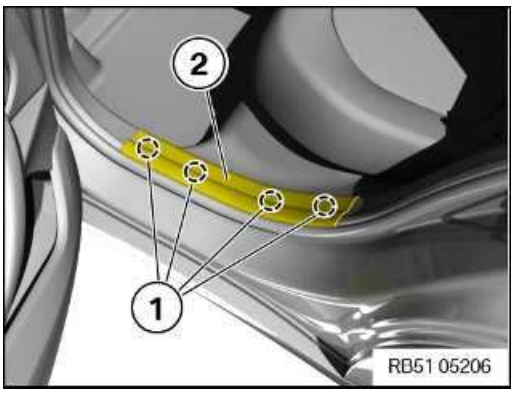
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Installing the rear door sill cover strip**

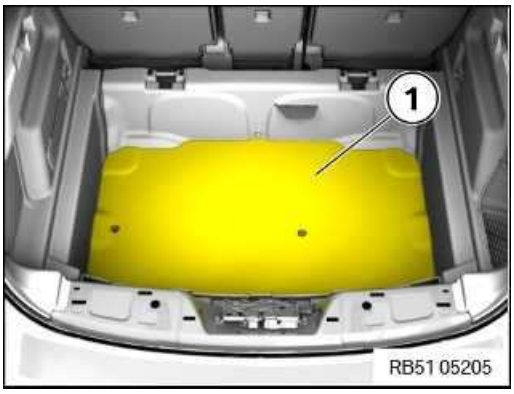


- Check the clips (1) for damage and renew where required.



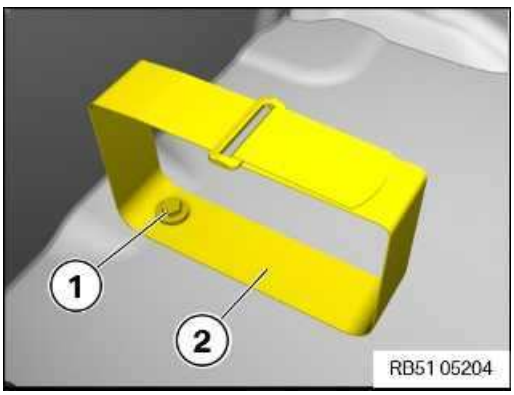
- Clip in the door sill cover strip (2) with the clips (1).

37 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

38 – Inserting the Velcro fastener for the toolkit



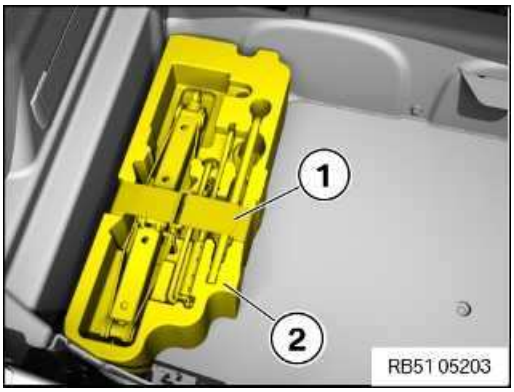
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

39 – Install the tool kit

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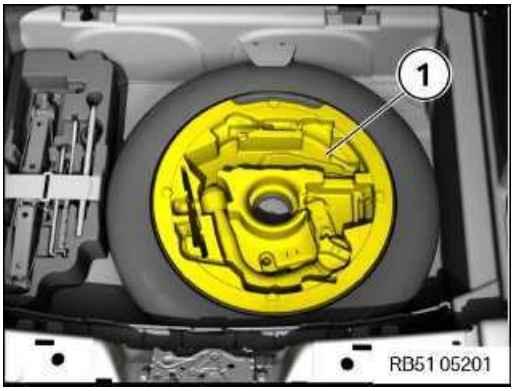


- Install the tool kit (2).
- Close the hook and loop tape (1).

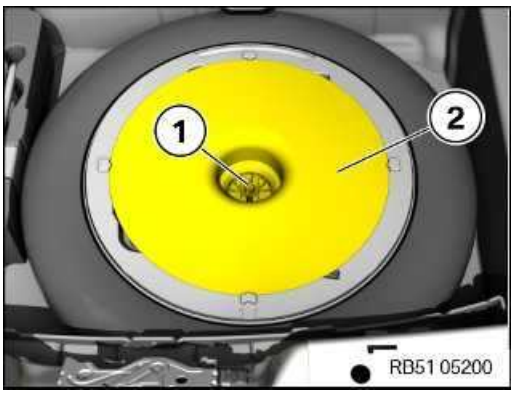
40 – Install the emergency wheel



- Insert compact spare wheel(1).

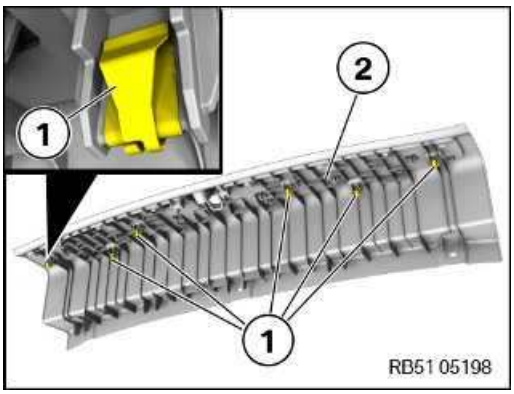


- Insert oddments tray into the compact spare wheel (1).



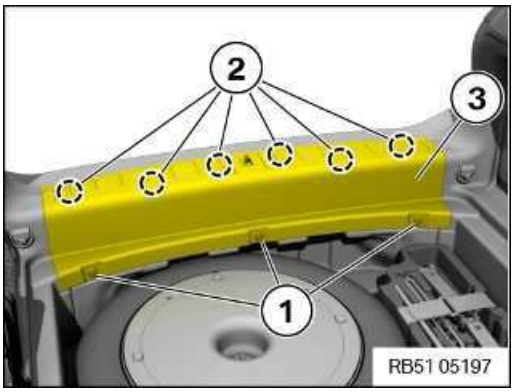
- Insert the lid (2).
- Hand-tighten the bolt (1).

41 – Installing loading edge trim



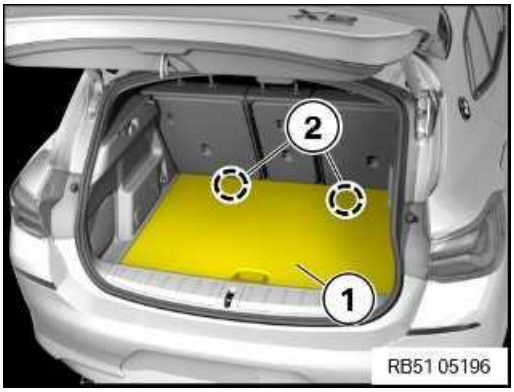
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.

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- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

42 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

Roof rails on roof — Used in step 22

Nut, self-locking	Replace nuts	Tightening torque	21 Nm

A-pillar trim panel to body — Used in step 26

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Counter support on body — Used in step 28

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 32

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 32

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 33 34

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body — Used in step 35

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body — Used in step 38

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

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0 496 569 (00 9 325) Wedge



Common	Used in step 16 18
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	17 26

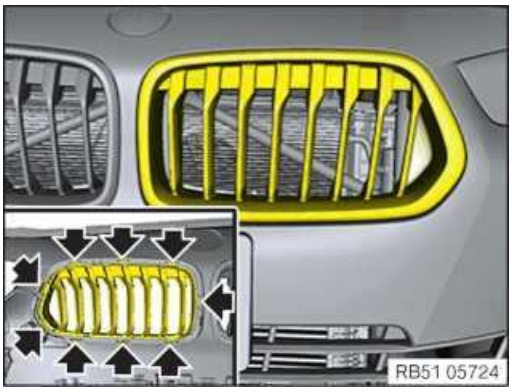
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51 13 146 Replace front radiator grille, centre left or right

1 – Remove front ornamental grille

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Disconnecting longitudinal bars of the kidney grille (break off).
- Release latch mechanisms (arrows) on front ornamental grille from outside.
- Remove front ornamental grille forwards.
- **The bumper panel must be disassembled to ensure the removal will not cause any damage.**

2 – Install front ornamental grille

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

NOTICE

Description is for left component only. Procedure on the right side is identical.



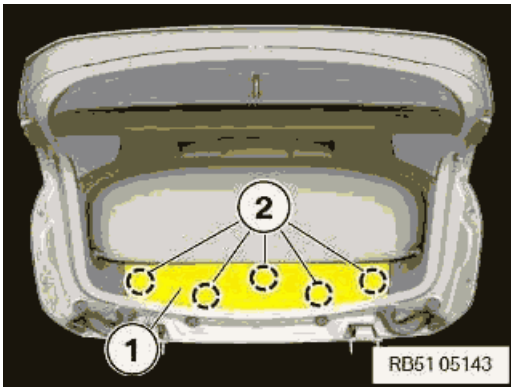
- Install the front ornamental grille and lock in the latch mechanisms (arrows).

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51 13 421 Replacing rear trim

PRELIMINARY WORK

1 – Remove the trim for the top rear window frame



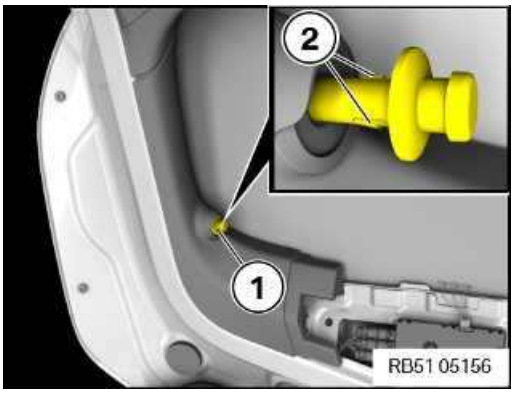
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Remove both trims for the rear window frame on the side

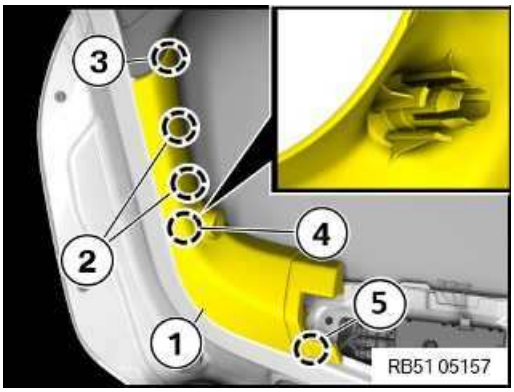
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim for the rear window frame on the side**



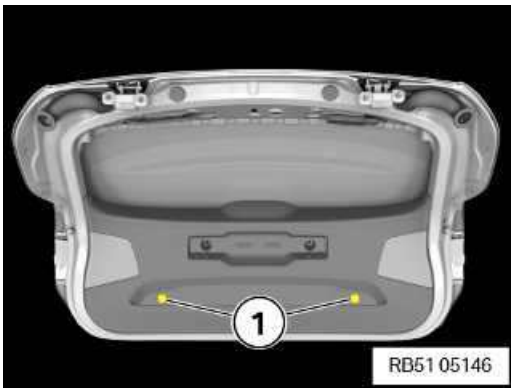
- Detach the mounting button (1) on the latch mechanisms (2) and remove it.



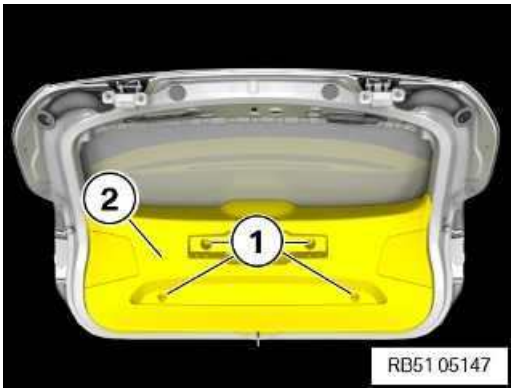
- Unclip the trim for the rear window frame on the side (1) with the clips (2) from the latch mechanisms (3), (4) and (5).

3 – Remove tailgate trim panel

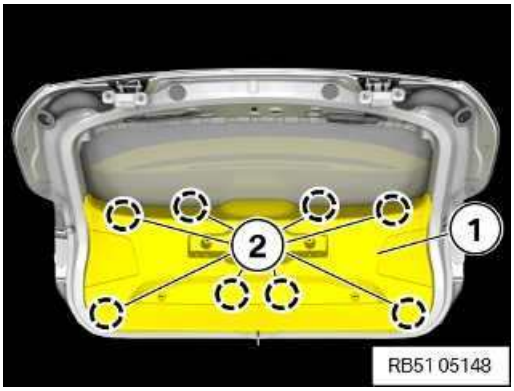
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- Lever out the covers of the screw points (1) with a suitable tool.

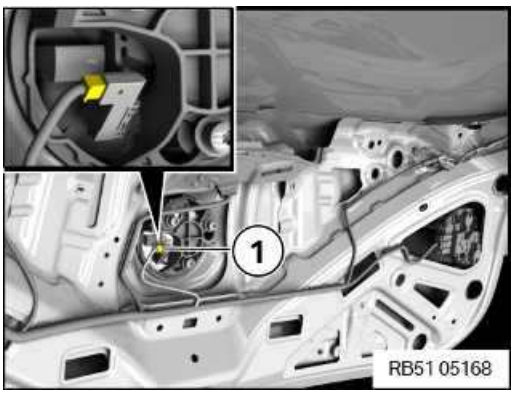


- If applicable, remove the warning triangle from the tailgate trim panel (2).
- Unscrew the bolts (1) at the tailgate trim panel (2).

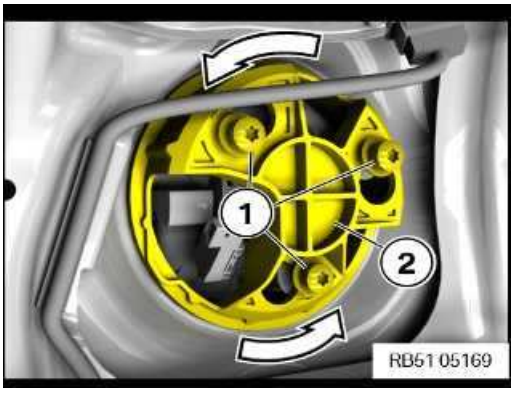


- Unclip the tailgate trim panel (1) at the latch mechanisms (2) and remove.

4 – Remove tailgate pushbutton

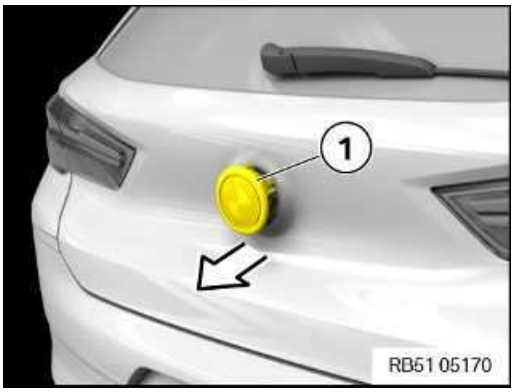


- Unlock plug connection (1) and disconnect.



- Unscrew the bolts (1) until you can turn the retaining ring (2).
- Turn the retaining ring (2) in the direction of the arrow and remove it.

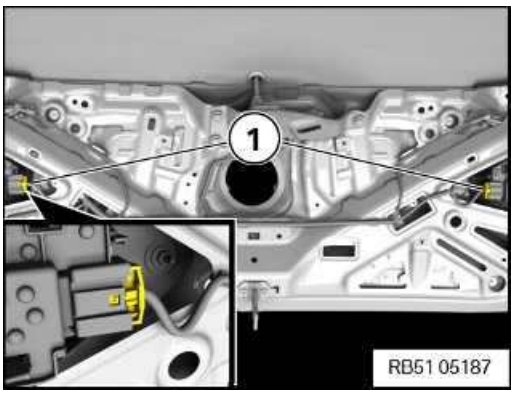
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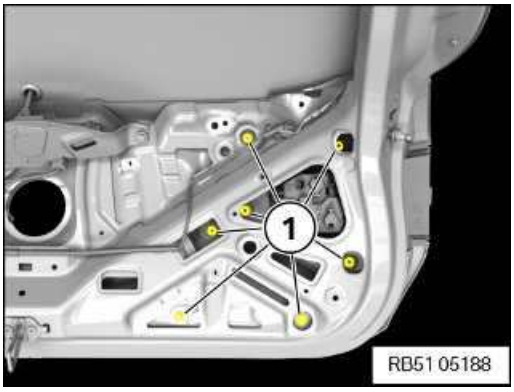
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- Remove the tailgate button (1) in the direction of the arrow.

5 – Removing the rear trim



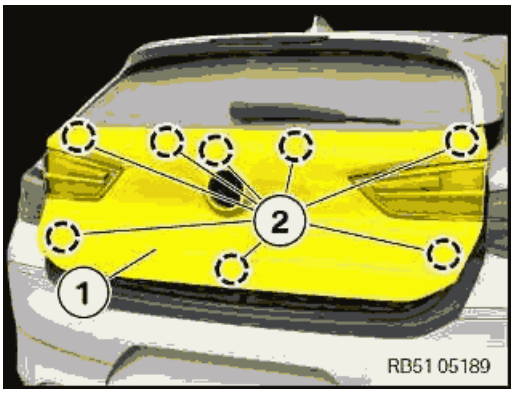
- Unlock and disconnect plug connections (1).



NOTICE

Perform the operations on the left and right side.

- Loosen nuts (1).

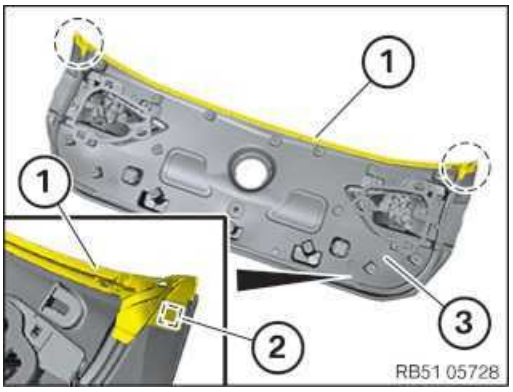


- Unclip the rear trim (1) at the clips (2) and remove toward the rear.

MAIN WORK

6 – Remove the rear trim seal

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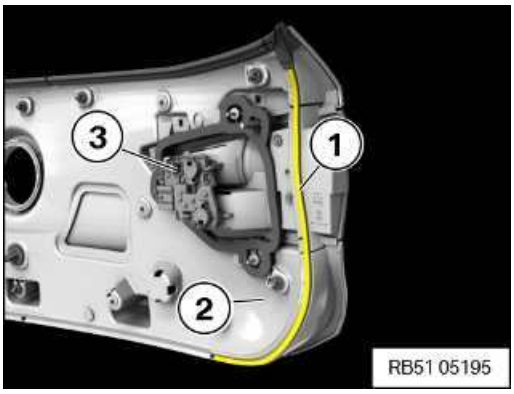


- Release the seal (1) in the adhesive area (2) and pull it off of the rear trim (3) towards the rear.

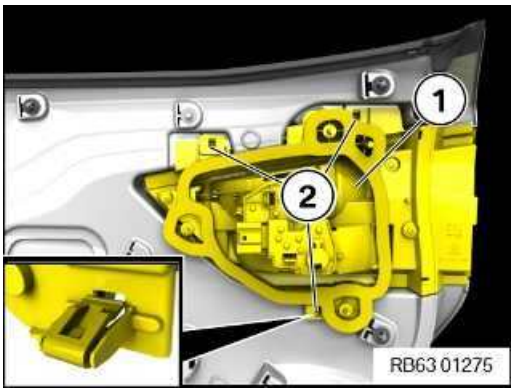
7 – Remove both rear lights from the tailgate

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Detach gutter strip (1) from rear trim (2) and rear light (3).



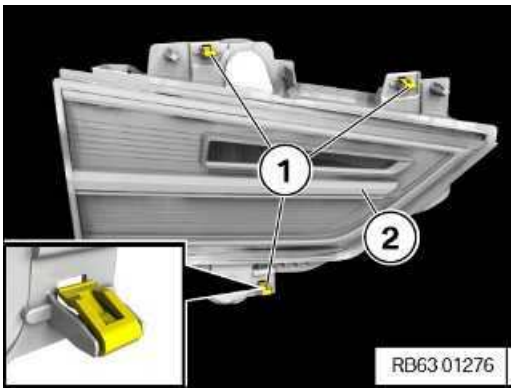
- Unclip rear light (1) with the clamps (2) and remove.

8 – Install both rear lights on the tailgate

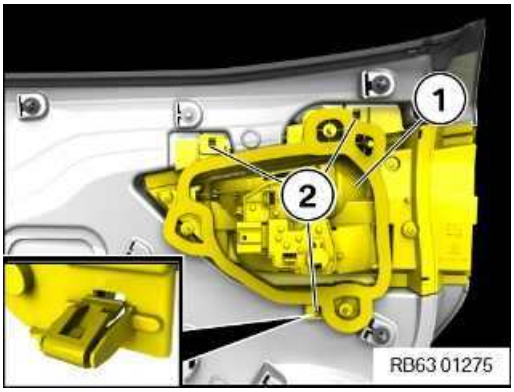
NOTICE

Description is for left component only. Procedure on the right side is identical.

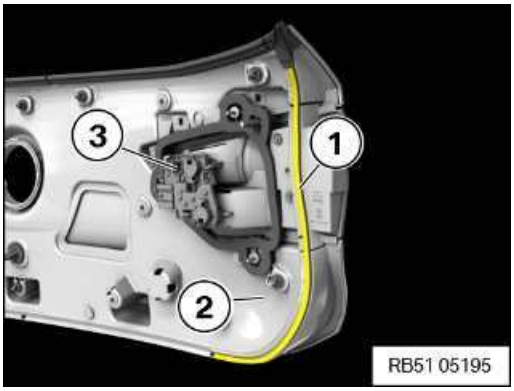
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- Check the clamps (1) at the rear light (2) for damage and renew if needed.



- Clip in the rear light (1) with the clamps (2).



- Clean the bonding surface for gutter strip (1) on the rear trim (2) and the rear light (3).
- Renew the gutter strip (1).

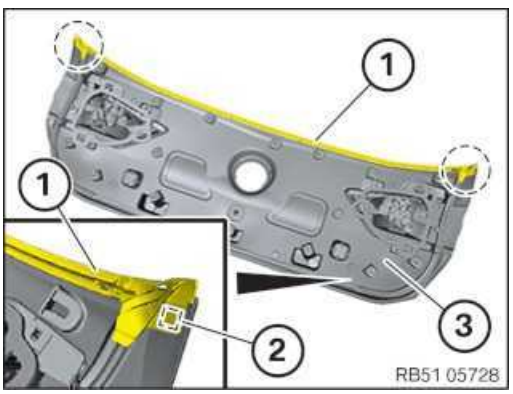
  Parts: Gutter strip
- Bond the gutter strip (1) on the seal beginning from the top.

9 – Install the rear trim seal

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Remove adhesive residue on the rear trim and clean the adhesive area (2) with solvent cleaner R2.
- Renew gasket (1).

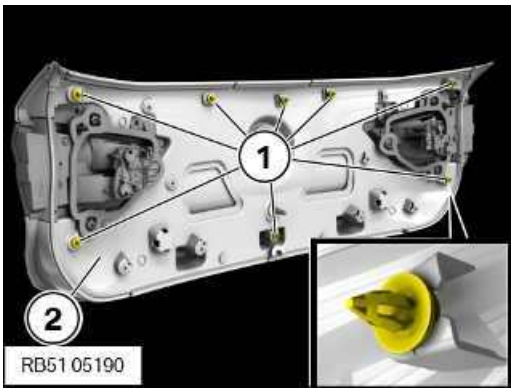
  Parts: Gasket
- Connect the seal (1) on the rear trim (3).
- Pull the liner* off of the adhesive strip.

  * The liner is the protective film on a new seal.
- Press the seal (1) in the adhesive area (2) onto the rear trim (3).

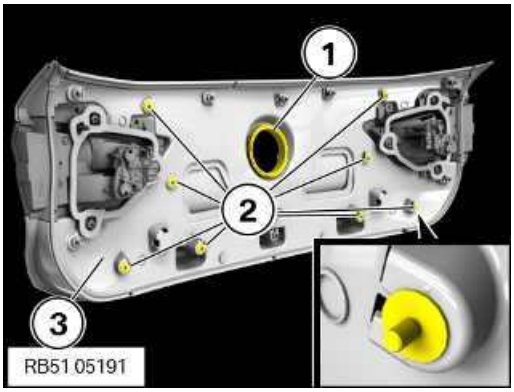
POSTPROCESSES

10 – Installing the rear trim

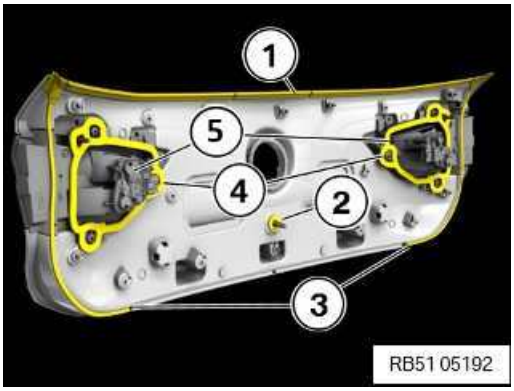
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- Check clips (1) on rear trim (2) for damage and renew them if necessary.

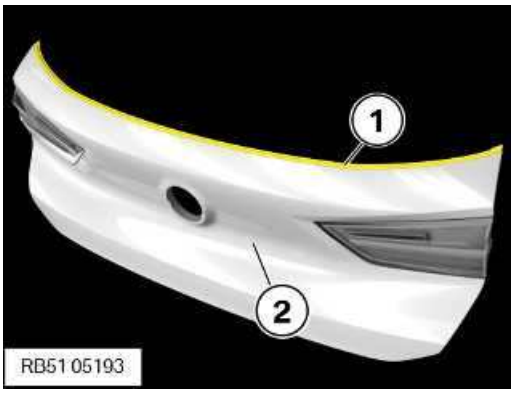


- Check spacer (1) for damage and renew it if necessary.
- Position and engage the spacer (1) correctly in the rear trim (3).
- If necessary, renew missing screws (2) on rear trim (3).

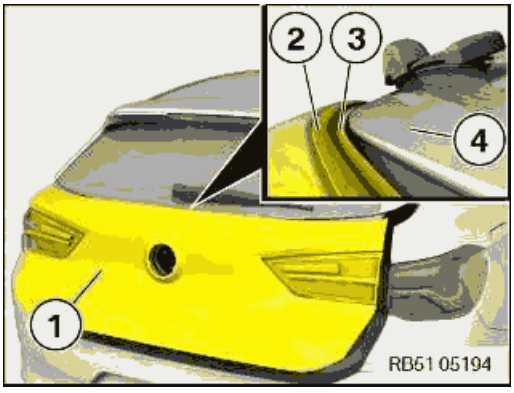


- Check the seals (1) and (2) for damage; renew if necessary.
- Check gutter strips (3) for damage and renew them if necessary.
- Check seals (4) on rear lights (5) on the tailgate for damage and renew them if necessary.

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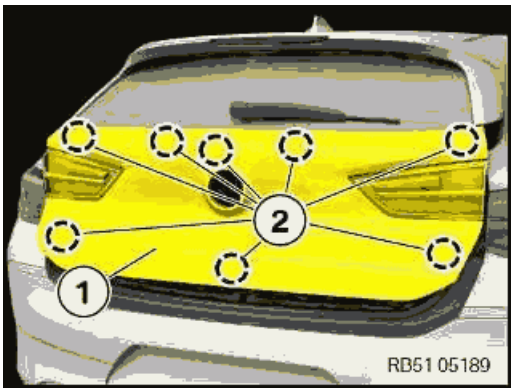


- Coat the seal (1) on the rear trim (2) with a suitable lubricant.

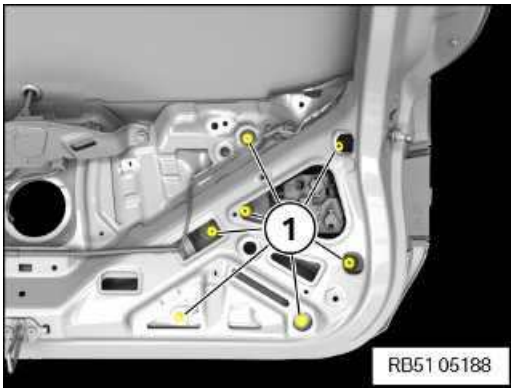


- Open the tailgate slightly.
- Position the rear trim (1) with the seal (2) on the rear window from the bottom.
- Thread the sealing lip (3) of the seal (2) completely under the rear window (4).
- Press on seal (2) with special tool **0 490 538 (00 9 321)**.

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- Clip in the rear trim (1) with the clips (2).



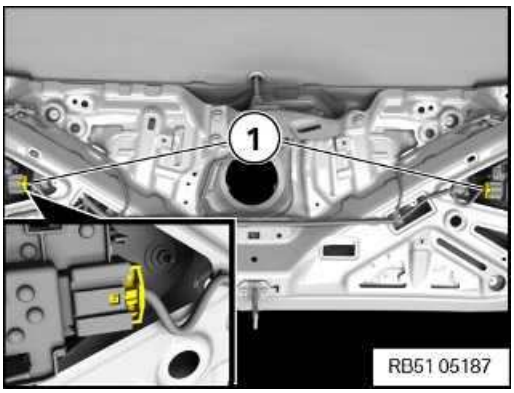
NOTICE

Perform the operations on the left and right side.

- Tighten nuts (1).

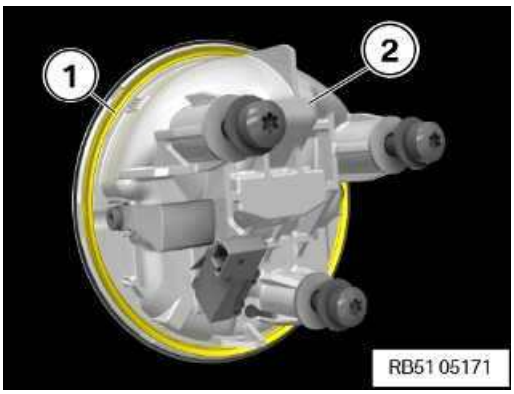
Rear trim to tailgate

M5 nut		Tightening torque	4,5 Nm



- Connect connectors (1) and lock.

11 – Install the tailgate button



Check

- Check the seal (1) on the tailgate button (2) for damage.

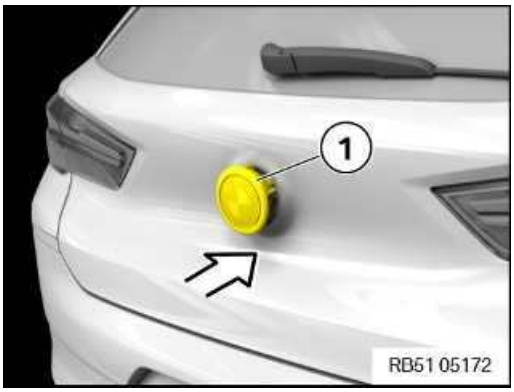
Result

» The seal (1) is damaged.

Measure

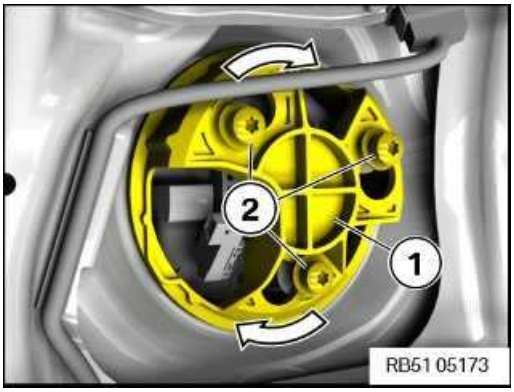
- Replace the tailgate button (2).

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- Insert the tailgate button (1) in the rear trim from the outside in.

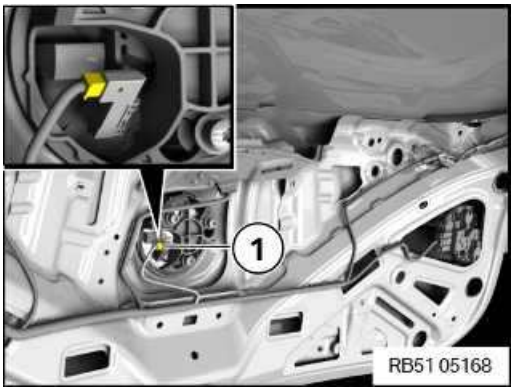
  The BMW badge must be aligned correctly.



- Attach the retaining ring (1) from the inside and turn it in the direction of the arrow to the stop.
- Tighten down screws (2).

Tailgate button

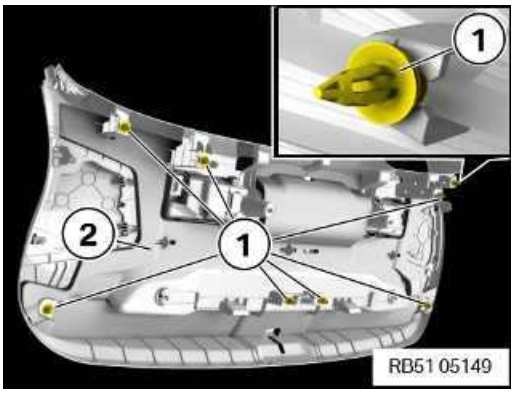
Screw with spring washer and washer M6x20		Tightening torque	8 Nm



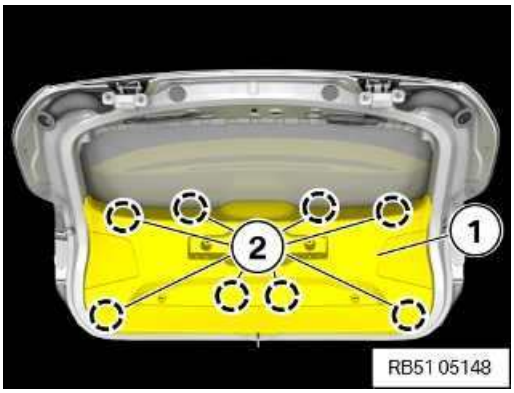
- Connect connectors (1) and lock.

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12 – Installing the tailgate trim panel

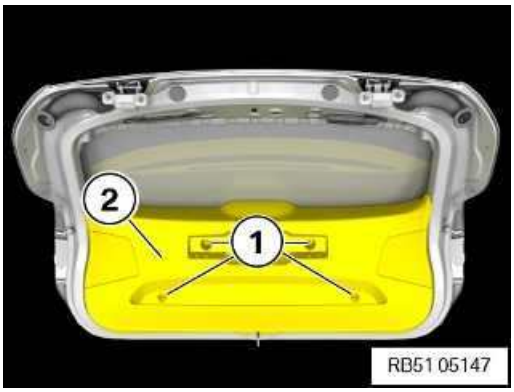


- Check the clips (1) on the tailgate trim panel (2) for damage and replace where required.



- Clip in the tailgate trim panel (1) with the clips (2).

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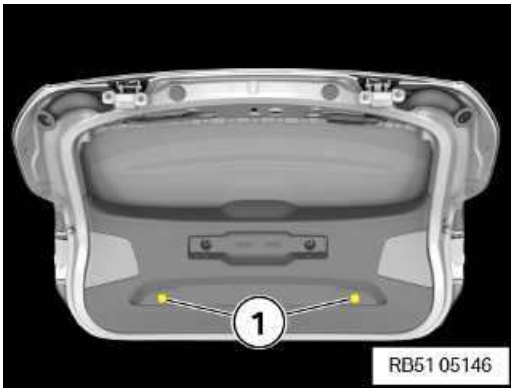


- Tighten the bolts (1) at the tailgate trim panel (2).

Tailgate trim panel

Screw		Tightening torque	1,8 Nm

- If necessary, insert and fasten the warning triangle in the tailgate trim panel (2).



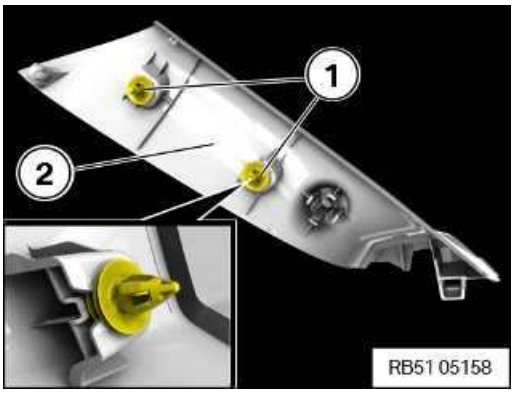
- Insert the covers of the screw points (1).

13 – Mount both trim pieces for the rear window frame on the side

NOTICE

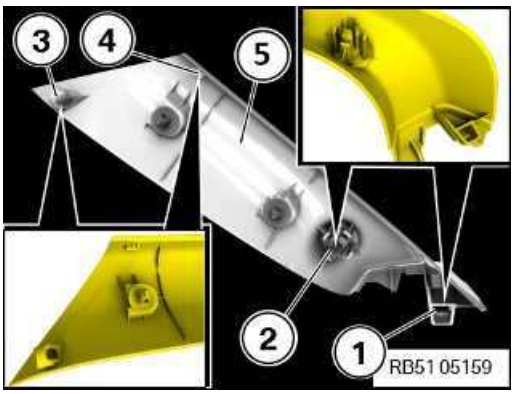
Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the rear window frame on the side**



- Check the clips (1) on the trim for the side rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1), (2), (3) and (4) at the trim for the side rear window frame (5) for damage.

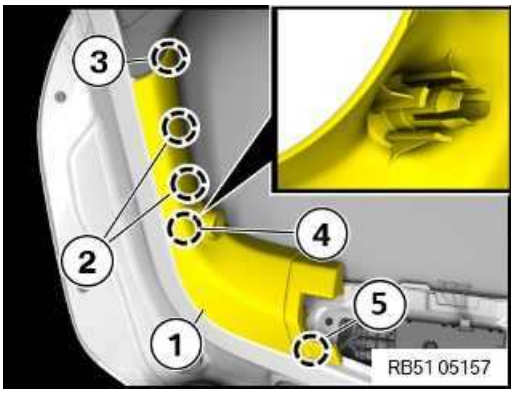
Result

» The latch mechanisms (1), (2), (3) or (4) are damaged.

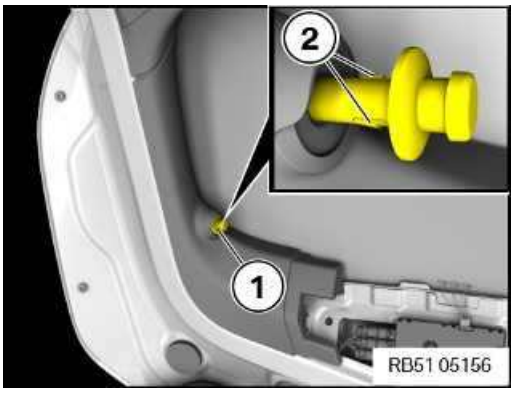
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Measure

- Renew the trim for the side rear window frame (5).

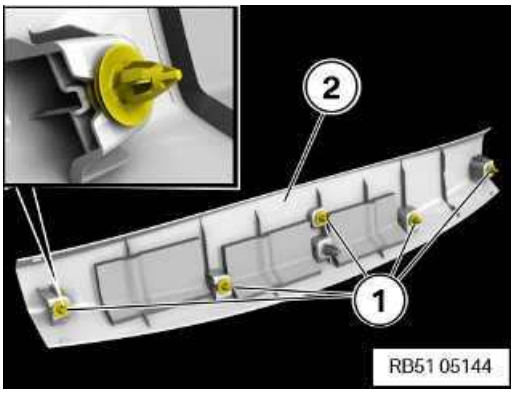


- Clip in the trim for the side rear window frame (1) with the clips (2) and in the latch mechanisms (3), (4) and (5).



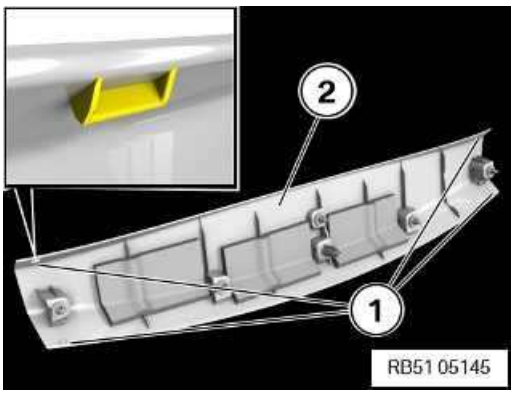
- Clip in the mounting button (1) with the latch mechanisms (2).

14 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

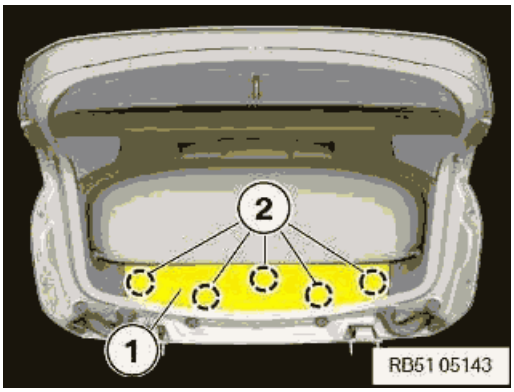
Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).

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- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

Rear trim to tailgate — Used in step 10

M5 nut		Tightening torque	4,5 Nm

Tailgate button — Used in step 11

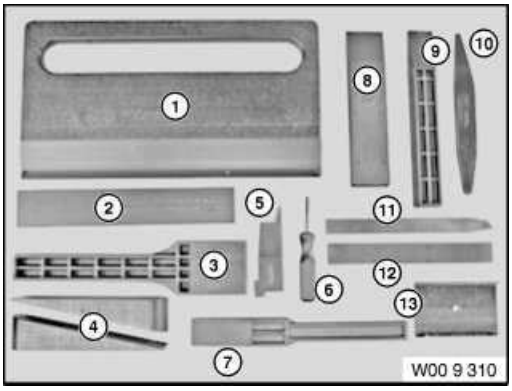
Screw with spring washer and washer M6x20		Tightening torque	8 Nm

Tailgate trim panel — Used in step 12

Screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 490 538 (00 9 321) Folding stick



Common	Used in step 10
Usage	
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

General repair instructions	Used in step
51 00 ... Notes on component bonding with adhesive tape	9

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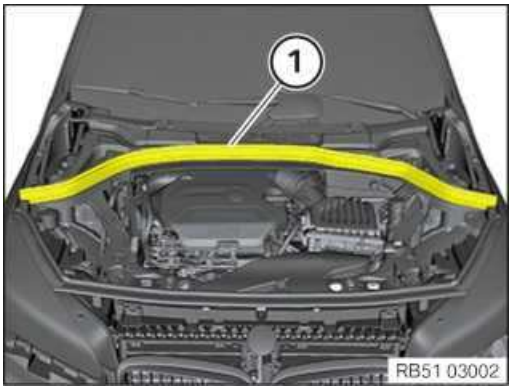
51 13 117 Replacing the cowl panel cover (rear)

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

2 – Remove the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

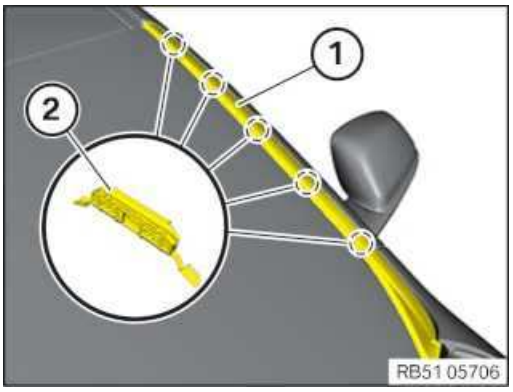
▸ **Remove the gutter strip on the windscreen**

RISK OF DAMAGE

Scratches.

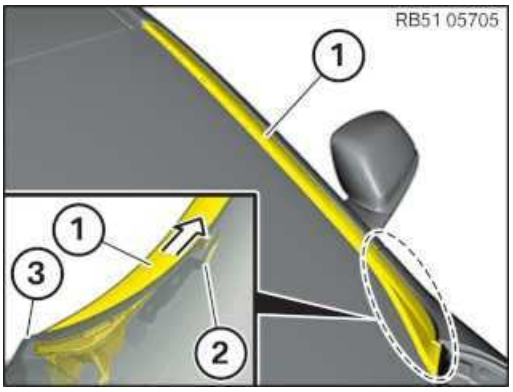
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



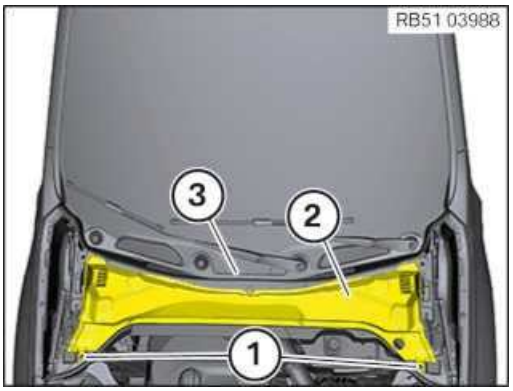
- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.

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- Pull out the gutter strip (1) from the guide (2) in direction of arrow and carefully feed out at the side panel (3).

3 – Removing front cowl panel cover



- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

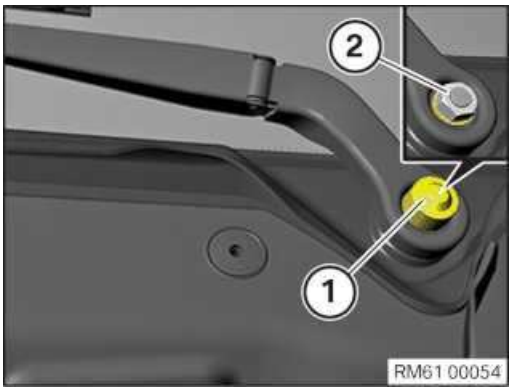
4 – Remove left and right wiper arm

RISK OF DAMAGE

Damage to wiper console

While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do not lift off wiper arm, else the wiper console may break on the predetermined breaking point for the pedestrian protection.



- Pull off the protective cap (1) and release the nut (2) below it.



- Pull off windscreen wiper arm (1)with special tool .

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MAIN WORK

5 – Remove the rear cowl panel



- Pull off the cowl panel cover (1) towards the top, starting from the side and feed out.

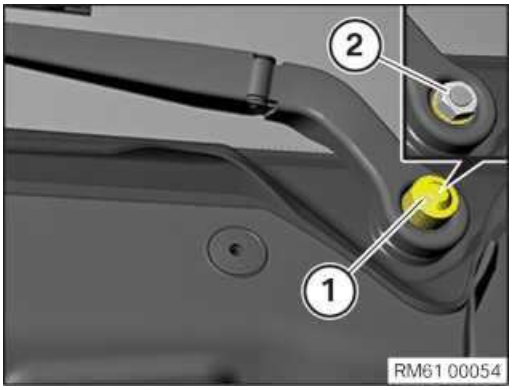
6 – Install the rear cowl panel



- Insert the cowl panel cover (1) and press it into the latch mechanism on the windscreen starting at the side.

POSTPROCESSES

7 – Install left and right wiper arm



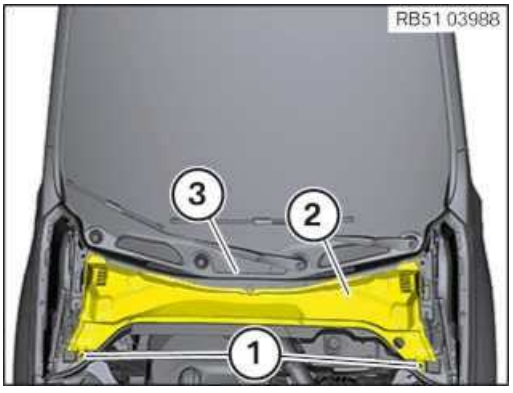
- Join wiper arm and tighten with nut (2).

Windscreen wiper arm

Combination hexagon nut		Tightening torque	35 Nm

- Join the protective cap (1).

8 – Installing front cowl panel cover



- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

9 – Install the gutter strip on the windscreen on the left and right

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the gutter strip on the windscreen**

RISK OF DAMAGE

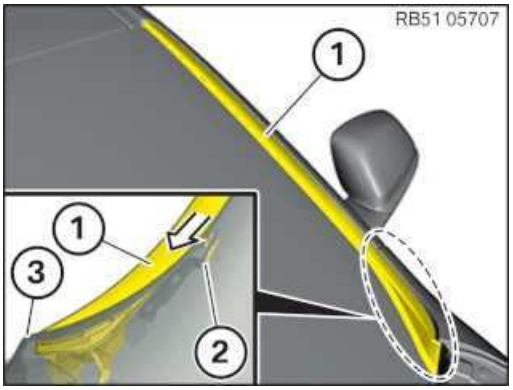
Scratches.

Tools and sharp-edged components can cause scratches.

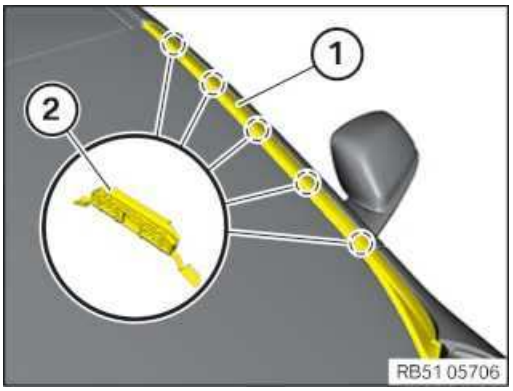
- Protect working area.
- Handle tools and components carefully.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.



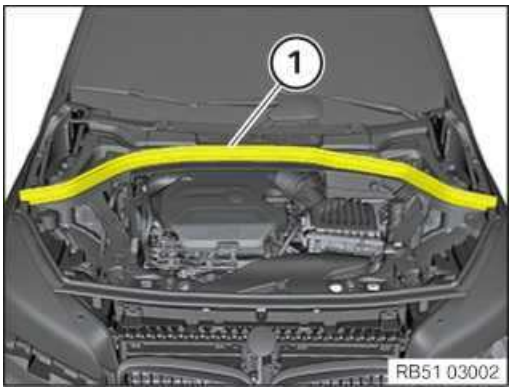
- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

10 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

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- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

Additional Information

Overview of Tightening Torques

Windscreen wiper arm Used in step 7

Combination hexagon nut		Tightening torque	35 Nm

Overview of Special Tools

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51 14 ... General notes for labelling with adhesive films

In the event of a repair the adhesive films must be partially or completely replaced. The basic procedure for all areas of the vehicle is described below.

In addition, vehicle-specific repair instructions are available.

1. Preparation:

Wash and dry vehicle. Rework with compressed air as required in area of joints.

Clean complete component surface with glass cleaner (BMW part number 83 12 0 396 775). Also clean the inside of the component in areas, in which adhesive films are applied.

Only carry out repair work with clean hands!

Important!

Labels can only be applied to recently painted components after a waiting period of **2 weeks**. The paint hardening is only fully completed after this time.

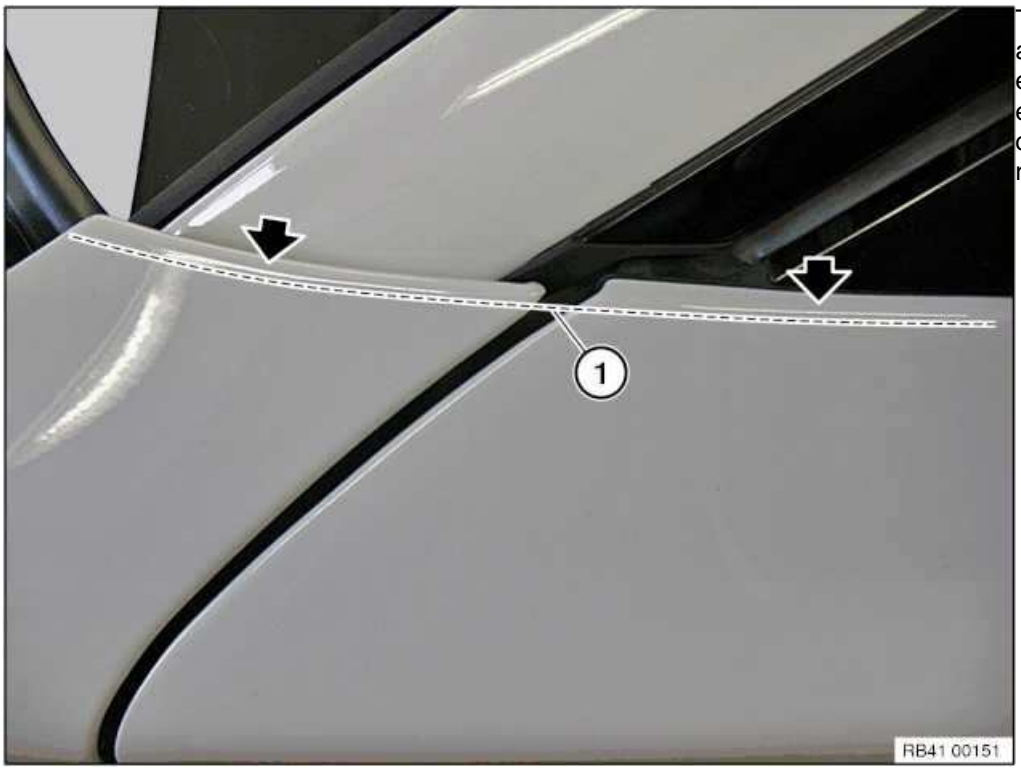
2. Procedure for applying labels:

All adhesive films in the repair kit are marked with numbers. Prepare the required plastic films prior to start of repairs.

The templates included in the repair kit assist orientation. A straight line running over the different components is the top priority.

Pull off the templates positioning of the adhesive films.

Only throw away templates after completion of all repair work, as some templates are used several times.



Templates are always applied along the light edge (1). The light edge is the reflection of the light source in radius (see arrow).

Roughly align the adhesive film using a template.

For large adhesive films, pull off the first 20 cm of protective film and fold back the edge.

Align and lightly press down the adhesive film. Use only one finger for this and not the entire hand so that air pockets are unable to form under the adhesive film.

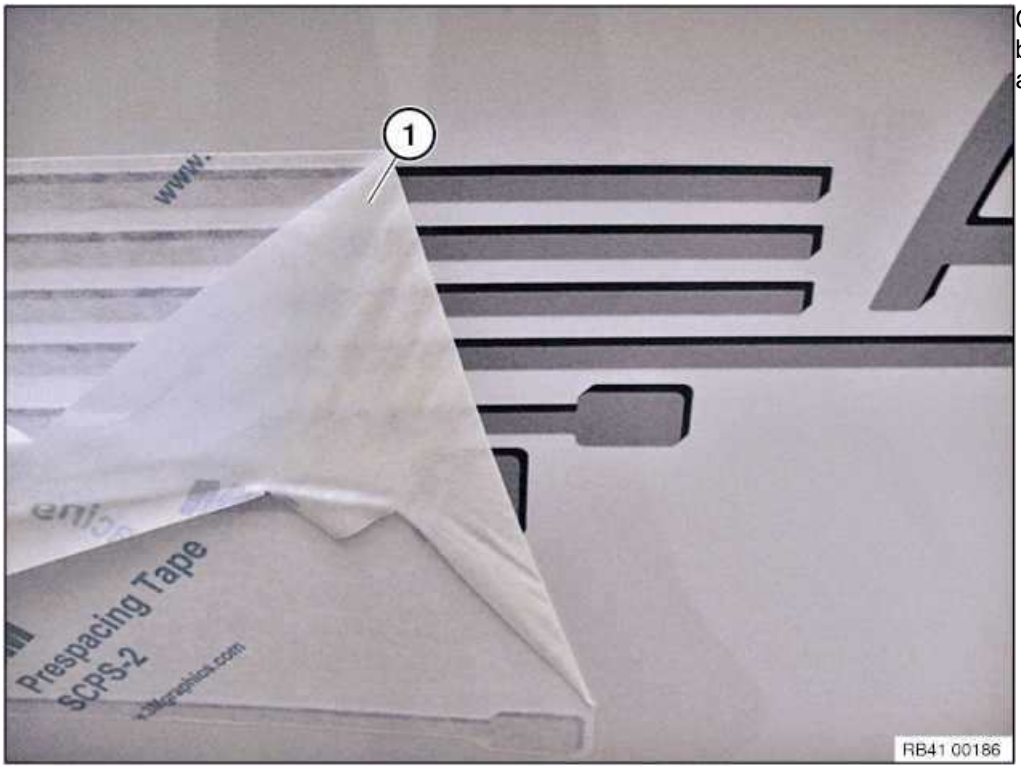
Pull off the remaining protective film and press down the adhesive film from front to rear and from inside to outside.

If faults are made in applying the adhesive film, it can be pulled off and repositioned several times. When no

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further corrections have to be made, use a squeegee to press down the adhesive film firmly from inside to outside.

Lay protruding ends of the adhesive film around the component edge and press down firmly.



Carefully pull off backing film (1) at an acute angle.

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51 14 000 Removing and installing / replacing front BMW badge

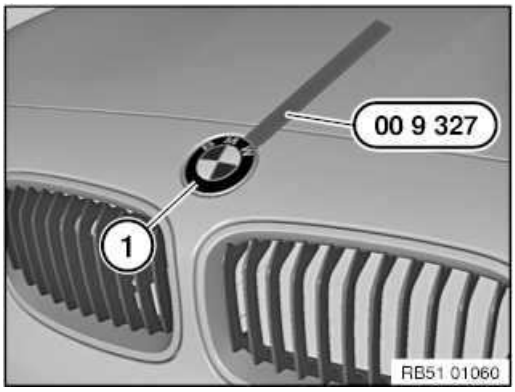
1 – Removing the front BMW badge

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Tape off working area around the BMW badge (1) with adhesive tape.
- Carefully warm up the BMW badge (1) with a hot air blower (temperature approx. 40 - 55 °C) and lift it out with the special tool **0 496 571 (00 9 327)**.

2 – Installing the BMW badge at the front

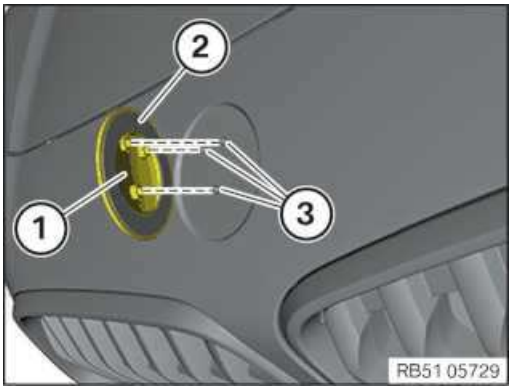
TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Remove any adhesive residue on the bumper panel and clean the adhesive area with cleaning agent R2.
- Pull off the liner* from the adhesive tape (2).

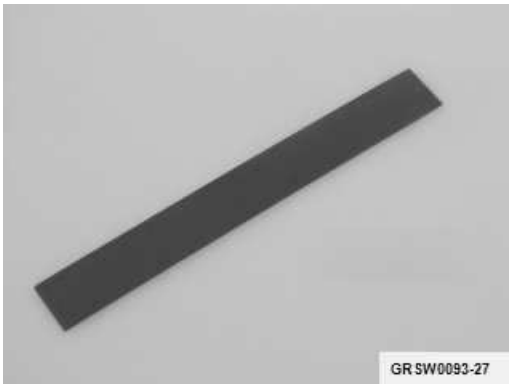
  * Liner is the protective film on a new MINI badge.
- Position the BMW badge (1) over the guides (3) and press on tight.

Additional Information

Overview of Special Tools

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0 496 571 (00 9 327) Wedge



Common	Used in step 1
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

General repair instructions	Used in step
51 00 ... Notes on component bonding with adhesive tape	2

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51 14 070 Replacing BMW badge rear left side panel

1 – Remove BMW badge on the rear side panel

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Tape off working area around the BMW badge (1) with adhesive tape.
- Carefully heat the BMW badge (1) with a hot air blower (temperature approx. 40-55°C).
- Carefully detach the BMW badge (1) from the adhesive strip with the special tool **0 496 571 (00 9 327)** and lever out of the guide pins (2).

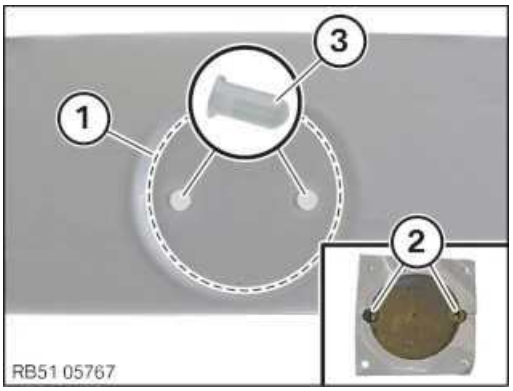
  The badge must be renewed after disassembly at all times.

2 – Installing the BMW badge on the rear side panel

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Renew the BMW badge.

  Parts: BMW badge
- Remove any adhesive residue from the body and clean the bonding surface (1) with the cleaning agent R2.

Expendable materials

Cleaning agent R2	500 ml	83190417324

- Check the guide pins (2).

  The guide pins (2) must not be damaged or missing.
- Renew the grommets (3).

  Parts: Grommets
- Coat the guide pins (2) using G14 lubricant.

Assembly aids

Lubricants G14	900 ml, Can	83232360412

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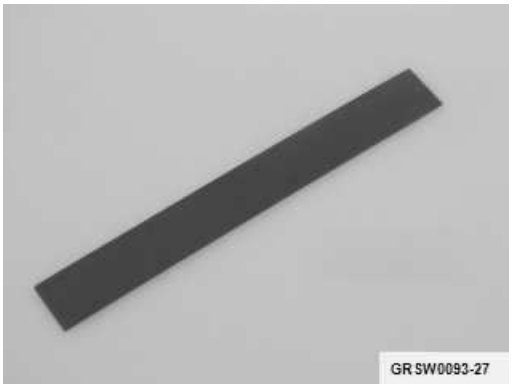


- Pull off the liner (protective film) from the adhesive tape of the badge.
- Press the BMW badge (1) onto the guide pins (2) and press on to the adhesive strip.

Additional Information

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common	Used in step 1
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

General repair instructions	Used in step
51 00 ... Notes on component bonding with adhesive tape	2

cardiagn.com

51 14 111 Replacing model name plate, rear

Note:
This document describes a general procedure for replacement and new bonding of model designations/lettering using the 335i (F30) as an example.

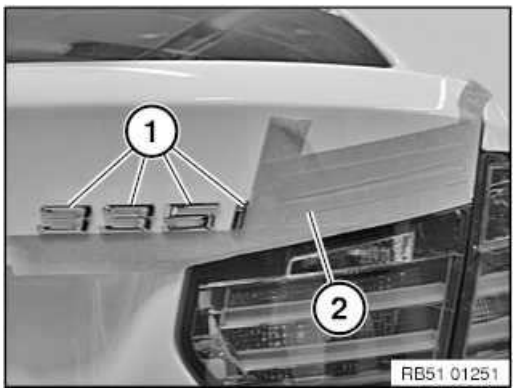
The procedure can be used for all models, positions and installation locations.

The model designation is attached with adhesive and can not be reused.

Refer to instructions for securing components with adhesive tape!

Consumables:

Cutting cord
Masking tape 19 mm or 30 mm
Yellow plastic adhesive tape
Eraser disk
Cleaning agent R2



Replacing model designation (new or newly painted tailgate):

Note:
Transfer position of model designation (1) from old tailgate by making an adhesive tape template.

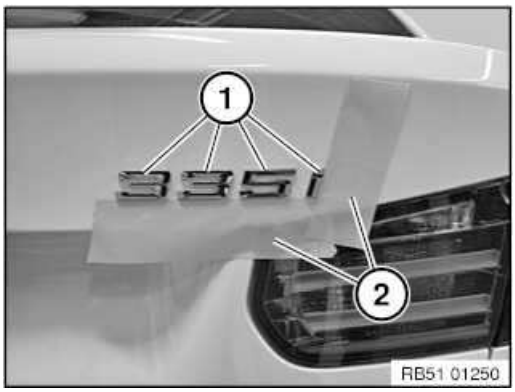
For paintwork, keep adhesive tape template up to installation.

Stick masking tape (2) to nearby reference edges of tailgate and therefore determine position of model designation (1).

Pull off masking tape (2) completely and stick to same reference edges of new/painted tailgate.

Check position, realign if required.

Refer to "**Installation**" operation for further procedure.



Replacing model designation:

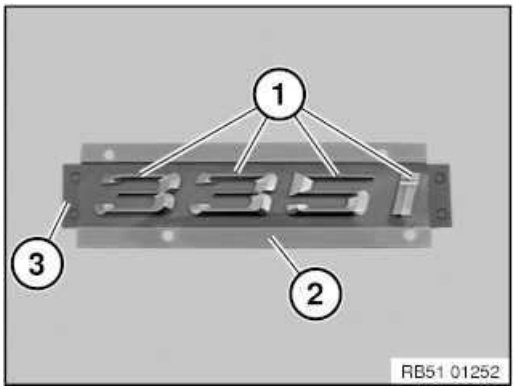
Mark position of model designation (1) with yellow plastic adhesive tape (2).

Coat separating string or strong yarn with tensides (e.g. washing-up liquid).

Cut through adhesive layer and remove model designation (1).

Refer to "**Installation**" operation for further procedure.

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Installation:

If required, remove adhesive layer residues with grinding wheel and/or cleaning agent R2.

Clean the adhesive area.

Number and letter combinations (1) of the model designation are not connected to each other and are supplied on a backing film (2).

Remove liner (3) (protective film for bonding surface).

Place model designation at marked position and press down firmly.

Remove backing film (2) and template.

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51 14 071 Replacing the BMW badge, rear side panel, right

1 – Remove BMW badge on the rear side panel

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Tape off working area around the BMW badge (1) with adhesive tape.
- Carefully heat the BMW badge (1) with a hot air blower (temperature approx. 40-55°C).
- Carefully detach the BMW badge (1) from the adhesive strip with the special tool **0 496 571 (00 9 327)** and lever out of the guide pins (2).

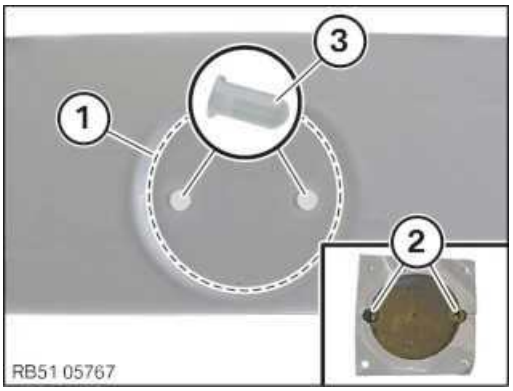
  The badge must be renewed after disassembly at all times.

2 – Installing the BMW badge on the rear side panel

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Renew the BMW badge.

  Parts: BMW badge
- Remove any adhesive residue from the body and clean the bonding surface (1) with the cleaning agent R2.

Expendable materials

Cleaning agent R2	500 ml	83190417324

- Check the guide pins (2).

  The guide pins (2) must not be damaged or missing.
- Renew the grommets (3).

  Parts: Grommets
- Coat the guide pins (2) using G14 lubricant.

Assembly aids

Lubricants G14	900 ml, Can	83232360412

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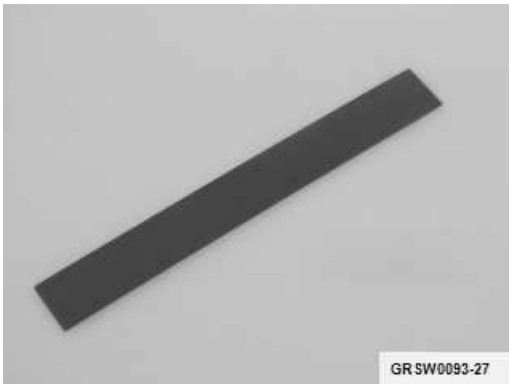


- Pull off the liner (protective film) from the adhesive tape of the badge.
- Press the BMW badge (1) onto the guide pins (2) and press on to the adhesive strip.

Additional Information

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common	Used in step 1
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

General repair instructions	Used in step
51 00 ... Notes on component bonding with adhesive tape	2

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51 14 001 Replacing the front BMW badge

1 – Installing the BMW badge at the front

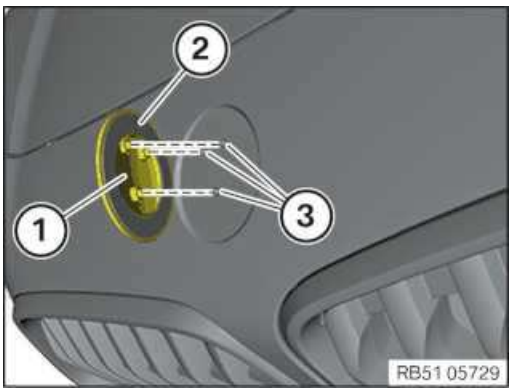
TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Remove any adhesive residue on the bumper panel and clean the adhesive area with cleaning agent R2.
- Pull off the liner* from the adhesive tape (2).

  * Liner is the protective film on a new MINI badge.
- Position the BMW badge (1) over the guides (3) and press on tight.

Additional Information

Links

General repair instructions	Used in step
51 00 ... Notes on component bonding with adhesive tape	1

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51 14 111 Replacing the model inscription, rear

CAUTION

Laser beam.

Danger of injury!

- Do not look into the laser beam.

1 – Remove the model designation

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- To avoid paint damage: Mask off the component in the working area with plastic adhesive tape.
- Heat the model designation (1) carefully with a hot air blower and release it from the adhesive strip with the special tool **0 490 539 (00 9 322)**.
- Remove adhesive residue from the tailgate.

2 – Incorporate the model designation

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



CAUTION

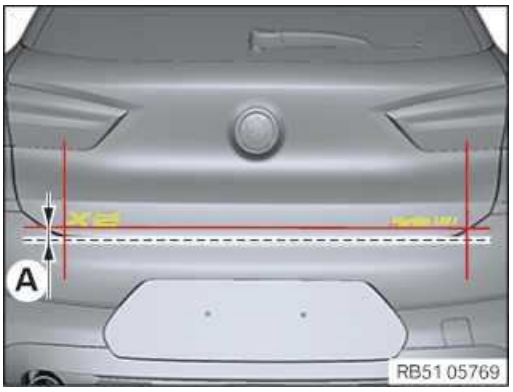
Laser beam.

Danger of injury!

- Do not look into the laser beam.

- Park the vehicle and the special tool **2 407 566** on a flat and even surface.
- Mount the laser on the tripod.
- Switch on laser (Position without automatic level).
- Activate laser horizontally and vertically.

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- Position the tool behind the vehicle.

  Align the horizontal laser beam at the edge of the tailgate with dimension (A=2,5 cm).

  Align the vertical laser beam on the rear light as shown.
- Remove adhesive residue and clean the bonding surface with solvent cleaner R2.

Expendable materials

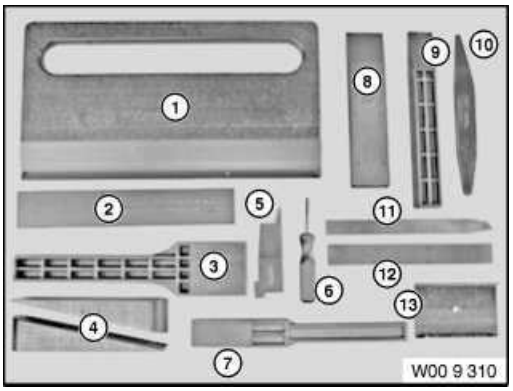
Cleaning agent R2	500 ml	83190417324

- Pull off the liner (protective film) from the adhesive tape of the model designation.
- Align the model designation on the laser beam and press onto the tailgate.

Additional Information

Overview of Special Tools

0 490 539 (00 9 322) Wedge



Common	Used in step 1
Usage	(Panel wedge)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

2 407 566 Laser



Common	Used in step 2
Usage	For aligning a number plate or a support for a number plate on the vehicle (front bumper). Delivery specification 1 x Kreuz-laser and 1 x tripod.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	
SI-Number	01 05 15 (235)

Links

General repair instructions	Used in step
51 00 ... Notes on component bonding with adhesive tape	1 2

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51 14 011 Replacing the rear BMW badge

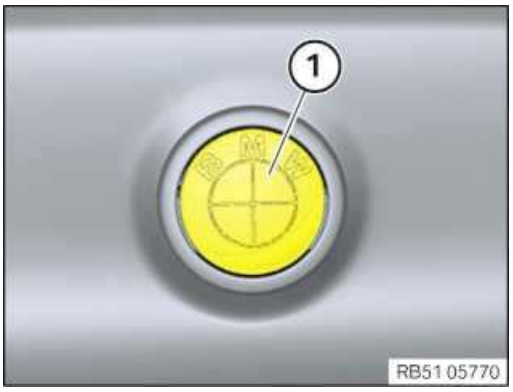
1 – Removing the rear BMW badge

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



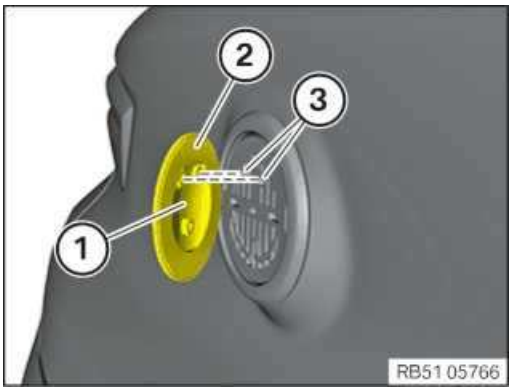
- Tape off working area around the BMW badge (1) with adhesive tape.
- Carefully heat up the BMW badge (1) with a hot air blower (temperature approx. 40-55°C) and lever it out of the badge operation with the special tool **0 496 571 (00 9 327)**.

2 – Installing the BMW badge at the rear

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Renew the BMW badge.

  Parts: BMW badge
- Completely remove adhesive residue on the badge operation and clean the adhesive area with solvent cleaner R2.

Expendable materials

Cleaning agent R2	500 ml	83190417324

- Pull off the liner* from the adhesive tape (2).

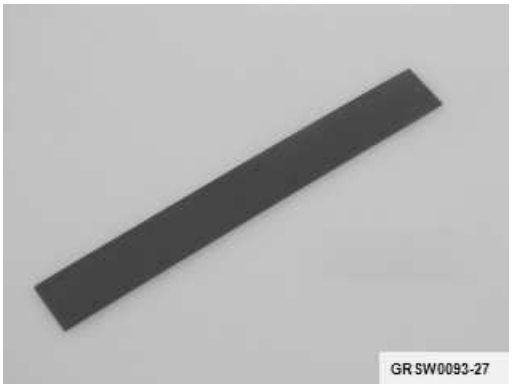
  * Liner is the protective film on a new MINI badge.
- Position the BMW badge (1) over the guides (3) and press on tight.

Additional Information

Overview of Special Tools

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0 496 571 (00 9 327) Wedge



Common	Used in step 1
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

General repair instructions	Used in step
51 00 ... Notes on component bonding with adhesive tape	2

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51 15 360 Detaching and attaching/replacing protective strip on left and right rear door

1 – Removing the protective strip on the rear door

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

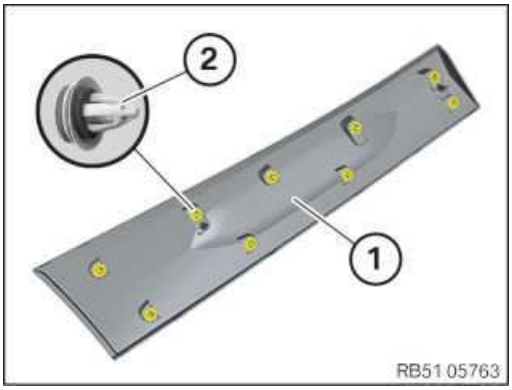
- Protect working area.
- Handle tools and components carefully.



- Detach protective strip (1) with the special tool **0 496 569 (00 9 325)** in sequence (1) to (9) from the clips (2).

  The clips must be released in the specified sequence separately in consecutive order.

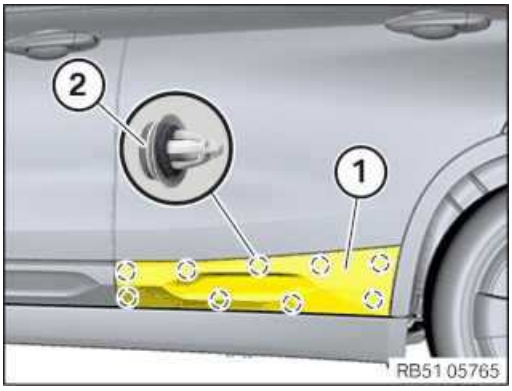
2 – Installing protective strip on the rear door



- Lever out stuck clips (2) from the door outer skin with the special tool **2 298 505** and fasten on the protective strip (2).
- Check the clips (2) and their brackets.

  Renew faulty clips (2) or clips without a sealing ring.

  Renew the protective strip on damaged brackets or a damaged centering pin.



- Correctly position the protective strip (1) and clip in on the clips (2) starting at the front on the centering pin to the rear.

Additional Information

Overview of Special Tools

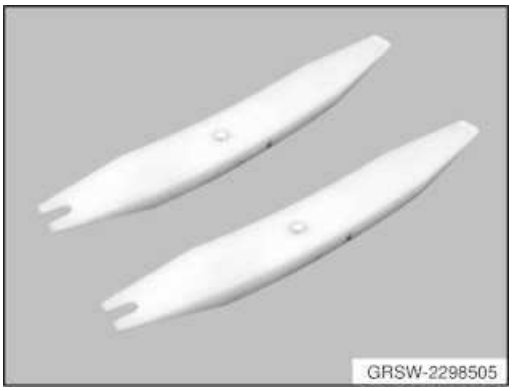
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0 496 569 (00 9 325) Wedge



Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

2 298 505 Wedge



Common	Used in step 2
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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51 15 330 Removing and installing/replacing the protective strip on the left and right front door

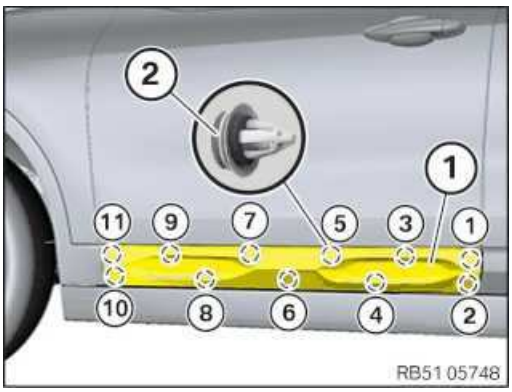
1 – Removing protective strip on the front door

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

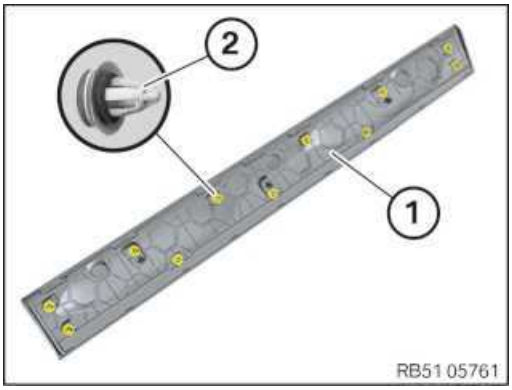
- Protect working area.
- Handle tools and components carefully.



- Release the protective strip (1) with the special tool **0 496 569 (00 9 325)** in the sequence (1) to (11) on the clips (2).

  The clips must be individually released one after the other in the specified sequence.

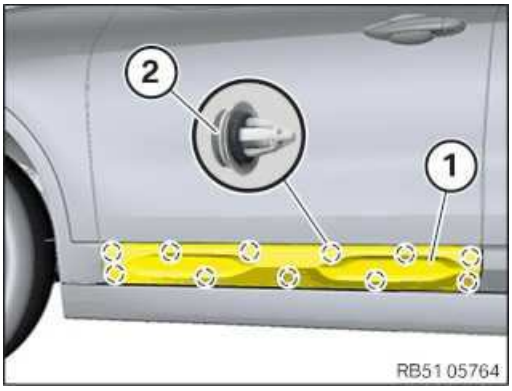
2 – Installing the protective strip on the front door



- Lever out stuck clips (2) from the door outer skin with the special tool **2 298 505** and fasten on the protective strip (2).
- Check the clips (2) and their brackets.

  Renew faulty clips (2) or clips without a sealing ring.

  Renew the protective strip on damaged brackets or damaged centering pins.



- Correctly position the protective strip (1) with the centering pin and clip in on the clips (2) starting from the centre to the outer.

Additional Information

Overview of Special Tools

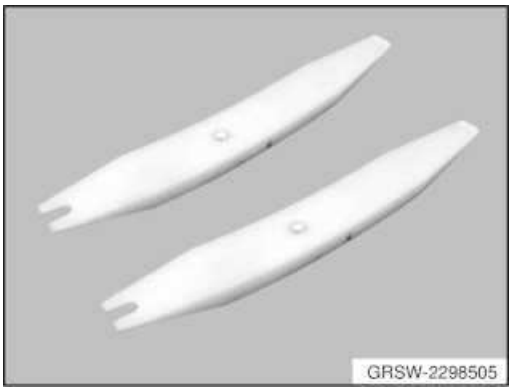
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0 496 569 (00 9 325) Wedge



Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

2 298 505 Wedge



Common	Used in step 2
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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51 16 165 Completely remove and install the centre console (with centre armrest)

RISK OF DAMAGE

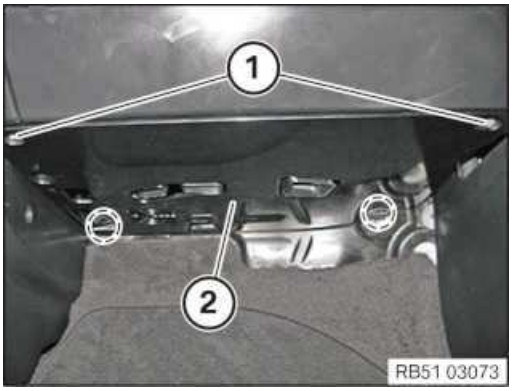
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

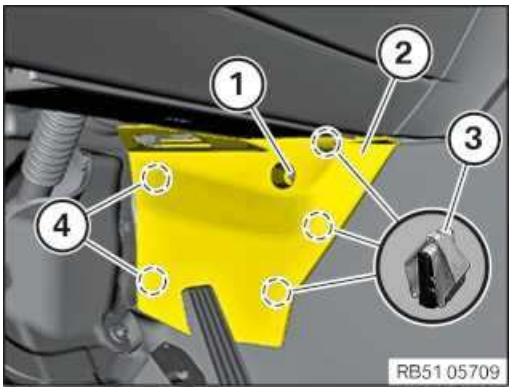
1 – Removing the instrument panel trim at bottom right



- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

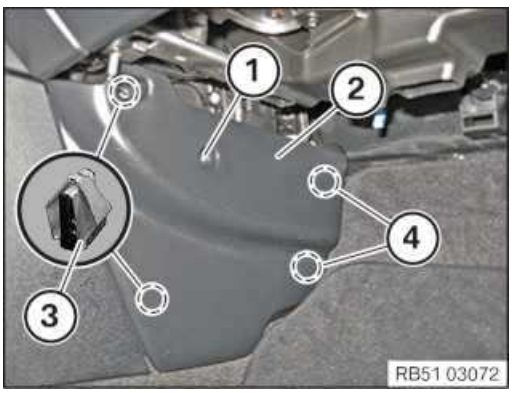
2 – Removing the side trim panel for the left and right centre console

▸ **Removing side trim panel for the left centre console**



- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▸ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

3 – Remove gearshift lever cover

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- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

4 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

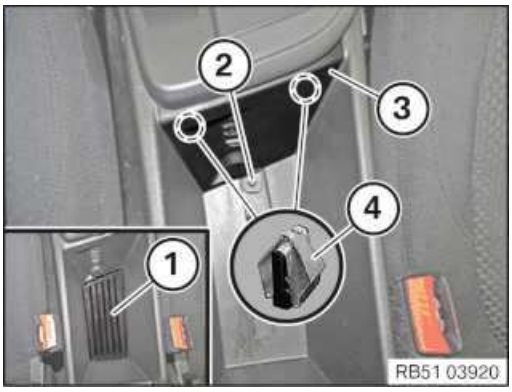


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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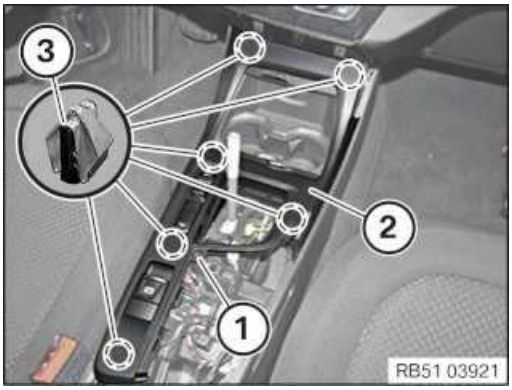


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

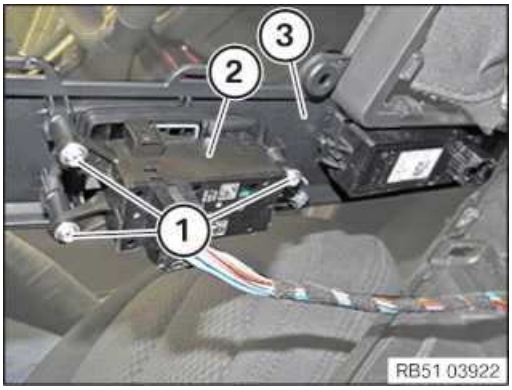


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

5 – Remove the centre console trim



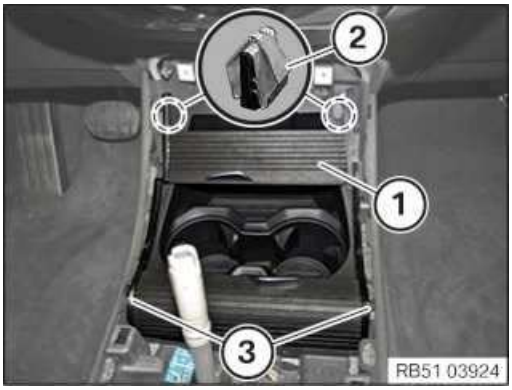
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

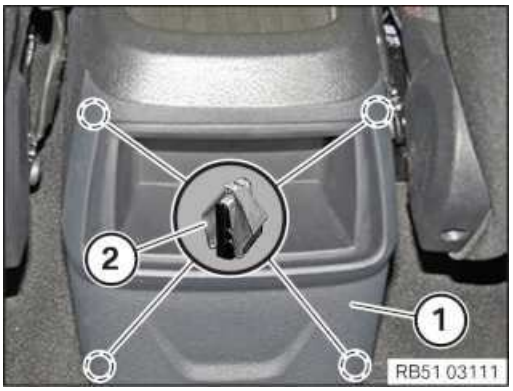
6 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

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7 – Removing the rear centre console trim



- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

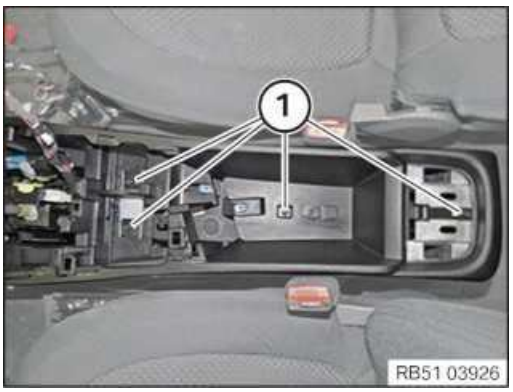
MAIN WORK

8 – Removing centre console fully with centre armrest

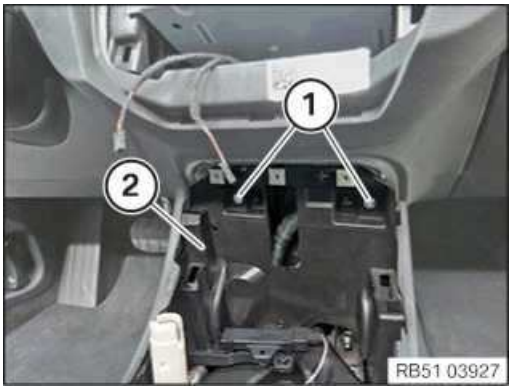
▶ **Removing the centre armrest**



- Release nuts (1) and remove centre armrest upwards.



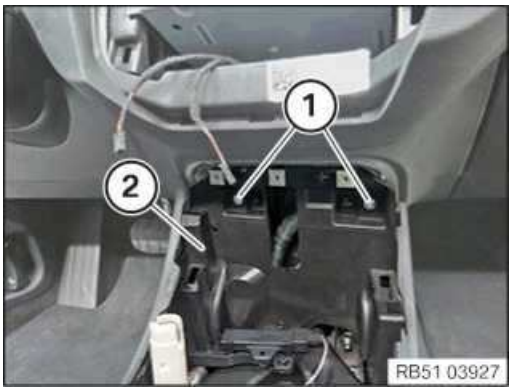
- Loosen screws (1).



- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

9 – Installing centre console fully with centre armrest

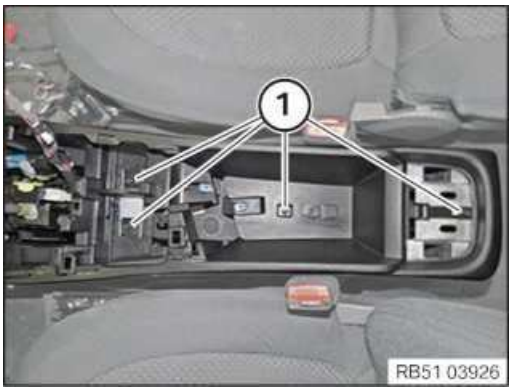
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- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm



- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing the centre armrest**



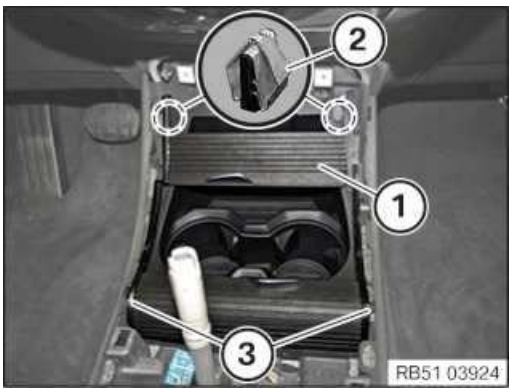
- Install the centre armrest and tighten nuts (1).

Centre armrest to support

Nut M8		Tightening torque	21,4 Nm

POSTPROCESSES

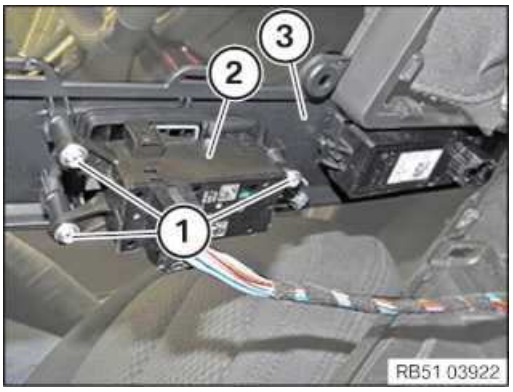
10 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

11 – Install the centre console trim

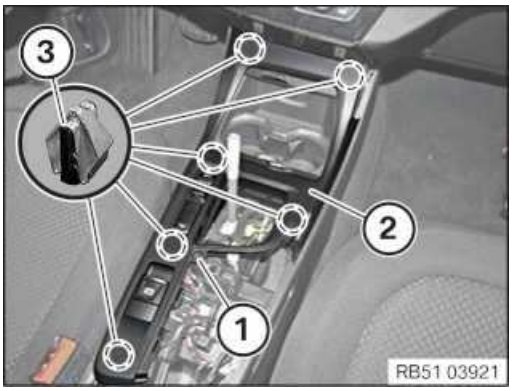
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- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

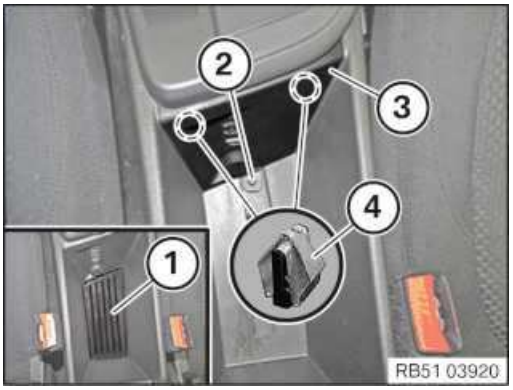
12 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

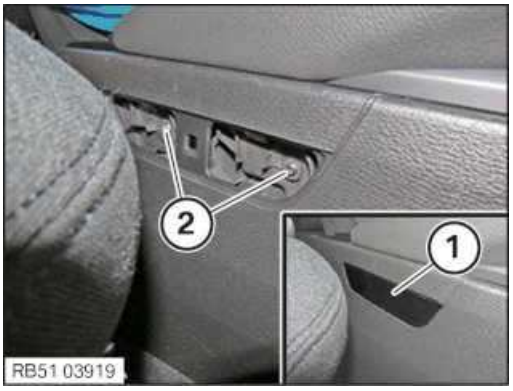


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

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- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

13 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

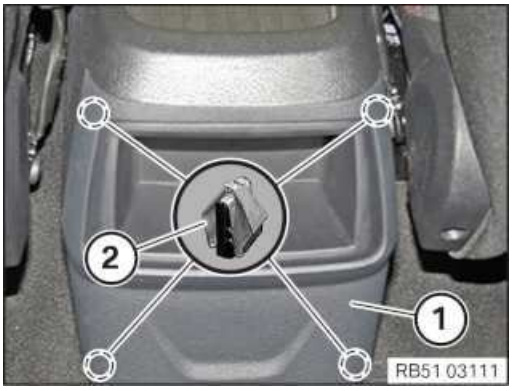
  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

14 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

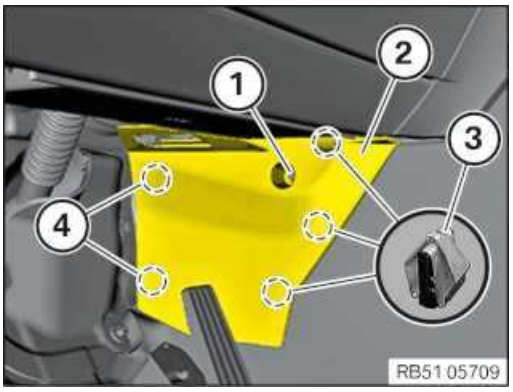
15 – Installing side trim panel for the left and right centre console

▸ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

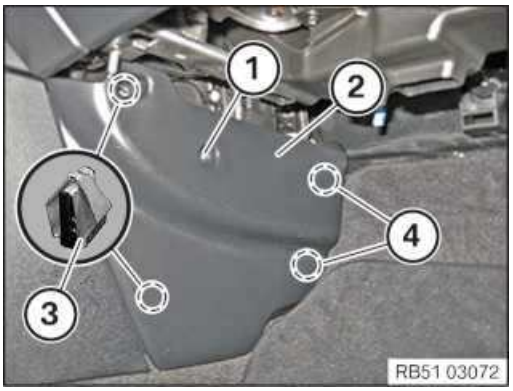
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

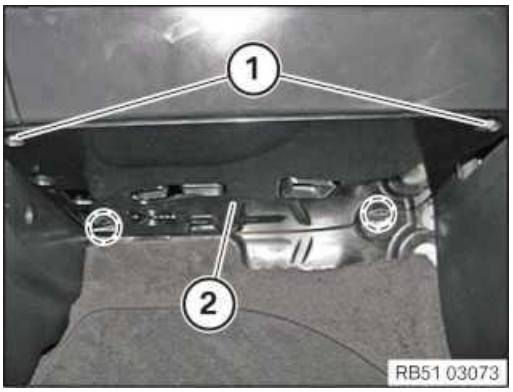
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

16 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

Additional Information

Overview of Tightening Torques

Screw connection for centre console Used in step 9 11 12

Oval-head screw		Tightening torque	1,8 Nm

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Centre armrest to support — Used in step 9

Nut M8		Tightening torque	21,4 Nm

Parking brake button — Used in step 11

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console — Used in step 12 15

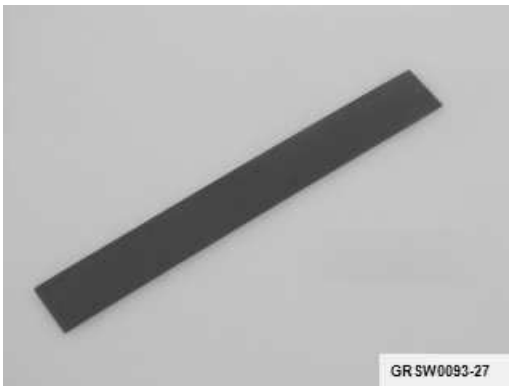
Oval-head screw		Tightening torque	1,8 Nm

Bottom left footwell trim to instrument panel — Used in step 16

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common — Used in step 4

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common — Used in step 5 7

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 16 150 Remove and install the front storage compartment

PRELIMINARY WORK

1 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

2 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

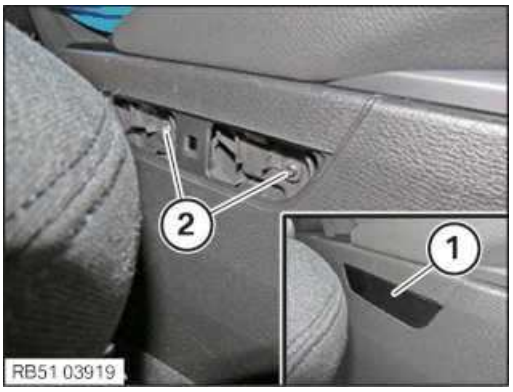
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

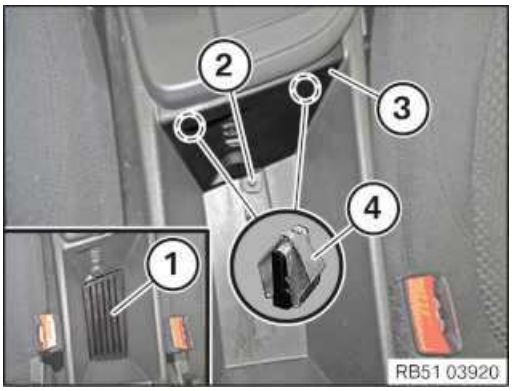


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

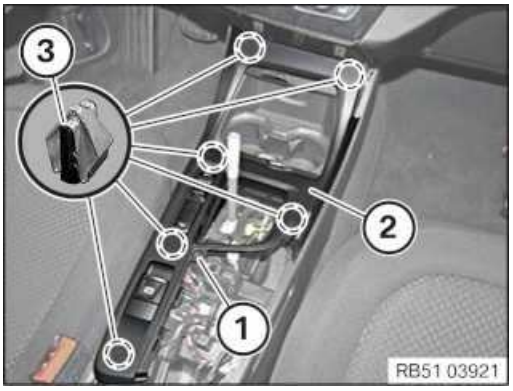


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

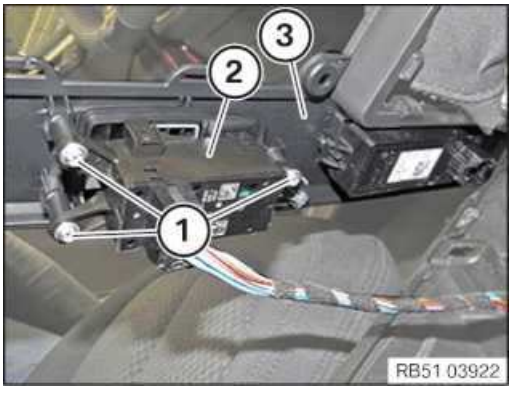


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

3 – Remove the centre console trim



- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



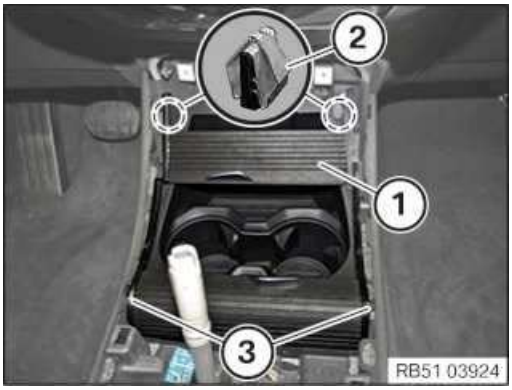
- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

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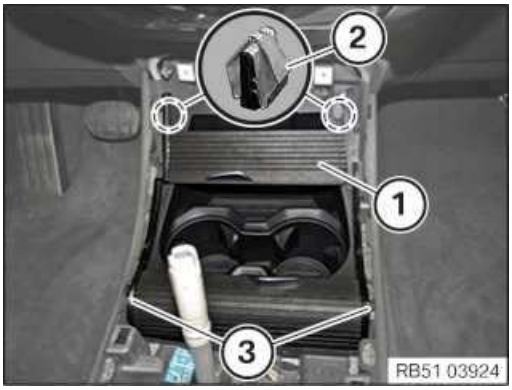
MAIN WORK

4 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

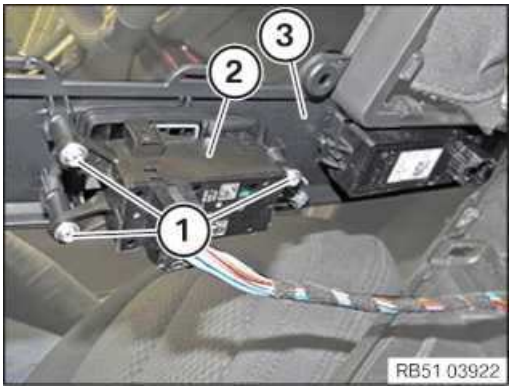
5 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

POSTPROCESSES

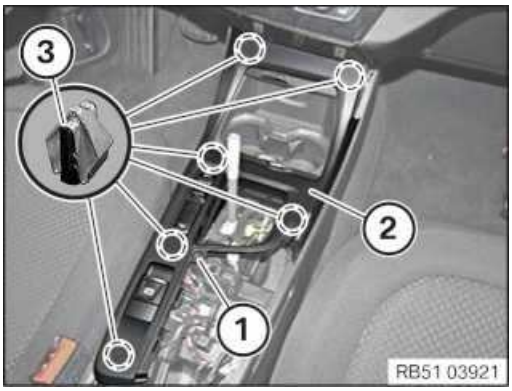
6 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

7 – Installing the decorative trim to the centre console

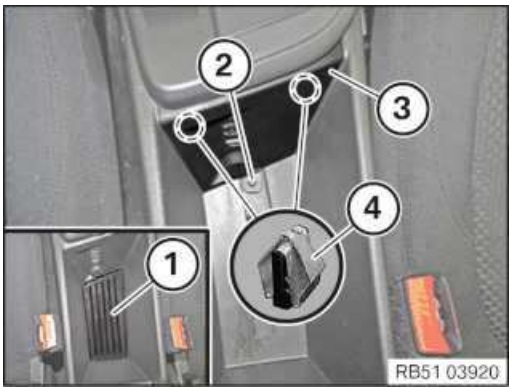
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- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

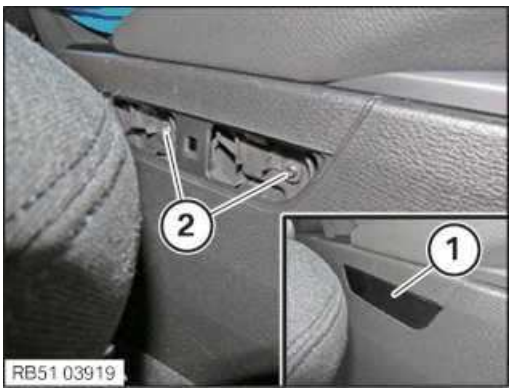


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

8 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.

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- Clip in gaiter (arrows).

Additional Information

Overview of Tightening Torques

Parking brake button — Used in step 6

Oval-head screw		Tightening torque	1,5 Nm

Screw connection for centre console — Used in step 6 7

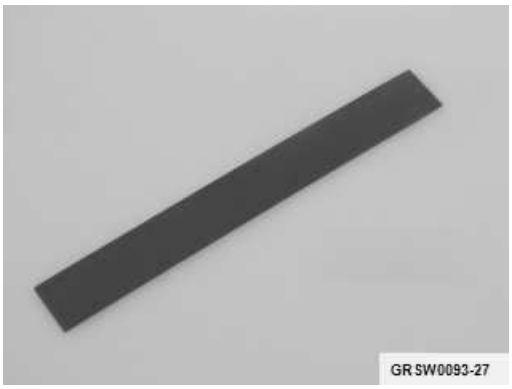
Oval-head screw		Tightening torque	1,8 Nm

Trim to centre console — Used in step 7

Oval-head screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common — Used in step 2

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common — Used in step 3

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 16 163 Remove and install the rear centre console trim

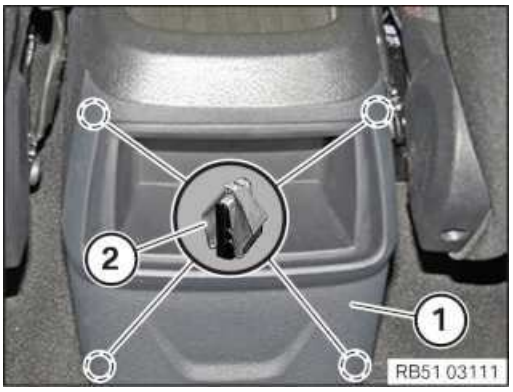
RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

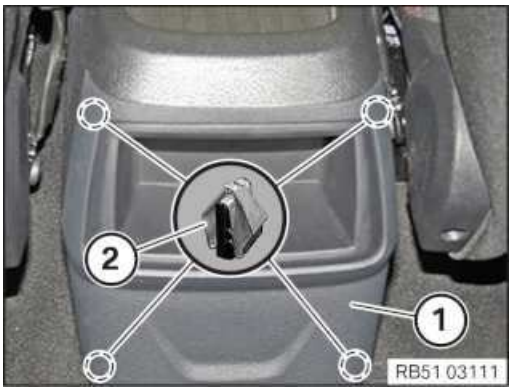
- Protect working area.
- Handle tools and components carefully.

1 – Removing the rear centre console trim



- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

2 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

Additional Information

Overview of Special Tools

0 496 569 (00 9 325) Wedge



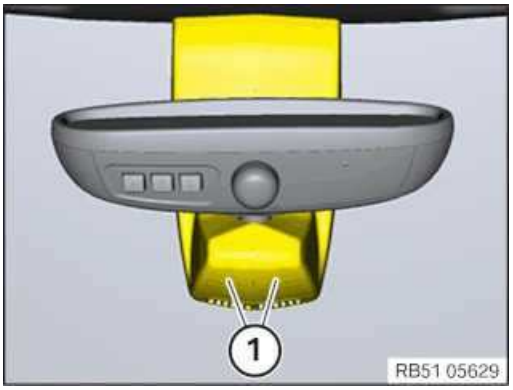
Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 16 063 Remove and install/replace the interior mirror

PRELIMINARY WORK

1 – Remove the cover on the inside mirror



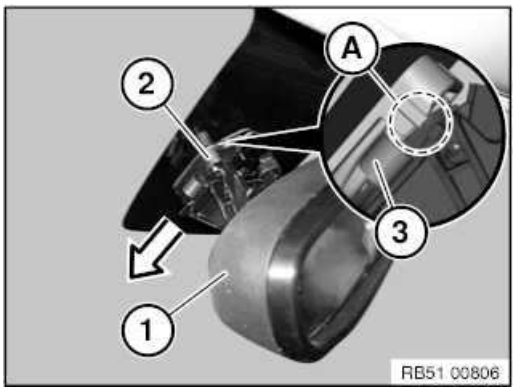
- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

MAIN WORK

2 – Removing the interior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



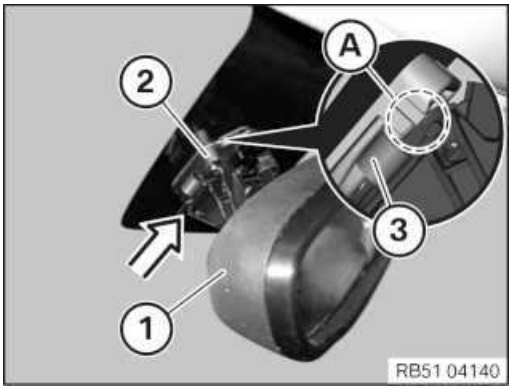
- Make sure that the interior mirror (1) does not bend or twist during removal.

  The interior mirror (1) is held by the clamp (3) and the latch mechanism in this area (A) on the base (2).
- If necessary unlock and disconnect the plug connection on the interior mirror (1).
- Pull off the interior mirror (1) from the mirror socket (2) with a downwards jerk in parallel to the windscreen.

3 – Installing the interior mirror

TECHNICAL INFORMATION

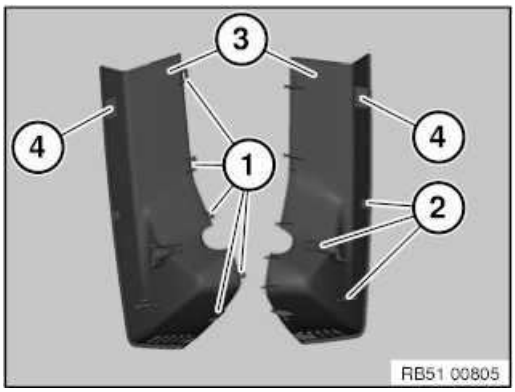
Carry out the work at temperatures between 18 °C and 23 °C only.



- Check the clamp (3) on both sides of the interior mirror (1) for damage and renew as needed.
- If necessary, connect the connector on the interior mirror (1).
- Slide the interior mirror (1) parallel to the windscreen in direction of arrow into the base (2) and lock correctly in area (A).

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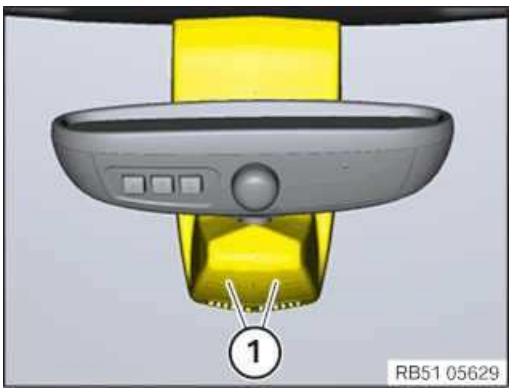
4 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



- Install covers on the interior mirror (1) clip together.

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51 16 160 Removing and installing center console trim

PRELIMINARY WORK

1 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

2 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

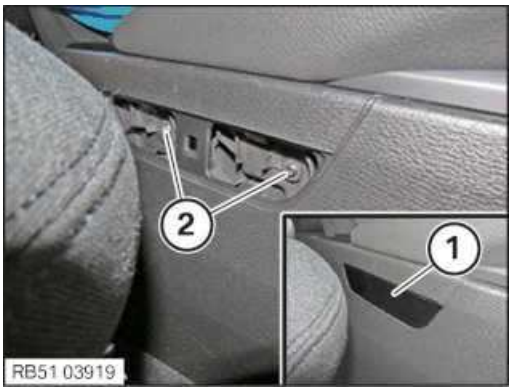
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

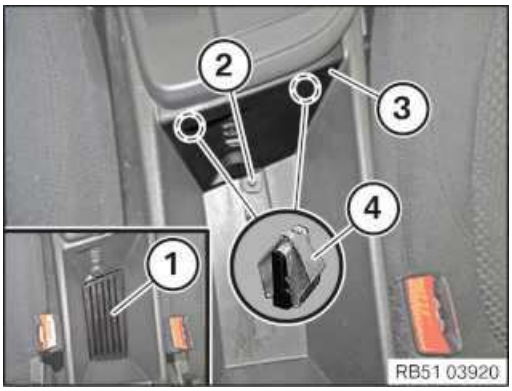


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



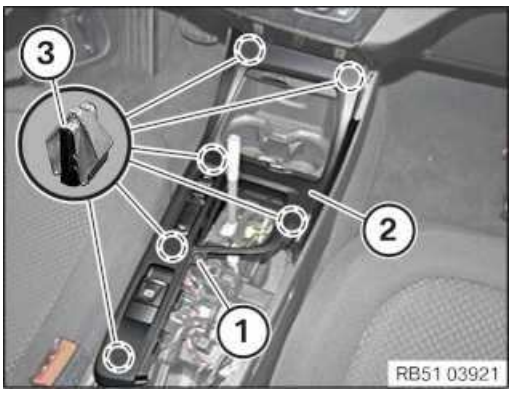
- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).



- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

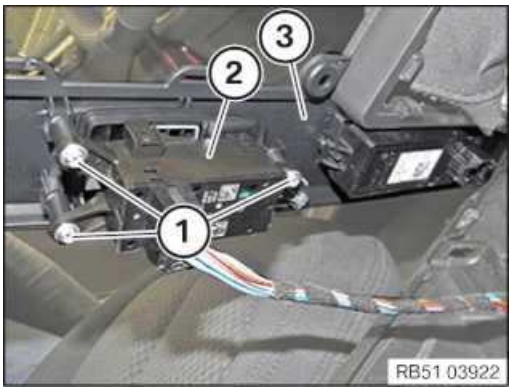
MAIN WORK

3 – Remove the centre console trim



- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).

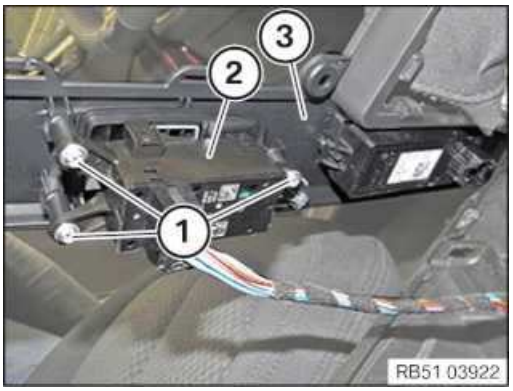
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- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

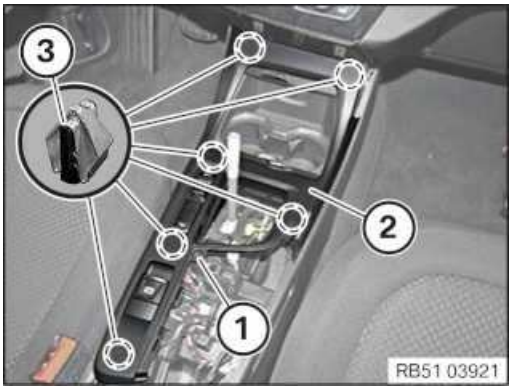
4 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

POSTPROCESSES

5 – Installing the decorative trim to the centre console

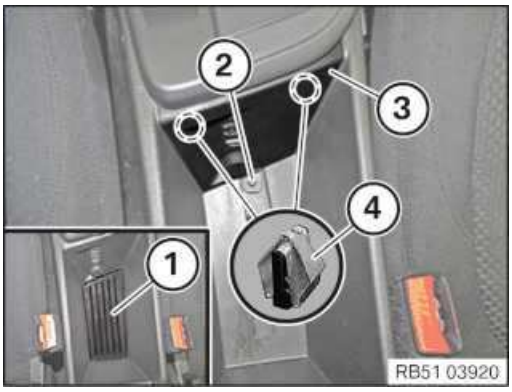


- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

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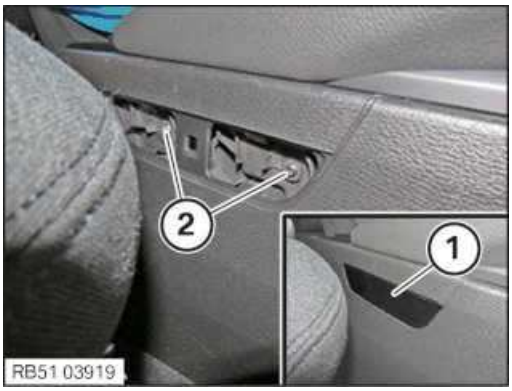


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

6 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

Additional Information

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Overview of Tightening Torques

Parking brake button

Used in step 4

Oval-head screw		Tightening torque	1,5 Nm

Screw connection for centre console

Used in step 4 5

Oval-head screw		Tightening torque	1,8 Nm

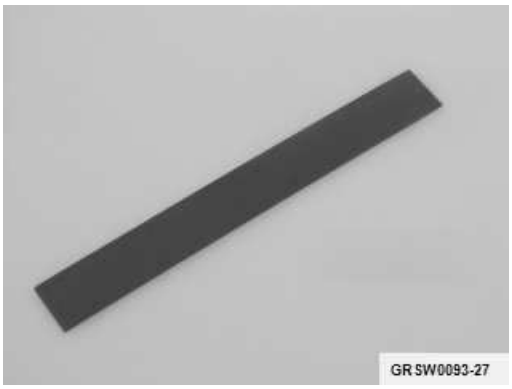
Trim to centre console

Used in step 5

Oval-head screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common Used in step 2

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common Used in step 3

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 16 165 Removing and installing complete centre console

RISK OF DAMAGE

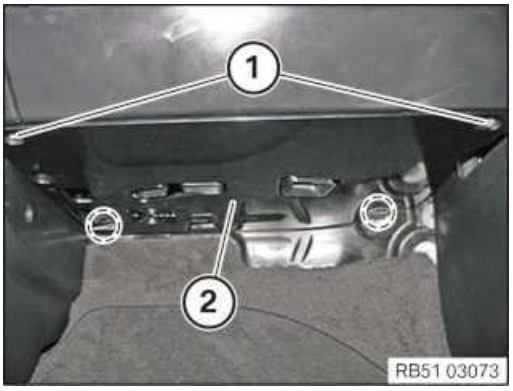
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

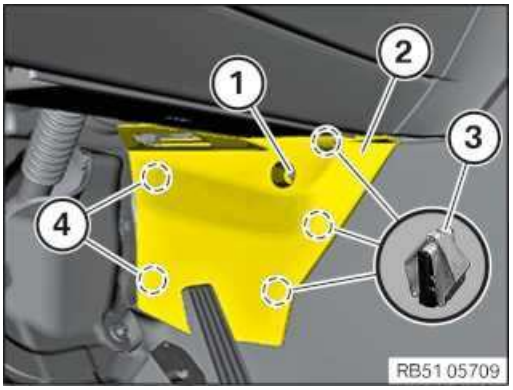
1 – Removing the instrument panel trim at bottom right



- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

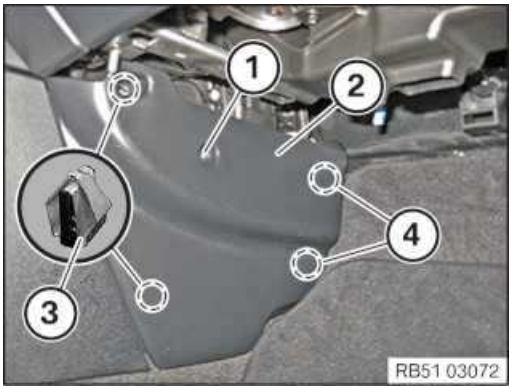
2 – Removing the side trim panel for the left and right centre console

▸ **Removing side trim panel for the left centre console**



- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▸ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

3 – Remove gearshift lever cover

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- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

4 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

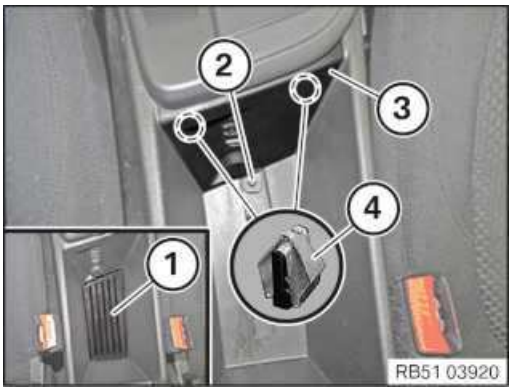


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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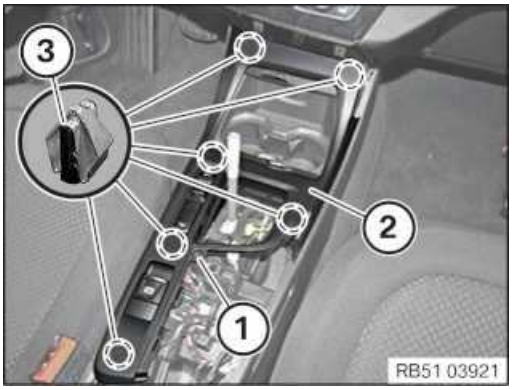


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

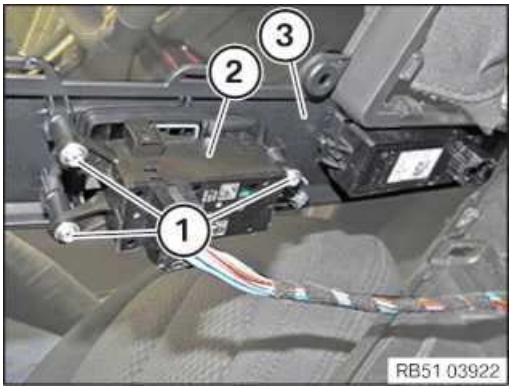


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

5 – Remove the centre console trim



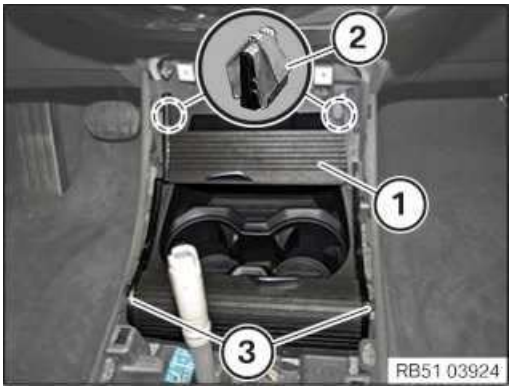
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

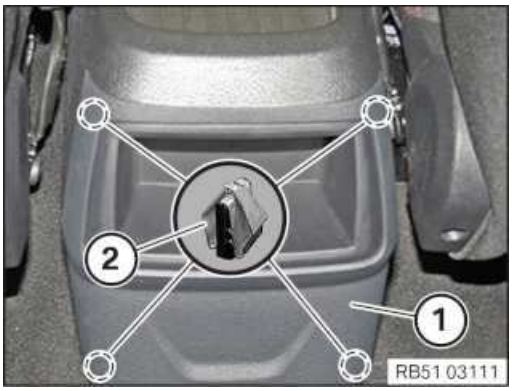
6 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

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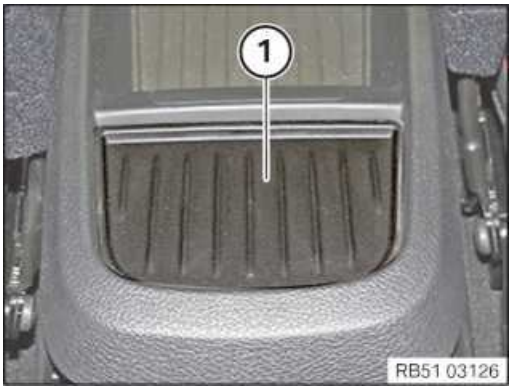
7 – Removing the rear centre console trim



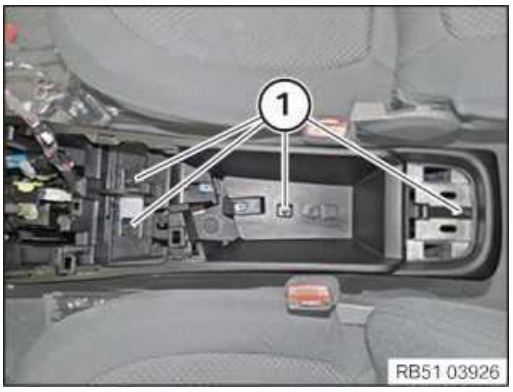
- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

MAIN WORK

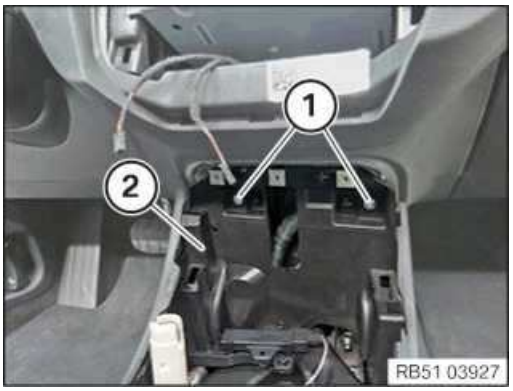
8 – Remove complete centre console



- Remove the cover (1).



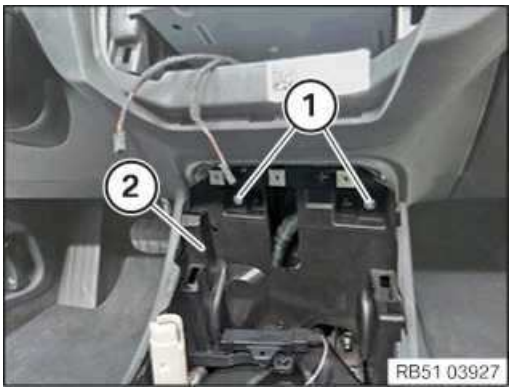
- Loosen screws (1).



- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

9 – Install centre console, complete

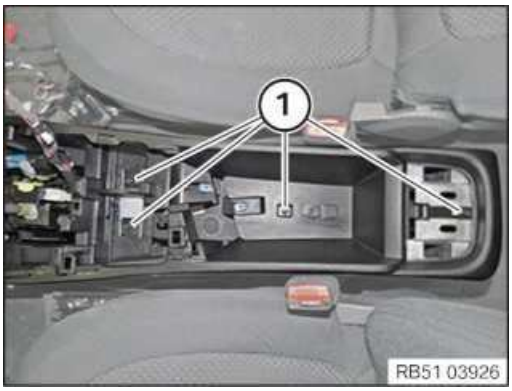
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- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

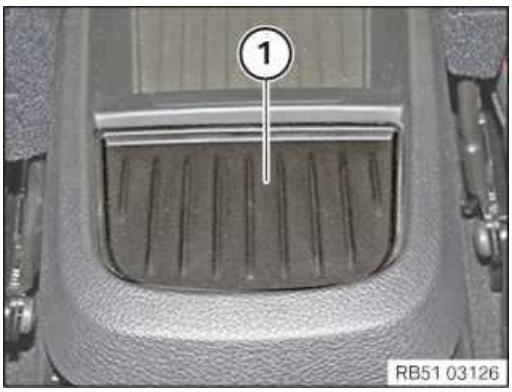
Oval-head screw		Tightening torque	1,8 Nm



- Tighten the screws (1).

Screw connection for centre console

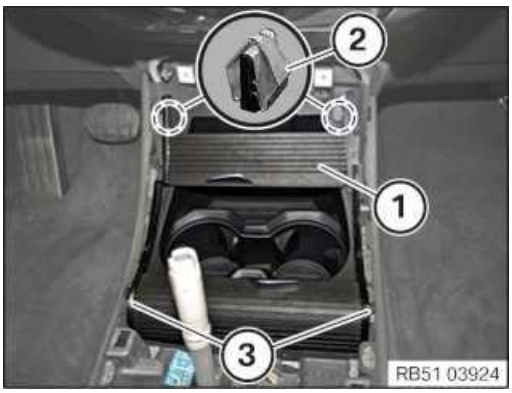
Oval-head screw		Tightening torque	1,8 Nm



- Install the cover (1).

POSTPROCESSES

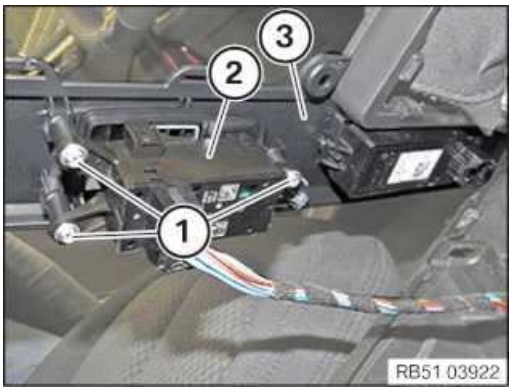
10 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

11 – Install the centre console trim

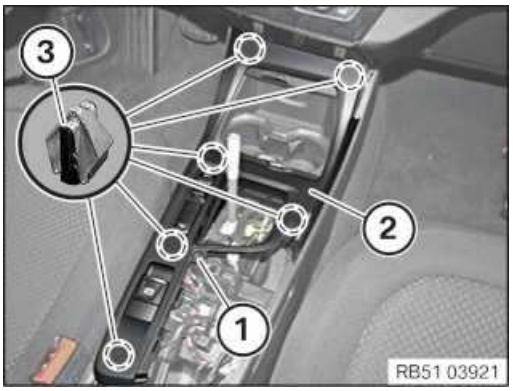
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- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

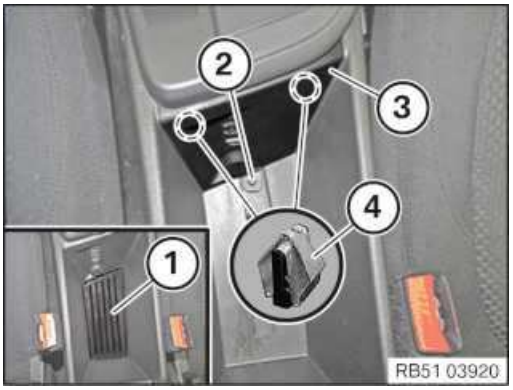
12 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

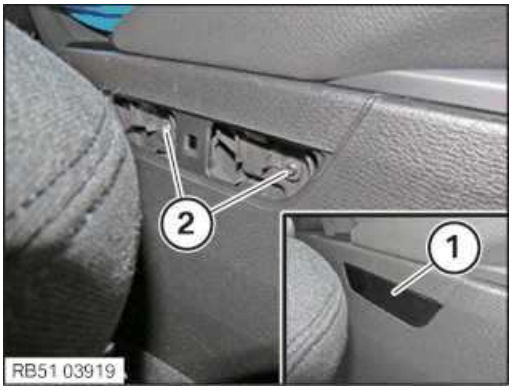


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

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- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

13 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

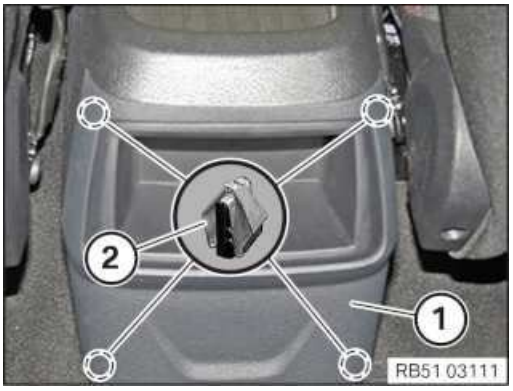
  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

14 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

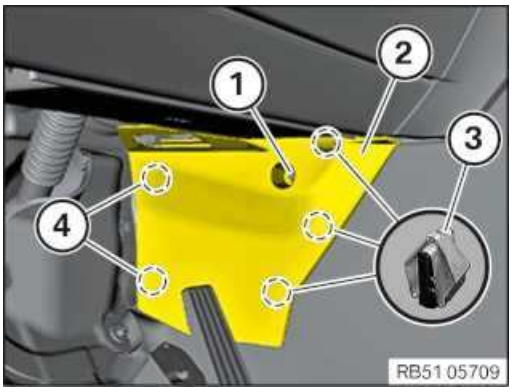
15 – Installing side trim panel for the left and right centre console

▸ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

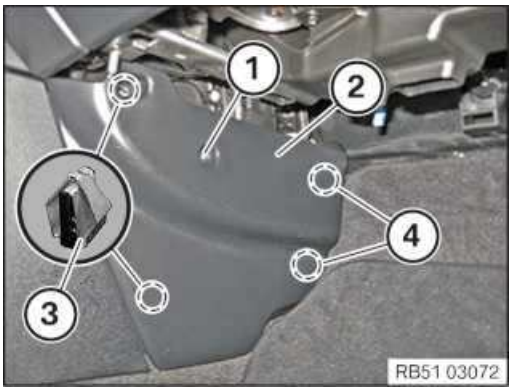
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

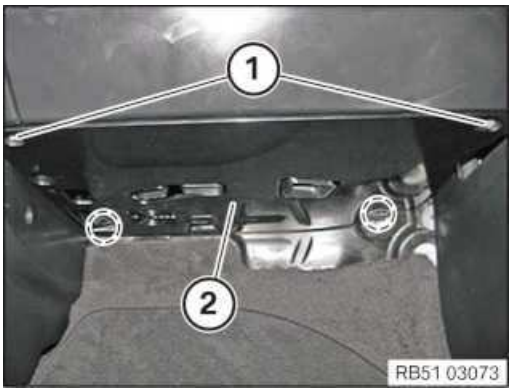
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

16 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

Additional Information

Overview of Tightening Torques

Screw connection for centre console Used in step 9 11 12

Oval-head screw		Tightening torque	1,8 Nm

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Parking brake button — Used in step 11

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console — Used in step 12 15

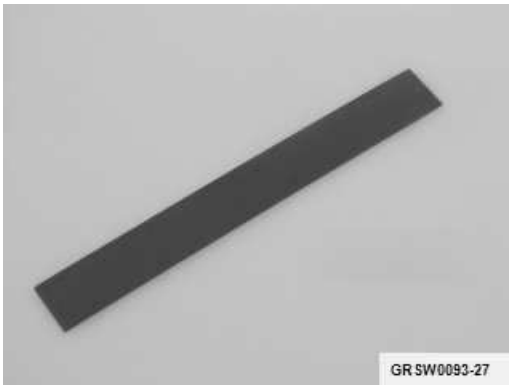
Oval-head screw		Tightening torque	1,8 Nm

Bottom left footwell trim to instrument panel — Used in step 16

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common — Used in step 4

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common — Used in step 5 7

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

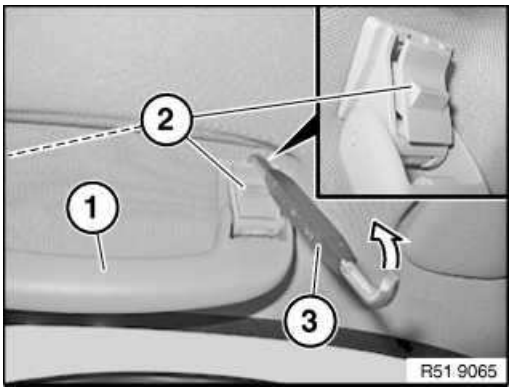
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51 16 480 Removing and installing or replacing front grab handle

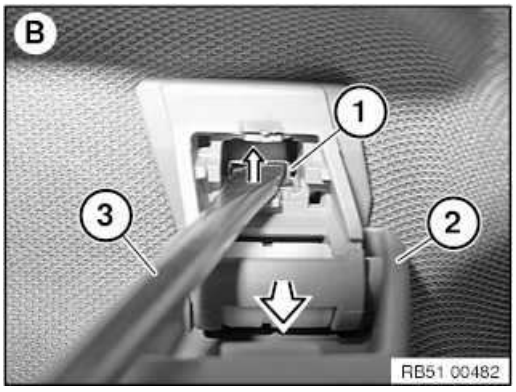
NOTICE

Description is for left component only. Procedure on the right side is identical.

1 – Removing the grab handle

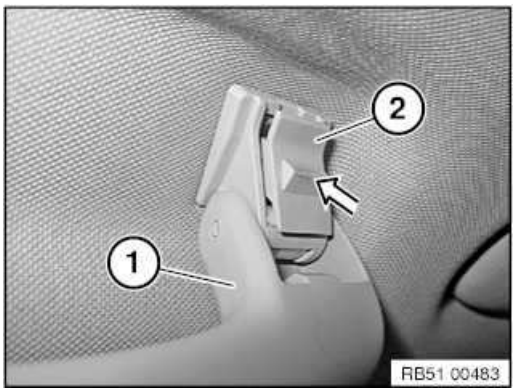


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

2 – Installing the grab handle



- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

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51 16 045 Removing and installing or replacing retaining ring on left or right exterior mirror

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Removing the mirror glass

CAUTION

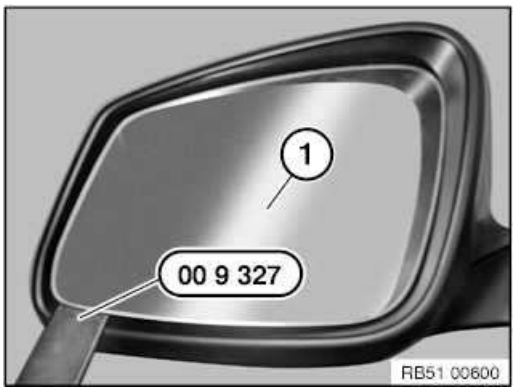
Glass splinters.

Danger of injury!

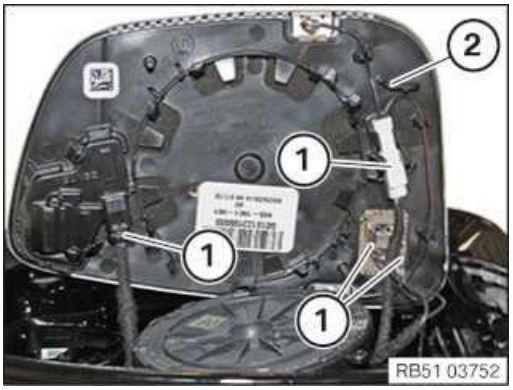
- If the mirror glass is damaged, wear safety goggles and protective gloves.

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Manually press the mirror glass (1) on the side of vehicle up to the end stop.
- Unclip the mirror glass (1) using special tool **0 496 571 (00 9 327)** all the way around, starting with the outer side.



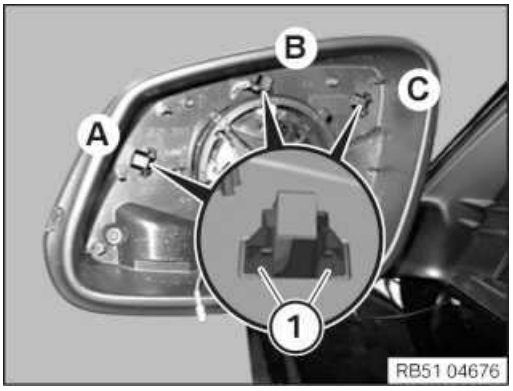
- Disconnect plug connection (1).
- Remove mirror glass (2).

2 – Remove cover cap on the exterior rearview mirror

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TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Press latch mechanisms (1) together in sequence (A), (B) and (C) and pull off the cover cap on the exterior rearview mirror to the outside at the same time.

3 – Removing the drive for exterior mirror adjustment



- Release the screws (1) and pull out the drive for exterior mirror adjustment (2) a little.

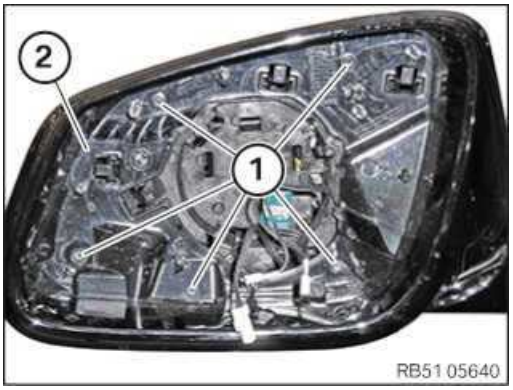


- Unlock plug connection (1) and disconnect and remove the drive for exterior mirror adjustment (2) .

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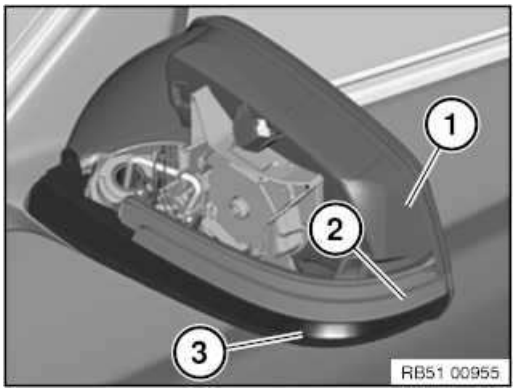
MAIN WORK

4 – Removing retaining ring from exterior rearview mirror

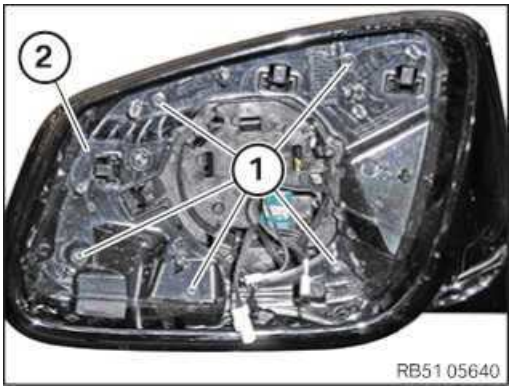


- Fold exterior mirror forwards.
- Loosen screws (1).
- Slide the retaining ring (2) out.

5 – Installing the retaining ring on the exterior rearview mirror



- Feed in the retaining ring (1) on the exterior rearview mirror.
- If necessary, feed in cable.
- Make sure the retaining ring (1) is fitted correctly on the side repeater (2) and on the housing (3).



- Tighten the screws (1) on the retaining ring (2).

Retaining ring to exterior mirror

Screw		Tightening torque	1,2 Nm

POSTPROCESSES

6 – Installing the drive for exterior mirror adjustment



- Position drive for exterior mirror adjustment (2).
- Connect connectors (1) and lock.

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- Position drive for exterior mirror adjustment (2) correctly.
- Tighten the screws (1).

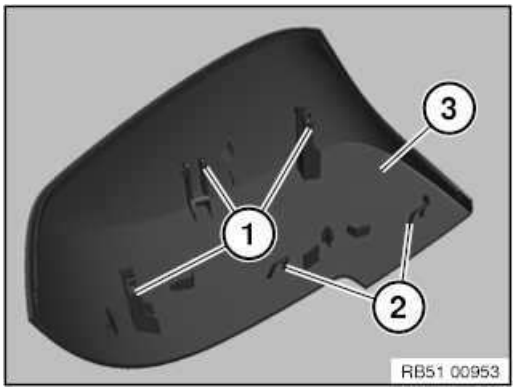
Drive for exterior mirror adjustment

	Tightening torque	1,2 Nm

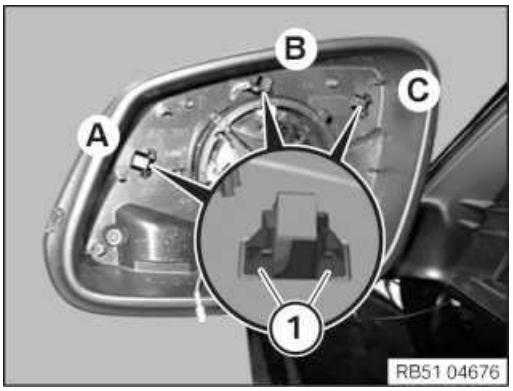
7 – Installing protective cap on exterior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.

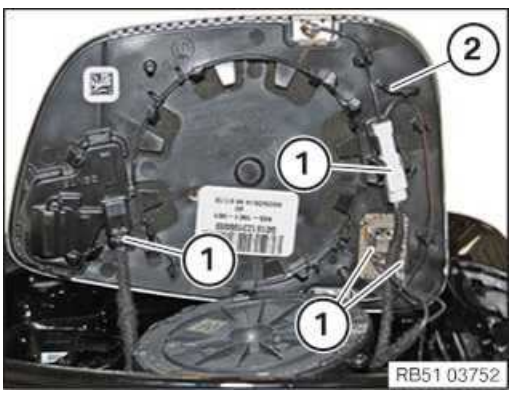


- Latch mechanisms (1) and guides (2) on the protective cap (3) must not be missing or damaged.



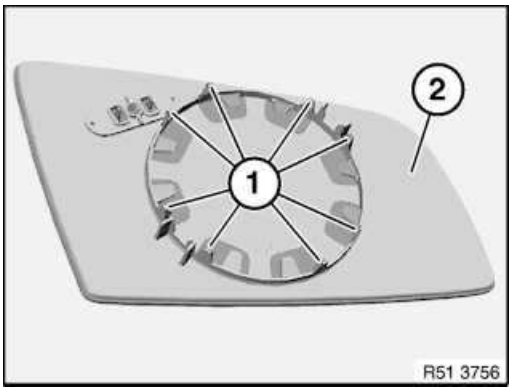
- Position protective cap on the exterior mirror and engage in the latch mechanisms (1) in order (C), (B) and (A).

8 – Installing the mirror glass



- Position mirror glass (2).
- Connect plug connections (1).

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- Check whether retaining lugs (1) are missing or damaged and, if required, renew the mirror glass.
- Position the mirror glass (2) with the retaining lugs (1) flush with the drive for exterior mirror adjustment and clip in.
- Ensure correct locking.
- Check if the drive for exterior mirror adjustment is functioning correctly.

Additional Information

Overview of Tightening Torques

Retaining ring to exterior mirror — Used in step 5

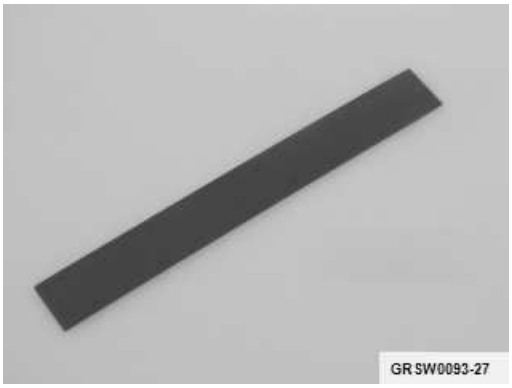
Screw		Tightening torque	1,2 Nm

Drive for exterior mirror adjustment — Used in step 6

		Tightening torque	1,2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common — Used in step 1

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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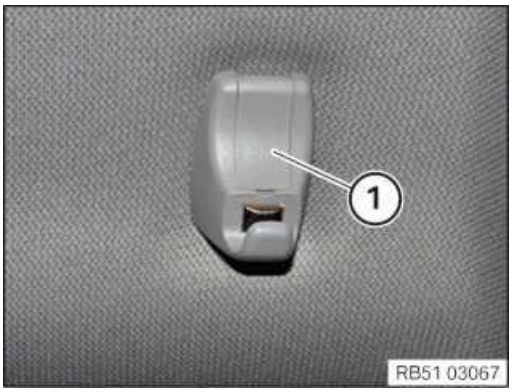
51 16 080 Removing and installing or replacing sun visor and left or right counter support

1 – Remove sun visor



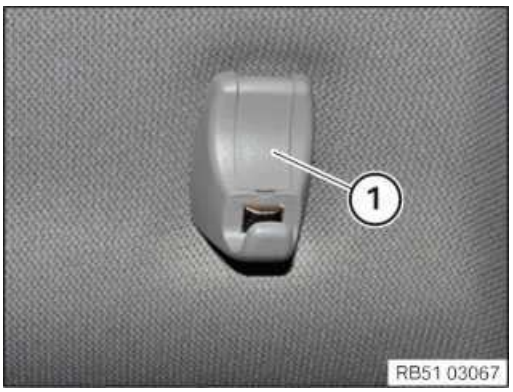
- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

2 – Remove the counter support for the sun visor



- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

3 – Install the counter support for the sun visor



- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

Screw		Tightening torque	2,5 Nm

4 – Install the sun visor



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

Additional Information

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Overview of Tightening Torques

Counter support on body

Used in step 3

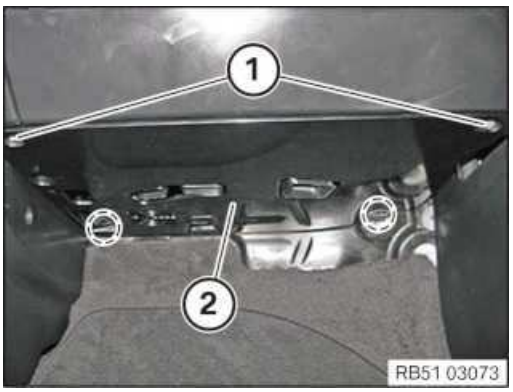
Screw		Tightening torque	2,5 Nm

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51 16 366 Removing and installing right glove box with housing

PRELIMINARY WORK

1 – Removing the instrument panel trim at bottom right

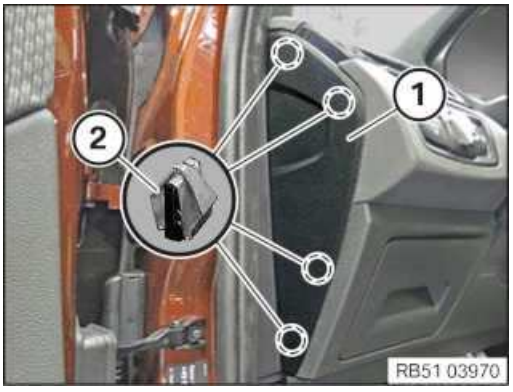


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

2 – Remove the side panel on the right instrument panel

NOTICE

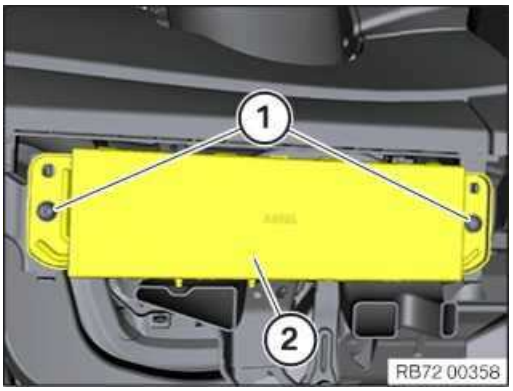
Description is for left component only. Procedure on the right side is identical.



- Lift the side panel (1) out of the clamps (2) with the special tool **0 496 569 (00 9 325)** and feed out toward the rear at an angle.

  If necessary, unlock and disconnect the plug connection on the switch for the front passenger airbag deactivation.

3 – Removing knee airbag

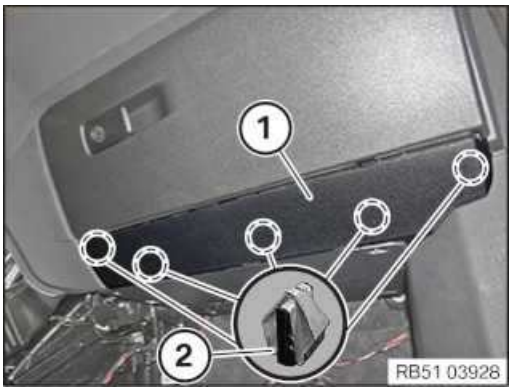


- Unlock plug connection on knee airbag (2) and disconnect.
- Loosen screws (1).
- Remove knee airbag (2).

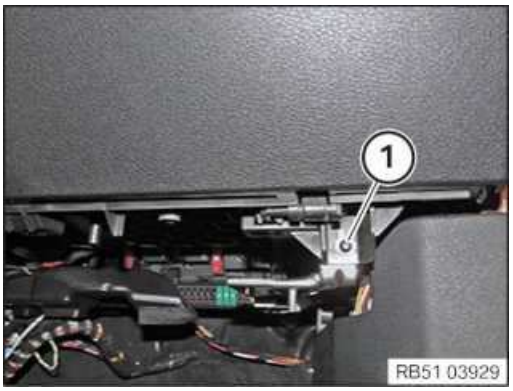
MAIN WORK

4 – Remove right glove box

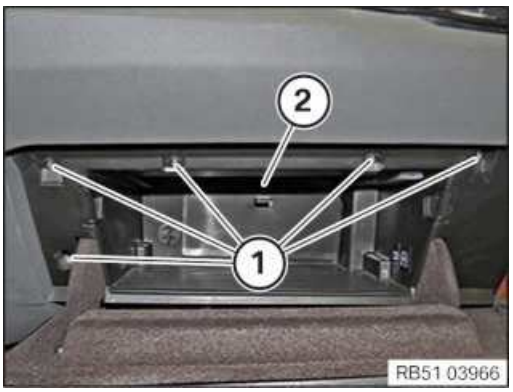
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- Release the trim (1) with the special tool **0 496 569 (00 9 325)** toward the bottom from the clamps (2) and remove.

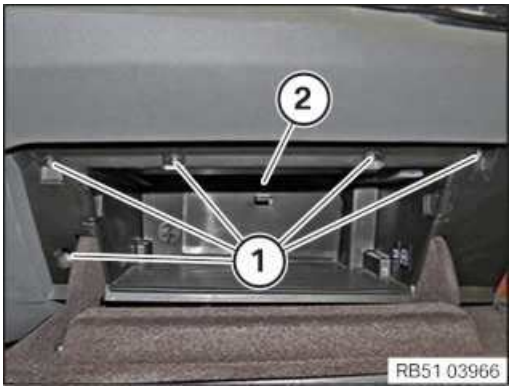


- Loosen screw (1).



- Loosen screws (1).
- Remove glove box (2) to the inside and disconnect associated plug connections.

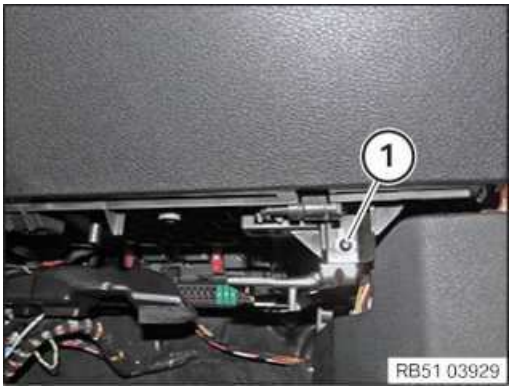
5 – Install right glove box



- Install the glove box (2) and connect and lock associated plug connections.
- Tighten the screws (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

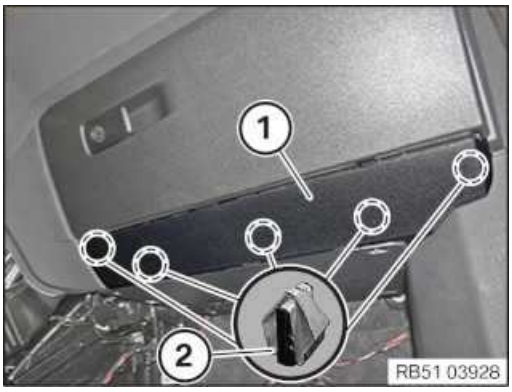


- Tighten down screw (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

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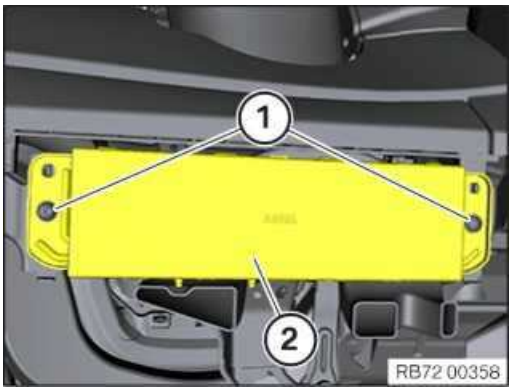
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

- Install the trim (1) and lock it at the clamps (2).

POSTPROCESSES

6 – Installing knee airbag



- Connect the plug connection to the knee airbag (2) and lock.
- Install knee airbag (2).
- Renew screws (1).

  Parts: Screw
- Tighten the screws (1).

Knee airbag to body

M8	Renew screws.	Tightening torque	8 Nm

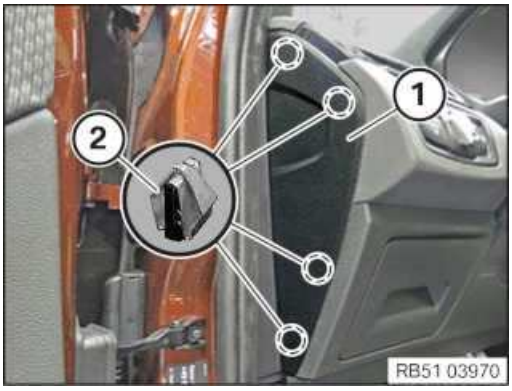
7 – Install the side panel on instrument panel on the right

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

NOTICE

Description is for left component only. Procedure on the right side is identical.



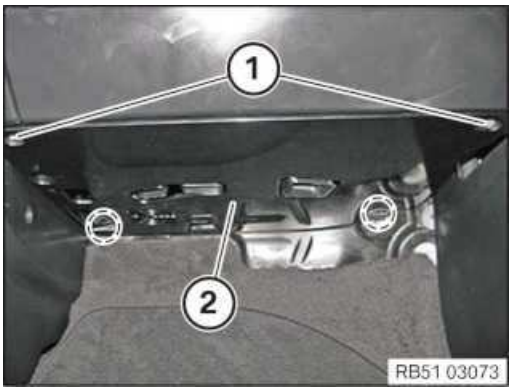
- If necessary, connect the plug connection on the switch for front passenger airbag deactivation and lock.
- Feed in the side panel (1) at an angle toward the front and lock at the clamps (2).

8 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

Additional Information

Overview of Tightening Torques

Glove box to instrument panel — Used in step 5

Screw		Tightening torque	1,8 Nm

Knee airbag to body — Used in step 6

M8	Renew screws.	Tightening torque	8 Nm

Bottom left footwell trim to instrument panel — Used in step 8

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common — Used in step 2 4

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 16 178 Removing and installing side clip on centre console

1 – Remove the decorative trim from the centre console

RISK OF DAMAGE

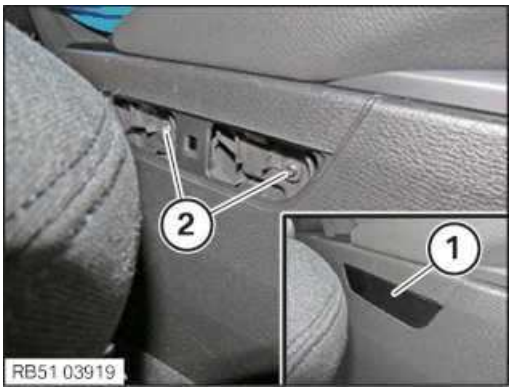
Scratches.

Tools and sharp-edged components can cause scratches.

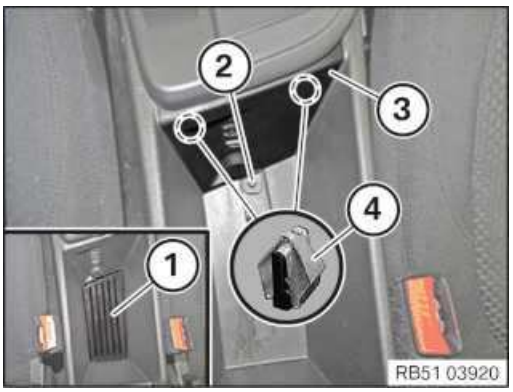
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).



- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

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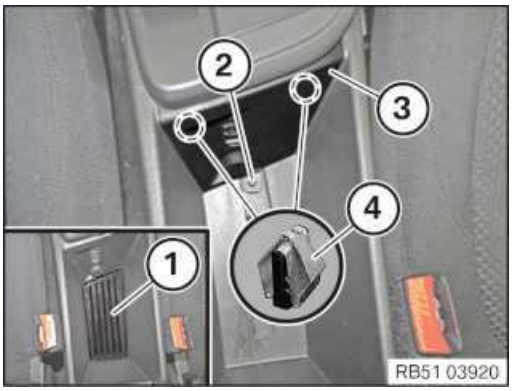
2 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

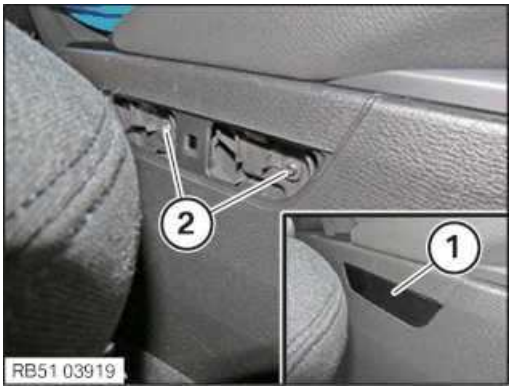


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

Additional Information

Overview of Tightening Torques

Screw connection for centre console Used in step 2

Oval-head screw		Tightening torque	1,8 Nm

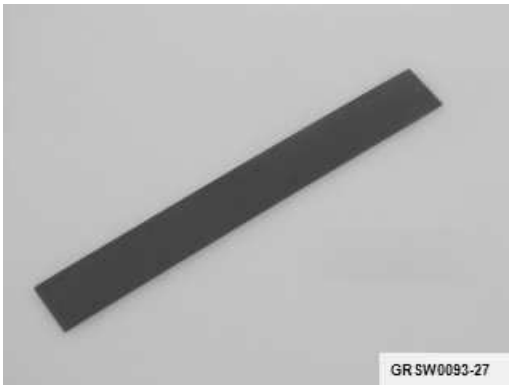
Trim to centre console Used in step 2

Oval-head screw		Tightening torque	1,8 Nm

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Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common	Used in step 1
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 16 001 Removing and installing the exterior mirror on left or right front door

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

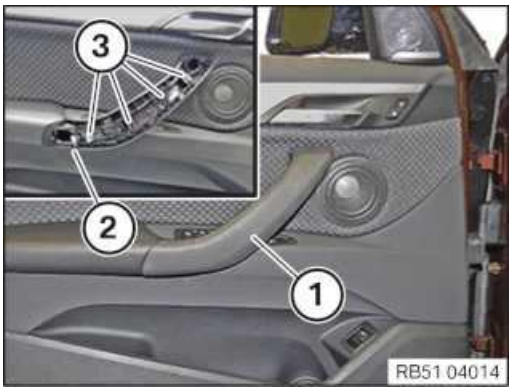
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

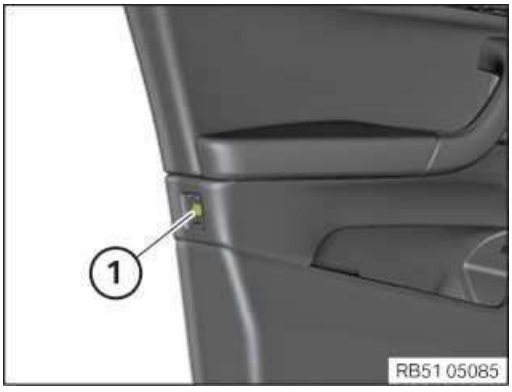
2 – Remove front door trim panel

RISK OF DAMAGE

Scratches.

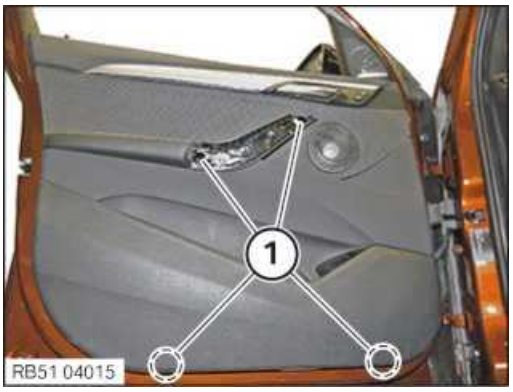
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

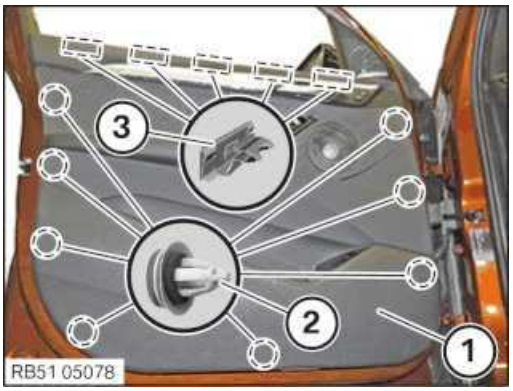


- If fitted: Remove the cover and unscrew the bolt (1).

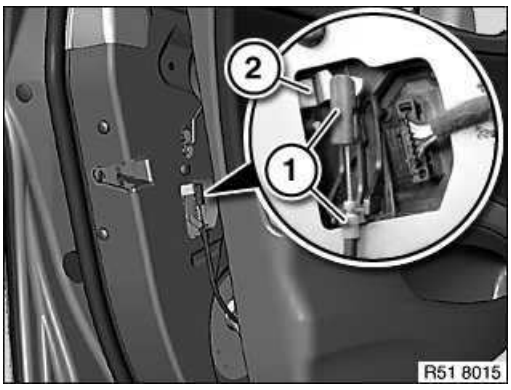
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- Loosen screws (1).

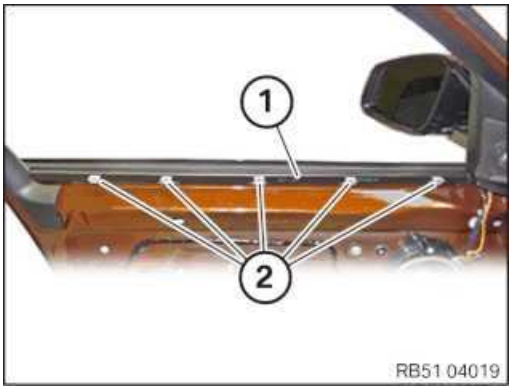


- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Remove the inside front weather strip



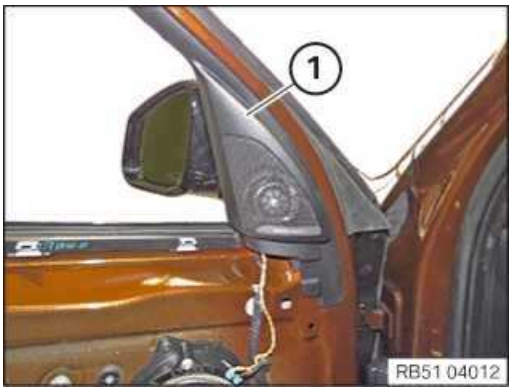
- Release the weather strip (1) from the clamps (2) and pull it off to the top.

  If weather strip (1) is reused, make sure it is not bent.

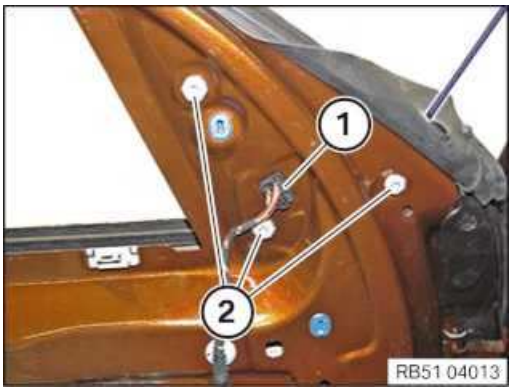
MAIN WORK

4 – Removing the exterior mirror

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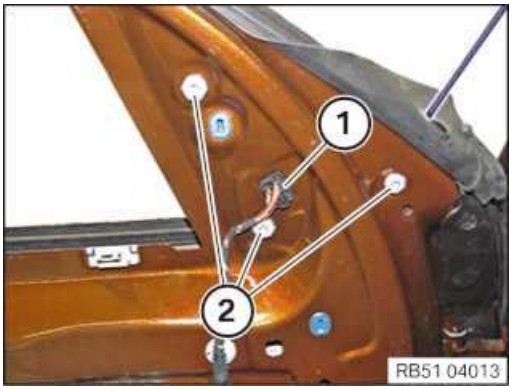


- Release the window frame cover (1) in the area of the mirror.
- If necessary, disconnect related plug connections.



- Secure exterior mirror against falling out.
- Unlock plug connection (1) and disconnect.
- Release the screws (2) and remove the exterior rearview mirror.

5 – Installing the exterior mirror



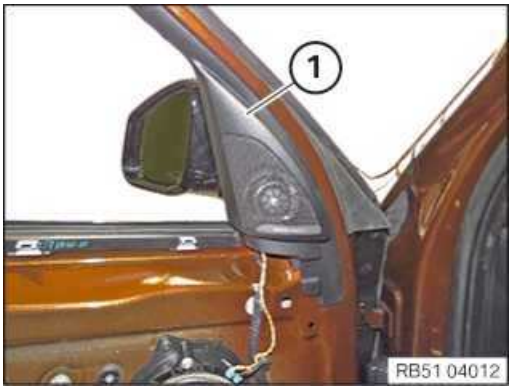
- Check sound insulation on the mirror base. It must not be damaged or missing.
- Mount exterior rearview mirror and tighten the bolts (2).

  Due to self-tapping screws, the tightening torque in the new condition of exterior mirror increases by 2 Nm.

Exterior mirror to door

Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

- Connect the plug connection (1).
- Carry out functional check.

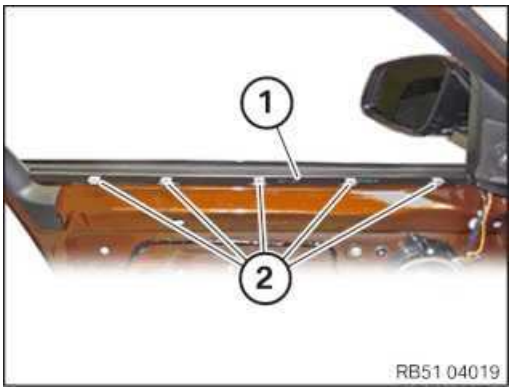


- Mount the window frame cover (1) in the area of the mirror.
- If necessary, connect related plug connections.

POSTPROCESSES

6 – Installing front inner weather strip

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- Coat weather strip (1) prior to installation with approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.

  Replace defective clamps.
- Position weather strip (1) on the door and engage into the clamps (2).

7 – Install front door trim panel

RISK OF DAMAGE

Scratches.

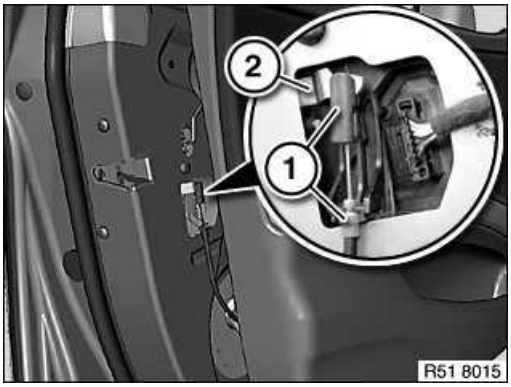
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

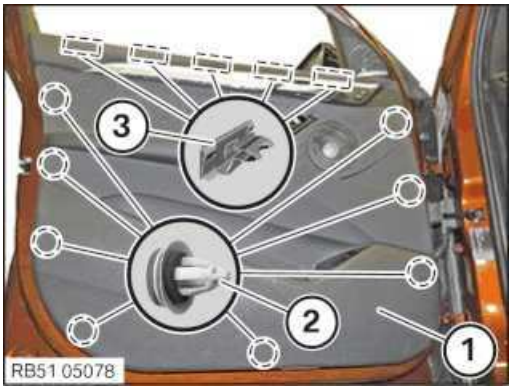


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

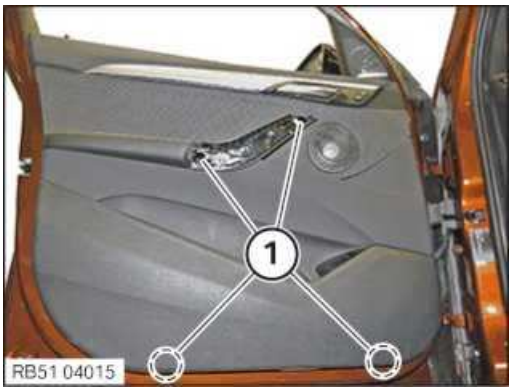


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

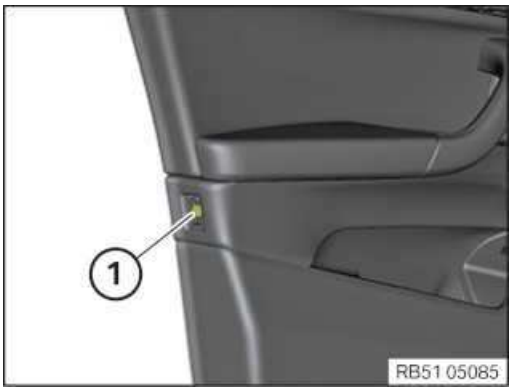
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- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

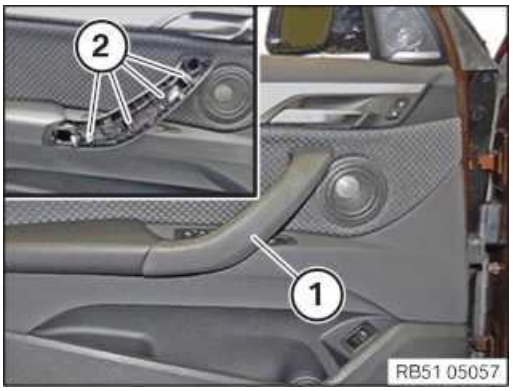
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

8 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Exterior mirror to door — Used in step 5

Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

Door trim panel to door — Used in step 7

Screw TS5x20		Tightening torque	2,5 Nm

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51 16 206 Removing and installing/replacing centre armrest

RISK OF DAMAGE

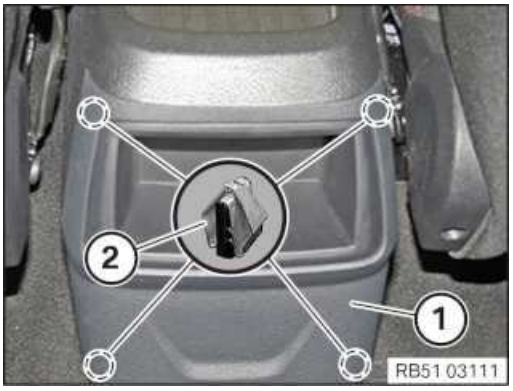
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Removing the rear centre console trim



- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

MAIN WORK

2 – Removing the centre armrest



- Release nuts (1) and remove centre armrest upwards.

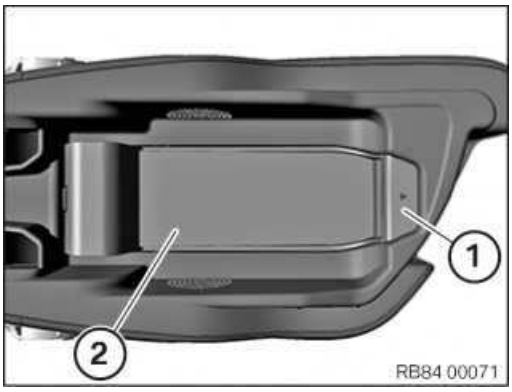
3 – When replacing the centre armrest: Remount base plate

▸ **Removing the base plate**



- Expose the access line (2) up to base plate (1).

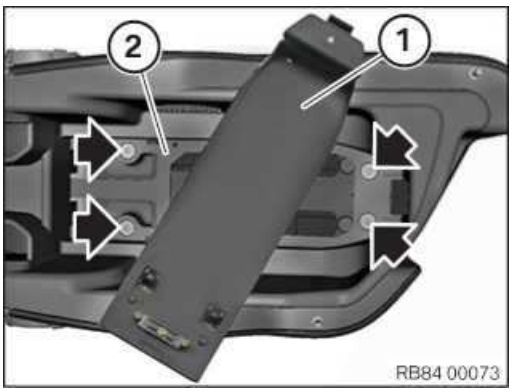
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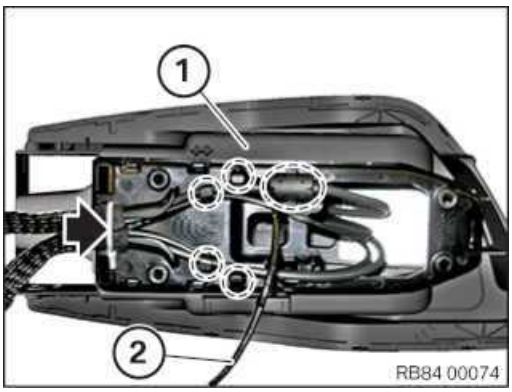
- If necessary, press the button (1) and remove the cover (2).



- Disengage the base plate (1) on both sides from the centre armrest with special tools **0 493 687 (00 9 340)**.

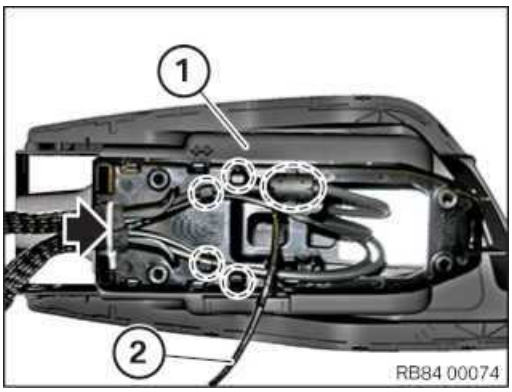


- Turn the base plate (1) away to the side.
- Unscrew the bolts from the upper housing section (2).



- Remove the upper housing section (1) and release cable straps if necessary.
- Unlock and disconnect the cable (2) to the fan.
- Unclip all cables on underside of the upper housing section (1).
- Thread out all cables and remove base plate.

▸ **Installing the base plate**

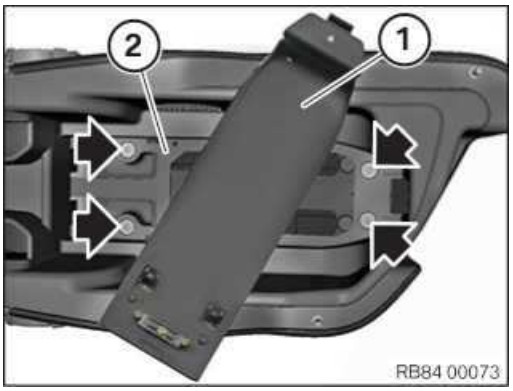


- Thread in all cables and base plate.
- Clip in all cables on underside of upper housing section (1).
- If necessary, fasten cables on the upper housing section (1) with cable straps.
- Connect cable (2) to fan.

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- Thread the access line (2) through at the centre armrest (1).

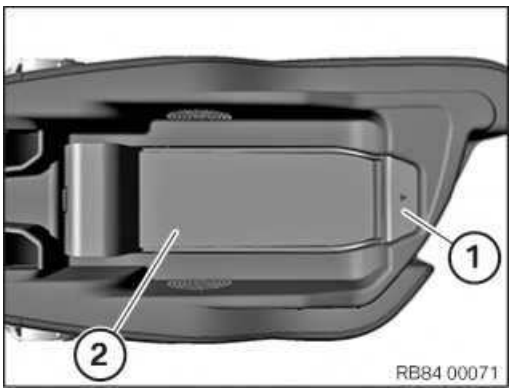


- Tighten screws of upper housing section (2).

Upper housing section

Screw			2,7 Nm

- Fit the base plate (1) in the upper housing section (2).



- If necessary, fit the cover (2) in the base plate (1).

4 – Installing the centre armrest



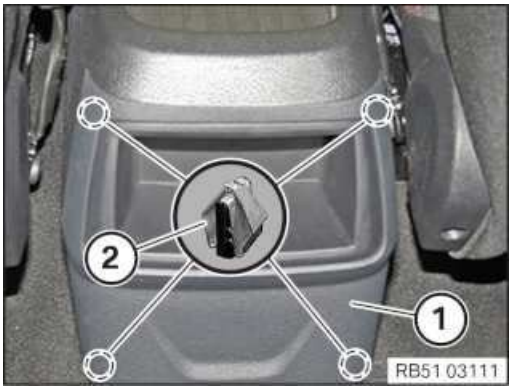
- Install the centre armrest and tighten nuts (1).

Centre armrest to support

Nut M8		Tightening torque	21,4 Nm

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5 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

Additional Information

Overview of Tightening Torques

Upper housing section			Used in step 3
Screw			2,7 Nm

Centre armrest to support			Used in step 4
Nut M8		Tightening torque	21,4 Nm

Overview of Special Tools

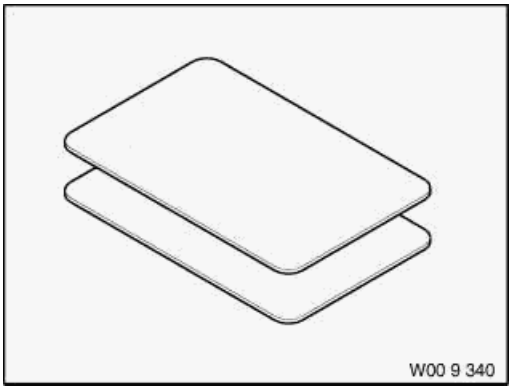
0 496 569 (00 9 325) Wedge



Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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0 493 687 (00 9 340) Removal aid



Common

Used in step 3

Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		**Removal aid** Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

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51 16 041 Removing and installing/replacing cover cap on left or right exterior mirror

PRELIMINARY WORK

1 – Removing the mirror glass

CAUTION

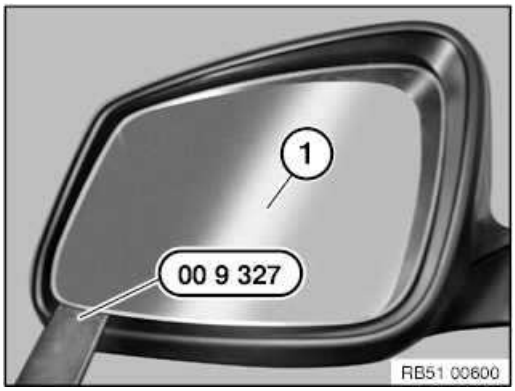
Glass splinters.

Danger of injury!

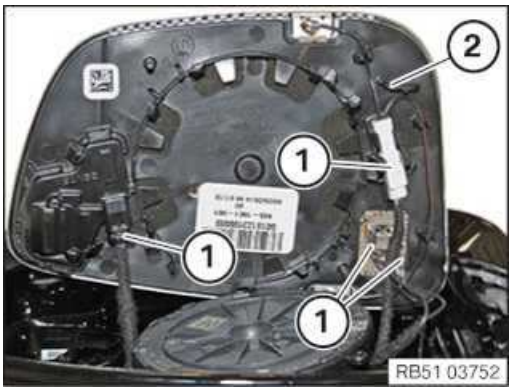
- If the mirror glass is damaged, wear safety goggles and protective gloves.

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Manually press the mirror glass (1) on the side of vehicle up to the end stop.
- Unclip the mirror glass (1) using special tool **0 496 571 (00 9 327)** all the way around, starting with the outer side.



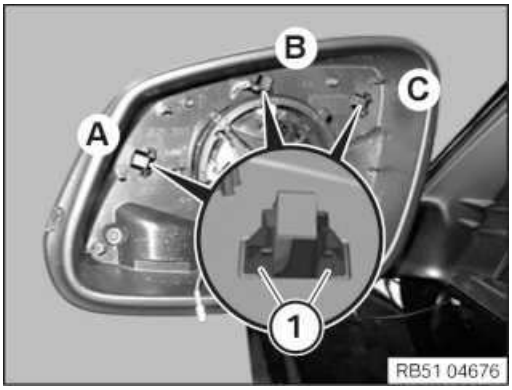
- Disconnect plug connection (1).
- Remove mirror glass (2).

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2 – Remove cover cap on the exterior rearview mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.

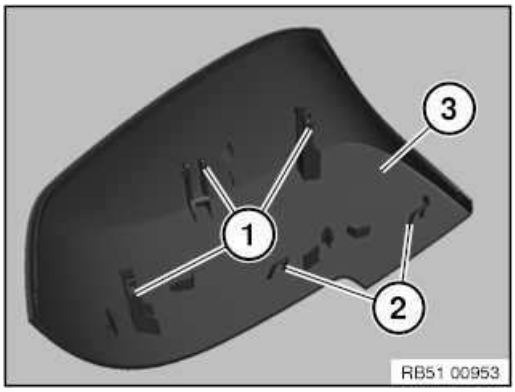


- Press latch mechanisms (1) together in sequence (A), (B) and (C) and pull off the cover cap on the exterior rearview mirror to the outside at the same time.

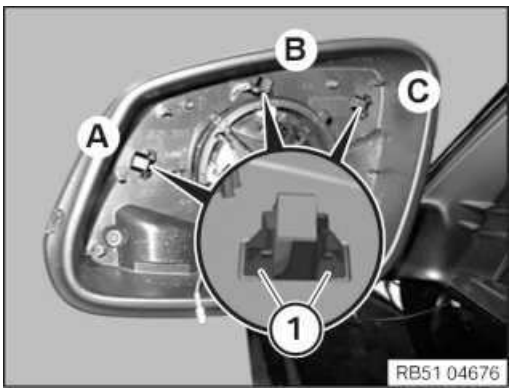
3 – Installing protective cap on exterior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



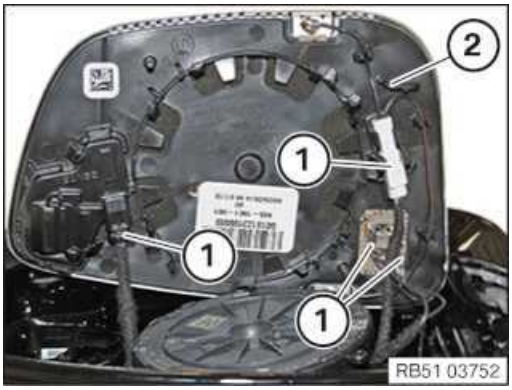
- Latch mechanisms (1) and guides (2) on the protective cap (3) must not be missing or damaged.



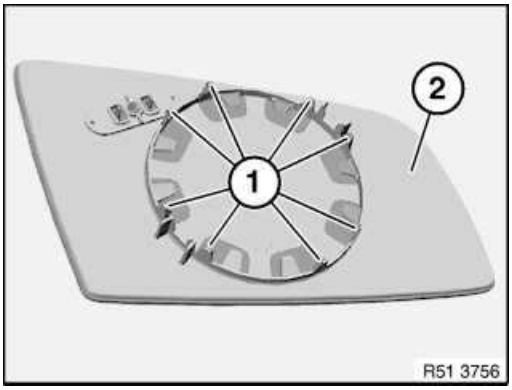
- Position protective cap on the exterior mirror and engage in the latch mechanisms (1) in order (C), (B) and (A).

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4 – Installing the mirror glass



- Position mirror glass (2).
- Connect plug connections (1).

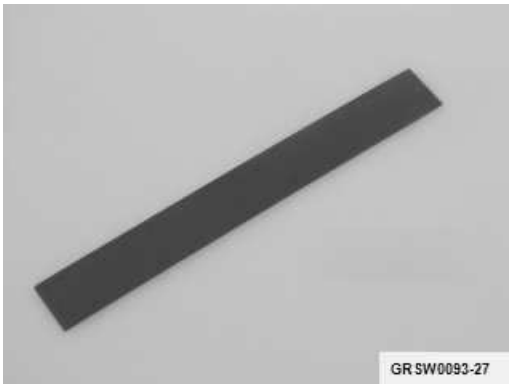


- Check whether retaining lugs (1) are missing or damaged and, if required, renew the mirror glass.
- Position the mirror glass (2) with the retaining lugs (1) flush with the drive for exterior mirror adjustment and clip in.
- Ensure correct locking.
- Check if the drive for exterior mirror adjustment is functioning correctly.

Additional Information

Overview of Special Tools

0 496 571 (00 9 327) Wedge



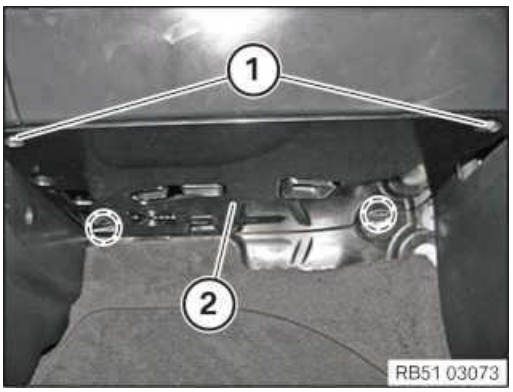
Common	Used in step 1
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 16 383 Removing and installing/replacing damper for glove box

PRELIMINARY WORK

1 – Removing the instrument panel trim at bottom right

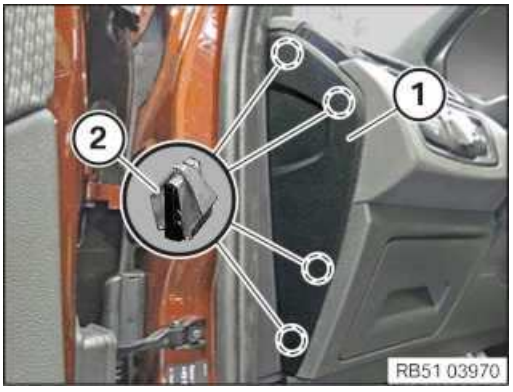


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

2 – Remove the side panel on the right instrument panel

NOTICE

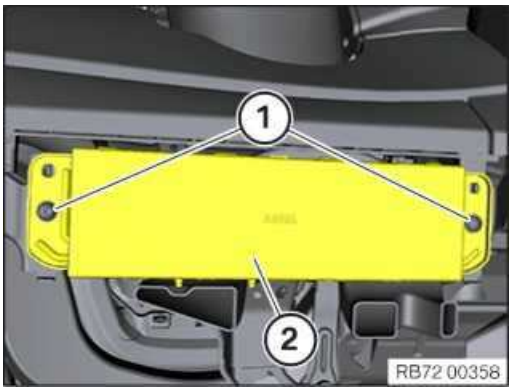
Description is for left component only. Procedure on the right side is identical.



- Lift the side panel (1) out of the clamps (2) with the special tool **0 496 569 (00 9 325)** and feed out toward the rear at an angle.

  If necessary, unlock and disconnect the plug connection on the switch for the front passenger airbag deactivation.

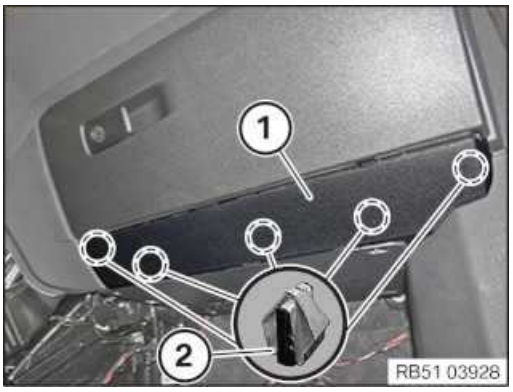
3 – Removing knee airbag



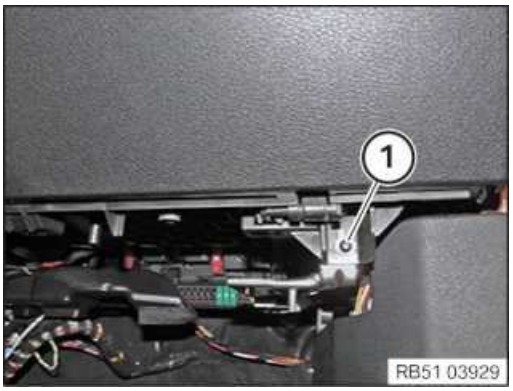
- Unlock plug connection on knee airbag (2) and disconnect.
- Loosen screws (1).
- Remove knee airbag (2).

4 – Remove right glove box

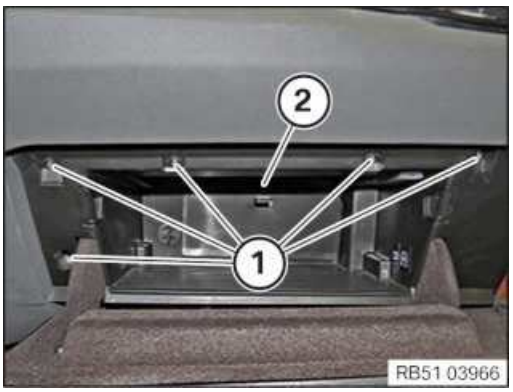
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- Release the trim (1) with the special tool **0 496 569 (00 9 325)** toward the bottom from the clamps (2) and remove.



- Loosen screw (1).

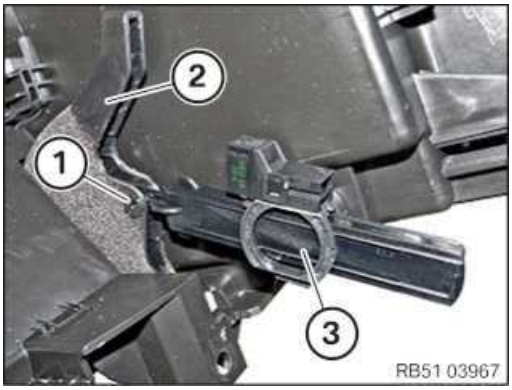


- Loosen screws (1).
- Remove glove box (2) to the inside and disconnect associated plug connections.

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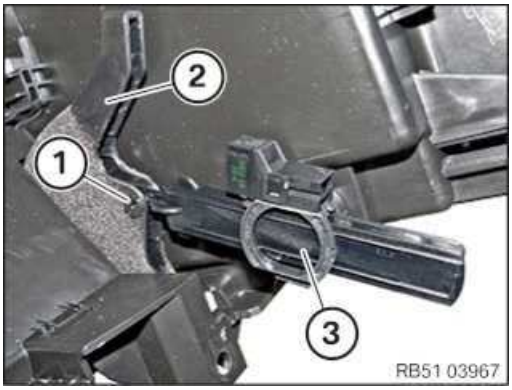
MAIN WORK

5 – Remove right glove box damper



- Release pin (1) from the retaining bracket (2).
- Turn glove box damper (3) by about 90° and remove.

6 – Installing the right glove box damper

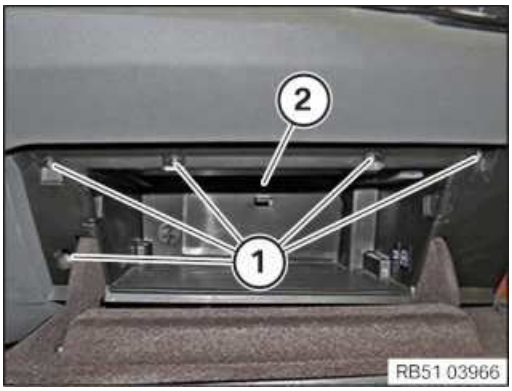


- Insert the glove box damper (3) and turn by approx. 90°.
- Fasten the glove box damper (3) with pin (1) on the retaining bracket (2).

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POSTPROCESSES

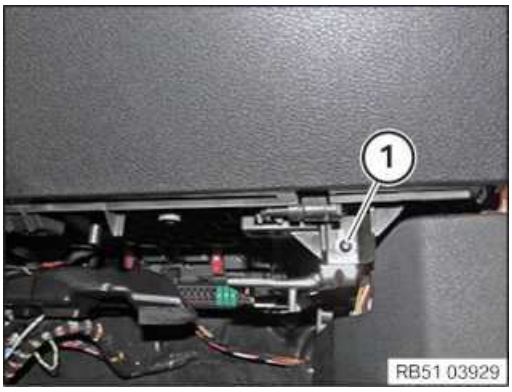
7 – Install right glove box



- Install the glove box (2) and connect and lock associated plug connections.
- Tighten the screws (1).

Glove box to instrument panel

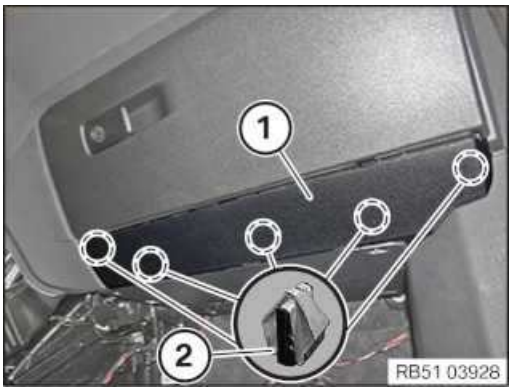
Screw		Tightening torque	1,8 Nm



- Tighten down screw (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

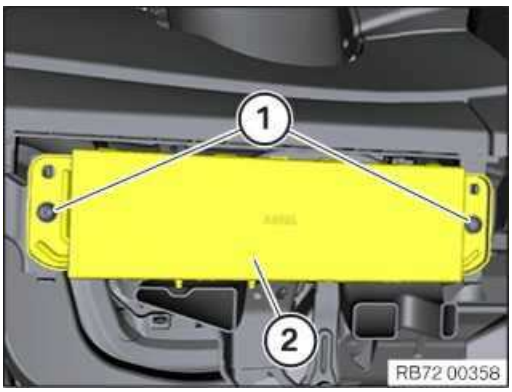


TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

- Install the trim (1) and lock it at the clamps (2).

8 – Installing knee airbag



- Connect the plug connection to the knee airbag (2) and lock.
- Install knee airbag (2).
- Renew screws (1).

  Parts: Screw
- Tighten the screws (1).

Knee airbag to body

M8	Renew screws.	Tightening torque	8 Nm

9 – Install the side panel on instrument panel on the right

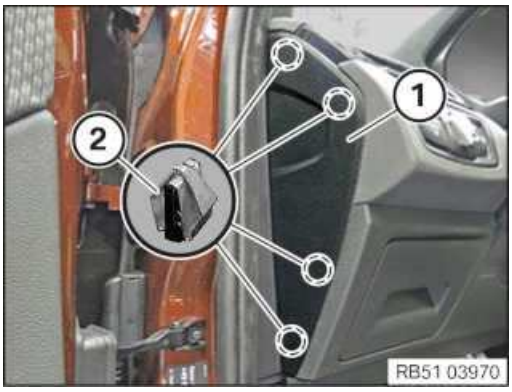
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

NOTICE

Description is for left component only. Procedure on the right side is identical.

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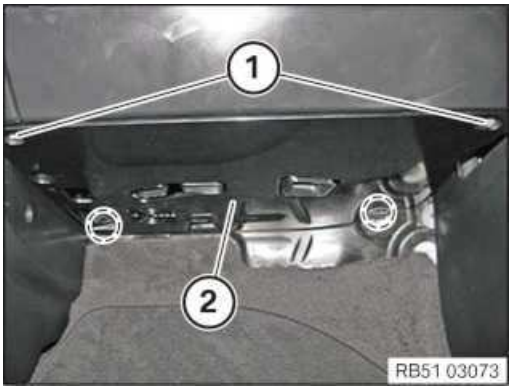


- If necessary, connect the plug connection on the switch for front passenger airbag deactivation and lock.
- Feed in the side panel (1) at an angle toward the front and lock at the clamps (2).

10 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

Additional Information

Overview of Tightening Torques

Glove box to instrument panel Used in step 7

Screw		Tightening torque	1,8 Nm

Knee airbag to body Used in step 8

M8	Renew screws.	Tightening torque	8 Nm

Bottom left footwell trim to instrument panel Used in step 10

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

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0 496 569 (00 9 325) Wedge



Common

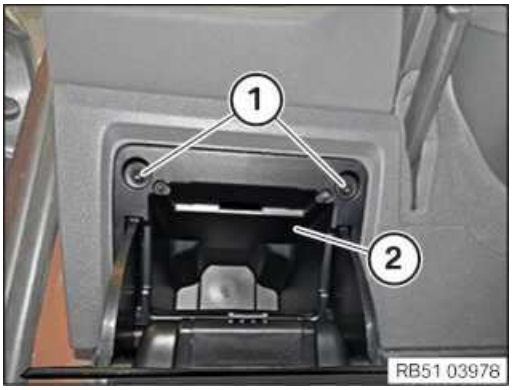
Used in step 2 4

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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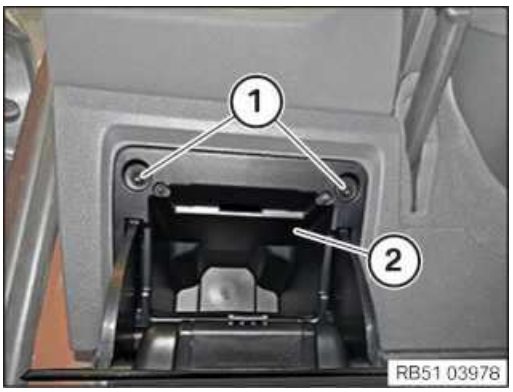
51 16 355 Removing and installing/replacing driver's side fold-down compartment

1 – Removing the left fold-down compartment



- Loosen screws (1).
- Guide out and remove the fold-down compartment (2) downward from the instrument panel.

2 – Installing the left fold-down compartment



- Guide in the fold-down compartment (2) on the instrument panel.
- Tighten the screws (1).

Fold-down compartment to instrument panel

Screw		Tightening torque	1,8 Nm

Additional Information

Overview of Tightening Torques

Fold-down compartment to instrument panel Used in step 2

Screw		Tightening torque	1,8 Nm

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51 16 202 Removing and installing/replacing front cup holder

PRELIMINARY WORK

1 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

2 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

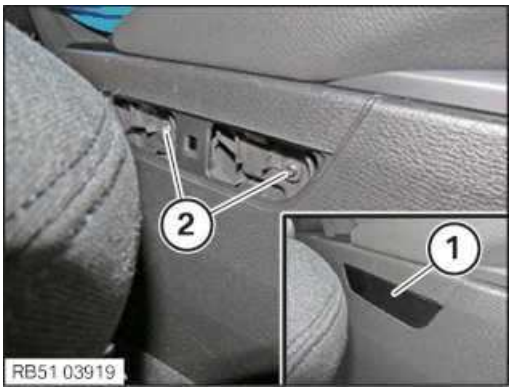
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

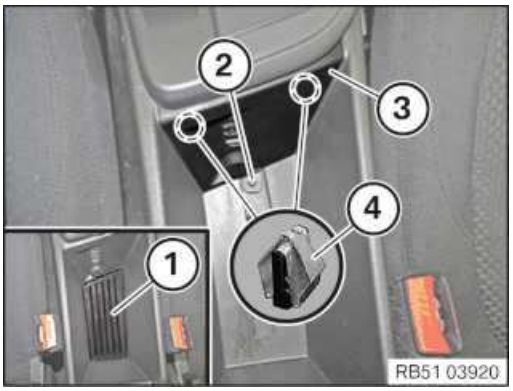


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

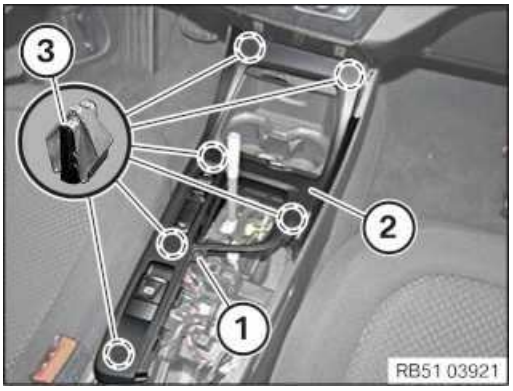


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

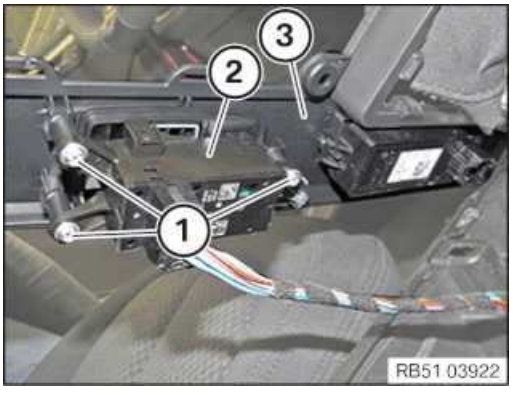


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

3 – Remove the centre console trim



- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



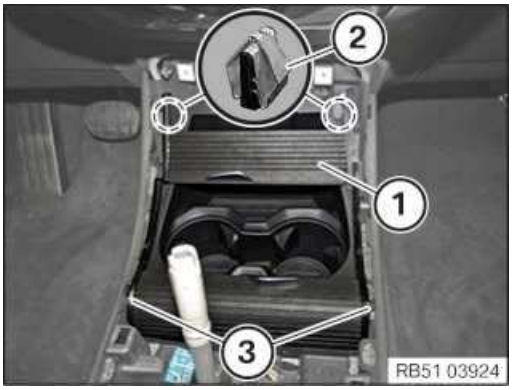
- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

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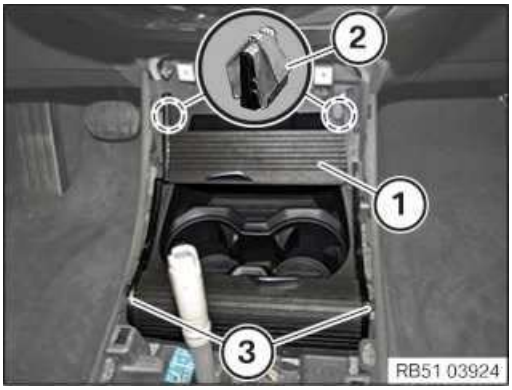
MAIN WORK

4 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

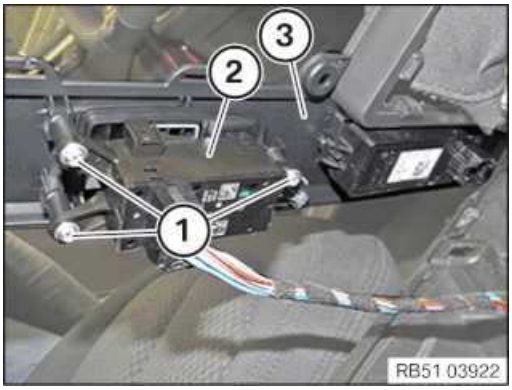
5 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

POSTPROCESSES

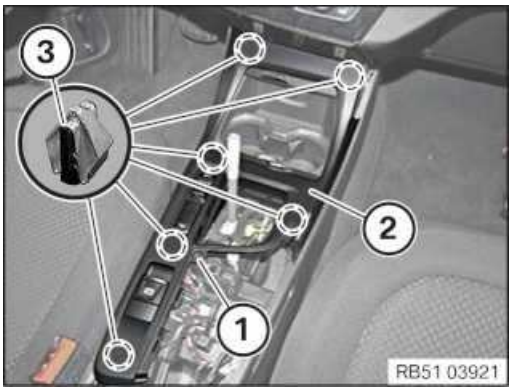
6 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

7 – Installing the decorative trim to the centre console

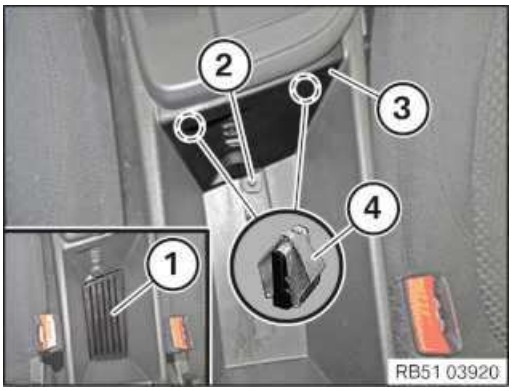
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- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

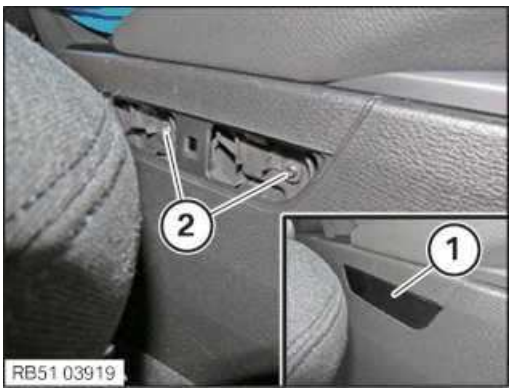


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

8 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.

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- Clip in gaiter (arrows).

Additional Information

Overview of Tightening Torques

Parking brake button — Used in step 6

Oval-head screw		Tightening torque	1,5 Nm

Screw connection for centre console — Used in step 6 7

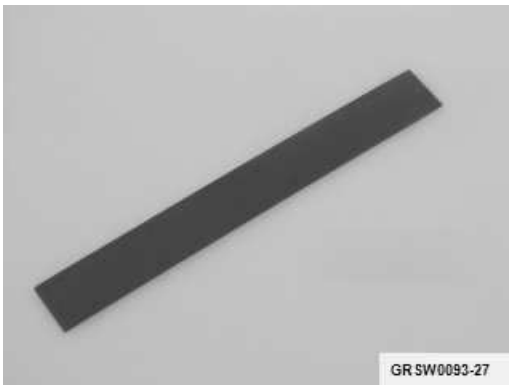
Oval-head screw		Tightening torque	1,8 Nm

Trim to centre console — Used in step 7

Oval-head screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common — Used in step 2

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common — Used in step 3

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 16 040 Removing and installing/replacing housing on left or right exterior mirror

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Removing the mirror glass

CAUTION

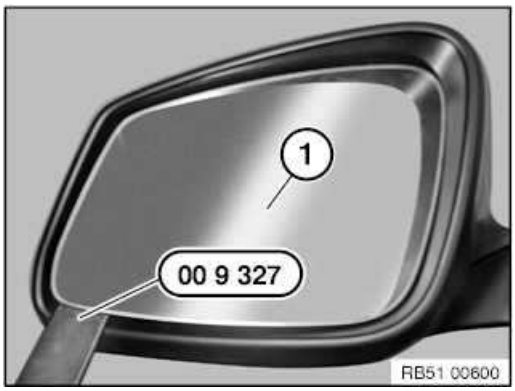
Glass splinters.

Danger of injury!

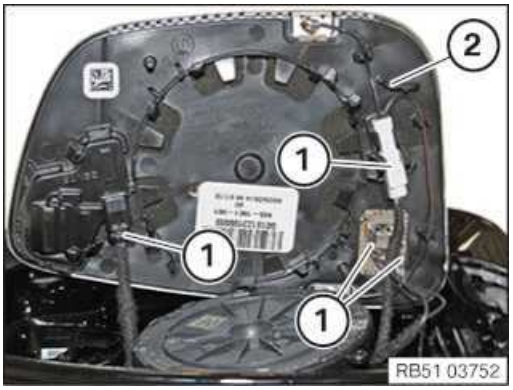
- If the mirror glass is damaged, wear safety goggles and protective gloves.

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Manually press the mirror glass (1) on the side of vehicle up to the end stop.
- Unclip the mirror glass (1) using special tool **0 496 571 (00 9 327)** all the way around, starting with the outer side.



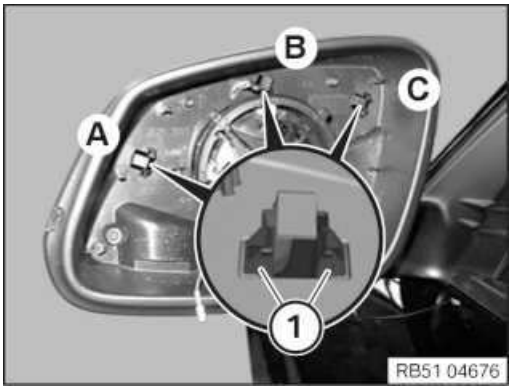
- Disconnect plug connection (1).
- Remove mirror glass (2).

2 – Remove cover cap on the exterior rearview mirror

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TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Press latch mechanisms (1) together in sequence (A), (B) and (C) and pull off the cover cap on the exterior rearview mirror to the outside at the same time.

3 – Removing the drive for exterior mirror adjustment



- Release the screws (1) and pull out the drive for exterior mirror adjustment (2) a little.



- Unlock plug connection (1) and disconnect and remove the drive for exterior mirror adjustment (2) .

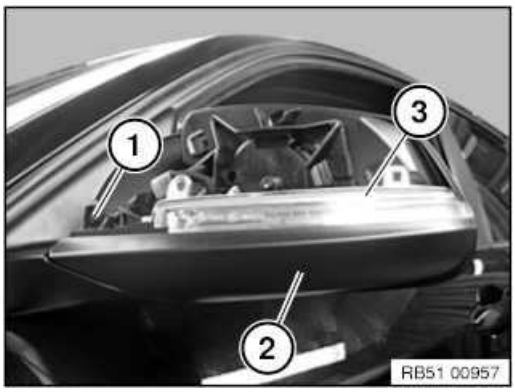
MAIN WORK

4 – Removing the mirror housing



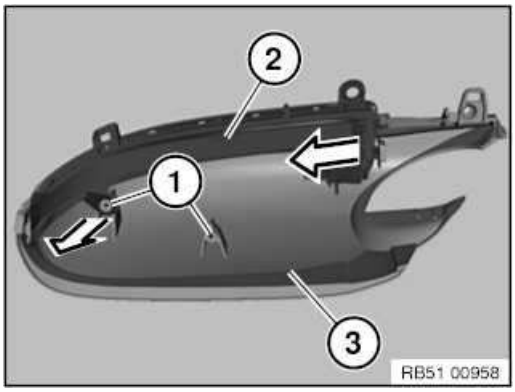
- Fold exterior mirror forwards.
- Loosen screws (1).

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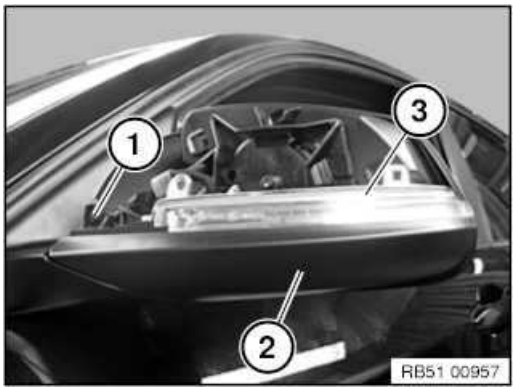


- Loosen screw (1).
- Carefully feed out the mirror housing (2) and disconnect the plug connection on the side repeater (3).

5 – Installing the mirror housing



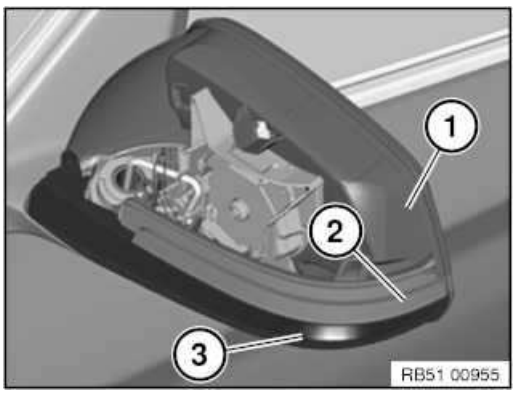
- Check the threaded holes (1) for damage and renew them if necessary.
- **Replacement**: Guide the side repeater (2) out of the mirror housing (3) in the direction of the arrow and mount it on the new mirror housing.



- Carefully guide in the mirror housing (2) and connect the connector to the side repeater (3).
- Tighten down screw (1).

Mirror housing to mirror base

Screw		Tightening torque	1,2 Nm



- Ensure that the retaining ring (1) fit correctly on the side repeater (2) and the mirror housing (3).



- Tighten the screws (1).

Retaining ring to exterior mirror

Screw		Tightening torque	1,2 Nm

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6 – Installing the drive for exterior mirror adjustment



- Position drive for exterior mirror adjustment (2).
- Connect connectors (1) and lock.



- Position drive for exterior mirror adjustment (2) correctly.
- Tighten the screws (1).

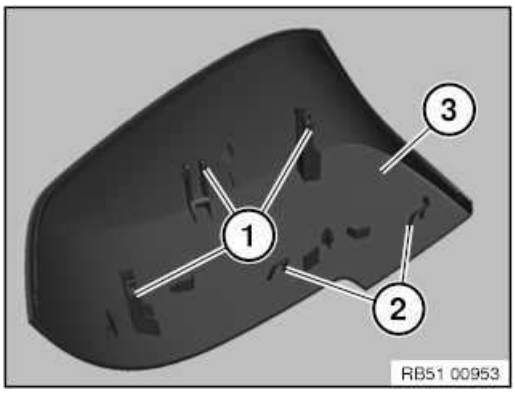
Drive for exterior mirror adjustment

	Tightening torque	1,2 Nm

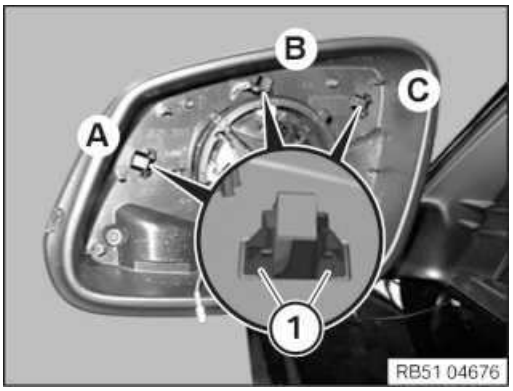
7 – Installing protective cap on exterior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



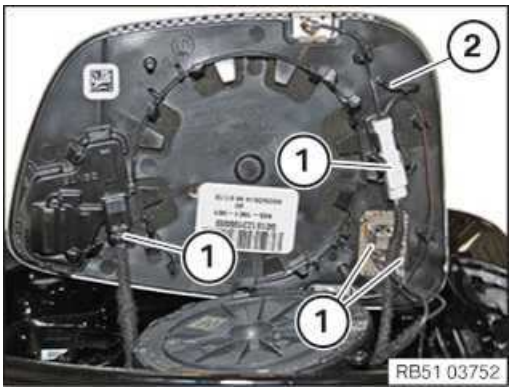
- Latch mechanisms (1) and guides (2) on the protective cap (3) must not be missing or damaged.



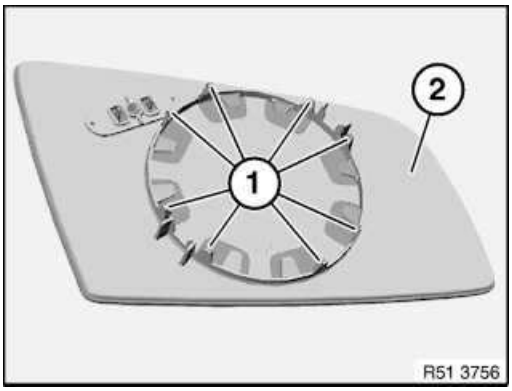
- Position protective cap on the exterior mirror and engage in the latch mechanisms (1) in order (C), (B) and (A).

8 – Installing the mirror glass

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- Position mirror glass (2).
- Connect plug connections (1).



- Check whether retaining lugs (1) are missing or damaged and, if required, renew the mirror glass.
- Position the mirror glass (2) with the retaining lugs (1) flush with the drive for exterior mirror adjustment and clip in.
- Ensure correct locking.
- Check if the drive for exterior mirror adjustment is functioning correctly.

Additional Information

Overview of Tightening Torques

Mirror housing to mirror base — Used in step 5

Screw		Tightening torque	1,2 Nm

Retaining ring to exterior mirror — Used in step 5

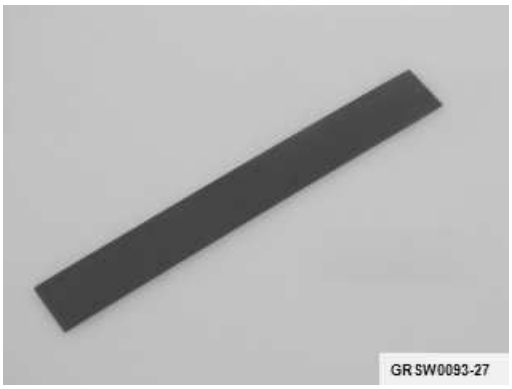
Screw		Tightening torque	1,2 Nm

Drive for exterior mirror adjustment — Used in step 6

		Tightening torque	1,2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common — Used in step 1

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

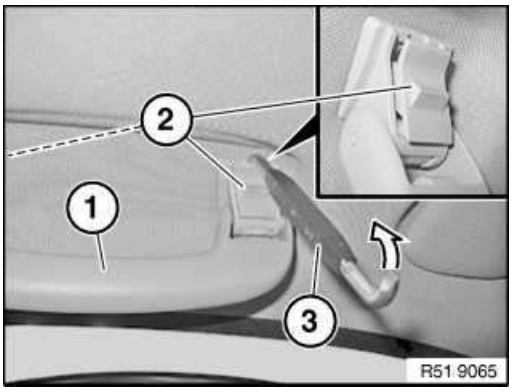
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51 16 450 Removing and installing/replacing rear left/right grab handle

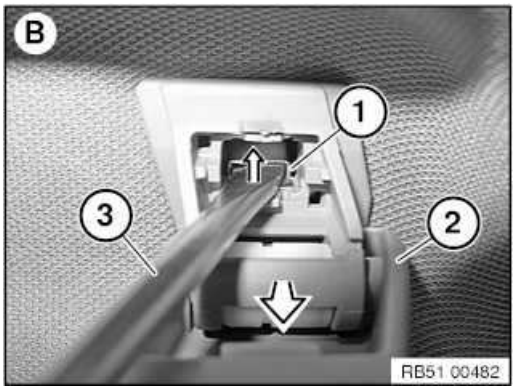
NOTICE

Description is for left component only. Procedure on the right side is identical.

1 – Removing the grab handle

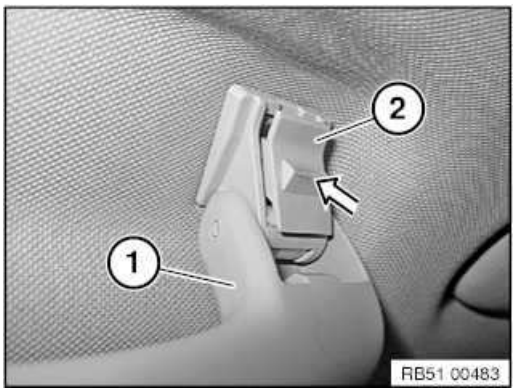


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

2 – Installing the grab handle



- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

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51 16 151 Replace front storage compartment

PRELIMINARY WORK

1 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

2 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

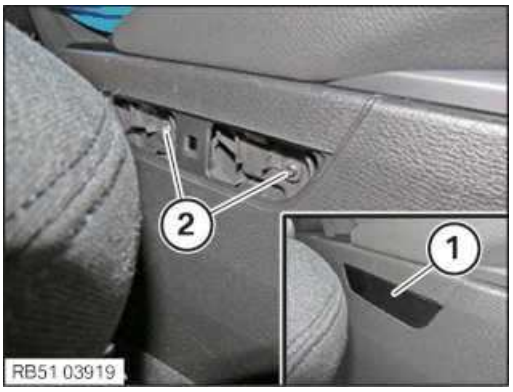
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

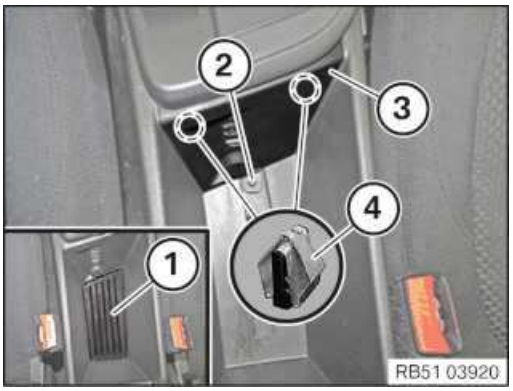


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

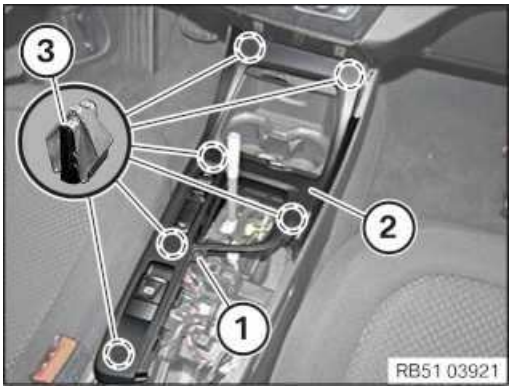


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

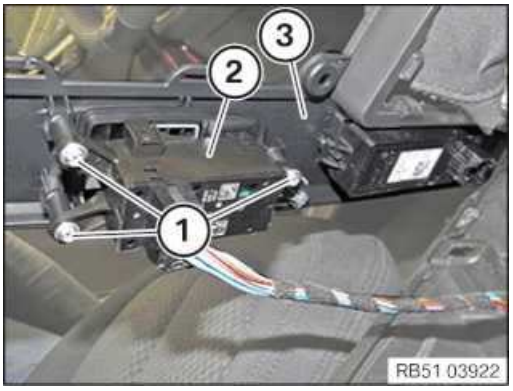


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

3 – Remove the centre console trim



- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).

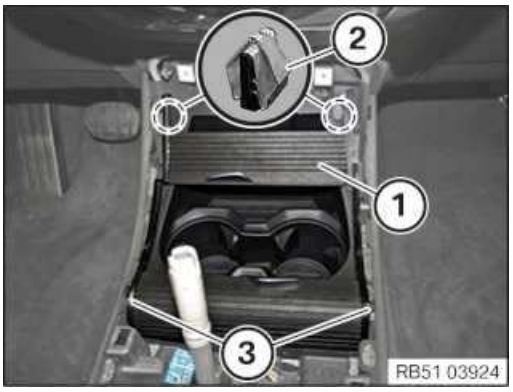


- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

4 – Removing the front storage compartment

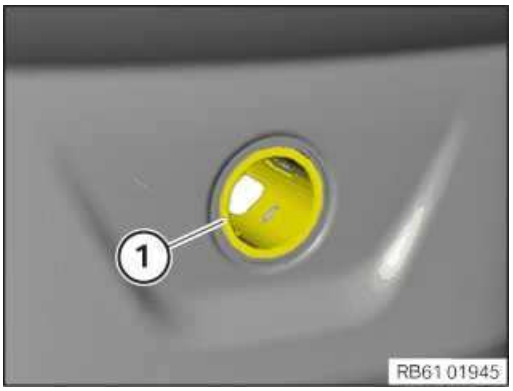
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- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

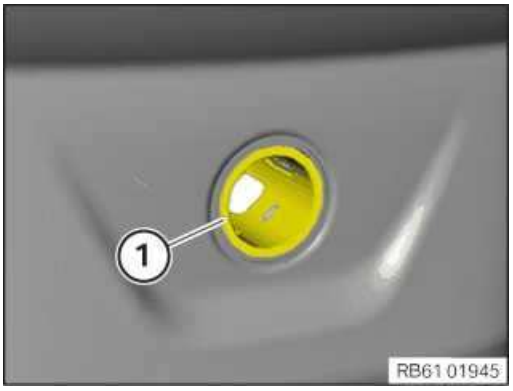
MAIN WORK

5 – Removing the 12 V power socket in the front storage compartment



- Remove the 12 V power socket (1) with special tool **0 496 588 (61 0 250)**.

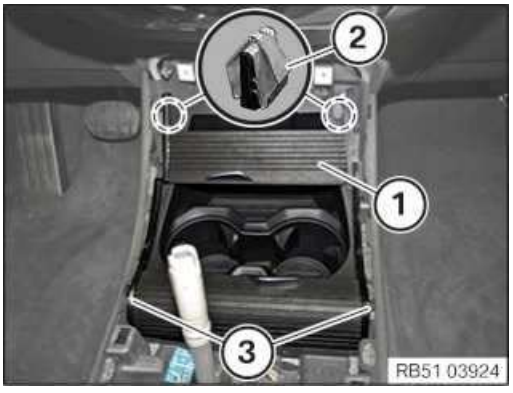
6 – Installing the 12 V power socket in the front storage compartment



- Clip in the 12 V power socket (1).

POSTPROCESSES

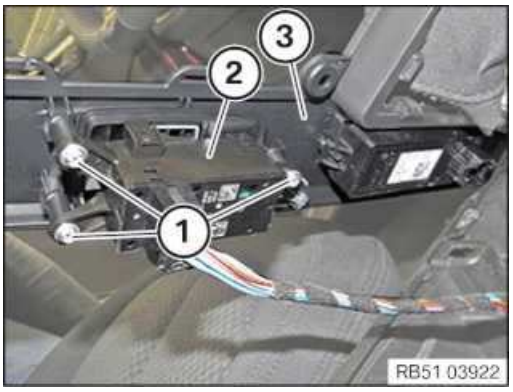
7 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

8 – Install the centre console trim

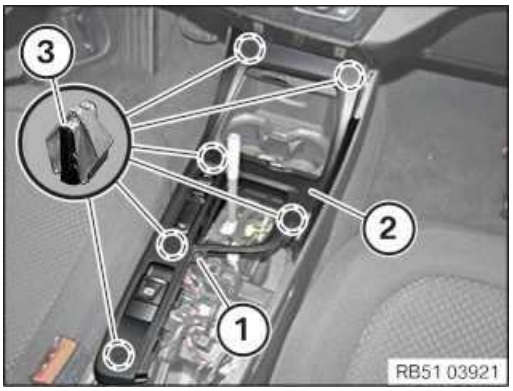
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- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

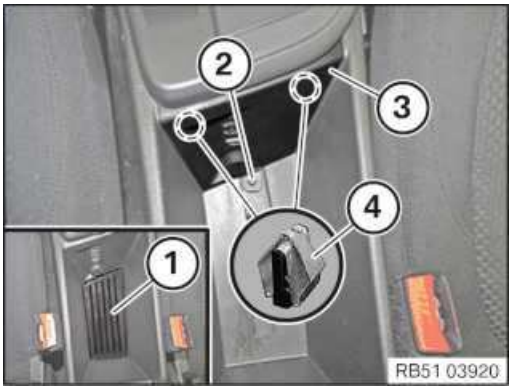
9 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

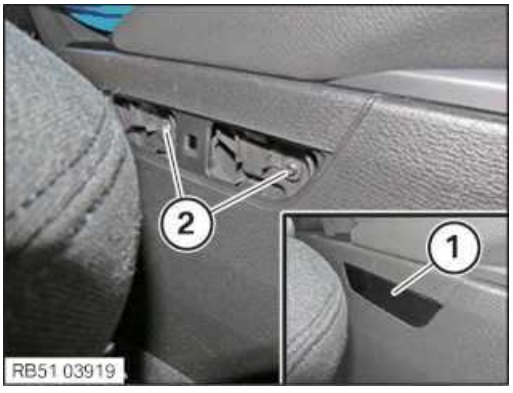


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

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- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

10 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

Additional Information

Overview of Tightening Torques

Parking brake button Used in step 8

Oval-head screw		Tightening torque	1,5 Nm

Screw connection for centre console Used in step 8 9

Oval-head screw		Tightening torque	1,8 Nm

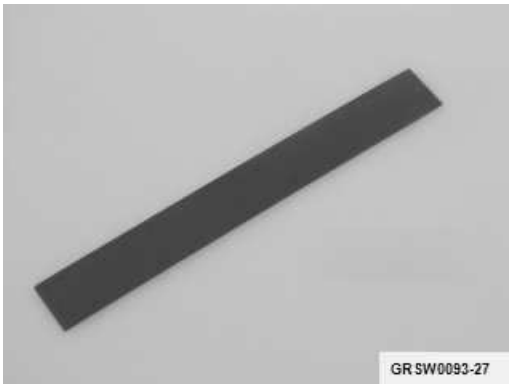
Trim to centre console Used in step 9

Oval-head screw		Tightening torque	1,8 Nm

Overview of Special Tools

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0 496 571 (00 9 327) Wedge



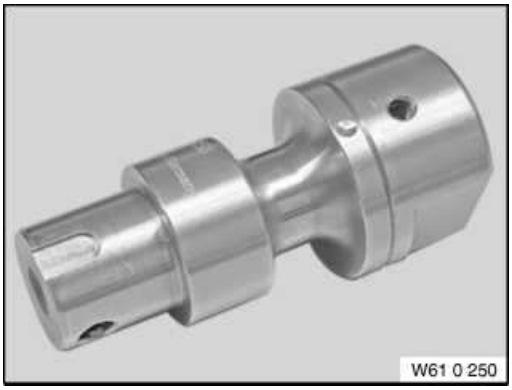
Common	Used in step 2
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common	Used in step 3
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

0 496 588 (61 0 250) Release tool



Common	Used in step 5
Usage	For disassembly of 12V power sockets.
Included in the tool or work	
Storage location	A25
Replaced by	
In connection with	
SI-Number	01 08 09 (531)

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51 16 161 Replace the centre console trim

PRELIMINARY WORK

1 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

2 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

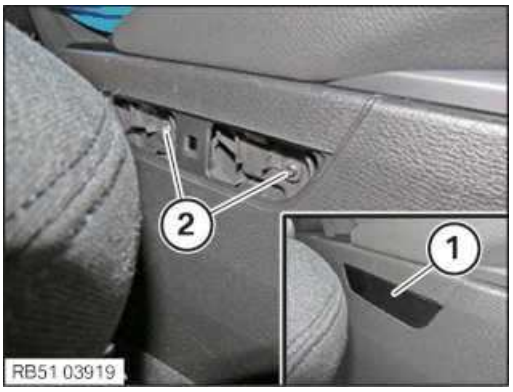
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

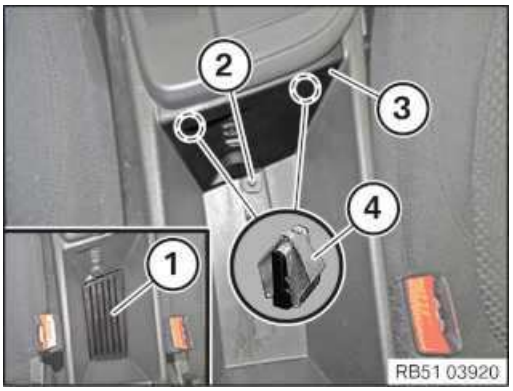


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

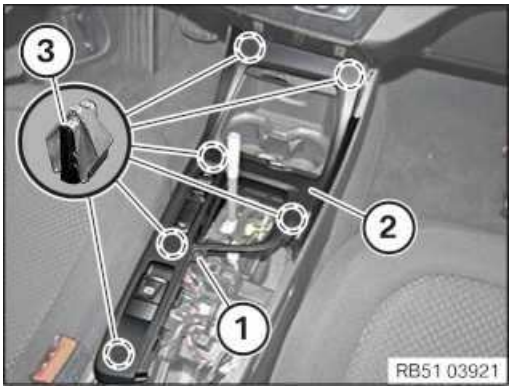


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

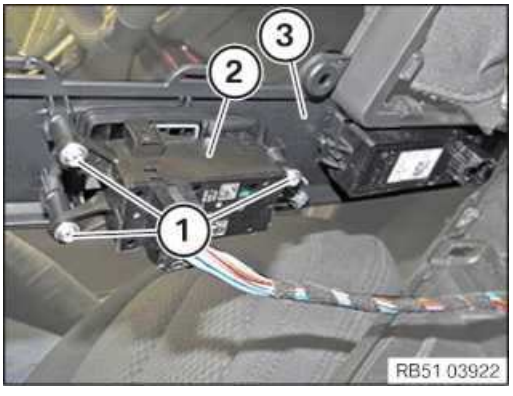


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

3 – Remove the centre console trim



- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



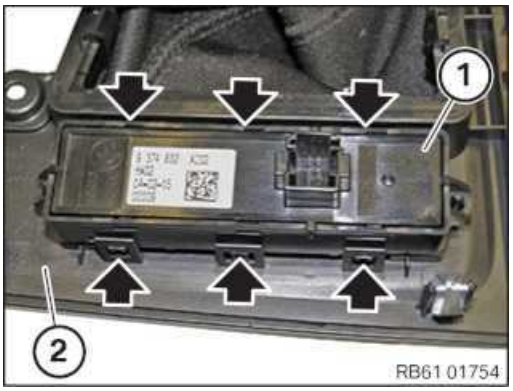
- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

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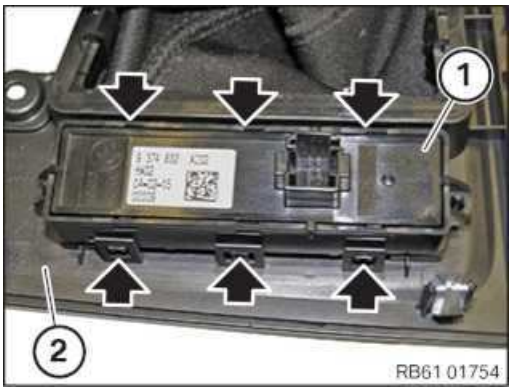
MAIN WORK

4 – When replacing the centre console trim: Remount the operating facility in the centre console



▸ **Remove the operating facility in the centre console**

- Release operating facility in the centre console (1) from the latch mechanisms (arrows) with the special tool **0 493 681 (64 1 020)**.
- Remove the operating facility in the centre console (1) from the centre console trim (2).

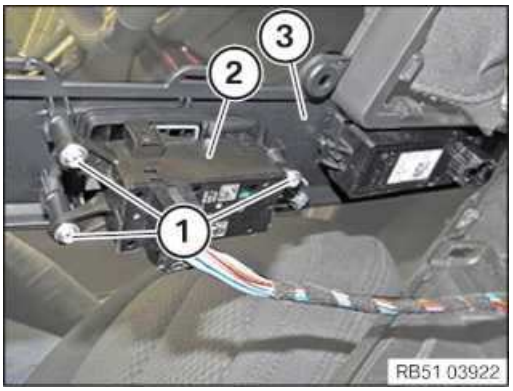


▸ **Install the operating facility in the centre console**

- Position operating facility in the centre console (1) correctly and engage it in the centre console trim (2).

POSTPROCESSES

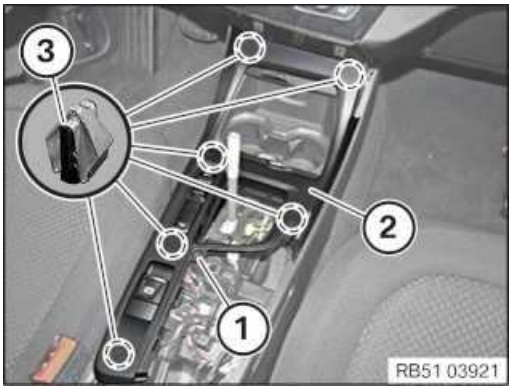
5 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

6 – Installing the decorative trim to the centre console

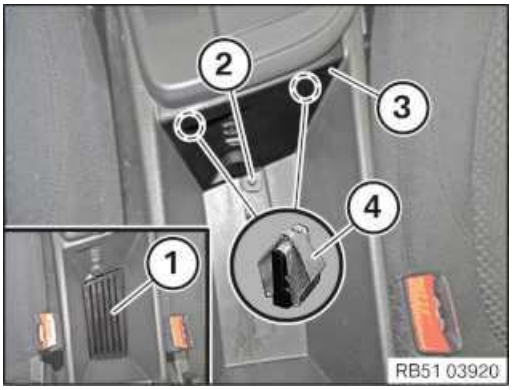
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- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

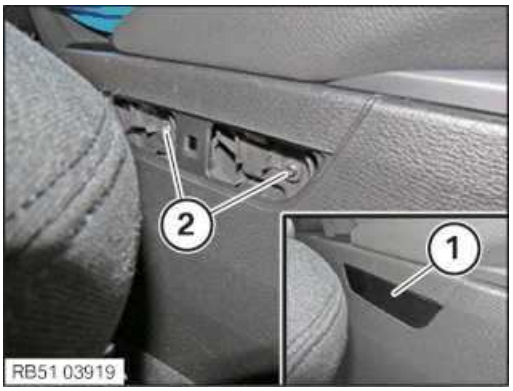


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

7 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.

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- Clip in gaiter (arrows).

Additional Information

Overview of Tightening Torques

Parking brake button — Used in step 5

Oval-head screw		Tightening torque	1,5 Nm

Screw connection for centre console — Used in step 5 6

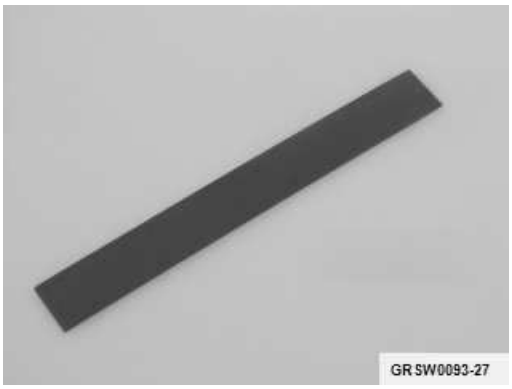
Oval-head screw		Tightening torque	1,8 Nm

Trim to centre console — Used in step 6

Oval-head screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common — Used in step 2

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge

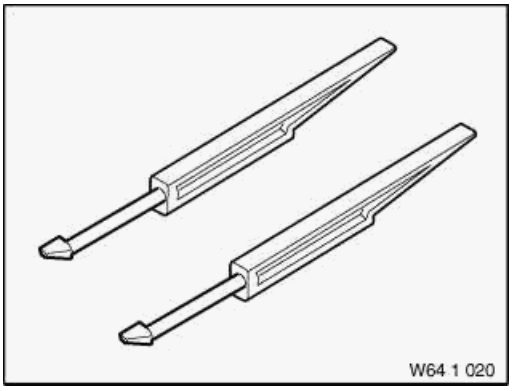


Common — Used in step 3

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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0 493 681 (64 1 020) Hook



Common

Used in step 4

Usage	(release hook) For releasing and removing fresh air grille. For removing various covers.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

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51 16 164 Replace the rear centre console trim

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

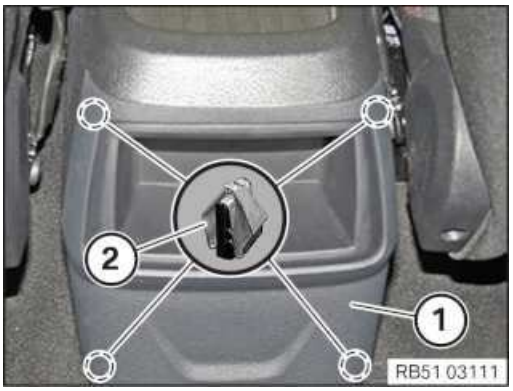
PRELIMINARY WORK

1 – Remove the fresh air grille in the rear passenger compartment



- Disengage the fresh air grille (1) with the special tool **2 298 505** and remove it.

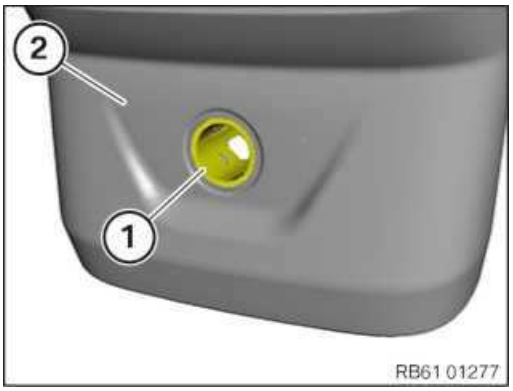
2 – Removing the rear centre console trim



- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

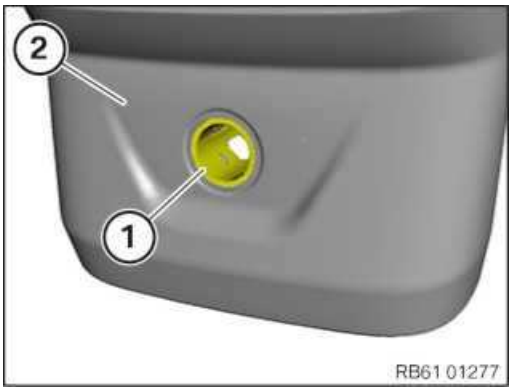
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3 – When replacing the rear centre console trim: Remount 12 V power socket



▸ **Remove the 12 V power socket from the rear centre console trim**

- Remove the 12 V power socket (1) from the rear centre console trim (2) using the special tool **0 496 588 (61 0 250)**.

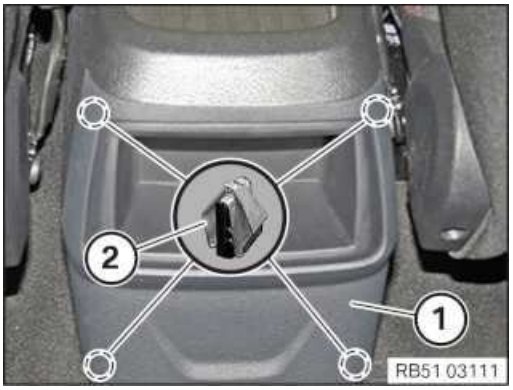


▸ **Install the 12 V power socket in the rear centre console trim**

- Install 12 V power socket (1) in the rear centre console trim (2).

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4 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

5 – Install the fresh air grille of the rear passenger compartment



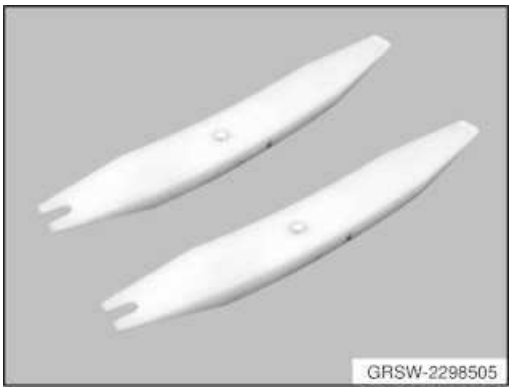
- Latch mechanisms on the fresh air grille (1) must not be damaged or missing.
- Correctly position and engage the fresh air grille (1).

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Additional Information

Overview of Special Tools

2 298 505 Wedge



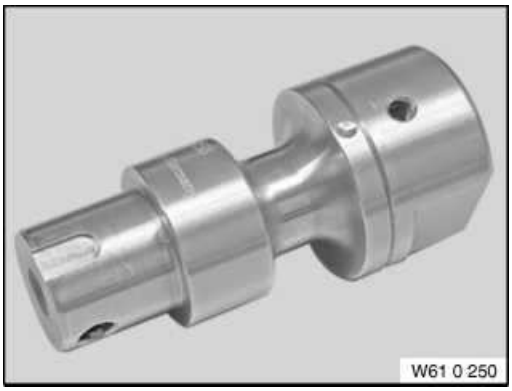
Common	Used in step 1
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

0 496 569 (00 9 325) Wedge



Common	Used in step 2
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

0 496 588 (61 0 250) Release tool



Common	Used in step 3
Usage	For disassembly of 12V power sockets.
Included in the tool or work	
Storage location	A25
Replaced by	
In connection with	
SI-Number	01 08 09 (531)

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51 16 166 Replacing centre console

RISK OF DAMAGE

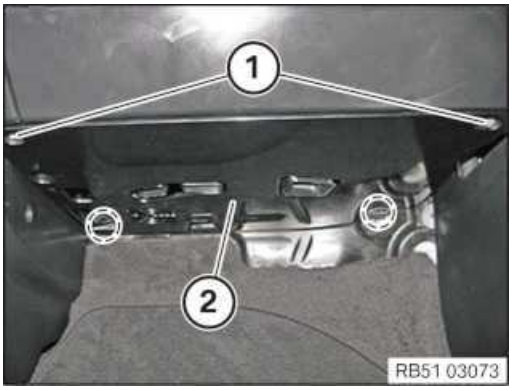
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

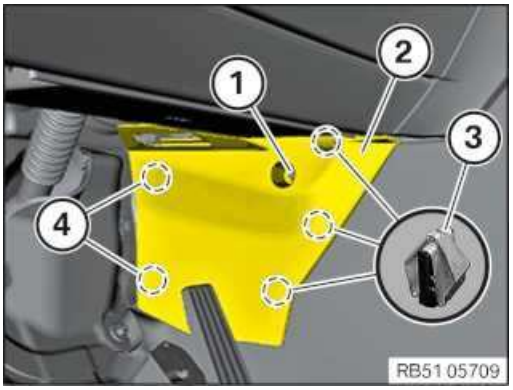
1 – Removing the instrument panel trim at bottom right



- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

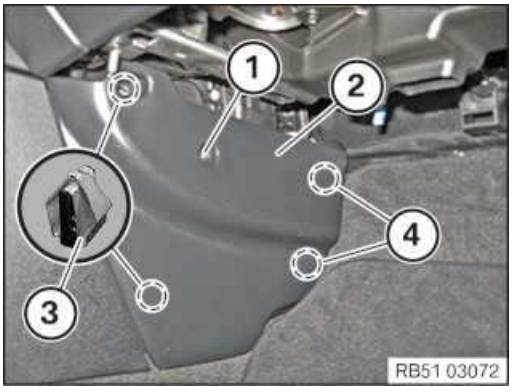
2 – Removing the side trim panel for the left and right centre console

▶ **Removing side trim panel for the left centre console**



- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▶ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

3 – Remove gearshift lever cover

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- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

4 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

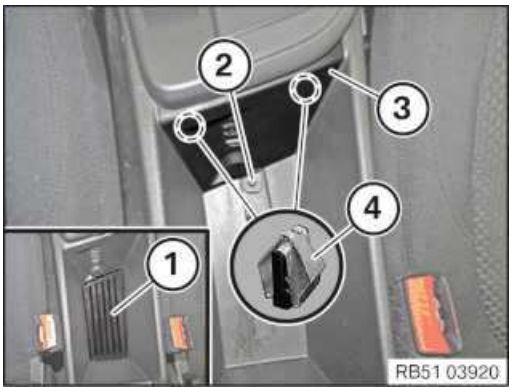


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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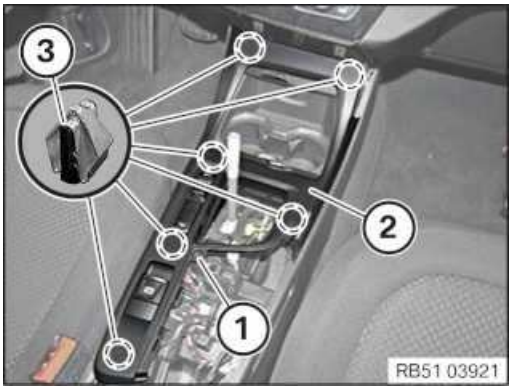


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

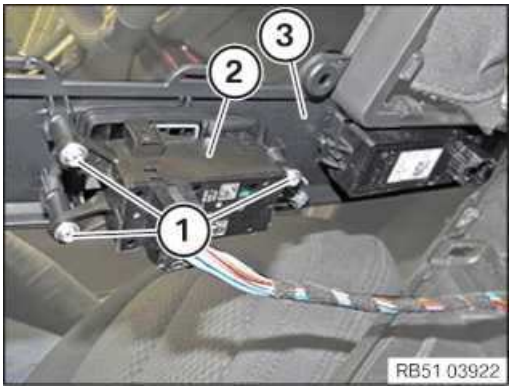


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

5 – Remove the centre console trim



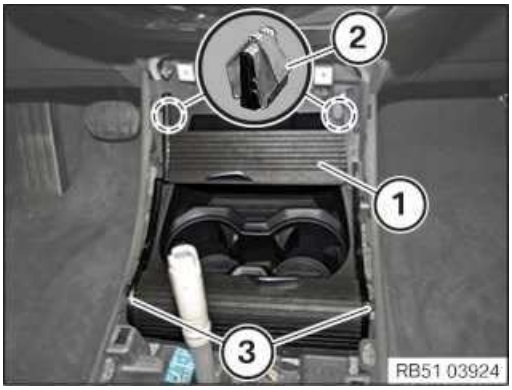
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

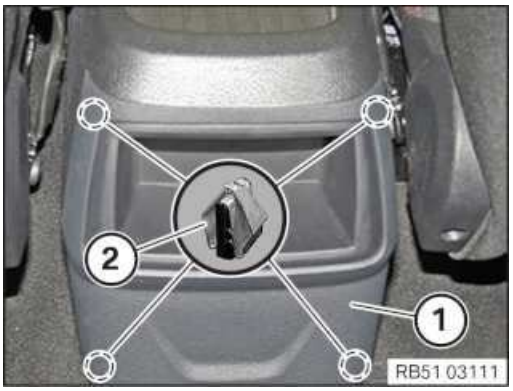
6 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

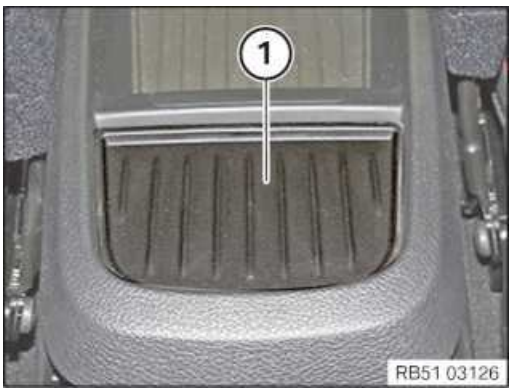
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7 – Removing the rear centre console trim

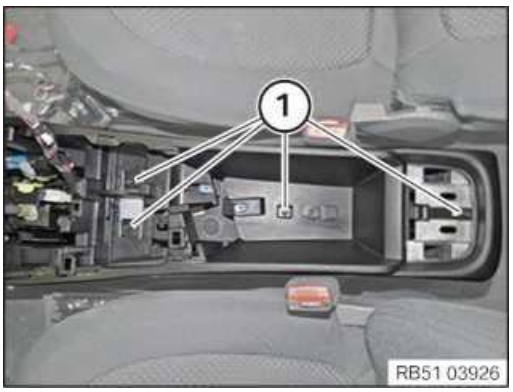


- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

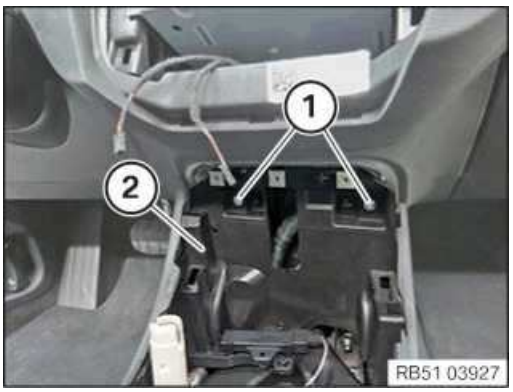
8 – Remove complete centre console



- Remove the cover (1).



- Loosen screws (1).

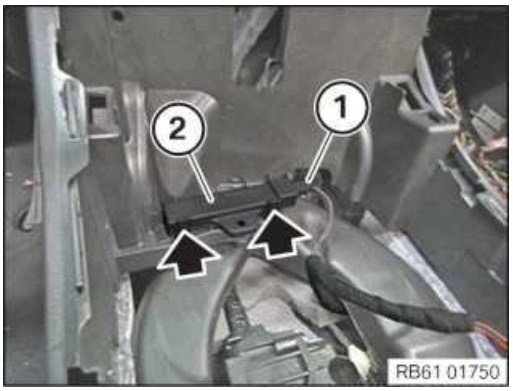


- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

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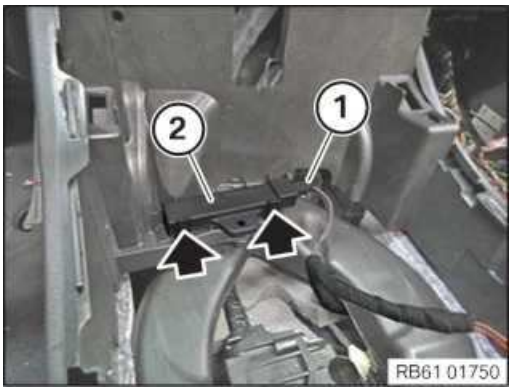
MAIN WORK

9 – When replacing the centre console: Remounting interior aerial for the Comfort Access



▸ **Removing front interior aerial for front Comfort Access**

- Disconnect plug connection (1).
- Release the latch mechanisms (arrows).
- Remove the interior aerial for Comfort Access (2).

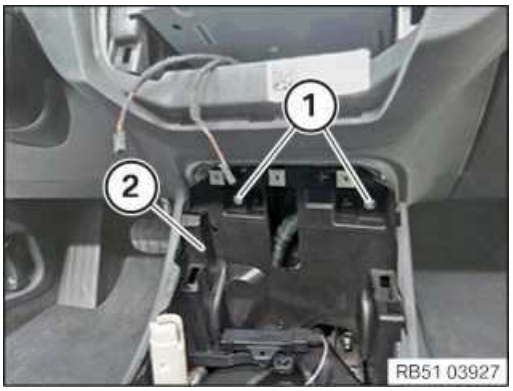


▸ **Installing interior aerial for the front Comfort Access**

- Clip in the interior aerial for the Comfort Access (2).
  The latch mechanisms (arrows) must engage audibly.
- Connect connector (1).

POSTPROCESSES

10 – Install centre console, complete

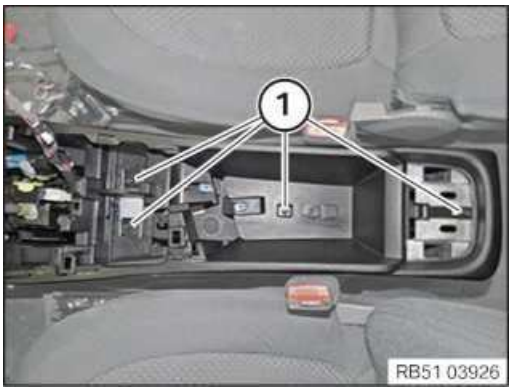


- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

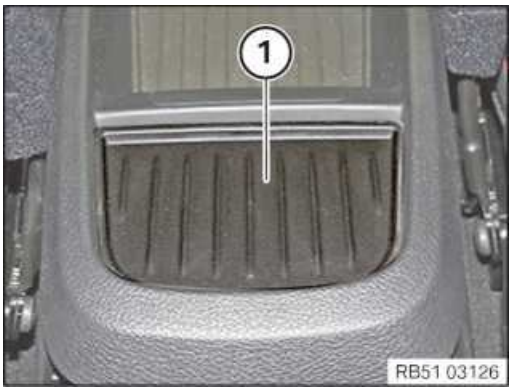
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- Tighten the screws (1).

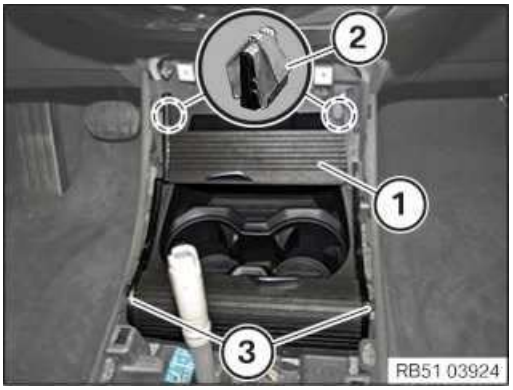
Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm



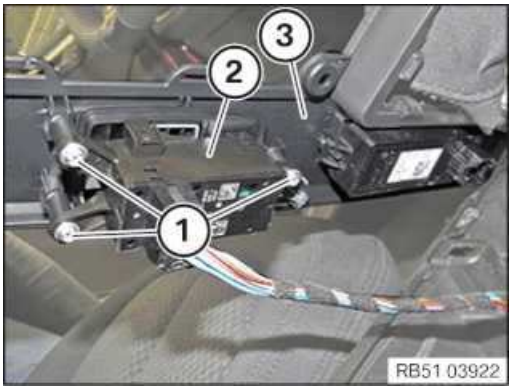
- Install the cover (1).

11 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

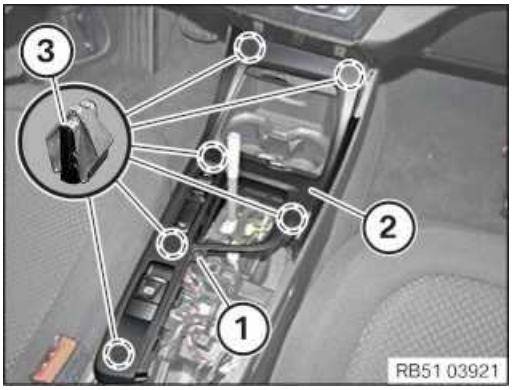
12 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

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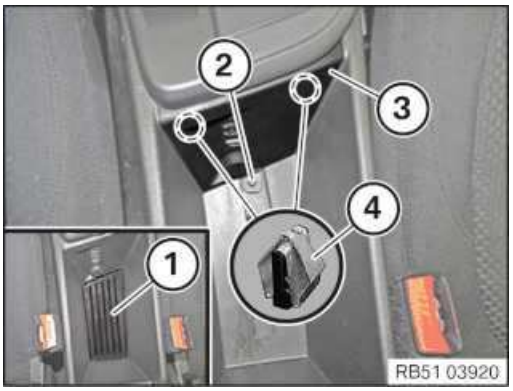
13 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

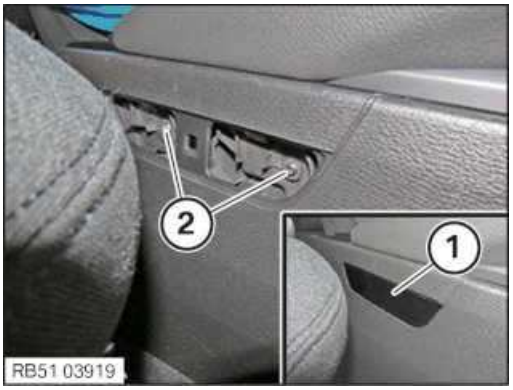


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

14 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

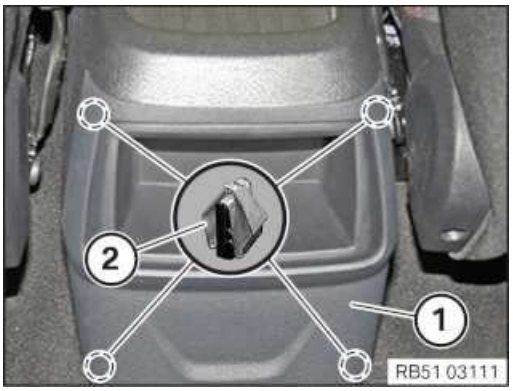
  When installing, the tie rod of the gearshift lever must not be bent.

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- Clip in gaiter (arrows).

15 – Installing the rear centre console trim



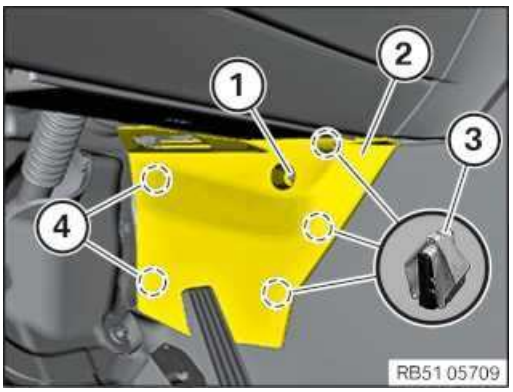
- Install centre console trim (1) and engage it into clamps (2).

16 – Installing side trim panel for the left and right centre console

▸ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

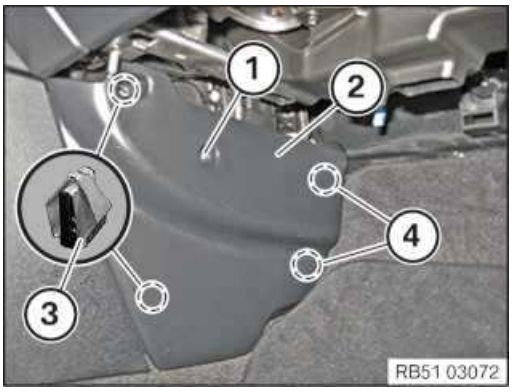
Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

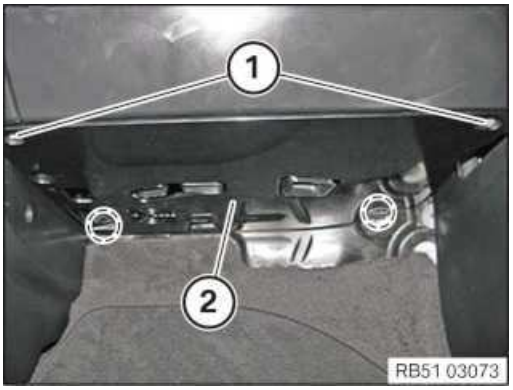
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

17 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

Additional Information

Overview of Tightening Torques

Screw connection for centre console — Used in step 10 12 13

Oval-head screw		Tightening torque	1,8 Nm

Parking brake button — Used in step 12

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console — Used in step 13 16

Oval-head screw		Tightening torque	1,8 Nm

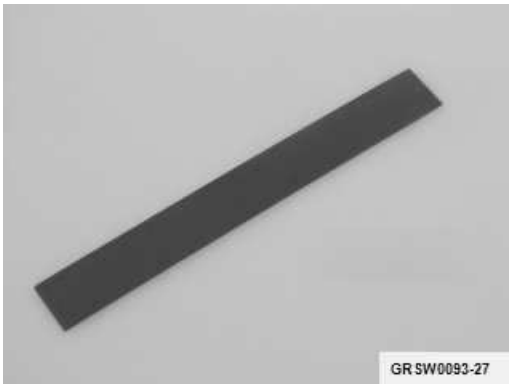
Bottom left footwell trim to instrument panel — Used in step 17

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

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0 496 571 (00 9 327) Wedge



Common	Used in step 4
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common	Used in step 5 7
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 16 026 Replacing mirror glass for exterior mirror

1 – Removing the mirror glass

CAUTION

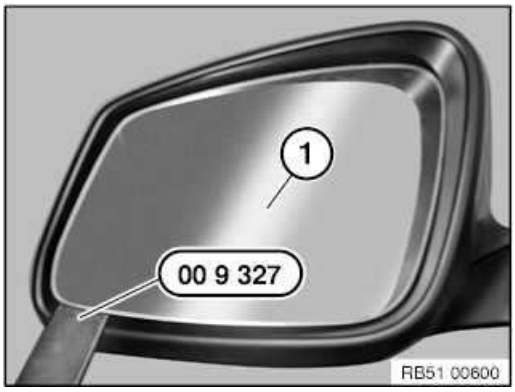
Glass splinters.

Danger of injury!

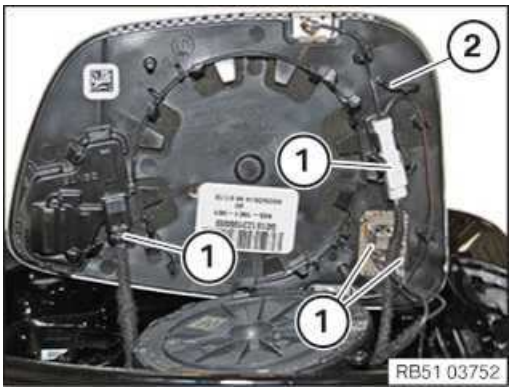
- If the mirror glass is damaged, wear safety goggles and protective gloves.

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.

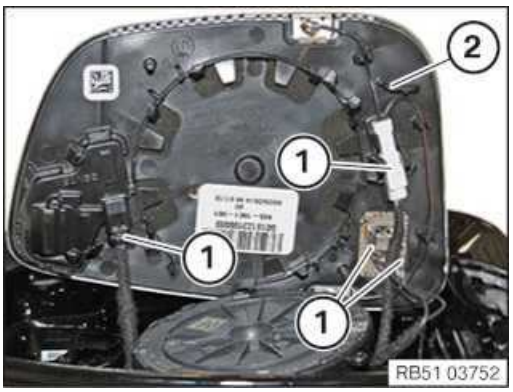


- Manually press the mirror glass (1) on the side of vehicle up to the end stop.
- Unclip the mirror glass (1) using special tool **0 496 571 (00 9 327)** all the way around, starting with the outer side.



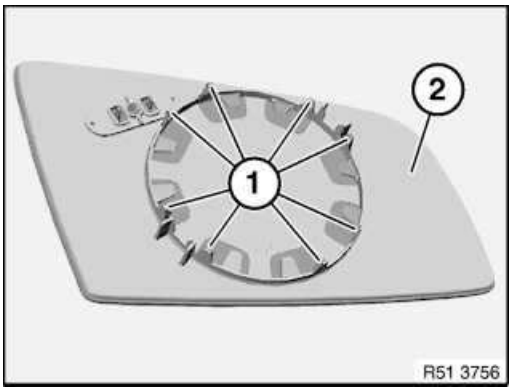
- Disconnect plug connection (1).
- Remove mirror glass (2).

2 – Installing the mirror glass



- Position mirror glass (2).
- Connect plug connections (1).

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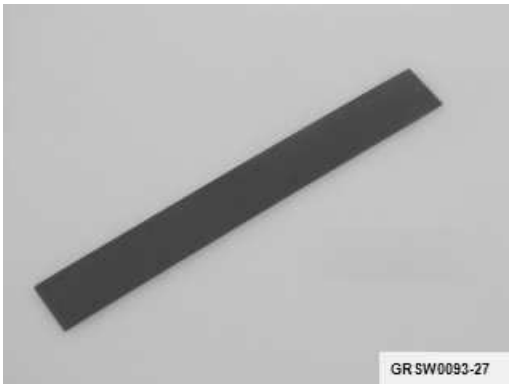


- Check whether retaining lugs (1) are missing or damaged and, if required, renew the mirror glass.
- Position the mirror glass (2) with the retaining lugs (1) flush with the drive for exterior mirror adjustment and clip in.
- Ensure correct locking.
- Check if the drive for exterior mirror adjustment is functioning correctly.

Additional Information

Overview of Special Tools

0 496 571 (00 9 327) Wedge



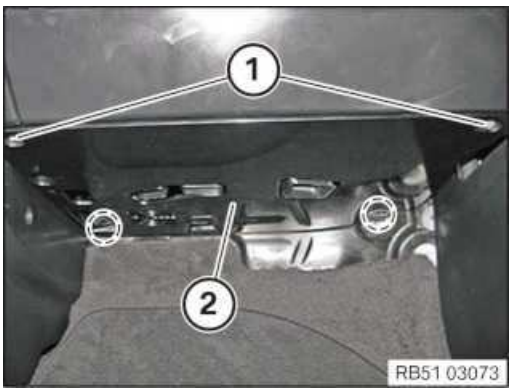
Common	Used in step 1
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 16 368 Replacing right glove box with housing

PRELIMINARY WORK

1 – Removing the instrument panel trim at bottom right

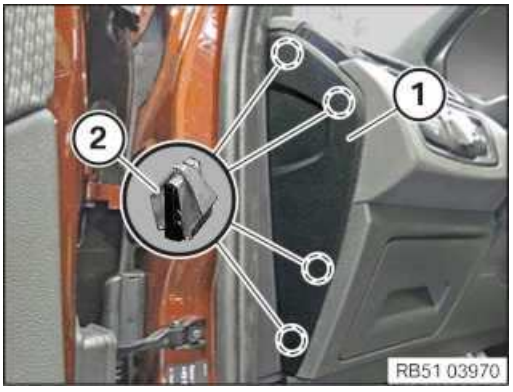


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

2 – Remove the side panel on the right instrument panel

NOTICE

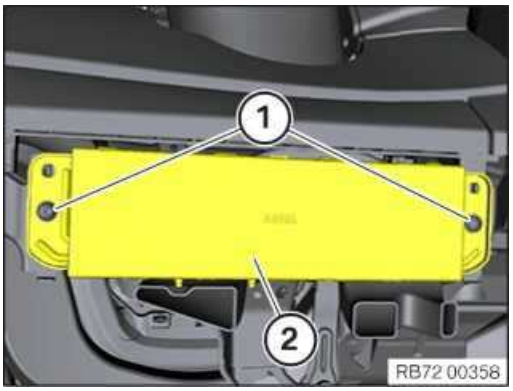
Description is for left component only. Procedure on the right side is identical.



- Lift the side panel (1) out of the clamps (2) with the special tool **0 496 569 (00 9 325)** and feed out toward the rear at an angle.

  If necessary, unlock and disconnect the plug connection on the switch for the front passenger airbag deactivation.

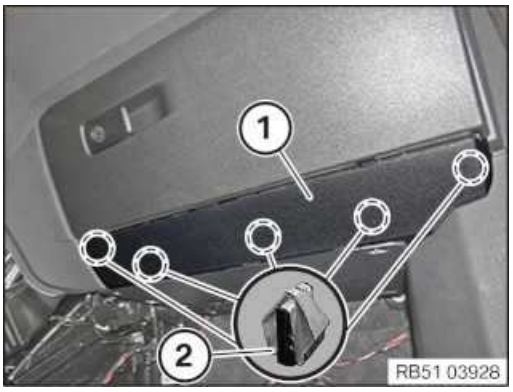
3 – Removing knee airbag



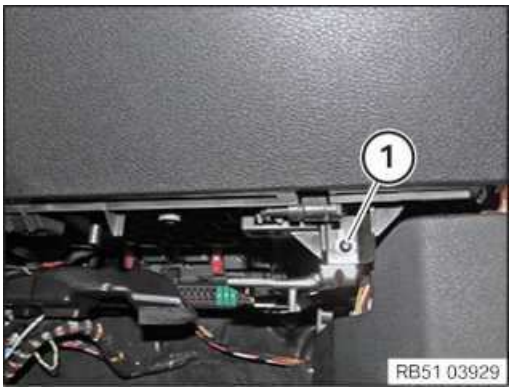
- Unlock plug connection on knee airbag (2) and disconnect.
- Loosen screws (1).
- Remove knee airbag (2).

4 – Remove right glove box

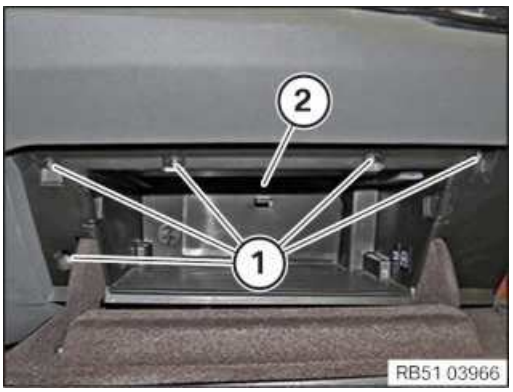
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- Release the trim (1) with the special tool **0 496 569 (00 9 325)** toward the bottom from the clamps (2) and remove.



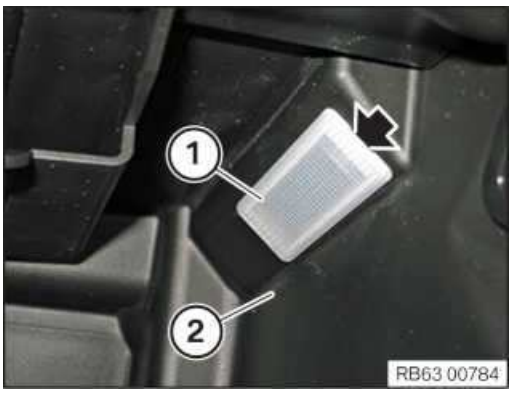
- Loosen screw (1).



- Loosen screws (1).
- Remove glove box (2) to the inside and disconnect associated plug connections.

MAIN WORK

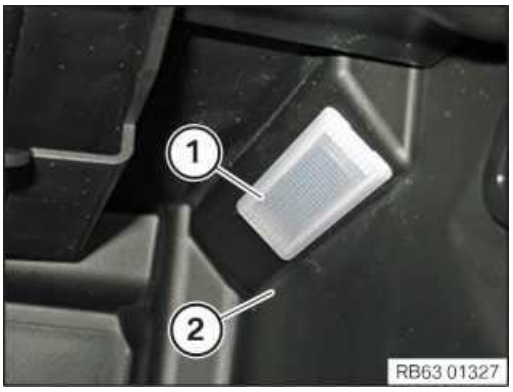
5 – Remove glove box light



- Lever out the glove box light (1) from the glove box (2).
- Unlock and disconnect associated connector.

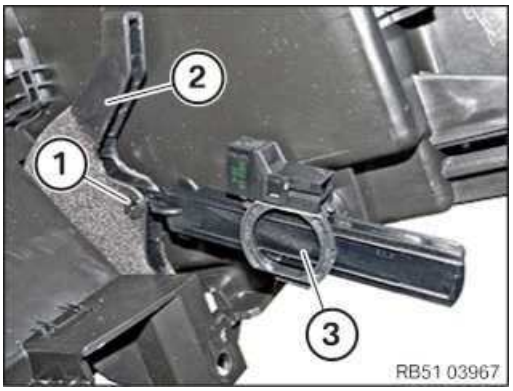
6 – Installing the glove box light

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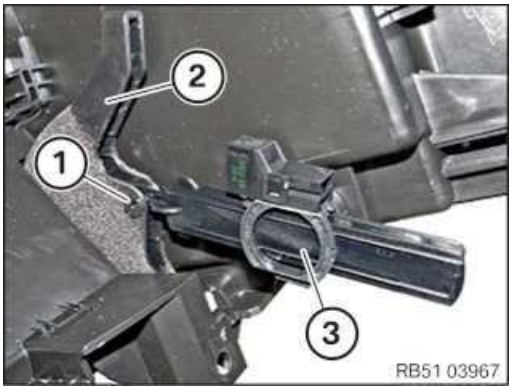
- Connect and lock corresponding connectors.
- Join glove box light (1) from glove box (2).

7 – Remove right glove box damper



- Release pin (1) from the retaining bracket (2).
- Turn glove box damper (3) by about 90° and remove.

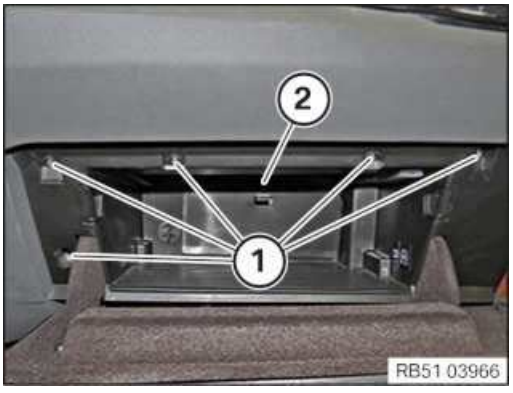
8 – Installing the right glove box damper



- Insert the glove box damper (3) and turn by approx. 90°.
- Fasten the glove box damper (3) with pin (1) on the retaining bracket (2).

POSTPROCESSES

9 – Install right glove box

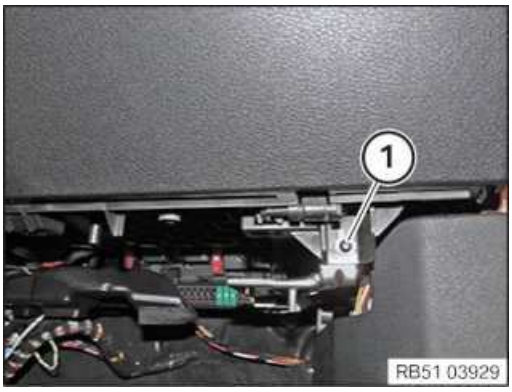


- Install the glove box (2) and connect and lock associated plug connections.
- Tighten the screws (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

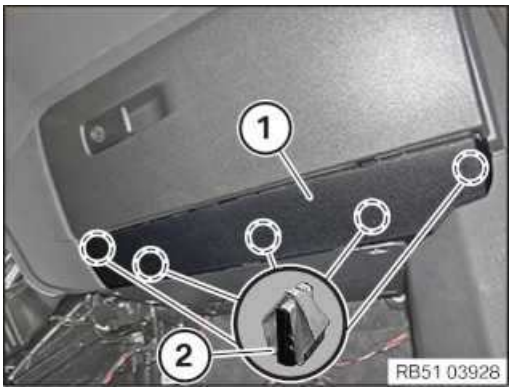
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- Tighten down screw (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

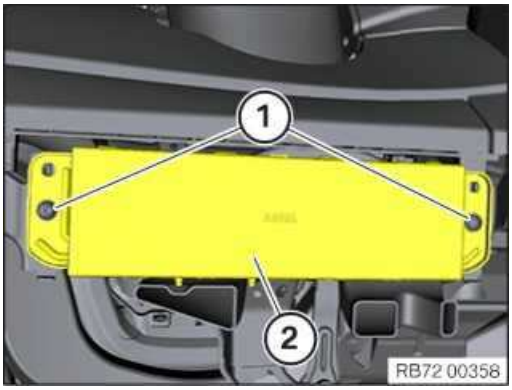


TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

- Install the trim (1) and lock it at the clamps (2).

10 – Installing knee airbag



- Connect the plug connection to the knee airbag (2) and lock.
- Install knee airbag (2).
- Renew screws (1).

  Parts: Screw
- Tighten the screws (1).

Knee airbag to body

M8	Renew screws.	Tightening torque	8 Nm

11 – Install the side panel on instrument panel on the right

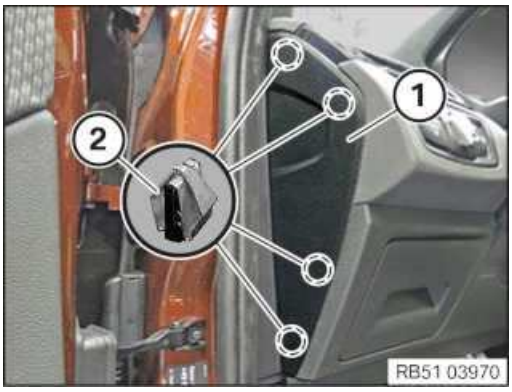
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

NOTICE

Description is for left component only. Procedure on the right side is identical.

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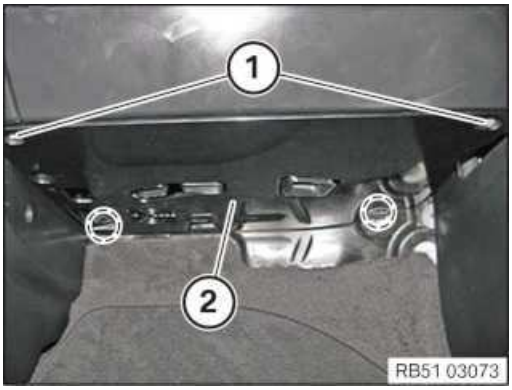


- If necessary, connect the plug connection on the switch for front passenger airbag deactivation and lock.
- Feed in the side panel (1) at an angle toward the front and lock at the clamps (2).

12 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

Additional Information

Overview of Tightening Torques

Glove box to instrument panel Used in step 9

Screw		Tightening torque	1,8 Nm

Knee airbag to body Used in step 10

M8	Renew screws.	Tightening torque	8 Nm

Bottom left footwell trim to instrument panel Used in step 12

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

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0 496 569 (00 9 325) Wedge



Common

Used in step 2 4

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 16 179 Replacing side clip on centre console

PRELIMINARY WORK

1 – Remove the decorative trim from the centre console

RISK OF DAMAGE

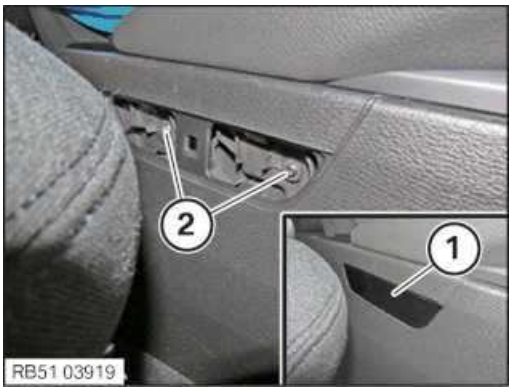
Scratches.

Tools and sharp-edged components can cause scratches.

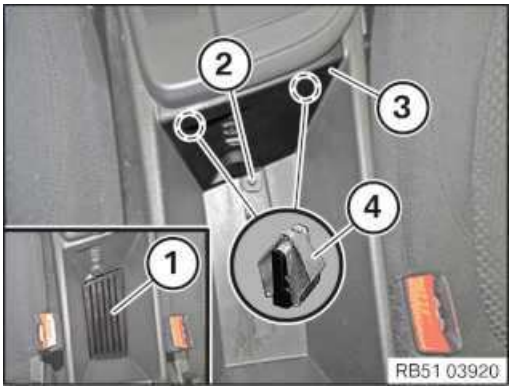
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

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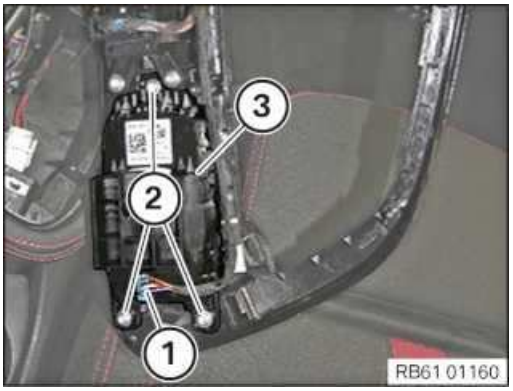


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

MAIN WORK

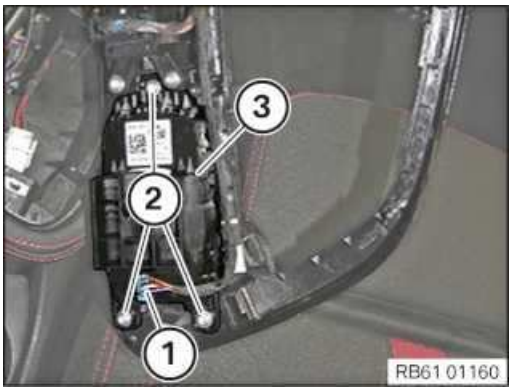
2 – When replacing the decorative trim on the centre console:Remount controller

▸ **Remove controller**



- Unlock and disconnect connector (1).
- Release the screws (2) and remove the controller (3).

▸ **Install controller**



- Position the controller (3) and tighten the screws (2).

Controller to cover

Screw			2,5 Nm

- Connect connector (1).

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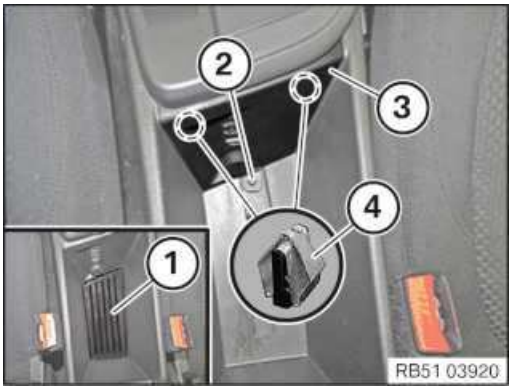
3 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

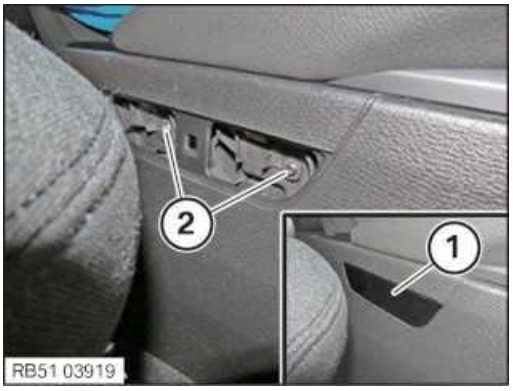


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

Additional Information

Overview of Tightening Torques

Controller to cover Used in step 2

Screw			2,5 Nm

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Screw connection for centre console

Used in step 3

Oval-head screw		Tightening torque	1,8 Nm

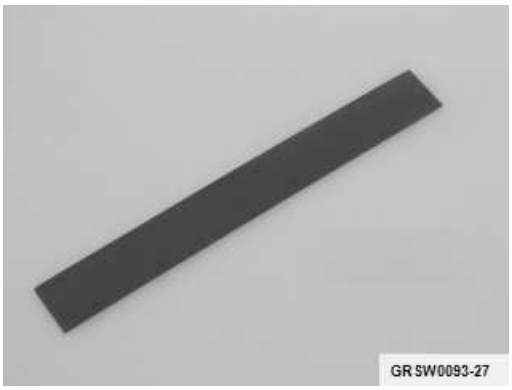
Trim to centre console

Used in step 3

Oval-head screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common

Used in step 1

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 16 002 Replacing the exterior rearview mirror on the front door on the left or right

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Removing the mirror glass

CAUTION

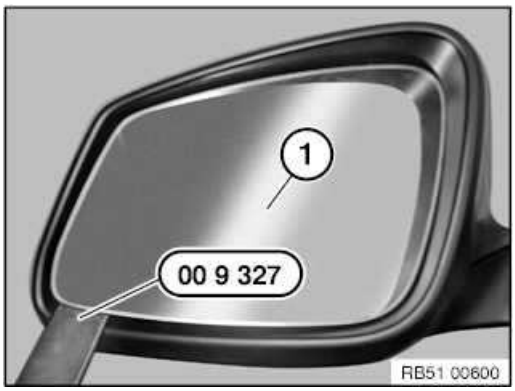
Glass splinters.

Danger of injury!

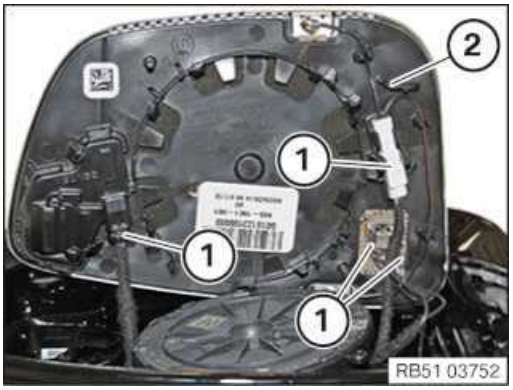
- If the mirror glass is damaged, wear safety goggles and protective gloves.

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Manually press the mirror glass (1) on the side of vehicle up to the end stop.
- Unclip the mirror glass (1) using special tool **0 496 571 (00 9 327)** all the way around, starting with the outer side.



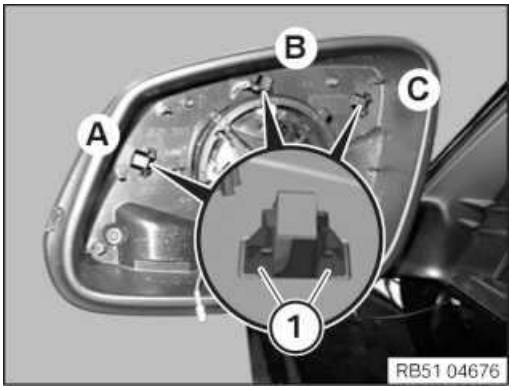
- Disconnect plug connection (1).
- Remove mirror glass (2).

2 – Remove cover cap on the exterior rearview mirror

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TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Press latch mechanisms (1) together in sequence (A), (B) and (C) and pull off the cover cap on the exterior rearview mirror to the outside at the same time.

3 – Removing the drive for exterior mirror adjustment

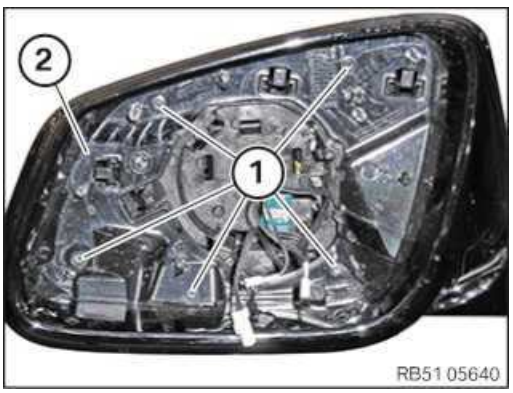


- Release the screws (1) and pull out the drive for exterior mirror adjustment (2) a little.



- Unlock plug connection (1) and disconnect and remove the drive for exterior mirror adjustment (2) .

4 – Removing retaining ring from exterior rearview mirror



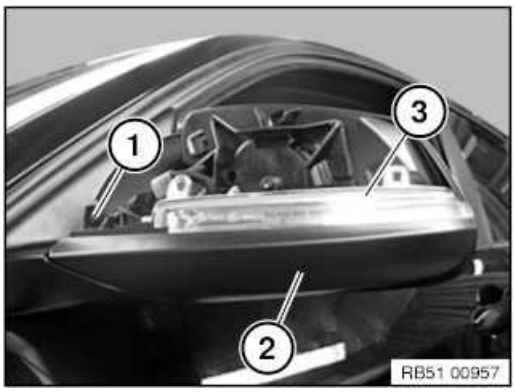
- Fold exterior mirror forwards.
- Loosen screws (1).
- Slide the retaining ring (2) out.

5 – Removing the mirror housing

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- Fold exterior mirror forwards.
- Loosen screws (1).



- Loosen screw (1).
- Carefully feed out the mirror housing (2) and disconnect the plug connection on the side repeater (3).

6 – Remove cover on door handle

RISK OF DAMAGE

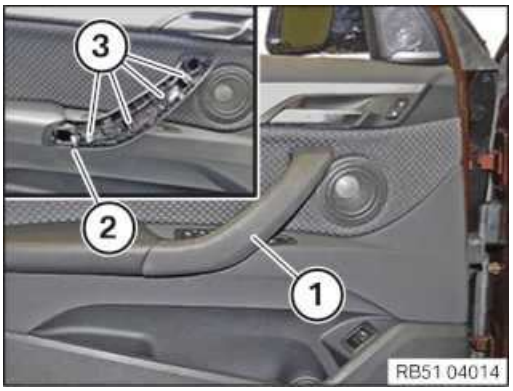
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

7 – Remove front door trim panel

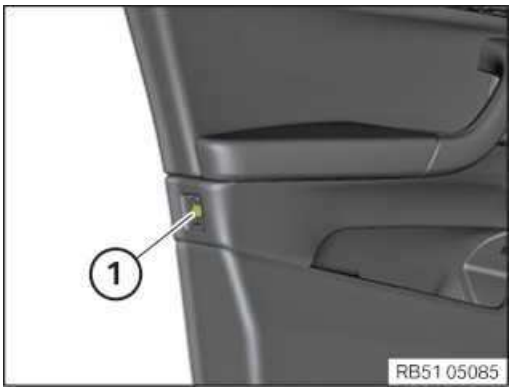
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RISK OF DAMAGE

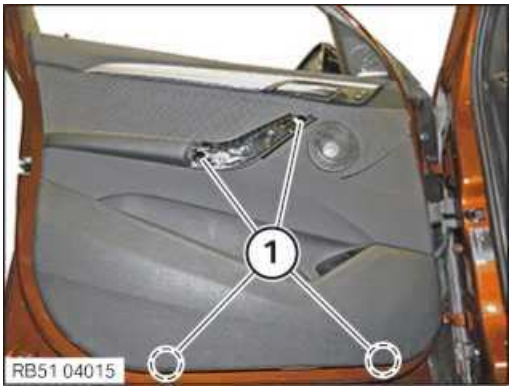
Scratches.

Tools and sharp-edged components can cause scratches.

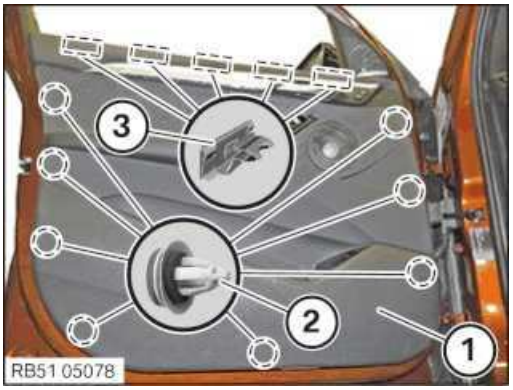
- Protect working area.
- Handle tools and components carefully.



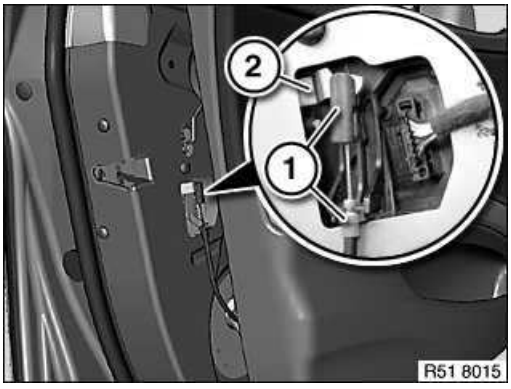
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



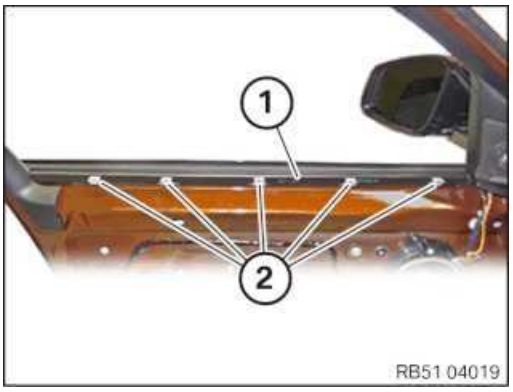
- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

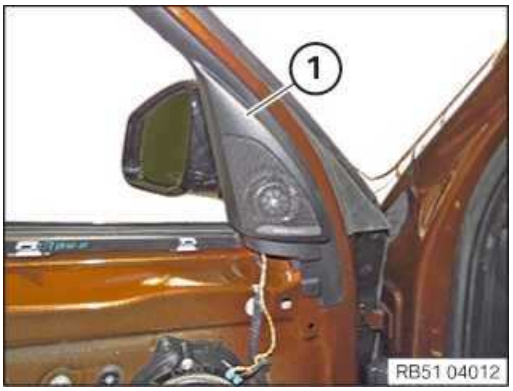
8 – Remove the inside front weather strip

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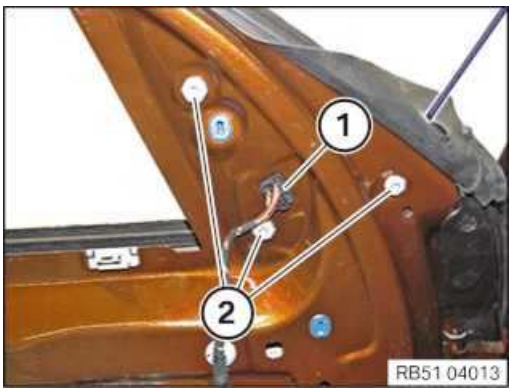


- Release the weather strip (1) from the clamps (2) and pull it off to the top.
  If weather strip (1) is reused, make sure it is not bent.

9 – Removing the exterior mirror



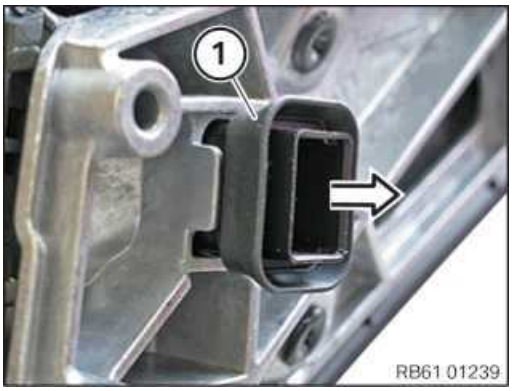
- Release the window frame cover (1) in the area of the mirror.
- If necessary, disconnect related plug connections.



- Secure exterior mirror against falling out.
- Unlock plug connection (1) and disconnect.
- Release the screws (2) and remove the exterior rearview mirror.

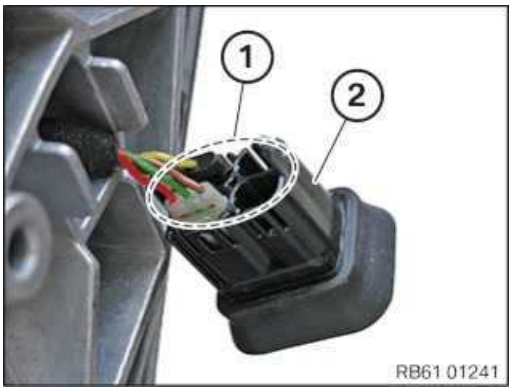
MAIN WORK

10 – Remove the mirror electronics

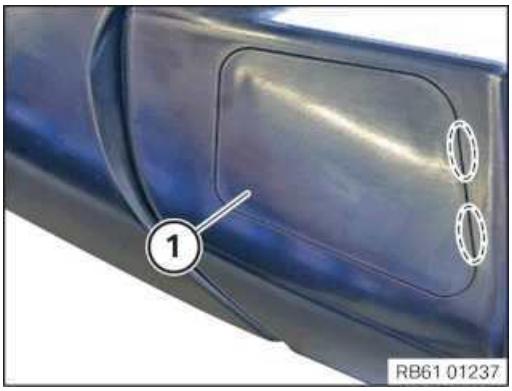


- Pull out the connector housing (1) in direction of arrow.

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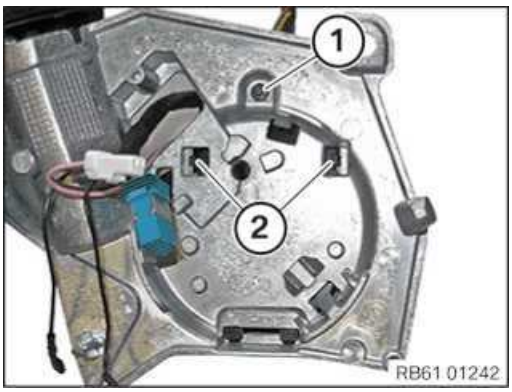
- Unlock all connectors (1) on the connector housing (2) and disconnect.



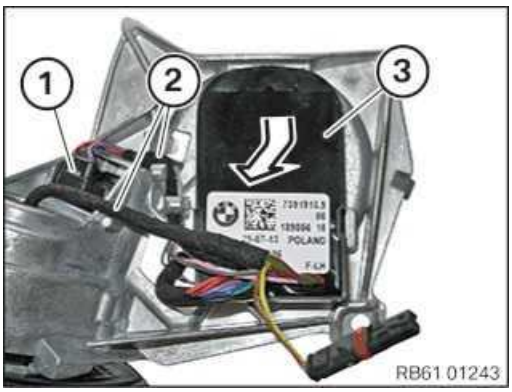
- Unclip the cover (1).



- Slide out all cables (1) in direction of arrow.



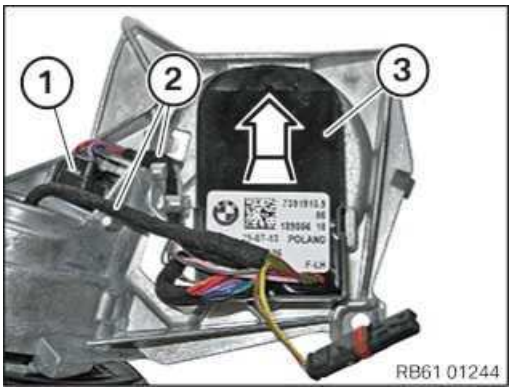
- Loosen screws (1).
- Unlock the retaining lugs (2) on both sides.



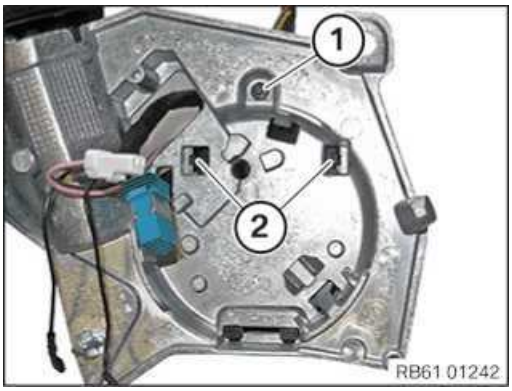
- Unlock and disconnect connector (1).
- Remove the cable (2).
- Slide out the mirror electronics (3) in direction of arrow.

11 – Installing mirror electronics

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- Join mirror electronics (3) in direction of arrow.
- Feed in cable (2).
- Connect connectors (1) and lock.



- Tighten the screws (1).

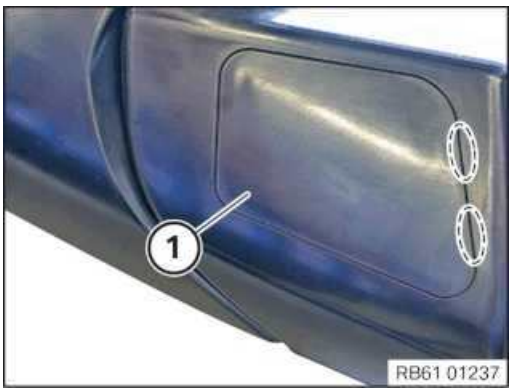
  Note: Make sure the mirror electronics are latched correctly (2).



- Insert cable (1) in direction of arrow.

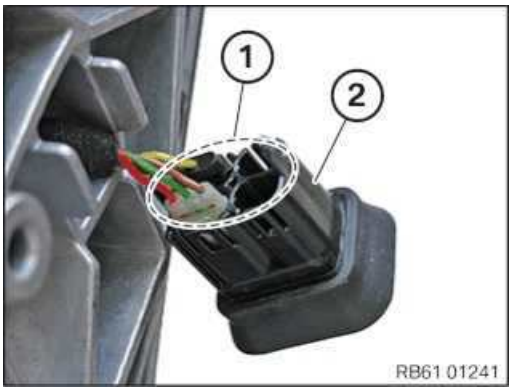


- **Note:** Retaining lugs on cover (1) must not be damaged or missing.

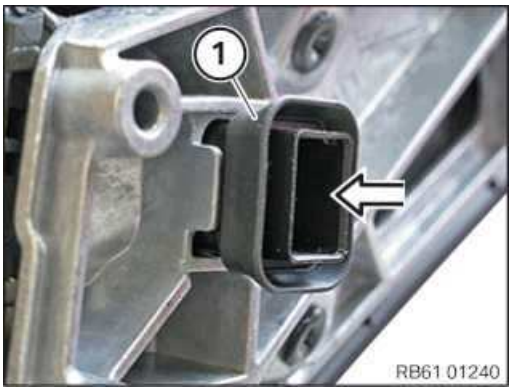


- Clip in the cover (1).

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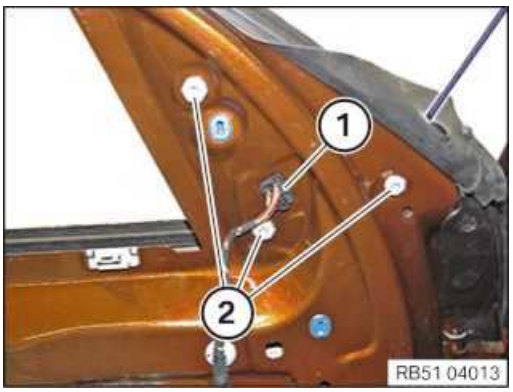
- Connect all connectors (1) to the connector housing (2) and lock.



- Join connector housing (1) in direction of arrow.

POSTPROCESSES

12 – Installing the exterior mirror



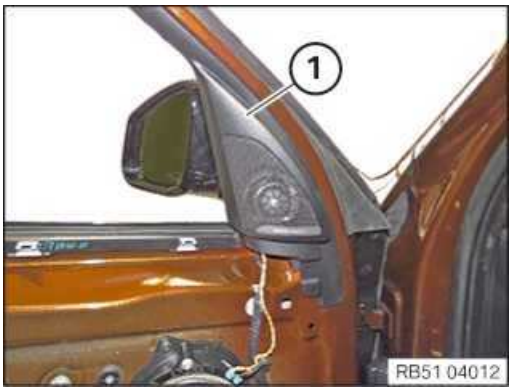
- Check sound insulation on the mirror base. It must not be damaged or missing.
- Mount exterior rearview mirror and tighten the bolts (2).

  Due to self-tapping screws, the tightening torque in the new condition of exterior mirror increases by 2 Nm.

Exterior mirror to door

Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

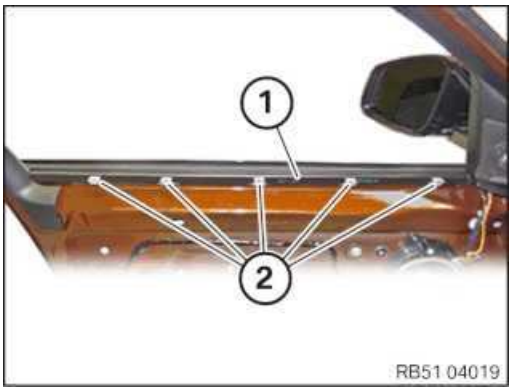
- Connect the plug connection (1).
- Carry out functional check.



- Mount the window frame cover (1) in the area of the mirror.
- If necessary, connect related plug connections.

13 – Installing front inner weather strip

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- Coat weather strip (1) prior to installation with approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.

  Replace defective clamps.
- Position weather strip (1) on the door and engage into the clamps (2).

14 – Install front door trim panel

RISK OF DAMAGE

Scratches.

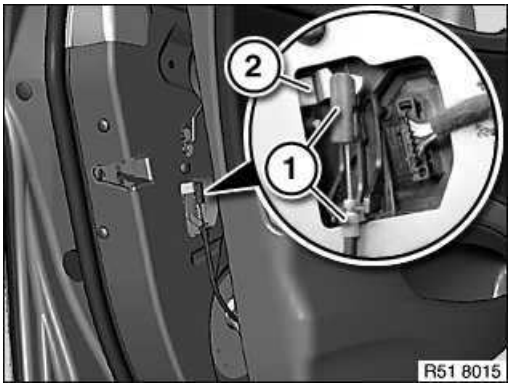
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

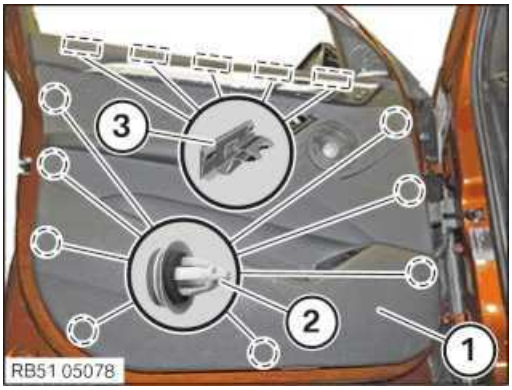


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

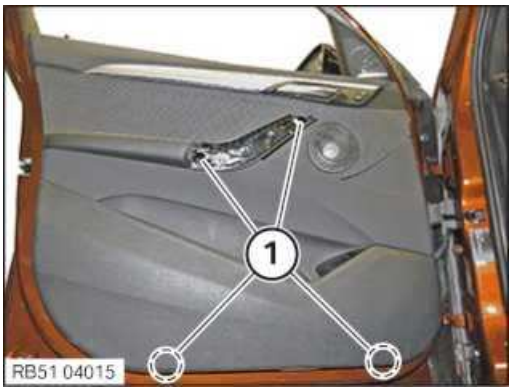


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

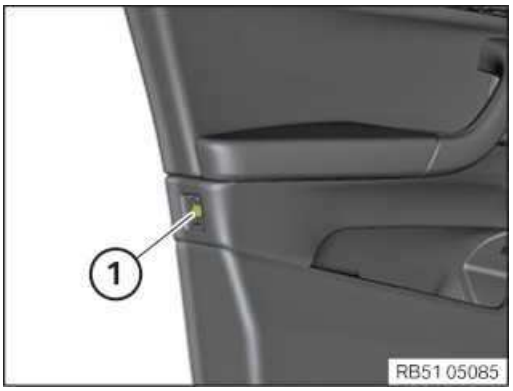
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- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

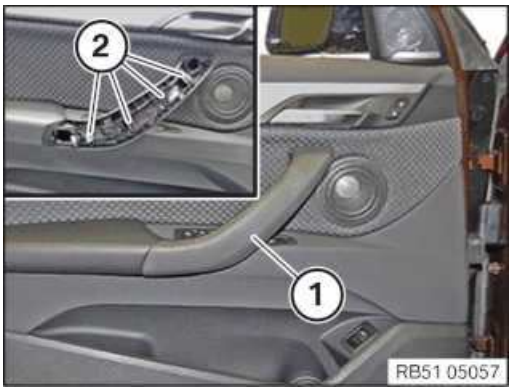
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

15 – Install the cover on the door handle

NOTICE

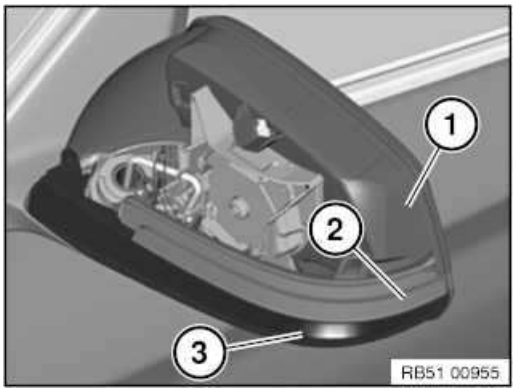
Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

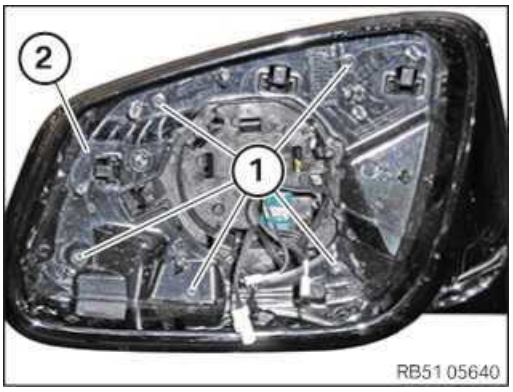
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

16 – Installing the retaining ring on the exterior rearview mirror



- Feed in the retaining ring (1) on the exterior rearview mirror.
- If necessary, feed in cable.
- Make sure the retaining ring (1) is fitted correctly on the side repeater (2) and on the housing (3).

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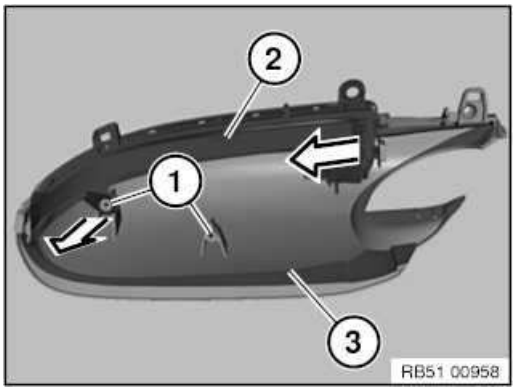


- Tighten the screws (1) on the retaining ring (2).

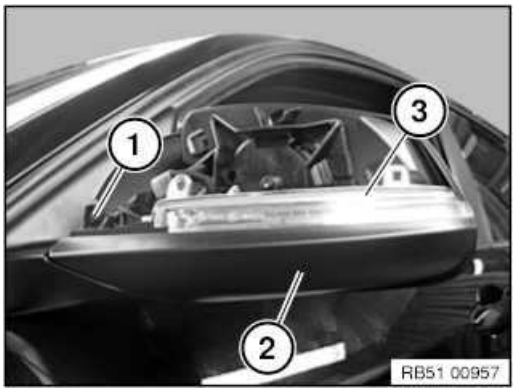
Retaining ring to exterior mirror

Screw		Tightening torque	1,2 Nm

17 – Installing the mirror housing



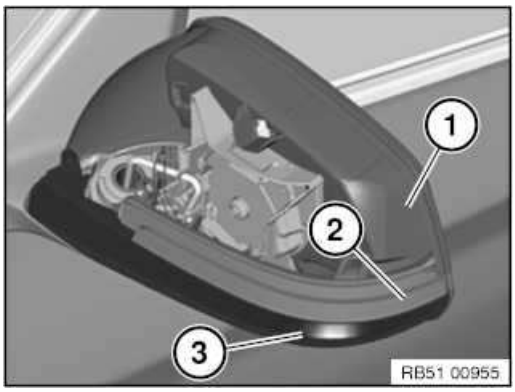
- Check the threaded holes (1) for damage and renew them if necessary.
- **Replacement**: Guide the side repeater (2) out of the mirror housing (3) in the direction of the arrow and mount it on the new mirror housing.



- Carefully guide in the mirror housing (2) and connect the connector to the side repeater (3).
- Tighten down screw (1).

Mirror housing to mirror base

Screw		Tightening torque	1,2 Nm



- Ensure that the retaining ring (1) fit correctly on the side repeater (2) and the mirror housing (3).



- Tighten the screws (1).

Retaining ring to exterior mirror

Screw		Tightening torque	1,2 Nm

18 – Installing the drive for exterior mirror adjustment

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- Position drive for exterior mirror adjustment (2).
- Connect connectors (1) and lock.



- Position drive for exterior mirror adjustment (2) correctly.
- Tighten the screws (1).

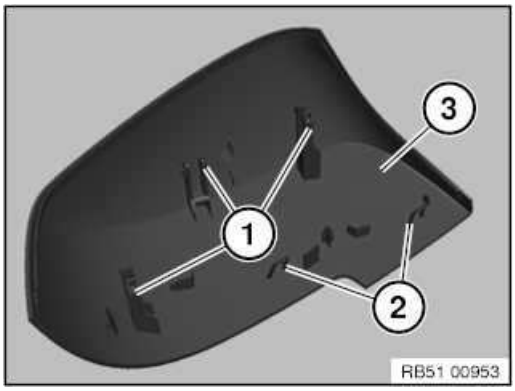
Drive for exterior mirror adjustment

	Tightening torque	1,2 Nm

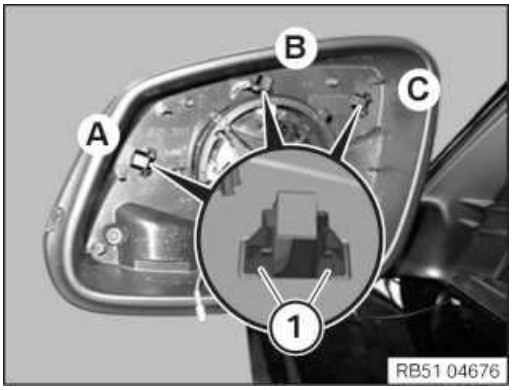
19 – Installing protective cap on exterior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



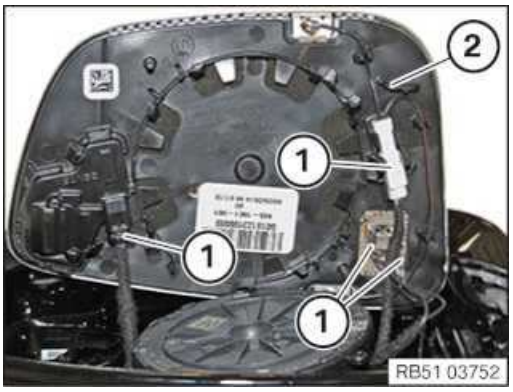
- Latch mechanisms (1) and guides (2) on the protective cap (3) must not be missing or damaged.



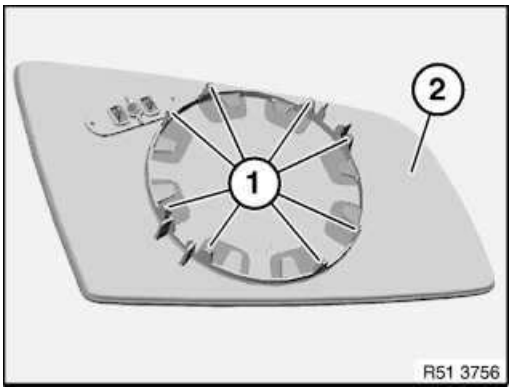
- Position protective cap on the exterior mirror and engage in the latch mechanisms (1) in order (C), (B) and (A).

20 – Installing the mirror glass

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- Position mirror glass (2).
- Connect plug connections (1).



- Check whether retaining lugs (1) are missing or damaged and, if required, renew the mirror glass.
- Position the mirror glass (2) with the retaining lugs (1) flush with the drive for exterior mirror adjustment and clip in.
- Ensure correct locking.
- Check if the drive for exterior mirror adjustment is functioning correctly.

Additional Information

Overview of Tightening Torques

Exterior mirror to door — Used in step 12

Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

Door trim panel to door — Used in step 14

Screw TS5x20		Tightening torque	2,5 Nm

Retaining ring to exterior mirror — Used in step 16 17

Screw		Tightening torque	1,2 Nm

Mirror housing to mirror base — Used in step 17

Screw		Tightening torque	1,2 Nm

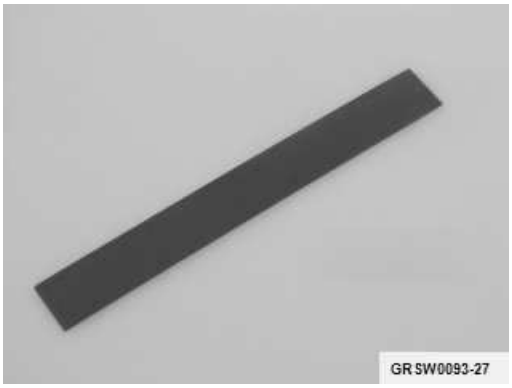
Drive for exterior mirror adjustment — Used in step 18

		Tightening torque	1,2 Nm

Overview of Special Tools

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0 496 571 (00 9 327) Wedge



Common

Used in step 1

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 21 004 Adjusting front left or right lock striker

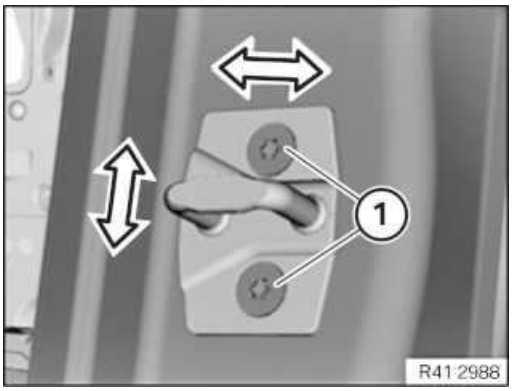
NOTICE

Description is for left component only. Procedure on the right side is identical.

1 â€“ Adjust lock striker

Prerequisite

The screws on lock striker are loosened so far that the lock striker can still be moved.



TECHNICAL INFORMATION

The gap dimensions form the basis for these repair instructions and must be observed without fail.

For more information see: 41 00 ... Gap dimensions for body

- Adjust the lock striker's height such that the door lock does not bump or rub against anything.
- Move lock striker sideways in order to adjust the gap dimensions between door and rear side panel.
- Tighten the screws (1).

Lock striker

Screw		Tightening torque	21 Nm

Additional Information

Overview of Tightening Torques

Lock striker Used in step 1

Screw		Tightening torque	21 Nm

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1

Repair instructions	Used in step
41 00 ... Gap dimensions, body	1

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51 21 235 Remove and install/replace Bowden cable for inner door opener on left or right front door

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

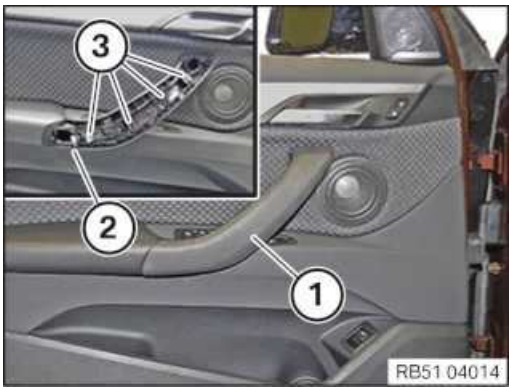
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

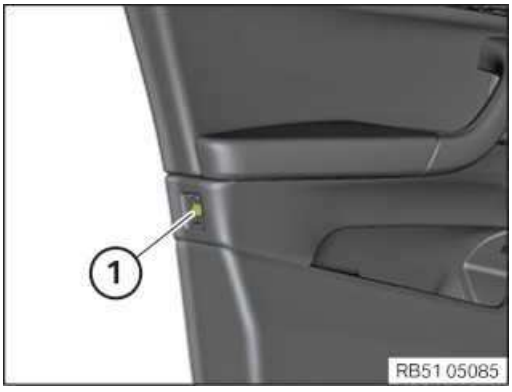
2 – Remove front door trim panel

RISK OF DAMAGE

Scratches.

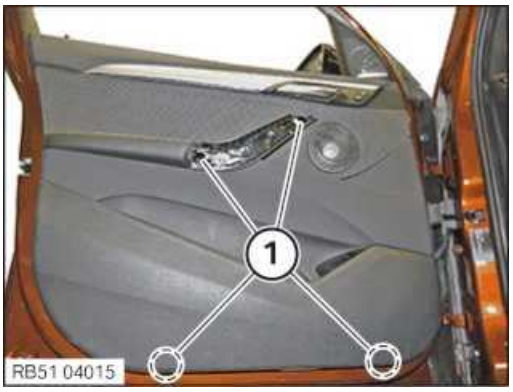
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

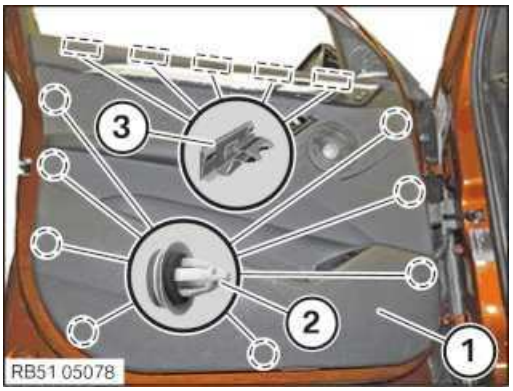


- If fitted: Remove the cover and unscrew the bolt (1).

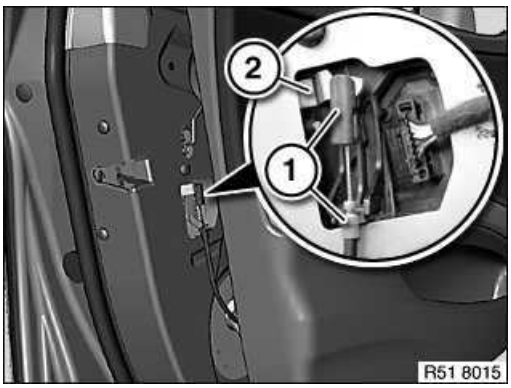
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- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.

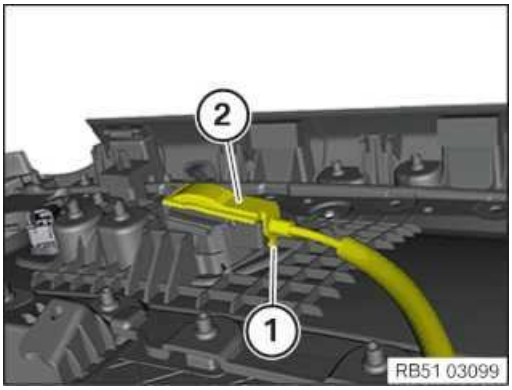


- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

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MAIN WORK

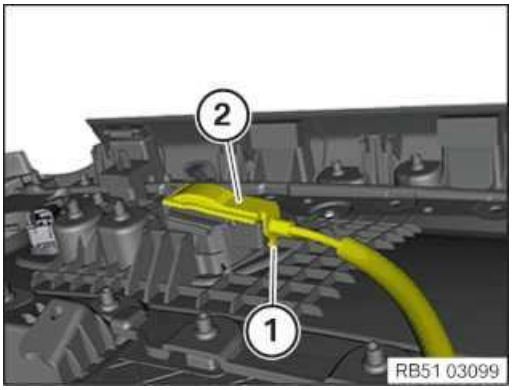
3 – Remove Bowden cable for the inside door opener



- Unlock the lock (1) and remove the Bowden cable (2) toward the top.

  The Bowden cable will thereby slide out automatically.

4 – Install the Bowden cable for the inside door opener



- Push the inside door handle in "closed" direction.
- Engage the Bowden cable (2) into the lock (1) towards the front/bottom.

  The Bowden cable (2) must be positioned correctly in the dedicated brackets.

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POSTPROCESSES

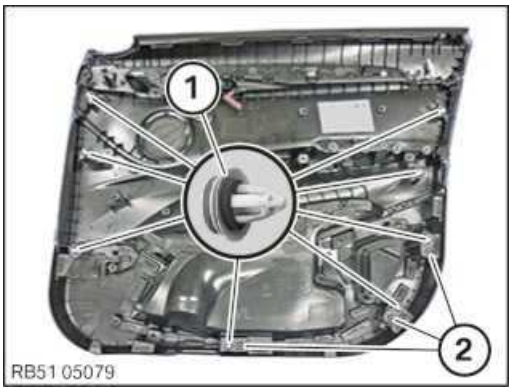
5 – Install front door trim panel

RISK OF DAMAGE

Scratches.

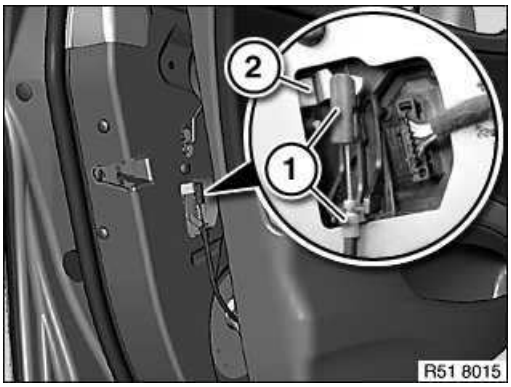
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

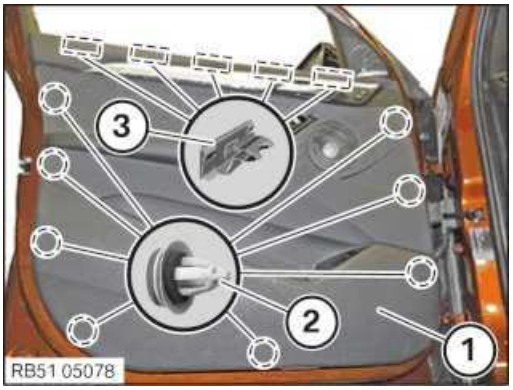


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

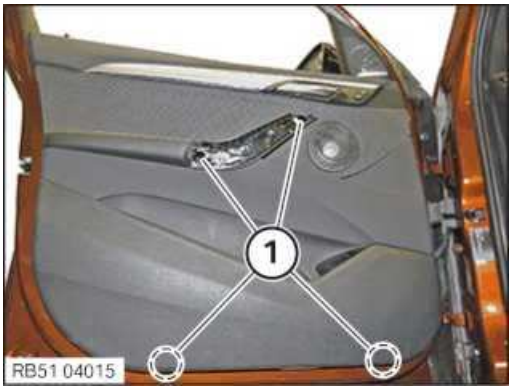
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



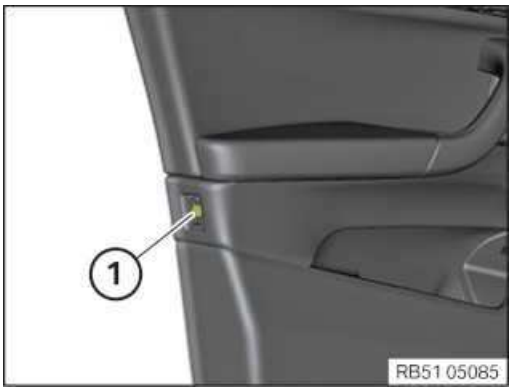
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

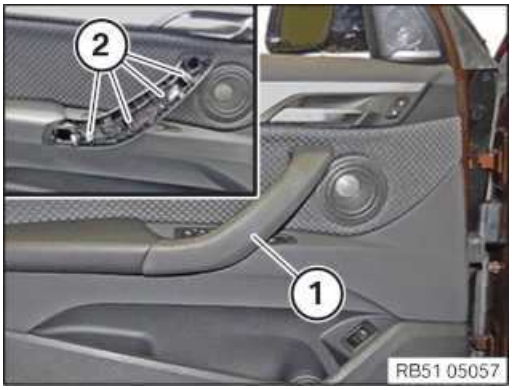
- Mount cover .

6 – Install the cover on the door handle

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door Used in step 5

Screw TS5x20		Tightening torque	2,5 Nm

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51 21 280 Remove and install/replace door stop of the front left or front right door

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

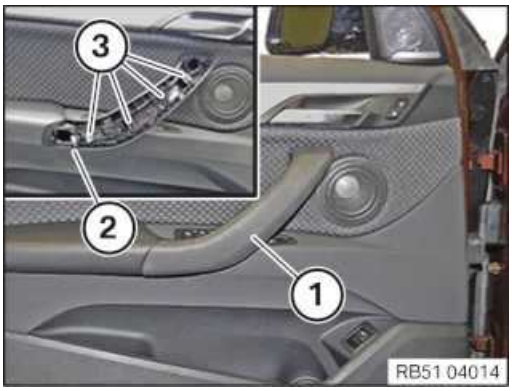
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

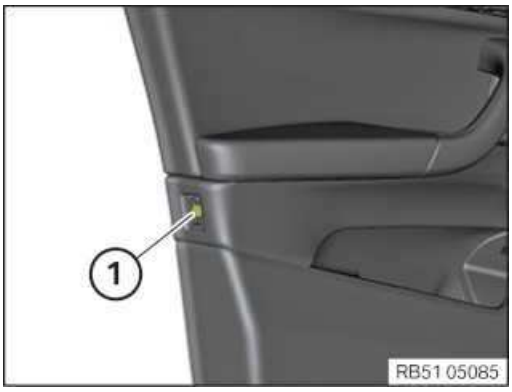
RISK OF DAMAGE

Scratches.

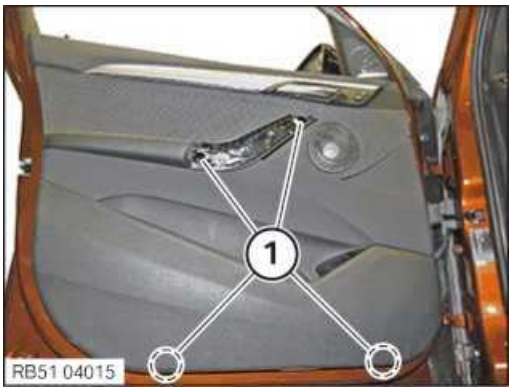
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

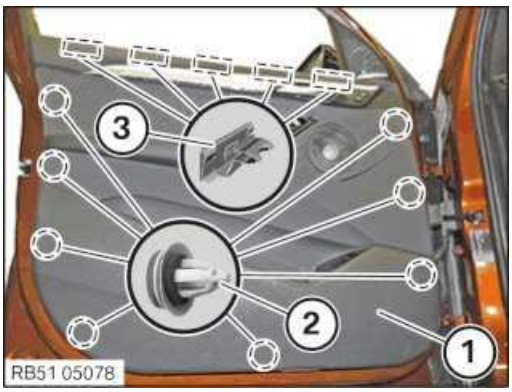
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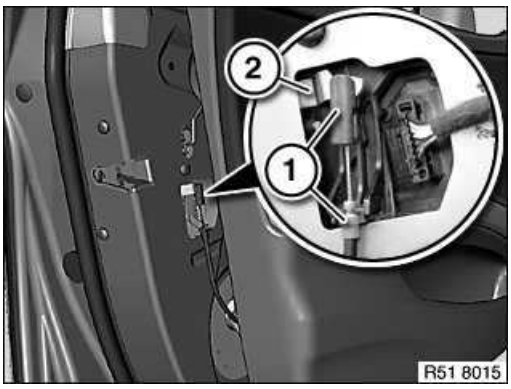
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



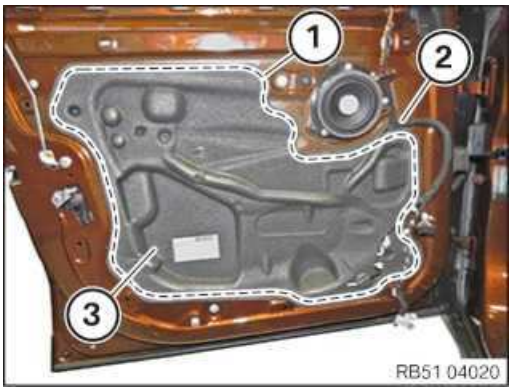
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

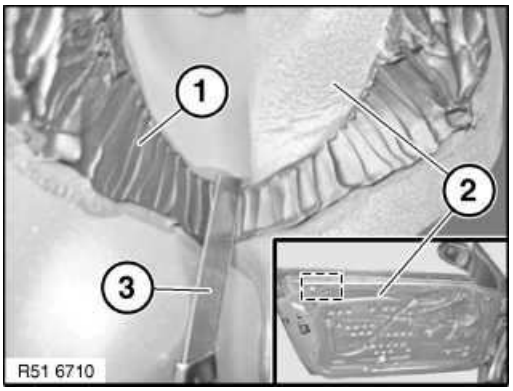
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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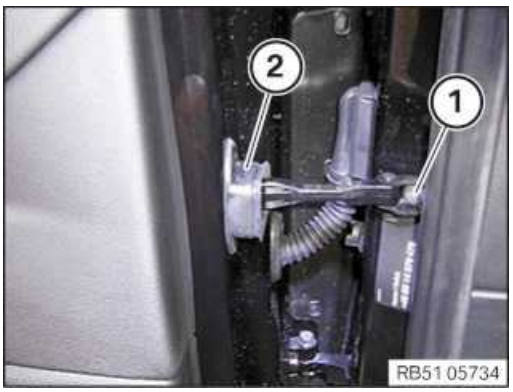
- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).



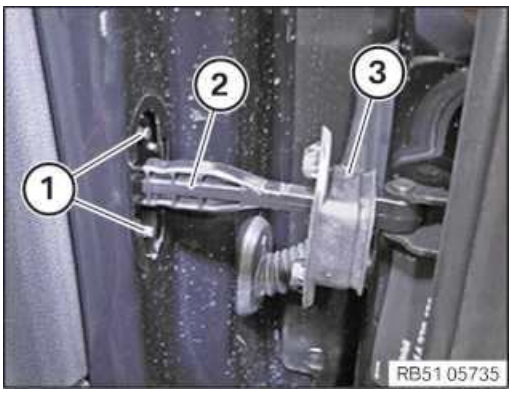
- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

MAIN WORK

4 – Remove door stop



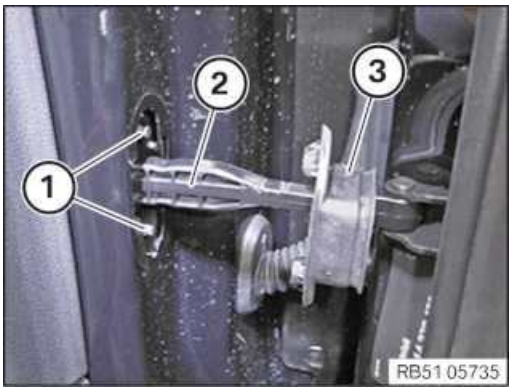
- Loosen screw (1).
- Pull off the cover (2) from the door outer skin.



- Loosen nuts (1).
- Feed the door brake (2) out of the door and remove the cover (3).

5 – Installing the door stop

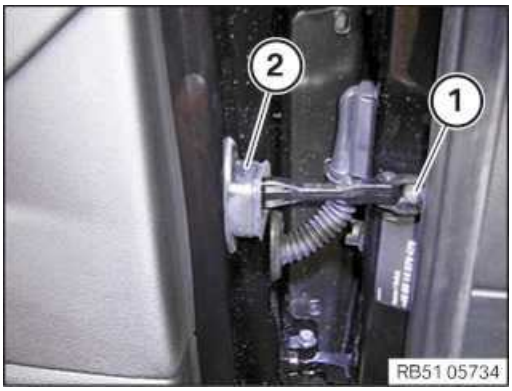
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- Guide door brake (2) into the door.
- Check the retaining lugs of the cover (3), they must not be missing or damaged.
- Attach the cover (3) to the door brake (2).
- Tighten nuts (1).

Door retainer to door

Nut M6		Tightening torque	8 Nm



- Tighten down screw (1).

Door stop to pillar

Screw		Tightening torque	28 Nm

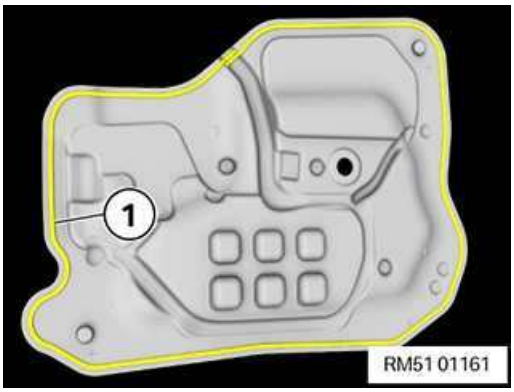
- Mount the cover (1) on the door outer skin and lock.

POSTPROCESSES

6 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

- Check sound insulation for damage.

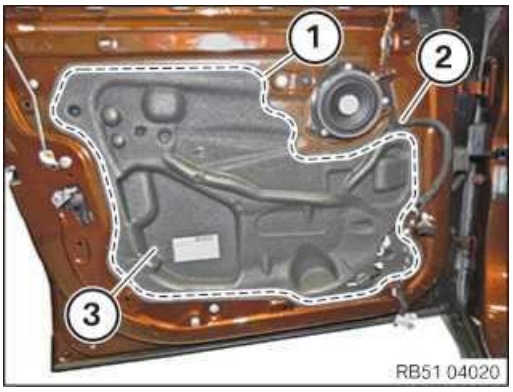
Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.

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- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

7 – Install front door trim panel

RISK OF DAMAGE

Scratches.

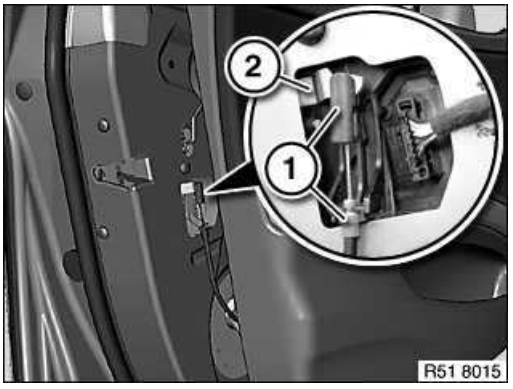
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

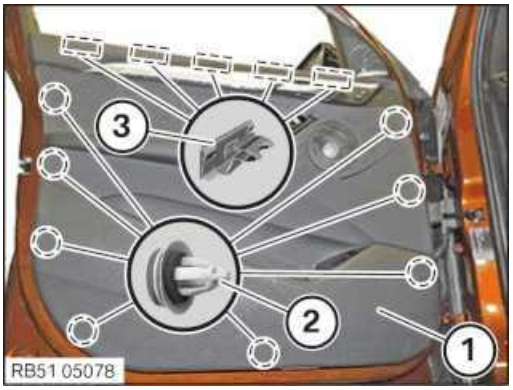


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

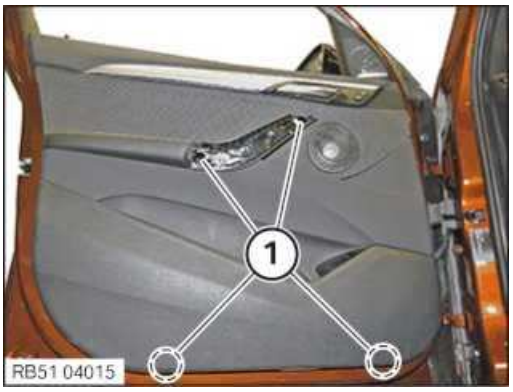


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

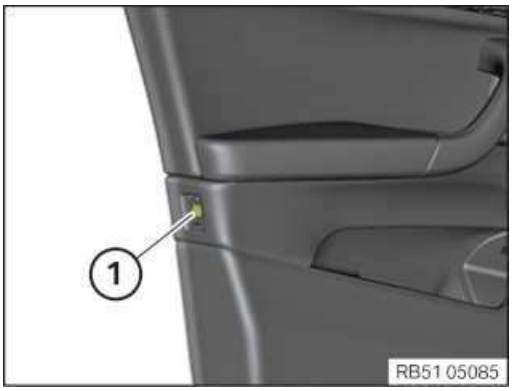
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- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

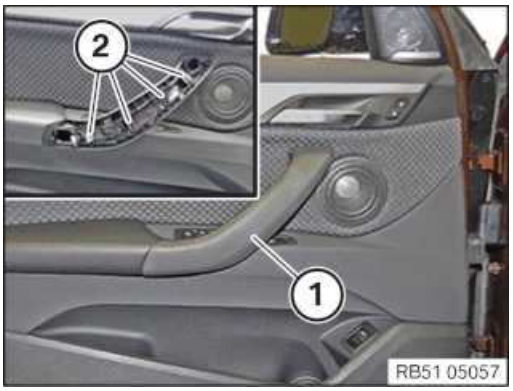
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

8 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door retainer to door — Used in step 5

Nut M6		Tightening torque	8 Nm

Door stop to pillar — Used in step 5

Screw		Tightening torque	28 Nm

Door trim panel to door — Used in step 7

Screw TS5x20		Tightening torque	2,5 Nm

Links

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General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 6

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51 21 140 Remove and install/replace lock barrel of the left or right front door completely

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

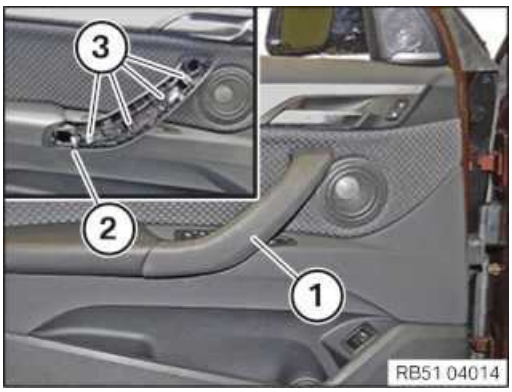
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

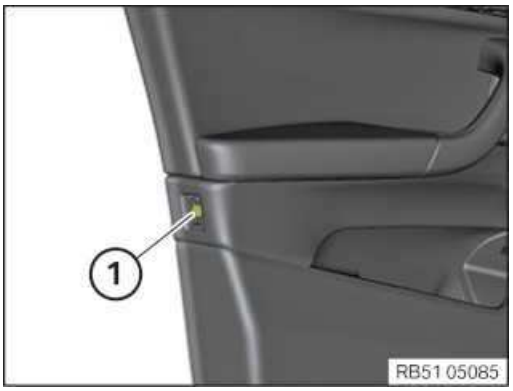
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RISK OF DAMAGE

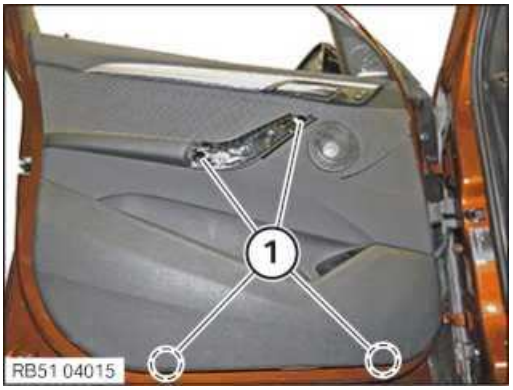
Scratches.

Tools and sharp-edged components can cause scratches.

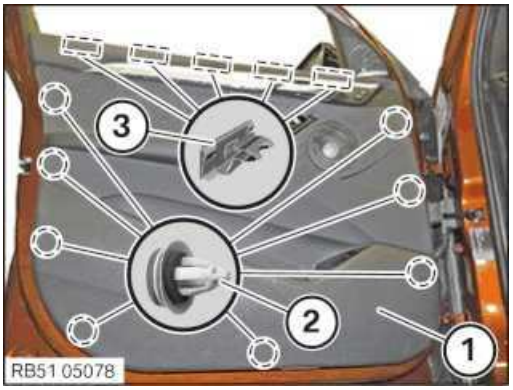
- Protect working area.
- Handle tools and components carefully.



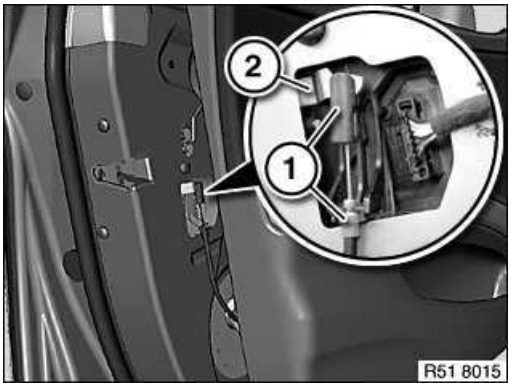
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps (3) at the top.



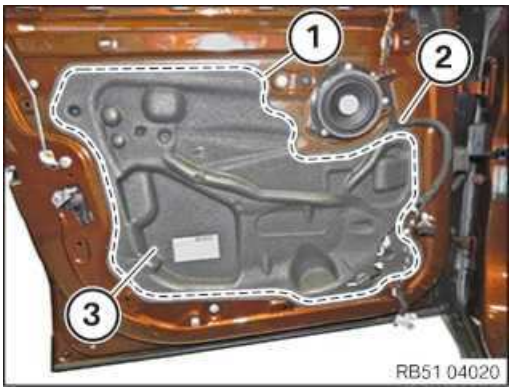
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

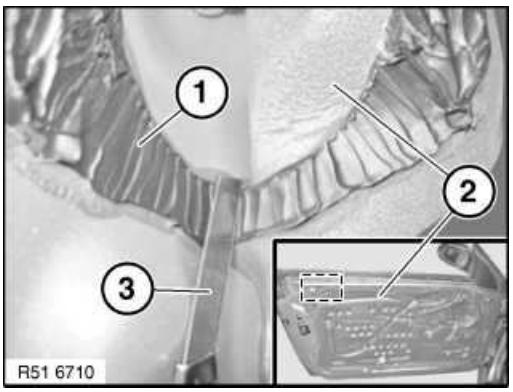
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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

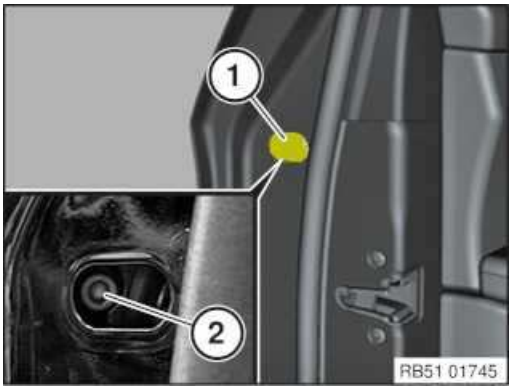


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

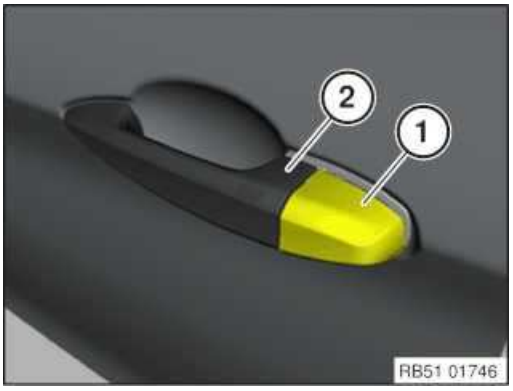


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Remove cover on the outside door handle



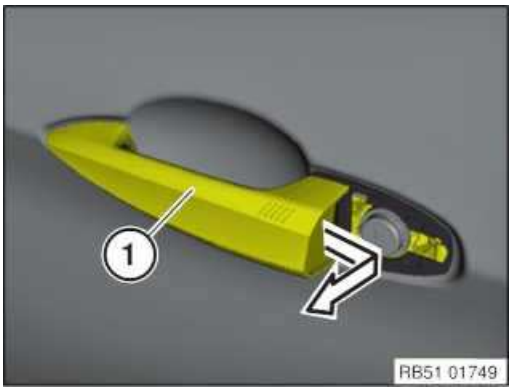
- Lever out the cover (1).
- Release screw (2) below it.



- Pull off the cover (1) with the outside door handle (2) slightly open.

5 – Remove the outside door handle

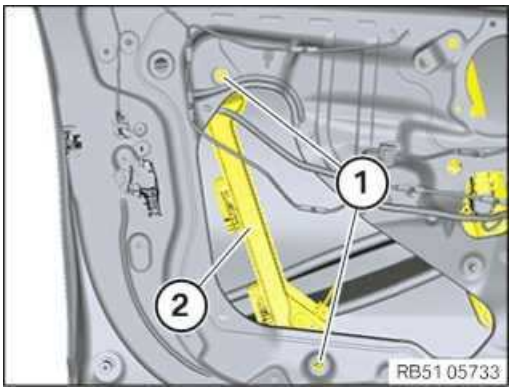
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- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

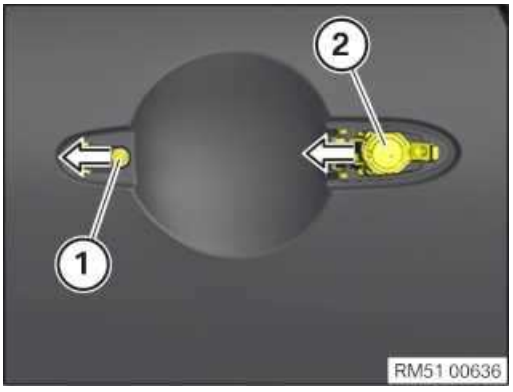
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

6 – Partially remove power window regulator

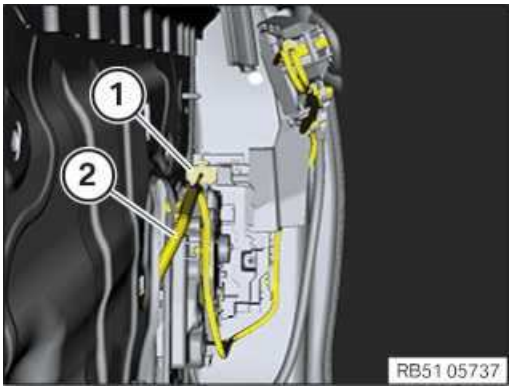


- Loosen nuts (1).
- Carefully slide the power windows (2) to the side.

7 – Remove the outer door handle support

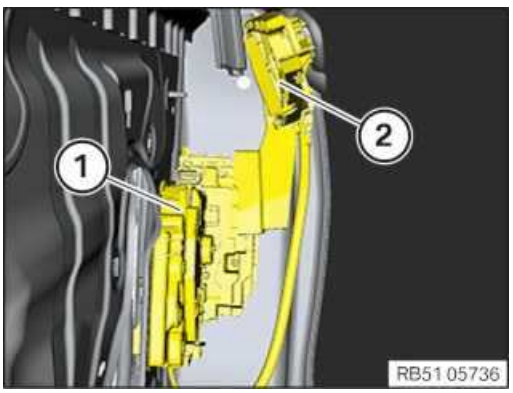


- Loosen screw (1).
- Slide the outside door handle support (2) towards the front and feed out in an inward direction.



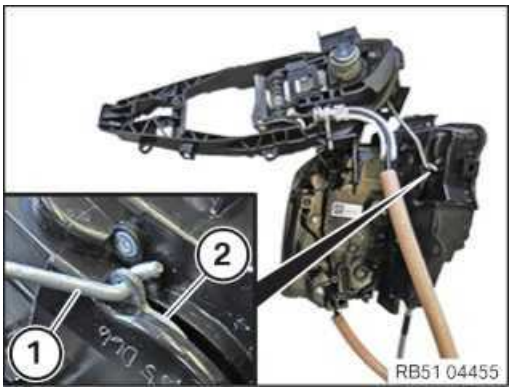
- Unlock and disconnect the plug connection (1) on the door lock.

  Release the vehicle wiring harness (2) from the door lock and the outside door handle support.

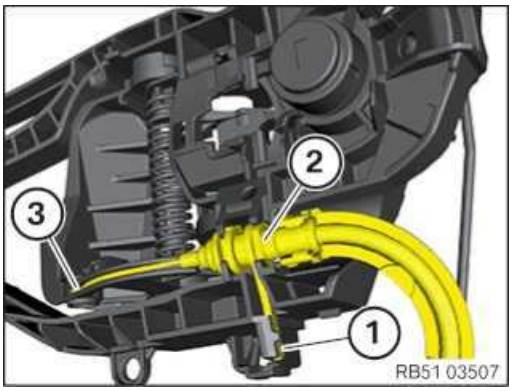


- Guide out the door lock (1) together with the outside door handle support (2) from the door.

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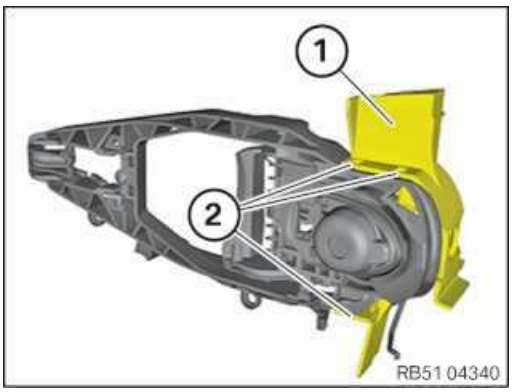
- Detach the linkage (1) from the door lock (2).



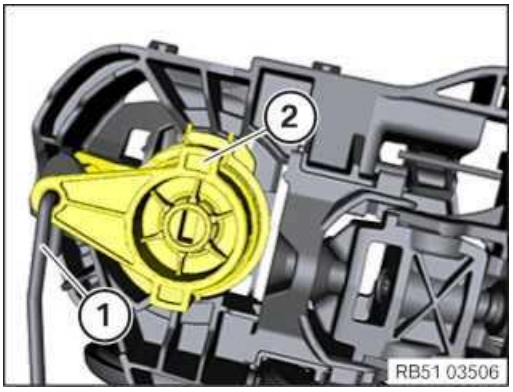
- Lift the tab (1) over the latch mechanism, twist it upwards and detach the Bowden cable (2).
- Detach the Bowden cable nipple (3) and remove the Bowden cable (2).

MAIN WORK

8 – Remove lock barrel lock barrel



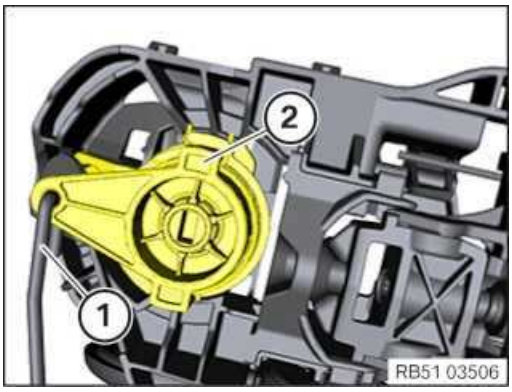
- Undo the cover (1) in the indicated areas (2).
- Remove the cover (1).



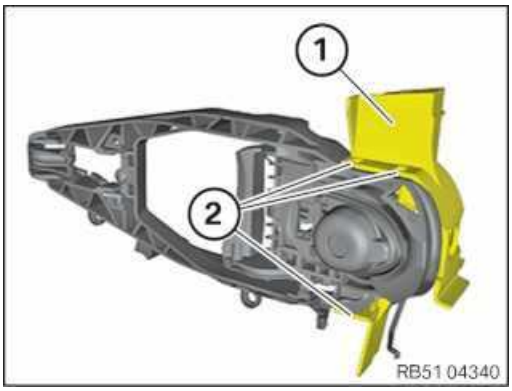
- Detach the locking rod (1).
- Twist the lock barrel (2) in clockwise direction and remove it.

9 – Install lock barrel

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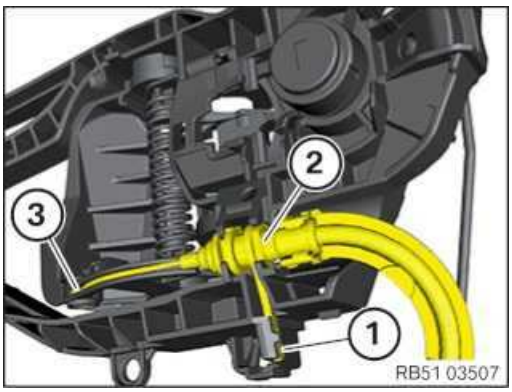
- Attach the locking rod (1).
- Install the lock barrel (2) and turn it counter-clockwise.



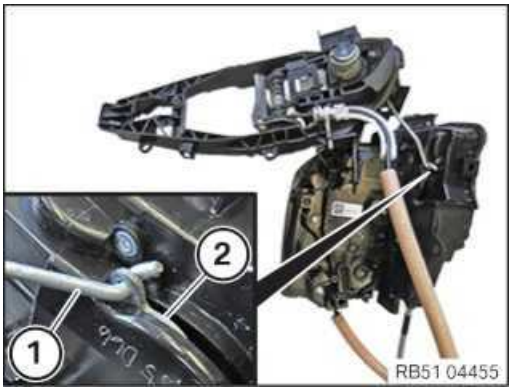
- Install the cover (1).
- Engage the cover (1) at the points (2).

POSTPROCESSES

10 – Install the outer door handle support

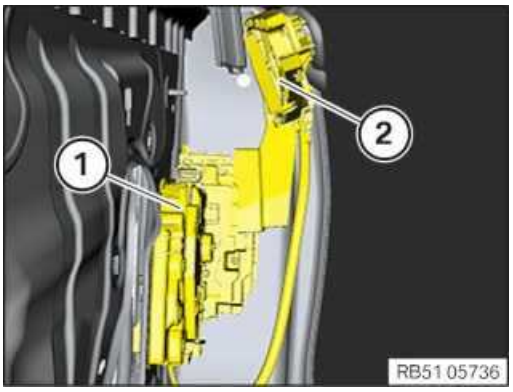


- Attach the Bowden cable nipple (3).
- Twist and lock the Bowden cable (2) and the tab (1).

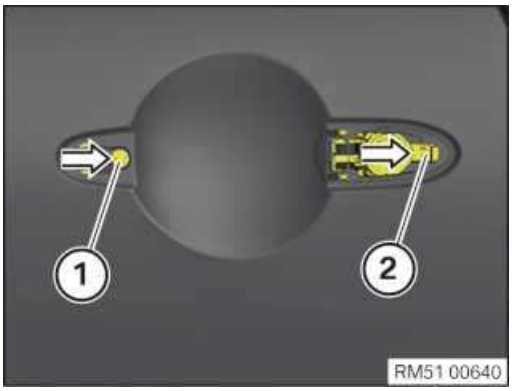


- Attach the linkage (1) in the door lock (2).

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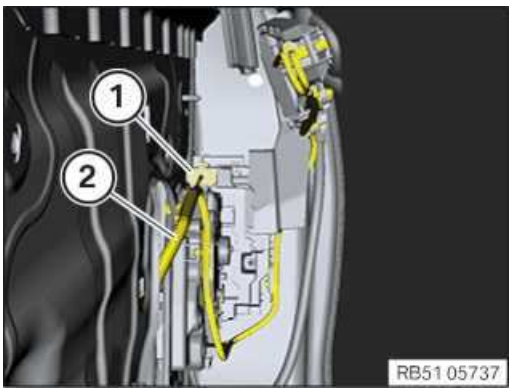
- Guide the door lock (1) together with the outside door handle support (2) into the door.



- Insert the outside door handle support (2) into the fixture toward the rear.
- Tighten down screw (1).

Outside door handle support to door

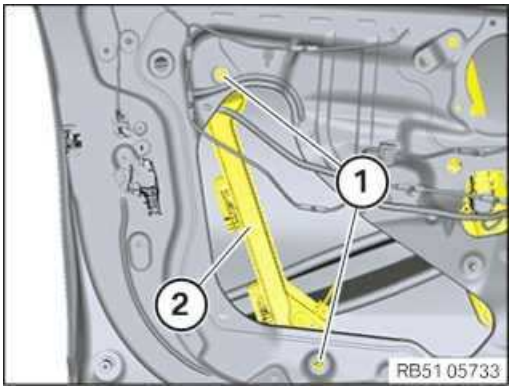
Screw		Tightening torque	2,6 Nm



- Connect and lock the connector (1) on the door lock.

  Fasten the vehicle wiring harness (2) on the door lock and the outside door handle support.

11 – Partially install the power windows

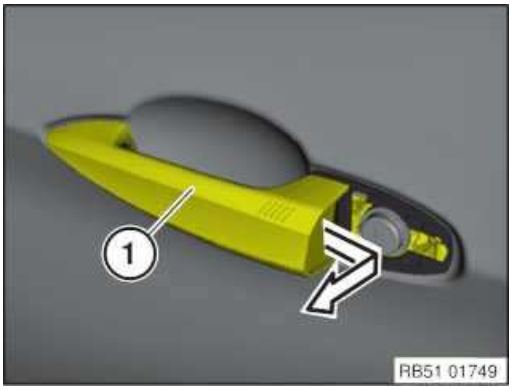


- Correctly position the power windows (2).
- Tighten nuts (1).

Window regulator to door

Nut M6, self-locking		Tightening torque	9,5 Nm

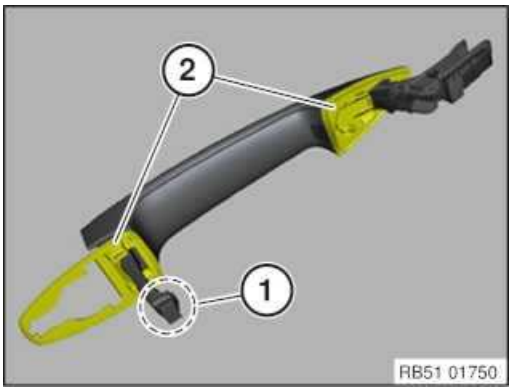
12 – Install the outside door handle



- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

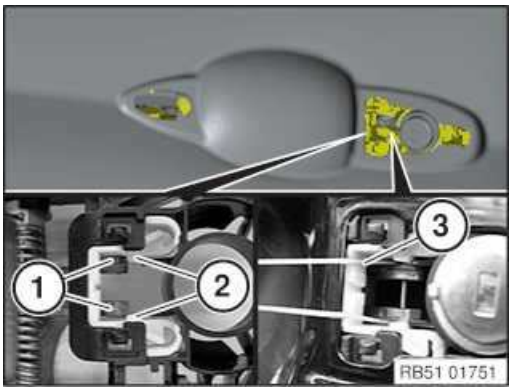
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

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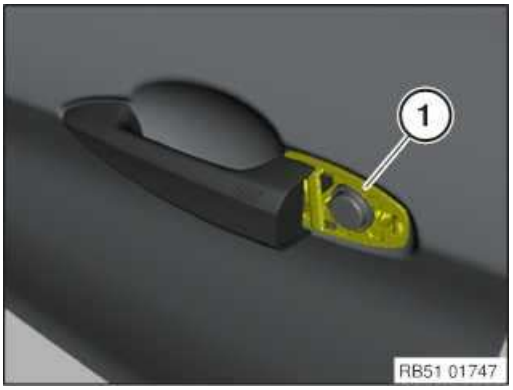
- Check the fixture (1) for damage.

  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.

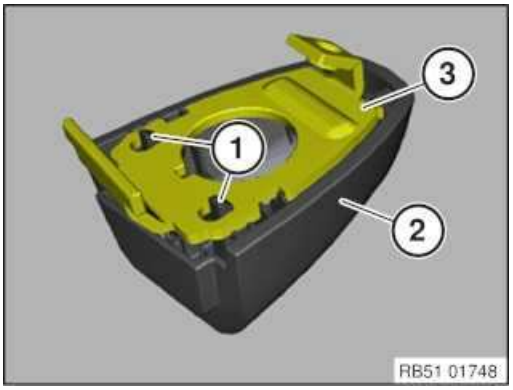


- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

13 – Install the cover on the outside door handle

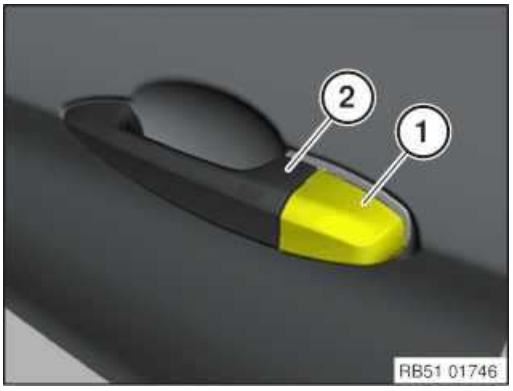


- Make sure the gasket (1) is fitted correctly.



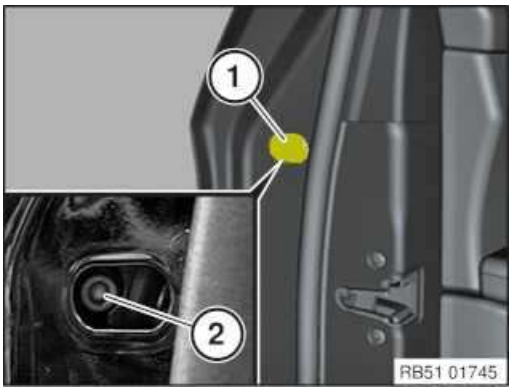
- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.

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- Tighten down screw (2).

Attachment bell to outside door handle support

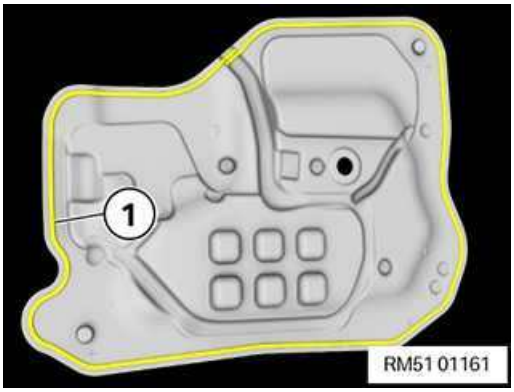
Screw		Tightening torque	3 Nm

- Mount the cover (1).

14 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

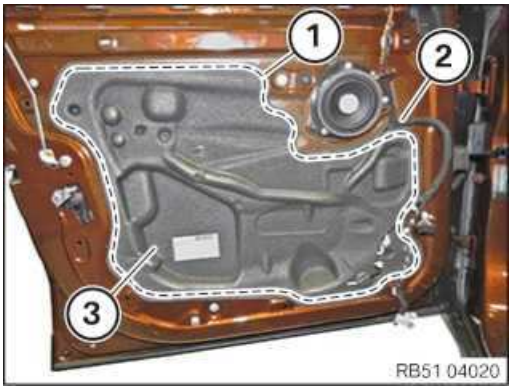
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

15 – Install front door trim panel

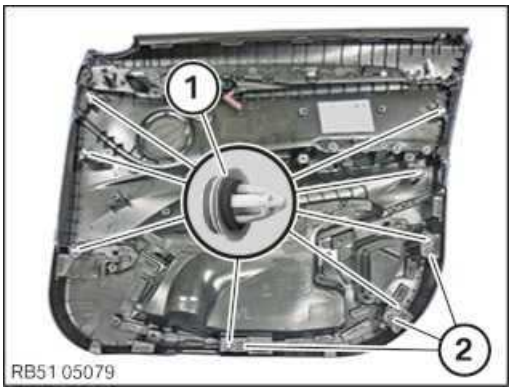
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RISK OF DAMAGE

Scratches.

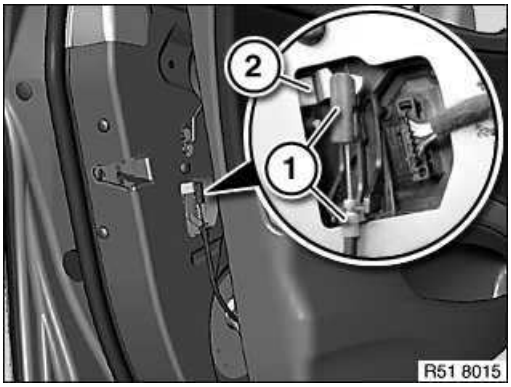
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

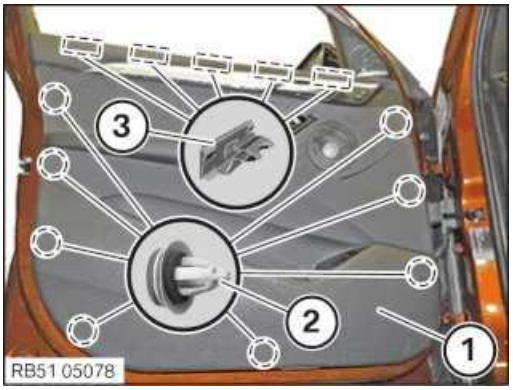


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

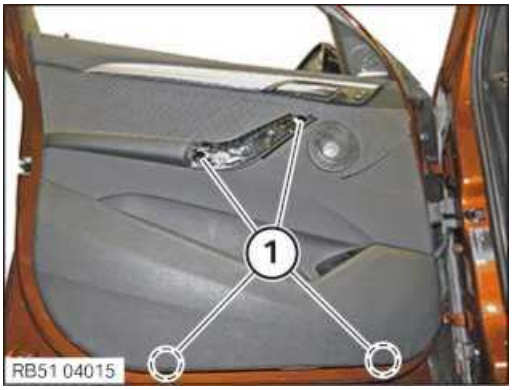
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

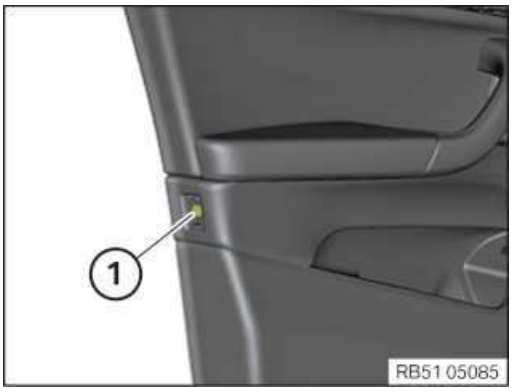


- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

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- If fitted: Tighten down screw (1).

Door trim panel to door

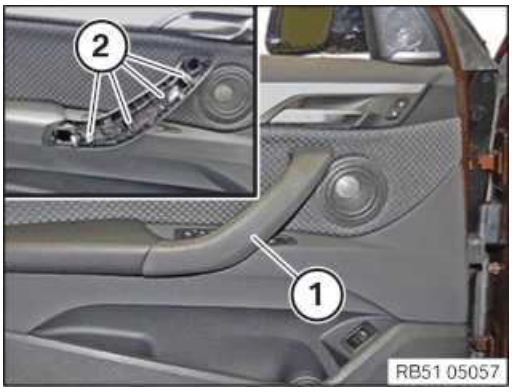
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

16 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Outside door handle support to door — Used in step 10

Screw		Tightening torque	2,6 Nm

Window regulator to door — Used in step 11

Nut M6, self-locking		Tightening torque	9,5 Nm

Attachment bell to outside door handle support — Used in step 13

Screw		Tightening torque	3 Nm

Door trim panel to door — Used in step 15

Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 14

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51 21 170 Removing and installing/replacing left or right front outside door handle

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

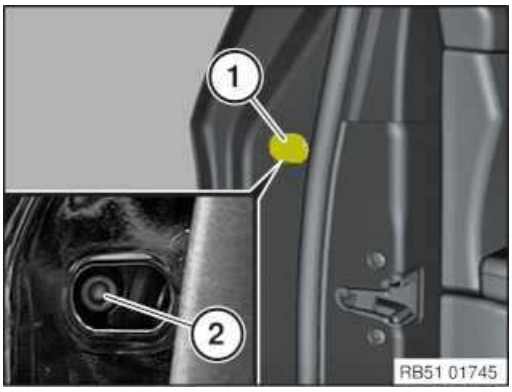
- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

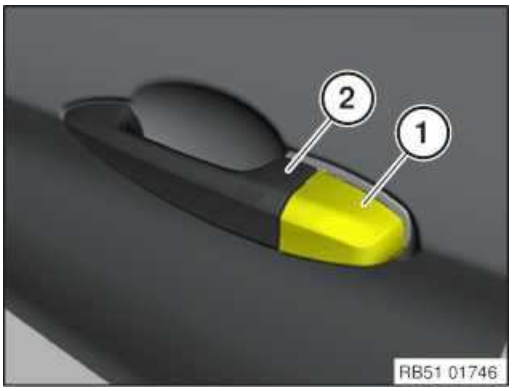
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on the outside door handle



- Lever out the cover (1).
- Release screw (2) below it.

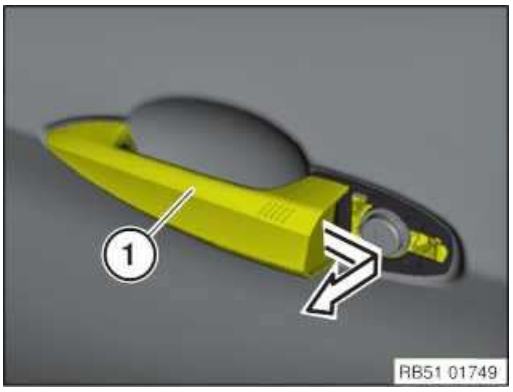


- Pull off the cover (1) with the outside door handle (2) slightly open.

MAIN WORK

2 – Remove the outside door handle

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- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

3 – When replacing the front outside door handle



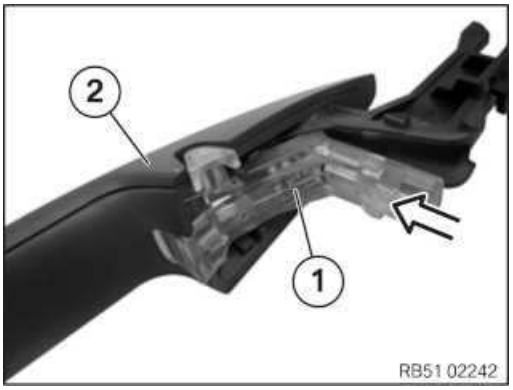
- **Version with Comfort Access:**
- Check the outside door handle for proper function before painting.

  Connect all connectors to outside door handle and wait approx. 10 seconds.

  Perform convenient closing/opening.
- Paint outside door handle before installation.

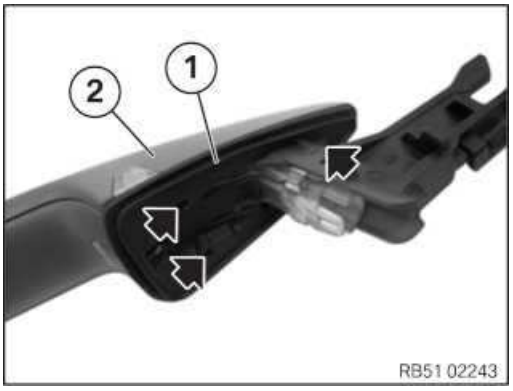
  Do not paint the marked area of the outside door handle.

  Do not exceed drying temperature of 60 °C.



- **Version with light package:**

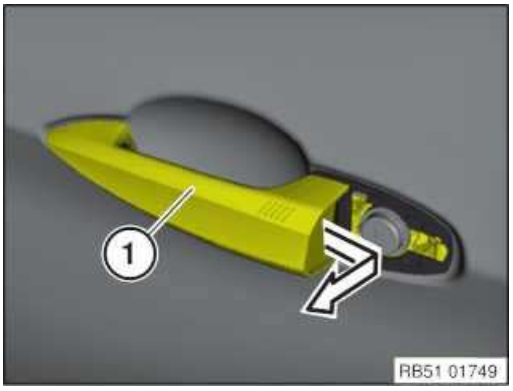
  Clip the lighting unit (1) into the outside door handle (2) in direction of arrow.



- Mount the seal (1) on the outside door handle (2).

  Make sure the gasket (1) is fitted correctly.

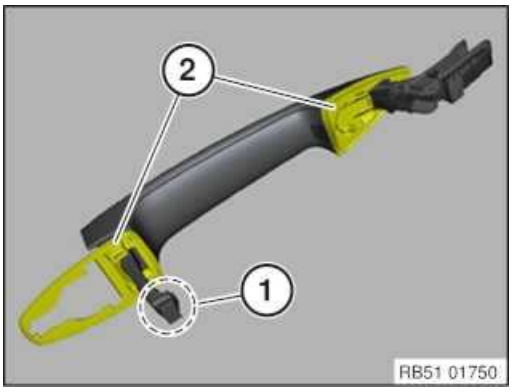
4 – Install the outside door handle



- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

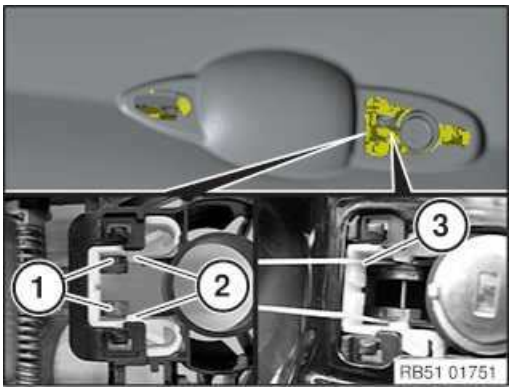
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

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- Check the fixture (1) for damage.

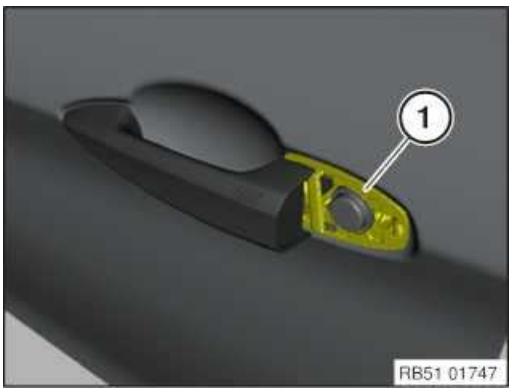
  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.



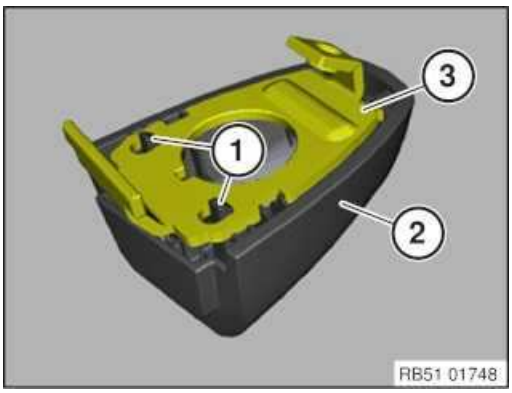
- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

POSTPROCESSES

5 – Install the cover on the outside door handle



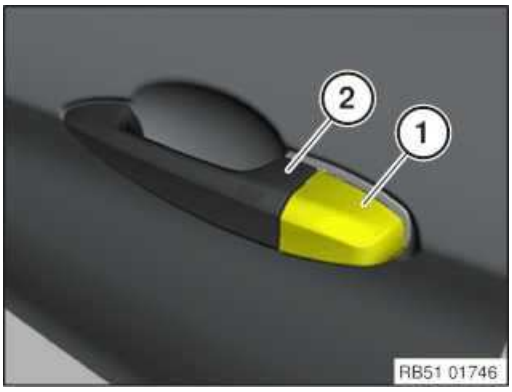
- Make sure the gasket (1) is fitted correctly.



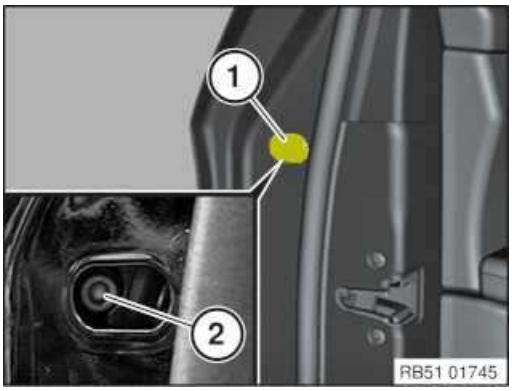
- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).

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- Install the cover (1) with the outside door handle (2) slightly open.



- Tighten down screw (2).

Attachment bell to outside door handle support

Screw		Tightening torque	3 Nm

- Mount the cover (1).

Additional Information

Overview of Tightening Torques

Attachment bell to outside door handle support Used in step 5

Screw		Tightening torque	3 Nm

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51 21 233 Removing and installing/replacing left or right front outside door handle Bowden cable

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

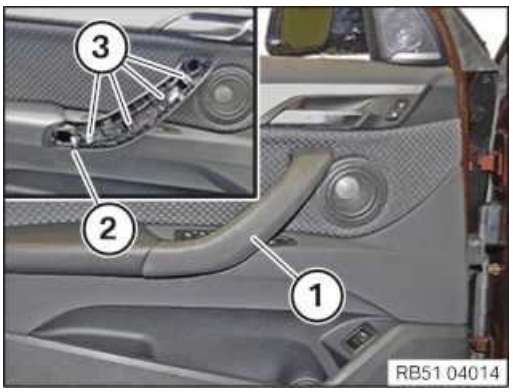
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

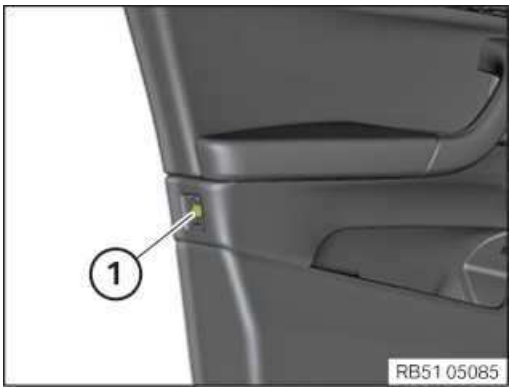
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RISK OF DAMAGE

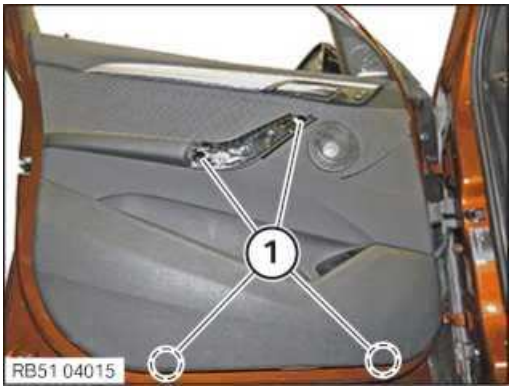
Scratches.

Tools and sharp-edged components can cause scratches.

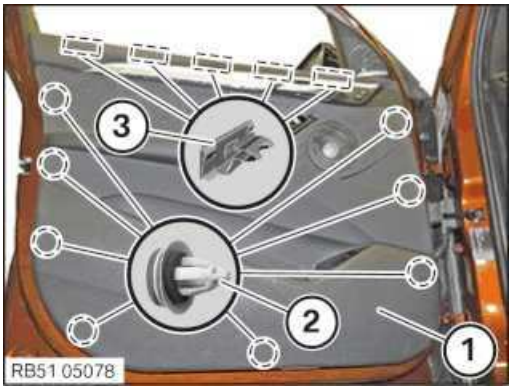
- Protect working area.
- Handle tools and components carefully.



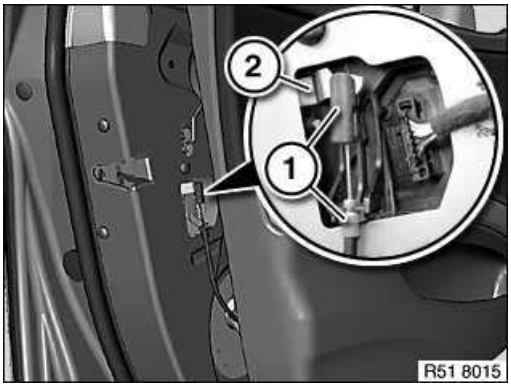
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps (3) at the top.



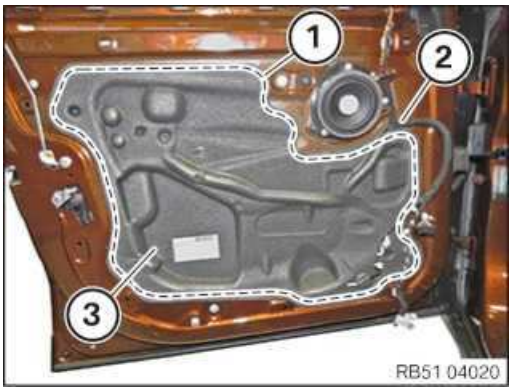
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

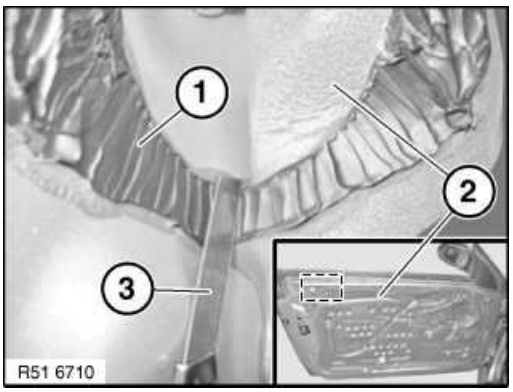
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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

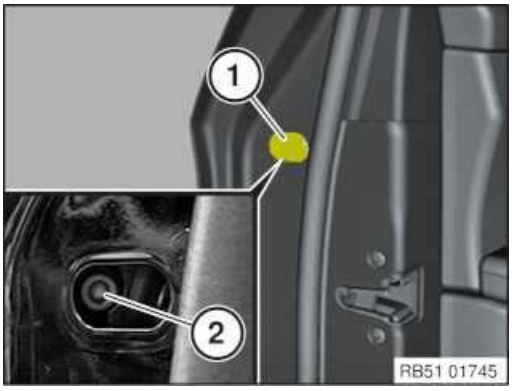


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

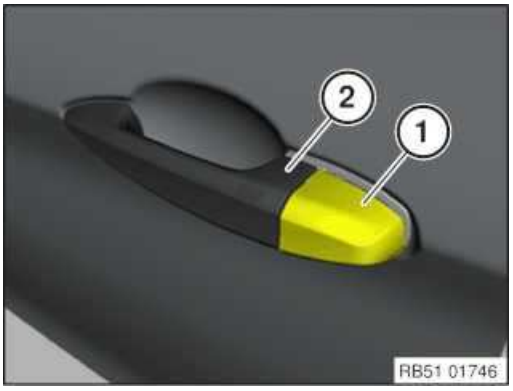


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Remove cover on the outside door handle



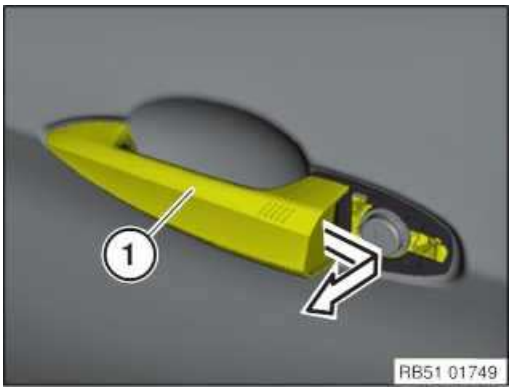
- Lever out the cover (1).
- Release screw (2) below it.



- Pull off the cover (1) with the outside door handle (2) slightly open.

5 – Remove the outside door handle

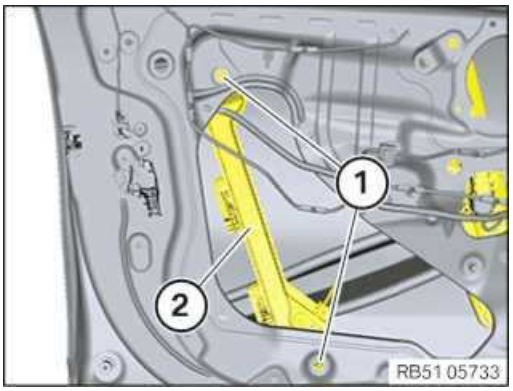
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- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

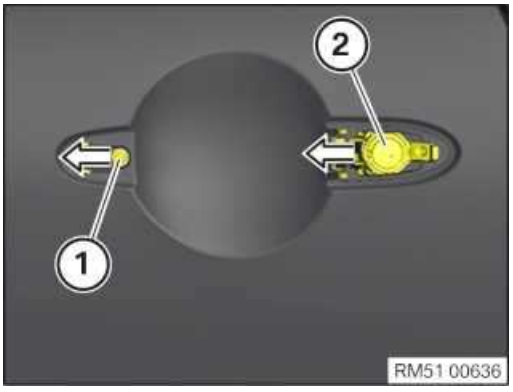
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

6 – Partially remove power window regulator

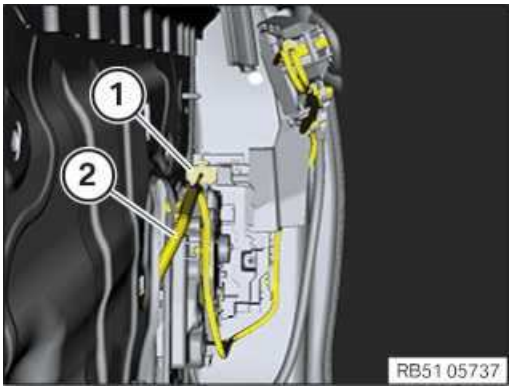


- Loosen nuts (1).
- Carefully slide the power windows (2) to the side.

7 – Remove door lock

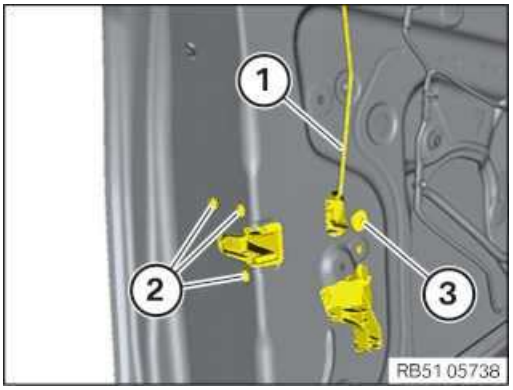


- Loosen screw (1).
- Slide the outside door handle support (2) towards the front and feed out inwards.



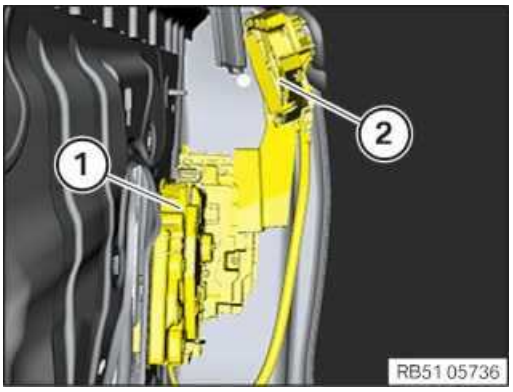
- Unlock and disconnect the plug connection (1) on the door lock.

  Release the vehicle wiring harness (2) from the door lock and the outside door handle support.



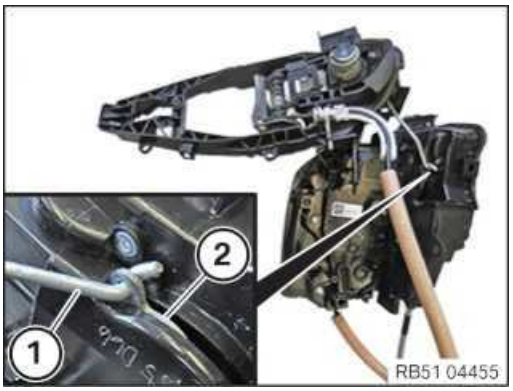
- Unclip locking rod (1).
- Loosen screws (2) and (3).

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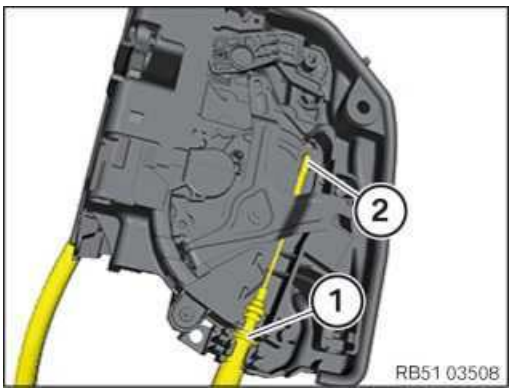


- Guide out the door lock (1) together with the outer door handle support (2) from the door.

  Make sure that the seal from the door lock is not damaged when removing.



- Detach the linkage (1) from the door lock (2).

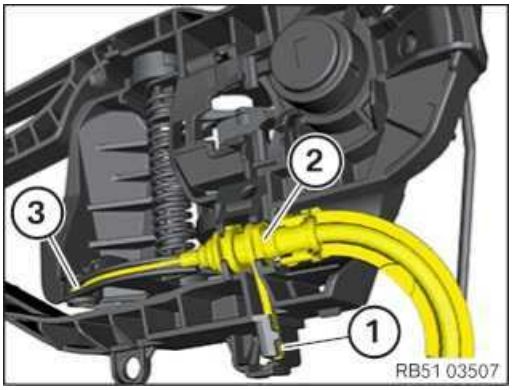


- Detach the Bowden cable (1).
- Detach the Bowden cable nipple (2).

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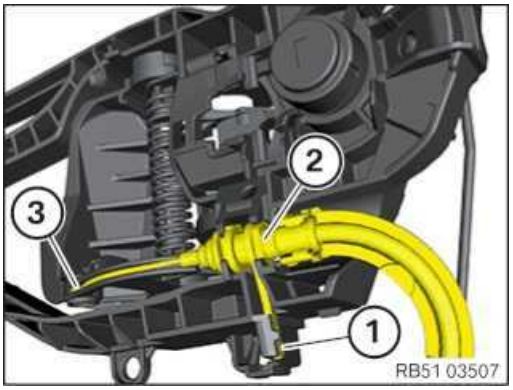
MAIN WORK

8 – Removing the Bowden cable for the outside door handle



- Lift the tab (1) over the latch mechanism, twist it upwards and detach the Bowden cable (2).
- Detach the Bowden cable nipple (3) and remove the Bowden cable (2).

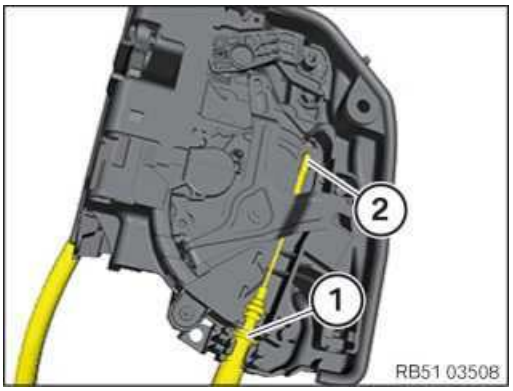
9 – Installing the Bowden cable for the outside door handle



- Attach the Bowden cable nipple (3).
- Twist the Bowden cable (1) tab (2) and lock.

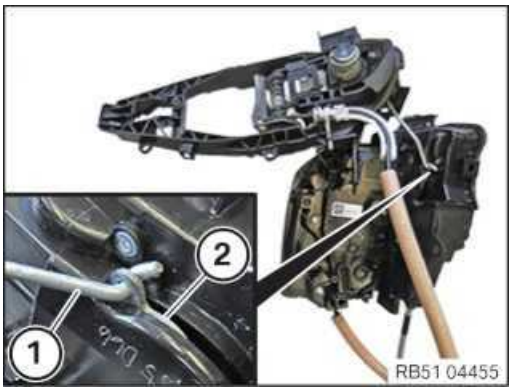
POSTPROCESSES

10 – Install door lock

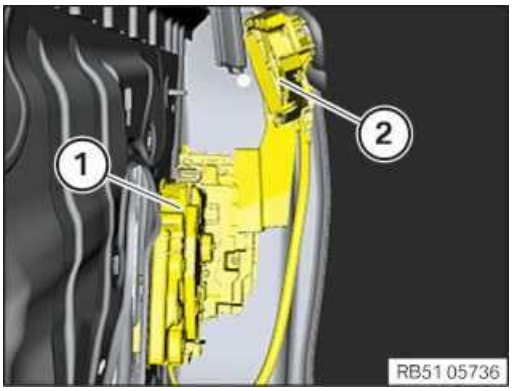


- Attach the Bowden cable nipple (2).
- Attach the Bowden cable (1).

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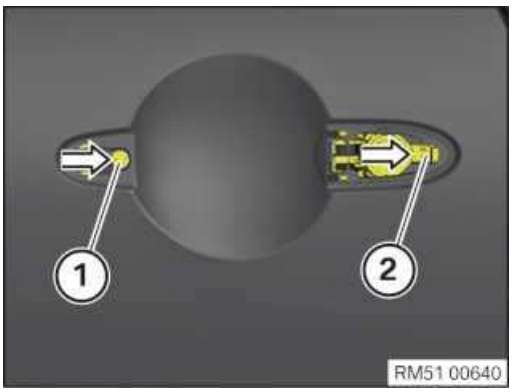


- Attach the linkage (1) in the door lock (2).



- Guide in the door lock (1) together with the outside door handle support (2) in the door.

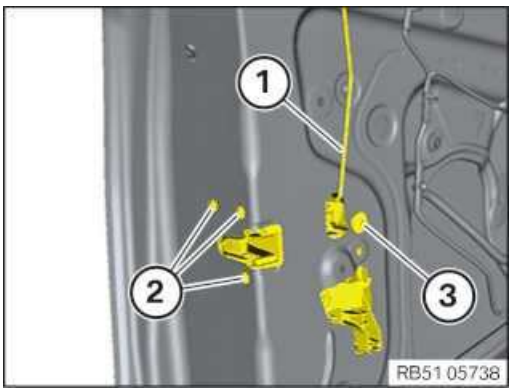
  Make sure the new seal from the door lock is not damaged during installation.



- Feed the support (2) into the mounting towards the rear.
- Tighten down screw (1).

Outside door handle support to door

Screw		Tightening torque	2,6 Nm



- Screw in screws (2), and (3) a few turns.
- First tighten the screws (2).

Door lock to door

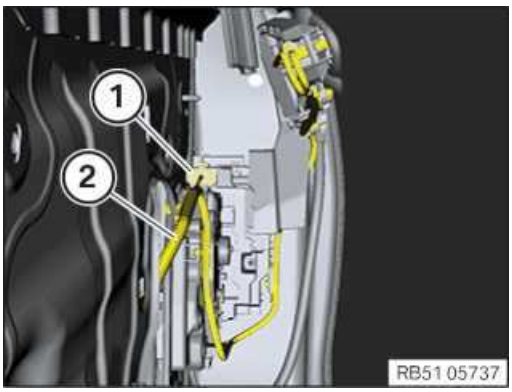
Screw		Tightening torque	8,8 Nm

- Then tighten screw (3).

Door lock to door

Screw		Tightening torque	8,8 Nm

- Clip in locking rod (1).

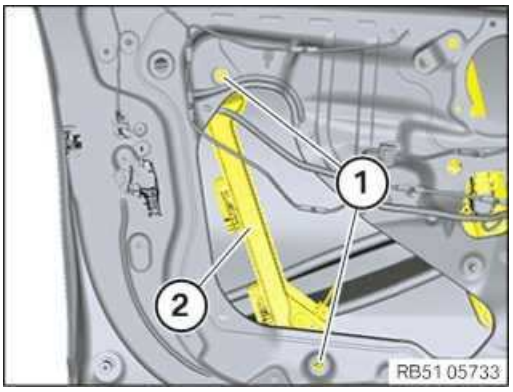


- Connect and lock the connector (1) on the door lock.

  Fasten the vehicle wiring harness (2) on the door lock and on the outside door handle support.

11 – Partially install the power windows

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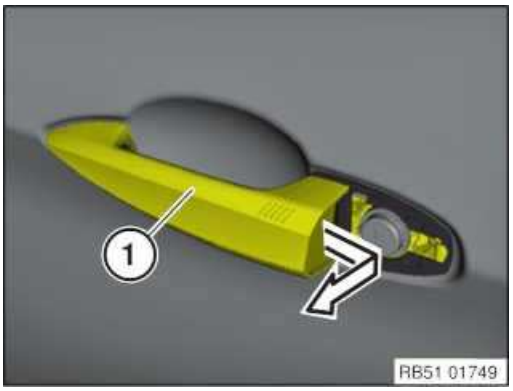


- Correctly position the power windows (2).
- Tighten nuts (1).

Window regulator to door

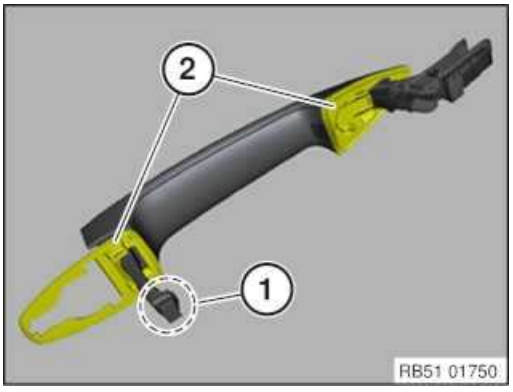
Nut M6, self-locking		Tightening torque	9,5 Nm

12 – Install the outside door handle



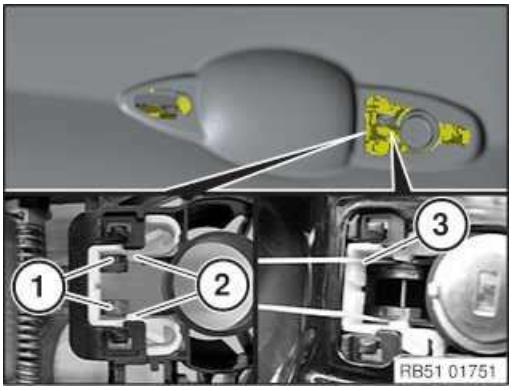
- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.



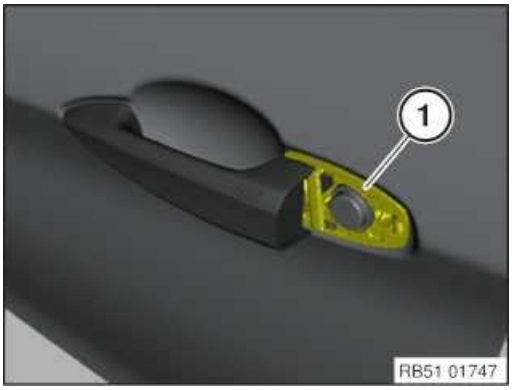
- Check the fixture (1) for damage.

  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.



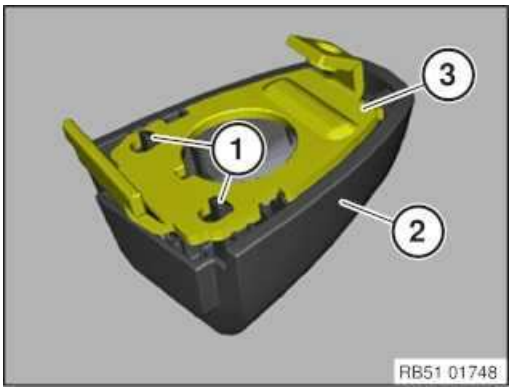
- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

13 – Install the cover on the outside door handle



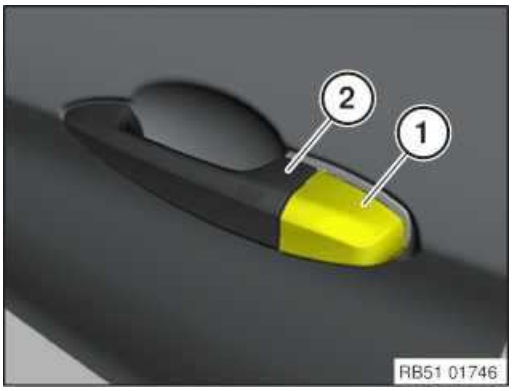
- Make sure the gasket (1) is fitted correctly.

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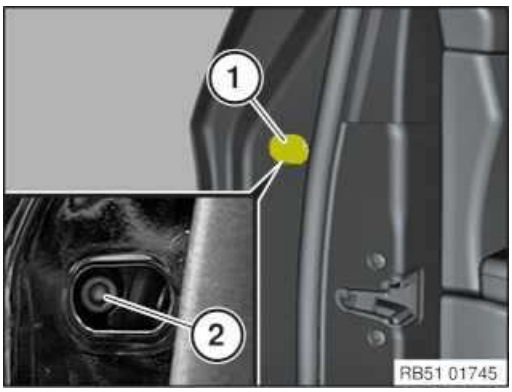


- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.



- Tighten down screw (2).

Attachment bell to outside door handle support

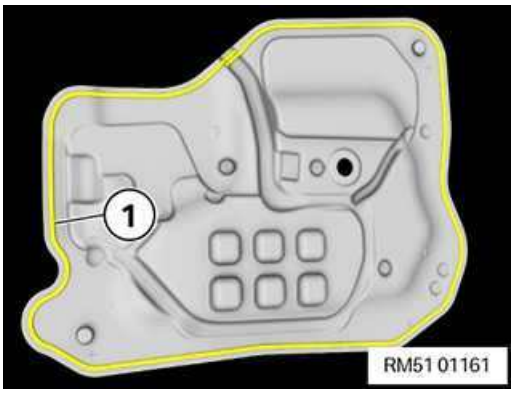
Screw		Tightening torque	3 Nm

- Mount the cover (1).

14 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

- Check sound insulation for damage.

Result

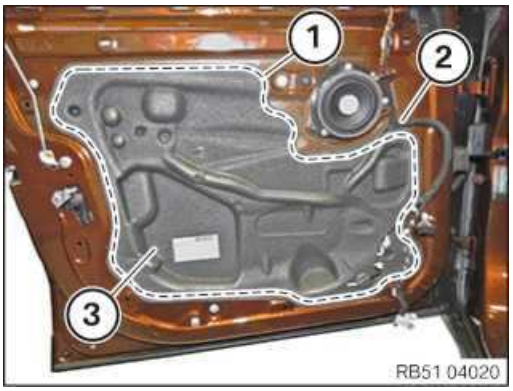
» The sound insulation is damaged.

Measure

- Replace the sound insulation.

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- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

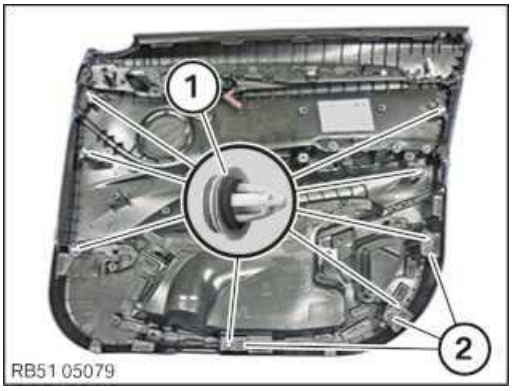
15 – Install front door trim panel

RISK OF DAMAGE

Scratches.

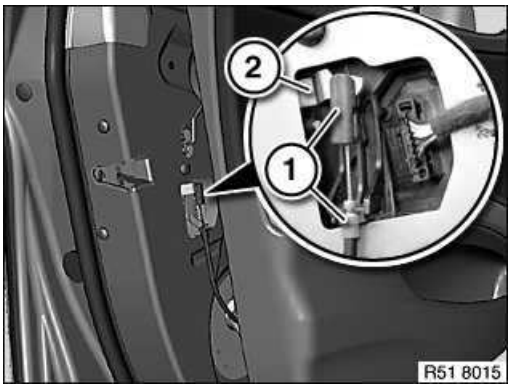
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



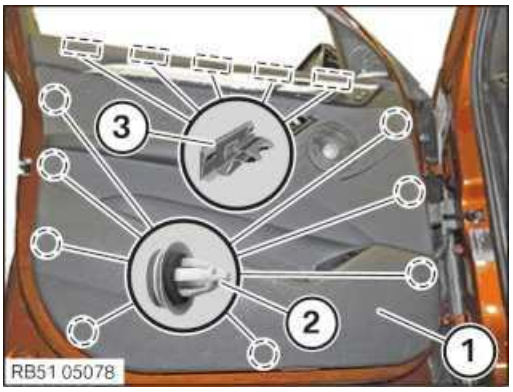
- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

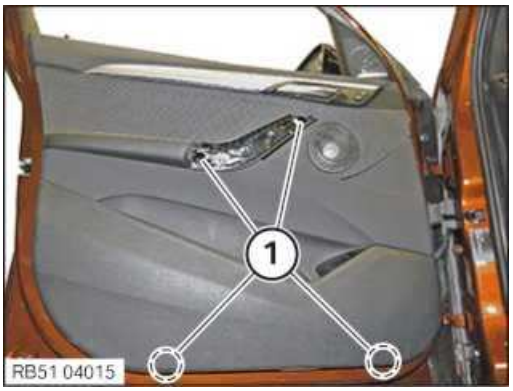


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).

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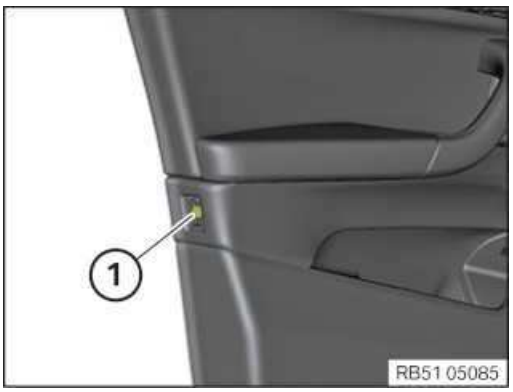
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

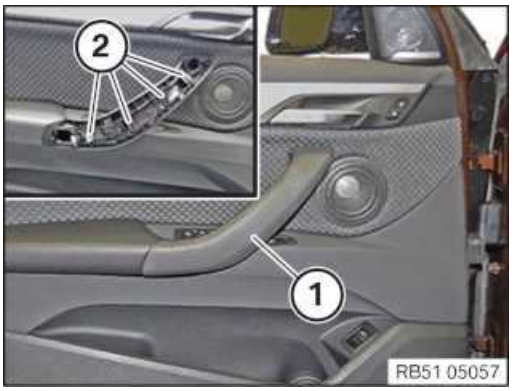
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

16 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

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Outside door handle support to door			Used in step 10
Screw		Tightening torque	2,6 Nm

Door lock to door			Used in step 10
Screw		Tightening torque	8,8 Nm

Window regulator to door			Used in step 11
Nut M6, self-locking		Tightening torque	9,5 Nm

Attachment bell to outside door handle support			Used in step 13
Screw		Tightening torque	3 Nm

Door trim panel to door			Used in step 15
Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 14

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51 21 180 Removing and installing/replacing outside front door handle cover

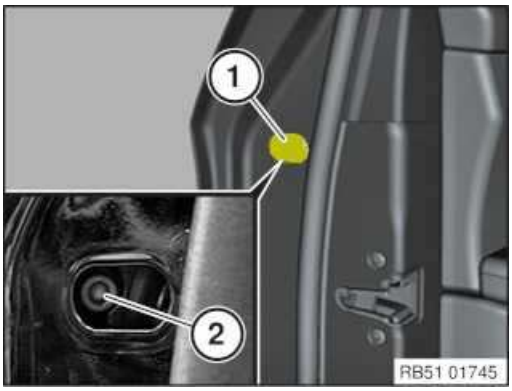
RISK OF DAMAGE

Paint damage.

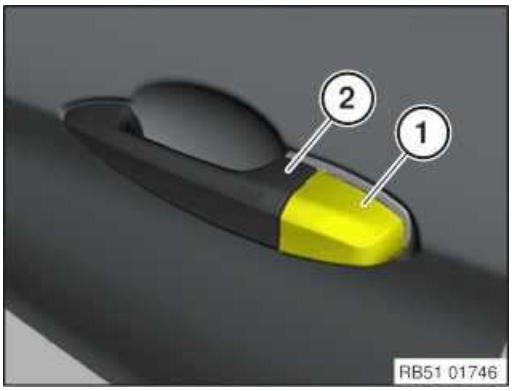
Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

1 – Remove cover on the outside door handle

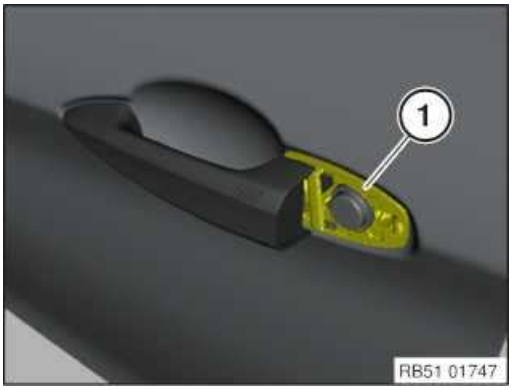


- Lever out the cover (1).
- Release screw (2) below it.



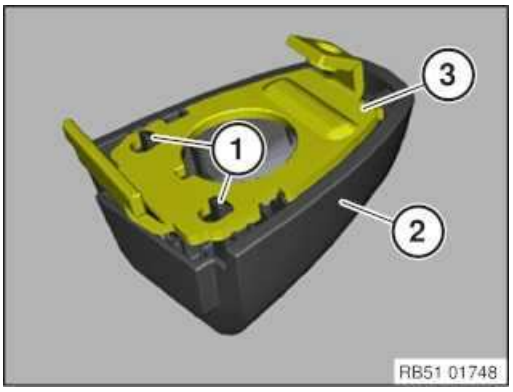
- Pull off the cover (1) with the outside door handle (2) slightly open.

2 – Install the cover on the outside door handle



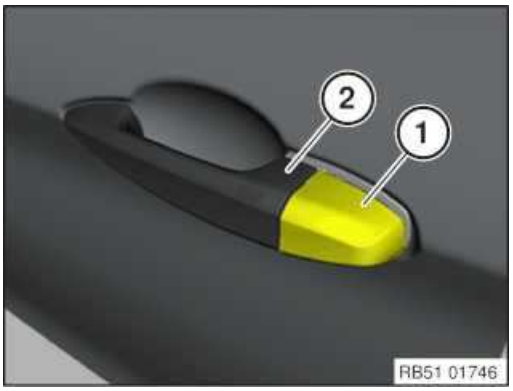
- Make sure the gasket (1) is fitted correctly.

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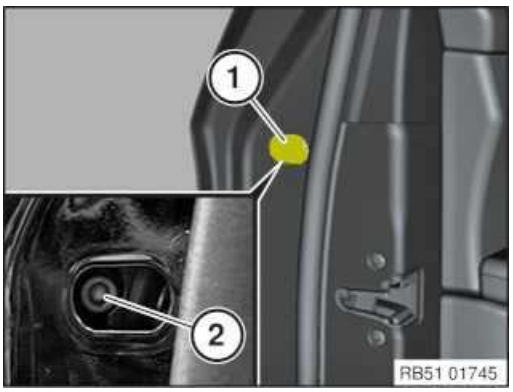


- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.



- Tighten down screw (2).

Attachment bell to outside door handle support

Screw		Tightening torque	3 Nm

- Mount the cover (1).

Additional Information

Overview of Tightening Torques

Attachment bell to outside door handle support Used in step 2

Screw		Tightening torque	3 Nm

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51 21 370 Removing and installing/replacing the cover on the bottom left or right of the front door

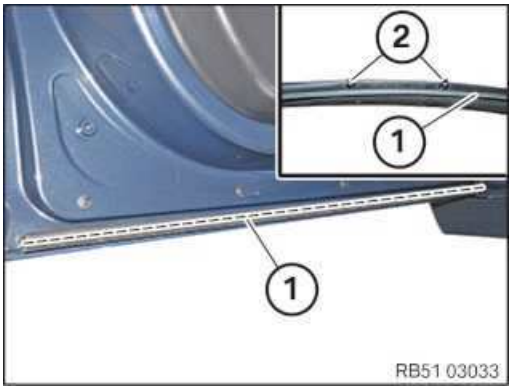
Prerequisite

- Front door is open.

NOTICE

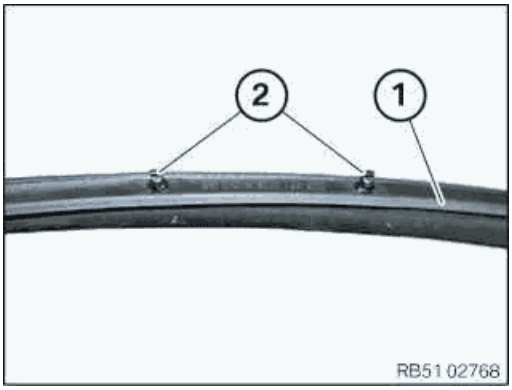
Description is for left component only. Procedure on the right side is identical.

1 – Removing the cover on the front door at the bottom



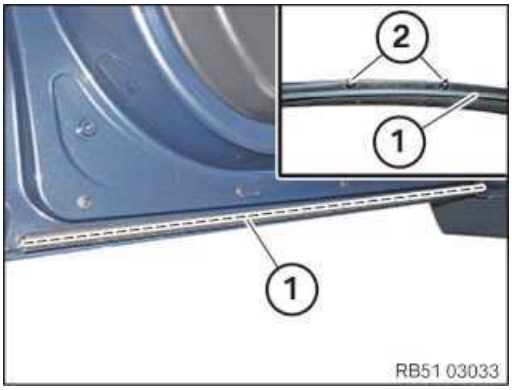
- Unclip the clips (2) along the dotted line using the special tool **2 298 505**.
- Remove the cover (1).

2 – Install the cover on the front door at bottom



- Check the clips of the (2) cover (1) for damage, renew if necessary.

  The clips (2) must not be damaged or missing.



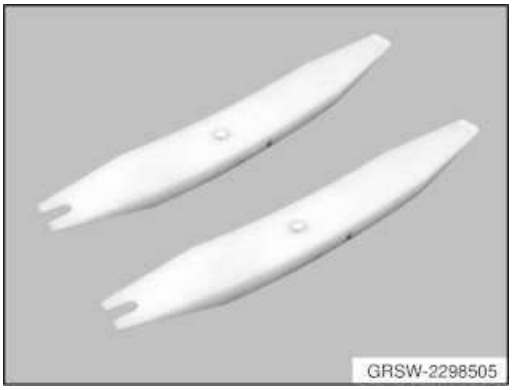
- Install the cover (1).
- Clip in the clips (2) along the dotted line.

Additional Information

Overview of Special Tools

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2 298 505 Wedge



Common

Used in step 1

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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51 21 092 Removing and installing/replacing the door lock of the driver's door

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

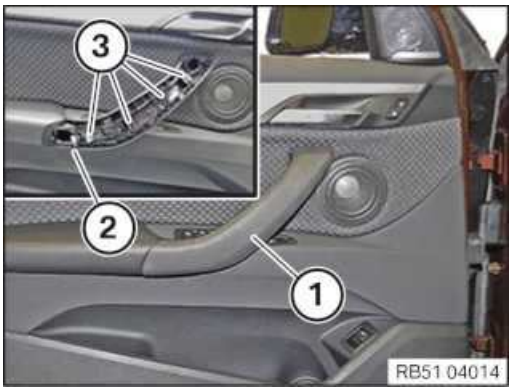
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

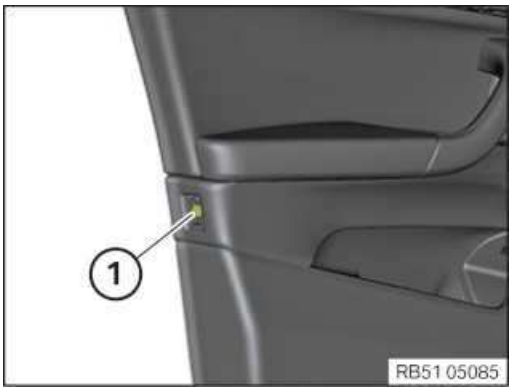
RISK OF DAMAGE

Scratches.

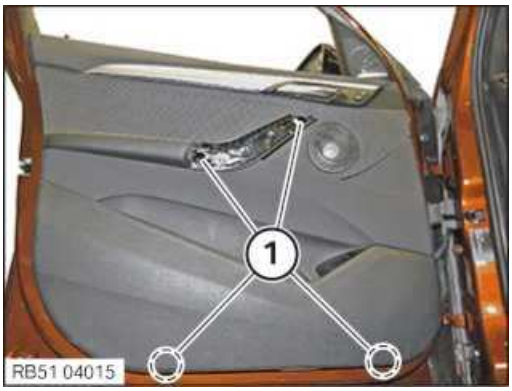
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

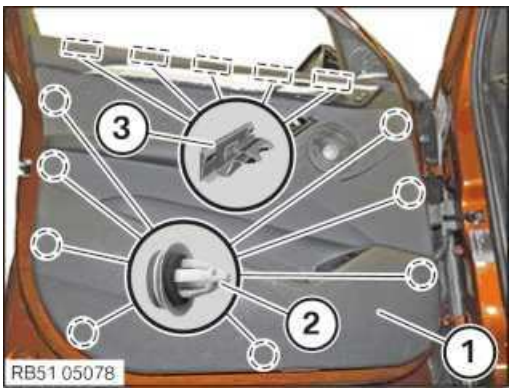
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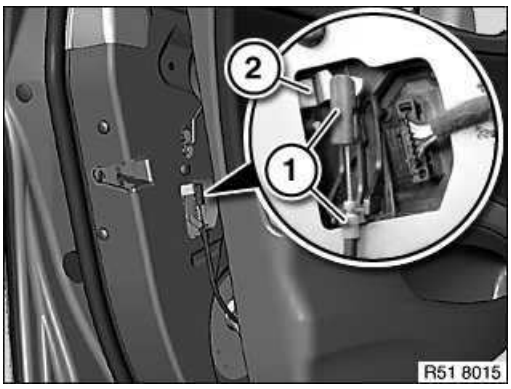
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



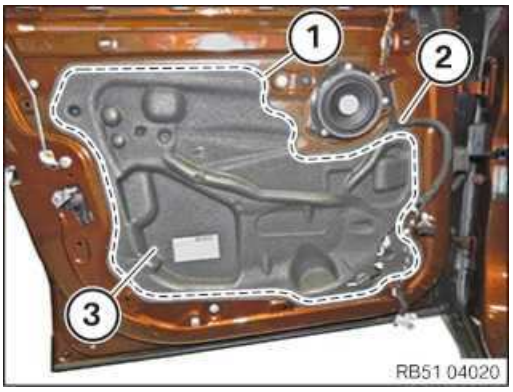
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

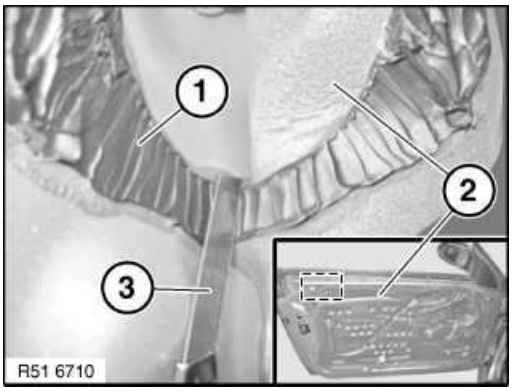
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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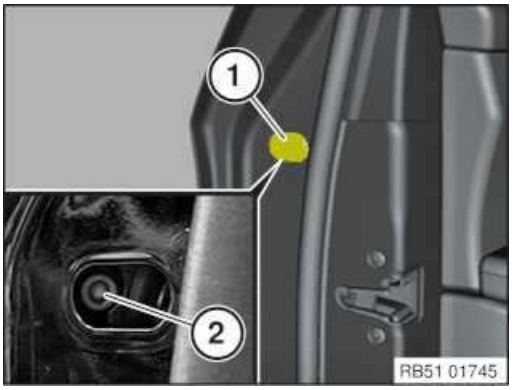


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

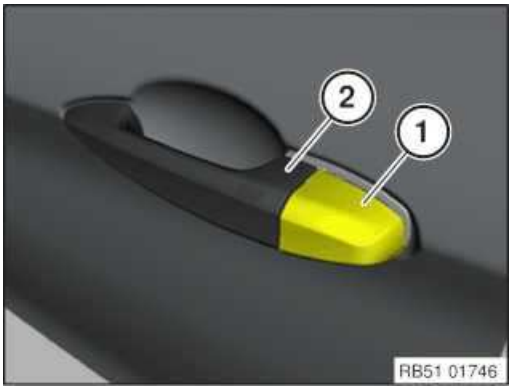


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Remove cover on the outside door handle

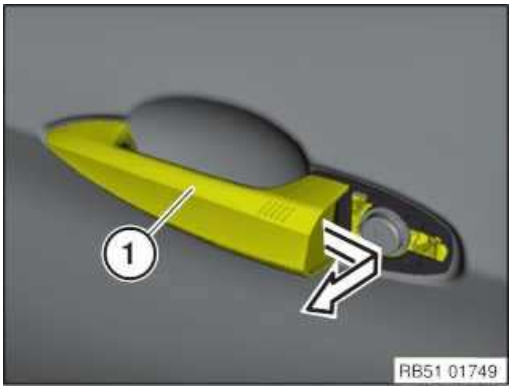


- Lever out the cover (1).
- Release screw (2) below it.



- Pull off the cover (1) with the outside door handle (2) slightly open.

5 – Remove the outside door handle

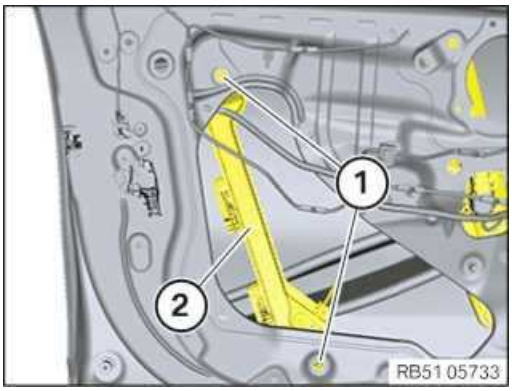


- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

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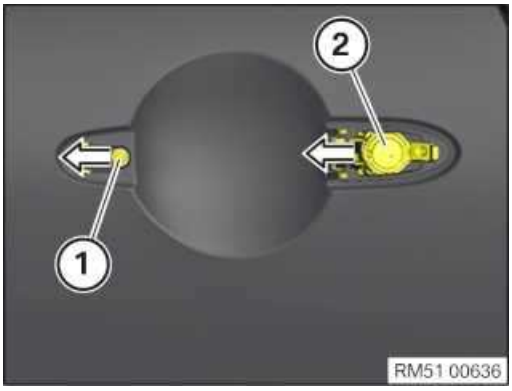
6 – Partially remove power window regulator



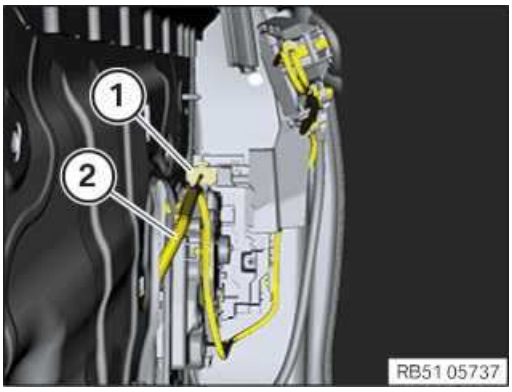
- Loosen nuts (1).
- Carefully slide the power windows (2) to the side.

MAIN WORK

7 – Remove door lock

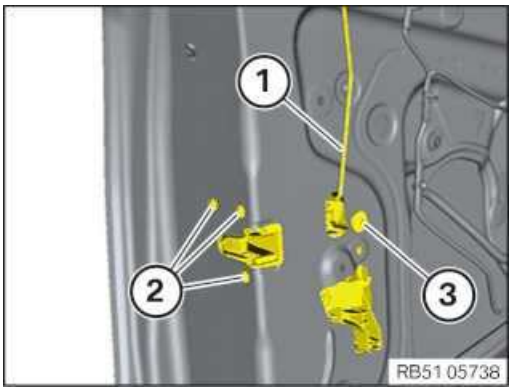


- Loosen screw (1).
- Slide the outside door handle support (2) towards the front and feed out inwards.



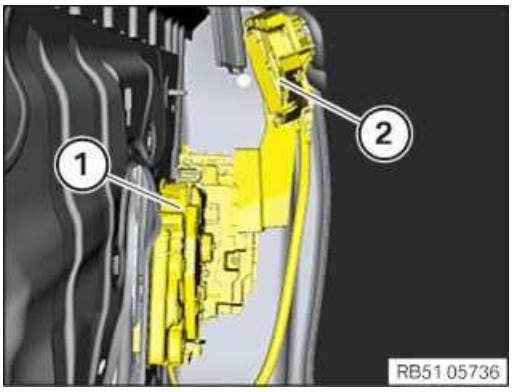
- Unlock and disconnect the plug connection (1) on the door lock.

  Release the vehicle wiring harness (2) from the door lock and the outside door handle support.



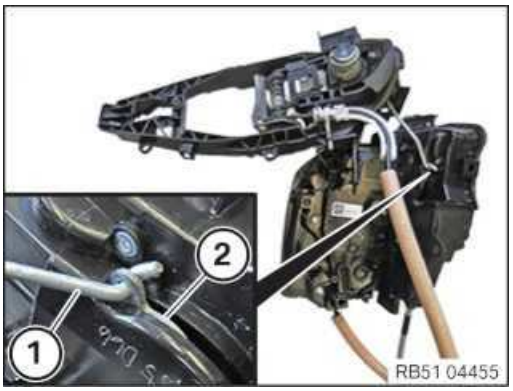
- Unclip locking rod (1).
- Loosen screws (2) and (3).

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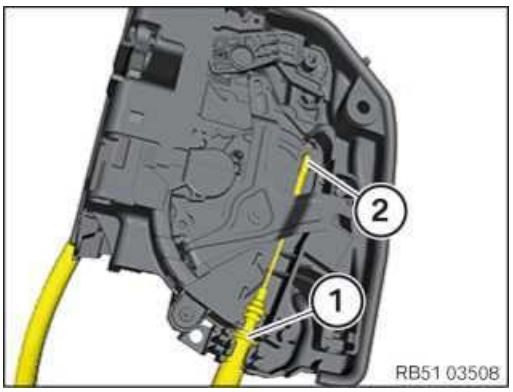


- Guide out the door lock (1) together with the outer door handle support (2) from the door.

  Make sure that the seal from the door lock is not damaged when removing.

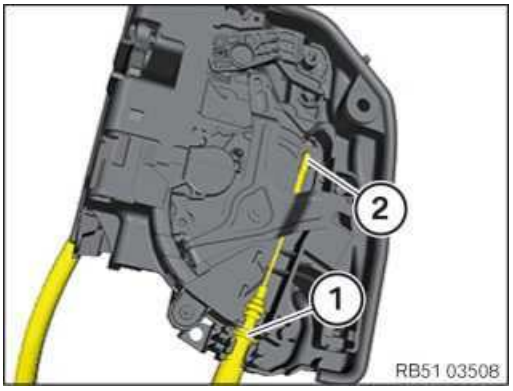


- Detach the linkage (1) from the door lock (2).

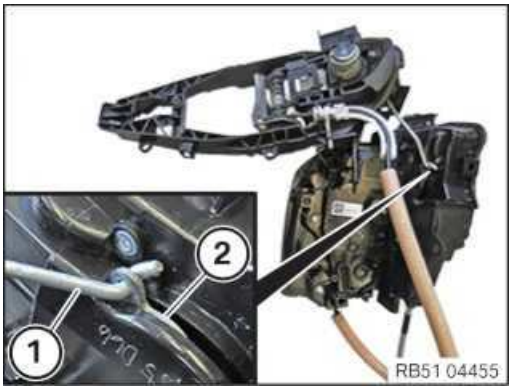


- Detach the Bowden cable (1).
- Detach the Bowden cable nipple (2).

8 – Install door lock

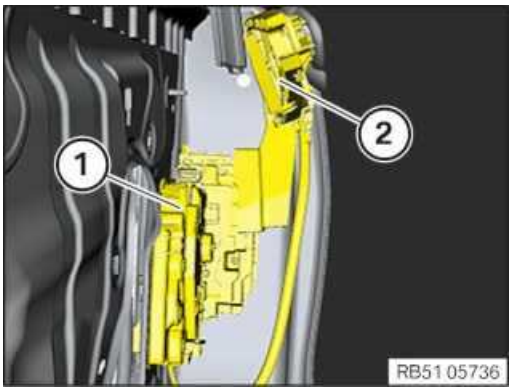


- Attach the Bowden cable nipple (2).
- Attach the Bowden cable (1).



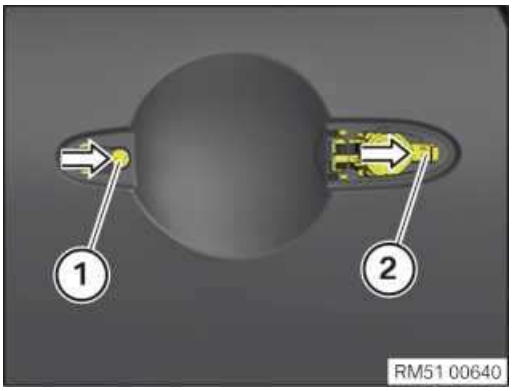
- Attach the linkage (1) in the door lock (2).

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- Guide in the door lock (1) together with the outside door handle support (2) in the door.

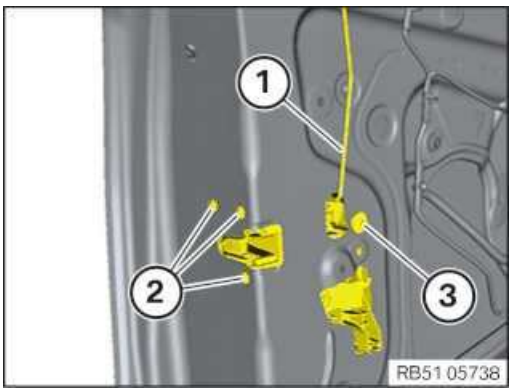
  Make sure the new seal from the door lock is not damaged during installation.



- Feed the support (2) into the mounting towards the rear.
- Tighten down screw (1).

Outside door handle support to door

Screw		Tightening torque	2,6 Nm



- Screw in screws (2), and (3) a few turns.
- First tighten the screws (2).

Door lock to door

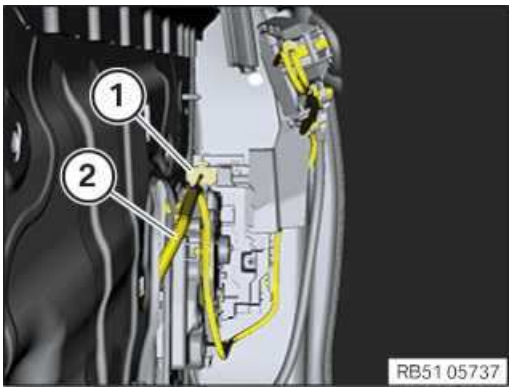
Screw		Tightening torque	8,8 Nm

- Then tighten screw (3).

Door lock to door

Screw		Tightening torque	8,8 Nm

- Clip in locking rod (1).



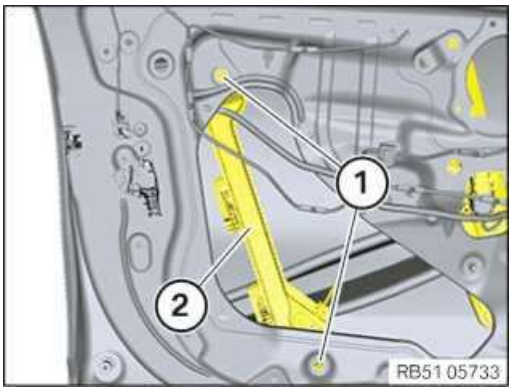
- Connect and lock the connector (1) on the door lock.

  Fasten the vehicle wiring harness (2) on the door lock and on the outside door handle support.

POSTPROCESSES

9 – Partially install the power windows

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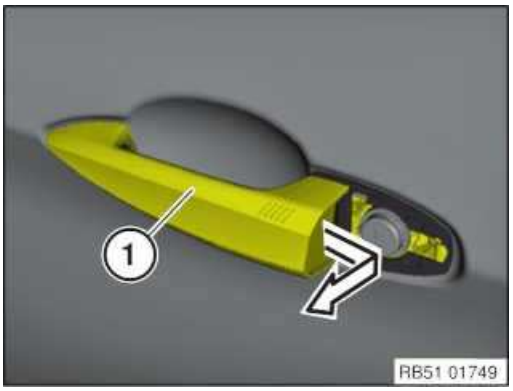


- Correctly position the power windows (2).
- Tighten nuts (1).

Window regulator to door

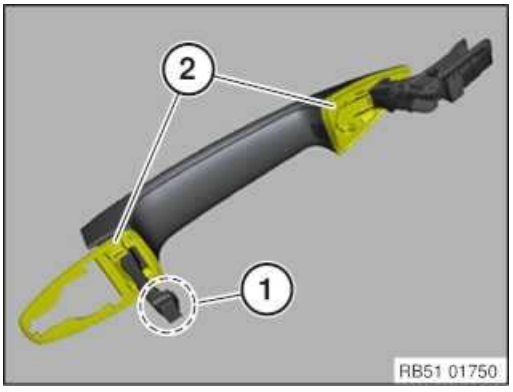
Nut M6, self-locking		Tightening torque	9,5 Nm

10 – Install the outside door handle



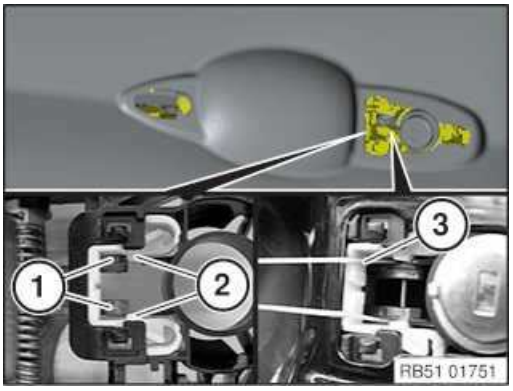
- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.



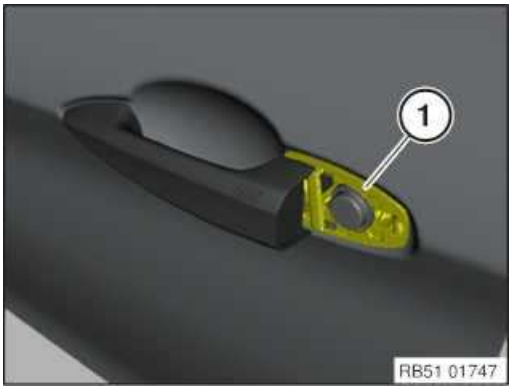
- Check the fixture (1) for damage.

  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.



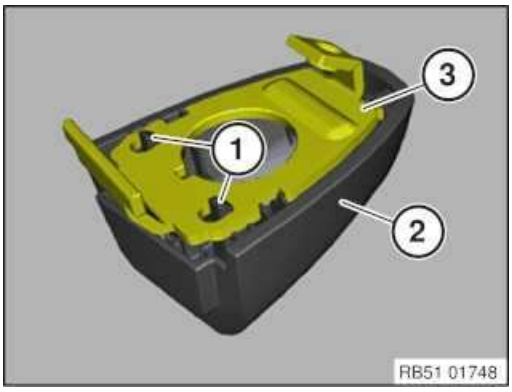
- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

11 – Install the cover on the outside door handle



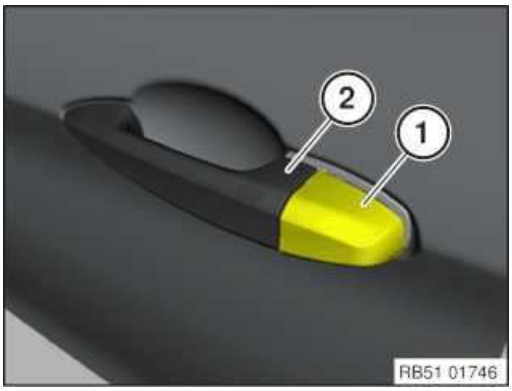
- Make sure the gasket (1) is fitted correctly.

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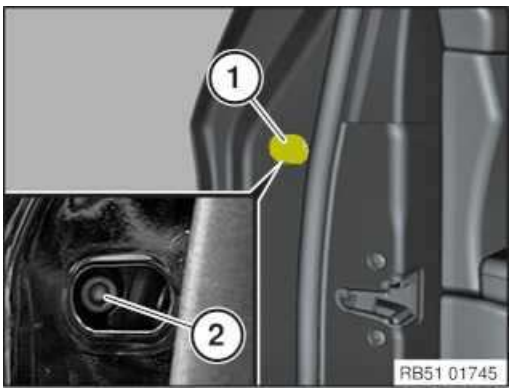


- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.



- Tighten down screw (2).

Attachment bell to outside door handle support

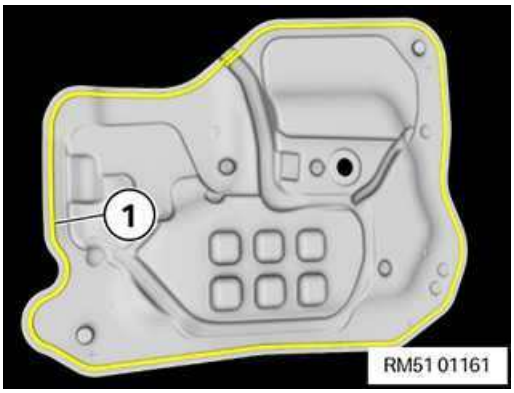
Screw		Tightening torque	3 Nm

- Mount the cover (1).

12 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

- Check sound insulation for damage.

Result

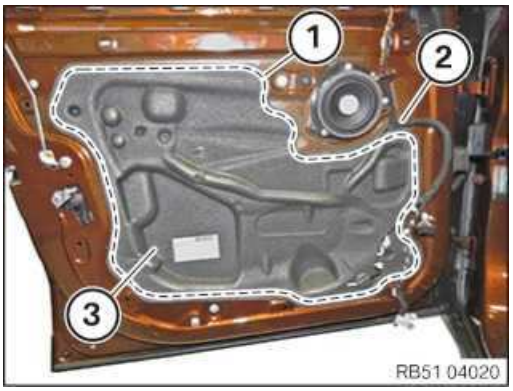
» The sound insulation is damaged.

Measure

- Replace the sound insulation.

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- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

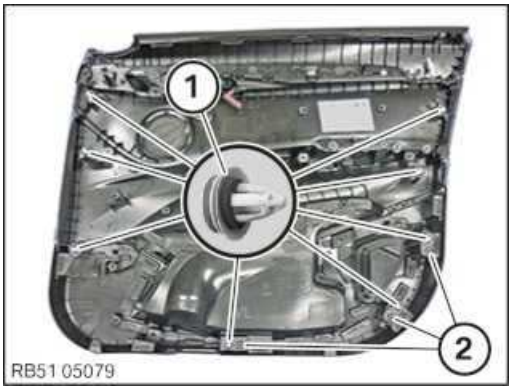
13 – Install front door trim panel

RISK OF DAMAGE

Scratches.

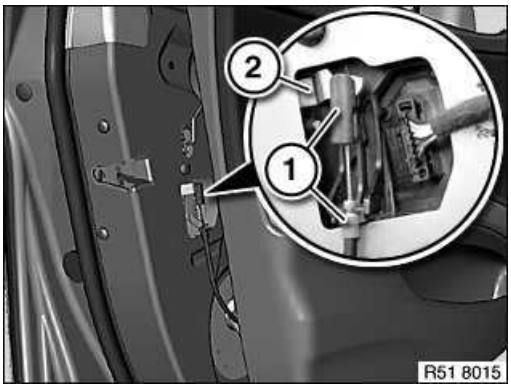
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



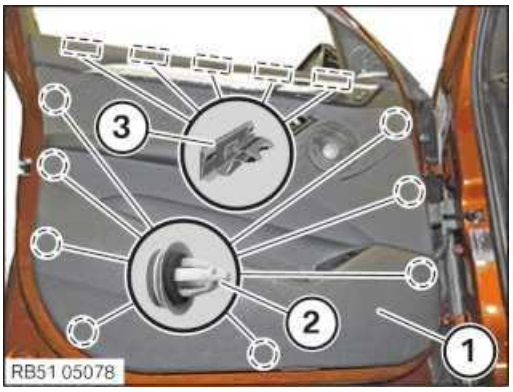
- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

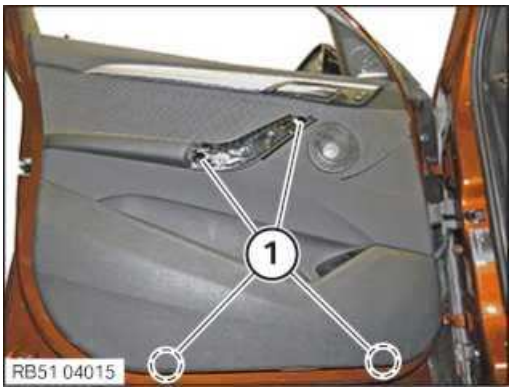


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).

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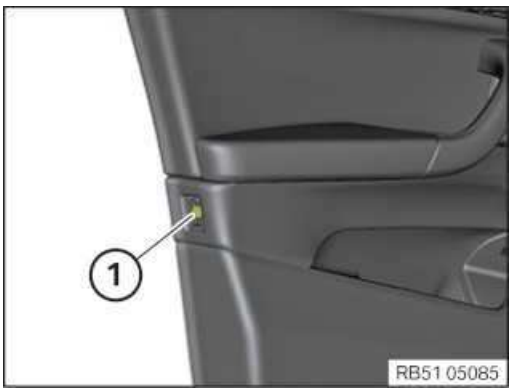
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

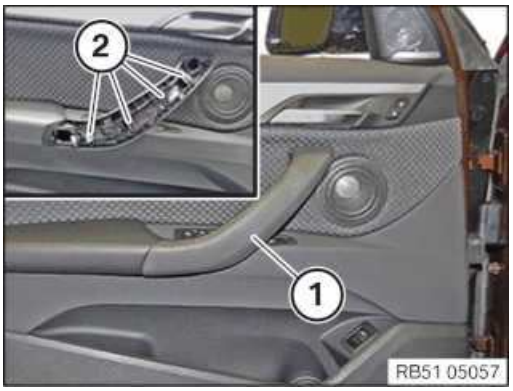
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

14 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

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Outside door handle support to door			Used in step 8
Screw		Tightening torque	2,6 Nm

Door lock to door			Used in step 8
Screw		Tightening torque	8,8 Nm

Window regulator to door			Used in step 9
Nut M6, self-locking		Tightening torque	9,5 Nm

Attachment bell to outside door handle support			Used in step 11
Screw		Tightening torque	3 Nm

Door trim panel to door			Used in step 13
Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 12

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51 21 111 Removing and installing/replacing the door lock of the front passenger door

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

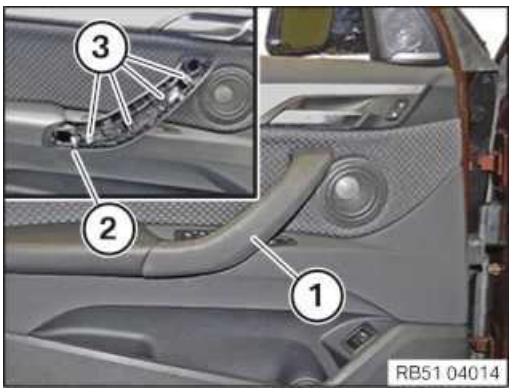
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

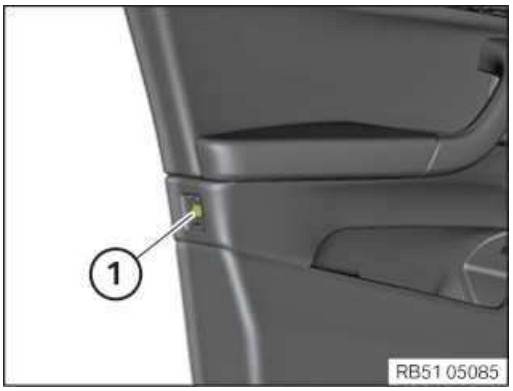
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RISK OF DAMAGE

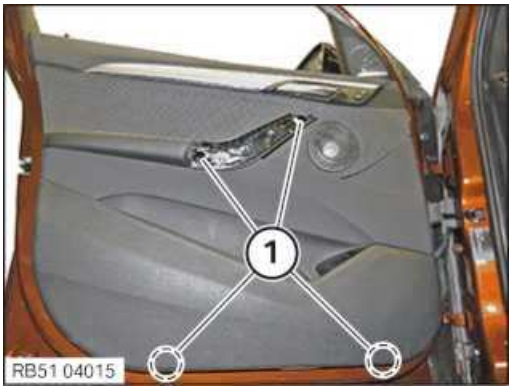
Scratches.

Tools and sharp-edged components can cause scratches.

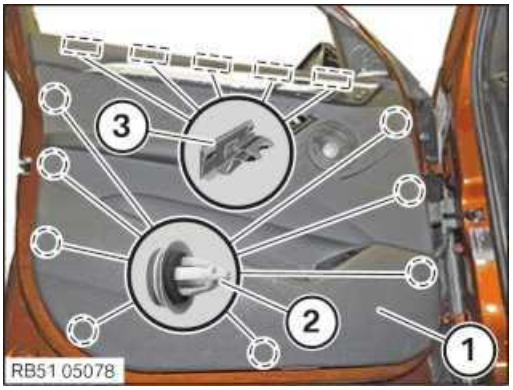
- Protect working area.
- Handle tools and components carefully.



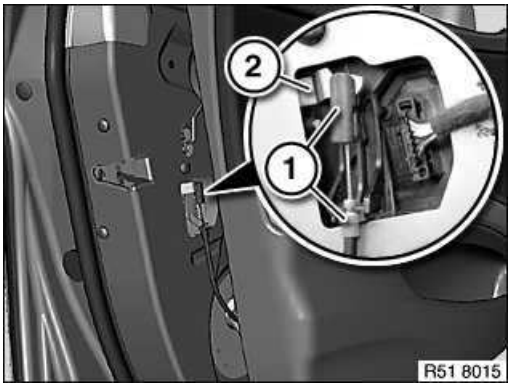
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps (3) at the top.



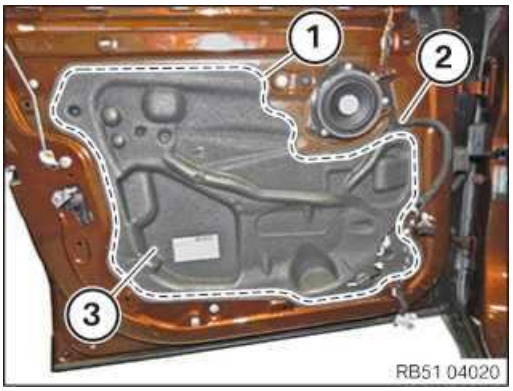
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

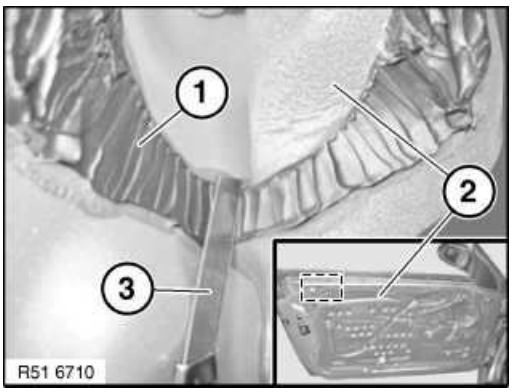
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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

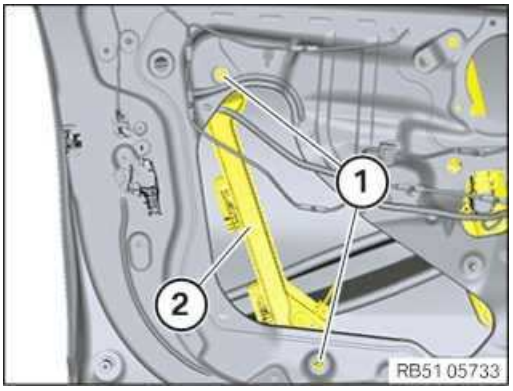


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).



- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

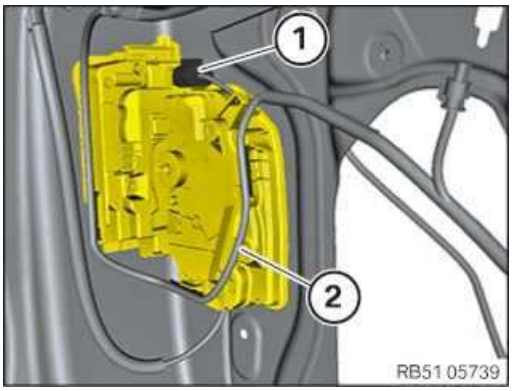
4 – Partially remove power window regulator



- Loosen nuts (1).
- Carefully slide the power windows (2) to the side.

MAIN WORK

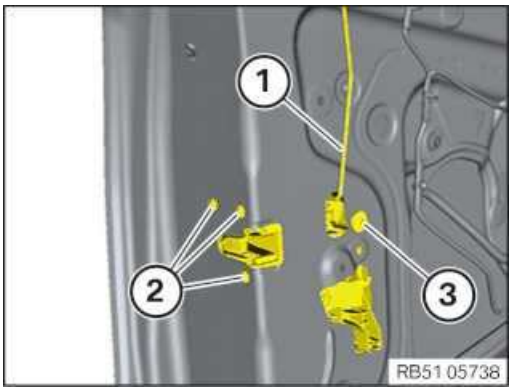
5 – Remove right door lock



- Unlock and disconnect the plug connection (1) on the door lock.

  Disconnect the wiring harness (2) from the door lock.

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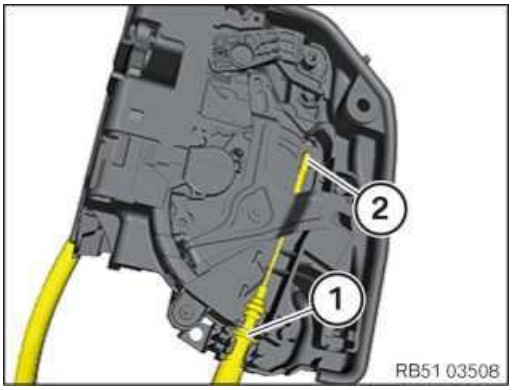


NOTICE

Description is for left component only. Procedure on the right side is identical.

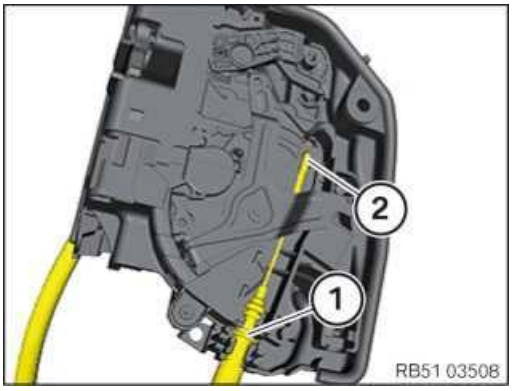
- Unclip locking rod (1).
- Loosen screws (2) and (3).
- Feed the door lock out of the door.

  Make sure that the seal of the door lock is not damaged during removal.

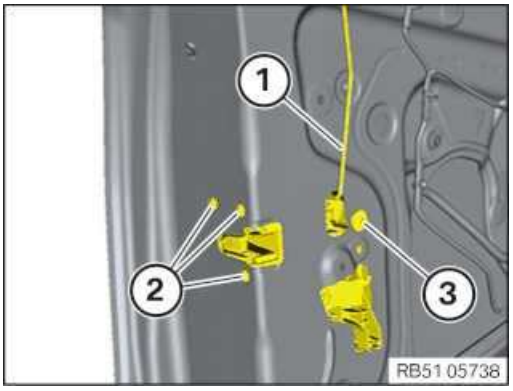


- Detach the Bowden cable (1).
- Detach the Bowden cable nipple (2).

6 – Install the right door lock



- Attach the Bowden cable nipple (2).
- Attach the Bowden cable (1).



NOTICE

Description is for left component only. Procedure on the right side is identical.

- Guide the door lock into the door.

  Make sure the seal from the door lock is not damaged during installation.
- Screw in screws (2) and (3) a few turns.
- First tighten the screws (2).

Door lock to door

Screw		Tightening torque	8,8 Nm

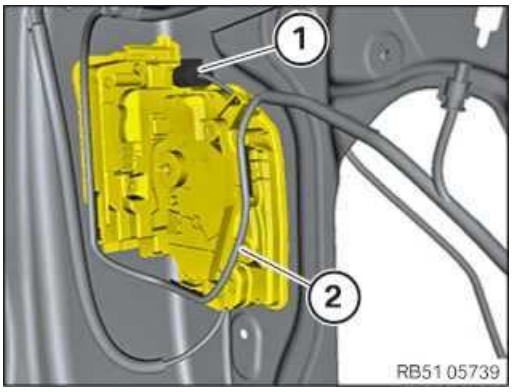
- Then tighten the screw (3).

Door lock to door

Screw		Tightening torque	8,8 Nm

- Clip in locking rod (1).

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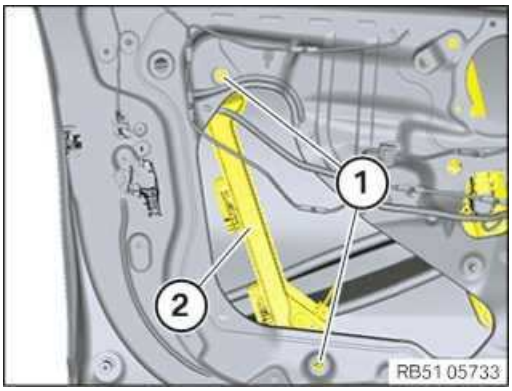


- Connect and lock the connector (1) on the door lock.

  Fasten the wiring harness (2) on the door lock.

POSTPROCESSES

7 – Partially install the power windows



- Correctly position the power windows (2).
- Tighten nuts (1).

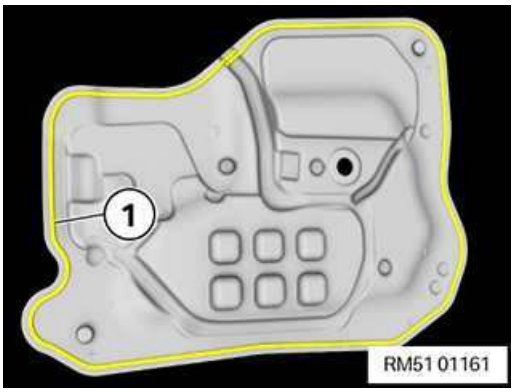
Window regulator to door

Nut M6, self-locking		Tightening torque	9,5 Nm

8 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

- Check sound insulation for damage.

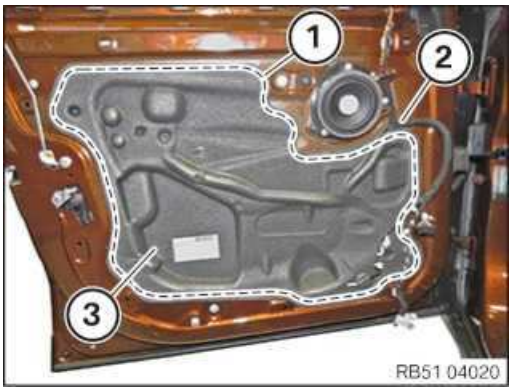
Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.

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- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

9 – Install front door trim panel

RISK OF DAMAGE

Scratches.

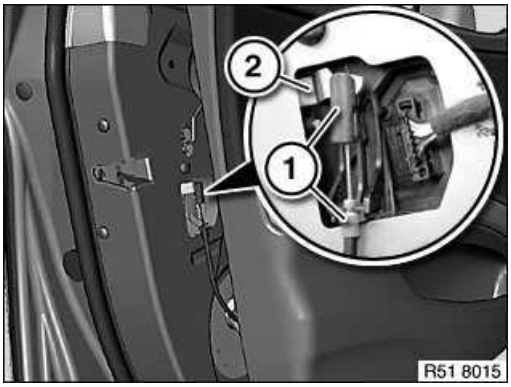
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

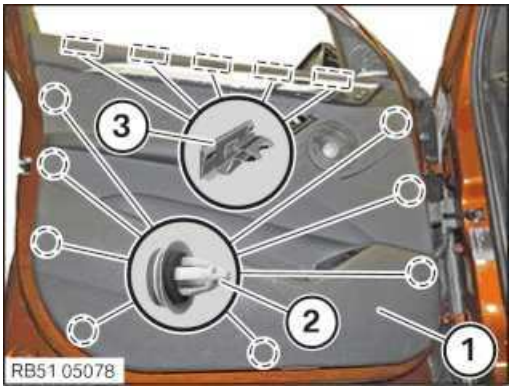


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

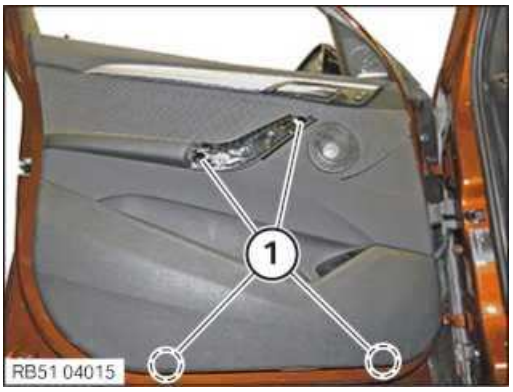


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

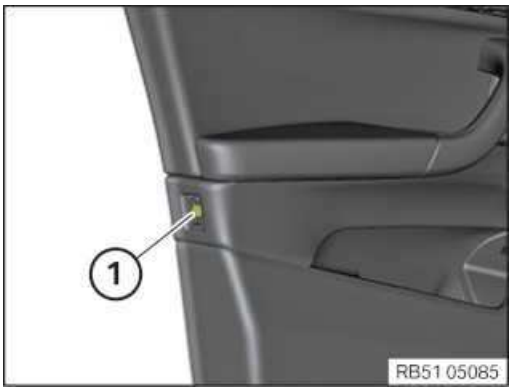
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- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

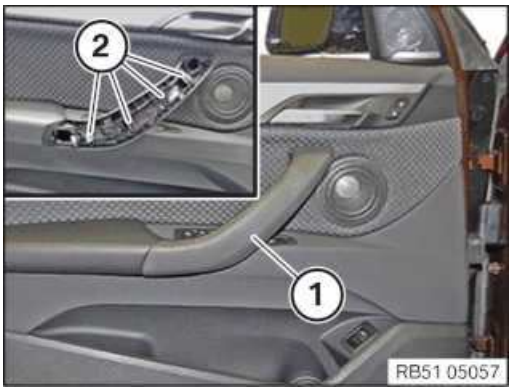
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

10 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door lock to door — Used in step 6

Screw		Tightening torque	8,8 Nm

Window regulator to door — Used in step 7

Nut M6, self-locking		Tightening torque	9,5 Nm

Door trim panel to door — Used in step 9

Screw TS5x20		Tightening torque	2,5 Nm

Links

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General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 8

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51 21 125 Removing and installing/replacing the outside door handle support including lock barrel, left or right

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

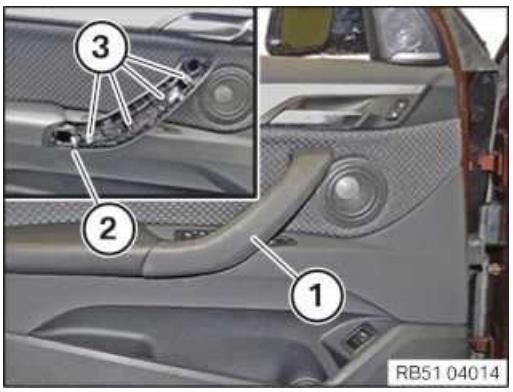
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

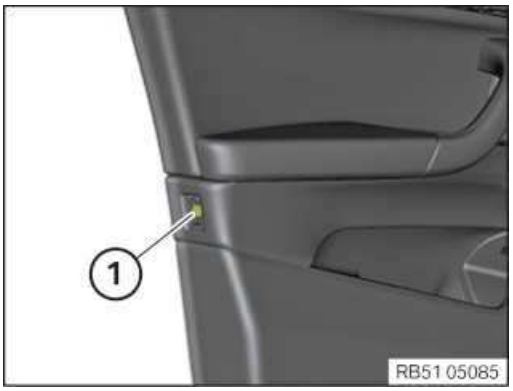
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RISK OF DAMAGE

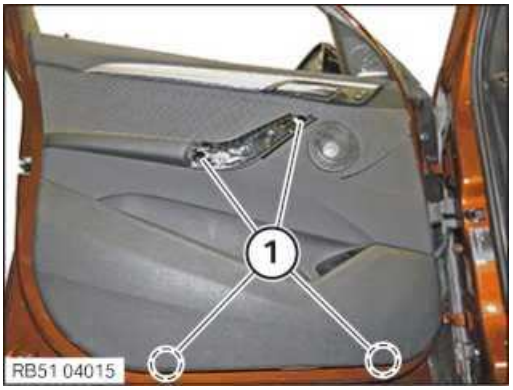
Scratches.

Tools and sharp-edged components can cause scratches.

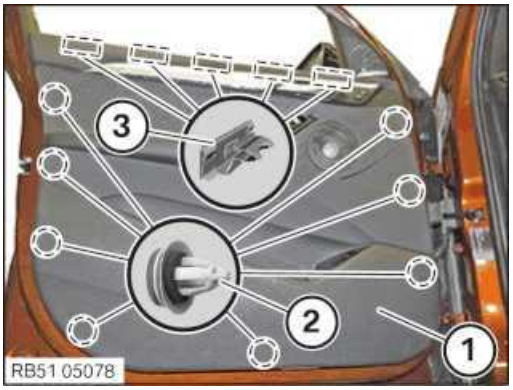
- Protect working area.
- Handle tools and components carefully.



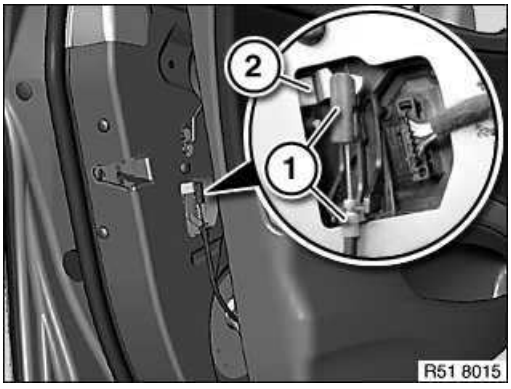
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps (3) at the top.



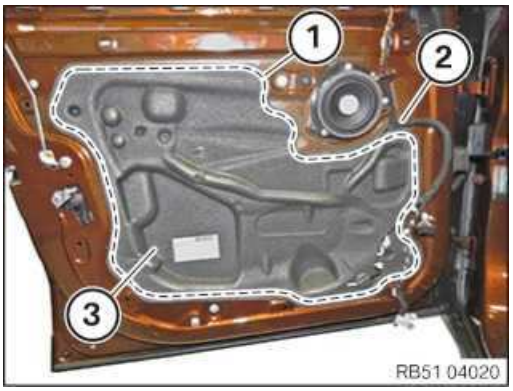
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

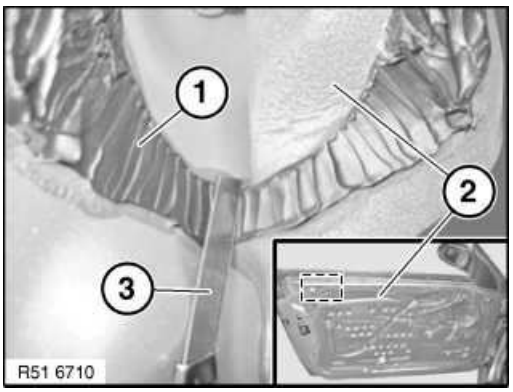
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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

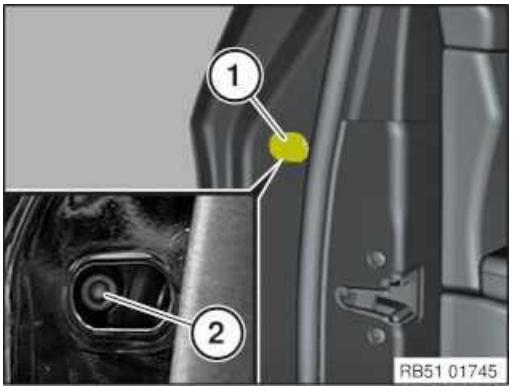


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

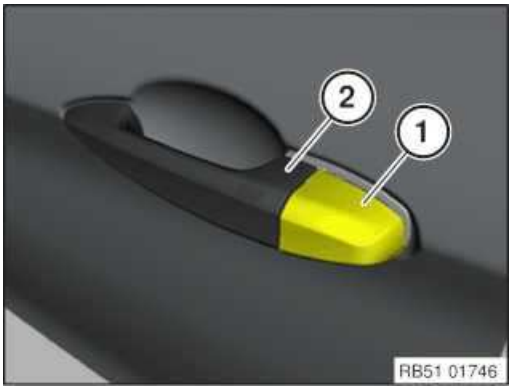


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Remove cover on the outside door handle



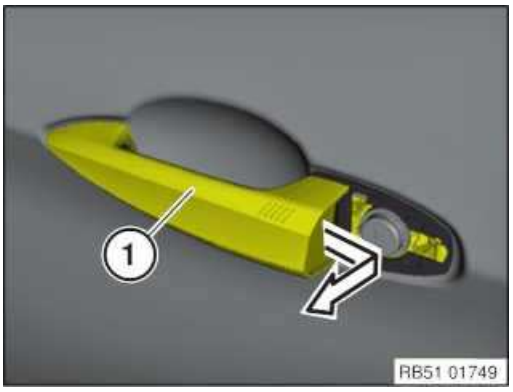
- Lever out the cover (1).
- Release screw (2) below it.



- Pull off the cover (1) with the outside door handle (2) slightly open.

5 – Remove the outside door handle

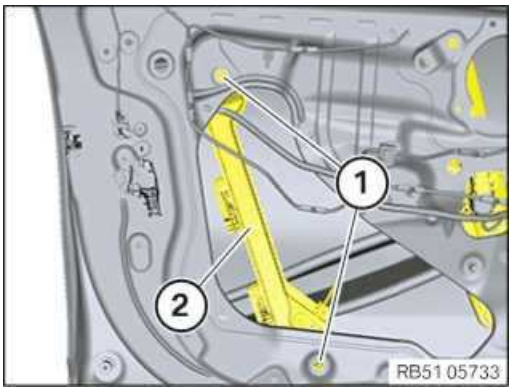
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- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

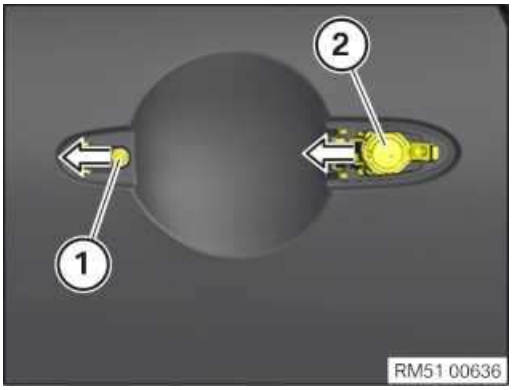
6 – Partially remove power window regulator



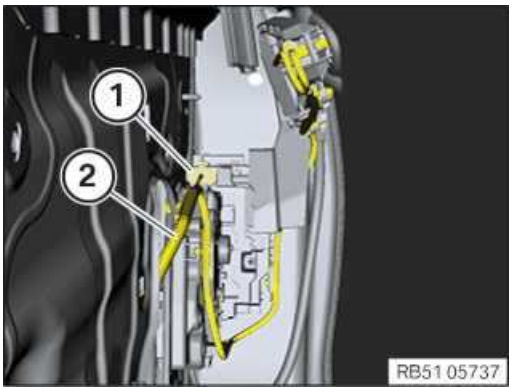
- Loosen nuts (1).
- Carefully slide the power windows (2) to the side.

MAIN WORK

7 – Remove the outer door handle support



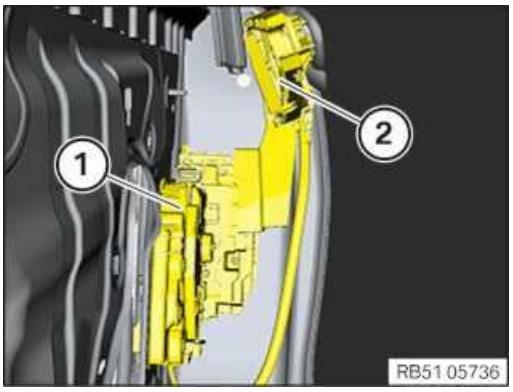
- Loosen screw (1).
- Slide the outside door handle support (2) towards the front and feed out in an inward direction.



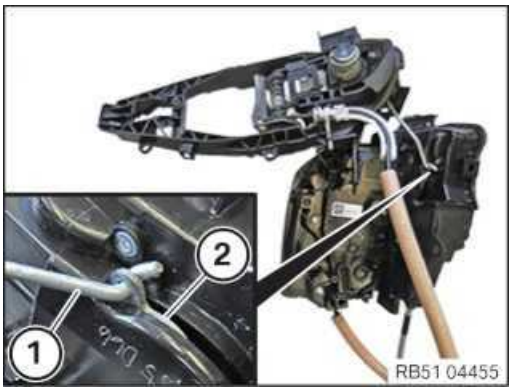
- Unlock and disconnect the plug connection (1) on the door lock.

  Release the vehicle wiring harness (2) from the door lock and the outside door handle support.

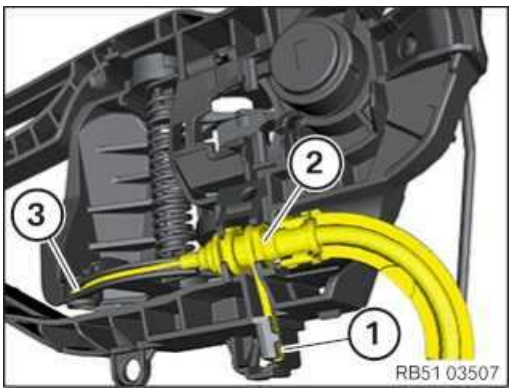
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- Guide out the door lock (1) together with the outside door handle support (2) from the door.



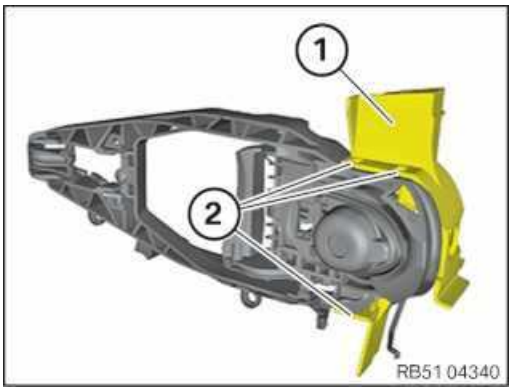
- Detach the linkage (1) from the door lock (2).



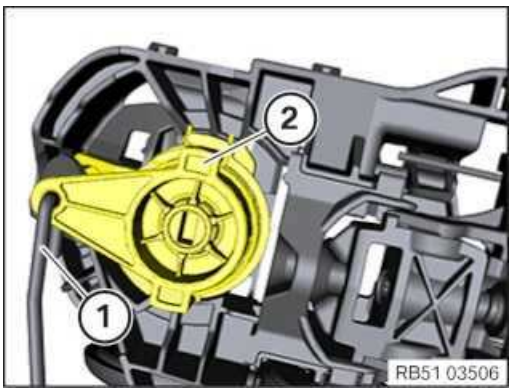
- Lift the tab (1) over the latch mechanism, twist it upwards and detach the Bowden cable (2).
- Detach the Bowden cable nipple (3) and remove the Bowden cable (2).

8 – If the outside door handle support is replaced: Remount the lock barrel

▸ **Remove lock barrel lock barrel**



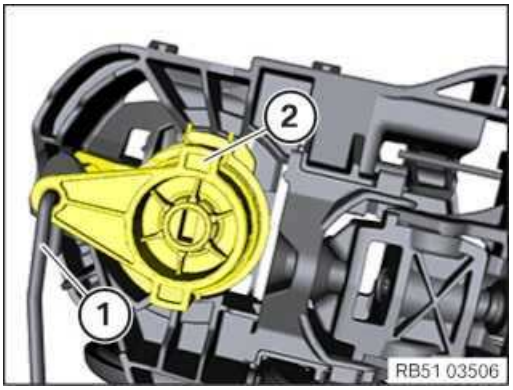
- Undo the cover (1) in the indicated areas (2).
- Remove the cover (1).



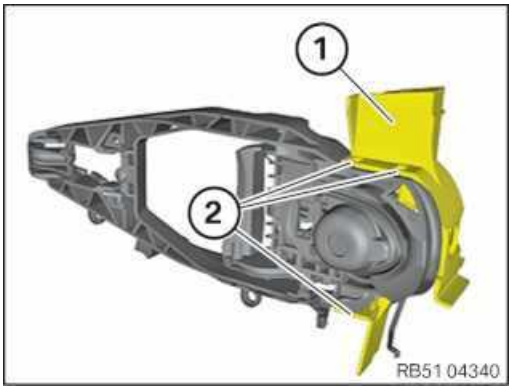
- Detach the locking rod (1).
- Twist the lock barrel (2) in clockwise direction and remove it.

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▸ **Install lock barrel**

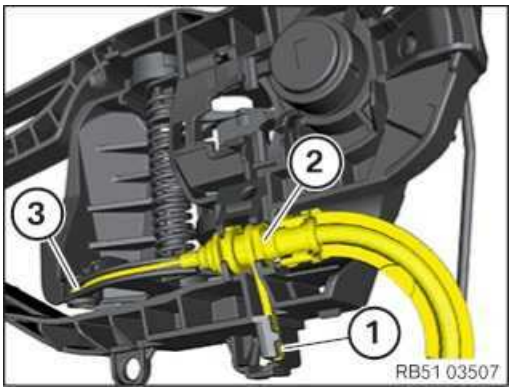


- Attach the locking rod (1).
- Install the lock barrel (2) and turn it counter-clockwise.

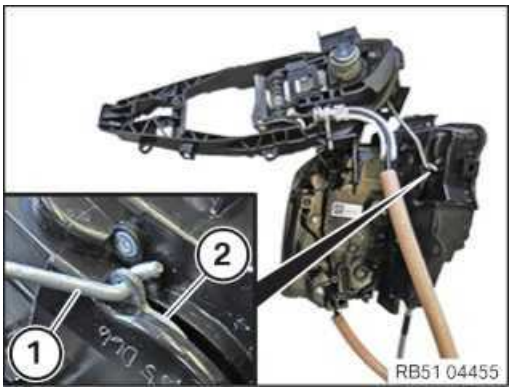


- Install the cover (1).
- Engage the cover (1) at the points (2).

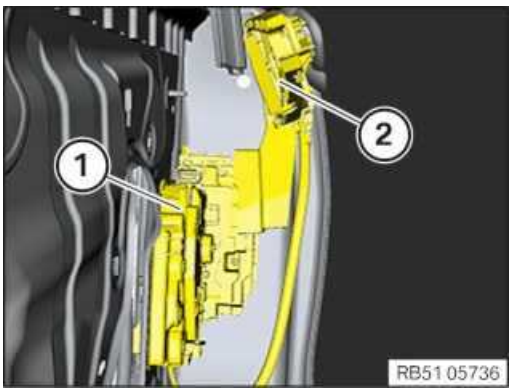
9 – Install the outer door handle support



- Attach the Bowden cable nipple (3).
- Twist and lock the Bowden cable (2) and the tab (1).

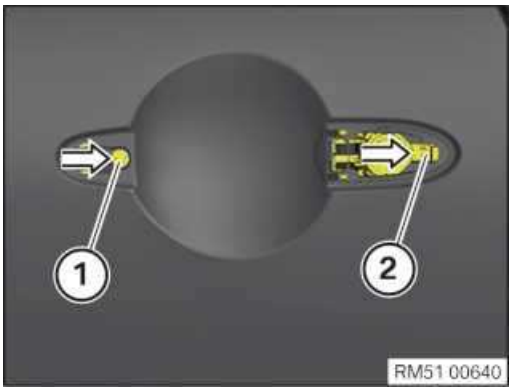


- Attach the linkage (1) in the door lock (2).



- Guide the door lock (1) together with the outside door handle support (2) into the door.

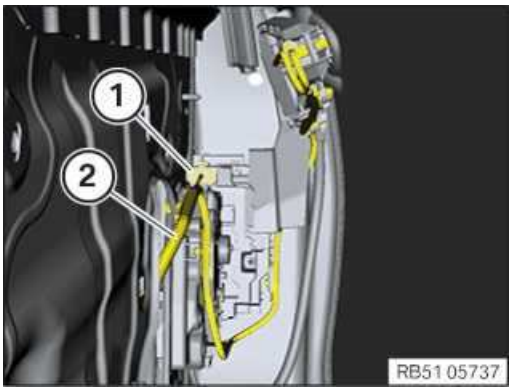
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- Insert the outside door handle support (2) into the fixture toward the rear.
- Tighten down screw (1).

Outside door handle support to door

Screw		Tightening torque	2,6 Nm

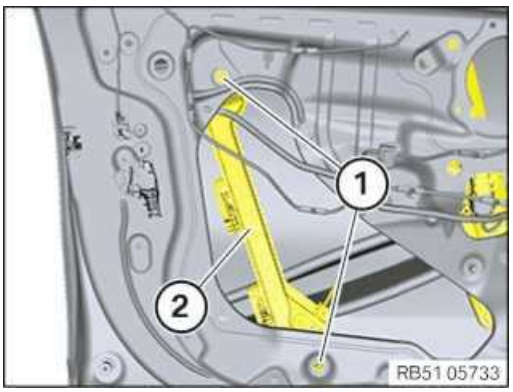


- Connect and lock the connector (1) on the door lock.

  Fasten the vehicle wiring harness (2) on the door lock and the outside door handle support.

POSTPROCESSES

10 – Partially install the power windows

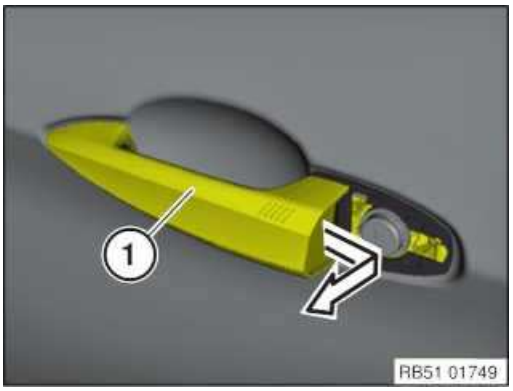


- Correctly position the power windows (2).
- Tighten nuts (1).

Window regulator to door

Nut M6, self-locking		Tightening torque	9,5 Nm

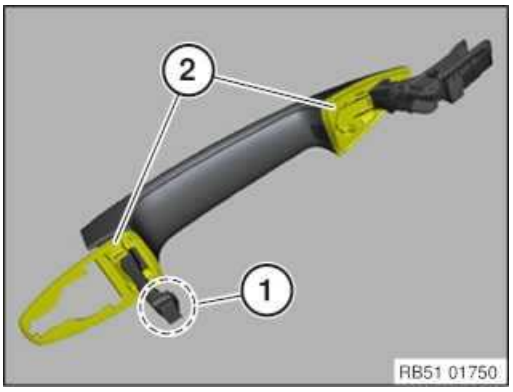
11 – Install the outside door handle



- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

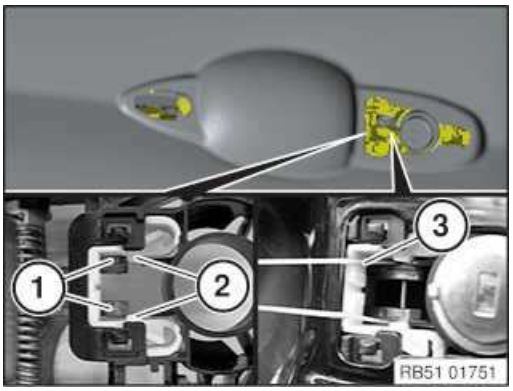
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

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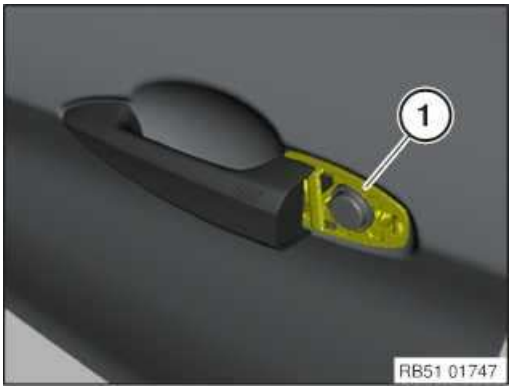
- Check the fixture (1) for damage.

  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.

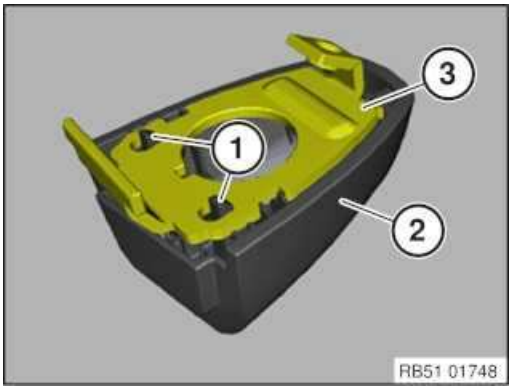


- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

12 – Install the cover on the outside door handle

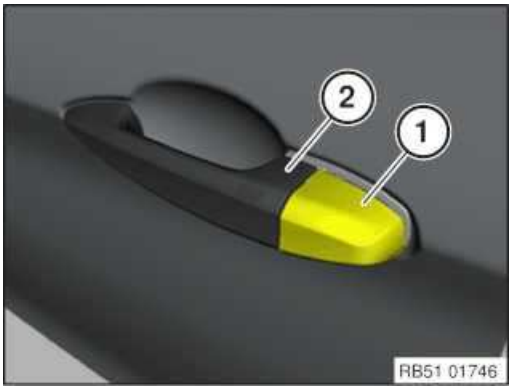


- Make sure the gasket (1) is fitted correctly.



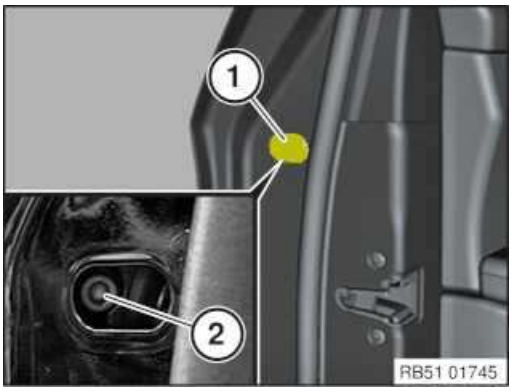
- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.

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- Tighten down screw (2).

Attachment bell to outside door handle support

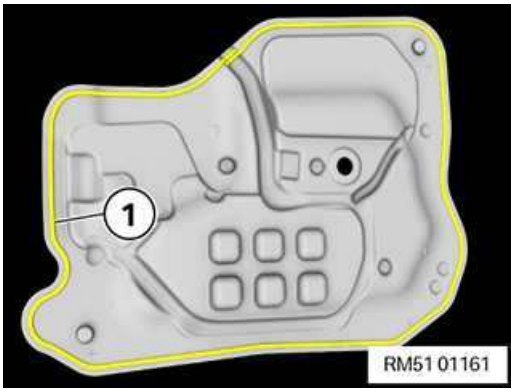
Screw		Tightening torque	3 Nm

- Mount the cover (1).

13 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

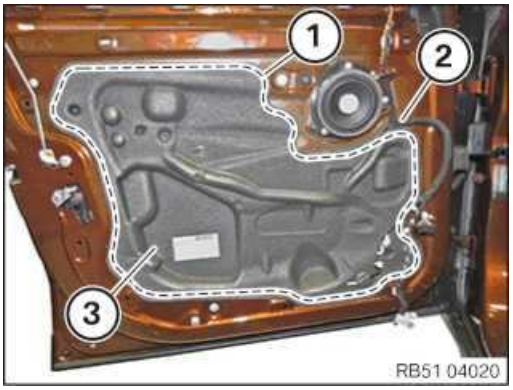
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

14 – Install front door trim panel

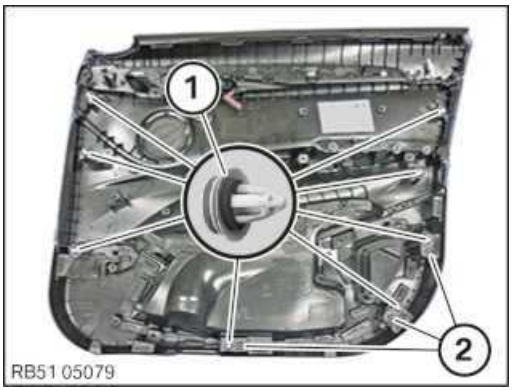
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RISK OF DAMAGE

Scratches.

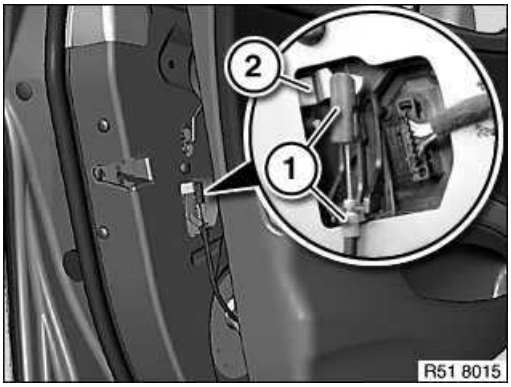
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

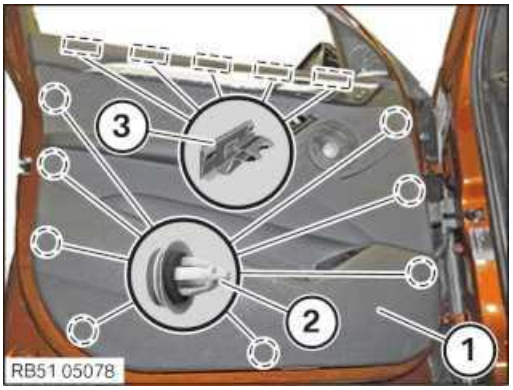


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

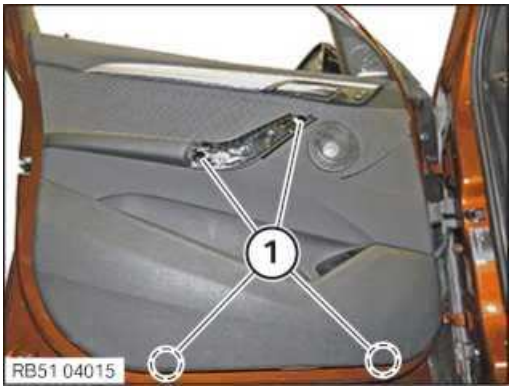
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

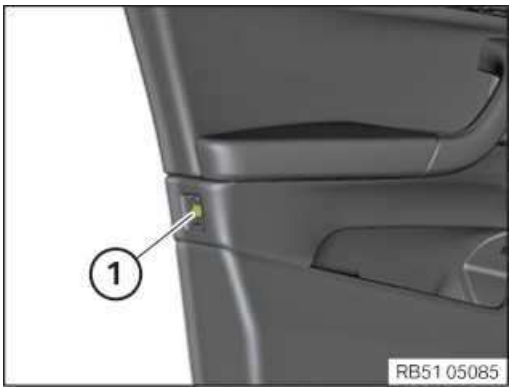


- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

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- If fitted: Tighten down screw (1).

Door trim panel to door

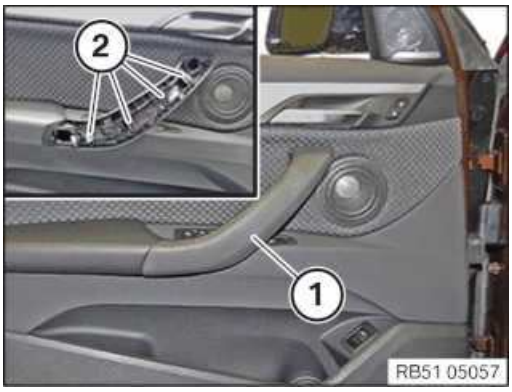
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

15 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Outside door handle support to door — Used in step 9

Screw		Tightening torque	2,6 Nm

Window regulator to door — Used in step 10

Nut M6, self-locking		Tightening torque	9,5 Nm

Attachment bell to outside door handle support — Used in step 12

Screw		Tightening torque	3 Nm

Door trim panel to door — Used in step 14

Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 13

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51 21 126 Removing and installing/replacing the outside door handle support without lock barrel, left or right

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

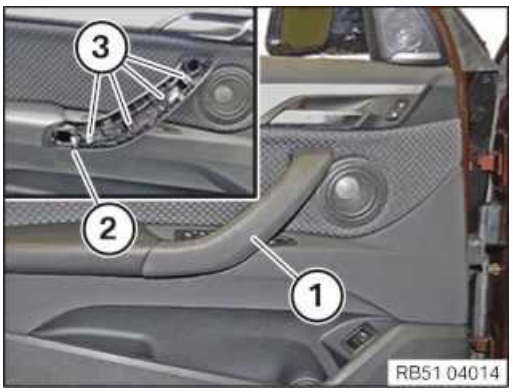
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

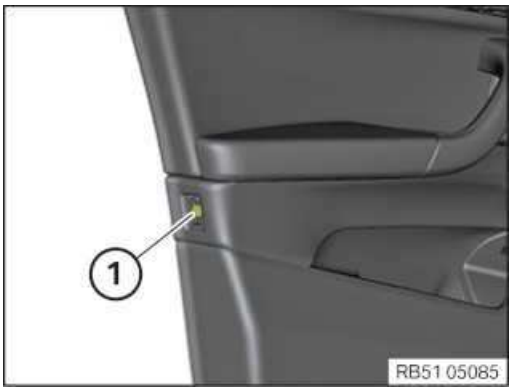
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RISK OF DAMAGE

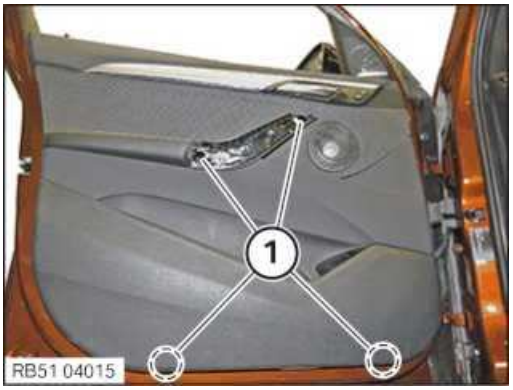
Scratches.

Tools and sharp-edged components can cause scratches.

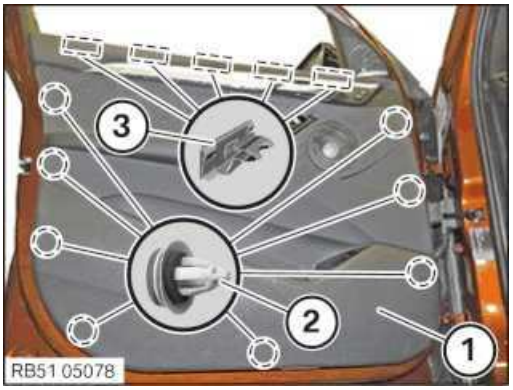
- Protect working area.
- Handle tools and components carefully.



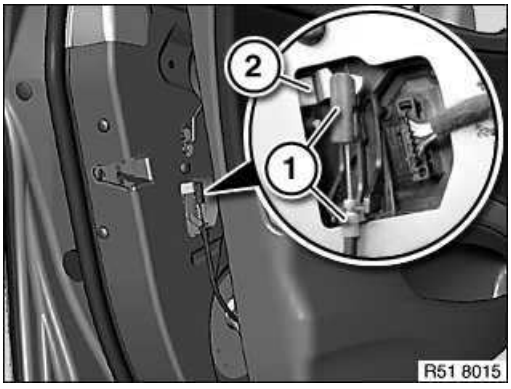
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps (3) at the top.



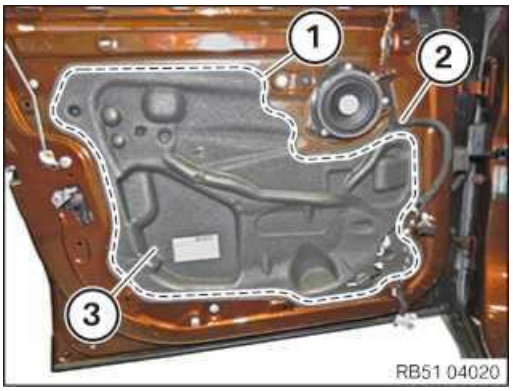
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

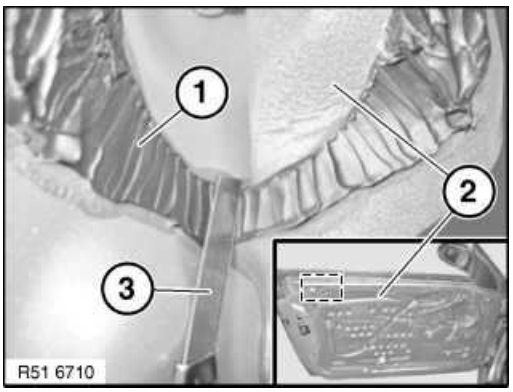
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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

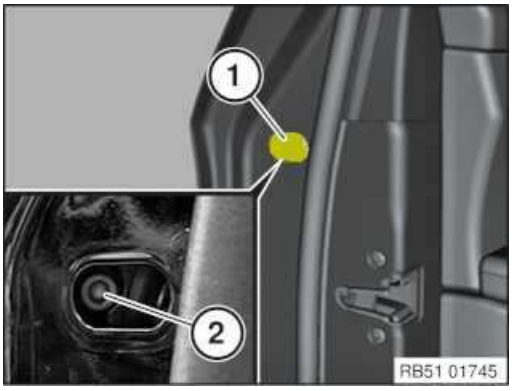


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

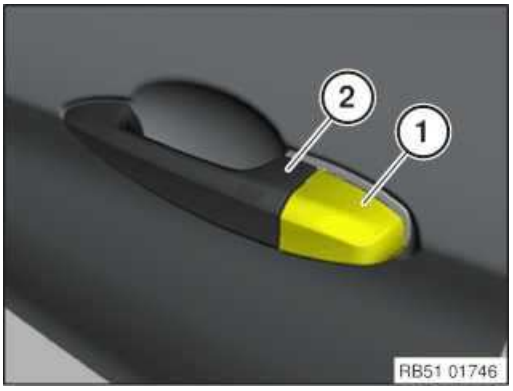


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Remove cover on the outside door handle



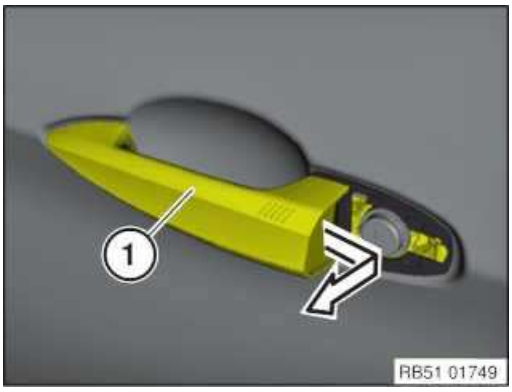
- Lever out the cover (1).
- Release screw (2) below it.



- Pull off the cover (1) with the outside door handle (2) slightly open.

5 – Remove the outside door handle

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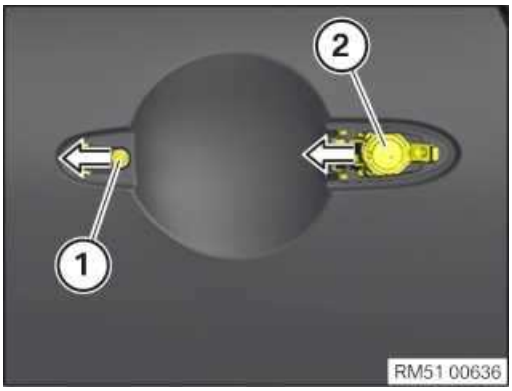


- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

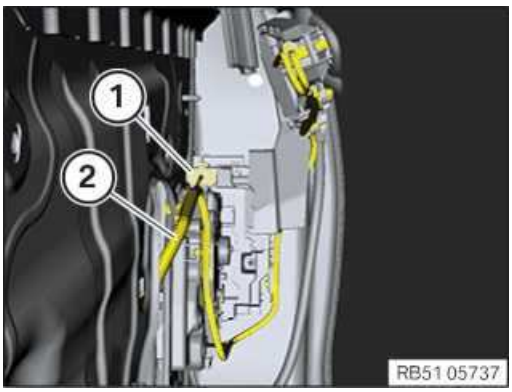
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

MAIN WORK

6 – Remove the outer door handle support

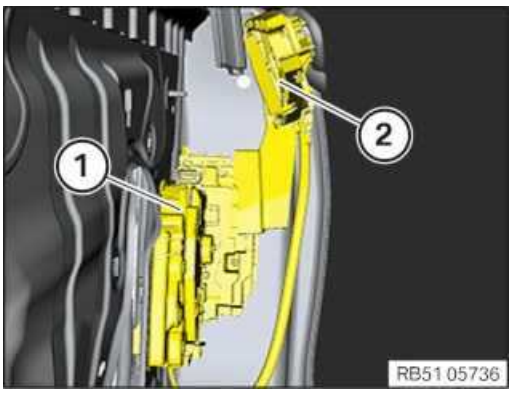


- Loosen screw (1).
- Slide the outside door handle support (2) towards the front and feed out in an inward direction.



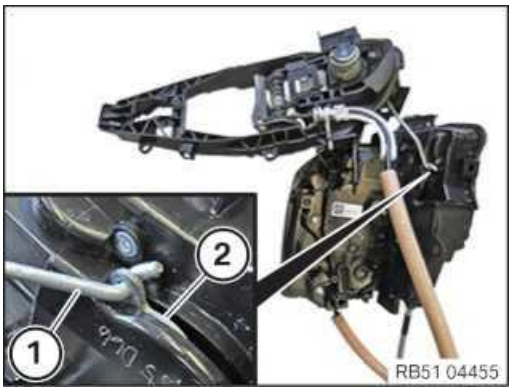
- Unlock and disconnect the plug connection (1) on the door lock.

  Release the vehicle wiring harness (2) from the door lock and the outside door handle support.

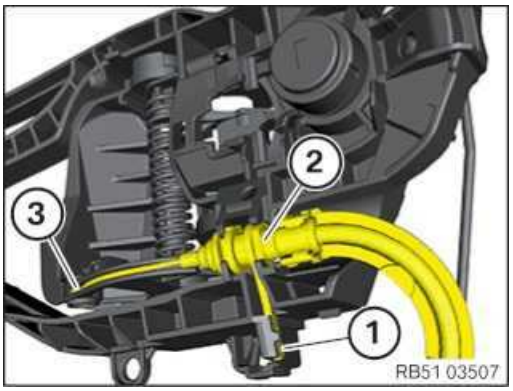


- Guide out the door lock (1) together with the outside door handle support (2) from the door.

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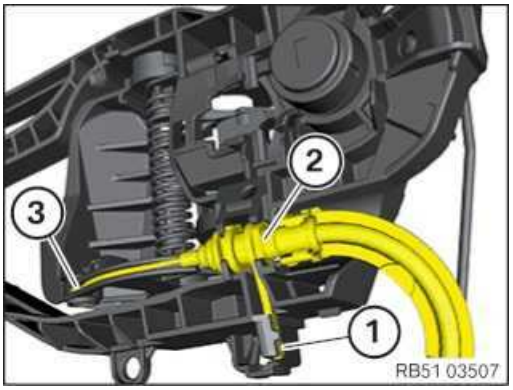


- Detach the linkage (1) from the door lock (2).

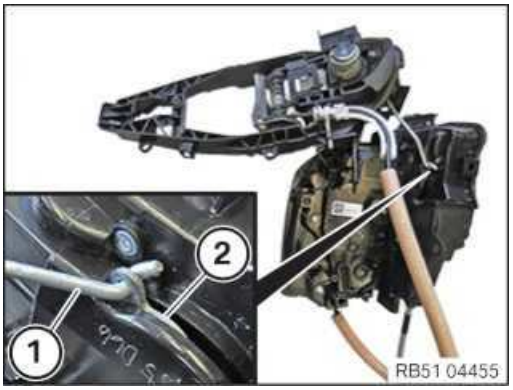


- Lift the tab (1) over the latch mechanism, twist it upwards and detach the Bowden cable (2).
- Detach the Bowden cable nipple (3) and remove the Bowden cable (2).

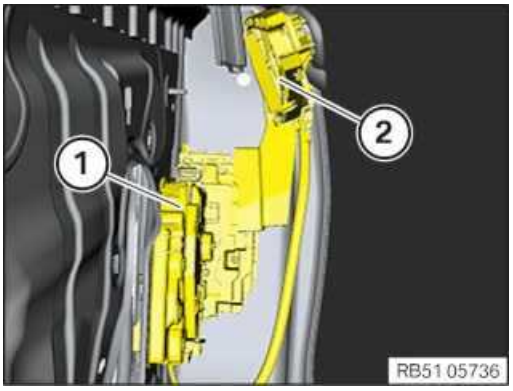
7 – Install the outer door handle support



- Attach the Bowden cable nipple (3).
- Twist and lock the Bowden cable (2) and the tab (1).

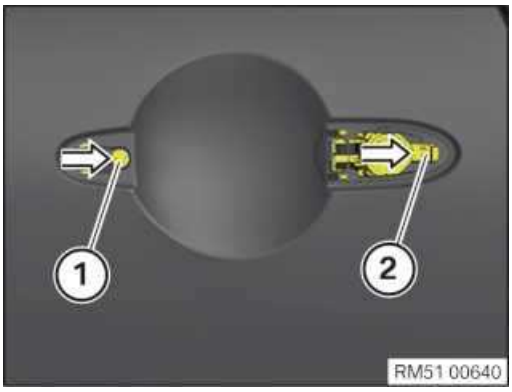


- Attach the linkage (1) in the door lock (2).



- Guide the door lock (1) together with the outside door handle support (2) into the door.

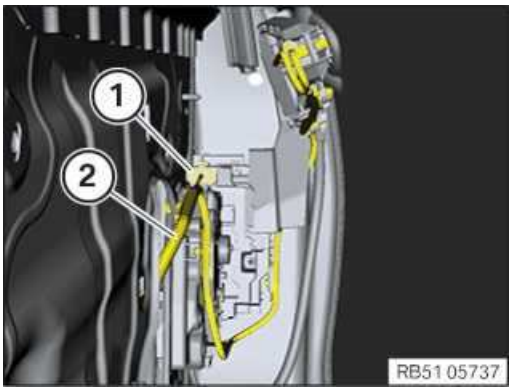
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- Insert the outside door handle support (2) into the fixture toward the rear.
- Tighten down screw (1).

Outside door handle support to door

Screw		Tightening torque	2,6 Nm

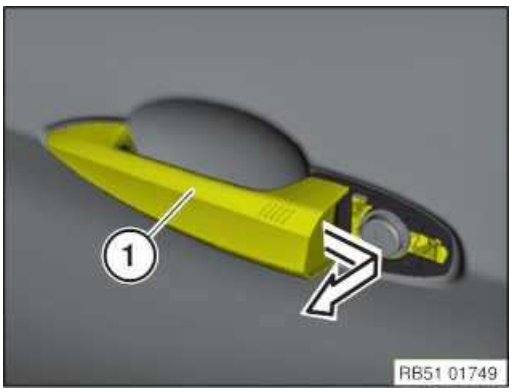


- Connect and lock the connector (1) on the door lock.

  Fasten the vehicle wiring harness (2) on the door lock and the outside door handle support.

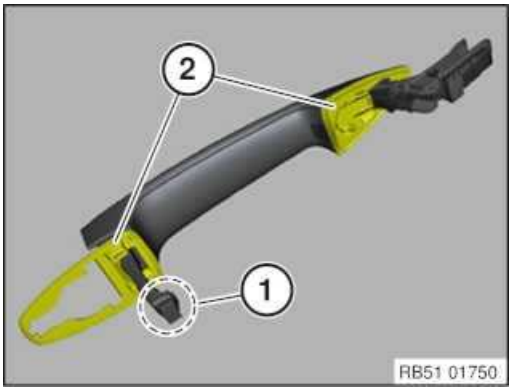
POSTPROCESSES

8 – Install the outside door handle



- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

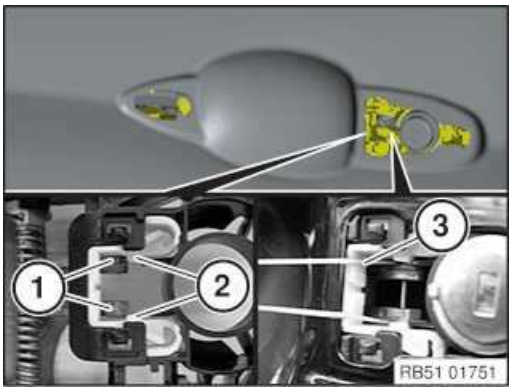
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.



- Check the fixture (1) for damage.

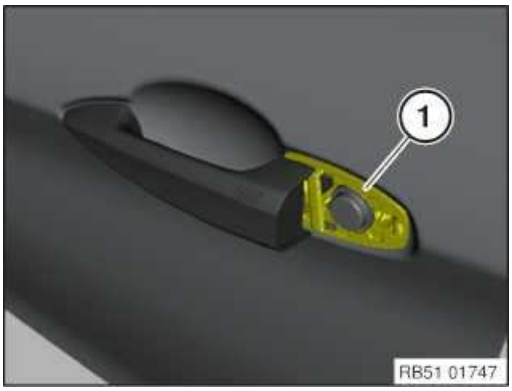
  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.

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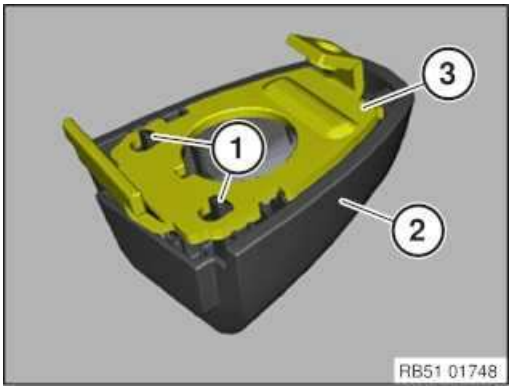


- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

9 – Install the cover on the outside door handle

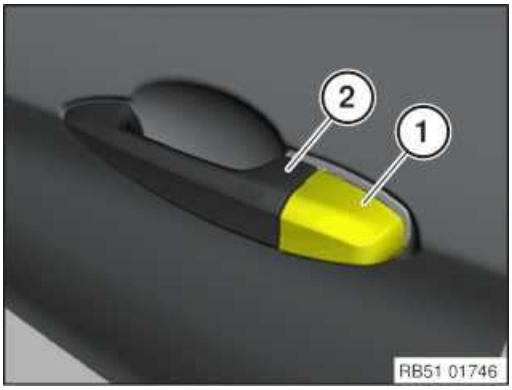


- Make sure the gasket (1) is fitted correctly.

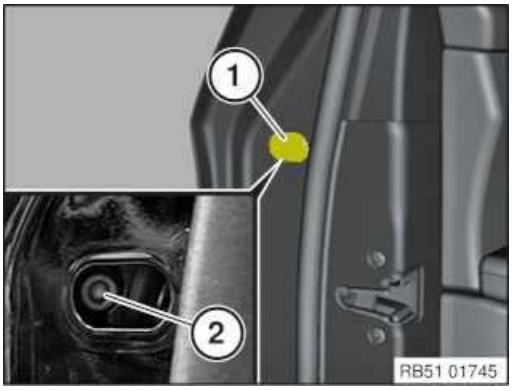


- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.



- Tighten down screw (2).

Attachment bell to outside door handle support

Screw		Tightening torque	3 Nm

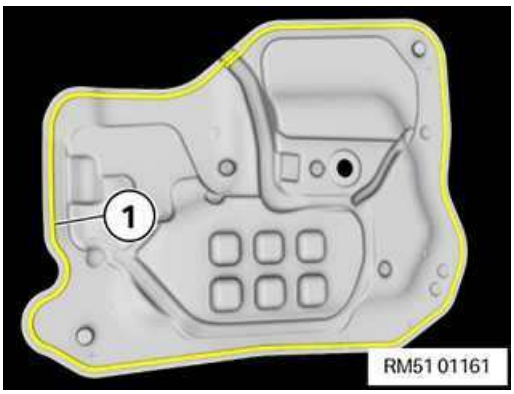
- Mount the cover (1).

10 – Installing sound insulation on front door

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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

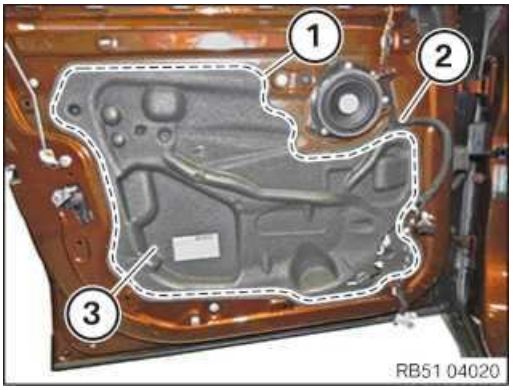
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.
- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.



11 – Install front door trim panel

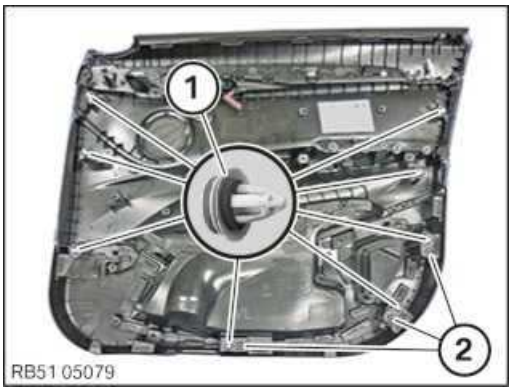
RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

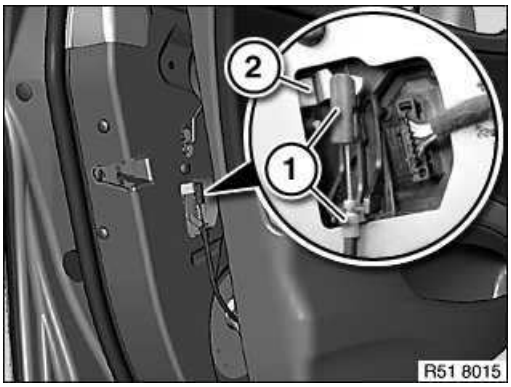
- Protect working area.
- Handle tools and components carefully.

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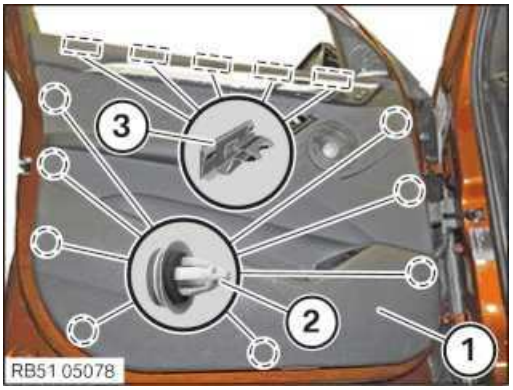


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

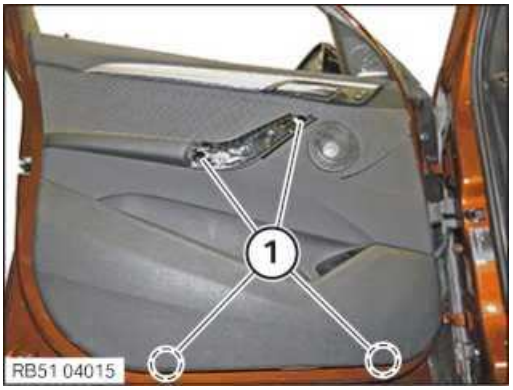
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



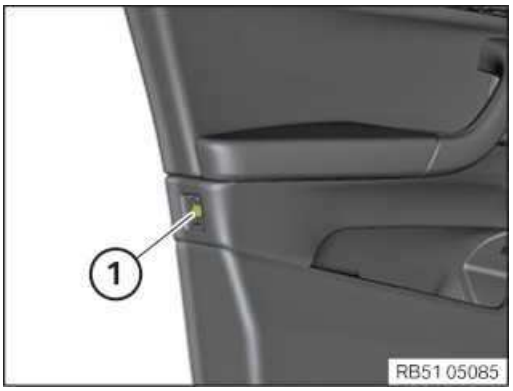
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

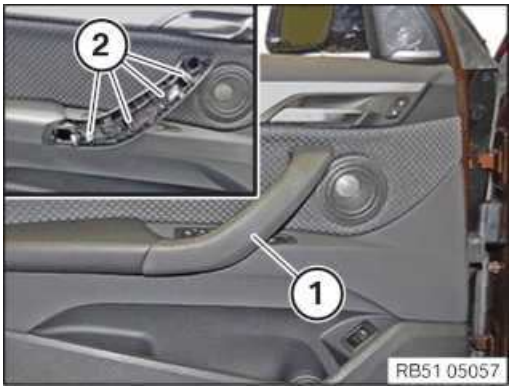
- Mount cover .

12 – Install the cover on the door handle

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Outside door handle support to door — Used in step 7

Screw		Tightening torque	2,6 Nm

Attachment bell to outside door handle support — Used in step 9

Screw		Tightening torque	3 Nm

Door trim panel to door — Used in step 11

Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 10

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51 21 330 Removing and installing/replacing the weather strip on the inside of the front door

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

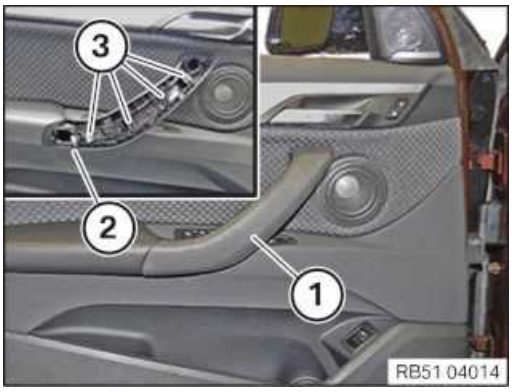
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

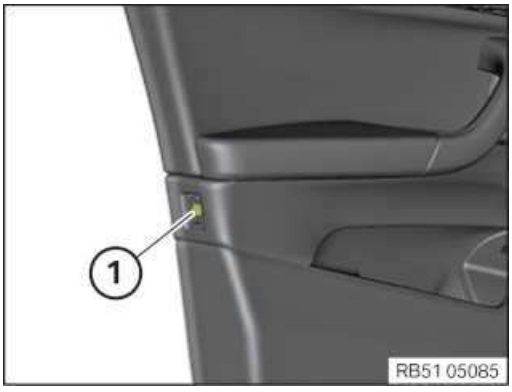
2 – Remove front door trim panel

RISK OF DAMAGE

Scratches.

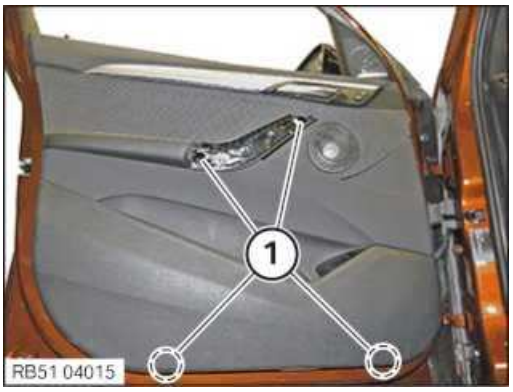
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

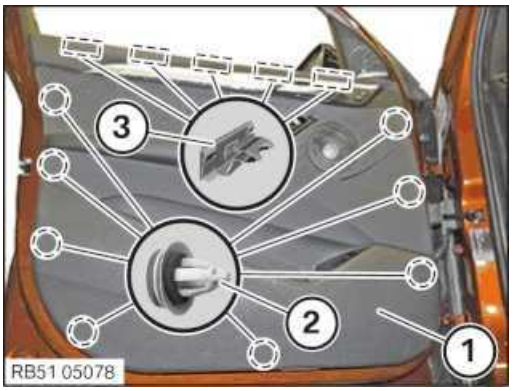


- If fitted: Remove the cover and unscrew the bolt (1).

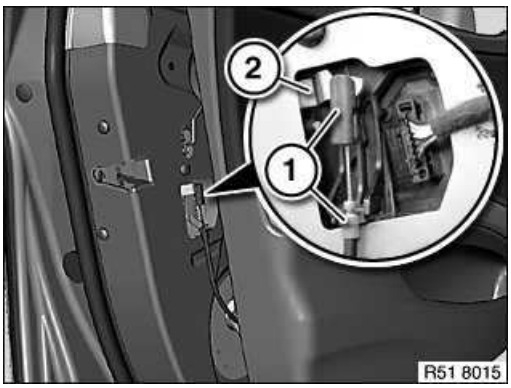
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- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.

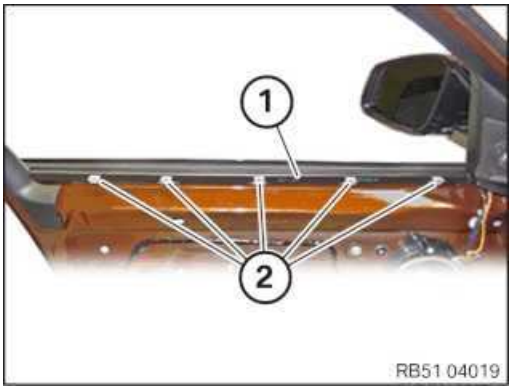


- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

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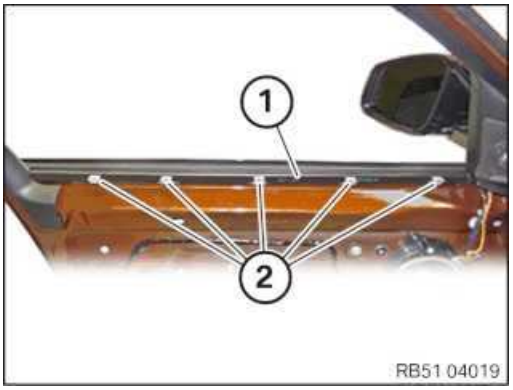
MAIN WORK

3 – Remove the inside front weather strip



- Release the weather strip (1) from the clamps (2) and pull it off to the top.
  If weather strip (1) is reused, make sure it is not bent.

4 – Installing front inner weather strip



- Coat weather strip (1) prior to installation with approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.
  Replace defective clamps.
- Position weather strip (1) on the door and engage into the clamps (2).

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POSTPROCESSES

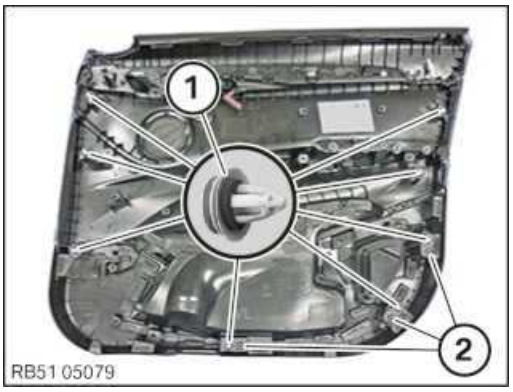
5 – Install front door trim panel

RISK OF DAMAGE

Scratches.

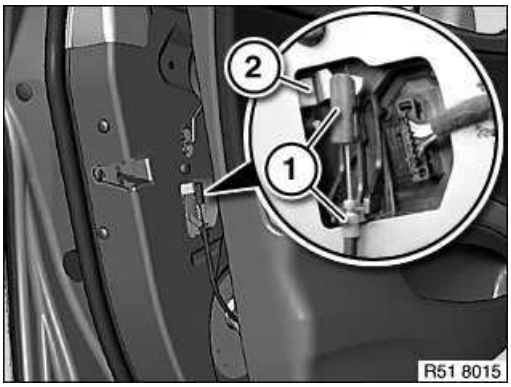
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

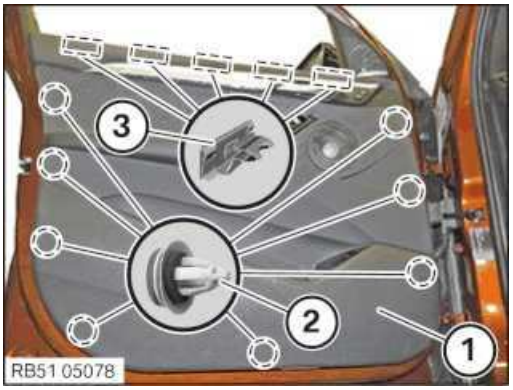


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

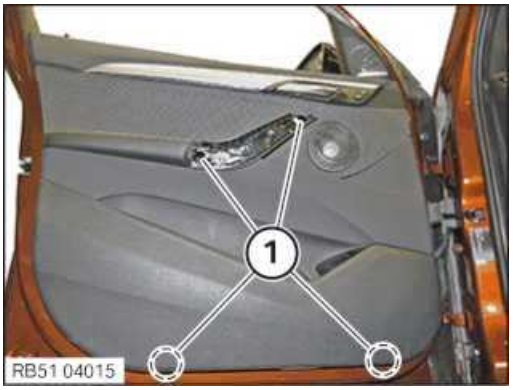
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



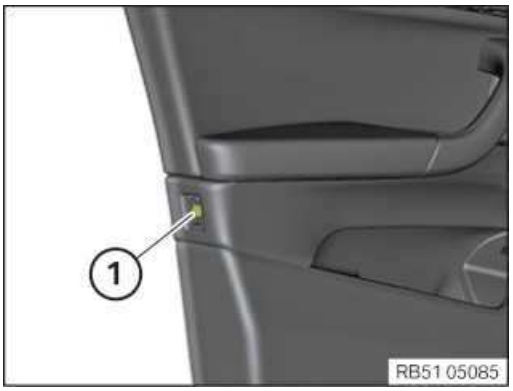
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

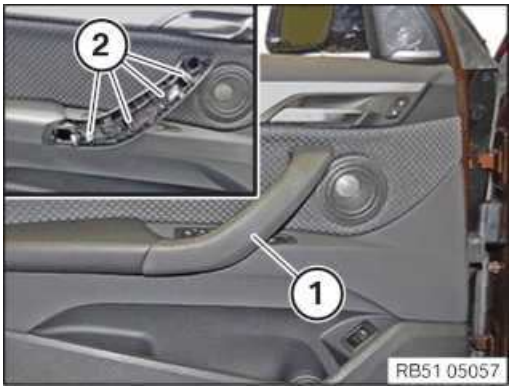
- Mount cover .

6 – Install the cover on the door handle

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door Used in step 5

Screw TS5x20		Tightening torque	2,5 Nm

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51 21 300 Removing and installing/replacing weather strip on outside of front door

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

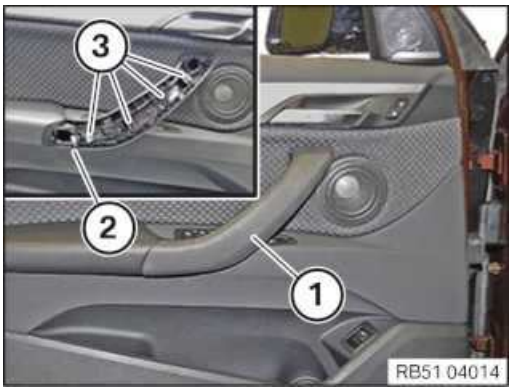
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

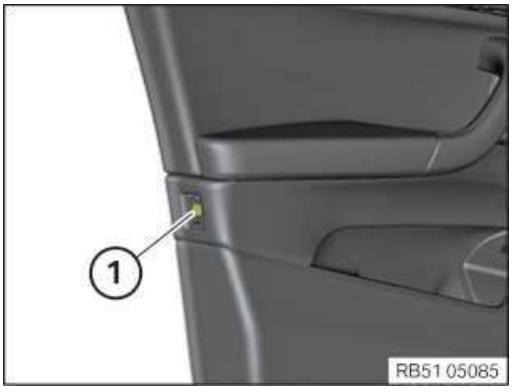
2 – Remove front door trim panel

RISK OF DAMAGE

Scratches.

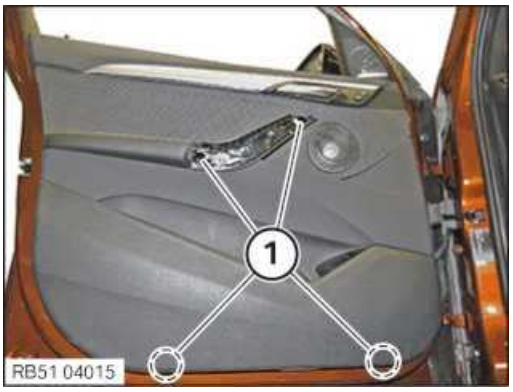
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

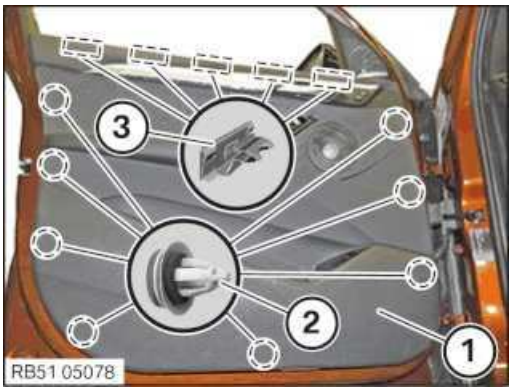


- If fitted: Remove the cover and unscrew the bolt (1).

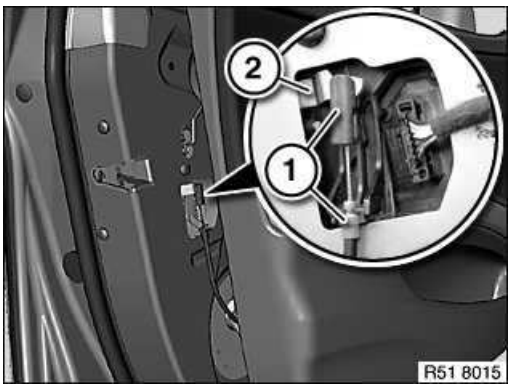
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- Loosen screws (1).

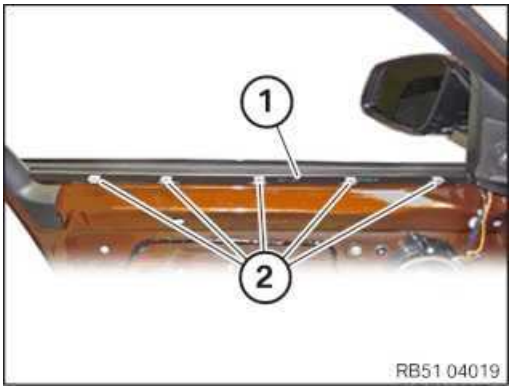


- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



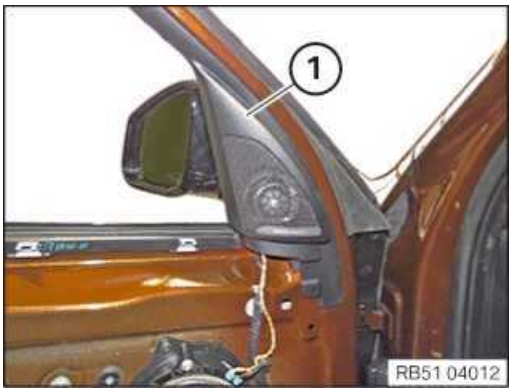
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Remove the inside front weather strip



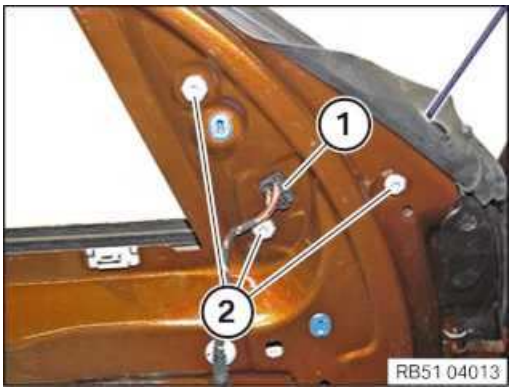
- Release the weather strip (1) from the clamps (2) and pull it off to the top.
  If weather strip (1) is reused, make sure it is not bent.

4 – Removing the exterior mirror



- Release the window frame cover (1) in the area of the mirror.
- If necessary, disconnect related plug connections.

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- Secure exterior mirror against falling out.
- Unlock plug connection (1) and disconnect.
- Release the screws (2) and remove the exterior rearview mirror.

MAIN WORK

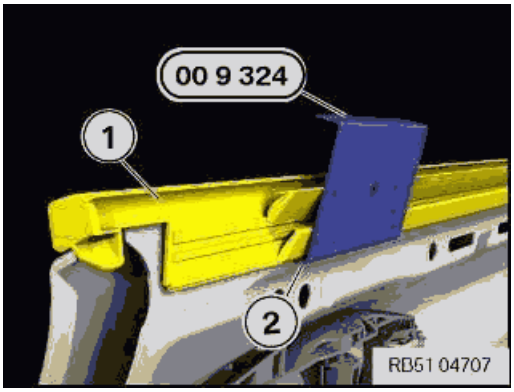
5 – Removing the weather strip on the outside of the front door

Prerequisite

The door window glass is open.

NOTICE

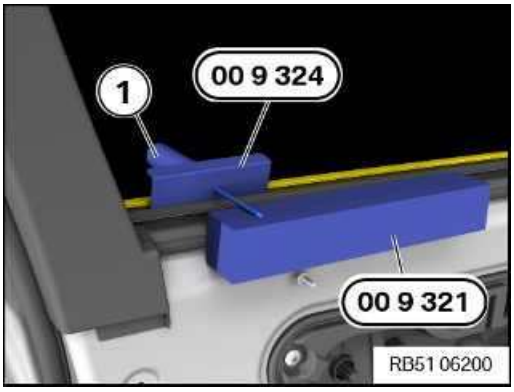
Description is for left component only. Procedure on the right side is identical.



NOTICE

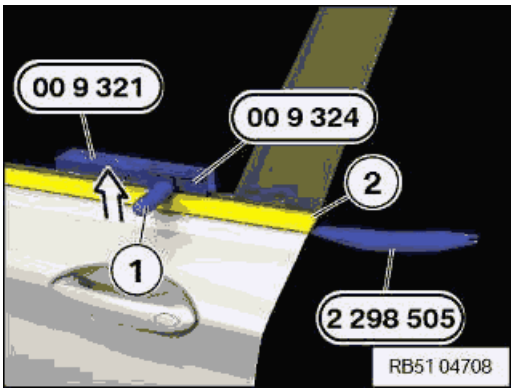
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Insert the special tool **0 495 484 (00 9 324)** at the front (on the A-pillar) into the window recess and slide it to the rear.
- Position the special tool **0 495 484 (00 9 324)** as shown at the lower edge of the weather strip (1) with the short shank (2).



- Place the special tool **0 490 538 (00 9 321)** on the inner door panel.
- Thread a suitable tool (1) through the opening in the special tool **0 495 484 (00 9 324)**.

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RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Lift up the rear weather strip (2) with the special tool **2 298 505** as shown; maximum 5 mm.
- With a suitable tool (1), move the lever in the direction of arrow using the special tool **0 490 538 (00 9 321)** for support.

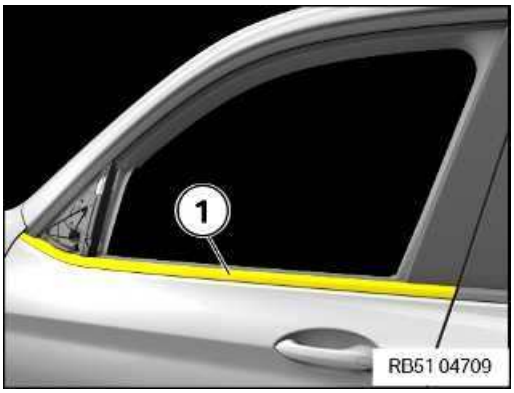
  The special tool **0 495 484 (00 9 324)** lifts the window recess finisher strip (2) upwards.
- Repeat this process step by step towards the front until the window recess finisher strip (2) is removed completely.

Your browser doesn't support HTML5 video.

6 – Installing the weather strip on the front door on the outside

NOTICE

Description is for left component only. Procedure on the right side is identical.

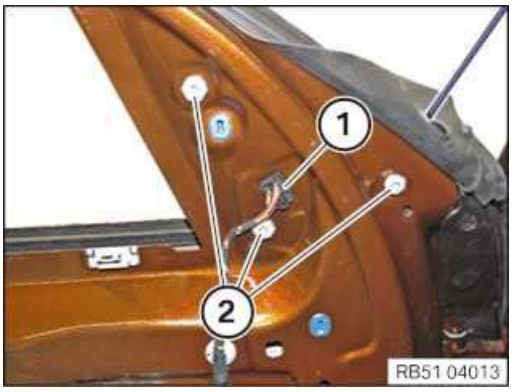


- Check the weather strip (1) for damage, renew if necessary.
- Coat the weather strip (1) with a suitable lubricant prior to installation.
- Position the weather strip (1) in front at the door.
- Press down the weather strip (1) across its entire length.

POSTPROCESSES

7 – Installing the exterior mirror

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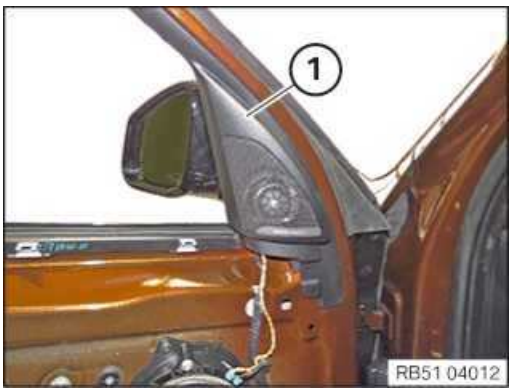
- Check sound insulation on the mirror base. It must not be damaged or missing.
- Mount exterior rearview mirror and tighten the bolts (2).

  Due to self-tapping screws, the tightening torque in the new condition of exterior mirror increases by 2 Nm.

Exterior mirror to door

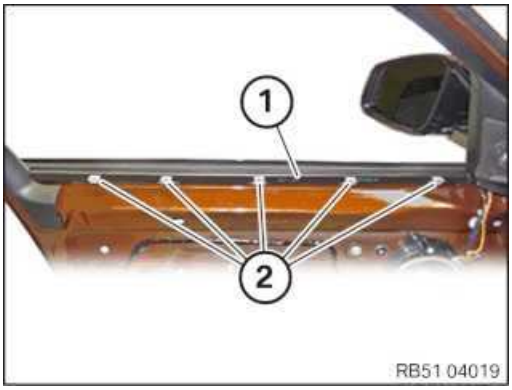
Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

- Connect the plug connection (1).
- Carry out functional check.



- Mount the window frame cover (1) in the area of the mirror.
- If necessary, connect related plug connections.

8 – Installing front inner weather strip



- Coat weather strip (1) prior to installation with approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.

  Replace defective clamps.
- Position weather strip (1) on the door and engage into the clamps (2).

9 – Install front door trim panel

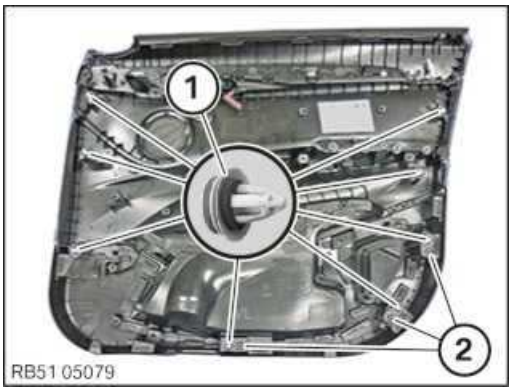
RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

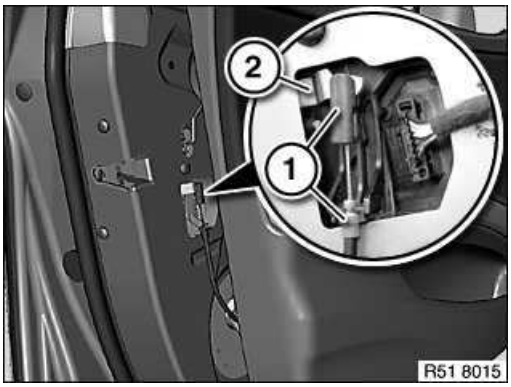
- Protect working area.
- Handle tools and components carefully.

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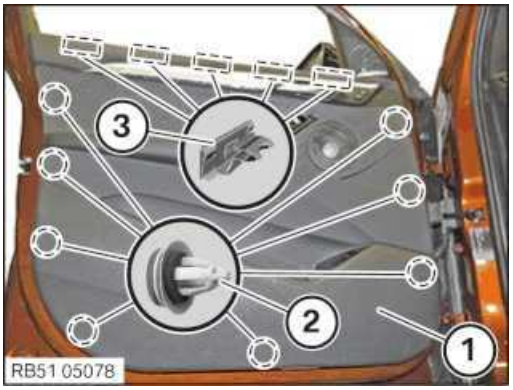


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

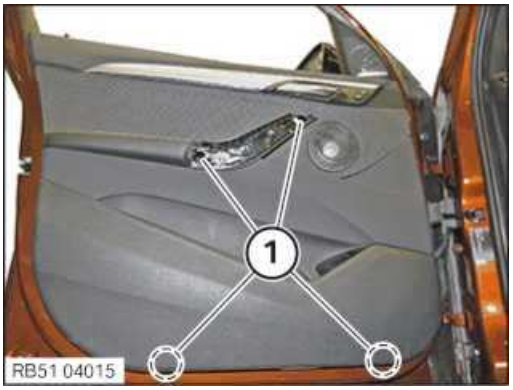
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



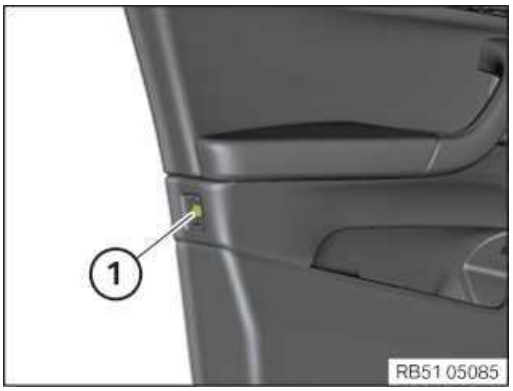
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

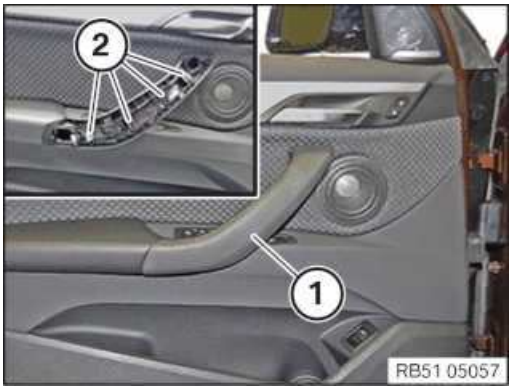
- Mount cover .

10 – Install the cover on the door handle

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Exterior mirror to door — Used in step 7

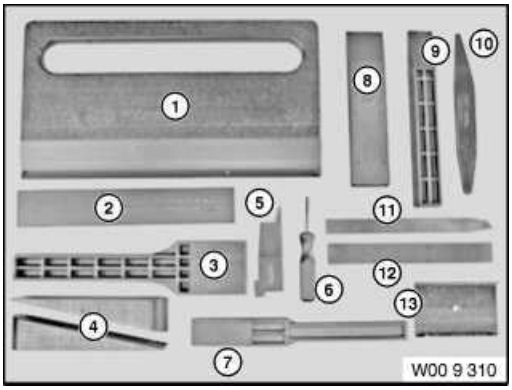
Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

Door trim panel to door — Used in step 9

Screw TS5x20		Tightening torque	2,5 Nm

Overview of Special Tools

0 495 484 (00 9 324) Panel wedge

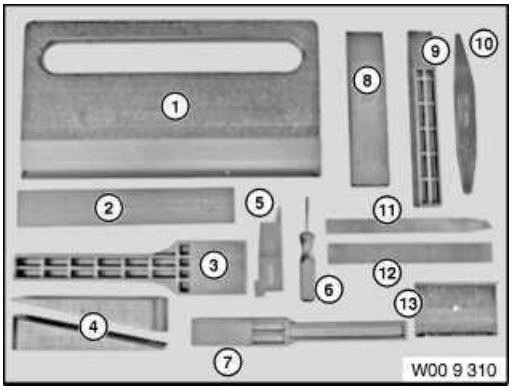


Common — Used in step 5

Usage	(Panel wedge (panel)) For removing cavity strips on the doors from E60
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 25 05 (230)

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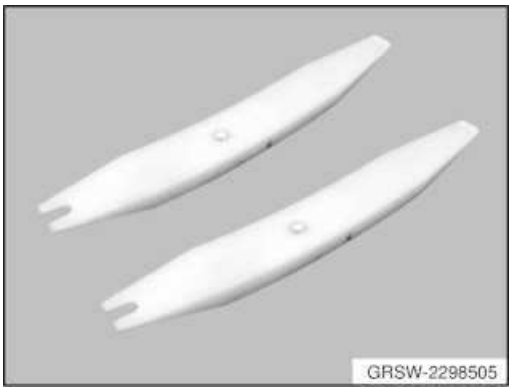
0 490 538 (00 9 321) Folding stick



Common Used in step 5

Usage	
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

2 298 505 Wedge



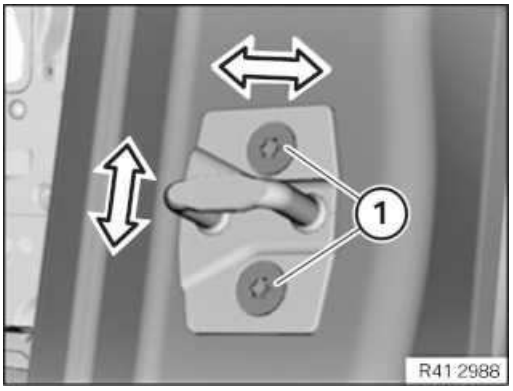
Common Used in step 5

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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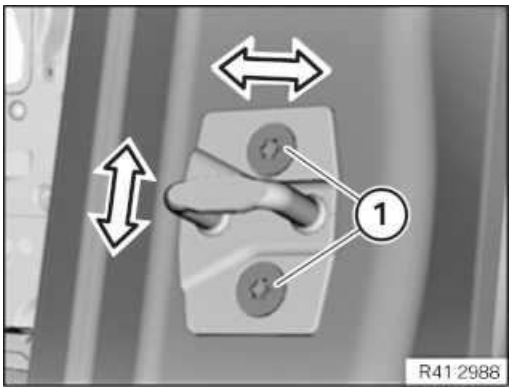
51 21 003 Replacing front left or right lock striker

1 – Removing lock striker



- Loosen screws (1).
- Remove lock striker.

2 – Installing lock striker

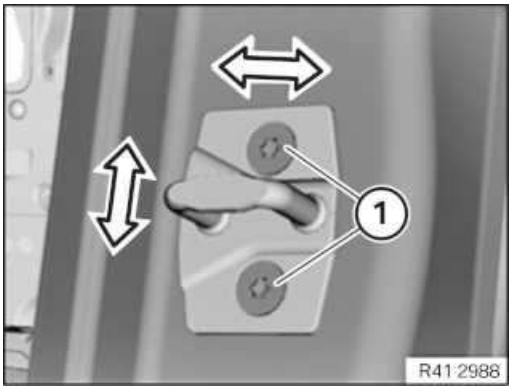


- Position lock striker.
- Tighten down screws (1) until lock striker can still just be moved.

3 – Adjust lock striker

Prerequisite

The screws on lock striker are loosened so far that the lock striker can still be moved.



TECHNICAL INFORMATION

The gap dimensions form the basis for these repair instructions and must be observed without fail.

For more information see: 41 00 ... Gap dimensions for body

- Adjust the lock striker's height such that the door lock does not bump or rub against anything.
- Move lock striker sideways in order to adjust the gap dimensions between door and rear side panel.
- Tighten the screws (1).

Lock striker

Screw		Tightening torque	21 Nm

Additional Information

Overview of Tightening Torques

Lock striker Used in step 3

Screw		Tightening torque	21 Nm

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Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	

Repair instructions	Used in step
41 00 ... Gap dimensions, body	3

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51 22 004 Adjusting rear left or right lock striker

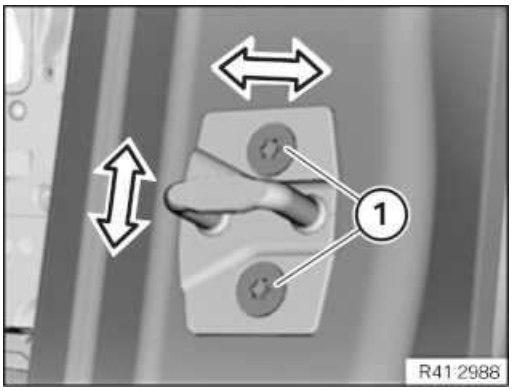
NOTICE

Description is for left component only. Procedure on the right side is identical.

1 â€“ Adjust lock striker

Prerequisite

The screws on lock striker are loosened so far that the lock striker can still be moved.



TECHNICAL INFORMATION

The gap dimensions form the basis for these repair instructions and must be observed without fail.

For more information see: 41 00 ... Gap dimensions for body

- Adjust the lock striker's height such that the door lock does not bump or rub against anything.
- Move lock striker sideways in order to adjust the gap dimensions between door and rear side panel.
- Tighten the screws (1).

Lock striker

Screw		Tightening torque	21 Nm

Additional Information

Overview of Tightening Torques

Lock striker Used in step 1

Screw		Tightening torque	21 Nm

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1
Gap dimensions, body	1

Repair instructions	Used in step
41 00 ... Gap dimensions, body	1

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51 22 090 Remove and install/replace the door lock on the left or right rear doors

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

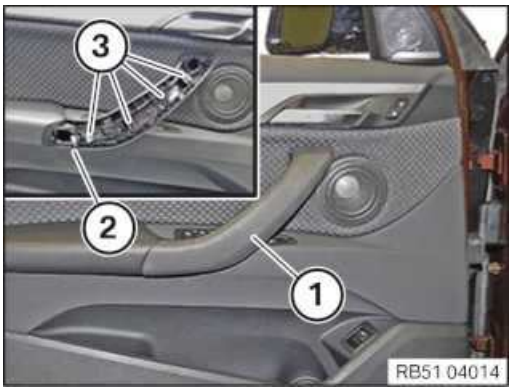
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

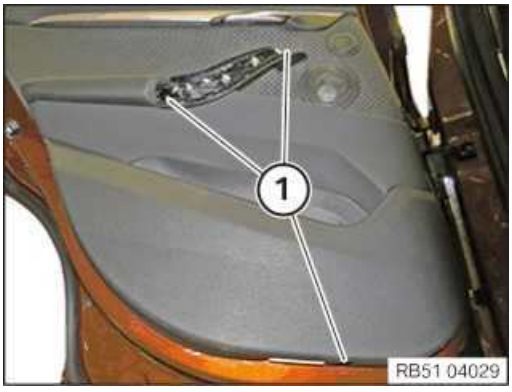
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

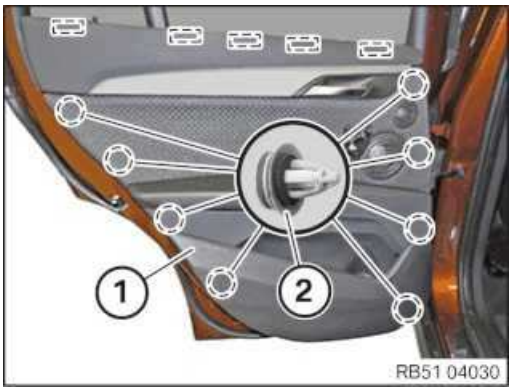
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

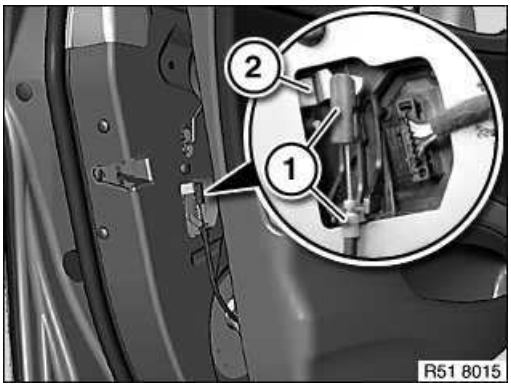


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



- Detach Bowden cable (1) from door lock (2).

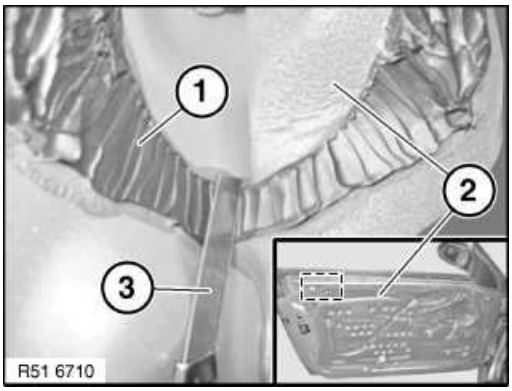
  Disconnect all plug connections and remove door trim panel.

3 – Remove sound insulation on the rear door

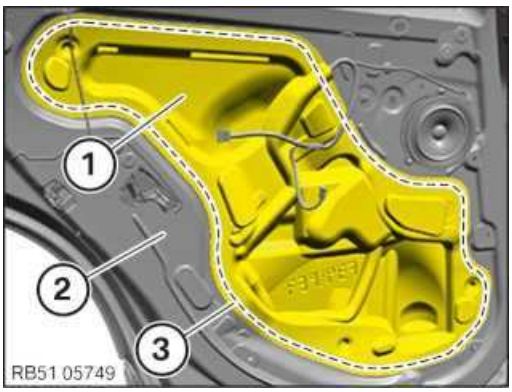
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.

For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

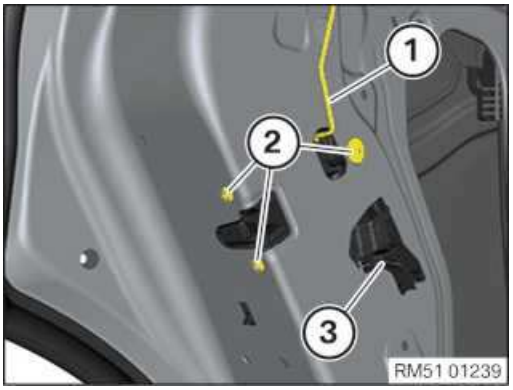


- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

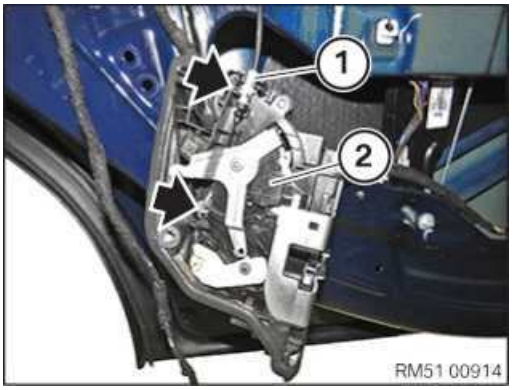
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MAIN WORK

4 – Removing the door lock in the rear door

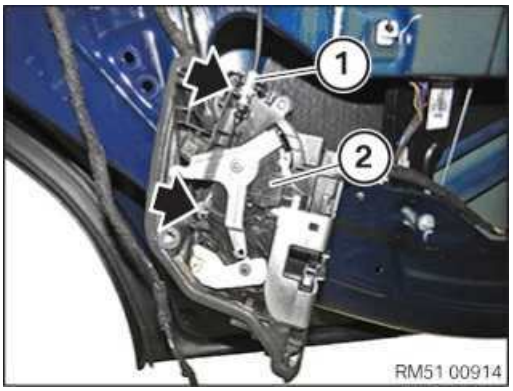


- Unclip locking rod (1).
- Disconnect the plug connection and cable clip at the door lock (3).
- Loosen screws (2).
- Feed the door lock (3) out of the door.

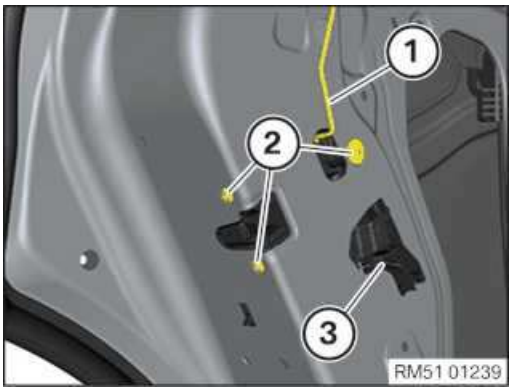


- Detach Bowden cable (1) from door lock (2).

5 – Install door lock in the rear door



- Attach the Bowden cable (1) to the door lock (2).



- Guide the door lock (3) into the door.
- Tighten down screws (2).

Door lock to door

Screw		Tightening torque	8,8 Nm

- Connect the plug connection and cable clip at the door lock (3).
- Clip in locking rod (1).

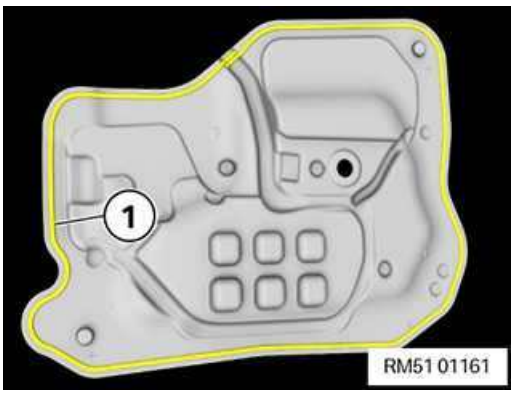
POSTPROCESSES

6 – Installing the sound insulation on the rear door

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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

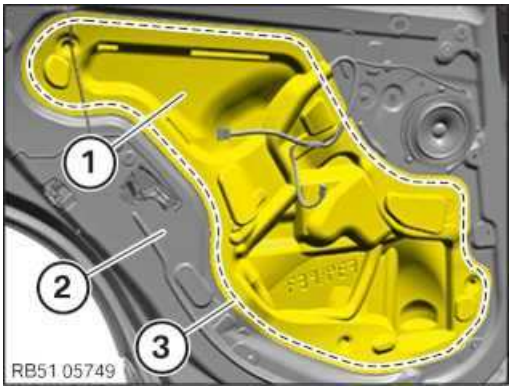
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Renew the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.
- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).



7 – Installing rear door trim panel

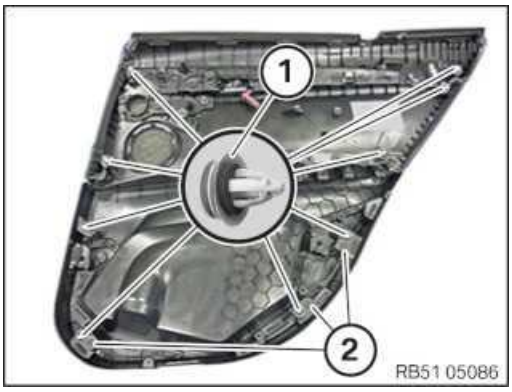
RISK OF DAMAGE

Scratches.

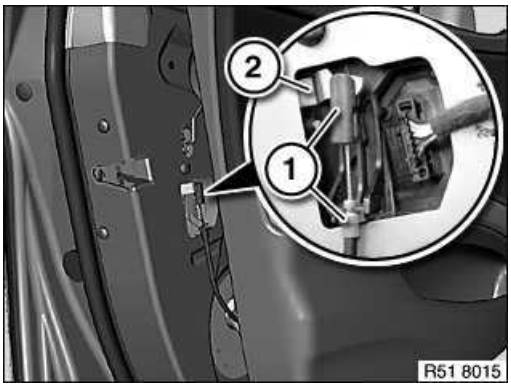
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

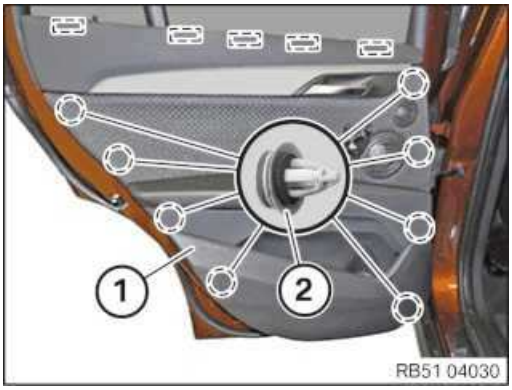
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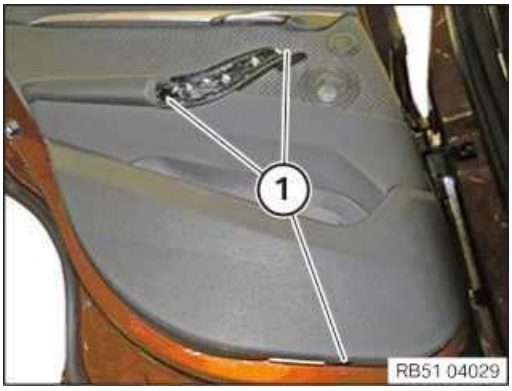
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

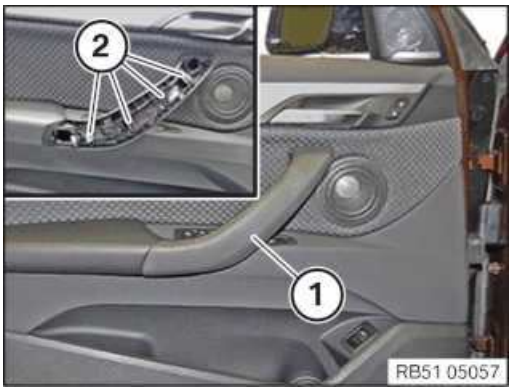
Screw TS5x20		Tightening torque	2,5 Nm

8 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door lock to door — Used in step 5

Screw		Tightening torque	8,8 Nm

Door trim panel to door — Used in step 7

Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 6

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51 22 235 Removing and installing/replacing Bowden cable for inside door opener on left or right rear door

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

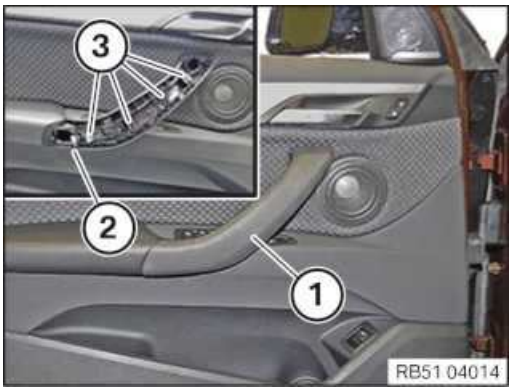
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

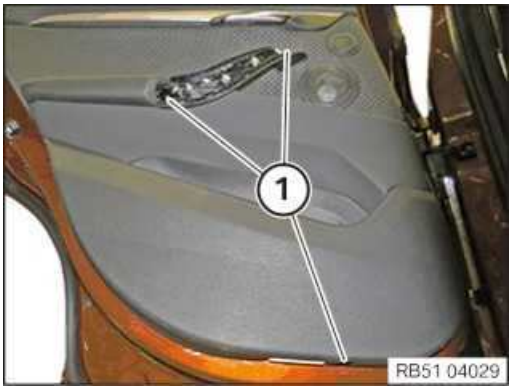
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

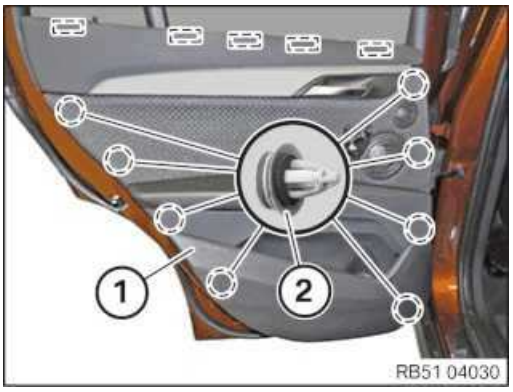
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

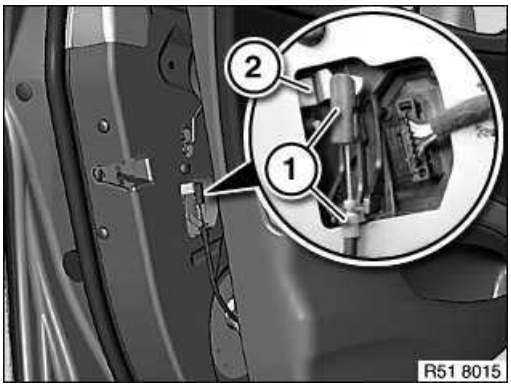


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.

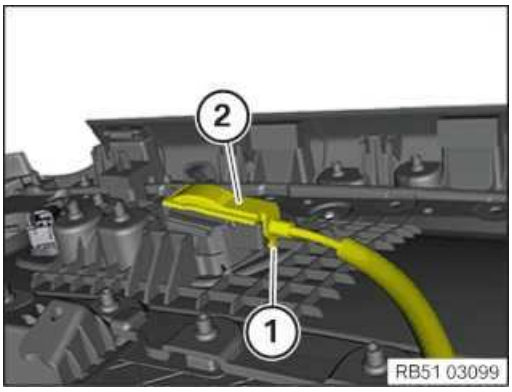


- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

MAIN WORK

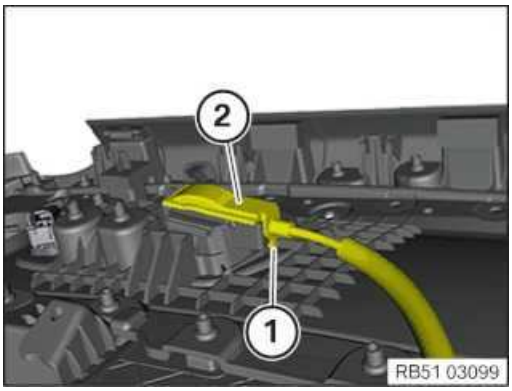
3 – Remove Bowden cable for the inside door opener



- Unlock the lock (1) and remove the Bowden cable (2) toward the top.

  The Bowden cable will thereby slide out automatically.

4 – Install the Bowden cable for the inside door opener



- Push the inside door handle in "closed" direction.
- Engage the Bowden cable (2) into the lock (1) towards the front/bottom.

  The Bowden cable (2) must be positioned correctly in the dedicated brackets.

POSTPROCESSES

5 – Installing rear door trim panel

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RISK OF DAMAGE

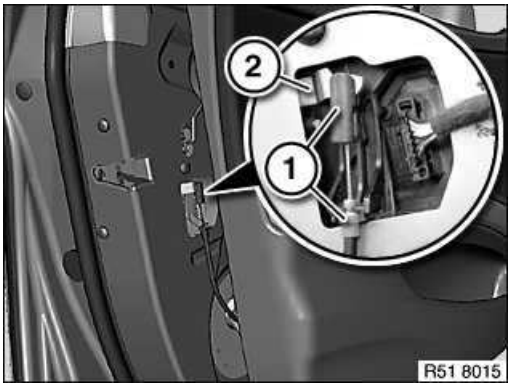
Scratches.

Tools and sharp-edged components can cause scratches.

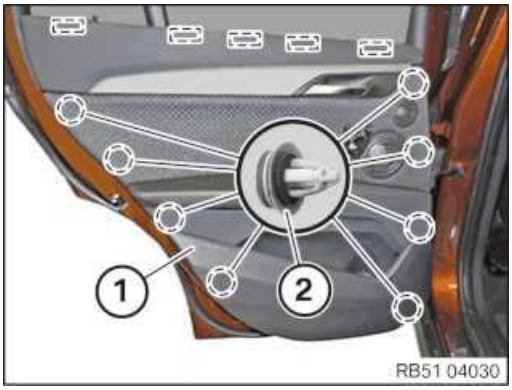
- Protect working area.
- Handle tools and components carefully.



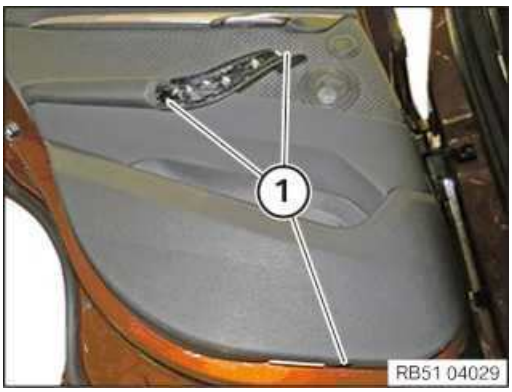
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

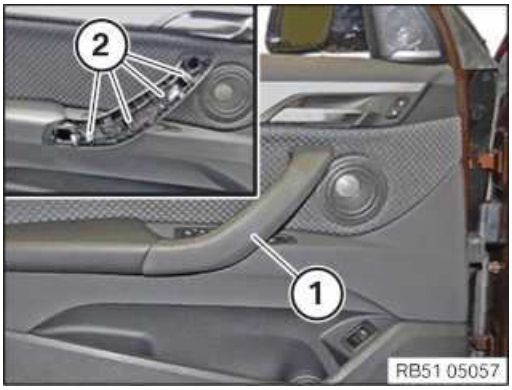
Screw TS5x20		Tightening torque	2,5 Nm

6 – Install the cover on the door handle

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door Used in step 5

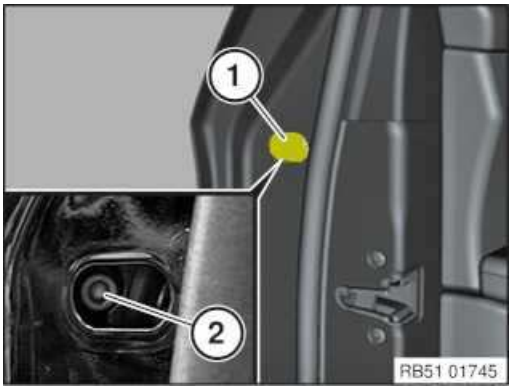
Screw TS5x20		Tightening torque	2,5 Nm

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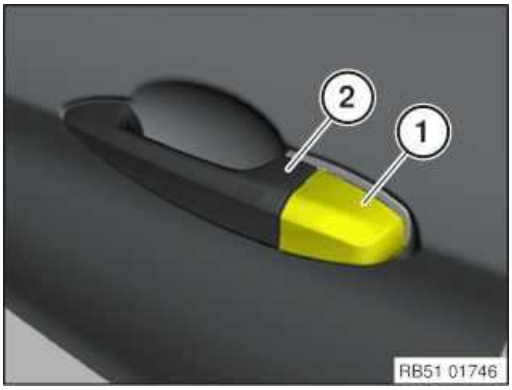
51 22 233 Removing and installing/replacing the Bowden cable for the outside door handle at the rear left or right

PRELIMINARY WORK

1 – Remove cover on the outside door handle

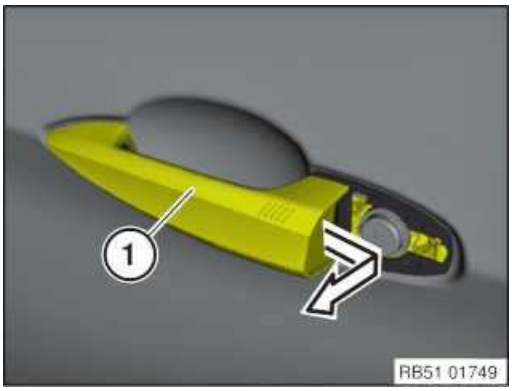


- Lever out the cover (1).
- Release screw (2) below it.



- Pull off the cover (1) with the outside door handle (2) slightly open.

2 – Remove the outside door handle



- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

3 – Remove cover on door handle

RISK OF DAMAGE

Scratches.

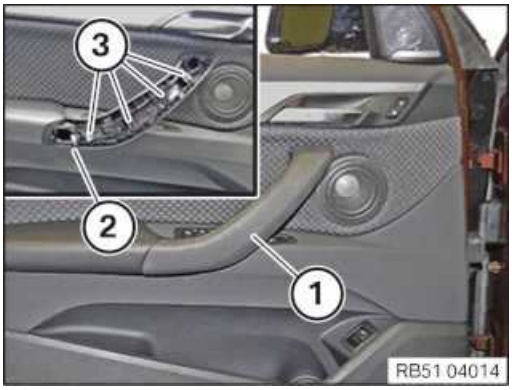
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

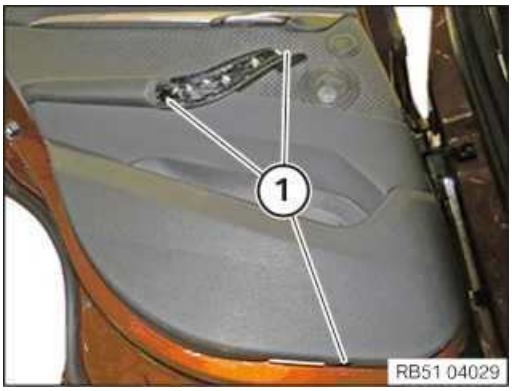
4 – Remove rear door trim

RISK OF DAMAGE

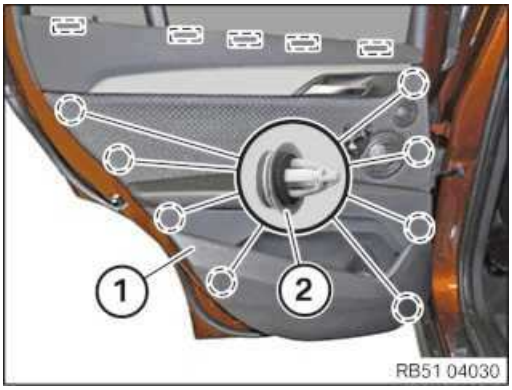
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

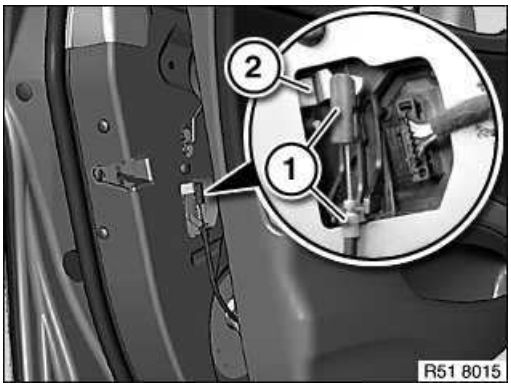


- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.

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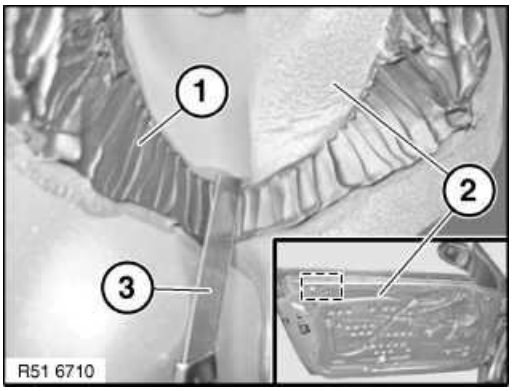
- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

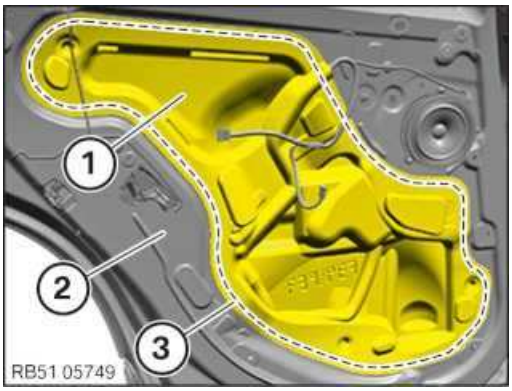
5 – Remove sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

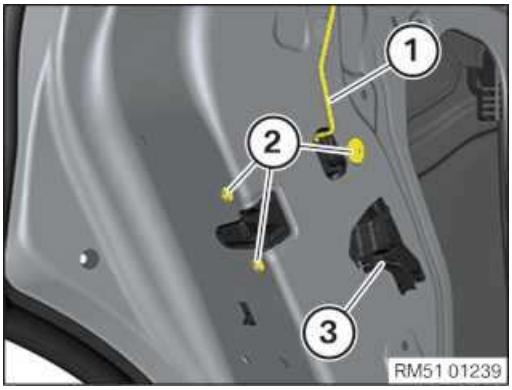


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.



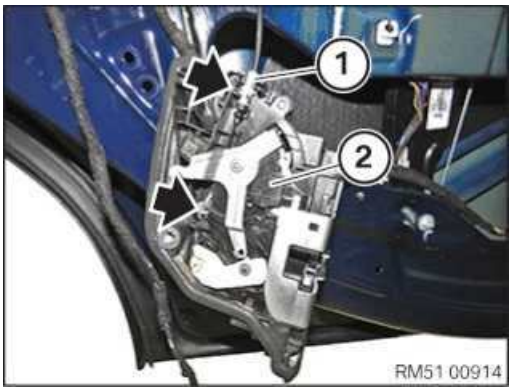
- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

6 – Removing the door lock in the rear door



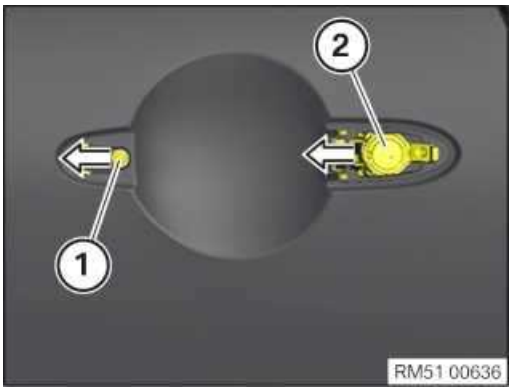
- Unclip locking rod (1).
- Disconnect the plug connection and cable clip at the door lock (3).
- Loosen screws (2).
- Feed the door lock (3) out of the door.

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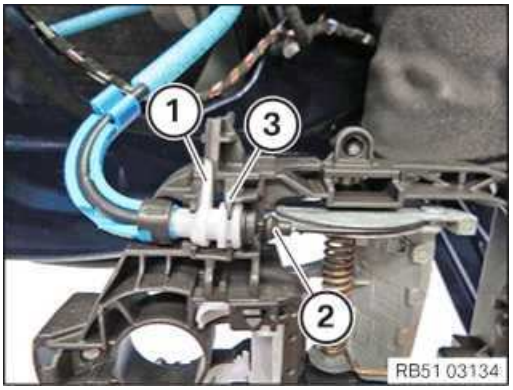


- Detach Bowden cable (1) from door lock (2).

7 – Remove the rear outer door handle support



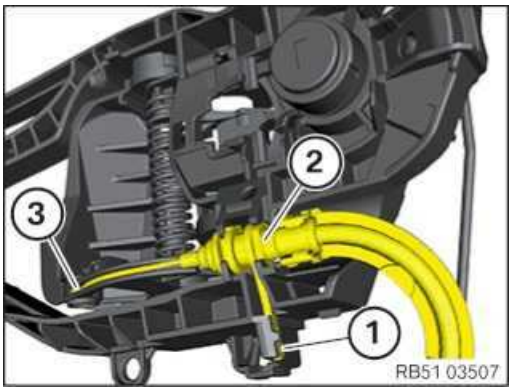
- Loosen screw (1).
- Slide the outside door handle support (2) forward and thread out to the inside.
- Detach the wiring harness from the outside door handle support (2).
- Feed the outside door handle support (1) out of the door.



- Disengage lever (1) and turn it by 90°.
- Detach Bowden cable (2) at the counter support (3).
- Detach Bowden cable (2) at the Bowden cable nipple.

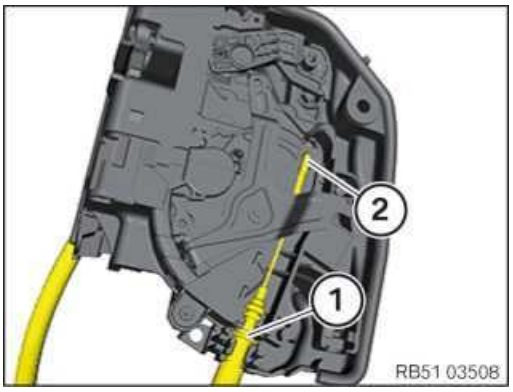
MAIN WORK

8 – Remove the Bowden cable of the rear outside door handle



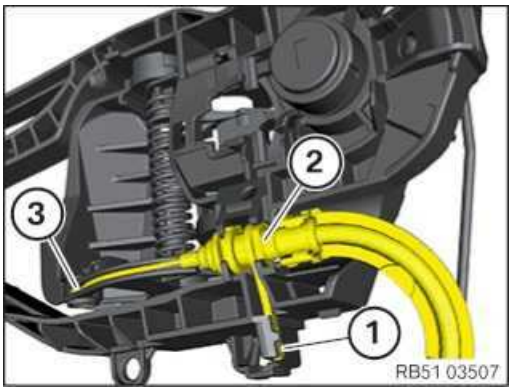
- Lift the tab (1) over the latch mechanism and twist it upwards and detach the Bowden cable (2).
- Detach the Bowden cable nipple (3).

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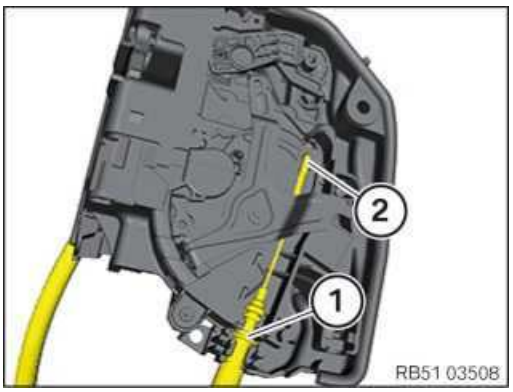


- Detach the Bowden cable (1).
- Detach the Bowden cable nipple (2).
- Remove the Bowden cable (1).

9 – Install Bowden cable for rear outside door handle



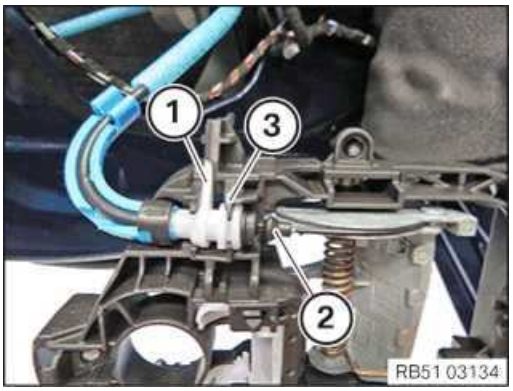
- Attach the Bowden cable nipple (3).
- Attach Bowden cable (2) and twist and lock the tab (1).



- Attach the Bowden cable nipple (2).
- Attach the Bowden cable (1).

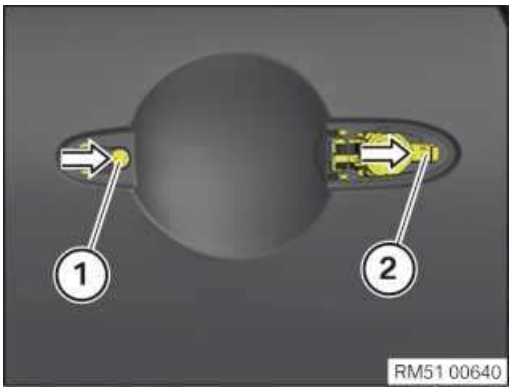
POSTPROCESSES

10 – Install the rear outside door handle support



- Attach Bowden cable (2) to the Bowden cable nipple.
- Attach the Bowden cable (2) on the counter support (3).
- Turn lever (1) by 90° and engage.

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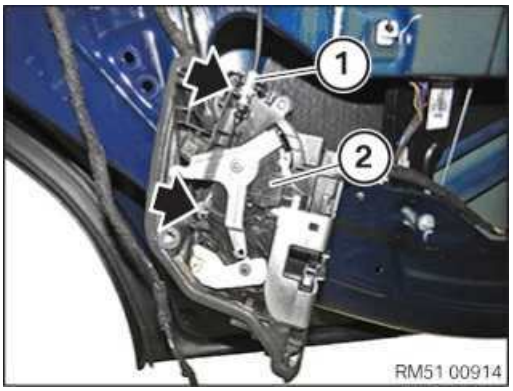


- Feed in the outside door handle support (2) into the door.
- Insert the outside door handle support (2) into the fixture toward the rear.
- Attach vehicle wiring harness to the outside door handle support (2).
- Tighten down screw (1).

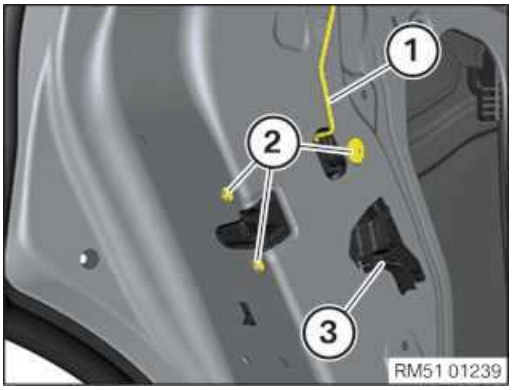
Outside door handle support to door

Screw		Tightening torque	2,6 Nm

11 – Install door lock in the rear door



- Attach the Bowden cable (1) to the door lock (2).



- Guide the door lock (3) into the door.
- Tighten down screws (2).

Door lock to door

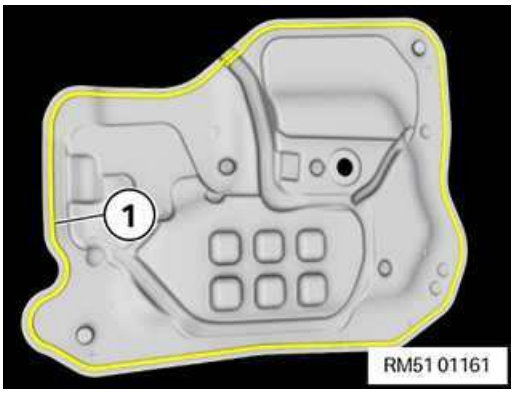
Screw		Tightening torque	8,8 Nm

- Connect the plug connection and cable clip at the door lock (3).
- Clip in locking rod (1).

12 – Installing the sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

- Check sound insulation for damage.

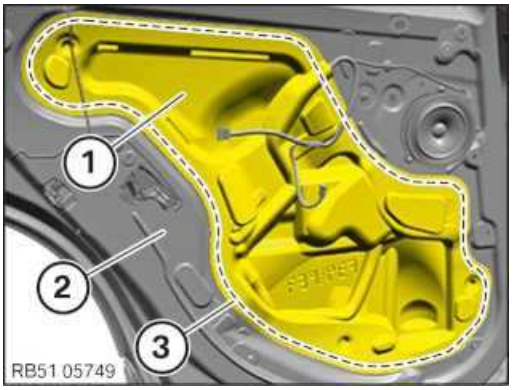
Result

» The sound insulation is damaged.

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Measure

- Renew the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).

13 – Installing rear door trim panel

RISK OF DAMAGE

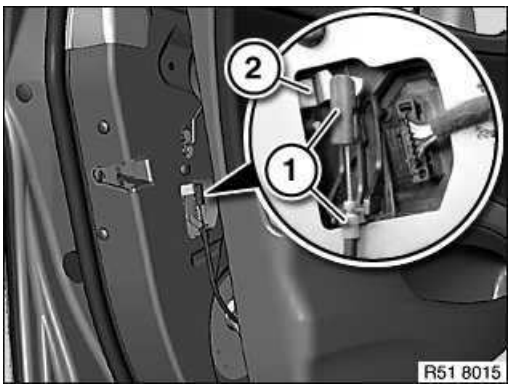
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

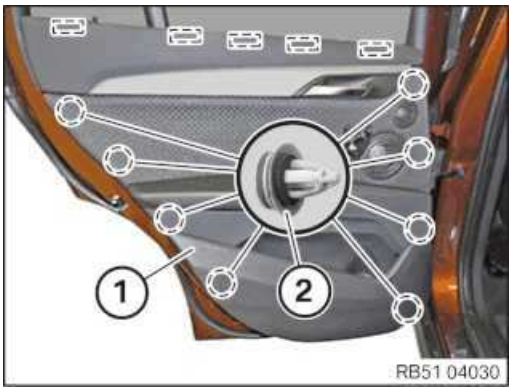


- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

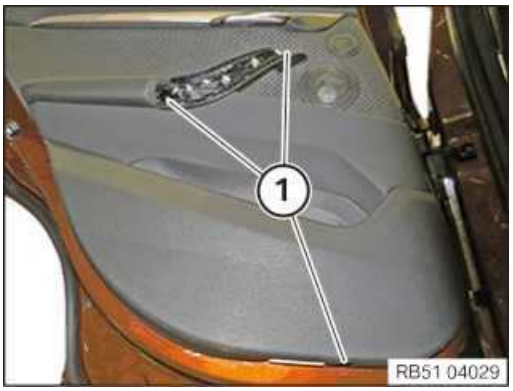


- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).

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- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

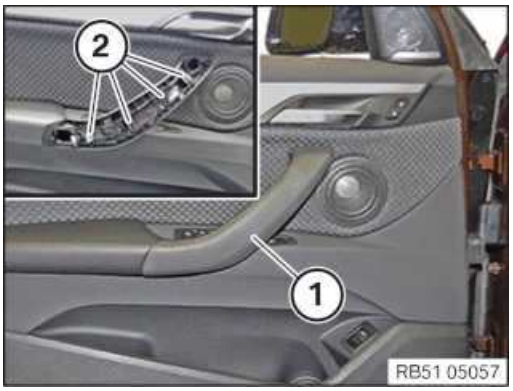
Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

14 – Install the cover on the door handle

NOTICE

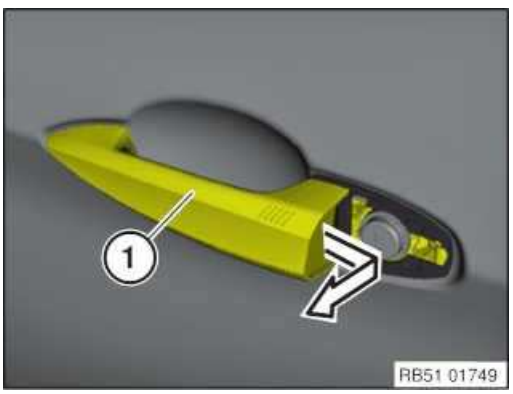
Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

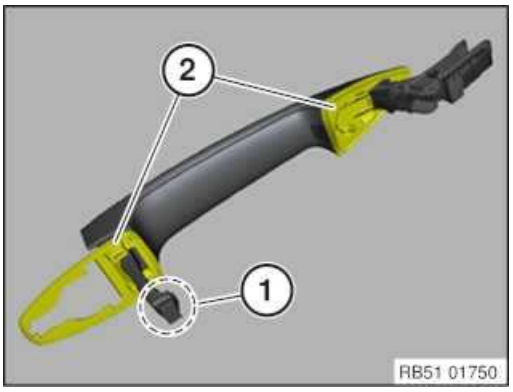
15 – Install the outside door handle



- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

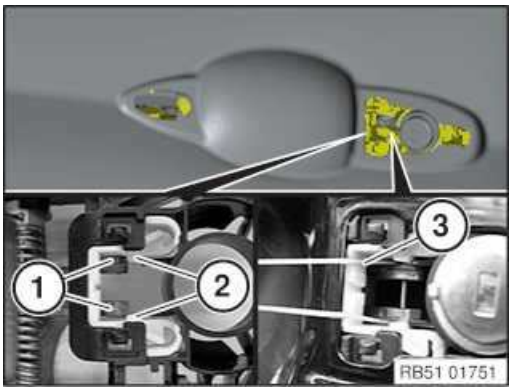
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

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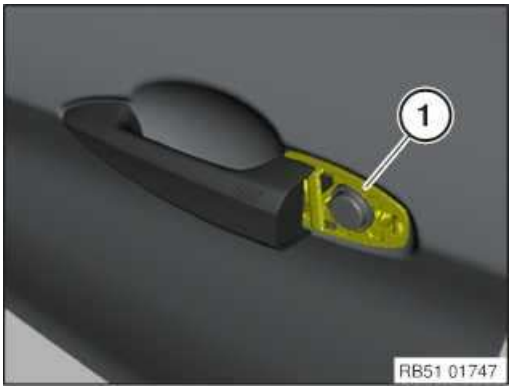
- Check the fixture (1) for damage.

  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.

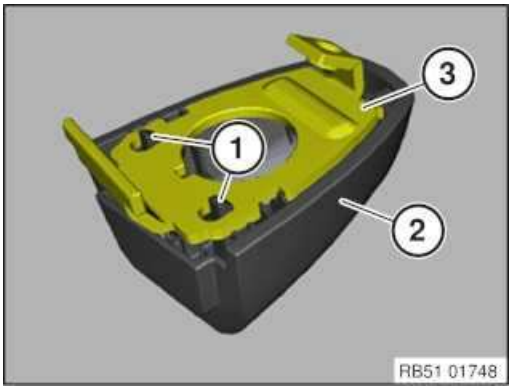


- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

16 – Install the cover on the outside door handle

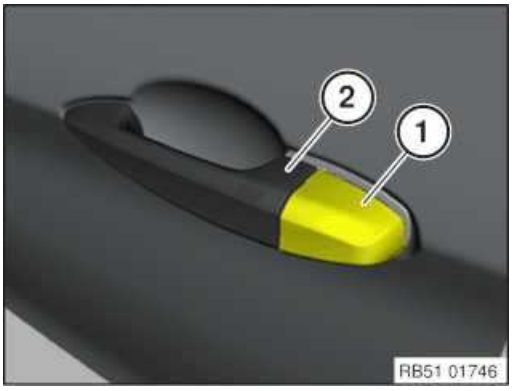


- Make sure the gasket (1) is fitted correctly.



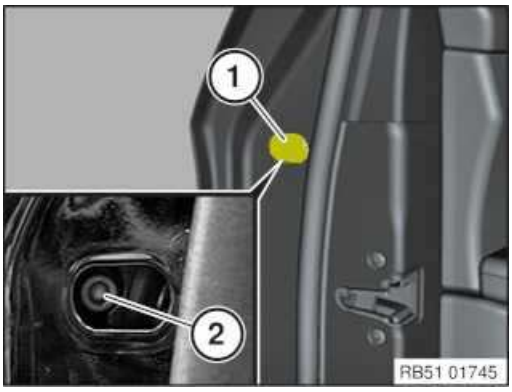
- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.

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- Tighten down screw (2).

Attachment bell to outside door handle support

Screw		Tightening torque	3 Nm

- Mount the cover (1).

Additional Information

Overview of Tightening Torques

Outside door handle support to door Used in step 10

Screw		Tightening torque	2,6 Nm

Door lock to door Used in step 11

Screw		Tightening torque	8,8 Nm

Door trim panel to door Used in step 13

Screw TS5x20		Tightening torque	2,5 Nm

Attachment bell to outside door handle support Used in step 16

Screw		Tightening torque	3 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	5 12

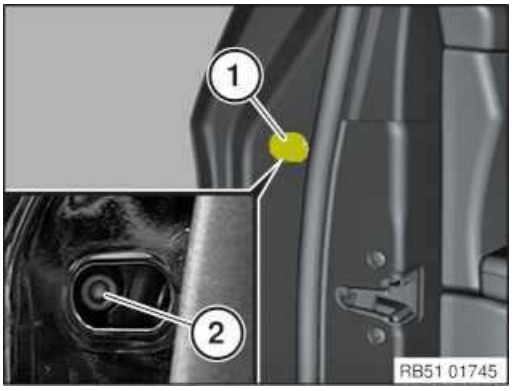
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51 22 180 Removing and installing/replacing the cover for the outside door handle at the rear left or right

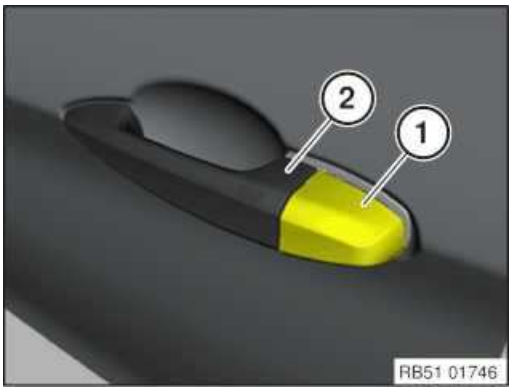
NOTICE

Description is for left component only. Procedure on the right side is identical.

1 – Remove cover on the outside door handle

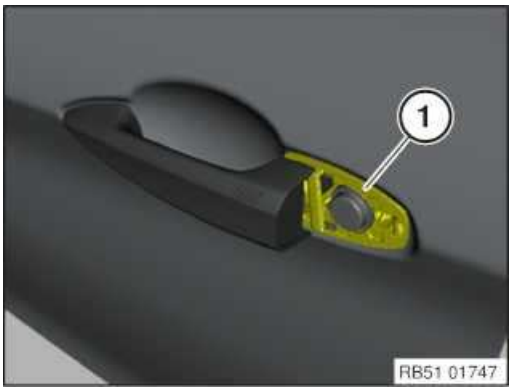


- Lever out the cover (1).
- Release screw (2) below it.

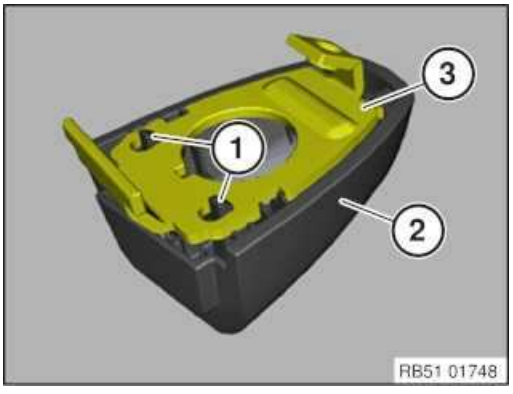


- Pull off the cover (1) with the outside door handle (2) slightly open.

2 – Install the cover on the outside door handle



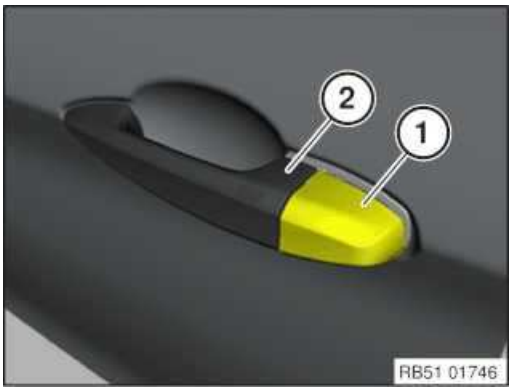
- Make sure the gasket (1) is fitted correctly.



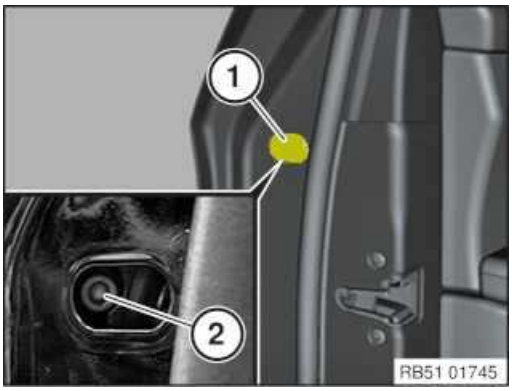
- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).

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- Install the cover (1) with the outside door handle (2) slightly open.



- Tighten down screw (2).

Attachment bell to outside door handle support

Screw		Tightening torque	3 Nm

- Mount the cover (1).

Additional Information

Overview of Tightening Torques

Attachment bell to outside door handle support Used in step 2

Screw		Tightening torque	3 Nm

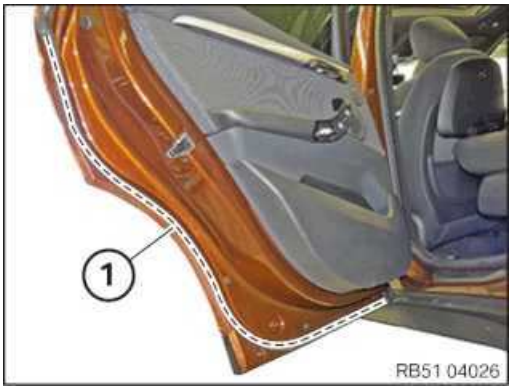
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51 22 370 Removing and installing/replacing the cover on the rear door at the bottom left or right

NOTICE

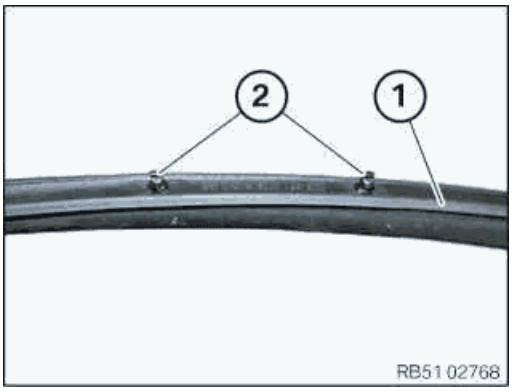
Description is for left component only. Procedure on the right side is identical.

1 – Remove seal on the rear door at the bottom

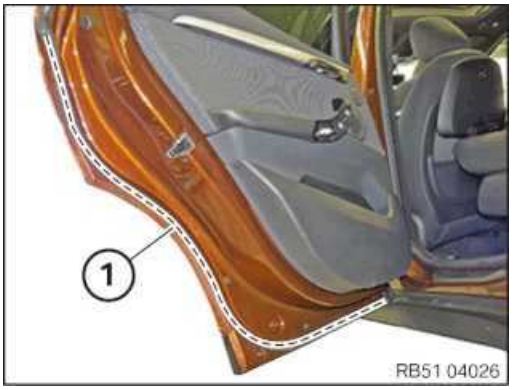


- Unclip the seal (1) from the clips along the dotted line with the special tool **2 298 505**.
- Remove the seal (1).

2 – Install the seal on the rear door at bottom



- Check the clips (2) of the seal (1) and replace if necessary.



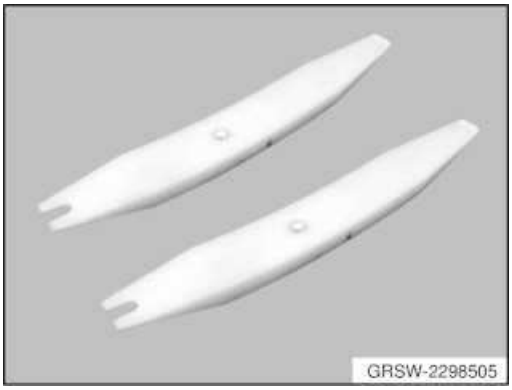
- Position the seal (1).
- Clip in the seal (1) along the dotted line.

Additional Information

Overview of Special Tools

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2 298 505 Wedge



Common

Used in step 1

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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51 22 280 Removing and installing/replacing the door brake on the left or right rear door

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

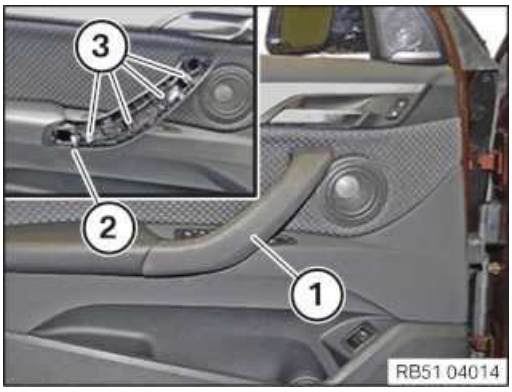
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

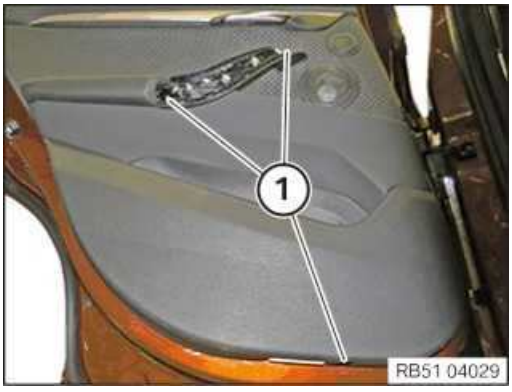
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

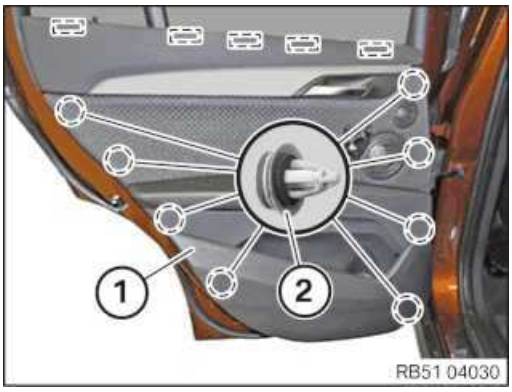
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

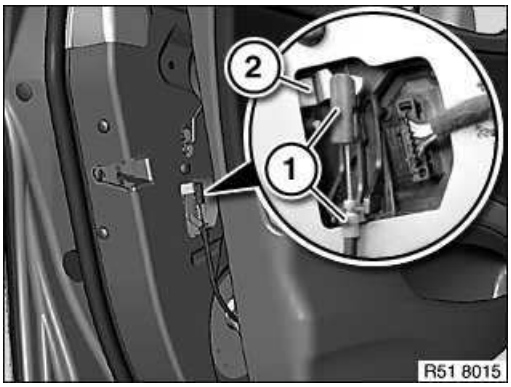


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



- Detach Bowden cable (1) from door lock (2).

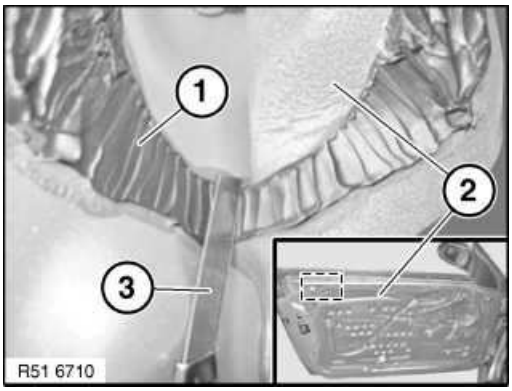
  Disconnect all plug connections and remove door trim panel.

3 – Remove sound insulation on the rear door

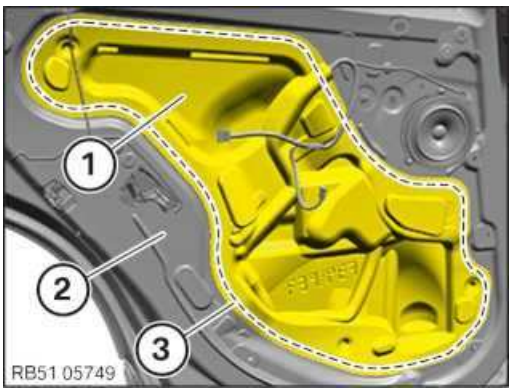
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.

For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



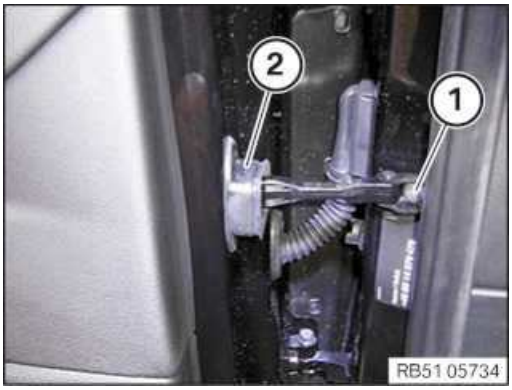
- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.



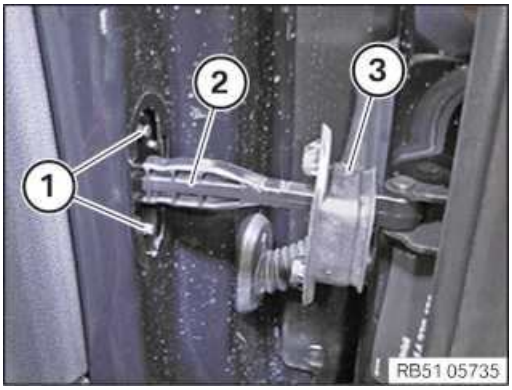
- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

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4 – Remove door stop

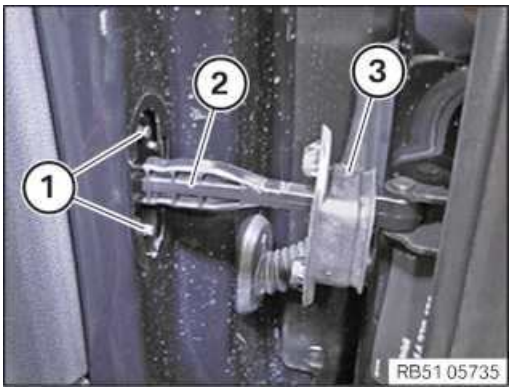


- Loosen screw (1).
- Pull off the cover (2) from the door outer skin.



- Loosen nuts (1).
- Feed the door brake (2) out of the door and remove the cover (3).

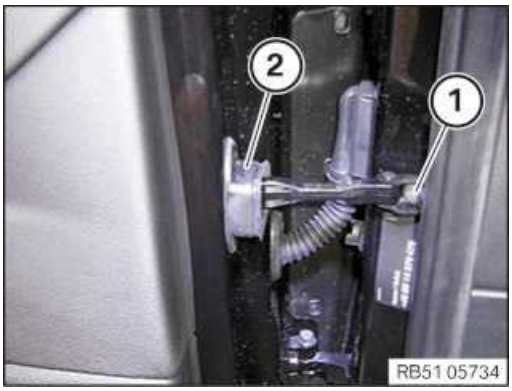
5 – Installing the door stop



- Guide door brake (2) into the door.
- Check the retaining lugs of the cover (3), they must not be missing or damaged.
- Attach the cover (3) to the door brake (2).
- Tighten nuts (1).

Door retainer to door

Nut M6		Tightening torque	8 Nm



- Tighten down screw (1).

Door stop to pillar

Screw		Tightening torque	28 Nm

- Mount the cover (1) on the door outer skin and lock.

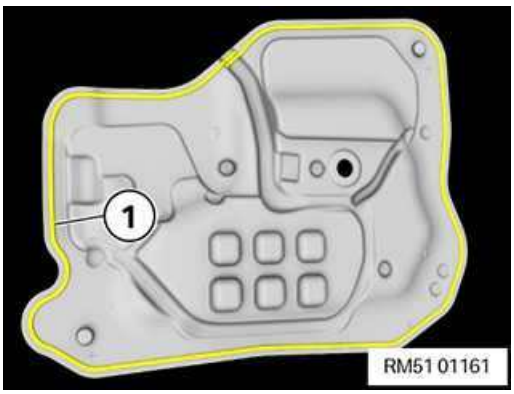
POSTPROCESSES

6 – Installing the sound insulation on the rear door

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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

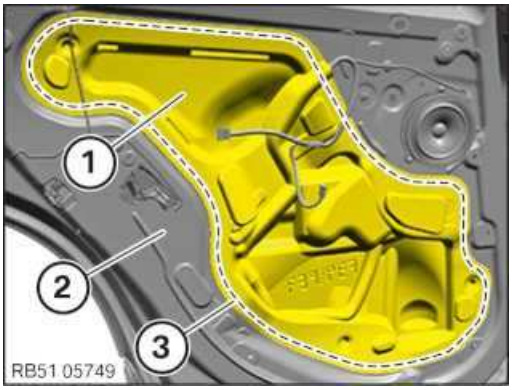
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Renew the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.
- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).



7 – Installing rear door trim panel

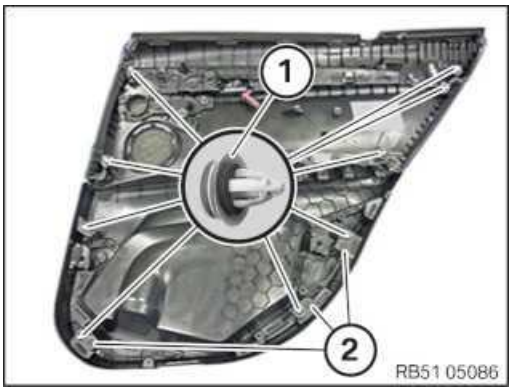
RISK OF DAMAGE

Scratches.

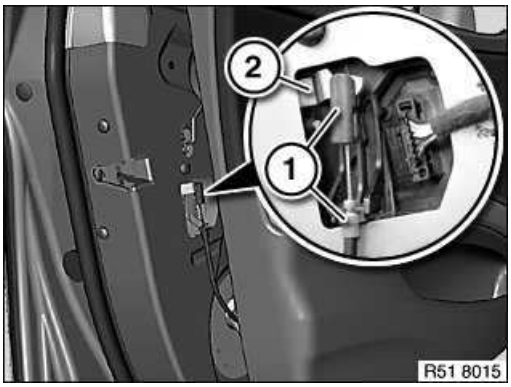
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

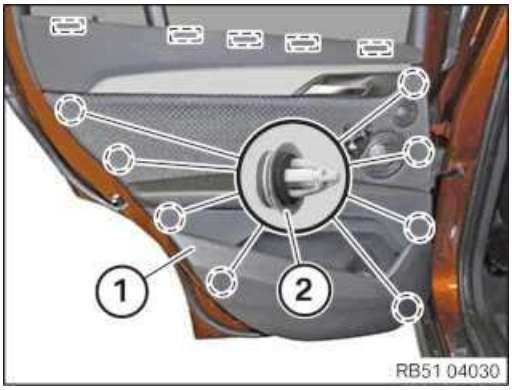
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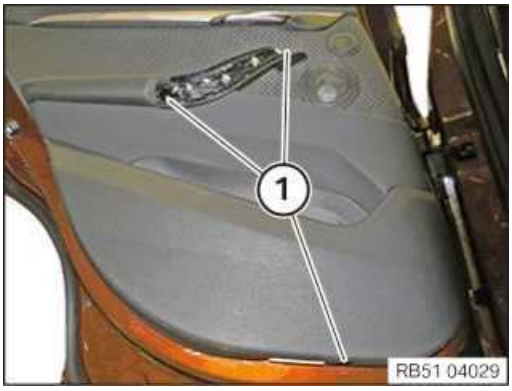
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

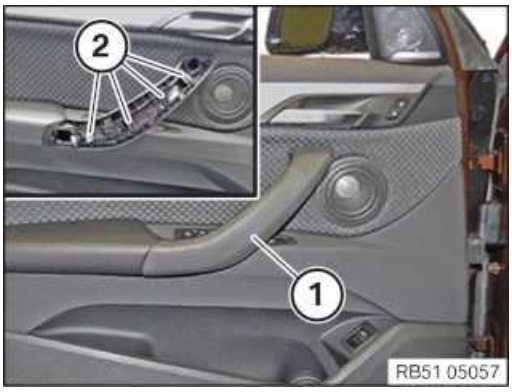
Screw TS5x20		Tightening torque	2,5 Nm

8 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door retainer to door			Used in step 5
Nut M6		Tightening torque	8 Nm

Door stop to pillar			Used in step 5
Screw		Tightening torque	28 Nm

Door trim panel to door			Used in step 7
Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 6

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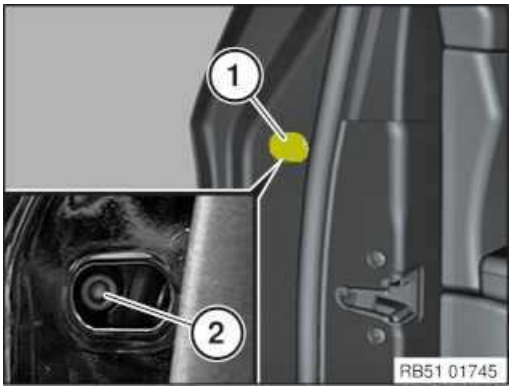
51 22 170 Removing and installing/replacing the outside door handle at the rear left or right

NOTICE

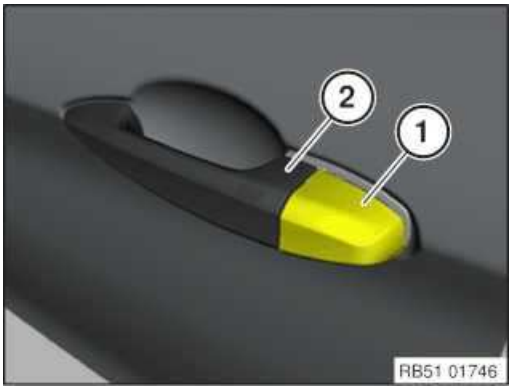
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on the outside door handle



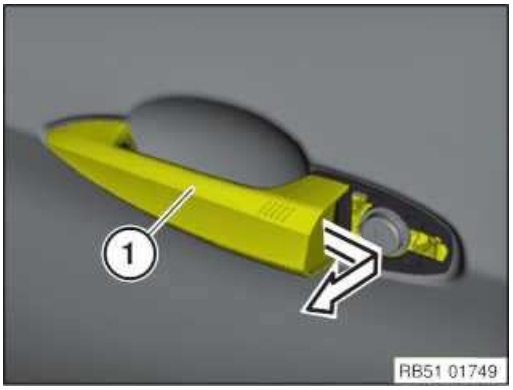
- Lever out the cover (1).
- Release screw (2) below it.



- Pull off the cover (1) with the outside door handle (2) slightly open.

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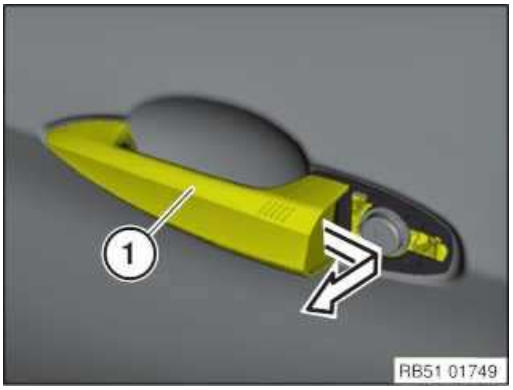
2 – Remove the outside door handle



- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

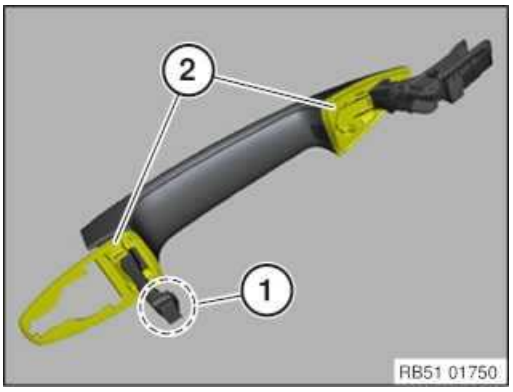
  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

3 – Install the outside door handle



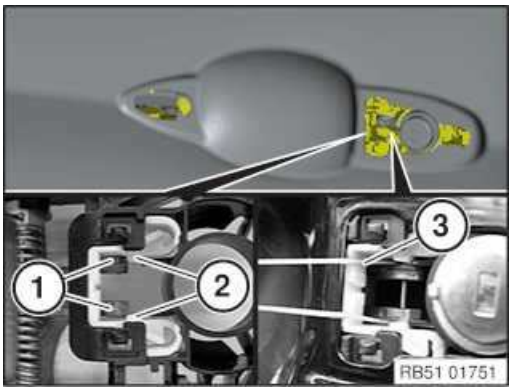
- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.



- Check the fixture (1) for damage.

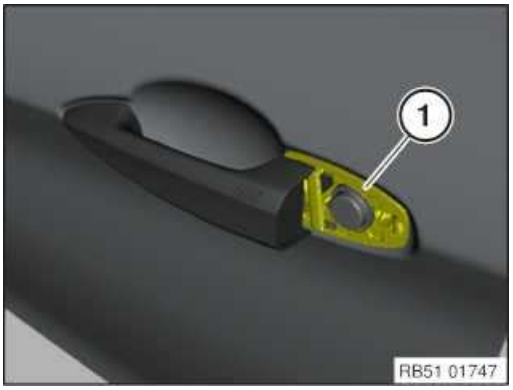
  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.



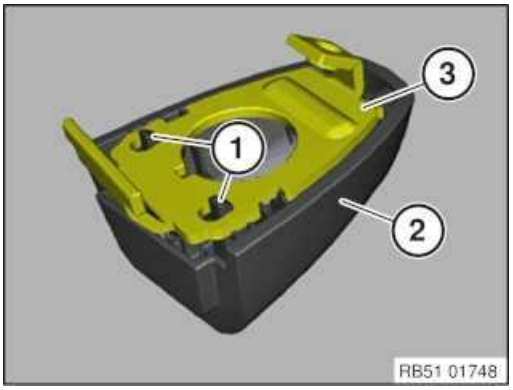
- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

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4 – Install the cover on the outside door handle

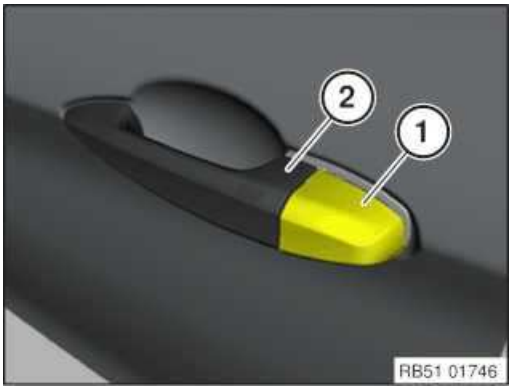


- Make sure the gasket (1) is fitted correctly.

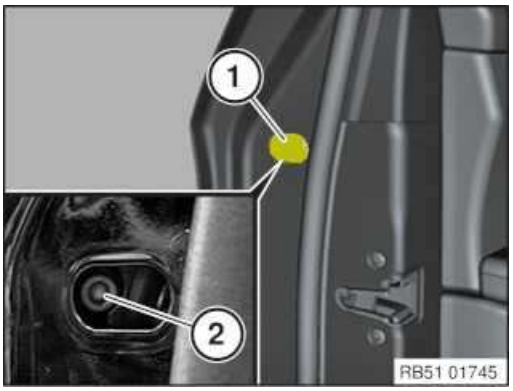


- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.



- Tighten down screw (2).

Attachment bell to outside door handle support

Screw		Tightening torque	3 Nm

- Mount the cover (1).

Additional Information

Overview of Tightening Torques

Attachment bell to outside door handle support Used in step 4

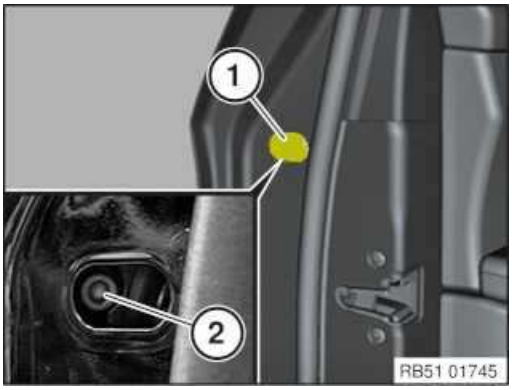
Screw		Tightening torque	3 Nm

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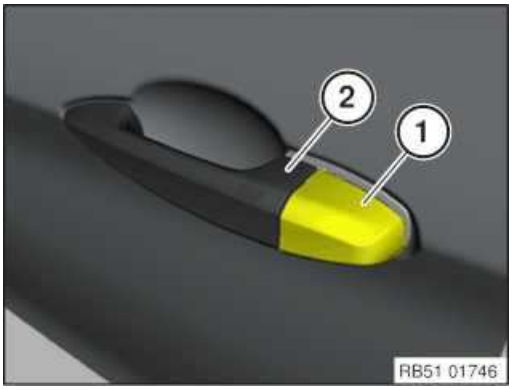
51 22 126 Removing and installing/replacing the outside door handle support in the left or right rear door

PRELIMINARY WORK

1 – Remove cover on the outside door handle

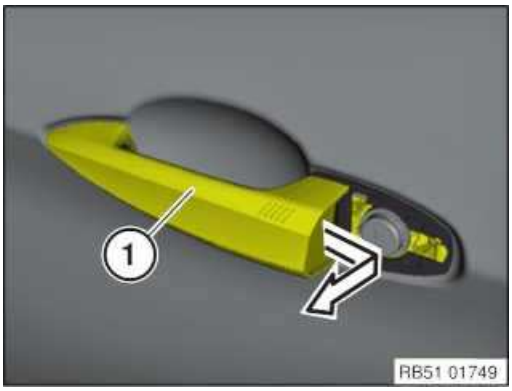


- Lever out the cover (1).
- Release screw (2) below it.



- Pull off the cover (1) with the outside door handle (2) slightly open.

2 – Remove the outside door handle



- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.

3 – Remove cover on door handle

RISK OF DAMAGE

Scratches.

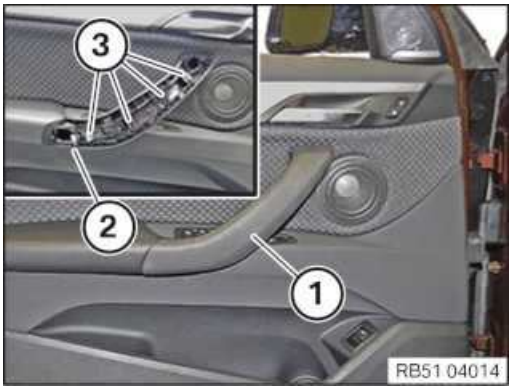
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

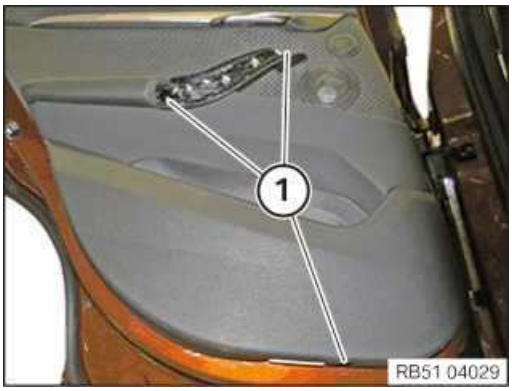
4 – Remove rear door trim

RISK OF DAMAGE

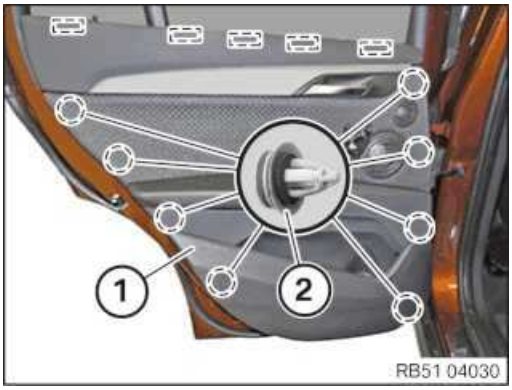
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

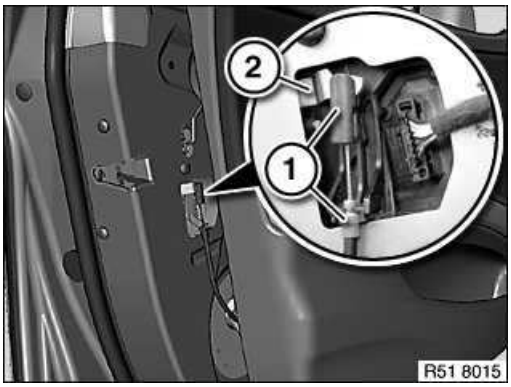


- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.

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- Detach Bowden cable (1) from door lock (2).

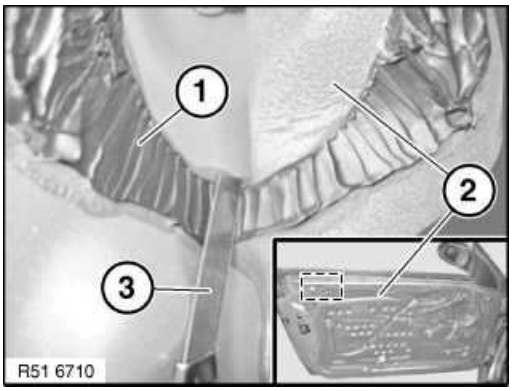
  Disconnect all plug connections and remove door trim panel.

5 – Remove sound insulation on the rear door

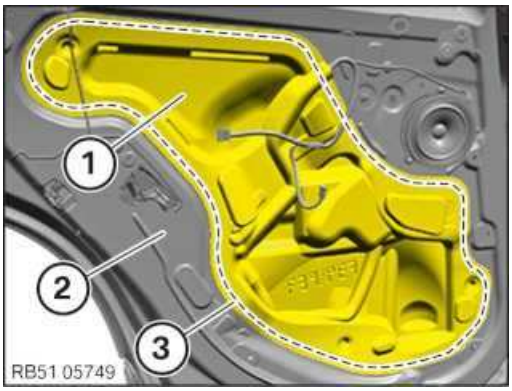
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.

For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



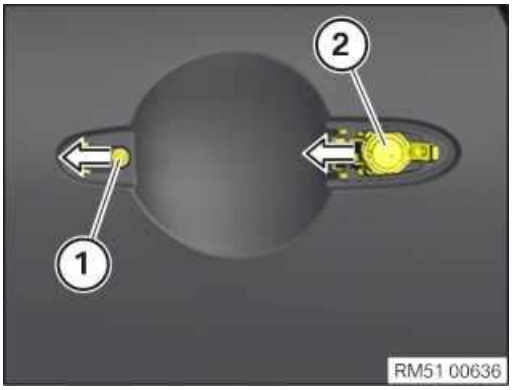
- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.



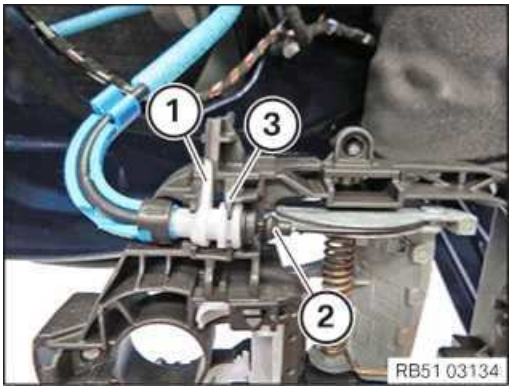
- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

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6 – Remove the rear outer door handle support

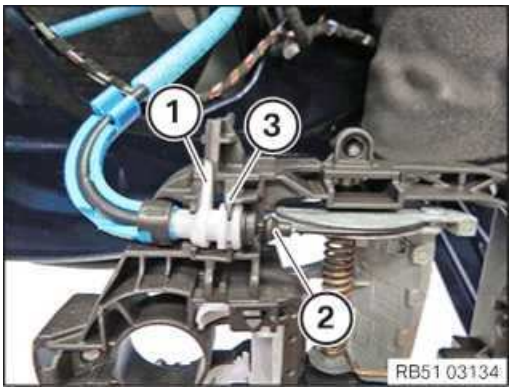


- Loosen screw (1).
- Slide the outside door handle support (2) forward and thread out to the inside.
- Detach the wiring harness from the outside door handle support (2).
- Feed the outside door handle support (1) out of the door.

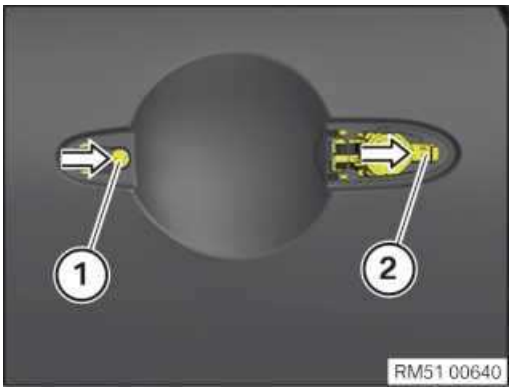


- Disengage lever (1) and turn it by 90°.
- Detach Bowden cable (2) at the counter support (3).
- Detach Bowden cable (2) at the Bowden cable nipple.

7 – Install the rear outside door handle support



- Attach Bowden cable (2) to the Bowden cable nipple.
- Attach the Bowden cable (2) on the counter support (3).
- Turn lever (1) by 90° and engage.



- Feed in the outside door handle support (2) into the door.
- Insert the outside door handle support (2) into the fixture toward the rear.
- Attach vehicle wiring harness to the outside door handle support (2).
- Tighten down screw (1).

Outside door handle support to door

Screw		Tightening torque	2,6 Nm

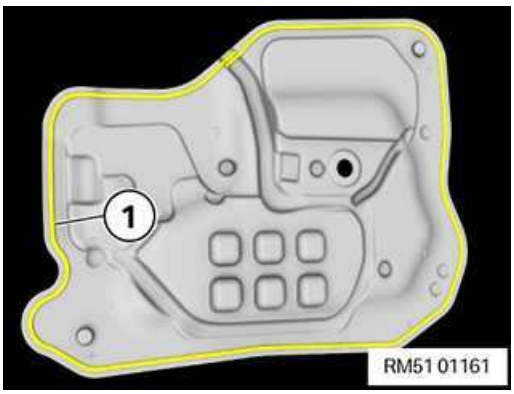
POSTPROCESSES

8 – Installing the sound insulation on the rear door

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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

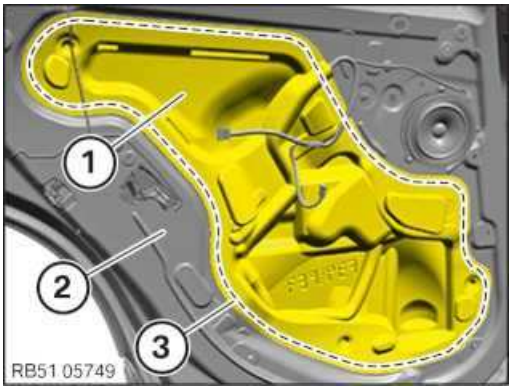
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Renew the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.
- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).



9 – Installing rear door trim panel

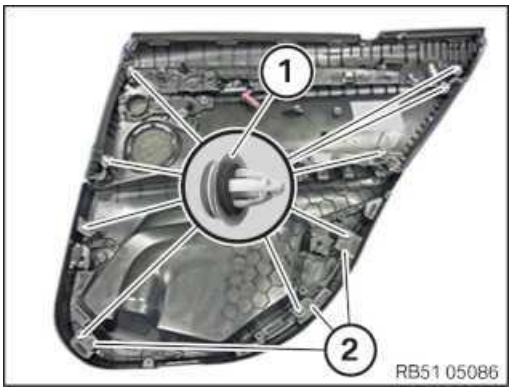
RISK OF DAMAGE

Scratches.

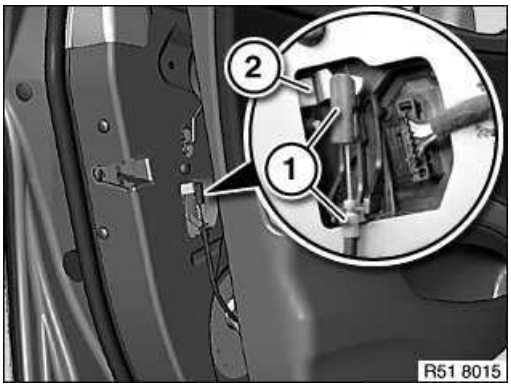
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

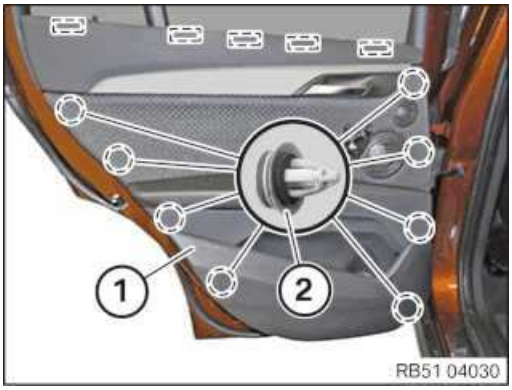
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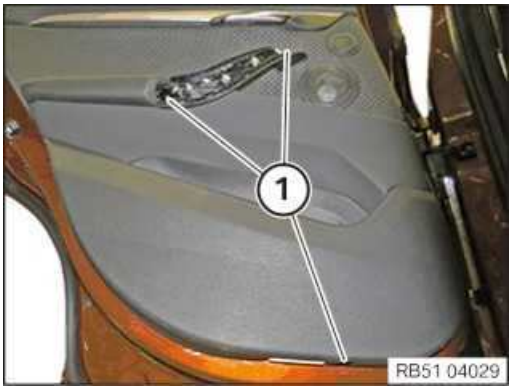
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

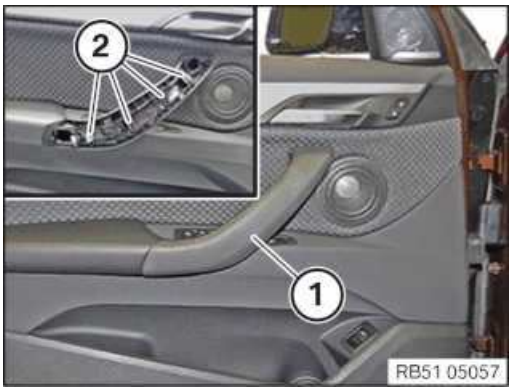
Screw TS5x20		Tightening torque	2,5 Nm

10 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.

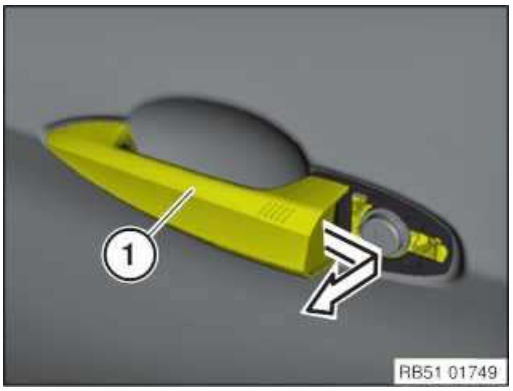
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- Check clamps (2) for damage; renew if necessary.

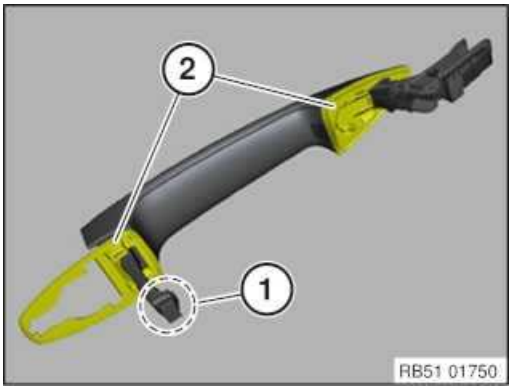
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

11 – Install the outside door handle



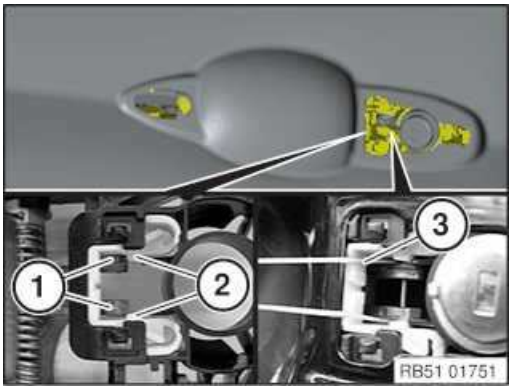
- Pull out the outside door handle (1) and feed out in direction of arrow.
- **Equipment specification with Comfort Access/light package**:

  Carefully feed out the outside door handle (1) and disconnect the associated plug connections.



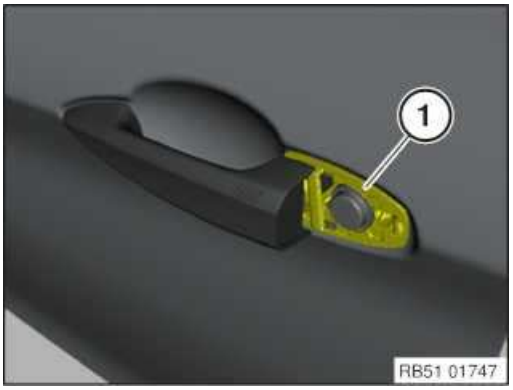
- Check the fixture (1) for damage.

  Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged of missing.



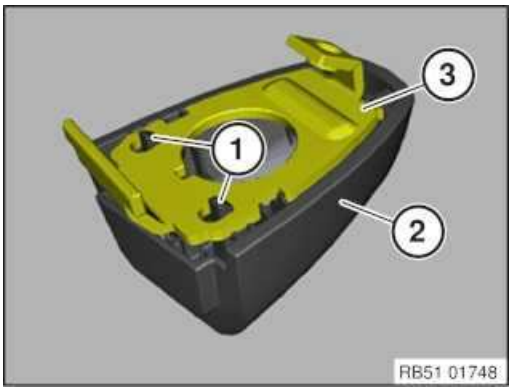
- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into the lock actuation (1) correctly.
- Remove the string (3).
- Carry out functional check with door open.

12 – Install the cover on the outside door handle



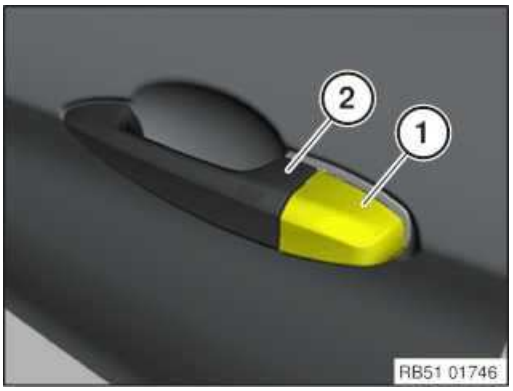
- Make sure the gasket (1) is fitted correctly.

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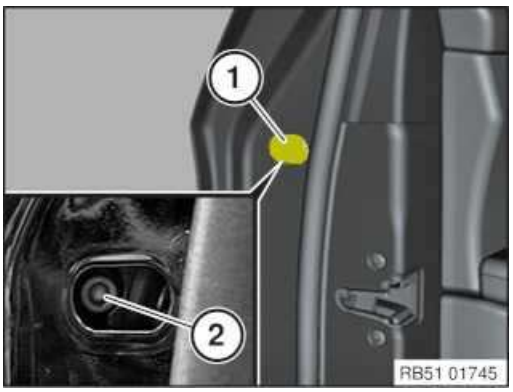


- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

  The latch mechanisms (1) must not be damaged or missing.
- **When replacing the cover** (2)**:** Remount retaining plate (3).



- Install the cover (1) with the outside door handle (2) slightly open.



- Tighten down screw (2).

Attachment bell to outside door handle support

Screw		Tightening torque	3 Nm

- Mount the cover (1).

Additional Information

Overview of Tightening Torques

Outside door handle support to door Used in step 7

Screw		Tightening torque	2,6 Nm

Door trim panel to door Used in step 9

Screw TS5x20		Tightening torque	2,5 Nm

Attachment bell to outside door handle support Used in step 12

Screw		Tightening torque	3 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	5 8

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51 22 330 Removing and installing/replacing the weather strip on the inside of the rear door

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

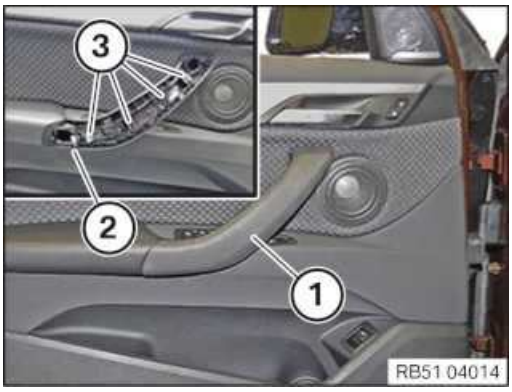
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

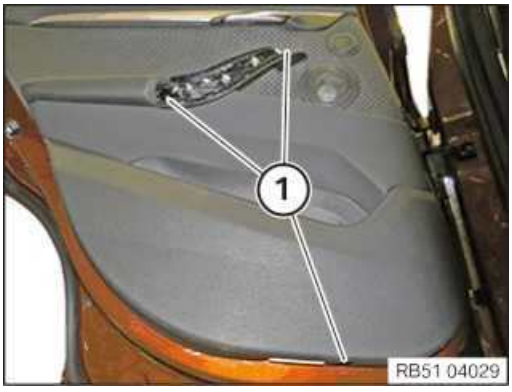
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

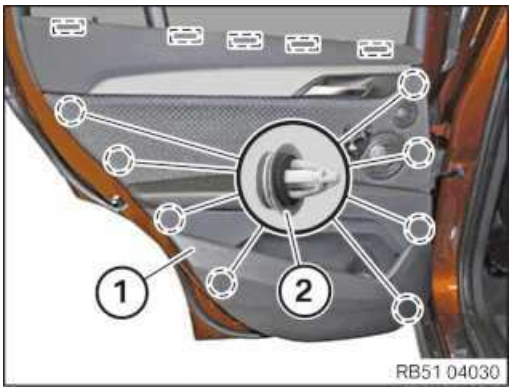
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

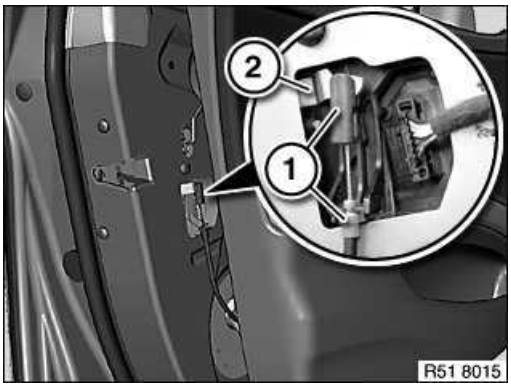


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.

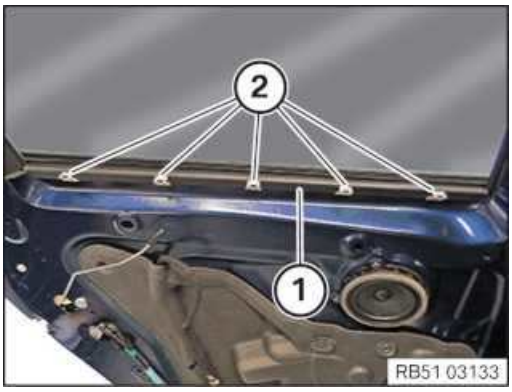


- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

MAIN WORK

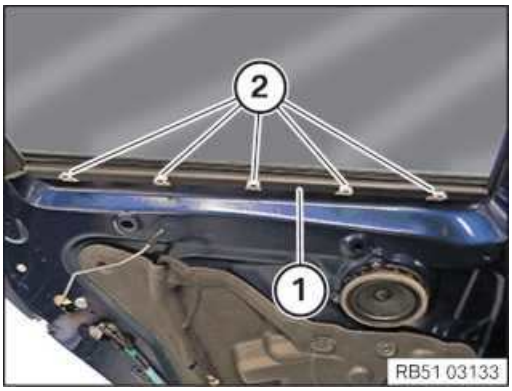
3 – Remove the weather strip from the rear inner door



- Release the weather strip (1) from the brackets (2) and pull it off to the top.
- Make sure the weather strip (1) is not deformed.

  It is exclusively possible to re-use a weather strip that has not been deformed.

4 – Installing weather strip on inner rear door



- Coat the weather strip (1) prior to installation with an approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.
- Renew defective clamps (2).
- Position weather strip (1) on the door and engage into the clamps (2).

POSTPROCESSES

5 – Installing rear door trim panel

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RISK OF DAMAGE

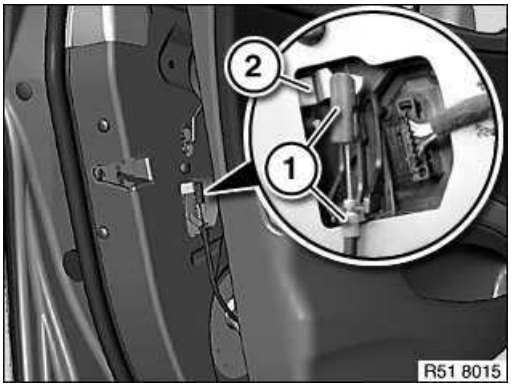
Scratches.

Tools and sharp-edged components can cause scratches.

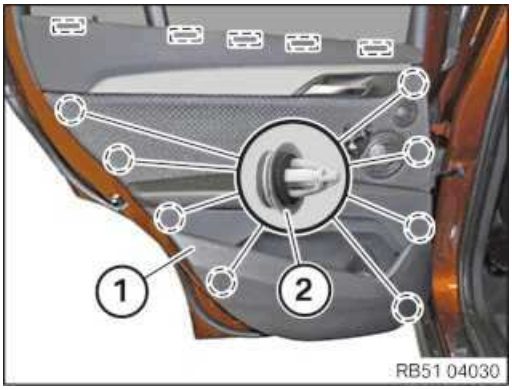
- Protect working area.
- Handle tools and components carefully.



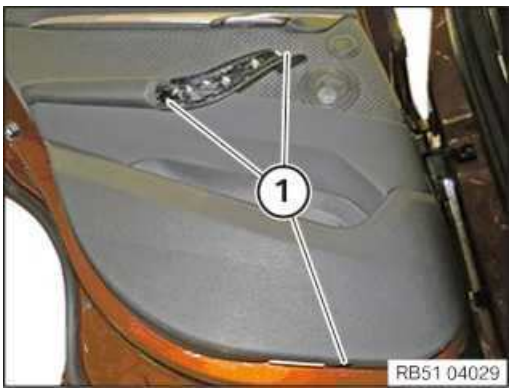
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

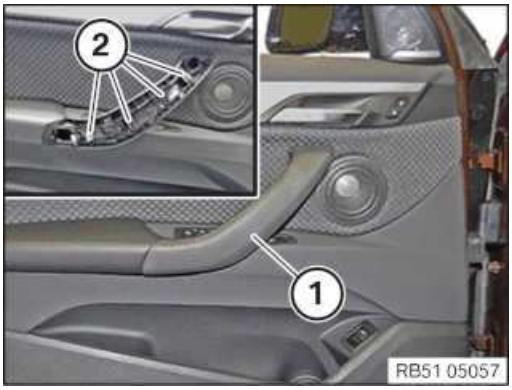
Screw TS5x20		Tightening torque	2,5 Nm

6 – Install the cover on the door handle

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door Used in step 5

Screw TS5x20		Tightening torque	2,5 Nm

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51 22 300 Removing and installing/replacing the weather strip on the outside left or right rear door

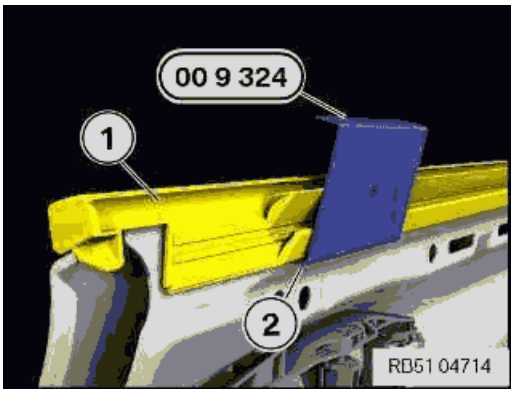
NOTICE

Description is for left component only. Procedure on the right side is identical.

1 – Removing the outer weather strip at the rear door

Prerequisite

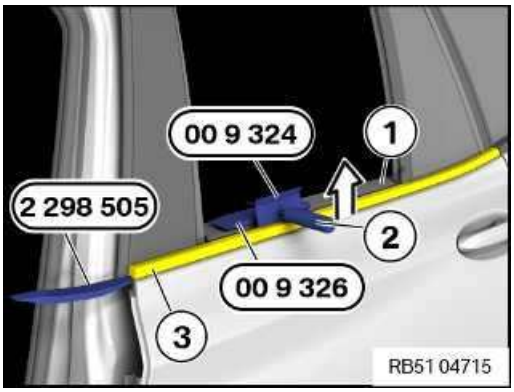
The door window glass is open.



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Insert special tool **0 495 484 (00 9 324)** into window cavity.
- Position the special tool **0 495 484 (00 9 324)** as shown at the lower edge of the weather strip (1) with the short shank (2).



RISK OF DAMAGE

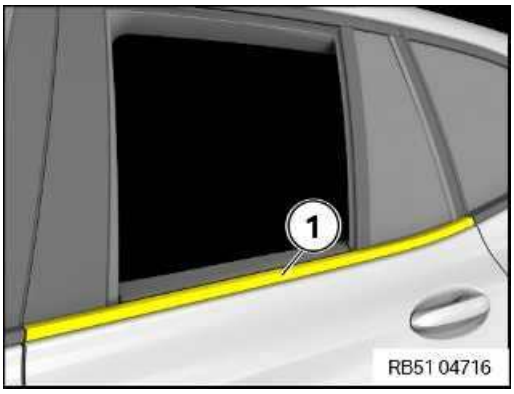
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Lift weather strip (3) using the special tool **2 298 505** by a maximum of 5 mm as illustrated.
- Position the special tool **0 496 570 (00 9 326)** on the door trim panel (1).
- Thread a suitable tool (2) through the opening of the special tool **0 495 484 (00 9 324)**.
- Gradually move special tool **2 298 505** and **0 495 484 (00 9 324)** backwards until the weather strip (3) has been completely disassembled.

2 – Installing the outer weather strip on the rear door



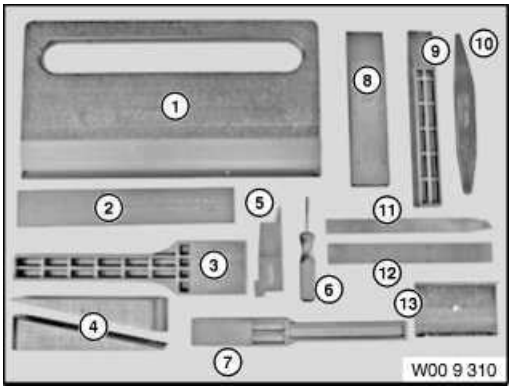
- Check the weather strip (1) for damage, renew if necessary.
- Coat the weather strip (1) with a suitable lubricant prior to installation.
- Position the weather strip (1) in front at the door.
- Press down the weather strip (1) across its entire length.

Additional Information

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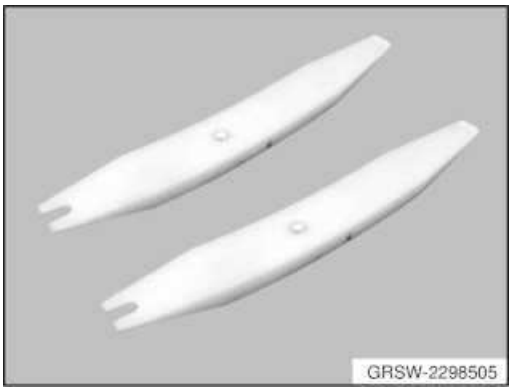
Overview of Special Tools

0 495 484 (00 9 324) Panel wedge



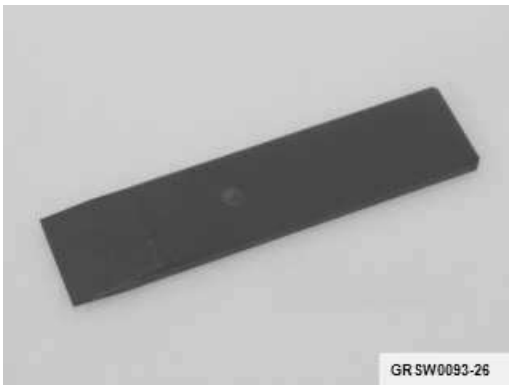
Common	Used in step 1
Usage	(Panel wedge (panel)) For removing cavity strips on the doors from E60
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 25 05 (230)

2 298 505 Wedge



Common	Used in step 1
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

0 496 570 (00 9 326) Wedge

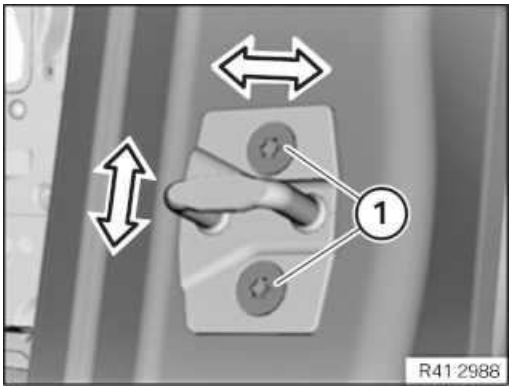


Common	Used in step 1
Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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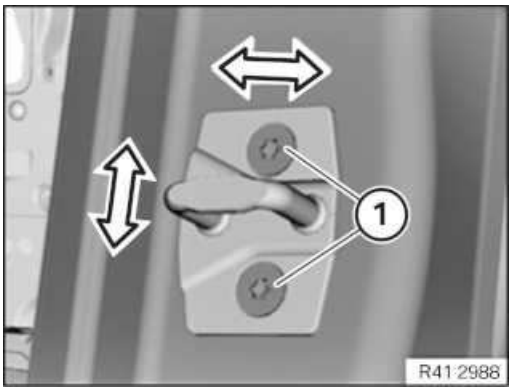
51 22 001 Replacing the rear left or right lock striker

1 – Removing lock striker



- Loosen screws (1).
- Remove lock striker.

2 – Installing lock striker

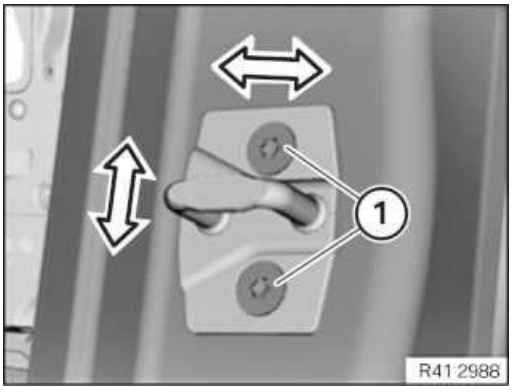


- Position lock striker.
- Tighten down screws (1) until lock striker can still just be moved.

3 – Adjust lock striker

Prerequisite

The screws on lock striker are loosened so far that the lock striker can still be moved.



TECHNICAL INFORMATION

The gap dimensions form the basis for these repair instructions and must be observed without fail.

For more information see: 41 00 ... Gap dimensions for body

- Adjust the lock striker's height such that the door lock does not bump or rub against anything.
- Move lock striker sideways in order to adjust the gap dimensions between door and rear side panel.
- Tighten the screws (1).

Lock striker

Screw		Tightening torque	21 Nm

Additional Information

Overview of Tightening Torques

Lock striker Used in step 3

Screw		Tightening torque	21 Nm

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Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3
Gap dimensions, body	3

Repair instructions	Used in step
41 00 ... Gap dimensions, body	3

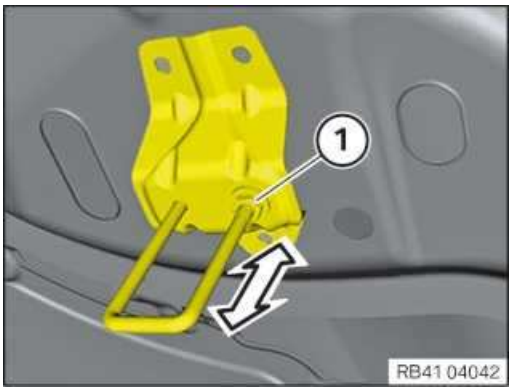
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51 23 004 Adjusting engine compartment lid catch

1 – Adjusting engine compartment lid catch

TECHNICAL INFORMATION

Notes on the body gap dimensions are the basis of these repair instructions and must be observed without fail.
For additional information see: 41 00 ... Gap dimensions for body

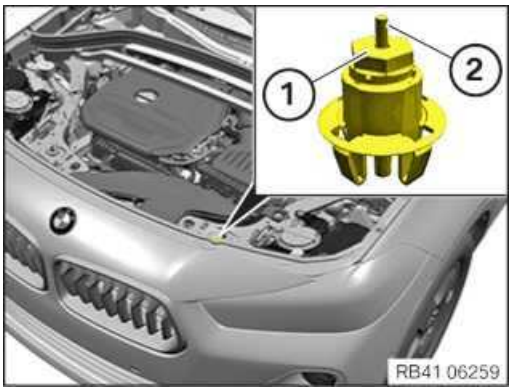


NOTICE

Perform the operations on the left and right side.

- Adjust striker by turning nut (1).

2 – Adjusting the stop pads of the bonnet



NOTICE

Perform the operations on the left and right side.

- Screw in stop pads (1) fully until the pin (2) can be pulled out.

  Pull out the pin (2) by approximately 5 mm.
- Slowly close bonnet. Pin (2) will be pressed into stop pad (1) while doing so.
- Raise bonnet.
- Unscrew stop pad (1) until the stop pad is flush with the upper edge of pin (2).

Additional Information

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	1

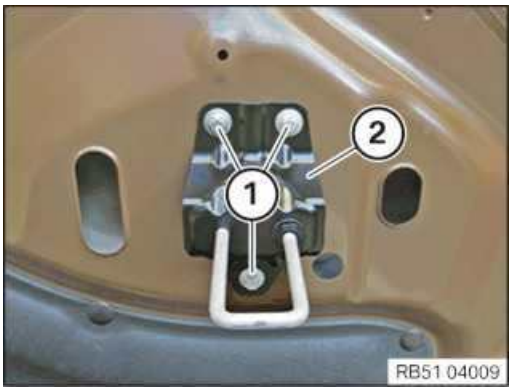
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51 23 131 Adjusting left or right striker on engine compartment lid

1 – Remove the striker for the bonnet

NOTICE

Description is for left component only. Procedure on the right side is identical.

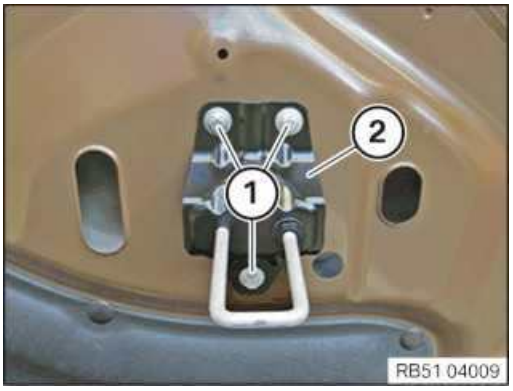


- Loosen screws (1).
- Remove the striker (2).

2 – Install the striker for the bonnet

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Install the striker (2).
- Tighten the screws (1).

Striker to bonnet

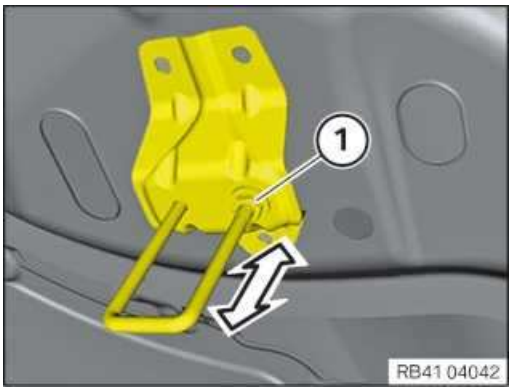
Screw		Tightening torque	7,6 Nm

3 – Adjusting engine compartment lid catch

TECHNICAL INFORMATION

Notes on the body gap dimensions are the basis of these repair instructions and must be observed without fail.
For additional information see: 41 00 ... Gap dimensions for body

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NOTICE

Perform the operations on the left and right side.

- Adjust striker by turning nut (1).

Additional Information

Overview of Tightening Torques

Striker to bonnet			Used in step 2
Screw		Tightening torque	7,6 Nm

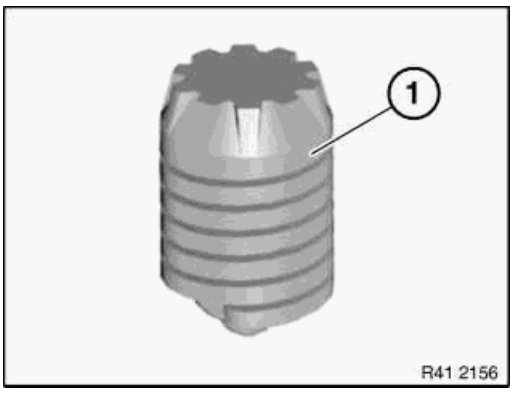
Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	3

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51 23 ... Adjusting/replacing bump stops

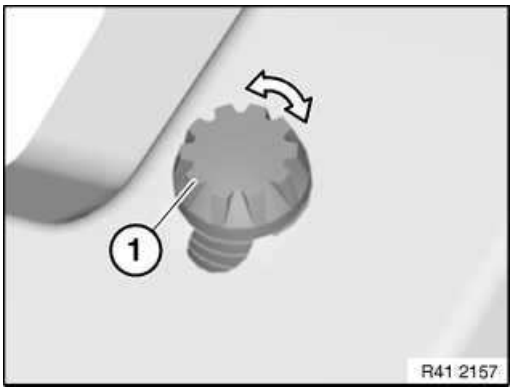
The illustrations are schematic representations and are to be applied to the relevant vehicle type.



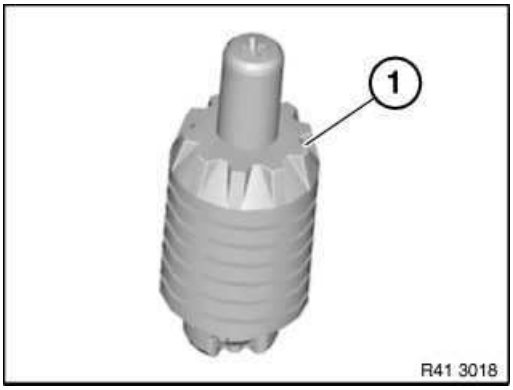
Version 1:

Following parts must not be damaged:

- (1) Bump stop



Adjust bump stop (1) to correct height by turning left or right.

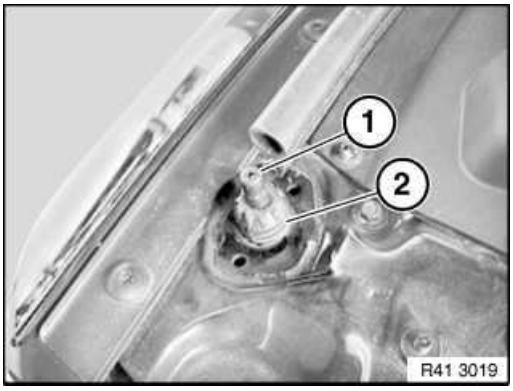


Version 2:

Replace damaged bump stops (refer to EPC):

- (1) Bump stop with ejector

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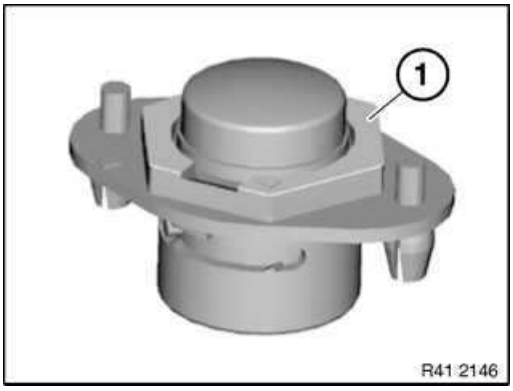


Press ejector (1) into bump stop and, in this position, twist approx. 90° counterclockwise with a Phillips screwdriver.

This locks the ejectors (1) in the bump stops.

Adjust bump stop (2) to correct height by turning left or right.

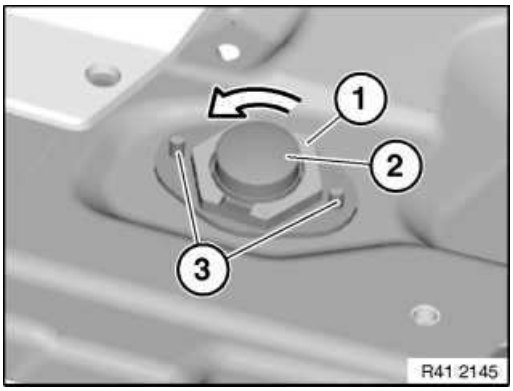
Unlock the ejector (1) again after completing adjustment.



<u>Version 3:</u>

Replace damaged bump stops (refer to EPC):

- (1) Bump stop



Turn lock (1) 45° counterclockwise.

Pull bump stop (2) upwards.

Close lid slowly until it is at the same height as the side panel.

Open lid and turn lock (1) clockwise.

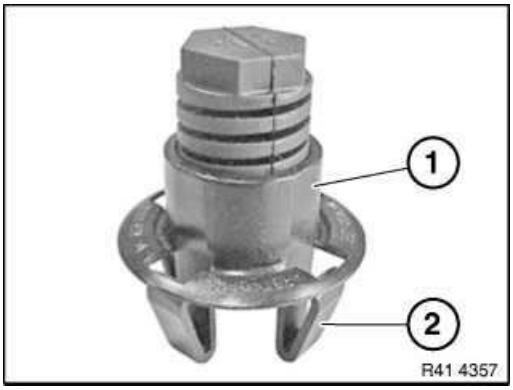
Installation:
Press bump stop into panel and drive in expanding pins (3).

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51 23 ... Adjusting/replacing bump stops

The graphics are schematic representations and are to be applied to the relevant vehicle type.

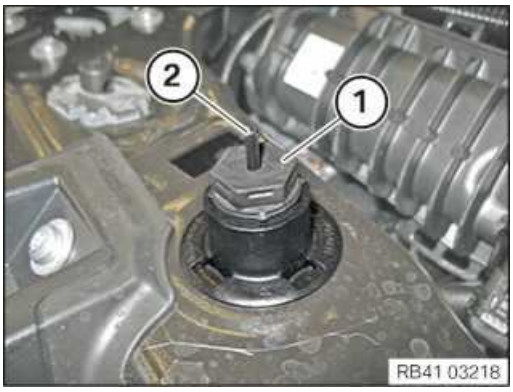
Prerequisite: Lid must be correctly adjusted.



Following parts must not be damaged:

- (1) Bump stop
- (2) Catches

Remove adjusting buffer by pressing latch mechanisms back.



Screw adjusting buffer (1) until the pin (2) can be pulled out.

Slowly pull the pin (2) out approx. 15 mm.

Slowly close engine compartment lid.

The pin (2) is thus pushed into the adjusting buffer (1).



Raise engine compartment lid.

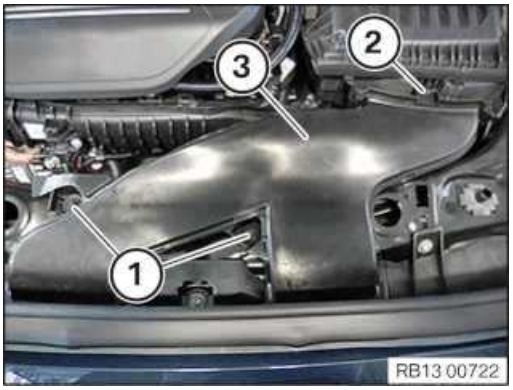
Unscrew the adjusting buffer (1) until it is flush with the upper edge of the pin (2).

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51 23 211 Removing and installing/replacing Bowden cable for front bonnet locks

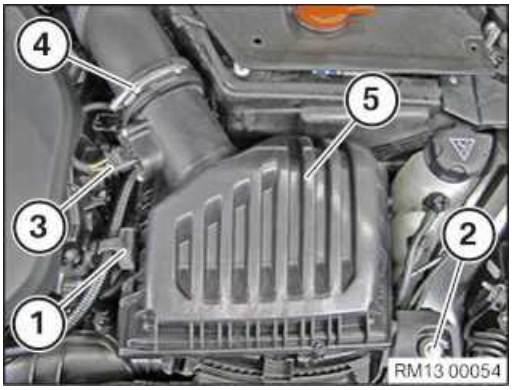
PRELIMINARY WORK

1 – Remove the intake neck for intake silencer housing



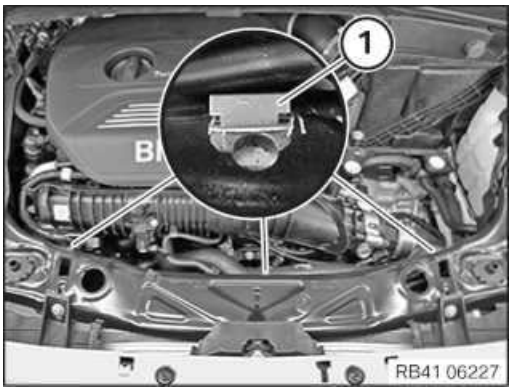
- Loosen nuts (1).
- Loosen the lock (2).
- Guide the intake neck (3) out and remove it.

2 – Removing intake silencer housing

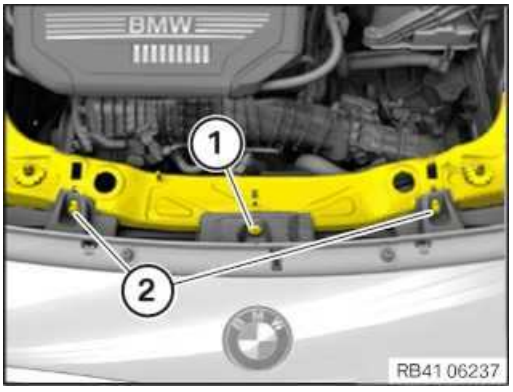


- Loosen the holder (1).
- Loosen screw (2).
- Unlock and loosen connector (3).
- Unfasten clamp (4).
- Pull out and remove the intake silencer housing (5) from the rubber mounts towards the top.

3 – Remove front cross connection

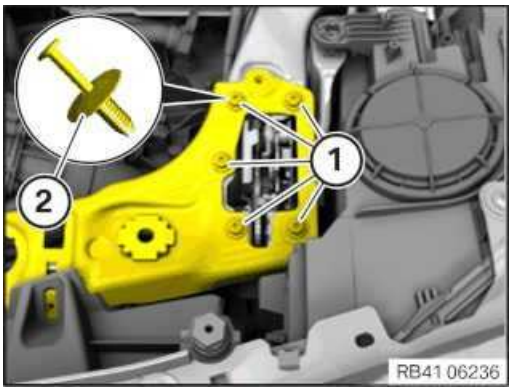


- Detach the clamps (1) for the Bowden cable of the bonnet locks from the cross connection.

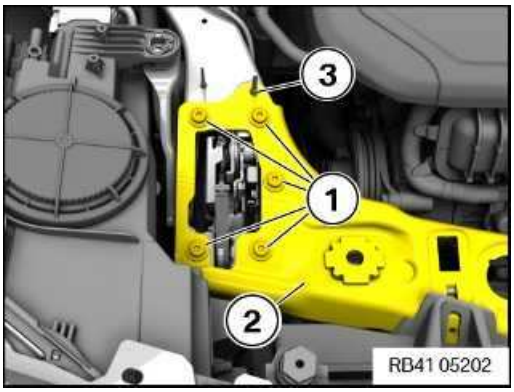


- Loosen screw (1).
- Loosen screws (2).

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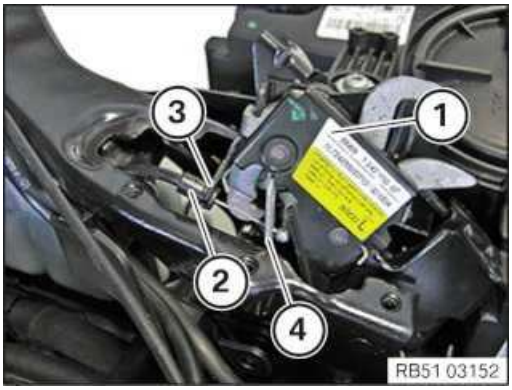


- Loosen screws (1).
- Lever out expanding rivet (2).



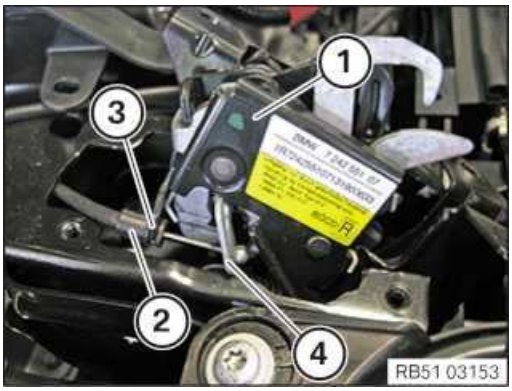
- Loosen screws (1).
- Unclip the front cross connection (2) from the rubber retainer (3) and remove it upward.

4 – Removing the left bonnet lock



- Feed out the left bonnet lock (1) in an upward direction.
- Detach the Bowden cable (2) at the counter support (3) and lock lever (4).
- Unlock all plug connections and disconnect.

5 – Removing the right bonnet lock



- Feed out the right bonnet lock (1) in an upward direction.
- Detach the Bowden cable (2) from the counter support (3).
- Detach the Bowden cable (2) from the lock lever (4).
- Unlock all plug connections and disconnect.

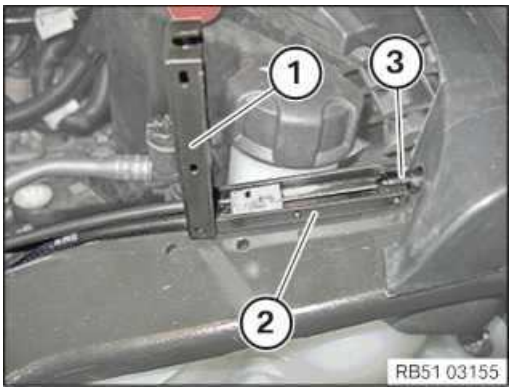
MAIN WORK

6 – Remove Bowden cable for front bonnet locks

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- Unclip clutch housing for Bowden cable (1) from the body at the marked points.



- Fold cover (1) of clutch housing for the Bowden cable (2) open to the front.
- Detach the Bowden cable (3).

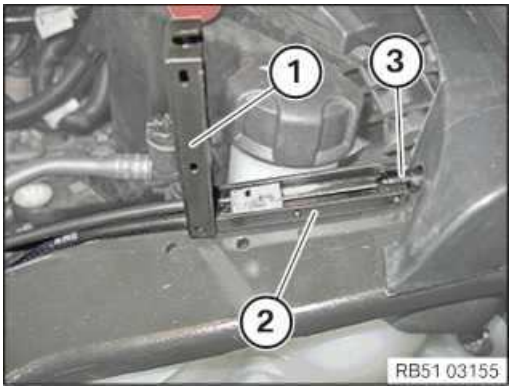


- Unclip clutch housing for the Bowden cable (1) from the body to the top.
- Guide out the Bowden cable (2) and remove it.

7 – Install the Bowden cable for the front bonnet lock



- Feed in Bowden cable (2).
- Clip in the clutch housing for the Bowden cable (1) on the body.



- Attach the Bowden cable (3).
- Close the cover (1) from the clutch housing for the Bowden cable (2).

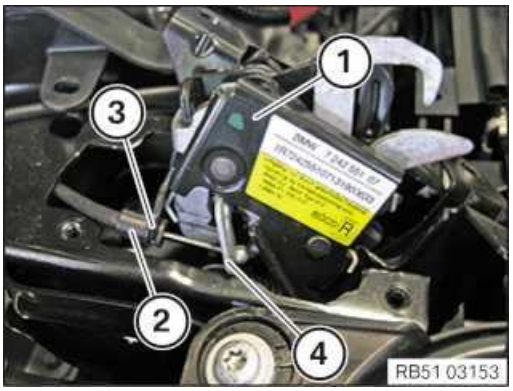
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- Clip in the clutch housing for the Bowden cable (1) on the body at the marked areas.

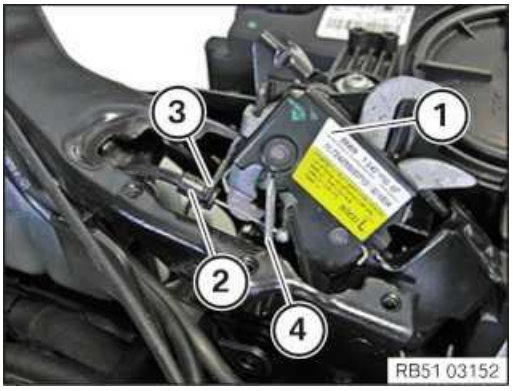
POSTPROCESSES

8 – Installing the right bonnet lock



- Attach Bowden cable (2) to the lock lever (4).
- Attach Bowden cable (2) to the counter support (3).
- Connect all connectors and lock.
- Install the right bonnet lock (1).

9 – Installing the left bonnet lock



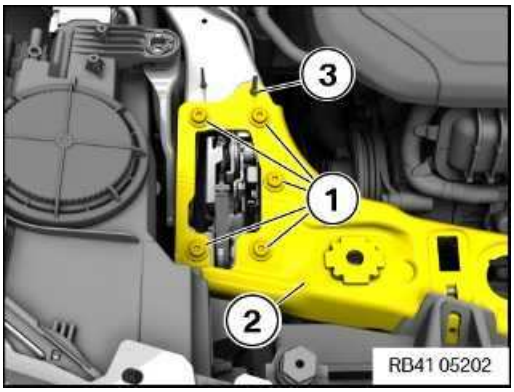
- First hang the Bowden cable (2) in the lock lever (4) then in the counter support (3).
- Connect all connectors and lock.
- Fit the left bonnet lock (1).

10 – Install front cross connection



- Right side of vehicle only: Secure spray guard (1) on the cross connection (2) as pictured.

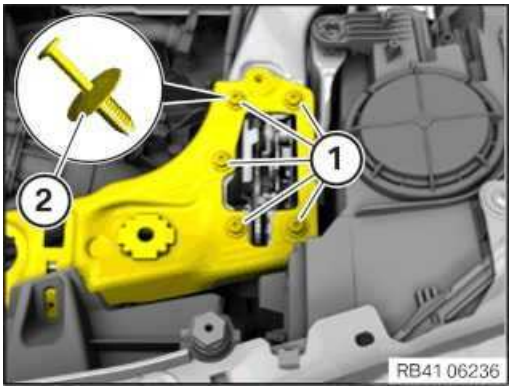
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- Position front cross connection (2) and clip front cross connection (2) into the rubber retainer (3) at the same time.
- Tighten the screws (1).

Cross connection to carrier support

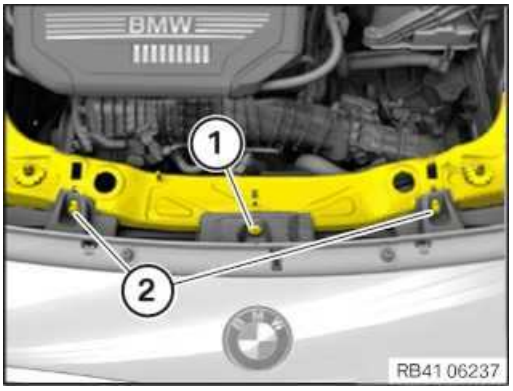
Screws M6x20		Tightening torque	11,8 Nm



- Tighten the screws (1).

Cross connection to carrier support

Screws M6x20		Tightening torque	11,8 Nm



- Position screws (3) on the rubber mounts for the radiator and tighten.

Screw connection for rubber mount of coolant radiator to coolant radiator

Bolt to rubber mount		Tightening torque	8 Nm

- Tighten down screws (2).

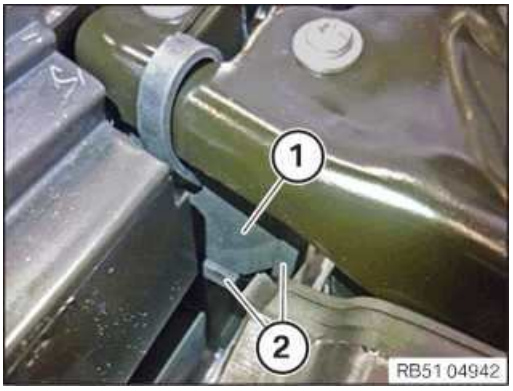
Air duct to upper connection

M6x20 screw		Tightening torque	11,8 Nm

- Tighten down screw (1).

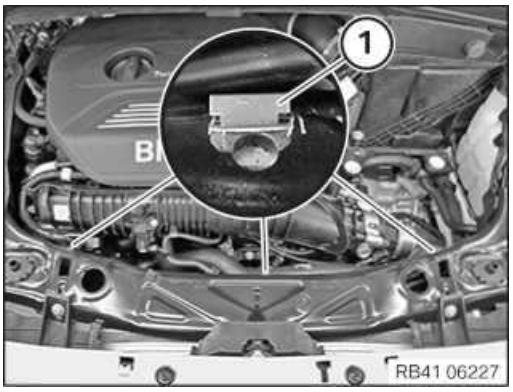
Bracing strut to upper connection

M8x20 screw		Tightening torque	28 Nm



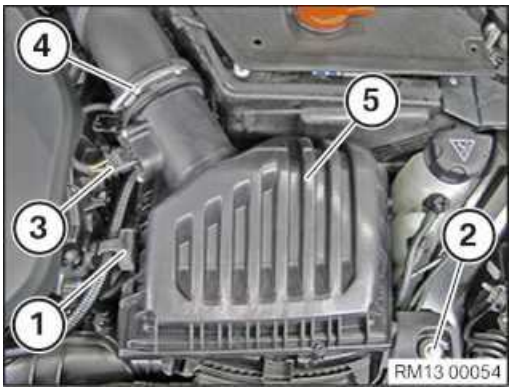
- Right side of vehicle only: Properly mount spray guard (1) to prevent corrosion.
- Secure spray guard (1) to the bridge with retaining tabs (2).

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- Fasten the clamps (1) from the Bowden cable of the bonnet lock on the cross connection.

11 – Installing intake silencer housing



- Insert the intake silencer housing (5) into the rubber mounts and install it.

  Intake filter housing (5) must engage audibly.
- Tighten down screw (2).

Intake silencer housing to lock bridge

M6X30		Tightening torque	8 Nm

- Tighten clamp (4).

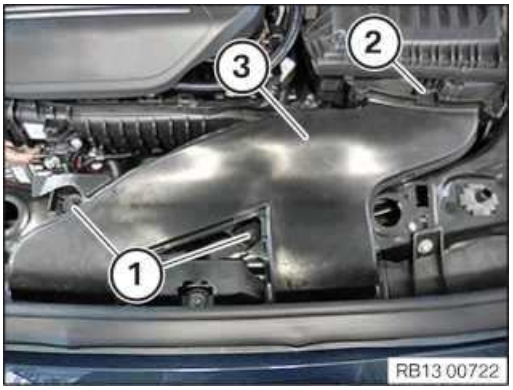
Clean air pipe to intake silencer housing

Clamp		Tightening torque	3 Nm

- Connect and lock the connector (3).

  The connector (3) must engage audibly.
- Insert and install the holder (1).

12 – Install the intake neck for the intake filter housing



- Insert and install the intake neck (3).

  The lock (2) must audibly engage.
- Tighten nuts (1).

Intake neck to cross connection

M6		Tightening torque	8 Nm

Additional Information

Overview of Tightening Torques

Cross connection to carrier support Used in step 10

Screws M6x20		Tightening torque	11,8 Nm

Screw connection for rubber mount of coolant radiator to coolant radiator Used in step 10

Bolt to rubber mount		Tightening torque	8 Nm

Air duct to upper connection Used in step 10

M6x20 screw		Tightening torque	11,8 Nm

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Bracing strut to upper connection

Used in step 10

M8x20 screw		Tightening torque	28 Nm

Intake silencer housing to lock bridge

Used in step 11

M6X30		Tightening torque	8 Nm

Clean air pipe to intake silencer housing

Used in step 11

Clamp		Tightening torque	3 Nm

Intake neck to cross connection

Used in step 12

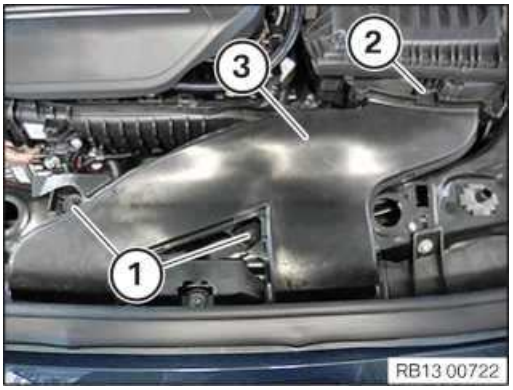
M6		Tightening torque	8 Nm

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51 23 110 Removing and installing/replacing left engine compartment lid lock

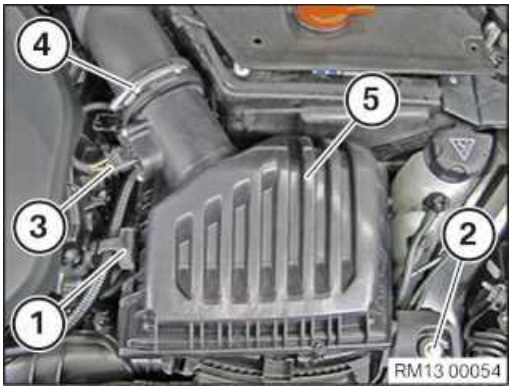
PRELIMINARY WORK

1 – Remove the intake neck for intake silencer housing



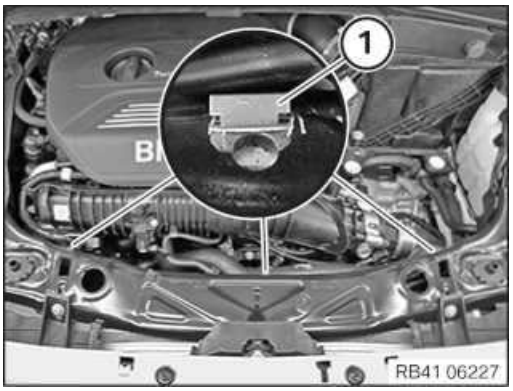
- Loosen nuts (1).
- Loosen the lock (2).
- Guide the intake neck (3) out and remove it.

2 – Removing intake silencer housing

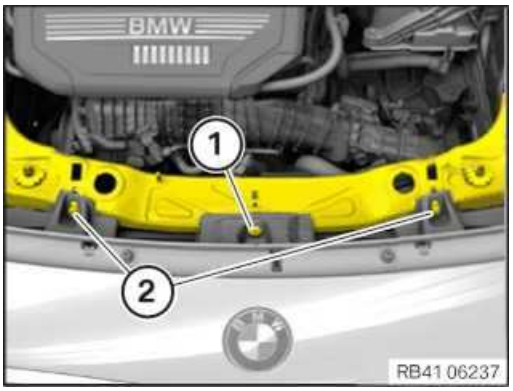


- Loosen the holder (1).
- Loosen screw (2).
- Unlock and loosen connector (3).
- Unfasten clamp (4).
- Pull out and remove the intake silencer housing (5) from the rubber mounts towards the top.

3 – Remove front cross connection

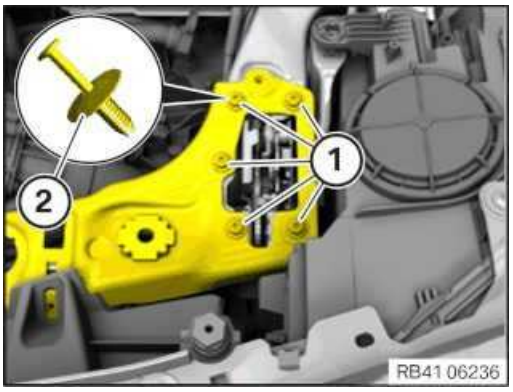


- Detach the clamps (1) for the Bowden cable of the bonnet locks from the cross connection.

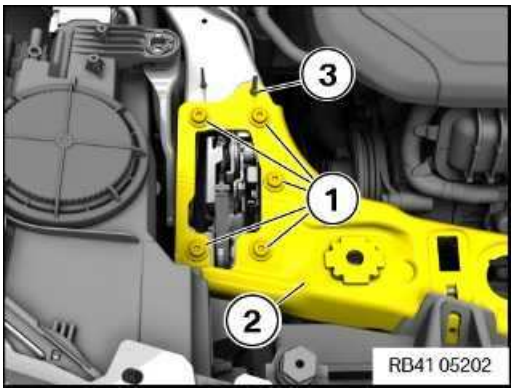


- Loosen screw (1).
- Loosen screws (2).

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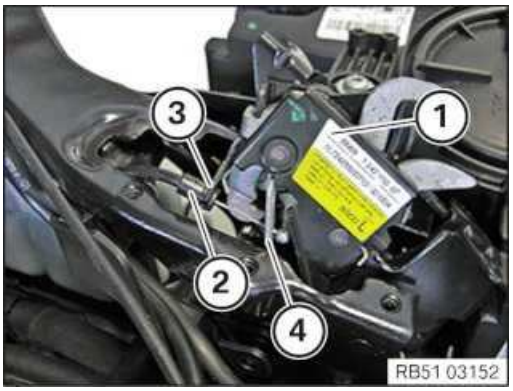
- Loosen screws (1).
- Lever out expanding rivet (2).



- Loosen screws (1).
- Unclip the front cross connection (2) from the rubber retainer (3) and remove it upward.

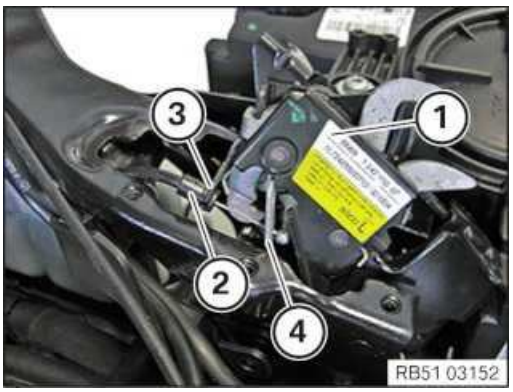
MAIN WORK

4 – Removing the left bonnet lock



- Feed out the left bonnet lock (1) in an upward direction.
- Detach the Bowden cable (2) at the counter support (3) and lock lever (4).
- Unlock all plug connections and disconnect.

5 – Installing the left bonnet lock



- First hang the Bowden cable (2) in the lock lever (4) then in the counter support (3).
- Connect all connectors and lock.
- Fit the left bonnet lock (1).

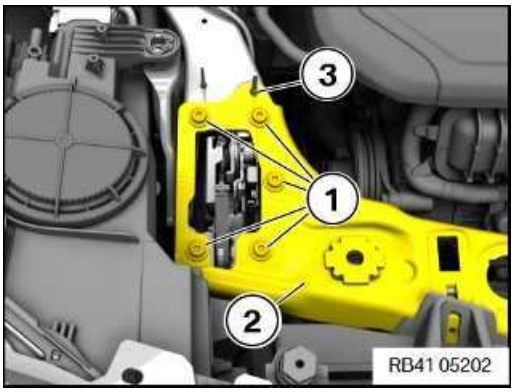
POSTPROCESSES

6 – Install front cross connection

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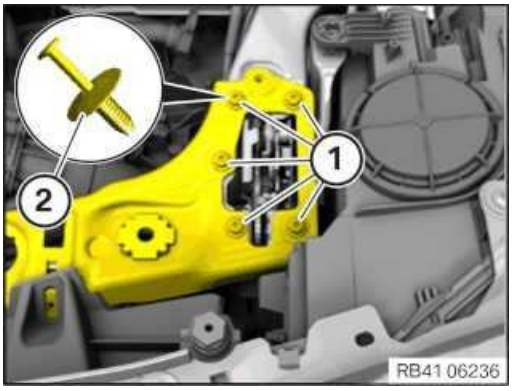
- Right side of vehicle only: Secure spray guard (1) on the cross connection (2) as pictured.



- Position front cross connection (2) and clip front cross connection (2) into the rubber retainer (3) at the same time.
- Tighten the screws (1).

Cross connection to carrier support

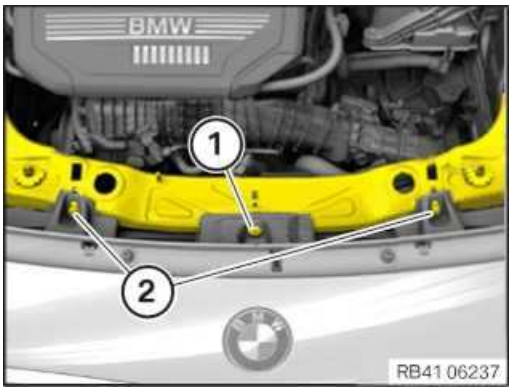
Screws M6x20		Tightening torque	11,8 Nm



- Tighten the screws (1).

Cross connection to carrier support

Screws M6x20		Tightening torque	11,8 Nm



- Position screws (3) on the rubber mounts for the radiator and tighten.

Screw connection for rubber mount of coolant radiator to coolant radiator

Bolt to rubber mount		Tightening torque	8 Nm

- Tighten down screws (2).

Air duct to upper connection

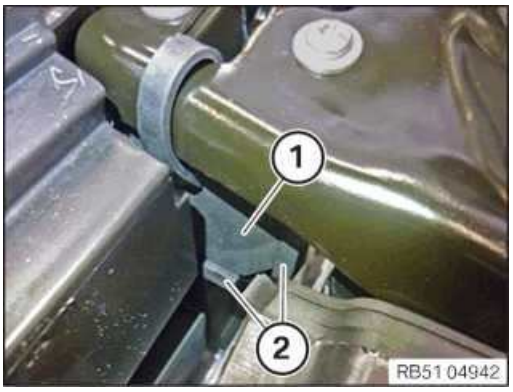
M6x20 screw		Tightening torque	11,8 Nm

- Tighten down screw (1).

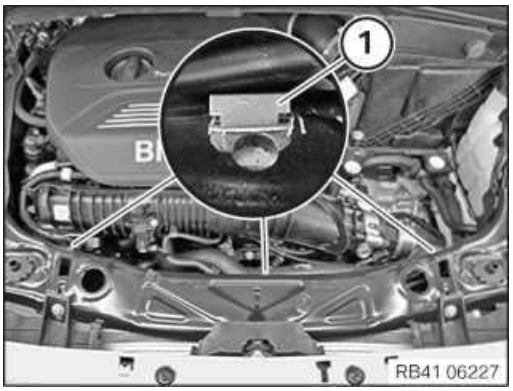
Bracing strut to upper connection

M8x20 screw		Tightening torque	28 Nm

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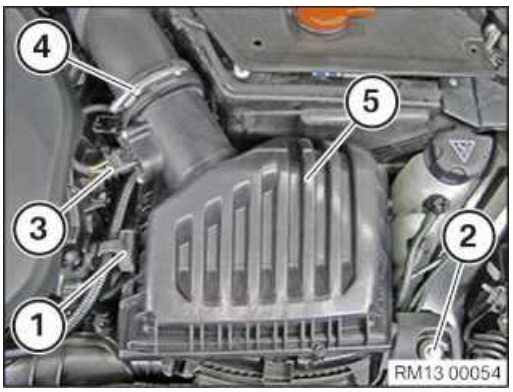


- Right side of vehicle only: Properly mount spray guard (1) to prevent corrosion.
- Secure spray guard (1) to the bridge with retaining tabs (2).



- Fasten the clamps (1) from the Bowden cable of the bonnet lock on the cross connection.

7 – Installing intake silencer housing



- Insert the intake silencer housing (5) into the rubber mounts and install it.

  Intake filter housing (5) must engage audibly.
- Tighten down screw (2).

Intake silencer housing to lock bridge

M6X30		Tightening torque	8 Nm

- Tighten clamp (4).

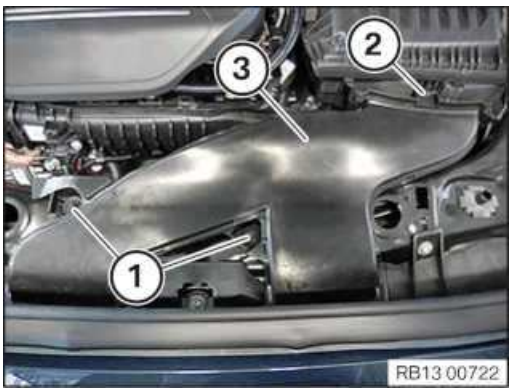
Clean air pipe to intake silencer housing

Clamp		Tightening torque	3 Nm

- Connect and lock the connector (3).

  The connector (3) must engage audibly.
- Insert and install the holder (1).

8 – Install the intake neck for the intake filter housing



- Insert and install the intake neck (3).

  The lock (2) must audibly engage.
- Tighten nuts (1).

Intake neck to cross connection

M6		Tightening torque	8 Nm

Additional Information

Overview of Tightening Torques

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Cross connection to carrier support

Used in step 6

Screws M6x20		Tightening torque	11,8 Nm

Screw connection for rubber mount of coolant radiator to coolant radiator

Used in step 6

Bolt to rubber mount		Tightening torque	8 Nm

Air duct to upper connection

Used in step 6

M6x20 screw		Tightening torque	11,8 Nm

Bracing strut to upper connection

Used in step 6

M8x20 screw		Tightening torque	28 Nm

Intake silencer housing to lock bridge

Used in step 7

M6X30		Tightening torque	8 Nm

Clean air pipe to intake silencer housing

Used in step 7

Clamp		Tightening torque	3 Nm

Intake neck to cross connection

Used in step 8

M6		Tightening torque	8 Nm

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51 23 265 Removing and installing/replacing left or right gas pressure spring for engine compartment lid

1 – Remove the gas pressure spring for the bonnet

CAUTION

Shutting bonnet or tailgate.

Danger of injury!

- Support bonnet/tailgate in fully open position with the aid of a suitable device.

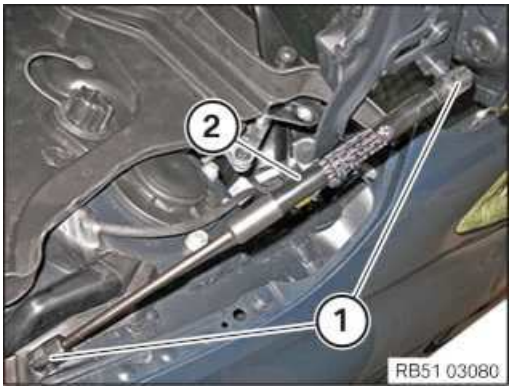
TECHNICAL INFORMATION

The notes on the disassembly and installation of ball sockets with clamps are the basis for these repair instructions and must be observed without fail.

For additional information see: 51 23 ... Note information on disassembly/installation of ball sockets with clamp

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Slide the locking spring (1) to the end of the gas pressure spring (2) and remove the gas pressure spring (2) from the ball head.

2 – Install the gas pressure spring for the bonnet

CAUTION

Shutting bonnet or tailgate.

Danger of injury!

- Support bonnet/tailgate in fully open position with the aid of a suitable device.

TECHNICAL INFORMATION

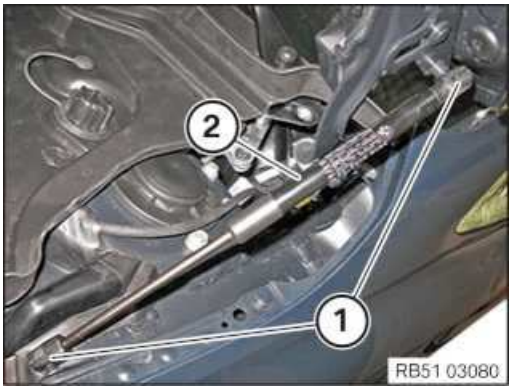
The notes on the disassembly and installation of ball sockets with clamps are the basis for these repair instructions and must be observed without fail.

For additional information see: 51 23 ... Note information on disassembly/installation of ball sockets with clamp

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Install the gas pressure spring (2).
- Set the gas pressure spring (2) on the ball head and engage on the locking springs (1).

Additional Information

Links

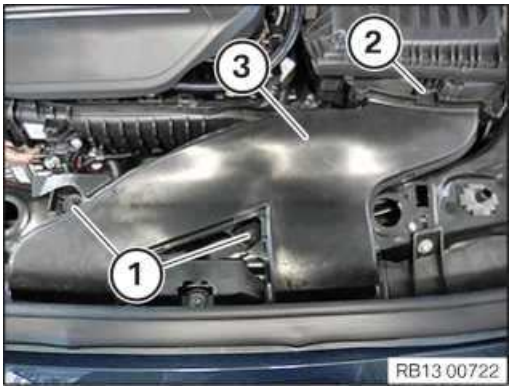
Repair instructions	Used in step
51 23 ... Removing/installing ball sockets with clip	1 2

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51 23 100 Removing and installing/replacing right engine compartment lid lock

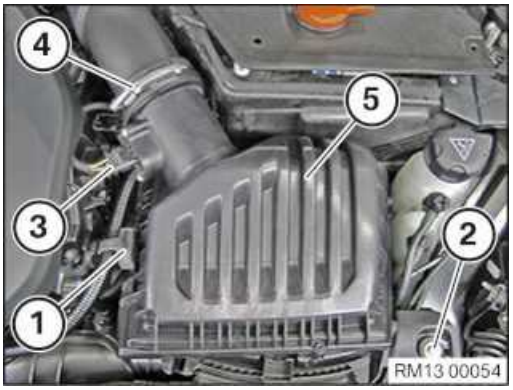
PRELIMINARY WORK

1 – Remove the intake neck for intake silencer housing



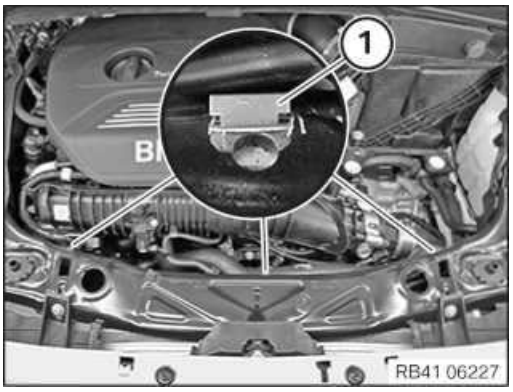
- Loosen nuts (1).
- Loosen the lock (2).
- Guide the intake neck (3) out and remove it.

2 – Removing intake silencer housing

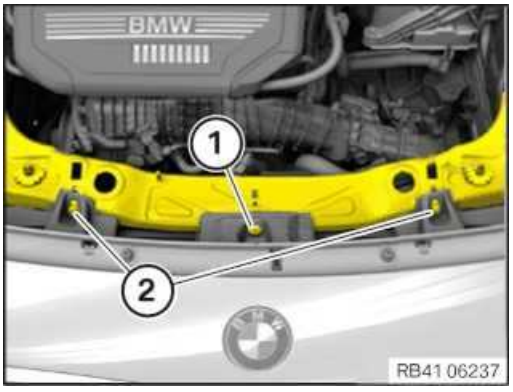


- Loosen the holder (1).
- Loosen screw (2).
- Unlock and loosen connector (3).
- Unfasten clamp (4).
- Pull out and remove the intake silencer housing (5) from the rubber mounts towards the top.

3 – Remove front cross connection

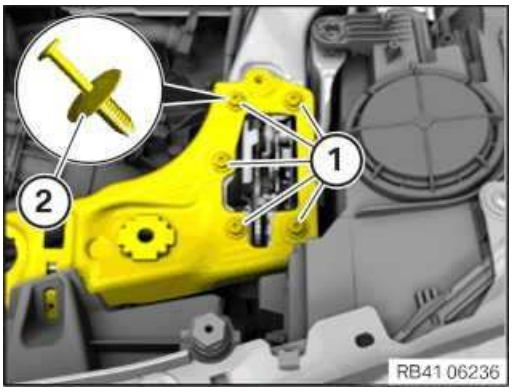


- Detach the clamps (1) for the Bowden cable of the bonnet locks from the cross connection.

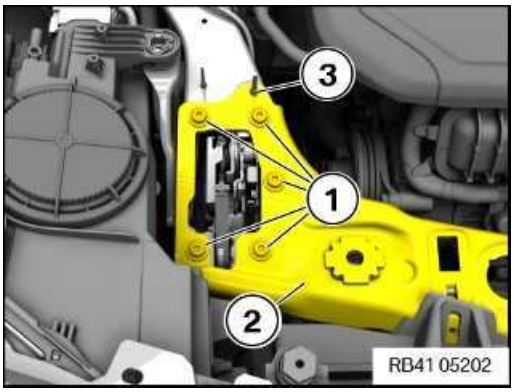


- Loosen screw (1).
- Loosen screws (2).

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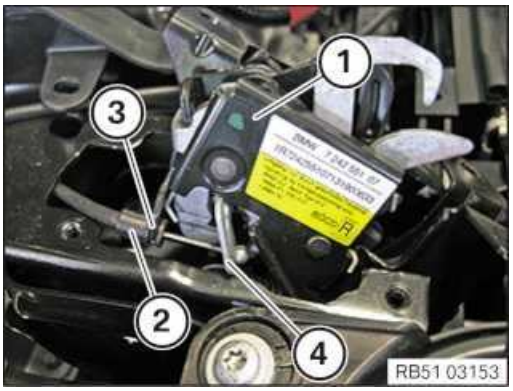
- Loosen screws (1).
- Lever out expanding rivet (2).



- Loosen screws (1).
- Unclip the front cross connection (2) from the rubber retainer (3) and remove it upward.

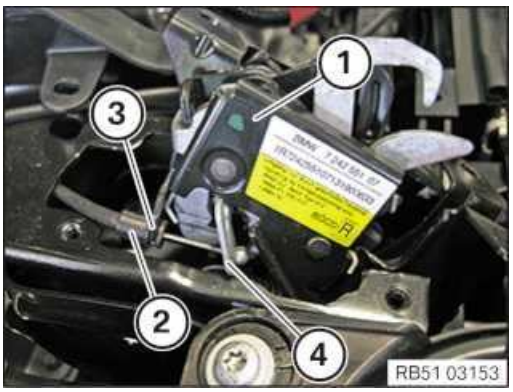
MAIN WORK

4 – Removing the right bonnet lock



- Feed out the right bonnet lock (1) in an upward direction.
- Detach the Bowden cable (2) from the counter support (3).
- Detach the Bowden cable (2) from the lock lever (4).
- Unlock all plug connections and disconnect.

5 – Installing the right bonnet lock



- Attach Bowden cable (2) to the lock lever (4).
- Attach Bowden cable (2) to the counter support (3).
- Connect all connectors and lock.
- Install the right bonnet lock (1).

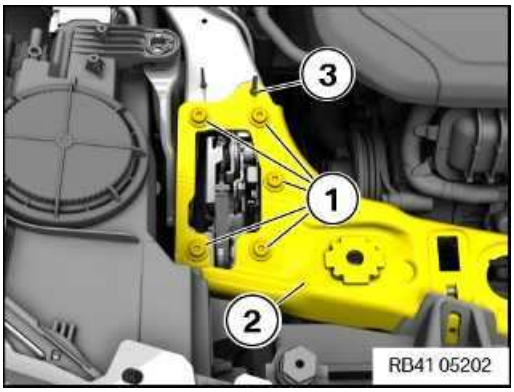
POSTPROCESSES

6 – Install front cross connection

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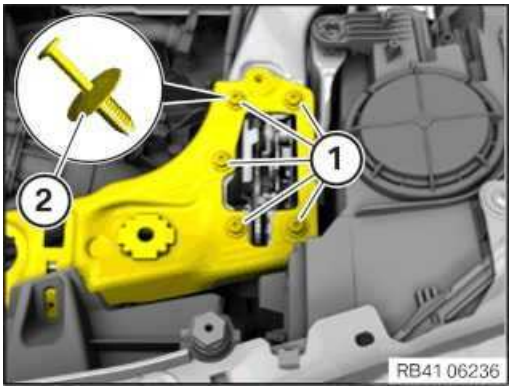
- Right side of vehicle only: Secure spray guard (1) on the cross connection (2) as pictured.



- Position front cross connection (2) and clip front cross connection (2) into the rubber retainer (3) at the same time.
- Tighten the screws (1).

Cross connection to carrier support

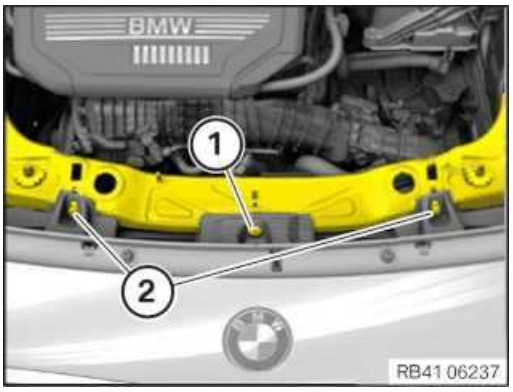
Screws M6x20		Tightening torque	11,8 Nm



- Tighten the screws (1).

Cross connection to carrier support

Screws M6x20		Tightening torque	11,8 Nm



- Position screws (3) on the rubber mounts for the radiator and tighten.

Screw connection for rubber mount of coolant radiator to coolant radiator

Bolt to rubber mount		Tightening torque	8 Nm

- Tighten down screws (2).

Air duct to upper connection

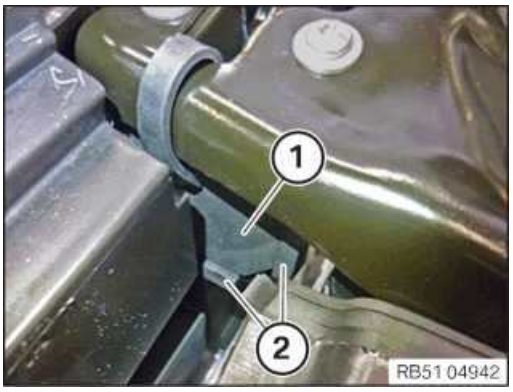
M6x20 screw		Tightening torque	11,8 Nm

- Tighten down screw (1).

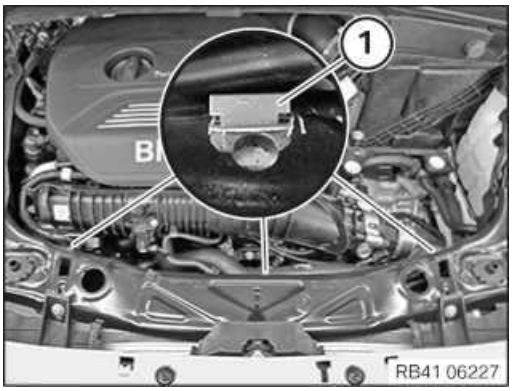
Bracing strut to upper connection

M8x20 screw		Tightening torque	28 Nm

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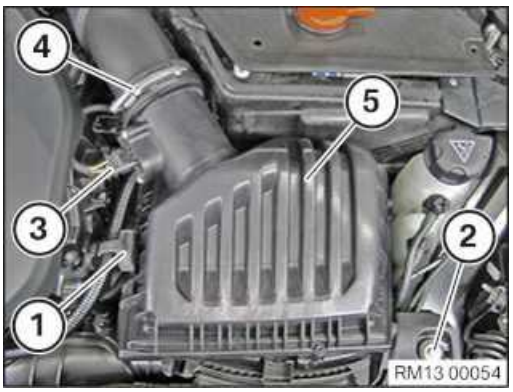


- Right side of vehicle only: Properly mount spray guard (1) to prevent corrosion.
- Secure spray guard (1) to the bridge with retaining tabs (2).



- Fasten the clamps (1) from the Bowden cable of the bonnet lock on the cross connection.

7 – Installing intake silencer housing



- Insert the intake silencer housing (5) into the rubber mounts and install it.

  Intake filter housing (5) must engage audibly.
- Tighten down screw (2).

Intake silencer housing to lock bridge

M6X30		Tightening torque	8 Nm

- Tighten clamp (4).

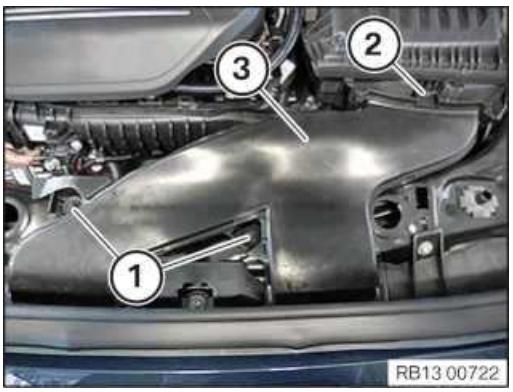
Clean air pipe to intake silencer housing

Clamp		Tightening torque	3 Nm

- Connect and lock the connector (3).

  The connector (3) must engage audibly.
- Insert and install the holder (1).

8 – Install the intake neck for the intake filter housing



- Insert and install the intake neck (3).

  The lock (2) must audibly engage.
- Tighten nuts (1).

Intake neck to cross connection

M6		Tightening torque	8 Nm

Additional Information

Overview of Tightening Torques

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Cross connection to carrier support

Used in step 6

Screws M6x20		Tightening torque	11,8 Nm

Screw connection for rubber mount of coolant radiator to coolant radiator

Used in step 6

Bolt to rubber mount		Tightening torque	8 Nm

Air duct to upper connection

Used in step 6

M6x20 screw		Tightening torque	11,8 Nm

Bracing strut to upper connection

Used in step 6

M8x20 screw		Tightening torque	28 Nm

Intake silencer housing to lock bridge

Used in step 7

M6X30		Tightening torque	8 Nm

Clean air pipe to intake silencer housing

Used in step 7

Clamp		Tightening torque	3 Nm

Intake neck to cross connection

Used in step 8

M6		Tightening torque	8 Nm

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51 23 400 Removing and installing/replacing the left or right actuator

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

Working on 12 V vehicle electrical system.

Risk of short circuits! Risk of fire!

- Detach battery earth lead from battery.
- For additional batteries: Detach all battery earth leads from additional batteries.

NOTICE

Description is for left component only. Procedure on the right side is identical.

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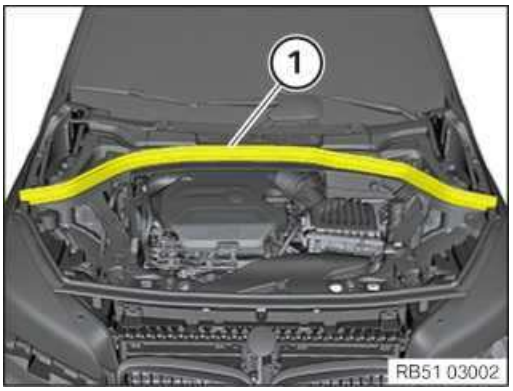
PRELIMINARY WORK

1 – Disconnecting the battery earth lead

▸ **Remove the seal for the rear bonnet**

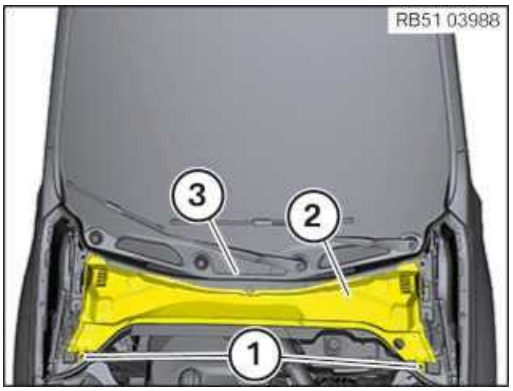
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

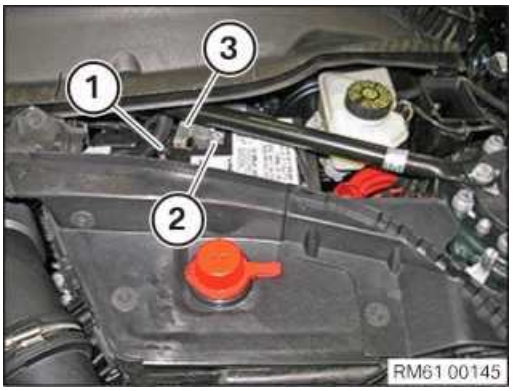


- Pull off rear bonnet seal (1) towards the top and remove.

▸ **Removing front cowl panel cover**



- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).



- Unlock and disconnect connector (1).
- Loosen nut (2).
- Remove the battery earth lead (3) and secure to one side.

MAIN WORK

2 – Remove the actuator on the bonnet hinge

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WARNING

Pyrotechnic components.

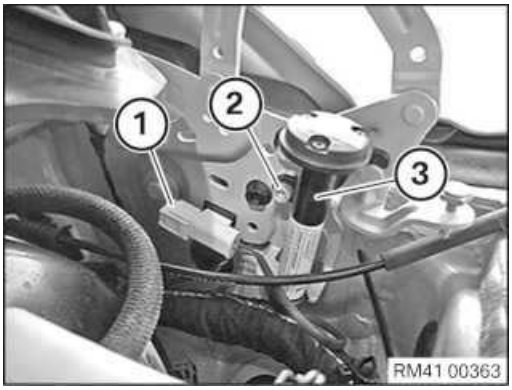
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Notes on active pedestrian protection are a fundamental requirement for these repair instructions and must be complied with at all times.

For additional information see: 41 00 ... Procedure for vehicles with active pedestrian protection after an accident



- Unlock plug connection (1) and disconnect.
- Loosen screw (2).
- Guide out and remove the actuator (3).

3 – Install the actuator on the bonnet hinge

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

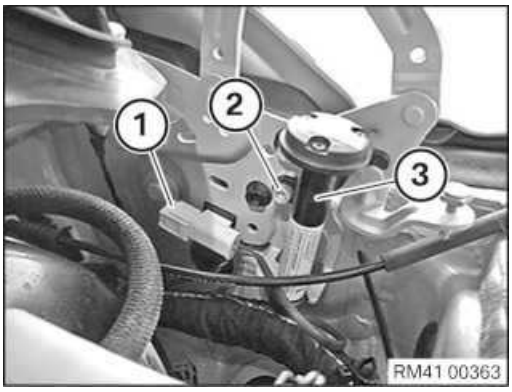
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Notes on active pedestrian protection are a fundamental requirement for these repair instructions and must be complied with at all times.

For additional information see: 41 00 ... Procedure for vehicles with active pedestrian protection after an accident

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- Feed in and install the actuator (3).
- Tighten down screw (2).

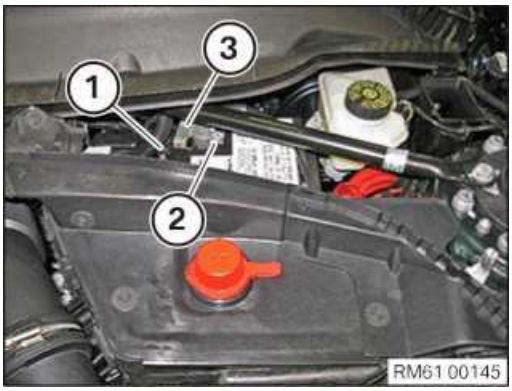
Actuator to engine compartment lid hinge

M6x12 screw		Tightening torque	6,8 Nm

- Connect connectors (1) and lock.

POSTPROCESSES

4 – Connecting the battery earth lead



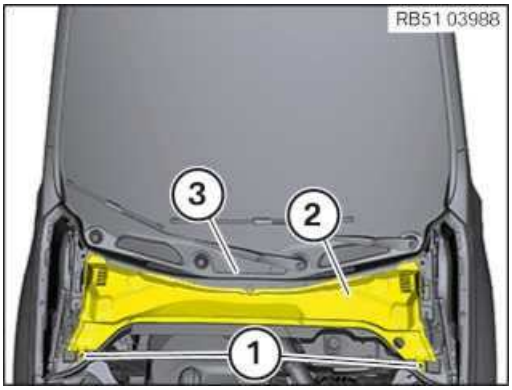
- Mount battery earth lead (3) on the negative battery terminal.
- Tighten nut (2).

Battery terminal with IBS positive battery terminal / negative battery terminal

NutM6		5 Nm

- Connect the connector (1) to the IBS and lock it audibly.

▸ **Installing front cowl panel cover**

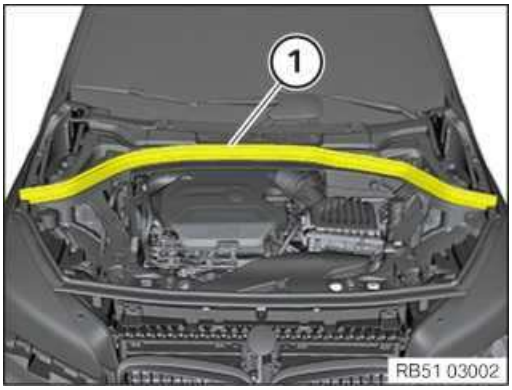


- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

▸ **Install the seal for the bonnet**

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

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Additional Information

Overview of Tightening Torques

Actuator to engine compartment lid hinge Used in step 3

M6x12 screw		Tightening torque	6,8 Nm

Battery terminal with IBS positive battery terminal / negative battery terminal Used in step 4

NutM6		5 Nm

Links

General repair instructions	Used in step
41 00 ... Procedure for vehicles with active pedestrian protection after an accident	2 3

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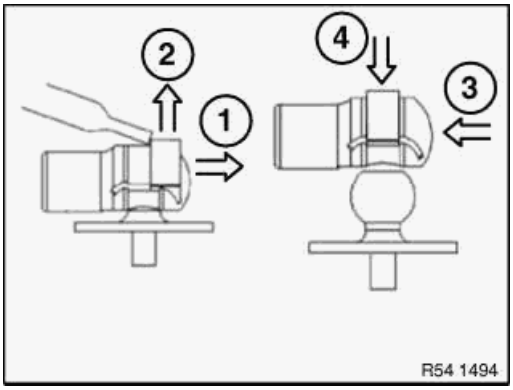
51 23 ... Removing/installing ball sockets with clip

Warning!

Danger of injury! When installed, the gas pressurised shock absorber is under preload. Minimise preload as far as possible before removing.

Important!

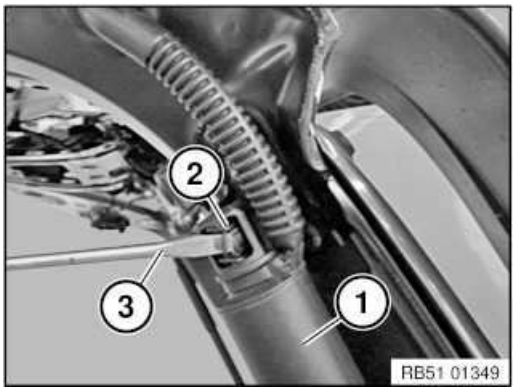
Never lift off ball socket with engaged clamp.



Version A:

1. Push on clamp in direction of groove with screwdriver
2. Lift off ball socket from ball pin
3. Slide clamp back
4. Fit ball socket on ball stud and snap into place with force

Installation note:
Pack grease into two opposite positions in socket. The grease spreads after installation on the ball pin all round in the ball socket.



Version B:

Important!

Risk of damage!

If you are not careful, retaining spring (2) may be bent to such an extent that the entire drive spindle will have to be replaced.

Press drive spindle (1) against ball pin in order to relieve strain on retaining spring (2) at ball pin.

Pull out retaining spring (2) approx. 2-3 mm with screwdriver (3).

Pull off spindle foot.

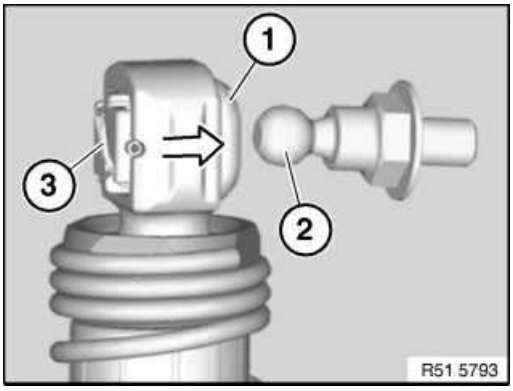
Warning!

Observe warning notices on the damper.

Electrical spindle drive for tailgate is under mechanical spring load!

The component must be secured against falling down.

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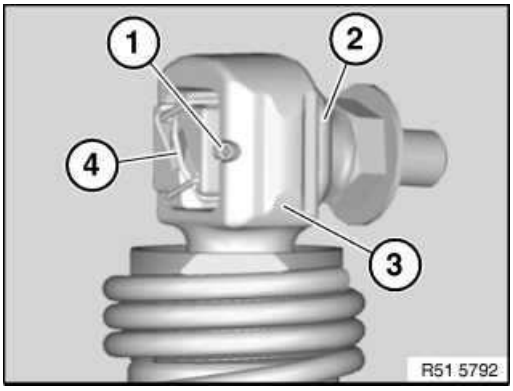


Attention!

Risk of damage!

Do not press on spindle drive at an angle or twisted.

Installation note:
Press ball socket (1) onto ball pin (2) until retaining spring (3) engages correctly (clicking sound).



Important!

If retaining spring (4) is damaged!

Release pin (1).

Remove spindle drive (3).

Remove ball socket (2).

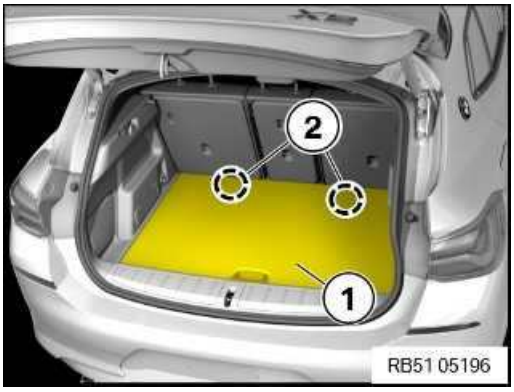
Remove retaining spring (4) and replace if necessary.

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51 24 004 Adjusting rear lid lock

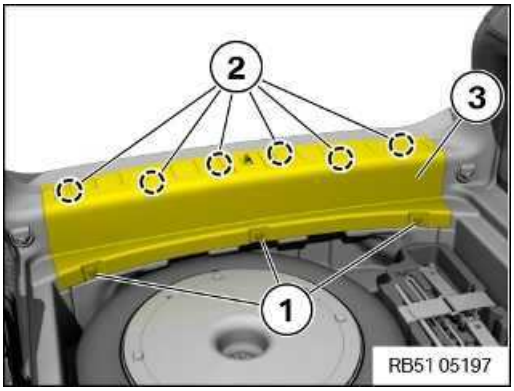
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel



- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the loading edge trim



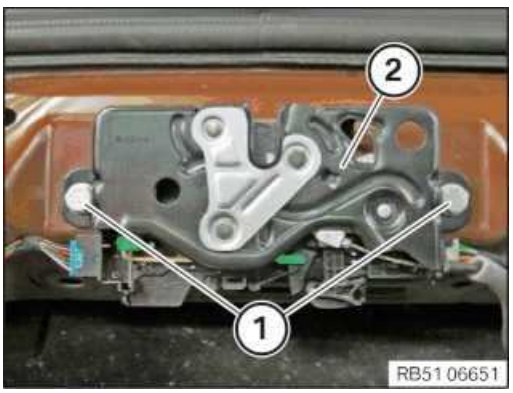
- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

MAIN WORK

3 – Adjusting rear lid lock

TECHNICAL INFORMATION

The gap dimensions form the basis for these repair instructions and must be observed without fail.
For more information see: 41 00 ... Gap dimensions for body



- Slacken the screws (1) until the tailgate lock (2) can be barely moved and centres itself.
- Close tailgate.
- Open tailgate.
- Tighten the screws (1).

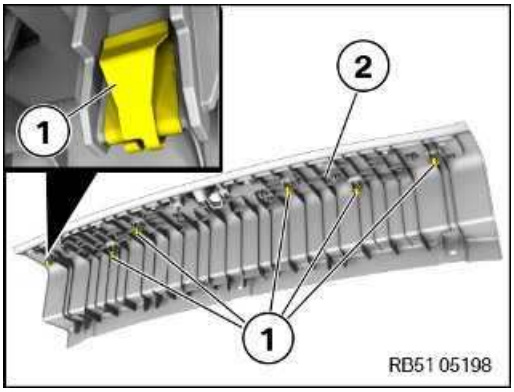
Note: When the tailgate is closed, the striker must not touch or scrape against the tailgate lock. Watch out for scratches!

Tailgate lock to body

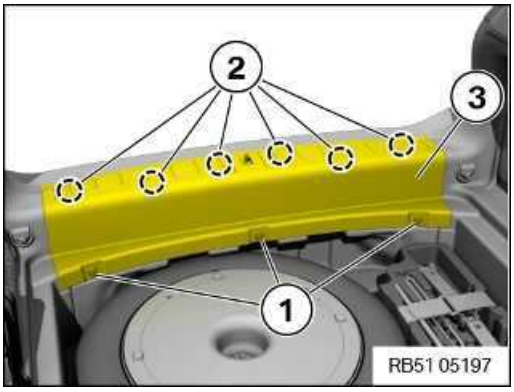
M8x20 screw		Tightening torque	19 Nm

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4 – Installing loading edge trim

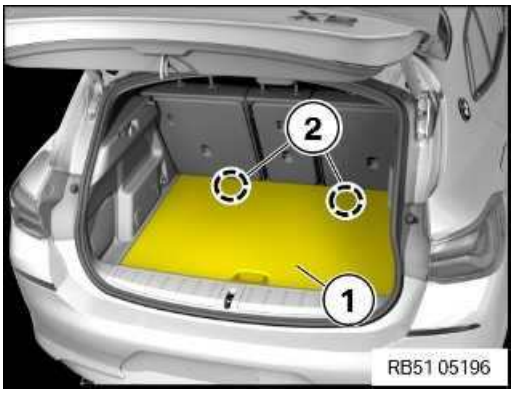


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

5 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

Tailgate lock to body			Used in step 3
M8x20 screw		Tightening torque	19 Nm

Links

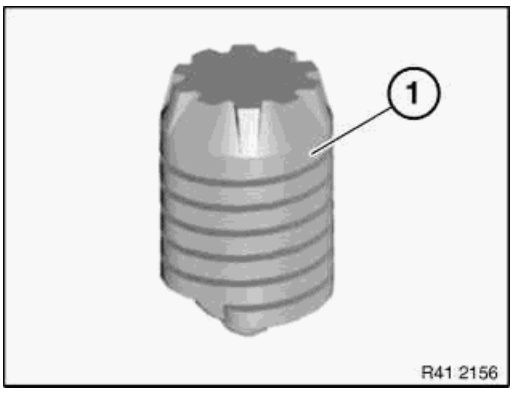
Repair instructions (PRE)	Used in step
Gap dimensions, body	3

Repair instructions	Used in step
41 00 ... Gap dimensions, body	3

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51 23 ... Adjusting/replacing bump stops

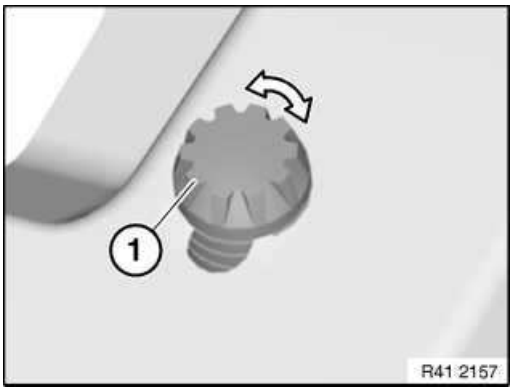
The illustrations are schematic representations and are to be applied to the relevant vehicle type.



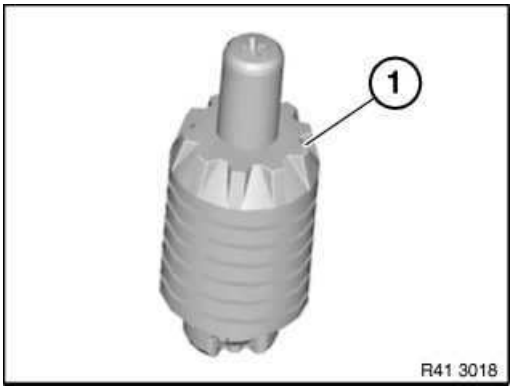
Version 1:

Following parts must not be damaged:

- (1) Bump stop



Adjust bump stop (1) to correct height by turning left or right.

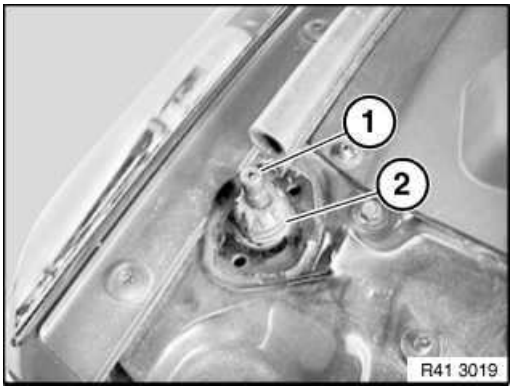


Version 2:

Replace damaged bump stops (refer to EPC):

- (1) Bump stop with ejector

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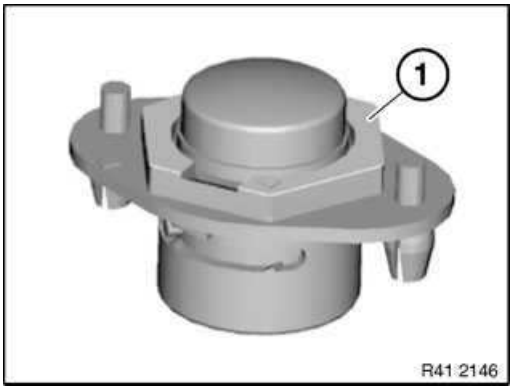


Press ejector (1) into bump stop and, in this position, twist approx. 90° counterclockwise with a Phillips screwdriver.

This locks the ejectors (1) in the bump stops.

Adjust bump stop (2) to correct height by turning left or right.

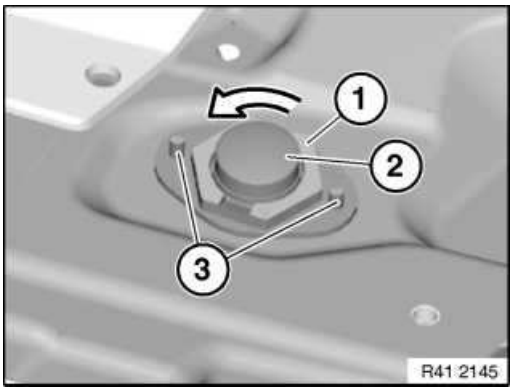
Unlock the ejector (1) again after completing adjustment.



<u>Version 3:</u>

Replace damaged bump stops (refer to EPC):

- (1) Bump stop



Turn lock (1) 45° counterclockwise.

Pull bump stop (2) upwards.

Close lid slowly until it is at the same height as the side panel.

Open lid and turn lock (1) clockwise.

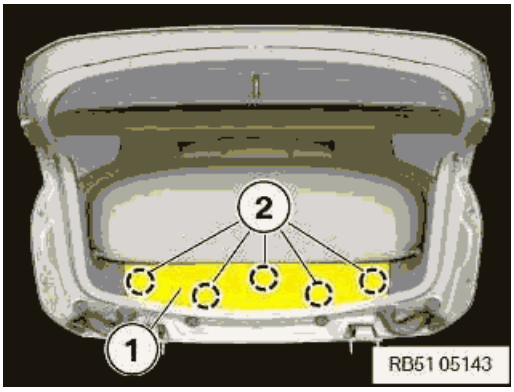
Installation:
Press bump stop into panel and drive in expanding pins (3).

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51 24 146 Remove and install the button for the tailgate activation

PRELIMINARY WORK

1 – Remove the trim for the top rear window frame



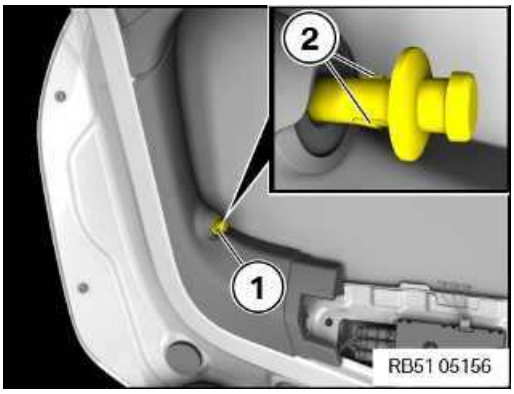
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Remove both trims for the rear window frame on the side

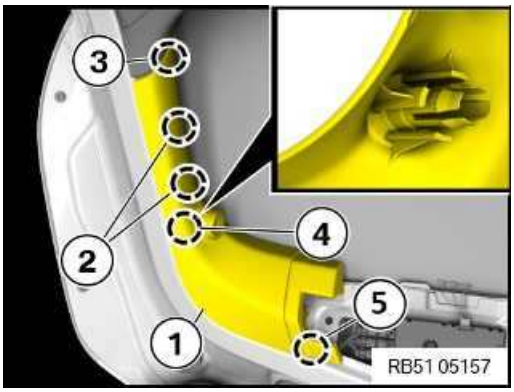
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim for the rear window frame on the side**



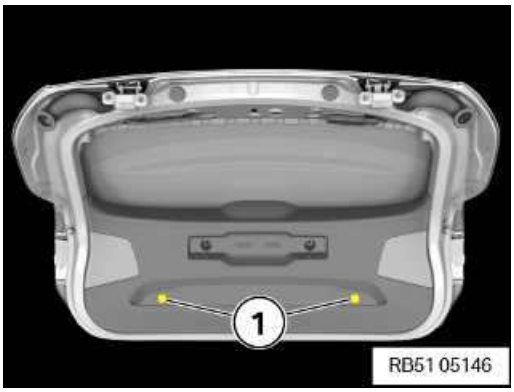
- Detach the mounting button (1) on the latch mechanisms (2) and remove it.



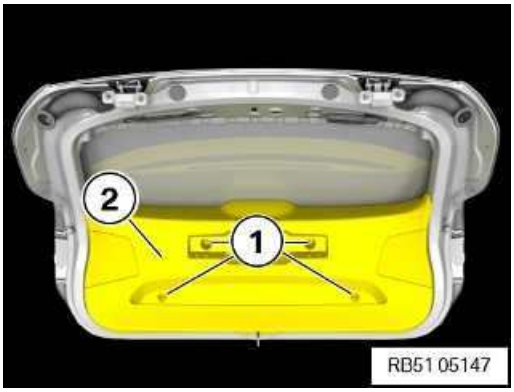
- Unclip the trim for the rear window frame on the side (1) with the clips (2) from the latch mechanisms (3), (4) and (5).

3 – Remove tailgate trim panel

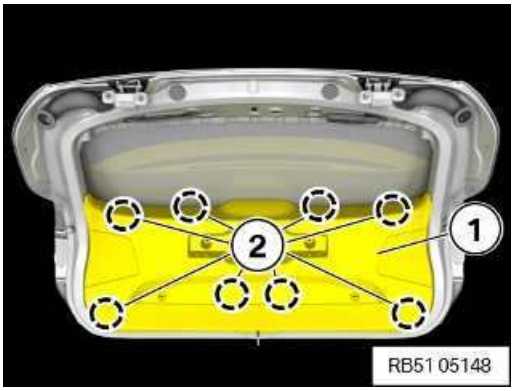
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- Lever out the covers of the screw points (1) with a suitable tool.



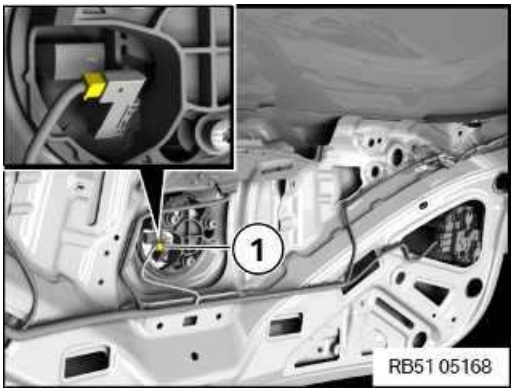
- If applicable, remove the warning triangle from the tailgate trim panel (2).
- Unscrew the bolts (1) at the tailgate trim panel (2).



- Unclip the tailgate trim panel (1) at the latch mechanisms (2) and remove.

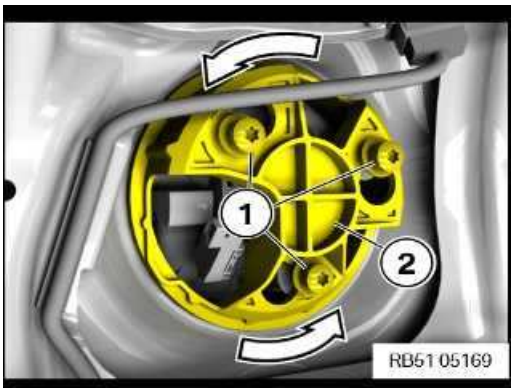
MAIN WORK

4 – Remove tailgate pushbutton

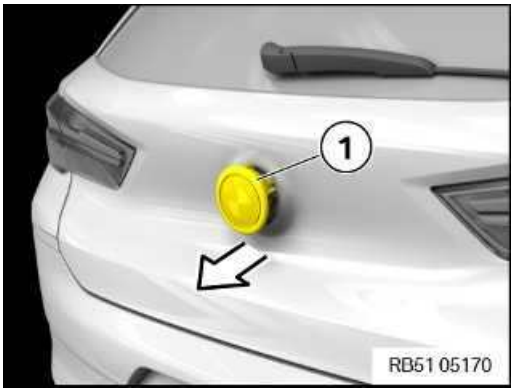


- Unlock plug connection (1) and disconnect.

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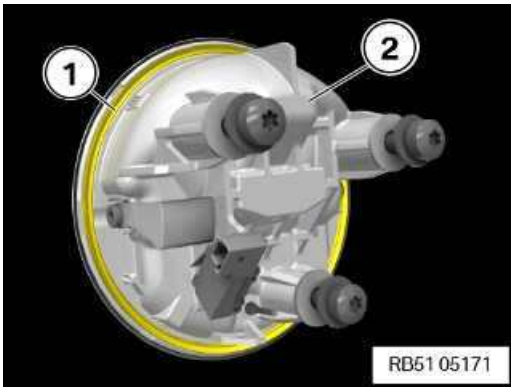
- Unscrew the bolts (1) until you can turn the retaining ring (2).
- Turn the retaining ring (2) in the direction of the arrow and remove it.



- Remove the tailgate button (1) in the direction of the arrow.

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5 – Install the tailgate button



Check

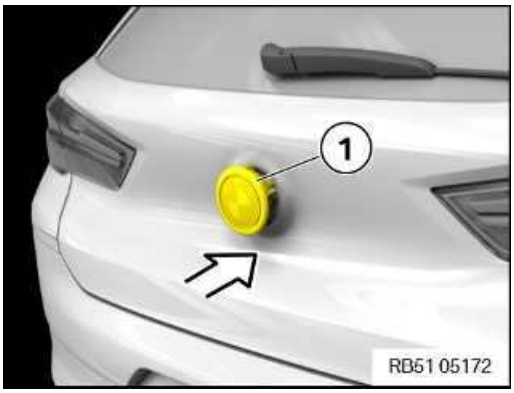
- Check the seal (1) on the tailgate button (2) for damage.

Result

» The seal (1) is damaged.

Measure

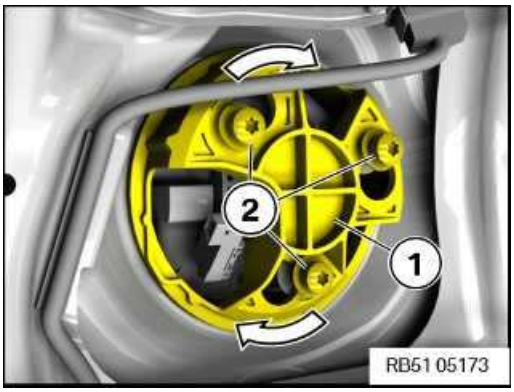
- Replace the tailgate button (2).



- Insert the tailgate button (1) in the rear trim from the outside in.

  The BMW badge must be aligned correctly.

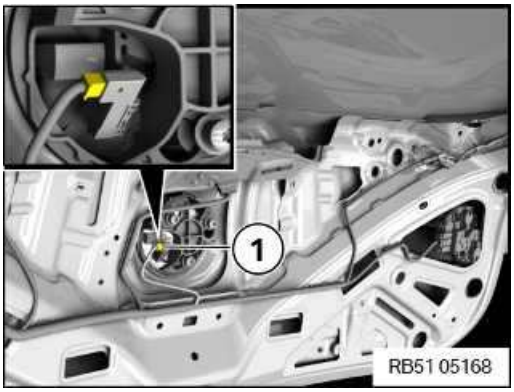
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- Attach the retaining ring (1) from the inside and turn it in the direction of the arrow to the stop.
- Tighten down screws (2).

Tailgate button

Screw with spring washer and washer M6x20		Tightening torque	8 Nm

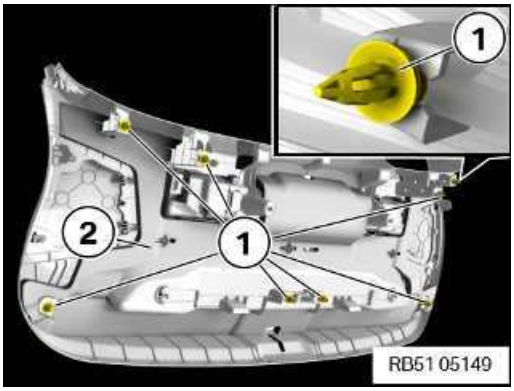


- Connect connectors (1) and lock.

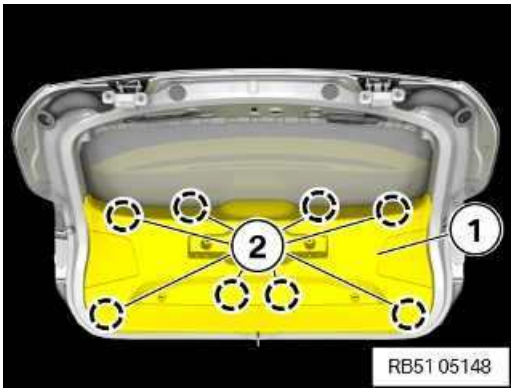
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POSTPROCESSES

6 – Installing the tailgate trim panel

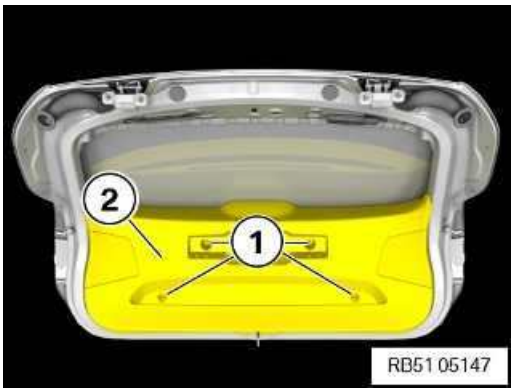


- Check the clips (1) on the tailgate trim panel (2) for damage and replace where required.



- Clip in the tailgate trim panel (1) with the clips (2).

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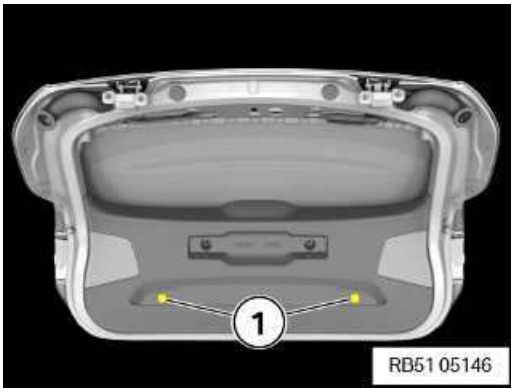


- Tighten the bolts (1) at the tailgate trim panel (2).

Tailgate trim panel

Screw		Tightening torque	1,8 Nm

- If necessary, insert and fasten the warning triangle in the tailgate trim panel (2).



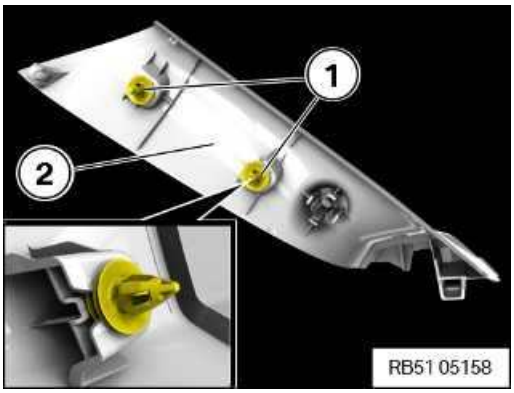
- Insert the covers of the screw points (1).

7 – Mount both trim pieces for the rear window frame on the side

NOTICE

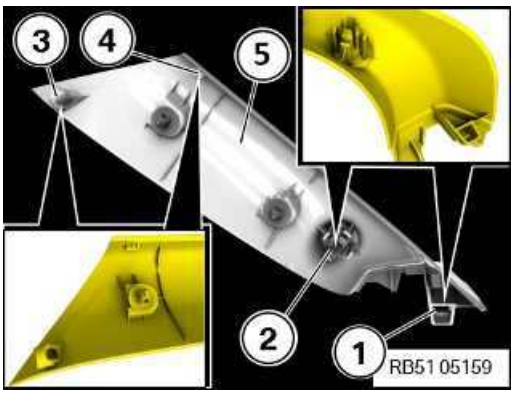
Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the rear window frame on the side**



- Check the clips (1) on the trim for the side rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1), (2), (3) and (4) at the trim for the side rear window frame (5) for damage.

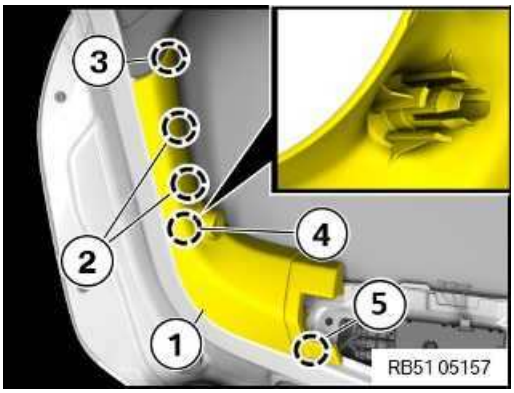
Result

» The latch mechanisms (1), (2), (3) or (4) are damaged.

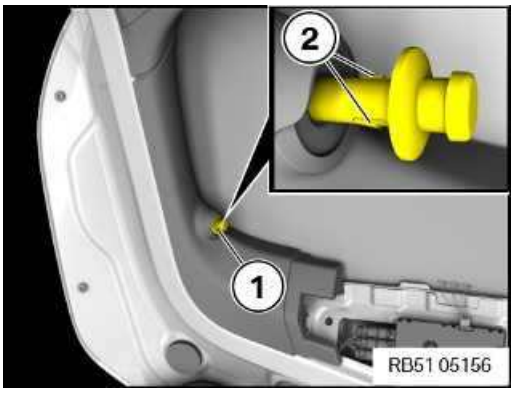
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Measure

- Renew the trim for the side rear window frame (5).

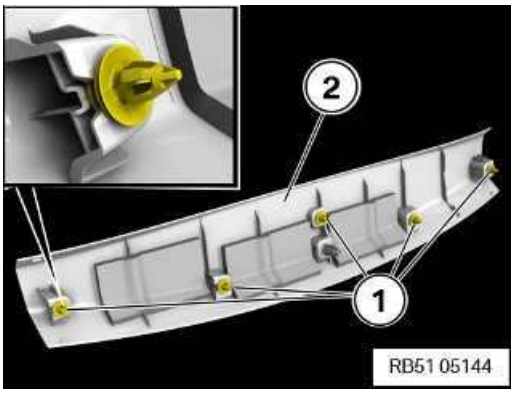


- Clip in the trim for the side rear window frame (1) with the clips (2) and in the latch mechanisms (3), (4) and (5).



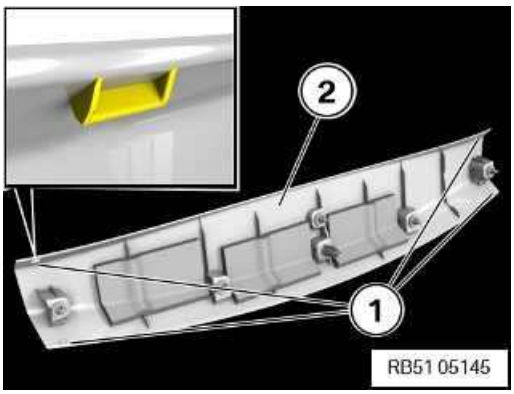
- Clip in the mounting button (1) with the latch mechanisms (2).

8 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

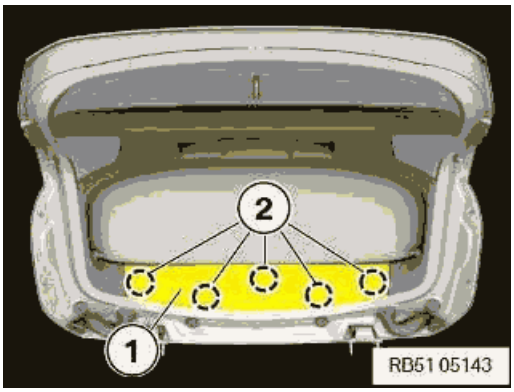
Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).

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- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

Tailgate button — Used in step 5

Screw with spring washer and washer M6x20		Tightening torque	8 Nm

Tailgate trim panel — Used in step 6

Screw		Tightening torque	1,8 Nm

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51 24 300 Removing and installing or replacing left or right gas pressure spring for tailgate

1 – Remove rear lid gas pressure spring

CAUTION

Shutting bonnet or tailgate.

Danger of injury!

- Support bonnet/tailgate in fully open position with the aid of a suitable device.

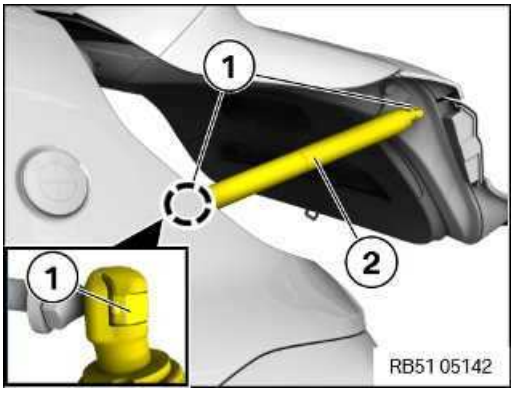
TECHNICAL INFORMATION

The notes on the disassembly and installation of ball sockets with clamps are the basis for these repair instructions and must be observed without fail.

For additional information see: 51 23 ... Note information on disassembly/installation of ball sockets with clamp

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Slide the locking spring (1) to the end of the gas pressure spring (2) and remove the gas pressure spring (2) from the ball head.

2 – Install the gas pressure spring of the tailgate

CAUTION

Shutting bonnet or tailgate.

Danger of injury!

- Support bonnet/tailgate in fully open position with the aid of a suitable device.

TECHNICAL INFORMATION

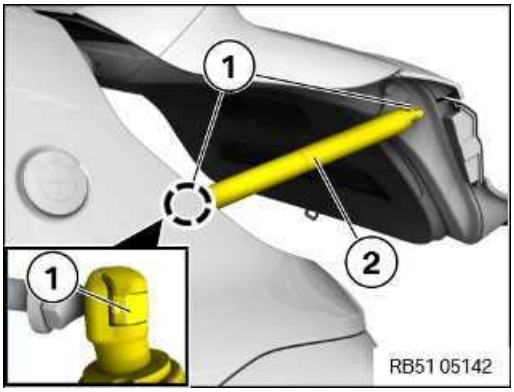
The notes on the disassembly and installation of ball sockets with clamps are the basis for these repair instructions and must be observed without fail.

For additional information see: 51 23 ... Note information on disassembly/installation of ball sockets with clamp

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Mount the gas pressure spring (2) at the top and bottom on the associated ball head and lock with the locking spring (1).

Additional Information

Links

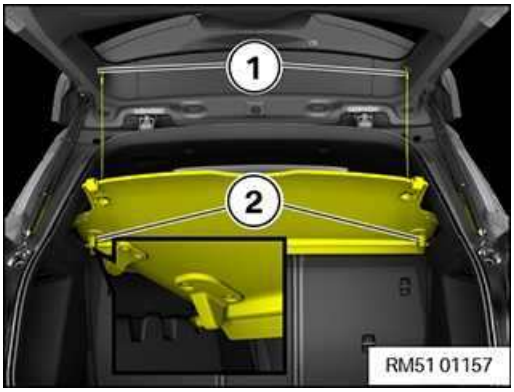
Repair instructions	Used in step
51 23 ... Removing/installing ball sockets with clip	1 2

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51 24 133 Removing and installing/replacing drive for Automatic Soft Close drive on tailgate

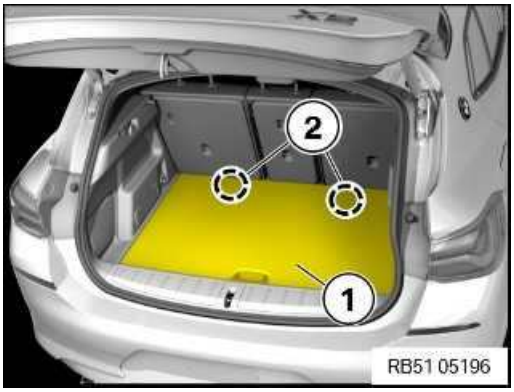
PRELIMINARY WORK

1 – Remove trim panel for storage shelf (parcel shelf)



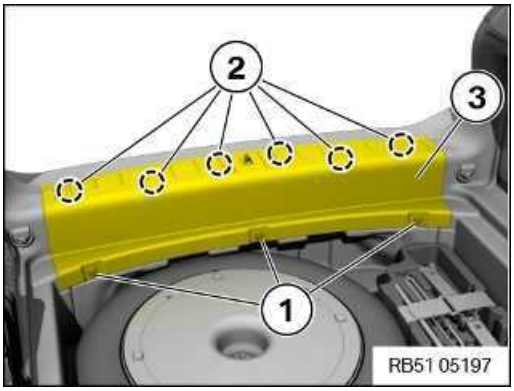
- Release the left and right retaining straps (1).
- Pull out and set aside the trim panel for the storage shelf from the guides (2).

2 – Removing the luggage compartment removable panel



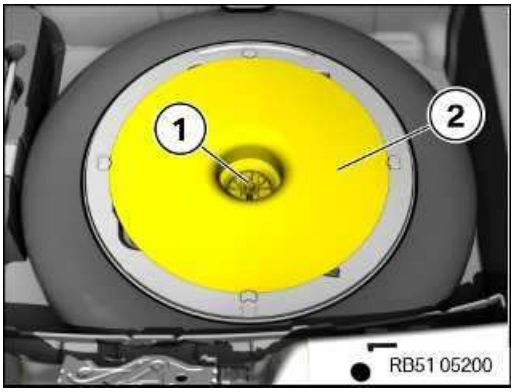
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

3 – Removing the loading edge trim



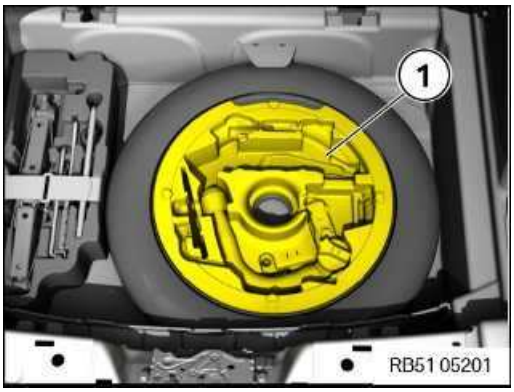
- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).

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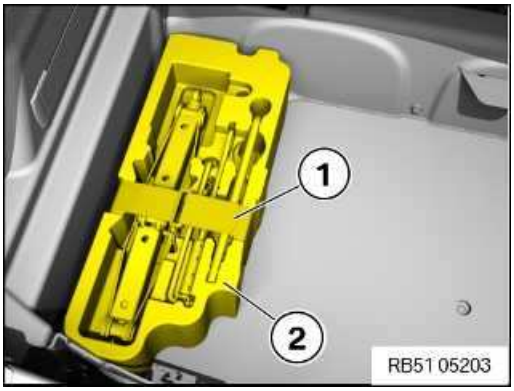


- Remove the oddments tray from the emergency wheel (1).



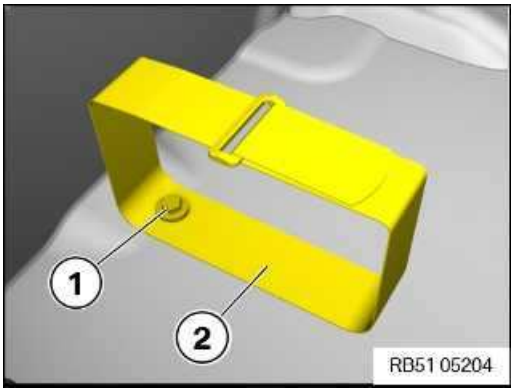
- Remove the emergency wheel (1).

5 – Remove the tool kit



- Open the hook and loop tape (1).
- Remove the tool kit (2).

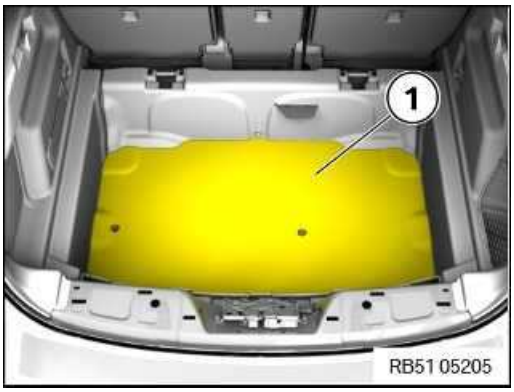
6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

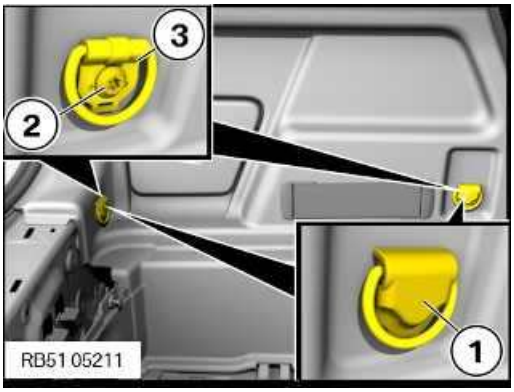
7 – Removing the luggage compartment floor trim panel

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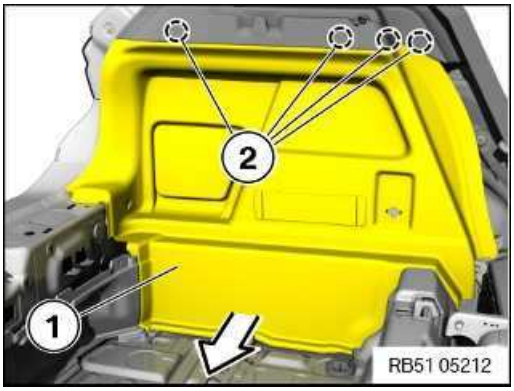


- Remove the luggage compartment floor trim panel (1) upwards.

8 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

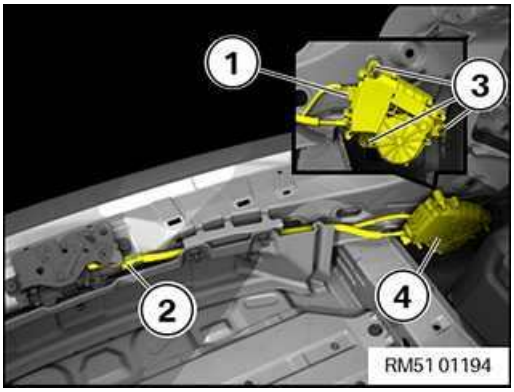
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

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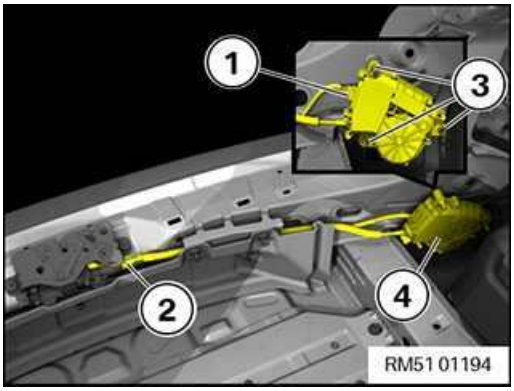
MAIN WORK

9 – Removing the Automatic Soft Close drive on the tailgate



- Unlock plug connection (1) and disconnect.
- Detach the cable (2) from the guides and on the tailgate lock.
- Release the Automatic Soft Close drive (4) from the brackets (3) and remove together with the cable (2).

10 – Install the Automatic Soft Close drive on the tailgate

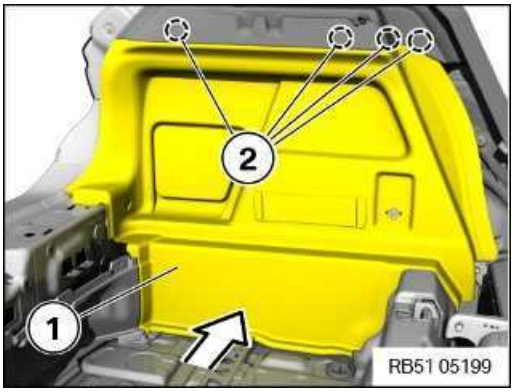


- Clip the automatic Soft Close drive (4) into the brackets (3).
- Attach the cable (2) in the guides and on the tailgate lock.
- Connect connectors (1) and lock.

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POSTPROCESSES

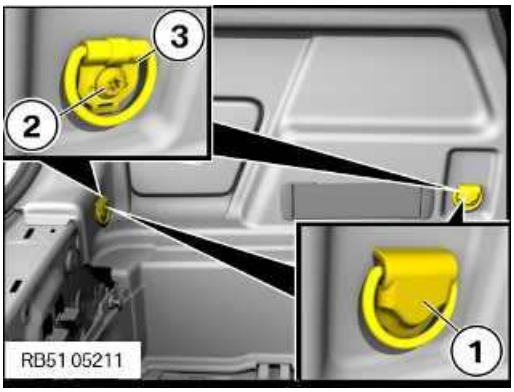
11 – Install luggage compartment wheel arch trim panel at left



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.



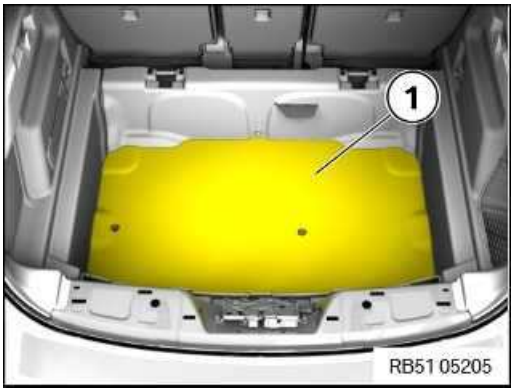
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

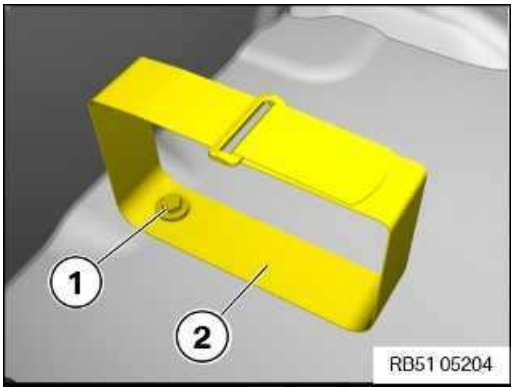
- Clip in the covers (1).

12 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

13 – Inserting the Velcro fastener for the toolkit

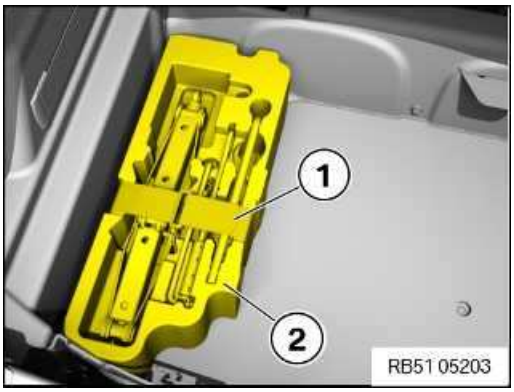


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

14 – Install the tool kit



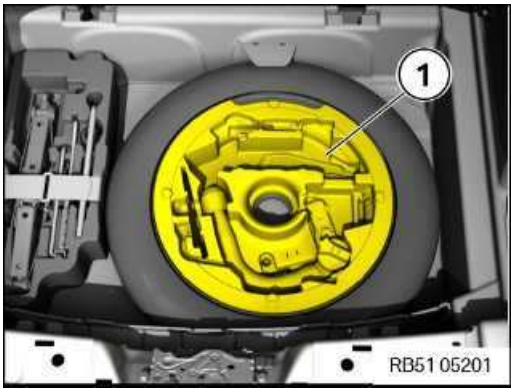
- Install the tool kit (2).
- Close the hook and loop tape (1).

15 – Install the emergency wheel

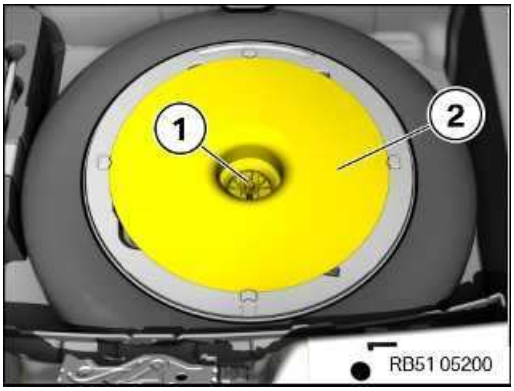
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- Insert compact spare wheel(1).

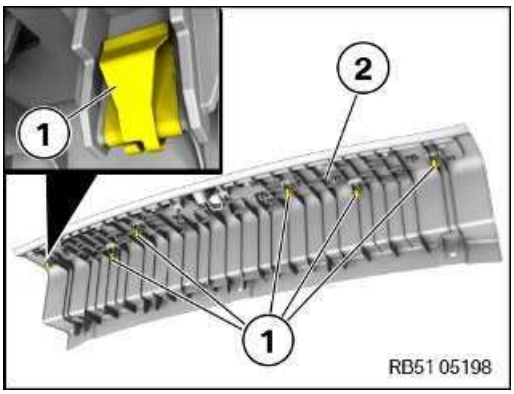


- Insert oddments tray into the compact spare wheel (1).

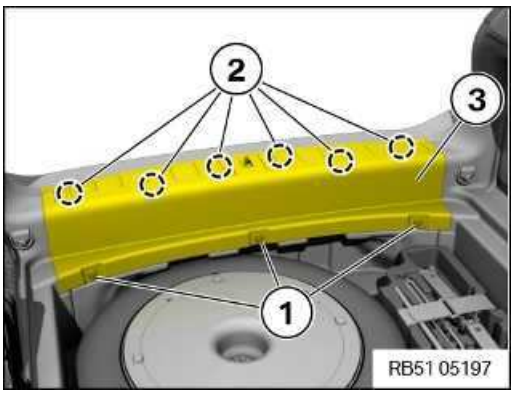


- Insert the lid (2).
- Hand-tighten the bolt (1).

16 – Installing loading edge trim



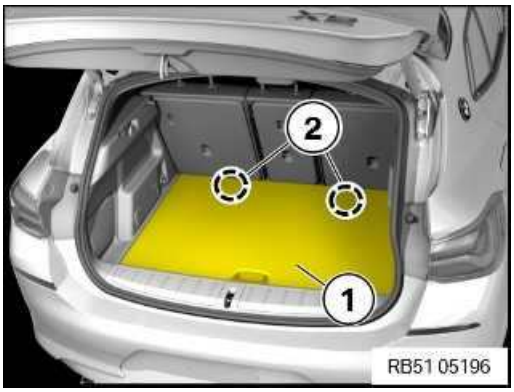
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

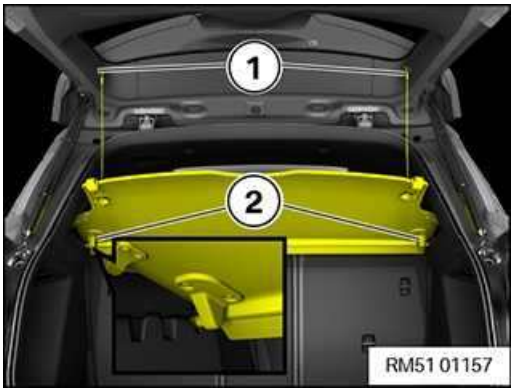
17 – Installing the luggage compartment removable panel

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- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

18 – Install trim panel for storage shelf (parcel shelf)



- Insert the trim panel for the storage shelf into the guides (2).
- Attach the left and right retaining straps (1).

Additional Information

Overview of Tightening Torques

Lashing eye in luggage compartment Used in step 11

Bolt M8 x 22		Tightening torque	21 Nm

Toolkit hook and loop tape to body Used in step 13

Bolt M6 x 20		Tightening torque	4 Nm

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51 24 350 Removing and installing/replacing left electrical spindle drive for tailgate

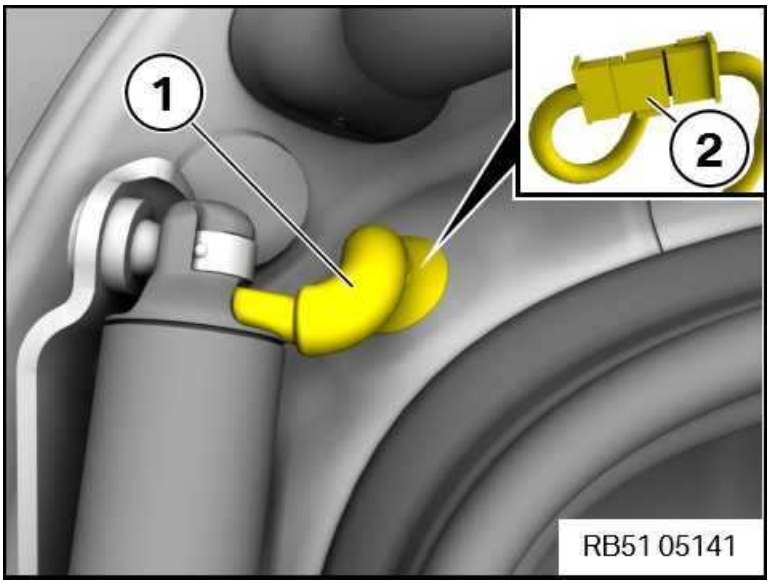
1 – Removing spindle drive of the tailgate

CAUTION

Shutting bonnet or tailgate.

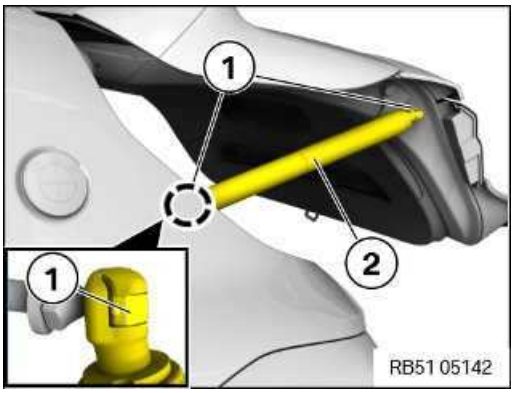
Danger of injury!

- Support bonnet/tailgate in fully open position with the aid of a suitable device.



- Remove grommet (1) from the body panel.
- Unlock and disconnect the two plug connections (2).

  The plug connections (2) must be outside the body.



- Open locks (1) at the top and bottom on the spindle drive (2) and remove the spindle drive (2).

2 – Install the spindle drive of the tailgate

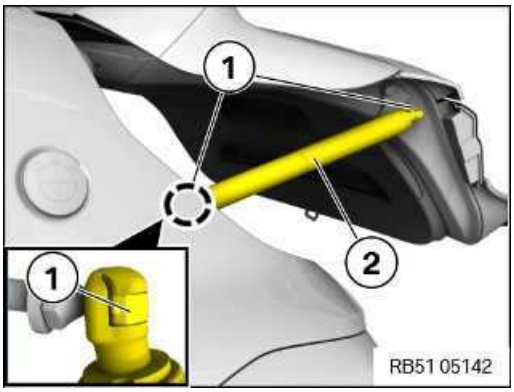
CAUTION

Shutting bonnet or tailgate.

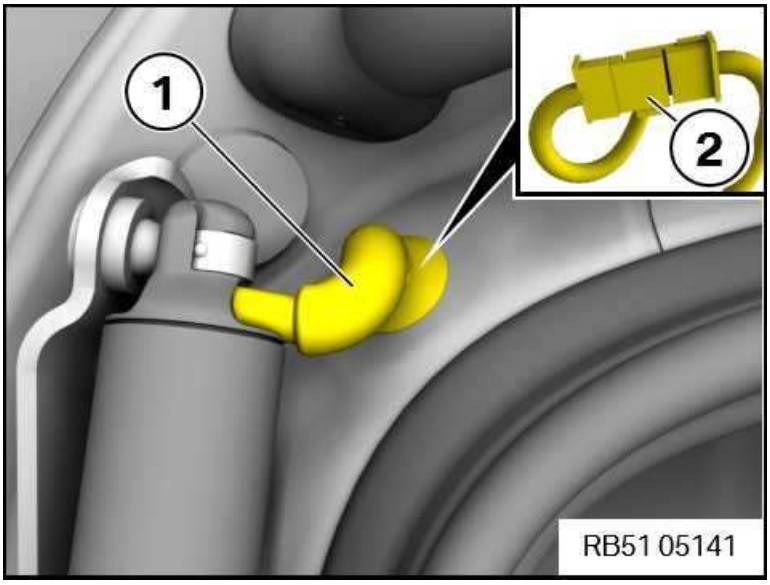
Danger of injury!

- Support bonnet/tailgate in fully open position with the aid of a suitable device.

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- Mount the spindle drive (2) at the top and bottom on the associated ball head and lock with the locking mechanism (1).



- Connect and lock both connectors (2).
- Install the grommet (1) in the body panel.

  The arrow on the grommet (1) must point up.

3 – When replacing the spindle drive



▶ **Initialise the tailgate lift**

- Initialise automatic operation of tailgate using the corresponding service function in the diagnosis system.

  Selection via:

  - Body
  - Automatic tailgate operation
  - Power tailgate initialisation

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51 24 351 Removing and installing/replacing right electrical spindle drive for tailgate

1 – Remove the spindle drive of the tailgate at right

NOTICE

Description is for left component only. Procedure on the right side is identical.

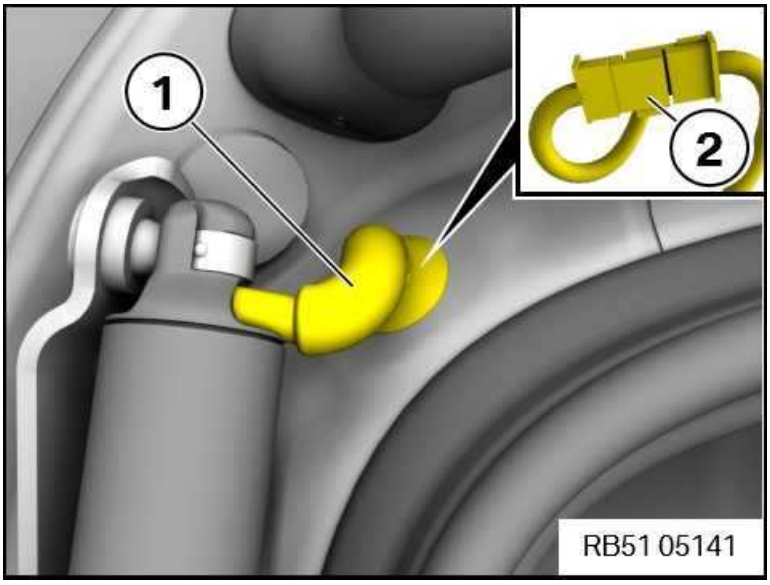
▸ **Removing spindle drive of the tailgate**

CAUTION

Shutting bonnet or tailgate.

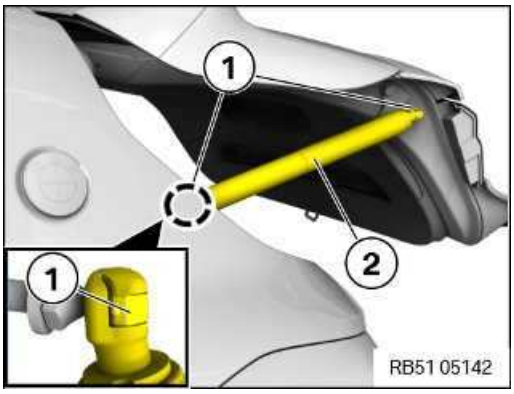
Danger of injury!

- Support bonnet/tailgate in fully open position with the aid of a suitable device.



- Remove grommet (1) from the body panel.
- Unlock and disconnect the two plug connections (2).

  The plug connections (2) must be outside the body.



- Open locks (1) at the top and bottom on the spindle drive (2) and remove the spindle drive (2).

2 – Install the spindle drive of the right tailgate

NOTICE

Description is for left component only. Procedure on the right side is identical.

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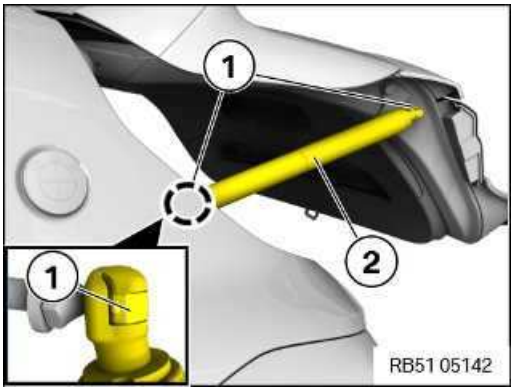
▸ **Install the spindle drive of the tailgate**

CAUTION

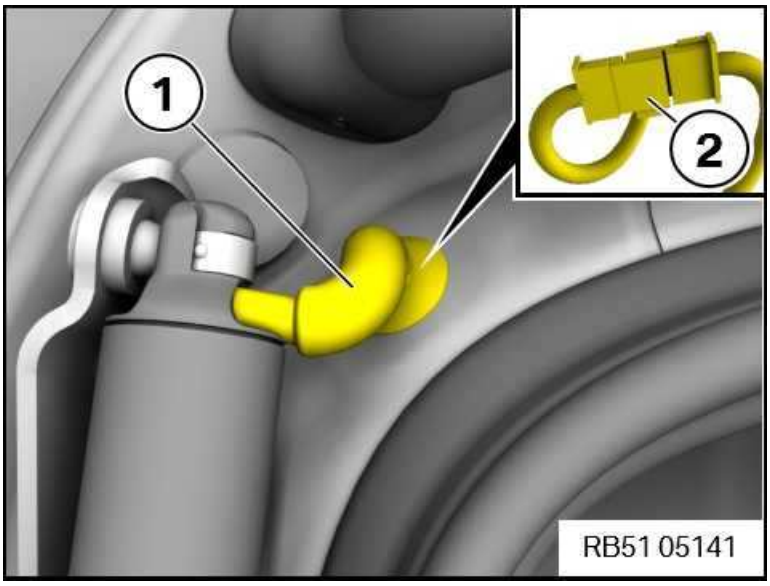
Shutting bonnet or tailgate.

Danger of injury!

- Support bonnet/tailgate in fully open position with the aid of a suitable device.



- Mount the spindle drive (2) at the top and bottom on the associated ball head and lock with the locking mechanism (1).



- Connect and lock both connectors (2).
- Install the grommet (1) in the body panel.

  The arrow on the grommet (1) must point up.

3 – When replacing the spindle drive

▸ **Initialise the tailgate lift**



- Initialise automatic operation of tailgate using the corresponding service function in the diagnosis system.

  Selection via:

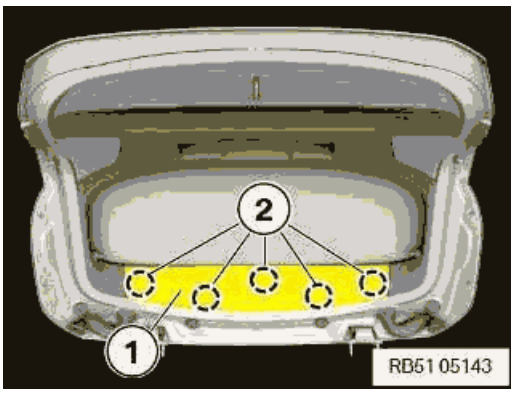
  - Body
  - Automatic tailgate operation
  - Power tailgate initialisation

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51 24 130 Removing and installing/replacing striker for tailgate lock

PRELIMINARY WORK

1 – Remove the trim for the top rear window frame



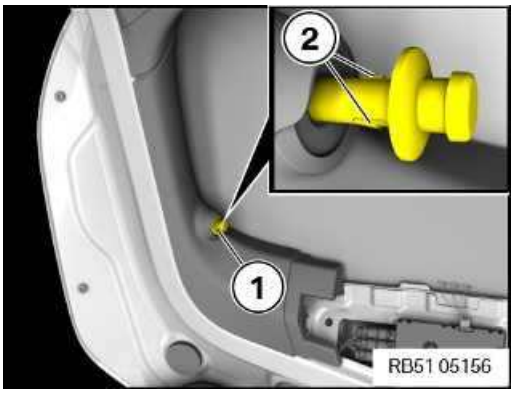
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Remove both trims for the rear window frame on the side

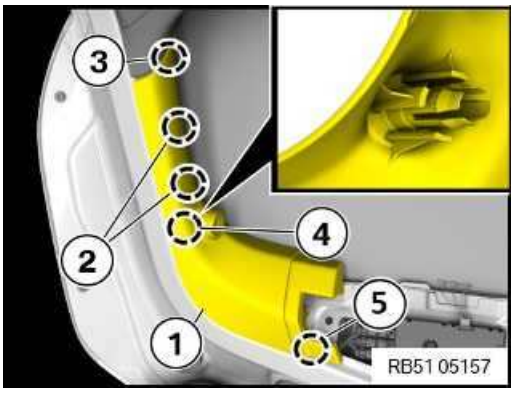
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim for the rear window frame on the side**



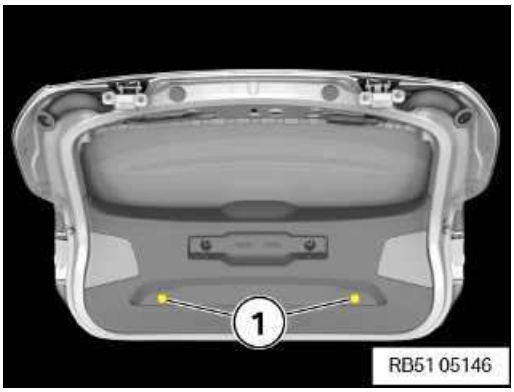
- Detach the mounting button (1) on the latch mechanisms (2) and remove it.



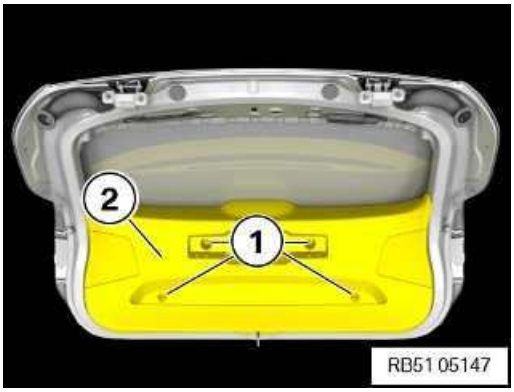
- Unclip the trim for the rear window frame on the side (1) with the clips (2) from the latch mechanisms (3), (4) and (5).

3 – Remove tailgate trim panel

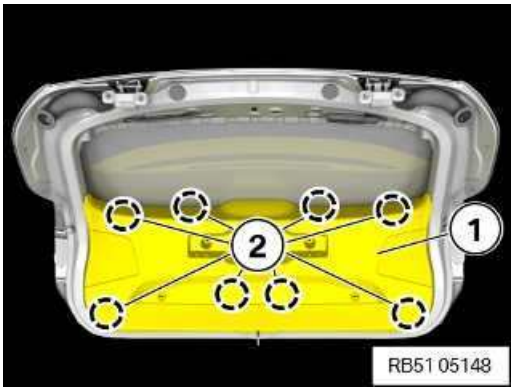
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- Lever out the covers of the screw points (1) with a suitable tool.



- If applicable, remove the warning triangle from the tailgate trim panel (2).
- Unscrew the bolts (1) at the tailgate trim panel (2).

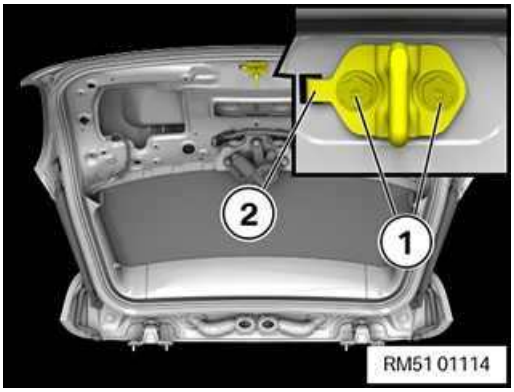


- Unclip the tailgate trim panel (1) at the latch mechanisms (2) and remove.

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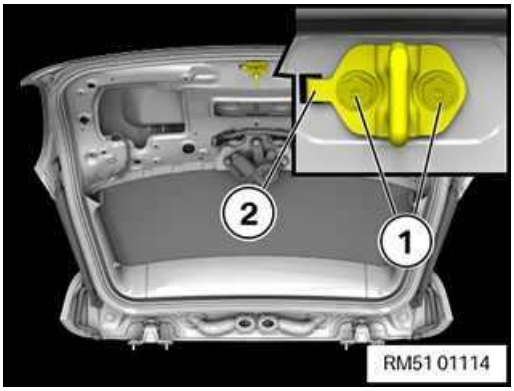
MAIN WORK

4 – Remove striker for tailgate catch



- Unscrew the bolts (1) and remove the striker for the tailgate catch (2).

5 – Install striker for tailgate catch



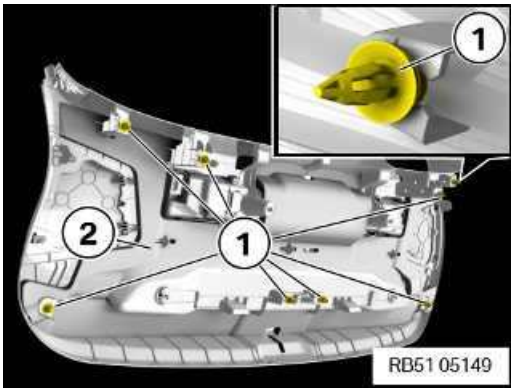
- Mount the striker for the tailgate catch (2) with the bolts (1).
- Tighten the screws (1).

Striker for tailgate catch

Screw		Tightening torque	19 Nm

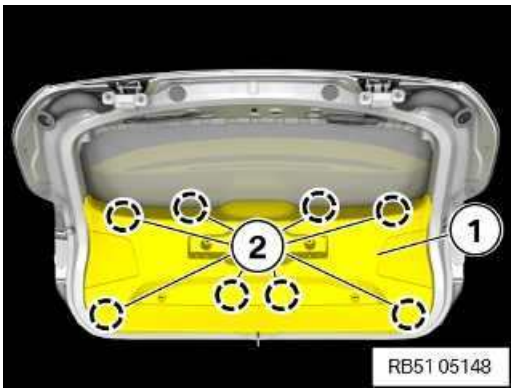
POSTPROCESSES

6 – Installing the tailgate trim panel

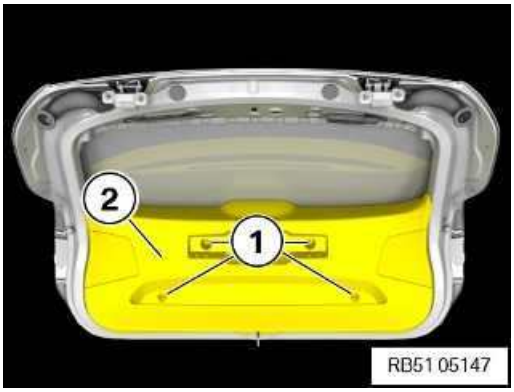


- Check the clips (1) on the tailgate trim panel (2) for damage and replace where required.

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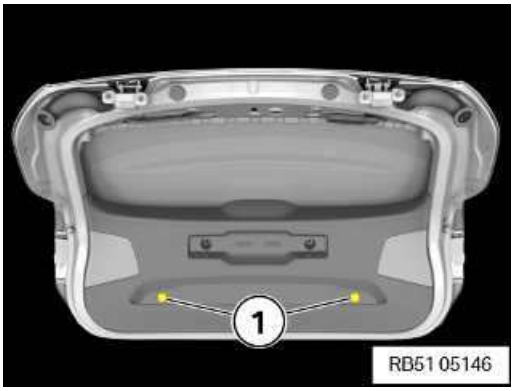
- Clip in the tailgate trim panel (1) with the clips (2).



- Tighten the bolts (1) at the tailgate trim panel (2).

Tailgate trim panel

Screw		Tightening torque	1,8 Nm



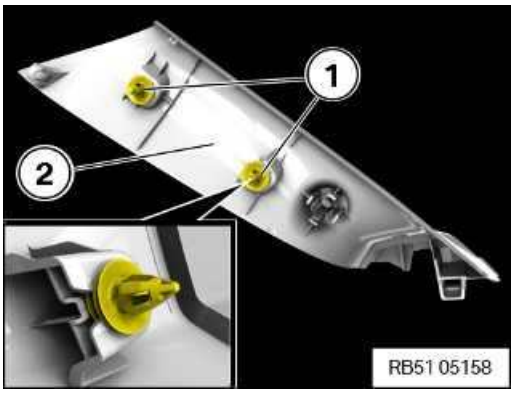
- If necessary, insert and fasten the warning triangle in the tailgate trim panel (2).
- Insert the covers of the screw points (1).

7 – Mount both trim pieces for the rear window frame on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

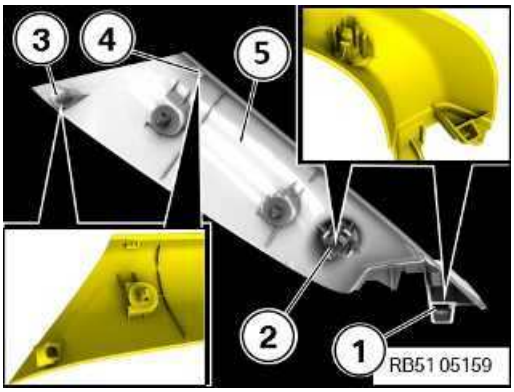
▸ **Install the trim for the rear window frame on the side**



- Check the clips (1) on the trim for the side rear window frame (2) for damage and replace where required.

Check

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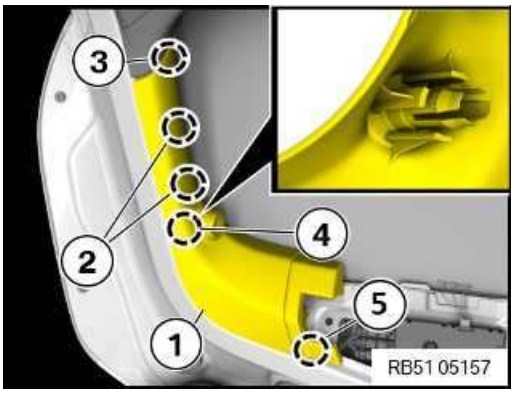
- Check the latch mechanisms (1), (2), (3) and (4) at the trim for the side rear window frame (5) for damage.

Result

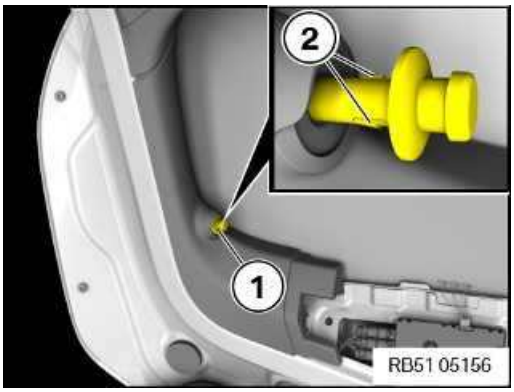
» The latch mechanisms (1), (2), (3) or (4) are damaged.

Measure

- Renew the trim for the side rear window frame (5).

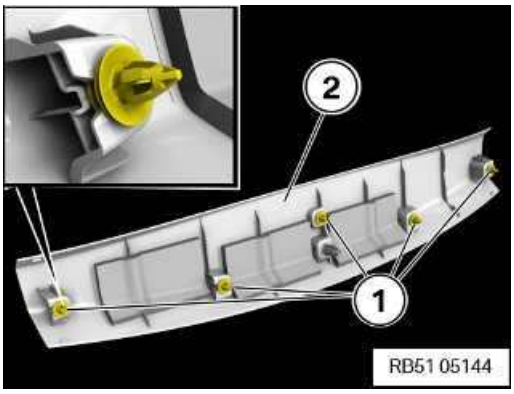


- Clip in the trim for the side rear window frame (1) with the clips (2) and in the latch mechanisms (3), (4) and (5).



- Clip in the mounting button (1) with the latch mechanisms (2).

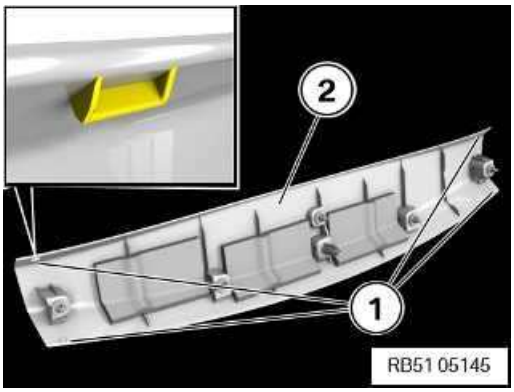
8 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check

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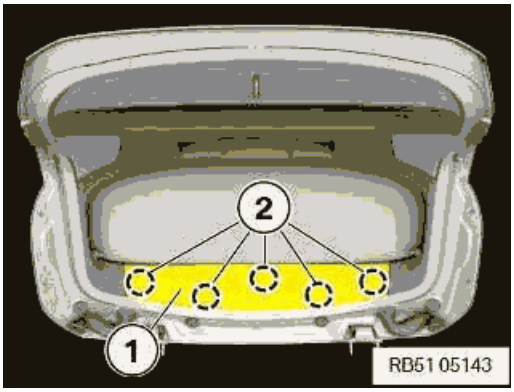
- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).



- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

Striker for tailgate catch — Used in step 5

Screw		Tightening torque	19 Nm

Tailgate trim panel — Used in step 6

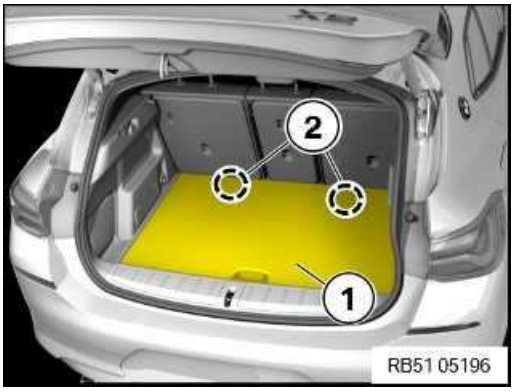
Screw		Tightening torque	1,8 Nm

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51 24 105 Removing and installing/replacing tailgate lock

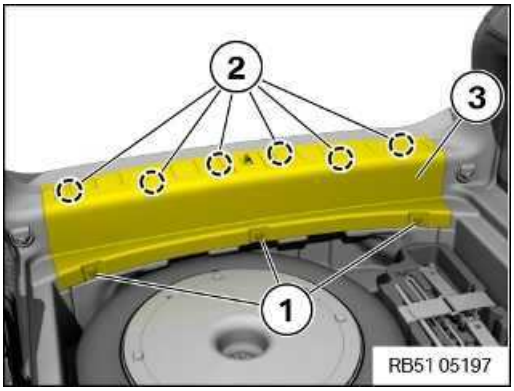
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel



- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

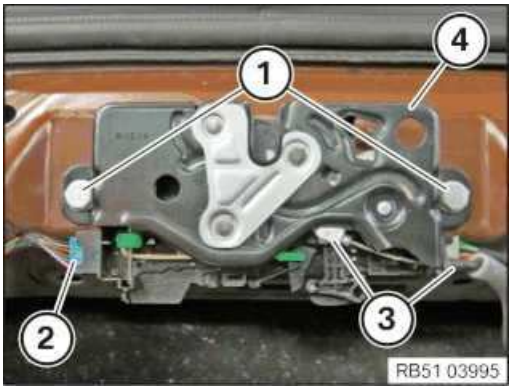
2 – Removing the loading edge trim



- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

MAIN WORK

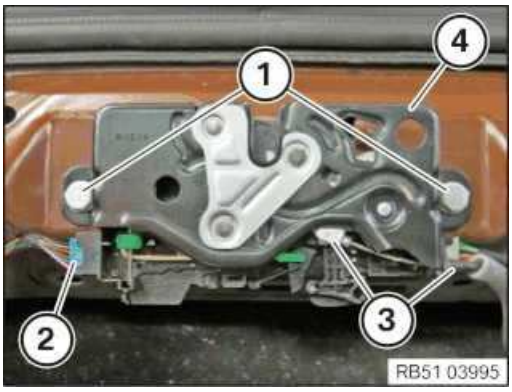
3 – Removing the tailgate lock



- Loosen screws (1).
- Disconnect plug connection (2).
- Detach the cable (3).
- Remove the tailgate lock (4).

4 – Installing the tailgate lock

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- Remove the tailgate lock (4).
- Attach the cable (3).
- Connect connector (2).
- Tighten the screws (1).

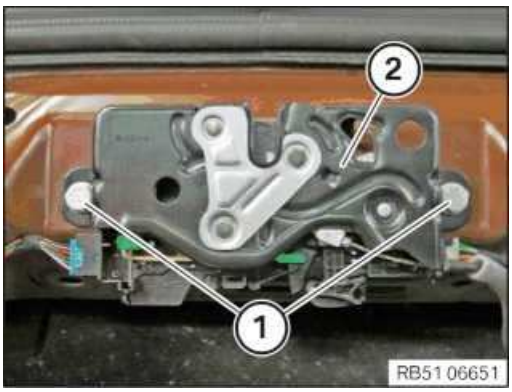
Tailgate lock to body

M8x20 screw		Tightening torque	19 Nm

5 – Adjusting rear lid lock

TECHNICAL INFORMATION

The gap dimensions form the basis for these repair instructions and must be observed without fail.
For more information see: 41 00 ... Gap dimensions for body



- Slacken the screws (1) until the tailgate lock (2) can be barely moved and centres itself.
- Close tailgate.
- Open tailgate.
- Tighten the screws (1).

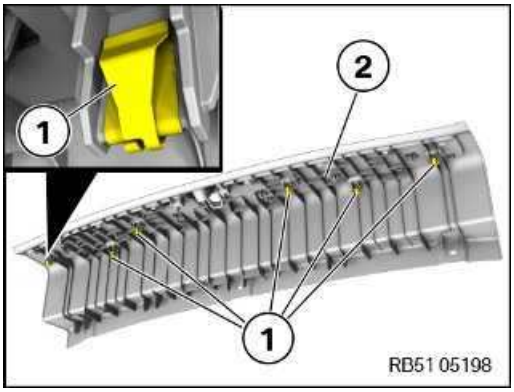
Note: When the tailgate is closed, the striker must not touch or scrape against the tailgate lock. Watch out for scratches!

Tailgate lock to body

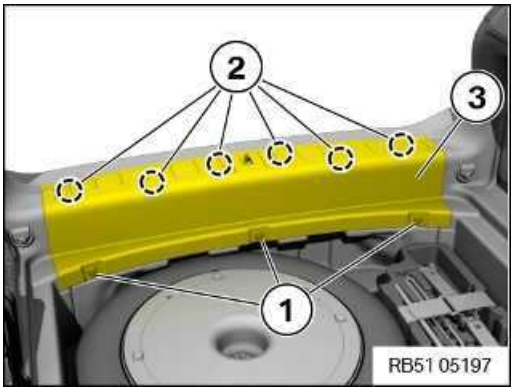
M8x20 screw		Tightening torque	19 Nm

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6 – Installing loading edge trim

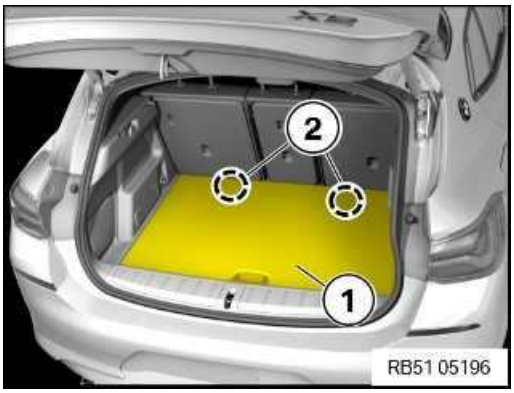


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

7 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

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Additional Information

Overview of Tightening Torques

Tailgate lock to body Used in step 4 5

M8x20 screw		Tightening torque	19 Nm

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	5

Repair instructions	Used in step
41 00 ... Gap dimensions, body	5

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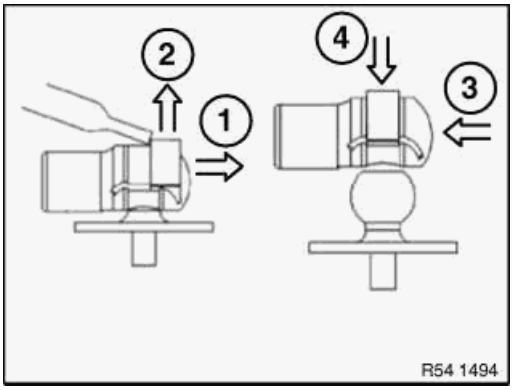
51 23 ... Removing/installing ball sockets with clip

Warning!

Danger of injury! When installed, the gas pressurised shock absorber is under preload. Minimise preload as far as possible before removing.

Important!

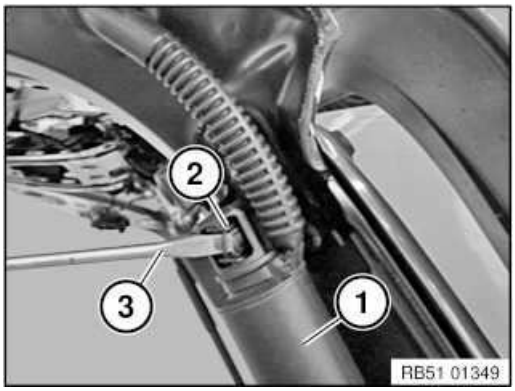
Never lift off ball socket with engaged clamp.



Version A:

1. Push on clamp in direction of groove with screwdriver
2. Lift off ball socket from ball pin
3. Slide clamp back
4. Fit ball socket on ball stud and snap into place with force

Installation note:
Pack grease into two opposite positions in socket. The grease spreads after installation on the ball pin all round in the ball socket.



Version B:

Important!

Risk of damage!

If you are not careful, retaining spring (2) may be bent to such an extent that the entire drive spindle will have to be replaced.

Press drive spindle (1) against ball pin in order to relieve strain on retaining spring (2) at ball pin.

Pull out retaining spring (2) approx. 2-3 mm with screwdriver (3).

Pull off spindle foot.

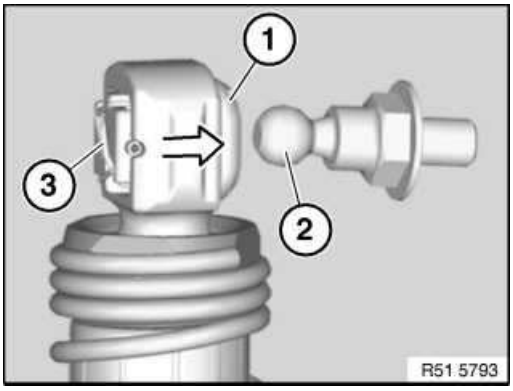
Warning!

Observe warning notices on the damper.

Electrical spindle drive for tailgate is under mechanical spring load!

The component must be secured against falling down.

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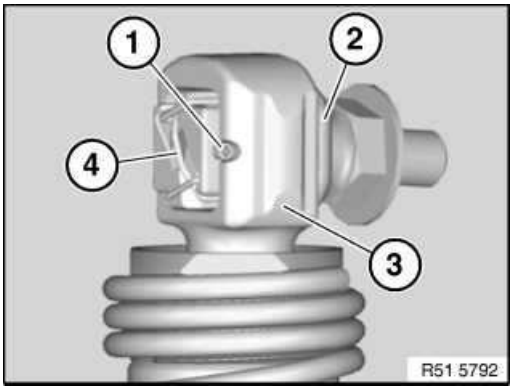


Attention!

Risk of damage!

Do not press on spindle drive at an angle or twisted.

Installation note:
Press ball socket (1) onto ball pin (2) until retaining spring (3) engages correctly (clicking sound).



Important!

If retaining spring (4) is damaged!

Release pin (1).

Remove spindle drive (3).

Remove ball socket (2).

Remove retaining spring (4) and replace if necessary.

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51 31 ... General procedure for the disassembly and installation of bonded window glass

1 General information

Follow general instructions on window bonding.

Materials needed for window bonding.

The vehicle can be towed away or driven without a windscreen, rear window and side window.

When carrying out disassembly/installation work and during the hardening time, the vehicle must be standing on its wheels on a level surface.

The windscreen, rear window and side windows are glued to the body. This bonding will increase the torsional rigidity of the vehicle. To obtain perfect bonding, comply with the installation procedure described in the following.

2 Disassembly

2.1 Disassembly in general

The following dismantling methods are applied, according to the version:

- Oscillating knife (not permissible for vehicles with window bonding on carbon body components)
- Cutting wire with wire pull handles
- "Spider" window glass removal system (unsuitable for severely damaged window glass)

Note:

> When cutting out the window glass with wire pull handles, there is a risk of damage to the window glass if the wire is pulled over the window edge.
>
> Unless otherwise described, only use this method when replacing the window glass.

Follow the vehicle-specific repair instructions!

2.2 Disassembly of damaged window glass

The disassembly method described in the REP may be unsuitable depending on the degree of damage.

- e.g. suction cups cannot be attached to window glass around cracks
- Damaged window glass may damage and tear the nylon string

Attention! Risk of damage!

Use one of the other disassembly methods at your own discretion in the event of severely damaged window glass.

Make sure adjacent components are adequately protected.

3 Installation

3.1 Preparation

Position the windscreen or rear window on a universal work top or secure the components on a tool trolley using suction lifters.

Attach two suction lifters to the outsides of the window glass in the event of storage on a universal work top.

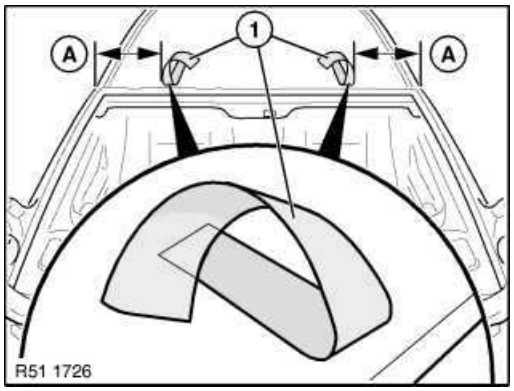
According to its size, fix side and door window glass onto the tool trolley using suction lifters or special tool 51 3 220 and set down on a suitable support.

Always keep the suction faces of the window glass suction lifters dry and clean.

Note:

> If accessibility is restricted, insert the window glass on a trial basis.

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Bond two yellow plastic adhesive tapes (1) approx. 400 mm in length to the roof.

(A) = 250 mm

Only the yellow plastic adhesive tape may be used to fix the window glass.

The glass will slip down if other adhesive tapes are used.

Window glass slippage will result in leaks and wind noises.

After completing the paint work, the paint must be fully hardened before the plastic adhesive tapes are applied.

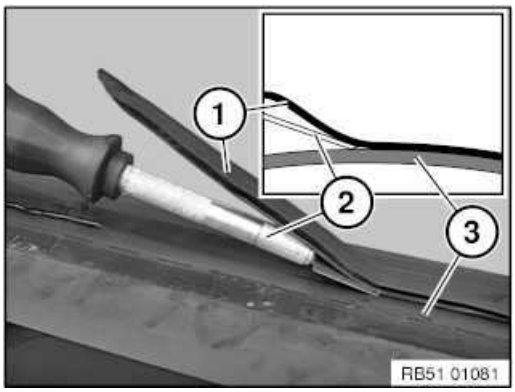
3.2 Pre-treatment of bonding surfaces

- Protect the vehicle interior against contamination, cover the Head-Up Display.
- Clean window glass and body aperture (with residual adhesive bead) with cleaning agent R2
  Attention! Do **not** use Sika remover 208 for cleaning in the adhesive area.
- Observe an air drying time of at least 5 minutes (at least 15 minutes when applied to residual adhesive bead)
- Remove residual adhesive bead from body and window glass (see point 3.3)
- Touch up paintwork damage to body aperture with BMW multibase filler (except for carbon body components)

Pretreatment on new body component (no residual adhesive beads present):

Surface	Pretreatment
Panel painted	Wipe cleaning agent R1 dry with a paper towel or observe the air drying time of at least 1 minute
Carbon	Only cleaning agent R2
Carbon painted (e.g. roof outer skin M3)	Wipe cleaning agent R1 dry with a paper towel or observe the air drying time of at least 1 minute
Plastic (e.g. I01 A-pillar)	Cleaning agent R2 and ScotchBrite Multiflex abrasive pad

3.3 Remove adhesive residue from the body and window glass



Do not remove residual adhesive bead (1) until shortly before bonding.

Use the pitchweld scraper to remove the residual adhesive bead (1) from the body aperture and window glass (3).

Position the pinchweld scraper (2) as shown and remove the residual adhesive bead (1) up to a thickness of approx. 0.5 mm.

Attention!

Carbon body components are not to have scratches with a depth greater than 0.2 mm.

Note, comply with life module check!

3.4 Installation of spacer (spacer buffer / dual-lock tapes)

Completely remove all residue of existing spacers before bonding new adhesive spacers.

The exact position of the spacers must be retained (see vehicle-specific repair instructions).

Incorrectly fitted spacers will result in:

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- Window glass breakage due to tension
- leakage (if the spacer is in the adhesive area)
- Wind noises

3.5 Add-on part

Depending on the version, attach sealing, expanding foam tape, rain sensor, etc.

Observe Overview of additional work with rain sensor when working with versions including the rain sensor!

Follow the vehicle-specific repair instructions!

3.6 Pre-treatment of new window glass

- Apply a thin coat of glass activator (yellow stick); a final wipe is not necessary.
- Observe an air drying time of at least 2 minutes

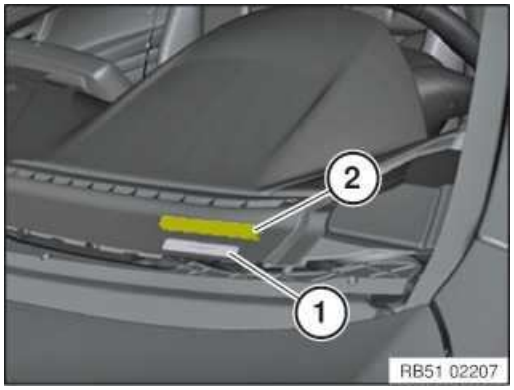
The glass activator is used for adhesion between glass or ceramic glass and the adhesive. Therefore, a thin, homogeneous and continuous line of glass activator must be applied. If the window glass is to be reused with a cut-back adhesive bead, glass activator is not needed.

It must be guaranteed that a 1 to 2 mm wide line of glass activator is located on the ceramic glass next to the squeezed adhesive bead.

The adhesive bead may become up to 15 mm wide in compressed condition. The width of the glass activator is therefore normally a minimum of 17 mm for windscreens and rear windows and a minimum of 9 mm for side windows.

The glass activator may not be applied in the field of view or the point grid. Fresh glass activator in the field of view must immediately be wiped off with cleaning agent R2 because hardened glass activator will leave a haze behind.

3.7 Version with inspection glass for vehicle identification number in windscreen



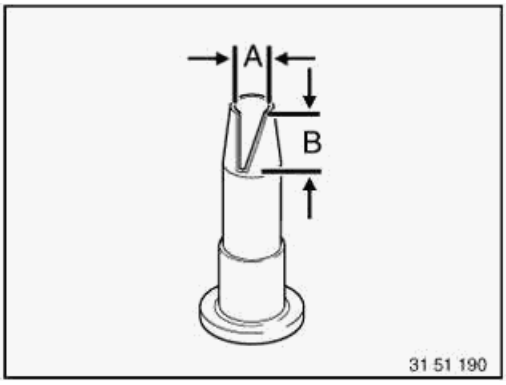
Foam tape (2) must be installed to protect the vehicle identification number (1) against tampering. If necessary, install foam tape 07 14 7 222 909.

Close off the inspection glass on the windscreen (bottom left) with Sika bonding base VP 206.

Except for:

- All US/GB models
- All models with a black dashboard cover, which means that the vehicle colour cannot be seen through the inspection glass

3.8 Nozzle preparation



Use the standard nozzle C for windscreens, rear windows, and body-specific fixed side window glass.

A	8 ±1 mm
B	12 ±1 mm

Prepare plastic nozzle for fixed door window glass.

A	8 ±1 mm
B	15 ±1 mm

Deviations are described in the vehicle-specific repair instructions.

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Black ceramic glass impermeable to UV light is located on the peripheral zone of the inside of the window to protect the adhesive bead.

Ceramic glass must not be damaged.

3.9 Apply adhesive

Adhesive is applied to the window glass using a cartridge gun.

Glue cartridge must be vertical to window glass.

The almost vertical part of the adhesive bead must be facing the outer window glass edge.

On window glass with guidelines, the adhesive bead must be applied centrally between the guidelines.

On window glass without guidelines, the position of the adhesive bead is specified in the vehicle-specific repair instructions.

Coat bead joint.

Effect of differing adhesive quantities:

Too little adhesive:	Too much adhesive:
• Window glass rests too low in body aperture • Insufficient squeezing of adhesive bead (leaking)	• Window glass rests too high in body aperture • Wind noise may occur • Strains/tensions may occur (window glass breakage) • Dirt contamination of add-on parts by emerging adhesive • Adhesive on uninsulated strainer pressure lines of aerial(s) (interference of reception)

Note on bonding of windscreen:

The adhesive amount specified in the vehicle-specific repair instructions is sufficient if the specified adhesive bead size is maintained.

If too much adhesive is applied due to application-related variations (manual application), the specified adhesive amount may not be sufficient. To avoid interrupting adhesive application for longer than the permitted period, have another glue cartridge ready.

Attention!

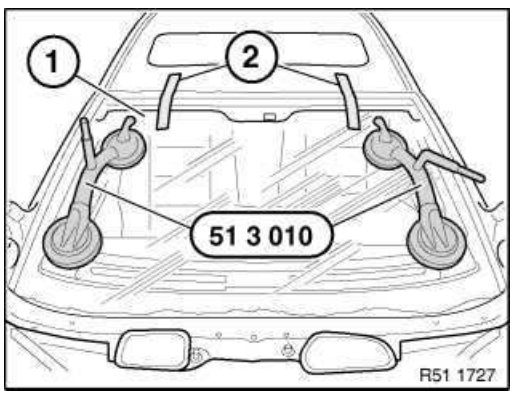
Once the adhesive bead has been applied, the window glass must be installed within 7 minutes (depending on air humidity, temperature).

After 7 minutes the adhesive bead forms a skin which can no longer guarantee a perfect bond.

3.10 Mounting the window glass

To prevent a pressure build-up in the passenger compartment when the doors are closed:

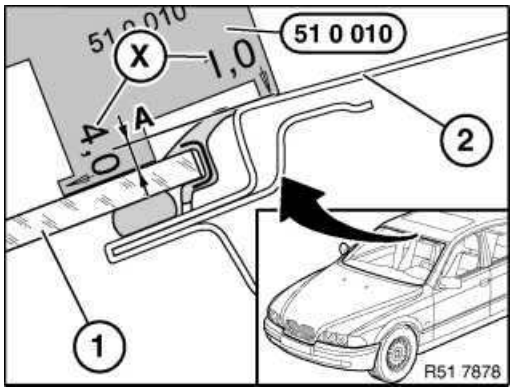
- Open a side window



Mount window glass (1) with suction lifter (51 3 010).

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3.11 Adjusting the window glass



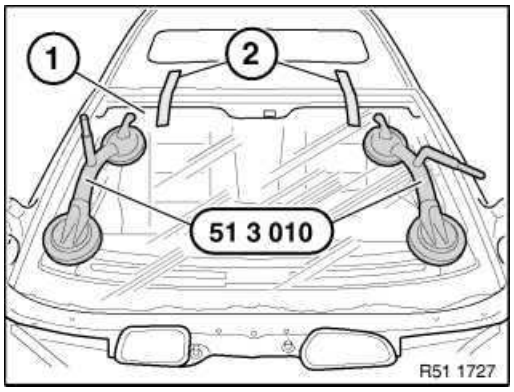
To avoid wind noise, the front and rear windows (1) must be lower than the roof outer skin (2).

Check ride height of the windscreen or rear window using special tool 51 0 010.

Dimension (A) of window glass offset, refer to vehicle-specific repair instructions.

X = measurement stages 1 ... 4 mm

3.12 Fixing the window glass



Fix the window glass with yellow plastic adhesive tapes (2).

Immediately remove dirt contamination with adhesive residue using Sika remover 208. Do not press out the window glass again.

Hardened adhesive can only be removed mechanically.

3.13 Label

Depending on version, apply label.

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51 31 ... Materials for bonding window



Special tools required:

- 51 3 220

1 Tools

Type	Type	Order/part number
Electric special cutter	SuperCut FSC 1.6Q	81 43 2 296 987
Knife set Contains: Knife (U-shape) Knife (L shape) Knife (straight with stop roller)	 24 / 36 / 45 mm 25,4 mm 16 to 43 mm (adjustable) 14 mm (fixed)	81 43 9 428 596
"Roll Out 2000"	Wire cutting system	81 62 0 301 768
"Spider"	Cutting system with nylon string	81 43 2 357 248
Wire pull handles		81 43 2 326 501
Cartridge gun		81 49 2 213 059
Pinchweld scraper set		81 62 0 410 436
Siphon		81 64 2 184 377
Single suction cup	Special tool	51 3 220
Universal work table		81 49 0 151 675

2 Consumables:

Naming of Electronic Parts Catalogue	Designation, repair instructions /addition	BMW part number
Window glass repair kit, cold, 1 hour	Small repair kit	83 19 2 289 285 83 19 2 289 180 (US) 83 19 2 180 001 (China)
Window glass repair kit, cold, 1 hour	Large repair kit Like small repair kit, plus 1x window glass adhesive 300 ml	83 19 2 360 680 (not available for the US/China)
Cutting wire for glass repair	Cutting wire, square	83 19 2 150 267
Nylon string	Nylon string	81 43 2 344 272
Multi-base filler	BMW multibase filler	
Cleaning agent R1	Cleaning agent R1	83 19 2 211 217
Cleaning agent R2	Cleaning agent R2	83 19 0 417 324
Adhesive tape	Plastic adhesive tape, yellow	83 19 9 410 979
Adhesive cleaner 208	Sika remover 208	83 19 9 407 780
Aktivator 205	Sika Activator 205 (e.g. for rubber frame on windscreen)	83 19 0 030 155

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Bonding base VP 206	Sika bonding base VP 206 (e.g. for inspection glass for vehicle identification number)	83 19 9 407 777

Storage of all consumables

Dry at 15 ° - 25 °C.

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51 31 ... Notes on window bonding repair kit

	Part number	Part number (US)	Part number (China)
Small repair kit	83 19 2 289 285	83 19 2 289 180	83 19 2 180 001
- Window glass adhesive 300 ml	83 19 2 289 286	83 19 2 289 181	83 19 2 180 002
- Glass activator	83 19 0 444 142		
- C nozzle	83 19 2 155 589		
- Plastic nozzle and paper tissue			
Large repair kit (Contains an additional window glass adhesive 300 ml)	83 19 2 360 680	Not available	Not available

Important!

Before working with the consumables, note the following information.

- Country-specific safety and industrial safety regulations
- Material safety data sheet of manufacturer
- Processing instructions on the packaging

1 Storage and processing of all consumables

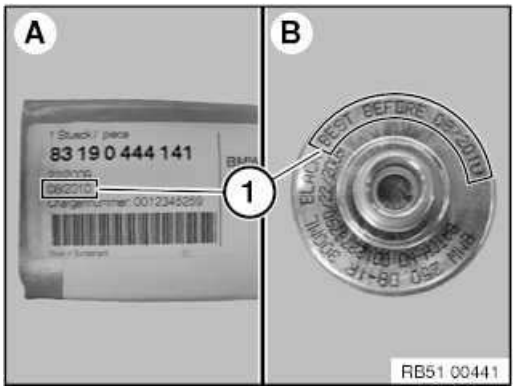
Dry at 15 ° - 25 °C.

2 Expiry date of adhesive:

Repair kit and glue cartridges are marked with a date (expiry).

Date (1) refers to the calendar week and year (KW/JJJJ).

The adhesive cannot be used after this date (1).



3 Hardening of adhesive:

The adhesive hardens by reacting with air humidity at room temperature.

Important!

Once the adhesive bead has been applied, the window glass must be installed within 7 minutes (depending on air humidity, temperature).

After 7 minutes the adhesive bead forms a skin which can no longer guarantee a perfect bond.

At ambient temperatures above 23 °C and 50 % relative air humidity (hot countries), the adhesive open time is shortened to approx. 5 minutes (skin formation time).

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A relative air humidity of < 30% significantly slows hardening.

The adhesive hardening process is interrupted completely at ambient temperatures below 5 °C. In this event, there will be no increase in the strength of the bonded connection.

3.1 Minimum hardening time:

Minimum hardening time is reached beginning at 22 °C and 38 % relative air humidity.

- 1 hour, vehicles without front passenger airbag (after which vehicle can be moved)
- 2 hours, vehicles with front passenger airbag in countries without mandatory seat belt usage

Note:

> **In vehicles with front passenger airbag in countries without mandatory seat belt usage:**
>
> The vehicle can be transferred to the customer after a 1-hour hardening time with the following warning:
>
> **Once the windscreen glass has been bonded, all occupants must travel with their seat belts attached for 1 hour.**

Important!

> If the minimum hardening time is not adhered to, an accident can cause the passenger together with the windscreen to fall out of the vehicle after the front passenger airbag deploys.

During the minimum hardening time of 1 hour, the vehicle must not be subjected to load on one side such as e.g.:

- one wheel on kerb
- vehicle hoist
- etc.

Manoeuvring inside garage/workshop:

- only permitted on level ground
- do not under any circumstances drive over approach ramps, e.g. into multi-storey car parks

Do not remove adhesive tapes until after hardening time.

If the minimum hardening time of 1 hour is undercut, leaks and wind noises may occur at the window glass.

4 Disposal of adhesive:

Hardened adhesive is disposed of as normal waste.

Non-hardened adhesive, glue cartridge and mixtures of adhesive and solvents and the like must be disposed of as hazardous waste.

The adhesive is disposed of in paper sacks so that it can react with moisture.

5 Glass activator:

Warning!

> Wear cut resistant gloves when breaking the glass ampule.

Prepare glass activator for processing by shaking and snapping (breaking glass ampoule).

Apply glass activator by pressing gently. There is no need for final wiping. Air drying time approx. 2 minutes.

6 Expiry date of glass activator:

Repair kit and glass activator are marked with a date (best before date).

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- The glass activator may only be used up to this date (if not already opened previously).
- After opening, keep only for one week even if the expiry date has not yet been reached.

7 Disposal of glass activator:

Glass activator must not be disposed of as part of household waste.

Glass activator must be disposed of as hazardous waste.

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61 35 ... Overview, rain sensor (additional work when replacing the windscreen / sensor replacement)

- **1-Series:** E8x
- **3-Series:** E9x
- **5-Series:** E6x
- **6-Series:** E6x
- **X1:** E84
- **Z4:** E89

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor/ Programming/encoding necessary	When replacing the sensor/ Initialisation required	Connecting the diagnosis system required
Condensation sensor square 30 x 20 mm	Yes	No	No	No

- **5-Series:** E6x
- **6-Series:** E6x
- **7-Series:** E6x

Sensor type/ Sensor shape	With windscreen replacement replacement **sensor** required	When replacing **the sensor** Programming/encoding necessary	When replacing **substitute visuals** Programming/encoding necessary	When replacing **the sensor/ substitute visuals** Initialisation required	Connecting the diagnosis system required
all types square 60 x 40 mm	No	Yes	-	Yes	Yes
RLS approximately ø 50 mm	No (new **substitute visuals** required, refer to Electronic Parts Catalogue)	-	No	Yes	Yes

- **X5:** E70
- **X6**: E7x

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Sensor type/ Sensor shape	With windscreen replacement replacement **sensor** required	When replacing **the sensor** Programming/encoding necessary	When replacing **substitute visuals** Programming/encoding necessary	When replacing **the sensor/** **substitute visuals** Initialisation required	Connecting the diagnosis system required
RLPSS (Rain, light and precipitation solar sensor) (Designation is located on the back of the sensor) approximately ø 50 mm	Yes	Yes	-	Yes	Yes
RLS (vehicle **with no HUD**) (Designation is located on the back of the sensor) approximately ø 50 mm	No (new **substitute visuals** required, refer to Electronic Parts Catalogue)	-	No	Yes	Yes
RLSS (vehicle **with HUD**) (Designation is located on the back of the sensor) approximately ø 50 mm	Yes	Yes	-	Yes	Yes

- **1-Series:** E8x
- **3-Series:** E9x
- **X1:** E84
- **X3:** E83
- **Z4:** E89

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types square 60 x 40 mm	No	Yes	Yes	Yes

- **5-Series:** F1x
- **5 Series GT:** F07

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- **6-Series:** F06, F1x
- **7-Series:** F0x
- **X3:** F25
- **X4:** F26

Sensor type/ Sensor shape	With windscreen replacement replacement **sensor** required	When replacing **the sensor** Programming/encoding necessary	When replacing **substitute visuals** Programming/encoding necessary	When replacing **the sensor/ substitute visuals** Initialisation required	Connecting the diagnosis system required
all types approximately ø 35 mm	No	No	-	Yes	Yes
all types approximately ø 50 mm	Yes	Yes	-	Yes	Yes
Only for F25 : RLS approximately ø 50 mm	No (new **substitute visuals** required, refer to Electronic Parts Catalogue)	-	No	Yes	Yes

- **X5:** F15, F85
- **X6:** F16, F86

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types approximately ø 35 mm	No	No	No	No

- **1-Series:** F2x
- **2-Series:** F2x
- **3-Series:** F3x, F8x
- **3 Series GT:** F34
- **4-Series:** F3x, F8x

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required

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all **up to 03/2014** except SBS (01) (Designation is located on the back of the sensor) approximately ø 35 mm	No	No	Yes	Yes
SBS (01) (Designation is located on the back of the sensor) approximately ø 35 mm	No	No	No	No
All **as from 03/2014** approximately ø 35 mm	No	No	No	No

- **2-Series:** F4x

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types	No	No	No	No

BMW i:

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types approximately ø 35 mm	No	No	No	No

BMW from **G series**

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types	No	No	No	No

MINI (all):

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types square 60 x 40 mm	No	Yes	Yes	Yes

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all types approximately ø 35 mm	No	No	No	No

Rolls-Royce:

- RR1
- RR2
- RR3
- RR4
- RR5
- RR6

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types square 60 x 40 mm	No	Yes	Yes	Yes
all types approximately ø 35 mm	No	No	Yes	Yes
all types approximately ø 50 mm	Yes	Yes	Yes	Yes

Rolls-Royce:

- RR11
- RR12

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types approximately ø 35 mm	No	No	No	No

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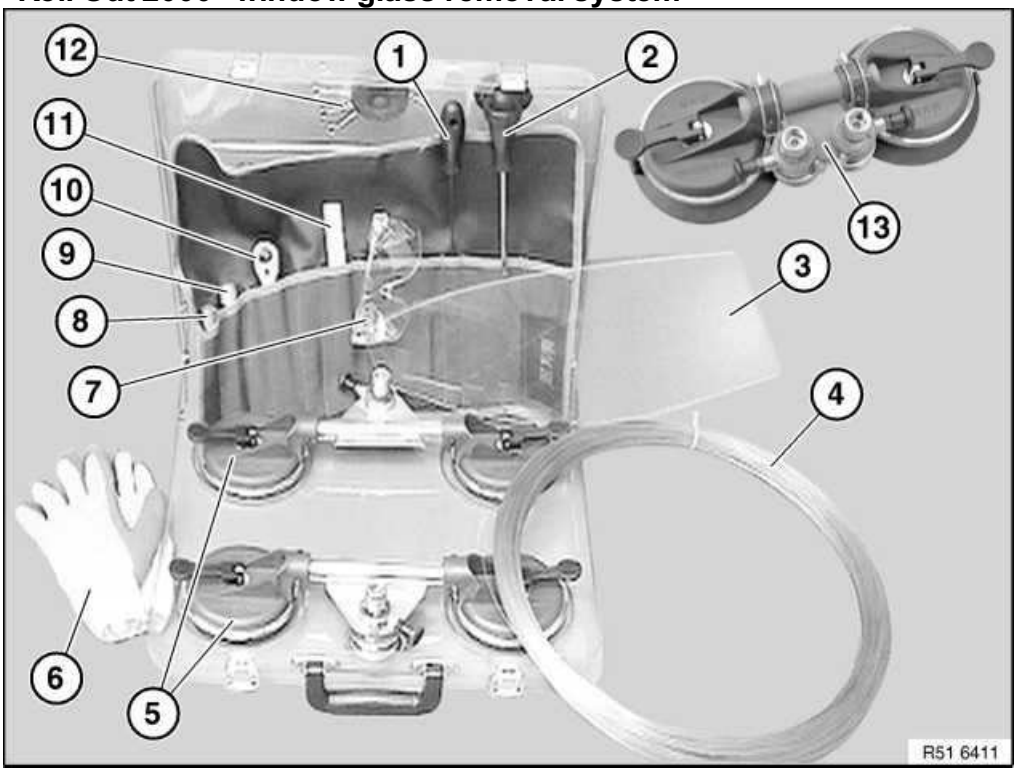
51 31 ... Remove windscreen with "Roll Out 2000"

Special tools required:

- 2 150 267

"Roll Out 2000" has been replaced by the "Spider" removal system."Roll Out 2000" may still be used. The "Spider" removal system is recommended for removing window glass.

"Roll Out 2000" window glass removal system



1	Wire starter	8	Extension (short)
2	Parabolic tool	9	Extension (long)
3	Plastic washer	10	Reversible ratchet
4	Wire cutting roller	11	Plastic wedge
5	Suction cup lifters	12	Guide needles
6	Protective gloves	13	Suction cup lifter with double spool
7	Safety goggles		

Note:
Both paint and ergonomic and health-endangering damage is minimised with the "Roll Out 2000" system.

Sourcing reference:

See Aftersales Assistance Portal (ASAP) - Service/Technical - Workshop Equipment (Start BMW) - Shop Workshop Equipment or at www.bmwgroup.com

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Warning!

Follow safety instructions for working on vehicles with airbag systems (risk of injury).

Important!

Take care when handling sharp-edged tools and cutting wire (risk of damage to head airbag and window glass).

Important!

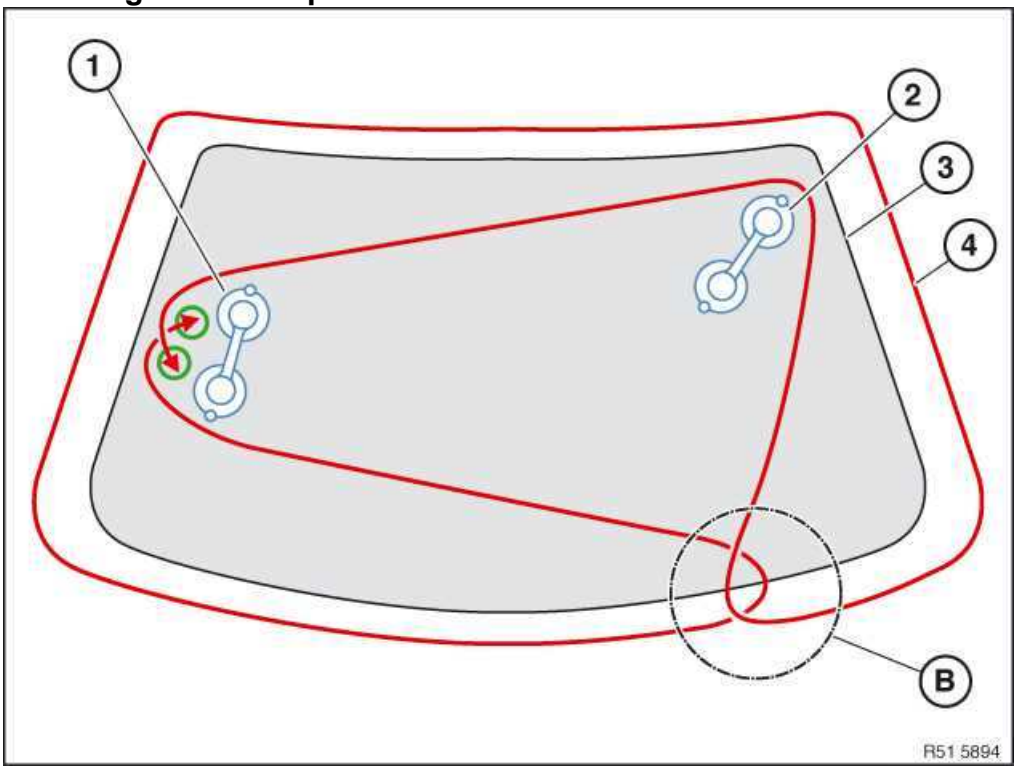
Always keep both suction cups dry and clean to ensure their optimum adhesion on the windscreen.

Suction cup may not be applied at the damaged point (crack in window glass).

Lubricate spool if lock rattling becomes too loud.

Always wear safety goggles and protective gloves for your own safety.

Mounting suction cup lifters on windscreen or rear window:



- Secure position of lifting jacks as shown (view from outside):
  1. Suction cup lifter with double spool
  2. Suction cup lifter with single spool (as deflecting point)
  3. Window
  4. Cutting wire

Note:

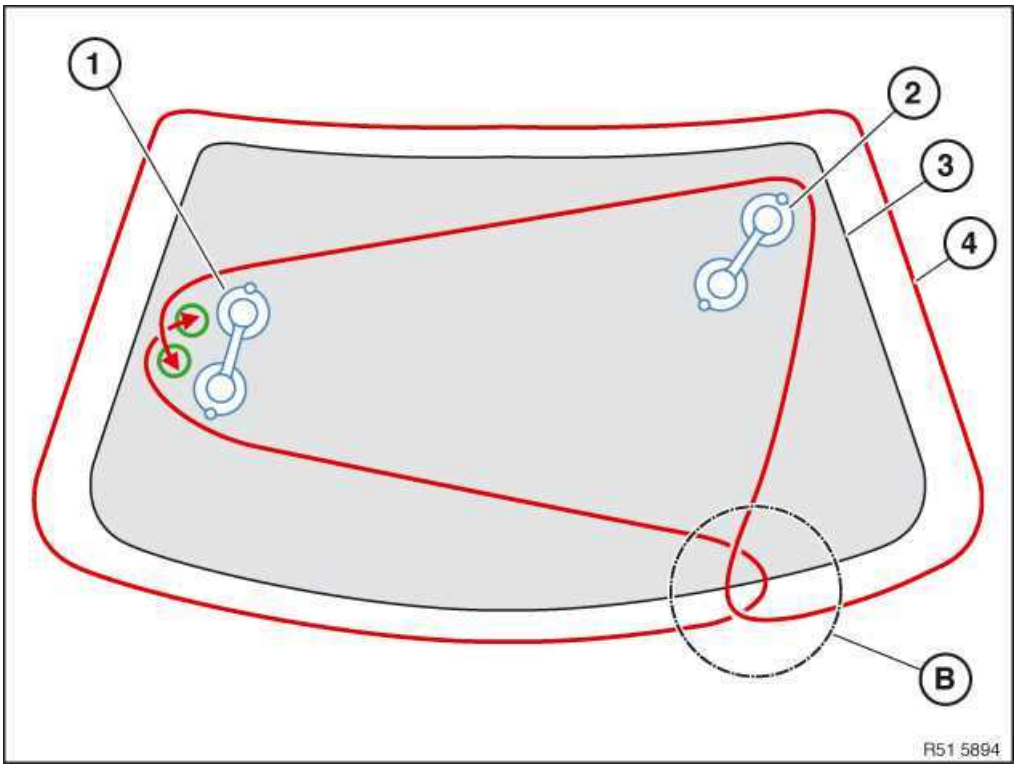
Optimum cutting is guaranteed when the cutting wire is at an acute angle to the adhesive bead. There is a risk of the cutting wire breaking if the angle is too obtuse.

The suction cup lifter (2) is used as the deflection point to achieve the corresponding angle.

Depending on the window glass version and the effort applied during cutting, it may be necessary to change the deflection point during cutting.

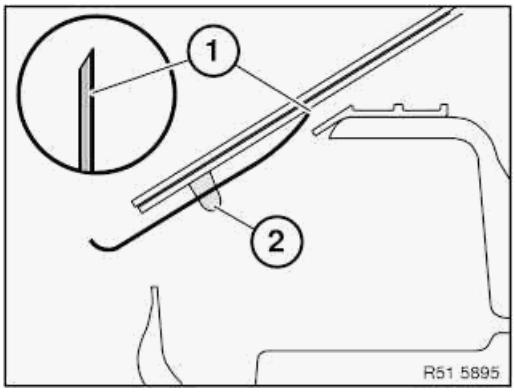
The suction cups without a spool can even be used as the deflection point.

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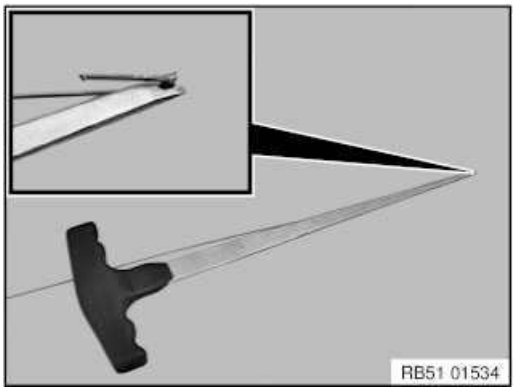
Preparatory work:

- Cut off required cutting wire length:
  Length approximately = 6 x window glass diagonal
- The cutting wire loops must lie on top of each other in area (B).
  They must not get caught up in each other. (Otherwise no possibility of cutting the adhesive bead/wire will break.)
  Overlapping of cutting wire loops approx. 10 cm.
  Distance from right window edge approx. 30 cm.



Pulling cutting wire into vehicle:

- Grip wire with pliers
  (If accessibility is bad, stick wire with wire starter 2 150 267 through adhesive bead.)
- Wire end (1) must be bent towards window glass.
- Heat wire end (1) and use it to pierce adhesive bead (2).
- Pull the wire approximately 1.5 m into the passenger compartment

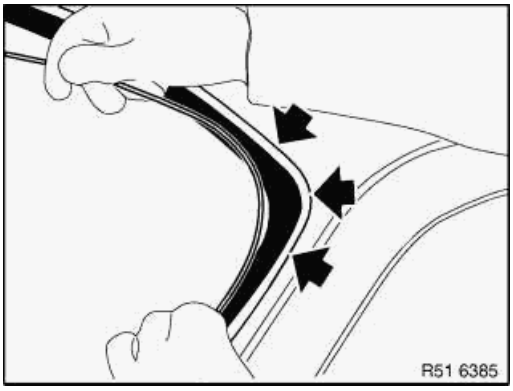


Using wire starter:

Bend wire end approx. 10 mm and insert in notched tip.

Pierce wire starter with uniform pressure through adhesive bead, wire end (bent part) must be positioned on window glass.

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Laying cutting wire around window glass:

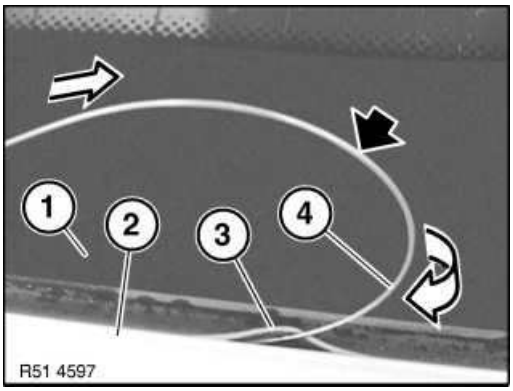
- Starting from pull-in point, lay wire eyelet created on the outside around the window glass
- Pull excess wire into passenger compartment

Important!

Make sure the cutting wire is located at all four corner points below the window glass.

Check that the cutting wire is not caught on clamps or body.

Secure window glass on outside with adhesive tape against sliding.



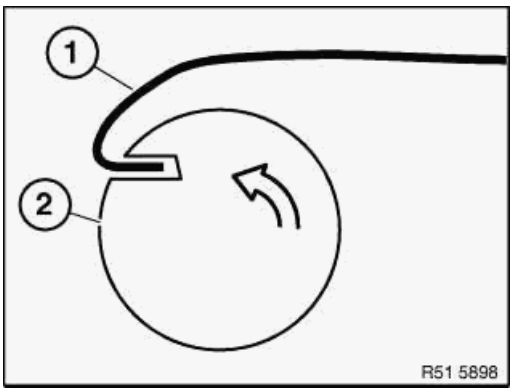
Note:
Window glass (1) with installed seals (3) or moulded-on surrounds:

- Moisten cutting wire (4) and seals (3) on window glass (1) with water
- Insert cutting wire (4) in bend (without kinking) between window glass(1) and body aperture (2)



Protect the passenger compartment:

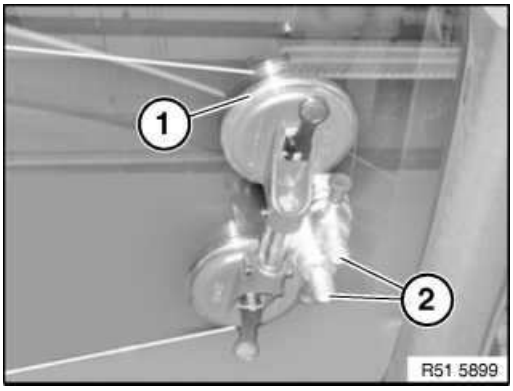
- To avoid damage and possible dirt contamination, protect A-pillars, roof and dashboard trim panel (3) by means of plastic washer (1)
- Always carry plastic washer (1) between respective wire (2) being tightened and trim panels



Attaching wire in hoisting winch with double coil:

- Bend over cutting wire end (1) approximately 10 mm and insert into slot of spool (2)
- Repeat process with other end of wire (1) and second spool (2)
- Wind cutting wire (1) onto spools by hand until cutting wire (1) is under slight tension

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Starting the dismantling: *Note:*
Spools can only be rotated in one direction.

- Make sure the wire is always situated in the guide channel of the suction cup lifter (1)
- Fit reversible ratchet onto top spool shaft (2) and tighten wire
- Start by cutting lower adhesive bead
- At the end of the cutting process, the two wire loops join up at the lifting winch (1)
- Remove "Roll Out 2000"
- Remove window glass

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51 31 030 Removing and installing or replacing left or right gutter strip along windscreen

NOTICE

Description is for right component only. The procedure on the left side is identical.

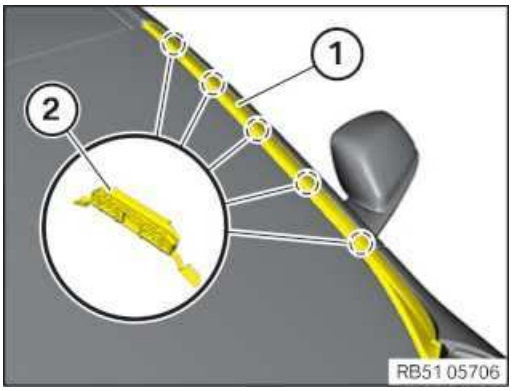
1 – Remove the gutter strip on the windscreen

RISK OF DAMAGE

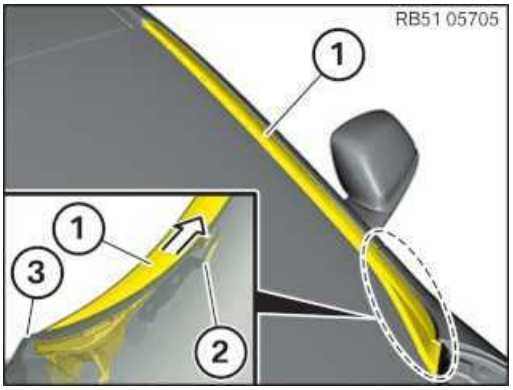
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.



- Pull out the gutter strip (1) from the guide (2) in direction of arrow and carefully feed out at the side panel (3).

2 – Install the gutter strip on the windscreen

RISK OF DAMAGE

Scratches.

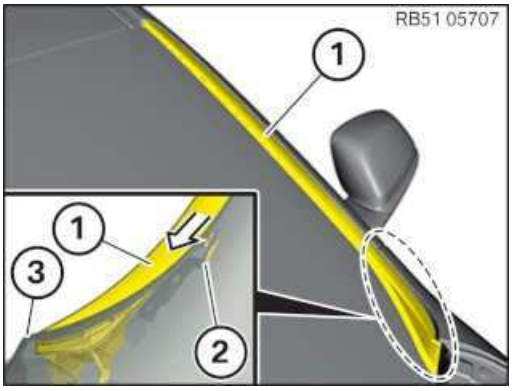
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

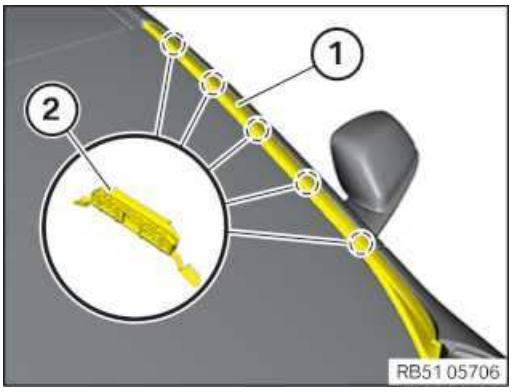
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TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.



- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

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51 31 200 Removing and installing rear window

TECHNICAL INFORMATION

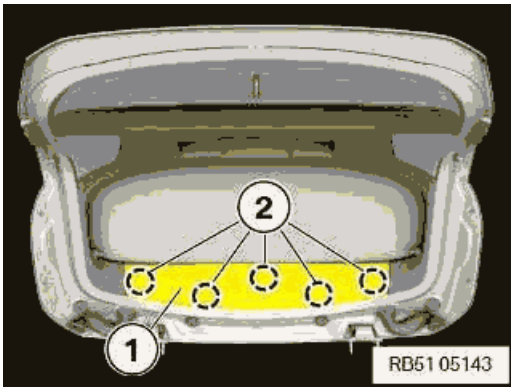
The following procedure forms the basis for these repair instructions and must be observed without fail.
For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

TECHNICAL INFORMATION

Perform window removal using the "spider".
For additional information see: 51 31 ... Window glass removal using "spider"

PRELIMINARY WORK

1 – Remove the trim for the top rear window frame



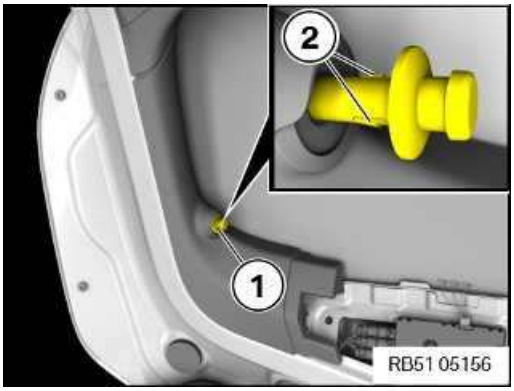
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Remove both trims for the rear window frame on the side

NOTICE

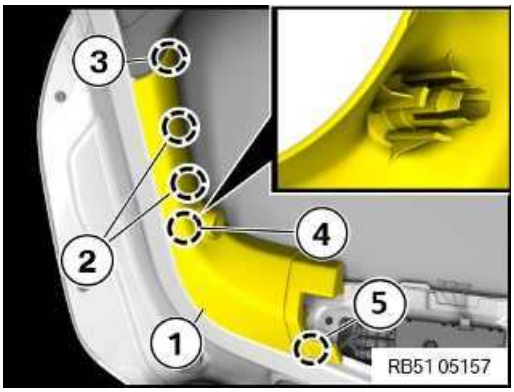
Description is for left component only. Procedure on the right side is identical.

▶ **Remove the trim for the rear window frame on the side**



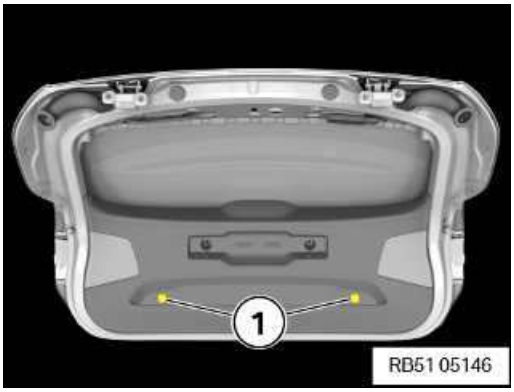
- Detach the mounting button (1) on the latch mechanisms (2) and remove it.

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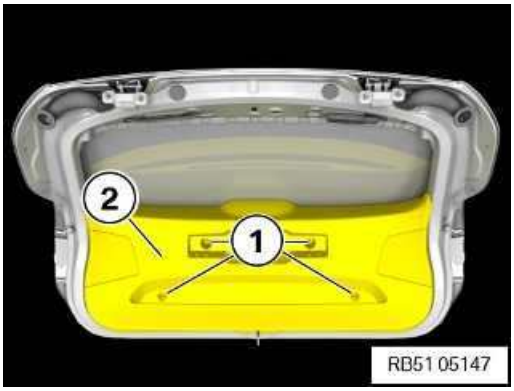


- Unclip the trim for the rear window frame on the side (1) with the clips (2) from the latch mechanisms (3), (4) and (5).

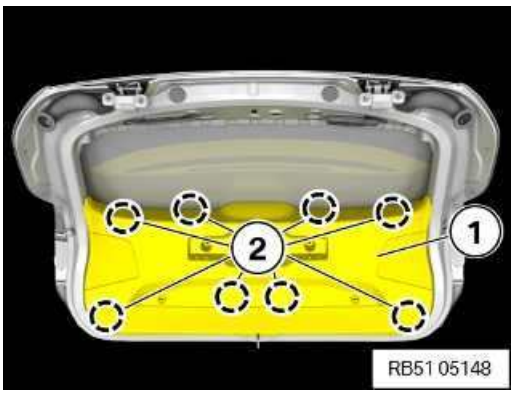
3 – Remove tailgate trim panel



- Lever out the covers of the screw points (1) with a suitable tool.

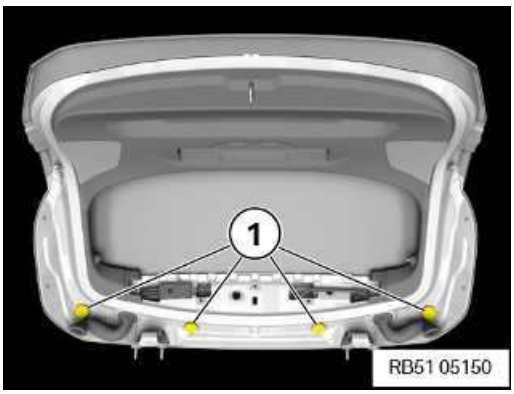


- If applicable, remove the warning triangle from the tailgate trim panel (2).
- Unscrew the bolts (1) at the tailgate trim panel (2).



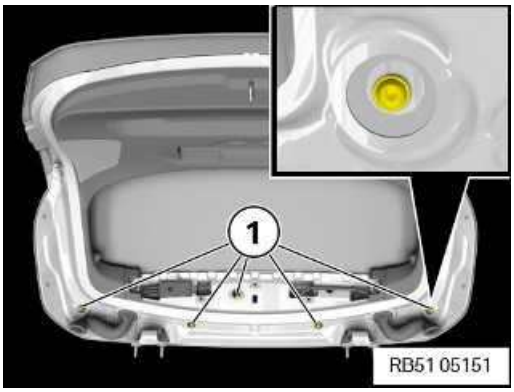
- Unclip the tailgate trim panel (1) at the latch mechanisms (2) and remove.

4 – Remove rear spoiler

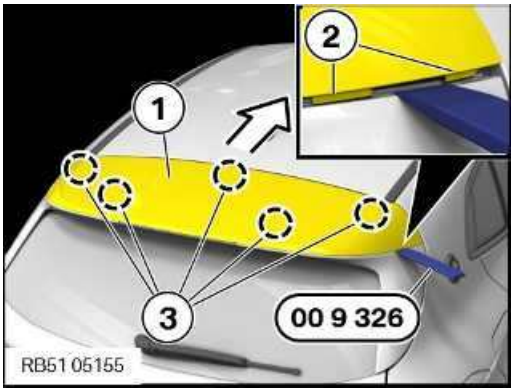


- Unclip the covers (1) with a suitable tool and remove.

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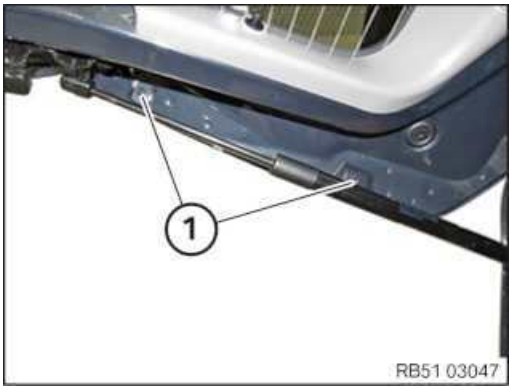


- Loosen screws (1).

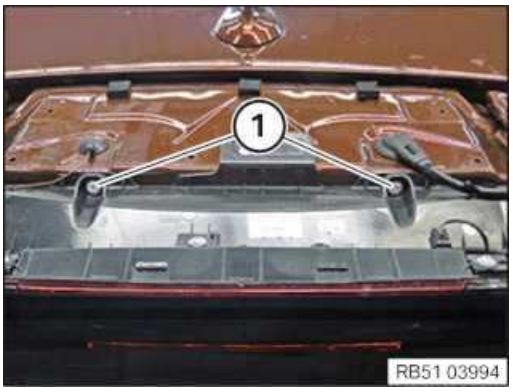


- Release rear spoilers (1) on both outer sides with the special tool **0 496 570 (00 9 326)** out of the latch mechanisms (2).
- Unclip rear spoiler (1) from the clips (3).
- Slightly lift rear spoiler (1) in the front area and remove in direction of arrow.

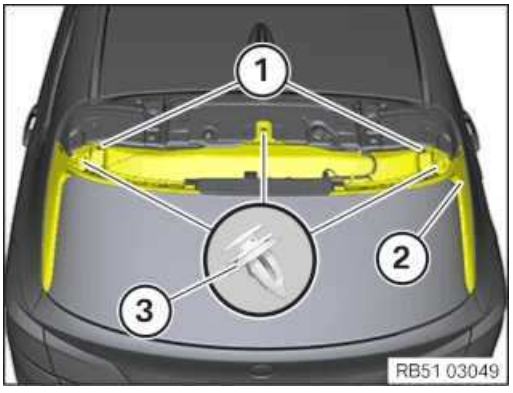
5 – Removing the lower section of the rear spoiler



- Open tailgate.
- Loosen screws (1) on left and right.



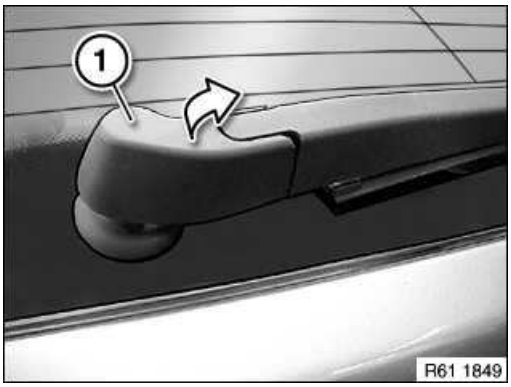
- Loosen screws (1).



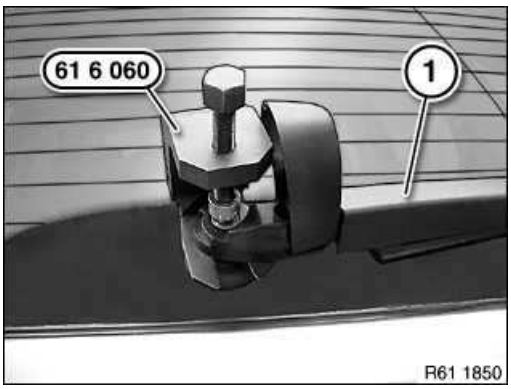
- Disconnect the plug connection of the additional brake light and guide out the cable.
- Disconnect the quick connector of the water pipe of the washer jet and guide out the water pipe.
- Loosen screws (1).
- Release the lower section of the rear spoiler (2) at the clips (3) and remove it.

6 – Removing windscreen wiper arm of the rear wiper

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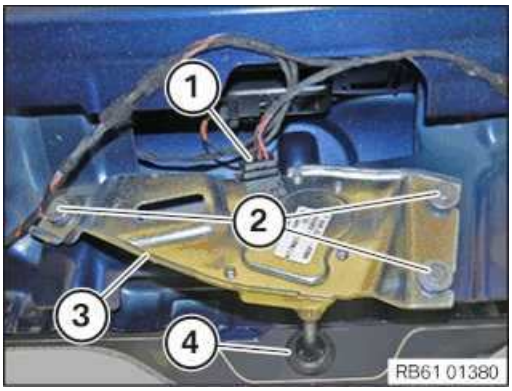


- Fold cover cap (1) in direction of arrow.
- Unscrew the nut below it.



- Pull off the wiper arm (1) using special tool .

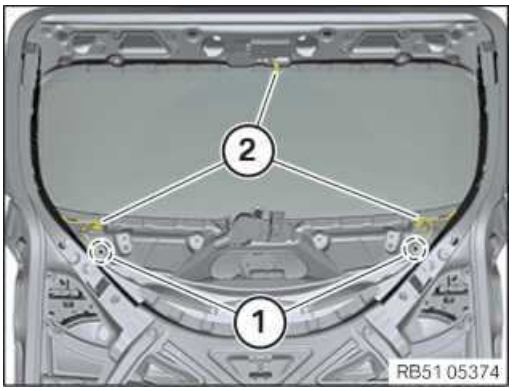
7 – Remove rear window wiper motor



- Unlock and disconnect connector (1).
- Unscrew all bolts (2).
- Remove rear wiper motor (3).

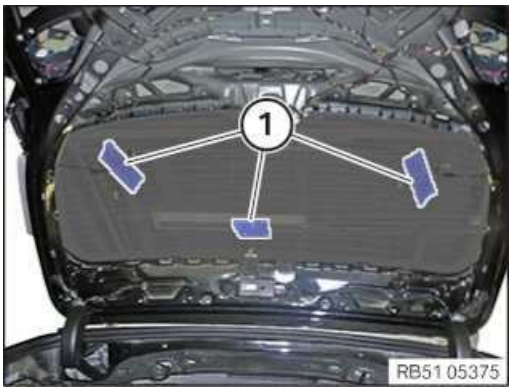
MAIN WORK

8 – Remove rear window

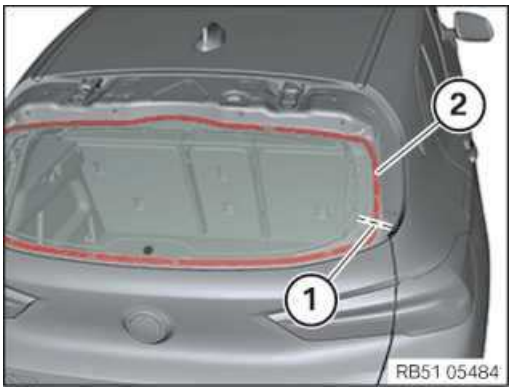


- Loosen screws (1).
- Disconnect the plug connections (2) and unclip from the cable clips.

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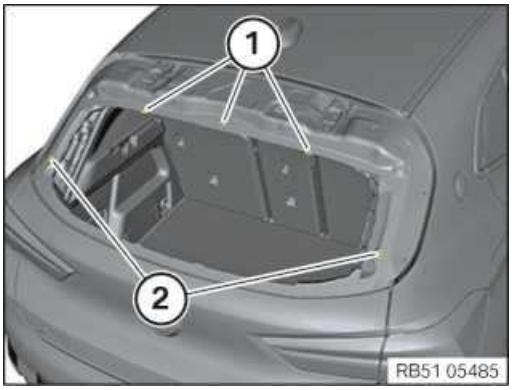


- Secure cable (1) to rear window with adhesive tape.



- Tape off body in area of piercing point with fabric adhesive tape.
- Push the thread (1) through the adhesive bead (2) along the line from the inside.
- Cut out the rear window with spider.

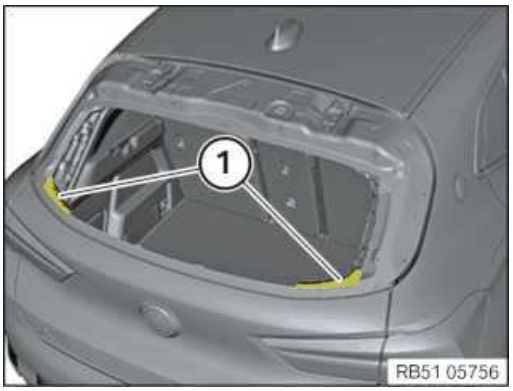
9 – Replace the spacer



- Remove the spacer (1) completely.
- Use spacer 5x5x20 mm.

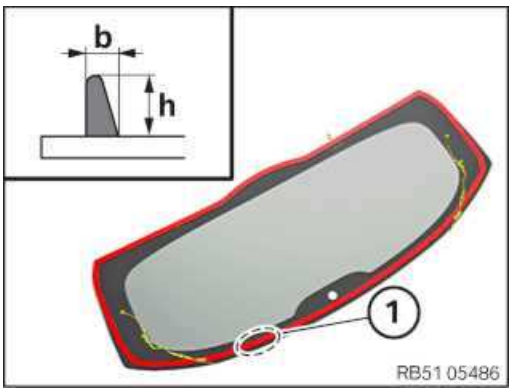
  Parts: Spacer 5x5x20 mm
- Bond the new spacer (1) centred on the embossed mark.
- Replace the damaged hook and loop tape (Dual Lock tape) (2) on the rear window and the body.

  Parts: Velcro fastener (Dual Lock tape)
- Bond the new hook and loop tape (Dual Lock tape) (2) centred on the embossed mark.



- Check the foam seals (1) for damage and replace if necessary.

10 – Install the rear window

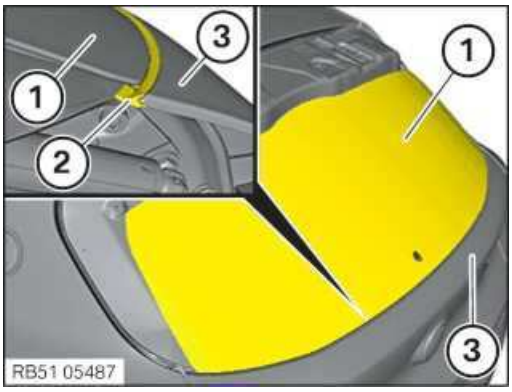


- Provide two glue cartridges.
- Prepare a glue cartridge with the standard jet nozzle C.
- Apply bead joint in area (1).
- Apply adhesive bead within the mark on the rear window.

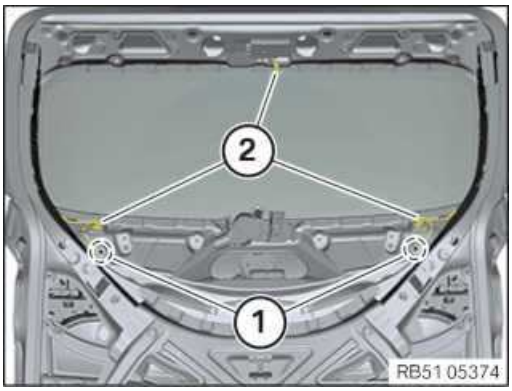
Adhesive bead

b = Width	7 mm ... 9 mm
h = Height	11 mm ... 13 mm

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- Carefully perform the following actions on rear window (1) with suction lifters
  - Fit at the bottom on the seal
  - Align sides evenly
  - press on evenly all the way around and engage at the hook and loop tape (Dual Lock tape)
- Make sure that the seal (2) rests evenly against the tailgate (3).
- Secure rear window (1) with adhesive tap on the roof.



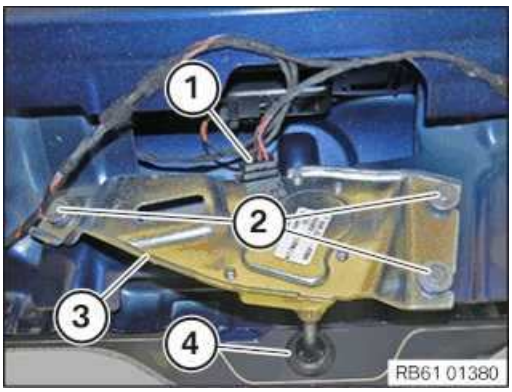
- Connect the connector (2) and attach the cable clips.
- Tighten the screws (1).

Ground strap to tailgate

Oval-head screw	Tightening torque		2,6 Nm

POSTPROCESSES

11 – Install rear window wiper motor



- Check the rubber grommet (4) for damage.
- Join the rear wiper motor (3) in the grommet (4).
- Tighten down screws (2).

Wiper motor to tailgate

Screw		Tightening torque	7,6 Nm

- Connect connector (1).

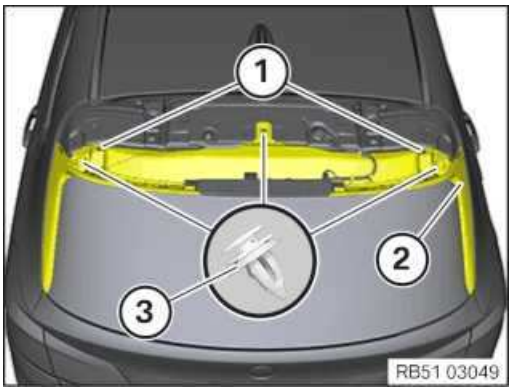
12 – Installing wiper arm of the rear wiper



- Position the wiper arm and tighten with the nut.
- Position the protective cap (1).

13 – Installing the lower section of the rear spoiler

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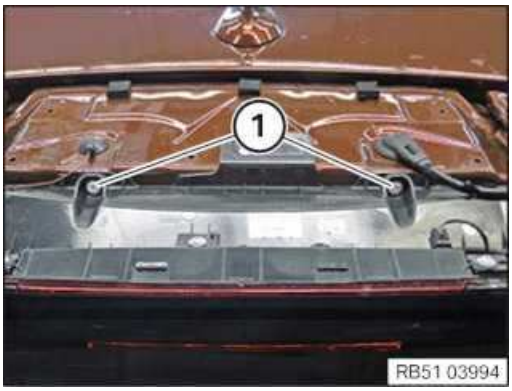


- Position the lower section of the rear spoiler (2) at the clips (3) and clip in.
- Tighten the screws (1).

Rear spoiler lower section to tailgate

Fillister head bolt		8 Nm

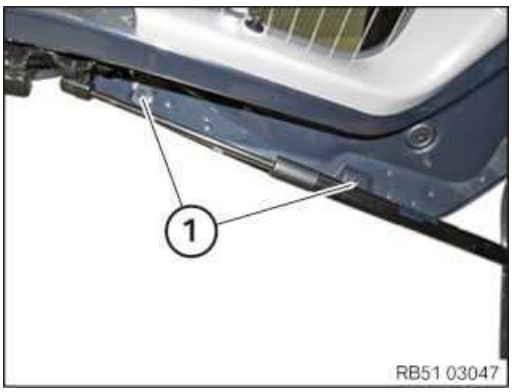
- Connect the quick connector of the water pipe to the washer jet.
- Connect the connector to the additional brake light.



- Tighten the screws (1).

Rear spoiler lower section to tailgate

Fillister head bolt		8 Nm

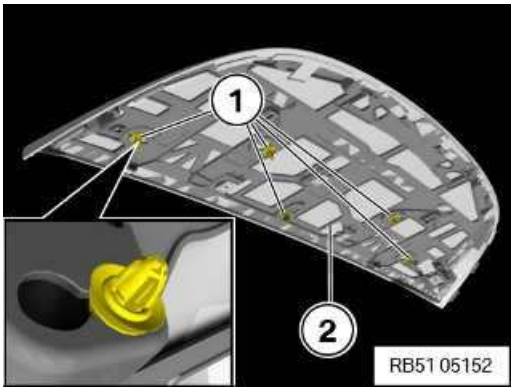


- Tighten screws (1) on left and right.

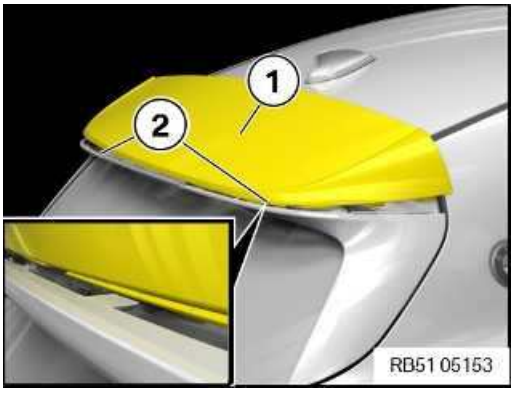
Rear spoiler lower section to tailgate, side

Oval-head screw		2,6 Nm

14 – Attach rear spoiler

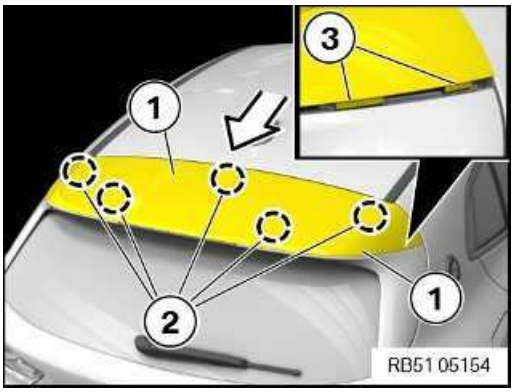


- Check clips (1) on the rear spoiler (2) for damage, renew if required.

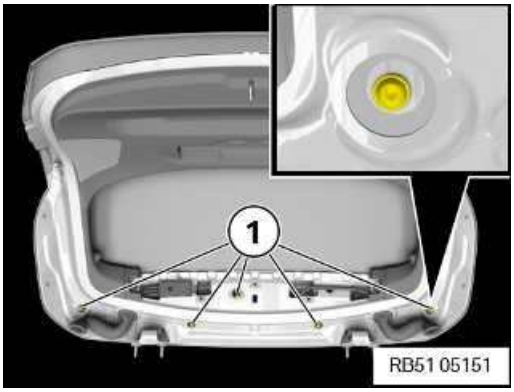


- Position the rear spoiler (1) on the guides (2) .

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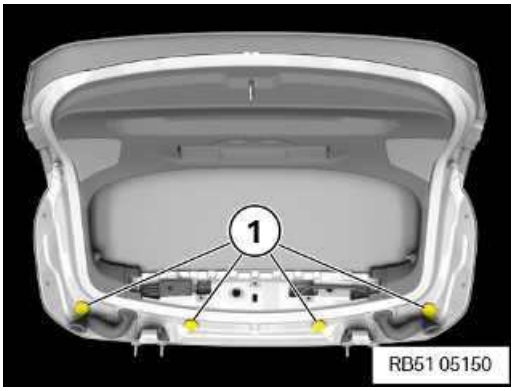
- Slide the rear spoiler (1) onto the lower section of the rear spoiler in the direction of the arrow.
- Clip in the rear spoiler (1) with the clips (2) and clip on the latch mechanisms (3) on both sides.



- Tighten the screws (1).

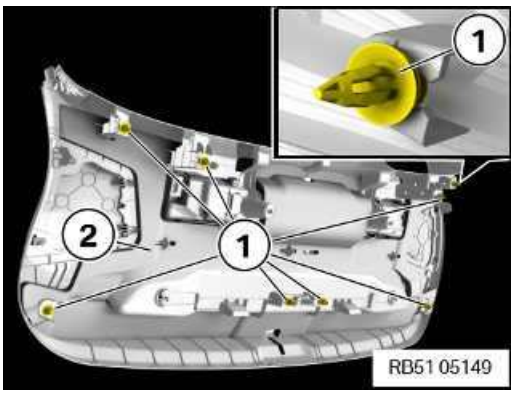
Rear spoiler to tailgate

Oval-head screw		Tightening torque	3,1 Nm

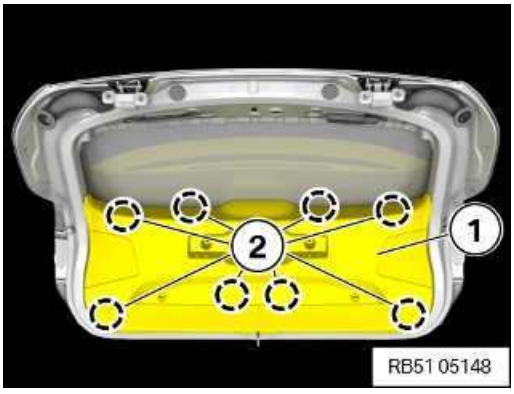


- Insert the covers (1).

15 – Installing the tailgate trim panel

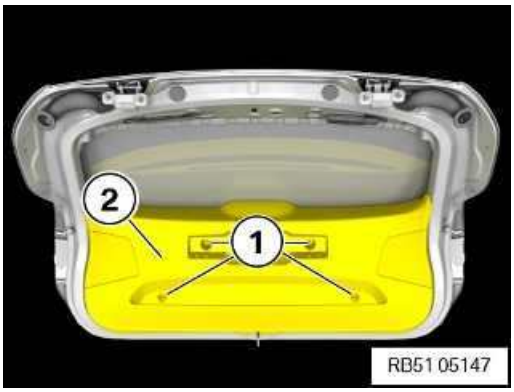


- Check the clips (1) on the tailgate trim panel (2) for damage and replace where required.



- Clip in the tailgate trim panel (1) with the clips (2).

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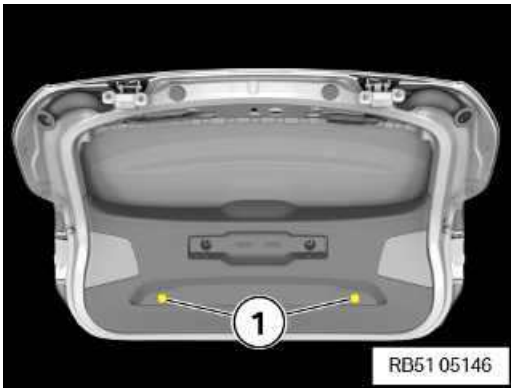


- Tighten the bolts (1) at the tailgate trim panel (2).

Tailgate trim panel

Screw		Tightening torque	1,8 Nm

- If necessary, insert and fasten the warning triangle in the tailgate trim panel (2).



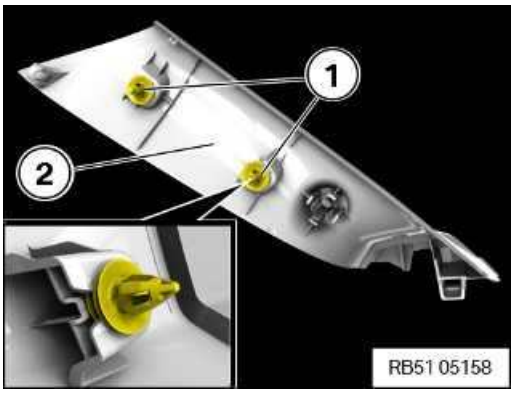
- Insert the covers of the screw points (1).

16 – Mount both trim pieces for the rear window frame on the side

NOTICE

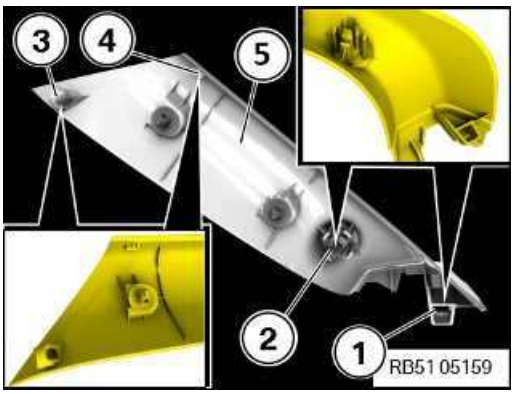
Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the rear window frame on the side**



- Check the clips (1) on the trim for the side rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1), (2), (3) and (4) at the trim for the side rear window frame (5) for damage.

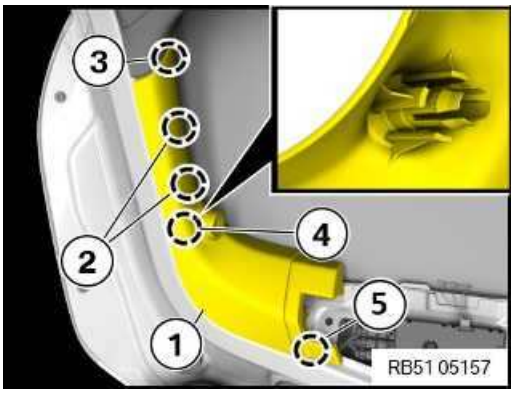
Result

» The latch mechanisms (1), (2), (3) or (4) are damaged.

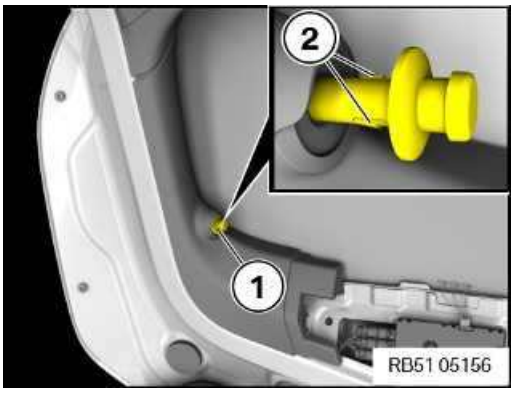
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Measure

- Renew the trim for the side rear window frame (5).

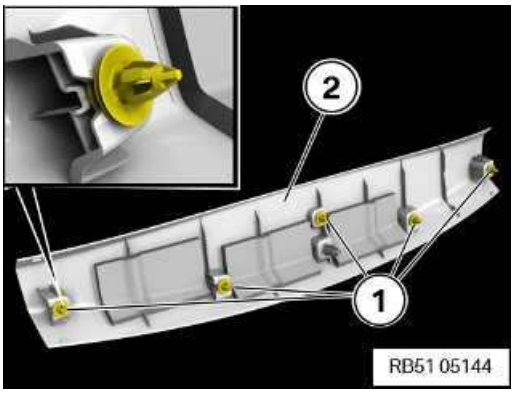


- Clip in the trim for the side rear window frame (1) with the clips (2) and in the latch mechanisms (3), (4) and (5).



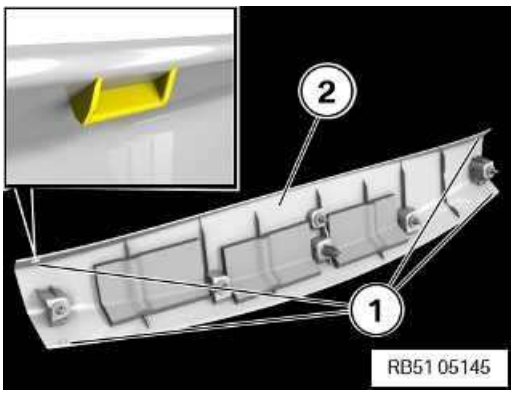
- Clip in the mounting button (1) with the latch mechanisms (2).

17 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

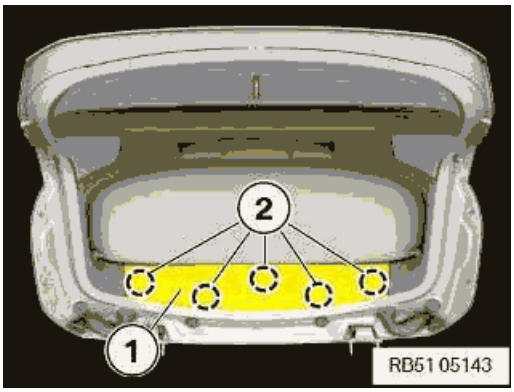
Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).

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- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

Ground strap to tailgate — Used in step 10

Oval-head screw	Tightening torque		2,6 Nm

Wiper motor to tailgate — Used in step 11

Screw		Tightening torque	7,6 Nm

Rear spoiler lower section to tailgate — Used in step 13

Fillister head bolt			8 Nm

Rear spoiler lower section to tailgate, side — Used in step 13

Oval-head screw			2,6 Nm

Rear spoiler to tailgate — Used in step 14

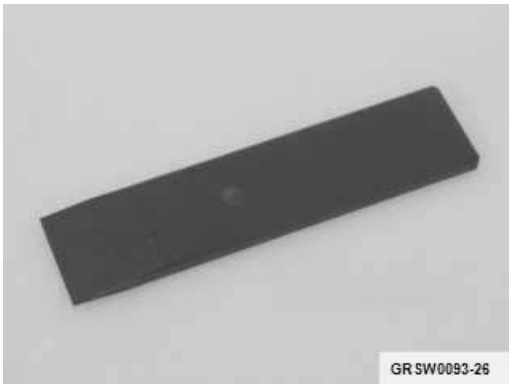
Oval-head screw		Tightening torque	3,1 Nm

Tailgate trim panel — Used in step 15

Screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 496 570 (00 9 326) Wedge



Common — Used in step 4

Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Overview Technical Data

Adhesive bead — Used in step 10

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b = Width	7 mm ... 9 mm
h = Height	11 mm ... 13 mm

Links

General repair instructions	Used in step
51 31 ... General procedure for the disassembly and installation of bonded window glass	

Repair instructions	Used in step
51 31 ... Removing windows with a "Spider"	
61 35 ... Notes on ESD protection (Electro Static Discharge)	

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51 31 000 Removing and installing windscreen

RISK OF DAMAGE

Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

TECHNICAL INFORMATION

The following procedure forms the basis for these repair instructions and must be observed without fail.
For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

TECHNICAL INFORMATION

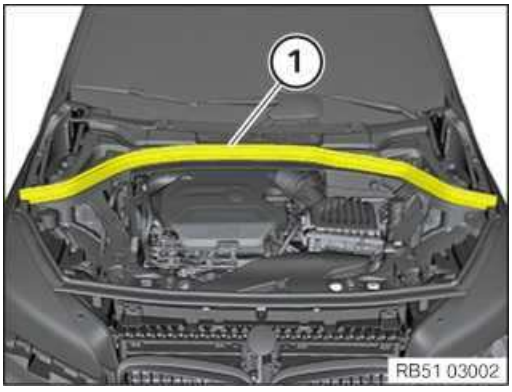
Perform window removal using the "spider".
For additional information see: 51 31 ... Window glass removal using "spider"

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

2 – Remove the gutter strip on the windscreen on the left and right

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NOTICE

Description is for left component only. Procedure on the right side is identical.

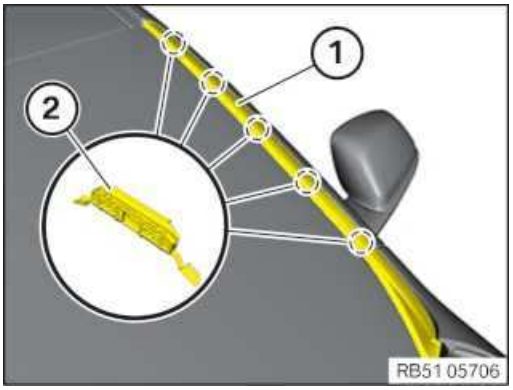
▸ **Remove the gutter strip on the windscreen**

RISK OF DAMAGE

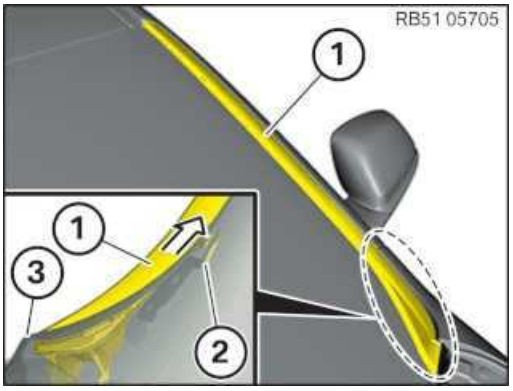
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

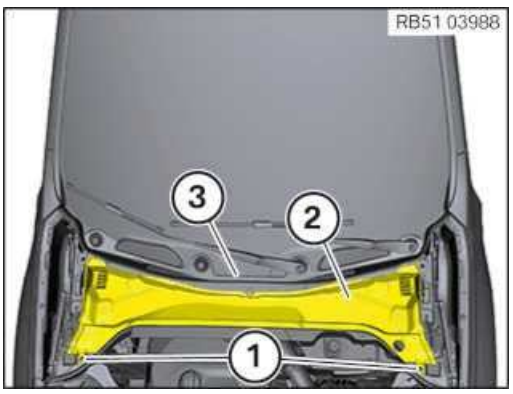


- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.



- Pull out the gutter strip (1) from the guide (2) in direction of arrow and carefully feed out at the side panel (3).

3 – Removing front cowl panel cover



- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

4 – Remove left and right wiper arm

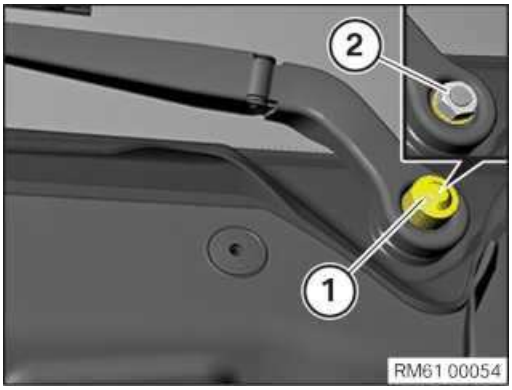
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RISK OF DAMAGE

Damage to wiper console

While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do not lift off wiper arm, else the wiper console may break on the predetermined breaking point for the pedestrian protection.



- Pull off the protective cap (1) and release the nut (2) below it.



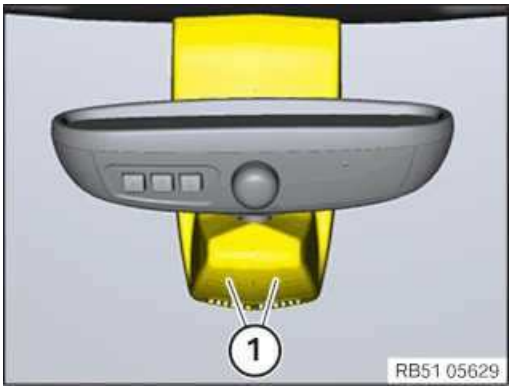
- Pull off windscreen wiper arm (1)with special tool .

5 – Remove the rear cowl panel



- Pull off the cowl panel cover (1) towards the top, starting from the side and feed out.

6 – Remove the cover on the inside mirror



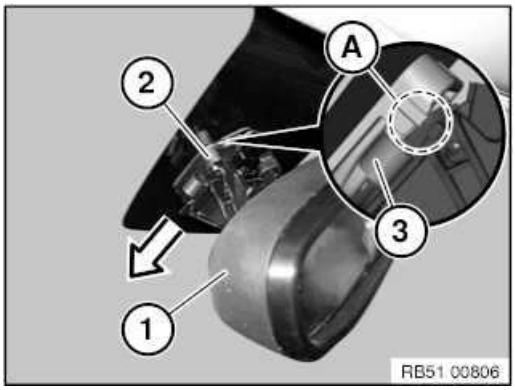
- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

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7 – Removing the interior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



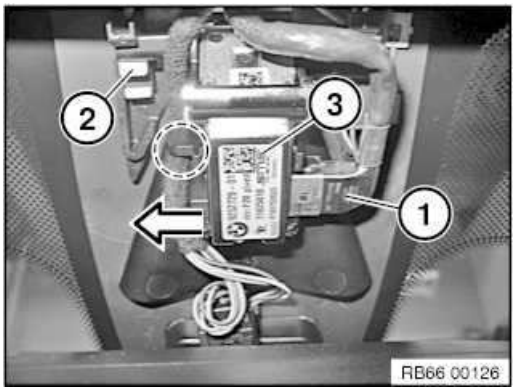
- Make sure that the interior mirror (1) does not bend or twist during removal.

  The interior mirror (1) is held by the clamp (3) and the latch mechanism in this area (A) on the base (2).
- If necessary unlock and disconnect the plug connection on the interior mirror (1).
- Pull off the interior mirror (1) from the mirror socket (2) with a downwards jerk in parallel to the windscreen.

8 – Remove the KAFAS camera

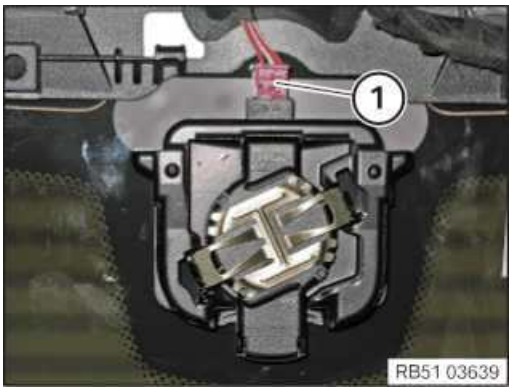
TECHNICAL INFORMATION

The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.



- Disconnect plug connection (1).
- Unclip cable in marked area.
- Unlock the retaining clamp (2) and remove camera (3) in direction of arrow.

9 – Disconnect the plug connection on the rain-light-solar-condensation sensor



- Disconnect plug connection (1).

10 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

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▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

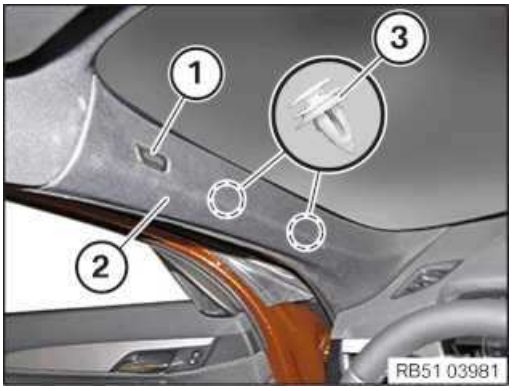
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

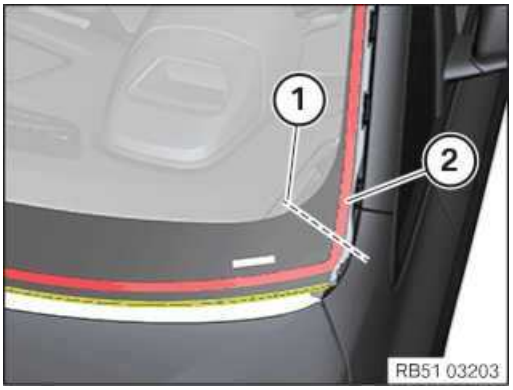
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

MAIN WORK

11 – Removing the windscreen



- Tape off body in area of piercing point with fabric adhesive tape.
- Push the thread (1) through the adhesive bead (2) along the line from the inside.
- Cut out the windscreen with spider.

12 – Renew the spacer

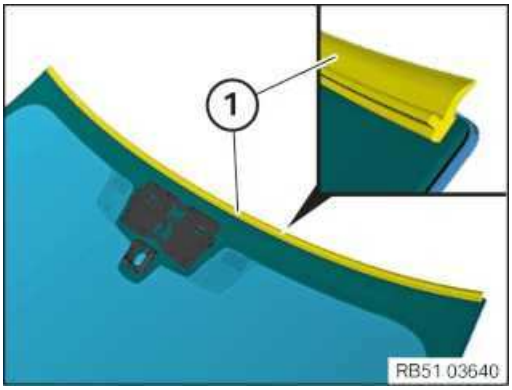
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- Remove the spacer (arrows) completely.
- Renew the spacer 5 x 5 x 20 mm (arrows).

  Parts: Spacer 5 x 5 x 20 mm
- Bond the spacer (arrows) centrally on the embossed marks.

13 – Checking cover on windscreen



Check

- Check cover (1) on the windscreen for damage.

Result

» The cover (1) on the windscreen is damaged.

Measure

- Renew the cover (1) on the windscreen.

  Parts: Cover

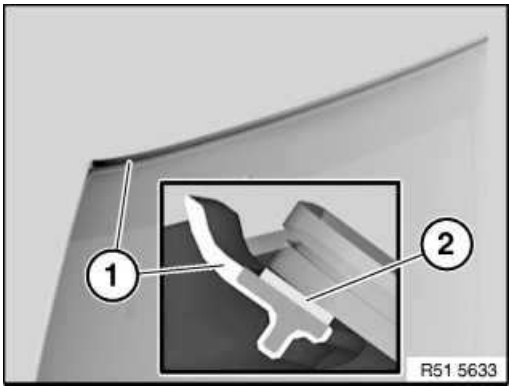
▶ **Renew the cover on the windscreen**

▷ **Removing the cover on the windscreen**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Pull off the rubber frame (1) from the windscreen using the adhesive tape (2).

◁

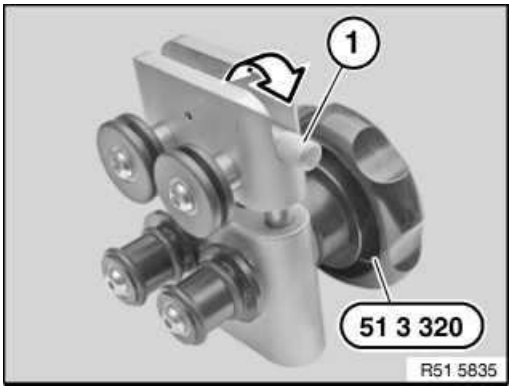
▷ **Installing the cover on the windscreen**

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TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



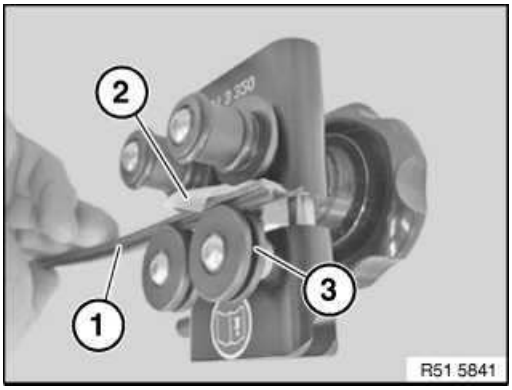
- Clean the adhesive area of the windscreen and pre-treat with Sika activator -205.

  The Sika activator -205 must not get onto adhesive area of adhesive bead.

Adhesive

Aktivator -205	250 ml, Bottle	83190030155

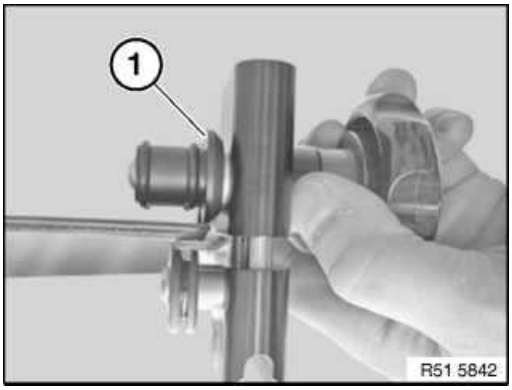
- Adhere to the air drying time of 1 min at least.
- Reposition the lever (1) and open the special tool .



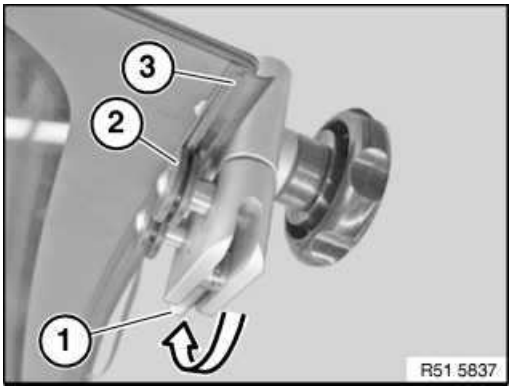
- Pull off protective film (2) in stages from adhesive tape.
- Renew cover (1).

  Parts: Cover

- Insert the cover (1) into the guide pulleys (3).

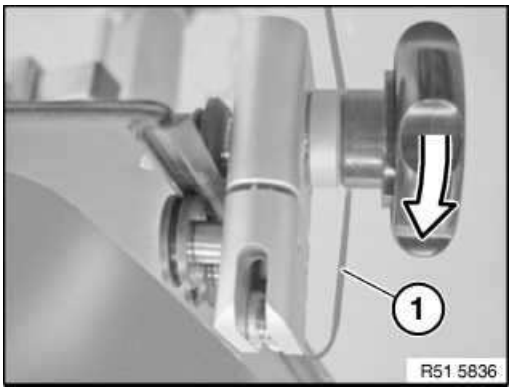


- Place the special tool with the pressure rollers (1) up against the window edge.
- Align the cover on the outer edge of the window glass.
- Fit the cover and visually check for perfect fit.



- Reposition the lever (1) in direction of arrow and close the special tool.
- Ensure the cover (3) fits correctly into the guide pulleys (2).

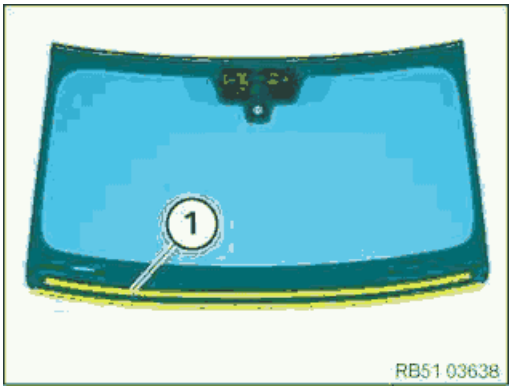
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- Continue to pull off protective film (1) in stages from adhesive tape.
- Run the special tool with the handwheel over the entire upper edge of the window glass.

◁

14 – Checking the sound insulation for the cowl panel



Check

- Check sound insulation (1) for the cowl panel for damage.

Result

» Sound insulation (1) for the cowl panel is damaged.

Measure

- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation

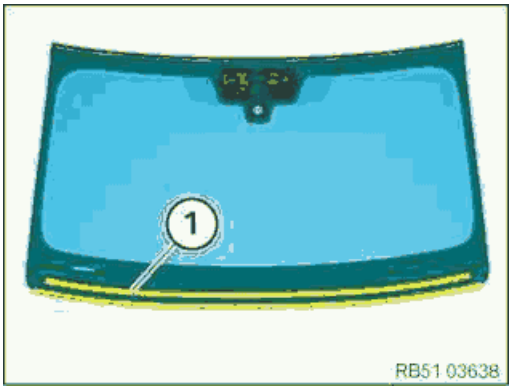
▸ **Renew sound insulation for the cowl panel**

▹ **Removing the sound insulation for the cowl panel**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Remove the sound insulation (1) for the cowl panel from the windscreen.

◁

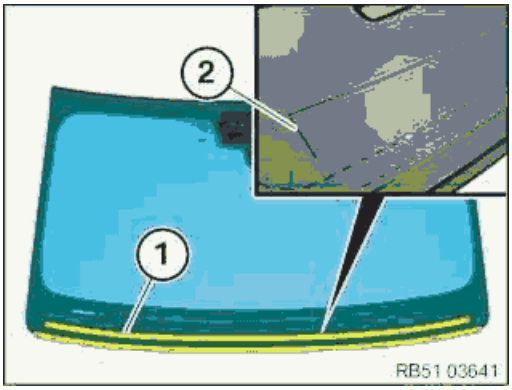
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▷ **Mount the sound insulation for the cowl panel**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape

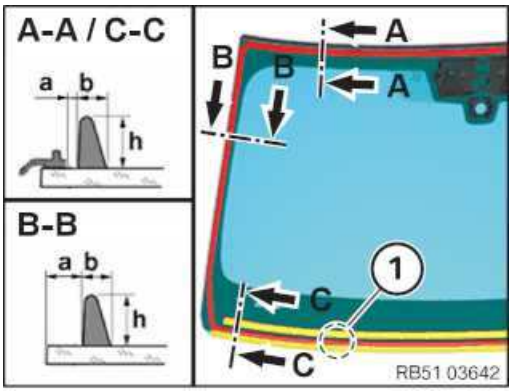


- Clean the adhesive area for the sound insulation (1) for the cowl panel.
- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation
- Bond the sound insulation (1) for the cowl panel along the mark (2) to the windscreen.

◁

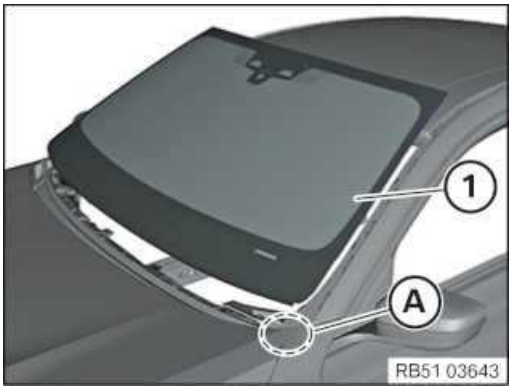
15 – Install windscreen.



- Prepare the glue cartridge with the standard nozzle C.
- Apply bead joint in area (1).
- Apply adhesive bead within the mark on the windscreen.

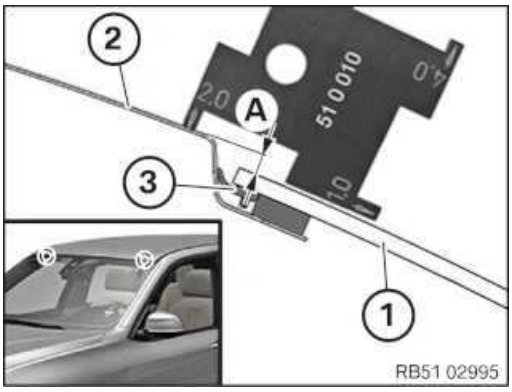
Cut	A - A	B - B	C - C
a = Position of the adhesive bead	2 ±2 mm	3 ±2 mm	2 ±2 mm
b = Width of adhesive bead	8 ±1 mm	8 ±1 mm	8 ±1 mm
h = Height of adhesive bead	12 ±1 mm	12 ±1 mm	12 ±1 mm

- Adhere to the geometry of the adhesive bead to make sure that one glue cartridge is sufficient for the complete windscreen.



- Carefully perform the following operations on the windscreen (1) with suction lifter:
  - running it in parallel to the A-pillar
  - feed it in the area (A) on left and right below the side panel
  - Position at top
  - Align sides evenly
  - Press upwards until sealing rests evenly on roof
  - press evenly all around
  - fix with adhesive tape on the roof

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- Measure short length (A) of the windscreen (1) to the roof outer skin (2) with special tool **0 495 259 (51 0 010)**.
- Adjust short length (A).

Gap dimension of windscreen to the body

Short length A	2,5 mm ... 4,5 mm

- Position the windscreen (1) in such a way that the rubber frame (3) lies even and parallel to the roof outer skin (2).

POSTPROCESSES

16 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

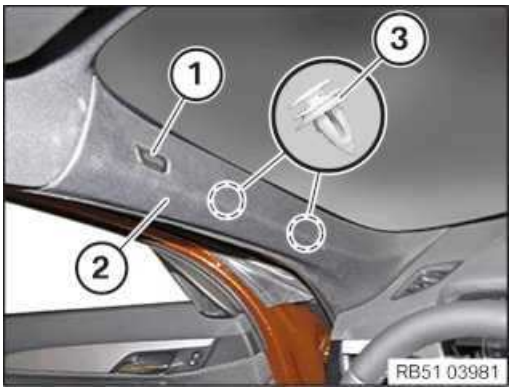
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

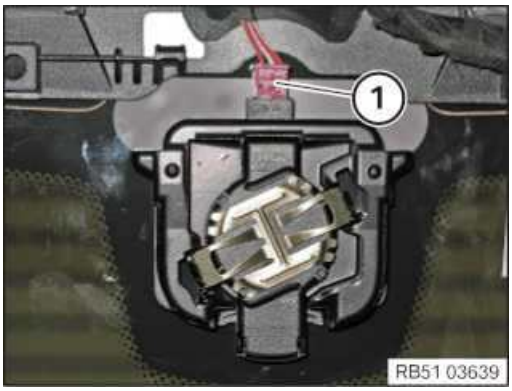
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

17 – Connect connector to rain-light-solar-condensation sensor

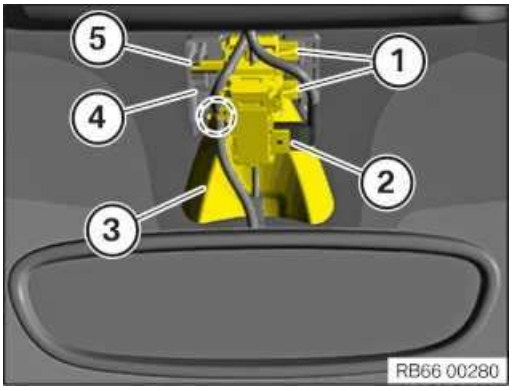


- Connect connector (1).

18 – Install the KAFAS camera

TECHNICAL INFORMATION

The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.



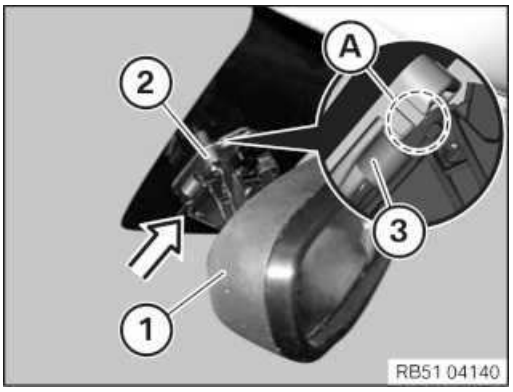
- Correctly feed in the KAFAS camera (3) with the guides (1) on the holder (4).
- Engage the latch mechanism (5).
- Connect connector (2).
- Attach cable in the marked area.

19 – Installing the interior mirror

TECHNICAL INFORMATION

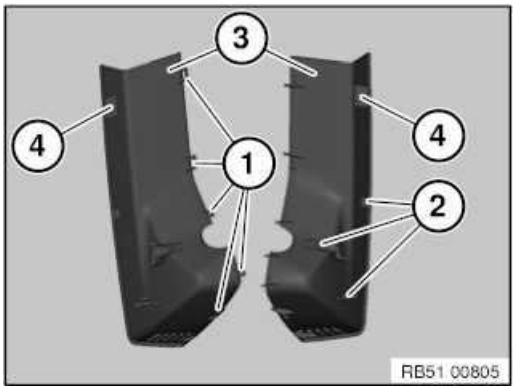
Carry out the work at temperatures between 18 °C and 23 °C only.

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- Check the clamp (3) on both sides of the interior mirror (1) for damage and renew as needed.
- If necessary, connect the connector on the interior mirror (1).
- Slide the interior mirror (1) parallel to the windscreen in direction of arrow into the base (2) and lock correctly in area (A).

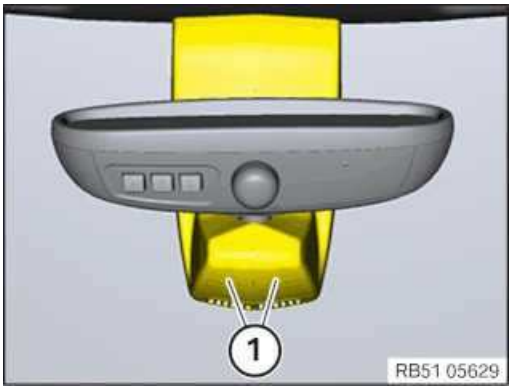
20 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



- Install covers on the interior mirror (1) clip together.

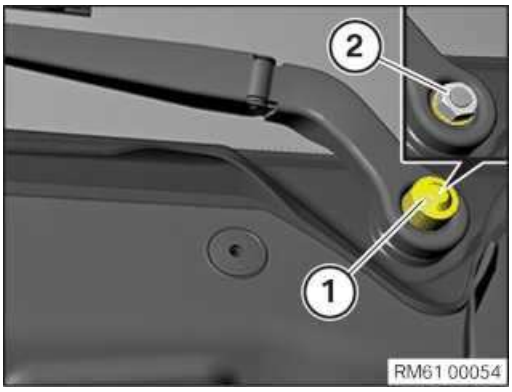
21 – Install the rear cowl panel



- Insert the cowl panel cover (1) and press it into the latch mechanism on the windscreen starting at the side.

22 – Install left and right wiper arm

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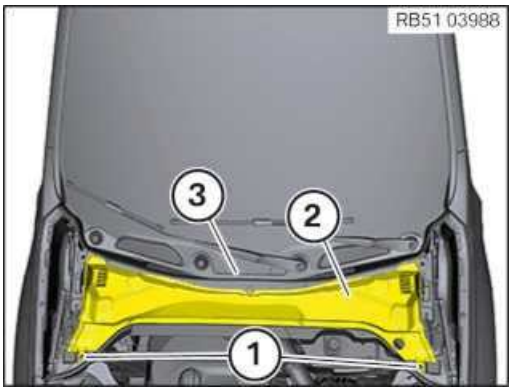
- Join wiper arm and tighten with nut (2).

Windscreen wiper arm

Combination hexagon nut		Tightening torque	35 Nm

- Join the protective cap (1).

23 – Installing front cowl panel cover



- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

24 – Install the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the gutter strip on the windscreen**

RISK OF DAMAGE

Scratches.

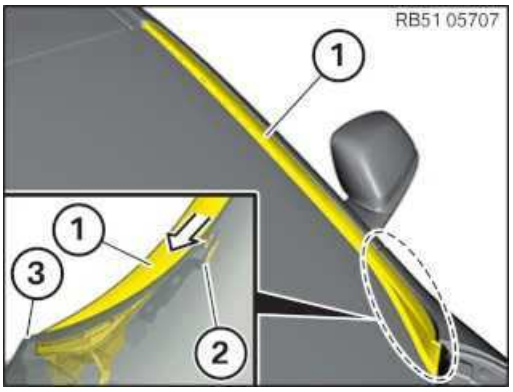
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

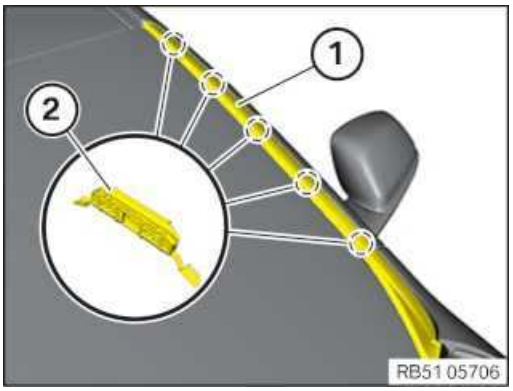
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.

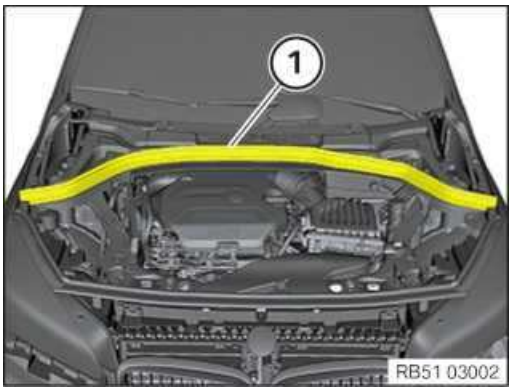


- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

25 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

26 – Calibrate KAFAS camera

TECHNICAL INFORMATION

The calibration process of the KAFAS camera is not complete until the vehicle drives in traffic. Tell the customer that some assistance systems are temporarily unavailable after vehicle pick-up.

- Perform camera calibration using diagnosis system.

  Under Service Functions menu:

  - Driver assistance
  - Camera-based driver assistance systems
  - Calibration of camera-based driver support systems

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Additional Information

Overview of Tightening Torques

A-pillar trim panel to body

Used in step 16

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

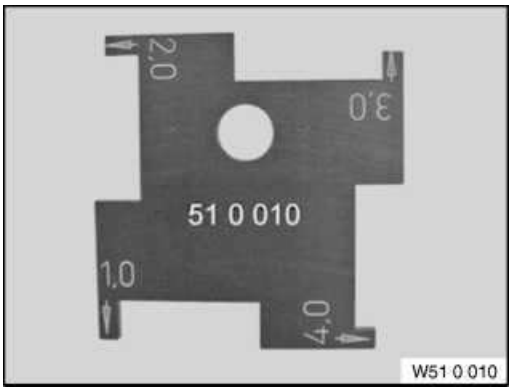
Windscreen wiper arm

Used in step 22

Combination hexagon nut		Tightening torque	35 Nm

Overview of Special Tools

0 495 259 (51 0 010) Gauge



Common	Used in step 15
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)
Included in the tool or work	
Storage location	B2
Replaced by	
In connection with	
SI-Number	01 10 05 (189)

Overview Technical Data

Gap dimension of windscreen to the body

Used in step 15

Short length A	2,5 mm ... 4,5 mm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	10 16
51 00 ... Notes on component bonding using adhesive tape	13 14
51 31 ... General procedure for the disassembly and installation of bonded window glass	

Repair instructions	Used in step
51 31 ... Removing windows with a "Spider"	
61 35 ... Notes on ESD protection (Electro Static Discharge)	

Parts

Parts required

Designation	Used in step
Sound insulation cowl panel	14

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51 31 021 Removing and installing/replacing windscreen rubber surround

RISK OF DAMAGE

Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

TECHNICAL INFORMATION

The following procedure forms the basis for these repair instructions and must be observed without fail.
For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

TECHNICAL INFORMATION

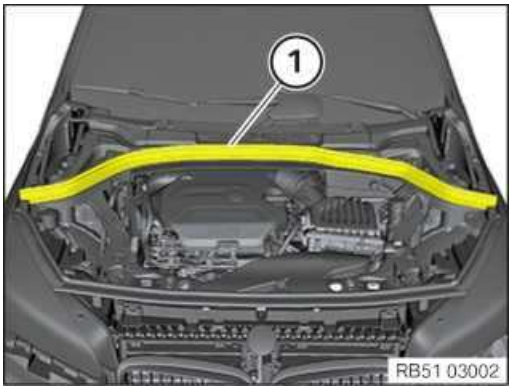
Perform window removal using the "spider".
For additional information see: 51 31 ... Window glass removal using "spider"

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

2 – Remove the gutter strip on the windscreen on the left and right

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NOTICE

Description is for left component only. Procedure on the right side is identical.

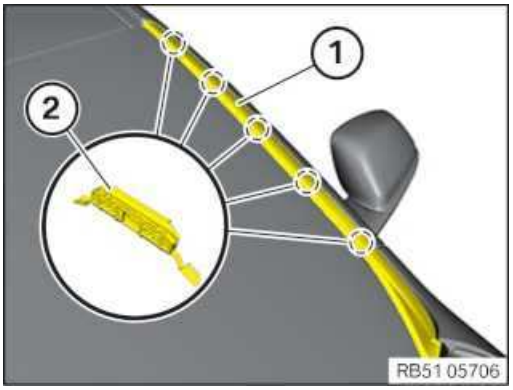
▸ **Remove the gutter strip on the windscreen**

RISK OF DAMAGE

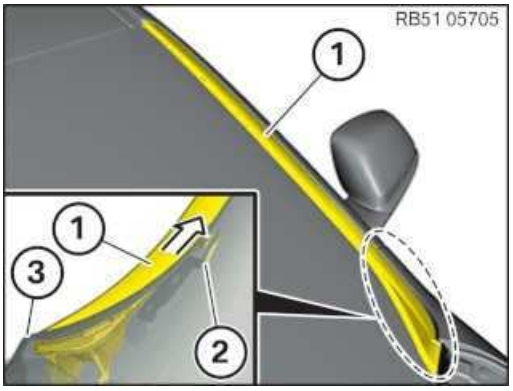
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

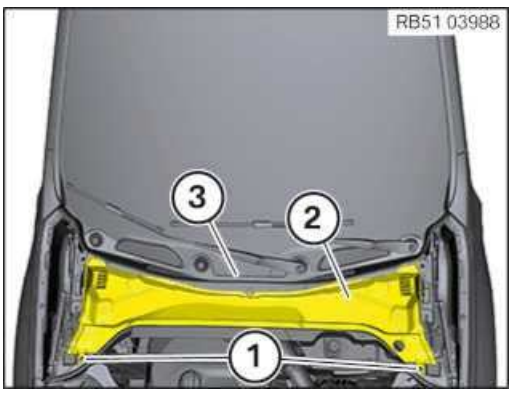


- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.



- Pull out the gutter strip (1) from the guide (2) in direction of arrow and carefully feed out at the side panel (3).

3 – Removing front cowl panel cover



- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

4 – Remove left and right wiper arm

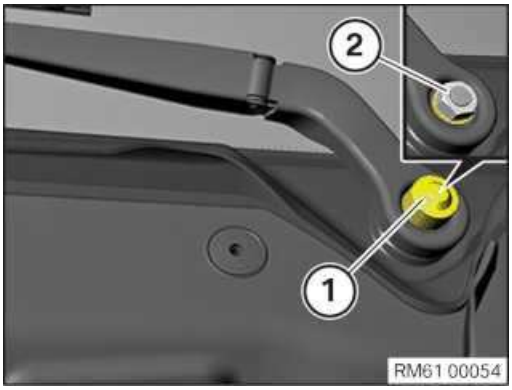
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RISK OF DAMAGE

Damage to wiper console

While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do not lift off wiper arm, else the wiper console may break on the predetermined breaking point for the pedestrian protection.



- Pull off the protective cap (1) and release the nut (2) below it.



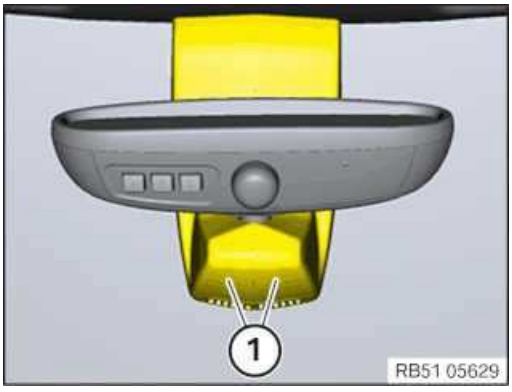
- Pull off windscreen wiper arm (1)with special tool .

5 – Remove the rear cowl panel



- Pull off the cowl panel cover (1) towards the top, starting from the side and feed out.

6 – Remove the cover on the inside mirror



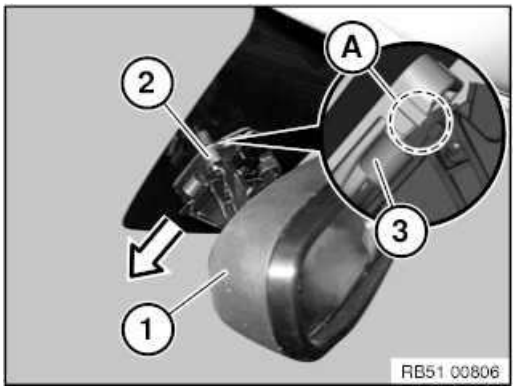
- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

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7 – Removing the interior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



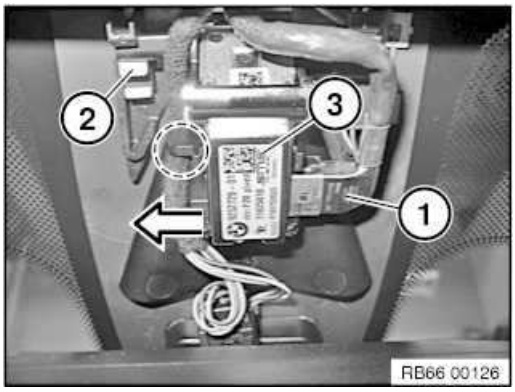
- Make sure that the interior mirror (1) does not bend or twist during removal.

  The interior mirror (1) is held by the clamp (3) and the latch mechanism in this area (A) on the base (2).
- If necessary unlock and disconnect the plug connection on the interior mirror (1).
- Pull off the interior mirror (1) from the mirror socket (2) with a downwards jerk in parallel to the windscreen.

8 – Remove the KAFAS camera

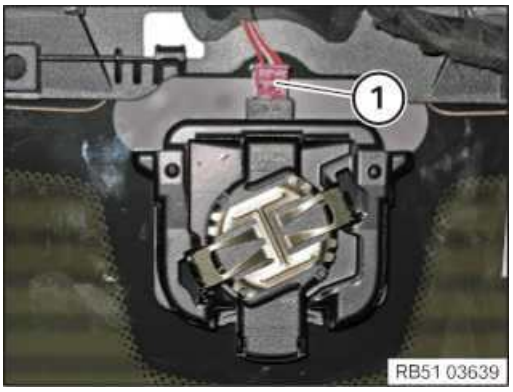
TECHNICAL INFORMATION

The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.



- Disconnect plug connection (1).
- Unclip cable in marked area.
- Unlock the retaining clamp (2) and remove camera (3) in direction of arrow.

9 – Disconnect the plug connection on the rain-light-solar-condensation sensor



- Disconnect plug connection (1).

10 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

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▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

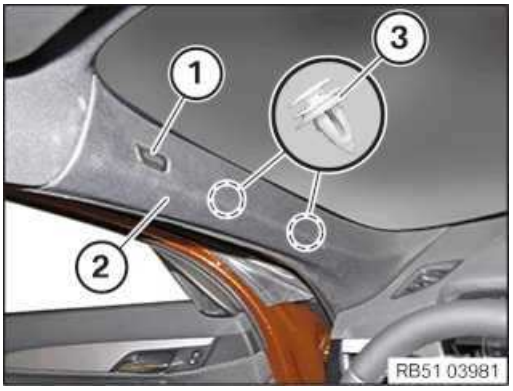
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

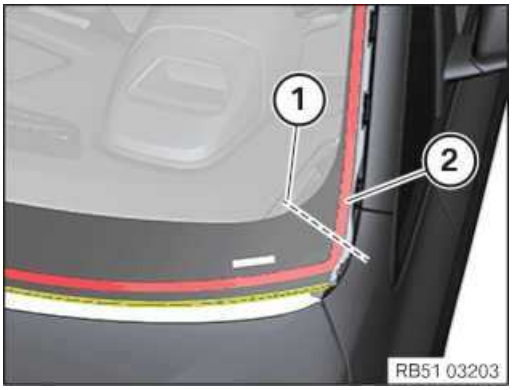
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

MAIN WORK

11 – Removing the windscreen



- Tape off body in area of piercing point with fabric adhesive tape.
- Push the thread (1) through the adhesive bead (2) along the line from the inside.
- Cut out the windscreen with spider.

12 – Renew the spacer

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- Remove the spacer (arrows) completely.
- Renew the spacer 5 x 5 x 20 mm (arrows).

  Parts: Spacer 5 x 5 x 20 mm
- Bond the spacer (arrows) centrally on the embossed marks.

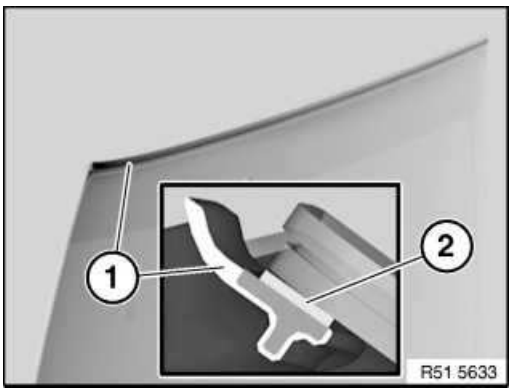
13 – Renew the cover on the windscreen

▸ **Removing the cover on the windscreen**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



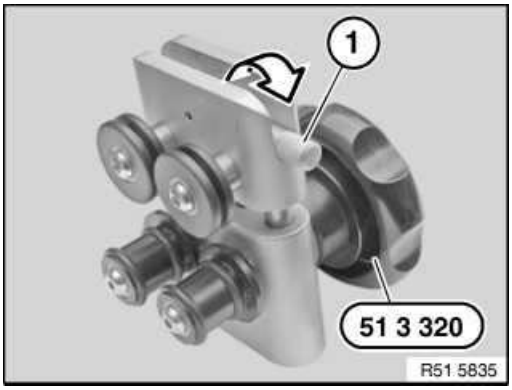
- Pull off the rubber frame (1) from the windscreen using the adhesive tape (2).

▸ **Installing the cover on the windscreen**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Clean the adhesive area of the windscreen and pre-treat with Sika activator -205.

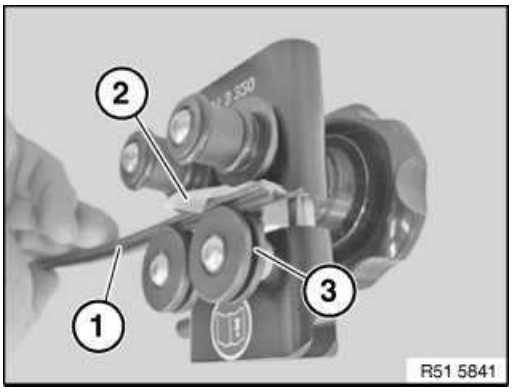
  The Sika activator -205 must not get onto adhesive area of adhesive bead.

Adhesive

Aktivator -205	250 ml, Bottle	83190030155

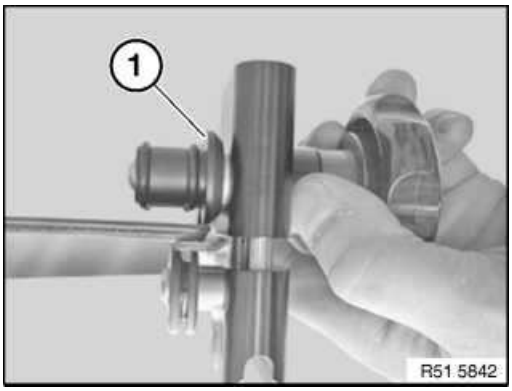
- Adhere to the air drying time of 1 min at least.
- Reposition the lever (1) and open the special tool .

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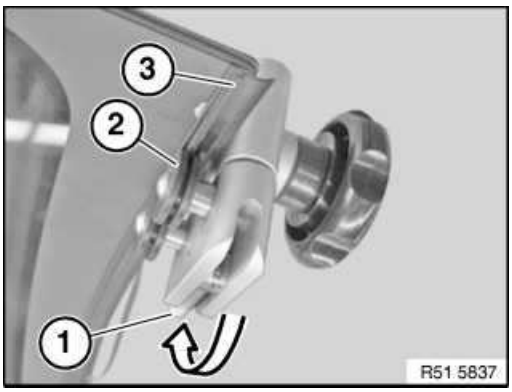


- Pull off protective film (2) in stages from adhesive tape.
- Renew cover (1).

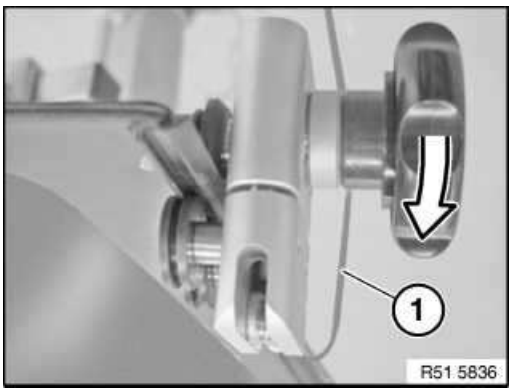
  Parts: Cover
- Insert the cover (1) into the guide pulleys (3).



- Place the special tool with the pressure rollers (1) up against the window edge.
- Align the cover on the outer edge of the window glass.
- Fit the cover and visually check for perfect fit.



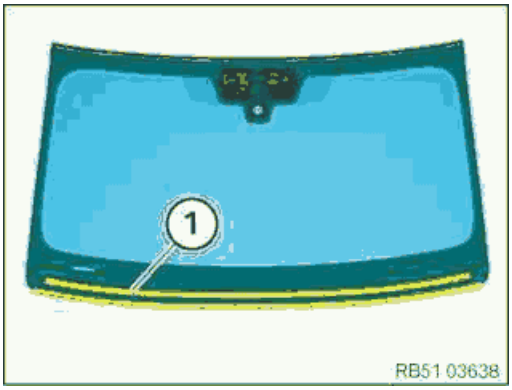
- Reposition the lever (1) in direction of arrow and close the special tool.
- Ensure the cover (3) fits correctly into the guide pulleys (2).



- Continue to pull off protective film (1) in stages from adhesive tape.
- Run the special tool with the handwheel over the entire upper edge of the window glass.

14 – Checking the sound insulation for the cowl panel

Check



- Check sound insulation (1) for the cowl panel for damage.

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Result

» Sound insulation (1) for the cowl panel is damaged.

Measure

- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation

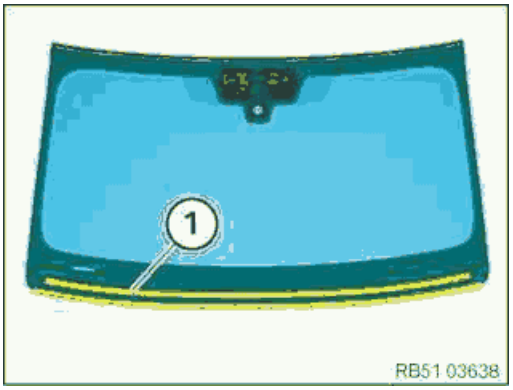
▶ **Renew sound insulation for the cowl panel**

▷ **Removing the sound insulation for the cowl panel**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Remove the sound insulation (1) for the cowl panel from the windscreen.

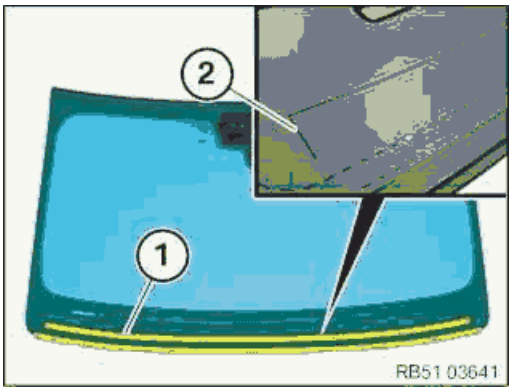
◁

▷ **Mount the sound insulation for the cowl panel**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



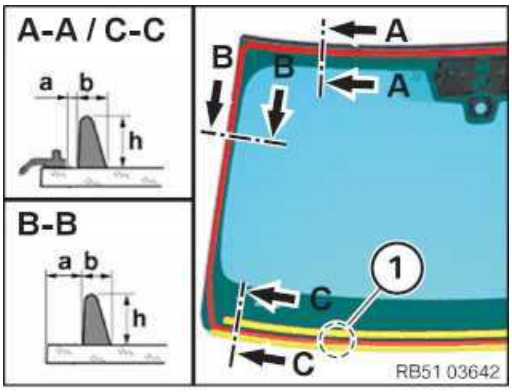
- Clean the adhesive area for the sound insulation (1) for the cowl panel.
- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation
- Bond the sound insulation (1) for the cowl panel along the mark (2) to the windscreen.

◁

15 – Install windscreen.

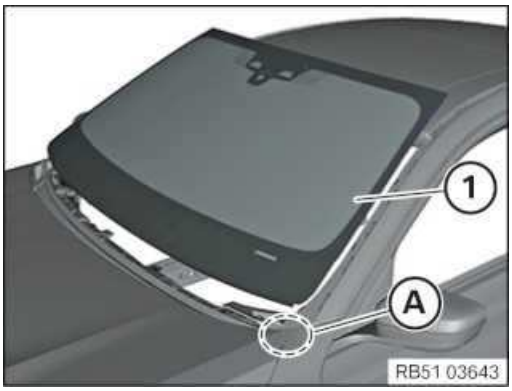
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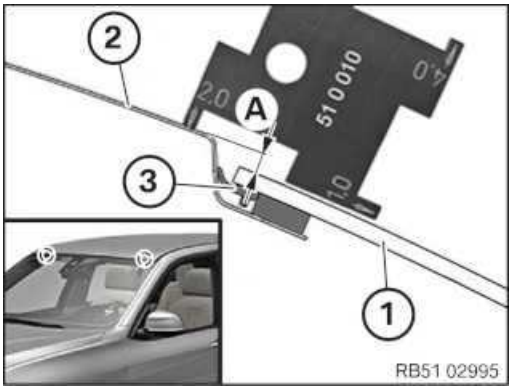
- Prepare the glue cartridge with the standard nozzle C.
- Apply bead joint in area (1).
- Apply adhesive bead within the mark on the windscreen.

Cut	A - A	B - B	C - C
a = Position of the adhesive bead	2 ±2 mm	3 ±2 mm	2 ±2 mm
b = Width of adhesive bead	8 ±1 mm	8 ±1 mm	8 ±1 mm
h = Height of adhesive bead	12 ±1 mm	12 ±1 mm	12 ±1 mm

- Adhere to the geometry of the adhesive bead to make sure that one glue cartridge is sufficient for the complete windscreen.



- Carefully perform the following operations on the windscreen (1) with suction lifter:
  - running it in parallel to the A-pillar
  - feed it in the area (A) on left and right below the side panel
  - Position at top
  - Align sides evenly
  - Press upwards until sealing rests evenly on roof
  - press evenly all around
  - fix with adhesive tape on the roof



- Measure short length (A) of the windscreen (1) to the roof outer skin (2) with special tool **0 495 259 (51 0 010)**.
- Adjust short length (A).

Gap dimension of windscreen to the body

Short length A	2,5 mm ... 4,5 mm

- Position the windscreen (1) in such a way that the rubber frame (3) lies even and parallel to the roof outer skin (2).

POSTPROCESSES

16 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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WARNING

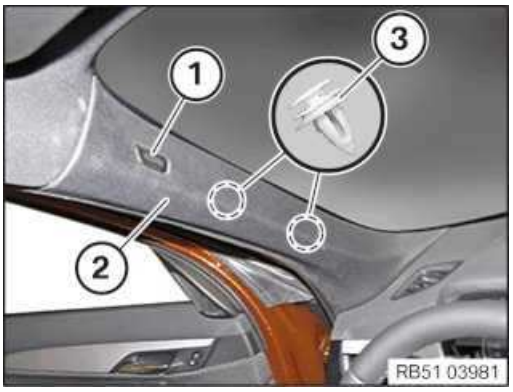
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

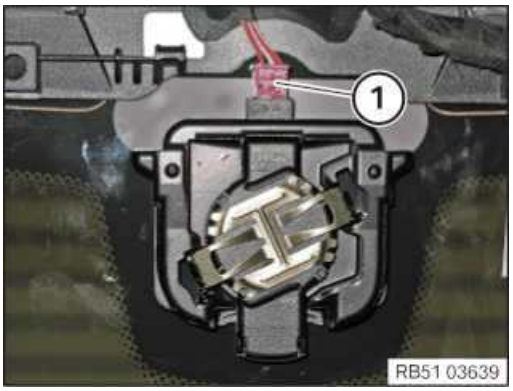
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

17 – Connect connector to rain-light-solar-condensation sensor



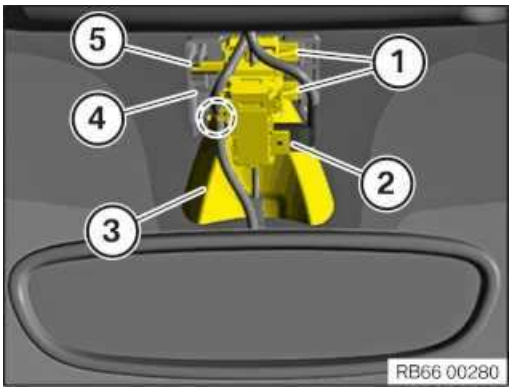
- Connect connector (1).

18 – Install the KAFAS camera

TECHNICAL INFORMATION

The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.

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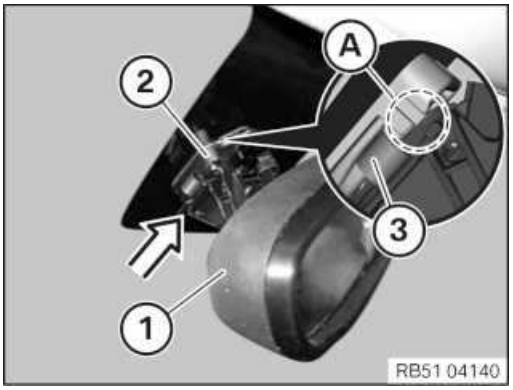


- Correctly feed in the KAFAS camera (3) with the guides (1) on the holder (4).
- Engage the latch mechanism (5).
- Connect connector (2).
- Attach cable in the marked area.

19 – Installing the interior mirror

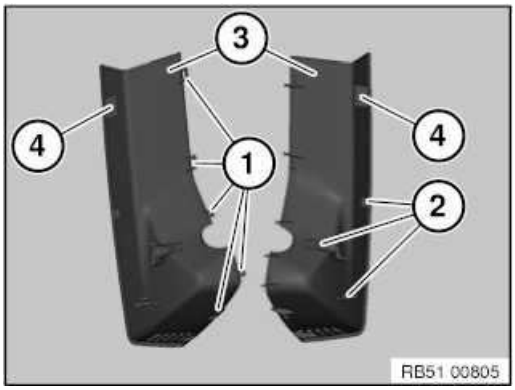
TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Check the clamp (3) on both sides of the interior mirror (1) for damage and renew as needed.
- If necessary, connect the connector on the interior mirror (1).
- Slide the interior mirror (1) parallel to the windscreen in direction of arrow into the base (2) and lock correctly in area (A).

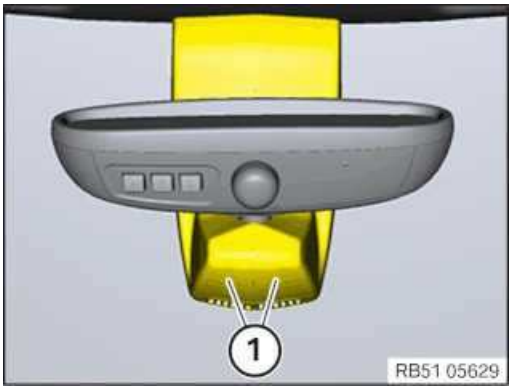
20 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



- Install covers on the interior mirror (1) clip together.

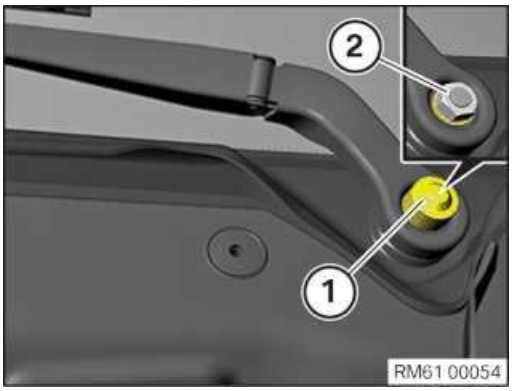
21 – Install the rear cowl panel

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- Insert the cowl panel cover (1) and press it into the latch mechanism on the windscreen starting at the side.

22 – Install left and right wiper arm



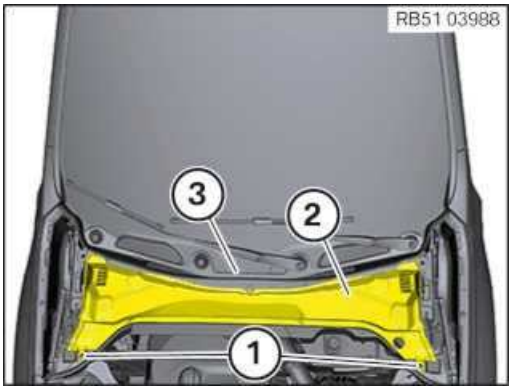
- Join wiper arm and tighten with nut (2).

Windscreen wiper arm

Combination hexagon nut		Tightening torque	35 Nm

- Join the protective cap (1).

23 – Installing front cowl panel cover



- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

24 – Install the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the gutter strip on the windscreen**

RISK OF DAMAGE

Scratches.

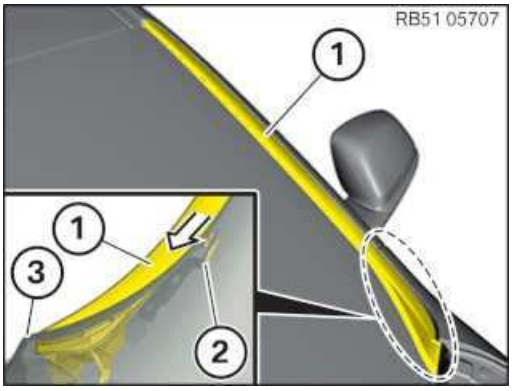
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

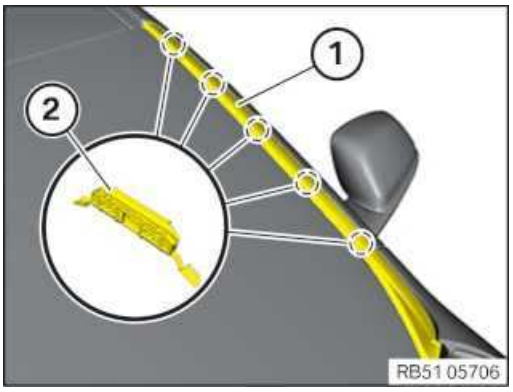
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TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.

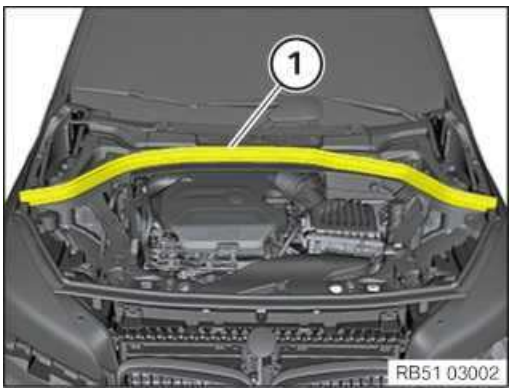


- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

25 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

26 – Calibrate KAFAS camera

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TECHNICAL INFORMATION

The calibration process of the KAFAS camera is not complete until the vehicle drives in traffic. Tell the customer that some assistance systems are temporarily unavailable after vehicle pick-up.

- Perform camera calibration using diagnosis system.

  Under Service Functions menu:

  - Driver assistance
  - Camera-based driver assistance systems
  - Calibration of camera-based driver support systems

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body — Used in step 16

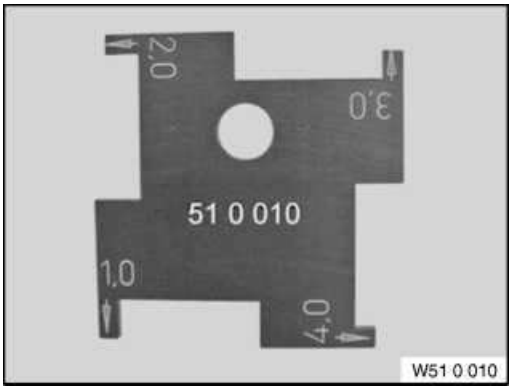
M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Windscreen wiper arm — Used in step 22

Combination hexagon nut		Tightening torque	35 Nm

Overview of Special Tools

0 495 259 (51 0 010) Gauge



Common — Used in step 15

Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)
Included in the tool or work	
Storage location	B2
Replaced by	
In connection with	
SI-Number	01 10 05 (189)

Overview Technical Data

Gap dimension of windscreen to the body — Used in step 15

Short length A	2,5 mm ... 4,5 mm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	10 16
51 00 ... Notes on component bonding using adhesive tape	13 14
51 31 ... General procedure for the disassembly and installation of bonded window glass	

Repair instructions	Used in step

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51 31 ... Removing windows with a "Spider"

61 35 ... Notes on ESD protection (Electro Static Discharge)

Parts

Parts required

Designation	Used in step
Sound insulation cowl panel	14

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51 31 ... Removing windows with a "Spider"

Windscreen removal system "Spider"



1	"Spider" separation device	6	Line threader
2	Bit holder	7	Line routing tool
3	Operating instructions	8	Suction anchor
4	Dashboard protection	9	Cord for separating adhesive strips
5	Angular transmission		

Accessories required for operation (not included):

Cordless screwdriver/drill with at least a 10.8 V Li-ion battery or a 18 V Ni-Cd battery and variable speed.

Note: Always use a low gear setting.

Note:
Damage as well as ergonomic and health-endangering damage are minimised with the "Spider" disassembly system.

Sourcing reference:

See Aftersales Assistance Portal (ASAP) - Service/Technical - Workshop Equipment (Start BMW) - Shop Workshop Equipment or at www.bmwgroup.com

Warning!
Follow safety instructions for working on vehicles with airbag systems (risk of injury).

Important!
Handle sharp-edged tools with care (risk of damage to the head airbag and the window glass).

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Important!

Always keep both suction cups dry and clean to ensure their optimum adhesion on the windscreen.

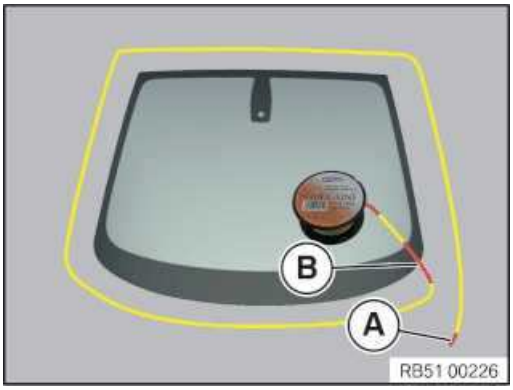
Suction cup may not be applied at the damaged point (crack in window glass).

The bearing bushes of the shaft (spindle) must always be lubricated.

Always wear safety goggles and protective gloves for your own safety.

The procedure for disassembly of the windscreen is described below as an example.

Deviations in the work procedure can be found in the vehicle-specific repair instructions.



General

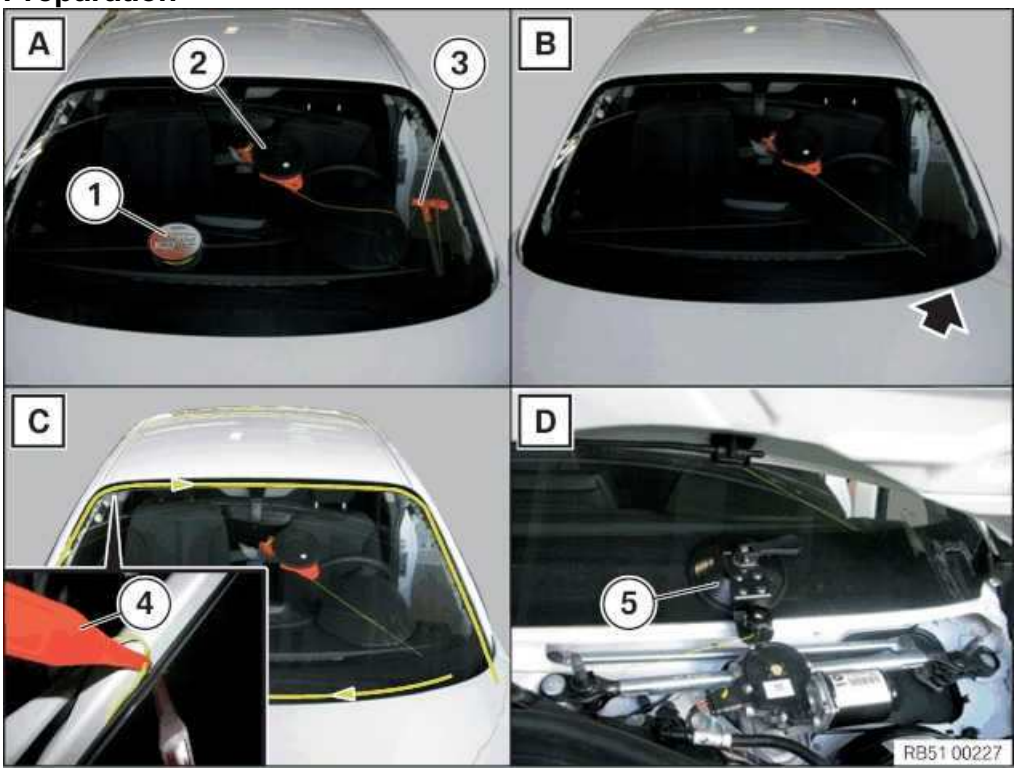
A cord approx. 6.8 m long is used to cut through the adhesive bead.

The cord length to be used is identified by a short red mark (A) approx. 5 cm.

The part of the cord laid outside around the window glass (approx. 5 m) is identified with a long red mark (B) (approx. 18 cm).

The marks are applied so that the cord has to be pulled from the inside to the outside.

Preparation



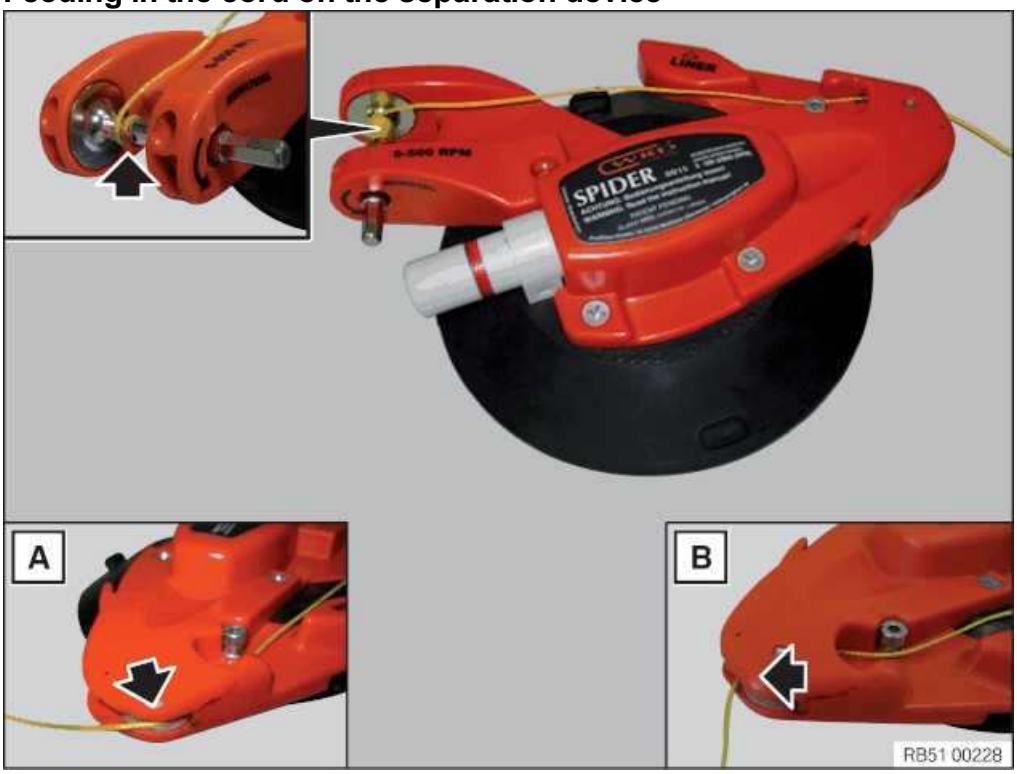
A. Pierce cord from the roller (1) or separation device (2) with cord threader (3) through the adhesive bead from the inside, protect the area from the inside as required.
B. Pull out cord up to the first red mark (approx. 18 cm long).
C. Lay cord around the window glass, use pulling aid (4) if required.
D. Secure suction anchor (5) outside on window glass, secure cord to suction anchor (5).

If required, unwind cord from roller (1) up to the second red mark (approx. 5 cm long) and cut off.

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Make sure the cord lies below the window glass at all four corners.
Check that the cord is not caught on clamps or body.
Secure window glass on outside with adhesive tape against sliding.

Feeding in the cord on the separation device



Normally, the adhesive bead is cut through anticlockwise seen from the passenger compartment.

- This means the cord must be fed into the separation device as shown in graphic A.

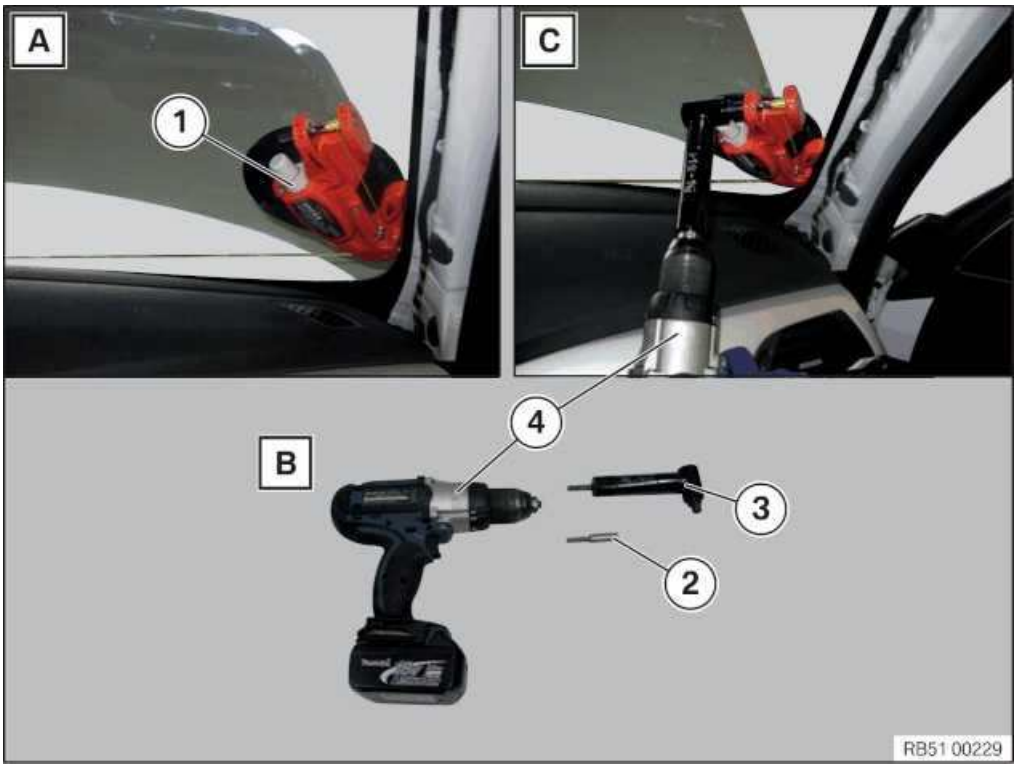
When accessibility is not optimal, the opposite cutting direction may be required (comply with vehicle-specific repair instructions).

- This means the cord must be fed into the separation device as shown in graphic B.

Feed cord into coil and wind it on, at the same time trapping the end of the cord.
When winding the cord, the correct direction of rotation on the separation device must be observed.

Cutting out procedure

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Optimum cutting is guaranteed when the cord is at an acute angle to the adhesive bead. There is a risk of the cord ripping if the angle is too obtuse.

The separation device must be positioned correspondingly to achieve the appropriate angle.

A. Fix separation device (1) on window glass at bottom right.
B. Depending on accessibility, attach bit holder (2) or angle gear (3) to cordless screwdriver (4).
C. Place cordless screwdriver (4) on separation device (1) and start winding cord, observe direction of rotation on separation device.

If required, over trim panel components with plastic protection.

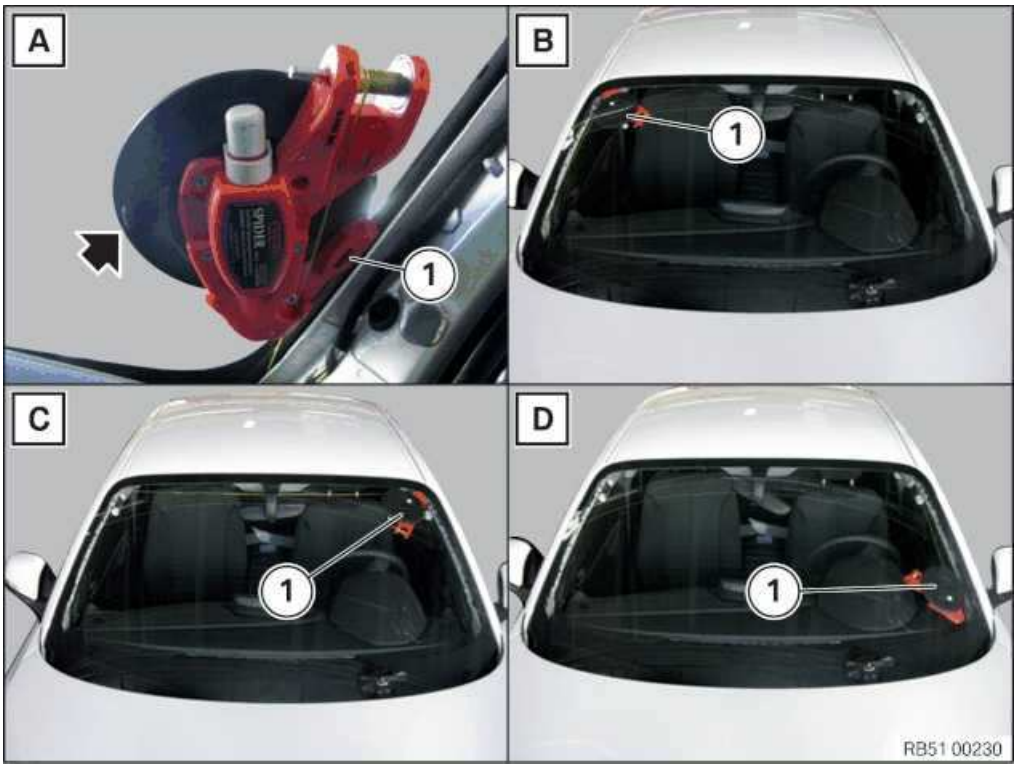
Guide cord with plastic protection around sharp-edged positions.

Cut through adhesive bead up to bottom area of A-pillar.

Turn back cordless screwdriver (4) approx. 2 rotations and remove.

Cutting out procedure

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A. Discharge vacuum on windscreen removal tool (1) by pressing the tab, remove windscreen removal tool (1) from window glass.

B. Reset removal tool (1) at illustrated and wind up cord up to the position of windscreen removal tool (1).

C./D. Repeat further resetting, work sequence as given at B.

Additional resetting may be required for very curved window glass.

It is possible to reuse the cord. When a cord is used many times the risk of ripping increases.

Dirt contamination must be avoided when a cord is reused.

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51 31 ... Removing windows with an oscillating knife

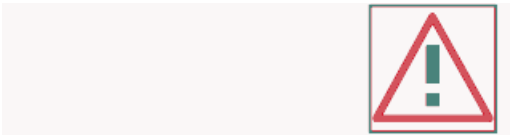


Warning!

Follow safety instructions for working on vehicles with airbag systems (risk of injury).

Important!

Handle sharp-edged tools with care (risk of damage to the head airbag and the window glass).



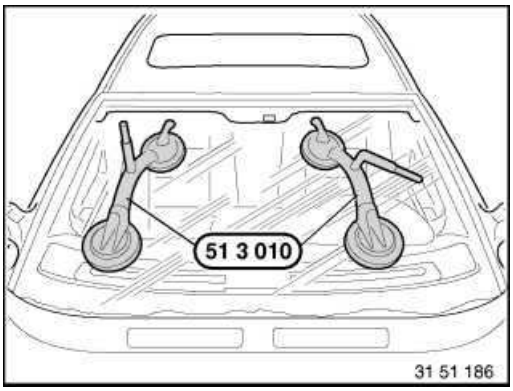
Important!

Follow the vehicle-specific repair instructions!

Always wear safety goggles and protective gloves for your own safety.

Cover the working area (side walls, roof-mounted aerial and if necessary interior equipment) with protective covers.

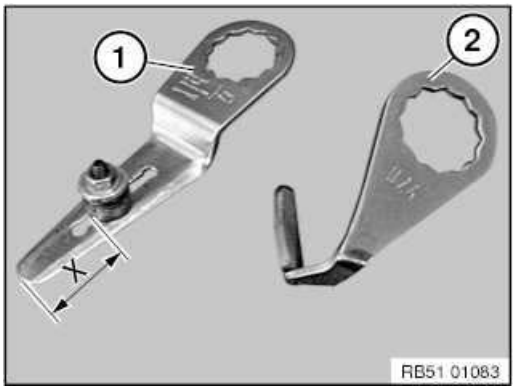
Tape off body with fabric adhesive tape (e.g. Tesa) in areas where the oscillating knife could damage the window glass or the paint.



Use suction cups (51 3 010) to lift out the window glass.

Always keep both suction cups dry and clean to ensure their optimum adhesion on the windscreen.

Secure window glass against falling out.



Depending on the area of application, knife 1 or 2 is used.

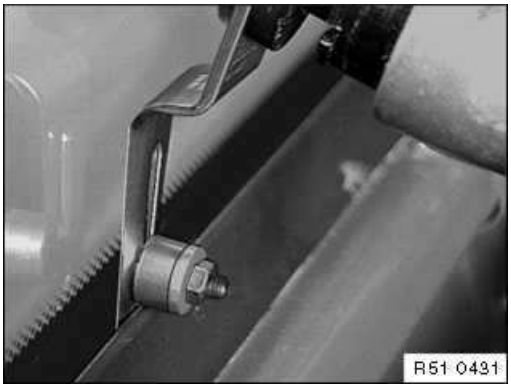
(1) Straight knife with adjustable thrust roller

(2) U-shaped knife

Dimension (X) on the knife (1) can be adjusted individually, see vehicle-specific repair instructions.

Note:
Sharpen knife blade before every use on a running machine with a grinding stone (even with new knife blade).

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Removing from the inside:

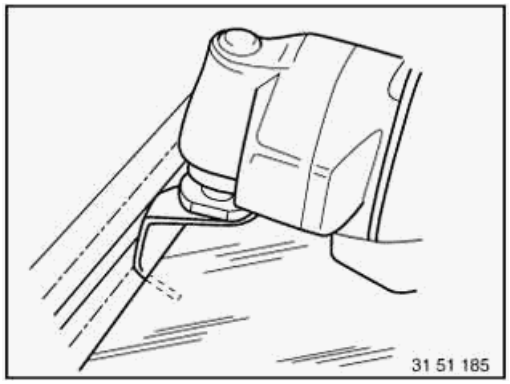
Guide knife carefully between body and window glass.

Run blade of knife parallel to glass.

Take care not to damage paintwork.

Cut through adhesive bead all the way around.

Pull window glass outwards to remove.



Removal from outside:

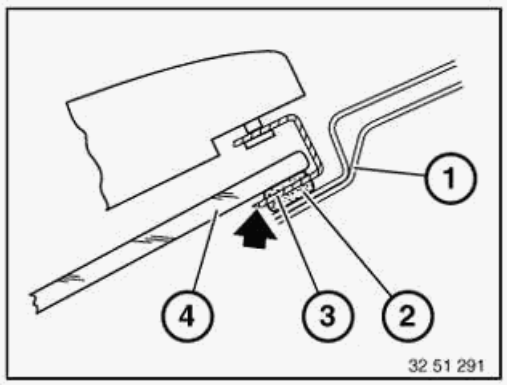
Guide knife carefully between body and window glass.

Run blade of knife parallel to glass.

Take care not to damage paintwork.

Cut through adhesive bead all the way around.

Pull window glass outwards to remove.



Cut through adhesive bead as closely as possible to window glass.

(1) Body opening

(2) Adhesive bead

(3) Knife

(4) Window

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51 31 231 Replace rear window

TECHNICAL INFORMATION

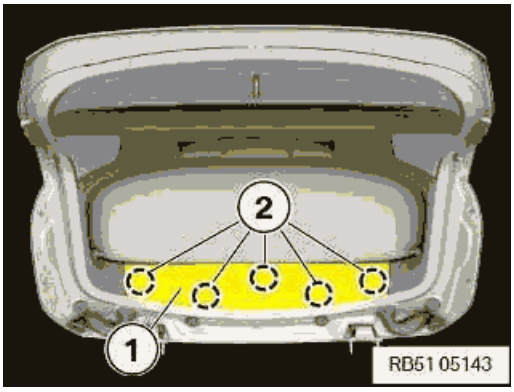
The following procedure forms the basis for these repair instructions and must be observed without fail.
For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

TECHNICAL INFORMATION

Perform window removal using the "spider".
For additional information see: 51 31 ... Window glass removal using "spider"

PRELIMINARY WORK

1 – Remove the trim for the top rear window frame



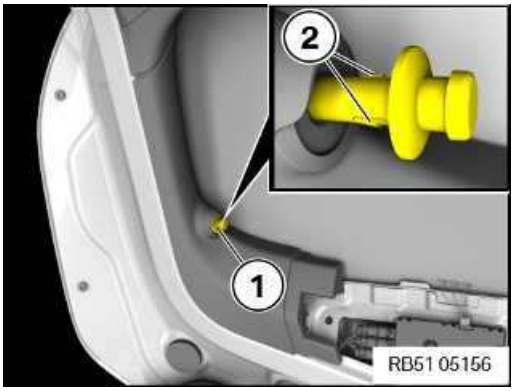
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Remove both trims for the rear window frame on the side

NOTICE

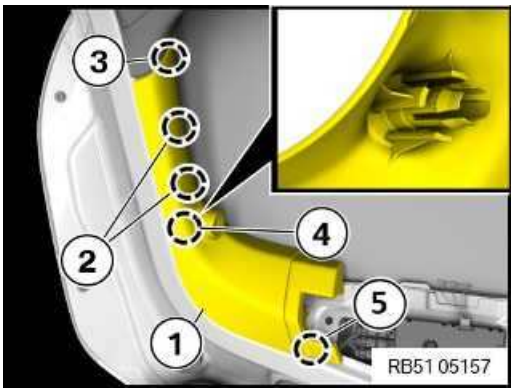
Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim for the rear window frame on the side**



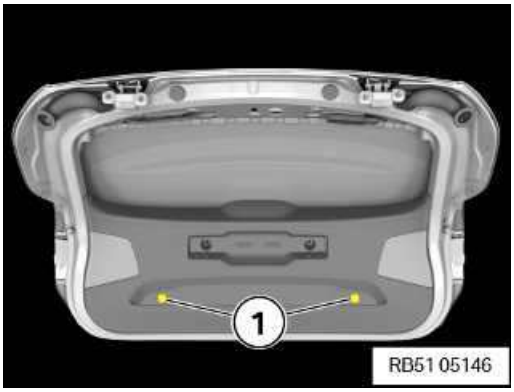
- Detach the mounting button (1) on the latch mechanisms (2) and remove it.

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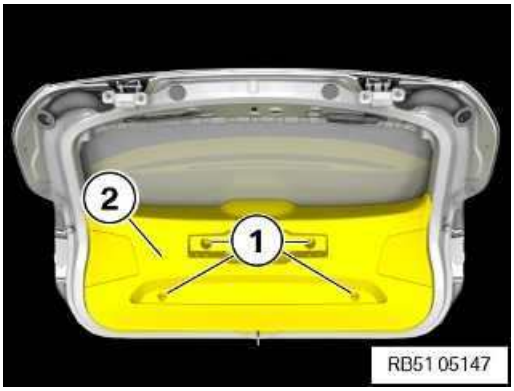


- Unclip the trim for the rear window frame on the side (1) with the clips (2) from the latch mechanisms (3), (4) and (5).

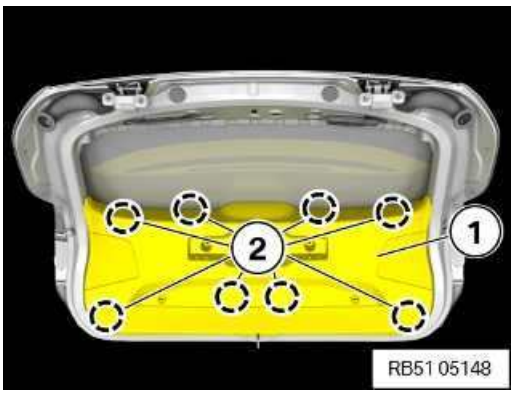
3 – Remove tailgate trim panel



- Lever out the covers of the screw points (1) with a suitable tool.

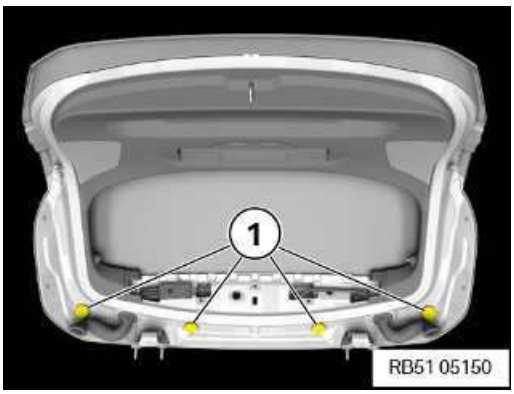


- If applicable, remove the warning triangle from the tailgate trim panel (2).
- Unscrew the bolts (1) at the tailgate trim panel (2).



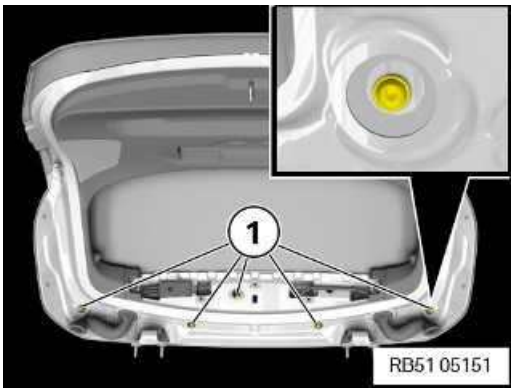
- Unclip the tailgate trim panel (1) at the latch mechanisms (2) and remove.

4 – Remove rear spoiler

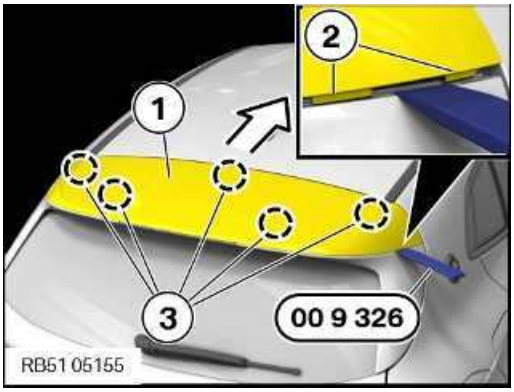


- Unclip the covers (1) with a suitable tool and remove.

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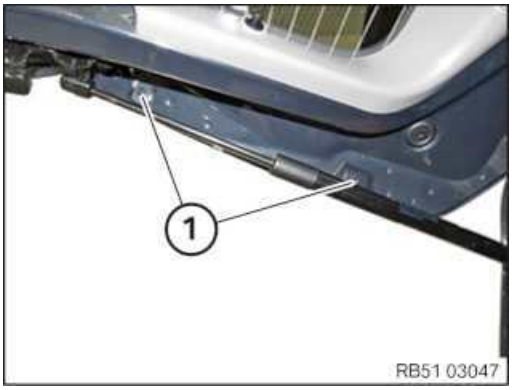


- Loosen screws (1).

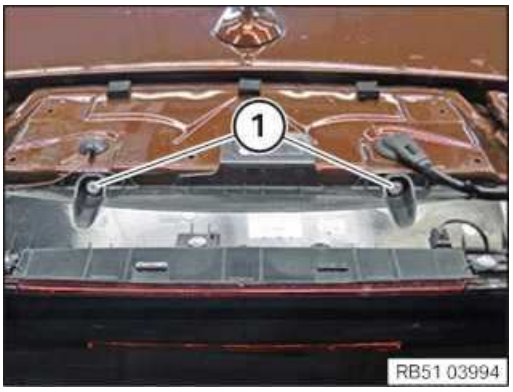


- Release rear spoilers (1) on both outer sides with the special tool **0 496 570 (00 9 326)** out of the latch mechanisms (2).
- Unclip rear spoiler (1) from the clips (3).
- Slightly lift rear spoiler (1) in the front area and remove in direction of arrow.

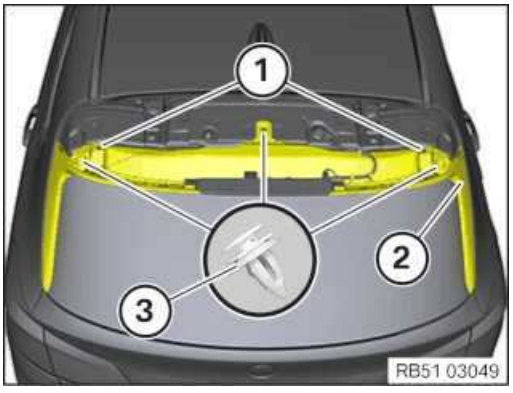
5 – Removing the lower section of the rear spoiler



- Open tailgate.
- Loosen screws (1) on left and right.



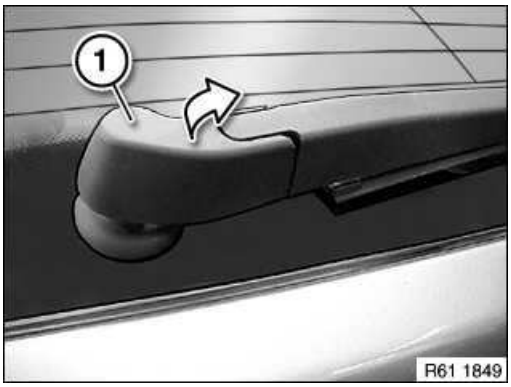
- Loosen screws (1).



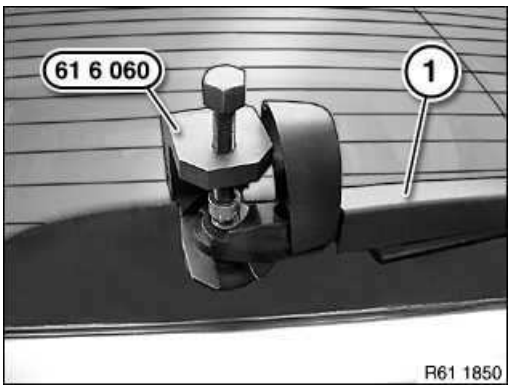
- Disconnect the plug connection of the additional brake light and guide out the cable.
- Disconnect the quick connector of the water pipe of the washer jet and guide out the water pipe.
- Loosen screws (1).
- Release the lower section of the rear spoiler (2) at the clips (3) and remove it.

6 – Removing windscreen wiper arm of the rear wiper

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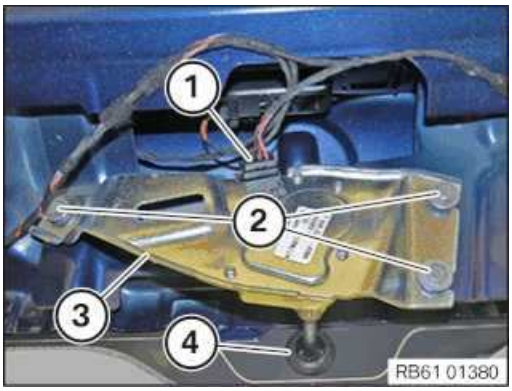


- Fold cover cap (1) in direction of arrow.
- Unscrew the nut below it.



- Pull off the wiper arm (1) using special tool .

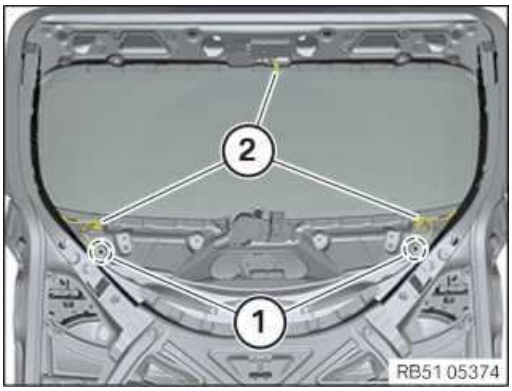
7 – Remove rear window wiper motor



- Unlock and disconnect connector (1).
- Unscrew all bolts (2).
- Remove rear wiper motor (3).

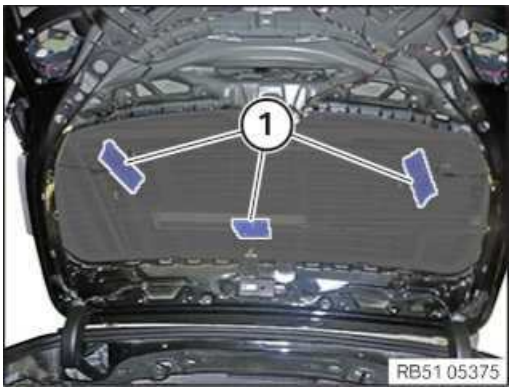
MAIN WORK

8 – Remove rear window

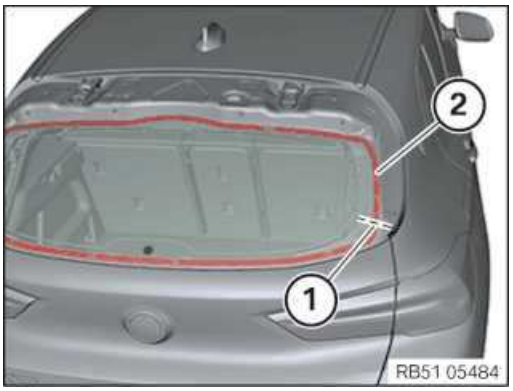


- Loosen screws (1).
- Disconnect the plug connections (2) and unclip from the cable clips.

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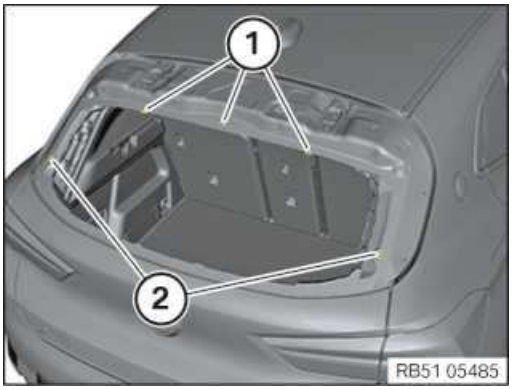


- Secure cable (1) to rear window with adhesive tape.



- Tape off body in area of piercing point with fabric adhesive tape.
- Push the thread (1) through the adhesive bead (2) along the line from the inside.
- Cut out the rear window with spider.

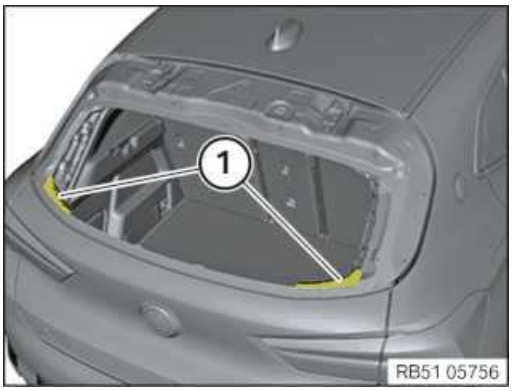
9 – Replace the spacer



- Remove the spacer (1) completely.
- Use spacer 5x5x20 mm.

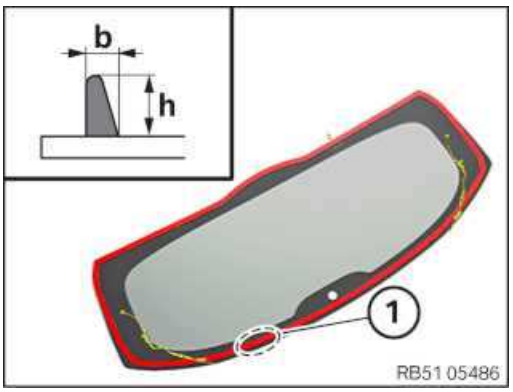
  Parts: Spacer 5x5x20 mm
- Bond the new spacer (1) centred on the embossed mark.
- Replace the damaged hook and loop tape (Dual Lock tape) (2) on the rear window and the body.

  Parts: Velcro fastener (Dual Lock tape)
- Bond the new hook and loop tape (Dual Lock tape) (2) centred on the embossed mark.



- Check the foam seals (1) for damage and replace if necessary.

10 – Install the rear window

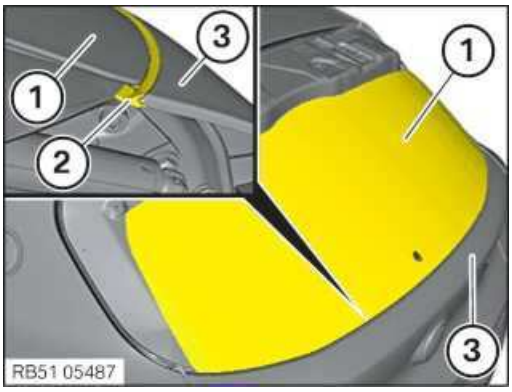


- Provide two glue cartridges.
- Prepare a glue cartridge with the standard jet nozzle C.
- Apply bead joint in area (1).
- Apply adhesive bead within the mark on the rear window.

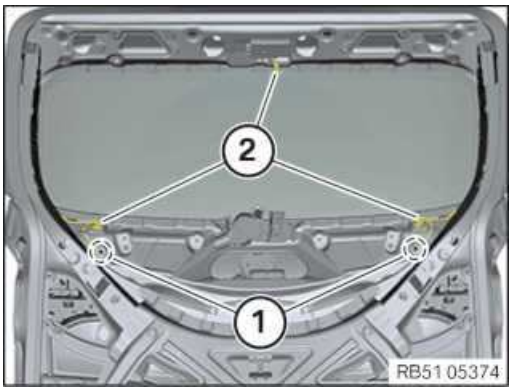
Adhesive bead

b = Width	7 mm ... 9 mm
h = Height	11 mm ... 13 mm

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- Carefully perform the following actions on rear window (1) with suction lifters
  - Fit at the bottom on the seal
  - Align sides evenly
  - press on evenly all the way around and engage at the hook and loop tape (Dual Lock tape)
- Make sure that the seal (2) rests evenly against the tailgate (3).
- Secure rear window (1) with adhesive tap on the roof.



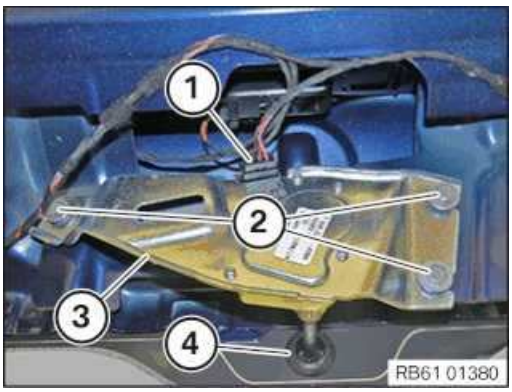
- Connect the connector (2) and attach the cable clips.
- Tighten the screws (1).

Ground strap to tailgate

Oval-head screw	Tightening torque		2,6 Nm

POSTPROCESSES

11 – Install rear window wiper motor



- Check the rubber grommet (4) for damage.
- Join the rear wiper motor (3) in the grommet (4).
- Tighten down screws (2).

Wiper motor to tailgate

Screw		Tightening torque	7,6 Nm

- Connect connector (1).

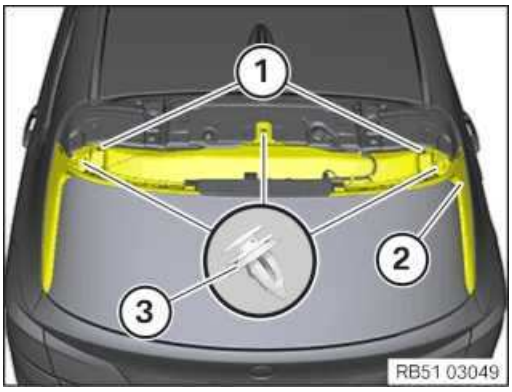
12 – Installing wiper arm of the rear wiper



- Position the wiper arm and tighten with the nut.
- Position the protective cap (1).

13 – Installing the lower section of the rear spoiler

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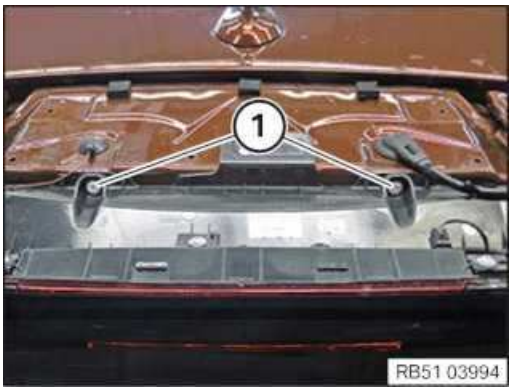


- Position the lower section of the rear spoiler (2) at the clips (3) and clip in.
- Tighten the screws (1).

Rear spoiler lower section to tailgate

Fillister head bolt		8 Nm

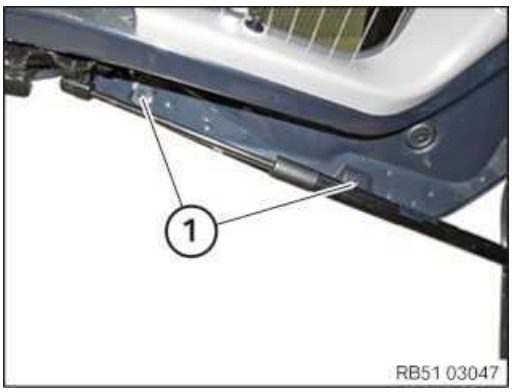
- Connect the quick connector of the water pipe to the washer jet.
- Connect the connector to the additional brake light.



- Tighten the screws (1).

Rear spoiler lower section to tailgate

Fillister head bolt		8 Nm

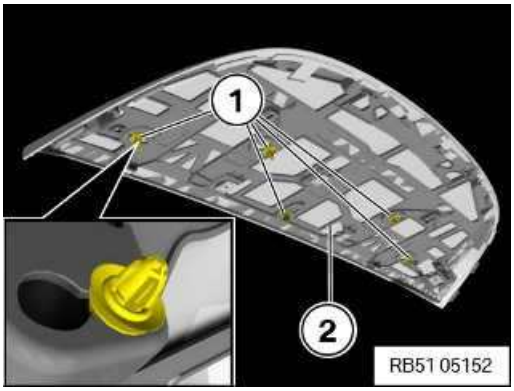


- Tighten screws (1) on left and right.

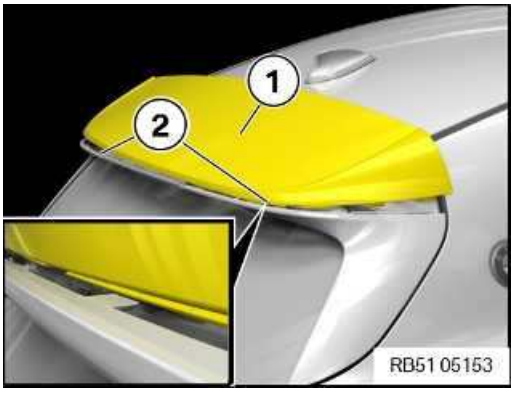
Rear spoiler lower section to tailgate, side

Oval-head screw		2,6 Nm

14 – Attach rear spoiler

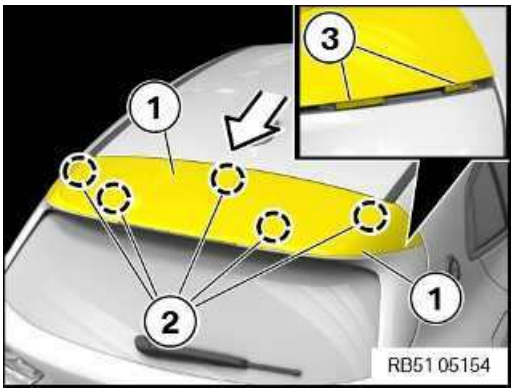


- Check clips (1) on the rear spoiler (2) for damage, renew if required.

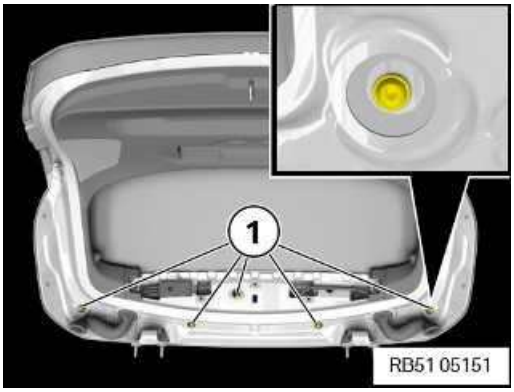


- Position the rear spoiler (1) on the guides (2) .

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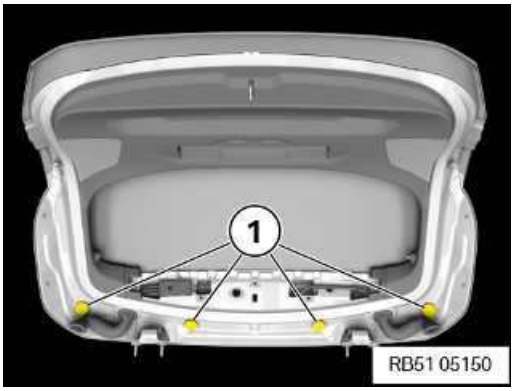
- Slide the rear spoiler (1) onto the lower section of the rear spoiler in the direction of the arrow.
- Clip in the rear spoiler (1) with the clips (2) and clip on the latch mechanisms (3) on both sides.



- Tighten the screws (1).

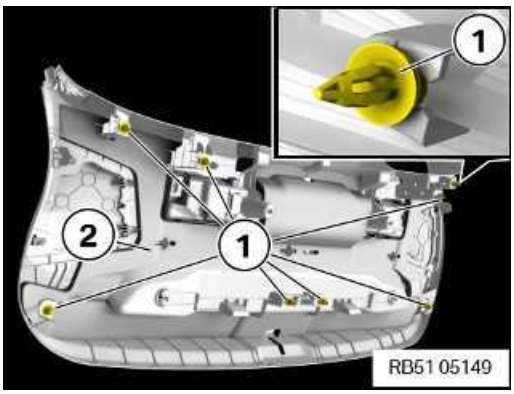
Rear spoiler to tailgate

Oval-head screw		Tightening torque	3,1 Nm

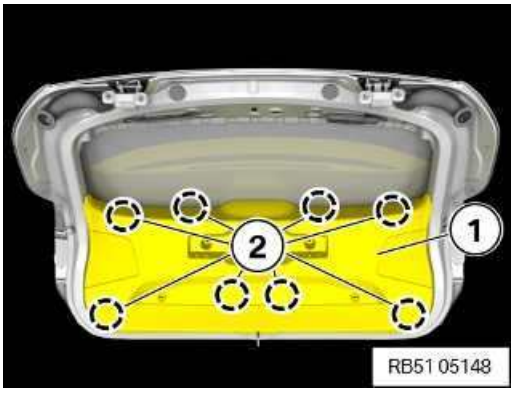


- Insert the covers (1).

15 – Installing the tailgate trim panel

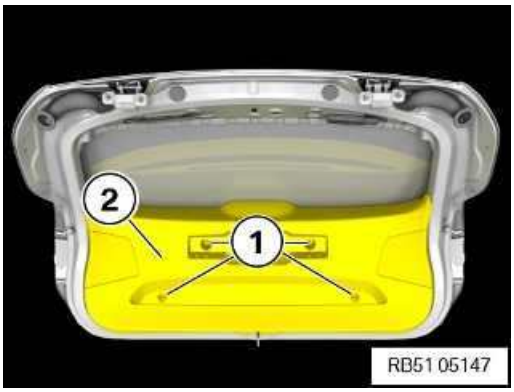


- Check the clips (1) on the tailgate trim panel (2) for damage and replace where required.



- Clip in the tailgate trim panel (1) with the clips (2).

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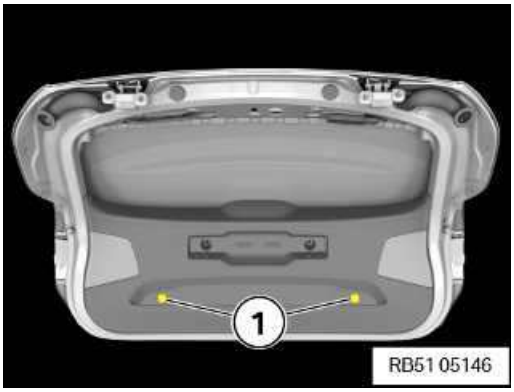


- Tighten the bolts (1) at the tailgate trim panel (2).

Tailgate trim panel

Screw		Tightening torque	1,8 Nm

- If necessary, insert and fasten the warning triangle in the tailgate trim panel (2).



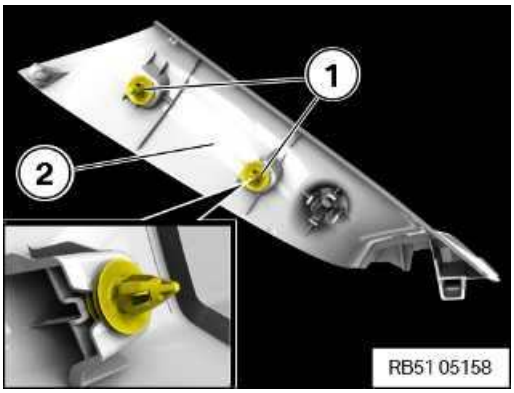
- Insert the covers of the screw points (1).

16 – Mount both trim pieces for the rear window frame on the side

NOTICE

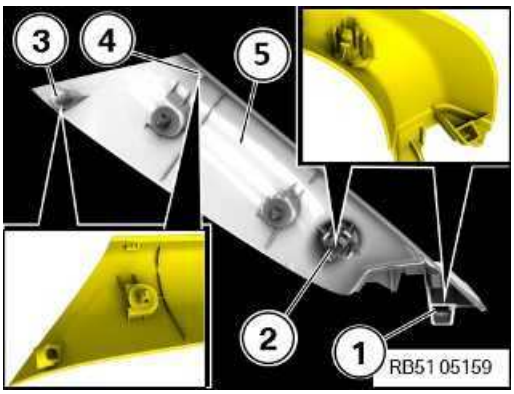
Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the rear window frame on the side**



- Check the clips (1) on the trim for the side rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1), (2), (3) and (4) at the trim for the side rear window frame (5) for damage.

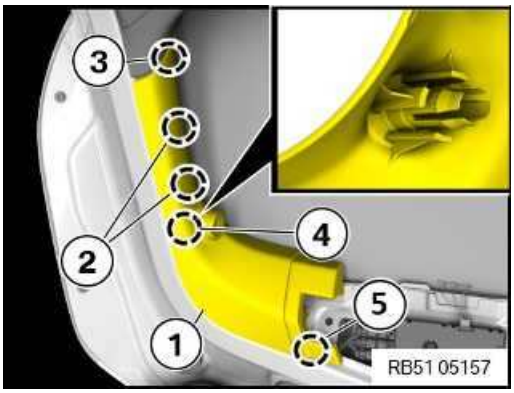
Result

» The latch mechanisms (1), (2), (3) or (4) are damaged.

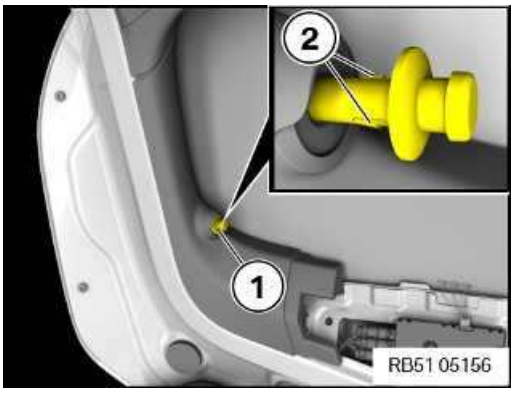
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Measure

- Renew the trim for the side rear window frame (5).

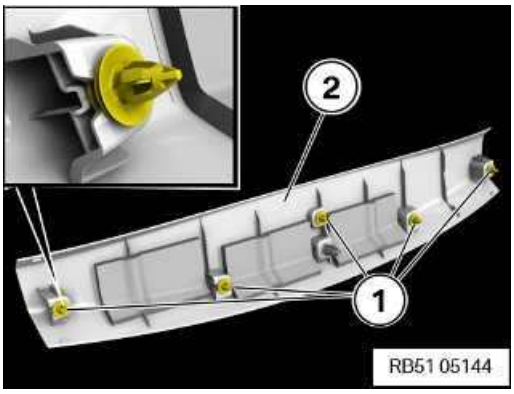


- Clip in the trim for the side rear window frame (1) with the clips (2) and in the latch mechanisms (3), (4) and (5).



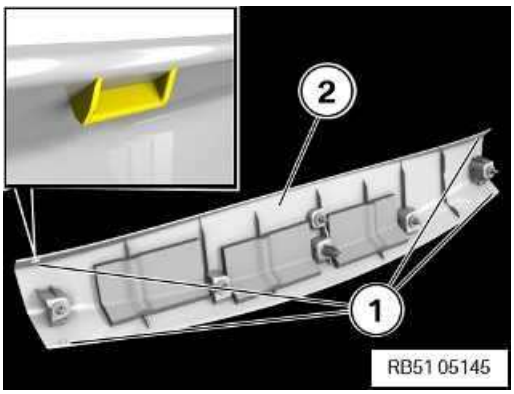
- Clip in the mounting button (1) with the latch mechanisms (2).

17 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

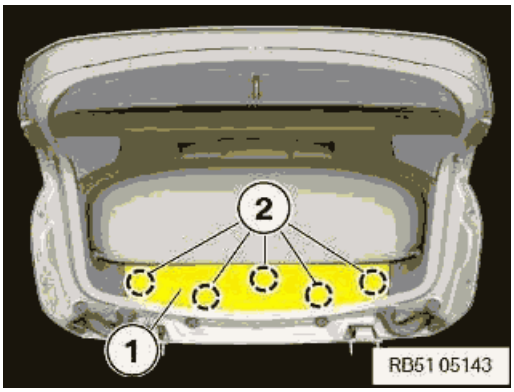
Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).

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- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

Ground strap to tailgate — Used in step 10

Oval-head screw	Tightening torque		2,6 Nm

Wiper motor to tailgate — Used in step 11

Screw		Tightening torque	7,6 Nm

Rear spoiler lower section to tailgate — Used in step 13

Fillister head bolt			8 Nm

Rear spoiler lower section to tailgate, side — Used in step 13

Oval-head screw			2,6 Nm

Rear spoiler to tailgate — Used in step 14

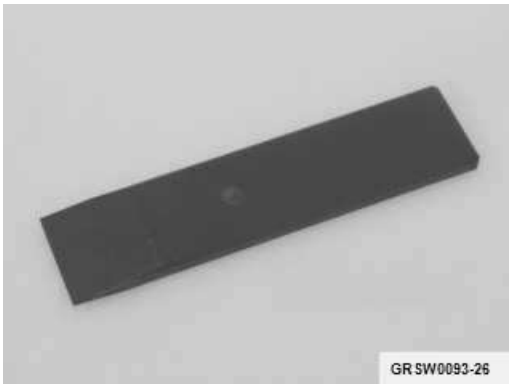
Oval-head screw		Tightening torque	3,1 Nm

Tailgate trim panel — Used in step 15

Screw		Tightening torque	1,8 Nm

Overview of Special Tools

0 496 570 (00 9 326) Wedge



Common — Used in step 4

Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Overview Technical Data

Adhesive bead — Used in step 10

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b = Width	7 mm ... 9 mm
h = Height	11 mm ... 13 mm

Links

General repair instructions	Used in step
51 31 ... General procedure for the disassembly and installation of bonded window glass	

Repair instructions	Used in step
51 31 ... Removing windows with a "Spider"	
61 35 ... Notes on ESD protection (Electro Static Discharge)	

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51 31 011 Replace windscreen

RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

TECHNICAL INFORMATION

The following procedure forms the basis for these repair instructions and must be observed without fail.
For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

TECHNICAL INFORMATION

Perform window removal using the "spider".
For additional information see: 51 31 ... Window glass removal using "spider"

PRELIMINARY WORK

1 – Required new parts/consumables

- Have the following new parts/consumables to hand.

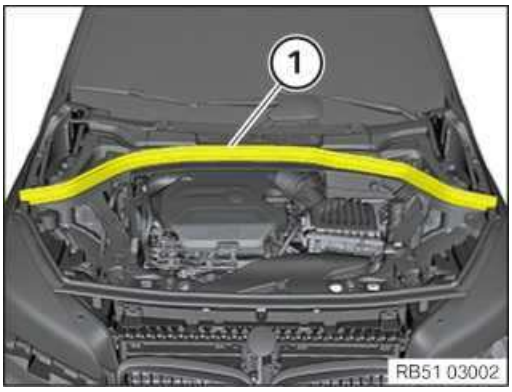
Material	Quantity
Windscreen	1
Cover on the windscreen	1
Sound insulation for the cowl panel	1
Spacer buffer 5 x 5 x 20 mm	6
Small repair kit	1
Sika activator-205 (for cover of windscreen)	1

2 – Remove the seal for the rear bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

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- Pull off rear bonnet seal (1) towards the top and remove.

3 – Remove the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

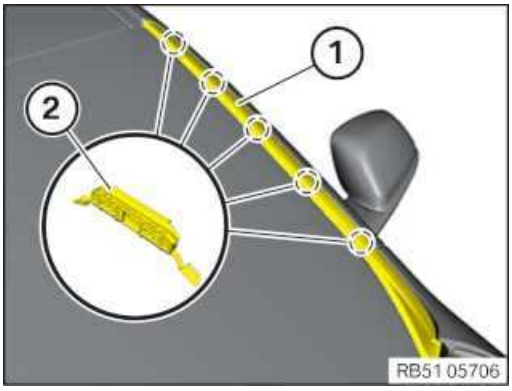
▶ **Remove the gutter strip on the windscreen**

RISK OF DAMAGE

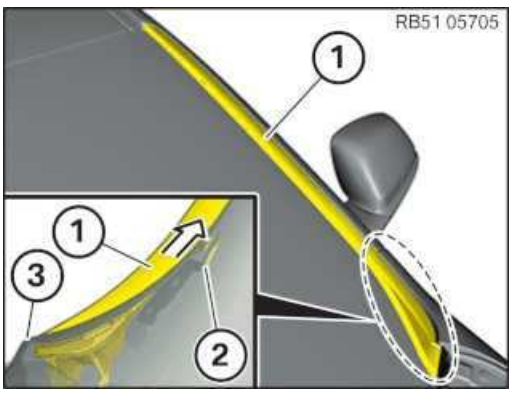
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



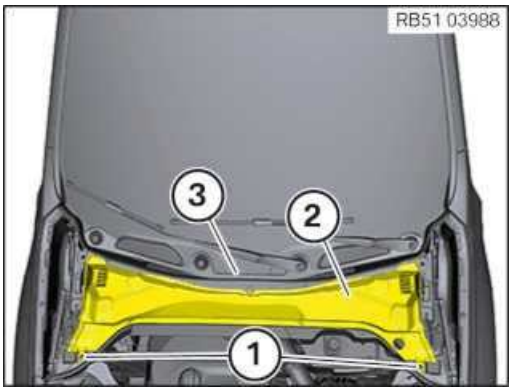
- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.



- Pull out the gutter strip (1) from the guide (2) in direction of arrow and carefully feed out at the side panel (3).

4 – Removing front cowl panel cover

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- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

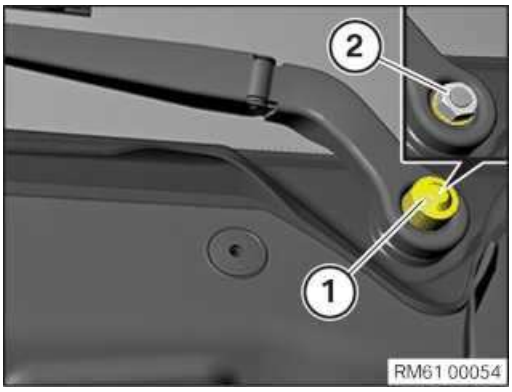
5 – Remove left and right wiper arm

RISK OF DAMAGE

Damage to wiper console

While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do not lift off wiper arm, else the wiper console may break on the predetermined breaking point for the pedestrian protection.



- Pull off the protective cap (1) and release the nut (2) below it.



- Pull off windscreen wiper arm (1)with special tool .

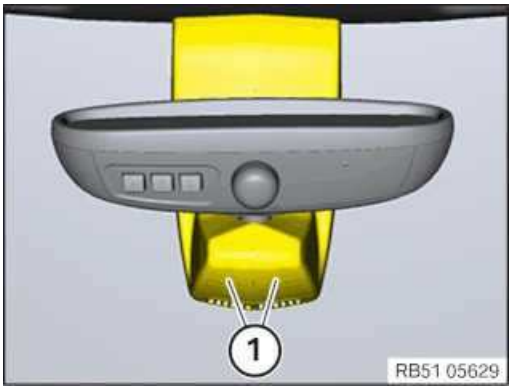
6 – Remove the rear cowl panel



- Pull off the cowl panel cover (1) towards the top, starting from the side and feed out.

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7 – Remove the cover on the inside mirror

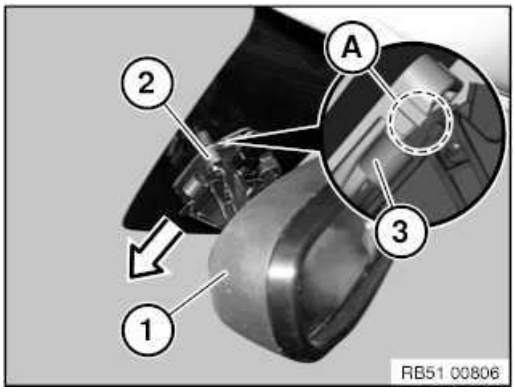


- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

8 – Removing the interior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



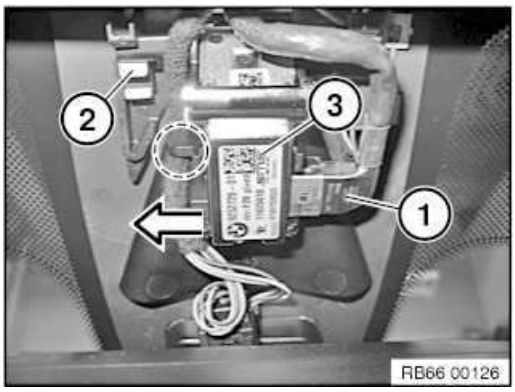
- Make sure that the interior mirror (1) does not bend or twist during removal.

  The interior mirror (1) is held by the clamp (3) and the latch mechanism in this area (A) on the base (2).
- If necessary unlock and disconnect the plug connection on the interior mirror (1).
- Pull off the interior mirror (1) from the mirror socket (2) with a downwards jerk in parallel to the windscreen.

9 – Remove the KAFAS camera

TECHNICAL INFORMATION

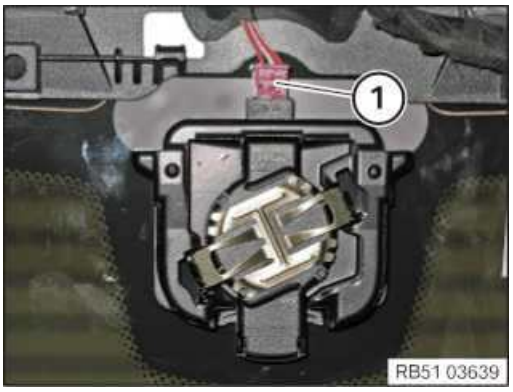
The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.



- Disconnect plug connection (1).
- Unclip cable in marked area.
- Unlock the retaining clamp (2) and remove camera (3) in direction of arrow.

10 – Disconnect the plug connection on the rain-light-solar-condensation sensor

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- Disconnect plug connection (1).

11 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

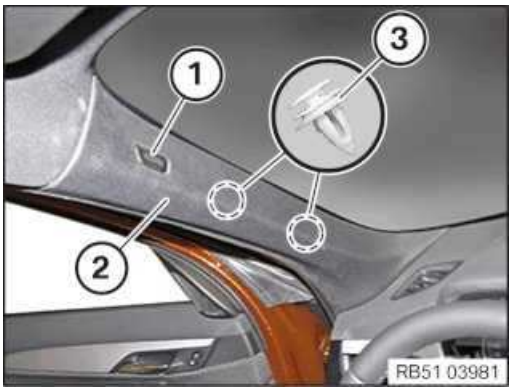
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

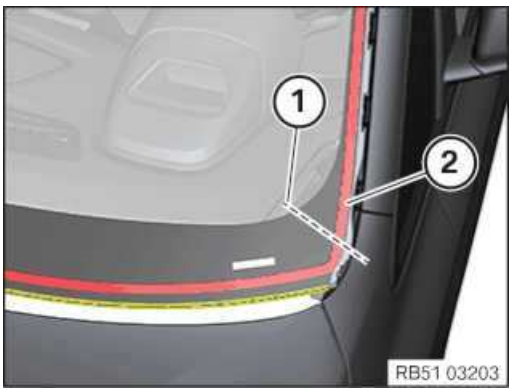


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

MAIN WORK

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12 – Removing the windscreen



- Tape off body in area of piercing point with fabric adhesive tape.
- Push the thread (1) through the adhesive bead (2) along the line from the inside.
- Cut out the windscreen with spider.

13 – Renew the spacer



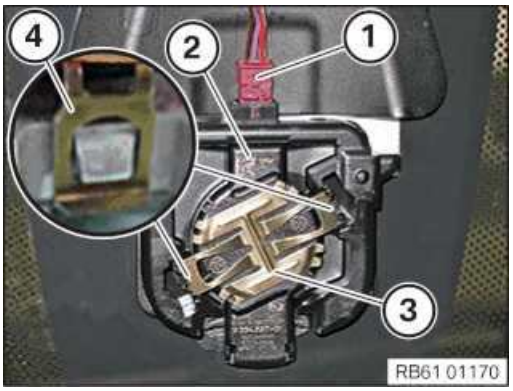
- Remove the spacer (arrows) completely.
- Renew the spacer 5 x 5 x 20 mm (arrows).

  Parts: Spacer 5 x 5 x 20 mm
- Bond the spacer (arrows) centrally on the embossed marks.

14 – Remount rain-light-solar-condensation sensor



- Carefully clean the new windscreen in contact area (1) of the rain-light-solar-condensation sensor.



RISK OF DAMAGE

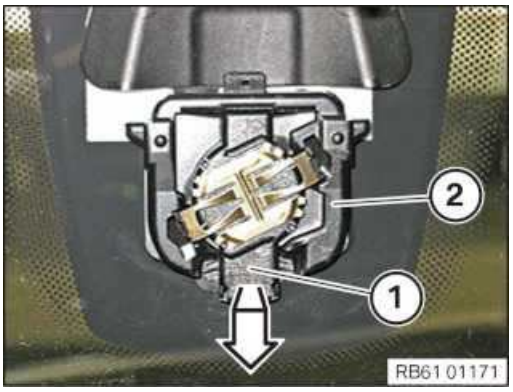
Damage to silicone surface.

A damaged silicone surface can lead to malfunctioning of the rain-light-solar-condensation sensor.

- Do not touch or damage the silicone-coated surface on the rain-light-solar-condensation sensor.
- After releasing lock, wait approx. 30 min. at 20°C for silicone surface to relax.

- Disconnect the connector (1) .
- Push in retaining spring (3) on both sides and unlock the lock (4) by means of a screwdriver.
- Release the rain-light-solar-condensation sensor(2).

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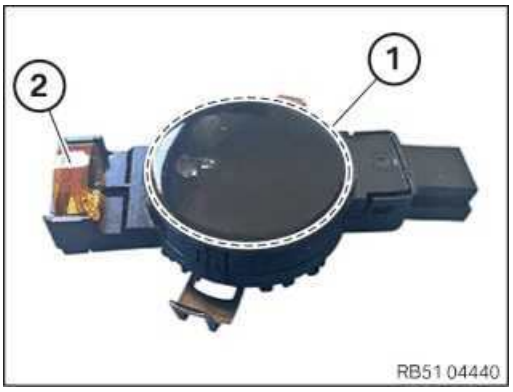


- Slowly pull off rain-light-solar-condensation sensor (1) from the holder in the direction of the arrow (2). At the same time, monitor the release of the silicone surface from the outside.

  The silicone surface must be released uniformly from the windscreen, lower the speed at which it is released if necessary.

▸ Checking the gel pad

Check



- Check the silicone-coated surface (1) and the printed circuit board (2) for damage.

Result

» Silicone-coated surface (1) is damaged.

Measure

- Replace the gel pad.

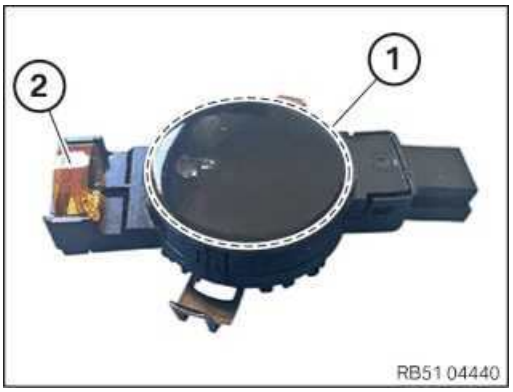
Result

» The printed circuit board (2) is damaged.

Measure

- Replace the rain-light-solar-condensation sensor.

▹ Replacing the gel pad



RISK OF DAMAGE

Damage to the surface.

The use of sharp-edged tools may damage the surface.

- Use only microfibre cloths.

- Remove the gel pad (1) by hand.

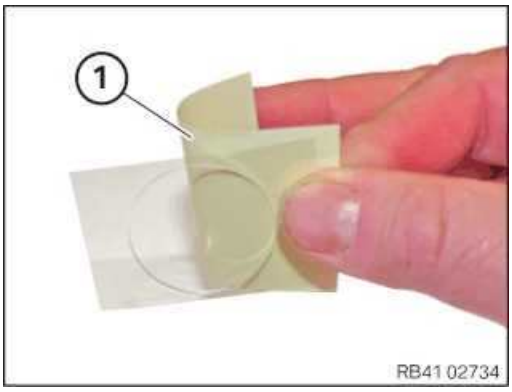
  Do not touch or damage the printed circuit (2).

- If necessary, remove any gel residue using a microfibre cloth.
- Clean the surface of the rain-light-solar-fogging sensor using a microfibre cloth R2 soaked in cleaning agent.

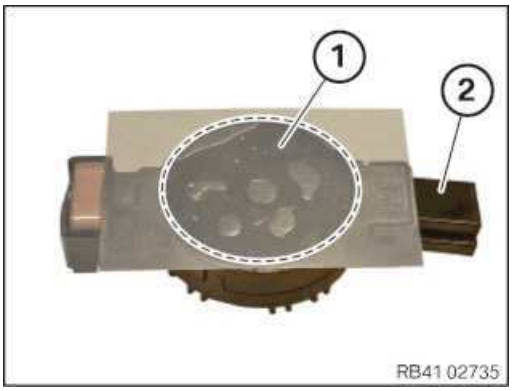
Expendable materials

Cleaning agent R2	500 ml	83190417324

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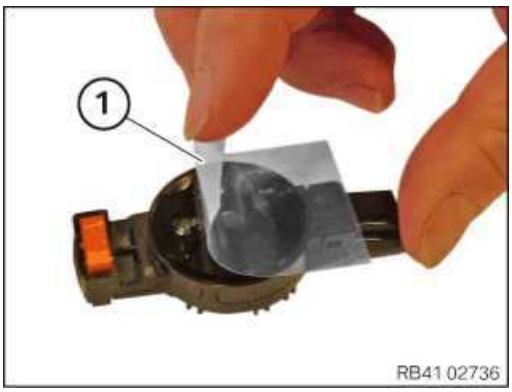
- Remove the yellow protective film (1).



- Place the gel pad (1) in the centre of the surface of the rain-light-solar-fogging sensor (2).

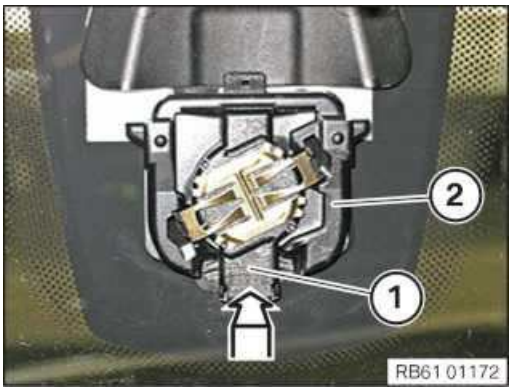
  Do not eliminate existing air bubbles.

  Air pockets disappear within 30 min after mounting the sensor on the windscreen.

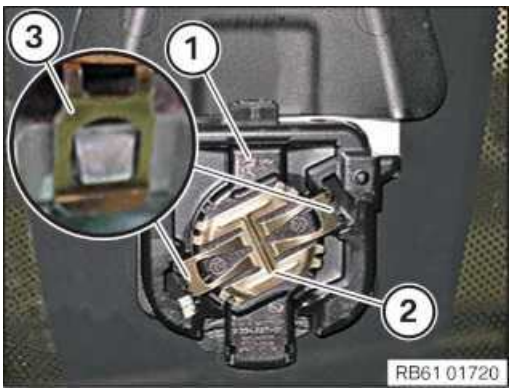


- Remove transparent protective film (1).

◁



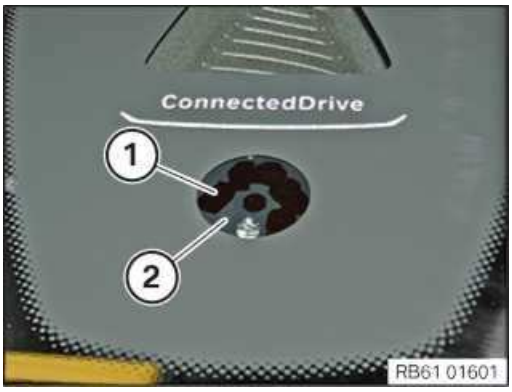
- Feed the rain-light-solar and condensation sensor (1) into the holder (2) on the new windscreen in the direction of the arrow.



- Centrally press on the solar rain/light sensor and condensation sensor (2) onto the metal spring (3).

  To lock, consecutively press down both sheet metal tabs (4) on every side.

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- Check field of view for air pockets.

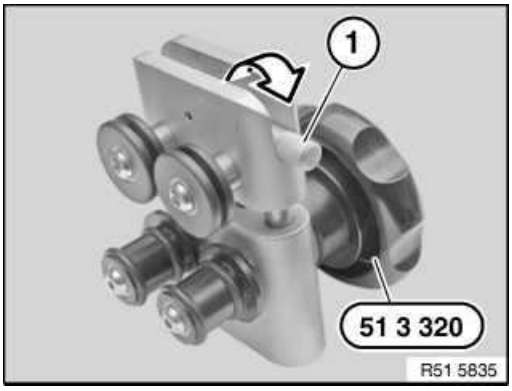
  Visible shading (1) and (2) do not represent air pockets, but indicate the optical element of the sensor. This is not a functional limitation.

15 – Installing the cover on the windscreen

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



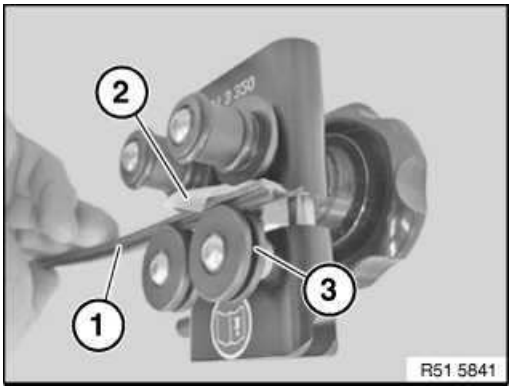
- Clean the adhesive area of the windscreen and pre-treat with Sika activator -205.

  The Sika activator -205 must not get onto adhesive area of adhesive bead.

Adhesive

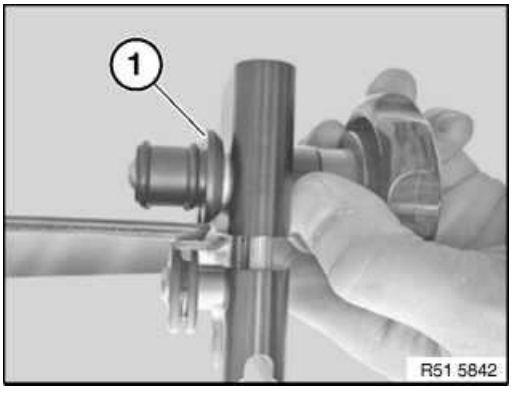
Aktivator -205	250 ml, Bottle	83190030155

- Adhere to the air drying time of 1 min at least.
- Reposition the lever (1) and open the special tool .



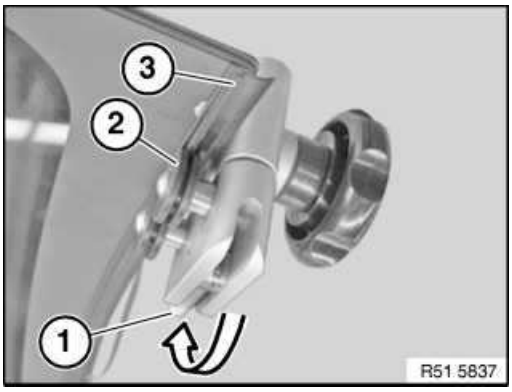
- Pull off protective film (2) in stages from adhesive tape.
- Renew cover (1).

  Parts: Cover
- Insert the cover (1) into the guide pulleys (3).

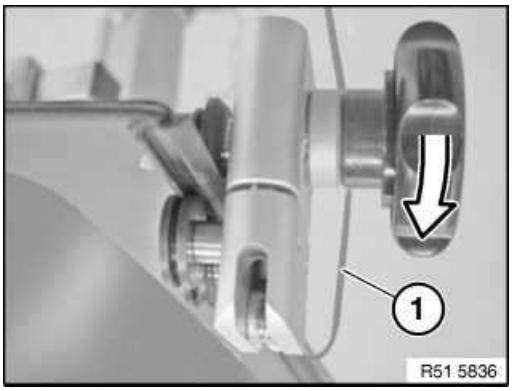


- Place the special tool with the pressure rollers (1) up against the window edge.
- Align the cover on the outer edge of the window glass.
- Fit the cover and visually check for perfect fit.

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- Reposition the lever (1) in direction of arrow and close the special tool.
- Ensure the cover (3) fits correctly into the guide pulleys (2).



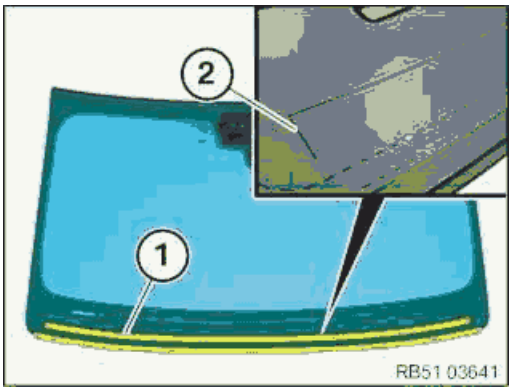
- Continue to pull off protective film (1) in stages from adhesive tape.
- Run the special tool with the handwheel over the entire upper edge of the window glass.

16 – Mount the sound insulation for the cowl panel

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

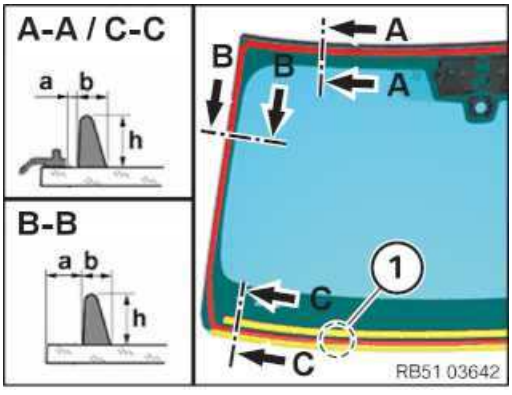
For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Clean the adhesive area for the sound insulation (1) for the cowl panel.
- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation
- Bond the sound insulation (1) for the cowl panel along the mark (2) to the windscreen.

17 – Install windscreen.

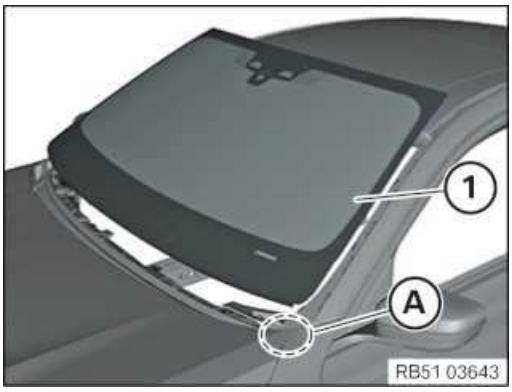


- Prepare the glue cartridge with the standard nozzle C.
- Apply bead joint in area (1).
- Apply adhesive bead within the mark on the windscreen.

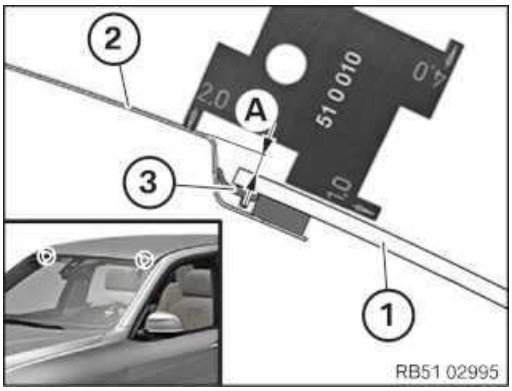
Cut	A - A	B - B	C - C
a = Position of the adhesive bead	2 ±2 mm	3 ±2 mm	2 ±2 mm
b = Width of adhesive bead	8 ±1 mm	8 ±1 mm	8 ±1 mm
h = Height of adhesive bead	12 ±1 mm	12 ±1 mm	12 ±1 mm

- Adhere to the geometry of the adhesive bead to make sure that one glue cartridge is sufficient for the complete windscreen.

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- Carefully perform the following operations on the windscreen (1) with suction lifter:
  - running it in parallel to the A-pillar
  - feed it in the area (A) on left and right below the side panel
  - Position at top
  - Align sides evenly
  - Press upwards until sealing rests evenly on roof
  - press evenly all around
  - fix with adhesive tape on the roof



- Measure short length (A) of the windscreen (1) to the roof outer skin (2) with special tool **0 495 259 (51 0 010)**.
- Adjust short length (A).

Gap dimension of windscreen to the body

Short length A	2,5 mm ... 4,5 mm

- Position the windscreen (1) in such a way that the rubber frame (3) lies even and parallel to the roof outer skin (2).

POSTPROCESSES

18 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

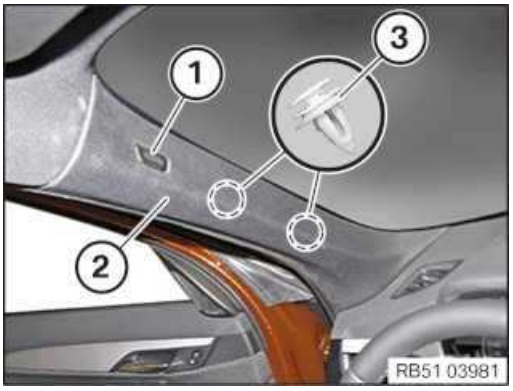
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

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TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

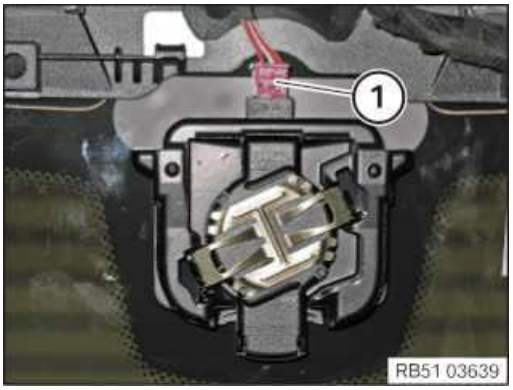
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

19 – Connect connector to rain-light-solar-condensation sensor

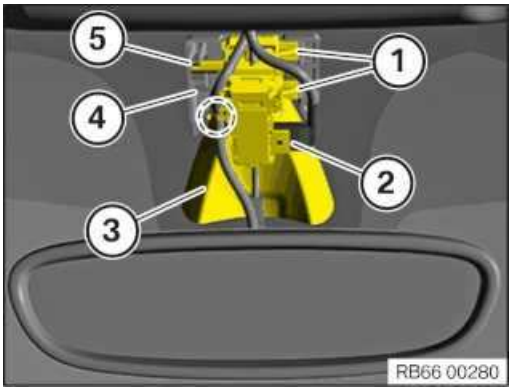


- Connect connector (1).

20 – Install the KAFAS camera

TECHNICAL INFORMATION

The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.



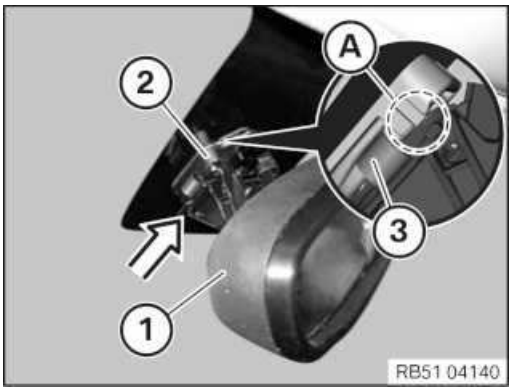
- Correctly feed in the KAFAS camera (3) with the guides (1) on the holder (4).
- Engage the latch mechanism (5).
- Connect connector (2).
- Attach cable in the marked area.

21 – Installing the interior mirror

TECHNICAL INFORMATION

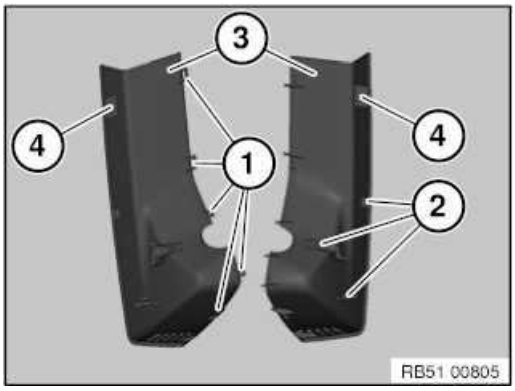
Carry out the work at temperatures between 18 °C and 23 °C only.

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- Check the clamp (3) on both sides of the interior mirror (1) for damage and renew as needed.
- If necessary, connect the connector on the interior mirror (1).
- Slide the interior mirror (1) parallel to the windscreen in direction of arrow into the base (2) and lock correctly in area (A).

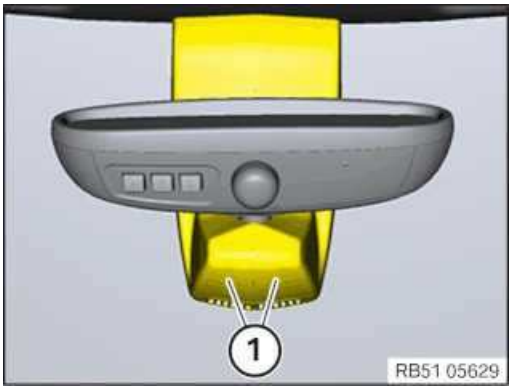
22 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



- Install covers on the interior mirror (1) clip together.

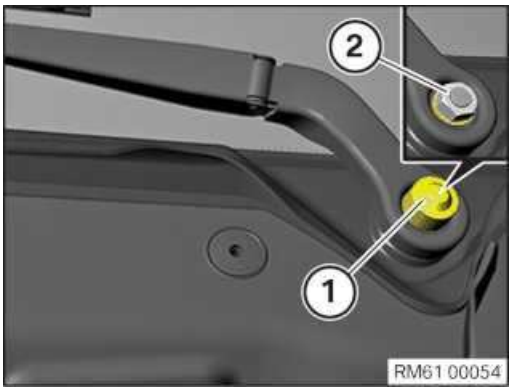
23 – Install the rear cowl panel



- Insert the cowl panel cover (1) and press it into the latch mechanism on the windscreen starting at the side.

24 – Install left and right wiper arm

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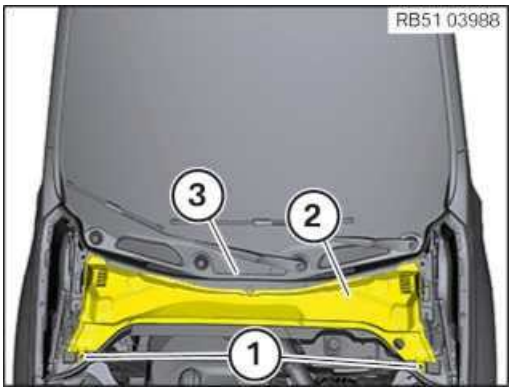
- Join wiper arm and tighten with nut (2).

Windscreen wiper arm

Combination hexagon nut		Tightening torque	35 Nm

- Join the protective cap (1).

25 – Installing front cowl panel cover



- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

26 – Install the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the gutter strip on the windscreen**

RISK OF DAMAGE

Scratches.

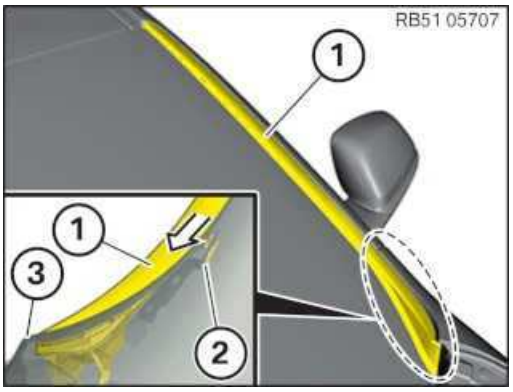
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

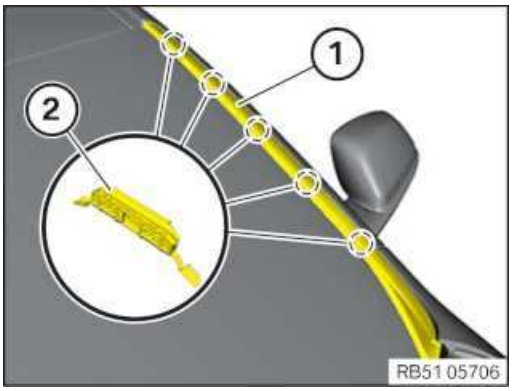
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.

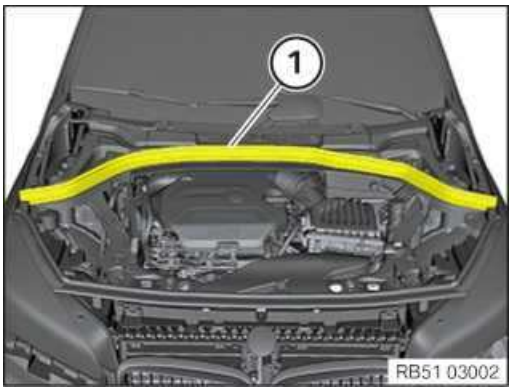


- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

27 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

28 – Calibrate KAFAS camera

TECHNICAL INFORMATION

The calibration process of the KAFAS camera is not complete until the vehicle drives in traffic. Tell the customer that some assistance systems are temporarily unavailable after vehicle pick-up.

- Perform camera calibration using diagnosis system.

  Under Service Functions menu:

  - Driver assistance
  - Camera-based driver assistance systems
  - Calibration of camera-based driver support systems

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Additional Information

Overview of Tightening Torques

A-pillar trim panel to body

Used in step 18

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

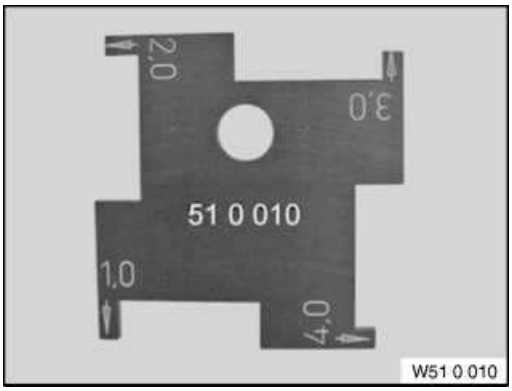
Windscreen wiper arm

Used in step 24

Combination hexagon nut		Tightening torque	35 Nm

Overview of Special Tools

0 495 259 (51 0 010) Gauge



Common	Used in step 17
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)
Included in the tool or work	
Storage location	B2
Replaced by	
In connection with	
SI-Number	01 10 05 (189)

Overview Technical Data

Gap dimension of windscreen to the body

Used in step 17

Short length A	2,5 mm ... 4,5 mm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	11 18
51 00 ... Notes on component bonding using adhesive tape	15 16
51 31 ... General procedure for the disassembly and installation of bonded window glass	

Repair instructions	Used in step
51 31 ... Removing windows with a "Spider"	
61 35 ... Notes on ESD protection (Electro Static Discharge)	

Parts

Parts required

Designation	Used in step
Sound insulation cowl panel	16

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51 31 ... Window glass removal with wire pull handle

Special tools required:

- 2 150 267

Warning!

Follow safety instructions for working on vehicles with airbag systems (risk of injury).

Always wear safety goggles and protective gloves for your own safety.

Attention!

Handle sharp-edged tools with care (risk of damage to the head airbag and the window glass).

Attention!

Follow the vehicle-specific repair instructions!

Protect inner and outer working area (body, trim panels, cables etc.) against damage.

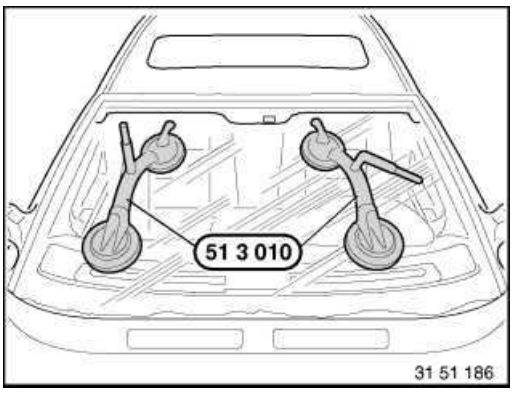
Depending on the area of application, a separating cord can also be used as an alternative to wire.

Using the separating cord prevents any damage to the body.

Do not pull the separating cord over any sharp edges (risk of tearing)!

Used tool:

- Wire pull handles
- Dashboard protection
- Wire starter (special tool 2 150 267)

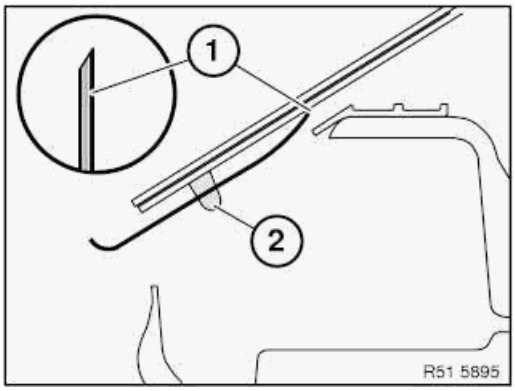


Use suction cups (51 3 010) to lift out the window glass.

Always keep both suction cups dry and clean to ensure their optimum adhesion on the windscreen.

Secure window glass (if necessary with adhesive tape) against falling out.

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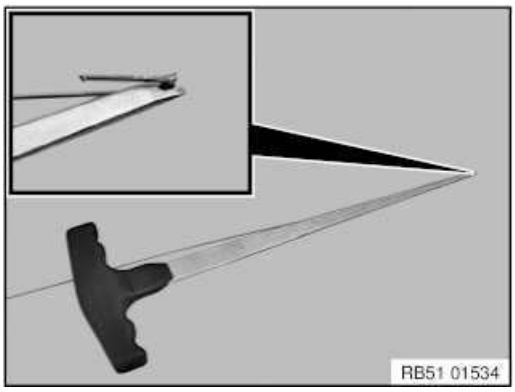


Pulling cutting wire into vehicle:

- Grip wire with pliers

  (If access is difficult: using wire starter 2 150 267 , feed wire through adhesive bead.)
- Wire end (1) must be bent towards window glass.
- Heat wire end (1) and use it to pierce adhesive bead (2).
- Pull approximately half of the wire into the passenger compartment

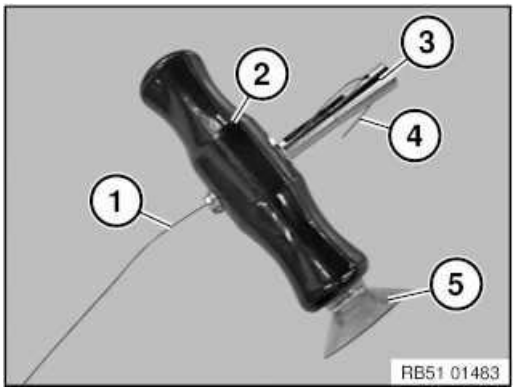
Note:
When using the separating cord, always pull it in using the wire starter 2 150 267 .



Using wire starter:

Bend wire end approx. 10 mm and insert in notched tip.

Pierce wire starter with uniform pressure through adhesive bead, wire end (bent part) must be positioned on window glass.



Attach wire pull handles:

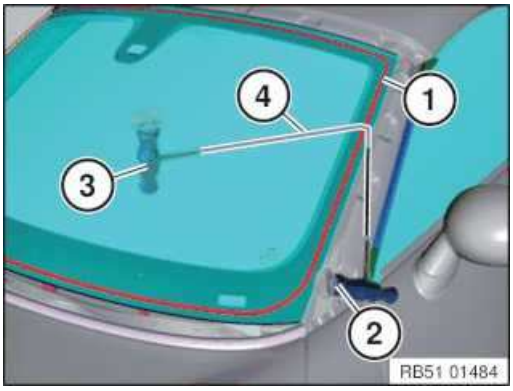
Feed in cutting wire (1) in cutting handle (2) and clamping element (3) as illustrated.

Move back cutting handle (2) over clamping element (3) and trap wire end (4).

Danger of injury!
Wire end (4) must not protrude out of cutting handle (2).

Cutting handle (2) can be secured with suction cup (5) to the vehicle window or body during each of the work operations. This prevents damage to the paint.

Fit second wire pull handle to other wire end.



Perform repair work with the aid of a second person.

Cutting wire (4) must be guided in cutting direction at an acute as possible angle (>45°) to adhesive bead (1).

Cut through adhesive bead (1) by pulling cutting handle (2) and at the same time providing counter support with cutting handle (3).

Pull back cutting wire (4) with cutting handle (3) and make sure that cutting wire (4) is always held under tension.

Cut through remaining adhesive bead in the same way.

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51 32 420 Remove and install/replace window frame trim of the front left or front right door

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

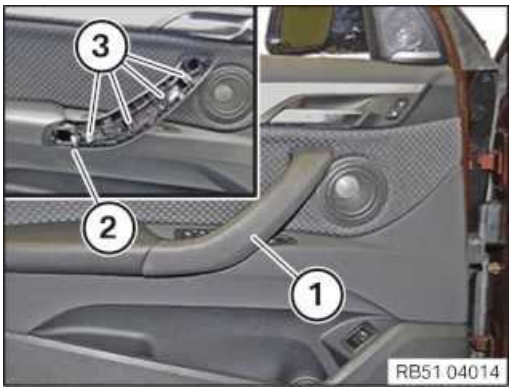
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

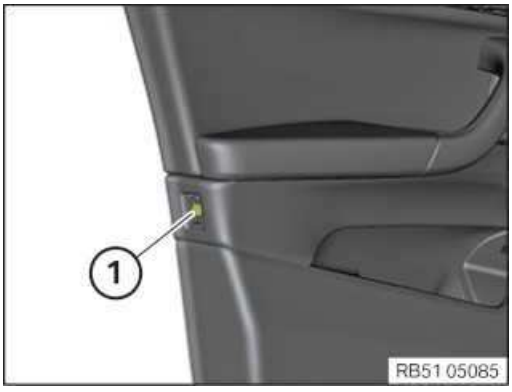
2 – Remove front door trim panel

RISK OF DAMAGE

Scratches.

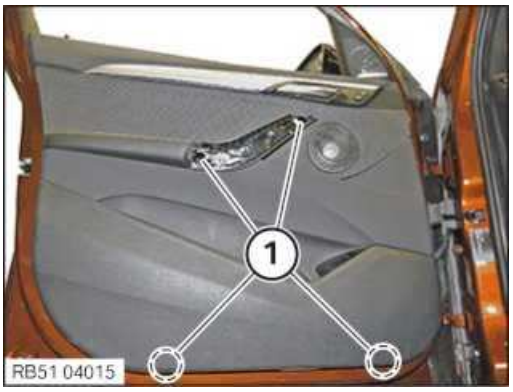
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

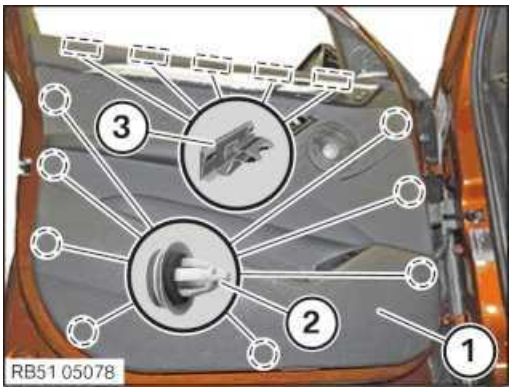


- If fitted: Remove the cover and unscrew the bolt (1).

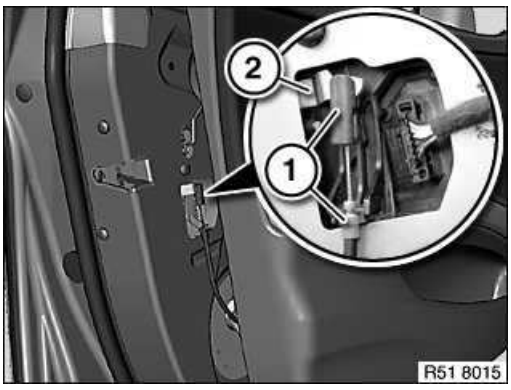
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- Loosen screws (1).

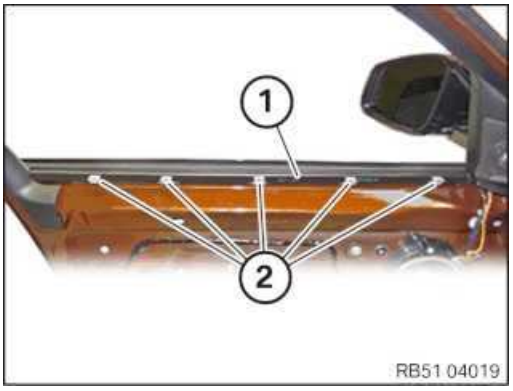


- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



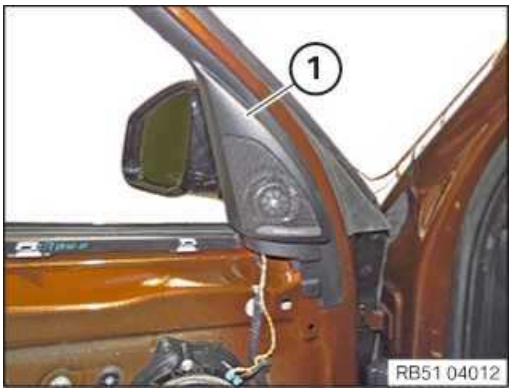
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Remove the inside front weather strip



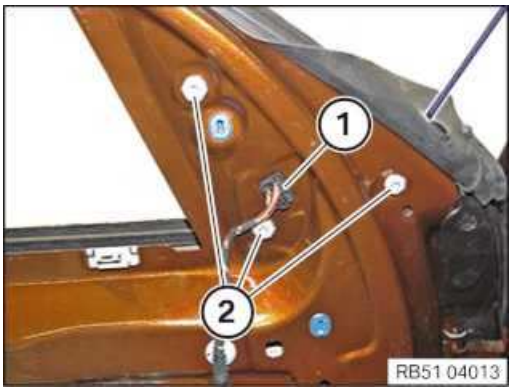
- Release the weather strip (1) from the clamps (2) and pull it off to the top.
  If weather strip (1) is reused, make sure it is not bent.

4 – Removing the exterior mirror



- Release the window frame cover (1) in the area of the mirror.
- If necessary, disconnect related plug connections.

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- Secure exterior mirror against falling out.
- Unlock plug connection (1) and disconnect.
- Release the screws (2) and remove the exterior rearview mirror.

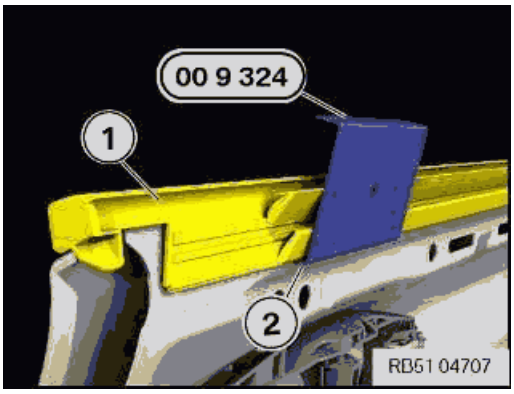
5 – Removing the weather strip on the outside of the front door

Prerequisite

The door window glass is open.

NOTICE

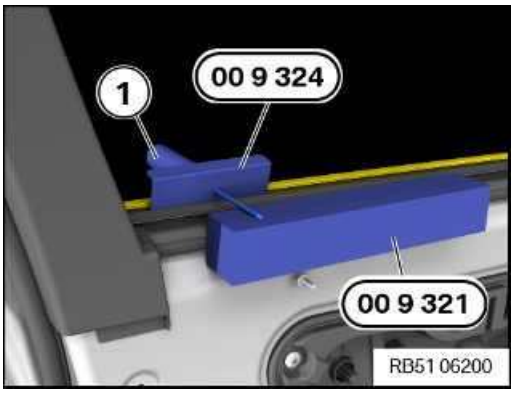
Description is for left component only. Procedure on the right side is identical.



NOTICE

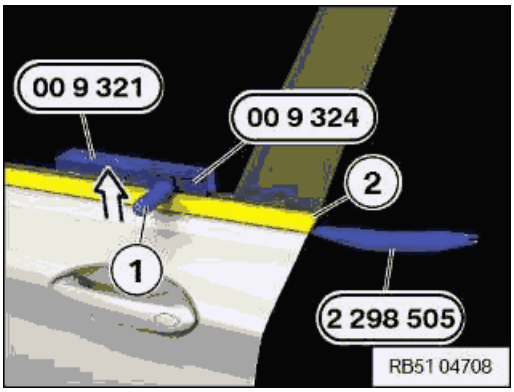
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Insert the special tool **0 495 484 (00 9 324)** at the front (on the A-pillar) into the window recess and slide it to the rear.
- Position the special tool **0 495 484 (00 9 324)** as shown at the lower edge of the weather strip (1) with the short shank (2).



- Place the special tool **0 490 538 (00 9 321)** on the inner door panel.
- Thread a suitable tool (1) through the opening in the special tool **0 495 484 (00 9 324)**.

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RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Lift up the rear weather strip (2) with the special tool **2 298 505** as shown; maximum 5 mm.
- With a suitable tool (1), move the lever in the direction of arrow using the special tool **0 490 538 (00 9 321)** for support.

  The special tool **0 495 484 (00 9 324)** lifts the window recess finisher strip (2) upwards.
- Repeat this process step by step towards the front until the window recess finisher strip (2) is removed completely.

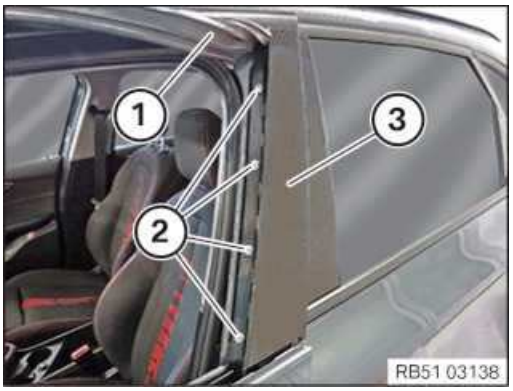
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MAIN WORK

6 – Remove the front window frame trim

Prerequisite

Door window glass open

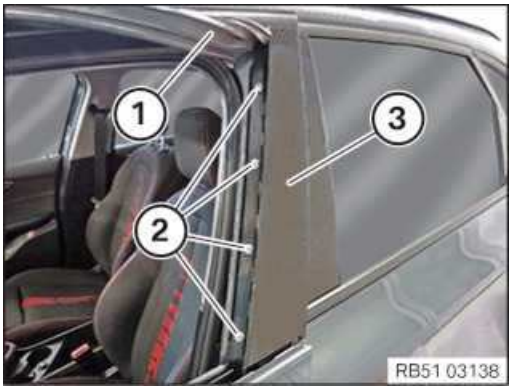


- Pull the rubber window seal (1) out of the rear window guide.
- Loosen screws (2).
- Feed out the trim (3) towards the top.

7 – Install the front window frame trim

Prerequisite

Door window glass open



- Feed in the trim (3).
- Tighten down screws (2).

Window frame trim to window frame

Screw		Tightening torque	2,4 Nm

- Coat the rubber window seal (1) with water prior to installation and mount on the rear window guide.

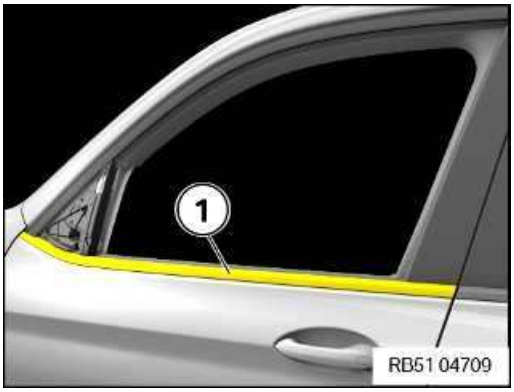
POSTPROCESSES

8 – Installing the weather strip on the front door on the outside

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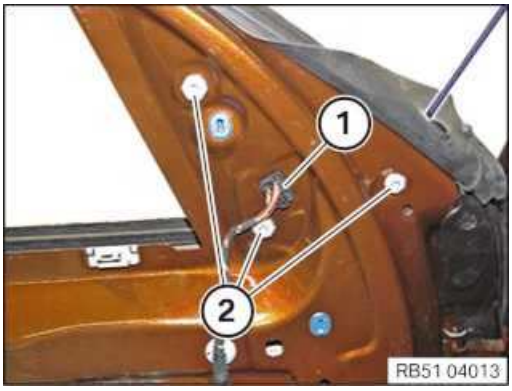
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the weather strip (1) for damage, renew if necessary.
- Coat the weather strip (1) with a suitable lubricant prior to installation.
- Position the weather strip (1) in front at the door.
- Press down the weather strip (1) across its entire length.

9 – Installing the exterior mirror



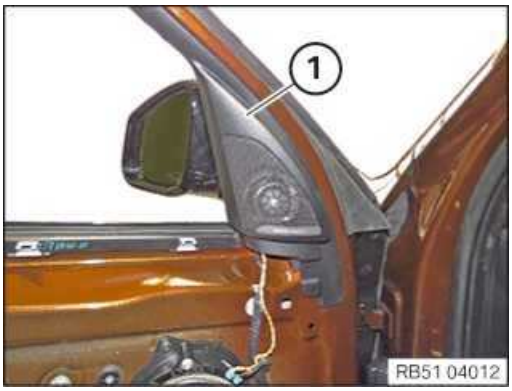
- Check sound insulation on the mirror base. It must not be damaged or missing.
- Mount exterior rearview mirror and tighten the bolts (2).

  Due to self-tapping screws, the tightening torque in the new condition of exterior mirror increases by 2 Nm.

Exterior mirror to door

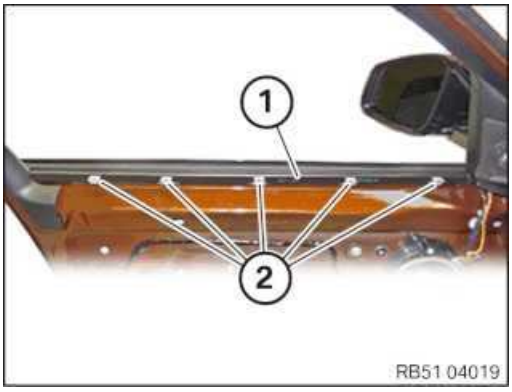
Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

- Connect the plug connection (1).
- Carry out functional check.



- Mount the window frame cover (1) in the area of the mirror.
- If necessary, connect related plug connections.

10 – Installing front inner weather strip



- Coat weather strip (1) prior to installation with approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.

  Replace defective clamps.
- Position weather strip (1) on the door and engage into the clamps (2).

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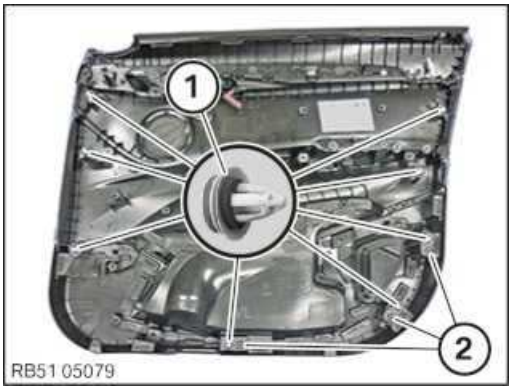
11 – Install front door trim panel

RISK OF DAMAGE

Scratches.

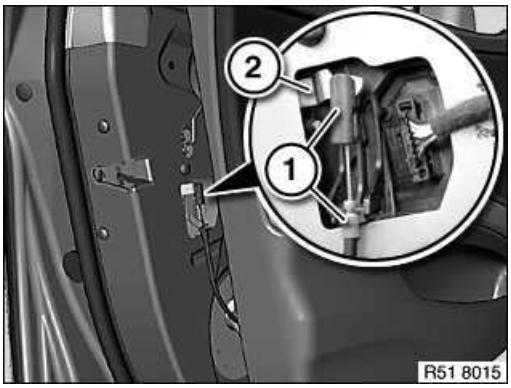
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

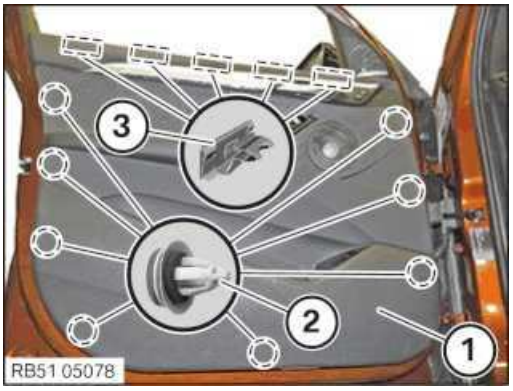


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

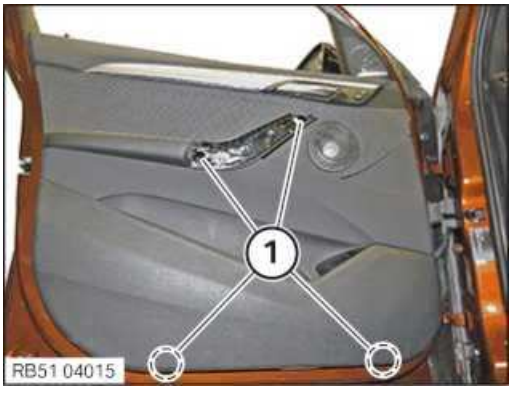
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

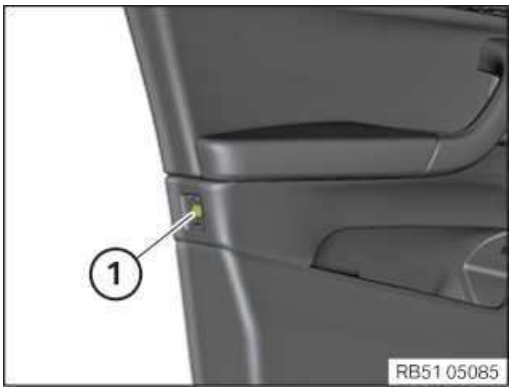


- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

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- If fitted: Tighten down screw (1).

Door trim panel to door

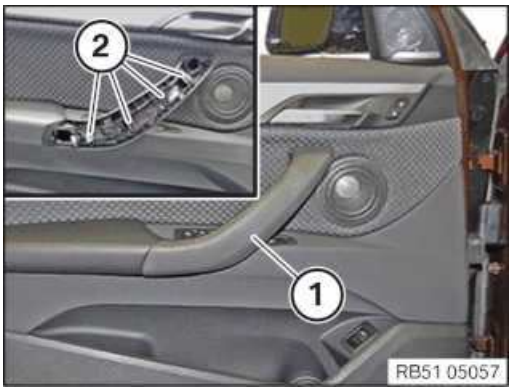
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

12 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Window frame trim to window frame Used in step 7

Screw		Tightening torque	2,4 Nm

Exterior mirror to door Used in step 9

Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

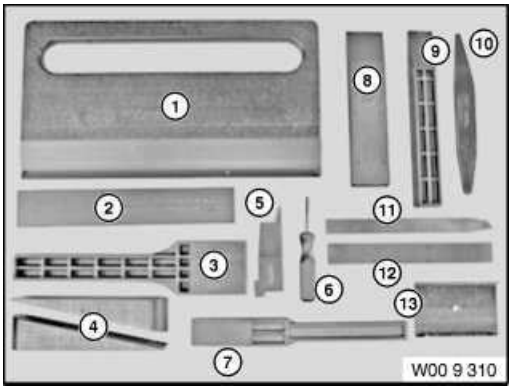
Door trim panel to door Used in step 11

Screw TS5x20		Tightening torque	2,5 Nm

Overview of Special Tools

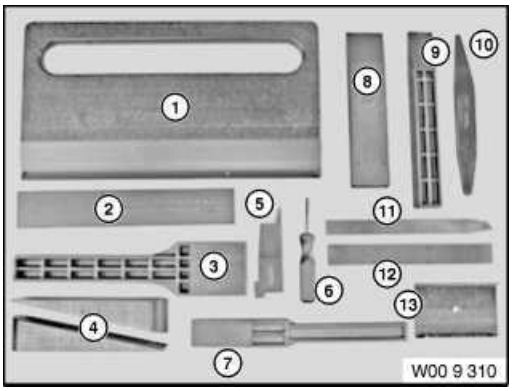
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0 495 484 (00 9 324) Panel wedge



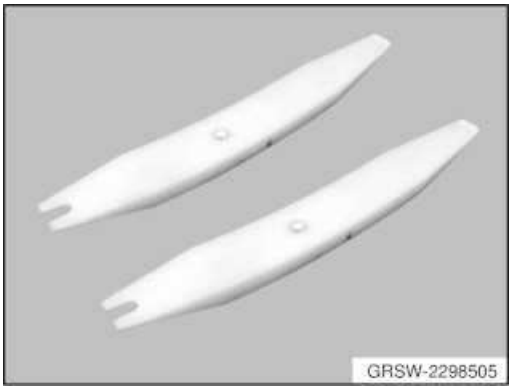
Common	Used in step 5
Usage	(Panel wedge (panel)) For removing cavity strips on the doors from E60
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 25 05 (230)

0 490 538 (00 9 321) Folding stick



Common	Used in step 5
Usage	
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

2 298 505 Wedge



Common	Used in step 5
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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51 32 170 Removing and installing/replacing door window glass, front left or right

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

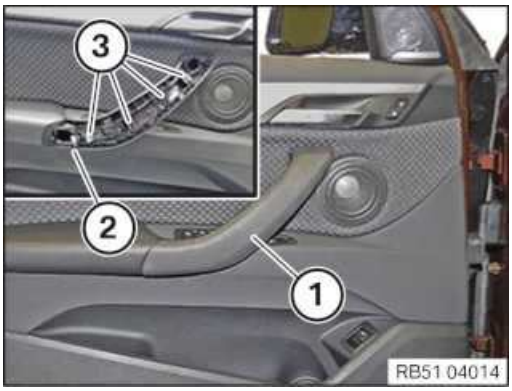
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

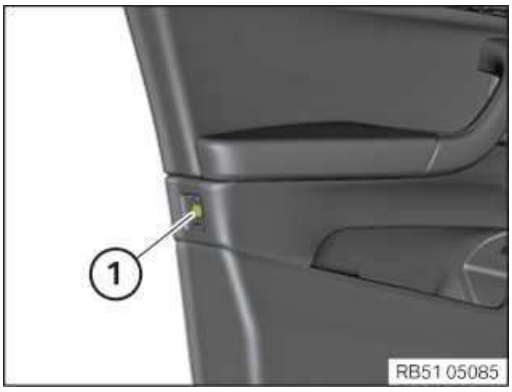
RISK OF DAMAGE

Scratches.

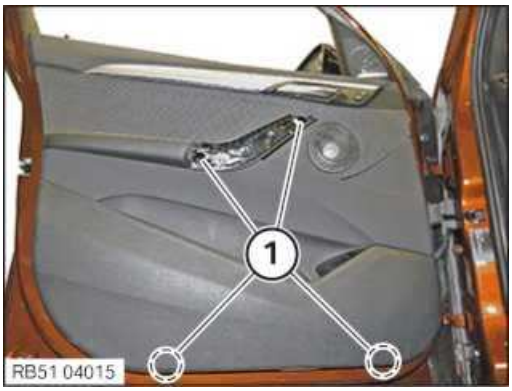
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

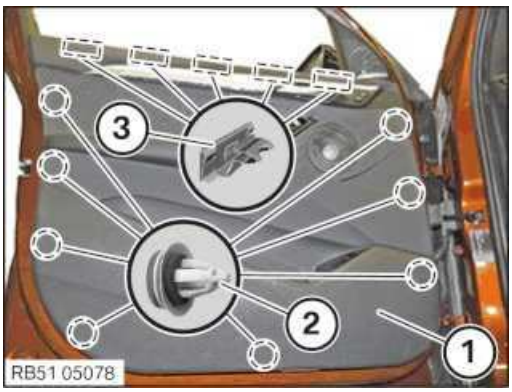
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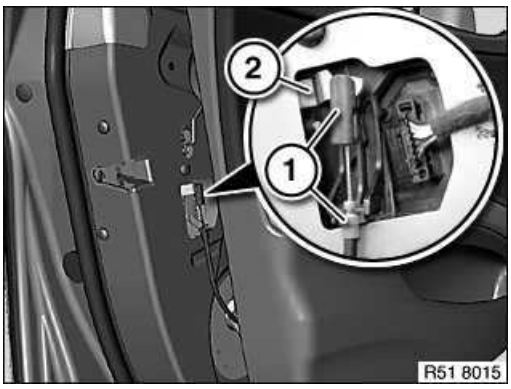
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



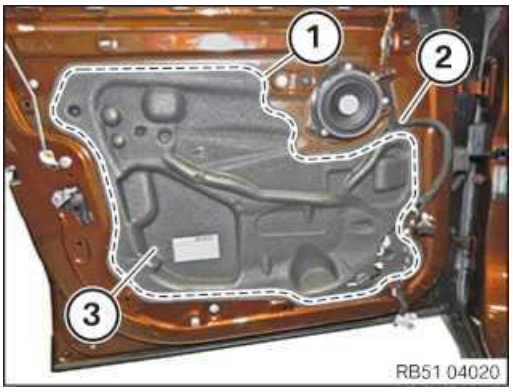
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

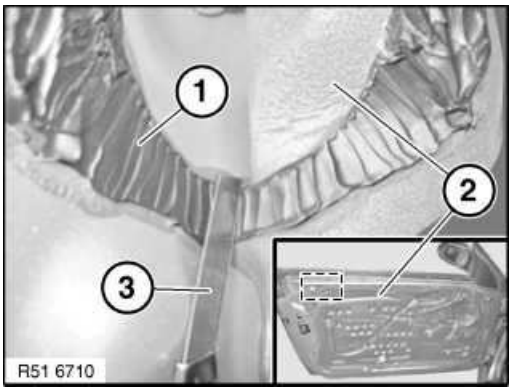
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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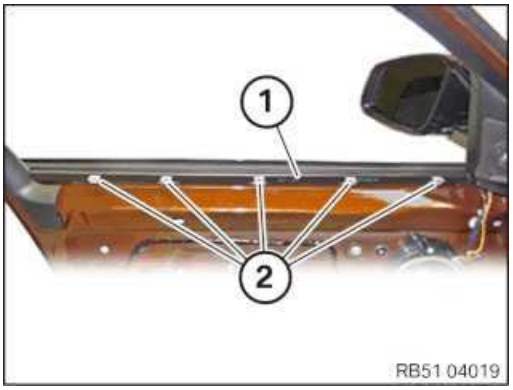


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).



- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Remove the inside front weather strip

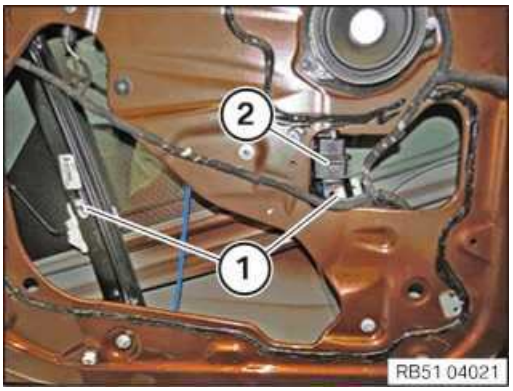


- Release the weather strip (1) from the clamps (2) and pull it off to the top.

  If weather strip (1) is reused, make sure it is not bent.

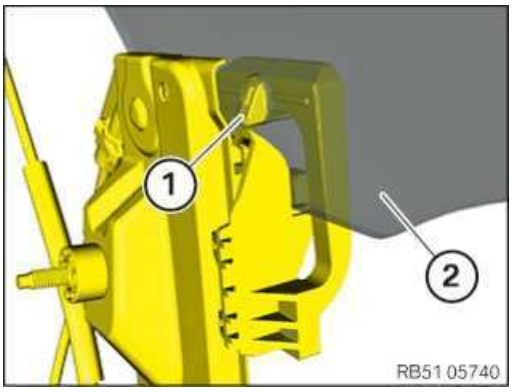
MAIN WORK

5 – Remove front door window glass



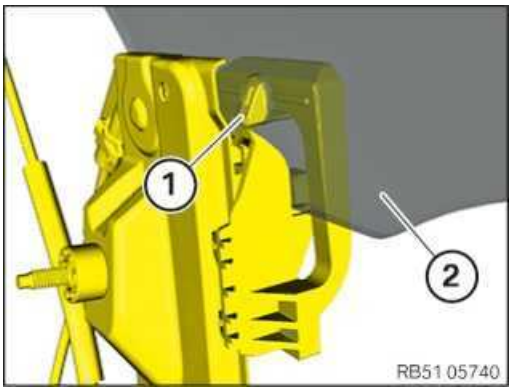
- Move the door window glass until the stop of the mounting (1) is accessible.
- Unlock the plug connection (2) to the power window motor and disconnect it (pinch hazard).

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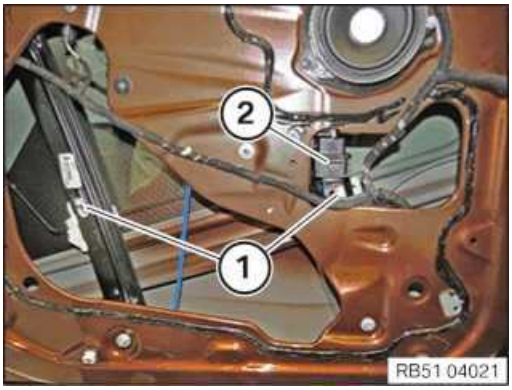
- Operate the stops of the front and rear mounting (1) using a suitable tool.
- Twist the door window glass (2) in the door frame and feed out upwards out of the door.

6 – Installing front door window glass



- Thread door window glass (2) from above into door.
- Check stops of the mounting (1) for damage.

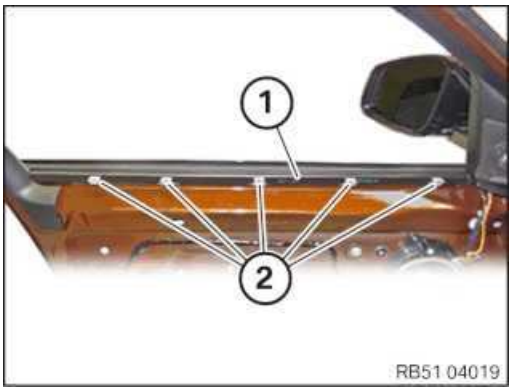
  The stops of the mounting (1) may not be missing or damaged.



- Feed the door window glass into the window guide and slide downward.
- Thread the door window glass into the mountings (1) and lock.
- Connect and lock the connector (2) on the power window motor.

POSTPROCESSES

7 – Installing front inner weather strip



- Coat weather strip (1) prior to installation with approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.

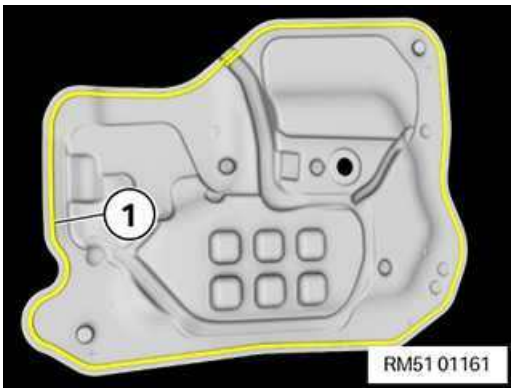
  Replace defective clamps.
- Position weather strip (1) on the door and engage into the clamps (2).

8 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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Check

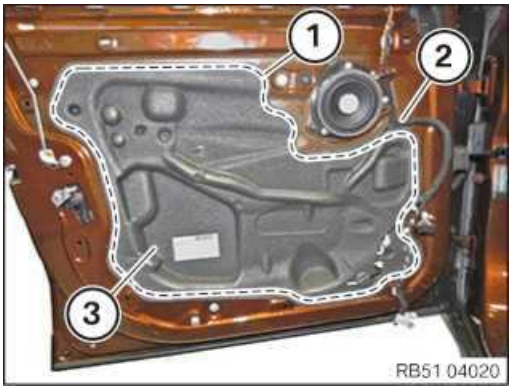
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

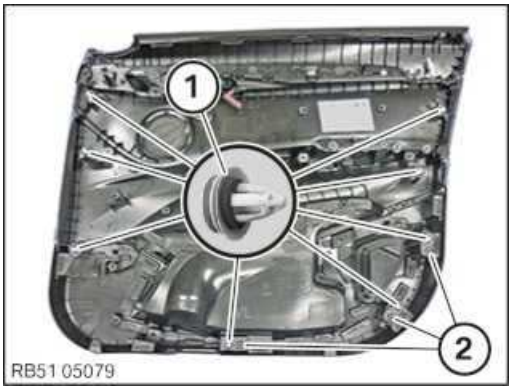
9 – Install front door trim panel

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

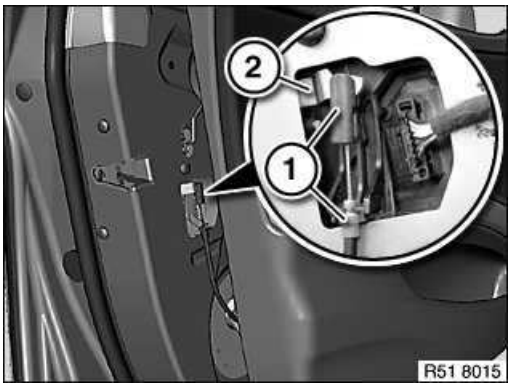
- Protect working area.
- Handle tools and components carefully.



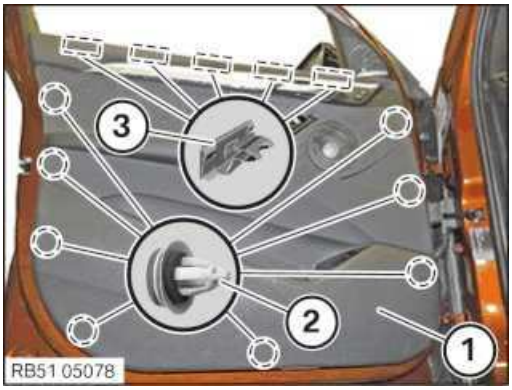
- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

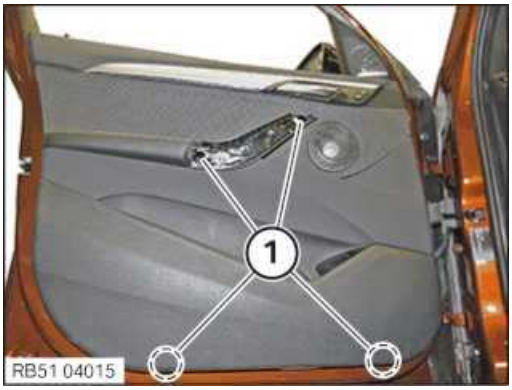
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- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



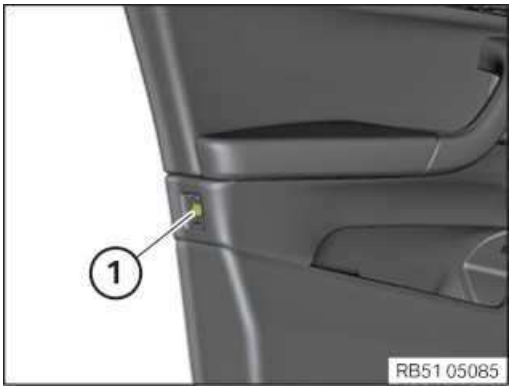
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

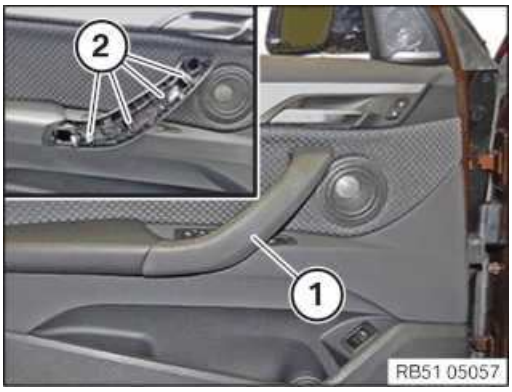
- Mount cover .

10 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door			Used in step 9
Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 8

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51 32 160 Removing and installing/replacing housing cover on inner left or right door window frame

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

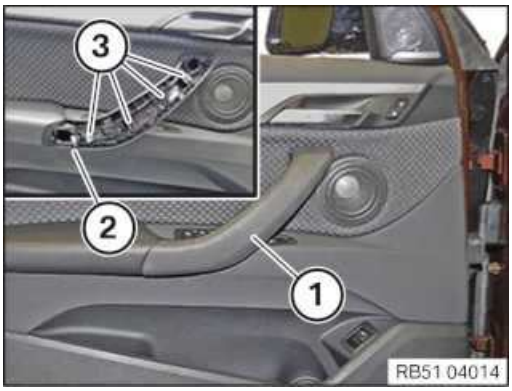
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

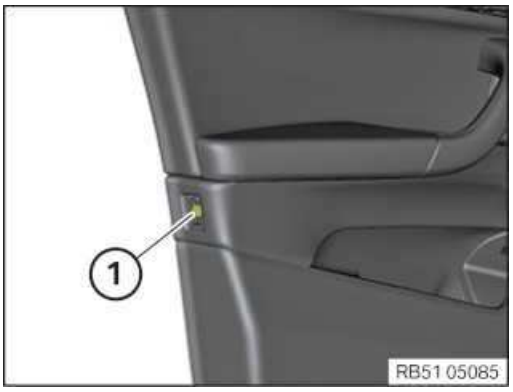
RISK OF DAMAGE

Scratches.

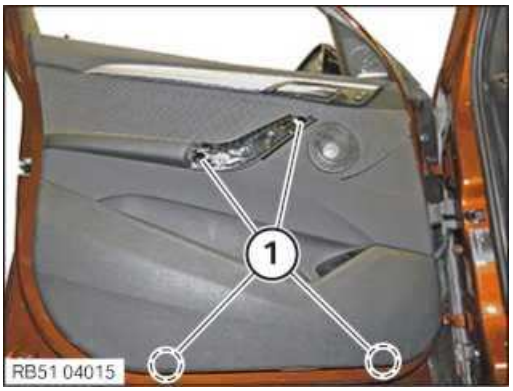
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

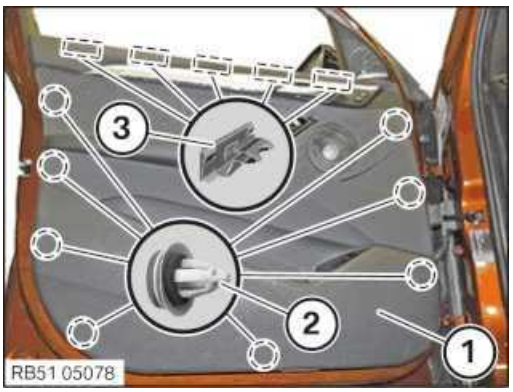
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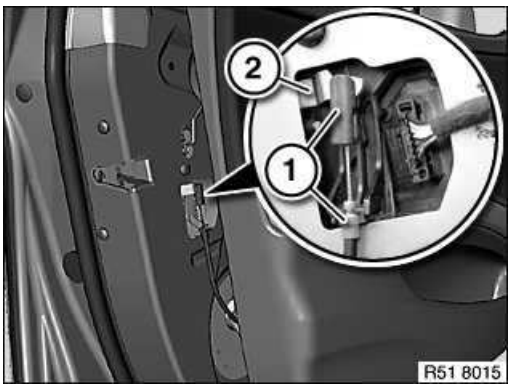
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

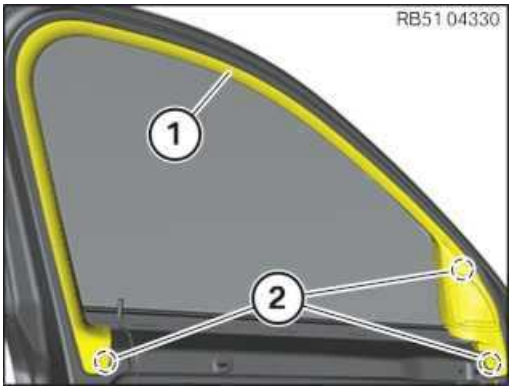
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MAIN WORK

3 – Remove the cover on the window frame

Prerequisite

Door window glass open



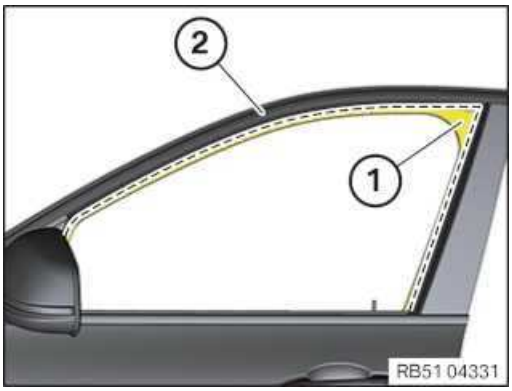
- Lever out the cover (1) at the clamps (2).
- Carefully thread out the cover (1) to the bottom.

  Do not kink the cover (1).
- Remove the cover (1) and disconnect the plug connection where required.

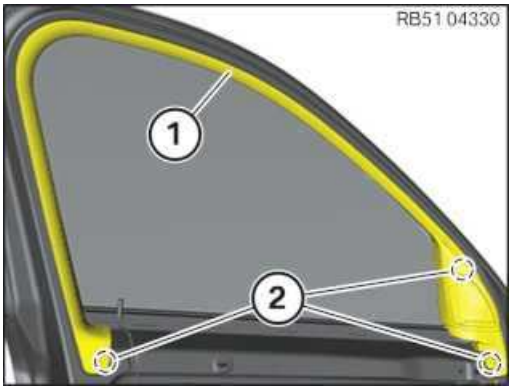
4 – Install the cover on the window frame

Prerequisite

Door window glass open



- Make sure the cover (1) is correctly fitted in the joint of the rubber window seal (2).
- Make sure that the cover (1) is correctly fitted on the door seal.



- Feed in the cover (1) at the top on the door frame.
- Connect the plug connection .
- Clip in the cover (1) at the clamps (2).

POSTPROCESSES

5 – Install front door trim panel

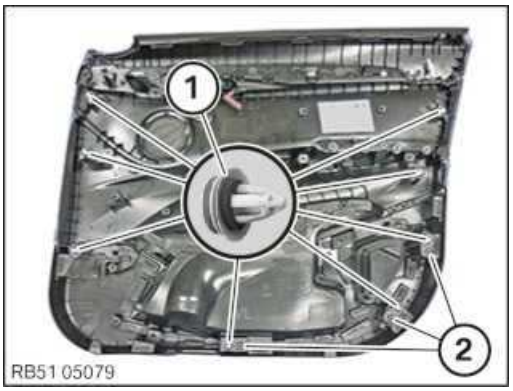
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RISK OF DAMAGE

Scratches.

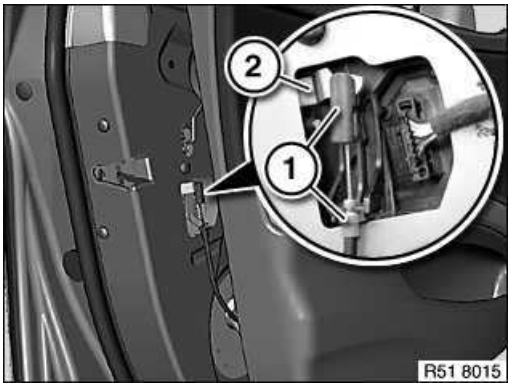
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

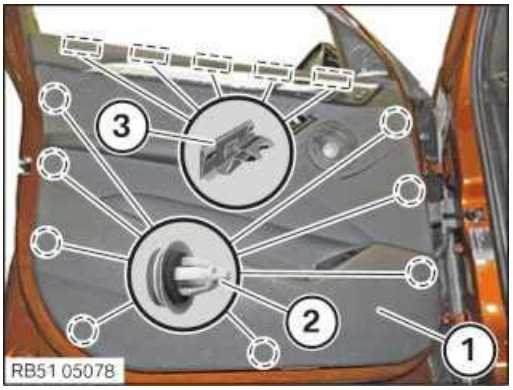


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

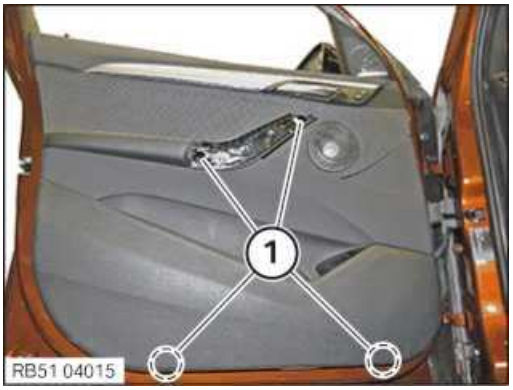
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

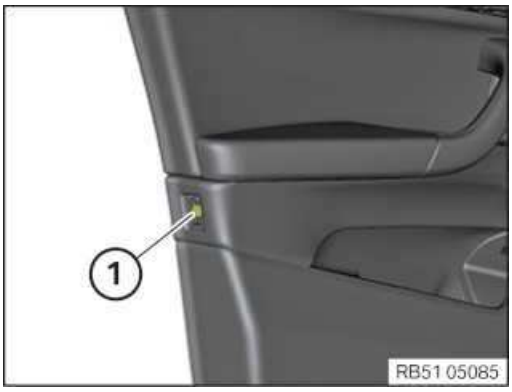


- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

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- If fitted: Tighten down screw (1).

Door trim panel to door

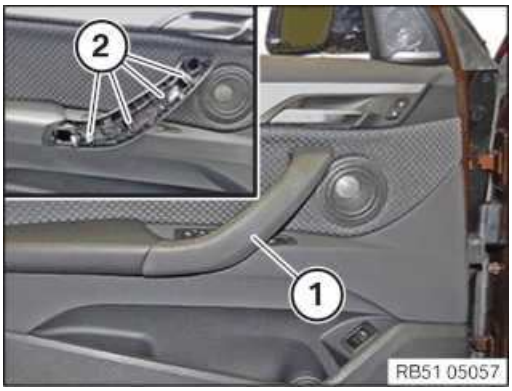
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

6 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door Used in step 5

Screw TS5x20		Tightening torque	2,5 Nm

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51 32 211 Replace the rubber window seal for the front left or right door window glass

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

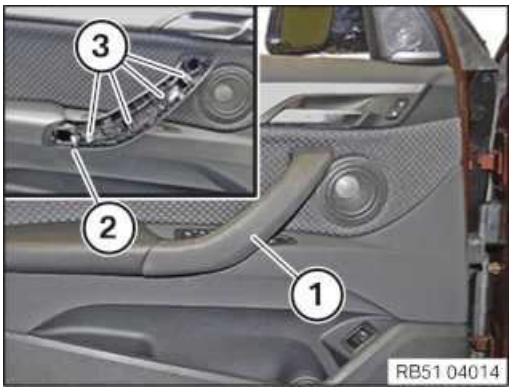
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

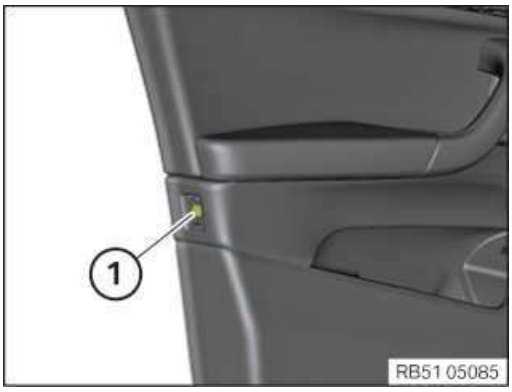
RISK OF DAMAGE

Scratches.

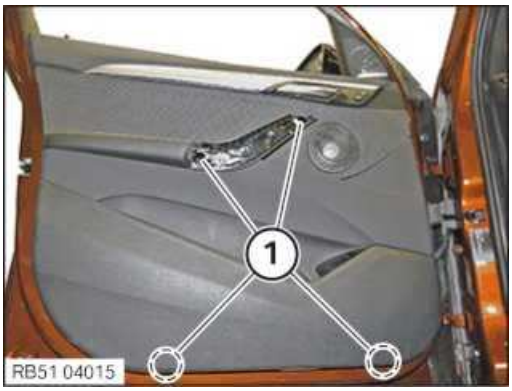
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

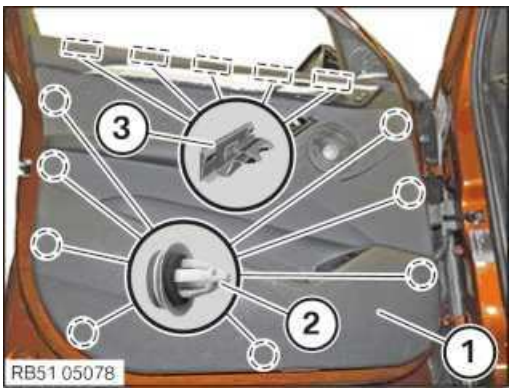
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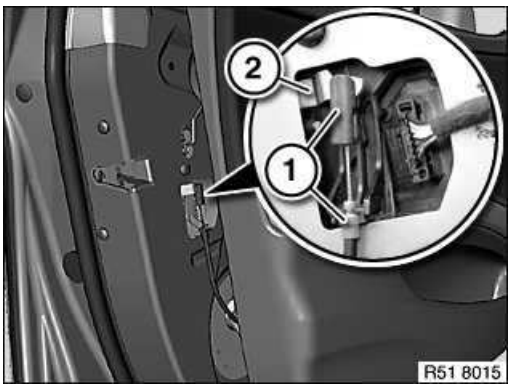
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



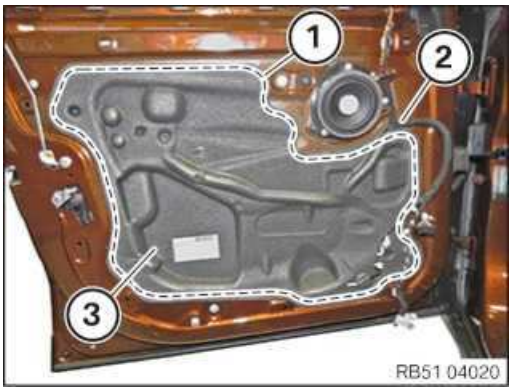
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

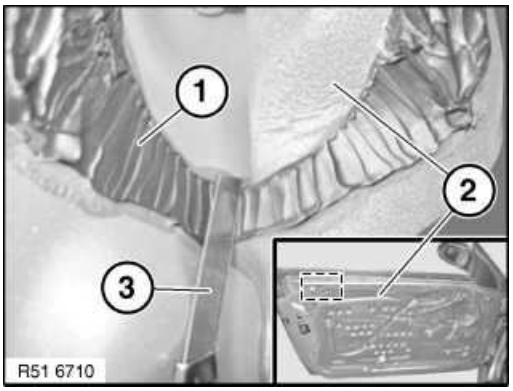
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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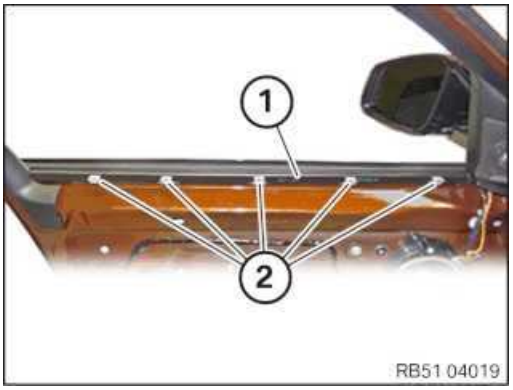


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).



- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

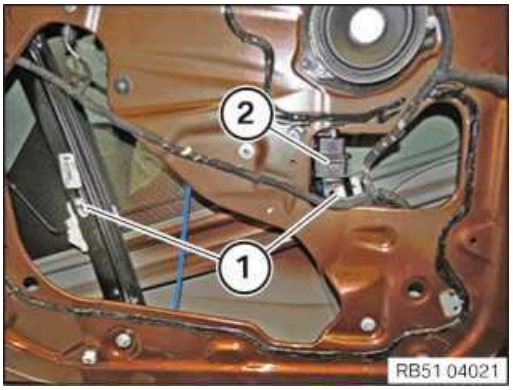
4 – Remove the inside front weather strip



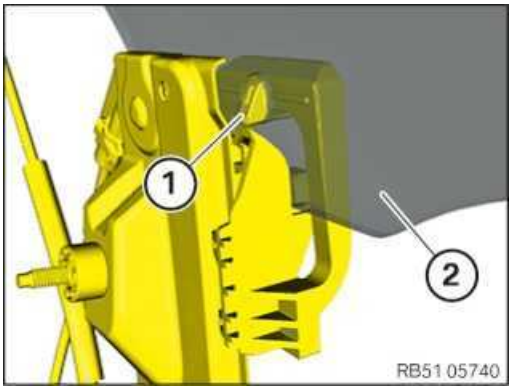
- Release the weather strip (1) from the clamps (2) and pull it off to the top.

  If weather strip (1) is reused, make sure it is not bent.

5 – Remove front door window glass



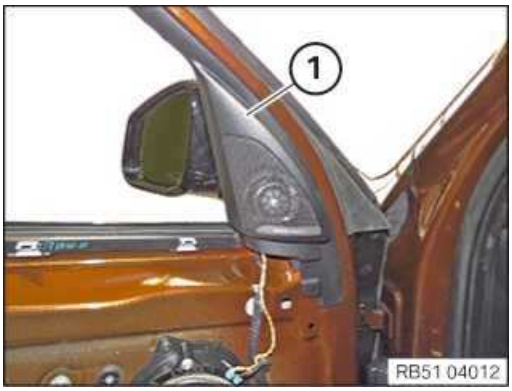
- Move the door window glass until the stop of the mounting (1) is accessible.
- Unlock the plug connection (2) to the power window motor and disconnect it (pinch hazard).



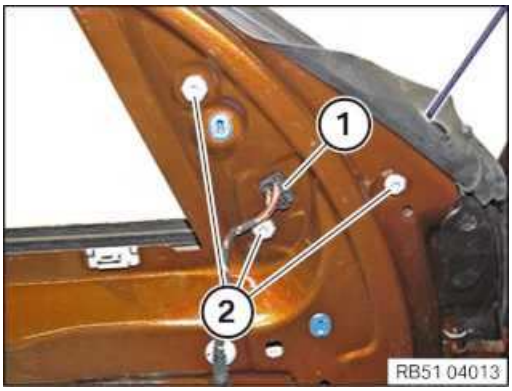
- Operate the stops of the front and rear mounting (1) using a suitable tool.
- Twist the door window glass (2) in the door frame and feed out upwards out of the door.

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6 – Removing the exterior mirror



- Release the window frame cover (1) in the area of the mirror.
- If necessary, disconnect related plug connections.

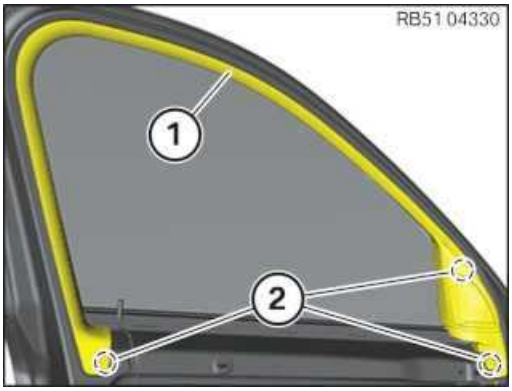


- Secure exterior mirror against falling out.
- Unlock plug connection (1) and disconnect.
- Release the screws (2) and remove the exterior rearview mirror.

7 – Remove the cover on the window frame

Prerequisite

Door window glass open



- Lever out the cover (1) at the clamps (2).
- Carefully thread out the cover (1) to the bottom.

  Do not kink the cover (1).
- Remove the cover (1) and disconnect the plug connection where required.

8 – Removing the weather strip on the outside of the front door

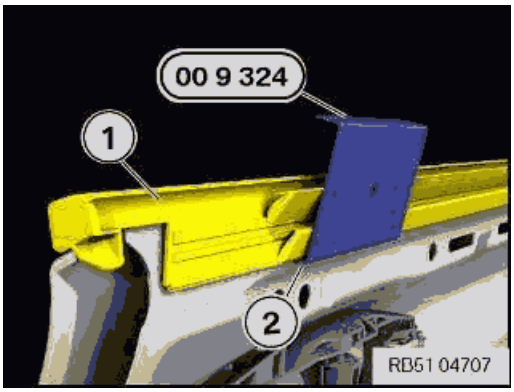
Prerequisite

The door window glass is open.

NOTICE

Description is for left component only. Procedure on the right side is identical.

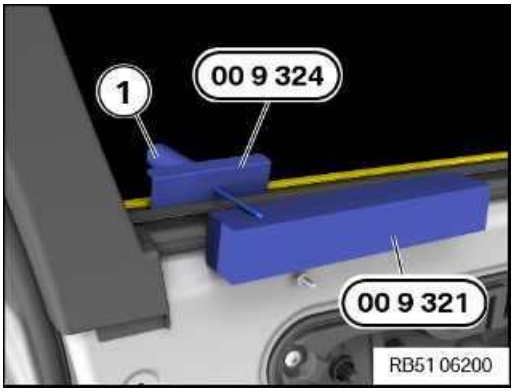
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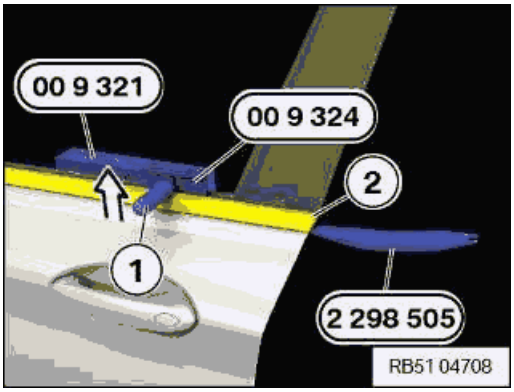
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Insert the special tool **0 495 484 (00 9 324)** at the front (on the A-pillar) into the window recess and slide it to the rear.
- Position the special tool **0 495 484 (00 9 324)** as shown at the lower edge of the weather strip (1) with the short shank (2).



- Place the special tool **0 490 538 (00 9 321)** on the inner door panel.
- Thread a suitable tool (1) through the opening in the special tool **0 495 484 (00 9 324)**.



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Lift up the rear weather strip (2) with the special tool **2 298 505** as shown; maximum 5 mm.
- With a suitable tool (1), move the lever in the direction of arrow using the special tool **0 490 538 (00 9 321)** for support.

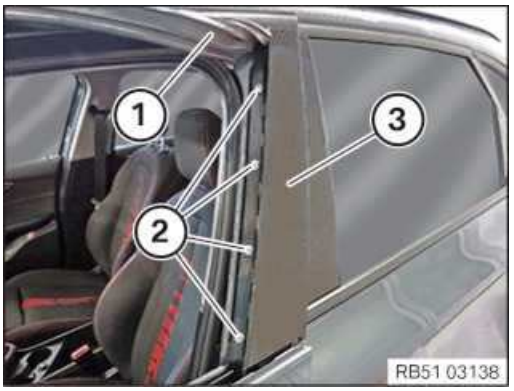
  The special tool **0 495 484 (00 9 324)** lifts the window recess finisher strip (2) upwards.
- Repeat this process step by step towards the front until the window recess finisher strip (2) is removed completely.

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9 – Remove the front window frame trim

Prerequisite

Door window glass open

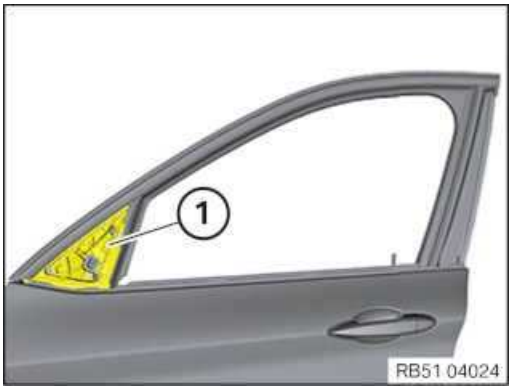


- Pull the rubber window seal (1) out of the rear window guide.
- Loosen screws (2).
- Feed out the trim (3) towards the top.

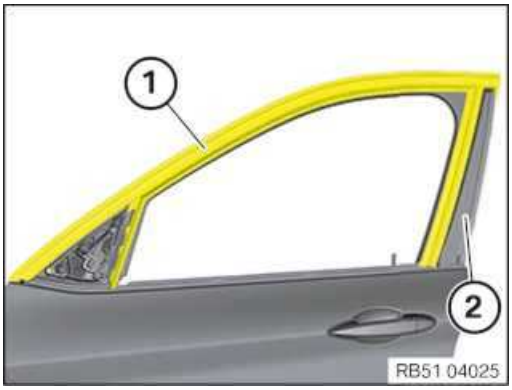
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MAIN WORK

10 – Remove the front rubber window seal

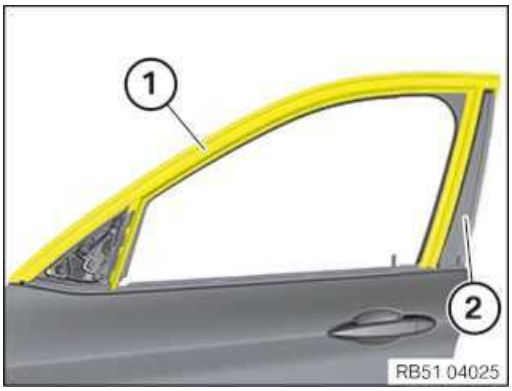


- Remove the sound insulation (1).

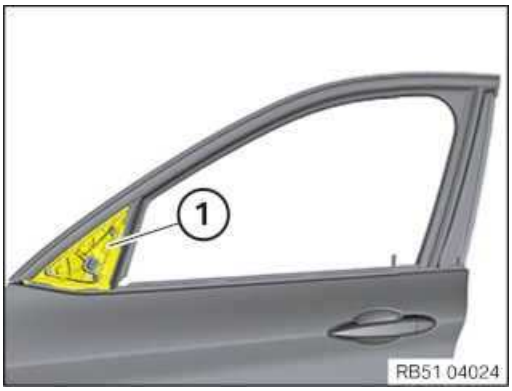


- Pull off the entire rubber window seal (1) from the door frame (2).
- Pull out rubber window seal (1) from window guide rail and remove.

11 – Install the front rubber window seal



- Coat the rubber window seal (1) with water prior to installation.
- Insert the rubber window seal (1) in the window guide rail.
- Connect the entire rubber window seal (1) to the door frame (2).
  Make sure the rubber window seal (1) is correctly seated.



- Install the sound insulation (1).

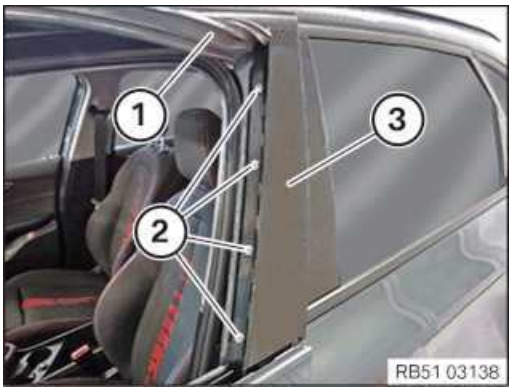
POSTPROCESSES

12 – Install the front window frame trim

Prerequisite

Door window glass open

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- Feed in the trim (3).
- Tighten down screws (2).

Window frame trim to window frame

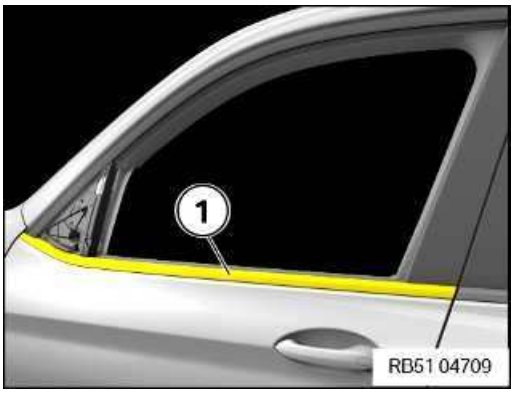
Screw		Tightening torque	2,4 Nm

- Coat the rubber window seal (1) with water prior to installation and mount on the rear window guide.

13 – Installing the weather strip on the front door on the outside

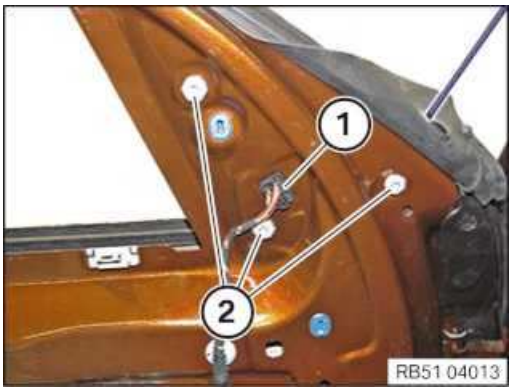
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the weather strip (1) for damage, renew if necessary.
- Coat the weather strip (1) with a suitable lubricant prior to installation.
- Position the weather strip (1) in front at the door.
- Press down the weather strip (1) across its entire length.

14 – Installing the exterior mirror



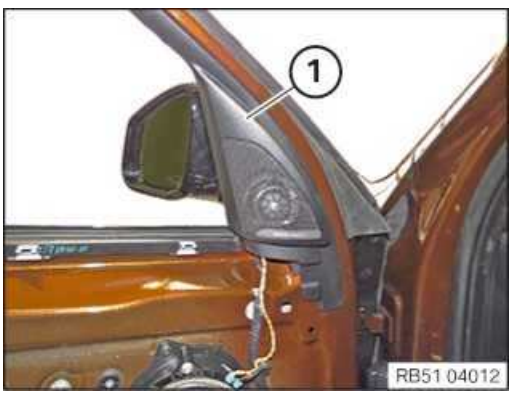
- Check sound insulation on the mirror base. It must not be damaged or missing.
- Mount exterior rearview mirror and tighten the bolts (2).

  Due to self-tapping screws, the tightening torque in the new condition of exterior mirror increases by 2 Nm.

Exterior mirror to door

Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

- Connect the plug connection (1).
- Carry out functional check.



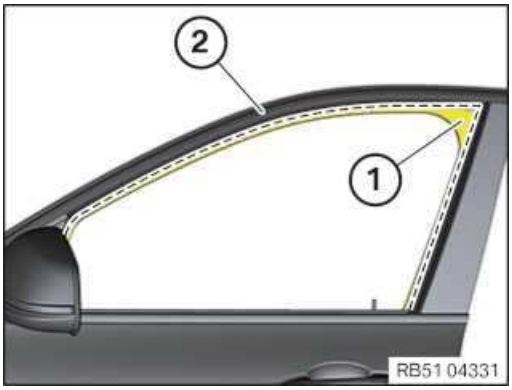
- Mount the window frame cover (1) in the area of the mirror.
- If necessary, connect related plug connections.

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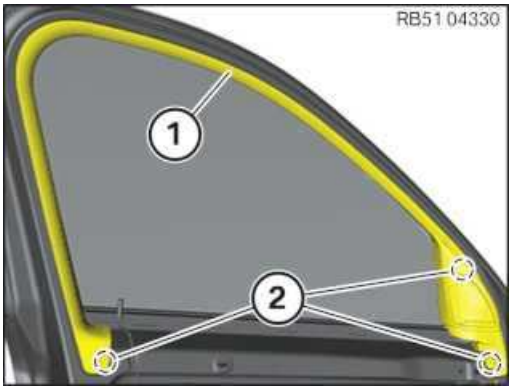
15 – Install the cover on the window frame

Prerequisite

Door window glass open

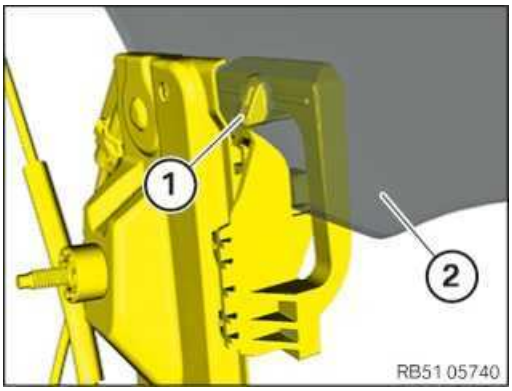


- Make sure the cover (1) is correctly fitted in the joint of the rubber window seal (2).
- Make sure that the cover (1) is correctly fitted on the door seal.



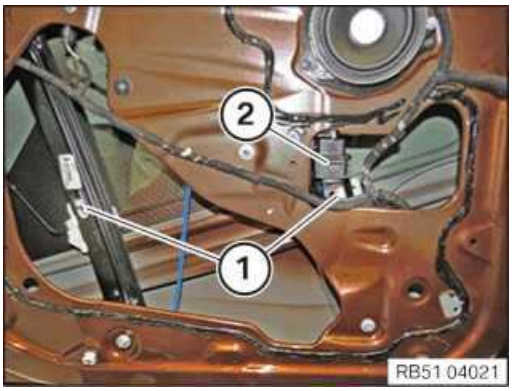
- Feed in the cover (1) at the top on the door frame.
- Connect the plug connection .
- Clip in the cover (1) at the clamps (2).

16 – Installing front door window glass



- Thread door window glass (2) from above into door.
- Check stops of the mounting (1) for damage.

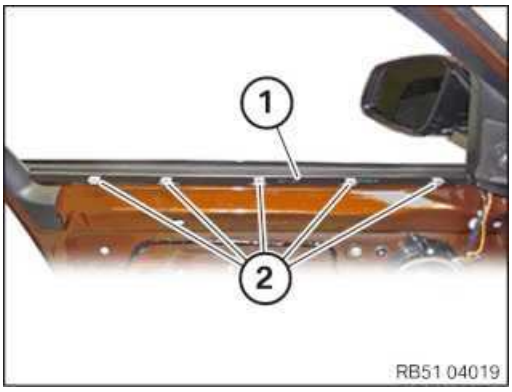
  The stops of the mounting (1) may not be missing or damaged.



- Feed the door window glass into the window guide and slide downward.
- Thread the door window glass into the mountings (1) and lock.
- Connect and lock the connector (2) on the power window motor.

17 – Installing front inner weather strip

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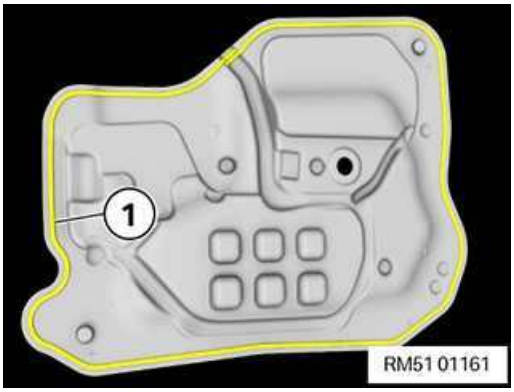
- Coat weather strip (1) prior to installation with approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.

  Replace defective clamps.
- Position weather strip (1) on the door and engage into the clamps (2).

18 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

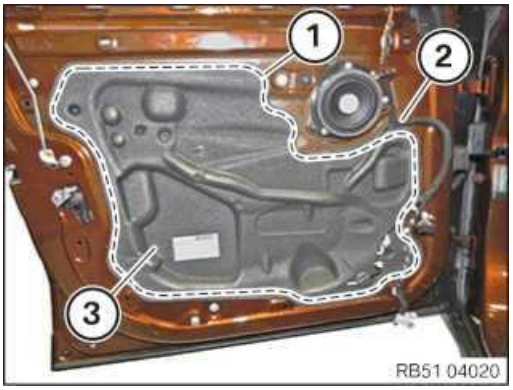
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

19 – Install front door trim panel

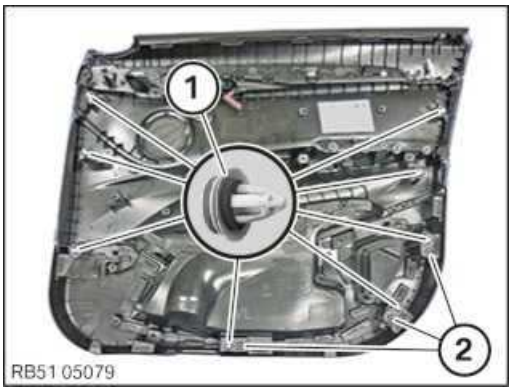
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RISK OF DAMAGE

Scratches.

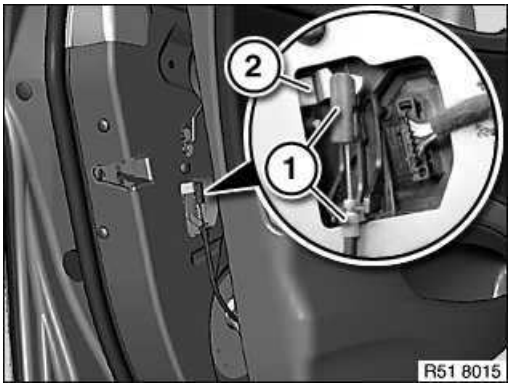
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

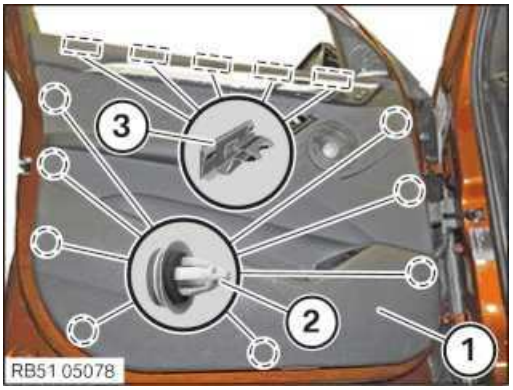


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

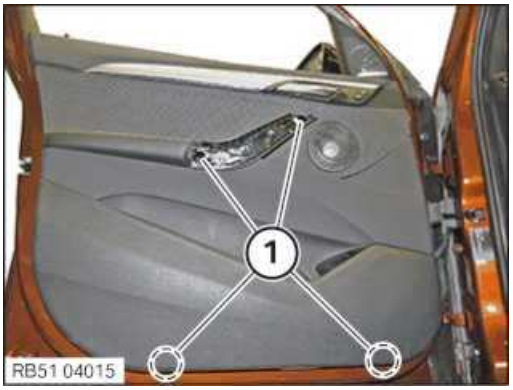
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

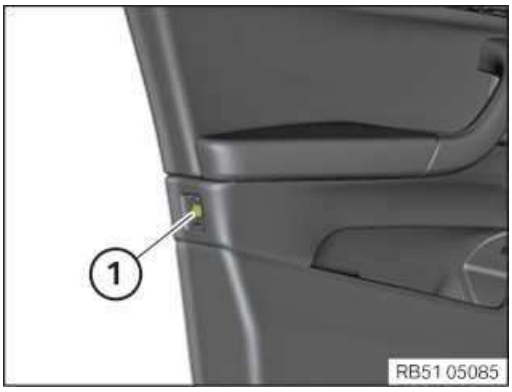


- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

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- If fitted: Tighten down screw (1).

Door trim panel to door

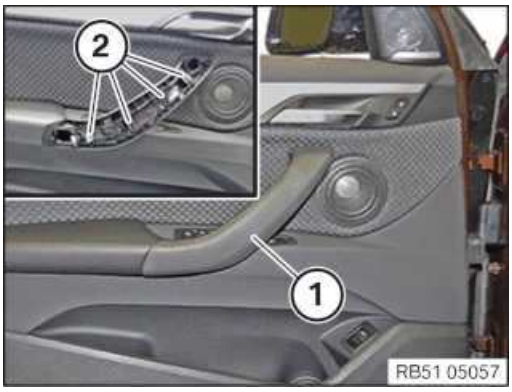
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

20 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Window frame trim to window frame Used in step 12

Screw		Tightening torque	2,4 Nm

Exterior mirror to door Used in step 14

Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

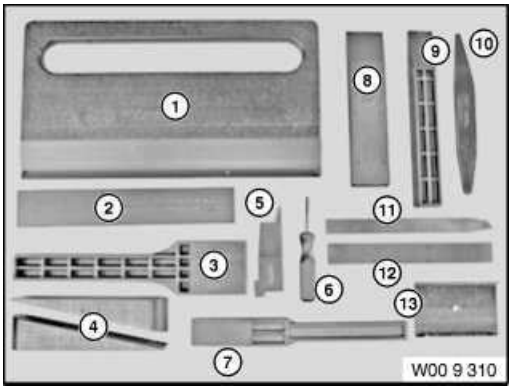
Door trim panel to door Used in step 19

Screw TS5x20		Tightening torque	2,5 Nm

Overview of Special Tools

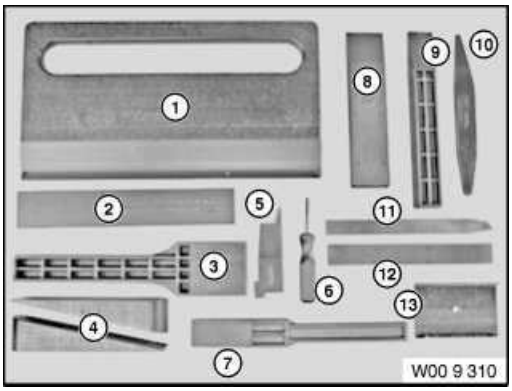
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0 495 484 (00 9 324) Panel wedge



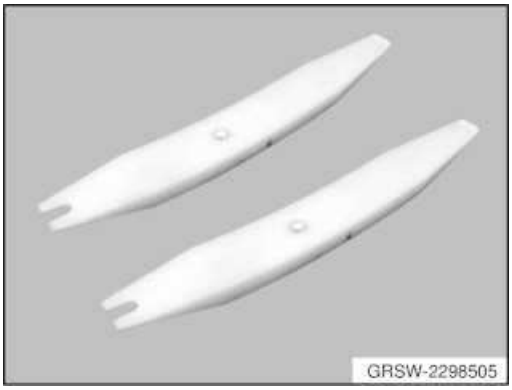
Common	Used in step 8
Usage	(Panel wedge (panel)) For removing cavity strips on the doors from E60
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 25 05 (230)

0 490 538 (00 9 321) Folding stick



Common	Used in step 8
Usage	
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

2 298 505 Wedge



Common	Used in step 8
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step

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51 33 000 Remove and install the power window regulator in the left or right front door

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

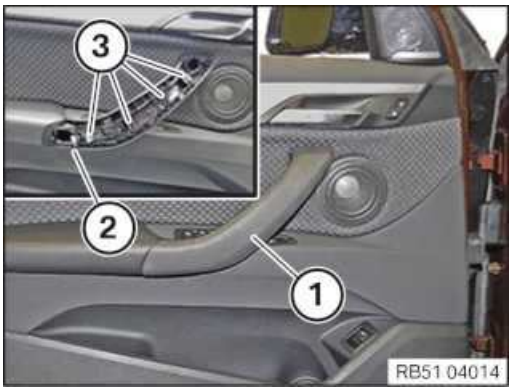
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

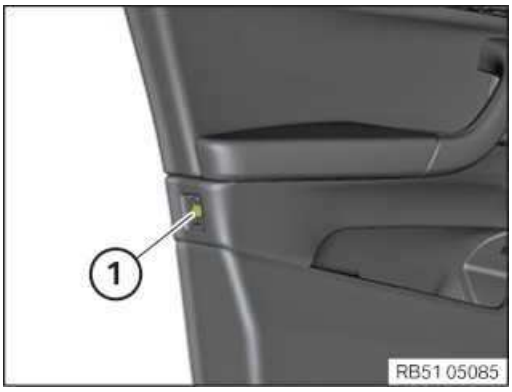
RISK OF DAMAGE

Scratches.

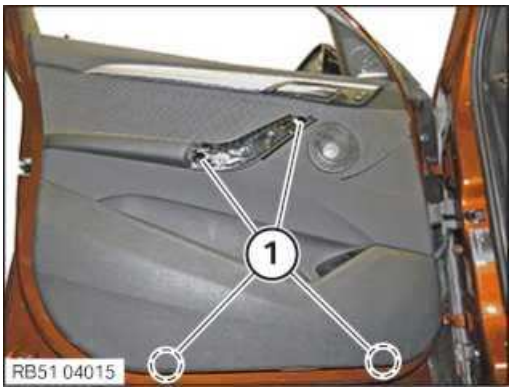
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

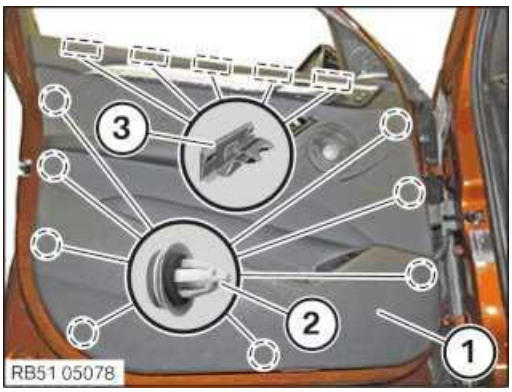
cardiagn.com



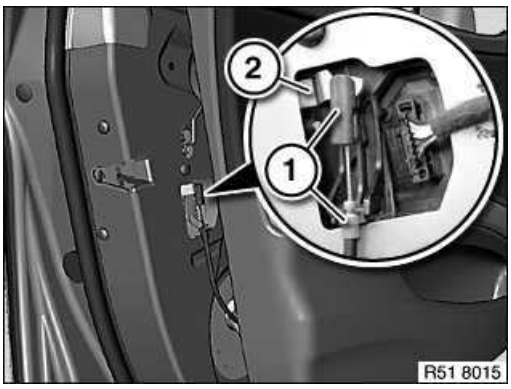
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



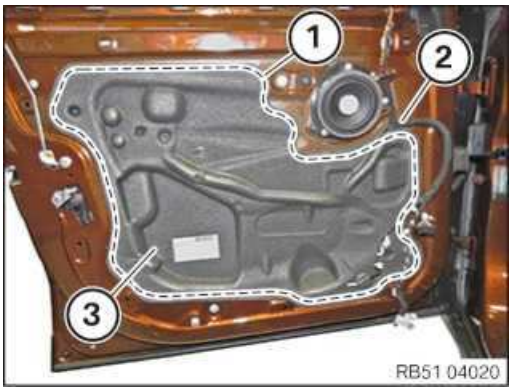
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

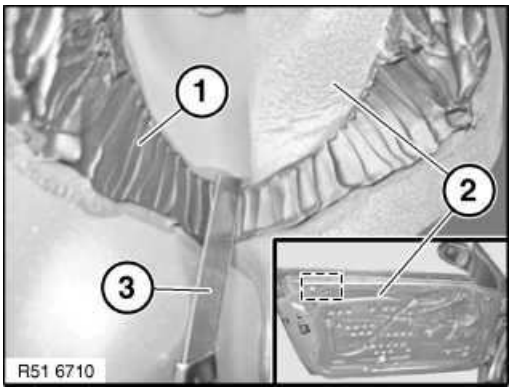
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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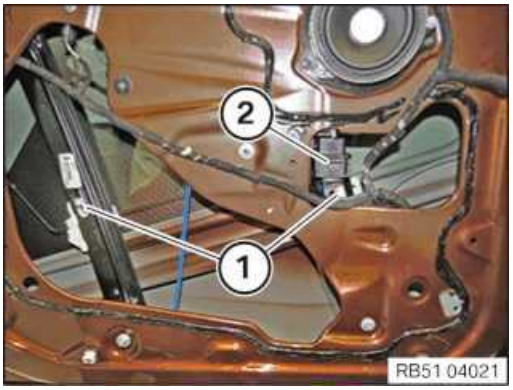


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

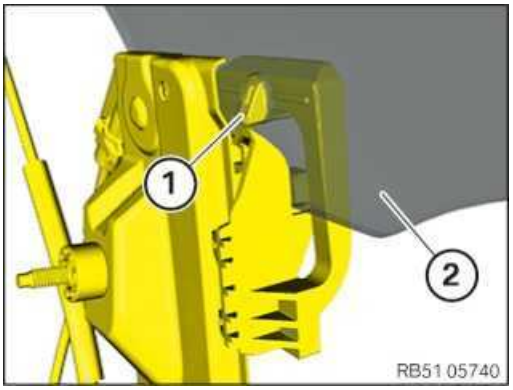


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Partially remove front door window glass



- Move the door window glass until the mounting (1) stop is accessible.
- Unlock the plug connection (2) to the power window motor and disconnect it (pinch hazard).

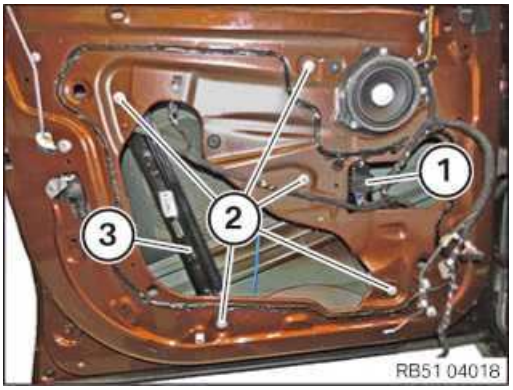


- Operate the stops of the front and rear mounting (1) using a suitable tool.
- Push the door window glass (2) in the guide rails up and secure it on the door frame with adhesive tape.

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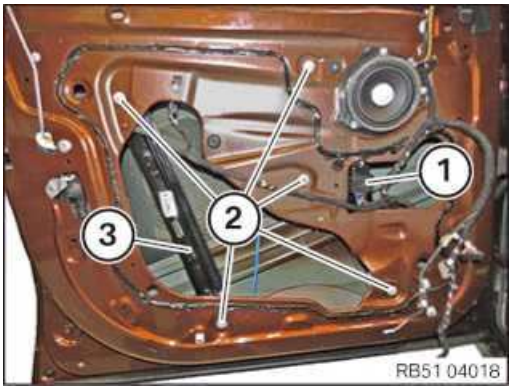
MAIN WORK

5 – Removing power window regulator



- Unlock plug connection (1) and disconnect.
- Loosen nuts (2).
- Carefully thread the power windows (3) out of the door and detach the Bowden cable from the holder at the same time.

6 – Installing the power windows



- Carefully feed the power windows (3) into the door and attach the Bowden cable in the holder.
- Tighten nuts (2).

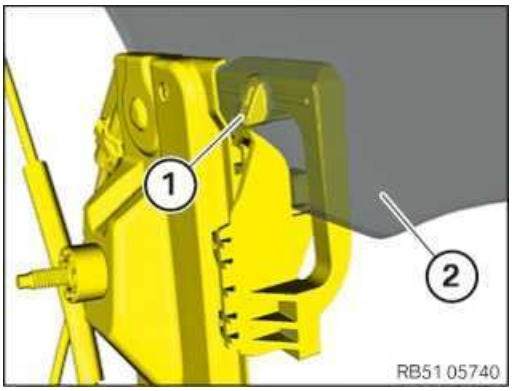
Window regulator to door

Nut M6, self-locking		Tightening torque	9,5 Nm

- Connect connectors (1) and lock.

POSTPROCESSES

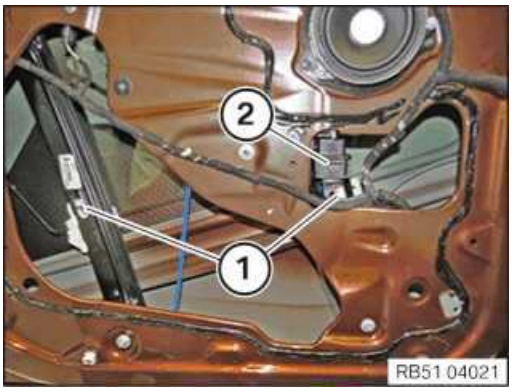
7 – Partially install the front door window glass



- Check stops of the mounting (1) for damage.

  The stops of the mounting (1) may not be missing or damaged.
- Release the adhesive tape from the door frame and slide the door window glass (2) down.

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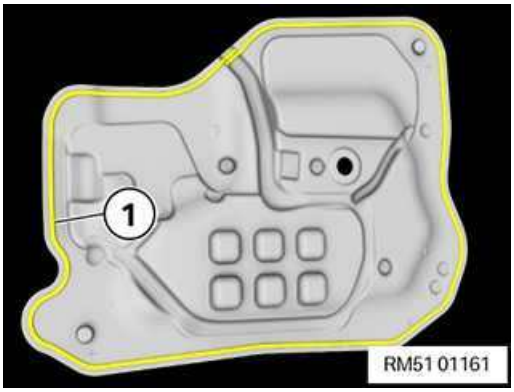


- Thread the door window glass into the mountings (1) and lock.
- Connect and lock the connector (2) on the power window motor.

8 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

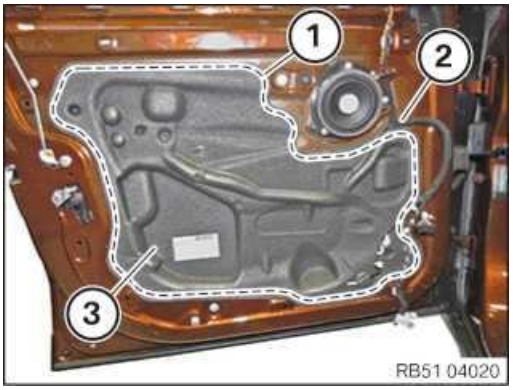
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

9 – Install front door trim panel

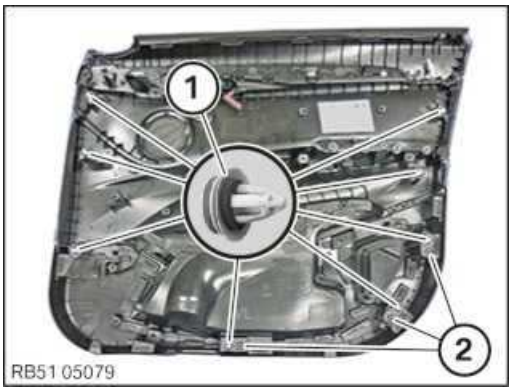
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RISK OF DAMAGE

Scratches.

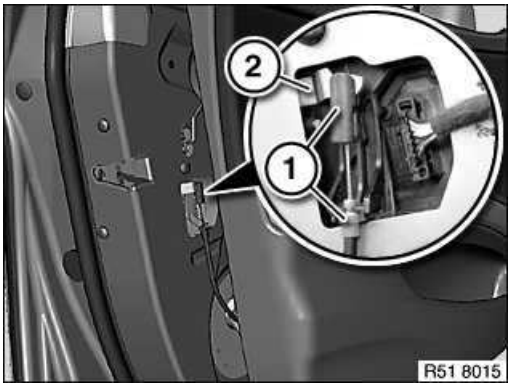
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

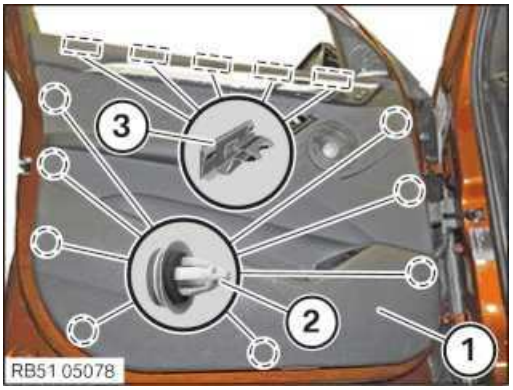


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

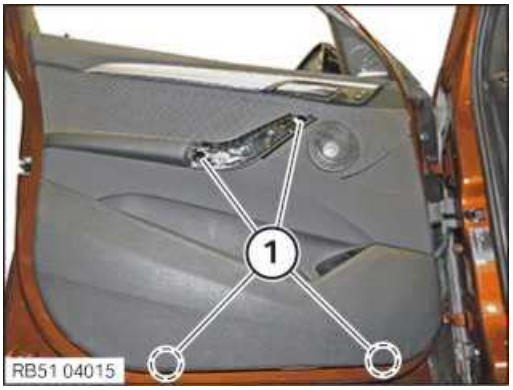
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

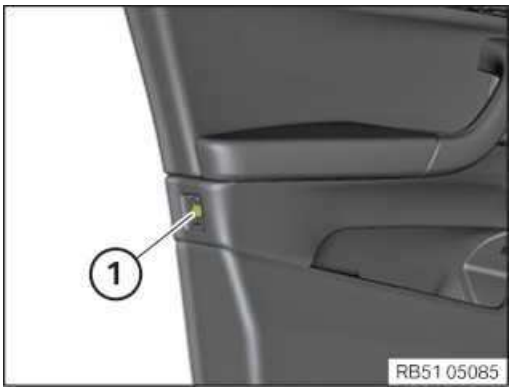


- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

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- If fitted: Tighten down screw (1).

Door trim panel to door

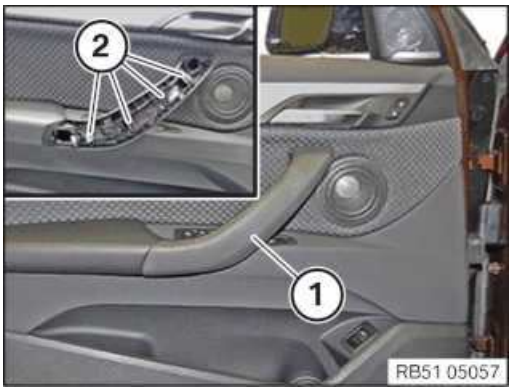
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

10 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

11 – Initialising the power windows

TECHNICAL INFORMATION

Notes on power window initialisation must be strictly observed for these repair instructions.
Additional information, see 67 62 ... Information on power window initialisation.

- Initialise power window.

Additional Information

Overview of Tightening Torques

Window regulator to door — Used in step 6

Nut M6, self-locking		Tightening torque	9,5 Nm

Door trim panel to door — Used in step 9

Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 8

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Repair instructions	Used in step
67 62 ... Notes on initializing power windows	11
67 62 ... Notes on initializing power windows	11

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51 33 003 Replacing power window regulator in the left or right front door

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

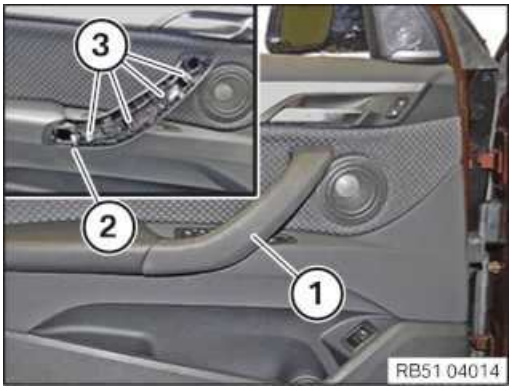
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

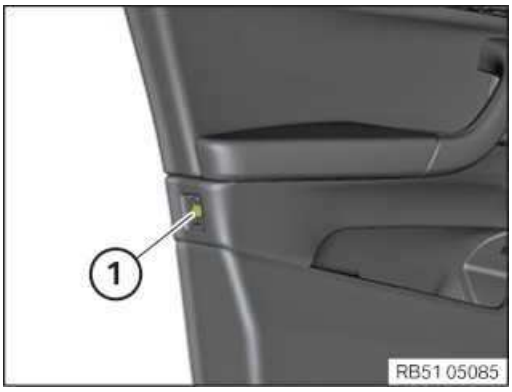
RISK OF DAMAGE

Scratches.

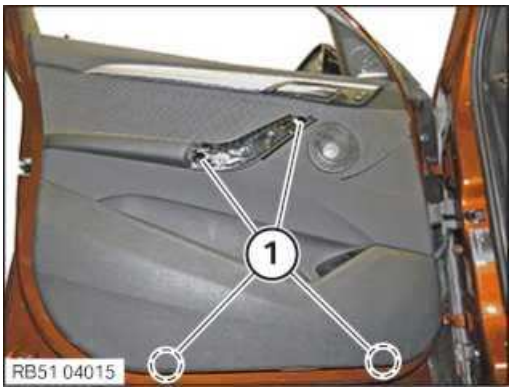
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

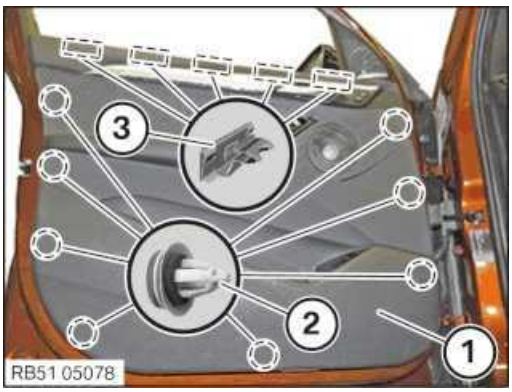
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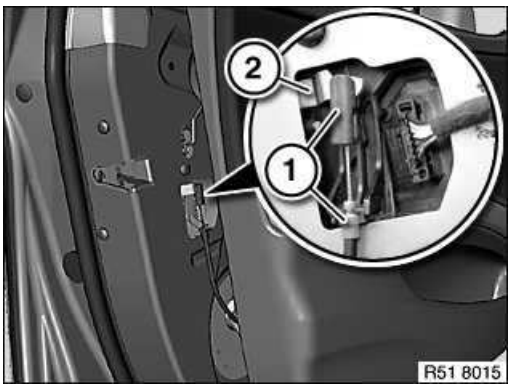
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



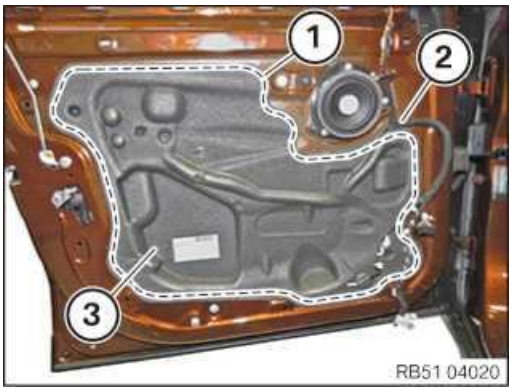
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Removing sound insulation on front door

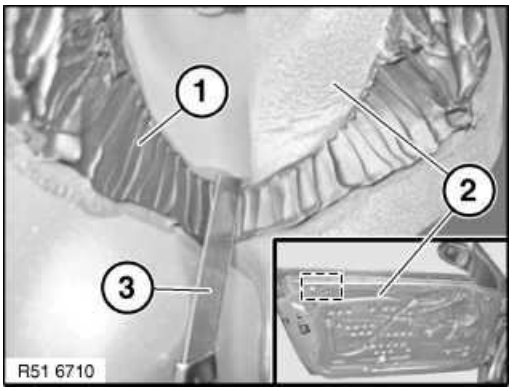
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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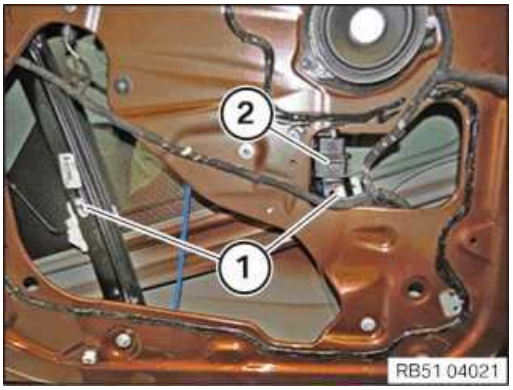


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

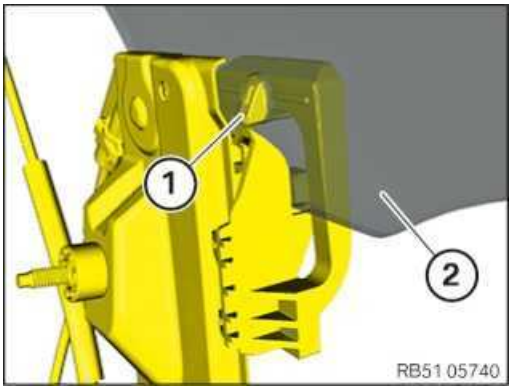


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Partially remove front door window glass

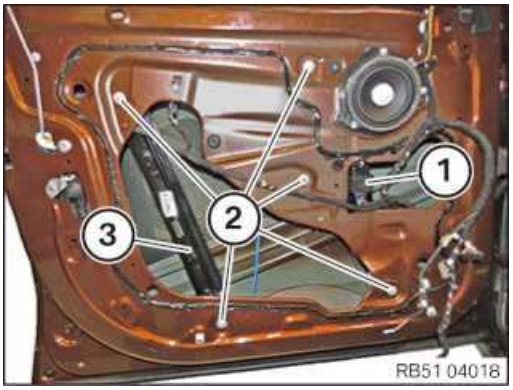


- Move the door window glass until the mounting (1) stop is accessible.
- Unlock the plug connection (2) to the power window motor and disconnect it (pinch hazard).



- Operate the stops of the front and rear mounting (1) using a suitable tool.
- Push the door window glass (2) in the guide rails up and secure it on the door frame with adhesive tape.

5 – Removing power window regulator

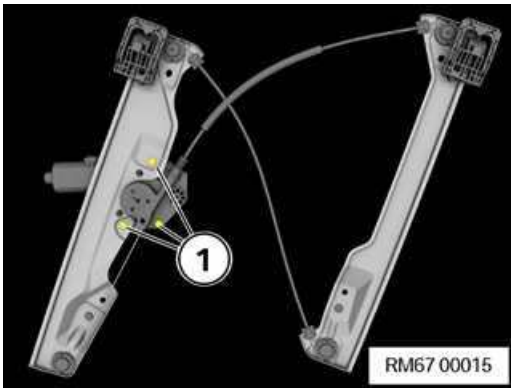


- Unlock plug connection (1) and disconnect.
- Loosen nuts (2).
- Carefully thread the power windows (3) out of the door and detach the Bowden cable from the holder at the same time.

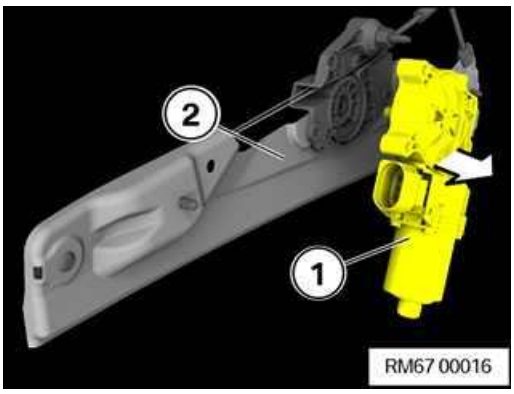
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MAIN WORK

6 – Remove the flat motor for the front power windows

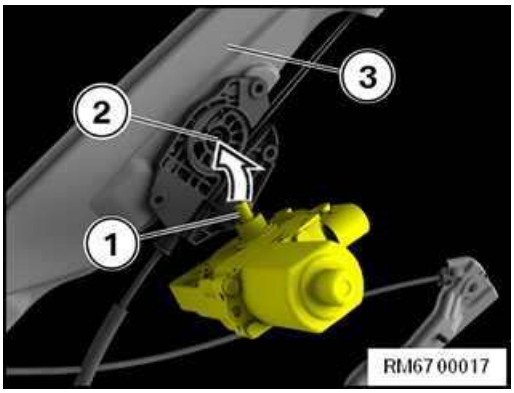


- Loosen screws (1).

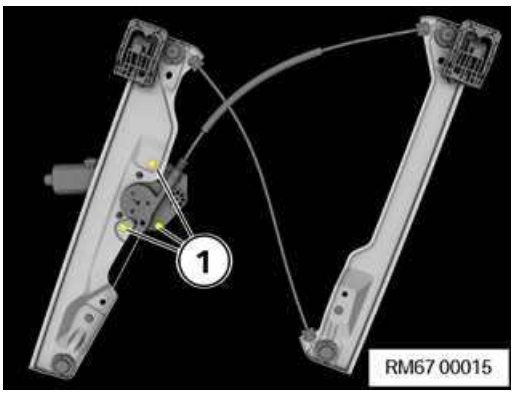


- Remove the flat motor (1) for the power window from the power window (2) in direction of arrow.

7 – Install the flat motor for the front power windows



- Position the flat motor for the power window in direction of arrow so that its shaft (1) is fitted de-energised in the gearing (2) of the power window (3).



- Tighten the screws (1).

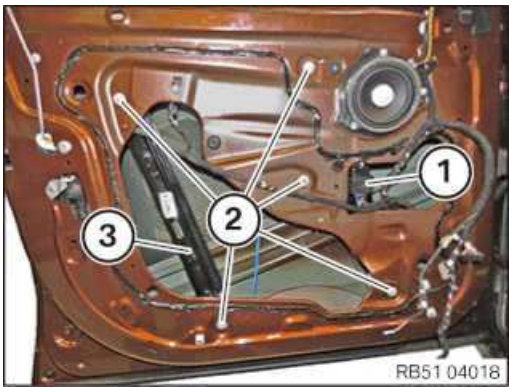
Flat motor to power window regulator

Screw		Tightening torque	4,5 Nm

POSTPROCESSES

8 – Installing the power windows

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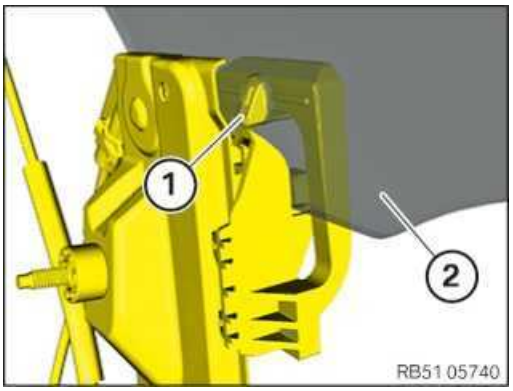
- Carefully feed the power windows (3) into the door and attach the Bowden cable in the holder.
- Tighten nuts (2).

Window regulator to door

Nut M6, self-locking		Tightening torque	9,5 Nm

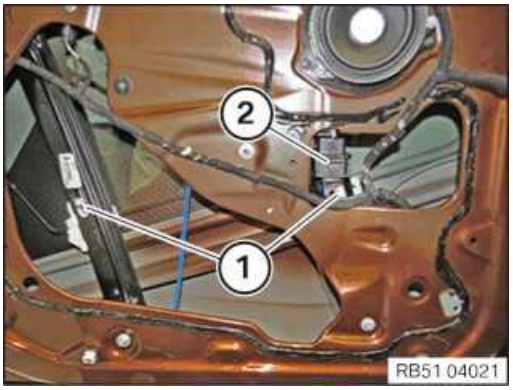
- Connect connectors (1) and lock.

9 – Partially install the front door window glass



- Check stops of the mounting (1) for damage.

  The stops of the mounting (1) may not be missing or damaged.
- Release the adhesive tape from the door frame and slide the door window glass (2) down.

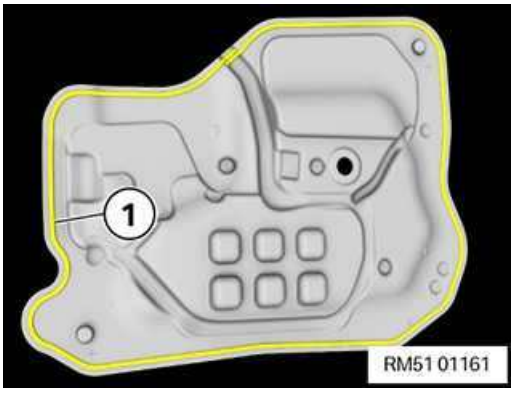


- Thread the door window glass into the mountings (1) and lock.
- Connect and lock the connector (2) on the power window motor.

10 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

- Check sound insulation for damage.

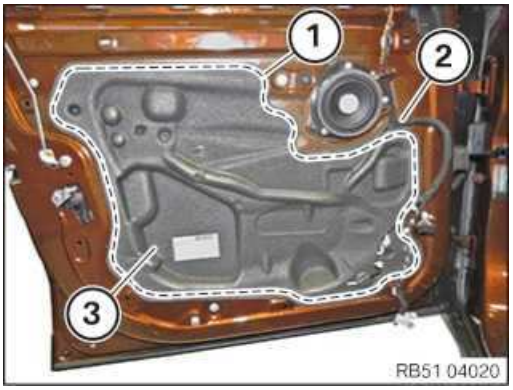
Result

» The sound insulation is damaged.

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Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

11 – Install front door trim panel

RISK OF DAMAGE

Scratches.

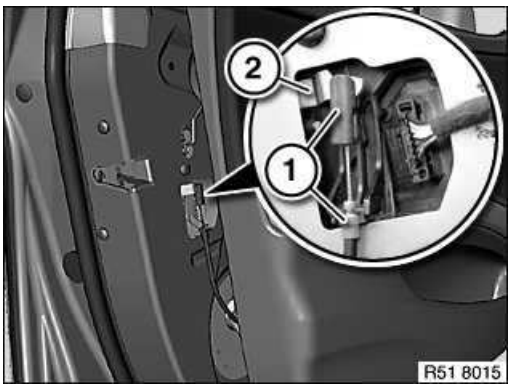
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



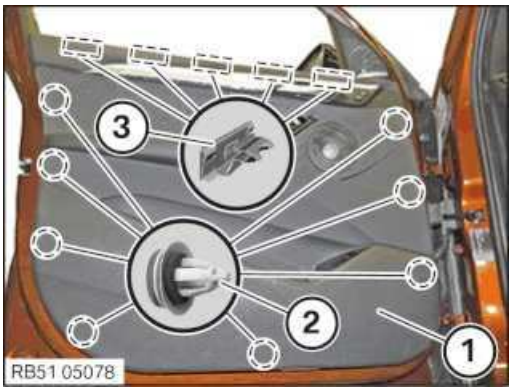
- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

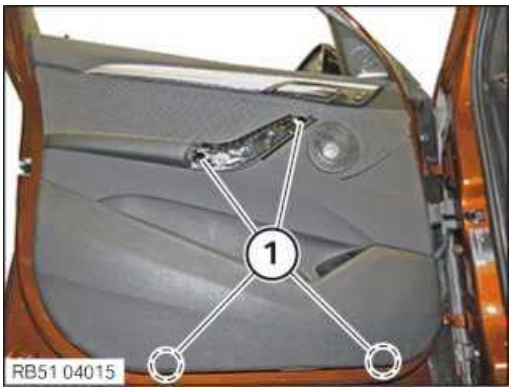


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).

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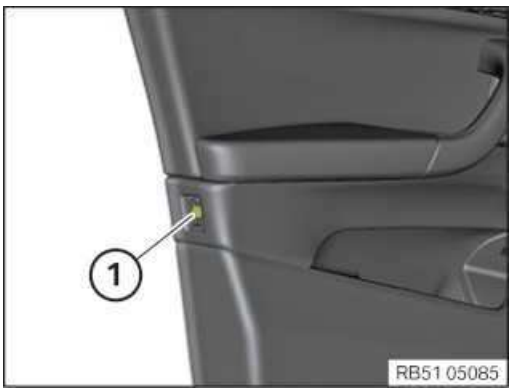
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

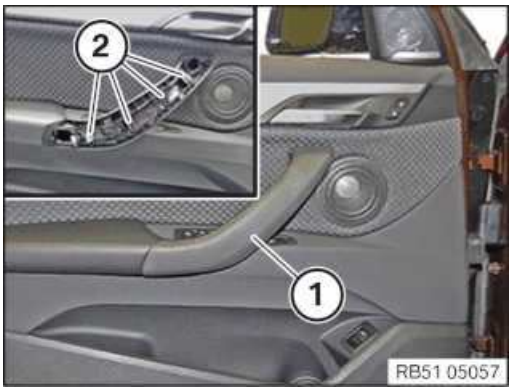
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

12 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

13 – Initialising the power windows

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TECHNICAL INFORMATION

Notes on power window initialisation must be strictly observed for these repair instructions.
Additional information, see 67 62 ... Information on power window initialisation.

- Initialise power window.

Additional Information

Overview of Tightening Torques

Flat motor to power window regulator			Used in step 7
Screw		Tightening torque	4,5 Nm

Window regulator to door			Used in step 8
Nut M6, self-locking		Tightening torque	9,5 Nm

Door trim panel to door			Used in step 11
Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 10

Repair instructions	Used in step
67 62 ... Notes on initializing power windows	13
67 62 ... Notes on initializing power windows	13

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51 34 160 Removing and installing/replacing housing cover on inner left or right door window frame

Prerequisite

› Open the window glass.

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

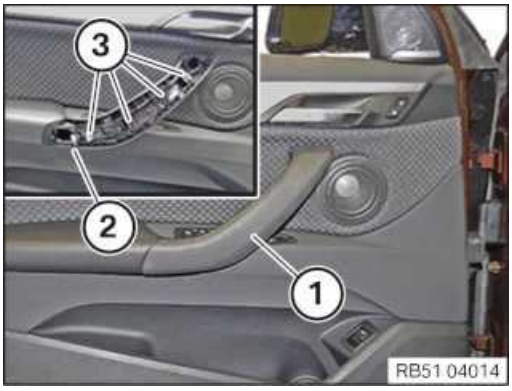
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove rear door trim

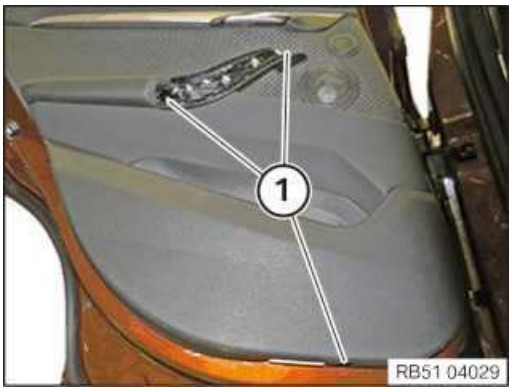
RISK OF DAMAGE

Scratches.

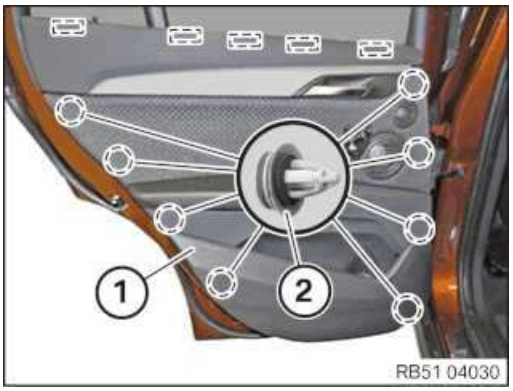
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

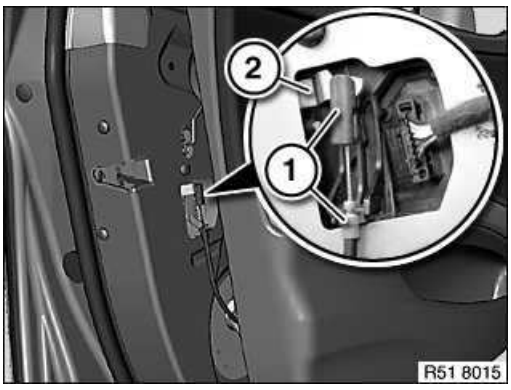
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- Loosen screws (1).



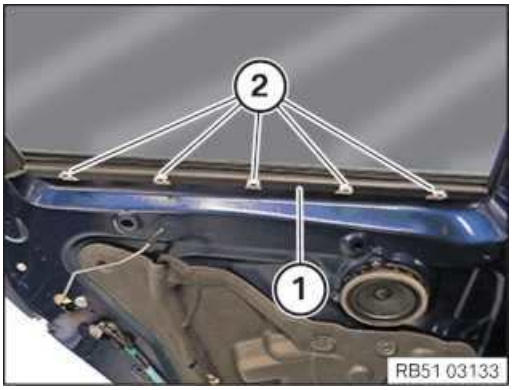
- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.



- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

3 – Remove the weather strip from the rear inner door



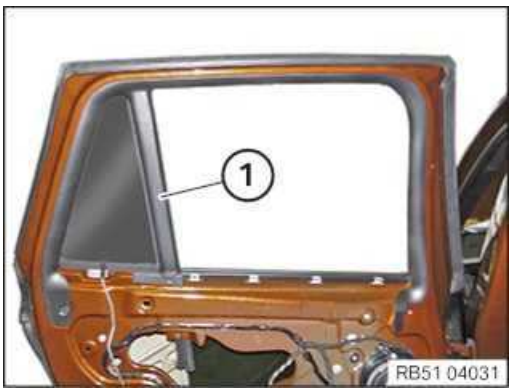
- Release the weather strip (1) from the brackets (2) and pull it off to the top.
- Make sure the weather strip (1) is not deformed.

  It is exclusively possible to re-use a weather strip that has not been deformed.

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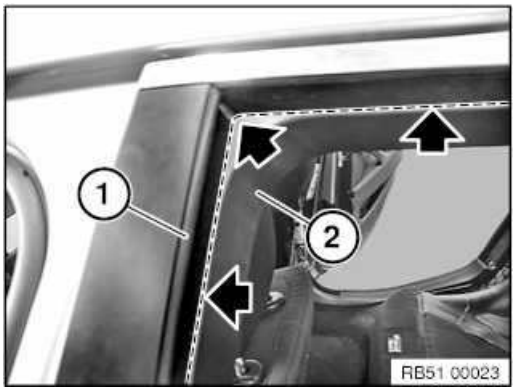
MAIN WORK

4 – Remove the window frame cover of the rear door

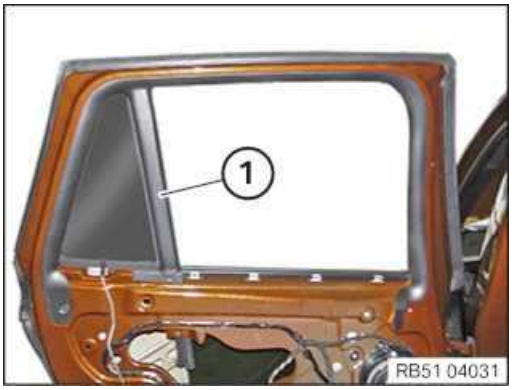


- Pull off the cover (1) in an inwards direction out of the latch mechanisms.

5 – Install the window frame cover for the rear door



- Install the cover (2).
- Make sure that the cover (2) is threaded correctly into the groove of the rubber window seal (1).

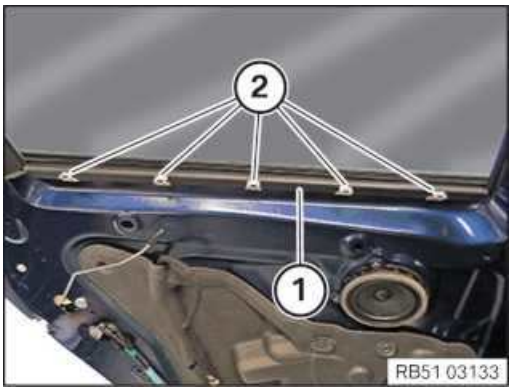


- Engage the cover (1) in the latch mechanisms .

POSTPROCESSES

6 – Installing weather strip on inner rear door

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- Coat the weather strip (1) prior to installation with an approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.
- Renew defective clamps (2).
- Position weather strip (1) on the door and engage into the clamps (2).

7 – Installing rear door trim panel

RISK OF DAMAGE

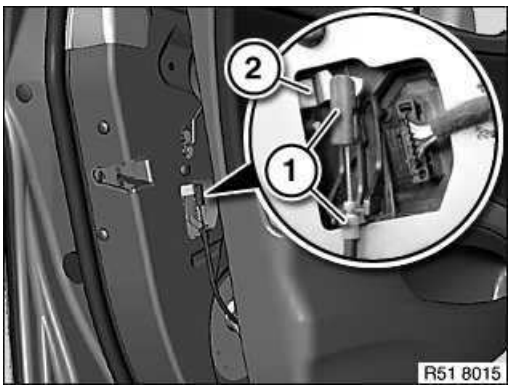
Scratches.

Tools and sharp-edged components can cause scratches.

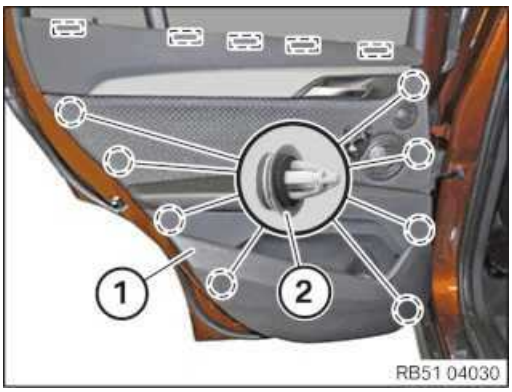
- Protect working area.
- Handle tools and components carefully.



- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

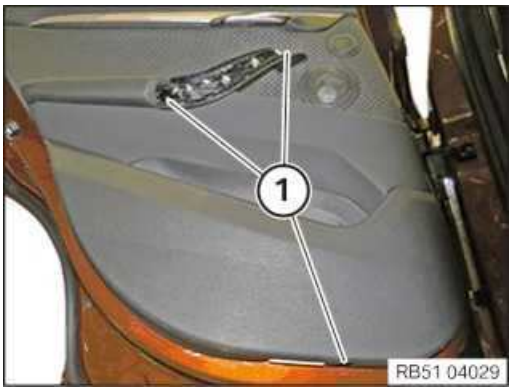


- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

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- Tighten the screws (1).

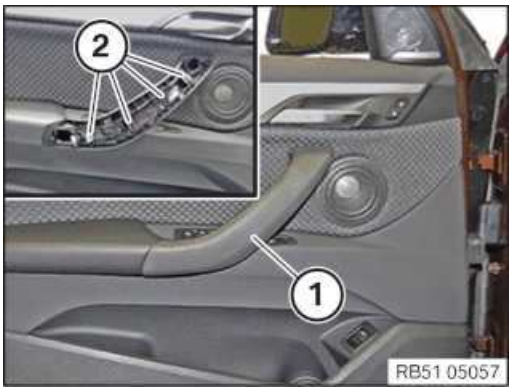
Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

8 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door Used in step 7

Screw TS5x20		Tightening torque	2,5 Nm

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51 34 420 Removing and installing/replacing window frame trim of the rear left or rear right door

NOTICE

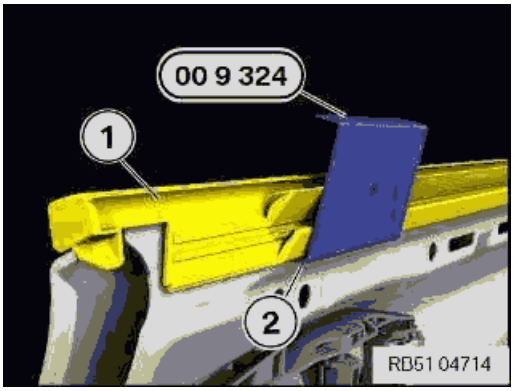
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Removing the outer weather strip at the rear door

Prerequisite

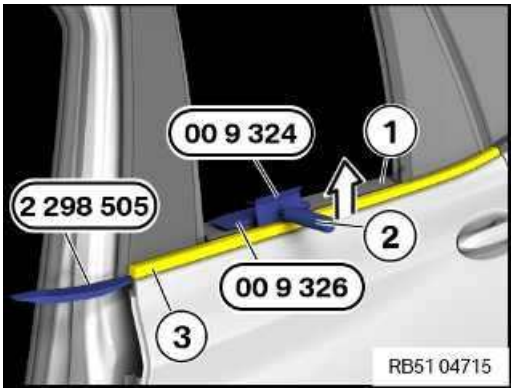
The door window glass is open.



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Insert special tool **0 495 484 (00 9 324)** into window cavity.
- Position the special tool **0 495 484 (00 9 324)** as shown at the lower edge of the weather strip (1) with the short shank (2).



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

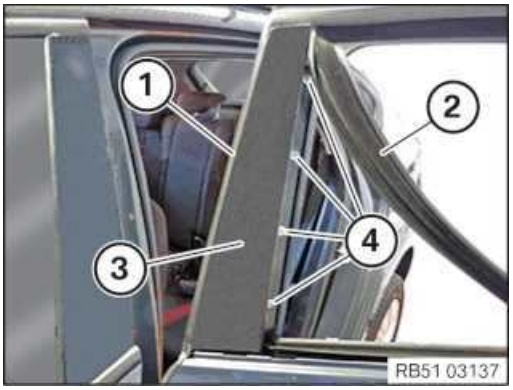
- Protect working area.
- Handle tools and components carefully.

- Lift weather strip (3) using the special tool **2 298 505** by a maximum of 5 mm as illustrated.
- Position the special tool **0 496 570 (00 9 326)** on the door trim panel (1).
- Thread a suitable tool (2) through the opening of the special tool **0 495 484 (00 9 324)**.
- Gradually move special tool **2 298 505** and **0 495 484 (00 9 324)** backwards until the weather strip (3) has been completely disassembled.

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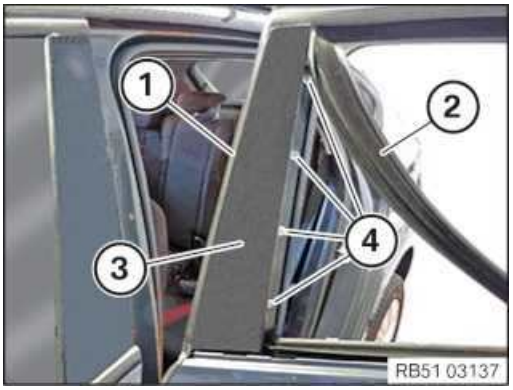
MAIN WORK

2 – Remove the outer window frame cover of the rear door



- Pull off the rubber seal (1) and the rubber window seal (2) from the cover (3).
- Loosen screws (4).
- Remove the cover (3).

3 – Install the outer window frame cover of the rear door



- Insert the cover (3).
- Tighten down screws (4).

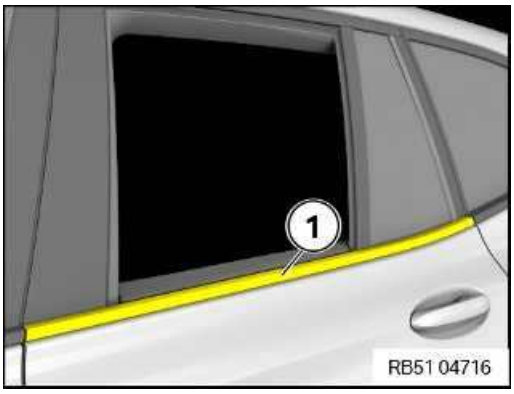
Window frame cover to door shell

Oval-head screw	Tightening torque		2,3 Nm

- Connect the rubber seal (1) and the rubber window seal (2) on the cover (3).
- Make sure that the rubber window seal (2) touches the cover (3) correctly.

POSTPROCESSES

4 – Installing the outer weather strip on the rear door



- Check the weather strip (1) for damage, renew if necessary.
- Coat the weather strip (1) with a suitable lubricant prior to installation.
- Position the weather strip (1) in front at the door.
- Press down the weather strip (1) across its entire length.

Additional Information

Overview of Tightening Torques

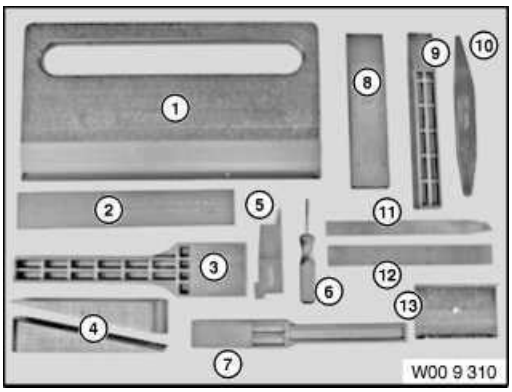
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Window frame cover to door shell Used in step 3

Oval-head screw	Tightening torque		2,3 Nm

Overview of Special Tools

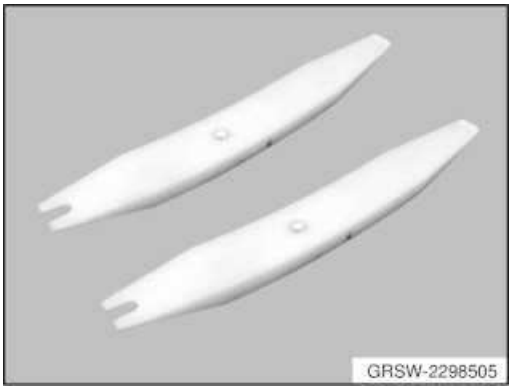
0 495 484 (00 9 324) Panel wedge



Common Used in step 1

Usage	(Panel wedge (panel)) For removing cavity strips on the doors from E60
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 25 05 (230)

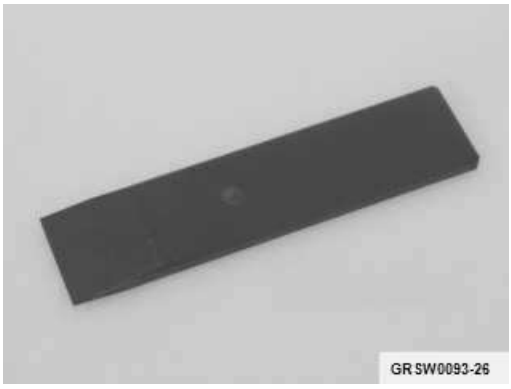
2 298 505 Wedge



Common Used in step 1

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

0 496 570 (00 9 326) Wedge



Common Used in step 1

Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 34 191 Replacing left or right fixed door window in rear window frame

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

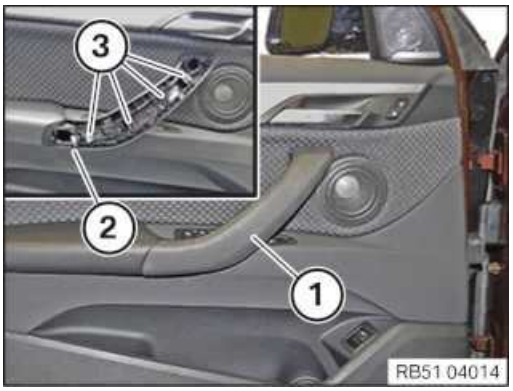
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

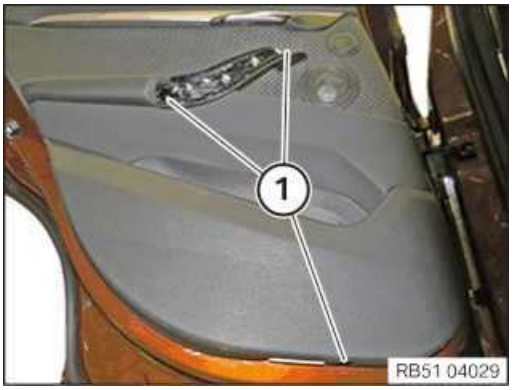
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

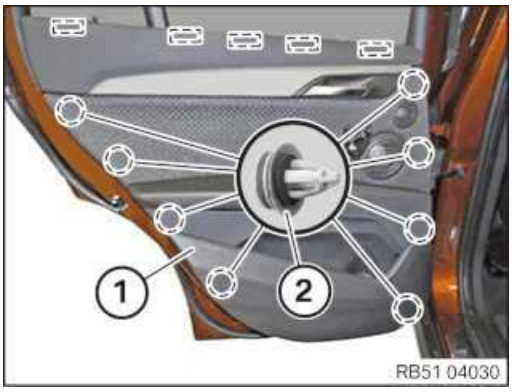
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

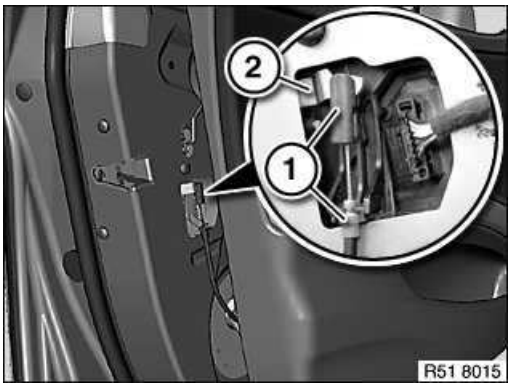


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



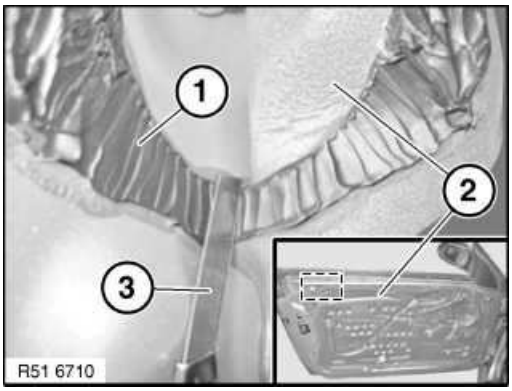
- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

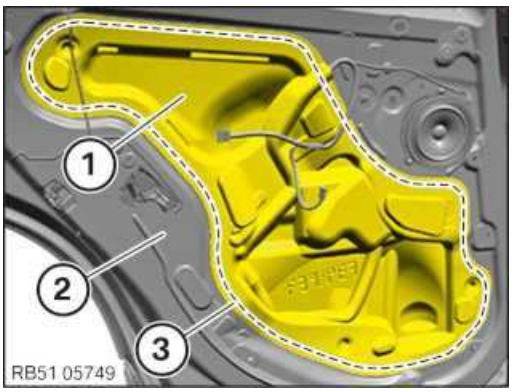
3 – Remove sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.



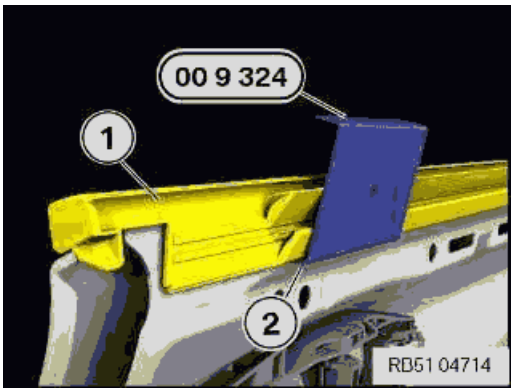
- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

4 – Removing the outer weather strip at the rear door

Prerequisite

The door window glass is open.

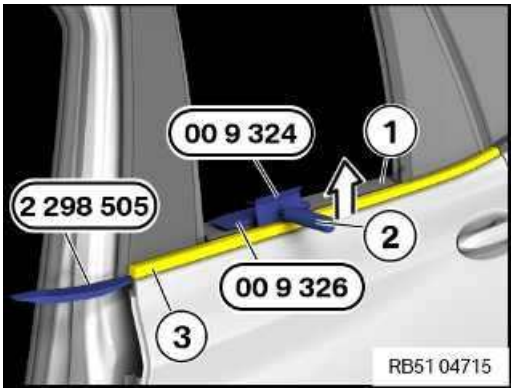
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NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Insert special tool **0 495 484 (00 9 324)** into window cavity.
- Position the special tool **0 495 484 (00 9 324)** as shown at the lower edge of the weather strip (1) with the short shank (2).



RISK OF DAMAGE

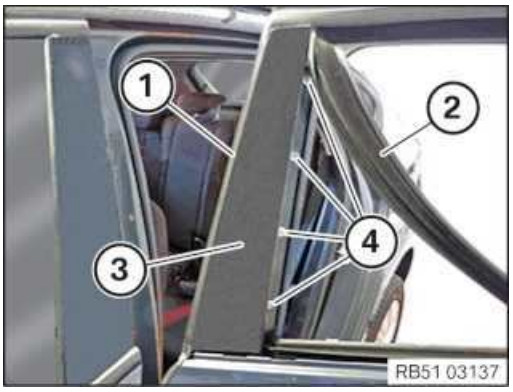
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

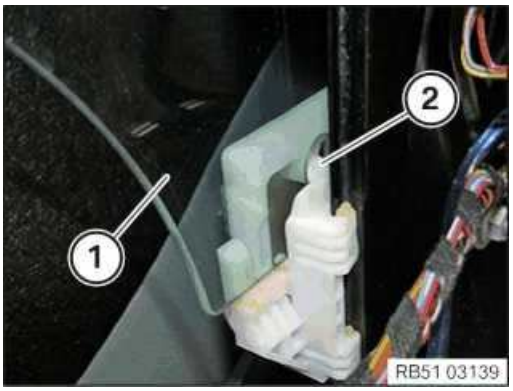
- Lift weather strip (3) using the special tool **2 298 505** by a maximum of 5 mm as illustrated.
- Position the special tool **0 496 570 (00 9 326)** on the door trim panel (1).
- Thread a suitable tool (2) through the opening of the special tool **0 495 484 (00 9 324)**.
- Gradually move special tool **2 298 505** and **0 495 484 (00 9 324)** backwards until the weather strip (3) has been completely disassembled.

5 – Remove the outer window frame cover of the rear door



- Pull off the rubber seal (1) and the rubber window seal (2) from the cover (3).
- Loosen screws (4).
- Remove the cover (3).

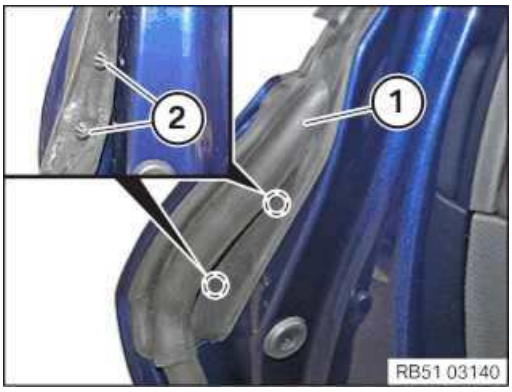
6 – Removing rear door window glass



- Move door window glass (1) until you can operate the stop of the mounting (2).
- Press the stop of the mounting (2) towards the outside using a screwdriver.
- Guide the door window glass (1) out to the top.

7 – Removing rubber window seal of rear door window glass

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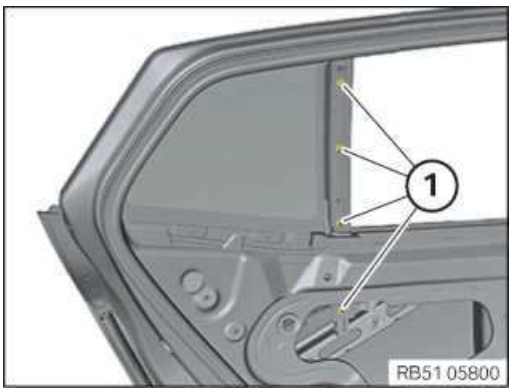
- Detach the rubber window seal (1) from the mounting (2).



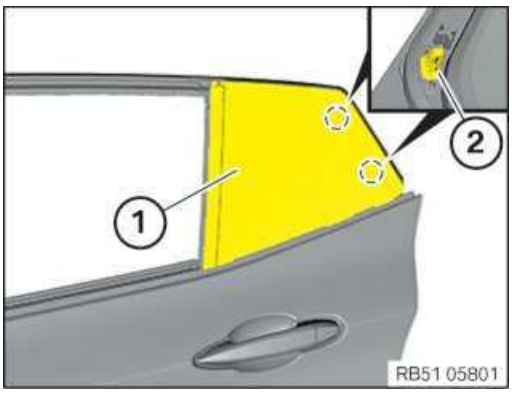
- Remove rubber window seal (1) sideways from the door frame.
- Pull out rubber window seal (1) from the window guide rails and remove.

MAIN WORK

8 – Remove rear door side window glass



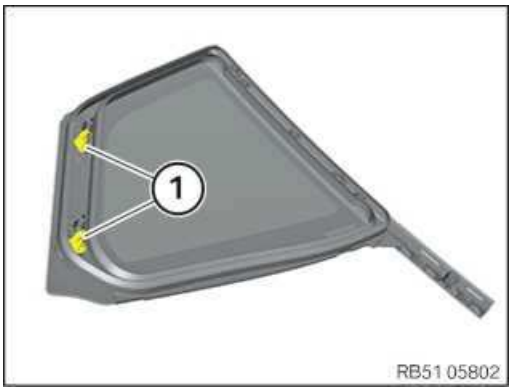
- Loosen screws (1).



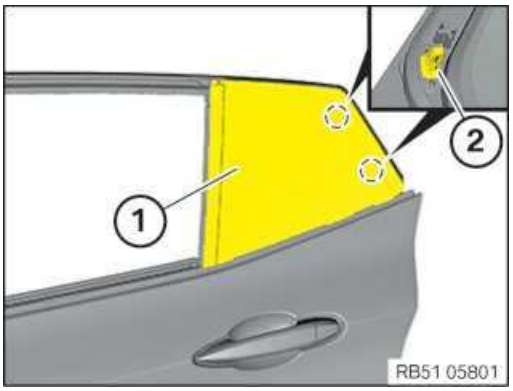
- Slide the side window glass (1) slightly forward and guide out of the latch mechanisms (2).
- Slide the side window glass (1) further forward and guide it out of the door.

9 – Install the fixed side window glass for rear door

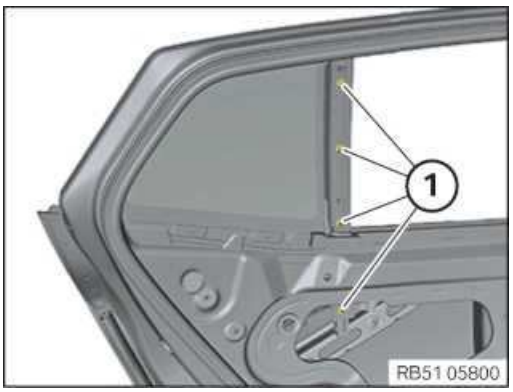
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- Check the retaining lugs (1) for damage and replace if necessary.



- Feed the fixed side window glass (1) into the door from the front.
- Slide the fixed side window glass (1) further toward the rear and feed in on the retaining lugs (2).



- Tighten the screws (1).

Fixed side window glass to door

Oval-head screw	Tightening torque		2,3 Nm

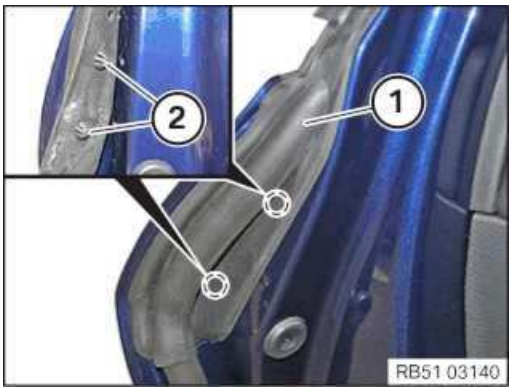
POSTPROCESSES

10 – Install rubber window seal of rear door window glass



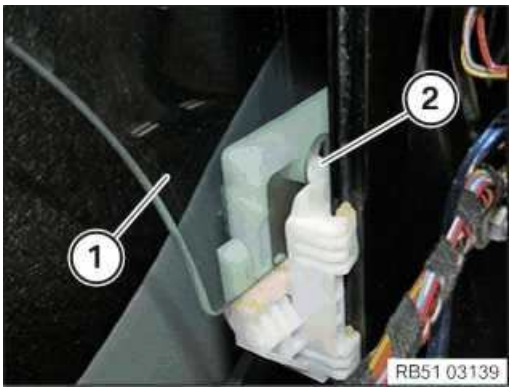
- Insert rubber window seal (1) into the guide rails.
- Attach the rubber window seal (1) to the door frame.

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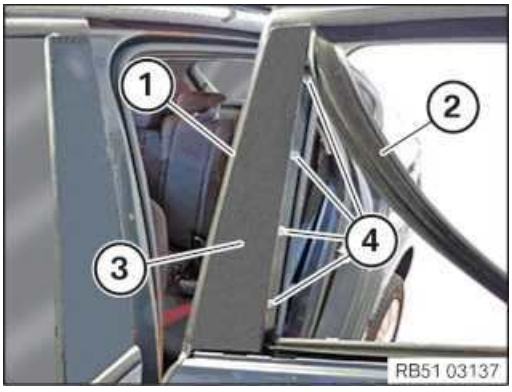
- Engage rubber window seal (1) in mounting (2).
- Make sure that the rubber window seal (1) rests correctly against the door frame.

11 – Installing rear door window glass



- Feed in the door window glass (1).
- Engage the door window glass (1) into the stop of the fixture (2).
- Make sure that the door window glass (1) correctly engages into fixture (2).

12 – Install the outer window frame cover of the rear door



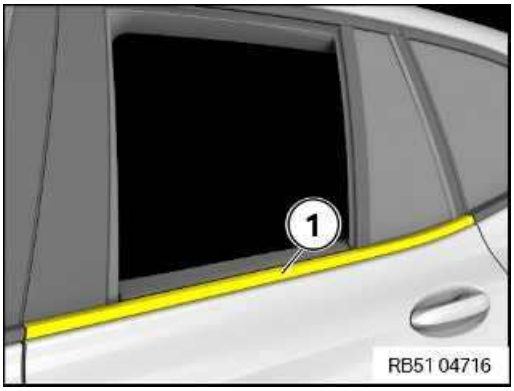
- Insert the cover (3).
- Tighten down screws (4).

Window frame cover to door shell

Oval-head screw	Tightening torque		2,3 Nm

- Connect the rubber seal (1) and the rubber window seal (2) on the cover (3).
- Make sure that the rubber window seal (2) touches the cover (3) correctly.

13 – Installing the outer weather strip on the rear door



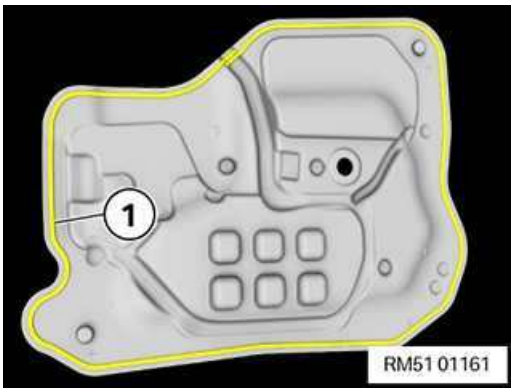
- Check the weather strip (1) for damage, renew if necessary.
- Coat the weather strip (1) with a suitable lubricant prior to installation.
- Position the weather strip (1) in front at the door.
- Press down the weather strip (1) across its entire length.

14 – Installing the sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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Check

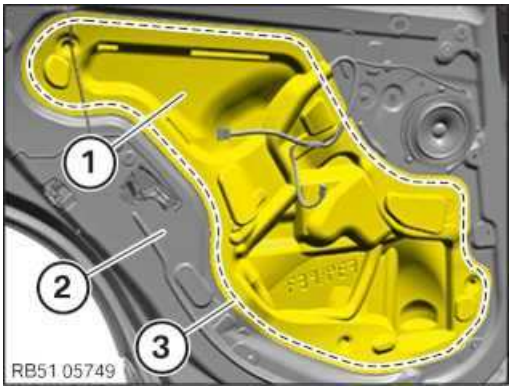
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Renew the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.
- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).



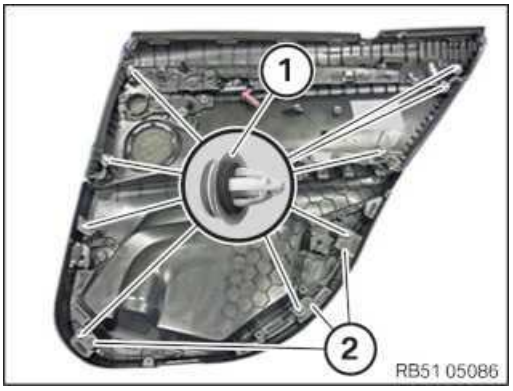
15 – Installing rear door trim panel

RISK OF DAMAGE

Scratches.

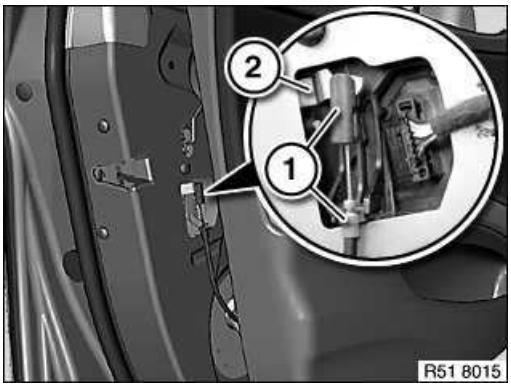
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

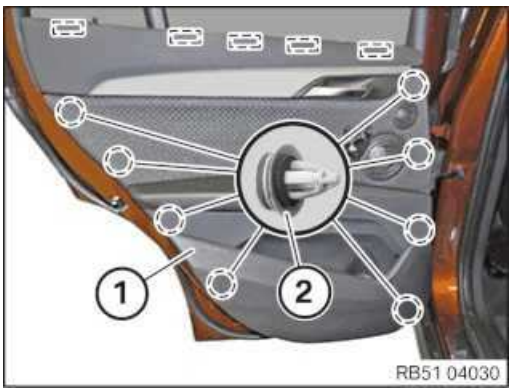


- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

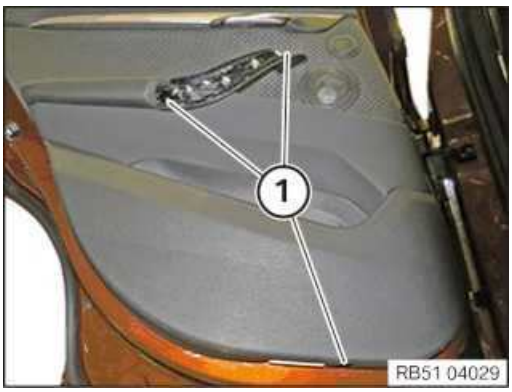
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- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

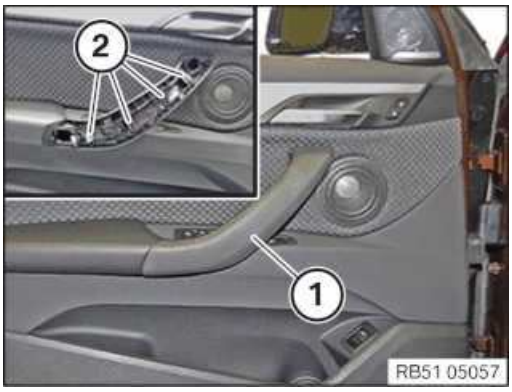
Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

16 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

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Fixed side window glass to door — Used in step 9

Oval-head screw	Tightening torque		2,3 Nm

Window frame cover to door shell — Used in step 12

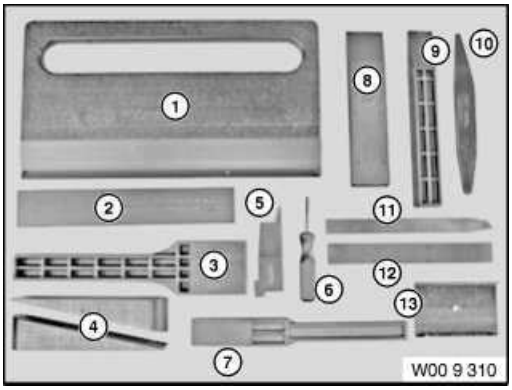
Oval-head screw	Tightening torque		2,3 Nm

Door trim panel to door — Used in step 15

Screw TS5x20		Tightening torque	2,5 Nm

Overview of Special Tools

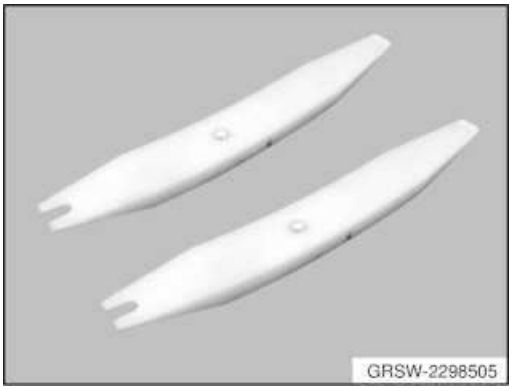
0 495 484 (00 9 324) Panel wedge



Common — Used in step 4

Usage	(Panel wedge (panel)) For removing cavity strips on the doors from E60
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 25 05 (230)

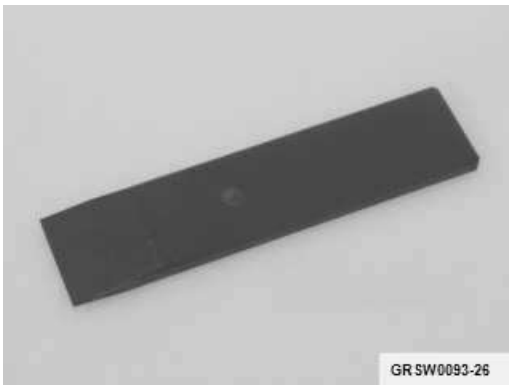
2 298 505 Wedge



Common — Used in step 4

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

0 496 570 (00 9 326) Wedge



Common — Used in step 4

Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 14

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51 34 171 Replacing rear left or right door window

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

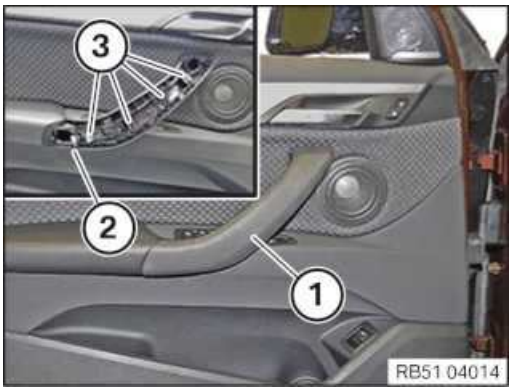
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

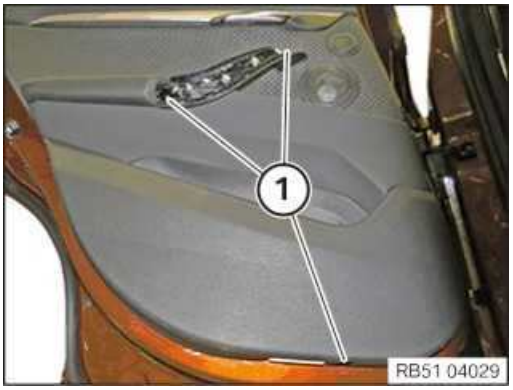
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

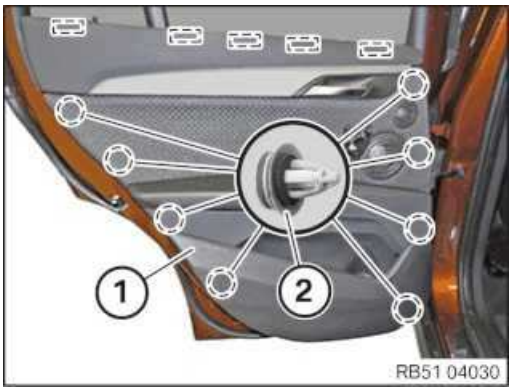
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

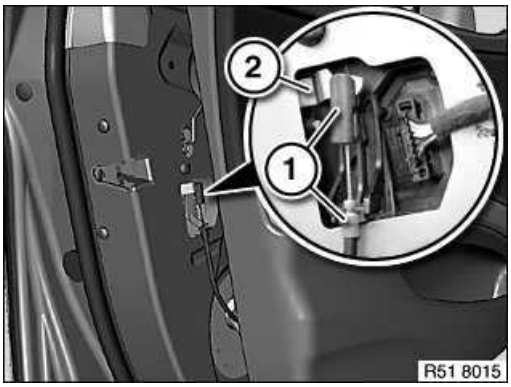


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



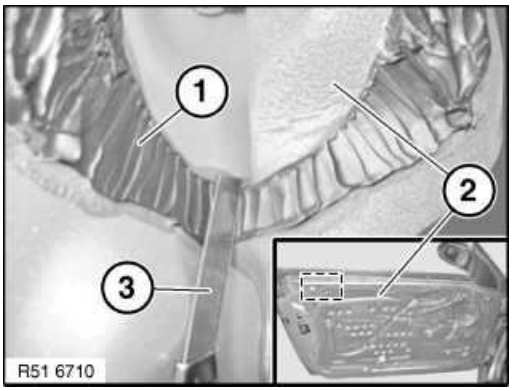
- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

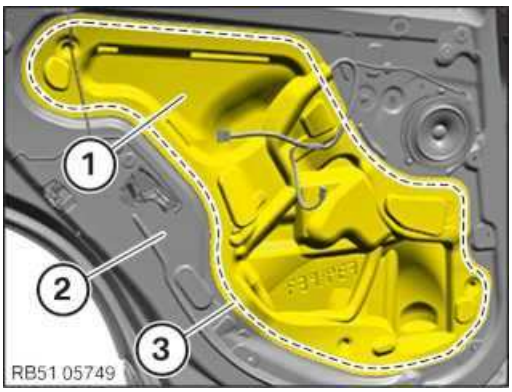
3 – Remove sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.



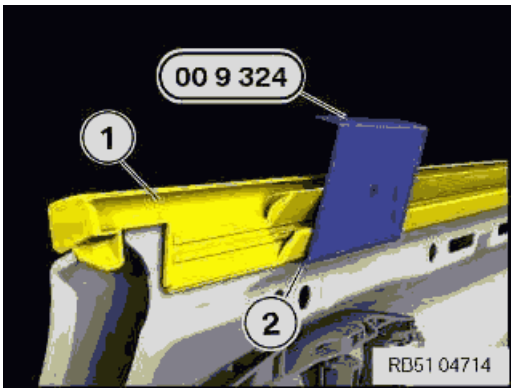
- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

4 – Removing the outer weather strip at the rear door

Prerequisite

The door window glass is open.

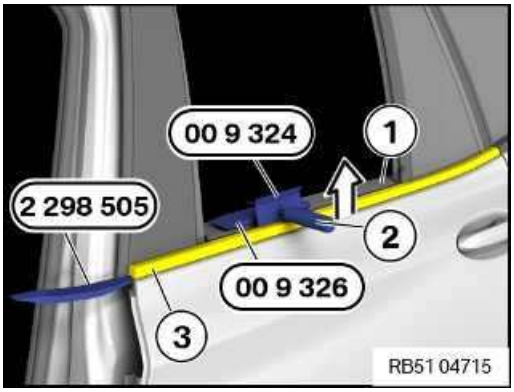
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NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Insert special tool **0 495 484 (00 9 324)** into window cavity.
- Position the special tool **0 495 484 (00 9 324)** as shown at the lower edge of the weather strip (1) with the short shank (2).



RISK OF DAMAGE

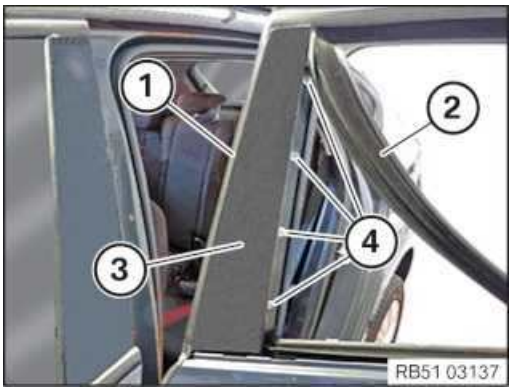
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Lift weather strip (3) using the special tool **2 298 505** by a maximum of 5 mm as illustrated.
- Position the special tool **0 496 570 (00 9 326)** on the door trim panel (1).
- Thread a suitable tool (2) through the opening of the special tool **0 495 484 (00 9 324)**.
- Gradually move special tool **2 298 505** and **0 495 484 (00 9 324)** backwards until the weather strip (3) has been completely disassembled.

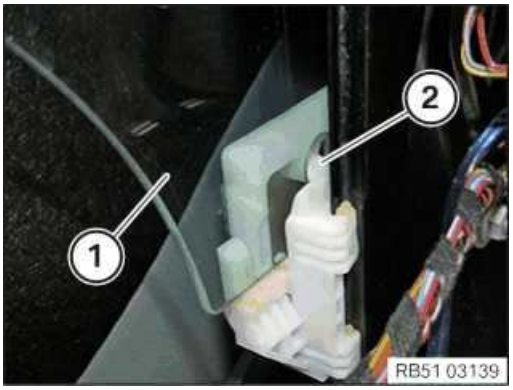
5 – Remove the outer window frame cover of the rear door



- Pull off the rubber seal (1) and the rubber window seal (2) from the cover (3).
- Loosen screws (4).
- Remove the cover (3).

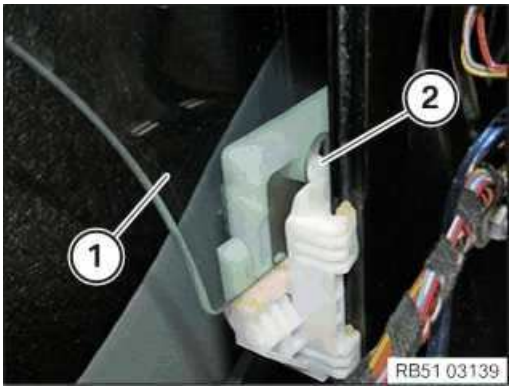
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6 – Removing rear door window glass



- Move door window glass (1) until you can operate the stop of the mounting (2).
- Press the stop of the mounting (2) towards the outside using a screwdriver.
- Guide the door window glass (1) out to the top.

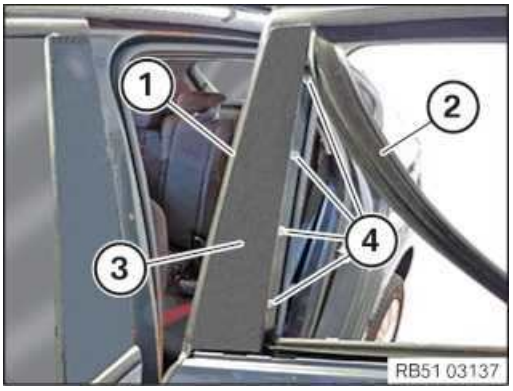
7 – Installing rear door window glass



- Feed in the door window glass (1).
- Engage the door window glass (1) into the stop of the fixture (2).
- Make sure that the door window glass (1) correctly engages into fixture (2).

POSTPROCESSES

8 – Install the outer window frame cover of the rear door



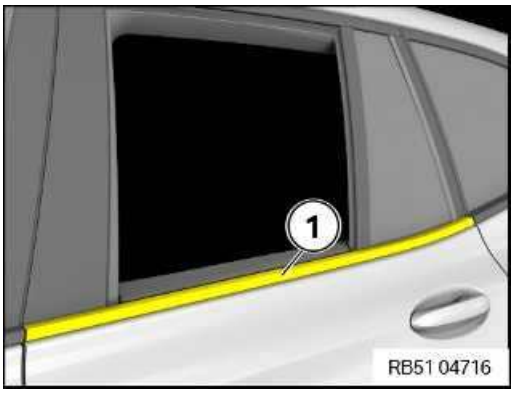
- Insert the cover (3).
- Tighten down screws (4).

Window frame cover to door shell

Oval-head screw	Tightening torque		2,3 Nm

- Connect the rubber seal (1) and the rubber window seal (2) on the cover (3).
- Make sure that the rubber window seal (2) touches the cover (3) correctly.

9 – Installing the outer weather strip on the rear door



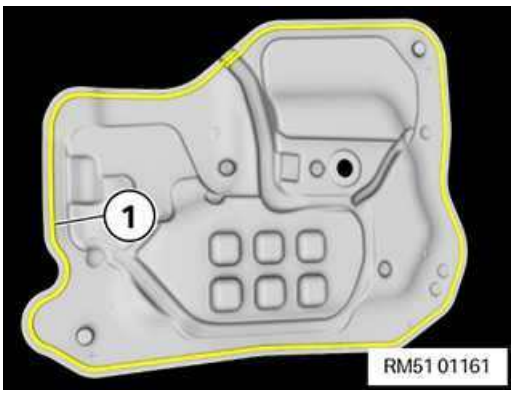
- Check the weather strip (1) for damage, renew if necessary.
- Coat the weather strip (1) with a suitable lubricant prior to installation.
- Position the weather strip (1) in front at the door.
- Press down the weather strip (1) across its entire length.

10 – Installing the sound insulation on the rear door

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TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

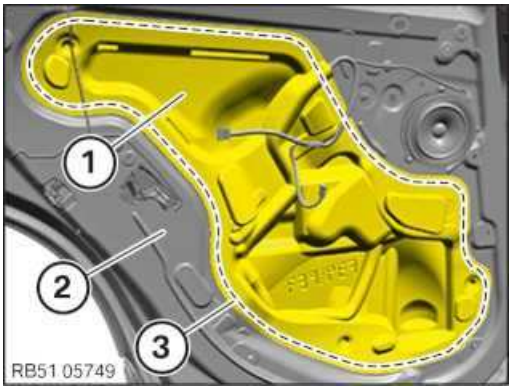
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Renew the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.
- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).



11 – Installing rear door trim panel

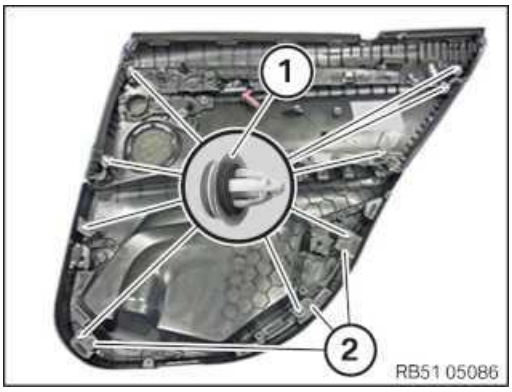
RISK OF DAMAGE

Scratches.

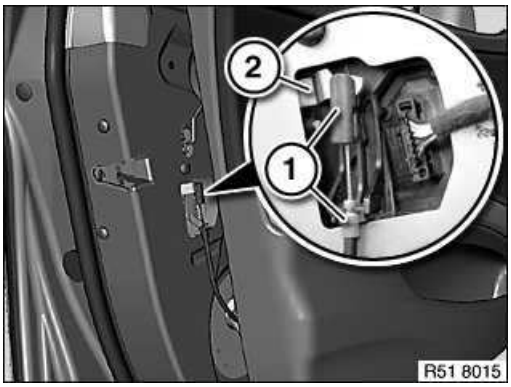
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

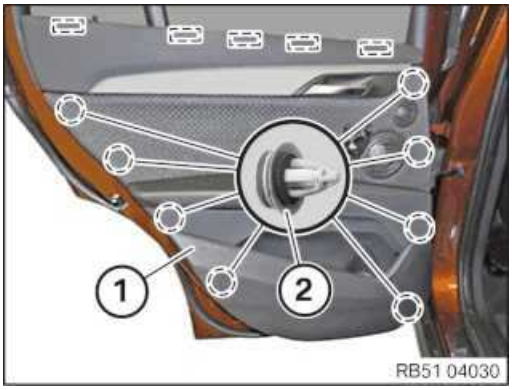
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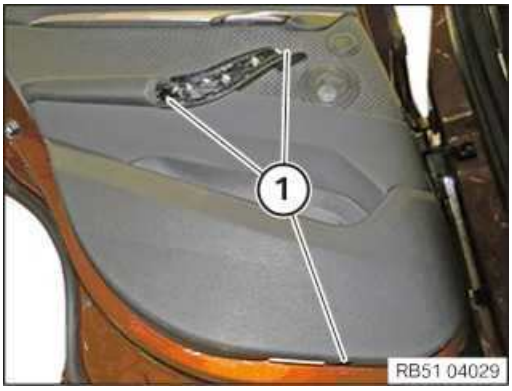
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

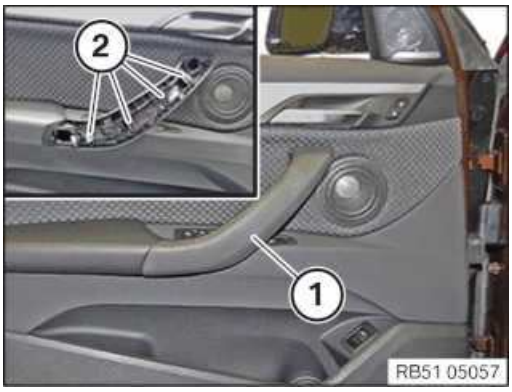
Screw TS5x20		Tightening torque	2,5 Nm

12 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Window frame cover to door shell — Used in step 8

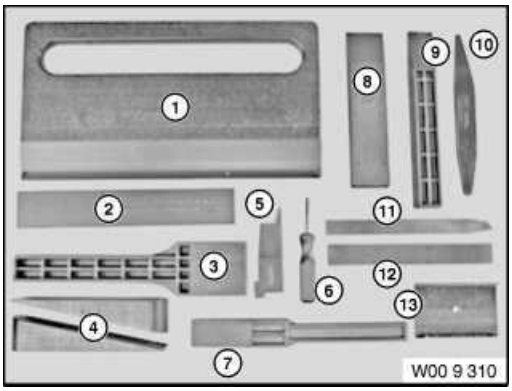
Oval-head screw	Tightening torque		2,3 Nm

Door trim panel to door — Used in step 11

Screw TS5x20		Tightening torque	2,5 Nm

Overview of Special Tools

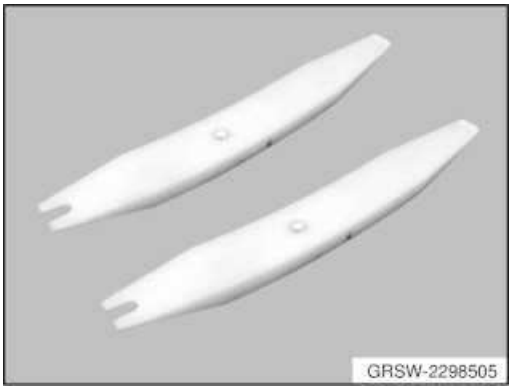
0 495 484 (00 9 324) Panel wedge



Common — Used in step 4

Usage	(Panel wedge (panel)) For removing cavity strips on the doors from E60
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 25 05 (230)

2 298 505 Wedge

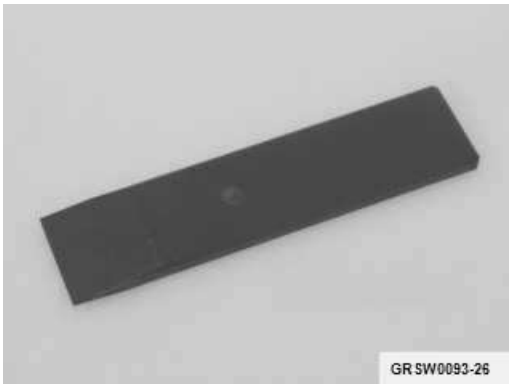


Common — Used in step 4

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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0 496 570 (00 9 326) Wedge



Common	Used in step 4
Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 10

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51 34 211 Replacing rubber seal for rear left or right door window

Prerequisite

› Open the window glass.

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

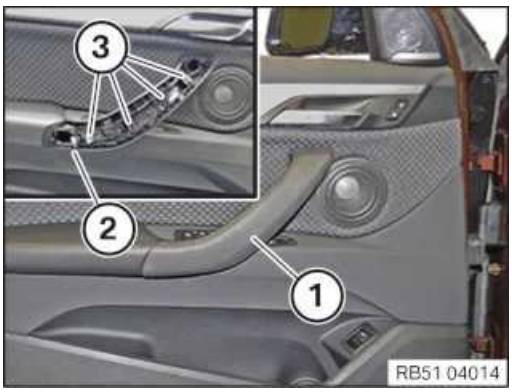
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove rear door trim

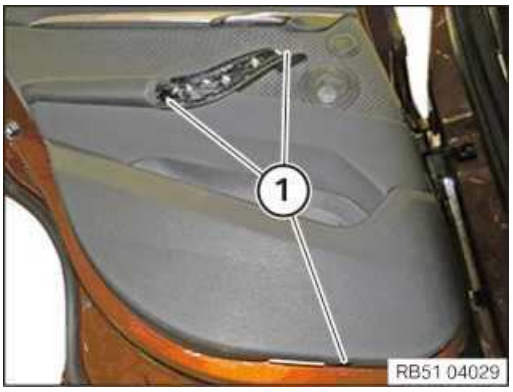
RISK OF DAMAGE

Scratches.

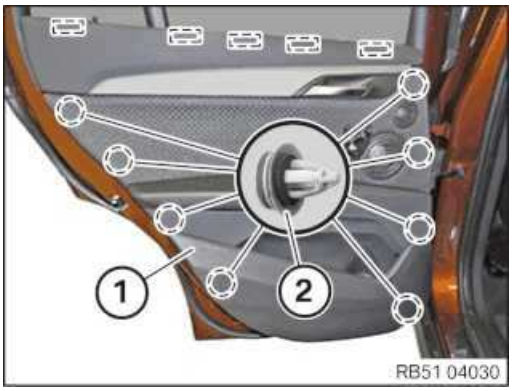
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

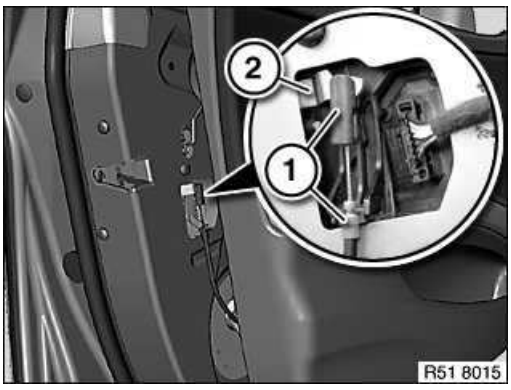
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- Loosen screws (1).



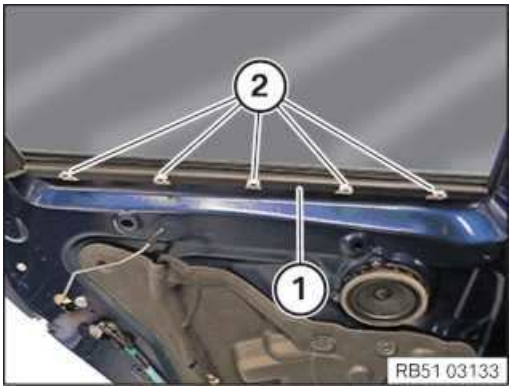
- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.



- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

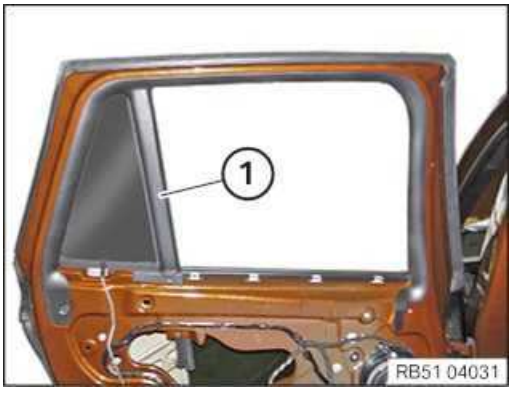
3 – Remove the weather strip from the rear inner door



- Release the weather strip (1) from the brackets (2) and pull it off to the top.
- Make sure the weather strip (1) is not deformed.

  It is exclusively possible to re-use a weather strip that has not been deformed.

4 – Remove the window frame cover of the rear door



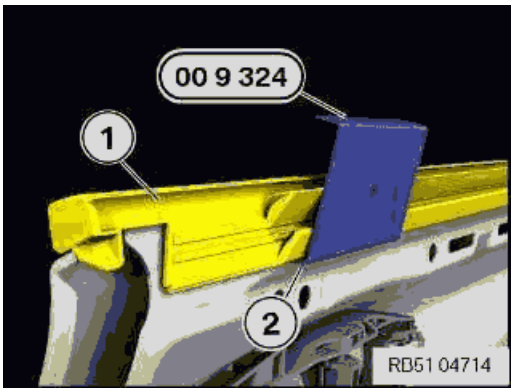
- Pull off the cover (1) in an inwards direction out of the latch mechanisms.

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5 – Removing the outer weather strip at the rear door

Prerequisite

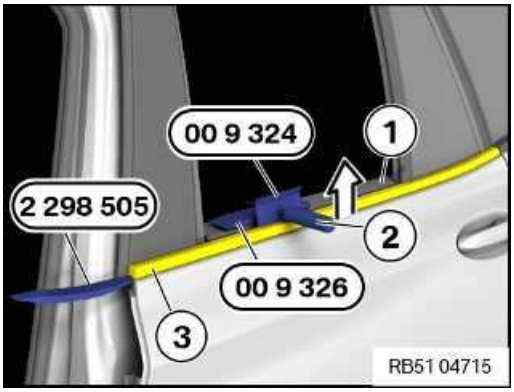
The door window glass is open.



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Insert special tool **0 495 484 (00 9 324)** into window cavity.
- Position the special tool **0 495 484 (00 9 324)** as shown at the lower edge of the weather strip (1) with the short shank (2).



RISK OF DAMAGE

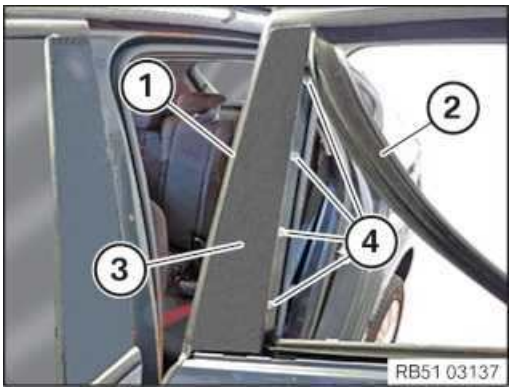
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Lift weather strip (3) using the special tool **2 298 505** by a maximum of 5 mm as illustrated.
- Position the special tool **0 496 570 (00 9 326)** on the door trim panel (1).
- Thread a suitable tool (2) through the opening of the special tool **0 495 484 (00 9 324)**.
- Gradually move special tool **2 298 505** and **0 495 484 (00 9 324)** backwards until the weather strip (3) has been completely disassembled.

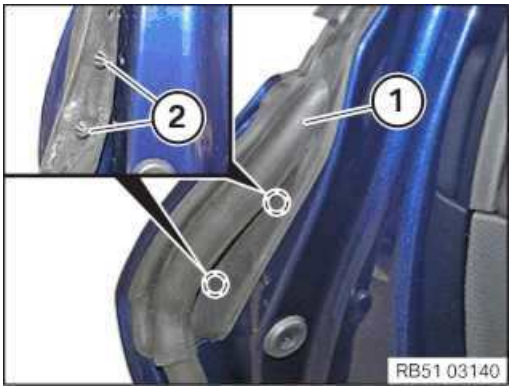
6 – Remove the outer window frame cover of the rear door



- Pull off the rubber seal (1) and the rubber window seal (2) from the cover (3).
- Loosen screws (4).
- Remove the cover (3).

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7 – Removing rubber window seal of rear door window glass



- Detach the rubber window seal (1) from the mounting (2).

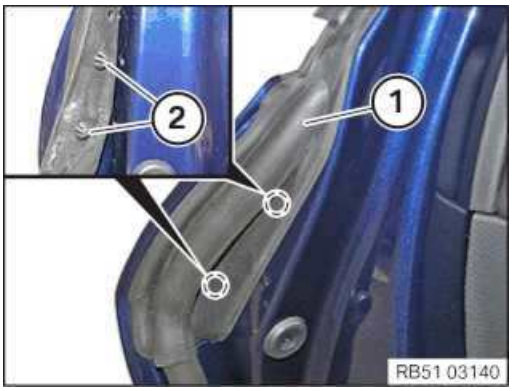


- Remove rubber window seal (1) sideways from the door frame.
- Pull out rubber window seal (1) from the window guide rails and remove.

8 – Install rubber window seal of rear door window glass



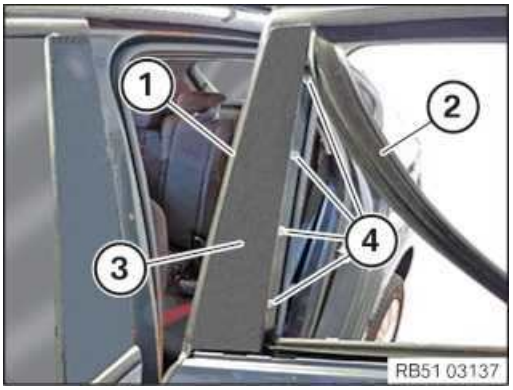
- Insert rubber window seal (1) into the guide rails.
- Attach the rubber window seal (1) to the door frame.



- Engage rubber window seal (1) in mounting (2).
- Make sure that the rubber window seal (1) rests correctly against the door frame.

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9 – Install the outer window frame cover of the rear door



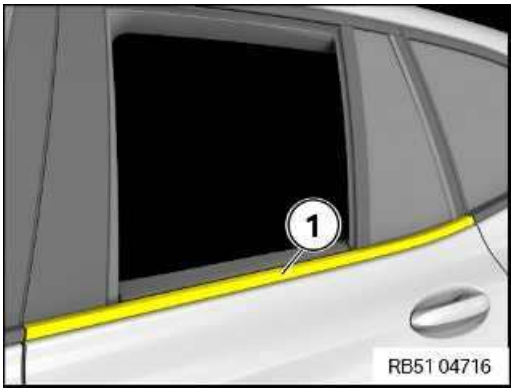
- Insert the cover (3).
- Tighten down screws (4).

Window frame cover to door shell

Oval-head screw	Tightening torque		2,3 Nm

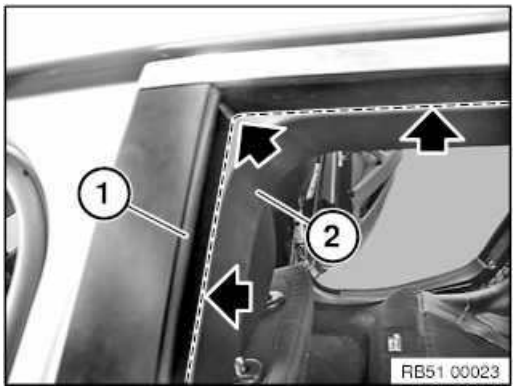
- Connect the rubber seal (1) and the rubber window seal (2) on the cover (3).
- Make sure that the rubber window seal (2) touches the cover (3) correctly.

10 – Installing the outer weather strip on the rear door

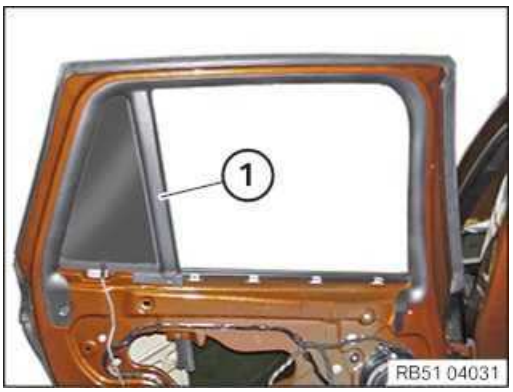


- Check the weather strip (1) for damage, renew if necessary.
- Coat the weather strip (1) with a suitable lubricant prior to installation.
- Position the weather strip (1) in front at the door.
- Press down the weather strip (1) across its entire length.

11 – Install the window frame cover for the rear door



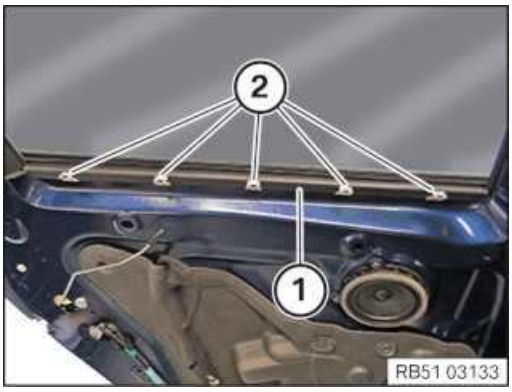
- Install the cover (2).
- Make sure that the cover (2) is threaded correctly into the groove of the rubber window seal (1).



- Engage the cover (1) in the latch mechanisms .

12 – Installing weather strip on inner rear door

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- Coat the weather strip (1) prior to installation with an approved lubricant.
- If necessary, remove clamps (2) from weather strip (1) and attach to door.
- Renew defective clamps (2).
- Position weather strip (1) on the door and engage into the clamps (2).

13 – Installing rear door trim panel

RISK OF DAMAGE

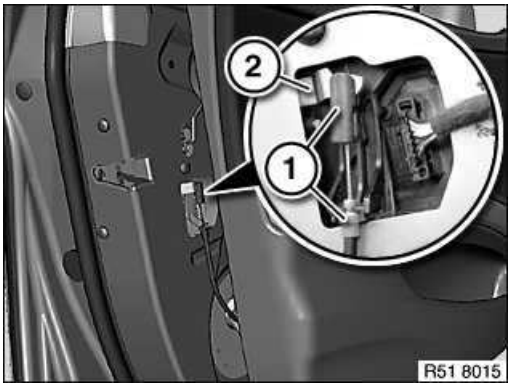
Scratches.

Tools and sharp-edged components can cause scratches.

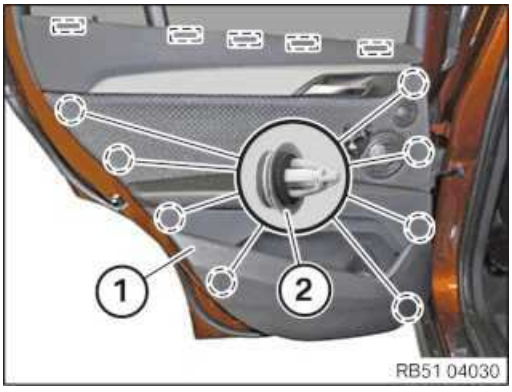
- Protect working area.
- Handle tools and components carefully.



- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

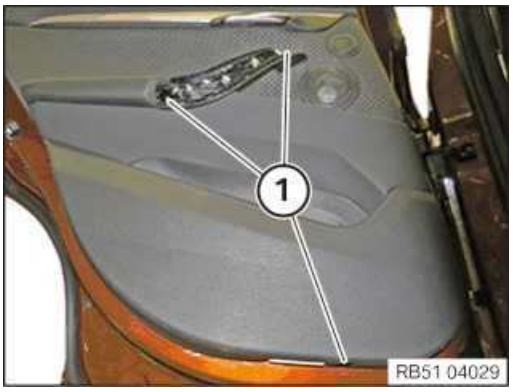


- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

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- Tighten the screws (1).

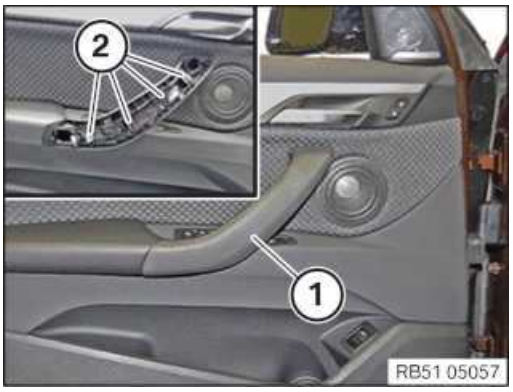
Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

14 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Window frame cover to door shell Used in step 9

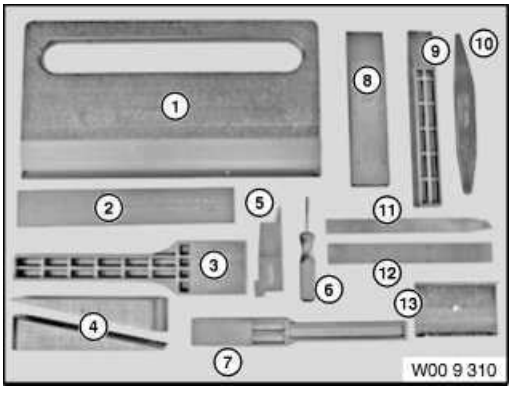
Oval-head screw	Tightening torque		2,3 Nm

Door trim panel to door Used in step 13

Screw TS5x20		Tightening torque	2,5 Nm

Overview of Special Tools

0 495 484 (00 9 324) Panel wedge

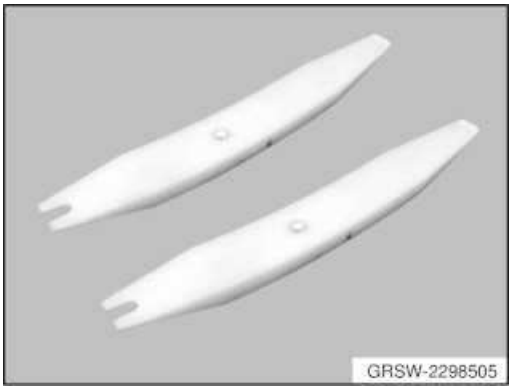


Common Used in step 5

Usage	(Panel wedge (panel)) For removing cavity strips on the doors from E60
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 25 05 (230)

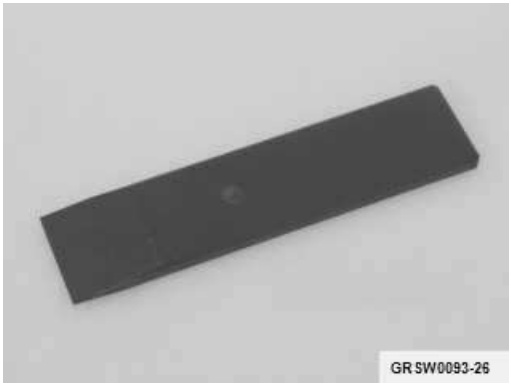
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2 298 505 Wedge



Common	Used in step 5
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

0 496 570 (00 9 326) Wedge



Common	Used in step 5
Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 37 000 Removing and installing complete rear left or right power window regulator

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

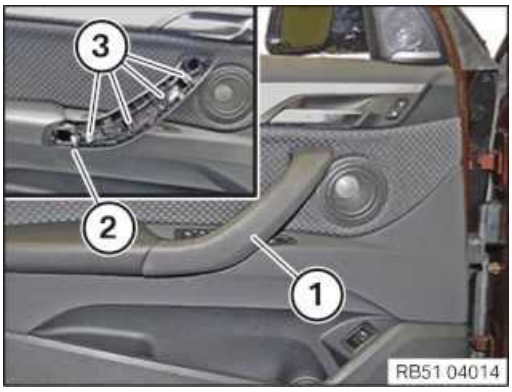
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

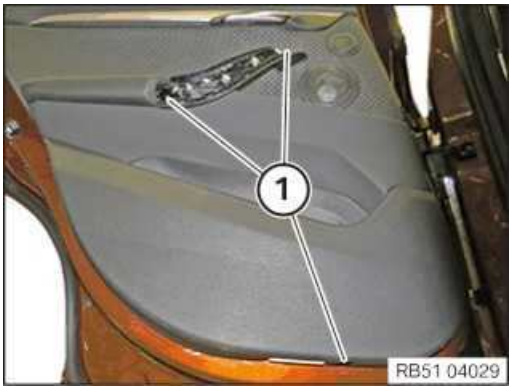
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

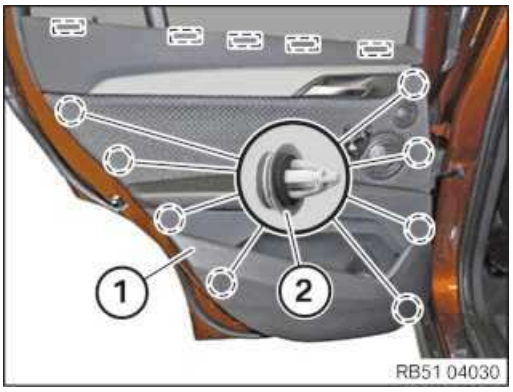
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

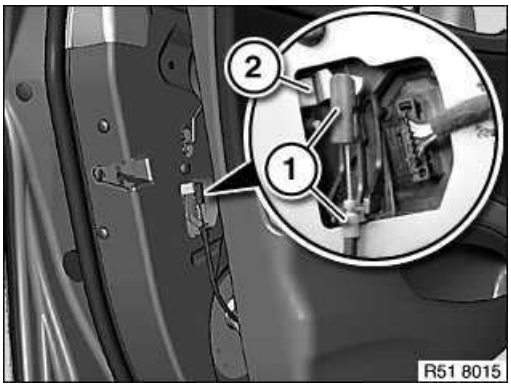


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



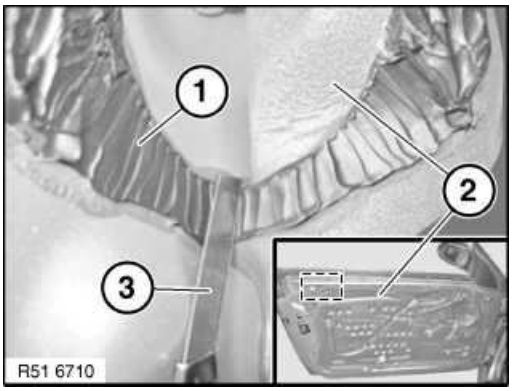
- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

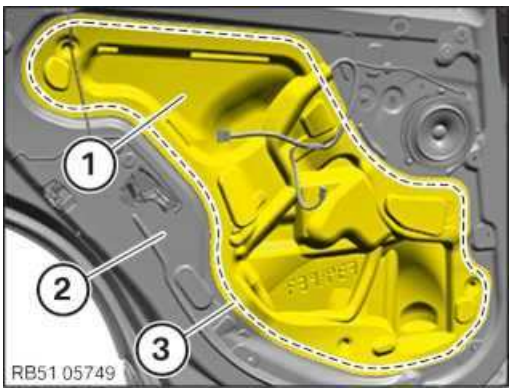
3 – Remove sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

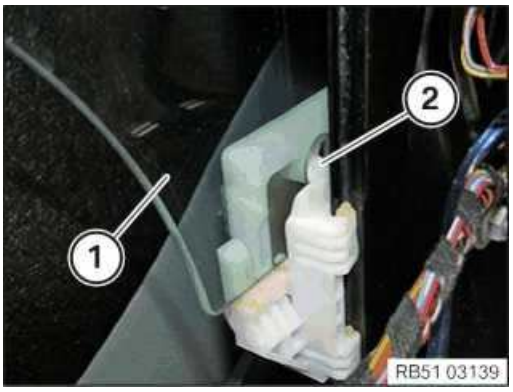


- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

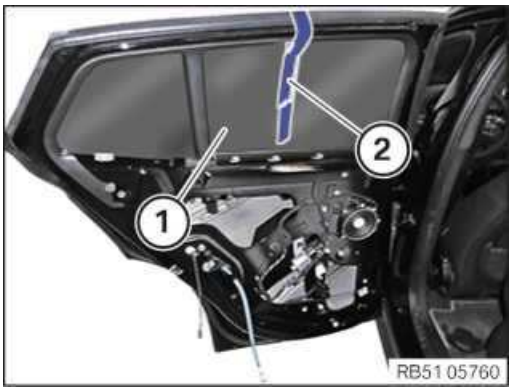
MAIN WORK

4 – Remove rear power window regulator

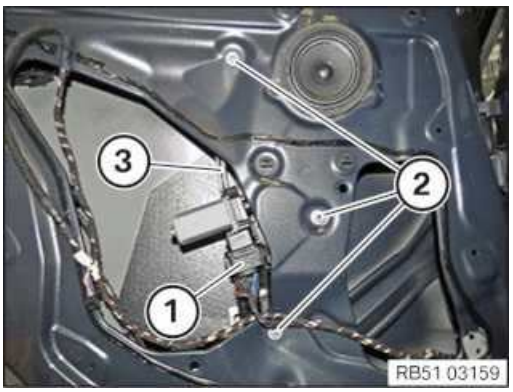
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- Move door window glass (1) until you can operate the stop of the mounting (2).
- Press the stop of the mounting (2) towards the outside using a screwdriver.
- Slide the door window glass (2) in an upward direction.

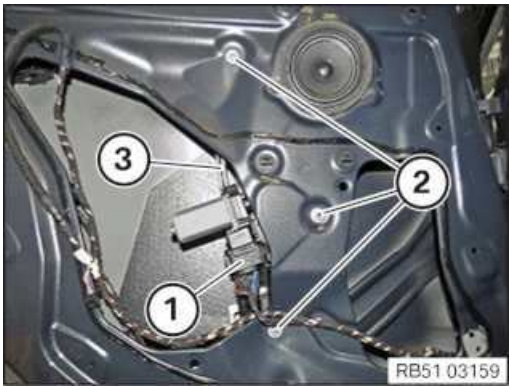


- Push the door window glass (1) completely upwards and secure with adhesive tape (2).



- Unlock plug connection (1) and disconnect.
- Loosen the nuts (2) and guide the power windows (3) out of the door.

5 – Installing rear power window regulator

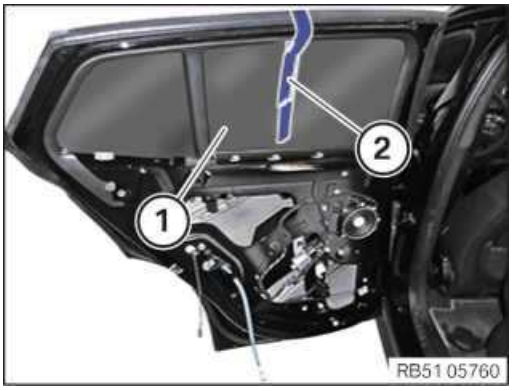


- Feed in and position the power windows (3) in the door.
- Tighten nuts (2).

Window regulator to door

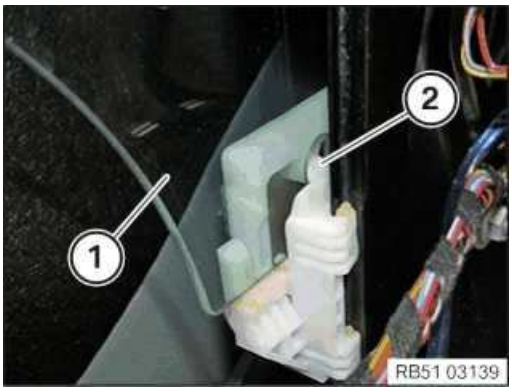
Nut M6, self-locking		Tightening torque	9,5 Nm

- Connect plug connection (1) and lock.



- Remove adhesive tape (2) from the door window glass (1).

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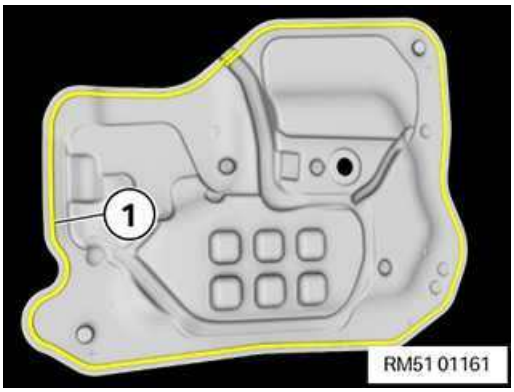
- Slide the door window glass (1) downward and engage into the stop of the fixture (2).
- Make sure that the door window glass (1) correctly engages into fixture (2).

POSTPROCESSES

6 – Installing the sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

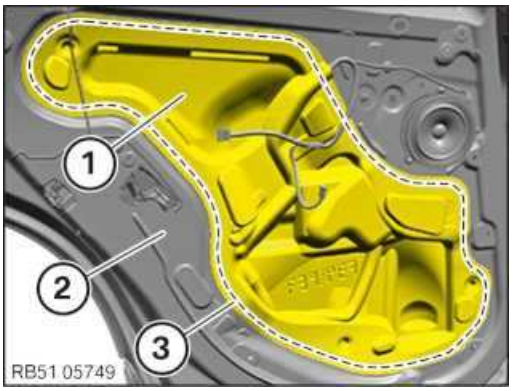
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Renew the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).

7 – Installing rear door trim panel

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RISK OF DAMAGE

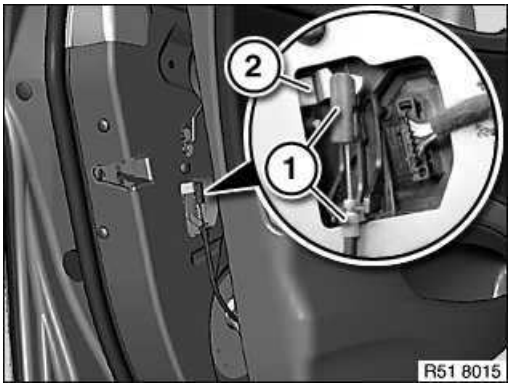
Scratches.

Tools and sharp-edged components can cause scratches.

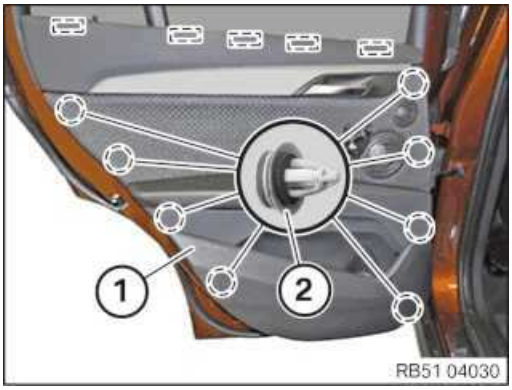
- Protect working area.
- Handle tools and components carefully.



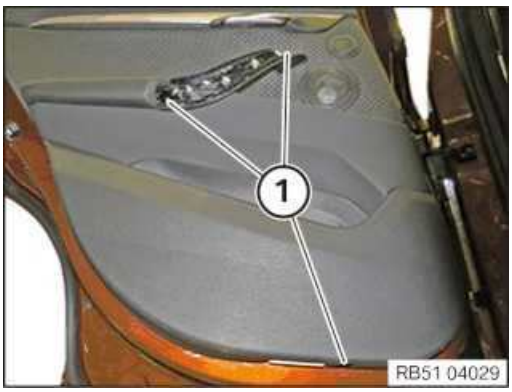
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

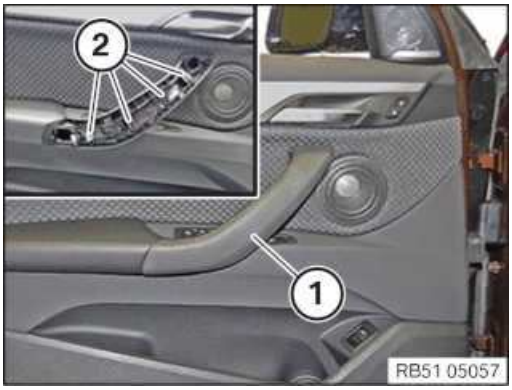
Screw TS5x20		Tightening torque	2,5 Nm

8 – Install the cover on the door handle

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

9 – Initialising the power windows

TECHNICAL INFORMATION

Notes on power window initialisation must be strictly observed for these repair instructions.
Additional information, see 67 62 ... Information on power window initialisation.

- Initialise power window.

Additional Information

Overview of Tightening Torques

Window regulator to door			Used in step 5
Nut M6, self-locking		Tightening torque	9,5 Nm

Door trim panel to door			Used in step 7
Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 6

Repair instructions	Used in step
67 62 ... Notes on initializing power windows	9
67 62 ... Notes on initializing power windows	9

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51 37 003 Replacing rear left or right power window regulator

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

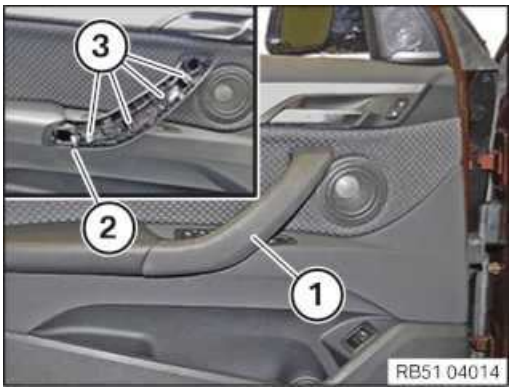
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

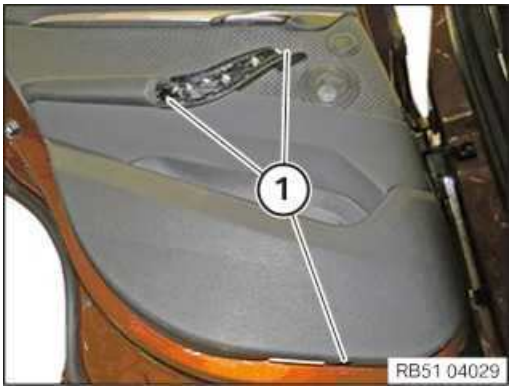
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

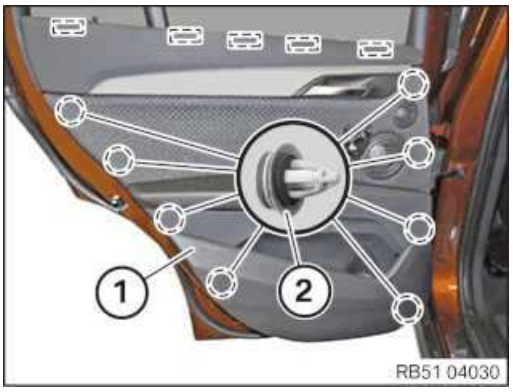
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

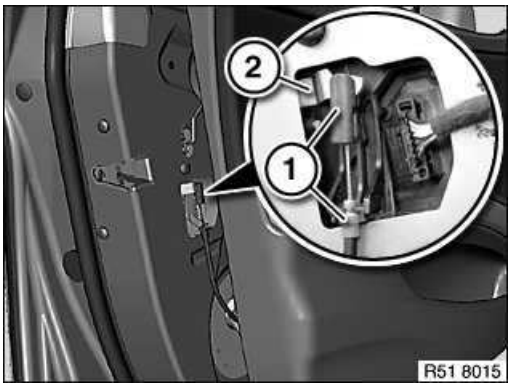


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



- Detach Bowden cable (1) from door lock (2).

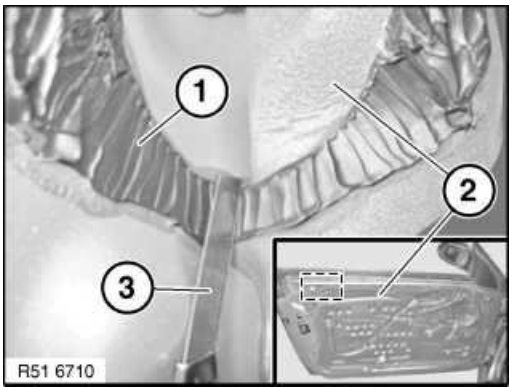
  Disconnect all plug connections and remove door trim panel.

3 – Remove sound insulation on the rear door

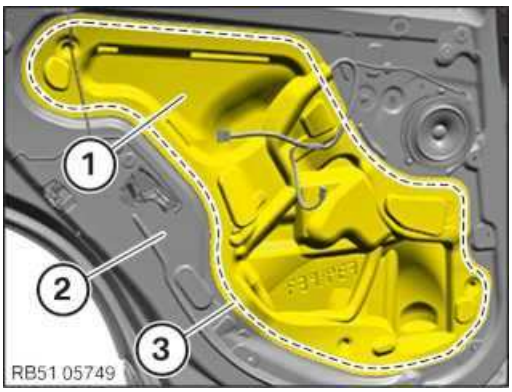
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.

For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



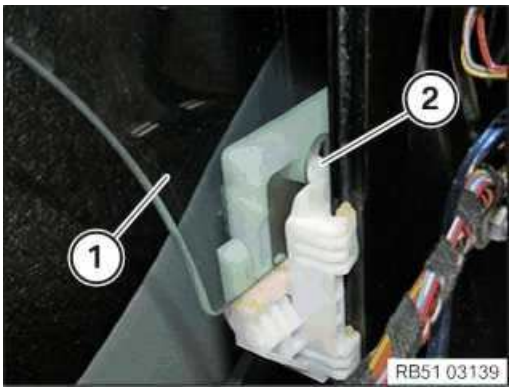
- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.



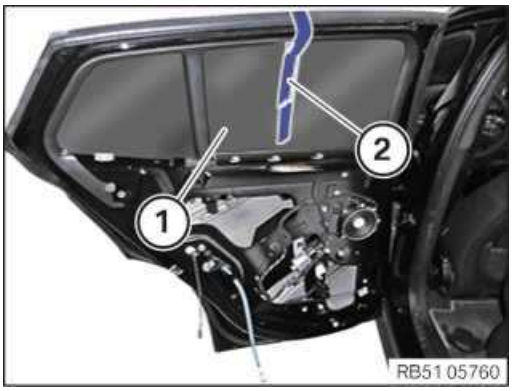
- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

4 – Remove rear power window regulator

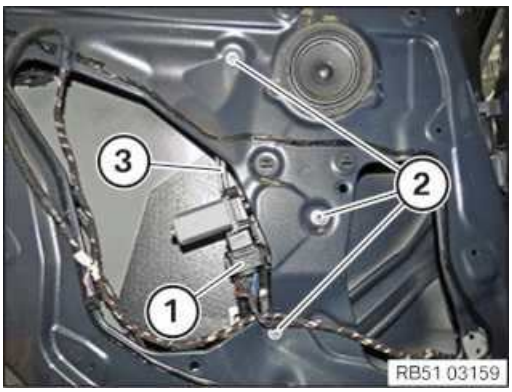
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- Move door window glass (1) until you can operate the stop of the mounting (2).
- Press the stop of the mounting (2) towards the outside using a screwdriver.
- Slide the door window glass (2) in an upward direction.



- Push the door window glass (1) completely upwards and secure with adhesive tape (2).

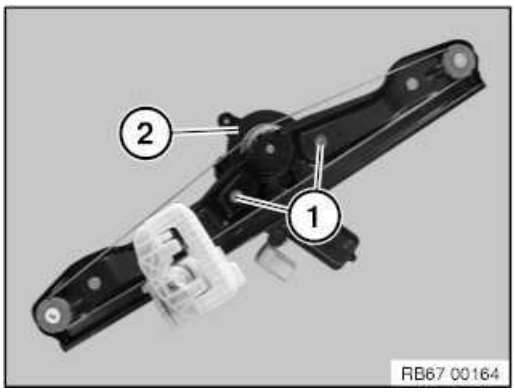


- Unlock plug connection (1) and disconnect.
- Loosen the nuts (2) and guide the power windows (3) out of the door.

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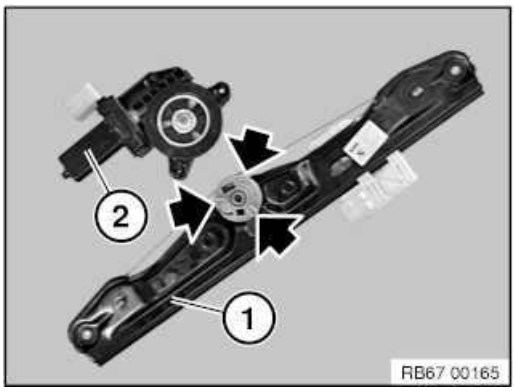
MAIN WORK

5 – Remove the flat motor for the rear power window

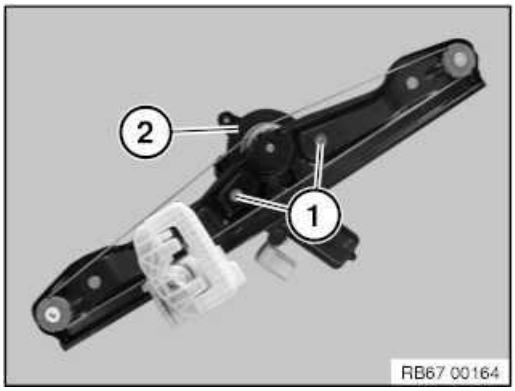


- Loosen screws (1).
- Thread the flat motor (2) out and remove it so that the cable does not disconnect from the power window.

6 – Install the flat motor for the rear power window



- Engage the flat motor (2) precisely at the marked points on the power window (1).



- Tighten the screws (1) for the flat motor (2) at the same time.

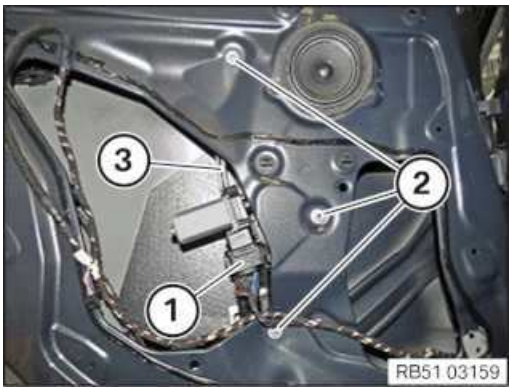
Flat motor to power window regulator

Screw		Tightening torque	7 Nm

POSTPROCESSES

7 – Installing rear power window regulator

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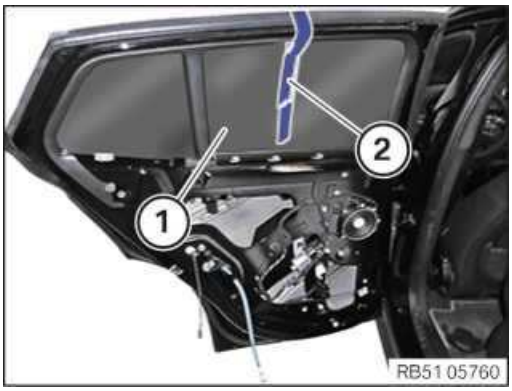


- Feed in and position the power windows (3) in the door.
- Tighten nuts (2).

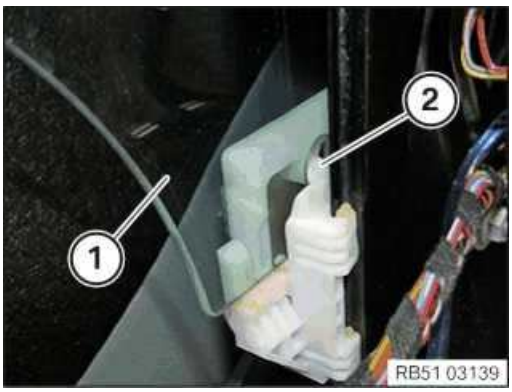
Window regulator to door

Nut M6, self-locking		Tightening torque	9,5 Nm

- Connect plug connection (1) and lock.



- Remove adhesive tape (2) from the door window glass (1).

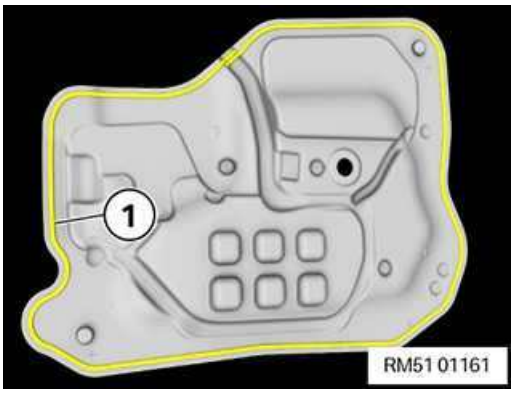


- Slide the door window glass (1) downward and engage into the stop of the fixture (2).
- Make sure that the door window glass (1) correctly engages into fixture (2).

8 – Installing the sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

- Check sound insulation for damage.

Result

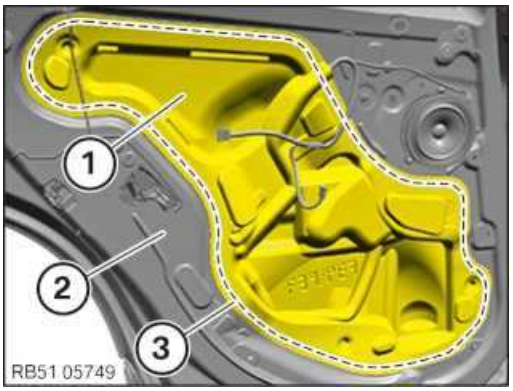
» The sound insulation is damaged.

Measure

- Renew the sound insulation.

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- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).

9 – Installing rear door trim panel

RISK OF DAMAGE

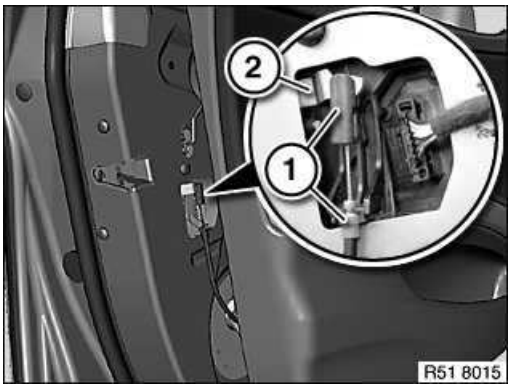
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

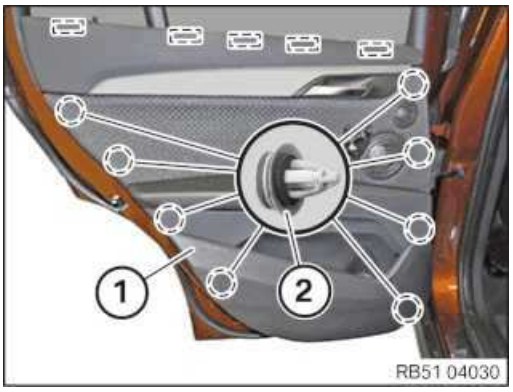


- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

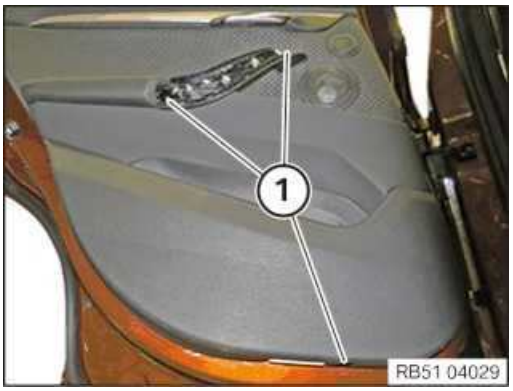


- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).

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- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

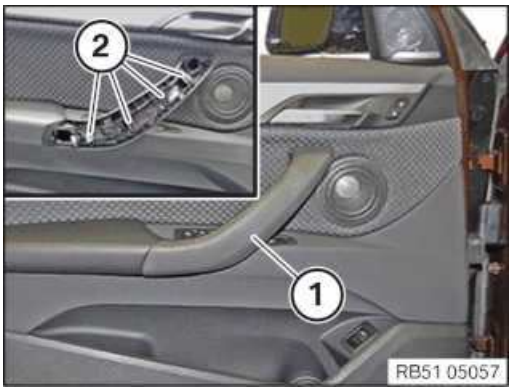
Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

10 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

11 – Initialising the power windows

TECHNICAL INFORMATION

Notes on power window initialisation must be strictly observed for these repair instructions.
Additional information, see 67 62 ... Information on power window initialisation.

- Initialise power window.

Additional Information

Overview of Tightening Torques

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Flat motor to power window regulator			Used in step 6
Screw		Tightening torque	7 Nm

Window regulator to door			Used in step 7
Nut M6, self-locking		Tightening torque	9,5 Nm

Door trim panel to door			Used in step 9
Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 8

Repair instructions	Used in step
67 62 ... Notes on initializing power windows	11
67 62 ... Notes on initializing power windows	11

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51 48 ... Notes for bonding sound insulation (SI), doors



Special tools required:

- 51 0 300

Attention!

Do not yank at the sound insulation (risk of damage).

General:

Sound insulation is bonded to the inner door panel.

Bonded sound insulation must not be subjected to load (e.g. leak test) before 5 hours have elapsed.

On-the-job safety:

When working with bonding products (adhesive, cleaning agent, etc.):

- Wear safety goggles, protective gloves and if necessary an apron.
- Ensure the area is well ventilated.
- Change work clothing contaminated with adhesive immediately.
- Change work clothing contaminated with solvents and swelling agents immediately (keep spare work clothing on hand).
- Take skin protection measures, provide washing facilities including hot water, use silicone-free skin creams.
- Always keep an eye douche on hand, change the water regularly (once a month).
- Comply with the relevant safety regulations.

Handling adhesive area on inner door panel:

Adhesive	Cleaning
a. Butyl bead applied to sound insulation with protective film b. Butyl mini-round profile ⌀ 4 mm from the roller c. Butyl round profile ⌀ 6 mm from the roller	a. Cleaning agentR2 *Under no circumstances: paint thinning* b. Carry out bonding only after an air drying time ≥ 1 min. Air drying time may be omitted if the entire bonding surface is wiped with a dry cloth c. After cleaning, the bonding surface may not be touched with hands or fouled again

Repair in area of sound insulation, door:

Repair	
	• Cut the butyl rope between the sound insulation and the inner door panel with a sharp knife • After the repair is finished, position a new butyl rope ⌀ 4 mm directly on the original adhesive bead • Heat the butyl bead with a standard hot air blower until the butyl rope strings when touched slightly. Do not damage the sound insulation in the process • Press on with special tool 51 0 300. Perform this work extremely carefully because the increased amount of adhesive requires contact pressure of ≥ 20 N/cm^2 (compared to firm thumb pressure ~ 30 N/cm^2) • Visually check the adhesive bead and its compression (no capillaries or broken adhesive bead permitted)

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in the event of damaged sound insulation or leakage	• In the cases mentioned, the complete sound insulation must be replaced. After removing the sound insulation, removal all butyl remnants from the inner door panel. Apply 6 mm ⌀ butyl rope to new sound insulation • Press on with special tool 51 0 300. Contact pressure ≥ 20 N/cm^2 (compare to firm thumb pressure ~ 30 N/cm^2)

The sound insulation must be bonded watertight below the door lock:

- Flat bonding surface required all round.
- No bonding in the event of moisture (e.g. condensation, etc.).
- Bonding area must not show any traces of adhesion-reducing residues (e.g. separating agents, greases, oils, paraffins, plastisols, cavity wax, polishing dust residues, etc.).
- Remove the protective film directly before joining (under no circumstances remove earlier, since the butyl, because of its stickiness, will very quickly pick up adhesion-reducing dirt contaminants).
- The sound insulation must be attached with positional accuracy to the inner door panel because it will no longer be possible to change the position without damaging the butyl bead.
- With repainted areas, the maximum permitted temperature of 90°C may not be exceeded in the area of the sound insulation. Otherwise, the sound insulation must be removed (and replaced, if necessary).

Expiry date of adhesive:

24 months, see label on packaging.

Disposal of the cleaning cloth:

Cleaning cloths and cleaning agent residues are hazardous waste (see also safety data sheet).

Disposal of adhesive:

Hazardous waste (see also safety data sheet).

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51 41 000 Removing and installing left or right front door trim panel

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

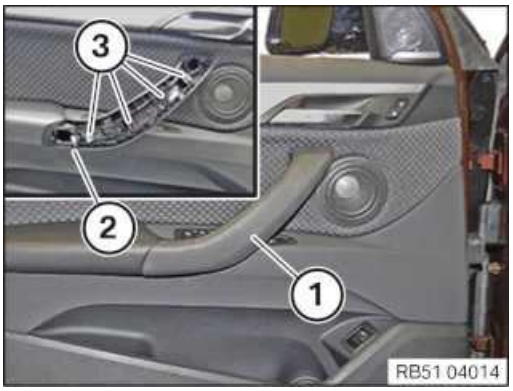
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

MAIN WORK

2 – Remove front door trim panel

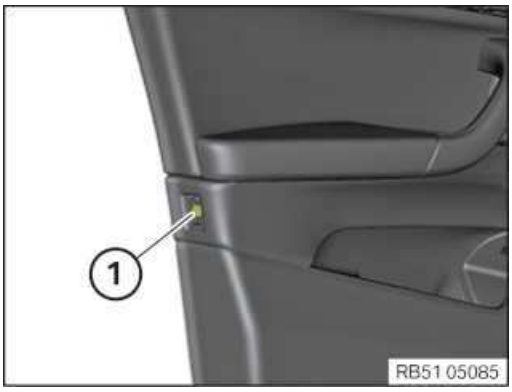
RISK OF DAMAGE

Scratches.

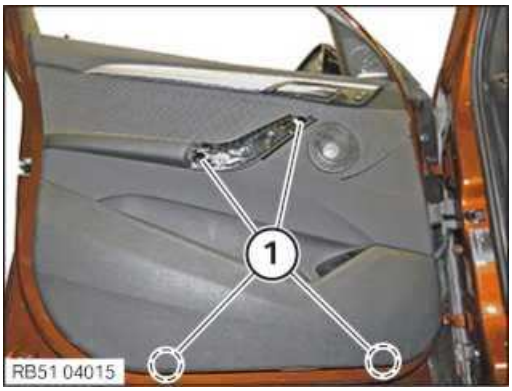
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

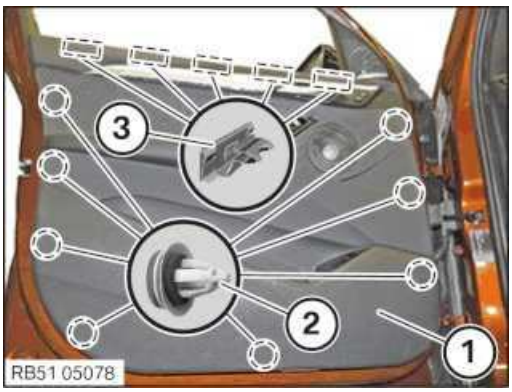
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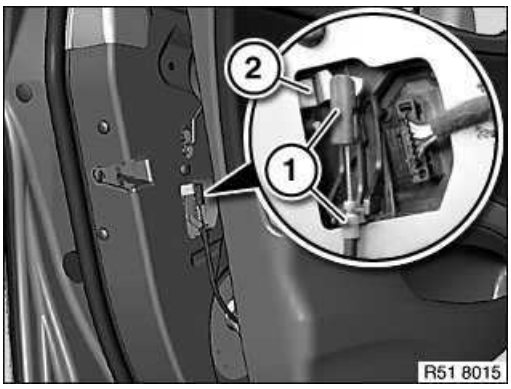
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Install front door trim panel

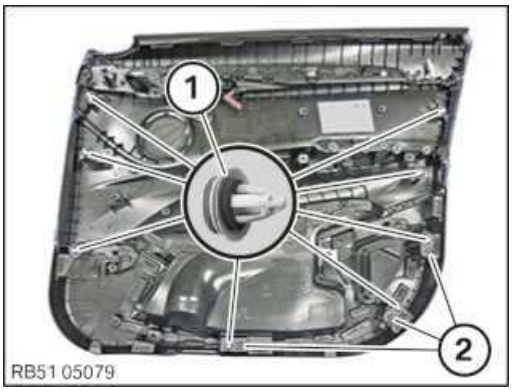
RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

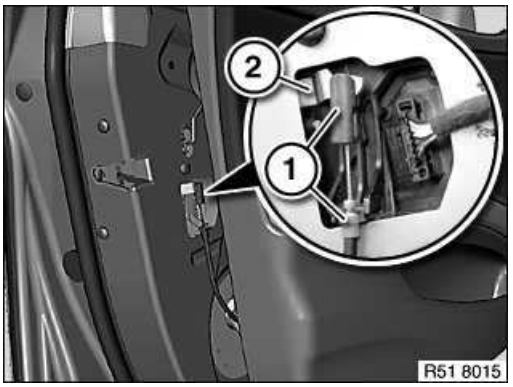
- Protect working area.
- Handle tools and components carefully.

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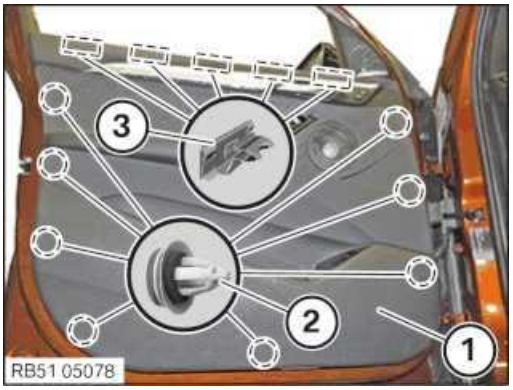


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

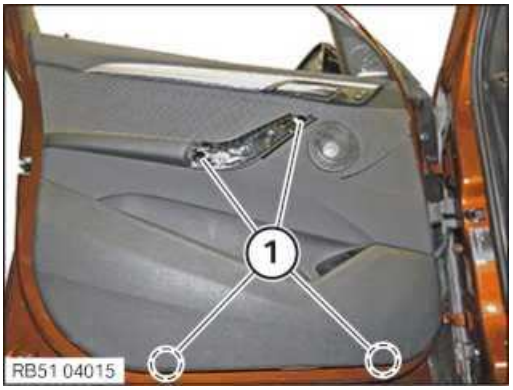
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



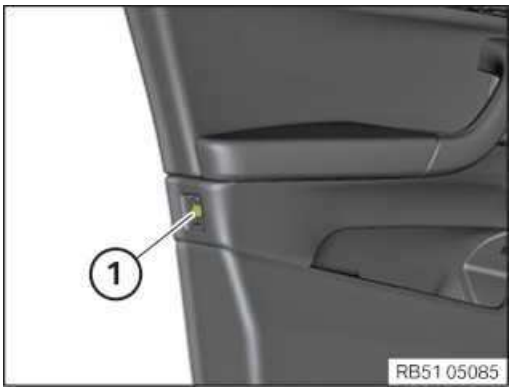
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

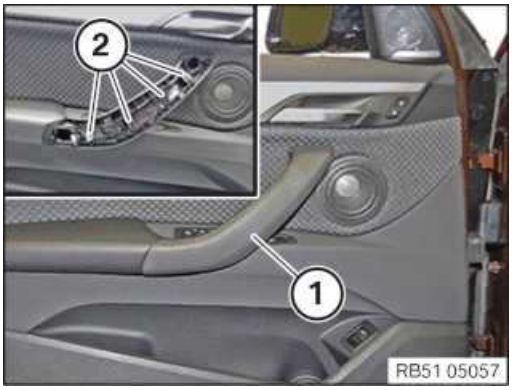
- Mount cover .

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4 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door Used in step 3

Screw TS5x20		Tightening torque	2,5 Nm

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51 41 017 Removing and installing or replacing cover on door handle, front left or right

1 – Remove cover on door handle

RISK OF DAMAGE

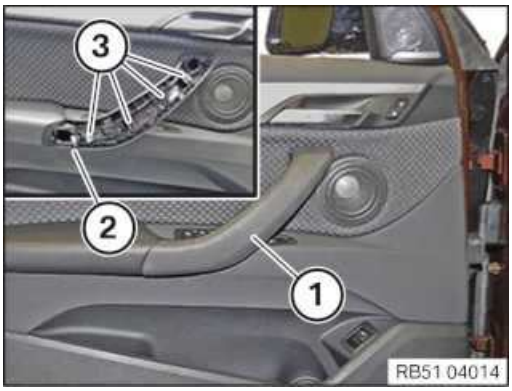
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.

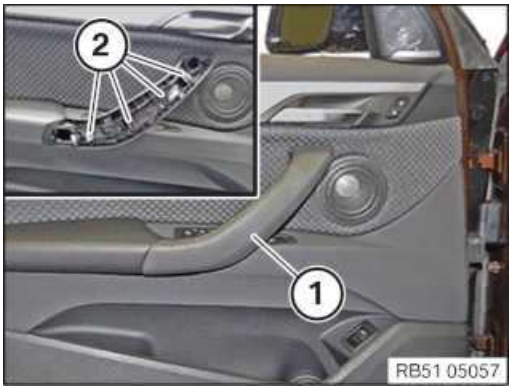


- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

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51 41 900 Replace the armrest (door trim panel removed)

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

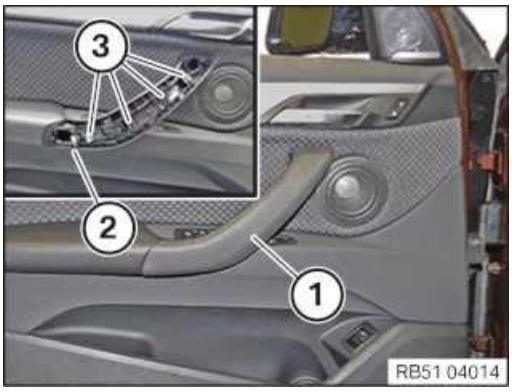
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

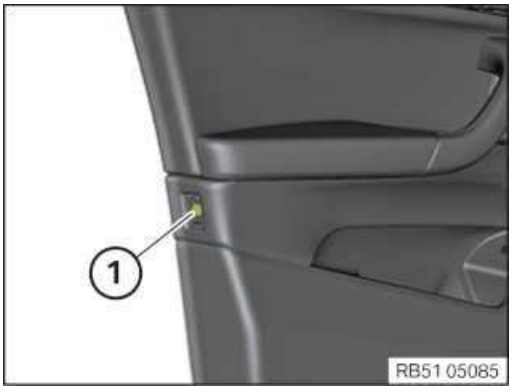
2 – Remove front door trim panel

RISK OF DAMAGE

Scratches.

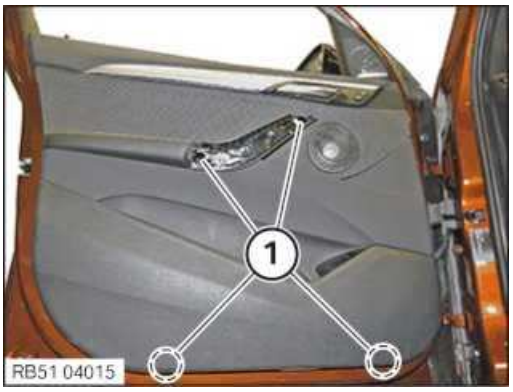
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

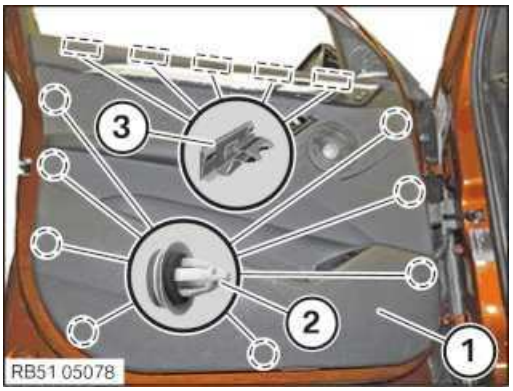


- If fitted: Remove the cover and unscrew the bolt (1).

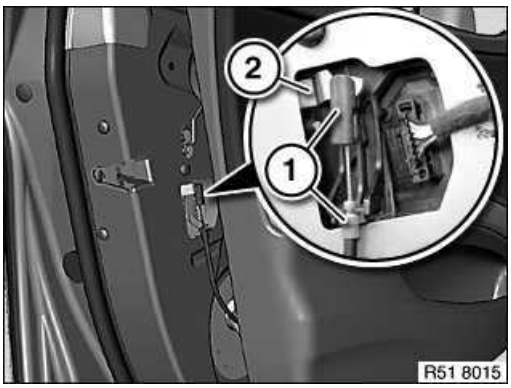
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- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

MAIN WORK

3 – Remove the armrest from the door trim panel

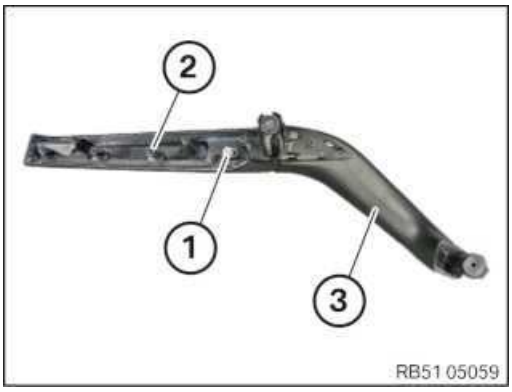
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Drill out or grind down all marked spot-welds (arrows).
- Remove the armrest together with the handle.

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- Loosen screw (1).
- Detach the armrest (2) from the handle (3).

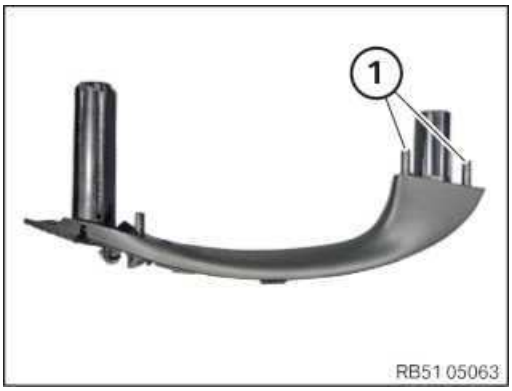
4 – Install the armrest on the door trim panel

NOTICE

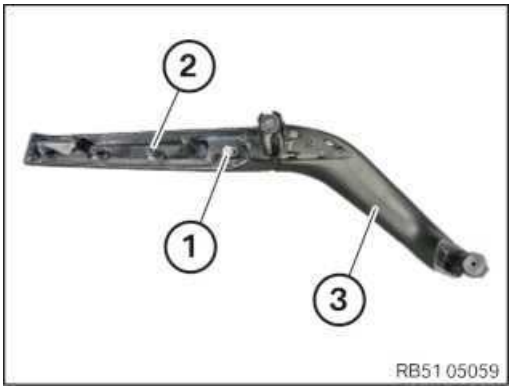
Description is for left component only. Procedure on the right side is identical.



- Saw off all welding pins on the armrest along the mouldings (arrow).



- Cut off the welding pins (1) on the handle along the moulding.

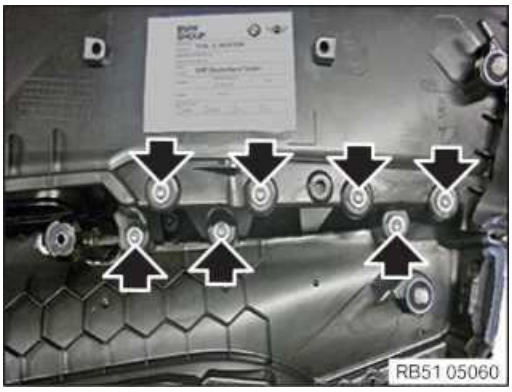


- Connect the armrest (2) with the handle (3).
- Mount and tighten the bolt (1).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

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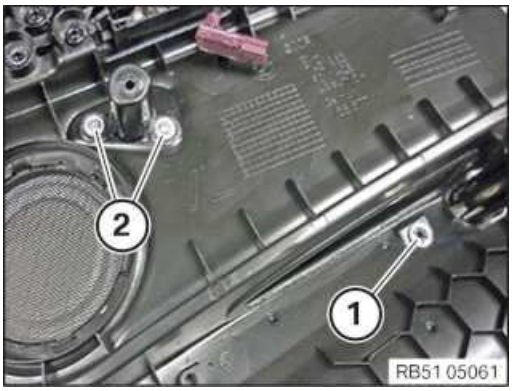
- Install the armrest together with the handle .

Note: Sawn off welding pins must not protrude from the door trim panel.

- Mount and tighten the repair screws (arrows).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm



- Mount the lock washer (1).
- Mount and tighten the repair screws (2).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

POSTPROCESSES

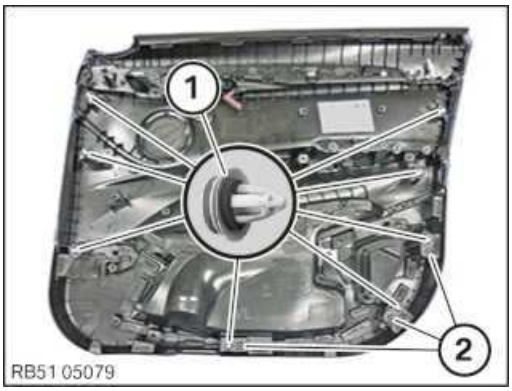
5 – Install front door trim panel

RISK OF DAMAGE

Scratches.

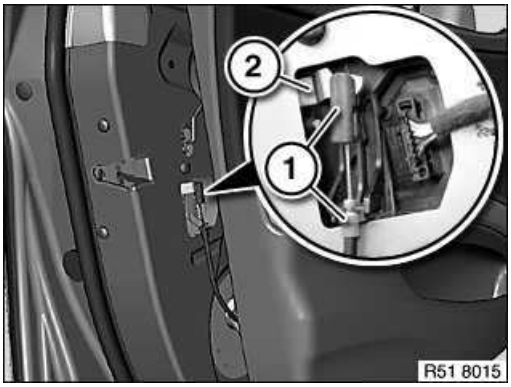
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



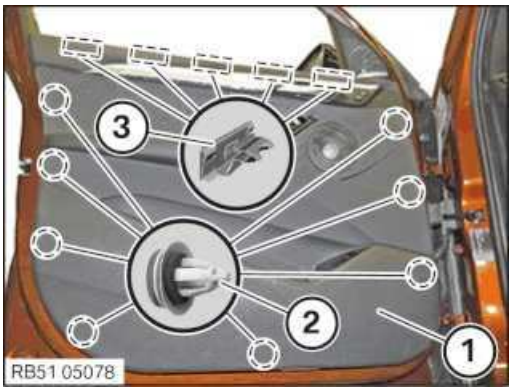
- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

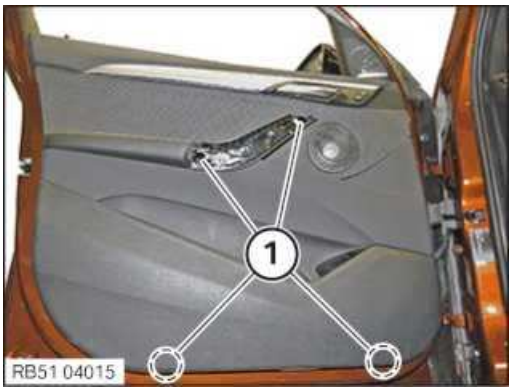


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).

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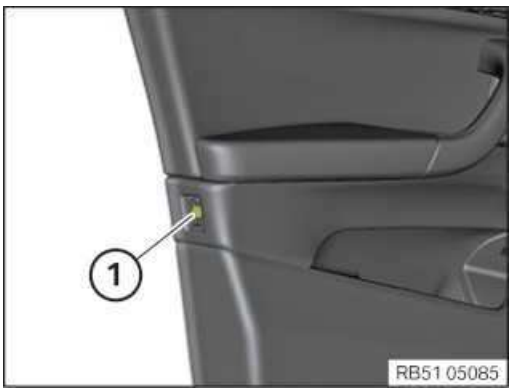
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

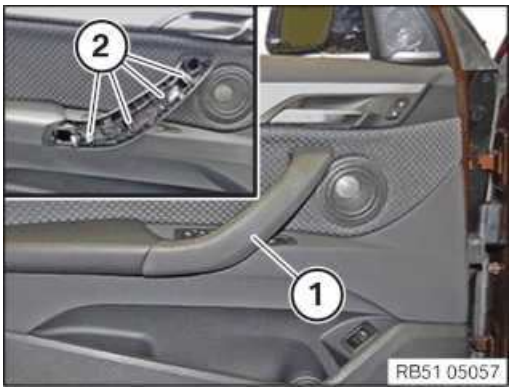
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

6 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

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Repair screw to door trim panel Used in step 4

Oval-head screw		Tightening torque	2,3 Nm

Door trim panel to door Used in step 5

Screw TS5x20		Tightening torque	2,5 Nm

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51 41 901 Replace the finisher (door trim panel removed)

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

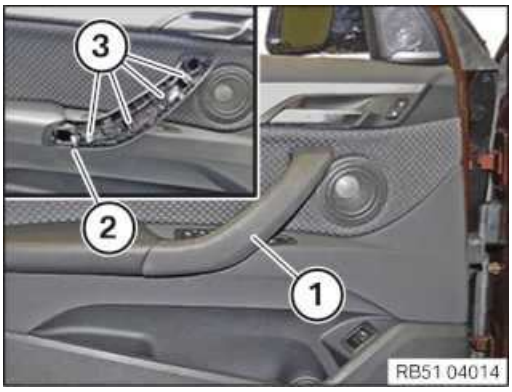
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

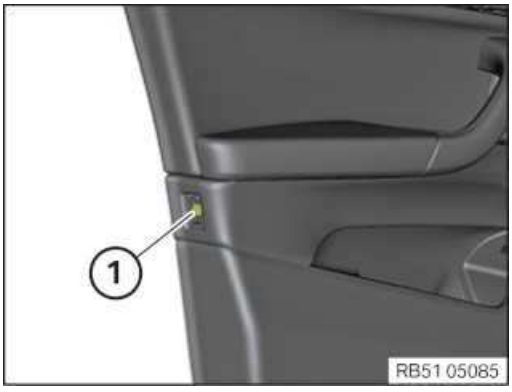
2 – Remove front door trim panel

RISK OF DAMAGE

Scratches.

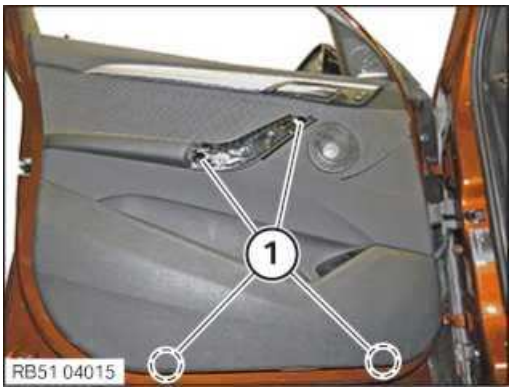
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

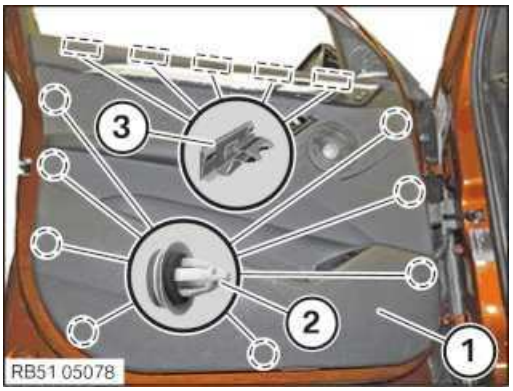


- If fitted: Remove the cover and unscrew the bolt (1).

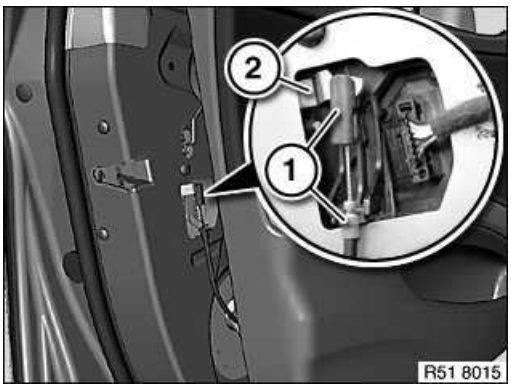
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- Loosen screws (1).

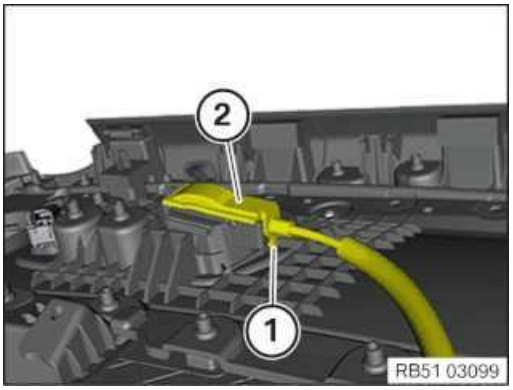


- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

3 – Remove Bowden cable for the inside door opener



- Unlock the lock (1) and remove the Bowden cable (2) toward the top.

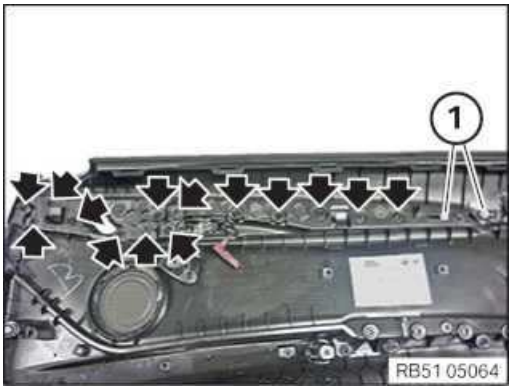
  The Bowden cable will thereby slide out automatically.

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4 – Remove the finisher from the door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

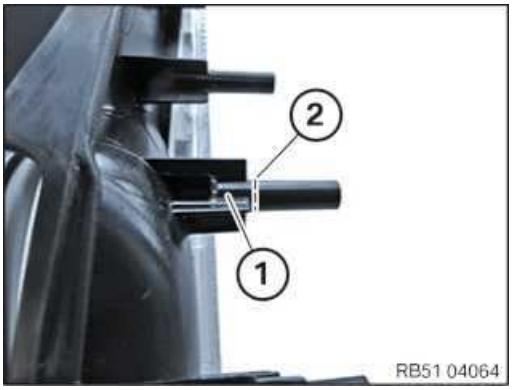


- Loosen screws (1).
- Drill out all marked spot-welds (arrows).
- Remove the LED modules where required.
- Remove finisher.

5 – Install the finisher on the door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Saw off all welding pins (1) on the finisher along the moulding (2).



- Remove welding remnants on door trim panel with a scalpel.
- Installing finisher.

Note: Welding pins must not protrude from the door trim panel.

- Screw in and tighten the repair screws (arrows) in the door trim panel.

Repair screw to door trim panel

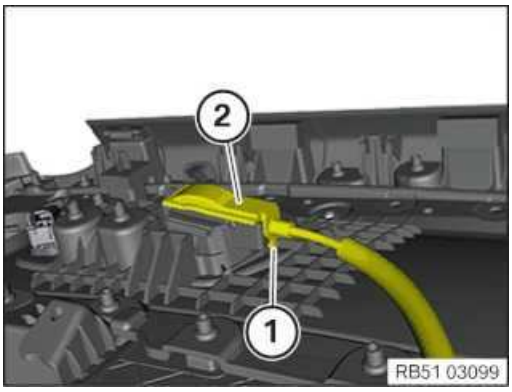
Oval-head screw		Tightening torque	2,3 Nm

- If necessary, mount the LED module.

POSTPROCESSES

6 – Install the Bowden cable for the inside door opener

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- Push the inside door handle in "closed" direction.
- Engage the Bowden cable (2) into the lock (1) towards the front/bottom.

  The Bowden cable (2) must be positioned correctly in the dedicated brackets.

7 – Install front door trim panel

RISK OF DAMAGE

Scratches.

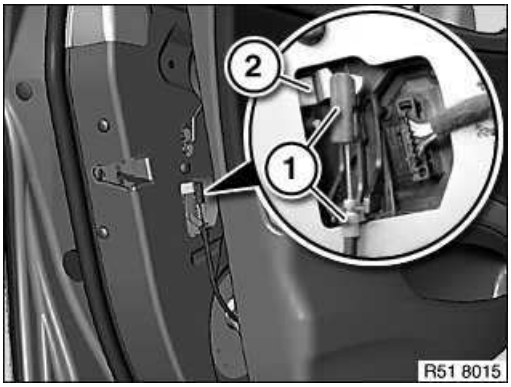
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

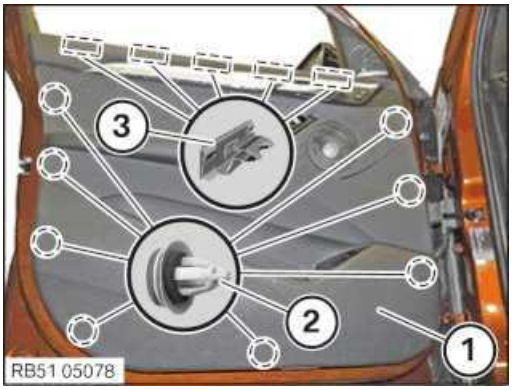


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

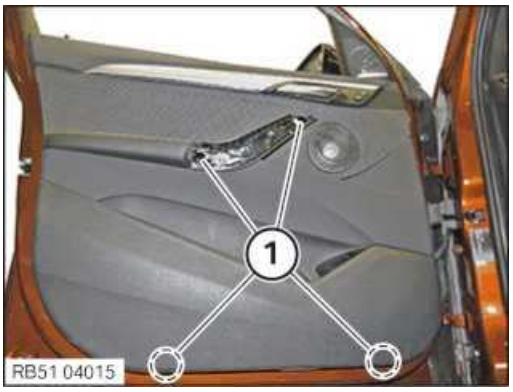


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

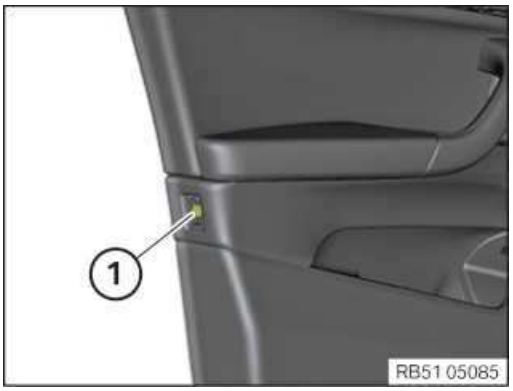
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- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

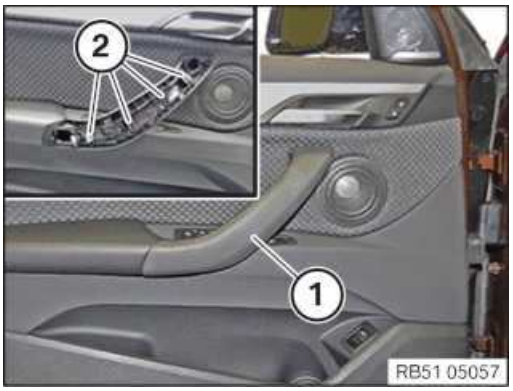
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

8 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Repair screw to door trim panel Used in step 5

Oval-head screw		Tightening torque	2,3 Nm

Door trim panel to door Used in step 7

Screw TS5x20		Tightening torque	2,5 Nm

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51 41 001 Replacing left or right front door trim panel

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

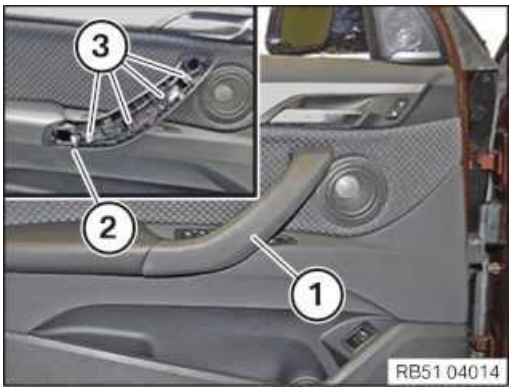
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

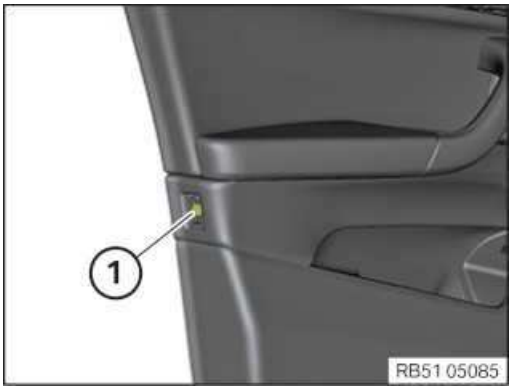
2 – Remove front door trim panel

RISK OF DAMAGE

Scratches.

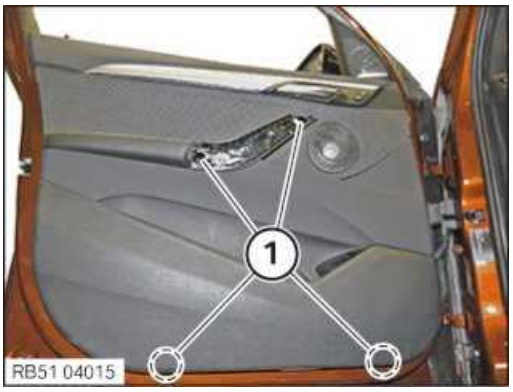
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

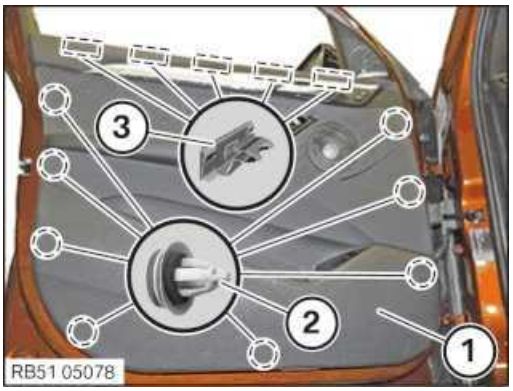


- If fitted: Remove the cover and unscrew the bolt (1).

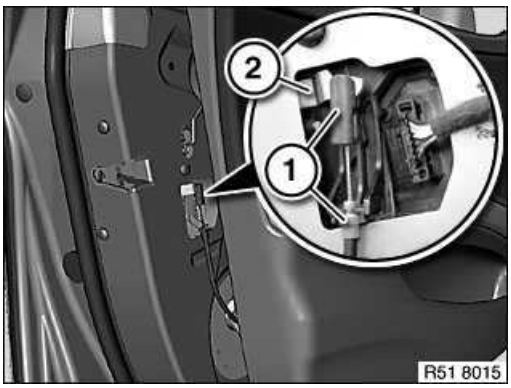
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- Loosen screws (1).



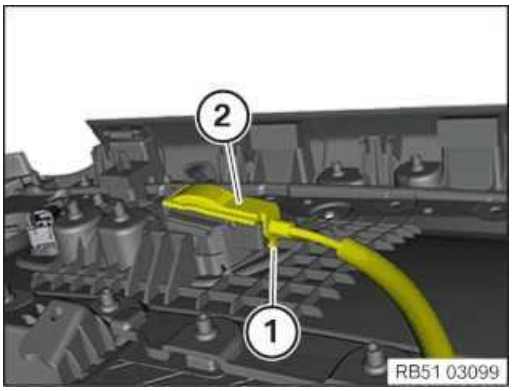
- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

MAIN WORK

3 – Remove Bowden cable for the inside door opener



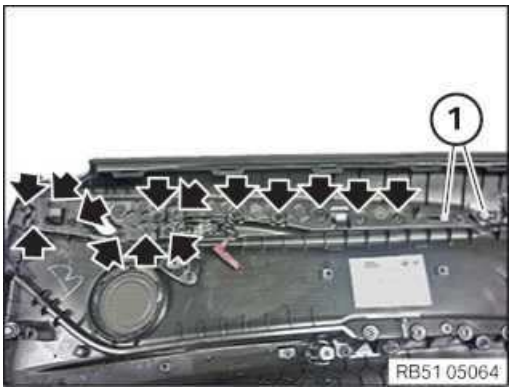
- Unlock the lock (1) and remove the Bowden cable (2) toward the top.
  The Bowden cable will thereby slide out automatically.

4 – Remove the finisher from the door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

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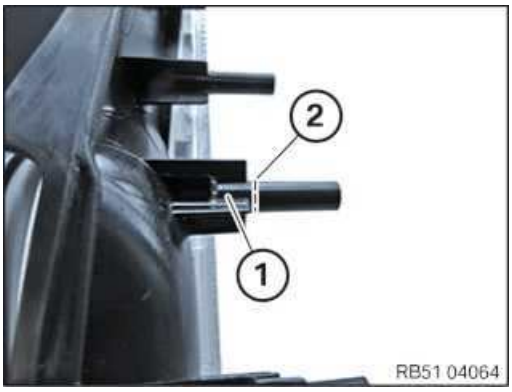


- Loosen screws (1).
- Drill out all marked spot-welds (arrows).
- Remove the LED modules where required.
- Remove finisher.

5 – Install the finisher on the door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Saw off all welding pins (1) on the finisher along the moulding (2).



- Remove welding remnants on door trim panel with a scalpel.
- Installing finisher.

Note: Welding pins must not protrude from the door trim panel.

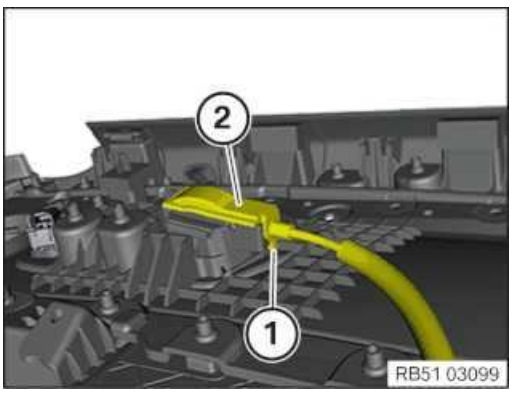
- Screw in and tighten the repair screws (arrows) in the door trim panel.

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

- If necessary, mount the LED module.

6 – Install the Bowden cable for the inside door opener



- Push the inside door handle in "closed" direction.
- Engage the Bowden cable (2) into the lock (1) towards the front/bottom.

  The Bowden cable (2) must be positioned correctly in the dedicated brackets.

7 – Remove the front power window switch

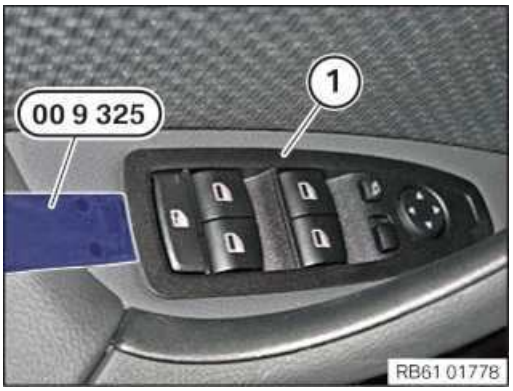
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RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Lever out power window switch (1) with special tool **0 496 569 (00 9 325)** from the armrest.
- Disconnect plug connections.

  Remove power window switch (1).

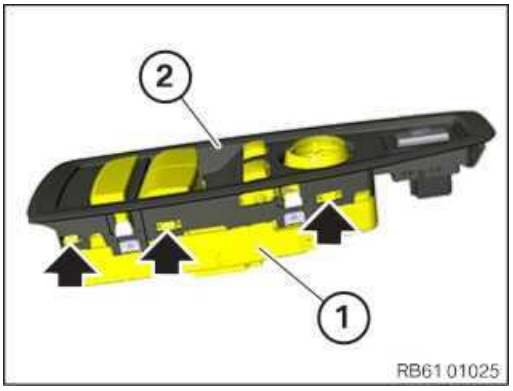
8 – Install the front power window switch

RISK OF DAMAGE

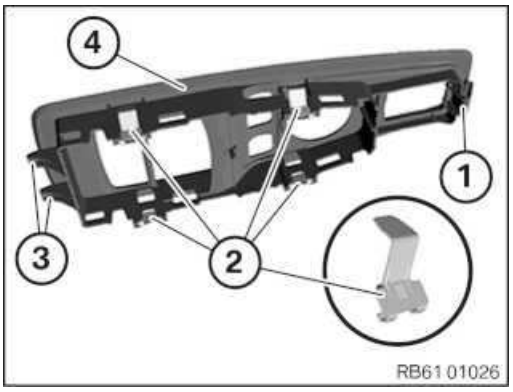
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Release all latch mechanisms (arrows) on the trim (2) on both sides.
- Guide the power window switch (1) out of the trim (2).



- Check latch mechanism (1), clamps (2) and guides (3) on the trim (4) for damage, renew the trim if necessary (4).

  The latch mechanism, clamps and guides must not be missing or damaged.

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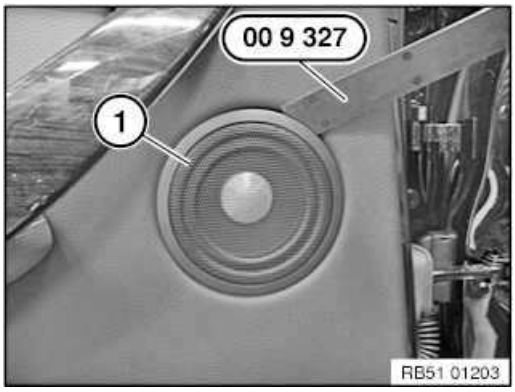


- Connect the associated connector with the power window switch (1).
- Engage the power window switch (1) in direction of arrow into the armrest.

9 – Remove the speaker trim from the door trim panel

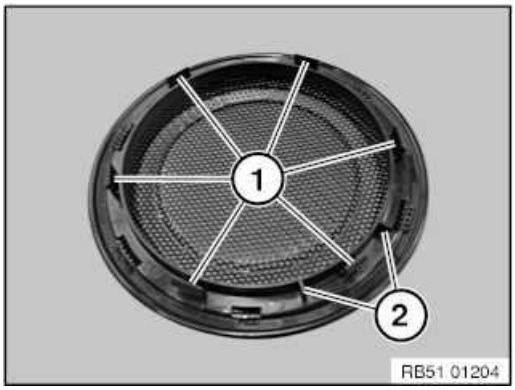
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out and remove the speaker trim (1) from the door trim panel using the special tool **0 496 571 (00 9 327)**.

10 – Install the speaker trim on the door trim panel



- Check the latch mechanisms (1) and the guides (2) for damage, renew if necessary.

  The latch mechanisms (1) and the guides (2) must not be damaged or missing.

  The guides are used to correctly position the speaker trim on the door trim panel.
- Position and engage the speaker trim correctly in the door trim panel.

11 – Remove the armrest from the door trim panel

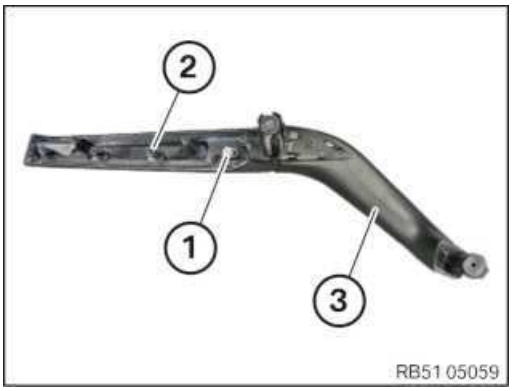
NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Drill out or grind down all marked spot-welds (arrows).
- Remove the armrest together with the handle.



- Loosen screw (1).
- Detach the armrest (2) from the handle (3).

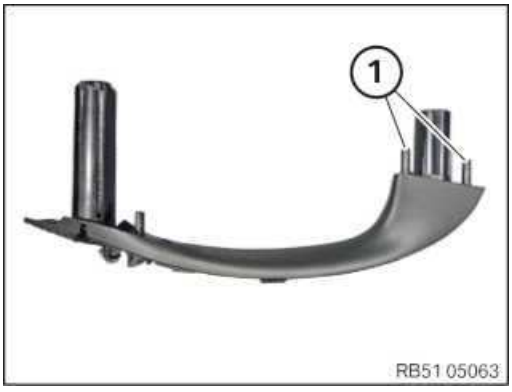
12 – Install the armrest on the door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

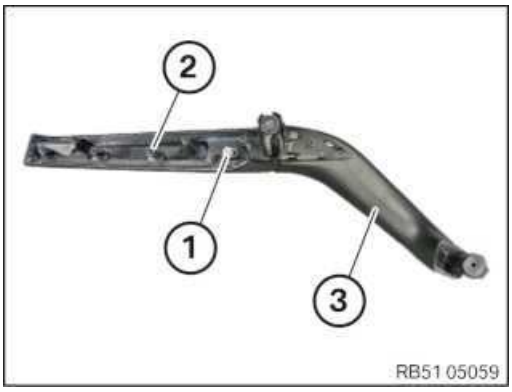


- Saw off all welding pins on the armrest along the mouldings (arrow).



- Cut off the welding pins (1) on the handle along the moulding.

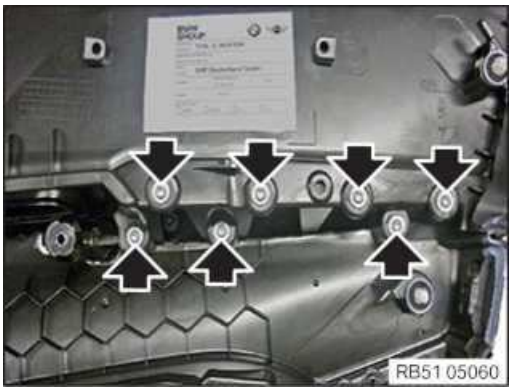
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- Connect the armrest (2) with the handle (3).
- Mount and tighten the bolt (1).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm



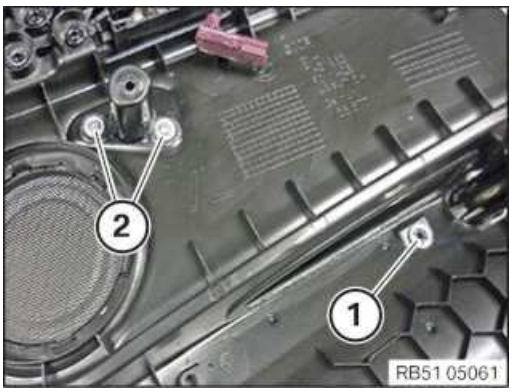
- Install the armrest together with the handle .

Note: Sawn off welding pins must not protrude from the door trim panel.

- Mount and tighten the repair screws (arrows).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm



- Mount the lock washer (1).
- Mount and tighten the repair screws (2).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

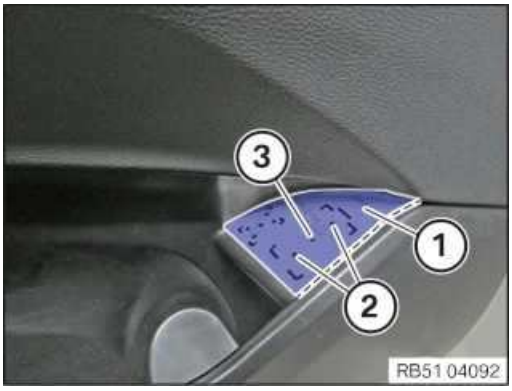
13 – Punch the contour for the switch of the tailgate lift into the door trim panel (if installed)

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

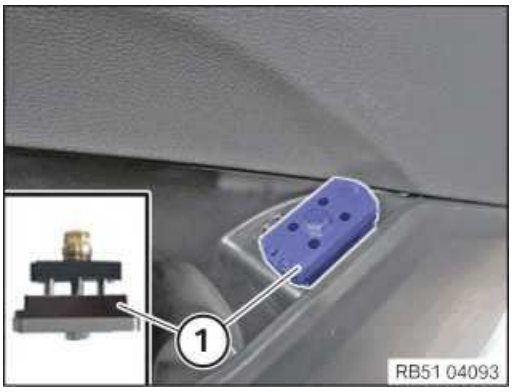


- Position the template (1) on the dashed line on the door trim panel and slide it slightly upward.
- Transfer the bore holes (2) and (3) from the template (1) to the door trim panel.

  The transfer of the bore holes must be precise.
- Pre-drill bore holes (2) and (3) with small drill of the special tool .

  The bore holes must be drilled precisely.
- Drill out medium bore hole (2) with the large drill of the special tool .

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- Disassemble special tool .
- Guide the lower section (1) of the special tool into the door trim panel at the front as shown.



- Put together special tool as shown.
- Align the special tool and compress it by turning the nut (1) clockwise.
- Loosen the nut (1) after having cut through the door trim panel.
- Remove special tool .
- Press out the punching residue from the special tool using the pressing-off tool.

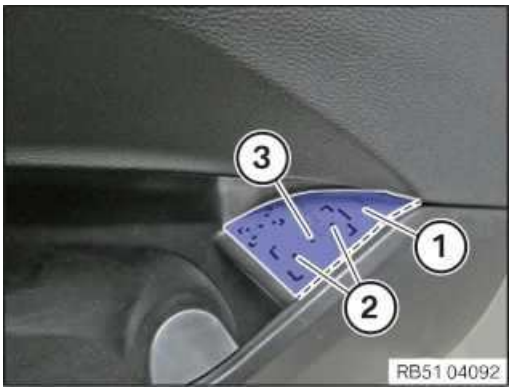
14 – Punch the contour for the button for the pressurised tank release button into the door trim panel (if installed)

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

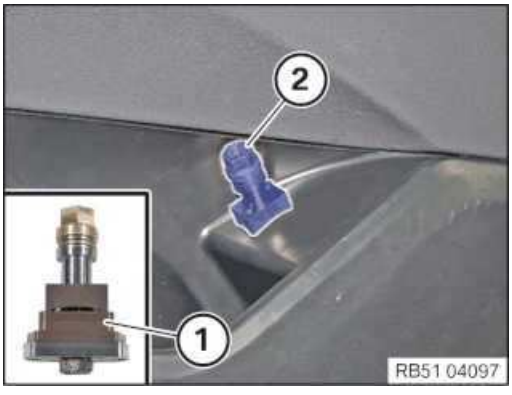
- Protect working area.
- Handle tools and components carefully.



- Position the template (1) on the dashed line on the door trim panel and slide it slightly upward.
- Transfer the bore holes (2) and (3) from the template (1) to the door trim panel.

  The transfer of the bore holes must be precise.
- Pre-drill bore holes (2) and (3) with small drill of the special tool .

  The bore holes must be drilled precisely.
- Drill out medium bore hole (2) with the large drill of the special tool .



- Disassemble special tool .
- Thread the lower section (1) of the special tool into the door trim panel from the rear as shown.
- Put together special tool as shown.
- Align special tool with the marks and compress by turning the nut (2) in the clockwise direction.
- Loosen the nut (2) after having cut through the door trim panel.
- Remove special tool .
- Press out the punching residue from the special tool using the pressing-off tool.

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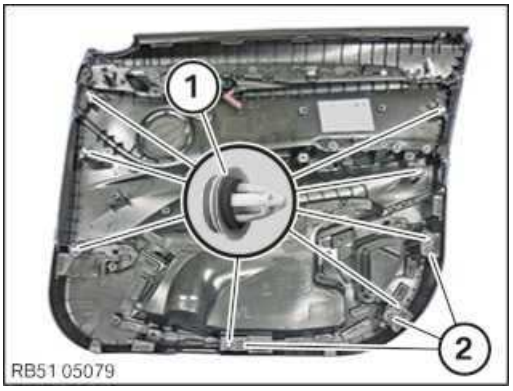
15 – Install front door trim panel

RISK OF DAMAGE

Scratches.

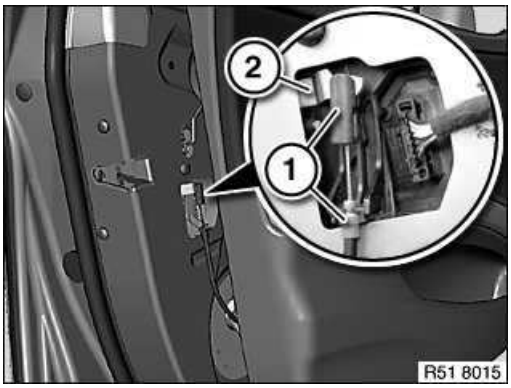
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

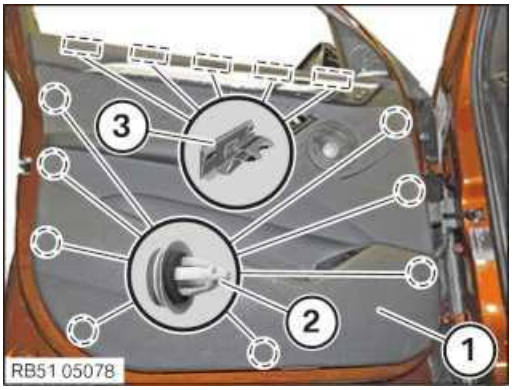


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

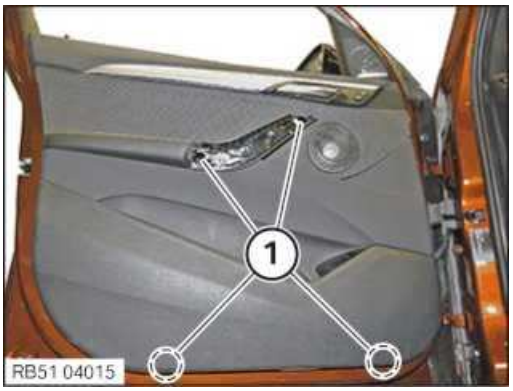
  The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

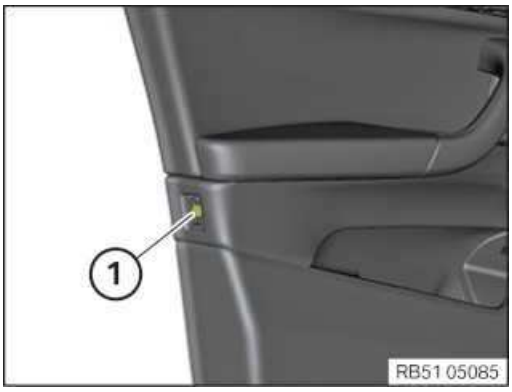


- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

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- If fitted: Tighten down screw (1).

Door trim panel to door

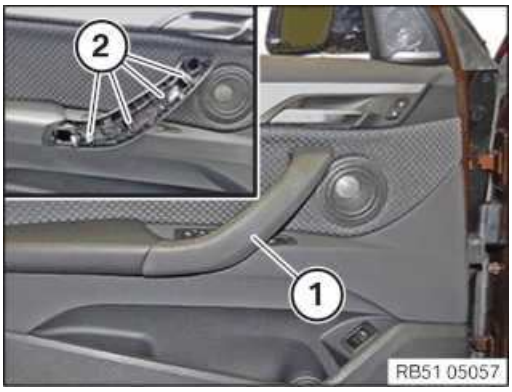
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

16 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Repair screw to door trim panel Used in step 5 12

Oval-head screw		Tightening torque	2,3 Nm

Door trim panel to door Used in step 15

Screw TS5x20		Tightening torque	2,5 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge

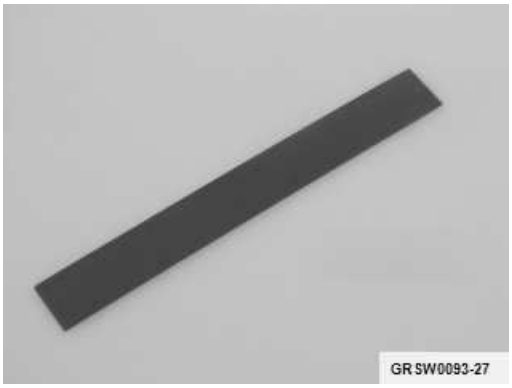


Common Used in step 7

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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0 496 571 (00 9 327) Wedge



Common

Used in step 9

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 41 018 Replacing speaker cover on left or right front door trim panel

RISK OF DAMAGE

Scratches.

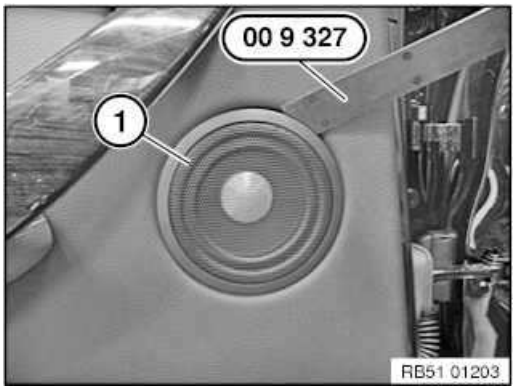
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

1 – Remove the speaker trim from the door trim panel

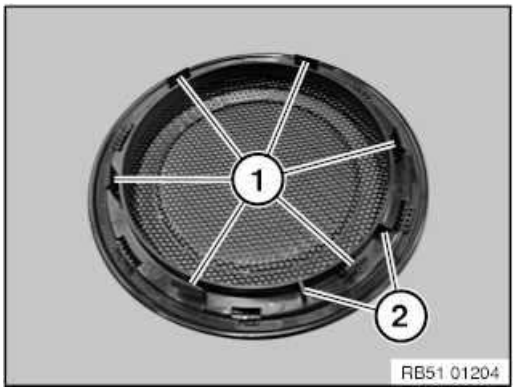
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out and remove the speaker trim (1) from the door trim panel using the special tool **0 496 571 (00 9 327)**.

2 – Install the speaker trim on the door trim panel



- Check the latch mechanisms (1) and the guides (2) for damage, renew if necessary.

  The latch mechanisms (1) and the guides (2) must not be damaged or missing.

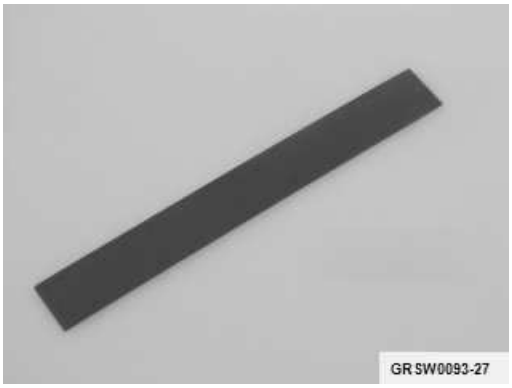
  The guides are used to correctly position the speaker trim on the door trim panel.
- Position and engage the speaker trim correctly in the door trim panel.

Additional Information

Overview of Special Tools

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0 496 571 (00 9 327) Wedge



Common

Used in step 1

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 48 ... Notes for bonding sound insulation (SI), doors



Special tools required:

- 51 0 300

Attention!

Do not yank at the sound insulation (risk of damage).

General:

Sound insulation is bonded to the inner door panel.

Bonded sound insulation must not be subjected to load (e.g. leak test) before 5 hours have elapsed.

On-the-job safety:

When working with bonding products (adhesive, cleaning agent, etc.):

- Wear safety goggles, protective gloves and if necessary an apron.
- Ensure the area is well ventilated.
- Change work clothing contaminated with adhesive immediately.
- Change work clothing contaminated with solvents and swelling agents immediately (keep spare work clothing on hand).
- Take skin protection measures, provide washing facilities including hot water, use silicone-free skin creams.
- Always keep an eye douche on hand, change the water regularly (once a month).
- Comply with the relevant safety regulations.

Handling adhesive area on inner door panel:

Adhesive	Cleaning
a. Butyl bead applied to sound insulation with protective film b. Butyl mini-round profile ⌀ 4 mm from the roller c. Butyl round profile ⌀ 6 mm from the roller	a. Cleaning agentR2 *Under no circumstances: paint thinning* b. Carry out bonding only after an air drying time ≥ 1 min. Air drying time may be omitted if the entire bonding surface is wiped with a dry cloth c. After cleaning, the bonding surface may not be touched with hands or fouled again

Repair in area of sound insulation, door:

Repair	
	• Cut the butyl rope between the sound insulation and the inner door panel with a sharp knife • After the repair is finished, position a new butyl rope ⌀ 4 mm directly on the original adhesive bead • Heat the butyl bead with a standard hot air blower until the butyl rope strings when touched slightly. Do not damage the sound insulation in the process • Press on with special tool 51 0 300. Perform this work extremely carefully because the increased amount of adhesive requires contact pressure of ≥ 20 N/cm^2 (compared to firm thumb pressure ~ 30 N/cm^2) • Visually check the adhesive bead and its compression (no capillaries or broken adhesive bead permitted)

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in the event of damaged sound insulation or leakage	• In the cases mentioned, the complete sound insulation must be replaced. After removing the sound insulation, removal all butyl remnants from the inner door panel. Apply 6 mm ⌀ butyl rope to new sound insulation • Press on with special tool 51 0 300. Contact pressure ≥ 20 N/cm^2 (compare to firm thumb pressure ~ 30 N/cm^2)

The sound insulation must be bonded watertight below the door lock:

- Flat bonding surface required all round.
- No bonding in the event of moisture (e.g. condensation, etc.).
- Bonding area must not show any traces of adhesion-reducing residues (e.g. separating agents, greases, oils, paraffins, plastisols, cavity wax, polishing dust residues, etc.).
- Remove the protective film directly before joining (under no circumstances remove earlier, since the butyl, because of its stickiness, will very quickly pick up adhesion-reducing dirt contaminants).
- The sound insulation must be attached with positional accuracy to the inner door panel because it will no longer be possible to change the position without damaging the butyl bead.
- With repainted areas, the maximum permitted temperature of 90°C may not be exceeded in the area of the sound insulation. Otherwise, the sound insulation must be removed (and replaced, if necessary).

Expiry date of adhesive:

24 months, see label on packaging.

Disposal of the cleaning cloth:

Cleaning cloths and cleaning agent residues are hazardous waste (see also safety data sheet).

Disposal of adhesive:

Hazardous waste (see also safety data sheet).

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51 42 000 Remove and install left or right rear door trim panel

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

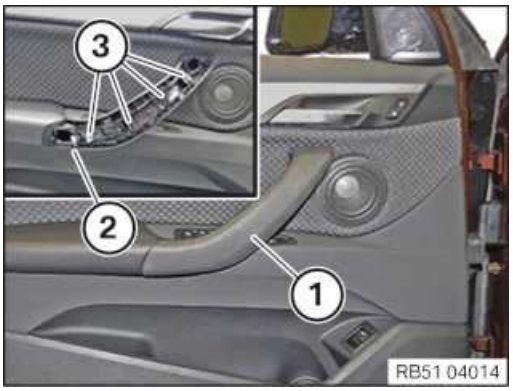
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

MAIN WORK

2 – Remove rear door trim

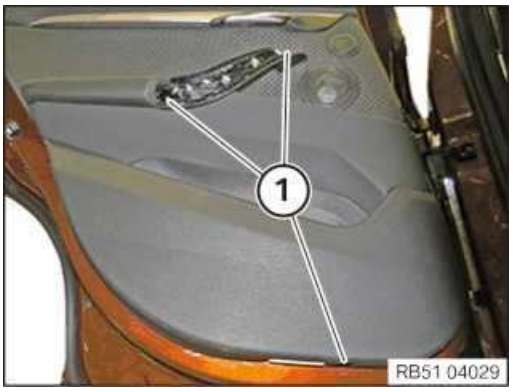
RISK OF DAMAGE

Scratches.

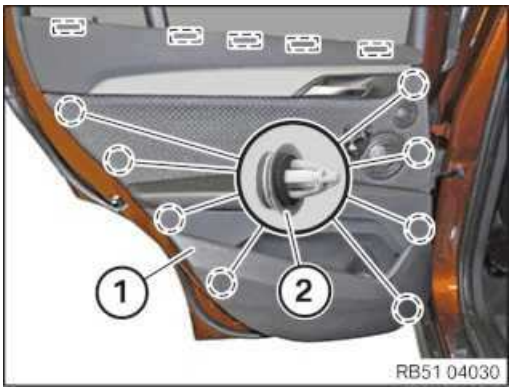
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

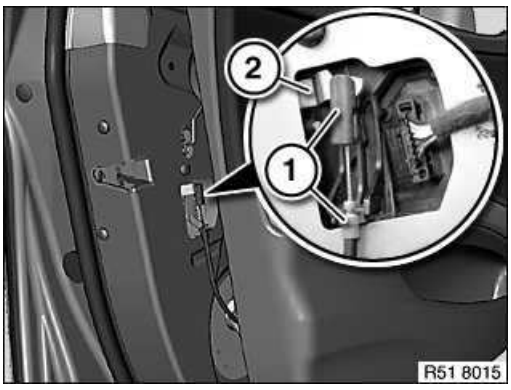
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- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.



- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

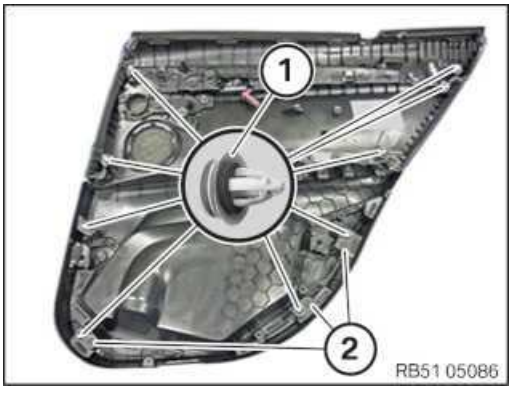
3 – Installing rear door trim panel

RISK OF DAMAGE

Scratches.

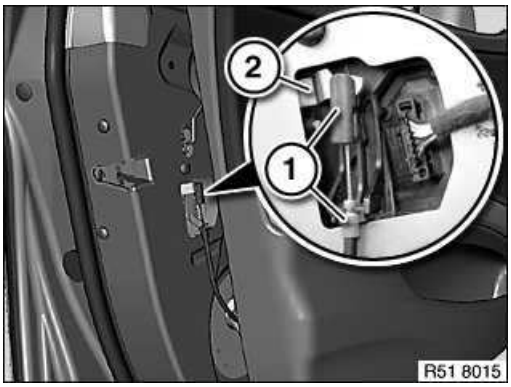
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

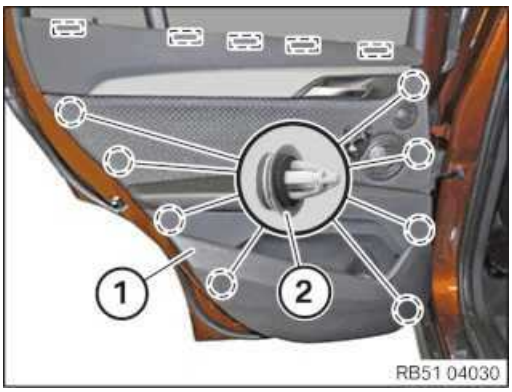


- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

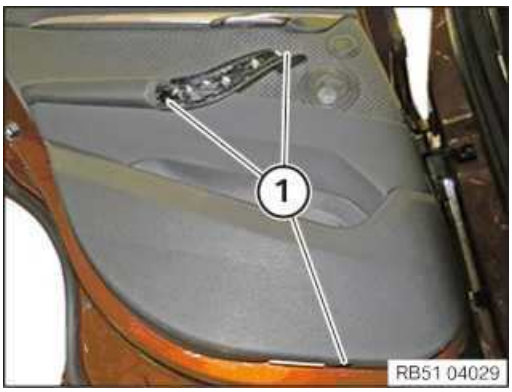
cardiagn.com



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

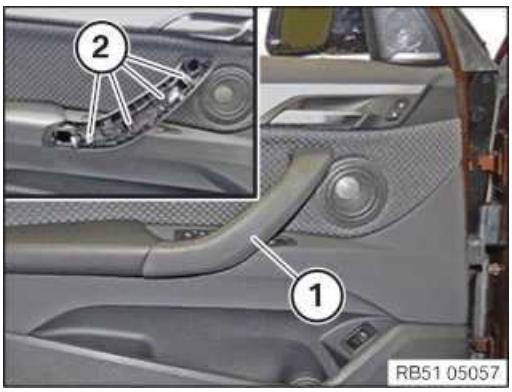
Screw TS5x20		Tightening torque	2,5 Nm

POSTPROCESSES

4 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

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Door trim panel to door

Used in step 3

Screw TS5x20		Tightening torque	2,5 Nm

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51 42 017 Removing and installing/replacing cover on door handle, rear left or right

NOTICE

The description is for one component only. The procedure is identical for all further components.

1 – Remove cover on door handle

RISK OF DAMAGE

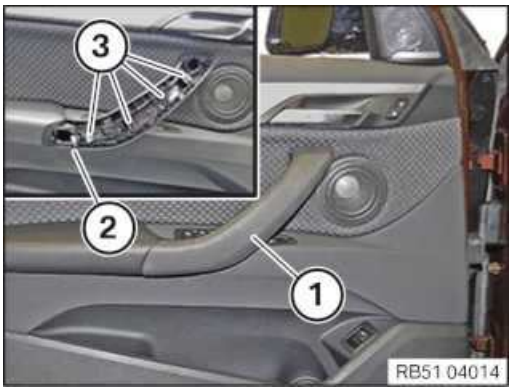
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.

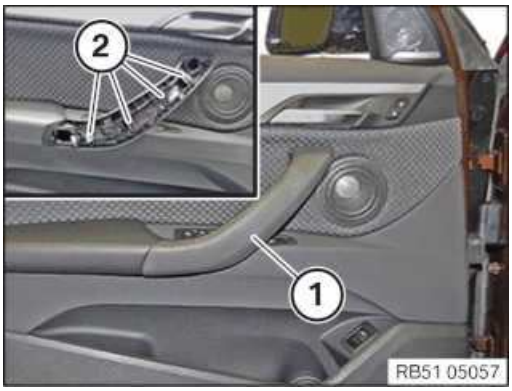


- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

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51 42 910 Replace the armrest (door trim panel removed)

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

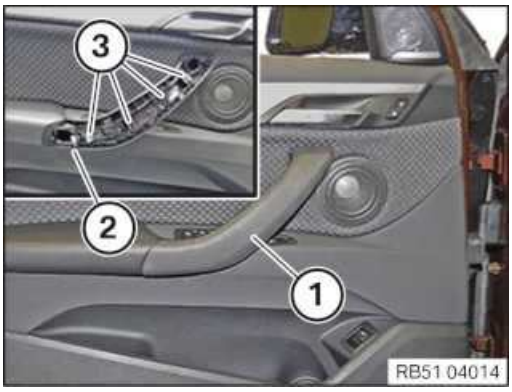
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

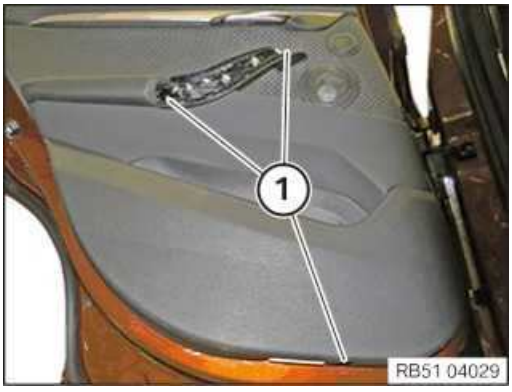
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

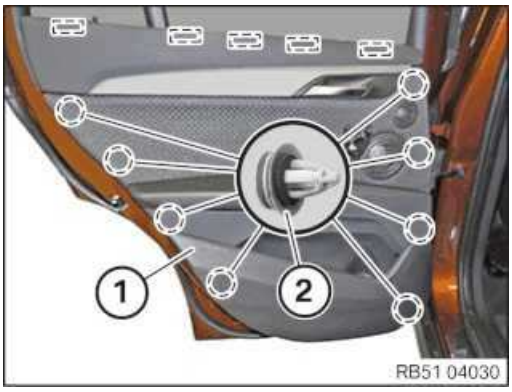
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

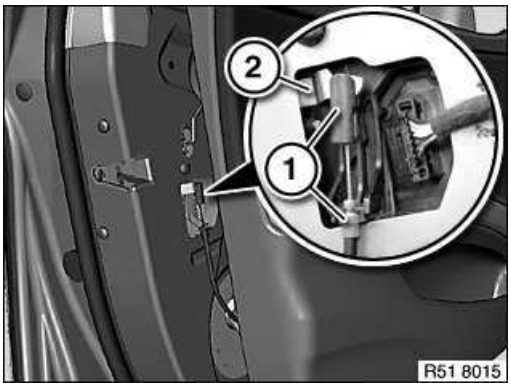


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



- Detach Bowden cable (1) from door lock (2).

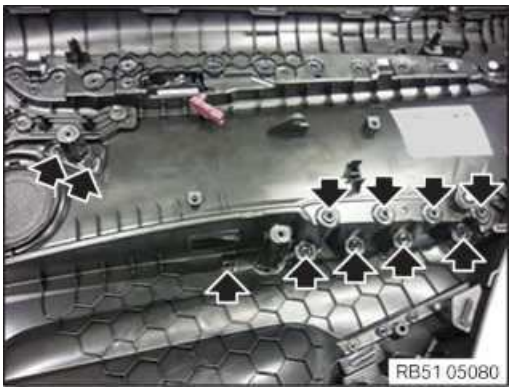
  Disconnect all plug connections and remove door trim panel.

MAIN WORK

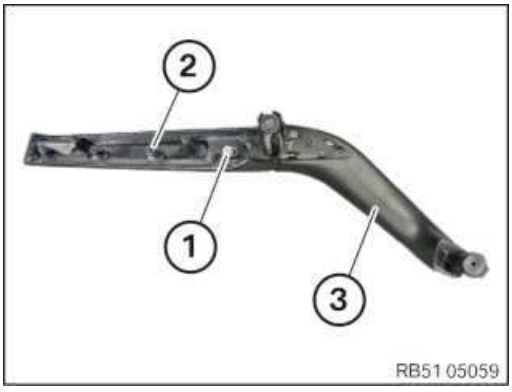
3 – Remove the armrest from the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Drill out or grind down all marked spot-welds (arrows).
- Remove the armrest together with the handle.



- Loosen screw (1).
- Detach the armrest (2) from the handle (3).

4 – Install the armrest on the rear door trim panel

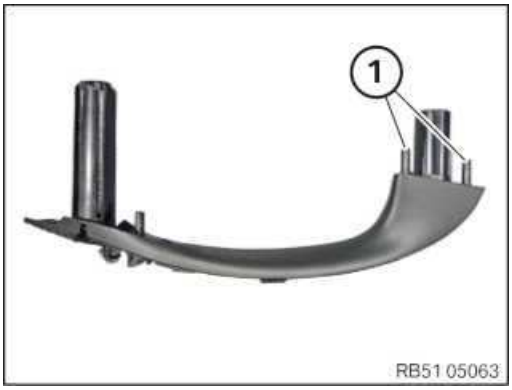
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NOTICE

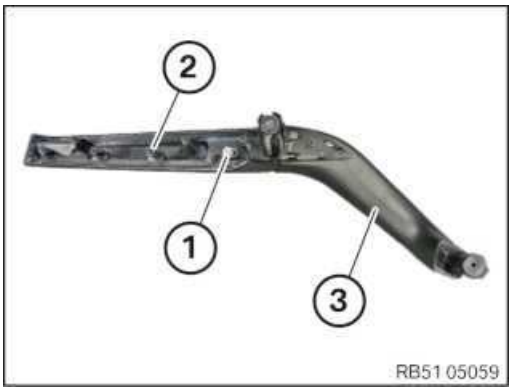
Description is for left component only. Procedure on the right side is identical.



- Saw off all welding pins on the armrest along the mouldings (arrow).



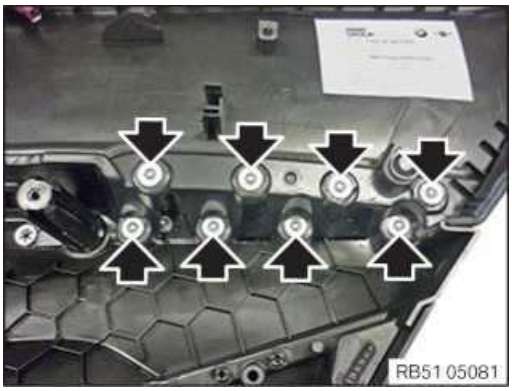
- Cut off the welding pins (1) on the handle along the moulding.



- Connect the armrest (2) with the handle (3).
- Mount and tighten the bolt (1).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm



- Install the armrest together with the handle .

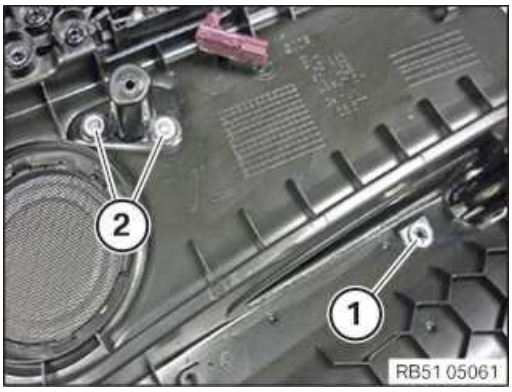
Note: Sawn off welding pins must not protrude from the door trim panel.

- Mount and tighten the repair screws (arrows).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

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- Mount the lock washer (1).
- Mount and tighten the repair screws (2).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

POSTPROCESSES

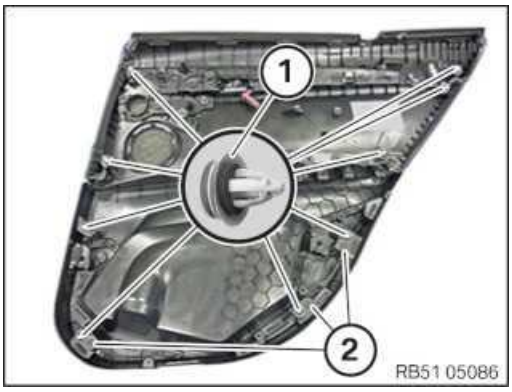
5 – Installing rear door trim panel

RISK OF DAMAGE

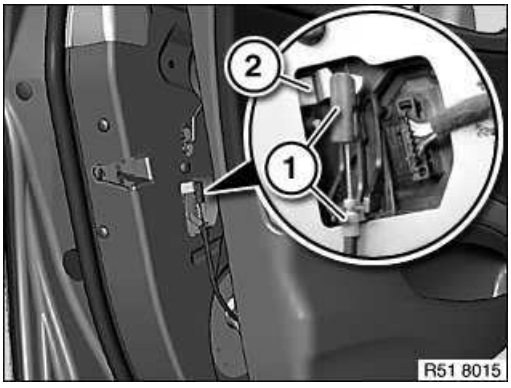
Scratches.

Tools and sharp-edged components can cause scratches.

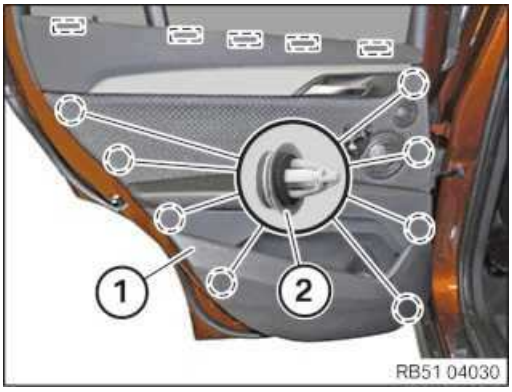
- Protect working area.
- Handle tools and components carefully.



- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

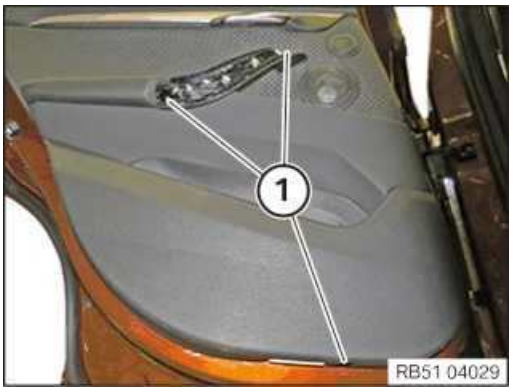


- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

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- Tighten the screws (1).

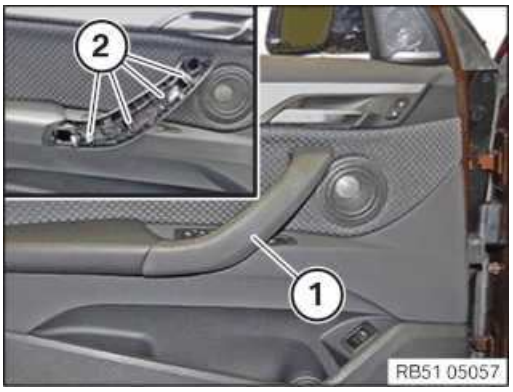
Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

6 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Repair screw to door trim panel Used in step 4

Oval-head screw		Tightening torque	2,3 Nm

Door trim panel to door Used in step 5

Screw TS5x20		Tightening torque	2,5 Nm

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51 42 911 Replace the finisher (door trim panel removed)

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

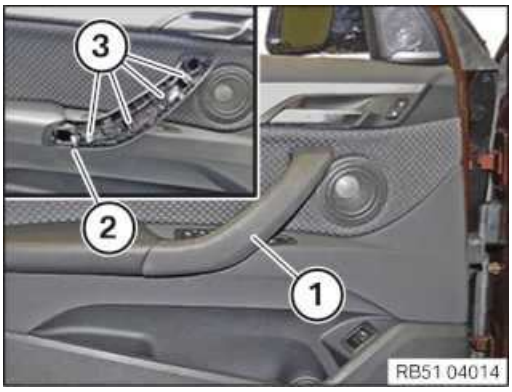
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

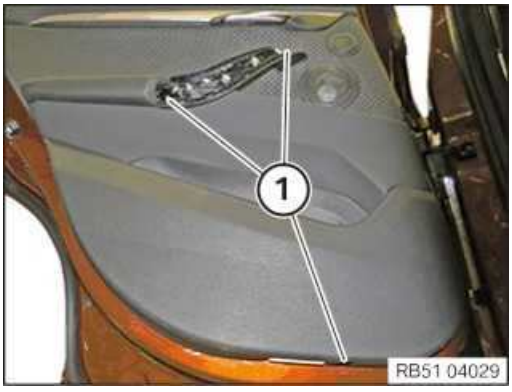
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

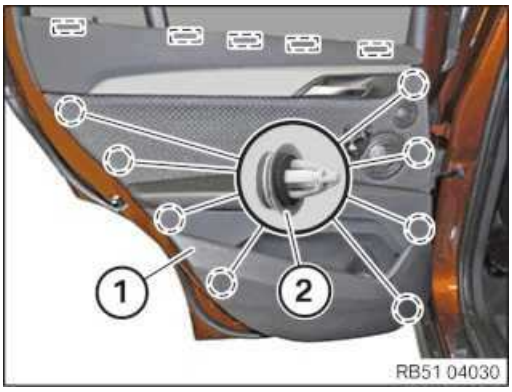
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

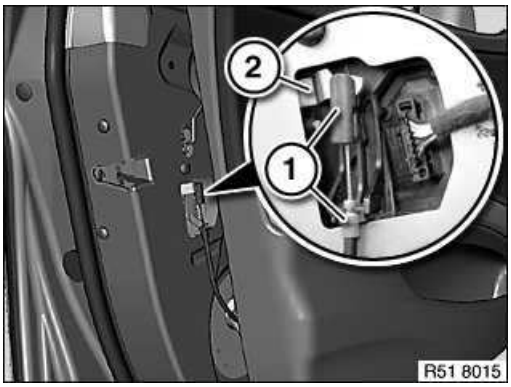


- Loosen screws (1).

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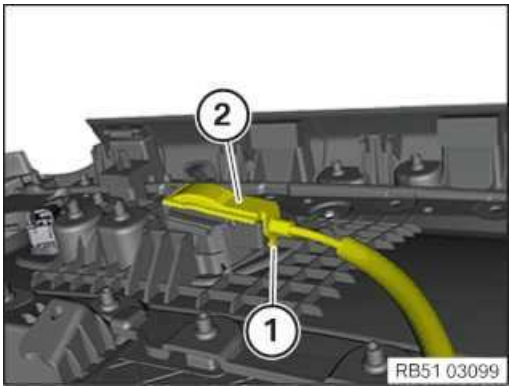
- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



- Detach Bowden cable (1) from door lock (2).

  Disconnect all plug connections and remove door trim panel.

3 – Remove Bowden cable for the inside door opener



- Unlock the lock (1) and remove the Bowden cable (2) toward the top.

  The Bowden cable will thereby slide out automatically.

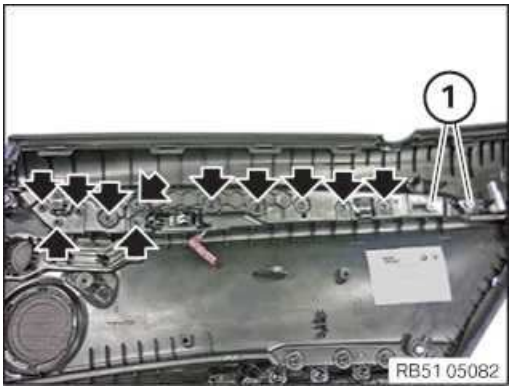
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MAIN WORK

4 – Remove the finisher from the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

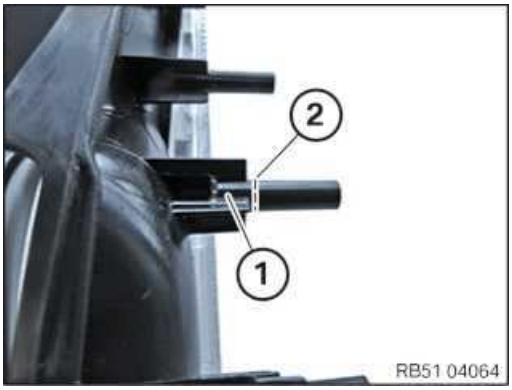


- Loosen screws (1).
- Drill out all marked spot-welds (arrows).
- Remove the LED modules where required.
- Remove finisher.

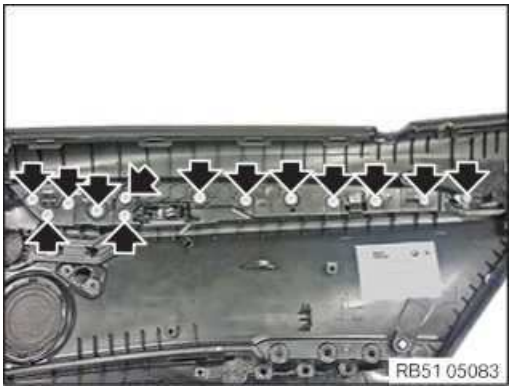
5 – Install the finisher on the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Saw off all welding pins (1) on the finisher along the moulding (2).



- Remove welding remnants on door trim panel with a scalpel.
- Installing finisher.

Note: Welding pins must not protrude from the door trim panel.

- Screw all of the repair screws (arrows) into the door trim panel and tighten.

Repair screw to door trim panel

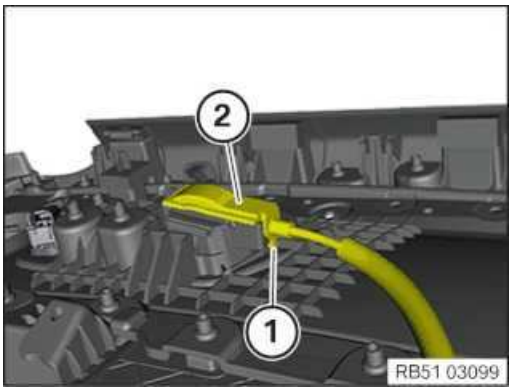
Oval-head screw		Tightening torque	2,3 Nm

- If necessary, mount the LED module.

POSTPROCESSES

6 – Install the Bowden cable for the inside door opener

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- Push the inside door handle in "closed" direction.
- Engage the Bowden cable (2) into the lock (1) towards the front/bottom.

  The Bowden cable (2) must be positioned correctly in the dedicated brackets.

7 – Installing rear door trim panel

RISK OF DAMAGE

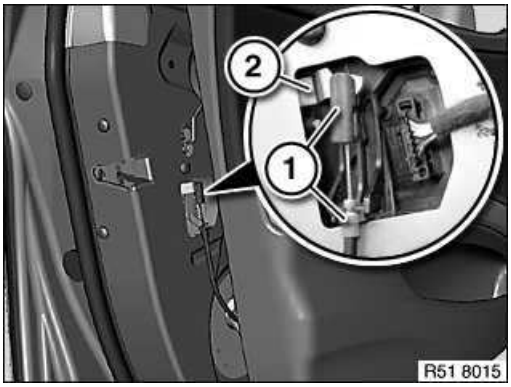
Scratches.

Tools and sharp-edged components can cause scratches.

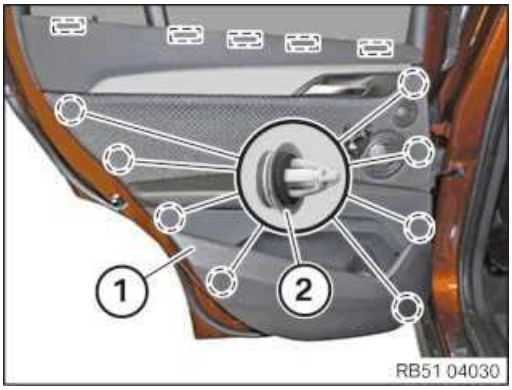
- Protect working area.
- Handle tools and components carefully.



- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

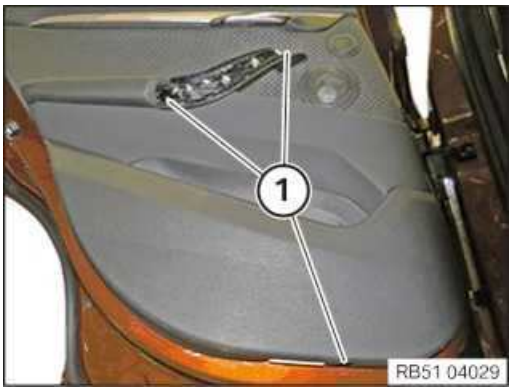


- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

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- Tighten the screws (1).

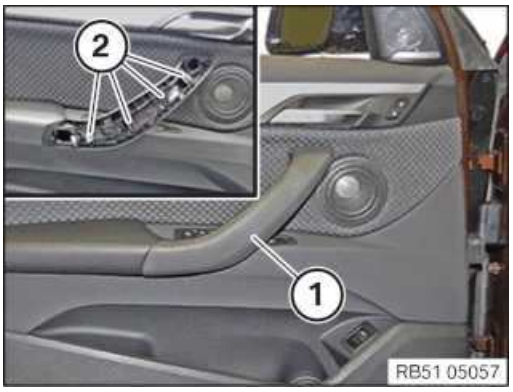
Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

8 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Repair screw to door trim panel Used in step 5

Oval-head screw		Tightening torque	2,3 Nm

Door trim panel to door Used in step 7

Screw TS5x20		Tightening torque	2,5 Nm

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51 42 001 Replacing left or right rear door trim panel

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

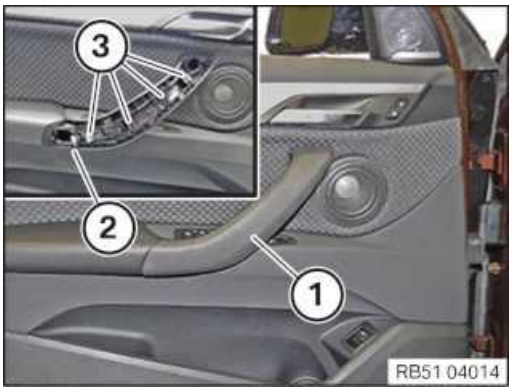
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

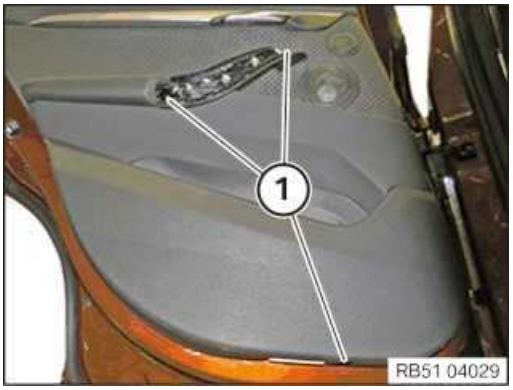
2 – Remove rear door trim

RISK OF DAMAGE

Scratches.

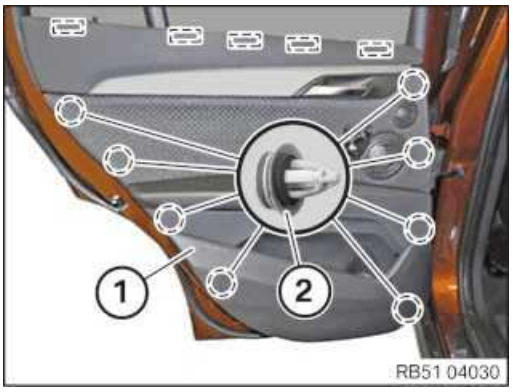
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

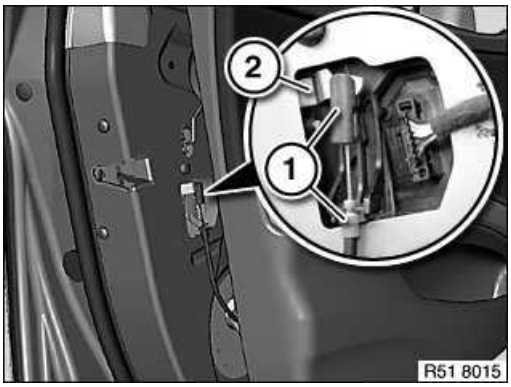


- Loosen screws (1).

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- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips on top.



- Detach Bowden cable (1) from door lock (2).

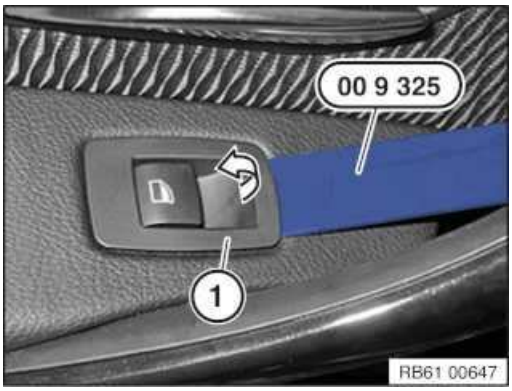
  Disconnect all plug connections and remove door trim panel.

MAIN WORK

3 – Removing the rocker switch for rear side window operation

NOTICE

Description is for left component only. Procedure on the right side is identical.



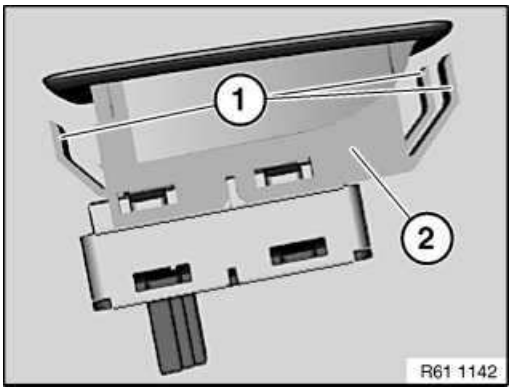
- Lever out the rocker switch (1) for the side window operation using the special tool **0 496 571 (00 9 327)** in the direction of the arrow.
- Disconnect the associated plug connection and remove the rocker switch.

4 – Installing the rocker switch for rear side window operation

NOTICE

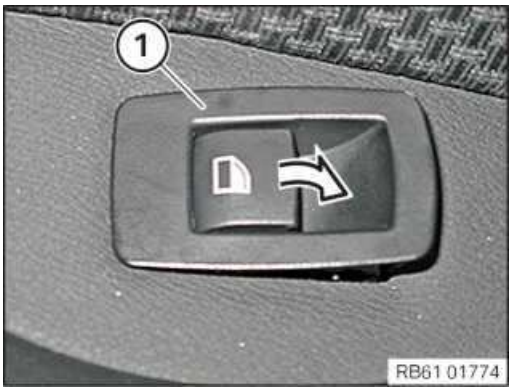
Description is for left component only. Procedure on the right side is identical.

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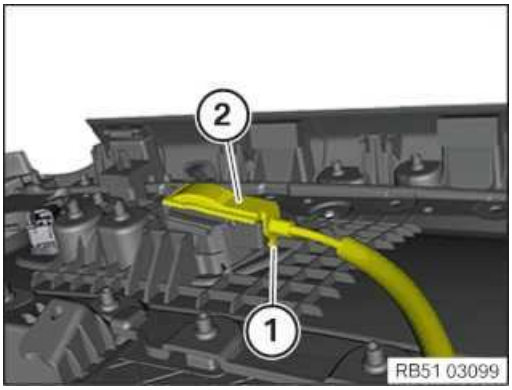
- Check the latch mechanisms (1) of the rocker switch (2) for the side window operation for damage and renew the rocker switch or the switch trim if necessary.

  The latch mechanisms (1) must not be damaged or missing.



- Connect corresponding connector.
- Install and engage the rocker switch (1) in the direction of the arrow.

5 – Remove Bowden cable for the inside door opener



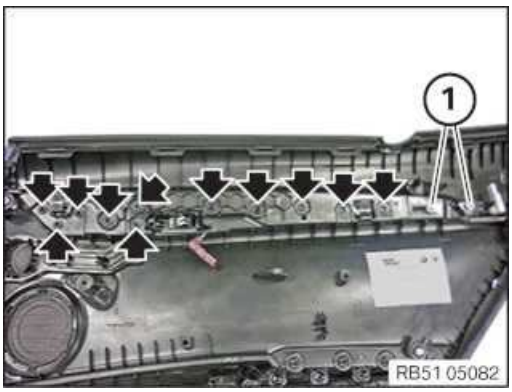
- Unlock the lock (1) and remove the Bowden cable (2) toward the top.

  The Bowden cable will thereby slide out automatically.

6 – Remove the finisher from the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



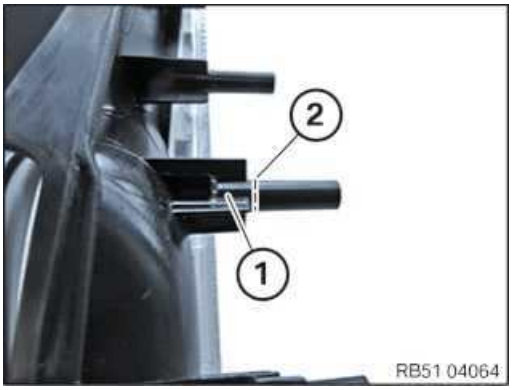
- Loosen screws (1).
- Drill out all marked spot-welds (arrows).
- Remove the LED modules where required.
- Remove finisher.

7 – Install the finisher on the rear door trim panel

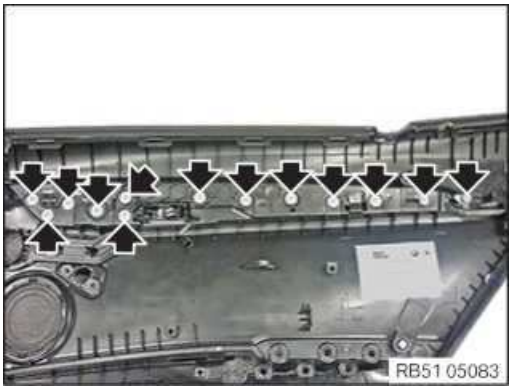
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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Saw off all welding pins (1) on the finisher along the moulding (2).



- Remove welding remnants on door trim panel with a scalpel.
- Installing finisher.

Note: Welding pins must not protrude from the door trim panel.

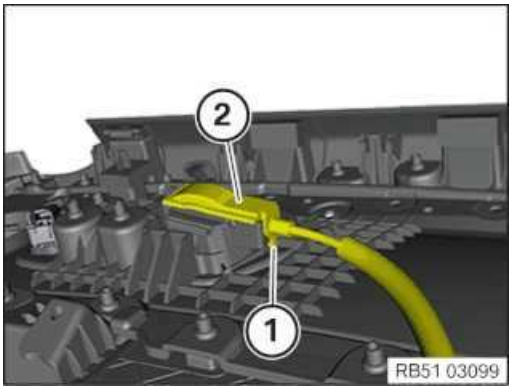
- Screw all of the repair screws (arrows) into the door trim panel and tighten.

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

- If necessary, mount the LED module.

8 – Install the Bowden cable for the inside door opener



- Push the inside door handle in "closed" direction.
- Engage the Bowden cable (2) into the lock (1) towards the front/bottom.

  The Bowden cable (2) must be positioned correctly in the dedicated brackets.

9 – Removing the speaker trim for the tweeter on the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Lever out the speaker trim (1) from the door trim panel using the special tool **0 493 681 (64 1 020)** and remove it.

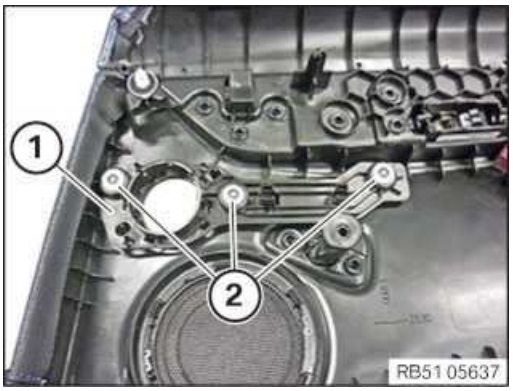
10 – Cut out the contour for the tweeter

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Use a conventional dia. 10 mm drill to drill a hole through the centre of the mark (1).
- Insert a suitable body saw through the hole.
- Cut out the contour for the tweeter along the provided line (1) with a suitable body saw.



- Install the fixture for the tweeter (1) and screw it to the door trim panel with the repair screws (2).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

11 – Installing the speaker trim for the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

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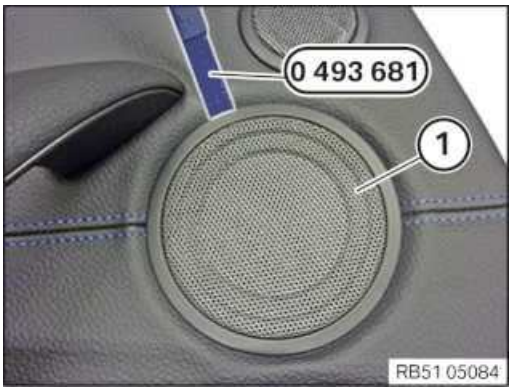
- Check latch mechanisms (1) for damage; renew the speaker trim if necessary.

  The latch mechanisms (1) must not be damaged or missing.
- Position speaker trim with the wide latch mechanism centred in direction of travel toward the front.
- Position and engage the speaker trim correctly in the door trim panel.

12 – Remove the speaker trim from the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

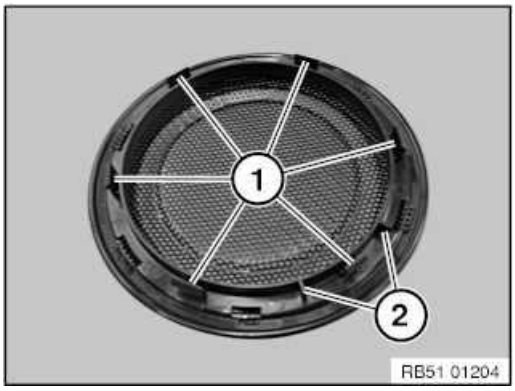


- Lever out the speaker trim (1) from the door trim panel using the special tool **0 493 681 (64 1 020)** and remove it.

13 – Install the speaker trim on the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the latch mechanisms (1) and the guides (2) for damage, renew the speaker trim if necessary.

  The latch mechanisms (1) and the guides (2) must not be damaged or missing.

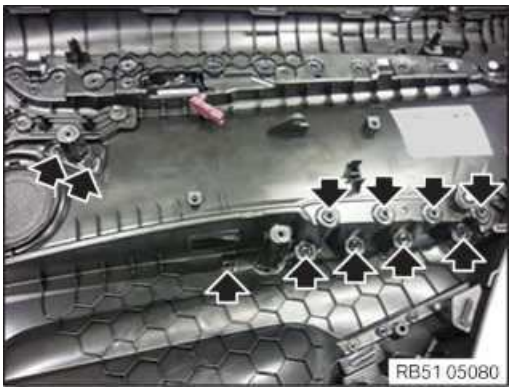
  The guides are used to correctly position the speaker trim on the door trim panel.
- Position and engage the speaker trim correctly in the door trim panel.

14 – Remove the armrest from the rear door trim panel

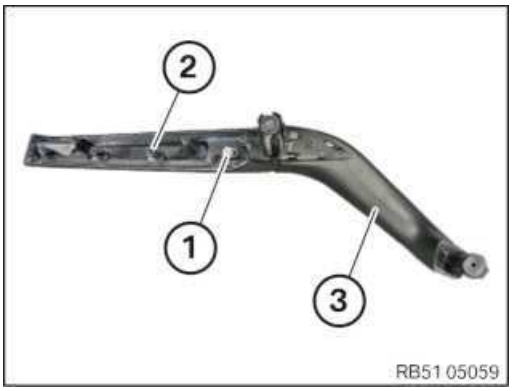
NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Drill out or grind down all marked spot-welds (arrows).
- Remove the armrest together with the handle.



- Loosen screw (1).
- Detach the armrest (2) from the handle (3).

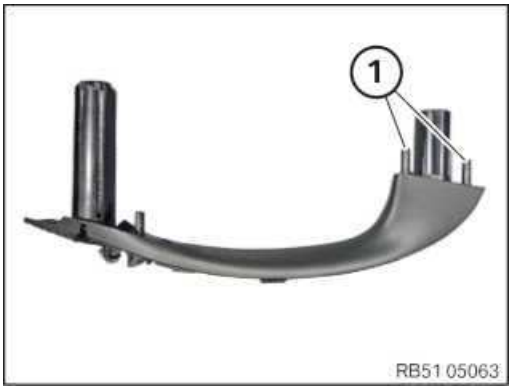
15 – Install the armrest on the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

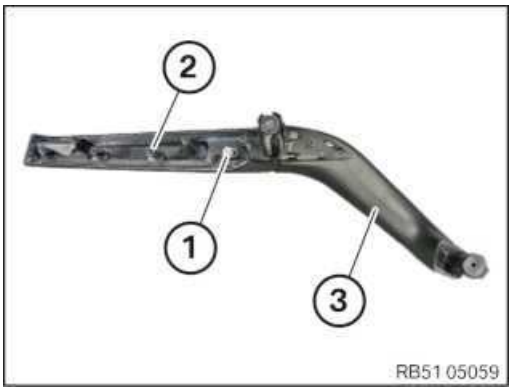


- Saw off all welding pins on the armrest along the mouldings (arrow).



- Cut off the welding pins (1) on the handle along the moulding.

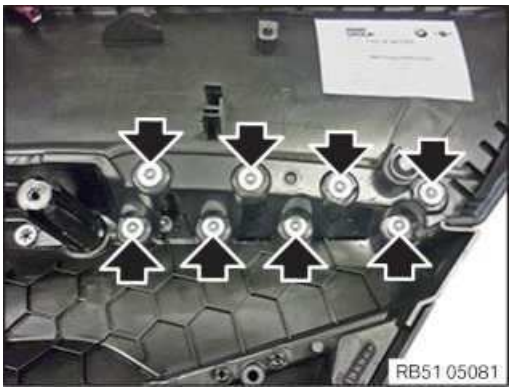
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- Connect the armrest (2) with the handle (3).
- Mount and tighten the bolt (1).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm



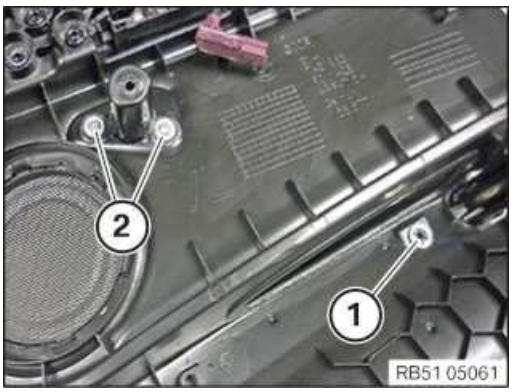
- Install the armrest together with the handle .

Note: Sawn off welding pins must not protrude from the door trim panel.

- Mount and tighten the repair screws (arrows).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm



- Mount the lock washer (1).
- Mount and tighten the repair screws (2).

Repair screw to door trim panel

Oval-head screw		Tightening torque	2,3 Nm

POSTPROCESSES

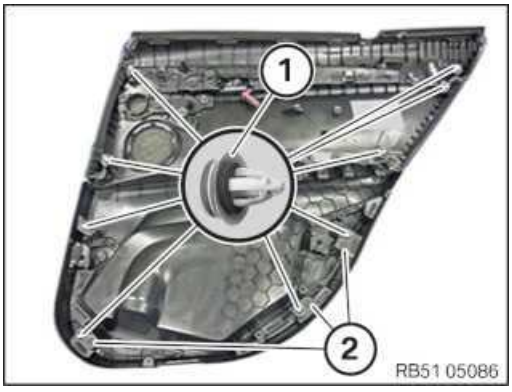
16 – Installing rear door trim panel

RISK OF DAMAGE

Scratches.

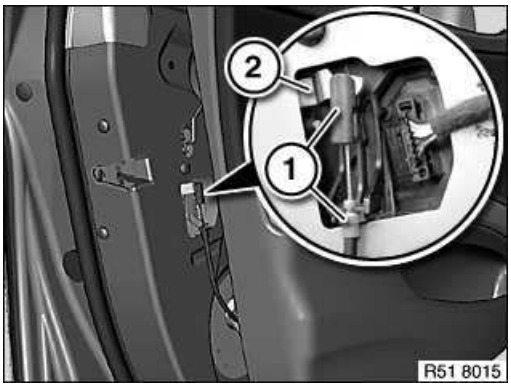
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

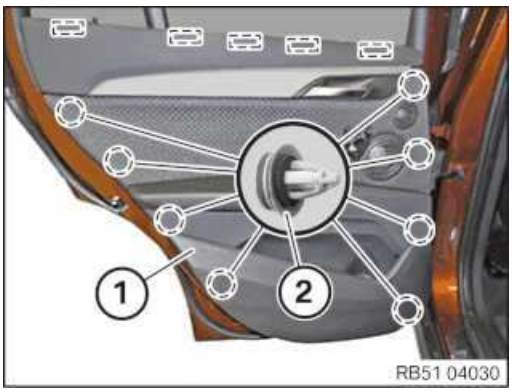


- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.

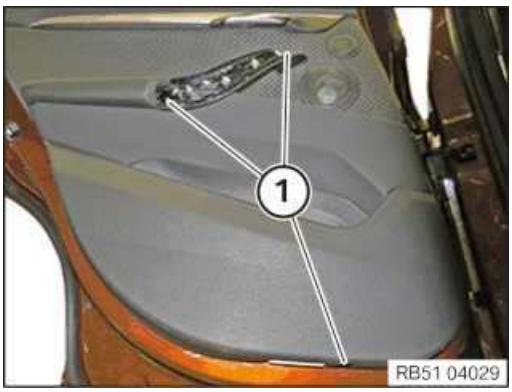
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- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

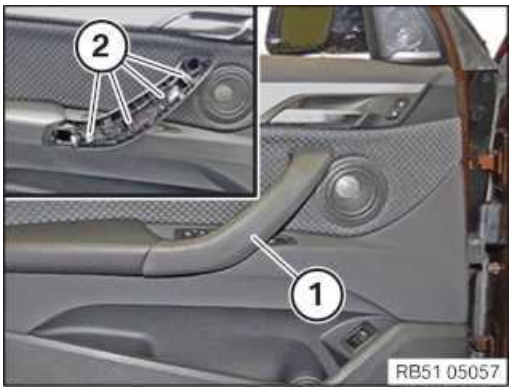
Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm

17 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

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Repair screw to door trim panel — Used in step 7 10 15

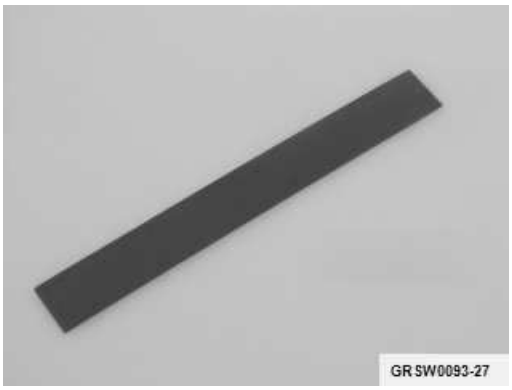
Oval-head screw		Tightening torque	2,3 Nm

Door trim panel to door — Used in step 16

Screw TS5x20		Tightening torque	2,5 Nm

Overview of Special Tools

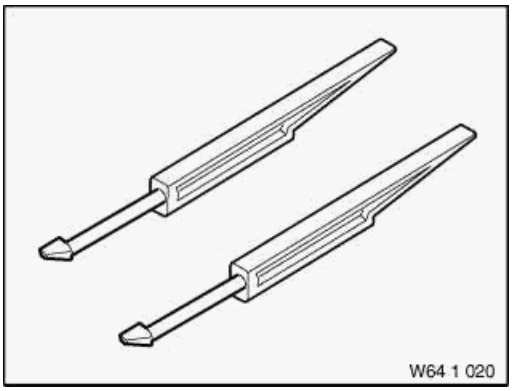
0 496 571 (00 9 327) Wedge



Common — Used in step 3

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 493 681 (64 1 020) Hook



Common — Used in step 9 12

Usage	(release hook) For releasing and removing fresh air grille. For removing various covers.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

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51 42 018 Replacing speaker trim on rear left or right door trim panel

RISK OF DAMAGE

Scratches.

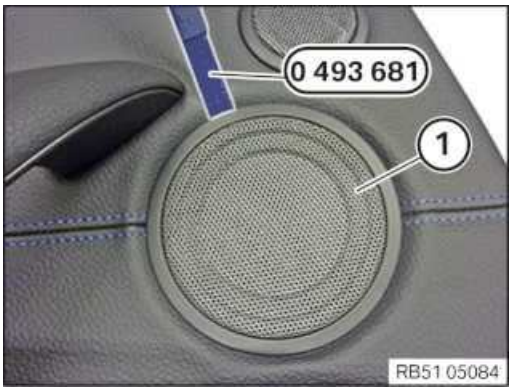
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

1 – Remove the speaker trim from the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

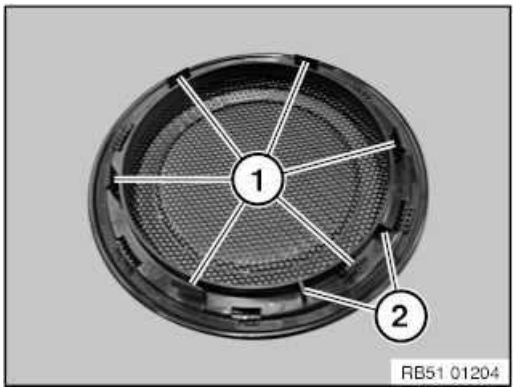


- Lever out the speaker trim (1) from the door trim panel using the special tool **0 493 681 (64 1 020)** and remove it.

2 – Install the speaker trim on the rear door trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the latch mechanisms (1) and the guides (2) for damage, renew the speaker trim if necessary.

  The latch mechanisms (1) and the guides (2) must not be damaged or missing.

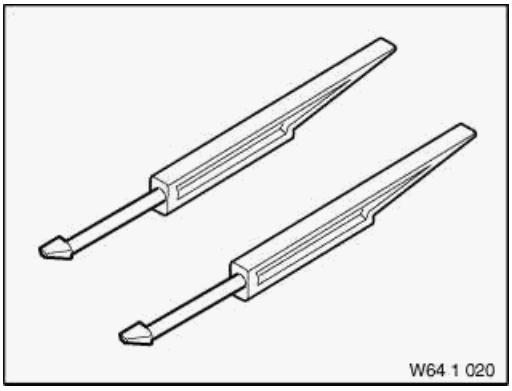
  The guides are used to correctly position the speaker trim on the door trim panel.
- Position and engage the speaker trim correctly in the door trim panel.

Additional Information

Overview of Special Tools

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0 493 681 (64 1 020) Hook



Common	Used in step 1
Usage	(release hook) For releasing and removing fresh air grille. For removing various covers.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

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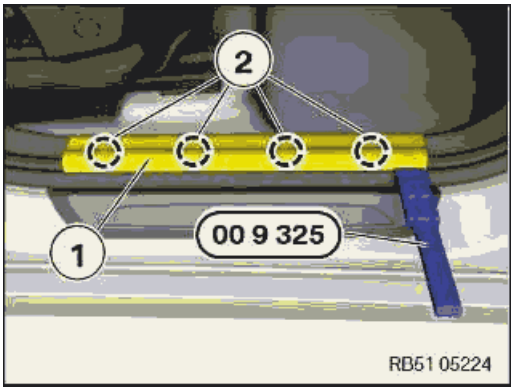
51 43 070 Remove and install/replace side trim panel, footwell, on A-pillar, left

NOTICE

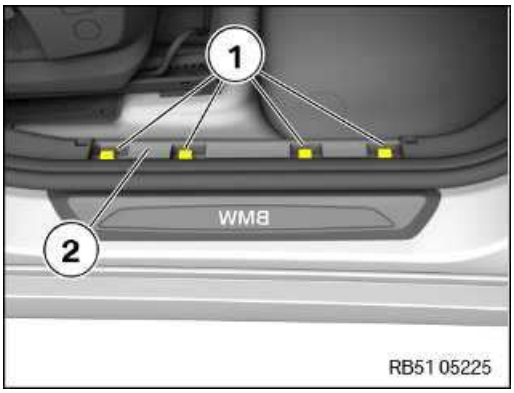
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove front entrance cover strip



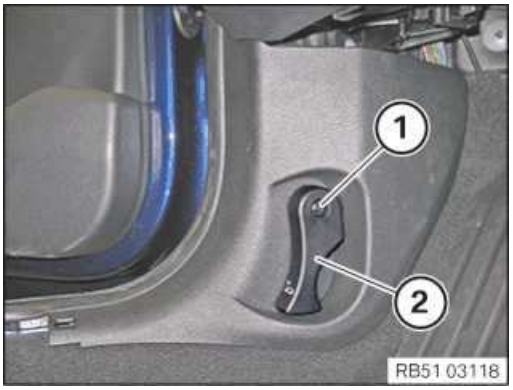
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



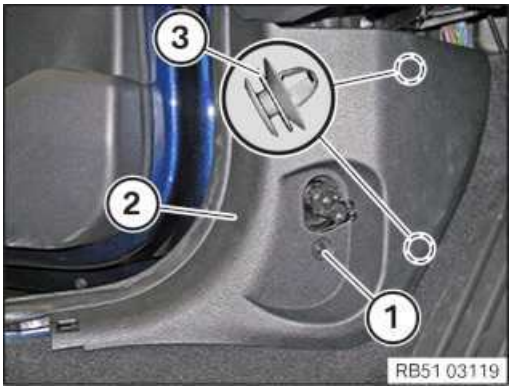
- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

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2 – Removing the side trim panel in the footwell at the A-pillar

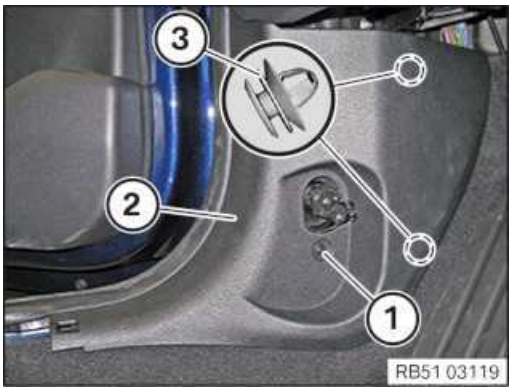


- Loosen screw (1).
- Remove bonnet release lever (2).



- Loosen screw (1).
- Unclip side trim panel (2) from the clips (3) and remove.

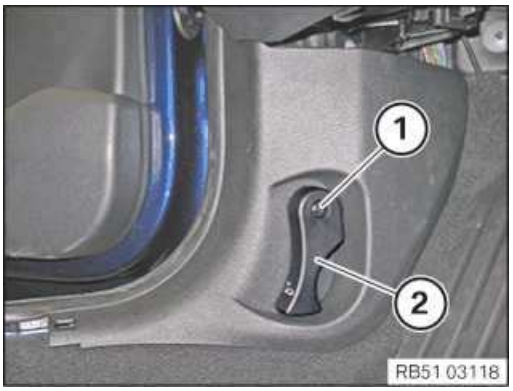
3 – Installing side trim panel in the footwell at A-pillar



- Position the side trim panel (2) and clip it to the clips (3).
- Make sure the edge protection on the side trim panel (2) fits correctly.
- Tighten down screw (1).

Side trim panel bottom left to holder

Screw		Tightening torque	3 Nm



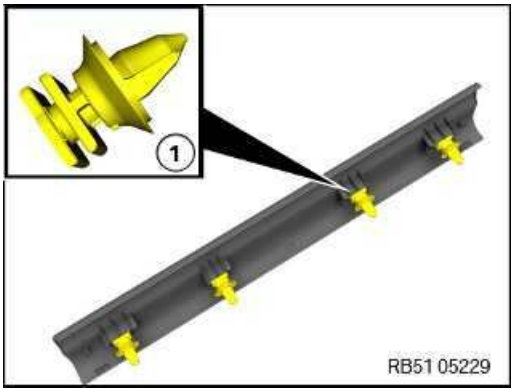
- Install lever for the bonnet release (2)l.
- Tighten down screw (1).

Lever for bonnet release to the holder

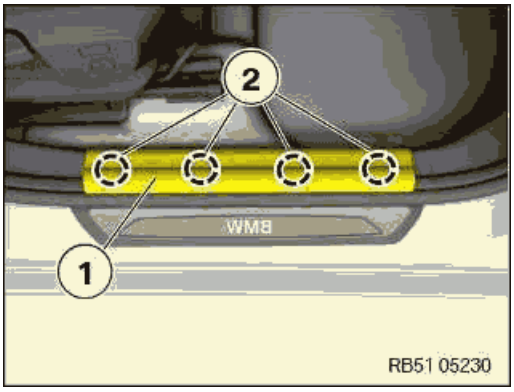
Screw		Tightening torque	3 Nm

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4 – Install the front door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

Additional Information

Overview of Tightening Torques

Side trim panel bottom left to holder — Used in step 3

Screw		Tightening torque	3 Nm

Lever for bonnet release to the holder — Used in step 3

Screw		Tightening torque	3 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common — Used in step 1

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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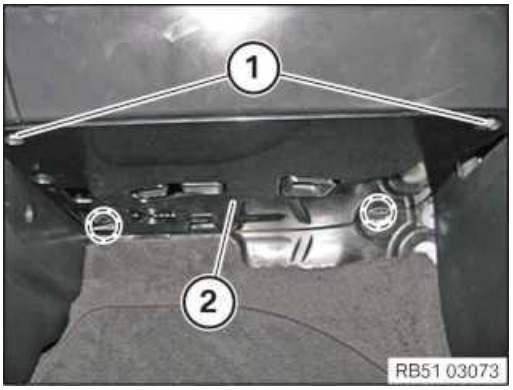
51 43 075 Remove and install/replace side trim panel, footwell, on A-pillar, right

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Removing the instrument panel trim at bottom right

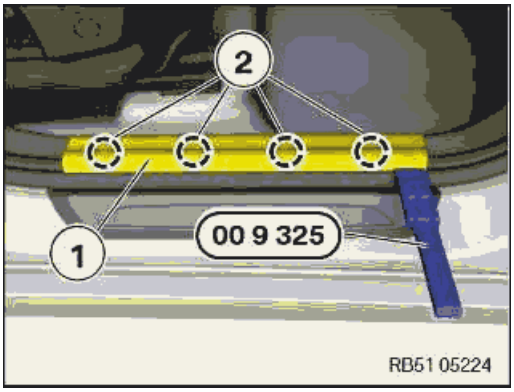


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

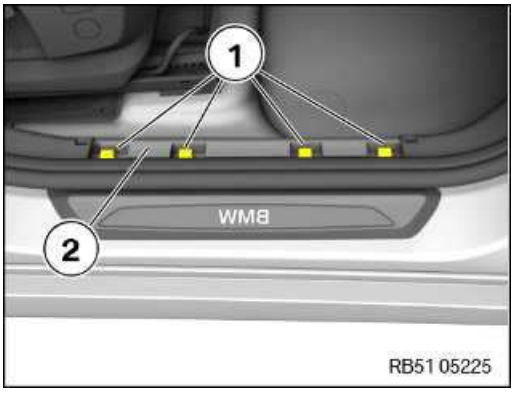
2 – Remove front right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



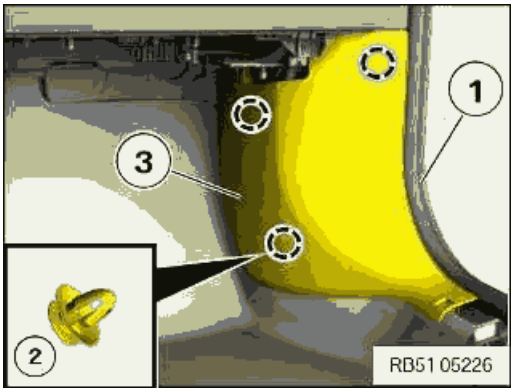
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

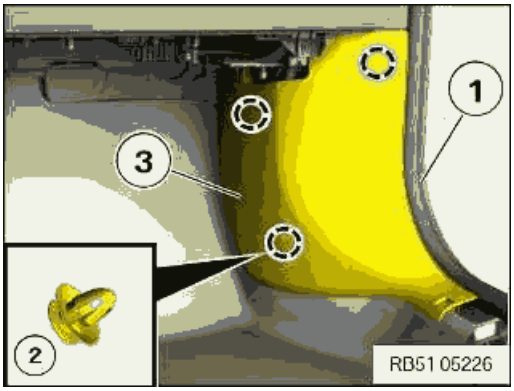
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3 – Removing the side trim panel in the footwell at the right-hand A-pillar



- Guide side trim panel (3) under the sealing lip out of the edge protection (1).
- Unclip and remove the side trim panel (3) at the clips (2).

4 – Installing side trim panel in footwell on right A-pillar



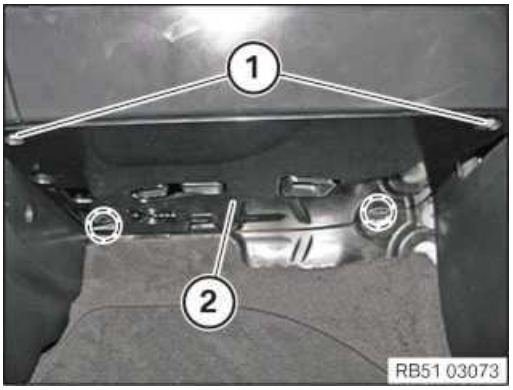
- Check clips (2) for damage, and replace if necessary.
- Feed the side trim panel (3) under the sealing lip of the edge protection (1).
- Clip in the side trim panel (3) with the clips (2).

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5 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

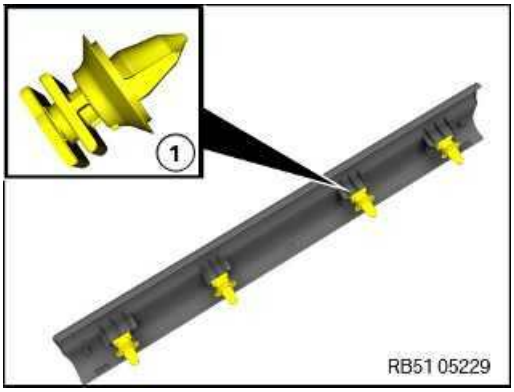
Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

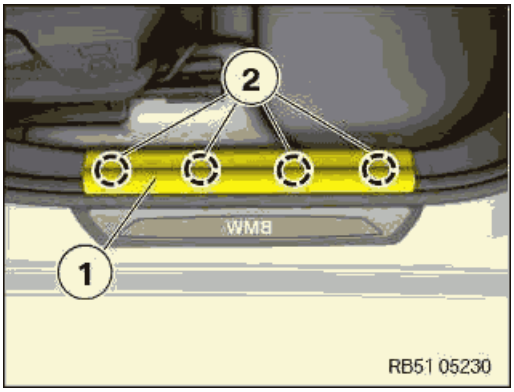
6 – Install the front right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

Additional Information

Overview of Tightening Torques

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Bottom left footwell trim to instrument panel Used in step 5

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common Used in step 2

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 43 201 Removing and installing/replacing A-pillar trim panel on left or right

NOTICE

Description is for left component only. Procedure on the right side is identical.

1 – Remove the A-pillar trim panel

WARNING

Airbag unit.

Danger! Life-threatening injuries!

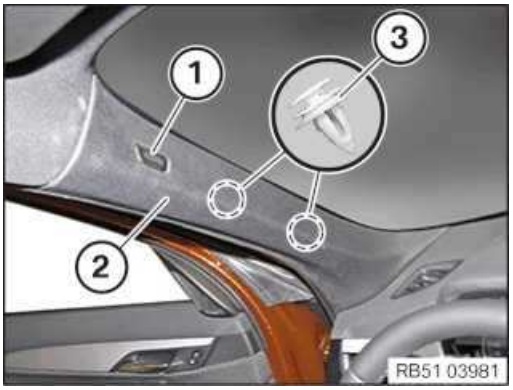
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

2 – Install the A-pillar trim panel

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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WARNING

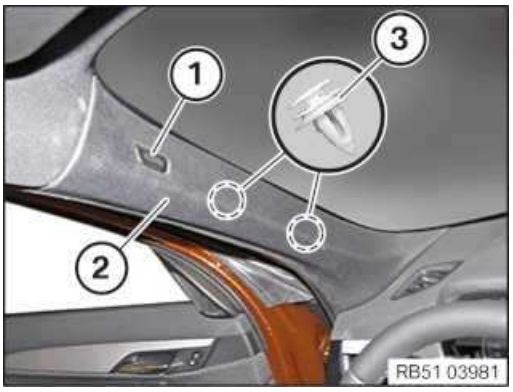
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body — Used in step 2

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	1 2

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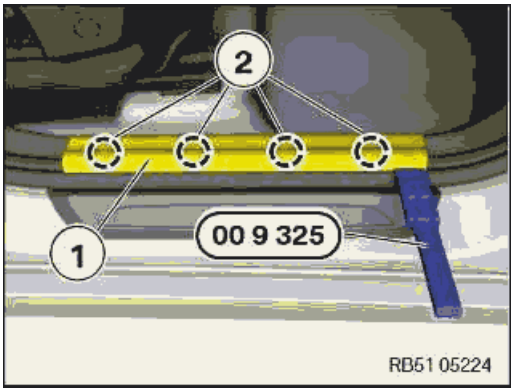
51 43 150 Removing and installing/replacing the trim panel for the left or right door post (bottom)

NOTICE

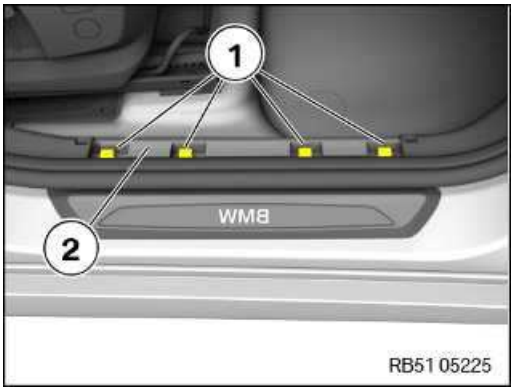
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove front entrance cover strip

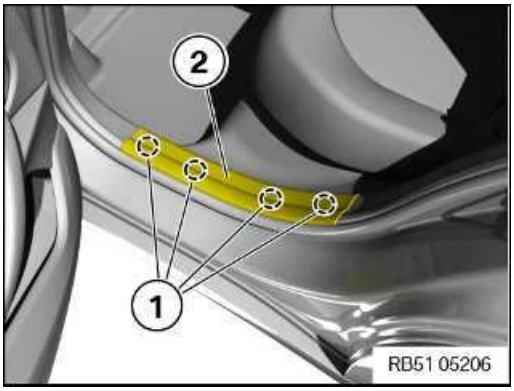


- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

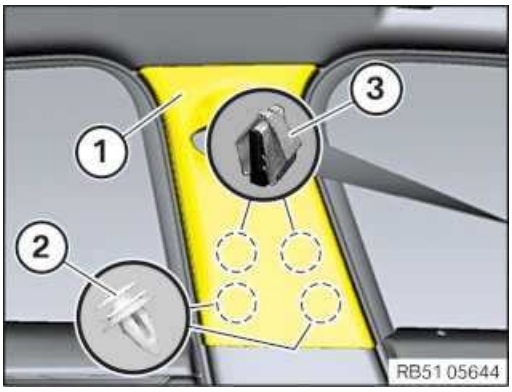
2 – Remove rear entrance cover strip



- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

3 – Partially removing upper B-pillar trim panel

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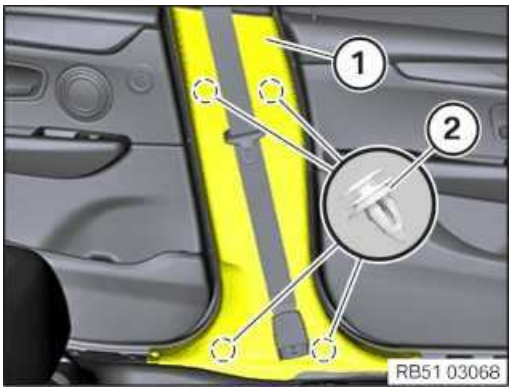
- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

MAIN WORK

4 – Remove the lower B-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

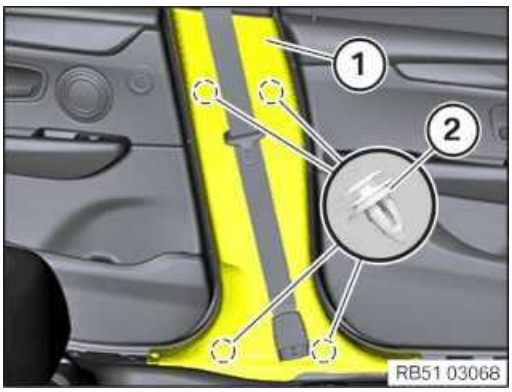


- Release the B-pillar trim panel (1) at bottom starting from the clips (2).
- Feed out and remove the B-pillar trim panel (1) inwards.

5 – Install the lower B-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Renew damaged clips (2).

  Parts: Clips
- Feed in the B-pillar trim panel (1) at the top and position correctly.
- Clip in the B-pillar trim panel (1) at the clips (2).
- Make sure the B-pillar trim panel (1) is correctly positioned on the edge protection.

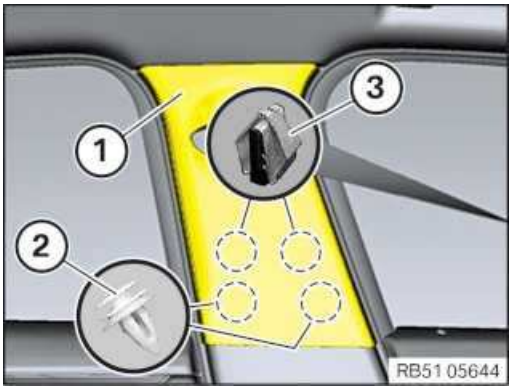
POSTPROCESSES

6 – Partially installing upper B-pillar trim panel

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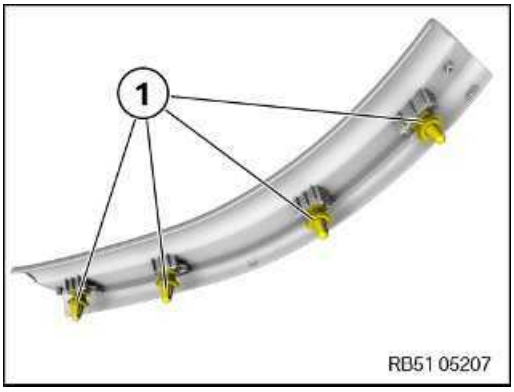
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

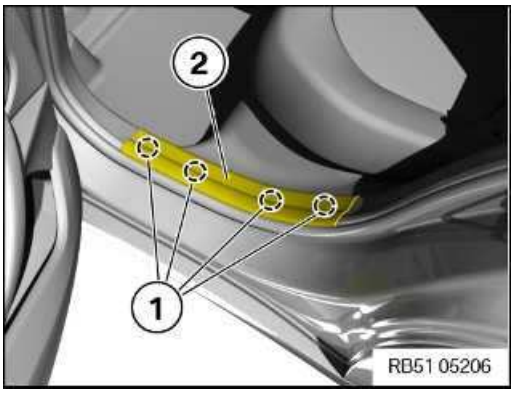


- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

7 – Installing the rear door sill cover strip

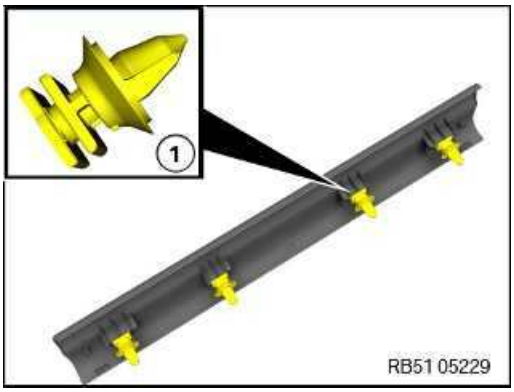


- Check the clips (1) for damage and renew where required.



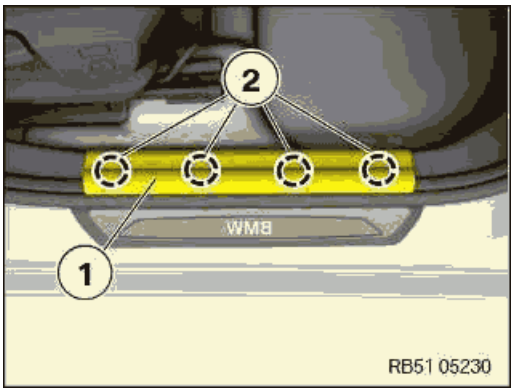
- Clip in the door sill cover strip (2) with the clips (1).

8 – Install the front door sill cover strip



- Check the clips (1) for damage and renew where required.

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- Clip the door sill cover strip (1) into the floor panel with the clips (2).

Additional Information

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step 1 3
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 43 148 Removing and installing/replacing trim panel for left or right body pillar (B-pillar)

NOTICE

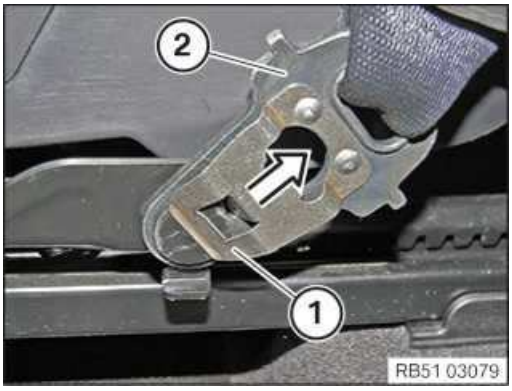
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.

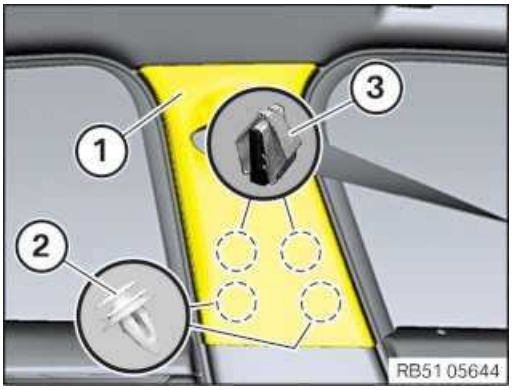


- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

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MAIN WORK

2 – Remove the upper B-pillar trim panel

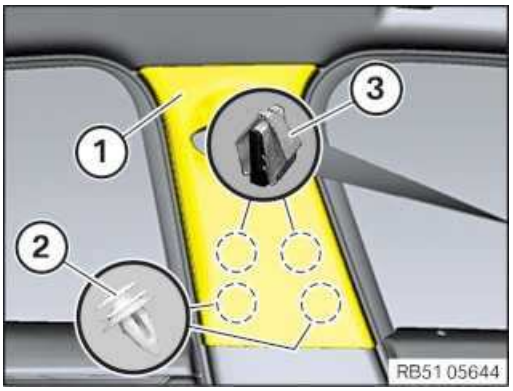


- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.
- Remove the B-pillar trim panel (1) and, when doing so, guide out the seat belt.

3 – Install upper B-pillar trim panel

TECHNICAL INFORMATION

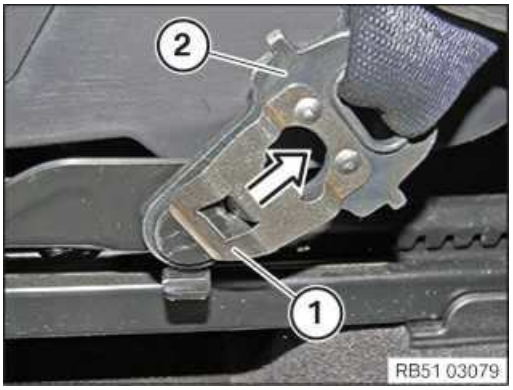
Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Insert the seat belt into the B-pillar trim panel (1).
- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

POSTPROCESSES

4 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

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Result

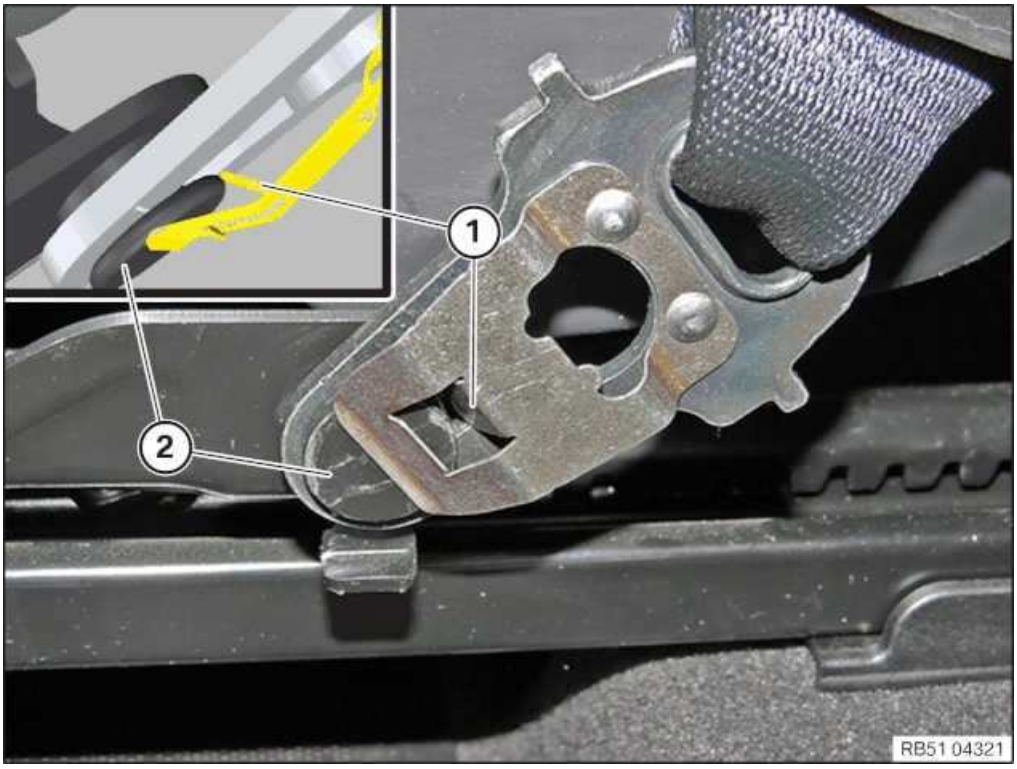
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

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Additional Information

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step 2
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 44 915 Lower roofliner

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

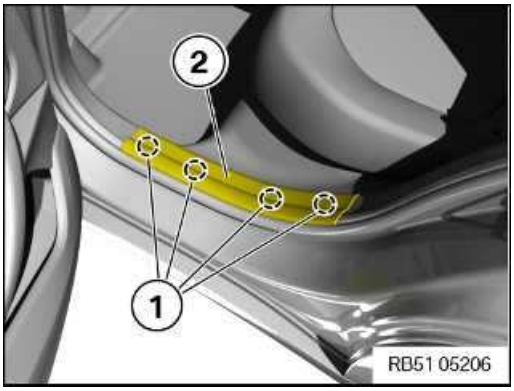
- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Remove the door sill cover strip on the rear left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.



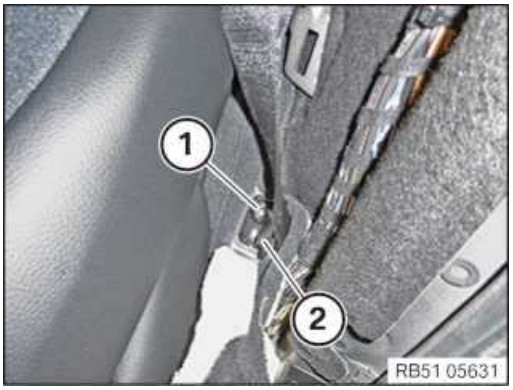
▸ **Remove rear entrance cover strip**

- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Removing the bottom left and right C-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.



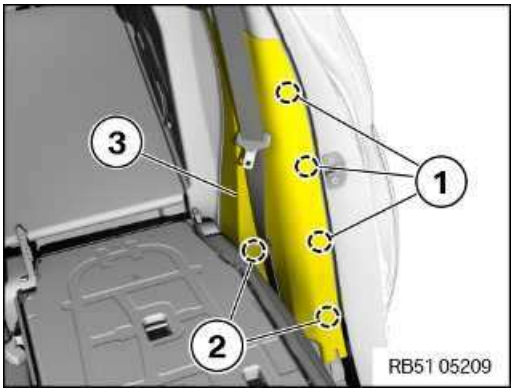
▸ **Remove the bottom C-pillar trim panel**

- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

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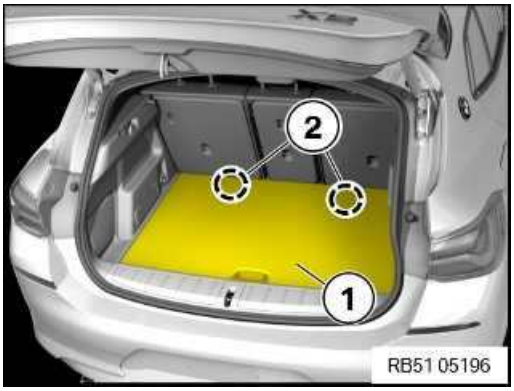


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



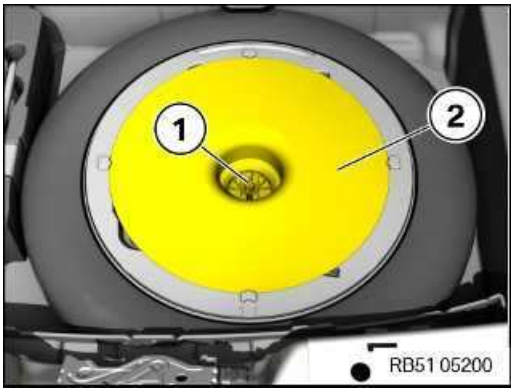
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

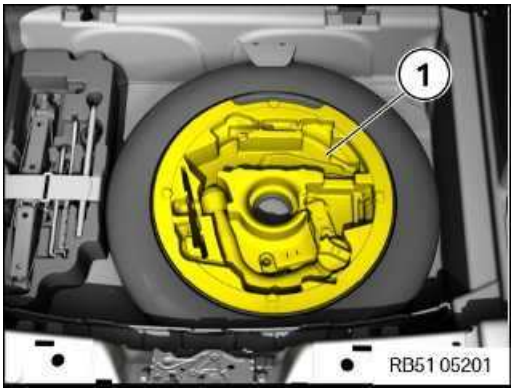


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



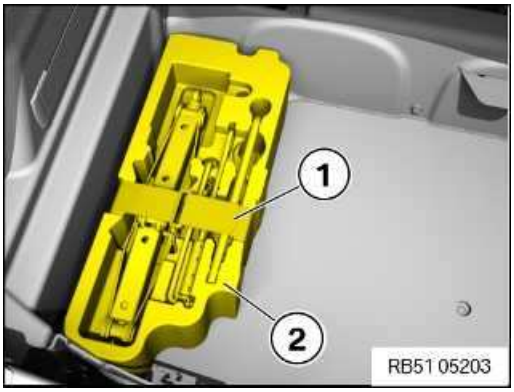
- Remove the oddments tray from the emergency wheel (1).

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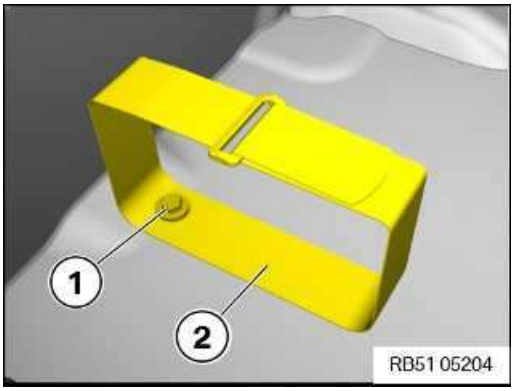
- Remove the emergency wheel (1).

5 – Remove the tool kit



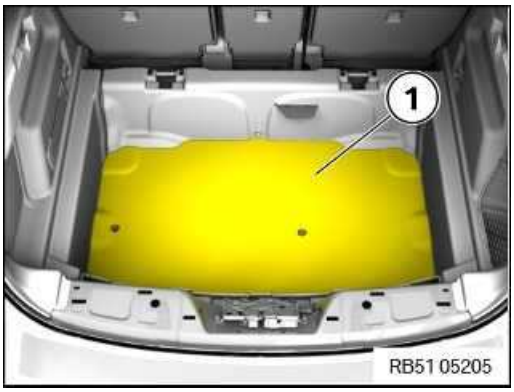
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

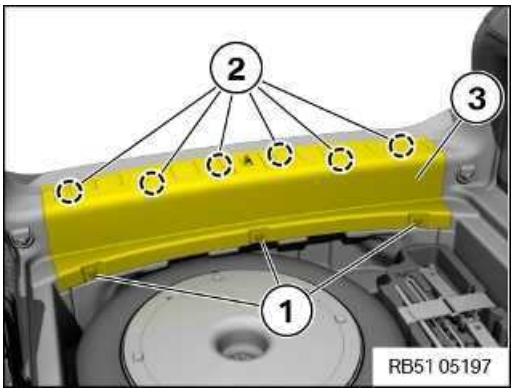
7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

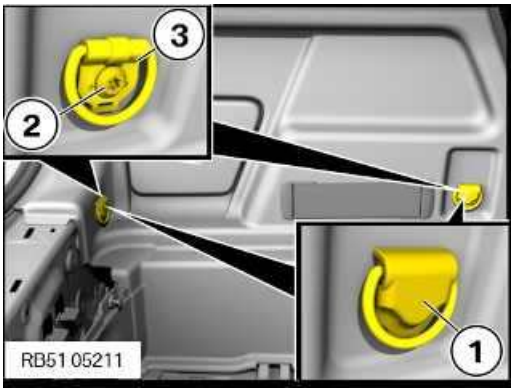
8 – Removing the loading edge trim

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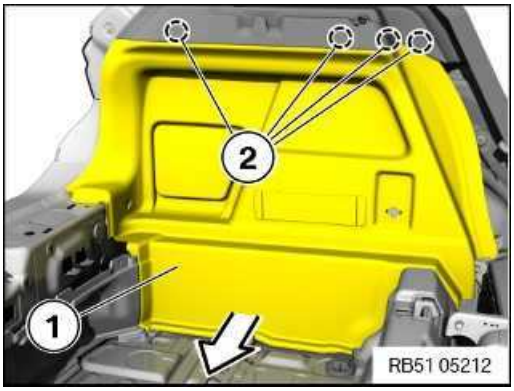


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

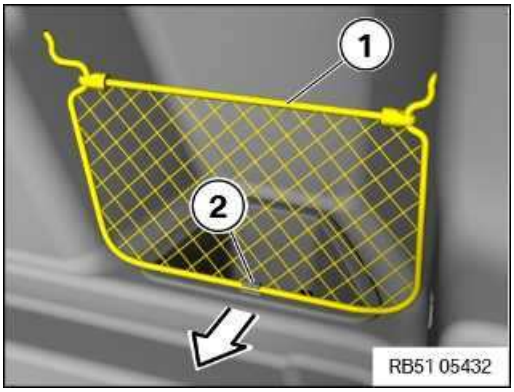


NOTICE

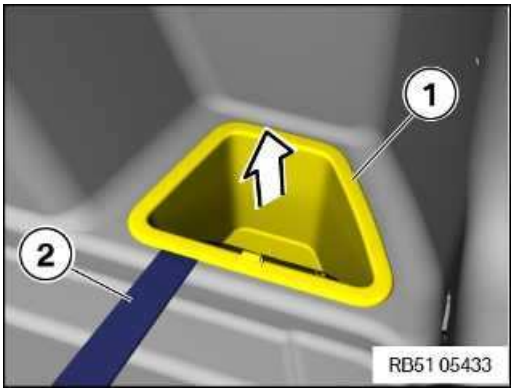
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

10 – Removing right luggage compartment wheel arch trim panel

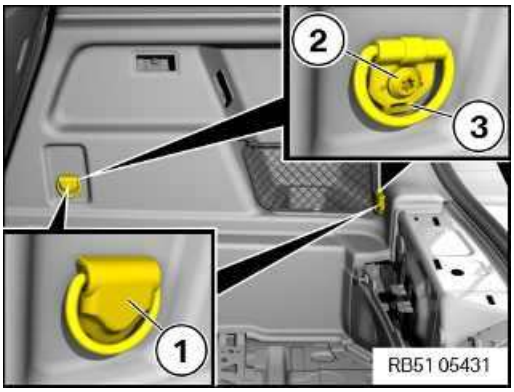


- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.

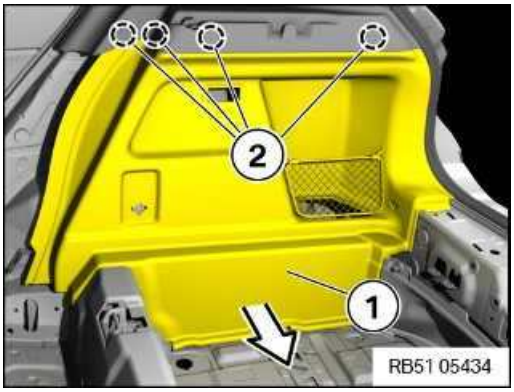


- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).

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- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

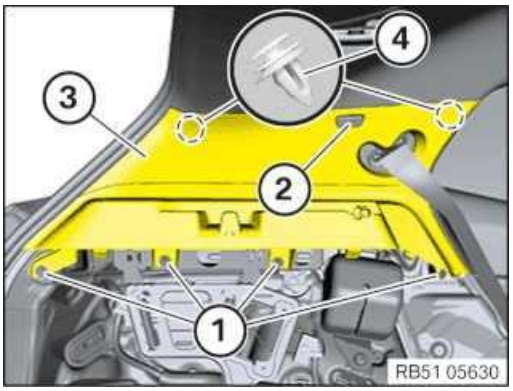
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

11 – Remove the trim panel of the luggage compartment capping on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim panel of the luggage compartment capping**



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

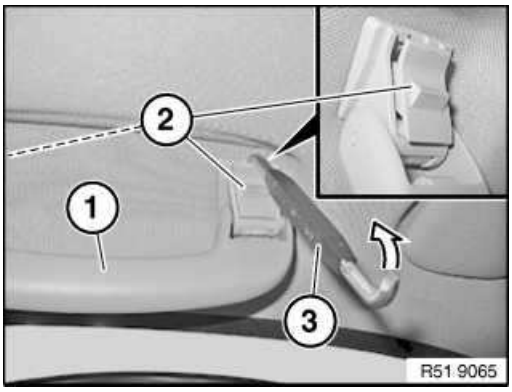
12 – Removing all grab handles

NOTICE

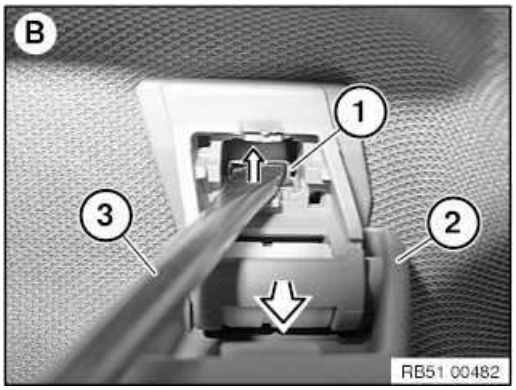
The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**

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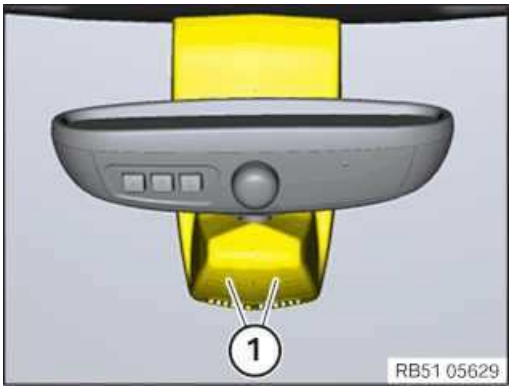


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

13 – Remove the cover on the inside mirror



- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

14 – Remove both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove sun visor**



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

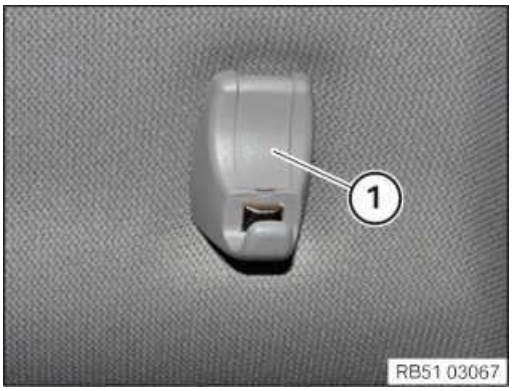
15 – Removing counter supports for sun visor on left and right

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NOTICE

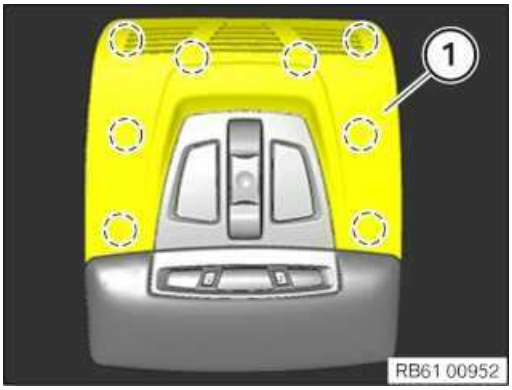
Description is for left component only. Procedure on the right side is identical.

▶ **Remove the counter support for the sun visor**

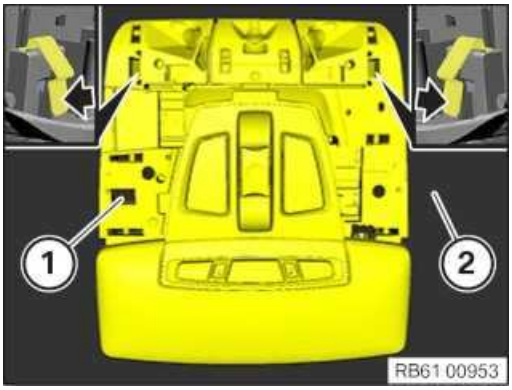


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

16 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

17 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Remove the A-pillar trim panel**

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WARNING

Airbag unit.

Danger! Life-threatening injuries!

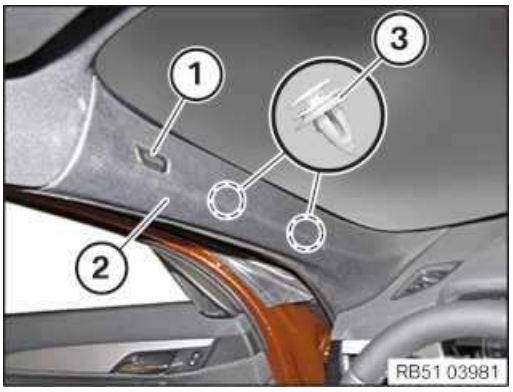
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

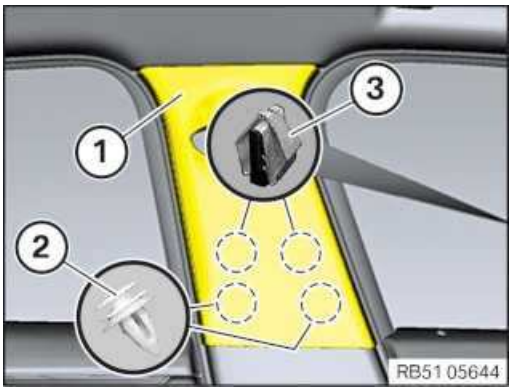


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

18 – Removing the B-pillar trim panels at top left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

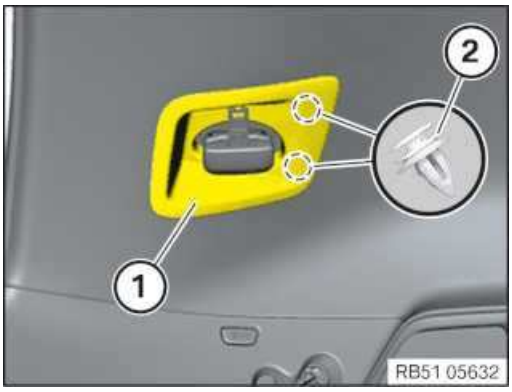


▸ **Partially removing upper B-pillar trim panel**

- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

19 – Remove the belt feed trim

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- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

MAIN WORK

20 – Lower roofliner

Prerequisite

The front seats have been fully adjusted towards the bottom.

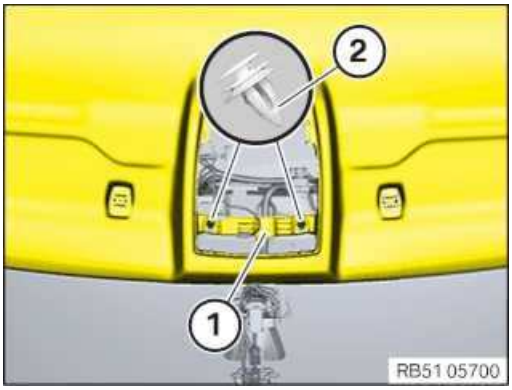
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

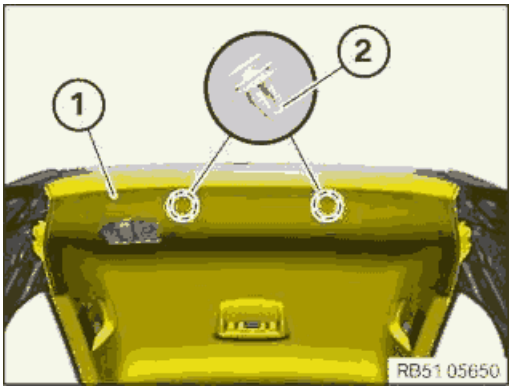
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

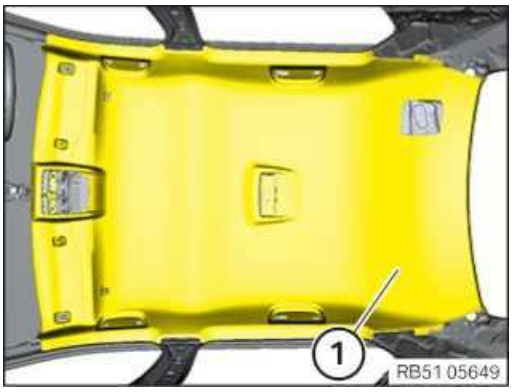


- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).

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- Carefully guide out the headlining (1) at the respective edge protection and place it onto the seats in the vehicle.

21 – Install the headlining (lowered)

Prerequisite

The front seats have been fully adjusted towards the bottom.

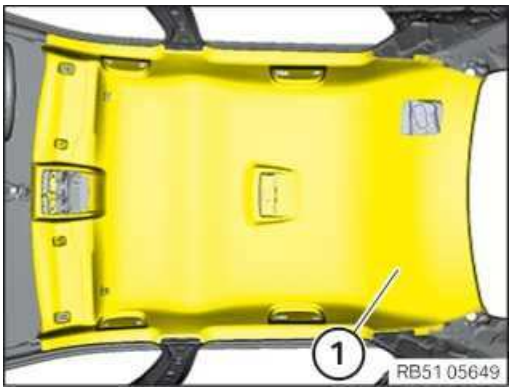
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

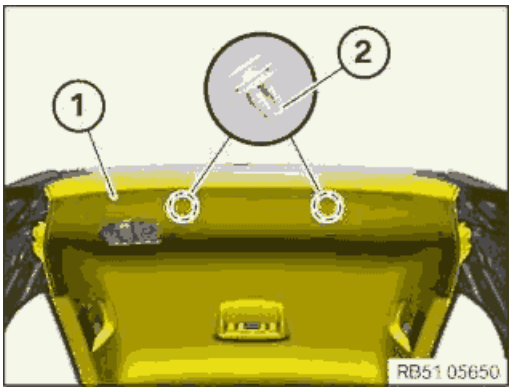
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

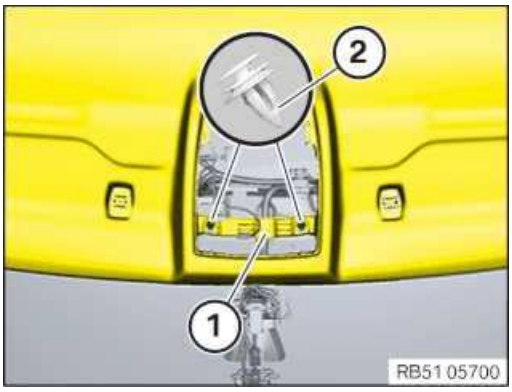


- Install the headlining (1) and carefully insert it at the respective edge protection.



- Clip in the headlining (1) using the clips (2).

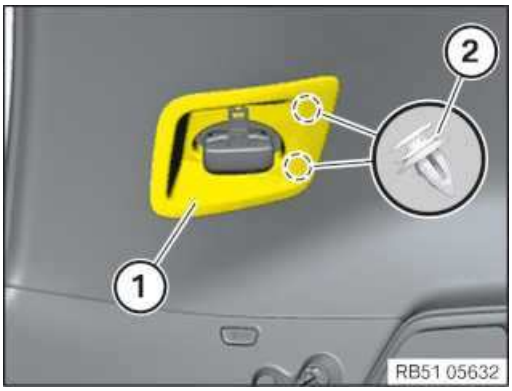
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- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

POSTPROCESSES

22 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

23 – Installing the top left and right B-pillar trim panels

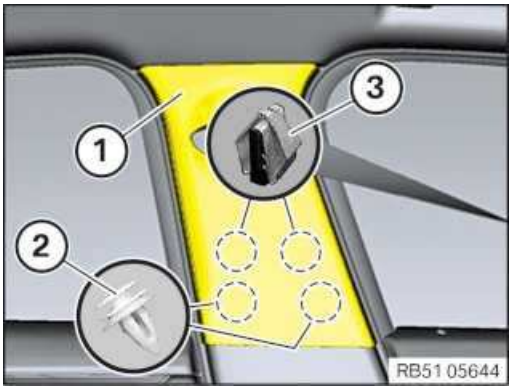
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Partially installing upper B-pillar trim panel**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

24 – Installing the left and right A-pillar trim panels

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

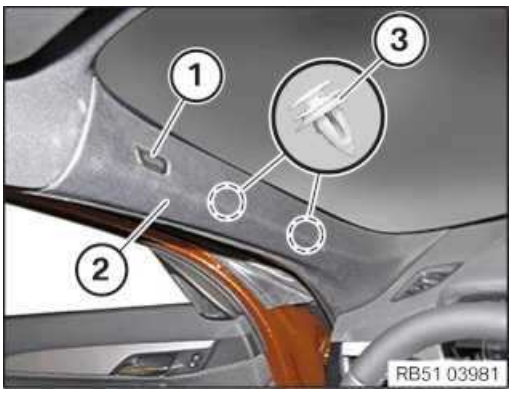
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

  Parts: Screw
- Tighten down screw.

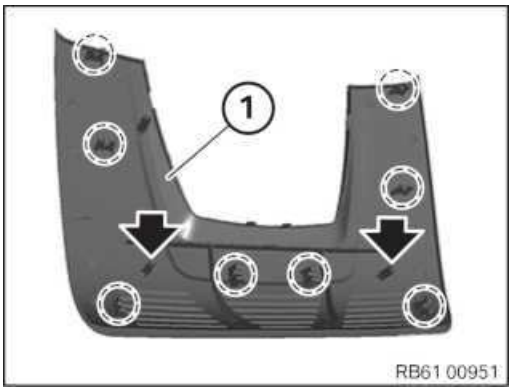
A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

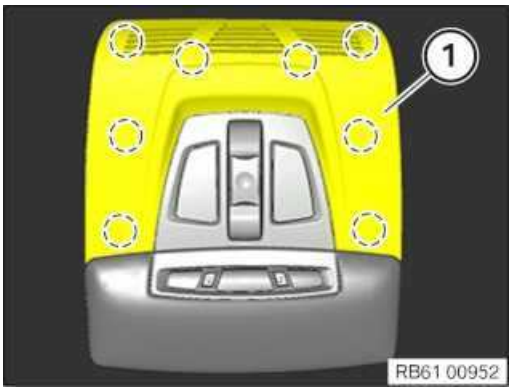
- Clip in the cover (1).

25 – Install the roof function centre

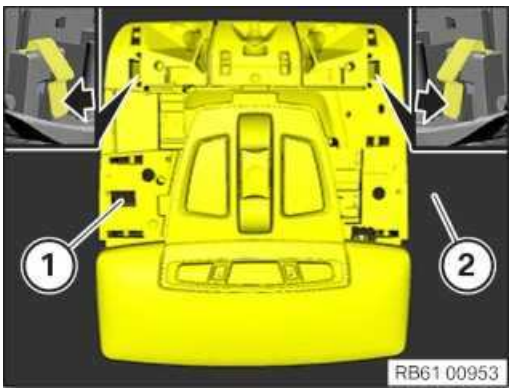
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- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.



NOTICE

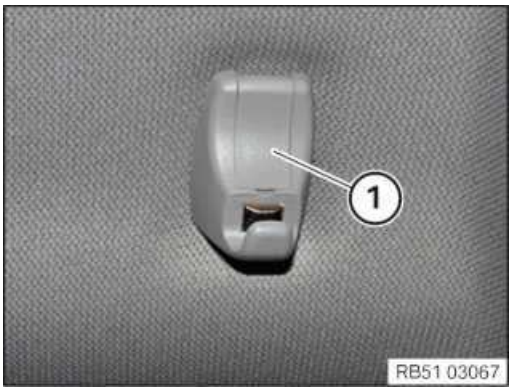
To provide a better overview: Schematic diagram with partially hidden components.

- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

26 – Install the counter supports for the sun visor on left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the counter support for the sun visor**

- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

Screw		Tightening torque	2,5 Nm

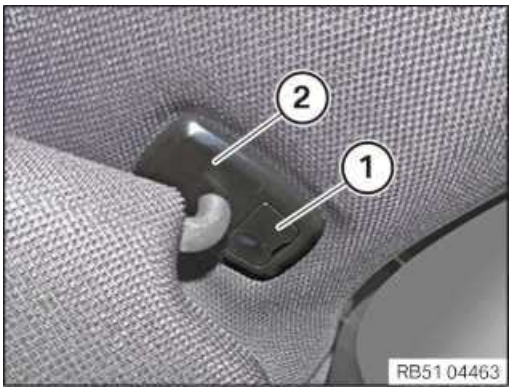
27 – Install both sun visors

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NOTICE

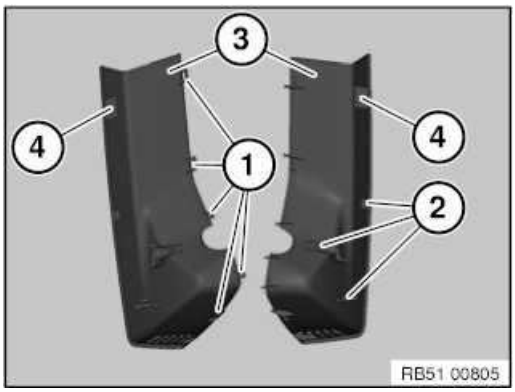
Description is for left component only. Procedure on the right side is identical.

▶ **Install the sun visor**



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

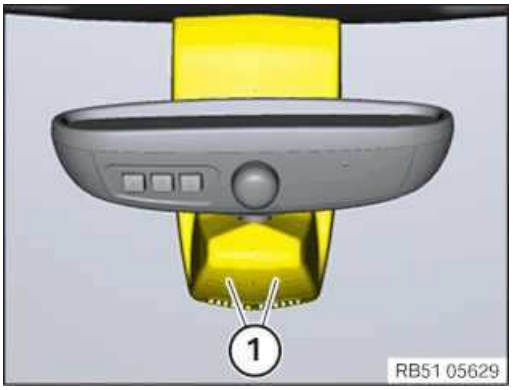
28 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



- Install covers on the interior mirror (1) clip together.

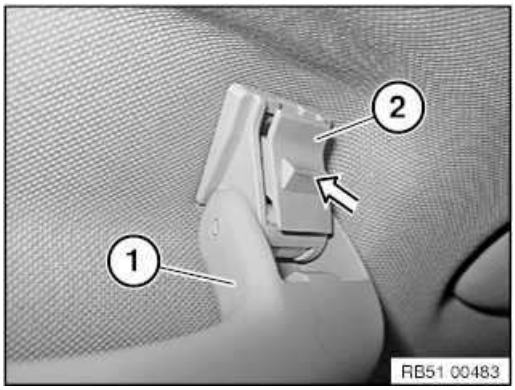
29 – Installing all grab handles

NOTICE

The description is for one component only. The procedure is identical for all further components.

▶ **Installing the grab handle**

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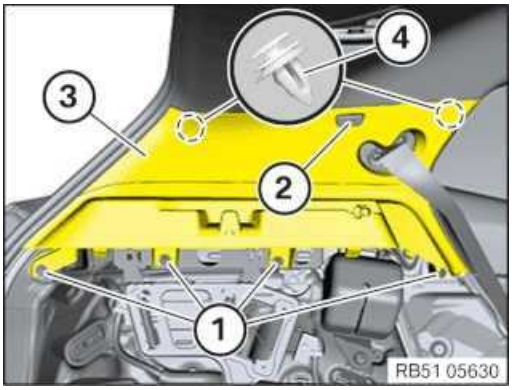


- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

30 – Install the trim panel for left and right the luggage compartment capping

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the trim panel for the luggage compartment capping**

- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

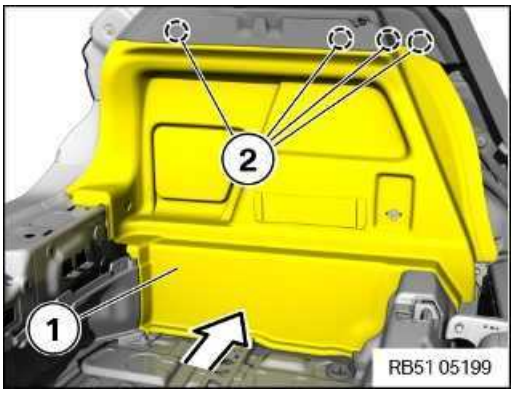
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

31 – Install luggage compartment wheel arch trim panel at left

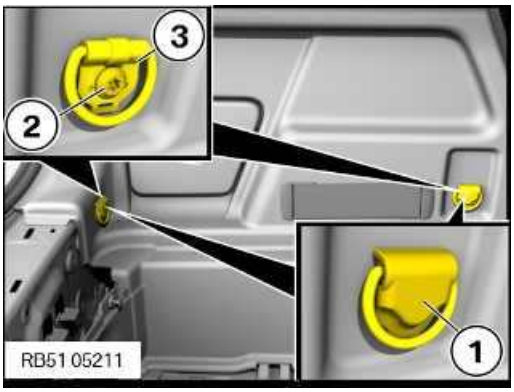


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.

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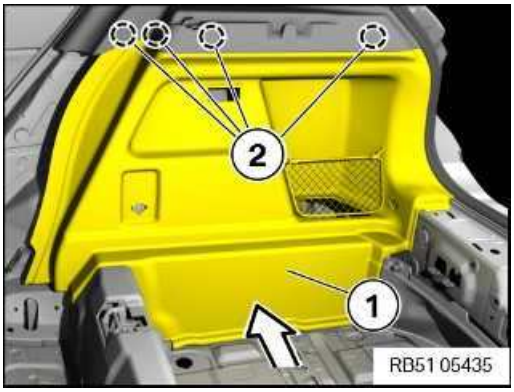
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

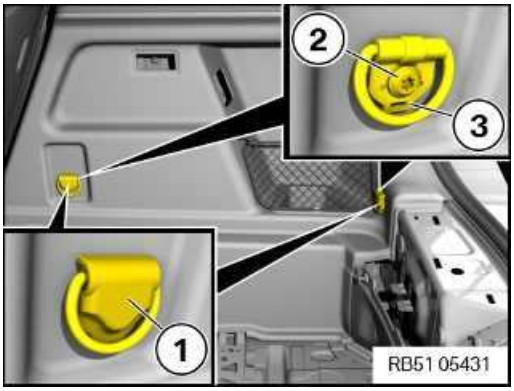
32 – Installing the luggage compartment wheel arch trim panel on the right



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

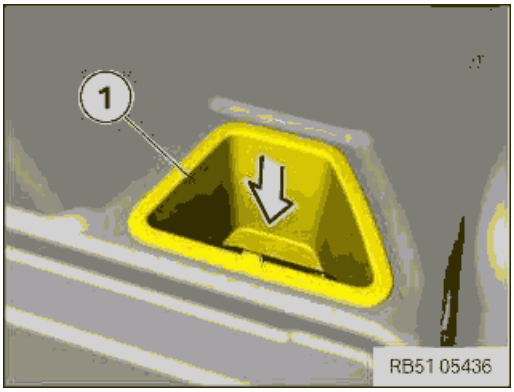


- Position the lashing eyes (3) and tighten the screws (2).

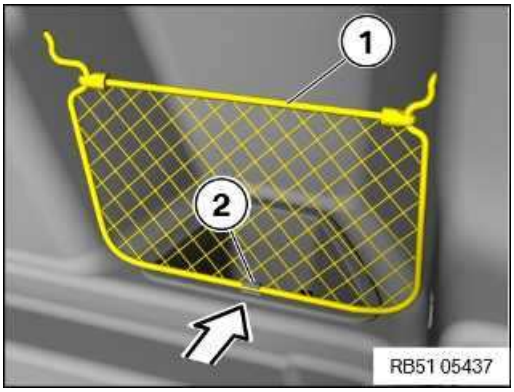
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

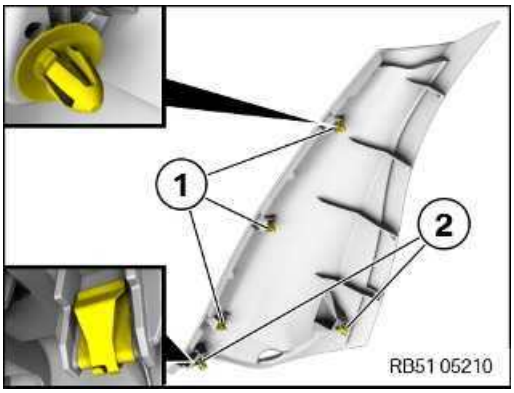
33 – Install C-pillar trim panel at bottom left and right

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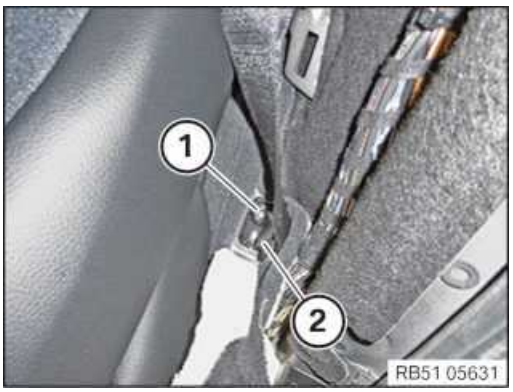
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Install the bottom C-pillar trim panel**



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

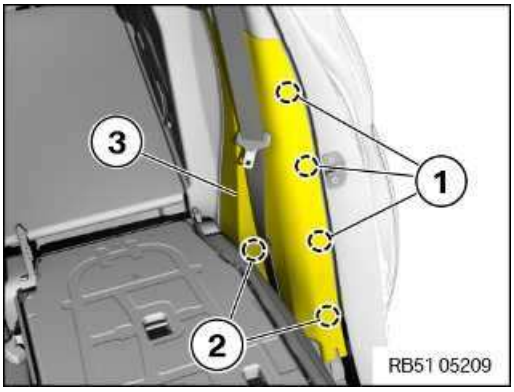


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

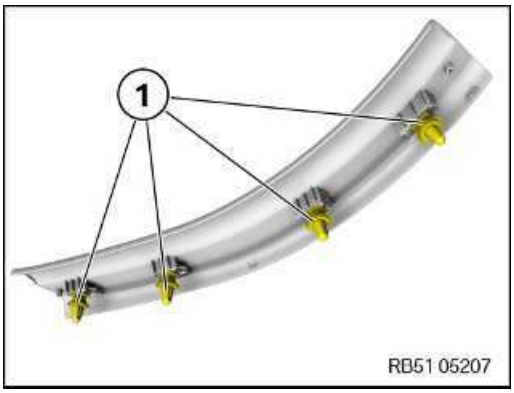
34 – Install the door sill cover strip on the rear left and right

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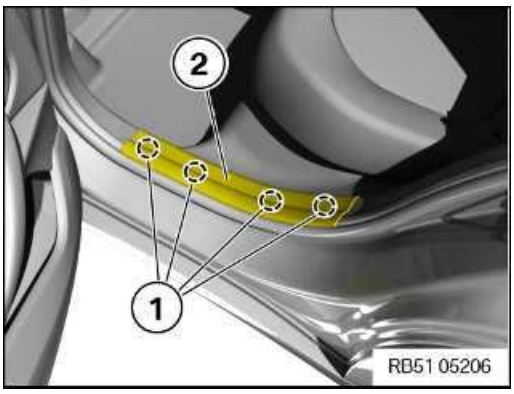
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Installing the rear door sill cover strip**

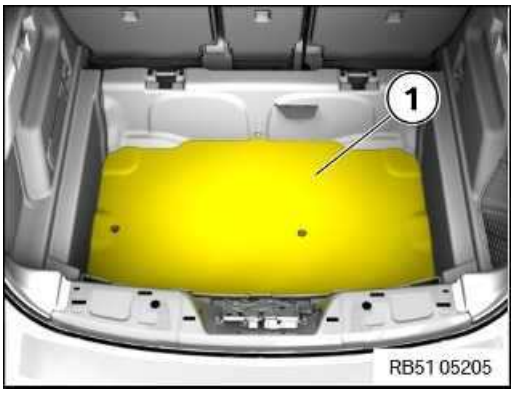


- Check the clips (1) for damage and renew where required.



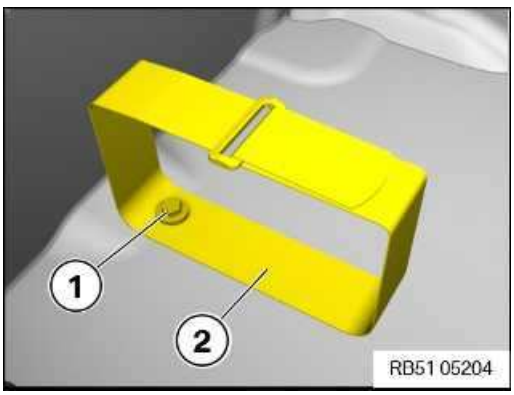
- Clip in the door sill cover strip (2) with the clips (1).

35 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

36 – Inserting the Velcro fastener for the toolkit



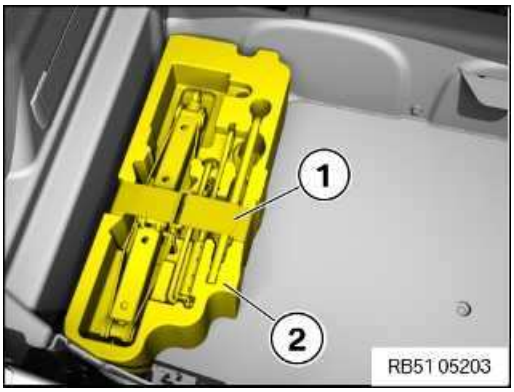
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

37 – Install the tool kit

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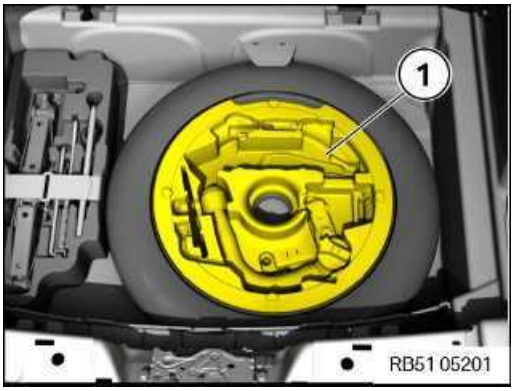


- Install the tool kit (2).
- Close the hook and loop tape (1).

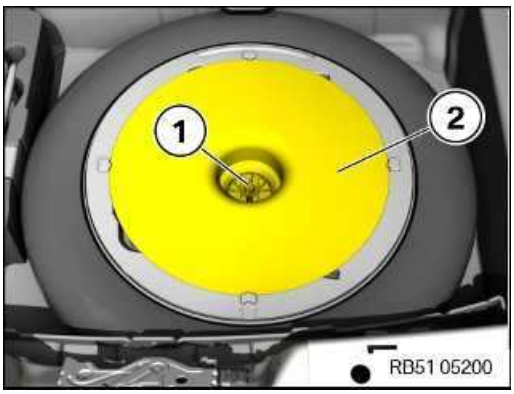
38 – Install the emergency wheel



- Insert compact spare wheel(1).

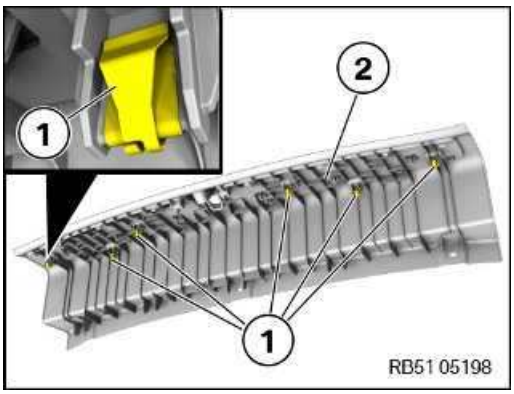


- Insert oddments tray into the compact spare wheel (1).



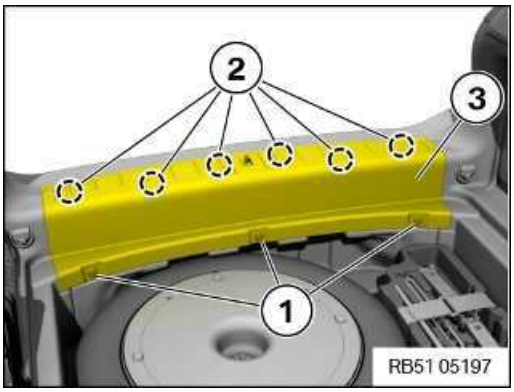
- Insert the lid (2).
- Hand-tighten the bolt (1).

39 – Installing loading edge trim



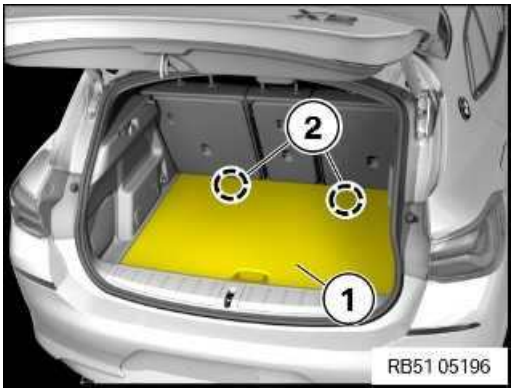
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.

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- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

40 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body — Used in step 24

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Counter support on body — Used in step 26

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 30

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 30

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 31 32

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body — Used in step 33

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body — Used in step 36

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

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0 496 569 (00 9 325) Wedge



Common	Used in step 16 18
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	17 24

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51 44 935 Lowering the headlining with panorama roof

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

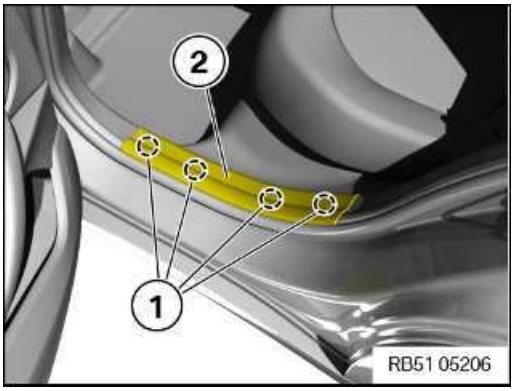
- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Remove the door sill cover strip on the rear left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.



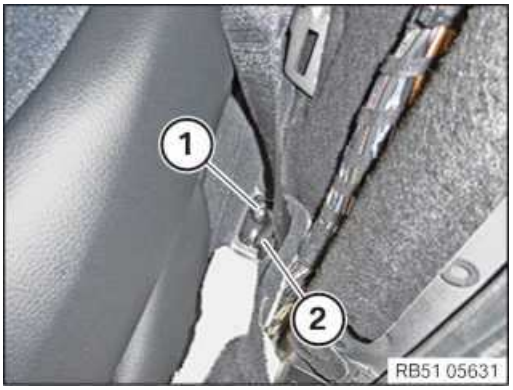
▸ **Remove rear entrance cover strip**

- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Removing the bottom left and right C-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.



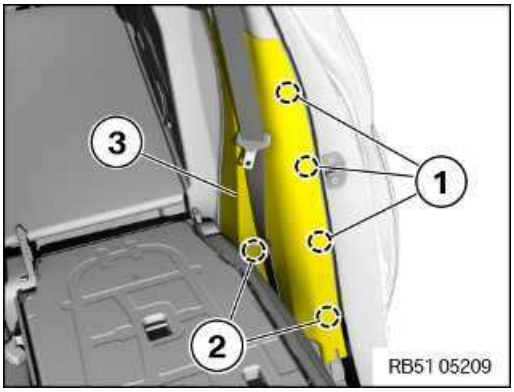
▸ **Remove the bottom C-pillar trim panel**

- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

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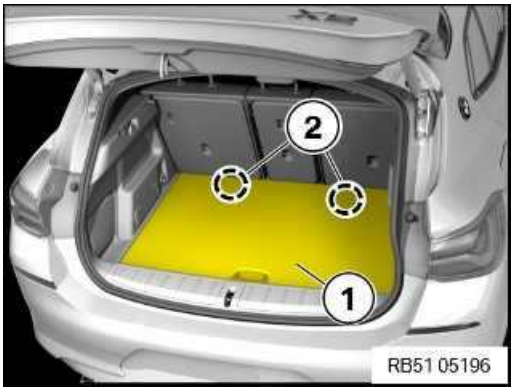


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



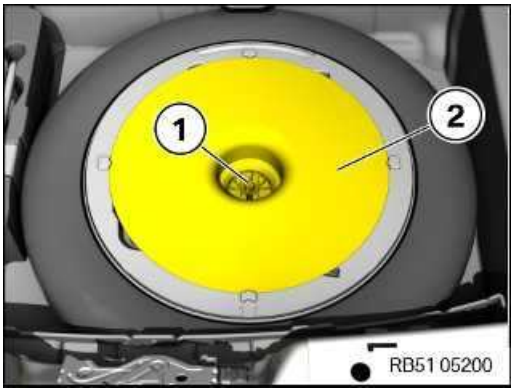
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

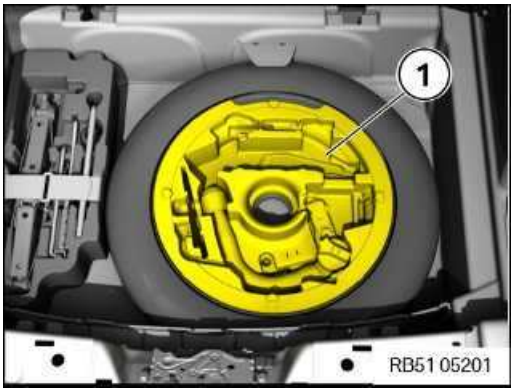


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



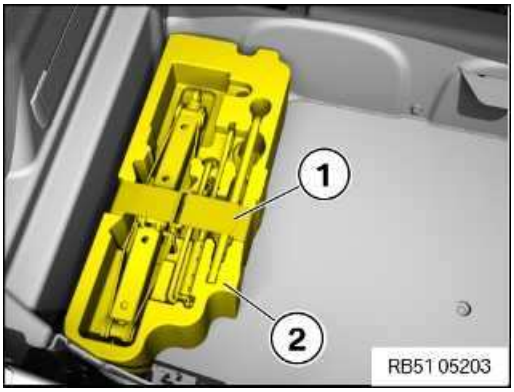
- Remove the oddments tray from the emergency wheel (1).

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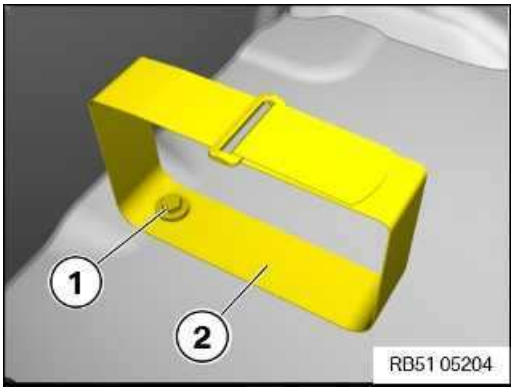
- Remove the emergency wheel (1).

5 – Remove the tool kit



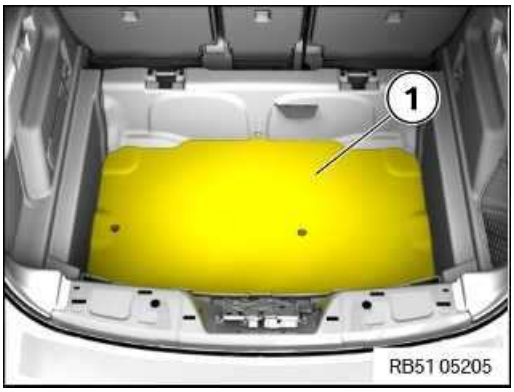
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

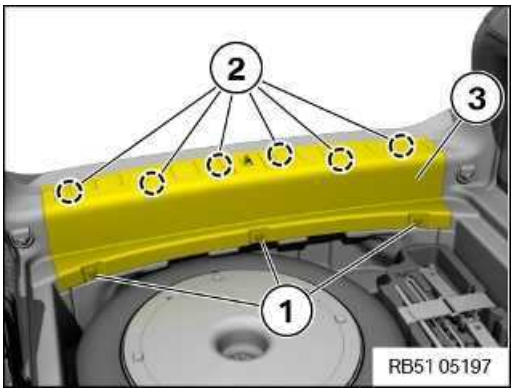
7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

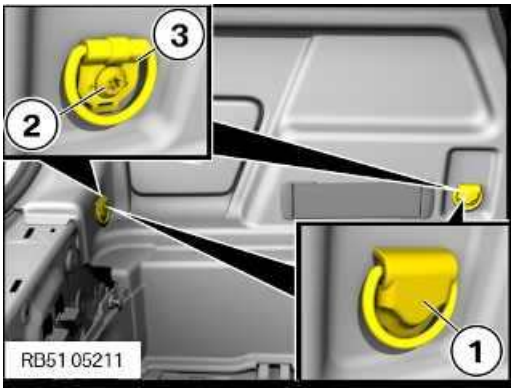
8 – Removing the loading edge trim

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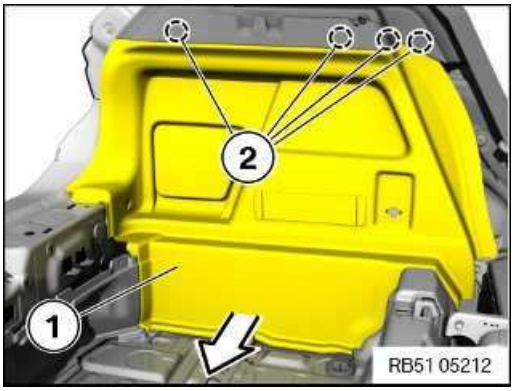


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

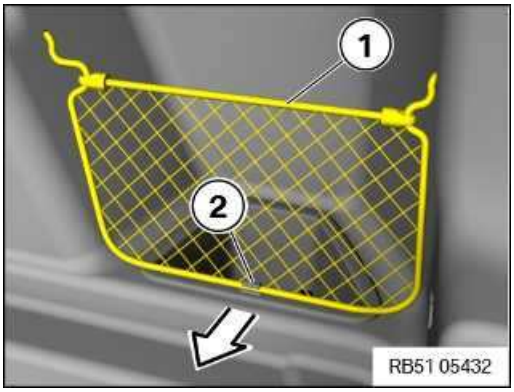


NOTICE

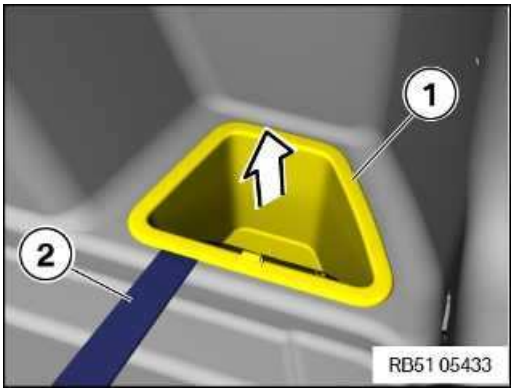
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

10 – Removing right luggage compartment wheel arch trim panel

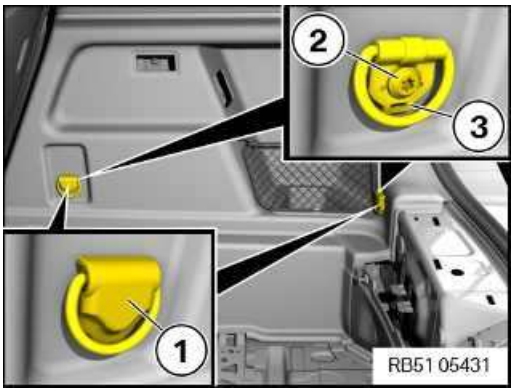


- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.

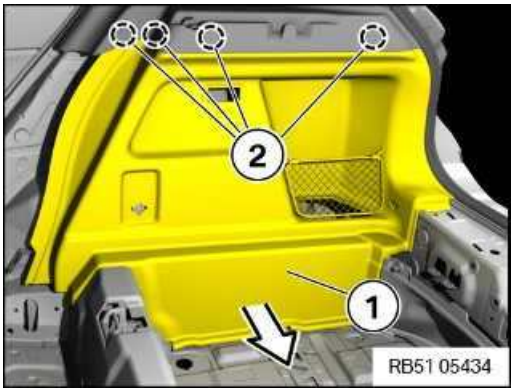


- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).

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- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

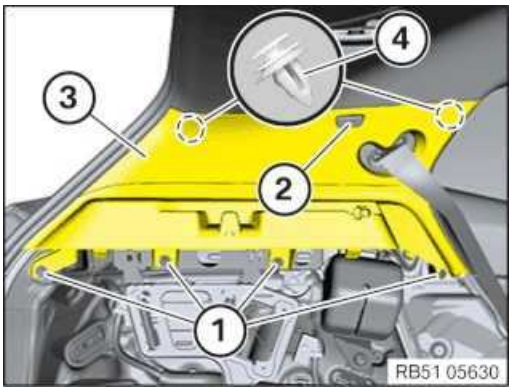
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

11 – Remove the trim panel of the luggage compartment capping on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim panel of the luggage compartment capping**



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

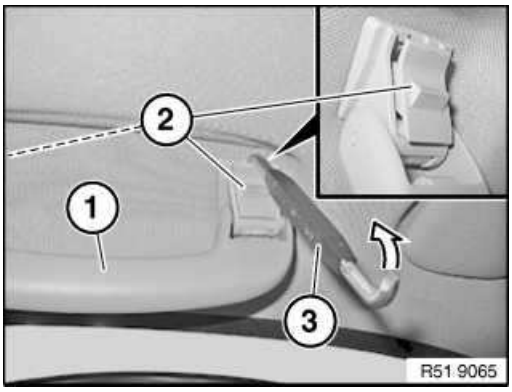
12 – Removing all grab handles

NOTICE

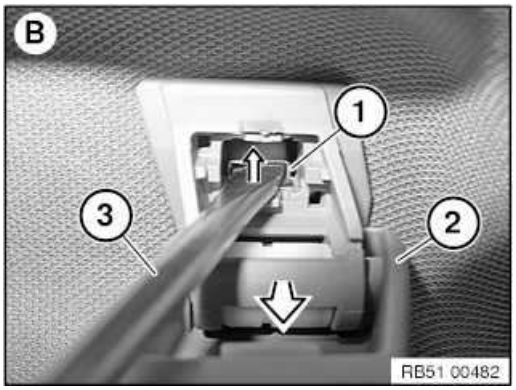
The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**

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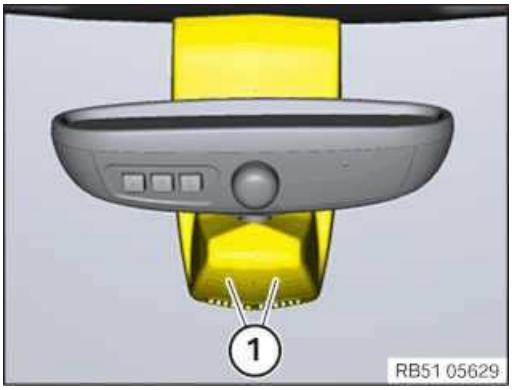


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

13 – Remove the cover on the inside mirror



- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

14 – Remove both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove sun visor**



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

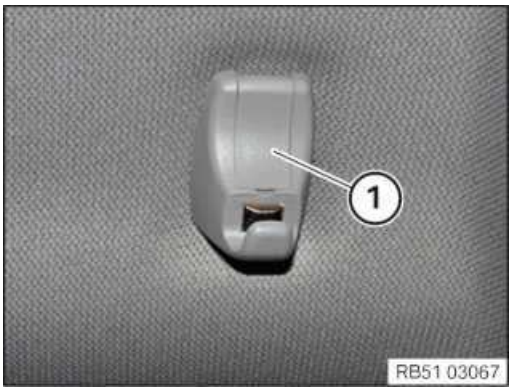
15 – Removing counter supports for sun visor on left and right

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NOTICE

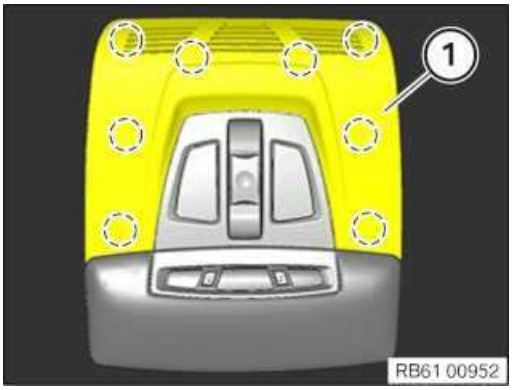
Description is for left component only. Procedure on the right side is identical.

▶ **Remove the counter support for the sun visor**

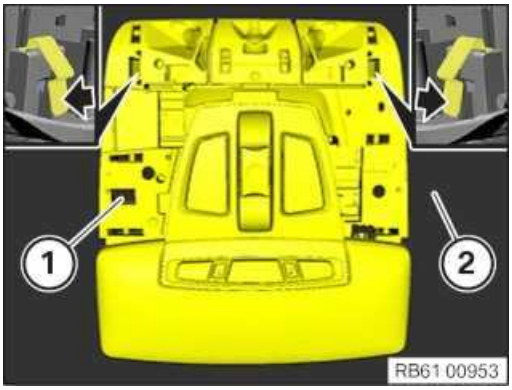


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

16 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

17 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Remove the A-pillar trim panel**

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WARNING

Airbag unit.

Danger! Life-threatening injuries!

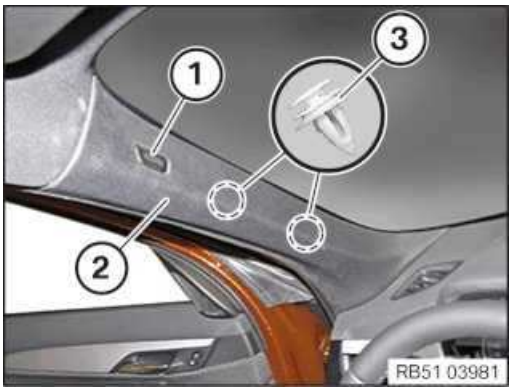
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

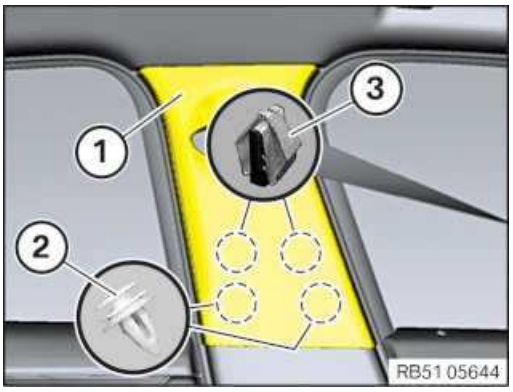


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

18 – Removing the B-pillar trim panels at top left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

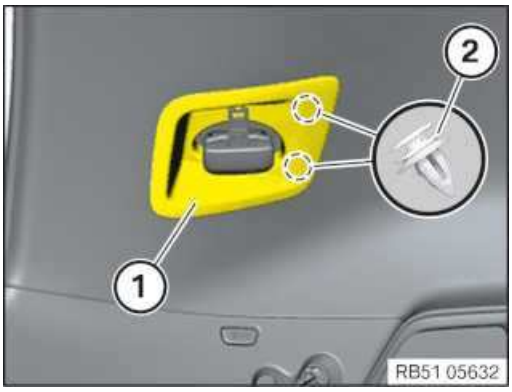


▸ **Partially removing upper B-pillar trim panel**

- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

19 – Remove the belt feed trim

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- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

MAIN WORK

20 – Lowering the headlining (with panorama glass roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

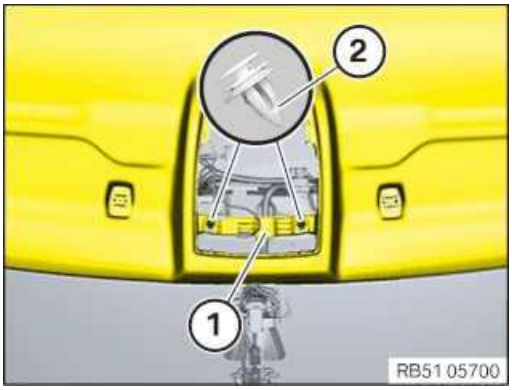
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

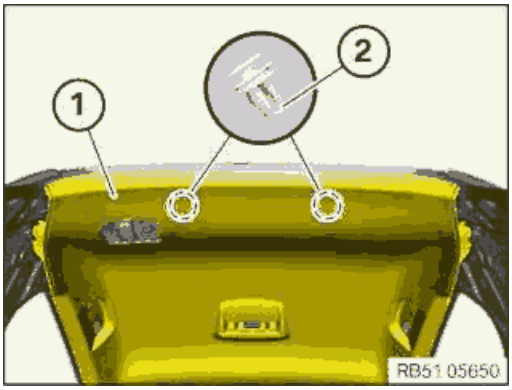
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

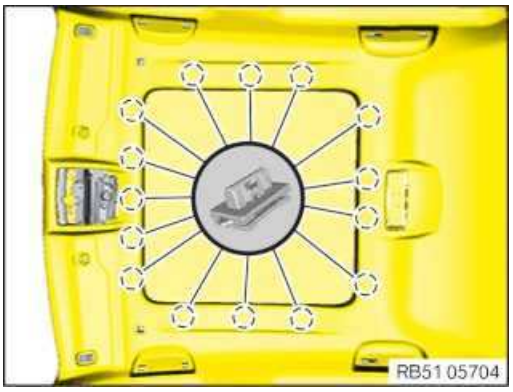


- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).

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- Carefully release the headlining with a suitable plastic wedge from the clamps (1) in a downwards direction.



- Carefully guide out the headlining (1) at the respective edge protection and place it onto the seats in the vehicle.

21 – Install the headlining (lowered with panorama roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

Fold the headlining.

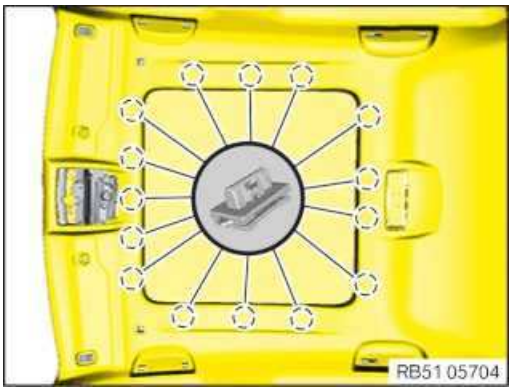
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

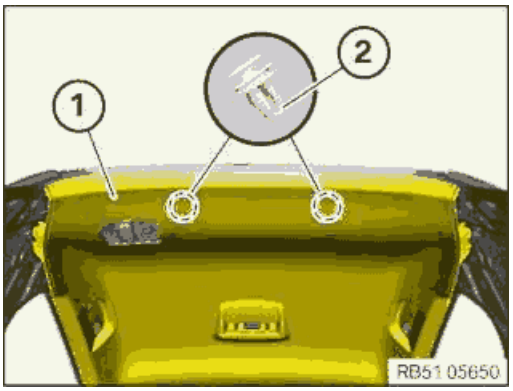


- Install the headlining (1) and carefully insert it at the respective edge protection.

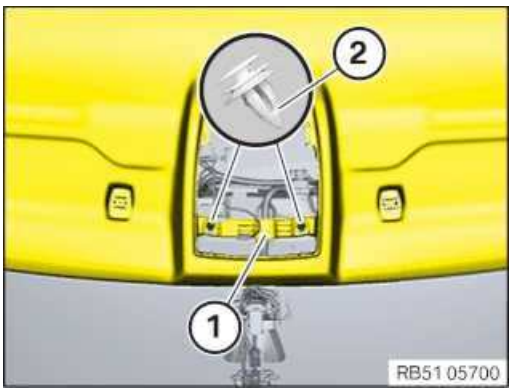
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- Carefully engage the headlining on the clamps (1).



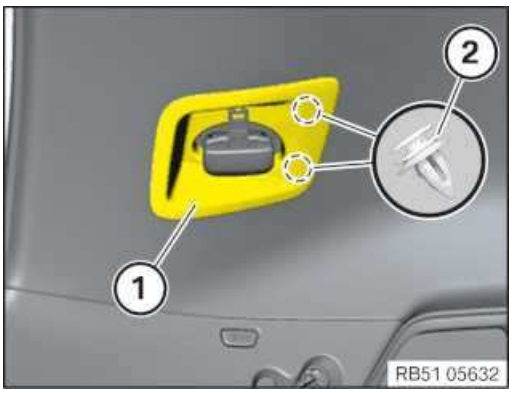
- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

POSTPROCESSES

22 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

23 – Installing the top left and right B-pillar trim panels

NOTICE

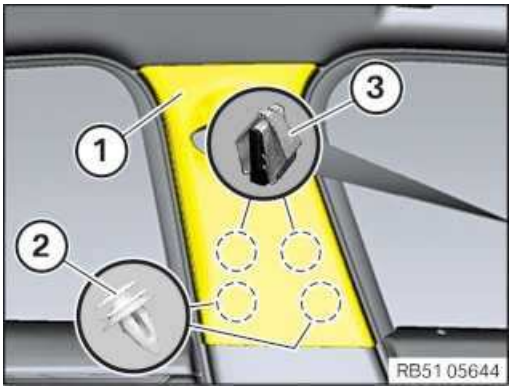
Description is for left component only. Procedure on the right side is identical.

▸ **Partially installing upper B-pillar trim panel**

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TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

24 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

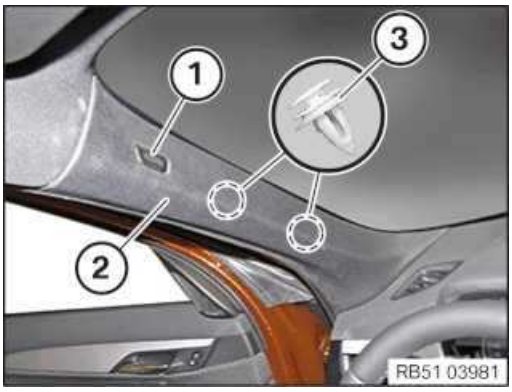
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

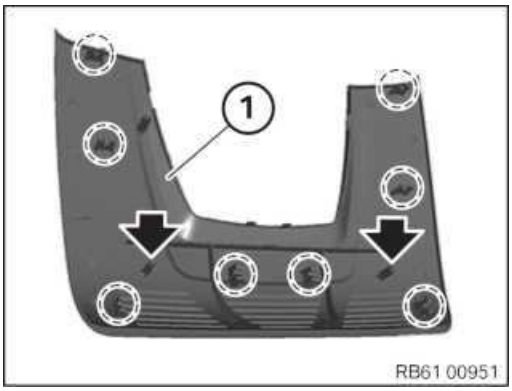
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

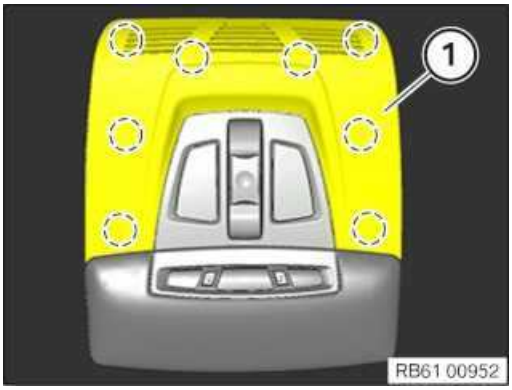
M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

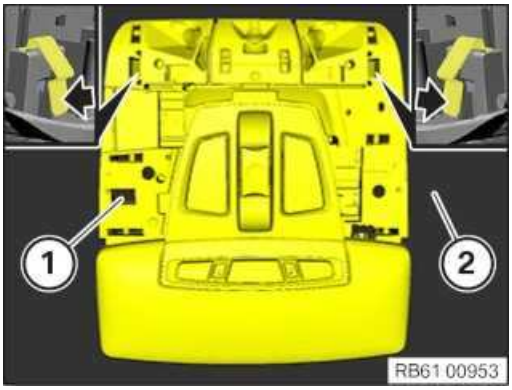
25 – Install the roof function centre



- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.



NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

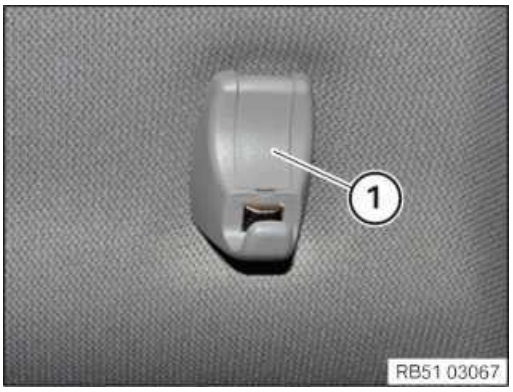
26 – Install the counter supports for the sun visor on left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the counter support for the sun visor**

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- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

Screw		Tightening torque	2,5 Nm

27 – Install both sun visors

NOTICE

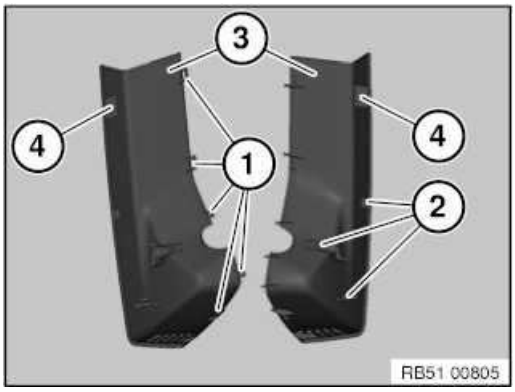
Description is for left component only. Procedure on the right side is identical.

▸ **Install the sun visor**



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

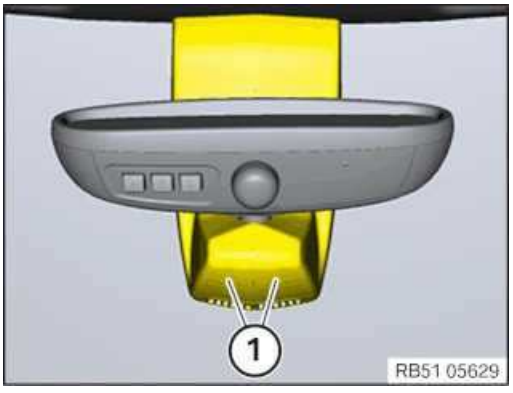
28 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



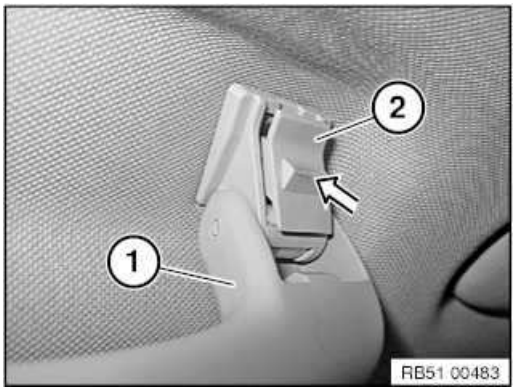
- Install covers on the interior mirror (1) clip together.

29 – Installing all grab handles

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NOTICE

The description is for one component only. The procedure is identical for all further components.



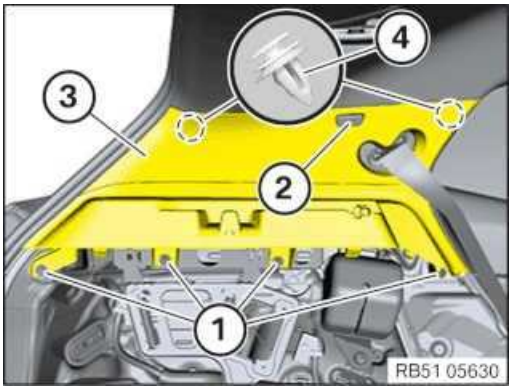
▸ **Installing the grab handle**

- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

30 – Install the trim panel for left and right the luggage compartment capping

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the trim panel for the luggage compartment capping**

- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

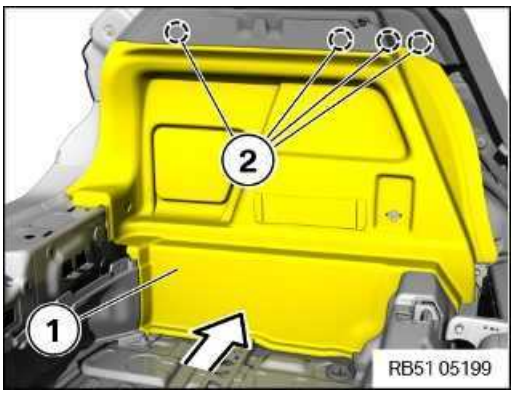
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

31 – Install luggage compartment wheel arch trim panel at left

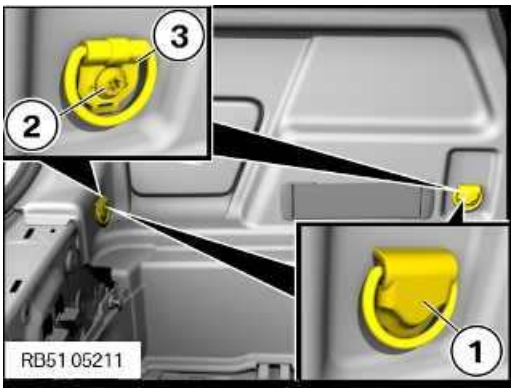


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.

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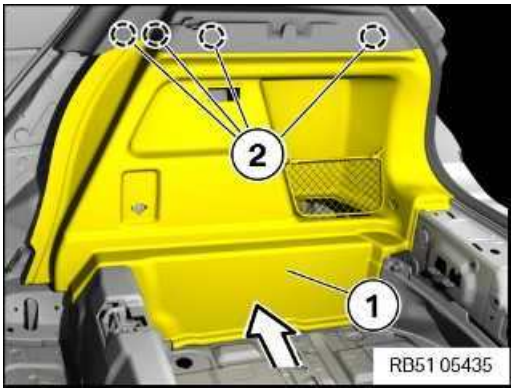
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

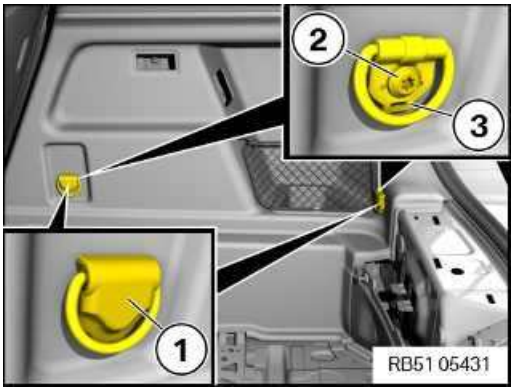
32 – Installing the luggage compartment wheel arch trim panel on the right



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

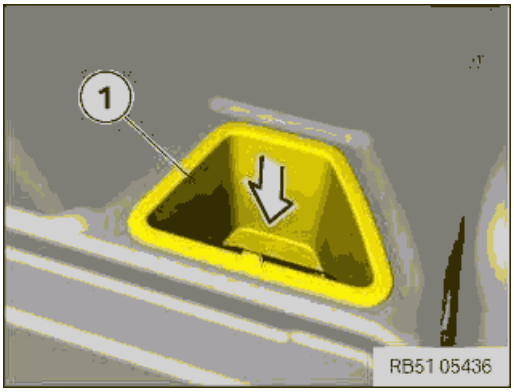


- Position the lashing eyes (3) and tighten the screws (2).

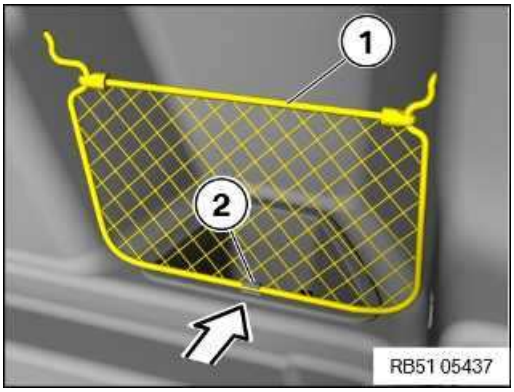
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

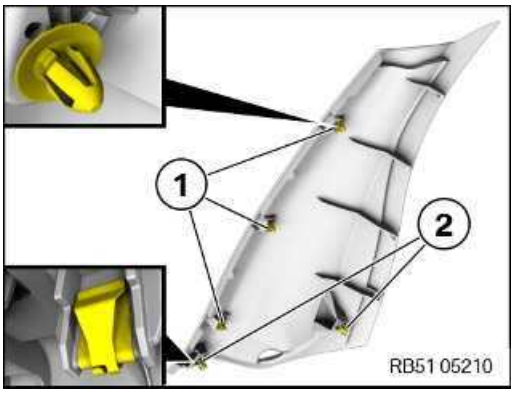
33 – Install C-pillar trim panel at bottom left and right

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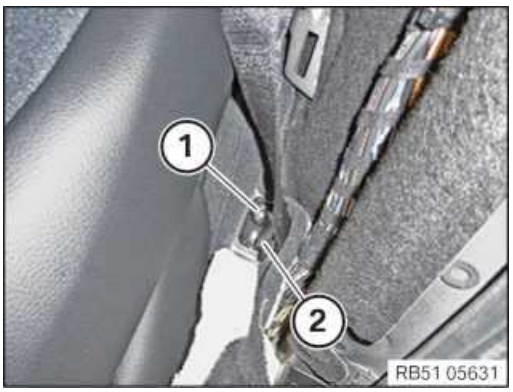
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Install the bottom C-pillar trim panel**



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

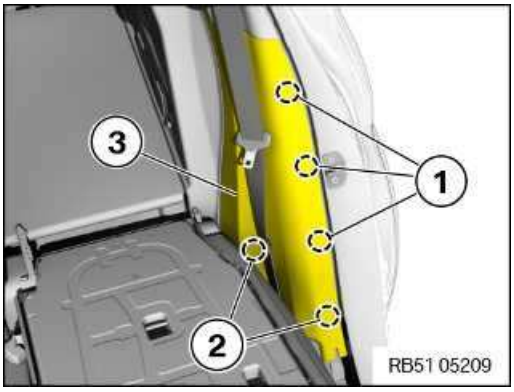


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

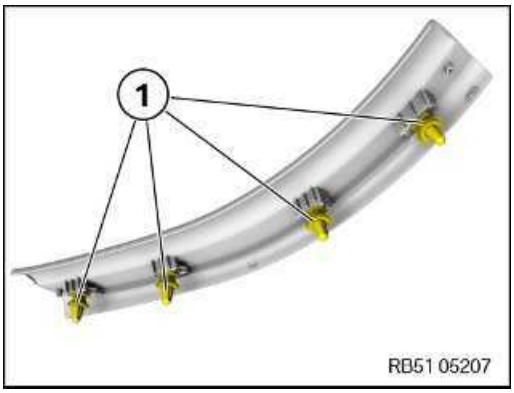
34 – Install the door sill cover strip on the rear left and right

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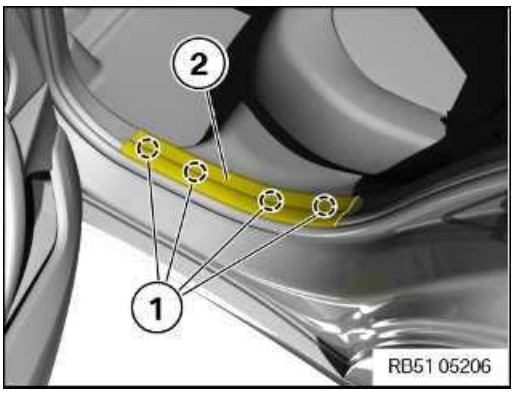
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Installing the rear door sill cover strip**

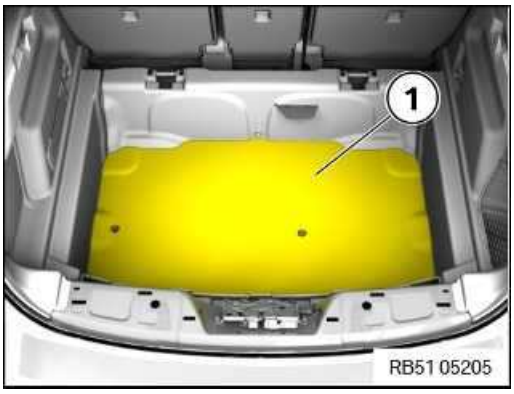


- Check the clips (1) for damage and renew where required.



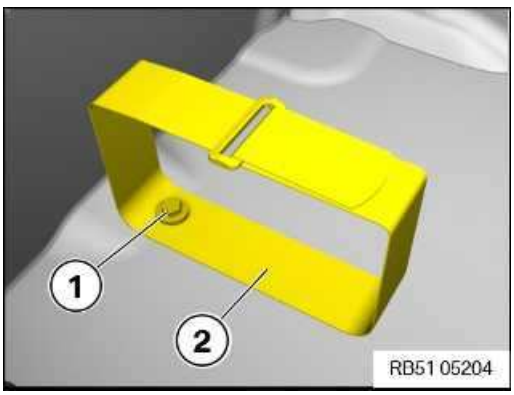
- Clip in the door sill cover strip (2) with the clips (1).

35 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

36 – Inserting the Velcro fastener for the toolkit



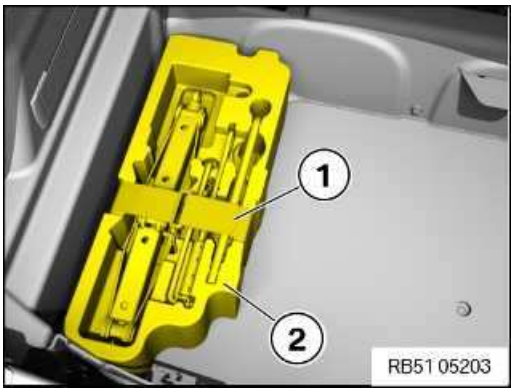
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

37 – Install the tool kit

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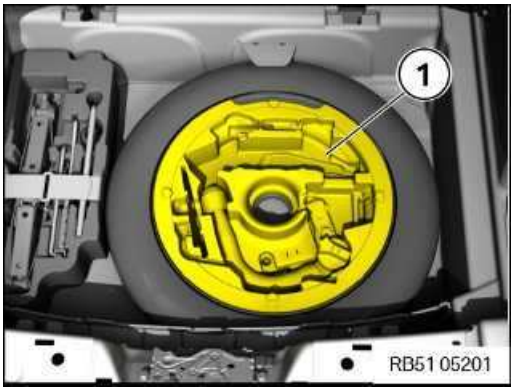


- Install the tool kit (2).
- Close the hook and loop tape (1).

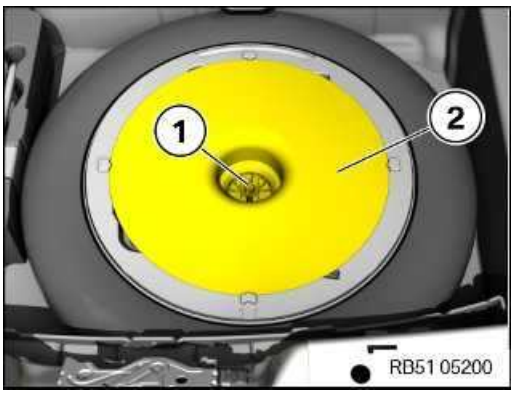
38 – Install the emergency wheel



- Insert compact spare wheel(1).

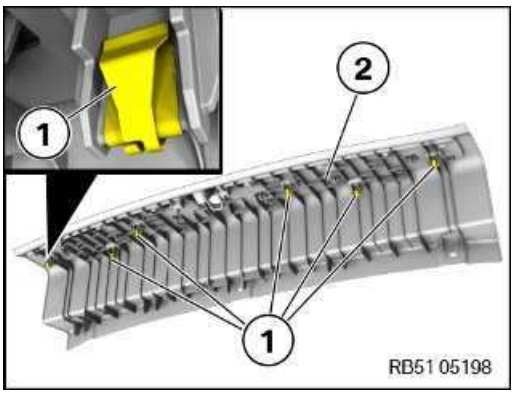


- Insert oddments tray into the compact spare wheel (1).



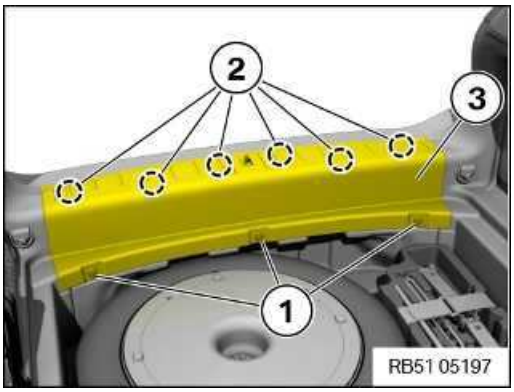
- Insert the lid (2).
- Hand-tighten the bolt (1).

39 – Installing loading edge trim



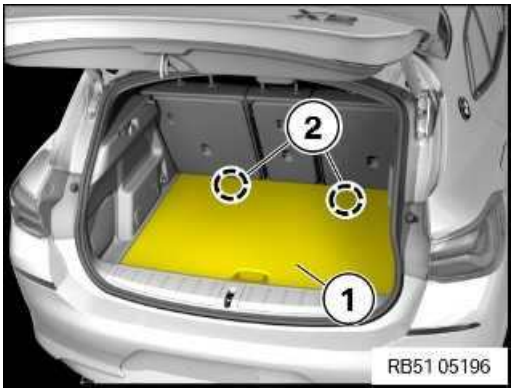
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.

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- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

40 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body — Used in step 24

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Counter support on body — Used in step 26

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 30

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 30

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 31 32

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body — Used in step 33

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body — Used in step 36

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

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0 496 569 (00 9 325) Wedge



Common	Used in step 16 18
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	17 24

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51 44 910 Releasing and securing the headlining on the left

RISK OF DAMAGE

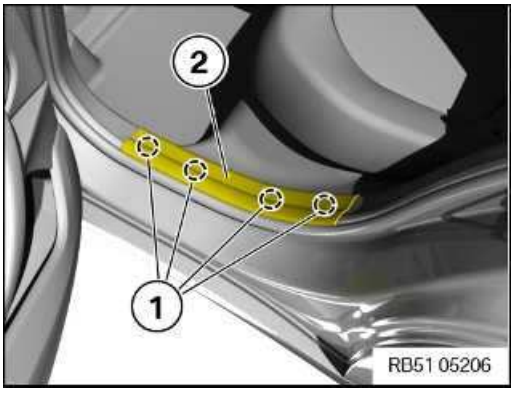
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

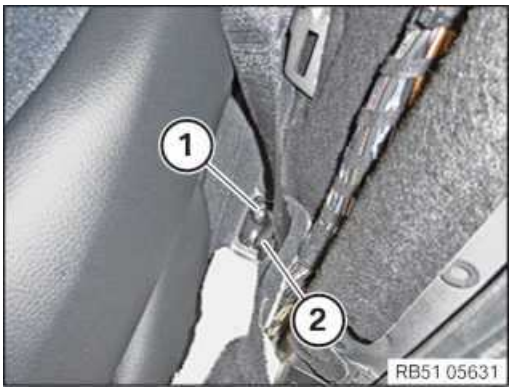
PRELIMINARY WORK

1 – Remove rear entrance cover strip

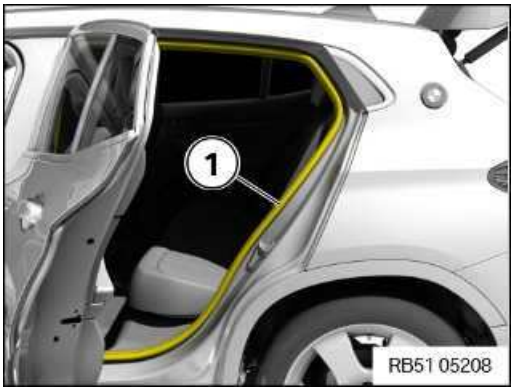


- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Remove the bottom C-pillar trim panel

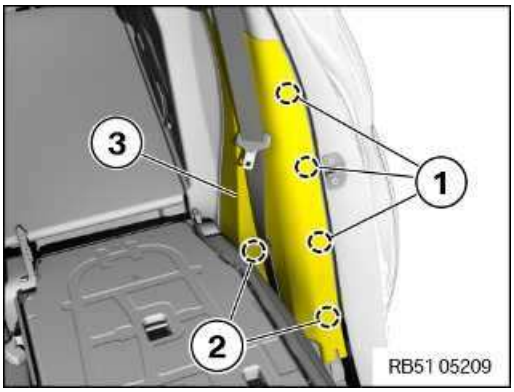


- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).



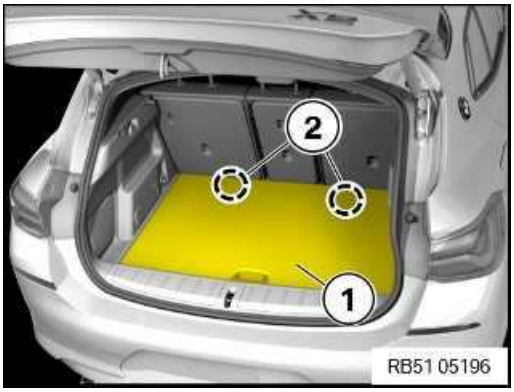
- Release the edge protection (1) in area of the bottom C-pillar trim panel.

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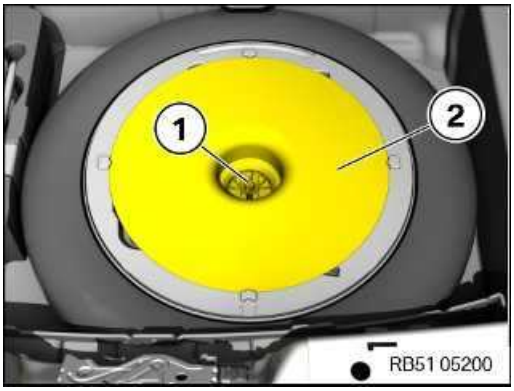
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

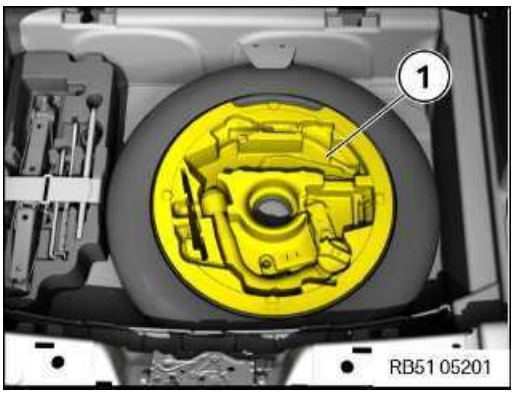


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

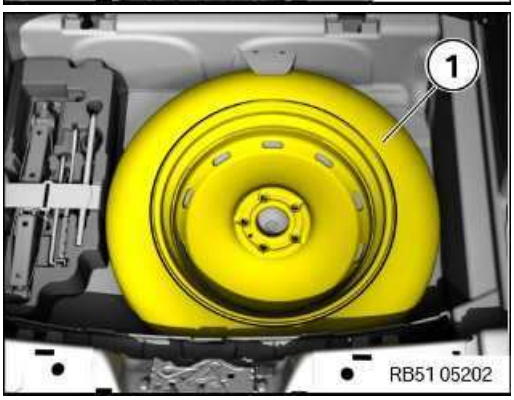
4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



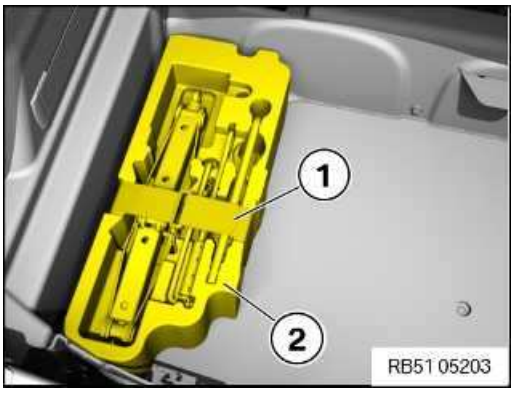
- Remove the oddments tray from the emergency wheel (1).



- Remove the emergency wheel (1).

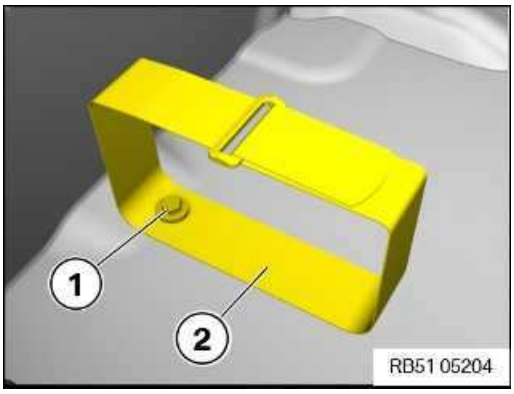
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5 – Remove the tool kit



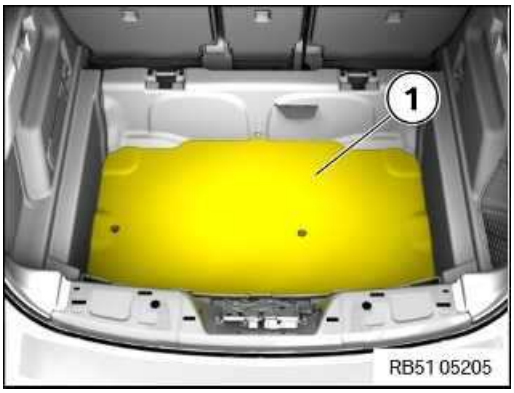
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



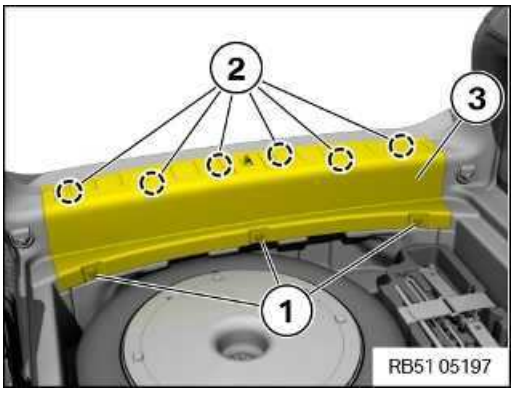
- Loosen screw (1).
- Remove the hook and loop tape (2).

7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

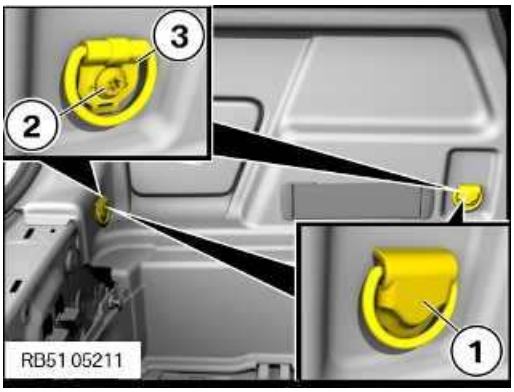
8 – Removing the loading edge trim



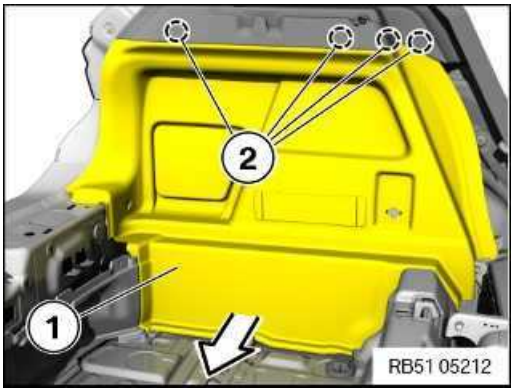
- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.

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- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

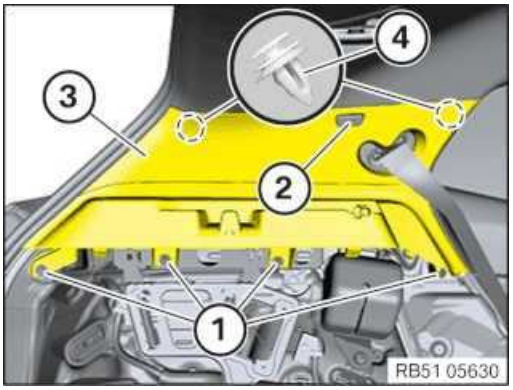


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

10 – Remove the trim panel of the luggage compartment capping



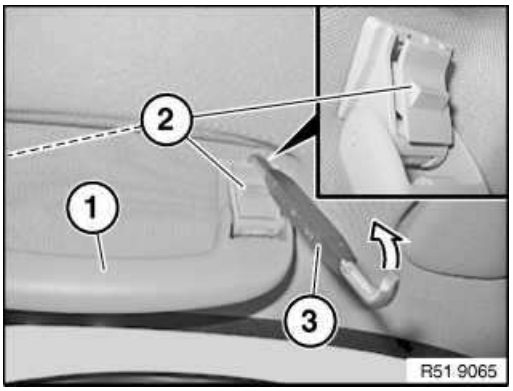
- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

11 – Removing both grab handles on left or right

NOTICE

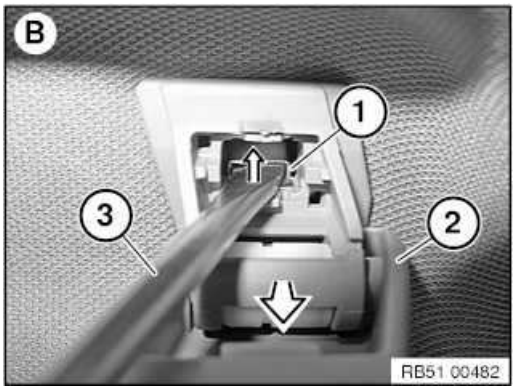
The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**



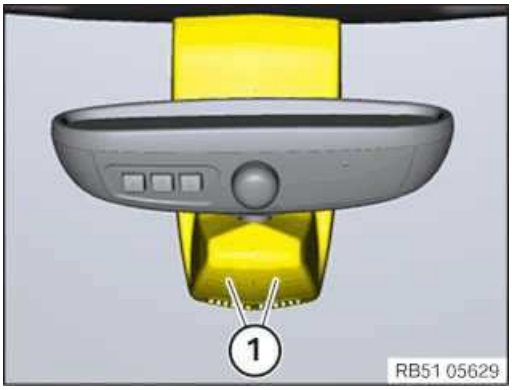
- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.

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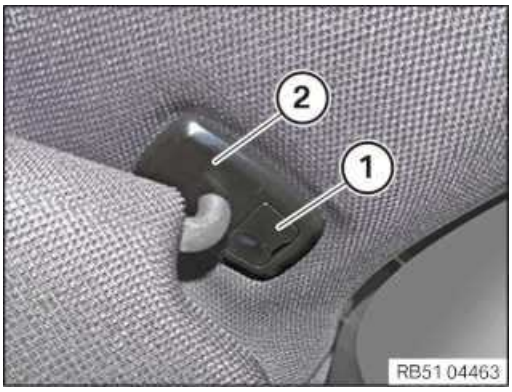
- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

12 – Remove the cover on the inside mirror



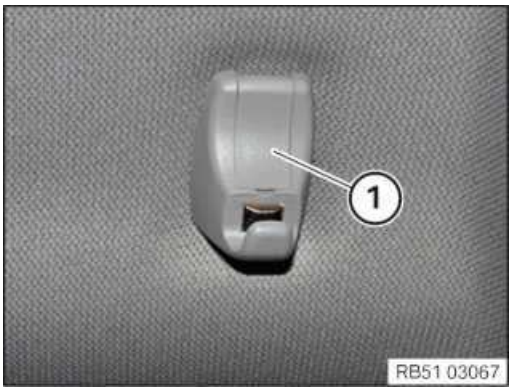
- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

13 – Remove sun visor



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

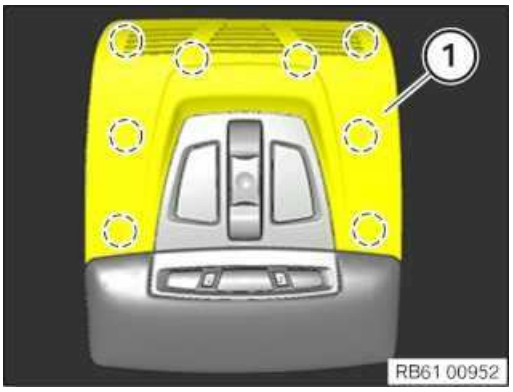
14 – Remove the counter support for the sun visor



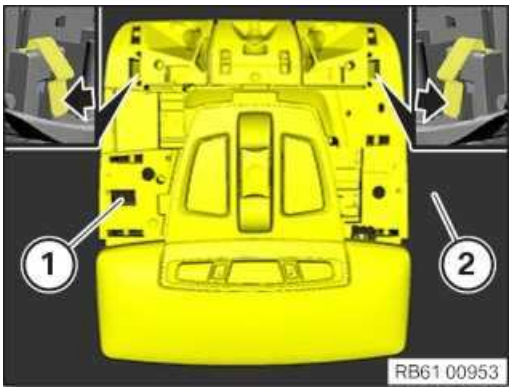
- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

15 – Remove the roof function centre

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- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

16 – Remove the A-pillar trim panel

WARNING

Airbag unit.

Danger! Life-threatening injuries!

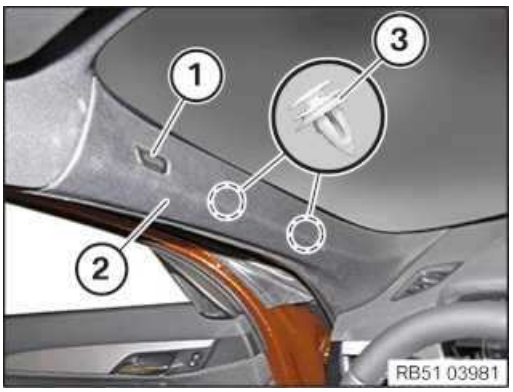
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

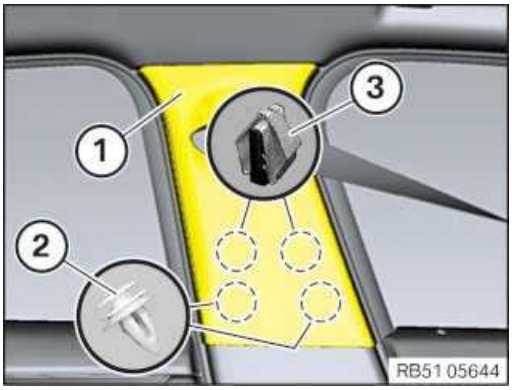
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

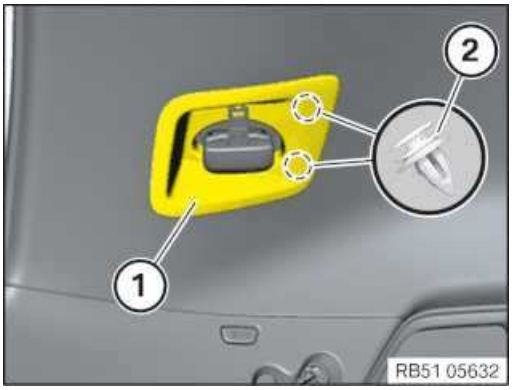
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17 – Partially removing upper B-pillar trim panel



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

18 – Remove the belt feed trim



- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

MAIN WORK

19 – Lower the headlining on the left or right

RISK OF DAMAGE

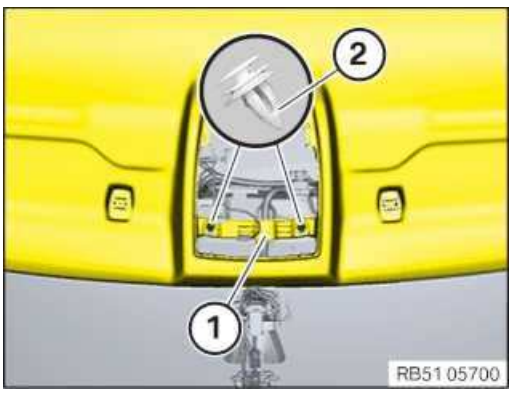
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

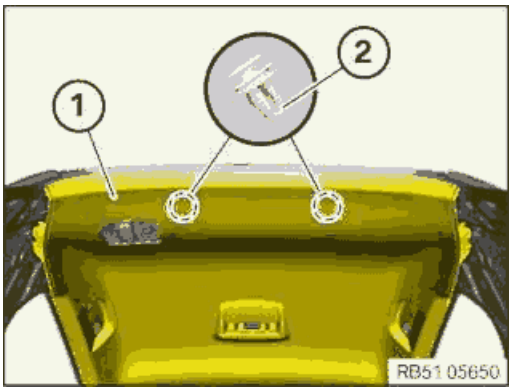
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).

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- Carefully release the headlining (1) at the clips (2).



- Carefully guide out the headlining (1) at the respective edge protection and let it hang down as shown.

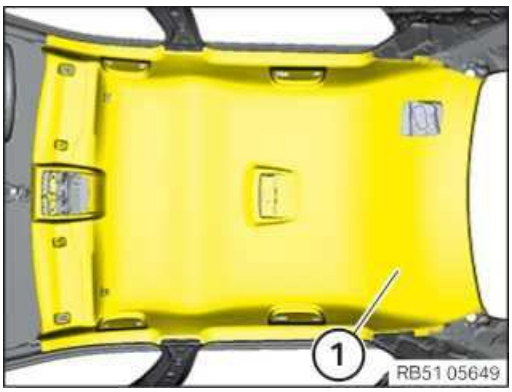
20 – Installing the left or right headlining (lowered)

RISK OF DAMAGE

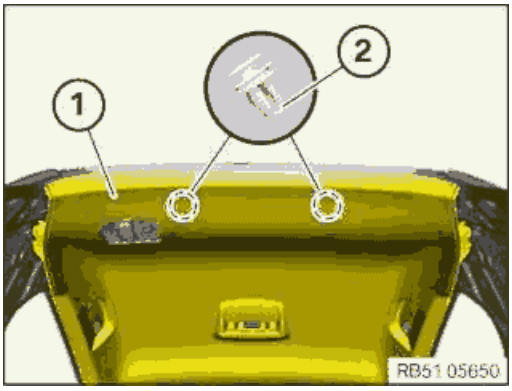
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

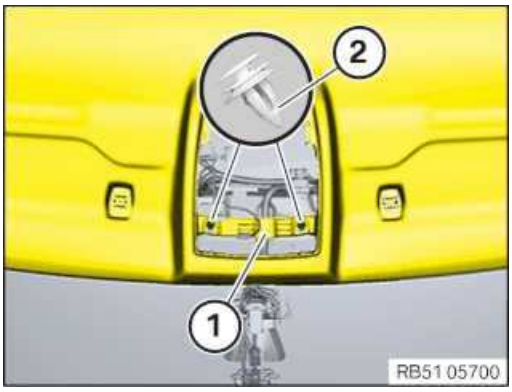


- Carefully insert the headlining (1) at the respective edge protection.



- Clip in the headlining (1) using the clips (2).

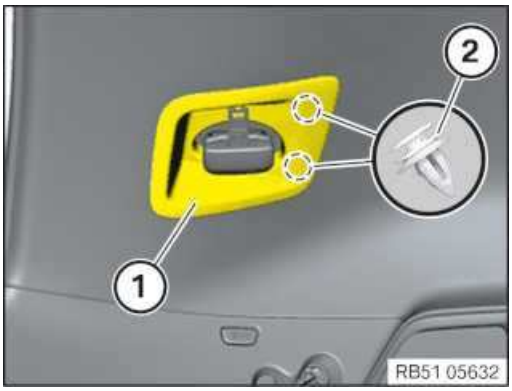
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- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

POSTPROCESSES

21 – Install the belt feed trim

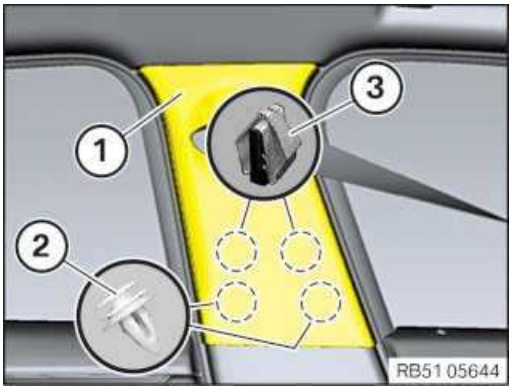


- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

22 – Partially installing upper B-pillar trim panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

23 – Install the A-pillar trim panel

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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WARNING

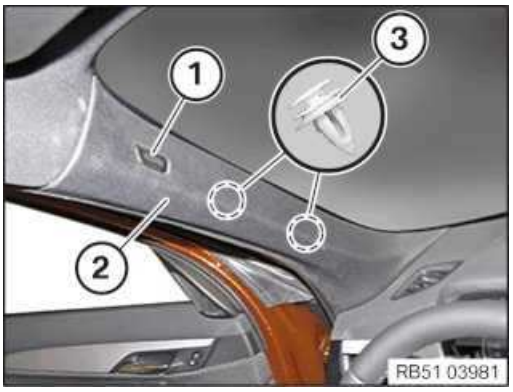
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

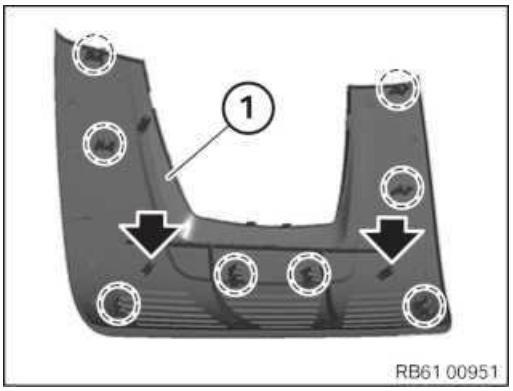
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

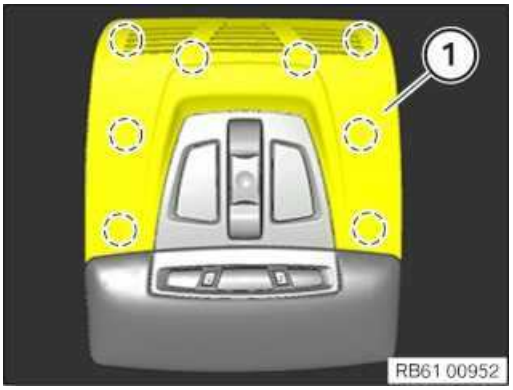
M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

24 – Install the roof function centre

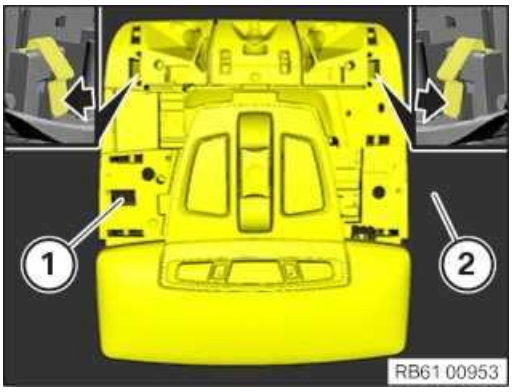


- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.

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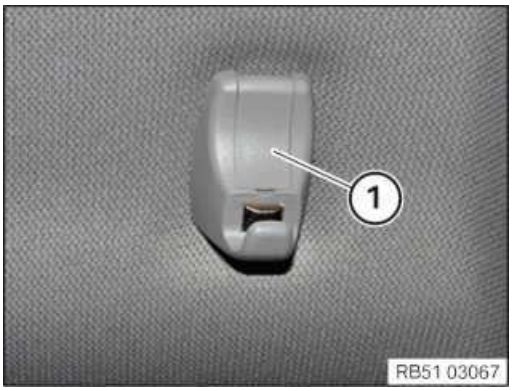


NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

25 – Install the counter support for the sun visor

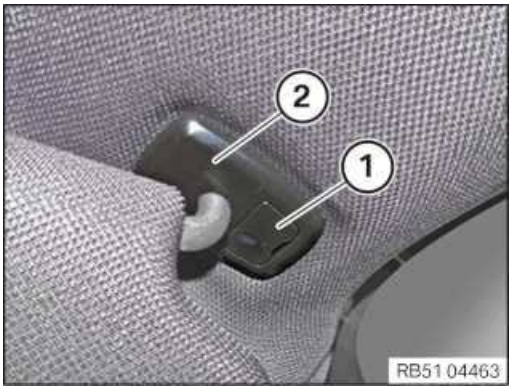


- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

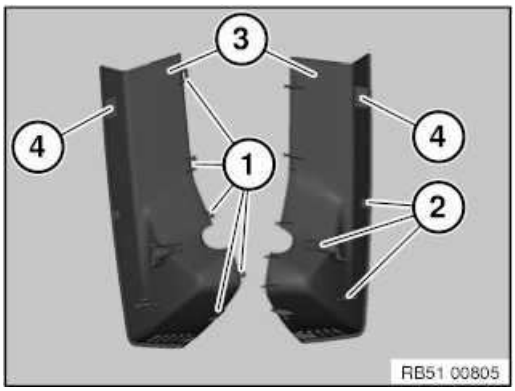
Screw		Tightening torque	2,5 Nm

26 – Install the sun visor



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

27 – Install the cover on the inside mirror

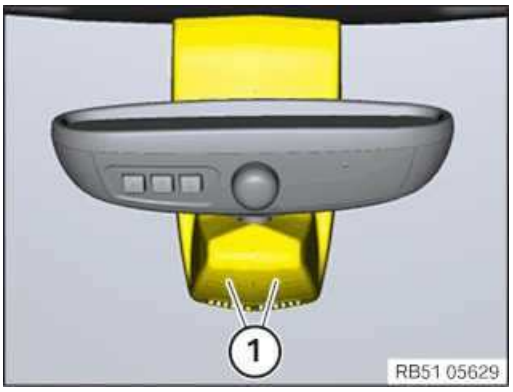


- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.

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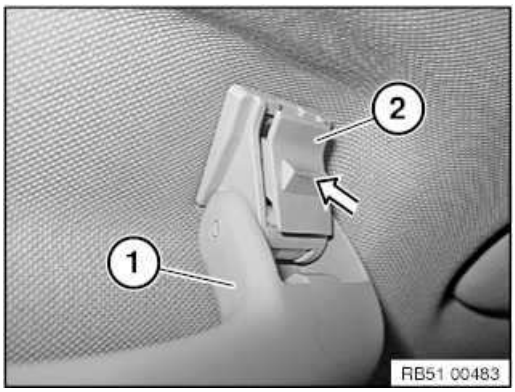


- Install covers on the interior mirror (1) clip together.

28 – Installing both grab handles on left or right

NOTICE

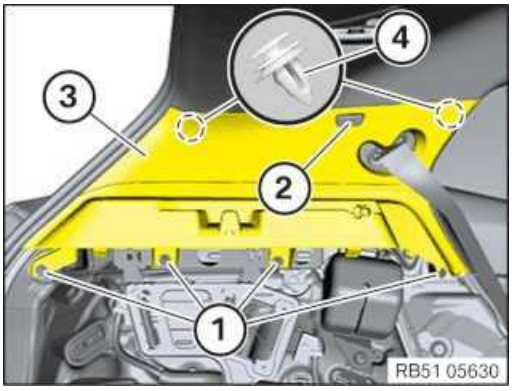
The description is for one component only. The procedure is identical for all further components.



▸ **Installing the grab handle**

- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

29 – Install the trim panel for the luggage compartment capping



- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

Self-tapping screw		Tightening torque	4 Nm

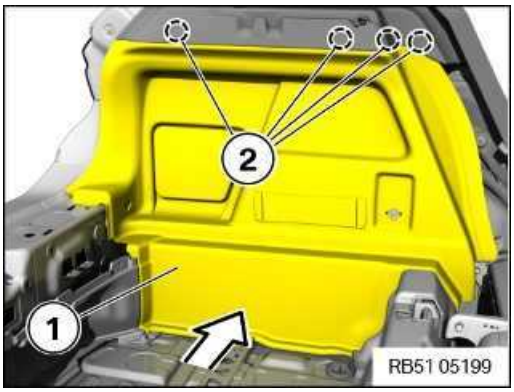
- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

30 – Install luggage compartment wheel arch trim panel at left

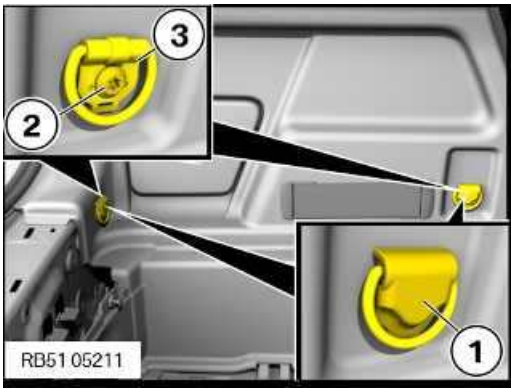
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NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.



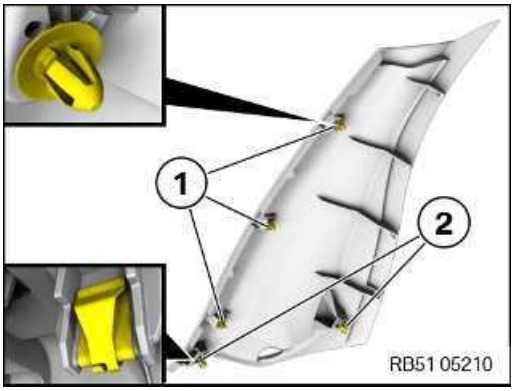
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

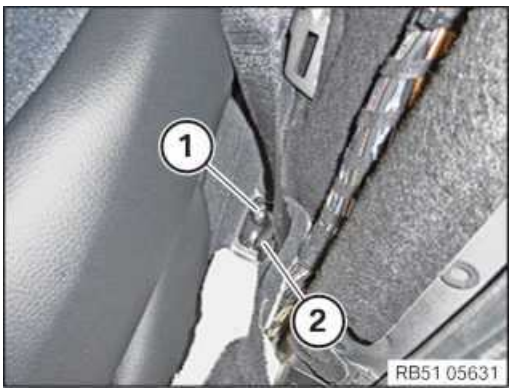
Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

31 – Install the bottom C-pillar trim panel



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

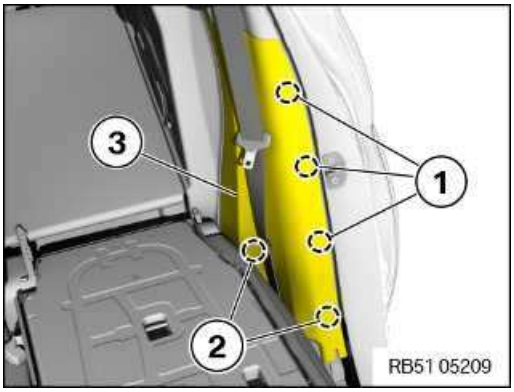


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



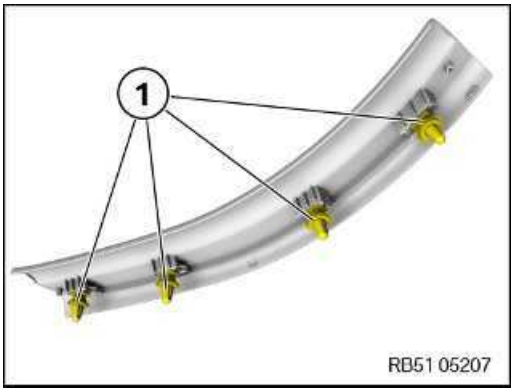
- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).

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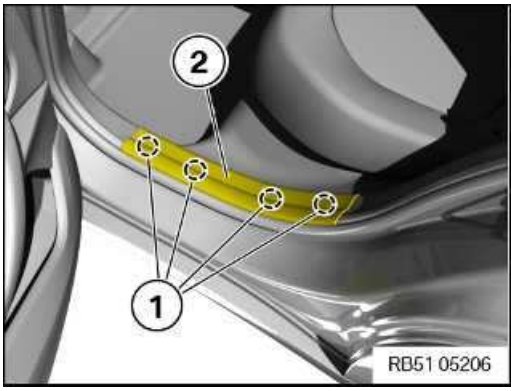


- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

32 – Installing the rear door sill cover strip

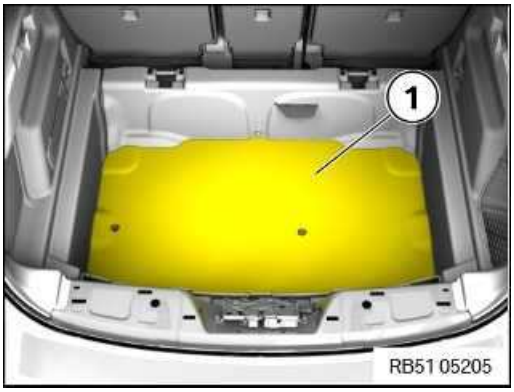


- Check the clips (1) for damage and renew where required.



- Clip in the door sill cover strip (2) with the clips (1).

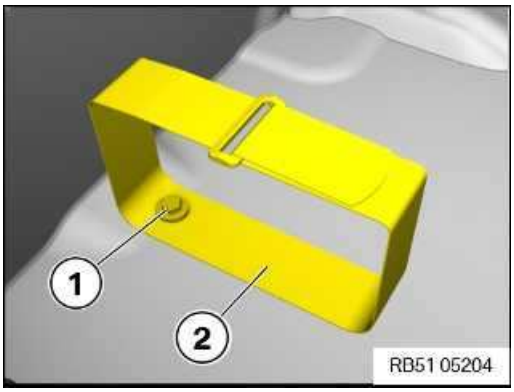
33 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

34 – Inserting the Velcro fastener for the toolkit

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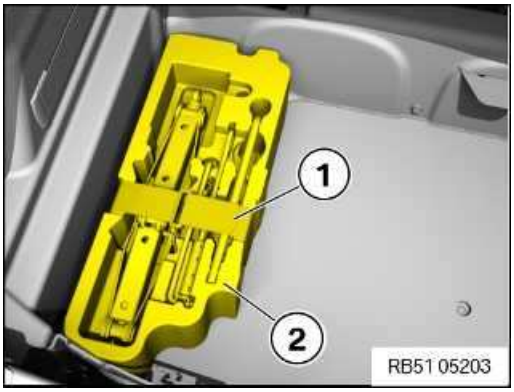


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

35 – Install the tool kit

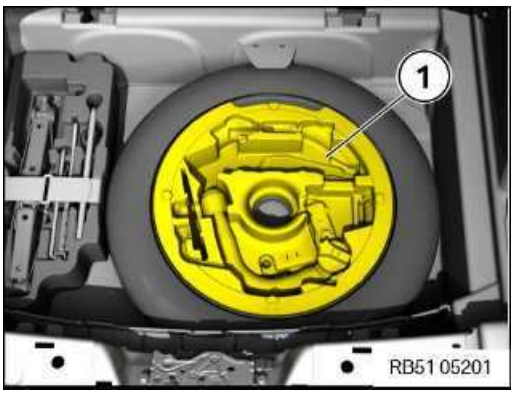


- Install the tool kit (2).
- Close the hook and loop tape (1).

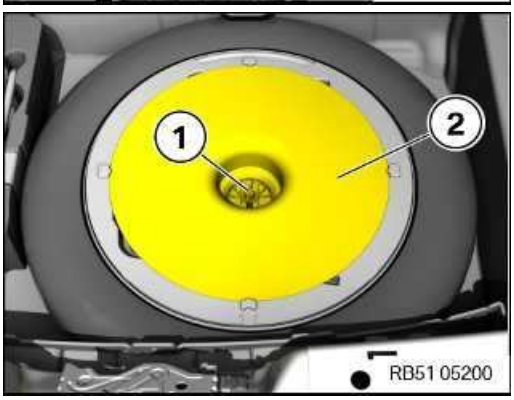
36 – Install the emergency wheel



- Insert compact spare wheel(1).



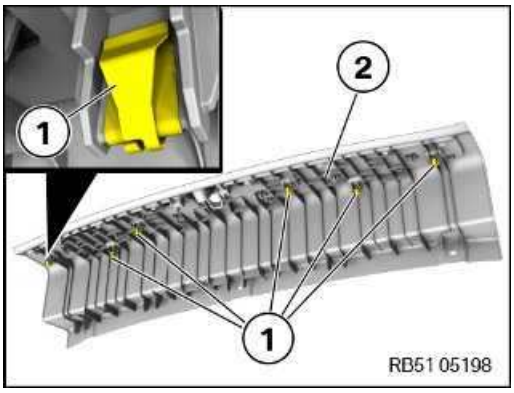
- Insert oddments tray into the compact spare wheel (1).



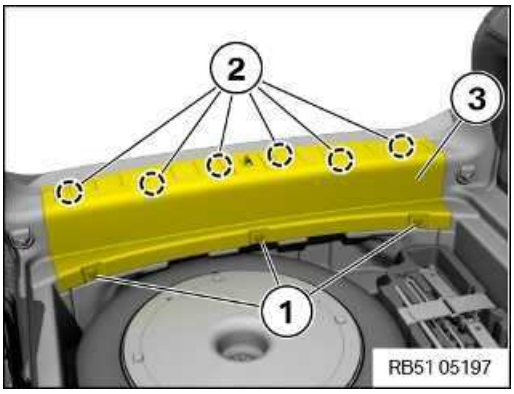
- Insert the lid (2).
- Hand-tighten the bolt (1).

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37 – Installing loading edge trim

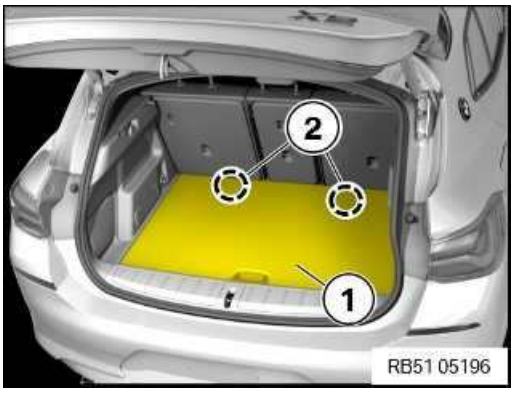


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

38 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body — Used in step 23

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Counter support on body — Used in step 25

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 29

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 29

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 30

Bolt M8 x 22		Tightening torque	21 Nm

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End fitting to body — Used in step 31

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body — Used in step 34

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common — Used in step 15 17

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	16 23

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51 44 911 Releasing and securing the headlining on the right

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

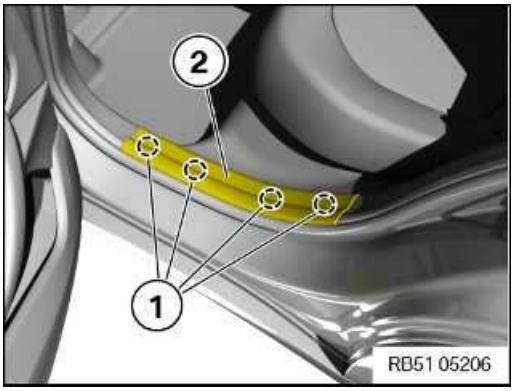
- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Remove the rear right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



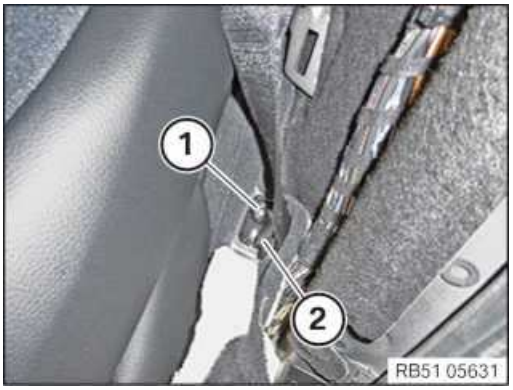
▸ **Remove rear entrance cover strip**

- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Removing bottom right C-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



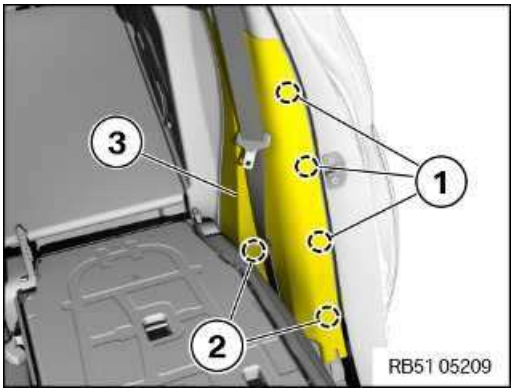
▸ **Remove the bottom C-pillar trim panel**

- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

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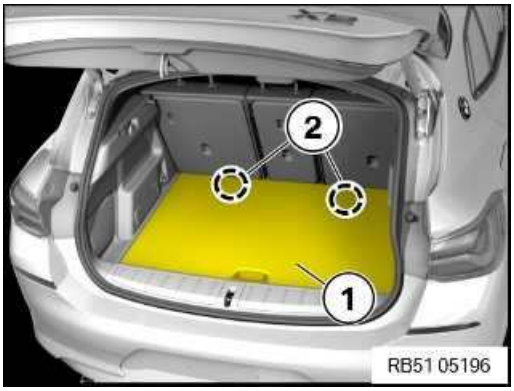


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



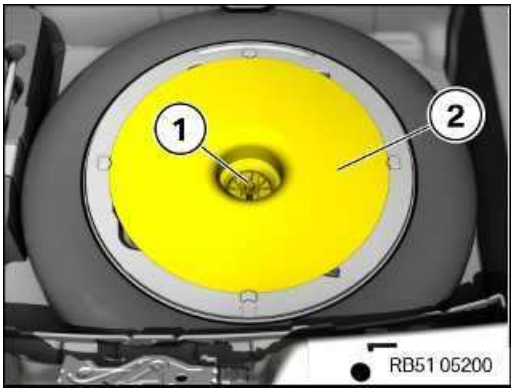
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

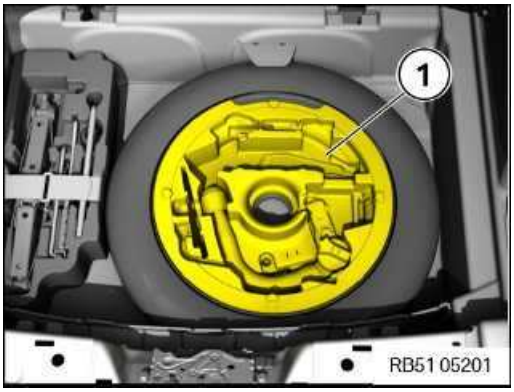


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



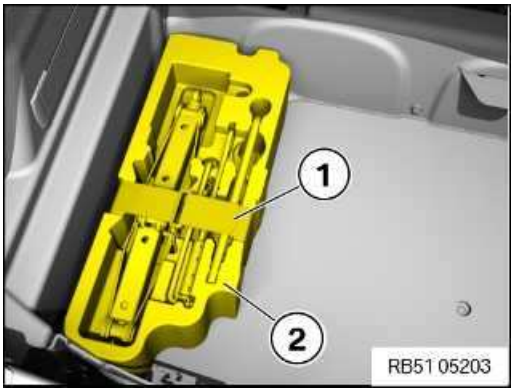
- Remove the oddments tray from the emergency wheel (1).

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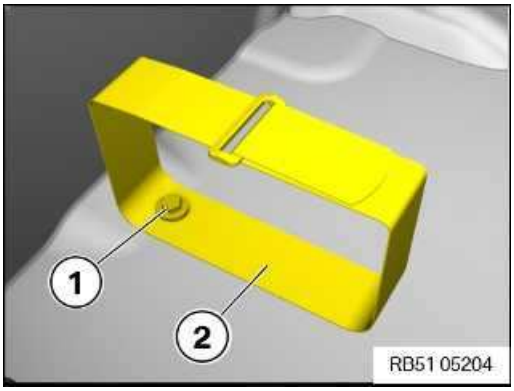
- Remove the emergency wheel (1).

5 – Remove the tool kit



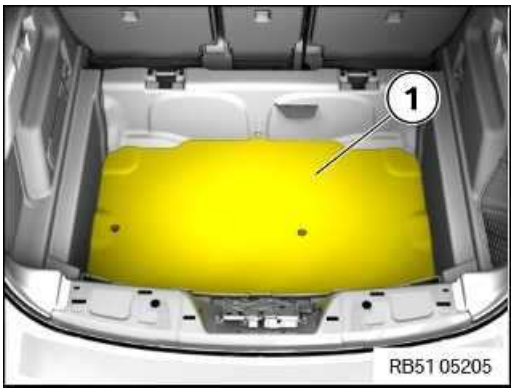
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

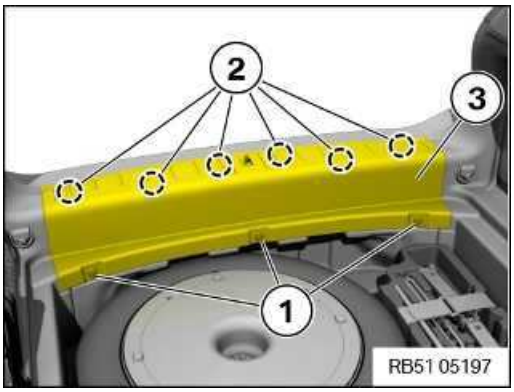
7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

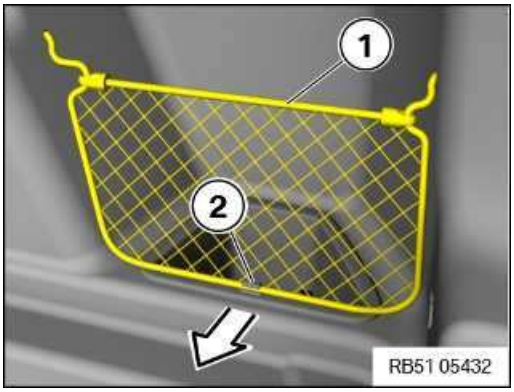
8 – Removing the loading edge trim

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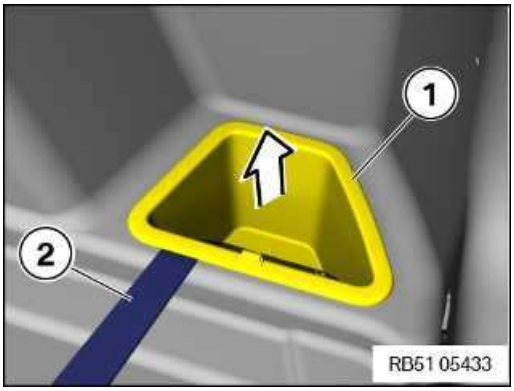


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

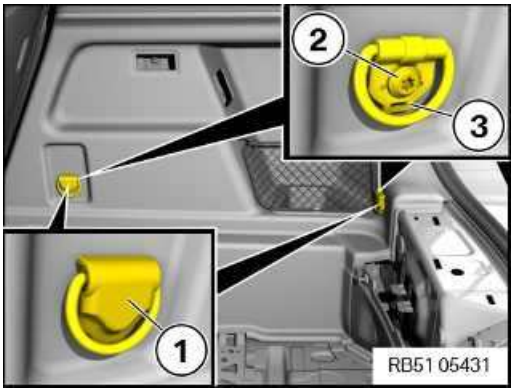
9 – Removing right luggage compartment wheel arch trim panel



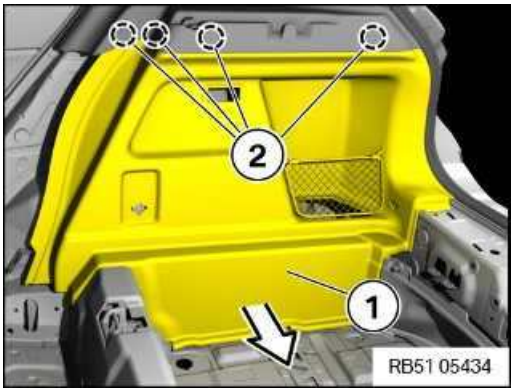
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

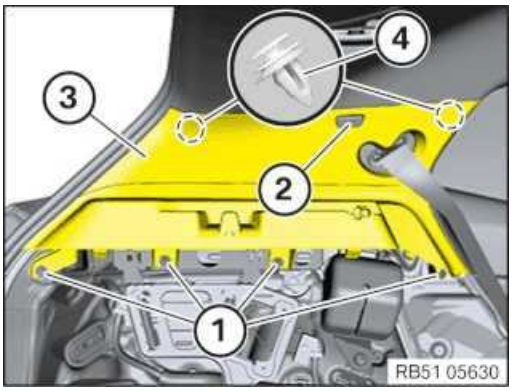
10 – Remove the trim panel of the right luggage compartment capping

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim panel of the luggage compartment capping**



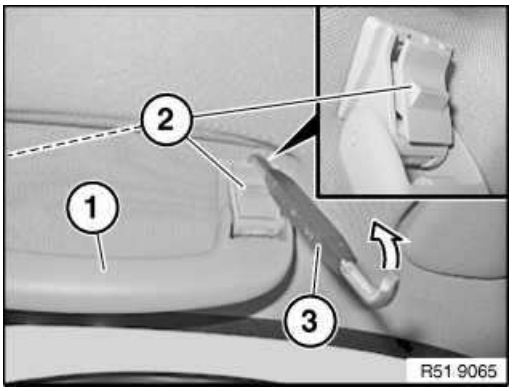
- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

11 – Removing both grab handles on left or right

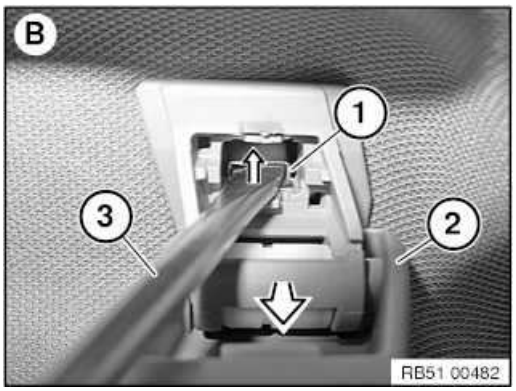
NOTICE

The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**



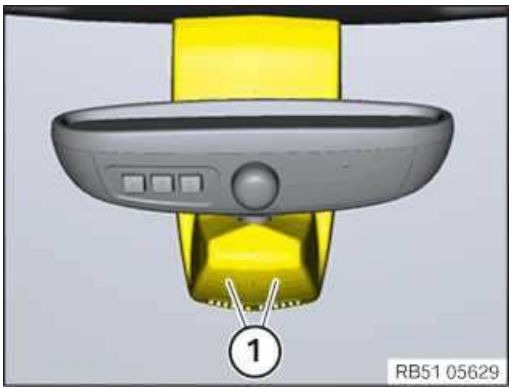
- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

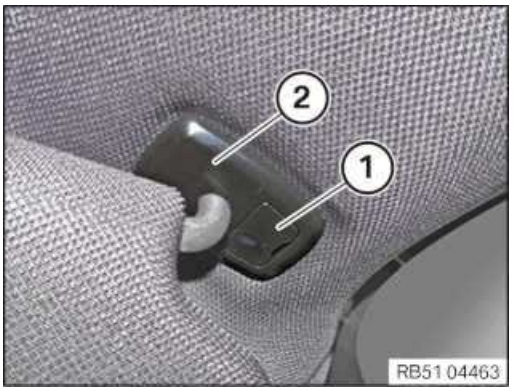
12 – Remove the cover on the inside mirror

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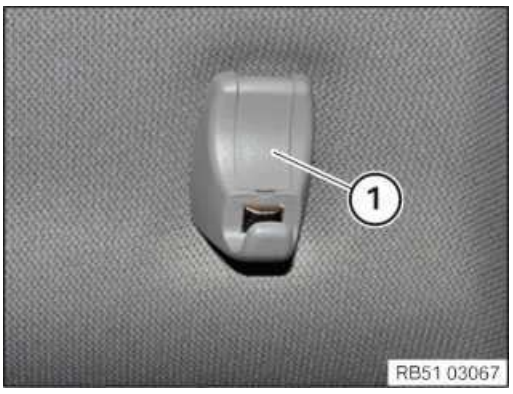
- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

13 – Remove sun visor



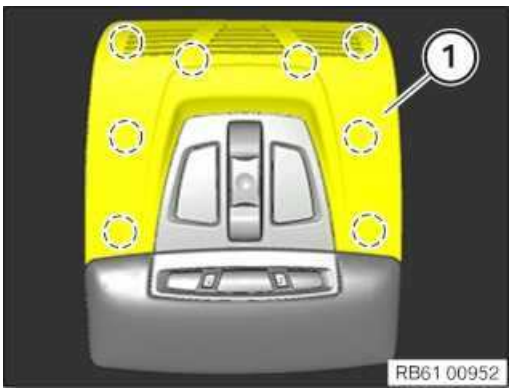
- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

14 – Remove the counter support for the sun visor



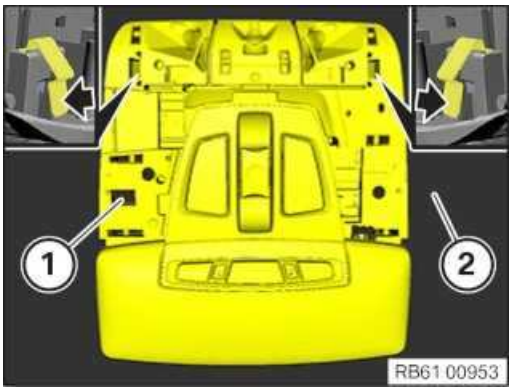
- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

15 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.

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- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

16 – Remove the right A-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

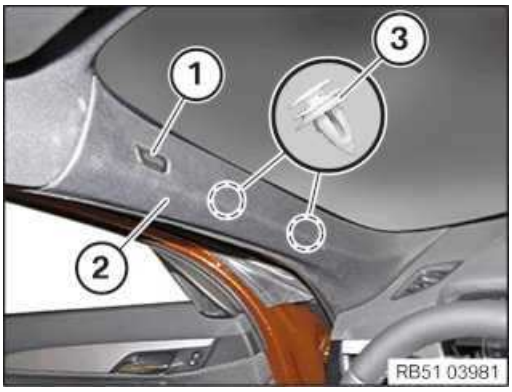
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

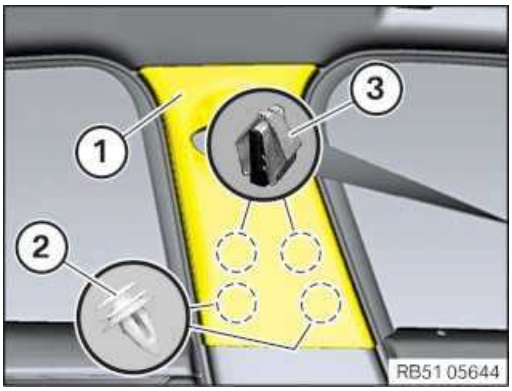
17 – Partially remove the right upper B-pillar trim panel

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NOTICE

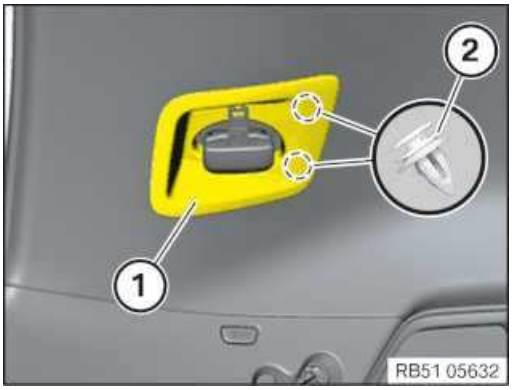
Description is for left component only. Procedure on the right side is identical.

▶ **Partially removing upper B-pillar trim panel**



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

18 – Remove the belt feed trim



- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

MAIN WORK

19 – Lower the headlining on the left or right

RISK OF DAMAGE

Fold the headlining.

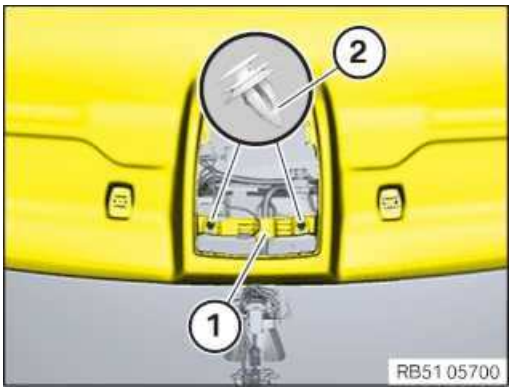
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

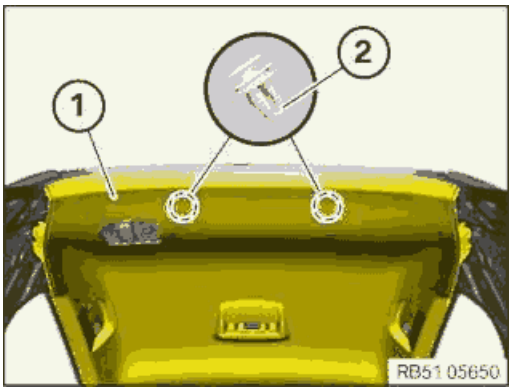
NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).



- Carefully guide out the headlining (1) at the respective edge protection and let it hang down as shown.

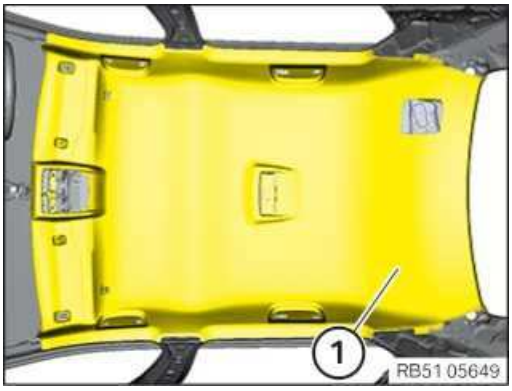
20 – Installing the left or right headlining (lowered)

RISK OF DAMAGE

Fold the headlining.

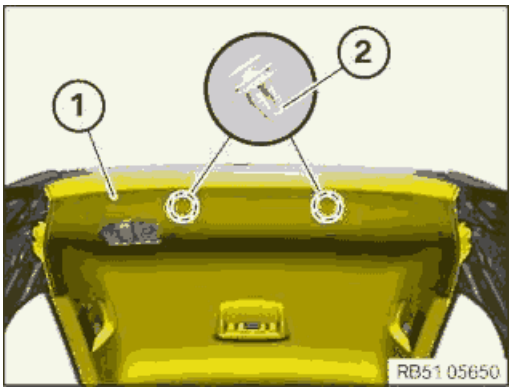
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

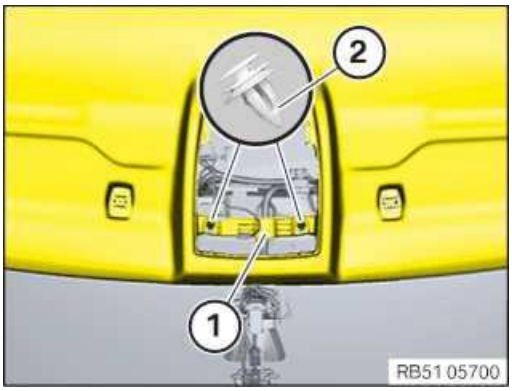


- Carefully insert the headlining (1) at the respective edge protection.

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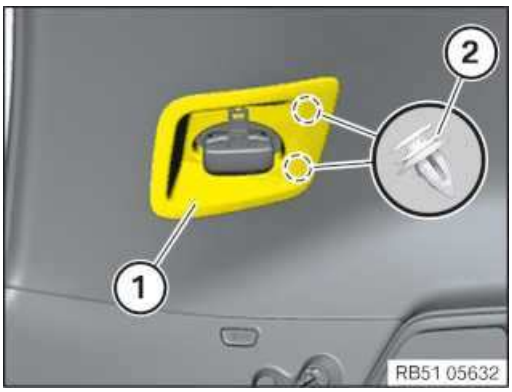
- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

POSTPROCESSES

21 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

22 – Partially installing upper right B-pillar trim panel

NOTICE

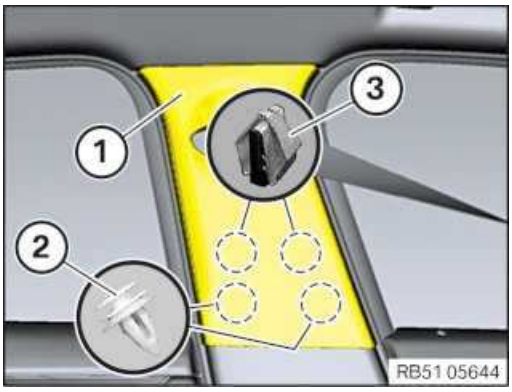
Description is for left component only. Procedure on the right side is identical.

▸ **Install upper B-pillar trim panel**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Insert the seat belt into the B-pillar trim panel (1).
- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

23 – Install the right A-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

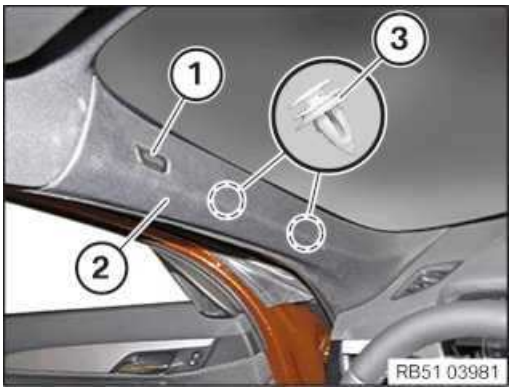
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

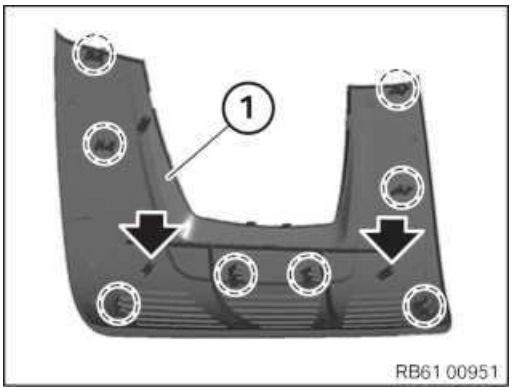
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

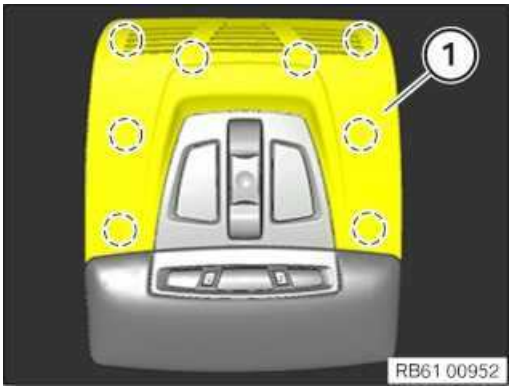
M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

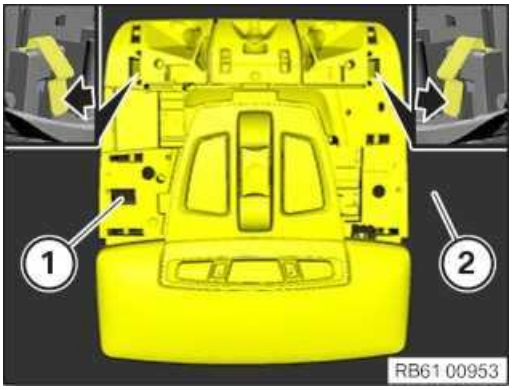
24 – Install the roof function centre



- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.

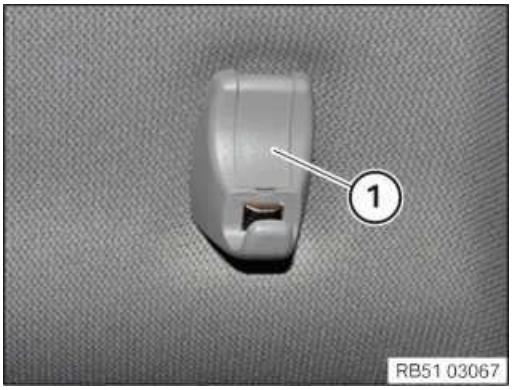


NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

25 – Install the counter support for the sun visor



- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

Screw		Tightening torque	2,5 Nm

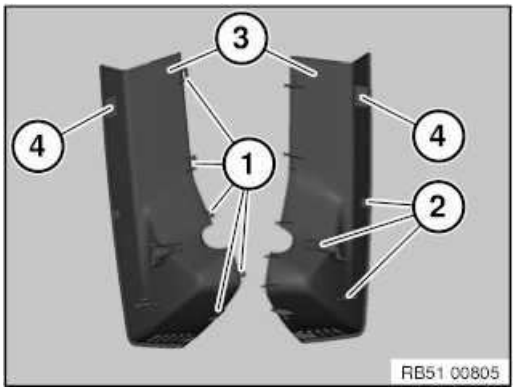
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26 – Install the sun visor



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

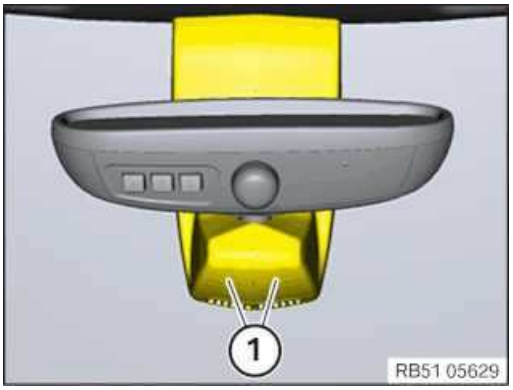
27 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



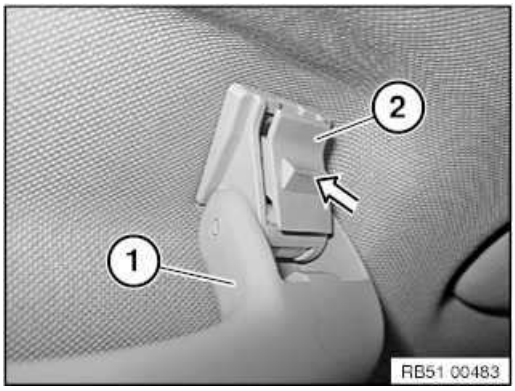
- Install covers on the interior mirror (1) clip together.

28 – Installing both grab handles on left or right

NOTICE

The description is for one component only. The procedure is identical for all further components.

▸ **Installing the grab handle**



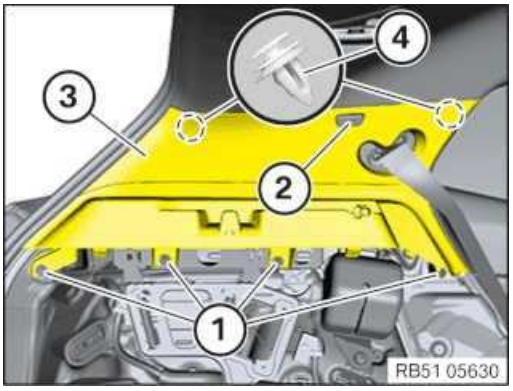
- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

29 – Install the trim panel for the right luggage compartment capping

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NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the trim panel for the luggage compartment capping**

- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

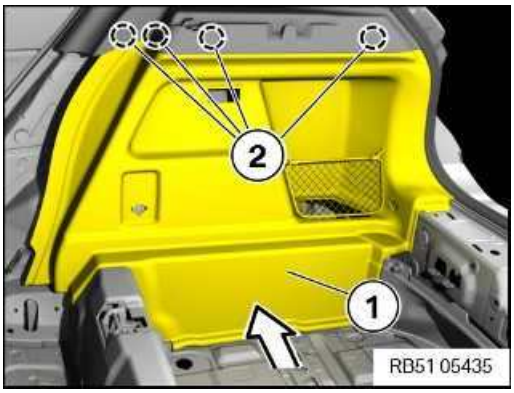
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

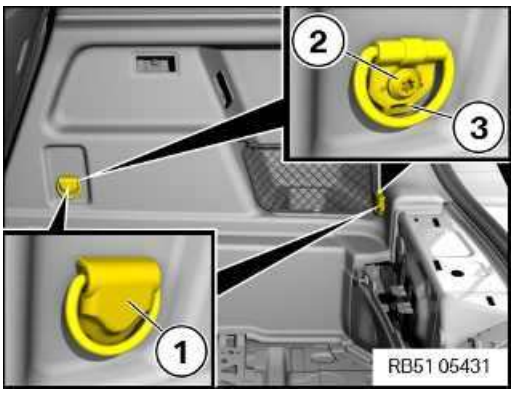
30 – Installing the luggage compartment wheel arch trim panel on the right



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

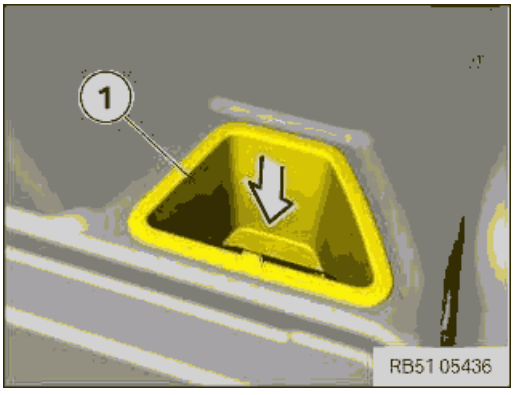


- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

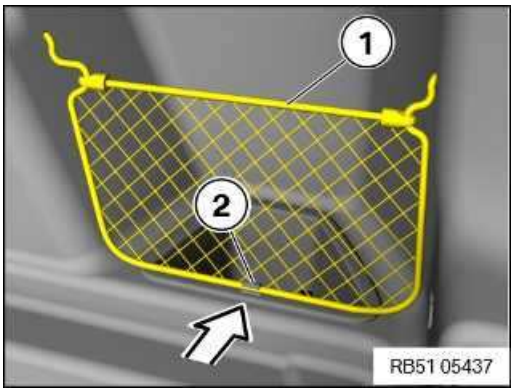
Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.

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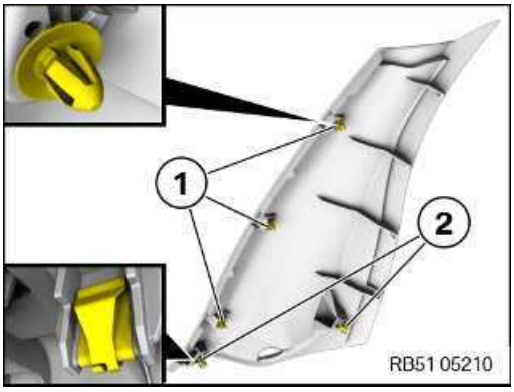
- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

31 – Install the C-pillar trim panel at the bottom right

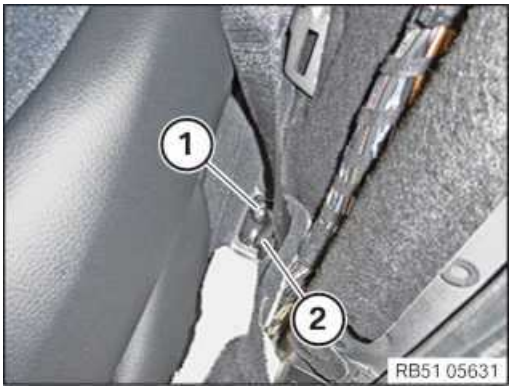
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Install the bottom C-pillar trim panel**



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

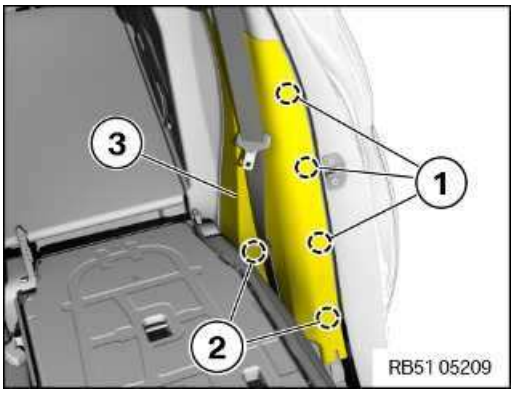


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).

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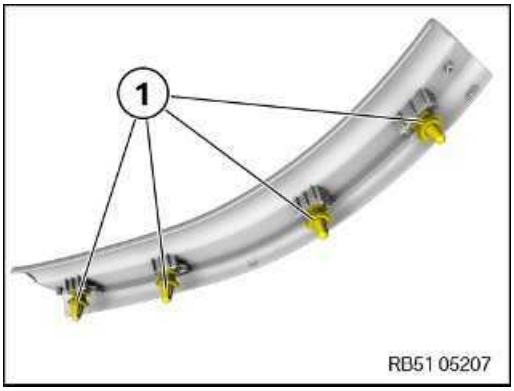
- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

32 – Installing rear right door sill cover strip

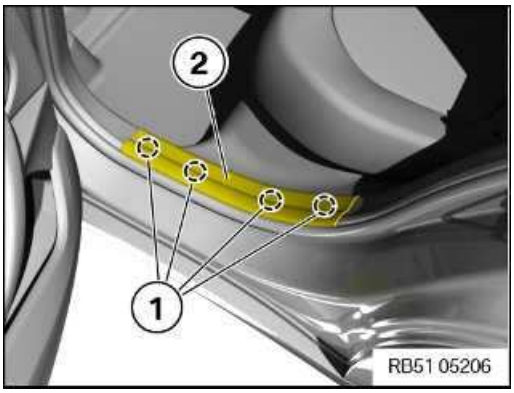
NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Installing the rear door sill cover strip**

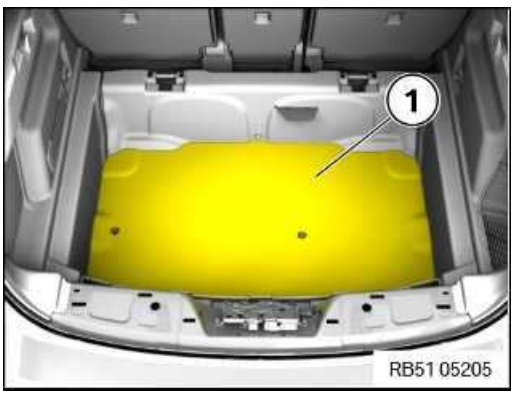


- Check the clips (1) for damage and renew where required.



- Clip in the door sill cover strip (2) with the clips (1).

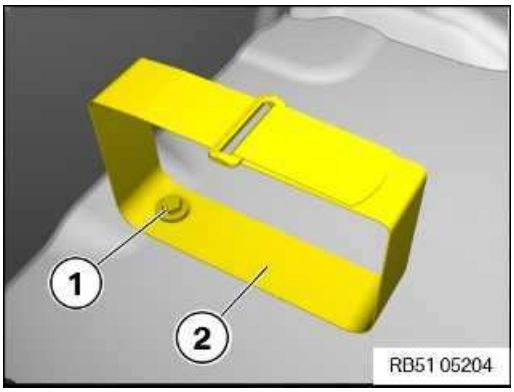
33 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

34 – Inserting the Velcro fastener for the toolkit

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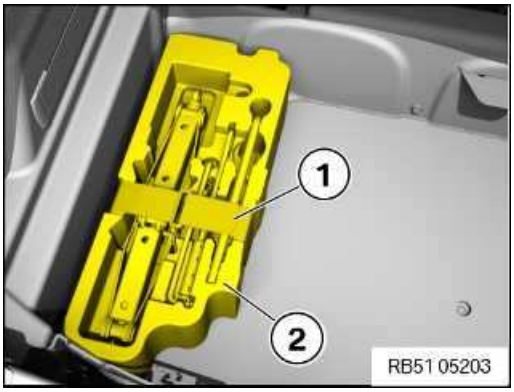


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

35 – Install the tool kit

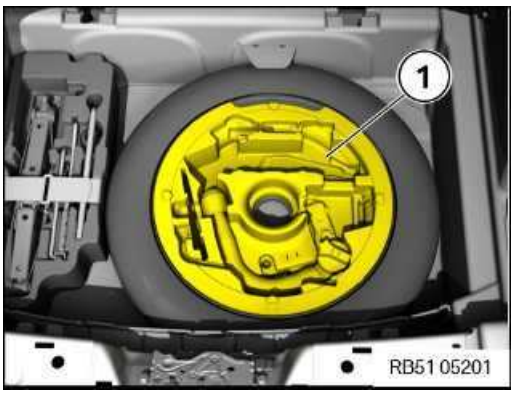


- Install the tool kit (2).
- Close the hook and loop tape (1).

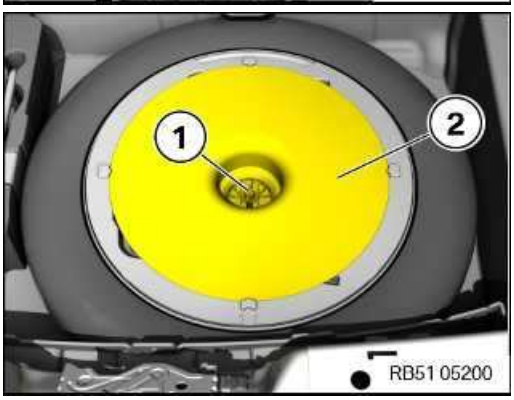
36 – Install the emergency wheel



- Insert compact spare wheel(1).



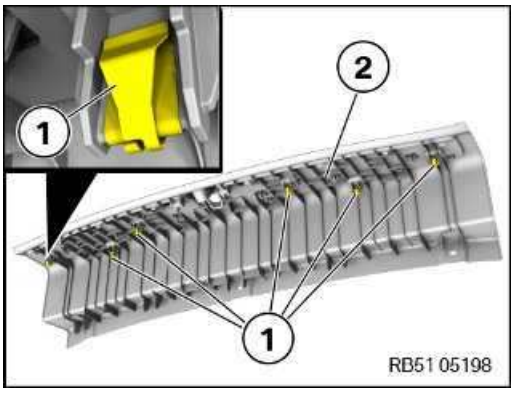
- Insert oddments tray into the compact spare wheel (1).



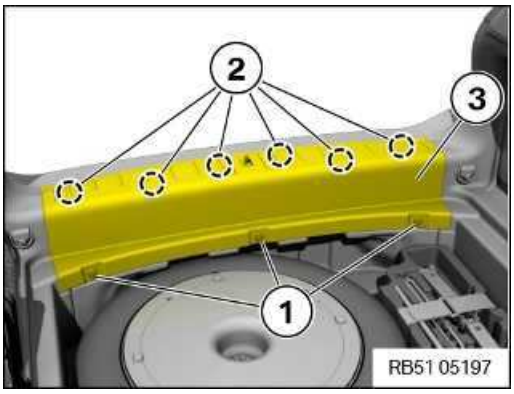
- Insert the lid (2).
- Hand-tighten the bolt (1).

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37 – Installing loading edge trim

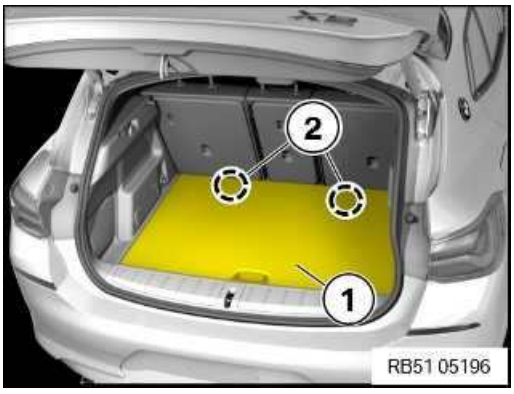


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

38 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body — Used in step 23

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Counter support on body — Used in step 25

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 29

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 29

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 30

Bolt M8 x 22		Tightening torque	21 Nm

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End fitting to body			Used in step 31
Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body			Used in step 34
Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step 15 17
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	16 23
72 00 ... Safety regulations for handling components with gas generators	16 23

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51 44 930 Releasing and securing the headlining with panorama roof on the left

RISK OF DAMAGE

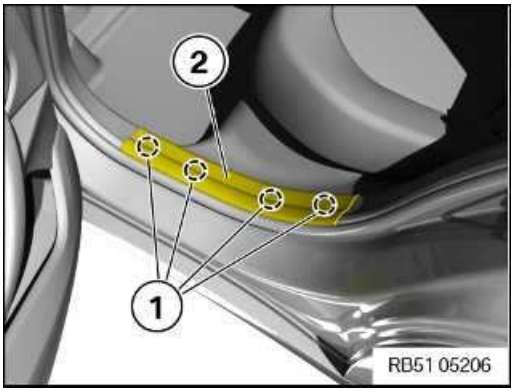
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

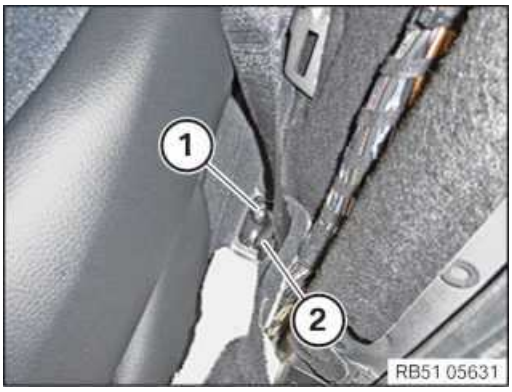
PRELIMINARY WORK

1 – Remove rear entrance cover strip



- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Remove the bottom C-pillar trim panel

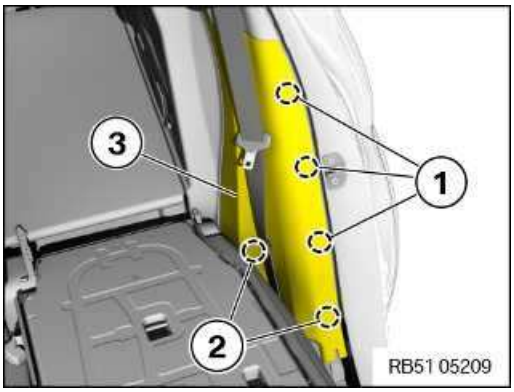


- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).



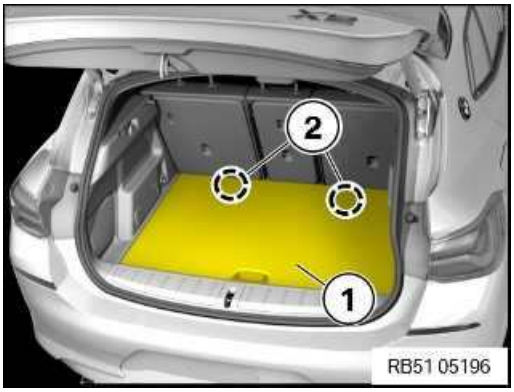
- Release the edge protection (1) in area of the bottom C-pillar trim panel.

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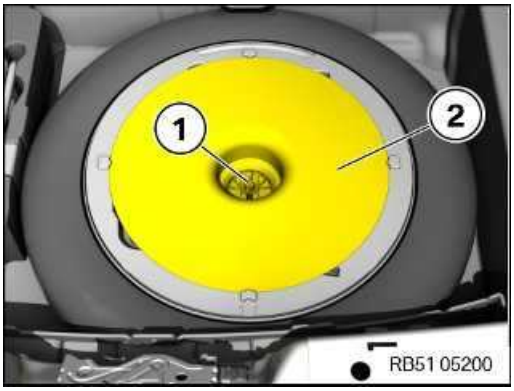
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

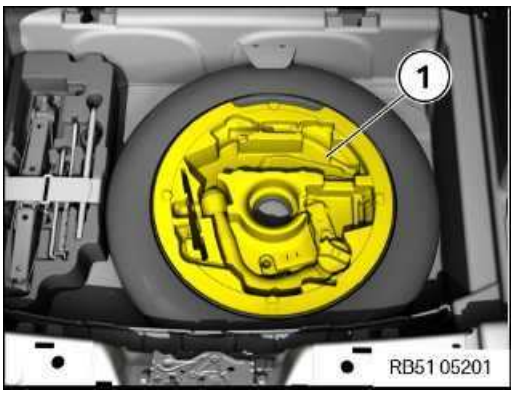


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

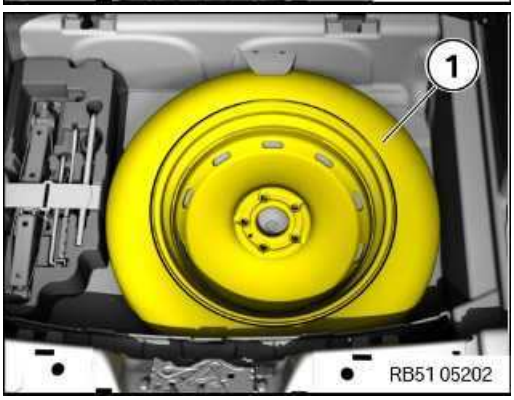
4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



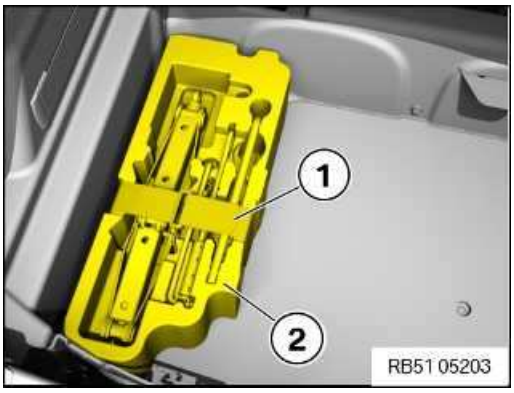
- Remove the oddments tray from the emergency wheel (1).



- Remove the emergency wheel (1).

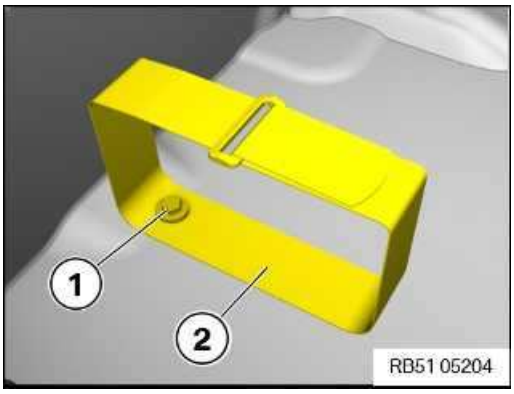
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5 – Remove the tool kit



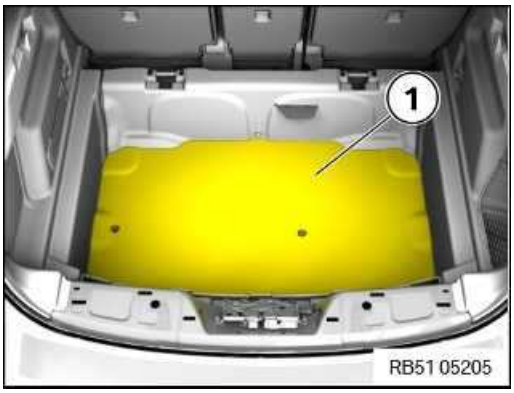
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



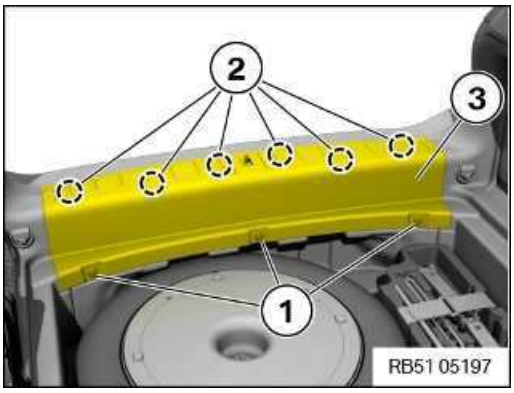
- Loosen screw (1).
- Remove the hook and loop tape (2).

7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

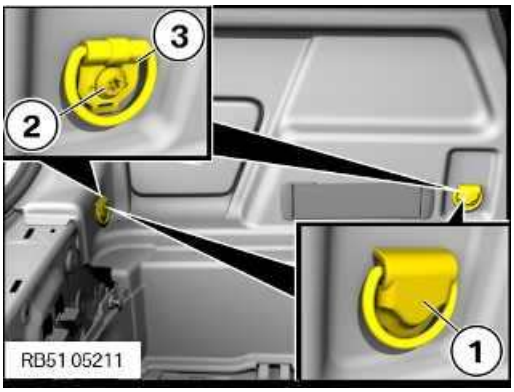
8 – Removing the loading edge trim



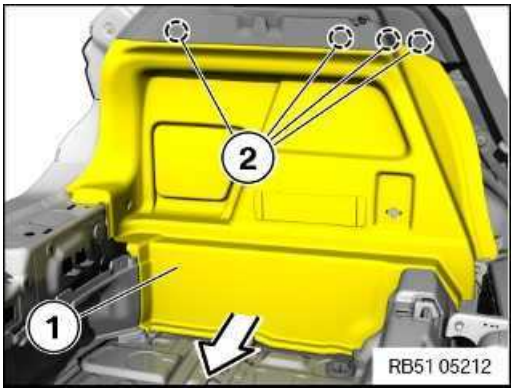
- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.

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- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

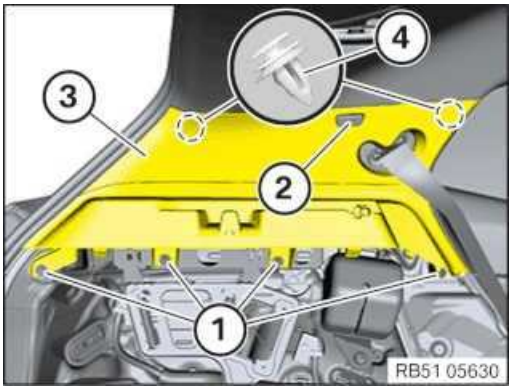


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

10 – Remove the trim panel of the luggage compartment capping



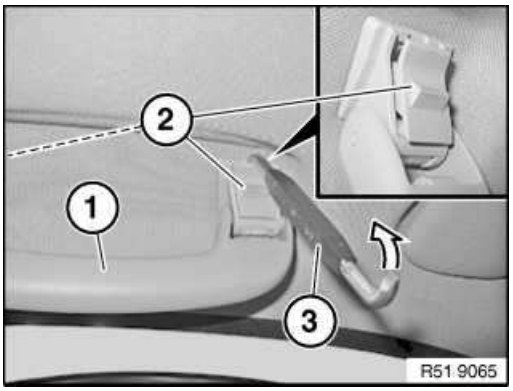
- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

11 – Removing both grab handles on left or right

NOTICE

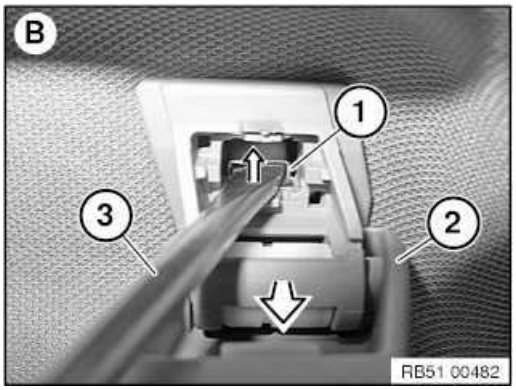
The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**



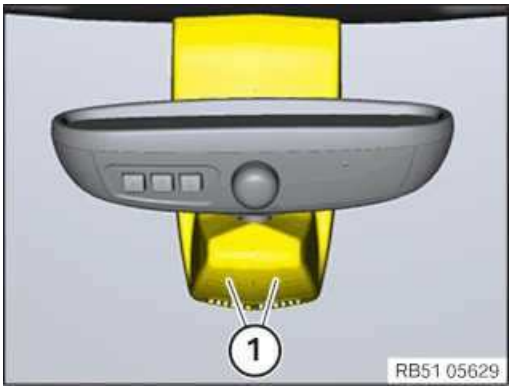
- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.

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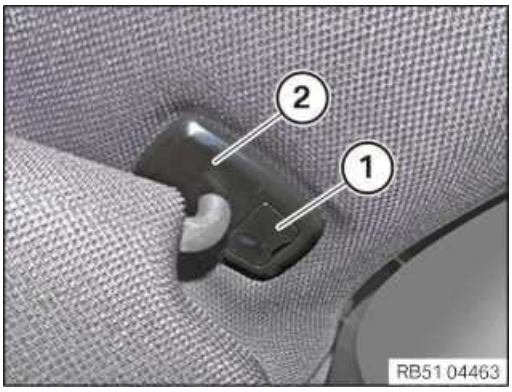
- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

12 – Remove the cover on the inside mirror



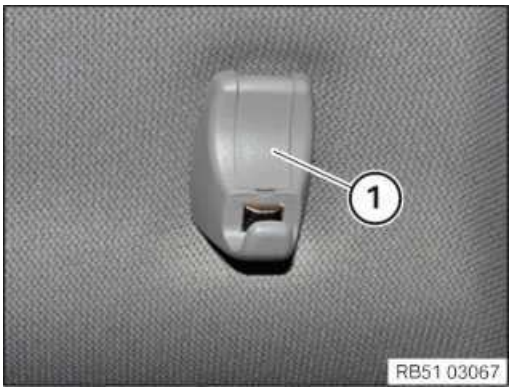
- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

13 – Remove sun visor



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

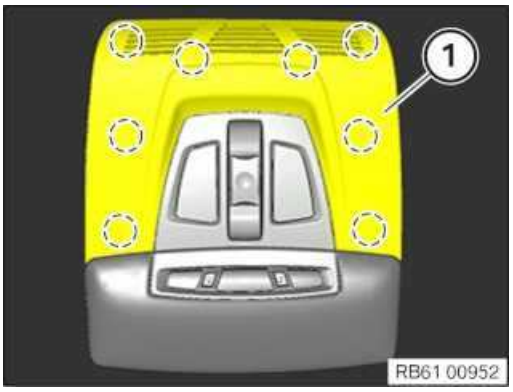
14 – Remove the counter support for the sun visor



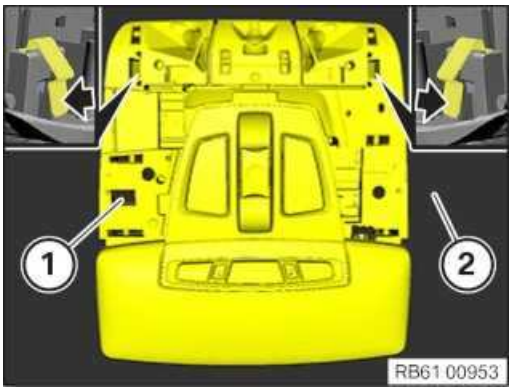
- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

15 – Remove the roof function centre

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- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

16 – Remove the A-pillar trim panel

WARNING

Airbag unit.

Danger! Life-threatening injuries!

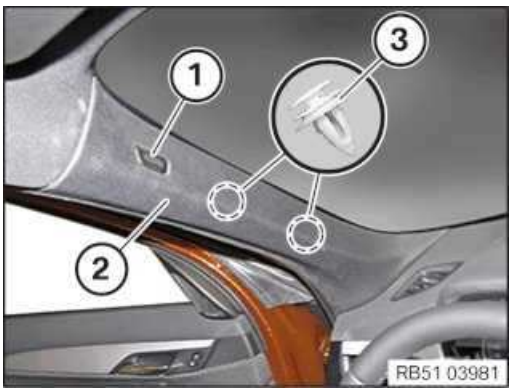
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

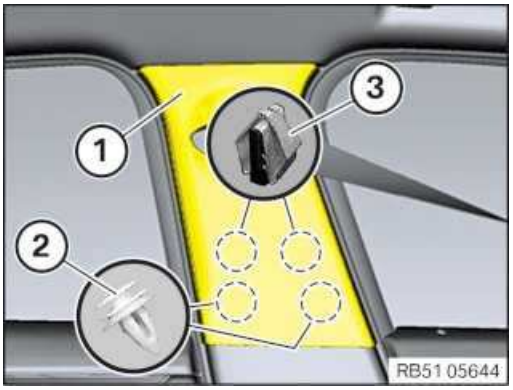
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

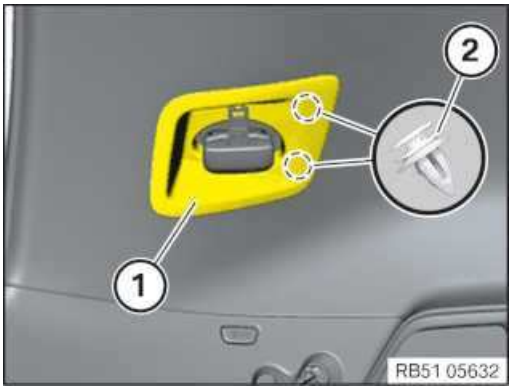
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17 – Partially removing upper B-pillar trim panel



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

18 – Remove the belt feed trim



- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

MAIN WORK

19 – Lower the headlining on the left or right (with panorama glass roof)

RISK OF DAMAGE

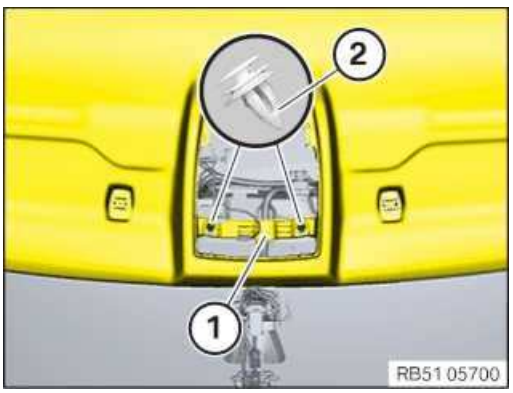
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

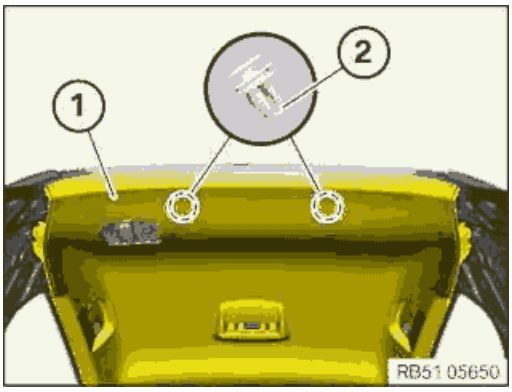
NOTICE

Description is for left component only. Procedure on the right side is identical.

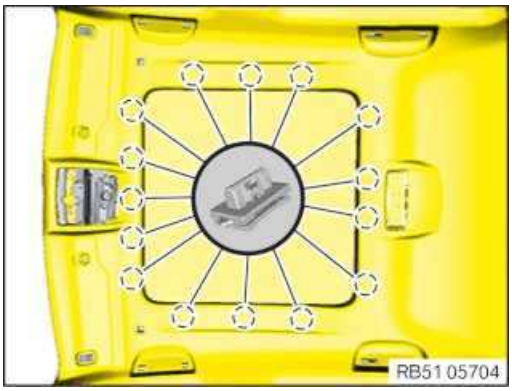


- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).

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- Carefully release the headlining (1) at the clips (2).



- Carefully release the headlining with a suitable plastic wedge from the clamps (1) in a downwards direction.



- Carefully guide out the headlining (1) at the respective edge protection and let it hang down as shown.

20 – Install the headlining on the left or right (lowered with panorama roof)

RISK OF DAMAGE

Fold the headlining.

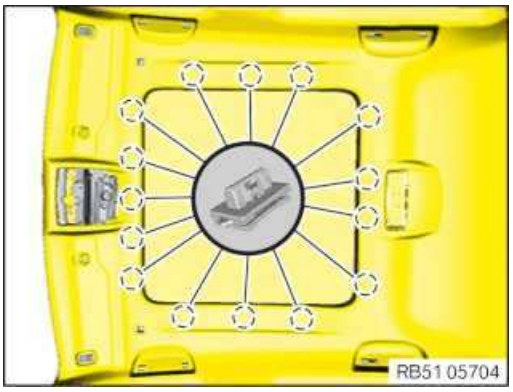
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

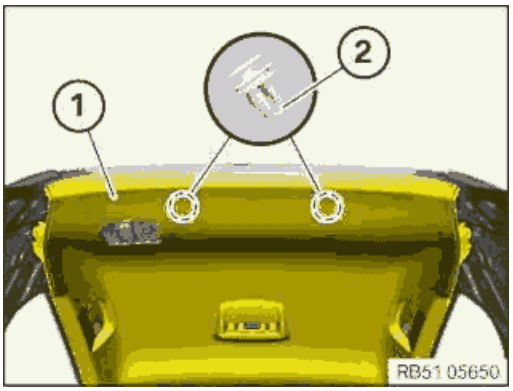


- Carefully insert the headlining (1) at the respective edge protection.

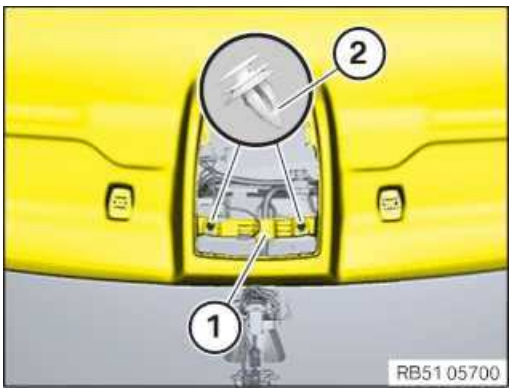
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- Carefully engage the headlining at the clamps (1).



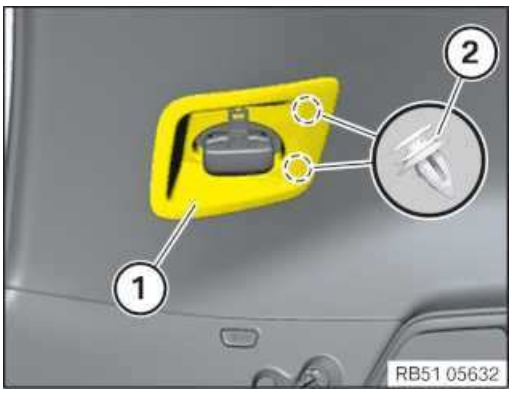
- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

POSTPROCESSES

21 – Install the belt feed trim



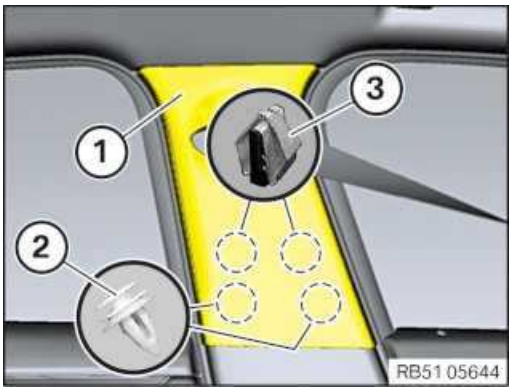
- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

22 – Partially installing upper B-pillar trim panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

23 – Install the A-pillar trim panel

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

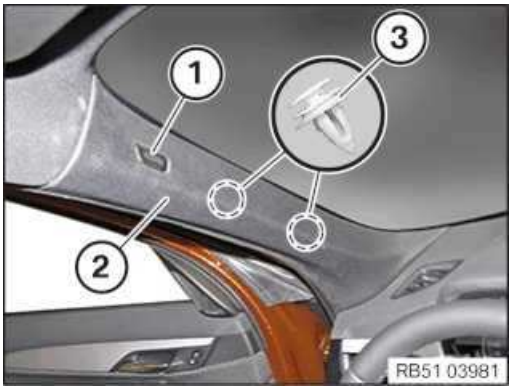
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

  Parts: Screw
- Tighten down screw.

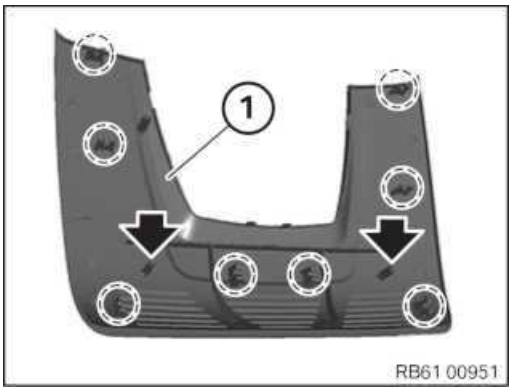
A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

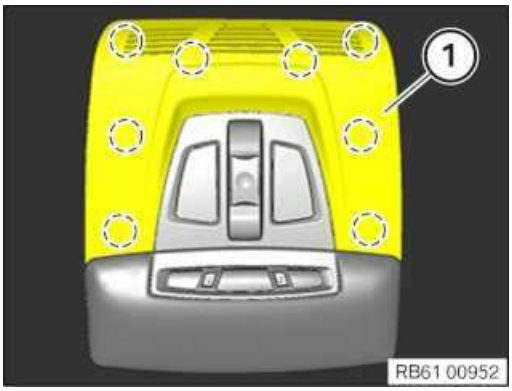
- Clip in the cover (1).

24 – Install the roof function centre

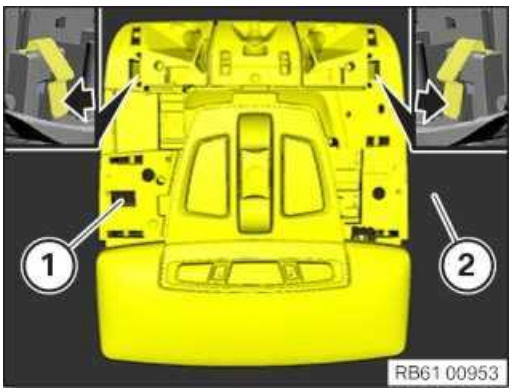
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- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.

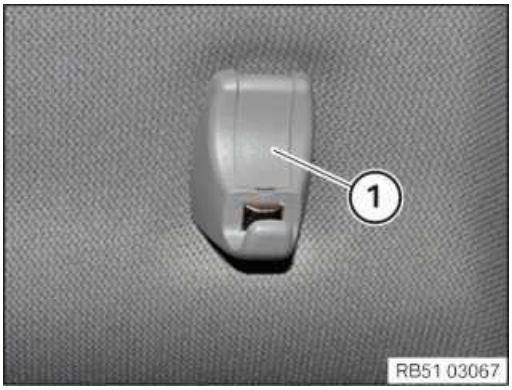


NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

25 – Install the counter support for the sun visor



- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

Screw		Tightening torque	2,5 Nm

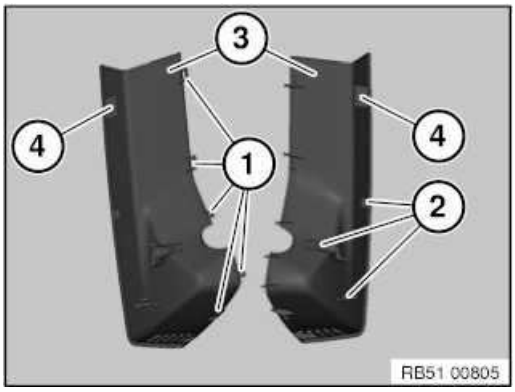
26 – Install the sun visor



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

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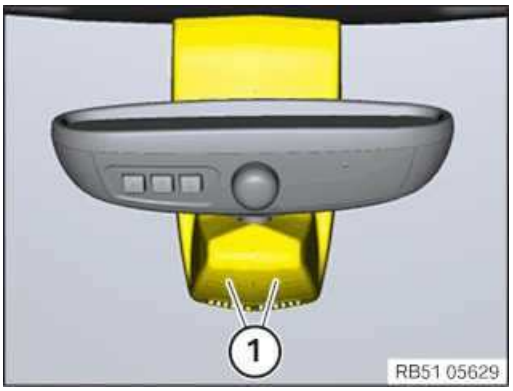
27 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



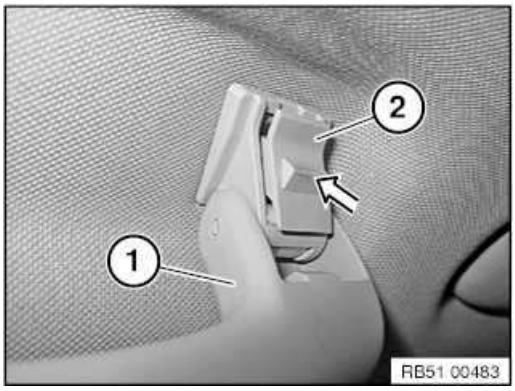
- Install covers on the interior mirror (1) clip together.

28 – Installing both grab handles on left or right

NOTICE

The description is for one component only. The procedure is identical for all further components.

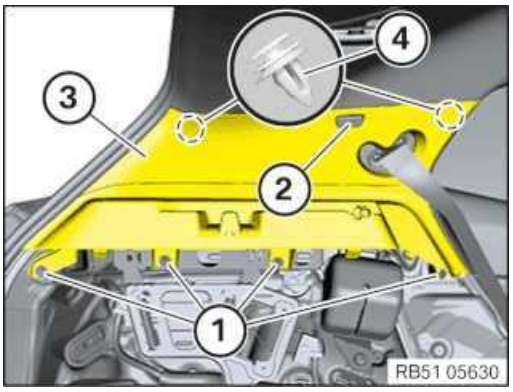
▶ **Installing the grab handle**



- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

29 – Install the trim panel for the luggage compartment capping

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- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

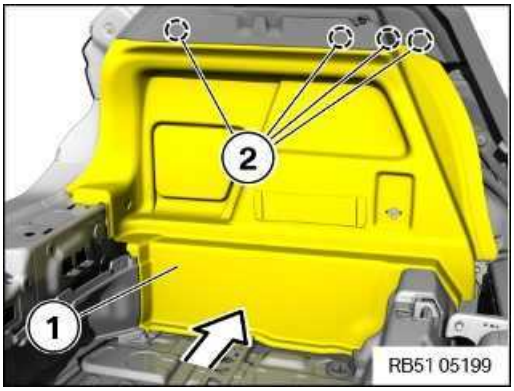
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

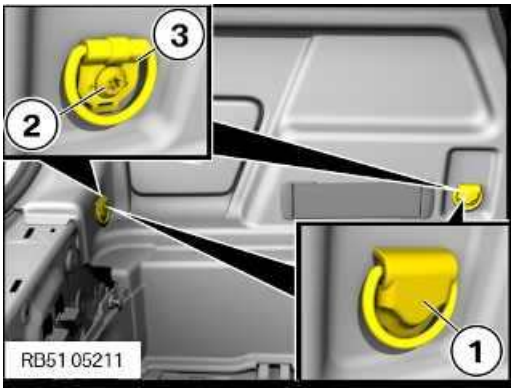
30 – Install luggage compartment wheel arch trim panel at left



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.



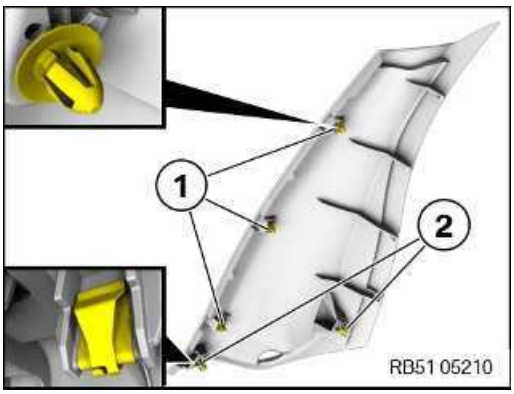
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

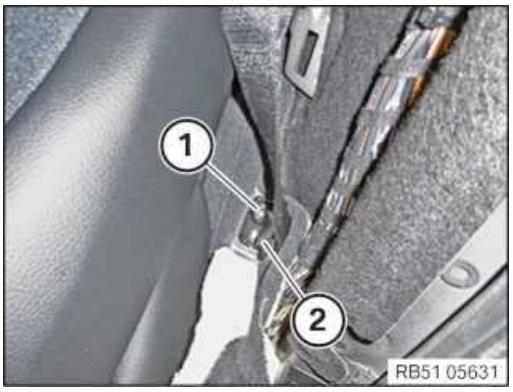
- Clip in the covers (1).

31 – Install the bottom C-pillar trim panel



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

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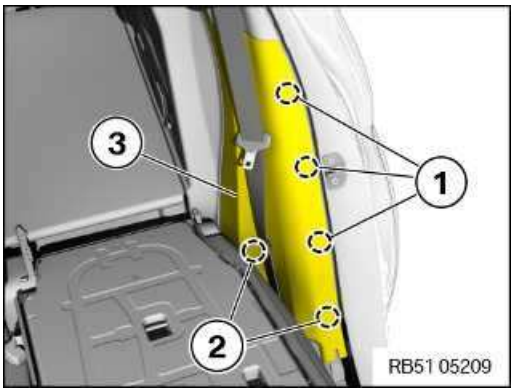


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

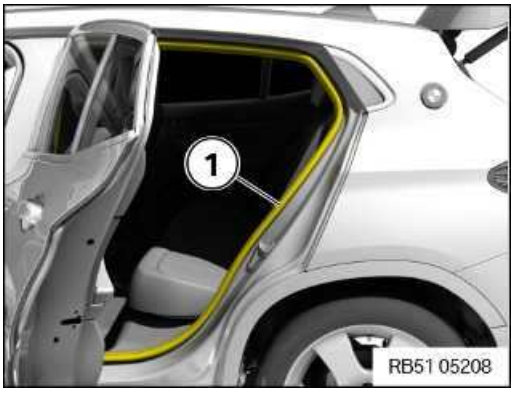
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.

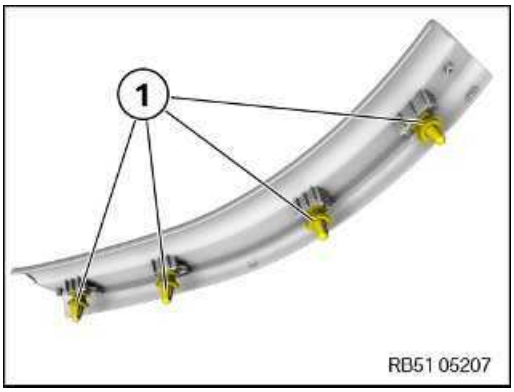


- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).

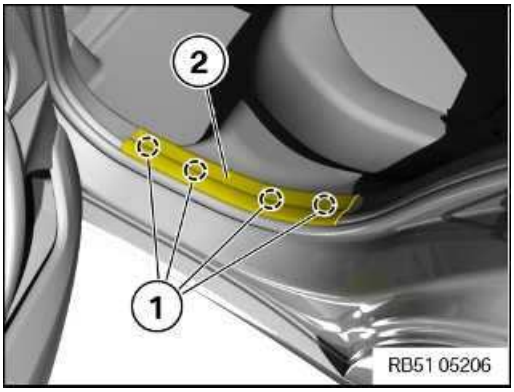


- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

32 – Installing the rear door sill cover strip



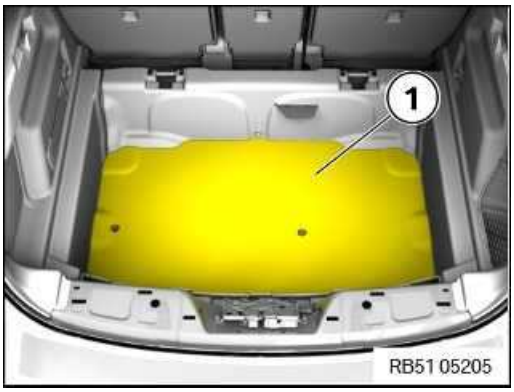
- Check the clips (1) for damage and renew where required.



- Clip in the door sill cover strip (2) with the clips (1).

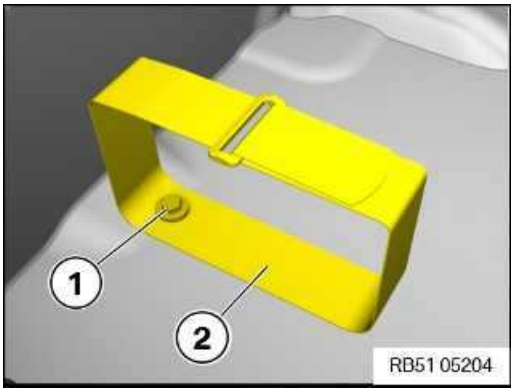
33 – Installing the luggage compartment floor trim panel

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- Position the luggage compartment floor trim panel (1).

34 – Inserting the Velcro fastener for the toolkit

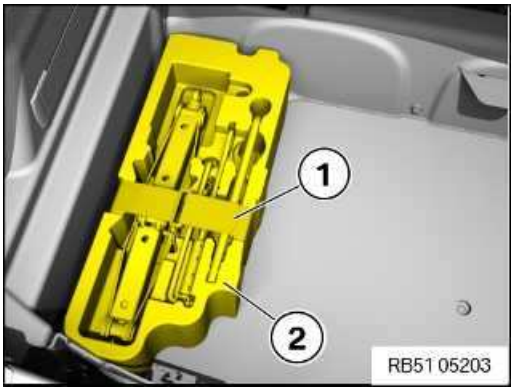


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

35 – Install the tool kit



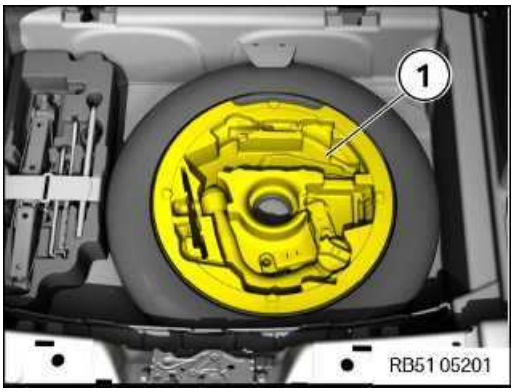
- Install the tool kit (2).
- Close the hook and loop tape (1).

36 – Install the emergency wheel

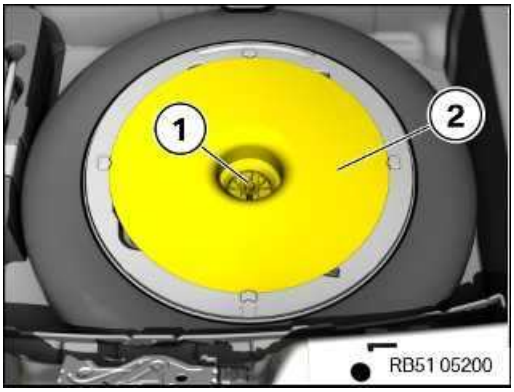


- Insert compact spare wheel(1).

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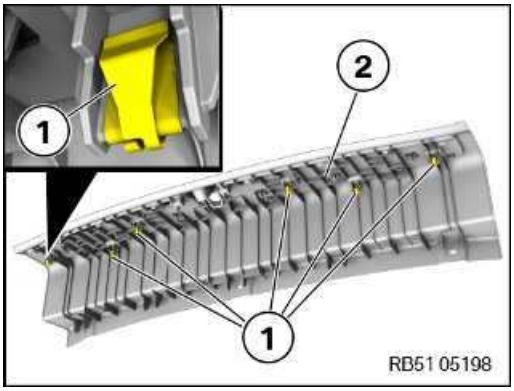


- Insert oddments tray into the compact spare wheel (1).

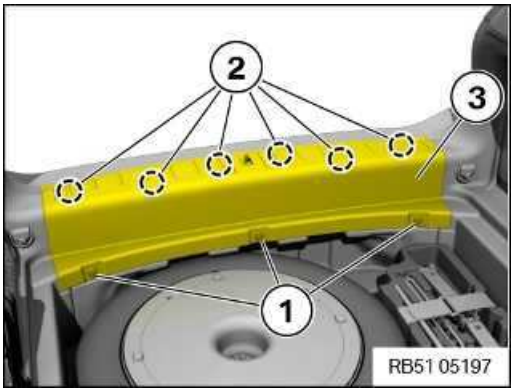


- Insert the lid (2).
- Hand-tighten the bolt (1).

37 – Installing loading edge trim

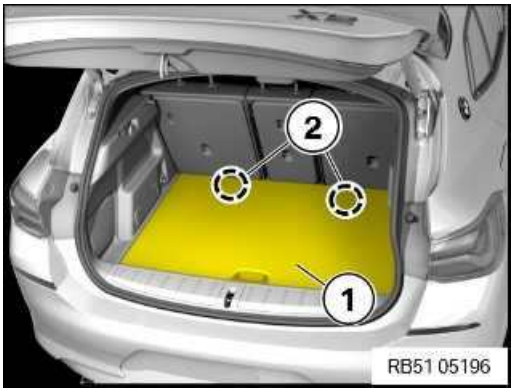


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

38 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

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Additional Information

Overview of Tightening Torques

A-pillar trim panel to body — Used in step 23

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Counter support on body — Used in step 25

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 29

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 29

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 30

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body — Used in step 31

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body — Used in step 34

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common — Used in step 15 17

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	16 23

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51 44 931 Releasing and securing the headlining with the panorama roof on the right

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

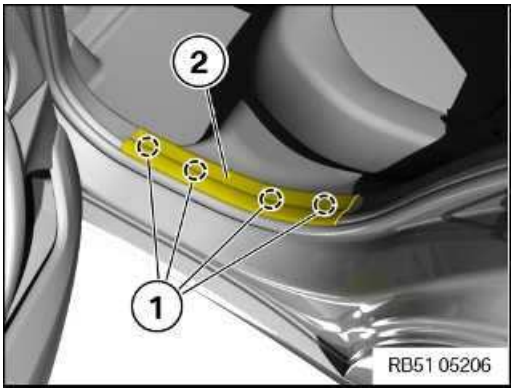
- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Remove the rear right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



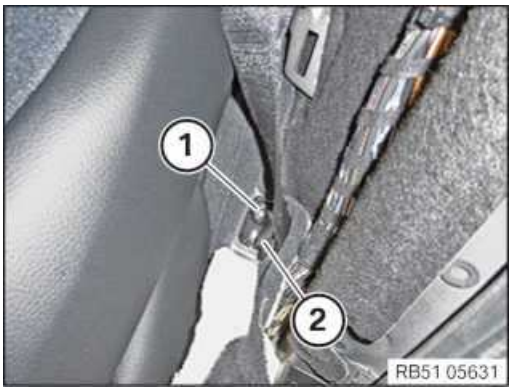
▸ **Remove rear entrance cover strip**

- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Removing bottom right C-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



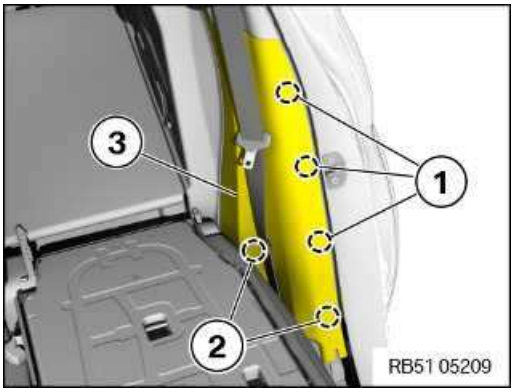
▸ **Remove the bottom C-pillar trim panel**

- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

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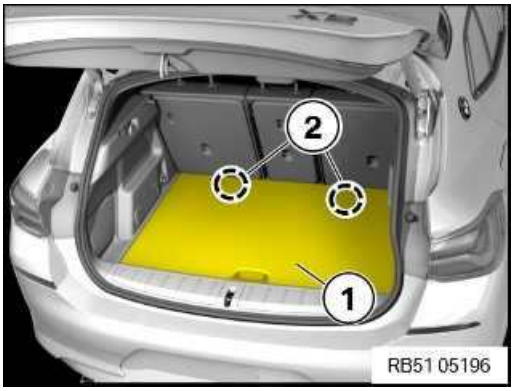


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



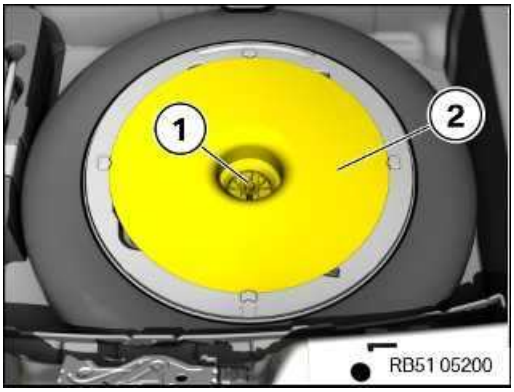
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

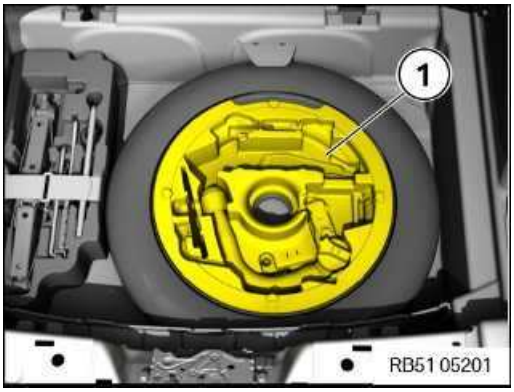


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



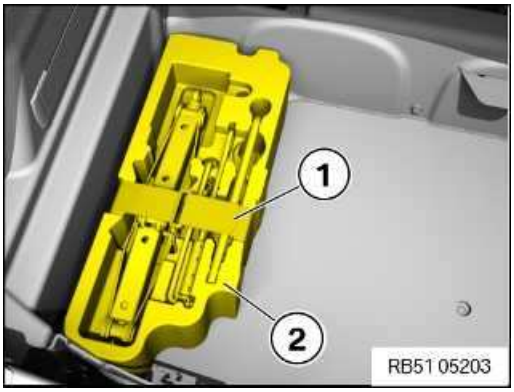
- Remove the oddments tray from the emergency wheel (1).

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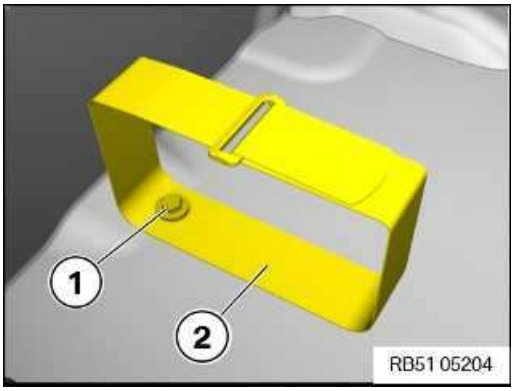
- Remove the emergency wheel (1).

5 – Remove the tool kit



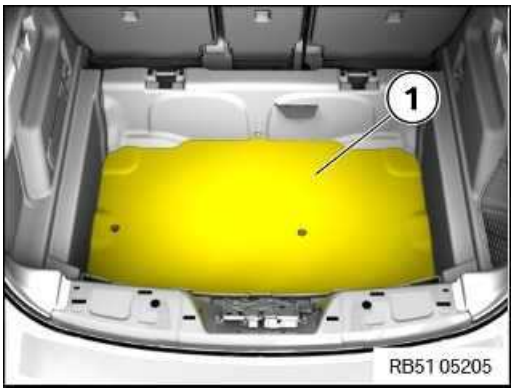
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

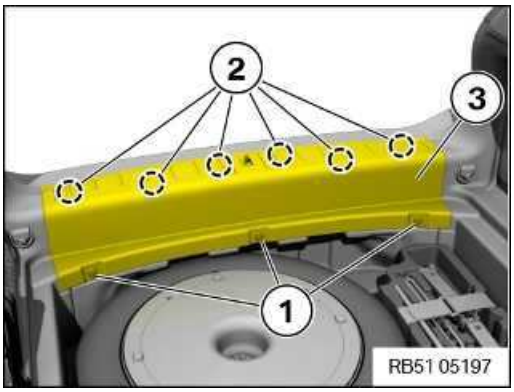
7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

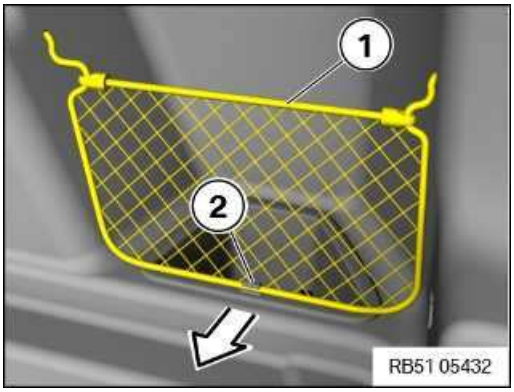
8 – Removing the loading edge trim

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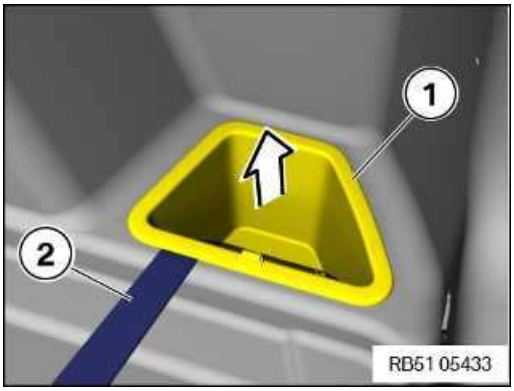


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

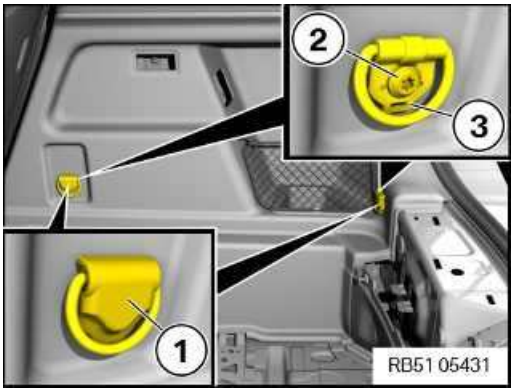
9 – Removing right luggage compartment wheel arch trim panel



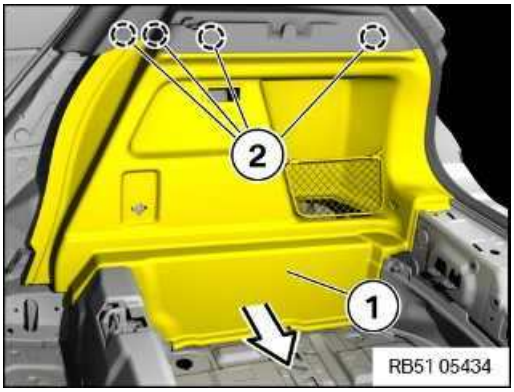
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

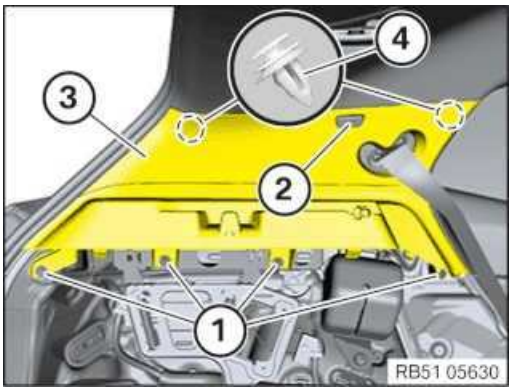
10 – Remove the trim panel of the right luggage compartment capping

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim panel of the luggage compartment capping**



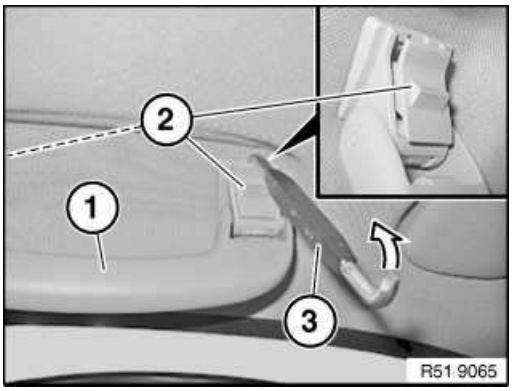
- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

11 – Removing both grab handles on left or right

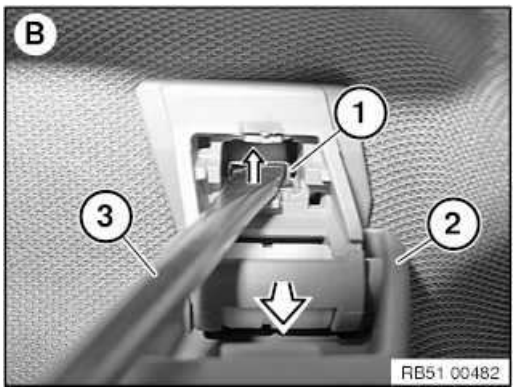
NOTICE

The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**



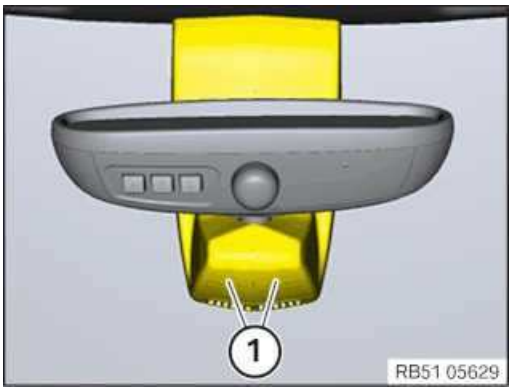
- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

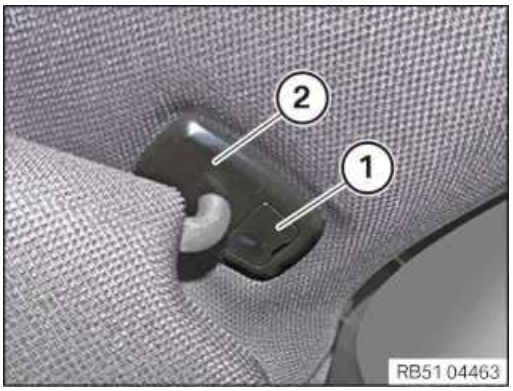
12 – Remove the cover on the inside mirror

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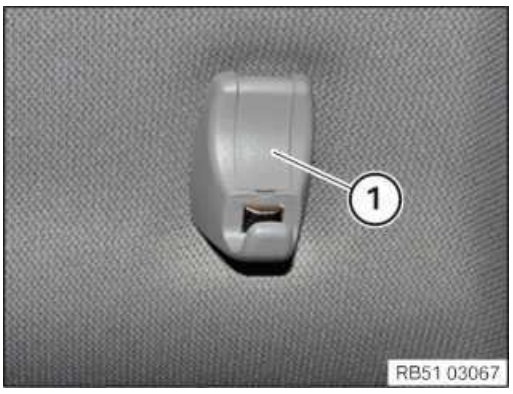
- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

13 – Remove sun visor



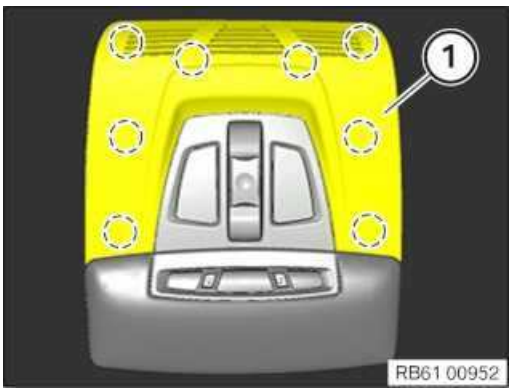
- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

14 – Remove the counter support for the sun visor



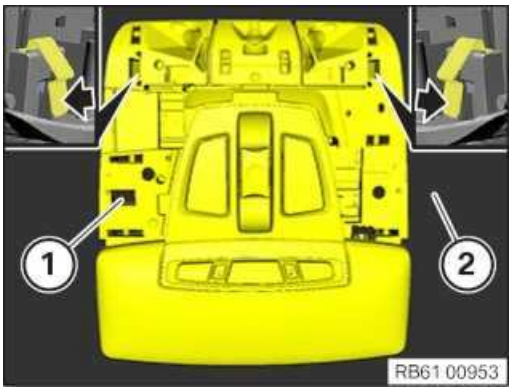
- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

15 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.

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- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

16 – Remove the right A-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

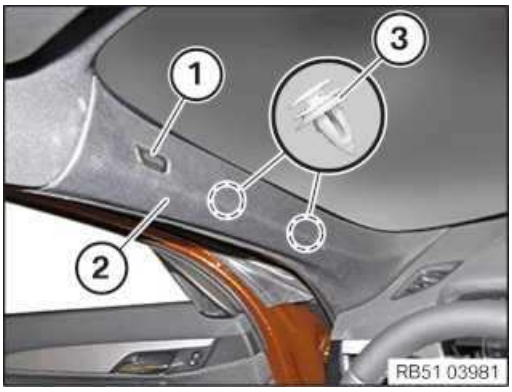
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

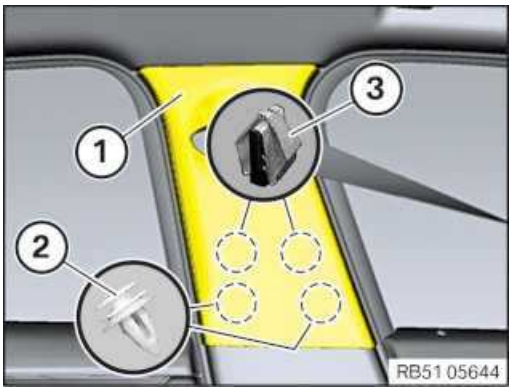
17 – Partially remove the right upper B-pillar trim panel

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NOTICE

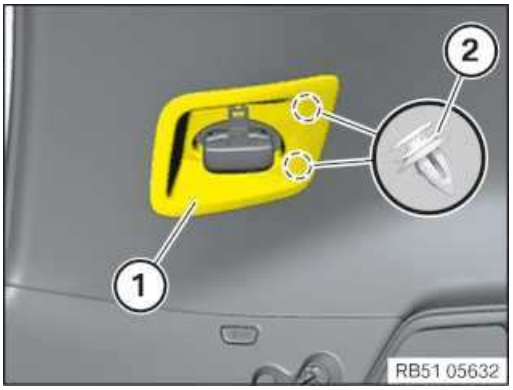
Description is for left component only. Procedure on the right side is identical.

▶ **Partially removing upper B-pillar trim panel**



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

18 – Remove the belt feed trim



- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

MAIN WORK

19 – Lower the headlining on the left or right (with panorama glass roof)

RISK OF DAMAGE

Fold the headlining.

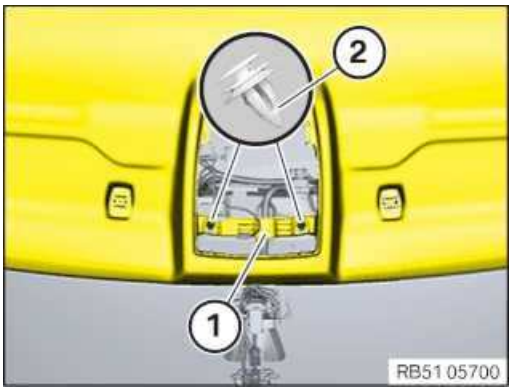
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

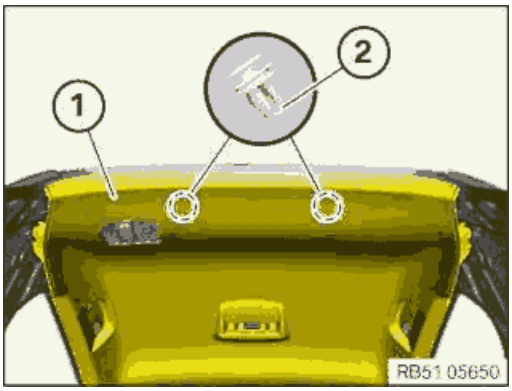
NOTICE

Description is for left component only. Procedure on the right side is identical.

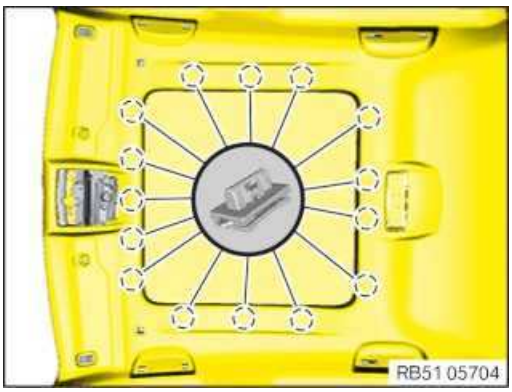
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- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).



- Carefully release the headlining with a suitable plastic wedge from the clamps (1) in a downwards direction.



- Carefully guide out the headlining (1) at the respective edge protection and let it hang down as shown.

20 – Install the headlining on the left or right (lowered with panorama roof)

RISK OF DAMAGE

Fold the headlining.

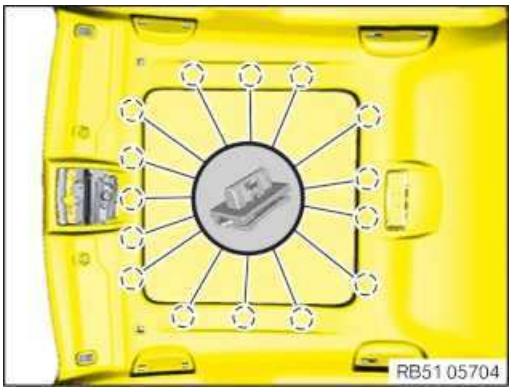
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

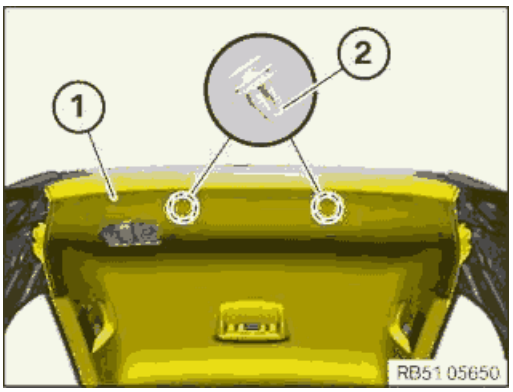
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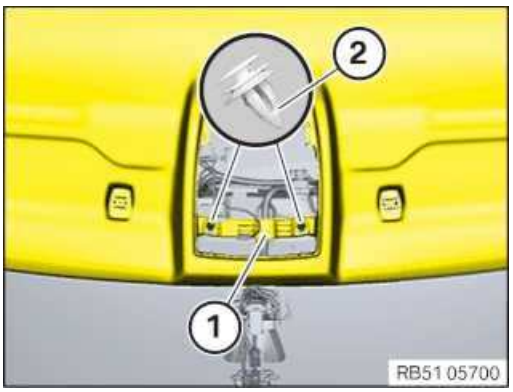
- Carefully insert the headlining (1) at the respective edge protection.



- Carefully engage the headlining at the clamps (1).



- Clip in the headlining (1) using the clips (2).

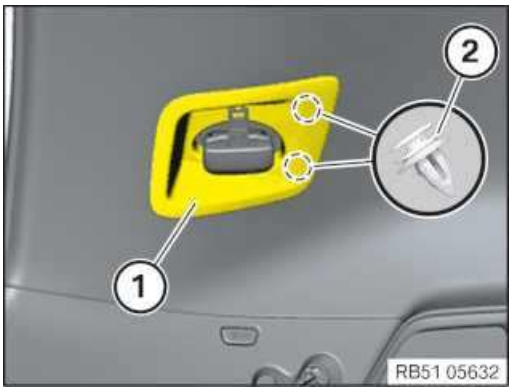


- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

POSTPROCESSES

21 – Install the belt feed trim

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- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

22 – Partially installing upper right B-pillar trim panel

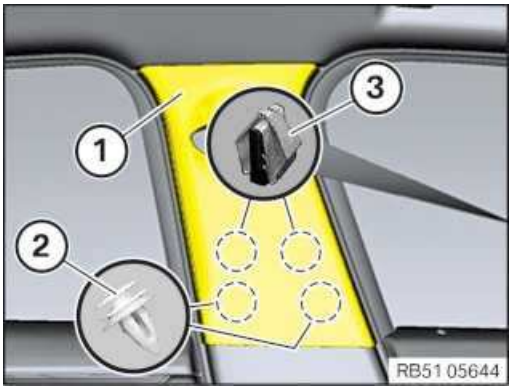
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install upper B-pillar trim panel**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Insert the seat belt into the B-pillar trim panel (1).
- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

23 – Install the right A-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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WARNING

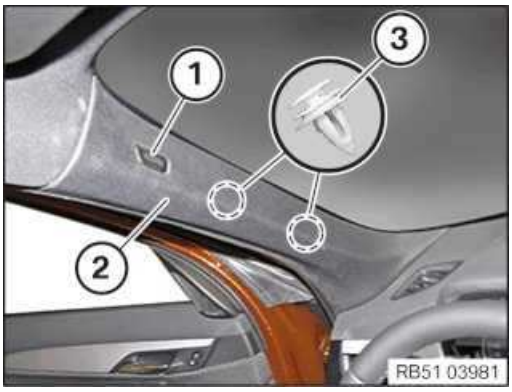
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

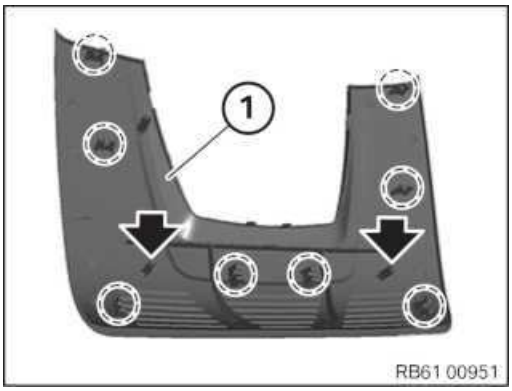
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

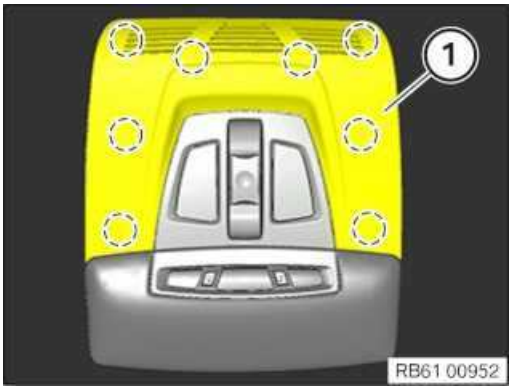
M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

24 – Install the roof function centre

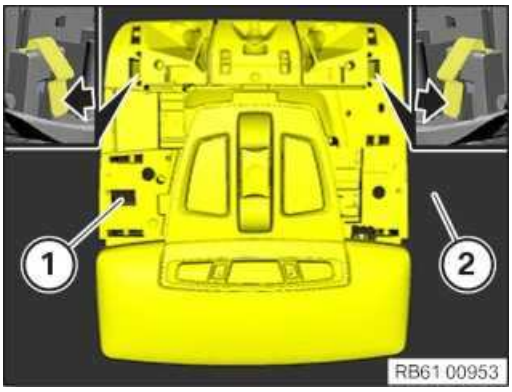


- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.

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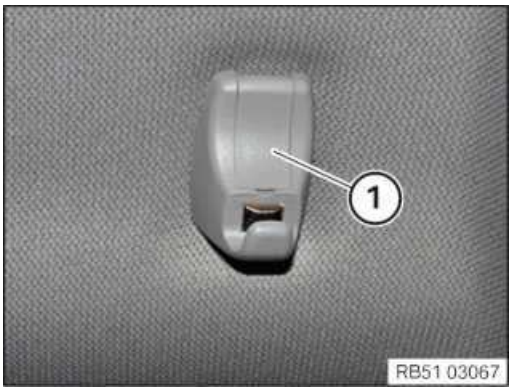


NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

25 – Install the counter support for the sun visor

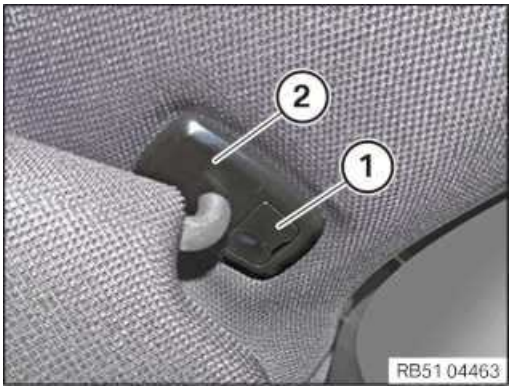


- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

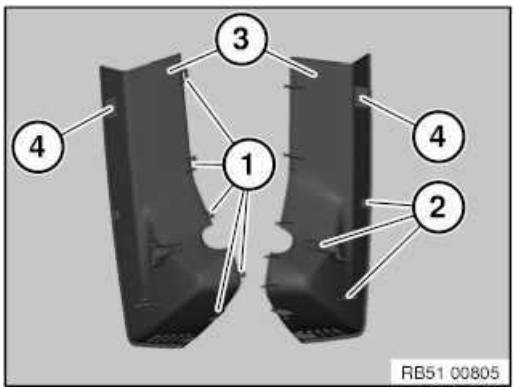
Screw		Tightening torque	2,5 Nm

26 – Install the sun visor



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

27 – Install the cover on the inside mirror

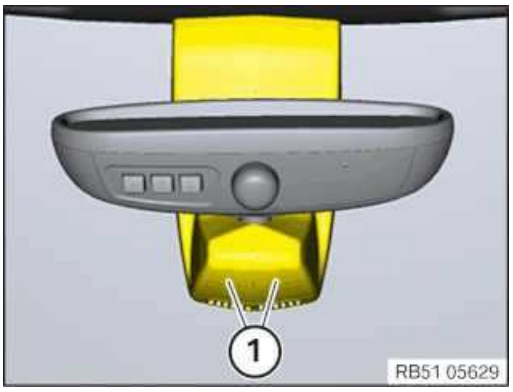


- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.

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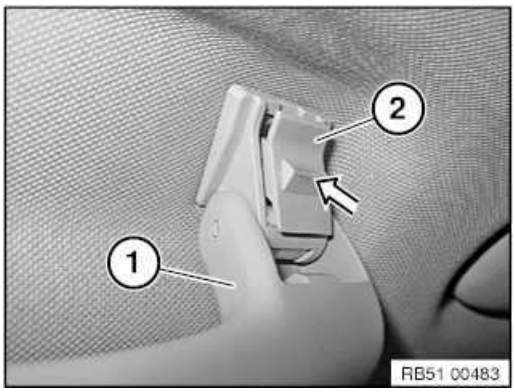


- Install covers on the interior mirror (1) clip together.

28 – Installing both grab handles on left or right

NOTICE

The description is for one component only. The procedure is identical for all further components.



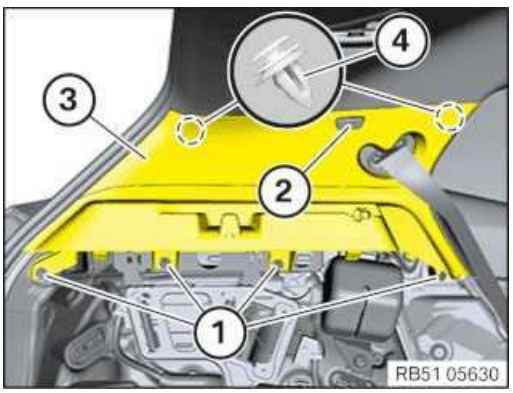
▸ **Installing the grab handle**

- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

29 – Install the trim panel for the right luggage compartment capping

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the trim panel for the luggage compartment capping**

- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

Self-tapping screw		Tightening torque	4 Nm

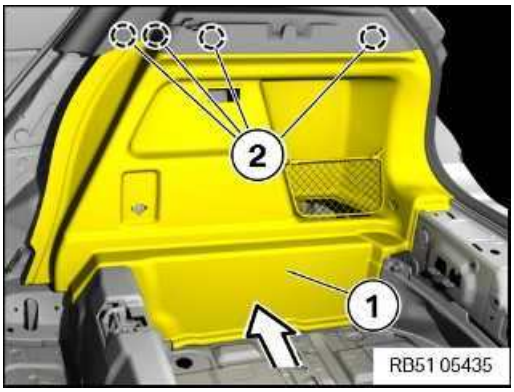
- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

30 – Installing the luggage compartment wheel arch trim panel on the right

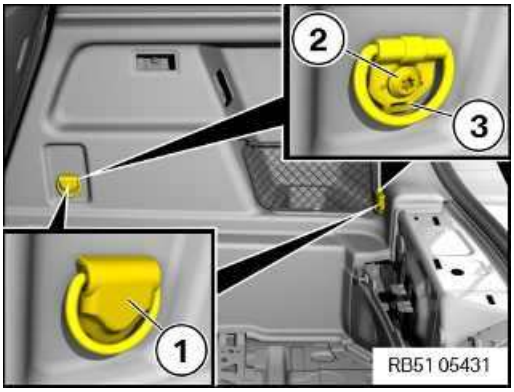
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NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

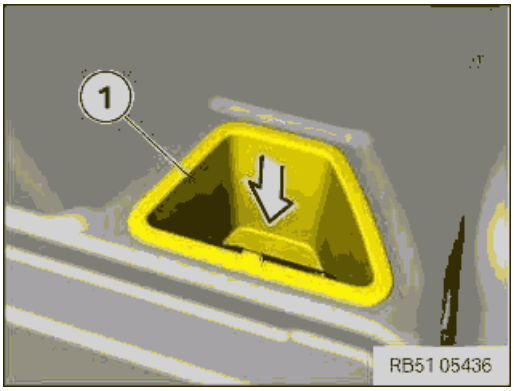


- Position the lashing eyes (3) and tighten the screws (2).

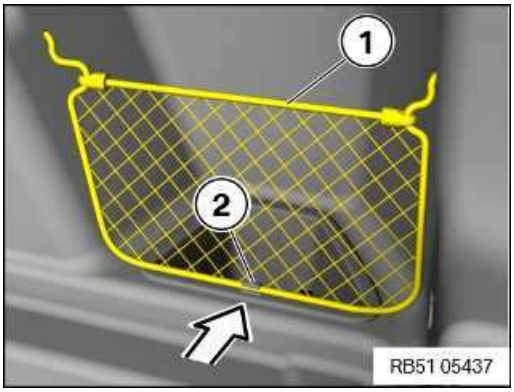
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

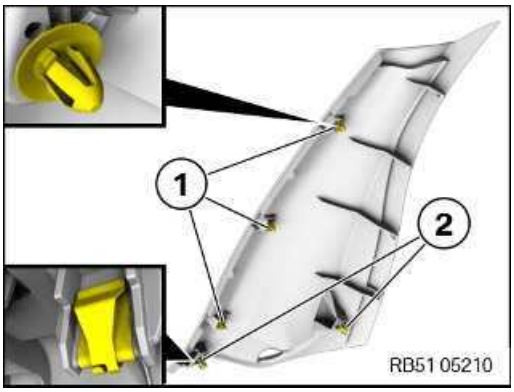
31 – Install the C-pillar trim panel at the bottom right

NOTICE

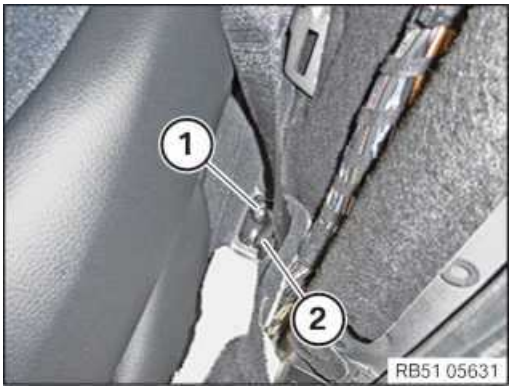
Description is for left component only. Procedure on the right side is identical.

▸ **Install the bottom C-pillar trim panel**

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- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

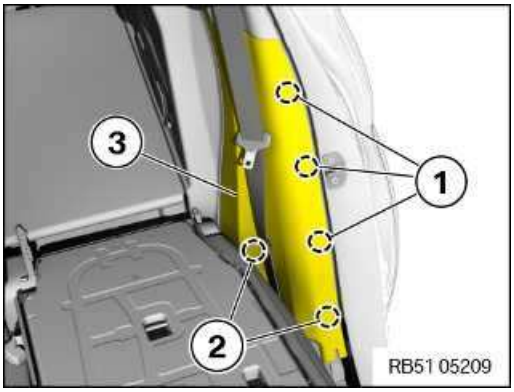


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

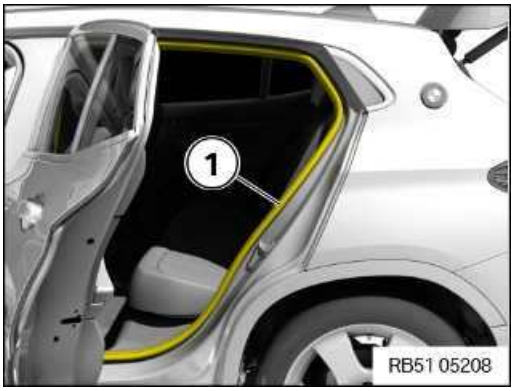
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

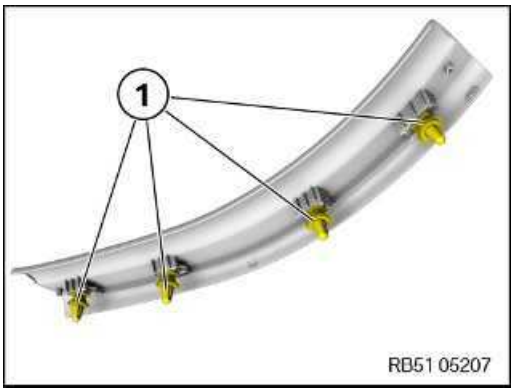
32 – Installing rear right door sill cover strip

NOTICE

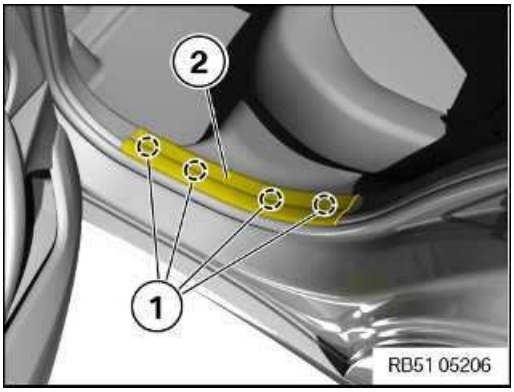
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the rear door sill cover strip**

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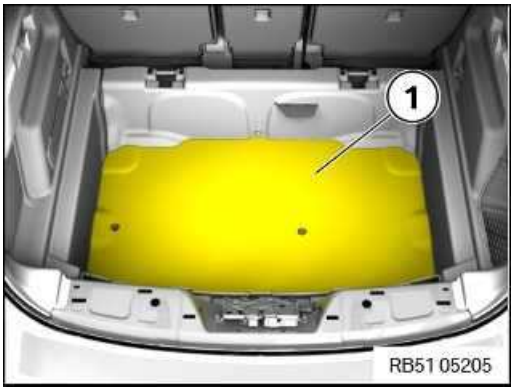


- Check the clips (1) for damage and renew where required.



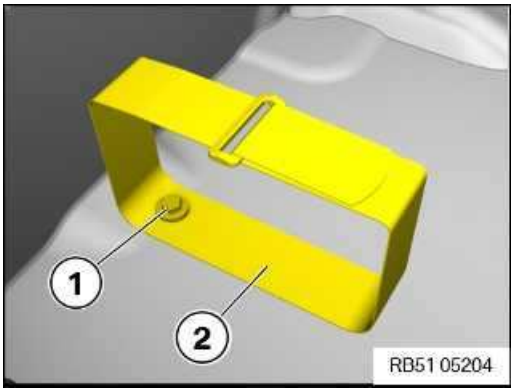
- Clip in the door sill cover strip (2) with the clips (1).

33 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

34 – Inserting the Velcro fastener for the toolkit



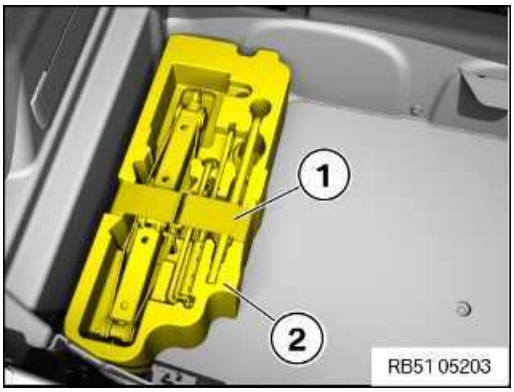
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

35 – Install the tool kit

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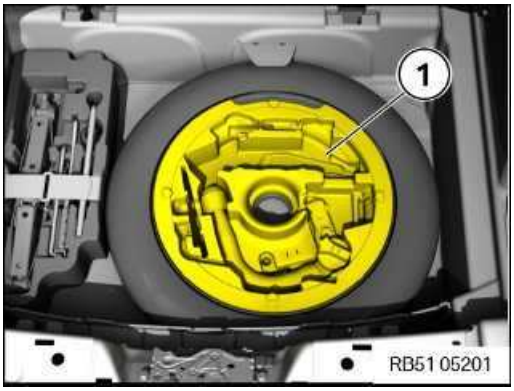


- Install the tool kit (2).
- Close the hook and loop tape (1).

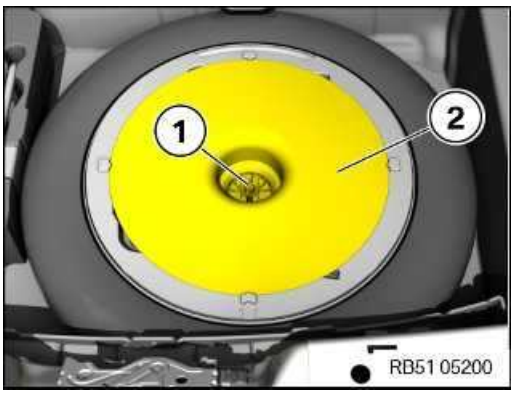
36 – Install the emergency wheel



- Insert compact spare wheel(1).

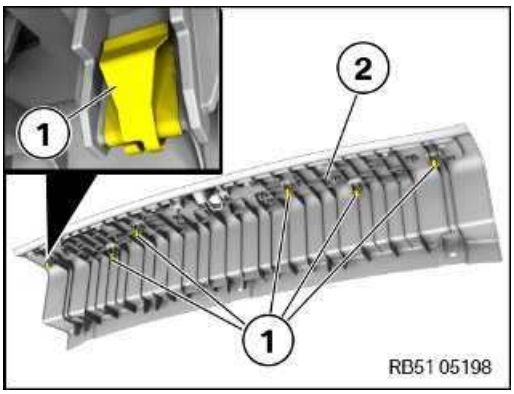


- Insert oddments tray into the compact spare wheel (1).



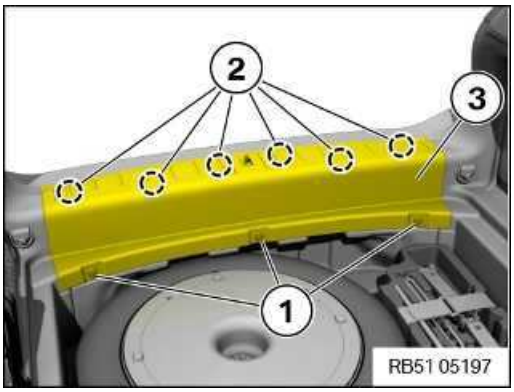
- Insert the lid (2).
- Hand-tighten the bolt (1).

37 – Installing loading edge trim



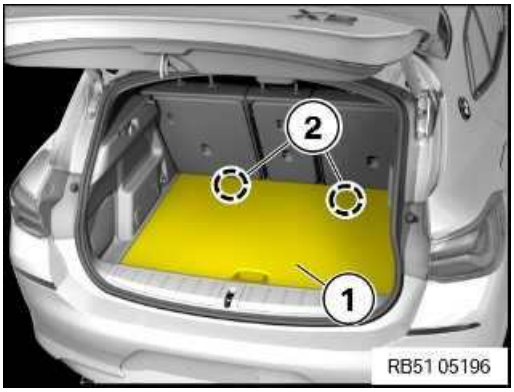
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.

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- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

38 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body — Used in step 23

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Counter support on body — Used in step 25

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 29

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 29

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 30

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body — Used in step 31

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body — Used in step 34

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

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0 496 569 (00 9 325) Wedge



Common	Used in step 15 17
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	16 23
72 00 ... Safety regulations for handling components with gas generators	16 23

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51 44 001 Removing and installing/replacing the headlining (version without panorama glass roof)

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

TECHNICAL INFORMATION

Perform window removal using the "spider".

For additional information see: 51 31 ... Window glass removal using "spider"

TECHNICAL INFORMATION

The following procedure forms the basis for these repair instructions and must be observed without fail.

For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

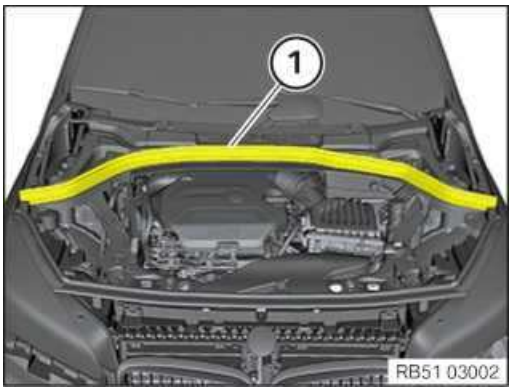
PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

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- Pull off rear bonnet seal (1) towards the top and remove.

2 – Remove the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

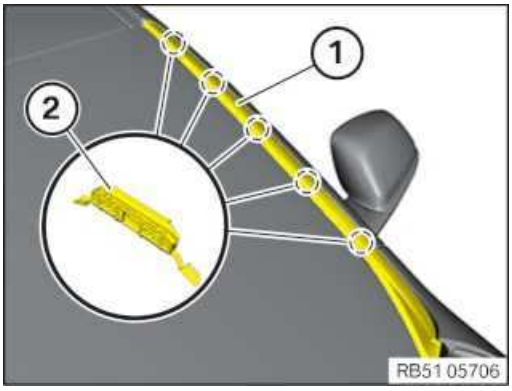
▶ **Remove the gutter strip on the windscreen**

RISK OF DAMAGE

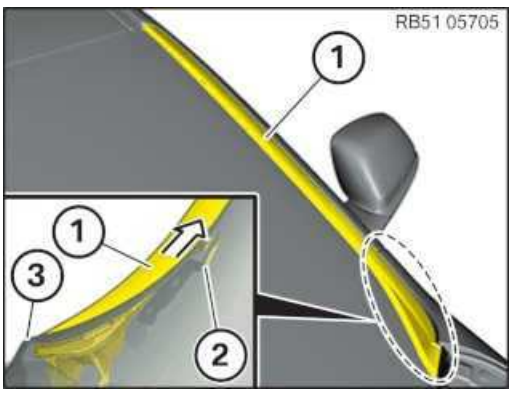
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



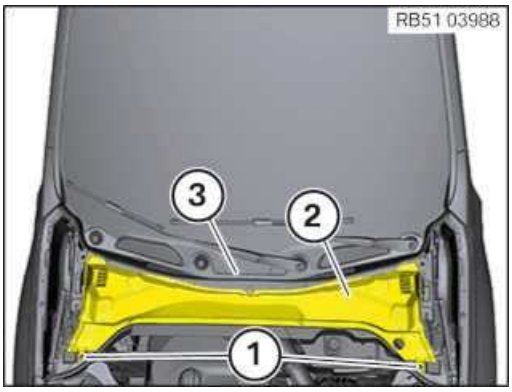
- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.



- Pull out the gutter strip (1) from the guide (2) in direction of arrow and carefully feed out at the side panel (3).

3 – Removing front cowl panel cover

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- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

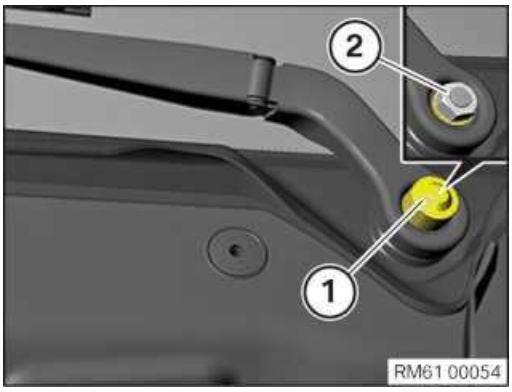
4 – Remove left and right wiper arm

RISK OF DAMAGE

Damage to wiper console

While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do not lift off wiper arm, else the wiper console may break on the predetermined breaking point for the pedestrian protection.



- Pull off the protective cap (1) and release the nut (2) below it.



- Pull off windscreen wiper arm (1)with special tool .

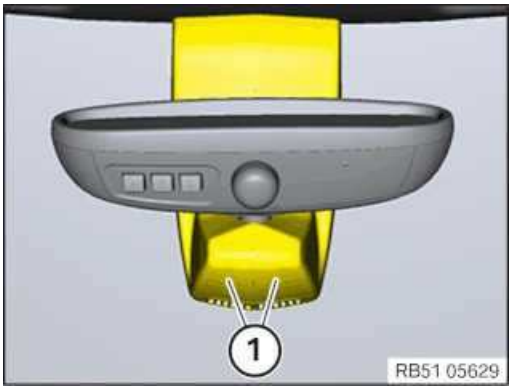
5 – Remove the rear cowl panel



- Pull off the cowl panel cover (1) towards the top, starting from the side and feed out.

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6 – Remove the cover on the inside mirror

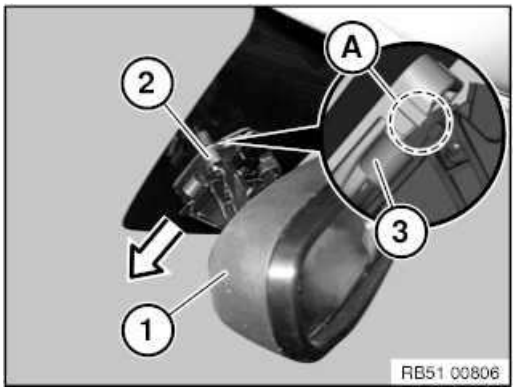


- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

7 – Removing the interior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



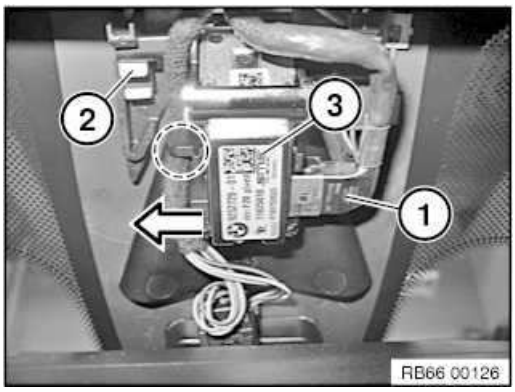
- Make sure that the interior mirror (1) does not bend or twist during removal.

  The interior mirror (1) is held by the clamp (3) and the latch mechanism in this area (A) on the base (2).
- If necessary unlock and disconnect the plug connection on the interior mirror (1).
- Pull off the interior mirror (1) from the mirror socket (2) with a downwards jerk in parallel to the windscreen.

8 – Remove the KAFAS camera

TECHNICAL INFORMATION

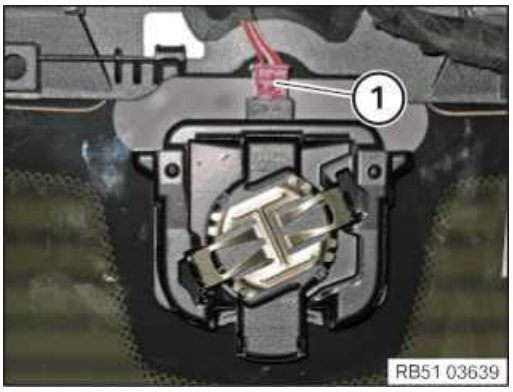
The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.



- Disconnect plug connection (1).
- Unclip cable in marked area.
- Unlock the retaining clamp (2) and remove camera (3) in direction of arrow.

9 – Disconnect the plug connection on the rain-light-solar-condensation sensor

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- Disconnect plug connection (1).

10 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

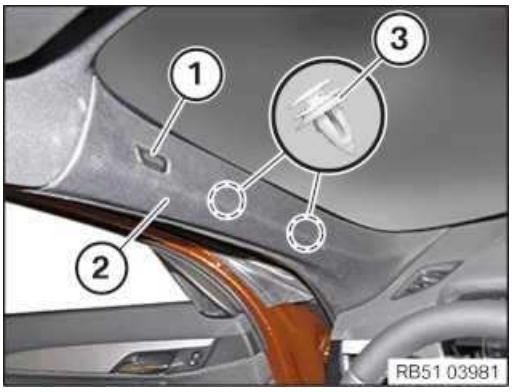
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

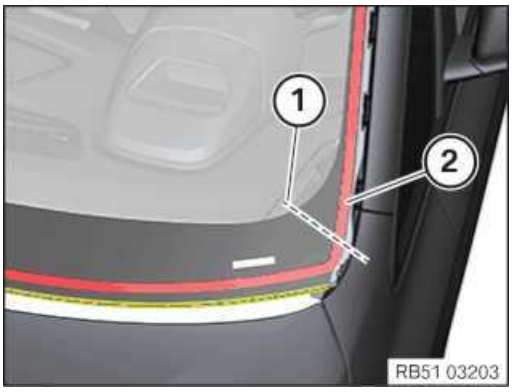
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

11 – Removing the windscreen

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- Tape off body in area of piercing point with fabric adhesive tape.
- Push the thread (1) through the adhesive bead (2) along the line from the inside.
- Cut out the windscreen with spider.

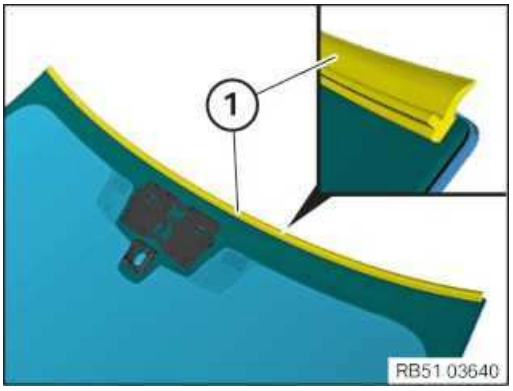
12 – Renew the spacer



- Remove the spacer (arrows) completely.
- Renew the spacer 5 x 5 x 20 mm (arrows).

  Parts: Spacer 5 x 5 x 20 mm
- Bond the spacer (arrows) centrally on the embossed marks.

13 – Checking cover on windscreen



Check

- Check cover (1) on the windscreen for damage.

Result

» The cover (1) on the windscreen is damaged.

Measure

- Renew the cover (1) on the windscreen.

  Parts: Cover

▸ **Renew the cover on the windscreen**

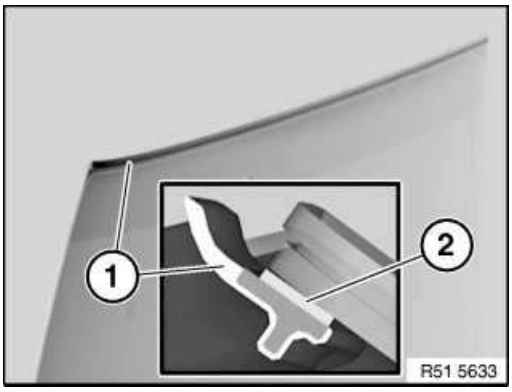
▹ **Removing the cover on the windscreen**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape

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- Pull off the rubber frame (1) from the windscreen using the adhesive tape (2).

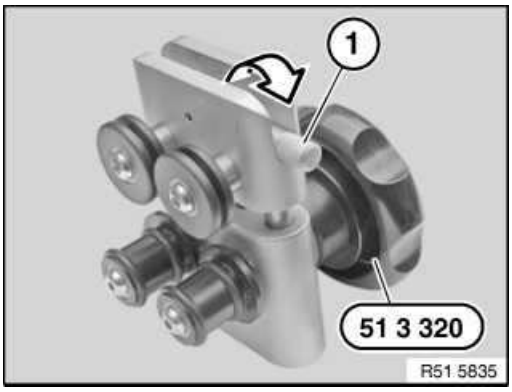
◁

▷ **Installing the cover on the windscreen**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



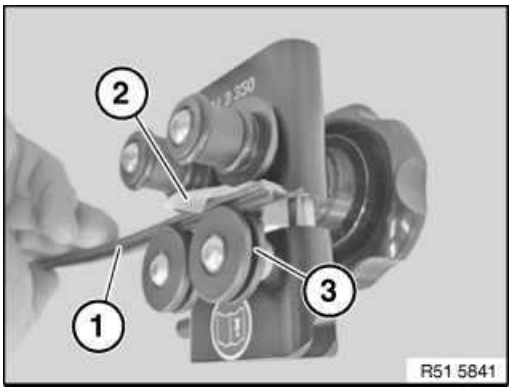
- Clean the adhesive area of the windscreen and pre-treat with Sika activator -205.

  The Sika activator -205 must not get onto adhesive area of adhesive bead.

Adhesive

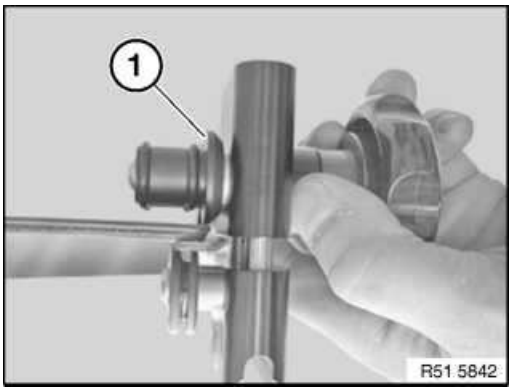
Aktivator -205	250 ml, Bottle	83190030155

- Adhere to the air drying time of 1 min at least.
- Reposition the lever (1) and open the special tool .



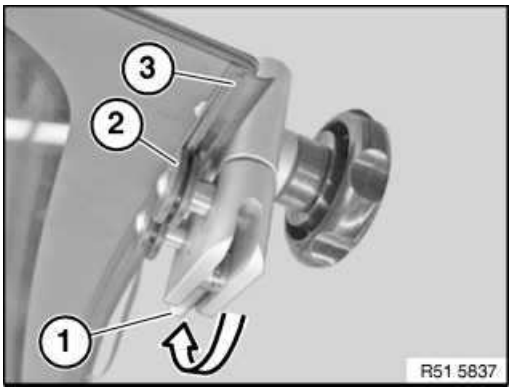
- Pull off protective film (2) in stages from adhesive tape.
- Renew cover (1).

  Parts: Cover
- Insert the cover (1) into the guide pulleys (3).

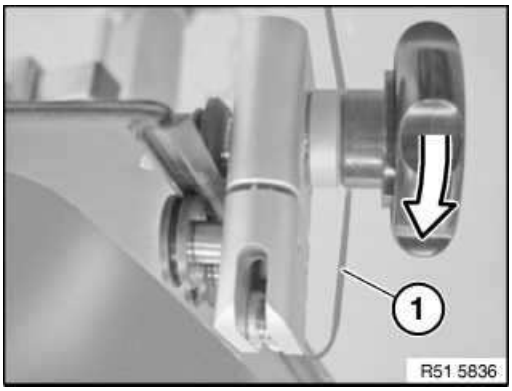


- Place the special tool with the pressure rollers (1) up against the window edge.
- Align the cover on the outer edge of the window glass.
- Fit the cover and visually check for perfect fit.

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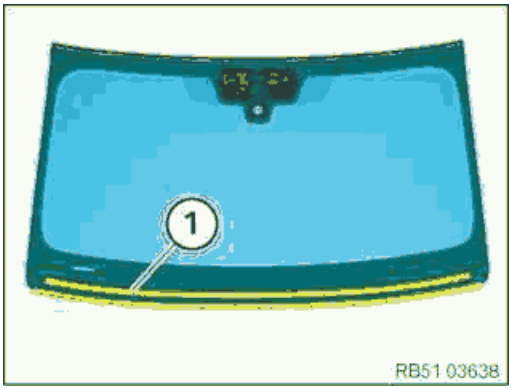
- Reposition the lever (1) in direction of arrow and close the special tool.
- Ensure the cover (3) fits correctly into the guide pulleys (2).



- Continue to pull off protective film (1) in stages from adhesive tape.
- Run the special tool with the handwheel over the entire upper edge of the window glass.

◁

14 – Checking the sound insulation for the cowl panel



Check

- Check sound insulation (1) for the cowl panel for damage.

Result

» Sound insulation (1) for the cowl panel is damaged.

Measure

- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation

▶ **Renew sound insulation for the cowl panel**

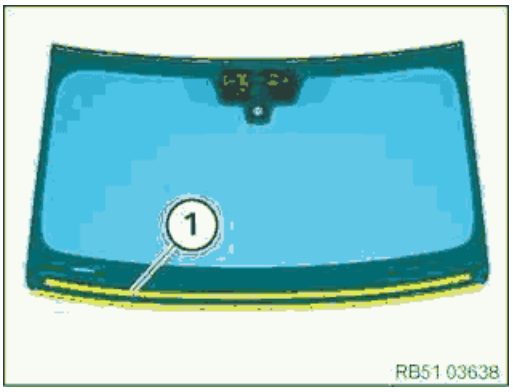
▷ **Removing the sound insulation for the cowl panel**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape

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- Remove the sound insulation (1) for the cowl panel from the windscreen.

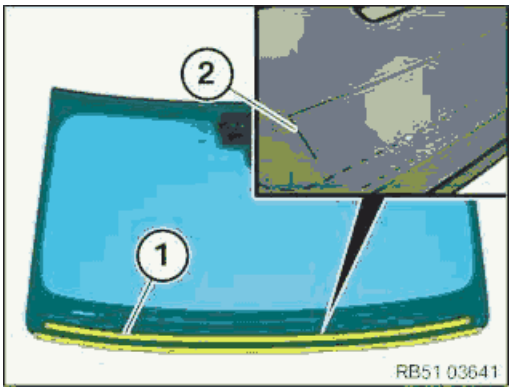
◁

▷ **Mount the sound insulation for the cowl panel**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Clean the adhesive area for the sound insulation (1) for the cowl panel.
- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation
- Bond the sound insulation (1) for the cowl panel along the mark (2) to the windscreen.

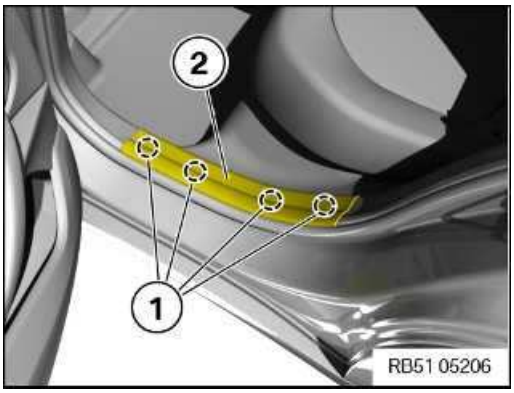
◁

15 – Remove the door sill cover strip on the rear left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Remove rear entrance cover strip**



- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

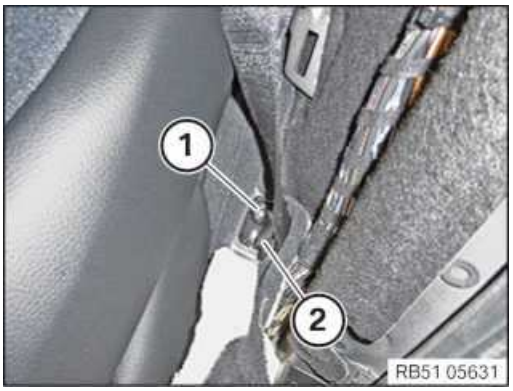
16 – Removing the bottom left and right C-pillar trim panels

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NOTICE

Description is for left component only. Procedure on the right side is identical.

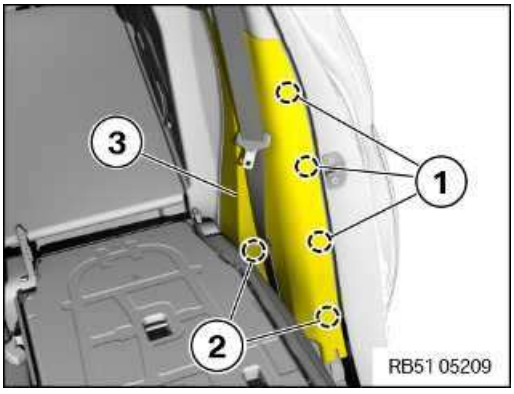
▶ **Remove the bottom C-pillar trim panel**



- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

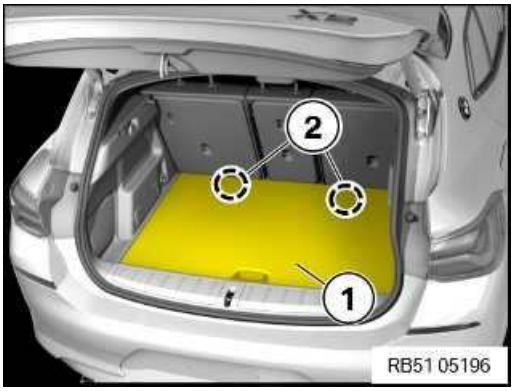


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

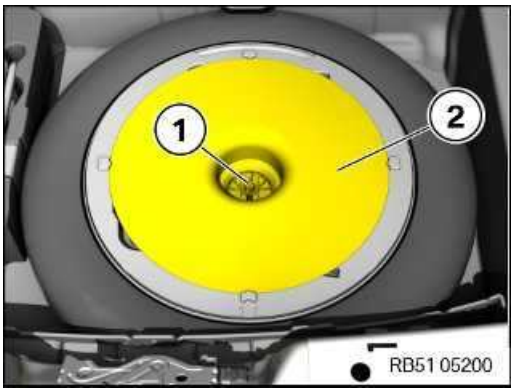
17 – Removing the luggage compartment removable panel



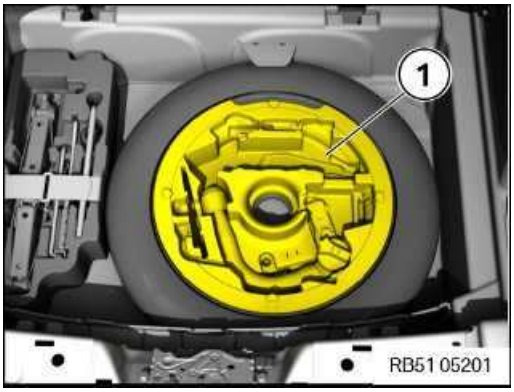
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

18 – Removing the compact spare wheel

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- Loosen screw (1).
- Remove the cover (2).

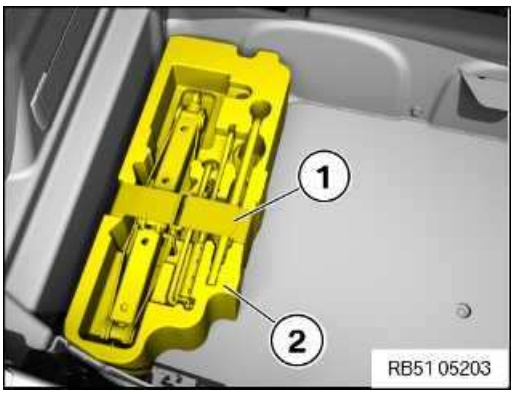


- Remove the oddments tray from the emergency wheel (1).



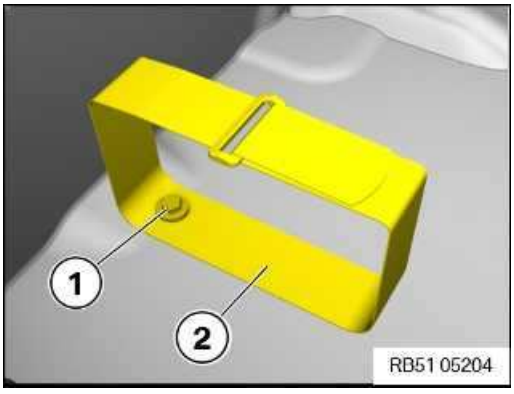
- Remove the emergency wheel (1).

19 – Remove the tool kit



- Open the hook and loop tape (1).
- Remove the tool kit (2).

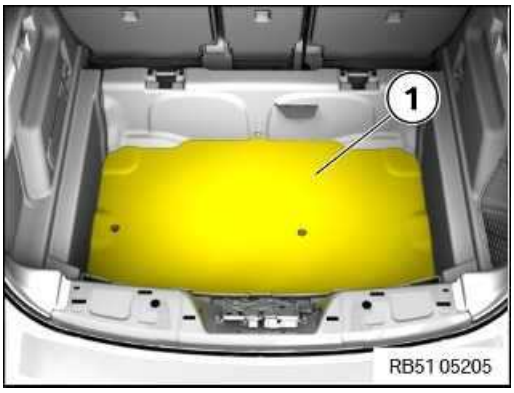
20 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

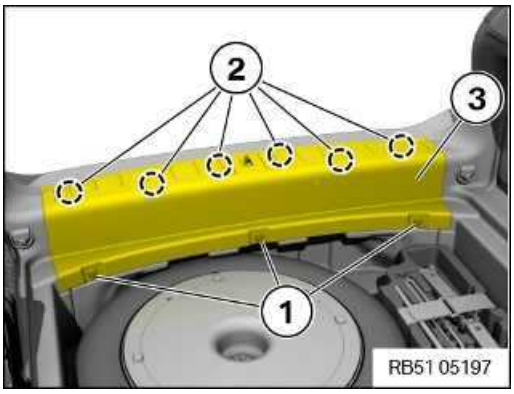
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21 – Removing the luggage compartment floor trim panel



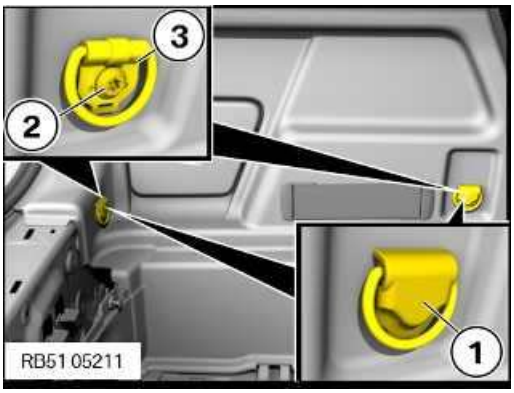
- Remove the luggage compartment floor trim panel (1) upwards.

22 – Removing the loading edge trim

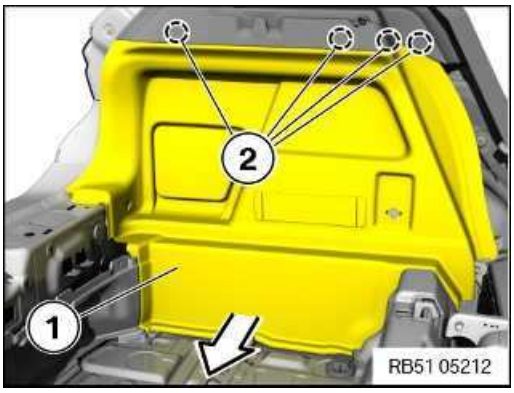


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

23 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



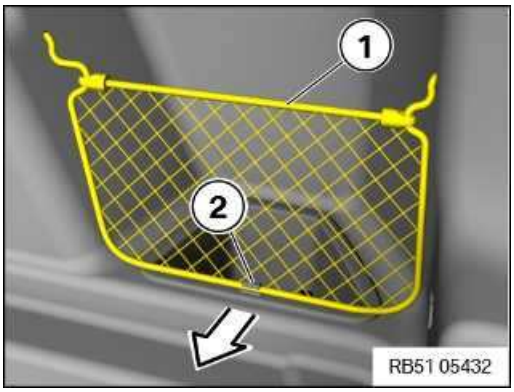
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

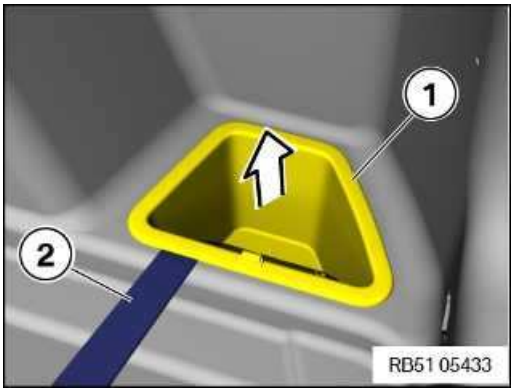
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

24 – Removing right luggage compartment wheel arch trim panel

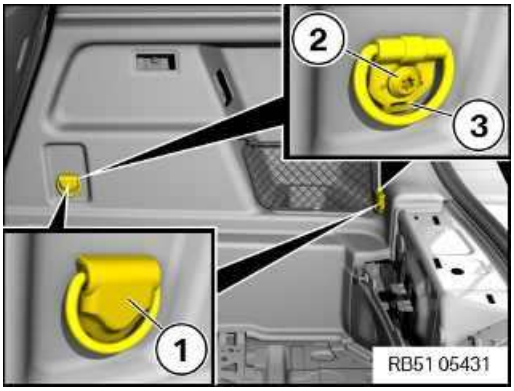
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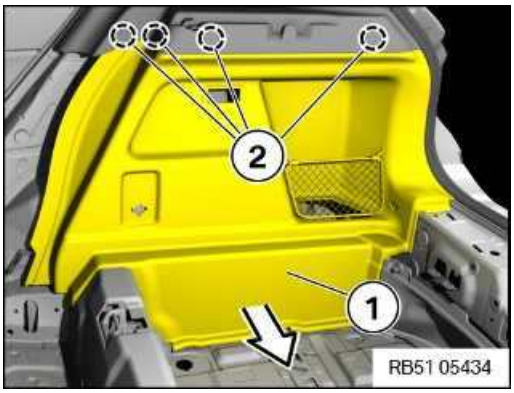
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

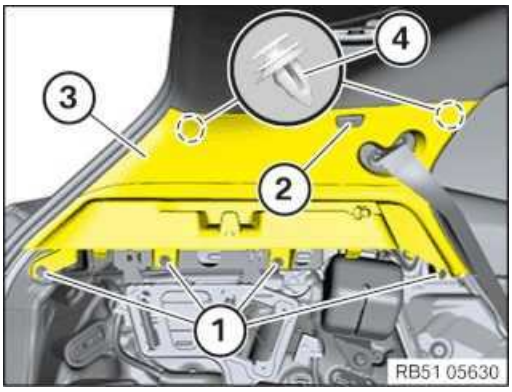
25 – Remove the trim panel of the luggage compartment capping on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim panel of the luggage compartment capping**

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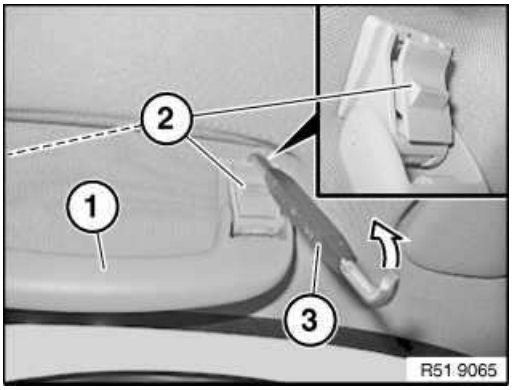
- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

26 – Removing all grab handles

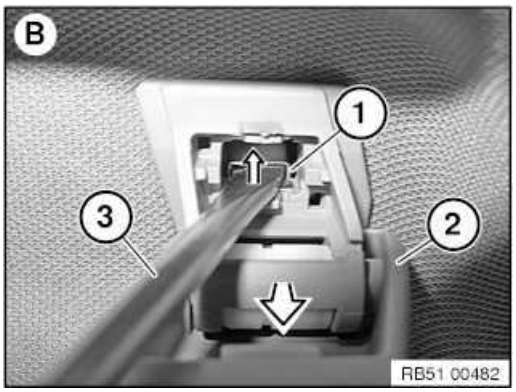
NOTICE

The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**



- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

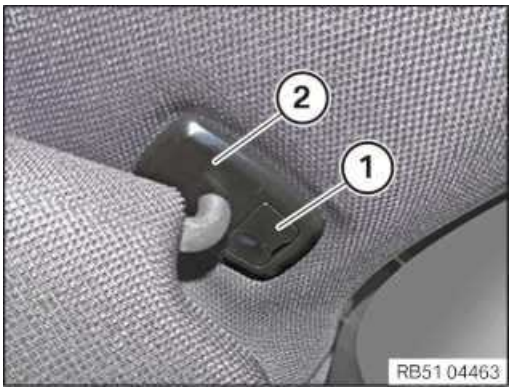
27 – Remove both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove sun visor**

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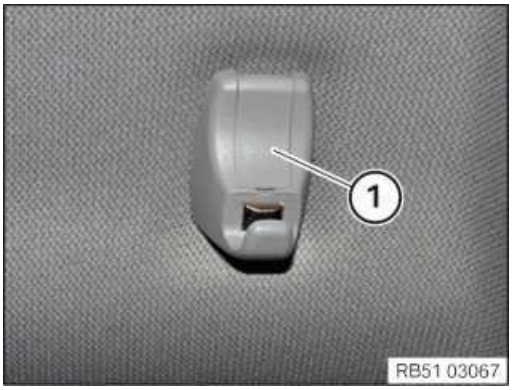
- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

28 – Removing counter supports for sun visor on left and right

NOTICE

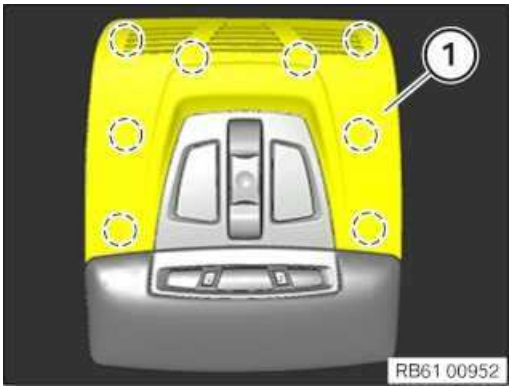
Description is for left component only. Procedure on the right side is identical.

▶ **Remove the counter support for the sun visor**

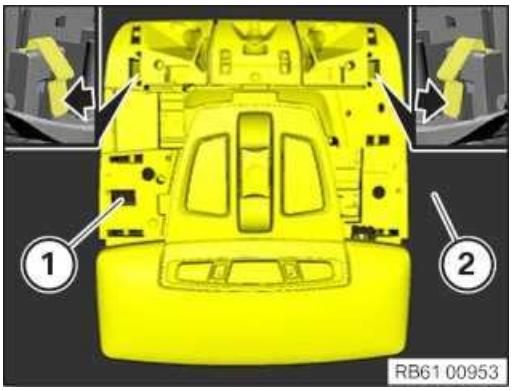


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

29 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

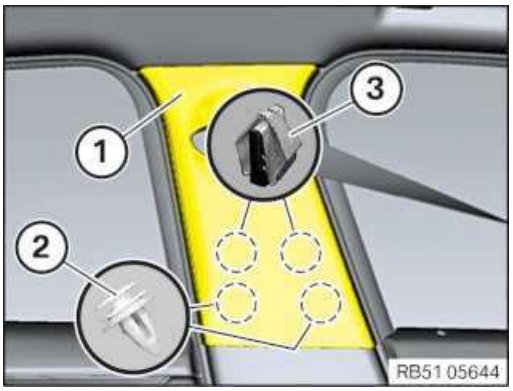
30 – Removing the B-pillar trim panels at top left and right

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NOTICE

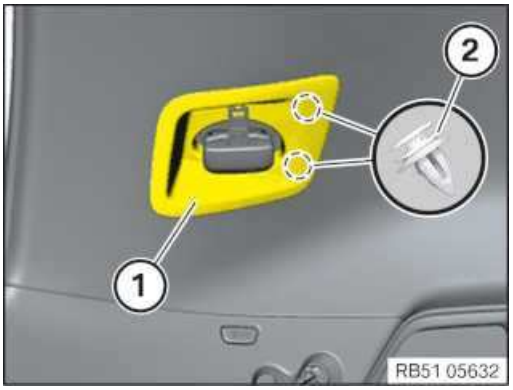
Description is for left component only. Procedure on the right side is identical.

▶ **Partially removing upper B-pillar trim panel**



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

31 – Remove the belt feed trim



- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

MAIN WORK

32 – Remove headlining

Prerequisite

The front seats have been fully adjusted towards the bottom.

The front seat backrests have been fully adjusted towards the rear.

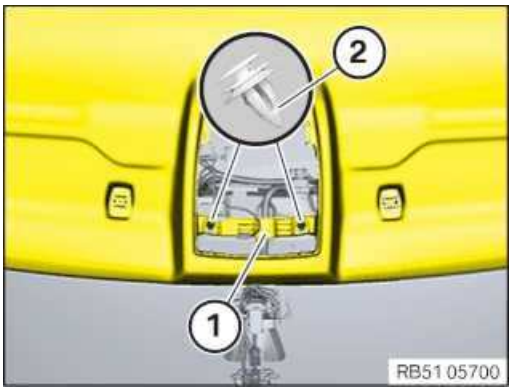
RISK OF DAMAGE

Fold the headlining.

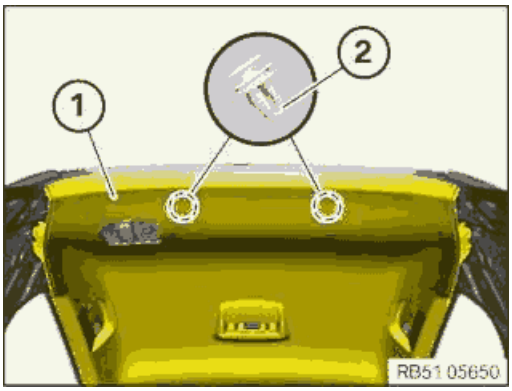
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

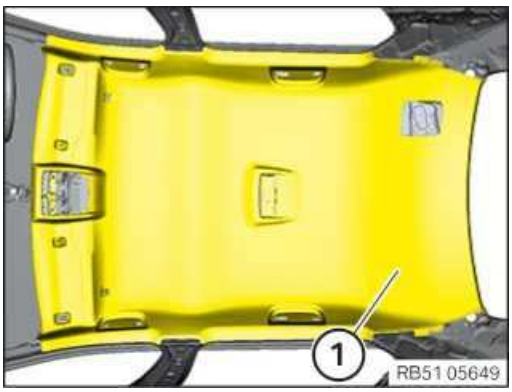
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- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).



- Carefully guide out the headlining (1) at the respective edge protection and remove it from the vehicle through the windscreen opening.

33 – Fit the roof lining

Prerequisite

The front seats have been fully adjusted towards the bottom.

The front seat backrests have been fully adjusted towards the rear.

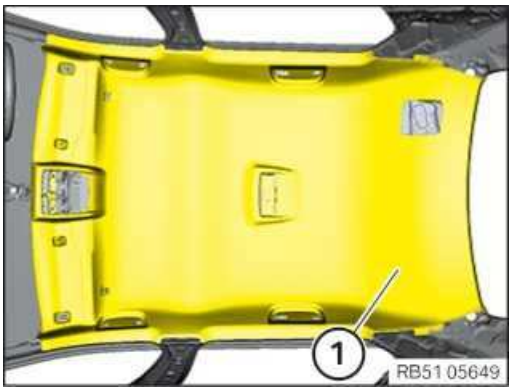
RISK OF DAMAGE

Fold the headlining.

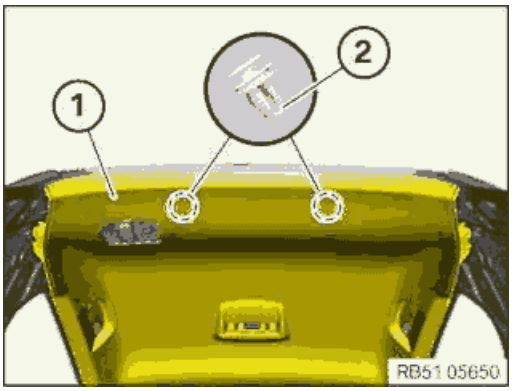
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

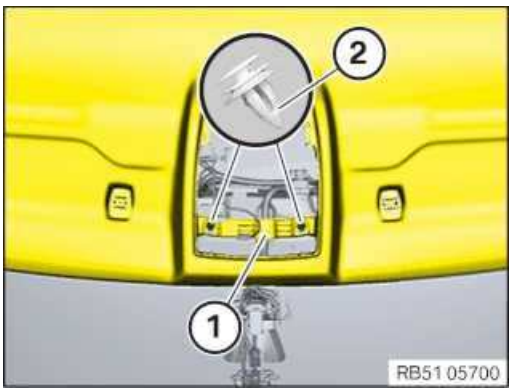
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- Insert the headlining (1) through the windscreen opening into the vehicle and carefully thread it onto the respective edge protection.



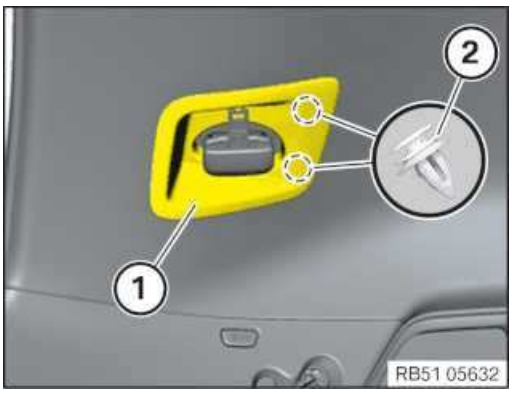
- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

POSTPROCESSES

34 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

35 – Installing the top left and right B-pillar trim panels

NOTICE

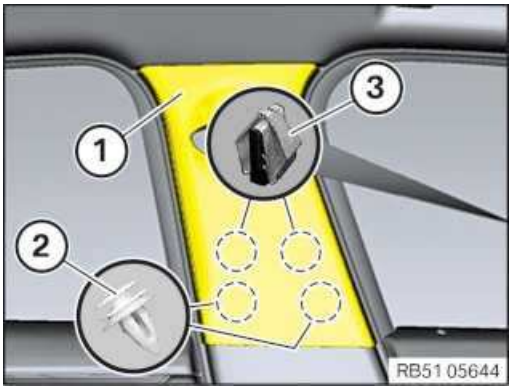
Description is for left component only. Procedure on the right side is identical.

▸ **Partially installing upper B-pillar trim panel**

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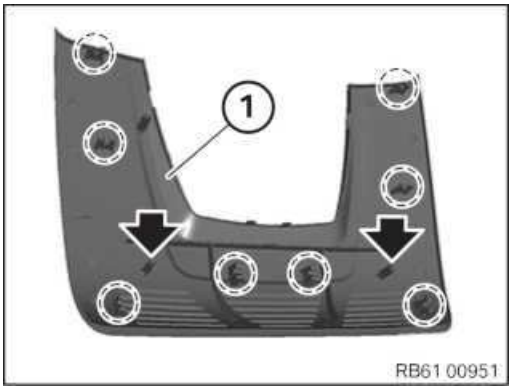
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

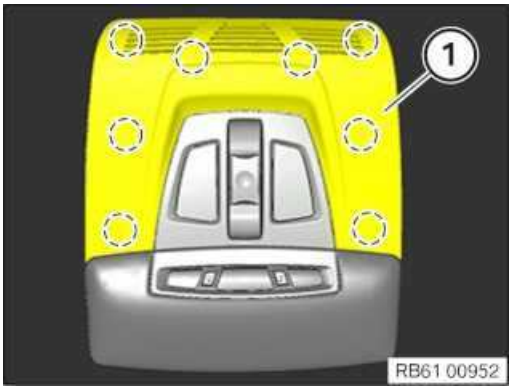


- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

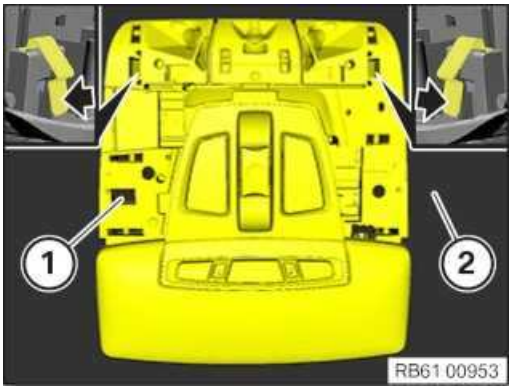
36 – Install the roof function centre



- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.



NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

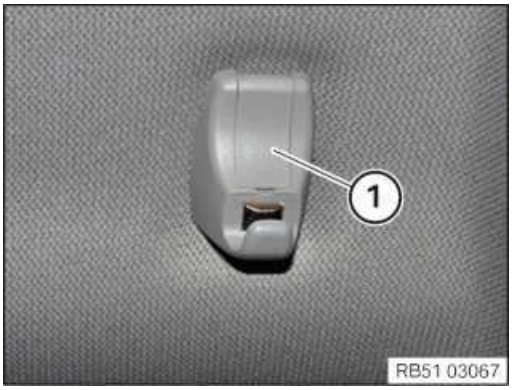
- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

37 – Install the counter supports for the sun visor on left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

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▸ **Install the counter support for the sun visor**

- Install the counter support.
- Tighten screw and close the cover (1).

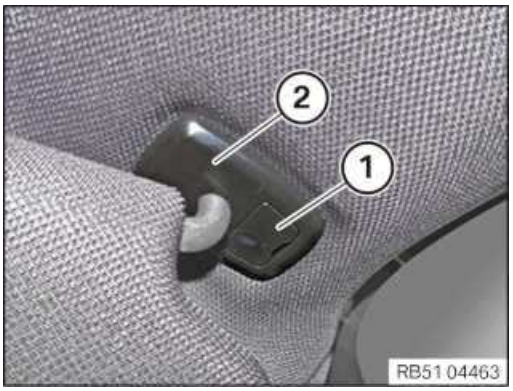
Counter support on body

Screw		Tightening torque	2,5 Nm

38 – Install both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.



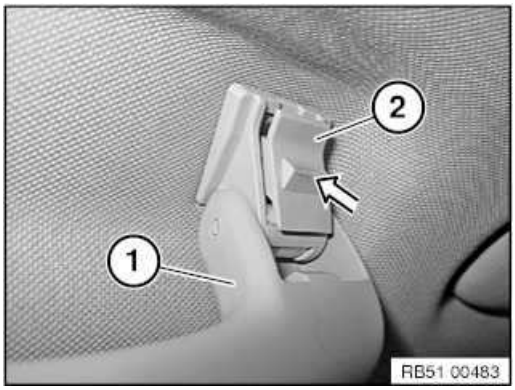
▸ **Install the sun visor**

- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

39 – Installing all grab handles

NOTICE

The description is for one component only. The procedure is identical for all further components.



▸ **Installing the grab handle**

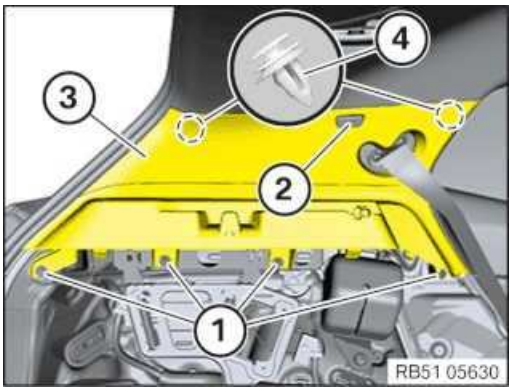
- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

40 – Install the trim panel for left and right the luggage compartment capping

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NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the trim panel for the luggage compartment capping**

- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

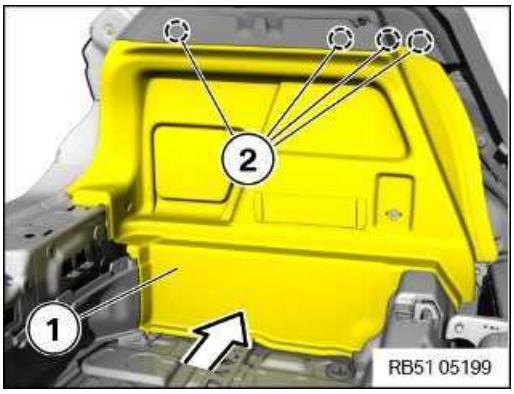
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

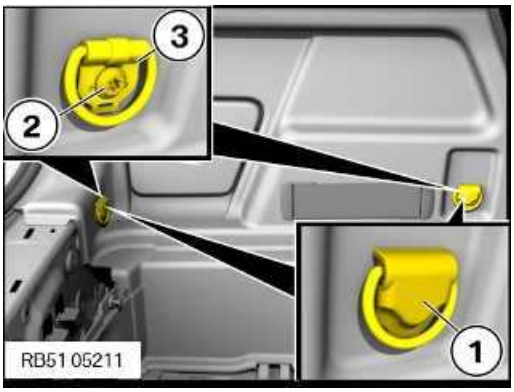
41 – Install luggage compartment wheel arch trim panel at left



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.



- Position the lashing eyes (3) and tighten the screws (2).

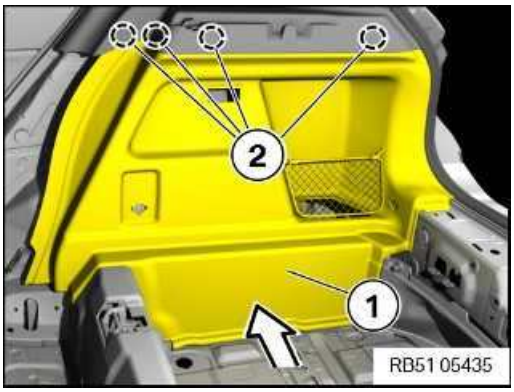
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

42 – Installing the luggage compartment wheel arch trim panel on the right

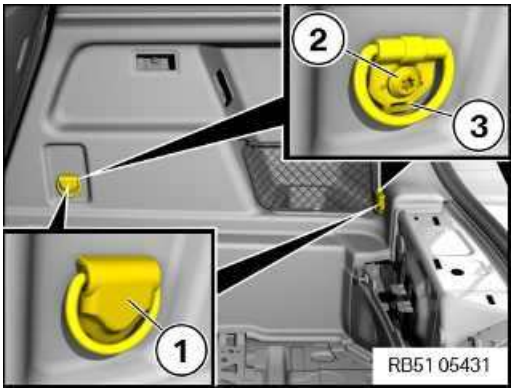
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NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

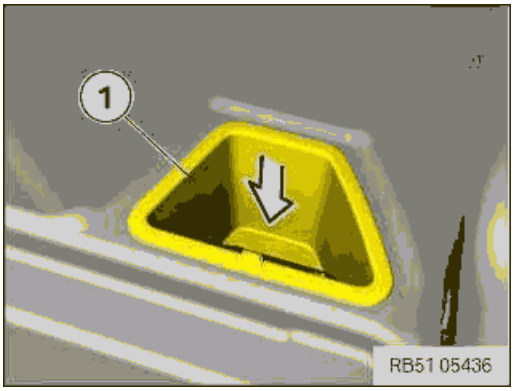


- Position the lashing eyes (3) and tighten the screws (2).

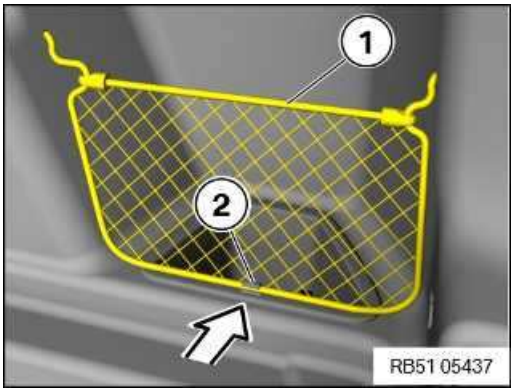
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

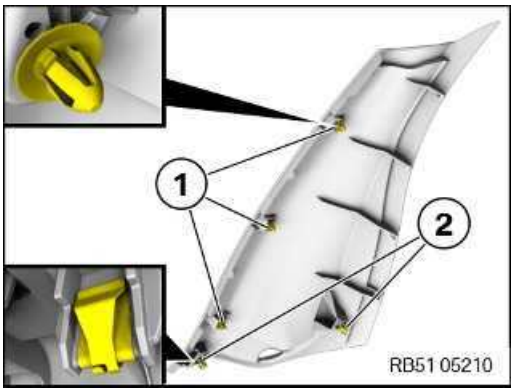
43 – Install C-pillar trim panel at bottom left and right

NOTICE

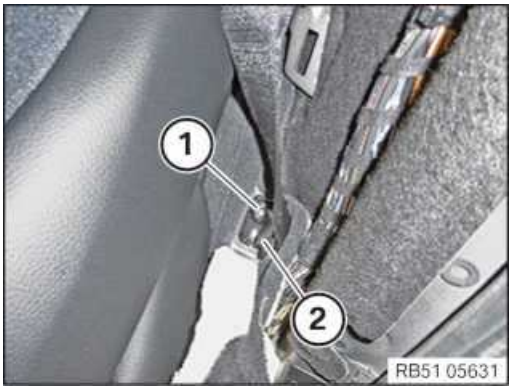
Description is for left component only. Procedure on the right side is identical.

▸ **Install the bottom C-pillar trim panel**

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- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

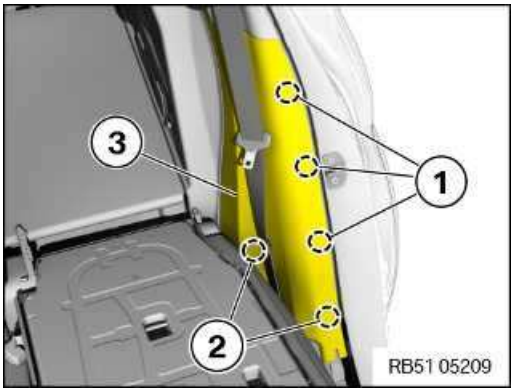


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

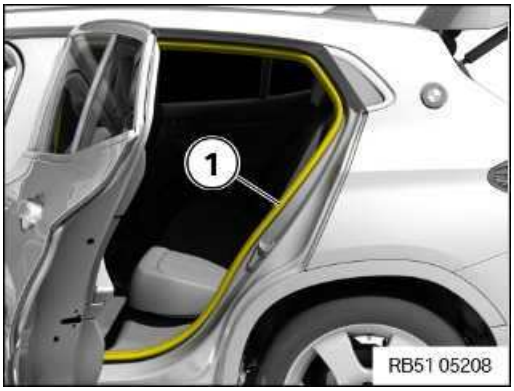
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

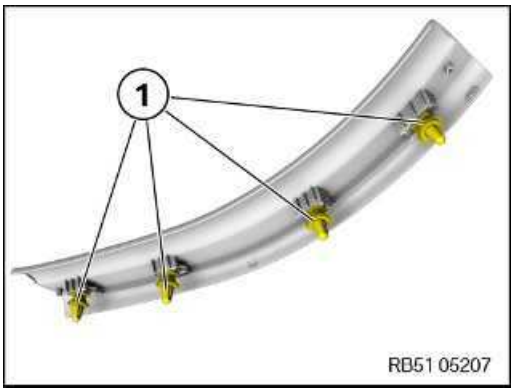
44 – Install the door sill cover strip on the rear left and right

NOTICE

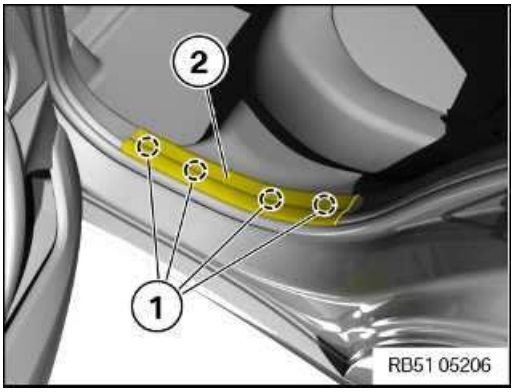
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the rear door sill cover strip**

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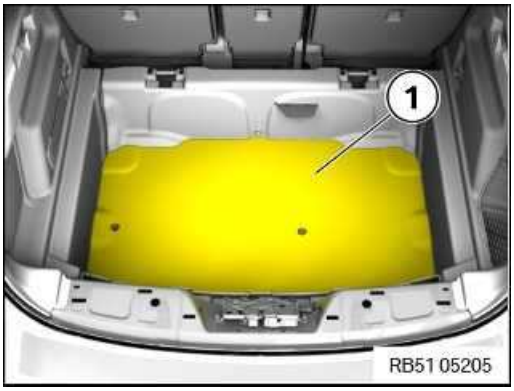


- Check the clips (1) for damage and renew where required.



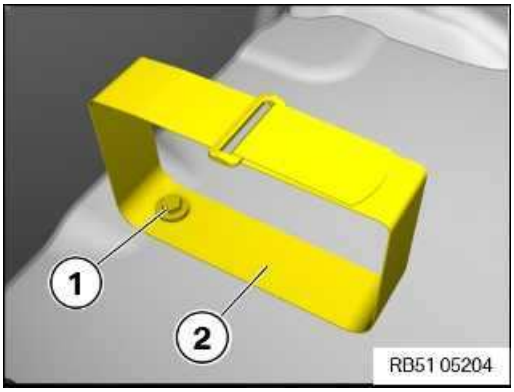
- Clip in the door sill cover strip (2) with the clips (1).

45 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

46 – Inserting the Velcro fastener for the toolkit



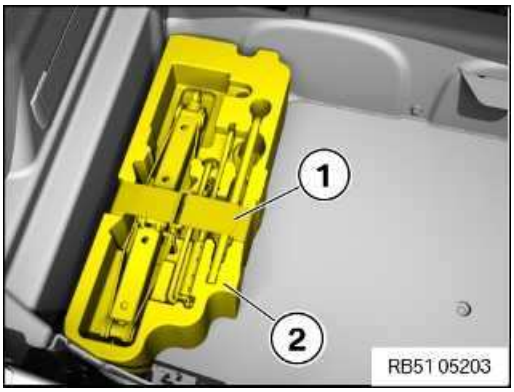
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

47 – Install the tool kit

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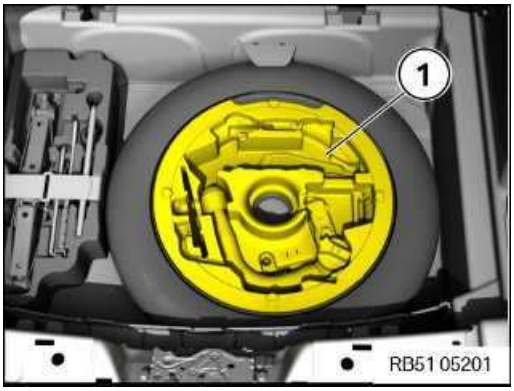


- Install the tool kit (2).
- Close the hook and loop tape (1).

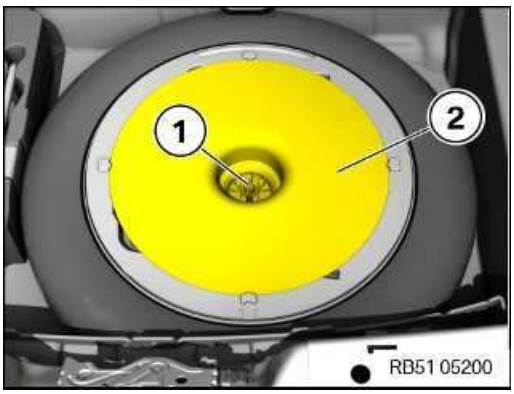
48 – Install the emergency wheel



- Insert compact spare wheel(1).

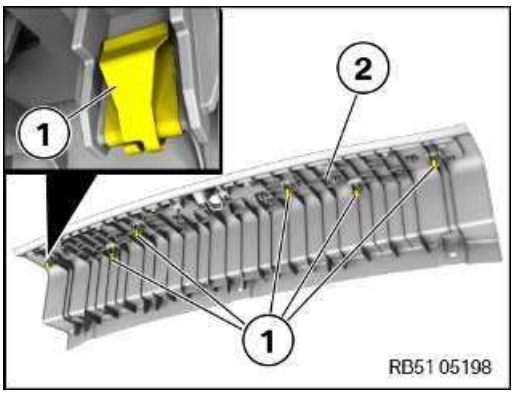


- Insert oddments tray into the compact spare wheel (1).



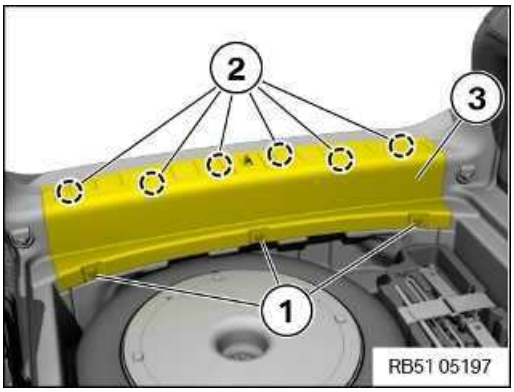
- Insert the lid (2).
- Hand-tighten the bolt (1).

49 – Installing loading edge trim



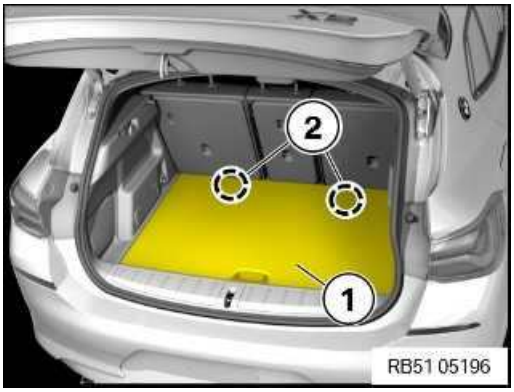
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.

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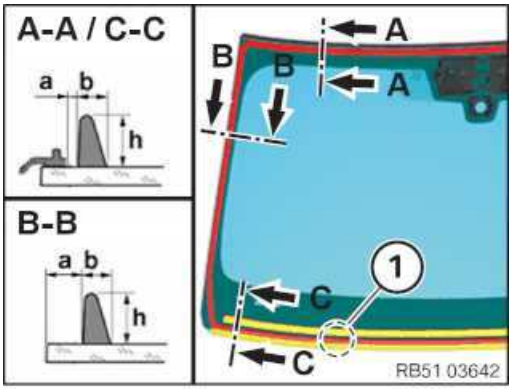
- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

50 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

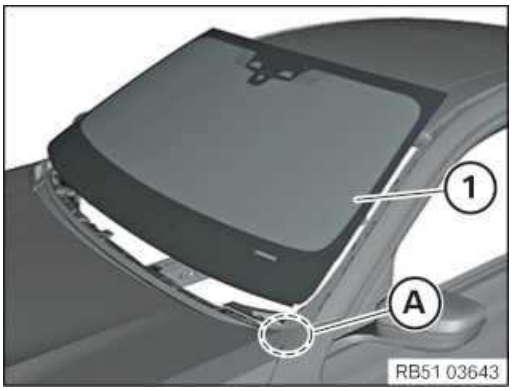
51 – Install windscreen.



- Prepare the glue cartridge with the standard nozzle C.
- Apply bead joint in area (1).
- Apply adhesive bead within the mark on the windscreen.

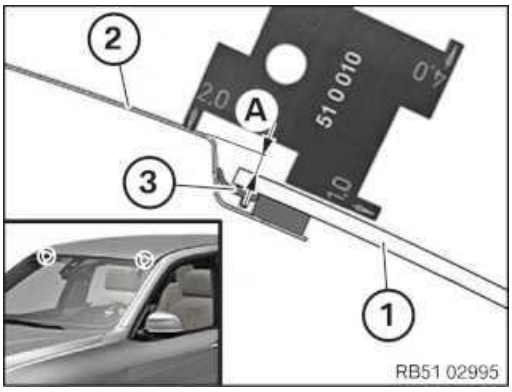
Cut	A - A	B - B	C - C
a = Position of the adhesive bead	2 ±2 mm	3 ±2 mm	2 ±2 mm
b = Width of adhesive bead	8 ±1 mm	8 ±1 mm	8 ±1 mm
h = Height of adhesive bead	12 ±1 mm	12 ±1 mm	12 ±1 mm

- Adhere to the geometry of the adhesive bead to make sure that one glue cartridge is sufficient for the complete windscreen.



- Carefully perform the following operations on the windscreen (1) with suction lifter:
  - running it in parallel to the A-pillar
  - feed it in the area (A) on left and right below the side panel
  - Position at top
  - Align sides evenly
  - Press upwards until sealing rests evenly on roof
  - press evenly all around
  - fix with adhesive tape on the roof

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- Measure short length (A) of the windscreen (1) to the roof outer skin (2) with special tool **0 495 259 (51 0 010)**.
- Adjust short length (A).

Gap dimension of windscreen to the body

Short length A	2,5 mm ... 4,5 mm

- Position the windscreen (1) in such a way that the rubber frame (3) lies even and parallel to the roof outer skin (2).

52 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

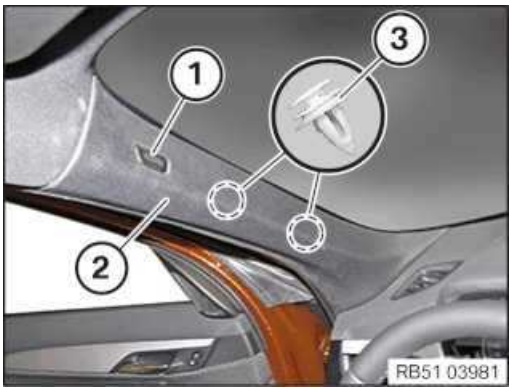
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

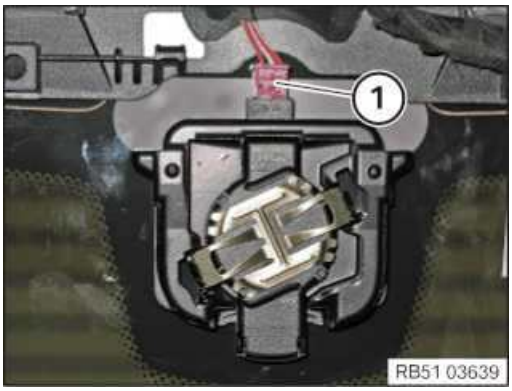
  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

53 – Connect connector to rain-light-solar-condensation sensor

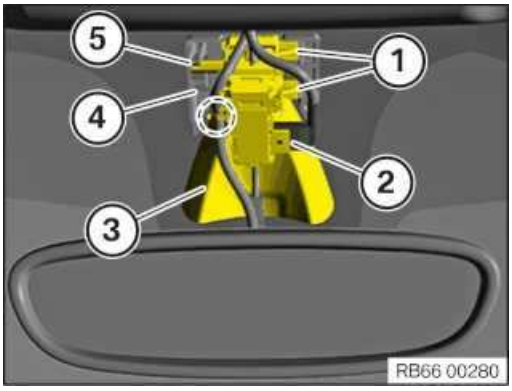


- Connect connector (1).

54 – Install the KAFAS camera

TECHNICAL INFORMATION

The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.



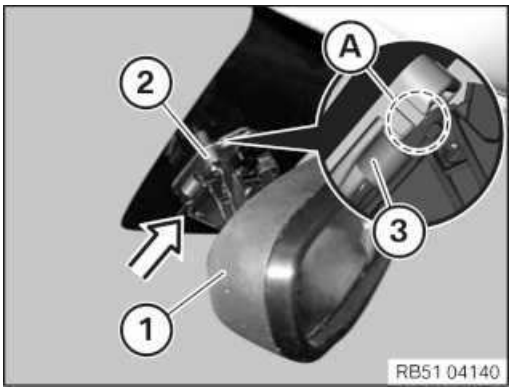
- Correctly feed in the KAFAS camera (3) with the guides (1) on the holder (4).
- Engage the latch mechanism (5).
- Connect connector (2).
- Attach cable in the marked area.

55 – Installing the interior mirror

TECHNICAL INFORMATION

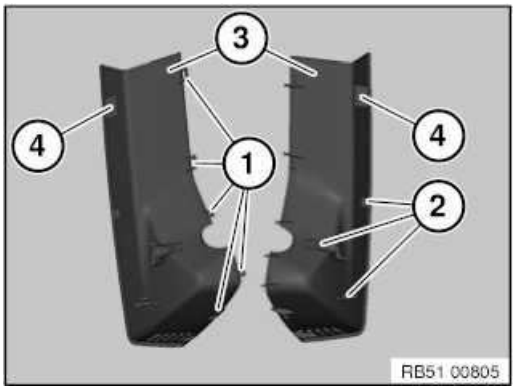
Carry out the work at temperatures between 18 °C and 23 °C only.

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- Check the clamp (3) on both sides of the interior mirror (1) for damage and renew as needed.
- If necessary, connect the connector on the interior mirror (1).
- Slide the interior mirror (1) parallel to the windscreen in direction of arrow into the base (2) and lock correctly in area (A).

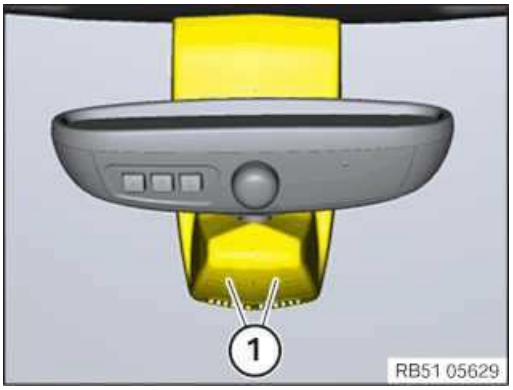
56 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



- Install covers on the interior mirror (1) clip together.

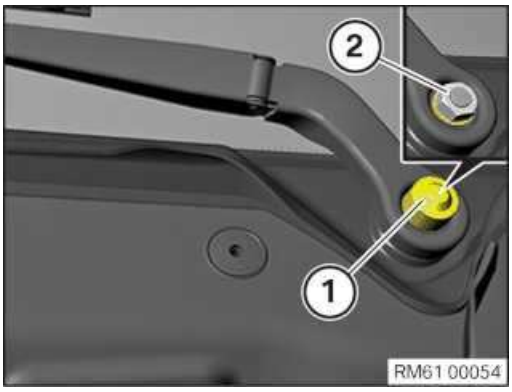
57 – Install the rear cowl panel



- Insert the cowl panel cover (1) and press it into the latch mechanism on the windscreen starting at the side.

58 – Install left and right wiper arm

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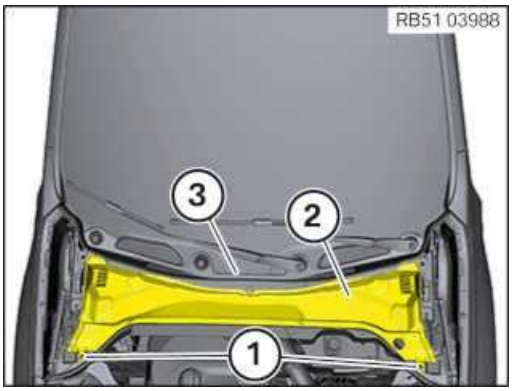
- Join wiper arm and tighten with nut (2).

Windscreen wiper arm

Combination hexagon nut		Tightening torque	35 Nm

- Join the protective cap (1).

59 – Installing front cowl panel cover



- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

60 – Install the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the gutter strip on the windscreen**

RISK OF DAMAGE

Scratches.

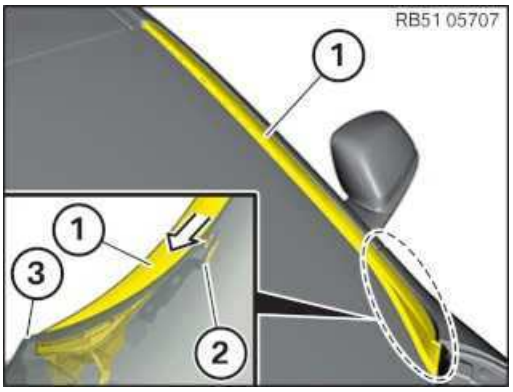
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

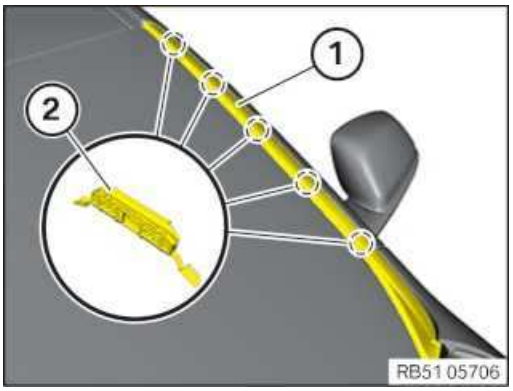
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.

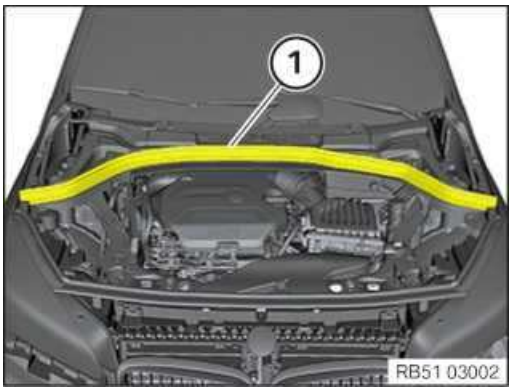


- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

61 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

62 – Calibrate KAFAS camera

TECHNICAL INFORMATION

The calibration process of the KAFAS camera is not complete until the vehicle drives in traffic. Tell the customer that some assistance systems are temporarily unavailable after vehicle pick-up.

- Perform camera calibration using diagnosis system.

  Under Service Functions menu:

  - Driver assistance
  - Camera-based driver assistance systems
  - Calibration of camera-based driver support systems

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Additional Information

Overview of Tightening Torques

Counter support on body

Used in step 37

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping

Used in step 40

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body

Used in step 40

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment

Used in step 41 42

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body

Used in step 43

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body

Used in step 46

Bolt M6 x 20		Tightening torque	4 Nm

A-pillar trim panel to body

Used in step 52

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Windscreen wiper arm

Used in step 58

Combination hexagon nut		Tightening torque	35 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge

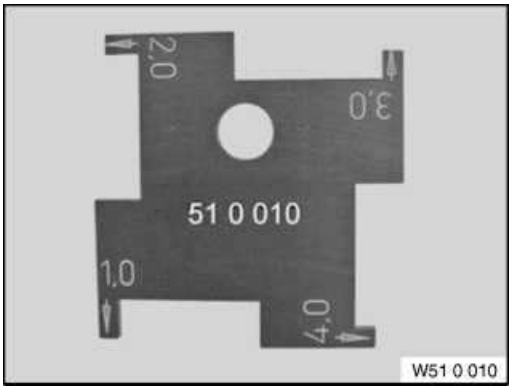


Common Used in step 29 30

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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0 495 259 (51 0 010) Gauge



Common	Used in step 51
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)
Included in the tool or work	
Storage location	B2
Replaced by	
In connection with	
SI-Number	01 10 05 (189)

Overview Technical Data

Gap dimension of windscreen to the body	Used in step 51
Short length A	2,5 mm ... 4,5 mm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	10 52
51 00 ... Notes on component bonding using adhesive tape	13 14
51 31 ... General procedure for the disassembly and installation of bonded window glass	

Repair instructions	Used in step
61 35 ... Notes on ESD protection (Electro Static Discharge)	
51 31 ... Removing windows with a "Spider"	

Parts

Parts required

Designation	Used in step

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51 44 011 Removing and installing/replacing the headlining (with equipment specification with panorama sunroof)

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

TECHNICAL INFORMATION

Perform window removal using the "spider".

For additional information see: 51 31 ... Window glass removal using "spider"

TECHNICAL INFORMATION

The following procedure forms the basis for these repair instructions and must be observed without fail.

For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

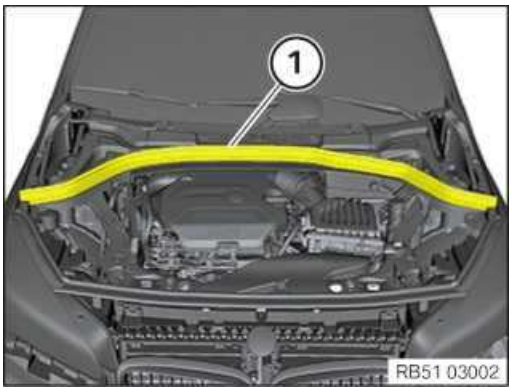
PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

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- Pull off rear bonnet seal (1) towards the top and remove.

2 – Remove the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

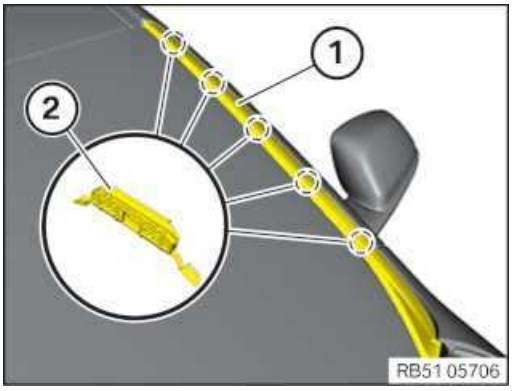
▶ **Remove the gutter strip on the windscreen**

RISK OF DAMAGE

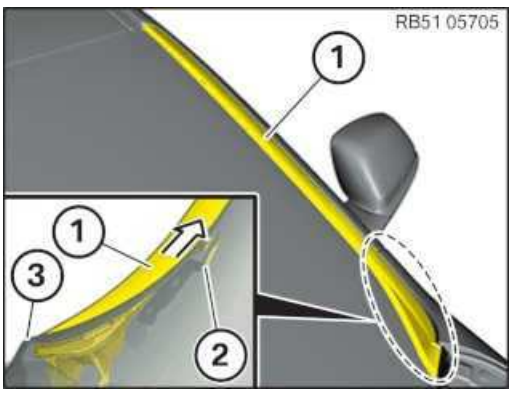
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



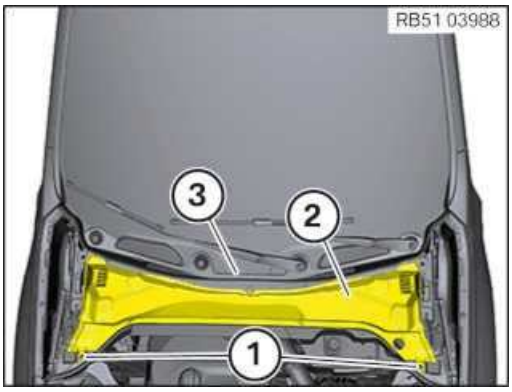
- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.



- Pull out the gutter strip (1) from the guide (2) in direction of arrow and carefully feed out at the side panel (3).

3 – Removing front cowl panel cover

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- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

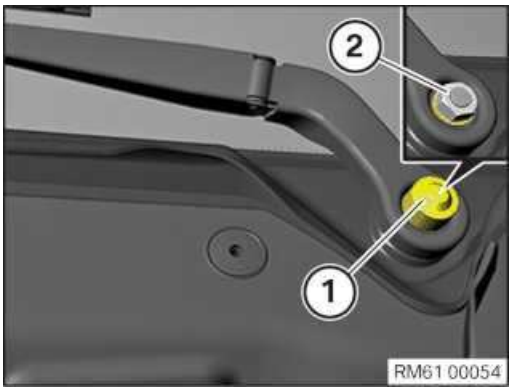
4 – Remove left and right wiper arm

RISK OF DAMAGE

Damage to wiper console

While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do not lift off wiper arm, else the wiper console may break on the predetermined breaking point for the pedestrian protection.



- Pull off the protective cap (1) and release the nut (2) below it.



- Pull off windscreen wiper arm (1)with special tool .

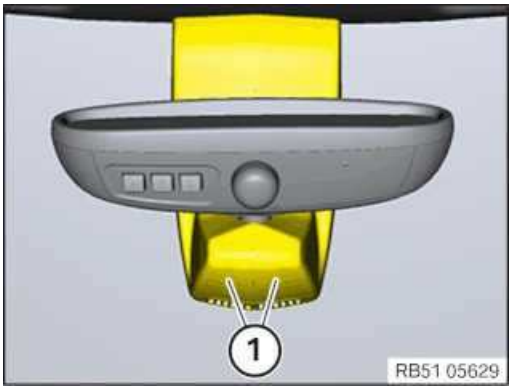
5 – Remove the rear cowl panel



- Pull off the cowl panel cover (1) towards the top, starting from the side and feed out.

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6 – Remove the cover on the inside mirror

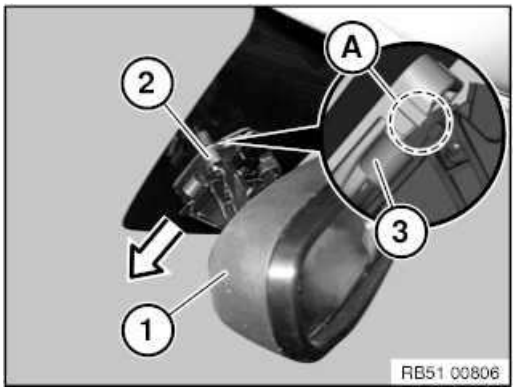


- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

7 – Removing the interior mirror

TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



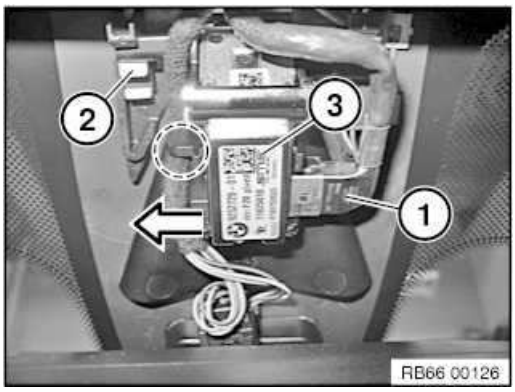
- Make sure that the interior mirror (1) does not bend or twist during removal.

  The interior mirror (1) is held by the clamp (3) and the latch mechanism in this area (A) on the base (2).
- If necessary unlock and disconnect the plug connection on the interior mirror (1).
- Pull off the interior mirror (1) from the mirror socket (2) with a downwards jerk in parallel to the windscreen.

8 – Remove the KAFAS camera

TECHNICAL INFORMATION

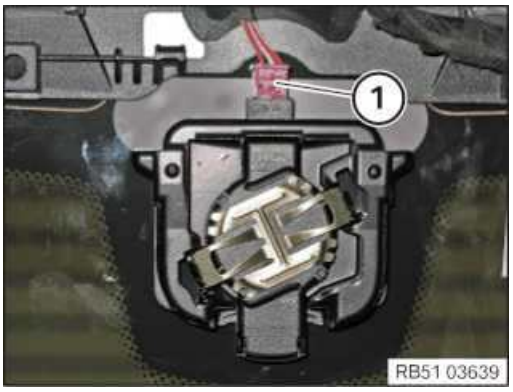
The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.



- Disconnect plug connection (1).
- Unclip cable in marked area.
- Unlock the retaining clamp (2) and remove camera (3) in direction of arrow.

9 – Disconnect the plug connection on the rain-light-solar-condensation sensor

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- Disconnect plug connection (1).

10 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

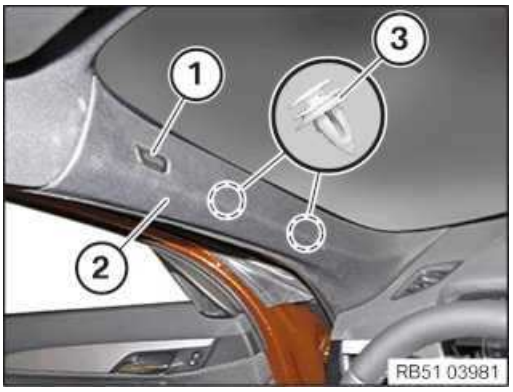
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

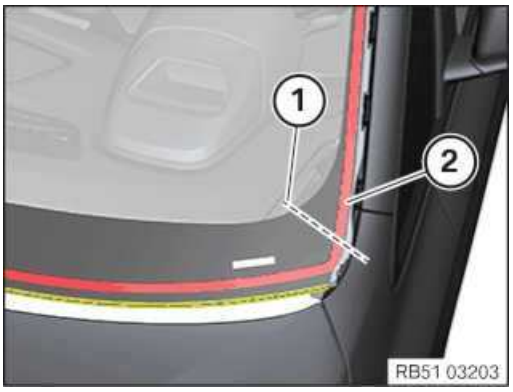
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

11 – Removing the windscreen

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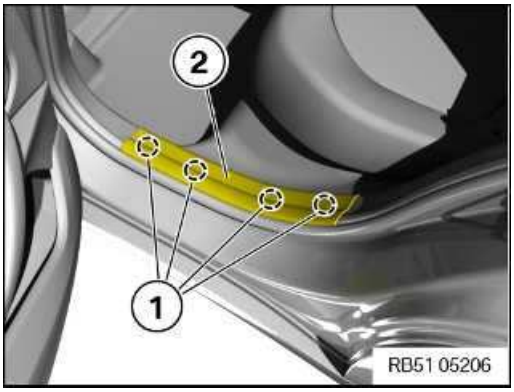
- Tape off body in area of piercing point with fabric adhesive tape.
- Push the thread (1) through the adhesive bead (2) along the line from the inside.
- Cut out the windscreen with spider.

12 – Remove the door sill cover strip on the rear left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Remove rear entrance cover strip**



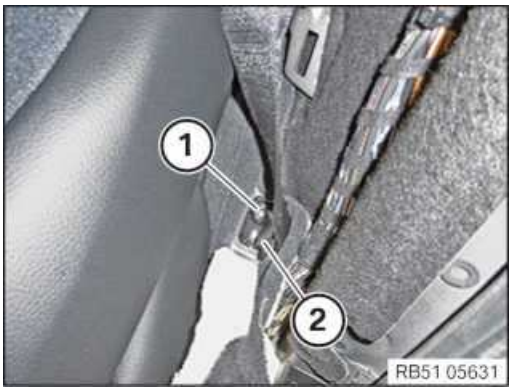
- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

13 – Removing the bottom left and right C-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Remove the bottom C-pillar trim panel**

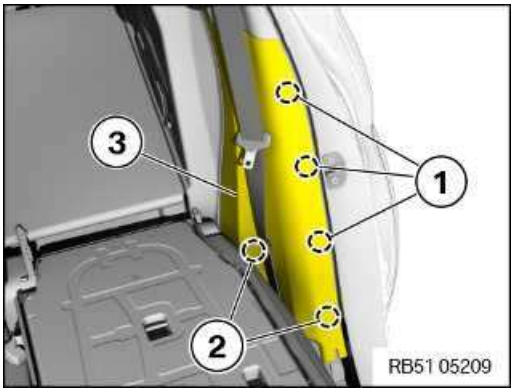


- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

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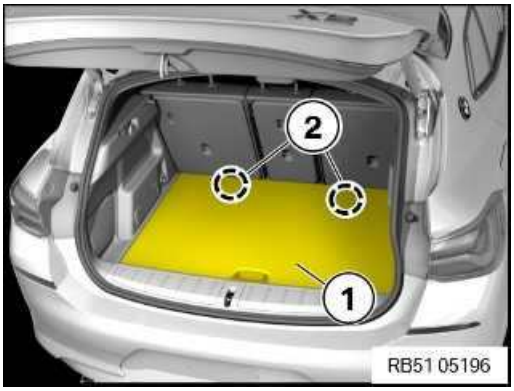


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



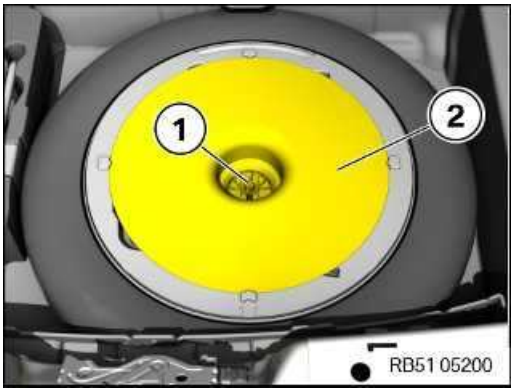
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

14 – Removing the luggage compartment removable panel

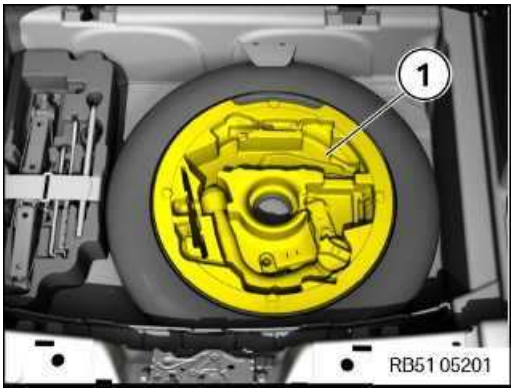


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

15 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



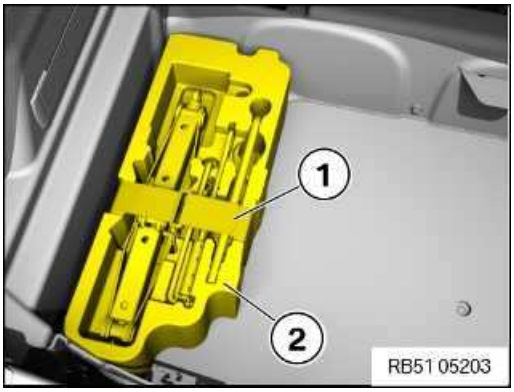
- Remove the oddments tray from the emergency wheel (1).

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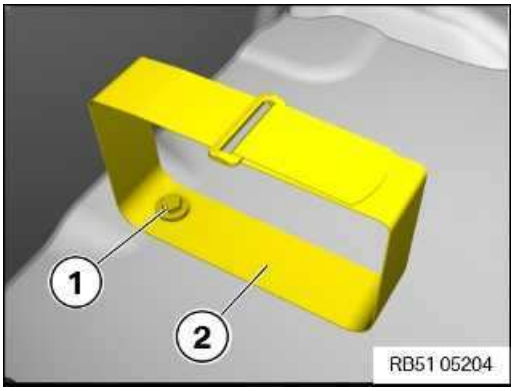
- Remove the emergency wheel (1).

16 – Remove the tool kit



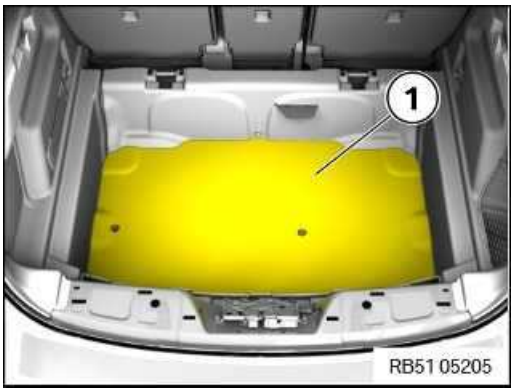
- Open the hook and loop tape (1).
- Remove the tool kit (2).

17 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

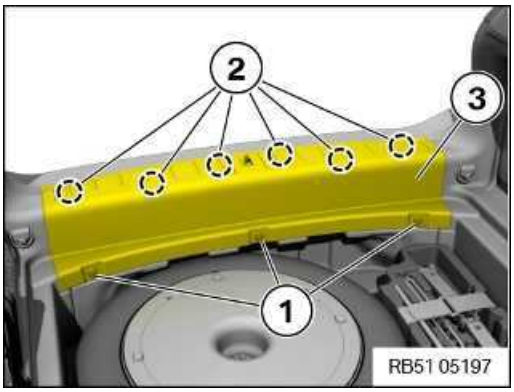
18 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

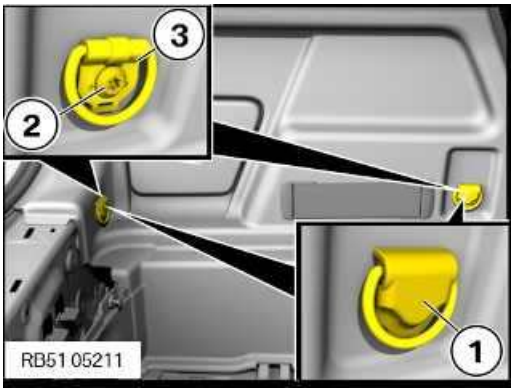
19 – Removing the loading edge trim

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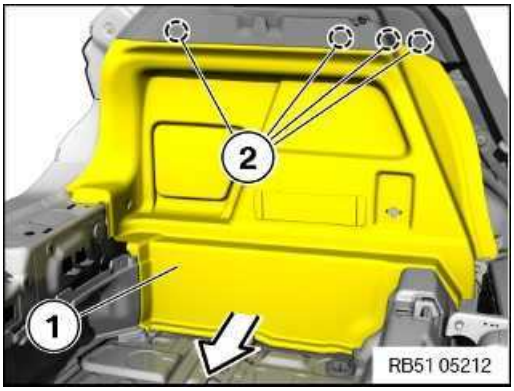


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

20 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

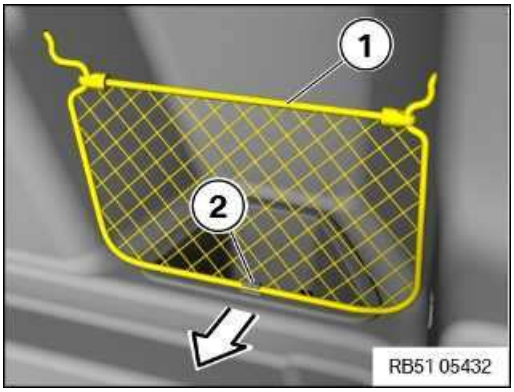


NOTICE

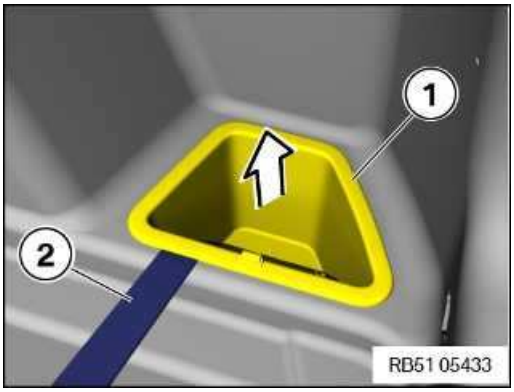
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

21 – Removing right luggage compartment wheel arch trim panel

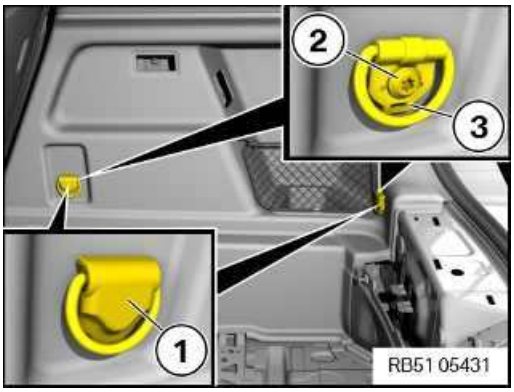


- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.

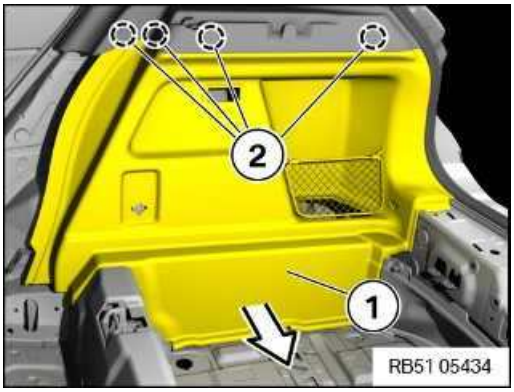


- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).

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- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

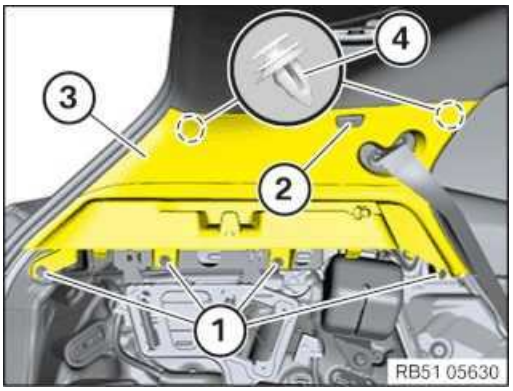
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

22 – Remove the trim panel of the luggage compartment capping on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim panel of the luggage compartment capping**



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

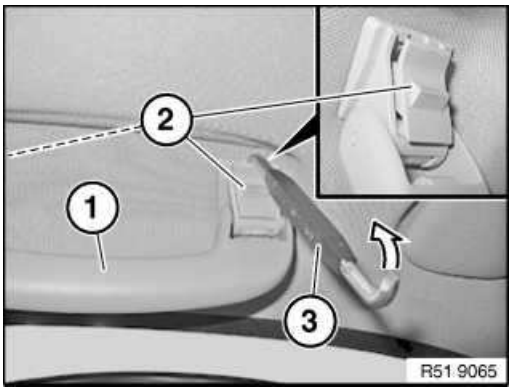
23 – Removing all grab handles

NOTICE

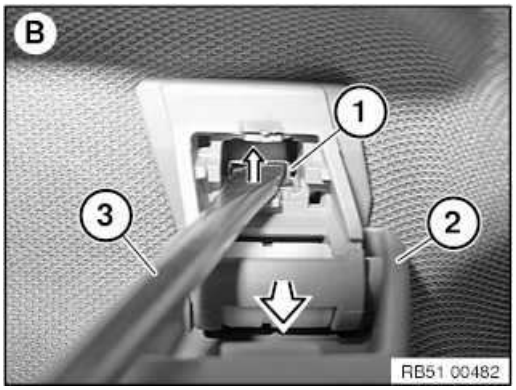
The description is for one component only. The procedure is identical for all further components.

▸ **Removing the grab handle**

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- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

24 – Remove both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove sun visor**



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

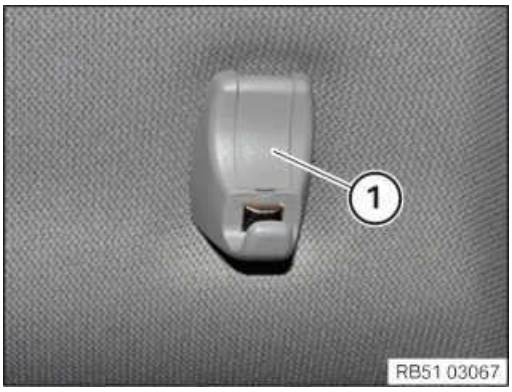
25 – Removing counter supports for sun visor on left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

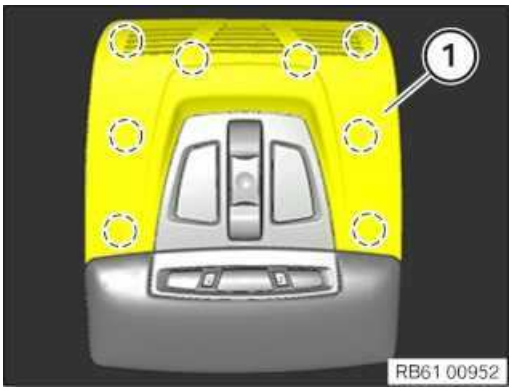
▸ **Remove the counter support for the sun visor**

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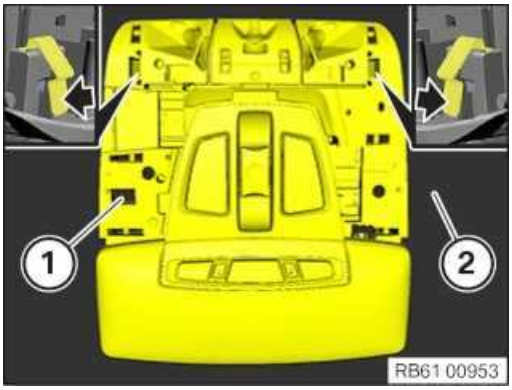


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

26 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



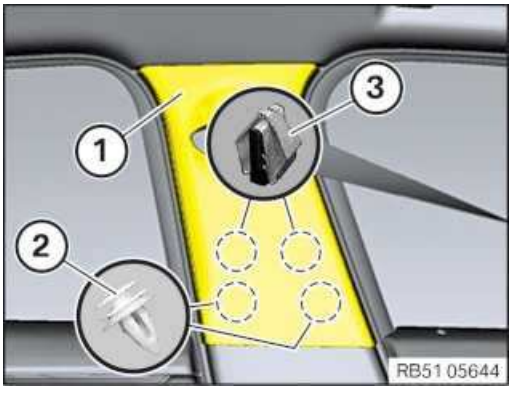
- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

27 – Removing the B-pillar trim panels at top left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

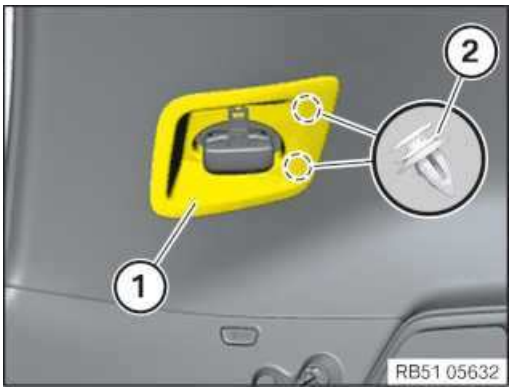
▶ **Partially removing upper B-pillar trim panel**



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

28 – Remove the belt feed trim

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- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

MAIN WORK

29 – Removing the headlining (with panorama glass roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

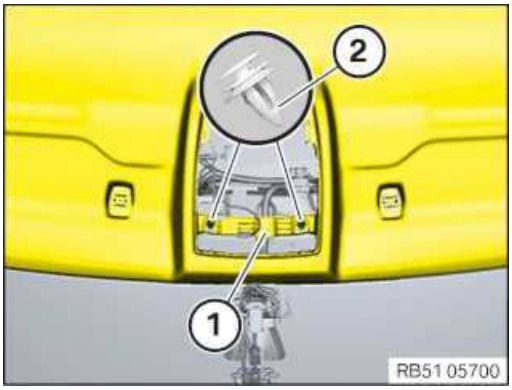
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

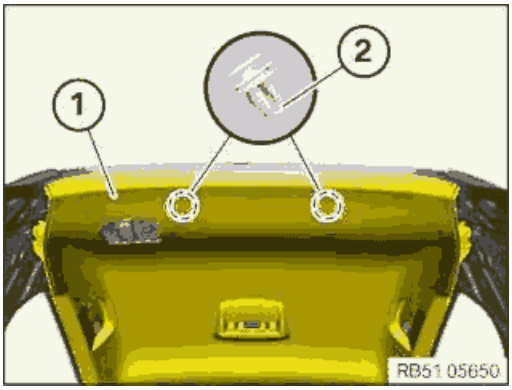
Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

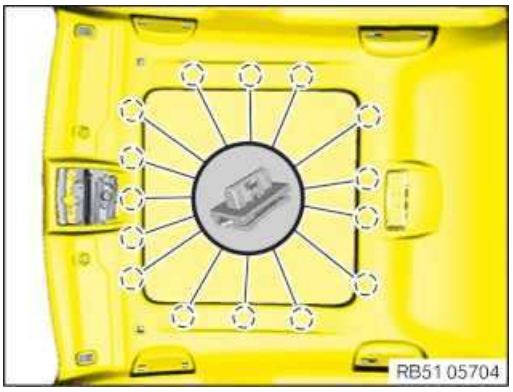


- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).

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- Carefully release the headlining with a suitable plastic wedge from the clamps (1) in a downwards direction.



- Carefully guide out the headlining (1) at the respective edge protection and remove it from the vehicle through the windscreen opening.

30 – Installing the headlining (with panorama glass roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

Fold the headlining.

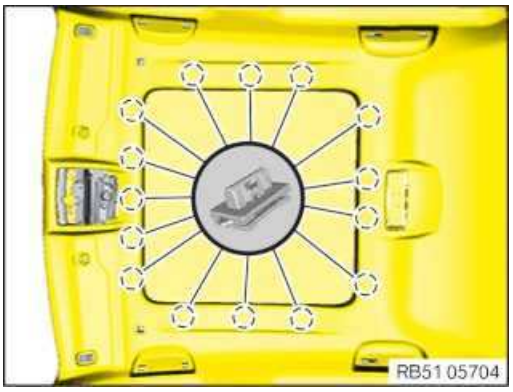
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.

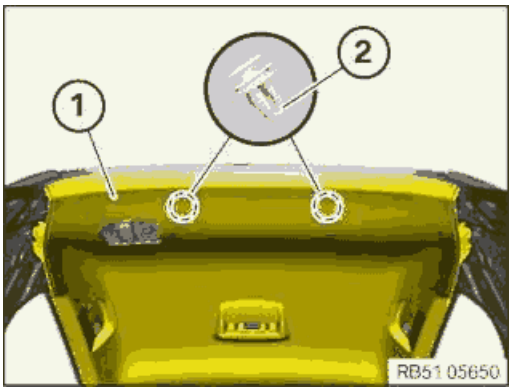


- Insert the headlining (1) through the windscreen opening into the vehicle and carefully thread it onto the respective edge protection.

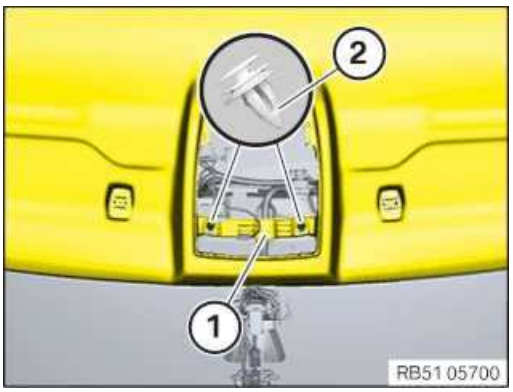
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- Carefully engage headlining at the clamps (1).



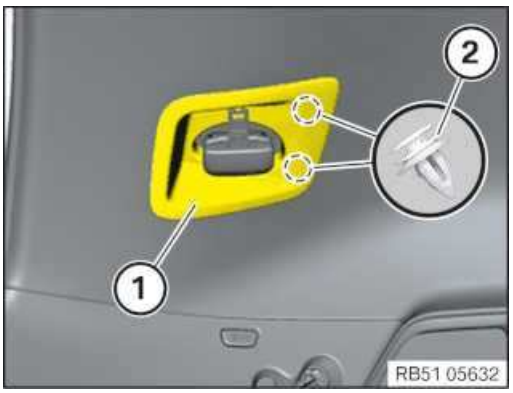
- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

POSTPROCESSES

31 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

32 – Installing the top left and right B-pillar trim panels

NOTICE

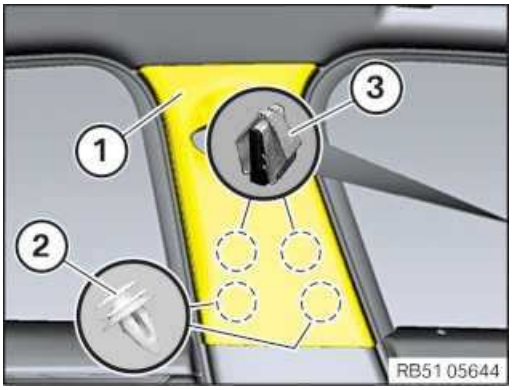
Description is for left component only. Procedure on the right side is identical.

▸ **Partially installing upper B-pillar trim panel**

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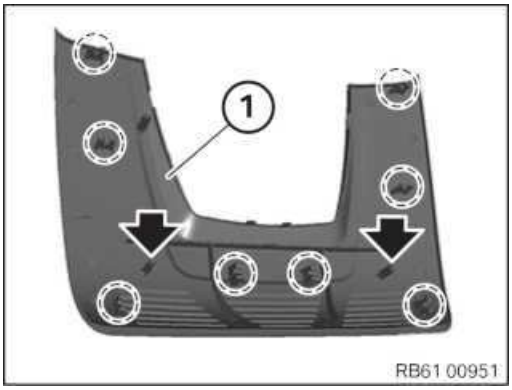
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

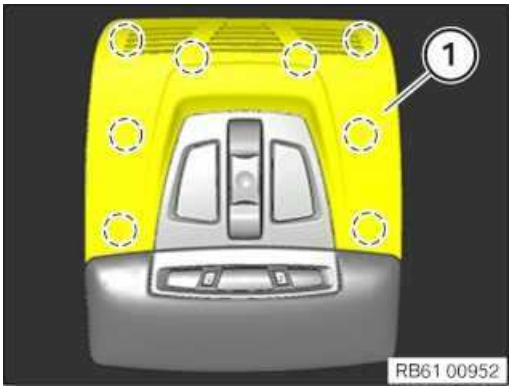


- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

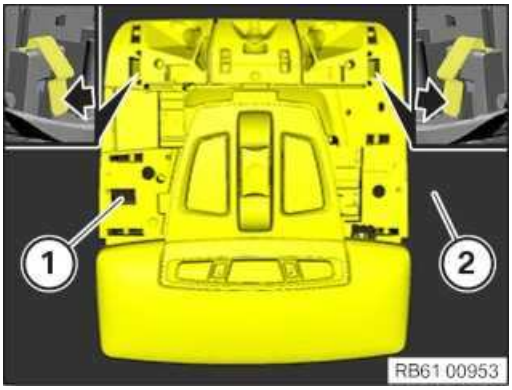
33 – Install the roof function centre



- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.



NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

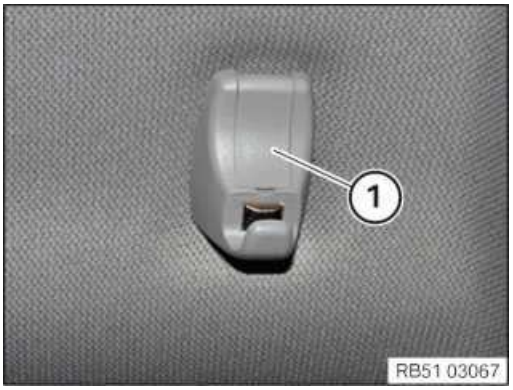
- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

34 – Install the counter supports for the sun visor on left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

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▸ **Install the counter support for the sun visor**

- Install the counter support.
- Tighten screw and close the cover (1).

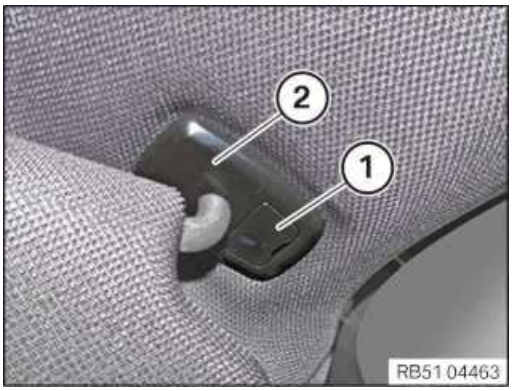
Counter support on body

Screw		Tightening torque	2,5 Nm

35 – Install both sun visors

NOTICE

Description is for left component only. Procedure on the right side is identical.



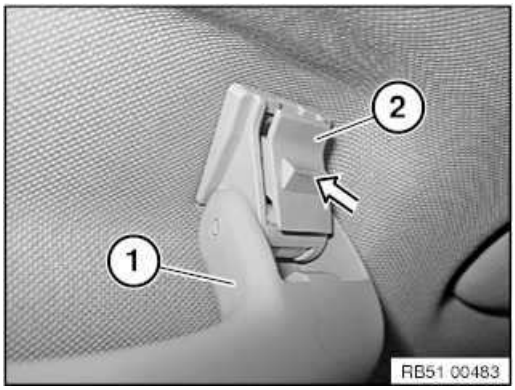
▸ **Install the sun visor**

- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

36 – Installing all grab handles

NOTICE

The description is for one component only. The procedure is identical for all further components.



▸ **Installing the grab handle**

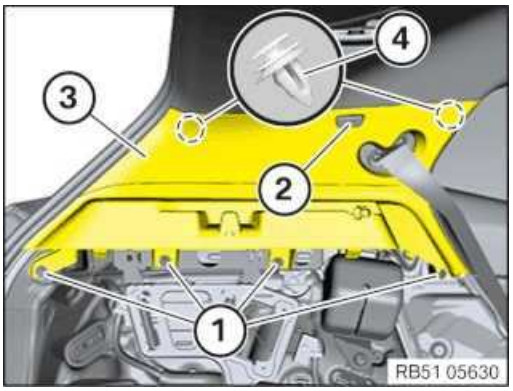
- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

37 – Install the trim panel for left and right the luggage compartment capping

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NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the trim panel for the luggage compartment capping**

- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

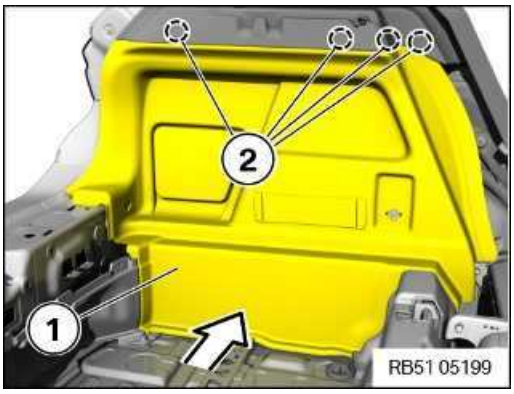
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

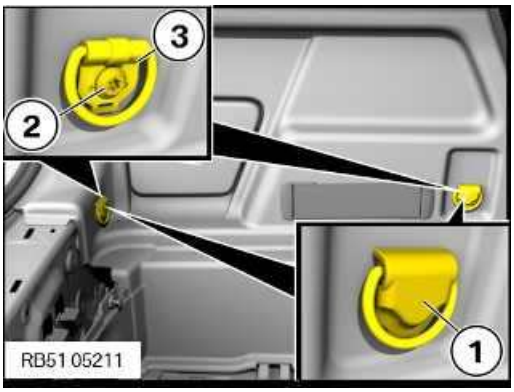
38 – Install luggage compartment wheel arch trim panel at left



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.



- Position the lashing eyes (3) and tighten the screws (2).

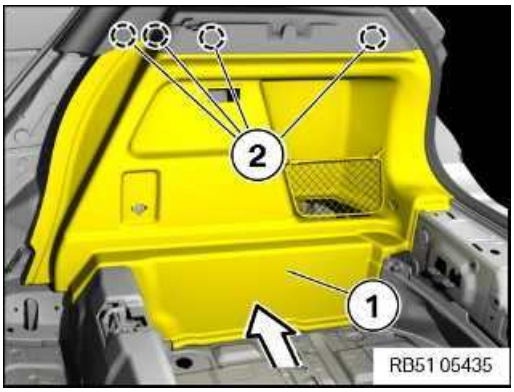
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

39 – Installing the luggage compartment wheel arch trim panel on the right

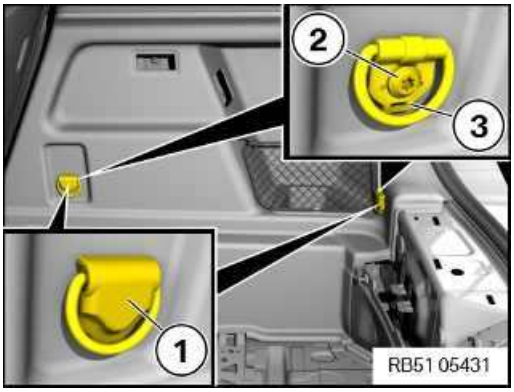
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NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

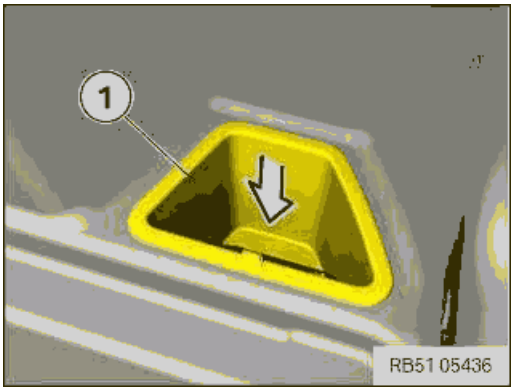


- Position the lashing eyes (3) and tighten the screws (2).

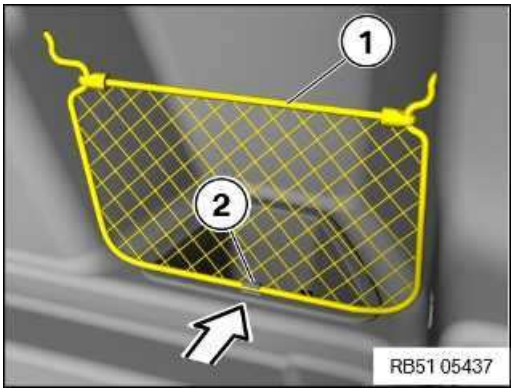
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

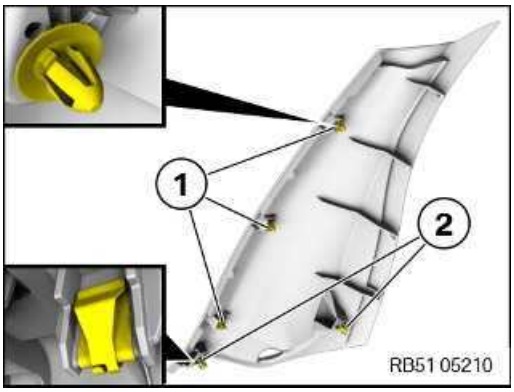
40 – Install C-pillar trim panel at bottom left and right

NOTICE

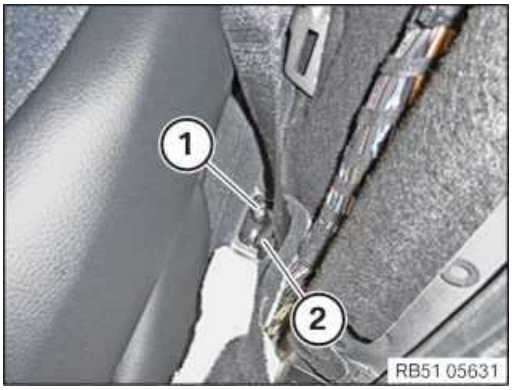
Description is for left component only. Procedure on the right side is identical.

▸ **Install the bottom C-pillar trim panel**

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- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

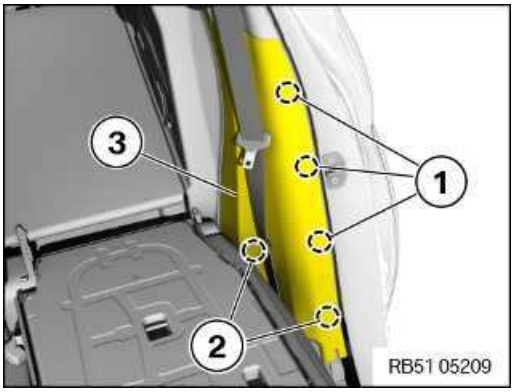


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

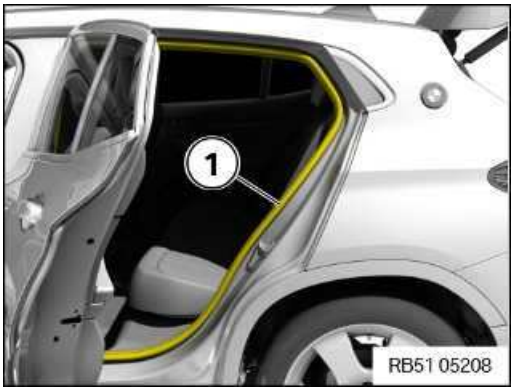
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

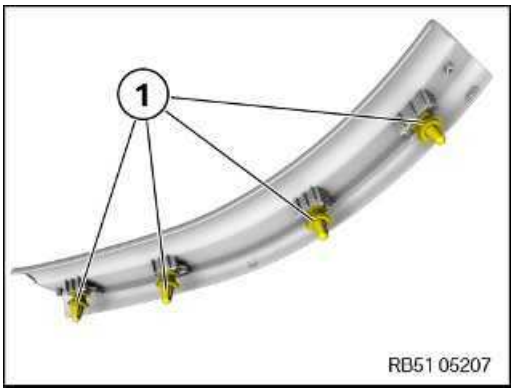
41 – Install the door sill cover strip on the rear left and right

NOTICE

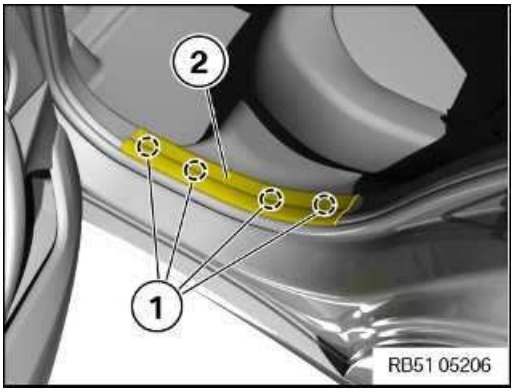
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the rear door sill cover strip**

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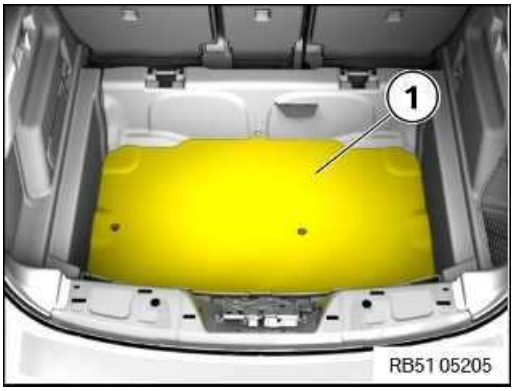


- Check the clips (1) for damage and renew where required.



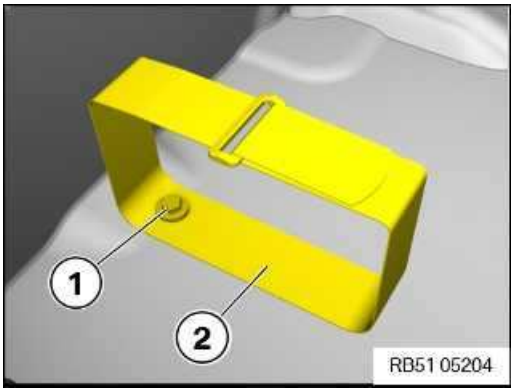
- Clip in the door sill cover strip (2) with the clips (1).

42 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

43 – Inserting the Velcro fastener for the toolkit



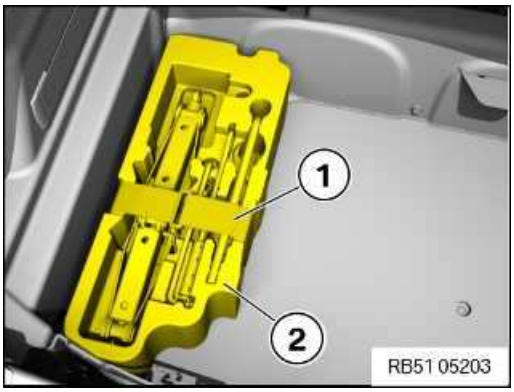
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

44 – Install the tool kit

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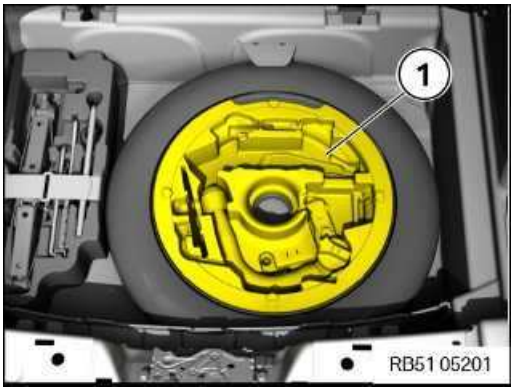


- Install the tool kit (2).
- Close the hook and loop tape (1).

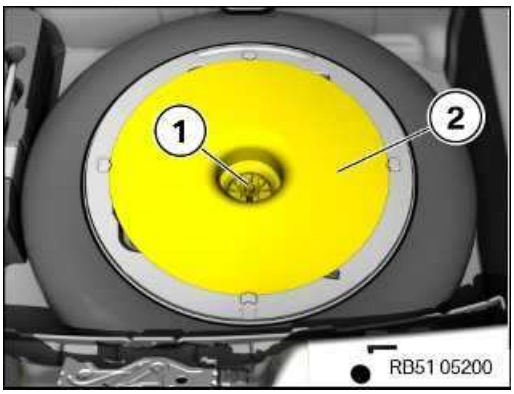
45 – Install the emergency wheel



- Insert compact spare wheel(1).

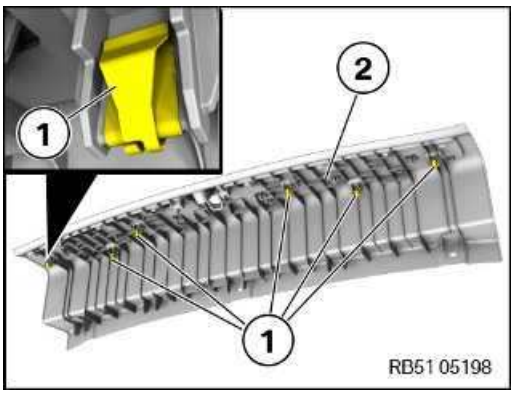


- Insert oddments tray into the compact spare wheel (1).



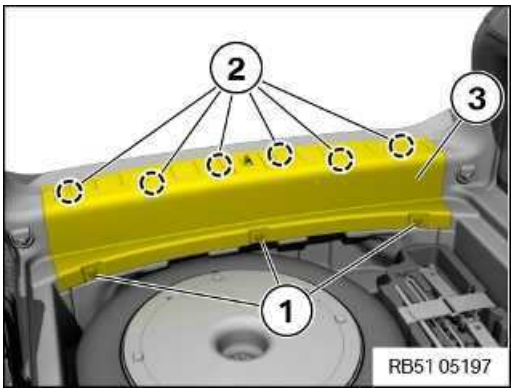
- Insert the lid (2).
- Hand-tighten the bolt (1).

46 – Installing loading edge trim



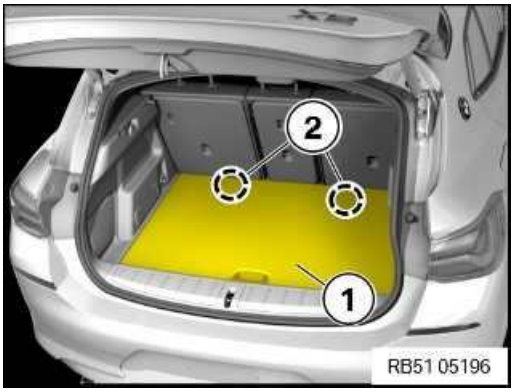
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.

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- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

47 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

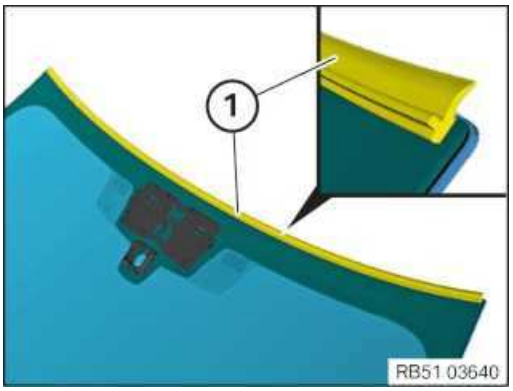
48 – Renew the spacer



- Remove the spacer (arrows) completely.
- Renew the spacer 5 x 5 x 20 mm (arrows).

  Parts: Spacer 5 x 5 x 20 mm
- Bond the spacer (arrows) centrally on the embossed marks.

49 – Checking cover on windscreen



Check

- Check cover (1) on the windscreen for damage.

Result

» The cover (1) on the windscreen is damaged.

Measure

- Renew the cover (1) on the windscreen.

  Parts: Cover

▸ **Renew the cover on the windscreen**

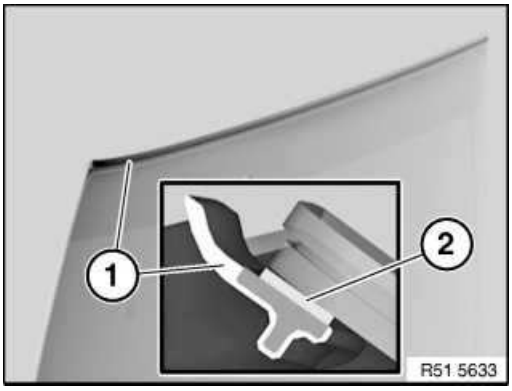
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▷ **Removing the cover on the windscreen**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Pull off the rubber frame (1) from the windscreen using the adhesive tape (2).

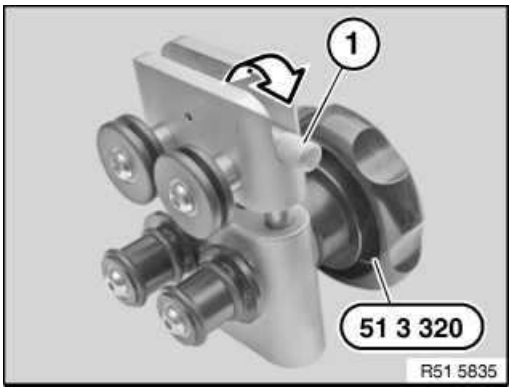
◁

▷ **Installing the cover on the windscreen**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



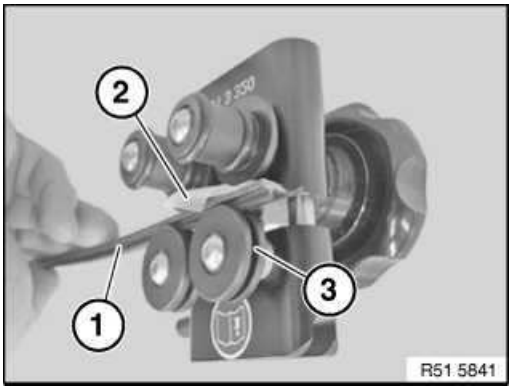
- Clean the adhesive area of the windscreen and pre-treat with Sika activator -205.

  The Sika activator -205 must not get onto adhesive area of adhesive bead.

Adhesive

Aktivator -205	250 ml, Bottle	83190030155

- Adhere to the air drying time of 1 min at least.
- Reposition the lever (1) and open the special tool .

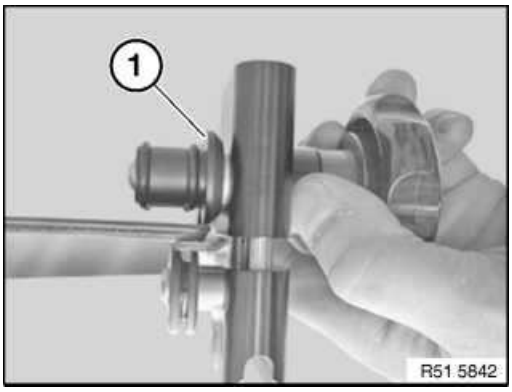


- Pull off protective film (2) in stages from adhesive tape.
- Renew cover (1).

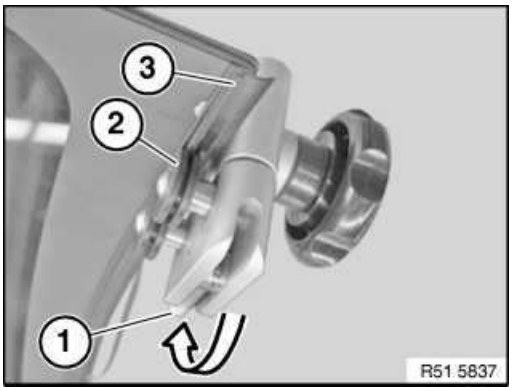
  Parts: Cover

- Insert the cover (1) into the guide pulleys (3).

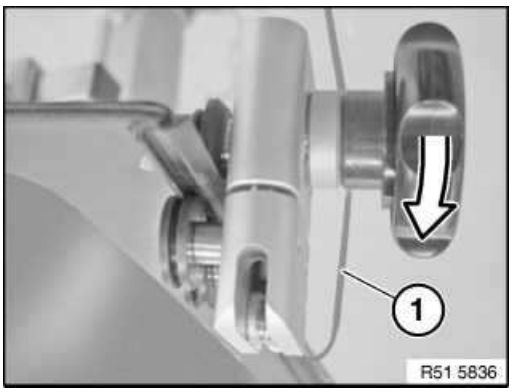
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- Place the special tool with the pressure rollers (1) up against the window edge.
- Align the cover on the outer edge of the window glass.
- Fit the cover and visually check for perfect fit.



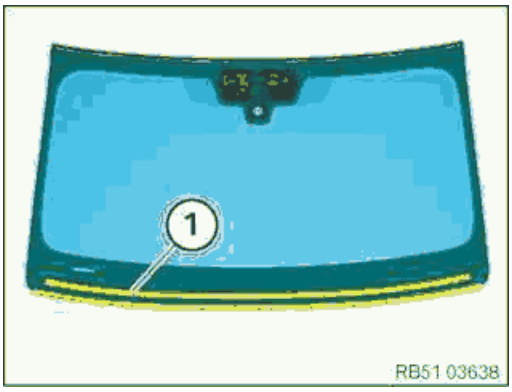
- Reposition the lever (1) in direction of arrow and close the special tool.
- Ensure the cover (3) fits correctly into the guide pulleys (2).



- Continue to pull off protective film (1) in stages from adhesive tape.
- Run the special tool with the handwheel over the entire upper edge of the window glass.

◁

50 – Checking the sound insulation for the cowl panel



Check

- Check sound insulation (1) for the cowl panel for damage.

Result

» Sound insulation (1) for the cowl panel is damaged.

Measure

- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation

▸ **Renew sound insulation for the cowl panel**

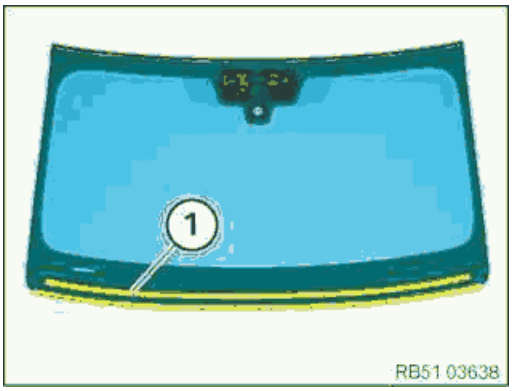
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▷ **Removing the sound insulation for the cowl panel**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



- Remove the sound insulation (1) for the cowl panel from the windscreen.

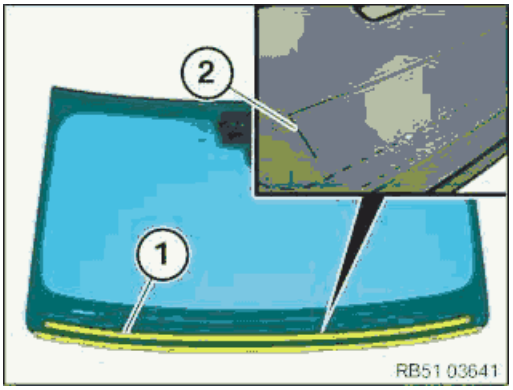
◁

▷ **Mount the sound insulation for the cowl panel**

TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape



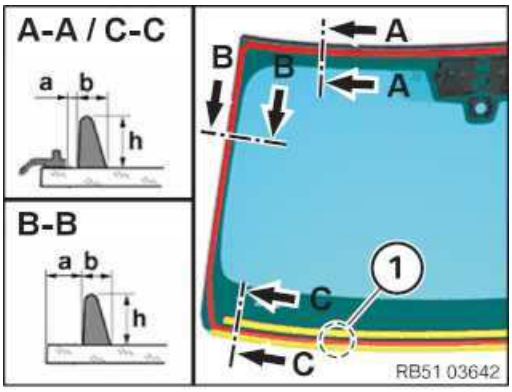
- Clean the adhesive area for the sound insulation (1) for the cowl panel.
- Renew sound insulation (1) for the cowl panel.

  Parts: Sound insulation
- Bond the sound insulation (1) for the cowl panel along the mark (2) to the windscreen.

◁

51 – Install windscreen.

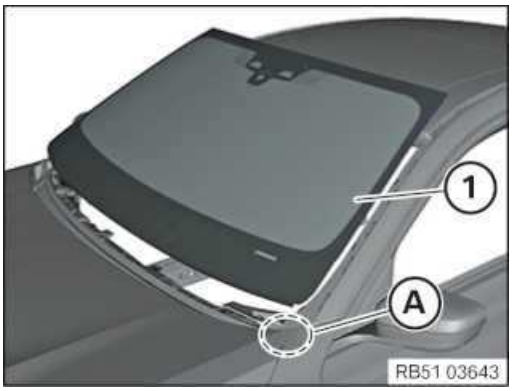
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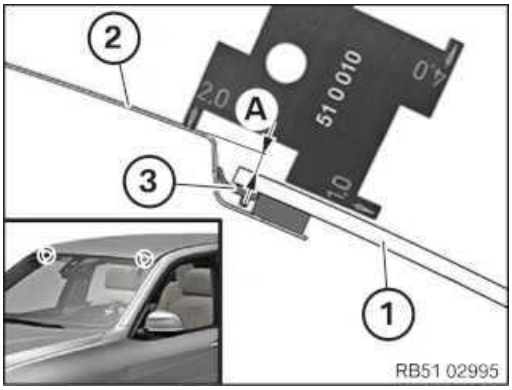
- Prepare the glue cartridge with the standard nozzle C.
- Apply bead joint in area (1).
- Apply adhesive bead within the mark on the windscreen.

Cut	A - A	B - B	C - C
a = Position of the adhesive bead	2 ±2 mm	3 ±2 mm	2 ±2 mm
b = Width of adhesive bead	8 ±1 mm	8 ±1 mm	8 ±1 mm
h = Height of adhesive bead	12 ±1 mm	12 ±1 mm	12 ±1 mm

- Adhere to the geometry of the adhesive bead to make sure that one glue cartridge is sufficient for the complete windscreen.



- Carefully perform the following operations on the windscreen (1) with suction lifter:
  - running it in parallel to the A-pillar
  - feed it in the area (A) on left and right below the side panel
  - Position at top
  - Align sides evenly
  - Press upwards until sealing rests evenly on roof
  - press evenly all around
  - fix with adhesive tape on the roof



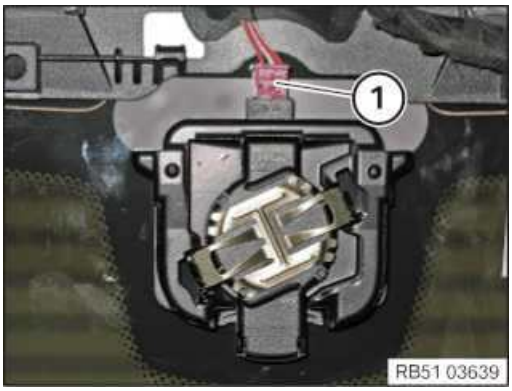
- Measure short length (A) of the windscreen (1) to the roof outer skin (2) with special tool **0 495 259 (51 0 010)**.
- Adjust short length (A).

Gap dimension of windscreen to the body

Short length A	2,5 mm ... 4,5 mm

- Position the windscreen (1) in such a way that the rubber frame (3) lies even and parallel to the roof outer skin (2).

52 – Connect connector to rain-light-solar-condensation sensor



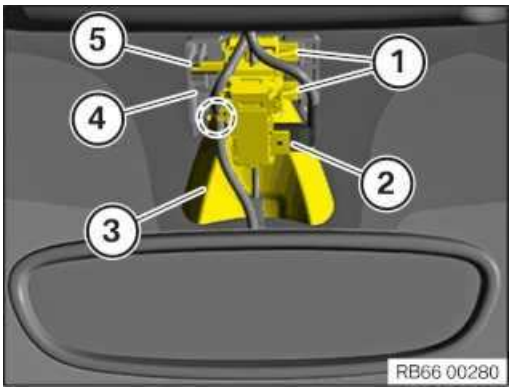
- Connect connector (1).

53 – Install the KAFAS camera

TECHNICAL INFORMATION

The heating of the KAFAS camera is integrated in the windscreen. If the heating is faulty, replace the windscreen.

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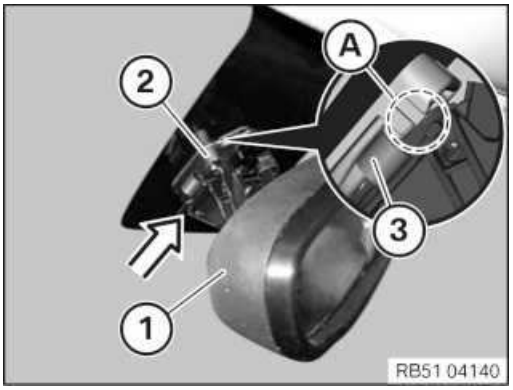


- Correctly feed in the KAFAS camera (3) with the guides (1) on the holder (4).
- Engage the latch mechanism (5).
- Connect connector (2).
- Attach cable in the marked area.

54 – Installing the interior mirror

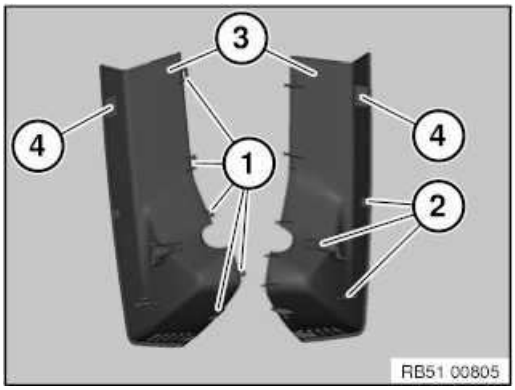
TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.



- Check the clamp (3) on both sides of the interior mirror (1) for damage and renew as needed.
- If necessary, connect the connector on the interior mirror (1).
- Slide the interior mirror (1) parallel to the windscreen in direction of arrow into the base (2) and lock correctly in area (A).

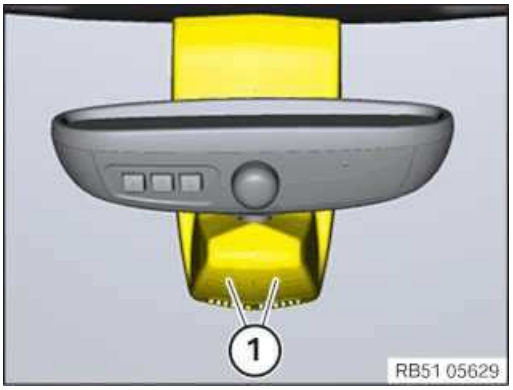
55 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

  The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).

  The spacers (4) must not be damaged or missing.



- Install covers on the interior mirror (1) clip together.

56 – Installing the left and right A-pillar trim panels

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

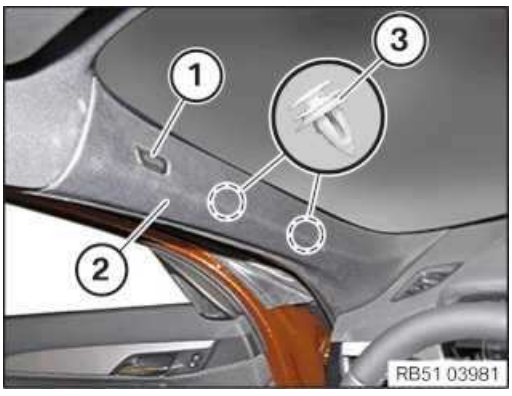
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

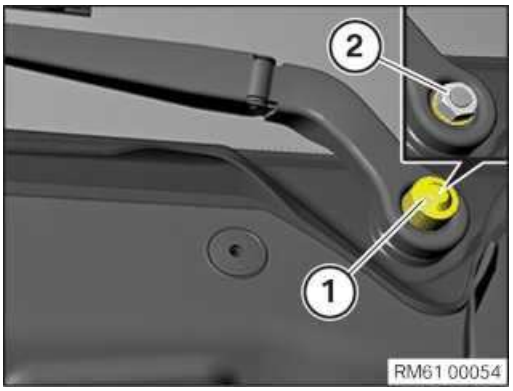
57 – Install the rear cowl panel

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- Insert the cowl panel cover (1) and press it into the latch mechanism on the windscreen starting at the side.

58 – Install left and right wiper arm



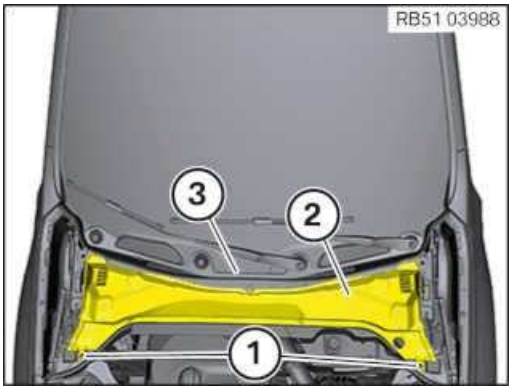
- Join wiper arm and tighten with nut (2).

Windscreen wiper arm

Combination hexagon nut		Tightening torque	35 Nm

- Join the protective cap (1).

59 – Installing front cowl panel cover



- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

60 – Install the gutter strip on the windscreen on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the gutter strip on the windscreen**

RISK OF DAMAGE

Scratches.

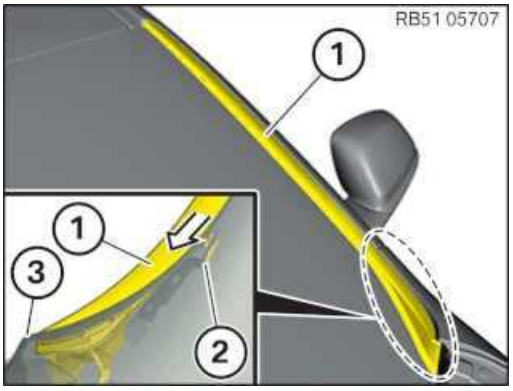
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

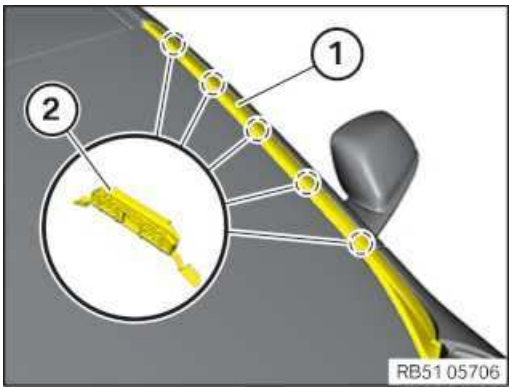
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TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.

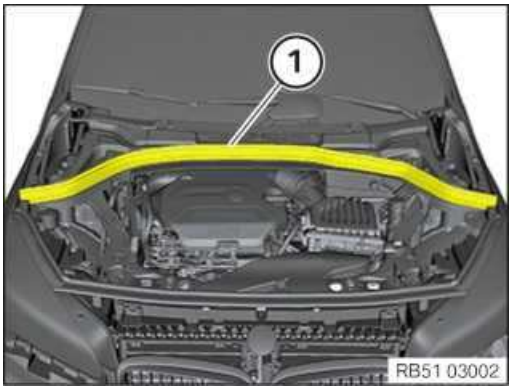


- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

61 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

62 – Calibrate KAFAS camera

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TECHNICAL INFORMATION

The calibration process of the KAFAS camera is not complete until the vehicle drives in traffic. Tell the customer that some assistance systems are temporarily unavailable after vehicle pick-up.

- Perform camera calibration using diagnosis system.

  Under Service Functions menu:

  - Driver assistance
  - Camera-based driver assistance systems
  - Calibration of camera-based driver support systems

Additional Information

Overview of Tightening Torques

Counter support on body — Used in step 34

Screw		Tightening torque	2,5 Nm

Trim panel of luggage compartment capping — Used in step 37

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 37

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 38 39

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body — Used in step 40

Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body — Used in step 43

Bolt M6 x 20		Tightening torque	4 Nm

A-pillar trim panel to body — Used in step 56

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Windscreen wiper arm — Used in step 58

Combination hexagon nut		Tightening torque	35 Nm

Overview of Special Tools

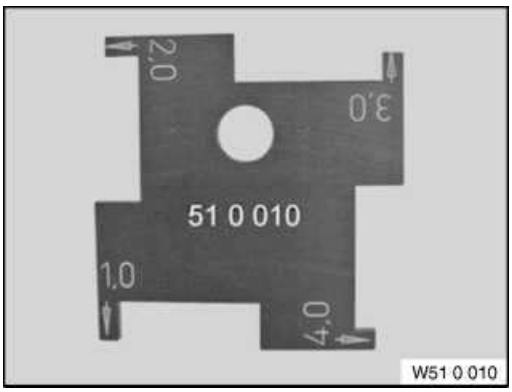
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0 496 569 (00 9 325) Wedge



Common	Used in step 26 27
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

0 495 259 (51 0 010) Gauge



Common	Used in step 51
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)
Included in the tool or work	
Storage location	B2
Replaced by	
In connection with	
SI-Number	01 10 05 (189)

Overview Technical Data

Gap dimension of windscreen to the body	Used in step 51
Short length A	2,5 mm ... 4,5 mm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	10 56
51 00 ... Notes on component bonding using adhesive tape	49 50
51 31 ... General procedure for the disassembly and installation of bonded window glass	

Repair instructions	Used in step

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61 35 ... Notes on ESD protection (Electro Static Discharge)

51 31 ... Removing windows with a "Spider"

Parts

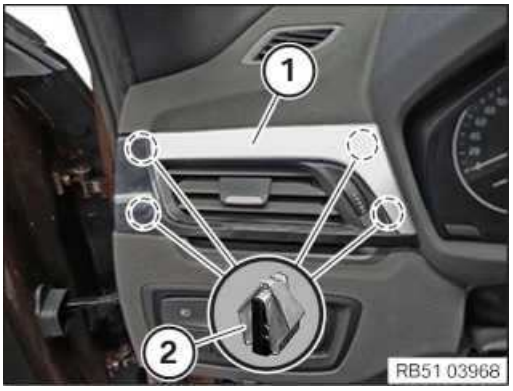
Parts required

Designation	Used in step
Sound insulation cowl panel	50

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51 45 370 Removing and installing decorative strip on left dashboard

1 – Remove decorative strip from instrument panel

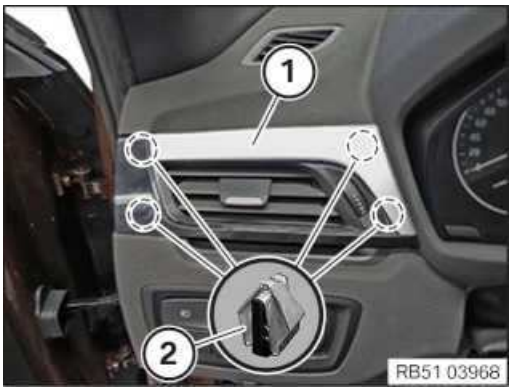


- Release the decorative strip (1) using the special tool **0 496 569 (00 9 325)** from the clamps (2) and remove.

2 – Install decorative strip from instrument panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install decorative strip (1) a snap into the clamps (2).

Additional Information

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 45 380 Removing and installing decorative strip on right dashboard

PRELIMINARY WORK

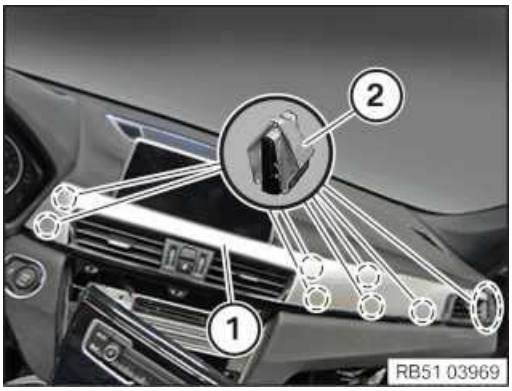
1 – Removing trim of the audio operating unit



- Unclip the trim (1) using special tool **2 298 505**.

MAIN WORK

2 – Remove the finisher on the right instrument panel

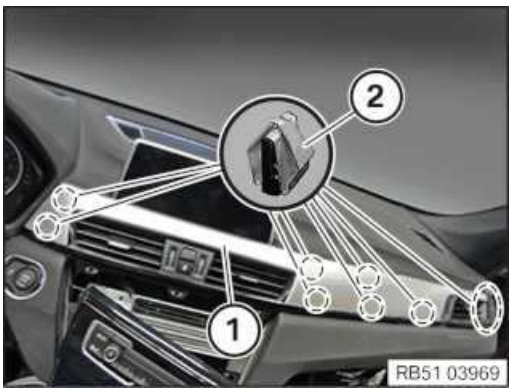


- Carefully release the decorative strip (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) starting from the side.
- Lift up the decorative strip (1) and disconnect the plug connections behind it.
- Remove the decorative strip (1).

3 – Install the finisher on the right instrument panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the decorative strip (1).
- Connect connector.
- Engage the decorative strip (1) on the clamps (2).

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4 – Installing the audio operating unit trim

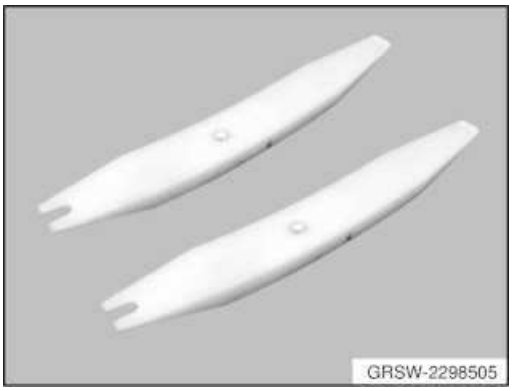


- Correctly position trim (1) and clip it into the instrument panel (2).

Additional Information

Overview of Special Tools

2 298 505 Wedge



Common	Used in step 1
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

0 496 569 (00 9 325) Wedge



Common	Used in step 2
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 45 030 Removing and installing instrument panel trim

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



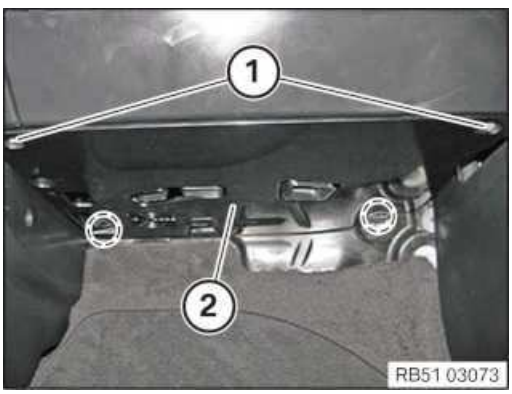
- See additional information.

2 – Adjust the steering column position



- Adjust the length of the steering column to the maximum length in the direction of arrow (1).
- Move the steering column to the lowest steering column position in the direction of arrow (2).

3 – Removing the instrument panel trim at bottom right

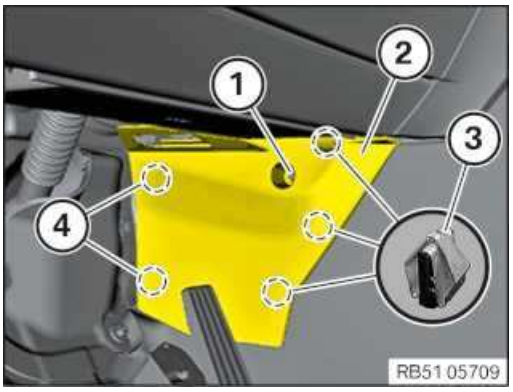


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

4 – Removing the side trim panel for the left and right centre console

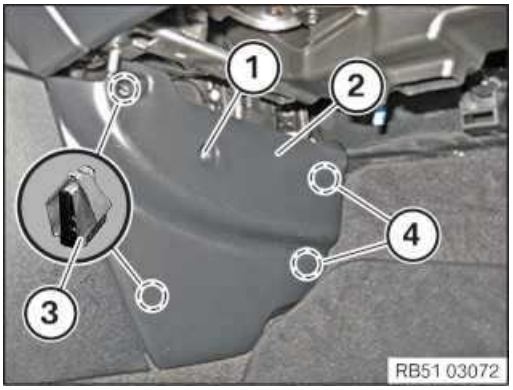
▸ **Removing side trim panel for the left centre console**

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- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▶ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

5 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

6 – Remove the decorative trim from the centre console

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RISK OF DAMAGE

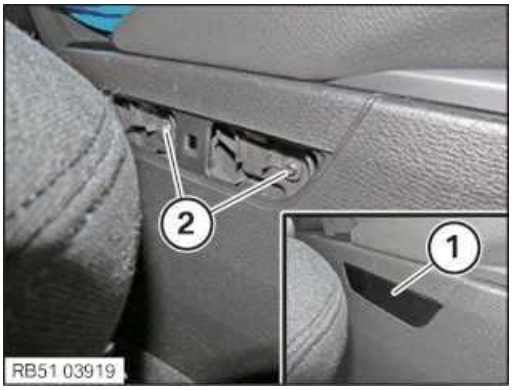
Scratches.

Tools and sharp-edged components can cause scratches.

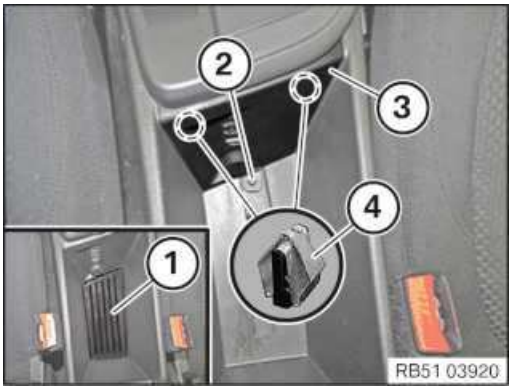
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



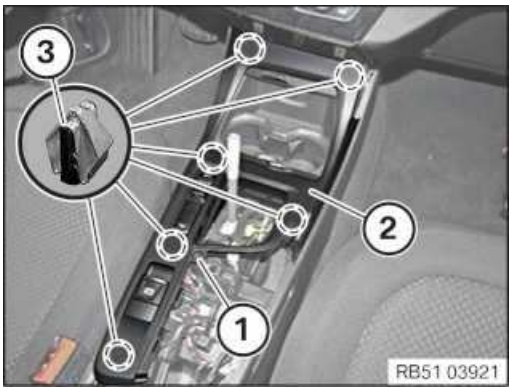
- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).



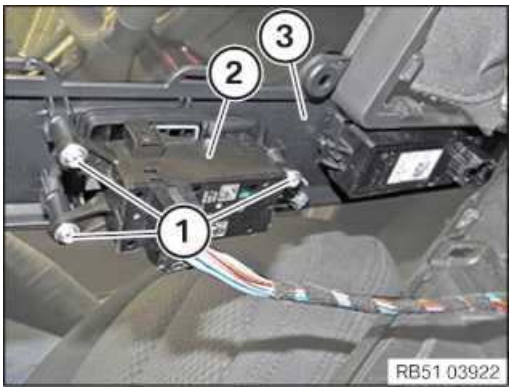
- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

7 – Remove the centre console trim

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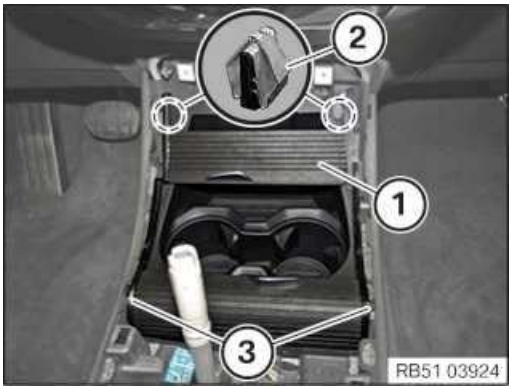
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

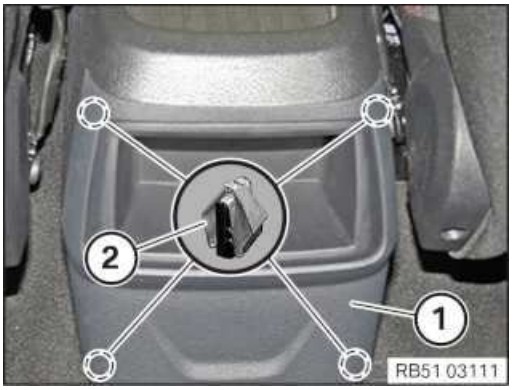
  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

8 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

9 – Removing the rear centre console trim



- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

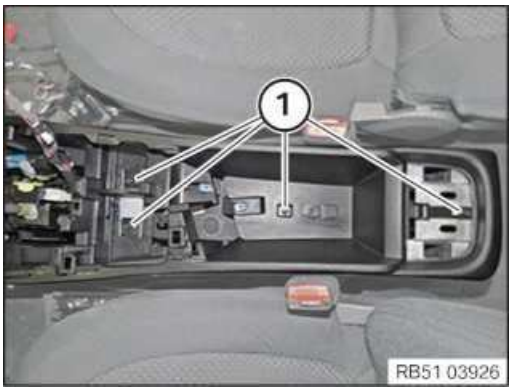
10 – Removing centre console fully with centre armrest

▸ **Removing the centre armrest**

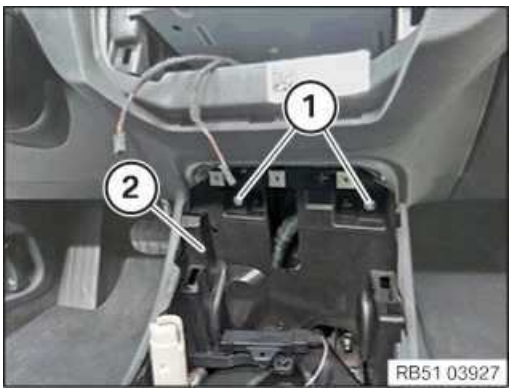
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- Release nuts (1) and remove centre armrest upwards.



- Loosen screws (1).



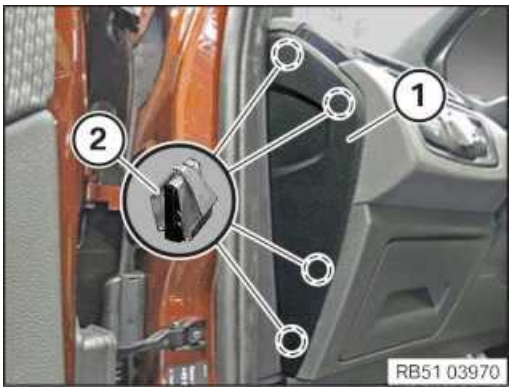
- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

11 – Remove the side panel on the left and right of the instrument panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

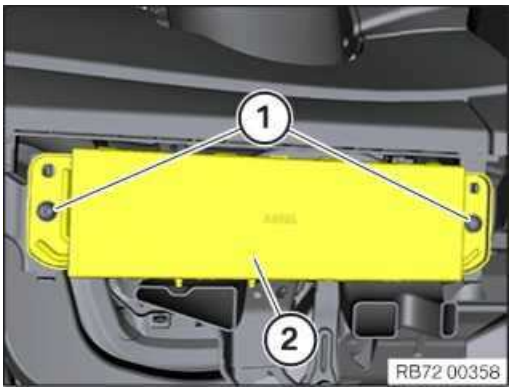
▸ **Remove side panel on the instrument panel**



- Lift out the side panel (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) and slide it out to the rear at an angle.

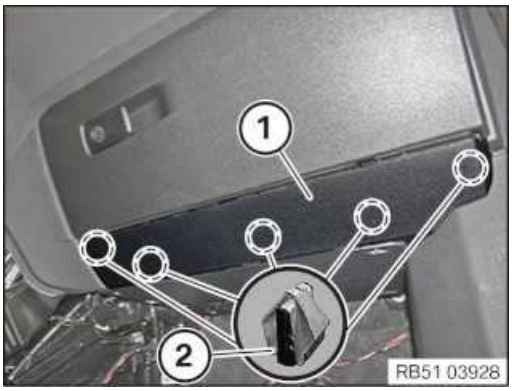
12 – Removing knee airbag

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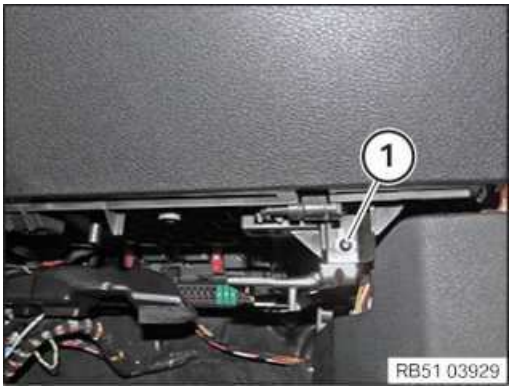


- Unlock plug connection on knee airbag (2) and disconnect.
- Loosen screws (1).
- Remove knee airbag (2).

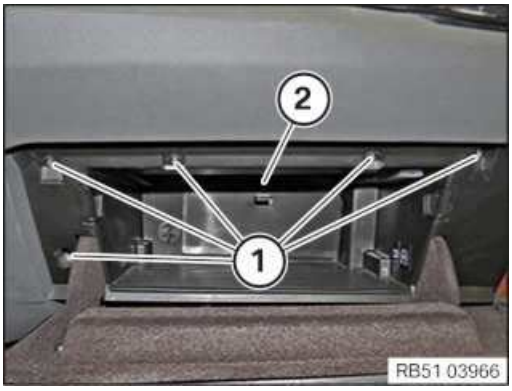
13 – Remove right glove box



- Release the trim (1) with the special tool **0 496 569 (00 9 325)** toward the bottom from the clamps (2) and remove.



- Loosen screw (1).



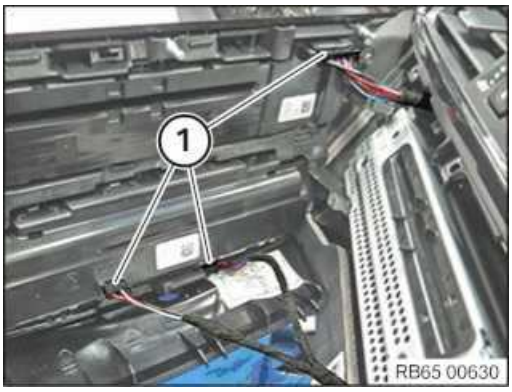
- Loosen screws (1).
- Remove glove box (2) to the inside and disconnect associated plug connections.

14 – Removing the audio operating unit and the air conditioning control panel



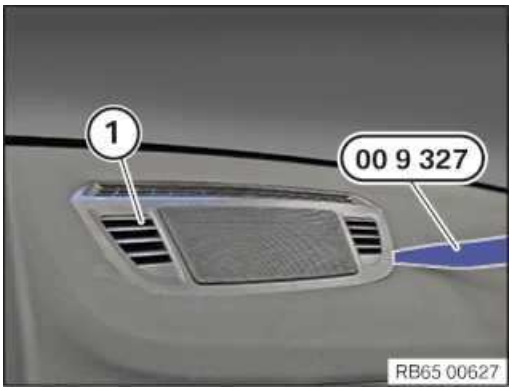
- Unclip the trim (1) using special tool **2 298 505**.

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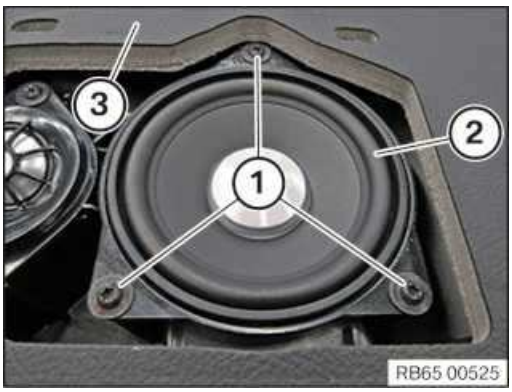


- Unlock plug connection (1) and disconnect.
- Remove the audio operating unit and the air conditioning control panel.

15 – Remove the mid-range speaker from the instrument panel



- Unclip the speaker cover (1) using the special tool **0 496 571 (00 9 327)** and remove upwards.



- Loosen screws (1).
- Disconnect plug connection underneath.
- Guide the mid-range speaker (2) out of the instrument panel (3) and remove it.

16 – Remove Head Unit High (HU-H)

RISK OF DAMAGE

Electrostatic discharge.

Damage to or destruction of electrical components.

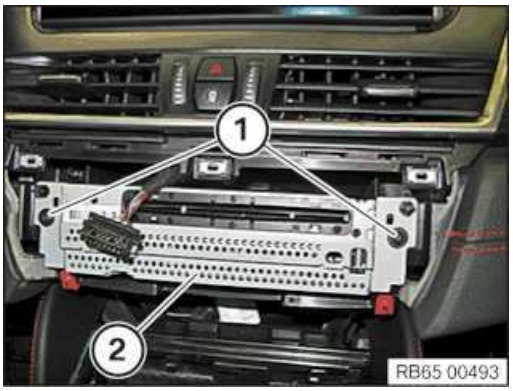
- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

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- Remove the wiring harness (1).

  In the factory, the wiring harness (1)is routed such that not enough excess length exists to remove the head unit.

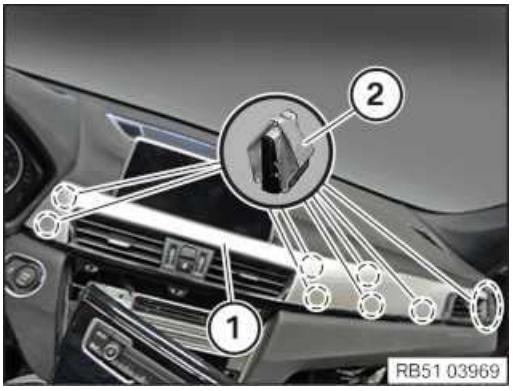


- Loosen screws (1).
- Pull out the head unit (2) a bit.



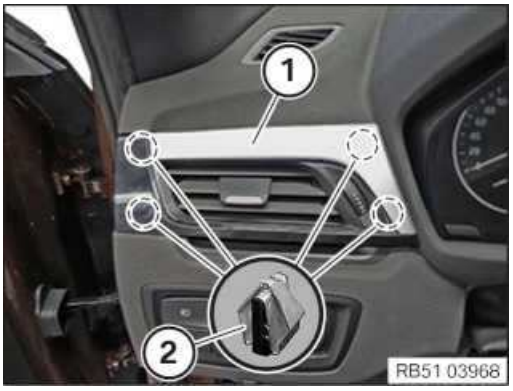
- Unlock and disconnect all connectors in the marked area.
- Remove head unit (1).

17 – Remove the finisher on the right instrument panel



- Carefully release the decorative strip (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) starting from the side.
- Lift up the decorative strip (1) and disconnect the plug connections behind it.
- Remove the decorative strip (1).

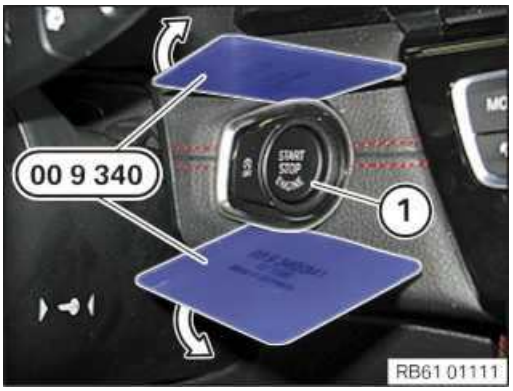
18 – Remove decorative strip from instrument panel



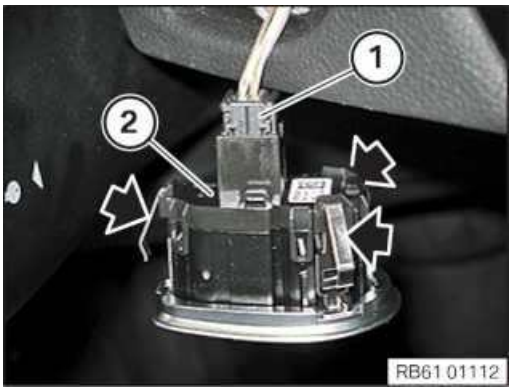
- Release the decorative strip (1) using the special tool **0 496 569 (00 9 325)** from the clamps (2) and remove.

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19 – Removing the START-STOP button



- Remove START-STOP button (1) using the special tool **0 493 687 (00 9 340)** .



- Disconnect the connector (1) and remove the START-STOP button (2).

20 – Removing the light operating unit



- Unclip the light operating unit (1) in the marked area.
- Unlock and disconnect associated connector.

21 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

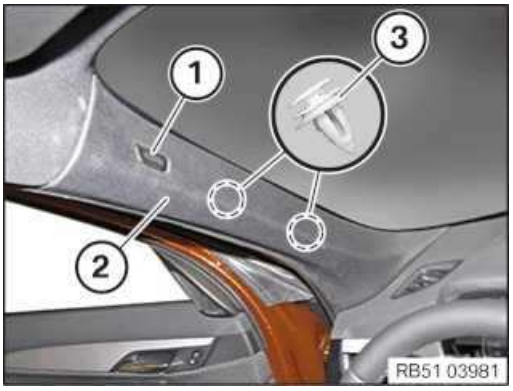
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WARNING

Pyrotechnic components.

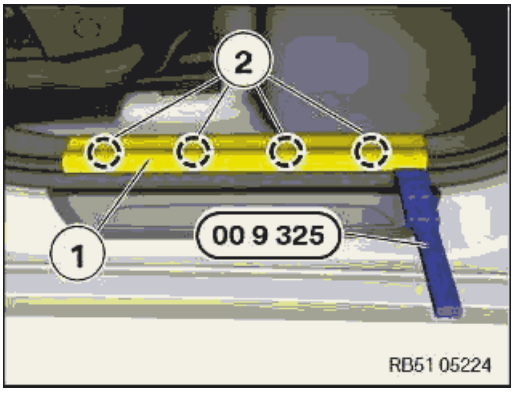
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

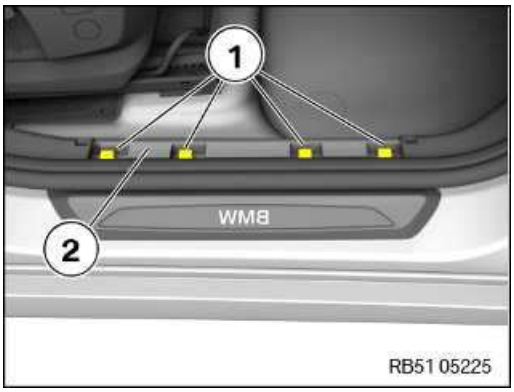


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

22 – Remove front entrance cover strip



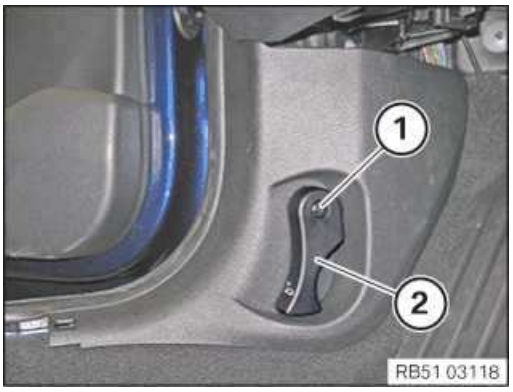
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



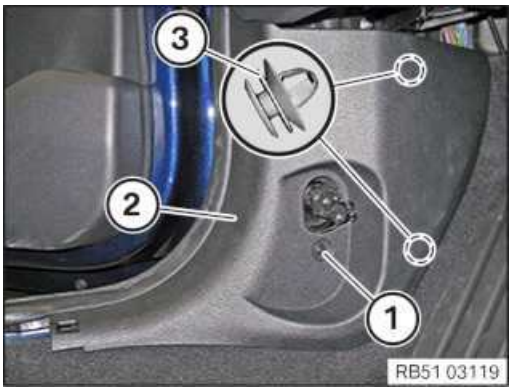
- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

23 – Removing the side trim panel in the footwell at the A-pillar

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- Loosen screw (1).
- Remove bonnet release lever (2).

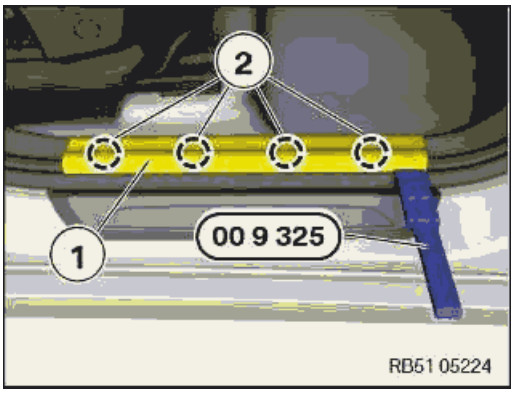


- Loosen screw (1).
- Unclip side trim panel (2) from the clips (3) and remove.

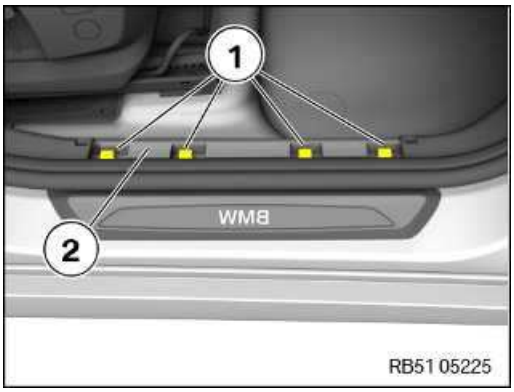
24 – Remove front right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



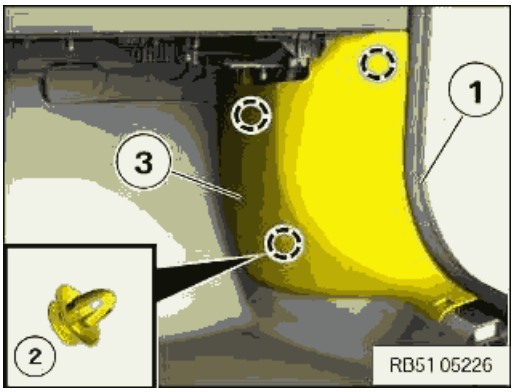
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

25 – Removing the side trim panel in the footwell at the right-hand A-pillar

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- Guide side trim panel (3) under the sealing lip out of the edge protection (1).
- Unclip and remove the side trim panel (3) at the clips (2).

26 – Removing airbag unit of the steering wheel/sports steering wheel

WARNING

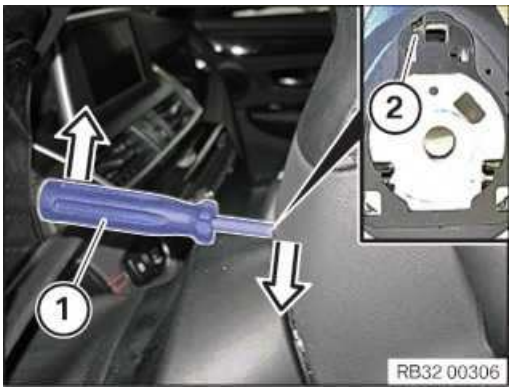
Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators



- Turn the steering wheel (1) through 180° from the "straight-ahead driving position".



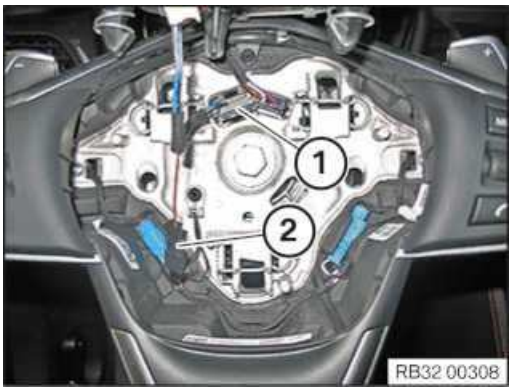
- Insert the slotted screwdriver (1) into the elongated hole on the rear side on the steering wheel.
- Push the slotted screwdriver (1) up and thereby push the retaining spring down (2).

  The airbag unit is unlocked.



- (1) Push unlocked airbag unit up.
- (2) At the same time, pull off the top airbag unit in the opposite direction of travel.

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- Unlock and disconnect the plug connections (1) and (2).
- Remove airbag unit.

27 – Removing steering wheel/sports steering wheel



- Move the steering wheel/sports steering wheels to the straight-ahead position.
- **Unlock plug connection and disconnect.**
- Release the screw (1) and remove the steering wheel/sports steering wheel.

28 – Removing steering column shroud upper section



NOTICE

Perform the operations on the left and right side.

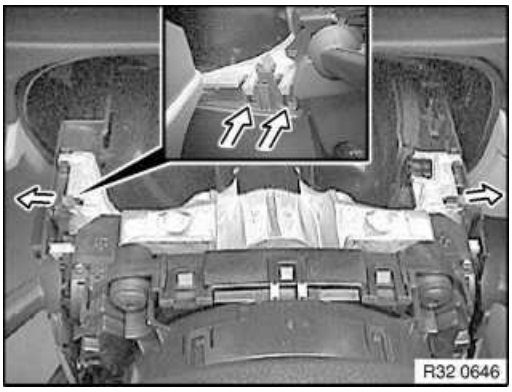
- Unclip the steering column shroud upper section (1) with the special tool **2 298 504** in area (2).
- Fold the steering column shroud upper section (1) up.



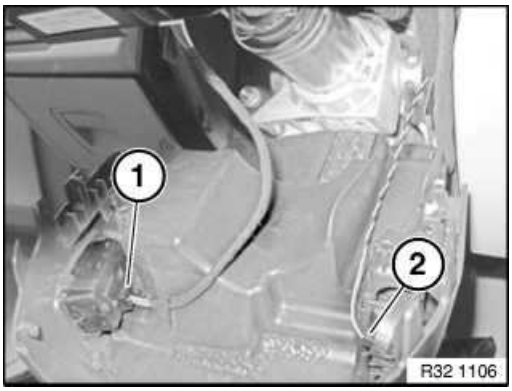
- Release the gap cover of the steering column (1) from the brackets (arrows) of the steering column shroud upper section.
- Remove steering column shroud upper section.

29 – Removing steering column shroud lower section

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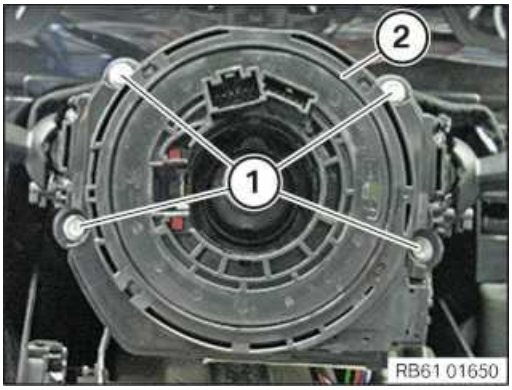


- Press the retaining lugs (arrows) a little outwards and unclip the steering column shroud lower section in a downward direction.

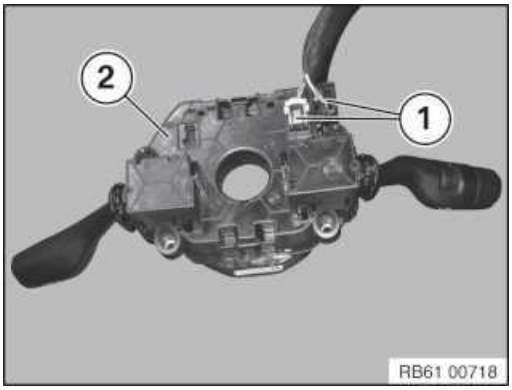


- Tilt steering column shroud lower section in downward direction.
- Unlock and disconnect the plug connections (1) and (2).
- Remove steering column shroud lower section.

30 – Removing the steering column switch cluster (SZL)



- Loosen screws (1).
- Remove the steering column switch cluster (SZL) (2).



- Unlock and disconnect the connector (1) on the steering column switch cluster (SZL) (2).

31 – Removing the instrument cluster (KOMBI)

RISK OF DAMAGE

Scratches.

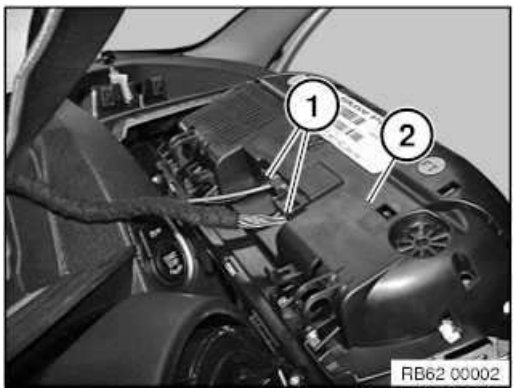
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

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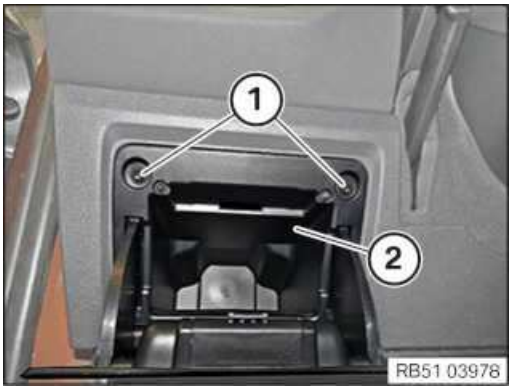


- Loosen both screws (1).
- Thread out instrument cluster (KOMBI) in direction of arrow.



- Disconnect all plug connections (1).
- Removing the instrument cluster (KOMBI) (2).

32 – Removing the left fold-down compartment



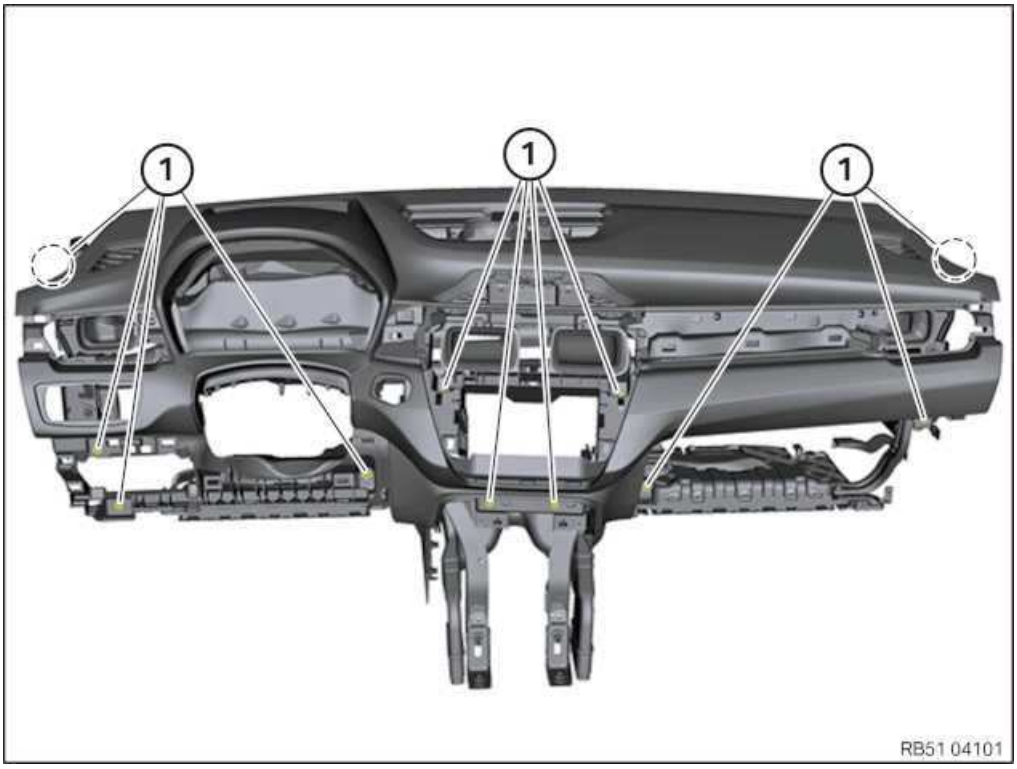
- Loosen screws (1).
- Guide out and remove the fold-down compartment (2) downward from the instrument panel.

MAIN WORK

33 – Remove instrument panel trim

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Instrument panel



TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

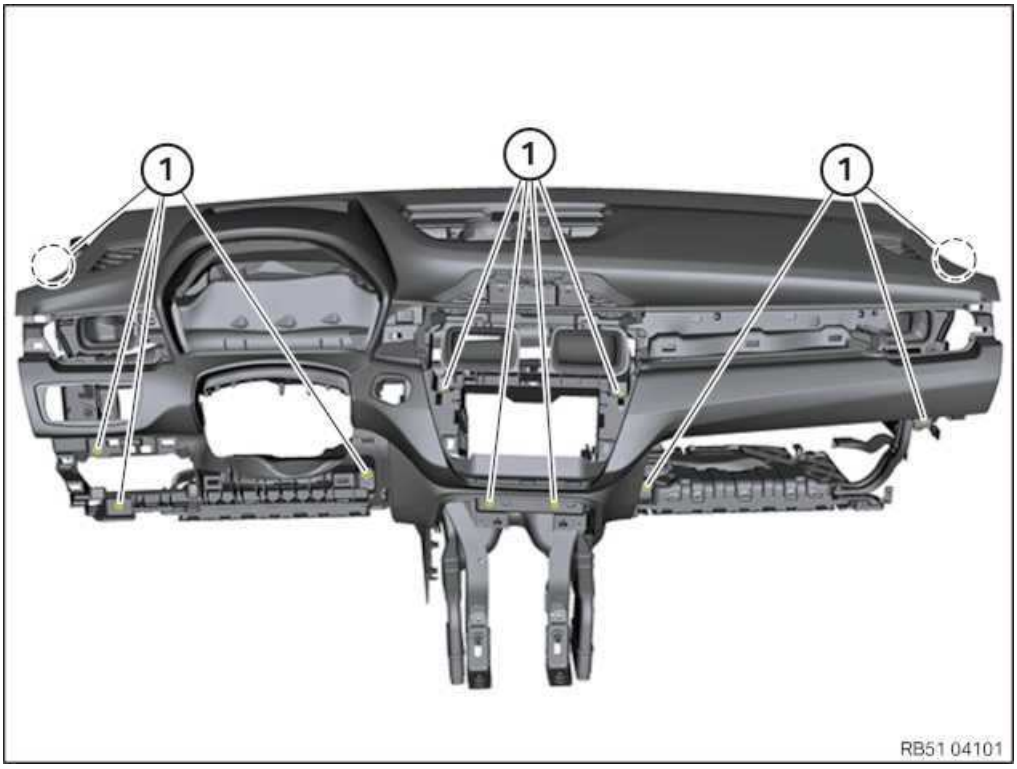
For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

- Loosen screws (1).
- Unlock and disconnect the plug connection of the front passenger airbag.
- Guide out the instrument panel trim with the help of an auxiliary person and unlock and disconnect all the plug connections.
- Release the wiring harness from the instrument panel trim.
- Guide out the instrument panel trim through the door aperture from the vehicle.

34 – Install instrument panel trim

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Instrument panel



TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

- Guide the instrument panel trim through the door aperture with the help of an auxiliary person.
- Install the instrument panel trim, and while doing so secure the wiring harness and connect and lock all the connectors.
- Connect and lock the plug connection of the front passenger airbag.
- Make sure guides on instrument panel are correctly seated in respective mountings of bulkhead.
- Make sure seals for the air ducts are correctly seated.
- Make sure wiring harness is correctly laid.
- Tighten the screws (1).

Instrument panel trim to carrier support

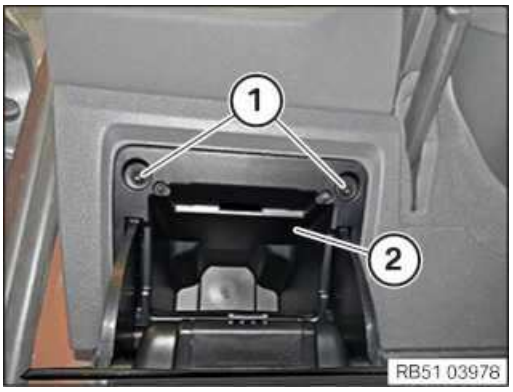
Screw		Tightening torque	2,4 Nm

POSTPROCESSES

35 – Installing the left fold-down compartment

- Guide in the fold-down compartment (2) on the instrument panel.

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- Tighten the screws (1).

Fold-down compartment to instrument panel

Screw		Tightening torque	1,8 Nm

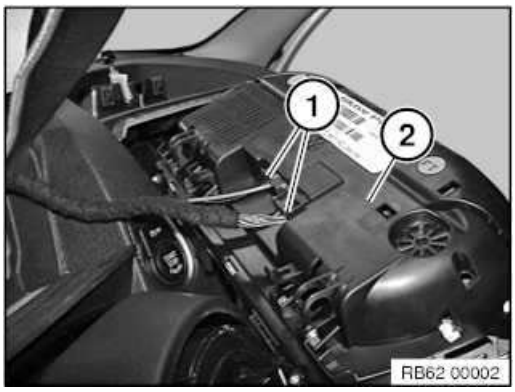
36 – Installing the instrument cluster (KOMBI)

RISK OF DAMAGE

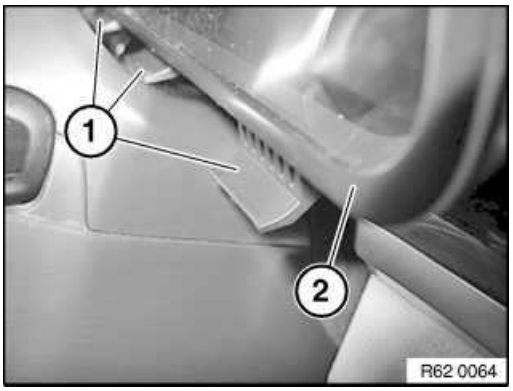
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Connect and lock all connectors (1) to the instrument cluster (KOMBI).



- Make sure that the retaining tabs (1) of the instrument cluster (KOMBI) (2) are seated exactly in mountings of the instrument panel.



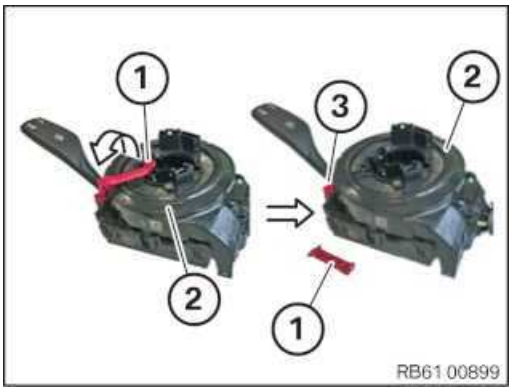
- Position the instrument cluster (KOMBI) position in the opposite direction of the arrow.
- Tighten the screws (1).

Instrument cluster to instrument panel

Screw		1,7 Nm

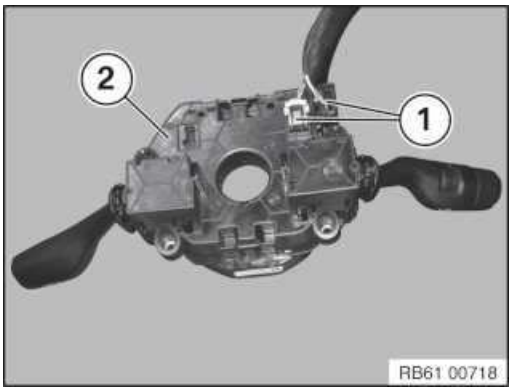
37 – Installing the steering column switch cluster (SZL)

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- **Replacement:** Break off the transportation retainer (1) on the steering column switch cluster (SZL) (2) in direction of arrow.

  The broken-off piece of (3) the transportation retainer (1) remains in the steering column switch cluster (SZL) (2).

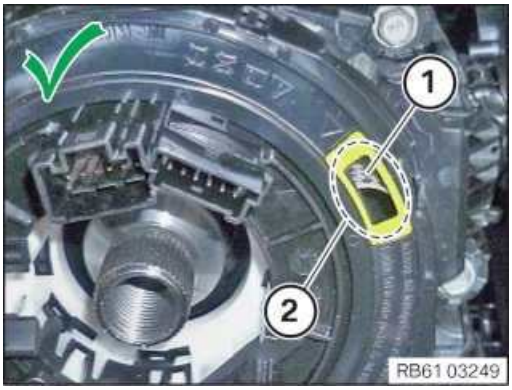


- Connect the connector (1) with the steering column switch cluster (SZL) (2).

▸ **Check the neutral position of the clock spring**

TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



Check

- **Version A:**

  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).

Check

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- **Version B:**

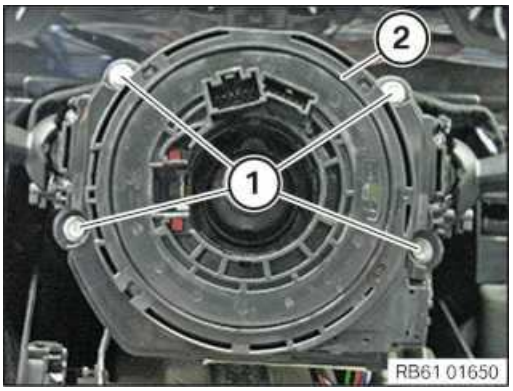
  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).

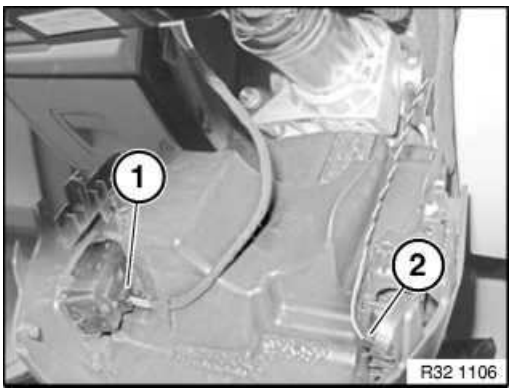


- Position the steering column switch cluster (SZL) (2).
- Tighten the screws (1).

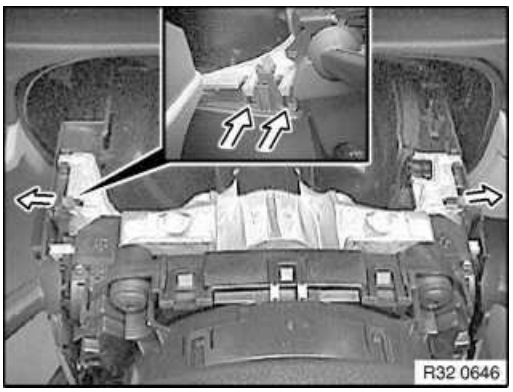
Steering column switch cluster (SZL) on the steering column

Screw TS5x20		Tightening torque	3 Nm

38 – Install steering column shroud lower section



- Position the steering column shroud lower section .
- Connect available connectors (1) and (2) and lock.



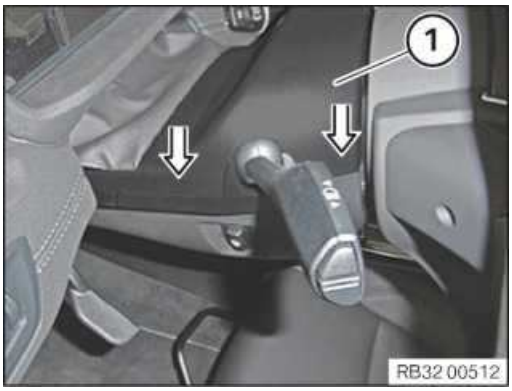
- Position the steering column shroud lower section with the retaining lugs (arrows).
- Press steering column shroud lower section completely towards the top until the retaining lugs (arrows) engage.

39 – Fit steering column shroud upper section

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- Position the steering column shroud upper section.
- Attach gap cover of the steering column (1) on the brackets (arrows).



- Position the steering column shroud upper section (1).

NOTICE

Perform the operations on the left and right side.

- Press the upper section of the steering column shroud (1) downwards in direction of arrow.

  The upper section of the steering column shroud must engage audibly and perceptibly.

40 – Installing the steering wheel/sports steering wheel

▸ **Check the neutral position of the clock spring**

- Ensure that the coil spring is not twisted.

  There are clock springs installed without a mechanical anti-twist lock.

  Coil springs without a mechanical anti-twist lock are identifiable on the inspection glass for the neutral position mark.
- Check the neutral position of the clock spring on the steering column switch cluster (SZL).

  The neutral position is correct if the yellow or green mark (1) is clearly visible.

Check



- Check the mark (1) in the inspection glass.

Result

» The mark (1) is not visible.

Measure

- Turn the coil spring until mark (1) is visible in the inspection glass.

Check

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- A micro-encapsulated screw (1) may be fitted.
- Checked threaded connection

Result

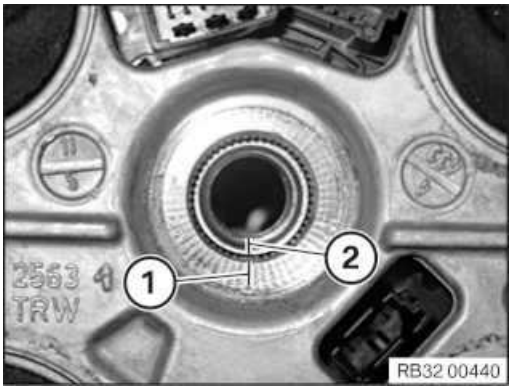
» Screw (1) is micro-encapsulated.

Measure

- Clean thread in the steering column.

  Renew the screw (1).

  Parts: Screw



- Align and connect the steering wheel/sports steering wheel according to the mark (1) with the steering column mark (2).



- Tighten down screw (1).

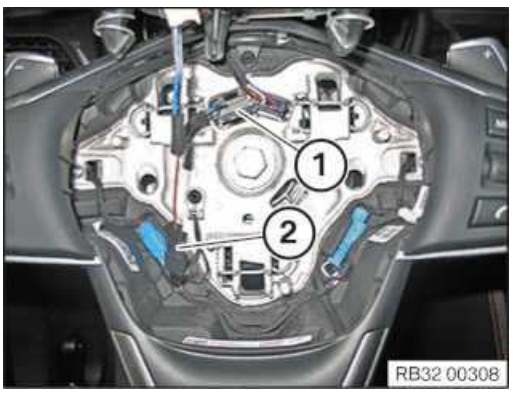
Steering wheel to steering column

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

- **Connect connectors and lock.**

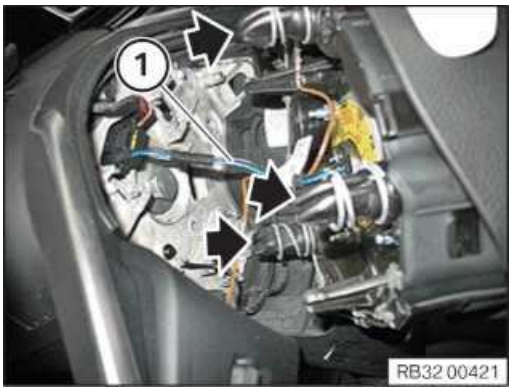
  Make sure connecting lines are correctly routed.

41 – Installing airbag unit of steering wheel/sports steering wheel



- Connect and lock connectors (1) and (2) of the airbag unit.

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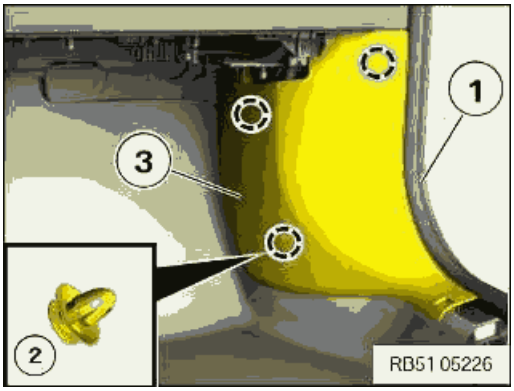
- Before installing the airbag unit, align the wiring harness (1) to the centre so that the latch mechanisms (arrows) are exposed!



- Position airbag unit (1).
- Press the airbag unit (1) with even pressure in each case in the direction of the arrow into the steering wheel.

  The airbag unit (1) must engage audibly and perceptibly.

42 – Installing side trim panel in footwell on right A-pillar

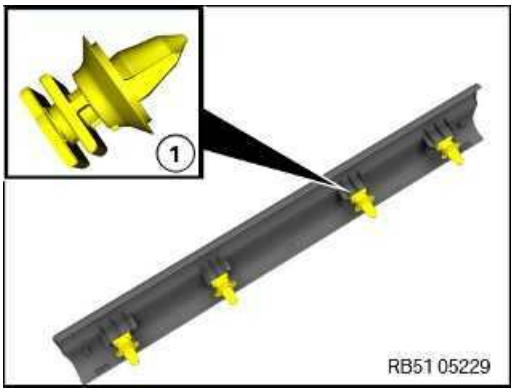


- Check clips (2) for damage, and replace if necessary.
- Feed the side trim panel (3) under the sealing lip of the edge protection (1).
- Clip in the side trim panel (3) with the clips (2).

43 – Install the front right door sill cover strip

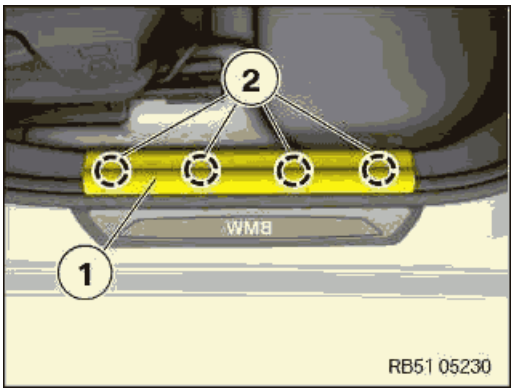
NOTICE

Description is for left component only. Procedure on the right side is identical.



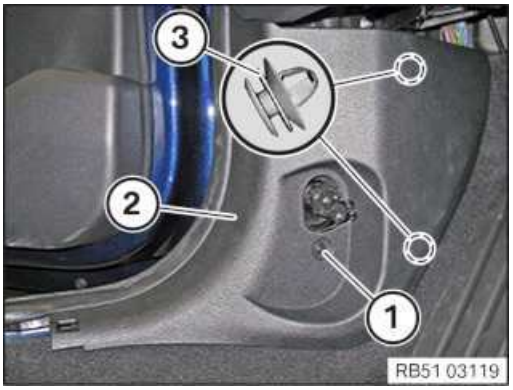
- Check the clips (1) for damage and renew where required.

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- Clip the door sill cover strip (1) into the floor panel with the clips (2).

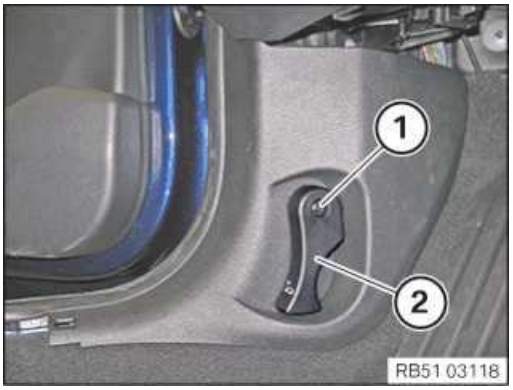
44 – Installing side trim panel in the footwell at A-pillar



- Position the side trim panel (2) and clip it to the clips (3).
- Make sure the edge protection on the side trim panel (2) fits correctly.
- Tighten down screw (1).

Side trim panel bottom left to holder

Screw		Tightening torque	3 Nm

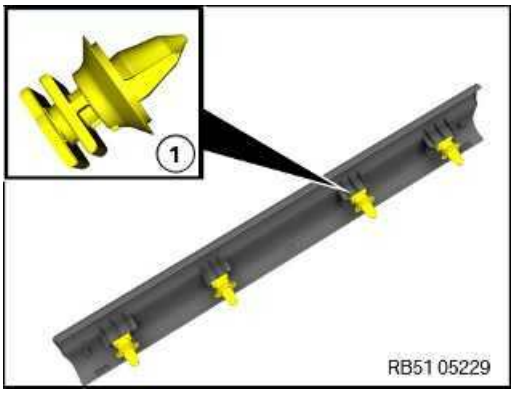


- Install lever for the bonnet release (2)I.
- Tighten down screw (1).

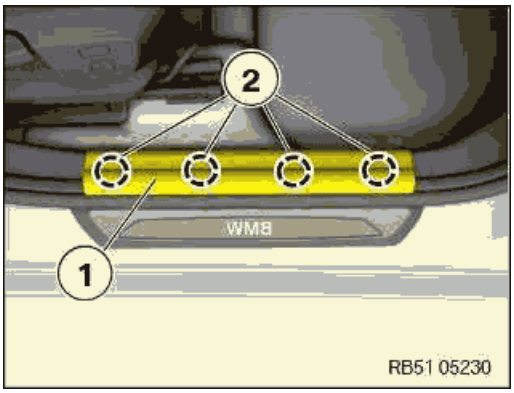
Lever for bonnet release to the holder

Screw		Tightening torque	3 Nm

45 – Install the front door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

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46 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

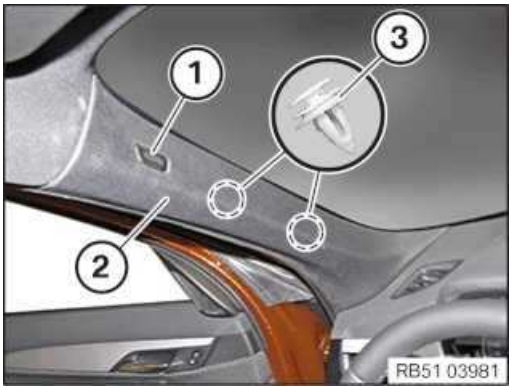
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

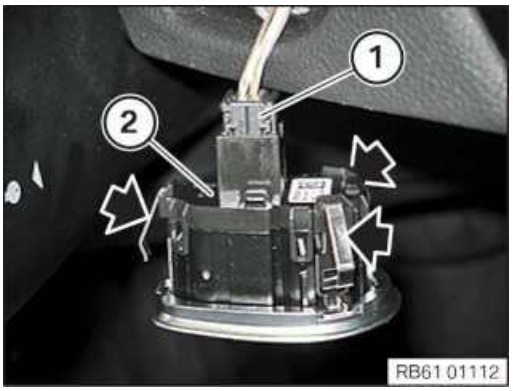
47 – Installing the light operating unit

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- Connect associated connector.
- Position light operating unit (1) correctly and clip in where marked.

48 – Installing the START-STOP button



- Connect connector (1) with START-STOP button (2).

  The retaining clips (arrows) must not be damaged or missing.



- Install START-STOP button (1) in the instrument panel trim.

49 – Install decorative strip from instrument panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install decorative strip (1) a snap into the clamps (2).

50 – Install the Head Unit High (HU-H)

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RISK OF DAMAGE

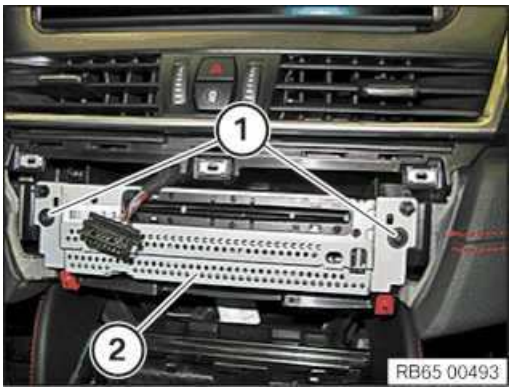
Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Position head unit (1).
- Connect and lock all connectors in the marked area.



- Slide in the head unit (2) correctly.
- Tighten the screws (1).

Head unit to instrument panel

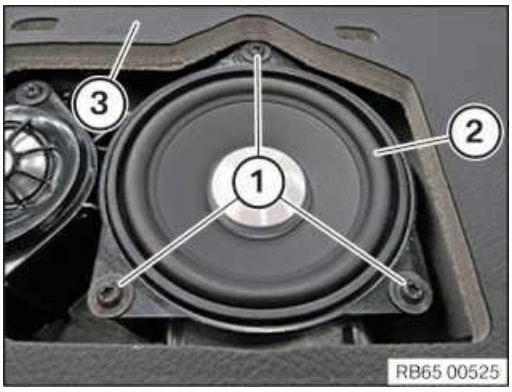
Screw		Tightening torque	1,8 Nm



- Route the wiring harness (1) correctly.

51 – Install the mid-range speakers in the instrument panel

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- Connect the connector below it to the mid-range speaker (2).
- Position the mid-range speaker (2) in the instrument panel (3).
- Tighten the screws (1).

Speaker to support / support to instrument panel / support to body

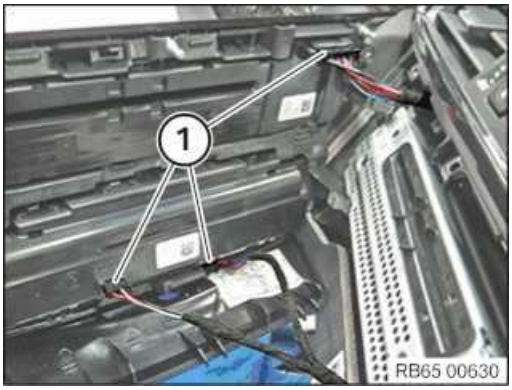
Screw		Tightening torque	1,8 Nm



- Check the latch mechanisms on the speaker cover (1) for damage and renew them if necessary.

  The latch mechanisms must not be missing or faulty.
- Engage the speaker cover (1) correctly into the instrument panel (2).

52 – Installing audio operating unit and air conditioning control panel



- Position audio operating unit and air conditioning control panel.
- Connect plug connection (1) and lock.



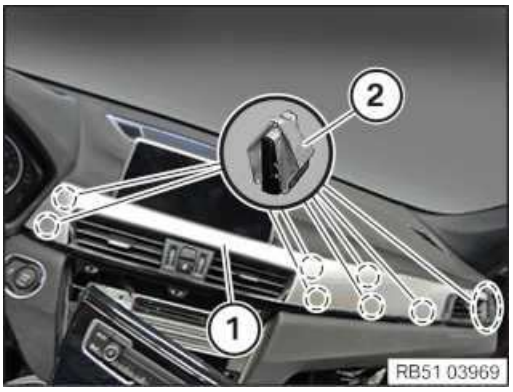
- Correctly position trim (1) and clip it into the instrument panel (2).

53 – Install the finisher on the right instrument panel

TECHNICAL INFORMATION

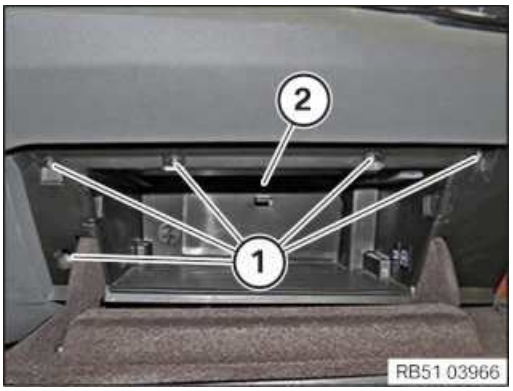
Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the decorative strip (1).
- Connect connector.
- Engage the decorative strip (1) on the clamps (2).

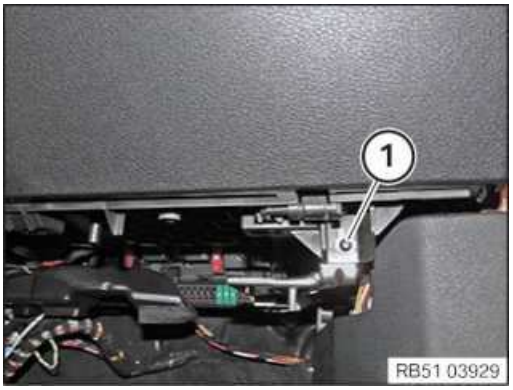
54 – Install right glove box



- Install the glove box (2) and connect and lock associated plug connections.
- Tighten the screws (1).

Glove box to instrument panel

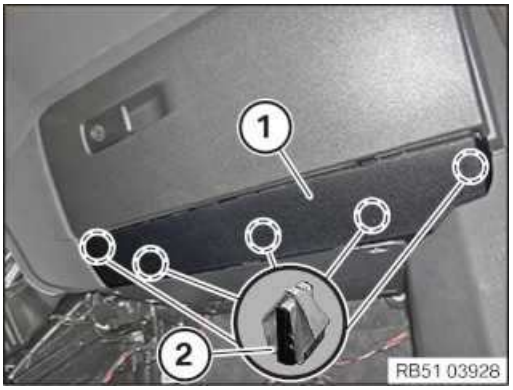
Screw		Tightening torque	1,8 Nm



- Tighten down screw (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

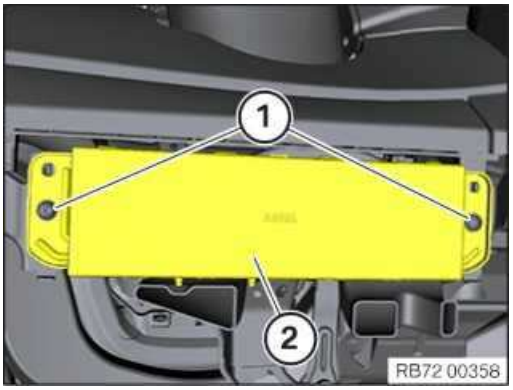


TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

- Install the trim (1) and lock it at the clamps (2).

55 – Installing knee airbag



- Connect the plug connection to the knee airbag (2) and lock.
- Install knee airbag (2).
- Renew screws (1).

  Parts: Screw
- Tighten the screws (1).

Knee airbag to body

M8	Renew screws.	Tightening torque	8 Nm

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56 – Install the side panel on instrument panel on the left and right

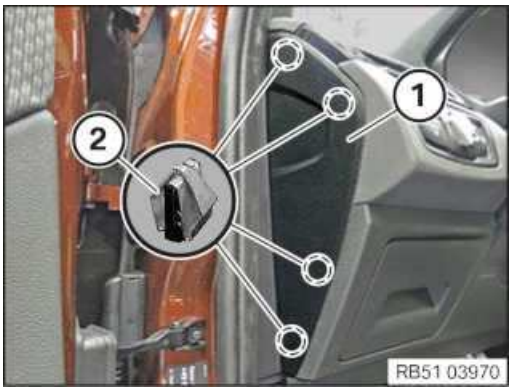
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install side panel on the instrument panel**

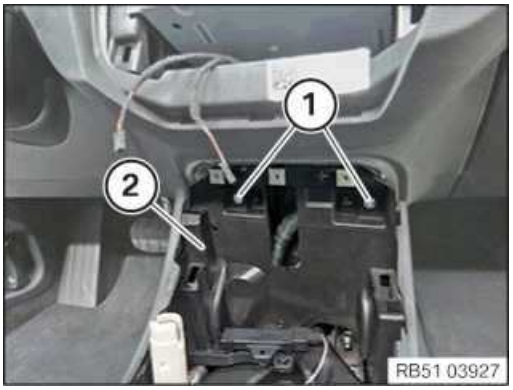
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Feed in the side panel (1) at an angle toward the front and lock at the clamps (2).

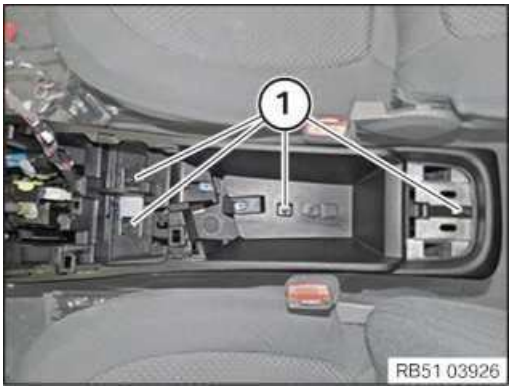
57 – Installing centre console fully with centre armrest



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm



- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing the centre armrest**

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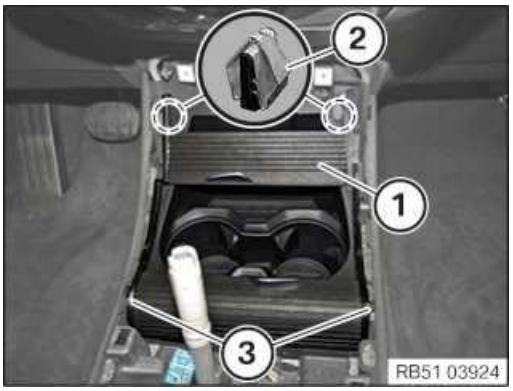


- Install the centre armrest and tighten nuts (1).

Centre armrest to support

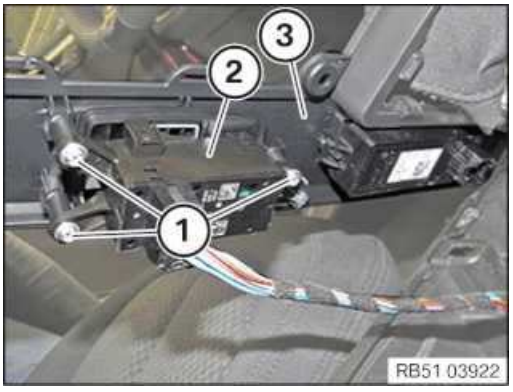
Nut M8		Tightening torque	21,4 Nm

58 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

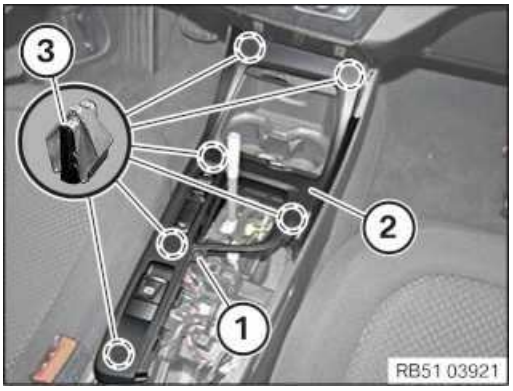
59 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

60 – Installing the decorative trim to the centre console

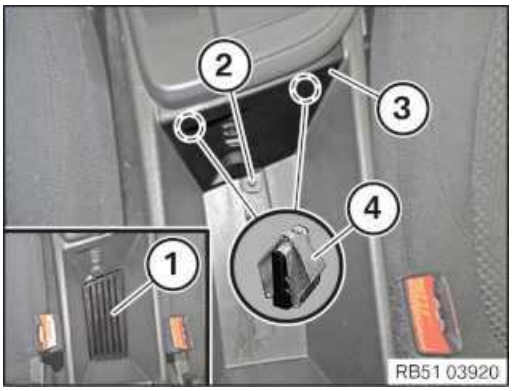
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- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

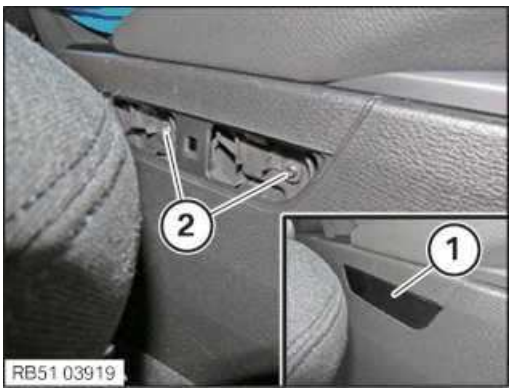


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

61 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.

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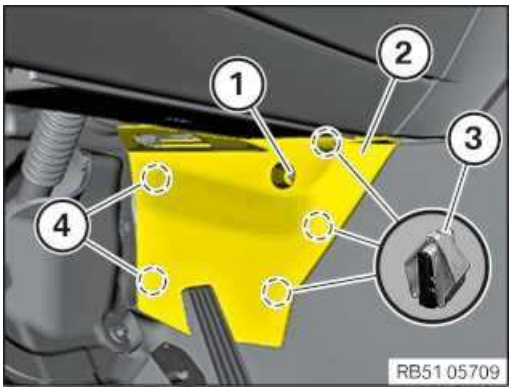
- Clip in gaiter (arrows).

62 – Installing side trim panel for the left and right centre console

▸ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

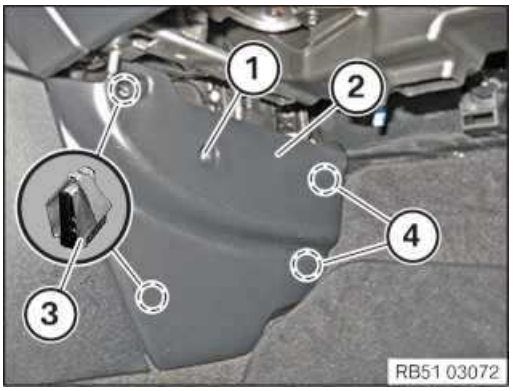
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

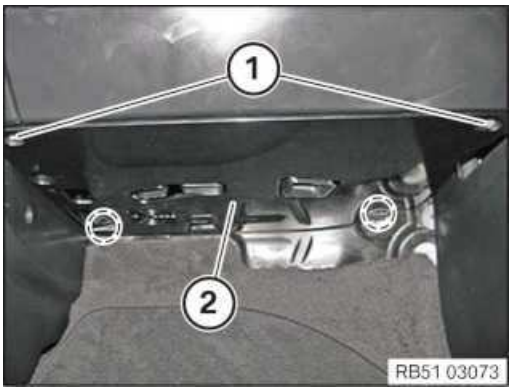
Oval-head screw		Tightening torque	1,8 Nm

63 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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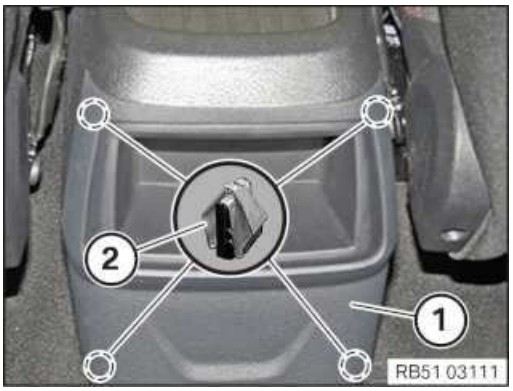


- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

64 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

65 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Instrument panel trim to carrier support Used in step 34

Screw		Tightening torque	2,4 Nm

Fold-down compartment to instrument panel Used in step 35

Screw		Tightening torque	1,8 Nm

Instrument cluster to instrument panel Used in step 36

Screw			1,7 Nm

Steering column switch cluster (SZL) on the steering column Used in step 37

Screw TS5x20		Tightening torque	3 Nm

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Steering wheel to steering column — Used in step 40

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

Side trim panel bottom left to holder — Used in step 44

Screw		Tightening torque	3 Nm

Lever for bonnet release to the holder — Used in step 44

Screw		Tightening torque	3 Nm

A-pillar trim panel to body — Used in step 46

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Head unit to instrument panel — Used in step 50

Screw		Tightening torque	1,8 Nm

Speaker to support / support to instrument panel / support to body — Used in step 51

Screw		Tightening torque	1,8 Nm

Glove box to instrument panel — Used in step 54

Screw		Tightening torque	1,8 Nm

Knee airbag to body — Used in step 55

M8	Renew screws.	Tightening torque	8 Nm

Screw connection for centre console — Used in step 57 59 60

Oval-head screw		Tightening torque	1,8 Nm

Centre armrest to support — Used in step 57

Nut M8		Tightening torque	21,4 Nm

Parking brake button — Used in step 59

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console — Used in step 60 62

Oval-head screw		Tightening torque	1,8 Nm

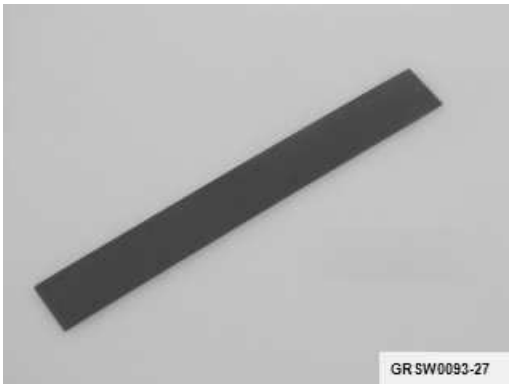
Bottom left footwell trim to instrument panel — Used in step 63

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

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0 496 571 (00 9 327) Wedge



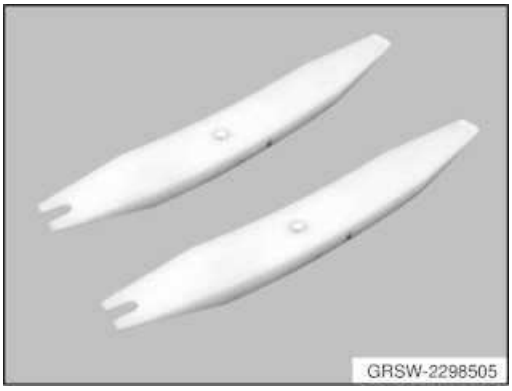
Common	Used in step 6 15
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common	Used in step 7 9 11 13 17 18 22 24
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

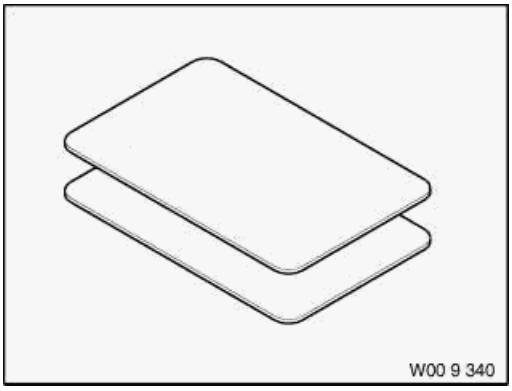
2 298 505 Wedge



Common	Used in step 14
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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0 493 687 (00 9 340) Removal aid



Common Used in step 19

Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		**Removal aid** Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

2 298 504 Wedge



Common Used in step 28

Usage	Wedge with angled lug
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	21 46

Repair instructions	Used in step

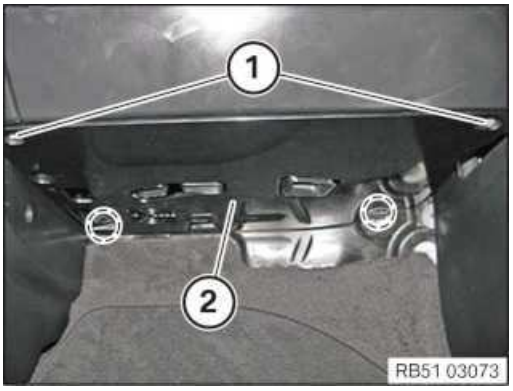
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61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	65
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	65
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
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61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 20 900 Disconnecting and connecting battery earth lead	1	65
61 35 ... Notes on ESD protection (Electro Static Discharge)		
72 12 ... Unlocking/locking airbag plug connections	33	34

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51 45 195 Removing and installing instrument trim panel trim at bottom right

1 – Removing the instrument panel trim at bottom right

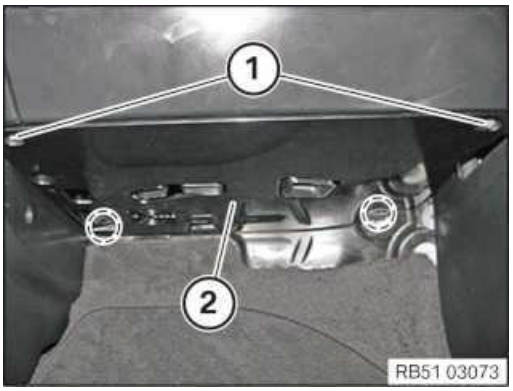


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

2 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

Additional Information

Overview of Tightening Torques

Bottom left footwell trim to instrument panel Used in step 2

M5 hexagon nut		Tightening torque	2 Nm

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51 45 075 Removing and installing support for dashboard

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



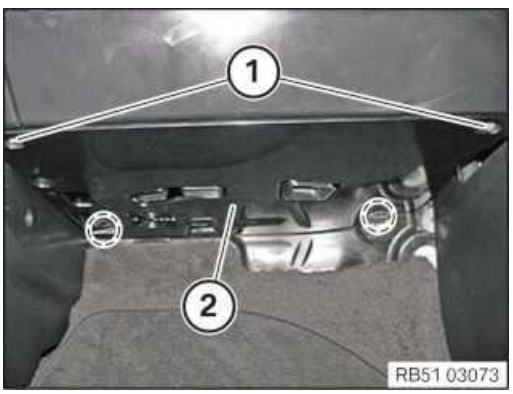
- See additional information.

2 – Adjust the steering column position



- Adjust the length of the steering column to the maximum length in the direction of arrow (1).
- Move the steering column to the lowest steering column position in the direction of arrow (2).

3 – Removing the instrument panel trim at bottom right

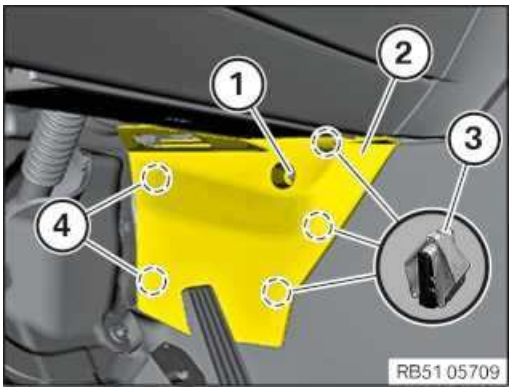


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

4 – Removing the side trim panel for the left and right centre console

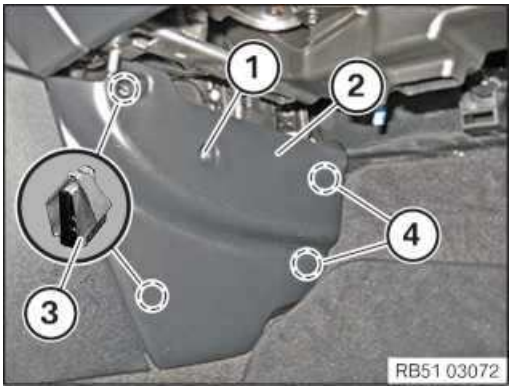
▸ **Removing side trim panel for the left centre console**

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- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▶ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

5 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

6 – Remove the decorative trim from the centre console

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RISK OF DAMAGE

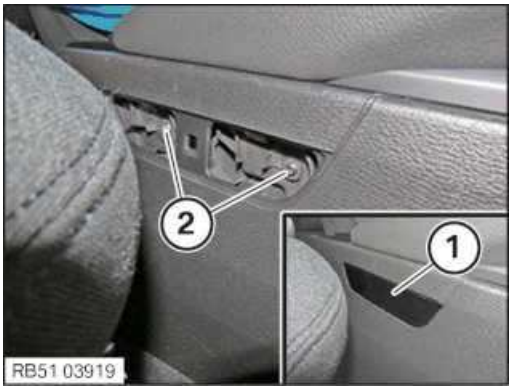
Scratches.

Tools and sharp-edged components can cause scratches.

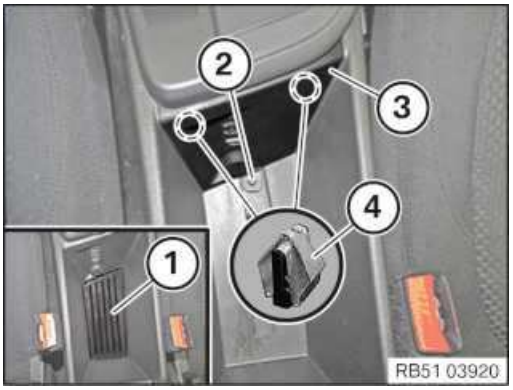
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



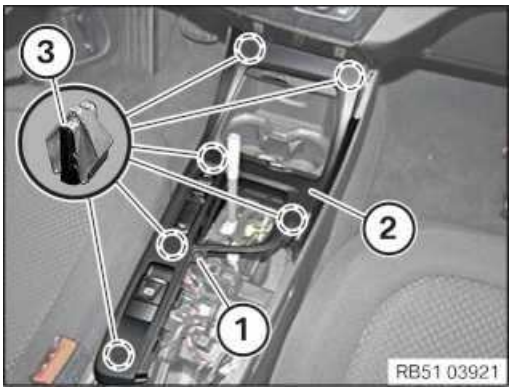
- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).



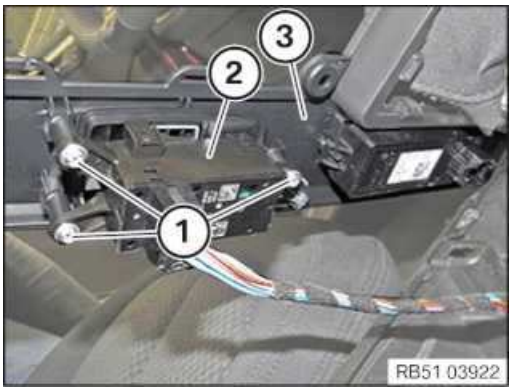
- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

7 – Remove the centre console trim

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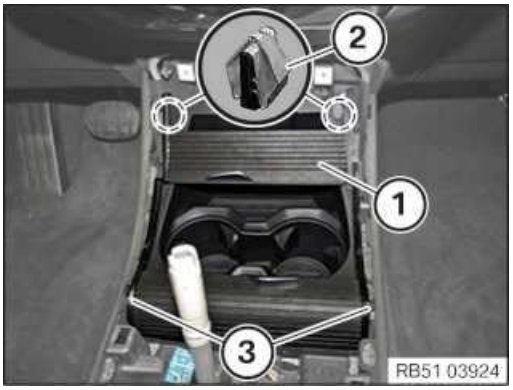
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

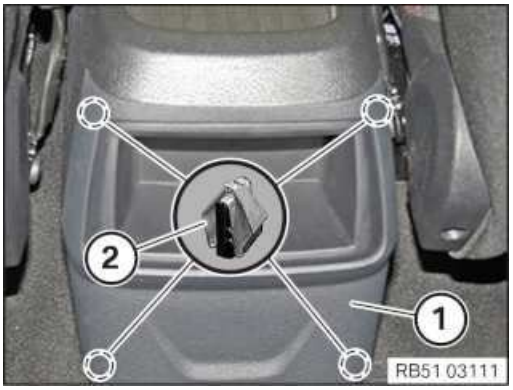
  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

8 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

9 – Removing the rear centre console trim



- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

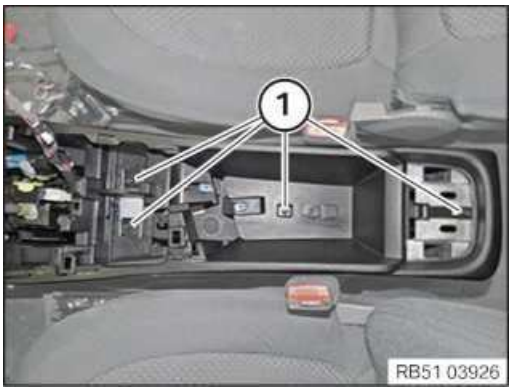
10 – Removing centre console fully with centre armrest

▸ **Removing the centre armrest**

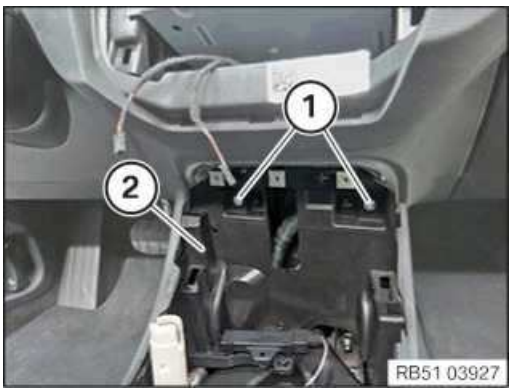
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- Release nuts (1) and remove centre armrest upwards.



- Loosen screws (1).



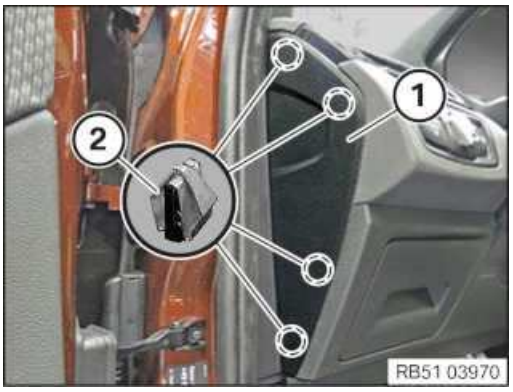
- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

11 – Remove the side panel on the left and right of the instrument panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

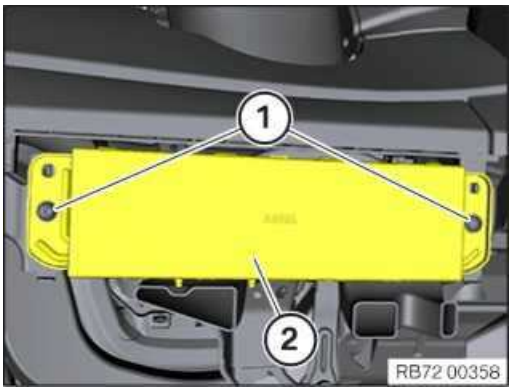
▸ **Remove side panel on the instrument panel**



- Lift out the side panel (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) and slide it out to the rear at an angle.

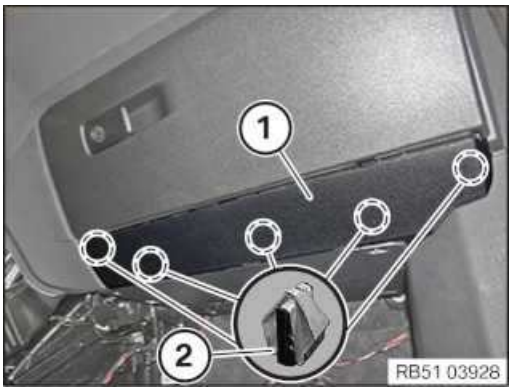
12 – Removing knee airbag

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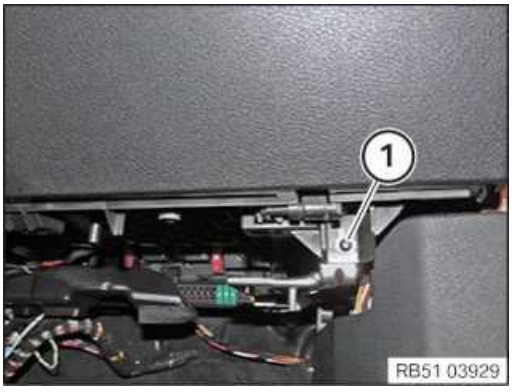


- Unlock plug connection on knee airbag (2) and disconnect.
- Loosen screws (1).
- Remove knee airbag (2).

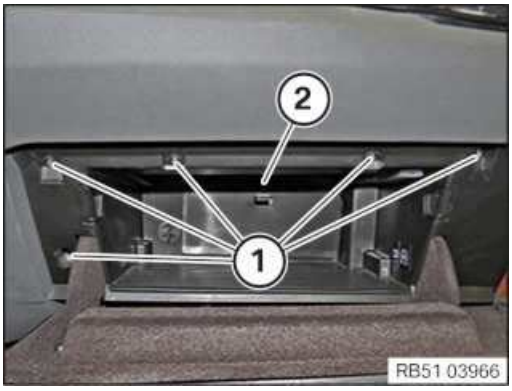
13 – Remove right glove box



- Release the trim (1) with the special tool **0 496 569 (00 9 325)** toward the bottom from the clamps (2) and remove.



- Loosen screw (1).



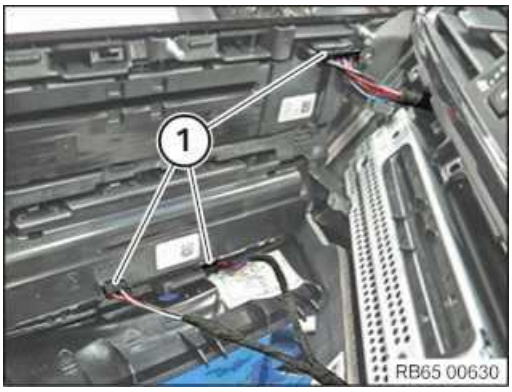
- Loosen screws (1).
- Remove glove box (2) to the inside and disconnect associated plug connections.

14 – Removing the audio operating unit and the air conditioning control panel



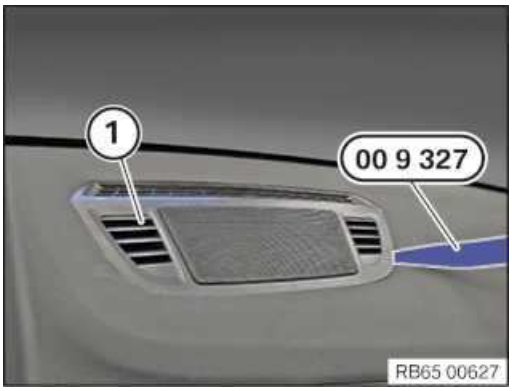
- Unclip the trim (1) using special tool **2 298 505**.

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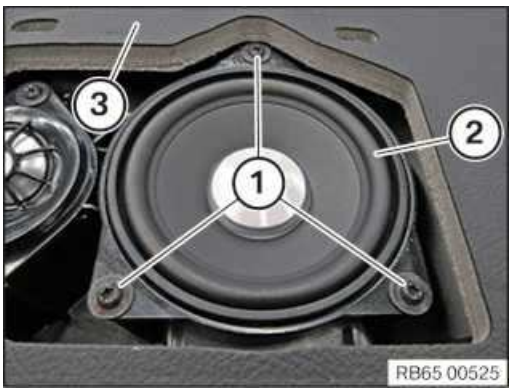


- Unlock plug connection (1) and disconnect.
- Remove the audio operating unit and the air conditioning control panel.

15 – Remove the mid-range speaker from the instrument panel



- Unclip the speaker cover (1) using the special tool **0 496 571 (00 9 327)** and remove upwards.



- Loosen screws (1).
- Disconnect plug connection underneath.
- Guide the mid-range speaker (2) out of the instrument panel (3) and remove it.

16 – Remove Head Unit High (HU-H)

RISK OF DAMAGE

Electrostatic discharge.

Damage to or destruction of electrical components.

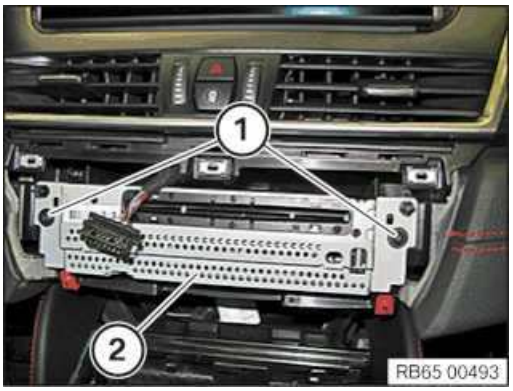
- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

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- Remove the wiring harness (1).

  In the factory, the wiring harness (1)is routed such that not enough excess length exists to remove the head unit.

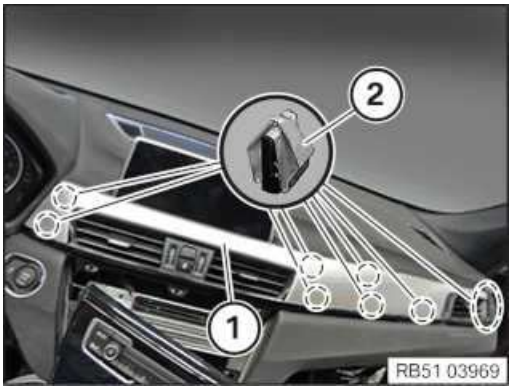


- Loosen screws (1).
- Pull out the head unit (2) a bit.



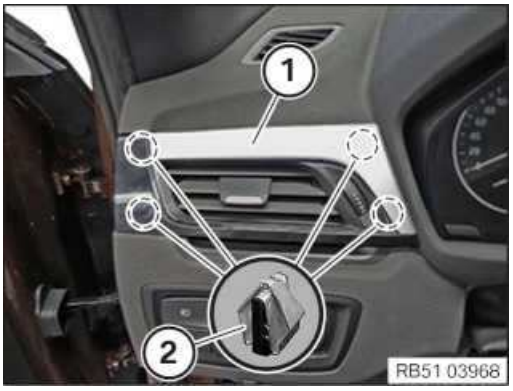
- Unlock and disconnect all connectors in the marked area.
- Remove head unit (1).

17 – Remove the finisher on the right instrument panel



- Carefully release the decorative strip (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) starting from the side.
- Lift up the decorative strip (1) and disconnect the plug connections behind it.
- Remove the decorative strip (1).

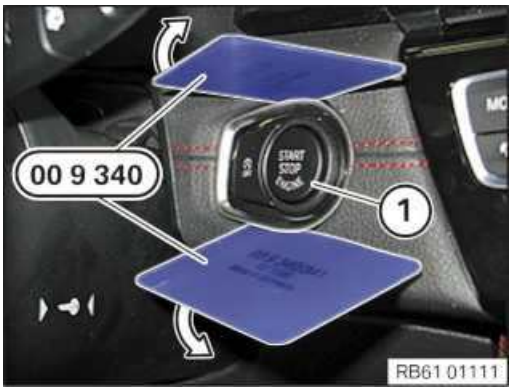
18 – Remove decorative strip from instrument panel



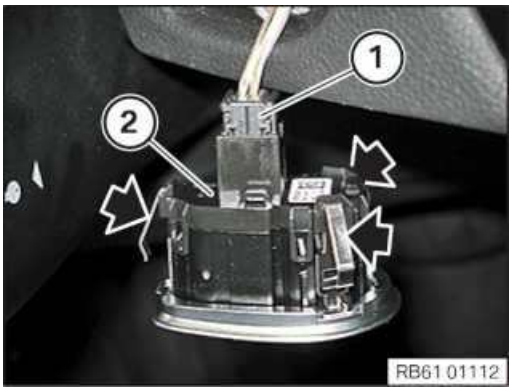
- Release the decorative strip (1) using the special tool **0 496 569 (00 9 325)** from the clamps (2) and remove.

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19 – Removing the START-STOP button



- Remove START-STOP button (1) using the special tool **0 493 687 (00 9 340)** .



- Disconnect the connector (1) and remove the START-STOP button (2).

20 – Removing the light operating unit



- Unclip the light operating unit (1) in the marked area.
- Unlock and disconnect associated connector.

21 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

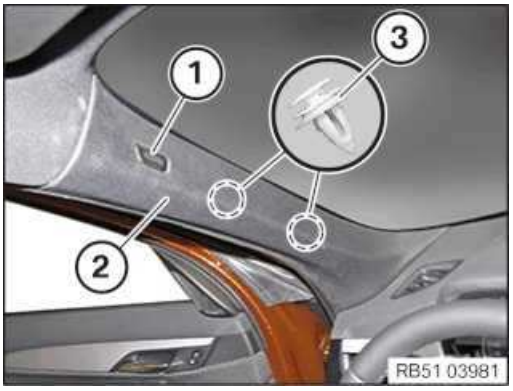
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WARNING

Pyrotechnic components.

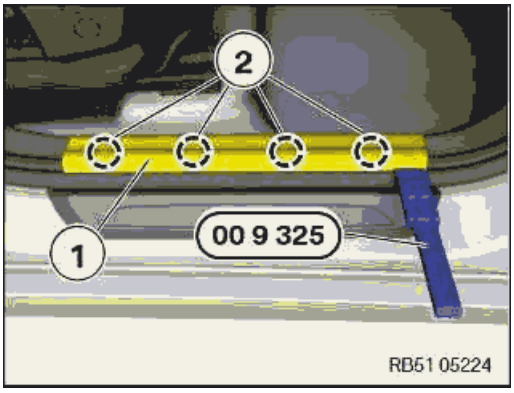
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

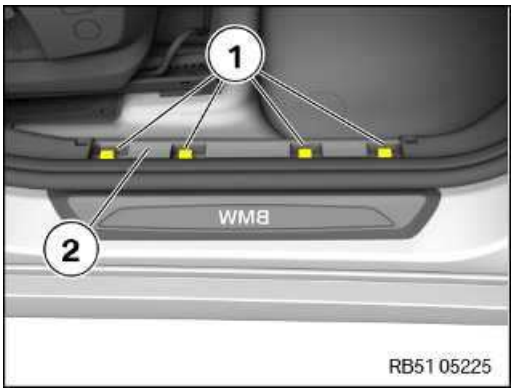


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

22 – Remove front entrance cover strip



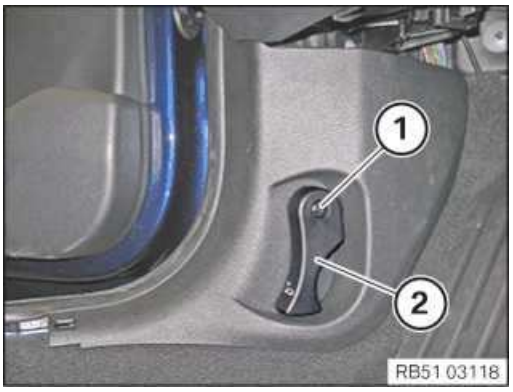
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



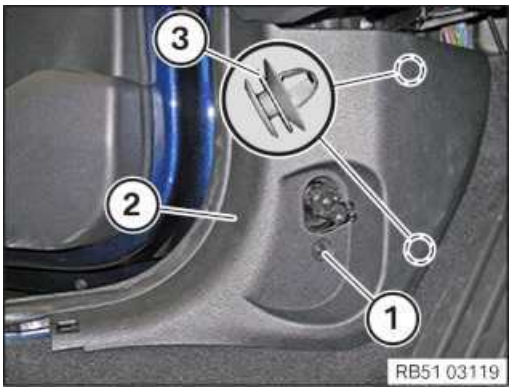
- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

23 – Removing the side trim panel in the footwell at the A-pillar

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- Loosen screw (1).
- Remove bonnet release lever (2).

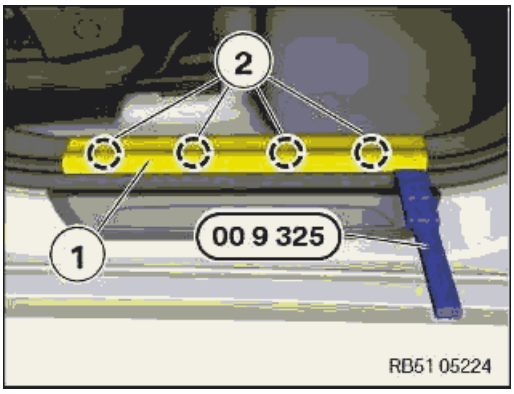


- Loosen screw (1).
- Unclip side trim panel (2) from the clips (3) and remove.

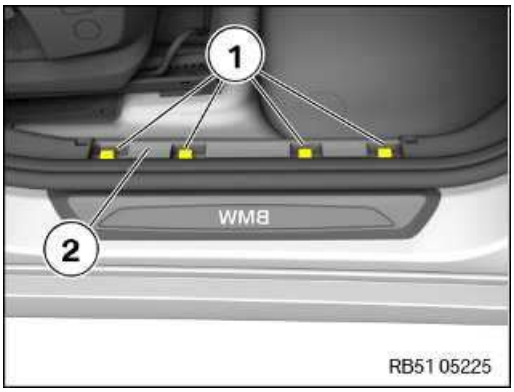
24 – Remove front right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



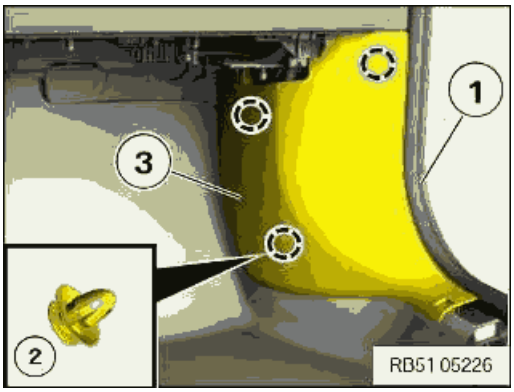
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

25 – Removing the side trim panel in the footwell at the right-hand A-pillar

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- Guide side trim panel (3) under the sealing lip out of the edge protection (1).
- Unclip and remove the side trim panel (3) at the clips (2).

26 – Removing airbag unit of the steering wheel/sports steering wheel

WARNING

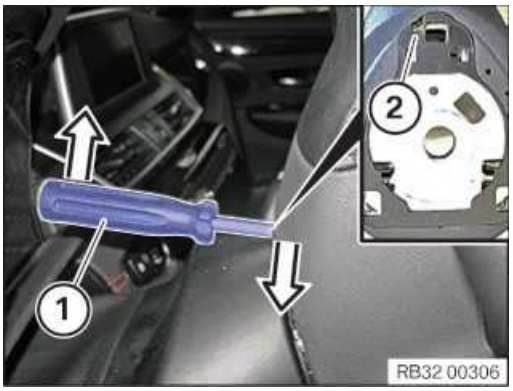
Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators



- Turn the steering wheel (1) through 180° from the "straight-ahead driving position".



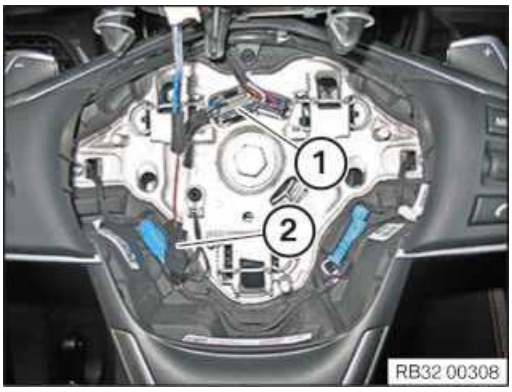
- Insert the slotted screwdriver (1) into the elongated hole on the rear side on the steering wheel.
- Push the slotted screwdriver (1) up and thereby push the retaining spring down (2).

  The airbag unit is unlocked.



- (1) Push unlocked airbag unit up.
- (2) At the same time, pull off the top airbag unit in the opposite direction of travel.

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- Unlock and disconnect the plug connections (1) and (2).
- Remove airbag unit.

27 – Removing steering wheel/sports steering wheel



- Move the steering wheel/sports steering wheels to the straight-ahead position.
- **Unlock plug connection and disconnect.**
- Release the screw (1) and remove the steering wheel/sports steering wheel.

28 – Removing steering column shroud upper section



NOTICE

Perform the operations on the left and right side.

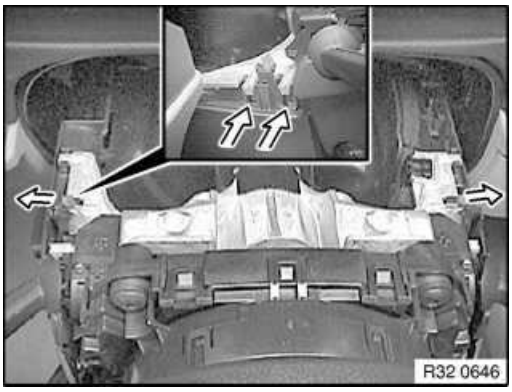
- Unclip the steering column shroud upper section (1) with the special tool **2 298 504** in area (2).
- Fold the steering column shroud upper section (1) up.



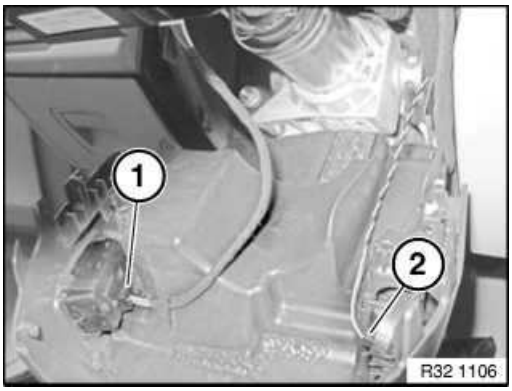
- Release the gap cover of the steering column (1) from the brackets (arrows) of the steering column shroud upper section.
- Remove steering column shroud upper section.

29 – Removing steering column shroud lower section

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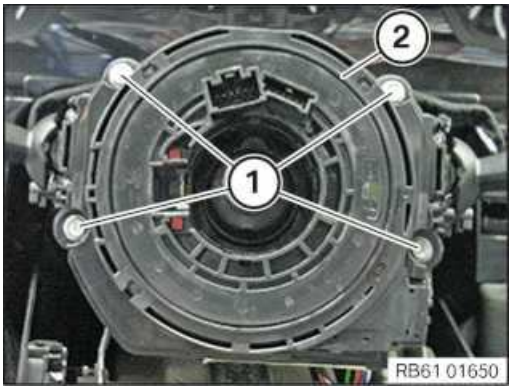


- Press the retaining lugs (arrows) a little outwards and unclip the steering column shroud lower section in a downward direction.

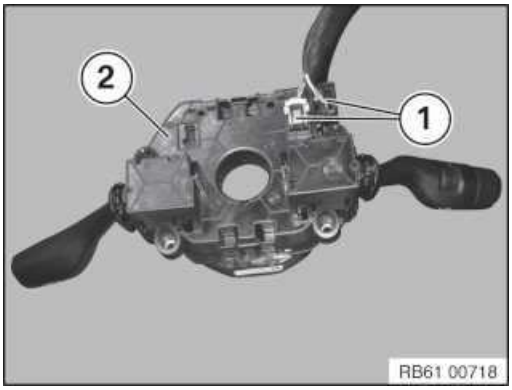


- Tilt steering column shroud lower section in downward direction.
- Unlock and disconnect the plug connections (1) and (2).
- Remove steering column shroud lower section.

30 – Removing the steering column switch cluster (SZL)



- Loosen screws (1).
- Remove the steering column switch cluster (SZL) (2).



- Unlock and disconnect the connector (1) on the steering column switch cluster (SZL) (2).

31 – Removing the instrument cluster (KOMBI)

RISK OF DAMAGE

Scratches.

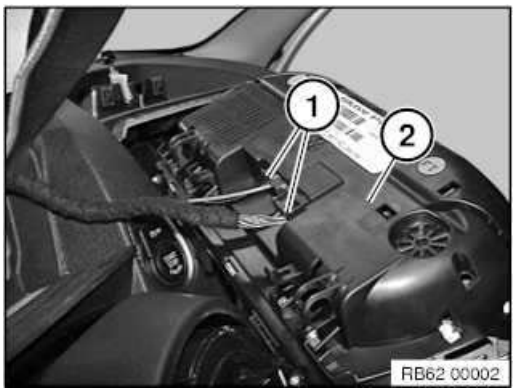
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

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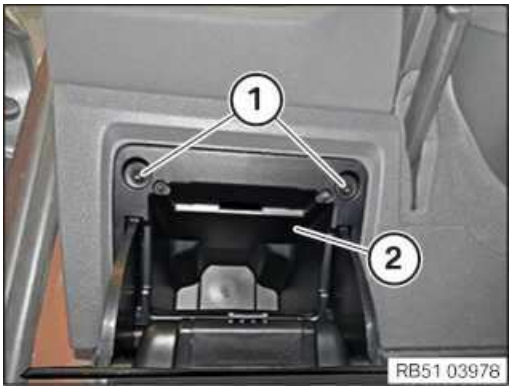


- Loosen both screws (1).
- Thread out instrument cluster (KOMBI) in direction of arrow.



- Disconnect all plug connections (1).
- Removing the instrument cluster (KOMBI) (2).

32 – Removing the left fold-down compartment

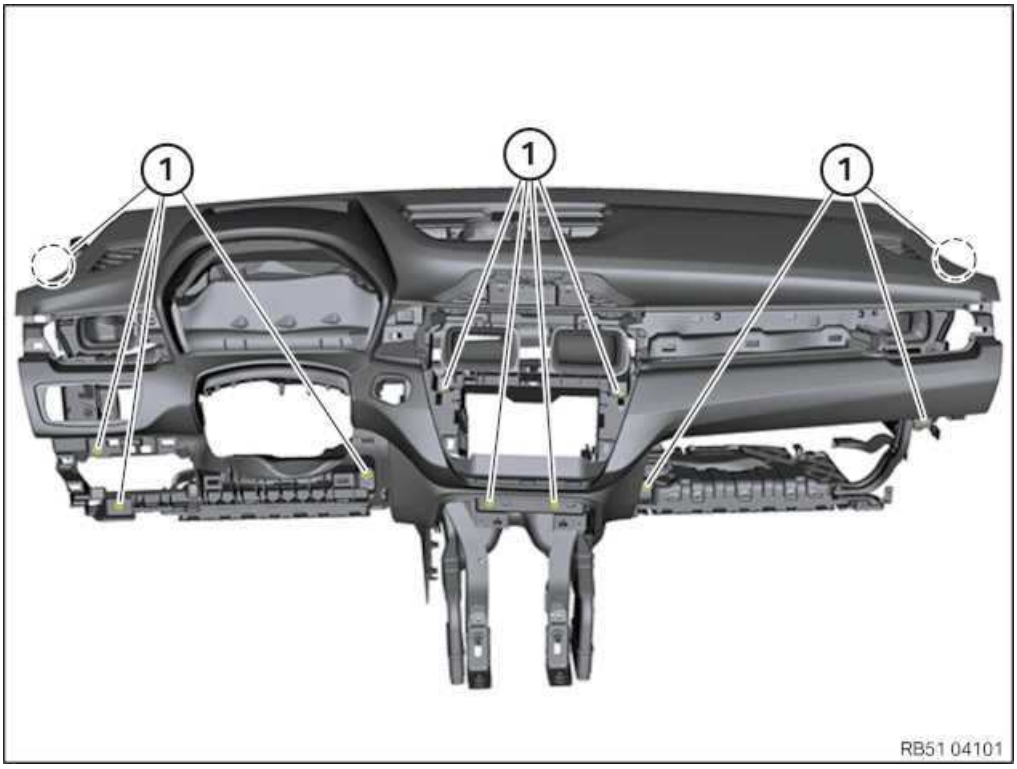


- Loosen screws (1).
- Guide out and remove the fold-down compartment (2) downward from the instrument panel.

33 – Remove instrument panel trim

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Instrument panel



TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

- Loosen screws (1).
- Unlock and disconnect the plug connection of the front passenger airbag.
- Guide out the instrument panel trim with the help of an auxiliary person and unlock and disconnect all the plug connections.
- Release the wiring harness from the instrument panel trim.
- Guide out the instrument panel trim through the door aperture from the vehicle.

MAIN WORK

34 – Removing the support for the instrument panel

▸ **Disconnect positive battery cable**

Prerequisite

Ignition is switched off.

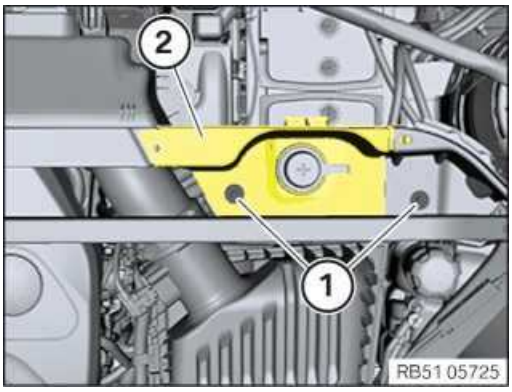
WARNING

Working on 12 V vehicle electrical system.

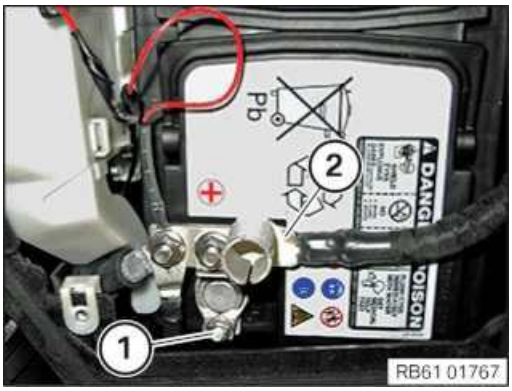
Risk of short circuits! Risk of fire!

- Detach battery earth lead from battery.
- For additional batteries: Detach all battery earth leads from additional batteries.

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- Loosen screws (1).
- Guide out and remove the cover (2).



- Slacken nut (1).
- Remove positive battery cable (2).

WARNING

Unprotected battery terminals.

Risk of short circuits! Risk of fire!

- Cover the vehicle battery.

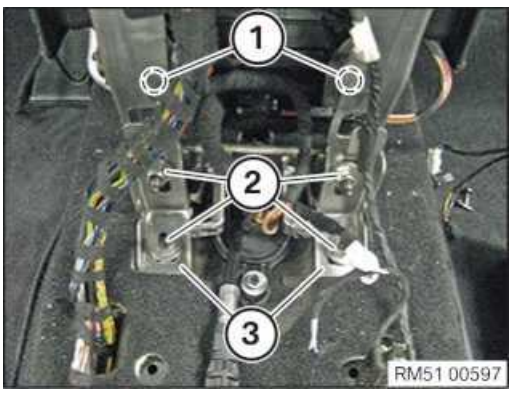
- Fasten positive battery cable (2) laterally.



- Release the screw (1) on bulkhead.



- Release the clamping bolt (1) of steering shaft on the steering column.
- Pull the steering shaft off of the steering column.

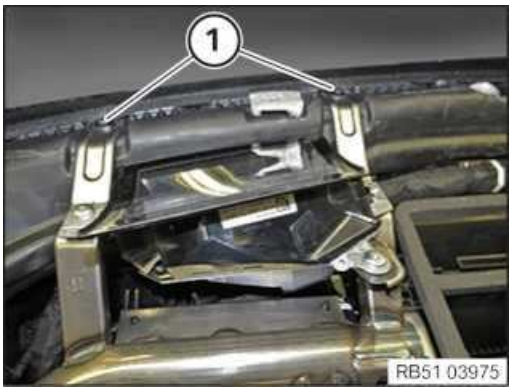


- Loosen nuts (2).
- Remove retaining bracket (3).
- Loosen screws (1).

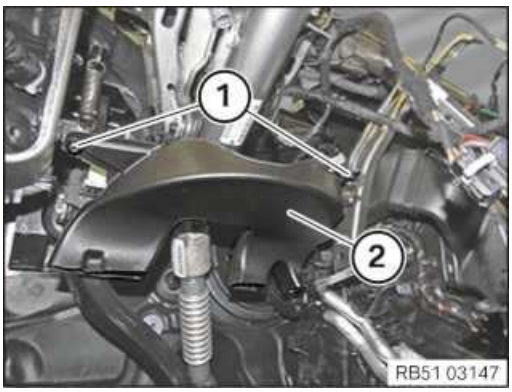
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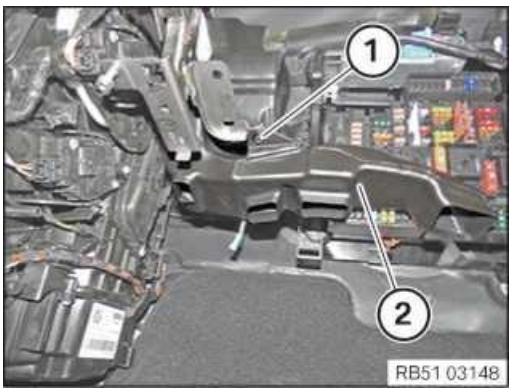
- Loosen the nuts (1) on the left and right.



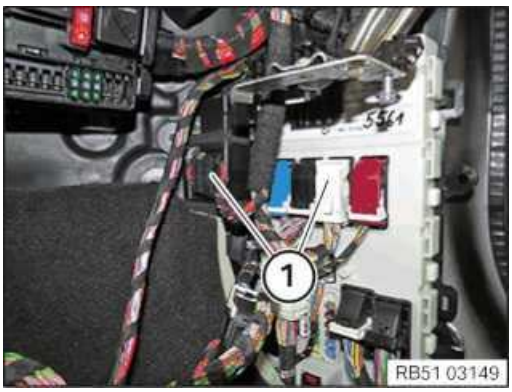
- Loosen screws (1).



- Loosen screws (1).
- Remove the air duct (2).

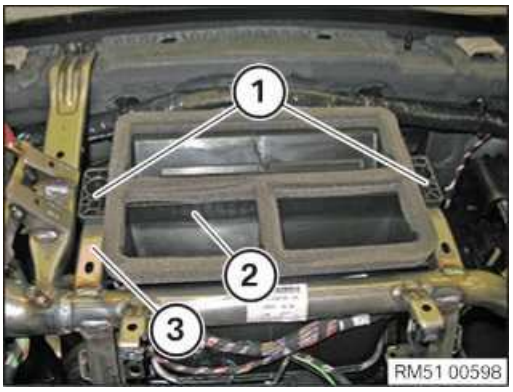


- Loosen screw (1).
- Remove the air duct (2).



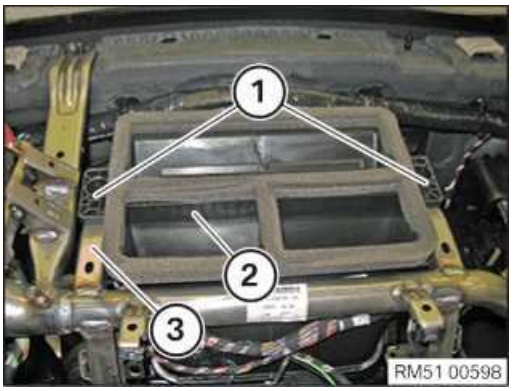
- Unlock and disconnect plug connections (1).

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- Loosen screws (1).
- Raise heating and air-conditioning unit (2) slightly and guide out the support (3) towards rear.
- If necessary, release additional cables and all cable clips and remove support (3).

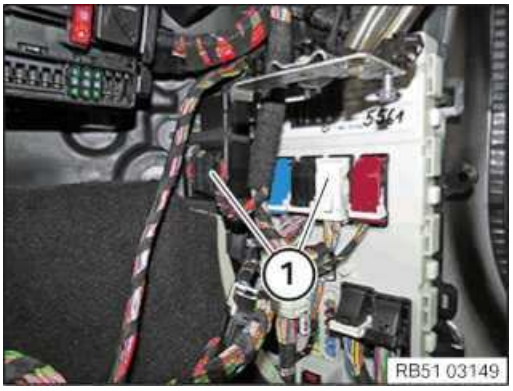
35 – Installing the support for instrument panel



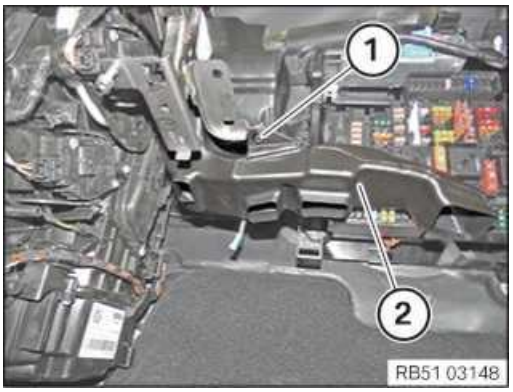
- Install the support (3).
- Correctly position the heating and air-conditioning unit (2) in the area of the screw connection (1) on the support (3).
- Make sure that cable routing is correct and clip in all cable clips on the support.
- Tighten the screws (1).

Heating and air-conditioning unit on the support for the instrument panel

M6x20 screw	Renew screw	Tightening torque	8 Nm
NutM6	Replace nut	Tightening torque	8 Nm



- Connect connectors (1) and lock.

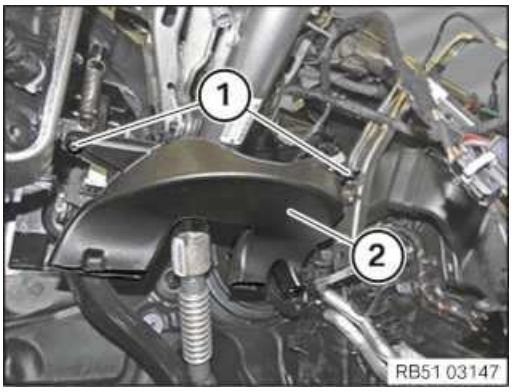


- Install air duct (2).
- Tighten down screw (1).

Footwell ventilation duct

Screw			2,4 Nm

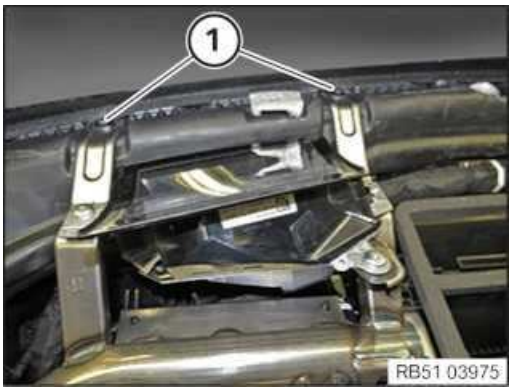
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- Install air duct (2).
- Tighten the screws (1).

Footwell ventilation duct

Screw			2,4 Nm



- Tighten the screws (1).

Support for the instrument panel

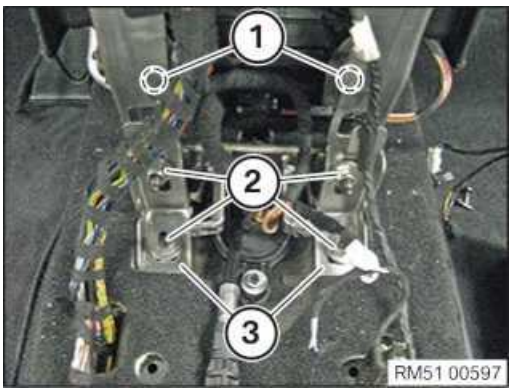
Screw		Tightening torque	21 Nm
Nut		Tightening torque	21 Nm



- Tighten the nuts(1) on the left and right.

Support for the instrument panel

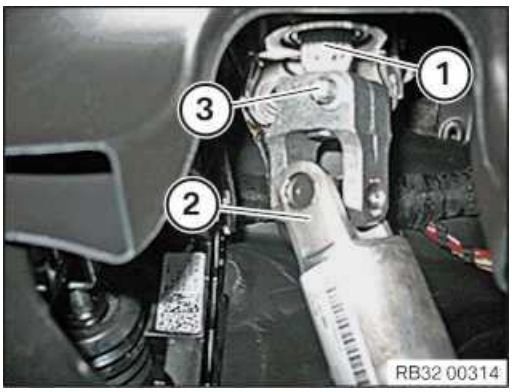
Screw		Tightening torque	21 Nm
Nut		Tightening torque	21 Nm



- Install retaining bracket (3).
- Tighten nuts (2).
- Tighten the screws (1).

Heating and air-conditioning unit on the support for the instrument panel

M6x20 screw	Renew screw	Tightening torque	8 Nm
NutM6	Replace nut	Tightening torque	8 Nm



- Pull the steering column spindle (1) out to the maximum length.
- Push universal joint (2)onto the spindle (1)of the steering column.

  Brace the spindle (1) on the steering column.
- Renew the clamping bolt (3).

  Parts: Clamping bolt
- Tighten the clamping bolt (3).

Lower steering shaft to steering column

Clamping bolt M8	Recut screw thread. Renew clamping bolt. No retorquing permitted!	Tightening torque	28 Nm

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- Tighten the screw (1) on the bulkhead.

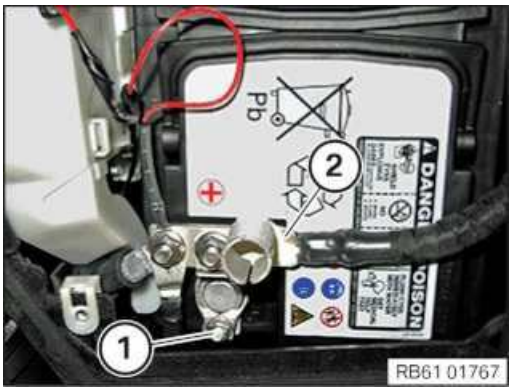
Support for the instrument panel

Screw		Tightening torque	21 Nm
Nut		Tightening torque	21 Nm

▸ **Connect positive battery cable**

Prerequisite

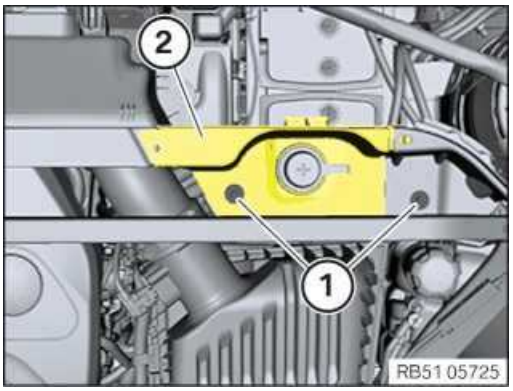
Ignition is switched off.



- Mount the positive battery cable (2) and position correctly.
- Tighten nut (1).

Battery terminal with IBS positive battery terminal / negative battery terminal

NutM6		5 Nm



- Feed in cover (2) and position correctly.
- Tighten the screws (1).

Cover of remote positive terminal

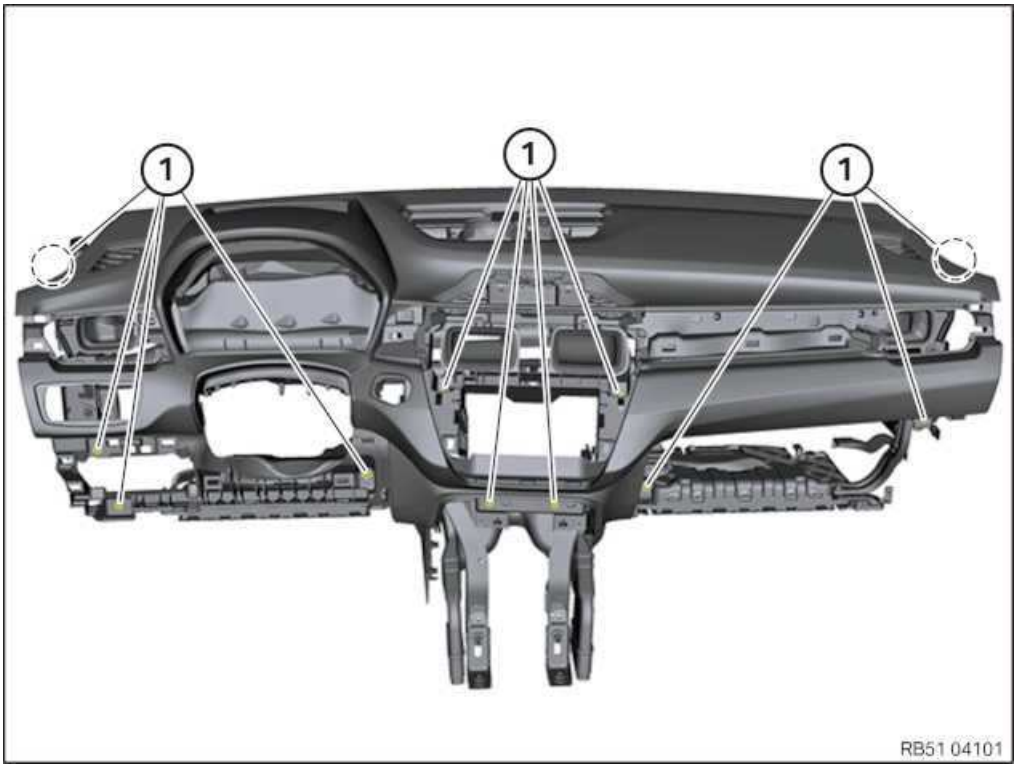
Screw		Tightening torque	2,6 Nm

POSTPROCESSES

36 – Install instrument panel trim

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Instrument panel



TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

- Guide the instrument panel trim through the door aperture with the help of an auxiliary person.
- Install the instrument panel trim, and while doing so secure the wiring harness and connect and lock all the connectors.
- Connect and lock the plug connection of the front passenger airbag.
- Make sure guides on instrument panel are correctly seated in respective mountings of bulkhead.
- Make sure seals for the air ducts are correctly seated.
- Make sure wiring harness is correctly laid.
- Tighten the screws (1).

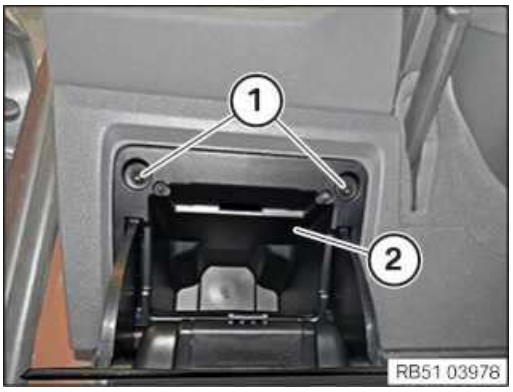
Instrument panel trim to carrier support

Screw		Tightening torque	2,4 Nm

37 – Installing the left fold-down compartment

- Guide in the fold-down compartment (2) on the instrument panel.

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- Tighten the screws (1).

Fold-down compartment to instrument panel

Screw		Tightening torque	1,8 Nm

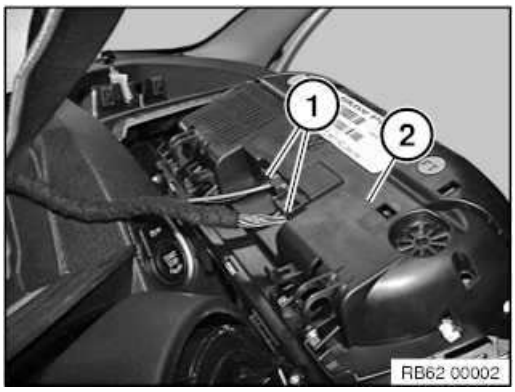
38 – Installing the instrument cluster (KOMBI)

RISK OF DAMAGE

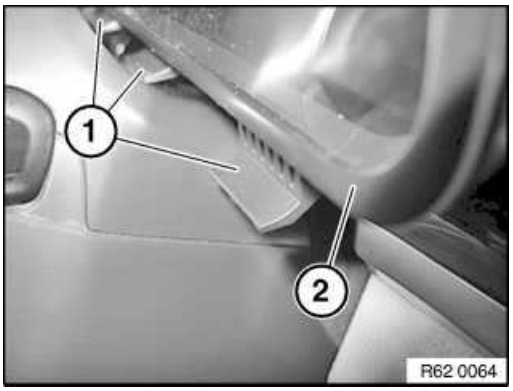
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Connect and lock all connectors (1) to the instrument cluster (KOMBI).



- Make sure that the retaining tabs (1) of the instrument cluster (KOMBI) (2) are seated exactly in mountings of the instrument panel.



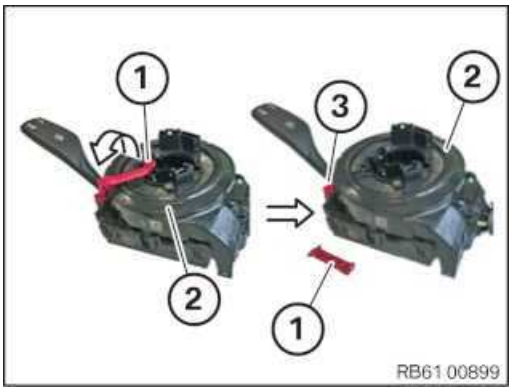
- Position the instrument cluster (KOMBI) position in the opposite direction of the arrow.
- Tighten the screws (1).

Instrument cluster to instrument panel

Screw		1,7 Nm

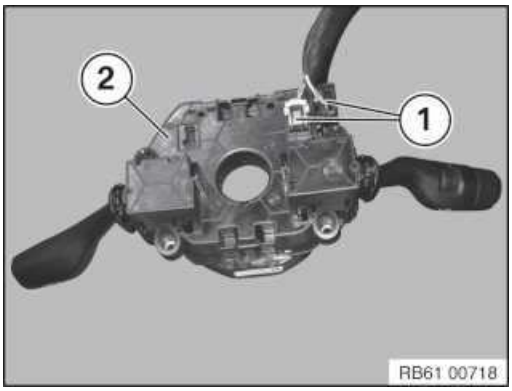
39 – Installing the steering column switch cluster (SZL)

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- **Replacement:** Break off the transportation retainer (1) on the steering column switch cluster (SZL) (2) in direction of arrow.

  The broken-off piece of (3) the transportation retainer (1) remains in the steering column switch cluster (SZL) (2).

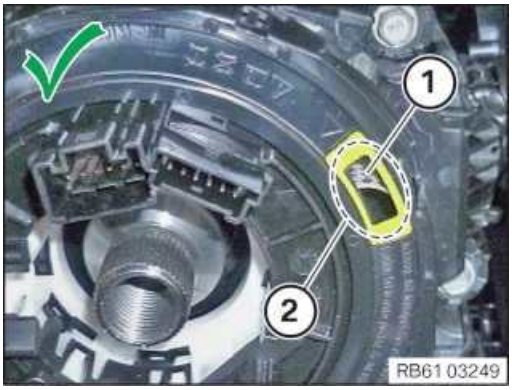


- Connect the connector (1) with the steering column switch cluster (SZL) (2).

▸ **Check the neutral position of the clock spring**

TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



Check

- **Version A:**

  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).

Check

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- **Version B:**

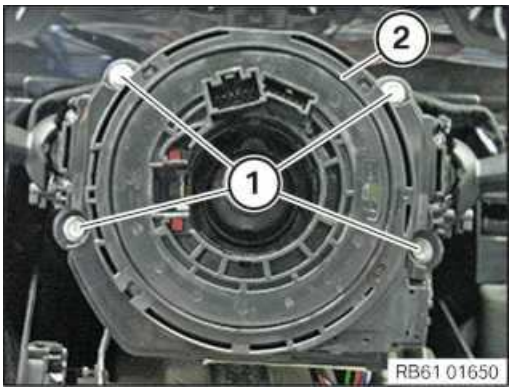
  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).

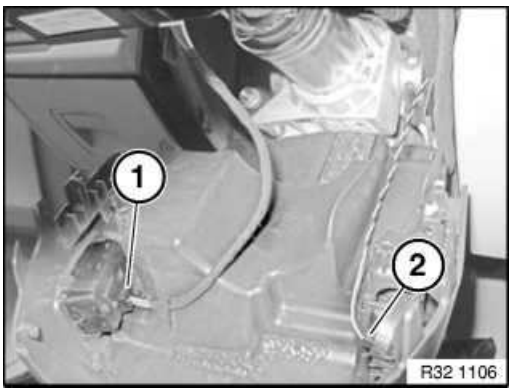


- Position the steering column switch cluster (SZL) (2).
- Tighten the screws (1).

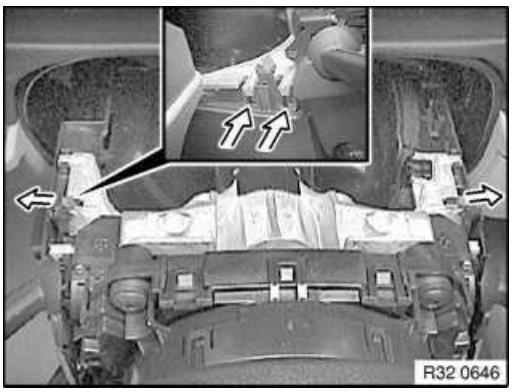
Steering column switch cluster (SZL) on the steering column

Screw TS5x20		Tightening torque	3 Nm

40 – Install steering column shroud lower section



- Position the steering column shroud lower section .
- Connect available connectors (1) and (2) and lock.



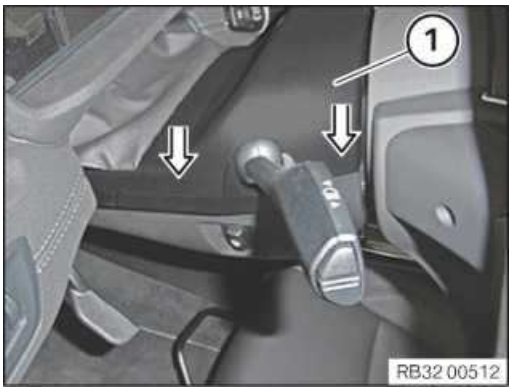
- Position the steering column shroud lower section with the retaining lugs (arrows).
- Press steering column shroud lower section completely towards the top until the retaining lugs (arrows) engage.

41 – Fit steering column shroud upper section

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- Position the steering column shroud upper section.
- Attach gap cover of the steering column (1) on the brackets (arrows).



- Position the steering column shroud upper section (1).

NOTICE

Perform the operations on the left and right side.

- Press the upper section of the steering column shroud (1) downwards in direction of arrow.

  The upper section of the steering column shroud must engage audibly and perceptibly.

42 – Installing the steering wheel/sports steering wheel

▸ **Check the neutral position of the clock spring**

- Ensure that the coil spring is not twisted.

  There are clock springs installed without a mechanical anti-twist lock.

  Coil springs without a mechanical anti-twist lock are identifiable on the inspection glass for the neutral position mark.
- Check the neutral position of the clock spring on the steering column switch cluster (SZL).

  The neutral position is correct if the yellow or green mark (1) is clearly visible.

Check



- Check the mark (1) in the inspection glass.

Result

» The mark (1) is not visible.

Measure

- Turn the coil spring until mark (1) is visible in the inspection glass.

Check

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- A micro-encapsulated screw (1) may be fitted.
- Checked threaded connection

Result

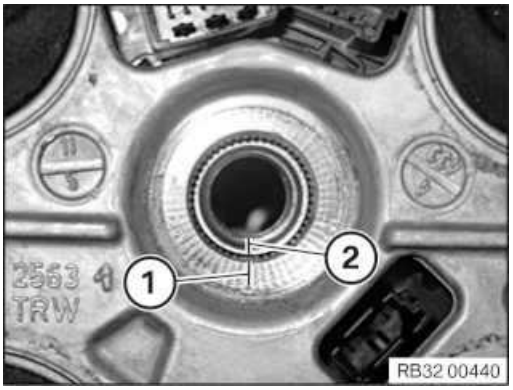
» Screw (1) is micro-encapsulated.

Measure

- Clean thread in the steering column.

  Renew the screw (1).

  Parts: Screw



- Align and connect the steering wheel/sports steering wheel according to the mark (1) with the steering column mark (2).



- Tighten down screw (1).

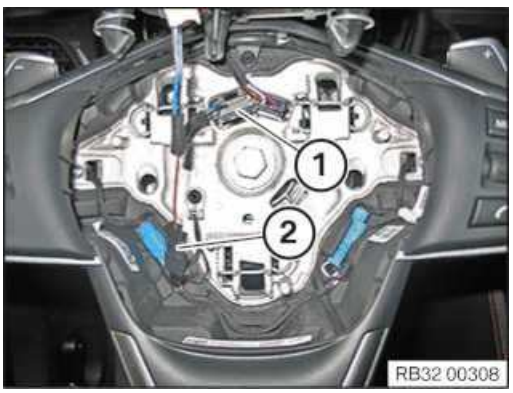
Steering wheel to steering column

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

- **Connect connectors and lock.**

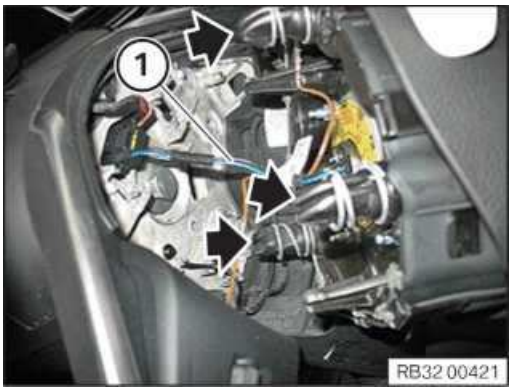
  Make sure connecting lines are correctly routed.

43 – Installing airbag unit of steering wheel/sports steering wheel



- Connect and lock connectors (1) and (2) of the airbag unit.

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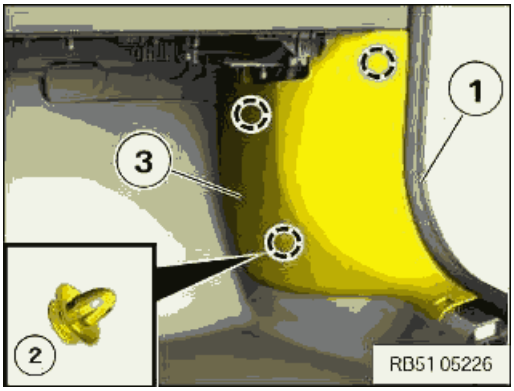
- Before installing the airbag unit, align the wiring harness (1) to the centre so that the latch mechanisms (arrows) are exposed!



- Position airbag unit (1).
- Press the airbag unit (1) with even pressure in each case in the direction of the arrow into the steering wheel.

  The airbag unit (1) must engage audibly and perceptibly.

44 – Installing side trim panel in footwell on right A-pillar

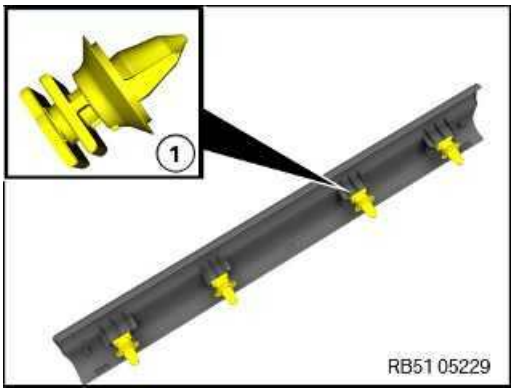


- Check clips (2) for damage, and replace if necessary.
- Feed the side trim panel (3) under the sealing lip of the edge protection (1).
- Clip in the side trim panel (3) with the clips (2).

45 – Install the front right door sill cover strip

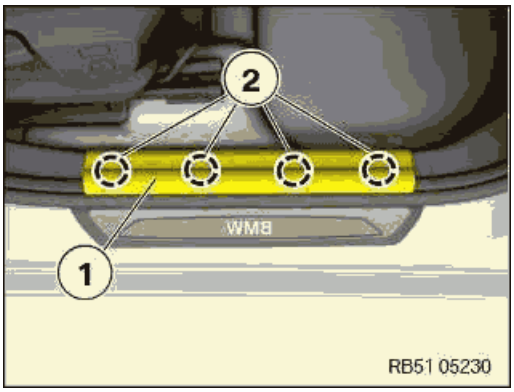
NOTICE

Description is for left component only. Procedure on the right side is identical.



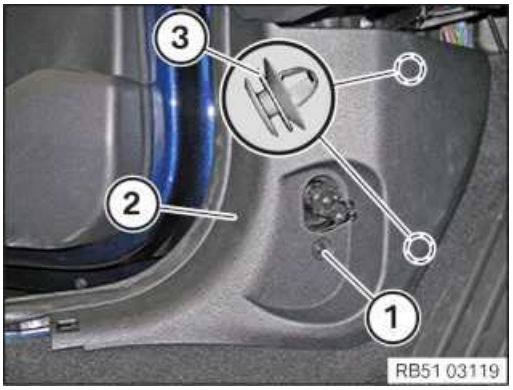
- Check the clips (1) for damage and renew where required.

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- Clip the door sill cover strip (1) into the floor panel with the clips (2).

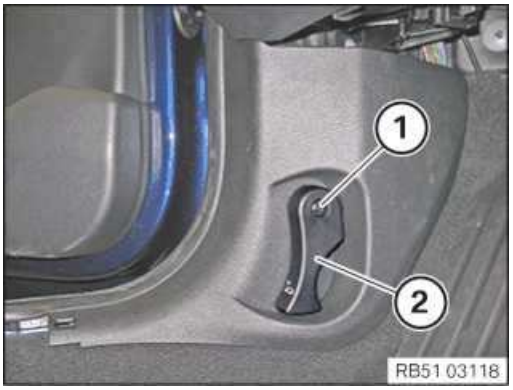
46 – Installing side trim panel in the footwell at A-pillar



- Position the side trim panel (2) and clip it to the clips (3).
- Make sure the edge protection on the side trim panel (2) fits correctly.
- Tighten down screw (1).

Side trim panel bottom left to holder

Screw		Tightening torque	3 Nm

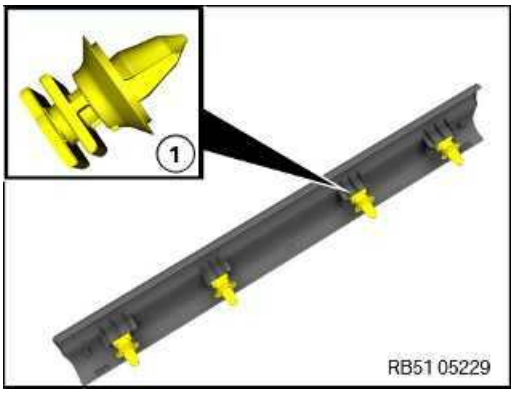


- Install lever for the bonnet release (2)l.
- Tighten down screw (1).

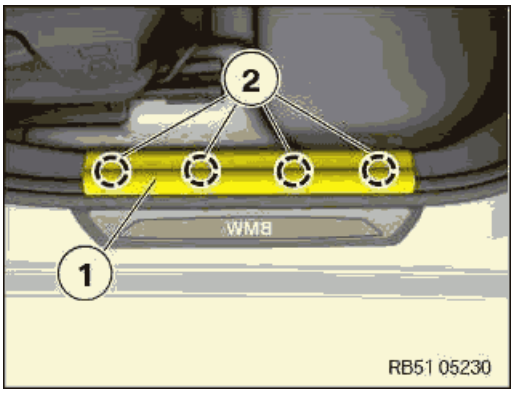
Lever for bonnet release to the holder

Screw		Tightening torque	3 Nm

47 – Install the front door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

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48 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

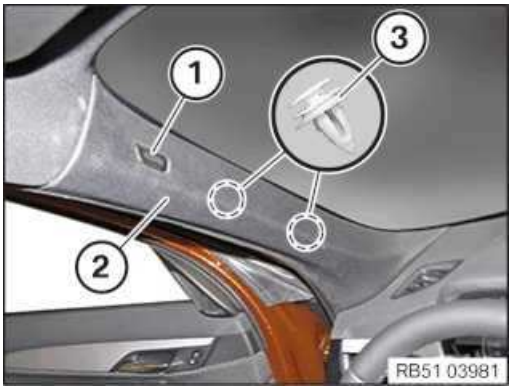
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

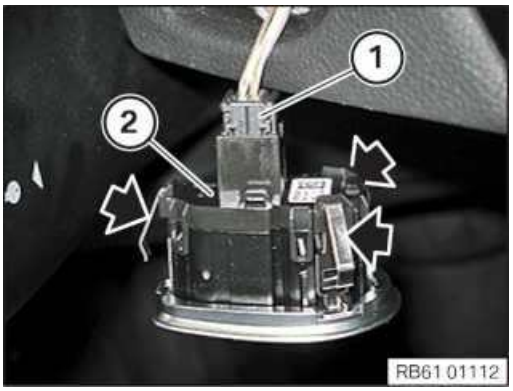
49 – Installing the light operating unit

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- Connect associated connector.
- Position light operating unit (1) correctly and clip in where marked.

50 – Installing the START-STOP button



- Connect connector (1) with START-STOP button (2).

  The retaining clips (arrows) must not be damaged or missing.



- Install START-STOP button (1) in the instrument panel trim.

51 – Install decorative strip from instrument panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install decorative strip (1) a snap into the clamps (2).

52 – Install the Head Unit High (HU-H)

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RISK OF DAMAGE

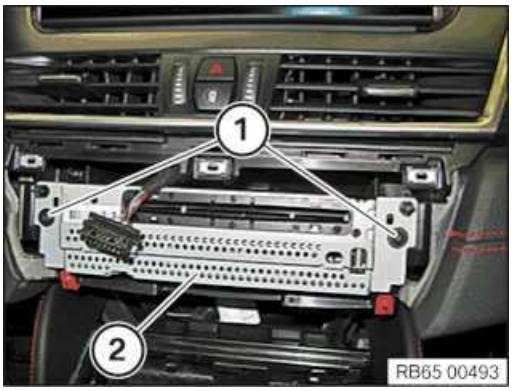
Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Position head unit (1).
- Connect and lock all connectors in the marked area.



- Slide in the head unit (2) correctly.
- Tighten the screws (1).

Head unit to instrument panel

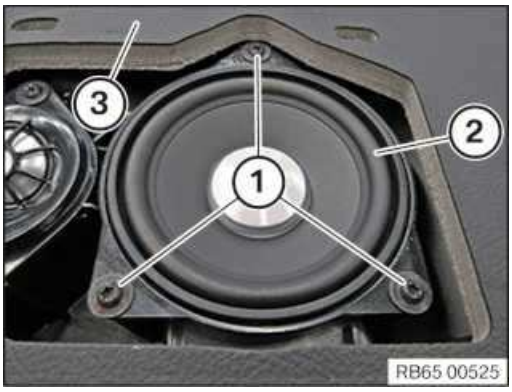
Screw		Tightening torque	1,8 Nm



- Route the wiring harness (1) correctly.

53 – Install the mid-range speakers in the instrument panel

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- Connect the connector below it to the mid-range speaker (2).
- Position the mid-range speaker (2) in the instrument panel (3).
- Tighten the screws (1).

Speaker to support / support to instrument panel / support to body

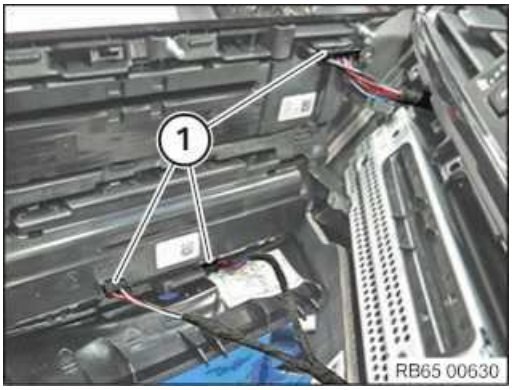
Screw		Tightening torque	1,8 Nm



- Check the latch mechanisms on the speaker cover (1) for damage and renew them if necessary.

  The latch mechanisms must not be missing or faulty.
- Engage the speaker cover (1) correctly into the instrument panel (2).

54 – Installing audio operating unit and air conditioning control panel



- Position audio operating unit and air conditioning control panel.
- Connect plug connection (1) and lock.



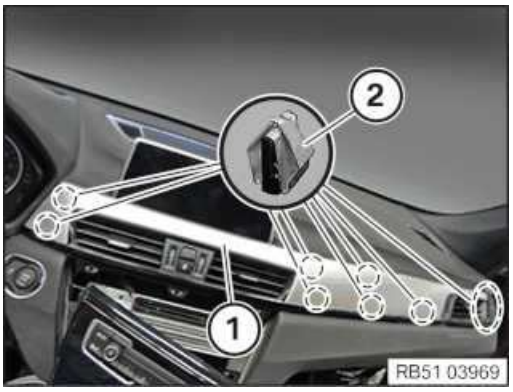
- Correctly position trim (1) and clip it into the instrument panel (2).

55 – Install the finisher on the right instrument panel

TECHNICAL INFORMATION

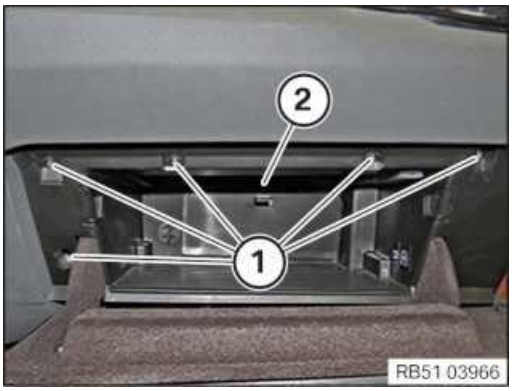
Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the decorative strip (1).
- Connect connector.
- Engage the decorative strip (1) on the clamps (2).

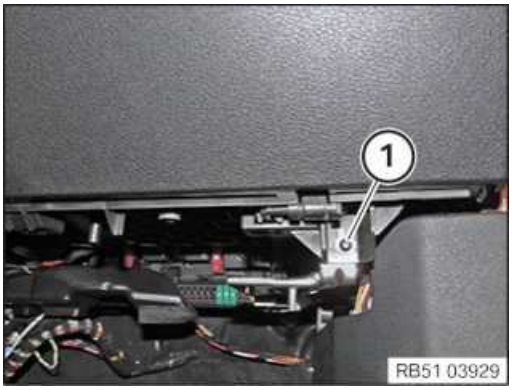
56 – Install right glove box



- Install the glove box (2) and connect and lock associated plug connections.
- Tighten the screws (1).

Glove box to instrument panel

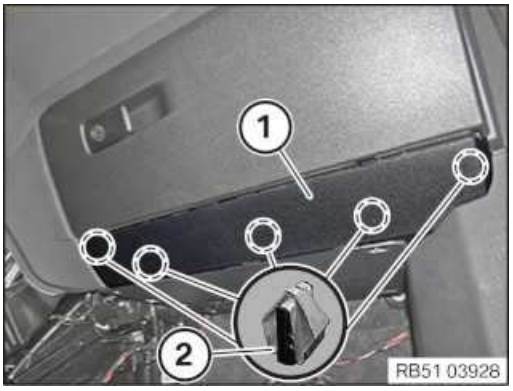
Screw		Tightening torque	1,8 Nm



- Tighten down screw (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

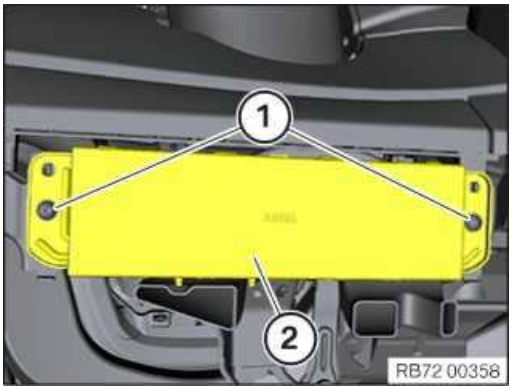


TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

- Install the trim (1) and lock it at the clamps (2).

57 – Installing knee airbag



- Connect the plug connection to the knee airbag (2) and lock.
- Install knee airbag (2).
- Renew screws (1).

  Parts: Screw
- Tighten the screws (1).

Knee airbag to body

M8	Renew screws.	Tightening torque	8 Nm

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58 – Install the side panel on instrument panel on the left and right

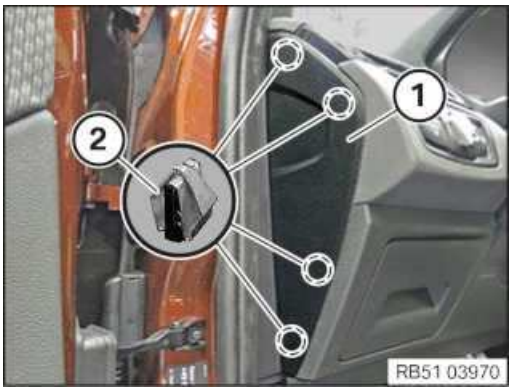
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install side panel on the instrument panel**

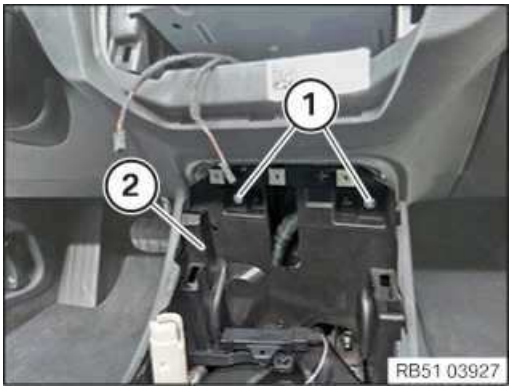
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Feed in the side panel (1) at an angle toward the front and lock at the clamps (2).

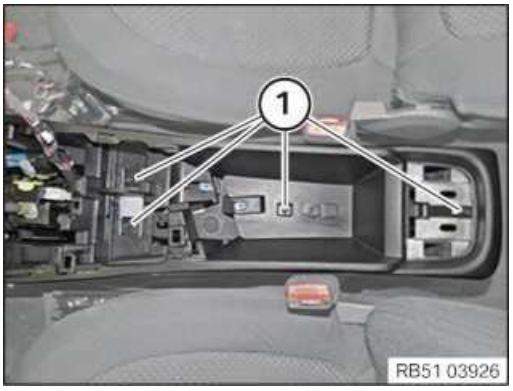
59 – Installing centre console fully with centre armrest



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm



- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing the centre armrest**

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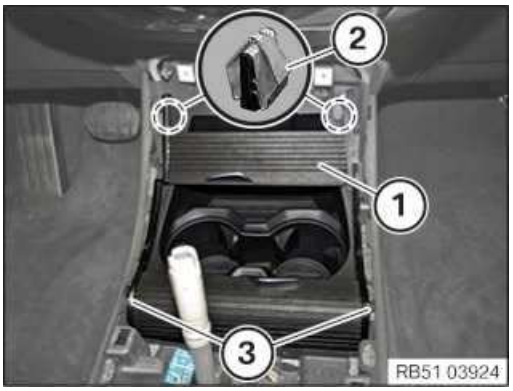


- Install the centre armrest and tighten nuts (1).

Centre armrest to support

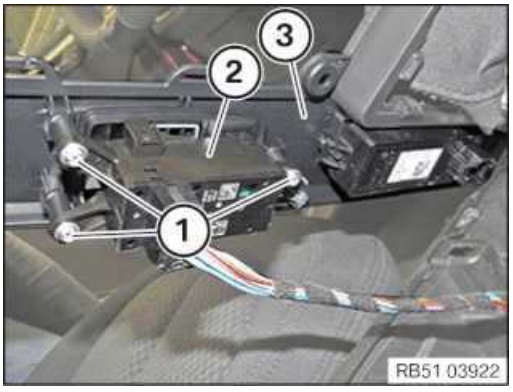
Nut M8		Tightening torque	21,4 Nm

60 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

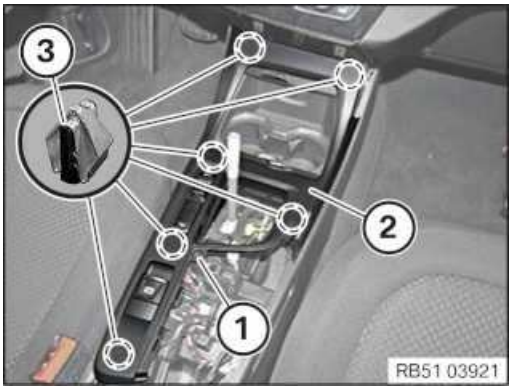
61 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

62 – Installing the decorative trim to the centre console

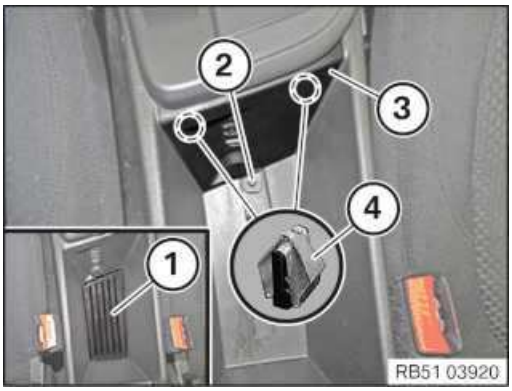
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- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

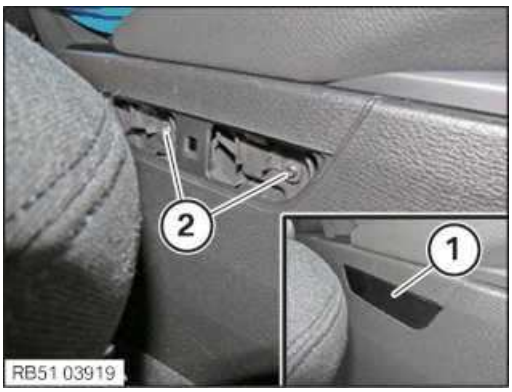


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

63 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.

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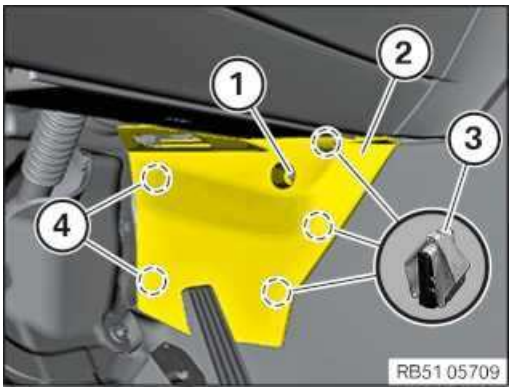
- Clip in gaiter (arrows).

64 – Installing side trim panel for the left and right centre console

▸ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

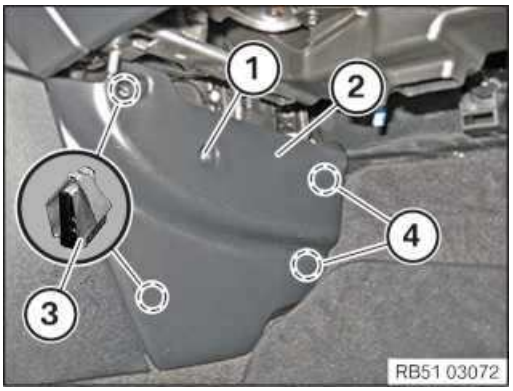
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

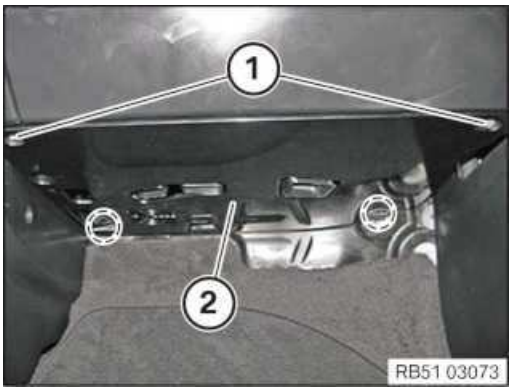
Oval-head screw		Tightening torque	1,8 Nm

65 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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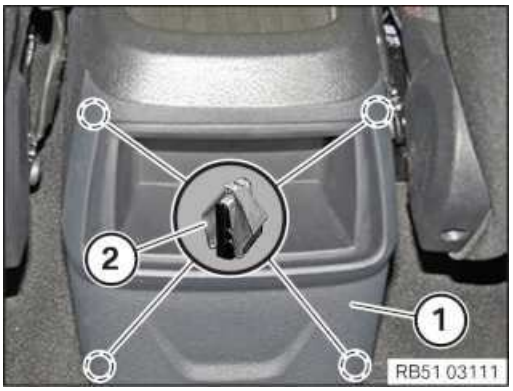


- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

66 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

67 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Heating and air-conditioning unit on the support for the instrument panel Used in step 35

M6x20 screw	Renew screw	Tightening torque	8 Nm
NutM6	Replace nut	Tightening torque	8 Nm

Footwell ventilation duct Used in step 35

Screw			2,4 Nm

Support for the instrument panel Used in step 35

Screw		Tightening torque	21 Nm
Nut		Tightening torque	21 Nm

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Lower steering shaft to steering column

Used in step 35

Clamping bolt M8	Recut screw thread. Renew clamping bolt. No retorquing permitted!	Tightening torque	28 Nm

Battery terminal with IBS positive battery terminal / negative battery terminal

Used in step 35

NutM6			5 Nm

Cover of remote positive terminal

Used in step 35

Screw		Tightening torque	2,6 Nm

Instrument panel trim to carrier support

Used in step 36

Screw		Tightening torque	2,4 Nm

Fold-down compartment to instrument panel

Used in step 37

Screw		Tightening torque	1,8 Nm

Instrument cluster to instrument panel

Used in step 38

Screw			1,7 Nm

Steering column switch cluster (SZL) on the steering column

Used in step 39

Screw TS5x20		Tightening torque	3 Nm

Steering wheel to steering column

Used in step 42

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

Side trim panel bottom left to holder

Used in step 46

Screw		Tightening torque	3 Nm

Lever for bonnet release to the holder

Used in step 46

Screw		Tightening torque	3 Nm

A-pillar trim panel to body

Used in step 48

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Head unit to instrument panel

Used in step 52

Screw		Tightening torque	1,8 Nm

Speaker to support / support to instrument panel / support to body

Used in step 53

Screw		Tightening torque	1,8 Nm

Glove box to instrument panel

Used in step 56

Screw		Tightening torque	1,8 Nm

Knee airbag to body

Used in step 57

M8	Renew screws.	Tightening torque	8 Nm

Screw connection for centre console

Used in step 59 61 62

Oval-head screw		Tightening torque	1,8 Nm

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Centre armrest to support

Used in step 59

Nut M8		Tightening torque	21,4 Nm

Parking brake button

Used in step 61

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console

Used in step 62 64

Oval-head screw		Tightening torque	1,8 Nm

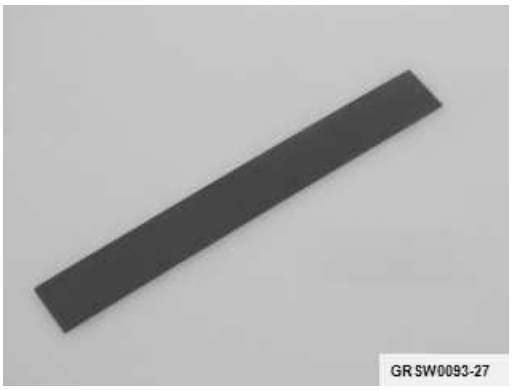
Bottom left footwell trim to instrument panel

Used in step 65

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common Used in step 6 15

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

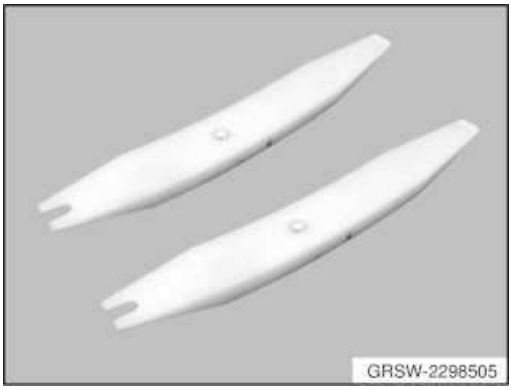
0 496 569 (00 9 325) Wedge



Common Used in step 7 9 11 13 17 18 22 24

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

2 298 505 Wedge

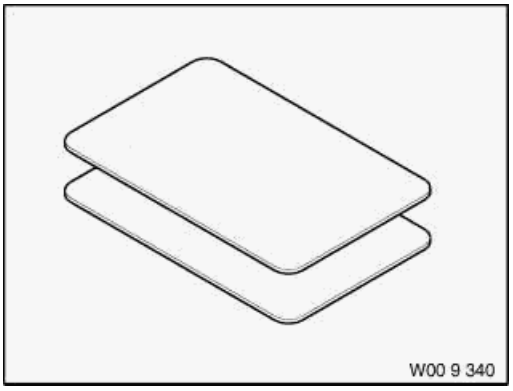


Common Used in step 14

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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0 493 687 (00 9 340) Removal aid



Common Used in step 19

Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		**Removal aid** Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

2 298 504 Wedge



Common Used in step 28

Usage	Wedge with angled lug
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	21 48

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 67
61 20 900 Disconnecting and connecting battery earth lead	1 67
61 20 900 Disconnecting and connecting battery earth lead	1 67
61 20 900 Disconnecting and connecting battery earth lead	1 67
61 20 900 Disconnecting and connecting battery earth lead	1 67
61 20 900 Disconnecting and connecting battery earth lead	1 67
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 67
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 67
61 20 900 Disconnecting and connecting battery earth lead	1 67

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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	67
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
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61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 20 900 Disconnecting and connecting battery earth lead	1	67
61 35 ... Notes on ESD protection (Electro Static Discharge)		
72 12 ... Unlocking/locking airbag plug connections	33	36

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51 45 382 Replace decorative strip on instrument panel at right

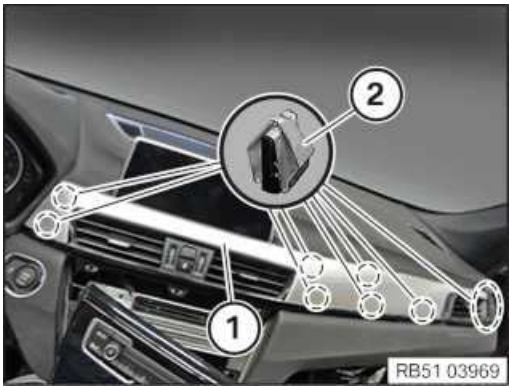
PRELIMINARY WORK

1 – Removing trim of the audio operating unit



- Unclip the trim (1) using special tool **2 298 505**.

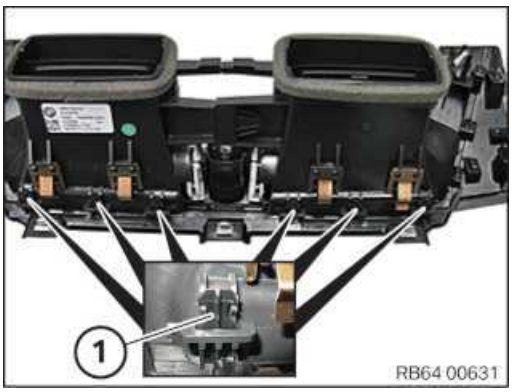
2 – Remove the finisher on the right instrument panel



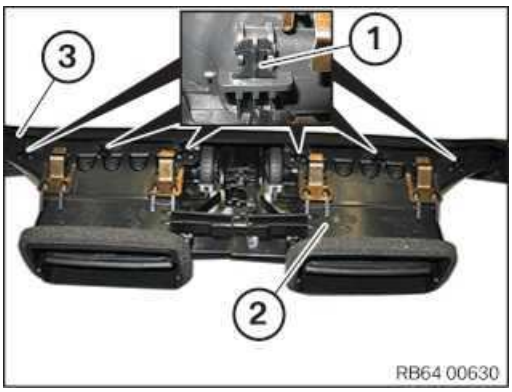
- Carefully release the decorative strip (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) starting from the side.
- Lift up the decorative strip (1) and disconnect the plug connections behind it.
- Remove the decorative strip (1).

MAIN WORK

3 – Removing the centre fresh air grille



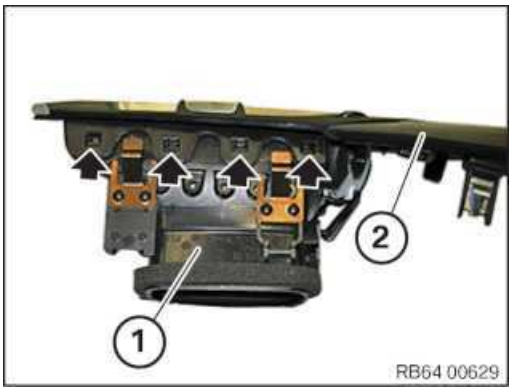
- Disengage the latch mechanisms (1).



- Disengage the latch mechanisms (1).
- Remove the fresh air grille (2) from the decorative strip (3).

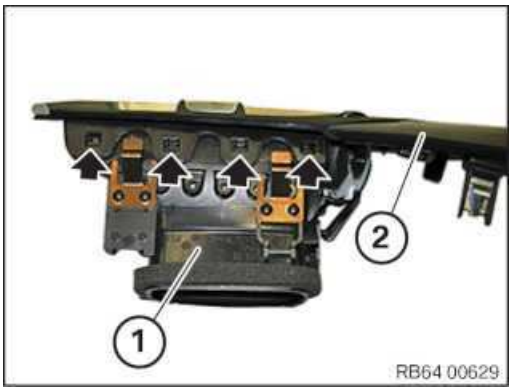
4 – Removing the right fresh air grille

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- Disengage the latch mechanisms (arrows).
- Remove the fresh air grille (1) from the decorative strip (2).

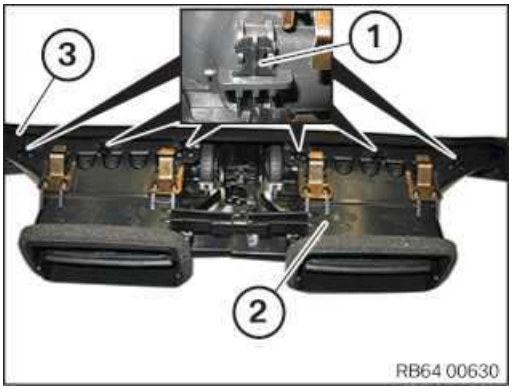
5 – Installing the right fresh-air grille



- Correctly position the fresh air grille (1) and engage it in the decorative strip (2).

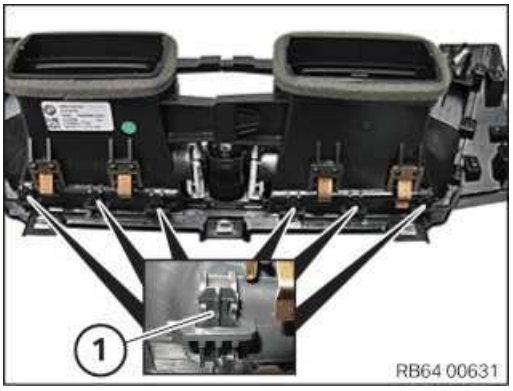
  Note: Make sure the latch mechanisms on the decorative strip (2) are not faulty.
- Make sure the fresh air grille (1) is securely fitted in the decorative strip (2).

6 – Installing the centre fresh-air grille



- Position the fresh air grille (2) correctly and engage it in the decorative strip (3).

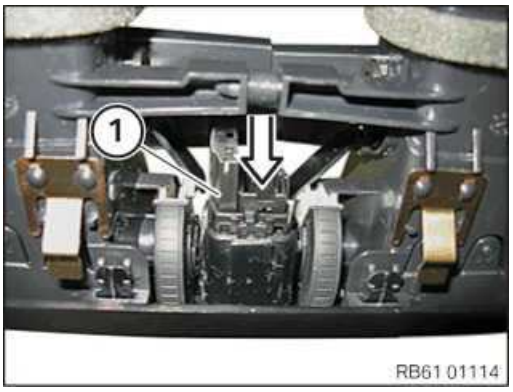
  Note: Make sure the latch mechanisms on the decorative strip (1) are not faulty.
- Make sure the fresh air grille (2) is correctly latched on the decorative strip (3).



- **Note:** Latch mechanisms (1) must not be damaged. Ensure correct locking.

7 – Remove the hazard warning switch

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- Disconnect the connector (1) .
- Press the hazard warning switch (1) carefully out of the trim centre in the direction of arrow.

8 – Install the hazard warning switch



- Check clamps (arrows) on the hazard warning switch (1) for damage; renew if necessary.

  The clamps (arrows) must not be missing or damaged.



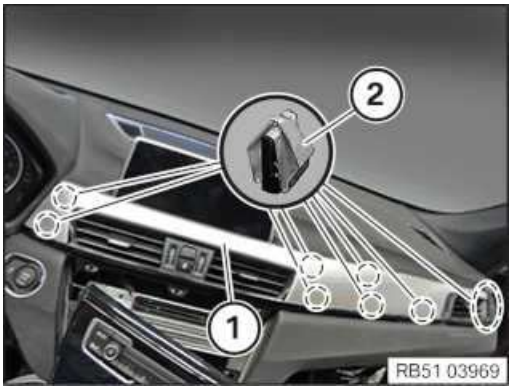
- Connect connector.
- Press the hazard warning switch (1) carefully in the direction of arrow into the trim centre.

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9 – Install the finisher on the right instrument panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the decorative strip (1).
- Connect connector.
- Engage the decorative strip (1) on the clamps (2).

10 – Installing the audio operating unit trim

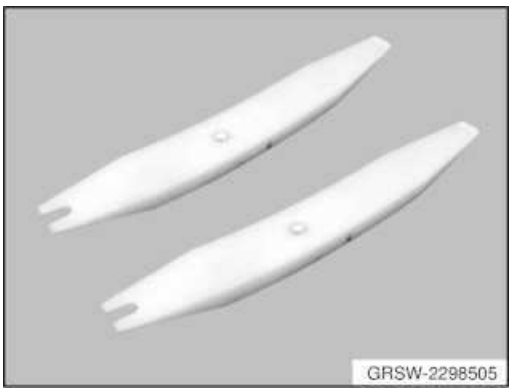


- Correctly position trim (1) and clip it into the instrument panel (2).

Additional Information

Overview of Special Tools

2 298 505 Wedge



Common	Used in step 1
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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0 496 569 (00 9 325) Wedge



Common

Used in step 2

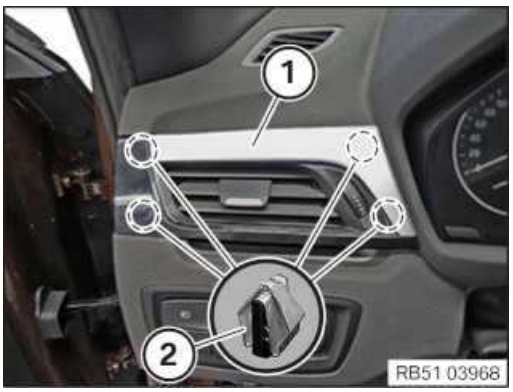
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 45 371 Replace the decorative strip on the dashboard, left.

PRELIMINARY WORK

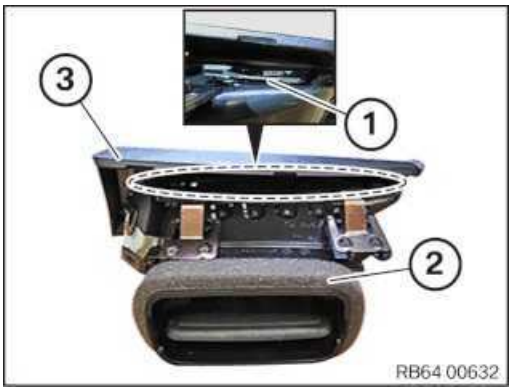
1 – Remove decorative strip from instrument panel



- Release the decorative strip (1) using the special tool **0 496 569 (00 9 325)** from the clamps (2) and remove.

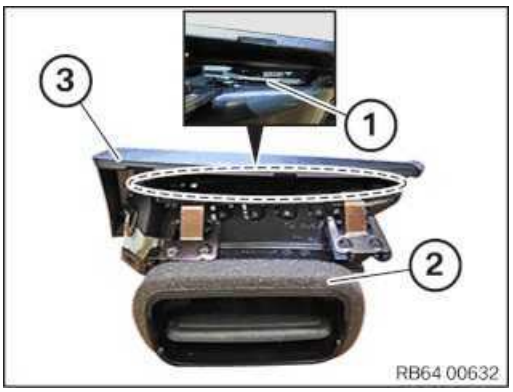
MAIN WORK

2 – Removing left fresh air grille



- Disengage latch mechanism (1) in the marked area.
- Remove the fresh air grille (2) from the decorative strip (3).

3 – Installing the left fresh air grille



- Position the fresh air grille (2) correctly and insert it in the decorative strip.

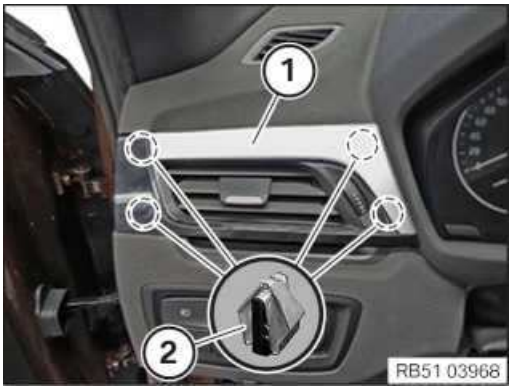
  Note: Make sure the latch mechanisms on the decorative strip (2) are not faulty.
- Make sure the fresh air grille (1) is securely fitted in the decorative strip (2).

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4 – Install decorative strip from instrument panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install decorative strip (1) a snap into the clamps (2).

Additional Information

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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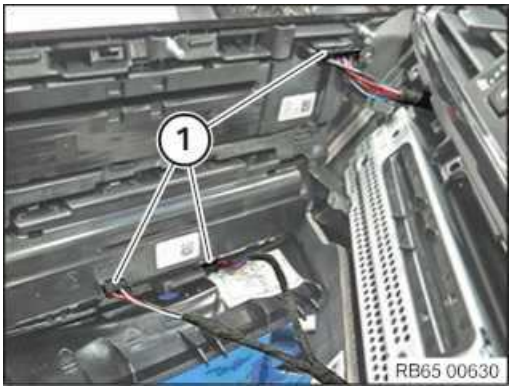
51 45 069 Replace the decorative trim of the control panel

PRELIMINARY WORK

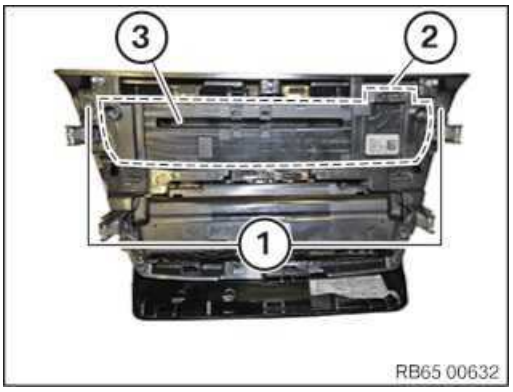
1 – Removing (renewing) the audio operating unit and the air conditioning control panel



- Unclip the trim (1) using special tool **2 298 505**.

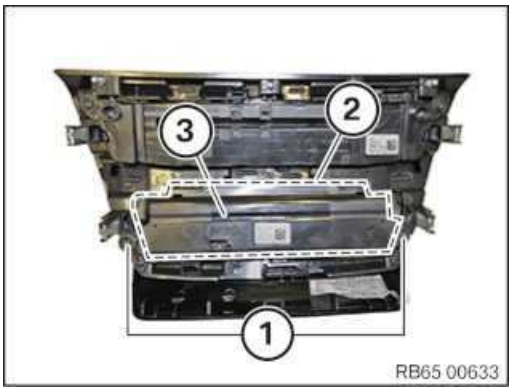


- Unlock plug connection (1) and disconnect.



- Loosen screws (1).
- Unlock the latch mechanisms (2).
- Remove the audio operating unit and the air conditioning control panel (3).

2 – Remove control panel for heating and air conditioning



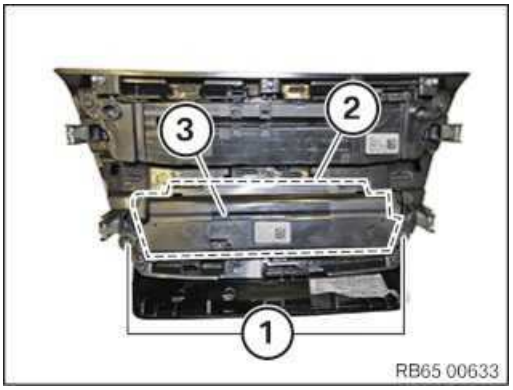
- Loosen screws (1).
- Unlock the latch mechanisms in the highlighted area (2) and remove the control panel of the heating and air conditioning system (3).

MAIN WORK

3 – Replace the decorative trim of the control panel

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4 – Install control panel for heating and air conditioning system

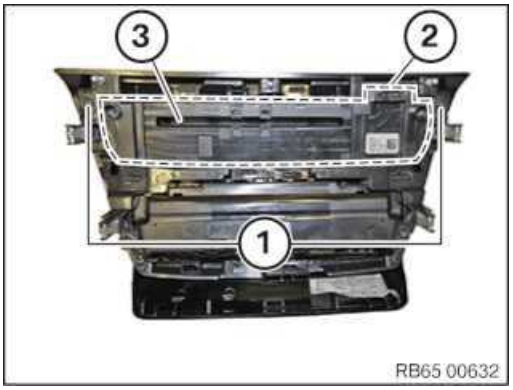


- Correctly position the control panel of the heating and air conditioning system (3) and engage it with the latch mechanisms (2).
- Tighten the screws (1).

Control panel for air conditioning on trim

Screw		Tightening torque	2,5 Nm

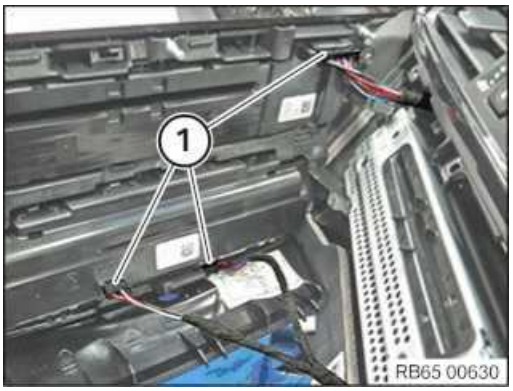
5 – Installing (renewing) audio operating unit and the air conditioning control panel



- Correctly position the audio operating unit (3) and engage it in the latch mechanisms (2).
- Tighten the screws (1).

Audio operating unit on instrument panel

Screw		Tightening torque	2,5 Nm



- Position audio operating unit and air conditioning control panel.
- Connect plug connection (1) and lock.



- Correctly position trim (1) and clip it into the instrument panel (2).

Additional Information

Overview of Tightening Torques

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Control panel for air conditioning on trim

Used in step 4

Screw		Tightening torque	2,5 Nm

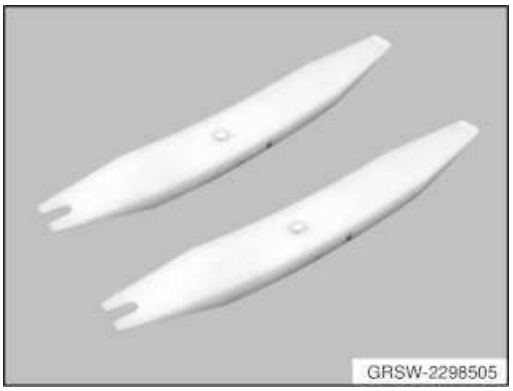
Audio operating unit on instrument panel

Used in step 5

Screw		Tightening torque	2,5 Nm

Overview of Special Tools

2 298 505 Wedge



Common

Used in step 1

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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51 45 076 Replacing carrier for dashboard

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



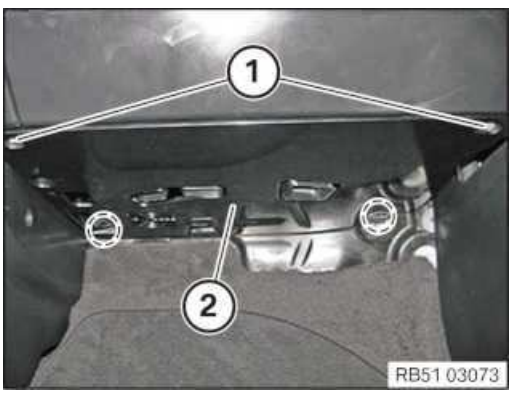
- See additional information.

2 – Adjust the steering column position



- Adjust the length of the steering column to the maximum length in the direction of arrow (1).
- Move the steering column to the lowest steering column position in the direction of arrow (2).

3 – Removing the instrument panel trim at bottom right

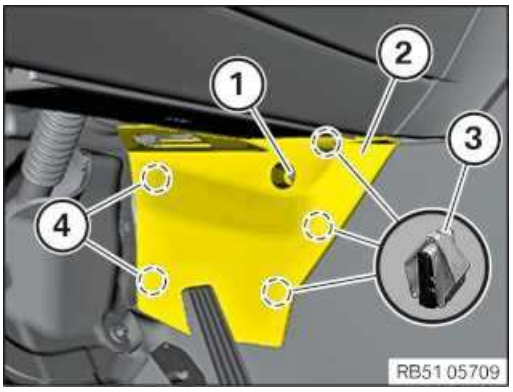


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

4 – Removing the side trim panel for the left and right centre console

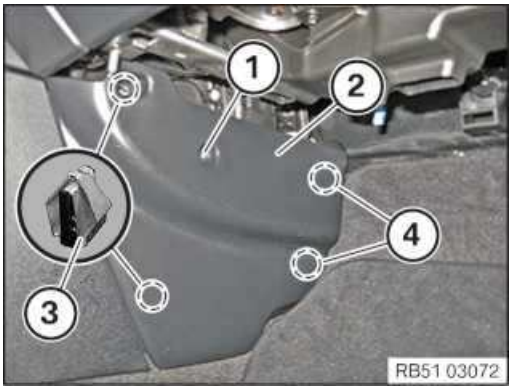
▸ **Removing side trim panel for the left centre console**

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- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▶ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

5 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

6 – Remove the decorative trim from the centre console

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RISK OF DAMAGE

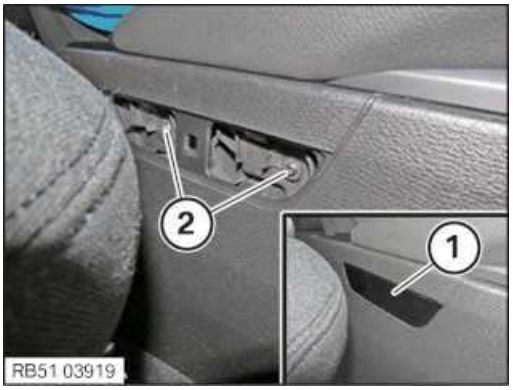
Scratches.

Tools and sharp-edged components can cause scratches.

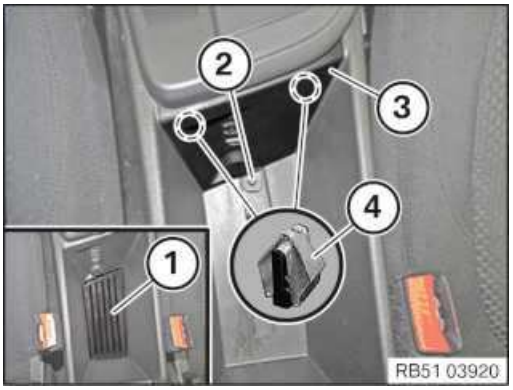
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



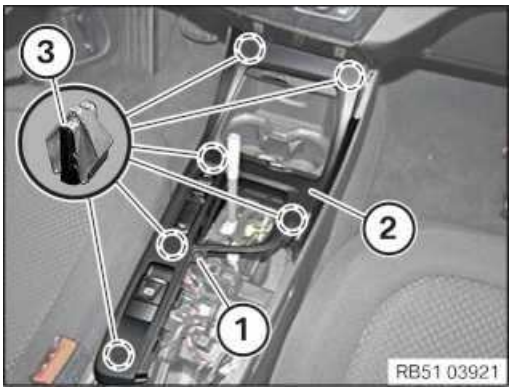
- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).



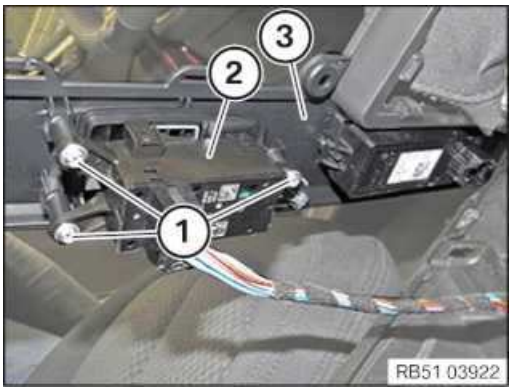
- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

7 – Remove the centre console trim

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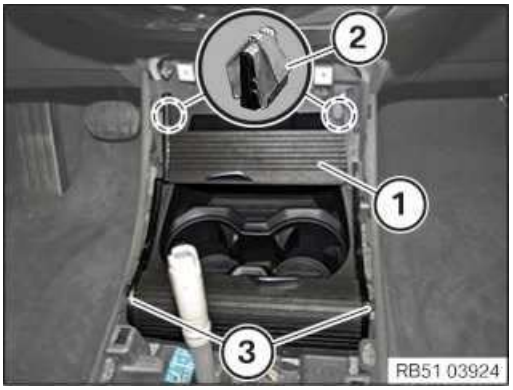
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

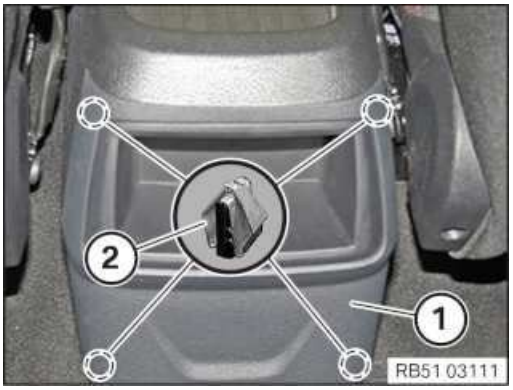
  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

8 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

9 – Removing the rear centre console trim



- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

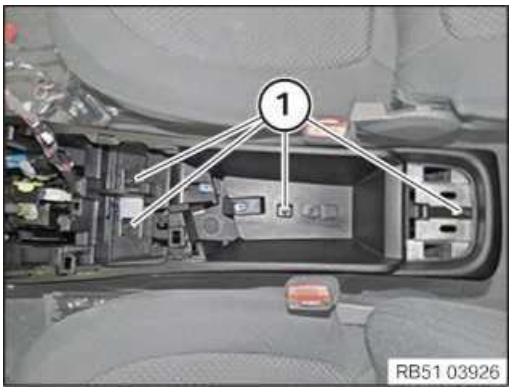
10 – Removing centre console fully with centre armrest

▸ **Removing the centre armrest**

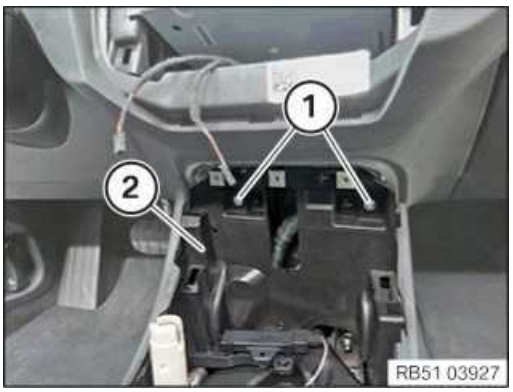
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- Release nuts (1) and remove centre armrest upwards.



- Loosen screws (1).



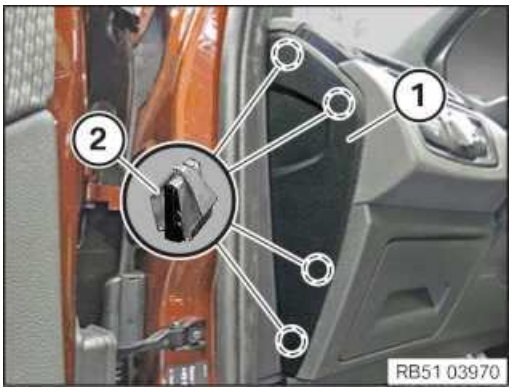
- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

11 – Remove the side panel on the left and right of the instrument panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

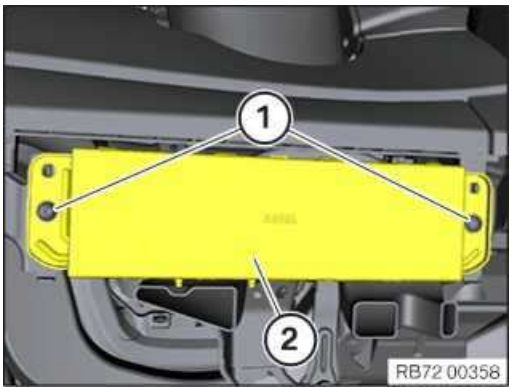
▸ **Remove side panel on the instrument panel**



- Lift out the side panel (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) and slide it out to the rear at an angle.

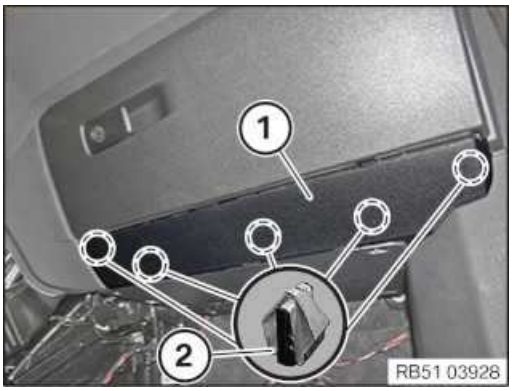
12 – Removing knee airbag

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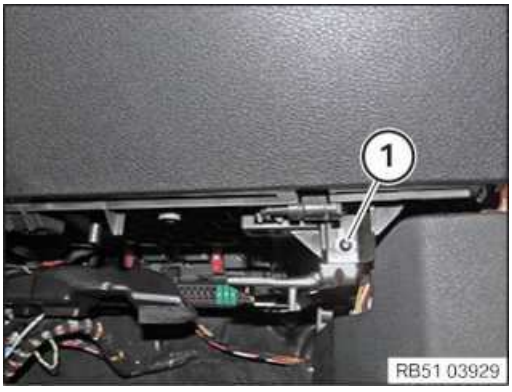


- Unlock plug connection on knee airbag (2) and disconnect.
- Loosen screws (1).
- Remove knee airbag (2).

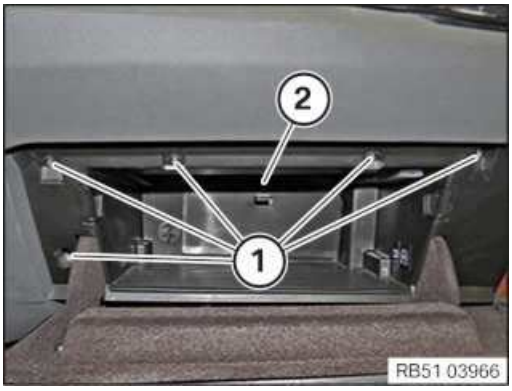
13 – Remove right glove box



- Release the trim (1) with the special tool **0 496 569 (00 9 325)** toward the bottom from the clamps (2) and remove.



- Loosen screw (1).



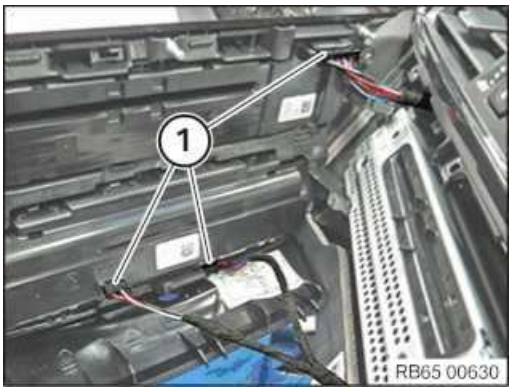
- Loosen screws (1).
- Remove glove box (2) to the inside and disconnect associated plug connections.

14 – Removing the audio operating unit and the air conditioning control panel



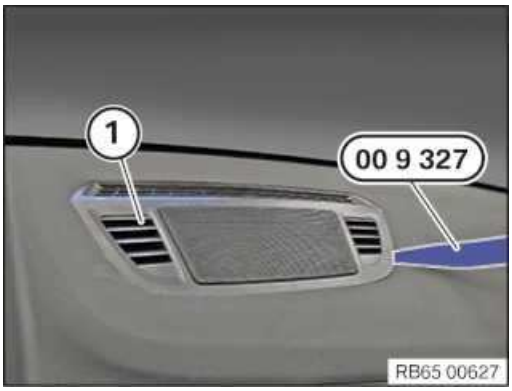
- Unclip the trim (1) using special tool **2 298 505**.

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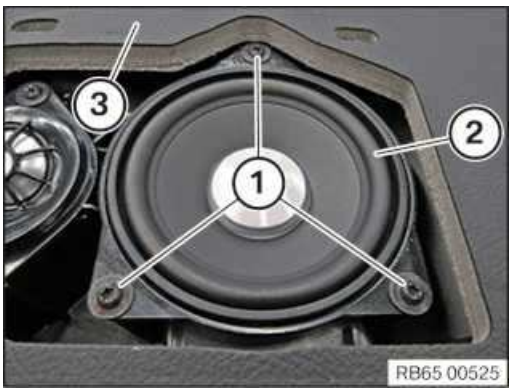


- Unlock plug connection (1) and disconnect.
- Remove the audio operating unit and the air conditioning control panel.

15 – Remove the mid-range speaker from the instrument panel



- Unclip the speaker cover (1) using the special tool **0 496 571 (00 9 327)** and remove upwards.



- Loosen screws (1).
- Disconnect plug connection underneath.
- Guide the mid-range speaker (2) out of the instrument panel (3) and remove it.

16 – Remove Head Unit High (HU-H)

RISK OF DAMAGE

Electrostatic discharge.

Damage to or destruction of electrical components.

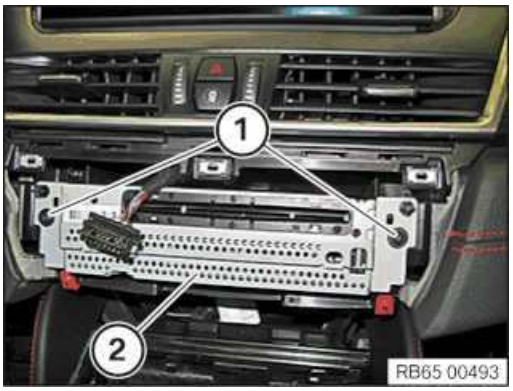
- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

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- Remove the wiring harness (1).

  In the factory, the wiring harness (1)is routed such that not enough excess length exists to remove the head unit.

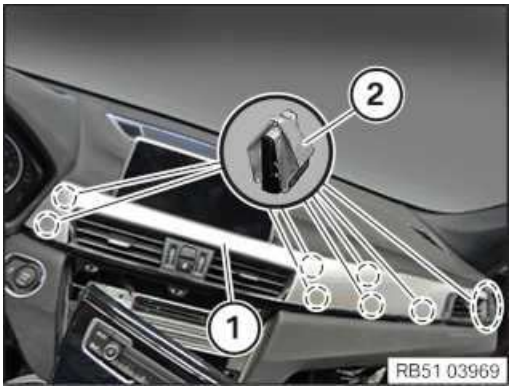


- Loosen screws (1).
- Pull out the head unit (2) a bit.



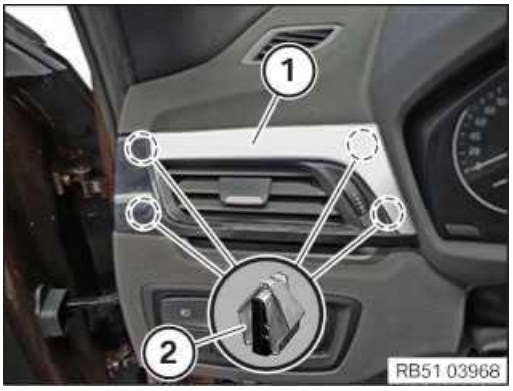
- Unlock and disconnect all connectors in the marked area.
- Remove head unit (1).

17 – Remove the finisher on the right instrument panel



- Carefully release the decorative strip (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) starting from the side.
- Lift up the decorative strip (1) and disconnect the plug connections behind it.
- Remove the decorative strip (1).

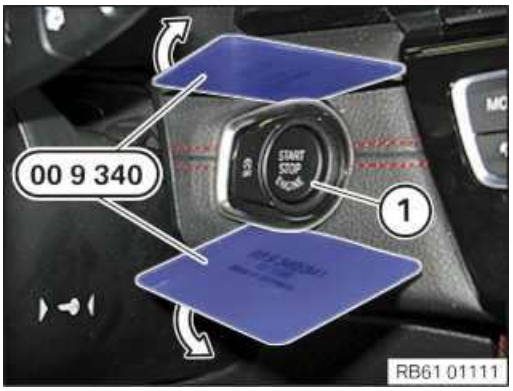
18 – Remove decorative strip from instrument panel



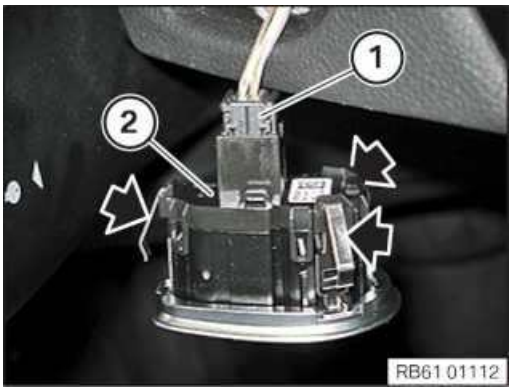
- Release the decorative strip (1) using the special tool **0 496 569 (00 9 325)** from the clamps (2) and remove.

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19 – Removing the START-STOP button



- Remove START-STOP button (1) using the special tool **0 493 687 (00 9 340)** .



- Disconnect the connector (1) and remove the START-STOP button (2).

20 – Removing the light operating unit



- Unclip the light operating unit (1) in the marked area.
- Unlock and disconnect associated connector.

21 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

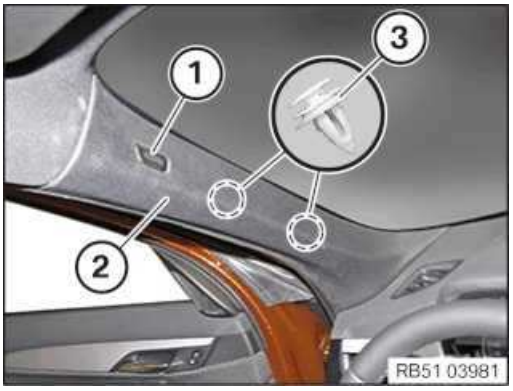
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WARNING

Pyrotechnic components.

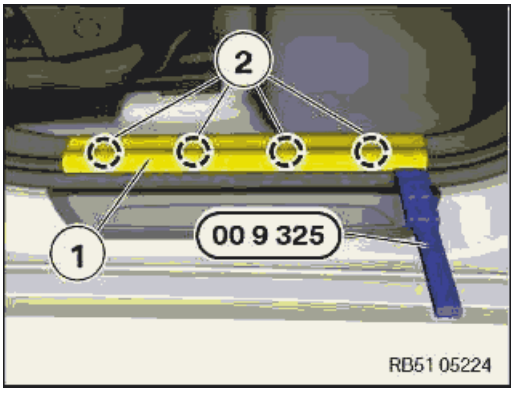
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

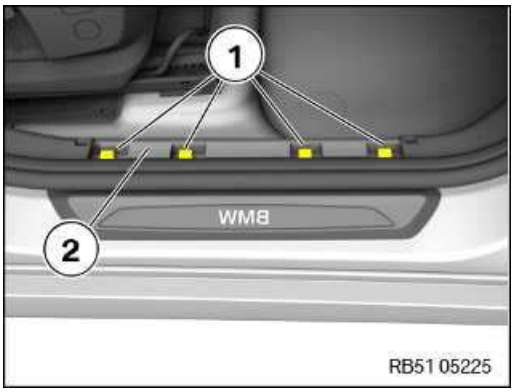


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

22 – Remove front entrance cover strip



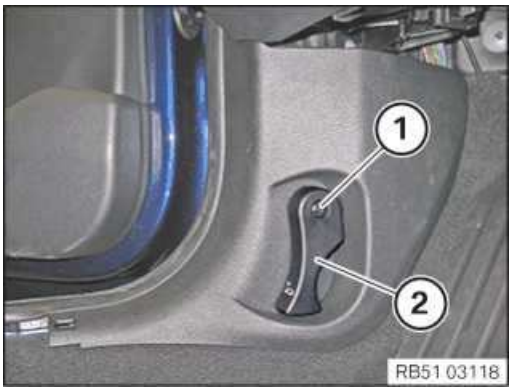
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



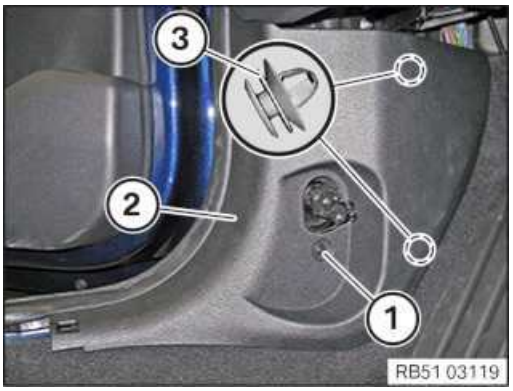
- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

23 – Removing the side trim panel in the footwell at the A-pillar

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- Loosen screw (1).
- Remove bonnet release lever (2).

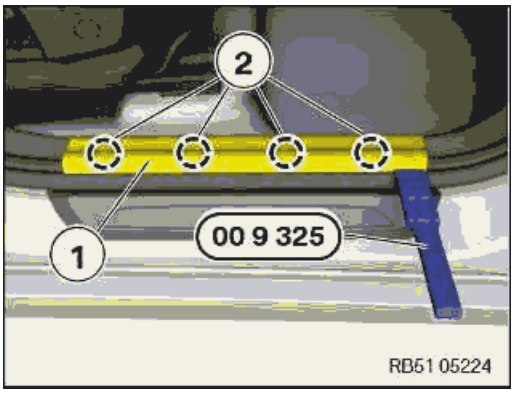


- Loosen screw (1).
- Unclip side trim panel (2) from the clips (3) and remove.

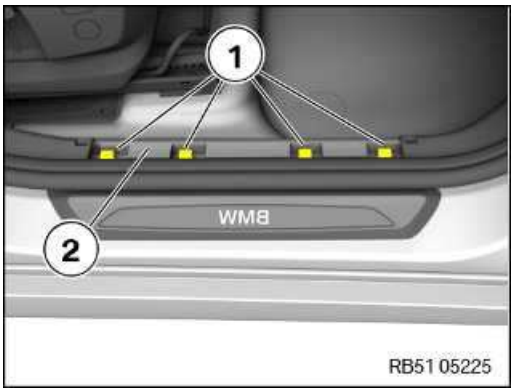
24 – Remove front right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



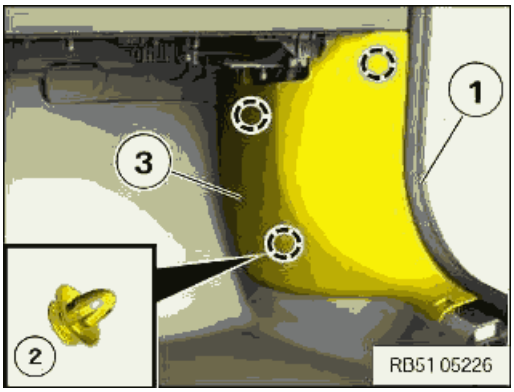
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

25 – Removing the side trim panel in the footwell at the right-hand A-pillar

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- Guide side trim panel (3) under the sealing lip out of the edge protection (1).
- Unclip and remove the side trim panel (3) at the clips (2).

26 – Removing airbag unit of the steering wheel/sports steering wheel

WARNING

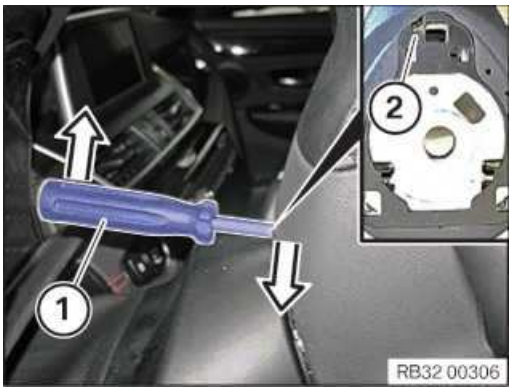
Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators



- Turn the steering wheel (1) through 180° from the "straight-ahead driving position".



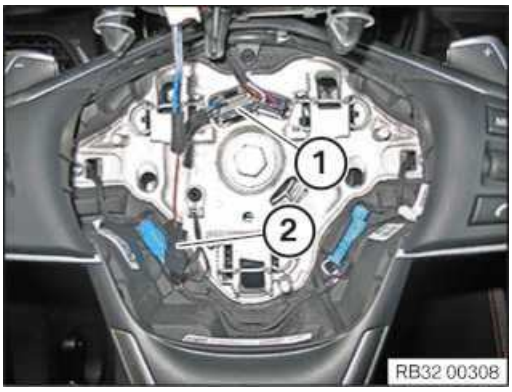
- Insert the slotted screwdriver (1) into the elongated hole on the rear side on the steering wheel.
- Push the slotted screwdriver (1) up and thereby push the retaining spring down (2).

  The airbag unit is unlocked.



- (1) Push unlocked airbag unit up.
- (2) At the same time, pull off the top airbag unit in the opposite direction of travel.

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- Unlock and disconnect the plug connections (1) and (2).
- Remove airbag unit.

27 – Removing steering wheel/sports steering wheel



- Move the steering wheel/sports steering wheels to the straight-ahead position.
- **Unlock plug connection and disconnect.**
- Release the screw (1) and remove the steering wheel/sports steering wheel.

28 – Removing steering column shroud upper section



NOTICE

Perform the operations on the left and right side.

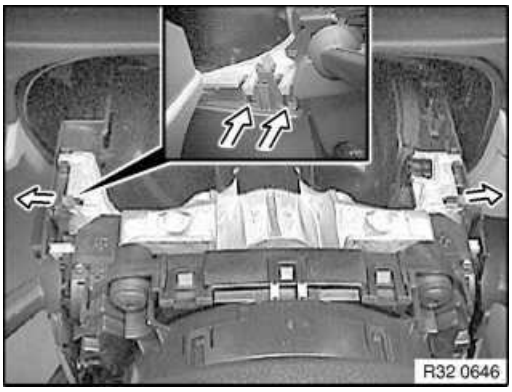
- Unclip the steering column shroud upper section (1) with the special tool **2 298 504** in area (2).
- Fold the steering column shroud upper section (1) up.



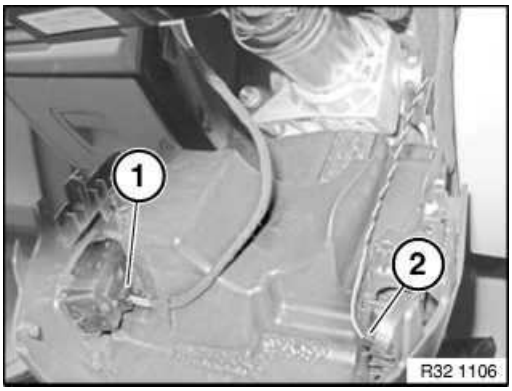
- Release the gap cover of the steering column (1) from the brackets (arrows) of the steering column shroud upper section.
- Remove steering column shroud upper section.

29 – Removing steering column shroud lower section

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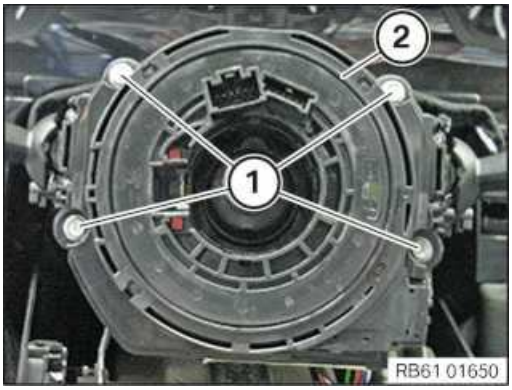


- Press the retaining lugs (arrows) a little outwards and unclip the steering column shroud lower section in a downward direction.

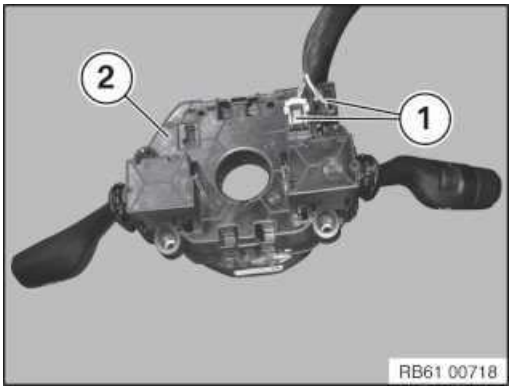


- Tilt steering column shroud lower section in downward direction.
- Unlock and disconnect the plug connections (1) and (2).
- Remove steering column shroud lower section.

30 – Removing the steering column switch cluster (SZL)



- Loosen screws (1).
- Remove the steering column switch cluster (SZL) (2).



- Unlock and disconnect the connector (1) on the steering column switch cluster (SZL) (2).

31 – Removing the instrument cluster (KOMBI)

RISK OF DAMAGE

Scratches.

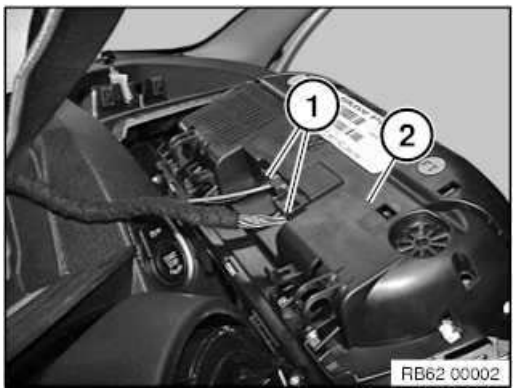
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

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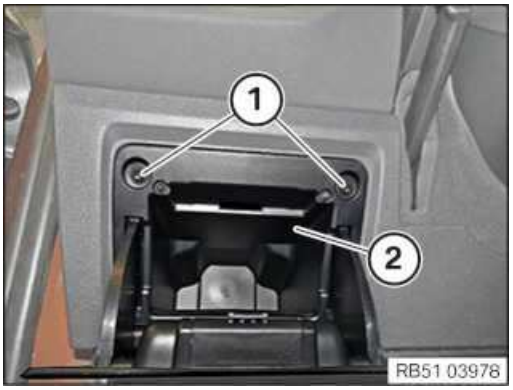


- Loosen both screws (1).
- Thread out instrument cluster (KOMBI) in direction of arrow.



- Disconnect all plug connections (1).
- Removing the instrument cluster (KOMBI) (2).

32 – Removing the left fold-down compartment

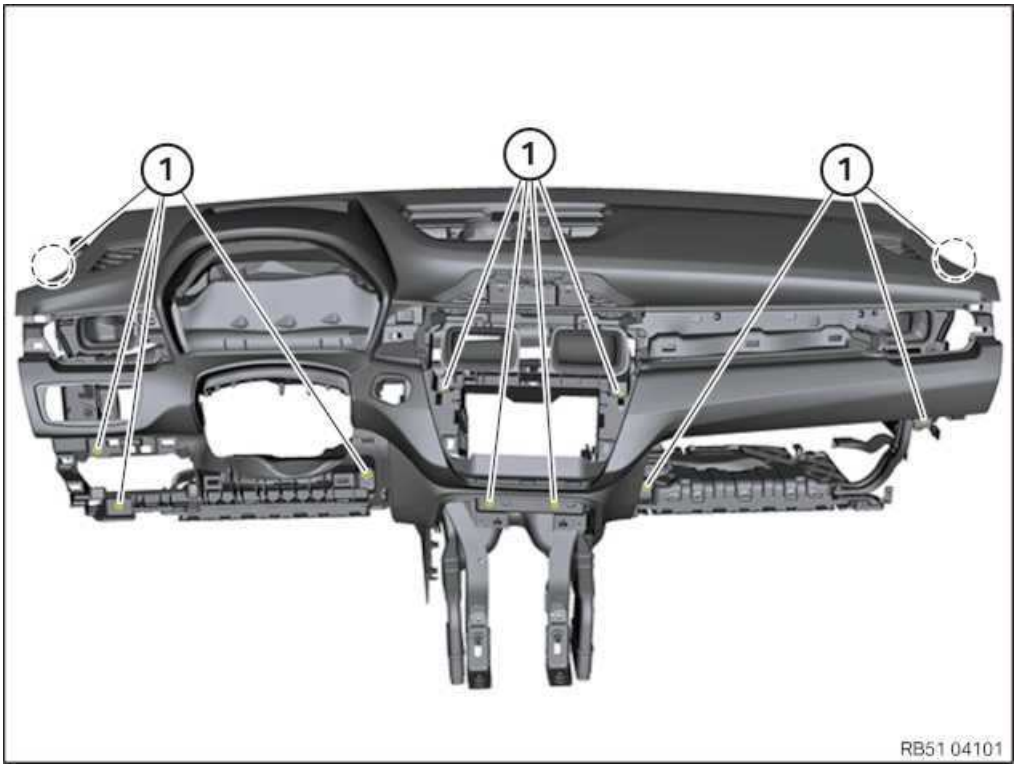


- Loosen screws (1).
- Guide out and remove the fold-down compartment (2) downward from the instrument panel.

33 – Remove instrument panel trim

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Instrument panel



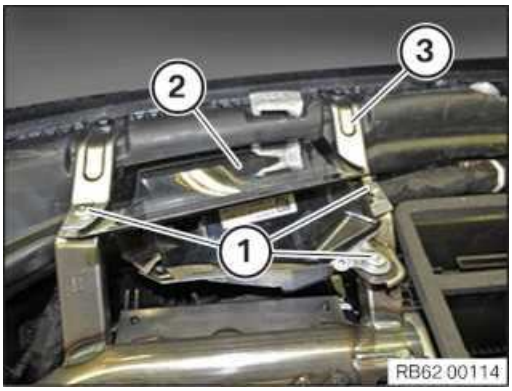
TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

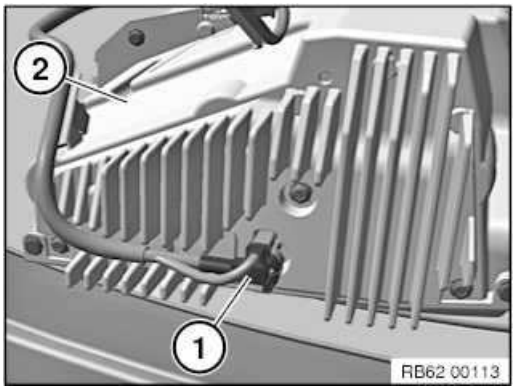
- Loosen screws (1).
- Unlock and disconnect the plug connection of the front passenger airbag.
- Guide out the instrument panel trim with the help of an auxiliary person and unlock and disconnect all the plug connections.
- Release the wiring harness from the instrument panel trim.
- Guide out the instrument panel trim through the door aperture from the vehicle.

34 – Removing the Head-Up Display



- Loosen screws (1).
- Carefully feed out the head-up display (2) from the support (3) towards the top.

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- Unlock and disconnect the plug connection (1) on the underside of the Head-Up Display (2).
- Remove the Head-Up Display (2).

35 – Removing the support for the instrument panel

▸ **Disconnect positive battery cable**

Prerequisite

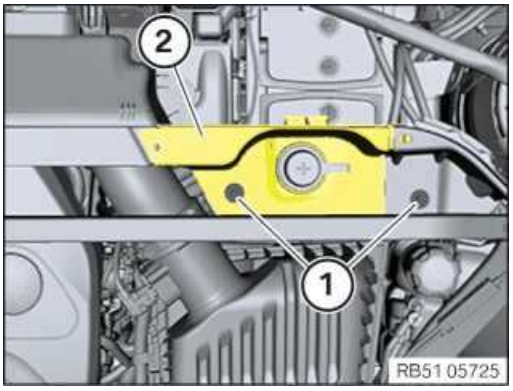
Ignition is switched off.

WARNING

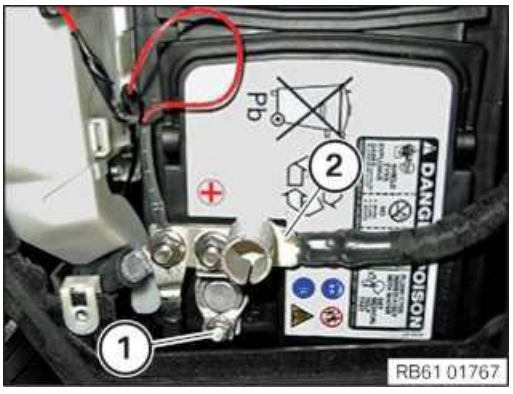
Working on 12 V vehicle electrical system.

Risk of short circuits! Risk of fire!

- Detach battery earth lead from battery.
- For additional batteries: Detach all battery earth leads from additional batteries.



- Loosen screws (1).
- Guide out and remove the cover (2).



- Slacken nut (1).
- Remove positive battery cable (2).

WARNING

Unprotected battery terminals.

Risk of short circuits! Risk of fire!

- Cover the vehicle battery.

- Fasten positive battery cable (2) laterally.

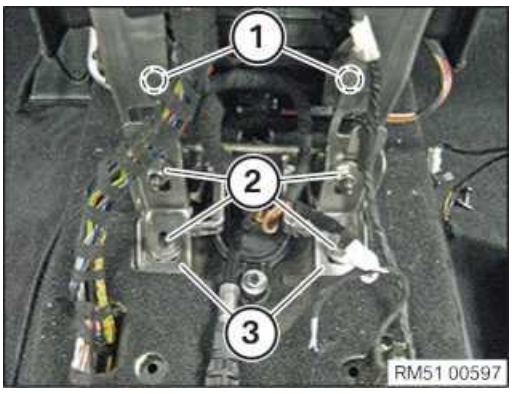
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- Release the screw (1) on bulkhead.



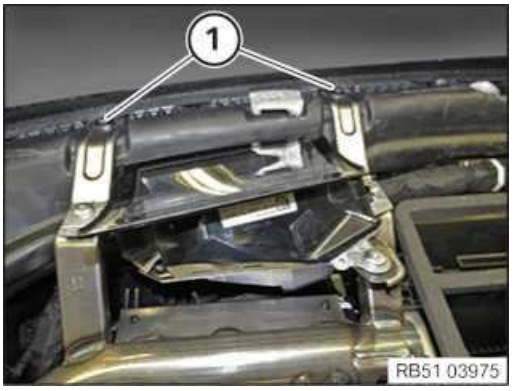
- Release the clamping bolt (1) of steering shaft on the steering column.
- Pull the steering shaft off of the steering column.



- Loosen nuts (2).
- Remove retaining bracket (3).
- Loosen screws (1).

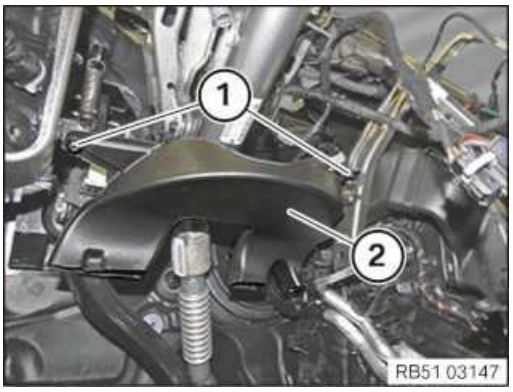


- Loosen the nuts (1) on the left and right.

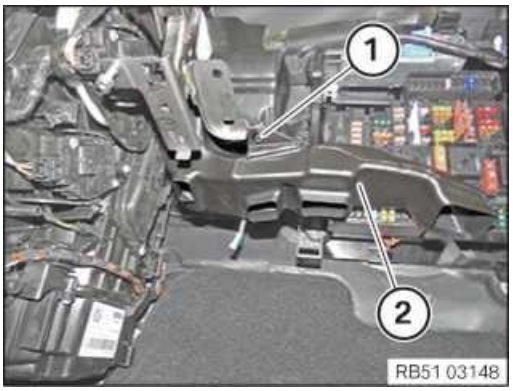


- Loosen screws (1).

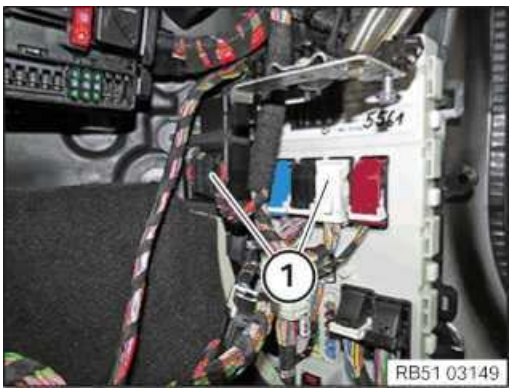
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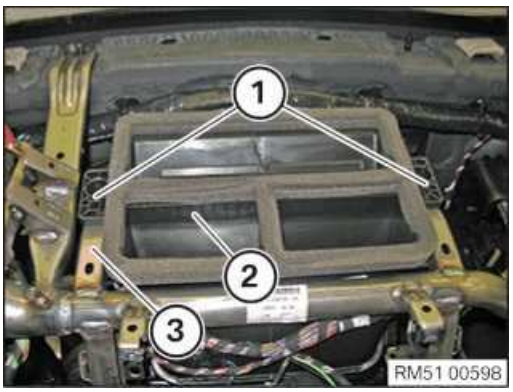
- Loosen screws (1).
- Remove the air duct (2).



- Loosen screw (1).
- Remove the air duct (2).



- Unlock and disconnect plug connections (1).



- Loosen screws (1).
- Raise heating and air-conditioning unit (2) slightly and guide out the support (3) towards rear.
- If necessary, release additional cables and all cable clips and remove support (3).

MAIN WORK

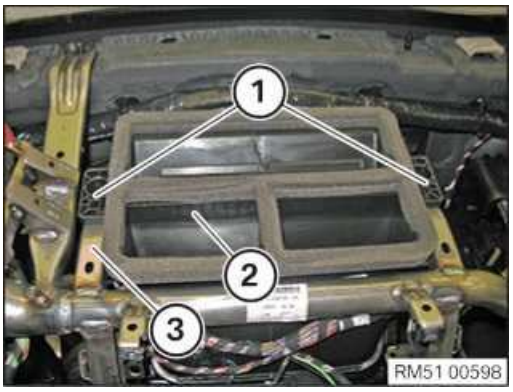
36 – Replace the supports for the instrument panel

- Remove the vehicle wiring harness from the support for the instrument panel and install on the new support for the instrument panel.

POSTPROCESSES

37 – Installing the support for instrument panel

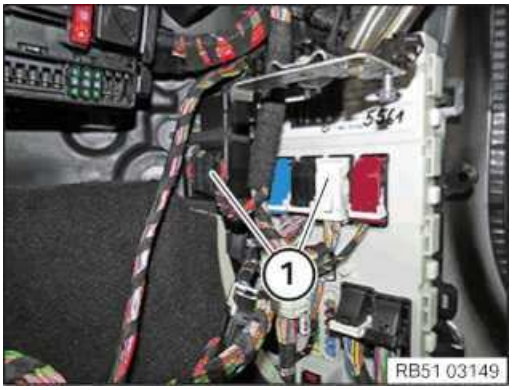
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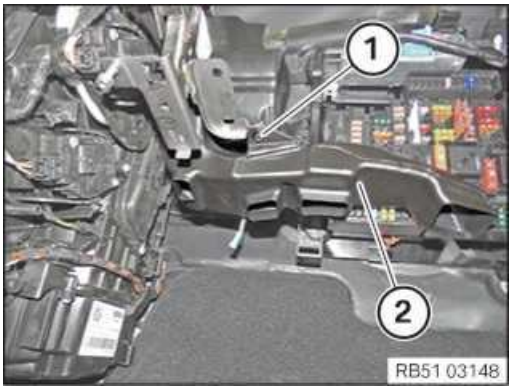
- Install the support (3).
- Correctly position the heating and air-conditioning unit (2) in the area of the screw connection (1) on the support (3).
- Make sure that cable routing is correct and clip in all cable clips on the support.
- Tighten the screws (1).

Heating and air-conditioning unit on the support for the instrument panel

M6x20 screw	Renew screw	Tightening torque	8 Nm
NutM6	Replace nut	Tightening torque	8 Nm



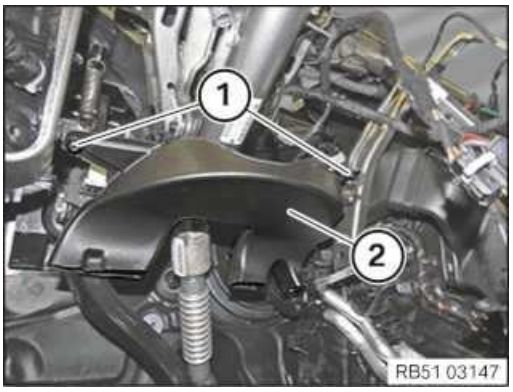
- Connect connectors (1) and lock.



- Install air duct (2).
- Tighten down screw (1).

Footwell ventilation duct

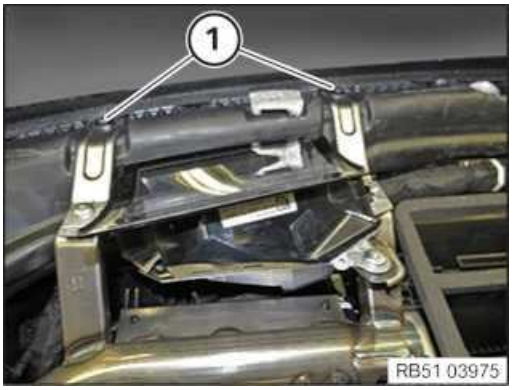
Screw			2,4 Nm



- Install air duct (2).
- Tighten the screws (1).

Footwell ventilation duct

Screw			2,4 Nm



- Tighten the screws (1).

Support for the instrument panel

Screw		Tightening torque	21 Nm
Nut		Tightening torque	21 Nm

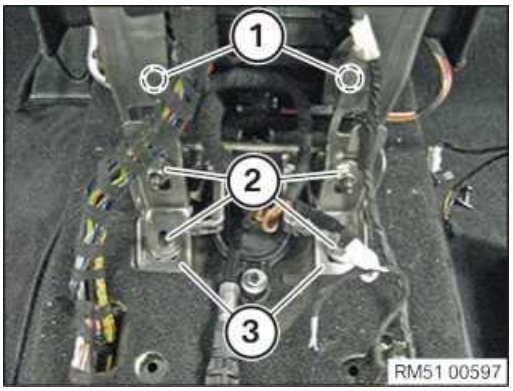
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- Tighten the nuts(1) on the left and right.

Support for the instrument panel

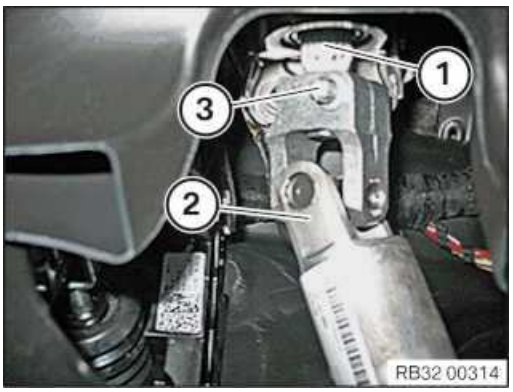
Screw		Tightening torque	21 Nm
Nut		Tightening torque	21 Nm



- Install retaining bracket (3).
- Tighten nuts (2).
- Tighten the screws (1).

Heating and air-conditioning unit on the support for the instrument panel

M6x20 screw	Renew screw	Tightening torque	8 Nm
NutM6	Replace nut	Tightening torque	8 Nm



- Pull the steering column spindle (1) out to the maximum length.
- Push universal joint (2)onto the spindle (1)of the steering column.

  Brace the spindle (1) on the steering column.
- Renew the clamping bolt (3).

  Parts: Clamping bolt
- Tighten the clamping bolt (3).

Lower steering shaft to steering column

Clamping bolt M8	Recut screw thread. Renew clamping bolt. No retorquing permitted!	Tightening torque	28 Nm



- Tighten the screw (1) on the bulkhead.

Support for the instrument panel

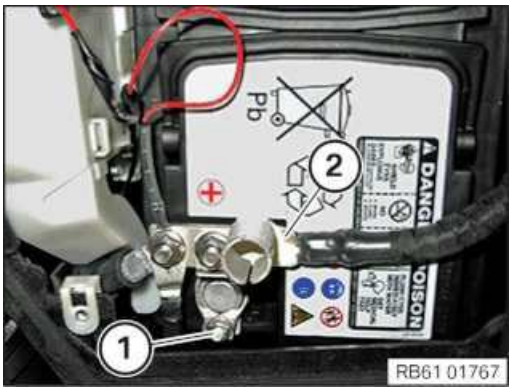
Screw		Tightening torque	21 Nm
Nut		Tightening torque	21 Nm

▸ **Connect positive battery cable**

Prerequisite

Ignition is switched off.

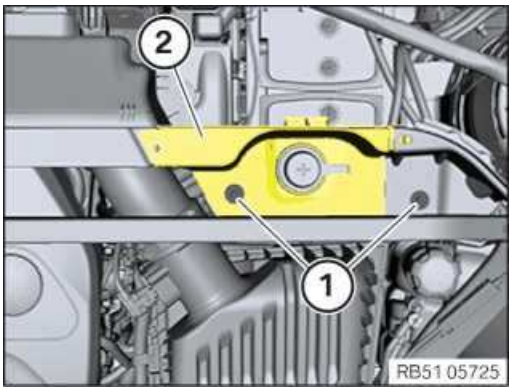
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- Mount the positive battery cable (2) and position correctly.
- Tighten nut (1).

Battery terminal with IBS positive battery terminal / negative battery terminal

NutM6		5 Nm

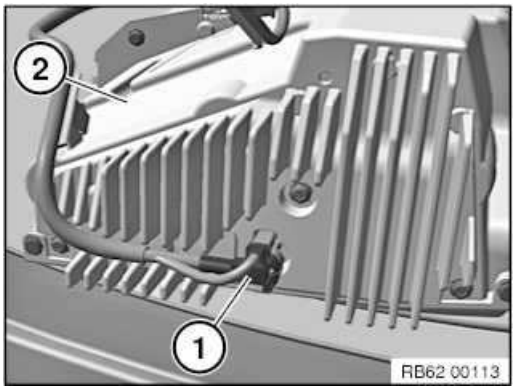


- Feed in cover (2) and position correctly.
- Tighten the screws (1).

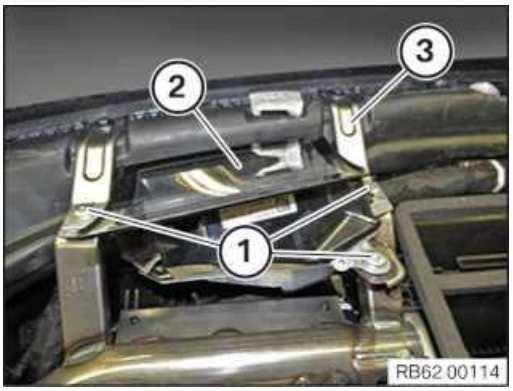
Cover of remote positive terminal

Screw		Tightening torque	2,6 Nm

38 – Installing the head-up display



- Connect and lock the connector (1) on the bottom of the Head-Up Display (2).



- Position the Head-Up Display (2) on the support (3) correctly.
- Tighten the screws (1).

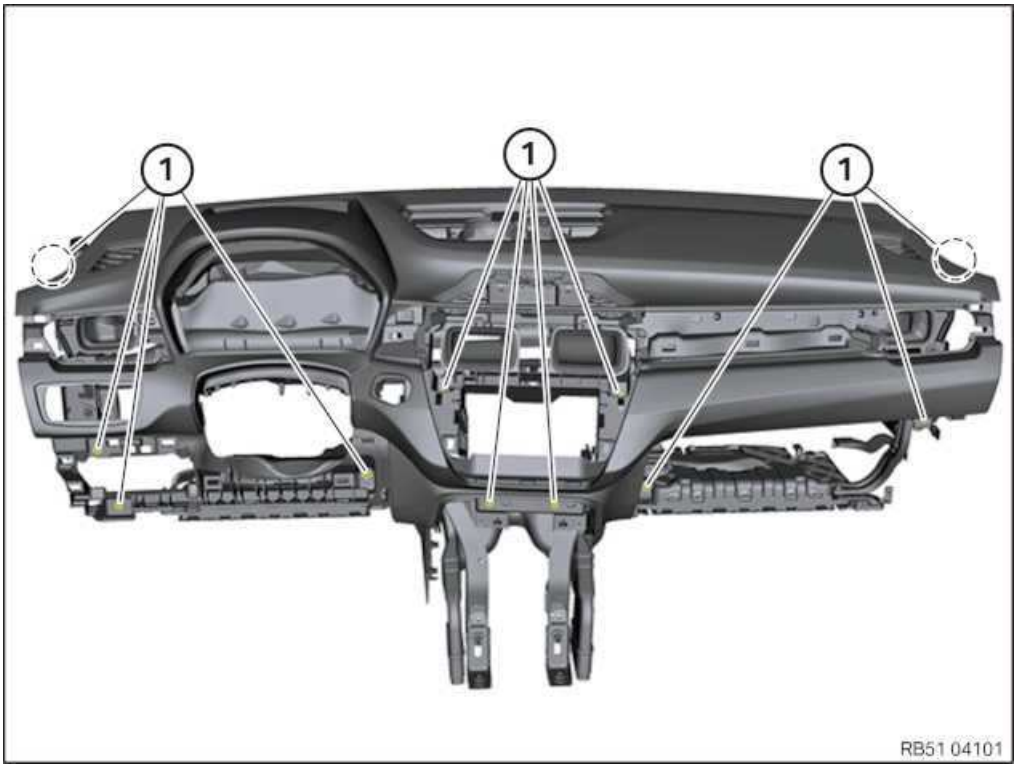
Head-Up Display to support

Screw			8 Nm

39 – Install instrument panel trim

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Instrument panel



TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

- Guide the instrument panel trim through the door aperture with the help of an auxiliary person.
- Install the instrument panel trim, and while doing so secure the wiring harness and connect and lock all the connectors.
- Connect and lock the plug connection of the front passenger airbag.
- Make sure guides on instrument panel are correctly seated in respective mountings of bulkhead.
- Make sure seals for the air ducts are correctly seated.
- Make sure wiring harness is correctly laid.
- Tighten the screws (1).

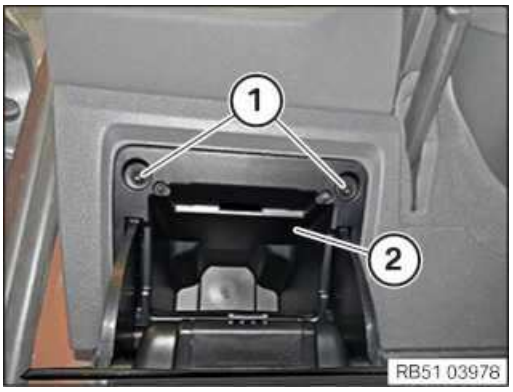
Instrument panel trim to carrier support

Screw		Tightening torque	2,4 Nm

40 – Installing the left fold-down compartment

- Guide in the fold-down compartment (2) on the instrument panel.

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- Tighten the screws (1).

Fold-down compartment to instrument panel

Screw		Tightening torque	1,8 Nm

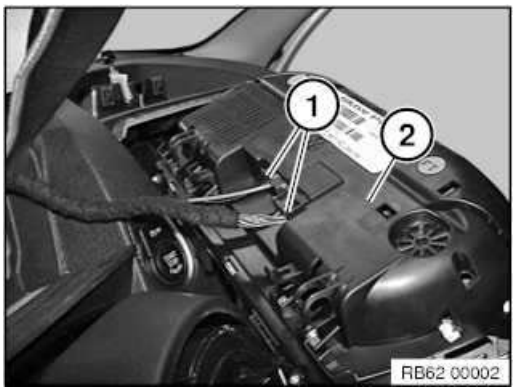
41 – Installing the instrument cluster (KOMBI)

RISK OF DAMAGE

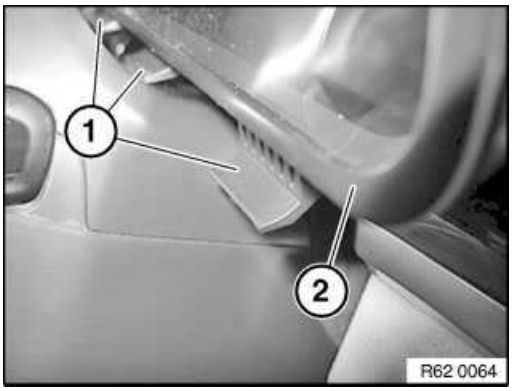
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.



- Connect and lock all connectors (1) to the instrument cluster (KOMBI).



- Make sure that the retaining tabs (1) of the instrument cluster (KOMBI) (2) are seated exactly in mountings of the instrument panel.



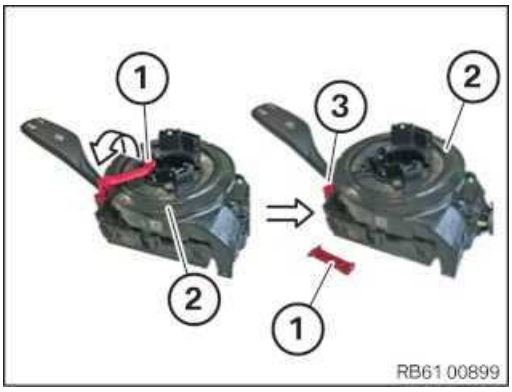
- Position the instrument cluster (KOMBI) position in the opposite direction of the arrow.
- Tighten the screws (1).

Instrument cluster to instrument panel

Screw		1,7 Nm

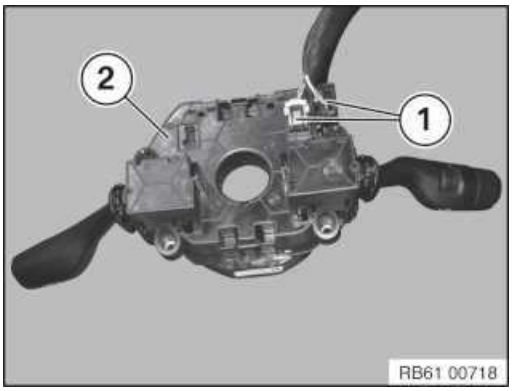
42 – Installing the steering column switch cluster (SZL)

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- **Replacement:** Break off the transportation retainer (1) on the steering column switch cluster (SZL) (2) in direction of arrow.

  The broken-off piece of (3) the transportation retainer (1) remains in the steering column switch cluster (SZL) (2).

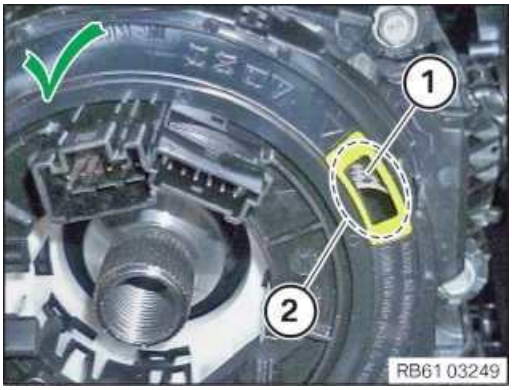


- Connect the connector (1) with the steering column switch cluster (SZL) (2).

▸ **Check the neutral position of the clock spring**

TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



Check

- **Version A:**

  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).

Check

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- **Version B:**

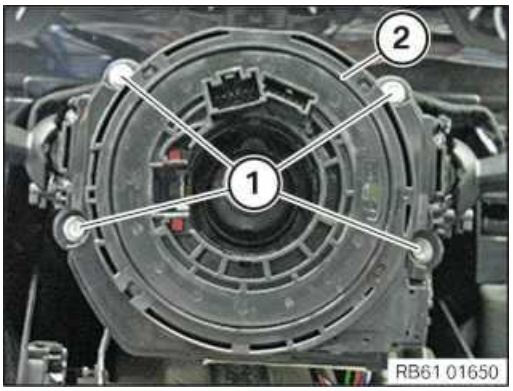
  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).

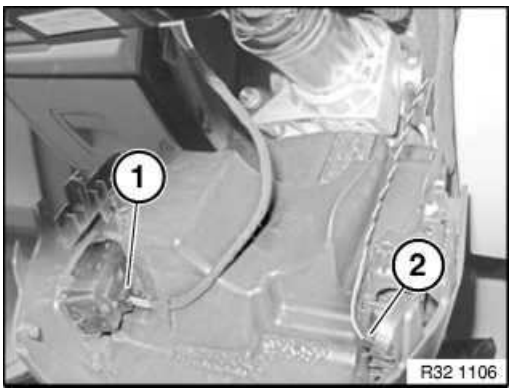


- Position the steering column switch cluster (SZL) (2).
- Tighten the screws (1).

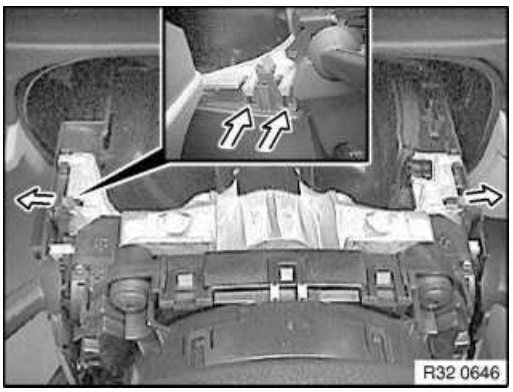
Steering column switch cluster (SZL) on the steering column

Screw TS5x20		Tightening torque	3 Nm

43 – Install steering column shroud lower section



- Position the steering column shroud lower section .
- Connect available connectors (1) and (2) and lock.



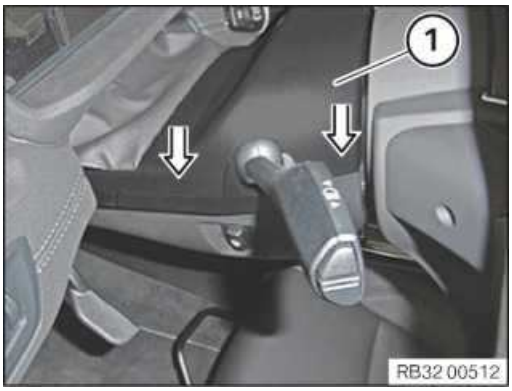
- Position the steering column shroud lower section with the retaining lugs (arrows).
- Press steering column shroud lower section completely towards the top until the retaining lugs (arrows) engage.

44 – Fit steering column shroud upper section

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- Position the steering column shroud upper section.
- Attach gap cover of the steering column (1) on the brackets (arrows).



- Position the steering column shroud upper section (1).

NOTICE

Perform the operations on the left and right side.

- Press the upper section of the steering column shroud (1) downwards in direction of arrow.

  The upper section of the steering column shroud must engage audibly and perceptibly.

45 – Installing the steering wheel/sports steering wheel

▸ **Check the neutral position of the clock spring**

- Ensure that the coil spring is not twisted.

  There are clock springs installed without a mechanical anti-twist lock.

  Coil springs without a mechanical anti-twist lock are identifiable on the inspection glass for the neutral position mark.
- Check the neutral position of the clock spring on the steering column switch cluster (SZL).

  The neutral position is correct if the yellow or green mark (1) is clearly visible.

Check



- Check the mark (1) in the inspection glass.

Result

» The mark (1) is not visible.

Measure

- Turn the coil spring until mark (1) is visible in the inspection glass.

Check

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- A micro-encapsulated screw (1) may be fitted.
- Checked threaded connection

Result

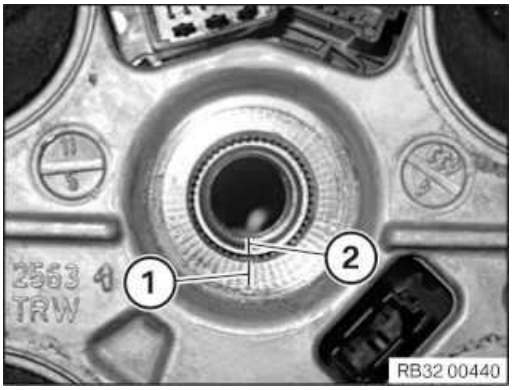
» Screw (1) is micro-encapsulated.

Measure

- Clean thread in the steering column.

  Renew the screw (1).

  Parts: Screw



- Align and connect the steering wheel/sports steering wheel according to the mark (1) with the steering column mark (2).



- Tighten down screw (1).

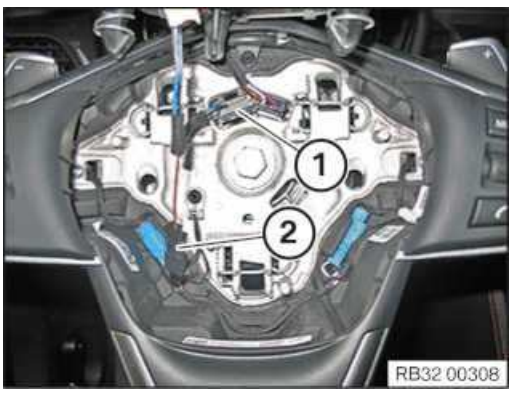
Steering wheel to steering column

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

- **Connect connectors and lock.**

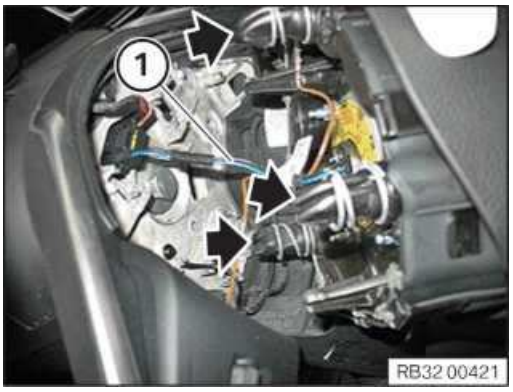
  Make sure connecting lines are correctly routed.

46 – Installing airbag unit of steering wheel/sports steering wheel



- Connect and lock connectors (1) and (2) of the airbag unit.

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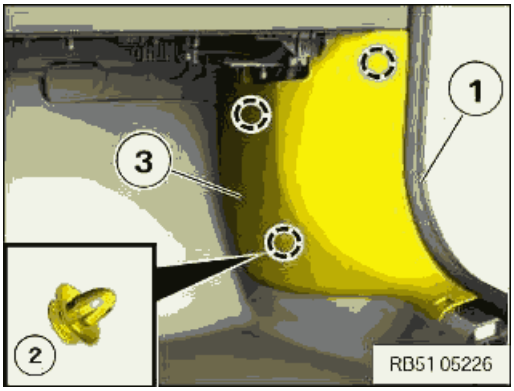
- Before installing the airbag unit, align the wiring harness (1) to the centre so that the latch mechanisms (arrows) are exposed!



- Position airbag unit (1).
- Press the airbag unit (1) with even pressure in each case in the direction of the arrow into the steering wheel.

  The airbag unit (1) must engage audibly and perceptibly.

47 – Installing side trim panel in footwell on right A-pillar

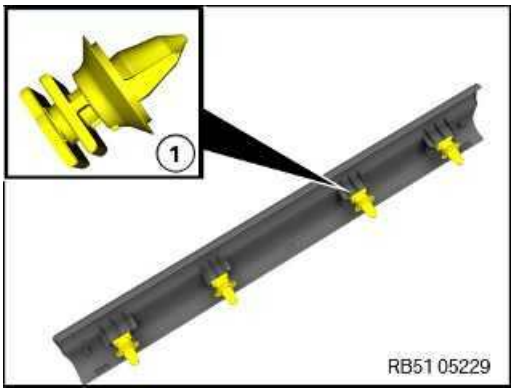


- Check clips (2) for damage, and replace if necessary.
- Feed the side trim panel (3) under the sealing lip of the edge protection (1).
- Clip in the side trim panel (3) with the clips (2).

48 – Install the front right door sill cover strip

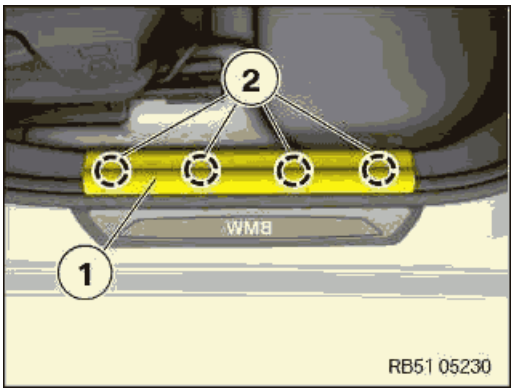
NOTICE

Description is for left component only. Procedure on the right side is identical.



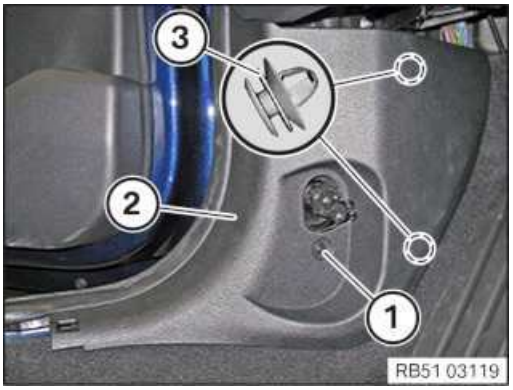
- Check the clips (1) for damage and renew where required.

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- Clip the door sill cover strip (1) into the floor panel with the clips (2).

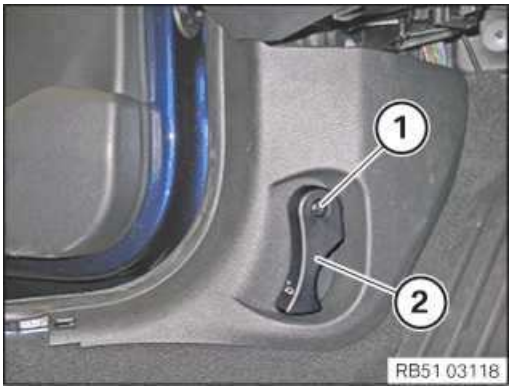
49 – Installing side trim panel in the footwell at A-pillar



- Position the side trim panel (2) and clip it to the clips (3).
- Make sure the edge protection on the side trim panel (2) fits correctly.
- Tighten down screw (1).

Side trim panel bottom left to holder

Screw		Tightening torque	3 Nm

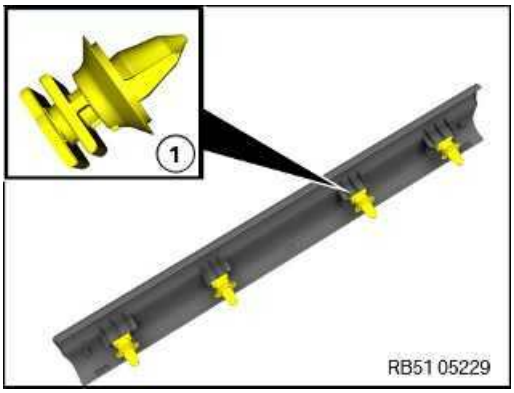


- Install lever for the bonnet release (2)I.
- Tighten down screw (1).

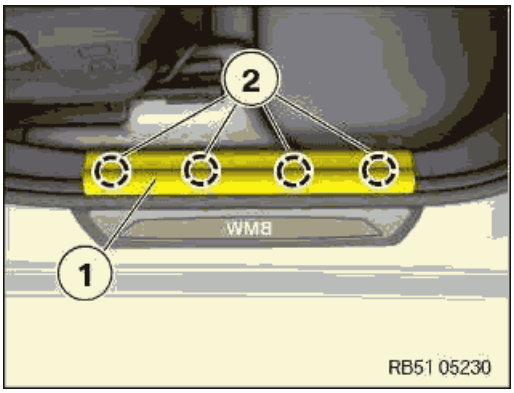
Lever for bonnet release to the holder

Screw		Tightening torque	3 Nm

50 – Install the front door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

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51 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

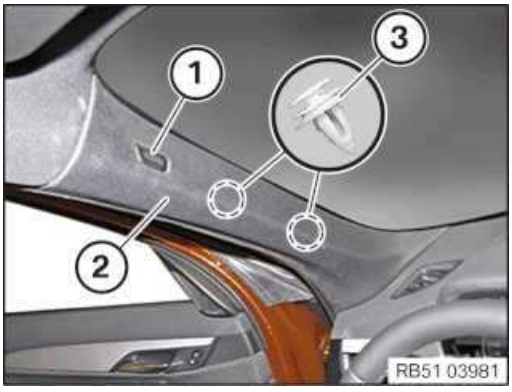
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

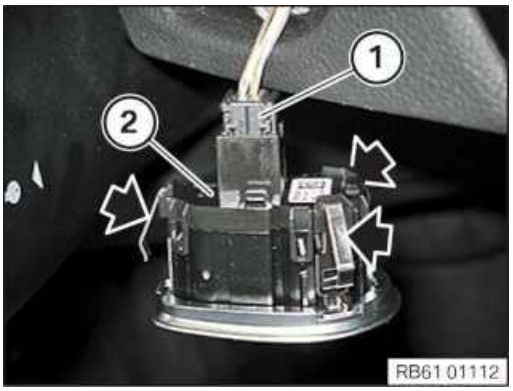
52 – Installing the light operating unit

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- Connect associated connector.
- Position light operating unit (1) correctly and clip in where marked.

53 – Installing the START-STOP button



- Connect connector (1) with START-STOP button (2).

  The retaining clips (arrows) must not be damaged or missing.



- Install START-STOP button (1) in the instrument panel trim.

54 – Install decorative strip from instrument panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install decorative strip (1) a snap into the clamps (2).

55 – Install the Head Unit High (HU-H)

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RISK OF DAMAGE

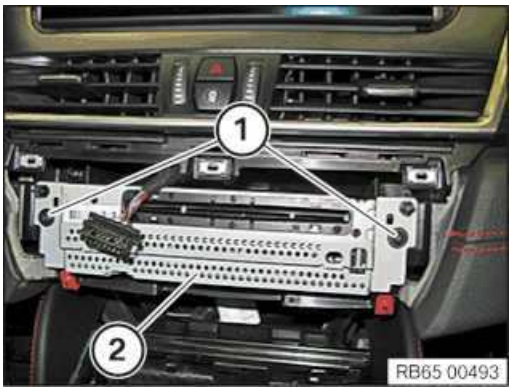
Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Position head unit (1).
- Connect and lock all connectors in the marked area.



- Slide in the head unit (2) correctly.
- Tighten the screws (1).

Head unit to instrument panel

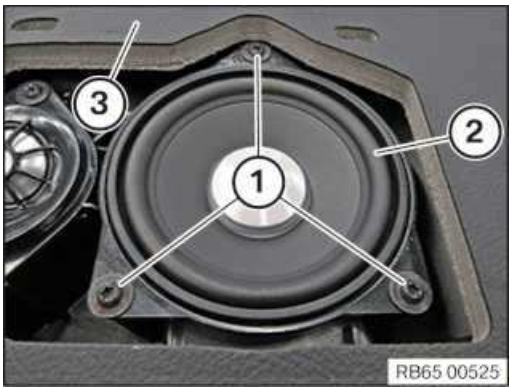
Screw		Tightening torque	1,8 Nm



- Route the wiring harness (1) correctly.

56 – Install the mid-range speakers in the instrument panel

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- Connect the connector below it to the mid-range speaker (2).
- Position the mid-range speaker (2) in the instrument panel (3).
- Tighten the screws (1).

Speaker to support / support to instrument panel / support to body

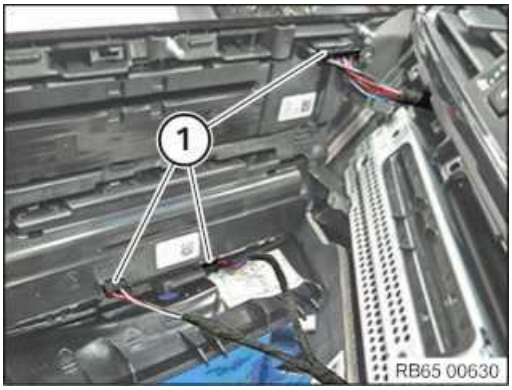
Screw		Tightening torque	1,8 Nm



- Check the latch mechanisms on the speaker cover (1) for damage and renew them if necessary.

  The latch mechanisms must not be missing or faulty.
- Engage the speaker cover (1) correctly into the instrument panel (2).

57 – Installing audio operating unit and air conditioning control panel



- Position audio operating unit and air conditioning control panel.
- Connect plug connection (1) and lock.



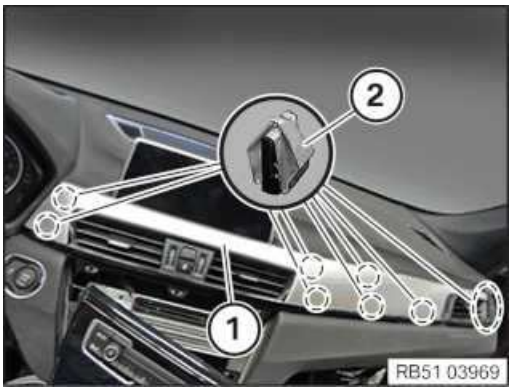
- Correctly position trim (1) and clip it into the instrument panel (2).

58 – Install the finisher on the right instrument panel

TECHNICAL INFORMATION

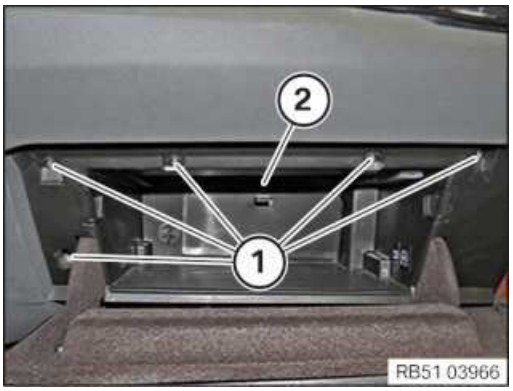
Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the decorative strip (1).
- Connect connector.
- Engage the decorative strip (1) on the clamps (2).

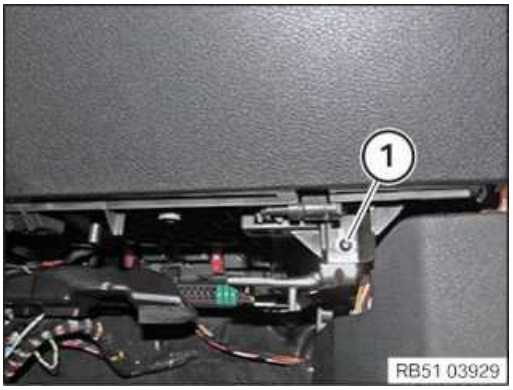
59 – Install right glove box



- Install the glove box (2) and connect and lock associated plug connections.
- Tighten the screws (1).

Glove box to instrument panel

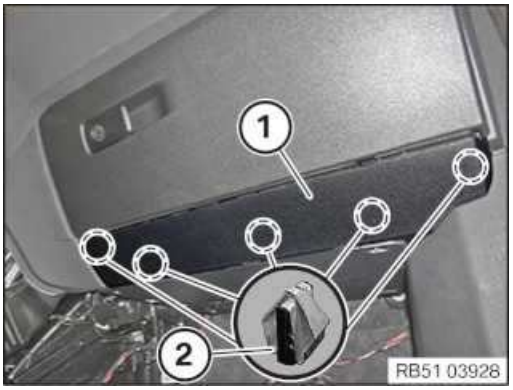
Screw		Tightening torque	1,8 Nm



- Tighten down screw (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

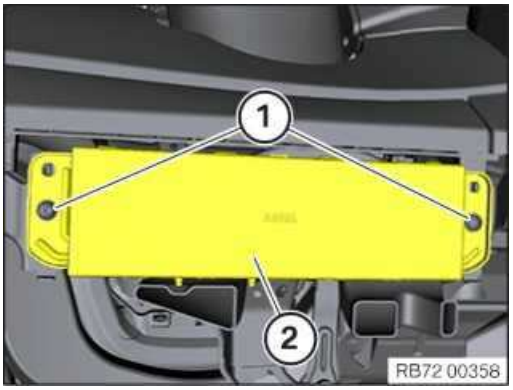


TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

- Install the trim (1) and lock it at the clamps (2).

60 – Installing knee airbag



- Connect the plug connection to the knee airbag (2) and lock.
- Install knee airbag (2).
- Renew screws (1).

  Parts: Screw
- Tighten the screws (1).

Knee airbag to body

M8	Renew screws.	Tightening torque	8 Nm

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61 – Install the side panel on instrument panel on the left and right

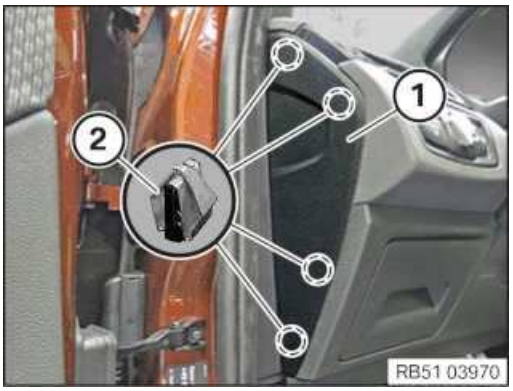
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install side panel on the instrument panel**

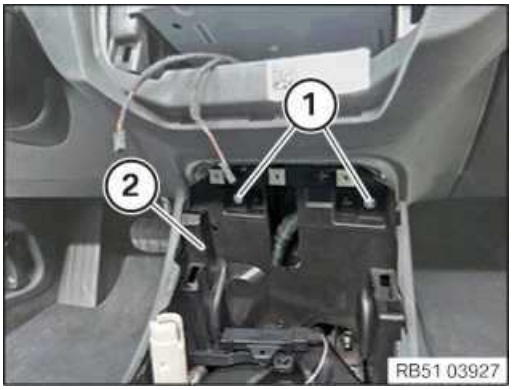
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Feed in the side panel (1) at an angle toward the front and lock at the clamps (2).

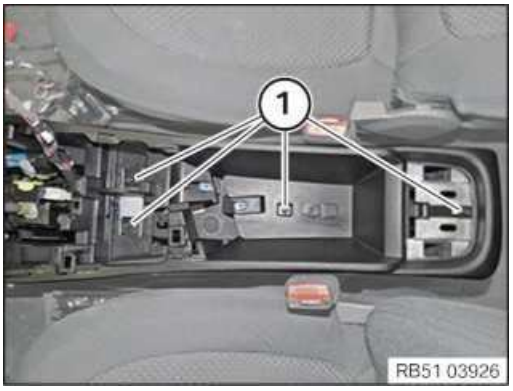
62 – Installing centre console fully with centre armrest



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm



- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing the centre armrest**

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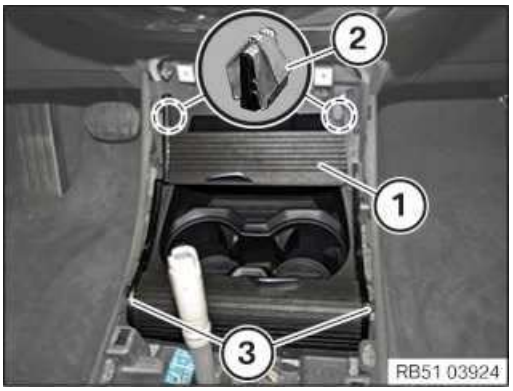


- Install the centre armrest and tighten nuts (1).

Centre armrest to support

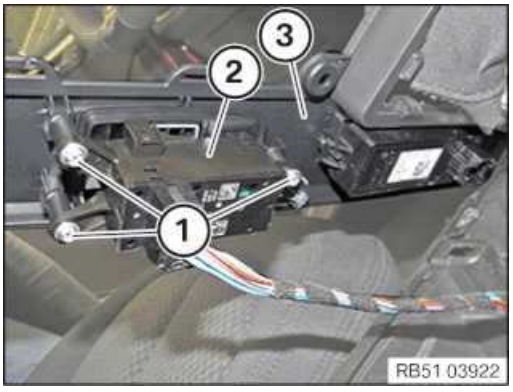
Nut M8		Tightening torque	21,4 Nm

63 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

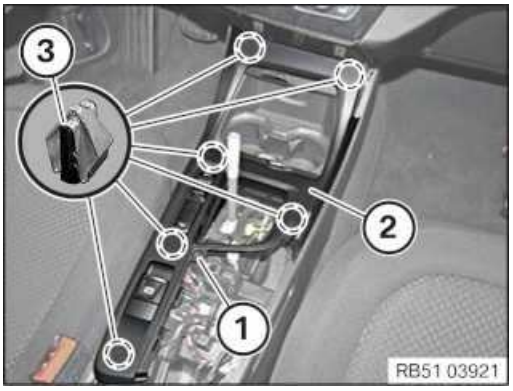
64 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

65 – Installing the decorative trim to the centre console

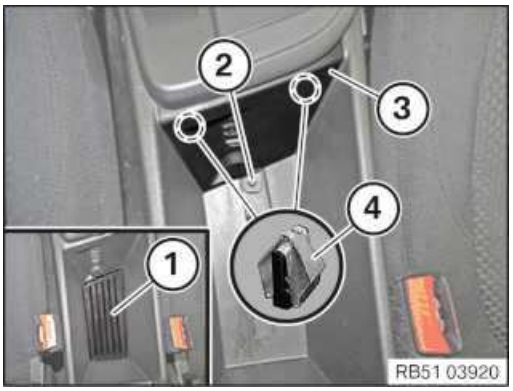
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- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

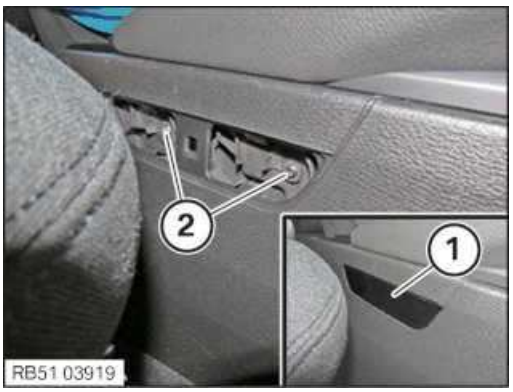


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

66 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.

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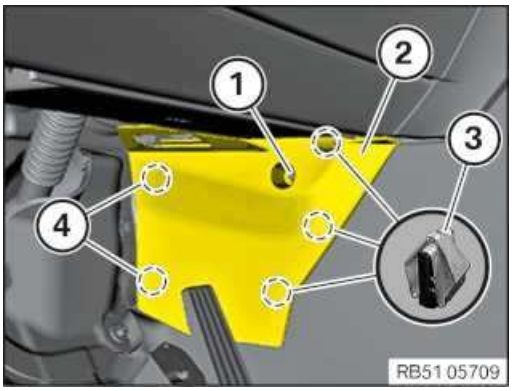
- Clip in gaiter (arrows).

67 – Installing side trim panel for the left and right centre console

▸ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

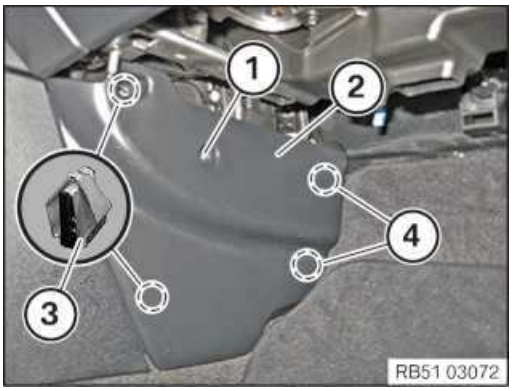
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

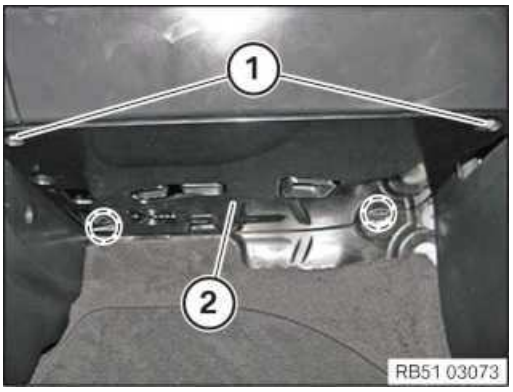
Oval-head screw		Tightening torque	1,8 Nm

68 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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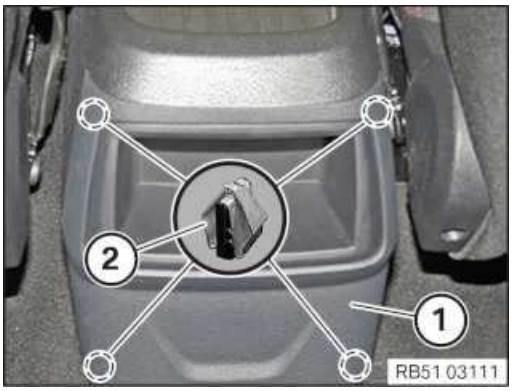


- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

69 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

70 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Heating and air-conditioning unit on the support for the instrument panel Used in step 37

M6x20 screw	Renew screw	Tightening torque	8 Nm
NutM6	Replace nut	Tightening torque	8 Nm

Footwell ventilation duct Used in step 37

Screw			2,4 Nm

Support for the instrument panel Used in step 37

Screw		Tightening torque	21 Nm
Nut		Tightening torque	21 Nm

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Lower steering shaft to steering column

Used in step 37

Clamping bolt M8	Recut screw thread. Renew clamping bolt. No retorquing permitted!	Tightening torque	28 Nm

Battery terminal with IBS positive battery terminal / negative battery terminal

Used in step 37

NutM6			5 Nm

Cover of remote positive terminal

Used in step 37

Screw		Tightening torque	2,6 Nm

Head-Up Display to support

Used in step 38

Screw			8 Nm

Instrument panel trim to carrier support

Used in step 39

Screw		Tightening torque	2,4 Nm

Fold-down compartment to instrument panel

Used in step 40

Screw		Tightening torque	1,8 Nm

Instrument cluster to instrument panel

Used in step 41

Screw			1,7 Nm

Steering column switch cluster (SZL) on the steering column

Used in step 42

Screw TS5x20		Tightening torque	3 Nm

Steering wheel to steering column

Used in step 45

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

Side trim panel bottom left to holder

Used in step 49

Screw		Tightening torque	3 Nm

Lever for bonnet release to the holder

Used in step 49

Screw		Tightening torque	3 Nm

A-pillar trim panel to body

Used in step 51

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Head unit to instrument panel

Used in step 55

Screw		Tightening torque	1,8 Nm

Speaker to support / support to instrument panel / support to body

Used in step 56

Screw		Tightening torque	1,8 Nm

Glove box to instrument panel

Used in step 59

Screw		Tightening torque	1,8 Nm

Knee airbag to body

Used in step 60

M8	Renew screws.	Tightening torque	8 Nm

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Screw connection for centre console

Used in step 62 64 65

Oval-head screw		Tightening torque	1,8 Nm

Centre armrest to support

Used in step 62

Nut M8		Tightening torque	21,4 Nm

Parking brake button

Used in step 64

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console

Used in step 65 67

Oval-head screw		Tightening torque	1,8 Nm

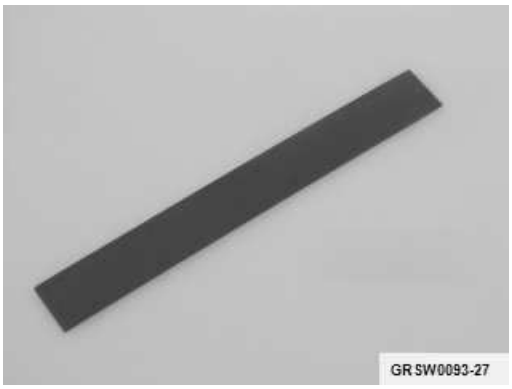
Bottom left footwell trim to instrument panel

Used in step 68

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common

Used in step 6 15

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge

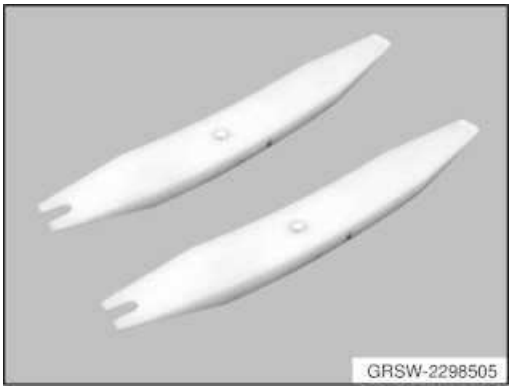


Common

Used in step 7 9 11 13 17 18 22 24

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

2 298 505 Wedge



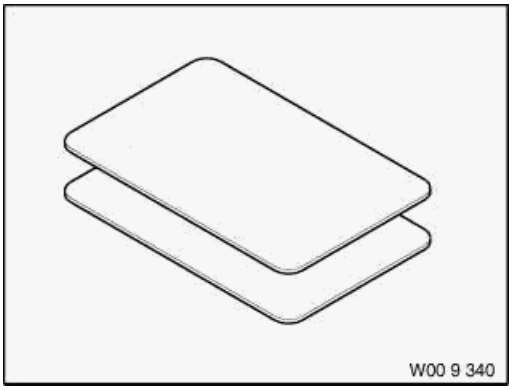
Common

Used in step 14

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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0 493 687 (00 9 340) Removal aid



Common Used in step 19

Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		**Removal aid** Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

2 298 504 Wedge



Common Used in step 28

Usage	Wedge with angled lug
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	21 51

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 70
61 20 900 Disconnecting and connecting battery earth lead	1 70
61 20 900 Disconnecting and connecting battery earth lead	1 70
61 20 900 Disconnecting and connecting battery earth lead	1 70
61 20 900 Disconnecting and connecting battery earth lead	1 70
61 20 900 Disconnecting and connecting battery earth lead	1 70
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 70
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 70
61 20 900 Disconnecting and connecting battery earth lead	1 70
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 70
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 70
61 20 900 Disconnecting and connecting battery earth lead	1 70

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61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
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61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 20 900 Disconnecting and connecting battery earth lead	1	70
61 35 ... Notes on ESD protection (Electro Static Discharge)		
72 12 ... Unlocking/locking airbag plug connections	33	39

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51 45 031 Replacing instrument panel trim

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



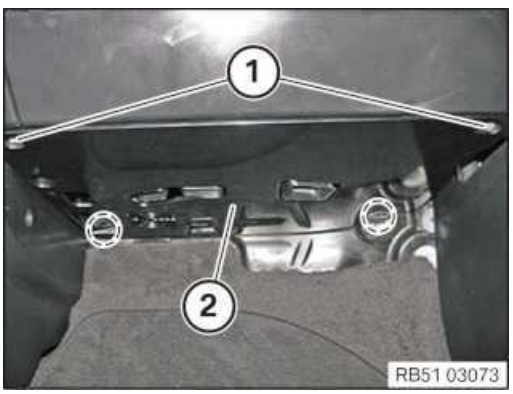
- See additional information.

2 – Adjust the steering column position



- Adjust the length of the steering column to the maximum length in the direction of arrow (1).
- Move the steering column to the lowest steering column position in the direction of arrow (2).

3 – Removing the instrument panel trim at bottom right

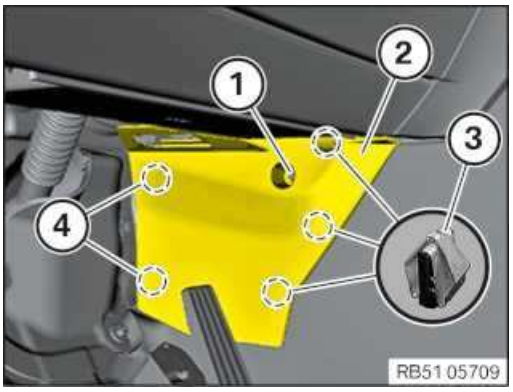


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

4 – Removing the side trim panel for the left and right centre console

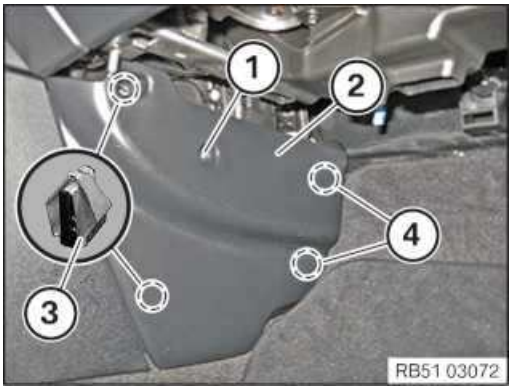
▸ **Removing side trim panel for the left centre console**

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- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▶ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

5 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

6 – Remove the decorative trim from the centre console

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RISK OF DAMAGE

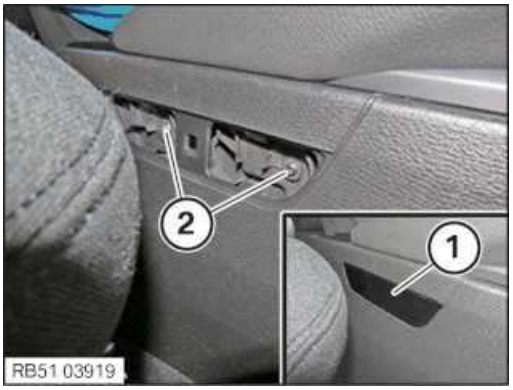
Scratches.

Tools and sharp-edged components can cause scratches.

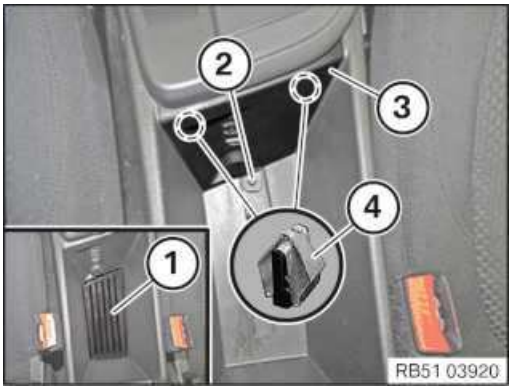
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



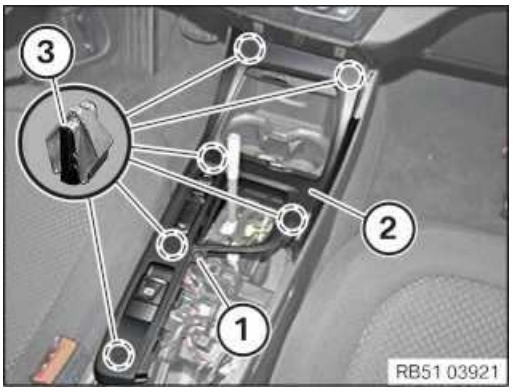
- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).



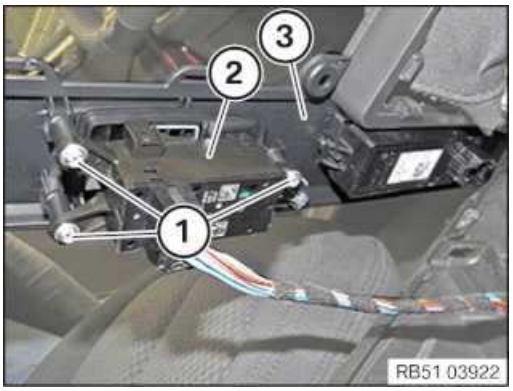
- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

7 – Remove the centre console trim

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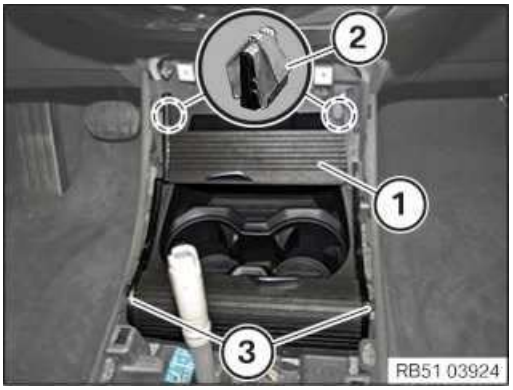
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

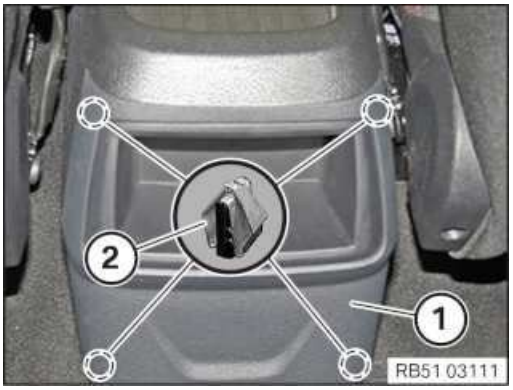
  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

8 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

9 – Removing the rear centre console trim



- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

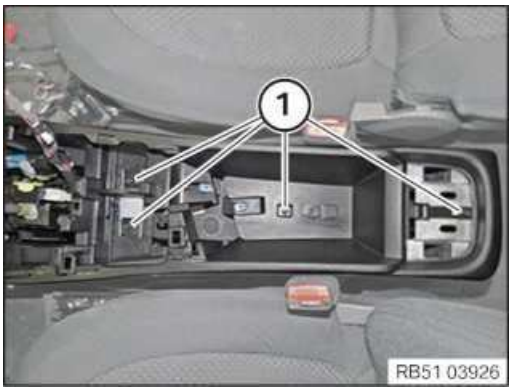
10 – Removing centre console fully with centre armrest

▸ **Removing the centre armrest**

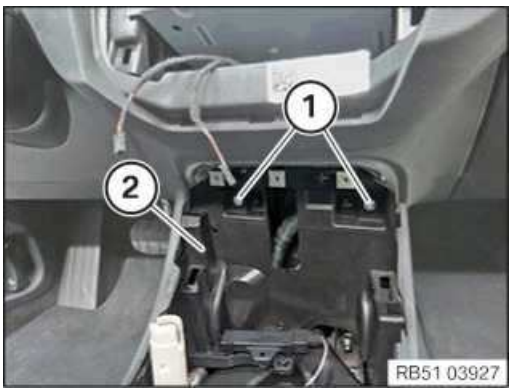
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- Release nuts (1) and remove centre armrest upwards.



- Loosen screws (1).



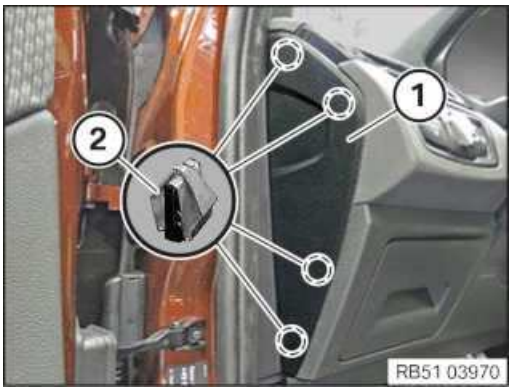
- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

11 – Remove the side panel on the left and right of the instrument panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

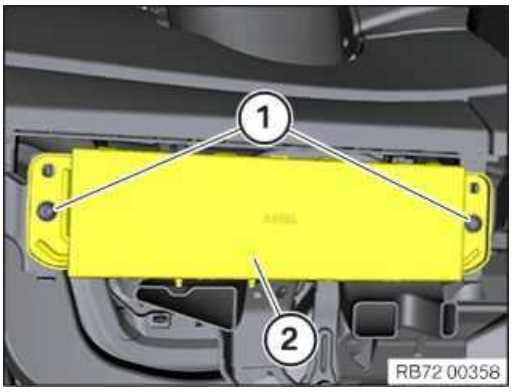
▸ **Remove side panel on the instrument panel**



- Lift out the side panel (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) and slide it out to the rear at an angle.

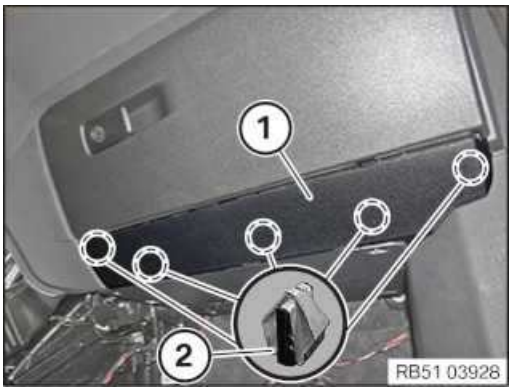
12 – Removing knee airbag

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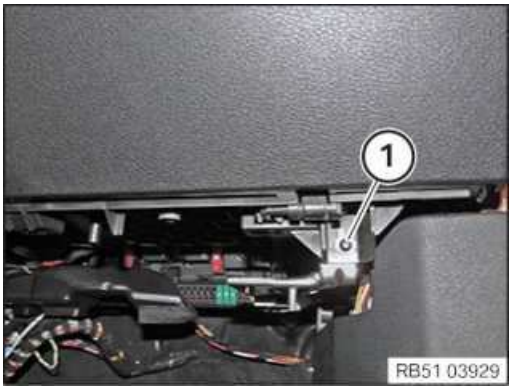


- Unlock plug connection on knee airbag (2) and disconnect.
- Loosen screws (1).
- Remove knee airbag (2).

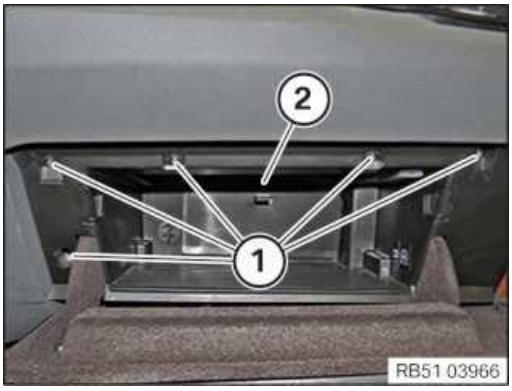
13 – Remove right glove box



- Release the trim (1) with the special tool **0 496 569 (00 9 325)** toward the bottom from the clamps (2) and remove.



- Loosen screw (1).



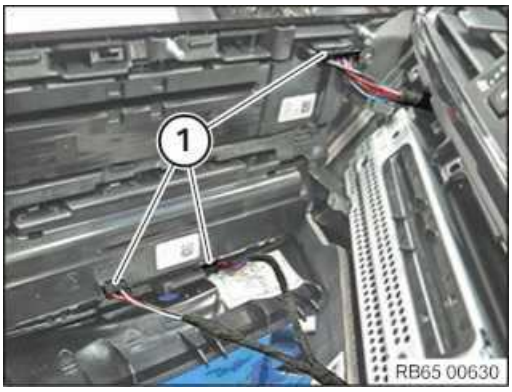
- Loosen screws (1).
- Remove glove box (2) to the inside and disconnect associated plug connections.

14 – Removing the audio operating unit and the air conditioning control panel



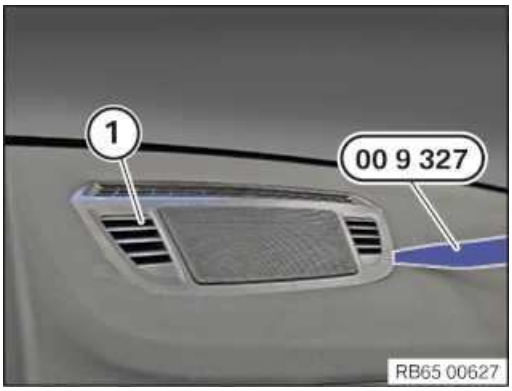
- Unclip the trim (1) using special tool **2 298 505**.

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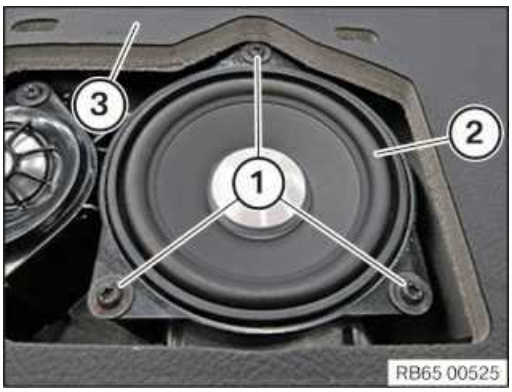


- Unlock plug connection (1) and disconnect.
- Remove the audio operating unit and the air conditioning control panel.

15 – Remove the mid-range speaker from the instrument panel



- Unclip the speaker cover (1) using the special tool **0 496 571 (00 9 327)** and remove upwards.



- Loosen screws (1).
- Disconnect plug connection underneath.
- Guide the mid-range speaker (2) out of the instrument panel (3) and remove it.

16 – Remove Head Unit High (HU-H)

RISK OF DAMAGE

Electrostatic discharge.

Damage to or destruction of electrical components.

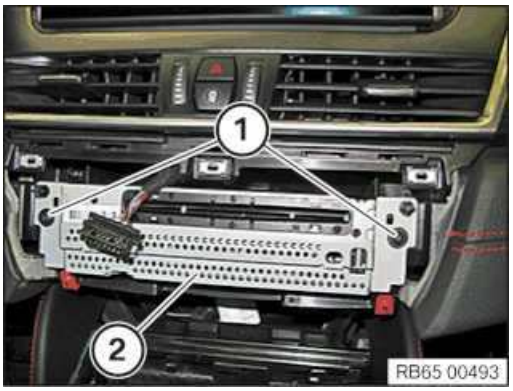
- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

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- Remove the wiring harness (1).

  In the factory, the wiring harness (1)is routed such that not enough excess length exists to remove the head unit.

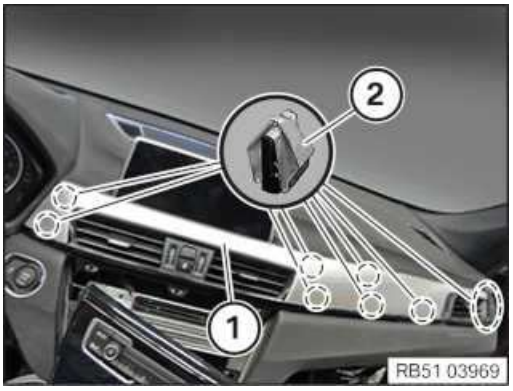


- Loosen screws (1).
- Pull out the head unit (2) a bit.



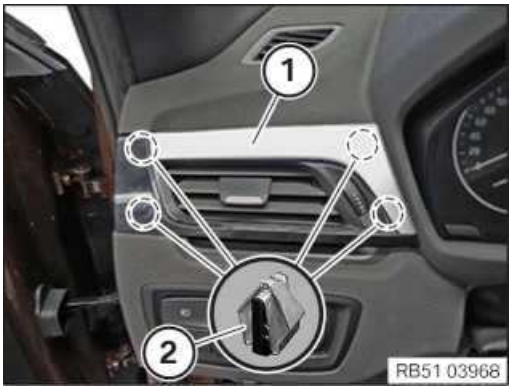
- Unlock and disconnect all connectors in the marked area.
- Remove head unit (1).

17 – Remove the finisher on the right instrument panel



- Carefully release the decorative strip (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) starting from the side.
- Lift up the decorative strip (1) and disconnect the plug connections behind it.
- Remove the decorative strip (1).

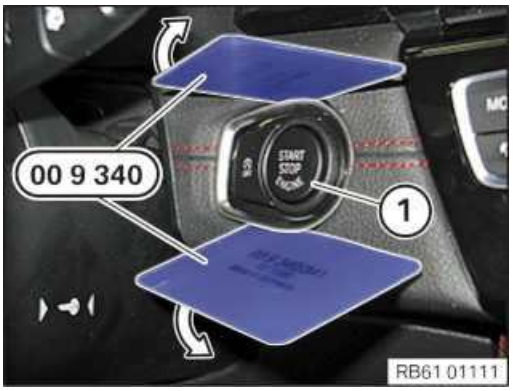
18 – Remove decorative strip from instrument panel



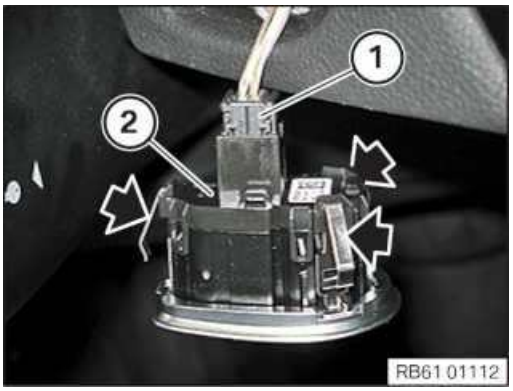
- Release the decorative strip (1) using the special tool **0 496 569 (00 9 325)** from the clamps (2) and remove.

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19 – Removing the START-STOP button



- Remove START-STOP button (1) using the special tool **0 493 687 (00 9 340)** .



- Disconnect the connector (1) and remove the START-STOP button (2).

20 – Removing the light operating unit



- Unclip the light operating unit (1) in the marked area.
- Unlock and disconnect associated connector.

21 – Removing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

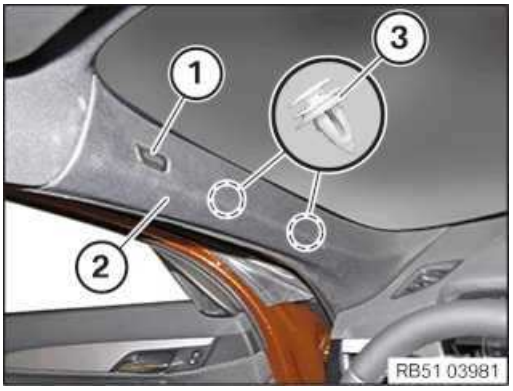
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WARNING

Pyrotechnic components.

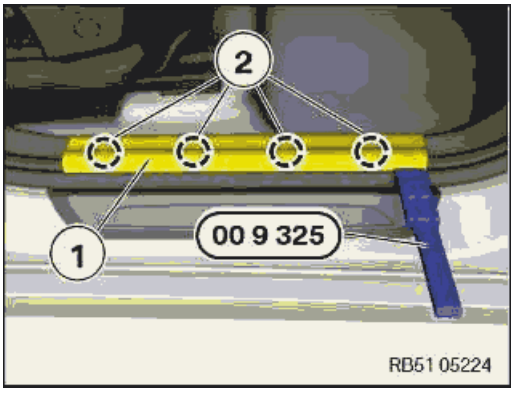
Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

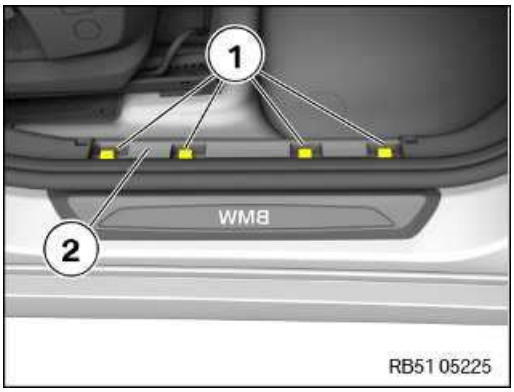


- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

22 – Remove front entrance cover strip



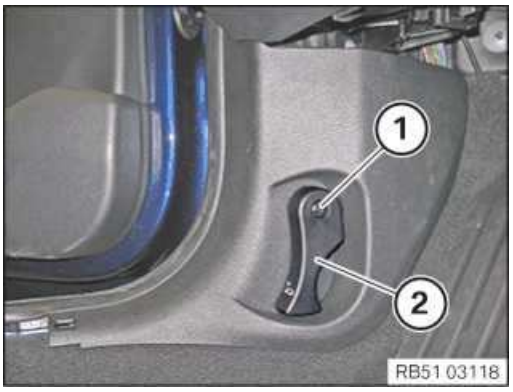
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



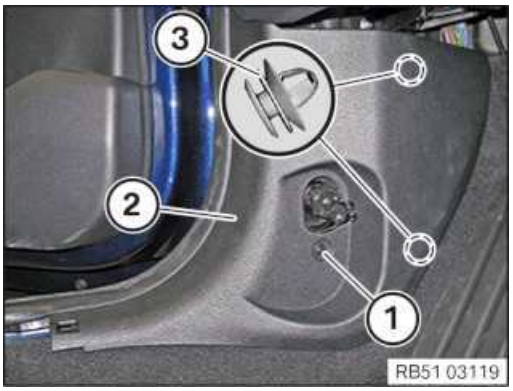
- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

23 – Removing the side trim panel in the footwell at the A-pillar

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- Loosen screw (1).
- Remove bonnet release lever (2).

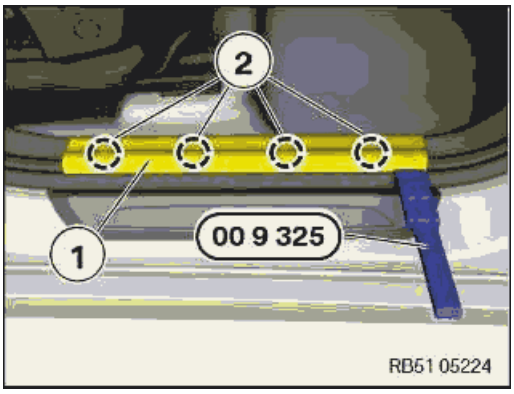


- Loosen screw (1).
- Unclip side trim panel (2) from the clips (3) and remove.

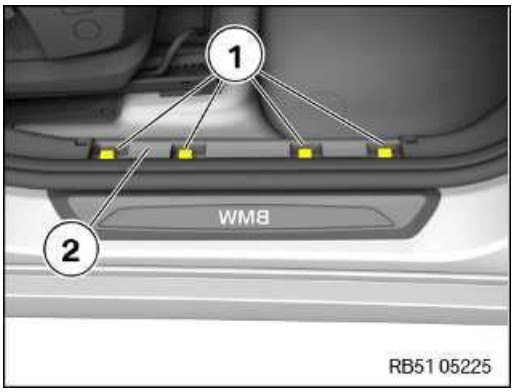
24 – Remove front right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



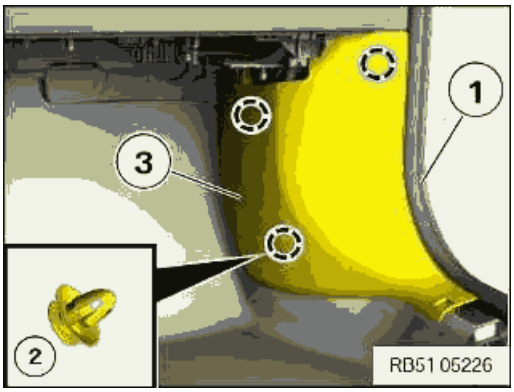
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

25 – Removing the side trim panel in the footwell at the right-hand A-pillar

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- Guide side trim panel (3) under the sealing lip out of the edge protection (1).
- Unclip and remove the side trim panel (3) at the clips (2).

26 – Removing airbag unit of the steering wheel/sports steering wheel

WARNING

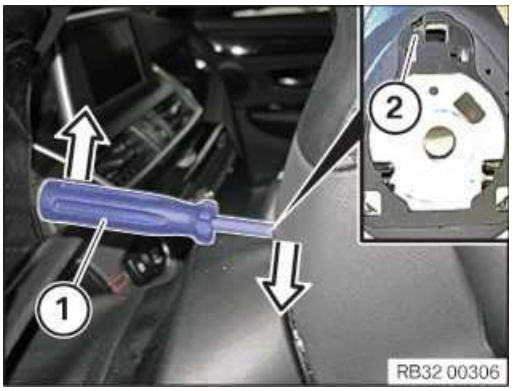
Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators



- Turn the steering wheel (1) through 180° from the "straight-ahead driving position".



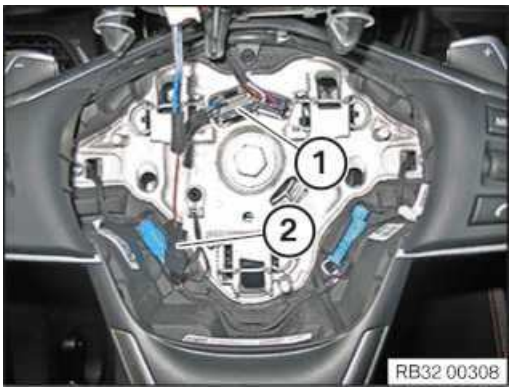
- Insert the slotted screwdriver (1) into the elongated hole on the rear side on the steering wheel.
- Push the slotted screwdriver (1) up and thereby push the retaining spring down (2).

  The airbag unit is unlocked.



- (1) Push unlocked airbag unit up.
- (2) At the same time, pull off the top airbag unit in the opposite direction of travel.

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- Unlock and disconnect the plug connections (1) and (2).
- Remove airbag unit.

27 – Removing steering wheel/sports steering wheel



- Move the steering wheel/sports steering wheels to the straight-ahead position.
- **Unlock plug connection and disconnect.**
- Release the screw (1) and remove the steering wheel/sports steering wheel.

28 – Removing steering column shroud upper section



NOTICE

Perform the operations on the left and right side.

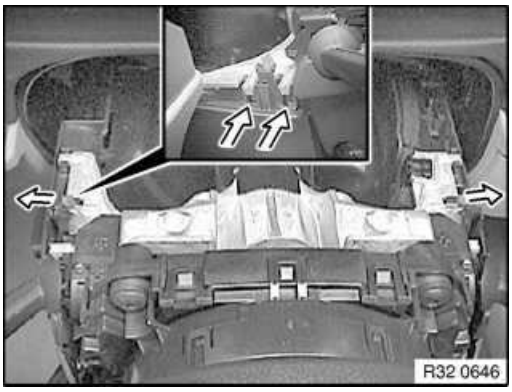
- Unclip the steering column shroud upper section (1) with the special tool **2 298 504** in area (2).
- Fold the steering column shroud upper section (1) up.



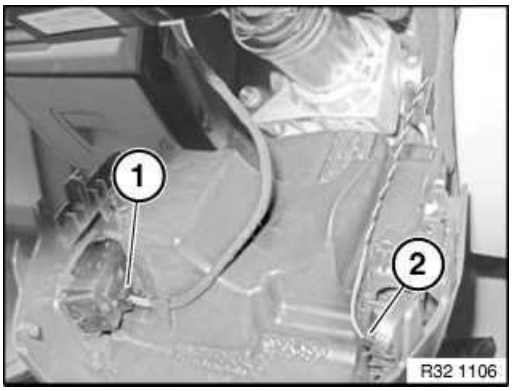
- Release the gap cover of the steering column (1) from the brackets (arrows) of the steering column shroud upper section.
- Remove steering column shroud upper section.

29 – Removing steering column shroud lower section

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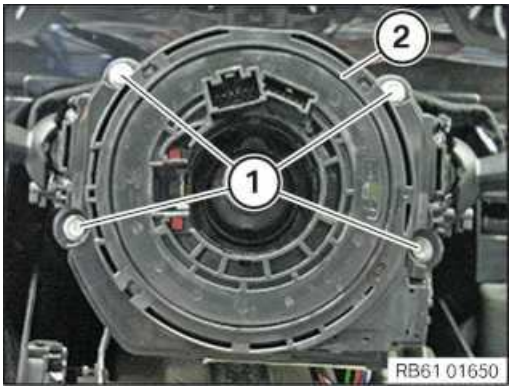


- Press the retaining lugs (arrows) a little outwards and unclip the steering column shroud lower section in a downward direction.

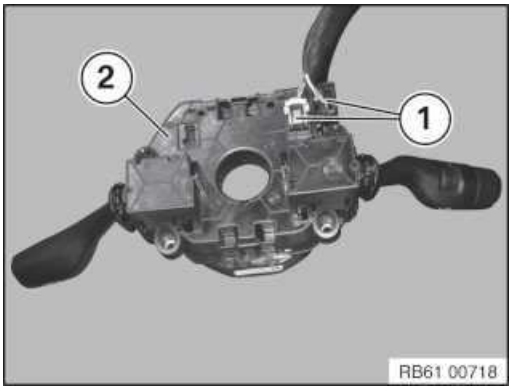


- Tilt steering column shroud lower section in downward direction.
- Unlock and disconnect the plug connections (1) and (2).
- Remove steering column shroud lower section.

30 – Removing the steering column switch cluster (SZL)



- Loosen screws (1).
- Remove the steering column switch cluster (SZL) (2).



- Unlock and disconnect the connector (1) on the steering column switch cluster (SZL) (2).

31 – Removing the instrument cluster (KOMBI)

RISK OF DAMAGE

Scratches.

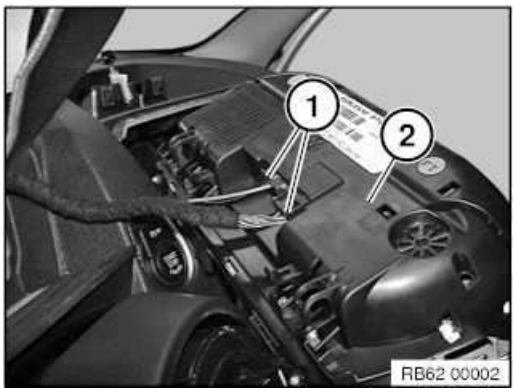
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

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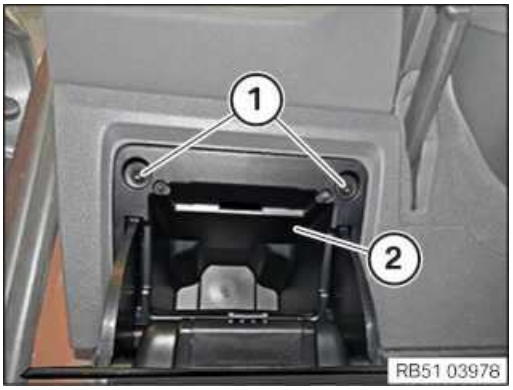


- Loosen both screws (1).
- Thread out instrument cluster (KOMBI) in direction of arrow.



- Disconnect all plug connections (1).
- Removing the instrument cluster (KOMBI) (2).

32 – Removing the left fold-down compartment



- Loosen screws (1).
- Guide out and remove the fold-down compartment (2) downward from the instrument panel.

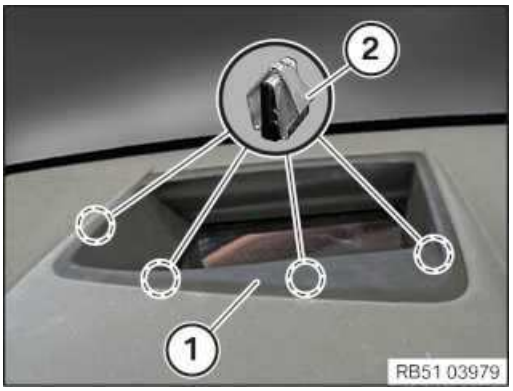
33 – Removing trim for the Head-Up Display

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

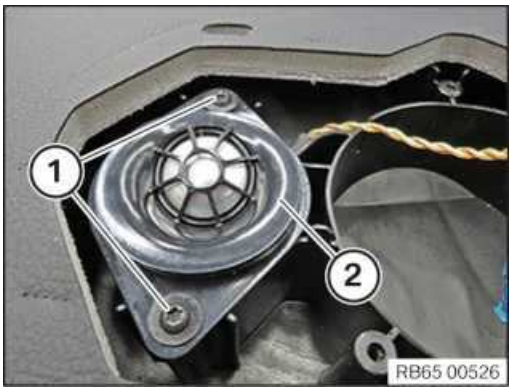
- Protect working area.
- Handle tools and components carefully.



- Release trim (1) for the Head-Up Display from retaining clips (2) with the special tool **0 496 569 (00 9 325)** and remove it.

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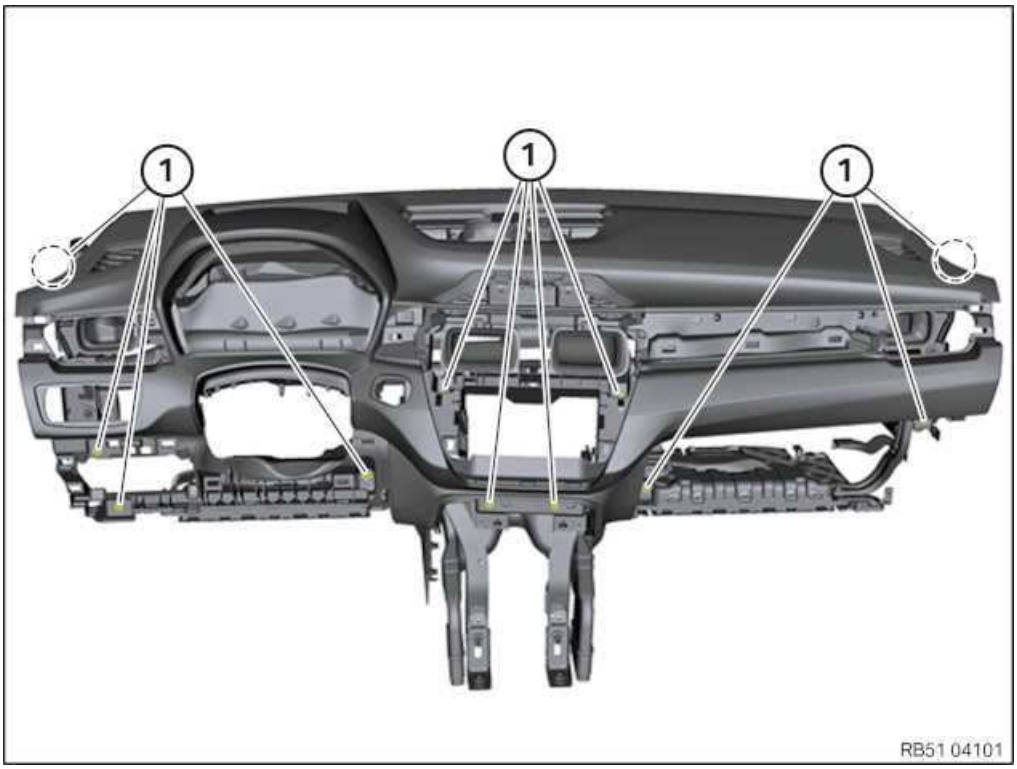
34 – Remove tweeters from the instrument panel



- Loosen screws (1).
- Remove the tweeter (2).

35 – Remove instrument panel trim

Instrument panel



TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

- Loosen screws (1).
- Unlock and disconnect the plug connection of the front passenger airbag.
- Guide out the instrument panel trim with the help of an auxiliary person and unlock and disconnect all the plug connections.
- Release the wiring harness from the instrument panel trim.
- Guide out the instrument panel trim through the door aperture from the vehicle.

36 – Remove front passenger airbag

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WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

Airbag unit.

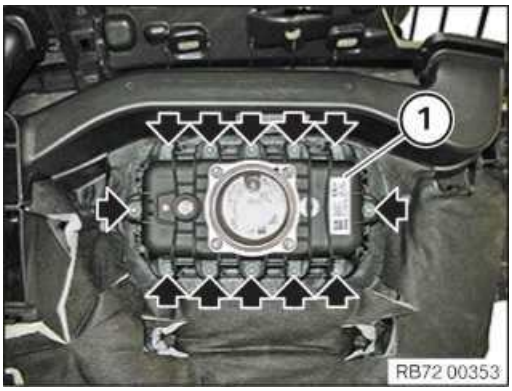
Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

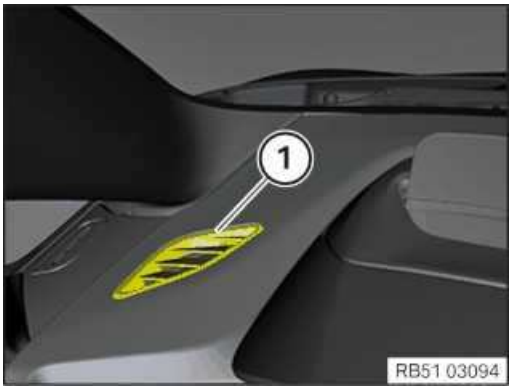


- Release all screws (arrows) on the front passenger airbag (1).
- Guide the front passenger airbag (1) out and remove.

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MAIN WORK

37 – Remount the ventilation outlet on the instrument panel

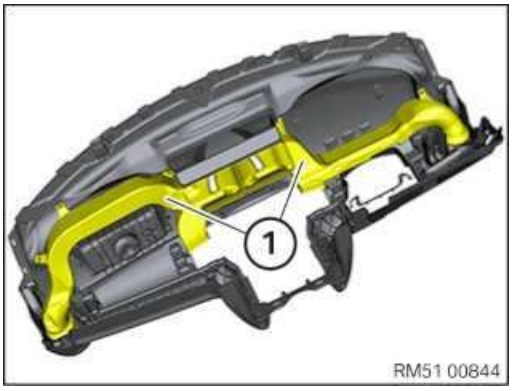


NOTICE

Description is for left component only. Procedure on the right side is identical.

- Lever out the ventilation outlet (1) with the special tool **0 493 681 (64 1 020)** and remount.

38 – Remount air ducts on the instrument panel



NOTICE

Description is for left component only. Procedure on the right side is identical.

- Remove air ducts (1) and remount.

  If necessary, remount other mounting elements that are not included with the new part.

POSTPROCESSES

39 – Installing front passenger airbag

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

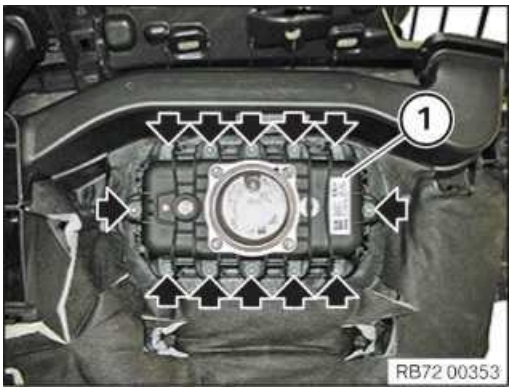
WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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- Position front passenger airbag (1).

TECHNICAL INFORMATION

Do not exceed the specified tightening torque.

- Tighten all screws (arrows) on the front passenger airbag (1).
- Make sure that the front passenger airbag is secured with the correct number of screws.

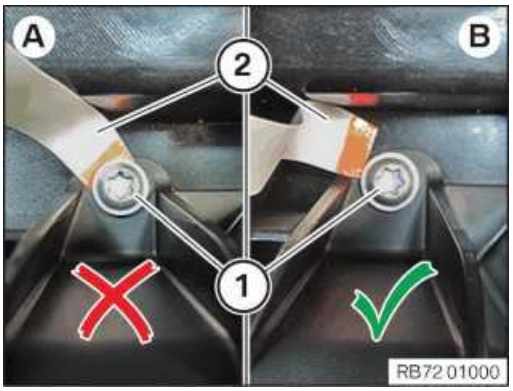
  At the factory the front passenger airbag is secured using **6 or 11** screws.

  If the component has been secured at the factory with **6** screws, the front passenger airbag must be secured with **12** screws upon installation.

  If the component has been secured at the factory with **11** screws, the front passenger airbag must be secured with **11** screws upon installation.

  If the component has been secured with **12** screws (e.g. following repair), the front passenger airbag must also be secured with **12** screws during installation.

Check



- Use a paper strip (2) to check whether the screw heads (1) of all screws are fully in contact with the installation surface.

  Even though the screws had been tightened to the correct tightening torque using a torque wrench it may potentially be the case that the screw head (1) is not fully in contact with the contact surface.

  Retorquing using the torque wrench is not permitted!

desired state

- Screw connection correct (B): Paper strip (2) does not fit underneath the screw head (1).

  The screw is correctly in contact with the contact surface.

Result

» Screw connection is not correct (A): Paper strip (2) fits underneath the screw head (1).

» The screw (1) is not fully in contact with the contact surface.

Measure

- Loosen screw (1).

TECHNICAL INFORMATION

Do not exceed the specified tightening torque.

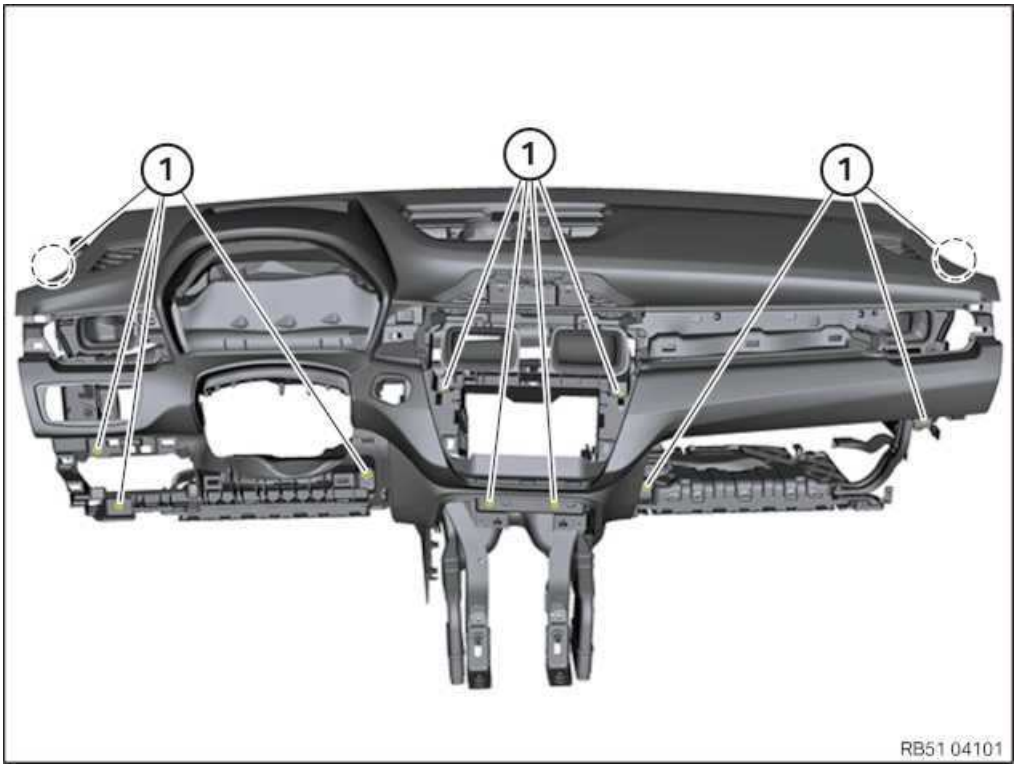
- Once again tighten the screw (1).

Front passenger airbag to instrument panel

Oval-head screw		M6	2,3 Nm

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Instrument panel



TECHNICAL INFORMATION

Notes on unlocking/locking airbag plug connections form the basis for these repair instructions and must be observed without fail.

For additional information see: 72 00 ... Notes on unlocking/locking airbag plug connections

- Guide the instrument panel trim through the door aperture with the help of an auxiliary person.
- Install the instrument panel trim, and while doing so secure the wiring harness and connect and lock all the connectors.
- Connect and lock the plug connection of the front passenger airbag.
- Make sure guides on instrument panel are correctly seated in respective mountings of bulkhead.
- Make sure seals for the air ducts are correctly seated.
- Make sure wiring harness is correctly laid.
- Tighten the screws (1).

Instrument panel trim to carrier support

Screw		Tightening torque	2,4 Nm

41 – Installing the trim for the Head-Up Display

RISK OF DAMAGE

Scratches.

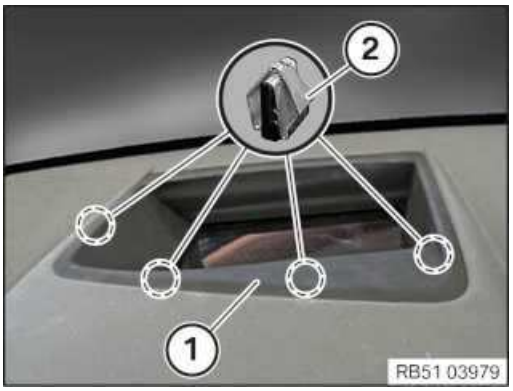
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

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- Check clamps (2) on trim (1) for the Head-Up Display for damage and renew them if necessary.



- Position trim (1) for the Head-Up Display on the instrument panel trim and clip it into clamps (2).

42 – Install the tweeters in the instrument panel

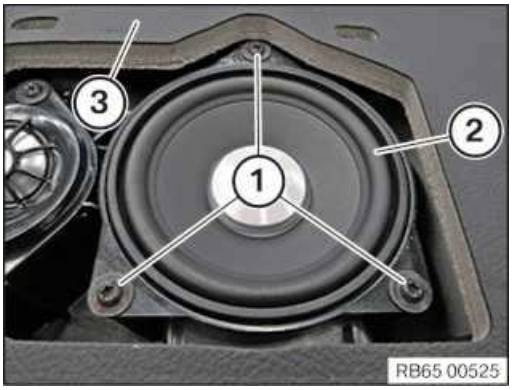


- Position the tweeter (2).
- Tighten the screws (1).

Speaker to support / support to instrument panel / support to body

Screw		Tightening torque	1,8 Nm

43 – Install the mid-range speakers in the instrument panel



- Connect the connector below it to the mid-range speaker (2).
- Position the mid-range speaker (2) in the instrument panel (3).
- Tighten the screws (1).

Speaker to support / support to instrument panel / support to body

Screw		Tightening torque	1,8 Nm

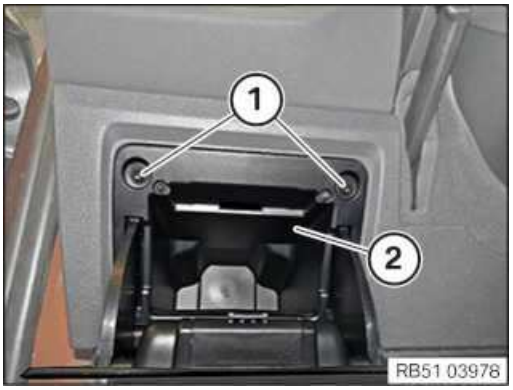


- Check the latch mechanisms on the speaker cover (1) for damage and renew them if necessary.

  The latch mechanisms must not be missing or faulty.
- Engage the speaker cover (1) correctly into the instrument panel (2).

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44 – Installing the left fold-down compartment



- Guide in the fold-down compartment (2) on the instrument panel.
- Tighten the screws (1).

Fold-down compartment to instrument panel

Screw		Tightening torque	1,8 Nm

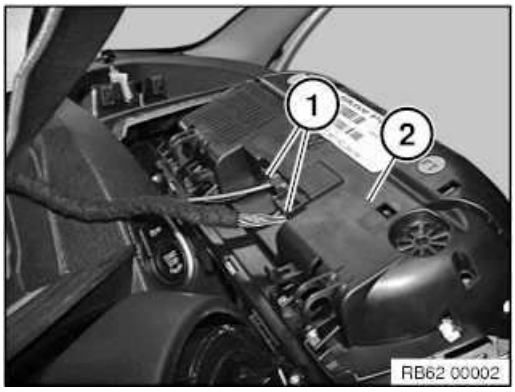
45 – Installing the instrument cluster (KOMBI)

RISK OF DAMAGE

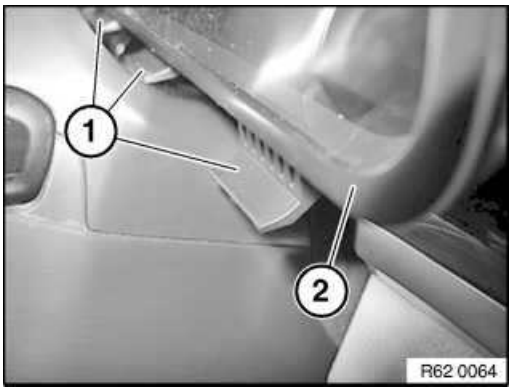
Scratches.

Tools and sharp-edged components can cause scratches.

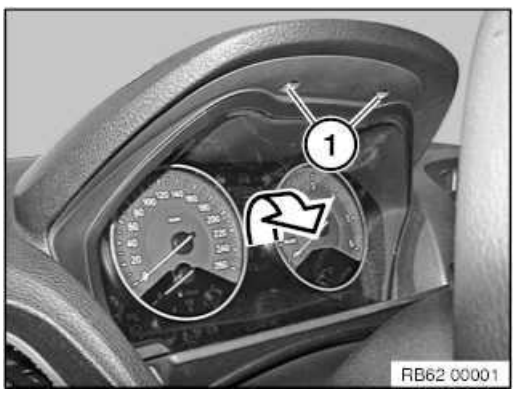
- Protect working area.
- Handle tools and components carefully.



- Connect and lock all connectors (1) to the instrument cluster (KOMBI).



- Make sure that the retaining tabs (1) of the instrument cluster (KOMBI) (2) are seated exactly in mountings of the instrument panel.



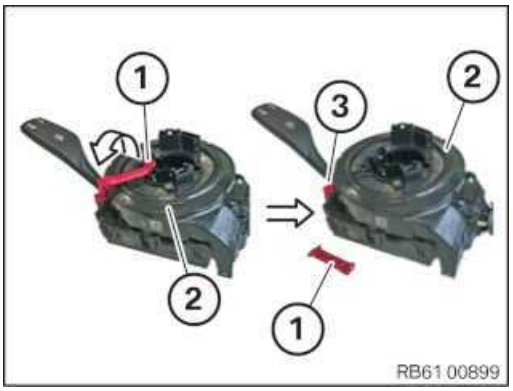
- Position the instrument cluster (KOMBI) position in the opposite direction of the arrow.
- Tighten the screws (1).

Instrument cluster to instrument panel

Screw		1,7 Nm

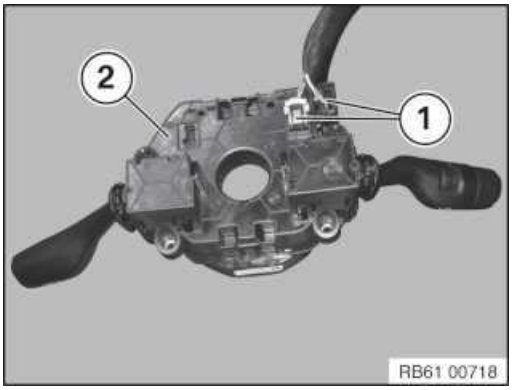
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46 – Installing the steering column switch cluster (SZL)



- **Replacement:** Break off the transportation retainer (1) on the steering column switch cluster (SZL) (2) in direction of arrow.

  The broken-off piece of (3) the transportation retainer (1) remains in the steering column switch cluster (SZL) (2).

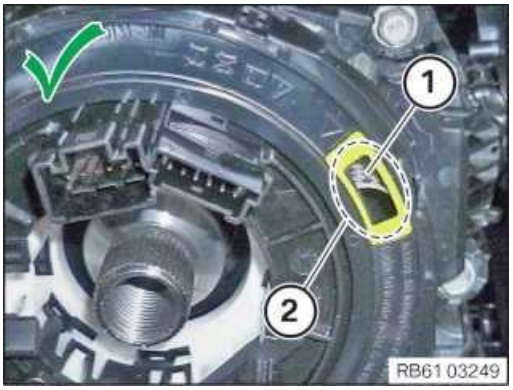


- Connect the connector (1) with the steering column switch cluster (SZL) (2).

▸ **Check the neutral position of the clock spring**

TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



Check

- **Version A:**

  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).

Check

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- **Version B:**

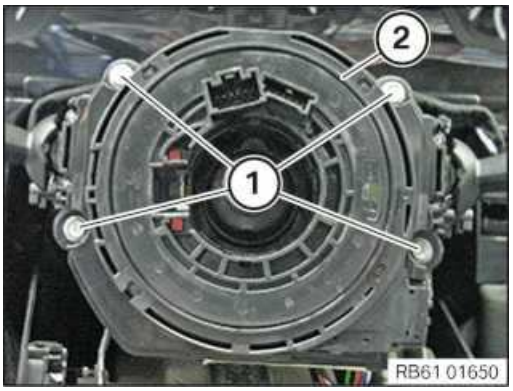
  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).

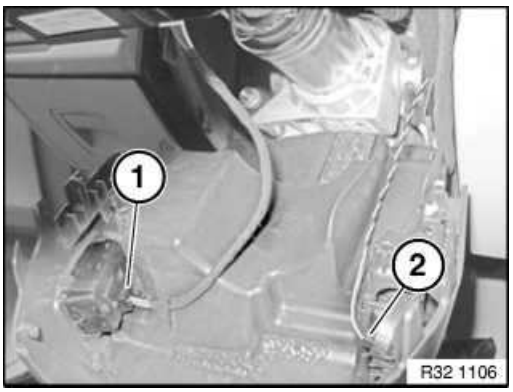


- Position the steering column switch cluster (SZL) (2).
- Tighten the screws (1).

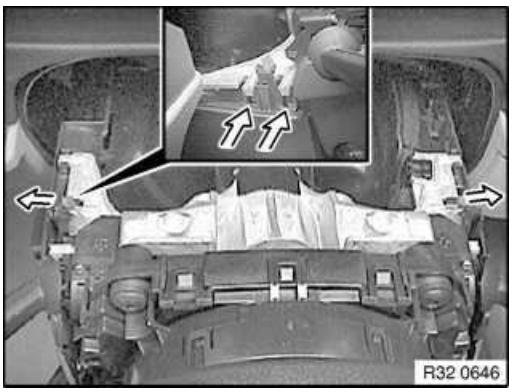
Steering column switch cluster (SZL) on the steering column

Screw TS5x20		Tightening torque	3 Nm

47 – Install steering column shroud lower section



- Position the steering column shroud lower section .
- Connect available connectors (1) and (2) and lock.



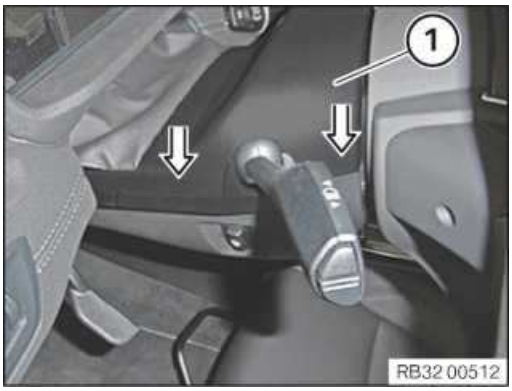
- Position the steering column shroud lower section with the retaining lugs (arrows).
- Press steering column shroud lower section completely towards the top until the retaining lugs (arrows) engage.

48 – Fit steering column shroud upper section

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- Position the steering column shroud upper section.
- Attach gap cover of the steering column (1) on the brackets (arrows).



- Position the steering column shroud upper section (1).

NOTICE

Perform the operations on the left and right side.

- Press the upper section of the steering column shroud (1) downwards in direction of arrow.

  The upper section of the steering column shroud must engage audibly and perceptibly.

49 – Installing the steering wheel/sports steering wheel

▸ **Check the neutral position of the clock spring**

- Ensure that the coil spring is not twisted.

  There are clock springs installed without a mechanical anti-twist lock.

  Coil springs without a mechanical anti-twist lock are identifiable on the inspection glass for the neutral position mark.
- Check the neutral position of the clock spring on the steering column switch cluster (SZL).

  The neutral position is correct if the yellow or green mark (1) is clearly visible.

Check



- Check the mark (1) in the inspection glass.

Result

» The mark (1) is not visible.

Measure

- Turn the coil spring until mark (1) is visible in the inspection glass.

Check

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- A micro-encapsulated screw (1) may be fitted.
- Checked threaded connection

Result

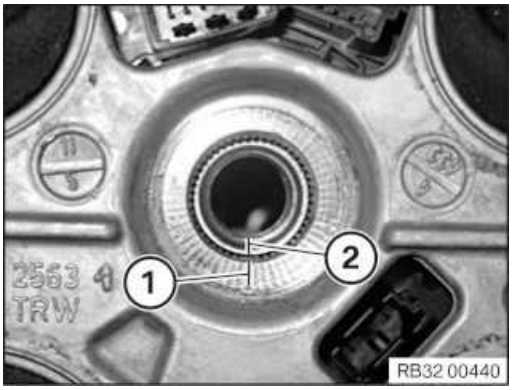
» Screw (1) is micro-encapsulated.

Measure

- Clean thread in the steering column.

  Renew the screw (1).

  Parts: Screw



- Align and connect the steering wheel/sports steering wheel according to the mark (1) with the steering column mark (2).



- Tighten down screw (1).

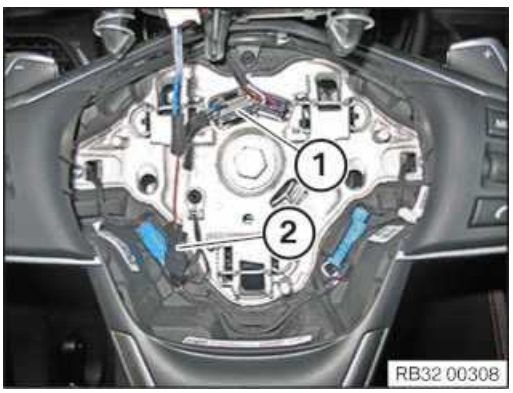
Steering wheel to steering column

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

- **Connect connectors and lock.**

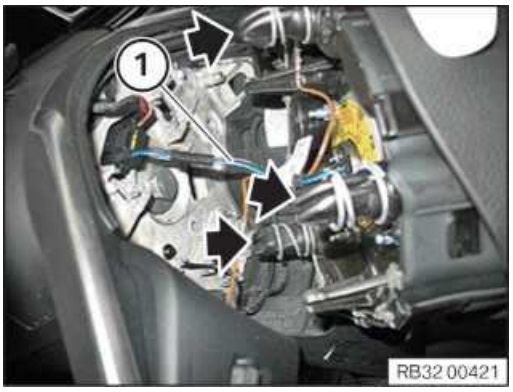
  Make sure connecting lines are correctly routed.

50 – Installing airbag unit of steering wheel/sports steering wheel



- Connect and lock connectors (1) and (2) of the airbag unit.

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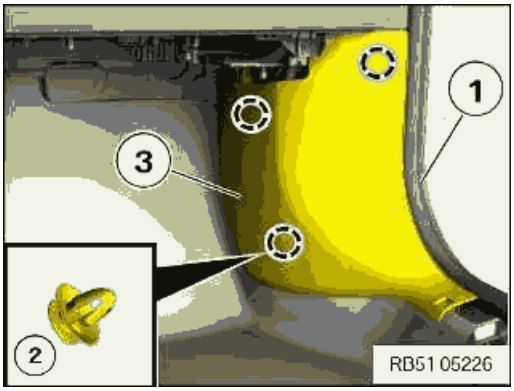
- Before installing the airbag unit, align the wiring harness (1) to the centre so that the latch mechanisms (arrows) are exposed!



- Position airbag unit (1).
- Press the airbag unit (1) with even pressure in each case in the direction of the arrow into the steering wheel.

  The airbag unit (1) must engage audibly and perceptibly.

51 – Installing side trim panel in footwell on right A-pillar

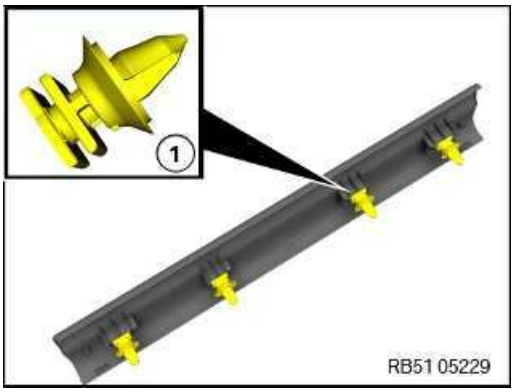


- Check clips (2) for damage, and replace if necessary.
- Feed the side trim panel (3) under the sealing lip of the edge protection (1).
- Clip in the side trim panel (3) with the clips (2).

52 – Install the front right door sill cover strip

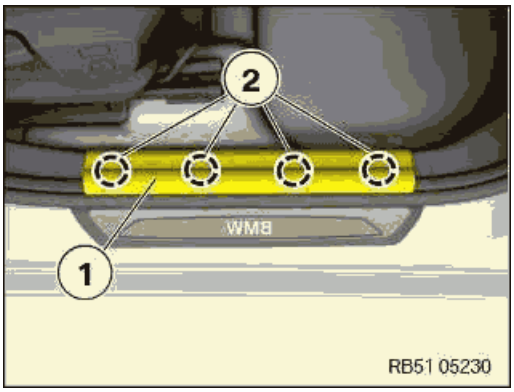
NOTICE

Description is for left component only. Procedure on the right side is identical.



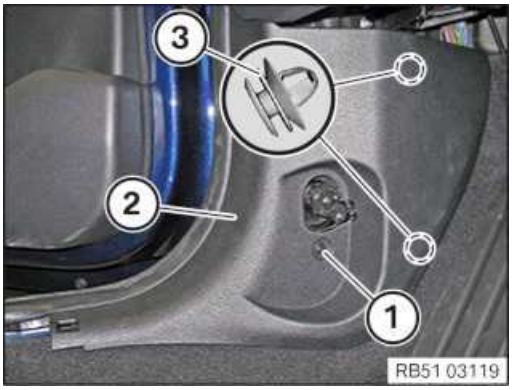
- Check the clips (1) for damage and renew where required.

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- Clip the door sill cover strip (1) into the floor panel with the clips (2).

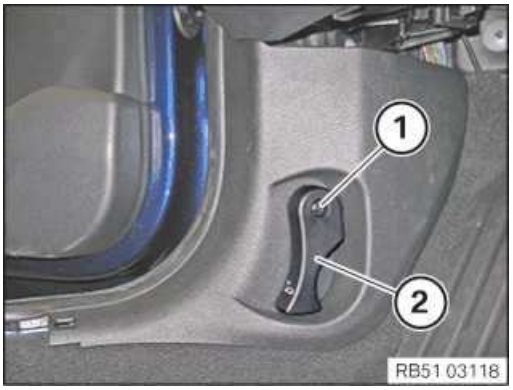
53 – Installing side trim panel in the footwell at A-pillar



- Position the side trim panel (2) and clip it to the clips (3).
- Make sure the edge protection on the side trim panel (2) fits correctly.
- Tighten down screw (1).

Side trim panel bottom left to holder

Screw		Tightening torque	3 Nm

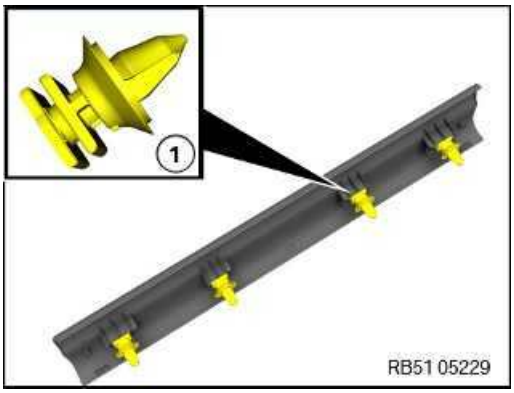


- Install lever for the bonnet release (2)l.
- Tighten down screw (1).

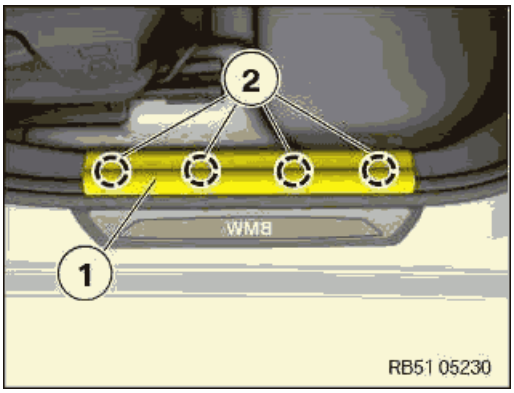
Lever for bonnet release to the holder

Screw		Tightening torque	3 Nm

54 – Install the front door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

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55 – Installing the left and right A-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Install the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

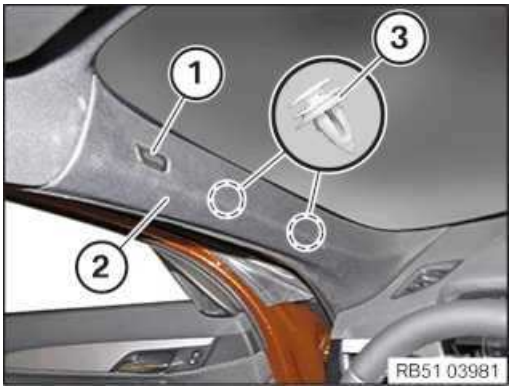
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.

  Parts: Screw
- Tighten down screw.

A-pillar trim panel to body

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

- Clip in the cover (1).

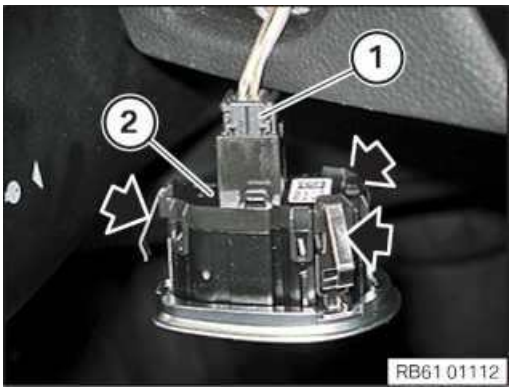
56 – Installing the light operating unit

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- Connect associated connector.
- Position light operating unit (1) correctly and clip in where marked.

57 – Installing the START-STOP button



- Connect connector (1) with START-STOP button (2).

  The retaining clips (arrows) must not be damaged or missing.



- Install START-STOP button (1) in the instrument panel trim.

58 – Install decorative strip from instrument panel

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install decorative strip (1) a snap into the clamps (2).

59 – Install the Head Unit High (HU-H)

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RISK OF DAMAGE

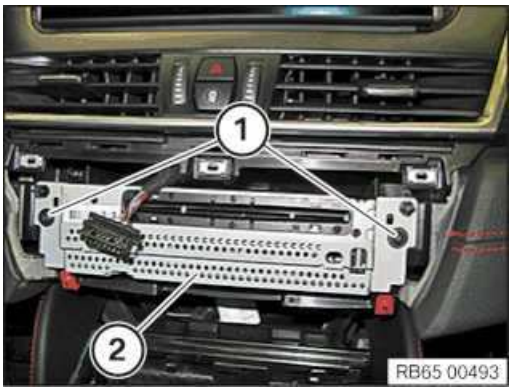
Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Position head unit (1).
- Connect and lock all connectors in the marked area.



- Slide in the head unit (2) correctly.
- Tighten the screws (1).

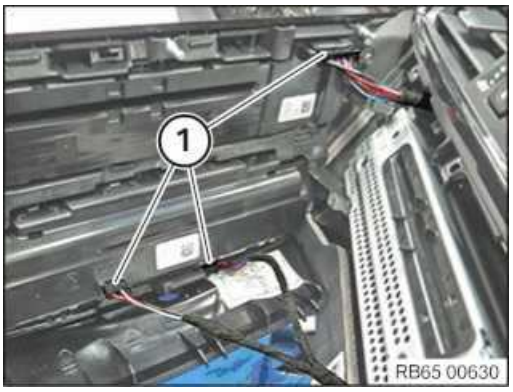
Head unit to instrument panel

Screw		Tightening torque	1,8 Nm



- Route the wiring harness (1) correctly.

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- Position audio operating unit and air conditioning control panel.
- Connect plug connection (1) and lock.

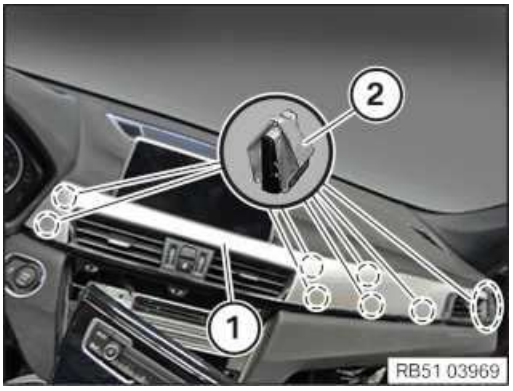


- Correctly position trim (1) and clip it into the instrument panel (2).

61 – Install the finisher on the right instrument panel

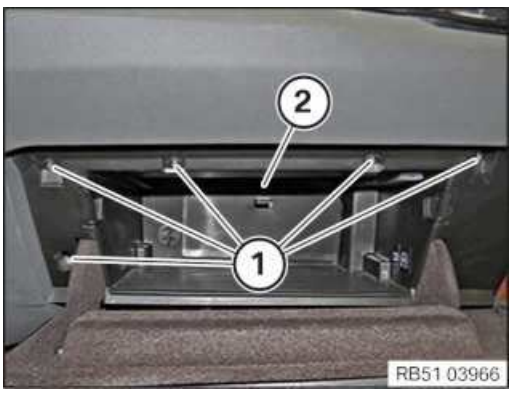
TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the decorative strip (1).
- Connect connector.
- Engage the decorative strip (1) on the clamps (2).

62 – Install right glove box

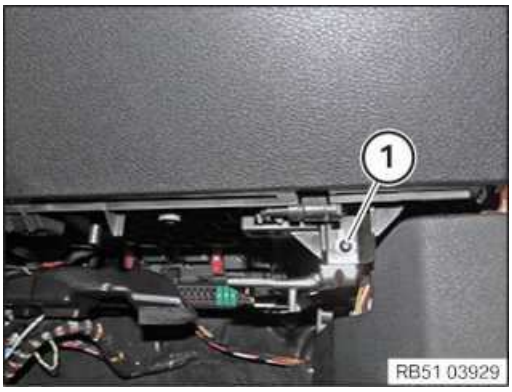


- Install the glove box (2) and connect and lock associated plug connections.
- Tighten the screws (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

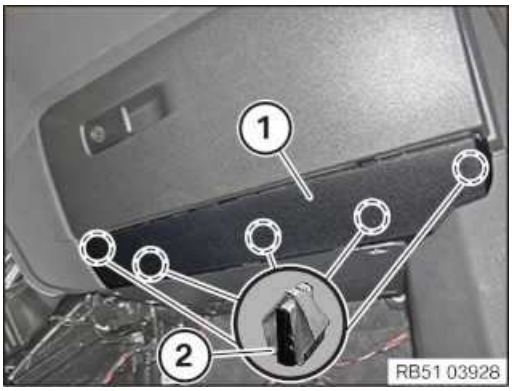
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- Tighten down screw (1).

Glove box to instrument panel

Screw		Tightening torque	1,8 Nm

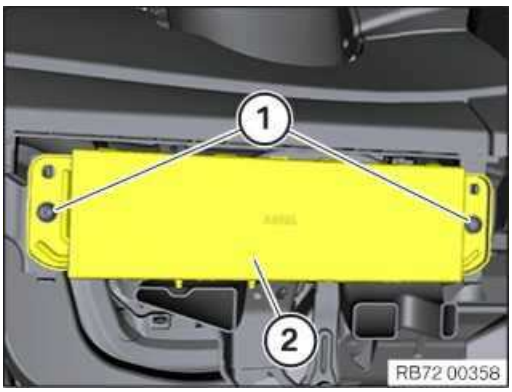


TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

- Install the trim (1) and lock it at the clamps (2).

63 – Installing knee airbag



- Connect the plug connection to the knee airbag (2) and lock.
- Install knee airbag (2).
- Renew screws (1).

  Parts: Screw
- Tighten the screws (1).

Knee airbag to body

M8	Renew screws.	Tightening torque	8 Nm

64 – Install the side panel on instrument panel on the left and right

NOTICE

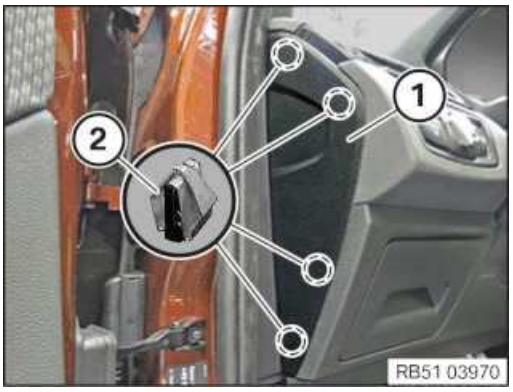
Description is for left component only. Procedure on the right side is identical.

▸ **Install side panel on the instrument panel**

TECHNICAL INFORMATION

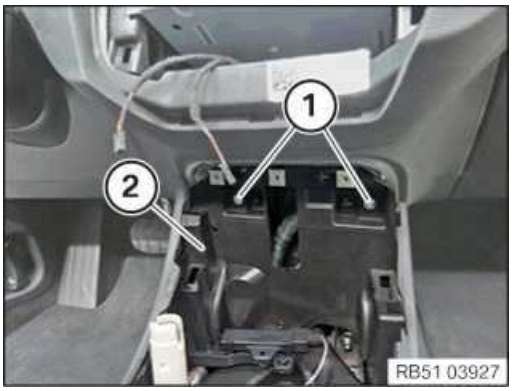
Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Feed in the side panel (1) at an angle toward the front and lock at the clamps (2).

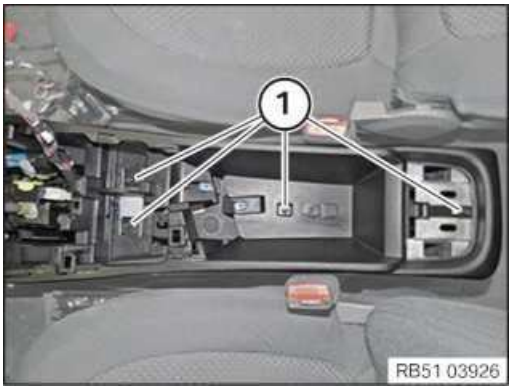
65 – Installing centre console fully with centre armrest



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm



- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing the centre armrest**



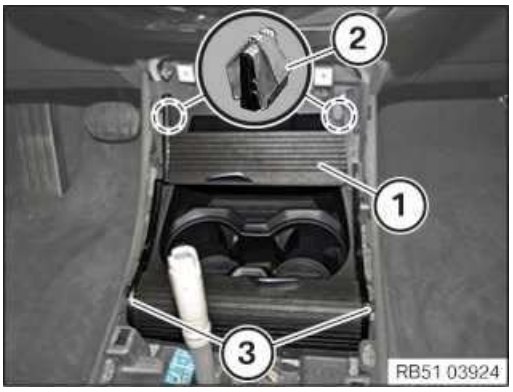
- Install the centre armrest and tighten nuts (1).

Centre armrest to support

Nut M8		Tightening torque	21,4 Nm

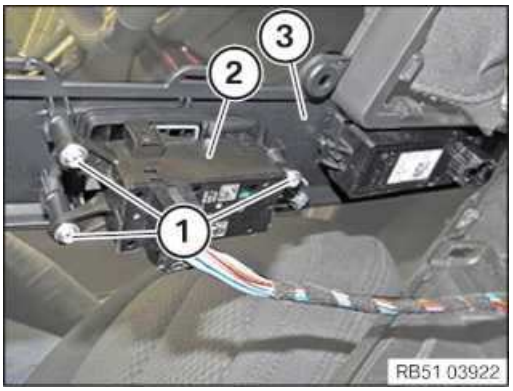
66 – Installing the front storage compartment

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- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

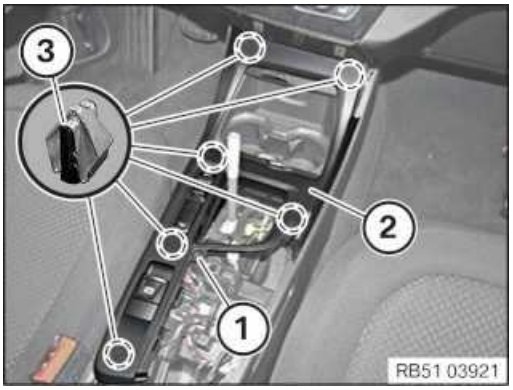
67 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

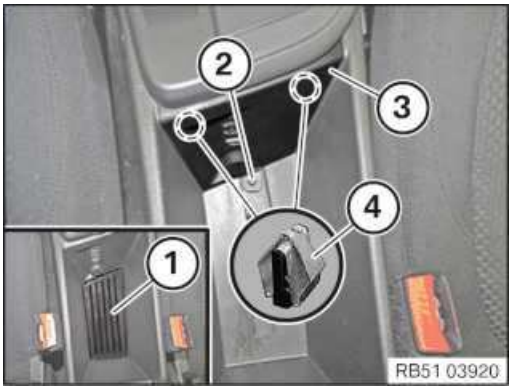
68 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm



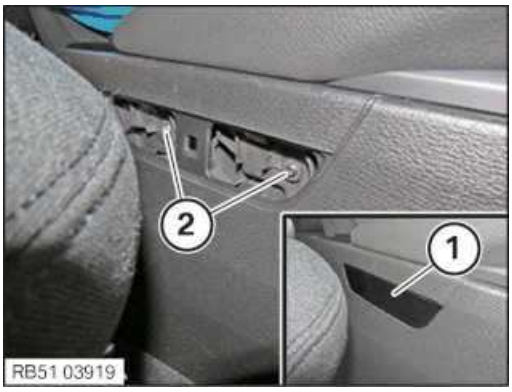
- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).

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- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

69 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

  When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

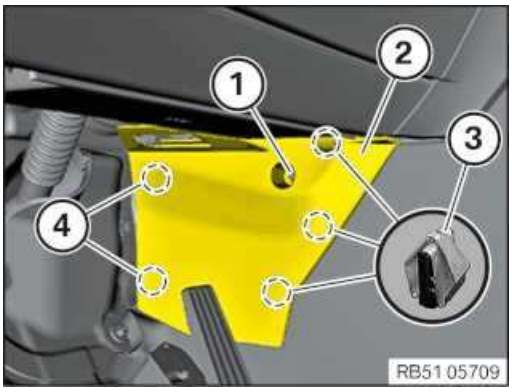
70 – Installing side trim panel for the left and right centre console

▶ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

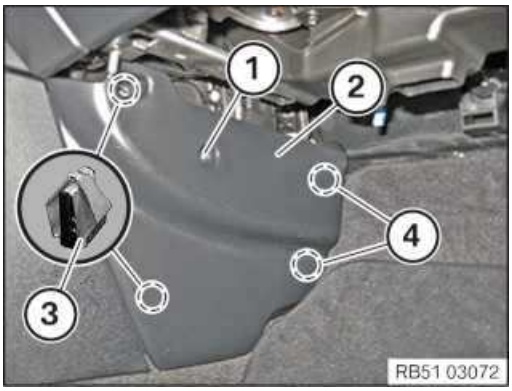
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

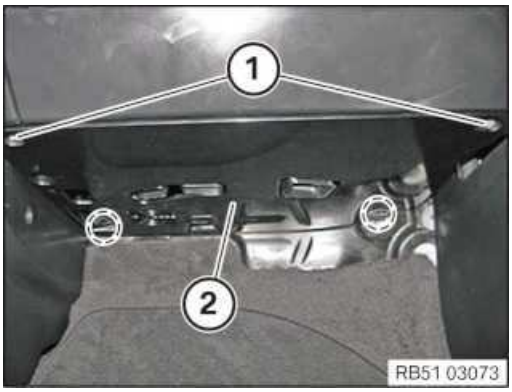
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

71 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



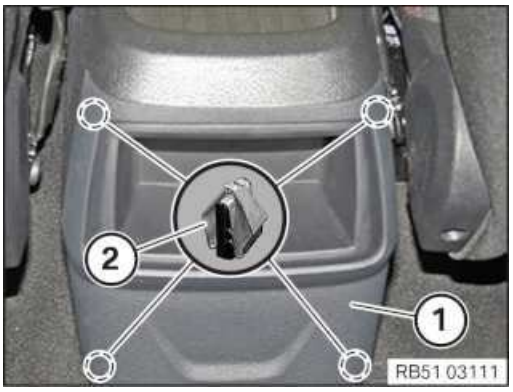
- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm

72 – Installing the rear centre console trim

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- Install centre console trim (1) and engage it into clamps (2).

73 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Front passenger airbag to instrument panel — Used in step 39

Oval-head screw		M6	2,3 Nm

Instrument panel trim to carrier support — Used in step 40

Screw		Tightening torque	2,4 Nm

Speaker to support / support to instrument panel / support to body — Used in step 42 43

Screw		Tightening torque	1,8 Nm

Fold-down compartment to instrument panel — Used in step 44

Screw		Tightening torque	1,8 Nm

Instrument cluster to instrument panel — Used in step 45

Screw			1,7 Nm

Steering column switch cluster (SZL) on the steering column — Used in step 46

Screw TS5x20		Tightening torque	3 Nm

Steering wheel to steering column — Used in step 49

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

Side trim panel bottom left to holder — Used in step 53

Screw		Tightening torque	3 Nm

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Lever for bonnet release to the holder — Used in step 53

Screw		Tightening torque	3 Nm

A-pillar trim panel to body — Used in step 55

M5x42 screw	Renew screw	Tightening torque	2,2 Nm

Head unit to instrument panel — Used in step 59

Screw		Tightening torque	1,8 Nm

Glove box to instrument panel — Used in step 62

Screw		Tightening torque	1,8 Nm

Knee airbag to body — Used in step 63

M8	Renew screws.	Tightening torque	8 Nm

Screw connection for centre console — Used in step 65 67 68

Oval-head screw		Tightening torque	1,8 Nm

Centre armrest to support — Used in step 65

Nut M8		Tightening torque	21,4 Nm

Parking brake button — Used in step 67

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console — Used in step 68 70

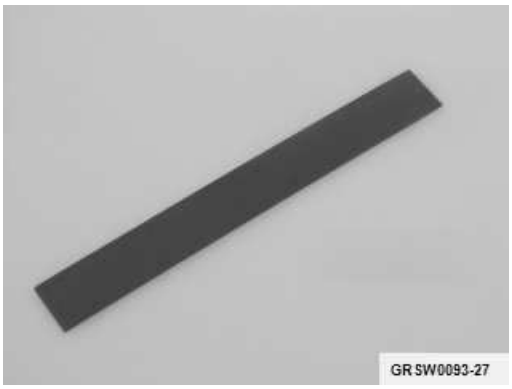
Oval-head screw		Tightening torque	1,8 Nm

Bottom left footwell trim to instrument panel — Used in step 71

M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common — Used in step 6 15

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

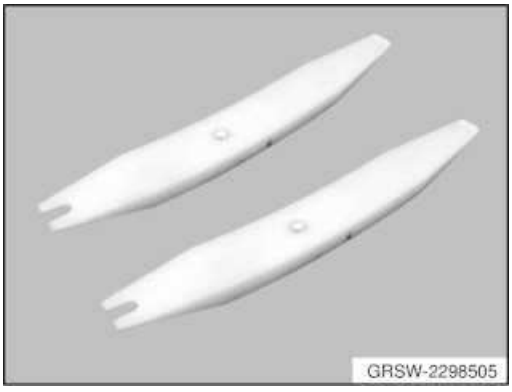
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0 496 569 (00 9 325) Wedge



Common	Used in step 7 9 11 13 17 18 22 24 33
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

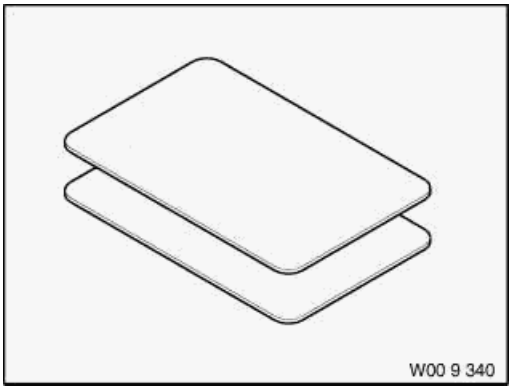
2 298 505 Wedge



Common	Used in step 14
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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0 493 687 (00 9 340) Removal aid



Common

Used in step 19

Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		**Removal aid** Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

2 298 504 Wedge



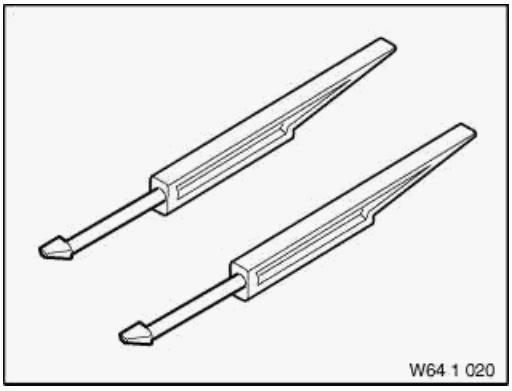
Common

Used in step 28

Usage	Wedge with angled lug
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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0 493 681 (64 1 020) Hook



Common	Used in step 37
Usage	(release hook) For releasing and removing fresh air grille. For removing various covers.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	21 36 39 55

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 73
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 73
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
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61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 73
61 20 900 Disconnecting and connecting battery earth lead	1 73

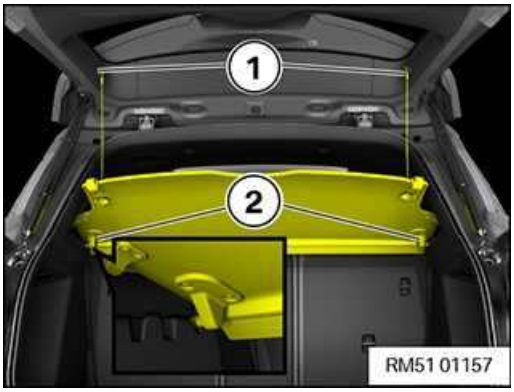
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61 20 900 Disconnecting and connecting battery earth lead 1 73
61 20 900 Disconnecting and connecting battery earth lead 1 73
61 20 900 Disconnecting and connecting battery earth lead 1 73
61 20 900 Disconnecting and connecting battery earth lead 1 73
61 20 900 Disconnecting and connecting battery earth lead 1 73
61 20 900 Disconnecting and connecting battery earth lead 1 73
61 35 ... Notes on ESD protection (Electro Static Discharge)
72 12 ... Unlocking/locking airbag plug connections 35 36 40

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51 46 003 Removing and installing or replacing storage shelf trim panel

1 – Remove trim panel for storage shelf (parcel shelf)



- Release the left and right retaining straps (1).
- Pull out and set aside the trim panel for the storage shelf from the guides (2).

2 – Install trim panel for storage shelf (parcel shelf)



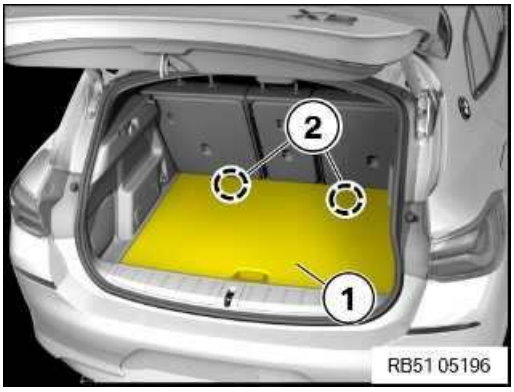
- Insert the trim panel for the storage shelf into the guides (2).
- Attach the left and right retaining straps (1).

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51 47 482 Remove and install/replace right shoulder trim panel

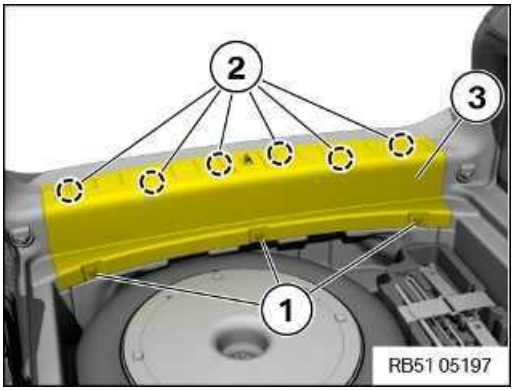
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel



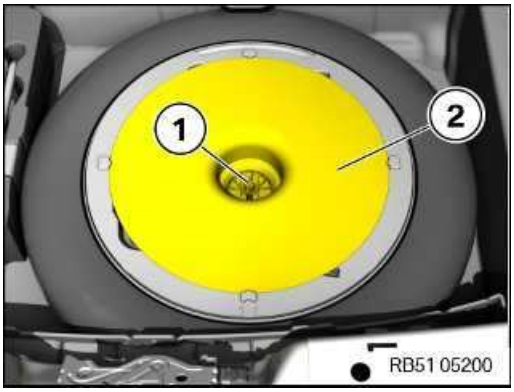
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the loading edge trim

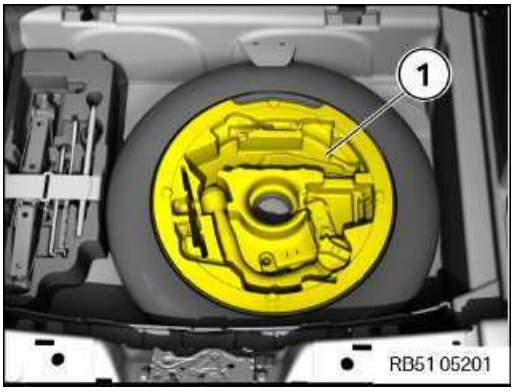


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

3 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



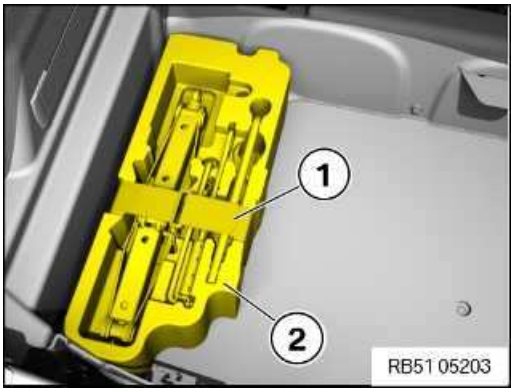
- Remove the oddments tray from the emergency wheel (1).

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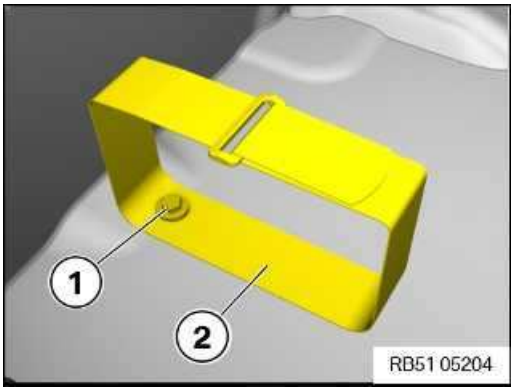
- Remove the emergency wheel (1).

4 – Remove the tool kit



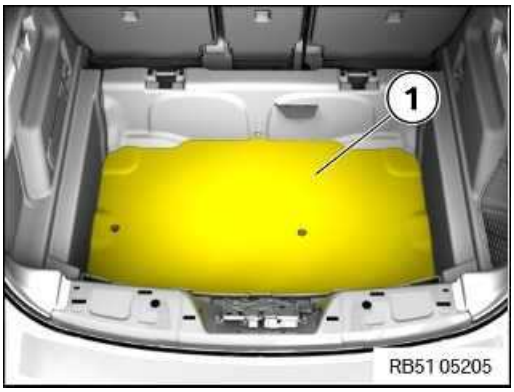
- Open the hook and loop tape (1).
- Remove the tool kit (2).

5 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

6 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

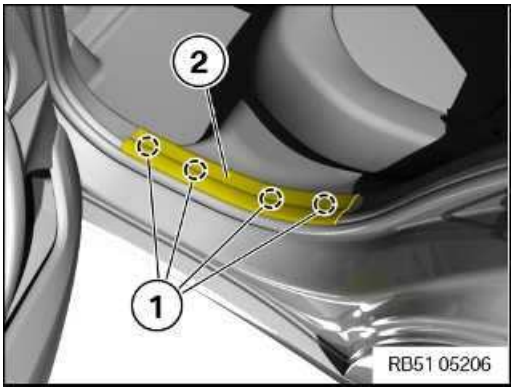
7 – Remove the rear right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.

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▸ **Remove rear entrance cover strip**



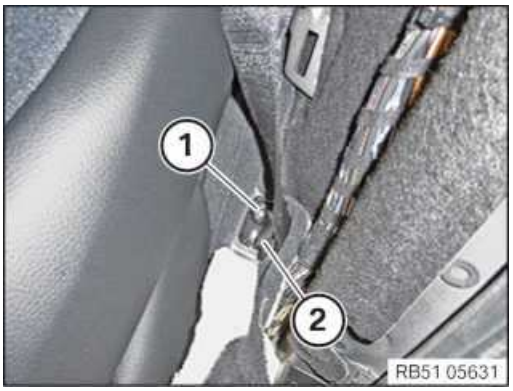
- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

8 – Removing bottom right C-pillar trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.

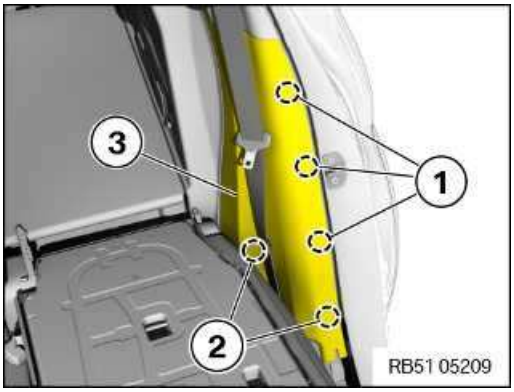
▸ **Remove the bottom C-pillar trim panel**



- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).



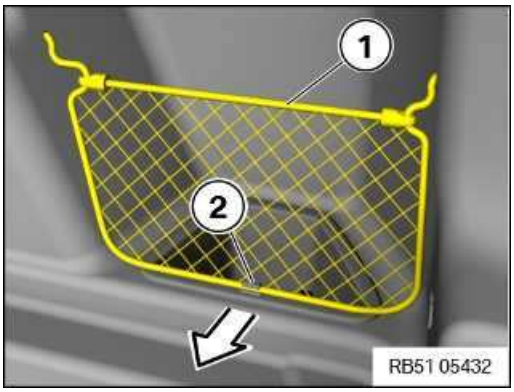
- Release the edge protection (1) in area of the bottom C-pillar trim panel.



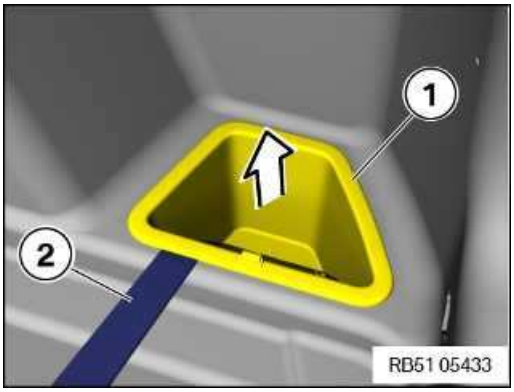
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

9 – Removing right luggage compartment wheel arch trim panel

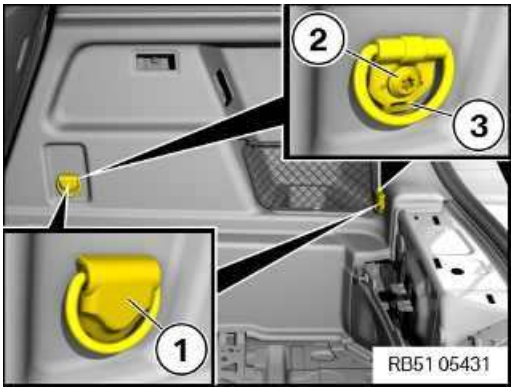
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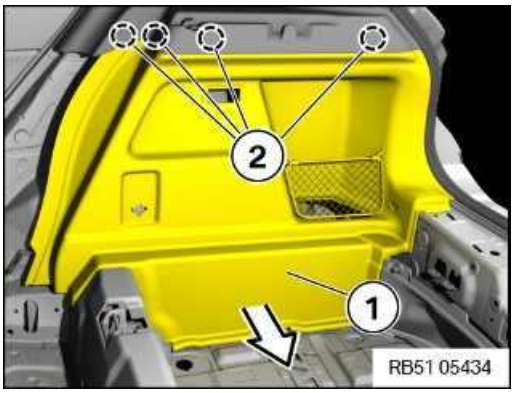
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

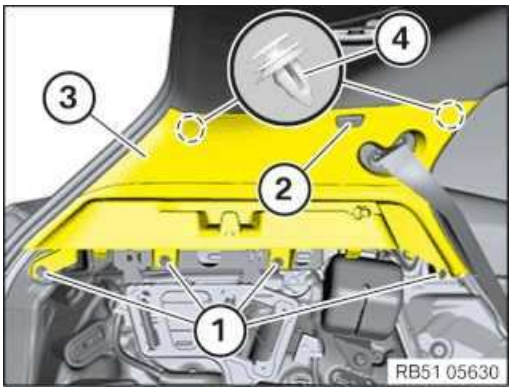
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MAIN WORK

10 – Remove the trim panel of the right luggage compartment capping

NOTICE

Description is for left component only. Procedure on the right side is identical.



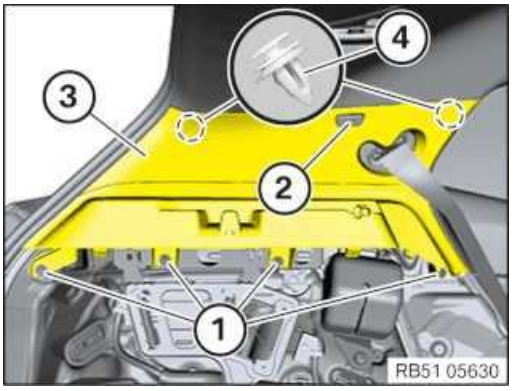
▸ **Remove the trim panel of the luggage compartment capping**

- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

11 – Install the trim panel for the right luggage compartment capping

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Install the trim panel for the luggage compartment capping**

- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

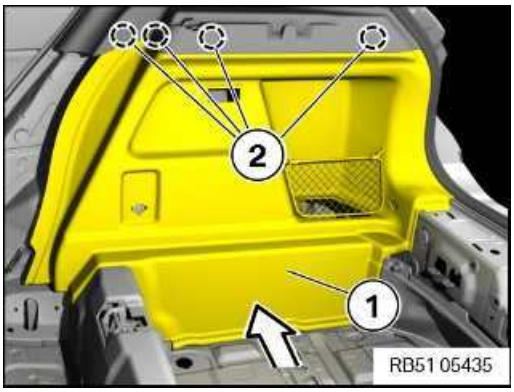
Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

POSTPROCESSES

12 – Installing the luggage compartment wheel arch trim panel on the right

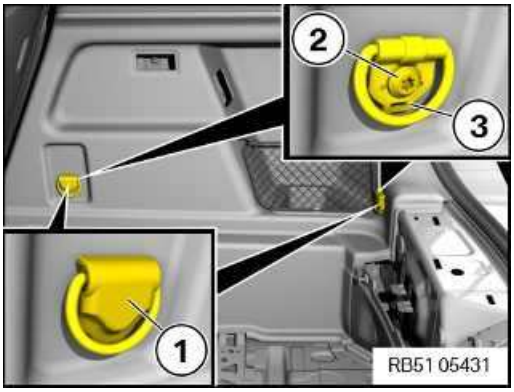
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NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

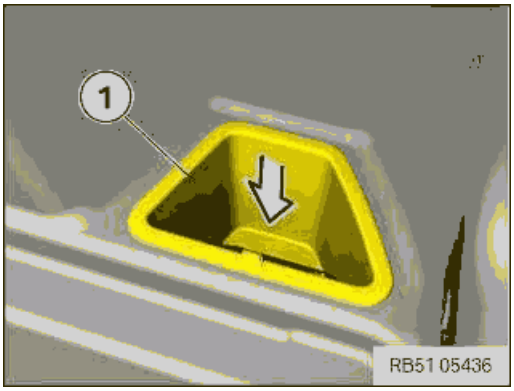


- Position the lashing eyes (3) and tighten the screws (2).

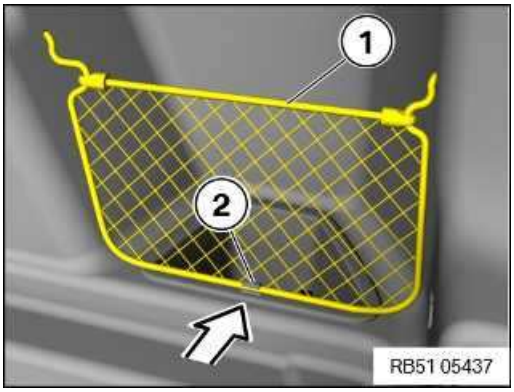
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

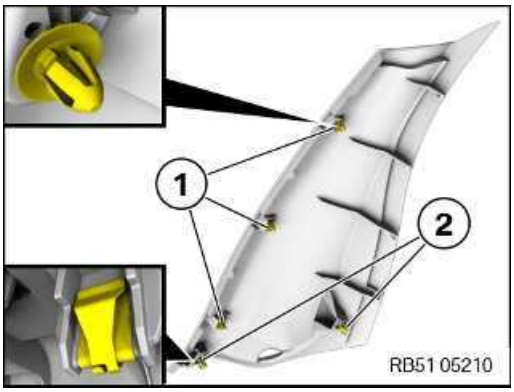
13 – Install the C-pillar trim panel at the bottom right

NOTICE

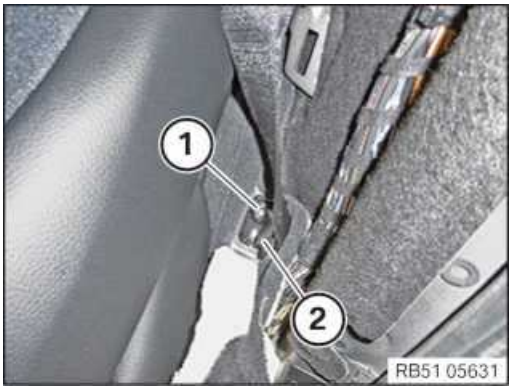
Description is for left component only. Procedure on the right side is identical.

▸ **Install the bottom C-pillar trim panel**

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- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

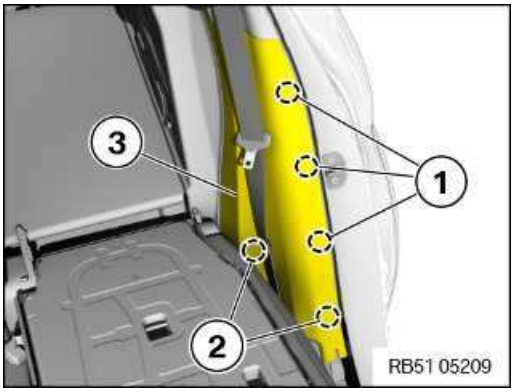


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

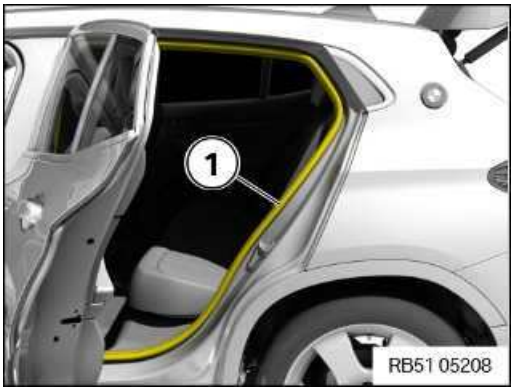
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

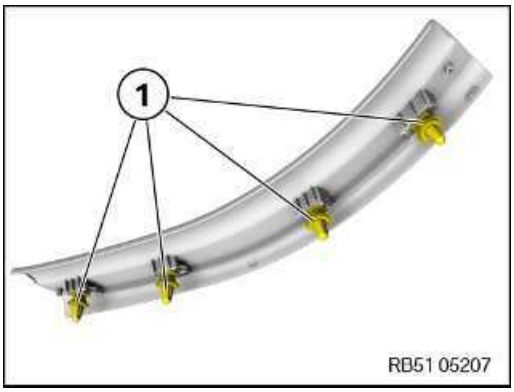
14 – Installing rear right door sill cover strip

NOTICE

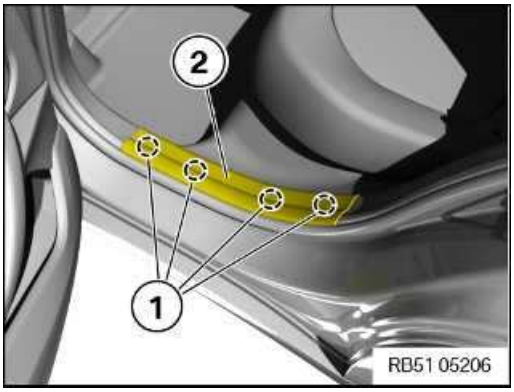
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the rear door sill cover strip**

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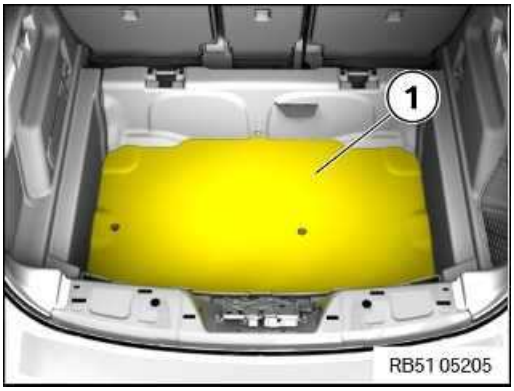


- Check the clips (1) for damage and renew where required.



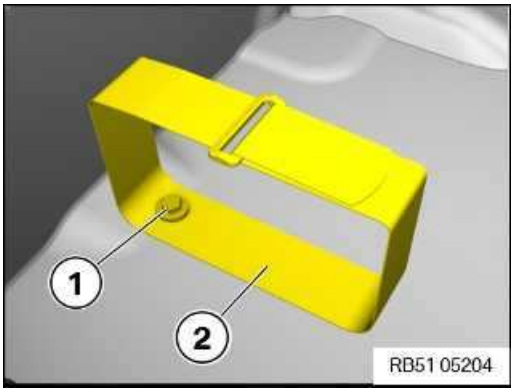
- Clip in the door sill cover strip (2) with the clips (1).

15 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

16 – Inserting the Velcro fastener for the toolkit



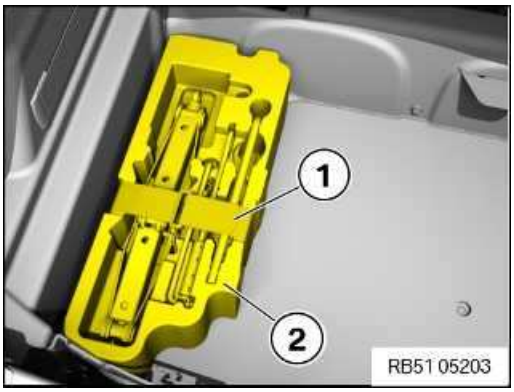
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

17 – Install the tool kit

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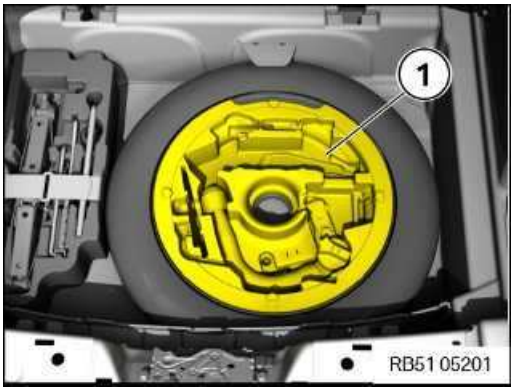


- Install the tool kit (2).
- Close the hook and loop tape (1).

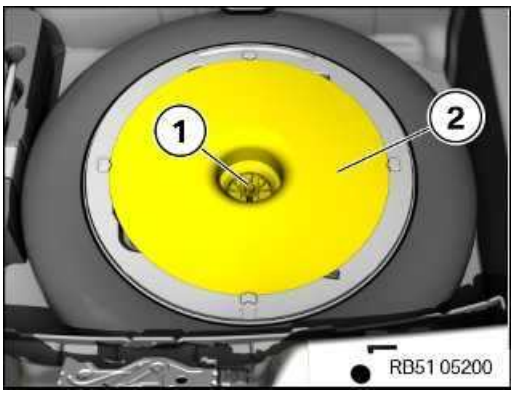
18 – Install the emergency wheel



- Insert compact spare wheel(1).

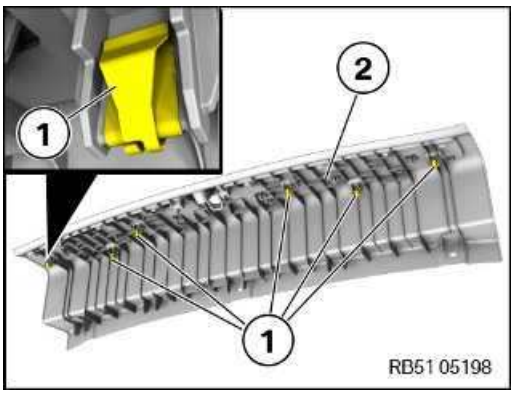


- Insert oddments tray into the compact spare wheel (1).



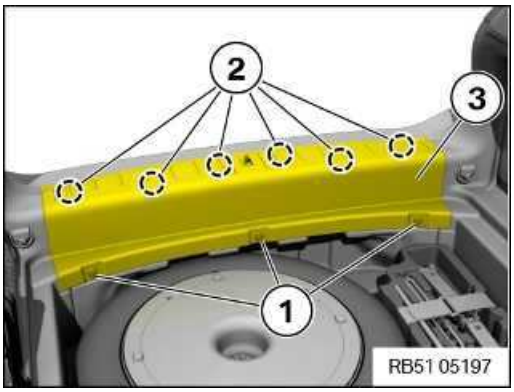
- Insert the lid (2).
- Hand-tighten the bolt (1).

19 – Installing loading edge trim



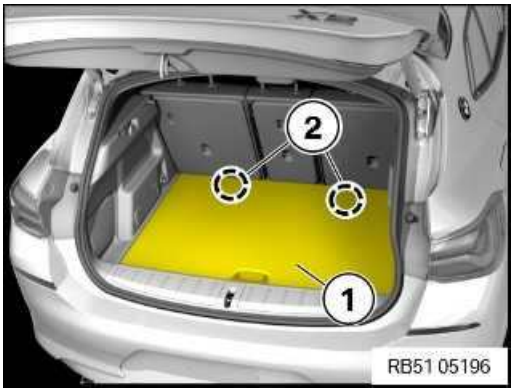
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.

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- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

20 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

Trim panel of luggage compartment capping			Used in step 11
Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body			Used in step 11
Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment			Used in step 12
Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body			Used in step 13
Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body			Used in step 16
Bolt M6 x 20		Tightening torque	4 Nm

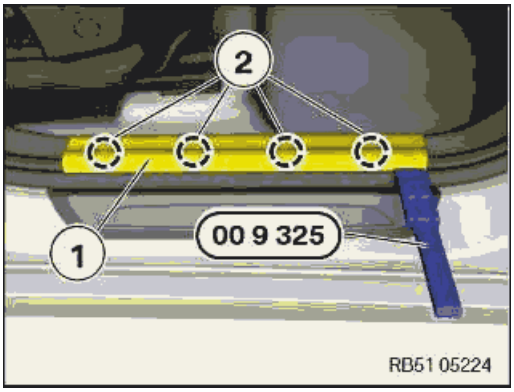
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51 47 000 Remove and install/replace the front left or right door sill cover strip (inner)

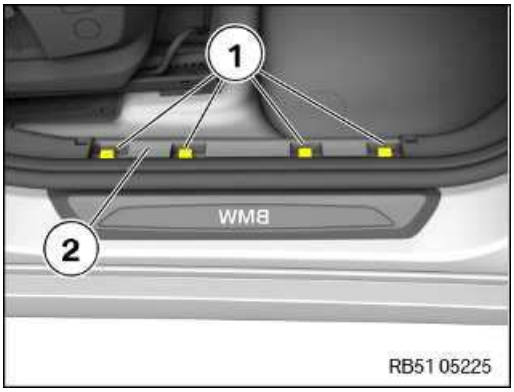
NOTICE

Description is for left component only. Procedure on the right side is identical.

1 – Remove front entrance cover strip

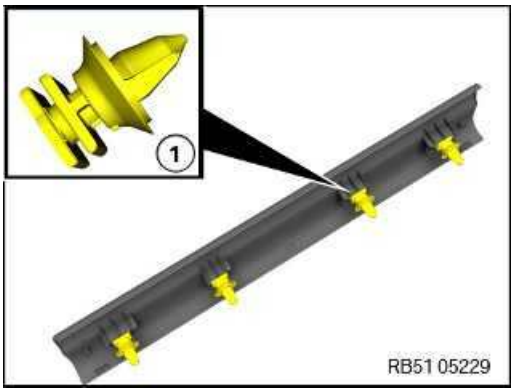


- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.

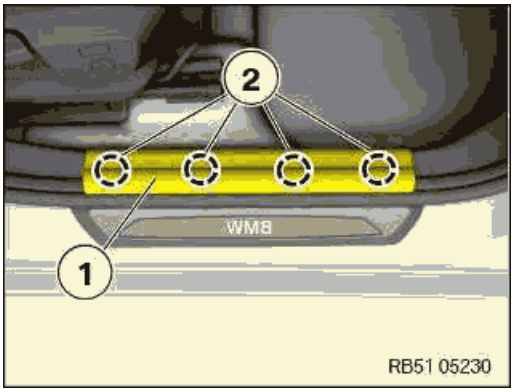


- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

2 – Install the front door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

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Additional Information

Overview of Special Tools

0 496 569 (00 9 325) Wedge



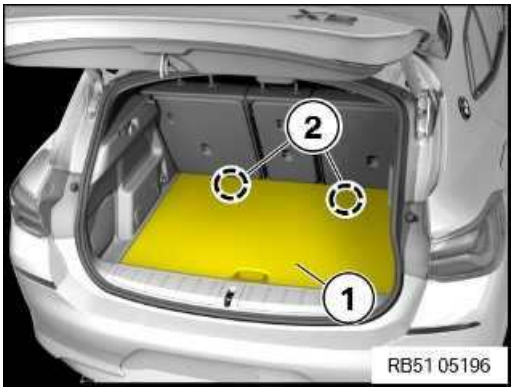
Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 47 480 Remove and install/replace the left capping trim panel

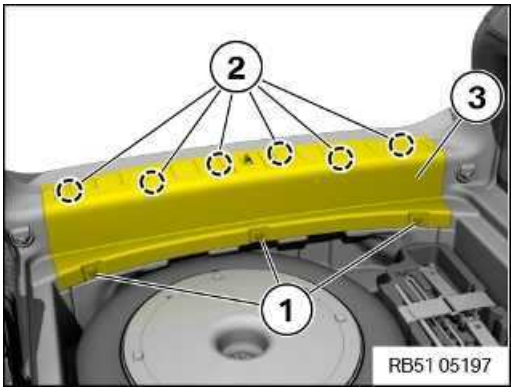
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel



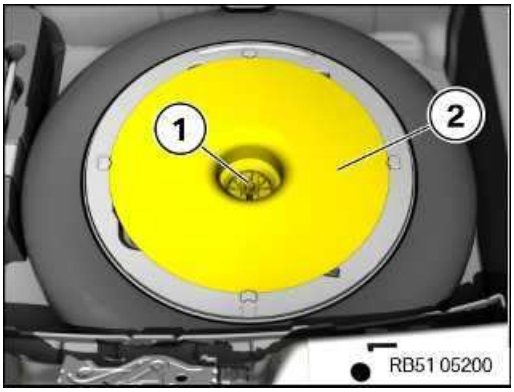
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the loading edge trim

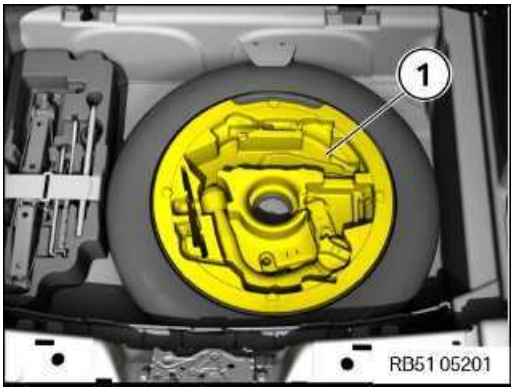


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

3 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



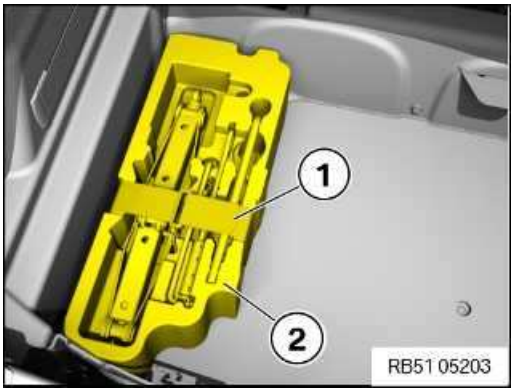
- Remove the oddments tray from the emergency wheel (1).

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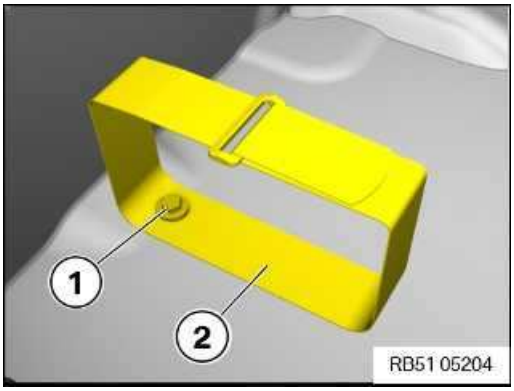
- Remove the emergency wheel (1).

4 – Remove the tool kit



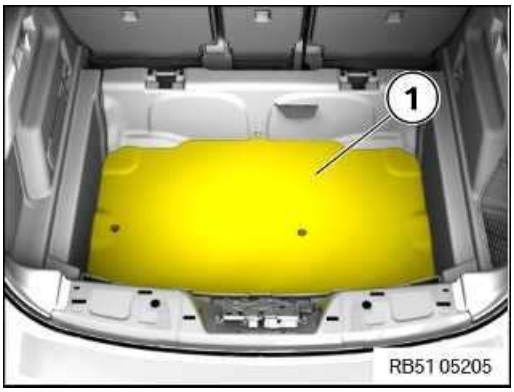
- Open the hook and loop tape (1).
- Remove the tool kit (2).

5 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

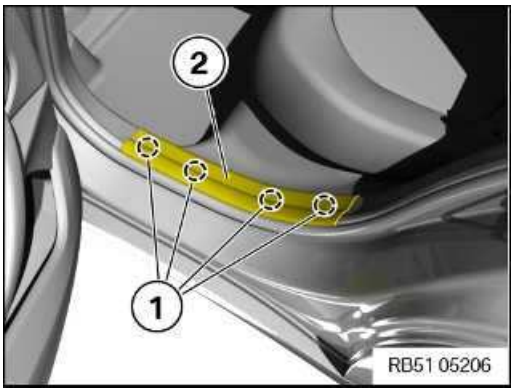
6 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

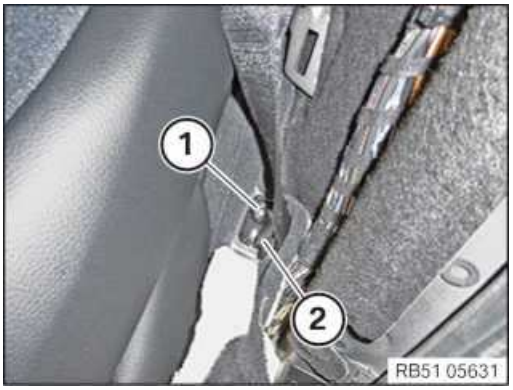
7 – Remove rear entrance cover strip

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- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

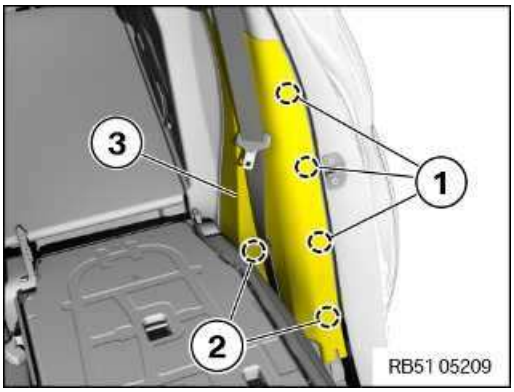
8 – Remove the bottom C-pillar trim panel



- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

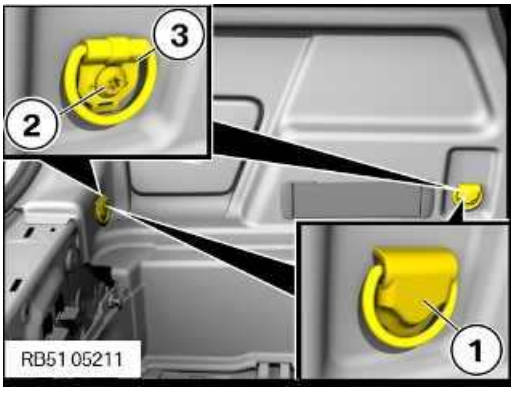


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



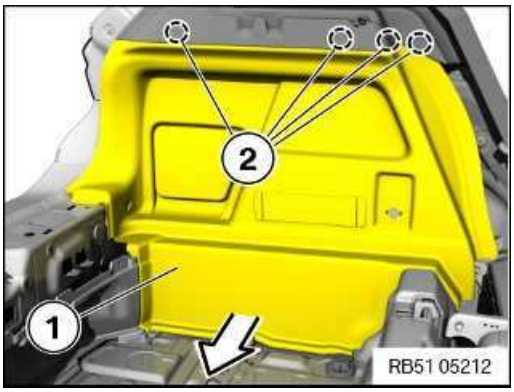
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

9 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

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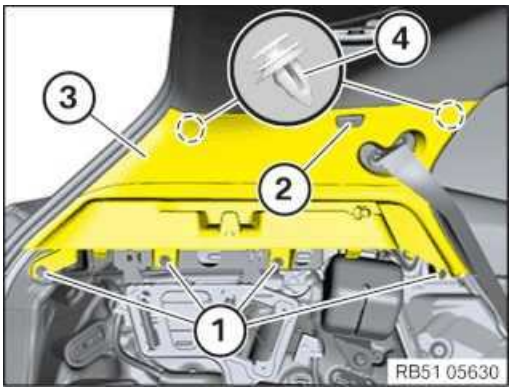
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

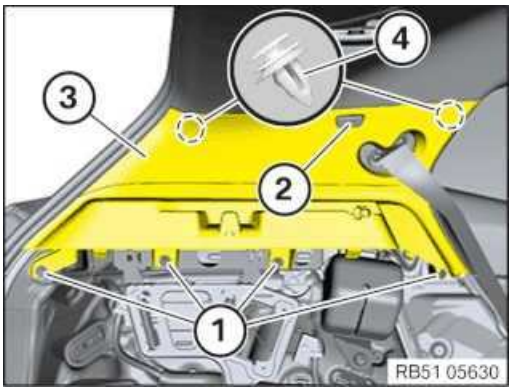
MAIN WORK

10 – Remove the trim panel of the luggage compartment capping



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

11 – Install the trim panel for the luggage compartment capping



- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

Self-tapping screw		Tightening torque	4 Nm

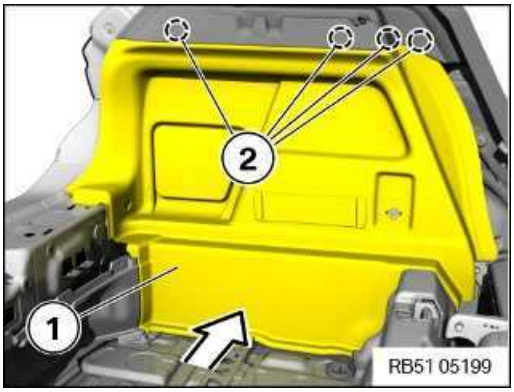
- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

POSTPROCESSES

12 – Install luggage compartment wheel arch trim panel at left

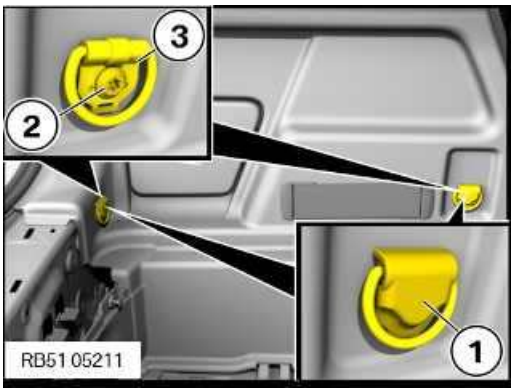


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.

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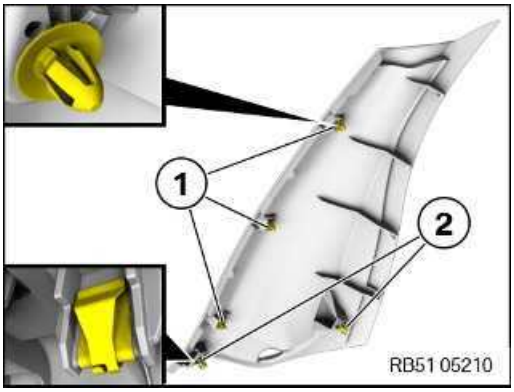
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

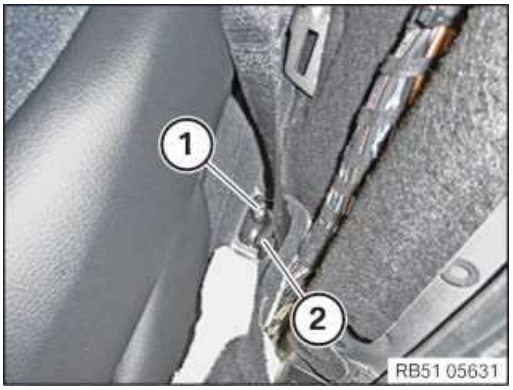
Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

13 – Install the bottom C-pillar trim panel



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

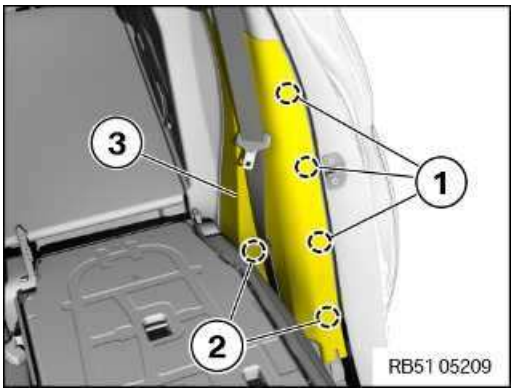


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



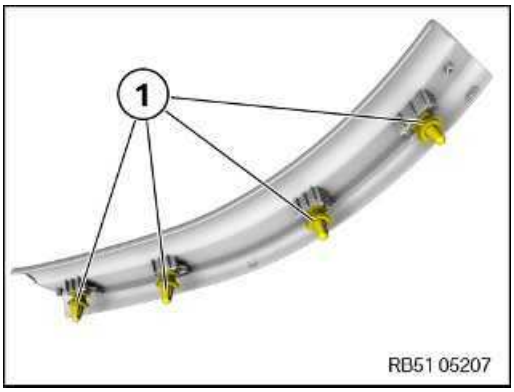
- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



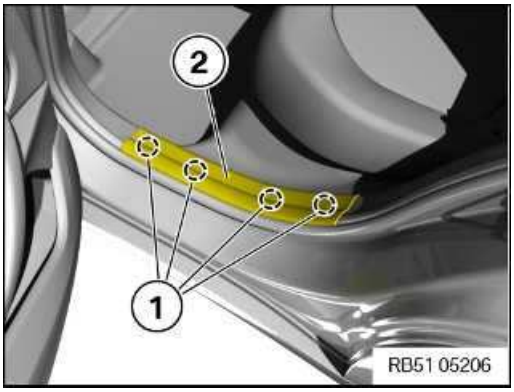
- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

14 – Installing the rear door sill cover strip

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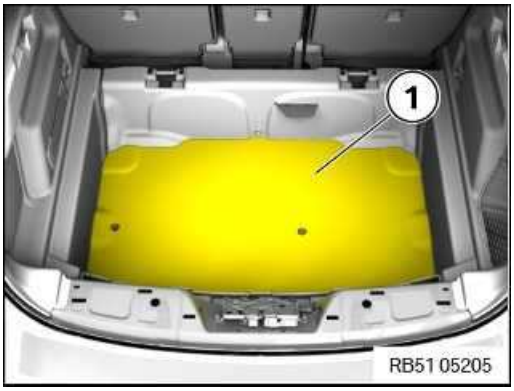


- Check the clips (1) for damage and renew where required.



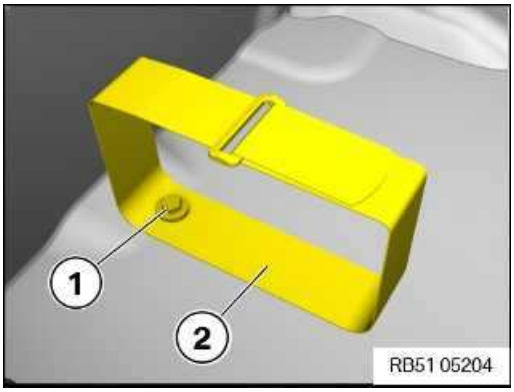
- Clip in the door sill cover strip (2) with the clips (1).

15 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

16 – Inserting the Velcro fastener for the toolkit



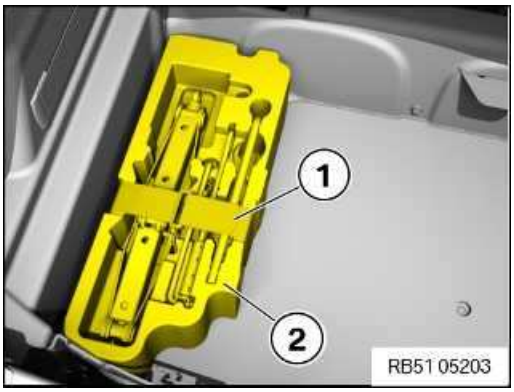
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

17 – Install the tool kit

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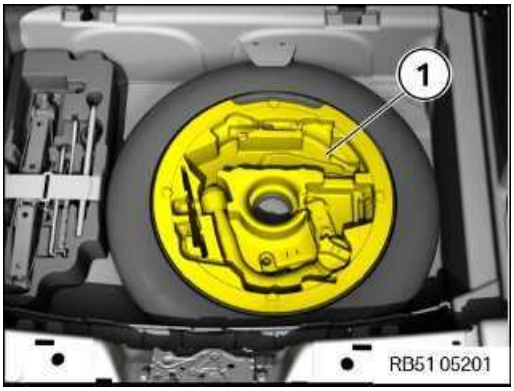


- Install the tool kit (2).
- Close the hook and loop tape (1).

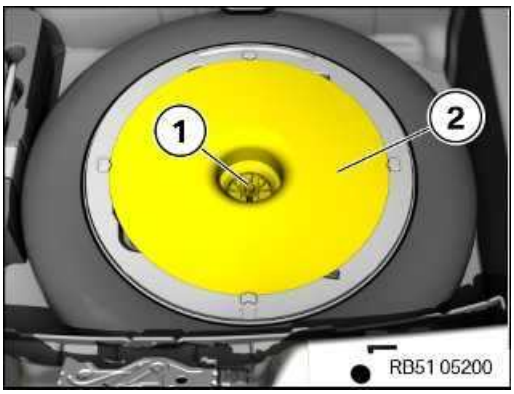
18 – Install the emergency wheel



- Insert compact spare wheel(1).

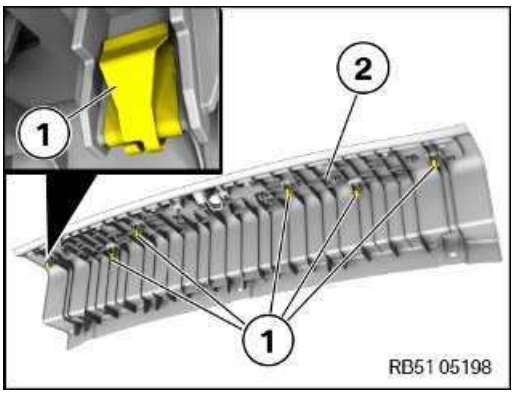


- Insert oddments tray into the compact spare wheel (1).



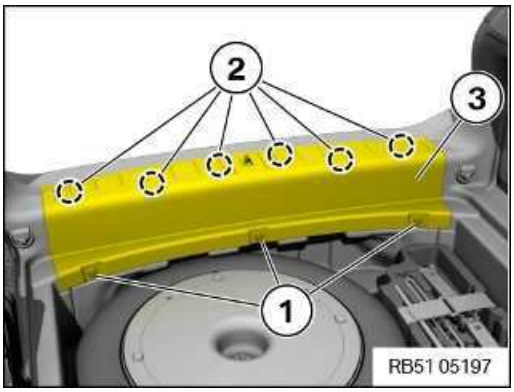
- Insert the lid (2).
- Hand-tighten the bolt (1).

19 – Installing loading edge trim



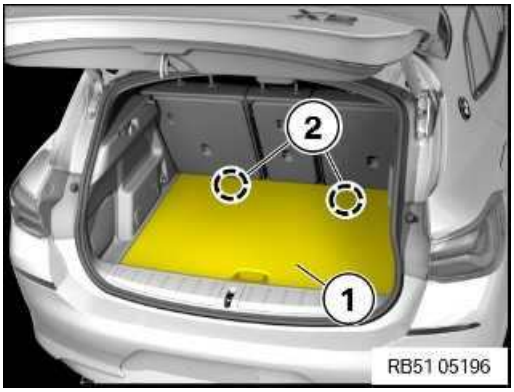
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.

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- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

20 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

Trim panel of luggage compartment capping			Used in step 11
Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body			Used in step 11
Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment			Used in step 12
Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body			Used in step 13
Screw	Renew screw.	Tightening torque	42 Nm

Toolkit hook and loop tape to body			Used in step 16
Bolt M6 x 20		Tightening torque	4 Nm

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51 47 315 Removing and installing/replacing carpet for vehicle interior

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

PRELIMINARY WORK

1 – Remove both front seats

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

NOTICE

Description is for left component only. Procedure on the right side is identical.

NOTICE

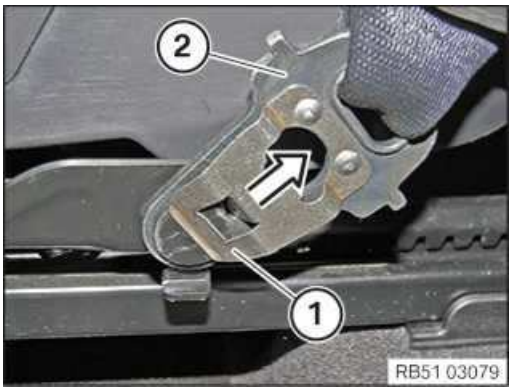
Perform the operations on the left and right side.

▸ **Remove the front end fitting**



- Slide the cover (1) on the seat belt (2) in an upward direction.

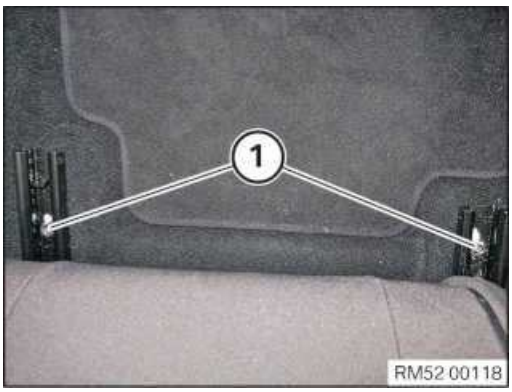
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- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.



- Fully move the seat backwards.
- Loosen screws (1).



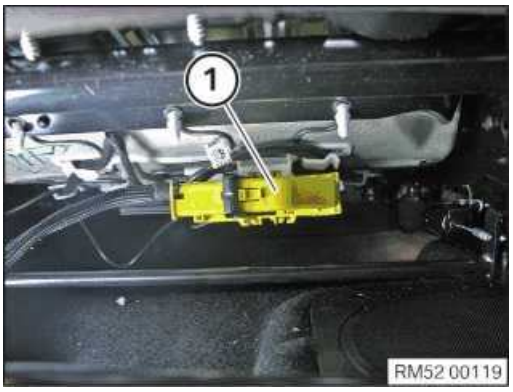
- Fully move the seat forwards.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Cover the door sill using protective covers.
- Fold the front seat back and disconnect the plug connection (1).

RISK OF DAMAGE

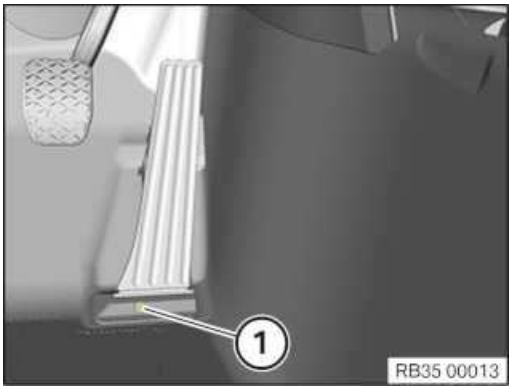
Heavy component.

Heavy components can lead to injury or damage.

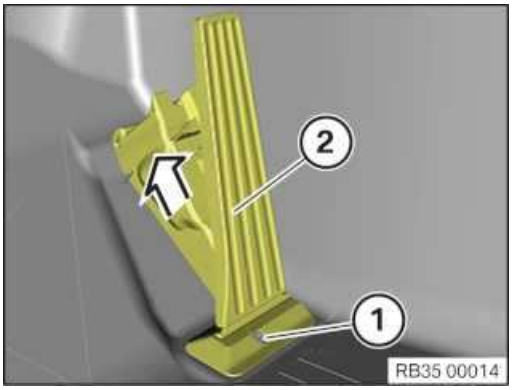
- Remove and install heavy components with the aid of another person/other persons.

- Remove the front seat with the assistance of an auxiliary person.

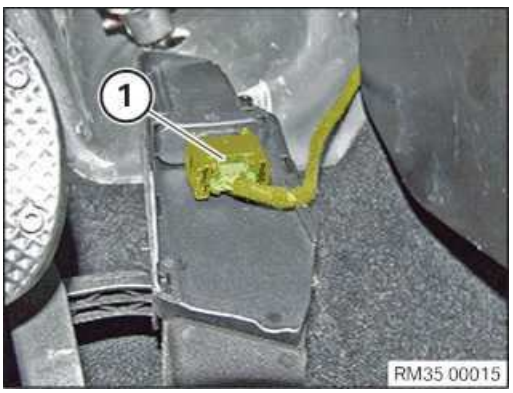
2 – Remove accelerator pedal module



- Lever out cover (1) towards the top.



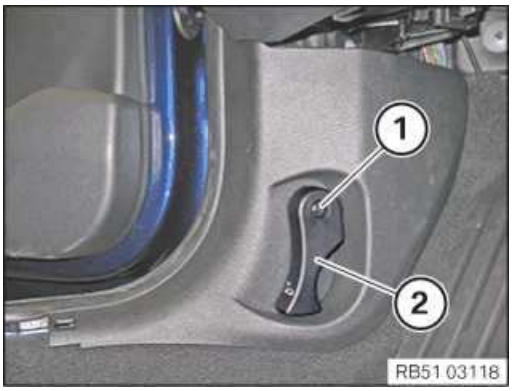
- Release the hexagon socket screw (1).
- Feed out accelerator pedal module (2) towards the top.



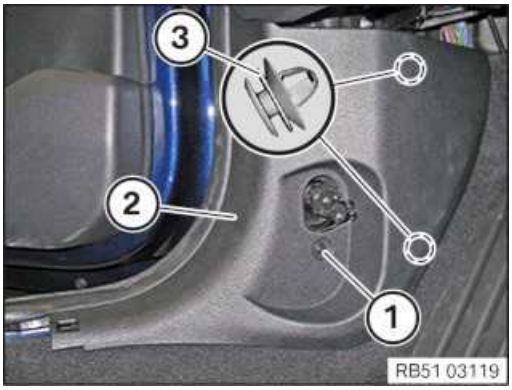
- Disconnect plug connection (1) and remove accelerator pedal module.

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3 – Removing the side trim panel in the footwell at the A-pillar

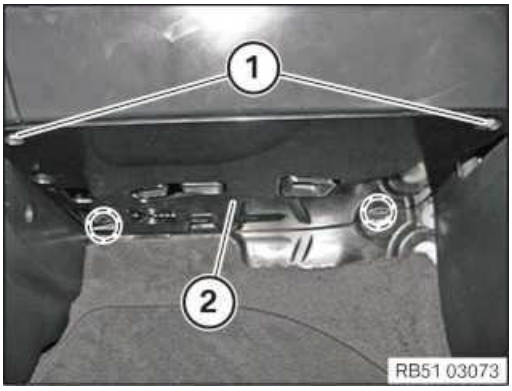


- Loosen screw (1).
- Remove bonnet release lever (2).



- Loosen screw (1).
- Unclip side trim panel (2) from the clips (3) and remove.

4 – Removing the instrument panel trim at bottom right

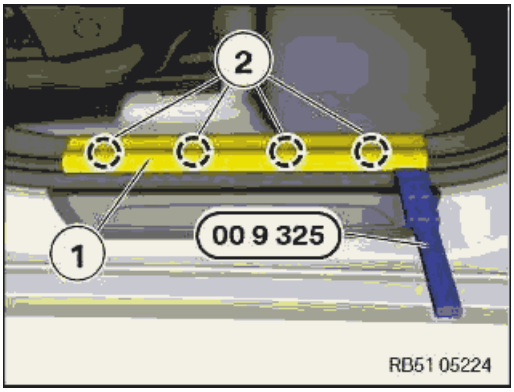


- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

5 – Remove front right door sill cover strip

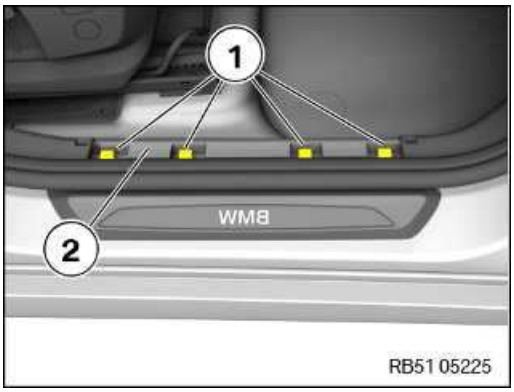
NOTICE

Description is for left component only. Procedure on the right side is identical.



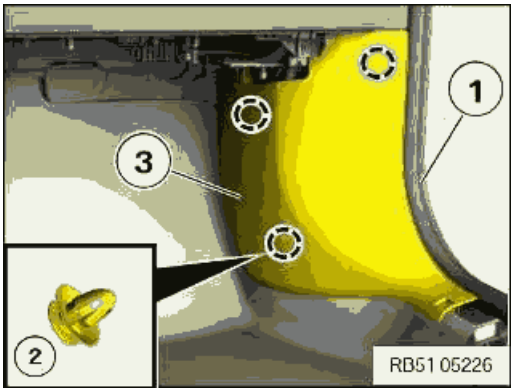
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.

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- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

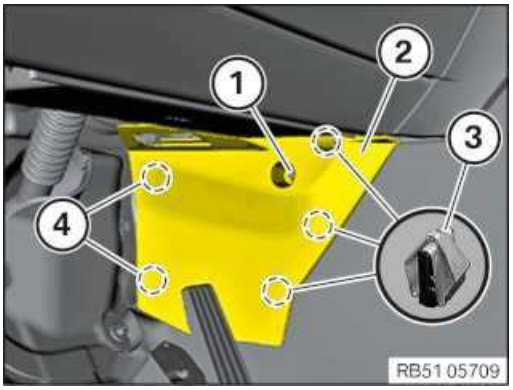
6 – Removing the side trim panel in the footwell at the right-hand A-pillar



- Guide side trim panel (3) under the sealing lip out of the edge protection (1).
- Unclip and remove the side trim panel (3) at the clips (2).

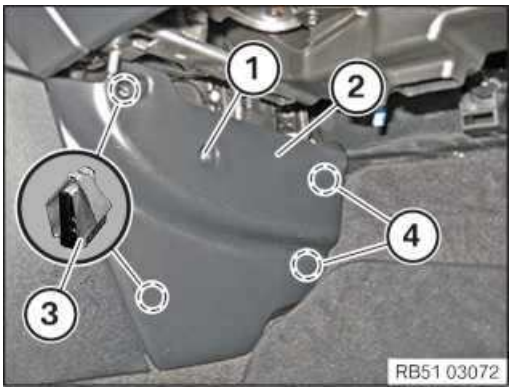
7 – Removing the side trim panel for the left and right centre console

▸ **Removing side trim panel for the left centre console**



- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▸ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

8 – Remove gearshift lever cover

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- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

9 – Remove the decorative trim from the centre console

RISK OF DAMAGE

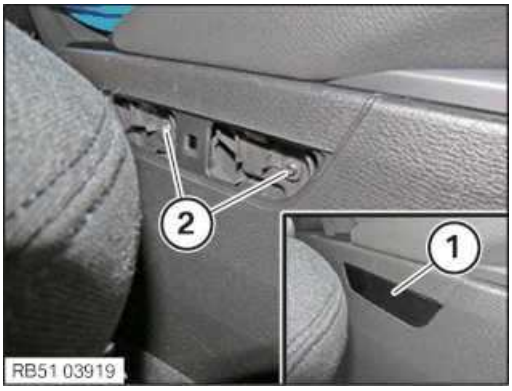
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

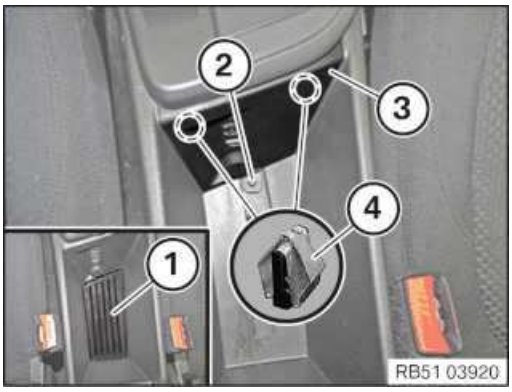


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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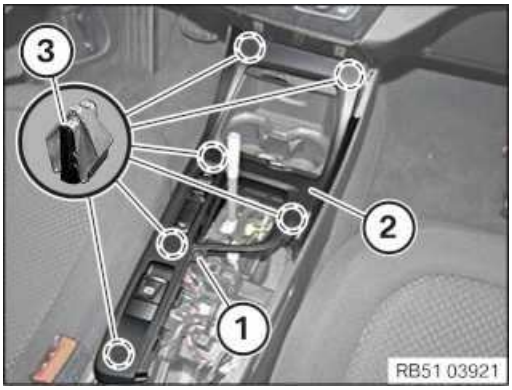


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

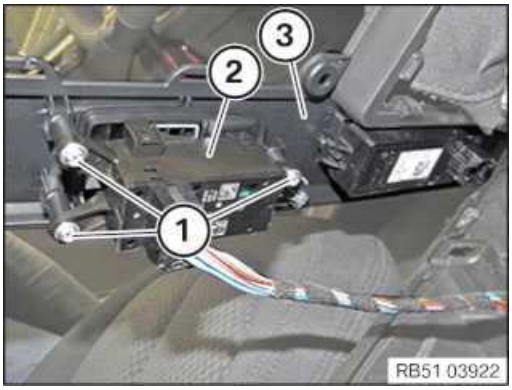


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

10 – Remove the centre console trim



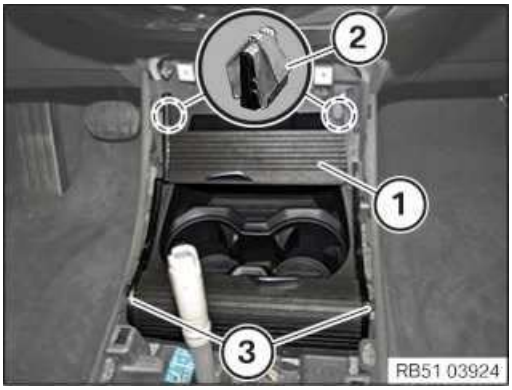
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

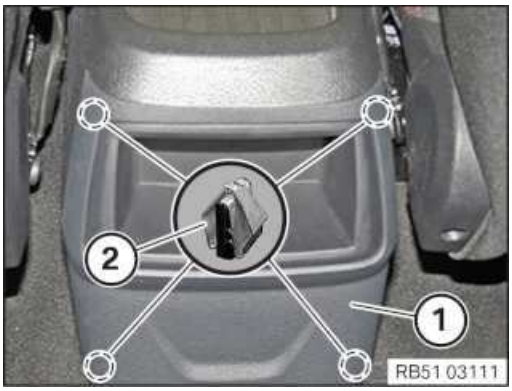
11 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

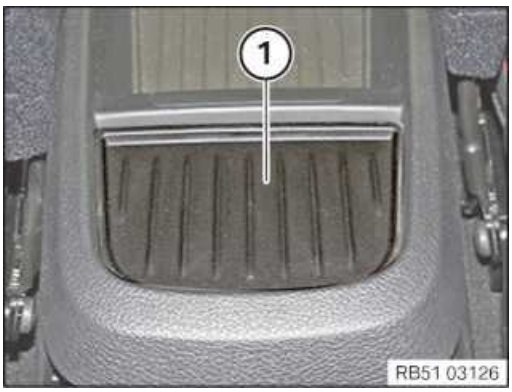
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12 – Removing the rear centre console trim

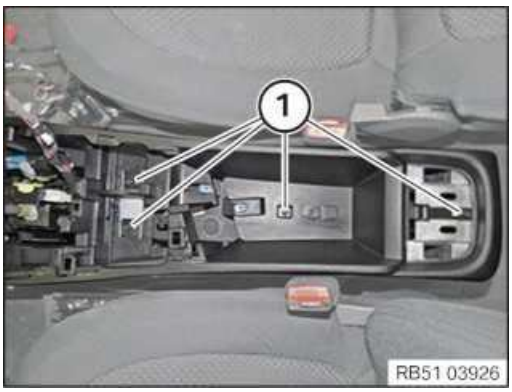


- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

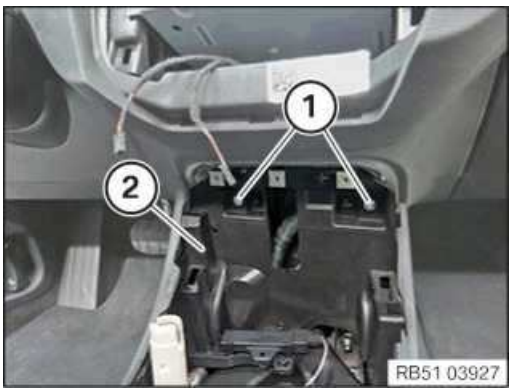
13 – Remove complete centre console



- Remove the cover (1).



- Loosen screws (1).



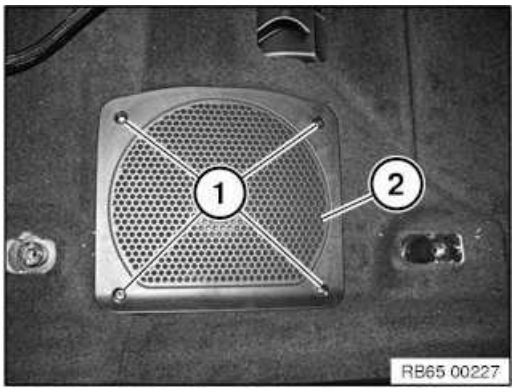
- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

14 – Removing the speaker trim from the left and right central bass

NOTICE

Description is for left component only. Procedure on the right side is identical.

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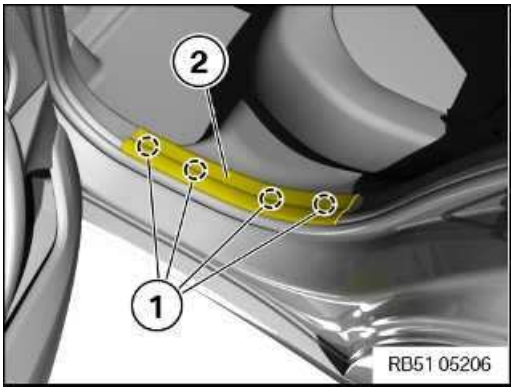
- Loosen screws (1).
- Remove the speaker trim from the central bass (2).

15 – Remove the door sill cover strip on the rear left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove rear entrance cover strip**



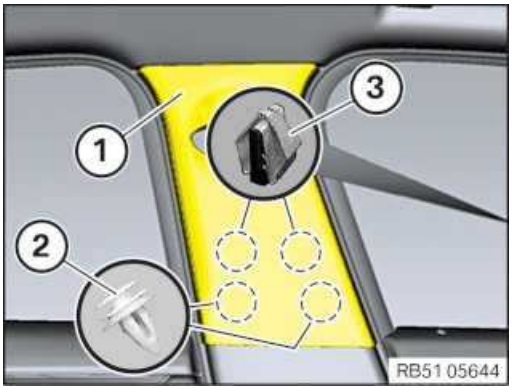
- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

16 – Removing the B-pillar trim panels at top left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing upper B-pillar trim panel**



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

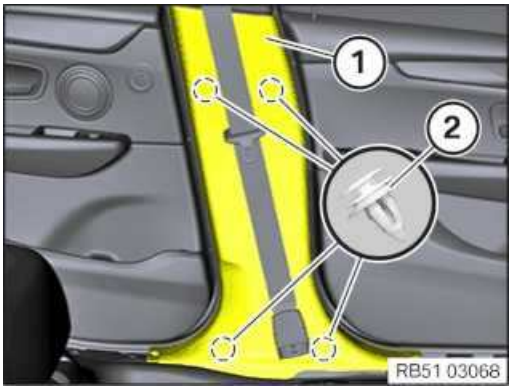
17 – Removing the left and right B-pillar trim panels at bottom

▸ **Remove the lower B-pillar trim panel**

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NOTICE

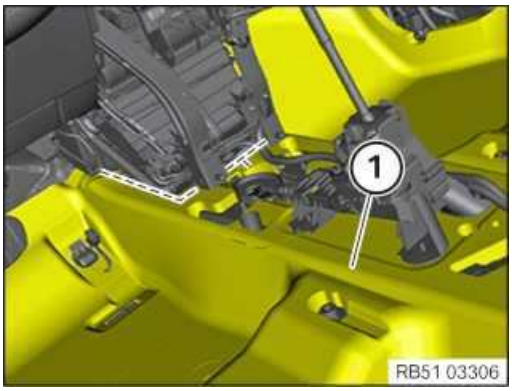
Description is for left component only. Procedure on the right side is identical.



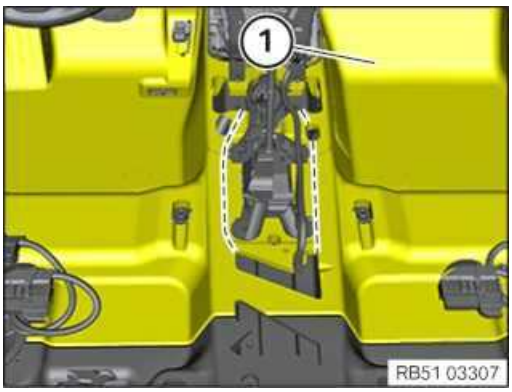
- Release the B-pillar trim panel (1) at bottom starting from the clips (2).
- Feed out and remove the B-pillar trim panel (1) inwards.

MAIN WORK

18 – Removing the front carpet

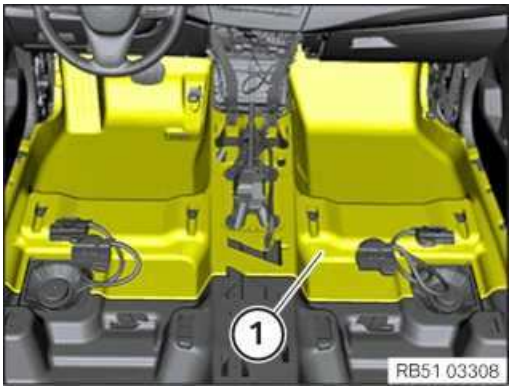


- Start the cuts towards the centre of vehicle as far as is possible to guarantee that cutting edges are covered by storage compartment and/or instrument panel.
- Remove carpet (1) along lines, cut on the right and left.



- Remove carpet (1) along lines, cut on the right and left.
- Remove the carpet (1) towards rear/top and if necessary feed out the cable.

19 – Installing the front carpet



- Lay the removed carpet over the new carpet and transfer the cuts to the new carpet.
- Install the carpet (1).

  Make sure the carpet (1) is positioned correctly at all adjacent parts.

POSTPROCESSES

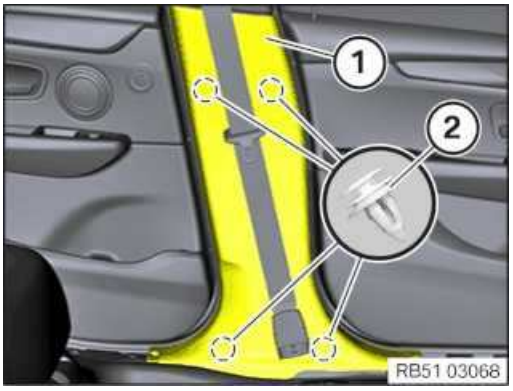
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20 – Install the left and right B-pillar trim panels at bottom

▸ **Install the lower B-pillar trim panel**

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Renew damaged clips (2).

  Parts: Clips
- Feed in the B-pillar trim panel (1) at the top and position correctly.
- Clip in the B-pillar trim panel (1) at the clips (2).
- Make sure the B-pillar trim panel (1) is correctly positioned on the edge protection.

21 – Installing the top left and right B-pillar trim panels

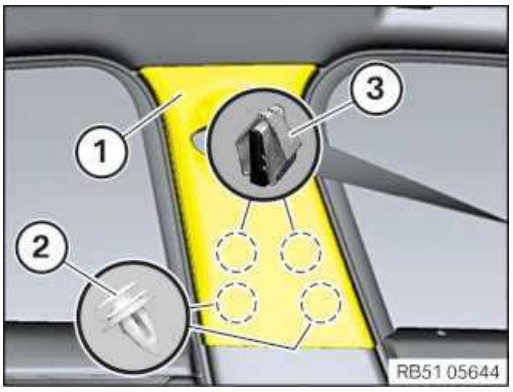
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially installing upper B-pillar trim panel**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

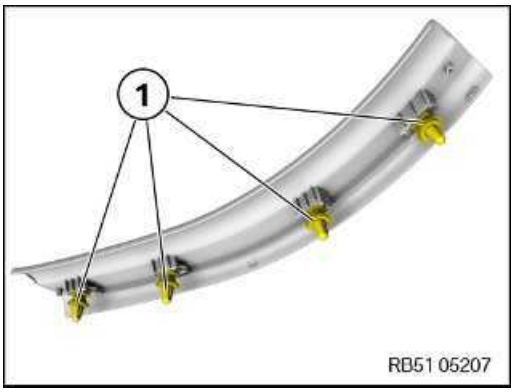
22 – Install the door sill cover strip on the rear left and right

NOTICE

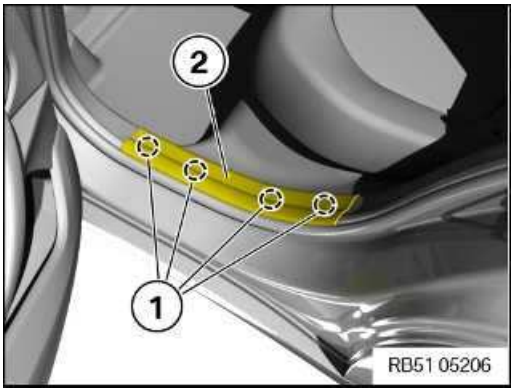
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the rear door sill cover strip**

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- Check the clips (1) for damage and renew where required.

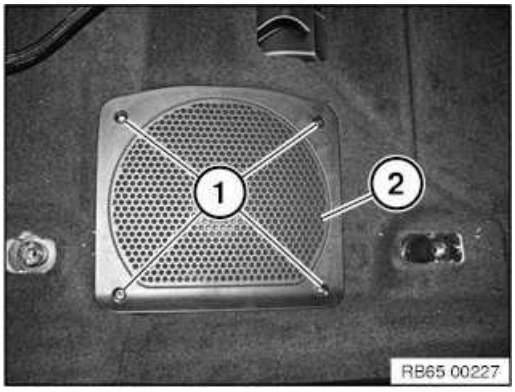


- Clip in the door sill cover strip (2) with the clips (1).

23 – Installing the speaker trim on the left and right central bass

NOTICE

Description is for left component only. Procedure on the right side is identical.

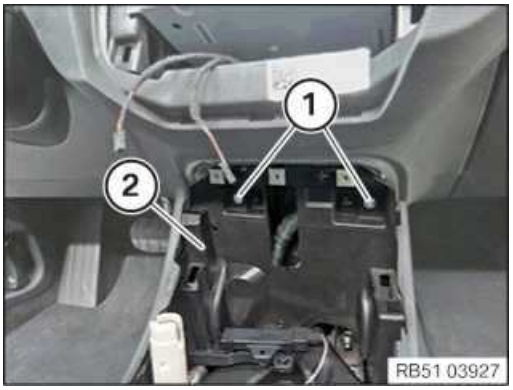


- Position the speaker trim on central bass (2).
- Tighten the screws (1).

Central bass speaker trim

Screw		Tightening torque	2 Nm

24 – Install centre console, complete

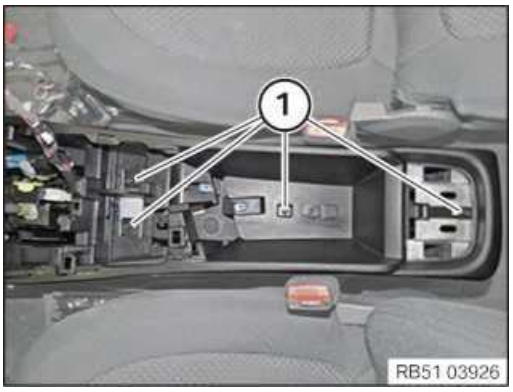


- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

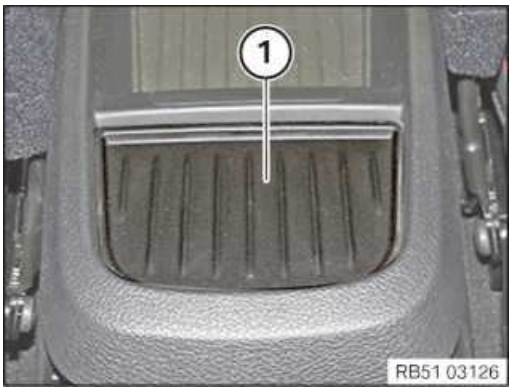
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- Tighten the screws (1).

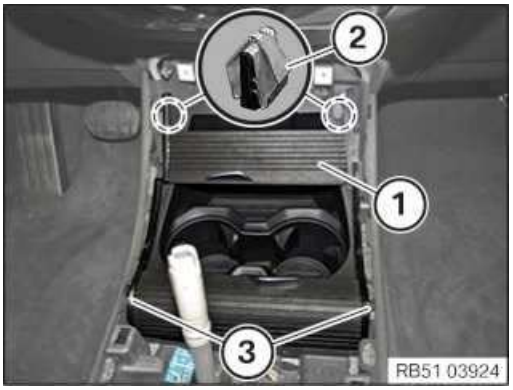
Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm



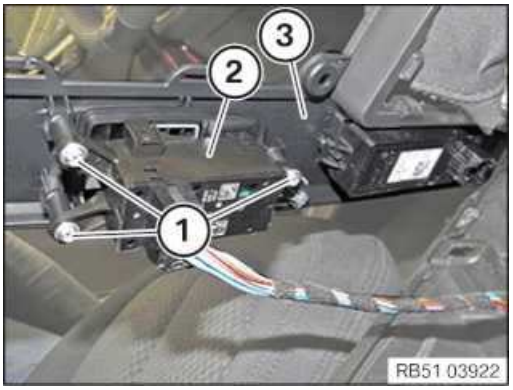
- Install the cover (1).

25 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

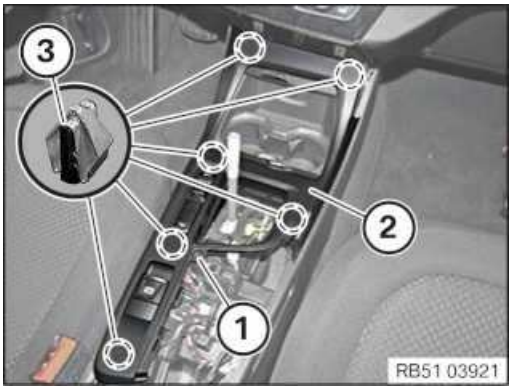
26 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

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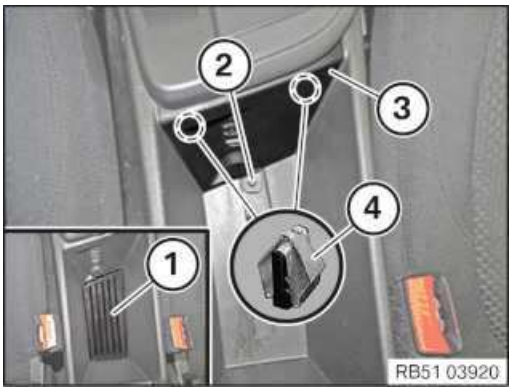
27 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

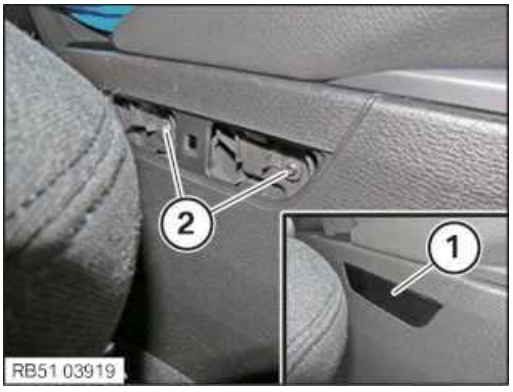


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

28 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

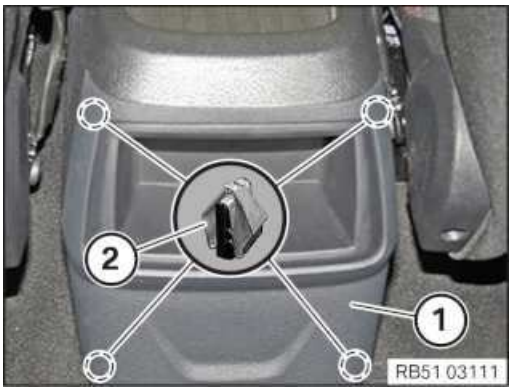
  When installing, the tie rod of the gearshift lever must not be bent.

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- Clip in gaiter (arrows).

29 – Installing the rear centre console trim



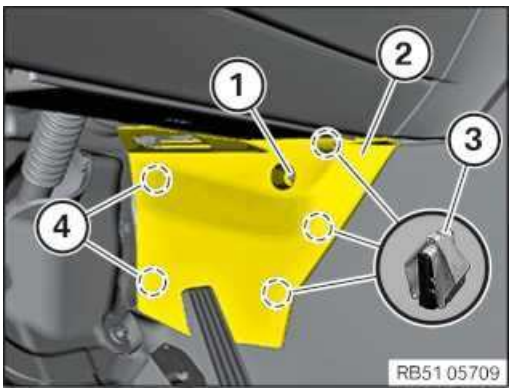
- Install centre console trim (1) and engage it into clamps (2).

30 – Installing side trim panel for the left and right centre console

▸ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

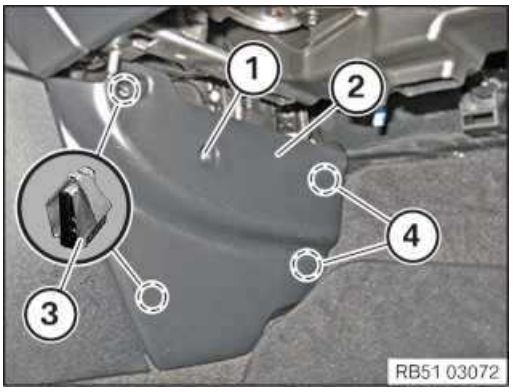
Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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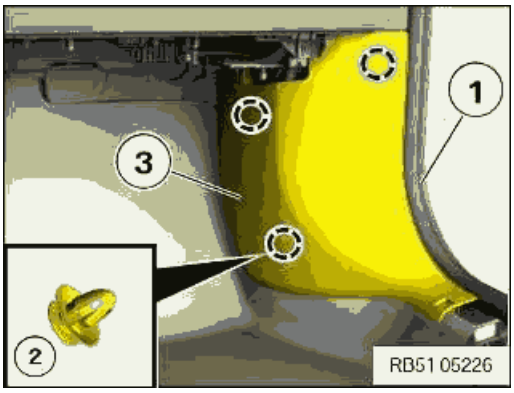


- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

31 – Installing side trim panel in footwell on right A-pillar

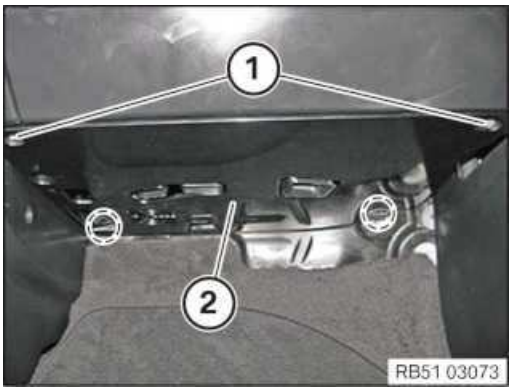


- Check clips (2) for damage, and replace if necessary.
- Feed the side trim panel (3) under the sealing lip of the edge protection (1).
- Clip in the side trim panel (3) with the clips (2).

32 – Installing the botto right instrument panel trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

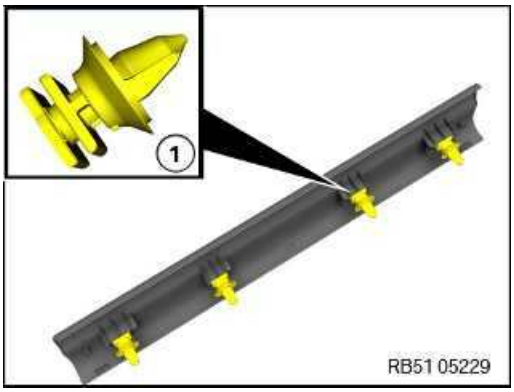
M5 hexagon nut		Tightening torque	2 Nm

33 – Install the front right door sill cover strip

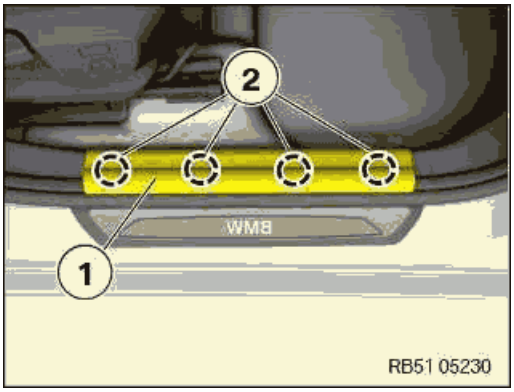
NOTICE

Description is for left component only. Procedure on the right side is identical.

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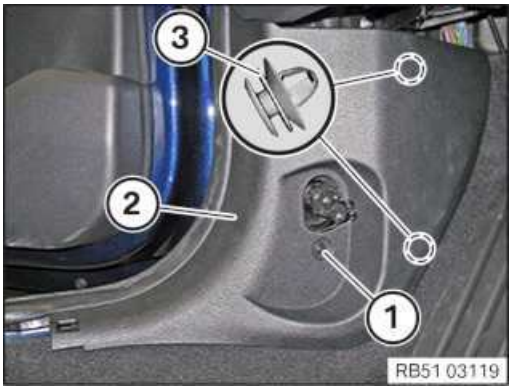


- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

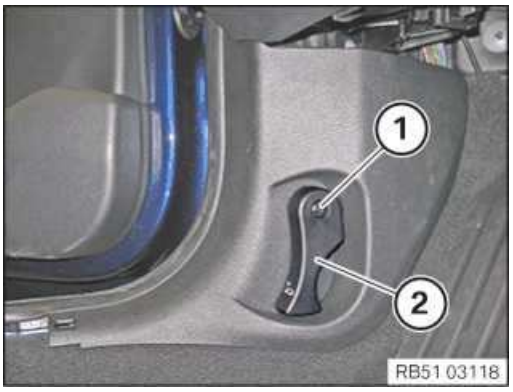
34 – Installing side trim panel in the footwell at A-pillar



- Position the side trim panel (2) and clip it to the clips (3).
- Make sure the edge protection on the side trim panel (2) fits correctly.
- Tighten down screw (1).

Side trim panel bottom left to holder

Screw		Tightening torque	3 Nm

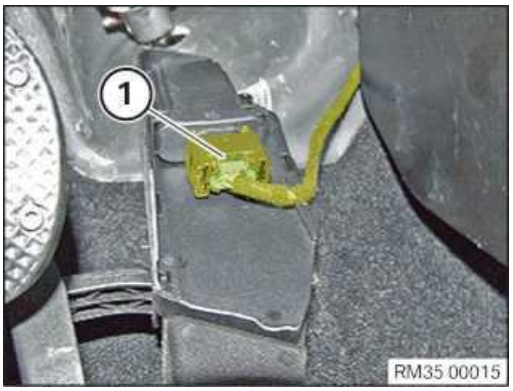


- Install lever for the bonnet release (2)l.
- Tighten down screw (1).

Lever for bonnet release to the holder

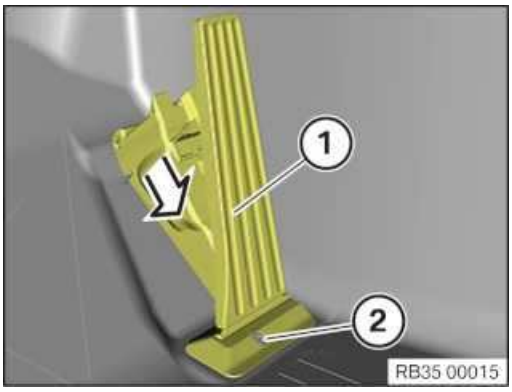
Screw		Tightening torque	3 Nm

35 – Install accelerator pedal module



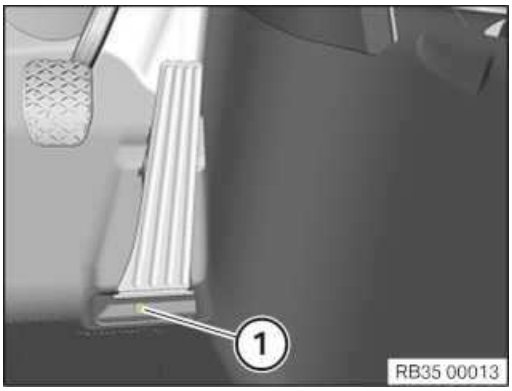
- Connect connectors (1) and lock.

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- Feed in accelerator pedal module (2) from above.
- Renew the hexagon socket screw (1).

  Parts: Hexagon socket screw
- Fit the hexagon socket screw (1) and tighten.



- Clip in the cover (1).

36 – Install both front seats

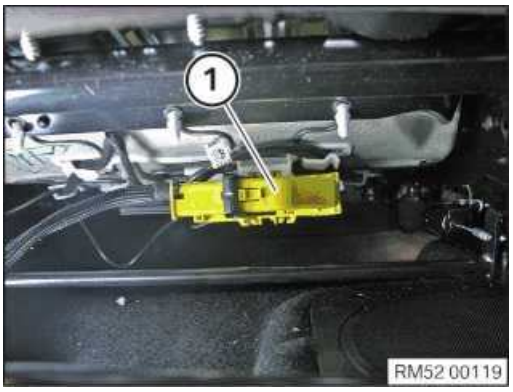
NOTICE

The data status was not available at the time of publication.

NOTICE

Perform the operations on the left and right side.

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RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Cover the door sill using protective covers.

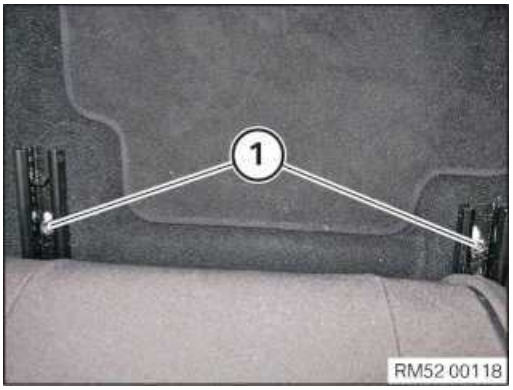
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect the plug connection (1).



- Move front seat rearwards.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm



- Move front seat forwards.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

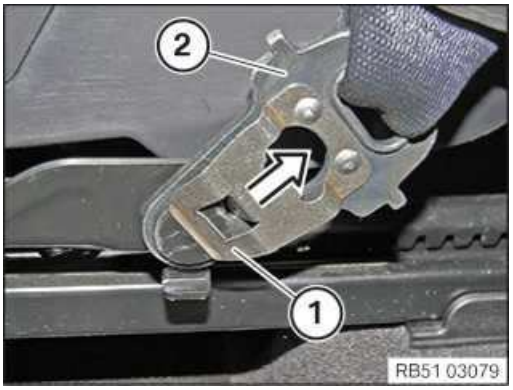
▸ **Disconnecting all battery earth leads**

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- See additional information.

▶ **Install front end fitting**



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

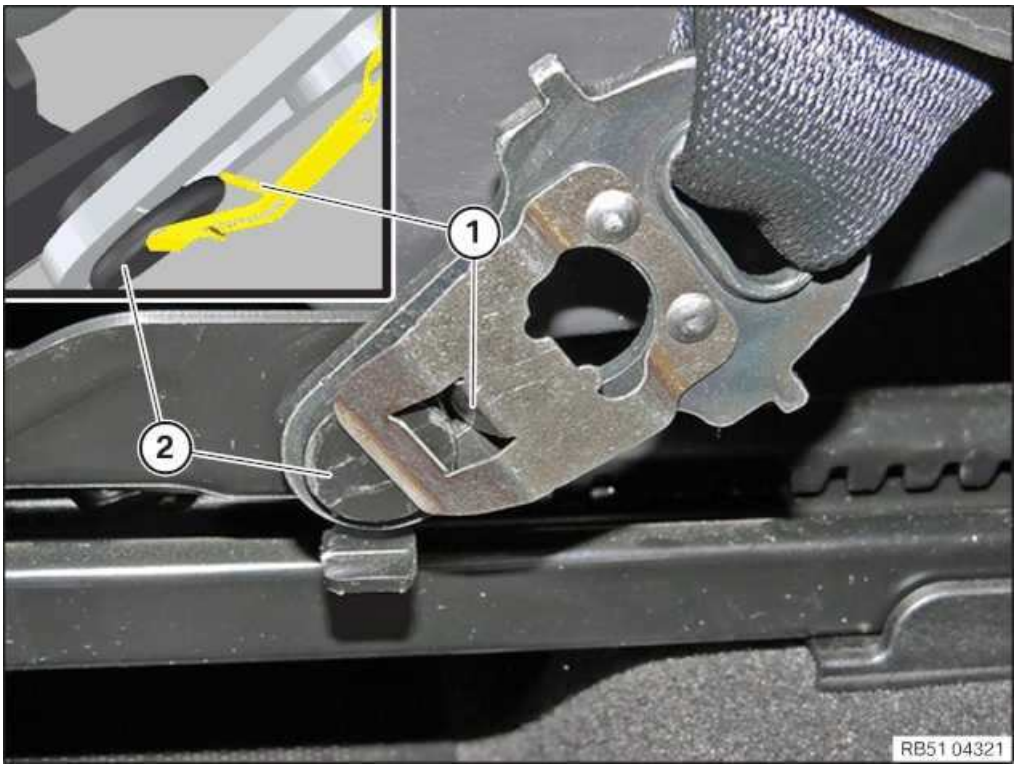
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▷ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.

◁



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Central bass speaker trim — Used in step 23

Screw		Tightening torque	2 Nm

Screw connection for centre console — Used in step 24 26 27

Oval-head screw		Tightening torque	1,8 Nm

Parking brake button — Used in step 26

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console — Used in step 27 30

Oval-head screw		Tightening torque	1,8 Nm

Bottom left footwell trim to instrument panel — Used in step 32

M5 hexagon nut		Tightening torque	2 Nm

Side trim panel bottom left to holder — Used in step 34

Screw		Tightening torque	3 Nm

Lever for bonnet release to the holder — Used in step 34

Screw		Tightening torque	3 Nm

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Seat to body			Used in step 36
M10	Renew screw.	Tightening torque	42 Nm

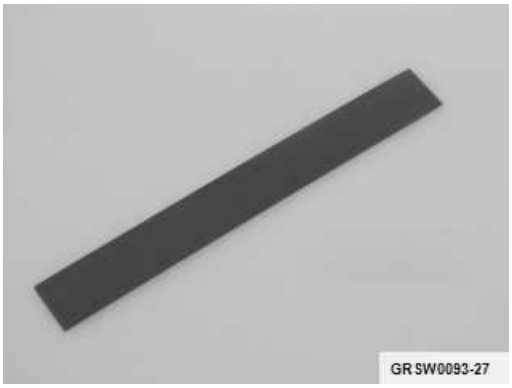
Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step 5 10 12 16
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

0 496 571 (00 9 327) Wedge



Common	Used in step 9
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 36
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
61 20 900 Disconnecting and connecting battery earth lead	1 36
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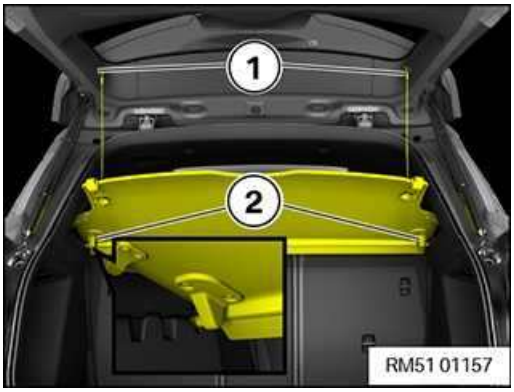
61 20 900 Disconnecting and connecting battery earth lead	1	36
61 20 900 Disconnecting and connecting battery earth lead	1	36
61 20 900 Disconnecting and connecting battery earth lead	1	36
61 20 900 Disconnecting and connecting battery earth lead	1	36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	36
61 20 900 Disconnecting and connecting battery earth lead	1	36
61 20 900 Disconnecting and connecting battery earth lead	1	36
61 20 900 Disconnecting and connecting battery earth lead	1	36
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61 20 900 Disconnecting and connecting battery earth lead	1	36
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61 20 900 Disconnecting and connecting battery earth lead	1	36

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51 47 151 Removing and installing/replacing left luggage compartment wheel arch trim

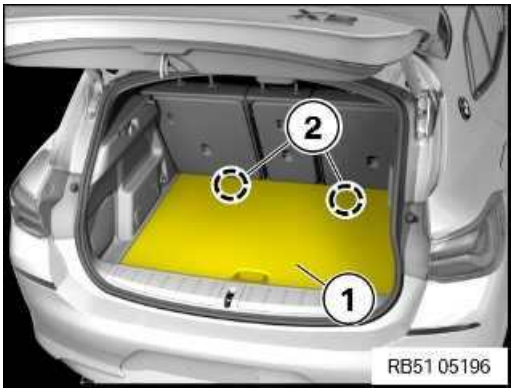
PRELIMINARY WORK

1 – Remove trim panel for storage shelf (parcel shelf)



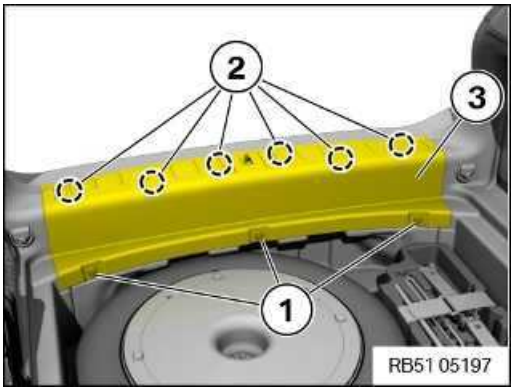
- Release the left and right retaining straps (1).
- Pull out and set aside the trim panel for the storage shelf from the guides (2).

2 – Removing the luggage compartment removable panel



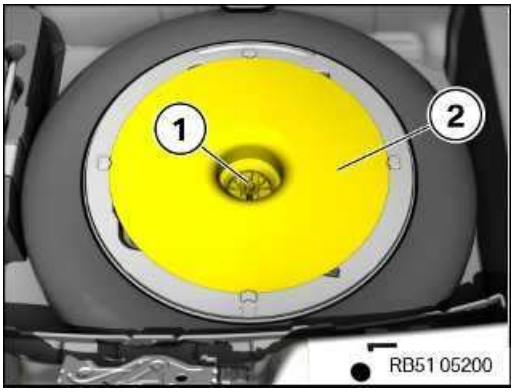
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

3 – Removing the loading edge trim



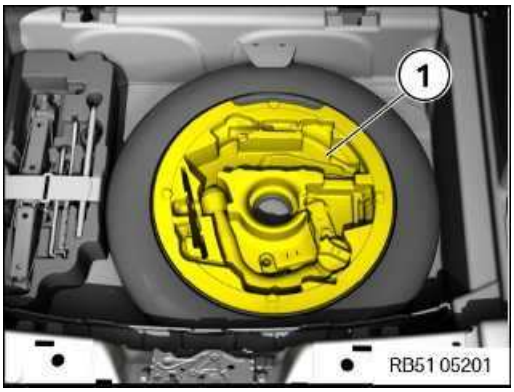
- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).

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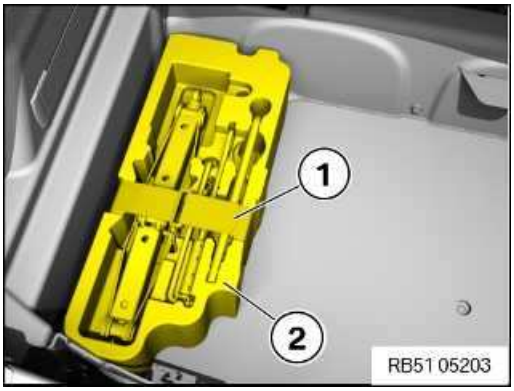


- Remove the oddments tray from the emergency wheel (1).



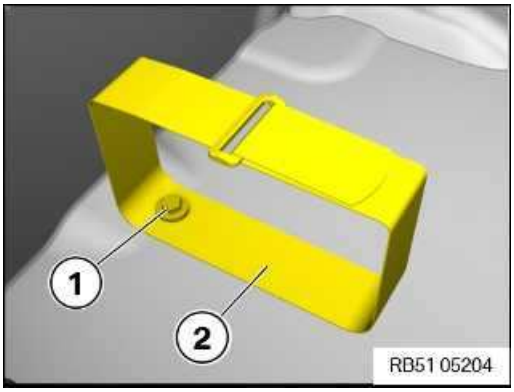
- Remove the emergency wheel (1).

5 – Remove the tool kit



- Open the hook and loop tape (1).
- Remove the tool kit (2).

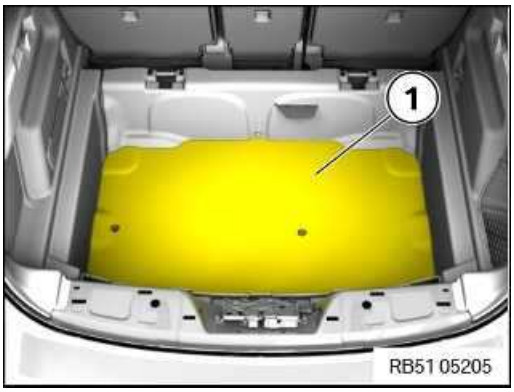
6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

7 – Removing the luggage compartment floor trim panel

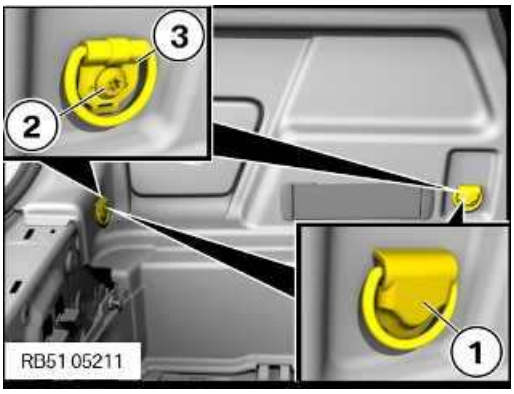
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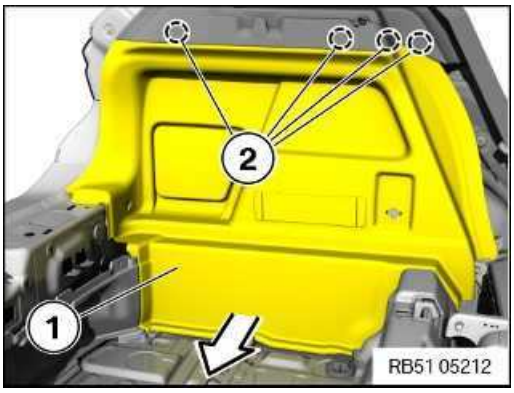
- Remove the luggage compartment floor trim panel (1) upwards.

MAIN WORK

8 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

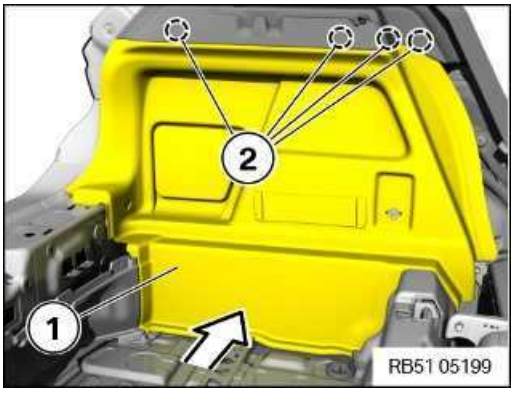


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

9 – Install luggage compartment wheel arch trim panel at left

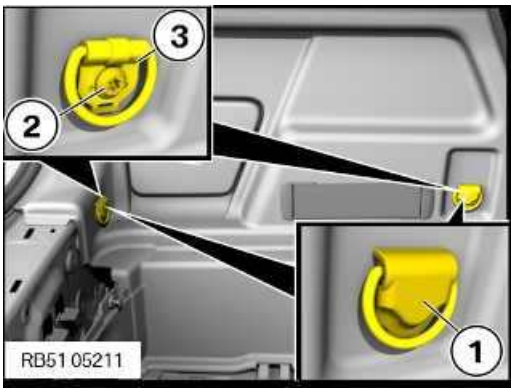


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.

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- Position the lashing eyes (3) and tighten the screws (2).

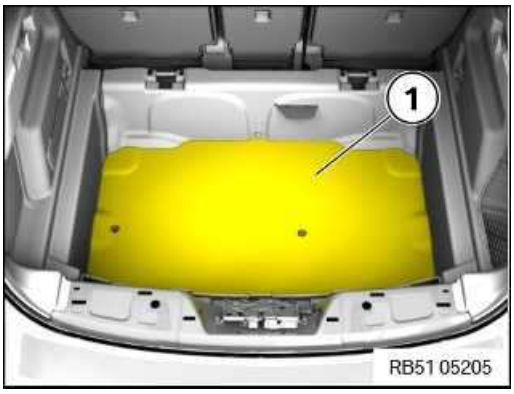
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).

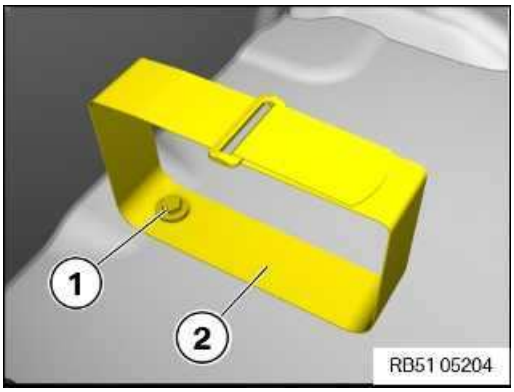
POSTPROCESSES

10 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

11 – Inserting the Velcro fastener for the toolkit

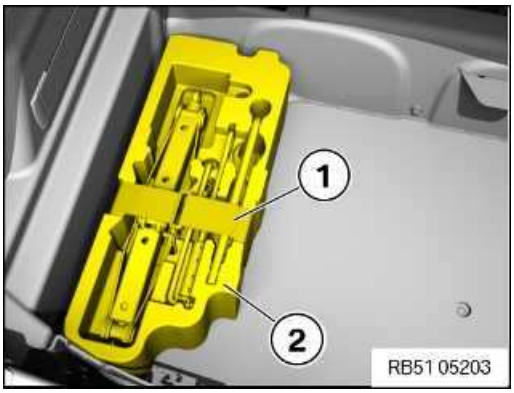


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

12 – Install the tool kit



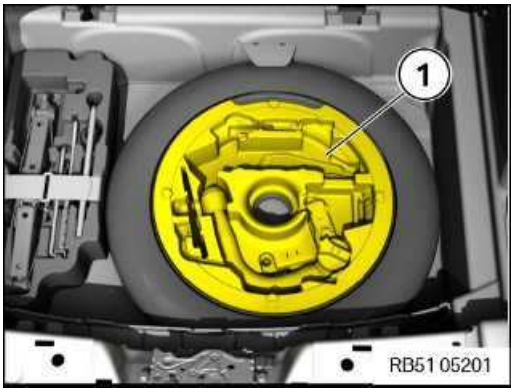
- Install the tool kit (2).
- Close the hook and loop tape (1).

13 – Install the emergency wheel

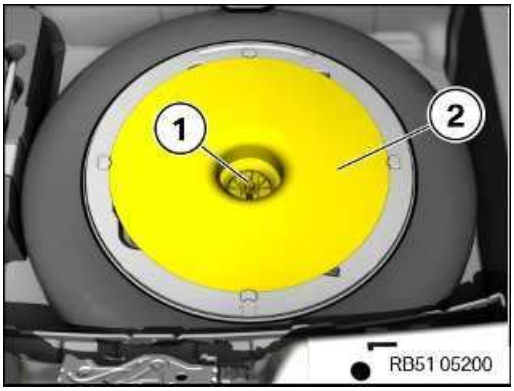
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- Insert compact spare wheel(1).

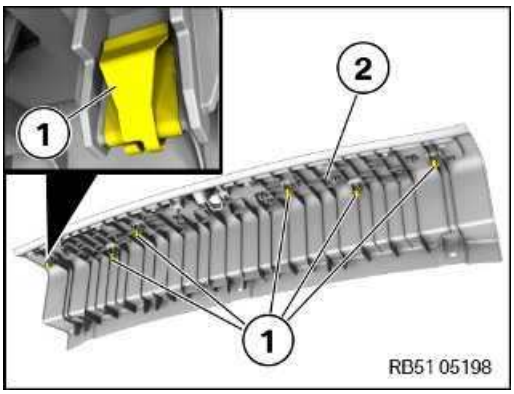


- Insert oddments tray into the compact spare wheel (1).

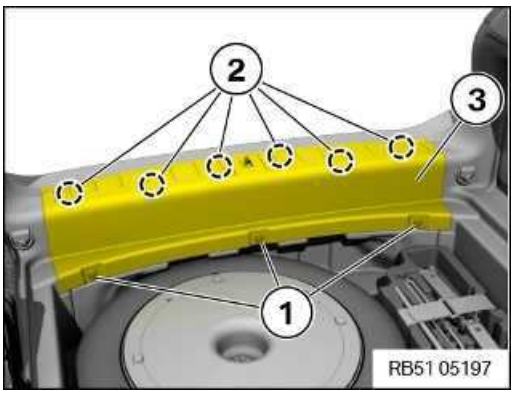


- Insert the lid (2).
- Hand-tighten the bolt (1).

14 – Installing loading edge trim



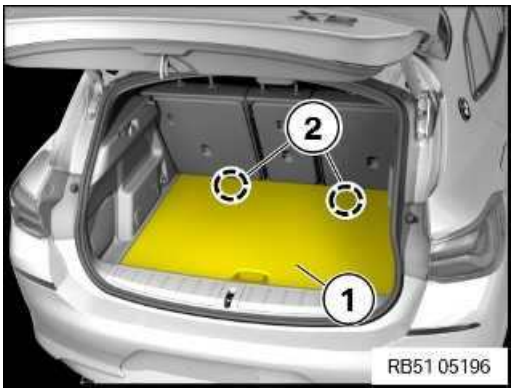
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

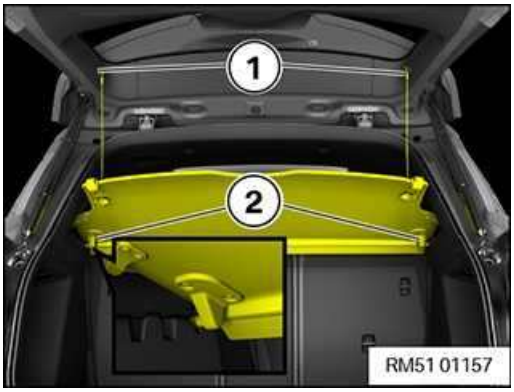
15 – Installing the luggage compartment removable panel

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- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

16 – Install trim panel for storage shelf (parcel shelf)



- Insert the trim panel for the storage shelf into the guides (2).
- Attach the left and right retaining straps (1).

Additional Information

Overview of Tightening Torques

Lashing eye in luggage compartment — Used in step 9

Bolt M8 x 22		Tightening torque	21 Nm

Toolkit hook and loop tape to body — Used in step 11

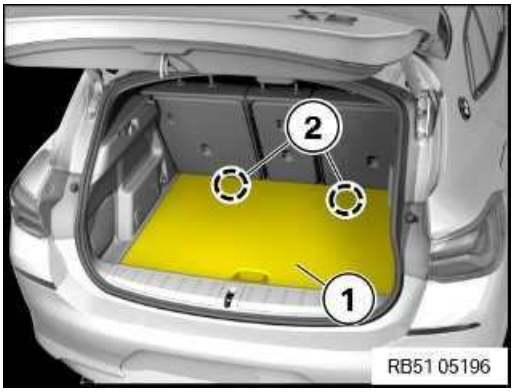
Bolt M6 x 20		Tightening torque	4 Nm

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51 47 101 Removing and installing/replacing luggage compartment floor trim panel

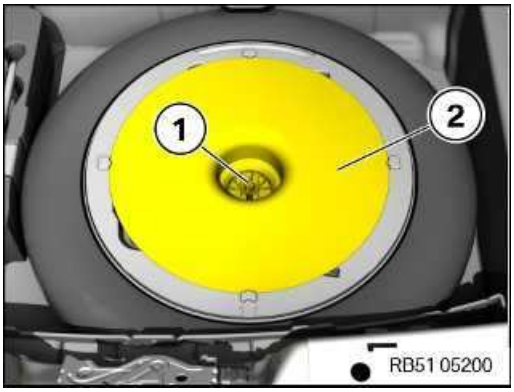
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel

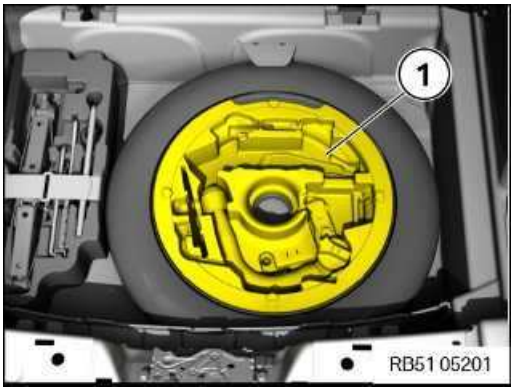


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



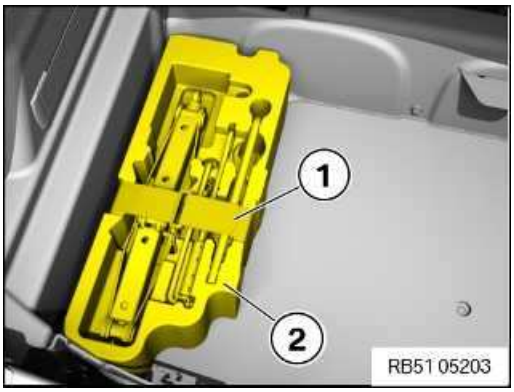
- Remove the oddments tray from the emergency wheel (1).



- Remove the emergency wheel (1).

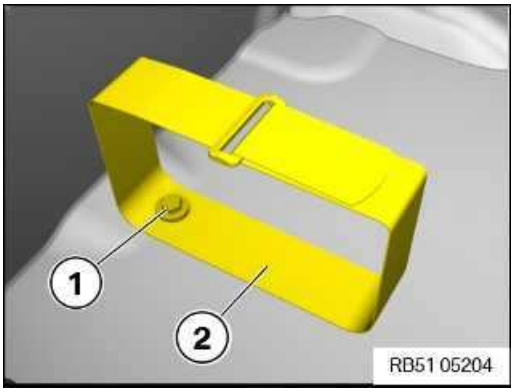
3 – Remove the tool kit

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- Open the hook and loop tape (1).
- Remove the tool kit (2).

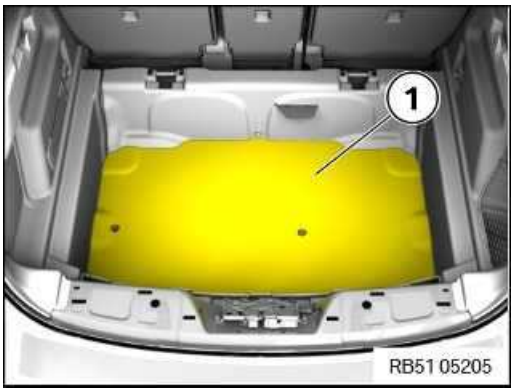
4 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

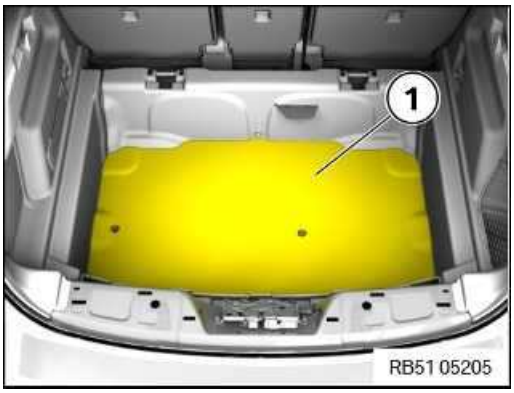
MAIN WORK

5 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

6 – Installing the luggage compartment floor trim panel

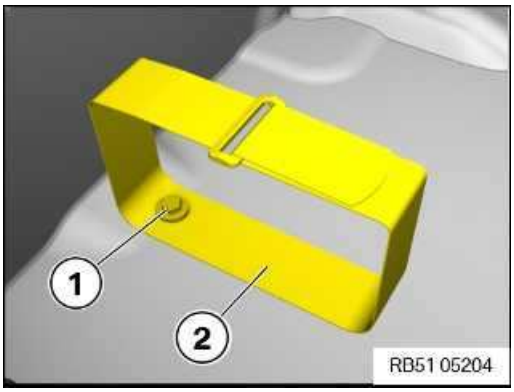


- Position the luggage compartment floor trim panel (1).

POSTPROCESSES

7 – Inserting the Velcro fastener for the toolkit

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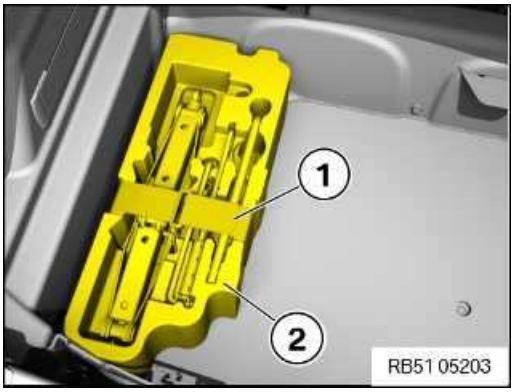


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

8 – Install the tool kit

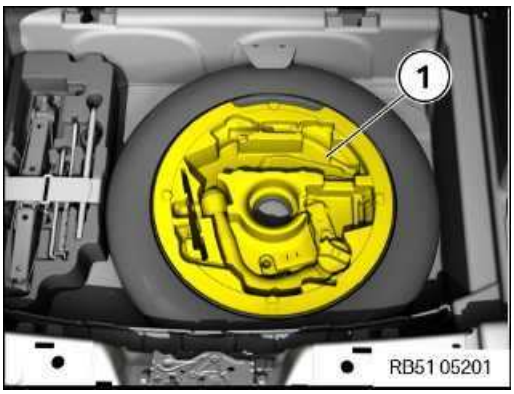


- Install the tool kit (2).
- Close the hook and loop tape (1).

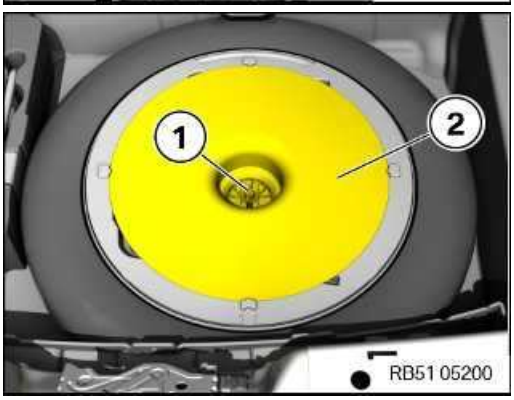
9 – Install the emergency wheel



- Insert compact spare wheel(1).



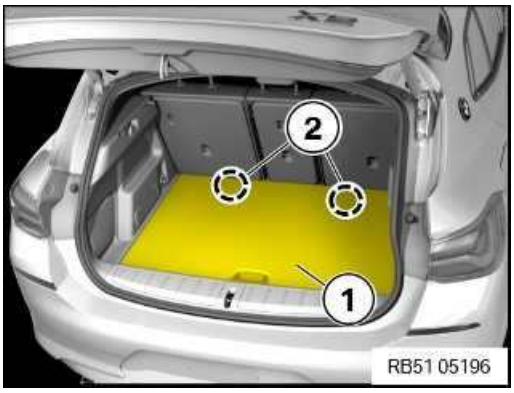
- Insert oddments tray into the compact spare wheel (1).



- Insert the lid (2).
- Hand-tighten the bolt (1).

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10 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

Toolkit hook and loop tape to body Used in step 7

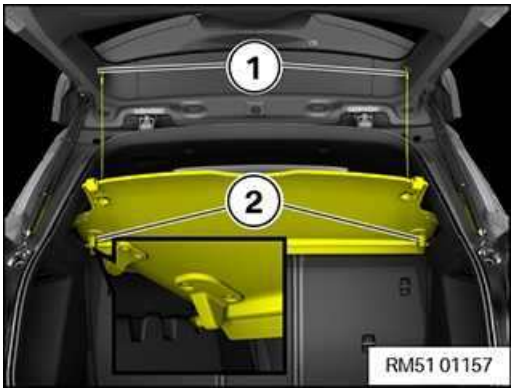
Bolt M6 x 20		Tightening torque	4 Nm

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51 47 161 Removing and installing/replacing right luggage compartment wheel arch panel

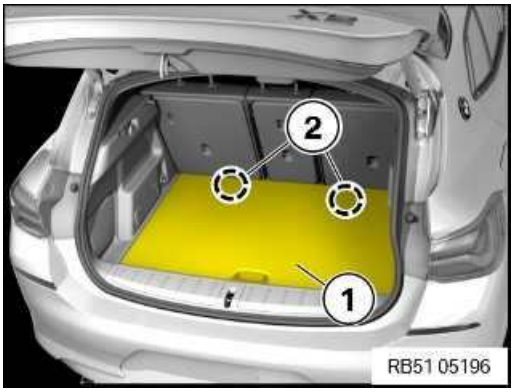
PRELIMINARY WORK

1 – Remove trim panel for storage shelf (parcel shelf)



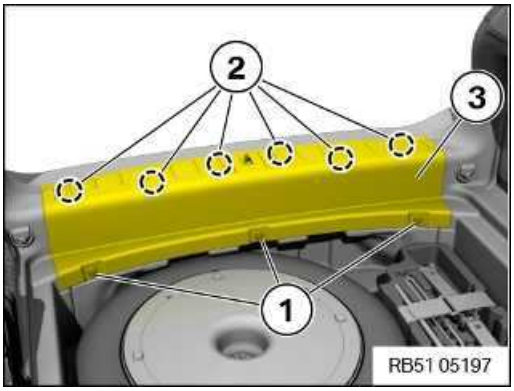
- Release the left and right retaining straps (1).
- Pull out and set aside the trim panel for the storage shelf from the guides (2).

2 – Removing the luggage compartment removable panel



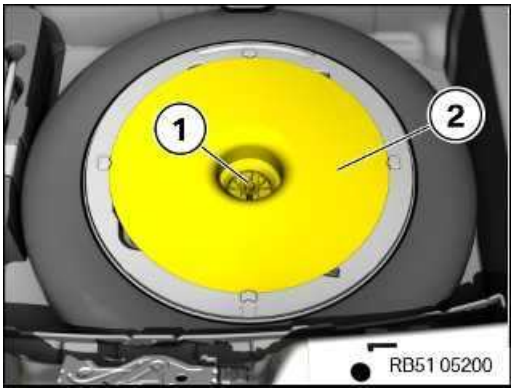
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

3 – Removing the loading edge trim



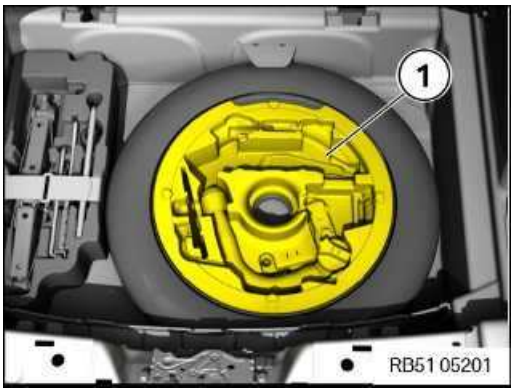
- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

4 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).

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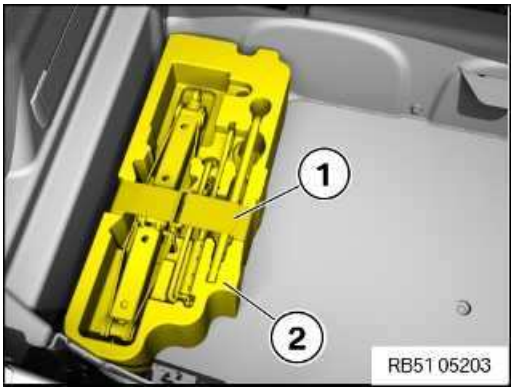


- Remove the oddments tray from the emergency wheel (1).



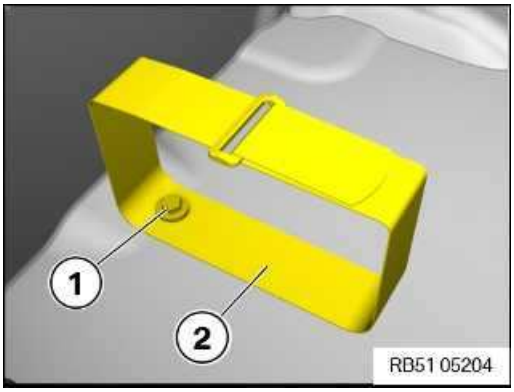
- Remove the emergency wheel (1).

5 – Remove the tool kit



- Open the hook and loop tape (1).
- Remove the tool kit (2).

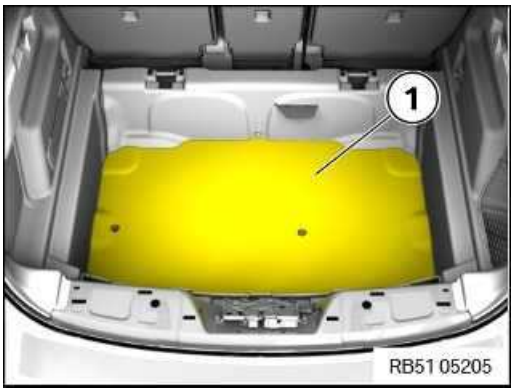
6 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

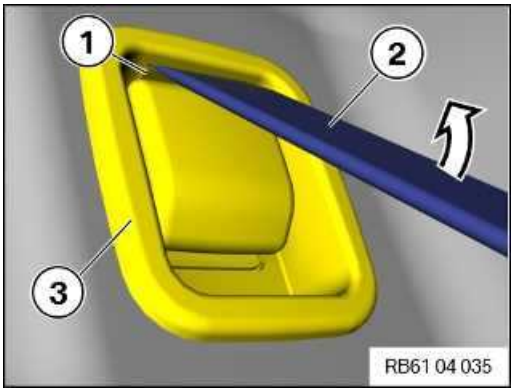
7 – Removing the luggage compartment floor trim panel

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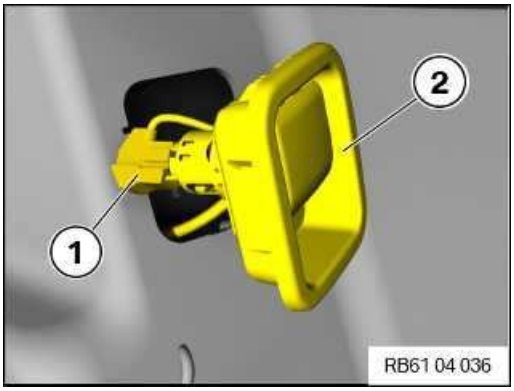


- Remove the luggage compartment floor trim panel (1) upwards.

8 – Remove the fixture of the 12 V power socket

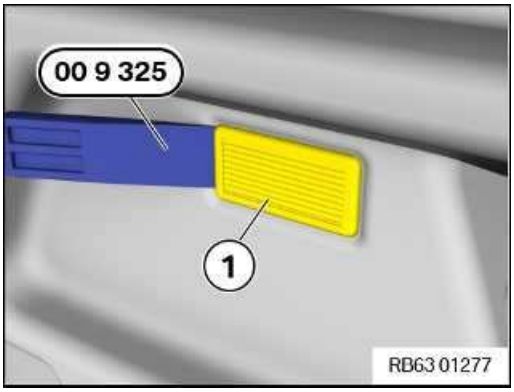


- Push the lock on top (1) with a suitable tool (2) in the direction of the arrow and unlock.
- Remove the fixture (3) of the 12 V power socket in the rear from the luggage compartment wheel arch trim panel.

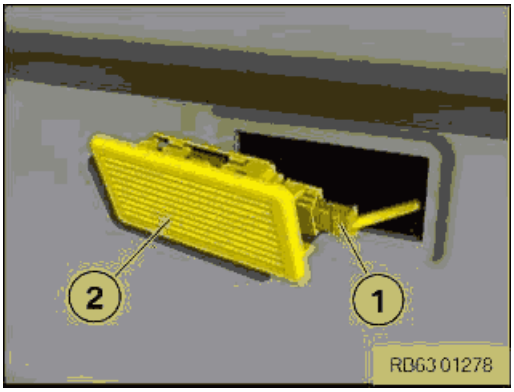


- Unlock the plug connection (1), disconnect it and remove the fixture (2) of the 12 V power socket.

9 – Removing the luggage compartment light



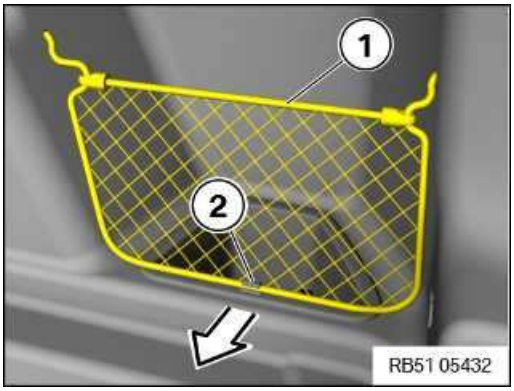
- Lever out the luggage compartment light (1) with the special tool **0 496 569 (00 9 325)**.



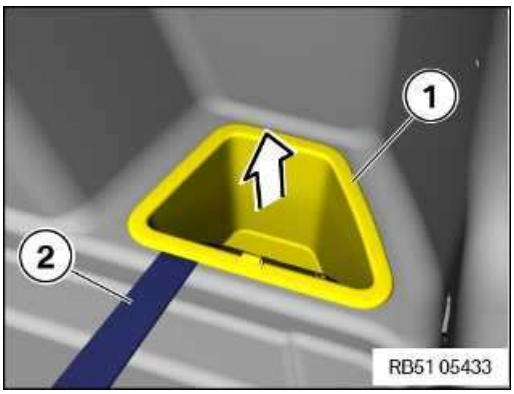
- Disconnect plug connection (1) and remove luggage compartment light (2).

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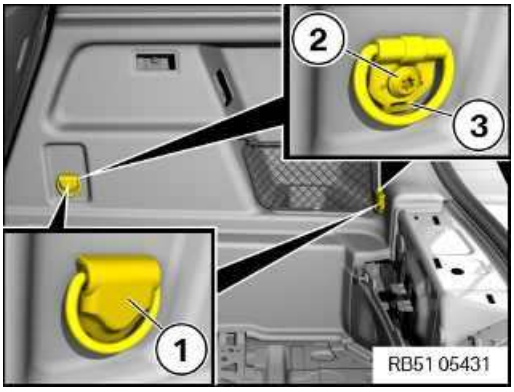
10 – Removing right luggage compartment wheel arch trim panel



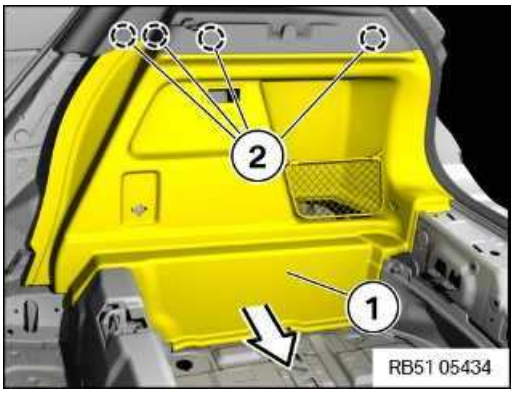
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



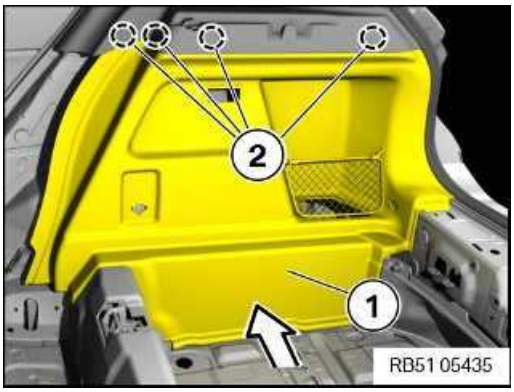
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

11 – Installing the luggage compartment wheel arch trim panel on the right

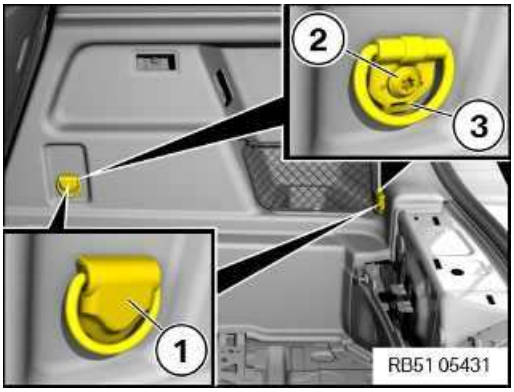
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NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

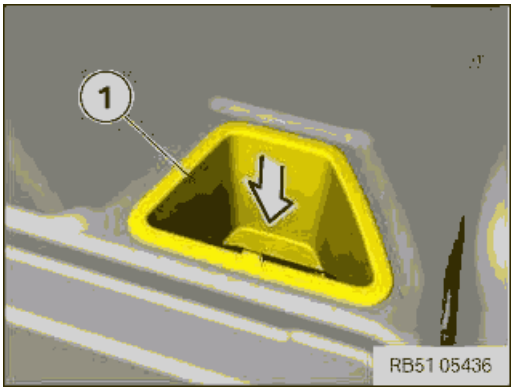


- Position the lashing eyes (3) and tighten the screws (2).

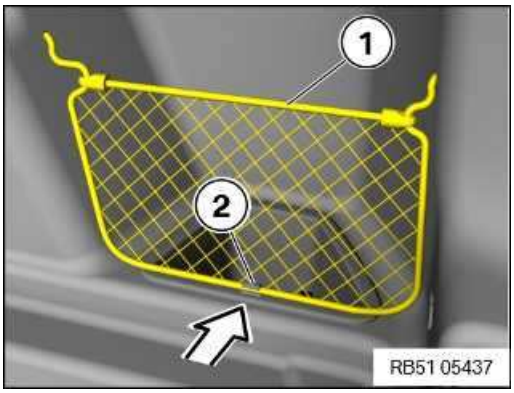
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.

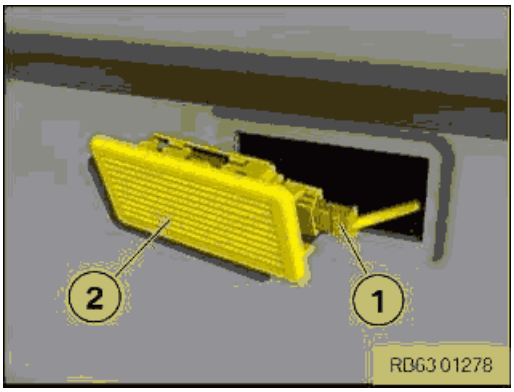


- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

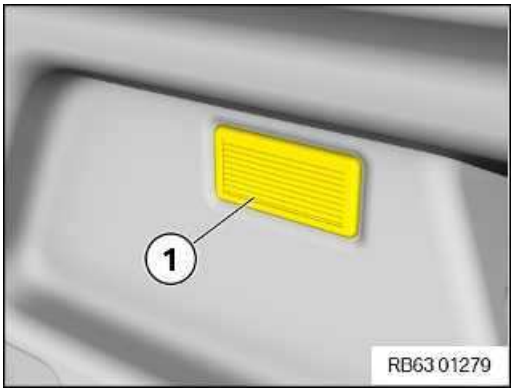
POSTPROCESSES

12 – Installing the luggage compartment light

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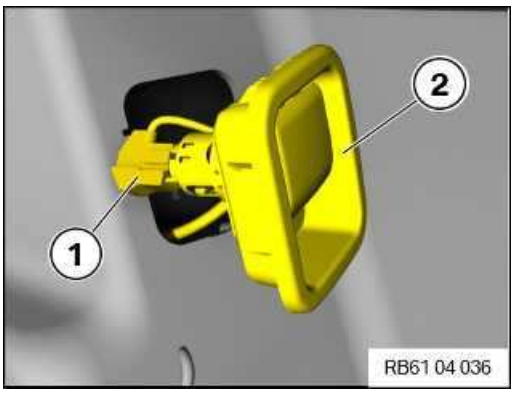


- Connect the connector (1) to the luggage compartment light (2).

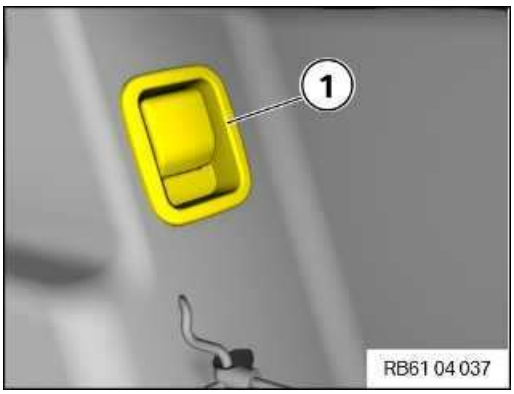


- Install the luggage compartment light (1).

13 – Install the fixture of the 12 V power socket

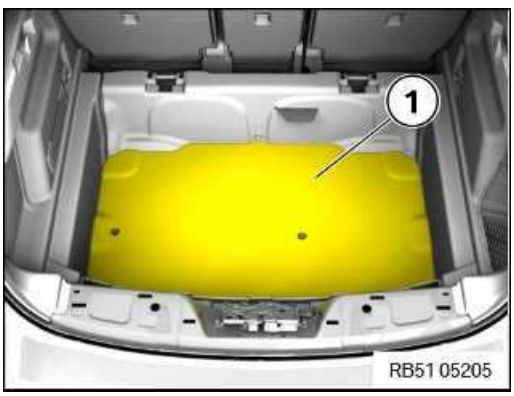


- Connect the connector (1) to the fixture (2) of the 12 V power socket and lock.



- Insert the fixture (1) of the 12 V power socket in the luggage compartment wheel arch trim panel and engage.

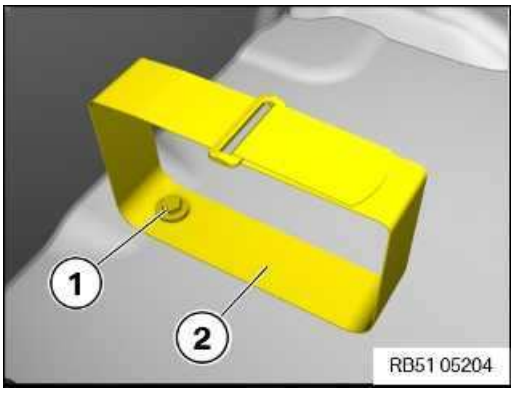
14 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

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15 – Inserting the Velcro fastener for the toolkit

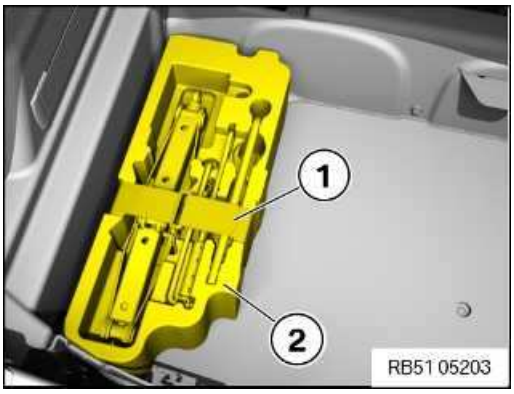


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

16 – Install the tool kit

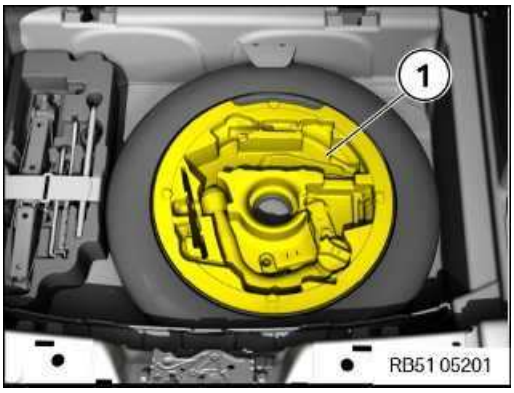


- Install the tool kit (2).
- Close the hook and loop tape (1).

17 – Install the emergency wheel

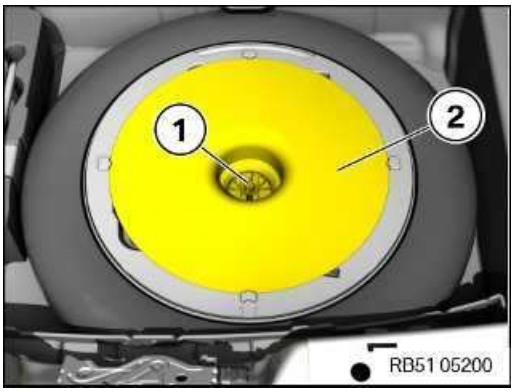


- Insert compact spare wheel(1).



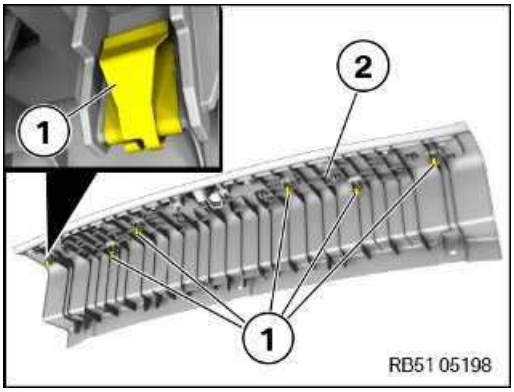
- Insert oddments tray into the compact spare wheel (1).

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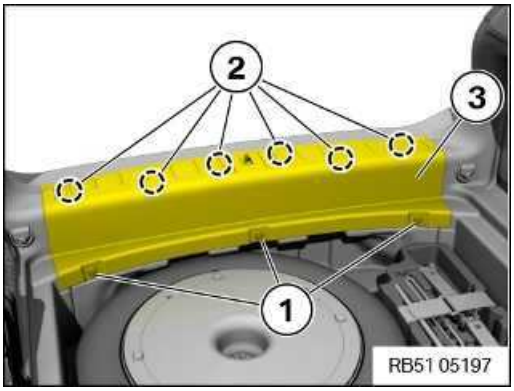


- Insert the lid (2).
- Hand-tighten the bolt (1).

18 – Installing loading edge trim

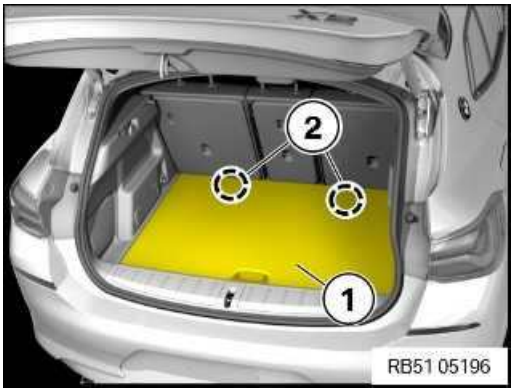


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

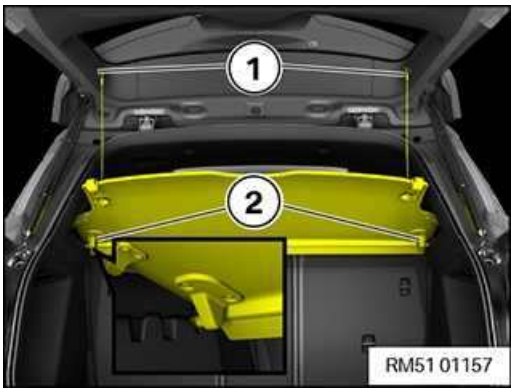
19 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

20 – Install trim panel for storage shelf (parcel shelf)

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- Insert the trim panel for the storage shelf into the guides (2).
- Attach the left and right retaining straps (1).

Additional Information

Overview of Tightening Torques

Lashing eye in luggage compartment — Used in step 11

Bolt M8 x 22		Tightening torque	21 Nm

Toolkit hook and loop tape to body — Used in step 15

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common — Used in step 9

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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51 47 065 Removing and installing/replacing sill trim, front left or right

NOTICE

Description is for left component only. Procedure on the right side is identical.

1 – Remove the sill trim



- Lever out and remove the sill trim (1) with the special tool **0 496 569 (00 9 325)** from the clips (2).

2 – Install the sill trim



- Check the clips (2) for damage and renew where required.

  The clips (2) must not be damaged or missing.
- Position the sill trim (1) correctly and engage it at the clips (2).

Additional Information

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

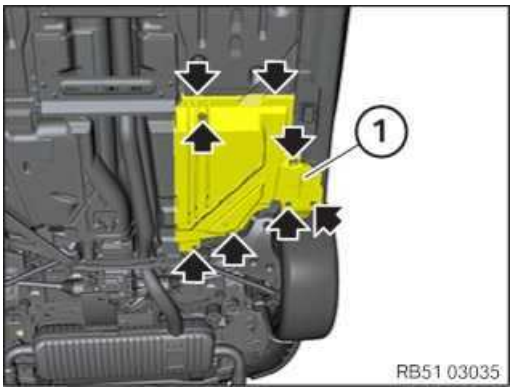
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51 75 ... Removing and installing/replacing tank cover on left or right

Necessary preliminary work:

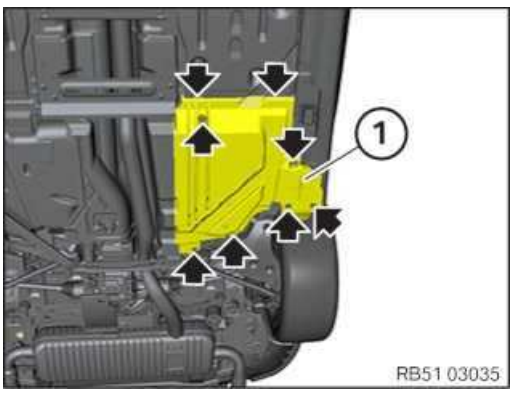
- Remove torsion strut

Removal:



Unscrew all bolts.
Remove tank cover (1).

Installation:



Install tank cover (1).
Tighten down all screws.
Tightening torque 51 75 1AZ.

Required follow-up work:

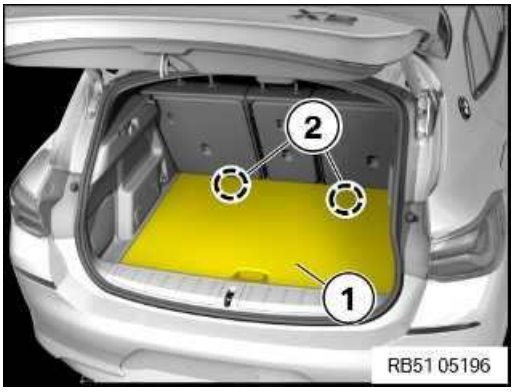
- Install torsion strut

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51 47 219 Removing and installing/replacing the loading edge trim

PRELIMINARY WORK

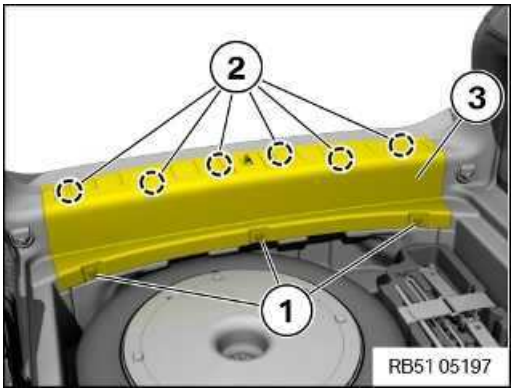
1 – Removing the luggage compartment removable panel



- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

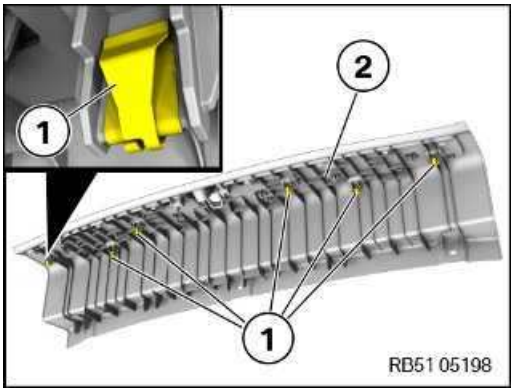
MAIN WORK

2 – Removing the loading edge trim

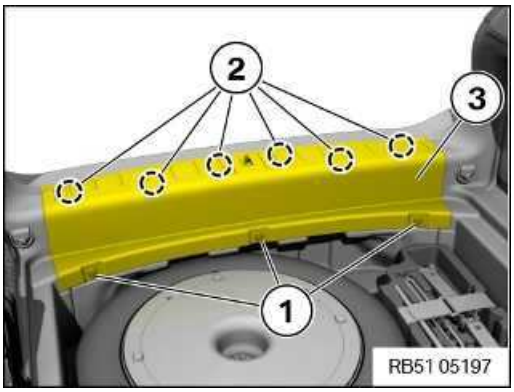


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

3 – Installing loading edge trim



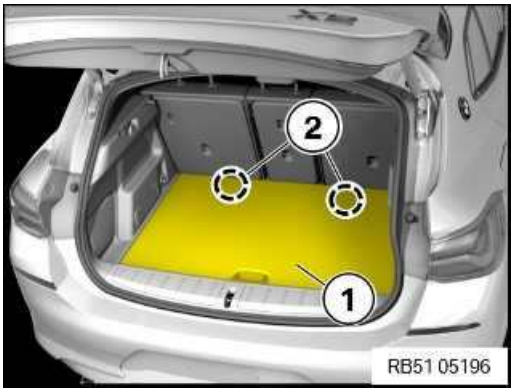
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

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4 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

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51 47 440 Removing and installing/replacing the rear carpet

RISK OF DAMAGE

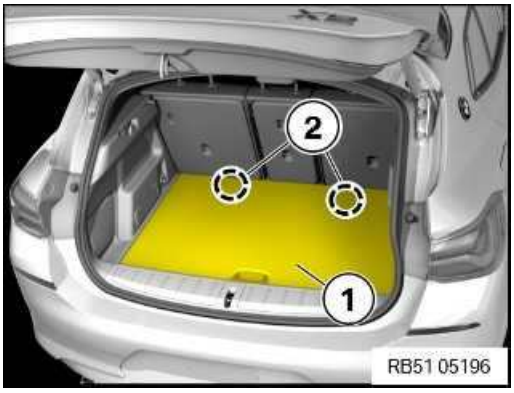
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

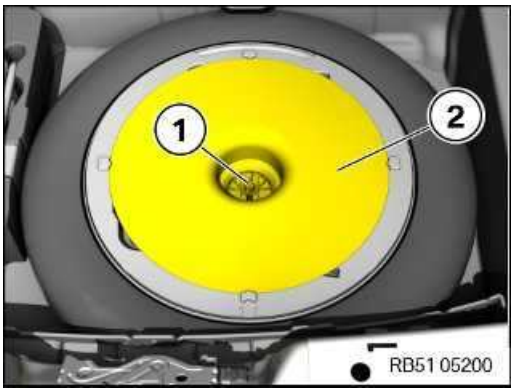
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel

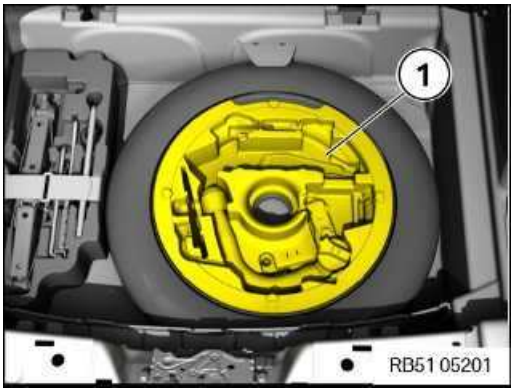


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the compact spare wheel



- Loosen screw (1).
- Remove the cover (2).



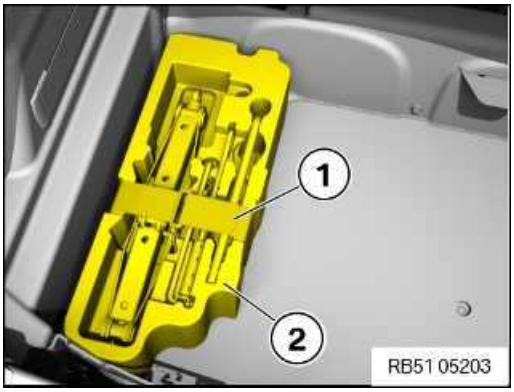
- Remove the oddments tray from the emergency wheel (1).

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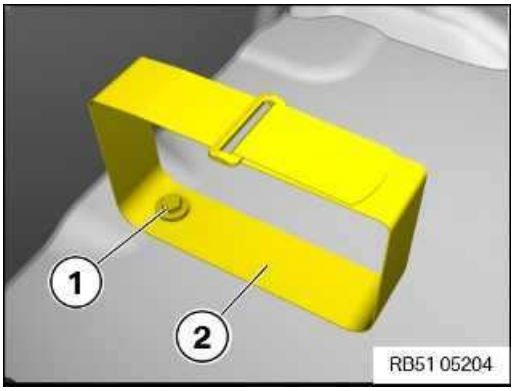
- Remove the emergency wheel (1).

3 – Remove the tool kit



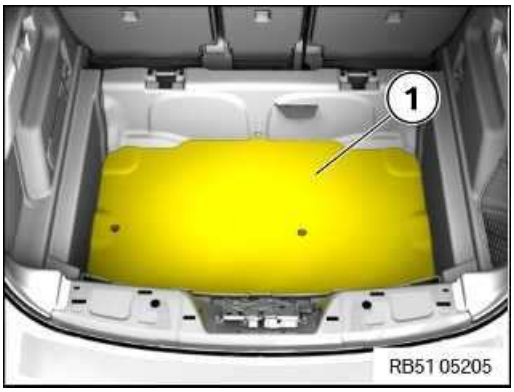
- Open the hook and loop tape (1).
- Remove the tool kit (2).

4 – Remove the hook and loop tape for the tool kit



- Loosen screw (1).
- Remove the hook and loop tape (2).

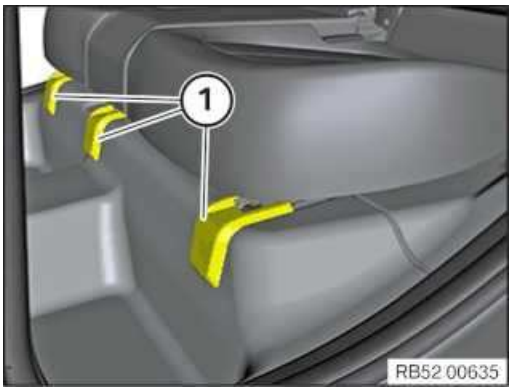
5 – Removing the luggage compartment floor trim panel



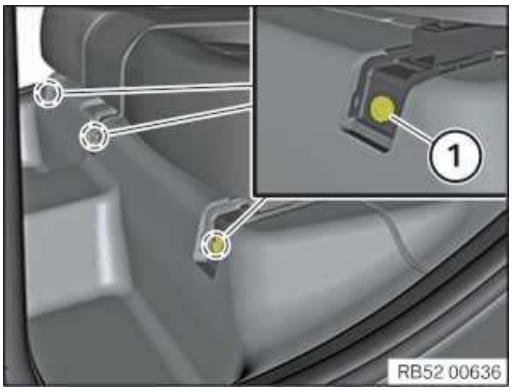
- Remove the luggage compartment floor trim panel (1) upwards.

6 – Remove seat bench

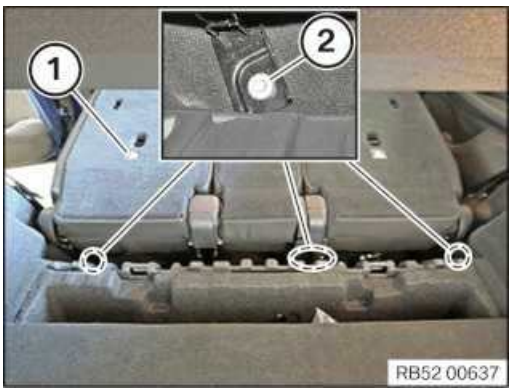
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- Unclip the cover (1) forwards.



- Loosen screws (1).



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Cover the door sill using protective covers.
- Fold down rear seat backrest (1) on left and right.
- Loosen screws (2).
- Disconnect existing plug connections where required.

RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.

- Lift out rear seat bench with the assistance of a second person.

7 – Remove both front seats

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WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

NOTICE

Description is for left component only. Procedure on the right side is identical.

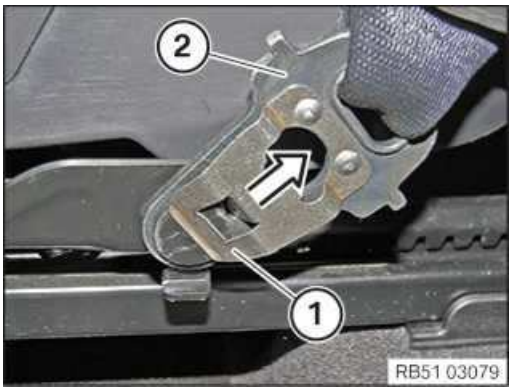
NOTICE

Perform the operations on the left and right side.

▸ **Remove the front end fitting**



- Slide the cover (1) on the seat belt (2) in an upward direction.

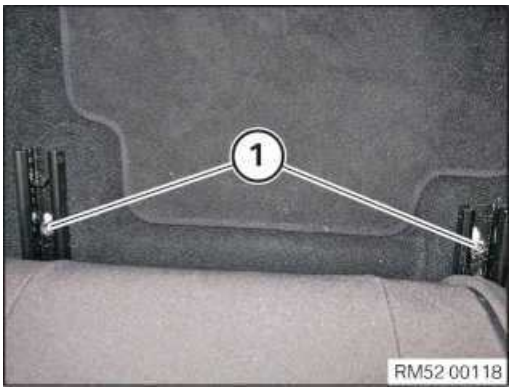


- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.



- Fully move the seat backwards.
- Loosen screws (1).

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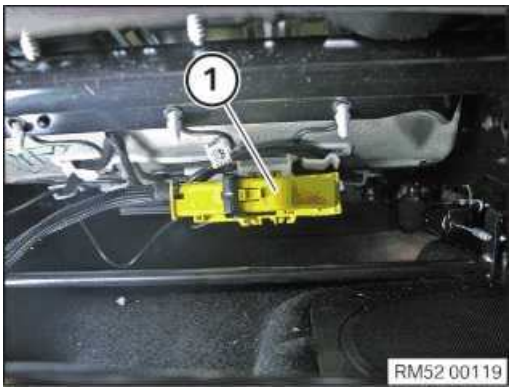


- Fully move the seat forwards.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Cover the door sill using protective covers.
- Fold the front seat back and disconnect the plug connection (1).

RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.

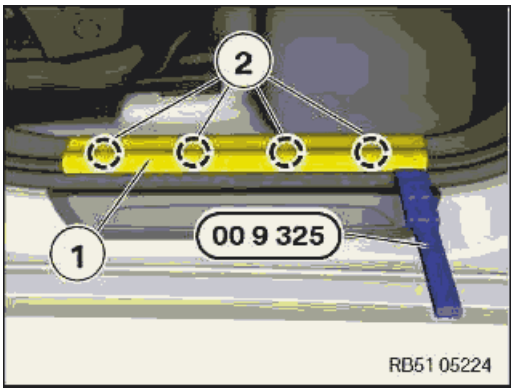
- Remove the front seat with the assistance of an auxiliary person.

8 – Remove front right door sill cover strip

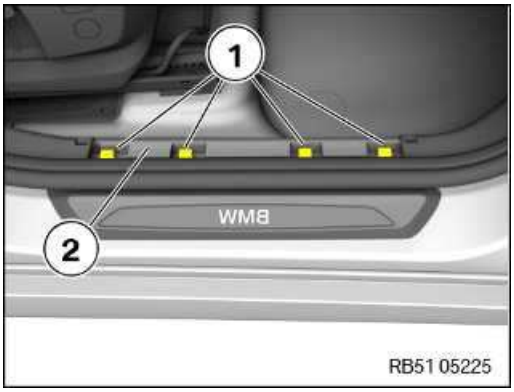
NOTICE

Description is for left component only. Procedure on the right side is identical.

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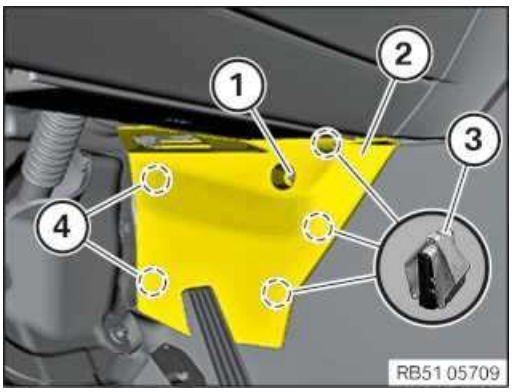
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

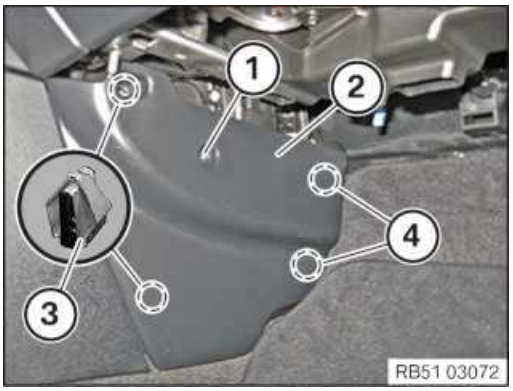
9 – Removing the side trim panel for the left and right centre console

▸ **Removing side trim panel for the left centre console**



- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

▸ **Removing side trim panel for the centre console on the right side**



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

10 – Remove gearshift lever cover

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- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.

  In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

11 – Remove the decorative trim from the centre console

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

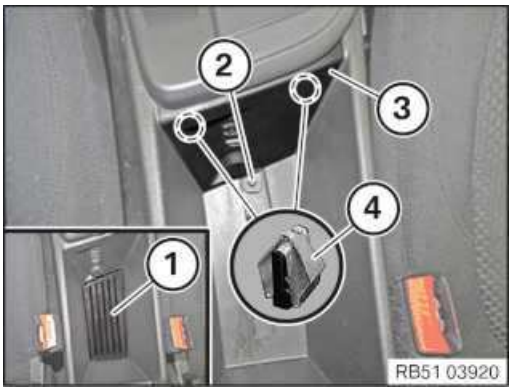


- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

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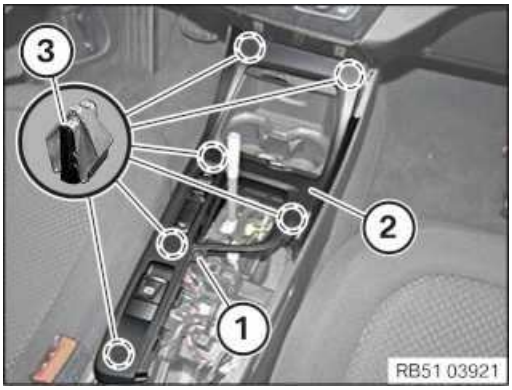


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

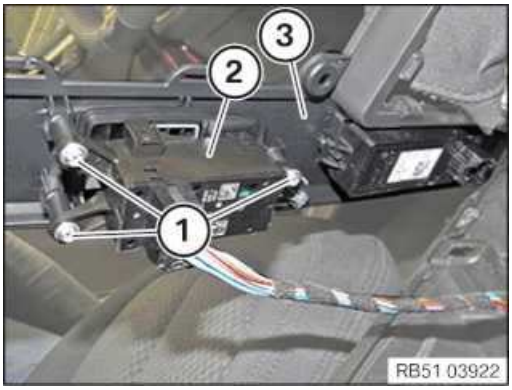


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

12 – Remove the centre console trim



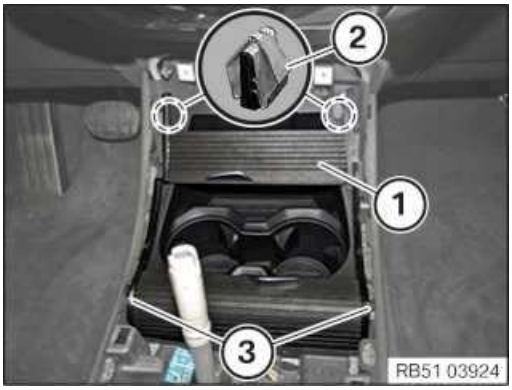
- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.

  The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

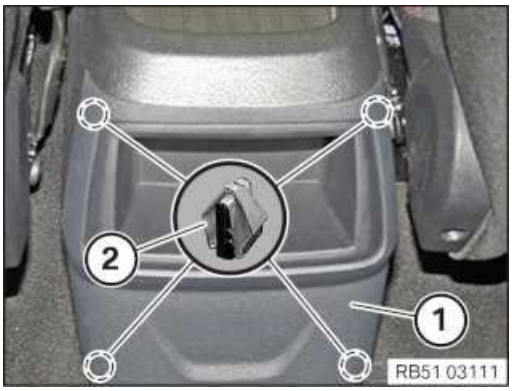
13 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

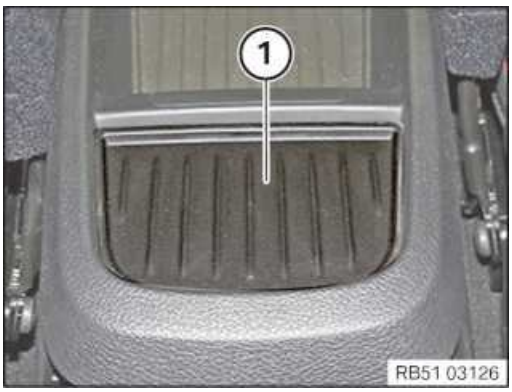
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14 – Removing the rear centre console trim

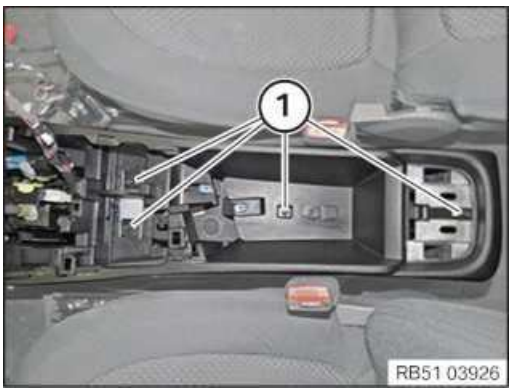


- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

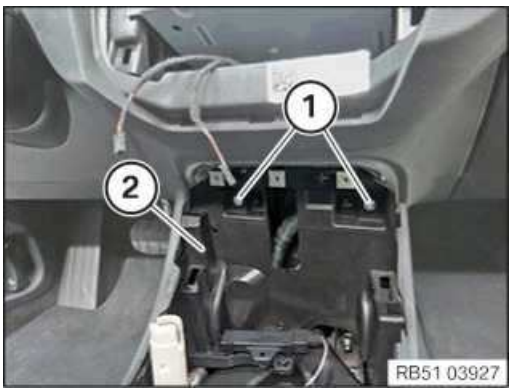
15 – Remove complete centre console



- Remove the cover (1).



- Loosen screws (1).



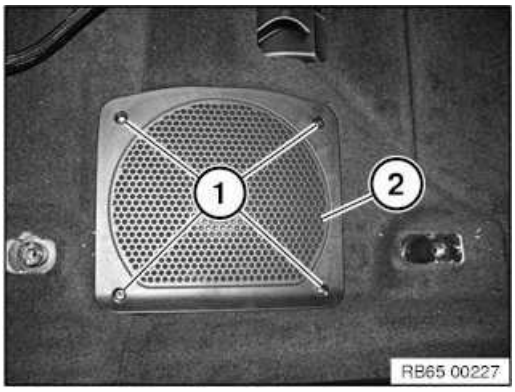
- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

16 – Removing the speaker trim from the left and right central bass

NOTICE

Description is for left component only. Procedure on the right side is identical.

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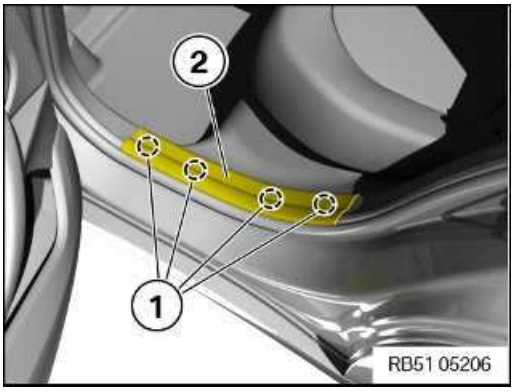
- Loosen screws (1).
- Remove the speaker trim from the central bass (2).

17 – Remove the door sill cover strip on the rear left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove rear entrance cover strip**



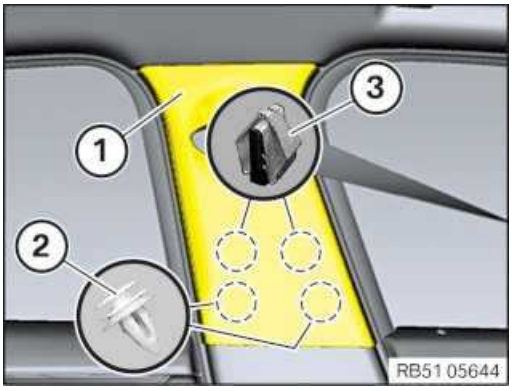
- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

18 – Removing the B-pillar trim panels at top left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially removing upper B-pillar trim panel**



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

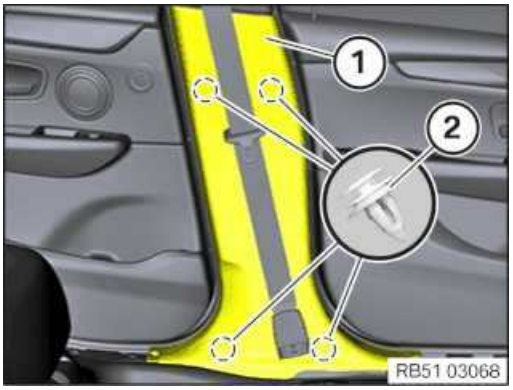
19 – Removing the left and right B-pillar trim panels at bottom

▸ **Remove the lower B-pillar trim panel**

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NOTICE

Description is for left component only. Procedure on the right side is identical.



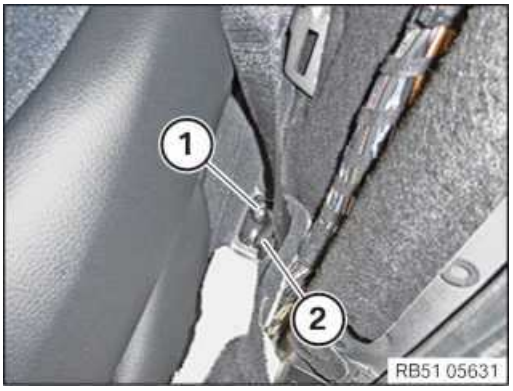
- Release the B-pillar trim panel (1) at bottom starting from the clips (2).
- Feed out and remove the B-pillar trim panel (1) inwards.

20 – Removing the bottom left and right C-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Remove the bottom C-pillar trim panel**

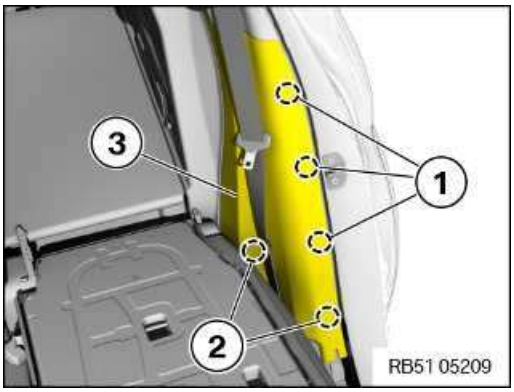


- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).



- Release the edge protection (1) in area of the bottom C-pillar trim panel.

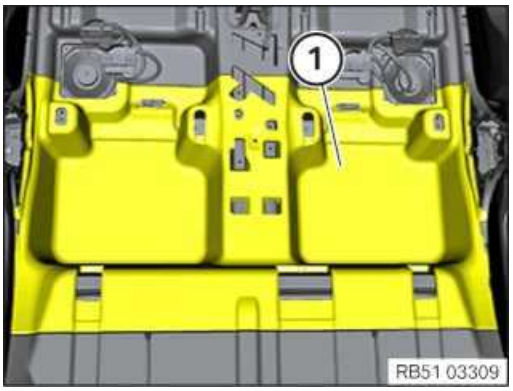
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- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

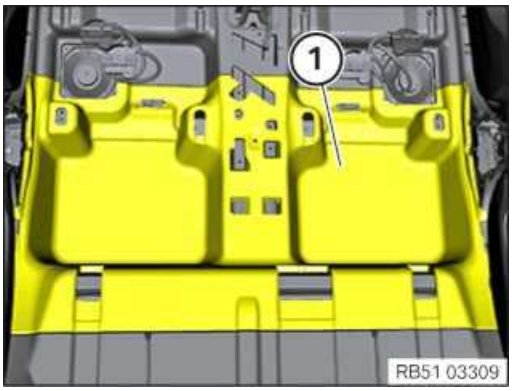
MAIN WORK

21 – Remove the rear carpet



- Raise the carpet (1) up and remove it from the vehicle.

22 – Install the rear carpet



- Place the carpet (1) in the motor vehicle.

  Make sure the carpet (1) is positioned correctly at all adjacent parts.

POSTPROCESSES

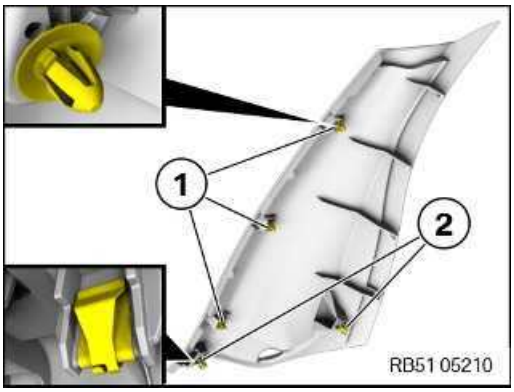
23 – Install C-pillar trim panel at bottom left and right

NOTICE

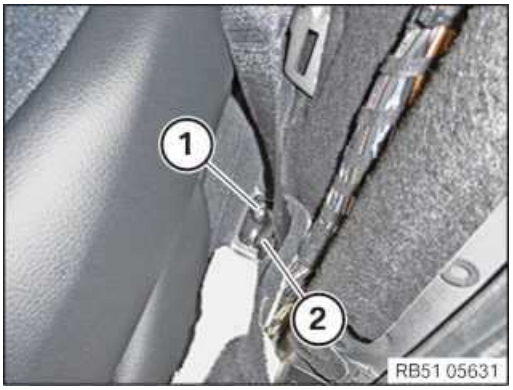
Description is for left component only. Procedure on the right side is identical.

▸ **Install the bottom C-pillar trim panel**

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- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

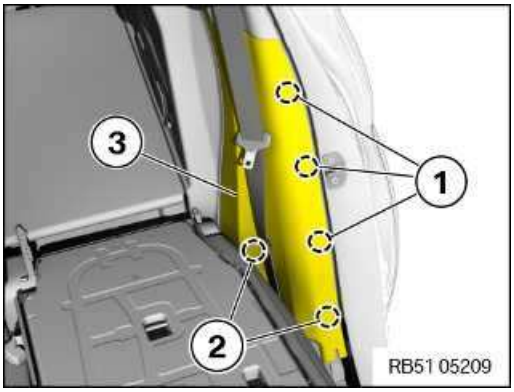


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

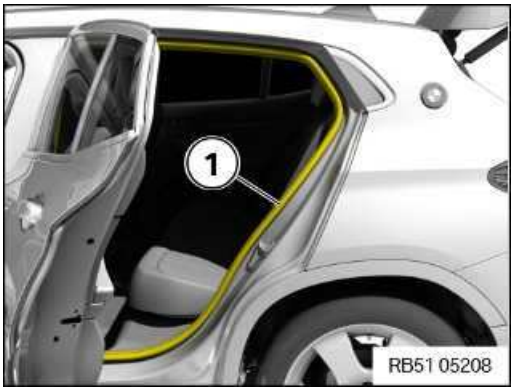
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

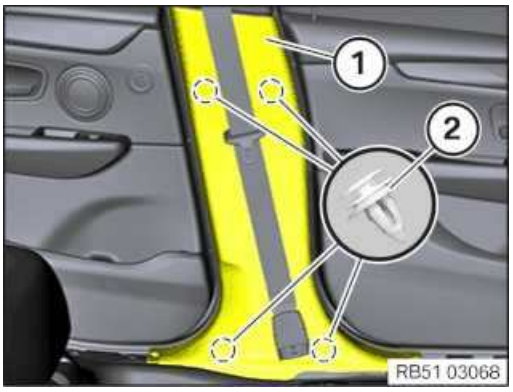
24 – Install the left and right B-pillar trim panels at bottom

▸ **Install the lower B-pillar trim panel**

NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Renew damaged clips (2).

  Parts: Clips
- Feed in the B-pillar trim panel (1) at the top and position correctly.
- Clip in the B-pillar trim panel (1) at the clips (2).
- Make sure the B-pillar trim panel (1) is correctly positioned on the edge protection.

25 – Installing the top left and right B-pillar trim panels

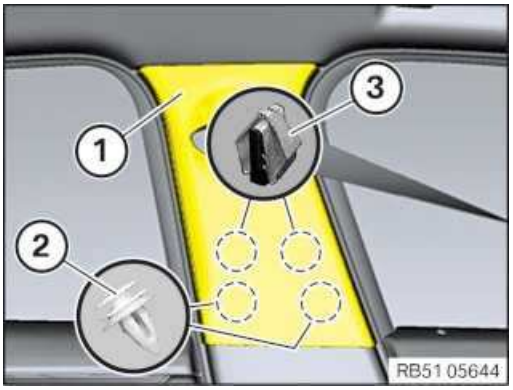
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially installing upper B-pillar trim panel**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



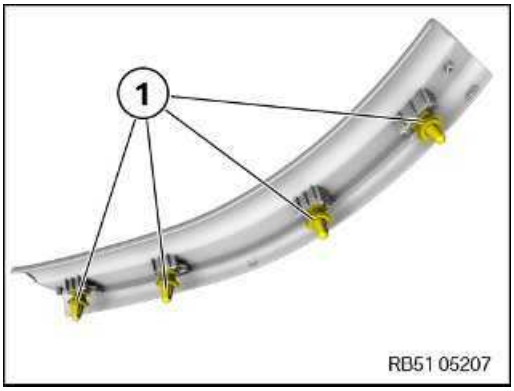
- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

26 – Install the door sill cover strip on the rear left and right

NOTICE

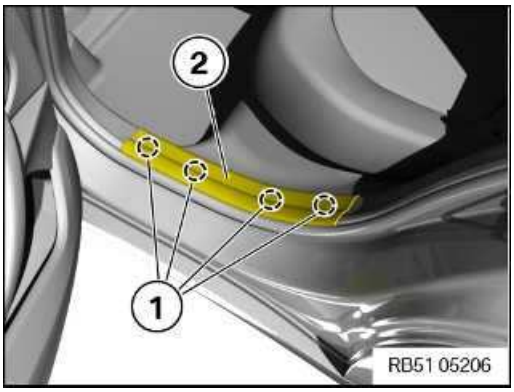
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the rear door sill cover strip**



- Check the clips (1) for damage and renew where required.

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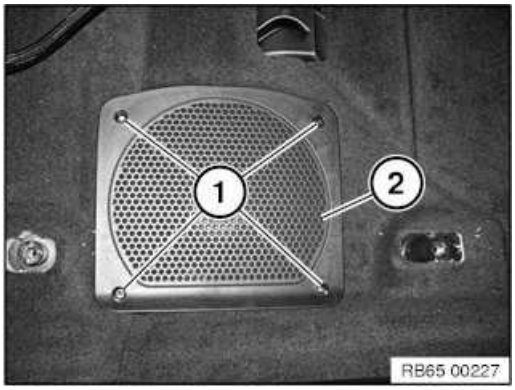


- Clip in the door sill cover strip (2) with the clips (1).

27 – Installing the speaker trim on the left and right central bass

NOTICE

Description is for left component only. Procedure on the right side is identical.

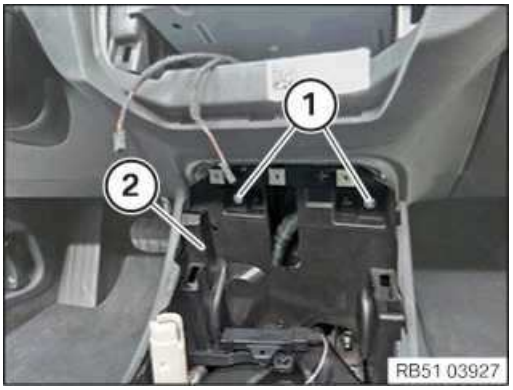


- Position the speaker trim on central bass (2).
- Tighten the screws (1).

Central bass speaker trim

Screw		Tightening torque	2 Nm

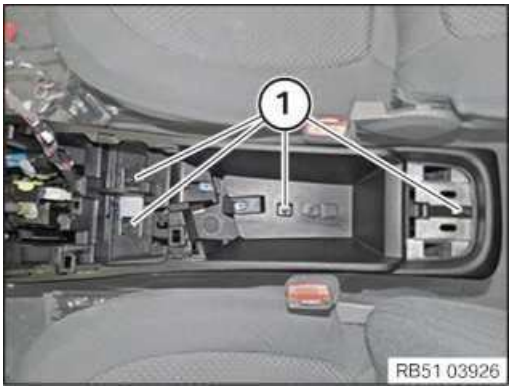
28 – Install centre console, complete



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

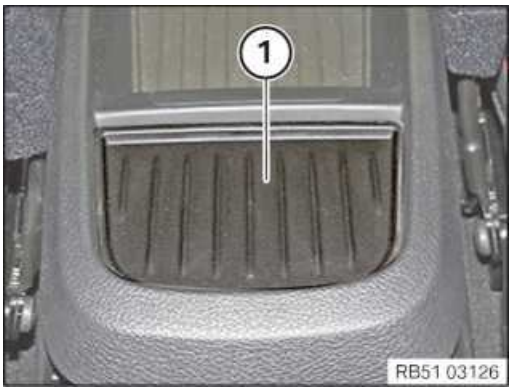


- Tighten the screws (1).

Screw connection for centre console

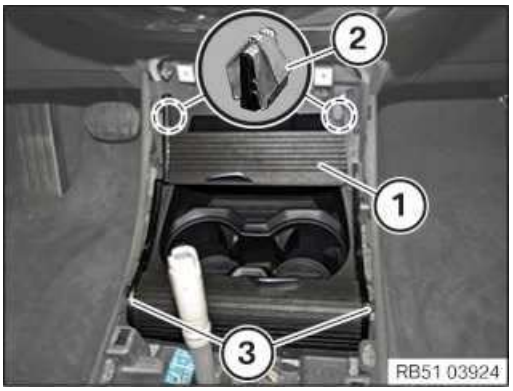
Oval-head screw		Tightening torque	1,8 Nm

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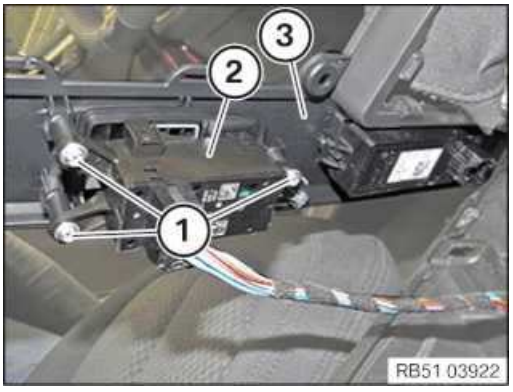
- Install the cover (1).

29 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

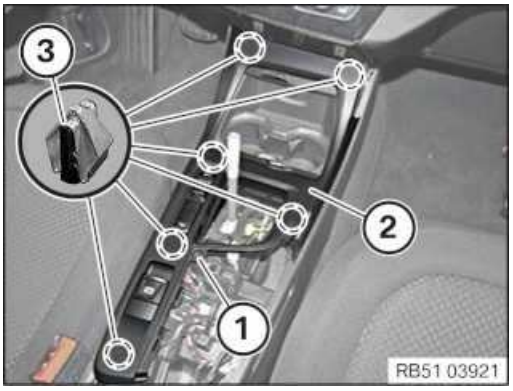
30 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm



- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

31 – Installing the decorative trim to the centre console

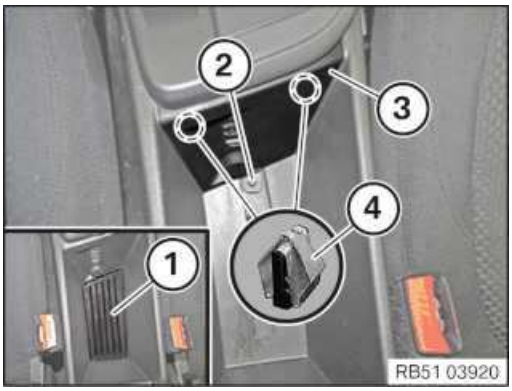
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- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

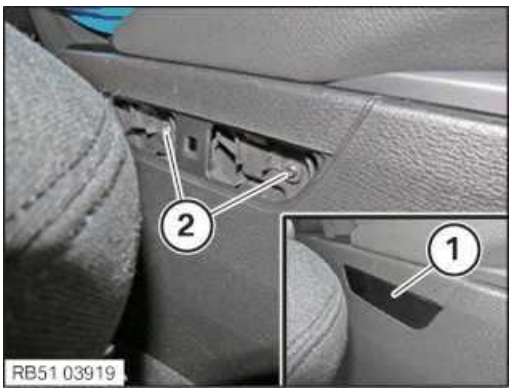


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm

- Install cover (1) and engage.

32 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

  The anti-twist lock must bite.
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

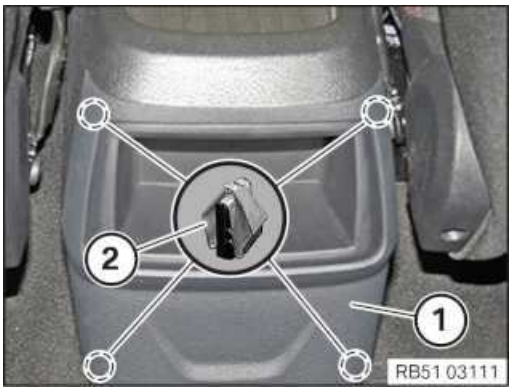
  When installing, the tie rod of the gearshift lever must not be bent.

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- Clip in gaiter (arrows).

33 – Installing the rear centre console trim



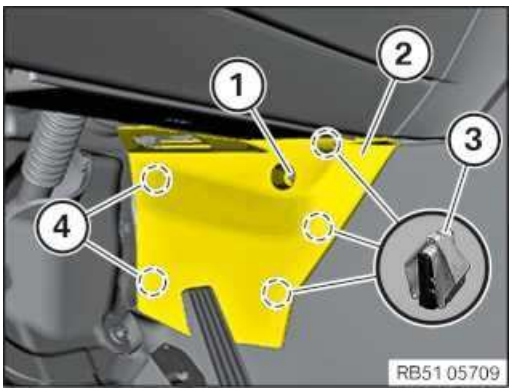
- Install centre console trim (1) and engage it into clamps (2).

34 – Installing side trim panel for the left and right centre console

▸ **Installing side trim panel for the left centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

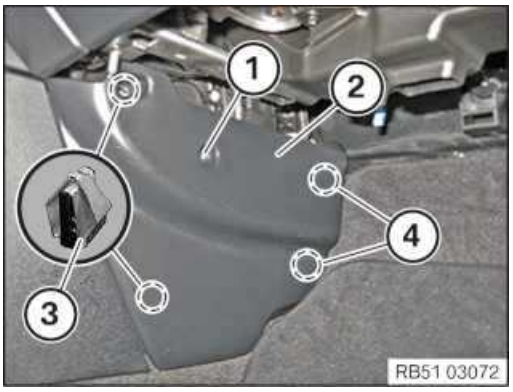
Oval-head screw		Tightening torque	1,8 Nm

▸ **Installing side trim panel for the right centre console**

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

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- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

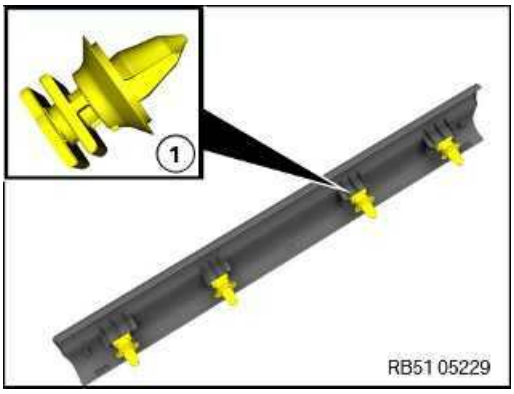
Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm

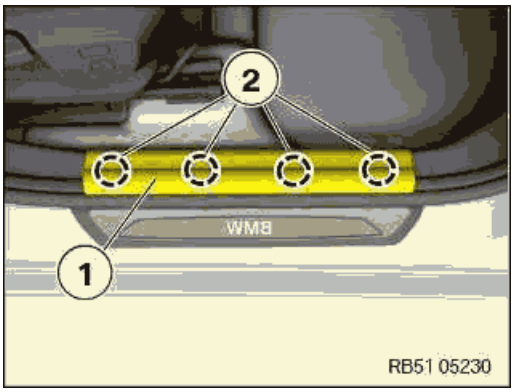
35 – Install the front right door sill cover strip

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

36 – Install both front seats

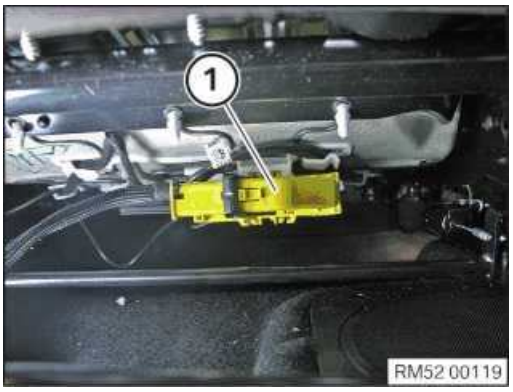
NOTICE

The data status was not available at the time of publication.

NOTICE

Perform the operations on the left and right side.

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RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Cover the door sill using protective covers.

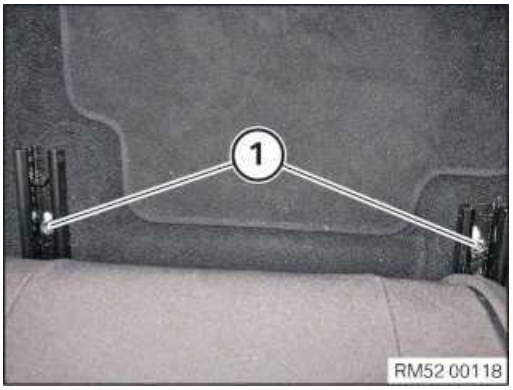
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect the plug connection (1).



- Move front seat rearwards.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm



- Move front seat forwards.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

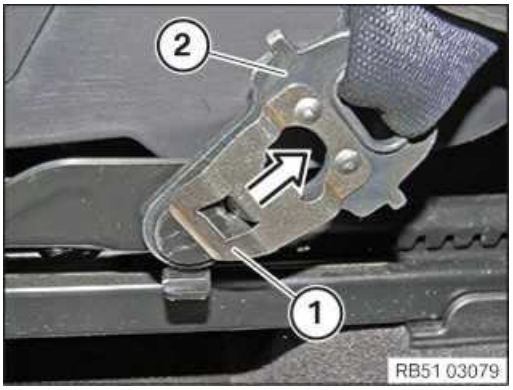
▸ **Disconnecting all battery earth leads**

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- See additional information.

▶ **Install front end fitting**



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

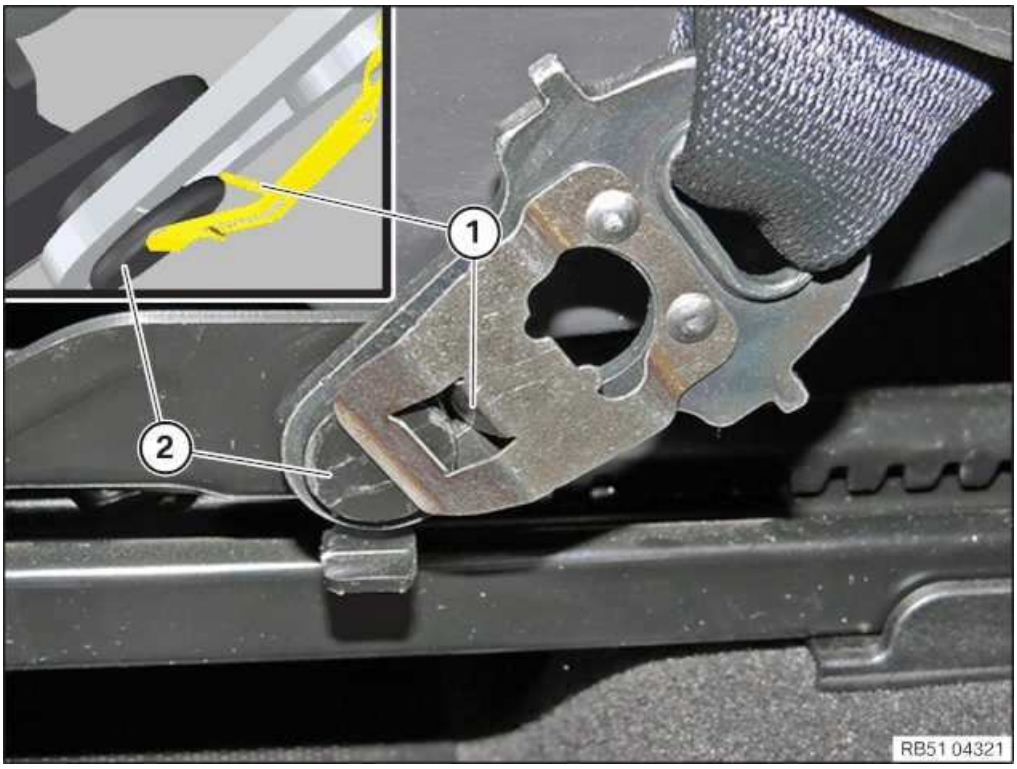
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▷ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

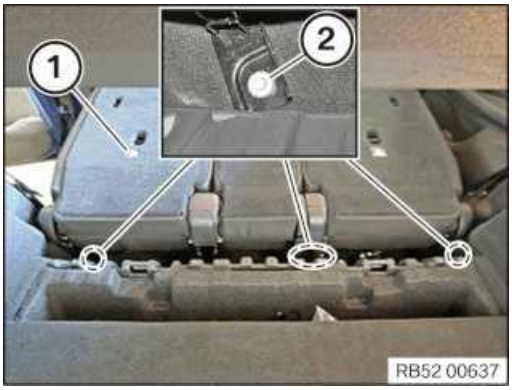
Your browser doesn't support HTML5 video.

◁



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

37 – Install rear seat bench



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

- Cover the door sill using protective covers.

RISK OF DAMAGE

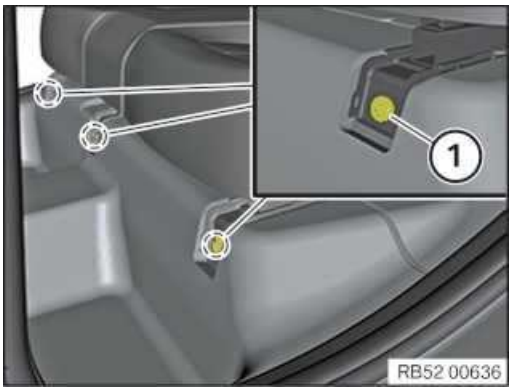
Heavy component.

Heavy components can lead to injury or damage.

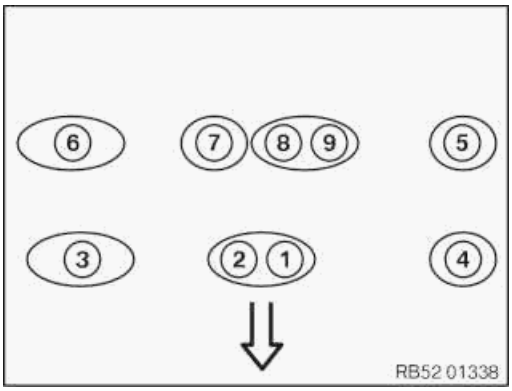
- Remove and install heavy components with the aid of another person/other persons.

- Insert the rear seat bench into the vehicle and position it with the assistance of a second person.
- If necessary, connect any available plug connections.
- Screw the bolts (2) in a few turns.

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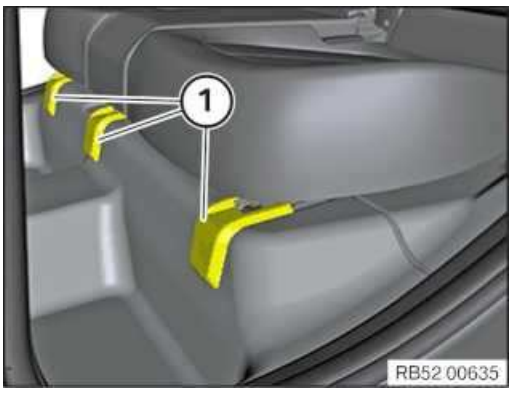
- Screw the bolts (1) in a few turns.



- Tighten the screws in a sequence from 1-9.

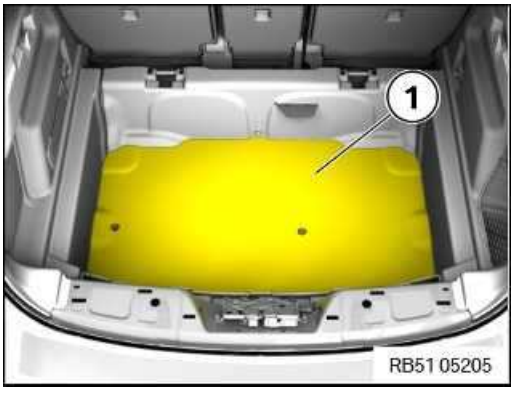
Seat bench to body

Oval-head screw		42 Nm



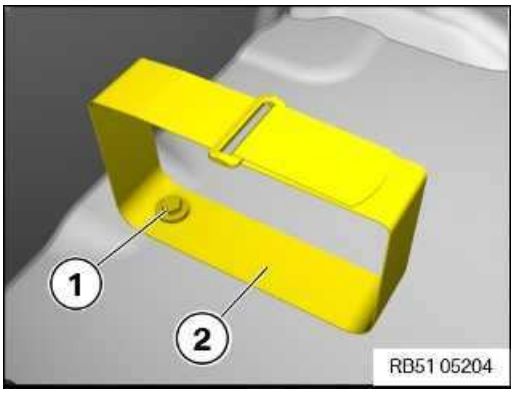
- Clip in the covers (1).

38 – Installing the luggage compartment floor trim panel



- Position the luggage compartment floor trim panel (1).

39 – Inserting the Velcro fastener for the toolkit



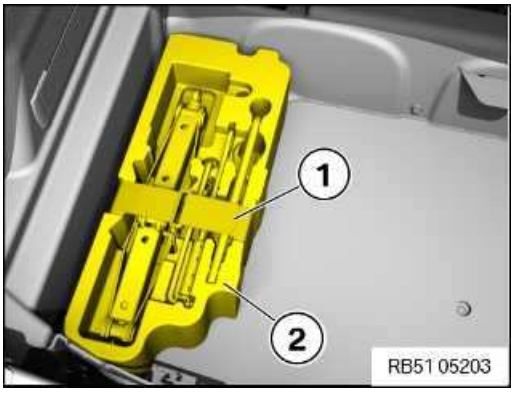
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

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40 – Install the tool kit

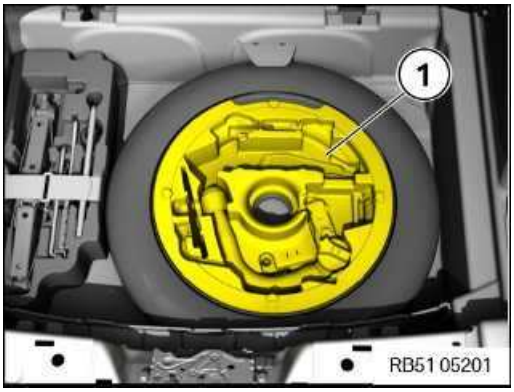


- Install the tool kit (2).
- Close the hook and loop tape (1).

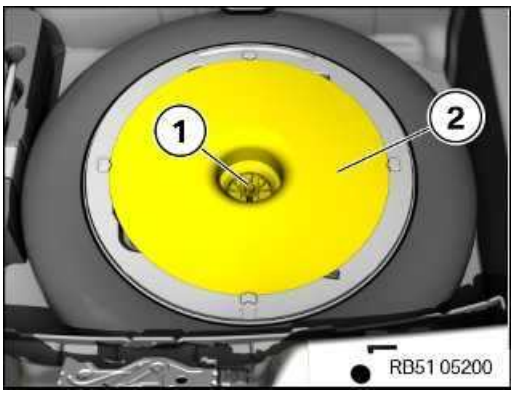
41 – Install the emergency wheel



- Insert compact spare wheel(1).



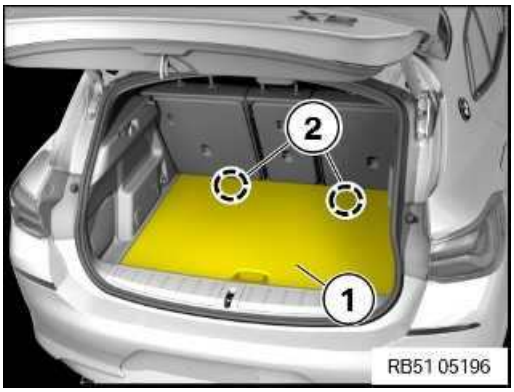
- Insert oddments tray into the compact spare wheel (1).



- Insert the lid (2).
- Hand-tighten the bolt (1).

42 – Installing the luggage compartment removable panel

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- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

End fitting to body — Used in step 23

Screw	Renew screw.	Tightening torque	42 Nm

Central bass speaker trim — Used in step 27

Screw		Tightening torque	2 Nm

Screw connection for centre console — Used in step 28 30 31

Oval-head screw		Tightening torque	1,8 Nm

Parking brake button — Used in step 30

Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console — Used in step 31 34

Oval-head screw		Tightening torque	1,8 Nm

Seat to body — Used in step 36

M10	Renew screw.	Tightening torque	42 Nm

Seat bench to body — Used in step 37

Oval-head screw			42 Nm

Toolkit hook and loop tape to body — Used in step 39

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge

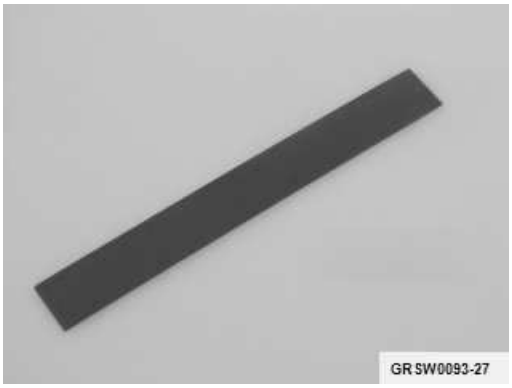


Common — Used in step 8 12 14 18

Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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0 496 571 (00 9 327) Wedge



Common	Used in step 11
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	7 36
61 20 900 Disconnecting and connecting battery earth lead	7 36
61 20 900 Disconnecting and connecting battery earth lead	7 36
61 20 900 Disconnecting and connecting battery earth lead	7 36
61 20 900 Disconnecting and connecting battery earth lead	7 36
61 20 900 Disconnecting and connecting battery earth lead	7 36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	7 36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	7 36
61 20 900 Disconnecting and connecting battery earth lead	7 36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	7 36
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	7 36
61 20 900 Disconnecting and connecting battery earth lead	7 36
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	7 36
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61 20 900 Disconnecting and connecting battery earth lead	7 36

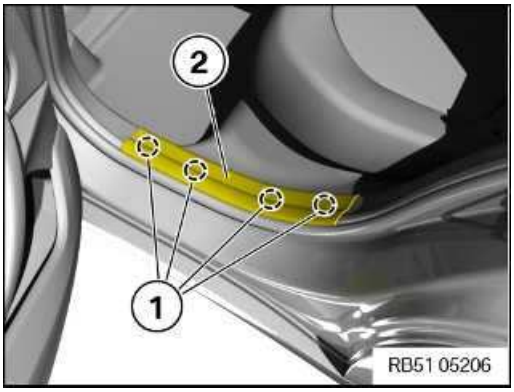
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51 47 030 Removing and installing/replacing the rear left or right door sill cover strip (inner)

NOTICE

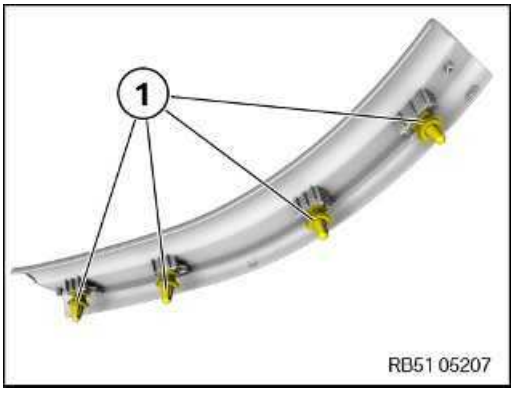
Description is for left component only. Procedure on the right side is identical.

1 – Remove rear entrance cover strip

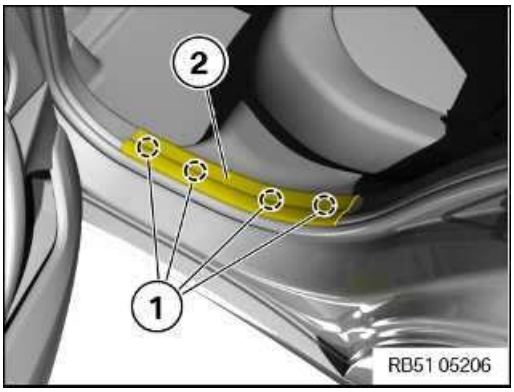


- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

2 – Installing the rear door sill cover strip



- Check the clips (1) for damage and renew where required.



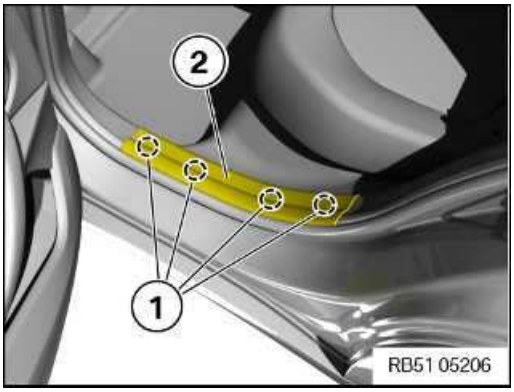
- Clip in the door sill cover strip (2) with the clips (1).

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51 47 098 Removing and installing/replacing trim on C-pillar at bottom left or right

PRELIMINARY WORK

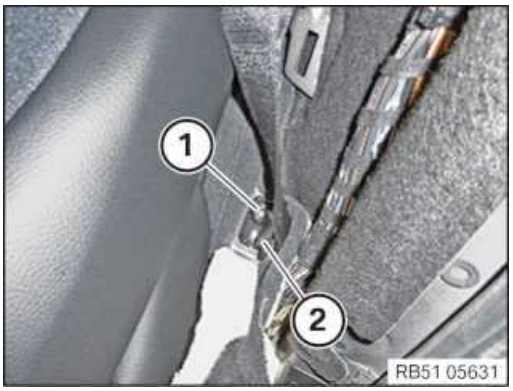
1 – Remove rear entrance cover strip



- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

MAIN WORK

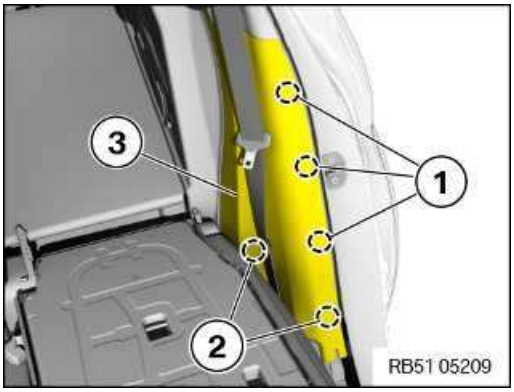
2 – Remove the bottom C-pillar trim panel



- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).



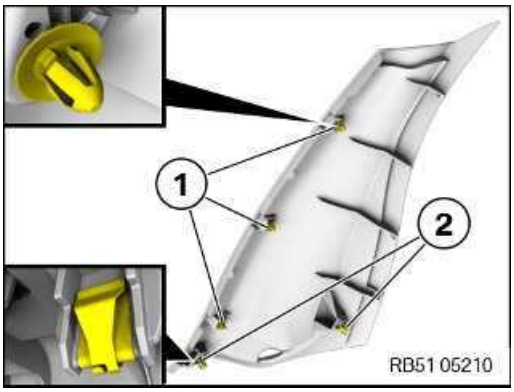
- Release the edge protection (1) in area of the bottom C-pillar trim panel.



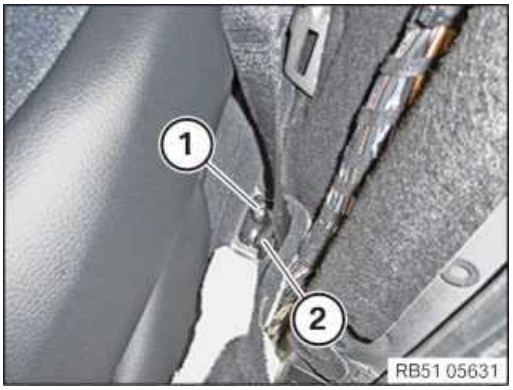
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Install the bottom C-pillar trim panel

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- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

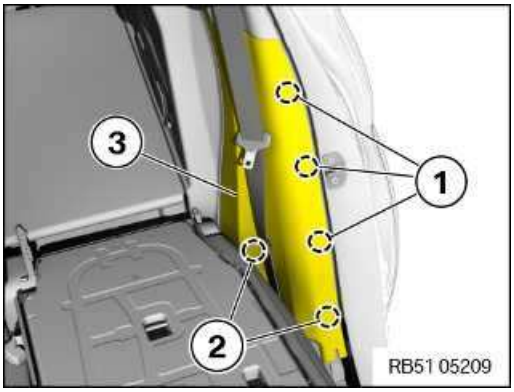


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

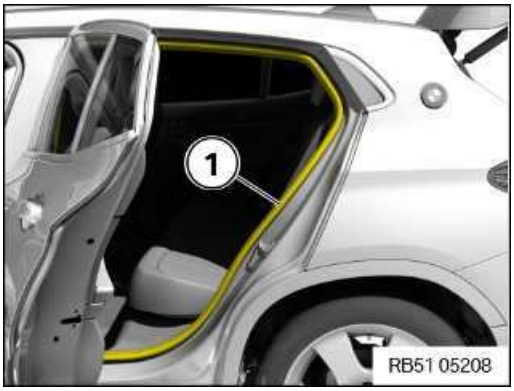
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.



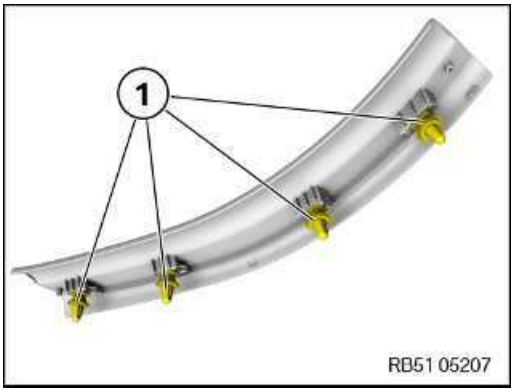
- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).



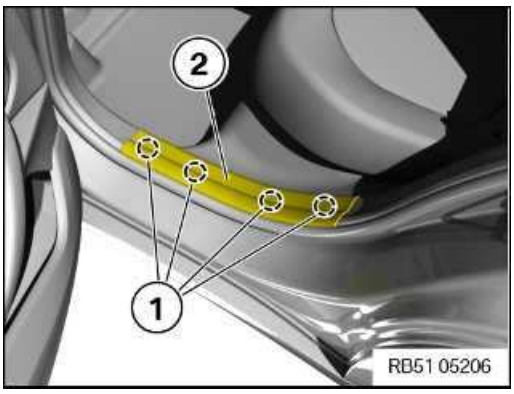
- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

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4 – Installing the rear door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip in the door sill cover strip (2) with the clips (1).

Additional Information

Overview of Tightening Torques

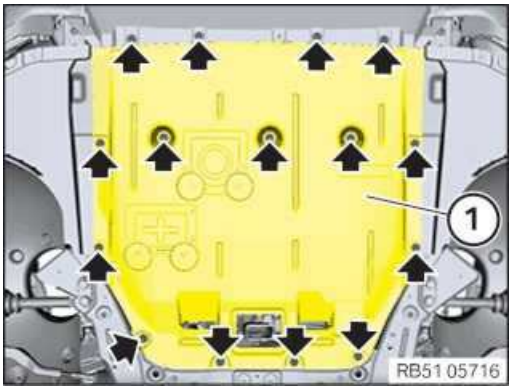
End fitting to body Used in step 3

Screw	Renew screw.	Tightening torque	42 Nm

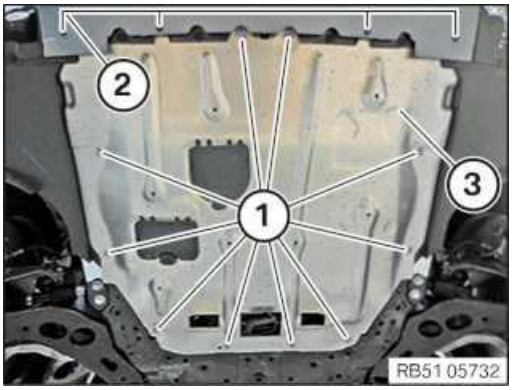
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51 47 490 Removing and installing/replacing underbody protection (front)

1 – Removing the front underbody protection

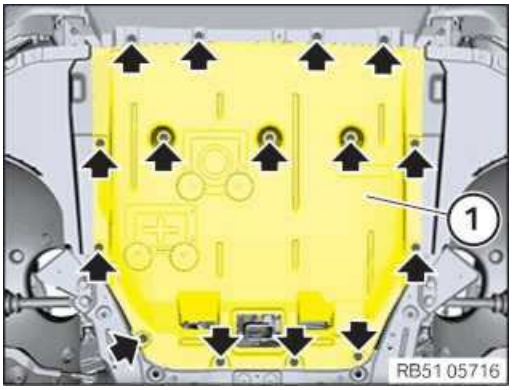


- Remove screws (arrows).
- Thread out and remove the front underbody protection (1) from the bumper panel.



- **Equipment specification with metal underride protection:**
- Loosen screws (1) and (2).
- Thread out and remove the underride protection (3).

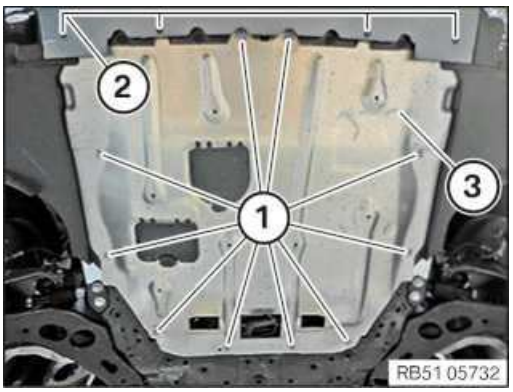
2 – Installing the front underbody protection



- Guide the front underbody protection (1) in under the bumper panel and position it at the screw points.
- Tighten screws (arrows).

Underbody protection front

Screw for thermoplastic plastic		Tightening torque	2,6 Nm
Hexagon screw M6x20		Tightening torque	8 Nm



- **Equipment specification with metal underride guard:**
- Guide in and attach the underride guard (3).
- Tighten down screws (1) and (2).

Underbody protection front

Screw for thermoplastic plastic		Tightening torque	2,6 Nm
Hexagon screw M6x20		Tightening torque	8 Nm

Additional Information

Overview of Tightening Torques

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Underbody protection front

Used in step 2

Screw for thermoplastic plastic		Tightening torque	2,6 Nm
Hexagon screw M6x20		Tightening torque	8 Nm

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51 48 ... Notes for bonding sound insulation (SI), doors



Special tools required:

- 51 0 300

Attention!

Do not yank at the sound insulation (risk of damage).

General:

Sound insulation is bonded to the inner door panel.

Bonded sound insulation must not be subjected to load (e.g. leak test) before 5 hours have elapsed.

On-the-job safety:

When working with bonding products (adhesive, cleaning agent, etc.):

- Wear safety goggles, protective gloves and if necessary an apron.
- Ensure the area is well ventilated.
- Change work clothing contaminated with adhesive immediately.
- Change work clothing contaminated with solvents and swelling agents immediately (keep spare work clothing on hand).
- Take skin protection measures, provide washing facilities including hot water, use silicone-free skin creams.
- Always keep an eye douche on hand, change the water regularly (once a month).
- Comply with the relevant safety regulations.

Handling adhesive area on inner door panel:

Adhesive	Cleaning
a. Butyl bead applied to sound insulation with protective film b. Butyl mini-round profile ⌀ 4 mm from the roller c. Butyl round profile ⌀ 6 mm from the roller	a. Cleaning agentR2 *Under no circumstances: paint thinning* b. Carry out bonding only after an air drying time ≥ 1 min. Air drying time may be omitted if the entire bonding surface is wiped with a dry cloth c. After cleaning, the bonding surface may not be touched with hands or fouled again

Repair in area of sound insulation, door:

Repair	
	• Cut the butyl rope between the sound insulation and the inner door panel with a sharp knife • After the repair is finished, position a new butyl rope ⌀ 4 mm directly on the original adhesive bead • Heat the butyl bead with a standard hot air blower until the butyl rope strings when touched slightly. Do not damage the sound insulation in the process • Press on with special tool 51 0 300. Perform this work extremely carefully because the increased amount of adhesive requires contact pressure of ≥ 20 N/cm^2 (compared to firm thumb pressure ~ 30 N/cm^2) • Visually check the adhesive bead and its compression (no capillaries or broken adhesive bead permitted)

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in the event of damaged sound insulation or leakage	• In the cases mentioned, the complete sound insulation must be replaced. After removing the sound insulation, removal all butyl remnants from the inner door panel. Apply 6 mm ⌀ butyl rope to new sound insulation • Press on with special tool 51 0 300. Contact pressure ≥ 20 N/cm^2 (compare to firm thumb pressure ~ 30 N/cm^2)

The sound insulation must be bonded watertight below the door lock:

- Flat bonding surface required all round.
- No bonding in the event of moisture (e.g. condensation, etc.).
- Bonding area must not show any traces of adhesion-reducing residues (e.g. separating agents, greases, oils, paraffins, plastisols, cavity wax, polishing dust residues, etc.).
- Remove the protective film directly before joining (under no circumstances remove earlier, since the butyl, because of its stickiness, will very quickly pick up adhesion-reducing dirt contaminants).
- The sound insulation must be attached with positional accuracy to the inner door panel because it will no longer be possible to change the position without damaging the butyl bead.
- With repainted areas, the maximum permitted temperature of 90°C may not be exceeded in the area of the sound insulation. Otherwise, the sound insulation must be removed (and replaced, if necessary).

Expiry date of adhesive:

24 months, see label on packaging.

Disposal of the cleaning cloth:

Cleaning cloths and cleaning agent residues are hazardous waste (see also safety data sheet).

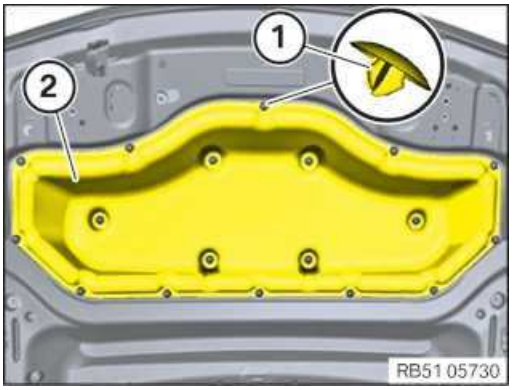
Disposal of adhesive:

Hazardous waste (see also safety data sheet).

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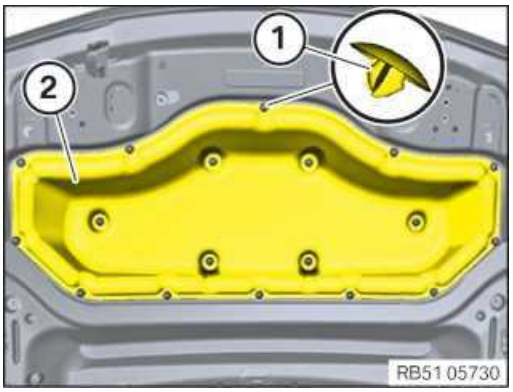
51 48 001 Removing and installing/replacing insulation lining on engine hood/bonnet

1 – Remove the damping material on the bonnet



- Unclip all clips (1) with a suitable plastic wedge.
- Remove the damping material from the bonnet (2) in a downwards direction.

2 – Install the damping material on the bonnet



- Mounting the damping material on the bonnet (2).
- Mount all clips (1).

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51 48 060 Removing and installing/replacing sound insulation in left or right front door

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

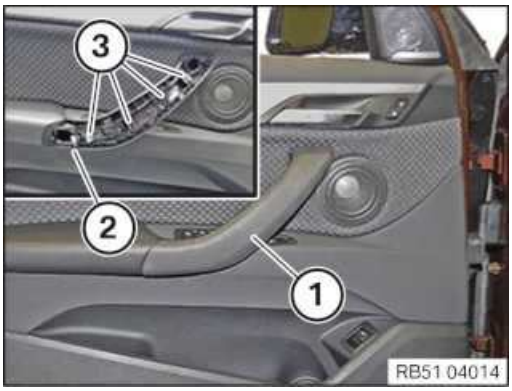
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

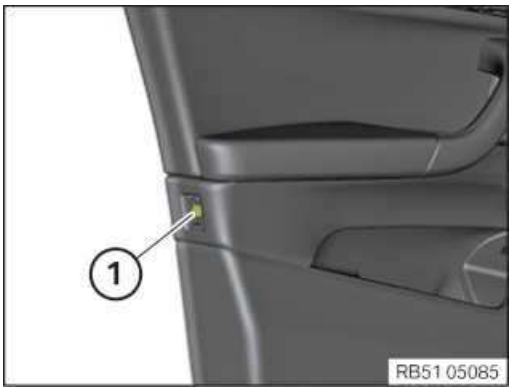
RISK OF DAMAGE

Scratches.

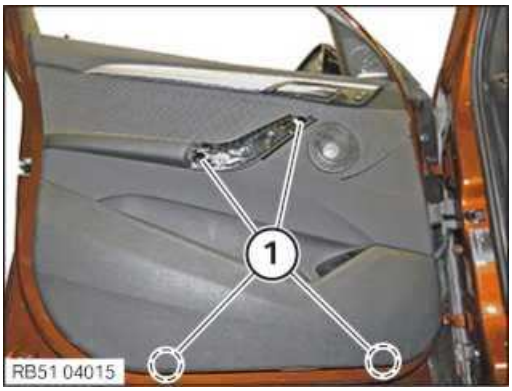
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

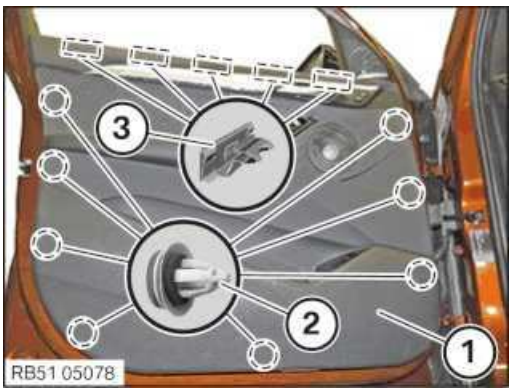
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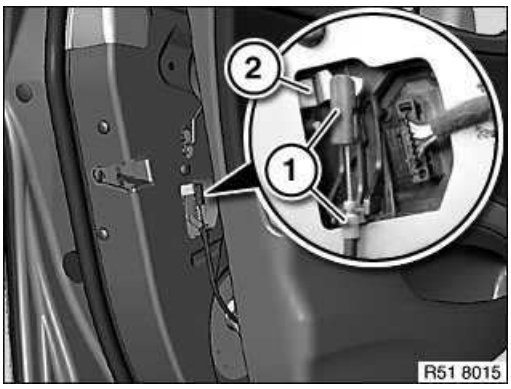
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clips (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

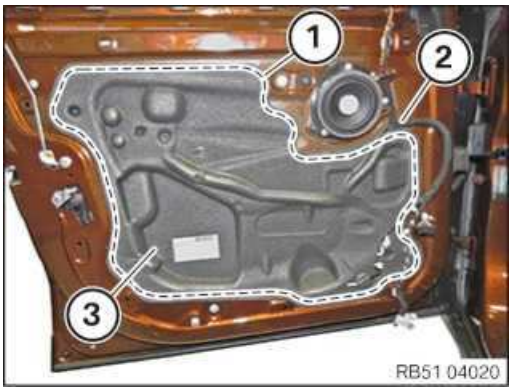
MAIN WORK

3 – Removing sound insulation on front door

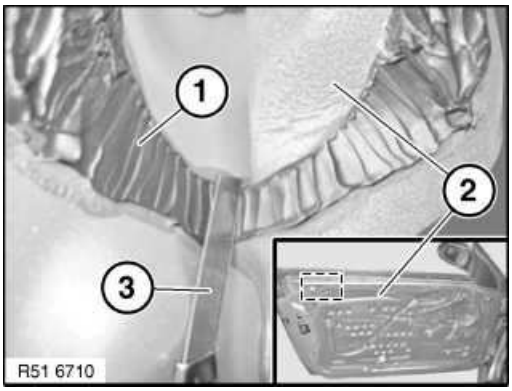
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

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- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

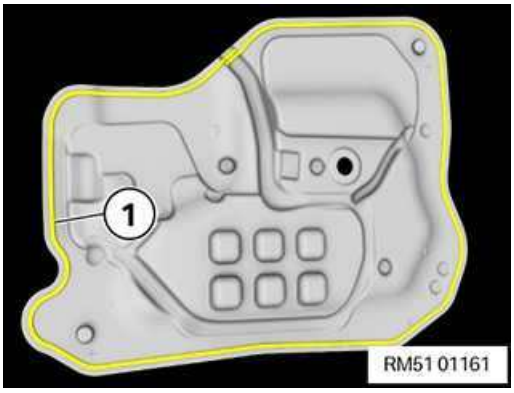


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Installing sound insulation on front door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

- Check sound insulation for damage.

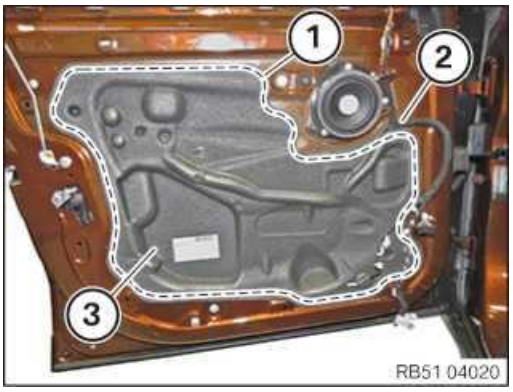
Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.

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- Slide the cable (2) slightly to the side.
- Press the sound insulation (3) hard along the mark (1) on the inner door panel.

POSTPROCESSES

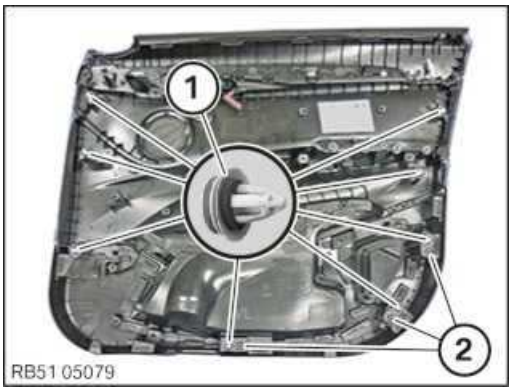
5 – Install front door trim panel

RISK OF DAMAGE

Scratches.

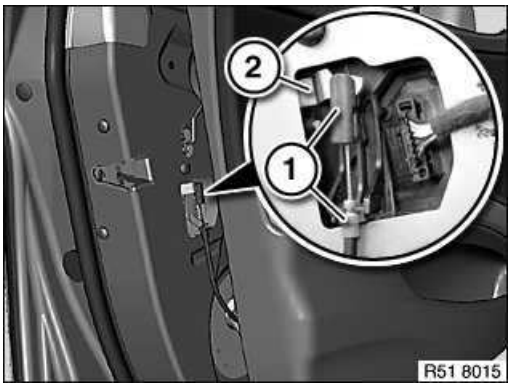
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

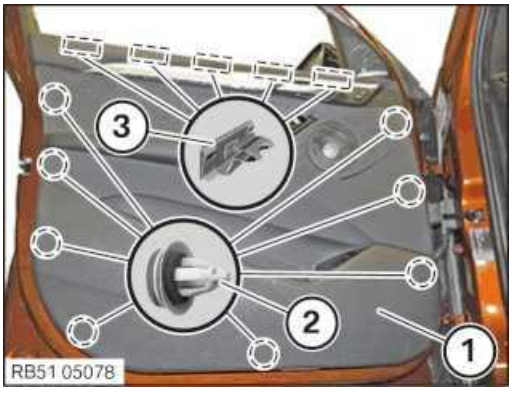


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

  The clips (1) and the stop pads (2) must not be damaged or missing.

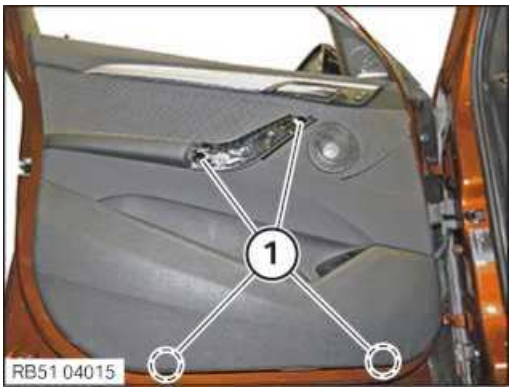


- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).

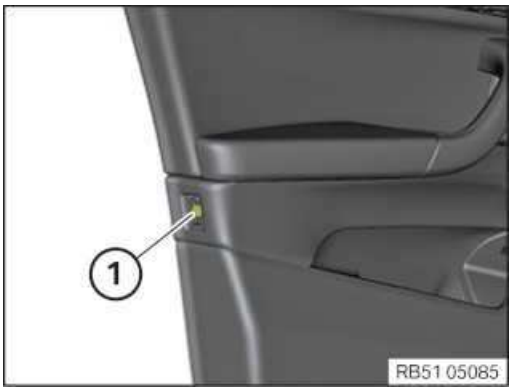
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- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm



- If fitted: Tighten down screw (1).

Door trim panel to door

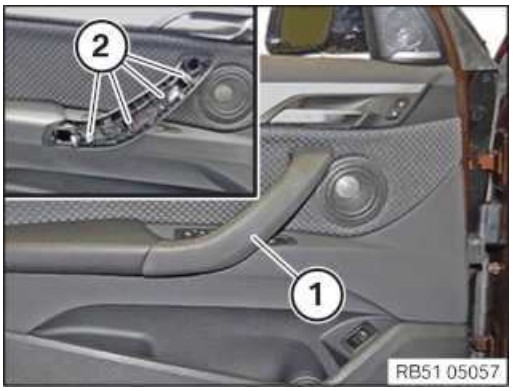
Screw TS5x20		Tightening torque	2,5 Nm

- Mount cover .

6 – Install the cover on the door handle

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.

  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door — Used in step 5

Screw TS5x20		Tightening torque	2,5 Nm

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 4

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51 48 070 Removing and installing/replacing sound insulation in left or right rear door

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove cover on door handle

RISK OF DAMAGE

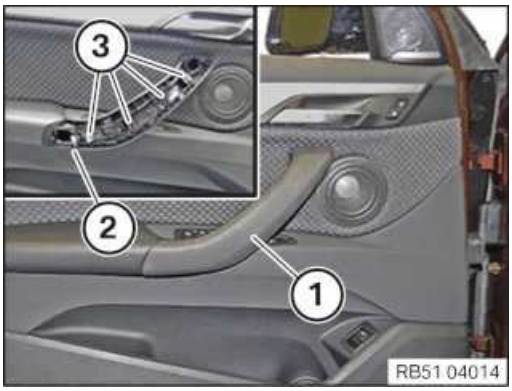
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove rear door trim

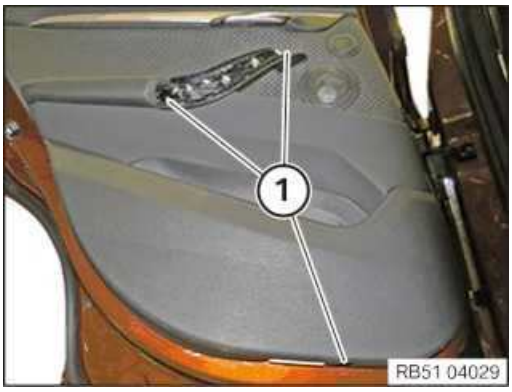
RISK OF DAMAGE

Scratches.

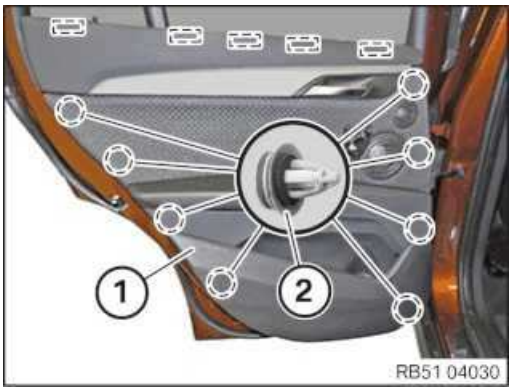
Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

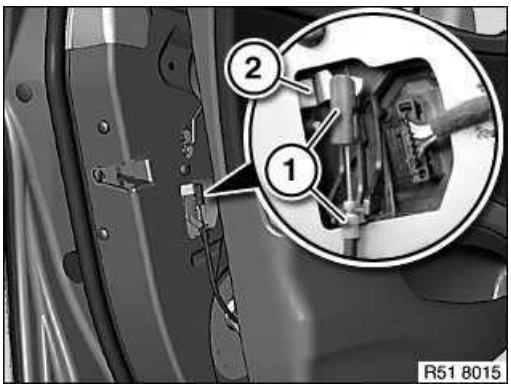
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- Loosen screws (1).



- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.



- Detach Bowden cable (1) from door lock (2).

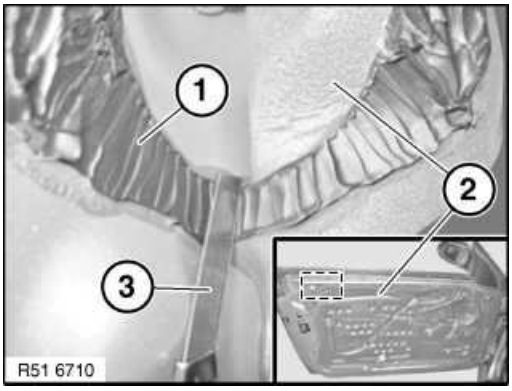
  Disconnect all plug connections and remove door trim panel.

MAIN WORK

3 – Remove sound insulation on the rear door

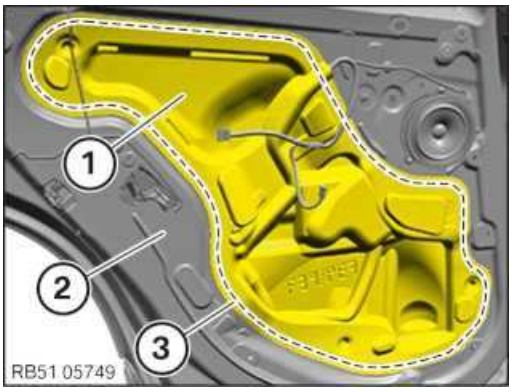
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

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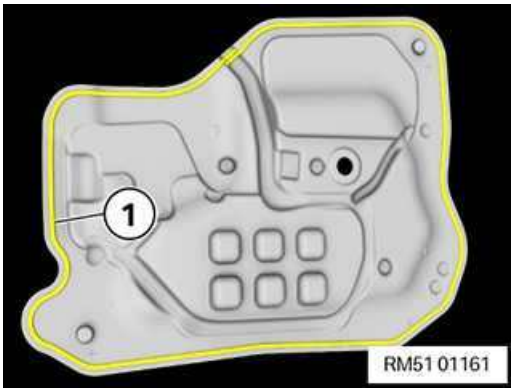


- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

4 – Installing the sound insulation on the rear door

TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.
For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors



Check

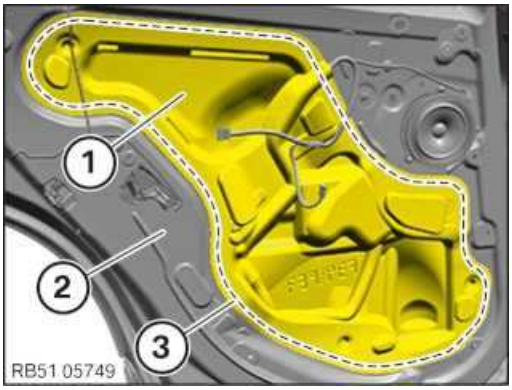
- Check sound insulation for damage.

Result

» The sound insulation is damaged.

Measure

- Renew the sound insulation.
- Route the butyl rope with 4 mm (sourcing reference BMW Group Parts) along the current layout of the butyl rope (1).
- Heat the butyl rope (1) with a hot air blower.



- Press on the sound insulation (1) along the mark (3) with force onto the inner door panel (2).

POSTPROCESSES

5 – Installing rear door trim panel

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RISK OF DAMAGE

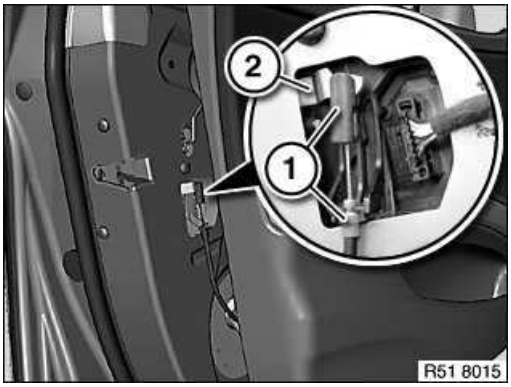
Scratches.

Tools and sharp-edged components can cause scratches.

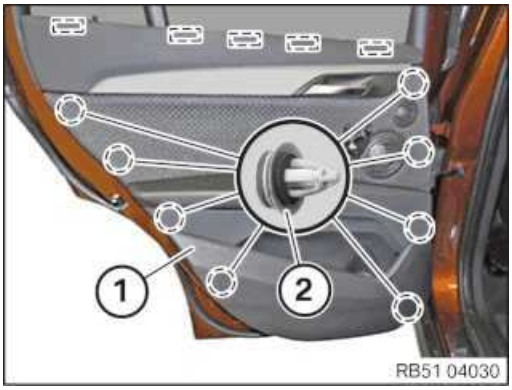
- Protect working area.
- Handle tools and components carefully.



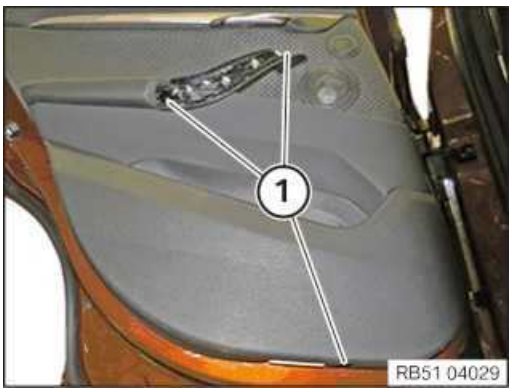
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- Install the door trim panel and connect all plug connections.
- Attach the Bowden cable (1) on the door lock (2).



- Engage the door trim panel (1) in the clamps at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

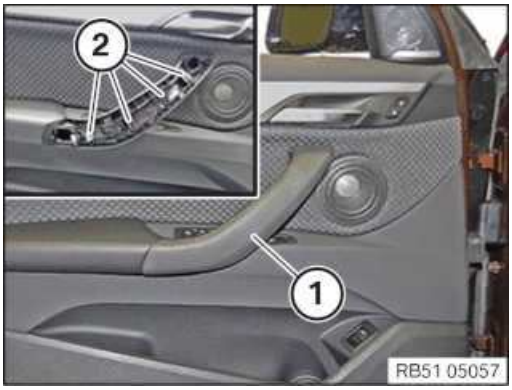
Screw TS5x20		Tightening torque	2,5 Nm

6 – Install the cover on the door handle

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check clamps (2) for damage; renew if necessary.
  The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

Additional Information

Overview of Tightening Torques

Door trim panel to door			Used in step 5
Screw TS5x20		Tightening torque	2,5 Nm

Links

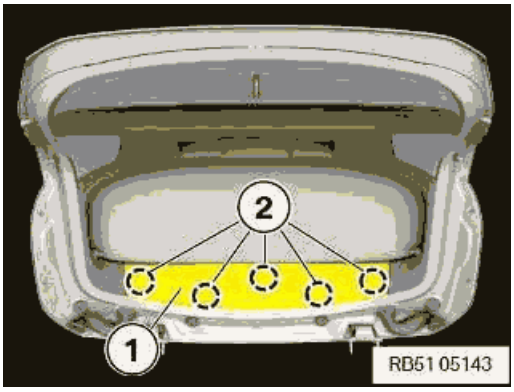
General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	3 4

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51 49 000 Removing and installing/replacing the tailgate trim panel

PRELIMINARY WORK

1 – Remove the trim for the top rear window frame



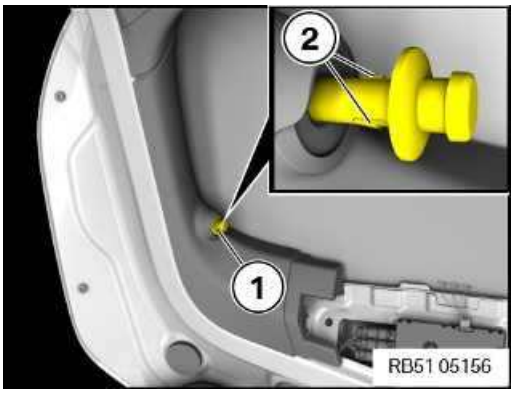
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Remove both trims for the rear window frame on the side

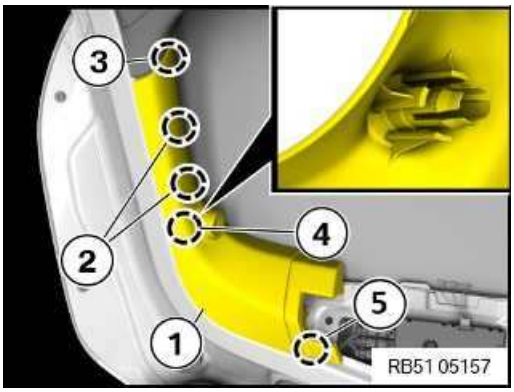
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the trim for the rear window frame on the side**



- Detach the mounting button (1) on the latch mechanisms (2) and remove it.

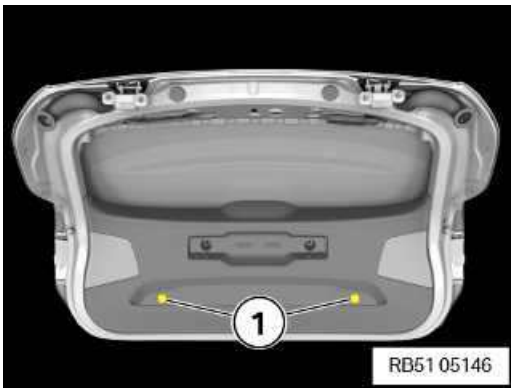


- Unclip the trim for the rear window frame on the side (1) with the clips (2) from the latch mechanisms (3), (4) and (5).

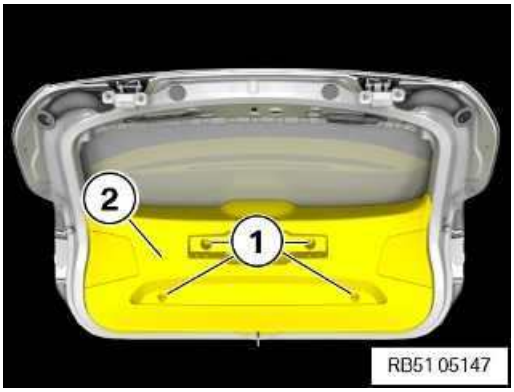
MAIN WORK

3 – Remove tailgate trim panel

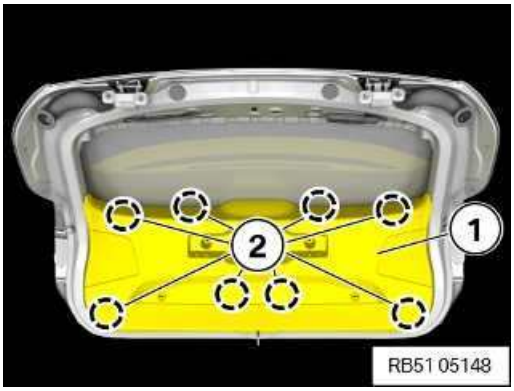
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- Lever out the covers of the screw points (1) with a suitable tool.

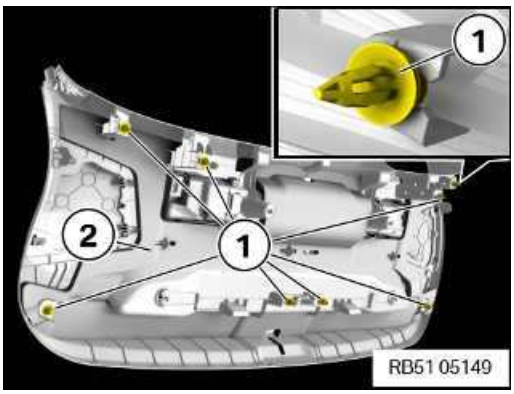


- If applicable, remove the warning triangle from the tailgate trim panel (2).
- Unscrew the bolts (1) at the tailgate trim panel (2).

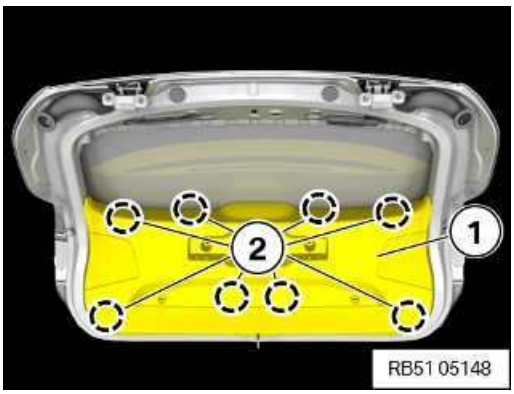


- Unclip the tailgate trim panel (1) at the latch mechanisms (2) and remove.

4 – Installing the tailgate trim panel

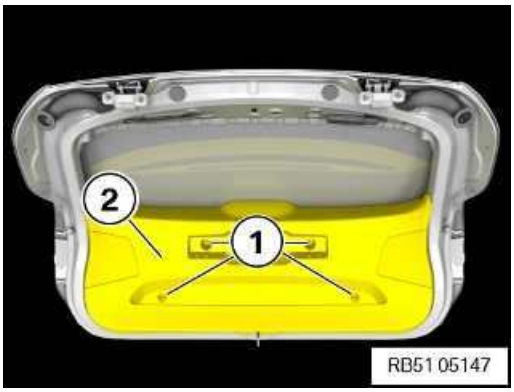


- Check the clips (1) on the tailgate trim panel (2) for damage and replace where required.



- Clip in the tailgate trim panel (1) with the clips (2).

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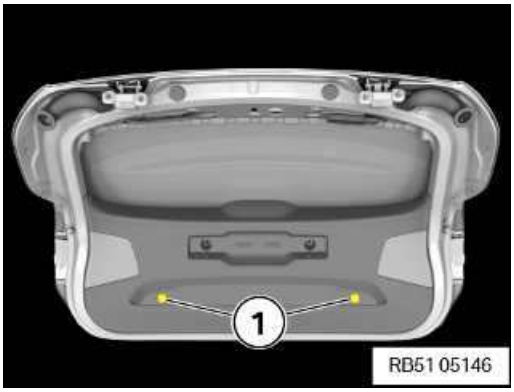


- Tighten the bolts (1) at the tailgate trim panel (2).

Tailgate trim panel

Screw		Tightening torque	1,8 Nm

- If necessary, insert and fasten the warning triangle in the tailgate trim panel (2).



- Insert the covers of the screw points (1).

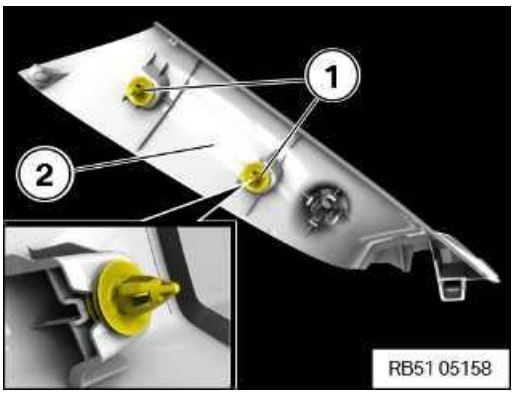
POSTPROCESSES

5 – Mount both trim pieces for the rear window frame on the side

NOTICE

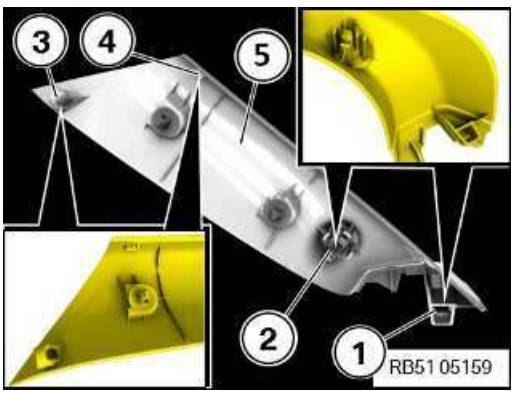
Description is for left component only. Procedure on the right side is identical.

▸ Install the trim for the rear window frame on the side



- Check the clips (1) on the trim for the side rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1), (2), (3) and (4) at the trim for the side rear window frame (5) for damage.

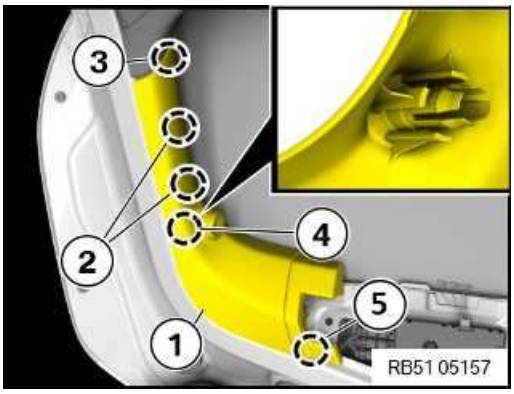
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Result

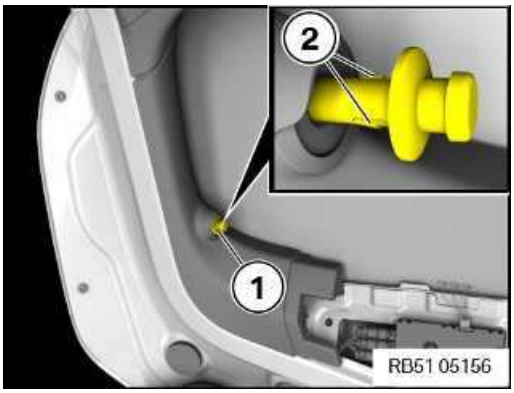
» The latch mechanisms (1), (2), (3) or (4) are damaged.

Measure

- Renew the trim for the side rear window frame (5).

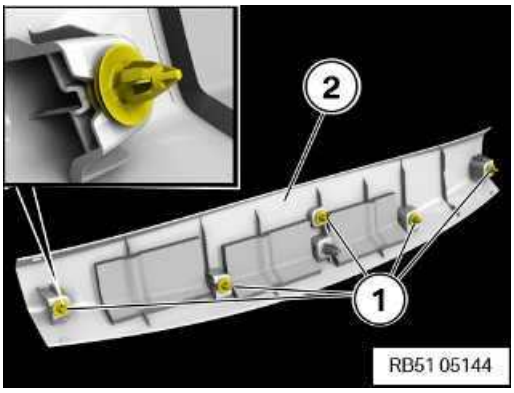


- Clip in the trim for the side rear window frame (1) with the clips (2) and in the latch mechanisms (3), (4) and (5).



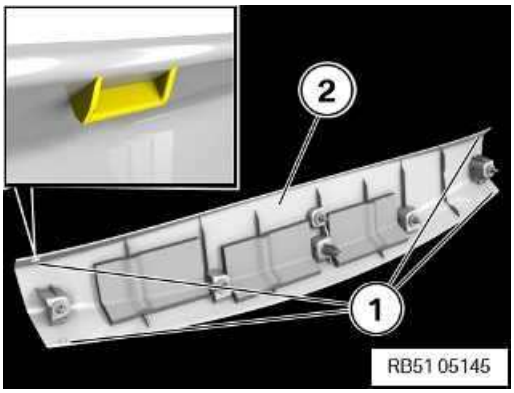
- Clip in the mounting button (1) with the latch mechanisms (2).

6 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

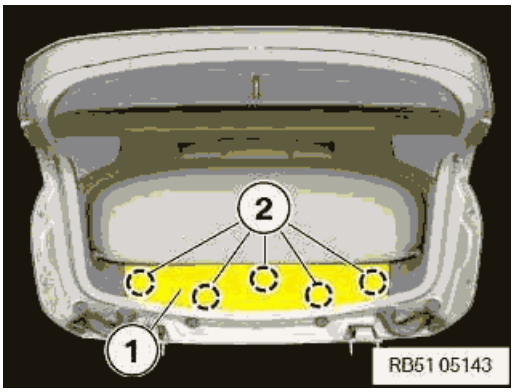
Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).

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- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

Tailgate trim panel Used in step 4

Screw		Tightening torque	1,8 Nm

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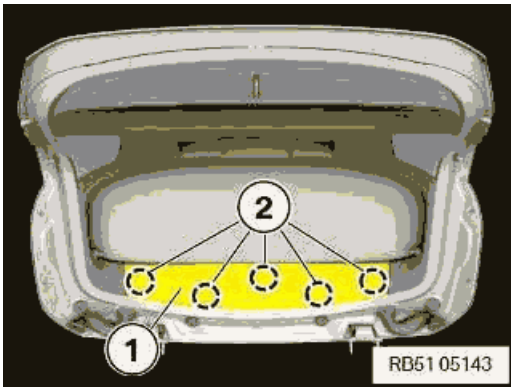
51 49 003 Removing and installing/replacing the trim for the left or right rear window frame

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

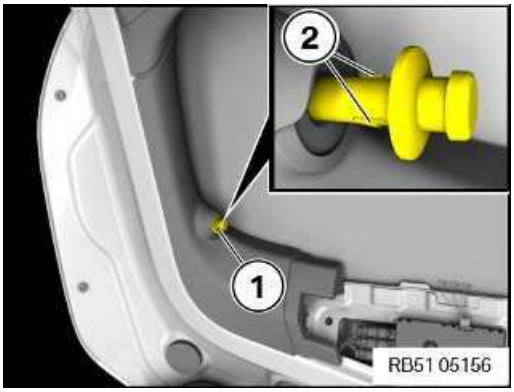
1 – Remove the trim for the top rear window frame



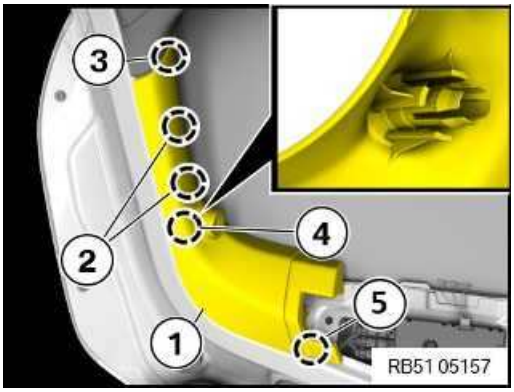
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

MAIN WORK

2 – Remove the trim for the rear window frame on the side



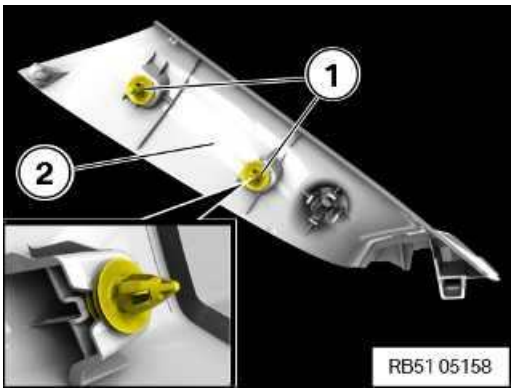
- Detach the mounting button (1) on the latch mechanisms (2) and remove it.



- Unclip the trim for the rear window frame on the side (1) with the clips (2) from the latch mechanisms (3), (4) and (5).

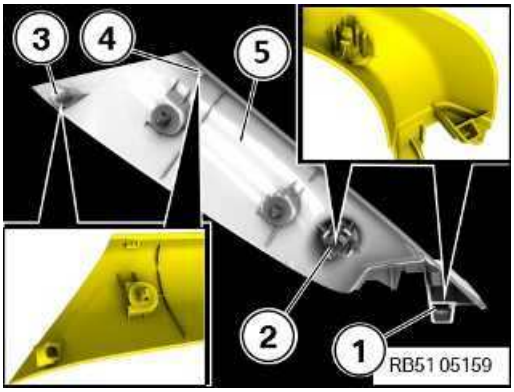
3 – Install the trim for the rear window frame on the side

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- Check the clips (1) on the trim for the side rear window frame (2) for damage and replace where required.

Check



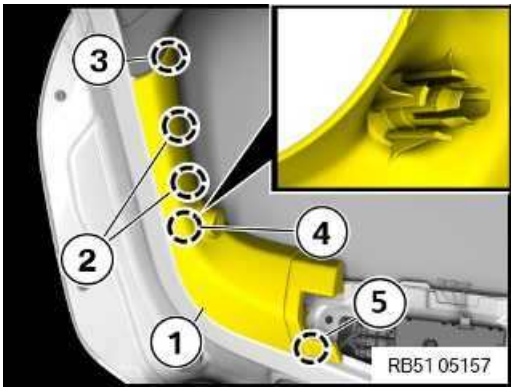
- Check the latch mechanisms (1), (2), (3) and (4) at the trim for the side rear window frame (5) for damage.

Result

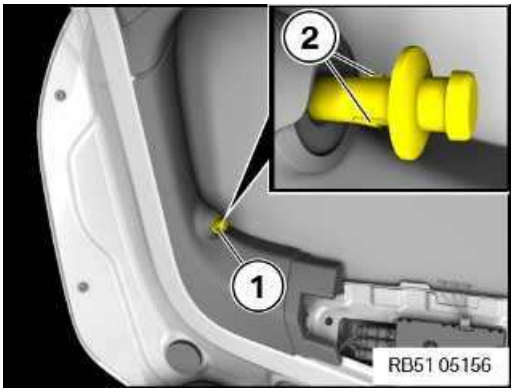
» The latch mechanisms (1), (2), (3) or (4) are damaged.

Measure

- Renew the trim for the side rear window frame (5).



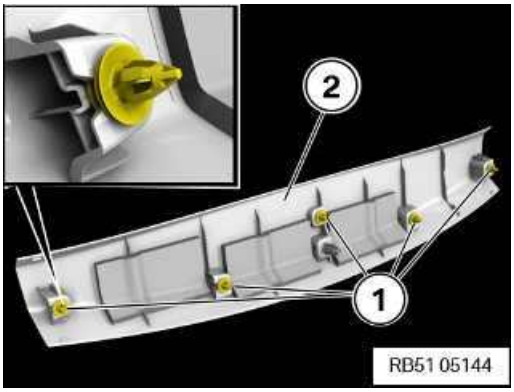
- Clip in the trim for the side rear window frame (1) with the clips (2) and in the latch mechanisms (3), (4) and (5).



- Clip in the mounting button (1) with the latch mechanisms (2).

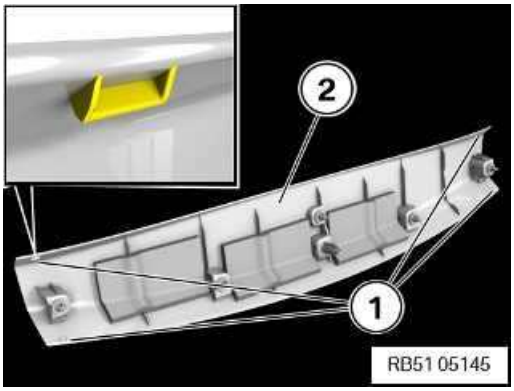
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4 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



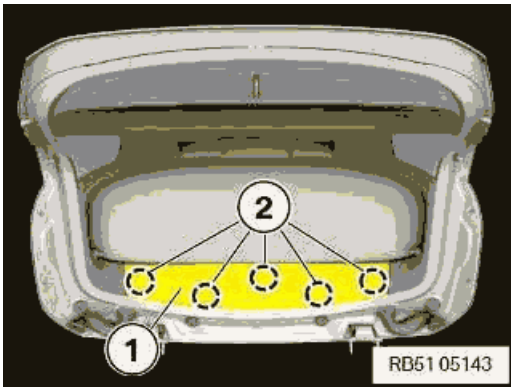
- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).

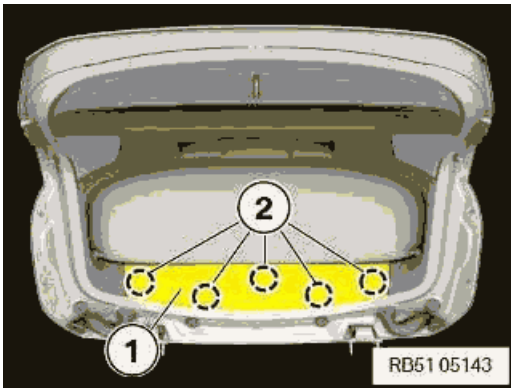


- Clip in the trim for the top rear window frame (1) with the clips (2).

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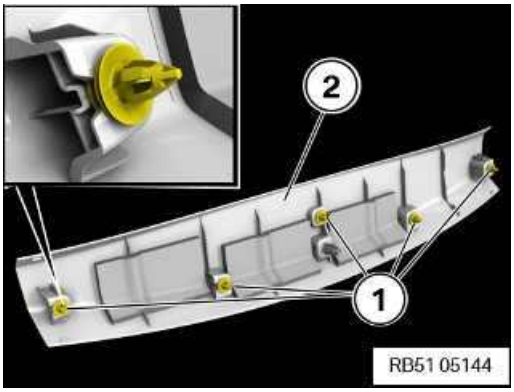
51 49 015 Removing and installing/replacing the trim for the rear window frame at the top

1 – Remove the trim for the top rear window frame



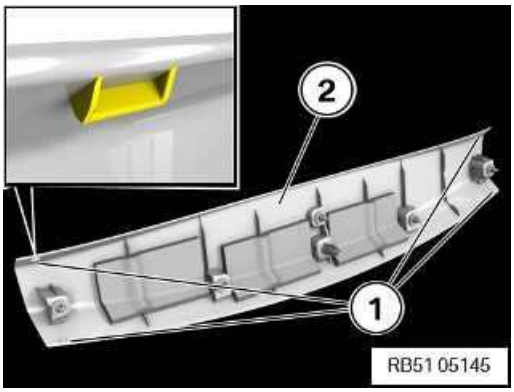
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



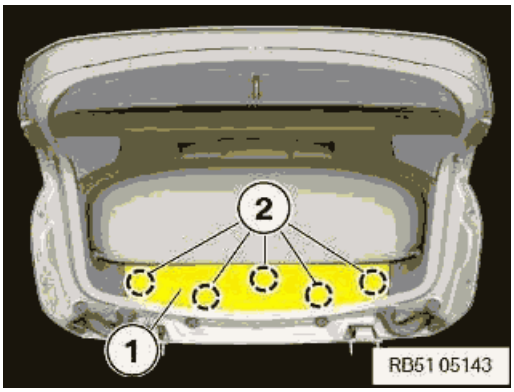
- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).



- Clip in the trim for the top rear window frame (1) with the clips (2).

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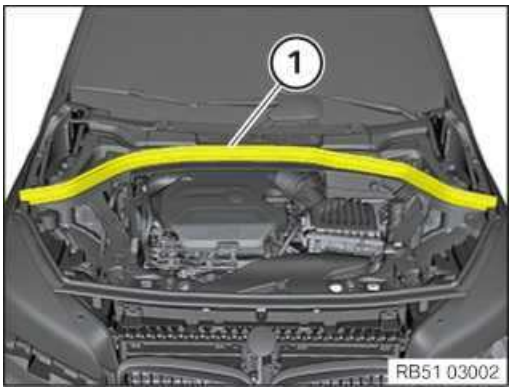
51 71 341 Remove & install/replace strut brace

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

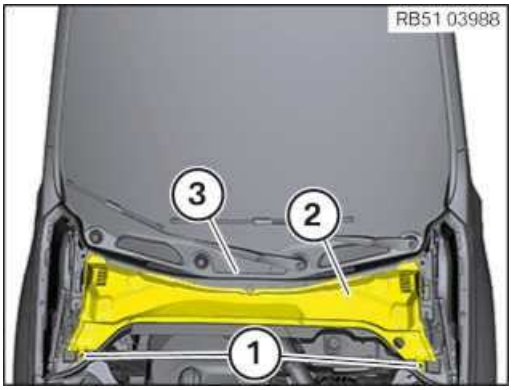
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

2 – Removing front cowl panel cover



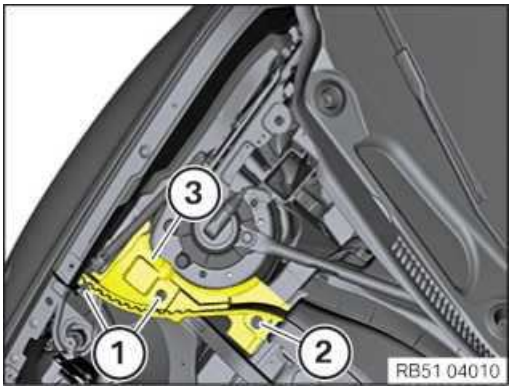
- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

MAIN WORK

3 – Remove suspension cross-brace

TECHNICAL INFORMATION

Driving without the strut brace/front end or tension strut is not permitted.

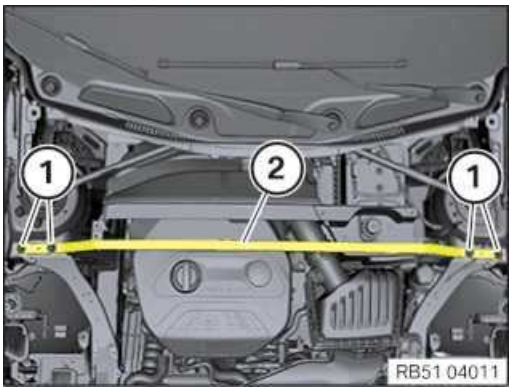


NOTICE

Description is for right component only. The procedure on the left side is identical.

- Loosen expanding rivet (1).
- Loosen screw (2).
- Remove the cover (3).

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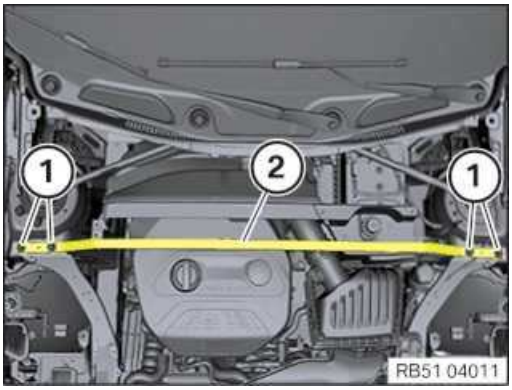


- Loosen screws (1).
- Remove strut brace (2).

4 – Install strut brace

TECHNICAL INFORMATION

Driving without the strut brace/front end or tension strut is not permitted.

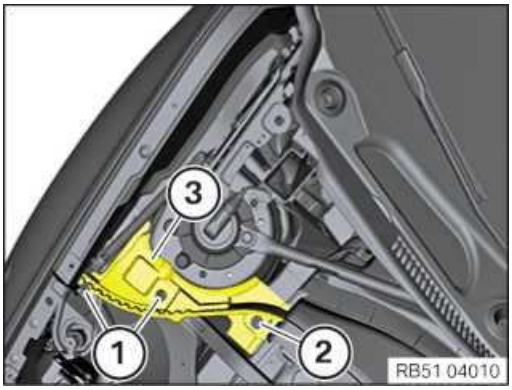


- Install the strut brace (2).
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Cross-brace to spring strut dome

	Renew screw.	Jointing torque	28 Nm
		Angle of rotation	180 °



NOTICE

Description is for right component only. The procedure on the left side is identical.

- Install the cover (3).
- Tighten down screw (2).

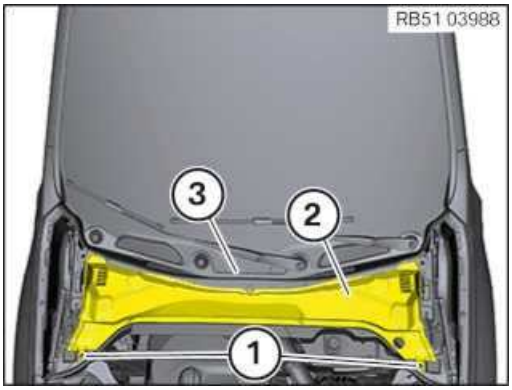
Cover on body

Hexagon screw		Tightening torque	3 Nm

- Install the expanding rivet (1).

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5 – Installing front cowl panel cover

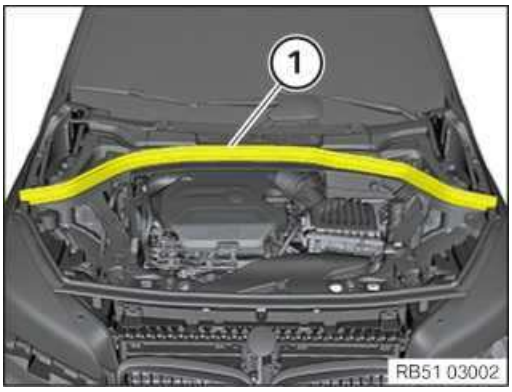


- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

6 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

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Additional Information

Overview of Tightening Torques

Cross-brace to spring strut dome — Used in step 4

	Renew screw.	Jointing torque	28 Nm
		Angle of rotation	180 °

Cover on body — Used in step 4

Hexagon screw		Tightening torque	3 Nm

51 71 447 Remove and install/replace left or right side sill trim panel

PRELIMINARY WORK

1 – Remove rear door

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Open door.
- Loosen screws (1) between both hinge elements at top and bottom.



- Pull lock (1) in upward direction and disconnect plug connection.

RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

- Secure door against closing.
- Loosen screw (2) at door stop.
- Detach door in upward direction and set down on a suitable surface.

2 – Partially removing the rear wheel arch trim

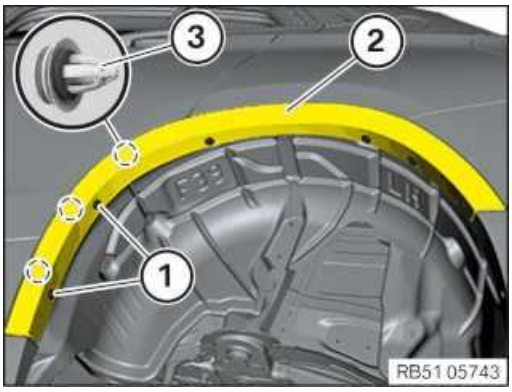
NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.

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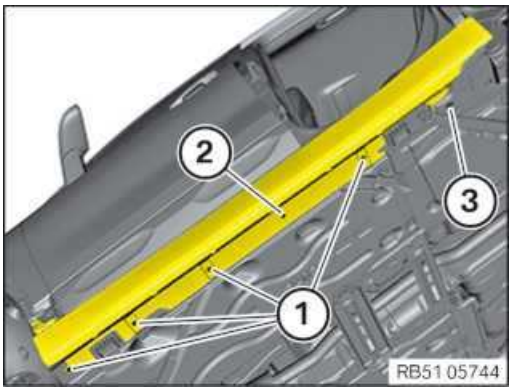
- Remove the blind rivets (1).
- Release wheel arch trim (2) from the clips (3).

MAIN WORK

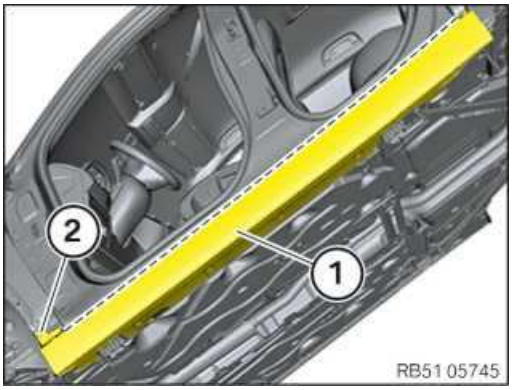
3 – Removing the side sill trim panel

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Loosen the expanding rivet (1).
- Remove the clip (2).
- Loosen screw (3).



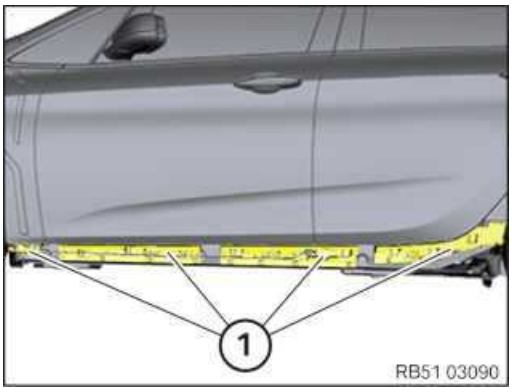
- Unclip the side sill trim panel (1) from the clip (2).
- Unclip the side sill trim panel (1) along the dashed line and remove.

4 – Installing the side sill trim panel

NOTICE

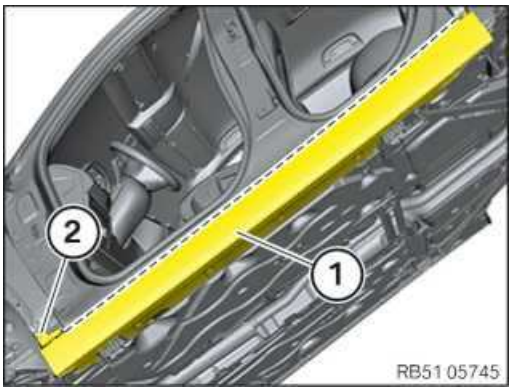
Description is for left component only. Procedure on the right side is identical.

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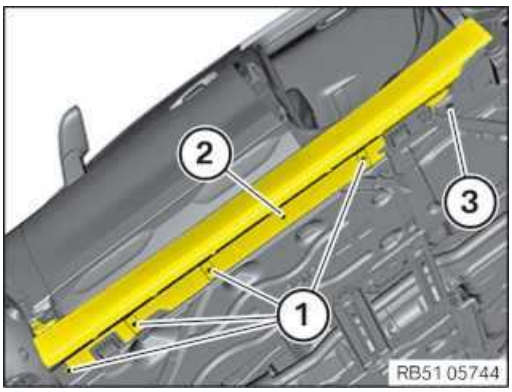


- If applicable, renew the faulty screws and associated fixture (1).
- Check the latch mechanisms of the mountings (1) and the side sill trim panel for damage, renew if necessary.

  The latch mechanisms of the mountings (1) must not be damaged or missing.



- Install the side sill trim panel (1) and clip in along dotted line.
- Clip in the side sill trim panel (1) at the clip (2).



- Mount the expanding rivets (1).
- Mount the clip (2).
- Tighten down screw (3).

Underbody panelling, side

Hexagon screw		Tightening torque	2,6 Nm

POSTPROCESSES

5 – Partly installing the rear wheel arch trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

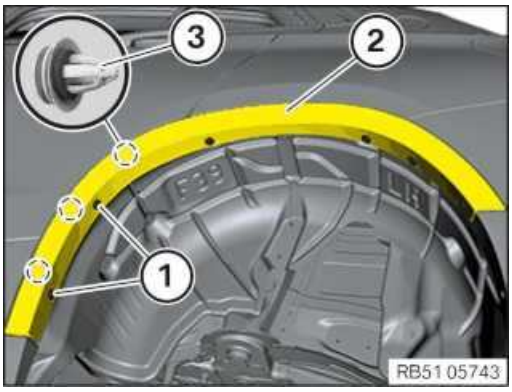
NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.

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- Check the clips (3) for damage and renew where required.
  The clips (3) must not be damaged or missing.
- Feed in wheel arch trim (2) and engage on the clips (3).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

6 – Install rear door

NOTICE

Description is for left component only. Procedure on the right side is identical.



RISK OF DAMAGE

Paint damage.

Mechanical action can lead to paint damage.

- Mask those working areas at risk with yellow plastic adhesive tape.
- Remove and install heavy or bulky components with the aid of another person/other persons.

- Attach door from above.
- Secure door against closing.
- Connect plug connection and push lock (1) down.
- Tighten screw (2) at door stop.

Door stop to pillar

Screw		Tightening torque	28 Nm



- Tighten screws (1) between both hinge elements at top and bottom.

Screw connection, hinge parts

Screw		Tightening torque	27 Nm

Additional Information

Overview of Tightening Torques

Underbody panelling, side Used in step 4

Hexagon screw		Tightening torque	2,6 Nm

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Door stop to pillar Used in step 6

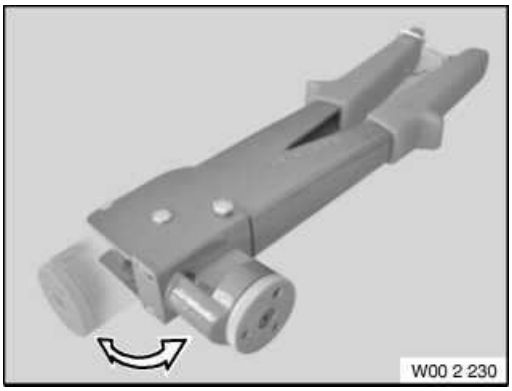
Screw		Tightening torque	28 Nm

Screw connection, hinge parts Used in step 6

Screw		Tightening torque	27 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



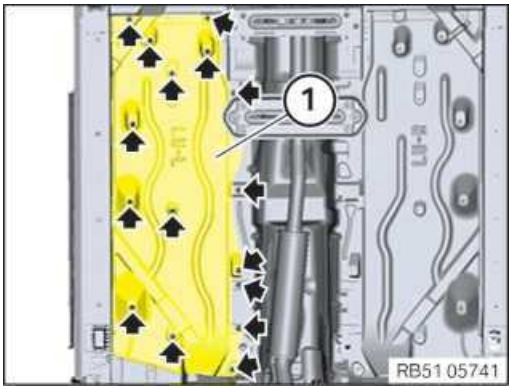
Common Used in step 5

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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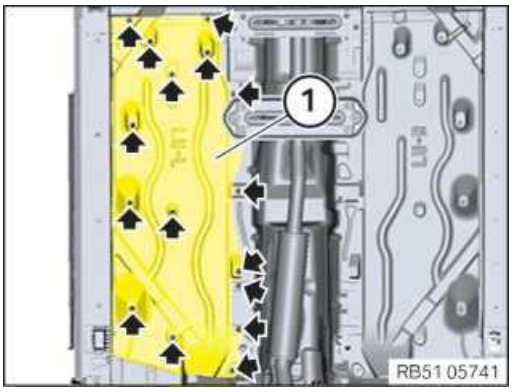
51 71 017 Remove and install/replace left underbody panelling

1 – Remove left underbody panelling



- Unscrew all bolts and nuts (arrows).
- Remove the underbody panelling (1).

2 – Install underbody panelling, left



- Correctly position the underbody panelling (1).
- Tighten all bolts and nuts (arrows).

Underbody panelling, side

Hexagon screw		Tightening torque	2,6 Nm

Underbody panelling, side

Plastic nut		Tightening torque	2,6 Nm

Additional Information

Overview of Tightening Torques

Underbody panelling, side Used in step 2

Hexagon screw		Tightening torque	2,6 Nm

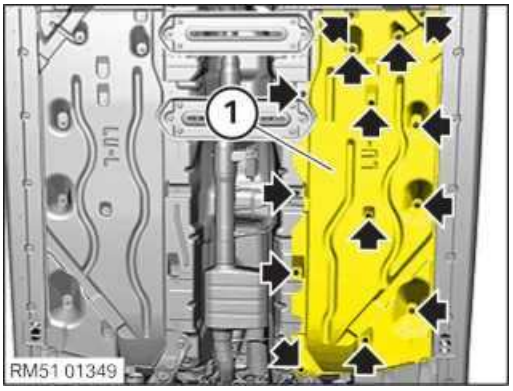
Underbody panelling, side Used in step 2

Plastic nut		Tightening torque	2,6 Nm

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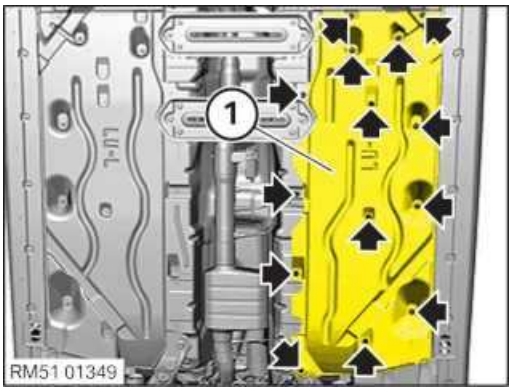
51 71 018 Remove and install/replace right underbody panelling

1 – Removing right underbody panelling



- Unscrew all bolts and nuts (arrows).
- Remove the underbody panelling (1).

2 – Installing underbody panelling , right



- Correctly position the underbody panelling (1).
- Tighten all bolts and nuts (arrows).

Underbody panelling, side

Hexagon screw		Tightening torque	2,6 Nm

Underbody panelling, side

Plastic nut		Tightening torque	2,6 Nm

Additional Information

Overview of Tightening Torques

Underbody panelling, side Used in step 2

Hexagon screw		Tightening torque	2,6 Nm

Underbody panelling, side Used in step 2

Plastic nut		Tightening torque	2,6 Nm

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51 71 415 Removing and installing lower section of rear spoiler

RISK OF DAMAGE

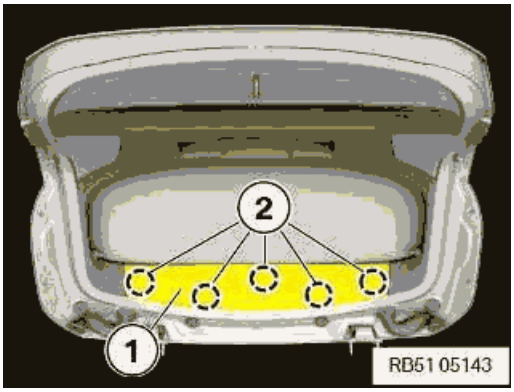
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

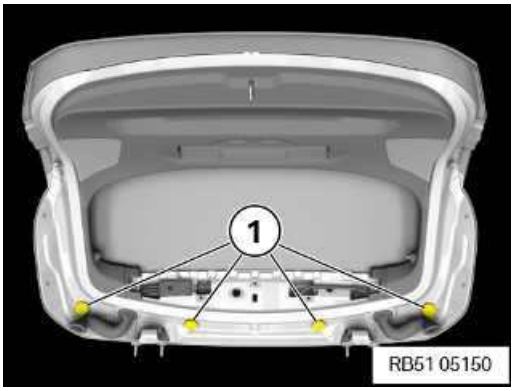
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1 – Remove the trim for the top rear window frame

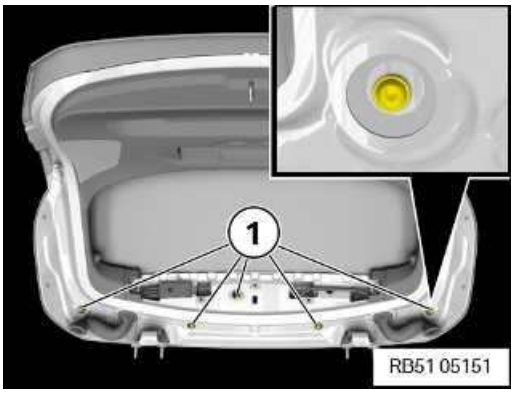


- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

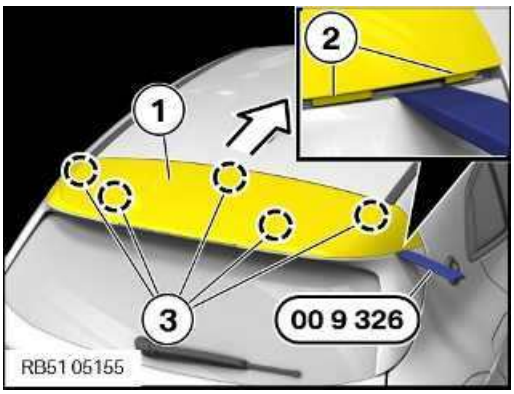
2 – Remove rear spoiler



- Unclip the covers (1) with a suitable tool and remove.



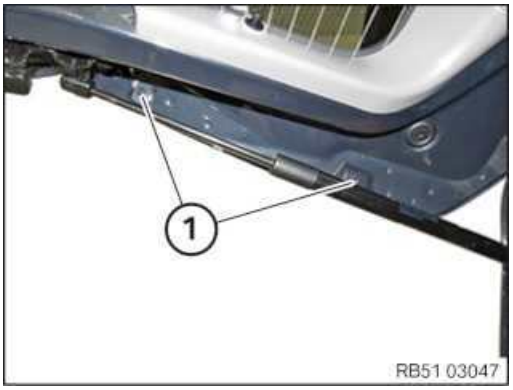
- Loosen screws (1).



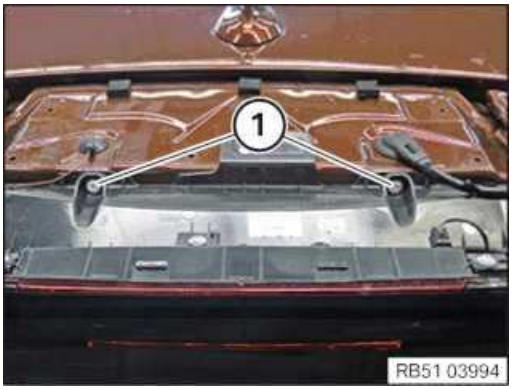
- Release rear spoilers (1) on both outer sides with the special tool **0 496 570 (00 9 326)** out of the latch mechanisms (2).
- Unclip rear spoiler (1) from the clips (3).
- Slightly lift rear spoiler (1) in the front area and remove in direction of arrow.

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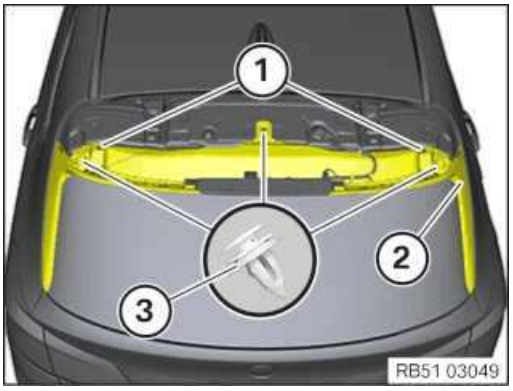
3 – Removing the lower section of the rear spoiler



- Open tailgate.
- Loosen screws (1) on left and right.

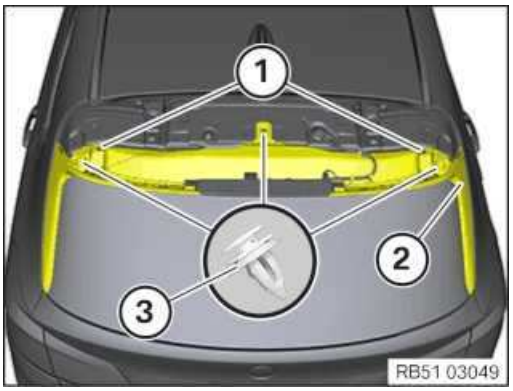


- Loosen screws (1).



- Disconnect the plug connection of the additional brake light and guide out the cable.
- Disconnect the quick connector of the water pipe of the washer jet and guide out the water pipe.
- Loosen screws (1).
- Release the lower section of the rear spoiler (2) at the clips (3) and remove it.

4 – Installing the lower section of the rear spoiler



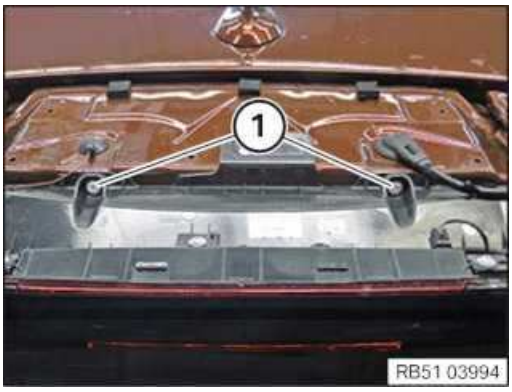
- Position the lower section of the rear spoiler (2) at the clips (3) and clip in.
- Tighten the screws (1).

Rear spoiler lower section to tailgate

Fillister head bolt		8 Nm

- Connect the quick connector of the water pipe to the washer jet.
- Connect the connector to the additional brake light.

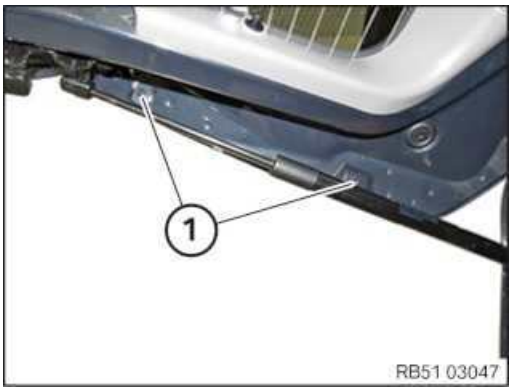
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- Tighten the screws (1).

Rear spoiler lower section to tailgate

Fillister head bolt		8 Nm



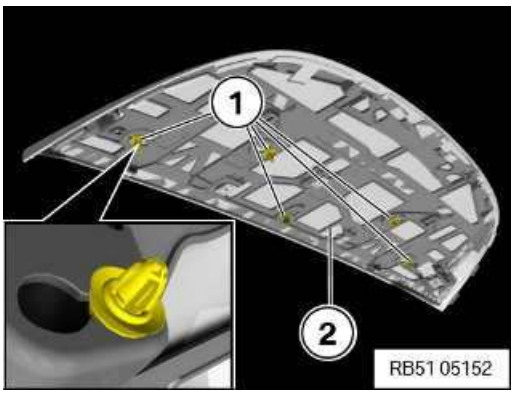
- Tighten screws (1) on left and right.

Rear spoiler lower section to tailgate, side

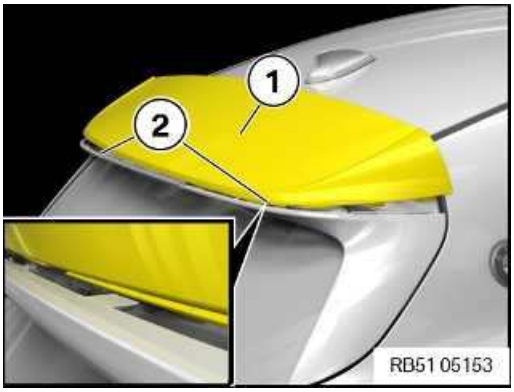
Oval-head screw		2,6 Nm

POSTPROCESSES

5 – Attach rear spoiler

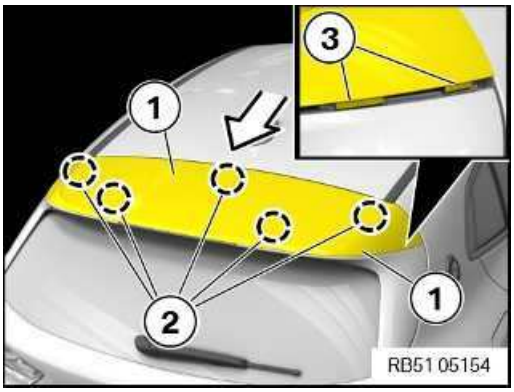


- Check clips (1) on the rear spoiler (2) for damage, renew if required.

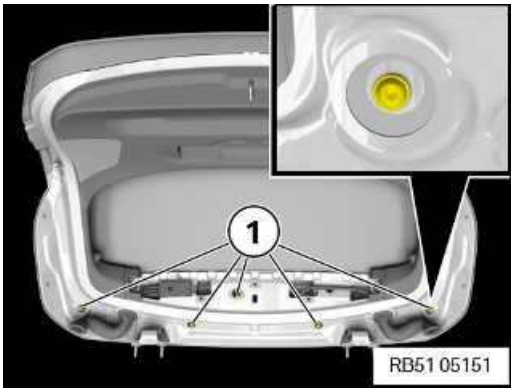


- Position the rear spoiler (1) on the guides (2) .

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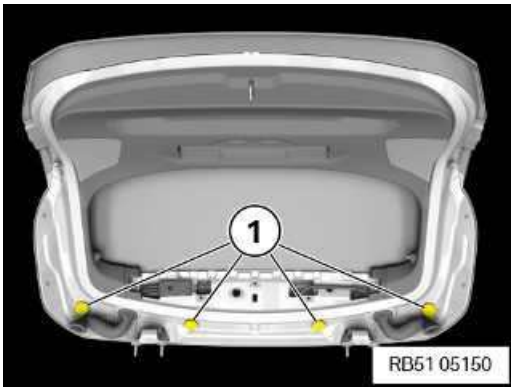
- Slide the rear spoiler (1) onto the lower section of the rear spoiler in the direction of the arrow.
- Clip in the rear spoiler (1) with the clips (2) and clip on the latch mechanisms (3) on both sides.



- Tighten the screws (1).

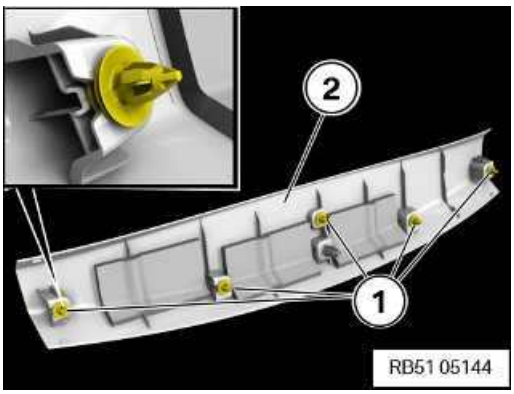
Rear spoiler to tailgate

Oval-head screw		Tightening torque	3,1 Nm



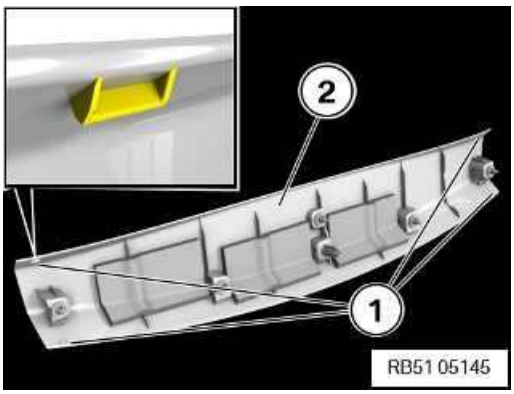
- Insert the covers (1).

6 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

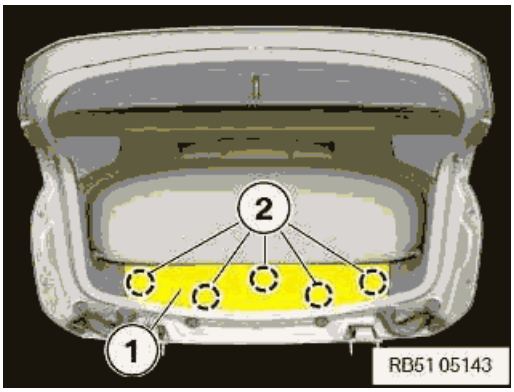
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Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).
- Clip in the trim for the top rear window frame (1) with the clips (2).



Additional Information

Overview of Tightening Torques

Rear spoiler lower section to tailgate — Used in step 4

Fillister head bolt		8 Nm

Rear spoiler lower section to tailgate, side — Used in step 4

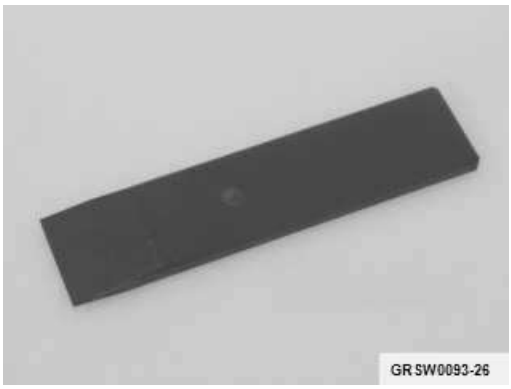
Oval-head screw		2,6 Nm

Rear spoiler to tailgate — Used in step 5

Oval-head screw		Tightening torque	3,1 Nm

Overview of Special Tools

0 496 570 (00 9 326) Wedge



Common — Used in step 2

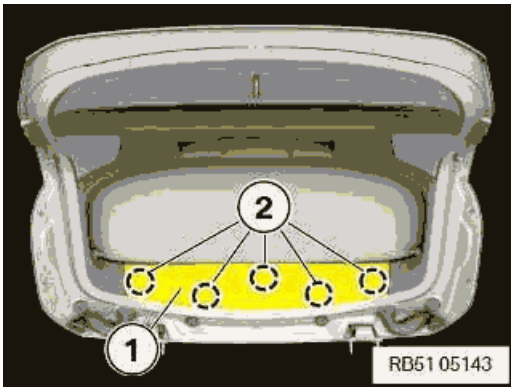
Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 71 412 Removing and installing the rear spoiler

PRELIMINARY WORK

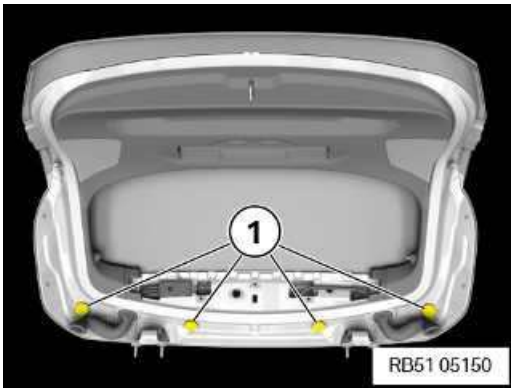
1 – Remove the trim for the top rear window frame



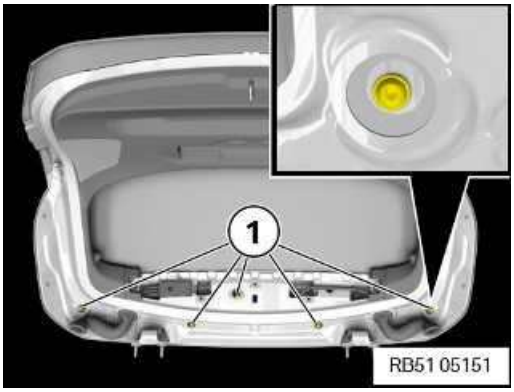
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

MAIN WORK

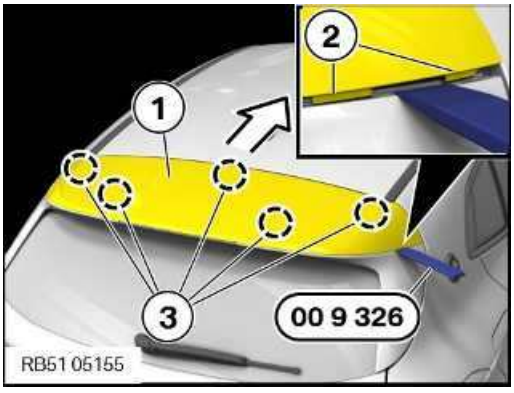
2 – Remove rear spoiler



- Unclip the covers (1) with a suitable tool and remove.



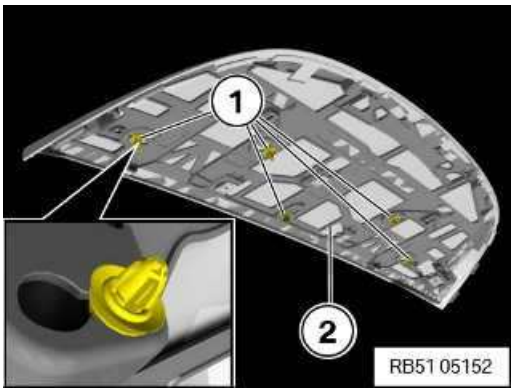
- Loosen screws (1).



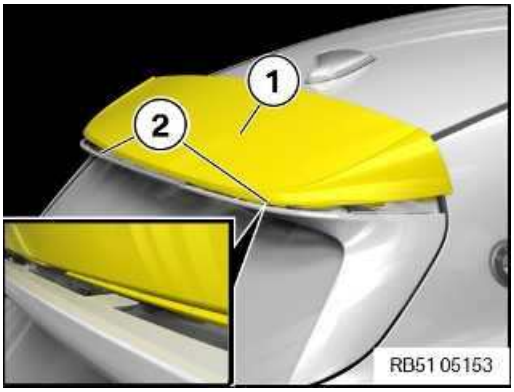
- Release rear spoilers (1) on both outer sides with the special tool **0 496 570 (00 9 326)** out of the latch mechanisms (2).
- Unclip rear spoiler (1) from the clips (3).
- Slightly lift rear spoiler (1) in the front area and remove in direction of arrow.

3 – Attach rear spoiler

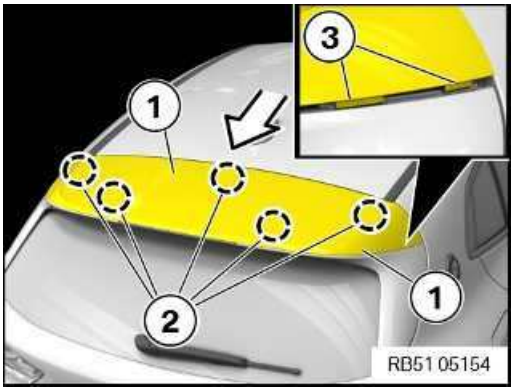
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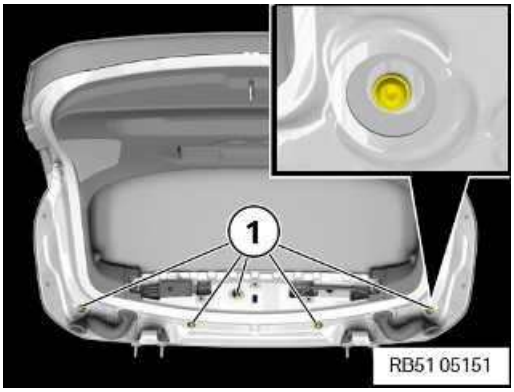
- Check clips (1) on the rear spoiler (2) for damage, renew if required.



- Position the rear spoiler (1) on the guides (2) .



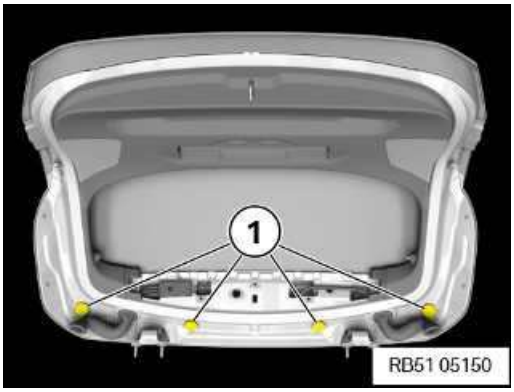
- Slide the rear spoiler (1) onto the lower section of the rear spoiler in the direction of the arrow.
- Clip in the rear spoiler (1) with the clips (2) and clip on the latch mechanisms (3) on both sides.



- Tighten the screws (1).

Rear spoiler to tailgate

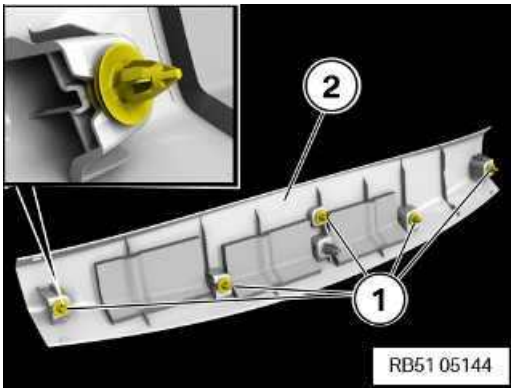
Oval-head screw		Tightening torque	3,1 Nm



- Insert the covers (1).

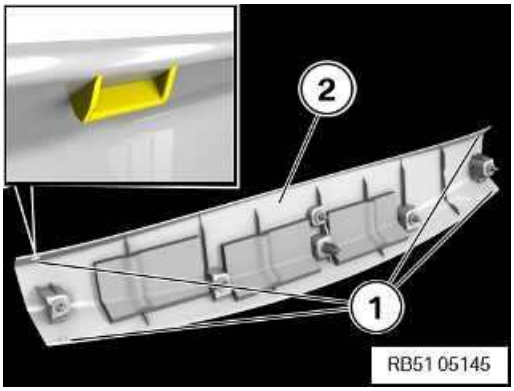
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4 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



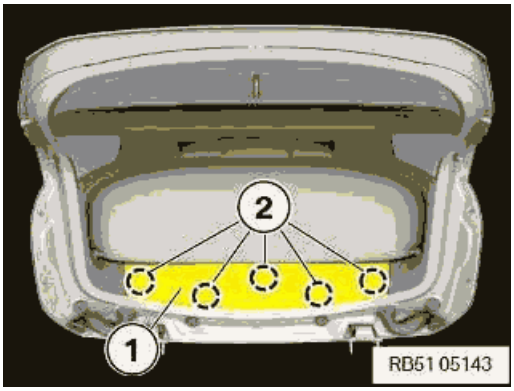
- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).



- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

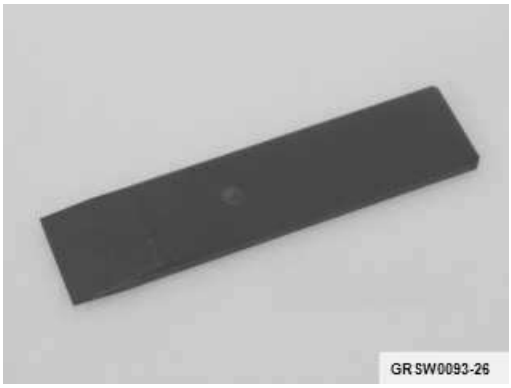
Rear spoiler to tailgate Used in step 3

Oval-head screw		Tightening torque	3,1 Nm

Overview of Special Tools

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0 496 570 (00 9 326) Wedge



Common

Used in step 2

Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 71 040 Removing and installing/replacing front left or right wheel arch cover (front part and rear part)

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

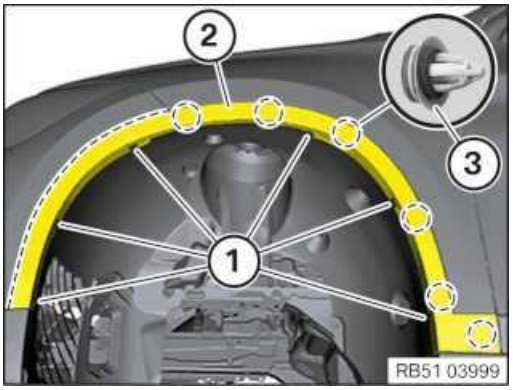
1 – Remove the front wheel arch trim

NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Remove the blind rivets (1).
- Release the wheel arch trim (2) in the area of the side panel from the clips (3).
- Release the wheel arch trim (2) from the latch mechanisms on the bumper and remove.

2 – Removing the wheel



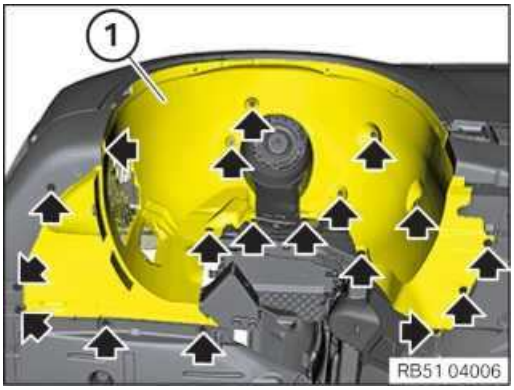
- If several wheels are removed simultaneously: Use a piece of chalk to mark on each tyre the axle and side on which the corresponding wheel is fitted.
- Unscrew the wheel bolts (arrows) and remove the wheel.

  Use the matching adapter from tool set (wheel bolt adapter set) to loosen and tighten down the wheel bolt with security code.

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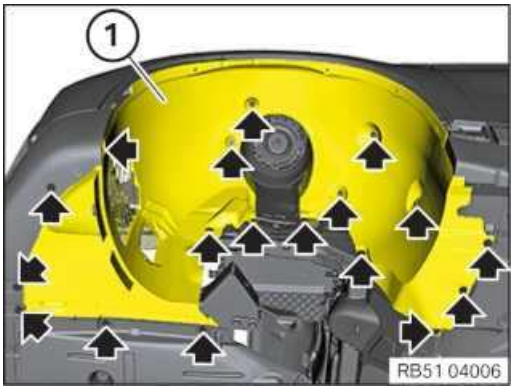
MAIN WORK

3 – Remove front wheel arch cover



- Unscrew all bolts and nuts (arrows).
- Guide the wheel arch cover (1) out.

4 – Installing the front wheel arch cover



- Guide the wheel arch cover (1) in.
- Tighten all bolts and nuts (arrows).

Wheel arch cover to body

Plastic nut		Tightening torque	2,6 Nm
Screw		Tightening torque	2,6 Nm

Wheel arch cover to body

Screw		Tightening torque	2,5 Nm

Wheel arch cover to body

Plastic nut		Tightening torque	3 Nm

POSTPROCESSES

5 – Mounting the wheel

▸ **Clean the contact surfaces between the brake disc and the wheel rim**

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TECHNICAL INFORMATION

The contact surface between the brake disc and the wheel rim must be clean and free from oil and grease. There is otherwise a risk of the wheel becoming loose at a later time.

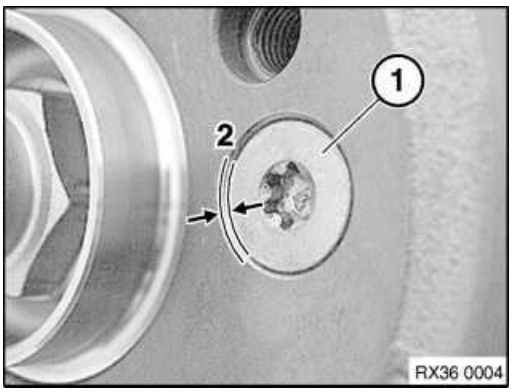
- Remove dirt, grease residues and corrosion from the contact surface with a drill and the special tool **2 344 011**.

  Do not operate special tool **2 344 011** with an impact screwdriver.
- Degrease the contact surfaces with the universal cleaner (see BMW Group Parts).
- In the event of grease residue in the area of the wheel bolt holes, remove and clean the brake disc.



- Remove dirt, grease residues and corrosion from the contact surface with a drill and the special tool **2 344 011**.

  Do not operate special tool **2 344 011** with an impact screwdriver.
- Degrease the contact surfaces with the universal cleaner (see BMW Group Parts).



- Renew mounting bolt (1).

  Parts: Mounting bolt
- Check that the mounting bolt (1) for the brake disc is securely seated.

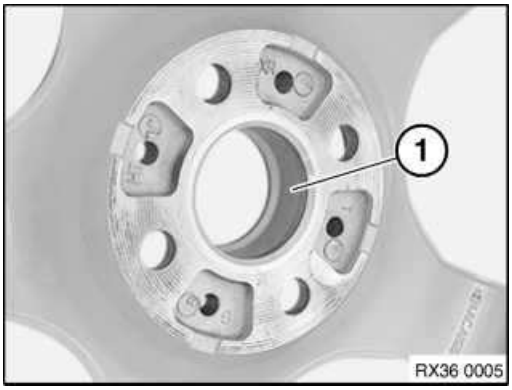
  The mounting bolt (1) for the brake disc may not protrude under any circumstances on the contact surface (2) between the brake disc and the wheel rim.

Brake disc to rear wheel hub

M8	Renew screw.	Tightening torque	16 Nm

Brake disc to front wheel hub

M8	Renew screw.	Tightening torque	16 Nm



- Lightly grease the wheel centring (1) in the wheel rim; refer to additional information for grease for the wheel centring (1).

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TECHNICAL INFORMATION

Never use impact screwdrivers or electric screwdrivers to screw in and tighten the wheel bolts.

The wheel rim must rest uniformly against the brake disc.

In the case of non-original BMW wheel bolts/wheel rims, it may be necessary to retighten the wheel bolts on account of setting properties (refer to the documentation from the manufacturer).

Do not apply oil to new wheel bolts.

- Renew corroded wheel bolts.

  Parts: Wheel bolts
- Clean the wheel bolts.
- Check the wheel bolts and threads for damage, renew the wheel bolts if necessary.
- Join and tighten the wheel bolts (arrows).

Wheel bolts

M 14/AF 17	Screw in wheel bolts and evenly tighten crosswise by hand in order to centre the wheel rim. Tighten wheel bolts to the prescribed tightening torque with a calibrated torque wrench in a crosswise sequence. Check all the wheel bolts in the same order or retighten to the prescribed tightening torque again.	Tightening torque Check	140 Nm 140 Nm

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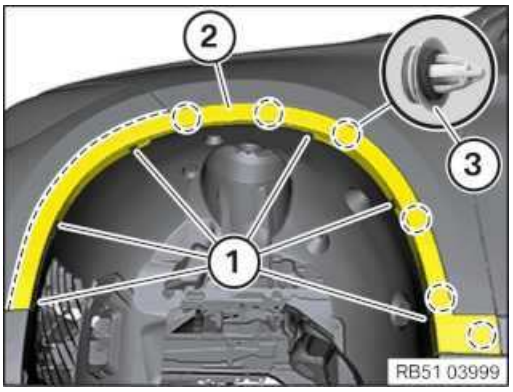
6 – Installing front wheel arch trim

NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the clips (3) for damage and renew where required.
  The clips (3) must not be damaged or missing.
- Feed in wheel arch trim (2) and engage on the clips (3).
- Engage wheel arch trim (2) into the latch mechanisms on the bumper panel.
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

Additional Information

Overview of Tightening Torques

Wheel arch cover to body — Used in step 4

Plastic nut		Tightening torque	2,6 Nm
Screw		Tightening torque	2,6 Nm

Wheel arch cover to body — Used in step 4

Screw		Tightening torque	2,5 Nm

Wheel arch cover to body — Used in step 4

Plastic nut		Tightening torque	3 Nm

Brake disc to rear wheel hub — Used in step 5

M8	Renew screw.	Tightening torque	16 Nm

Brake disc to front wheel hub — Used in step 5

M8	Renew screw.	Tightening torque	16 Nm

Wheel bolts — Used in step 5

M 14/AF 17	Screw in wheel bolts and evenly tighten crosswise by hand in order to centre the wheel rim. Tighten wheel bolts to the prescribed tightening torque with a calibrated torque wrench in a crosswise sequence. Check all the wheel bolts in the same order or retighten to the prescribed tightening torque again.	Tightening torque Check	140 Nm 140 Nm

Overview of Special Tools

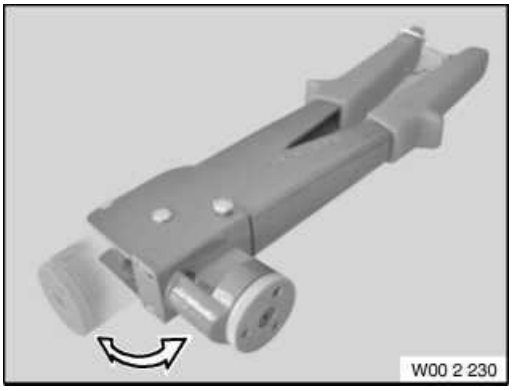
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2 344 011 Tool



Common	Used in step 5
Usage	Tool (wheel hub grinder) for cleaning the connection of the wheel rim (wheel contact face) to the wheel hub.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	
SI-Number	08 08 12 (872)

0 496 521 (00 2 230) Pliers

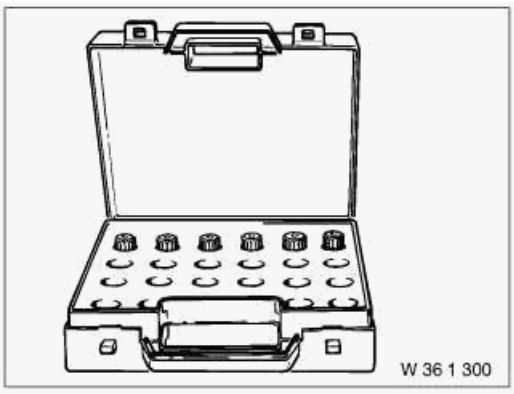


Common	Used in step 6
Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

Replacement tools:

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0 495 221 (36 1 323) Wheel stud



Common	Used in step 2
Usage	(Code 30) Code 39 available separately, (see EPC) under 36 13 1 181 259
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

0 495 224 (36 1 326) Wheel stud



Common	Used in step 2
Usage	(Code 33) With centring bore available separately, (see EPC) under 36 13 6 765 546
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

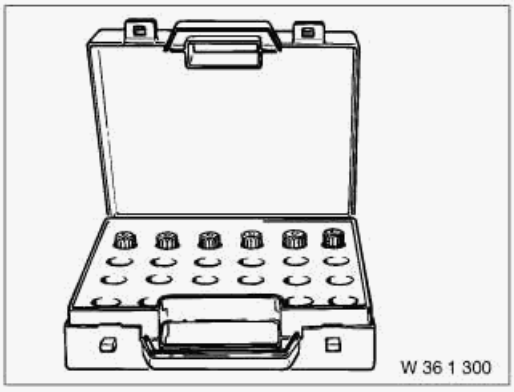
0 495 225 (36 1 327) Wheel stud



Common	Used in step 2
Usage	(Code 34) With centring bore available separately (see EPC) under 36 13 6 765 547
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

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0 495 226 (36 1 328) Wheel stud



Common	Used in step 2
Usage	(Code 35) With centring bore available separately, (see EPC) under 36 13 6 762 340
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

0 495 227 (36 1 329) Wheel stud



Common	Used in step 2
Usage	(Code 36) With centring bore available separately (see EPC) under 36 13 6 762 341
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

0 495 228 (36 1 331) Wheel stud



Common	Used in step 2
Usage	(Code 37) With centring bore available separately (see EPC) under 36 13 6 762 342
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

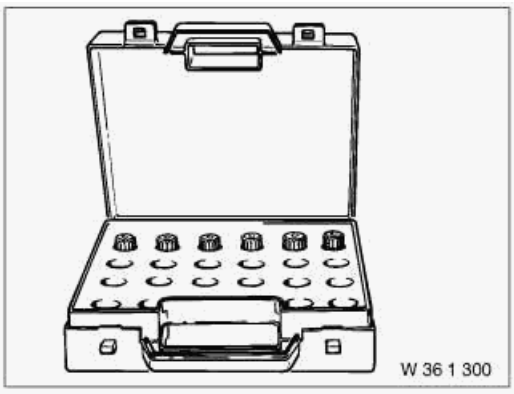
0 495 229 (36 1 332) Wheel stud



Common	Used in step 2
Usage	(Code 38) With centring bore available separately (see EPC) under 36 13 6 762 343
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

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0 495 230 (36 1 333) Wheel stud



Common	Used in step 2
Usage	(Code 40) With centring bore available separately (see EPC) under 36 13 6 762 344
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

Links

Operating materials	Used in step
2.0 Grease for wheel centring	5

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51 71 482 Removing and installing/replacing left or right tension strut

WARNING

Vehicle may slip off the vehicle hoist if the vehicle hoist is handled incorrectly.

Danger! Life-threatening injuries!

- Observe safety information on raising the vehicle using a vehicle hoist.
- For additional information see: 00 ... Raising the vehicle using a vehicle hoist.

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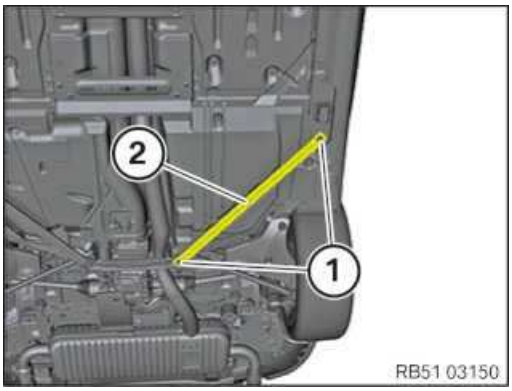
1 – Remove torsion strut

TECHNICAL INFORMATION

Driving without the strut brace/front end or tension strut is not permitted.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Loosen screws (1).
- Remove the torsion strut (2).

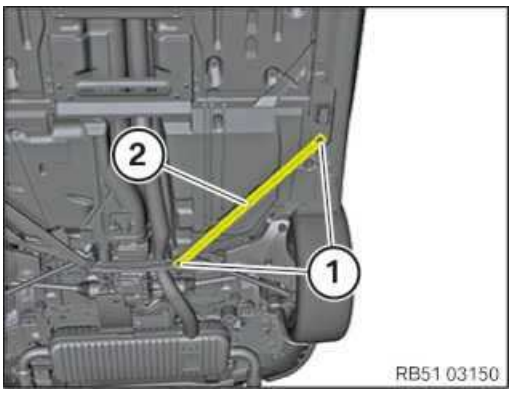
2 – Install torsion strut

TECHNICAL INFORMATION

Driving without the strut brace/front end or tension strut is not permitted.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Install the torsion strut (2).
- Tighten the screws (1).

Torsion struts on mounting

M12	Renew screws.	Tightening torque	100 Nm
		Angle of rotation	90 °

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Additional Information

Overview of Tightening Torques

Torsion struts on mounting Used in step 2

M12	Renew screws.	Tightening torque	100 Nm
		Angle of rotation	90 °

Links

Repair instructions	Used in step
00 .. ... Raising the vehicle using a vehicle hoist	

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51 71 041 Removing and installing/replacing rear left or right wheel arch cover

PRELIMINARY WORK

1 – Removing the wheel



- If several wheels are removed simultaneously: Use a piece of chalk to mark on each tyre the axle and side on which the corresponding wheel is fitted.
- Unscrew the wheel bolts (arrows) and remove the wheel.

  Use the matching adapter from tool set (wheel bolt adapter set) to loosen and tighten down the wheel bolt with security code.

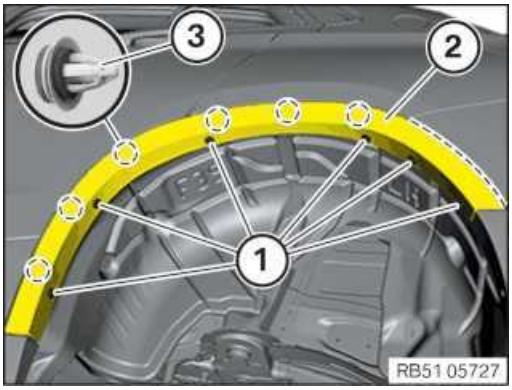
2 – Removing rear wheel arch trim

NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Remove the blind rivets (1).
- Disengage the wheel arch trim (2) from the clips (3).
- Release the wheel arch trim (2) from the latch mechanisms on the bumper and remove.

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MAIN WORK

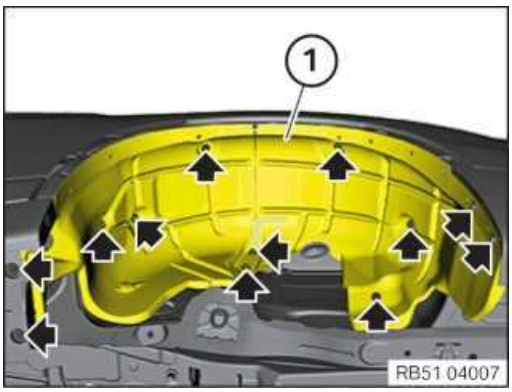
3 – Removing rear wheel arch cover

NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

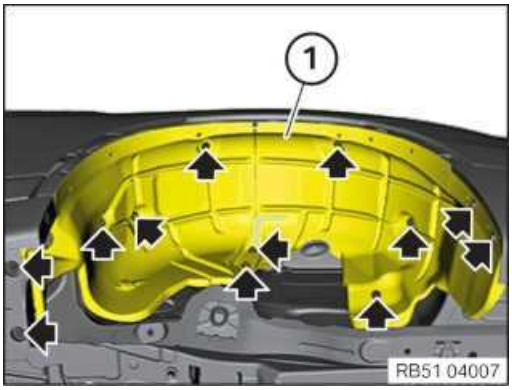
NOTICE

Description is for left component only. Procedure on the right side is identical.



- Unscrew all bolts and nuts (arrows).
- Carefully feed out and remove the wheel arch cover (2).

4 – Removing the rear wheel arch cover



- Feed in wheel arch cover (1) and correctly position it.
- Tighten all bolts and nuts (arrows).

Wheel arch cover to body

Plastic nut		Tightening torque	2,6 Nm
Screw		Tightening torque	2,6 Nm

POSTPROCESSES

5 – Installing the rear wheel arch trim

TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.

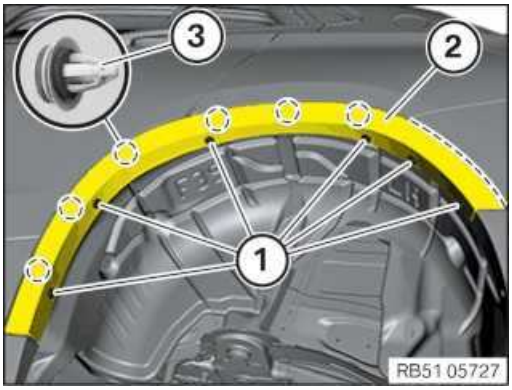
NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

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NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the clips (3) for damage and renew where required.

  The clips (3) must not be damaged or missing.
- Feed in wheel arch trim (2) and engage on the clips (3).
- Engage the wheel arch trim (2) with the latch mechanisms on the bumper panel.
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

6 – Mounting the wheel

▸ **Clean the contact surfaces between the brake disc and the wheel rim**



TECHNICAL INFORMATION

The contact surface between the brake disc and the wheel rim must be clean and free from oil and grease. There is otherwise a risk of the wheel becoming loose at a later time.

- Remove dirt, grease residues and corrosion from the contact surface with a drill and the special tool **2 344 011**.

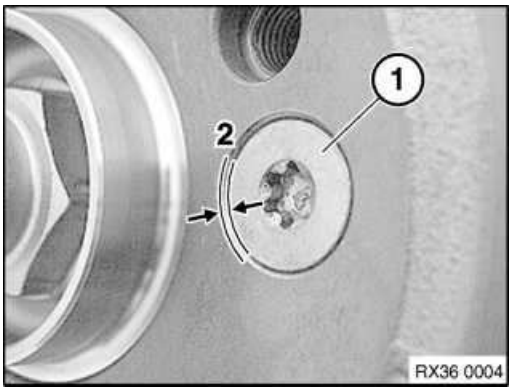
  Do not operate special tool **2 344 011** with an impact screwdriver.
- Degrease the contact surfaces with the universal cleaner (see BMW Group Parts).
- In the event of grease residue in the area of the wheel bolt holes, remove and clean the brake disc.



- Remove dirt, grease residues and corrosion from the contact surface with a drill and the special tool **2 344 011**.

  Do not operate special tool **2 344 011** with an impact screwdriver.
- Degrease the contact surfaces with the universal cleaner (see BMW Group Parts).

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- Renew mounting bolt (1).

  Parts: Mounting bolt

- Check that the mounting bolt (1) for the brake disc is securely seated.

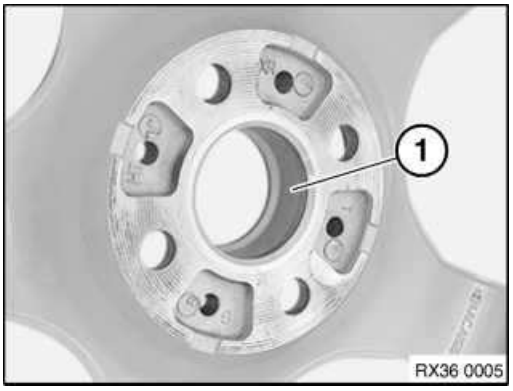
  The mounting bolt (1) for the brake disc may not protrude under any circumstances on the contact surface (2) between the brake disc and the wheel rim.

Brake disc to rear wheel hub

M8	Renew screw.	Tightening torque	16 Nm

Brake disc to front wheel hub

M8	Renew screw.	Tightening torque	16 Nm



- Lightly grease the wheel centring (1) in the wheel rim; refer to additional information for grease for the wheel centring (1).

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TECHNICAL INFORMATION

Never use impact screwdrivers or electric screwdrivers to screw in and tighten the wheel bolts.

The wheel rim must rest uniformly against the brake disc.

In the case of non-original BMW wheel bolts/wheel rims, it may be necessary to retighten the wheel bolts on account of setting properties (refer to the documentation from the manufacturer).

Do not apply oil to new wheel bolts.

- Renew corroded wheel bolts.

  Parts: Wheel bolts
- Clean the wheel bolts.
- Check the wheel bolts and threads for damage, renew the wheel bolts if necessary.
- Join and tighten the wheel bolts (arrows).

Wheel bolts

M 14/AF 17	Screw in wheel bolts and evenly tighten crosswise by hand in order to centre the wheel rim. Tighten wheel bolts to the prescribed tightening torque with a calibrated torque wrench in a crosswise sequence. Check all the wheel bolts in the same order or retighten to the prescribed tightening torque again.	Tightening torque Check	140 Nm 140 Nm

Additional Information

Overview of Tightening Torques

Wheel arch cover to body — Used in step 4

Plastic nut		Tightening torque	2,6 Nm
Screw		Tightening torque	2,6 Nm

Brake disc to rear wheel hub — Used in step 6

M8	Renew screw.	Tightening torque	16 Nm

Brake disc to front wheel hub — Used in step 6

M8	Renew screw.	Tightening torque	16 Nm

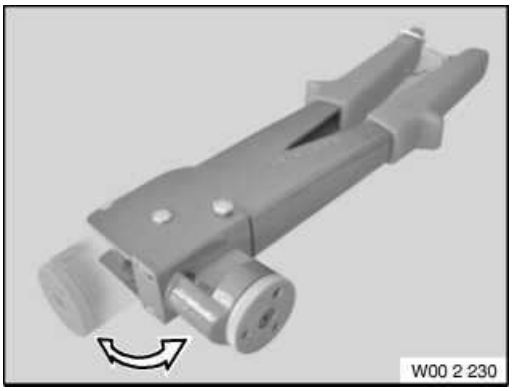
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Wheel bolts Used in step 6

M 14/AF 17	Screw in wheel bolts and evenly tighten crosswise by hand in order to centre the wheel rim. Tighten wheel bolts to the prescribed tightening torque with a calibrated torque wrench in a crosswise sequence. Check all the wheel bolts in the same order or retighten to the prescribed tightening torque again.	Tightening torque Check	140 Nm 140 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common Used in step 5

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

2 344 011 Tool



Common Used in step 6

Usage	Tool (wheel hub grinder) for cleaning the connection of the wheel rim (wheel contact face) to the wheel hub.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	
SI-Number	08 08 12 (872)

Replacement tools:

0 495 221 (36 1 323) Wheel stud

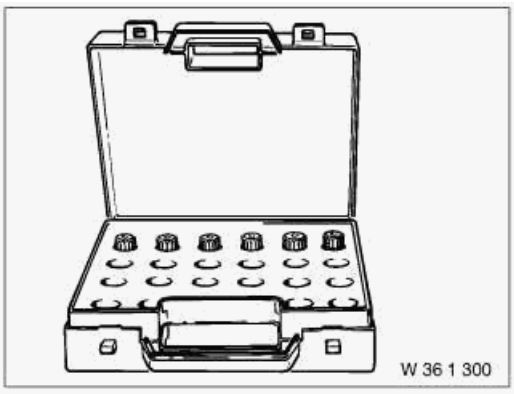


Common Used in step 1

Usage	(Code 30) Code 39 available separately, (see EPC) under 36 13 1 181 259
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

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0 495 224 (36 1 326) Wheel stud



Common	Used in step 1
Usage	(Code 33) With centring bore available separately, (see EPC) under 36 13 6 765 546
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

0 495 225 (36 1 327) Wheel stud



Common	Used in step 1
Usage	(Code 34) With centring bore available separately (see EPC) under 36 13 6 765 547
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

0 495 226 (36 1 328) Wheel stud



Common	Used in step 1
Usage	(Code 35) With centring bore available separately, (see EPC) under 36 13 6 762 340
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

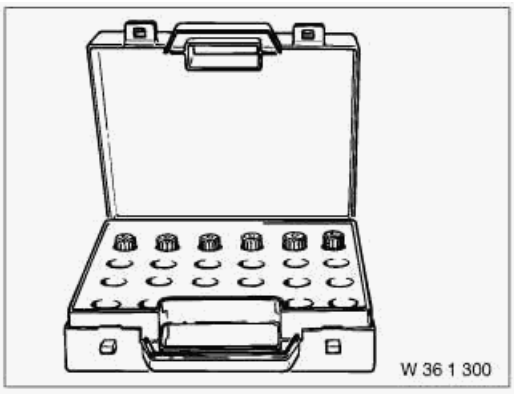
0 495 227 (36 1 329) Wheel stud



Common	Used in step 1
Usage	(Code 36) With centring bore available separately (see EPC) under 36 13 6 762 341
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

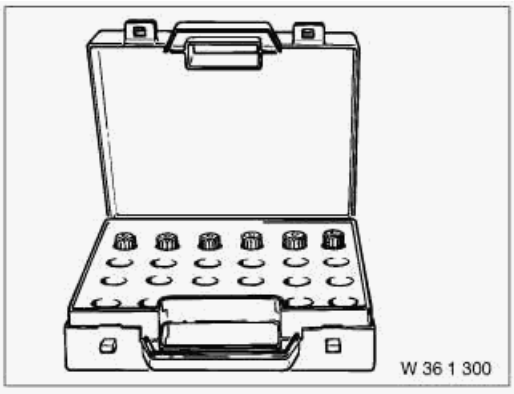
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0 495 228 (36 1 331) Wheel stud



Common	Used in step 1
Usage	(Code 37) With centring bore available separately (see EPC) under 36 13 6 762 342
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

0 495 229 (36 1 332) Wheel stud



Common	Used in step 1
Usage	(Code 38) With centring bore available separately (see EPC) under 36 13 6 762 343
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

0 495 230 (36 1 333) Wheel stud



Common	Used in step 1
Usage	(Code 40) With centring bore available separately (see EPC) under 36 13 6 762 344
Included in the tool or work	0 492 518
Storage location	
Replaced by	
In connection with	
SI-Number	

Links

Operating materials	Used in step
2.0 Grease for wheel centring	6

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51 71 099 Removing and installing/replacing the air duct for the coolant radiator

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



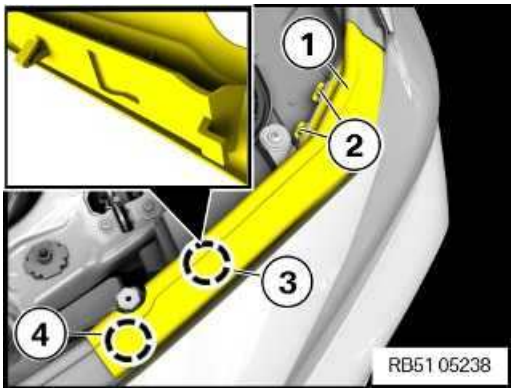
- See additional information.

2 – Remove both bonnet seals on the side

NOTICE

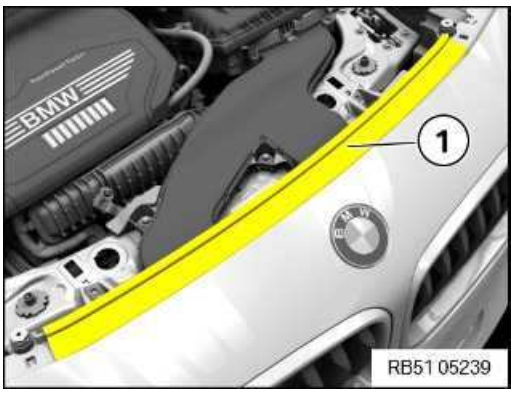
Description is for left component only. Procedure on the right side is identical.

▶ **Remove the bonnet seal on the side**



- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

3 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

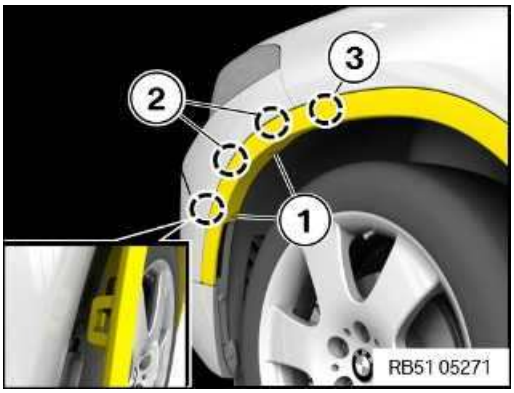
4 – Partially remove both front wheel arch trims

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NOTICE

Description is for left component only. Procedure on the right side is identical.

▶ **Partially removing the front wheel arch trim**



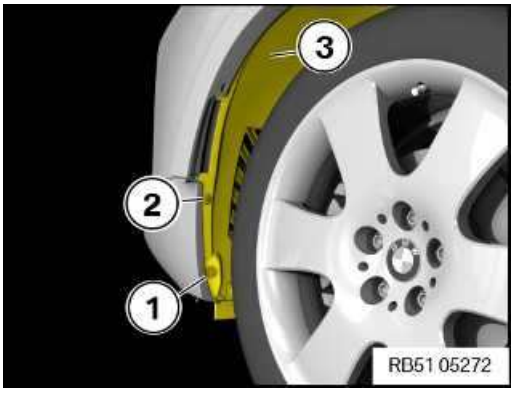
- Loosen blind rivet(1).
- Release front wheel arch trim in the area of the bumper panel from the latch mechanisms (2) and from the clip (3).

5 – Partially remove both front wheel arch covers

NOTICE

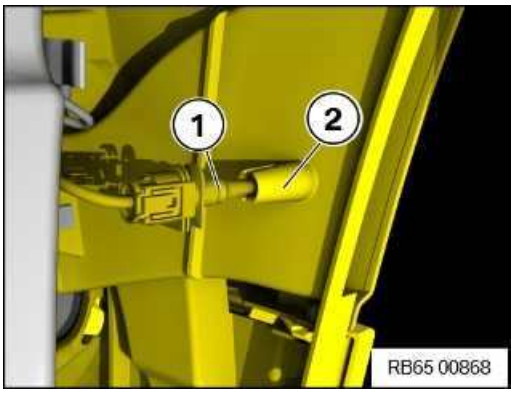
Description is for left component only. Procedure on the right side is identical.

▶ **Partially remove the front wheel arch cover**



- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

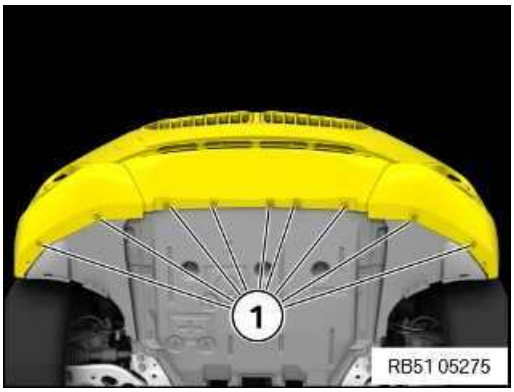
6 – Remove temperature sensor



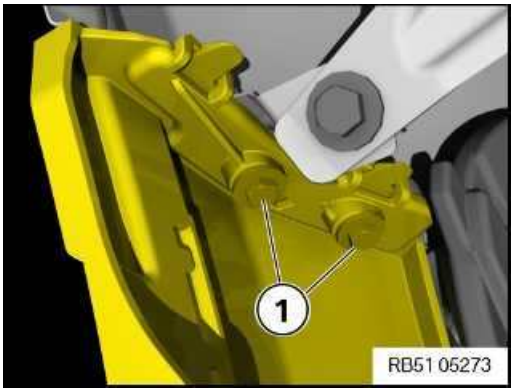
- Unclip temperature sensor (1) from front bumper panel (2).

7 – Remove front bumper panel

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- Loosen screws (1).



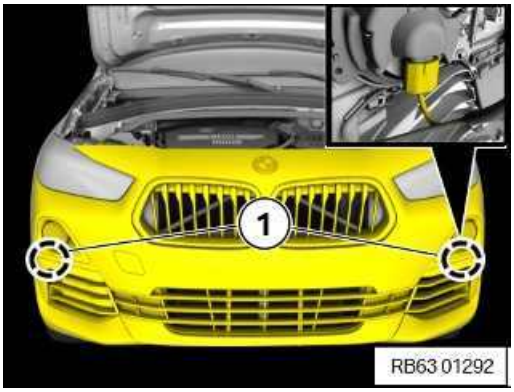
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Loosen screws (1).

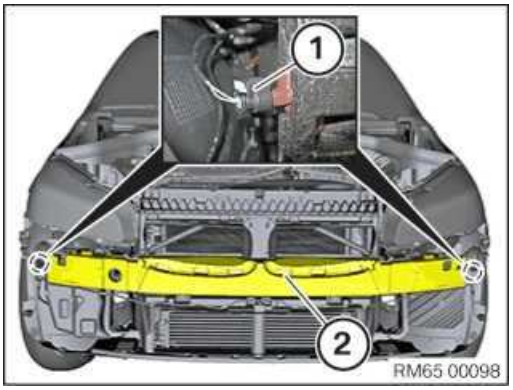


- Loosen screws (1).
- Loosen screws (2).



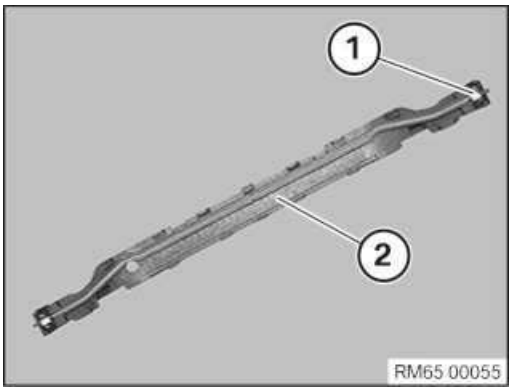
- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

8 – Remove impact absorber



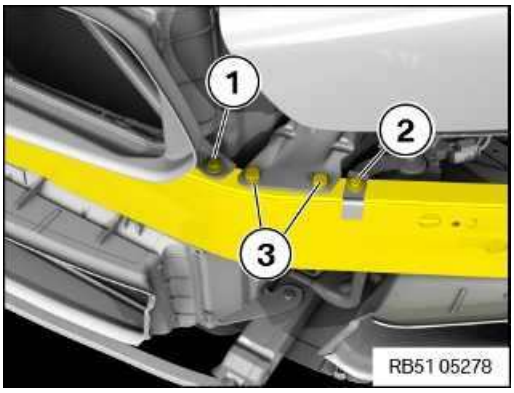
- Unlock and disconnect plug connections (1).
- Remove the impact absorber (2).

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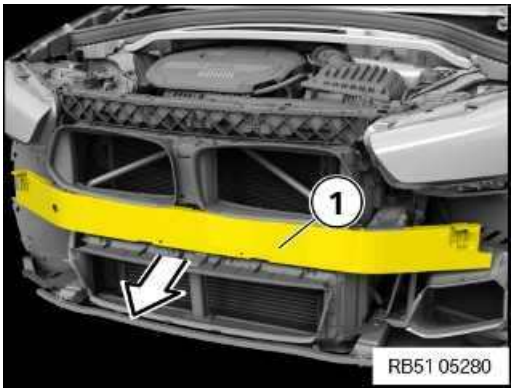


- Detach the pressure hose (1) from the impact absorber (2).

9 – Removing top front bumper support

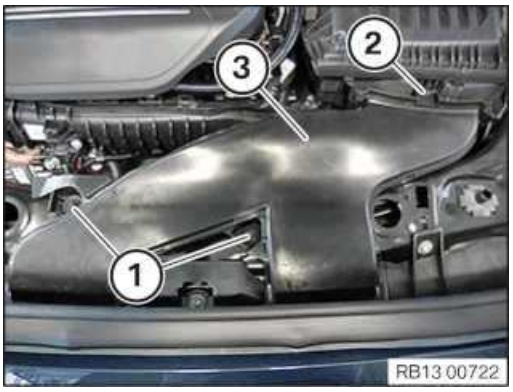


- Loosen screw (1).
- Loosen screw (2).
- Loosen screws (3).



- Guide out and remove the top front bumper support (1) in direction of arrow.

10 – Remove the intake neck for intake silencer housing

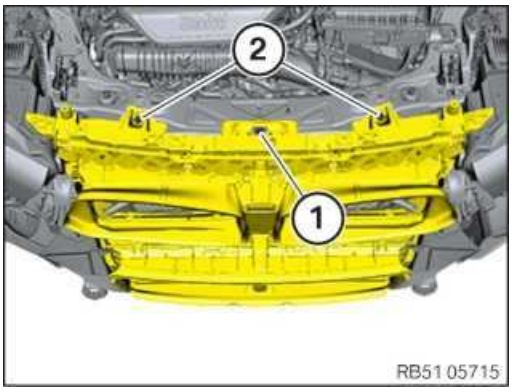


- Loosen nuts (1).
- Loosen the lock (2).
- Guide the intake neck (3) out and remove it.

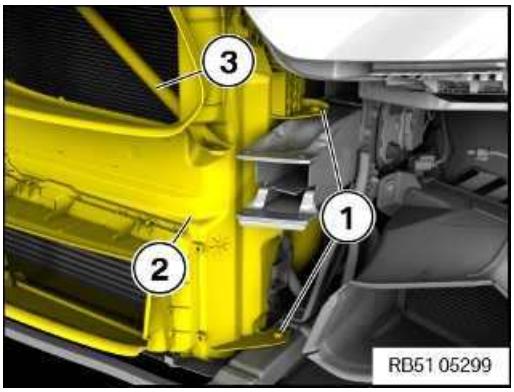
MAIN WORK

11 – Remove the air duct to the radiator

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- Loosen screw (1).
- Loosen screws (2).



NOTICE

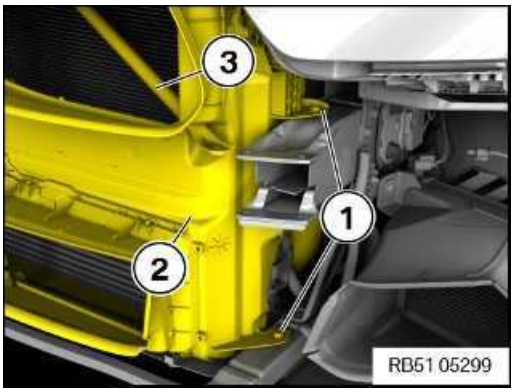
Perform the operations on the left and right side.

- Loosen screws (1).
- Feed out the air duct to the radiator (2) with the bracing strut (3) toward the front and remove.

12 – Installing air duct to radiator

NOTICE

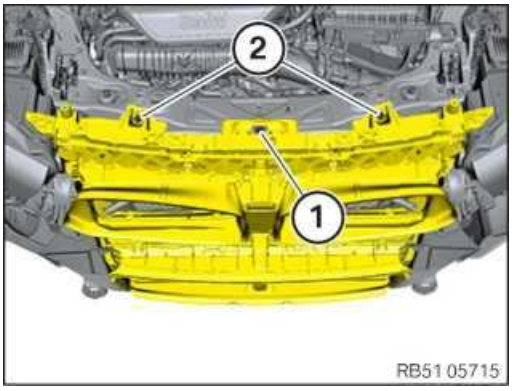
Perform the operations on the left and right side.



- Feed in air duct to radiator (2) with bracing strut (3).
- Tighten the screws (1).

Air duct to deformation element

M6x20 screw		Tightening torque	4,6 Nm



- Tighten down screw (1).

Bracing strut to top front bumper support or to top connection

M6x20 screw		Tightening torque	11,8 Nm

- Tighten down screws (2).

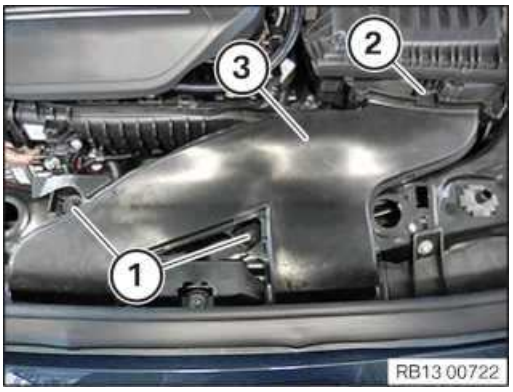
Air duct to upper connection

M6x20 screw		Tightening torque	11,8 Nm

POSTPROCESSES

13 – Install the intake neck for the intake filter housing

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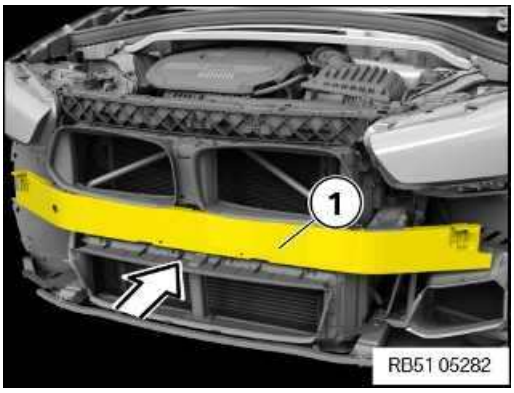
- Insert and install the intake neck (3).

  The lock (2) must audibly engage.
- Tighten nuts (1).

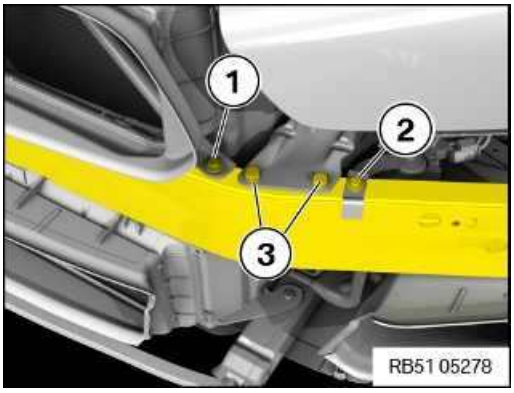
Intake neck to cross connection

M6		Tightening torque	8 Nm

14 – Installing top front bumper support



- Position top front bumper support (1).



- Tighten down screws (3).

Front top bumper support to top deformation element

Hexagon screw M8x95		Tightening torque	28 Nm

- Tighten down screw (2).

Fanfare to front top bumper support

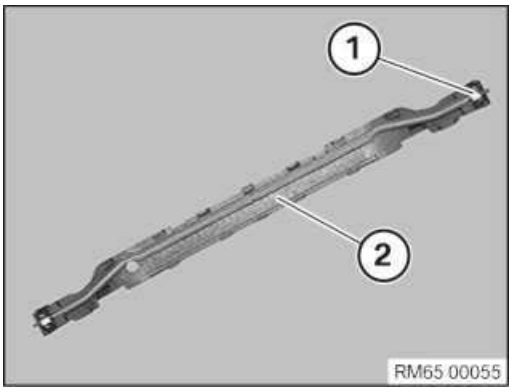
Hexagon screw		Tightening torque	11,8 Nm

- Tighten down screw (1).

Bracing strut to top front bumper support or to top connection

M6x20 screw		Tightening torque	11,8 Nm

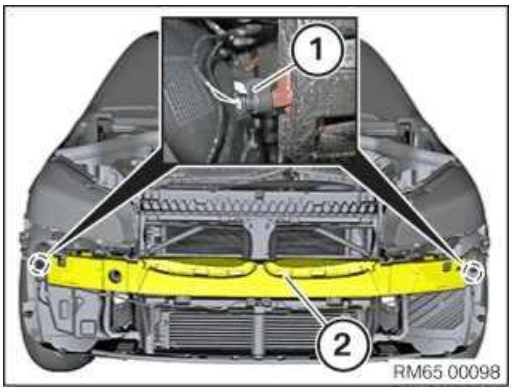
15 – Installing impact absorber



- Renew the impact absorber (2).

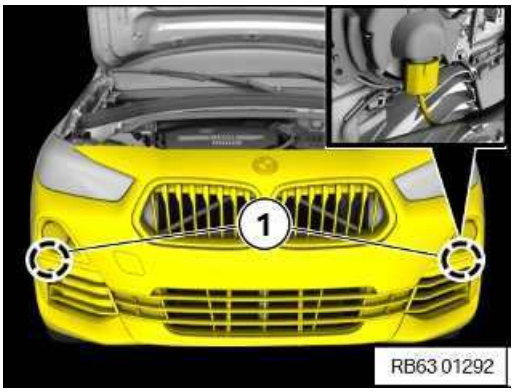
  Parts: Impact absorber
- Insert and engage pressure hose (1) in impact absorber (2).

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- Attach bottom impact absorber (2) and press upwards.
- Connect connectors (1) and lock.

16 – Install bumper panel, front



- Connect the connectors (1) on the fog lights and lock.
- Join the front bumper panel and position.



- Tighten the screws (1).

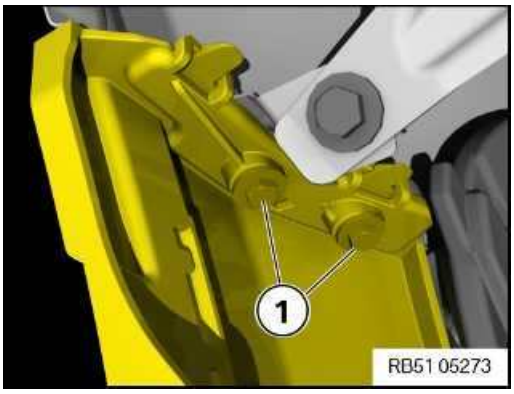
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm



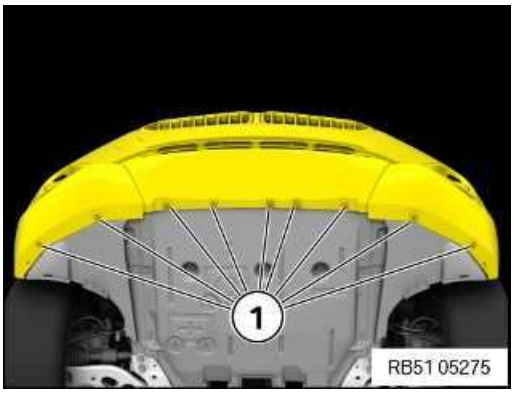
NOTICE

Description is for left component only. Procedure on the right side is identical.

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm



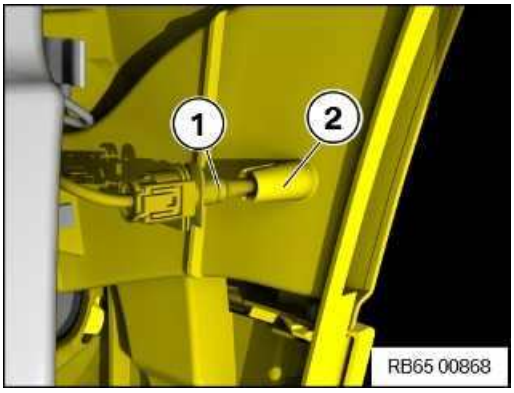
- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm

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17 – Install temperature sensor



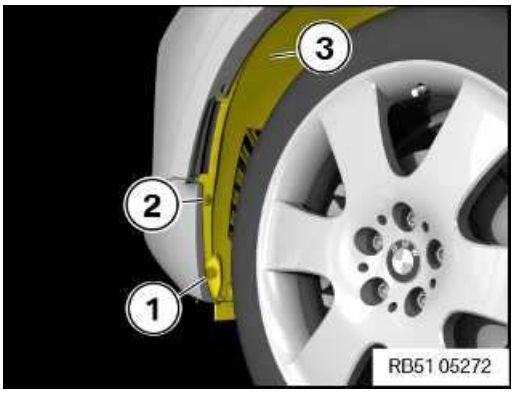
- Clip temperature sensor (1) into the front bumper panel (2).

18 – Partially install both front wheel arch covers

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Partially install the front wheel arch cover**



- Fold the front wheel arch cover (3) forward.
- Mount the blind rivet (2) with the special tool **0 496 521 (00 2 230)**.
- Tighten down screw (1).

Front wheel arch cover to front bumper panel

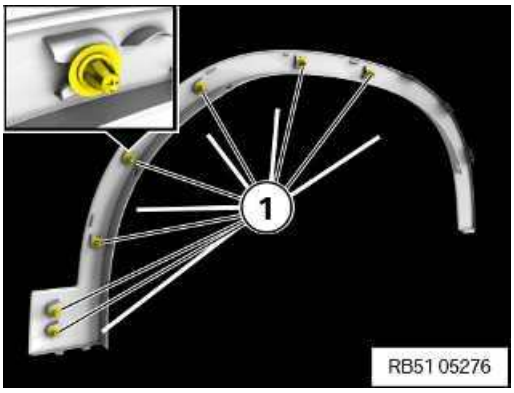
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

19 – Partially install both front wheel arch trims

NOTICE

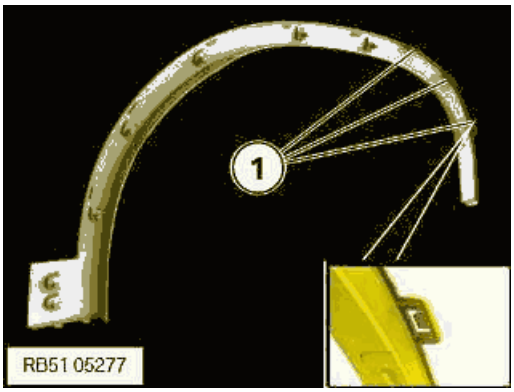
Description is for left component only. Procedure on the right side is identical.

▸ **Partly install the front wheel arch trim**

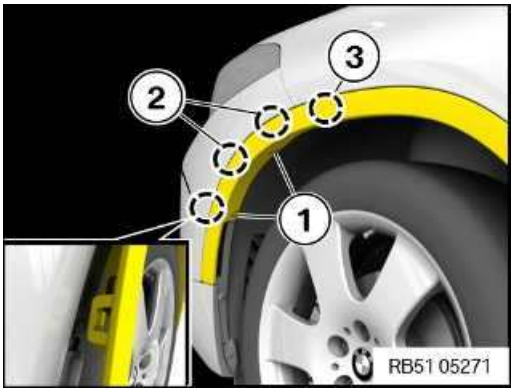


- Check clips (1) for damage, and replace if necessary.

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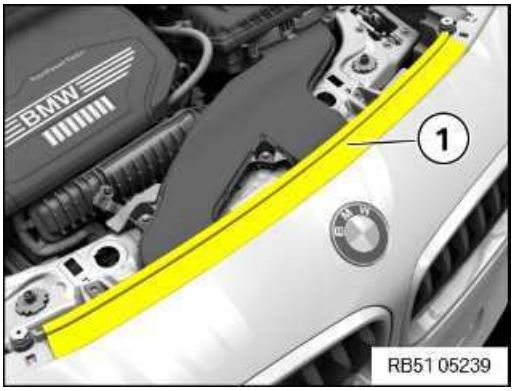


- Check the retaining lugs (1) for damage and replace the front wheel arch trim where required.



- Clip the front wheel arch trim into the clip (3) in the area of the bumper panel and into the latch mechanisms (2).
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

20 – Install the center front bonnet seal



- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

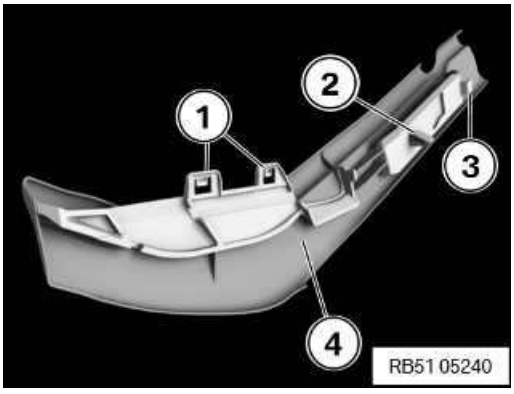
21 – Install both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check



- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

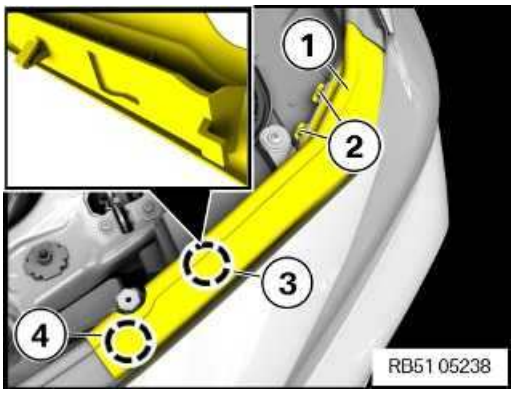
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Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).



- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

22 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Air duct to deformation element — Used in step 12

M6x20 screw		Tightening torque	4,6 Nm

Bracing strut to top front bumper support or to top connection — Used in step 12 14

M6x20 screw		Tightening torque	11,8 Nm

Air duct to upper connection — Used in step 12

M6x20 screw		Tightening torque	11,8 Nm

Intake neck to cross connection — Used in step 13

M6		Tightening torque	8 Nm

Front top bumper support to top deformation element — Used in step 14

Hexagon screw M8x95		Tightening torque	28 Nm

Fanfare to front top bumper support — Used in step 14

Hexagon screw		Tightening torque	11,8 Nm

Bumper panel to headlight — Used in step 16

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm

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Bumper panel to air duct — Used in step 16

Screw M6		Tightening torque	4,6 Nm

Front bumper panel to front side panel — Used in step 16

Screw TS5X35		Tightening torque	3 Nm

Front bumper panel to underbody panelling — Used in step 16

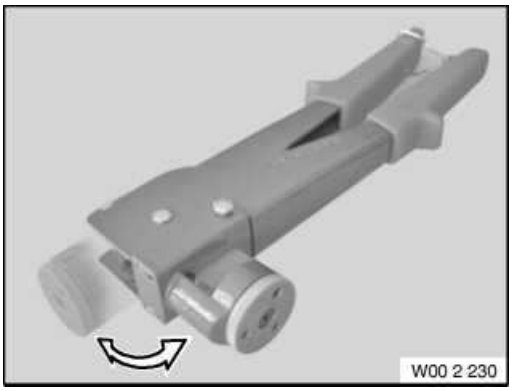
Thermoplastic hexagon screw		Tightening torque	2,5 Nm

Front wheel arch cover to front bumper panel — Used in step 18

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common — Used in step 18 19

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
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61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22

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51 71 478 Removing and installing/replacing the rear left or right wheel arch trim

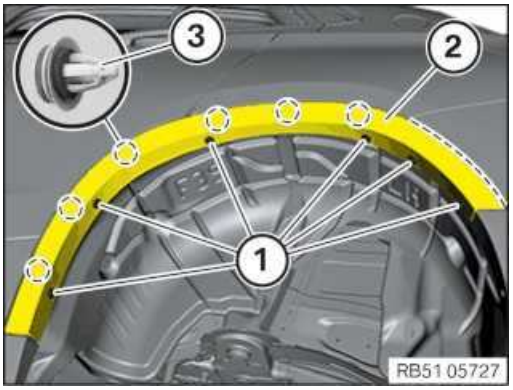
1 – Removing rear wheel arch trim

NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Remove the blind rivets (1).
- Disengage the wheel arch trim (2) from the clips (3).
- Release the wheel arch trim (2) from the latch mechanisms on the bumper and remove.

2 – Installing the rear wheel arch trim

TECHNICAL INFORMATION

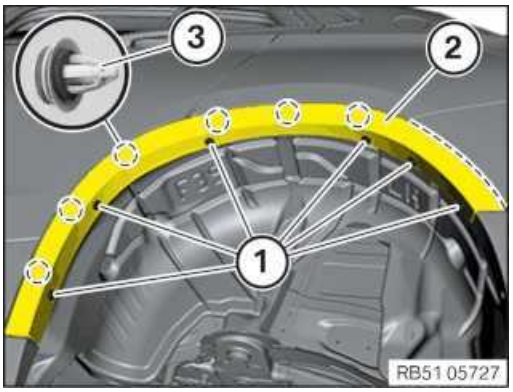
Latch mechanisms, guides and mounting elements must not be damaged or missing.

NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the clips (3) for damage and renew where required.

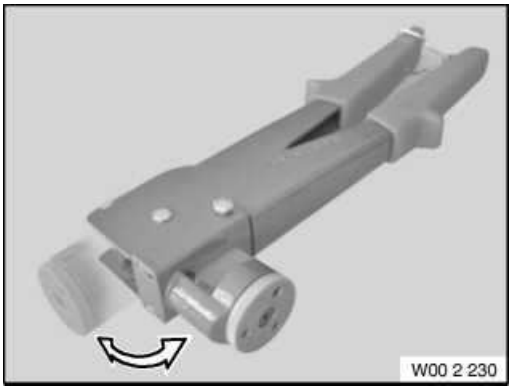
  The clips (3) must not be damaged or missing.
- Feed in wheel arch trim (2) and engage on the clips (3).
- Engage the wheel arch trim (2) with the latch mechanisms on the bumper panel.
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

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Additional Information

Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common	Used in step 2
Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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51 71 360 Removing and installing/replacing the tailgate seal

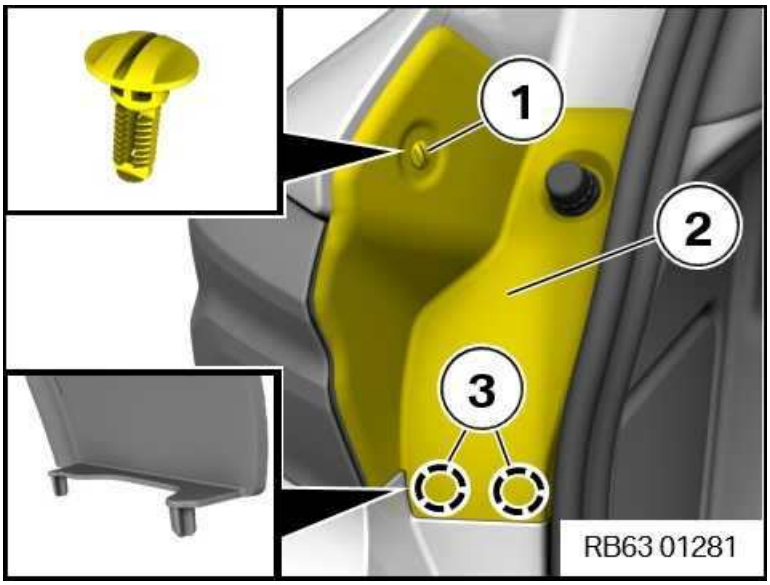
PRELIMINARY WORK

1 – Removing both trims for water channel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Removing trim for water channel**



- Detach rotary clip (1).
- Feed out and remove trim for water channel (2) from guides (3).

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MAIN WORK

2 – Removing the seal for the tailgate



- Pull off the gasket (1) towards the rear, starting from the sealing joint (2).

3 – Installing the seal for the tailgate



- Remove the residual sealant on the body.
- Clean the fold with solvent cleaner R2.

Expendable materials

Cleaning agent R2	500 ml	83190417324

- Renew gasket (1).

  Parts: Gasket

  The seal (1) must be renewed, as otherwise the tightness is not guaranteed.
- Feed in the seal (1) from the sealing joint (2) starting behind the bumper panel and connect on the fold.
- Ensure correct fit of seal (1) on all adjacent components.

POSTPROCESSES

4 – Install both trim pieces for the water channel

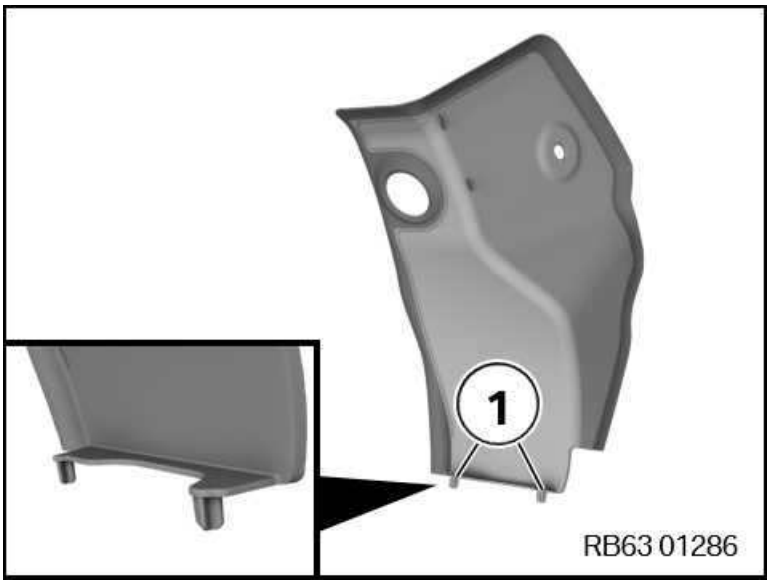
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the water channel**

Check

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- Check the guides (1) for damage.

Result

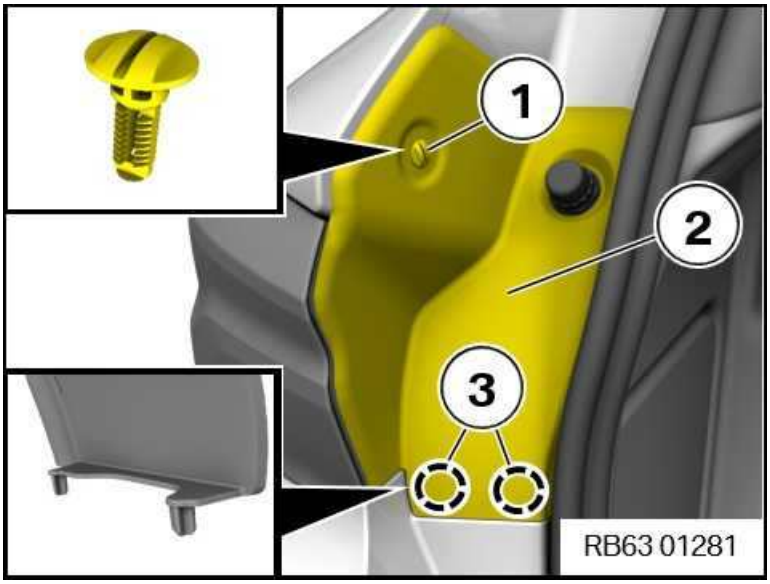
» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.



- Check rotary clip (1) for damage and, if necessary, replace it.



- Insert the trim for water channel (2) with guides (3).
- Fasten the rotary clip (1).

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51 71 470 Removing and installing/replacing the wheel arch trim at the front left or right

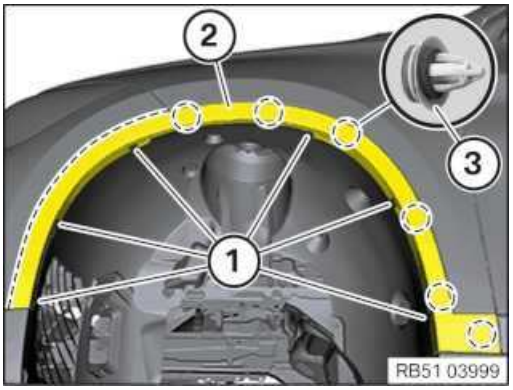
1 – Remove the front wheel arch trim

NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Remove the blind rivets (1).
- Release the wheel arch trim (2) in the area of the side panel from the clips (3).
- Release the wheel arch trim (2) from the latch mechanisms on the bumper and remove.

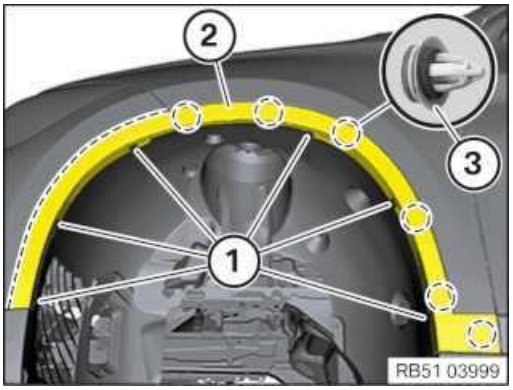
2 – Installing front wheel arch trim

NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

NOTICE

Description is for left component only. Procedure on the right side is identical.



- Check the clips (3) for damage and renew where required.

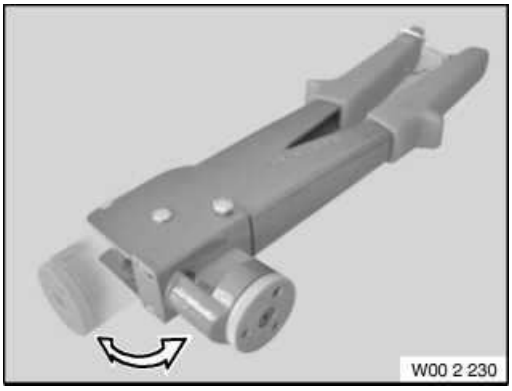
  The clips (3) must not be damaged or missing.
- Feed in wheel arch trim (2) and engage on the clips (3).
- Engage wheel arch trim (2) into the latch mechanisms on the bumper panel.
- Mount blind rivet (1) using the special tool **0 496 521 (00 2 230)**.

Additional Information

Overview of Special Tools

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0 496 521 (00 2 230) Pliers



Common

Used in step 2

Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm
Included in the tool or work	
Storage location	C25
Replaced by	
In connection with	
SI-Number	01 17 08 (478)

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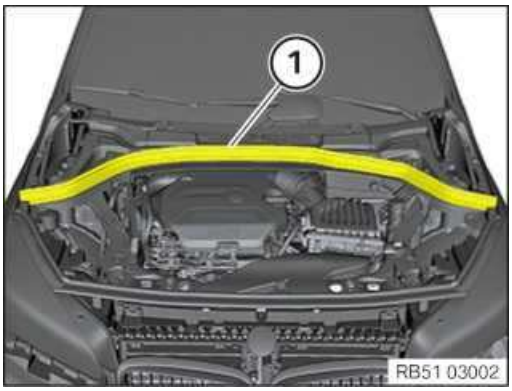
51 71 071 Removing and installing/replacing upper bulkhead cover

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

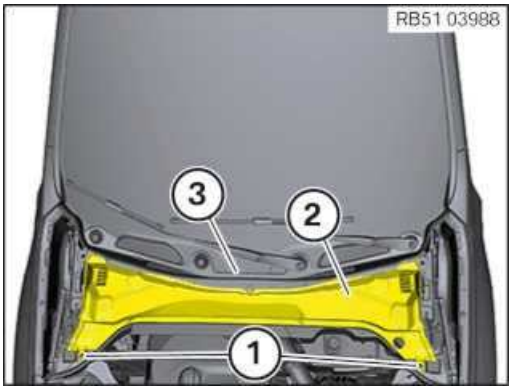
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

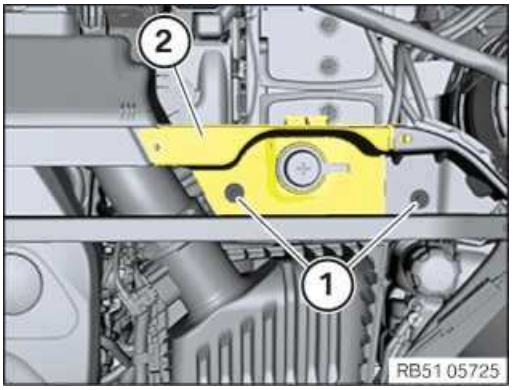
2 – Removing front cowl panel cover



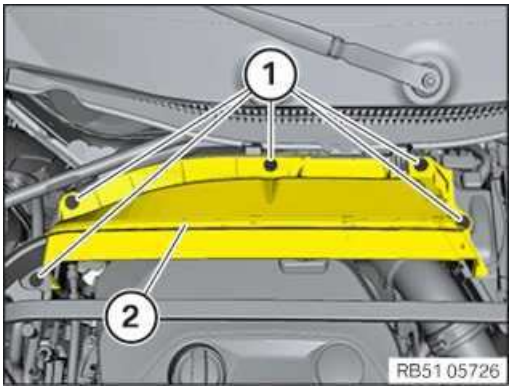
- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

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3 – Removing the upper bulkhead cover

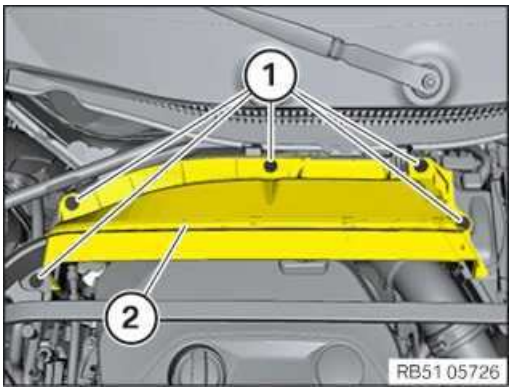


- Loosen screws (1).
- Guide out and remove the cover (2).



- Loosen screws (1).
- Feed out and remove the upper bulkhead cover (2).

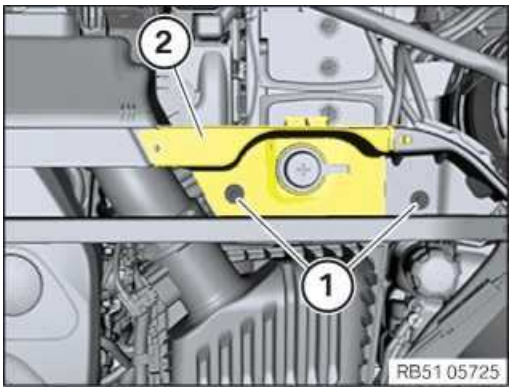
4 – Installing the upper bulkhead cover



- Feed in and install cover (2) of the bulkhead at the top.
- Tighten the screws (1).

Cover of top bulkhead

Screw		Tightening torque	2,6 Nm



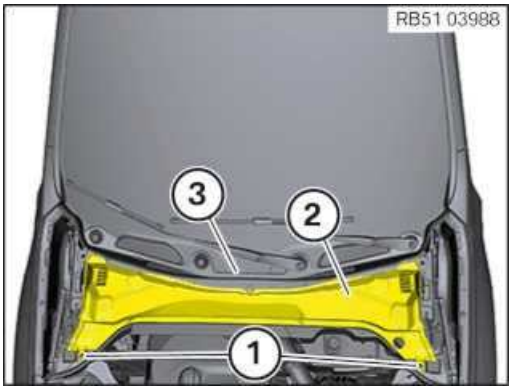
- Guide in and install cover (2).
- Tighten down screw (1).

Cover of remote positive terminal

Screw		Tightening torque	2,6 Nm

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5 – Installing front cowl panel cover

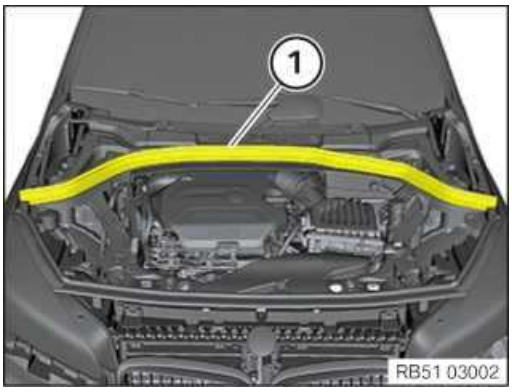


- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

6 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

Additional Information

Overview of Tightening Torques

Cover of top bulkhead Used in step 4

Screw		Tightening torque	2,6 Nm

Cover of remote positive terminal Used in step 4

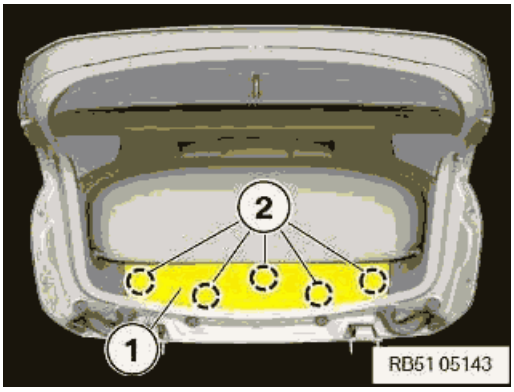
Screw		Tightening torque	2,6 Nm

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51 71 407 Replace the rear spoiler

PRELIMINARY WORK

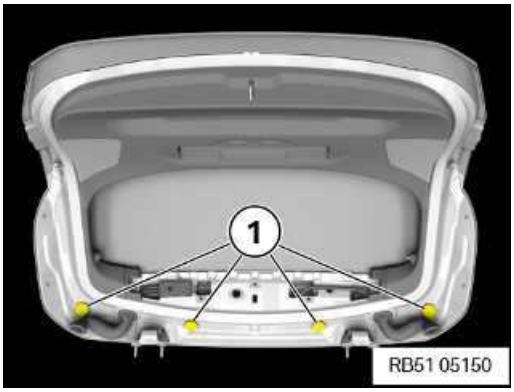
1 – Remove the trim for the top rear window frame



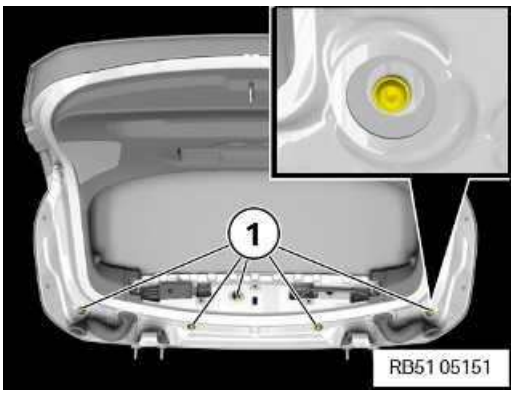
- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

MAIN WORK

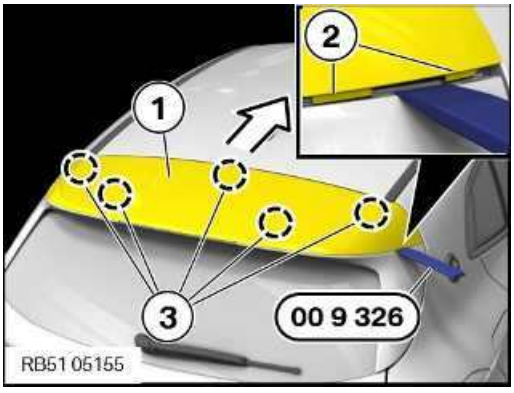
2 – Remove rear spoiler



- Unclip the covers (1) with a suitable tool and remove.



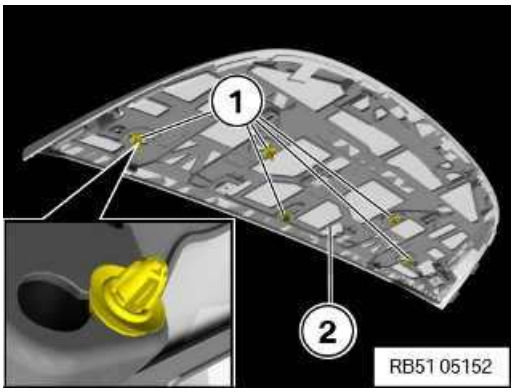
- Loosen screws (1).



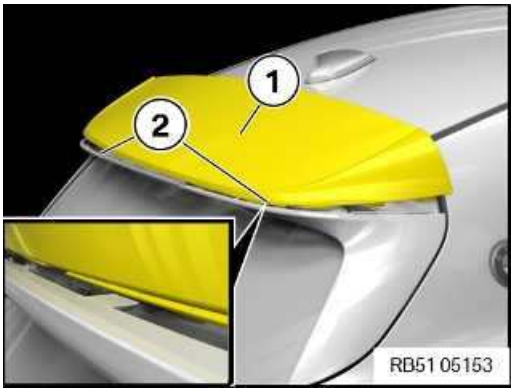
- Release rear spoilers (1) on both outer sides with the special tool **0 496 570 (00 9 326)** out of the latch mechanisms (2).
- Unclip rear spoiler (1) from the clips (3).
- Slightly lift rear spoiler (1) in the front area and remove in direction of arrow.

3 – Attach rear spoiler

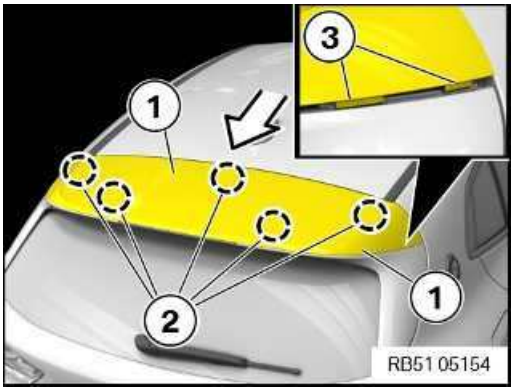
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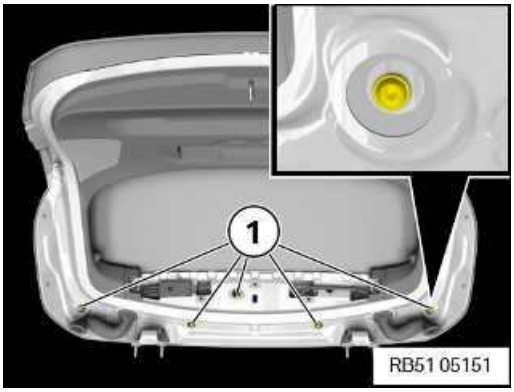
- Check clips (1) on the rear spoiler (2) for damage, renew if required.



- Position the rear spoiler (1) on the guides (2) .



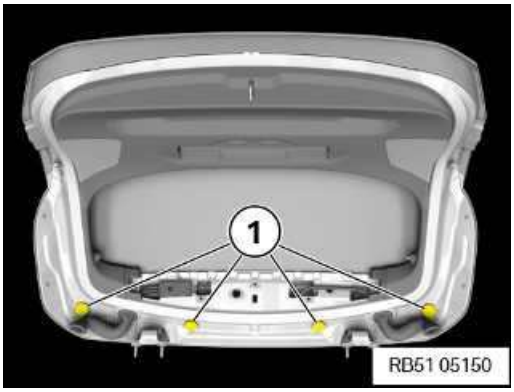
- Slide the rear spoiler (1) onto the lower section of the rear spoiler in the direction of the arrow.
- Clip in the rear spoiler (1) with the clips (2) and clip on the latch mechanisms (3) on both sides.



- Tighten the screws (1).

Rear spoiler to tailgate

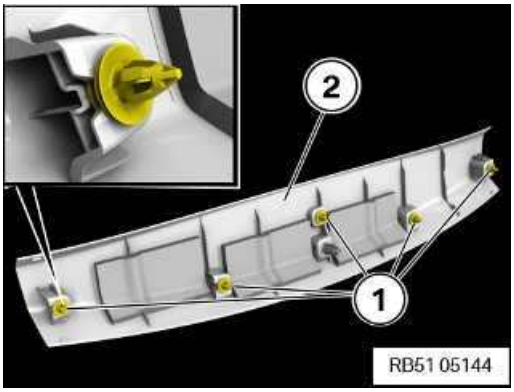
Oval-head screw		Tightening torque	3,1 Nm



- Insert the covers (1).

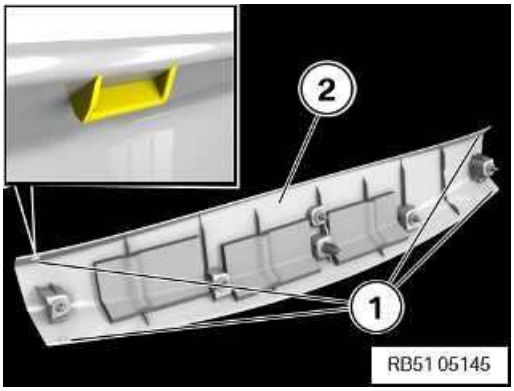
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4 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



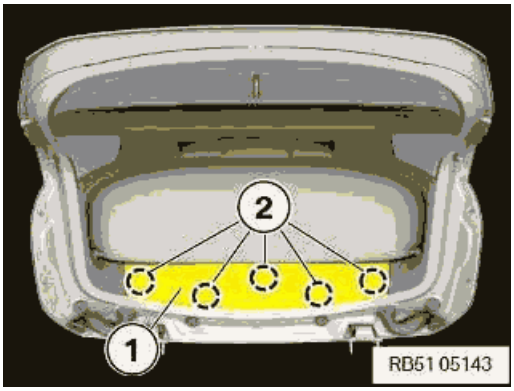
- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).



- Clip in the trim for the top rear window frame (1) with the clips (2).

Additional Information

Overview of Tightening Torques

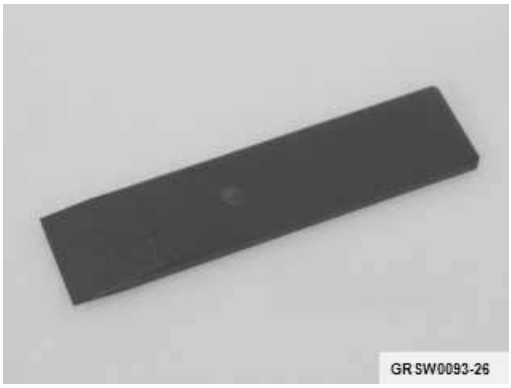
Rear spoiler to tailgate Used in step 3

Oval-head screw		Tightening torque	3,1 Nm

Overview of Special Tools

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0 496 570 (00 9 326) Wedge



Common

Used in step 2

Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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51 71 417 Replacing the lower section of the rear spoiler

RISK OF DAMAGE

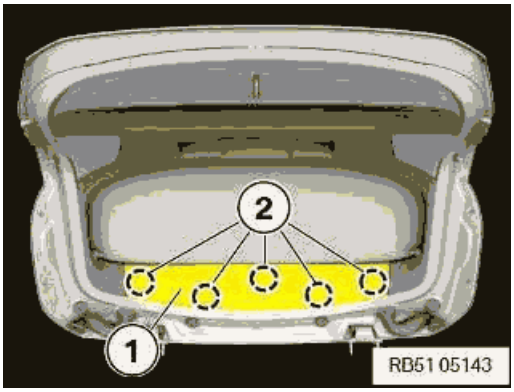
Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.

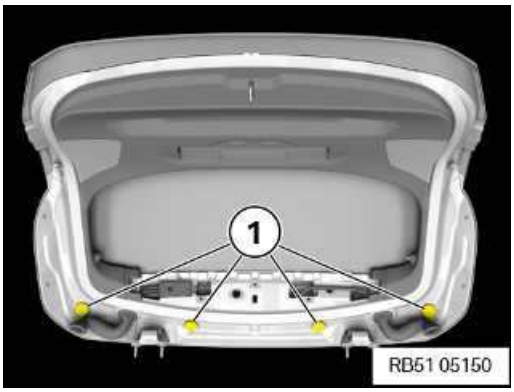
PRELIMINARY WORK

1 – Remove the trim for the top rear window frame

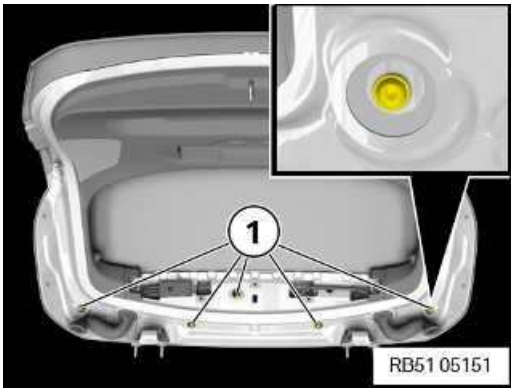


- Unclip the trim for the top rear window frame (1) at the latch mechanisms (2) and remove.

2 – Remove rear spoiler

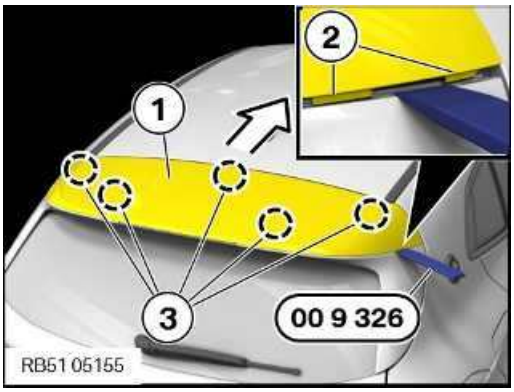


- Unclip the covers (1) with a suitable tool and remove.



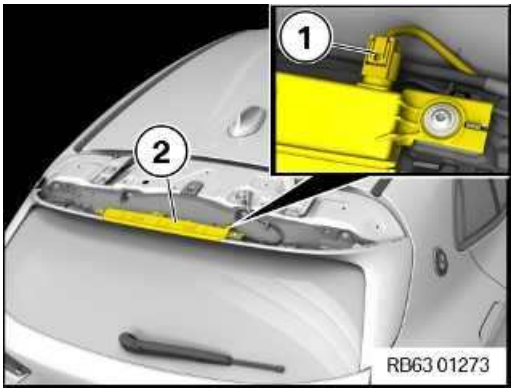
- Loosen screws (1).

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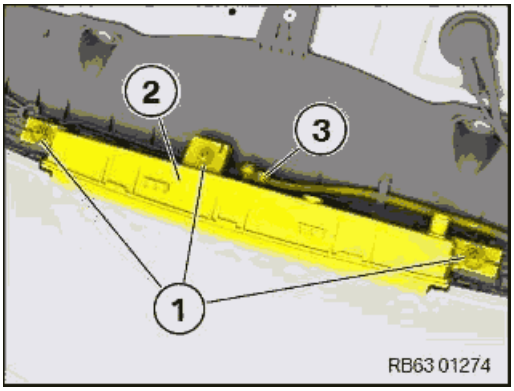


- Release rear spoilers (1) on both outer sides with the special tool **0 496 570 (00 9 326)** out of the latch mechanisms (2).
- Unclip rear spoiler (1) from the clips (3).
- Slightly lift rear spoiler (1) in the front area and remove in direction of arrow.

3 – Remove additional brake light



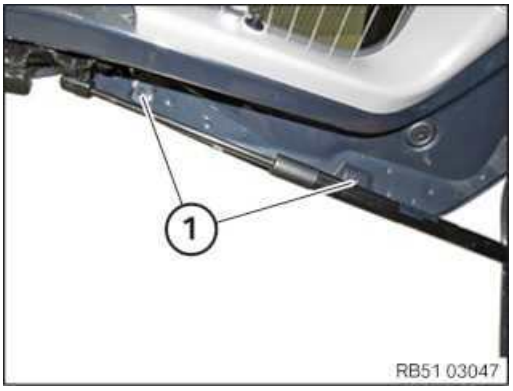
- Unlock and disconnect the plug connection (1) of the additional brake light (2).



- Loosen screws (1).
- Feed the additional brake light (2) out towards the top.
- Disconnect the hose pipe (3) and remove the additional brake light (2).

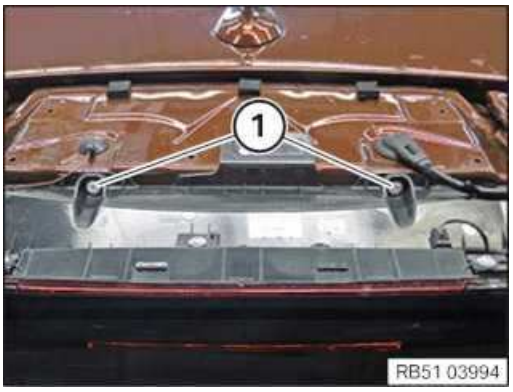
MAIN WORK

4 – Removing the lower section of the rear spoiler

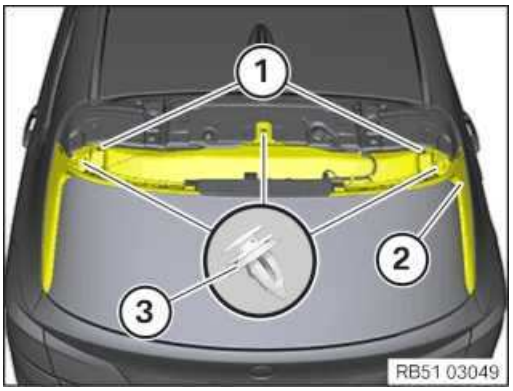


- Open tailgate.
- Loosen screws (1) on left and right.

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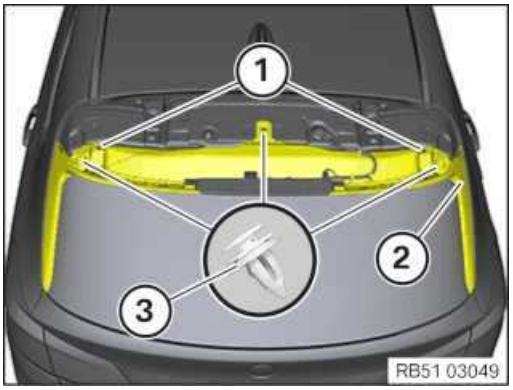


- Loosen screws (1).



- Disconnect the plug connection of the additional brake light and guide out the cable.
- Disconnect the quick connector of the water pipe of the washer jet and guide out the water pipe.
- Loosen screws (1).
- Release the lower section of the rear spoiler (2) at the clips (3) and remove it.

5 – Installing the lower section of the rear spoiler

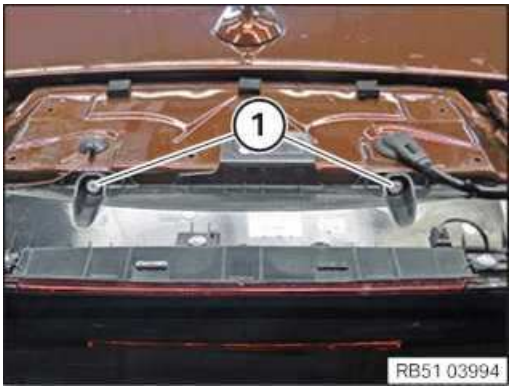


- Position the lower section of the rear spoiler (2) at the clips (3) and clip in.
- Tighten the screws (1).

Rear spoiler lower section to tailgate

Fillister head bolt		8 Nm

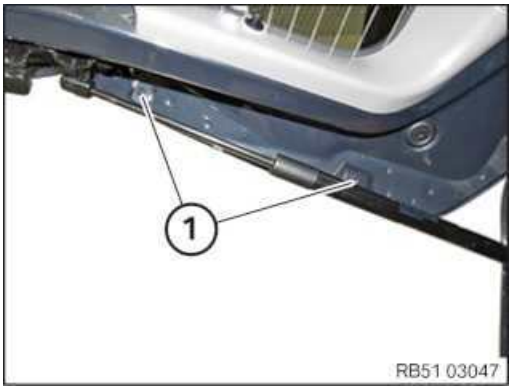
- Connect the quick connector of the water pipe to the washer jet.
- Connect the connector to the additional brake light.



- Tighten the screws (1).

Rear spoiler lower section to tailgate

Fillister head bolt		8 Nm



- Tighten screws (1) on left and right.

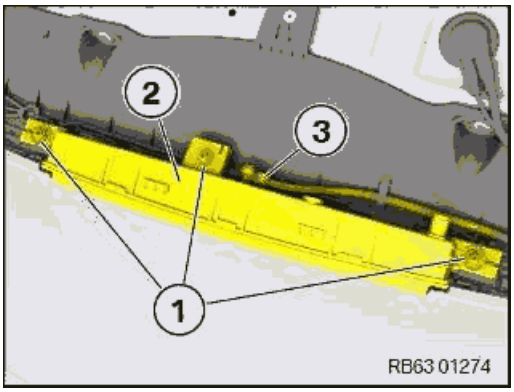
Rear spoiler lower section to tailgate, side

Oval-head screw		2,6 Nm

POSTPROCESSES

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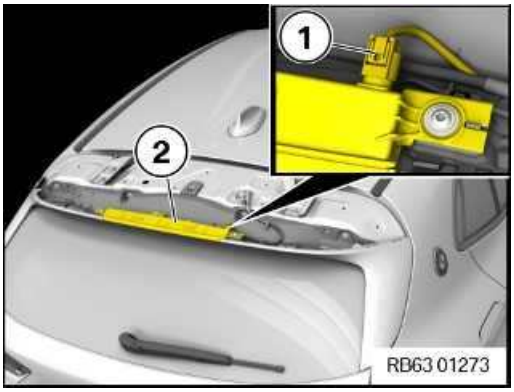
6 – Install the auxiliary stop lamp



- Connect hose pipe (3) and position the additional brake light (2).
- Tighten the screws (1).

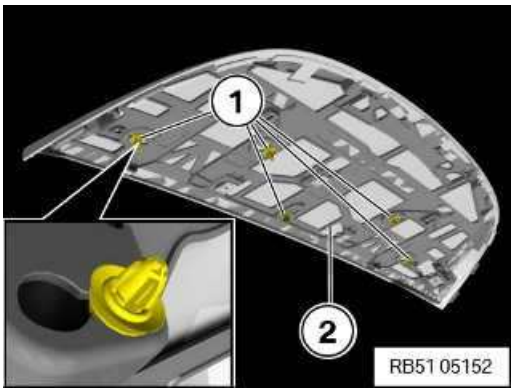
Additional brake light to tailgate

Sheet metal screw 4.8 x 16		Tightening torque	2 Nm

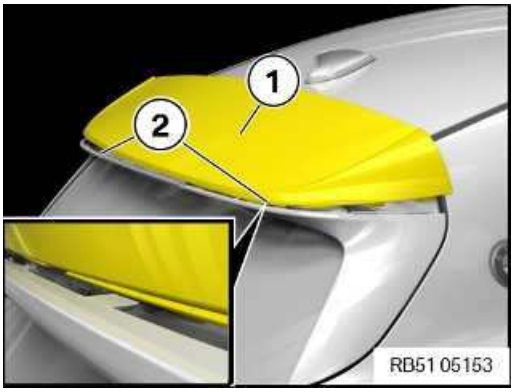


- Connect and lock the connector (1) with the additional brake light (2).

7 – Attach rear spoiler

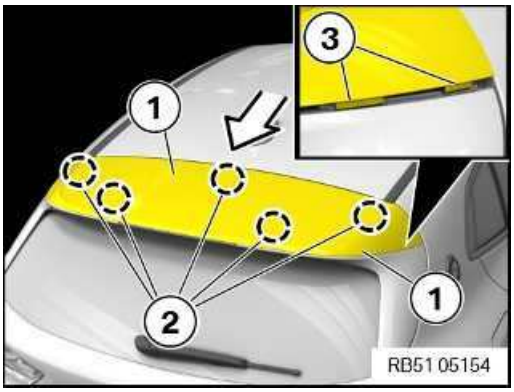


- Check clips (1) on the rear spoiler (2) for damage, renew if required.

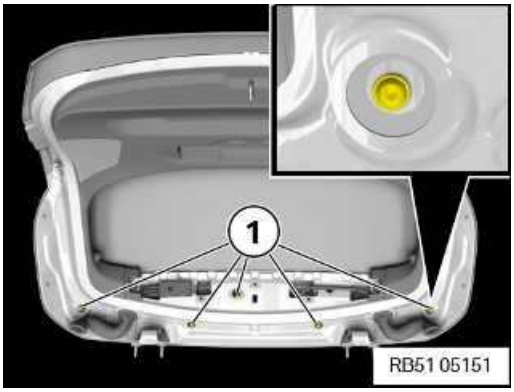


- Position the rear spoiler (1) on the guides (2) .

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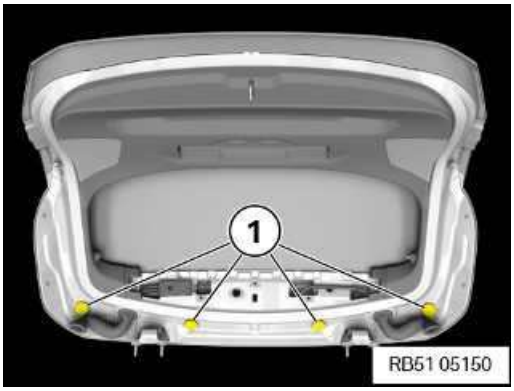
- Slide the rear spoiler (1) onto the lower section of the rear spoiler in the direction of the arrow.
- Clip in the rear spoiler (1) with the clips (2) and clip on the latch mechanisms (3) on both sides.



- Tighten the screws (1).

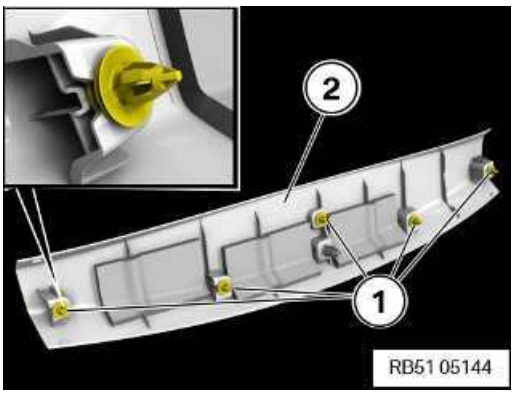
Rear spoiler to tailgate

Oval-head screw		Tightening torque	3,1 Nm



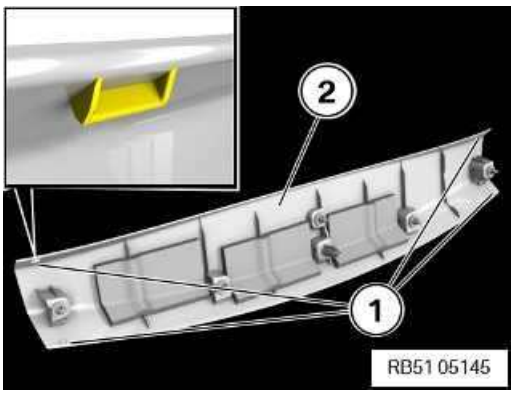
- Insert the covers (1).

8 – Install the trim for the top rear window frame



- Check the clips (1) on the trim for the top rear window frame (2) for damage and replace where required.

Check



- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

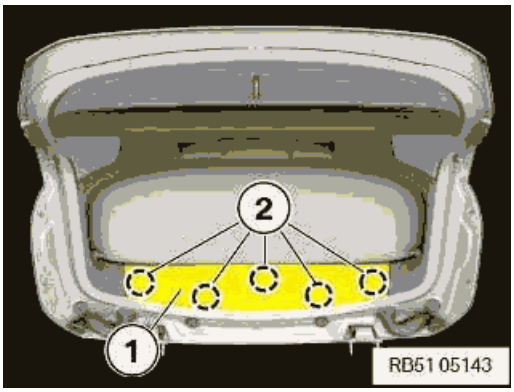
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Result

» The latch mechanisms (1) on the trim for the top rear window frame (2) are damaged.

Measure

- Renew the trim for the top rear window frame (2).
- Clip in the trim for the top rear window frame (1) with the clips (2).



Additional Information

Overview of Tightening Torques

Rear spoiler lower section to tailgate — Used in step 5

Fillister head bolt		8 Nm

Rear spoiler lower section to tailgate, side — Used in step 5

Oval-head screw		2,6 Nm

Additional brake light to tailgate — Used in step 6

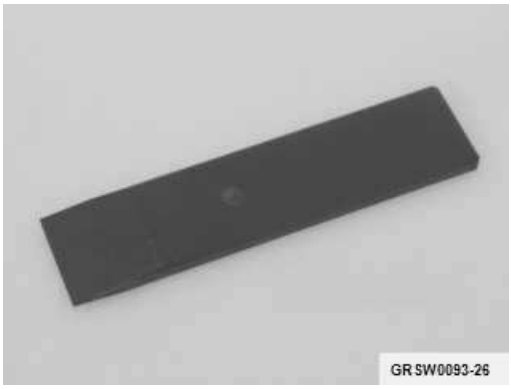
Sheet metal screw 4.8 x 16		Tightening torque	2 Nm

Rear spoiler to tailgate — Used in step 7

Oval-head screw		Tightening torque	3,1 Nm

Overview of Special Tools

0 496 570 (00 9 326) Wedge



Common — Used in step 2

Usage	(Universal wedge) From 11/2008 this special tool replaces panel wedge 00 9 318 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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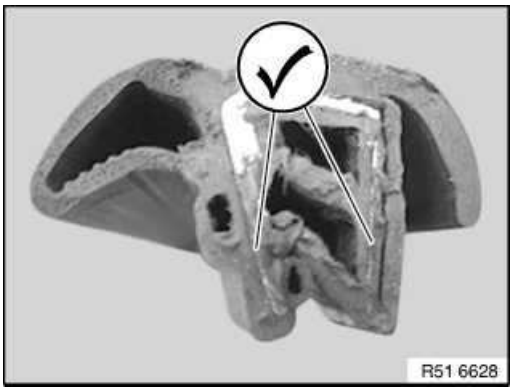
51 72 ... Sealing installation

Note:
The utmost care must be taken when removing all sealings on the vehicle. Incorrect fitting can lead to wind noise and water ingress among other things and can affect the ease of closing and opening.

The following instructions only apply to sealing without sealant.

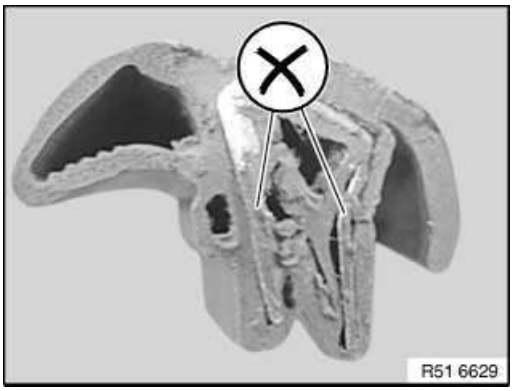
Sealings with sealant must be replaced each time they are disassembled.

Sealing surfaces must be cleaned.

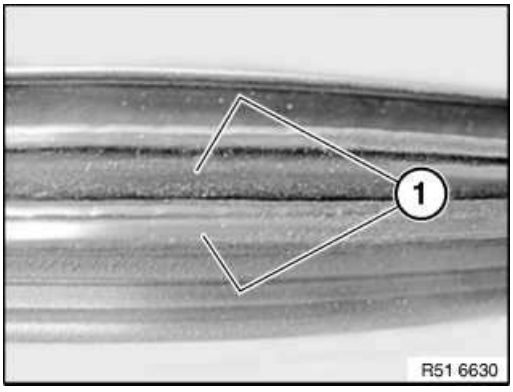


- <u>In general, the following applies:</u>

  Sealings on the side frame can be fitted and removed any number of times.
- Sealings must not be damaged or torn.
- The clamping surface must be compressed by hand far enough to ensure that a tight connection on the side flange is still possible. The sealing shanks may touch each other slightly. A completely compressed sealing is not permitted.

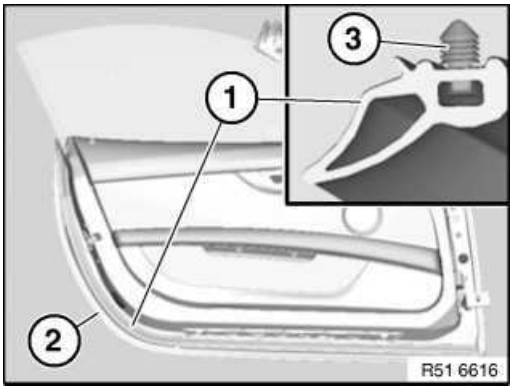


- It is not necessary to use special tools to compress the clamping surface. This can be done carefully by hand.
- The sealings must always be fitted except in the case of blockages. There is no defined contact pressure.
- A new gasket must be fitted if sealings in the tailgate area are repeatedly fitted and removed (water ingress due to cracked sheet metal).
- Sealings must be checked for correct fit after installation. If necessary, sealings should be lifted over the adjacent components using the appropriate tool. Neighbouring components must not be damaged.
- Sealings must be replaced if the metal inlay of the sealing is visible (corrosion).



- Ensure the clamping surface is even all round.

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- Sealings that are installed with plastic clips fit tightly against the body. If this is not the case, replace the clips or sealings.

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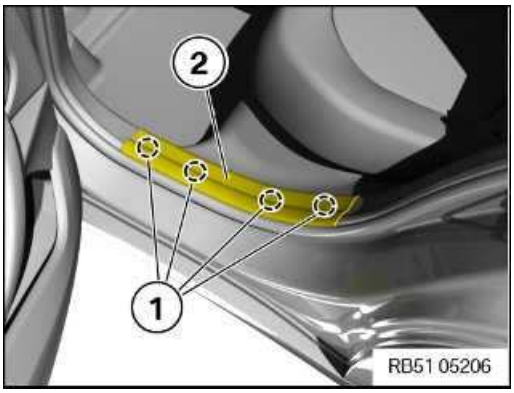
51 72 010 Replace edge protection for left or right rear door

NOTICE

Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove rear entrance cover strip



- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

MAIN WORK

2 – Remove edge protection of rear door



- Pull off edge protection (1) along the perimeter.

3 – Install edge protection of the rear door

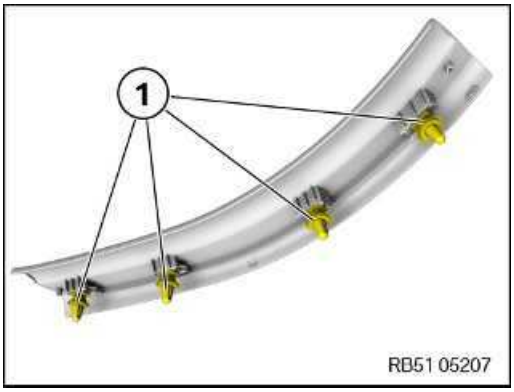


- Connect the edge protection (1) along the perimeter, starting at the bottom centre.

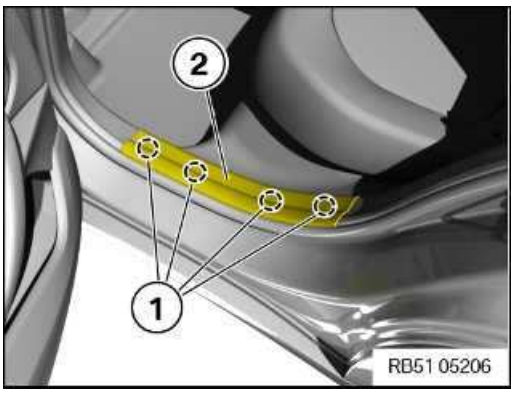
  Make sure that the edge protection (1) is positioned correctly at all adjacent parts.

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4 – Installing the rear door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip in the door sill cover strip (2) with the clips (1).

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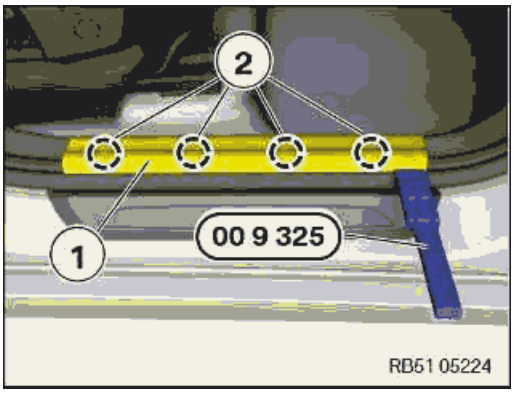
51 72 000 Replacing edge protection for left or right front door

NOTICE

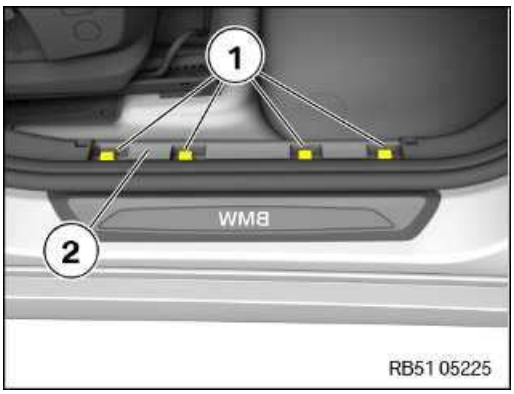
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove front entrance cover strip



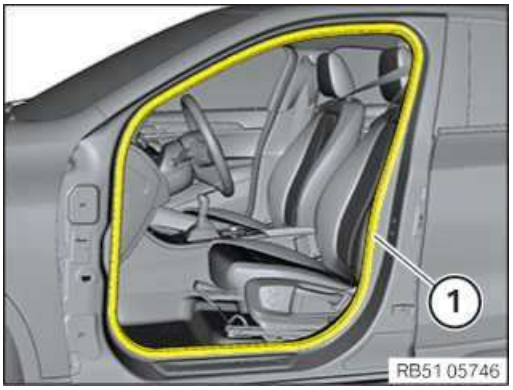
- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

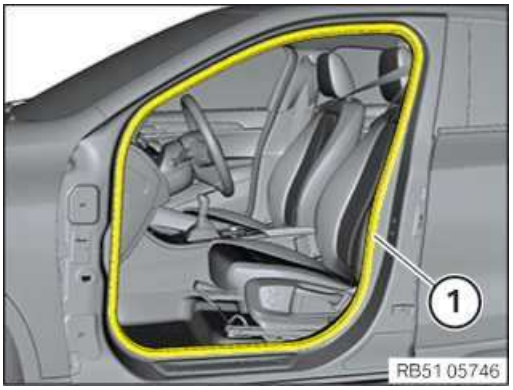
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2 – Remove edge protection of the front door



- Pull off edge protection (1) along the perimeter.

3 – Install edge protection of front door

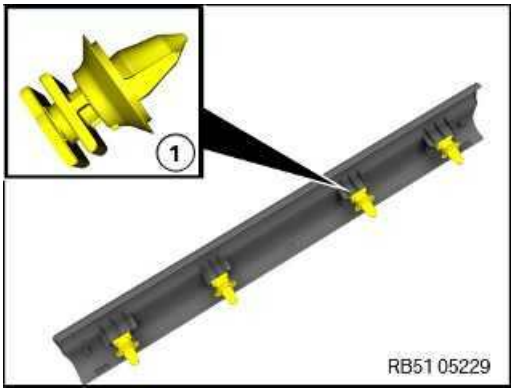


- Attach edge protection (1) starting at the bottom centre along the circumference.

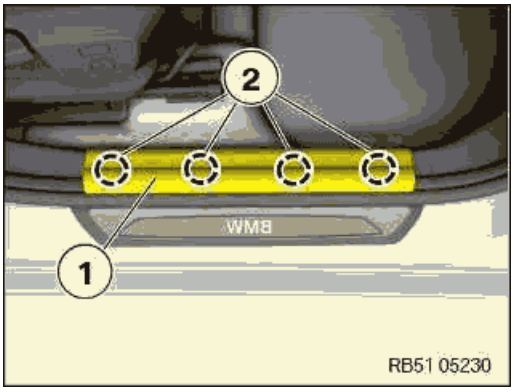
  Make sure that the edge protection (1) is positioned correctly at all adjacent parts.

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4 – Install the front door sill cover strip



- Check the clips (1) for damage and renew where required.



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

Additional Information

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step 1
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

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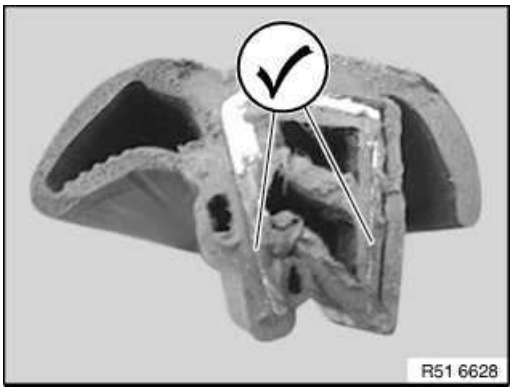
51 72 ... Sealing installation

Note:
The utmost care must be taken when removing all sealings on the vehicle. Incorrect fitting can lead to wind noise and water ingress among other things and can affect the ease of closing and opening.

The following instructions only apply to sealing without sealant.

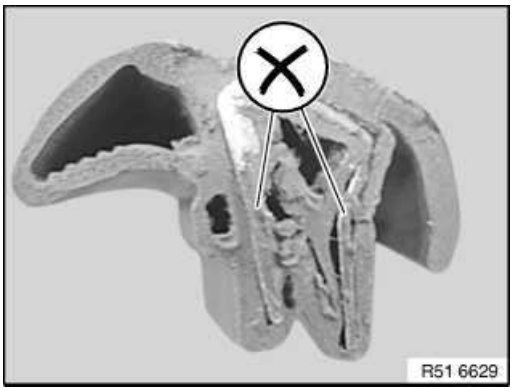
Sealings with sealant must be replaced each time they are disassembled.

Sealing surfaces must be cleaned.

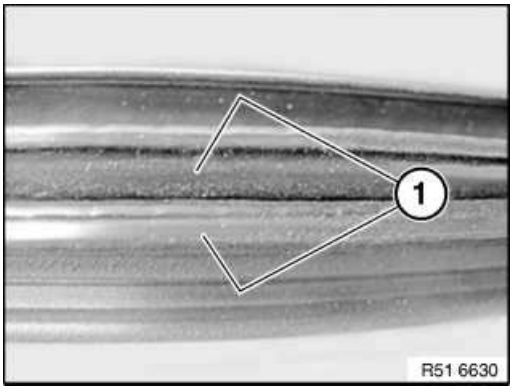


- <u>In general, the following applies:</u>

  Sealings on the side frame can be fitted and removed any number of times.
- Sealings must not be damaged or torn.
- The clamping surface must be compressed by hand far enough to ensure that a tight connection on the side flange is still possible. The sealing shanks may touch each other slightly. A completely compressed sealing is not permitted.

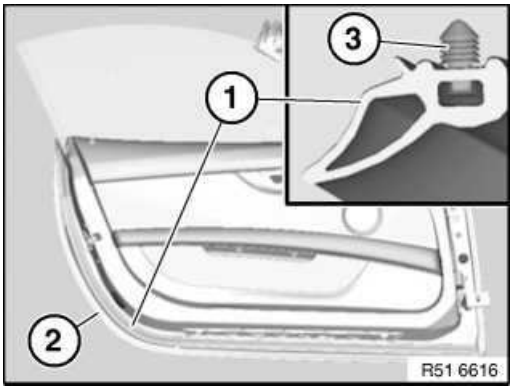


- It is not necessary to use special tools to compress the clamping surface. This can be done carefully by hand.
- The sealings must always be fitted except in the case of blockages. There is no defined contact pressure.
- A new gasket must be fitted if sealings in the tailgate area are repeatedly fitted and removed (water ingress due to cracked sheet metal).
- Sealings must be checked for correct fit after installation. If necessary, sealings should be lifted over the adjacent components using the appropriate tool. Neighbouring components must not be damaged.
- Sealings must be replaced if the metal inlay of the sealing is visible (corrosion).



- Ensure the clamping surface is even all round.

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- Sealings that are installed with plastic clips fit tightly against the body. If this is not the case, replace the clips or sealings.

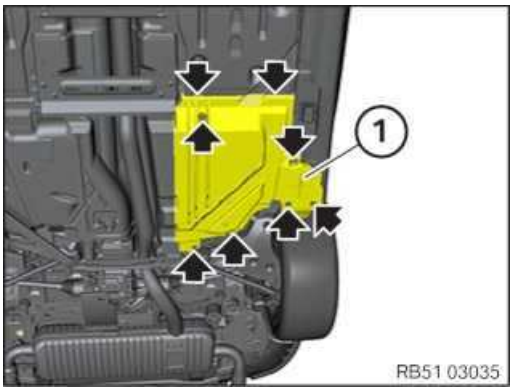
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51 75 ... Removing and installing/replacing tank cover on left or right

Necessary preliminary work:

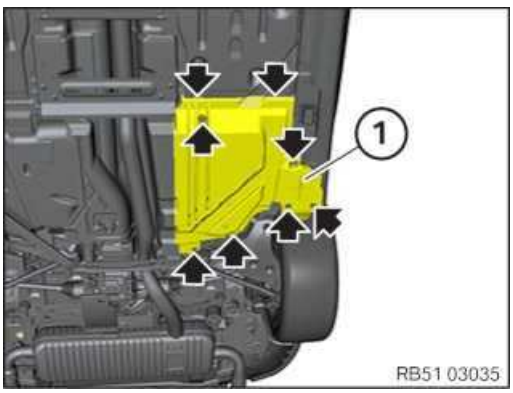
- Remove torsion strut

Removal:



Unscrew all bolts.
Remove tank cover (1).

Installation:



Install tank cover (1).
Tighten down all screws.
Tightening torque 51 75 1AZ.

Required follow-up work:

- Install torsion strut

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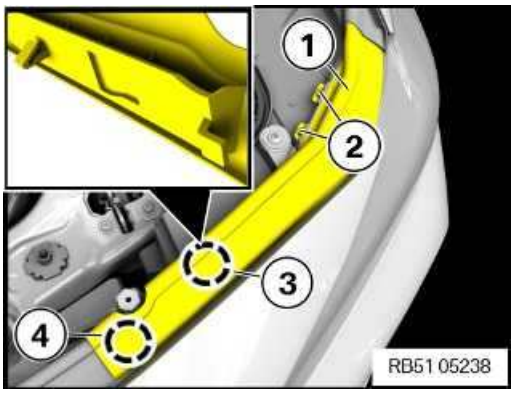
51 76 031 Remove and install/replace the front bonnet seal

PRELIMINARY WORK

1 – Remove both bonnet seals on the side

NOTICE

Description is for left component only. Procedure on the right side is identical.

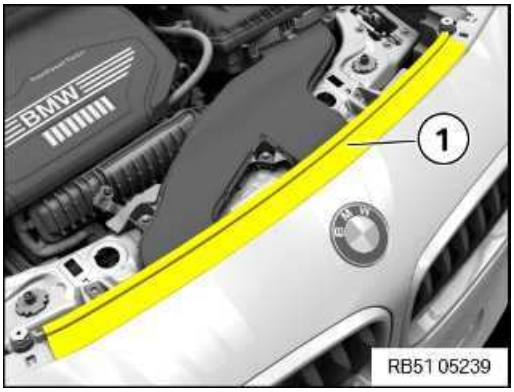


▸ **Remove the bonnet seal on the side**

- Unclip the side bonnet seal (1) from the outer latch mechanisms (2) and the inner latch mechanism (3).
- Feed out the side bonnet seal (1) from the guide (4) and remove.

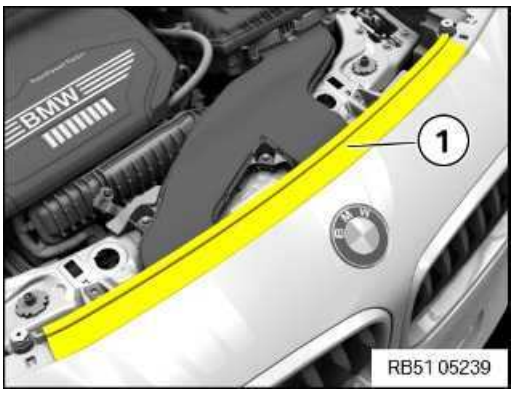
MAIN WORK

2 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

3 – Install the center front bonnet seal



- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

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4 – Install both bonnet seals on the side

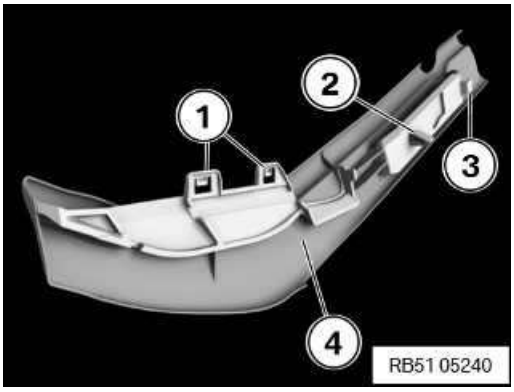
NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Installing seal for side bonnet**

Check

- Check latch mechanisms (1) and (2) and also the guide (3) on the bonnet seal on the side (4) for damage.

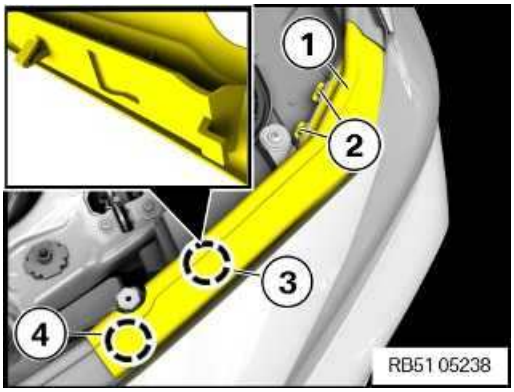


Result

» Latch mechanisms (1), (2) or the guide (3) are damaged.

Measure

- Renew the bonnet seal on the side (4).

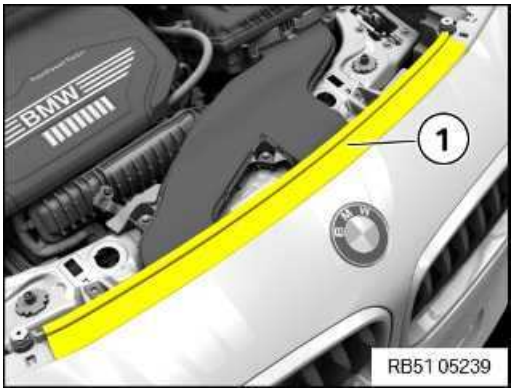


- Insert the bonnet seal on the side (1) in the guide (4).
- Clip in the bonnet seal on the side (1) in the inner latch mechanism (3) and the outer latch mechanisms (2).

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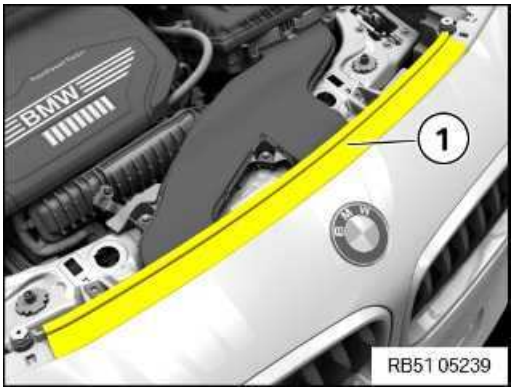
51 76 031 Removing and installing/replacing the front bonnet seal

1 – Removing the seal for the front centre bonnet



- Remove the seal for the front centre bonnet (1) towards the top.

2 – Install the center front bonnet seal



- Press the centre front bonnet seal (1) down into the guide.
- Make sure the centre front bonnet seal (1) is fitted correctly.

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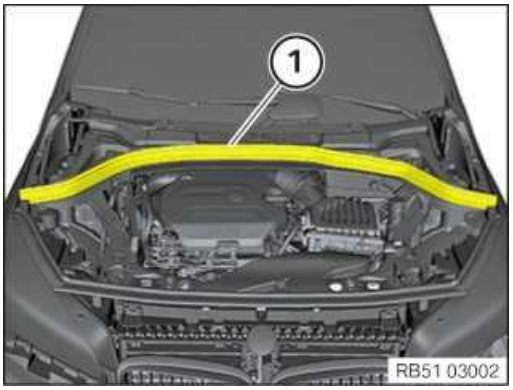
51 76 037 Removing and installing/replacing the mounting for the bonnet sealing on the left

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

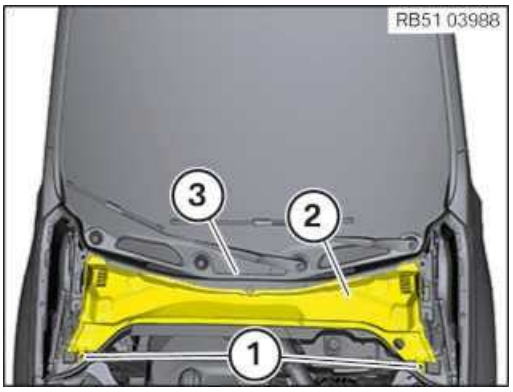
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

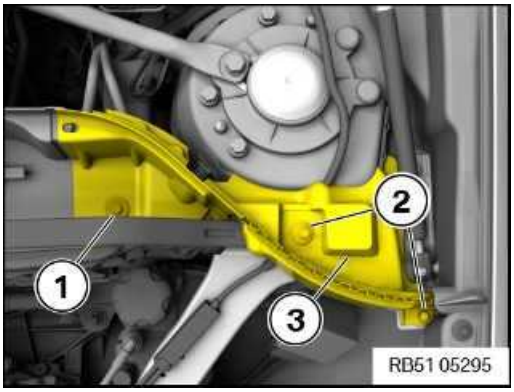
2 – Removing front cowl panel cover



- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

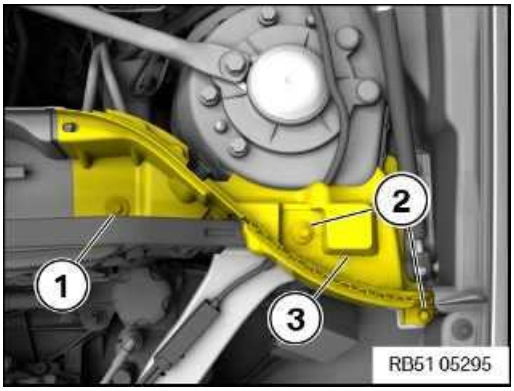
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3 – Removing the seal fixture for the bonnet



- Loosen screw (1).
- Loosen the expanding rivet (2).
- Remove the fixture for the seal on the bonnet (3).

4 – Installing seal fixture for bonnet



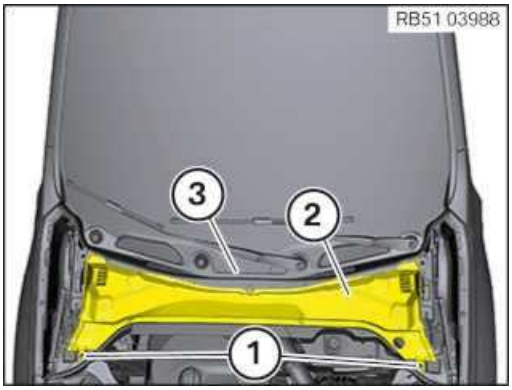
- Position fixture for bonnet seal (3).
- Secure expanding rivet (2).
- Tighten down screw (1).

Mounting for the bonnet seal to the second rear bulkhead upper part

Thermoplastic hexagon screw		Tightening torque	2,6 Nm

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5 – Installing front cowl panel cover

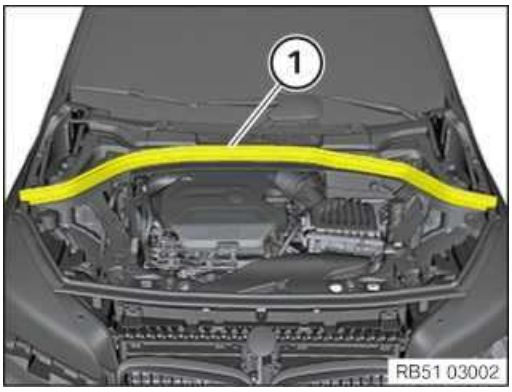


- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

6 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

Additional Information

Overview of Tightening Torques

Mounting for the bonnet seal to the second rear bulkhead upper part Used in step 4

Thermoplastic hexagon screw		Tightening torque	2,6 Nm

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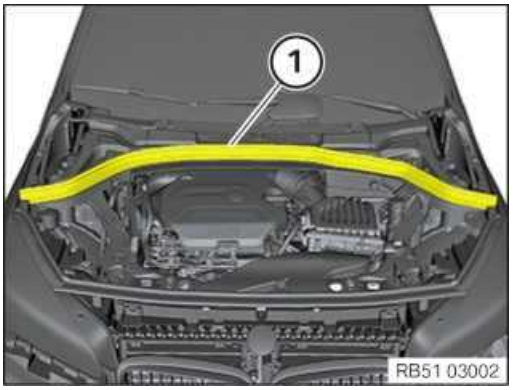
51 76 038 Removing and installing/replacing the mounting of the bonnet sealing on the right

PRELIMINARY WORK

1 – Remove the seal for the rear bonnet

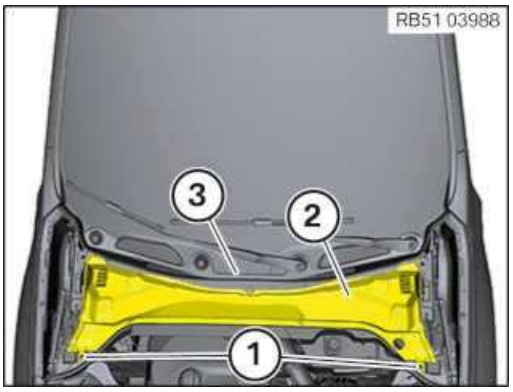
NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Pull off rear bonnet seal (1) towards the top and remove.

2 – Removing front cowl panel cover



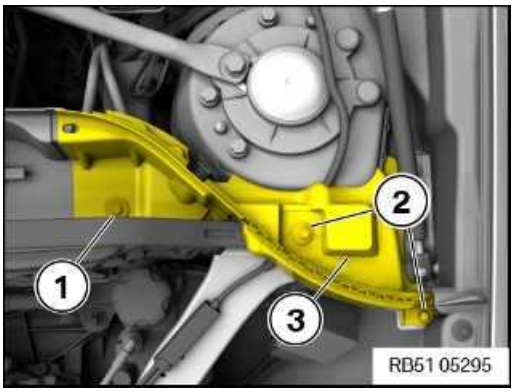
- Loosen the expanding rivet (1).
- Feed out and remove front cowl panel cover (2) from the rear cowl panel cover(3).

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3 – Remove the fixture of the right bonnet seal

NOTICE

Description is for left component only. Procedure on the right side is identical.



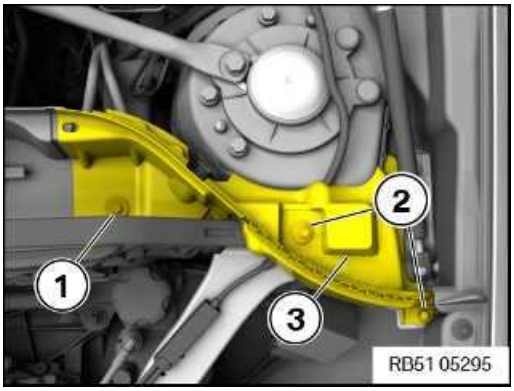
▸ **Removing the seal fixture for the bonnet**

- Loosen screw (1).
- Loosen the expanding rivet (2).
- Remove the fixture for the seal on the bonnet (3).

4 – Installing the fixture for right bonnet

NOTICE

Description is for left component only. Procedure on the right side is identical.



▸ **Installing seal fixture for bonnet**

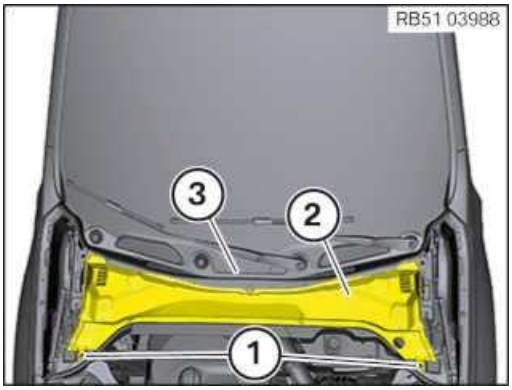
- Position fixture for bonnet seal (3).
- Secure expanding rivet (2).
- Tighten down screw (1).

Mounting for the bonnet seal to the second rear bulkhead upper part

Thermoplastic hexagon screw		Tightening torque	2,6 Nm

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5 – Installing front cowl panel cover

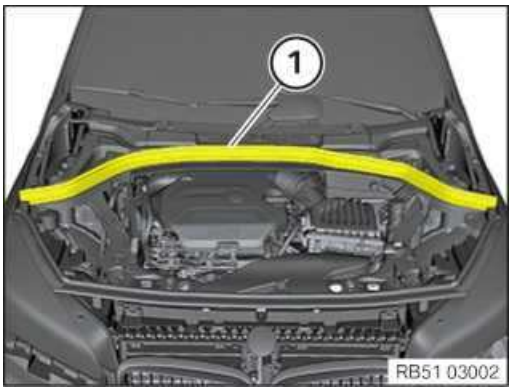


- Insert and install cowl panel cover at front (2) into cowl panel cover at rear (3).
- Check cowl panel cover at front is correctly seated (2).
- Secure expanding rivet (1).

6 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

Additional Information

Overview of Tightening Torques

Mounting for the bonnet seal to the second rear bulkhead upper part Used in step 4

Thermoplastic hexagon screw		Tightening torque	2,6 Nm

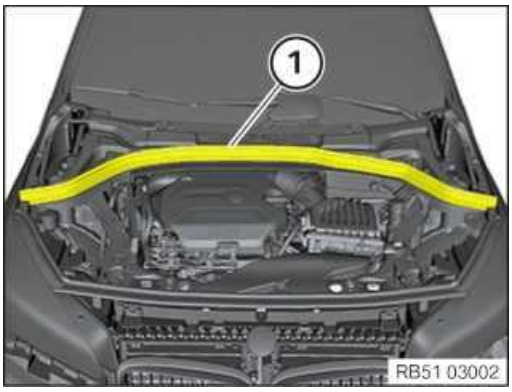
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51 76 030 Removing and installing/replacing the rear bonnet seal

1 – Remove the seal for the rear bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

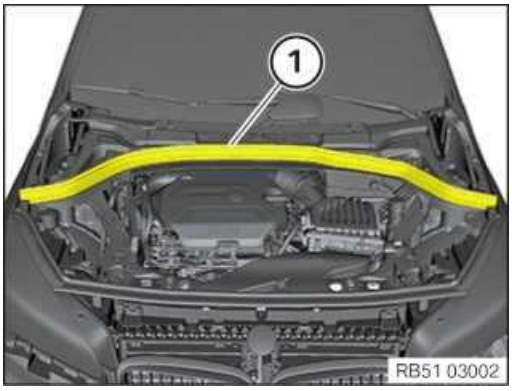


- Pull off rear bonnet seal (1) towards the top and remove.

2 – Install the seal for the bonnet

NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.



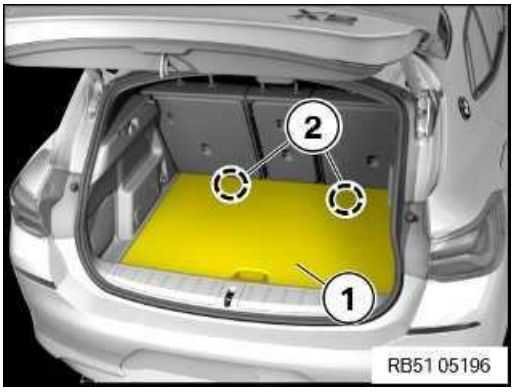
- Install bonnet seal at rear (1).
- Ensure that the rear bonnet seal (1) is fitted correctly.

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51 76 046 Replacing the tailgate seal

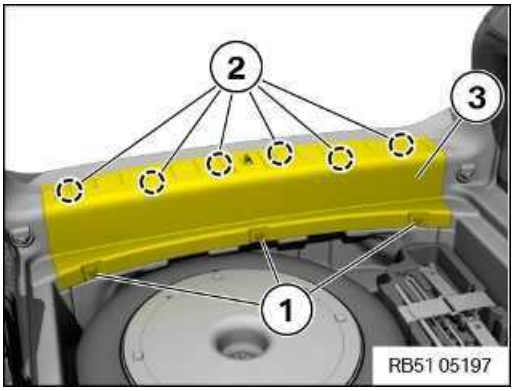
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel



- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the loading edge trim



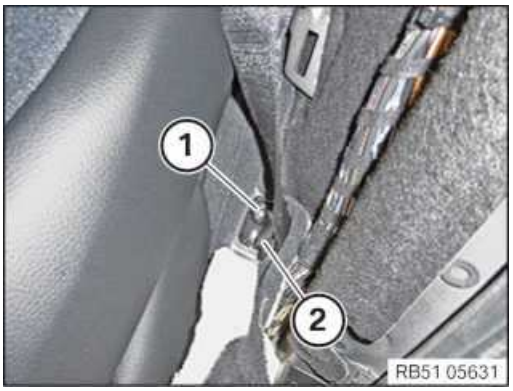
- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

3 – Removing the bottom left and right C-pillar trim panels

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Remove the bottom C-pillar trim panel**

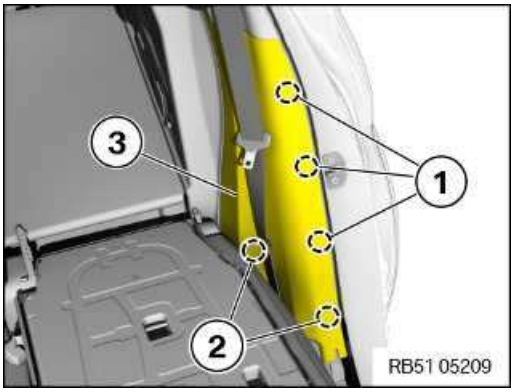


- Fold up the carpet as shown.
- Loosen screw (1).
- Remove end fitting (2).

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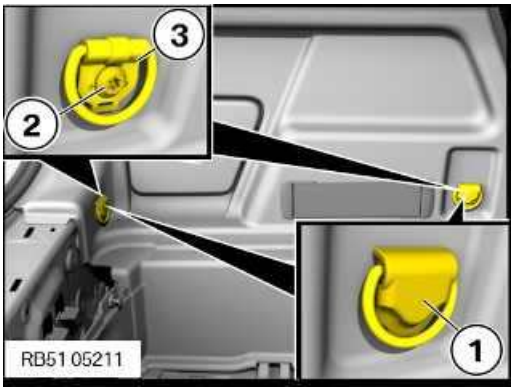


- Release the edge protection (1) in area of the bottom C-pillar trim panel.

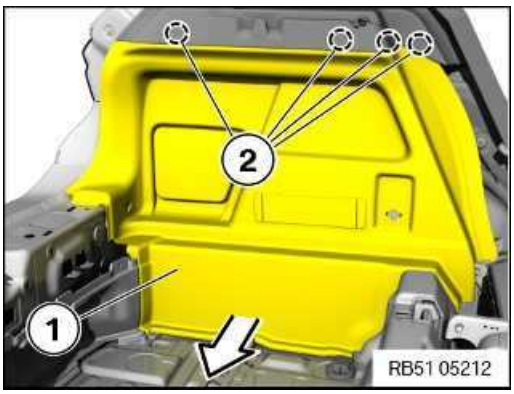


- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

4 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

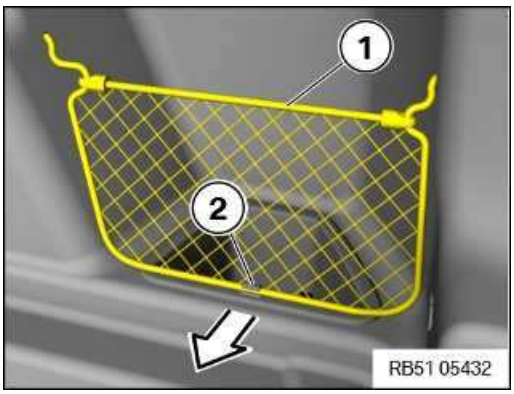


NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

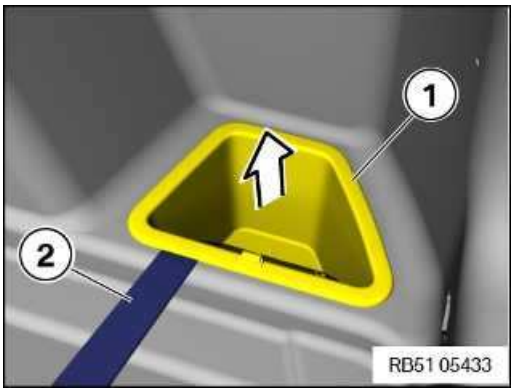
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

5 – Removing right luggage compartment wheel arch trim panel

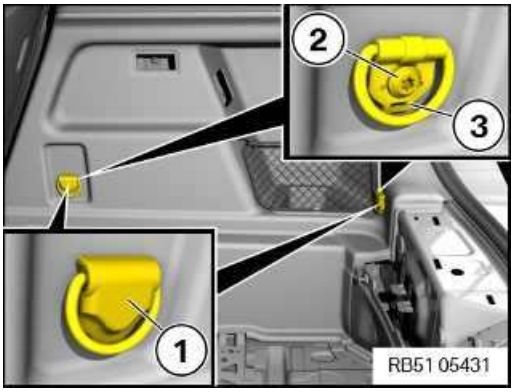


- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.

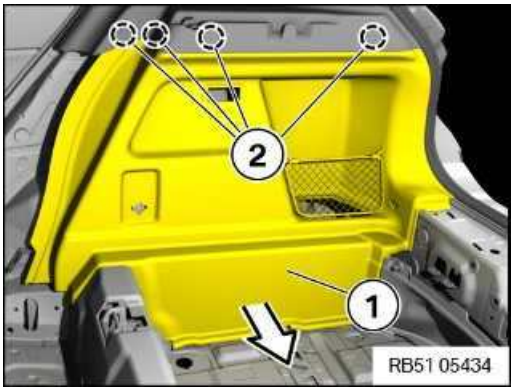
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- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

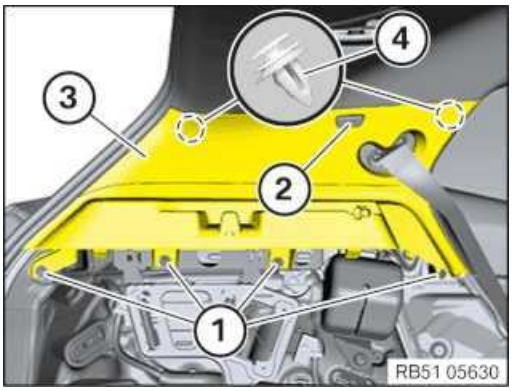
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

6 – Remove the trim panel of the luggage compartment capping on the left and right

NOTICE

Description is for left component only. Procedure on the right side is identical.

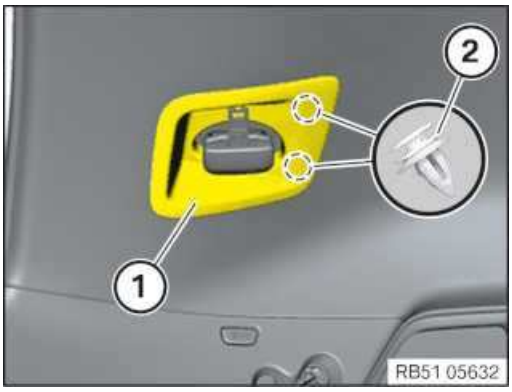
▸ **Remove the trim panel of the luggage compartment capping**



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

7 – Remove the belt feed trim

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- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

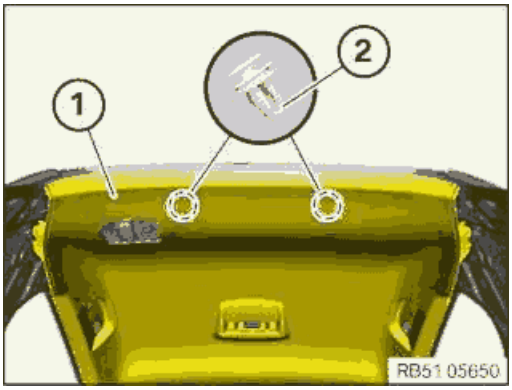
8 – Releasing the rear headlining

RISK OF DAMAGE

Fold the headlining.

If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Carefully release the headlining (1) at the clips (2) from the rear with a suitable plastic wedge.

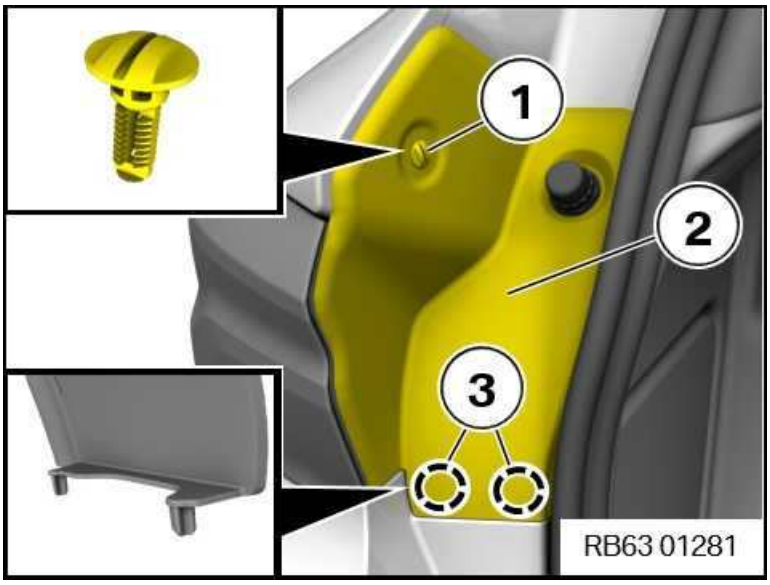
9 – Removing both trims for water channel

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Removing trim for water channel**

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- Detach rotary clip (1).
- Feed out and remove trim for water channel (2) from guides (3).

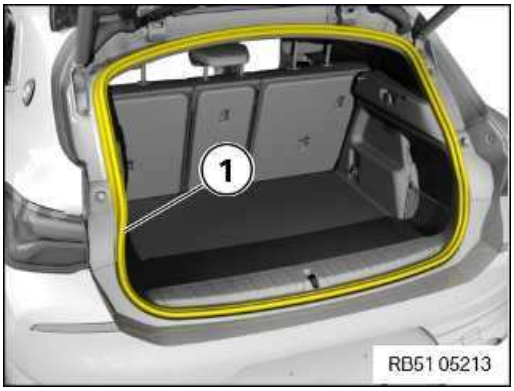
MAIN WORK

10 – Remove the seal for the tailgate



- Pull off the seal for the tailgate (1) from the body beginning from the centre and remove.

11 – Install the seal for the tailgate



- Remove remnants of the sealant from the sheet metal flange.
- Clean the sheet metal flange.
- Renew the seal for the tailgate (1).

  Parts: Seal for the tailgate
- Mount the seal for the tailgate (1) beginning from the top centre.
- Make sure that the tailgate seal (1) is positioned correctly against all adjacent trim panels.

Check

- Check the closing function of the tailgate.

Result

» Tailgate does not close.

Measure

- Make sure that the tailgate seal (1) is positioned correctly against all adjacent trim panels.

POSTPROCESSES

12 – Install both trim pieces for the water channel

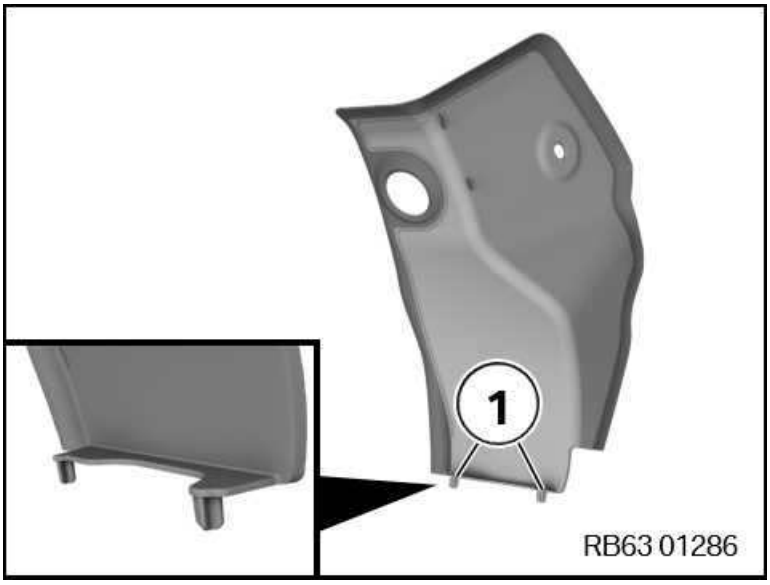
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NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim for the water channel**

Check



- Check the guides (1) for damage.

Result

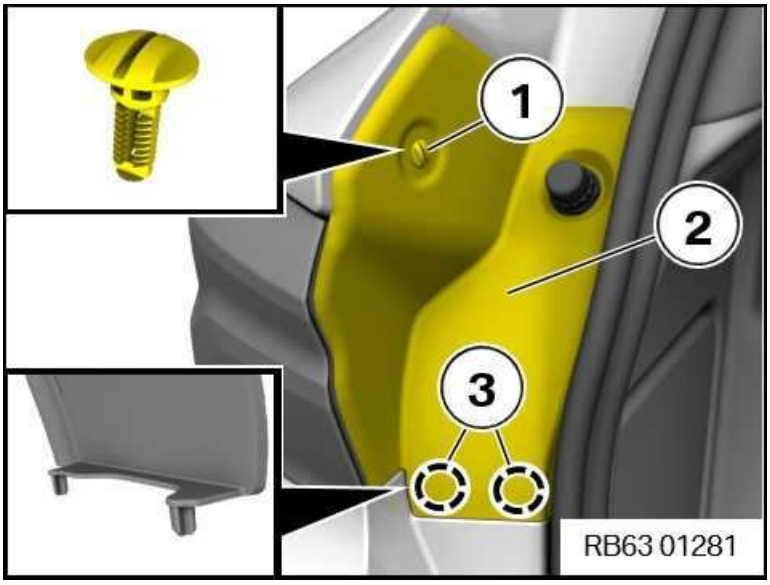
» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.



- Check rotary clip (1) for damage and, if necessary, replace it.



- Insert the trim for water channel (2) with guides (3).
- Fasten the rotary clip (1).

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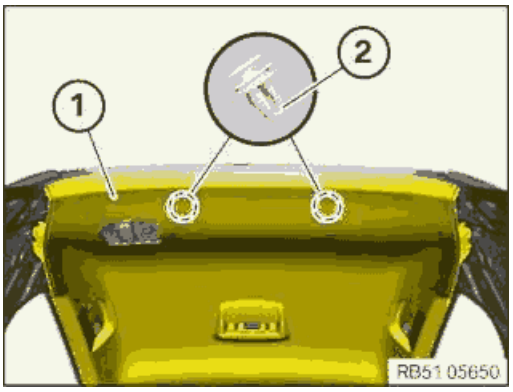
13 – Attaching the rear headlining

RISK OF DAMAGE

Fold the headlining.

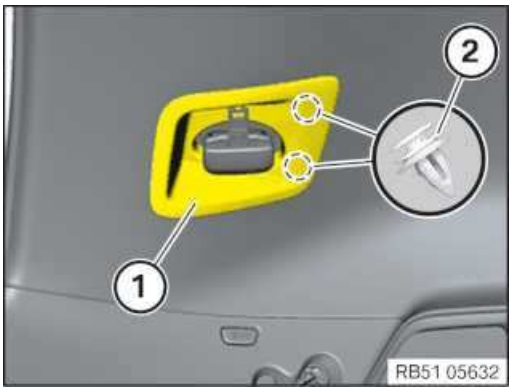
If the headlining is folded, it may have to be replaced.

- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Clip in the headlining (1) using the clips (2).

14 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

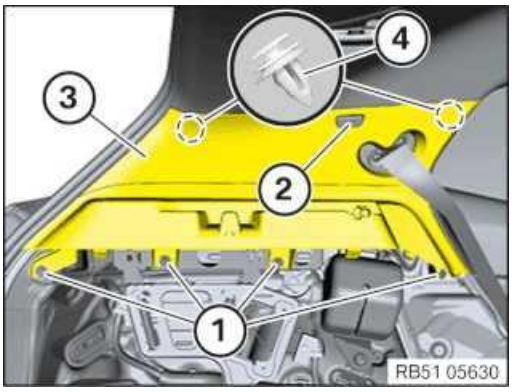
15 – Install the trim panel for left and right the luggage compartment capping

NOTICE

Description is for left component only. Procedure on the right side is identical.

▸ **Install the trim panel for the luggage compartment capping**

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- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

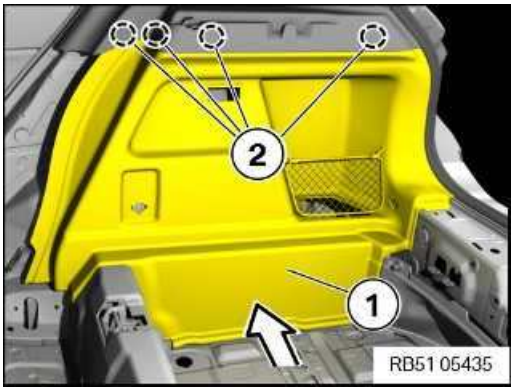
Self-tapping screw		Tightening torque	4 Nm

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm

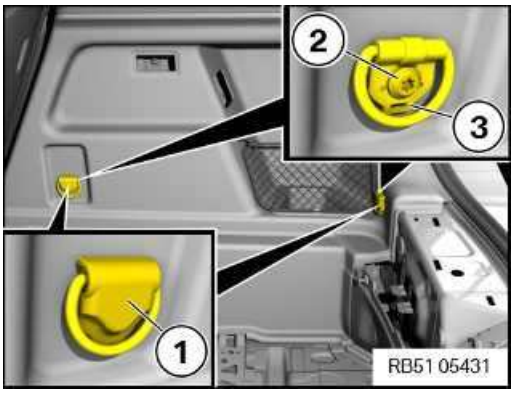
16 – Installing the luggage compartment wheel arch trim panel on the right



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

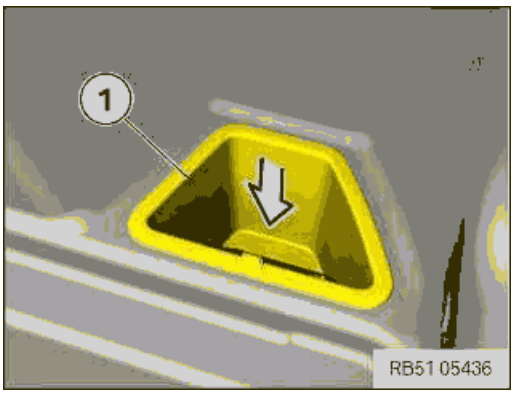


- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

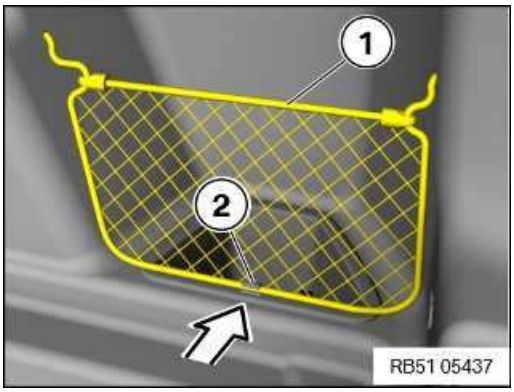
Bolt M8 x 22		Tightening torque	21 Nm

- Clip in the covers (1).



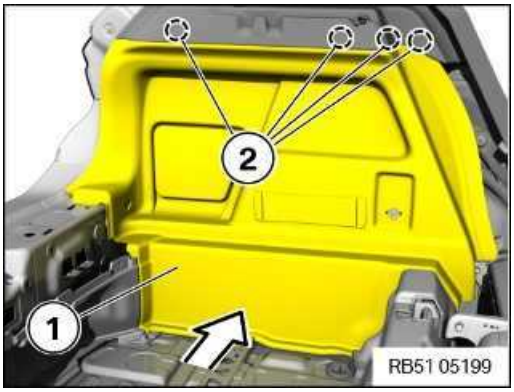
- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.

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- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

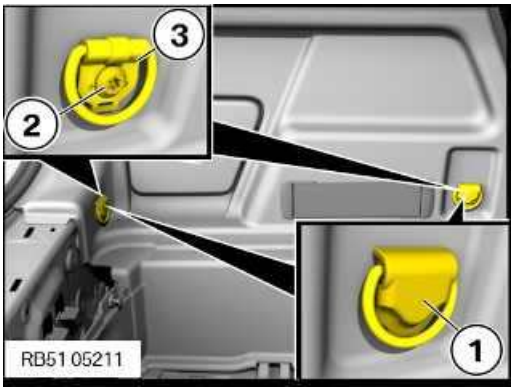
17 – Install luggage compartment wheel arch trim panel at left



NOTICE

Schematic diagram is for example purposes. Some parts may differ in certain details.

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.



- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm

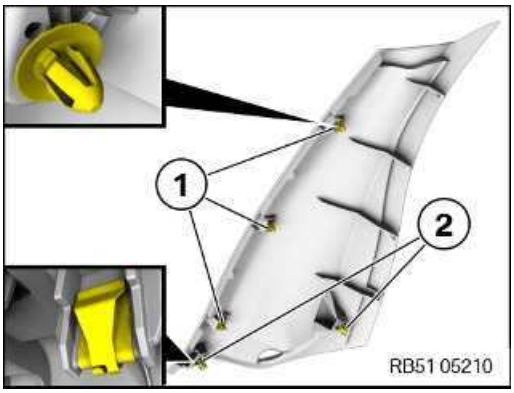
- Clip in the covers (1).

18 – Install C-pillar trim panel at bottom left and right

NOTICE

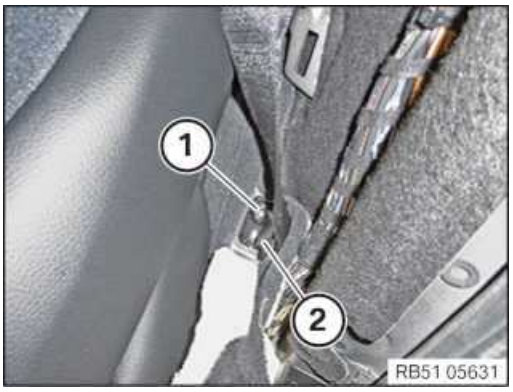
Description is for left component only. Procedure on the right side is identical.

▸ **Install the bottom C-pillar trim panel**



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

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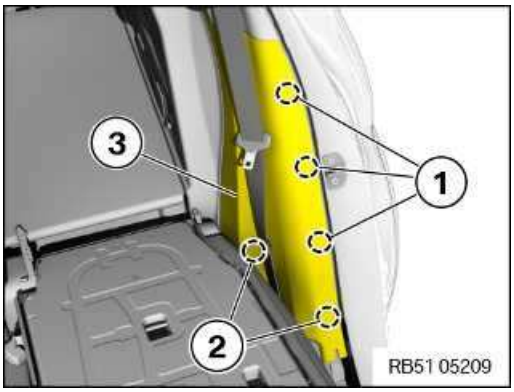


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

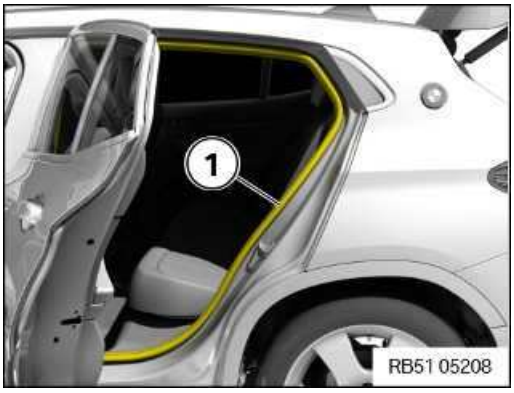
End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm

- Install the carpet correctly.

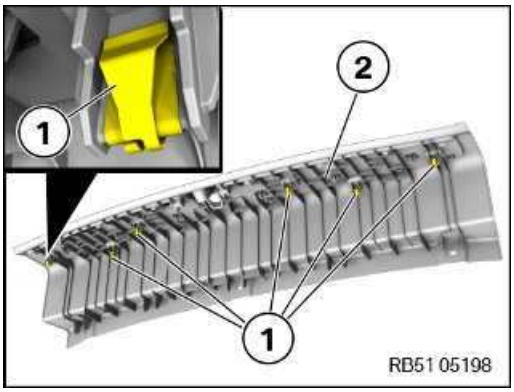


- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).

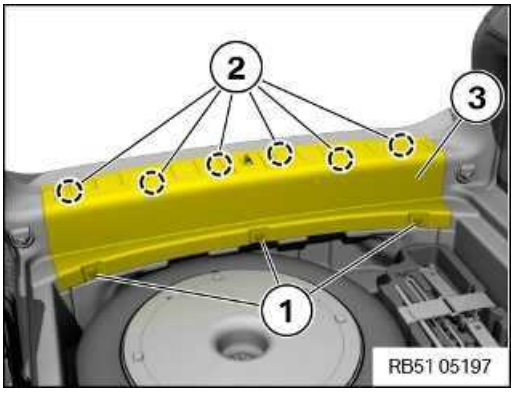


- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

19 – Installing loading edge trim



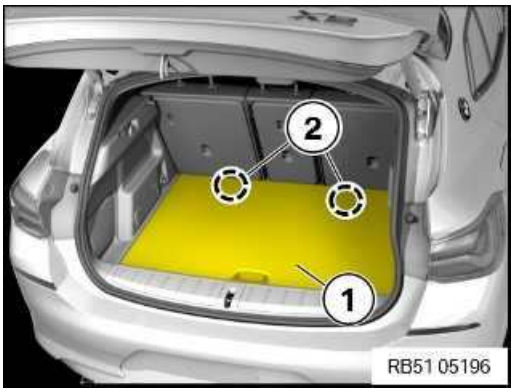
- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

20 – Installing the luggage compartment removable panel

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- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

Additional Information

Overview of Tightening Torques

Trim panel of luggage compartment capping — Used in step 15

Self-tapping screw		Tightening torque	4 Nm

Trim panel of luggage compartment capping to body — Used in step 15

Hexagon screw		Tightening torque	1,8 Nm

Lashing eye in luggage compartment — Used in step 16 17

Bolt M8 x 22		Tightening torque	21 Nm

End fitting to body — Used in step 18

Screw	Renew screw.	Tightening torque	42 Nm

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