

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



Warning!

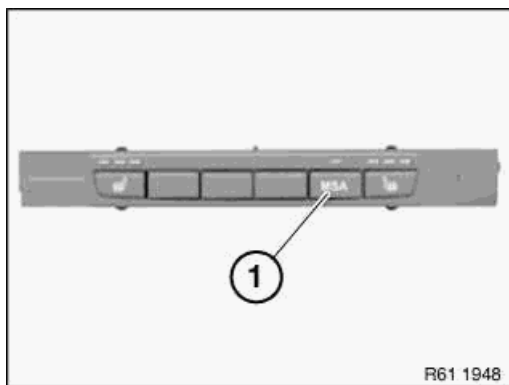
If the engine hood/bonnet contact is pulled upwards (workshop mode), the information "switch closed" is output. The automatic engine start-stop function is active.

An automatic engine start is possible.

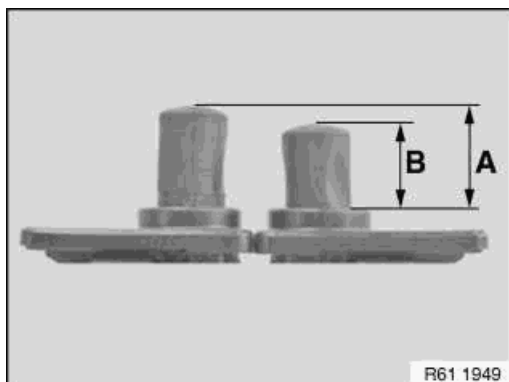
Observe safety precautions when working on MSA vehicles.

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



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](#)

67 11 612 Remove/install/replace actuator drive of front left door central locking drive



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.

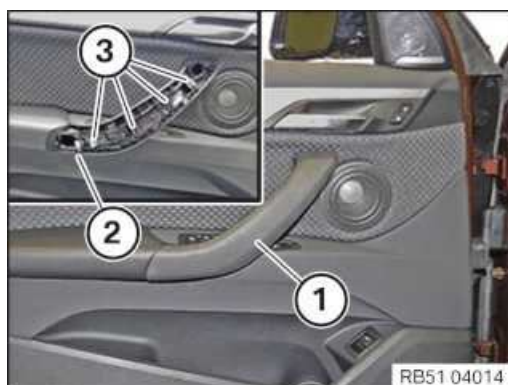
Tools and sharp-edged components can cause scratches.

- 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

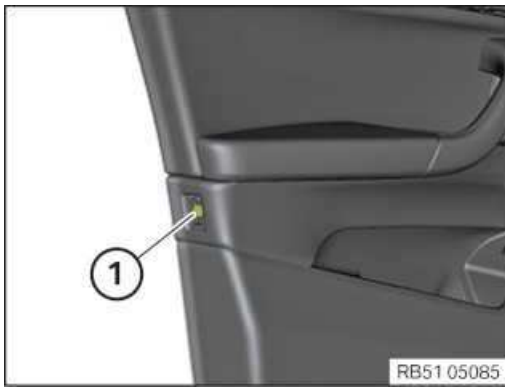


RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

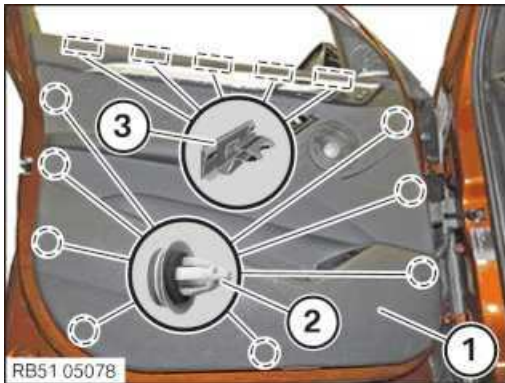
- Protect working area.
- Handle tools and components carefully.



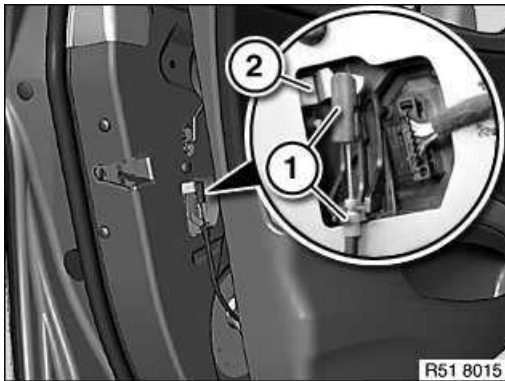
- If fitted: Remove the cover and unscrew the bolt (1).



- 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.

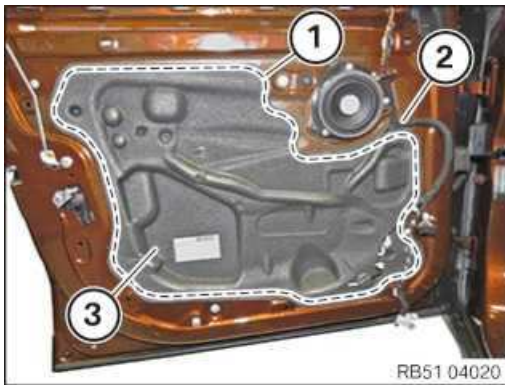
3 – Removing sound insulation on front door



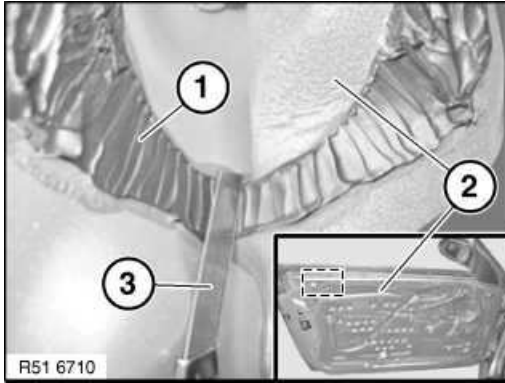
TECHNICAL INFORMATION

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

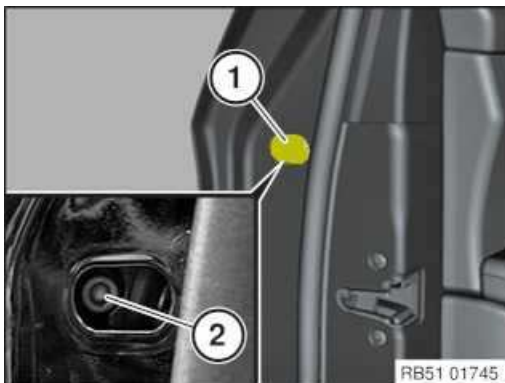


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

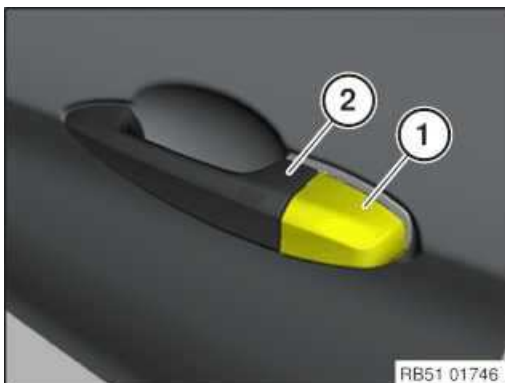


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Remove cover on the outside door handle

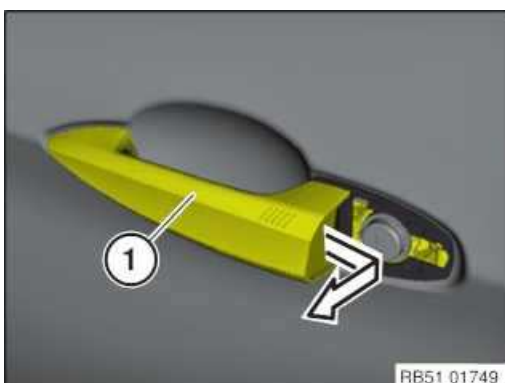


- Lever out the cover (1).
- Release screw (2) below it.



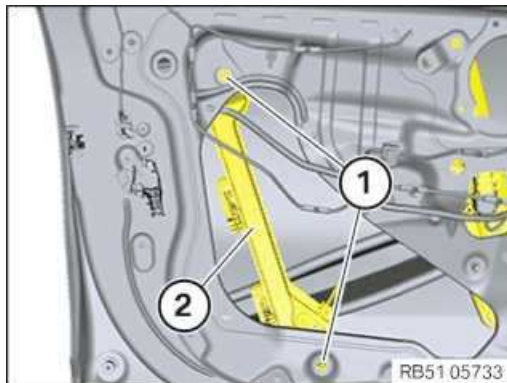
- Pull off the cover (1) with the outside door handle (2) slightly open.

5 – Remove the outside door handle



- 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.

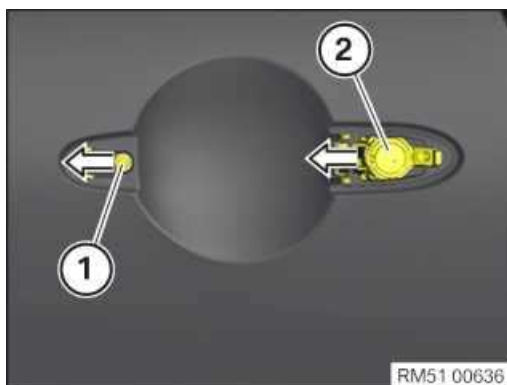
6 – Partially remove power window regulator



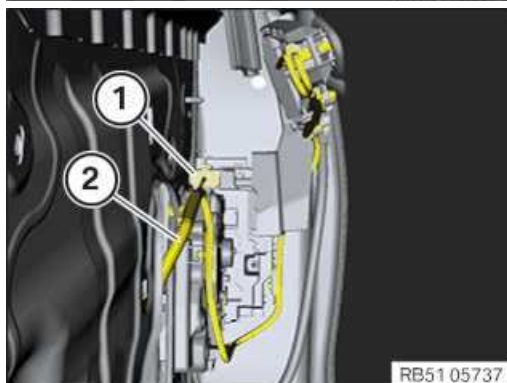
- Loosen nuts (1).
- Carefully slide the power windows (2) to the side.

MAIN WORK

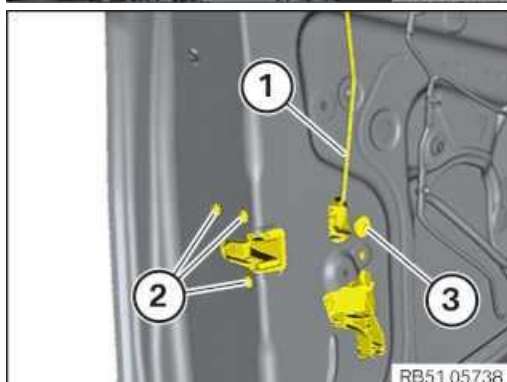
7 – Remove door lock



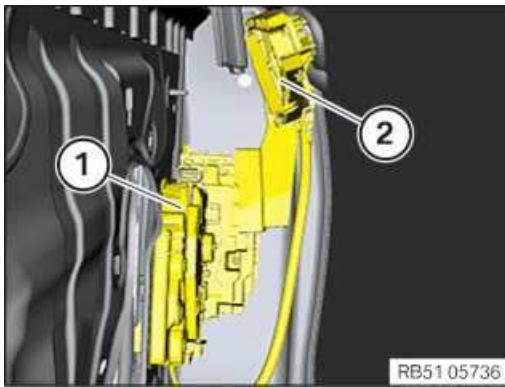
- Loosen screw (1).
- Slide the outside door handle support (2) towards the front and feed out inwards.



- 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.

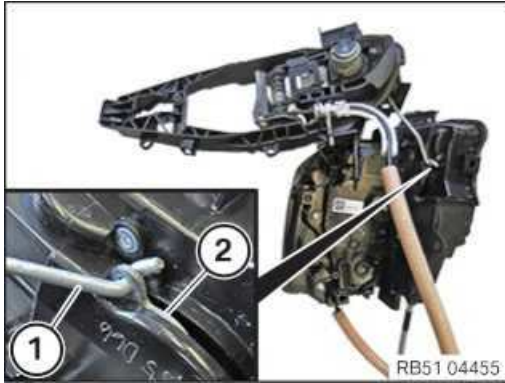


- Unclip locking rod (1).
- Loosen screws (2) and (3).

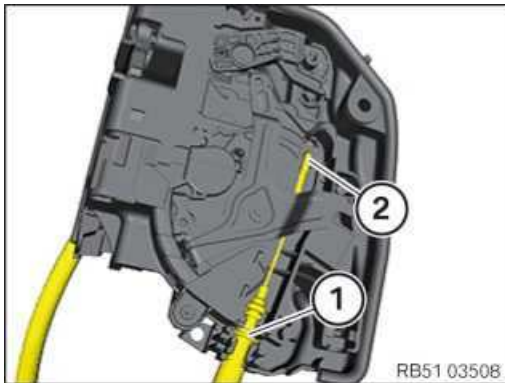


- Guide out the door lock (1) together with the outer door handle support (2) from the door.

Make sure that the seal from the door lock is not damaged when removing.

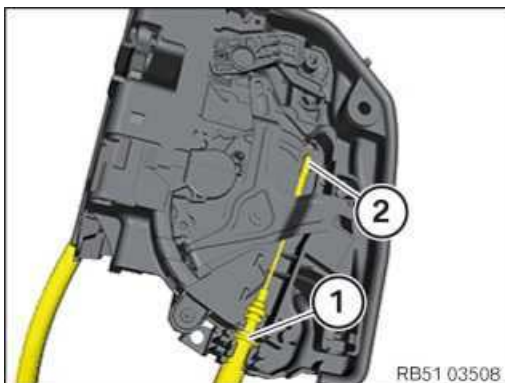


- Detach the linkage (1) from the door lock (2).

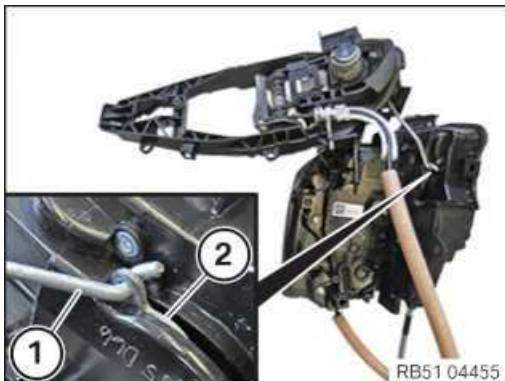


- Detach the Bowden cable (1).
- Detach the Bowden cable nipple (2).

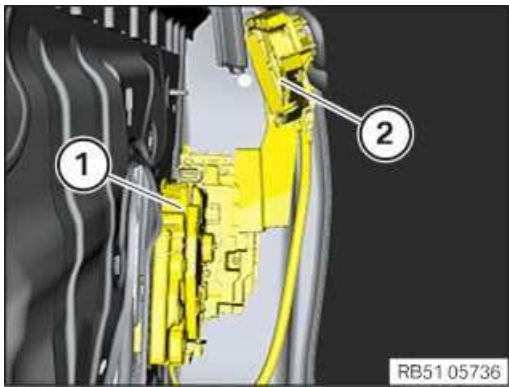
8 – Install door lock



- Attach the Bowden cable nipple (2).
- Attach the Bowden cable (1).

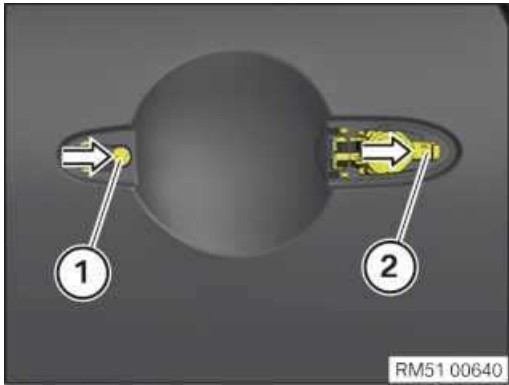


- Attach the linkage (1) in the door lock (2).



- Guide in the door lock (1) together with the outside door handle support (2) in the door.

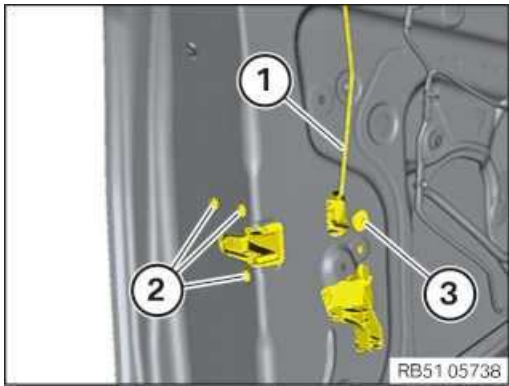
Make sure the new seal from the door lock is not damaged during installation.



- 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
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- Screw in screws (2), and (3) a few turns.
- First tighten the screws (2).

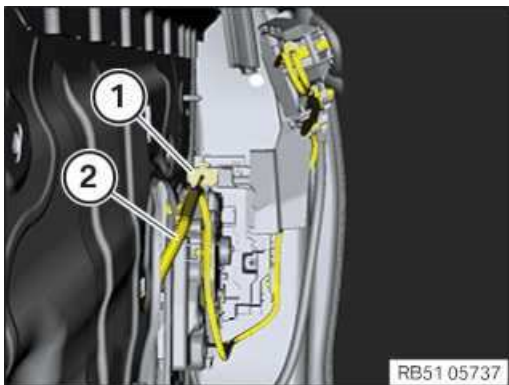
Door lock to door

Screw		Tightening torque	8,8 Nm
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- Then tighten screw (3).

Door lock to door

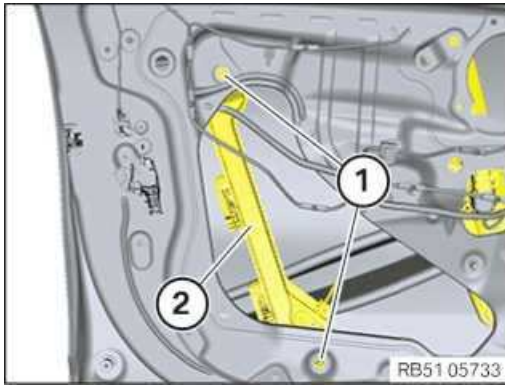
Screw		Tightening torque	8,8 Nm
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- Clip in locking rod (1).
 - Connect and lock the connector (1) on the door lock.
- Fasten the vehicle wiring harness (2) on the door lock and on the outside door handle support.

POSTPROCESSES

9 – Partially install the power windows

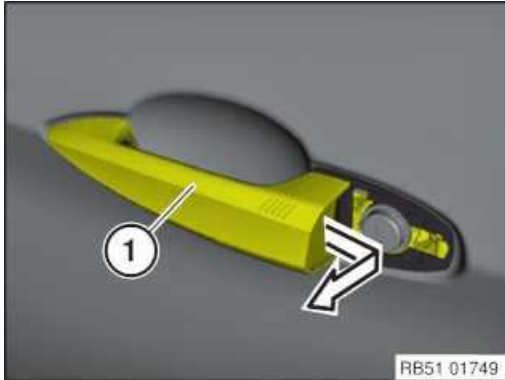


- Correctly position the power windows (2).
- Tighten nuts (1).

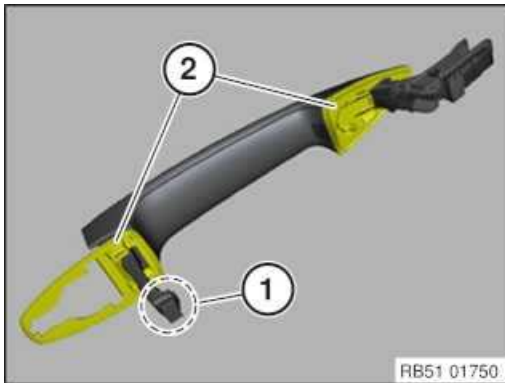
Window regulator to door

Nut M6, self-locking		Tightening torque	9,5 Nm
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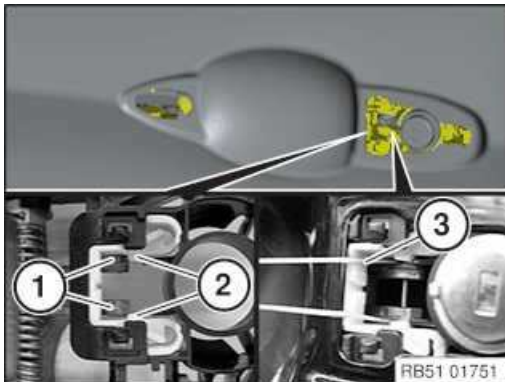
10 – Install the outside door handle



- 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.

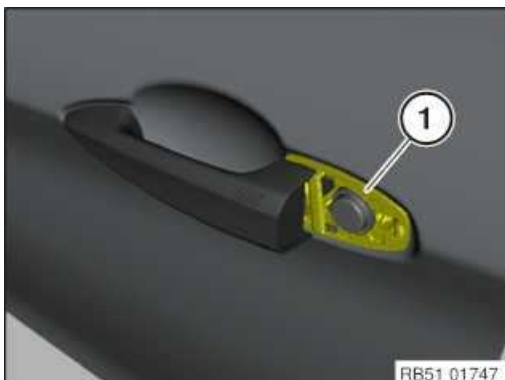


- Check the fixture (1) for damage.
Renew the damaged outside door handle if applicable.
- Check the seals (2); they must not be damaged or missing.

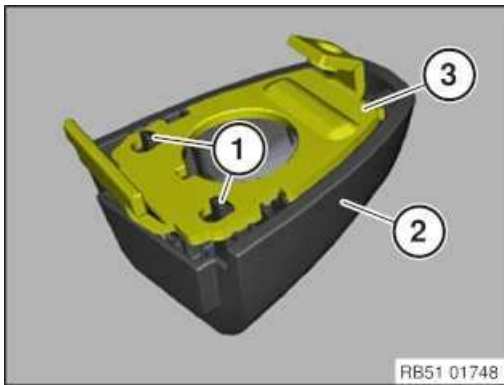


- During the disassembly of the outside door handle, the lock actuation (1) is held in the installation position by the retaining clamps (2).
- If the lock actuation (1) is not in the installation position, pull it outwards with a string (3) and hold it.
- Insert the outside door handle and feed it into 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



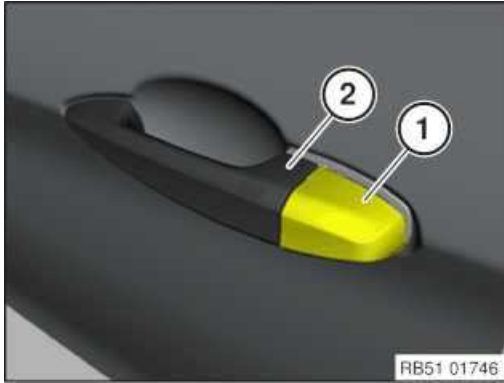
- Make sure the gasket (1) is fitted correctly.



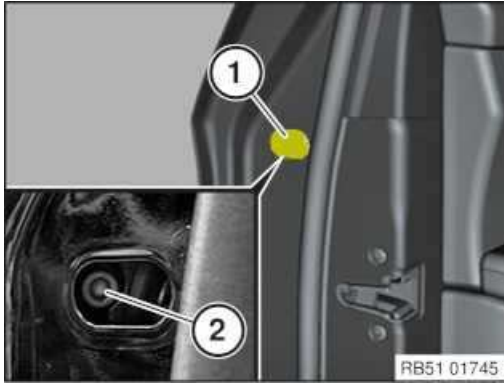
- Check the latch mechanisms (1) of the cover (2) for damage and renew the cover (2) as needed.

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).

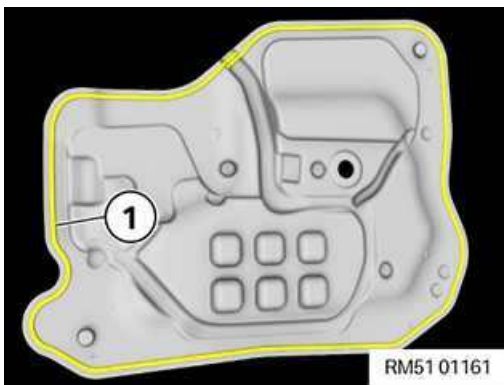
12 – Installing sound insulation on front door



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.

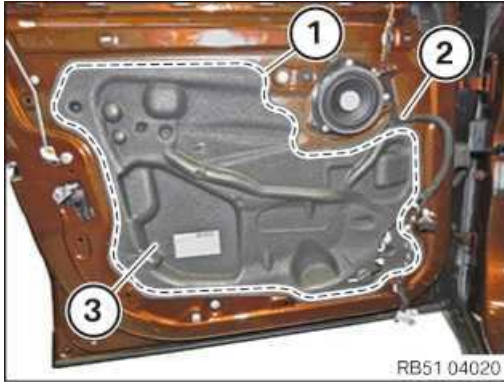
Result

» The sound insulation is damaged.

Measure

- Replace the sound insulation.

- 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

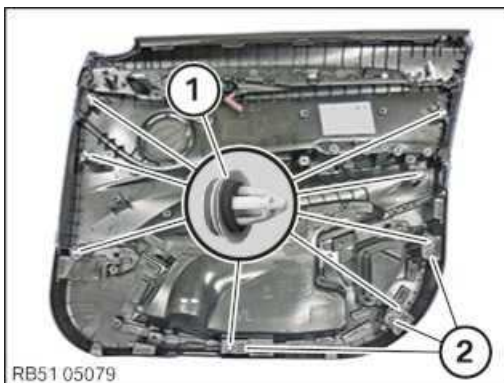


RISK OF DAMAGE

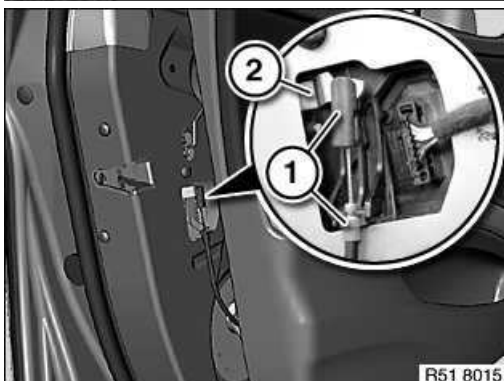
Scratches.

Tools and sharp-edged components can cause scratches.

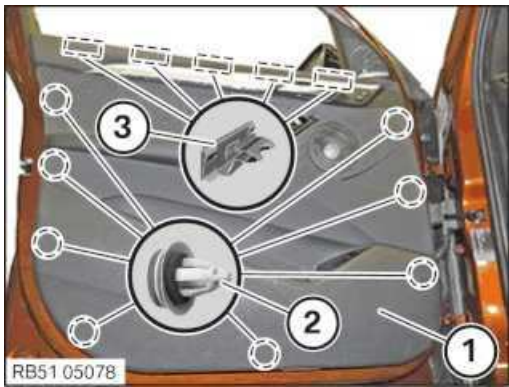
- Protect working area.
- Handle tools and components carefully.



- 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).



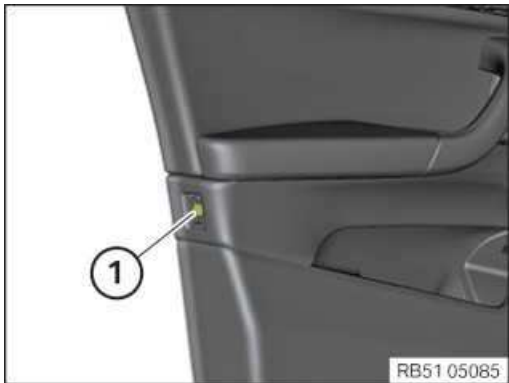
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- 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
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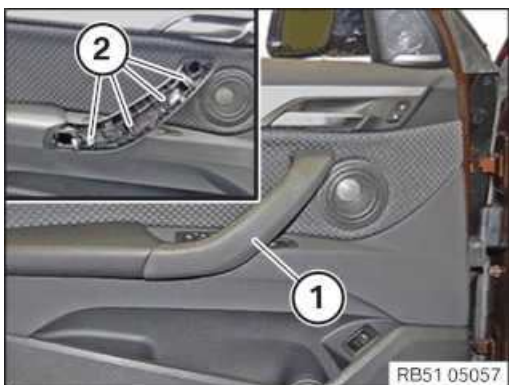
- Mount cover .

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

Outside door handle support to doorUsed in step **8**

Screw		Tightening torque	2,6 Nm
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Door lock to doorUsed in step **8**

Screw		Tightening torque	8,8 Nm
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Window regulator to doorUsed in step **9**

Nut M6, self-locking		Tightening torque	9,5 Nm
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Attachment bell to outside door handle supportUsed in step **11**

Screw		Tightening torque	3 Nm
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Door trim panel to doorUsed in step **13**

Screw TS5x20		Tightening torque	2,5 Nm
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Links**General repair instructions****Used in step**

51 48 ... Notes for bonding sound insulation (SI), doors	3 12
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67 11 613 Remove/install/replace actuator drive of front right door central locking drive



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.

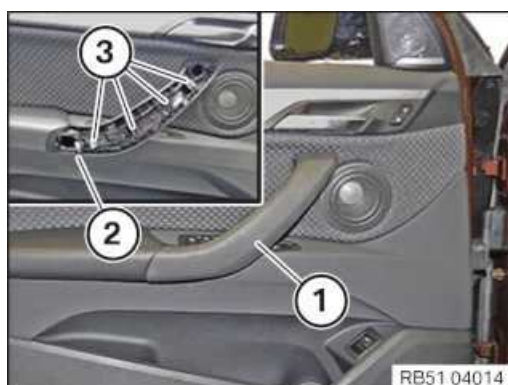
Tools and sharp-edged components can cause scratches.

- 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

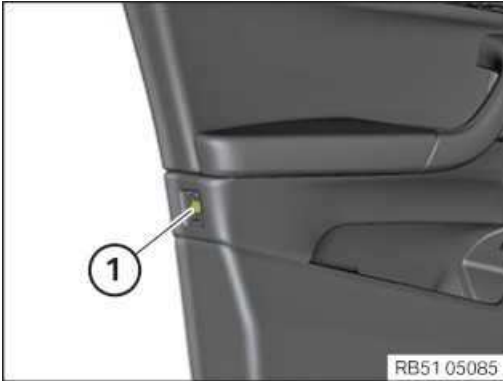


RISK OF DAMAGE

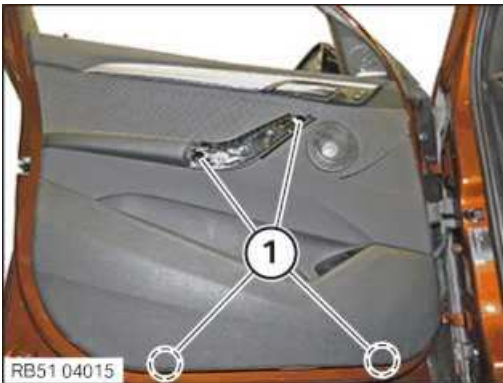
Scratches.

Tools and sharp-edged components can cause scratches.

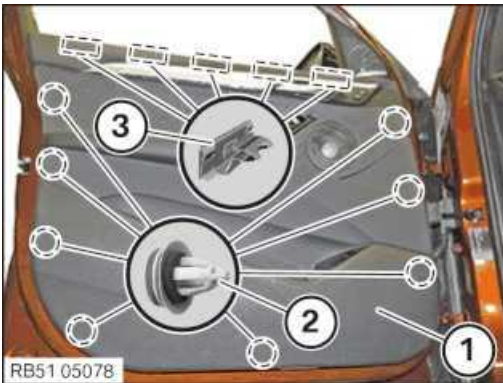
- Protect working area.
- Handle tools and components carefully.



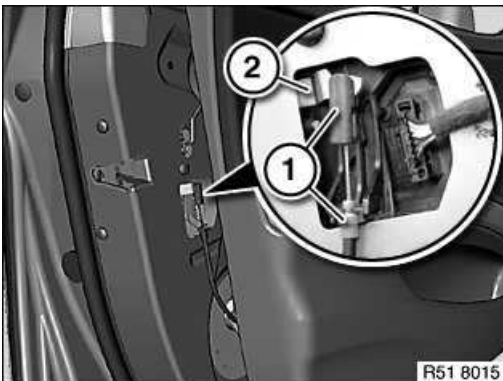
- If fitted: Remove the cover and unscrew the bolt (1).



- 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.

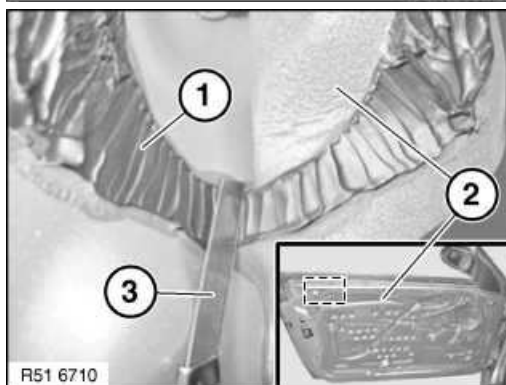
3 – Removing sound insulation on front door

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

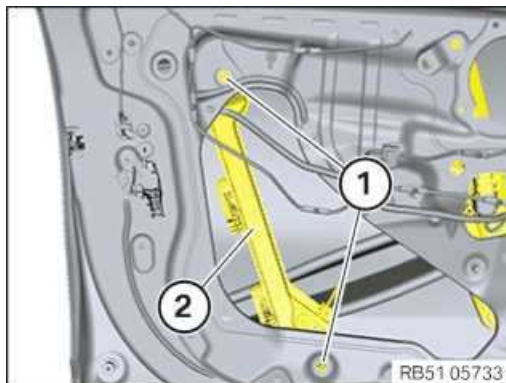


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).



- 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.

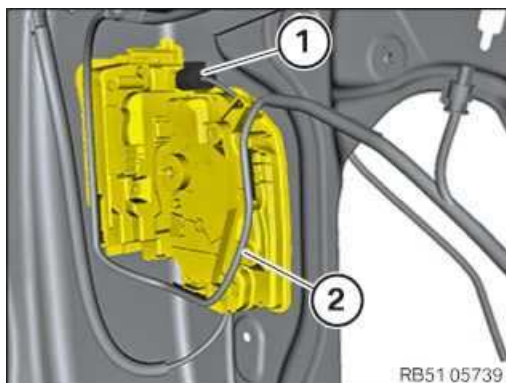
4 – Partially remove power window regulator



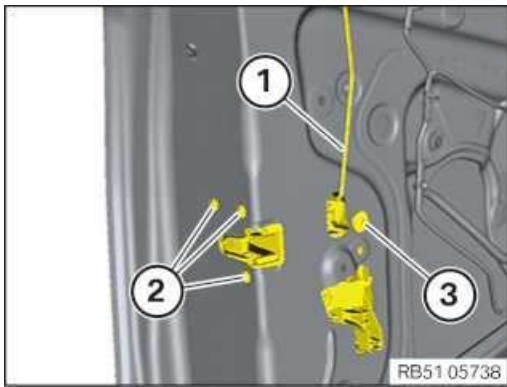
- Loosen nuts (1).
- Carefully slide the power windows (2) to the side.

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.

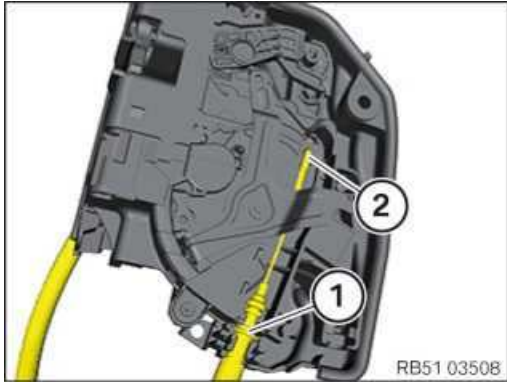


NOTICE

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

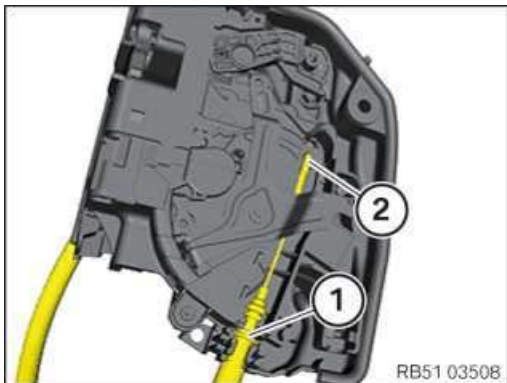
- Unclip locking rod (1).
- Loosen screws (2) and (3).
- Feed the door lock out of the door.

Make sure that the seal of the door lock is not damaged during removal.

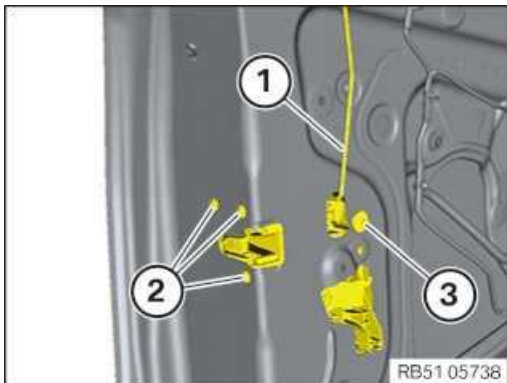


- Detach the Bowden cable (1).
- Detach the Bowden cable nipple (2).

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

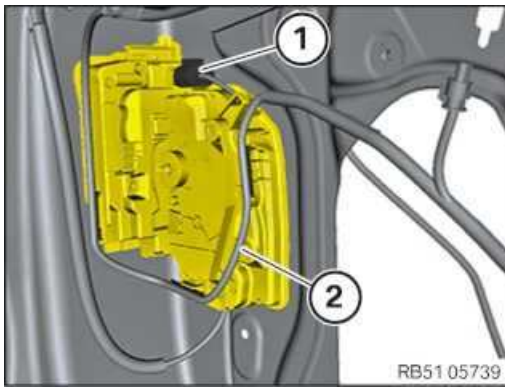
Screw		Tightening torque	8,8 Nm
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- Then tighten the screw (3).

Door lock to door

Screw		Tightening torque	8,8 Nm
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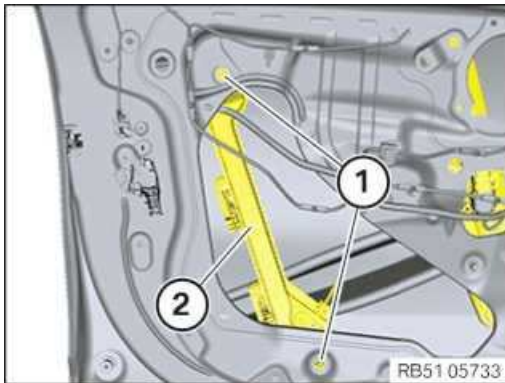
- Clip in locking rod (1).



- 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

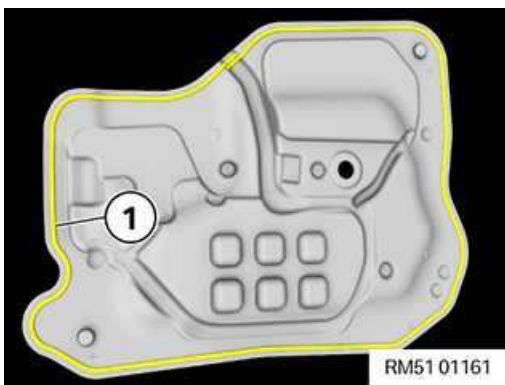
Nut M6, self-locking		Tightening torque	9,5 Nm
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8 – Installing sound insulation on front door



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

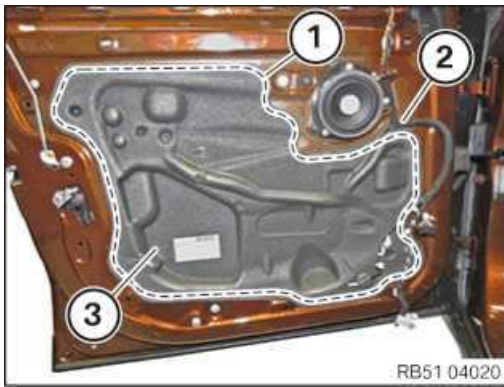
- Check sound insulation for damage.

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



RISK OF DAMAGE

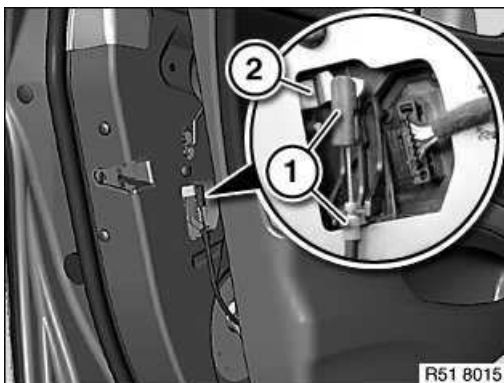
Scratches.

Tools and sharp-edged components can cause scratches.

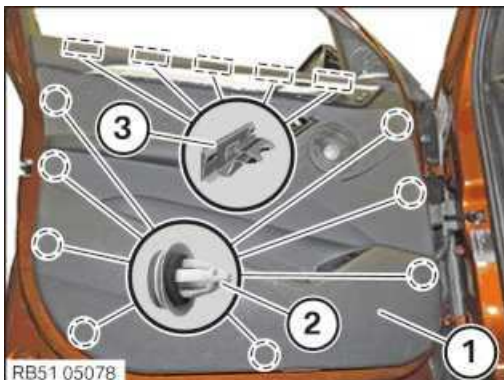
- Protect working area.
- Handle tools and components carefully.



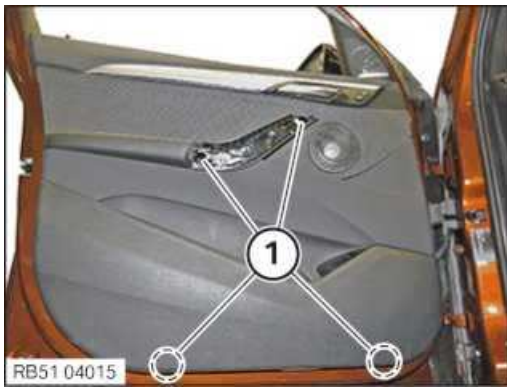
- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.
- The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



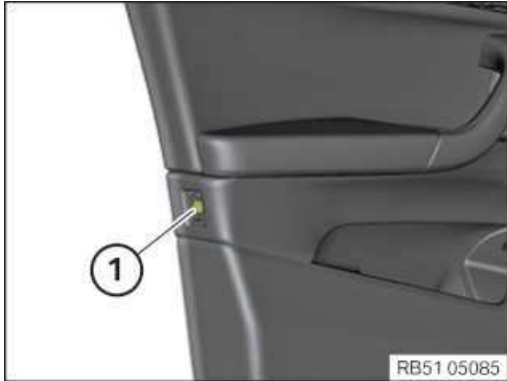
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- 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
--------------	--	-------------------	--------

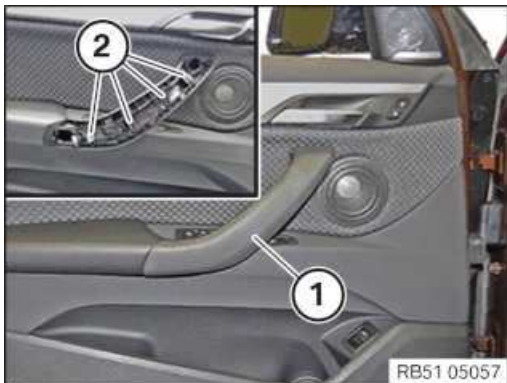
- Mount cover .

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).

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
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Door trim panel to door

Used in step [9](#)

Screw TS5x20		Tightening torque	2,5 Nm
--------------	--	-------------------	--------

Links

67 11 530 Removing and installing/replacing actuator drive for rear left or right central locking

PRELIMINARY WORK

1 – Remove cover on door handle



RISK OF DAMAGE

Scratches.

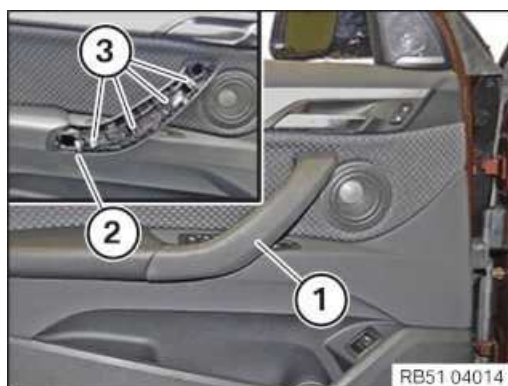
Tools and sharp-edged components can cause scratches.

- 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

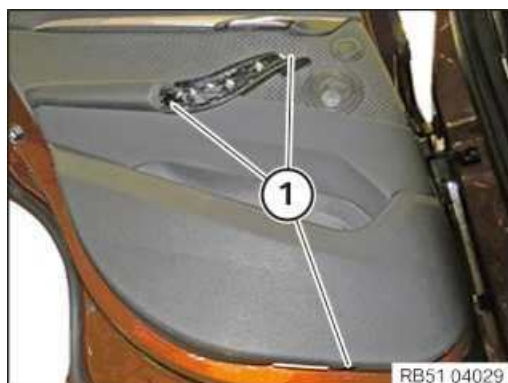


RISK OF DAMAGE

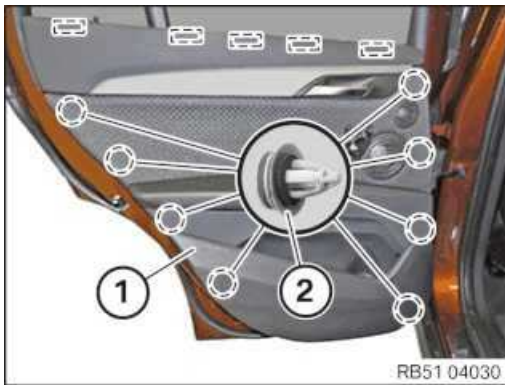
Scratches.

Tools and sharp-edged components can cause scratches.

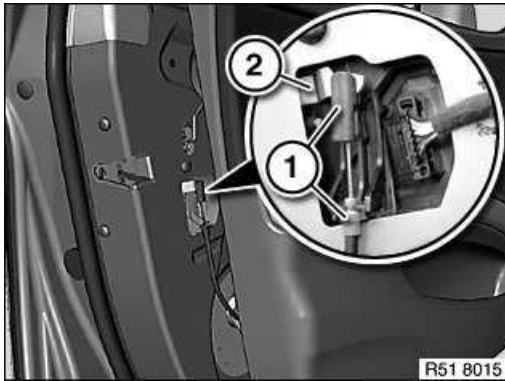
- Protect working area.
- Handle tools and components carefully.



- Loosen screws (1).



- 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.



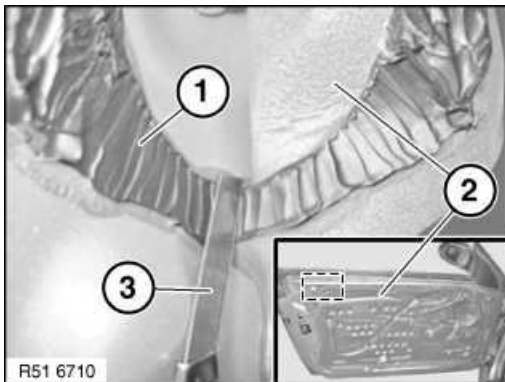
- Detach Bowden cable (1) from door lock (2).
Disconnect all plug connections and remove door trim panel.

3 – Remove sound insulation on the rear door

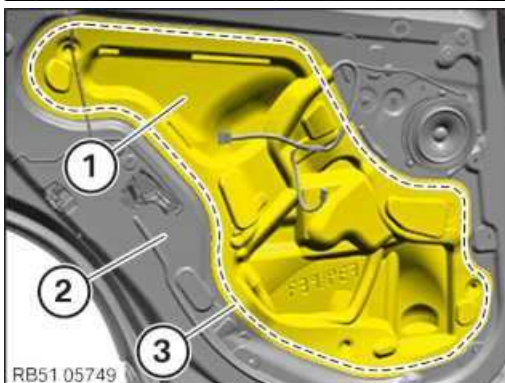


TECHNICAL INFORMATION

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



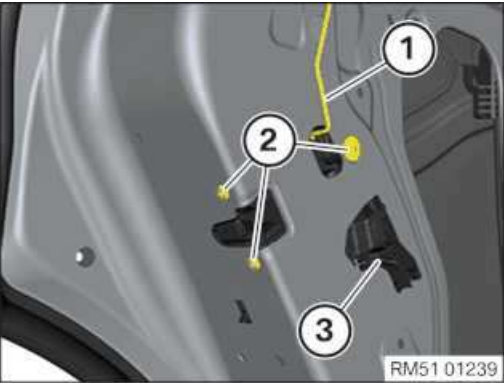
- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.



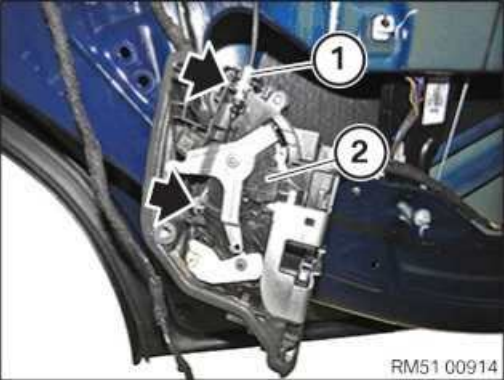
- Observe the position of the sealing bead (3) for the sound insulation (1).
- Remove the sound insulation (1) from the inner door panel.

MAIN WORK

4 – Removing the door lock in the rear door

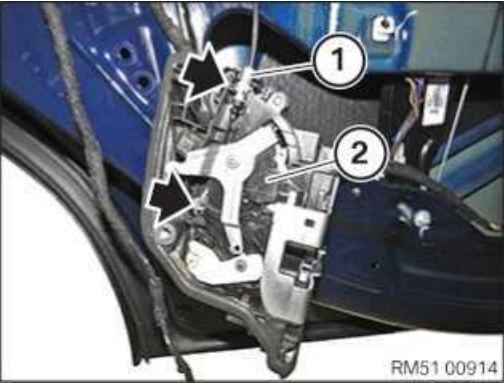


- Unclip locking rod (1).
- Disconnect the plug connection and cable clip at the door lock (3).
- Loosen screws (2).
- Feed the door lock (3) out of the door.

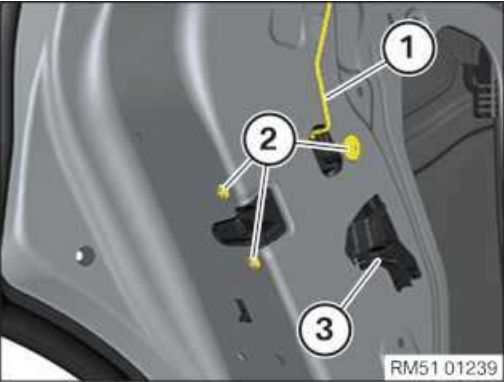


- Detach Bowden cable (1) from door lock (2).

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
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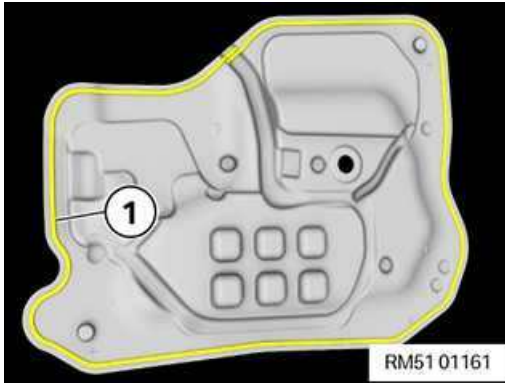
- Connect the plug connection and cable clip at the door lock (3).
- Clip in locking rod (1).

POSTPROCESSES

6 – Installing the sound insulation on the rear door

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

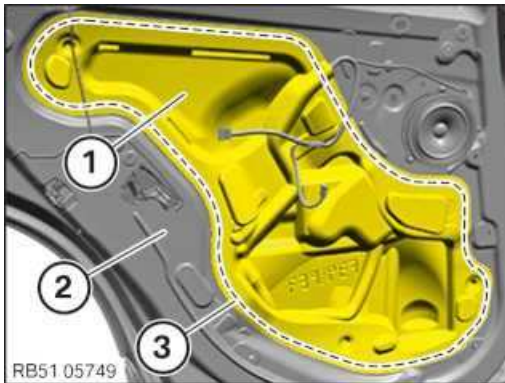
- Check sound insulation for damage.

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

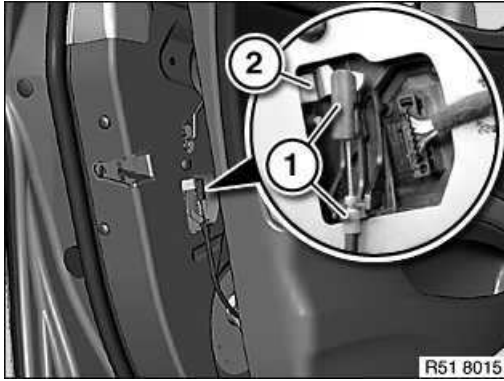
Scratches.

Tools and sharp-edged components can cause scratches.

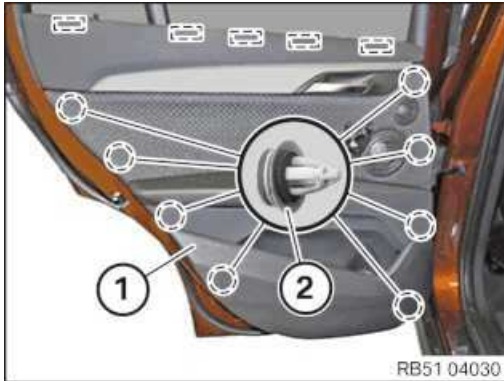
- Protect working area.
- Handle tools and components carefully.



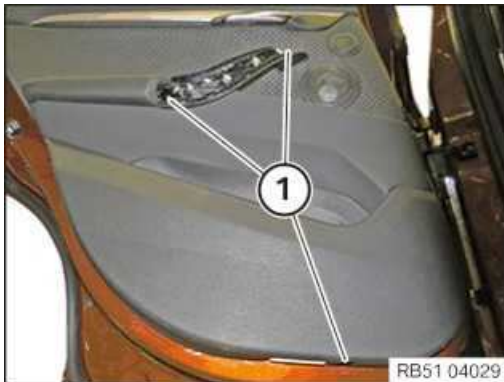
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- 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

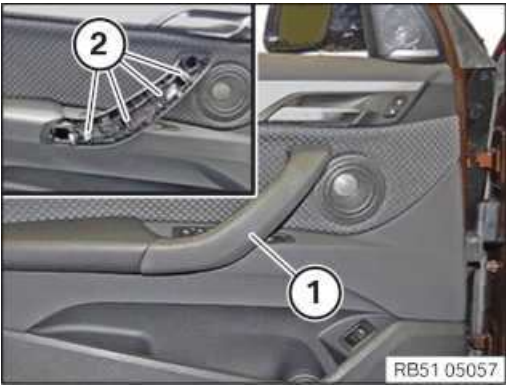
Screw TS5x20	Tightening torque	2,5 Nm
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8 – Install the cover on the door handle



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 lock to door			Used in step
Screw		Tightening torque	58,8 Nm

Door trim panel to door			Used in step
Screw TS5x20		Tightening torque	2,5 Nm

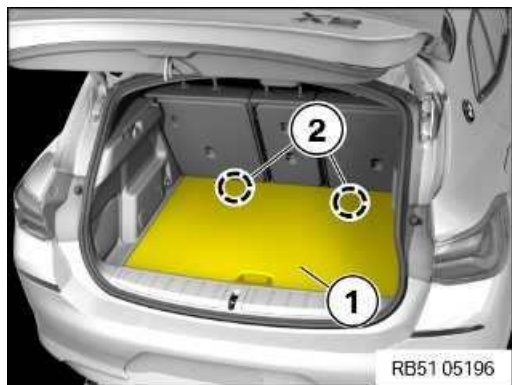
Links

General repair instructions		Used in step
51 48 ... Notes for bonding sound insulation (SI), doors		3 6

67 11 560 Replacing actuator drive for tailgate locking

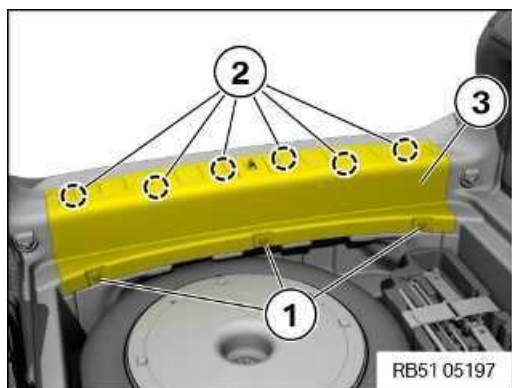
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel



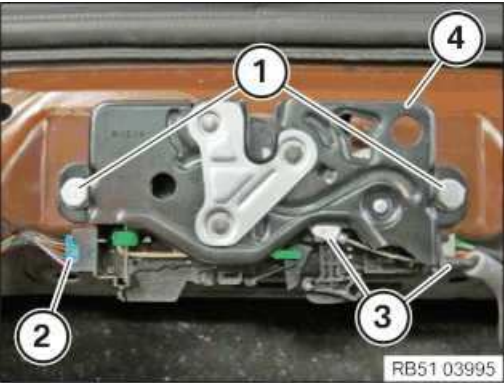
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the loading edge trim



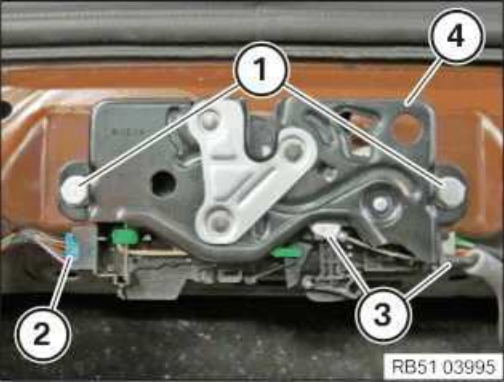
- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

3 – Removing the tailgate lock



- Loosen screws (1).
- Disconnect plug connection (2).
- Detach the cable (3).
- Remove the tailgate lock (4).

4 – Installing the tailgate lock

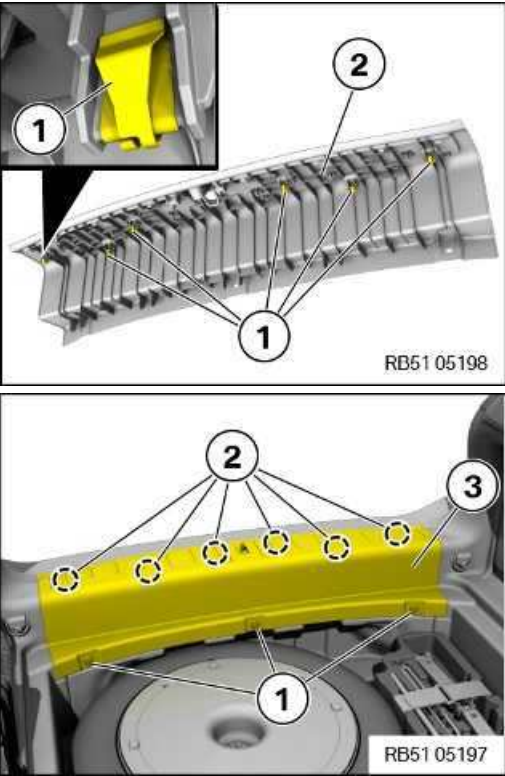


- Remove the tailgate lock (4).
- Attach the cable (3).
- Connect connector (2).
- Tighten the screws (1).

Tailgate lock to body

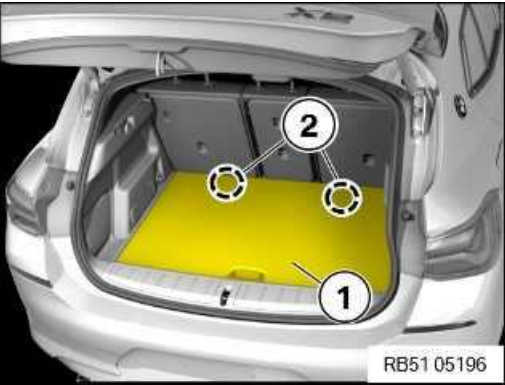
M8x20 screw		Tightening torque	19 Nm
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5 – Installing loading edge trim



- 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).

6 – 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 4

M8x20 screw	Tightening torque	19 Nm
-------------	-------------------	-------

67 13 001 Replacing drive for exterior mirror adjustment, 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.

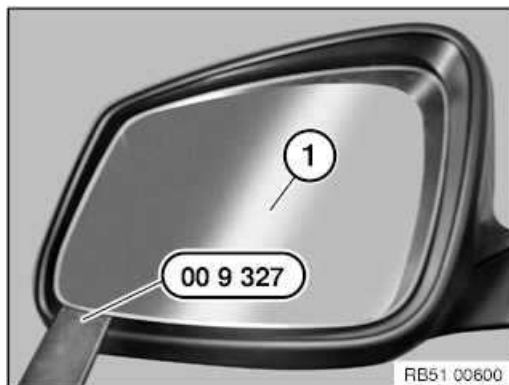
Danger of injury!

- 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 – Removing the drive for exterior mirror adjustment



- Release the screws (1) and pull out the drive for exterior mirror adjustment (2) a little.

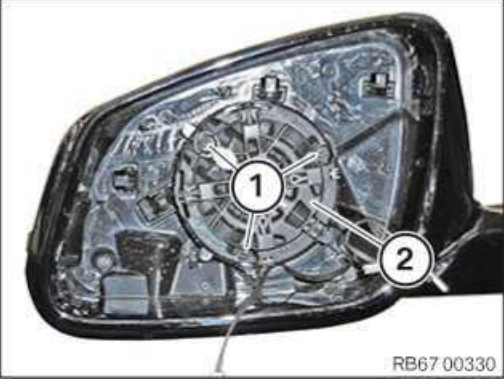


- Unlock plug connection (1) and disconnect and remove the drive for exterior mirror adjustment (2) .

3 – Installing the drive for exterior mirror adjustment



- Position drive for exterior mirror adjustment (2).
- Connect connectors (1) and lock.

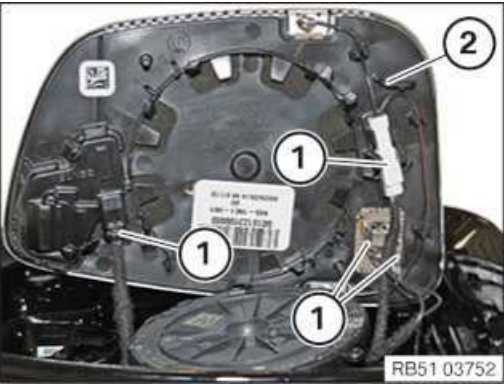


- Position drive for exterior mirror adjustment (2) correctly.
- Tighten the screws (1).

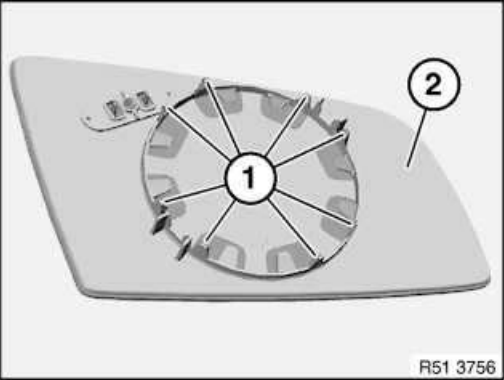
Drive for exterior mirror adjustment

	Tightening torque	1,2 Nm
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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 Tightening Torques

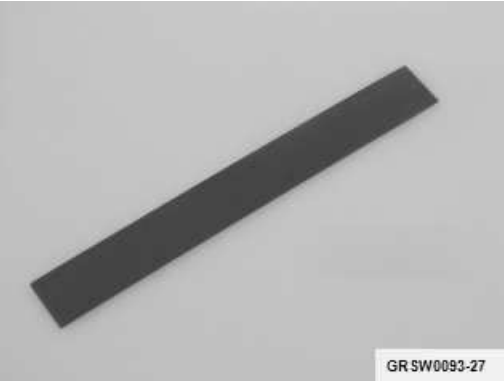
Drive for exterior mirror adjustment

Used in step 3

	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)

67 13 526 Replacing mirror electronics for electrically operated left or right door mirror (exterior rearview mirror removed)



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.

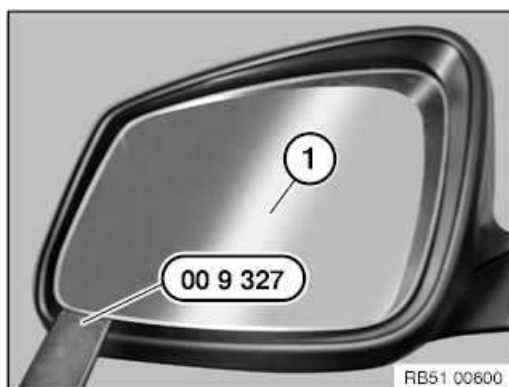
Danger of injury!

- 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.



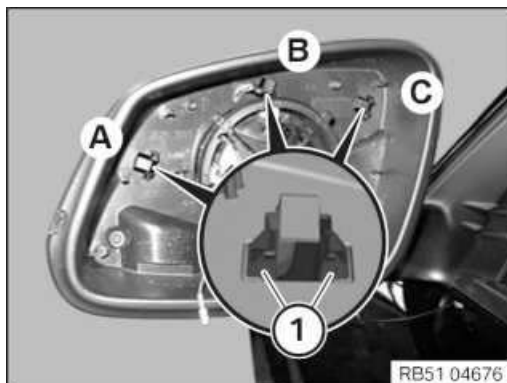
- Manually press the mirror glass (1) on the side of vehicle up to the end stop.
- Unclip the mirror glass (1) using special tool **0 496 571 (00 9 327)** all the way around, starting with the outer side.



- Disconnect plug connection (1).
- Remove mirror glass (2).

2 – Remove cover cap on the exterior rearview mirror

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

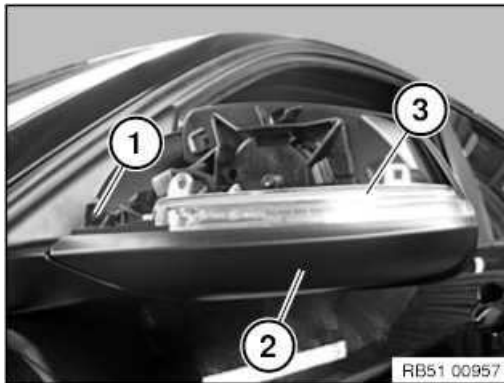


- Fold exterior mirror forwards.
- Loosen screws (1).
- Slide the retaining ring (2) out.

5 – Removing the mirror housing



- 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.

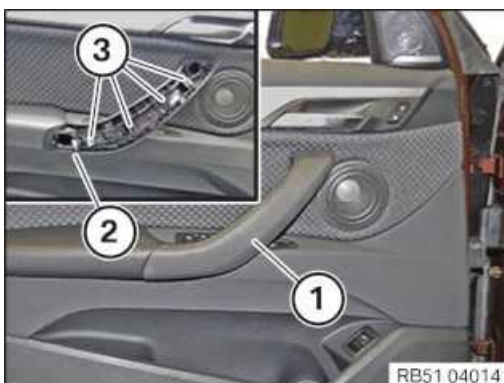
Tools and sharp-edged components can cause scratches.

- 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

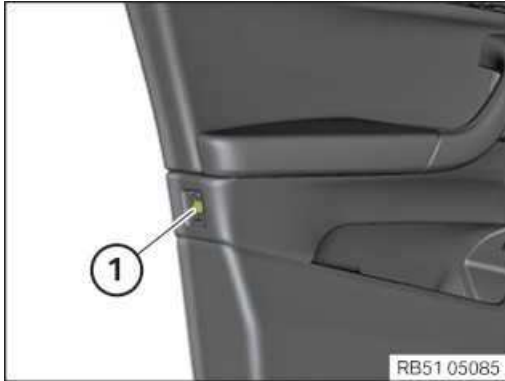


RISK OF DAMAGE

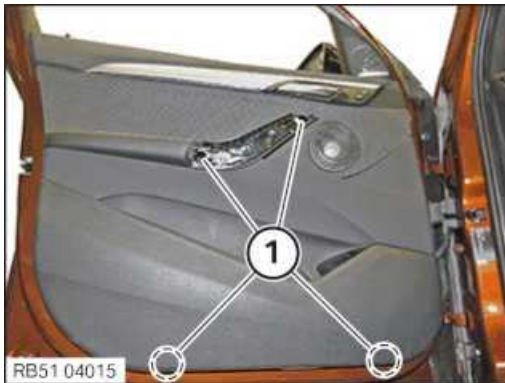
Scratches.

Tools and sharp-edged components can cause scratches.

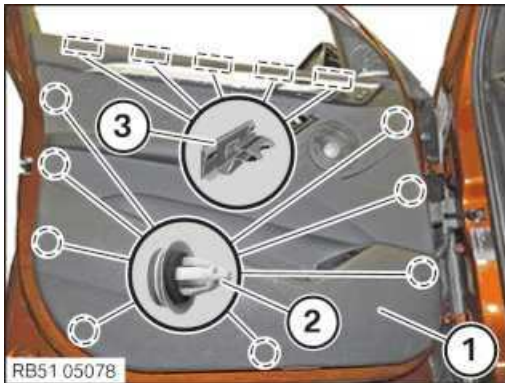
- Protect working area.
- Handle tools and components carefully.



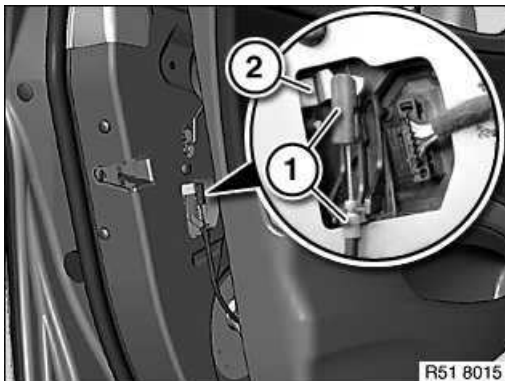
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).

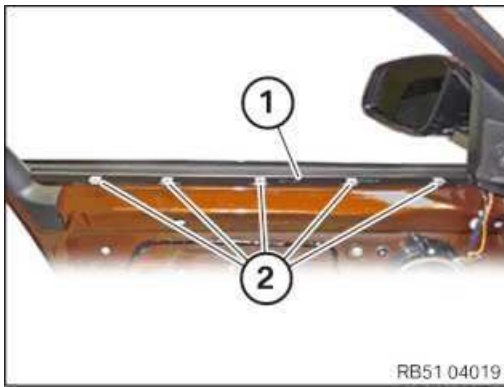


- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps (3) at the top.



- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

8 – Remove the inside front weather strip

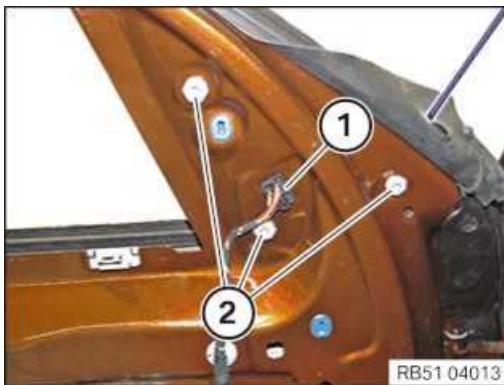


- Release the weather strip (1) from the clamps (2) and pull it off to the top. If weather strip (1) is reused, make sure it is not bent.

9 – Removing the exterior mirror



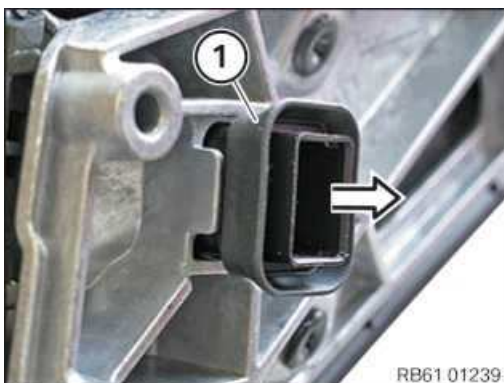
- Release the window frame cover (1) in the area of the mirror.
- If necessary, disconnect related plug connections.



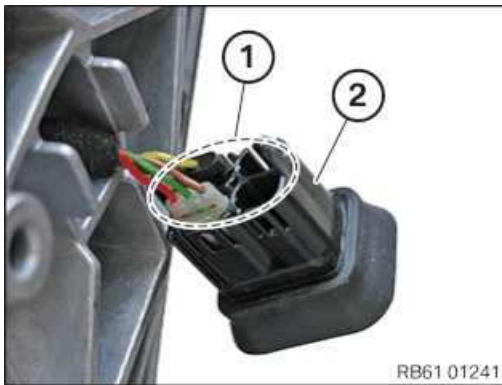
- Secure exterior mirror against falling out.
- Unlock plug connection (1) and disconnect.
- Release the screws (2) and remove the exterior rearview mirror.

MAIN WORK

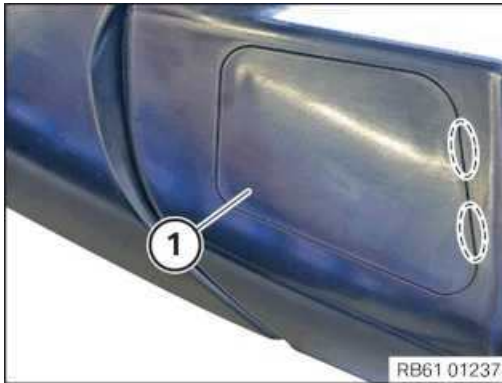
10 – Remove the mirror electronics



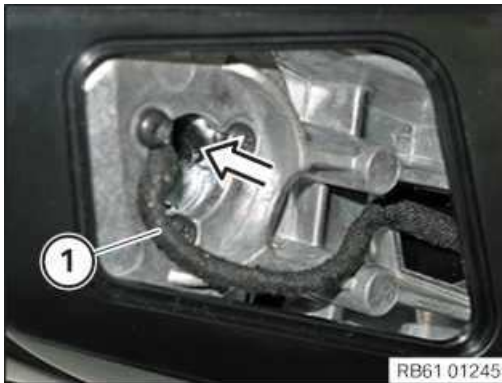
- Pull out the connector housing (1) in direction of arrow.



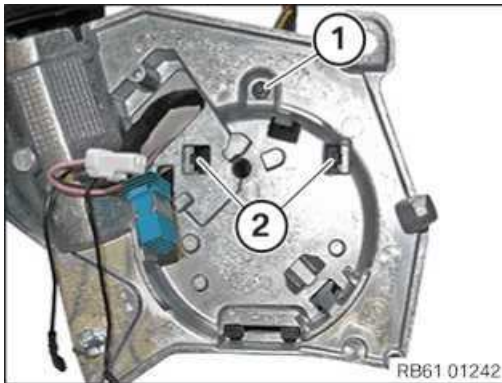
- Unlock all connectors (1) on the connector housing (2) and disconnect.



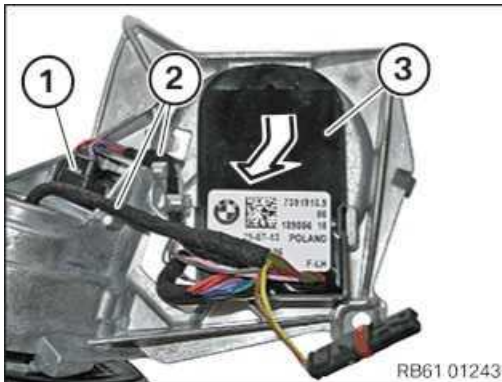
- Unclip the cover (1).



- Slide out all cables (1) in direction of arrow.

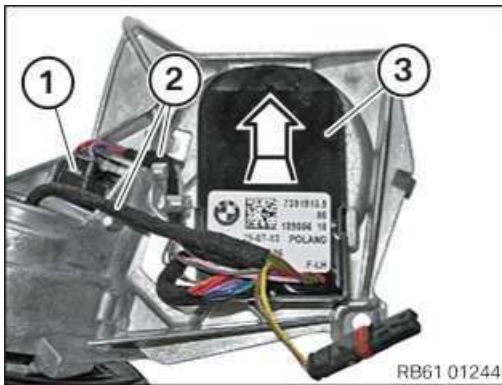


- Loosen screws (1).
- Unlock the retaining lugs (2) on both sides.

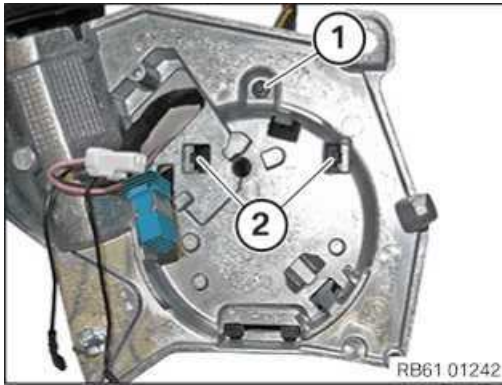


- Unlock and disconnect connector (1).
- Remove the cable (2).
- Slide out the mirror electronics (3) in direction of arrow.

11 – Installing mirror electronics



- Join mirror electronics (3) in direction of arrow.
- Feed in cable (2).
- Connect connectors (1) and lock.



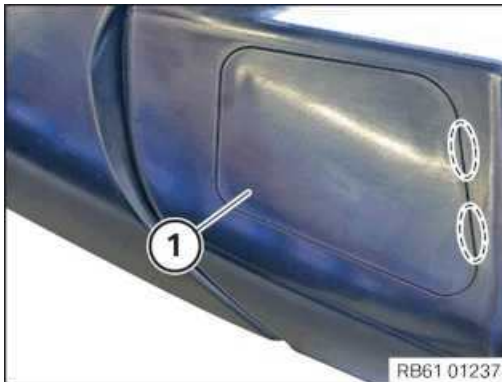
- Tighten the screws (1).
- Note:** Make sure the mirror electronics are latched correctly (2).



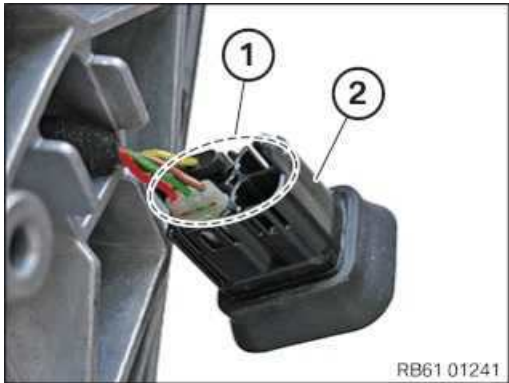
- Insert cable (1) in direction of arrow.



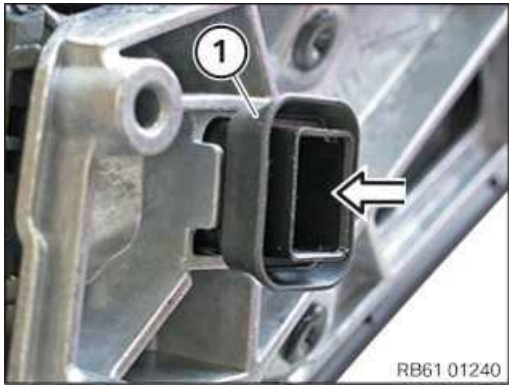
- **Note:** Retaining lugs on cover (1) must not be damaged or missing.



- Clip in the cover (1).



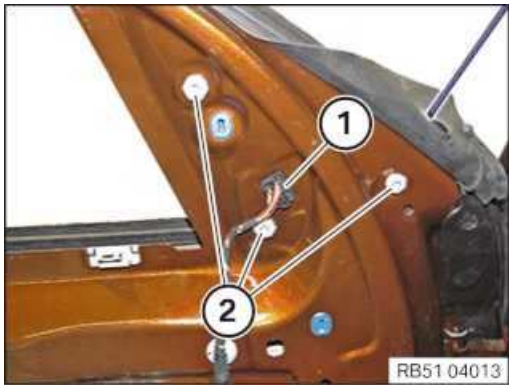
- Connect all connectors (1) to the connector housing (2) and lock.



- 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

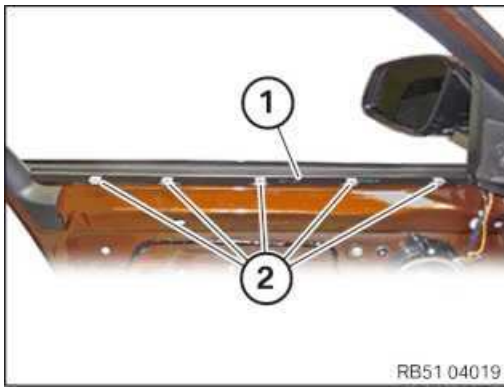
Self-tapping screw		Tightening torque	6 Nm
	With a new exterior rearview mirror (initial screw connection)	Tightening torque	8 Nm

- 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



- 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

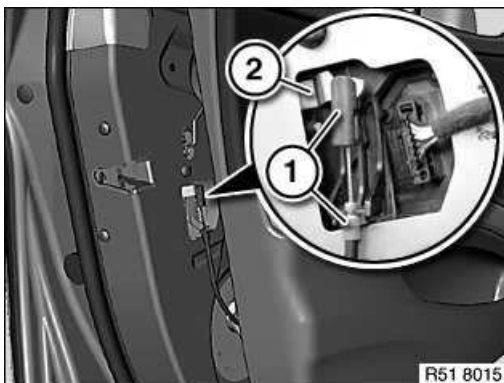
Scratches.

Tools and sharp-edged components can cause scratches.

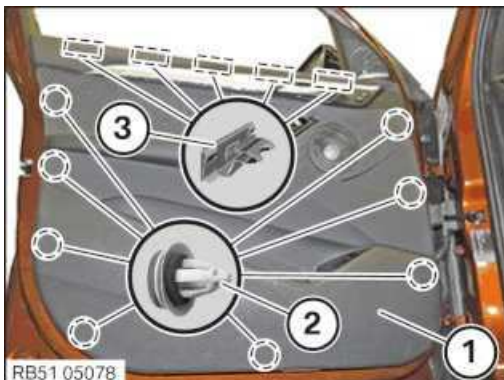
- Protect working area.
- Handle tools and components carefully.



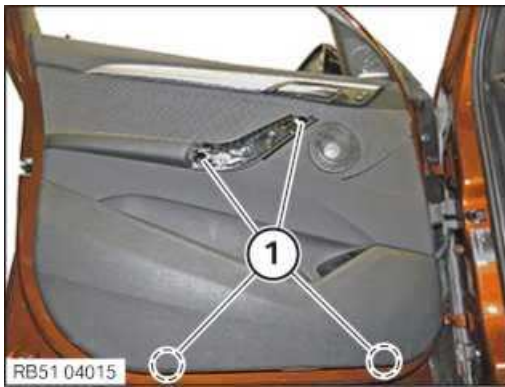
- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.
- The clips (1) and the stop pads (2) must not be damaged or missing.



- Install door trim panel and connect all the connectors.
- Attach the Bowden cable (1) on the door lock (2).



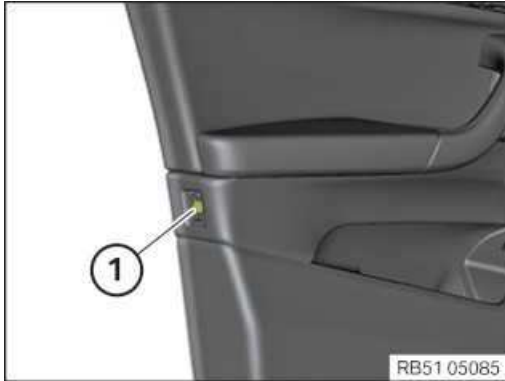
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- 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
--------------	--	-------------------	--------

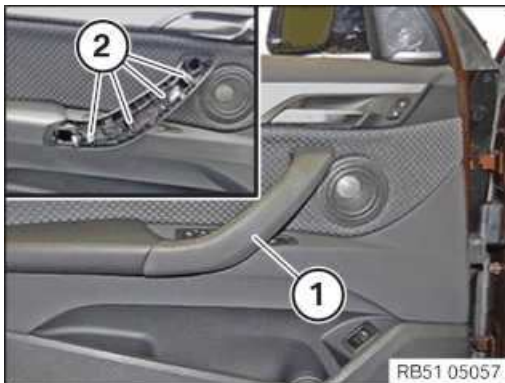
- Mount cover .

15 – Install the cover on the door handle



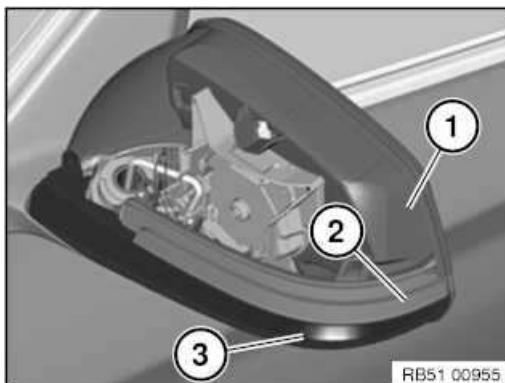
NOTICE

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

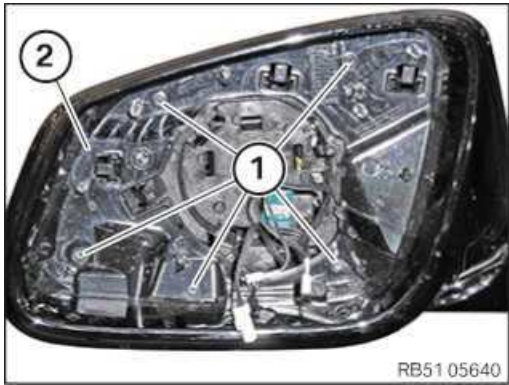


- Check clamps (2) for damage; renew if necessary.
The clamps (2) must not be damaged or missing.
- Position the cover (1) and engage it in the clamps (2).

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).

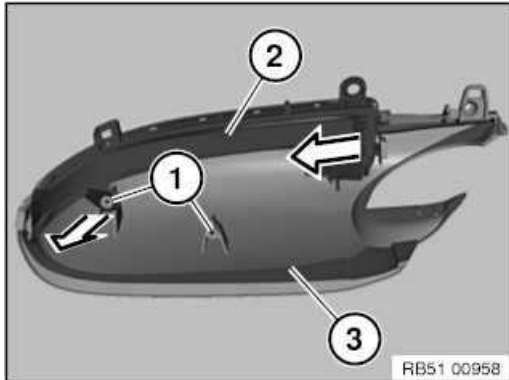


- Tighten the screws (1) on the retaining ring (2).

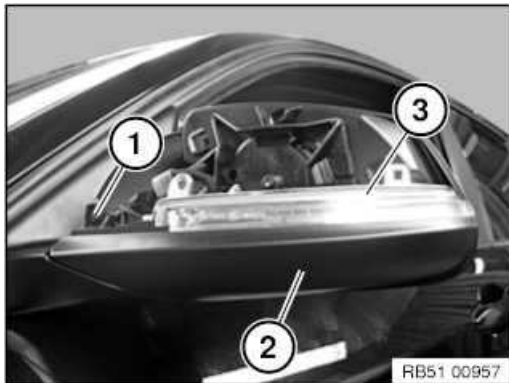
Retaining ring to exterior mirror

Screw		Tightening torque	1,2 Nm
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17 – Installing the mirror housing



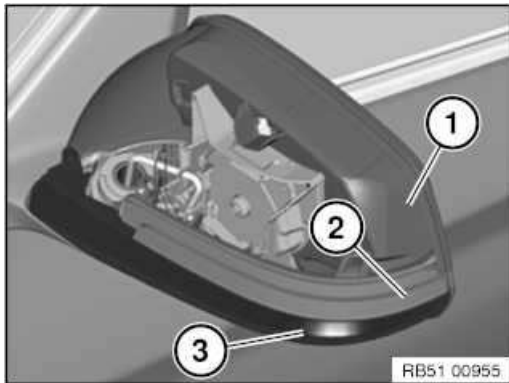
- Check the threaded holes (1) for damage and renew them if necessary.
- **Replacement:** Guide the side repeater (2) out of the mirror housing (3) in the direction of the arrow and mount it on the new mirror housing.



- 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
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- 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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18 – 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

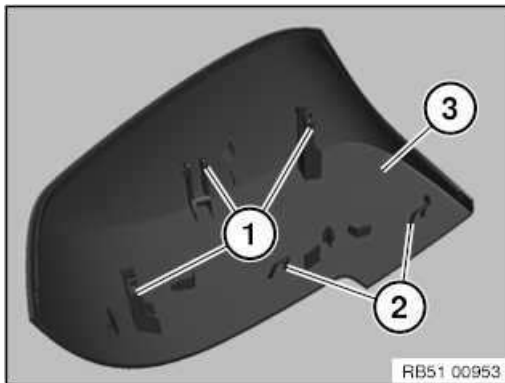
	Tightening torque	1,2 Nm
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19 – Installing protective cap on exterior mirror

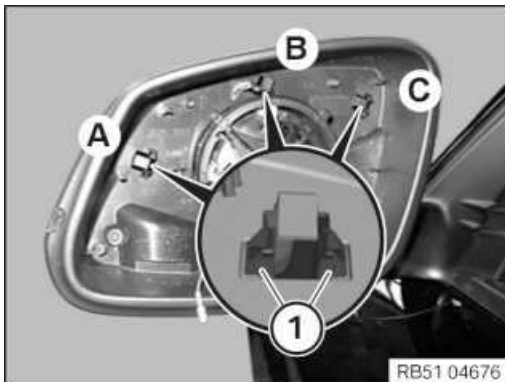


TECHNICAL INFORMATION

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.

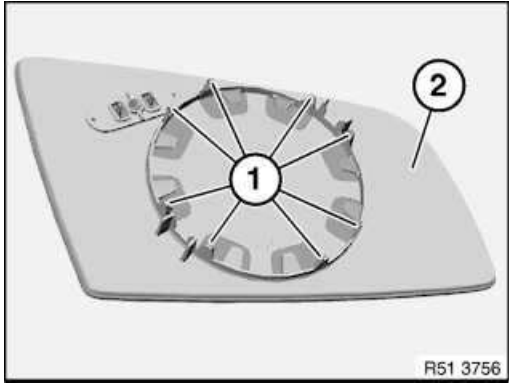


- Position protective cap on the exterior mirror and engage in the latch mechanisms (1) in order (C), (B) and (A).

20 – Installing the mirror glass



- 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
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Retaining ring to exterior mirror

Used in step [16](#) [17](#)

Screw		Tightening torque	1,2 Nm
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Mirror housing to mirror base

Used in step [17](#)

Screw		Tightening torque	1,2 Nm
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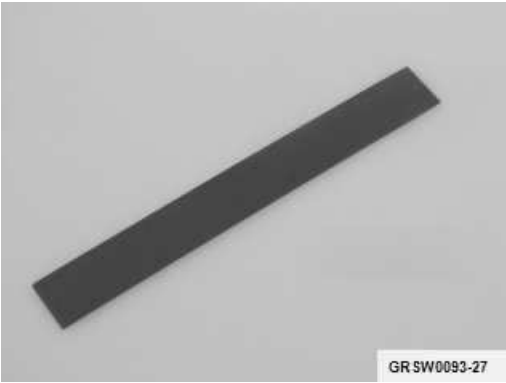
Drive for exterior mirror adjustment

Used in step [18](#)

		Tightening torque	1,2 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)		

67 61 007 Removing and installing drive with gearing for slide/tilt sunroof activation (behind)



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.



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

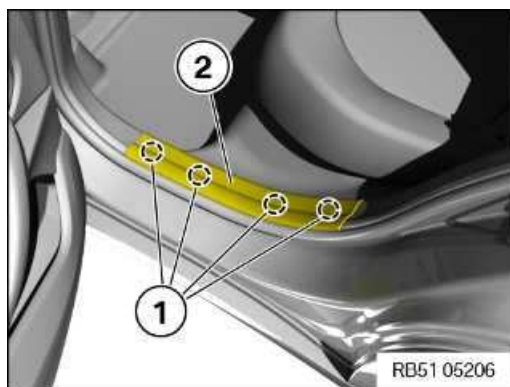


NOTICE

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).



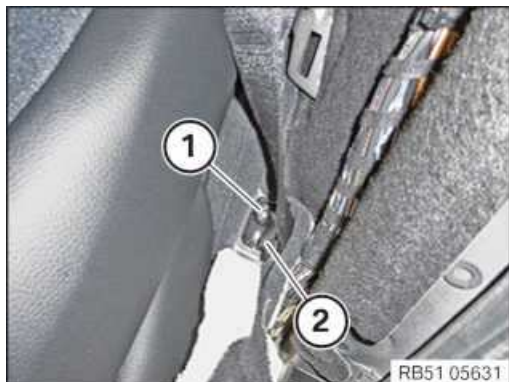
2 – Removing the bottom left and right C-pillar trim panels



NOTICE

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

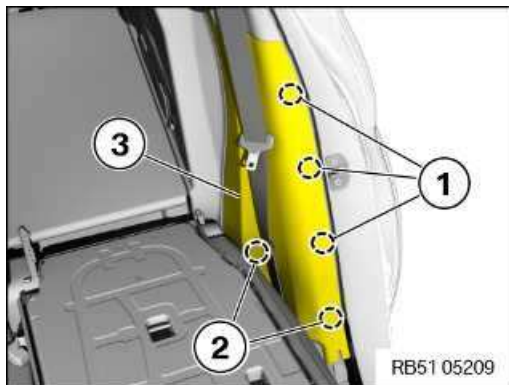
► Remove the bottom C-pillar trim panel



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

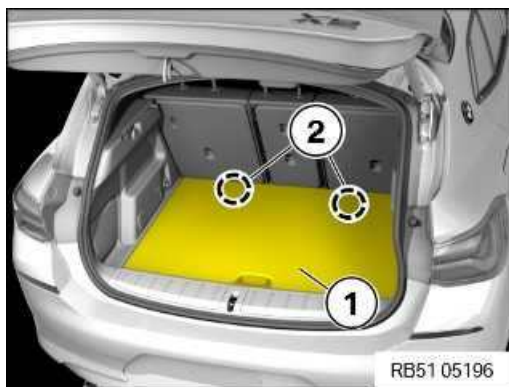


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



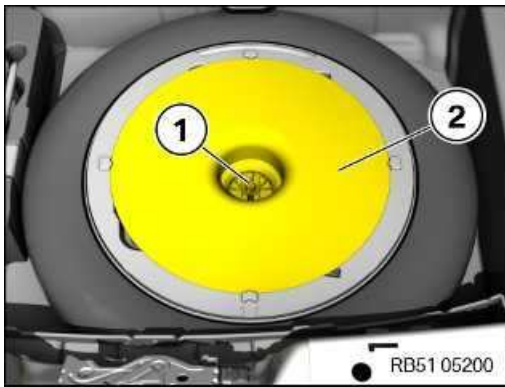
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

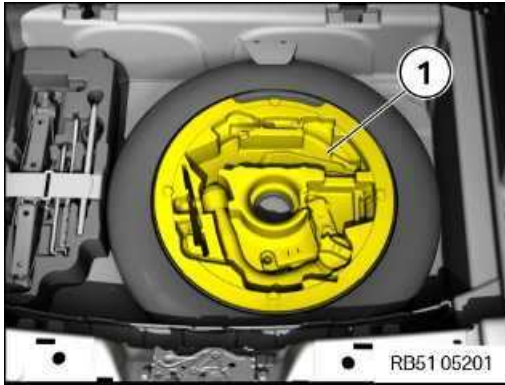


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



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

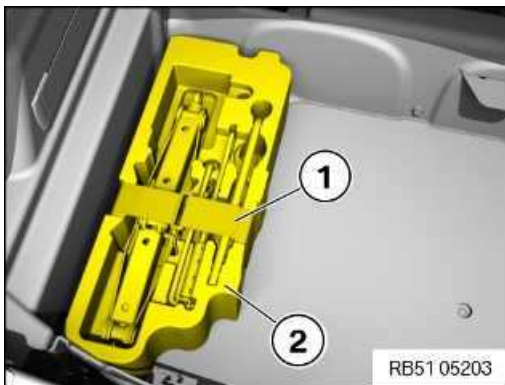


- Remove the oddments tray from the emergency wheel (1).



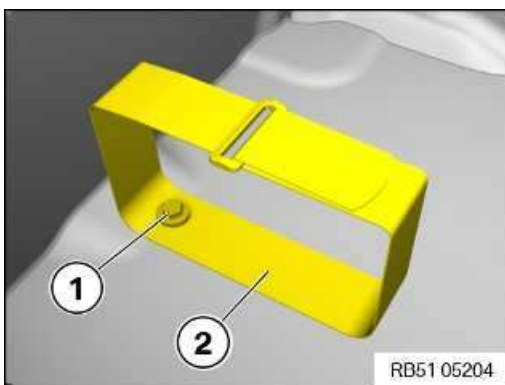
- Remove the emergency wheel (1).

5 – Remove the tool kit



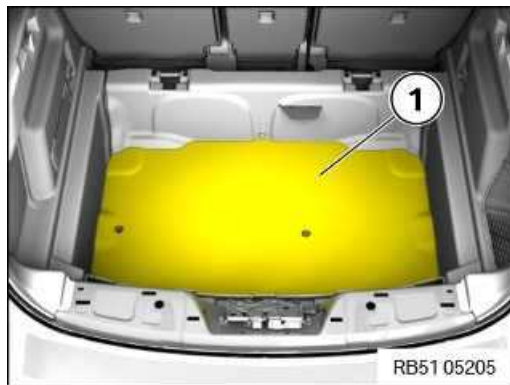
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



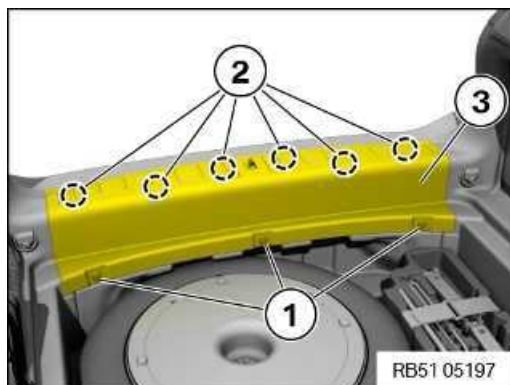
- Loosen screw (1).
- Remove the hook and loop tape (2).

7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

8 – Removing the loading edge trim

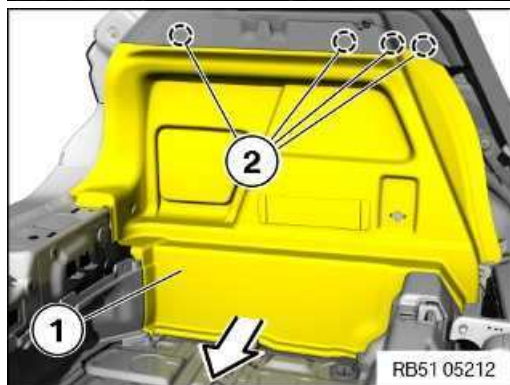


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

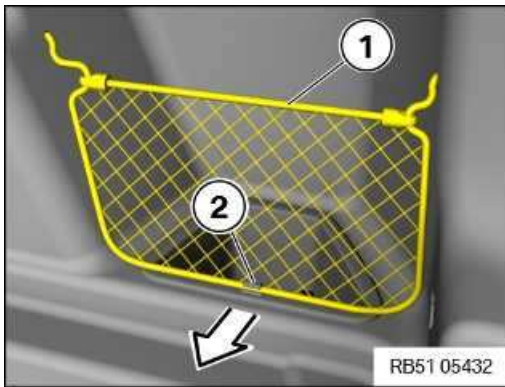


NOTICE

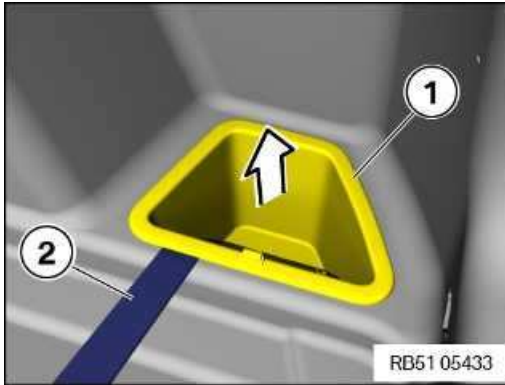
Schematic diagram is for example purposes. Some parts may differ in certain details.

- 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.

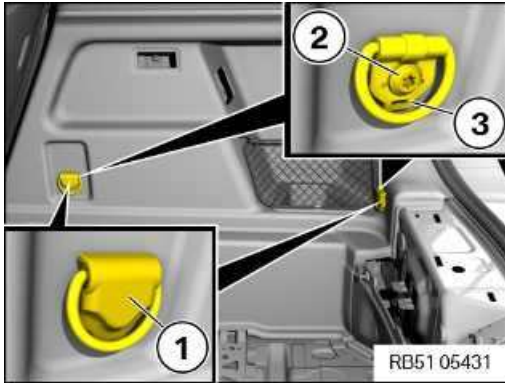
10 – Removing right luggage compartment wheel arch trim panel



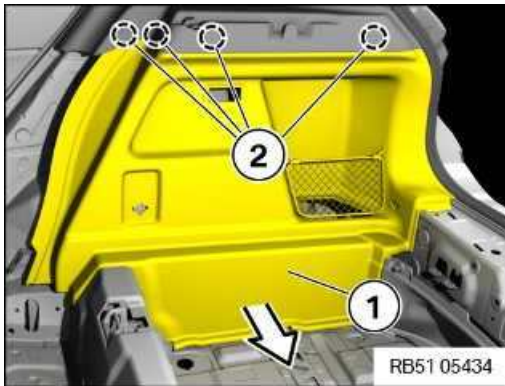
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- 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.

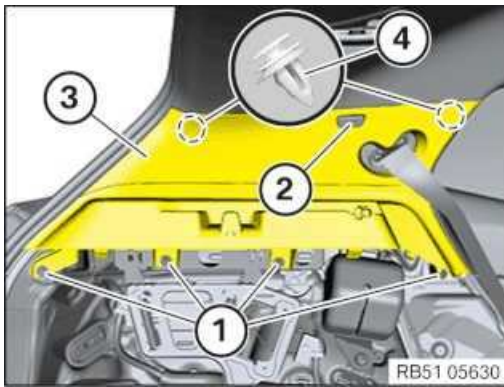
11 – Remove the trim panel of the luggage compartment capping on the left and right



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).

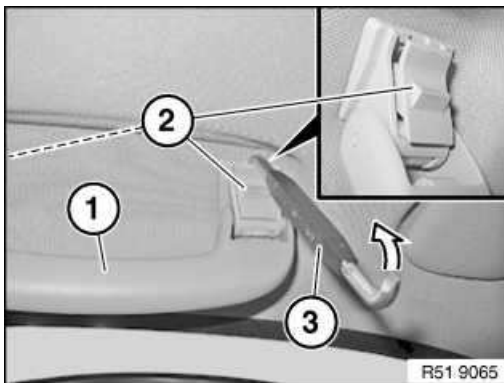
12 – Removing all grab handles



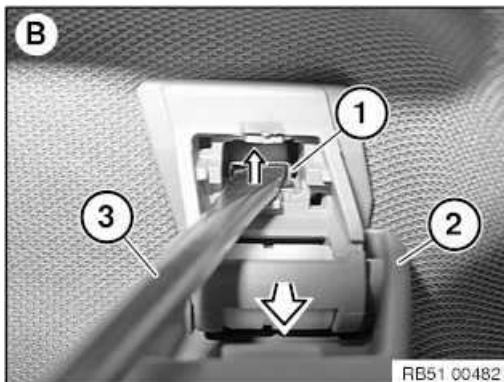
NOTICE

The description is for one component only. The procedure is identical for all further components.

► Removing the grab handle

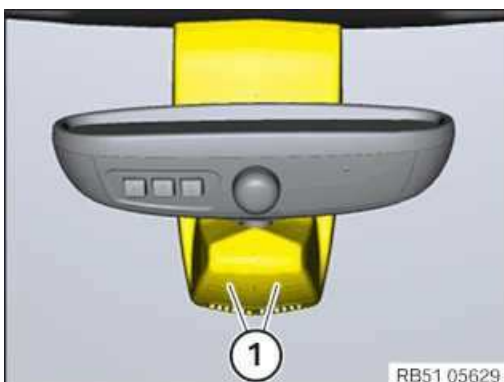


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- 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.

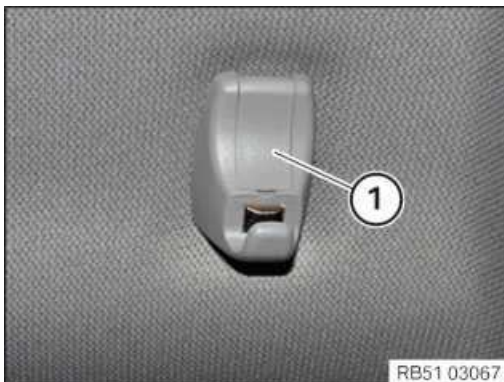
15 – Removing counter supports for sun visor on left and right



NOTICE

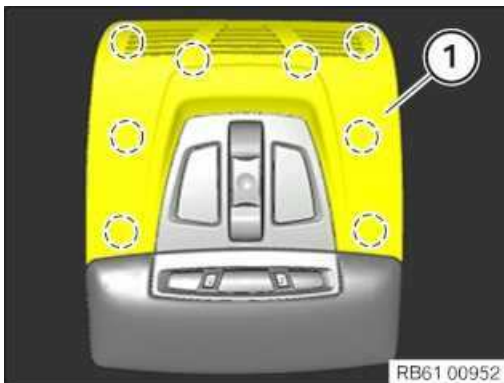
Description is for left component only. Procedure on the right side is identical.

► Remove the counter support for the sun visor

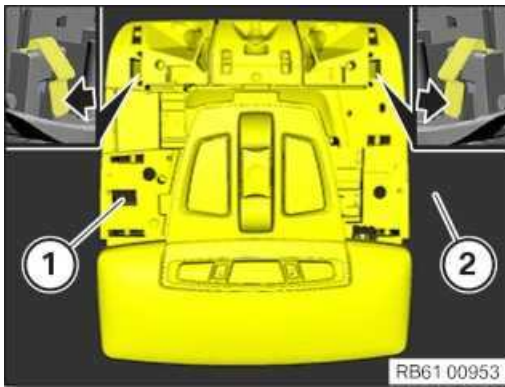


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

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



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.

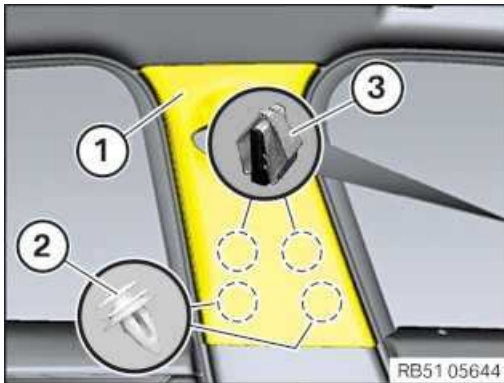
18 – Removing the B-pillar trim panels at top left and right



NOTICE

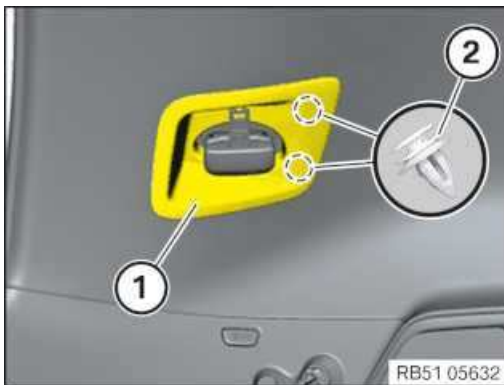
Description is for left component only. Procedure on the right side is identical.

► 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



- 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.

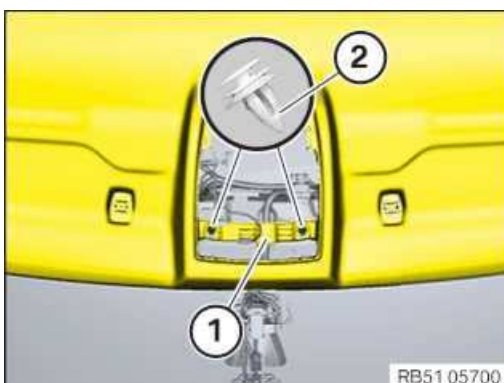


RISK OF DAMAGE

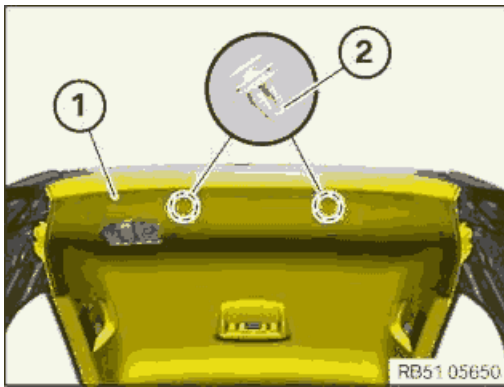
Fold the headlining.

If the headlining is folded, it may have to be replaced.

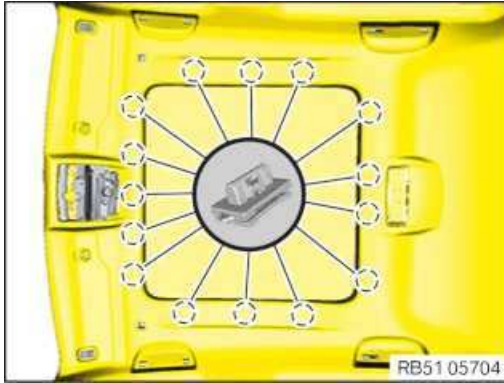
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



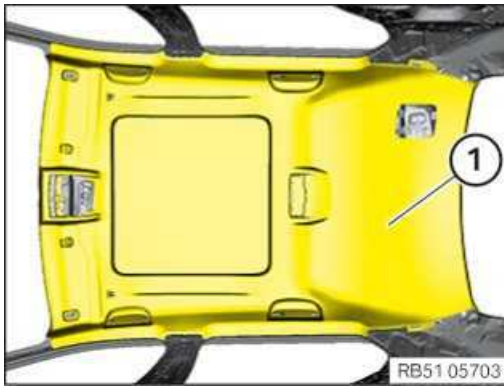
- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).



- 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 – Lower roofliner

Prerequisite

The front seats have been fully adjusted towards the bottom.

The front seat backrests have been fully adjusted towards the rear.

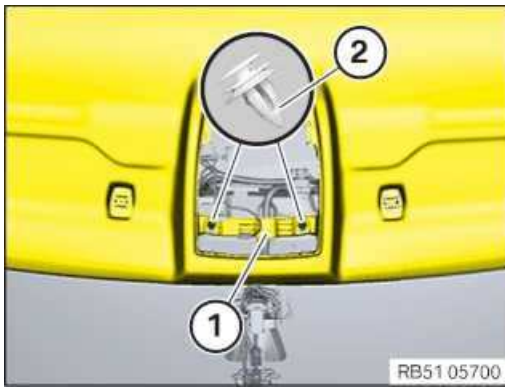


RISK OF DAMAGE

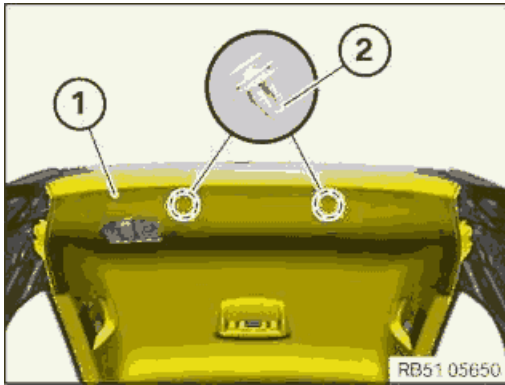
Fold the headlining.

If the headlining is folded, it may have to be replaced.

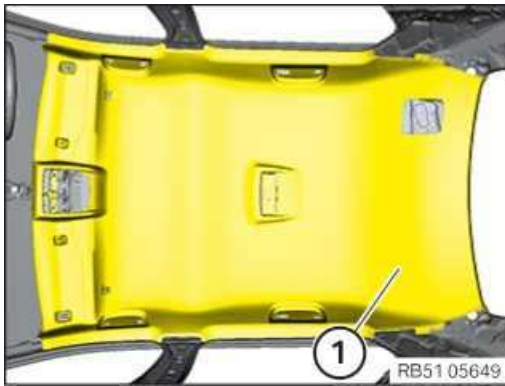
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).

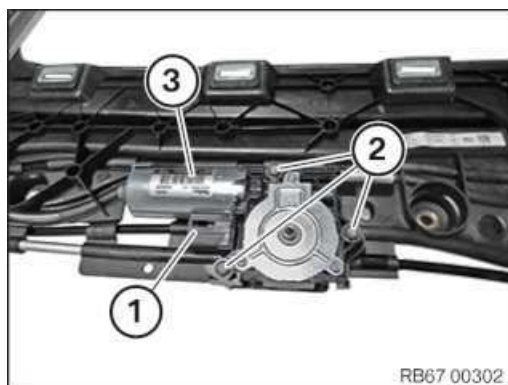


- Carefully release the headlining (1) at the clips (2).



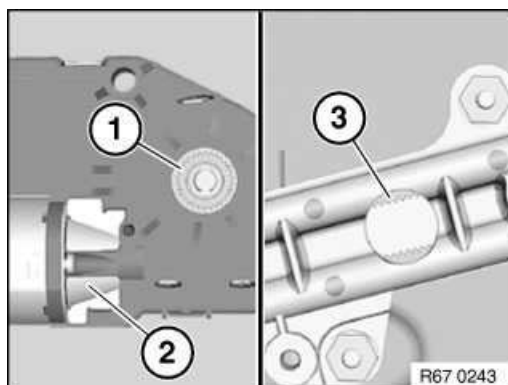
- Carefully guide out the headlining (1) at the respective edge protection and place it onto the seats in the vehicle.

22 – Remove the electric drive for the glass slide/tilt sunroof

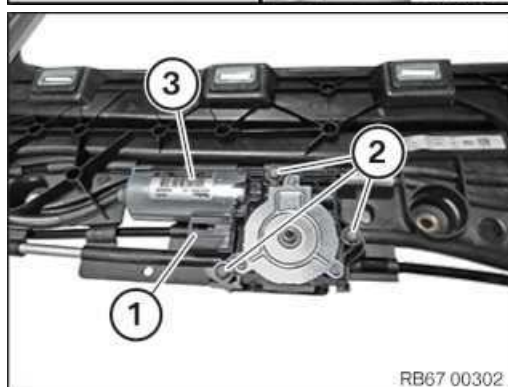


- Unlock plug connection (1) and disconnect.
- Loosen screws (2).
- Remove drive (3).

23 – Installing the drive for the glass slide/tilt sunroof



- Insert the gear (1) of the drive for the roller sunblind (2) precisely in the gearing (3).



- Position the drive (3) correctly.
- Tighten down screws (2).
- Connect connectors (1) and lock.

POSTPROCESSES

24 – 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.

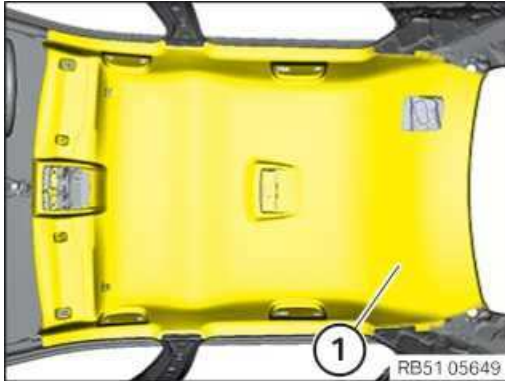


RISK OF DAMAGE

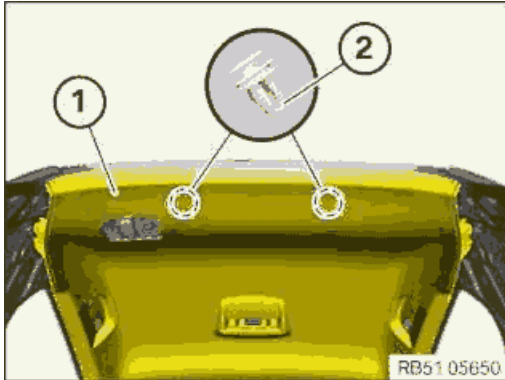
Fold the headlining.

If the headlining is folded, it may have to be replaced.

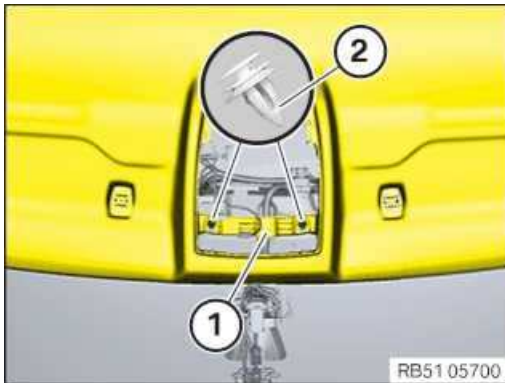
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Install the headlining (1) and carefully insert it at the respective edge protection.



- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

25 – 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.

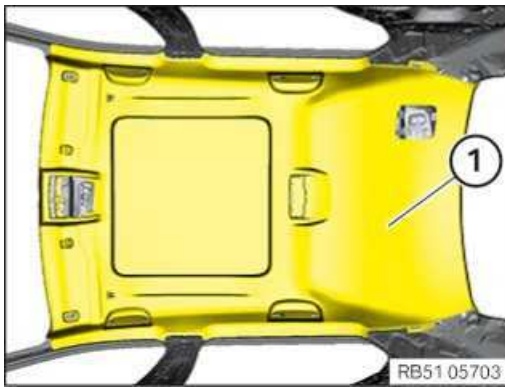


RISK OF DAMAGE

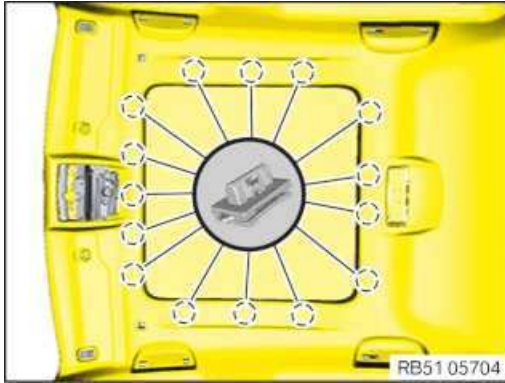
Fold the headlining.

If the headlining is folded, it may have to be replaced.

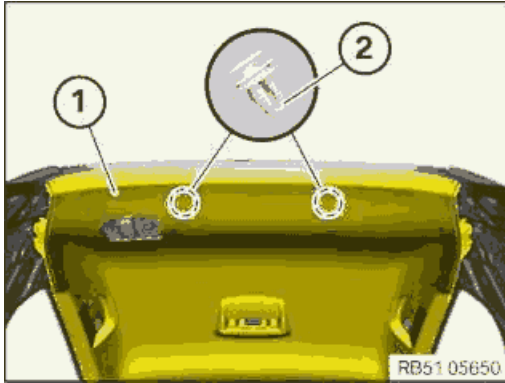
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



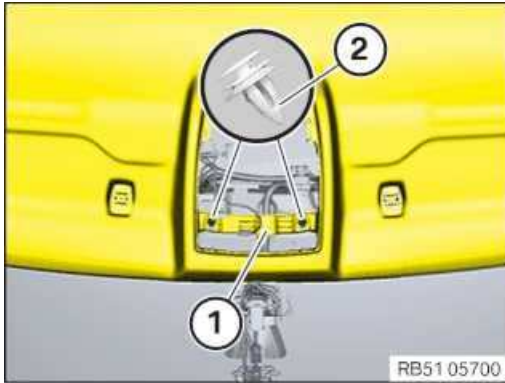
- Install the headlining (1) and carefully insert it at the respective edge protection.



- Carefully engage the headlining on the clamps (1).

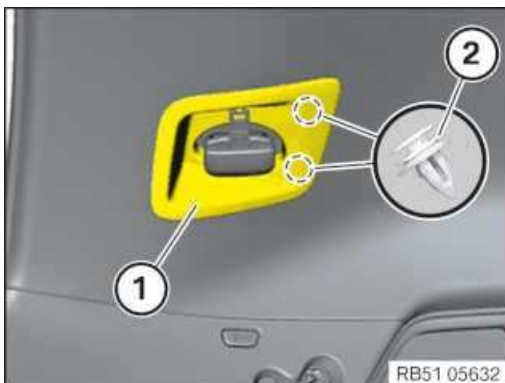


- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

26 – 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).

27 – Installing the top left and right B-pillar trim panels



NOTICE

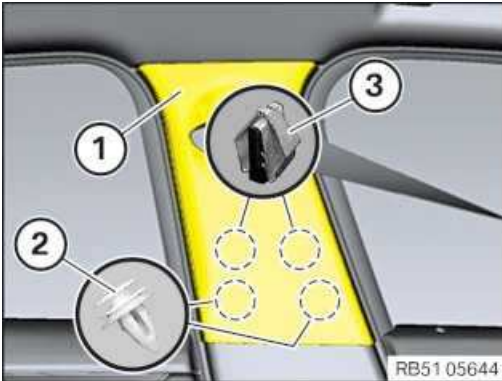
Description is for left component only. Procedure on the right side is identical.

► 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.

28 – 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.

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

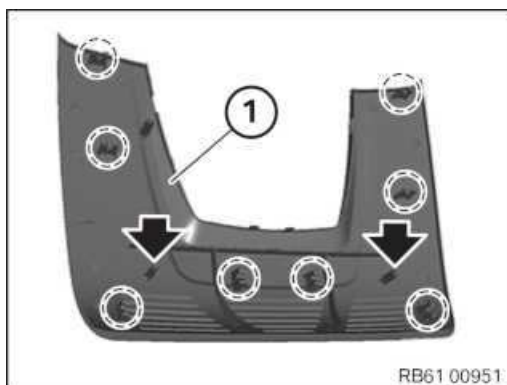
- Tighten down screw.

A-pillar trim panel to body

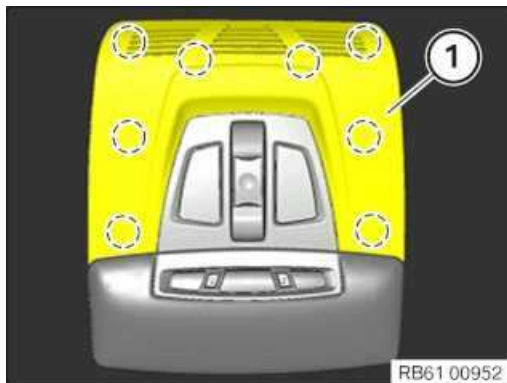
M5x42 screw	Renew screw	Tightening torque	2,2 Nm
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- Clip in the cover (1).

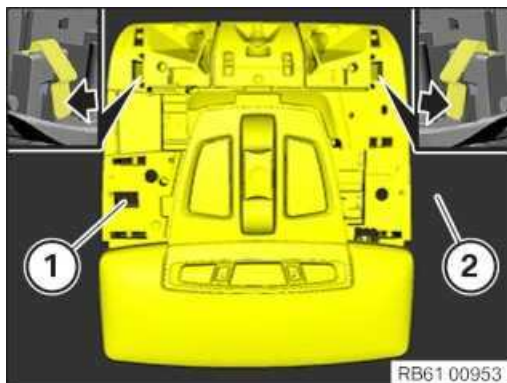
29 – Install the roof function centre



- 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.

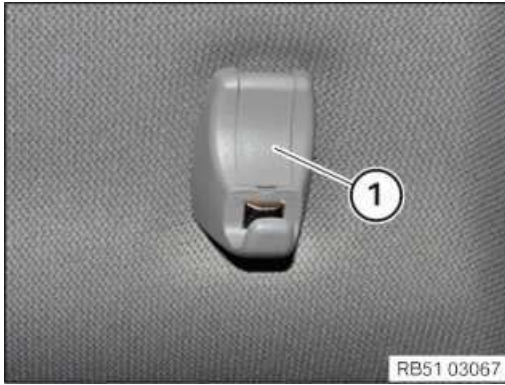
- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

30 – 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
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31 – Install both sun visors



NOTICE

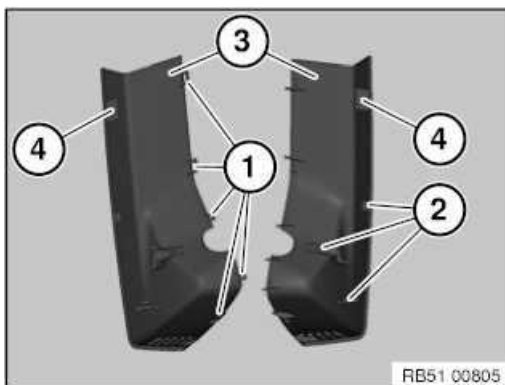
Description is for left component only. Procedure on the right side is identical.



► 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.

32 – Install the cover on the inside mirror

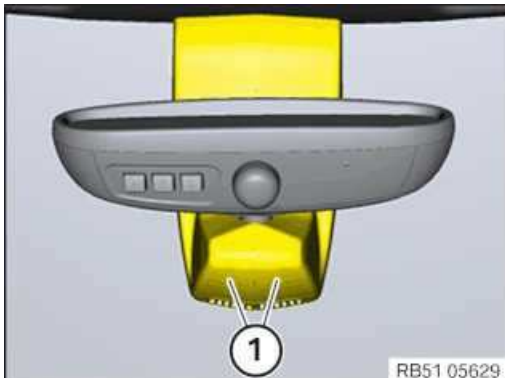


- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

The latch mechanisms (1) and guides (2) must not be damaged.

- Check the spacers (4).

The spacers (4) must not be damaged or missing.



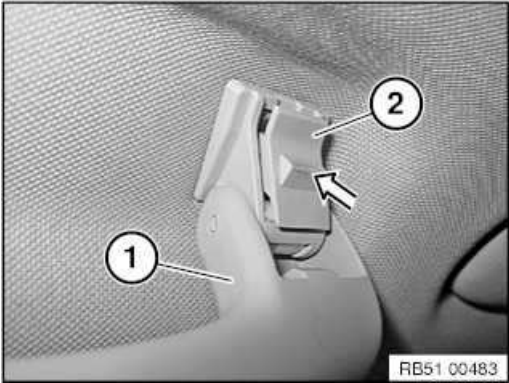
- Install covers on the interior mirror (1) clip together.

33 – Installing all grab handles



NOTICE

The description is for one component only. The procedure is identical for all further components.



► Installing the grab handle

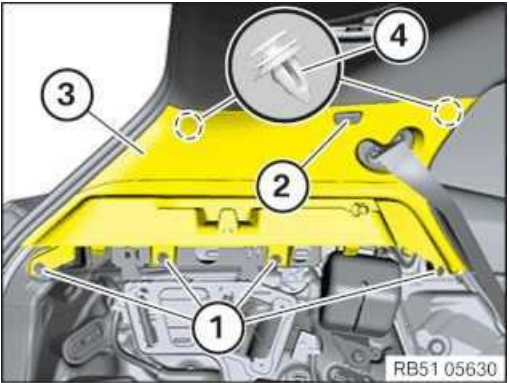
- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

34 – 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

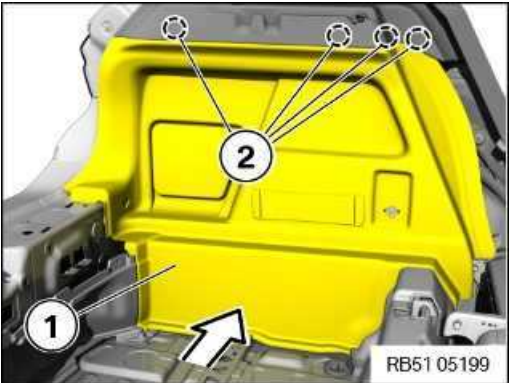
Self-tapping screw		Tightening torque	4 Nm
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- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm
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35 – 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.



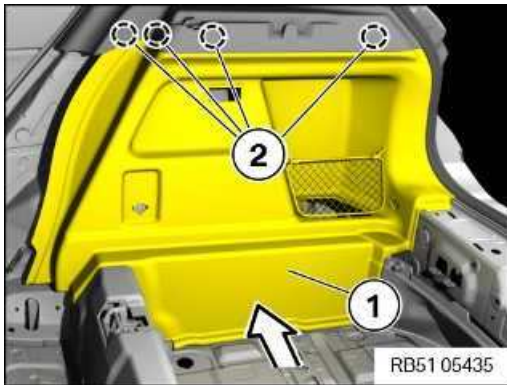
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm
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- Clip in the covers (1).

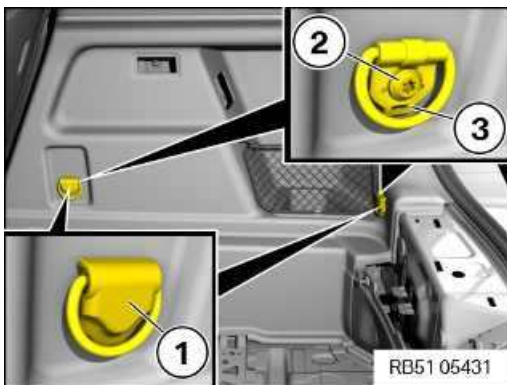
36 – Installing the luggage compartment wheel arch trim panel on the right



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).

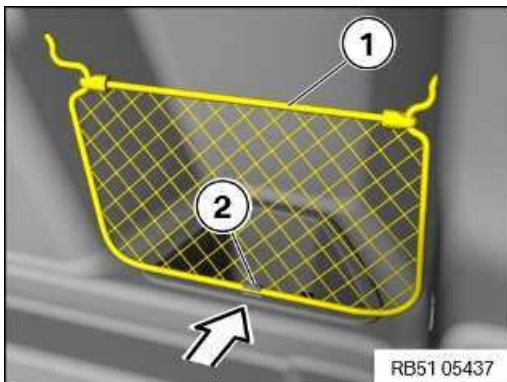
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm
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- 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.

37 – Install C-pillar trim panel at bottom left and right

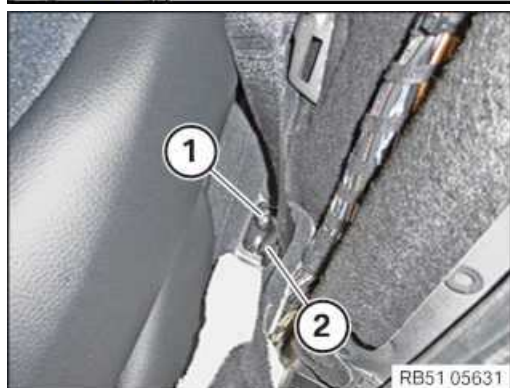
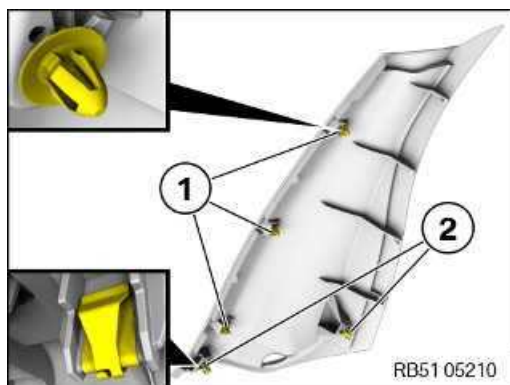


NOTICE

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.

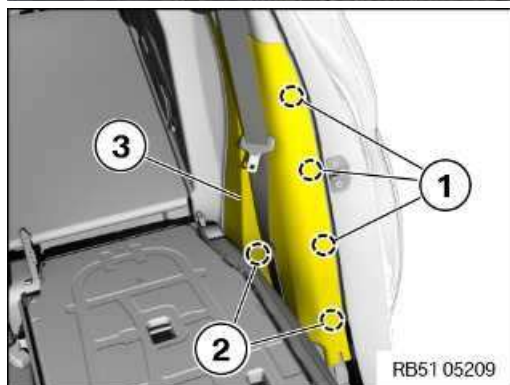


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm
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- 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.

38 – Install the door sill cover strip on the rear left and right

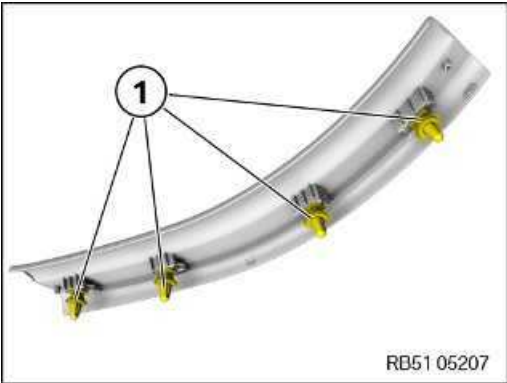


NOTICE

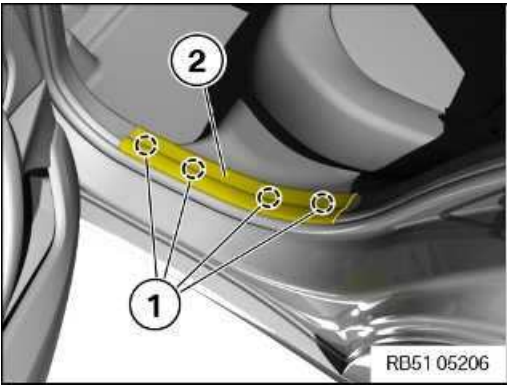
Description is for left component only. Procedure on the right side is identical.

► Installing the rear door sill cover strip

- Check the clips (1) for damage and renew where required.

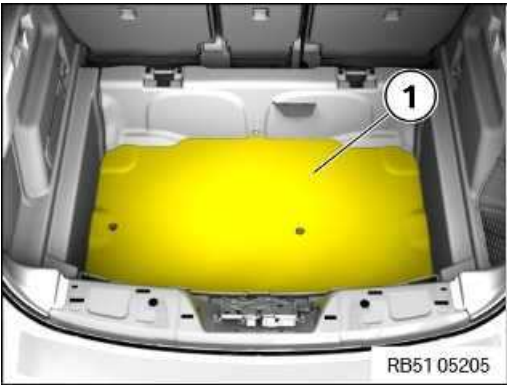


- Clip in the door sill cover strip (2) with the clips (1).



39 – Installing the luggage compartment floor trim panel

- Position the luggage compartment floor trim panel (1).

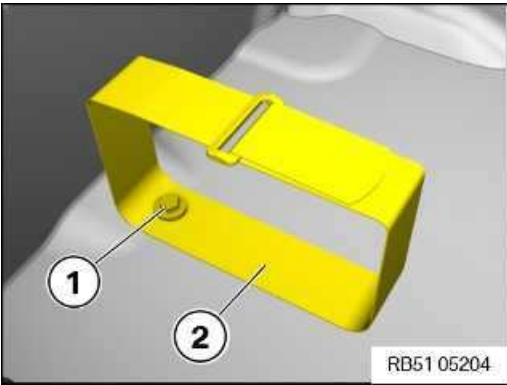


40 – Inserting the Velcro fastener for the toolkit

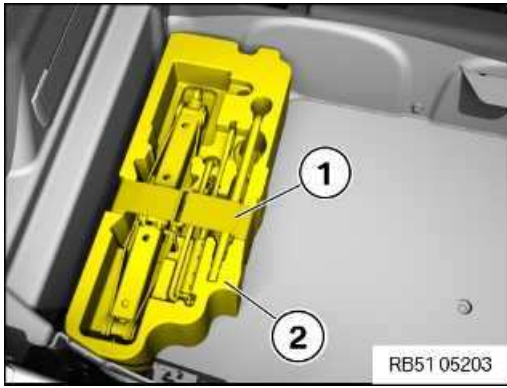
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm
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41 – Install the tool kit

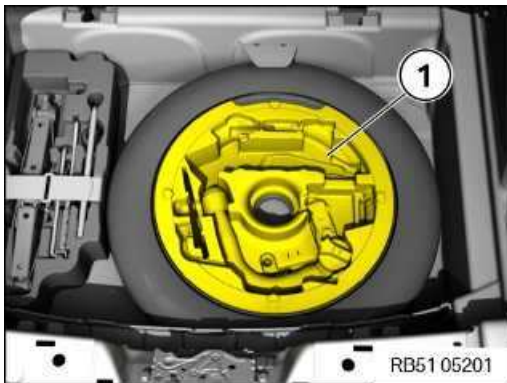


- Install the tool kit (2).
- Close the hook and loop tape (1).

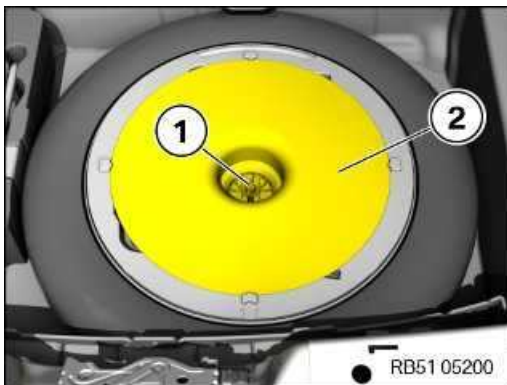
42 – Install the emergency wheel



- Insert compact spare wheel(1).

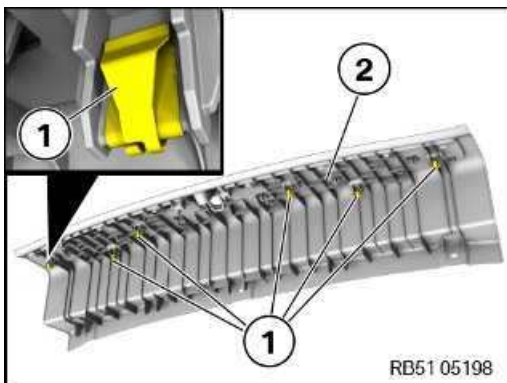


- Insert oddments tray into the compact spare wheel (1).

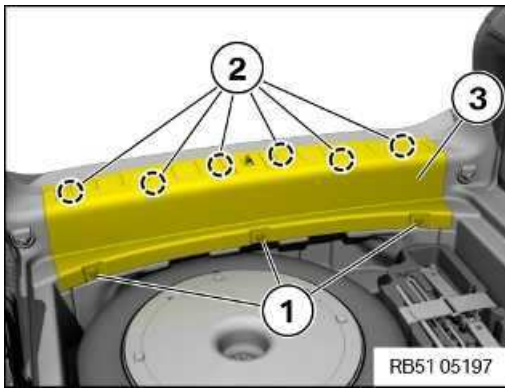


- Insert the lid (2).
- Hand-tighten the bolt (1).

43 – Installing loading edge trim

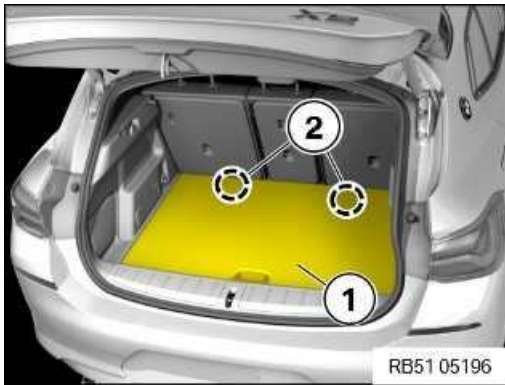


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- 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).

44 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

45 – Initialise panorama glass roof



- Close all doors.
- Operate the START-STOP button three times within 0.8 s.
- Press and hold the switch towards "Lift".
- In the event of a delayed start or sudden stop of the glass sunroof: Continue to press and hold the switch towards "Lift".



TECHNICAL INFORMATION

If the switch is released in the meantime, the initialisation must be restarted.

- Keep pressing the switch during the entire procedure (approx. 50 s):
 - Initialisation starts approx. 15 s after the button is pressed.
 - The glass roof and the roller sunblind are each opened and closed completely.

Initialisation is complete once the glass roof and the roller sunblind are completely closed. The button can then be released.

- Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).
- Clear fault memory in FZD control unit.

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body

Used in step 28

M5x42 screw	Renew screw	Tightening torque	2,2 Nm
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Counter support on bodyUsed in step [30](#)

Screw		Tightening torque	2,5 Nm
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Trim panel of luggage compartment cappingUsed in step [34](#)

Self-tapping screw		Tightening torque	4 Nm
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Trim panel of luggage compartment capping to bodyUsed in step [34](#)

Hexagon screw		Tightening torque	1,8 Nm
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Lashing eye in luggage compartmentUsed in step [35](#) [36](#)

Bolt M8 x 22		Tightening torque	21 Nm
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End fitting to bodyUsed in step [37](#)

Screw	Renew screw.	Tightening torque	42 Nm
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Toolkit hook and loop tape to bodyUsed in step [40](#)

Bolt M6 x 20		Tightening torque	4 Nm
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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)

Links**General repair instructions**

Used in step

72 00 ... Safety regulations for handling components with gas generators	17 28
--	---------------------------------------

Repair instructions

Used in step

61 35 ... Notes on ESD protection (Electro Static Discharge)
--

67 61 581 Replacing the drive for the roller sunblind



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.



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

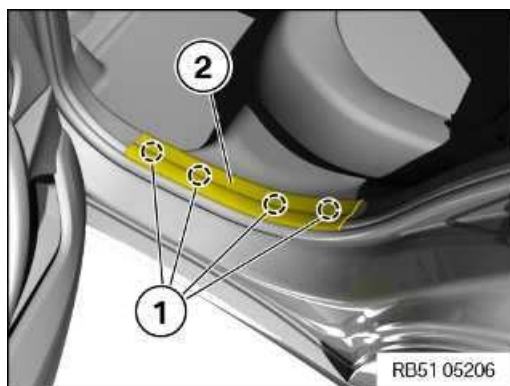
PRELIMINARY WORK

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).

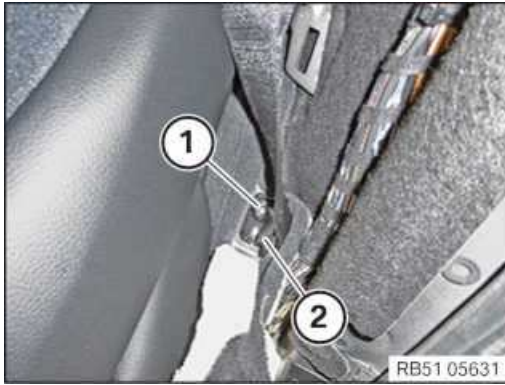
2 – Removing the bottom left and right C-pillar trim panels



NOTICE

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

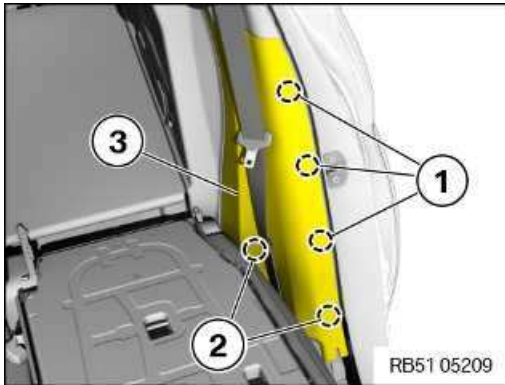
► Remove the bottom C-pillar trim panel



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

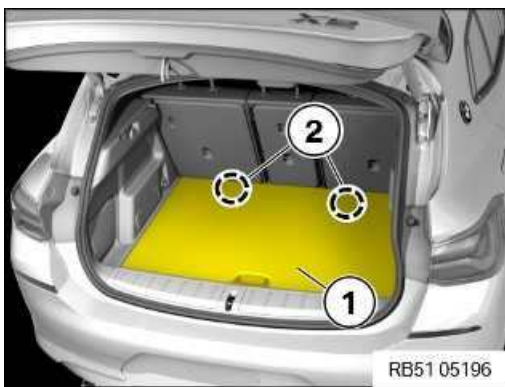


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



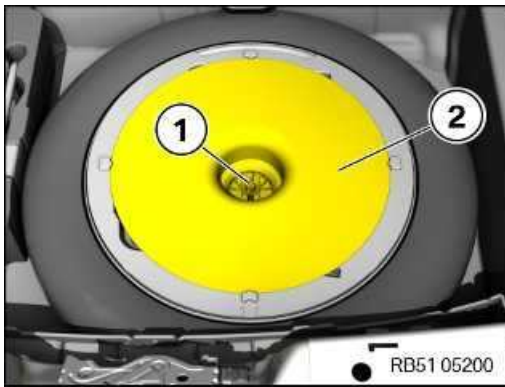
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

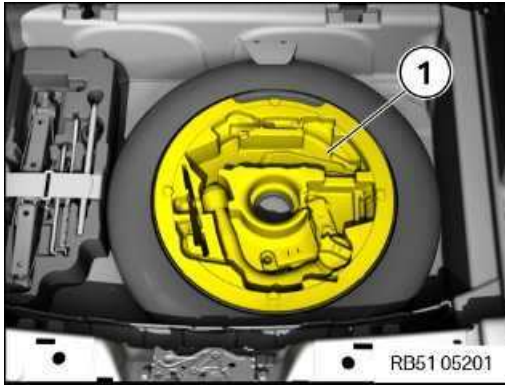


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



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

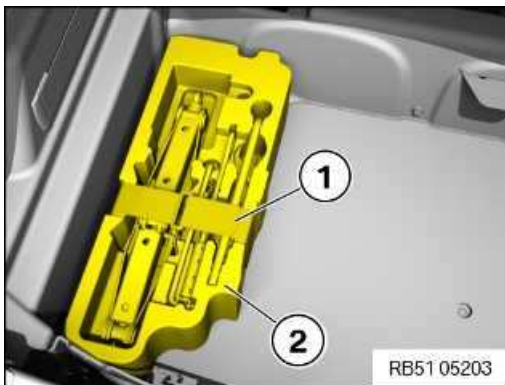


- Remove the oddments tray from the emergency wheel (1).



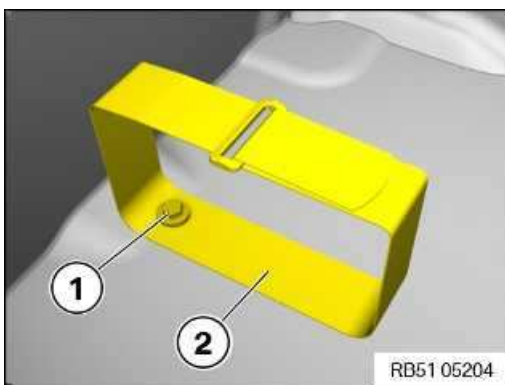
- Remove the emergency wheel (1).

5 – Remove the tool kit



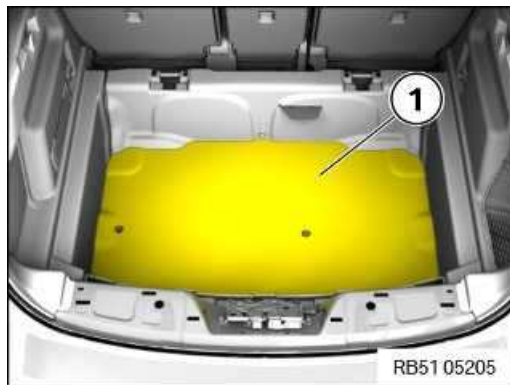
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



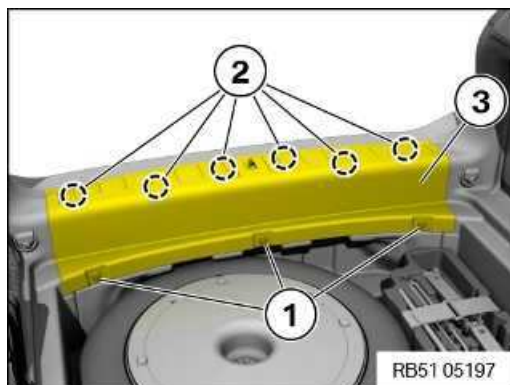
- Loosen screw (1).
- Remove the hook and loop tape (2).

7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

8 – Removing the loading edge trim

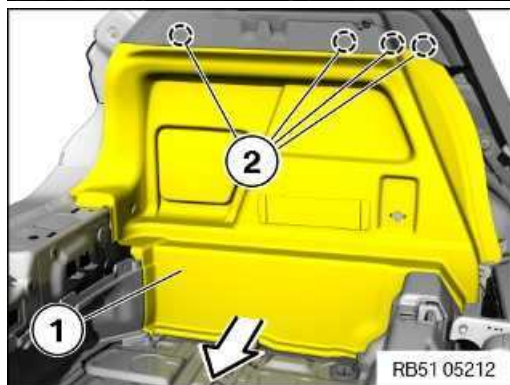


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

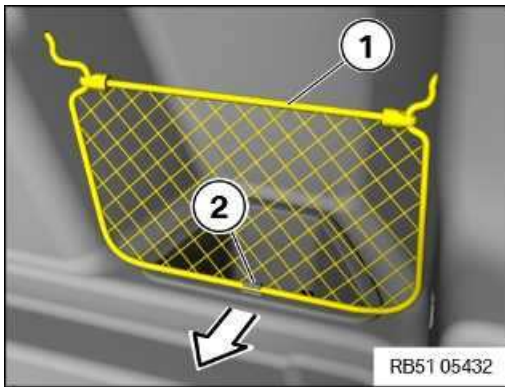


NOTICE

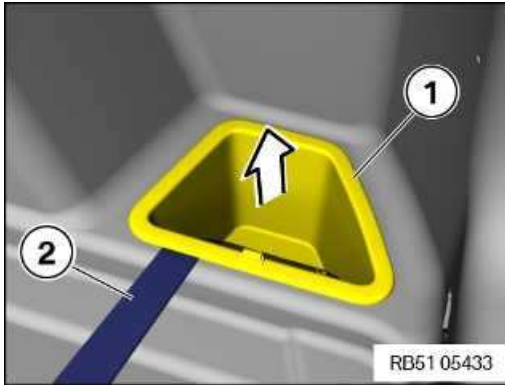
Schematic diagram is for example purposes. Some parts may differ in certain details.

- 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.

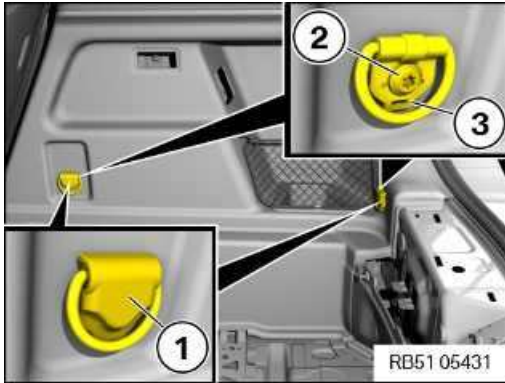
10 – Removing right luggage compartment wheel arch trim panel



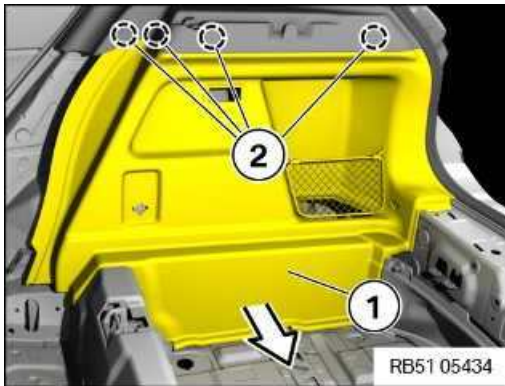
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- 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.

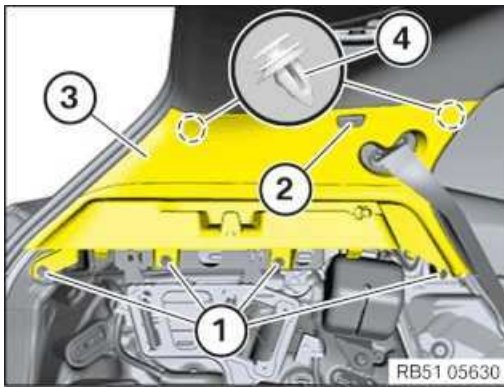
11 – Remove the trim panel of the luggage compartment capping on the left and right



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).

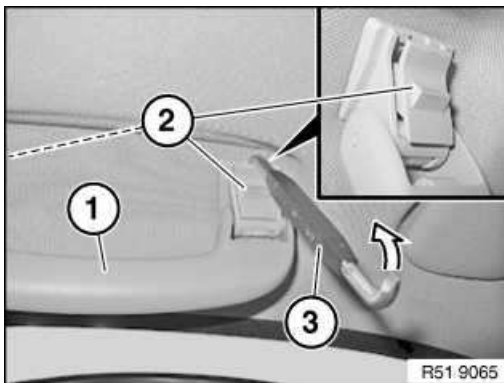
12 – Removing all grab handles



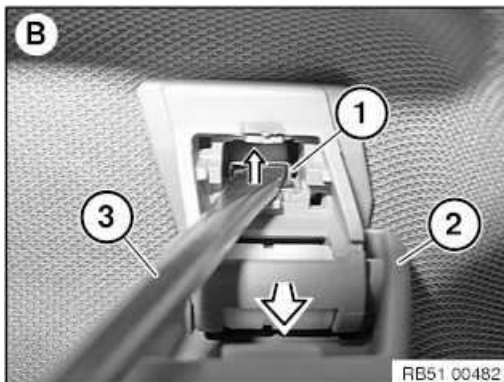
NOTICE

The description is for one component only. The procedure is identical for all further components.

► Removing the grab handle

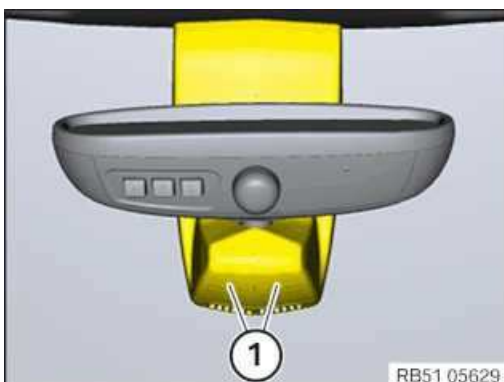


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- 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.

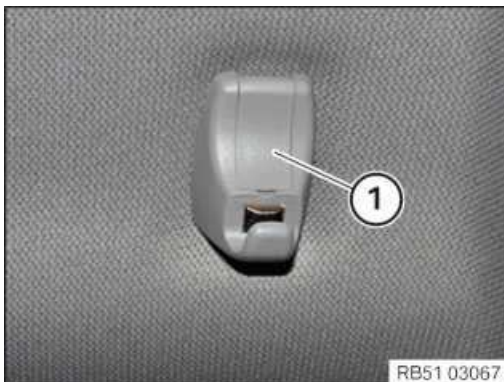
15 – Removing counter supports for sun visor on left and right



NOTICE

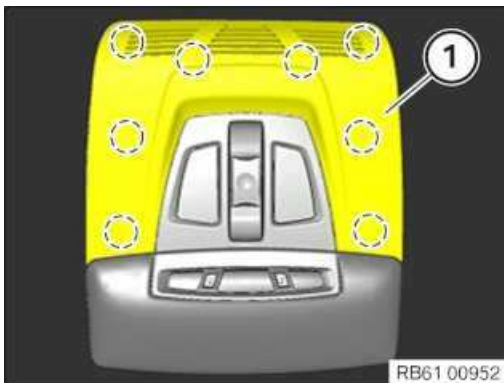
Description is for left component only. Procedure on the right side is identical.

► Remove the counter support for the sun visor

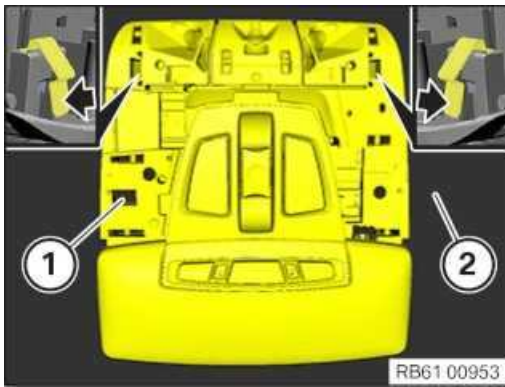


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

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



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.

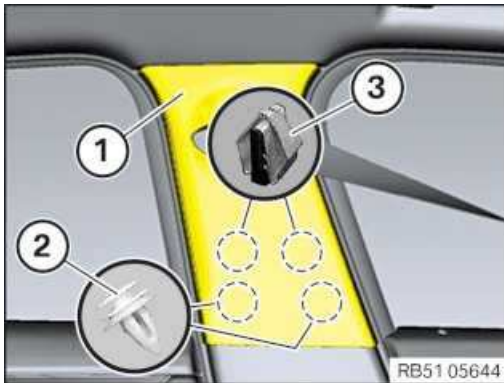
18 – Removing the B-pillar trim panels at top left and right



NOTICE

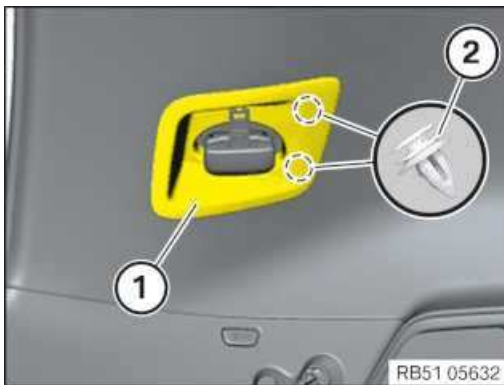
Description is for left component only. Procedure on the right side is identical.

► 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



- 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.

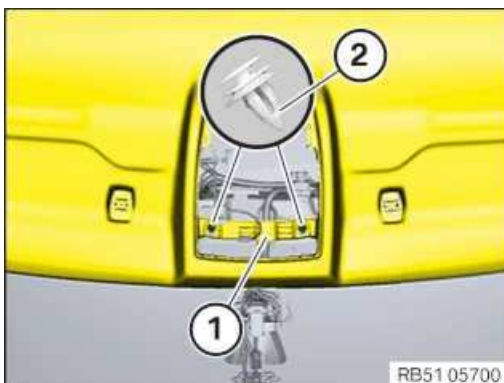


RISK OF DAMAGE

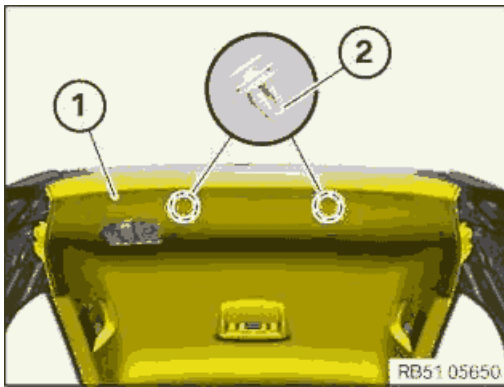
Fold the headlining.

If the headlining is folded, it may have to be replaced.

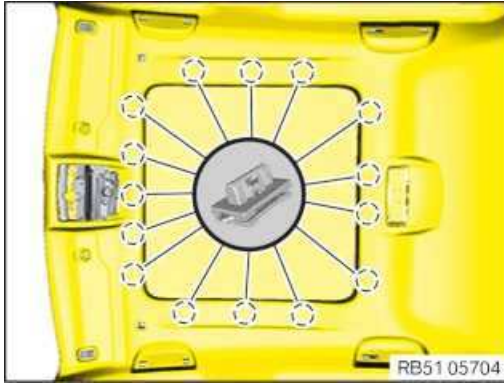
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



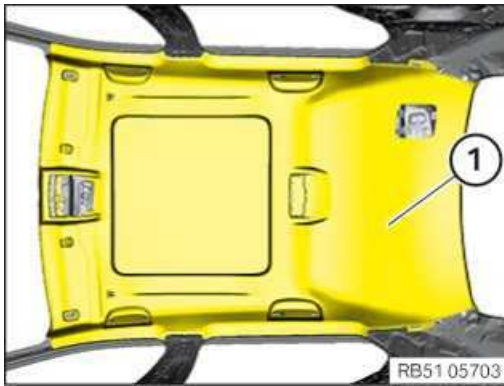
- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).



- 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 – Lower roofliner

Prerequisite

The front seats have been fully adjusted towards the bottom.

The front seat backrests have been fully adjusted towards the rear.

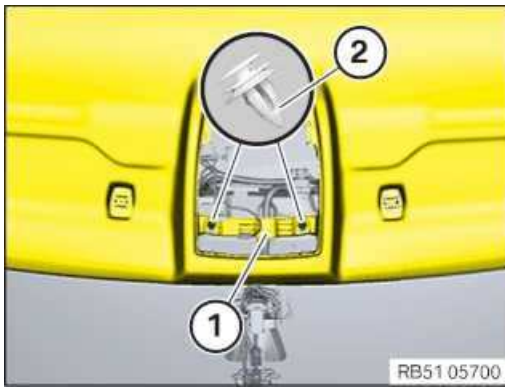


RISK OF DAMAGE

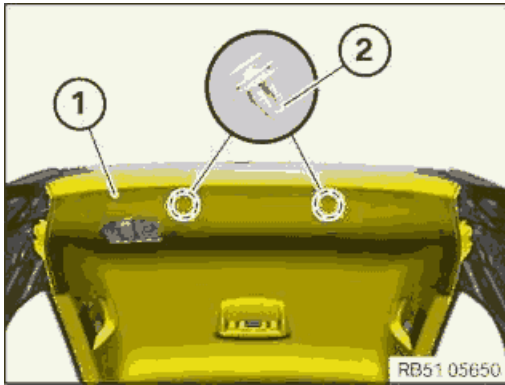
Fold the headlining.

If the headlining is folded, it may have to be replaced.

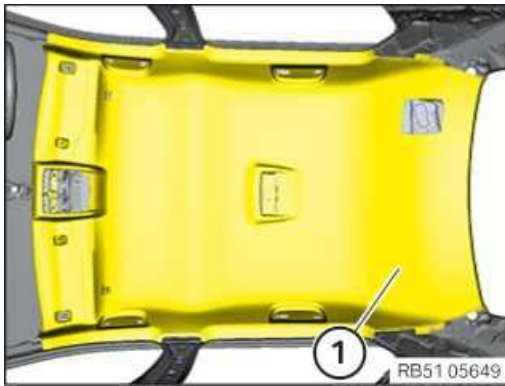
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).

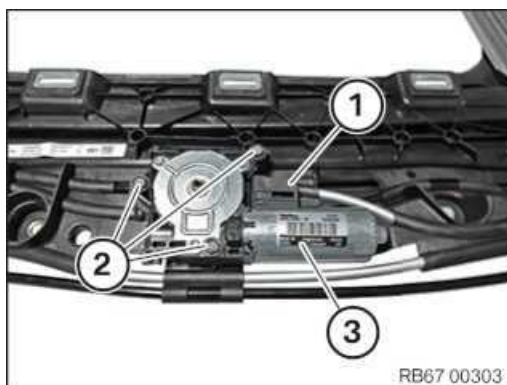


- Carefully release the headlining (1) at the clips (2).



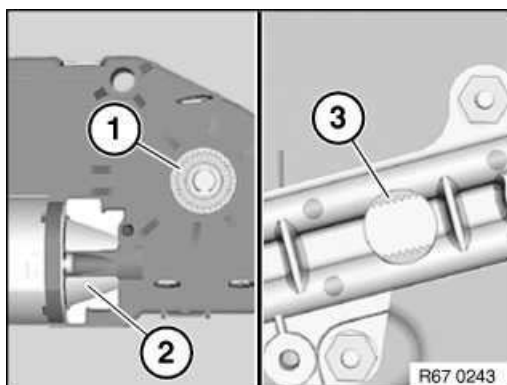
- Carefully guide out the headlining (1) at the respective edge protection and place it onto the seats in the vehicle.

22 – Remove electric motor for roller sunblind

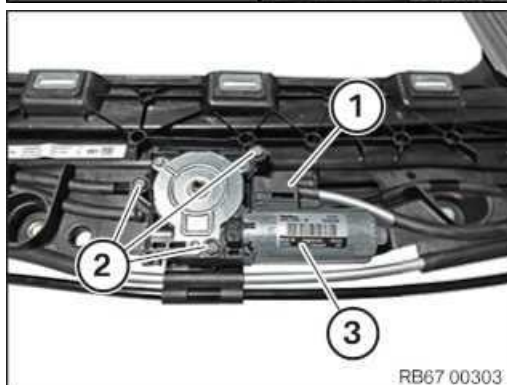


- Unlock plug connection (1) and disconnect.
- Loosen screws (2).
- Remove drive (3).

23 – Install the roller sunblind drive



- Precisely insert the gear (1) for the drive of the roller sunblind (2) in the gearing (3).



- Position the drive (3) correctly.
- Tighten down screws (2).
- Connect connectors (1) and lock.

POSTPROCESSES

24 – 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.

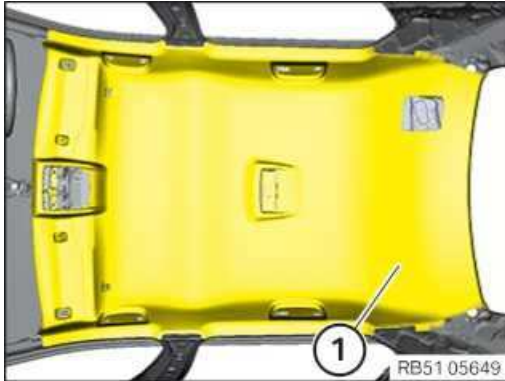


RISK OF DAMAGE

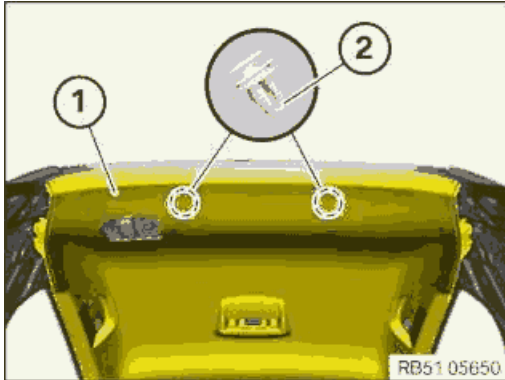
Fold the headlining.

If the headlining is folded, it may have to be replaced.

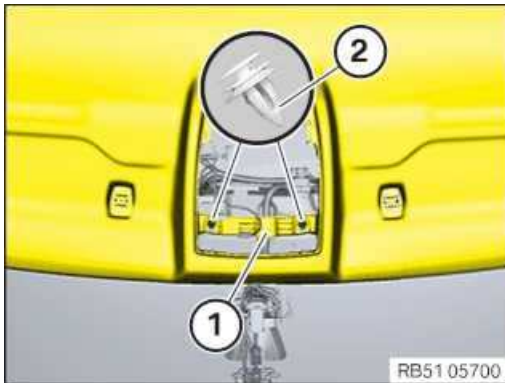
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Install the headlining (1) and carefully insert it at the respective edge protection.



- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

25 – 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.

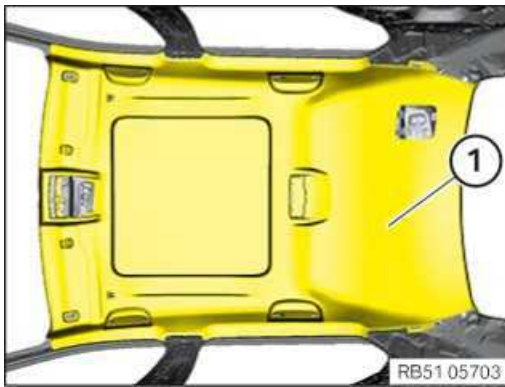


RISK OF DAMAGE

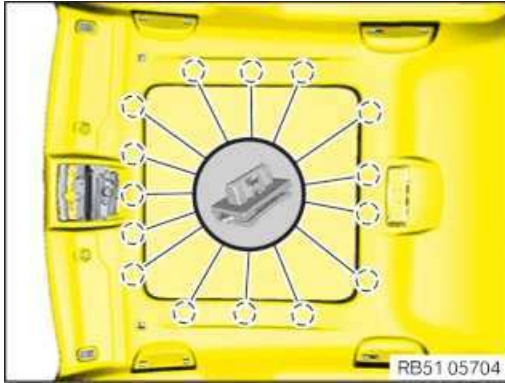
Fold the headlining.

If the headlining is folded, it may have to be replaced.

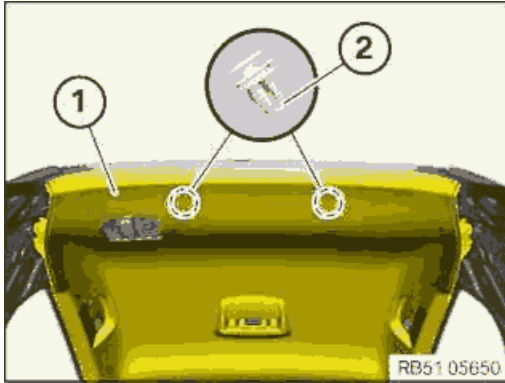
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



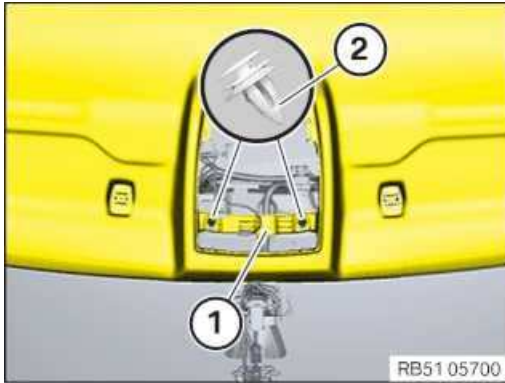
- Install the headlining (1) and carefully insert it at the respective edge protection.



- Carefully engage the headlining on the clamps (1).

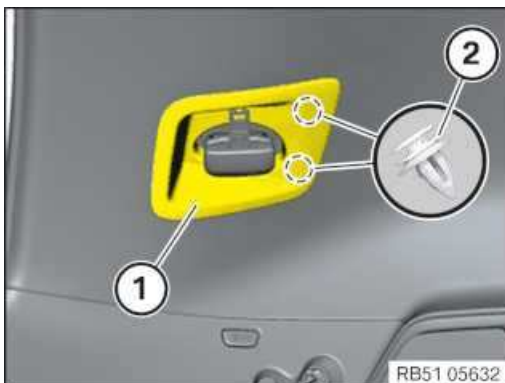


- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

26 – 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).

27 – Installing the top left and right B-pillar trim panels



NOTICE

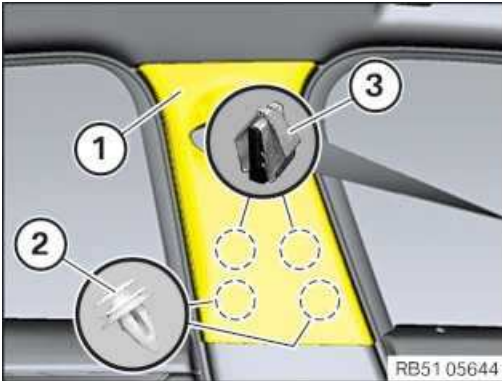
Description is for left component only. Procedure on the right side is identical.

► 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.

28 – 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.

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

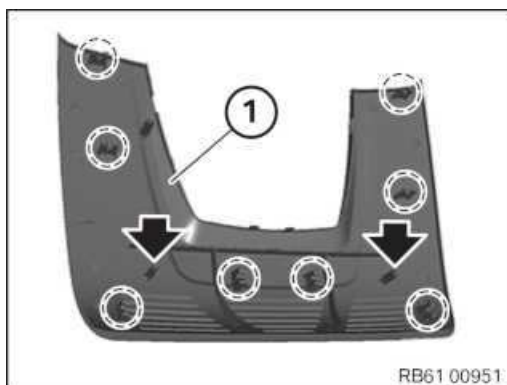
- Tighten down screw.

A-pillar trim panel to body

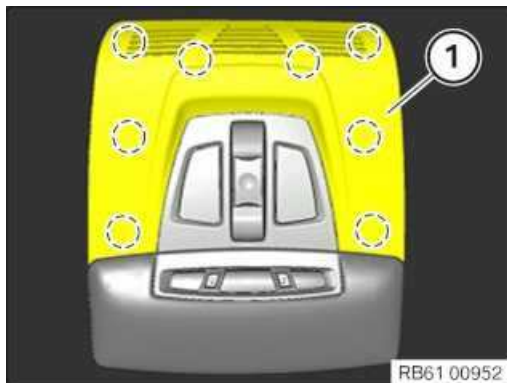
M5x42 screw	Renew screw	Tightening torque	2,2 Nm
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- Clip in the cover (1).

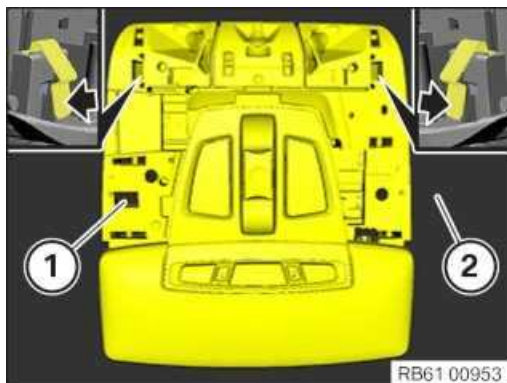
29 – Install the roof function centre



- 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.

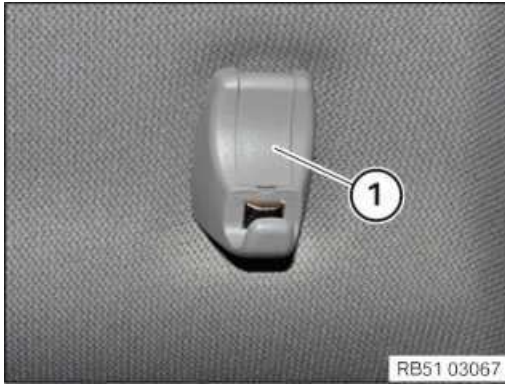
- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

30 – 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
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31 – Install both sun visors



NOTICE

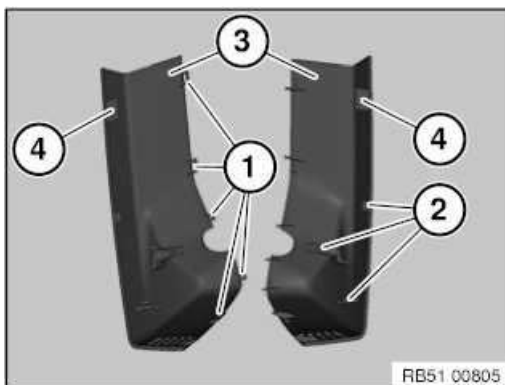
Description is for left component only. Procedure on the right side is identical.



► 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.

32 – Install the cover on the inside mirror

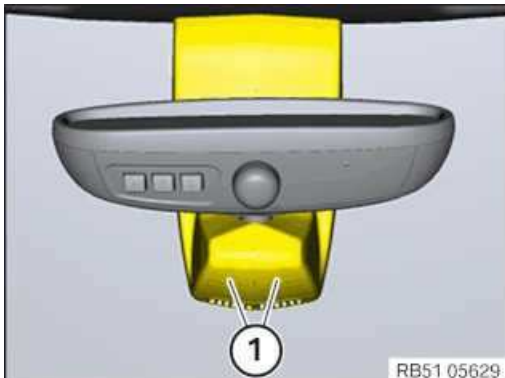


- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

The latch mechanisms (1) and guides (2) must not be damaged.

- Check the spacers (4).

The spacers (4) must not be damaged or missing.



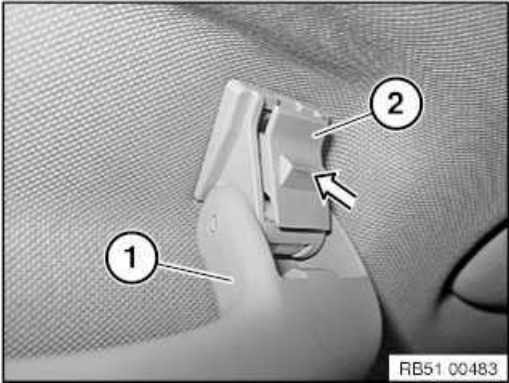
- Install covers on the interior mirror (1) clip together.

33 – Installing all grab handles



NOTICE

The description is for one component only. The procedure is identical for all further components.



► Installing the grab handle

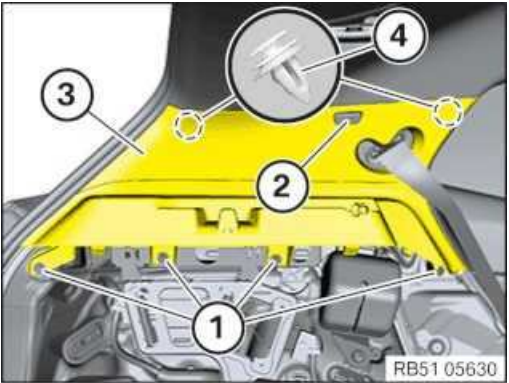
- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

34 – 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

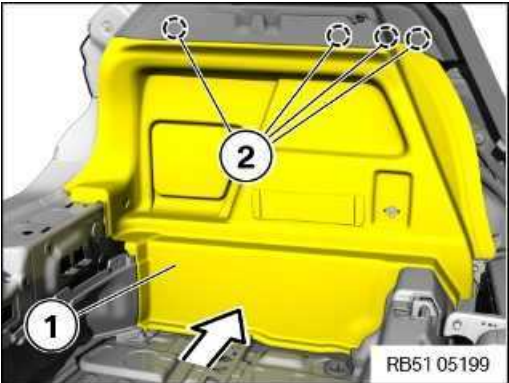
Self-tapping screw		Tightening torque	4 Nm
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- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm
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35 – 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.



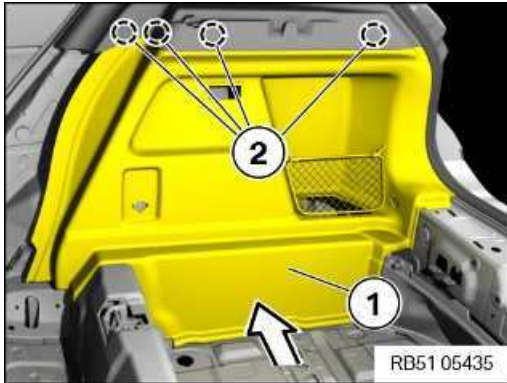
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm
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- Clip in the covers (1).

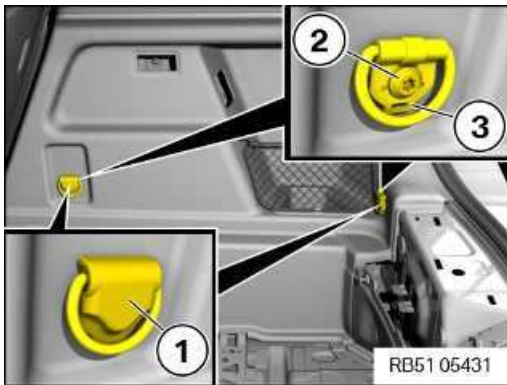
36 – Installing the luggage compartment wheel arch trim panel on the right



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).

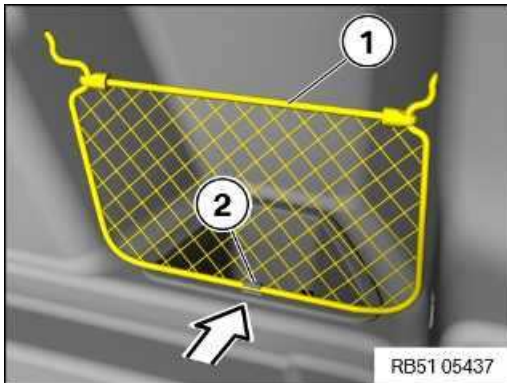
Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm
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- 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.

37 – Install C-pillar trim panel at bottom left and right

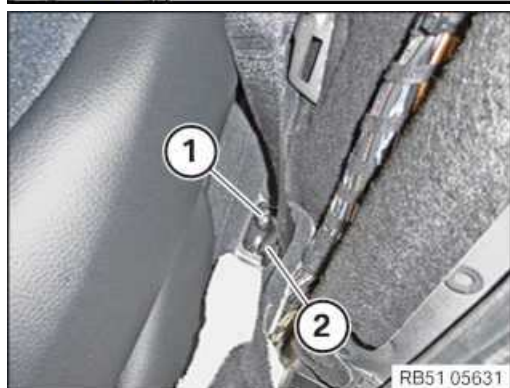
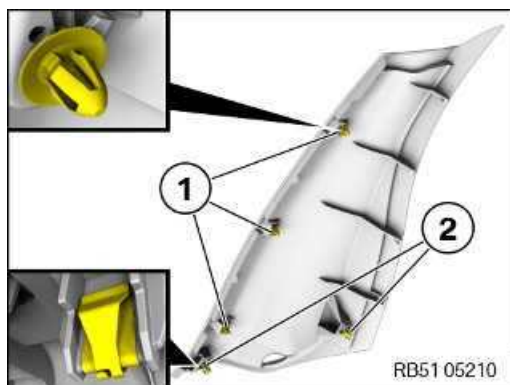


NOTICE

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.

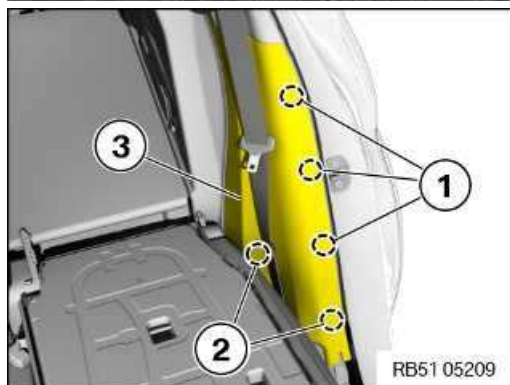


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm
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- 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.

38 – Install the door sill cover strip on the rear left and right

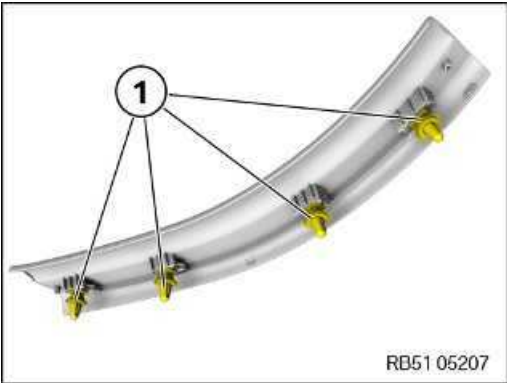


NOTICE

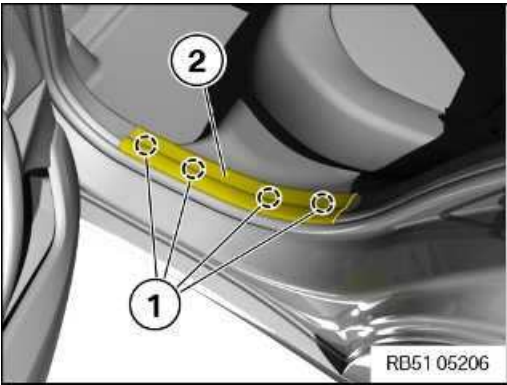
Description is for left component only. Procedure on the right side is identical.

► Installing the rear door sill cover strip

- Check the clips (1) for damage and renew where required.

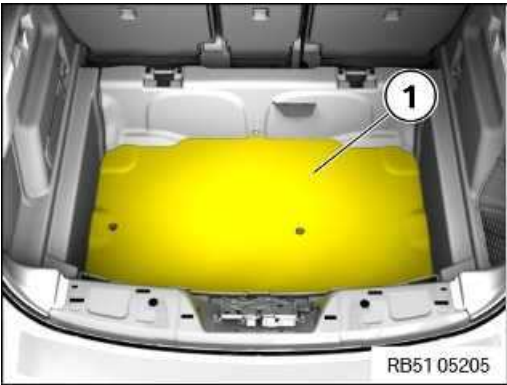


- Clip in the door sill cover strip (2) with the clips (1).



39 – Installing the luggage compartment floor trim panel

- Position the luggage compartment floor trim panel (1).

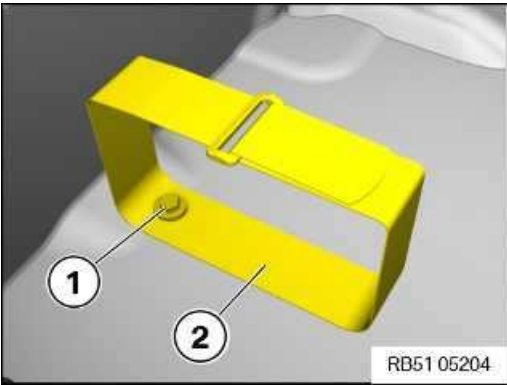


40 – Inserting the Velcro fastener for the toolkit

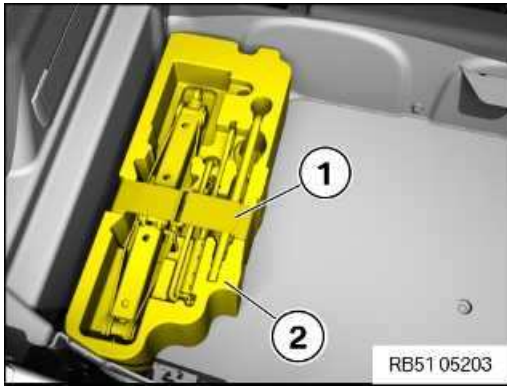
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm
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41 – Install the tool kit

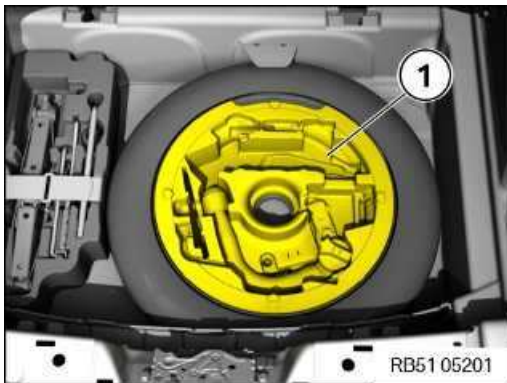


- Install the tool kit (2).
- Close the hook and loop tape (1).

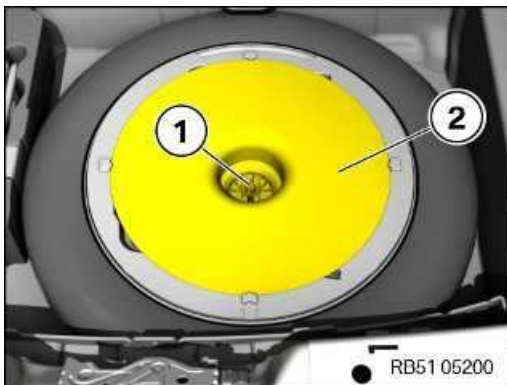
42 – Install the emergency wheel



- Insert compact spare wheel(1).

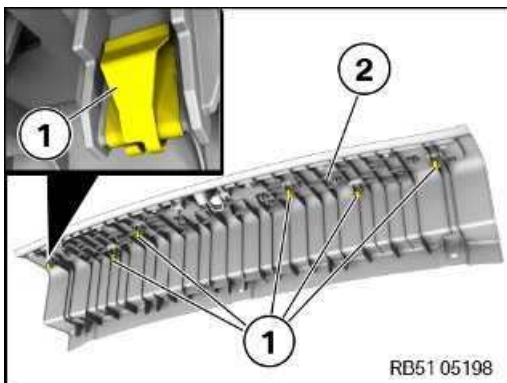


- Insert oddments tray into the compact spare wheel (1).

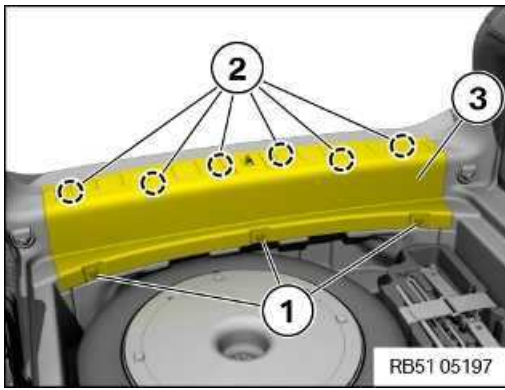


- Insert the lid (2).
- Hand-tighten the bolt (1).

43 – Installing loading edge trim

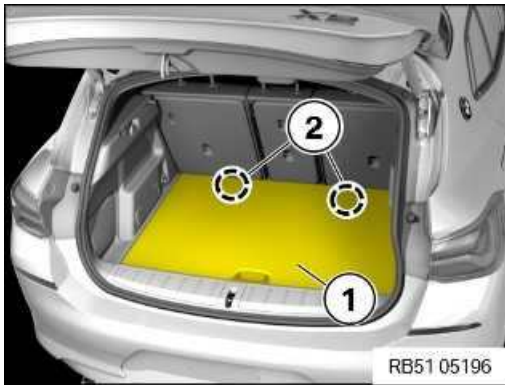


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- 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).

44 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

45 – Initialise panorama glass roof



- Close all doors.
- Operate the START-STOP button three times within 0.8 s.
- Press and hold the switch towards "Lift".
- In the event of a delayed start or sudden stop of the glass sunroof: Continue to press and hold the switch towards "Lift".



TECHNICAL INFORMATION

If the switch is released in the meantime, the initialisation must be restarted.

- Keep pressing the switch during the entire procedure (approx. 50 s):
 - Initialisation starts approx. 15 s after the button is pressed.
 - The glass roof and the roller sunblind are each opened and closed completely.

Initialisation is complete once the glass roof and the roller sunblind are completely closed. The button can then be released.

- Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).
- Clear fault memory in FZD control unit.

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body

Used in step 28

M5x42 screw	Renew screw	Tightening torque	2,2 Nm
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Counter support on body

Used in step [30](#)

Screw		Tightening torque	2,5 Nm
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Trim panel of luggage compartment capping

Used in step [34](#)

Self-tapping screw		Tightening torque	4 Nm
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Trim panel of luggage compartment capping to body

Used in step [34](#)

Hexagon screw		Tightening torque	1,8 Nm
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Lashing eye in luggage compartment

Used in step [35](#) [36](#)

Bolt M8 x 22		Tightening torque	21 Nm
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End fitting to body

Used in step [37](#)

Screw	Renew screw.	Tightening torque	42 Nm
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Toolkit hook and loop tape to body

Used in step [40](#)

Bolt M6 x 20		Tightening torque	4 Nm
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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)

Links

General repair instructions

Used in step

[72 00 ... Safety regulations for handling components with gas generators](#) [17](#) [28](#)

Repair instructions

Used in step

[61 35 ... Notes on ESD protection \(Electro Static Discharge\)](#)

67 61 517 Replacing the drive including transmission for the SHD operation (rear) (after vehicle diagnosis)



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.



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

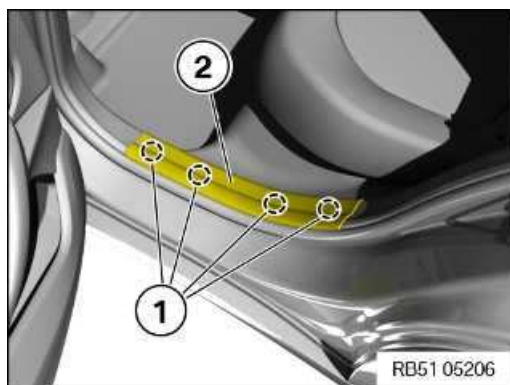


NOTICE

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).



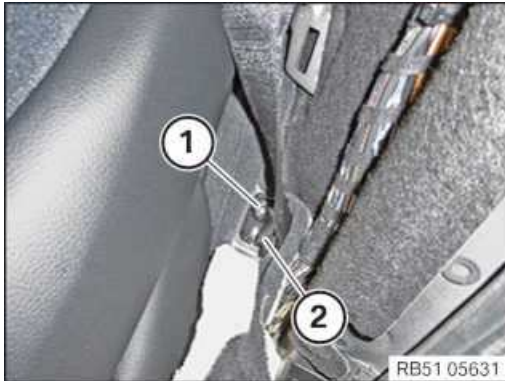
2 – Removing the bottom left and right C-pillar trim panels



NOTICE

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

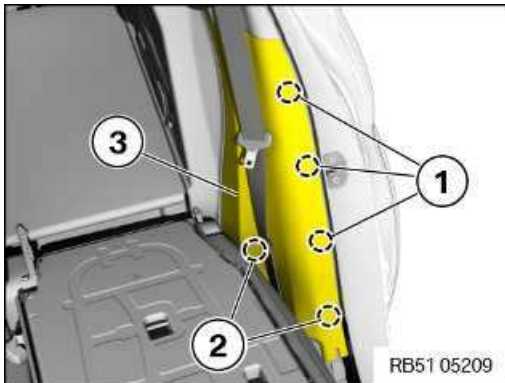
► Remove the bottom C-pillar trim panel



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

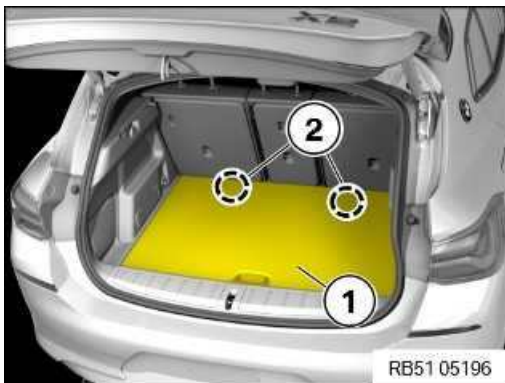


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



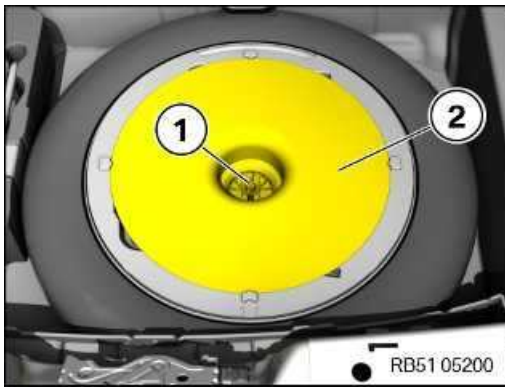
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

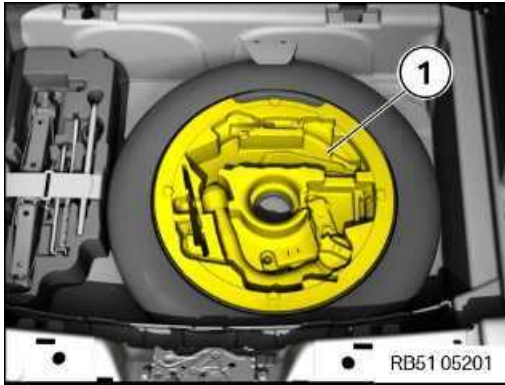


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



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

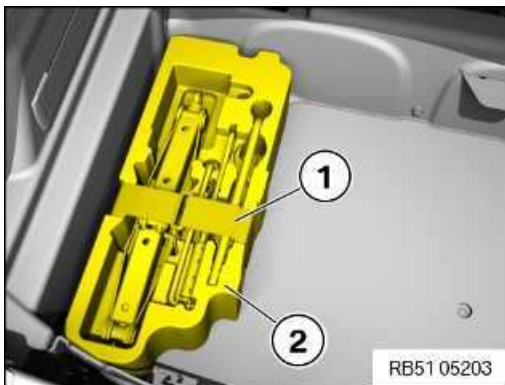


- Remove the oddments tray from the emergency wheel (1).



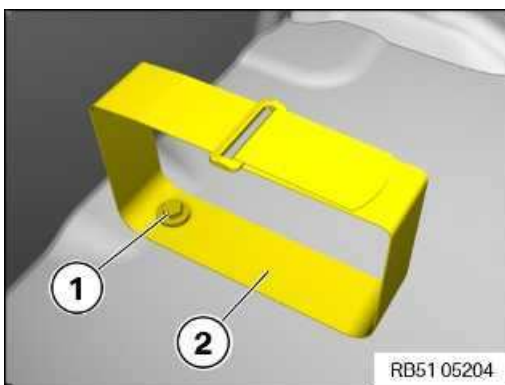
- Remove the emergency wheel (1).

5 – Remove the tool kit



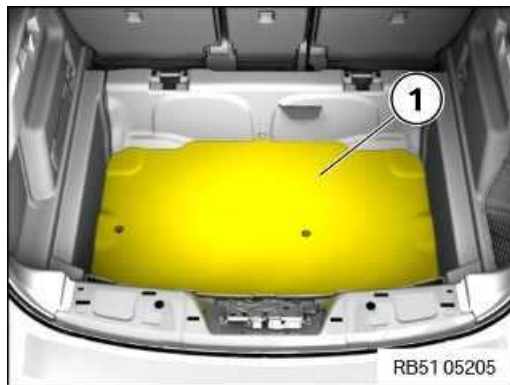
- Open the hook and loop tape (1).
- Remove the tool kit (2).

6 – Remove the hook and loop tape for the tool kit



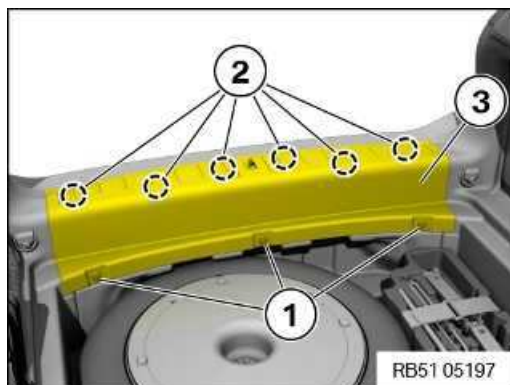
- Loosen screw (1).
- Remove the hook and loop tape (2).

7 – Removing the luggage compartment floor trim panel



- Remove the luggage compartment floor trim panel (1) upwards.

8 – Removing the loading edge trim

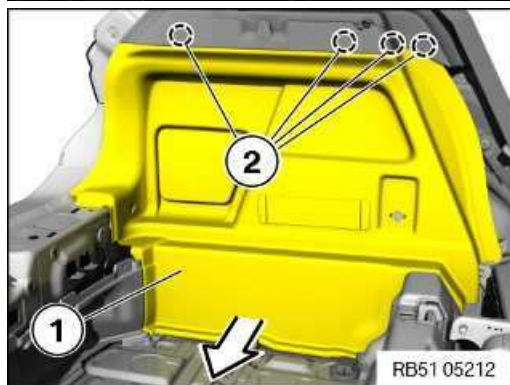


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

9 – Remove luggage compartment wheel arch trim panel on left.



- Unclip covers (1).
- Unscrew the bolts (2) and remove the lashing points (3).

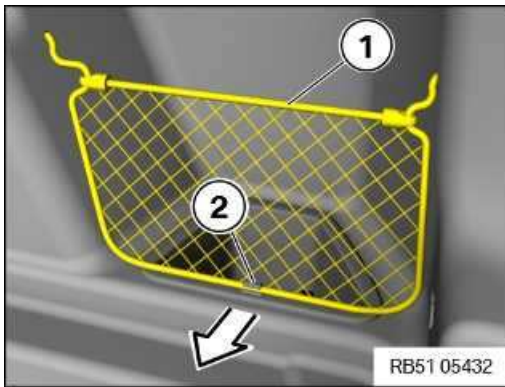


NOTICE

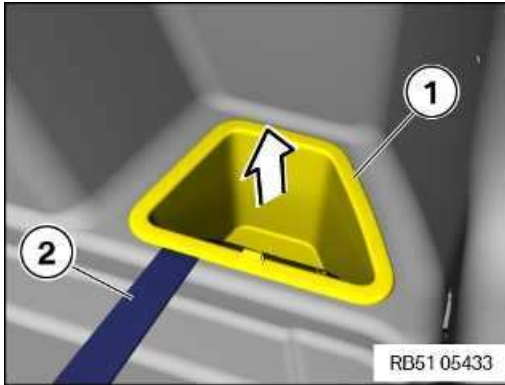
Schematic diagram is for example purposes. Some parts may differ in certain details.

- 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.

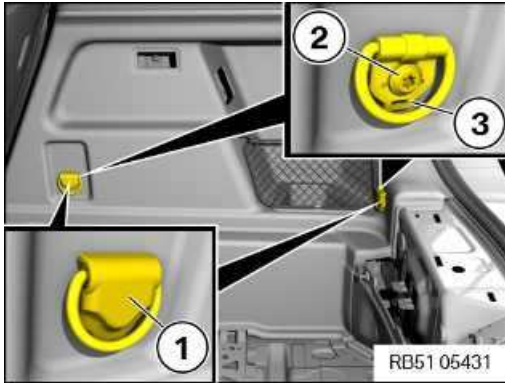
10 – Removing right luggage compartment wheel arch trim panel



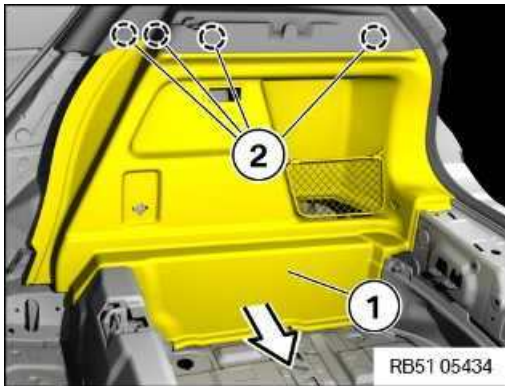
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- Remove storage compartment (1) out of the luggage compartment wheel arch trim panel in the direction of arrow using a suitable tool (2).



- 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.

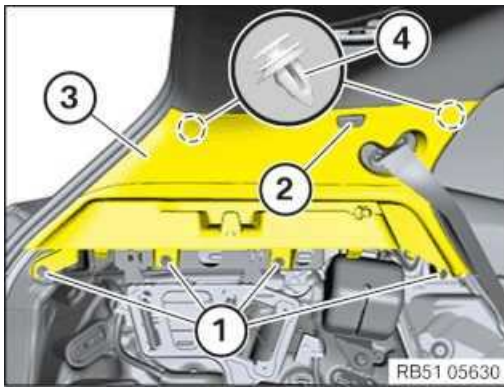
11 – Remove the trim panel of the luggage compartment capping on the left and right



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).

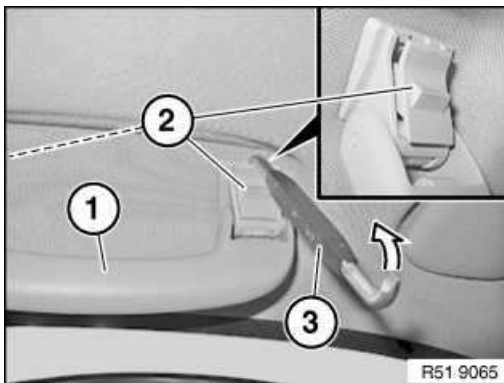
12 – Removing all grab handles



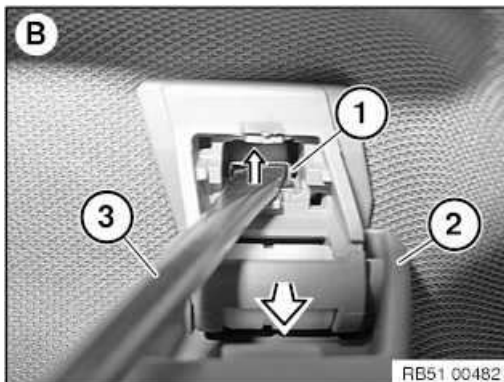
NOTICE

The description is for one component only. The procedure is identical for all further components.

► Removing the grab handle

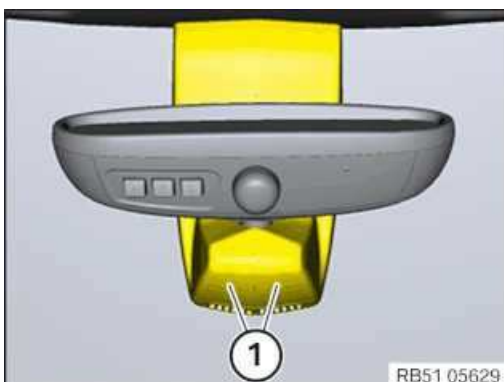


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- 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.

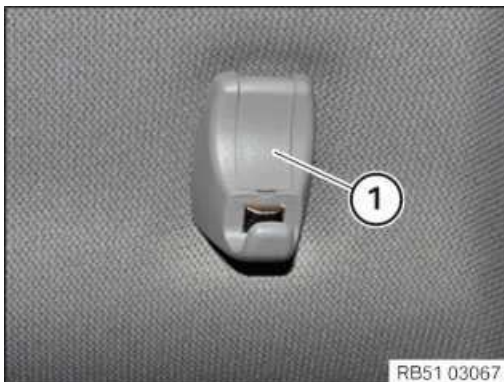
15 – Removing counter supports for sun visor on left and right



NOTICE

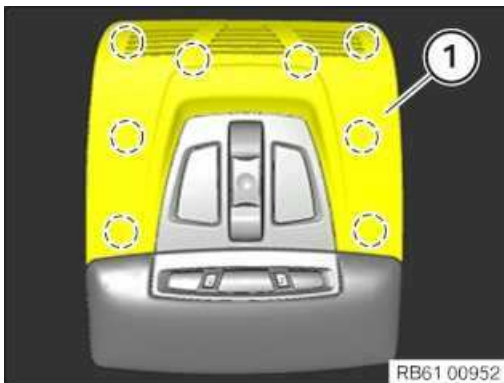
Description is for left component only. Procedure on the right side is identical.

► Remove the counter support for the sun visor

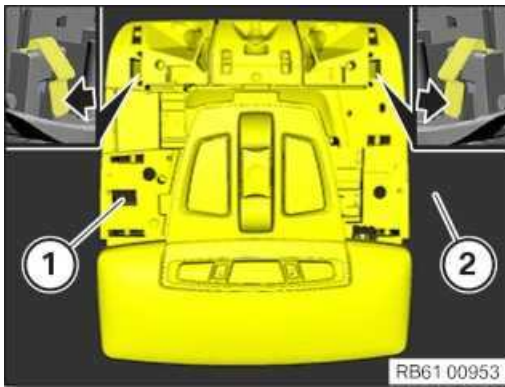


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

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



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.

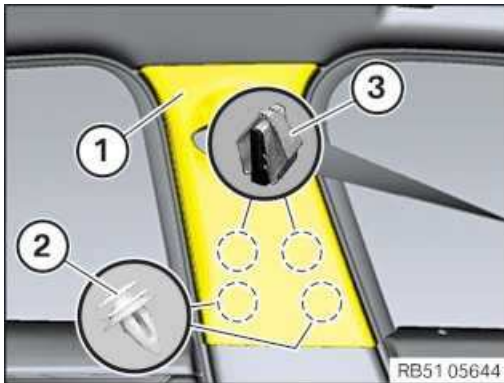
18 – Removing the B-pillar trim panels at top left and right



NOTICE

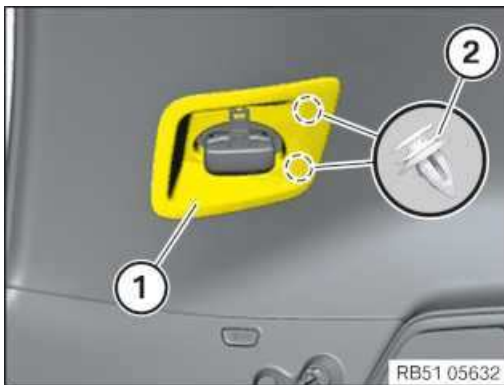
Description is for left component only. Procedure on the right side is identical.

► 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



- 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.

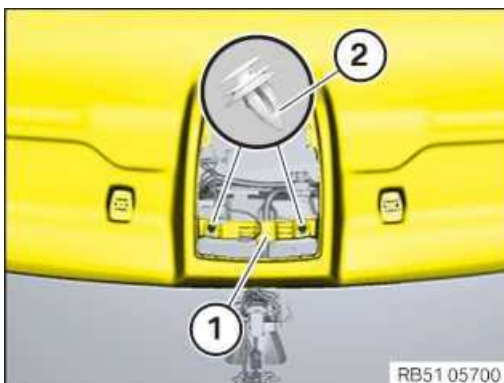


RISK OF DAMAGE

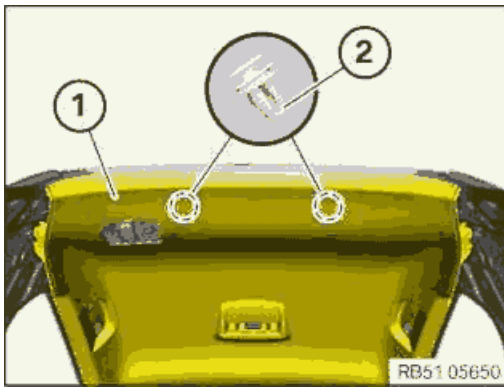
Fold the headlining.

If the headlining is folded, it may have to be replaced.

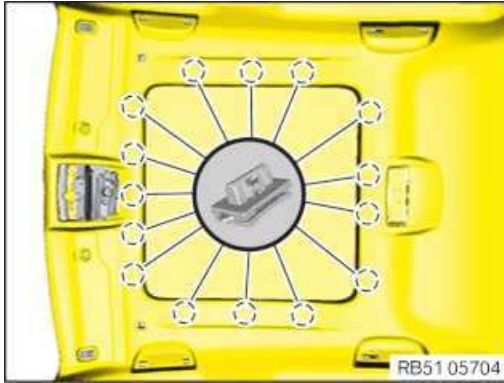
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



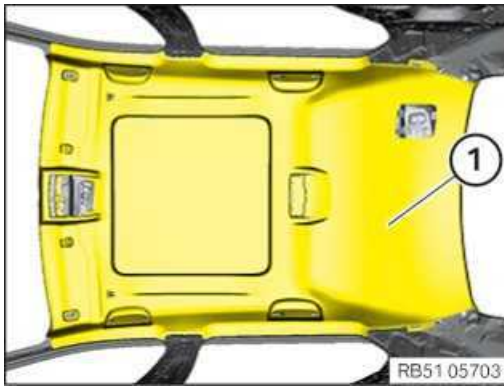
- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



- Carefully release the headlining (1) at the clips (2).



- 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 – Lower roofliner

Prerequisite

The front seats have been fully adjusted towards the bottom.

The front seat backrests have been fully adjusted towards the rear.

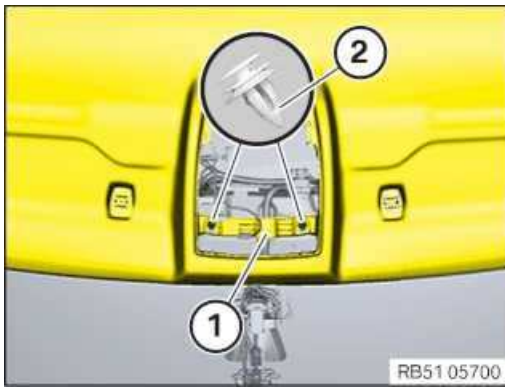


RISK OF DAMAGE

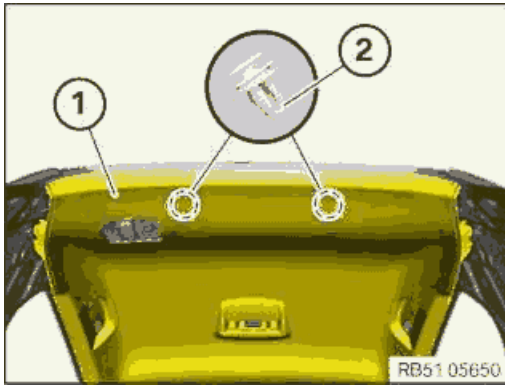
Fold the headlining.

If the headlining is folded, it may have to be replaced.

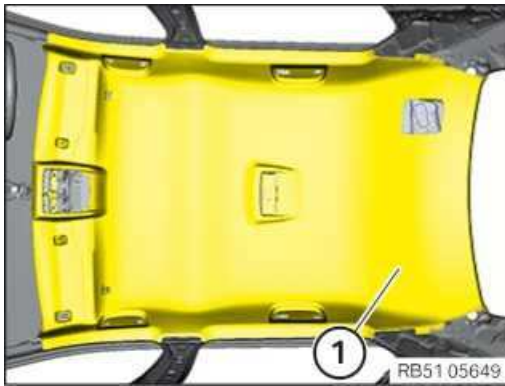
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).

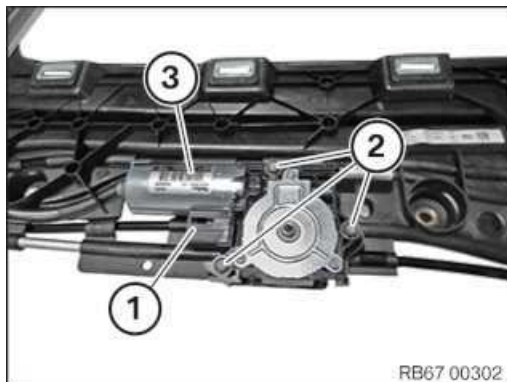


- Carefully release the headlining (1) at the clips (2).



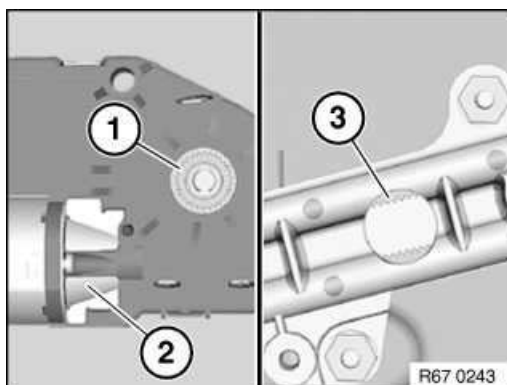
- Carefully guide out the headlining (1) at the respective edge protection and place it onto the seats in the vehicle.

22 – Remove the electric drive for the glass slide/tilt sunroof

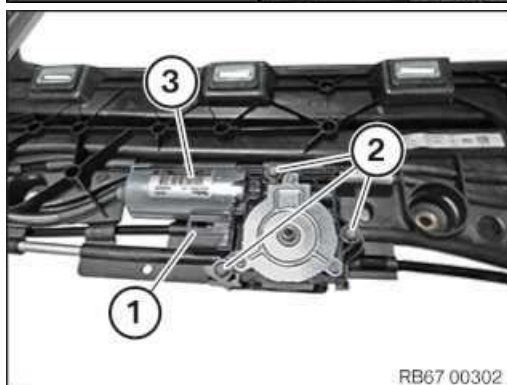


- Unlock plug connection (1) and disconnect.
- Loosen screws (2).
- Remove drive (3).

23 – Installing the drive for the glass slide/tilt sunroof



- Insert the gear (1) of the drive for the roller sunblind (2) precisely in the gearing (3).



- Position the drive (3) correctly.
- Tighten down screws (2).
- Connect connectors (1) and lock.

POSTPROCESSES

24 – 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.

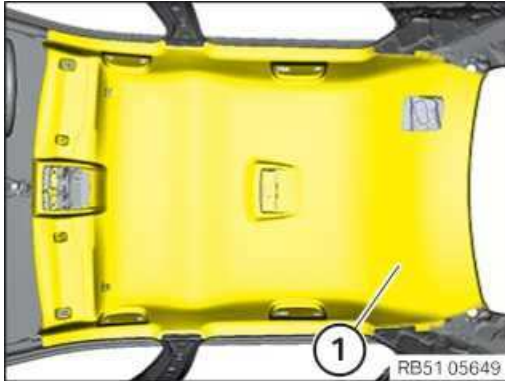


RISK OF DAMAGE

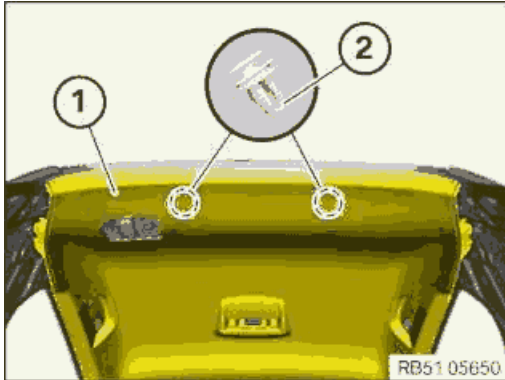
Fold the headlining.

If the headlining is folded, it may have to be replaced.

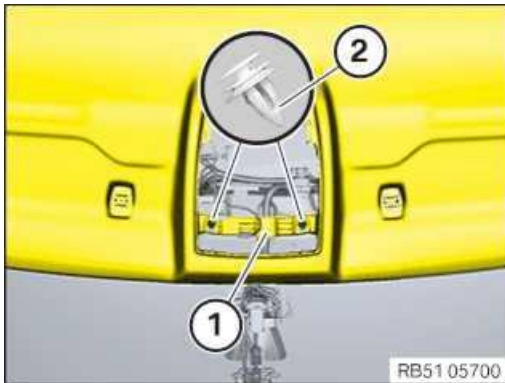
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Install the headlining (1) and carefully insert it at the respective edge protection.



- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

25 – 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.

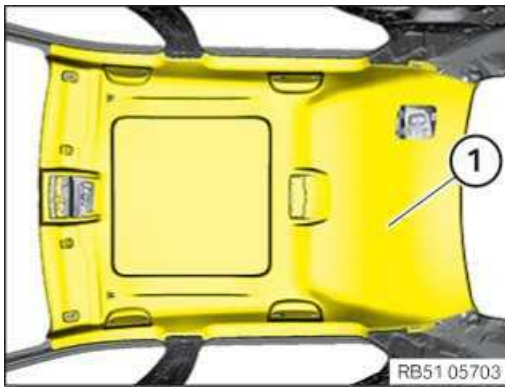


RISK OF DAMAGE

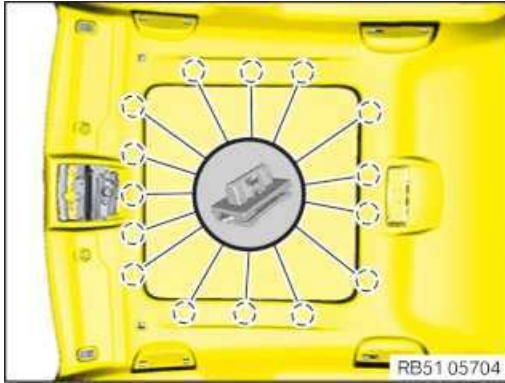
Fold the headlining.

If the headlining is folded, it may have to be replaced.

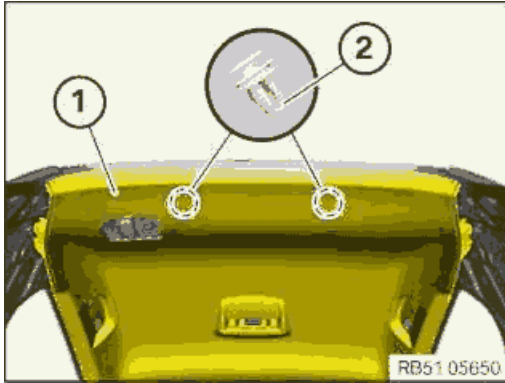
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



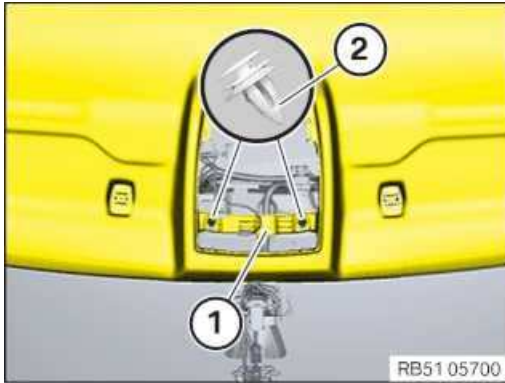
- Install the headlining (1) and carefully insert it at the respective edge protection.



- Carefully engage the headlining on the clamps (1).

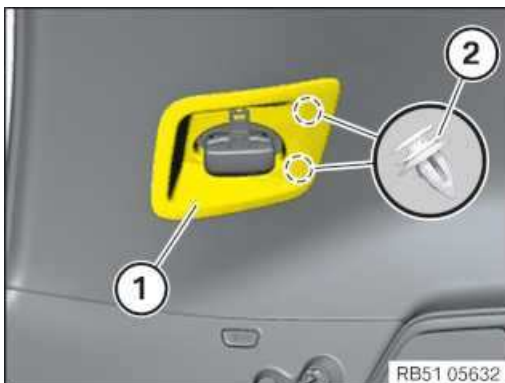


- Clip in the headlining (1) using the clips (2).



- Clip in the frame (1) with the clips (2).
- If necessary, attach the cable clip onto the frame (1).

26 – 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).

27 – Installing the top left and right B-pillar trim panels



NOTICE

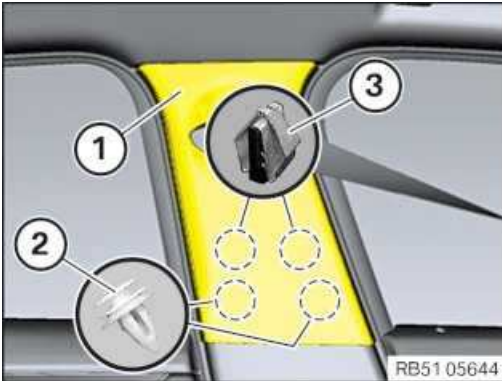
Description is for left component only. Procedure on the right side is identical.

► 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.

28 – 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.

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

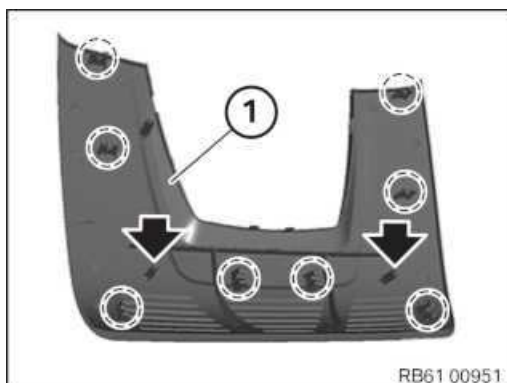
- Tighten down screw.

A-pillar trim panel to body

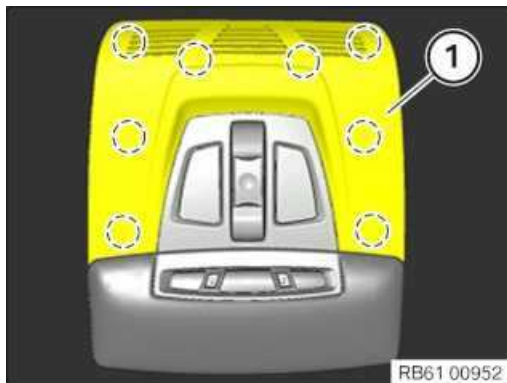
M5x42 screw	Renew screw	Tightening torque	2,2 Nm
-------------	-------------	-------------------	--------

- Clip in the cover (1).

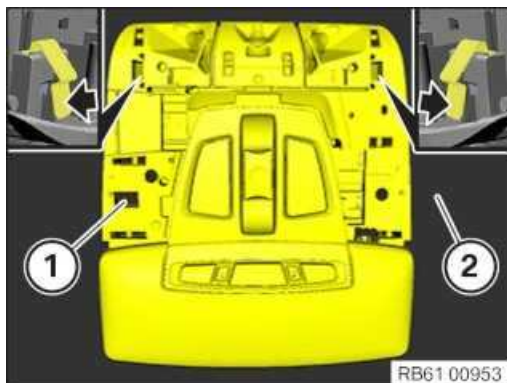
29 – Install the roof function centre



- 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.

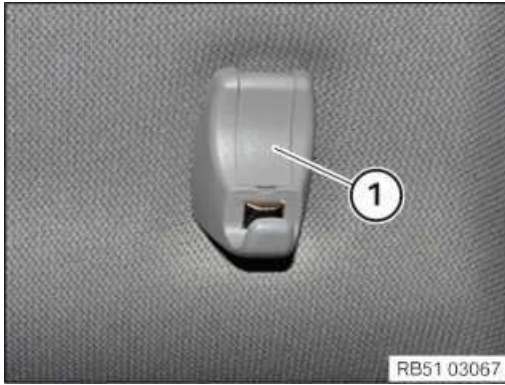
- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

30 – 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
-------	--	-------------------	--------

31 – Install both sun visors



NOTICE

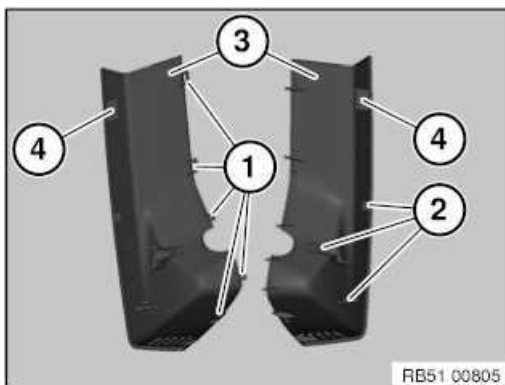
Description is for left component only. Procedure on the right side is identical.



► 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.

32 – Install the cover on the inside mirror

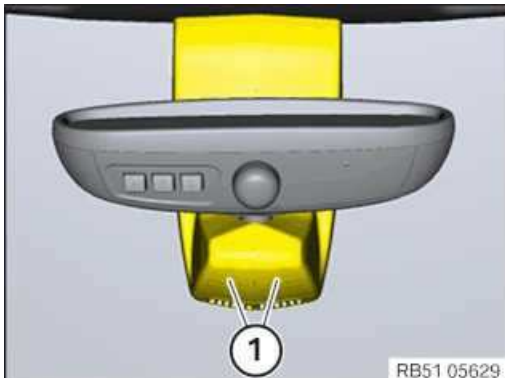


- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

The latch mechanisms (1) and guides (2) must not be damaged.

- Check the spacers (4).

The spacers (4) must not be damaged or missing.



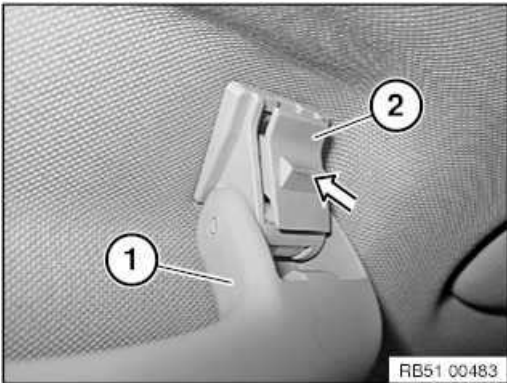
- Install covers on the interior mirror (1) clip together.

33 – Installing all grab handles



NOTICE

The description is for one component only. The procedure is identical for all further components.



► Installing the grab handle

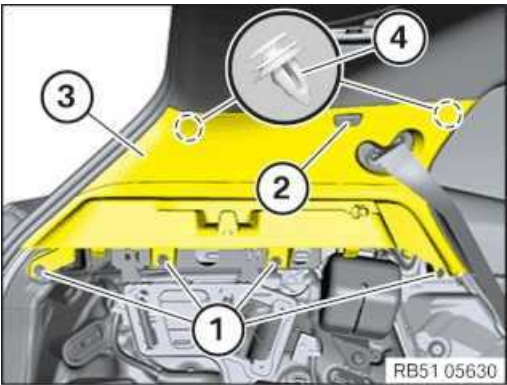
- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

34 – 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

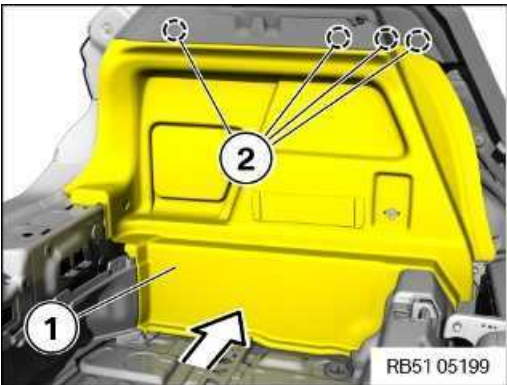
Self-tapping screw		Tightening torque	4 Nm
--------------------	--	-------------------	------

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm
---------------	--	-------------------	--------

35 – 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.



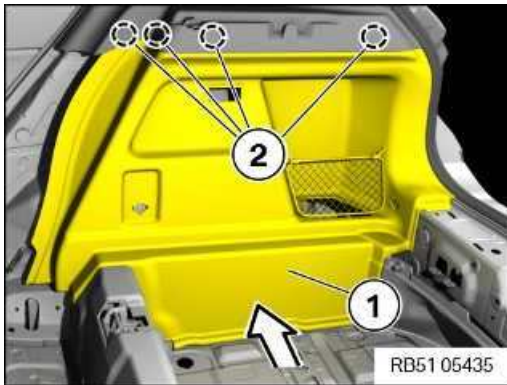
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

Bolt M8 x 22		Tightening torque	21 Nm
--------------	--	-------------------	-------

- Clip in the covers (1).

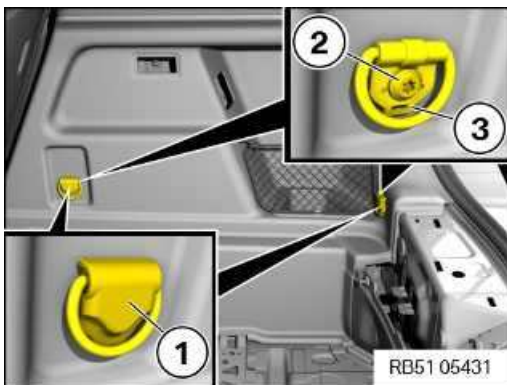
36 – Installing the luggage compartment wheel arch trim panel on the right



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).

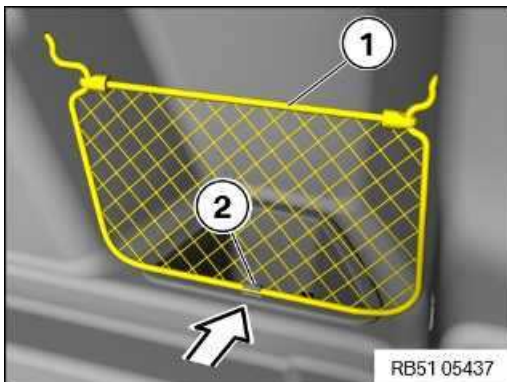
Lashing eye in luggage compartment

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.

37 – Install C-pillar trim panel at bottom left and right

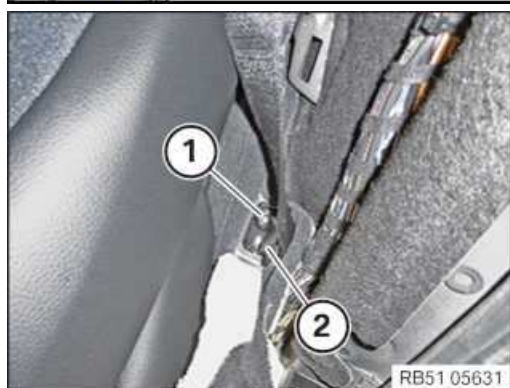
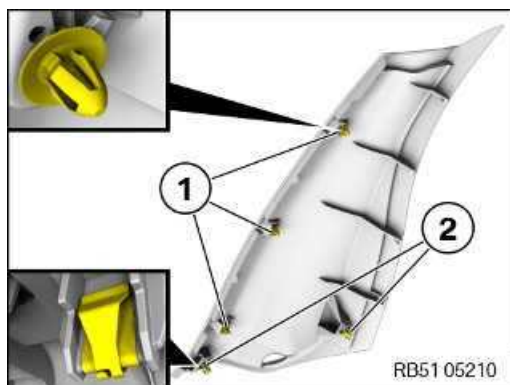


NOTICE

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.

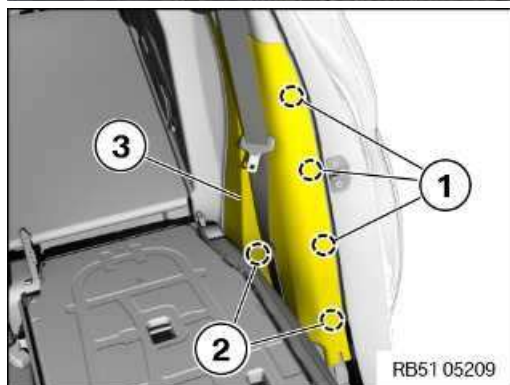


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm
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- 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.

38 – Install the door sill cover strip on the rear left and right

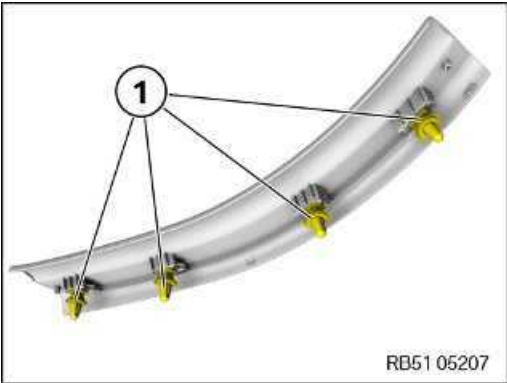


NOTICE

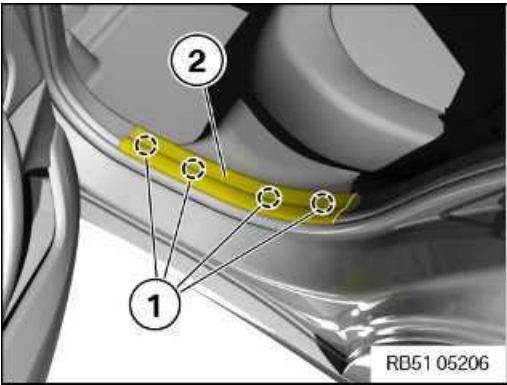
Description is for left component only. Procedure on the right side is identical.

► Installing the rear door sill cover strip

- Check the clips (1) for damage and renew where required.

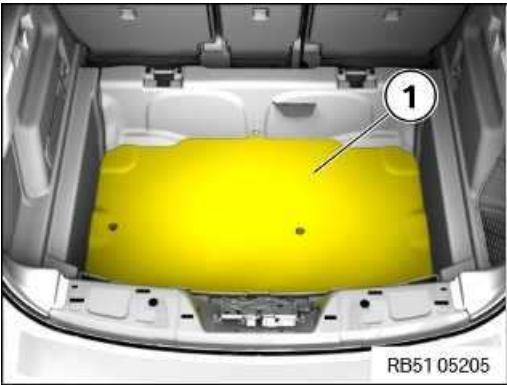


- Clip in the door sill cover strip (2) with the clips (1).



39 – Installing the luggage compartment floor trim panel

- Position the luggage compartment floor trim panel (1).

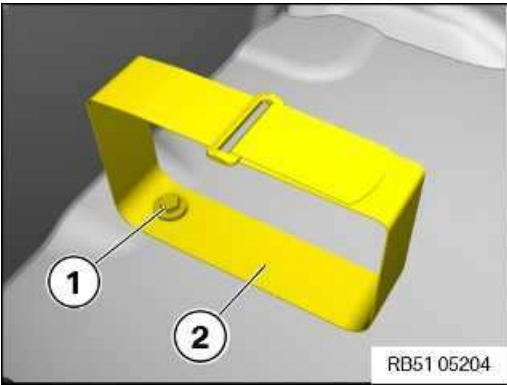


40 – Inserting the Velcro fastener for the toolkit

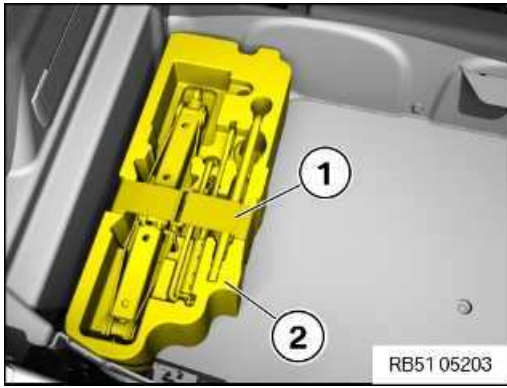
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm
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41 – Install the tool kit

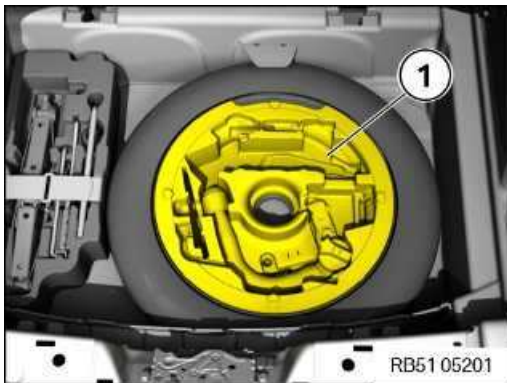


- Install the tool kit (2).
- Close the hook and loop tape (1).

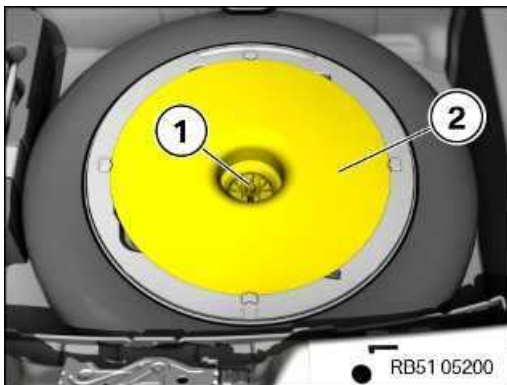
42 – Install the emergency wheel



- Insert compact spare wheel(1).

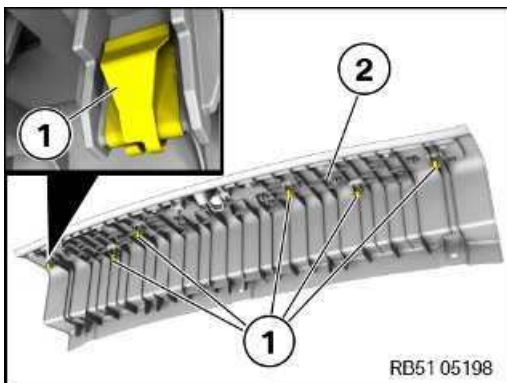


- Insert oddments tray into the compact spare wheel (1).

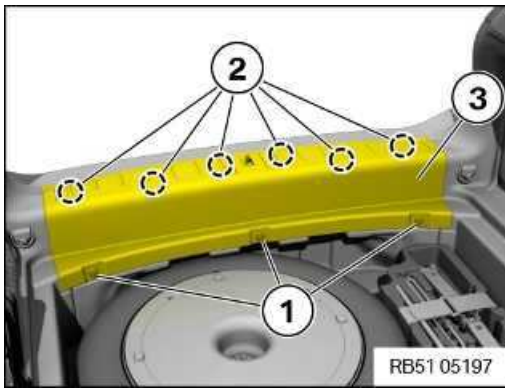


- Insert the lid (2).
- Hand-tighten the bolt (1).

43 – Installing loading edge trim

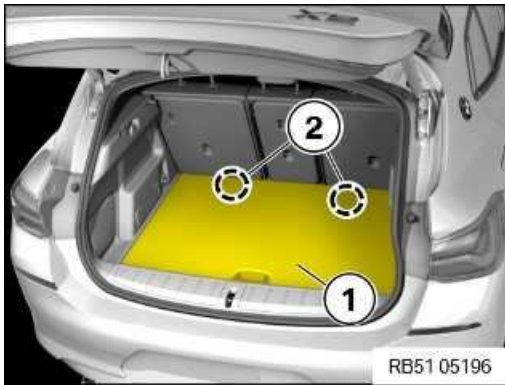


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- 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).

44 – Installing the luggage compartment removable panel



- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

45 – Initialise panorama glass roof



- Close all doors.
- Operate the START-STOP button three times within 0.8 s.
- Press and hold the switch towards "Lift".
- In the event of a delayed start or sudden stop of the glass sunroof: Continue to press and hold the switch towards "Lift".



TECHNICAL INFORMATION

If the switch is released in the meantime, the initialisation must be restarted.

- Keep pressing the switch during the entire procedure (approx. 50 s):
 - Initialisation starts approx. 15 s after the button is pressed.
 - The glass roof and the roller sunblind are each opened and closed completely.

Initialisation is complete once the glass roof and the roller sunblind are completely closed. The button can then be released.

- Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).
- Clear fault memory in FZD control unit.

Additional Information

Overview of Tightening Torques

A-pillar trim panel to body

Used in step 28

M5x42 screw	Renew screw	Tightening torque	2,2 Nm
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Counter support on bodyUsed in step [30](#)

Screw		Tightening torque	2,5 Nm
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Trim panel of luggage compartment cappingUsed in step [34](#)

Self-tapping screw		Tightening torque	4 Nm
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Trim panel of luggage compartment capping to bodyUsed in step [34](#)

Hexagon screw		Tightening torque	1,8 Nm
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Lashing eye in luggage compartmentUsed in step [35](#) [36](#)

Bolt M8 x 22		Tightening torque	21 Nm
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End fitting to bodyUsed in step [37](#)

Screw	Renew screw.	Tightening torque	42 Nm
-------	--------------	-------------------	-------

Toolkit hook and loop tape to bodyUsed in step [40](#)

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)

Links**General repair instructions**

Used in step

72 00 ... Safety regulations for handling components with gas generators	17 28
--	---------------------------------------

Repair instructions

Used in step

61 35 ... Notes on ESD protection (Electro Static Discharge)
--



Note:

Initialisation is performed on the power window switch of the relevant door.

Initialisation comprises:

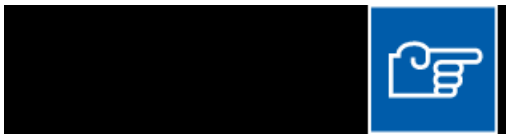
- Normalisation
- Learning characteristic curve

With normalisation, the mechanical end stops of the power windows are recorded and stored.

The characteristic curve is learnt immediately after normalisation.

When the characteristic curve is learnt, the mechanical closing forces of the power windows are recorded and stored for correct operation of the anti-trapping mechanism.

Initialisation, i.e. normalisation and learning of characteristic curve, is performed in a continuous operation.



Note:

An **initialisation** must be performed:

- In the event of malfunctions, e.g. no one-touch function, no opening or no convenience function possible.
- After the power windows drive or door module has been replaced.
- After work is carried out on the power windows mechanism.



Warning!

There is no anti-trap mechanism during initialisation.



Necessary preliminary tasks:

- Vehicle stationary
- Sufficient battery voltage available / connect charger if necessary
- Terminal "15" switched on
- All doors closed



Operating procedure for initialisation (manual):

Deleting the initialisation:

- Move side window into lower end position.
- Press and hold switch in "Open one-touch function" position (second switch position) for between 15 and 25 seconds.

Note:

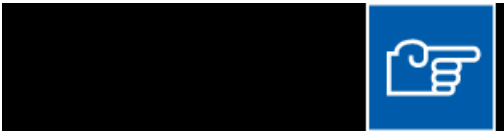
Deletion of initialisation was successful if toll function and anti-trap mechanism have been rendered inoperative.

Performing initialisation:

- Move side window to upper end position
- Pull and hold switch in "Close one-touch function" (2nd switch position) during the entire process.

Note:

Re-initialisation was successful if toll function and anti-trap mechanism function flawlessly.



Alternatively, initialisation of the power window regulation can also be carried out via the Service function in ISTA.

Selection via:

- Body
 - Locking and security functions
 - Power window regulator
 - Initialise power window regulators

67 62 000 Removing and installing or replacing flat motor for front left or right power window regulator



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.

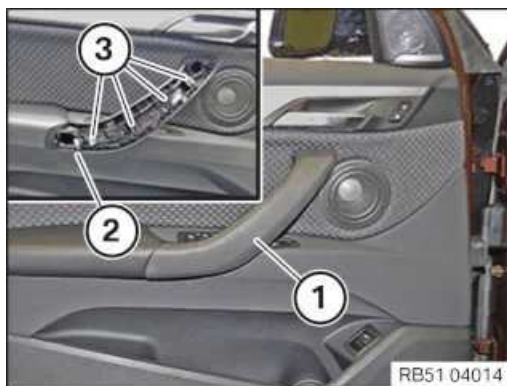
Tools and sharp-edged components can cause scratches.

- 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

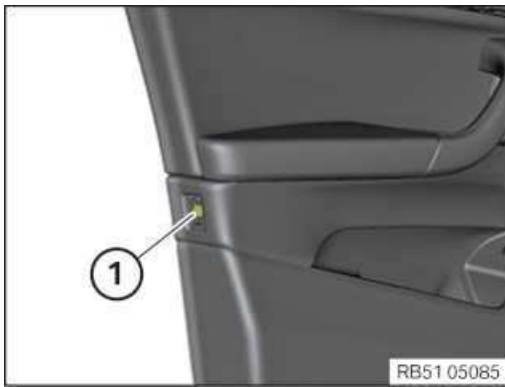


RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

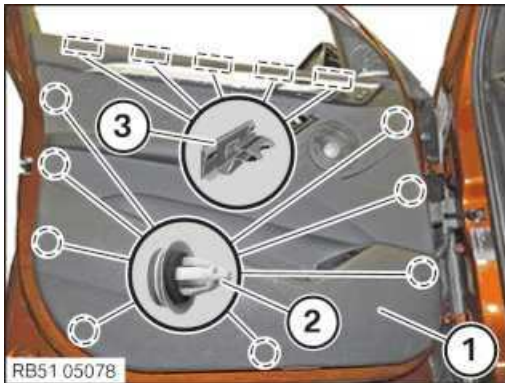
- Protect working area.
- Handle tools and components carefully.



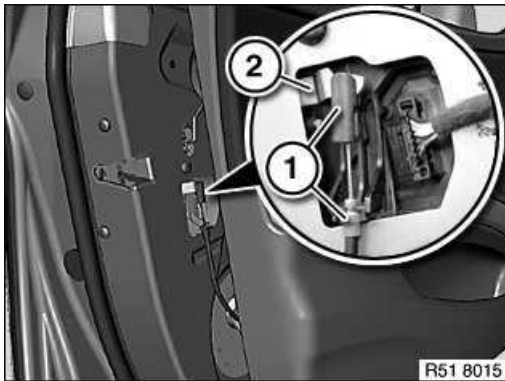
- If fitted: Remove the cover and unscrew the bolt (1).



- 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.

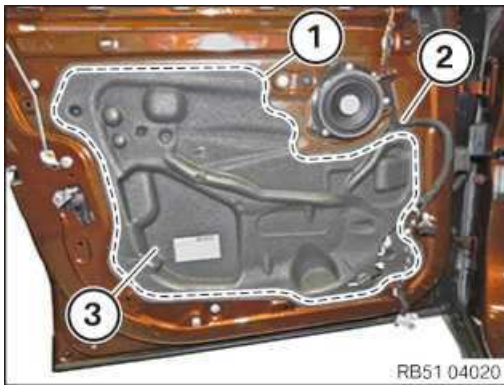
3 – Removing sound insulation on front door



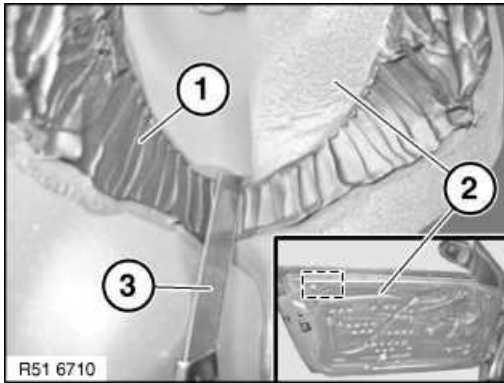
TECHNICAL INFORMATION

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

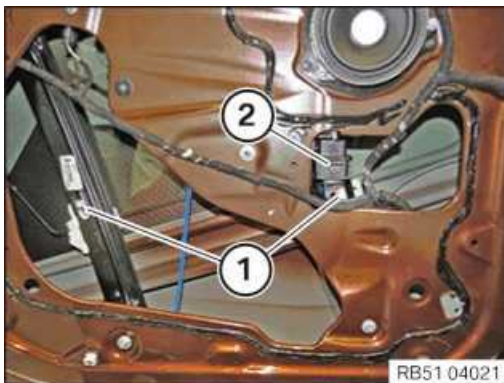


- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).

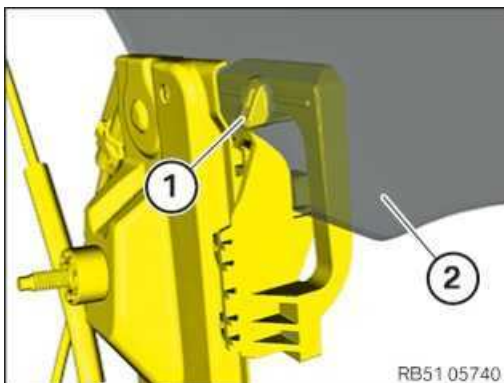


- When cutting through the sealing bead (1) make sure not to damage the sound insulation (2) and any potentially routed cables.
- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.

4 – Partially remove front door window glass

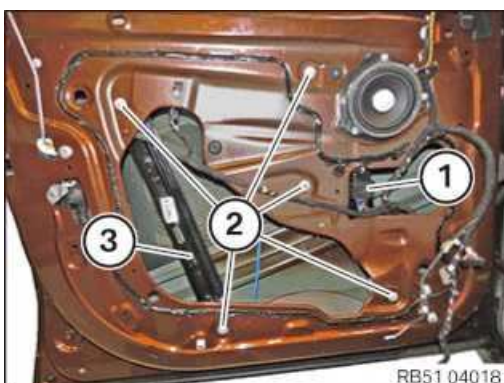


- Move the door window glass until the mounting (1) stop is accessible.
- Unlock the plug connection (2) to the power window motor and disconnect it (pinch hazard).



- 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.

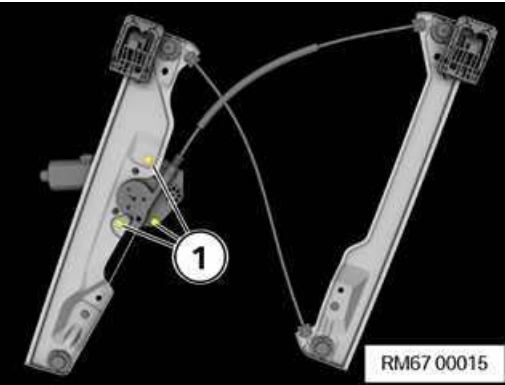
5 – Removing power window regulator



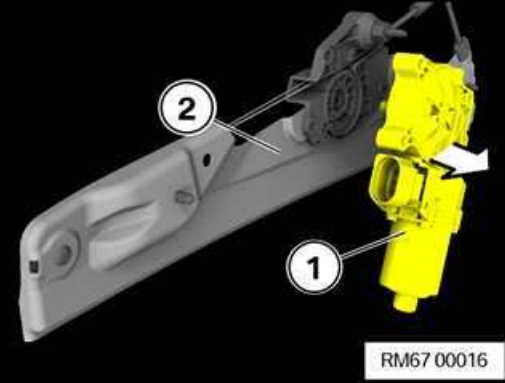
- Unlock plug connection (1) and disconnect.
- Loosen nuts (2).
- Carefully thread the power windows (3) out of the door and detach the Bowden cable from the holder at the same time.

MAIN WORK

6 – Remove the flat motor for the front power windows

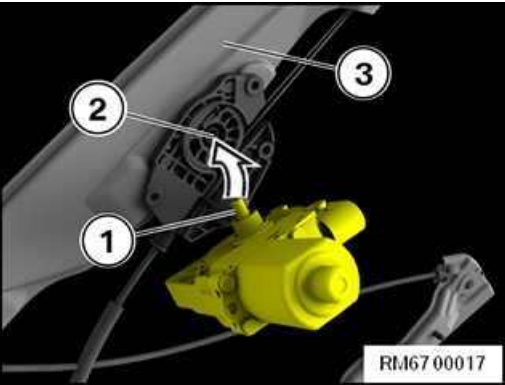


- Loosen screws (1).

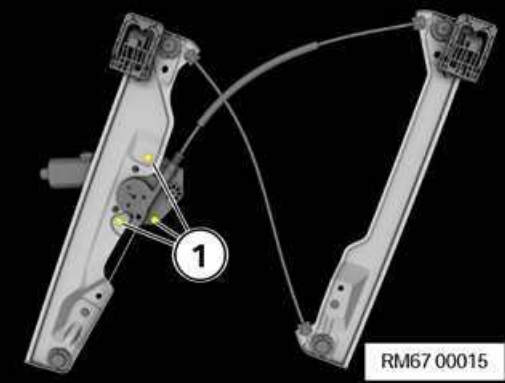


- Remove the flat motor (1) for the power window from the power window (2) in direction of arrow.

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).



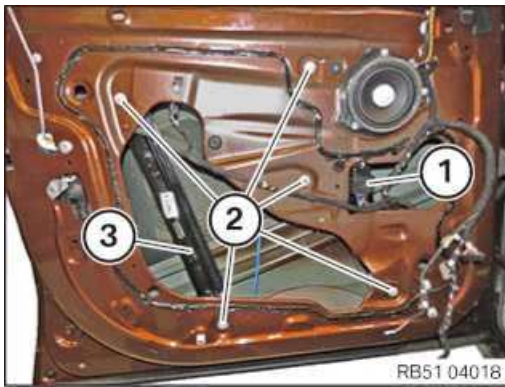
- Tighten the screws (1).

Flat motor to power window regulator

Screw		Tightening torque	4,5 Nm
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POSTPROCESSES

8 – Installing the power windows



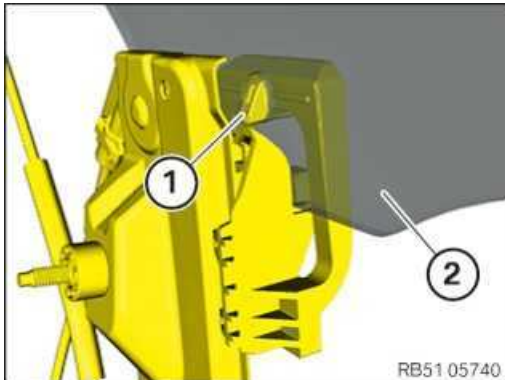
- Carefully feed the power windows (3) into the door and attach the Bowden cable in the holder.
- Tighten nuts (2).

Window regulator to door

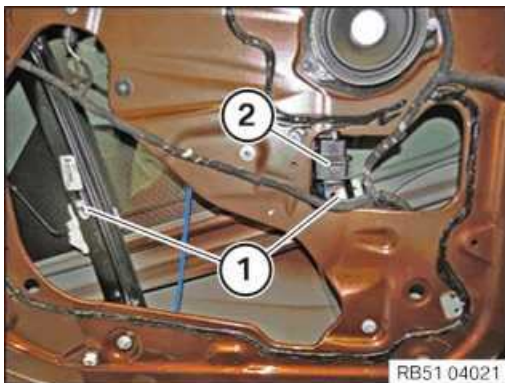
Nut M6, self-locking		Tightening torque	9,5 Nm
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- Connect connectors (1) and lock.

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.



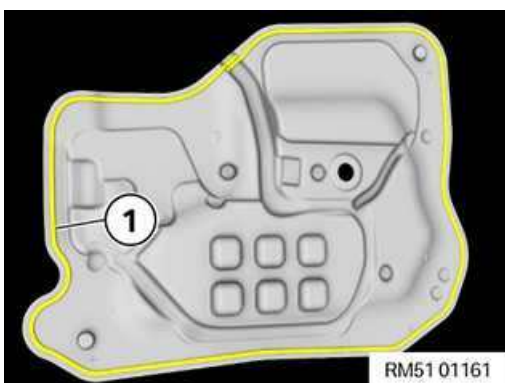
- Thread the door window glass into the mountings (1) and lock.
- Connect and lock the connector (2) on the power window motor.

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

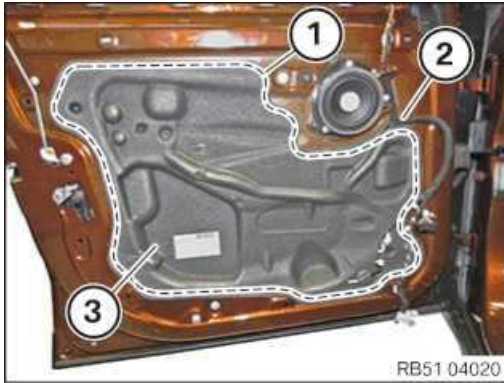
- Check sound insulation for damage.

Result

- » The sound insulation is damaged.

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

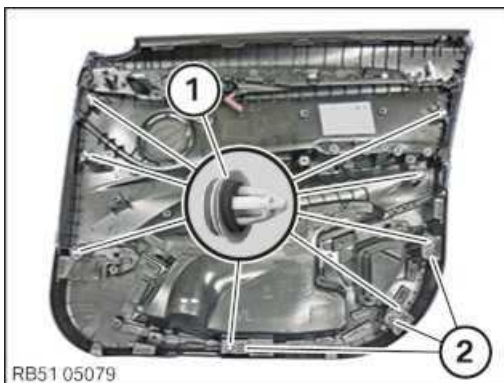


RISK OF DAMAGE

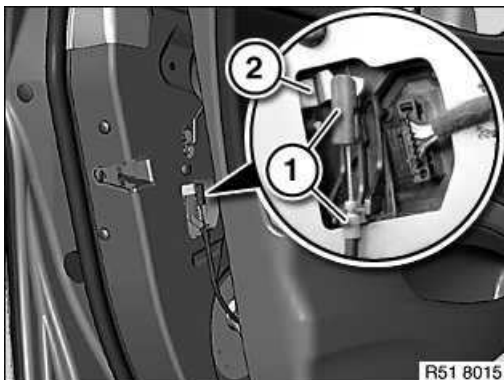
Scratches.

Tools and sharp-edged components can cause scratches.

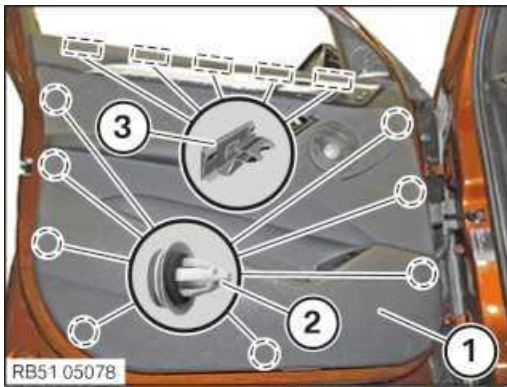
- Protect working area.
- Handle tools and components carefully.



- 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).



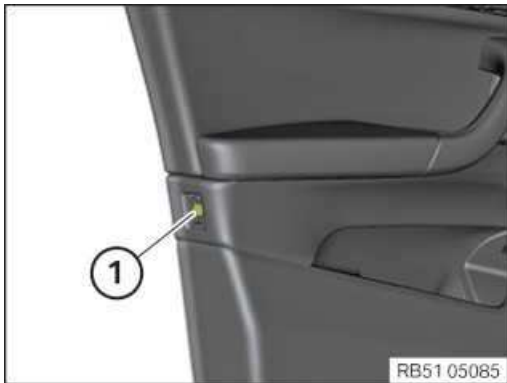
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- 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
--------------	--	-------------------	--------

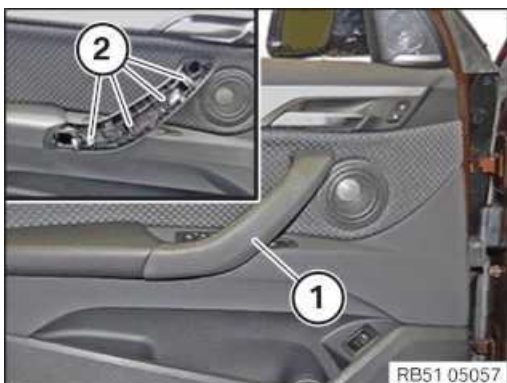
- Mount cover .

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).

13 – 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

Flat motor to power window regulator

Used in step 7

Screw		Tightening torque	4,5 Nm
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Window regulator to door

Used in step 8

Nut M6, self-locking		Tightening torque	9,5 Nm
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Door trim panel to door

Used in step 11

Screw TS5x20		Tightening torque	2,5 Nm
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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

67 62 020 Removing and installing/replacing flat motor for rear left or right power window regulator

PRELIMINARY WORK

1 – Remove cover on door handle



RISK OF DAMAGE

Scratches.

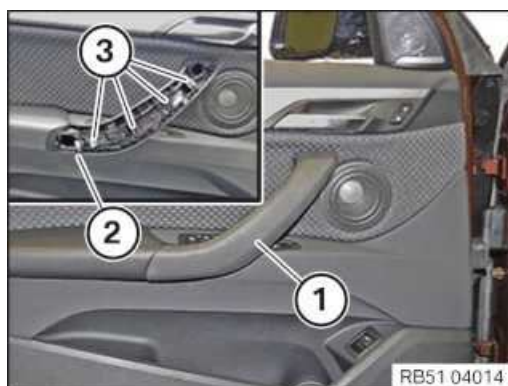
Tools and sharp-edged components can cause scratches.

- 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

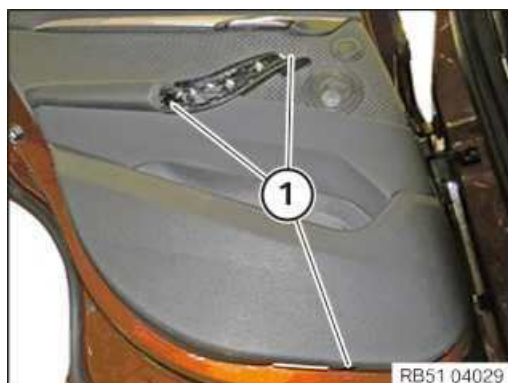


RISK OF DAMAGE

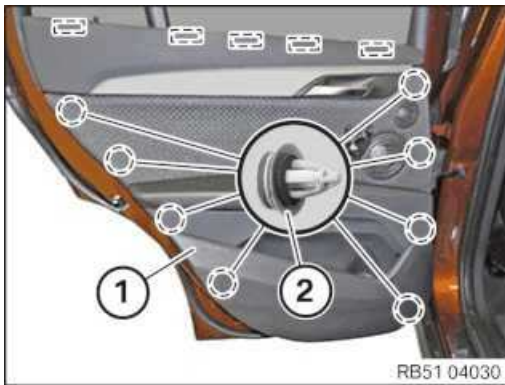
Scratches.

Tools and sharp-edged components can cause scratches.

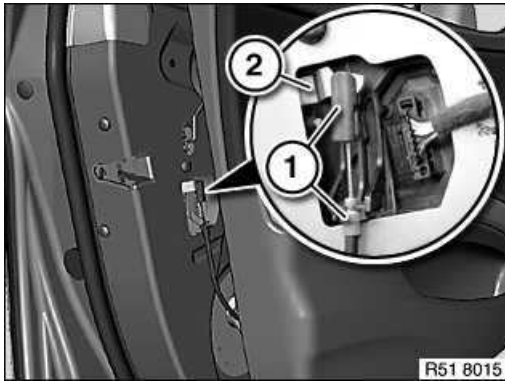
- Protect working area.
- Handle tools and components carefully.



- Loosen screws (1).

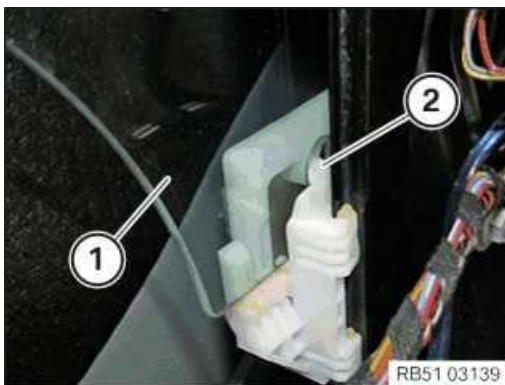


- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.

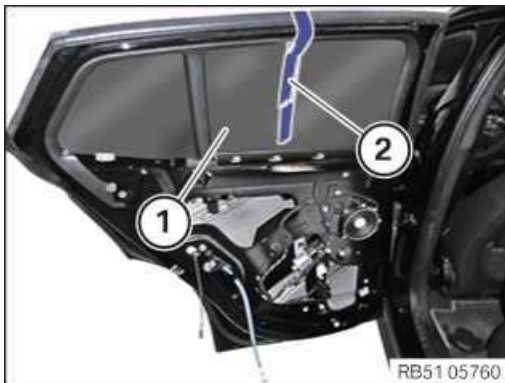


- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

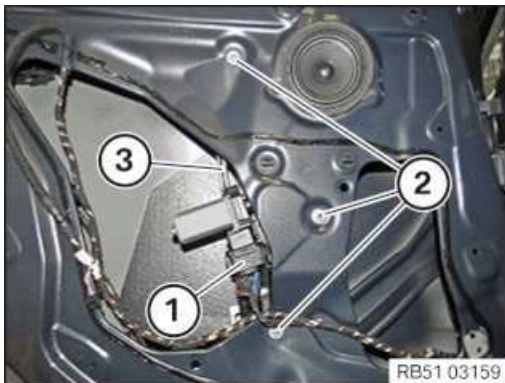
3 – Remove rear power window regulator



- 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.



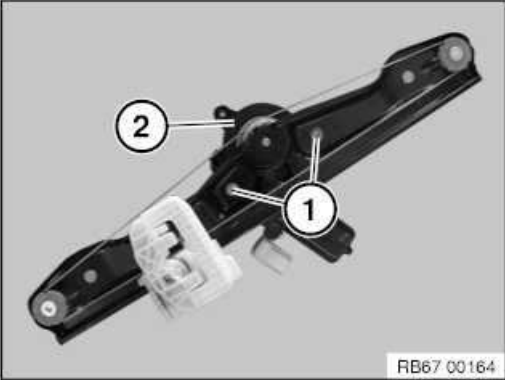
- Push the door window glass (1) completely upwards and secure with adhesive tape (2).



- Unlock plug connection (1) and disconnect.
- Loosen the nuts (2) and guide the power windows (3) out of the door.

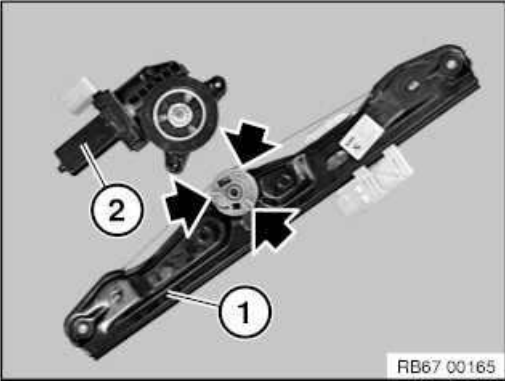
MAIN WORK

4 – Remove the flat motor for the rear power window

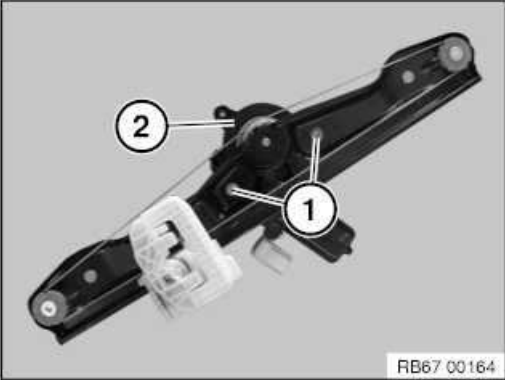


- Loosen screws (1).
- Thread the flat motor (2) out and remove it so that the cable does not disconnect from the power window.

5 – Install the flat motor for the rear power window



- Engage the flat motor (2) precisely at the marked points on the power window (1).



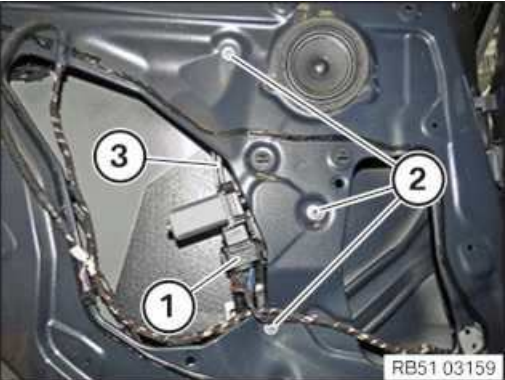
- Tighten the screws (1) for the flat motor (2) at the same time.

Flat motor to power window regulator

Screw		Tightening torque	7 Nm
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POSTPROCESSES

6 – Installing rear power window regulator

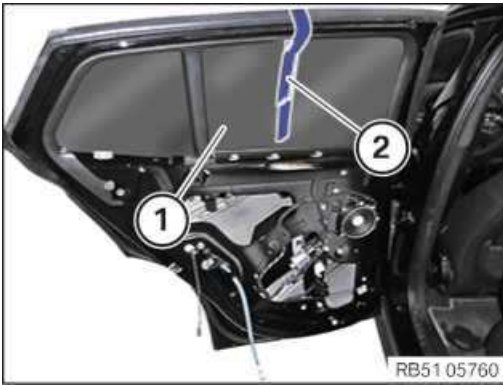


- Feed in and position the power windows (3) in the door.
- Tighten nuts (2).

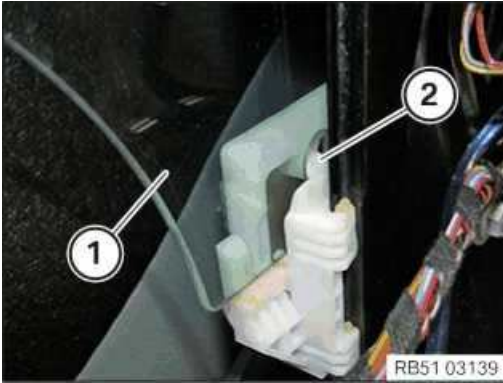
Window regulator to door

Nut M6, self-locking		Tightening torque	9,5 Nm
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- 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).

7 – Installing rear door trim panel



RISK OF DAMAGE

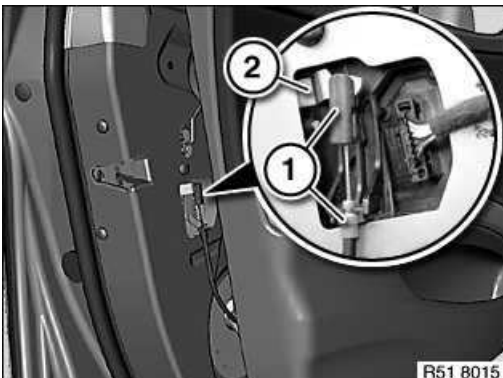
Scratches.

Tools and sharp-edged components can cause scratches.

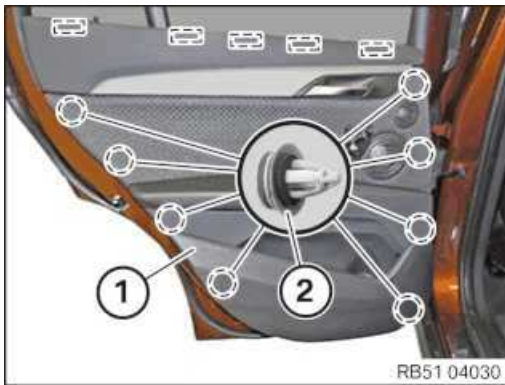
- Protect working area.
- Handle tools and components carefully.



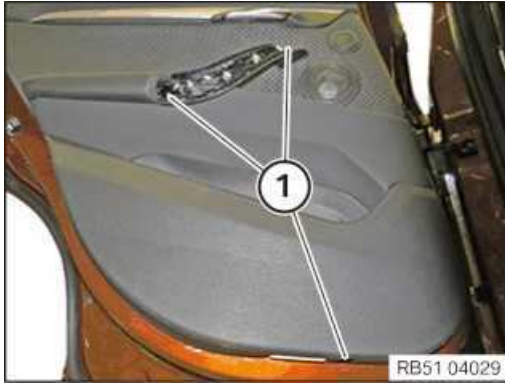
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



- 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).



- Tighten the screws (1).

Door trim panel to door

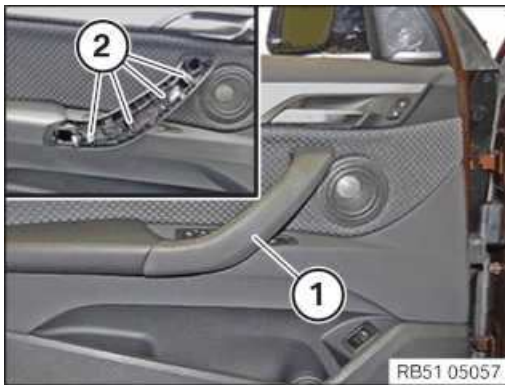
Screw TS5x20		Tightening torque	2,5 Nm
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8 – Install the cover on the door handle



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).

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

Flat motor to power window regulator			Used in step	5
Screw		Tightening torque		7 Nm

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	7
Screw TS5x20		Tightening torque		2,5 Nm

Links

Repair instructions		Used in step
67 62 ... Notes on initializing power windows		9
67 62 ... Notes on initializing power windows		9

67 63 512 Replacing wiper motor

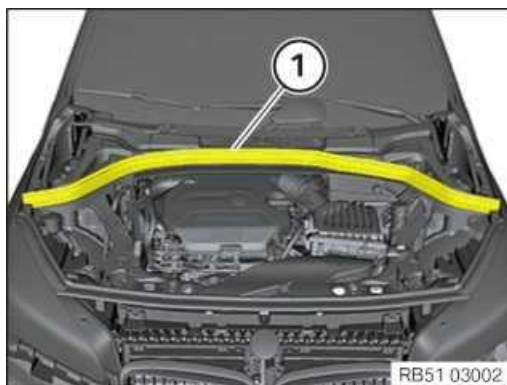
PRELIMINARY WORK

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

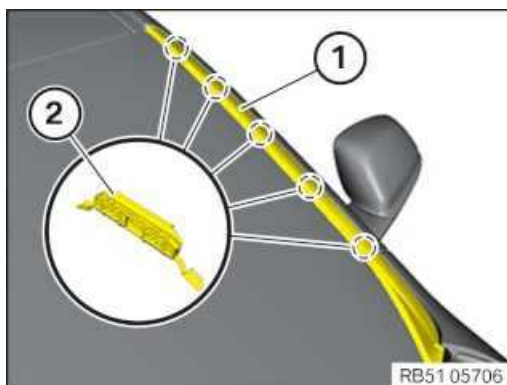


RISK OF DAMAGE

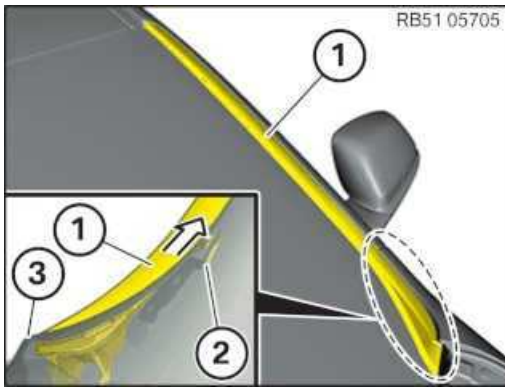
Scratches.

Tools and sharp-edged components can cause scratches.

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

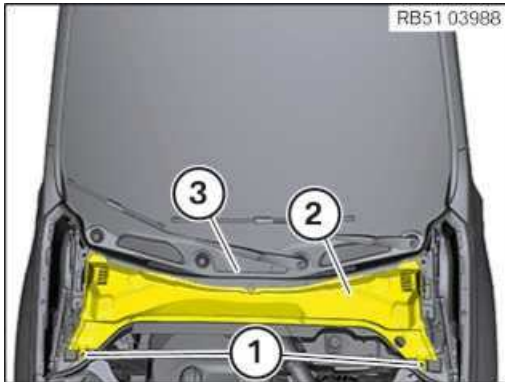


- Unclip the gutter strip (1) from the clamps (2) beginning at the roof to the top.



- 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

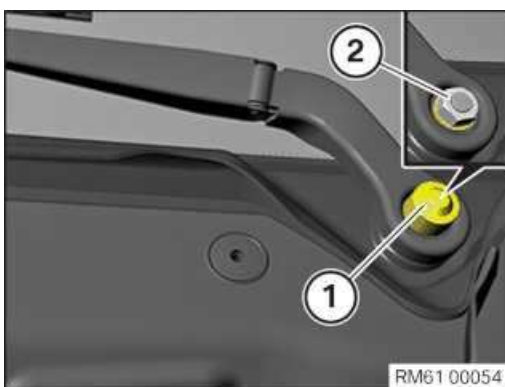


RISK OF DAMAGE

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.

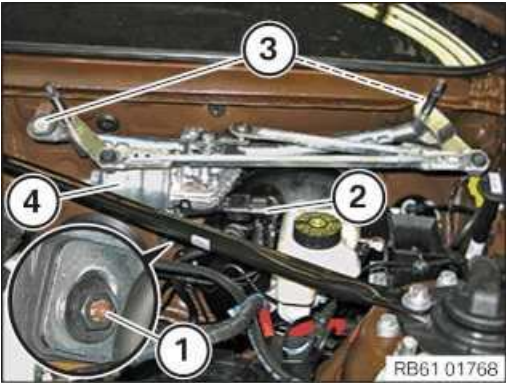
5 – Remove the rear cowl panel



- Pull off the cowl panel cover (1) towards the top, starting from the side and feed out.

MAIN WORK

6 – Removing the console for the windscreen wiper system complete with motor

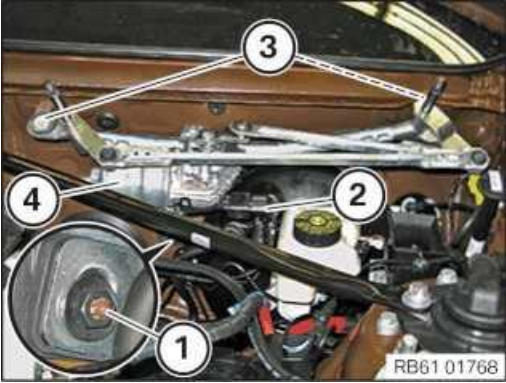


- Unfasten nut (1).
- Loosen screws (3).
- Unlock connector (2) and disconnect (see next figure).
- Remove the console for the windscreen wiper system (4).



- Press lock on the connector underside and pull out the connector.

7 – Installing console for windscreen wiper system complete with engine



- Feed in console for windscreen wiper system (4).
- Tighten down screws (3).

Wiper console to body

M6x30		Tightening torque	10 Nm
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- Tighten nut (1).

Wiper console to retaining bracket

M6		Tightening torque	10 Nm
----	--	-------------------	-------

- Connect connector (2).

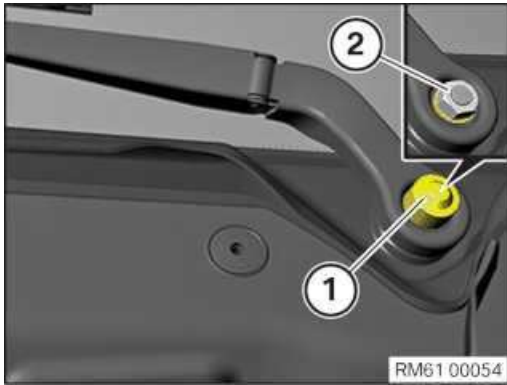
POSTPROCESSES

8 – 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.

9 – Install left and right wiper arm



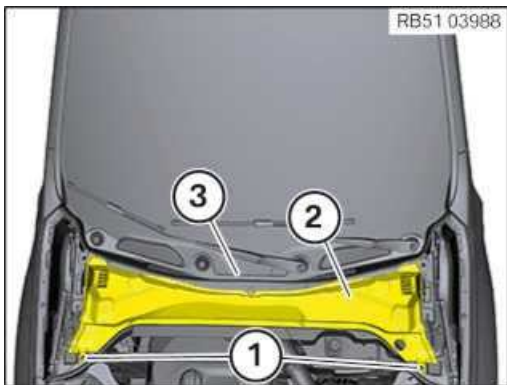
- Join wiper arm and tighten with nut (2).

Windscreen wiper arm

Combination hexagon nut		Tightening torque	35 Nm
-------------------------	--	-------------------	-------

- Join the protective cap (1).

10 – 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).

11 – 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.

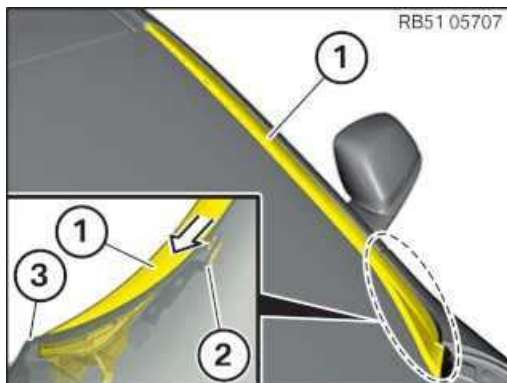
Tools and sharp-edged components can cause scratches.

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

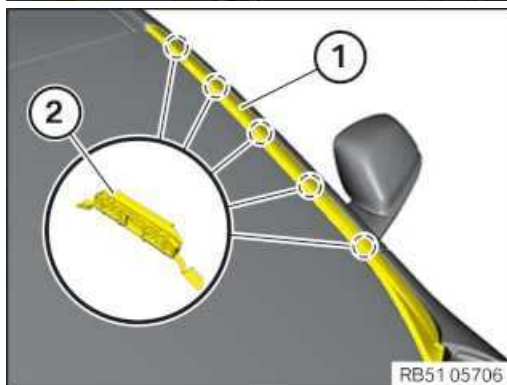


TECHNICAL INFORMATION

Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Carefully feed in the gutter strip (1) at the side panel (3) and simultaneously feed into the guide (2) in direction of arrow.



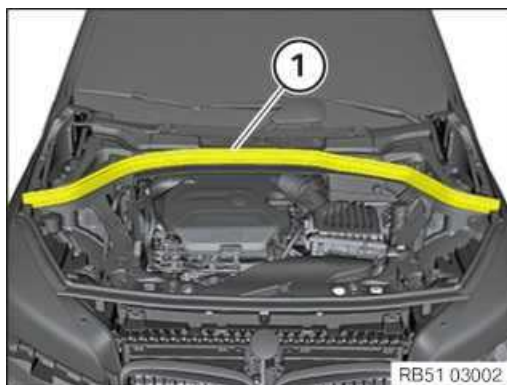
- Clip in the gutter strip (1) at the bottom starting at the clamps (2).

12 – 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

Wiper console to body

Used in step 7

M6x30	Tightening torque	10 Nm
-------	-------------------	-------

Wiper console to retaining bracket

Used in step 7

M6	Tightening torque	10 Nm
----	-------------------	-------

Combination hexagon nut		Tightening torque	35 Nm
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Overview of Special Tools