

65 12 ... Install the correct navigation map (after replacing the head unit as from 07/2015)

Install the correct navigation map depending on the validity of the customer subscription after having replaced the head unit for vehicles with a production date as from 07/2015.

Different cases:

Customer subscription is **still valid**:

- Install the most recent navigation map.

Customer subscription has **expired**:

- Check when the customer subscription expired*.
- Install the navigation map applicable on the expiry date.

The customer subscription has **expired**. **After the expiry** of his/her subscription, the customer **purchased a newer version of the navigation map** ("One Time Update"):

- Check which navigation map was installed most recently*.
- Install this navigation map

* The information required to determine the term of the customer subscription is available in the following path:

Aftersales Information Research (AIR)

- Navigation map

The following table is displayed in the "Navigation map" menu:

Installed map (Status with date)	Enabling code (Subscription)	Free update	Update subject to a charge
In this field the currently installed map with year specification is displayed. (E.g. navigation map Europe 2015)	Displayed in this field is: • Validity of the subscription (E.g. valid until 31.10.2017) • or an enabling code for "One Time Update"	Displayed in this field is: • During a valid subscription of the current, free enabling code • The last functional, free enabling code is shown if the subscription or "One time update" has expired	Displayed in this field is: • The field is empty during a valid subscription • The next available, most recent enabling code subject to a charge if the subscription or "one time update" has expired

Go to the following path for more information on navigation, such as update variants, new features and compatibility tables:

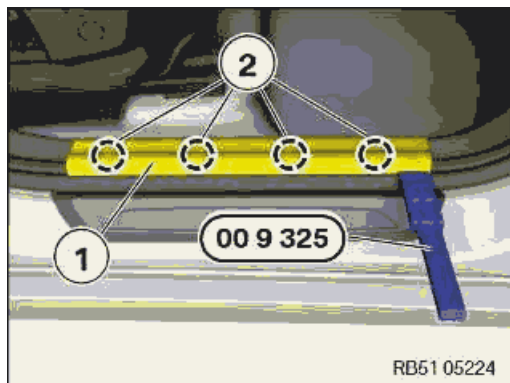
After-sales Assistance Portal (ASAP)

- Product information bulletin
- 07 Infotainment and communication
- 03 Navigation update

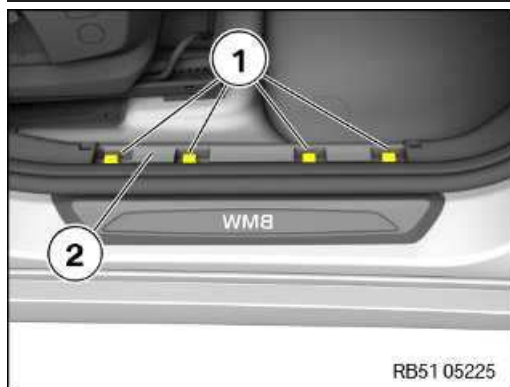
65 12 051 Remove and install / replace the central bass speaker on the driver's side

PRELIMINARY WORK

1 – Remove front entrance cover strip



- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.

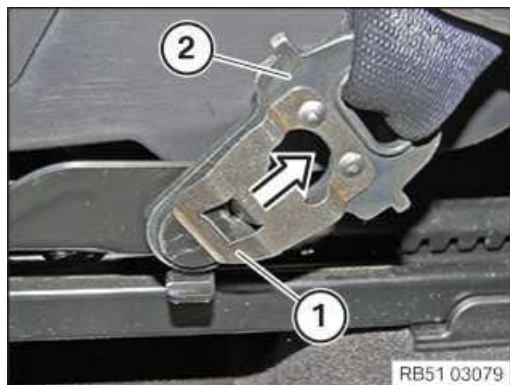


- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

2 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

3 – Remove front seat



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

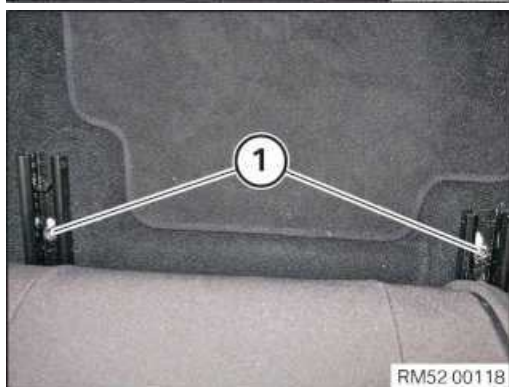


TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



- Adjust front seat completely to the rear.
- Loosen screws (1).

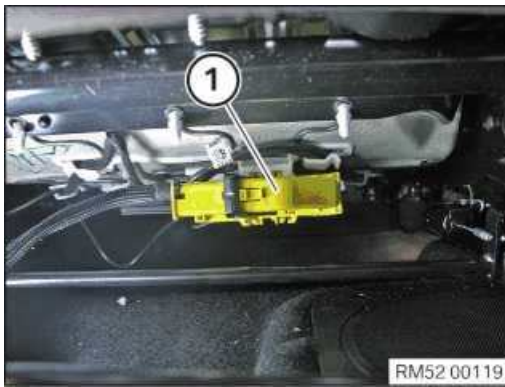


- Adjust front seat completely to the front.
- Loosen screws (1).

► Disconnecting all battery earth leads

- See additional information.





RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.
- Cover the door sill using protective covers.
- Fold the front seat back and disconnect the plug connection (1).



RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Remove the front seat with the assistance of an auxiliary person.

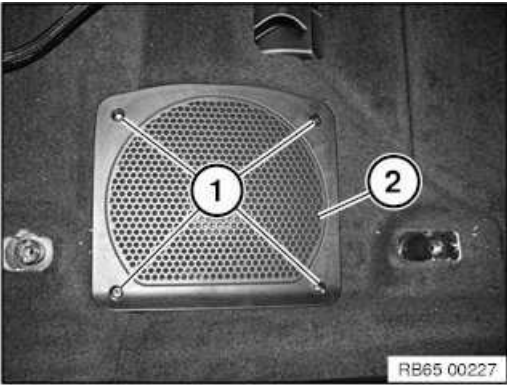
► Mounting the front seat on the universal seat mount

- Mounting the front seat on the special tool (universal seat mount) **2 154 711**.

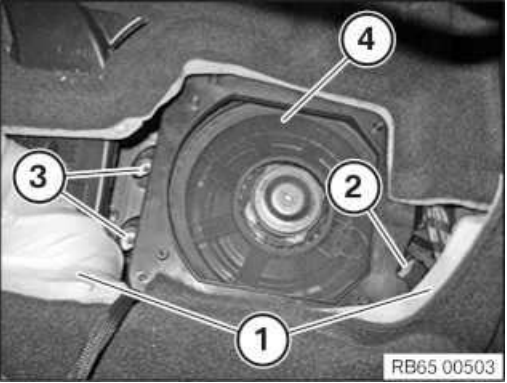
To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.



4 – Remove central bass

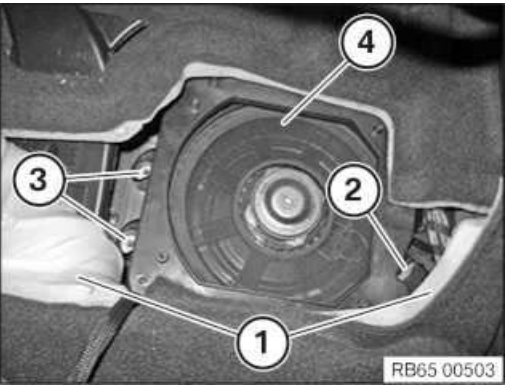


- Loosen screws (1).
- Remove the cover of the central bass (2).



- Fold up the carpet (1) as shown.
- Unlock and disconnect connector (2).
- Loosen nuts (3).
- Remove the central bass (4).

5 – Installing the central bass

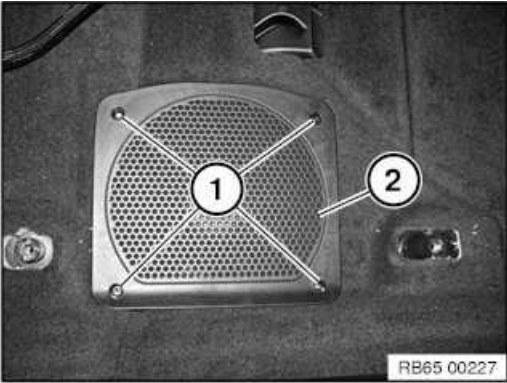


- Insert the central bass (4).
- Tighten nuts (3).

Central bass speaker to floor assembly

Nut		Tightening torque	5 Nm
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- Connect connectors (2) and lock.
- Correctly lay the carpet (1).



- Position the cover of the central bass (2).
- Tighten the screws (1).

Central bass speaker trim

Screw		Tightening torque	2 Nm
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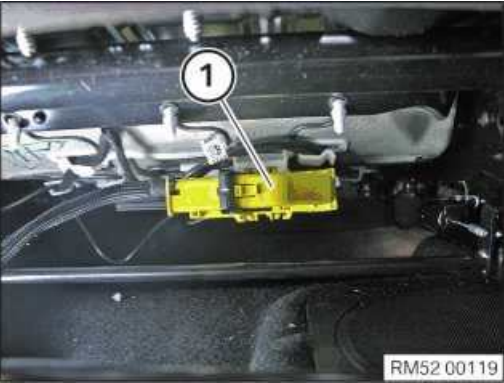
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TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



- **Removing the front seat from the universal seat mount .**
- Removing the seat from the special tool (universal seat mount) **2 154 711**.



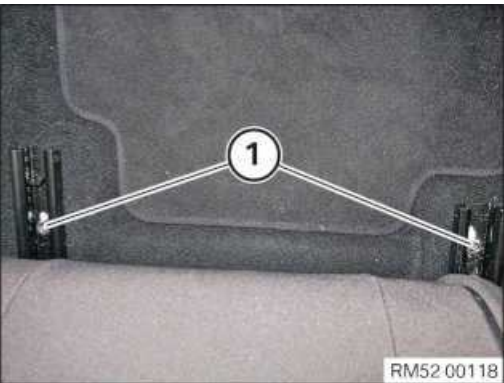
RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

- Cover the door sill using protective covers.



RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.

- Lift the front seat into the vehicle with an auxiliary person and position it.
 - Lay the front seat back and connect connector (1) .
 - Adjust the front seat to the rear.
 - Renew screws (1).
- Parts:** Bolts
- Tighten the screws (1).

Seat to body			
M10	Renew screw.	Tightening torque	42 Nm



- Adjust the front seat to the front.
- Renew screws (1).

Parts: Bolts

- Tighten the screws (1).

Seat to body

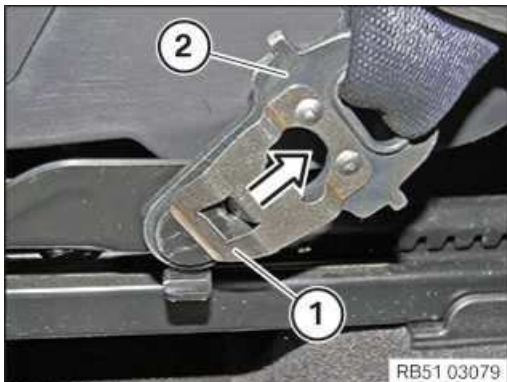
M10	Renew screw.	Tightening torque	42 Nm
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► Disconnecting all battery earth leads

- See additional information.

7 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

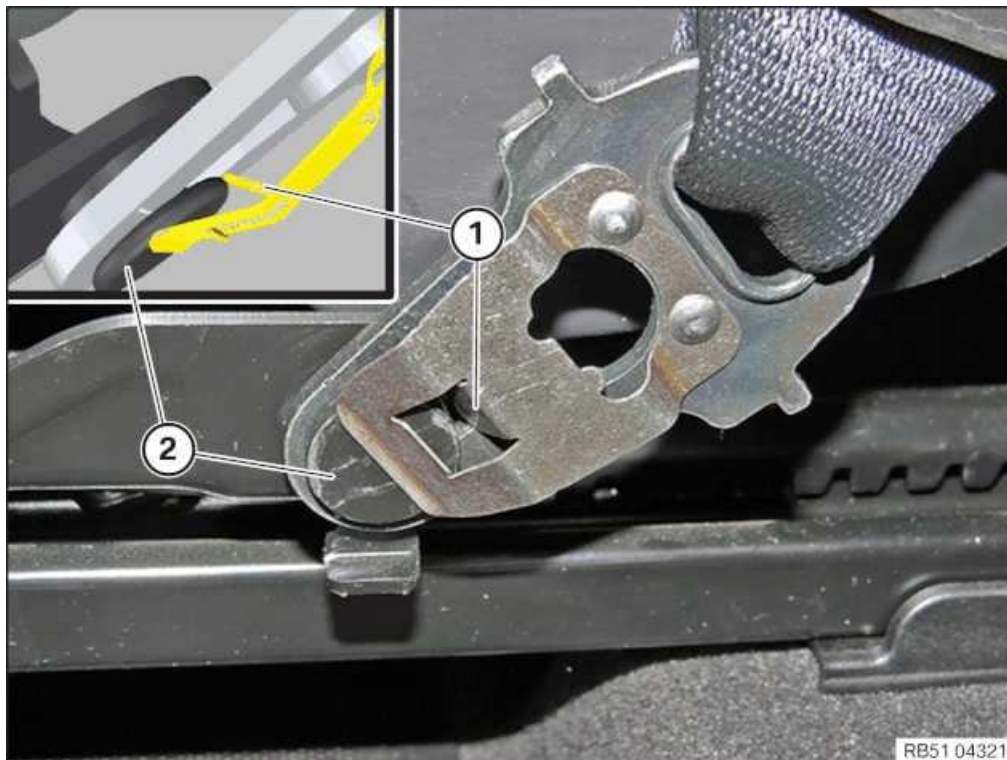
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

► Correctly mount the front end fitting

End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).



WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

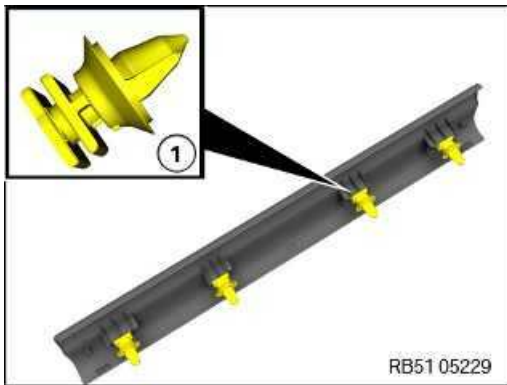
- Observe the following animation:

Your browser doesn't support HTML5 video.

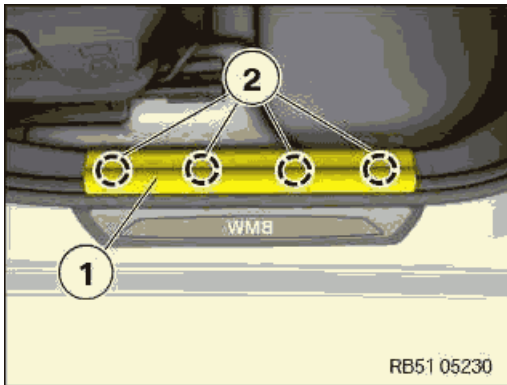


- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

8 – Install the front door sill cover strip



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



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

Additional Information

Overview of Tightening Torques

Central bass speaker to floor assembly

Used in step [5](#)

Nut		Tightening torque	5 Nm
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Central bass speaker trim

Used in step [5](#)

Screw		Tightening torque	2 Nm
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Seat to body

Used in step [6](#)

M10	Renew screw.	Tightening torque	42 Nm
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Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common

Used in step [1](#)

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

2 154 711 Fitting aid



Common

Used in step 3 6

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

Links

General repair instructions

Used in step

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

3

Repair instructions

Used in step

[61 20 900 Disconnecting and connecting battery earth lead](#)

3 6

[61 20 900 Disconnecting and connecting battery earth lead](#)

3 6

[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting the battery earth lead \(all battery earth leads\)](#)

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[61 20 900 Disconnecting and connecting the battery earth lead \(all battery earth leads\)](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting the battery earth lead \(all battery earth leads\)](#)

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[61 20 900 Disconnect and connect battery earth lead \(Plug-in Hybrid Electric Vehicle\)](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	3 6
61 20 900 Disconnecting and connecting battery earth lead	3 6
61 20 900 Disconnecting and connecting battery earth lead	3 6
61 20 900 Disconnecting and connecting battery earth lead	3 6
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61 20 900 Disconnecting and connecting battery earth lead	3 6
61 20 900 Disconnecting and connecting battery earth lead	3 6
61 20 900 Disconnecting and connecting battery earth lead	3 6

65 12 053 Remove and install / replace the central bass speaker on the passenger's side

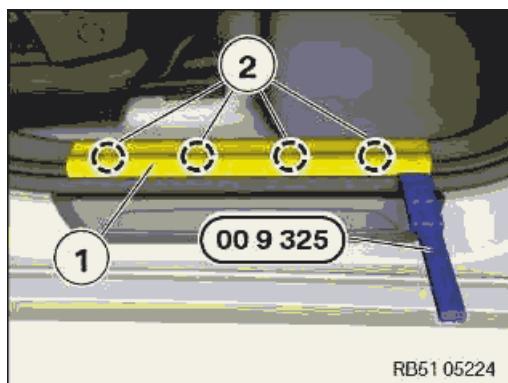
PRELIMINARY WORK

1 – Remove front right door sill cover strip

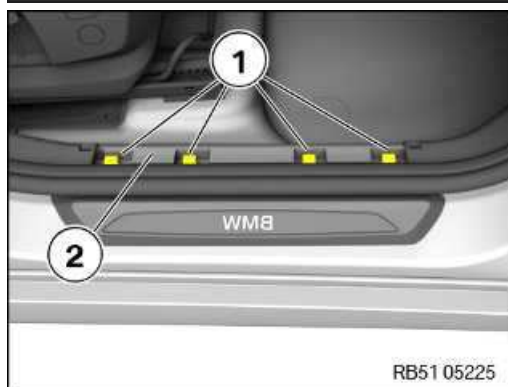


NOTICE

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



- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.

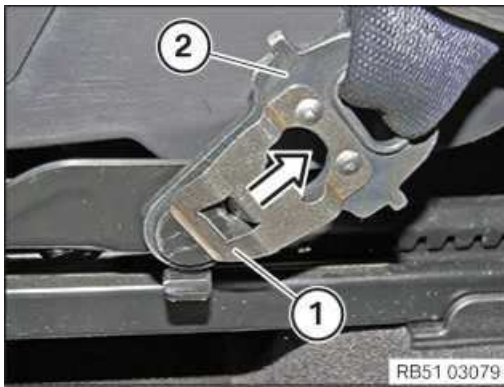


- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

2 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

3 – Remove front seat



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

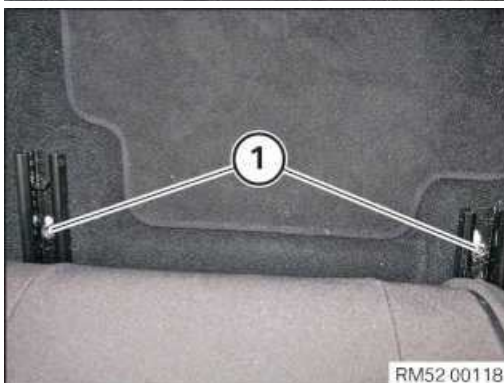


TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



- Adjust front seat completely to the rear.
- Loosen screws (1).

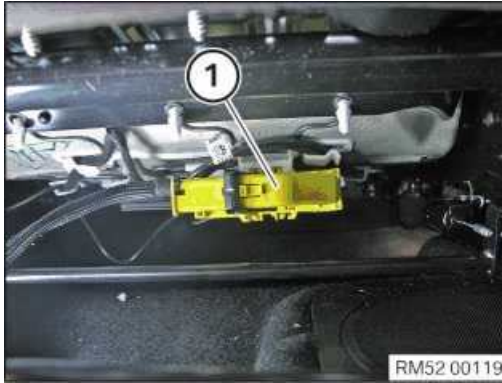


- Adjust front seat completely to the front.
- Loosen screws (1).

► Disconnecting all battery earth leads



- See additional information.



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.
- Cover the door sill using protective covers.
- Fold the front seat back and disconnect the plug connection (1).



RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Remove the front seat with the assistance of an auxiliary person.

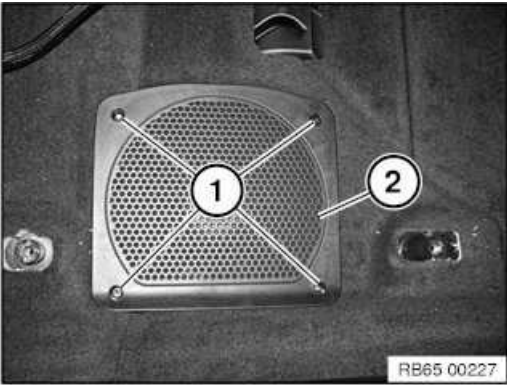
► Mounting the front seat on the universal seat mount

- Mounting the front seat on the special tool (universal seat mount) **2 154 711**.

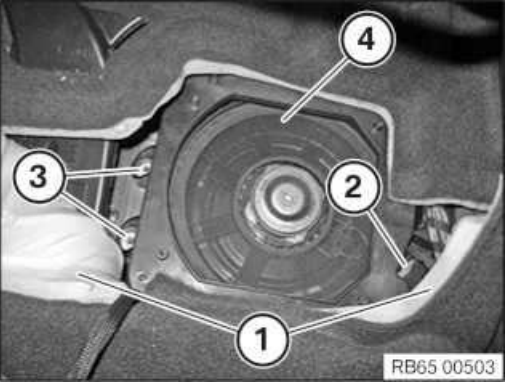
To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.



4 – Remove central bass

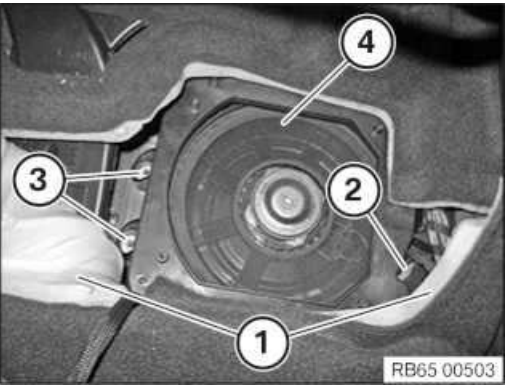


- Loosen screws (1).
- Remove the cover of the central bass (2).



- Fold up the carpet (1) as shown.
- Unlock and disconnect connector (2).
- Loosen nuts (3).
- Remove the central bass (4).

5 – Installing the central bass

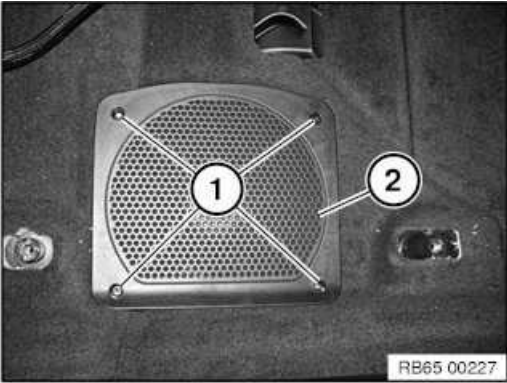


- Insert the central bass (4).
- Tighten nuts (3).

Central bass speaker to floor assembly

Nut		Tightening torque	5 Nm
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- Connect connectors (2) and lock.
- Correctly lay the carpet (1).



- Position the cover of the central bass (2).
- Tighten the screws (1).

Central bass speaker trim

Screw		Tightening torque	2 Nm
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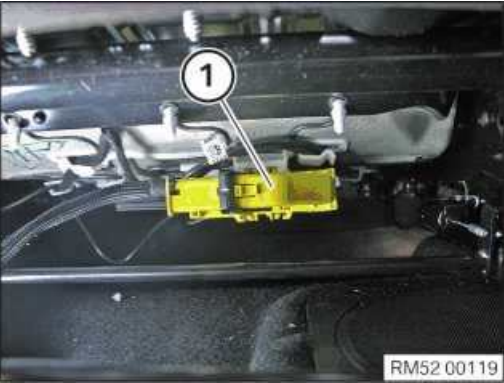
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TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



- **Removing the front seat from the universal seat mount .**
- Removing the seat from the special tool (universal seat mount) **2 154 711**.



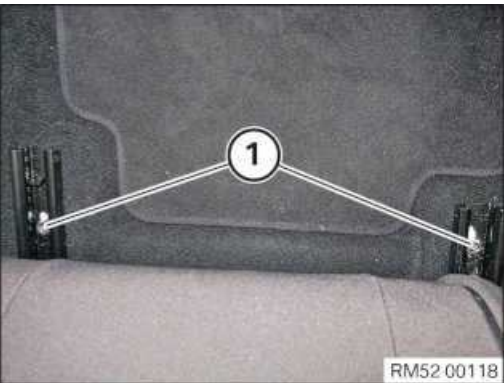
RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

- Cover the door sill using protective covers.



RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.

- Lift the front seat into the vehicle with an auxiliary person and position it.
 - Lay the front seat back and connect connector (1) .
 - Adjust the front seat to the rear.
 - Renew screws (1).
- Parts:** Bolts
- Tighten the screws (1).

Seat to body			
M10	Renew screw.	Tightening torque	42 Nm



- Adjust the front seat to the front.
- Renew screws (1).

Parts: Bolts

- Tighten the screws (1).

Seat to body

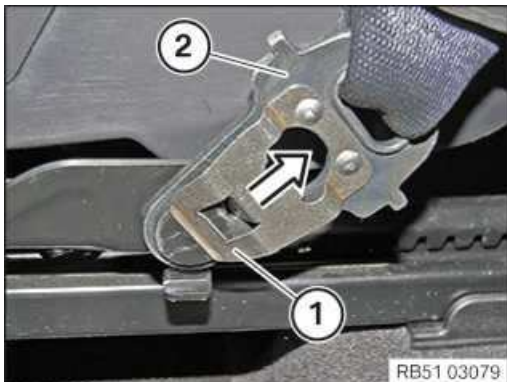
M10	Renew screw.	Tightening torque	42 Nm
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► Disconnecting all battery earth leads

- See additional information.

7 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

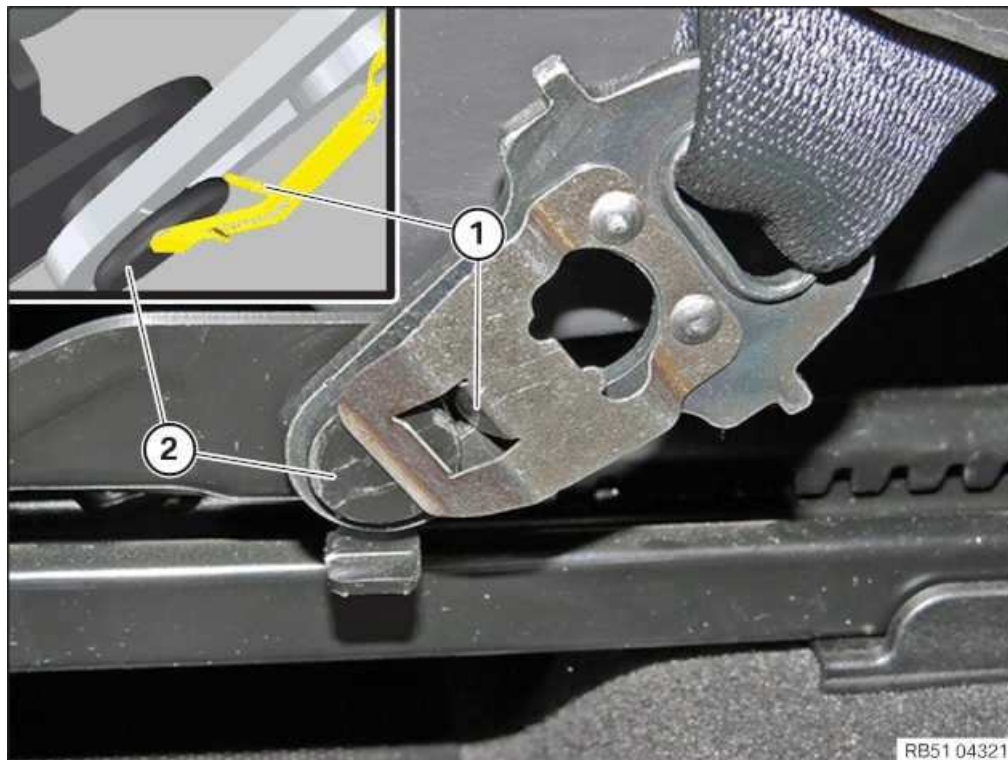
- » The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

► Correctly mount the front end fitting

End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).



WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



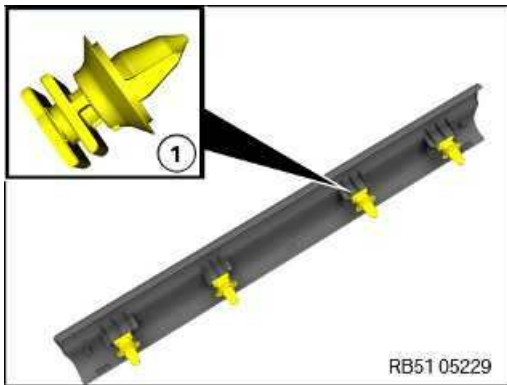
- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

8 – Install the front right door sill cover strip

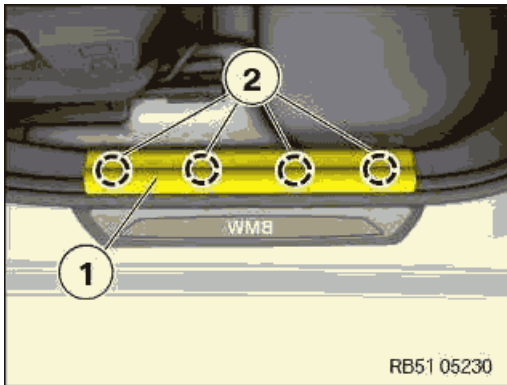


NOTICE

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



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



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

Additional Information

Overview of Tightening Torques

Central bass speaker to floor assembly

Used in step [5](#)

Nut		Tightening torque	5 Nm
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Central bass speaker trim

Used in step [5](#)

Screw		Tightening torque	2 Nm
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Seat to body

Used in step [6](#)

M10	Renew screw.	Tightening torque	42 Nm
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Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common

Used in step [1](#)

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

2 154 711 Fitting aid



Common

Used in step 3 6

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

Links

General repair instructions

Used in step

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

3

Repair instructions

Used in step

[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting the battery earth lead \(all battery earth leads\)](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting the battery earth lead \(all battery earth leads\)](#)

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[61 20 900 Disconnect and connect battery earth lead \(Plug-in Hybrid Electric Vehicle\)](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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[61 20 900 Disconnecting and connecting battery earth lead](#)

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61 20 900 Disconnecting and connecting battery earth lead	3 6

65 12 816 Replace Head Unit High (after vehicle diagnosis) (flat rate unit without programming/encoding, see 61 00 ...)



RISK OF DAMAGE

Damage to the head unit.

The plug connections of the head unit must not be disconnected if the battery is still connected.

- Disconnect all batteries.



RISK OF DAMAGE

Damage to the head unit.

The hard disk of the head unit can be damaged by vibration.

- Carry out mechanical work on the head unit and adjacent components with care.



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

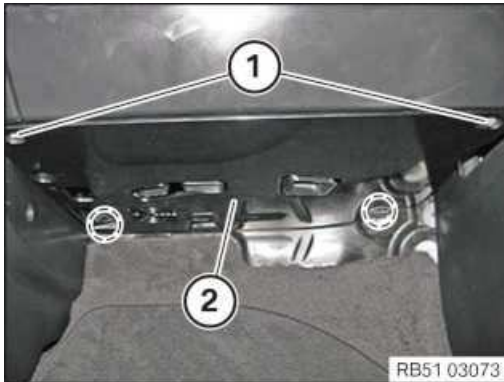
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

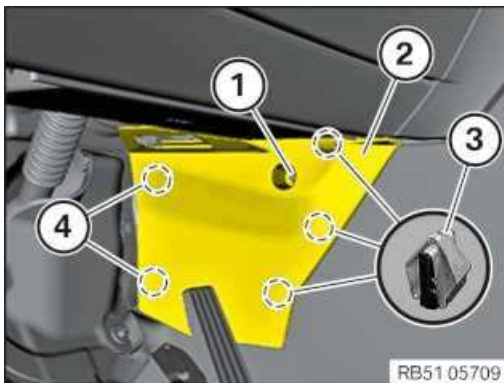
2 – Removing the instrument panel trim at bottom right



- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

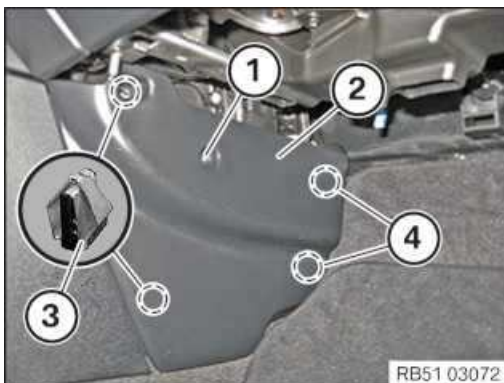
3 – Removing the side trim panel for the left and right centre console

► Removing side trim panel for the left centre console



- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

► Removing side trim panel for the centre console on the right side



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

4 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.
In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

5 – Remove the decorative trim from the centre console



RISK OF DAMAGE

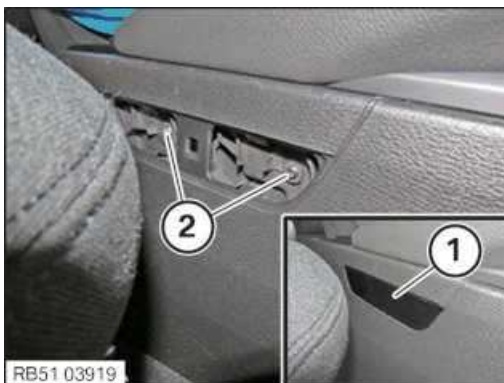
Scratches.

Tools and sharp-edged components can cause scratches.

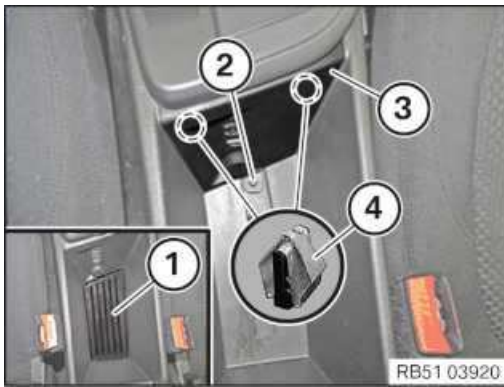
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

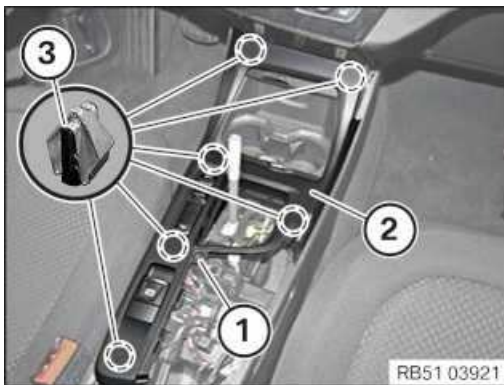


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

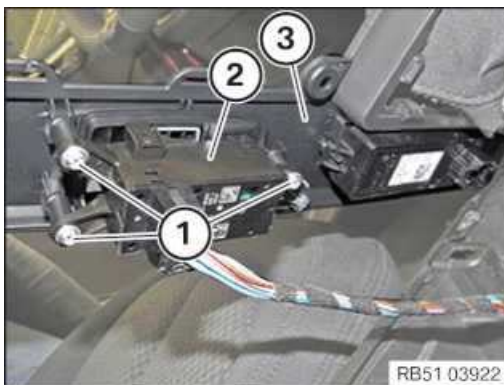


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

6 – Remove the centre console trim



- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



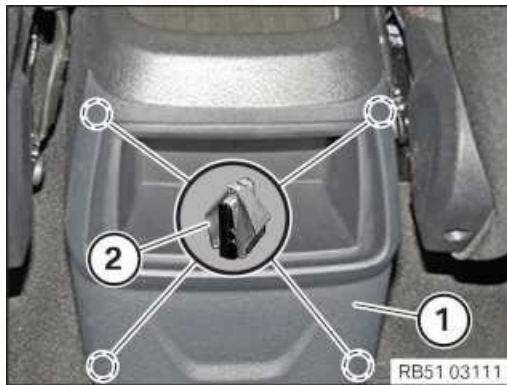
- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.
The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

7 – Removing the front storage compartment



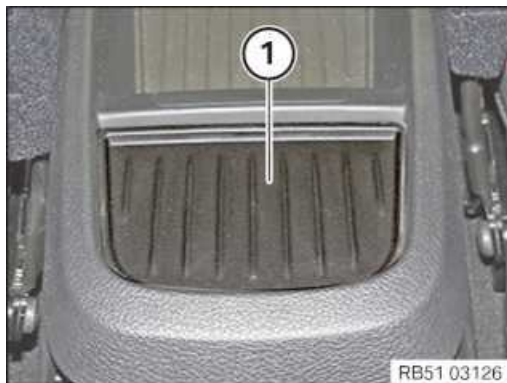
- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

8 – Removing the rear centre console trim

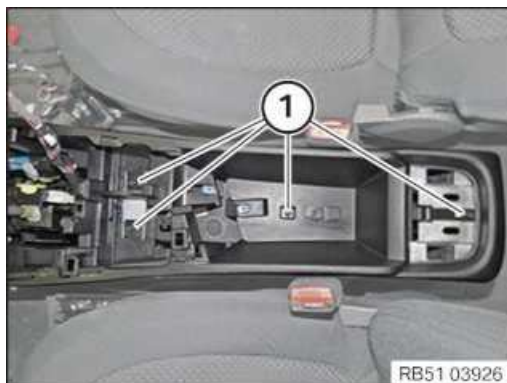


- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

9 – Remove complete centre console



- Remove the cover (1).



- Loosen screws (1).

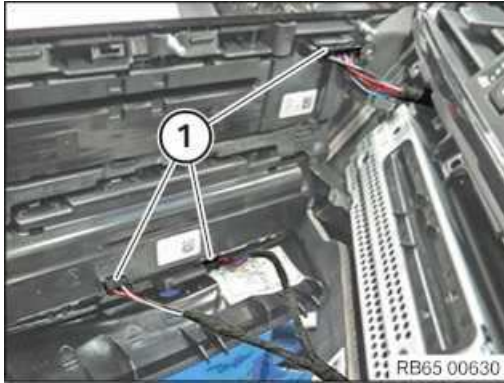


- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

10 – Removing the audio operating unit and the air conditioning control panel



- Unclip the trim (1) using special tool **2 298 505**.



- Unlock plug connection (1) and disconnect.
- Remove the audio operating unit and the air conditioning control panel.

MAIN WORK

11 – Remove Head Unit High (HU-H)



RISK OF DAMAGE



Electrostatic discharge.

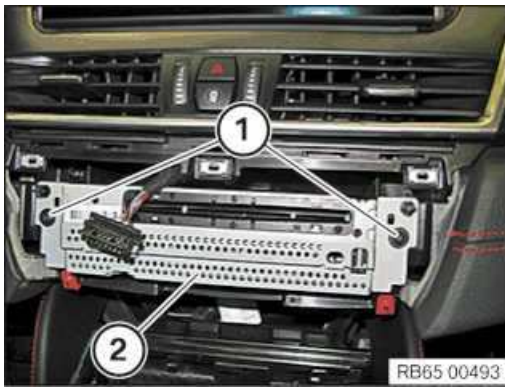
Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Remove the wiring harness (1).

In the factory, the wiring harness (1) is routed such that not enough excess length exists to remove the head unit.



- Loosen screws (1).
- Pull out the head unit (2) a bit.



- Unlock and disconnect all connectors in the marked area.
- Remove head unit (1).

12 – Install the Head Unit High (HU-H)



RISK OF DAMAGE



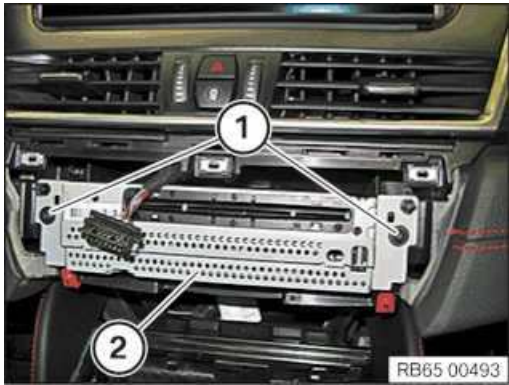
Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Position head unit (1).
- Connect and lock all connectors in the marked area.



- Slide in the head unit (2) correctly.
- Tighten the screws (1).

Head unit to instrument panel

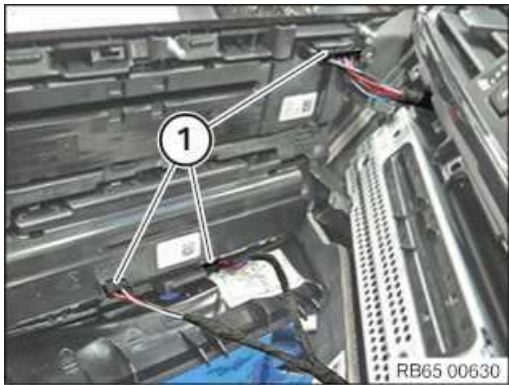
Screw		Tightening torque	1,8 Nm
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- Route the wiring harness (1) correctly.

POSTPROCESSES

13 – Installing audio operating unit and air conditioning control panel

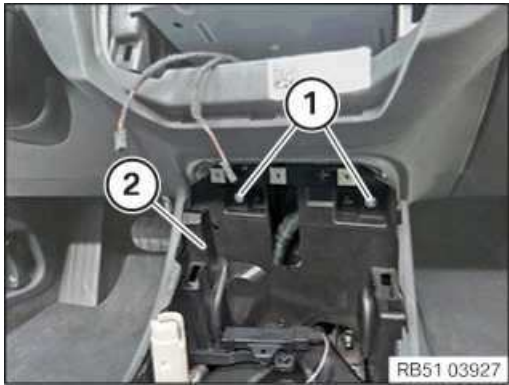


- Position audio operating unit and air conditioning control panel.
- Connect plug connection (1) and lock.



- Correctly position trim (1) and clip it into the instrument panel (2).

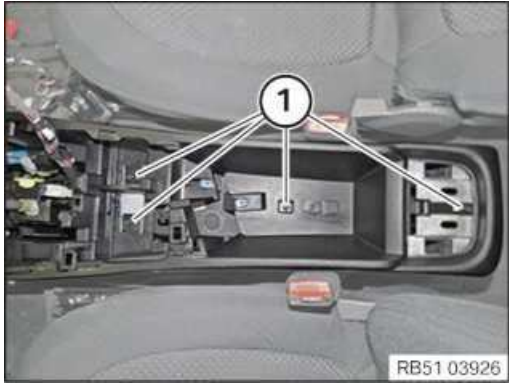
14 – Install centre console, complete



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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- Tighten the screws (1).

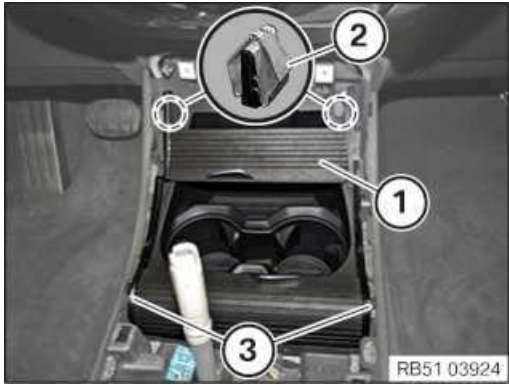
Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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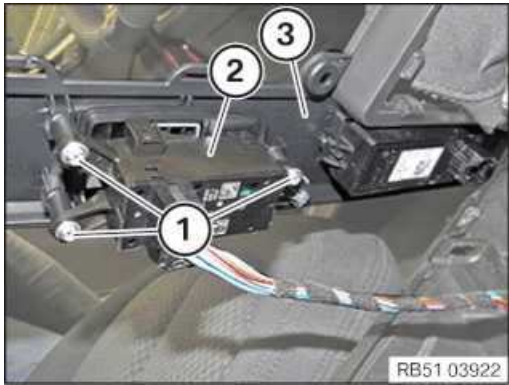
- Install the cover (1).

15 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

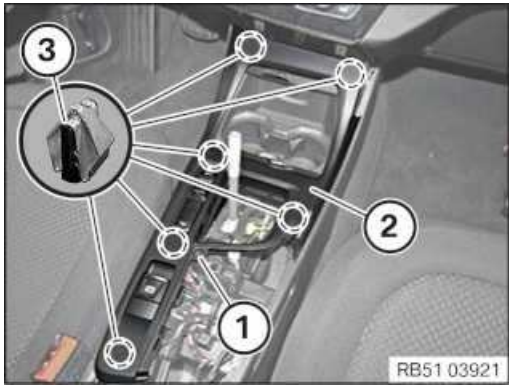
16 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm
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- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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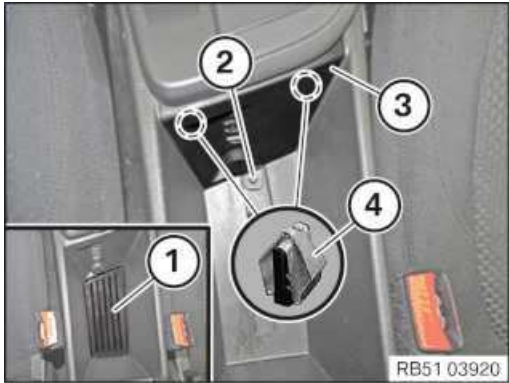
17 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm
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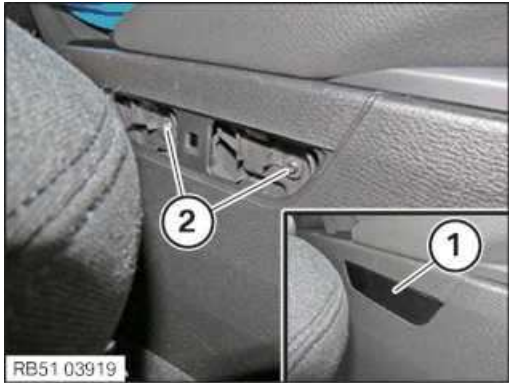
- Insert the insert (1).

- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

- Install cover (1) and engage.



18 – Installing the gearshift lever cover

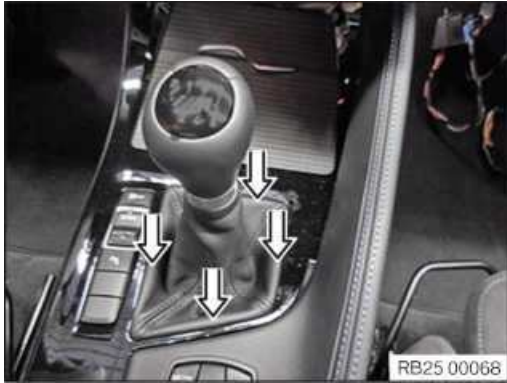


- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

The anti-twist lock must bite.

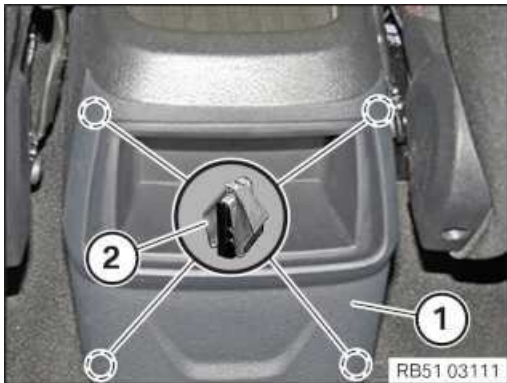
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

19 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

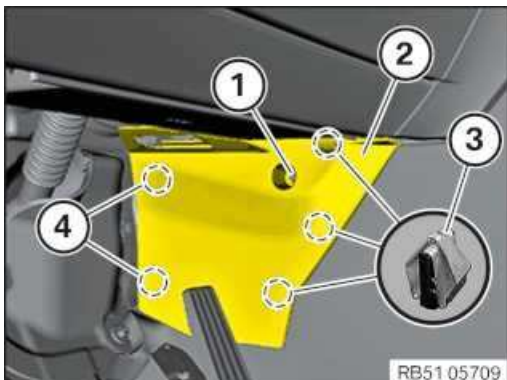
20 – Installing side trim panel for the left and right centre console

► Installing side trim panel for the left centre console



TECHNICAL INFORMATION

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



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

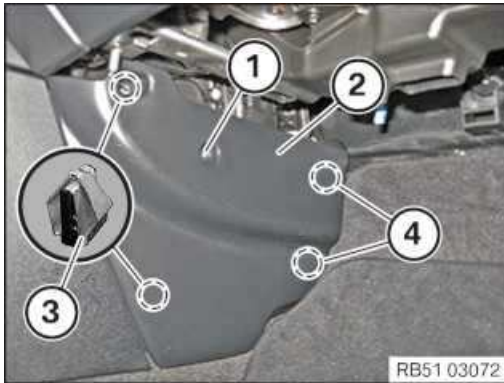
Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

► Installing side trim panel for the right centre console



TECHNICAL INFORMATION

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



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

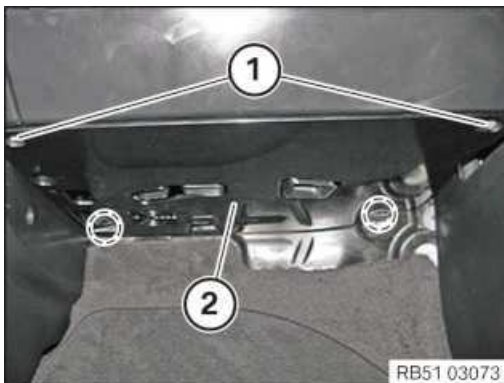
Oval-head screw		Tightening torque	1,8 Nm
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21 – Installing the botto right instrument panel trim



TECHNICAL INFORMATION

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



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm
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22 – Disconnecting all battery earth leads



- See additional information.

23 – Encode/program control unit(s)

Prerequisite

Replacement of the control unit.



TECHNICAL INFORMATION

Use the most recent software version to prevent faults during programming/encoding.
The battery voltage must not fall below 13.0 V during programming.
Use only chargers for a low volt-vehicle electrical system that are recommended by BMW.



TECHNICAL INFORMATION

No high-voltage switch off is required in electric vehicles or hybrid vehicles for programming/encoding.
The high-voltage system will be automatically switched off by the programming system.

Exception:

BMW I01: Note Product and Measures Management Aftersales measure 55176388.

- Connect the battery charger to the vehicle.
- Connect the programming system with the vehicle.
- Determine the action plan.
- Accept and fully process the measures plan.
- If applicable, connect the workshop system to the vehicle, depending on the reworking list.
- Carry out vehicle test.
- Delete the fault memory.
- The information about programming the workshop system and the corresponding notes in the user documentation must be observed.
- Wait until programming/encoding has been completed.
- Disconnect the programming system from the vehicle.
- Disconnect the battery charger from the vehicle.

Additional Information

Overview of Tightening Torques

Head unit to instrument panel

Used in step [12](#)

		Tightening torque	
Screw			1,8 Nm

Screw connection for centre console

Used in step [14](#) [16](#) [17](#)

		Tightening torque	
Oval-head screw			1,8 Nm

Parking brake button

Used in step [16](#)

		Tightening torque	
Oval-head screw			1,5 Nm

Trim to centre console

Used in step [17](#) [20](#)

		Tightening torque	
Oval-head screw			1,8 Nm

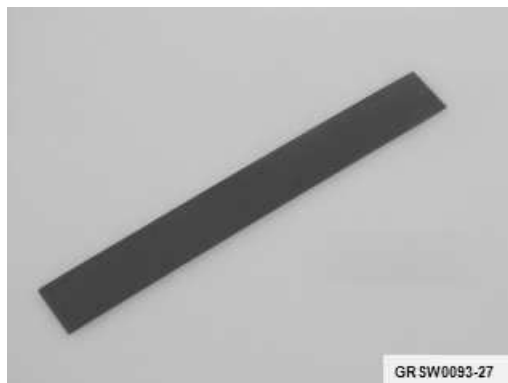
Bottom left footwell trim to instrument panel

Used in step [21](#)

		Tightening torque	
M5 hexagon nut			2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common

Used in step 5

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge

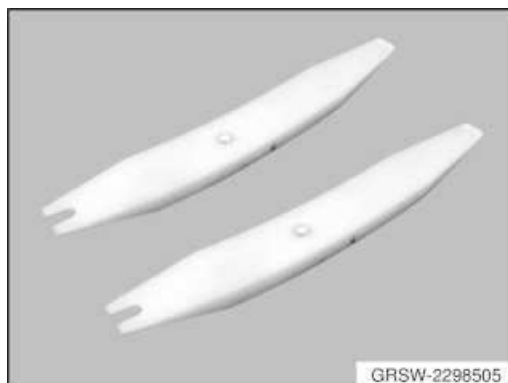


Common

Used in step 6 8

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

2 298 505 Wedge



Common

Used in step 10

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 22

61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 35 ... Notes on ESD protection (Electro Static Discharge)		

65 12 574 Replacing amplifier (Harman Kardon hi-fi system) (after vehicle diagnosis) (flat rate specification without programming/encoding, see 61 00 ...)



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.

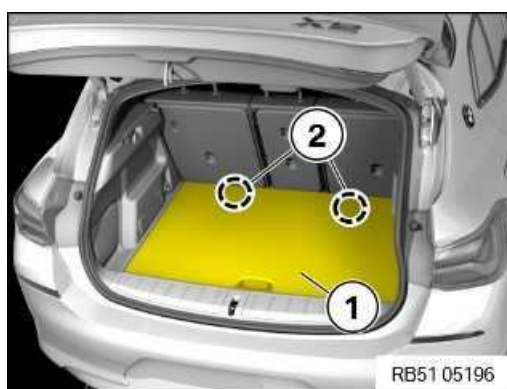
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



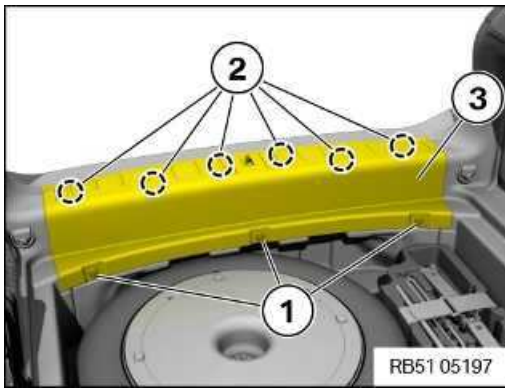
- See additional information.

2 – Removing the luggage compartment removable panel



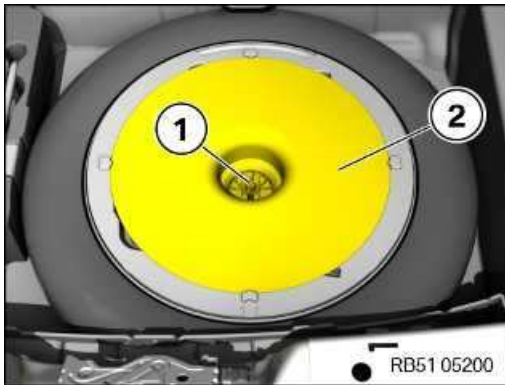
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

3 – Removing the loading edge trim

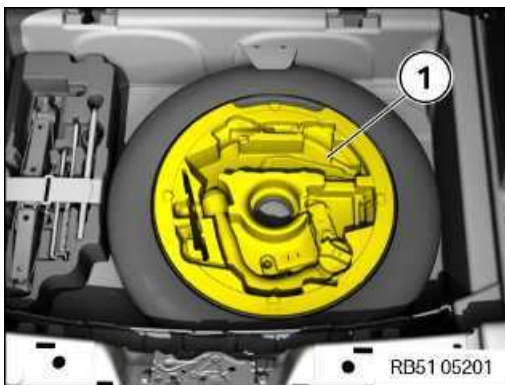


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

4 – Removing the compact spare wheel



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

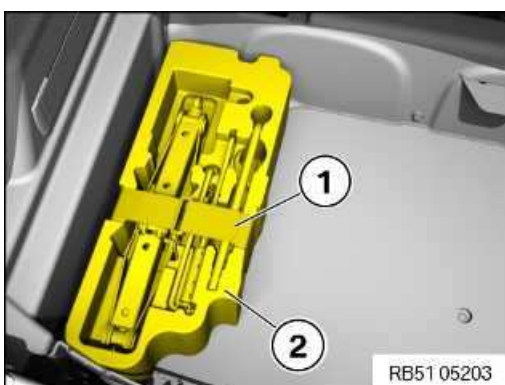


- Remove the oddments tray from the emergency wheel (1).



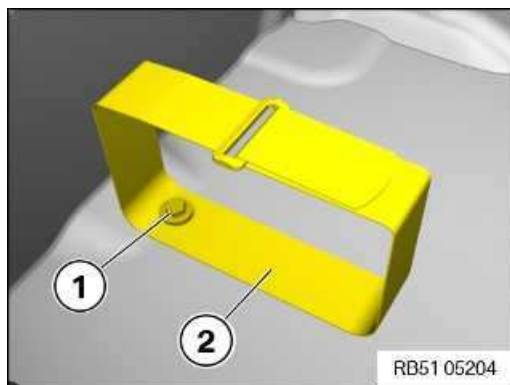
- Remove the emergency wheel (1).

5 – Remove the tool kit



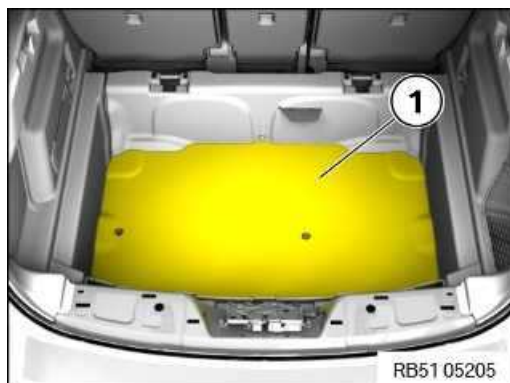
- Open the hook and loop tape (1).
- Remove the tool kit (2).

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

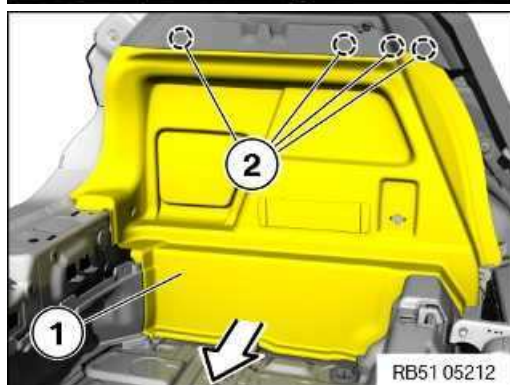


- Remove the luggage compartment floor trim panel (1) upwards.

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



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



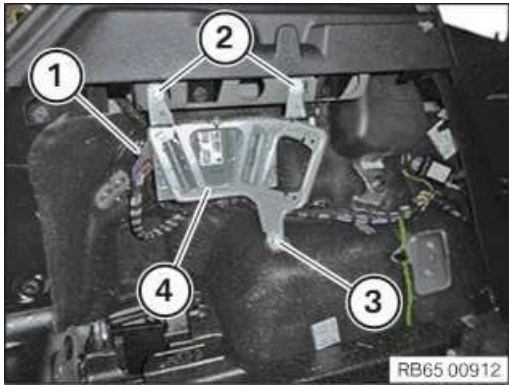
NOTICE

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

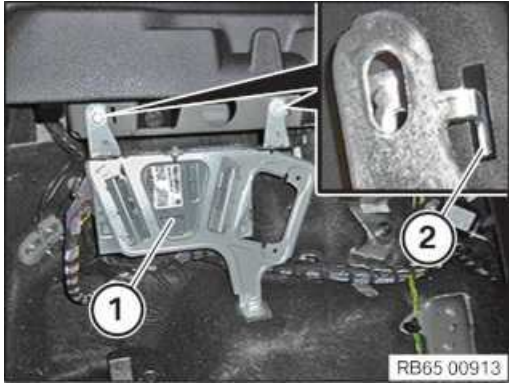
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

MAIN WORK

9 – Remove audio amplifier

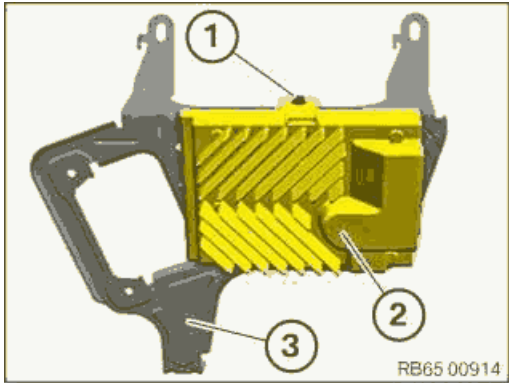


- Unlock and disconnect connector (1).
- Loosen screws (2).
- Disengage audio amplifier with holder (4) upwards out of the latch mechanism (3).

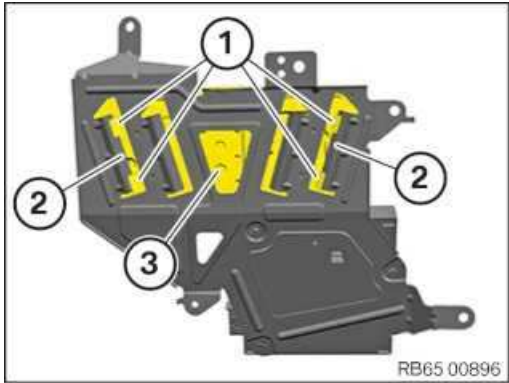


- Feed out guides (2).
- Remove audio amplifier (1) completely with holder.

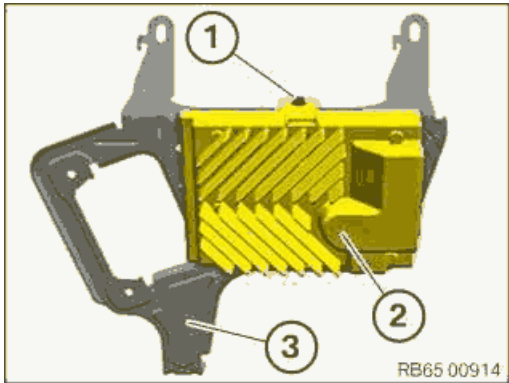
10 – Renew audio amplifier



- Loosen screw (1).
- Slide the audio amplifier (2) upwards and remove from holder (3).



- The tabs (1) of the audio amplifier (3) must be correctly pushed into the guides (2) on the holder.

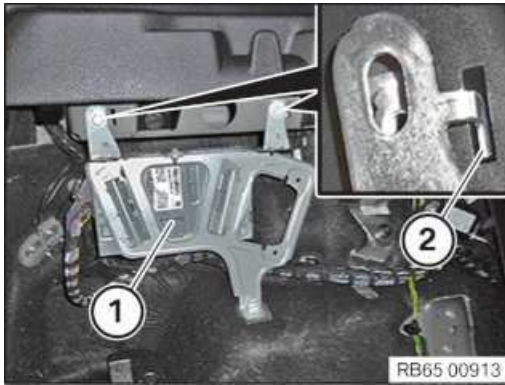


- Position the audio amplifier (2) on the holder (3).
- Tighten down screw (1).

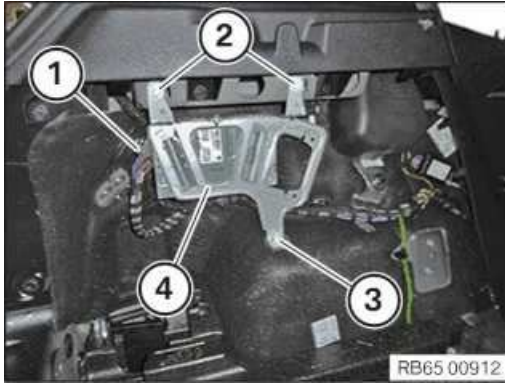
Amplifier / RAM on holder

M5 screw		Tightening torque	3 Nm
Nut		Tightening torque	3 Nm

11 – Installing the audio amplifier



- Install audio amplifier (1) completely with holder.
- Feed in guides (2).



- Engage audio amplifier with the holder (4) downwards into the latch mechanism (3).
- Tighten the screws (2).

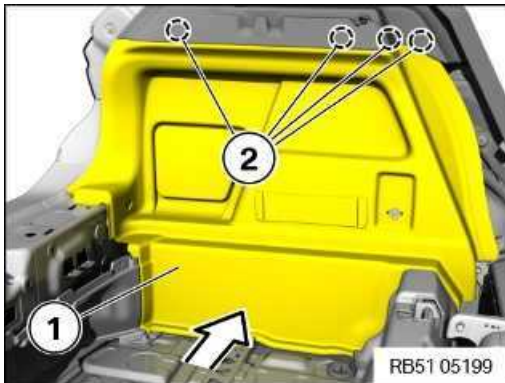
Bracket to body

Screw		Tightening torque	5 Nm
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- Connect connectors (1) and lock.

POSTPROCESSES

12 – Install luggage compartment wheel arch trim panel at left



NOTICE

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

- Push the luggage compartment wheel arch trim panel (1) down in the direction of the arrow and feed it into the guides (2) and under the C-pillar trim bottom.



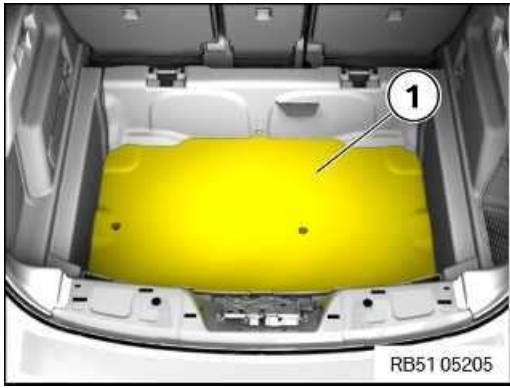
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

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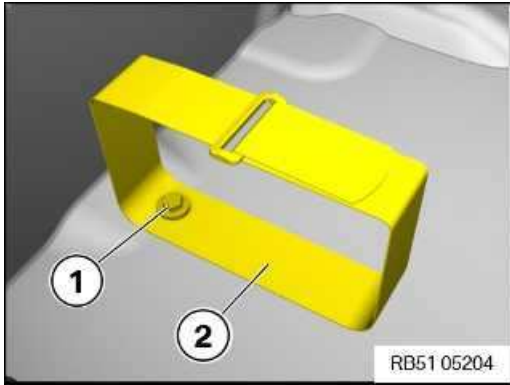
- Clip in the covers (1).

13 – Installing the luggage compartment floor trim panel



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

14 – Inserting the Velcro fastener for the toolkit

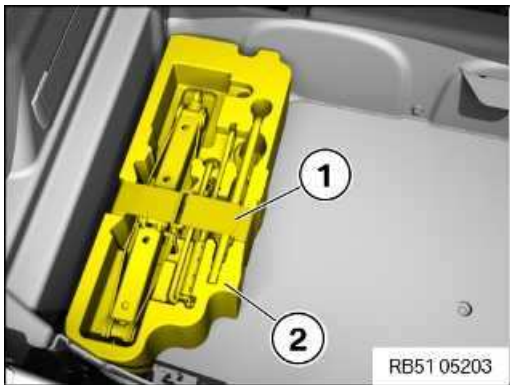


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

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

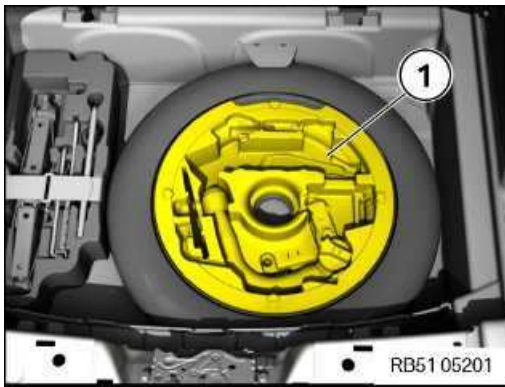


- Install the tool kit (2).
- Close the hook and loop tape (1).

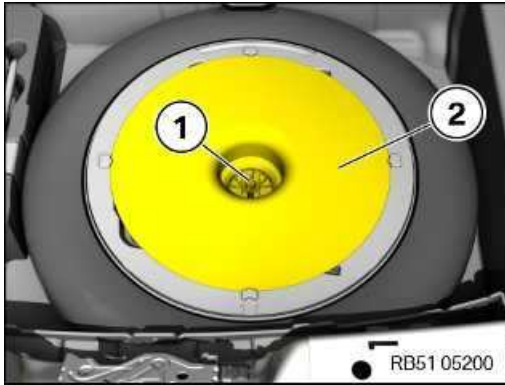
16 – Install the emergency wheel



- Insert compact spare wheel(1).

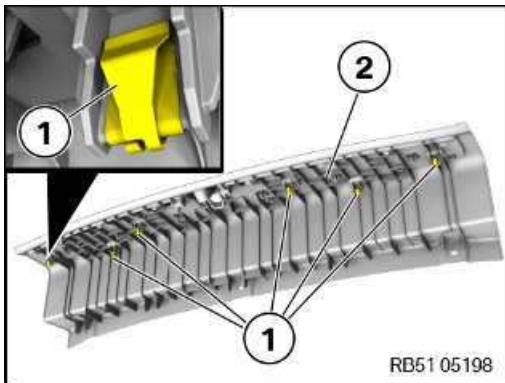


- Insert oddments tray into the compact spare wheel (1).

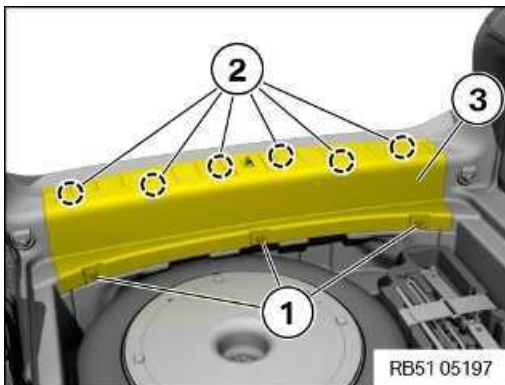


- Insert the lid (2).
- Hand-tighten the bolt (1).

17 – Installing loading edge trim

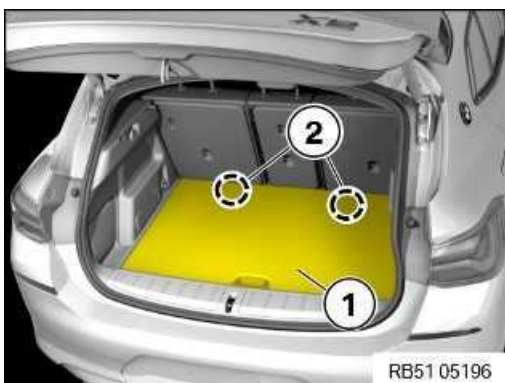


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- 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).

18 – Installing the luggage compartment removable panel



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

19 – Disconnecting all battery earth leads



- See additional information.

20 – Encode/program control unit(s)

Prerequisite

Replacement of the control unit.



TECHNICAL INFORMATION

Use the most recent software version to prevent faults during programming/encoding.
The battery voltage must not fall below 13.0 V during programming.
Use only chargers for a low volt-vehicle electrical system that are recommended by BMW.



TECHNICAL INFORMATION

No high-voltage switch off is required in electric vehicles or hybrid vehicles for programming/encoding.
The high-voltage system will be automatically switched off by the programming system.

Exception:

BMW I01: Note Product and Measures Management Aftersales measure 55176388.

- Connect the battery charger to the vehicle.
- Connect the programming system with the vehicle.
- Determine the action plan.
- Accept and fully process the measures plan.
- If applicable, connect the workshop system to the vehicle, depending on the reworking list.
- Carry out vehicle test.
- Delete the fault memory.
- The information about programming the workshop system and the corresponding notes in the user documentation must be observed.
- Wait until programming/encoding has been completed.
- Disconnect the programming system from the vehicle.
- Disconnect the battery charger from the vehicle.

Additional Information

Overview of Tightening Torques

Used in step 10

Bracket to body Used in step [11](#)

Lashing eye in luggage compartment Used in step [12](#)

Toolkit hook and loop tape to body Used in step 14

Links

Repair instructions	Used in step
1. Turn the engine off.	1
2. Remove the air filter.	2
3. Check the oil level.	3
4. Add oil if needed.	4
5. Replace the air filter.	5
6. Turn the engine on.	6

61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting the battery earth lead (all battery earth leads)	1	19
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61 20 900	Disconnecting and connecting the battery earth lead (all battery earth leads)	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting the battery earth lead (all battery earth leads)	1	19
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61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61 20 900	Disconnecting and connecting battery earth lead	1	19
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61.00.000 Disconnecting and reconnecting battery: earth lead	1	10
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Test	Test description	Test results
01.20.000	Disconnecting and connecting battery earth lead	1.10
01.20.000	Disconnecting and connecting battery earth lead	1.10

01.20.000 Disconnecting and connecting battery earth lead	1	10
01.20.000 Disconnecting and connecting battery earth lead	1	10

01.20.500 Disconnecting and connecting battery earth lead	1	10
01.20.600 Dis	1	10

01.20.500 Disconnecting and connecting the battery earthead (all battery eartheads)	1.10
01.20.600 Disconnecting and connecting battery earthead	1.10

01.20.000 Disconnecting and connecting battery earth lead	1.10
01.20.000 Disconnecting and connecting battery earth lead	1.10

01.20.500 Disconnecting and connecting battery earth lead	1	10
01.20.600 Disconnecting and connecting battery earth lead	1	10

01-20-500 Disconnecting and connecting battery earth lead

01-20-900 Disconnecting and connecting battery earth lead

01.20.900 Disconnecting and connecting battery earth lead	1	19
01.20.930 Disconnecting and connecting battery earth lead	1	19

01-20-900 Disconnecting and connecting battery earth lead	1	19
01-20-920 Fit battery earth lead to battery terminal	1	19

01 20 900 Disconnecting and connecting battery earth lead

0133 ... Notes on ESD protection (Electro Static Discharge)

65 12 821 Replacing the Head Unit Basic (after vehicle diagnosis) (FRU specification without programming/encoding, see 61 00 ...)



RISK OF DAMAGE

Damage to the head unit.

The plug connections of the head unit must not be disconnected if the battery is still connected.

- Disconnect all batteries.



RISK OF DAMAGE

Damage to the head unit.

The hard disk of the head unit can be damaged by vibration.

- Carry out mechanical work on the head unit and adjacent components with care.



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.

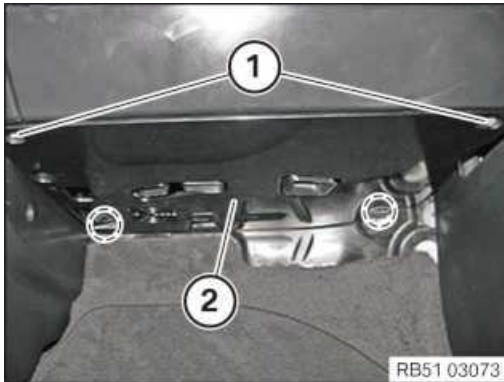
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

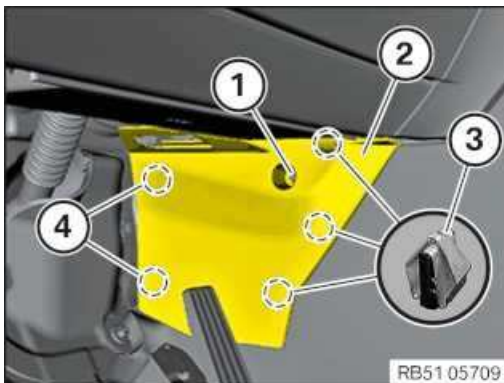
2 – Removing the instrument panel trim at bottom right



- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

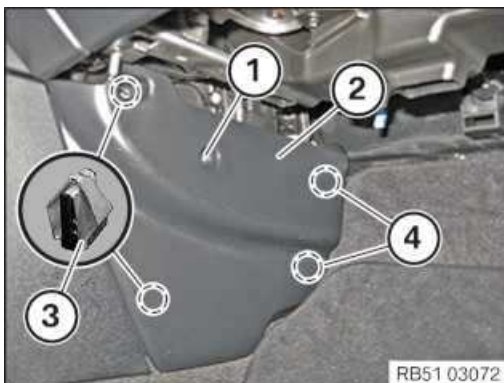
3 – Removing the side trim panel for the left and right centre console

► Removing side trim panel for the left centre console



- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

► Removing side trim panel for the centre console on the right side



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

4 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.
In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

5 – Remove the decorative trim from the centre console



RISK OF DAMAGE

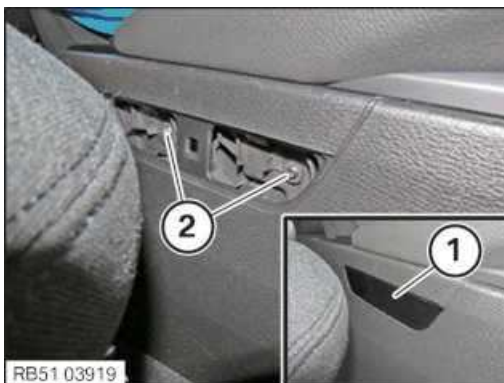
Scratches.

Tools and sharp-edged components can cause scratches.

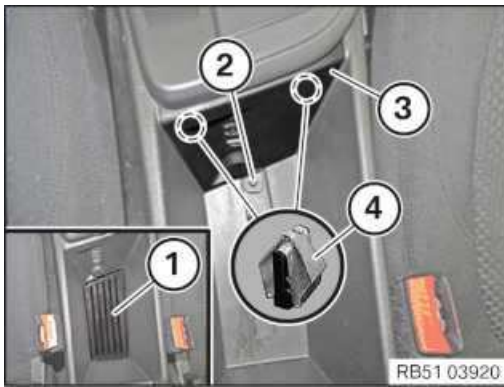
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

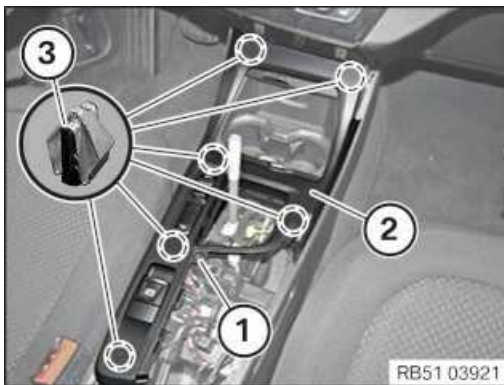


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

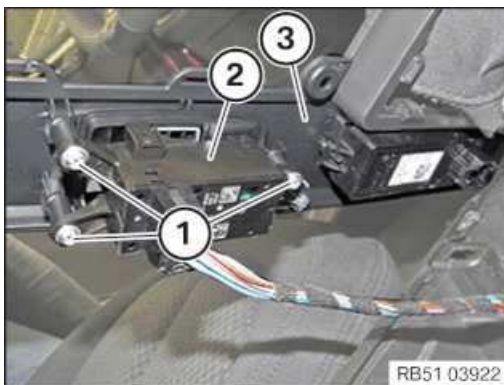


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

6 – Remove the centre console trim



- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



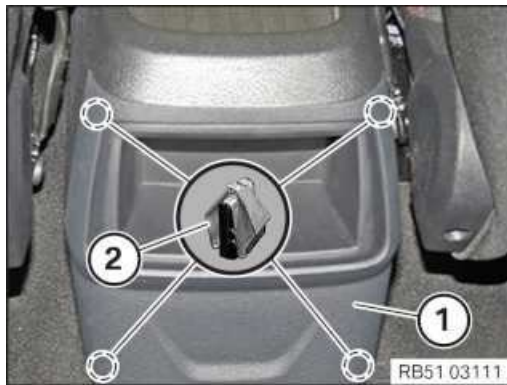
- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.
The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

7 – Removing the front storage compartment



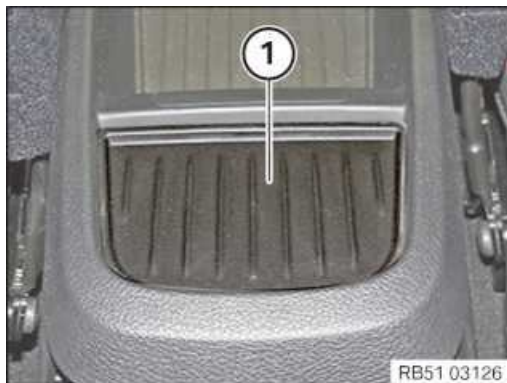
- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

8 – Removing the rear centre console trim

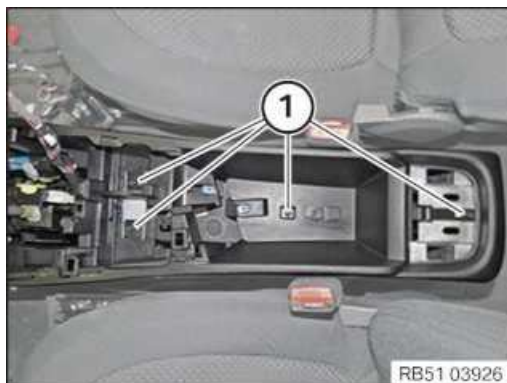


- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

9 – Remove complete centre console



- Remove the cover (1).



- Loosen screws (1).

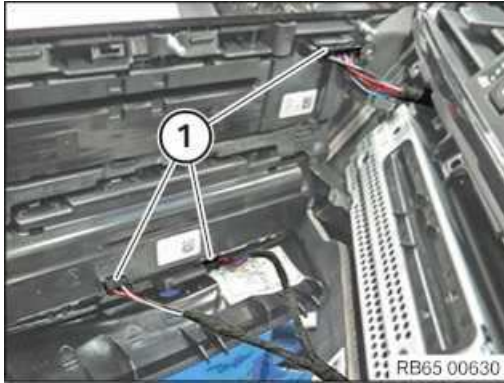


- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

10 – Removing the audio operating unit and the air conditioning control panel



- Unclip the trim (1) using special tool **2 298 505**.



- Unlock plug connection (1) and disconnect.
- Remove the audio operating unit and the air conditioning control panel.

MAIN WORK

11 – Remove Head Unit High (HU-H)



RISK OF DAMAGE



Electrostatic discharge.

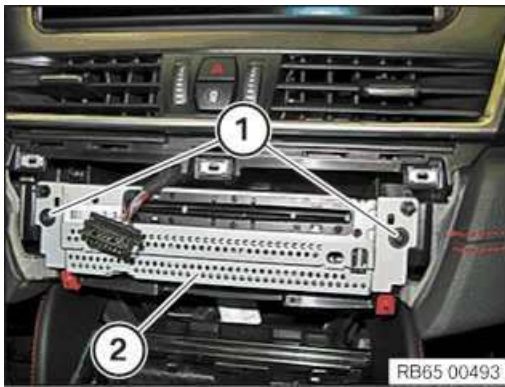
Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Remove the wiring harness (1).

In the factory, the wiring harness (1) is routed such that not enough excess length exists to remove the head unit.



- Loosen screws (1).
- Pull out the head unit (2) a bit.



- Unlock and disconnect all connectors in the marked area.
- Remove head unit (1).

12 – Install the Head Unit High (HU-H)



RISK OF DAMAGE



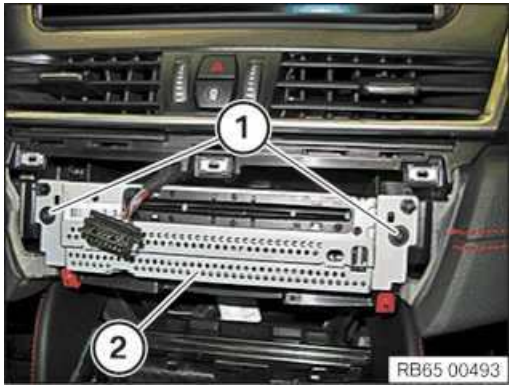
Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Position head unit (1).
- Connect and lock all connectors in the marked area.



- Slide in the head unit (2) correctly.
- Tighten the screws (1).

Head unit to instrument panel

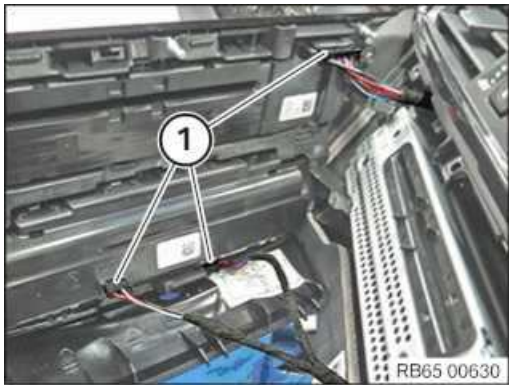
Screw		Tightening torque	1,8 Nm
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- Route the wiring harness (1) correctly.

POSTPROCESSES

13 – Installing audio operating unit and air conditioning control panel

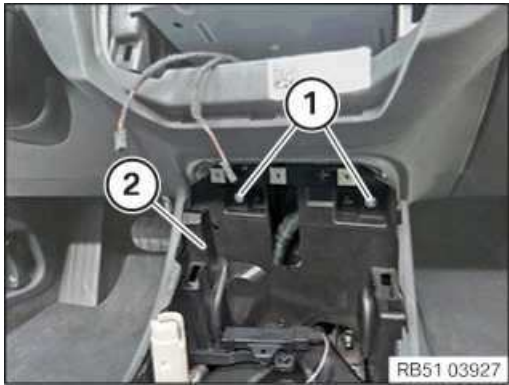


- Position audio operating unit and air conditioning control panel.
- Connect plug connection (1) and lock.



- Correctly position trim (1) and clip it into the instrument panel (2).

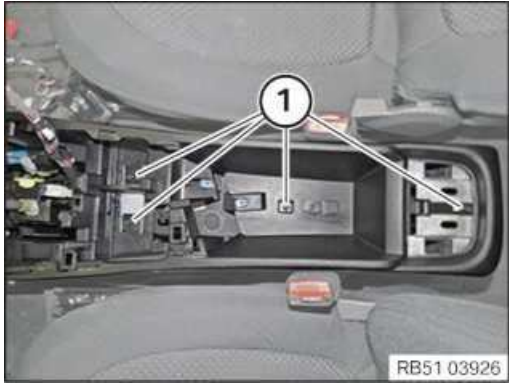
14 – Install centre console, complete



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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- Tighten the screws (1).

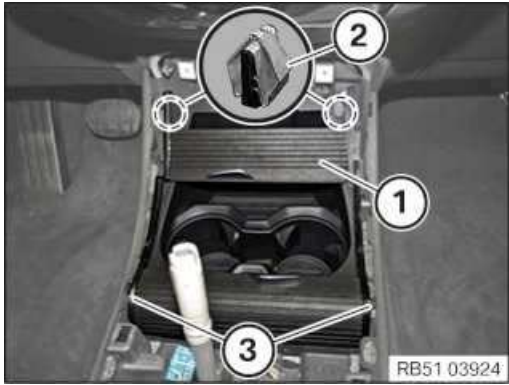
Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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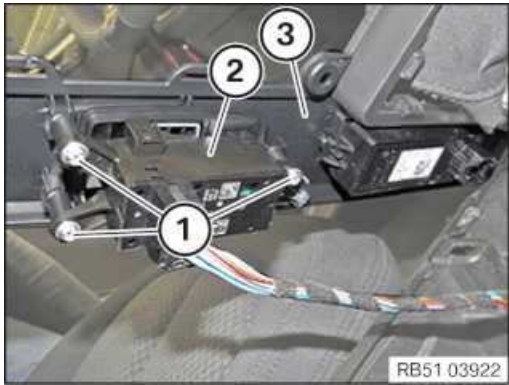
- Install the cover (1).

15 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

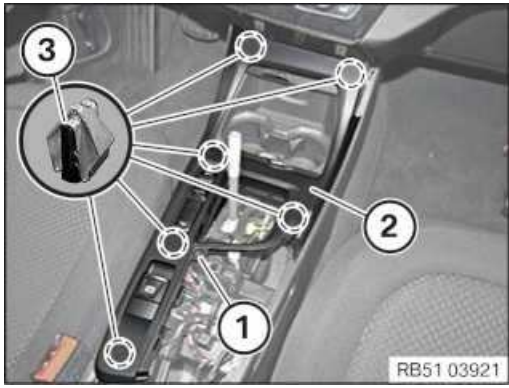
16 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm
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- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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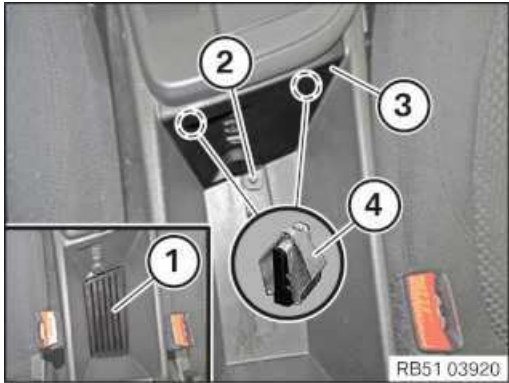
17 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm
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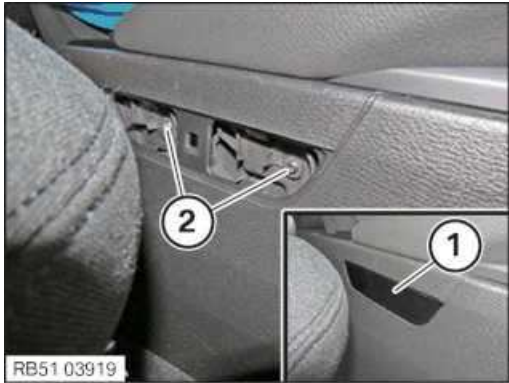
- Insert the insert (1).

- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
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- Install cover (1) and engage.



18 – Installing the gearshift lever cover

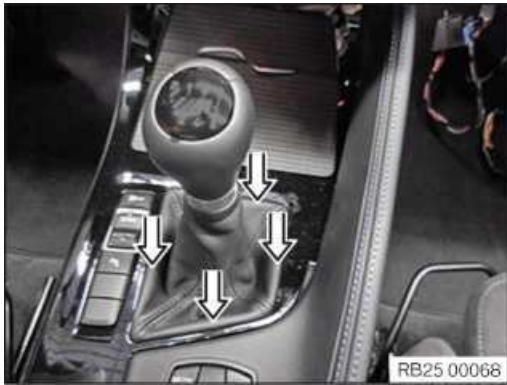


- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

The anti-twist lock must bite.

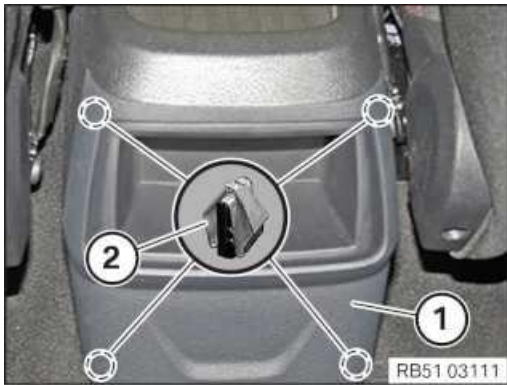
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

19 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

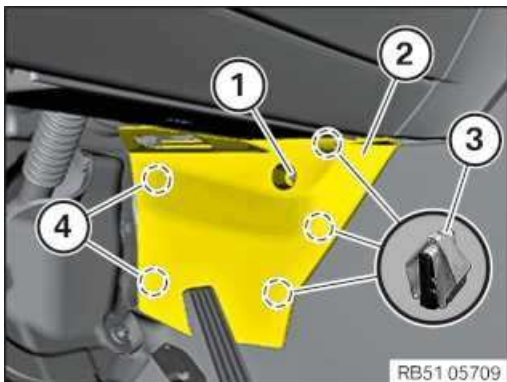
20 – Installing side trim panel for the left and right centre console

► Installing side trim panel for the left centre console

i

TECHNICAL INFORMATION

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



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

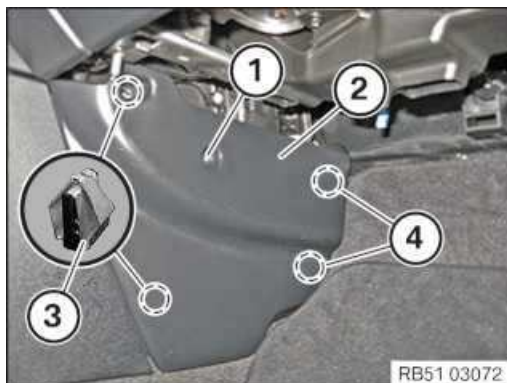
Oval-head screw		Tightening torque	1,8 Nm
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► Installing side trim panel for the right centre console



TECHNICAL INFORMATION

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



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

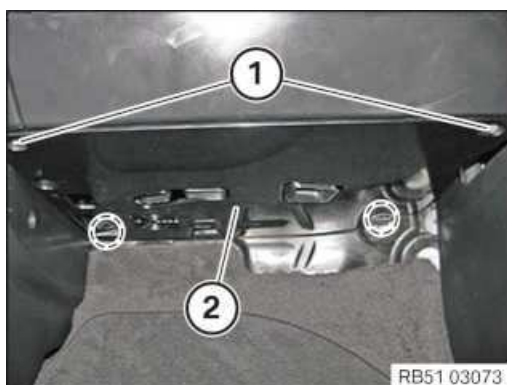
Oval-head screw		Tightening torque	1,8 Nm
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21 – Installing the botto right instrument panel trim



TECHNICAL INFORMATION

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



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm
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22 – Disconnecting all battery earth leads



- See additional information.

23 – Encode/program control unit(s)

Prerequisite

Replacement of the control unit.



TECHNICAL INFORMATION

Use the most recent software version to prevent faults during programming/encoding.
 The battery voltage must not fall below 13.0 V during programming.
 Use only chargers for a low volt-vehicle electrical system that are recommended by BMW.



TECHNICAL INFORMATION

No high-voltage switch off is required in electric vehicles or hybrid vehicles for programming/encoding.
 The high-voltage system will be automatically switched off by the programming system.

Exception:

BMW I01: Note Product and Measures Management Aftersales measure 55176388.

- Connect the battery charger to the vehicle.
- Connect the programming system with the vehicle.
- Determine the action plan.
- Accept and fully process the measures plan.
- If applicable, connect the workshop system to the vehicle, depending on the reworking list.
- Carry out vehicle test.
- Delete the fault memory.
- The information about programming the workshop system and the corresponding notes in the user documentation must be observed.
- Wait until programming/encoding has been completed.
- Disconnect the programming system from the vehicle.
- Disconnect the battery charger from the vehicle.

Additional Information

Overview of Tightening Torques

Head unit to instrument panel

Used in step [12](#)

Screw		Tightening torque	1,8 Nm
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Screw connection for centre console

Used in step [14](#) [16](#) [17](#)

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

Parking brake button

Used in step [16](#)

Oval-head screw		Tightening torque	1,5 Nm
-----------------	--	-------------------	--------

Trim to centre console

Used in step [17](#) [20](#)

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

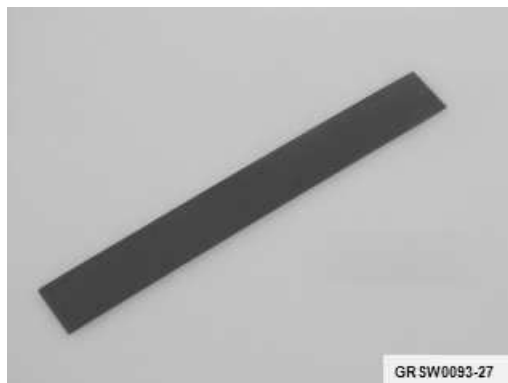
Bottom left footwell trim to instrument panel

Used in step [21](#)

M5 hexagon nut		Tightening torque	2 Nm
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Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common

Used in step 5

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge

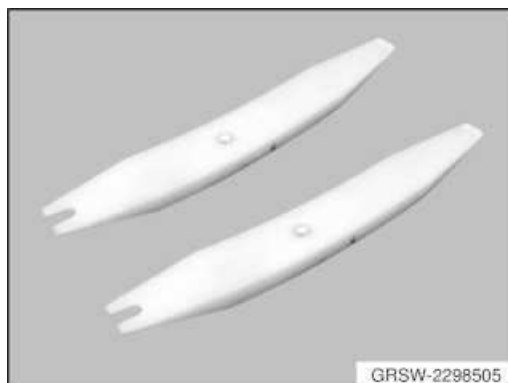


Common

Used in step 6 8

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

2 298 505 Wedge



Common

Used in step 10

Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

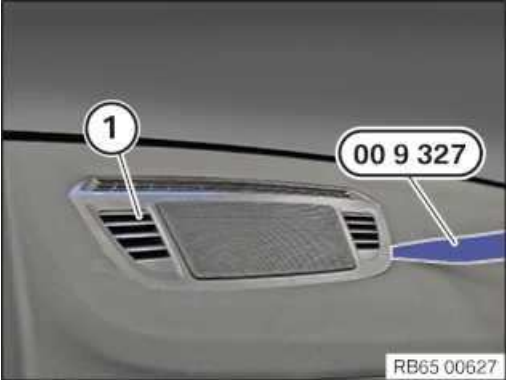
Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 22

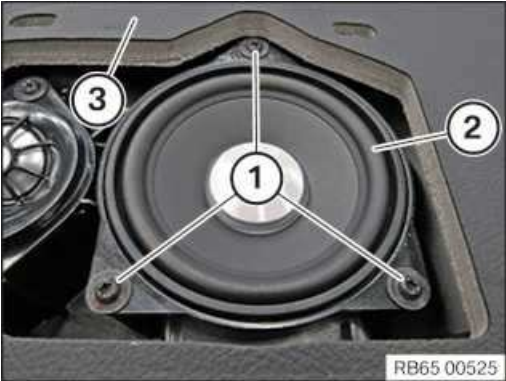
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 35 ... Notes on ESD protection (Electro Static Discharge)		

65 13 060 Removing and installing/replacing speaker (mid-range speaker in instrument panel trim)

1 – Remove the mid-range speaker from the instrument panel

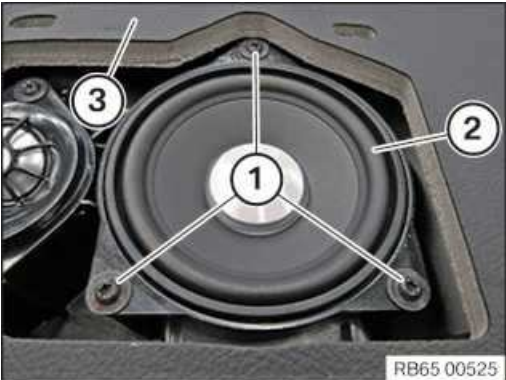


- Unclip the speaker cover (1) using the special tool **0 496 571 (00 9 327)** and remove upwards.



- Loosen screws (1).
- Disconnect plug connection underneath.
- Guide the mid-range speaker (2) out of the instrument panel (3) and remove it.

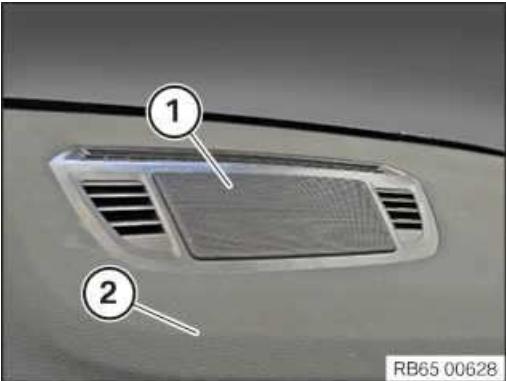
2 – Install the mid-range speakers in the instrument panel



- Connect the connector below it to the mid-range speaker (2).
- Position the mid-range speaker (2) in the instrument panel (3).
- Tighten the screws (1).

Speaker to support / support to instrument panel / support to body

Screw		Tightening torque	1,8 Nm
-------	--	-------------------	--------



- Check the latch mechanisms on the speaker cover (1) for damage and renew them if necessary.
The latch mechanisms must not be missing or faulty.
- Engage the speaker cover (1) correctly into the instrument panel (2).

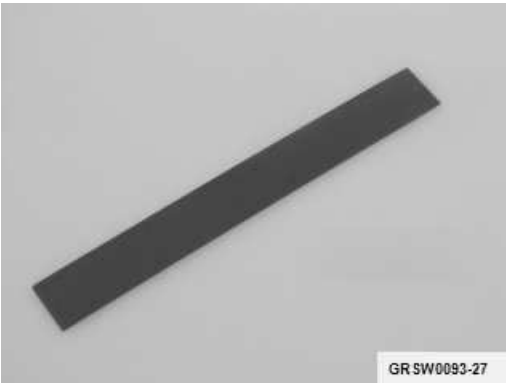
Additional Information

Overview of Tightening Torques

Screw		Tightening torque	1,8 Nm
-------	--	-------------------	--------

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common		Used in step 1
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)	
Included in the tool or work	0 490 527	
Storage location	Individual	
Replaced by		
In connection with		
SI-Number	01 07 09 (530)	

65 13 090 Removing and installing/replacing speaker (mid-range speaker in rear door)

PRELIMINARY WORK

1 – Remove cover on door handle



RISK OF DAMAGE

Scratches.

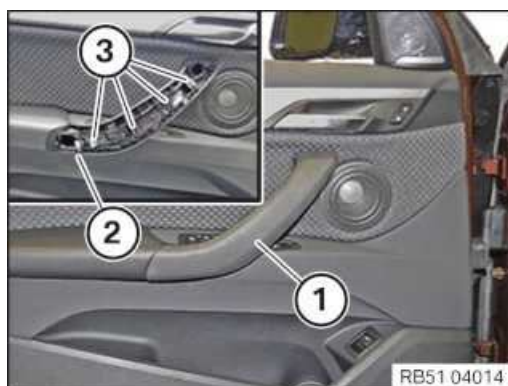
Tools and sharp-edged components can cause scratches.

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



NOTICE

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



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove rear door trim

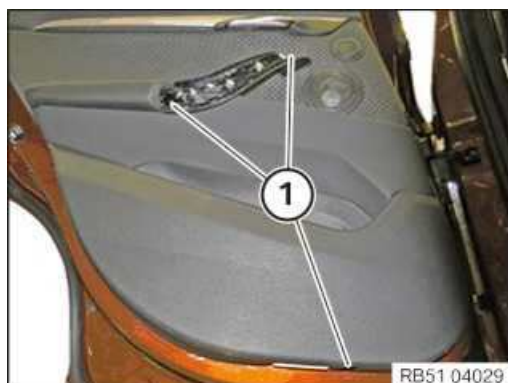


RISK OF DAMAGE

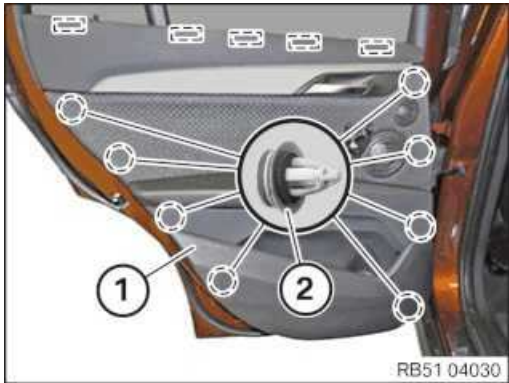
Scratches.

Tools and sharp-edged components can cause scratches.

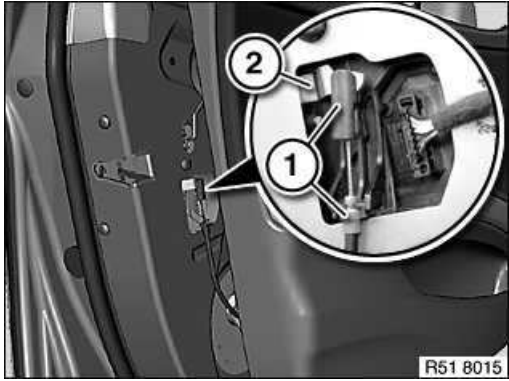
- Protect working area.
- Handle tools and components carefully.



- Loosen screws (1).



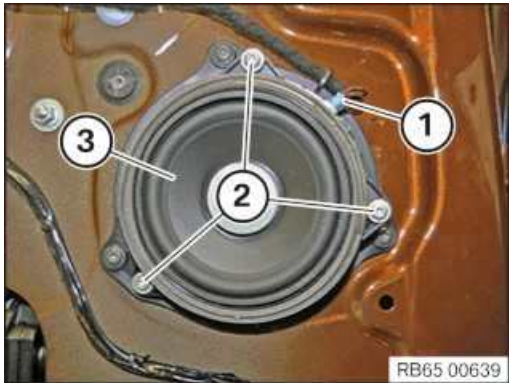
- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.



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

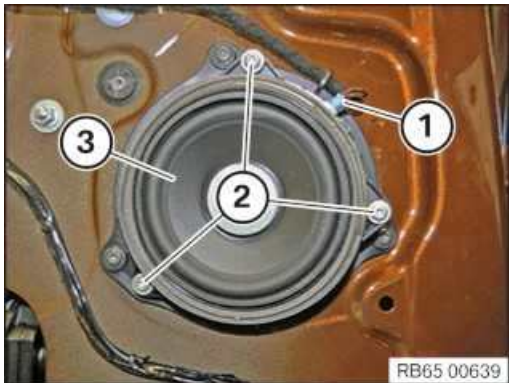
MAIN WORK

3 – Removing the mid-range speaker in the rear door



- Disconnect the connector (1) .
- Loosen screws (2).
- Remove the mid-range speaker (3).

4 – Installing the mid-range speaker in the rear door



- Fit the mid-range speaker (3) and position it correctly.
- Tighten down screws (2).

Loudspeakers on the door / trim panel

Screw		Tightening torque	2 Nm
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- Connect connector (1).

POSTPROCESSES

5 – Installing rear door trim panel



RISK OF DAMAGE

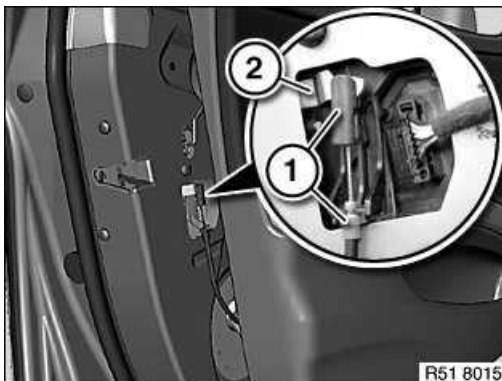
Scratches.

Tools and sharp-edged components can cause scratches.

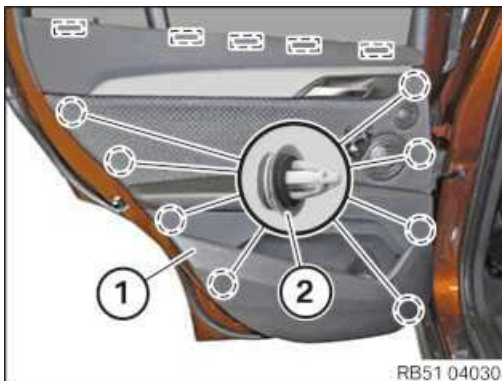
- Protect working area.
- Handle tools and components carefully.



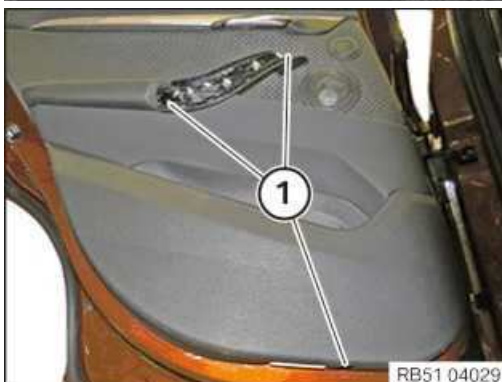
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



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



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



- Tighten the screws (1).

Door trim panel to door

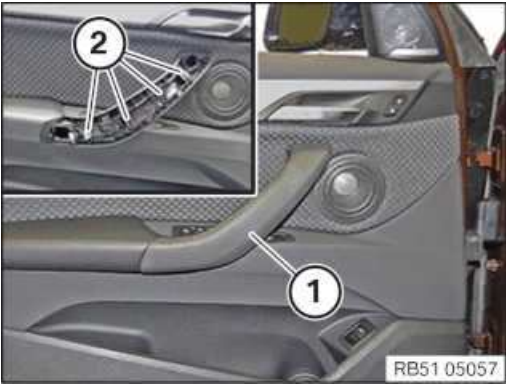
Screw TS5x20		Tightening torque	2,5 Nm
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6 – Install the cover on the door handle



NOTICE

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



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

Additional Information

Overview of Tightening Torques

Loudspeakers on the door / trim panel			Used in step 4
Screw		Tightening torque	2 Nm
Door trim panel to door			Used in step 5
Screw TS5x20		Tightening torque	2,5 Nm

65 13 080 Removing and installing/replacing speaker (tweeter in rear door)

PRELIMINARY WORK

1 – Remove cover on door handle



RISK OF DAMAGE

Scratches.

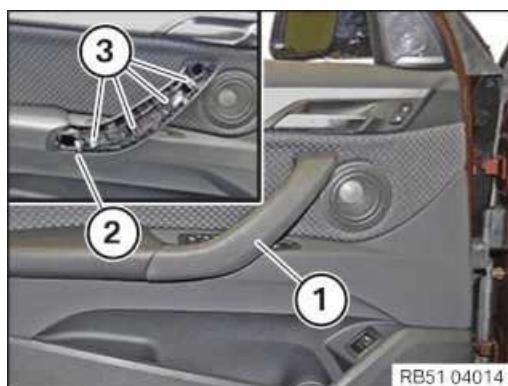
Tools and sharp-edged components can cause scratches.

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



NOTICE

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



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove rear door trim

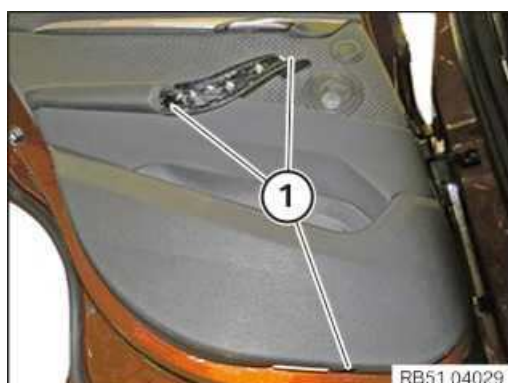


RISK OF DAMAGE

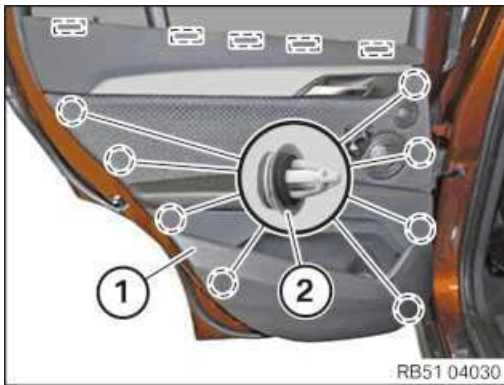
Scratches.

Tools and sharp-edged components can cause scratches.

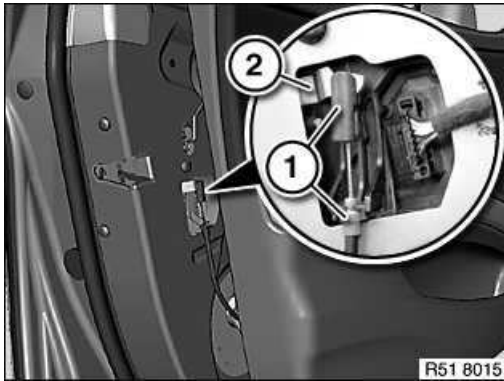
- Protect working area.
- Handle tools and components carefully.



- Loosen screws (1).



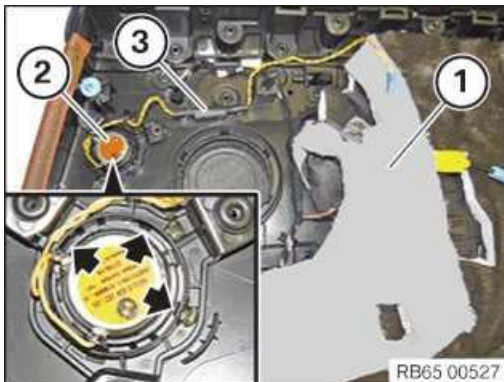
- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps on top.



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

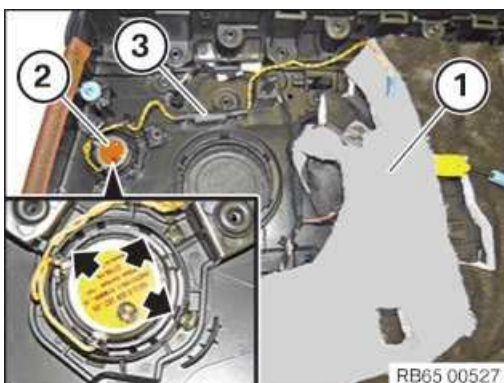
MAIN WORK

3 – Remove the tweeter from the rear door



- Lay sound insulation (1) to side as shown.
- Unlock the retaining lugs (arrows).
- Unclip the resistance (3).
- Remove tweeter (2).

4 – Install the tweeter in the rear door



- Insert the tweeter (2) correctly and engage it at the marks.
- Clip in the resistor (3) correctly.
- Position the sound insulation (1) correctly.

POSTPROCESSES

5 – Installing rear door trim panel



RISK OF DAMAGE

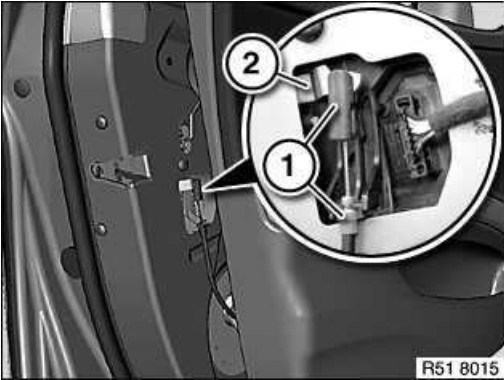
Scratches.

Tools and sharp-edged components can cause scratches.

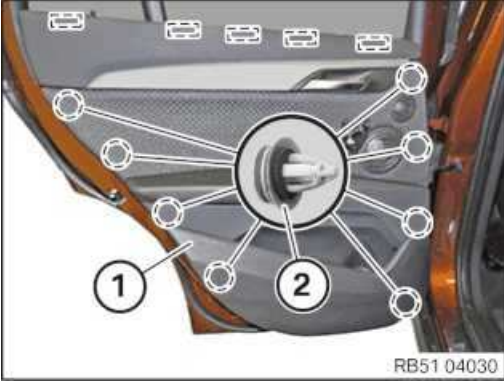
- Protect working area.
- Handle tools and components carefully.



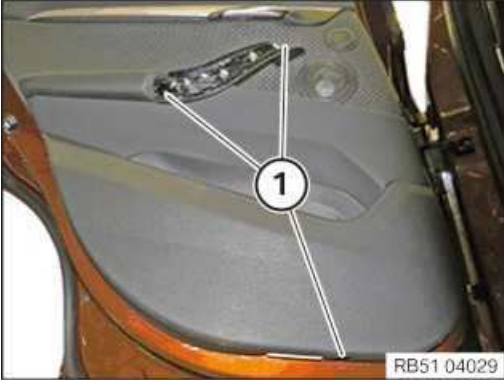
- Check the clips (1) and the stop pad (2), they must not be damaged or missing, renew if necessary.



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



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



- Tighten the screws (1).

Door trim panel to door

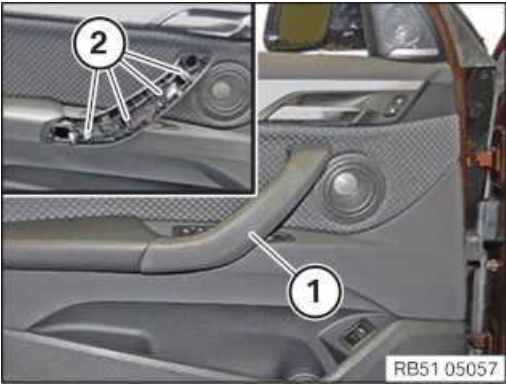
Screw TS5x20		Tightening torque	2,5 Nm
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6 – Install the cover on the door handle



NOTICE

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



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

Additional Information

Overview of Tightening Torques

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

65 13 070 Removing and installing/replacing speakers (mid-range speaker) (left or right front door)

PRELIMINARY WORK

1 – Remove cover on door handle



RISK OF DAMAGE

Scratches.

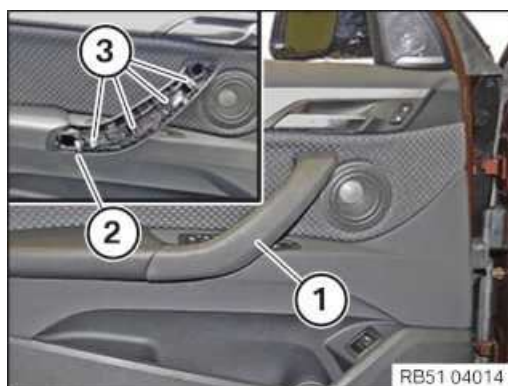
Tools and sharp-edged components can cause scratches.

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



NOTICE

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



- Lever out the cover (1) with a small screwdriver through the recess (2) toward the inside from the clamps (3) and remove.

2 – Remove front door trim panel

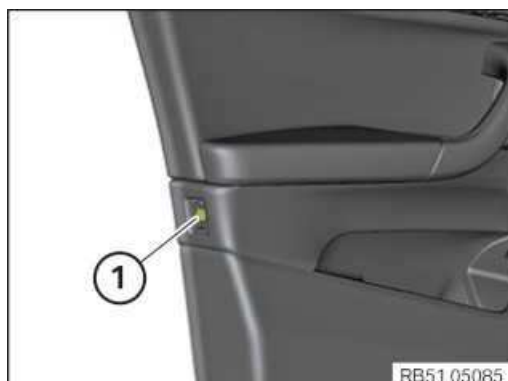


RISK OF DAMAGE

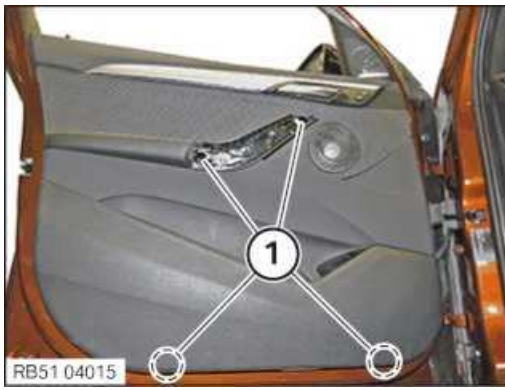
Scratches.

Tools and sharp-edged components can cause scratches.

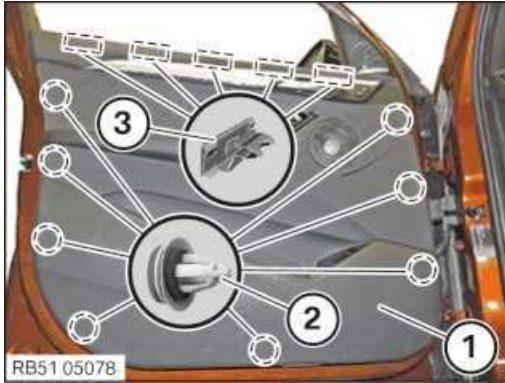
- Protect working area.
- Handle tools and components carefully.



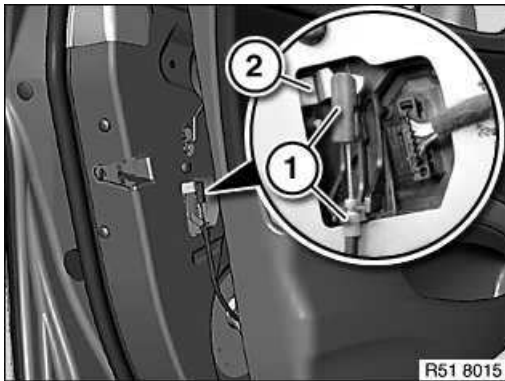
- If fitted: Remove the cover and unscrew the bolt (1).



- Loosen screws (1).



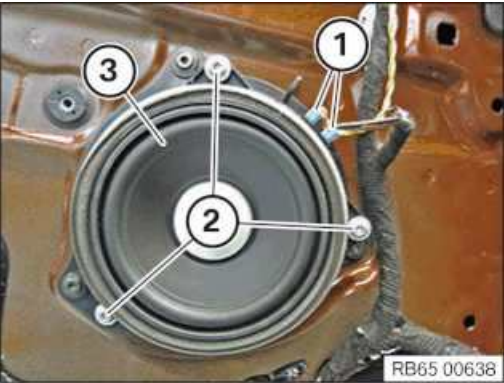
- Unclip the door trim panel (1) from the clips (2) with a suitable plastic wedge.
- Pull the door trim panel (1) from the clamps (3) at the top.



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

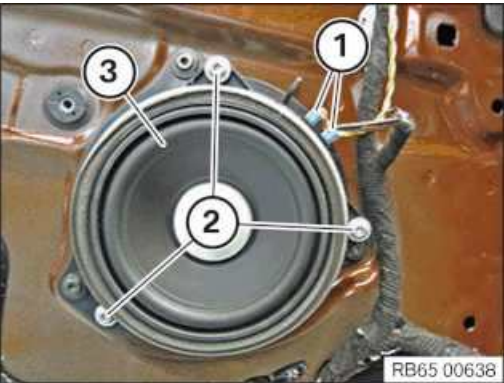
MAIN WORK

3 – Removing the mid-range speaker from the front door



- Disconnect the connector (1) .
- Loosen screws (2).
- Remove the mid-range speaker (3).

4 – Installing the mid-range speaker in the front door



- Fit the mid-range speaker (3) and position it correctly.
- Tighten down screws (2).

Loudspeakers on the door / trim panel

Screw		Tightening torque	2 Nm
-------	--	-------------------	------

- Connect connector (1).

POSTPROCESSES

5 – Install front door trim panel



RISK OF DAMAGE

Scratches.

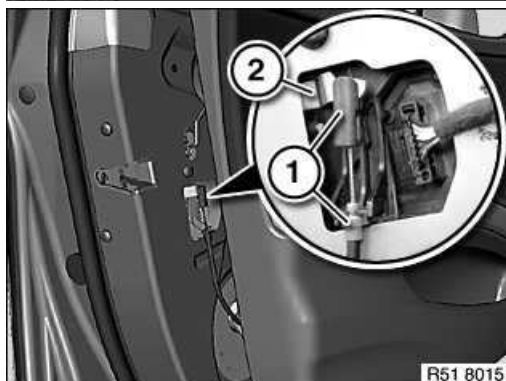
Tools and sharp-edged components can cause scratches.

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

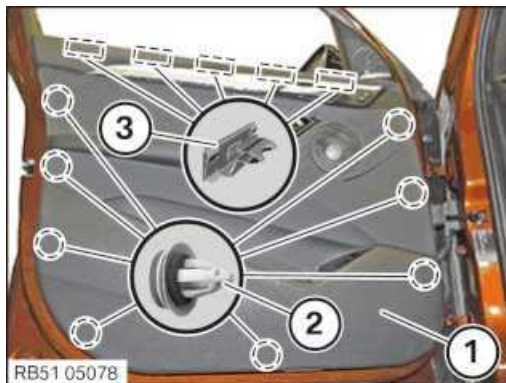


- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.

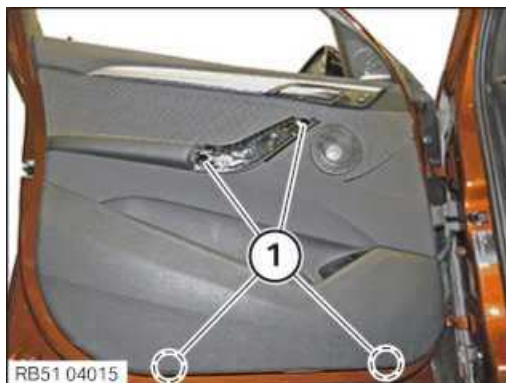
The clips (1) and the stop pads (2) must not be damaged or missing.



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



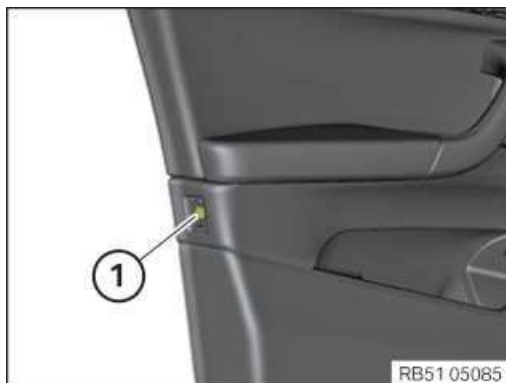
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

Screw TS5x20		Tightening torque	2,5 Nm
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- If fitted: Tighten down screw (1).

Door trim panel to door

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

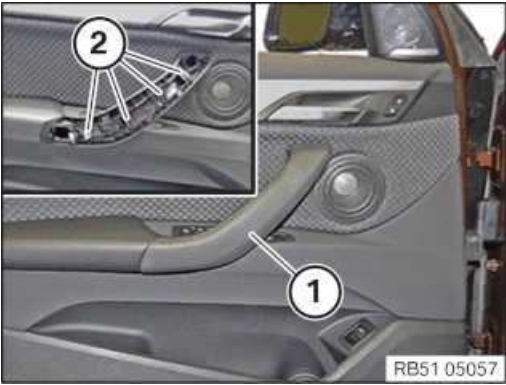
- Mount cover .

6 – Install the cover on the door handle



NOTICE

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



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

Additional Information

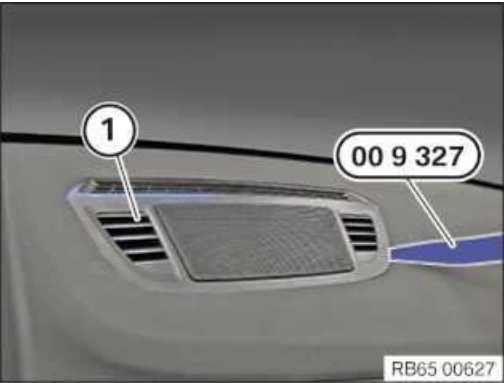
Overview of Tightening Torques

Loudspeakers on the door / trim panel			Used in step 4
Screw		Tightening torque	2 Nm
Door trim panel to door			Used in step 5
Screw TS5x20		Tightening torque	2,5 Nm

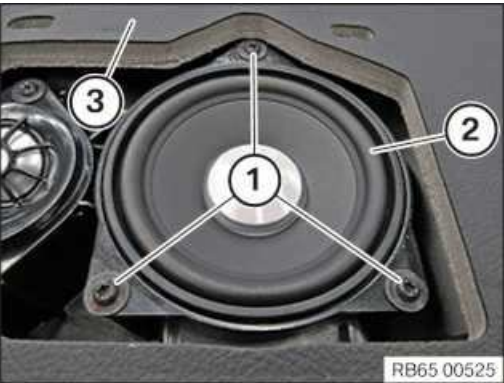
65 13 062 Removing and installing/replacing speakers (tweeter) (in instrument panel trim)

PRELIMINARY WORK

1 – Remove the mid-range speaker from the instrument panel



- Unclip the speaker cover (1) using the special tool **0 496 571 (00 9 327)** and remove upwards.



- Loosen screws (1).
- Disconnect plug connection underneath.
- Guide the mid-range speaker (2) out of the instrument panel (3) and remove it.

MAIN WORK

2 – Remove tweeters from the instrument panel



- Loosen screws (1).
- Remove the tweeter (2).

3 – Install the tweeters in the instrument panel

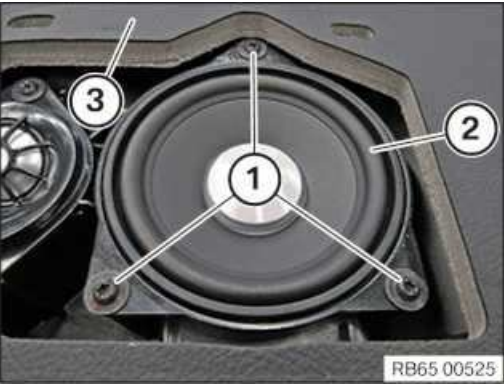


- Position the tweeter (2).
- Tighten the screws (1).

Speaker to support / support to instrument panel / support to body

Screw		Tightening torque	1,8 Nm
-------	--	-------------------	--------

4 – Install the mid-range speakers in the instrument panel



- Connect the connector below it to the mid-range speaker (2).
- Position the mid-range speaker (2) in the instrument panel (3).
- Tighten the screws (1).

Speaker to support / support to instrument panel / support to body

Screw		Tightening torque	1,8 Nm
-------	--	-------------------	--------



- Check the latch mechanisms on the speaker cover (1) for damage and renew them if necessary.
The latch mechanisms must not be missing or faulty.
- Engage the speaker cover (1) correctly into the instrument panel (2).

Additional Information

Overview of Tightening Torques

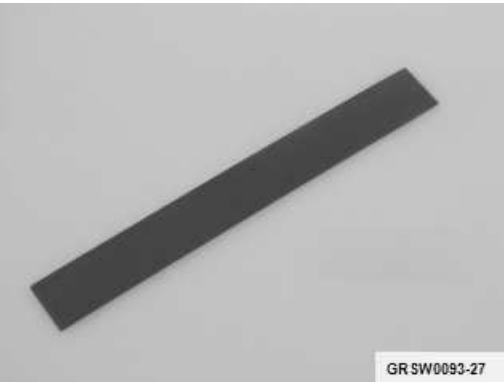
Speaker to support / support to instrument panel / support to body

Used in step 3 4

Screw		Tightening torque	1,8 Nm
-------	--	-------------------	--------

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common

Used in step 1

Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

65 13 050 Removing and installing/replacing the speaker

PRELIMINARY WORK

1 – Remove cover on door handle



RISK OF DAMAGE

Scratches.

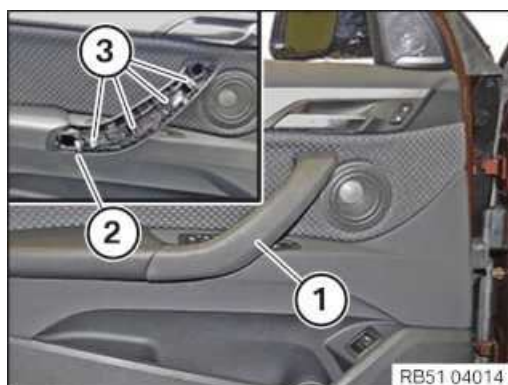
Tools and sharp-edged components can cause scratches.

- 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

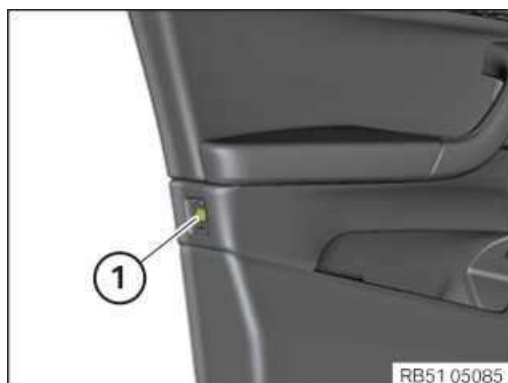


RISK OF DAMAGE

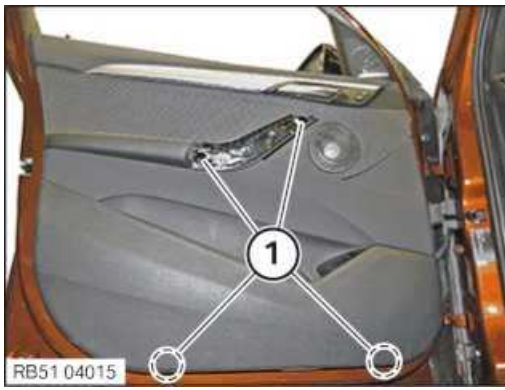
Scratches.

Tools and sharp-edged components can cause scratches.

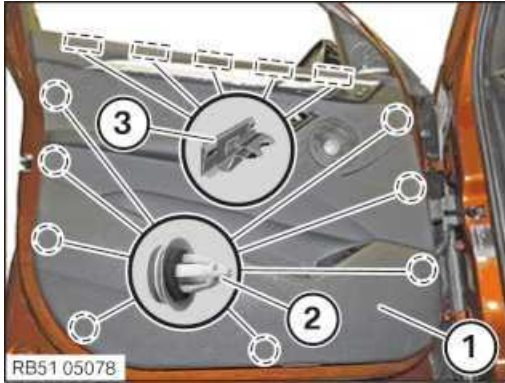
- Protect working area.
- Handle tools and components carefully.



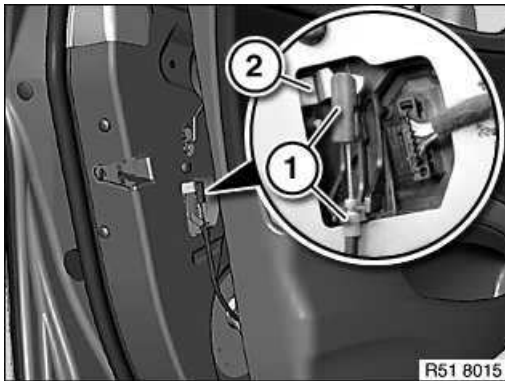
- If fitted: Remove the cover and unscrew the bolt (1).



- 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.



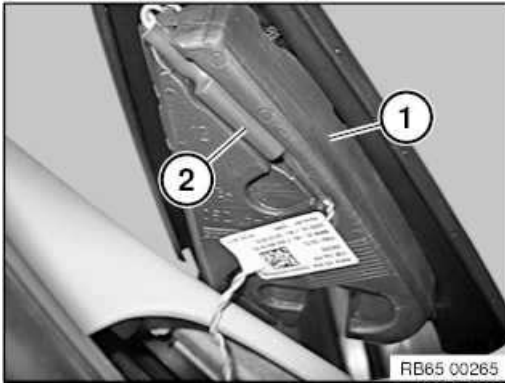
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

MAIN WORK

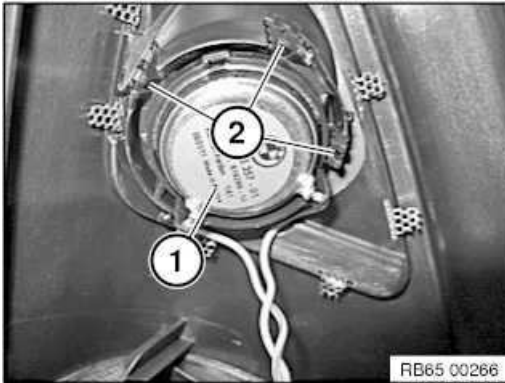
3 – Removing the tweeter in mirror triangle



- Release the window frame cover (1) in the area of the mirror.

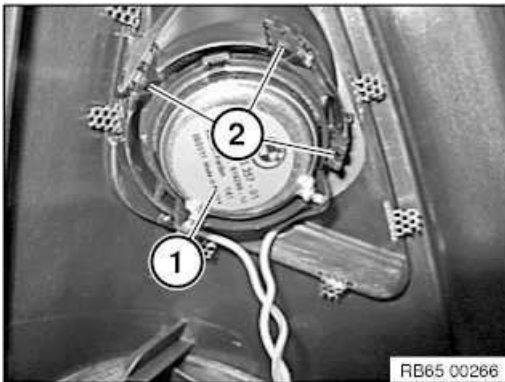


- Guide out the resistor (2) with the cable.
- Remove foam material (1).



- Unclip the tweeter (1) from the latch mechanisms (2).
- Disconnect the associated plug connection and remove the tweeter (1).

4 – Installing the tweeter in the mirror triangle



- Correctly position the tweeter (1) and engage in the latch mechanisms (2).
- Connect the associated connectors to the tweeter (1).



- Properly position the foam material (1).
- Insert the resistor (2) with the cable.



- Install window frame cover (1).

5 – Install front door trim panel

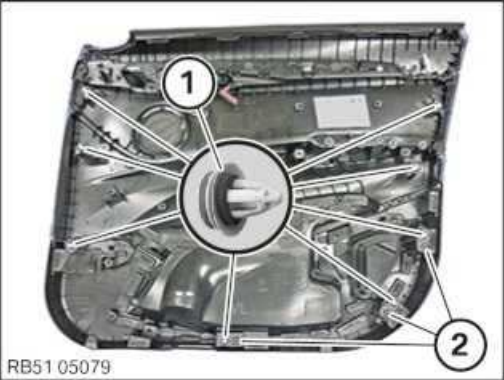


RISK OF DAMAGE

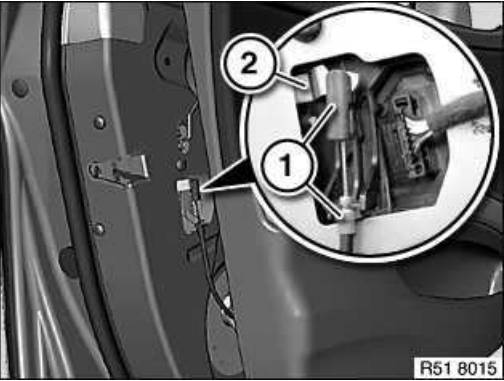
Scratches.

Tools and sharp-edged components can cause scratches.

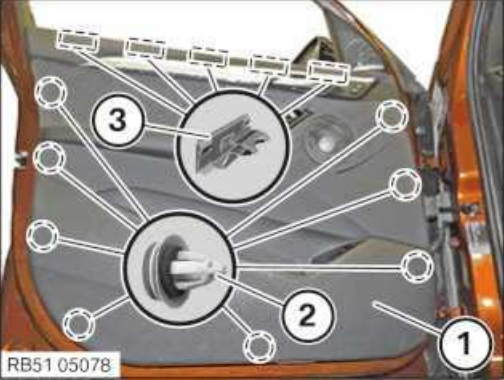
- Protect working area.
- Handle tools and components carefully.



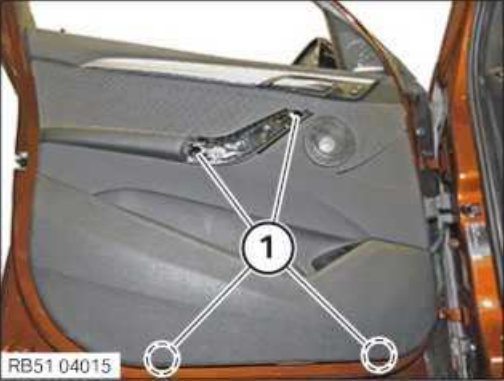
- Check the clips (1) and the stop pad (2) for damages, and replace if necessary.
- The clips (1) and the stop pads (2) must not be damaged or missing.



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



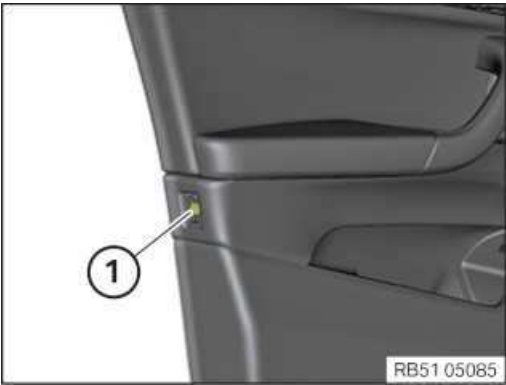
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

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



- If fitted: Tighten down screw (1).

Door trim panel to door

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

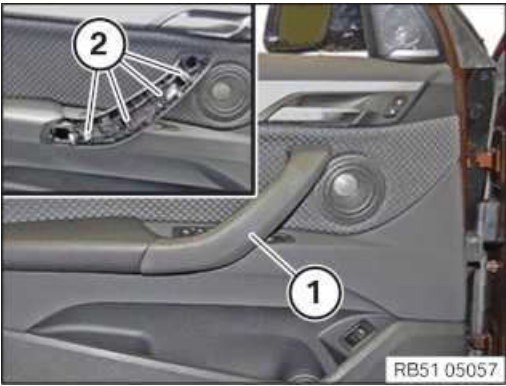
- Mount cover .

6 – Install the cover on the door handle



NOTICE

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



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

Additional Information

Overview of Tightening Torques

Door trim panel to door

Used in step 5

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

65 20 037 Remove and install/replace roof-mounted aerial with telematics control unit



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

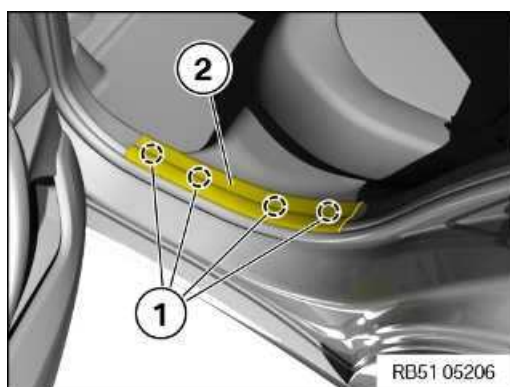


NOTICE

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

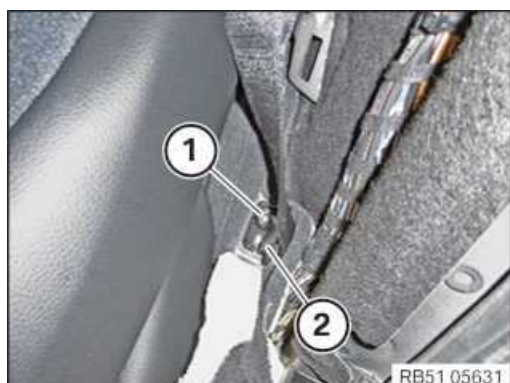


NOTICE

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

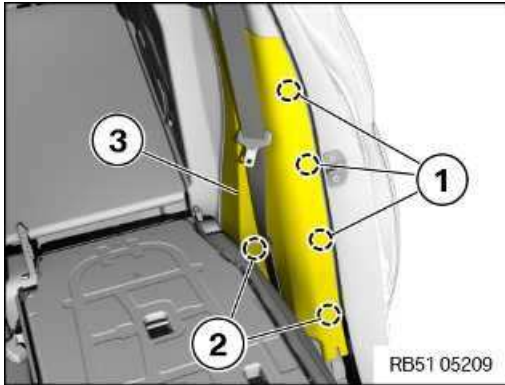
► Remove the bottom C-pillar trim panel

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



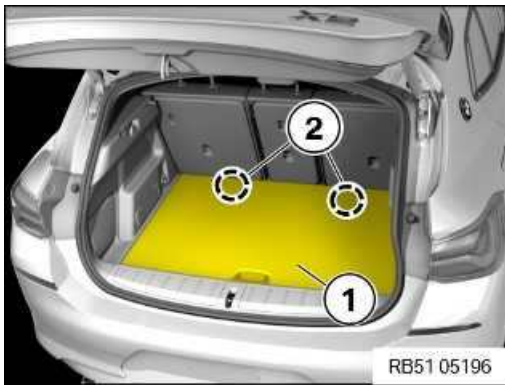


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



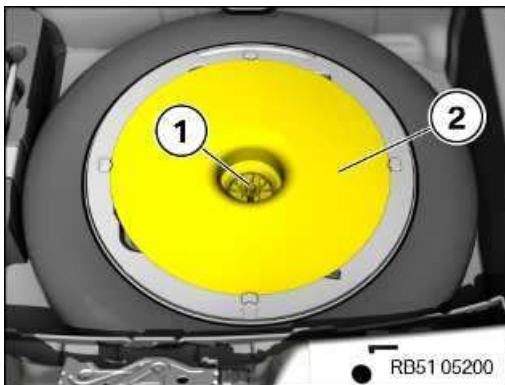
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

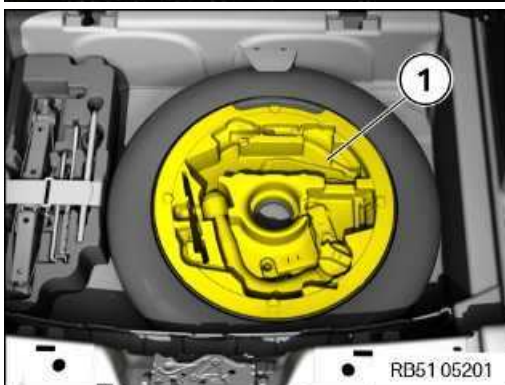


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



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

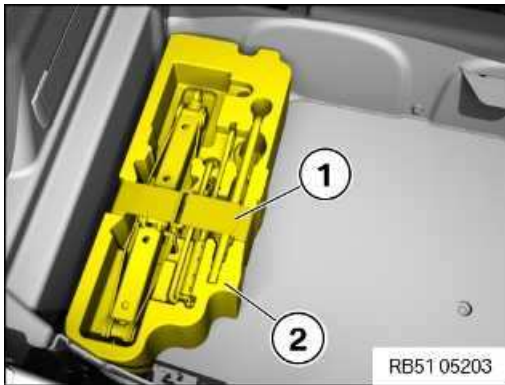


- Remove the oddments tray from the emergency wheel (1).



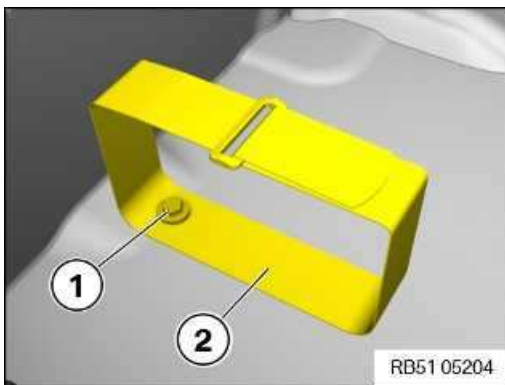
- Remove the emergency wheel (1).

5 – Remove the tool kit



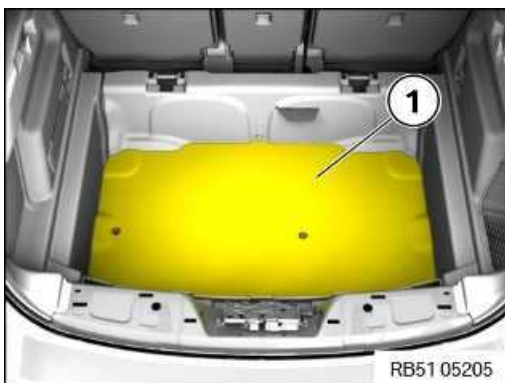
- Open the hook and loop tape (1).
- Remove the tool kit (2).

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



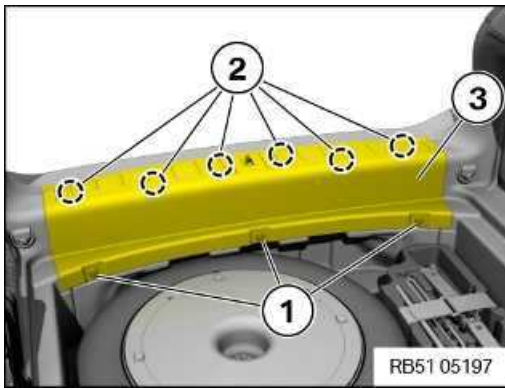
- Loosen screw (1).
- Remove the hook and loop tape (2).

7 – Removing the luggage compartment floor trim panel



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

8 – Removing the loading edge trim

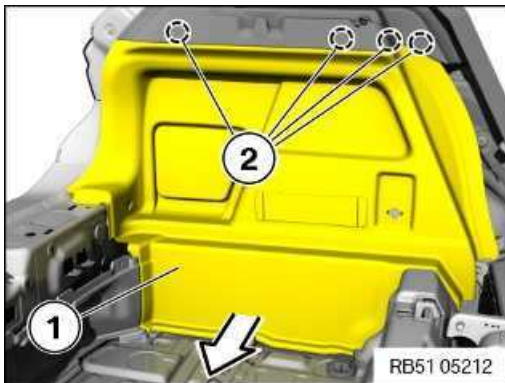


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

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



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

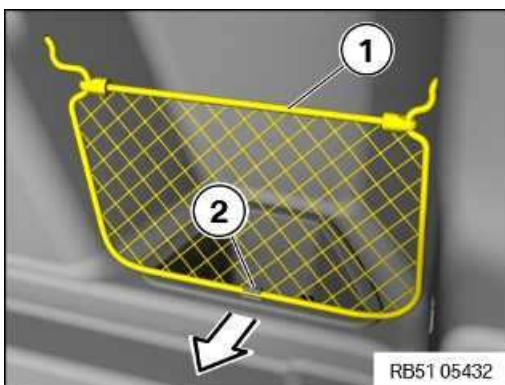


NOTICE

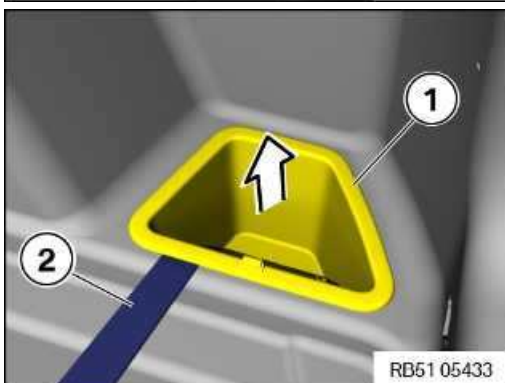
Schematic diagram is for example purposes. Some parts may differ in certain details.

- 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.

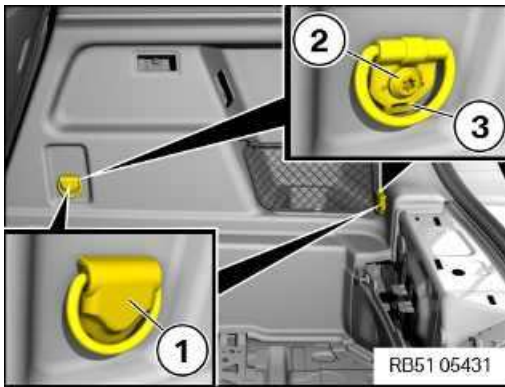
10 – Removing right luggage compartment wheel arch trim panel



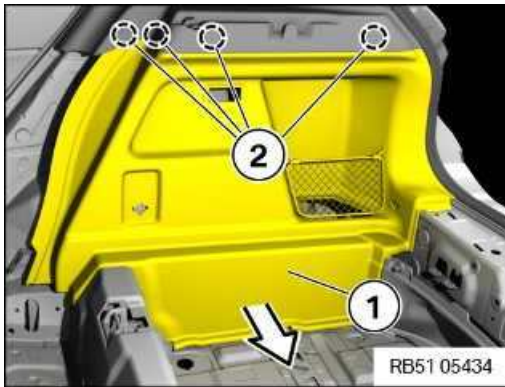
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



- 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.

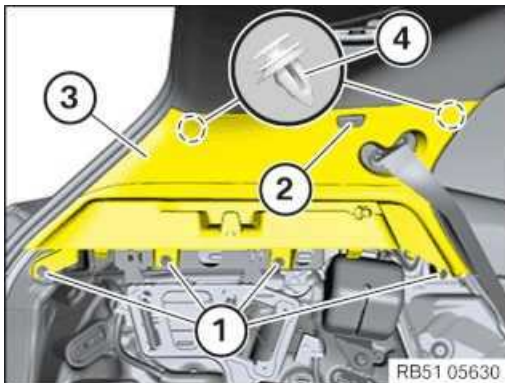
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

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).

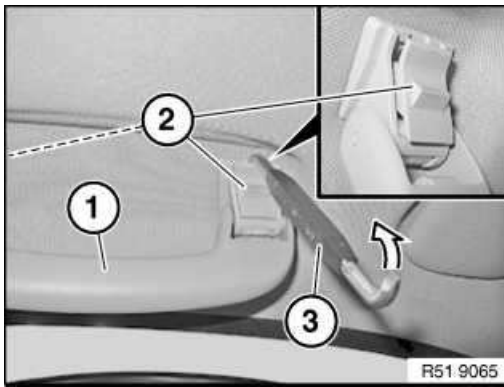
12 – Removing all grab handles



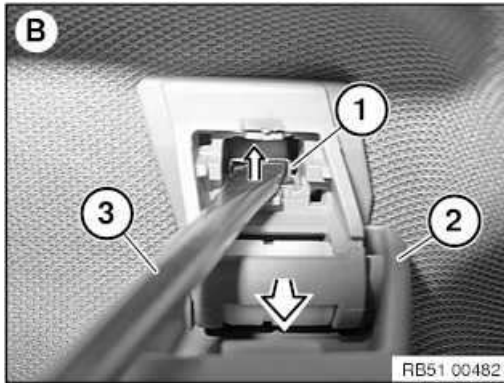
NOTICE

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

► Removing the grab handle

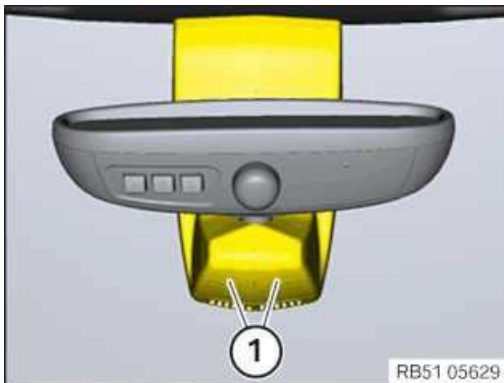


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- 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

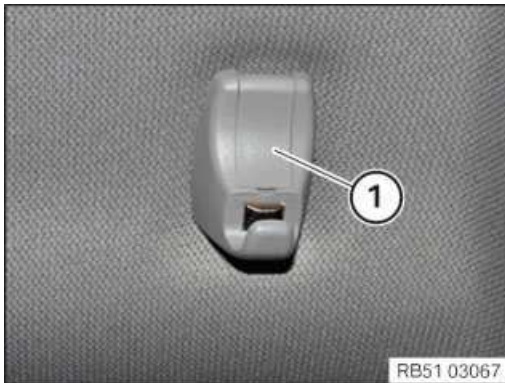


NOTICE

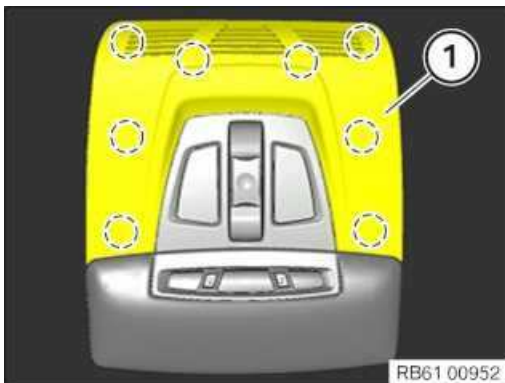
Description is for left component only. Procedure on the right side is identical.

► Remove the counter support for the sun visor

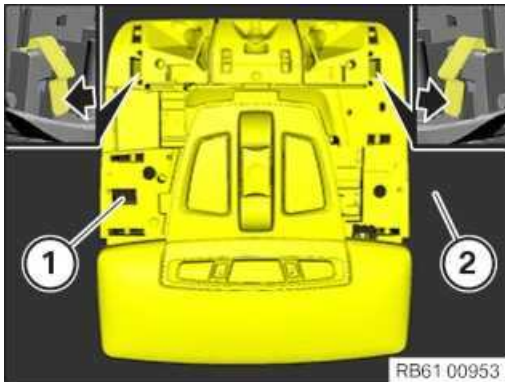
- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.



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.

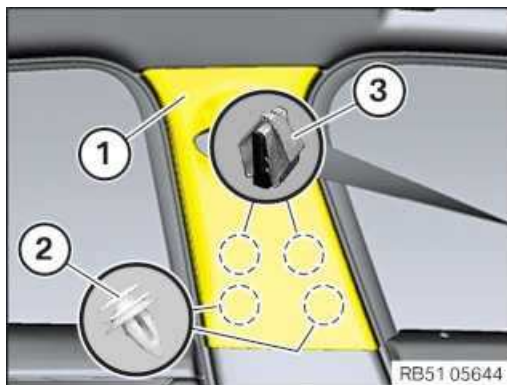
18 – Removing the B-pillar trim panels at top left and right



NOTICE

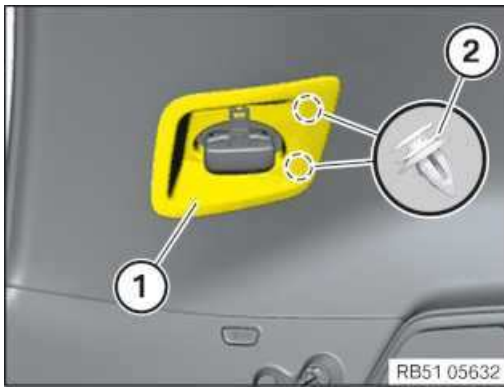
Description is for left component only. Procedure on the right side is identical.

► 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 – Lower roofliner

Prerequisite

The front seats have been fully adjusted towards the bottom.

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

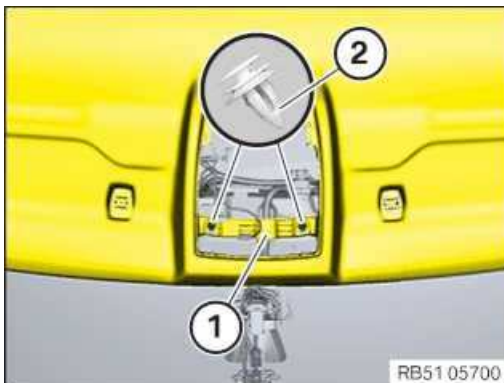


RISK OF DAMAGE

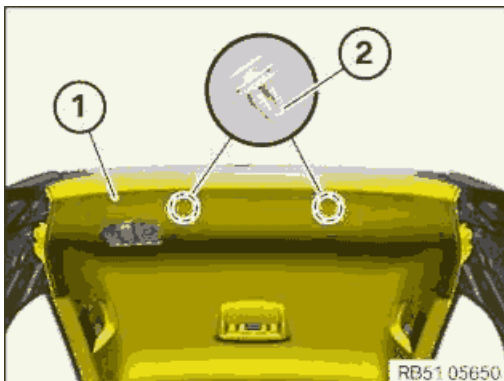
Fold the headlining.

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

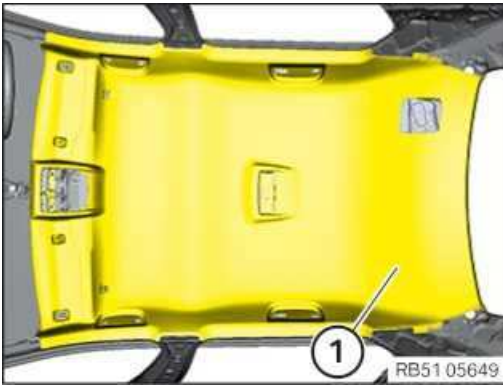
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- 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.

21 – 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.

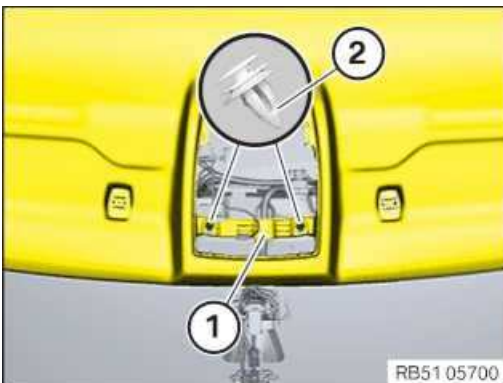


RISK OF DAMAGE

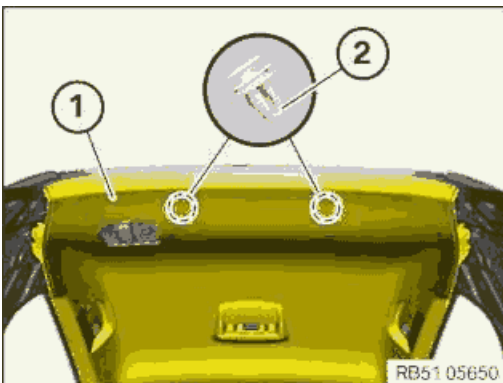
Fold the headlining.

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

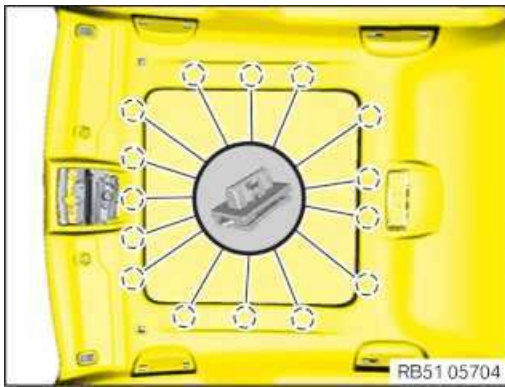
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- 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.

22 – Remove the empty roof-mounted aerial housing

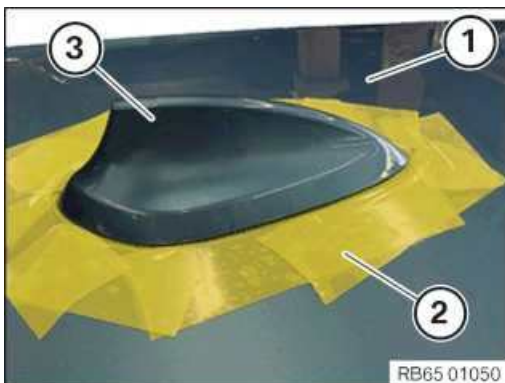


RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



- Slide the yellow plastic adhesive tape (2) under the empty housing (3) as far as possible.

Expendable materials

Yellow plastic adhesive tape	83199410979
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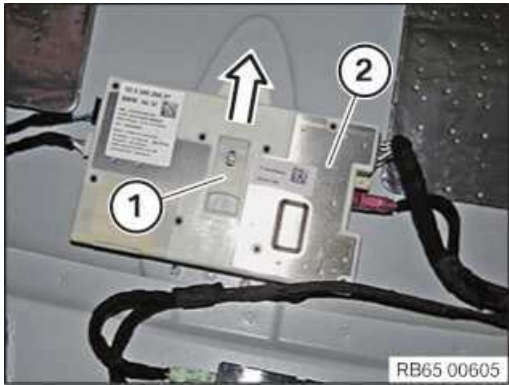
- Mask the roof outer skin (1) as shown.
- Cut through the adhesive bead using the special tool and remove the empty roof-mounted aerial housing (2).

Note: With increased effort, reposition the special tool 1 to recut the adhesive bead, if necessary.

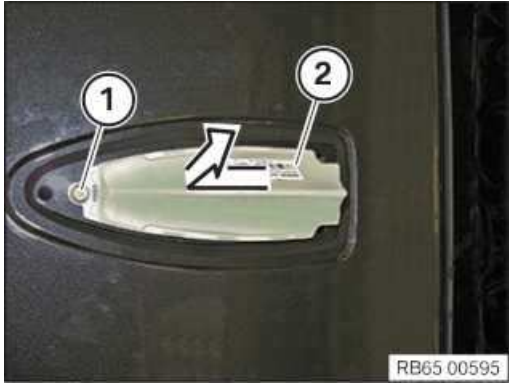
- If necessary, touch up the paintwork damage.

MAIN WORK

23 – Remove the roof-mounted aerial with telematics control unit

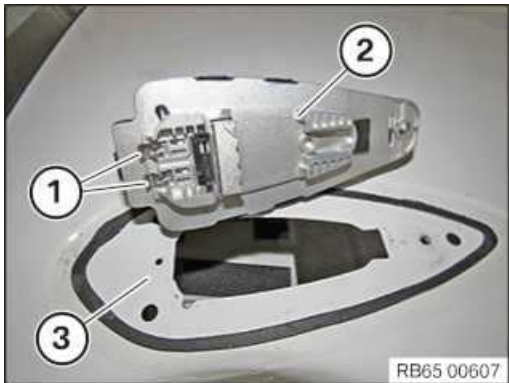


- Unlock the lock (1) downward.
- Slide the TCB (2) in the direction of arrow.

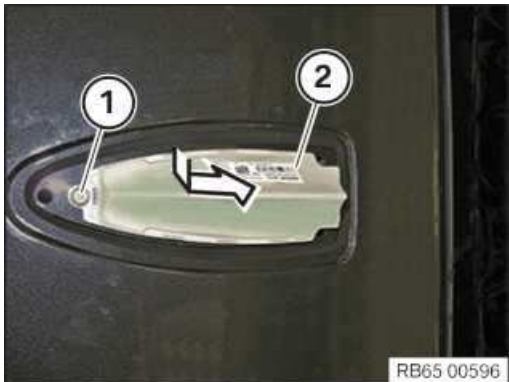


- Loosen screw (1).
- Remove the roof-mounted aerial (2) in the direction of the arrow.

24 – Install the roof-mounted aerial with the telematics control unit



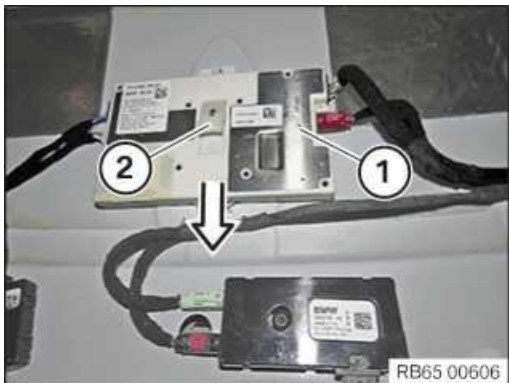
- Locks (1) on the roof-mounted aerial (2) must be correctly fitted under the roof (3).



- Install the roof-mounted aerial (2) in the direction of the arrow.
- Tighten down screw (1).

Roof-mounted aerial on the roof outer skin

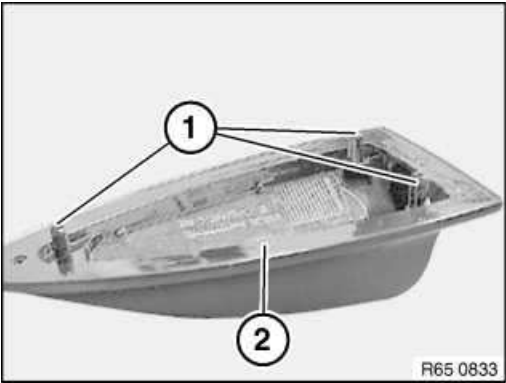
Screw		Tightening torque	4 Nm
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- Correctly position TCB (1) and push in direction of arrow till the lock is engaged (2).

25 – Installing the empty roof-mounted aerial housing

Note: The preparations correspond to the instructions for bonded window glasses; see further information.



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TECHNICAL INFORMATION

The following procedure forms the basis for these repair instructions and must be observed without fail.

For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

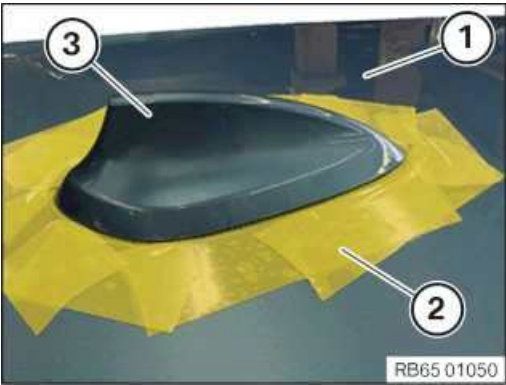
- Check centring pins (1) for damage.
- Clean bonding surface (2) with cleaning agent R1.

Expendable materials

Cleaning agent R1	100 ml, Bottle	83192211217
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- Apply trace of adhesive bead all round outer contour as follows.
- Distance between adhesive bead and edge of aerial housing:
 - A=6.5 mm ±1 mm
- The start and end of the bead must overlap by a maximum of 10 mm.
- To prevent the adhesive from leaking, the adhesive bead diameter must not exceed 2.5 mm to 3.5 mm.



- Join the empty housing coated with adhesive (3) by hand to block.
- To spread the adhesive better, move the empty housing (3) back and forth horizontally slightly when pressing down.
- Secure empty housing (3) if necessary with adhesive tape and press down uniformly.
- After bonding, leave vehicle to stand for at least 3 hours at room temperature.
- Remove adhesive tape (2) from the roof outer skin (1) and, if necessary, from the empty housing (3).

26 – 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.

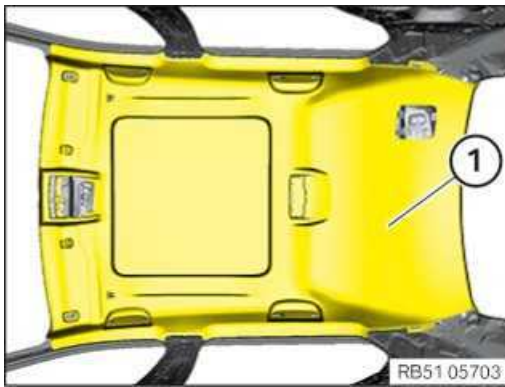
👉

RISK OF DAMAGE

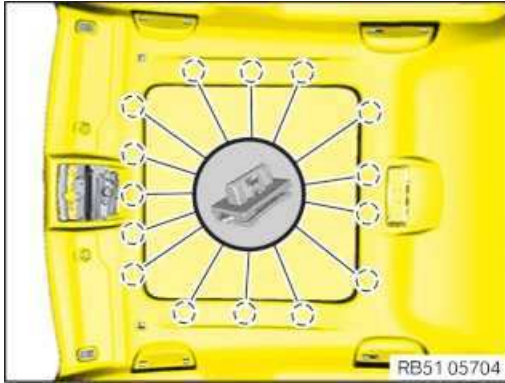
Fold the headlining.

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

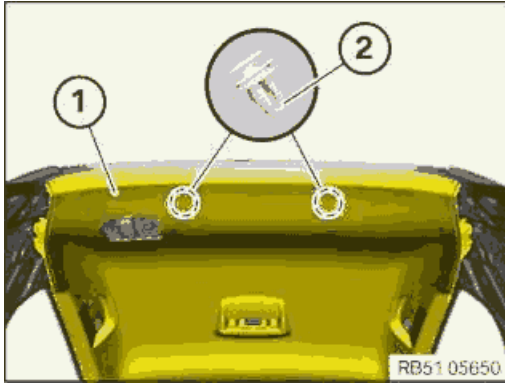
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



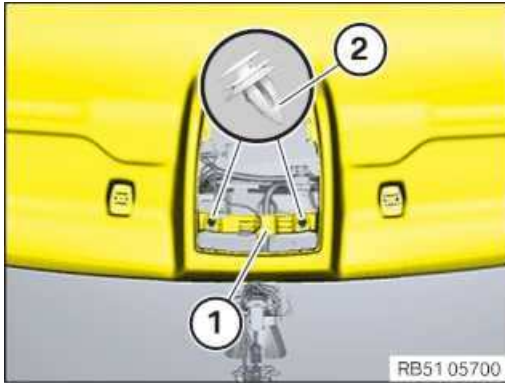
- Install the headlining (1) and carefully insert it at the respective edge protection.



- 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).

27 – 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.

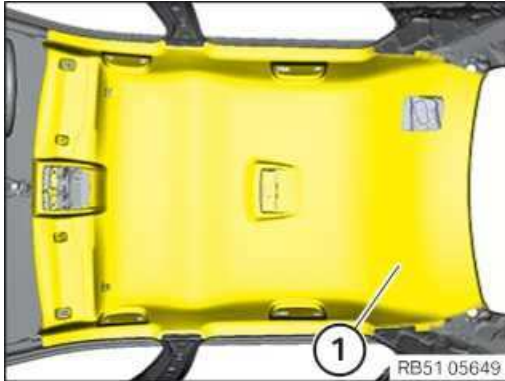


RISK OF DAMAGE

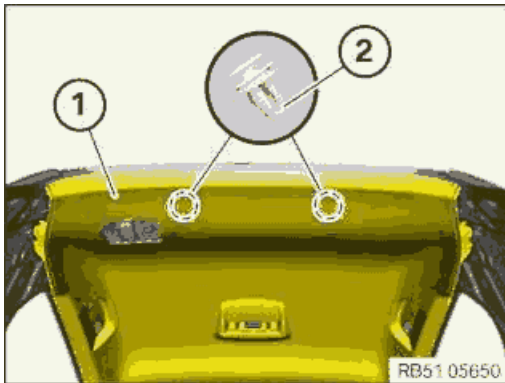
Fold the headlining.

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

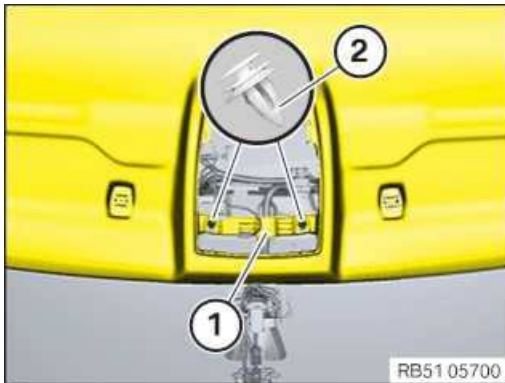
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- 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).

28 – 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).

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



NOTICE

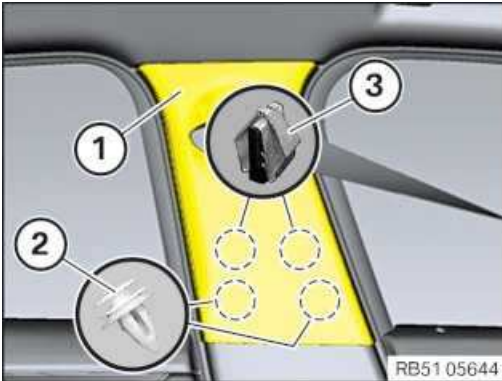
Description is for left component only. Procedure on the right side is identical.

► 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.

30 – 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

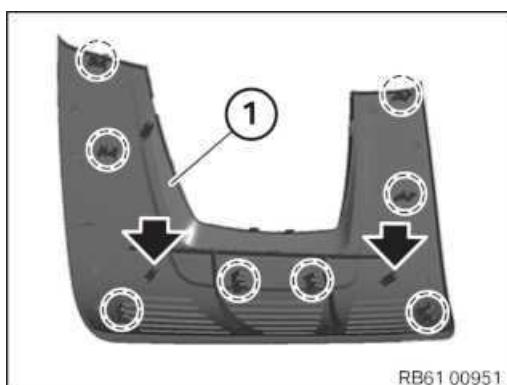
- Tighten down screw.

A-pillar trim panel to body

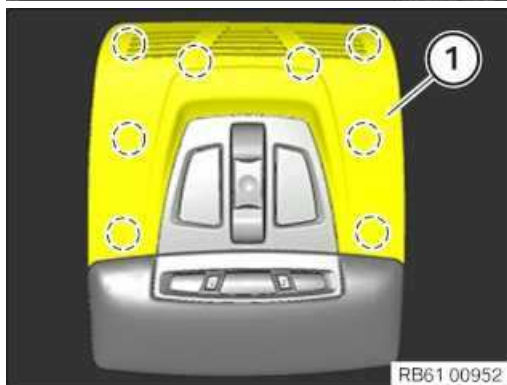
M5x42 screw	Renew screw	Tightening torque	2,2 Nm
-------------	-------------	-------------------	--------

- Clip in the cover (1).

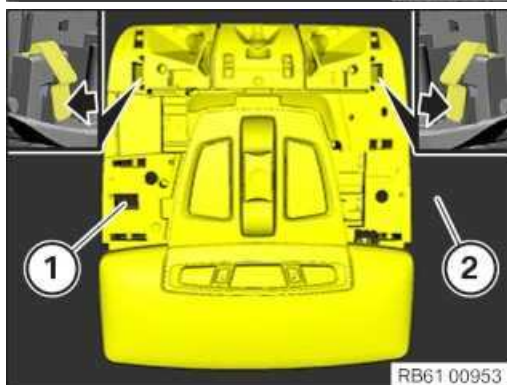
31 – Install the roof function centre



- 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.

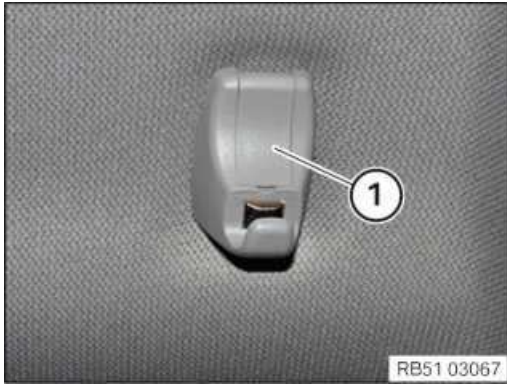
- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

32 – 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
-------	--	-------------------	--------

33 – Install both sun visors



NOTICE

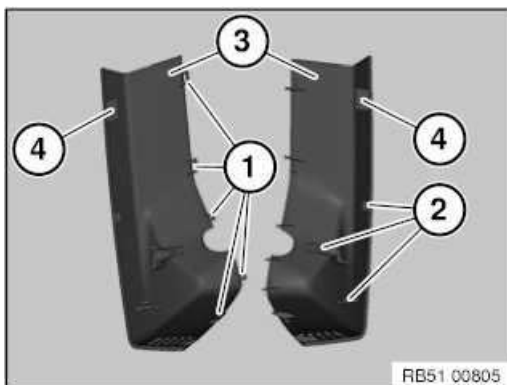
Description is for left component only. Procedure on the right side is identical.



► 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.

34 – Install the cover on the inside mirror

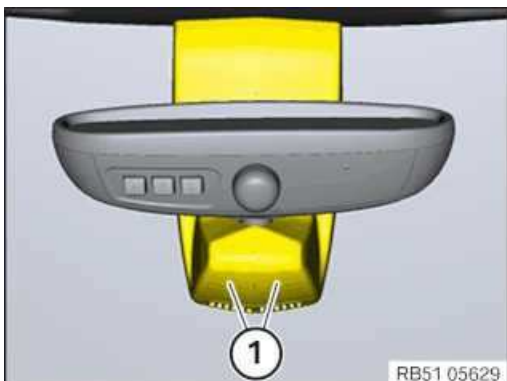


- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

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

- Check the spacers (4).

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

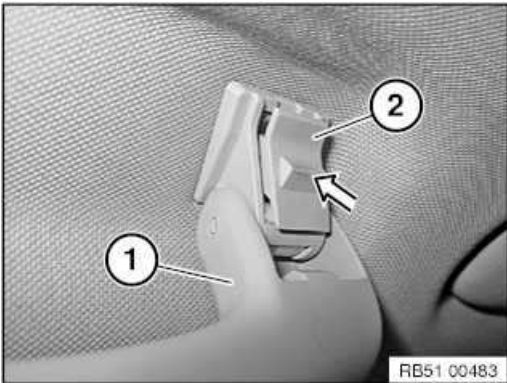


- Install covers on the interior mirror (1) clip together.

35 – Installing all grab handles

NOTICE

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



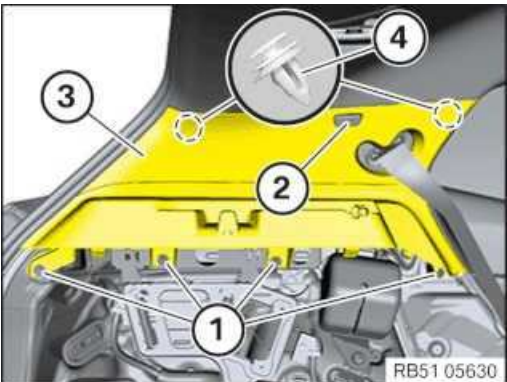
► Installing the grab handle

- 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).

36 – 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

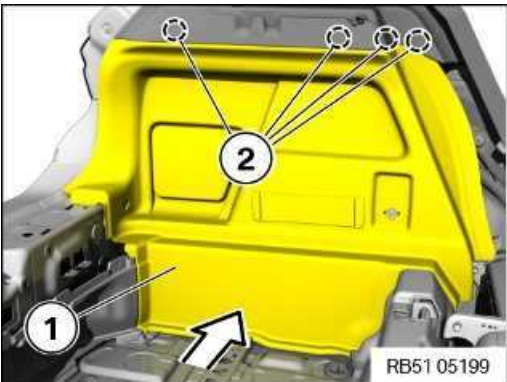
Self-tapping screw		Tightening torque	4 Nm
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- Tighten the screws (1).

Trim panel of luggage compartment capping to body

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

37 – 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.



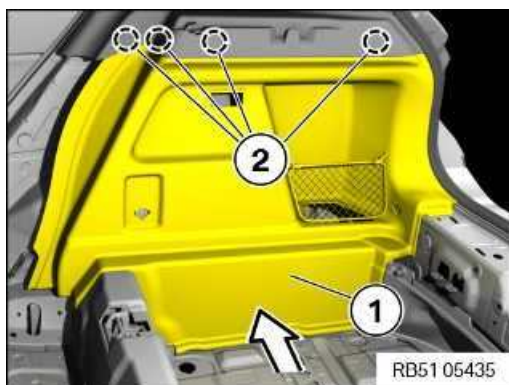
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

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

- Clip in the covers (1).

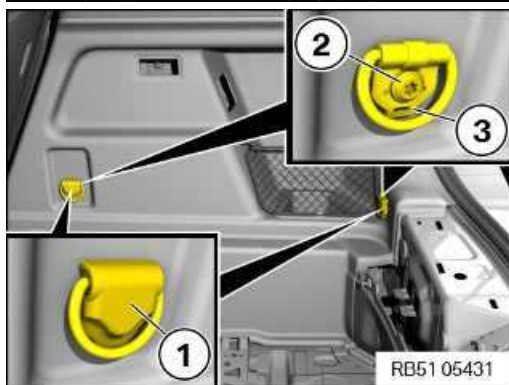
38 – Installing the luggage compartment wheel arch trim panel on the right



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).

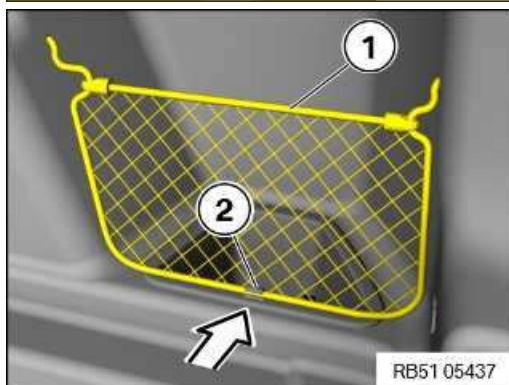
Lashing eye in luggage compartment

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.

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

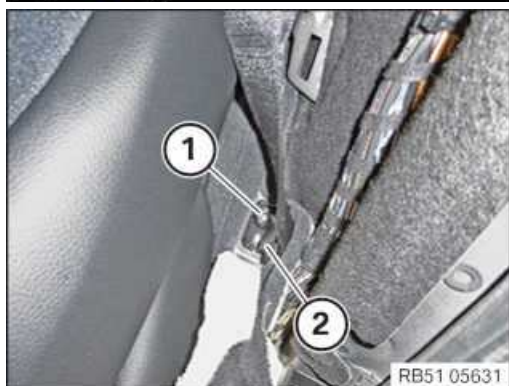
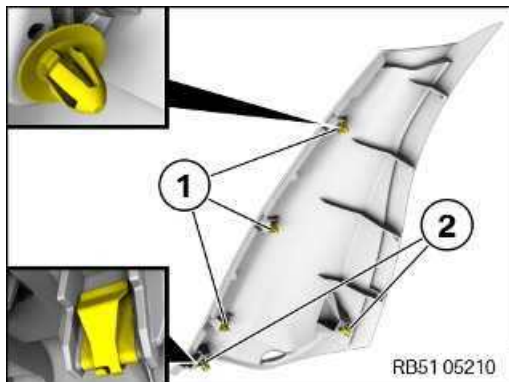


NOTICE

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.

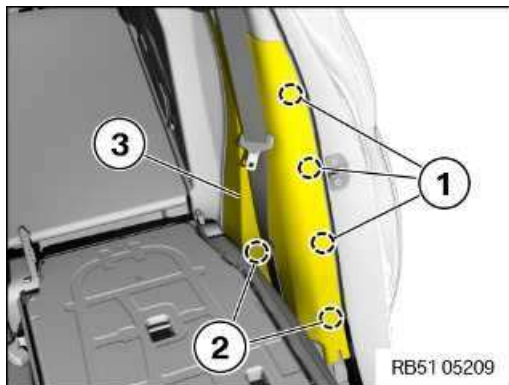


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

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.

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

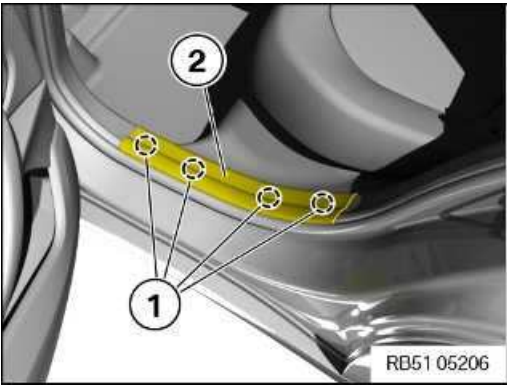
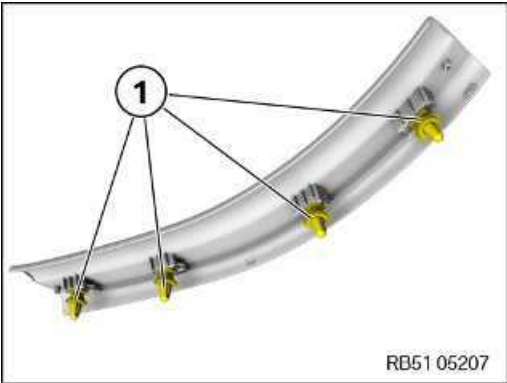


NOTICE

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

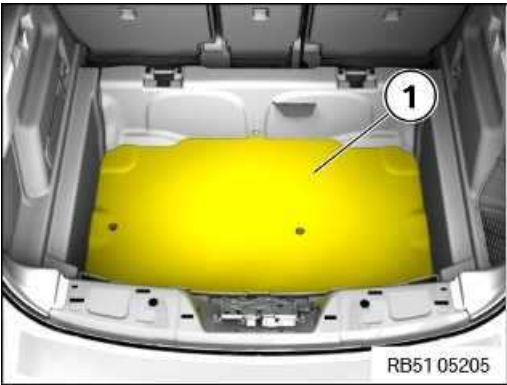
► Installing the rear door sill cover strip

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



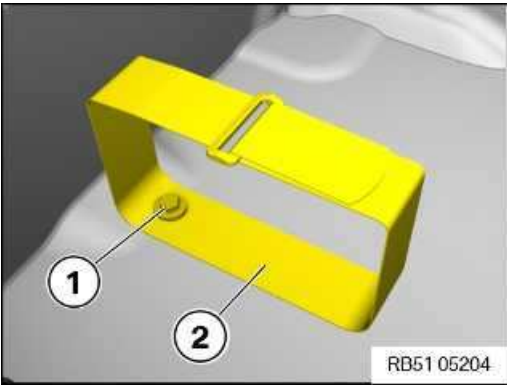
- Clip in the door sill cover strip (2) with the clips (1).

41 – Installing the luggage compartment floor trim panel



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

42 – Inserting the Velcro fastener for the toolkit

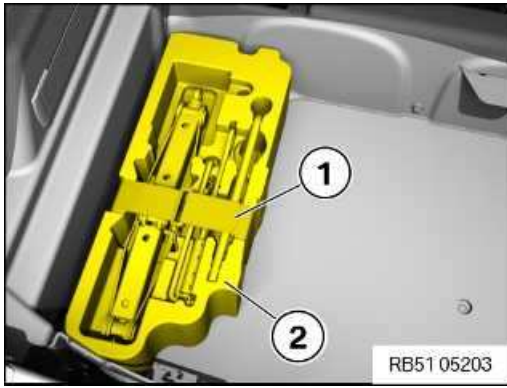


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

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

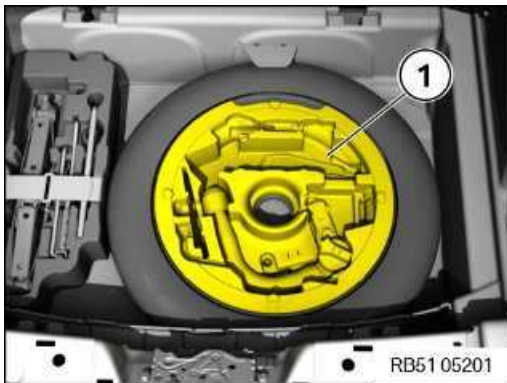


- Install the tool kit (2).
- Close the hook and loop tape (1).

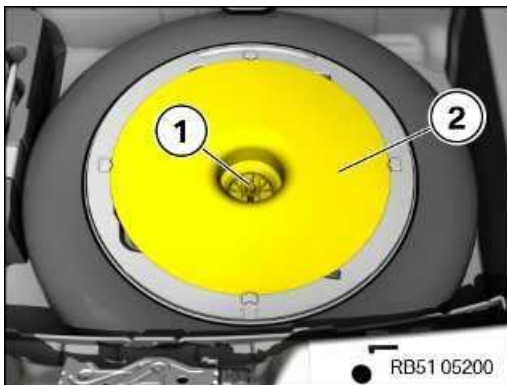
44 – Install the emergency wheel



- Insert compact spare wheel(1).

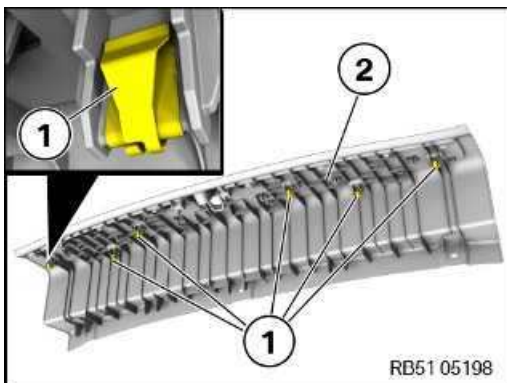


- Insert oddments tray into the compact spare wheel (1).

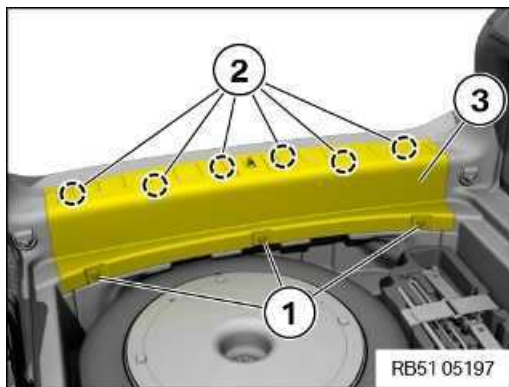


- Insert the lid (2).
- Hand-tighten the bolt (1).

45 – Installing loading edge trim

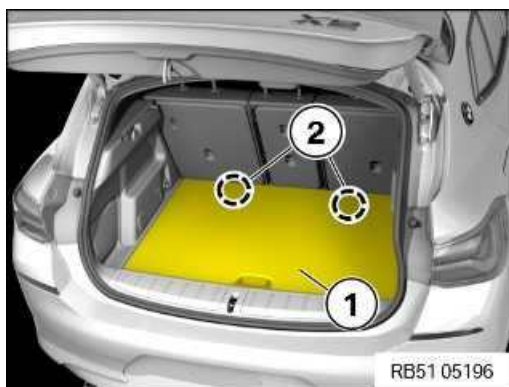


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- 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).

46 – Installing the luggage compartment removable panel



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

Additional Information

Overview of Tightening Torques

Roof-mounted aerial on the roof outer skin

Used in step [24](#)

Screw		Tightening torque	4 Nm
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A-pillar trim panel to body

Used in step [30](#)

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

Used in step [32](#)

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

Used in step [36](#)

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

Used in step [36](#)

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

Lashing eye in luggage compartment

Used in step [37](#) [38](#)

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

Used in step [39](#)

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

Used in step [42](#)

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)			

Replacement tools:
0 496 531 (65 2 014) Blade



Common		Used in step	22
Usage	(Special blade) Replaced by special tool 65 2 013 since 08/2008.		
Included in the tool or work	0 494 968		
Storage location			
Replaced by			
In connection with			
SI-Number	01 15 08 (475)		

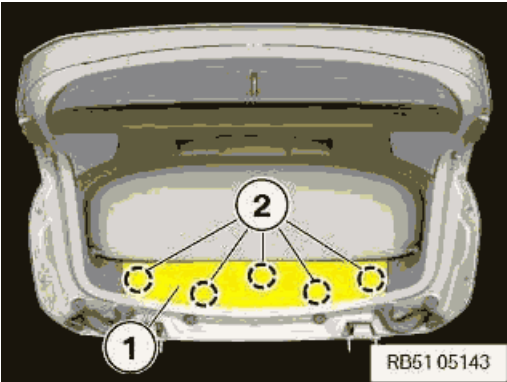
Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	17 30
99 00 ... Touching up paintwork damage	22
51 31 ... Notes on window bonding repair kit	25
51 00 ... Overview of consumables (Electronic Parts Catalogue)	25

65 20 090 Removing and installing or replacing aerial amplifier

PRELIMINARY WORK

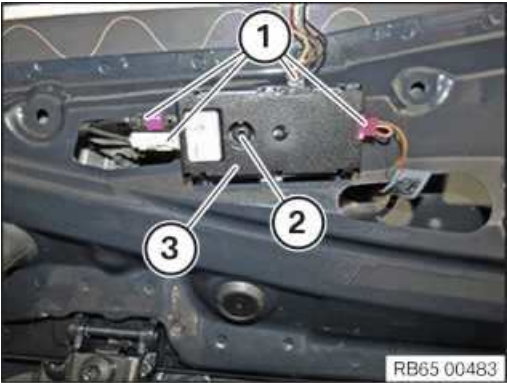
1 – Remove the trim for the top rear window frame



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

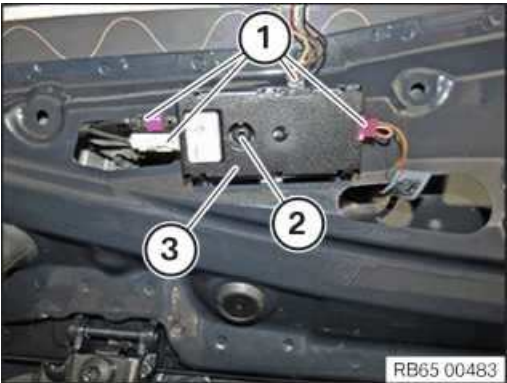
MAIN WORK

2 – Removing aerial amplifier



- Unlock and disconnect connector (1).
- Loosen screw (2).
- Remove the aerial amplifier (3).

3 – Installing the aerial amplifier



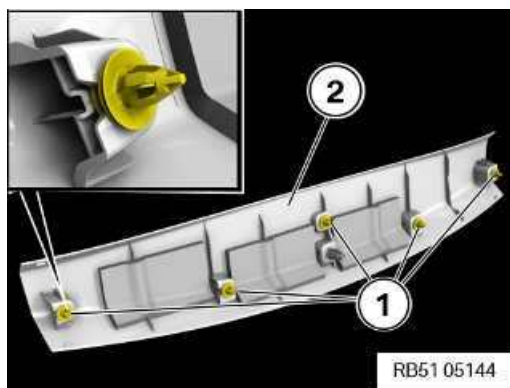
- Correctly position the aerial amplifier (3).
- Tighten down screw (2).

Aerial amplifier / interference suppression filter / wave trap to body

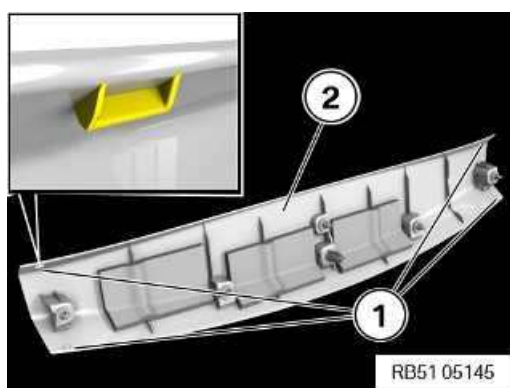
Screw		Tightening torque	3,3 Nm
-------	--	-------------------	--------

- Connect connectors (1) and lock.

4 – Install the trim for the top rear window frame



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



Check

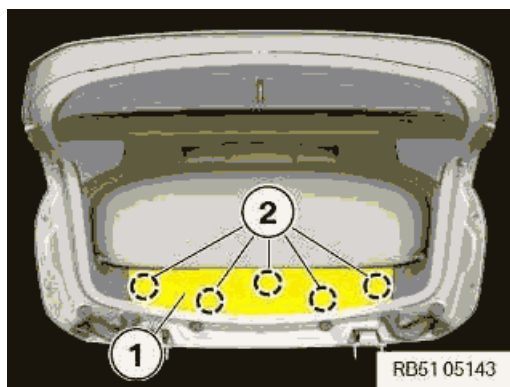
- Check the latch mechanisms (1) on the trim for the top rear window frame (2) for damage.

Result

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

Measure

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



Additional Information

Overview of Tightening Torques

Screw		Tightening torque	3,3 Nm
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Links

Repair instructions	Used in step
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61 35 ... Notes on ESD protection (Electro Static Discharge)
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65 20 030 Removing and installing roof-mounted aerial housing

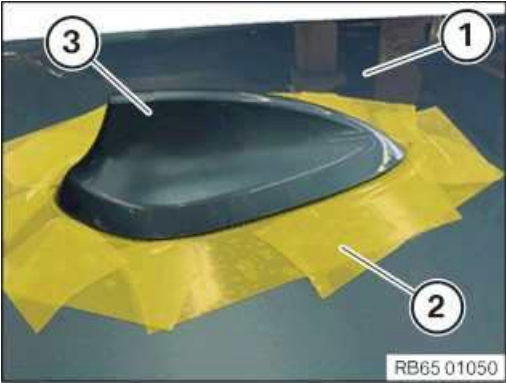
1 – Remove the empty roof-mounted aerial housing

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



- Slide the yellow plastic adhesive tape (2) under the empty housing (3) as far as possible.

Expendable materials

Yellow plastic adhesive tape		83199410979
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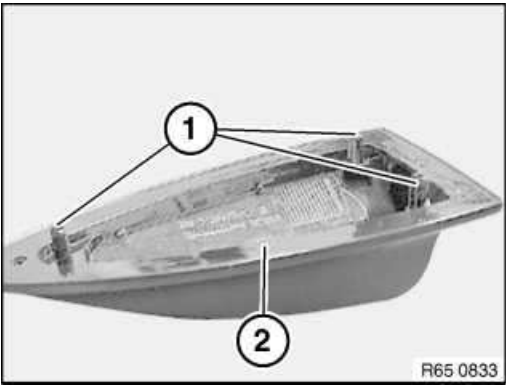
- Mask the roof outer skin (1) as shown.
- Cut through the adhesive bead using the special tool and remove the empty roof-mounted aerial housing (2).

Note: With increased effort, reposition the special tool 1 to recut the adhesive bead, if necessary.

- If necessary, touch up the paintwork damage.

2 – Installing the empty roof-mounted aerial housing

Note: The preparations correspond to the instructions for bonded window glasses; see further information.



TECHNICAL INFORMATION

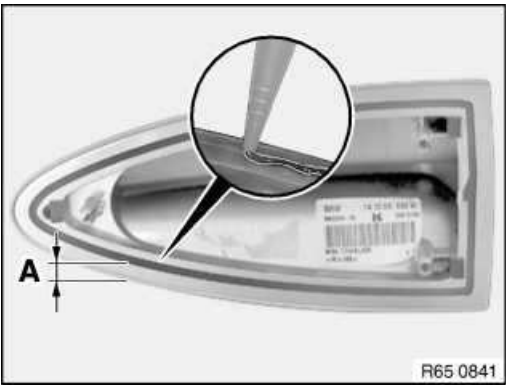
The following procedure forms the basis for these repair instructions and must be observed without fail.

For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

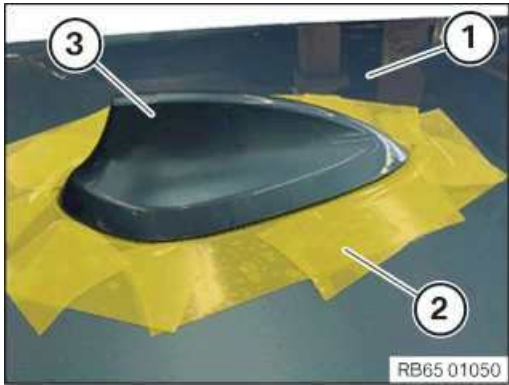
- Check centring pins (1) for damage.
- Clean bonding surface (2) with cleaning agent R1.

Expendable materials

Cleaning agent R1	100 ml, Bottle	83192211217
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- Apply trace of adhesive bead all round outer contour as follows.
- Distance between adhesive bead and edge of aerial housing:
 - $A=6.5\text{ mm} \pm 1\text{ mm}$
- The start and end of the bead must overlap by a maximum of 10 mm.
- To prevent the adhesive from leaking, the adhesive bead diameter must not exceed 2.5 mm to 3.5 mm.



- Join the empty housing coated with adhesive (3) by hand to block.
- To spread the adhesive better, move the empty housing (3) back and forth horizontally slightly when pressing down.
- Secure empty housing (3) if necessary with adhesive tape and press down uniformly.
- After bonding, leave vehicle to stand for at least 3 hours at room temperature.
- Remove adhesive tape (2) from the roof outer skin (1) and, if necessary, from the empty housing (3).

Additional Information

Overview of Special Tools

Replacement tools:
0 496 531 (65 2 014) Blade



Common		Used in step	1
Usage	(Special blade) Replaced by special tool 65 2 013 since 08/2008.		
Included in the tool or work	0 494 968		
Storage location			
Replaced by			
In connection with			
SI-Number	01 15 08 (475)		

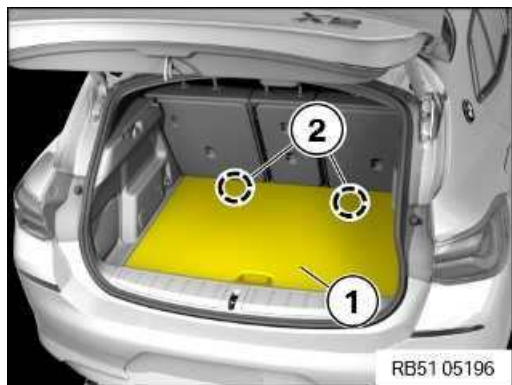
Links

General repair instructions	Used in step
99 00 ... Touching up paintwork damage	1
51 31 ... Notes on window bonding repair kit	2
51 00 ... Overview of consumables (Electronic Parts Catalogue)	2

65 20 350 Removing and installing/replacing interference suppression filter

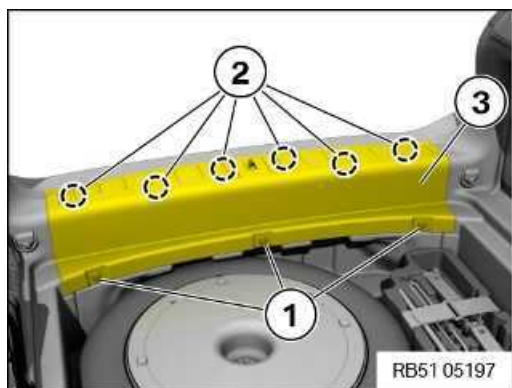
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel



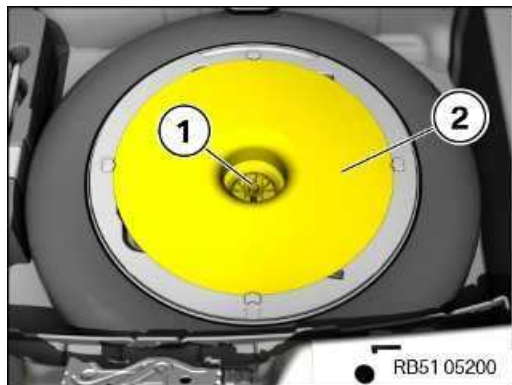
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the loading edge trim

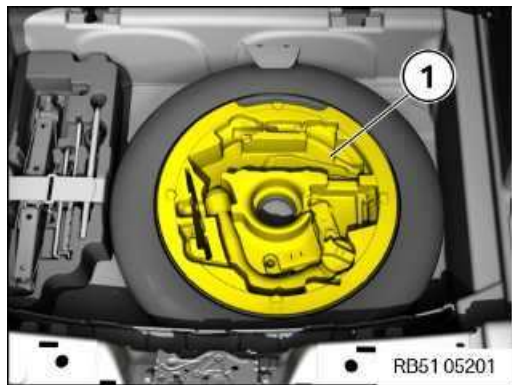


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

3 – Removing the compact spare wheel



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

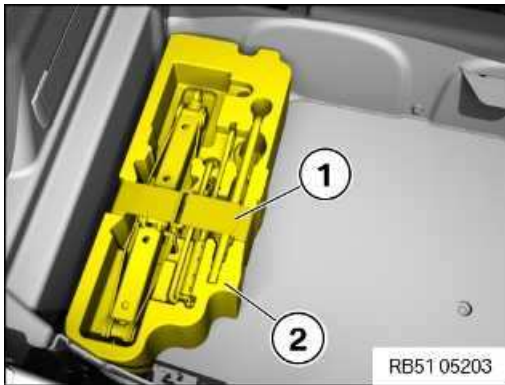


- Remove the oddments tray from the emergency wheel (1).



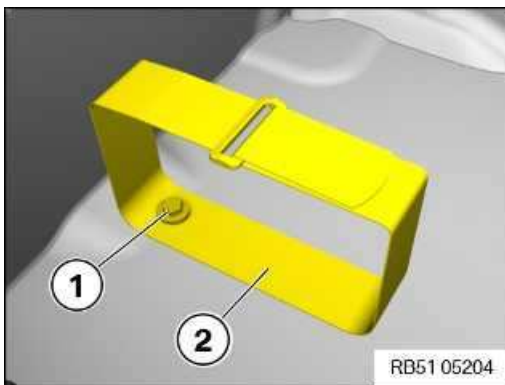
- Remove the emergency wheel (1).

4 – Remove the tool kit



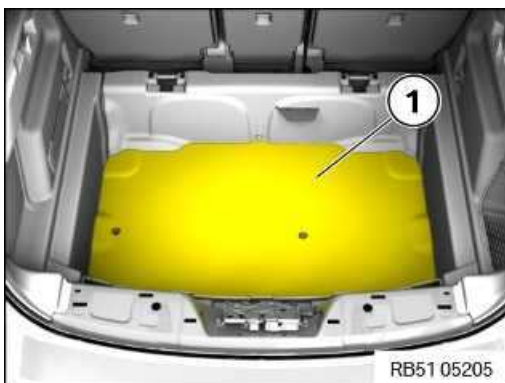
- Open the hook and loop tape (1).
- Remove the tool kit (2).

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



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

6 – Removing the luggage compartment floor trim panel



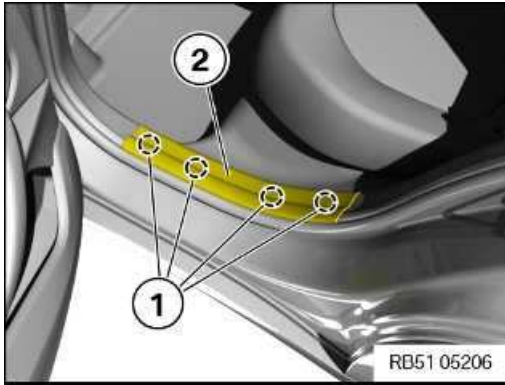
- Remove the luggage compartment floor trim panel (1) upwards.

7 – Remove the rear right door sill cover strip



NOTICE

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



► Remove rear entrance cover strip

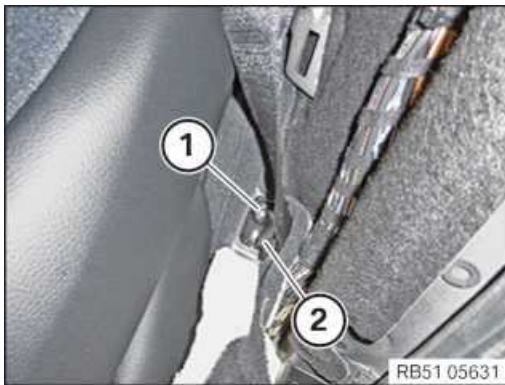
- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

8 – Removing bottom right C-pillar trim panel



NOTICE

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

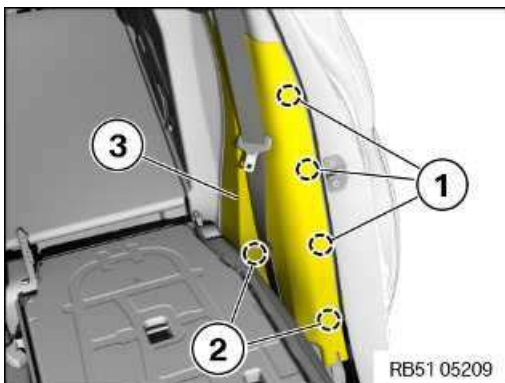


► Remove the bottom C-pillar trim panel

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

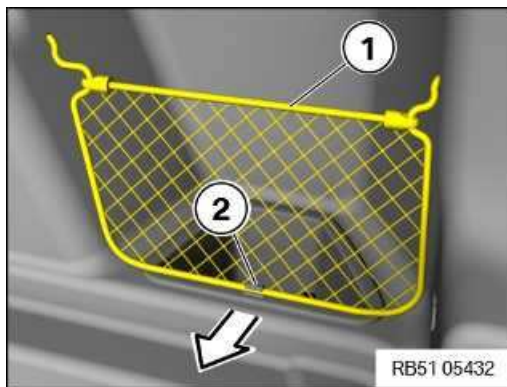


- Release the edge protection (1) in area of the bottom C-pillar trim panel.

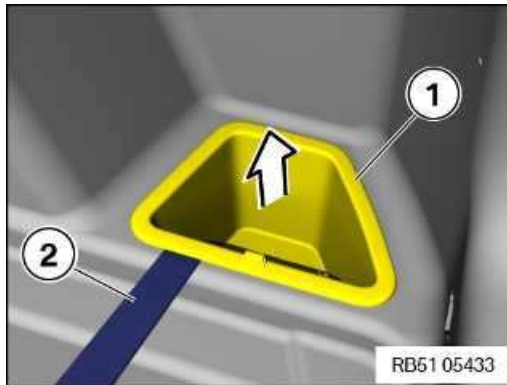


- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

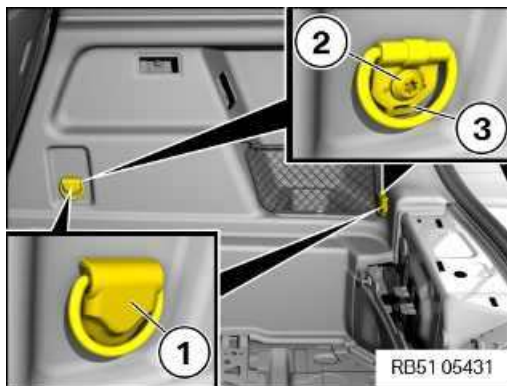
9 – Removing right luggage compartment wheel arch trim panel



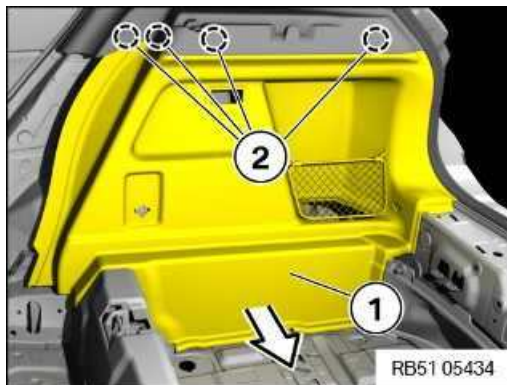
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



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



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



NOTICE

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

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

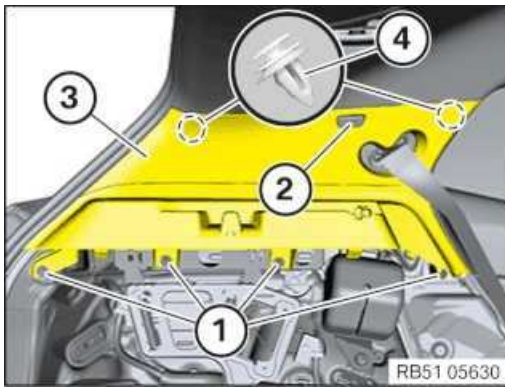
10 – Remove the trim panel of the right luggage compartment capping



NOTICE

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

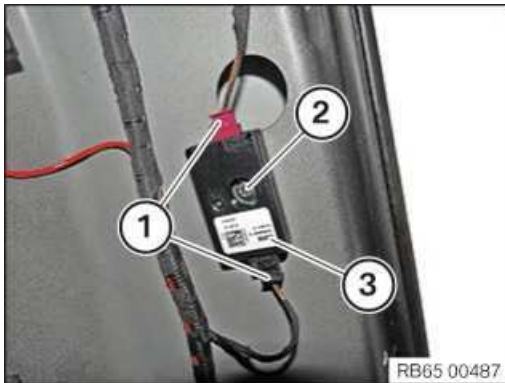
- Remove the trim panel of the luggage compartment capping



- 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).

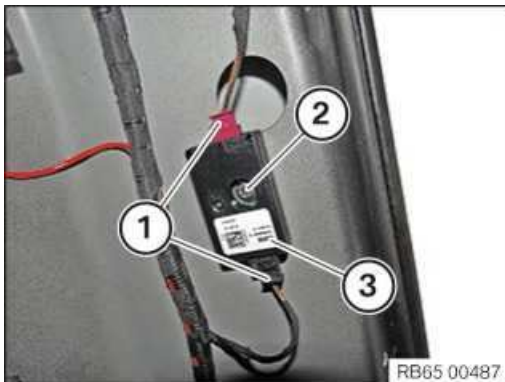
MAIN WORK

11 – Removing the interference suppression filter



- Disconnect the connector (1) .
- Loosen screw (2).
- Remove the interference suppression filter (3).

12 – Installing the interference suppression filter



- Correctly position the interference suppression filter (3).
- Tighten down screw (2).

Aerial amplifier / interference suppression filter / wave trap to body

Screw		Tightening torque	3,3 Nm
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- Connect connectors (1) and lock.

POSTPROCESSES

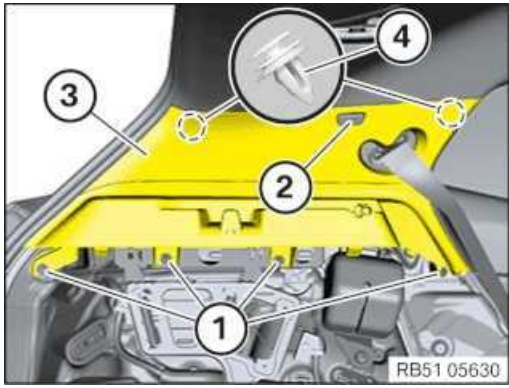
13 – Install the trim panel for the right luggage compartment capping



NOTICE

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

- Install the trim panel for the luggage compartment capping



- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

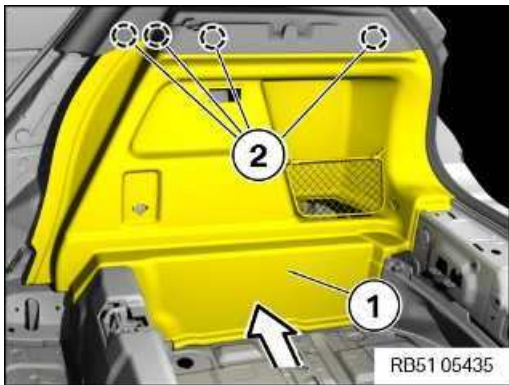
Self-tapping screw		Tightening torque	4 Nm
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- Tighten the screws (1).

Trim panel of luggage compartment capping to body

Hexagon screw		Tightening torque	1,8 Nm
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14 – 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.

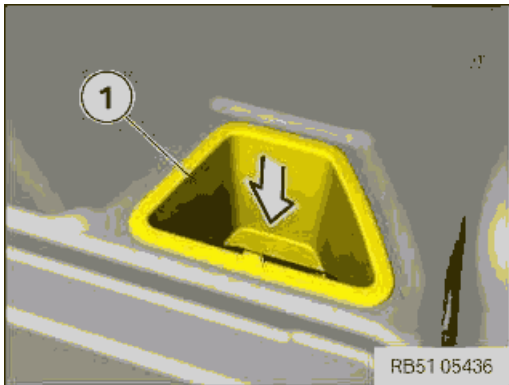
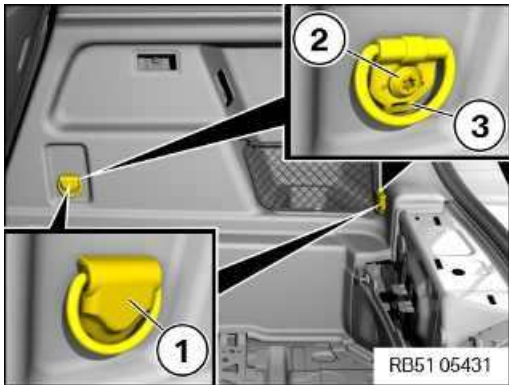
- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

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

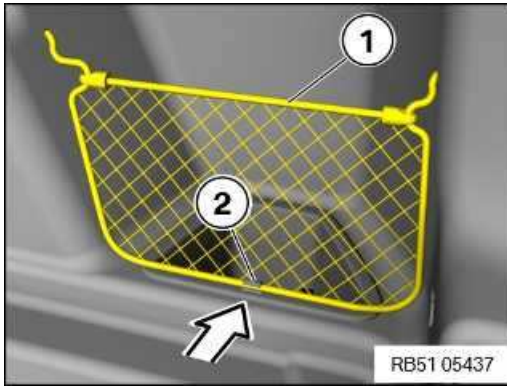
Lashing eye in luggage compartment

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.



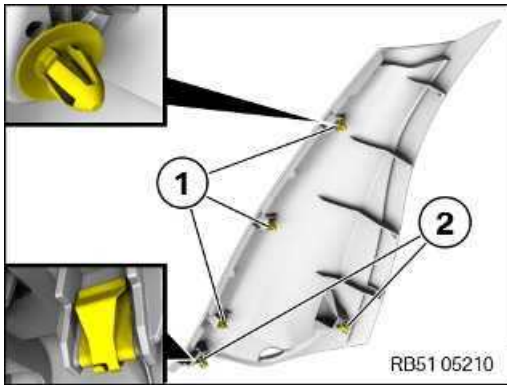
- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

15 – Install the C-pillar trim panel at the bottom right



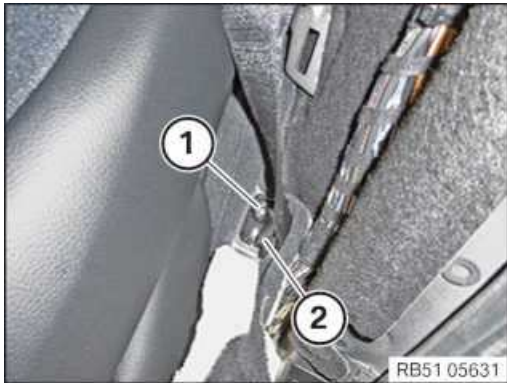
NOTICE

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



► Install the bottom C-pillar trim panel

- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

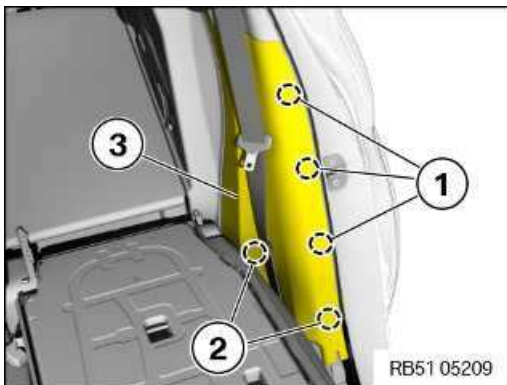


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm
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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).



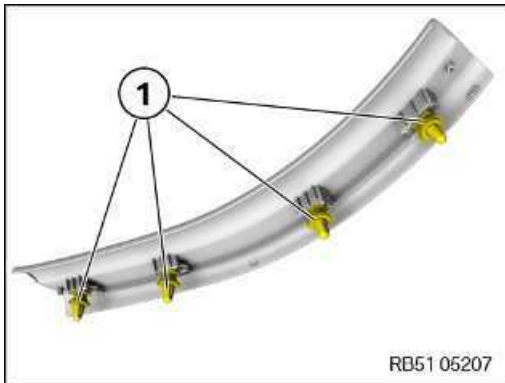
- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

16 – Installing rear right door sill cover strip



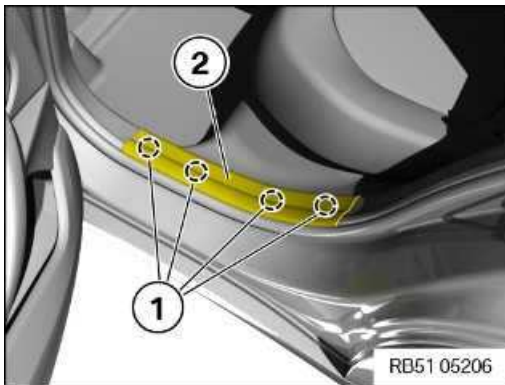
NOTICE

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



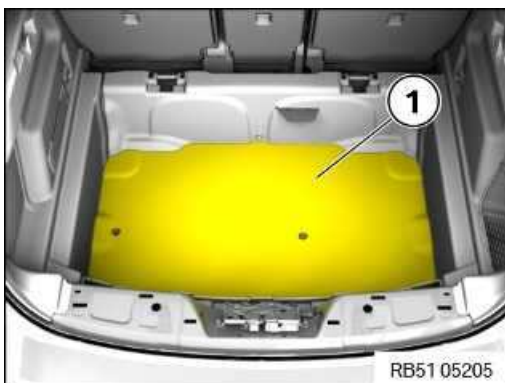
► Installing the rear door sill cover strip

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



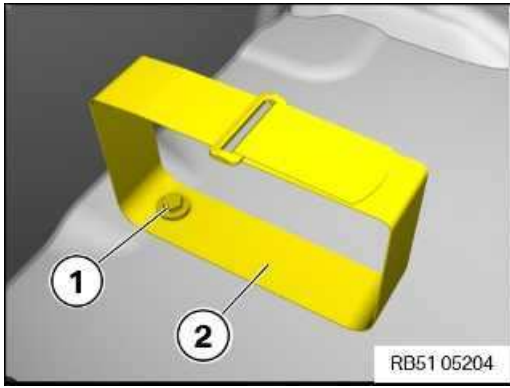
- Clip in the door sill cover strip (2) with the clips (1).

17 – Installing the luggage compartment floor trim panel



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

18 – Inserting the Velcro fastener for the toolkit

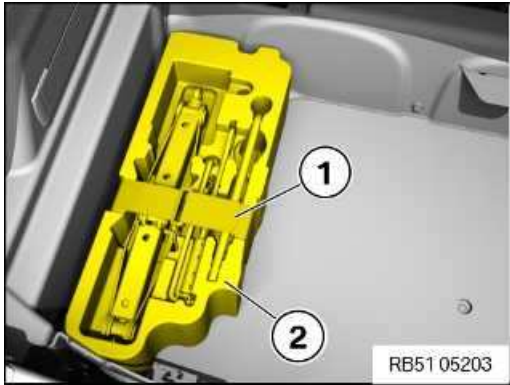


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

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

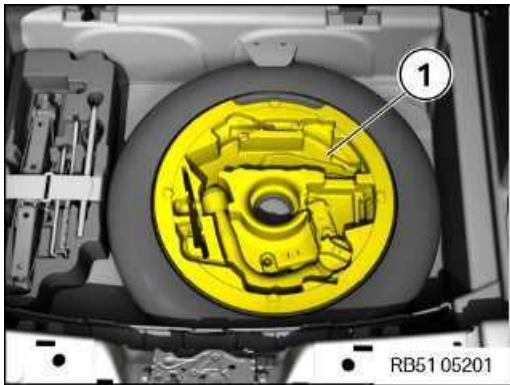


- Install the tool kit (2).
- Close the hook and loop tape (1).

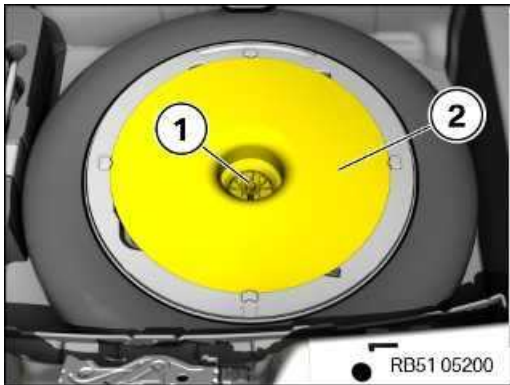
20 – Install the emergency wheel



- Insert compact spare wheel(1).

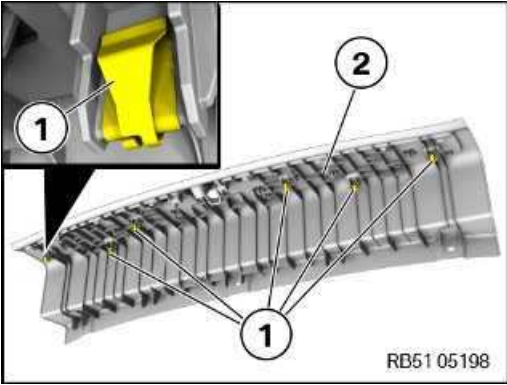


- Insert oddments tray into the compact spare wheel (1).

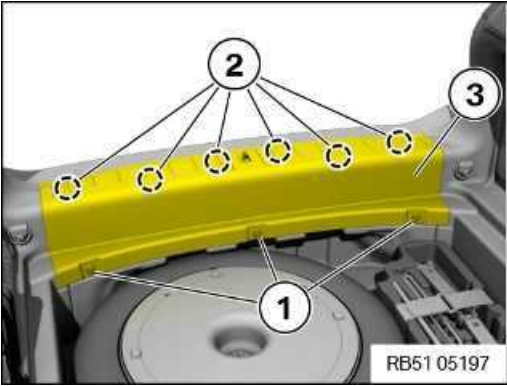


- Insert the lid (2).
- Hand-tighten the bolt (1).

21 – Installing loading edge trim

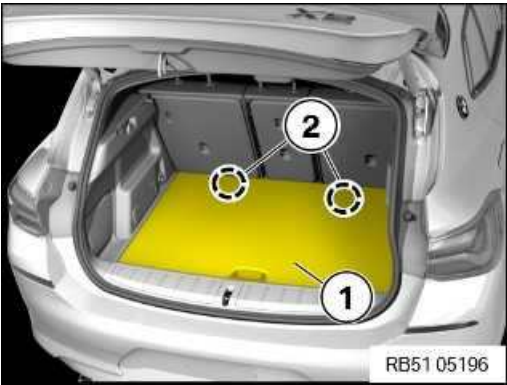


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- 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).

22 – 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

Aerial amplifier / interference suppression filter / wave trap to body			Used in step 12
Screw		Tightening torque	3,3 Nm
Trim panel of luggage compartment capping			Used in step 13
Self-tapping screw		Tightening torque	4 Nm
Trim panel of luggage compartment capping to body			Used in step 13
Hexagon screw		Tightening torque	1,8 Nm
Lashing eye in luggage compartment			Used in step 14
Bolt M8 x 22		Tightening torque	21 Nm
End fitting to body			Used in step 15
Screw	Renew screw.	Tightening torque	42 Nm

Bolt M6 x 20		Tightening torque	4 Nm
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65 20 032 Replacing roof-mounted aerial housing

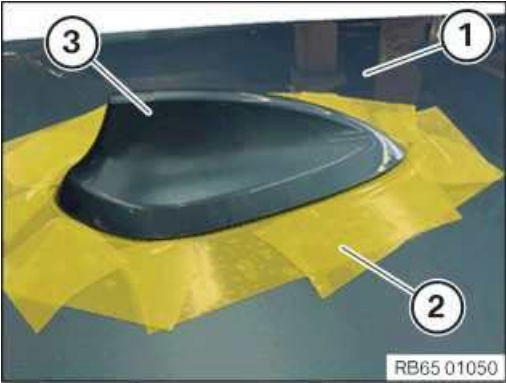
1 – Remove the empty roof-mounted aerial housing

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



- Slide the yellow plastic adhesive tape (2) under the empty housing (3) as far as possible.

Expendable materials

Yellow plastic adhesive tape		83199410979
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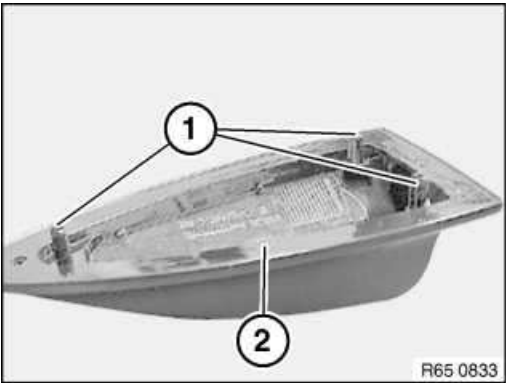
- Mask the roof outer skin (1) as shown.
- Cut through the adhesive bead using the special tool and remove the empty roof-mounted aerial housing (2).

Note: With increased effort, reposition the special tool 1 to recut the adhesive bead, if necessary.

- If necessary, touch up the paintwork damage.

2 – Installing the empty roof-mounted aerial housing

Note: The preparations correspond to the instructions for bonded window glasses; see further information.



TECHNICAL INFORMATION

The following procedure forms the basis for these repair instructions and must be observed without fail.

For more information see: 51 31 ... General procedure for disassembly/installation of bonded window glass

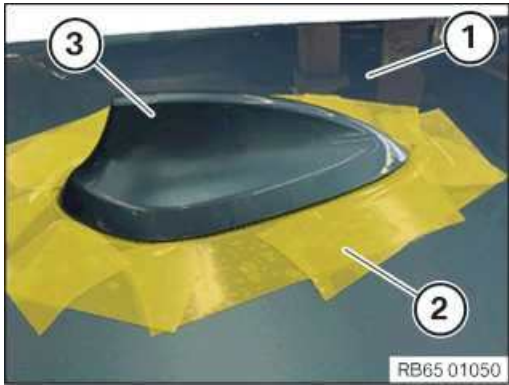
- Check centring pins (1) for damage.
- Clean bonding surface (2) with cleaning agent R1.

Expendable materials

Cleaning agent R1	100 ml, Bottle	83192211217
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- Apply trace of adhesive bead all round outer contour as follows.
- Distance between adhesive bead and edge of aerial housing:
 - $A=6.5\text{ mm} \pm 1\text{ mm}$
- The start and end of the bead must overlap by a maximum of 10 mm.
- To prevent the adhesive from leaking, the adhesive bead diameter must not exceed 2.5 mm to 3.5 mm.



- Join the empty housing coated with adhesive (3) by hand to block.
- To spread the adhesive better, move the empty housing (3) back and forth horizontally slightly when pressing down.
- Secure empty housing (3) if necessary with adhesive tape and press down uniformly.
- After bonding, leave vehicle to stand for at least 3 hours at room temperature.
- Remove adhesive tape (2) from the roof outer skin (1) and, if necessary, from the empty housing (3).

Additional Information

Overview of Special Tools

Replacement tools:
0 496 531 (65 2 014) Blade



Common		Used in step	1
Usage	(Special blade) Replaced by special tool 65 2 013 since 08/2008.		
Included in the tool or work	0 494 968		
Storage location			
Replaced by			
In connection with			
SI-Number	01 15 08 (475)		

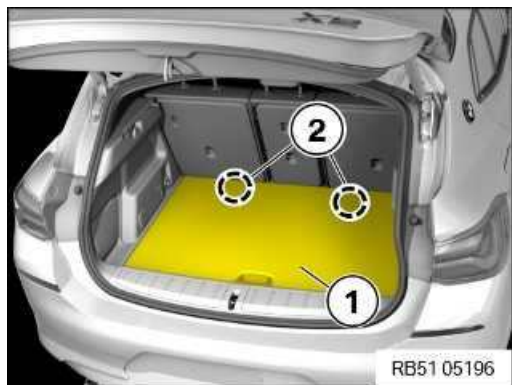
Links

General repair instructions	Used in step
99 00 ... Touching up paintwork damage	1
51 31 ... Notes on window bonding repair kit	2
51 00 ... Overview of consumables (Electronic Parts Catalogue)	2

65 24 020 Removing and installing/replacing wave trap

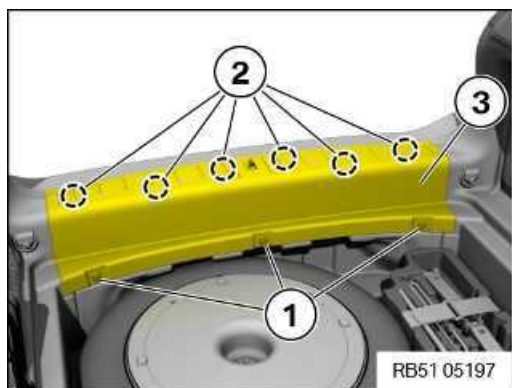
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel



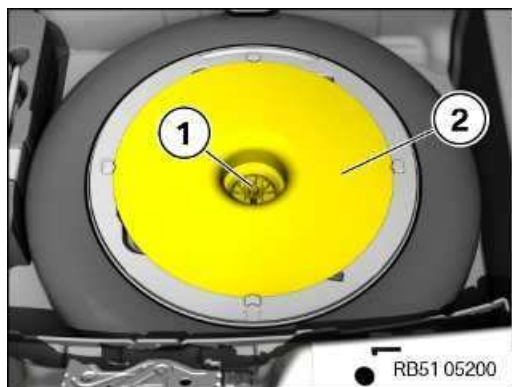
- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the loading edge trim

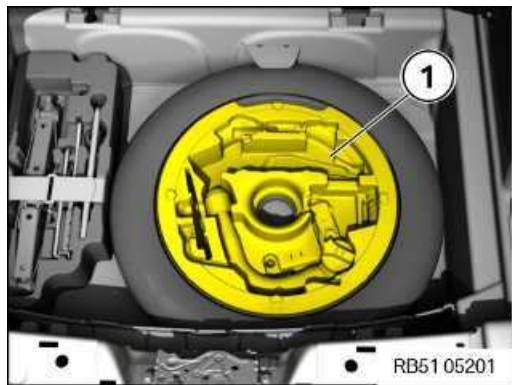


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

3 – Removing the compact spare wheel



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

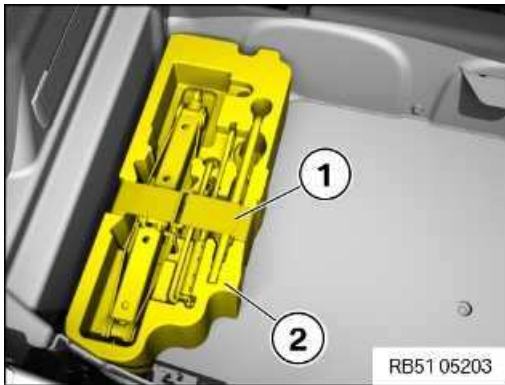


- Remove the oddments tray from the emergency wheel (1).



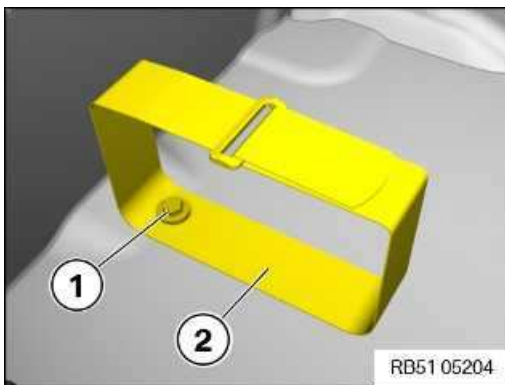
- Remove the emergency wheel (1).

4 – Remove the tool kit



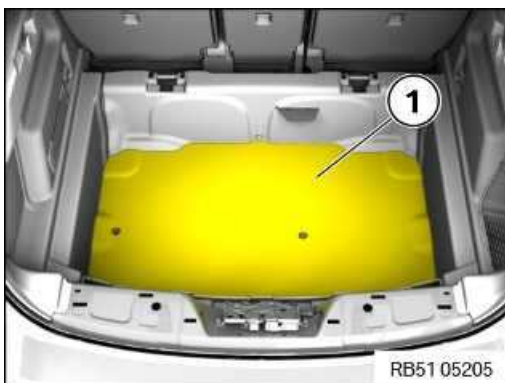
- Open the hook and loop tape (1).
- Remove the tool kit (2).

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



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

6 – Removing the luggage compartment floor trim panel



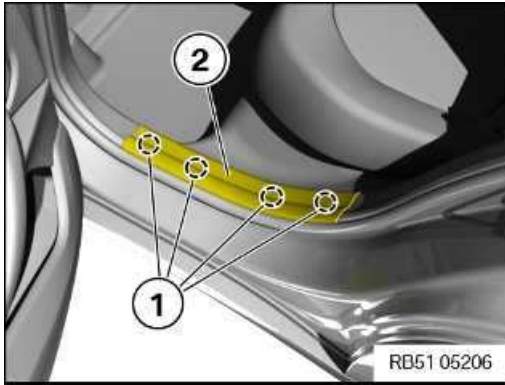
- Remove the luggage compartment floor trim panel (1) upwards.

7 – Remove the rear right door sill cover strip



NOTICE

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



► Remove rear entrance cover strip

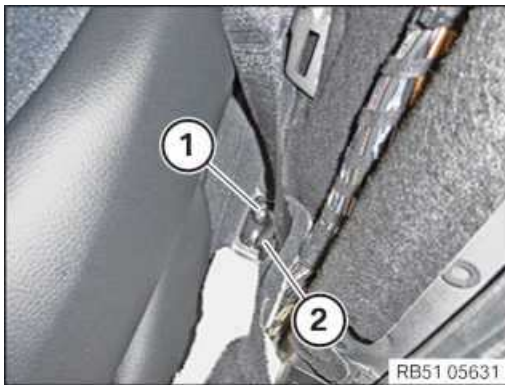
- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

8 – Removing bottom right C-pillar trim panel



NOTICE

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

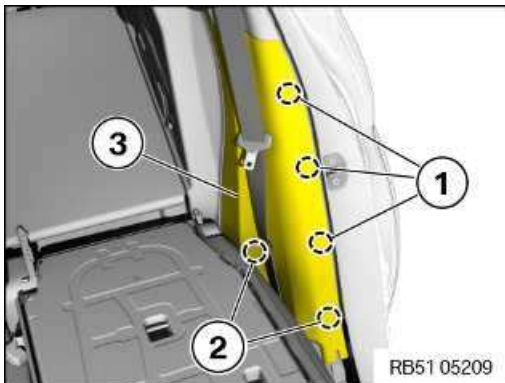


► Remove the bottom C-pillar trim panel

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

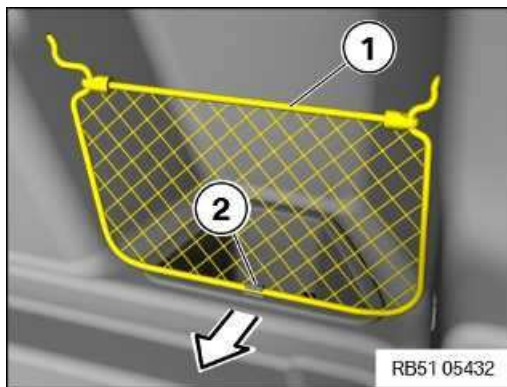


- Release the edge protection (1) in area of the bottom C-pillar trim panel.

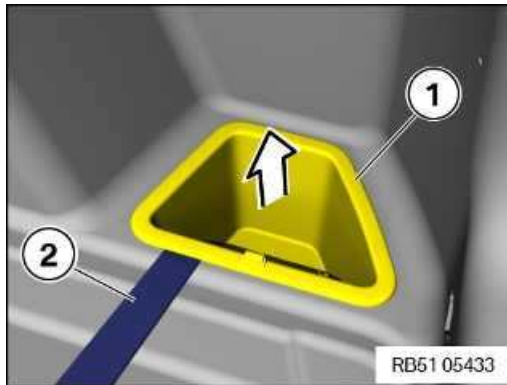


- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

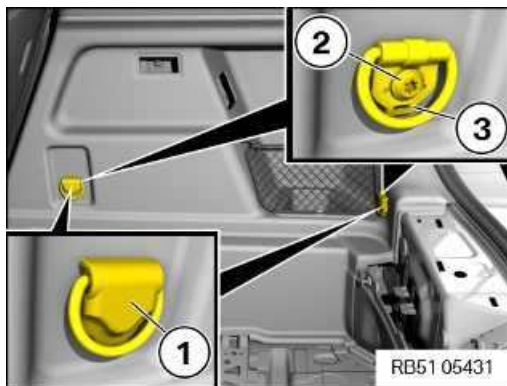
9 – Removing right luggage compartment wheel arch trim panel



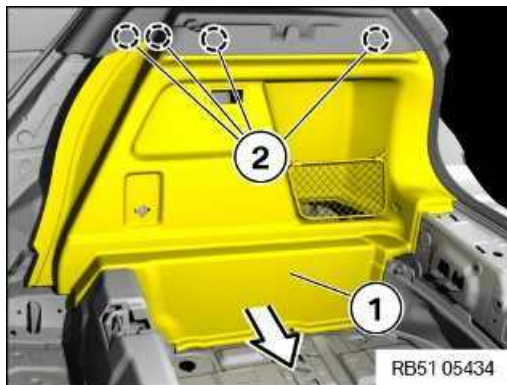
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



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



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



NOTICE

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

- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

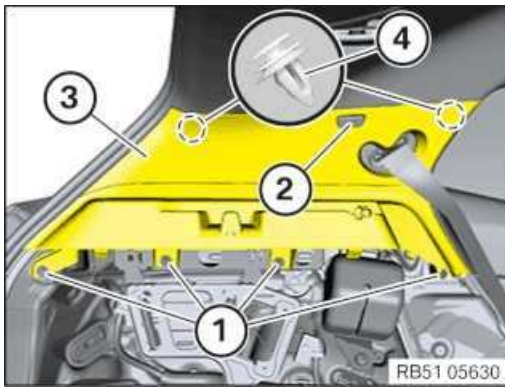
10 – Remove the trim panel of the right luggage compartment capping



NOTICE

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

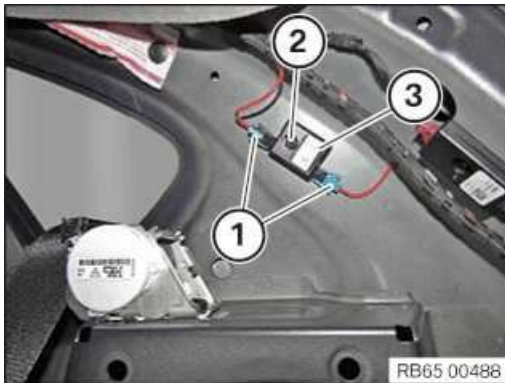
- Remove the trim panel of the luggage compartment capping



- 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).

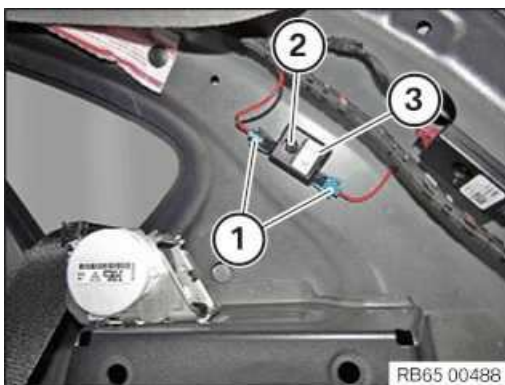
MAIN WORK

11 – Removing the wave trap



- Disconnect the connector (1) .
- Loosen screw (2).
- Remove the wave trap (3).

12 – Installing the wave trap



- Correctly position wave trap (3).
- Tighten down screw (2).

Aerial amplifier / interference suppression filter / wave trap to body

Screw		Tightening torque	3,3 Nm
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- Connect connectors (1) and lock.

POSTPROCESSES

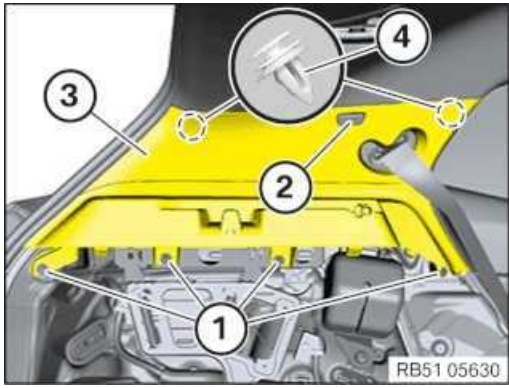
13 – Install the trim panel for the right luggage compartment capping



NOTICE

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

- Install the trim panel for the luggage compartment capping



- Install trim panel of the luggage compartment capping (3) and thread in the end fitting.
- Clip in the trim panel of the luggage compartment capping (3) at the clips (4).
- Tighten screw and mount cover (2).

Trim panel of luggage compartment capping

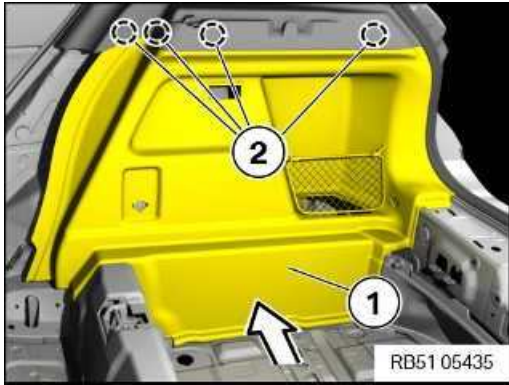
Self-tapping screw		Tightening torque	4 Nm
--------------------	--	-------------------	------

- Tighten the screws (1).

Trim panel of luggage compartment capping to body

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

14 – 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.

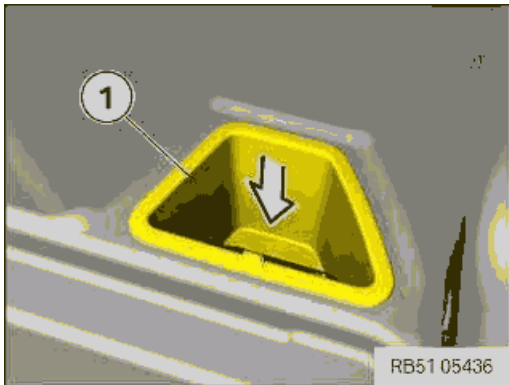
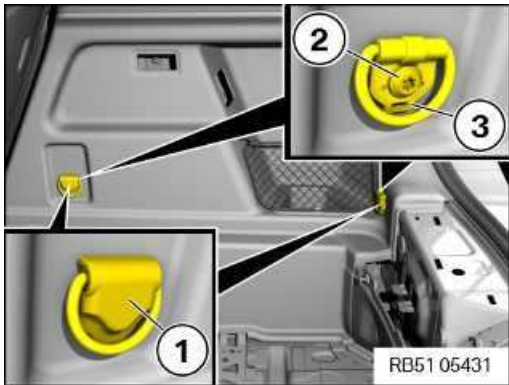
- Press luggage compartment wheel arch trim panel (1) down in direction of arrow and feed into the guides (2) and under the bottom C-pillar trim panel.

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

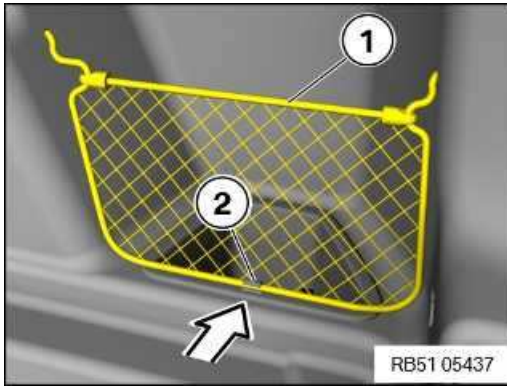
Lashing eye in luggage compartment

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.



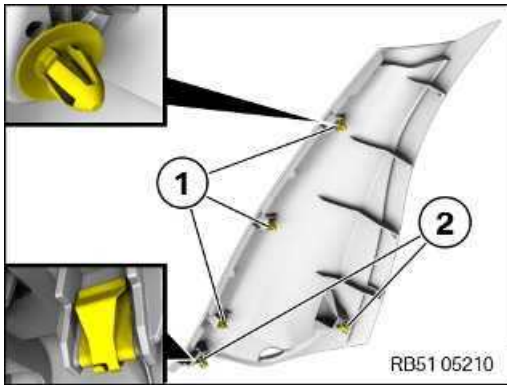
- Clip storage net (1) into latch mechanisms (2) in direction of arrow.

15 – Install the C-pillar trim panel at the bottom right



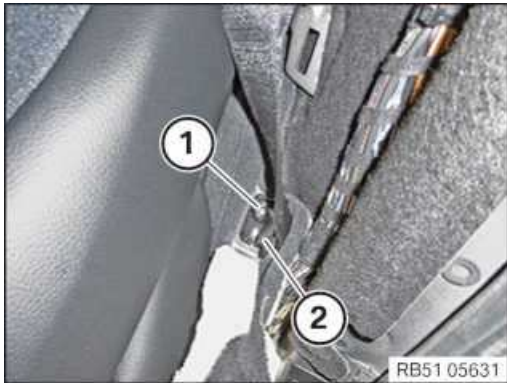
NOTICE

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



► Install the bottom C-pillar trim panel

- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

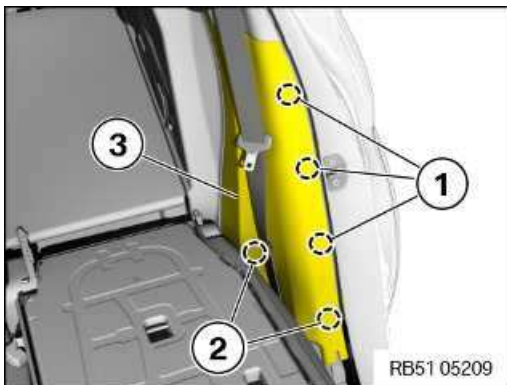


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm
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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).



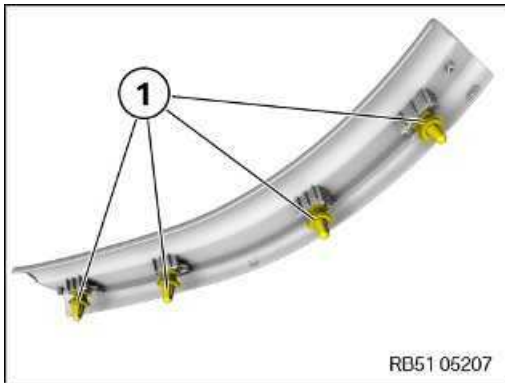
- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

16 – Installing rear right door sill cover strip



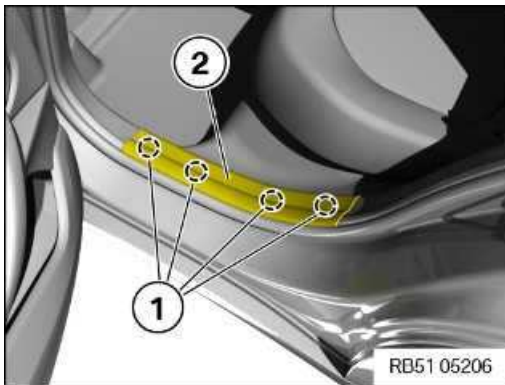
NOTICE

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



► Installing the rear door sill cover strip

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



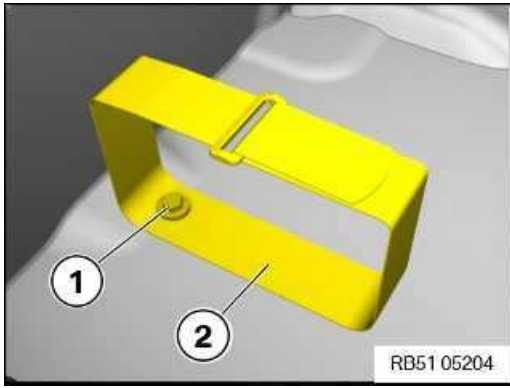
- Clip in the door sill cover strip (2) with the clips (1).

17 – Installing the luggage compartment floor trim panel



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

18 – Inserting the Velcro fastener for the toolkit

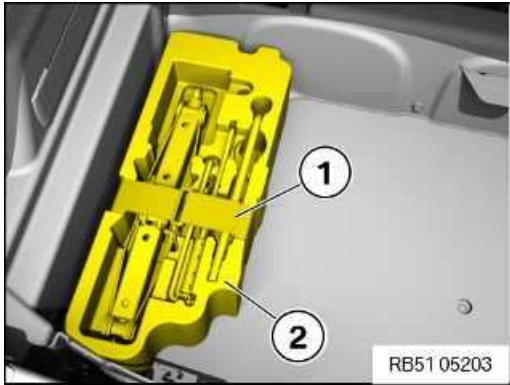


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

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

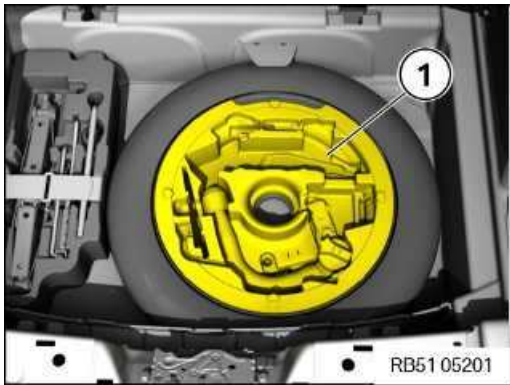


- Install the tool kit (2).
- Close the hook and loop tape (1).

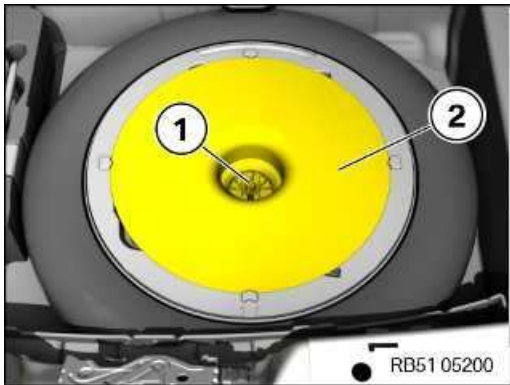
20 – Install the emergency wheel



- Insert compact spare wheel(1).

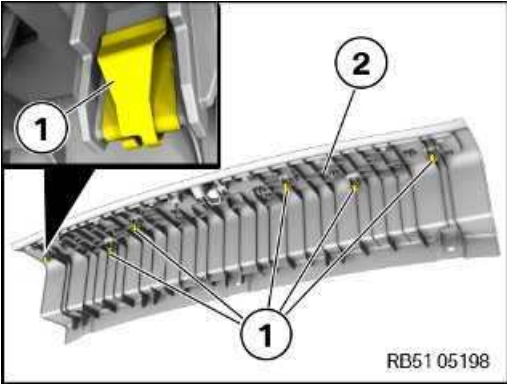


- Insert oddments tray into the compact spare wheel (1).

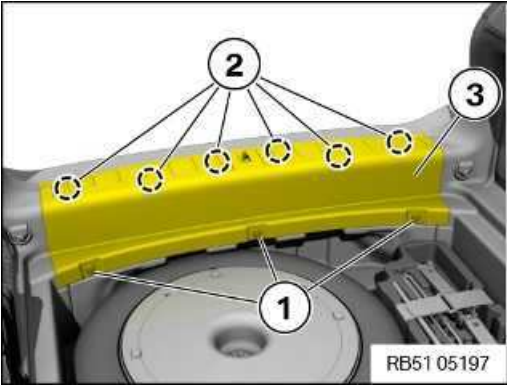


- Insert the lid (2).
- Hand-tighten the bolt (1).

21 – Installing loading edge trim

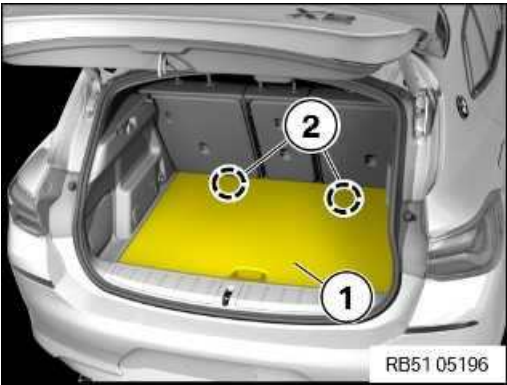


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- 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).

22 – 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

Aerial amplifier / interference suppression filter / wave trap to body			Used in step 12
Screw		Tightening torque	3,3 Nm
Trim panel of luggage compartment capping			Used in step 13
Self-tapping screw		Tightening torque	4 Nm
Trim panel of luggage compartment capping to body			Used in step 13
Hexagon screw		Tightening torque	1,8 Nm
Lashing eye in luggage compartment			Used in step 14
Bolt M8 x 22		Tightening torque	21 Nm
End fitting to body			Used in step 15
Screw	Renew screw.	Tightening torque	42 Nm

Bolt M6 x 20		Tightening torque	4 Nm
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65 50 057 Removing and installing the Central Information Display

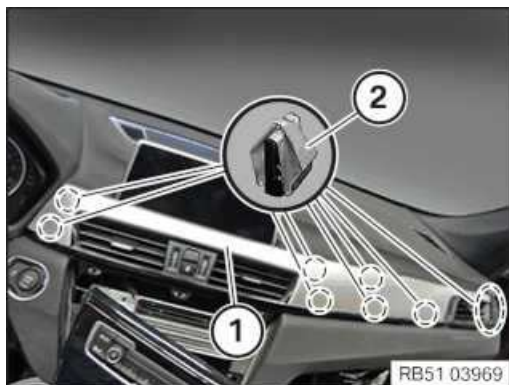
PRELIMINARY WORK

1 – Removing trim of the audio operating unit



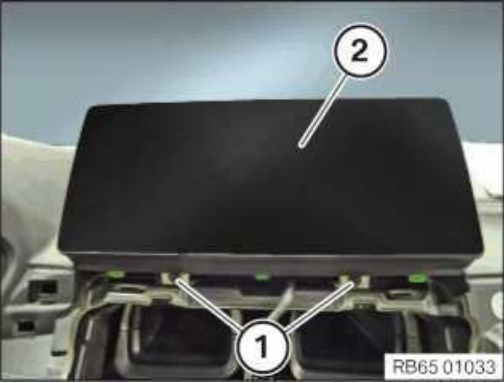
- Unclip the trim (1) using special tool **2 298 505**.

2 – Remove the finisher on the right instrument panel

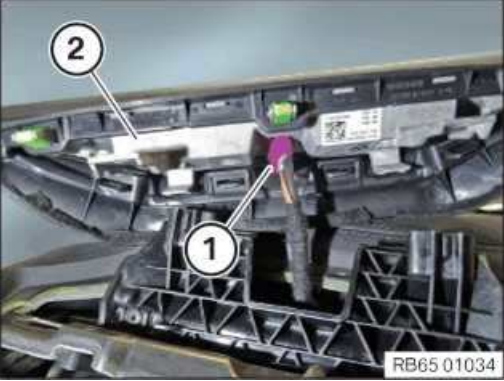


- Carefully release the decorative strip (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) starting from the side.
- Lift up the decorative strip (1) and disconnect the plug connections behind it.
- Remove the decorative strip (1).

3 – Remove Central Information Display (CID)

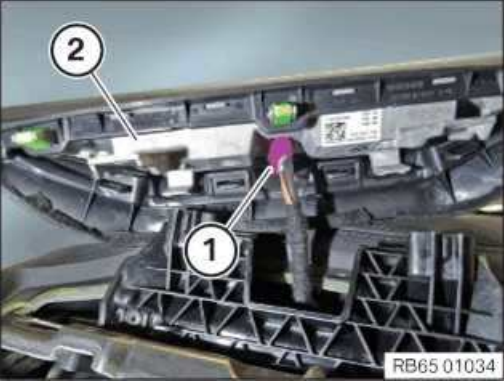


- Loosen screws (1).
- Feed the central information display (CID) (2) to the top out of the instrument panel.

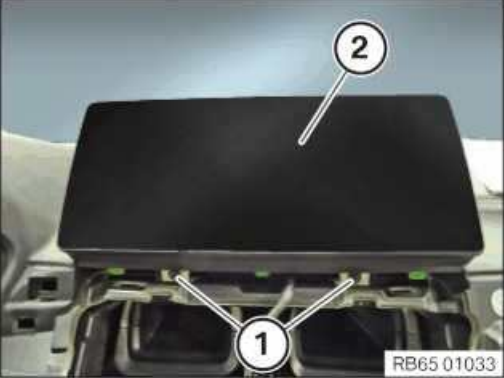


- Unlock and disconnect connector (1).
- Remove the central information display (CID) (2).

4 – Install the central information display (CID)



- Position and connect the connector (1) to the central information display (CID) (2).



- Guide central information display (CID) (2) from above into the instrument panel and position it correctly.
- Tighten the screws (1).

Central information display to instrument panel

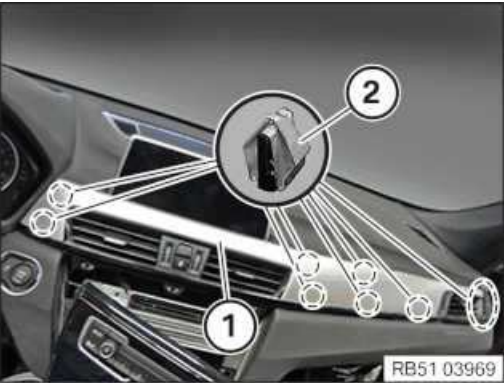
Screw		Tightening torque	1,8 Nm
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5 – Install the finisher on the right instrument panel

i

TECHNICAL INFORMATION

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



- Install the decorative strip (1).
- Connect connector.
- Engage the decorative strip (1) on the clamps (2).

6 – Installing the audio operating unit trim



- Correctly position trim (1) and clip it into the instrument panel (2).

Additional Information

Overview of Tightening Torques

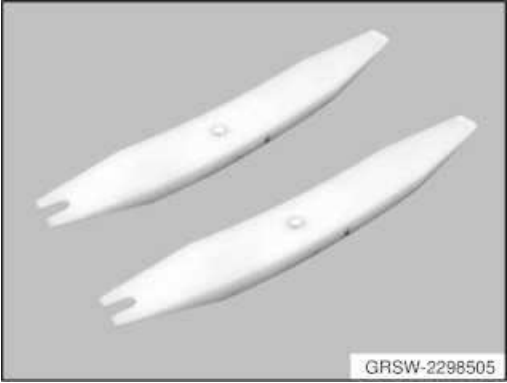
Central information display to instrument panel

Used in step 4

Screw		Tightening torque	1,8 Nm
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Overview of Special Tools

2 298 505 Wedge



Common		Used in step	1
Usage	Set (delivery of 2 pieces)		
Included in the tool or work			
Storage location	C34		
Replaced by			
In connection with			
SI-Number	01 03 12 (792)		

0 496 569 (00 9 325) Wedge



Common		Used in step	2
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)		
Included in the tool or work	0 490 527		
Storage location	Individual		
Replaced by			
In connection with			
SI-Number	41 01 09 (507)		

65 50 558 Replace the Central Information Display (after vehicle diagnosis) (AW specification without programming / encoding, see 61 00 ...)

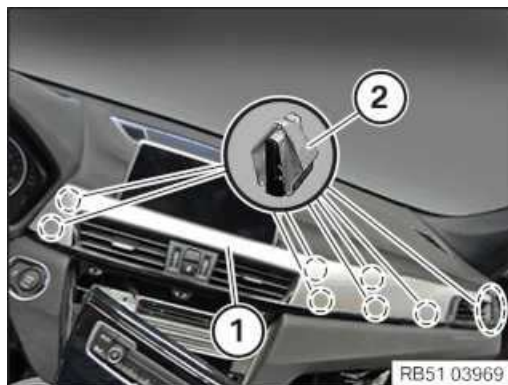
PRELIMINARY WORK

1 – Removing trim of the audio operating unit



- Unclip the trim (1) using special tool **2 298 505**.

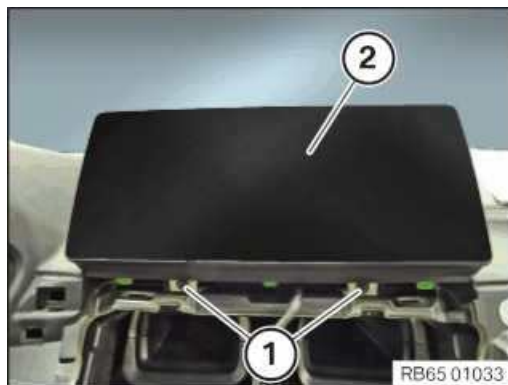
2 – Remove the finisher on the right instrument panel



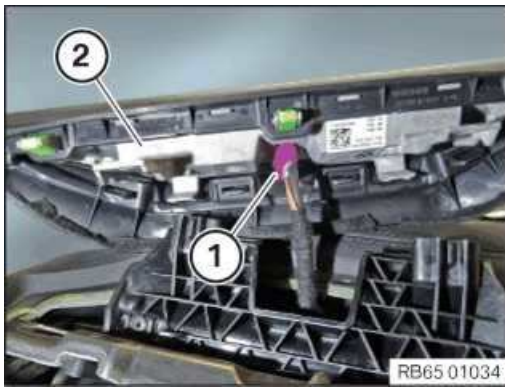
- Carefully release the decorative strip (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2) starting from the side.
- Lift up the decorative strip (1) and disconnect the plug connections behind it.
- Remove the decorative strip (1).

MAIN WORK

3 – Remove Central Information Display (CID)

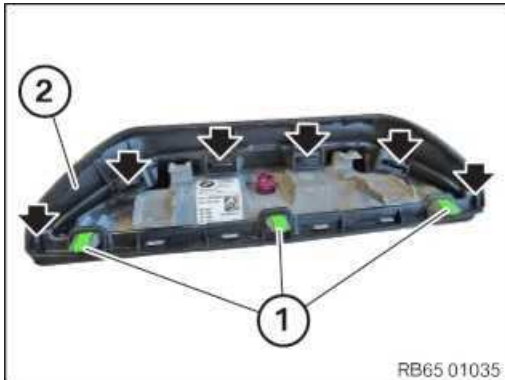


- Loosen screws (1).
- Feed the central information display (CID) (2) to the top out of the instrument panel.

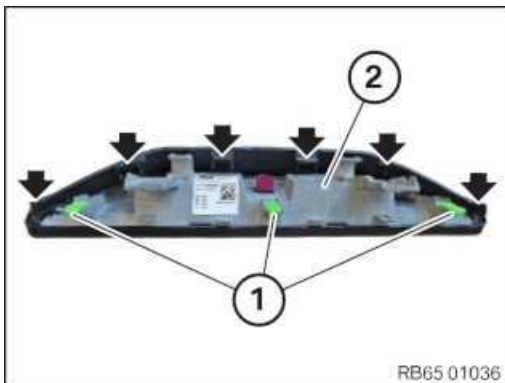


- Unlock and disconnect connector (1).
- Remove the central information display (CID) (2).

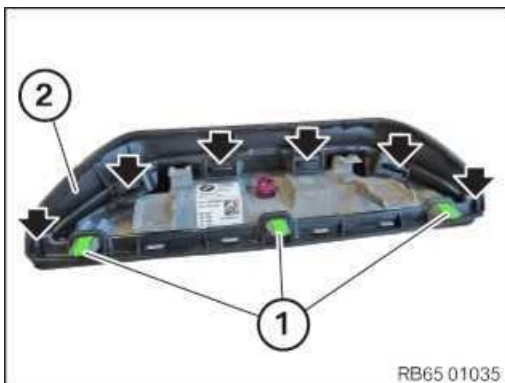
4 – Replacing the central information display (CID)



- **The locks (arrows) are an integral part of the central information display (CID) and may not be damaged.**
- Carefully unclip the latch mechanisms (1) on the adapter plate (2).
- Unlock the latch mechanisms (markings) carefully.
- Remove adapter plate (2).

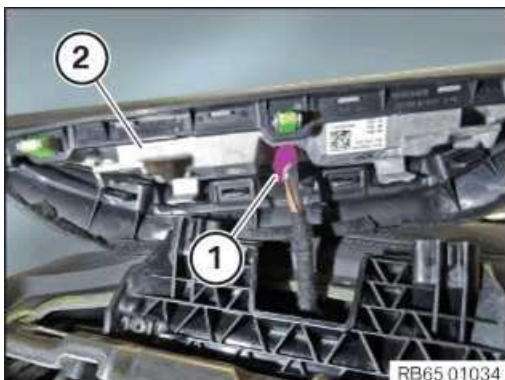


- Check the clamps (1).
- Replace broken or missing clamps.
- Check the locks (arrows) of the central information display (CID) (2) for damage and renew the central information display (2) if required.

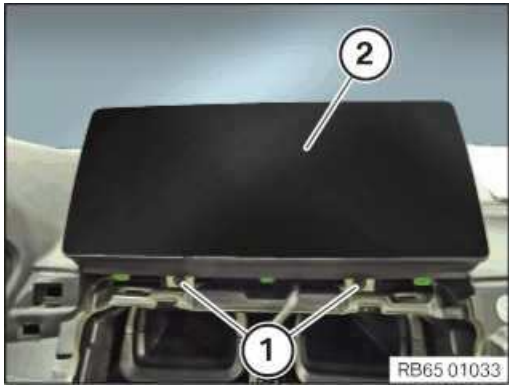


- **The locks (arrows) are an integral part of the central information display (CID) and may not be damaged.**
- Position adapter plate (2) correctly.
- Clip the latch mechanisms (1) on the adapter plate (2).
- Lock the locks (arrows).

5 – Install the central information display (CID)



- Position and connect the connector (1) to the central information display (CID) (2).



- Guide central information display (CID) (2) from above into the instrument panel and position it correctly.
- Tighten the screws (1).

Central information display to instrument panel

Screw		Tightening torque	1,8 Nm
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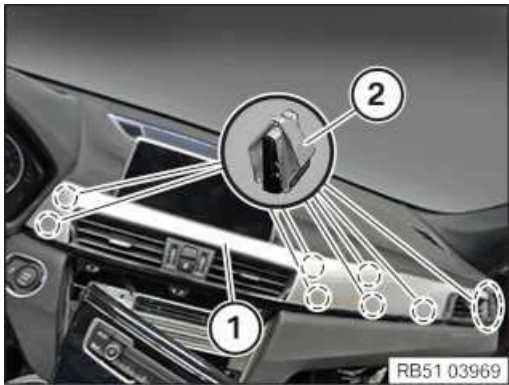
POSTPROCESSES

6 – Install the finisher on the right instrument panel

i

TECHNICAL INFORMATION

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



- Install the decorative strip (1).
- Connect connector.
- Engage the decorative strip (1) on the clamps (2).

7 – Installing the audio operating unit trim



- Correctly position trim (1) and clip it into the instrument panel (2).

Additional Information

Overview of Tightening Torques

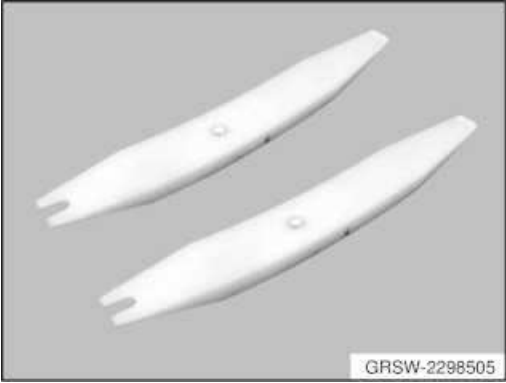
Central information display to instrument panel

Used in step 5

Screw		Tightening torque	1,8 Nm
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Overview of Special Tools

2 298 505 Wedge



Common		Used in step 1
Usage	Set (delivery of 2 pieces)	
Included in the tool or work		
Storage location	C34	
Replaced by		
In connection with		
SI-Number	01 03 12 (792)	

0 496 569 (00 9 325) Wedge



Common		Used in step 2
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)	
Included in the tool or work	0 490 527	
Storage location	Individual	
Replaced by		
In connection with		
SI-Number	41 01 09 (507)	

65 75 055 Removing and installation/replacing emergency power siren with tilt sensor

PRELIMINARY WORK

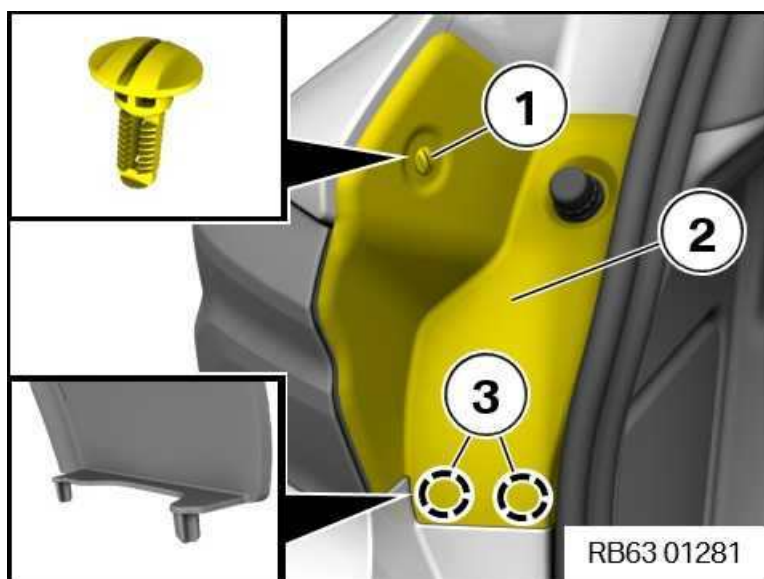
1 – Removing both trims for water channel



NOTICE

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

► Removing trim for water channel



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

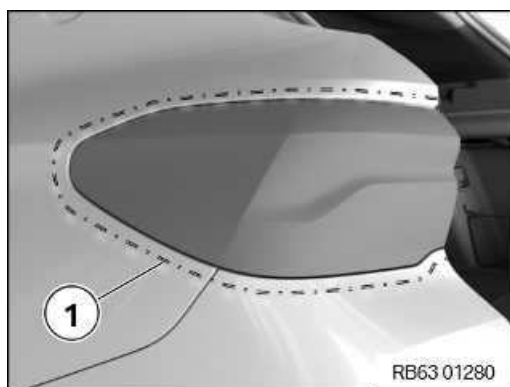
2 – Remove both rear lights from the side panel



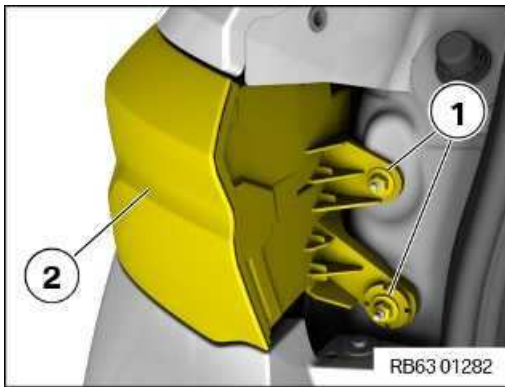
NOTICE

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

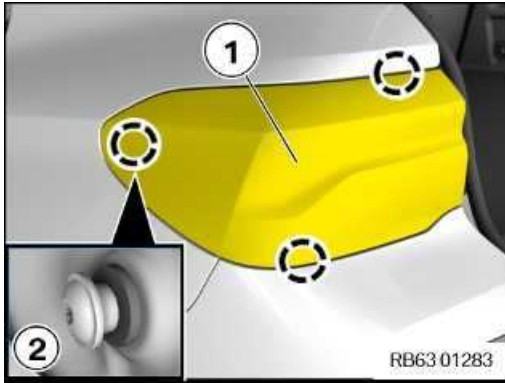
► Remove the rear light on the side panel



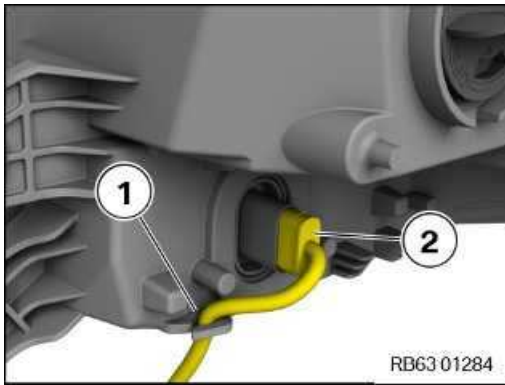
- Mask the body in area (1) with plastic adhesive tape.



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

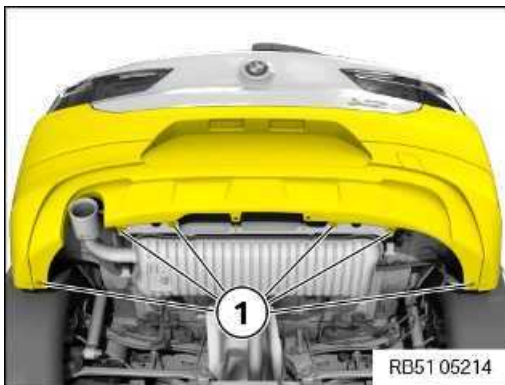


- Remove the rear light (1) from the guides (2) towards the rear.

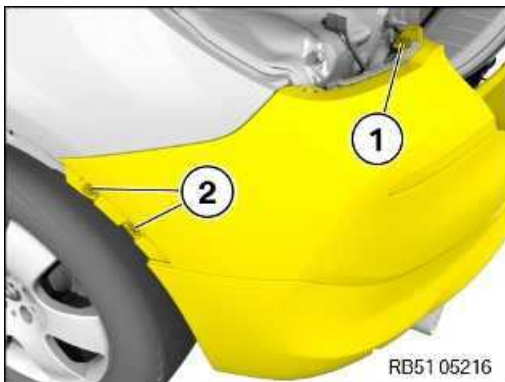


- Detach cable from guide (1).
- Unlock and disconnect the plug connection (2) and remove the rear light .

3 – Remove rear bumper panel



- Loosen screws (1).

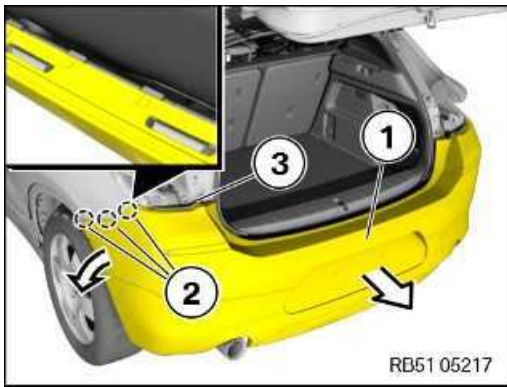


- Loosen screws (1) and (2).



NOTICE

Perform the operations on the left and right side.



NOTICE

Perform the operations on the left and right side.

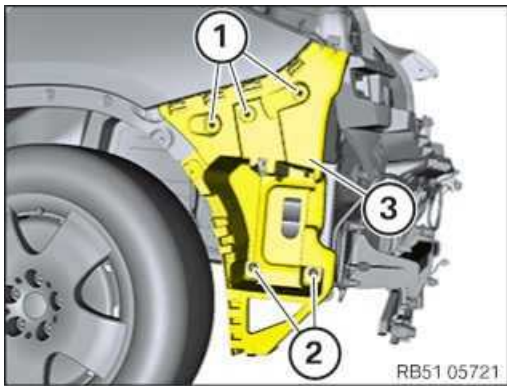
- Carefully detach side latch mechanisms(2) in direction of arrow.
- Carefully detach latch mechanisms in area (3) to the rear.
- Pull the bumper panel (1) straight toward the rear in direction of arrow with an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel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

4 – Remove the guide for the rear right bumper panel



NOTICE

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

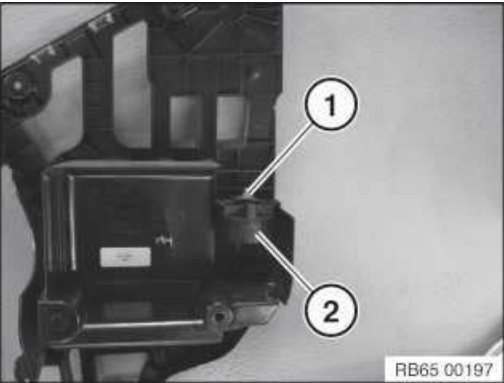


► Remove the guide for the rear bumper panel

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

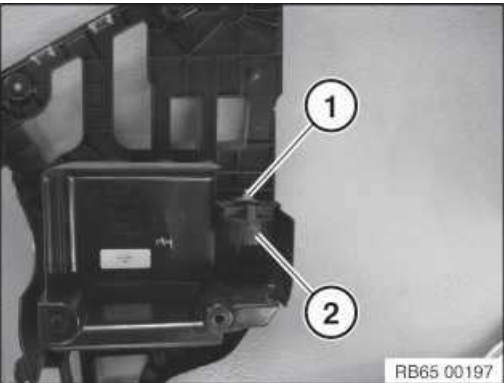
MAIN WORK

5 – Removing the emergency power siren with tilt sensor



- Unfasten nut (1).
- Remove the emergency power siren with tilt sensor (2).

6 – Installing the emergency power siren with tilt sensor



- Position the emergency power siren with tilt alarm sensor (2).
- Tighten nut (1).

Emergency siren to holder

Nut		Tightening torque	6 Nm
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POSTPROCESSES

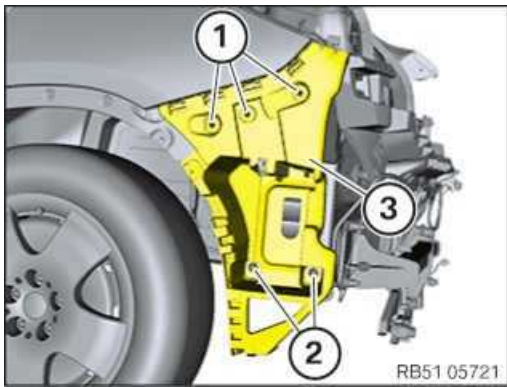
7 – Install the guide for the rear right bumper panel



NOTICE

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

► Install the guide for the rear bumper panel



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

Guide for the bumper panel to body

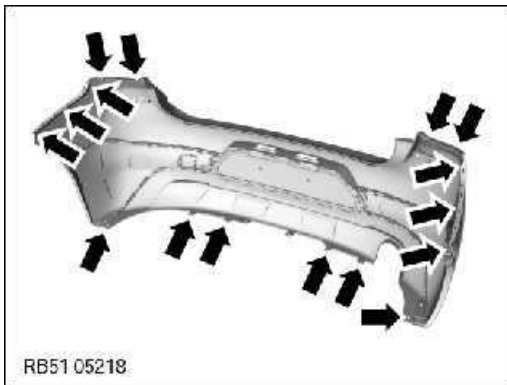
Screw		Tightening torque	4,6 Nm
Nut		Tightening torque	4,6 Nm

- Tighten nuts (2).

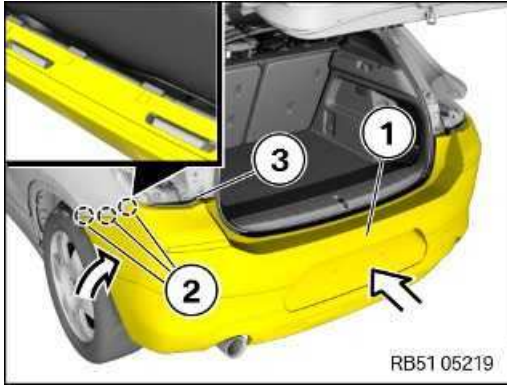
Guide for the bumper panel to body

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

8 – Install rear bumper panel



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

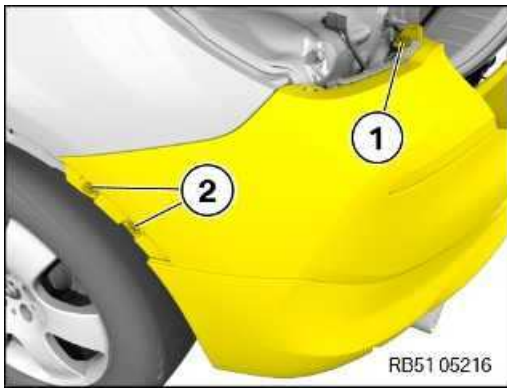


- Position the bumper panel (1) straight with the help of another person.
- Connect all connectors and lock.

NOTICE

Perform the operations on the left and right side.

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



NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm
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- Tighten down screws (2).

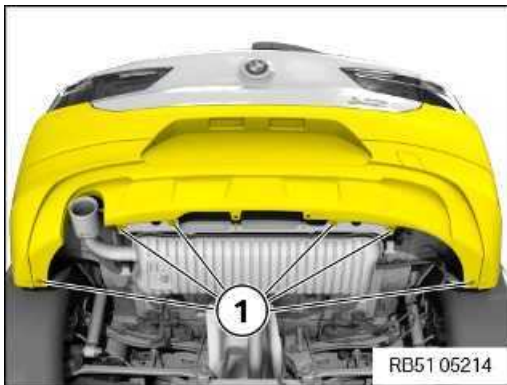
Rear bumper panel to side wall

Screw for thermoplastic plastic		Tightening torque	4,6 Nm
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- Tighten the screws (1).

Rear bumper panel to guides

Screw for thermoplastic plastic		Tightening torque	2,5 Nm
---------------------------------	--	-------------------	--------



9 – Install both rear lights on the side panel

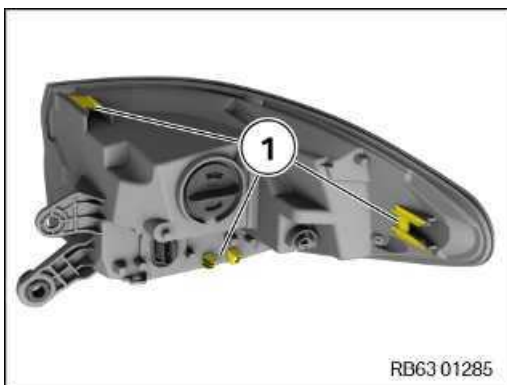


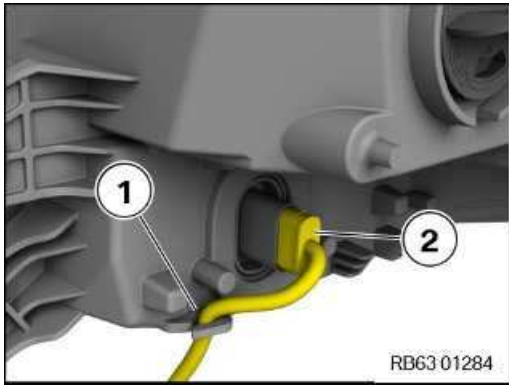
NOTICE

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

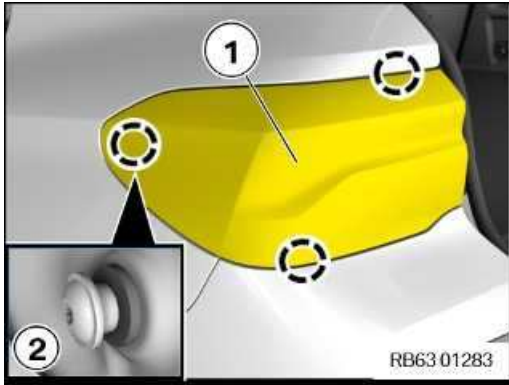
► Install the rear light on the side panel

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

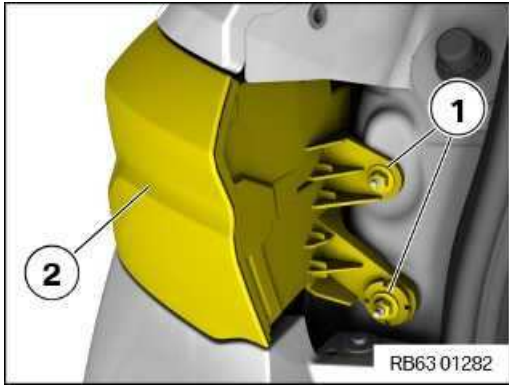




- Connect connectors (2) and lock.
- Attach the cable in the guide (1).



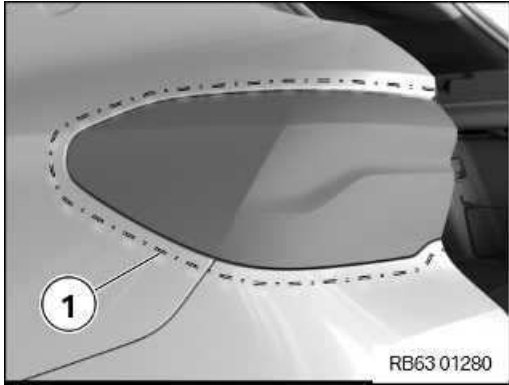
- Position the rear light (1) in the side panel.
- Make sure the rear light (1) is fitted correctly in the guides (2).



- Replace the nuts (1) on the rear light (2).
- Parts: Nuts**
- Tighten nuts (1).

Side panel rear light to body

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm
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- Pull off the plastic adhesive tape from the body in the area (1).

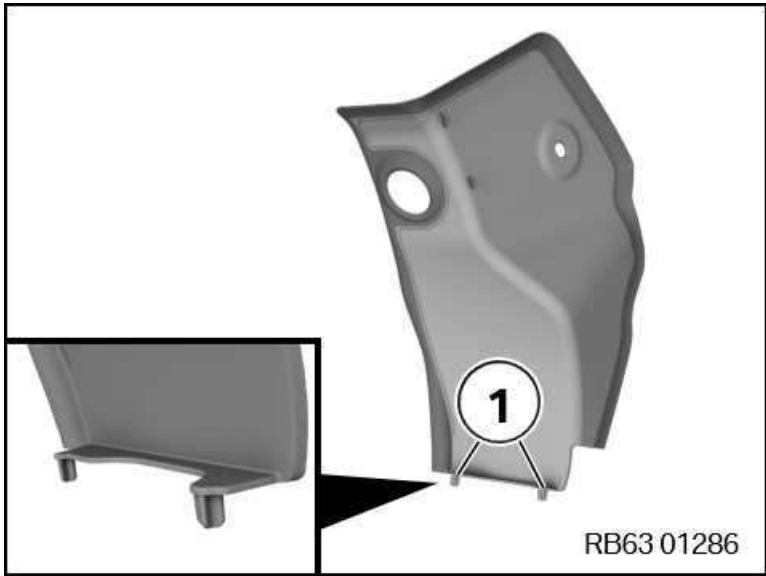
10 – Install both trim pieces for the water channel



NOTICE

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

- Install the trim for the water channel
- Check



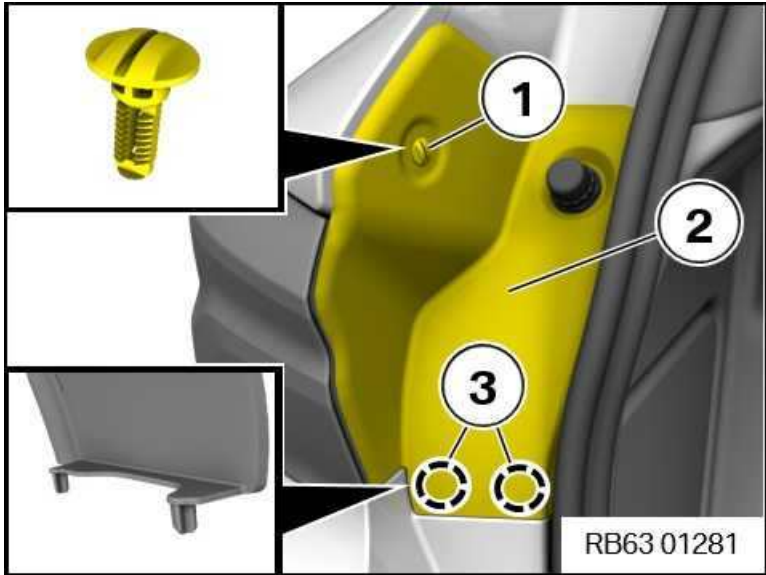
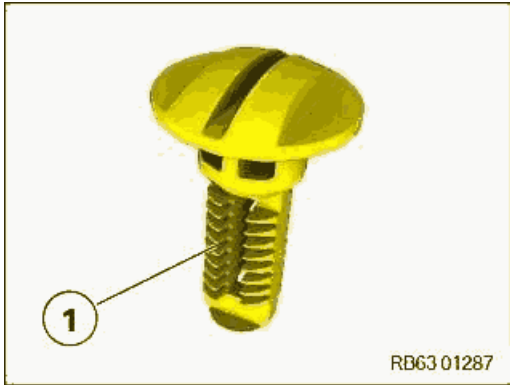
- Check the guides (1) for damage.

Result

» The guides (1) are damaged.

Measure

- Renew the trim for the water channel.
- Check rotary clip (1) for damage and, if necessary, replace it.



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

Additional Information

Overview of Tightening Torques

Emergency siren to holder

Used in step 6

Nut	Tightening torque	6 Nm
-----	-------------------	------

Guide for the bumper panel to bodyUsed in step **7**

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

Rear bumper panel to guidesUsed in step **8**

Screw for thermoplastic plastic		Tightening torque	2,5 Nm
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Rear bumper panel to side wallUsed in step **8**

Screw for thermoplastic plastic		Tightening torque	4,6 Nm
---------------------------------	--	-------------------	--------

Side panel rear light to bodyUsed in step **9**

Combination hexagon nut	Replace nuts.	Tightening torque	2.8 Nm
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65 76 629 Removing and installing pedestrian protection sensor (impact absorber)

Prerequisite

- Engine compartment lid is open.

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



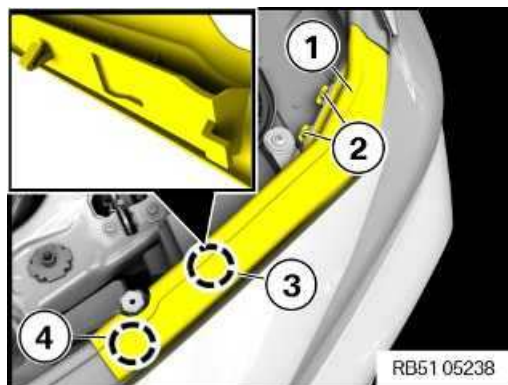
- See additional information.

2 – Remove both bonnet seals on the side



NOTICE

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



► Remove the bonnet seal on the side

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

3 – Removing the seal for the front centre bonnet



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

4 – Partially remove both front wheel arch trims

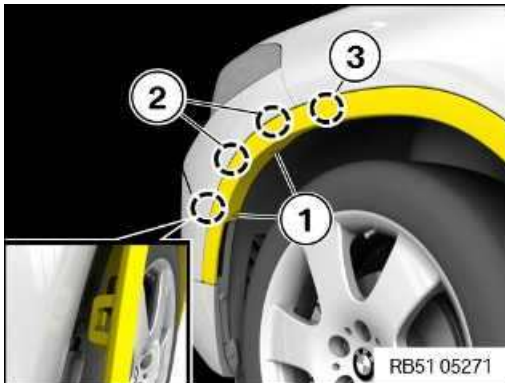


NOTICE

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

► Partially removing the front wheel arch trim

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



5 – Partially remove both front wheel arch covers



NOTICE

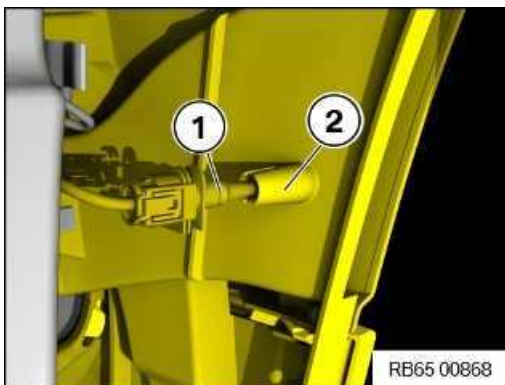
Description is for left component only. Procedure on the right side is identical.

► Partially remove the front wheel arch cover

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

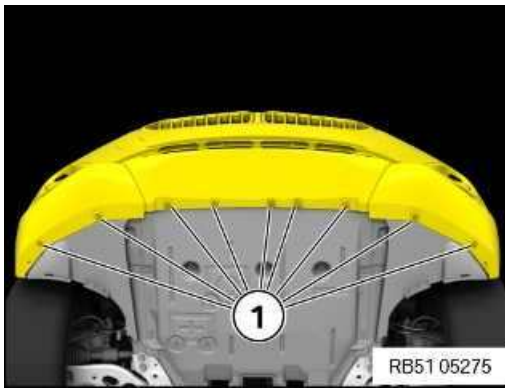


6 – Remove temperature sensor

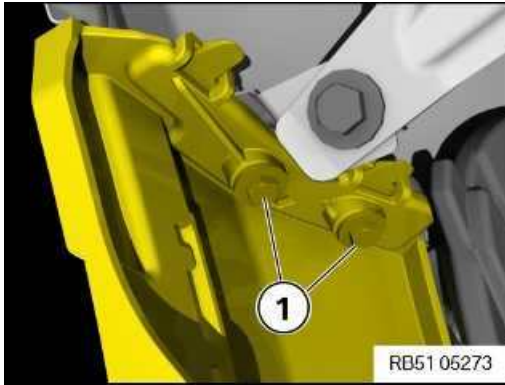


- Unclip temperature sensor (1) from front bumper panel (2).

7 – Remove front bumper panel



- Loosen screws (1).



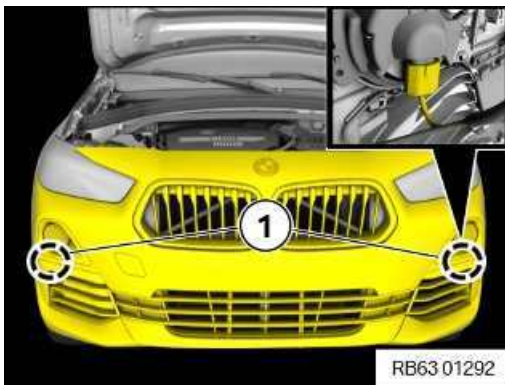
NOTICE

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

- Loosen screws (1).



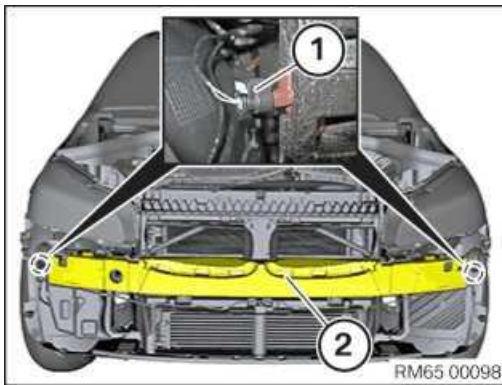
- Loosen screws (1).
- Loosen screws (2).



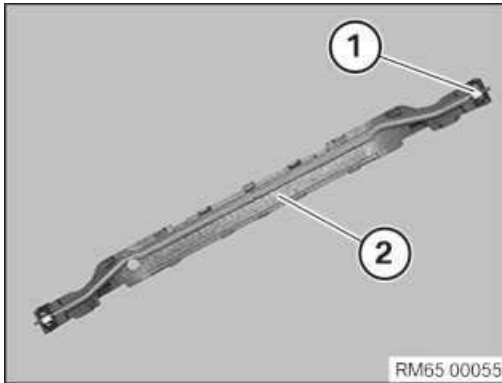
- Pull the front bumper panel slightly forward with the help of another person.
- Unlock and disconnect the plug connections (1) on the fog lights.
- Remove the front bumper panel.

MAIN WORK

8 – Remove impact absorber

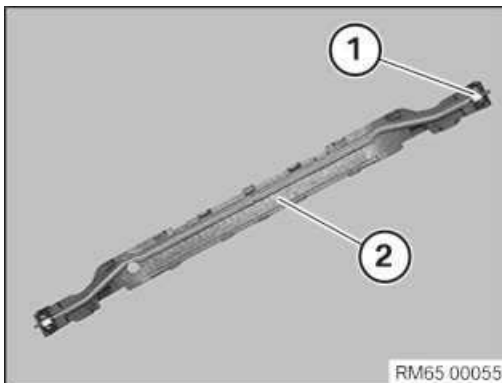


- Unlock and disconnect plug connections (1).
- Remove the impact absorber (2).

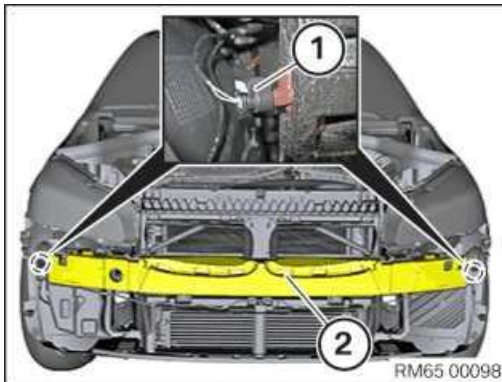


- Detach the pressure hose (1) from the impact absorber (2).

9 – Installing impact absorber



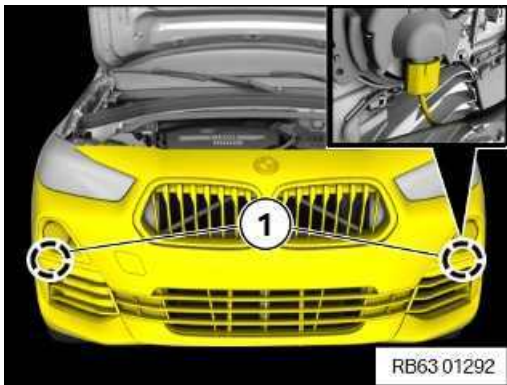
- Renew the impact absorber (2).
- Parts:** Impact absorber
- Insert and engage pressure hose (1) in impact absorber (2).



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

POSTPROCESSES

10 – Install bumper panel, front



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



- Tighten the screws (1).

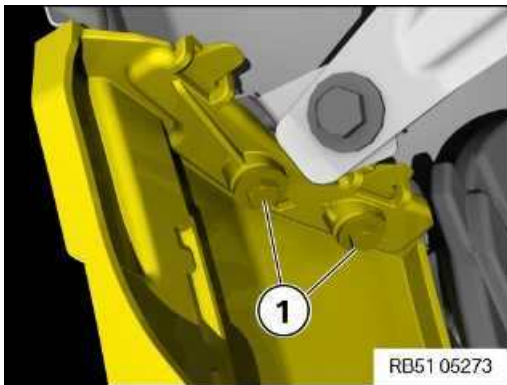
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm
----------------------------------	--	-------------------	--------

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm
----------	--	-------------------	--------



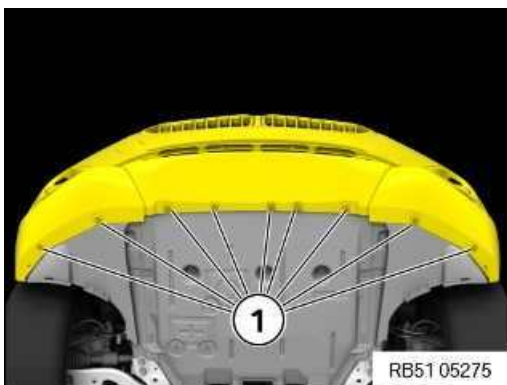
NOTICE

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

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm
--------------	--	-------------------	------

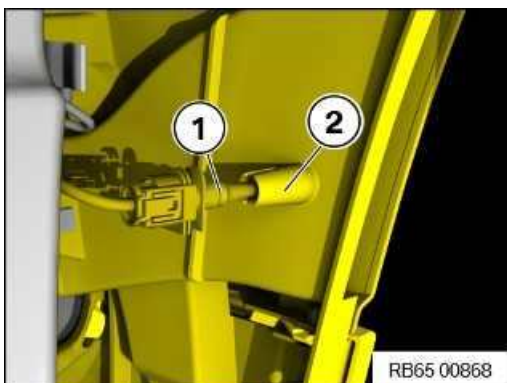


- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm
-----------------------------	--	-------------------	--------

11 – Install temperature sensor



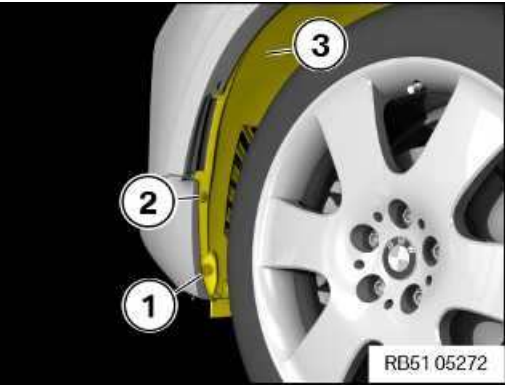
- Clip temperature sensor (1) into the front bumper panel (2).

12 – Partially install both front wheel arch covers



NOTICE

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



► Partially install the front wheel arch cover

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

Front wheel arch cover to front bumper panel

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm
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13 – Partially install both front wheel arch trims



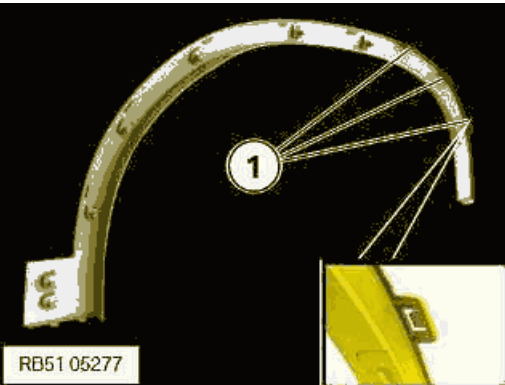
NOTICE

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

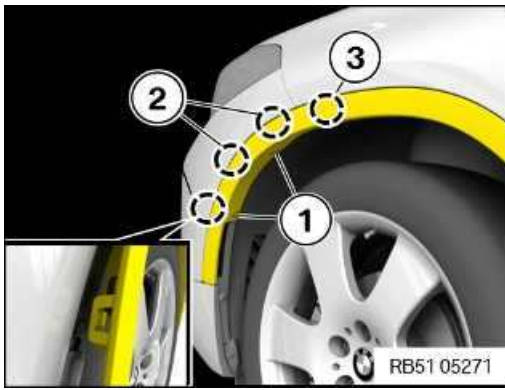


► Partly install the front wheel arch trim

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



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



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

14 – Install the center front bonnet seal



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

15 – Install both bonnet seals on the side



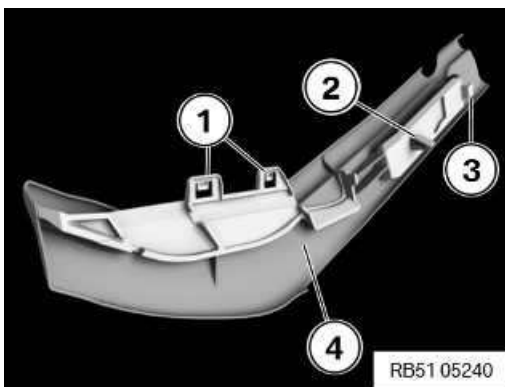
NOTICE

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

► Installing seal for side bonnet

Check

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

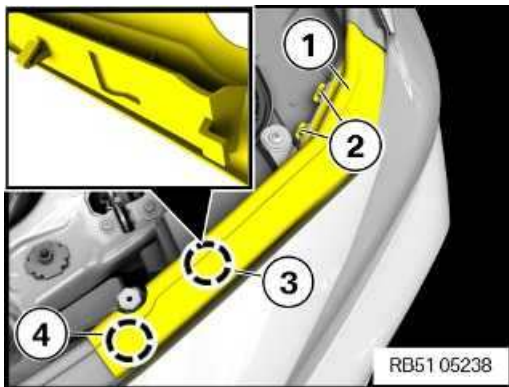


Result

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

Measure

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



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

16 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Bumper panel to headlight

Used in step [10](#)

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm
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Bumper panel to air duct

Used in step [10](#)

Screw M6		Tightening torque	4,6 Nm
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Front bumper panel to front side panel

Used in step [10](#)

Screw TS5X35		Tightening torque	3 Nm
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Front bumper panel to underbody panelling

Used in step [10](#)

Thermoplastic hexagon screw		Tightening torque	2,5 Nm
-----------------------------	--	-------------------	--------

Front wheel arch cover to front bumper panel

Used in step [12](#)

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm
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Overview of Special Tools

W00 2 230

Used in step 12 13

Links

Used in step

[illegible]

61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16

65 76 630 Replace pedestrian protection sensor (impact absorber) (after vehicle diagnosis)

Prerequisite

- Engine compartment lid is open.



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.

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



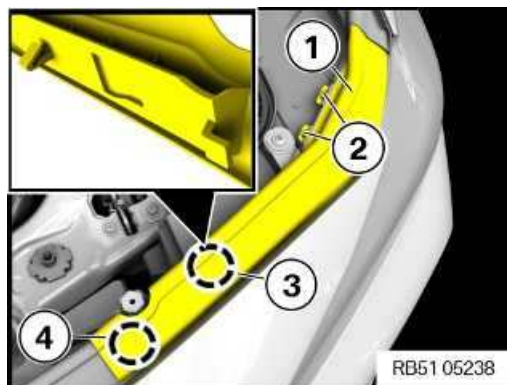
- See additional information.

2 – Remove both bonnet seals on the side



NOTICE

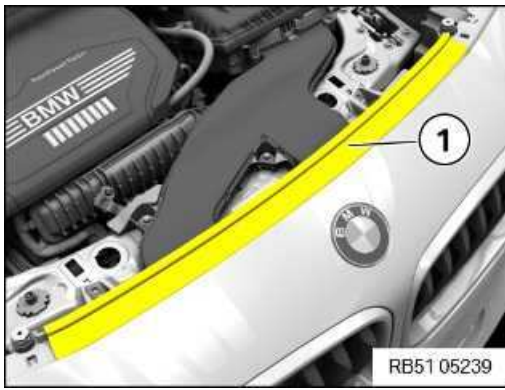
Description is for left component only. Procedure on the right side is identical.



► Remove the bonnet seal on the side

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

3 – Removing the seal for the front centre bonnet



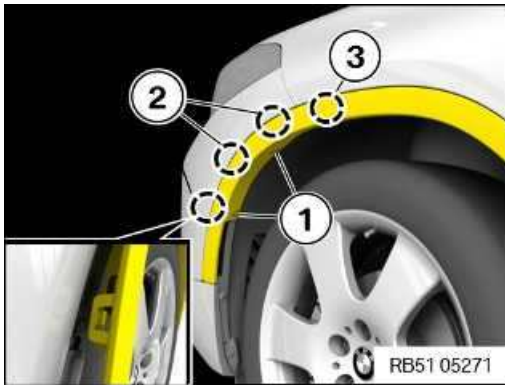
- Remove the seal for the front centre bonnet (1) towards the top.

4 – Partially remove both front wheel arch trims



NOTICE

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



► Partially removing the front wheel arch trim

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

5 – Partially remove both front wheel arch covers



NOTICE

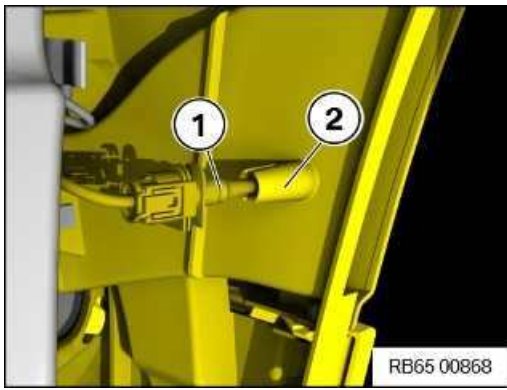
Description is for left component only. Procedure on the right side is identical.



► Partially remove the front wheel arch cover

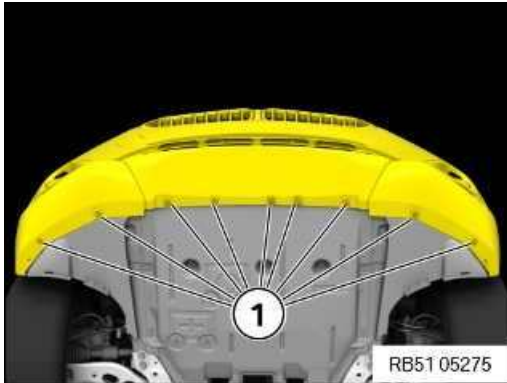
- Loosen screw (1).
- Release the blind rivet (2).
- Fold back the front wheel arch cover (3).

6 – Remove temperature sensor

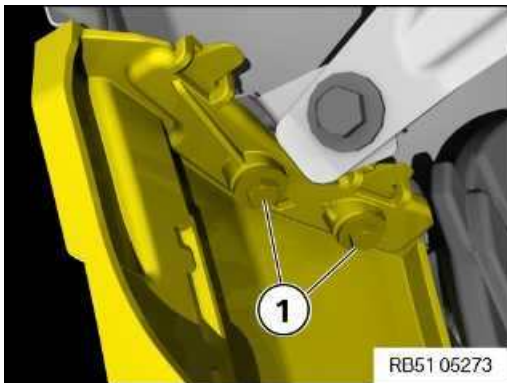


- Unclip temperature sensor (1) from front bumper panel (2).

7 – Remove front bumper panel



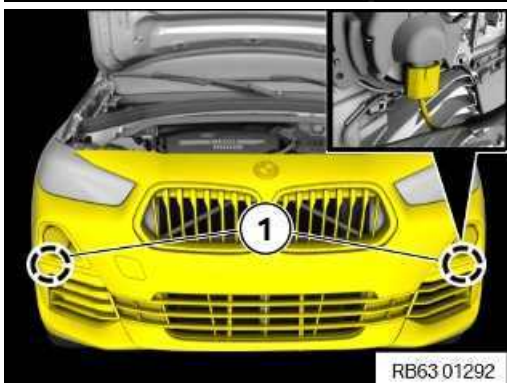
- Loosen screws (1).



- Loosen screws (1).



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



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

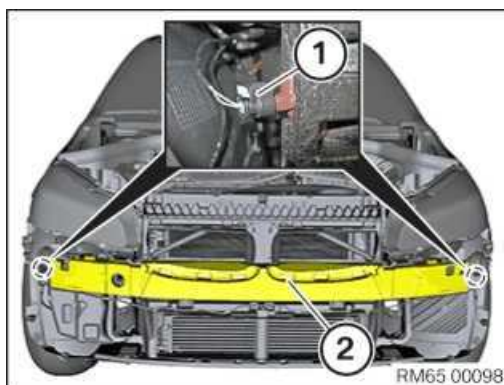


NOTICE

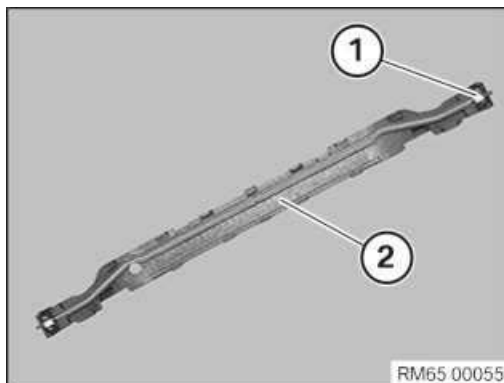
Description is for left component only. Procedure on the right side is identical.

MAIN WORK

8 – Remove impact absorber

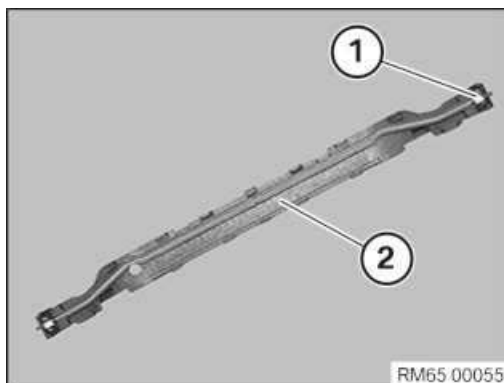


- Unlock and disconnect plug connections (1).
- Remove the impact absorber (2).

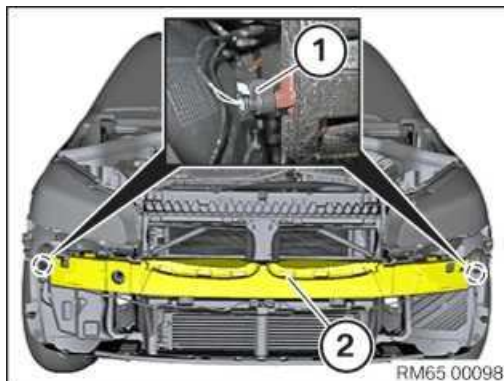


- Detach the pressure hose (1) from the impact absorber (2).

9 – Installing impact absorber



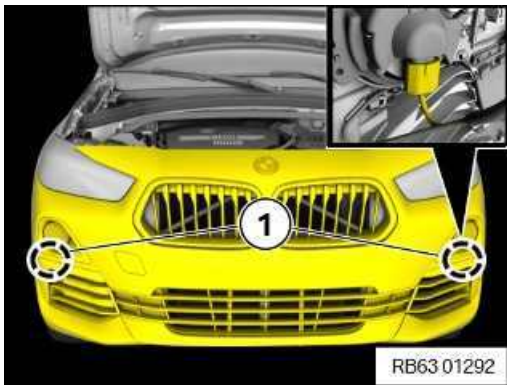
- Renew the impact absorber (2).
- Parts:** Impact absorber
- Insert and engage pressure hose (1) in impact absorber (2).



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

POSTPROCESSES

10 – Install bumper panel, front



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



- Tighten the screws (1).

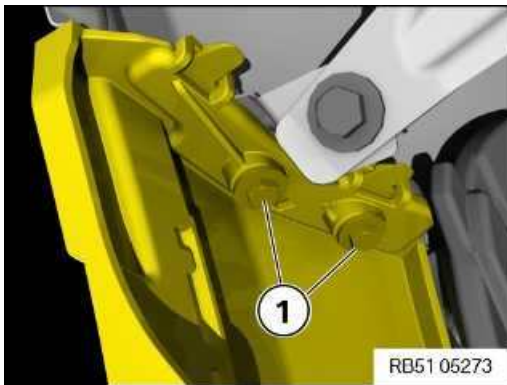
Bumper panel to headlight

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm
----------------------------------	--	-------------------	--------

- Tighten down screws (2).

Bumper panel to air duct

Screw M6		Tightening torque	4,6 Nm
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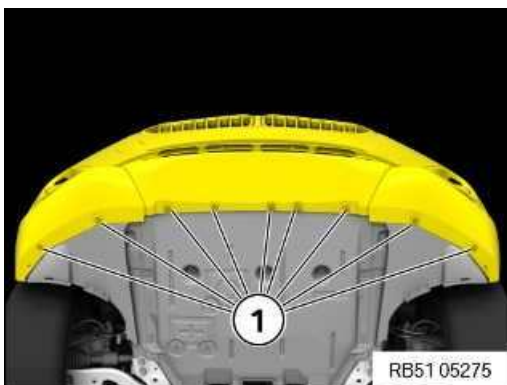
NOTICE

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

- Tighten the screws (1).

Front bumper panel to front side panel

Screw TS5X35		Tightening torque	3 Nm
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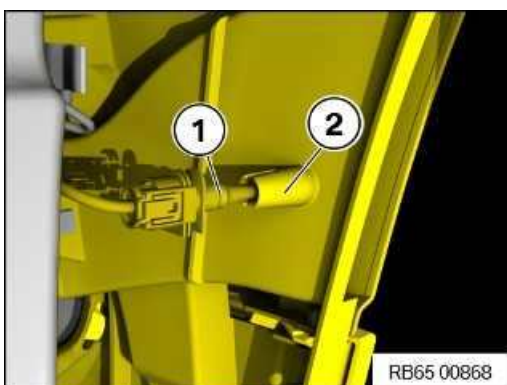


- Tighten the screws (1).

Front bumper panel to underbody panelling

Thermoplastic hexagon screw		Tightening torque	2,5 Nm
-----------------------------	--	-------------------	--------

11 – Install temperature sensor



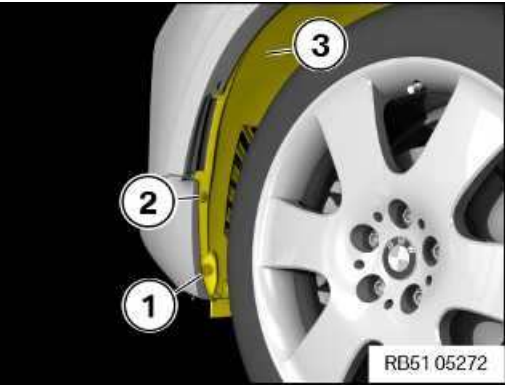
- Clip temperature sensor (1) into the front bumper panel (2).

12 – Partially install both front wheel arch covers



NOTICE

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



► Partially install the front wheel arch cover

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

Front wheel arch cover to front bumper panel

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm
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13 – Partially install both front wheel arch trims



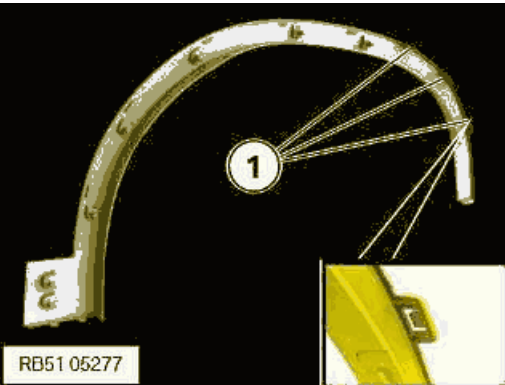
NOTICE

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

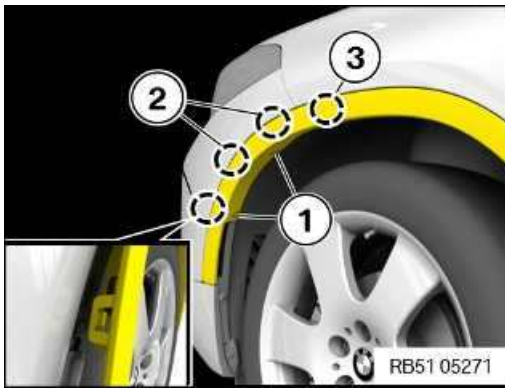


► Partly install the front wheel arch trim

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



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



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

14 – Install the center front bonnet seal



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

15 – Install both bonnet seals on the side



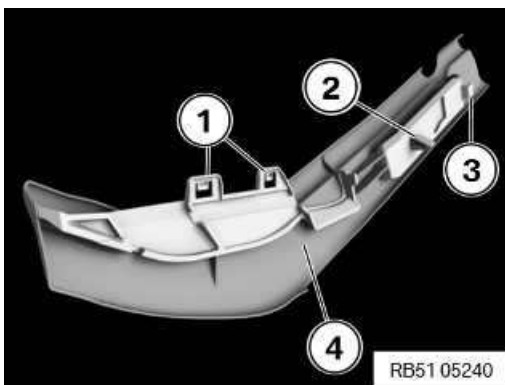
NOTICE

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

► Installing seal for side bonnet

Check

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

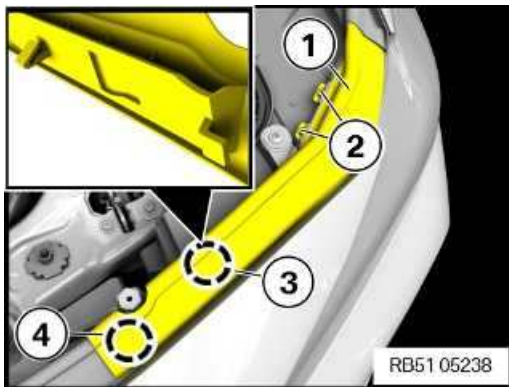


Result

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

Measure

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



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

16 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Bumper panel to headlight

Used in step [10](#)

Thermoplastic multi-purpose bolt		Tightening torque	2,5 Nm
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Bumper panel to air duct

Used in step [10](#)

Screw M6		Tightening torque	4,6 Nm
----------	--	-------------------	--------

Front bumper panel to front side panel

Used in step [10](#)

Screw TS5X35		Tightening torque	3 Nm
--------------	--	-------------------	------

Front bumper panel to underbody panelling

Used in step [10](#)

Thermoplastic hexagon screw		Tightening torque	2,5 Nm
-----------------------------	--	-------------------	--------

Front wheel arch cover to front bumper panel

Used in step [12](#)

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm
---	--	-------------------	--------

Overview of Special Tools

W00 2 230

Used in step 12 13

Links

Used in step

[illegible]

61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16
61 20 900 Disconnecting and connecting battery earth lead	1 16

65 77 016 Removing and installing airbag control unit



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

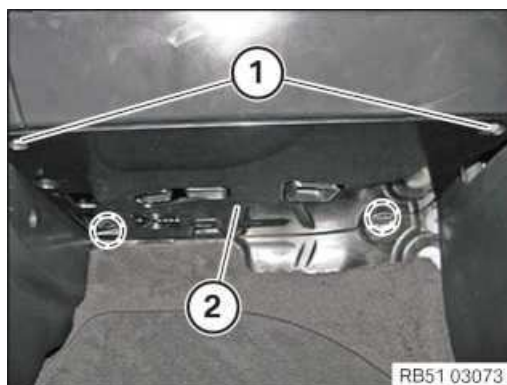
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



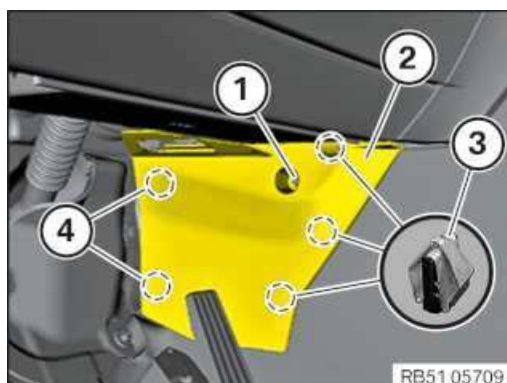
- See additional information.

2 – Removing the instrument panel trim at bottom right



- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

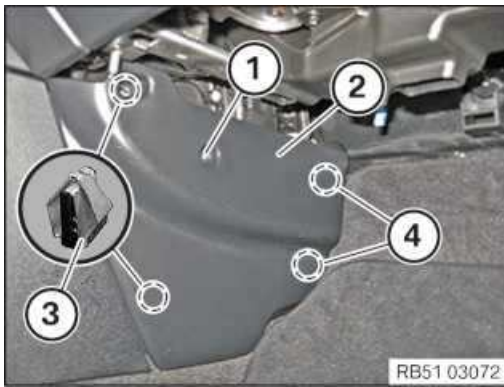
3 – Removing the side trim panel for the left and right centre console



► Removing side trim panel for the left centre console

- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.

► Removing side trim panel for the centre console on the right side



- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

4 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.
In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

5 – Remove the decorative trim from the centre console



RISK OF DAMAGE

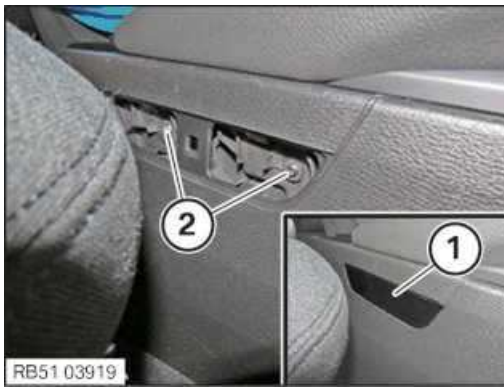
Scratches.

Tools and sharp-edged components can cause scratches.

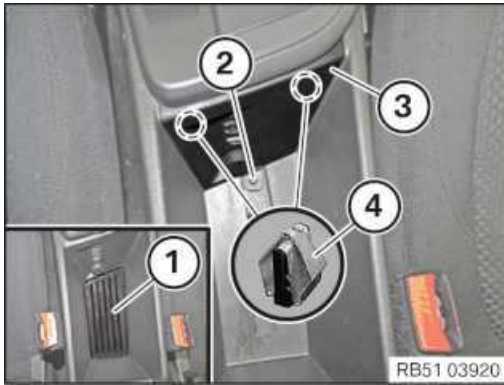
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

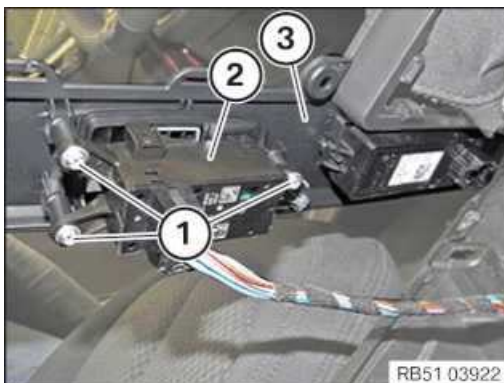


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

6 – Remove the centre console trim

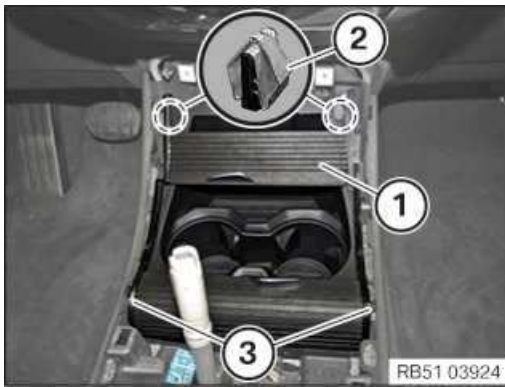


- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



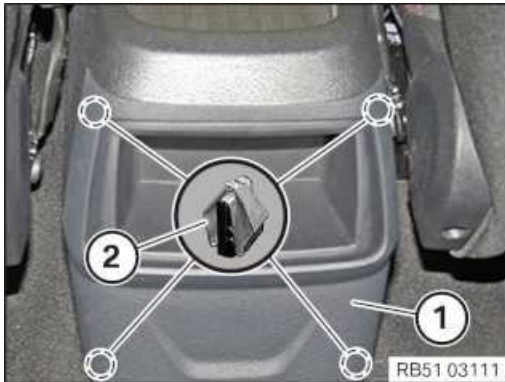
- Loosen screws (1).
 - Remove parking brake button (2) from centre console trim (3) and place it down.
- The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

7 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

8 – Removing the rear centre console trim



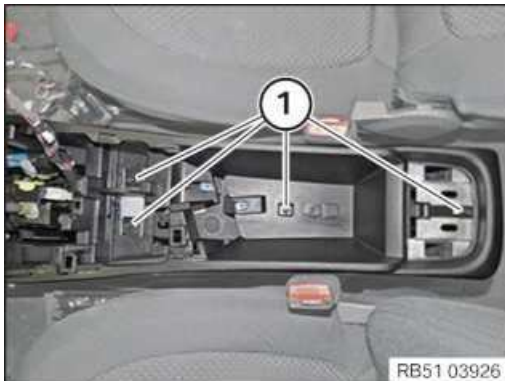
- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

9 – Removing centre console fully with centre armrest

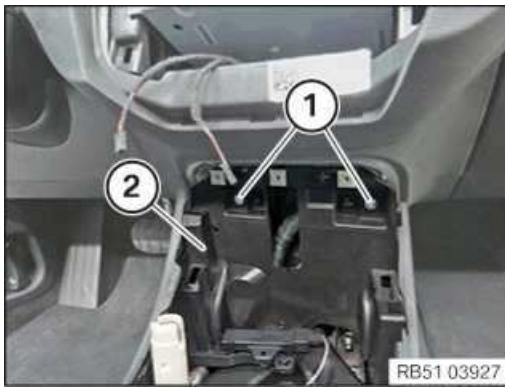
► Removing the centre armrest



- Release nuts (1) and remove centre armrest upwards.

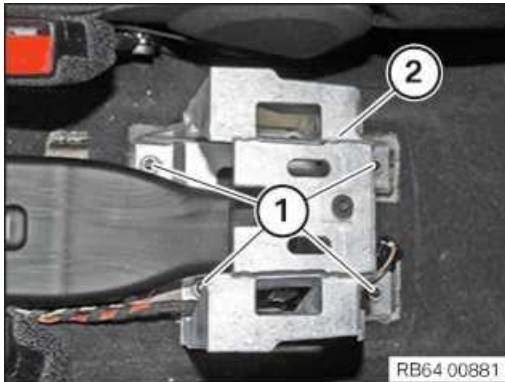


- Loosen screws (1).

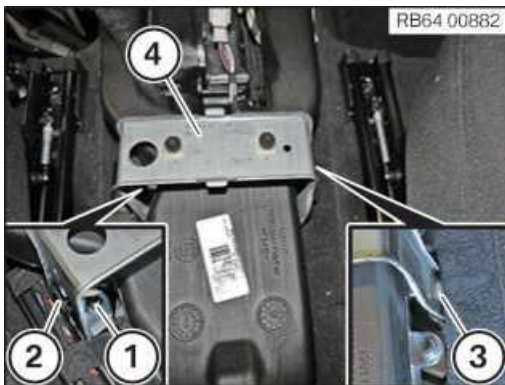


- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

10 – For equipment specification with air duct for rear passenger compartment: Remove the air duct



- Loosen the nuts (1) and remove the holder (2).



- Unfasten nut (1).
- Detach the cable clip (2).
- Loosen the screw (3) and remove the holder (4).



- Remove the air duct (1).

MAIN WORK

11 – Removing the airbag control unit



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



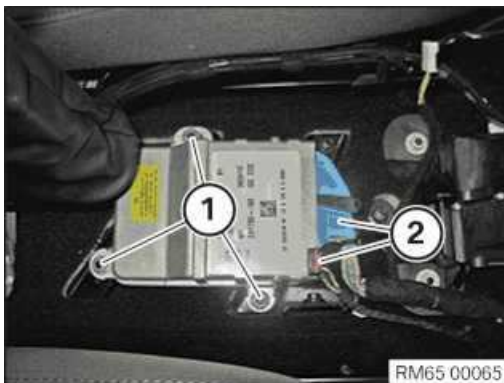
RISK OF DAMAGE



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.



- Loosen nuts (1).
- Unlock and disconnect plug connections (2).
- Remove airbag control unit (3).

12 – Installing the airbag control unit



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



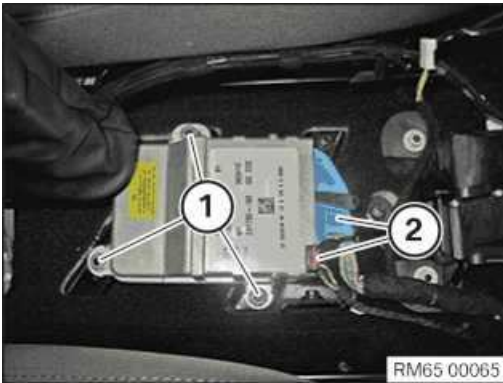
RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Position airbag control unit (3).
- Tighten nuts (1).

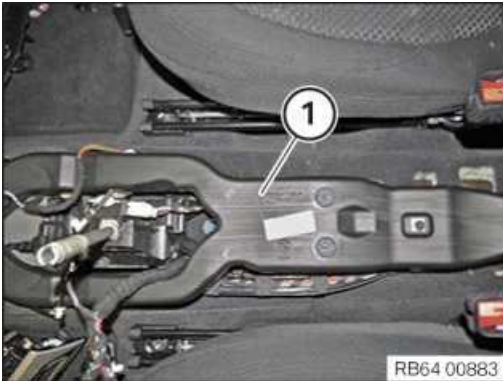
Airbag control unit to body

Screw		Tightening torque	8 Nm
-------	--	-------------------	------

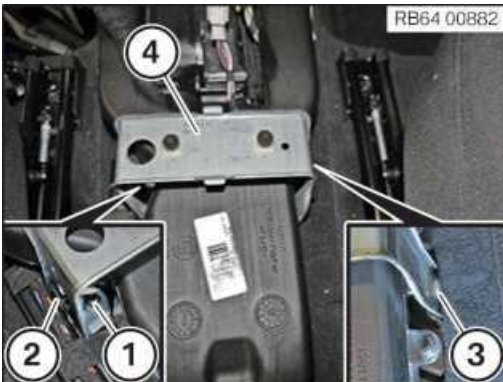
- Connect connectors (2) and lock.

POSTPROCESSES

13 – For equipment specification with air duct for rear passenger compartment: Install air duct



- Insert the air duct (1).



- Position the holder (4) correctly and tighten the screw (3).

Centre console holder to bodyshell

Nut		Tightening torque	8 Nm
-----	--	-------------------	------

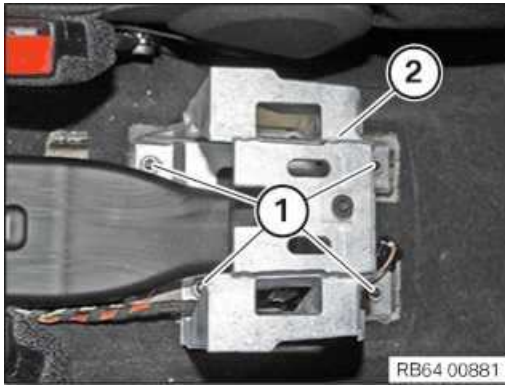
Screw		Tightening torque	8 Nm
-------	--	-------------------	------

- Tighten the nut (1) and attach the cable clip (2).

Centre console holder to bodyshell

Nut		Tightening torque	8 Nm
-----	--	-------------------	------

Screw		Tightening torque	8 Nm
-------	--	-------------------	------

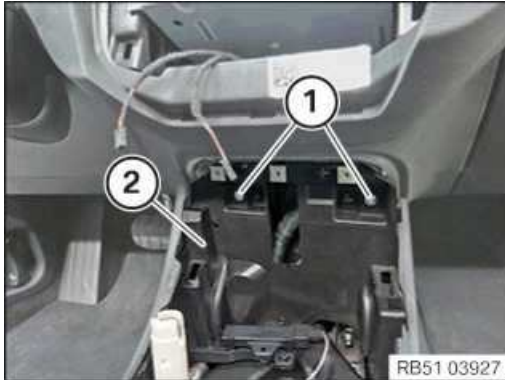


- Position the holder (2) correctly and tighten the nuts (1).

Centre console holder to bodyshell

Nut		Tightening torque	8 Nm
Screw		Tightening torque	8 Nm

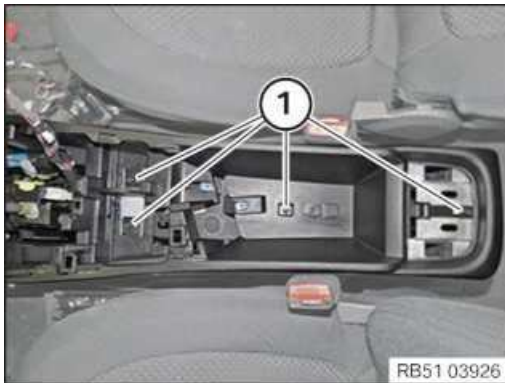
14 – Installing centre console fully with centre armrest



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------



- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------



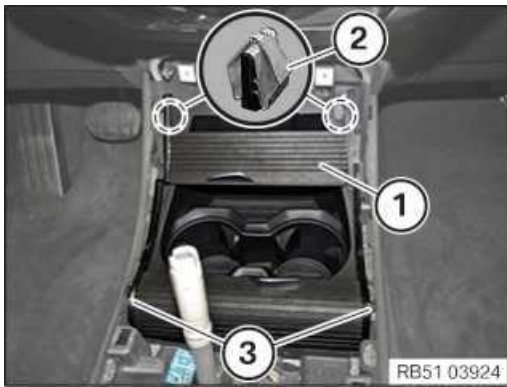
► Installing the centre armrest

- Install the centre armrest and tighten nuts (1).

Centre armrest to support

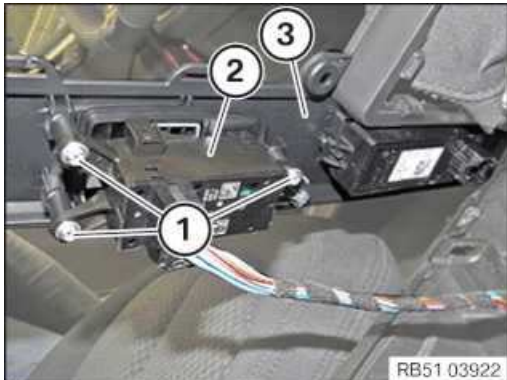
Nut M8		Tightening torque	21,4 Nm
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15 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

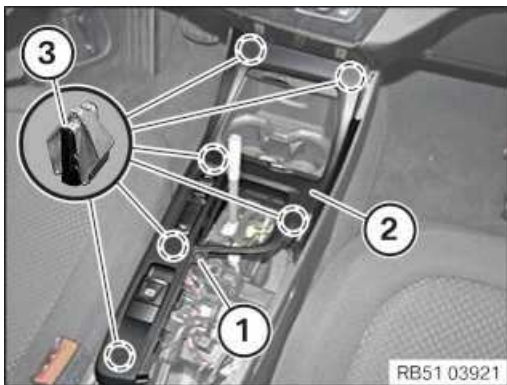
16 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm
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- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

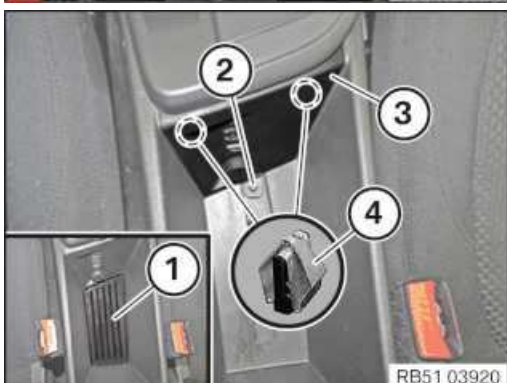
17 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

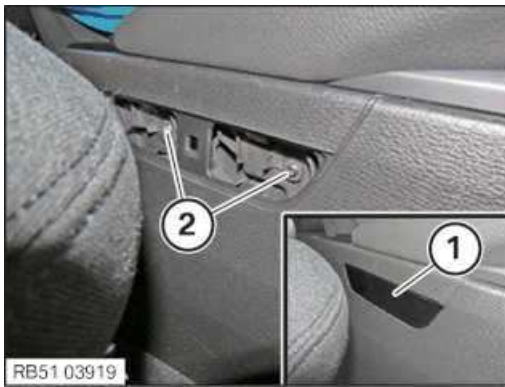


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

- Install cover (1) and engage.

18 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

The anti-twist lock must bite.

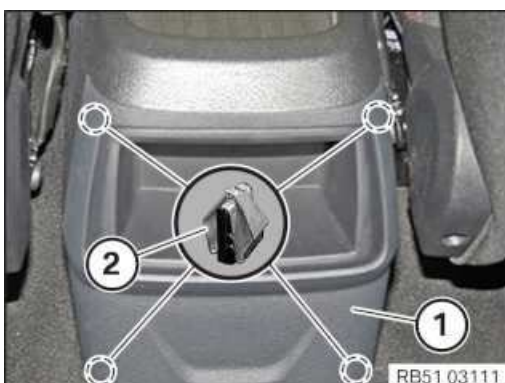
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

19 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

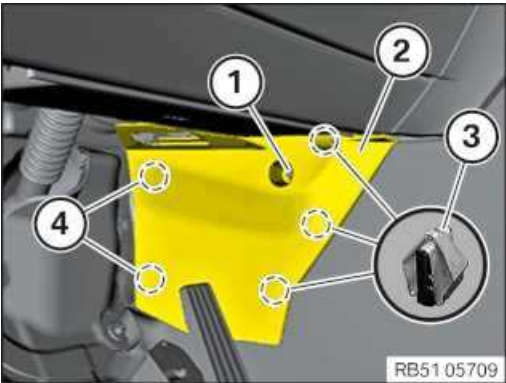
20 – Installing side trim panel for the left and right centre console

► Installing side trim panel for the left centre console

i

TECHNICAL INFORMATION

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



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

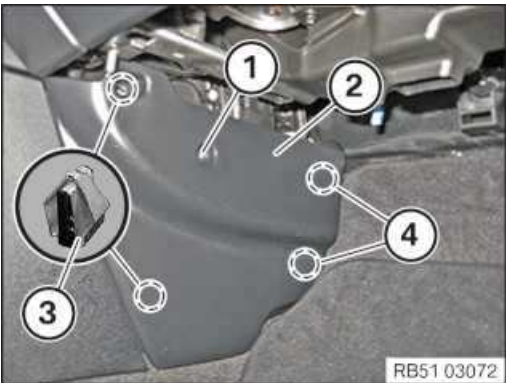
Oval-head screw		Tightening torque	1,8 Nm
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► Installing side trim panel for the right centre console

i

TECHNICAL INFORMATION

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



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

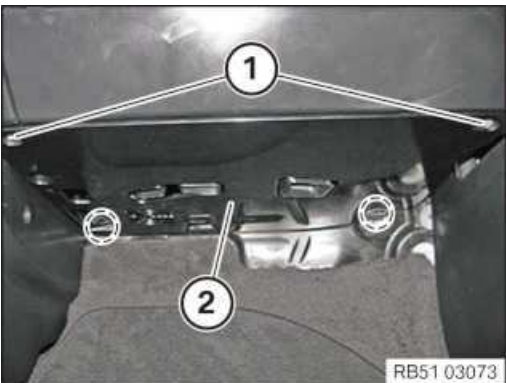
Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

21 – Installing the botto right instrument panel trim

i

TECHNICAL INFORMATION

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



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm
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22 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Airbag control unit to body		Used in step 12	
Screw		Tightening torque	8 Nm

Centre console holder to bodyshell		Used in step 13	
Nut		Tightening torque	8 Nm
Screw		Tightening torque	8 Nm

Screw connection for centre console		Used in step 14 16 17	
Oval-head screw		Tightening torque	1,8 Nm

Centre armrest to support		Used in step 14	
Nut M8		Tightening torque	21,4 Nm

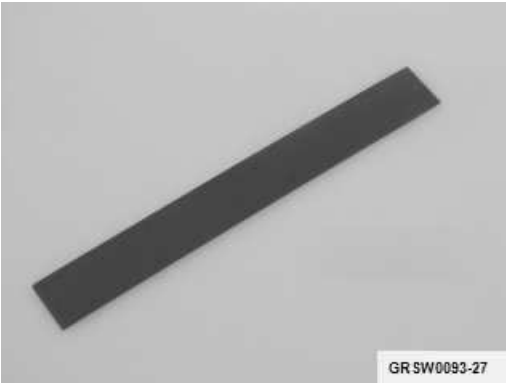
Parking brake button		Used in step 16	
Oval-head screw		Tightening torque	1,5 Nm

Trim to centre console		Used in step 17 20	
Oval-head screw		Tightening torque	1,8 Nm

Bottom left footwell trim to instrument panel		Used in step 21	
M5 hexagon nut		Tightening torque	2 Nm

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common		Used in step	5
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)		

**Common**

Used in step 6 8

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	11 12
--	-------

Repair instructions

Used in step

61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22

65 77 725 Removing and installing airbag sensor on the B-pillar



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



NOTICE

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

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



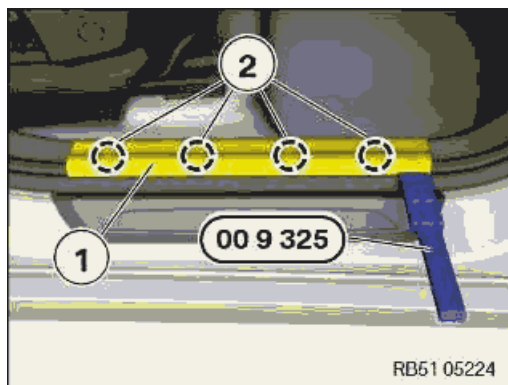
- See additional information.

2 – Remove front right door sill cover strip

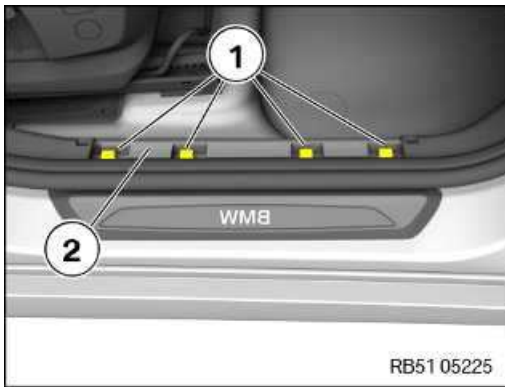


NOTICE

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



- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



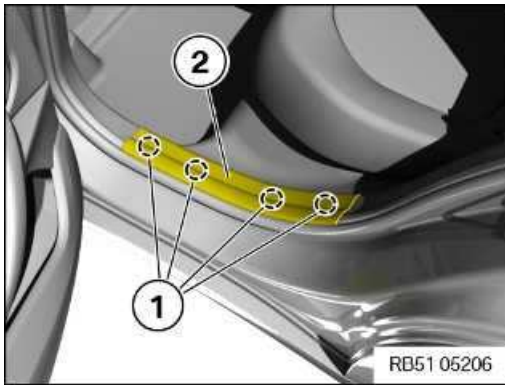
- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

3 – Remove the rear right door sill cover strip



NOTICE

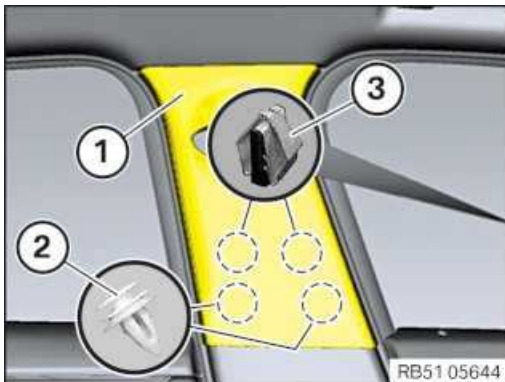
Description is for left component only. Procedure on the right side is identical.



► Remove rear entrance cover strip

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

4 – Partially removing upper B-pillar trim panel



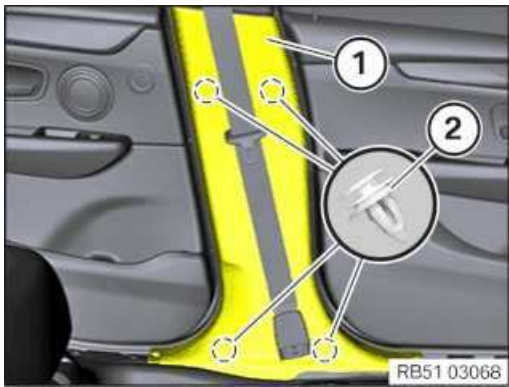
- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

5 – Remove the lower B-pillar trim panel



NOTICE

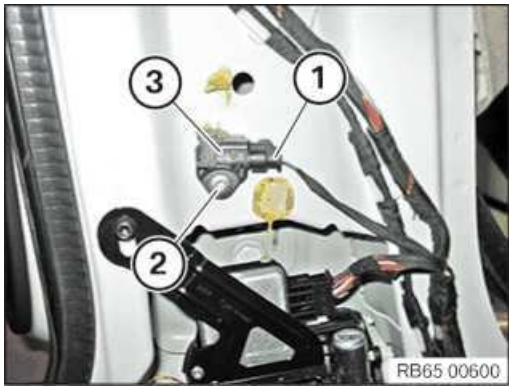
Description is for left component only. Procedure on the right side is identical.



- Release the B-pillar trim panel (1) at bottom starting from the clips (2).
- Feed out and remove the B-pillar trim panel (1) inwards.

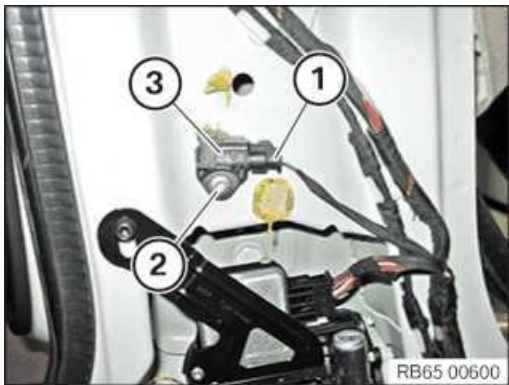
MAIN WORK

6 – Removing airbag sensor on the B-pillar



- Unlock and disconnect connector (1).
- Loosen screw (2).
- Remove the airbag sensor (3) on the B-pillar.

7 – Installing airbag sensor on the B-pillar



- Position the airbag sensor (3) correctly on the B-pillar.
- Tighten down screw (2).

Airbag sensor, B-pillar

M6		Tightening torque	8.8 Nm
----	--	-------------------	--------

- Connect connector (1).

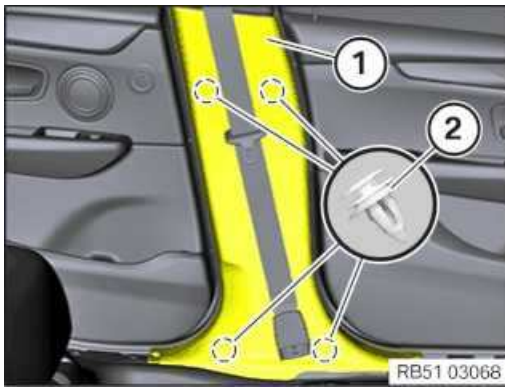
POSTPROCESSES

8 – Install the lower B-pillar trim panel



NOTICE

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



- Renew damaged clips (2).

Parts: Clips

- Feed in the B-pillar trim panel (1) at the top and position correctly.
- Clip in the B-pillar trim panel (1) at the clips (2).
- Make sure the B-pillar trim panel (1) is correctly positioned on the edge protection.

9 – Partially installing upper right B-pillar trim panel



NOTICE

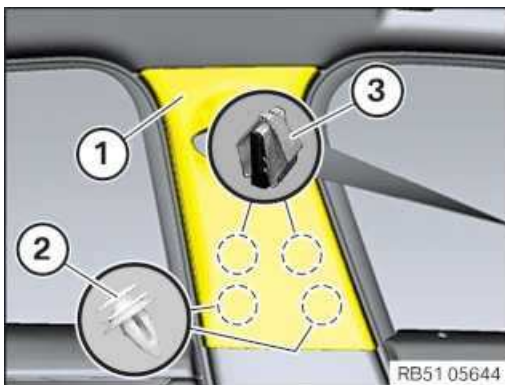
Description is for left component only. Procedure on the right side is identical.

► Install upper B-pillar trim panel



TECHNICAL INFORMATION

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



- Insert the seat belt into the B-pillar trim panel (1).
- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

10 – Installing rear right door sill cover strip

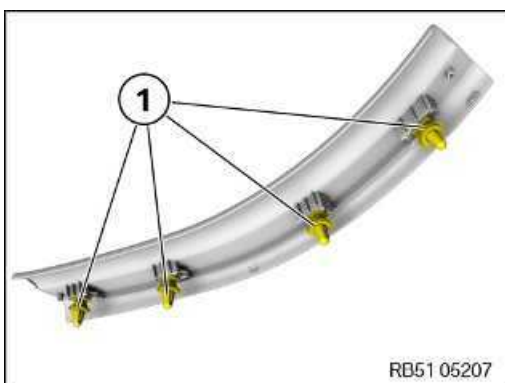


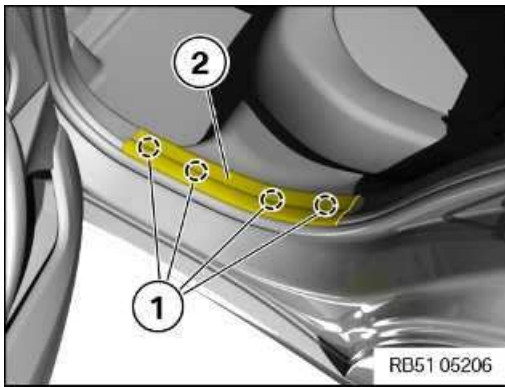
NOTICE

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

► Installing the rear door sill cover strip

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





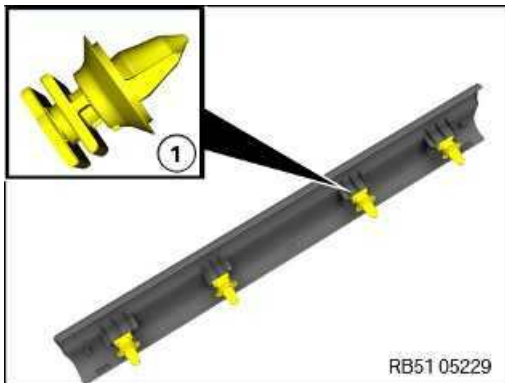
- Clip in the door sill cover strip (2) with the clips (1).

11 – Install the front right door sill cover strip

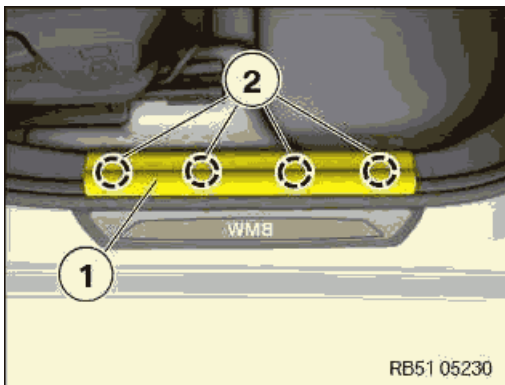


NOTICE

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



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



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

12 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

M6		Tightening torque	8.8 Nm
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Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common

Used in step 2 4

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

Links

General repair instructions

Used in step

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

Repair instructions

Used in step

61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
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61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12

61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12

65 77 720 Removing and installing airbag sensor on the left B-pillar



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.

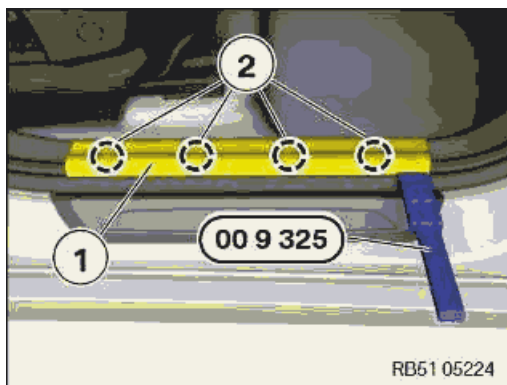
PRELIMINARY WORK

1 – Disconnecting all battery earth leads

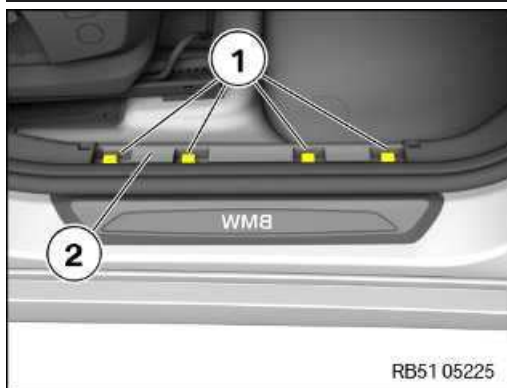


- See additional information.

2 – Remove front entrance cover strip

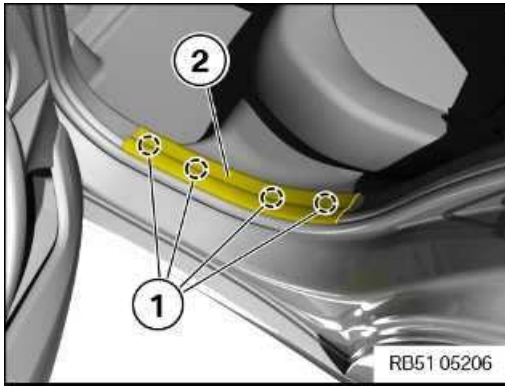


- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



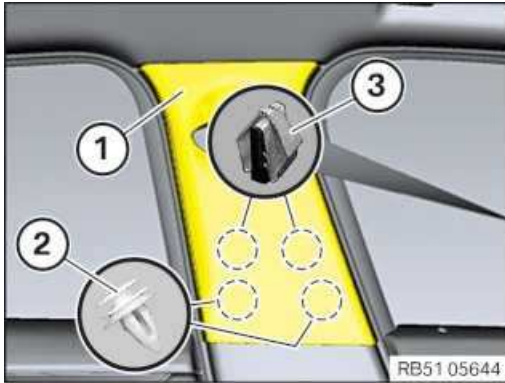
- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

3 – Remove rear entrance cover strip



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

4 – Partially removing upper B-pillar trim panel



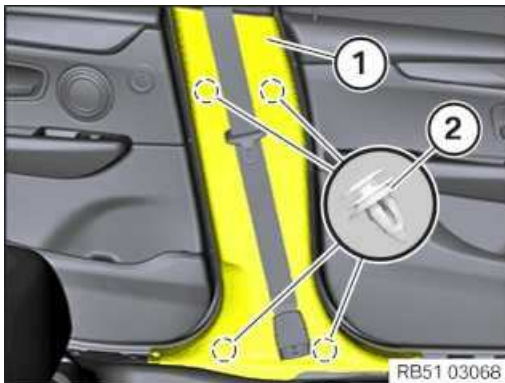
- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

5 – Remove the lower B-pillar trim panel



NOTICE

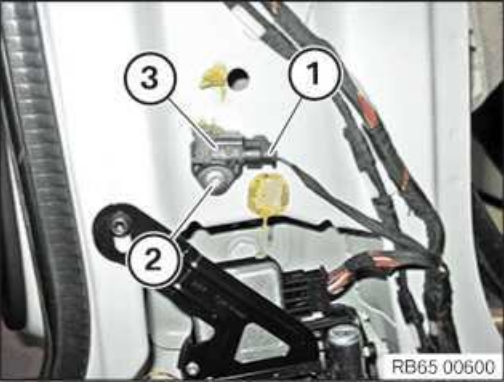
Description is for left component only. Procedure on the right side is identical.



- Release the B-pillar trim panel (1) at bottom starting from the clips (2).
- Feed out and remove the B-pillar trim panel (1) inwards.

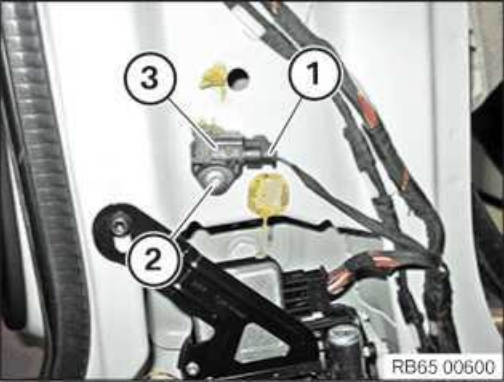
MAIN WORK

6 – Removing airbag sensor on the B-pillar



- Unlock and disconnect connector (1).
- Loosen screw (2).
- Remove the airbag sensor (3) on the B-pillar.

7 – Installing airbag sensor on the B-pillar



- Position the airbag sensor (3) correctly on the B-pillar.
- Tighten down screw (2).

Airbag sensor, B-pillar

M6		Tightening torque	8.8 Nm
----	--	-------------------	--------

- Connect connector (1).

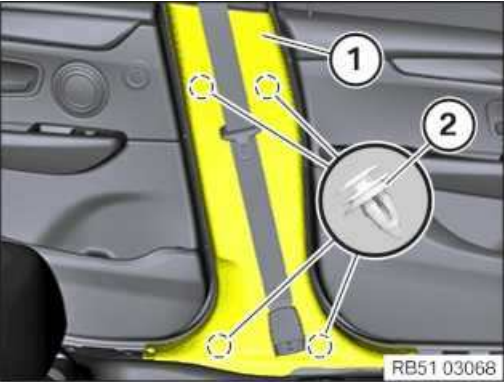
POSTPROCESSES

8 – Install the lower B-pillar trim panel



NOTICE

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



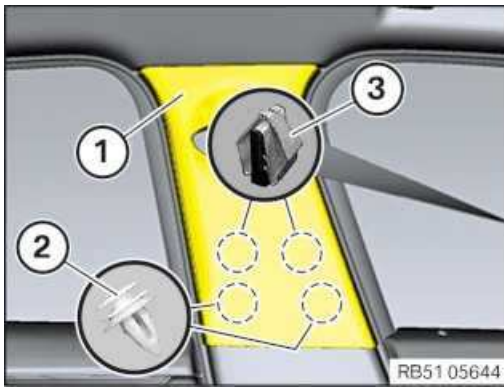
- Renew damaged clips (2).
- Parts:** Clips
- Feed in the B-pillar trim panel (1) at the top and position correctly.
 - Clip in the B-pillar trim panel (1) at the clips (2).
 - Make sure the B-pillar trim panel (1) is correctly positioned on the edge protection.

9 – Partially installing upper B-pillar trim panel



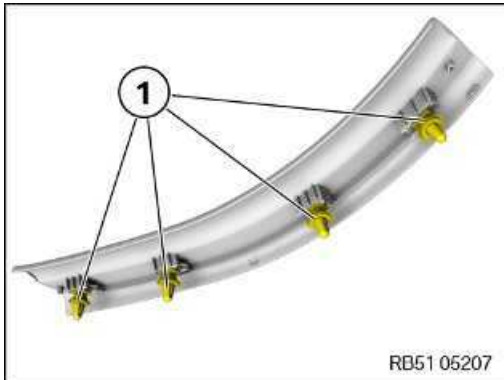
TECHNICAL INFORMATION

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

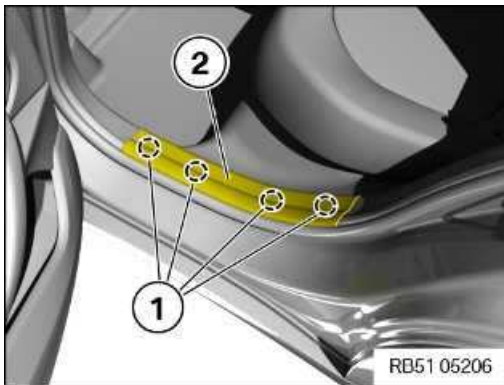


- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

10 – Installing the rear door sill cover strip

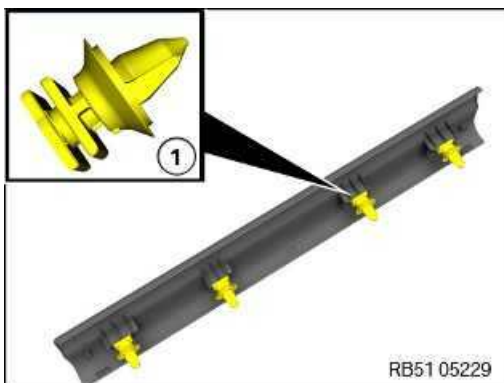


- Check the clips (1) for damage and renew where required.

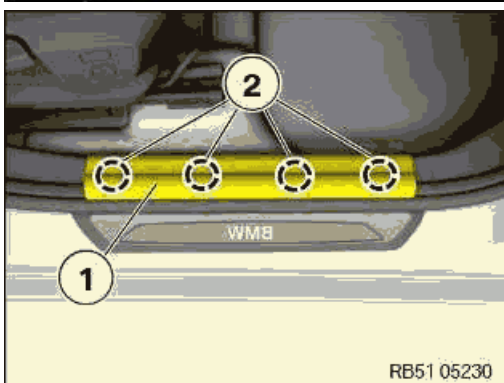


- Clip in the door sill cover strip (2) with the clips (1).

11 – Install the front door sill cover strip



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



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

12 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Airbag sensor, B-pillar		Used in step
M6	Tightening torque	8.8 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common		Used in step
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)	2 4
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 Safety information and general information	
72 00 ... Safety regulations for handling components with gas generators	
Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12

61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
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61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12

65 77 745 Removing and installing the front right door sensor



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



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 – Disconnecting all battery earth leads



- See additional information.

2 – Remove cover on door handle



RISK OF DAMAGE

Scratches.

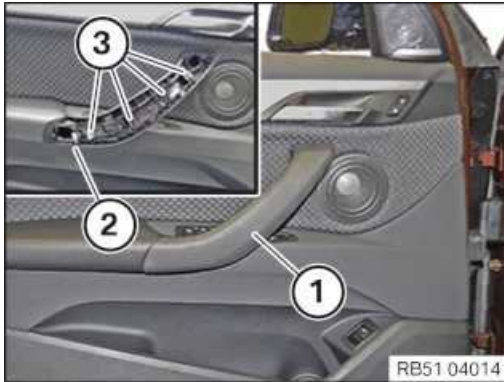
Tools and sharp-edged components can cause scratches.

- 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.

3 – Remove front door trim panel

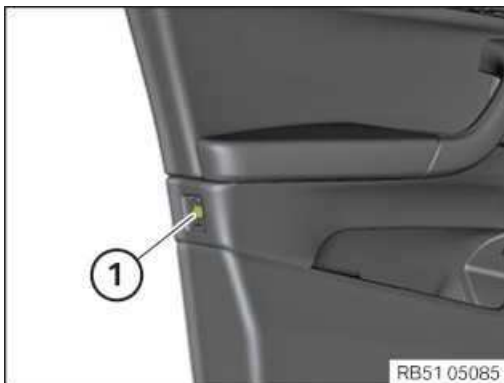


RISK OF DAMAGE

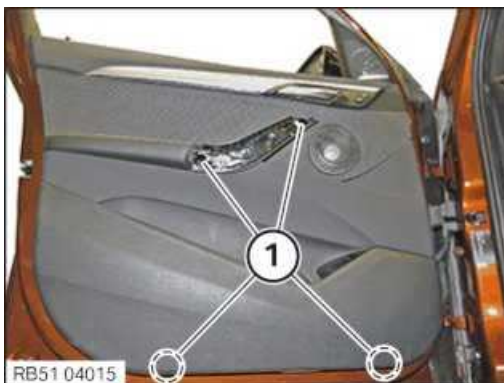
Scratches.

Tools and sharp-edged components can cause scratches.

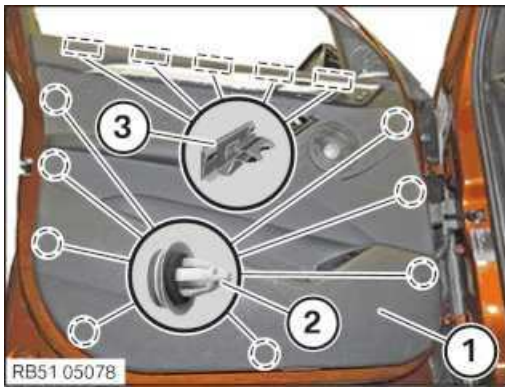
- Protect working area.
- Handle tools and components carefully.



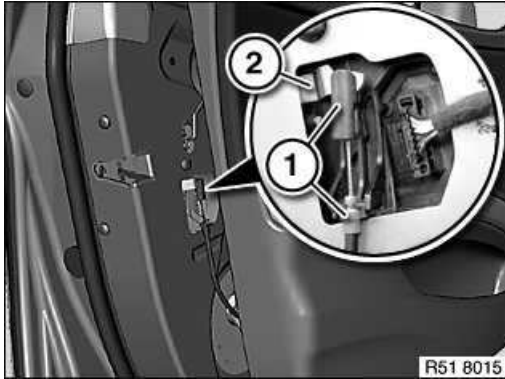
- If fitted: Remove the cover and unscrew the bolt (1).



- 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.

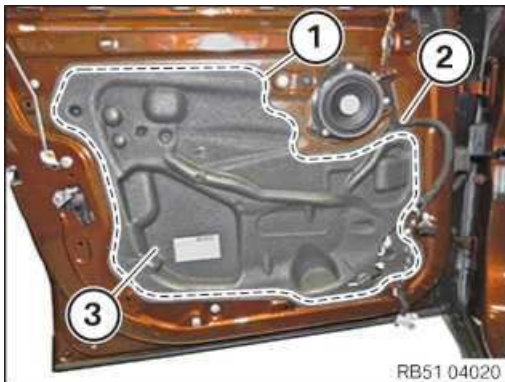
4 – Removing sound insulation on front door



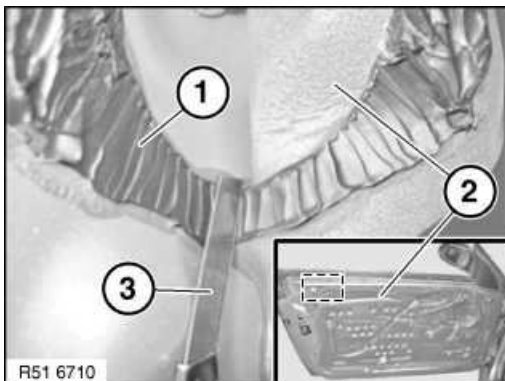
TECHNICAL INFORMATION

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



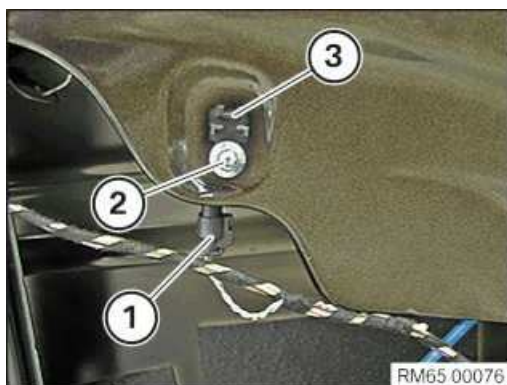
- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).



- 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.

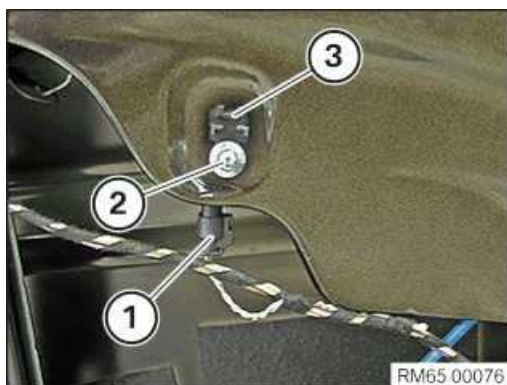
MAIN WORK

5 – Removing the airbag sensor on the front door



- Unlock and disconnect connector (1).
- Loosen nut (2).
- Remove airbag sensor (3).

6 – Installing the airbag sensor on the front door



- Correctly position airbag sensor (3).
- Tighten nut (2).

Front airbag sensor

	8,8 Nm
--	--------

- Connect connectors (1) and lock.

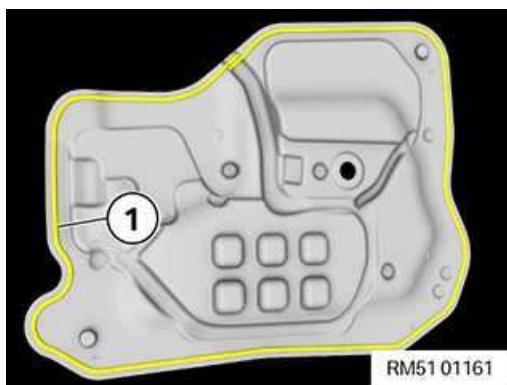
POSTPROCESSES

7 – 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.

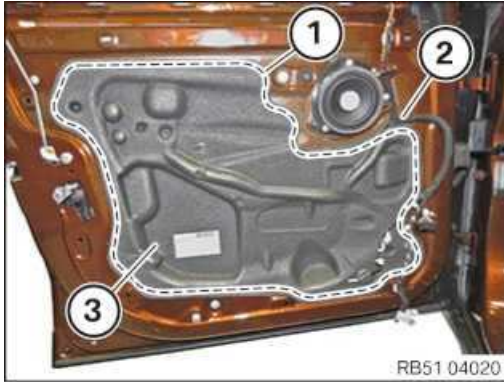
Result

» 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.



8 – Install front door trim panel

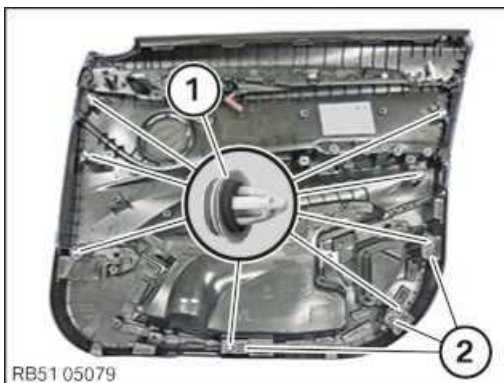


RISK OF DAMAGE

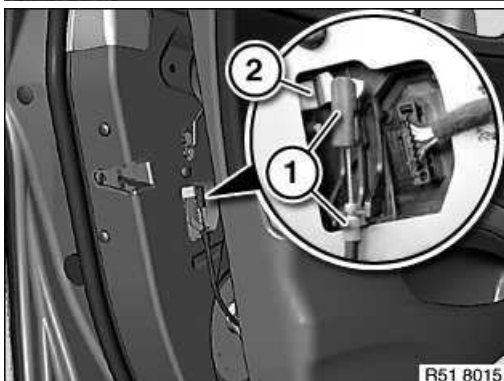
Scratches.

Tools and sharp-edged components can cause scratches.

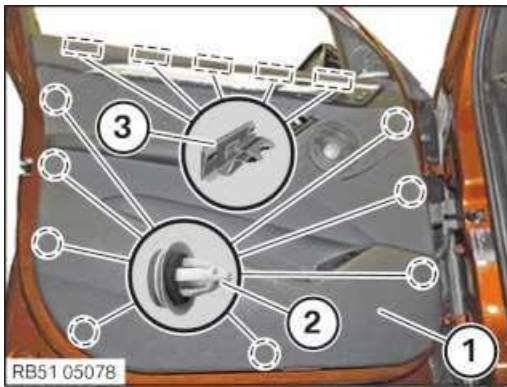
- Protect working area.
- Handle tools and components carefully.



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



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



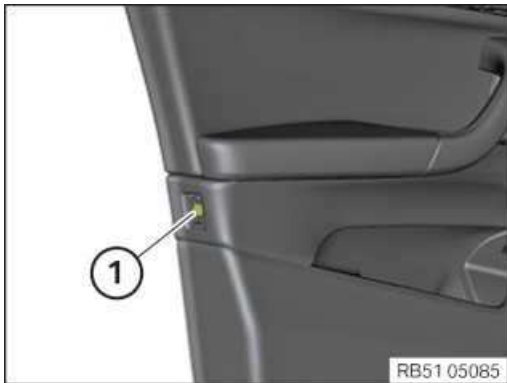
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

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



- If fitted: Tighten down screw (1).

Door trim panel to door

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

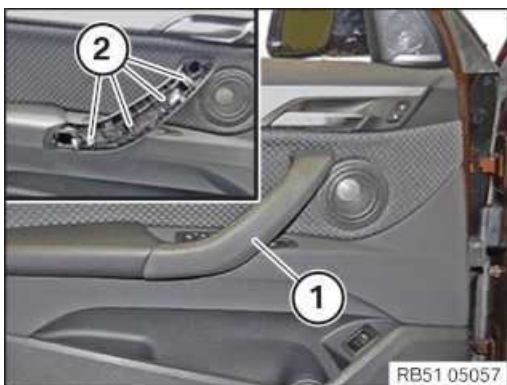
- Mount cover .

9 – 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).

10 – Disconnecting all battery earth leads

61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10

65 77 740 Removing and installing the sensor at the left-hand front door



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



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 – Disconnecting all battery earth leads



- See additional information.

2 – Remove cover on door handle



RISK OF DAMAGE

Scratches.

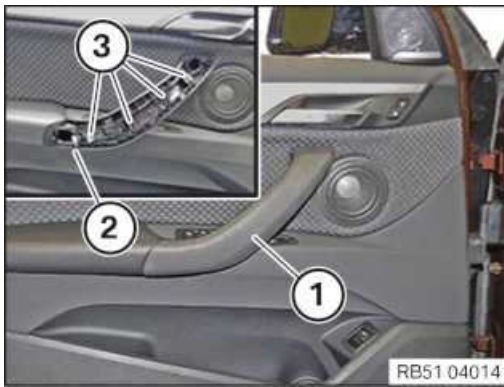
Tools and sharp-edged components can cause scratches.

- 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.

3 – Remove front door trim panel

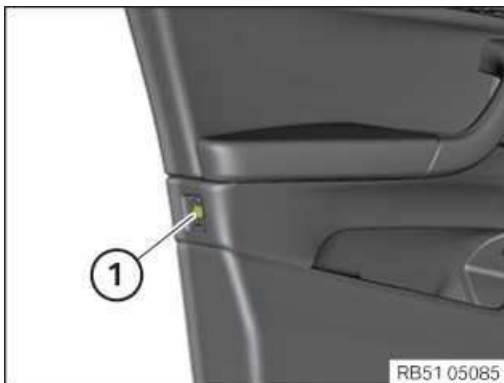


RISK OF DAMAGE

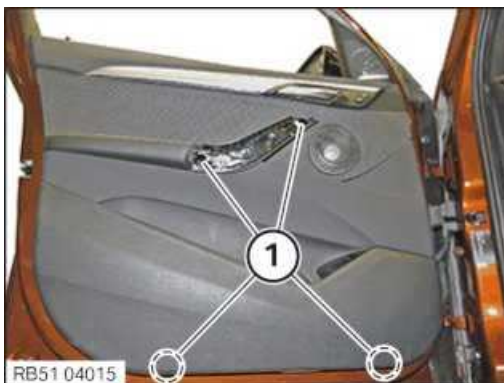
Scratches.

Tools and sharp-edged components can cause scratches.

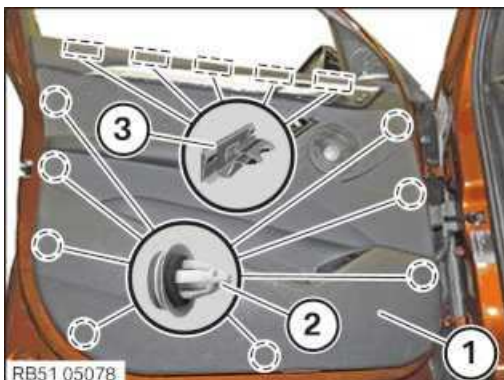
- Protect working area.
- Handle tools and components carefully.



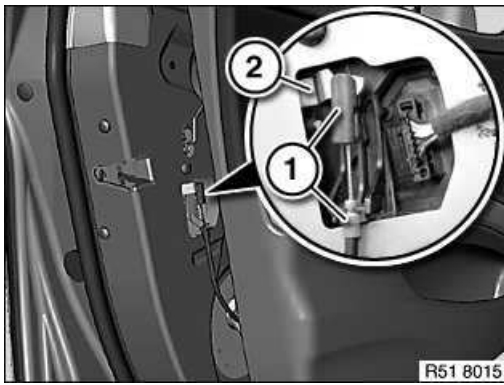
- If fitted: Remove the cover and unscrew the bolt (1).



- 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.



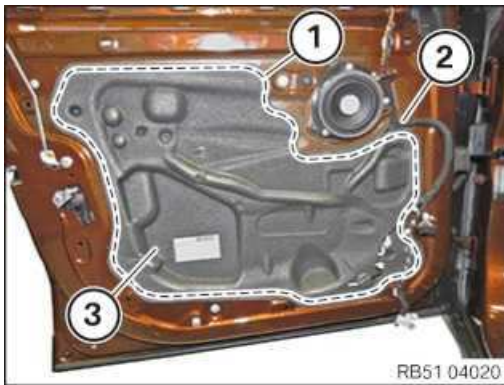
- Detach Bowden cable (1) from door lock (2).
- Disconnect all plug connections and remove door trim panel.

4 – Removing sound insulation on front door

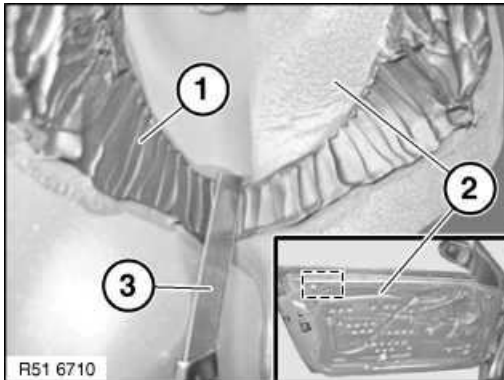


TECHNICAL INFORMATION

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



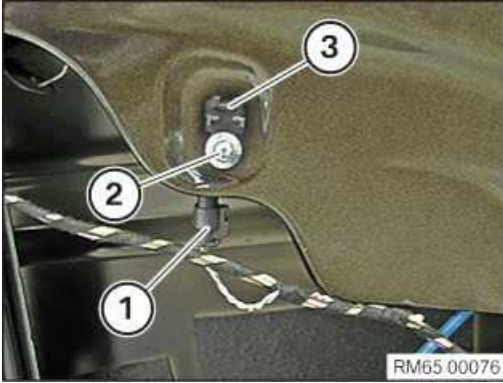
- Position of sealing bead (1)
- Pay attention to the cable (2) when removing the sound insulation (3).



- 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.

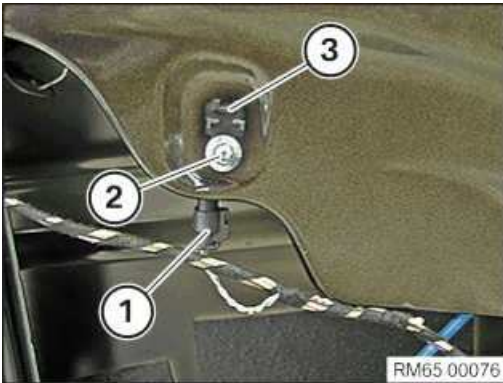
MAIN WORK

5 – Removing the airbag sensor on the front door



- Unlock and disconnect connector (1).
- Loosen nut (2).
- Remove airbag sensor (3).

6 – Installing the airbag sensor on the front door



- Correctly position airbag sensor (3).
- Tighten nut (2).

Front airbag sensor

	8,8 Nm
--	--------

- Connect connectors (1) and lock.

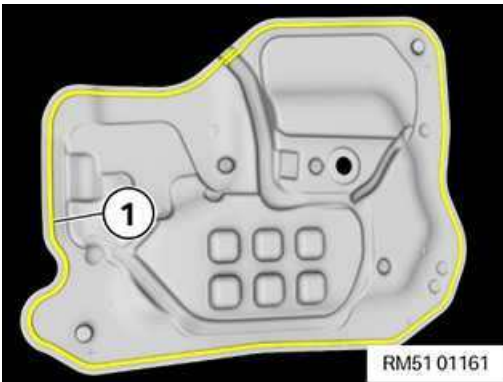
POSTPROCESSES

7 – 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.

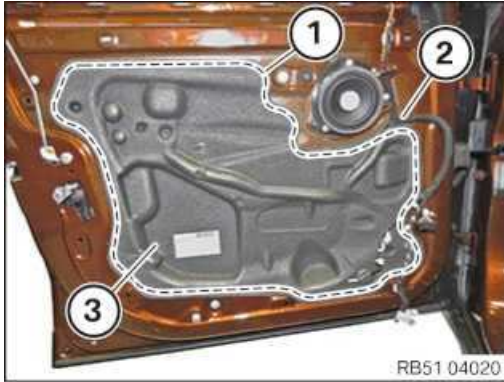
Result

» 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.



8 – Install front door trim panel

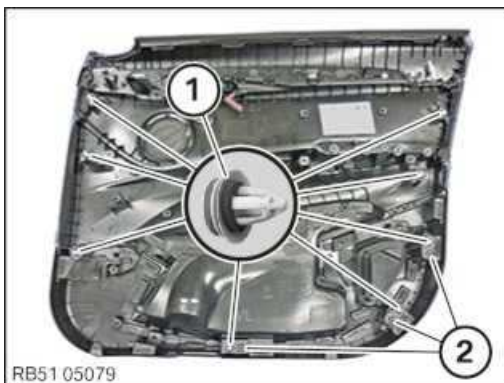


RISK OF DAMAGE

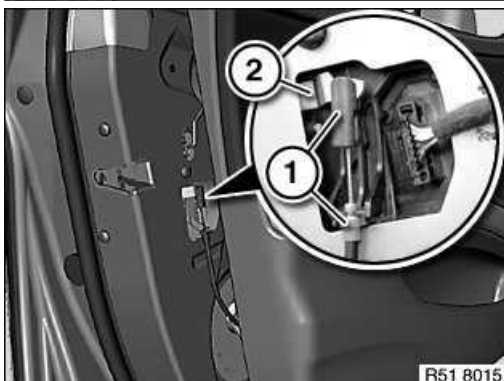
Scratches.

Tools and sharp-edged components can cause scratches.

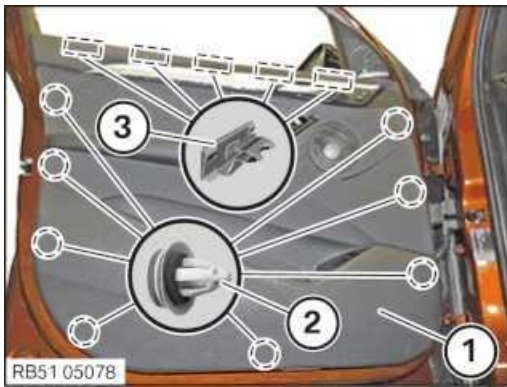
- Protect working area.
- Handle tools and components carefully.



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



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



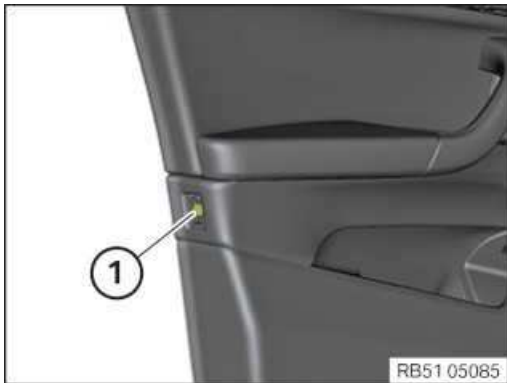
- Engage the door trim panel (1) in the clamps (3) at the top.
- Position the door trim panel (1) correctly and clip it into the clips (2).



- Tighten the screws (1).

Door trim panel to door

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



- If fitted: Tighten down screw (1).

Door trim panel to door

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

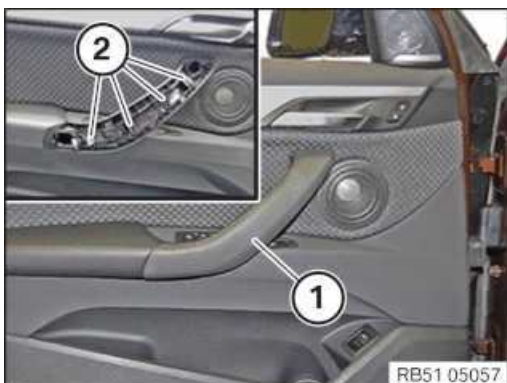
- Mount cover .

9 – 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).

10 – Disconnecting all battery earth leads

61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10
61 20 900 Disconnecting and connecting battery earth lead	1	10

65 77 518 Replace airbag control unit (Basic/central airbag unit or (multiple restraint system) (for process number 32 34 000)



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

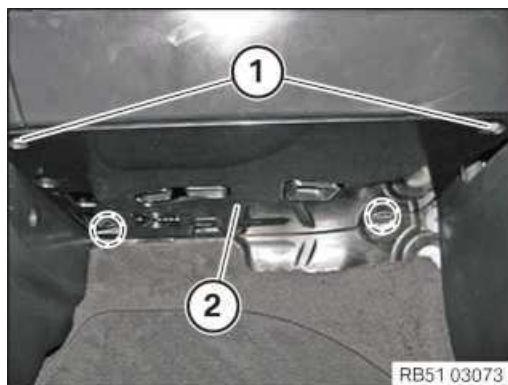
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

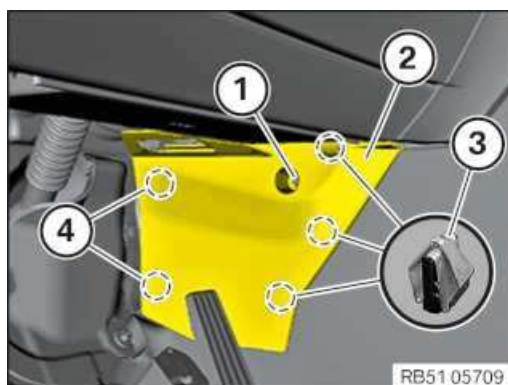
2 – Removing the instrument panel trim at bottom right



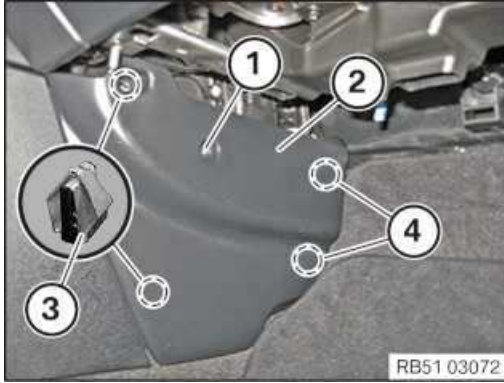
- Loosen nuts (1).
- Lower the instrument panel trim slightly at the bottom right (2) and disconnect the plug connection behind it.
- Guide the instrument panel trim at the bottom right (2) from the front guides and remove it.

3 – Removing the side trim panel for the left and right centre console

► Removing side trim panel for the left centre console



- Loosen screw (1).
- Release side trim panel (2) for the centre console from retaining clips (3).
- Remove side trim panel (2) for the centre console from guides (4) and remove it.



► **Removing side trim panel for the centre console on the right side**

- Loosen screw (1).
- Release the side trim panel for centre console (2) from retaining clips (3).
- Remove the side trim panel for centre console (2) from guides (4) and remove it.

4 – Remove gearshift lever cover



- Use wedges (1) to unclip the gaiter and pull it off upward.



- Remove the gearshift lever knob and the gaiter by means of a powerful jolt vertically upwards.
In doing so, the tie rod must not be bent or damaged.
- Ensure that the gearshift lever knob is not twisted when removing, otherwise the anti-twist lock in the gearshift lever knob will be sheared off.

5 – Remove the decorative trim from the centre console



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

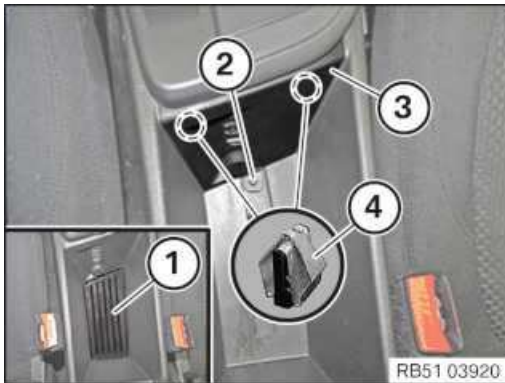
- Protect working area.
- Handle tools and components carefully.



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).



- Lever out and remove cover (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screws (2).

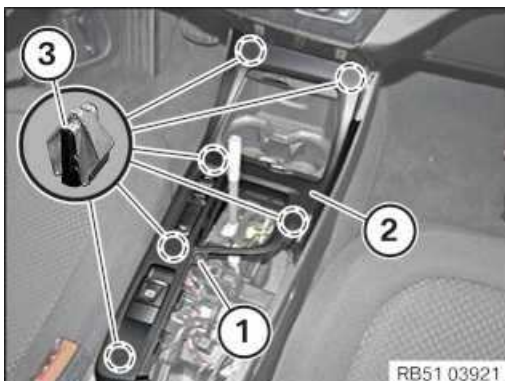


- Remove insert (1) with the special tool **0 496 571 (00 9 327)**.
- Loosen screw (2).
- Lever out trim (3) from clamps (4) towards the rear with the special tool **0 496 571 (00 9 327)**.
- Unfasten plug connection.
- Remove the trim (3).

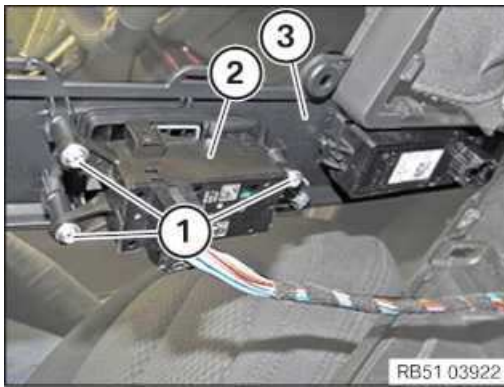


- Loosen screw (1).
- Remove decorative trim (2) and disconnect all the plug connections.
- Remove decorative trim (2).

6 – Remove the centre console trim

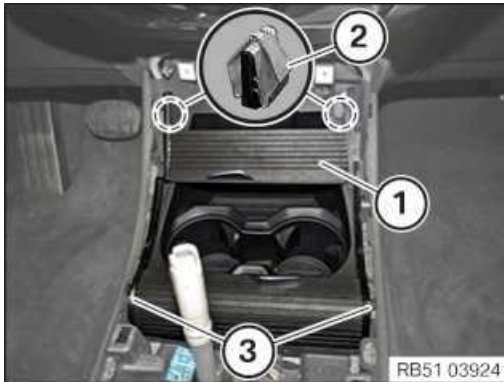


- Loosen screw (1).
- Release centre console trim (2) from clamps (3) with the special tool **0 496 569 (00 9 325)**.
- Lift centre console trim (2).



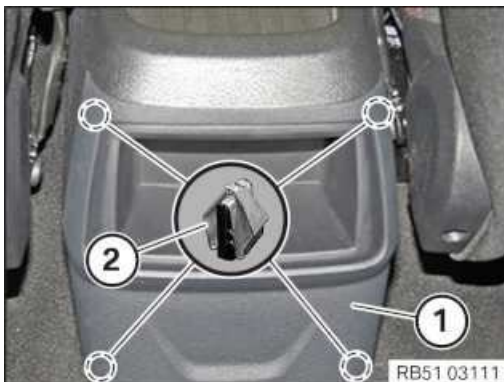
- Loosen screws (1).
- Remove parking brake button (2) from centre console trim (3) and place it down.
The plug connection must not be disconnected.
- Disconnect the remaining plug connections and remove centre console trim (3).

7 – Removing the front storage compartment



- Lever storage compartment (1) at top from the clamps (2).
- Fold storage compartment (1) so far back that it can be lifted from the guides (3).
- Disconnect plug connections and remove the storage compartment (1).

8 – Removing the rear centre console trim



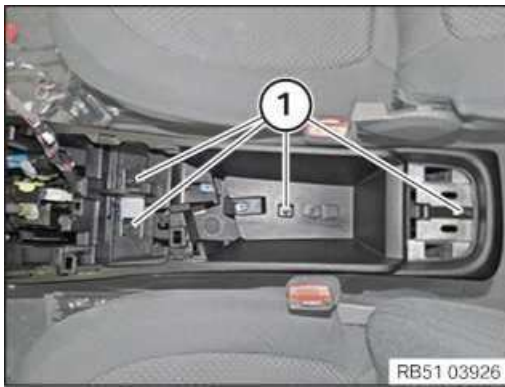
- Lever out and remove centre console trim (1) with the special tool **0 496 569 (00 9 325)** from the clamps (2).

9 – Removing centre console fully with centre armrest

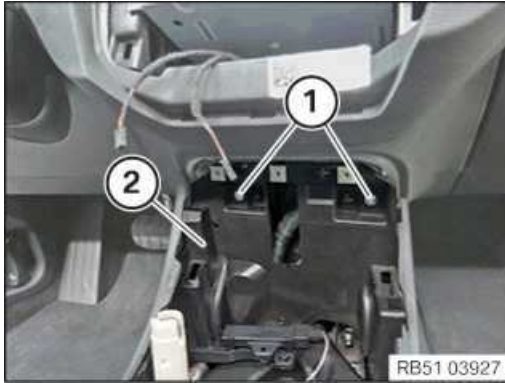
► Removing the centre armrest



- Release nuts (1) and remove centre armrest upwards.

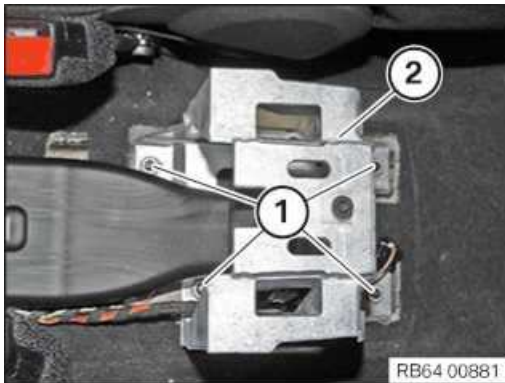


- Loosen screws (1).

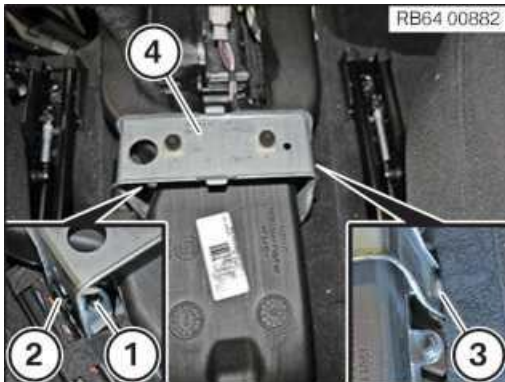


- Loosen screws (1).
- Lift the rear centre console (2) and in this process, disconnect all plug connections.
- Guide out the wiring harness and remove centre console (2) from the vehicle.

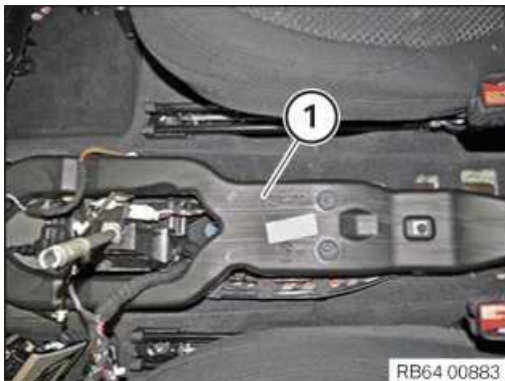
10 – For equipment specification with air duct for rear passenger compartment: Remove the air duct



- Loosen the nuts (1) and remove the holder (2).



- Unfasten nut (1).
- Detach the cable clip (2).
- Loosen the screw (3) and remove the holder (4).



- Remove the air duct (1).

11 – Removing the airbag control unit



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



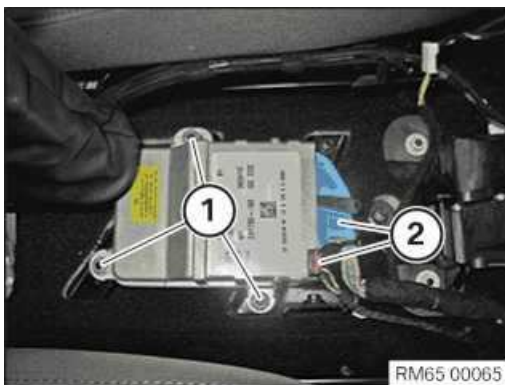
RISK OF DAMAGE



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.



- Loosen nuts (1).
- Unlock and disconnect plug connections (2).
- Remove airbag control unit (3).

12 – Installing the airbag control unit



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



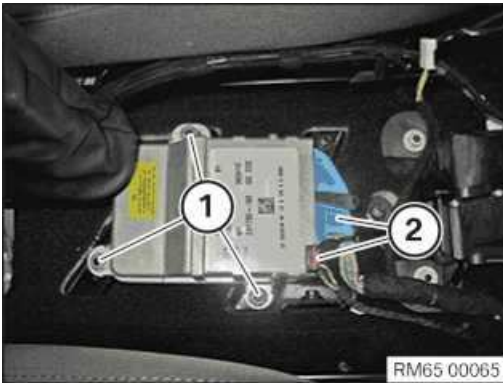
RISK OF DAMAGE



Electrostatic discharge.

Damage to or destruction of electrical components.

- Leave electrical components in original packaging until just before they are installed. Use the original packaging only for any return shipments. Always package removed components straight away.
- Read and comply with user information on using the associated special tool 12 7 060.
- Only touch the housings of electrical components. Do not touch pins or multi-pin connectors directly.
- Wear electrically conductive clothing and antistatic shoes (with ESD symbol).
- For additional information see: 61 35 Information on electrostatic discharge (ESD) protection.



- Position airbag control unit (3).
- Tighten nuts (1).

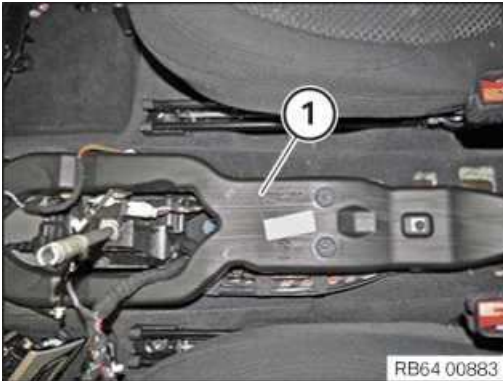
Airbag control unit to body

Screw		Tightening torque	8 Nm
-------	--	-------------------	------

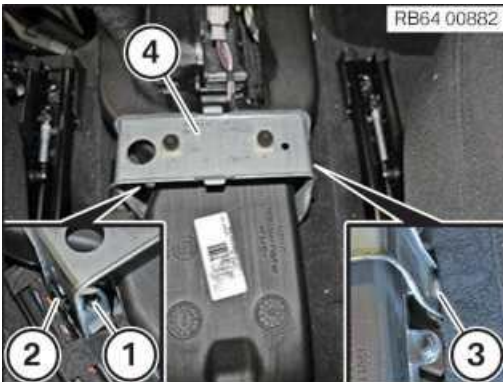
- Connect connectors (2) and lock.

POSTPROCESSES

13 – For equipment specification with air duct for rear passenger compartment: Install air duct



- Insert the air duct (1).



- Position the holder (4) correctly and tighten the screw (3).

Centre console holder to bodyshell

Nut		Tightening torque	8 Nm
-----	--	-------------------	------

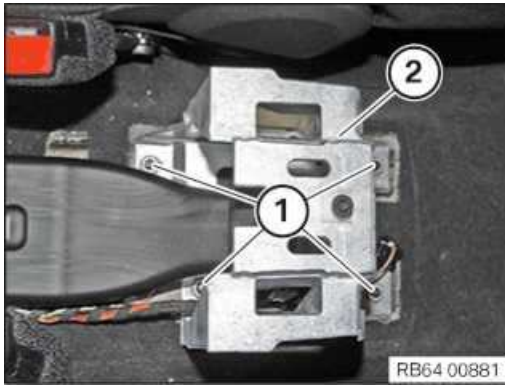
Screw		Tightening torque	8 Nm
-------	--	-------------------	------

- Tighten the nut (1) and attach the cable clip (2).

Centre console holder to bodyshell

Nut		Tightening torque	8 Nm
-----	--	-------------------	------

Screw		Tightening torque	8 Nm
-------	--	-------------------	------



- Position the holder (2) correctly and tighten the nuts (1).

Centre console holder to bodyshell

Nut		Tightening torque	8 Nm
Screw		Tightening torque	8 Nm

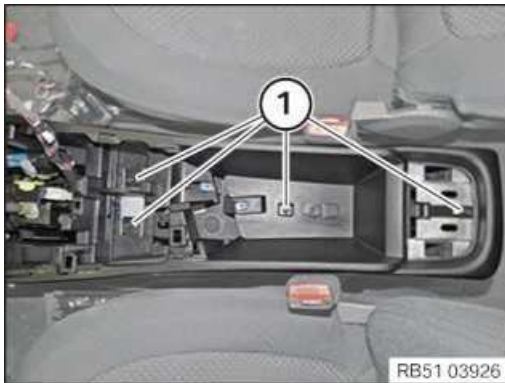
14 – Installing centre console fully with centre armrest



- Lift rear centre console (2), guide it forwards and connect all the connectors.
- Insert the wiring harness into the centre console (2).
- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------



- Tighten the screws (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------



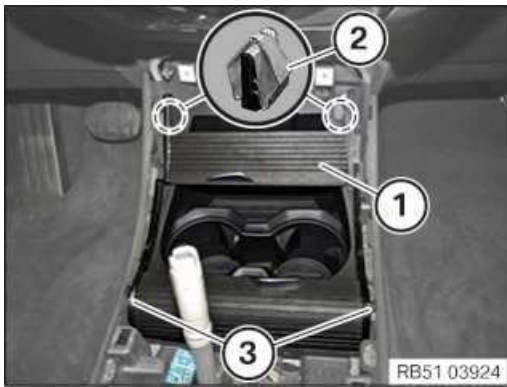
► Installing the centre armrest

- Install the centre armrest and tighten nuts (1).

Centre armrest to support

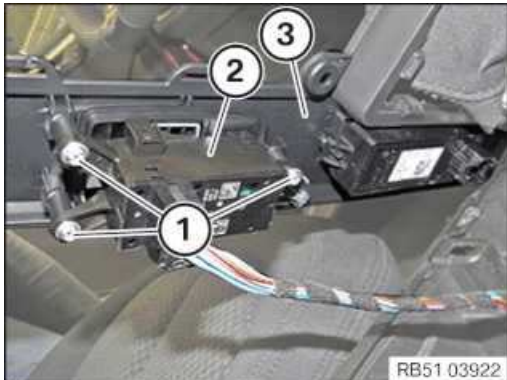
Nut M8		Tightening torque	21,4 Nm
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15 – Installing the front storage compartment



- Install storage compartment (1) and connect the connectors.
- Insert the storage compartment (1) into the guides (3) and fold forward.
- Engage storage compartment (1) in the clamps (2) at top.

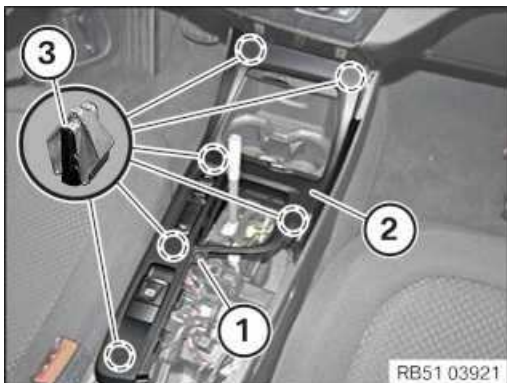
16 – Install the centre console trim



- Install centre console trim (3) and connect and lock the corresponding connectors.
- Install parking brake button (2) on centre console trim (3).
- Tighten the screws (1).

Parking brake button

Oval-head screw		Tightening torque	1,5 Nm
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- Install centre console trim (2) and engage it into clamps (3).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

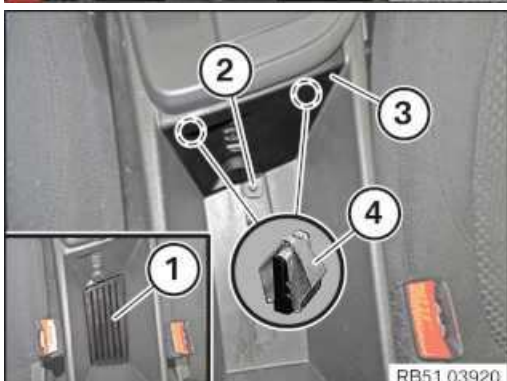
17 – Installing the decorative trim to the centre console



- Connect all connectors.
- Install decorative trim (2).
- Tighten down screw (1).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

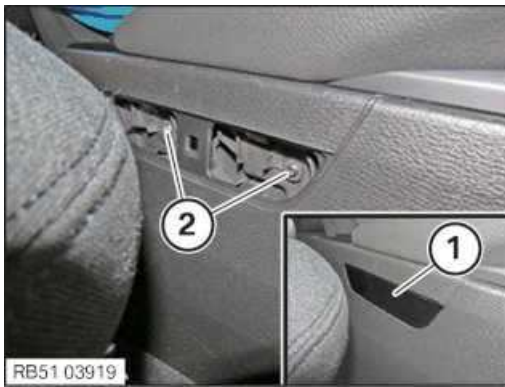


- Position trim (3) and connect all the connectors.
- Install trim (3) and engage it into clamps (4).
- Tighten down screw (2).

Trim to centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

- Insert the insert (1).



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

- Install cover (1) and engage.



- Tighten down screws (2).

Screw connection for centre console

Oval-head screw		Tightening torque	1,8 Nm
-----------------	--	-------------------	--------

- Install cover (1) and engage.

18 – Installing the gearshift lever cover



- Place the gearshift lever knob on gearshift lever and align by lightly pressing in the direction of travel.

The anti-twist lock must bite.

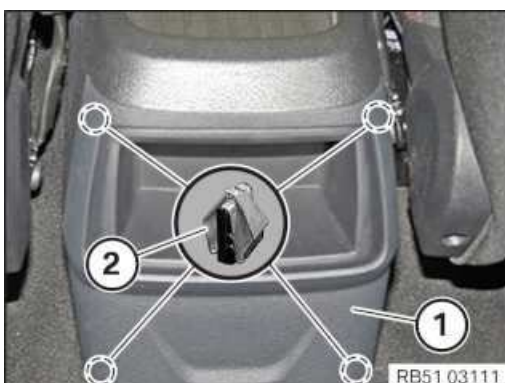
- Press the gearshift lever knob with the palm of the hand until it can be felt to engage.

When installing, the tie rod of the gearshift lever must not be bent.



- Clip in gaiter (arrows).

19 – Installing the rear centre console trim



- Install centre console trim (1) and engage it into clamps (2).

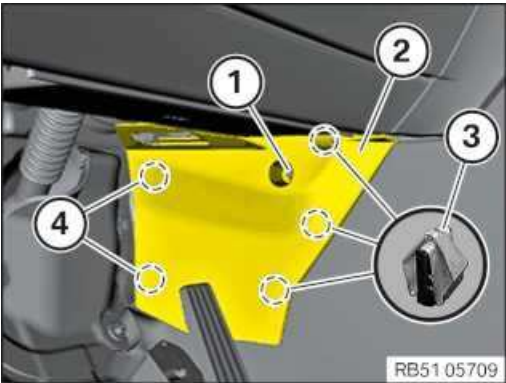
20 – Installing side trim panel for the left and right centre console

► Installing side trim panel for the left centre console

i

TECHNICAL INFORMATION

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



- Install the side trim panel (2) for the centre console and feed it into the guides (4).
- Engage the side trim panel (2) for the centre console into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

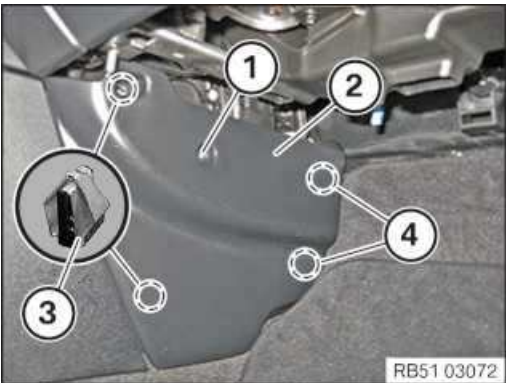
Oval-head screw		Tightening torque	1,8 Nm
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► Installing side trim panel for the right centre console

i

TECHNICAL INFORMATION

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



- Install the side trim panel for the centre console (2) and feed it into the guides (4).
- Engage the side trim panel for the centre console (2) into retaining clips (3).
- Tighten down screw (1).

Trim to centre console

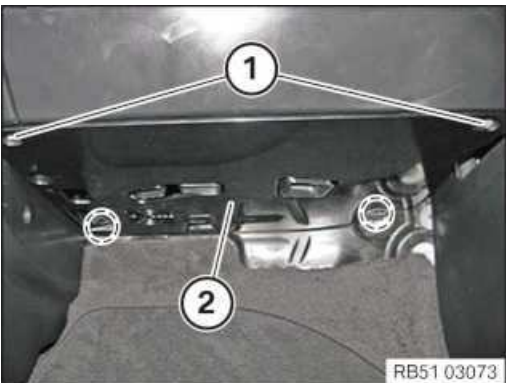
Oval-head screw		Tightening torque	1,8 Nm
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21 – Installing the botto right instrument panel trim

i

TECHNICAL INFORMATION

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



- Install the lower right instrument panel trim (2) and connect and lock the plug connection.
- Insert the lower right instrument panel trim (2) into the front guides.
- Tighten nuts (1).

Bottom left footwell trim to instrument panel

M5 hexagon nut		Tightening torque	2 Nm
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22 – Disconnecting all battery earth leads



- See additional information.

23 – Encode/program control unit(s)

Prerequisite

Replacement of the control unit.



TECHNICAL INFORMATION

Use the most recent software version to prevent faults during programming/encoding.
The battery voltage must not fall below 13.0 V during programming.
Use only chargers for a low volt-vehicle electrical system that are recommended by BMW.



TECHNICAL INFORMATION

No high-voltage switch off is required in electric vehicles or hybrid vehicles for programming/encoding.
The high-voltage system will be automatically switched off by the programming system.

Exception:

BMW I01: Note Product and Measures Management Aftersales measure 55176388.

- Connect the battery charger to the vehicle.
- Connect the programming system with the vehicle.
- Determine the action plan.
- Accept and fully process the measures plan.
- If applicable, connect the workshop system to the vehicle, depending on the reworking list.
- Carry out vehicle test.
- Delete the fault memory.
- The information about programming the workshop system and the corresponding notes in the user documentation must be observed.
- Wait until programming/encoding has been completed.
- Disconnect the programming system from the vehicle.
- Disconnect the battery charger from the vehicle.

24 – Adjusting the sensors for the driving dynamics

- Connect diagnosis system.
- Carry out the service function for adjustment of the sensors for driving dynamics.
 - Chassis and suspension
 - Traction control system
 - Adjustment of the driving dynamics sensors

Additional Information

Overview of Tightening Torques

Airbag control unit to body Used in step [12](#)

Screw		Tightening torque	8 Nm
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Centre console holder to bodyshell Used in step [13](#)

Nut		Tightening torque	8 Nm
Screw		Tightening torque	8 Nm

Screw connection for centre console Used in step [14](#) [16](#) [17](#)

Oval-head screw		Tightening torque	1,8 Nm
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Centre armrest to support Used in step [14](#)

Nut M8		Tightening torque	21,4 Nm
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Parking brake button Used in step [16](#)

Oval-head screw		Tightening torque	1,5 Nm
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Trim to centre console Used in step [17](#) [20](#)

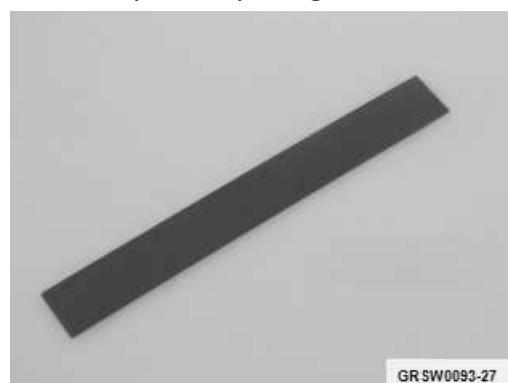
Oval-head screw		Tightening torque	1,8 Nm
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Bottom left footwell trim to instrument panel Used in step [21](#)

M5 hexagon nut		Tightening torque	2 Nm
----------------	--	-------------------	------

Overview of Special Tools

0 496 571 (00 9 327) Wedge



Common Used in step [5](#)

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)

**Common**

Used in step 6 8

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](#)

11 12

Repair instructions

Used in step

61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting battery earth lead	1 22
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 22

61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 20 900 Disconnecting and connecting battery earth lead	1	22
61 35 ... Notes on ESD protection (Electro Static Discharge)		

65 77 726 Replacing airbag sensor at the right B-pillar (after vehicle diagnosis)



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



NOTICE

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

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



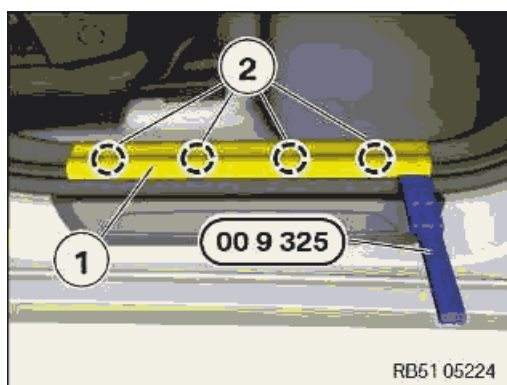
- See additional information.

2 – Remove front right door sill cover strip

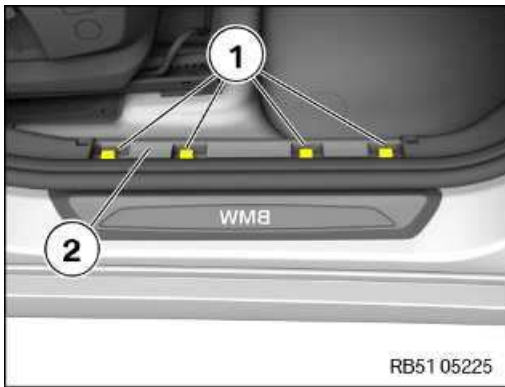


NOTICE

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



- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



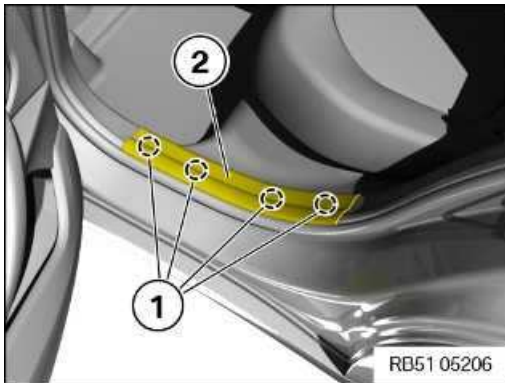
- If applicable, release clips (1) from floor panel (2) and mount on the door sill cover strip.

3 – Remove the rear right door sill cover strip



NOTICE

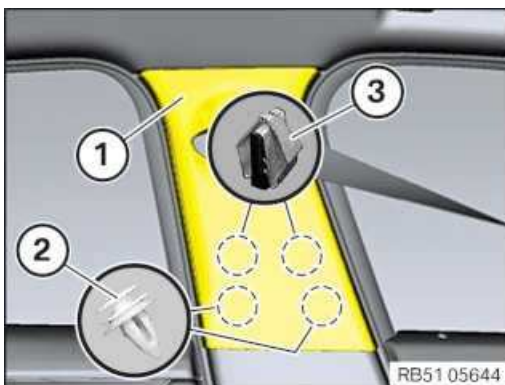
Description is for left component only. Procedure on the right side is identical.



► Remove rear entrance cover strip

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

4 – Partially removing upper B-pillar trim panel



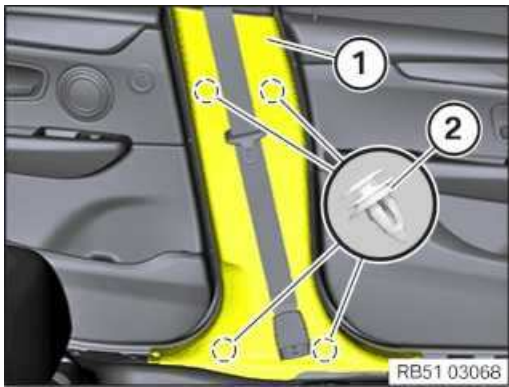
- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

5 – Remove the lower B-pillar trim panel



NOTICE

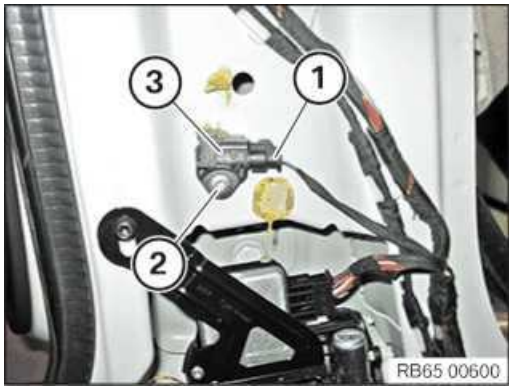
Description is for left component only. Procedure on the right side is identical.



- Release the B-pillar trim panel (1) at bottom starting from the clips (2).
- Feed out and remove the B-pillar trim panel (1) inwards.

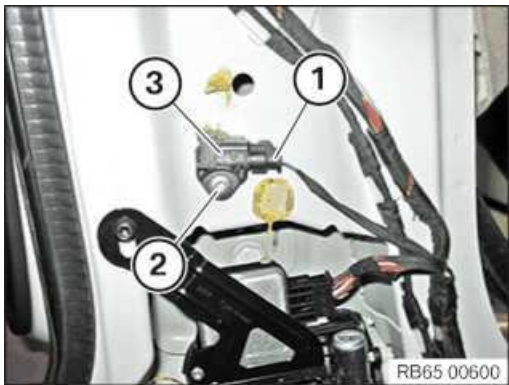
MAIN WORK

6 – Removing airbag sensor on the B-pillar



- Unlock and disconnect connector (1).
- Loosen screw (2).
- Remove the airbag sensor (3) on the B-pillar.

7 – Installing airbag sensor on the B-pillar



- Position the airbag sensor (3) correctly on the B-pillar.
- Tighten down screw (2).

Airbag sensor, B-pillar

M6		Tightening torque	8.8 Nm
----	--	-------------------	--------

- Connect connector (1).

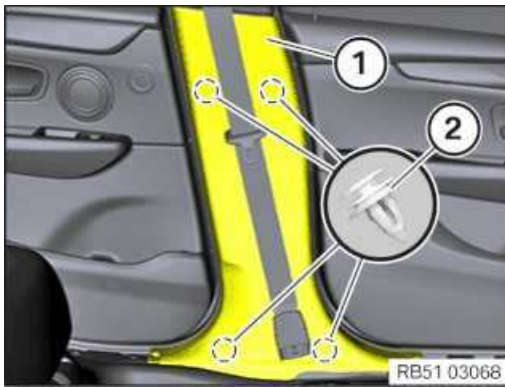
POSTPROCESSES

8 – Install the lower B-pillar trim panel



NOTICE

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



- Renew damaged clips (2).

Parts: Clips

- Feed in the B-pillar trim panel (1) at the top and position correctly.
- Clip in the B-pillar trim panel (1) at the clips (2).
- Make sure the B-pillar trim panel (1) is correctly positioned on the edge protection.

9 – Partially installing upper right B-pillar trim panel



NOTICE

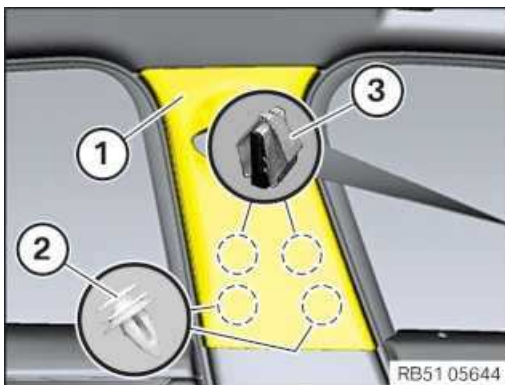
Description is for left component only. Procedure on the right side is identical.

► Install upper B-pillar trim panel



TECHNICAL INFORMATION

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



- Insert the seat belt into the B-pillar trim panel (1).
- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

10 – Installing rear right door sill cover strip

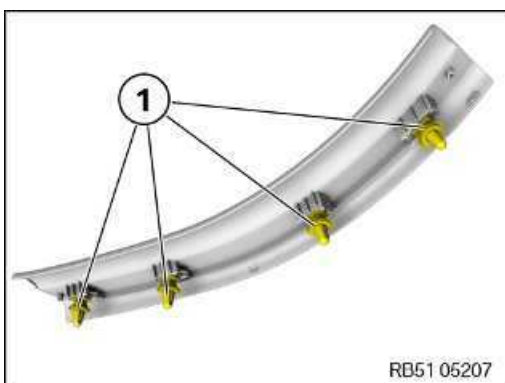


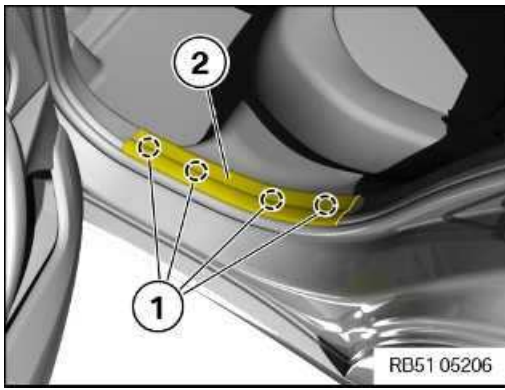
NOTICE

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

► Installing the rear door sill cover strip

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





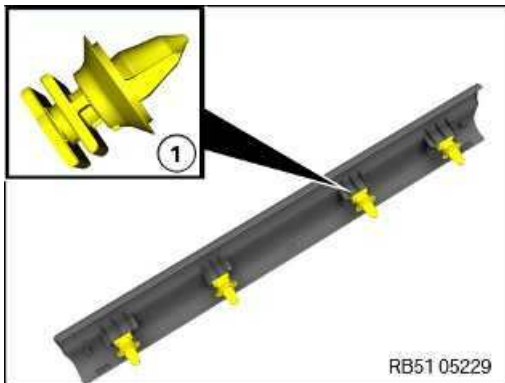
- Clip in the door sill cover strip (2) with the clips (1).

11 – Install the front right door sill cover strip

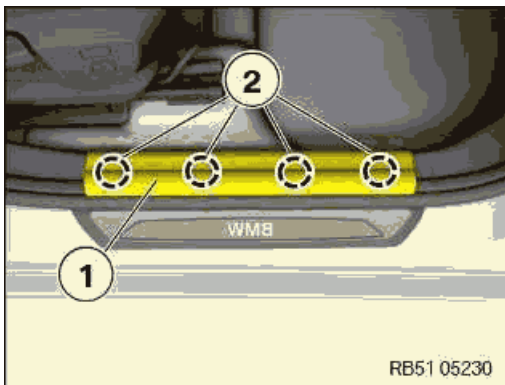


NOTICE

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



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



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

12 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

M6		Tightening torque	8.8 Nm
----	--	-------------------	--------

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common

Used in step 2 4

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

Links

General repair instructions

Used in step

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

Repair instructions

Used in step

61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12

61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12

65 77 721 Replacing airbag sensor on the left B-pillar (after vehicle diagnosis)



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



NOTICE

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

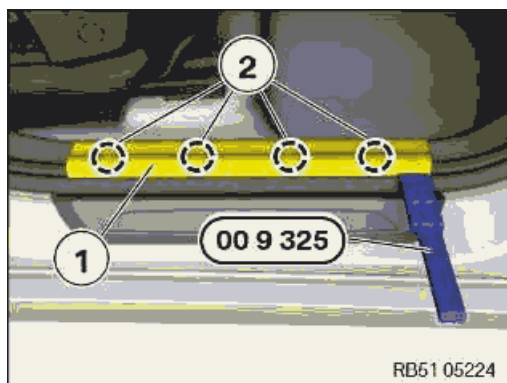
PRELIMINARY WORK

1 – Disconnecting all battery earth leads

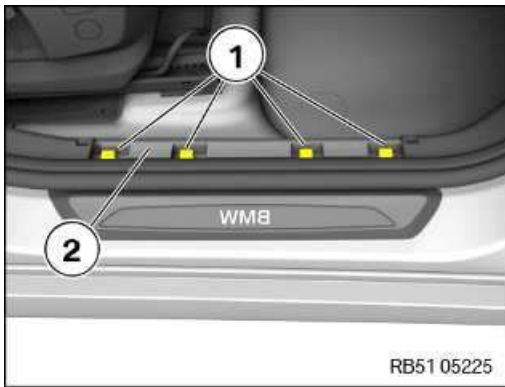


- See additional information.

2 – Remove front entrance cover strip

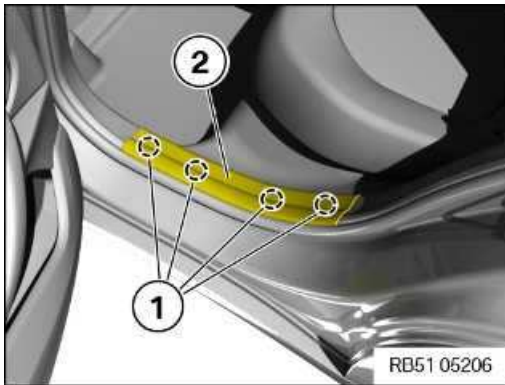


- Unclip the door sill cover strip (1) at the clips **0 496 569 (00 9 325)** using special tool (2) starting from the rear.



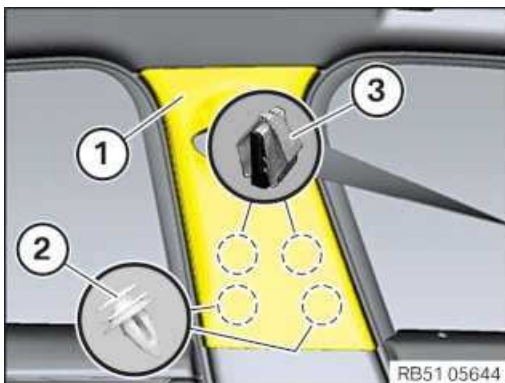
- If applicable, loosen clips (1) from floor panel (2) and mount on the door sill cover strip.

3 – Remove rear entrance cover strip



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

4 – Partially removing upper B-pillar trim panel



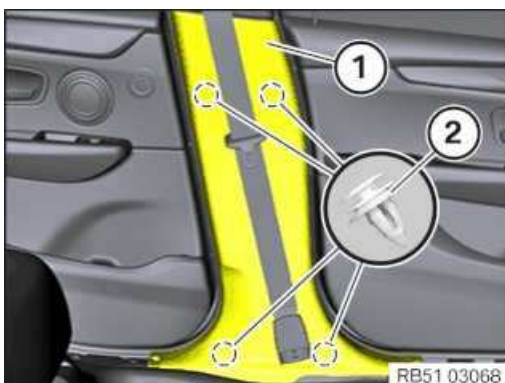
- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

5 – Remove the lower B-pillar trim panel



NOTICE

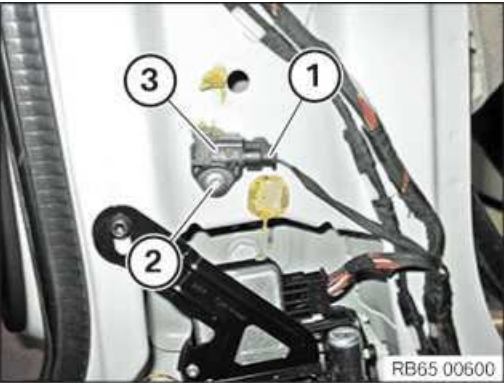
Description is for left component only. Procedure on the right side is identical.



- Release the B-pillar trim panel (1) at bottom starting from the clips (2).
- Feed out and remove the B-pillar trim panel (1) inwards.

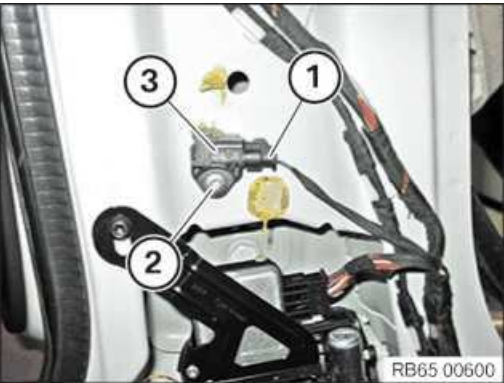
MAIN WORK

6 – Removing airbag sensor on the B-pillar



- Unlock and disconnect connector (1).
- Loosen screw (2).
- Remove the airbag sensor (3) on the B-pillar.

7 – Installing airbag sensor on the B-pillar



- Position the airbag sensor (3) correctly on the B-pillar.
- Tighten down screw (2).

Airbag sensor, B-pillar

M6		Tightening torque	8.8 Nm
----	--	-------------------	--------

- Connect connector (1).

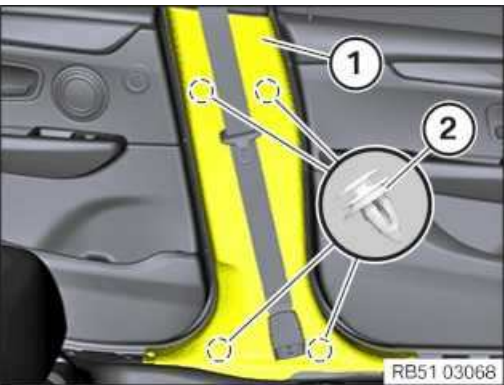
POSTPROCESSES

8 – Install the lower B-pillar trim panel



NOTICE

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



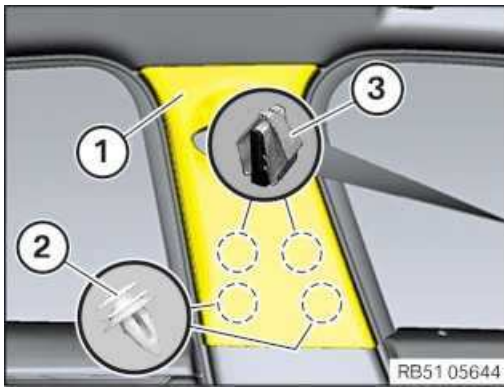
- Renew damaged clips (2).
- Parts:** Clips
- Feed in the B-pillar trim panel (1) at the top and position correctly.
 - Clip in the B-pillar trim panel (1) at the clips (2).
 - Make sure the B-pillar trim panel (1) is correctly positioned on the edge protection.

9 – Partially installing upper B-pillar trim panel



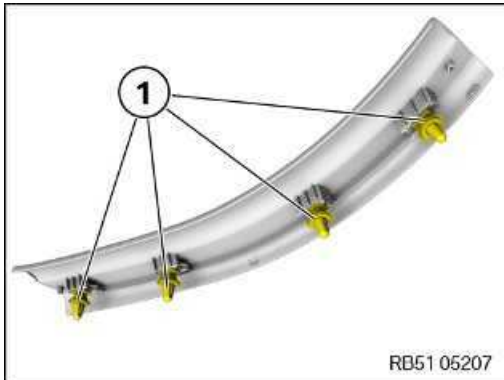
TECHNICAL INFORMATION

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

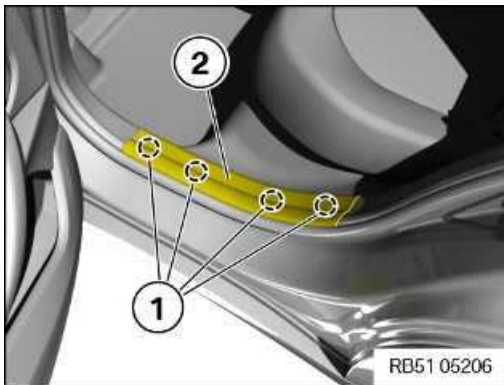


- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

10 – Installing the rear door sill cover strip

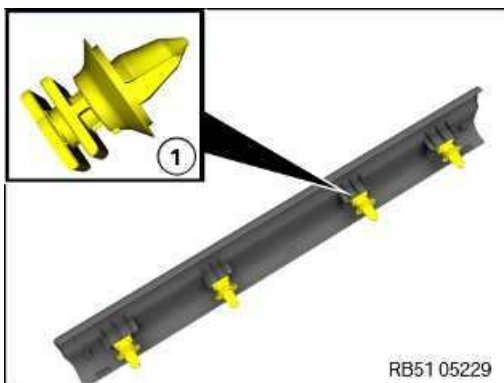


- Check the clips (1) for damage and renew where required.

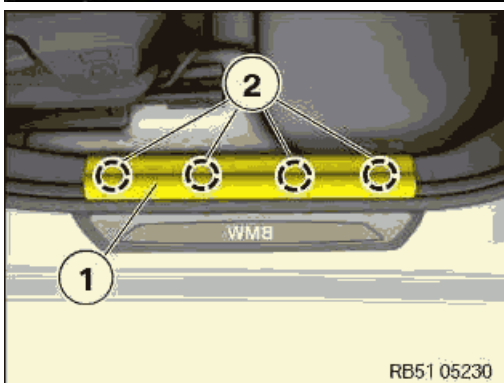


- Clip in the door sill cover strip (2) with the clips (1).

11 – Install the front door sill cover strip



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



- Clip the door sill cover strip (1) into the floor panel with the clips (2).

12 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Airbag sensor, B-pillar		Used in step
M6	Tightening torque	8.8 Nm

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common		Used in step
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)	2 4
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 Safety information and general information	
72 00 ... Safety regulations for handling components with gas generators	
Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12
61 20 900 Disconnecting and connecting battery earth lead	1 12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1 12

61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
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61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12
61 20 900 Disconnecting and connecting battery earth lead	1	12

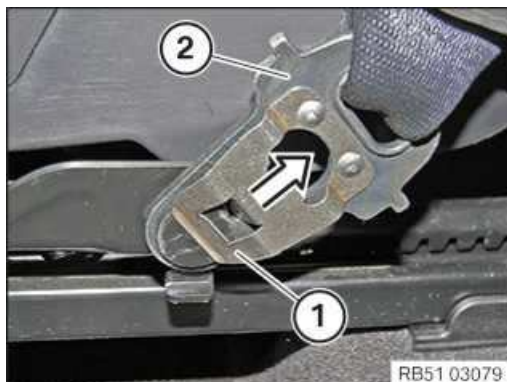
65 77 602 Replacing seat occupancy mat for front passenger seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – Remove front seat



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

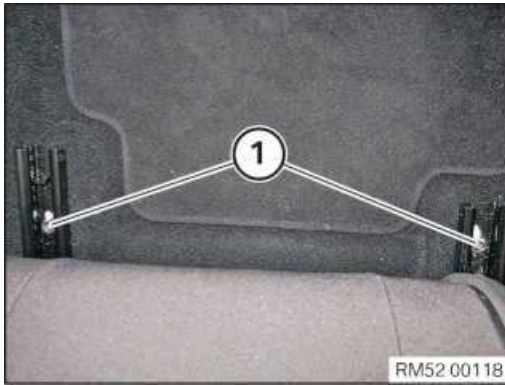


TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



- Adjust front seat completely to the rear.
- Loosen screws (1).

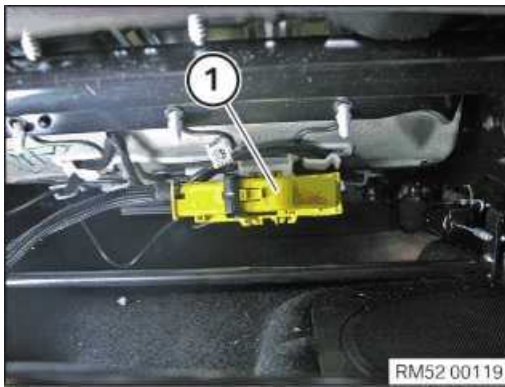


- Adjust front seat completely to the front.
- Loosen screws (1).

► **Disconnecting all battery earth leads**

- See additional information.





RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

- Protect working area.
- Handle tools and components carefully.
- Cover the door sill using protective covers.
- Fold the front seat back and disconnect the plug connection (1).



RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Remove the front seat with the assistance of an auxiliary person.

► Mounting the front seat on the universal seat mount

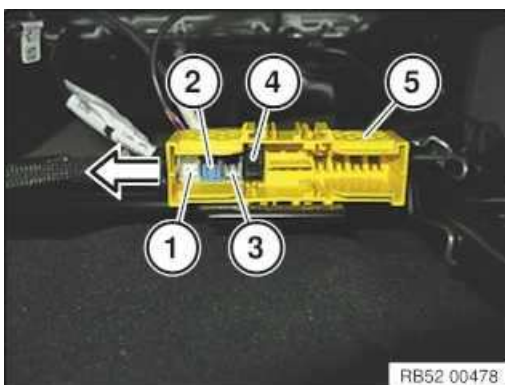
- Mounting the front seat on the special tool (universal seat mount) **2 154 711**.

To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

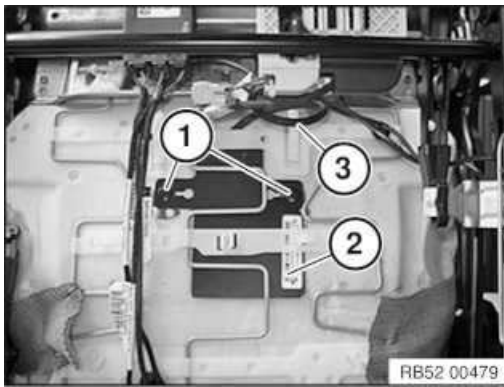


MAIN WORK

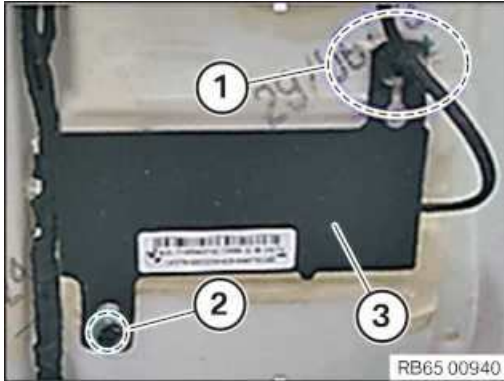
3 – Removing the sensor mat for SBE



- Unlock the connector housing (1 bis 4) and pull from the connector housing in the direction of arrow (5).

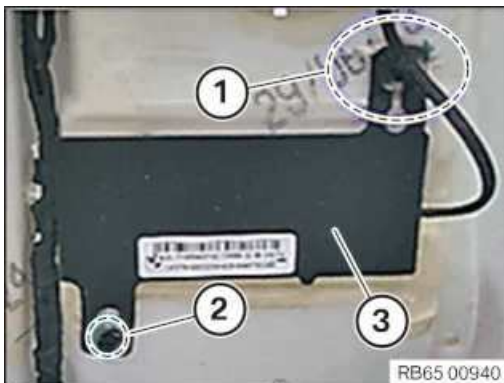


- For equipment specification with version before 2017:
- Loosen the clips (1).
- Carefully remove the sensor mat (2) and the cable (3) from the seat mechanism.



- For equipment specification with version as of 2017:
- Release the cable clip with cable (1) from the cushion.
- Loosen clip (2).
- Guide out sensor mat (3) carefully with the cable.

4 – Installing the sensor mat for SBE

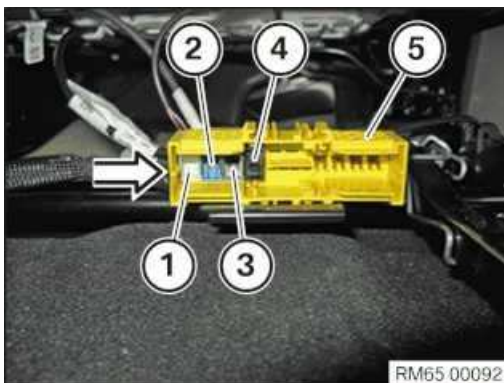


- The previously found variant of the sensor with a version before 2017 for removal has been changed and is not considered for installation.

- Insert sensor mat (3) and position it correctly on the cushion.
- Secure cable with tension relief (1) correctly on the cushion.

Note: If applicable, it is required to dispose the provided push-pin for the area 1, as the sensor should be installed only with tension relief as mapped.

- Secure the clip (2).



- Pull the connector housing (1 bis 4) into the connector housing in the direction of the arrow (5).

POSTPROCESSES

5 – Install front seat



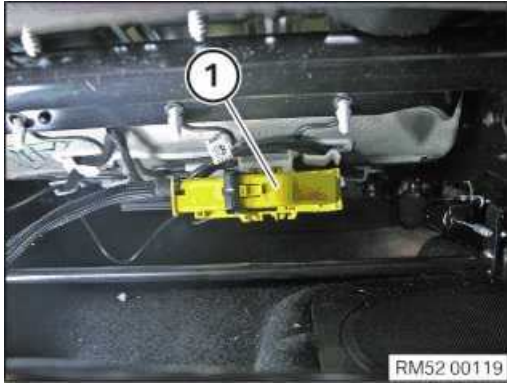
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

- Removing the front seat from the universal seat mount .



- Removing the seat from the special tool (universal seat mount) **2 154 711**.



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

- Cover the door sill using protective covers.



RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .

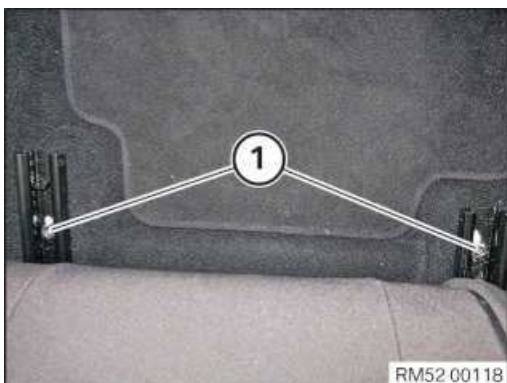
- Adjust the front seat to the rear.
- Renew screws (1).

Parts: Bolts

- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm
-----	--------------	-------------------	-------



- Adjust the front seat to the front.
- Renew screws (1).

Parts: Bolts

- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm
-----	--------------	-------------------	-------

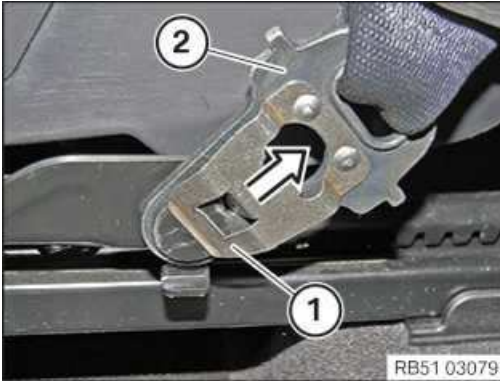


► **Disconnecting all battery earth leads**

- See additional information.



6 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

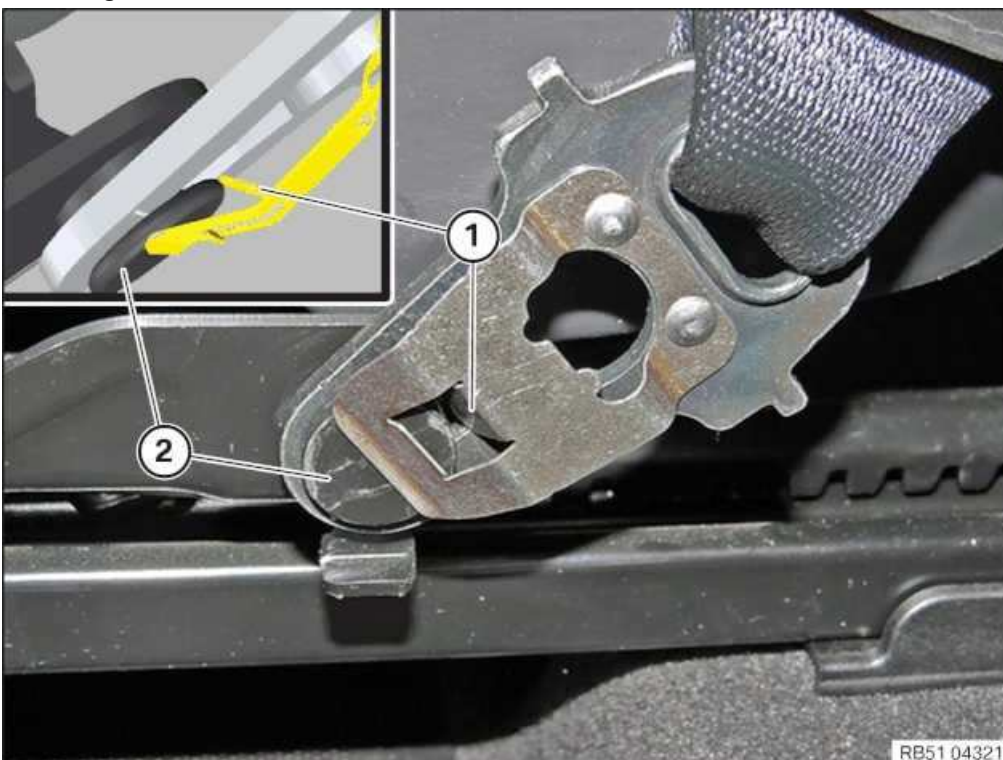
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

► **Correctly mount the front end fitting**

End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).



WARNING

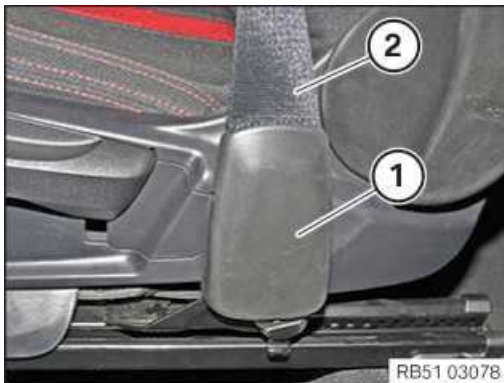
Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body

Used in step [5](#)

M10	Renew screw.	Tightening torque	42 Nm
-----	--------------	-------------------	-------

Overview of Special Tools

2 154 711 Fitting aid



Common

Used in step [2](#) [5](#)

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.		
Included in the tool or work			
Storage location			
Replaced by			
In connection with	Engine assembly stand with SWZ number 0495187		
SI-Number	08 18 08 (495)		

Links

General repair instructions

Used in step

[illegible]

65 81 061 Removing and installing/replacing outside temperature sensor

PRELIMINARY WORK

1 – Partially remove the front right wheel arch trim

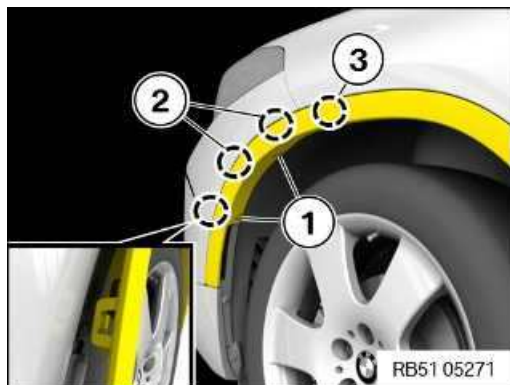


NOTICE

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

► Partially removing the front wheel arch trim

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



2 – Partially remove the front wheel arch cover

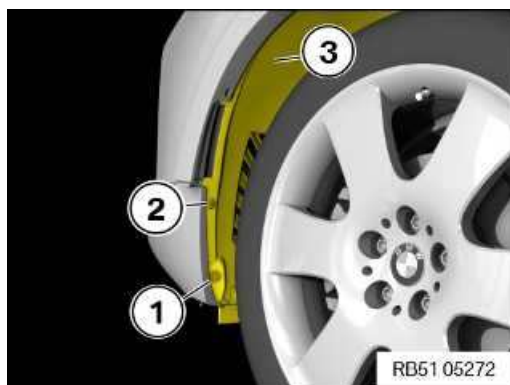


NOTICE

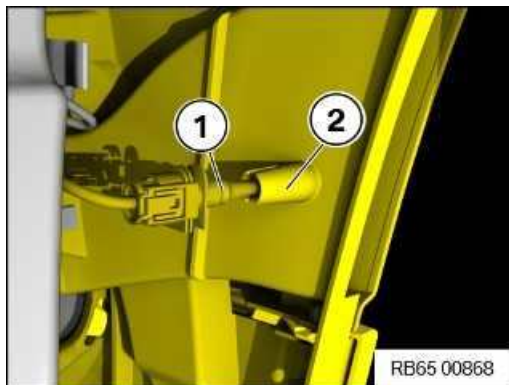
Description is for left component only. Procedure on the right side is identical.

► Partially remove the front wheel arch cover

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

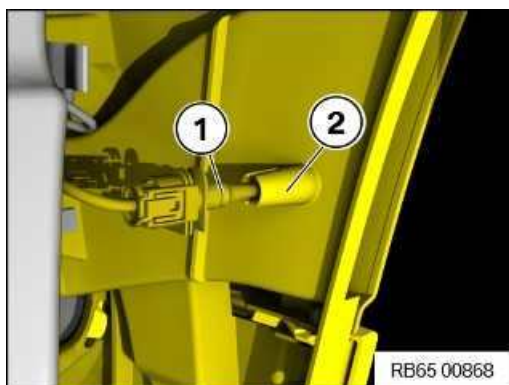


3 – Fully remove the temperature sensor



- Unclip temperature sensor (1) from front bumper panel (2).
- Disconnect the plug connection and remove the temperature sensor (1).

4 – Fully install the temperature sensor



- Connect and lock the connector on the temperature sensor (1).
- Clip temperature sensor (1) into the front bumper panel (2).

POSTPROCESSES

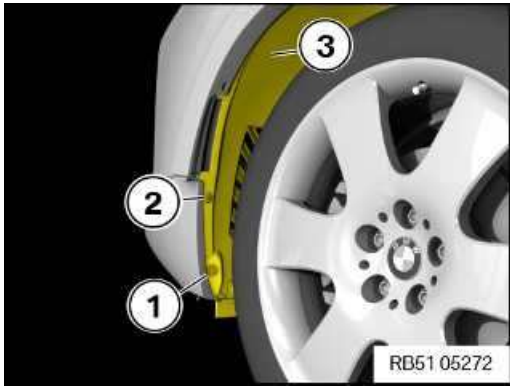
5 – Partially installing the front right wheel arch cover



NOTICE

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

► Partially install the front wheel arch cover



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

Front wheel arch cover to front bumper panel

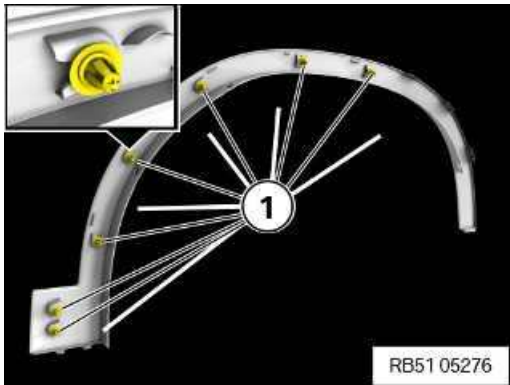
Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm
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6 – Partially installing the front right wheel arch trim



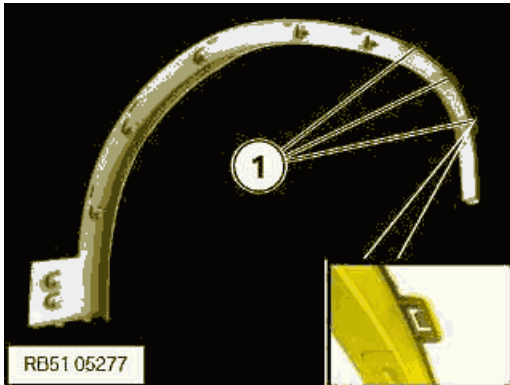
NOTICE

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

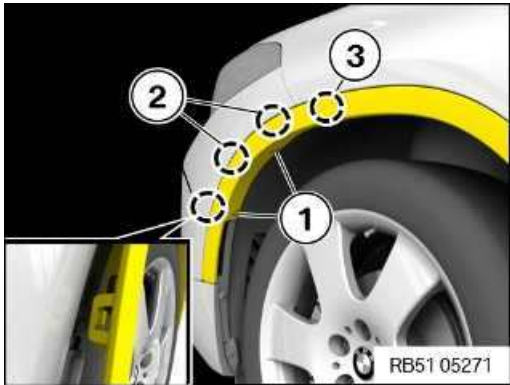


► Partly install the front wheel arch trim

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



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



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

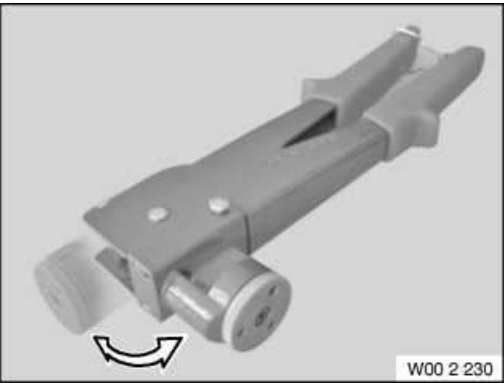
Additional Information

Overview of Tightening Torques

Hexagon screw for thermoplastic plastic		Tightening torque	2,6 Nm
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Overview of Special Tools

0 496 521 (00 2 230) Pliers



Common		Used in step		5	6
Usage	(Blind rivet pliers for plastic rivets) For shaft diameters of 3.5 mm, 3.9 mm and 4.5 mm				
Included in the tool or work					
Storage location	C25				
Replaced by					
In connection with					
SI-Number	01 17 08 (478)				

65 82 300 Removing and installing Touchbox (TBX) controller control unit



RISK OF DAMAGE



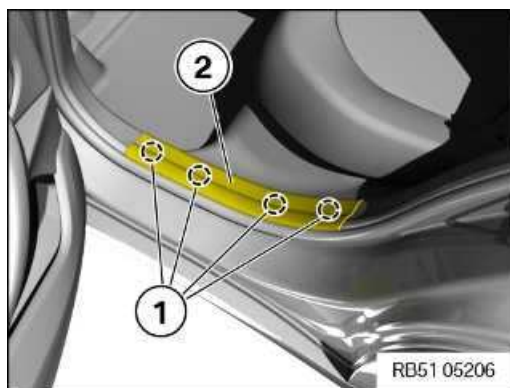
Electrostatic discharge.

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.

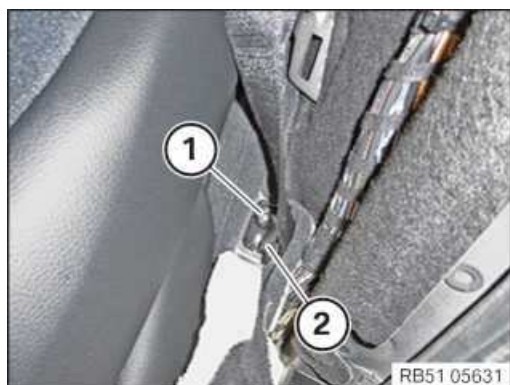
PRELIMINARY WORK

1 – Remove rear entrance cover strip



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

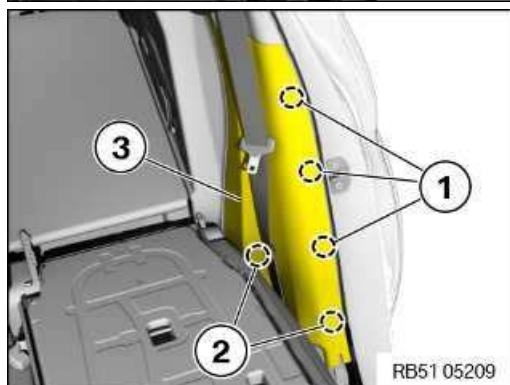
2 – Remove the bottom C-pillar trim panel



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



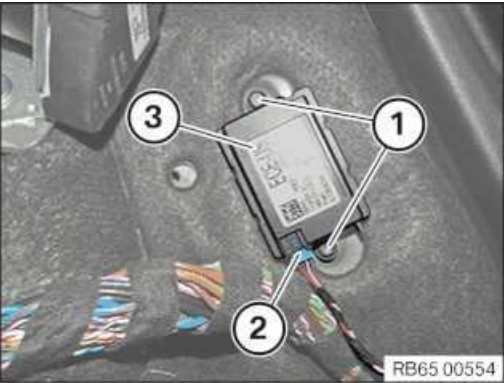
- Release the edge protection (1) in area of the bottom C-pillar trim panel.



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

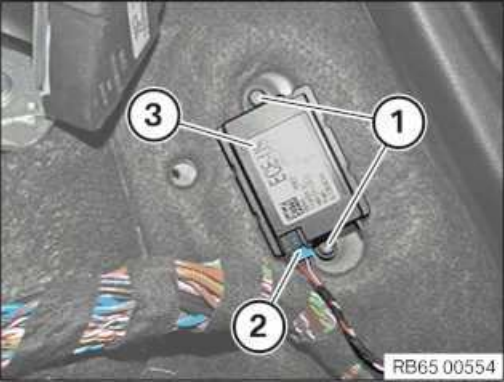
MAIN WORK

3 – Remove the control unit for the controller of the Touchbox (TBX)



- Loosen screws (1).
- Disconnect the connector (2) .
- Remove the control unit (3).

4 – Install the control unit for the controller of the Touchbox (TBX)



- Renew screws (1).
- Parts:** Bolts
- Position control unit (3).
- Tighten the screws (1).

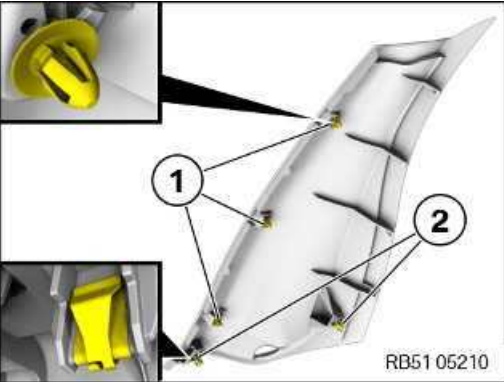
Touchbox (TBX) control unit

Screw		Tightening torque	3,3 Nm
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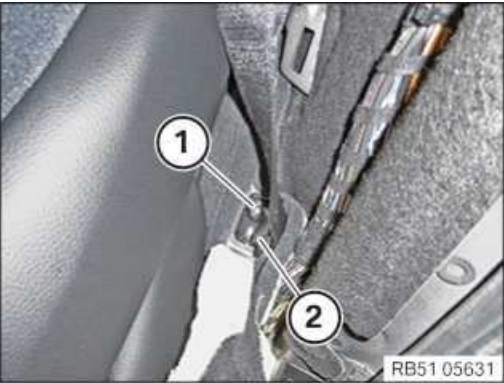
- Connect connector (2).

POSTPROCESSES

5 – 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.

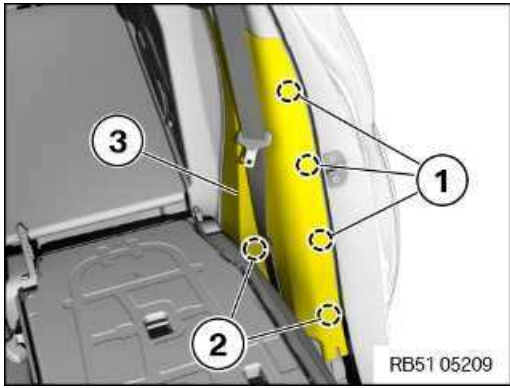


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm
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- Install the carpet correctly.

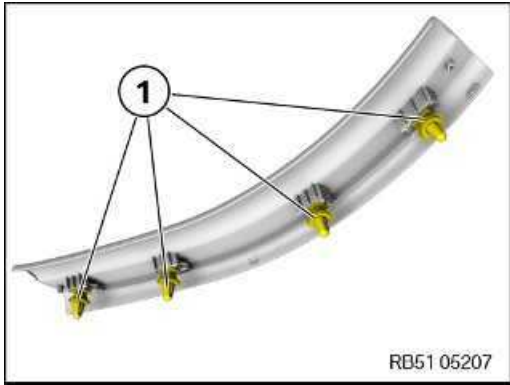


- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).

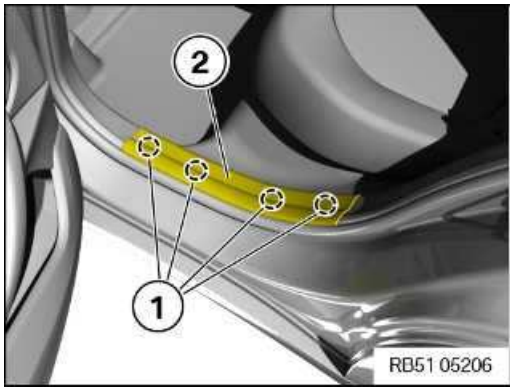


- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

6 – Installing the rear door sill cover strip



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



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

Additional Information

Overview of Tightening Torques

Touchbox (TBX) control unit

Used in step 4

Screw		Tightening torque	3,3 Nm
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End fitting to body

Used in step 5

Screw	Renew screw.	Tightening torque	42 Nm
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Links

Repair instructions	Used in step
61 35 ... Notes on ESD protection (Electro Static Discharge)	

65 82 801 Replace the Touchbox (TBX) controller control unit



RISK OF DAMAGE



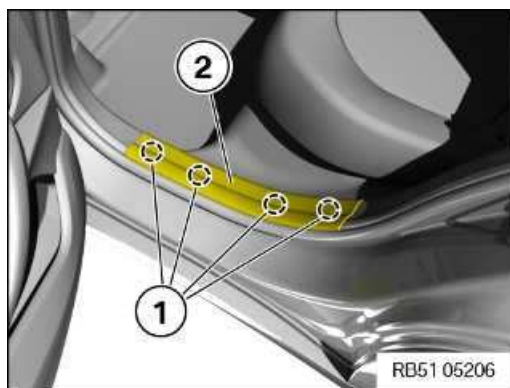
Electrostatic discharge.

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.

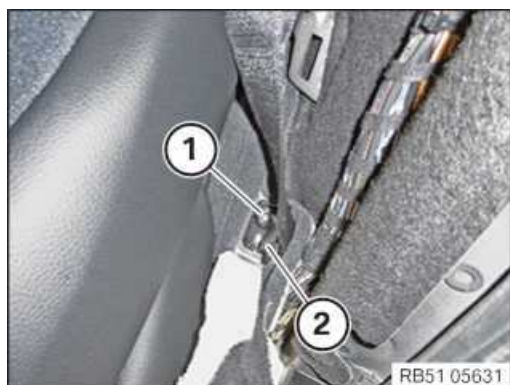
PRELIMINARY WORK

1 – Remove rear entrance cover strip



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

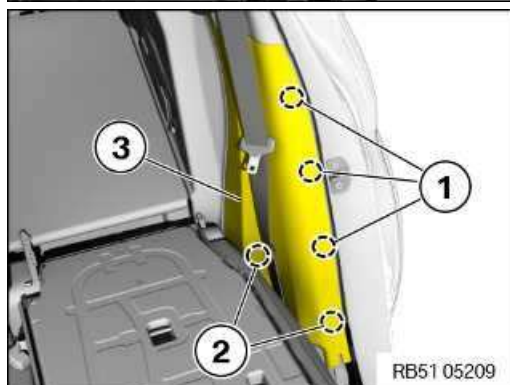
2 – Remove the bottom C-pillar trim panel



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



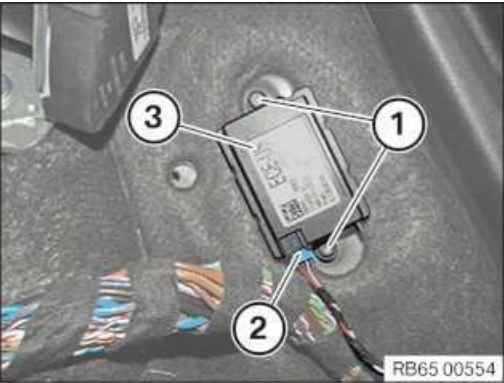
- Release the edge protection (1) in area of the bottom C-pillar trim panel.



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

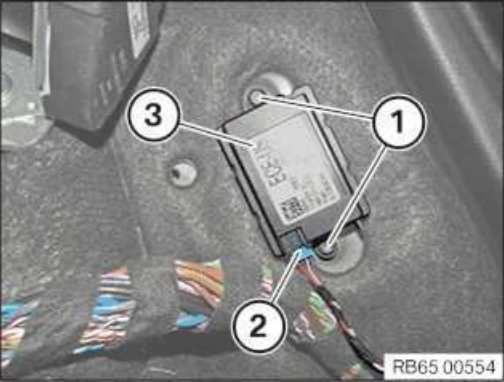
MAIN WORK

3 – Remove the control unit for the controller of the Touchbox (TBX)



- Loosen screws (1).
- Disconnect the connector (2) .
- Remove the control unit (3).

4 – Install the control unit for the controller of the Touchbox (TBX)



- Renew screws (1).
- Parts:** Bolts
- Position control unit (3).
- Tighten the screws (1).

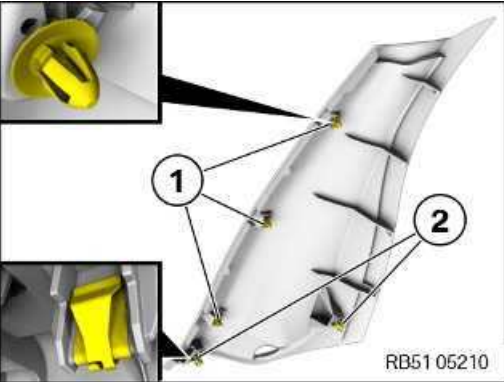
Touchbox (TBX) control unit

Screw		Tightening torque	3,3 Nm
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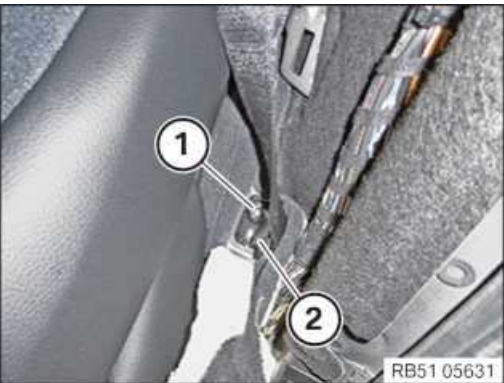
- Connect connector (2).

POSTPROCESSES

5 – Install the bottom C-pillar trim panel



- Check clips (1) for damage, and replace if necessary.
- Check the clamps (2) for damage, and replace if necessary.

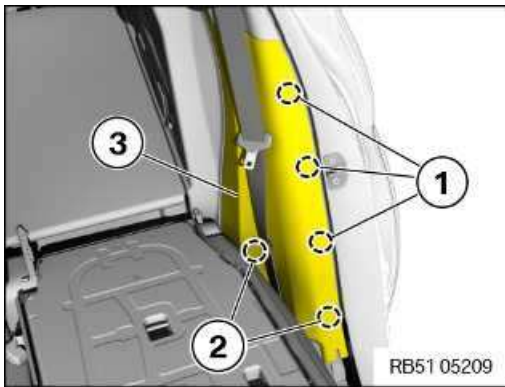


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

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

- Install the carpet correctly.

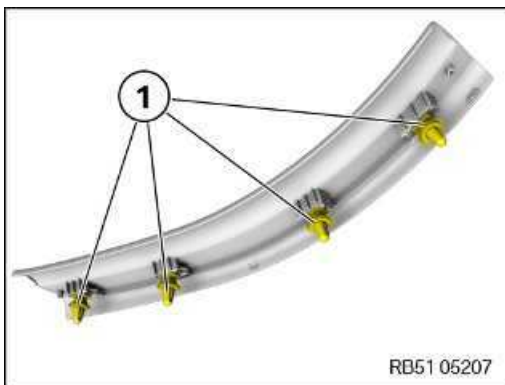


- Clip in the C-pillar trim panel on the bottom (3) with the clamps (2) and the clips (1).

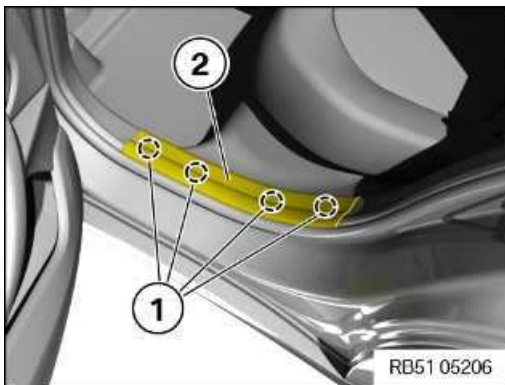


- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

6 – 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).

7 – Encode/program control unit(s)

Prerequisite

Replacement of the control unit.



TECHNICAL INFORMATION

Use the most recent software version to prevent faults during programming/encoding.

The battery voltage must not fall below 13.0 V during programming.

Use only chargers for a low volt-vehicle electrical system that are recommended by BMW.



TECHNICAL INFORMATION

No high-voltage switch off is required in electric vehicles or hybrid vehicles for programming/encoding.

The high-voltage system will be automatically switched off by the programming system.

Exception:

BMW I01: Note Product and Measures Management Aftersales measure 55176388.

- Connect the battery charger to the vehicle.
- Connect the programming system with the vehicle.
- Determine the action plan.
- Accept and fully process the measures plan.
- If applicable, connect the workshop system to the vehicle, depending on the reworking list.
- Carry out vehicle test.
- Delete the fault memory.
- The information about programming the workshop system and the corresponding notes in the user documentation must be observed.
- Wait until programming/encoding has been completed.
- Disconnect the programming system from the vehicle.
- Disconnect the battery charger from the vehicle.

Additional Information

Overview of Tightening Torques

Touchbox (TBX) control unit

Used in step 4

Screw		Tightening torque	3,3 Nm
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End fitting to body

Used in step 5

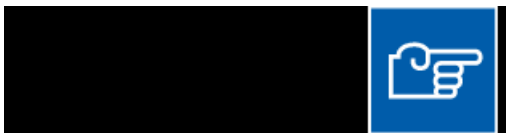
Screw	Renew screw.	Tightening torque	42 Nm
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Links

Repair instructions

Used in step

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

**The following applies in general:**

To avoid damage, observe the following instructions:

- Avoid compressive and tensile loads
- To ensure professional repairs, perform repair work only with BMW-approved or recommended special tools and spare parts
- Make sure cables are laid without kinks or abrasions
- Ensure non-contacting routing at sharp-edged body parts; use edge protection if necessary
- Secure additionally laid cables/leads with cable ties

The following additionally applies:Shielded lines

Interference radiation and interference resistance can lead to neutral zones at contact points in the shielding. Consequently, distinctions have to be drawn between the following types:

Coaxial lines

- Shielded coaxial cables RTK031 may only be repaired with a special [crimping tool](#).
- For aerial lines only the bushing contact may be repaired.
- RG174 Lines and the bushing contact may not be repaired.

CVBS lines

- CVBS cables may not be repaired.
- CVBS cables must be replaced in their entirety.

HSD lines

- HSD cables may not be repaired.
- HSD cables must be replaced in their entirety.

Optical fibre cable:*Note:*

Fibre-optic cables are coloured differently as follows:

- Green = **MOST** (**M**edia **O**riented **S**ystems **T**ransport) optical fibres
- Yellow = **ISIS** (**I**ntelligent **S**afety and **I**ntegration **S**ystem) optical fibres
- Orange=repair fibre-optic cables

Attention!

- Optical fibres are permitted to show only one junction point (bridge). Replace optical fibres if necessary
- Smallest permissible bending radius is 25 mm
- Avoid effects of heat $\geq 85^{\circ}$

[Treating cables and fibre-optic cables](#)FlexRay (twisted cables):

It is possible to repair the FlexRay. In the event of damage, the cables can be joined with conventional [butt connectors and heat-shrink tubing](#).

Note:

- FlexRay lines may only reveal one separation point (bride); renew complete line if necessary.
- If possible, maintain twisted cable after repair.
- After repairs, twist cables as close as possible to the connector/separation point.
- Twisting must be as symmetrical as possible.

Airbag lines:

[Repairing airbag cables](#)

Ribbon cables:

[Repairing ribbon cables](#)

Replacing wiring harnesses

Repair wiring harnesses mainly cover the full equipment of the vehicle. If certain optional equipment is not installed in the vehicle, note the following:

- If necessary, secure the remaining connectors.
- If necessary, seal the remaining connectors outside the vehicle interior, for example, with butyl tape in such a way that moisture ingress can be eliminated permanently.
- [If necessary, re-pin the connector of the repair wiring harness.](#)

Note:

Repair wiring harnesses can be equipped with an **additional socket housing** (30-pin, for example), **which was not provided on the previous vehicle-side wiring harness**. This socket housing also cannot be found in the wiring diagram.

Procedure

The separation point between the vehicle-side wiring harness and the repair wiring harness is located **in the vehicle interior** (in the footwell, for example):

- Cut the additional socket housing and connect the lines to the vehicle-side wiring harness using a butt connector.
- Alternatively, a suitable pin housing can be fitted on the vehicle-side wiring harness and connected to the additional socket housing.

However, this is permitted only if the following conditions are met:

- Carpets must not protrude visibly or become deformed due to the installation of the additional plug connection.
- It must be possible to install the adjacent components (for example, trims, trim panels, etc.) correctly after installing the additional plug connection.
- All the attachment points of the adjacent components (for example, trims, trim panels, etc.) must engage correctly.
- There must be no rattling noise due to the installation of the additional plug connection.
- The additional plug connection must not damage the adjacent components/wiring harnesses, etc..

The separation point between the vehicle-side wiring harness and the repair wiring harness is located **outside the vehicle interior** (in the wheel arch, for example):

- Cut the additional socket housing and connect the lines to the vehicle-side wiring harness using a butt connector.
- **Using the additional socket housing is not permitted with a separation point outside the vehicle interior.**