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

Special tools required:

- 12 7 060

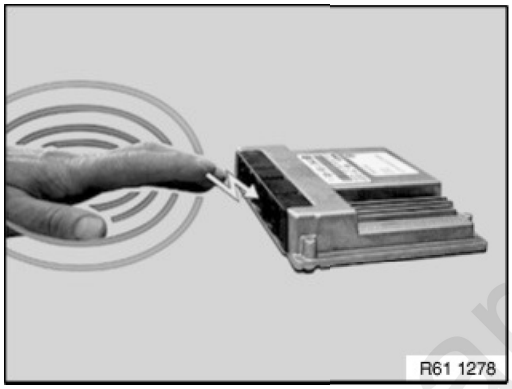
Note:
Electrical components which are particularly sensitive to electrostatic discharge (electronic control units, sensors, etc.) are marked with the ESD warning symbol.

E-Electro

S-Static

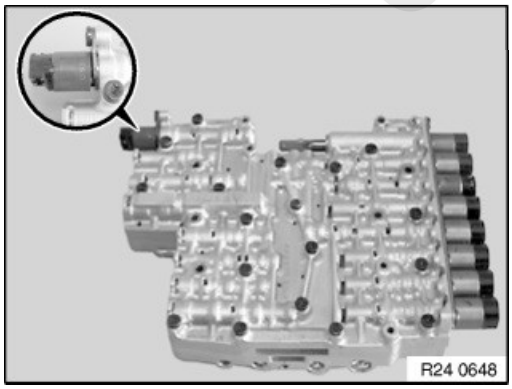
D-Discharge

Attention!
Refer to Service Information.



Statically charged persons can discharge themselves when they touch electrical components.*Note:*
Humans can only detect a discharge starting from a level of approx. 3000 V.

The danger threshold for electrical components already starts from a level of approx. 100 V.



Example:

Mechatronics control unit.

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Attention!
Do not touch pins and multi-pin connectors directly!

Only touch the housings of electrical components.



Attention!

To avoid damaging or destroying electrical components as a result of electrostatic discharge, it is absolutely essential to observe the following instructions:

- When replacing electrical components, leave the replacement components in their original packaging until immediately before they are to be installed
- If necessary, always return a removed component in its original packaging (always pack the component away immediately)
- Read and comply with user information on using the associated special tool 12 7 060



<u>Personal protective equipment:</u>

Electrically conducting clothing (high wool content, antistatic shoes required).

These can primarily be identified by the logo on the side.

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61 35 ... Overview of additional work for the removal and installation or replacement of electronic components in the body area/windscreen

Component	**Removal and installation** Calibration/Initialisation required **(diagnosis system must be connected)**	**Removal and installation** Use of the Special tool necessary	**Replacement** Programming/encoding Calibration/Initialisation required **(diagnosis system must be connected)**	**Replacement** Use of the Special tool necessary	Remarks
Front section: (including bumper panel)					
ACC sensor	Yes	Yes	Yes	Yes	
Night vision camera	No	No	Yes	Yes*	*conventional workshop headlight adjusting device
PDC ultrasonic sensor	No	No	No	No	
PMA ultrasonic sensor	No	No	No	No	
Sensor, lane change warning	no*	No	Yes	No	*Required after a body repair in the surrounding area of the sensor. **Comply with the regulations for repainting!**
Sensor for active pedestrian protection	No	No	No	No	Must be replaced after the active pedestrian protection has been activated! **Impact absorber** must also be replaced!
Actuator for active pedestrian protection	No	No	No	No	Must be replaced after the active pedestrian protection has been activated!
Front camera	No	No	Yes	No	
Side section:					

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Top view camera (in the exterior mirror)	No	No	Yes	No	
Rear area: (including bumper panel):					
reversing camera (with Surround View)	No	No	Yes	No	
reversing camera (without Surround View)	No	No	Yes	No	
PDC ultrasonic sensor	No	No	No	No	
PMA ultrasonic sensor	No	No	No	No	
Sensor, lane change warning	no*	No	Yes	No	*Required after a body repair in the surrounding area of the sensor. **Comply with the regulations for repainting!**
Windscreen:					
Camera-based driver support systems camera	no*	No	Yes	No	*Necessary after **replacement of the windscreen**
Rain sensor (separate document)					

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61 35 ... Overview, rain sensor (additional work when replacing the windscreen / sensor replacement)

BMW G series:

Sensor type/ Sensor shape	With windscreen replacement replacement sensor required	When replacing the sensor Programming/encoding necessary	When replacing the sensor Initialisation required	Connecting the diagnosis system required
all types approximately ø 35 mm	No	No	No	No

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61 35 278 Remove and install Body Domain Controller (BDC) control unit

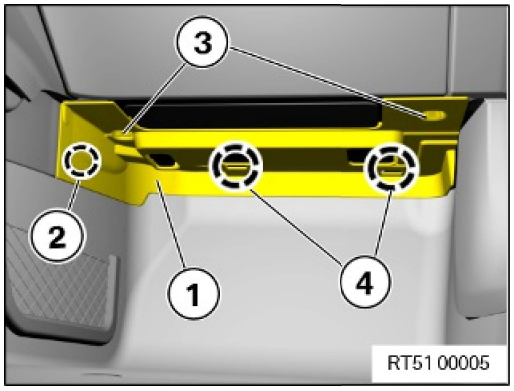
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

2 – Remove the right footwell trim



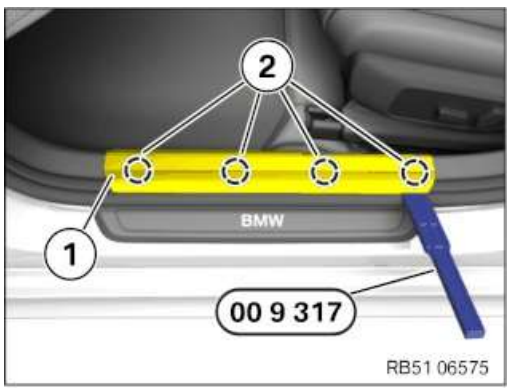
- Turn the locks (3) by 90°.
- Feed the footwell trim (1) out of the guide (2).
- Detach the footwell trim (1) inward out of the guides (4).
- Unlock associated plug connection and disconnect.

3 – Remove right door sill cover strip

NOTICE

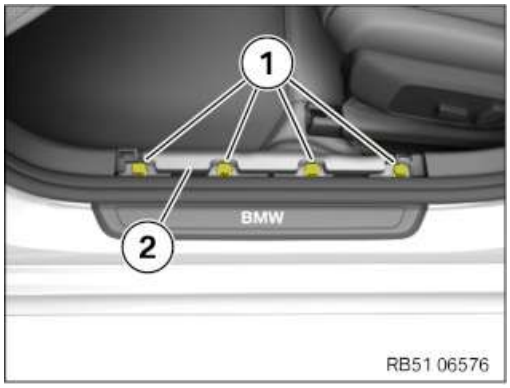
Description is for left component only. Procedure on the right side is identical.

▸ **Remove door sill cover strip**



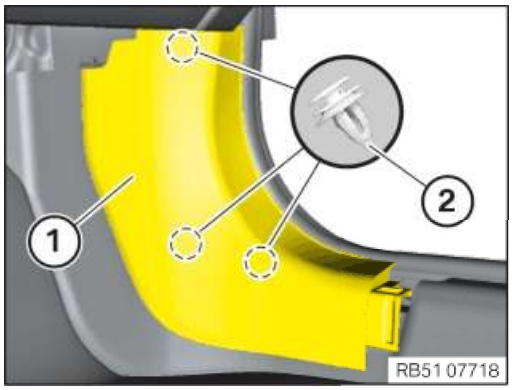
- Detach the door sill cover strip(1) using the special tool 0 490 534 (00 9 317) from the clips (2) in the floor panel.

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- If necessary, remove the clips (1) from the floor panel (2) and attach to the door sill cover strip.

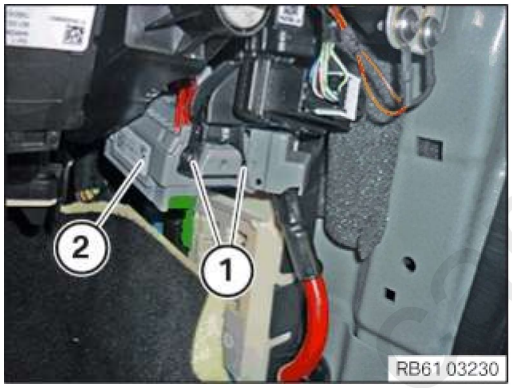
4 – Removing the side trim panel in the footwell at the right-hand A-pillar



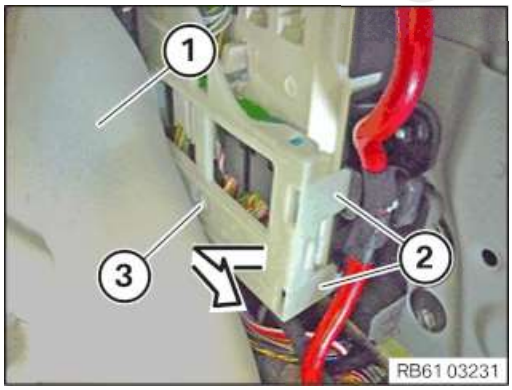
- Loosen the side trim panel (1) at the clips (2) and remove it toward the inside.

MAIN WORK

5 – Remove the BDC control unit

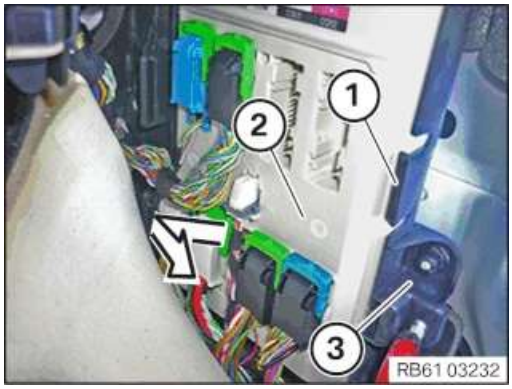


- Unlock the latch mechanisms (1) and remove the power distribution box (2) downwards.



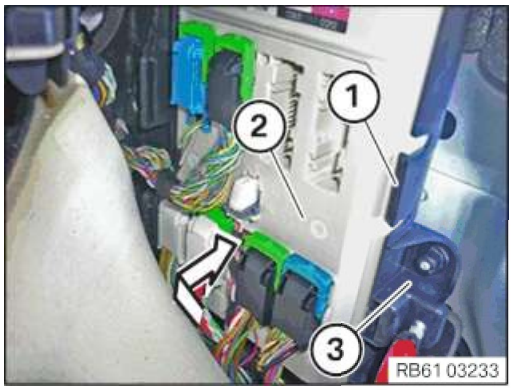
- Fold the carpet (1) to the side.
- Loosen the latch mechanisms (2).
- Guide cover (3) out in direction of arrow.

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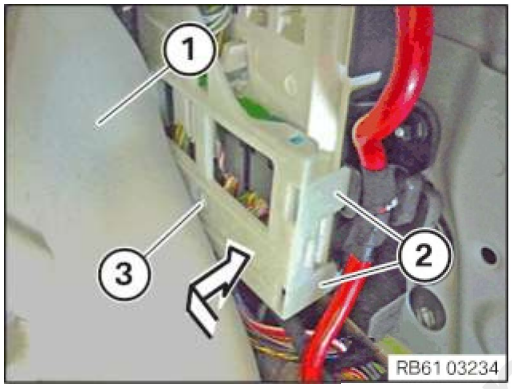


- Unlock and disconnect all connectors.
- Loosen latch mechanism (1).
- Guide out the BDC control unit (2) from the bracket(3) in the direction of the arrow.

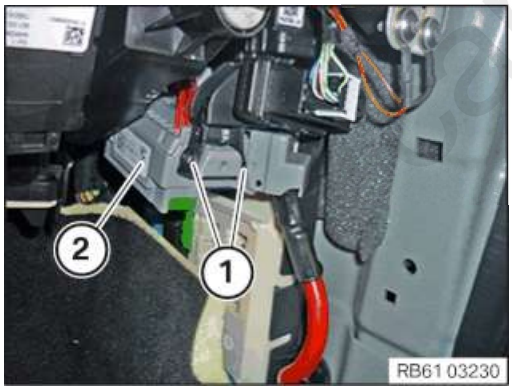
6 – Install the BDC control unit



- Guide in the BDC control unit (2) in the holder (3) in the direction of the arrow.
- Clip BDC control unit (2) into the latch mechanism (1).
- Connect all connectors and lock.



- Guide in the cover (3) in the direction of the arrow and clip into the latch mechanisms (2).
- Position the carpet (1).

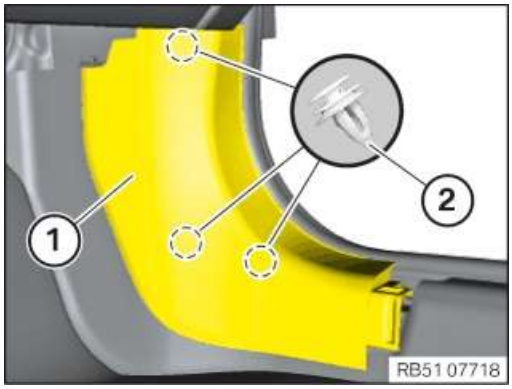


- Guide in the power distribution bow (2) upwards and correctly clip in the latching mechanisms (1).

POSTPROCESSES

7 – Installing side trim panel in footwell on right A-pillar

.diagn.com



- Check the clips (2) for damage.

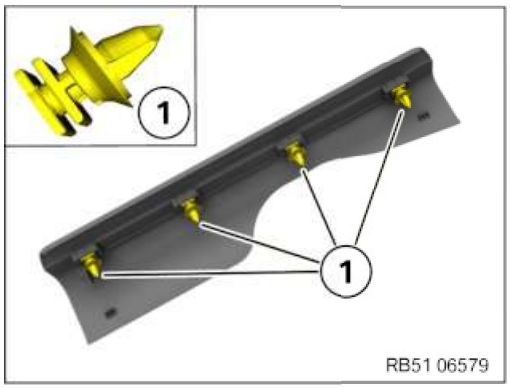
  Renew damaged or missing clips (2).
- Correctly position the side trim panel (1) and clip in to the clips (2).
- Make sure that the side trim panel (1) is correctly fitted against edge protection.

8 – Install right door sill cover strip

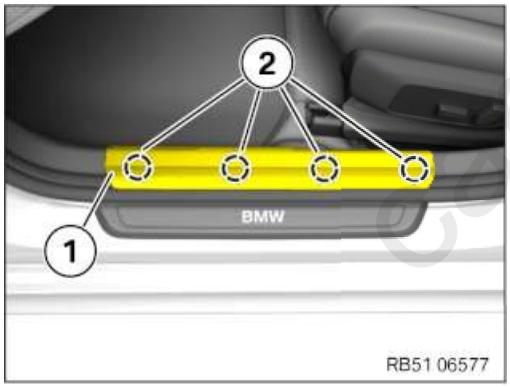
NOTICE

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

▸ **Install the door sill cover strip**

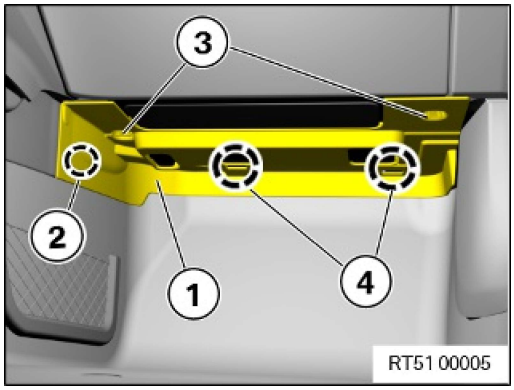


- Check the clips (1) for damage and renew if necessary.



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

9 – Install the right footwell trim panel



- Connect associated connector.
- Attach the footwell trim (1) to the guides (4) and fold up.
- Guide the footwell trim (1) into the guide (2) of the centre console.
- Position locks (3) correctly and turn by 90°.

10 – Disconnecting all battery earth leads

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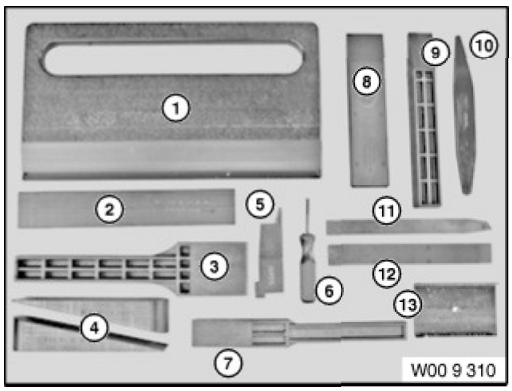


- See additional information.

Additional Information

Overview of Special Tools

0 490 534 (00 9 317) Wedge



Common	Used in step 3
Usage	(Trim wedge) Replaced by special tool 00 9 325 from 11/2008 (quality improvement due to new material) Replaced by 00 9 325 (0 496 569)
Included in the tool or work	0 490 527
Storage location	
Replaced by	
In connection with	
SI-Number	

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	110
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	110
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
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61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110

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61 35 013 Remove and install LIN power distribution box

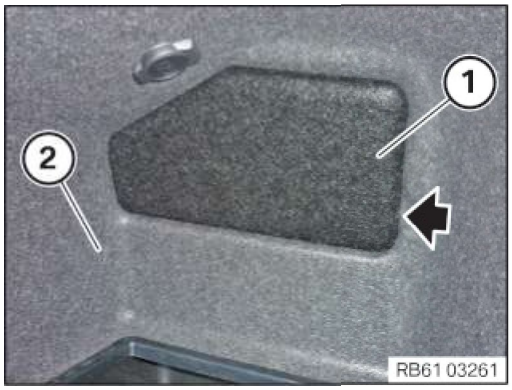
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

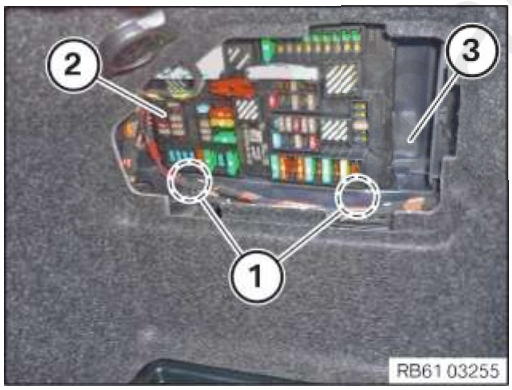
2 – Removing the flap in the luggage compartment wheel arch trim panel on the right



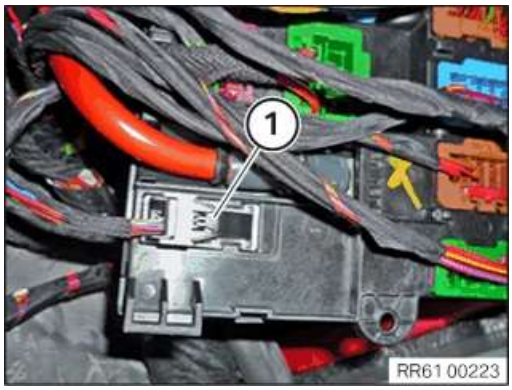
- Remove the flap (1) from the luggage compartment wheel arch trim panel on the right (2)

MAIN WORK

3 – Remove the LIN power distribution box

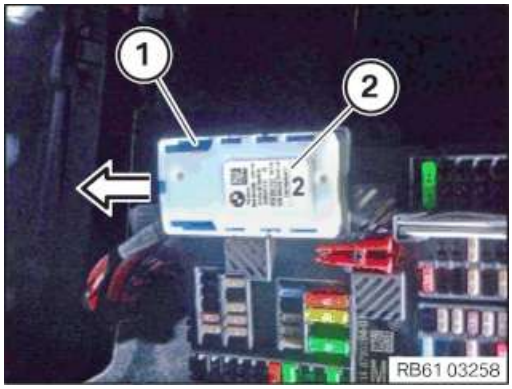


- Unlock latch mechanisms (1) and feed out power distribution box (2) from holder (3).



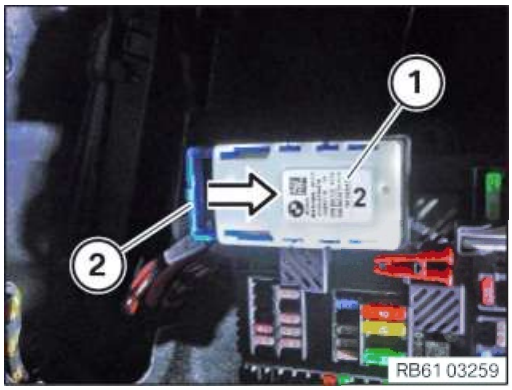
- Unlock and disconnect connector (1).

rdiagn.com

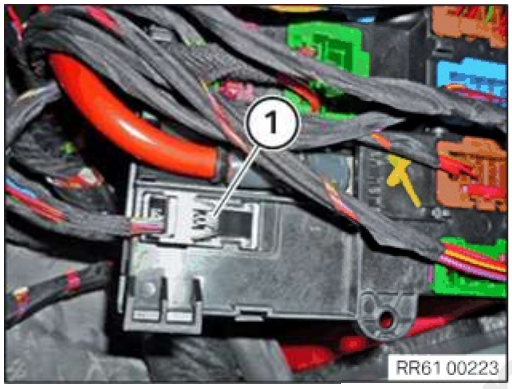


- Loosen the lock (1) in the direction of the arrow.
- Remove the LIN power distribution box (2).

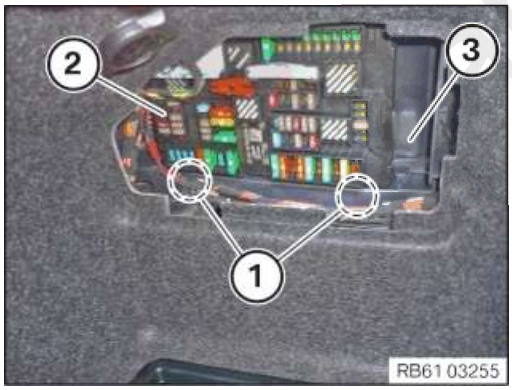
4 – Install the LIN power distribution box



- Correctly position the LIN power distribution box (1) and move the lock (2) in the direction of the arrow.



- Connect connectors (1) and lock.

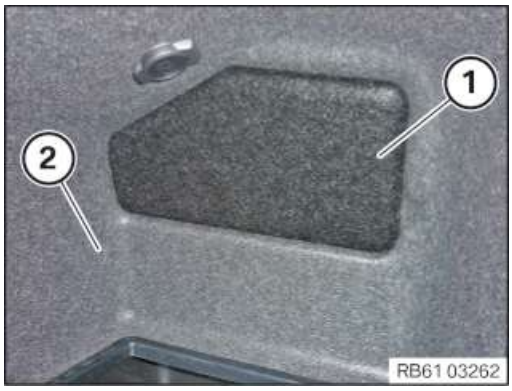


- Position power distribution box (2) correctly and engage it in bracket (3).

  The latch mechanisms (1) must engage correctly.

rdiag.com

5 – Installing the flap in the luggage compartment wheel arch trim panel on the right



- Position the flap (1) correctly in the right luggage compartment wheel arch trim panel (2) and install.

6 – Disconnecting all battery earth leads



- See additional information.

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Additional Information

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	16
61 20 900 Disconnecting and connecting battery earth lead	16
61 20 900 Disconnecting and connecting battery earth lead	16
61 20 900 Disconnecting and connecting battery earth lead	16
61 20 900 Disconnecting and connecting battery earth lead	16
61 20 900 Disconnecting and connecting battery earth lead	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	16
61 20 900 Disconnecting and connecting battery earth lead	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	16
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	16

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

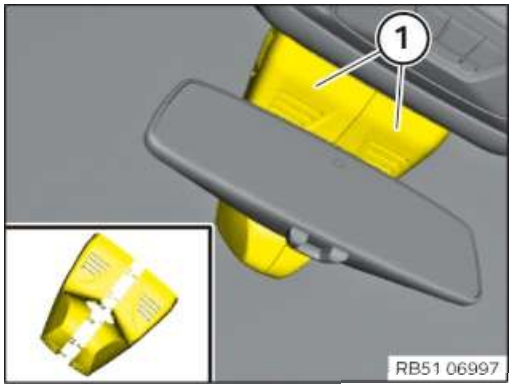
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61 35 177 Remove and install rain-light sensor

PRELIMINARY WORK

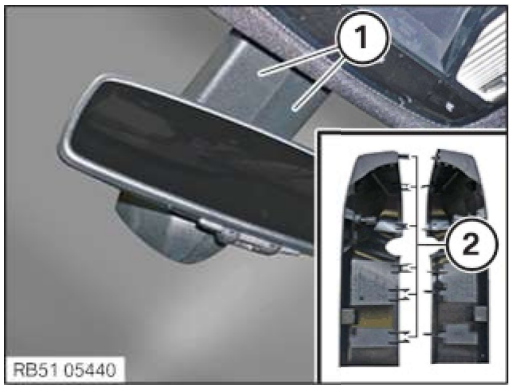
1 – Removing the covers for the interior mirror

- **Version A:**



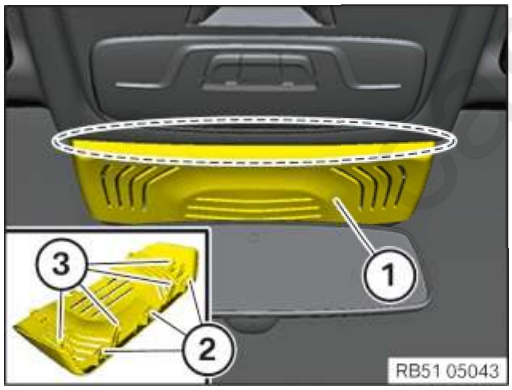
- Release the cover (1) at the centre from the latch mechanisms (2) with a suitable plastic wedge and remove.

- **Version B:**

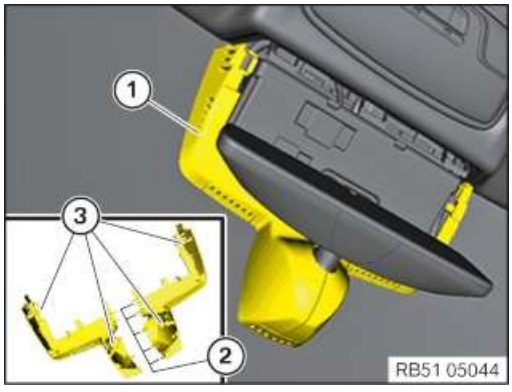


- Release the cover (1) from the latch mechanisms (2) with a suitable plastic wedge and remove sideways.

- **Version C:**



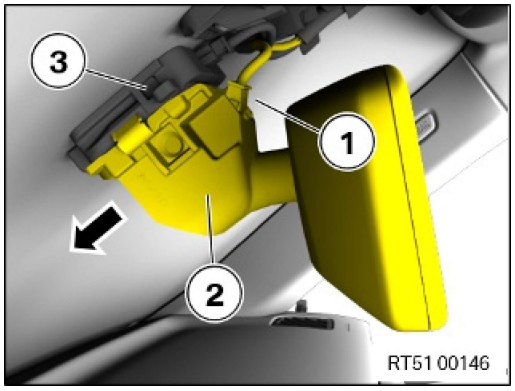
- Detach cover (1) from the clamps (2) in the marked area using a suitable plastic wedge and pull down a certain distance.
- Release cover (1) at the retaining lugs (3) and remove from the guides to the rear.



- Release cover (1) from the latch mechanisms (2) and (3) and remove sideways.
- Remove cover (1) from mirror base (2).

2 – Remove inside mirror

carmanualsdiagn.com



TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.

- Unlock plug connection (1) and disconnect.

RISK OF DAMAGE

Damage to the component.

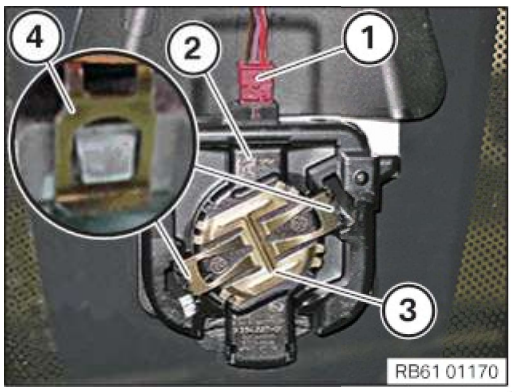
Excessive force may damage the component.

- Handle component carefully.

- Jerk and pull off the interior mirror (2) in the direction of the arrow from the mirror base (3).

MAIN WORK

3 – Remove driving light sensor



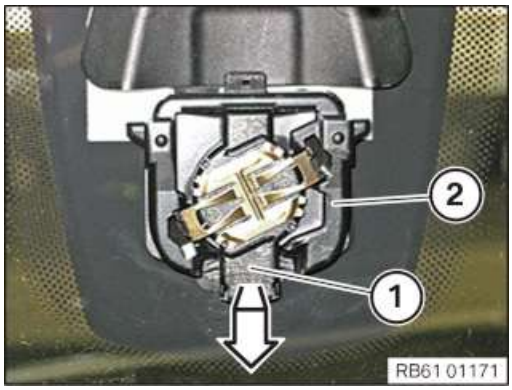
RISK OF DAMAGE

Damage to silicone surface.

A damaged silicone surface can lead to malfunctioning of the rain-light-solar-condensation sensor.

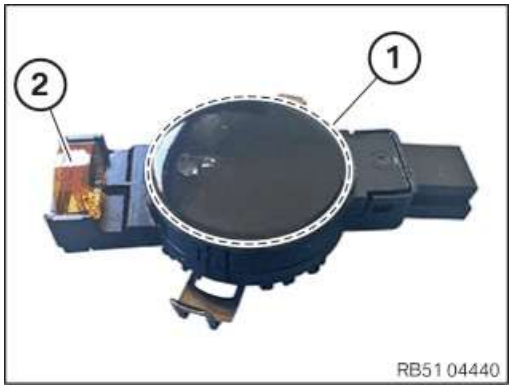
- Do not touch or damage the silicone-coated surface on the rain-light-solar-condensation sensor.
- After releasing lock, wait approx. 30 min. at 20°C for silicone surface to relax.

- Disconnect the connector (1) .
- Push in retaining spring (3) on both sides and unlock the lock (4) by means of a screwdriver.
- Release driving light sensor.



- Slowly pull the driving light sensor (1) in direction of arrow from the holder (2).

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RISK OF DAMAGE

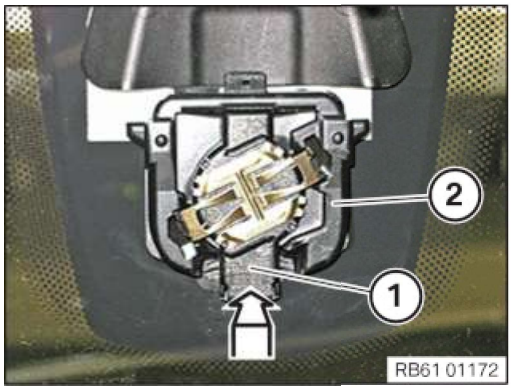
Damage to silicone surface.

A damaged silicone surface can lead to malfunctioning of the rain-light-solar-condensation sensor.

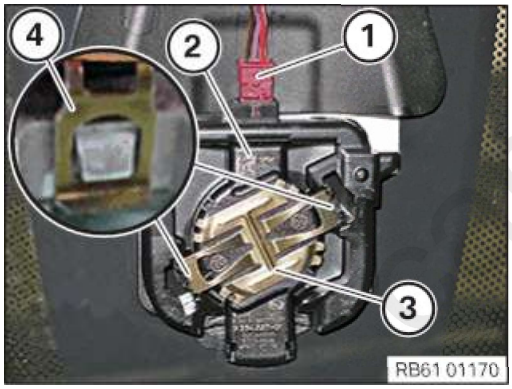
- Do not touch or damage the silicone-coated surface on the rain-light-solar-condensation sensor.
- After releasing lock, wait approx. 30 min. at 20°C for silicone surface to relax.

- Check the silicone-coated surface (1) and the printed circuit board (2) on the driving light sensor for damage.
- When replacing windscreen: Immediately install the driving light sensor on the new windscreen.

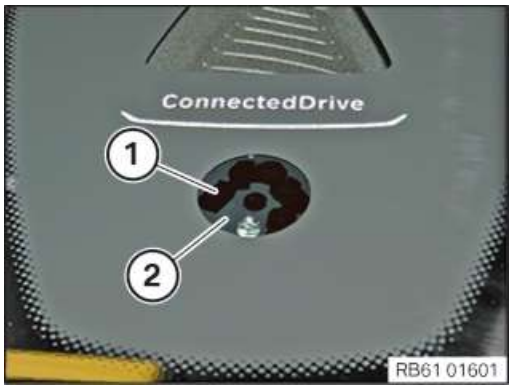
4 – Installing driving light sensor



- Thread in the driving light sensor (1) in direction of arrow into the holder (2).



- Press on the driving light sensor (2) on the retaining spring (3) in the centre.
- Successively press down the retaining springs (4) on each side to lock it.
- Connect connector (1).



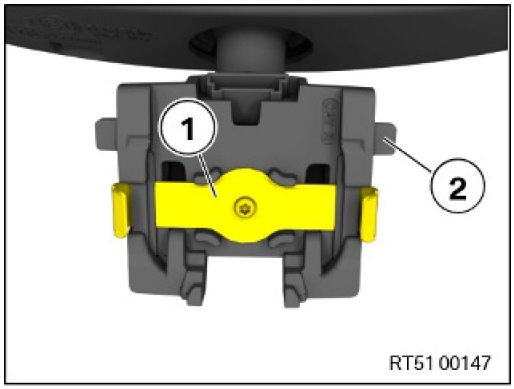
- Check if air pockets are visible.

  Visible shades (1) and (2) are not air pockets but rather the optical element of the sensor. The shades do not represent any functional limitation.

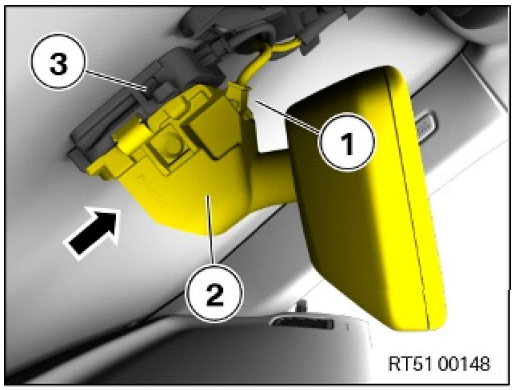
POSTPROCESSES

5 – Install interior mirror

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- Check the clamp (1) on both sides of the mirror base (2) for damage and renew as needed.



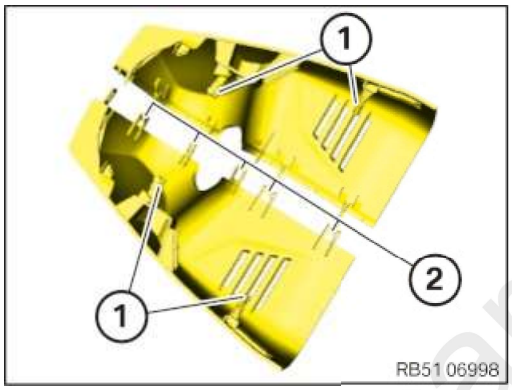
TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.

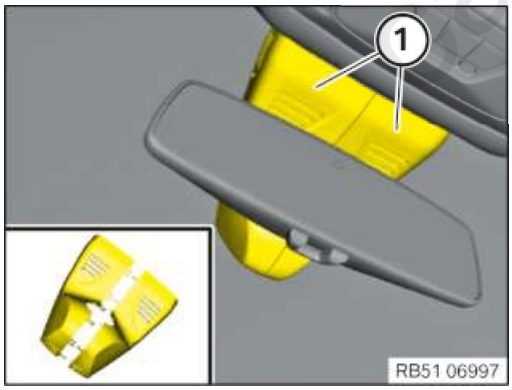
- Position the interior mirror (2) at the mirror base and slide it on in direction of the arrow.
- Check the correct installation position of the interior mirror (2) at the mirror base (3).
- Connect connectors (1) and lock.

6 – Installing the covers for the interior mirror

- **Version A:**

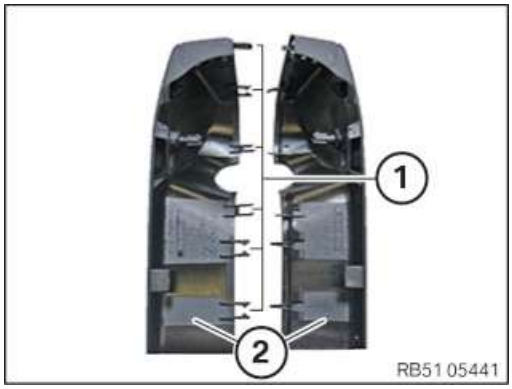


- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.



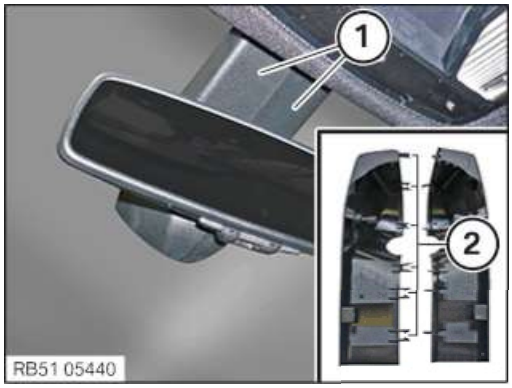
- Feed cover (1) in and lock.
- **Version B:**

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

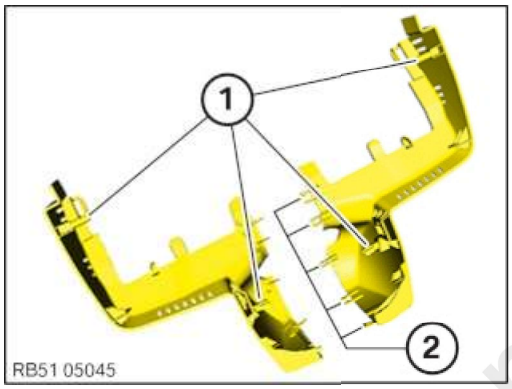
  The covers (2) must not be damaged or missing.



- Position the covers (1) correctly on the mirror and engage with the latch mechanisms (2).

- **Version C:**

Check



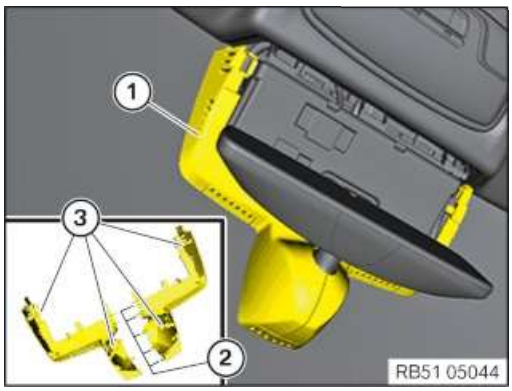
- Check the latch mechanisms (1) and (2) of the covers for damage.

Result

» The latch mechanism is damaged.

Measure

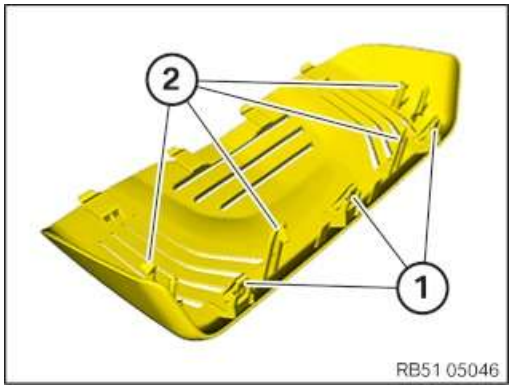
- Renew the cover.



- Guide in cover (1) on left and right and engage using latch mechanisms (2) and (3).

Check

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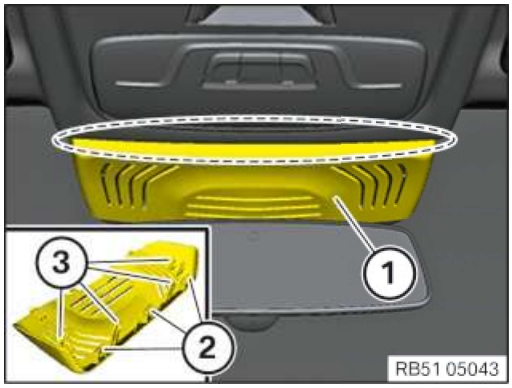
- Check clamps (1) for damage; renew if necessary.
- Check latch mechanisms (2) for damage.

Result

» The latch mechanism is damaged.

Measure

- Renew the cover.



- Guide cover (1) into front guides and engage using retaining lugs (3) and clamps (2).

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61 35 245 Remove and install sensor line for bottom CA

PRELIMINARY WORK

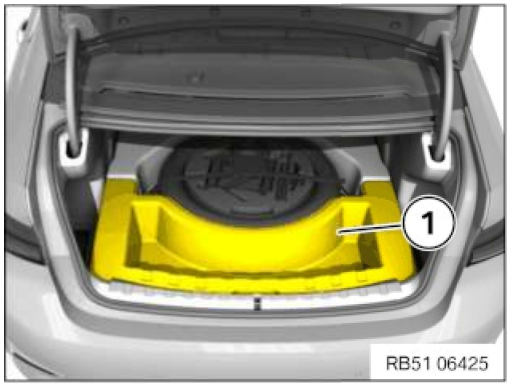
1 – Removing the luggage compartment floor trim panel



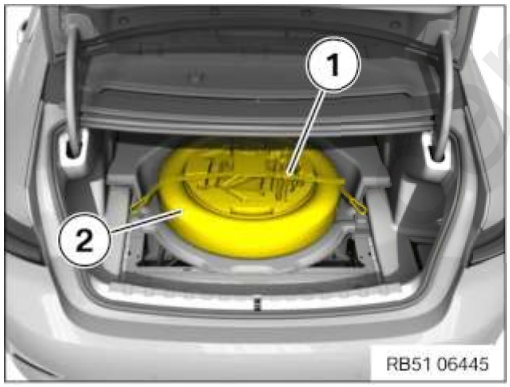
- Remove luggage compartment floor trim panel (1).

2 – If installed: Removing the compact spare wheel

▸ **Removing rear luggage compartment well**

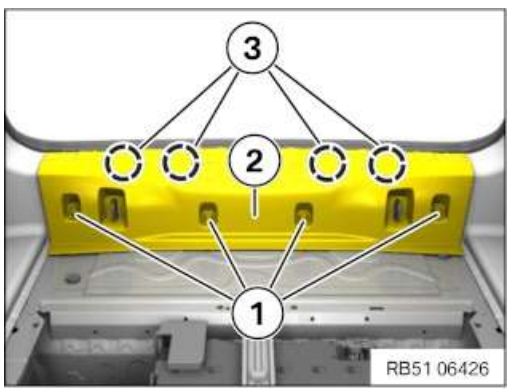


- Remove rear luggage compartment well (1).



- Open buckle on seat belt strap (1) and set it aside.
- Remove emergency wheel (2) with the insert.

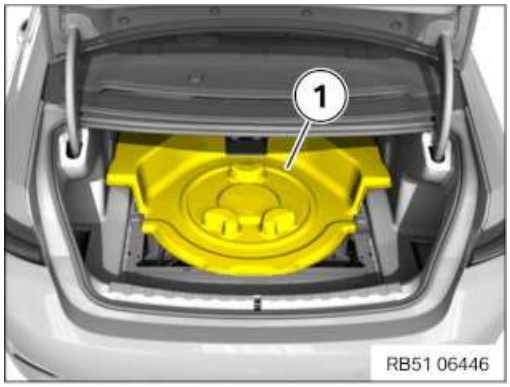
3 – Removing the loading edge trim



- Loosen the expanding rivet (1).
- Unclip loading edge trim(2) upwards from latch mechanisms (3).
- Guide out and remove loading edge trim (2) under the sealing lip of the tailgate seal.

4 – Removing front luggage compartment well

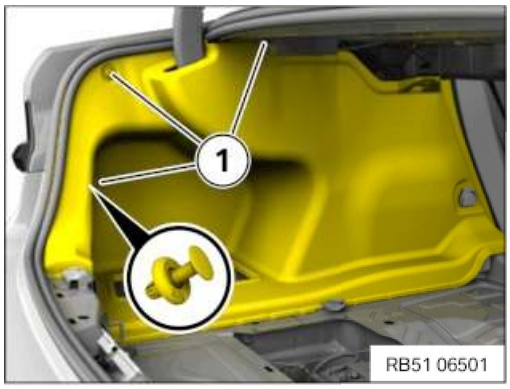
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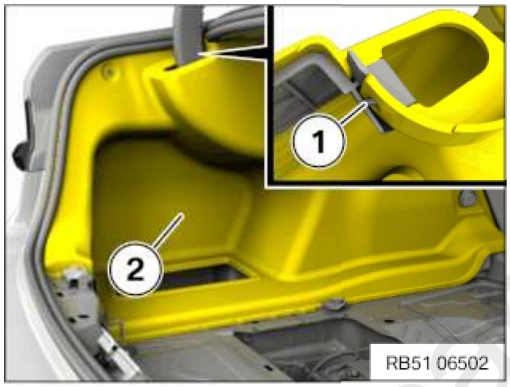
- Guide out and remove front luggage compartment well (1) on the seat belt strap.

5 – Removing both luggage compartment wheel arch trim panels partially

▶ Partially remove luggage compartment wheel arch trim on left



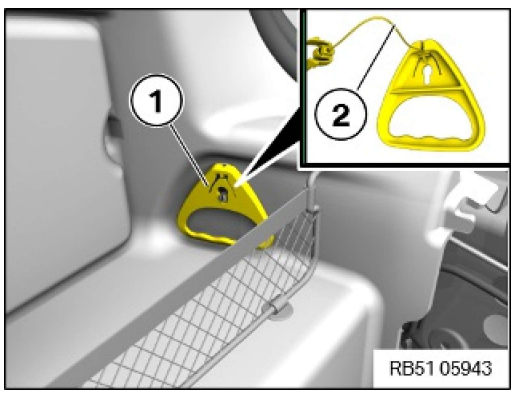
- Loosen the expanding rivet (1).



- Press the tab for luggage compartment wheel arch trim panel (2) on the outer side of the hinge to the front using the stop on trim (1).
- Guide out luggage compartment wheel arch trim panel (2) under the sealing lip of the tailgate seal and release it in the rear area.

▶ Partially remove luggage compartment wheel arch panel on right

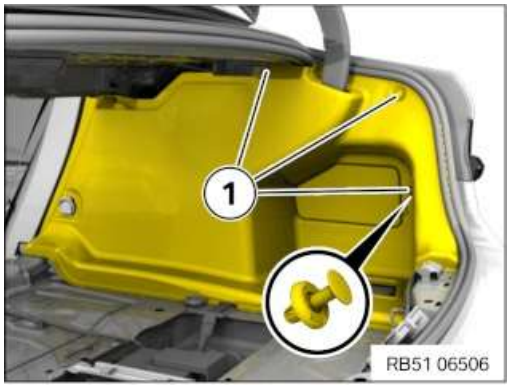
▷ If installed: Remove the emergency release handle for the tailgate (additional work in the US version)



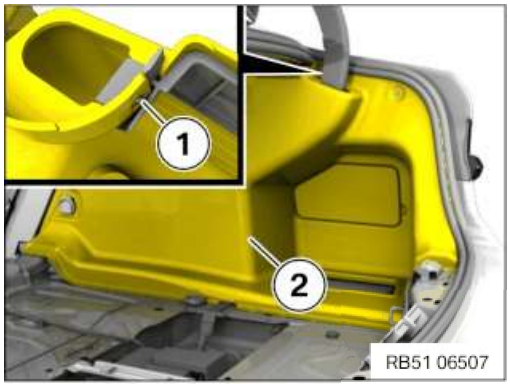
- Release the emergency release handle for tailgate (1) from the holder.
- Detach Bowden cable (2) and remove the emergency release handle for tailgate (1).

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- Loosen the expanding rivet (1).



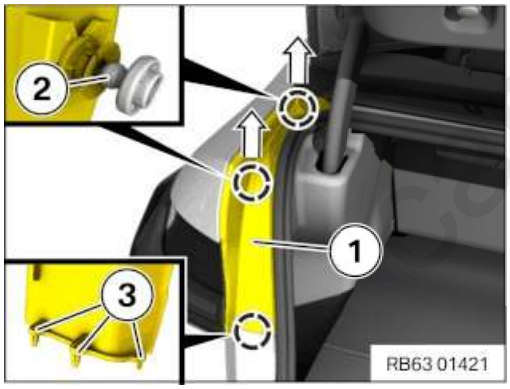
- Press the tab for luggage compartment wheel arch trim panel (2) on the outer side of the hinge to the front using the stop on trim (1).
- Guide out luggage compartment wheel arch trim panel (2) under the sealing lip of the tailgate seal and release it in the rear area.

6 – Removing both trims of water channel

NOTICE

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

▸ **Remove the trim in the water channel**



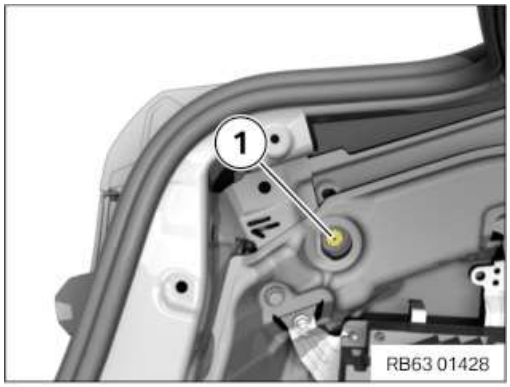
- Unclip the trim in the water channel (1) from the ball pins (2) towards the top.
- Release the trim in the water channel (1) from the guides (3) and remove it.

7 – Remove both rear lights from the side panel

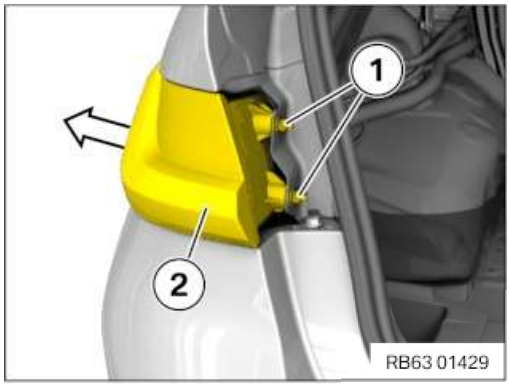
NOTICE

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

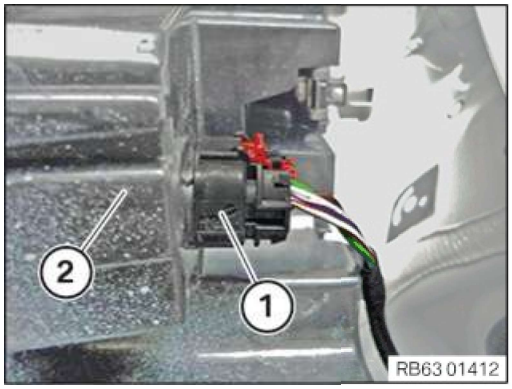
▸ **Remove the rear light on the side panel**



- Loosen nut (1).



- Release the nuts (1) and feed out the rear light on the side panel (2) in the direction of arrow.



TECHNICAL INFORMATION

Observe note on unlocking and disconnecting plug connections.
For additional information see: 6113 ... Unlocking and disconnecting different plug connections

- Unlock and disconnect plug connection (1) as described in position #28 in additional information.
- Remove the rear light on the side panel (2).

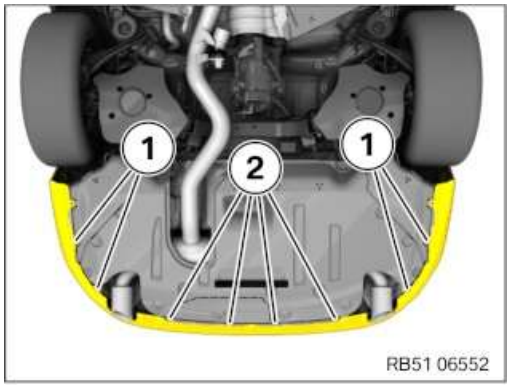
8 – Remove rear bumper panel



NOTICE

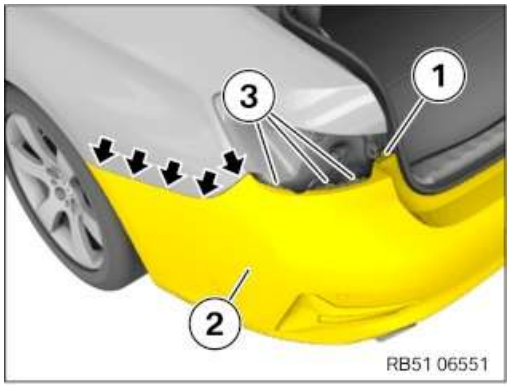
Perform the operations on the left and right side.

- Loosen screws (1).



- Loosen screws (1).
- Release the bumper panel on latch mechanisms (2) with a suitable tool.

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NOTICE

Perform the operations on the left and right side.

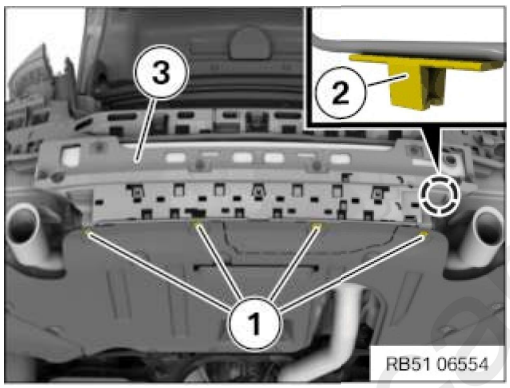
- Loosen screw (1).
- Release bumper panel (2) in the area of the rear light housing from latch mechanisms (3) with a suitable tool.
- Release side bumper panel (2) from the remaining latch mechanisms (arrows).



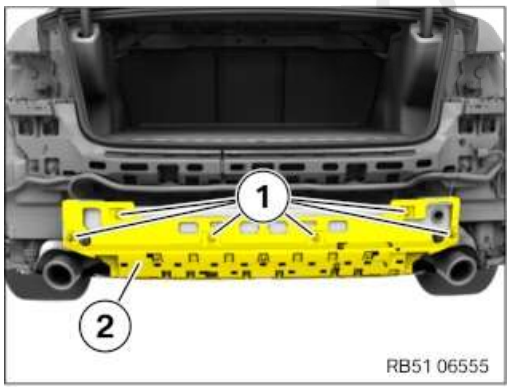
- Remove bumper panel (2) straight to the rear with the help of an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

MAIN WORK

9 – Remove the sensor line for the contactless tailgate opening (bottom)

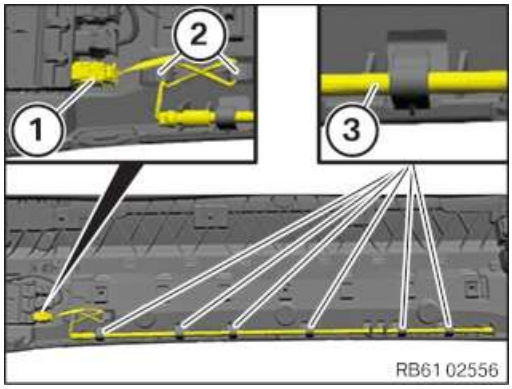


- Loosen screws (1).
- Unclip the cable clip (2) on the inside of the brace for the rear bumper (3).



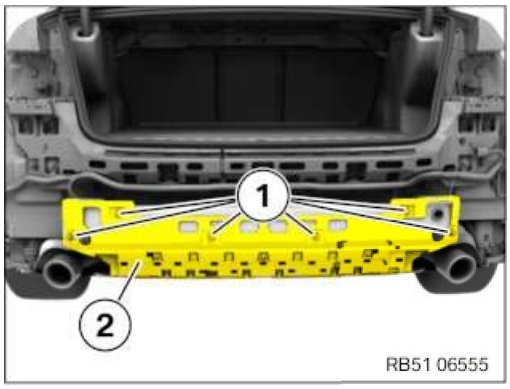
- Open the expanding rivets (1) and remove the brace for the rear bumper (2).

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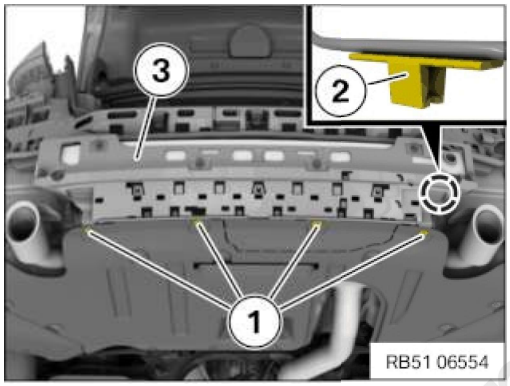


- Unlock and disconnect connector (1).
- Release cable from holder (2).
- Unclip the bottom sensor line (3)towards the top.

10 – Install the sensor line for the contactless tailgate opening (bottom)



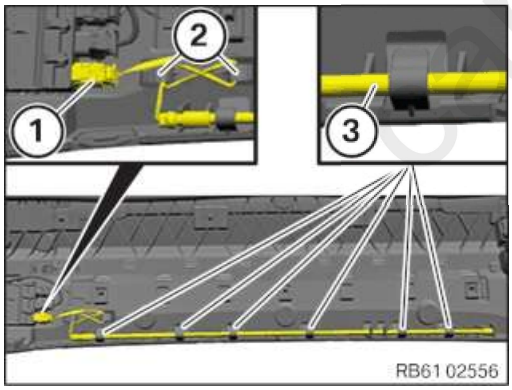
- Position brace for the rear bumper (2) on the support.
- Mount the expanding rivets (1).



- Clip in the cable clip (2) on the inside of the brace for the rear bumper (3).
- Tighten the screws (1).

Mounting for rear bumper panel on support for rear bumper panel

Hexagon screw for thermoplastic	Tightening torque	2,6 Nm



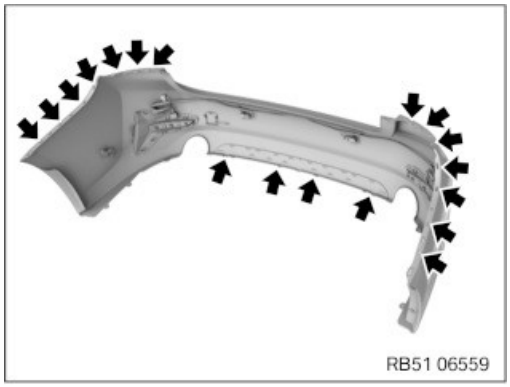
- Clip lower sensor cable (3) from above.
- Secure cable to holder (2).
- Connect connector (1).

POSTPROCESSES

11 – Install rear bumper panel

Check

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- Check the latch mechanisms (arrows) for damage.

Result

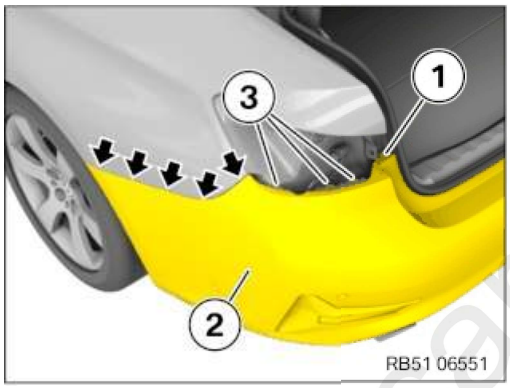
» Latch mechanisms are damaged.

Measure

- Renew the bumper panel.



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



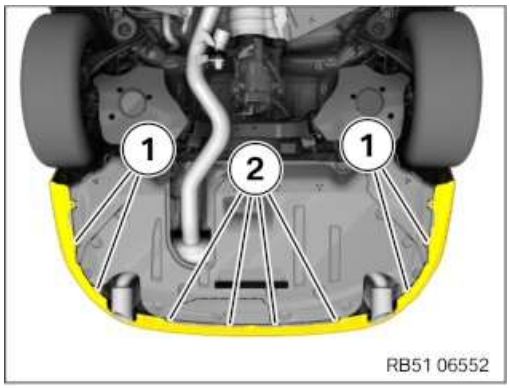
NOTICE

Perform the operations on the left and right side.

- Clip bumper panel (2) on the side in the latch mechanisms (arrows).
- Clip bumper panel (2) in the area of the rear light housing in latch mechanisms (3).
- Tighten down screw (1).

Rear bumper panel guide on rear centre guide

Hexagon screw for thermoplastic		Tightening torque	2,5 Nm



- Clip bumper panel into latch mechanisms (2).
- Tighten the screws (1).

Mounting for rear bumper panel on support for rear bumper panel

Hexagon screw for thermoplastic		Tightening torque	2,6 Nm

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NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

Rear bumper panel to rear side panel

Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

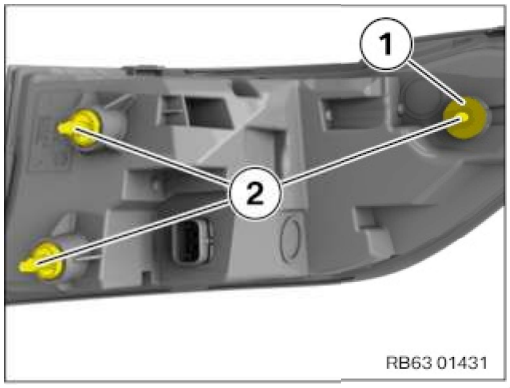
12 – Install both rear lights on the side panel

NOTICE

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

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

Check



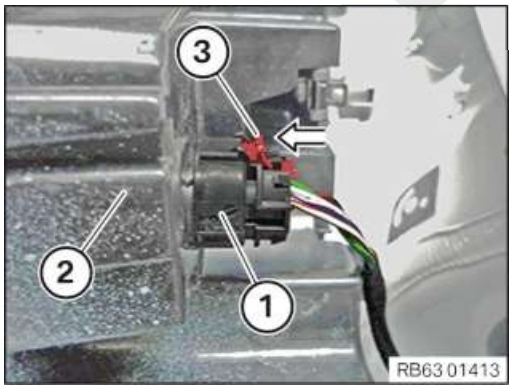
- Check the seal (1) for damage and renew if necessary.
- Check the threaded inserts (2) for damage.

Result

» The threaded inserts are damaged.

Measure

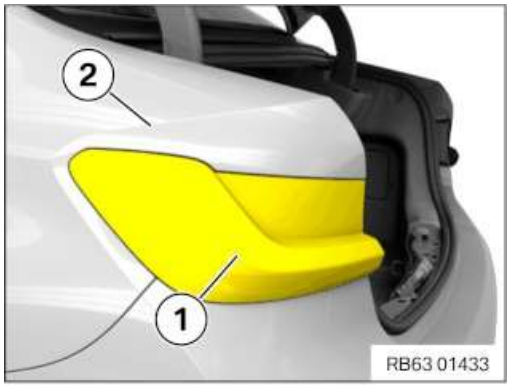
- Replace rear light.



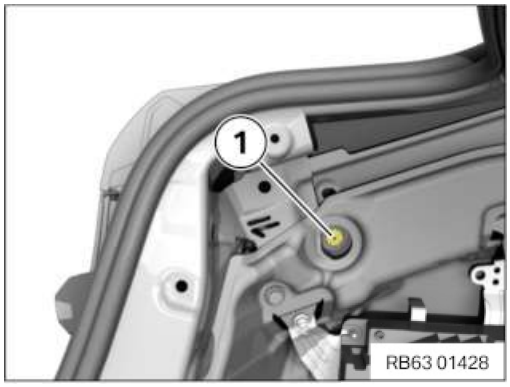
- Connect the connector (1) to the rear light on the side panel (2).

  The connector (1) must engage audibly.
- Lock the lock in direction of arrow (3).

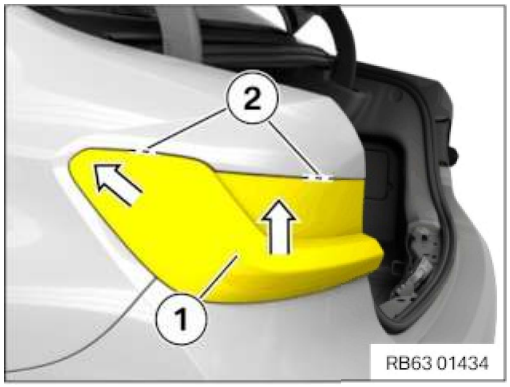
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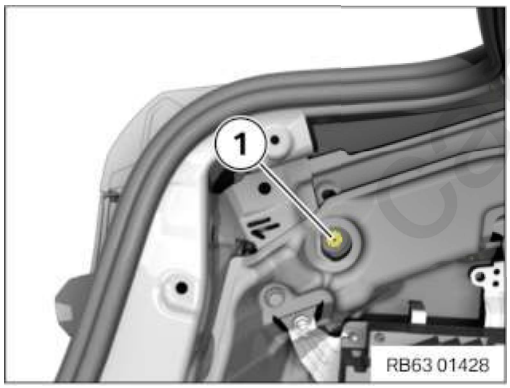
- Position the rear light on the side panel (1) on the side panel (2).



- Position the nut (1).



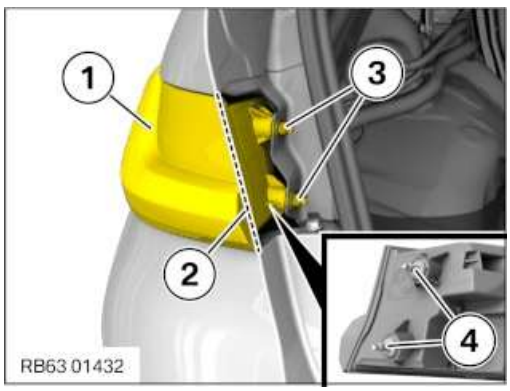
- Position the rear light on the side panel (1) to the front at the top.
- Move the contact surfaces (2) of the rear light on the side panel (1) upwards (arrow) so that they are in place.
- Hold the rear light on the side panel (1) in position.



- Tighten nut (1).

Rear light to side panel

Nut M5, AF 8		Tightening torque	3 Nm



- Position nuts (3).
- Align rear light on the side panel (1) with the connecting line (2).

  The alignment is done through threaded inserts (4) on the rear light on the side panel (2).
- If necessary, correct the position of the rear light on the side panel (1) by twisting threaded inserts (4).
- Tighten nuts (3).

Rear light to side panel

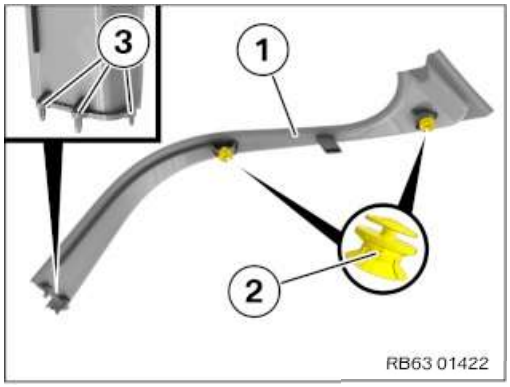
Nut M5, AF 10		Tightening torque	4 Nm

13 – Installing both trims of the water channel

NOTICE

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

▸ **Install the trim in the water channel**



Check

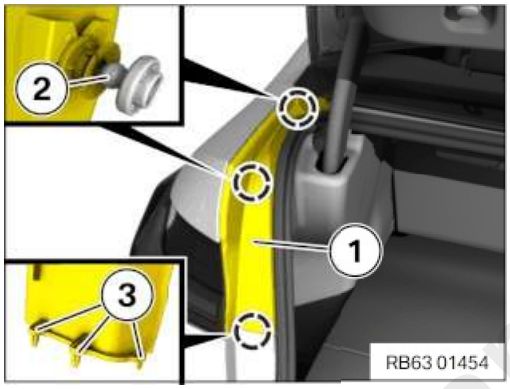
- Check the clips (2) for damage and renew if necessary.
- Check the guides (3) for damage.

Result

» The guides are damaged.

Measure

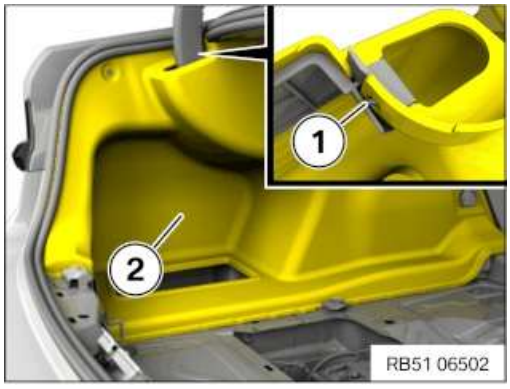
- Renew trim in the water channel .



- Insert the trim in the water channel (1) in the guides (3).
- Clip in the water channel trim (1) from the front into the ball pin (2).

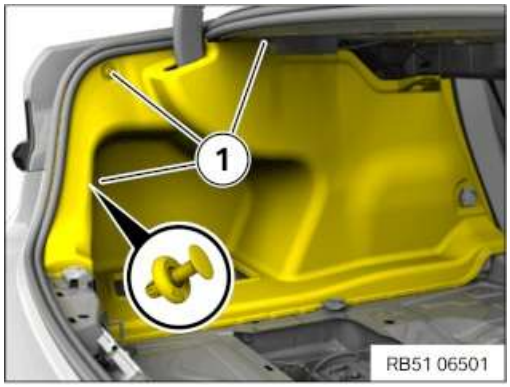
14 – Installing both luggage compartment wheel arch trim panels partially

▸ **Partially installing the left luggage compartment wheel arch trim panel**



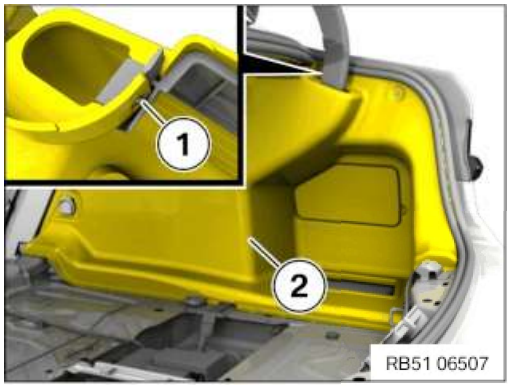
- Feed the luggage compartment wheel arch trim panel (2) in the rear area under the sealing lip of the seal of the tailgate.
- Feed the tab of the luggage compartment wheel arch trim panel (2) on the outer side of the hinge into the stop on the trim (1).

cardiagn.com

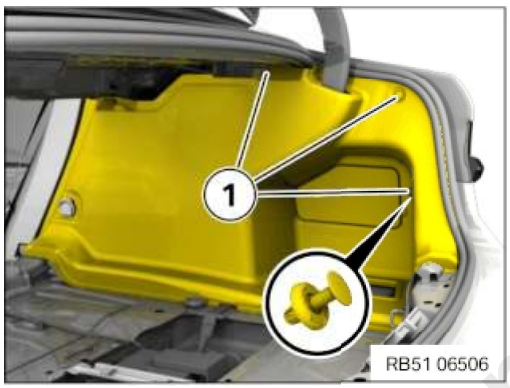


- Secure expanding rivet (1).

▶ **Partially installing right luggage compartment wheel arch trim panel**

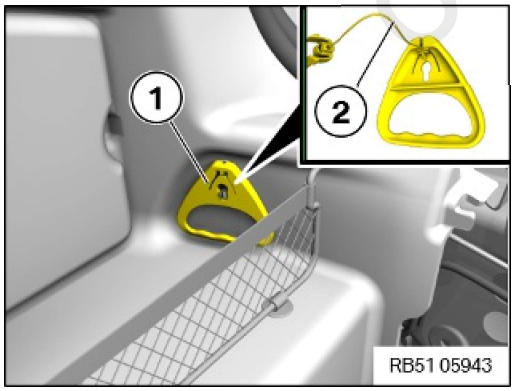


- Guide luggage compartment wheel arch trim panel (2) in the rear area under the sealing lip of the seal for tailgate.
- Feed the tab of the luggage compartment wheel arch trim panel (2) on the outer side of the hinge into the stop on the trim (1).



- Secure expanding rivet (1).

▷ **If installed: Installing the emergency tailgate release handle (additional work for US version)**

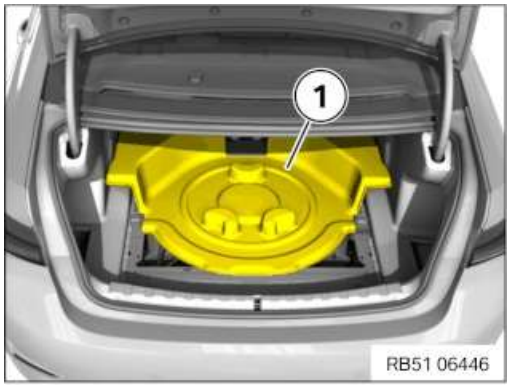


- Attach the Bowden cable (2).
- Fasten emergency tailgate release handle (1) to the bracket.

◁

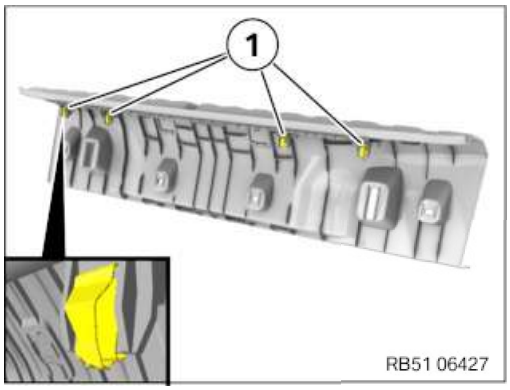
15 – Install the luggage compartment well in front

cardiagn.com

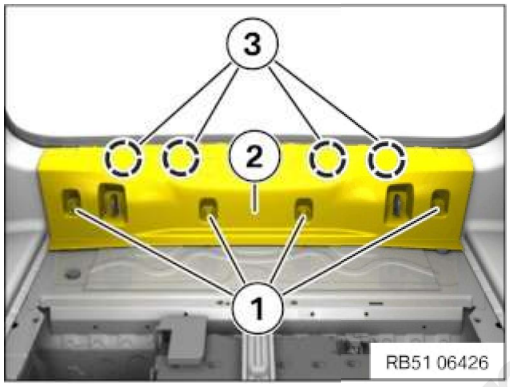


- Feed in and insert front luggage compartment well (1) on the seat belt strap.

16 – Installing loading edge trim

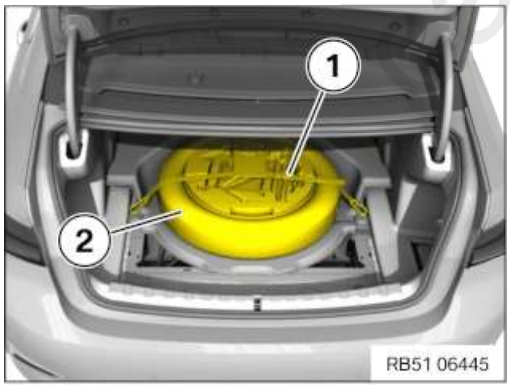


- Check the clamps (1) for damage and renew if necessary.



- Insert the loading edge trim (2) under the sealing lip of the tailgate seal.
- Fit the trim of the loading edge (2) at the latch mechanisms (3) and clip it in to the bottom.
- Secure expanding rivet (1).

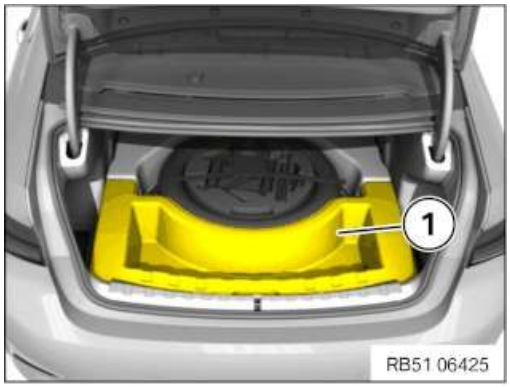
17 – If installed: Install the emergency wheel



- Install the emergency wheel (2) with the insert.
- Position the seat belt strap above the emergency wheel and close the buckle on the seat belt strap (1).

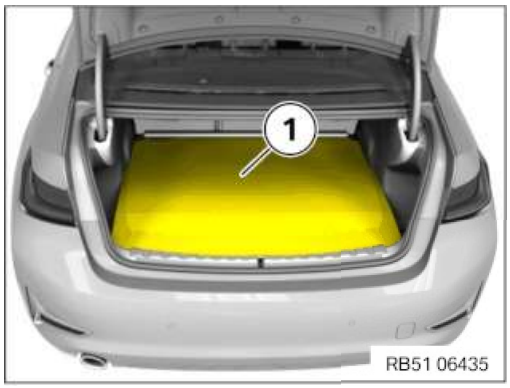
► **Installing rear luggage compartment well**

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- Install rear luggage compartment well (1).

18 – Installing the luggage compartment floor trim panel



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

Additional Information

Overview of Tightening Torques

Mounting for rear bumper panel on support for rear bumper panel			Used in step 1011
Hexagon screw for thermoplastic		Tightening torque	2,6 Nm

Rear bumper panel guide on rear centre guide			Used in step 11
Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

Rear bumper panel to rear side panel			Used in step 11
Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

Rear light to side panel			Used in step 12
Nut M5, AF 8		Tightening torque	3 Nm

Rear light to side panel			Used in step 12
Nut M5, AF 10		Tightening torque	4 Nm

Links

Repair instructions	**Used in step**
61 13 ... Unlocking and disconnecting different plug connections	7

cardiagn.com

61 35 953 Remove and install/replace interior aerial for Comfort Access

PRELIMINARY WORK

1 – Remove cupholder

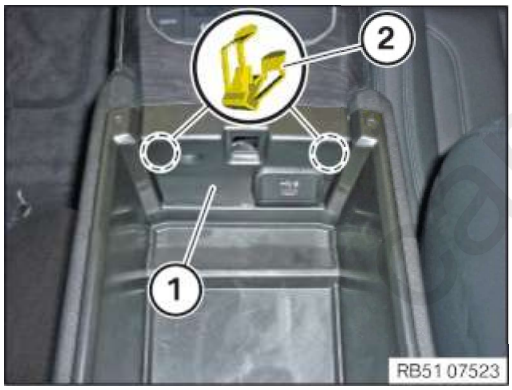


- Remove the insert (1).

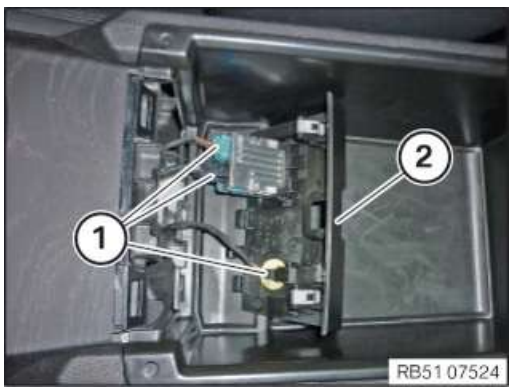


- Loosen screws (1).
- Feed the cup holder (2) out to the top.
- Unlock associated plug connections and disconnect.

2 – Removing the trim in the storage compartment on the centre armrest



- Lever out the trim (1) with the special tool (2) toward the rear from the clamps 2 298 505.



- Unlock and disconnect the plug connections (1) and remove the trim (2) .

3 – Remove the centre console trim

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RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



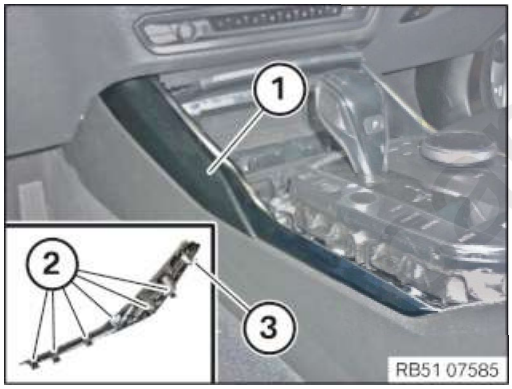
- Release and remove the centre console trim upwards (1) as shown using the special tool 2 298 505 from the latch mechanisms.

4 – Removing the decorative trim on the centre console trim on the left and right

▶ **Remove decorative trim on centre console**

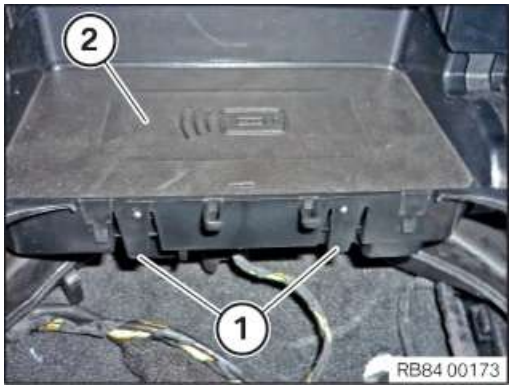
NOTICE

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

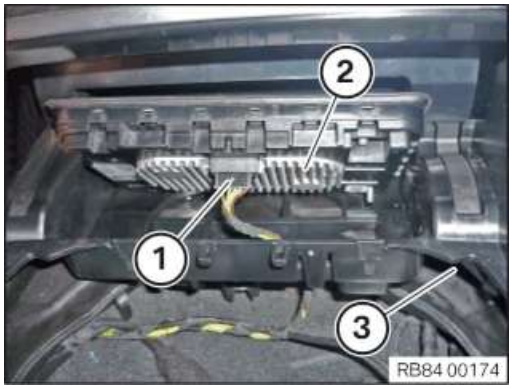


- Lever out the rear decorative trim (1) from the latch mechanisms (2) starting from the top.
- Feed out the decorative trim (1) backwards out of the guide (3) and remove.

5 – Removing the wireless charging station



- Loosen the latch mechanisms (1) and push out the wireless charging station (2) upwards.



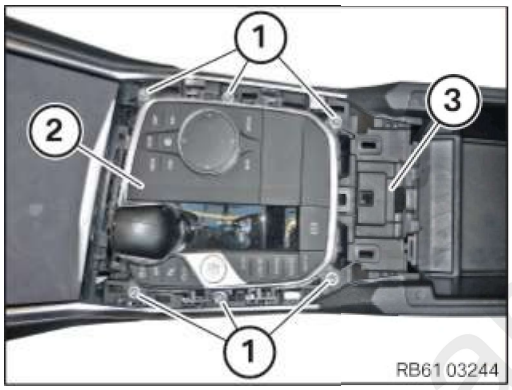
- Disconnect the connector (1) and remove the wireless charging station (2) from the centre console (3).

6 – Remove the operating facility in the centre console

▶ **Disconnecting all battery earth leads**

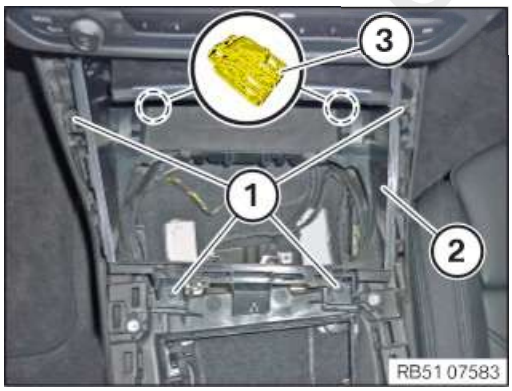


- See additional information.



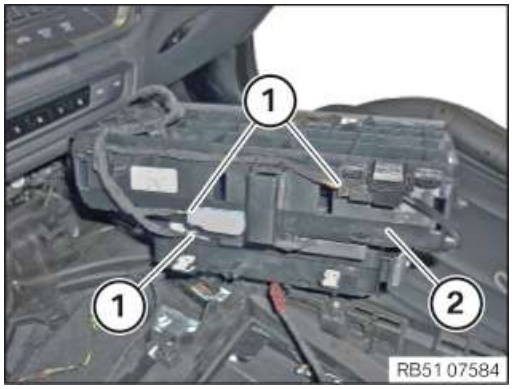
- Loosen screws (1).
- Remove the operating facility in the centre console (2) from the centre console (3).

7 – Removing the storage compartment of the front centre console



- Loosen screws (1).
- Remove storage compartment trim (2) backwards out of clamps (3).

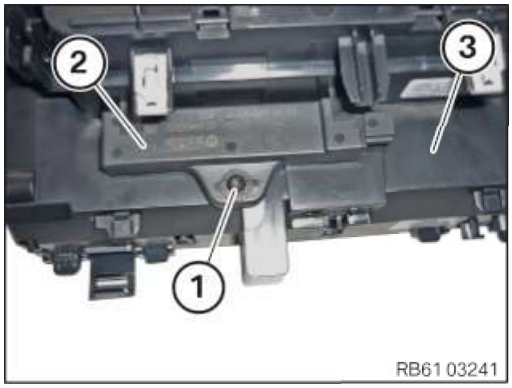
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- Unlock and disconnect all the plug connections (1) and remove the storage compartment (2).

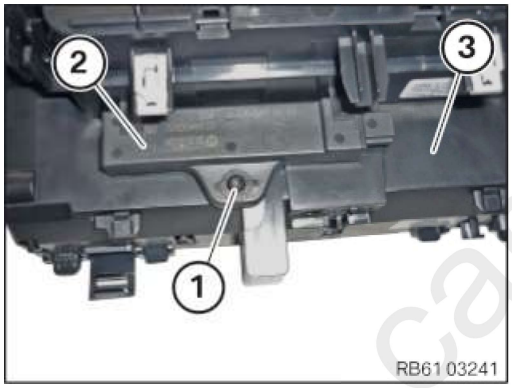
MAIN WORK

8 – Removing interior aerial on the front storage compartment



- Loosen screw (1).
- Detach the interior aerial (2) from the storage compartment (3) and remove.

9 – Install front interior aerial on storage compartment



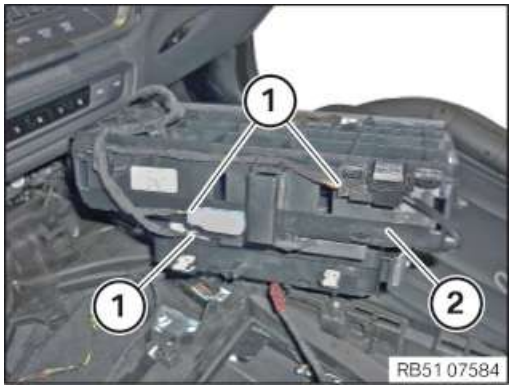
- Position interior aerial (2) on storage compartment (3) and tighten into the screw (1).

Front interior aerial

Screw		Tightening torque	2,3 Nm

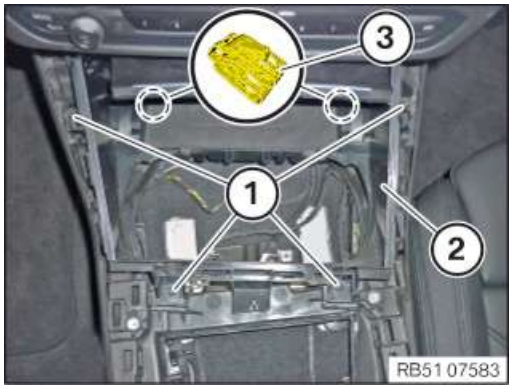
POSTPROCESSES

10 – Installing the storage compartment of the front centre console



- Mount the storage compartment (2) and connect connectors (1).

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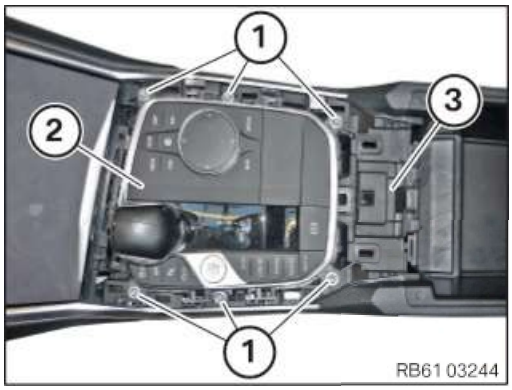


- Engage rear storage compartment trim (2) into clamps (3).
- Tighten the screws (1).

Storage compartment to centre console

Oval-head screw		Tightening torque	1,8 Nm

11 – Install the operating facility in the centre console



- Position operating facility (2) in the centre console (3).
- Tighten the screws (1).

Gear selector switch to centre console trim

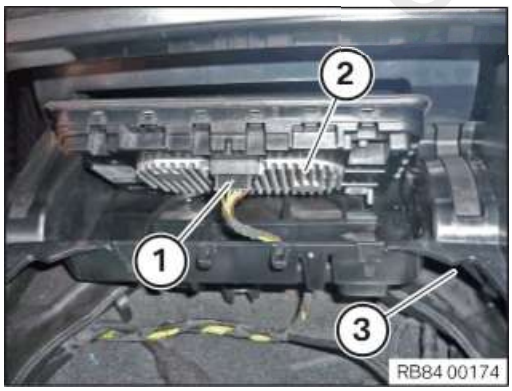
Screw		Tightening torque	1,8 Nm

▶ **Disconnecting all battery earth leads**



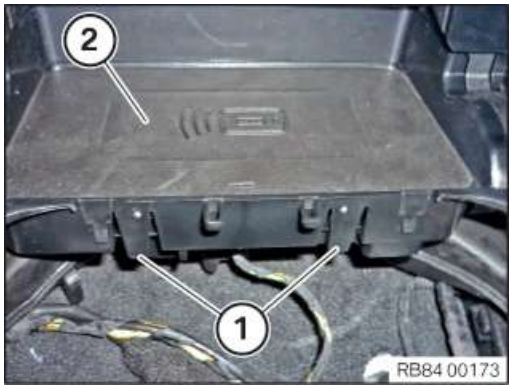
- See additional information.

12 – Installing the wireless charging station



- Connect connector (1).
- Position the wireless charging station (2) in the centre console (3).

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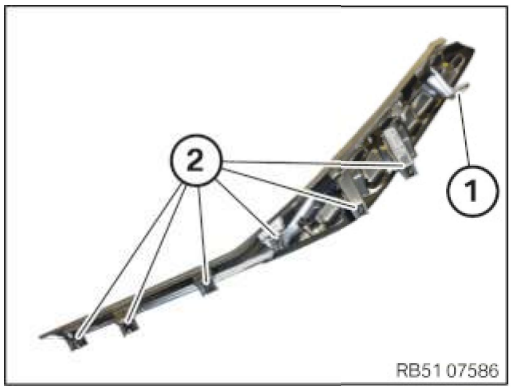
- Press the wireless charging station (2) down till the locking units (1) are engaged correctly.

13 – Install decorative trim on centre console on left and right

▶ **Installing the decorative trim to centre console**

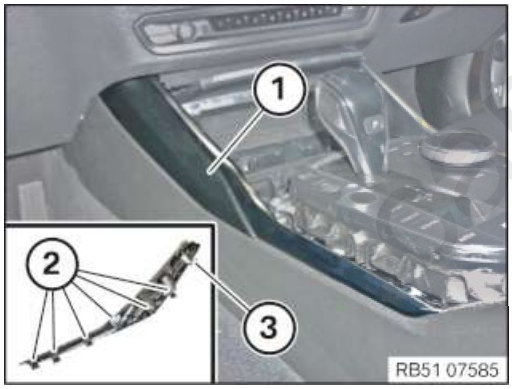
NOTICE

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



- Check guide (1) and the latch mechanisms (2).

  Renew defective decorative trim.



- Feed in the decorative trim (1) forward in the guide (3).
- Engage decorative trim (1) in latch mechanisms (2).

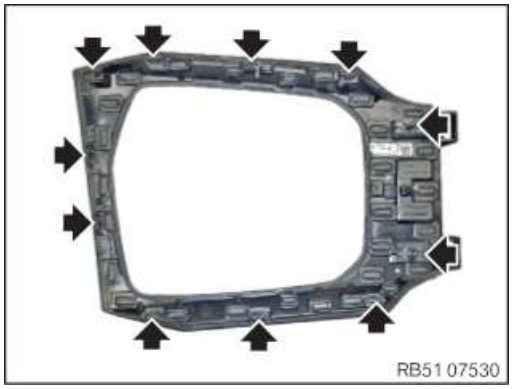
14 – Installing the centre console trim

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

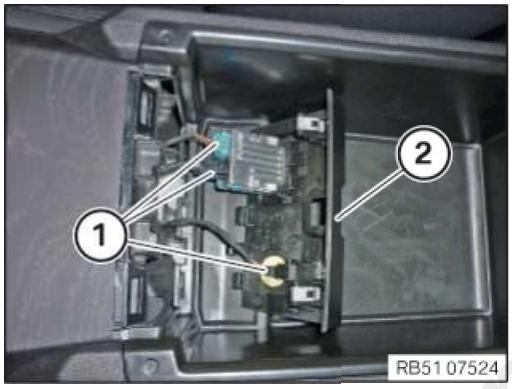


- Check all the latch mechanisms or clamps (arrows).
- In case the latch mechanisms or the clamps (arrows) are faulty, renew the centre console trim .

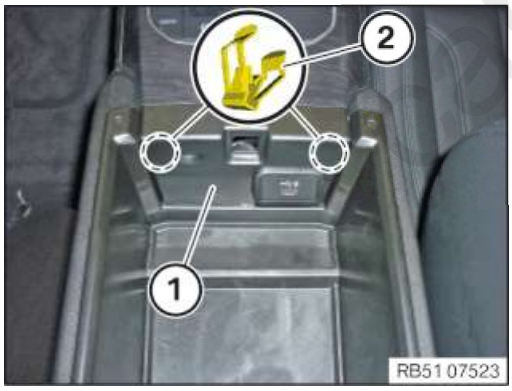


- Correctly position the centre console trim (1) and engage at the latch mechanisms.

15 – Installing the trim in the storage compartment of the centre armrest



- Mount the trim (2) and connect connector (1) and lock.



- Correctly position trim (1) and snap into the clamps (2).

16 – Install the cup holder



- Fix the cup holder (1) and the belonging connectors.
- Correctly position cup holder (1).
- Tighten the screws (2).

Cup holder to centre console

Oval-head screw		Tightening torque	1,8 Nm



- Insert the insert (1).

Additional Information

Overview of Tightening Torques

Front interior aerial			Used in step 9
Screw		Tightening torque	2,3 Nm

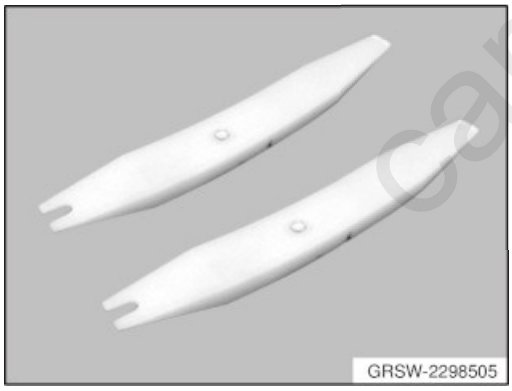
Storage compartment to centre console			Used in step 10
Oval-head screw		Tightening torque	1,8 Nm

Gear selector switch to centre console trim			Used in step 11
Screw		Tightening torque	1,8 Nm

Cup holder to centre console			Used in step 16
Oval-head screw		Tightening torque	1,8 Nm

Overview of Special Tools

2 298 505 Wedge



Common		Used in step 23
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	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	611

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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	611
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
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61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting the battery earth lead (*all* battery earth leads)	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611
61 20 900 Disconnecting and connecting battery earth lead	611

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61 35 954 Remove and install/replace interior aerial for Comfort Access

PRELIMINARY WORK

1 – Removing the rear centre console trim

RISK OF DAMAGE

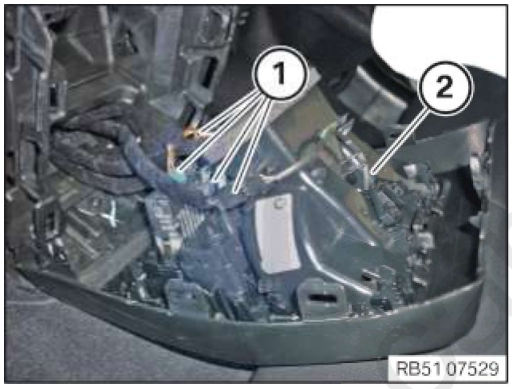
Scratches.

Tools and sharp-edged components can cause scratches.

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



- Release centre console trim (1) backwards from the latch mechanisms at the side and pull it a little way towards the rear.

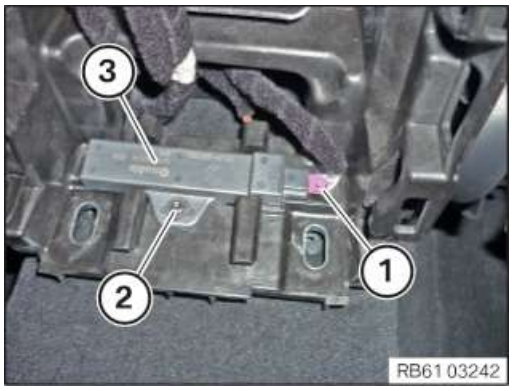


- Unlock and disconnect plug connections (1).
- Remove the centre console trim (2).

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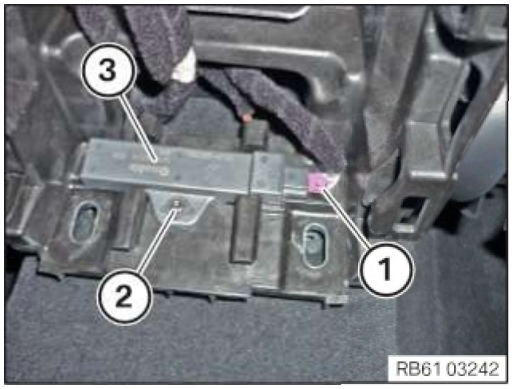
MAIN WORK

2 – Removing the interior aerial from the rear centre console



- Disconnect plug connection (1).
- Loosen screw (2).
- Remove the interior aerial (3).

3 – Install the interior aerial on the rear centre console



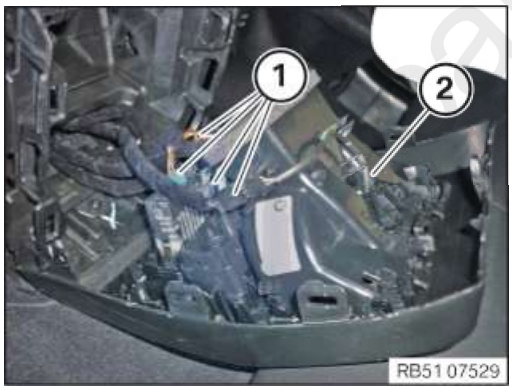
- Connect connector (1).
- Position interior aerial (3) correctly and tighten the screw (2).

Front interior aerial

Screw		Tightening torque	2,3 Nm

POSTPROCESSES

4 – Installing the rear centre console trim



- Install the centre console trim (2).
- Connect connectors (1) and lock.



- Position centre console trim (1) and engage at the latch mechanisms at the side.

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Additional Information

Overview of Tightening Torques

Front interior aerial Used in step 3

Screw		Tightening torque	2,3 Nm

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61 35 196 Removing and installing control unit for automatic tailgate operation

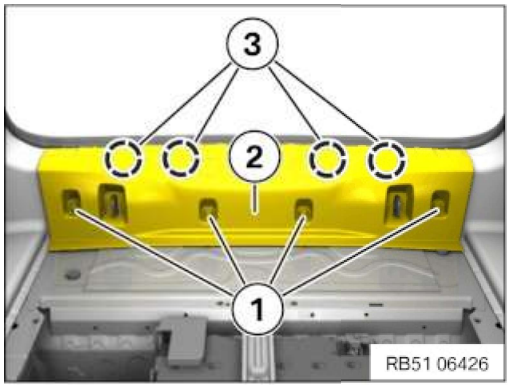
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



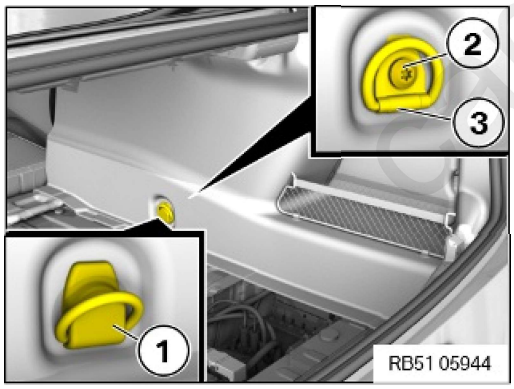
- See additional information.

2 – Removing the loading edge trim



- Loosen the expanding rivet (1).
- Unclip loading edge trim(2) upwards from latch mechanisms (3).
- Guide out and remove loading edge trim (2) under the sealing lip of the tailgate seal.

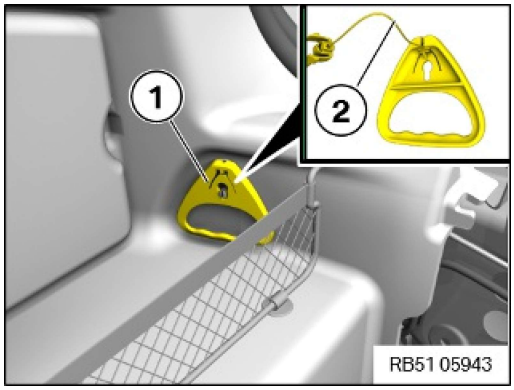
3 – Removing right luggage compartment wheel arch trim panel



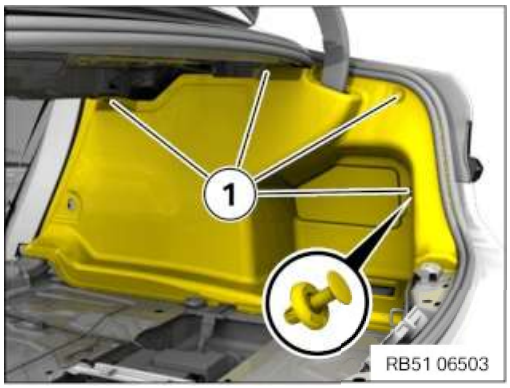
- Remove the cover (1).
- Loosen screw (2).
- Remove the lashing eye (3).

▸ If installed: Remove the emergency release handle for the tailgate (additional work in the US version)

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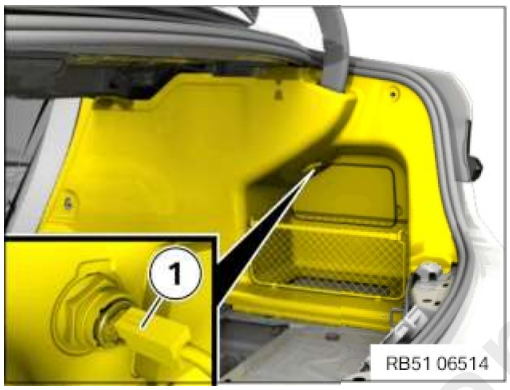


- Release the emergency release handle for tailgate (1) from the holder.
- Detach Bowden cable (2) and remove the emergency release handle for tailgate (1).

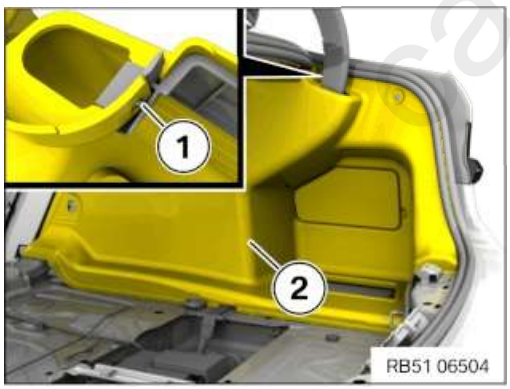


- Reposition the right rear seat backrest.
- Loosen the expanding rivet (1).

▸ If installed: Disconnect plug connection of the 12 V connection (additional work with storage package equipment specification)



- Unlock and disconnect the plug connection (1) of the 12 V power socket.

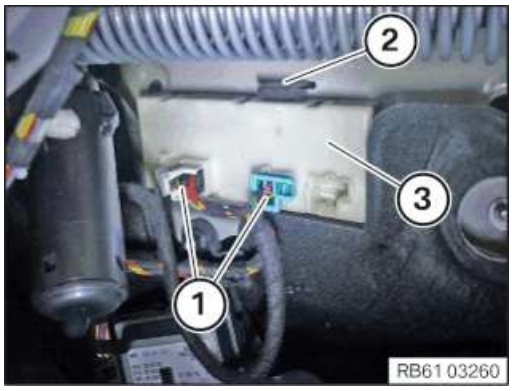


- Press the tab for luggage compartment wheel arch trim panel (2) on the outer side of the hinge to the front using the stop on trim (1).
- Guide out luggage compartment wheel arch trim panel (2) under the sealing lip for the tailgate and the side trim panel in the rear passenger compartment.
- Remove luggage compartment wheel arch trim panel (2).

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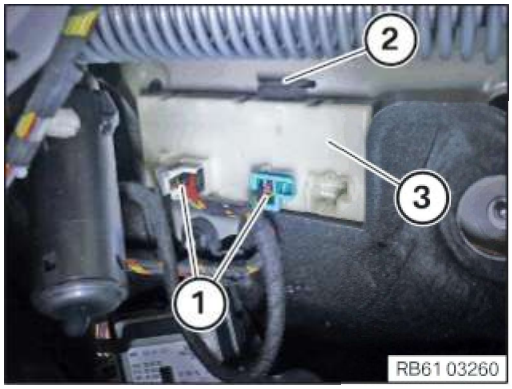
MAIN WORK

4 – Remove the control unit for the automatic tailgate operation



- Unlock and disconnect plug connections (1).
- Unlock the latch mechanism (2) and remove the control unit for the tailgate lift (3).

5 – Install the control unit for the automatic tailgate operation



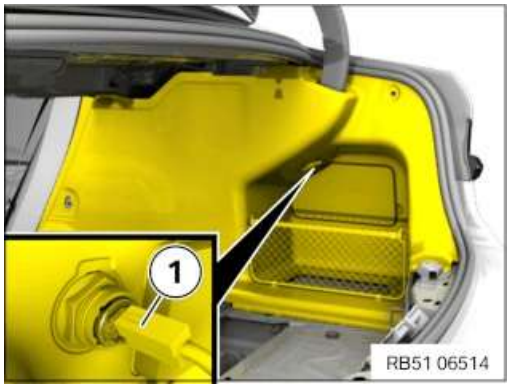
- Correctly position the control unit for the tailgate lift (3) and engage it with the latch mechanism (2).
- Connect connectors (1) and lock.

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POSTPROCESSES

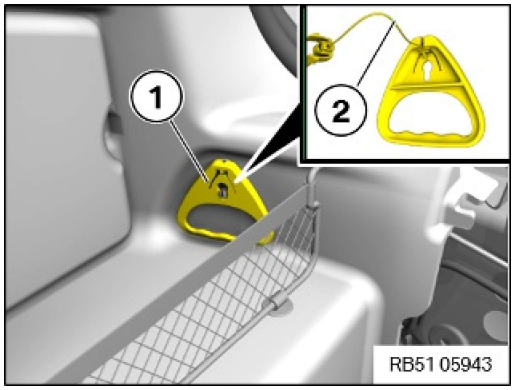
6 – Installing the luggage compartment wheel arch trim panel on the right

▸ If installed: Connecting plug of the 12 V power socket (additional work for equipment specification with storage package)

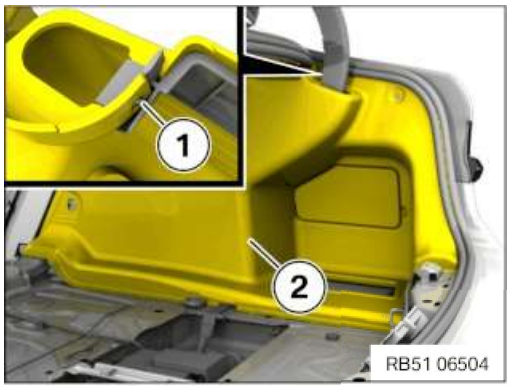


- Connect and lock connector (1) of the 12 V power socket.

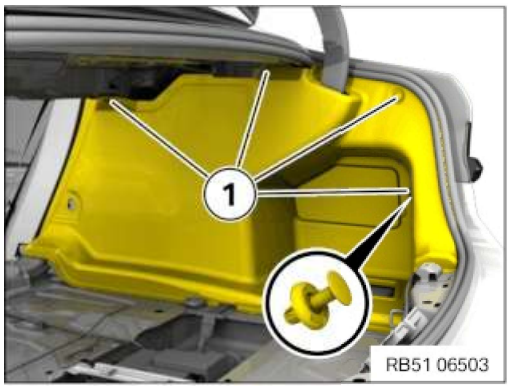
▸ If installed: Installing the emergency tailgate release handle (additional work for US version)



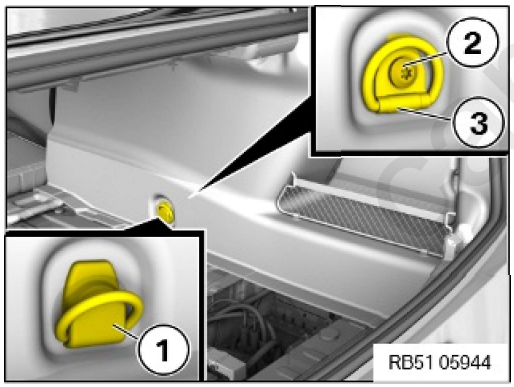
- Attach the Bowden cable (2).
- Fasten emergency tailgate release handle (1) to the bracket.



- Feed luggage compartment wheel arch trim panel (2) under the side trim panel in the rear passenger compartment and the sealing lip for the tailgate.
- Feed the tab of the luggage compartment wheel arch trim panel (2) on the outer side of the hinge into the stop on the trim (1).



- Secure expanding rivet (1).
- Raise the right rear seat backrest.



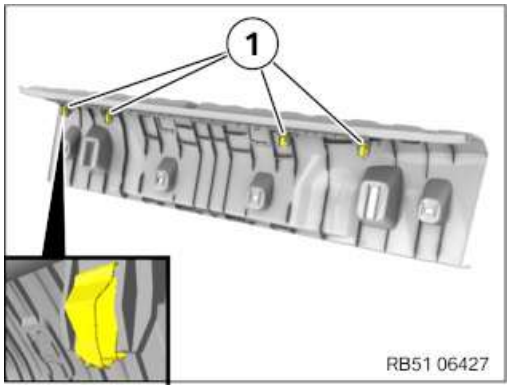
- Position the lashing eye (3).
- Tighten down screw (2).

Lashing eye to body

	Tightening torque	19 Nm

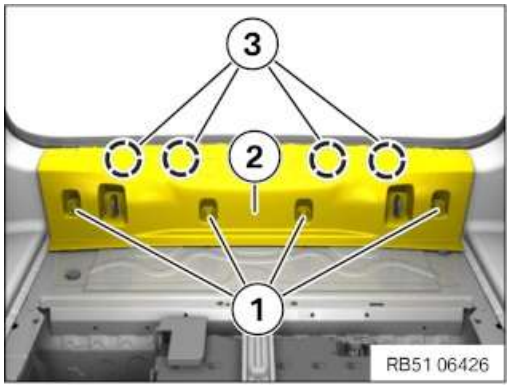
- Install the cover (1).

7 – Installing loading edge trim



- Check the clamps (1) for damage and renew if necessary.

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- Insert the loading edge trim (2) under the sealing lip of the tailgate seal.
- Fit the trim of the loading edge (2) at the latch mechanisms (3) and clip it in to the bottom.
- Secure expanding rivet (1).

8 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Lashing eye to body		Used in step 6
	Tightening torque	19 Nm

Links

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

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61 35 240 Removing and installing the non-contact tailgate opening control unit

PRELIMINARY WORK

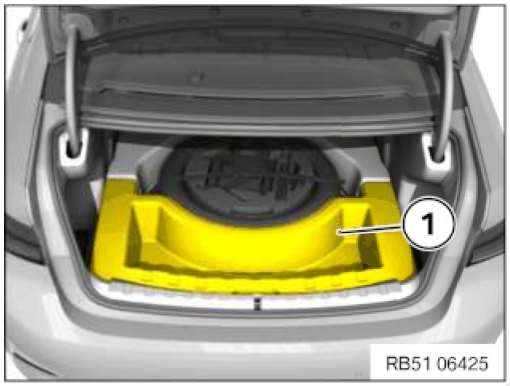
1 – Removing the luggage compartment floor trim panel



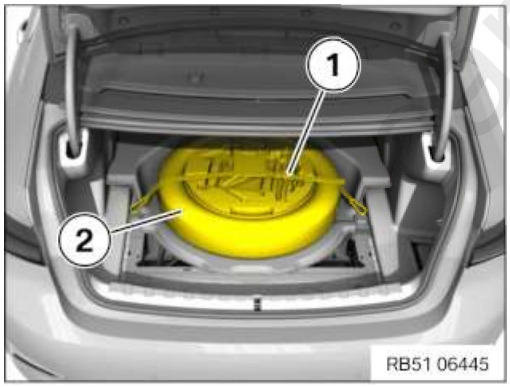
- Remove luggage compartment floor trim panel (1).

2 – If installed: Removing the compact spare wheel

▸ **Removing rear luggage compartment well**

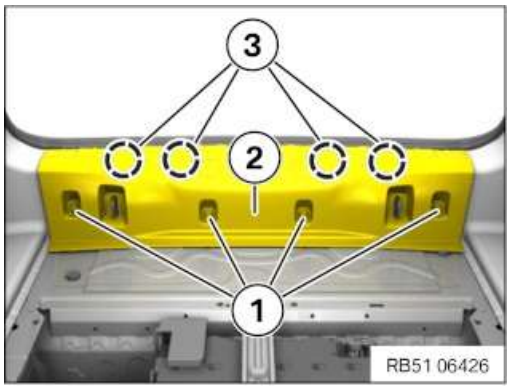


- Remove rear luggage compartment well (1).



- Open buckle on seat belt strap (1) and set it aside.
- Remove emergency wheel (2) with the insert.

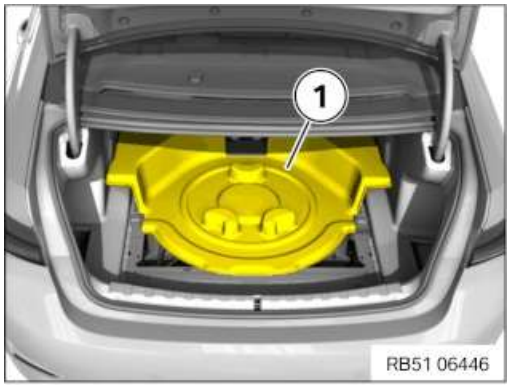
3 – Removing the loading edge trim



- Loosen the expanding rivet (1).
- Unclip loading edge trim(2) upwards from latch mechanisms (3).
- Guide out and remove loading edge trim (2) under the sealing lip of the tailgate seal.

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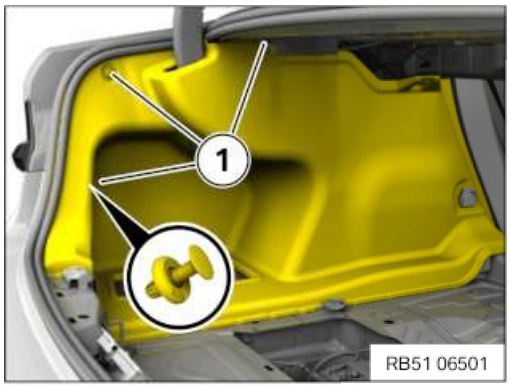
4 – Removing front luggage compartment well



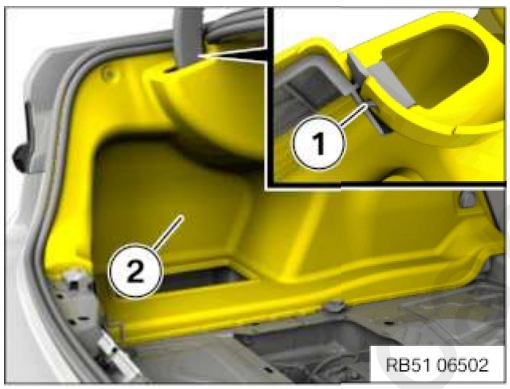
- Guide out and remove front luggage compartment well (1) on the seat belt strap.

5 – Removing both luggage compartment wheel arch trim panels partially

▸ Partially remove luggage compartment wheel arch trim on left



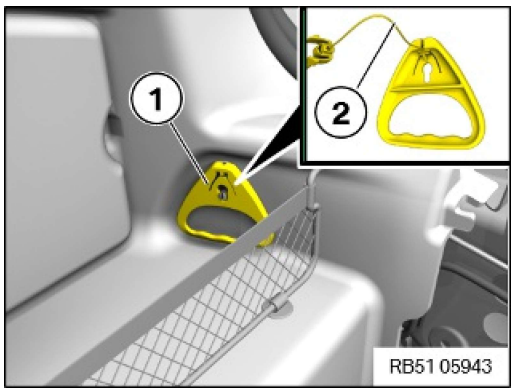
- Loosen the expanding rivet (1).



- Press the tab for luggage compartment wheel arch trim panel (2) on the outer side of the hinge to the front using the stop on trim (1).
- Guide out luggage compartment wheel arch trim panel (2) under the sealing lip of the tailgate seal and release it in the rear area.

▸ Partially remove luggage compartment wheel arch panel on right

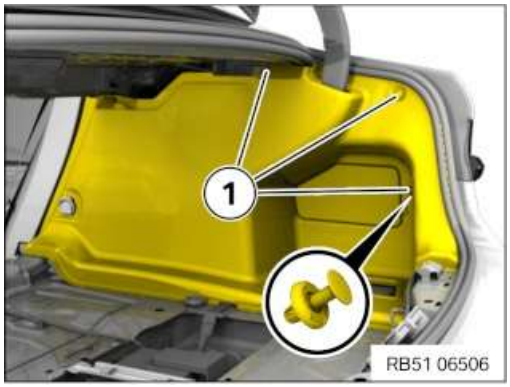
▹ If installed: Remove the emergency release handle for the tailgate (additional work in the US version)



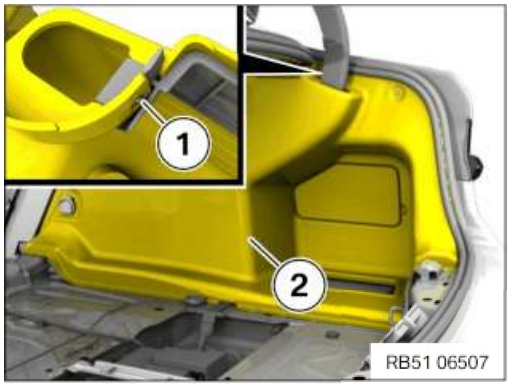
- Release the emergency release handle for tailgate (1) from the holder.
- Detach Bowden cable (2) and remove the emergency release handle for tailgate (1).

◁

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- Loosen the expanding rivet (1).



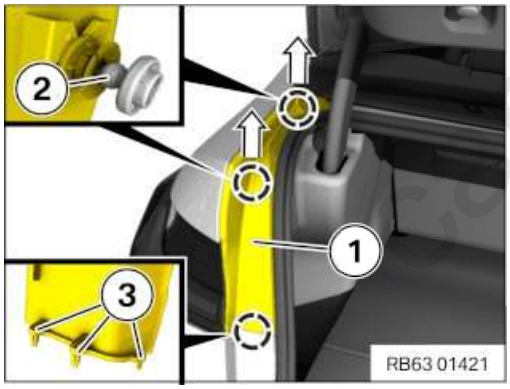
- Press the tab for luggage compartment wheel arch trim panel (2) on the outer side of the hinge to the front using the stop on trim (1).
- Guide out luggage compartment wheel arch trim panel (2) under the sealing lip of the tailgate seal and release it in the rear area.

6 – Removing both trims of water channel

NOTICE

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

▸ **Remove the trim in the water channel**



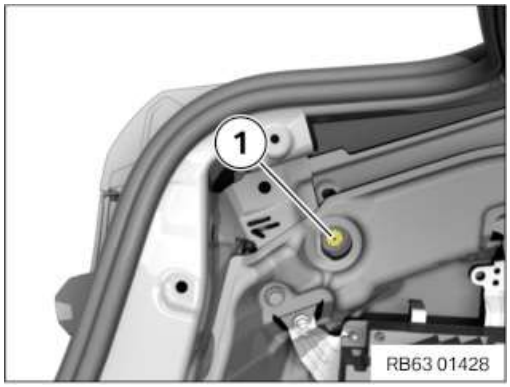
- Unclip the trim in the water channel (1) from the ball pins (2) towards the top.
- Release the trim in the water channel (1) from the guides (3) and remove it.

7 – Remove both rear lights from the side panel

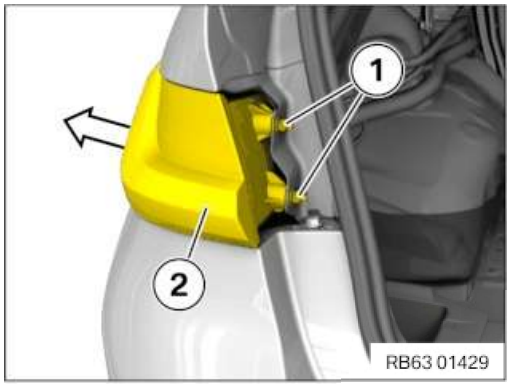
NOTICE

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

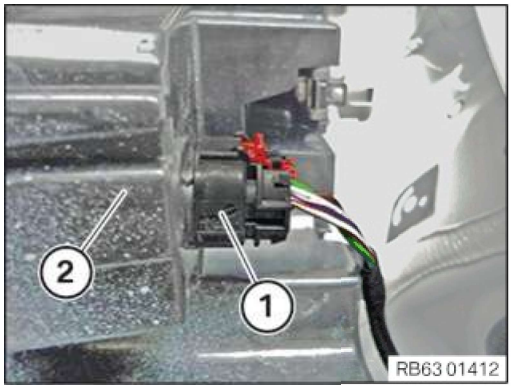
▸ **Remove the rear light on the side panel**



- Loosen nut (1).



- Release the nuts (1) and feed out the rear light on the side panel (2) in the direction of arrow.



TECHNICAL INFORMATION

Observe note on unlocking and disconnecting plug connections.
For additional information see: 6113 ... Unlocking and disconnecting different plug connections

- Unlock and disconnect plug connection (1) as described in position #28 in additional information.
- Remove the rear light on the side panel (2).

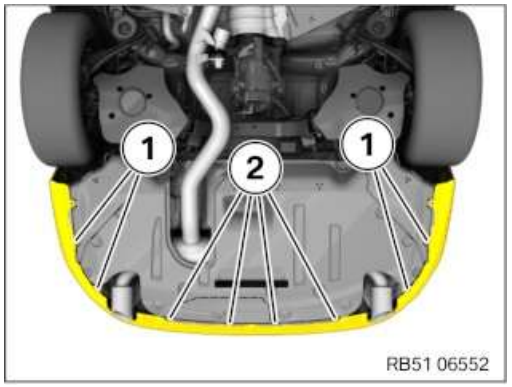
8 – Remove rear bumper panel



NOTICE

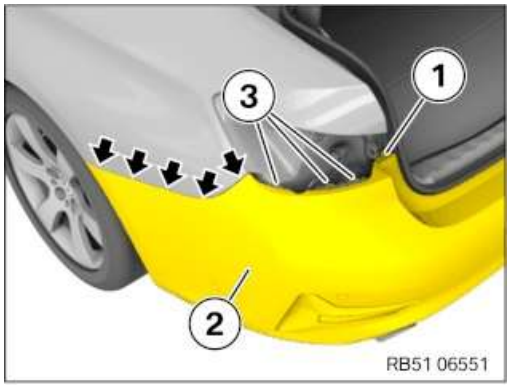
Perform the operations on the left and right side.

- Loosen screws (1).



- Loosen screws (1).
- Release the bumper panel on latch mechanisms (2) with a suitable tool.

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NOTICE

Perform the operations on the left and right side.

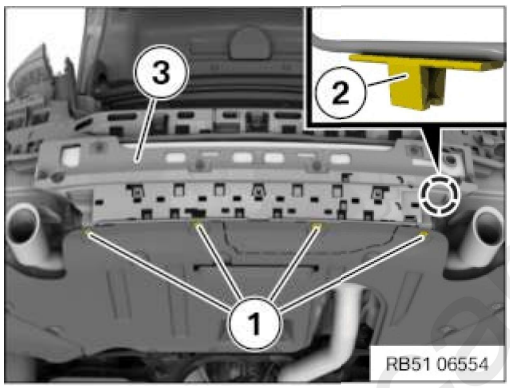
- Loosen screw (1).
- Release bumper panel (2) in the area of the rear light housing from latch mechanisms (3) with a suitable tool.
- Release side bumper panel (2) from the remaining latch mechanisms (arrows).



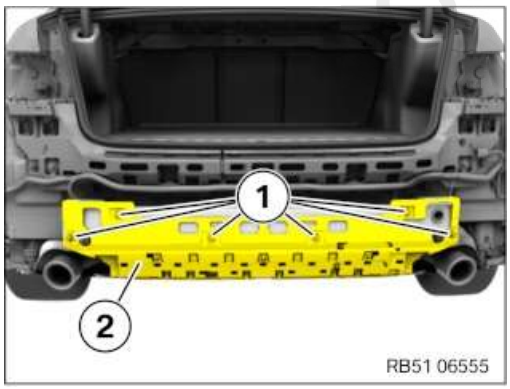
- Remove bumper panel (2) straight to the rear with the help of an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

MAIN WORK

9 – Remove the control unit for the contactless tailgate opening

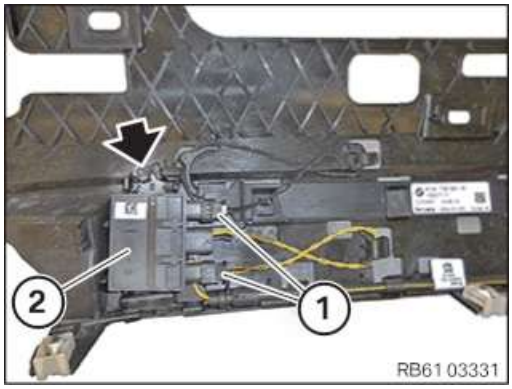


- Loosen screws (1).
- Unclip the cable clip (2) on the inside of the brace for the rear bumper (3).



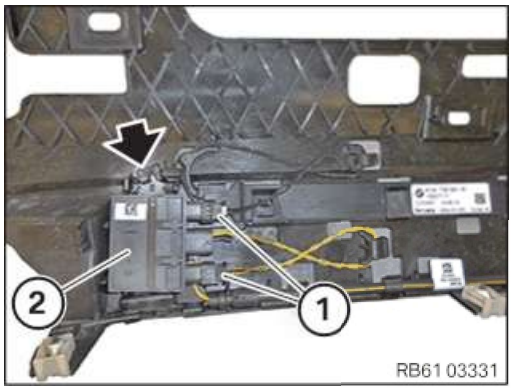
- Release expanding rivets (1) and remove brace for rear bumper (2).

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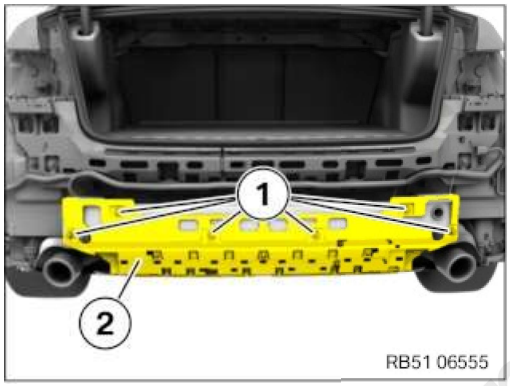


- Unlock and disconnect connector (1).
- Release latch mechanism (arrow) and remove control unit (2).

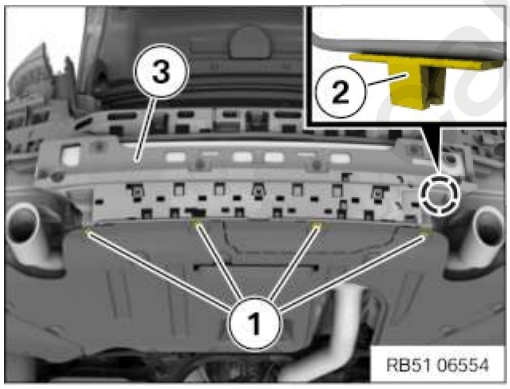
10 – Install the control unit for the contactless tailgate opening



- Position control unit (2) and clip into latch mechanism (arrow).
- Insert and connect the connector (1).



- Position brace for the rear bumper (2) on the support.
- Install the expanding rivet (1).



- Clip in the cable clip (2) on the inside of the brace for the rear bumper (3).
- Tighten the screws (1).

Mounting for rear bumper panel on support for rear bumper panel

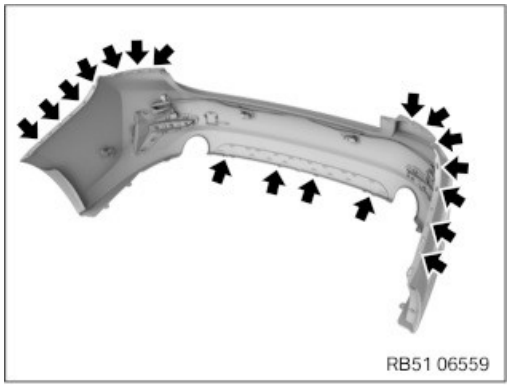
Hexagon screw for thermoplastic		Tightening torque	2,6 Nm

POSTPROCESSES

11 – Install rear bumper panel

Check

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- Check the latch mechanisms (arrows) for damage.

Result

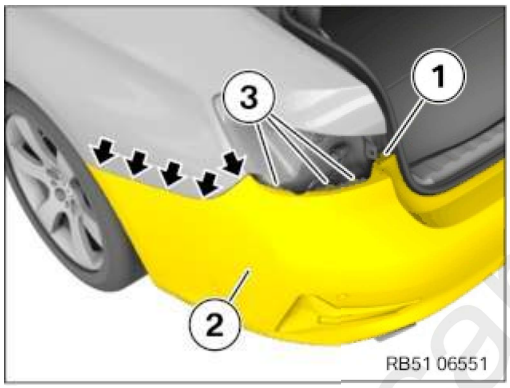
» Latch mechanisms are damaged.

Measure

- Renew the bumper panel.



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



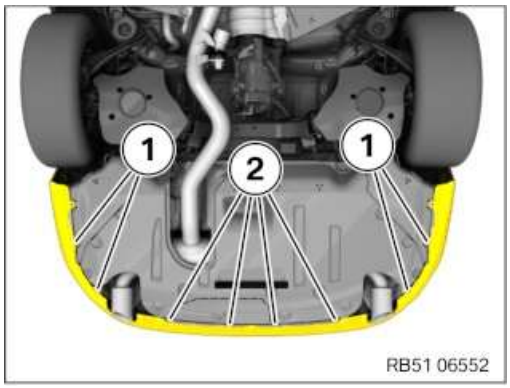
NOTICE

Perform the operations on the left and right side.

- Clip bumper panel (2) on the side in the latch mechanisms (arrows).
- Clip bumper panel (2) in the area of the rear light housing in latch mechanisms (3).
- Tighten down screw (1).

Rear bumper panel guide on rear centre guide

Hexagon screw for thermoplastic		Tightening torque	2,5 Nm



- Clip bumper panel into latch mechanisms (2).
- Tighten the screws (1).

Mounting for rear bumper panel on support for rear bumper panel

Hexagon screw for thermoplastic		Tightening torque	2,6 Nm

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NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

Rear bumper panel to rear side panel

Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

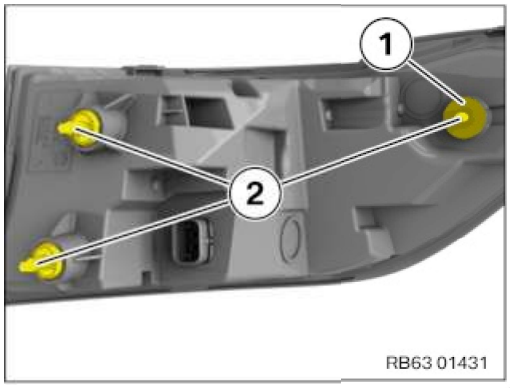
12 – Install both rear lights on the side panel

NOTICE

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

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

Check



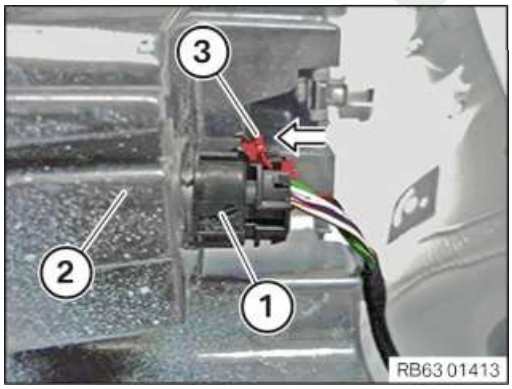
- Check the seal (1) for damage and renew if necessary.
- Check the threaded inserts (2) for damage.

Result

» The threaded inserts are damaged.

Measure

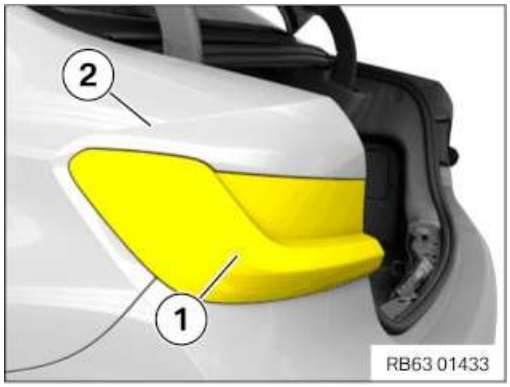
- Replace rear light.



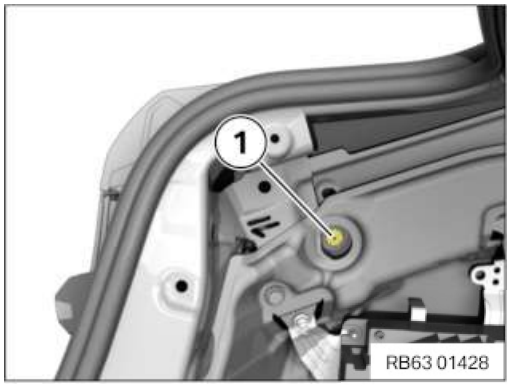
- Connect the connector (1) to the rear light on the side panel (2).

  The connector (1) must engage audibly.
- Lock the lock in direction of arrow (3).

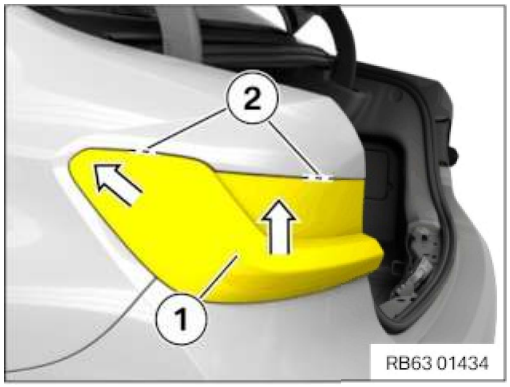
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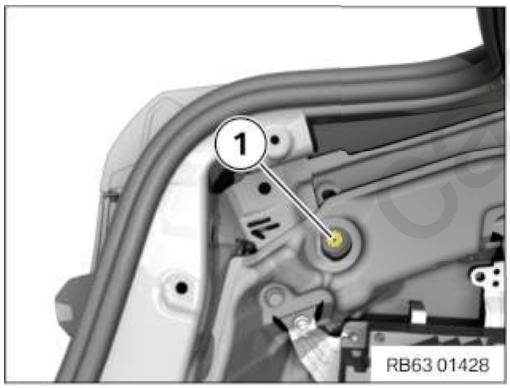
- Position the rear light on the side panel (1) on the side panel (2).



- Position the nut (1).



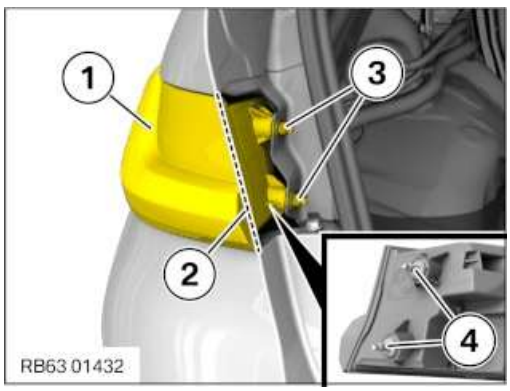
- Position the rear light on the side panel (1) to the front at the top.
- Move the contact surfaces (2) of the rear light on the side panel (1) upwards (arrow) so that they are in place.
- Hold the rear light on the side panel (1) in position.



- Tighten nut (1).

Rear light to side panel

Nut M5, AF 8		Tightening torque	3 Nm



- Position nuts (3).
- Align rear light on the side panel (1) with the connecting line (2).

  The alignment is done through threaded inserts (4) on the rear light on the side panel (2).
- If necessary, correct the position of the rear light on the side panel (1) by twisting threaded inserts (4).
- Tighten nuts (3).

Rear light to side panel

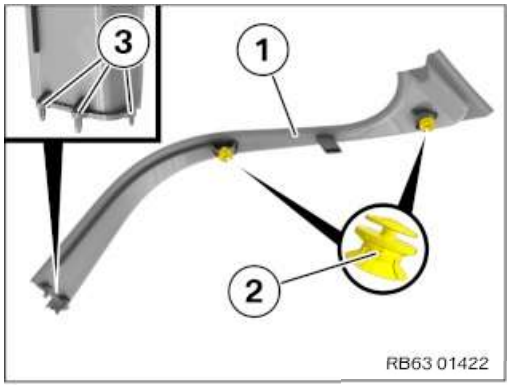
Nut M5, AF 10		Tightening torque	4 Nm

13 – Installing both trims of the water channel

NOTICE

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

▸ **Install the trim in the water channel**



Check

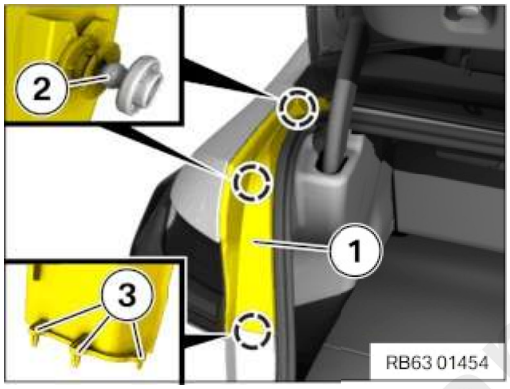
- Check the clips (2) for damage and renew if necessary.
- Check the guides (3) for damage.

Result

» The guides are damaged.

Measure

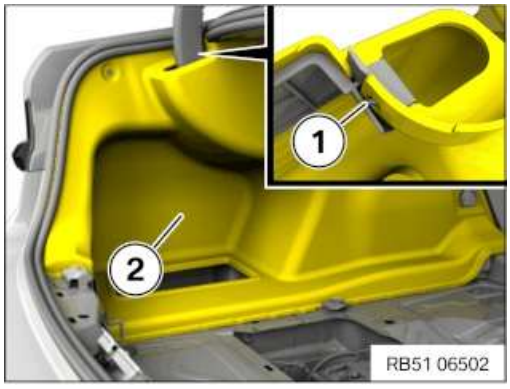
- Renew trim in the water channel .



- Insert the trim in the water channel (1) in the guides (3).
- Clip in the water channel trim (1) from the front into the ball pin (2).

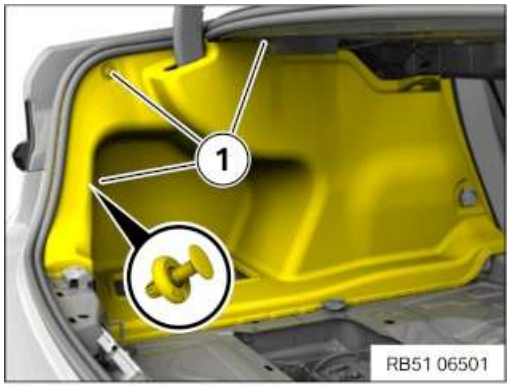
14 – Installing both luggage compartment wheel arch trim panels partially

▸ **Partially installing the left luggage compartment wheel arch trim panel**



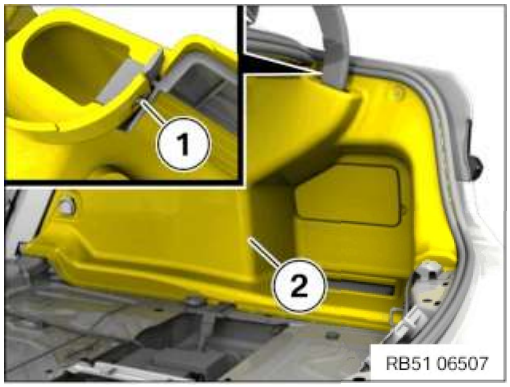
- Feed the luggage compartment wheel arch trim panel (2) in the rear area under the sealing lip of the seal of the tailgate.
- Feed the tab of the luggage compartment wheel arch trim panel (2) on the outer side of the hinge into the stop on the trim (1).

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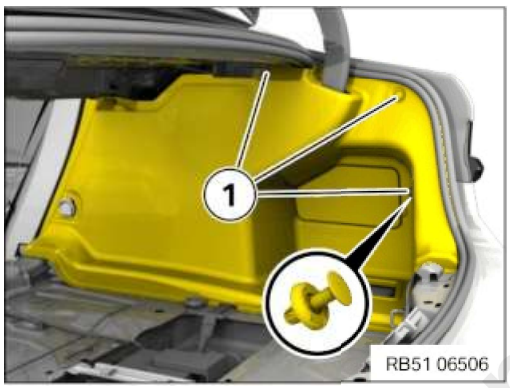


- Secure expanding rivet (1).

▶ **Partially installing right luggage compartment wheel arch trim panel**

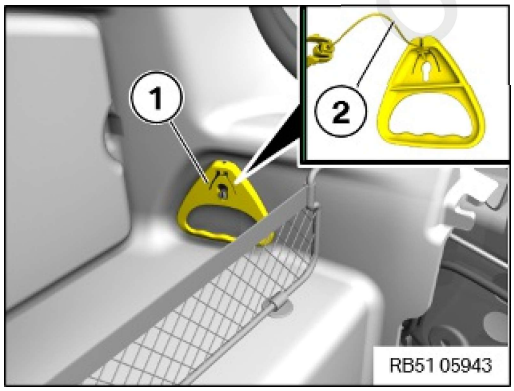


- Guide luggage compartment wheel arch trim panel (2) in the rear area under the sealing lip of the seal for tailgate.
- Feed the tab of the luggage compartment wheel arch trim panel (2) on the outer side of the hinge into the stop on the trim (1).



- Secure expanding rivet (1).

▷ **If installed: Installing the emergency tailgate release handle (additional work for US version)**

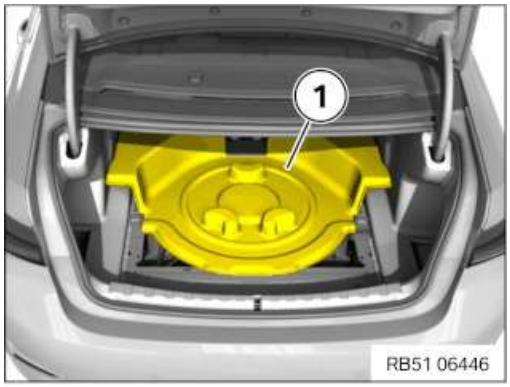


- Attach the Bowden cable (2).
- Fasten emergency tailgate release handle (1) to the bracket.

◁

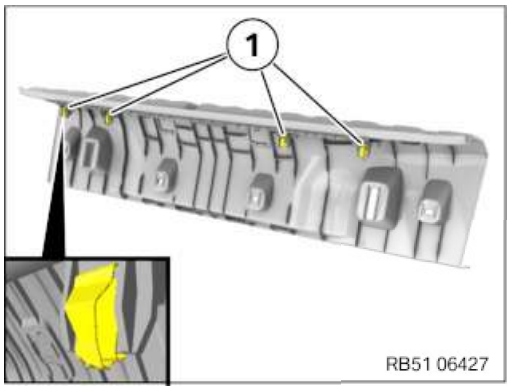
15 – Install the luggage compartment well in front

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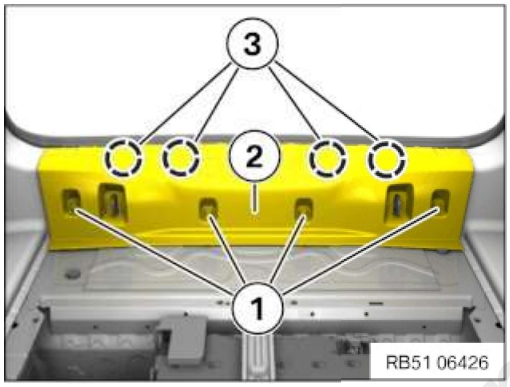


- Feed in and insert front luggage compartment well (1) on the seat belt strap.

16 – Installing loading edge trim

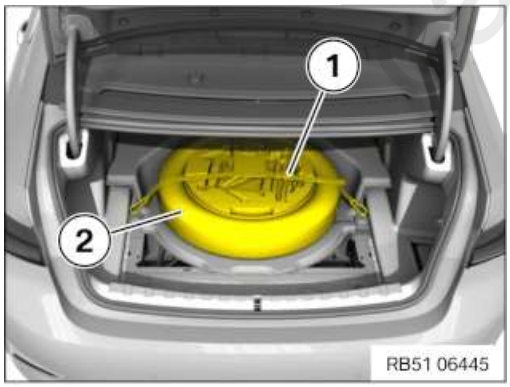


- Check the clamps (1) for damage and renew if necessary.



- Insert the loading edge trim (2) under the sealing lip of the tailgate seal.
- Fit the trim of the loading edge (2) at the latch mechanisms (3) and clip it in to the bottom.
- Secure expanding rivet (1).

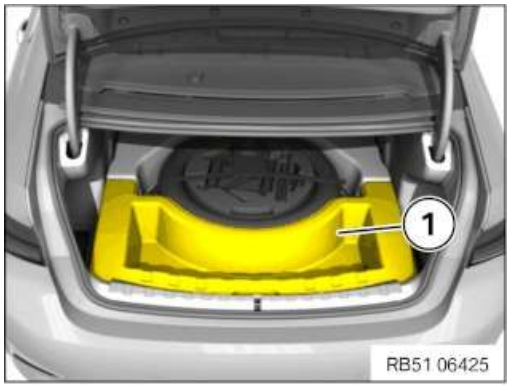
17 – If installed: Install the emergency wheel



- Install the emergency wheel (2) with the insert.
- Position the seat belt strap above the emergency wheel and close the buckle on the seat belt strap (1).

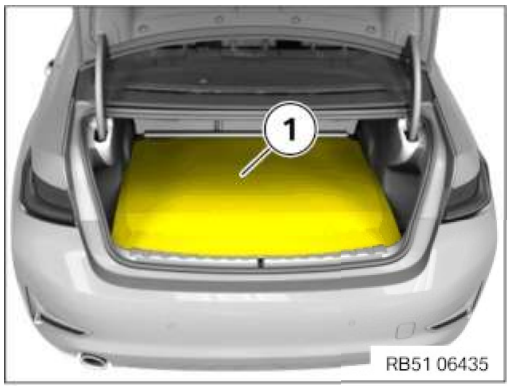
► **Installing rear luggage compartment well**

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- Install rear luggage compartment well (1).

18 – Installing the luggage compartment floor trim panel



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

Additional Information

Overview of Tightening Torques

Mounting for rear bumper panel on support for rear bumper panel			Used in step 1011
Hexagon screw for thermoplastic		Tightening torque	2,6 Nm

Rear bumper panel guide on rear centre guide			Used in step 11
Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

Rear bumper panel to rear side panel			Used in step 11
Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

Rear light to side panel			Used in step 12
Nut M5, AF 8		Tightening torque	3 Nm

Rear light to side panel			Used in step 12
Nut M5, AF 10		Tightening torque	4 Nm

Links

Repair instructions	**Used in step**
61 13 ... Unlocking and disconnecting different plug connections	7

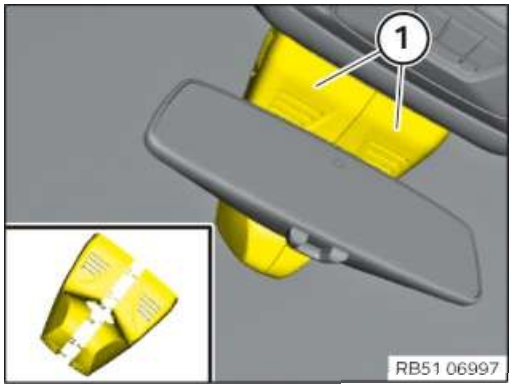
cardiagn.com

61 35 179 Removing and installing the rain-light-solar-condensation sensor

PRELIMINARY WORK

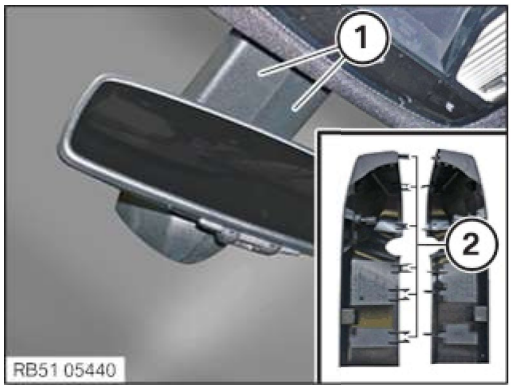
1 – Removing the covers for the interior mirror

- **Version A:**



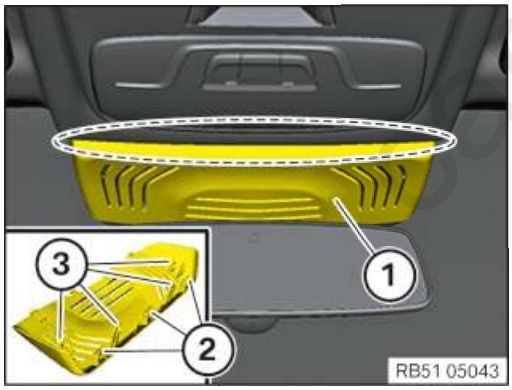
- Release the cover (1) at the centre from the latch mechanisms (2) with a suitable plastic wedge and remove.

- **Version B:**

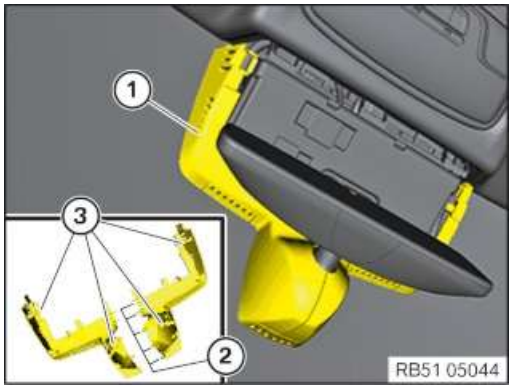


- Release the cover (1) from the latch mechanisms (2) with a suitable plastic wedge and remove sideways.

- **Version C:**



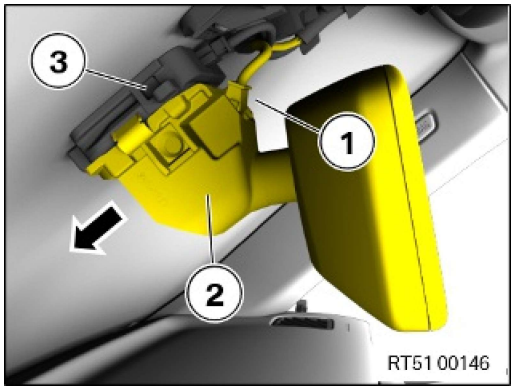
- Detach cover (1) from the clamps (2) in the marked area using a suitable plastic wedge and pull down a certain distance.
- Release cover (1) at the retaining lugs (3) and remove from the guides to the rear.



- Release cover (1) from the latch mechanisms (2) and (3) and remove sideways.
- Remove cover (1) from mirror base (2).

2 – Remove inside mirror

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TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.

- Unlock plug connection (1) and disconnect.

RISK OF DAMAGE

Damage to the component.

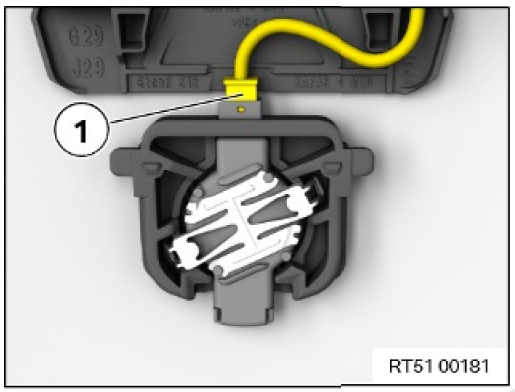
Excessive force may damage the component.

- Handle component carefully.

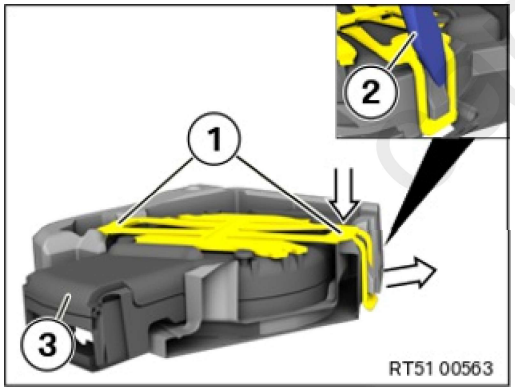
- Jerk and pull off the interior mirror (2) in the direction of the arrow from the mirror base (3).

MAIN WORK

3 – Remove rain-light-solar-condensation sensor



- Unlock plug connection (1) and disconnect.



- Push in retaining springs (1) on both sides and unlock the lock by means of a screwdriver (2) in the direction of the arrow.

RISK OF DAMAGE

Damage to silicone surface.

A damaged silicone surface can lead to malfunctioning of the rain-light-solar-condensation sensor.

- Do not touch or damage the silicone-coated surface on the rain-light-solar-condensation sensor.
- After releasing lock, wait approx. 30 min. at 20°C for silicone surface to relax.

- Pull the rain-light-solar-condensation sensor (3) slowly off the windscreen. At the same time, monitor the release of the silicone area from outside.

  The silicone surface must evenly loosen from the windscreen, if applicable, lower the pull-off force.

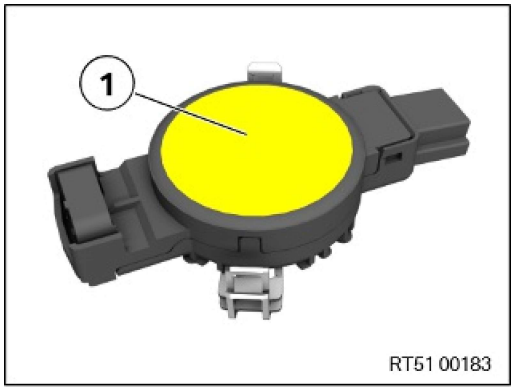
- Feed the rain-light-solar-condensation sensor (3) out of the holder.

Note: When replacing windscreen: Immediately install the rain-light-solar-condensation sensor on the new windscreen.

4 – Installing the rain-light-solar-condensation sensor

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4 – Installing the rain-light-solar-condensation sensor



Check

RISK OF DAMAGE

Damage to silicone surface.

A damaged silicone surface can lead to malfunctioning of the rain-light-solar-condensation sensor.

- Do not touch or damage the silicone-coated surface on the rain-light-solar-condensation sensor.
- After releasing lock, wait approx. 30 min. at 20°C for silicone surface to relax.

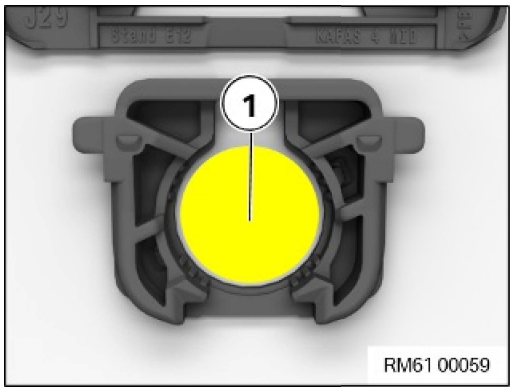
- Check silicon surface (1) for damage.

Result

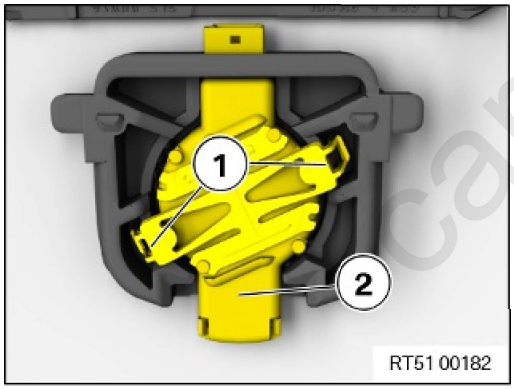
» Silicone surface (1) is damaged.

Measure

- Replace rain-light-solar-condensation sensor.

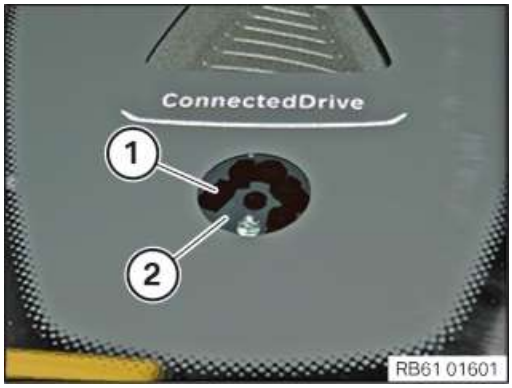


- Carefully clean windscreen in the contact area (1) of rain-light-solar-condensation sensor.



- Insert the rain-light-solar-condensation sensor (2) into the holder and press on centred on the retaining springs (1).
- Successively press down the retaining springs (1) on each side to lock it.

Check



- Check contact surfaces for air pockets from the outside.

  Visible shadows (1) are not air pockets, but the optical element of the rain-light-solar-condensation sensor (2). The shades (1) do not represent any functional limitation.

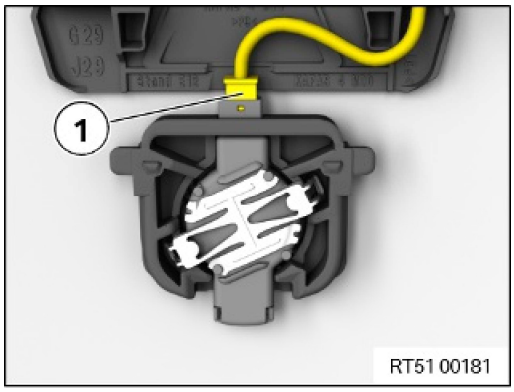
Result

» Contact surface has air pockets.

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Measure

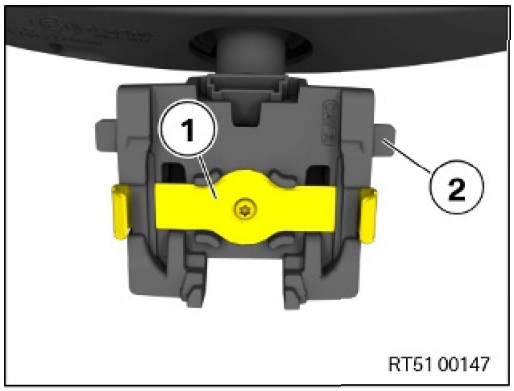
- Remove the rain-light-solar-condensation sensor and install again.



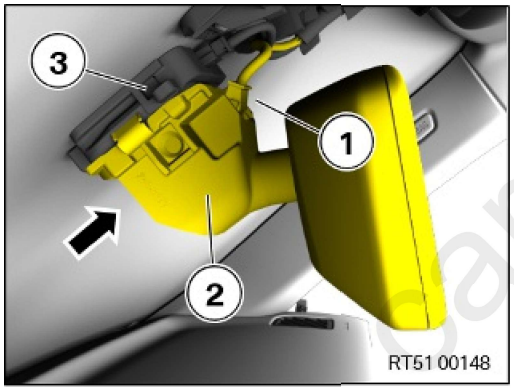
- Connect connectors (1) and lock.

POSTPROCESSES

5 – Install interior mirror



- Check the clamp (1) on both sides of the mirror base (2) for damage and renew as needed.



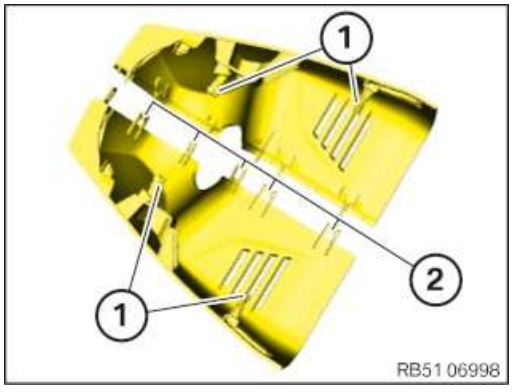
TECHNICAL INFORMATION

Carry out the work at temperatures between 18 °C and 23 °C only.

- Position the interior mirror (2) at the mirror base and slide it on in direction of the arrow.
- Check the correct installation position of the interior mirror (2) at the mirror base (3).
- Connect connectors (1) and lock.

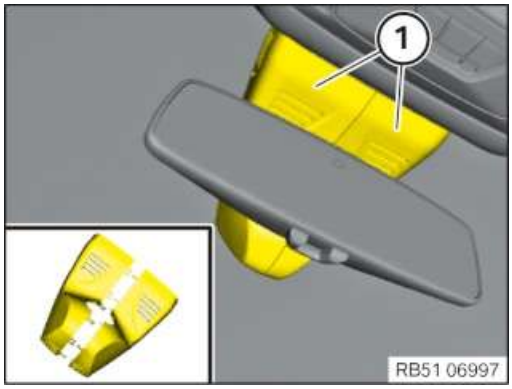
6 – Installing the covers for the interior mirror

- **Version A:**



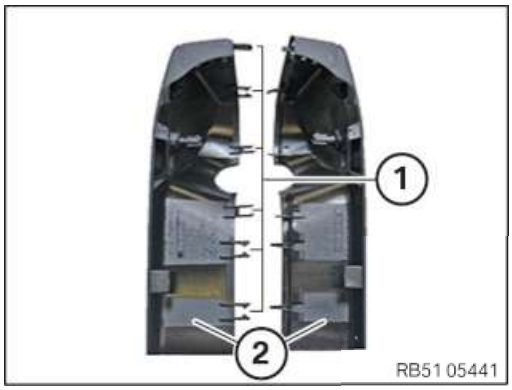
- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.

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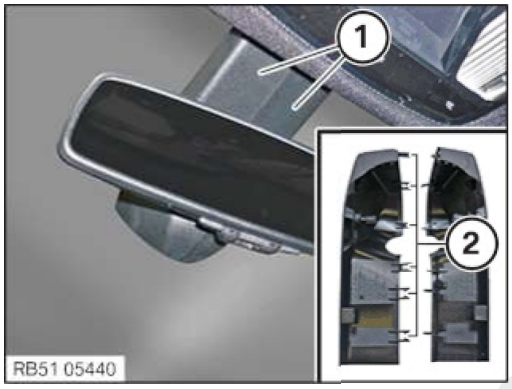
- Feed cover (1) in and lock.

- **Version B:**



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

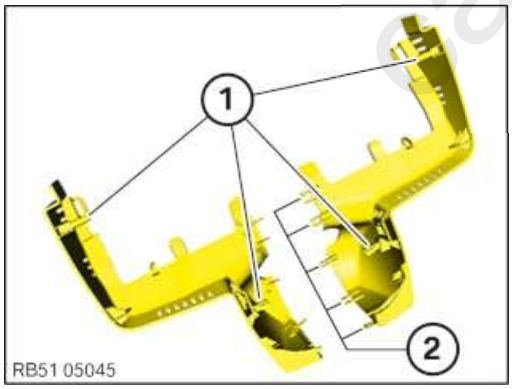
  The covers (2) must not be damaged or missing.



- Position the covers (1) correctly on the mirror and engage with the latch mechanisms (2).

- **Version C:**

Check



- Check the latch mechanisms (1) and (2) of the covers for damage.

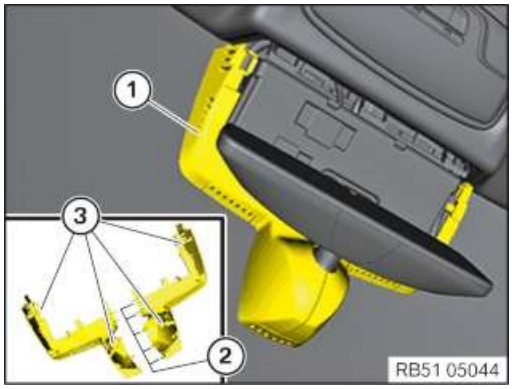
Result

» The latch mechanism is damaged.

Measure

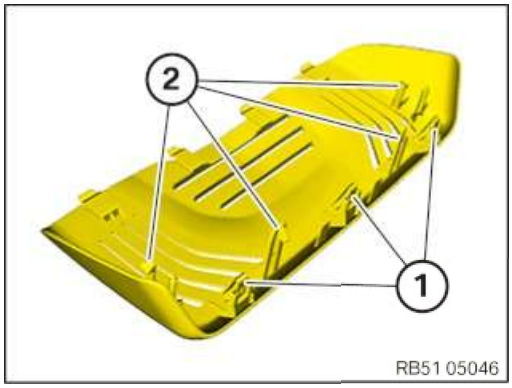
- Renew the cover.

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- Guide in cover (1) on left and right and engage using latch mechanisms (2) and (3).

Check



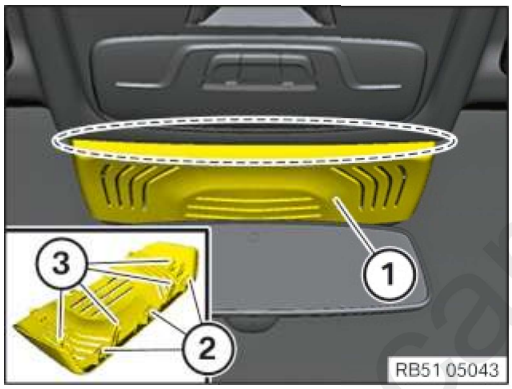
- Check clamps (1) for damage; renew if necessary.
- Check latch mechanisms (2) for damage.

Result

» The latch mechanism is damaged.

Measure

- Renew the cover.



- Guide cover (1) into front guides and engage using retaining lugs (3) and clamps (2).

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61 35 243 Removing and installing top non-contact tailgate opening sensor line

PRELIMINARY WORK

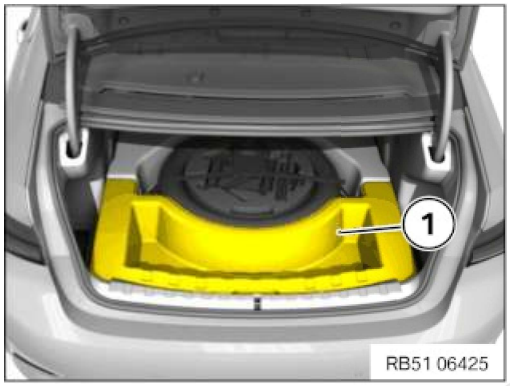
1 – Removing the luggage compartment floor trim panel



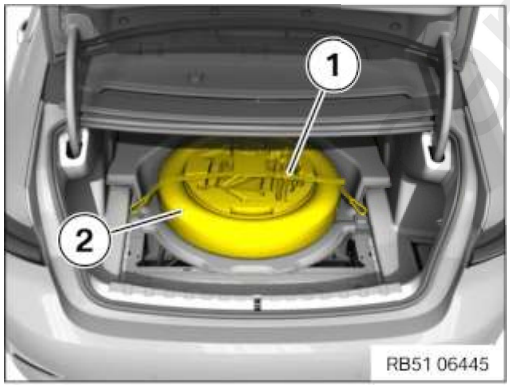
- Remove luggage compartment floor trim panel (1).

2 – If installed: Removing the compact spare wheel

▸ **Removing rear luggage compartment well**

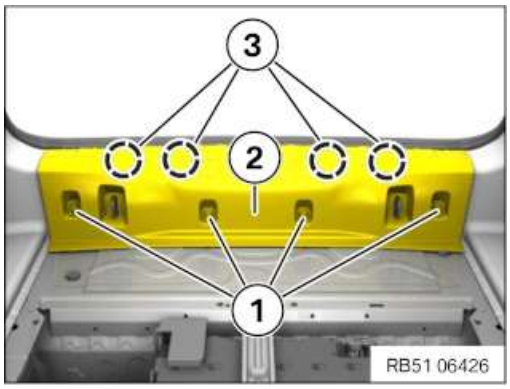


- Remove rear luggage compartment well (1).



- Open buckle on seat belt strap (1) and set it aside.
- Remove emergency wheel (2) with the insert.

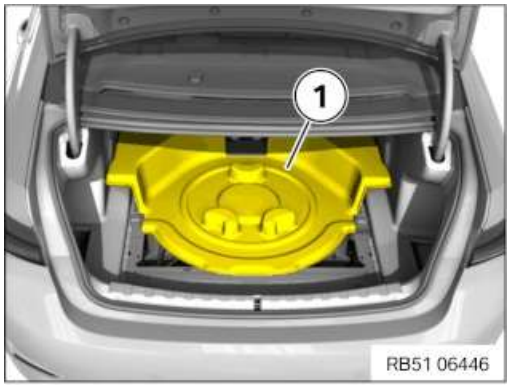
3 – Removing the loading edge trim



- Loosen the expanding rivet (1).
- Unclip loading edge trim(2) upwards from latch mechanisms (3).
- Guide out and remove loading edge trim (2) under the sealing lip of the tailgate seal.

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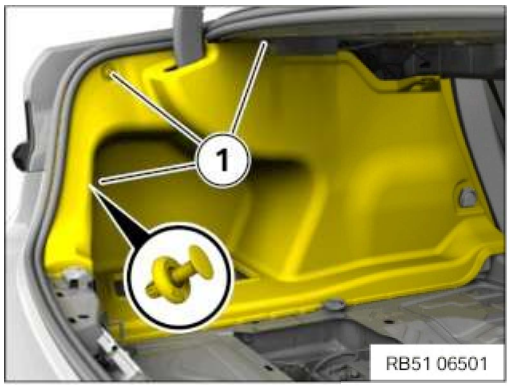
4 – Removing front luggage compartment well



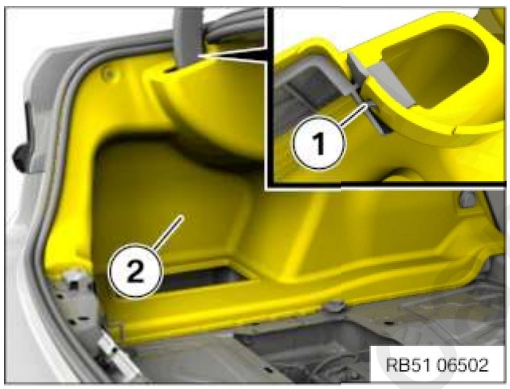
- Guide out and remove front luggage compartment well (1) on the seat belt strap.

5 – Removing both luggage compartment wheel arch trim panels partially

▸ Partially remove luggage compartment wheel arch trim on left



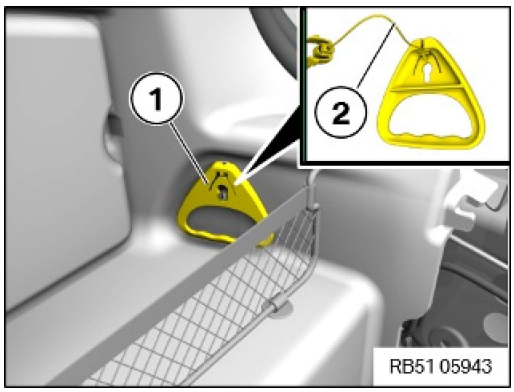
- Loosen the expanding rivet (1).



- Press the tab for luggage compartment wheel arch trim panel (2) on the outer side of the hinge to the front using the stop on trim (1).
- Guide out luggage compartment wheel arch trim panel (2) under the sealing lip of the tailgate seal and release it in the rear area.

▸ Partially remove luggage compartment wheel arch panel on right

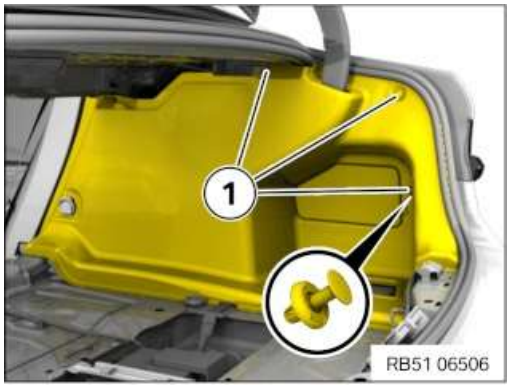
▹ If installed: Remove the emergency release handle for the tailgate (additional work in the US version)



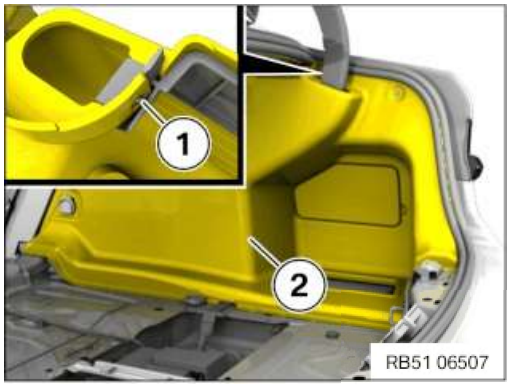
- Release the emergency release handle for tailgate (1) from the holder.
- Detach Bowden cable (2) and remove the emergency release handle for tailgate (1).

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- Loosen the expanding rivet (1).



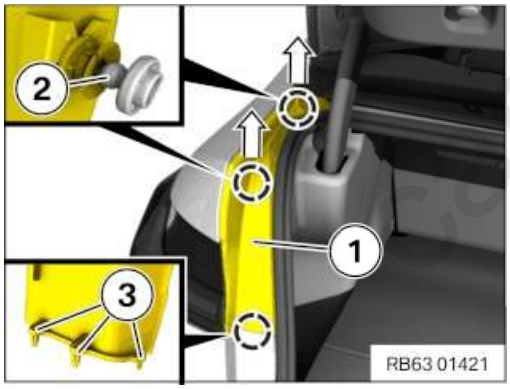
- Press the tab for luggage compartment wheel arch trim panel (2) on the outer side of the hinge to the front using the stop on trim (1).
- Guide out luggage compartment wheel arch trim panel (2) under the sealing lip of the tailgate seal and release it in the rear area.

6 – Removing both trims of water channel

NOTICE

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

▸ **Remove the trim in the water channel**



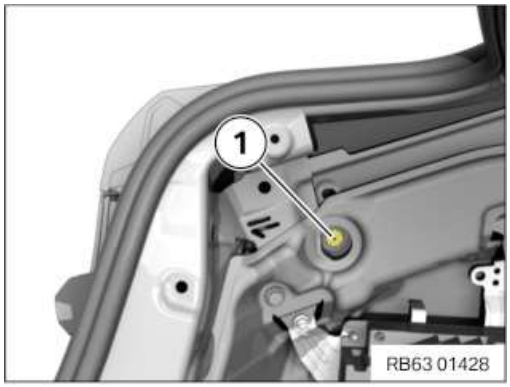
- Unclip the trim in the water channel (1) from the ball pins (2) towards the top.
- Release the trim in the water channel (1) from the guides (3) and remove it.

7 – Remove both rear lights from the side panel

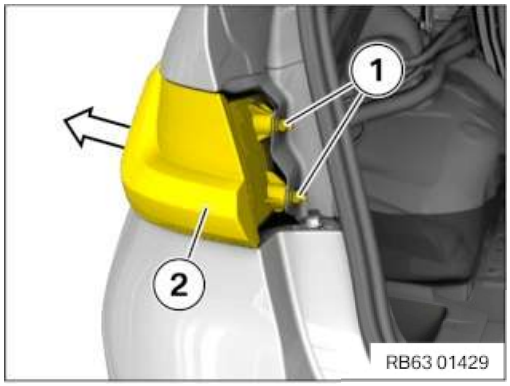
NOTICE

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

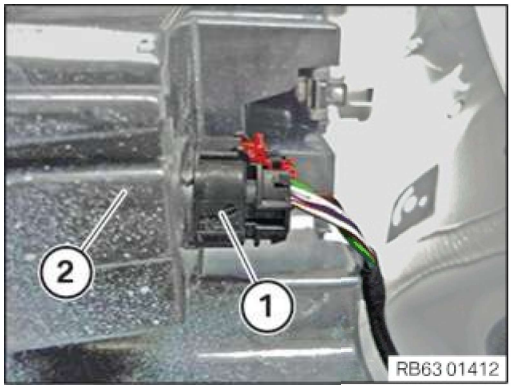
▸ **Remove the rear light on the side panel**



- Loosen nut (1).



- Release the nuts (1) and feed out the rear light on the side panel (2) in the direction of arrow.



TECHNICAL INFORMATION

Observe note on unlocking and disconnecting plug connections.
For additional information see: 6113 ... Unlocking and disconnecting different plug connections

- Unlock and disconnect plug connection (1) as described in position #28 in additional information.
- Remove the rear light on the side panel (2).

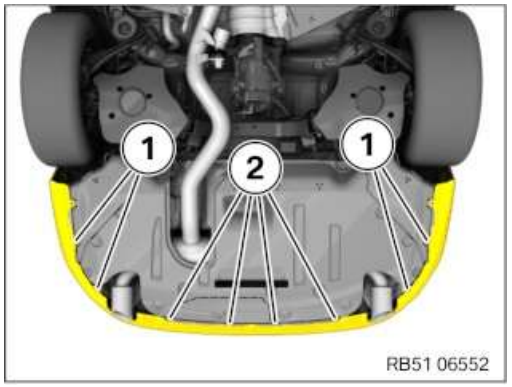
8 – Remove rear bumper panel



NOTICE

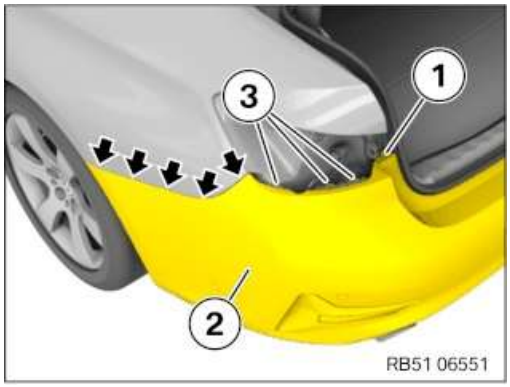
Perform the operations on the left and right side.

- Loosen screws (1).



- Loosen screws (1).
- Release the bumper panel on latch mechanisms (2) with a suitable tool.

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NOTICE

Perform the operations on the left and right side.

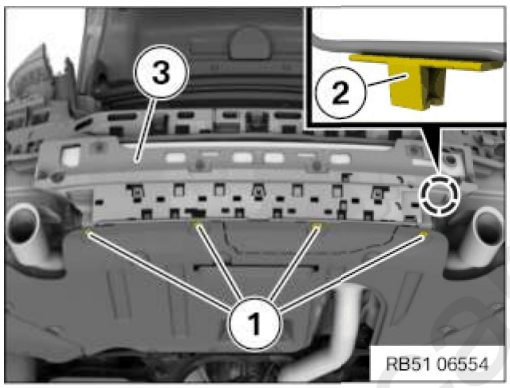
- Loosen screw (1).
- Release bumper panel (2) in the area of the rear light housing from latch mechanisms (3) with a suitable tool.
- Release side bumper panel (2) from the remaining latch mechanisms (arrows).



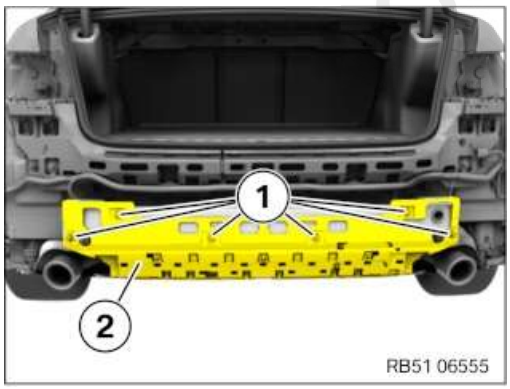
- Remove bumper panel (2) straight to the rear with the help of an auxiliary person.
- Unlock all plug connections and disconnect.
- Remove the bumper panel (1).

MAIN WORK

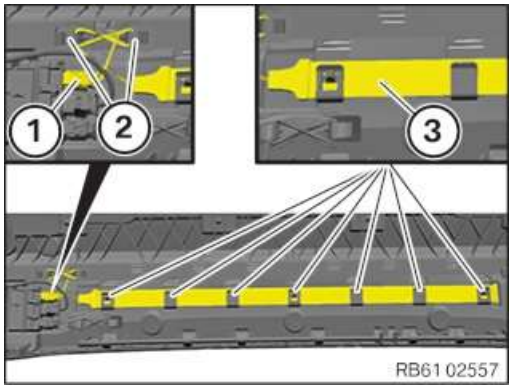
9 – Remove the sensor line for the contactless tailgate opening (top)



- Loosen screws (1).
- Unclip the cable clip (2) on the inside of the brace for the rear bumper (3).

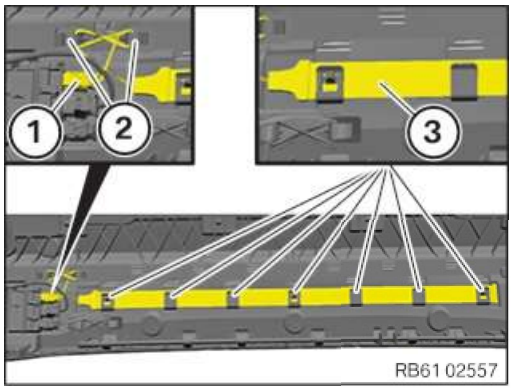


- Open expanding rivets (1) and remove the brace for the rear bumper (2).

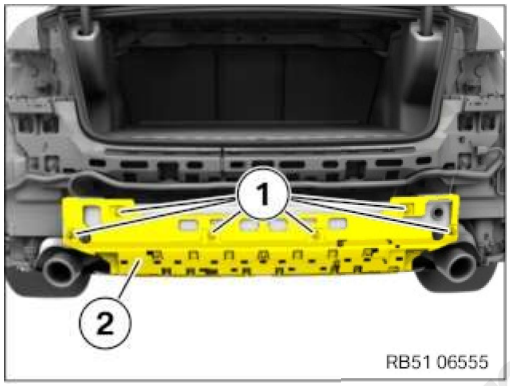


- Unlock and disconnect connector (1).
- Release cable from brackets (2).
- Unclip top sensor line (3) upwards.

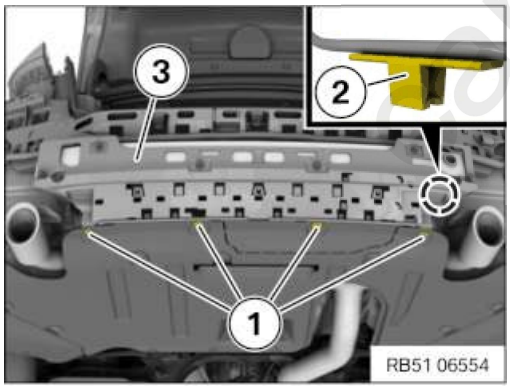
10 – Install the sensor line for the contactless tailgate opening (top)



- Clip in top sensor line (3) from above.
- Fasten the cable at the clips (2).
- Connect connector (1).



- Position brace for the rear bumper (2) on the support.
- Install the expanding rivet (1).



- Clip in the cable clip (2) on the inside of the brace for the rear bumper (3).
- Tighten the screws (1).

Mounting for rear bumper panel on support for rear bumper panel

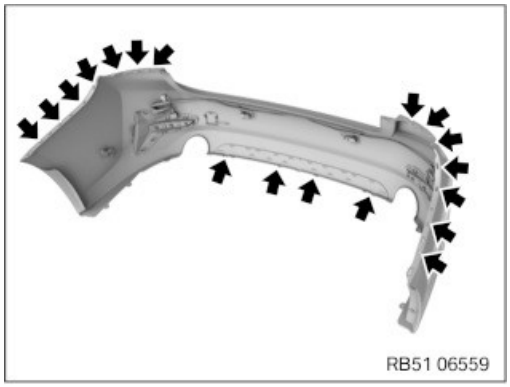
Hexagon screw for thermoplastic		Tightening torque	2,6 Nm

POSTPROCESSES

11 – Install rear bumper panel

Check

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- Check the latch mechanisms (arrows) for damage.

Result

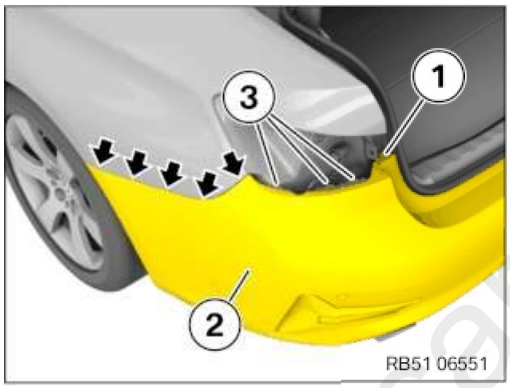
» Latch mechanisms are damaged.

Measure

- Renew the bumper panel.



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



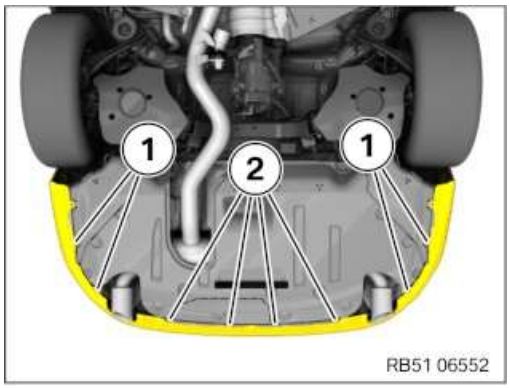
NOTICE

Perform the operations on the left and right side.

- Clip bumper panel (2) on the side in the latch mechanisms (arrows).
- Clip bumper panel (2) in the area of the rear light housing in latch mechanisms (3).
- Tighten down screw (1).

Rear bumper panel guide on rear centre guide

Hexagon screw for thermoplastic		Tightening torque	2,5 Nm



- Clip bumper panel into latch mechanisms (2).
- Tighten the screws (1).

Mounting for rear bumper panel on support for rear bumper panel

Hexagon screw for thermoplastic		Tightening torque	2,6 Nm

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NOTICE

Perform the operations on the left and right side.

- Tighten the screws (1).

Rear bumper panel to rear side panel

Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

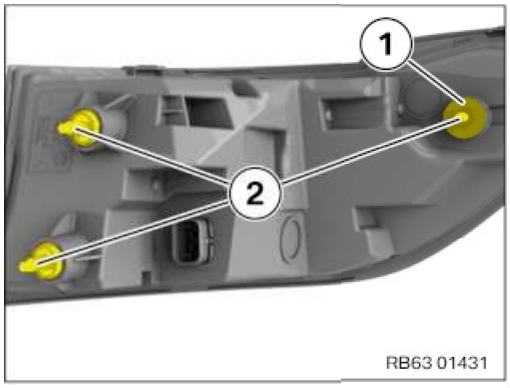
12 – Install both rear lights on the side panel

NOTICE

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

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

Check



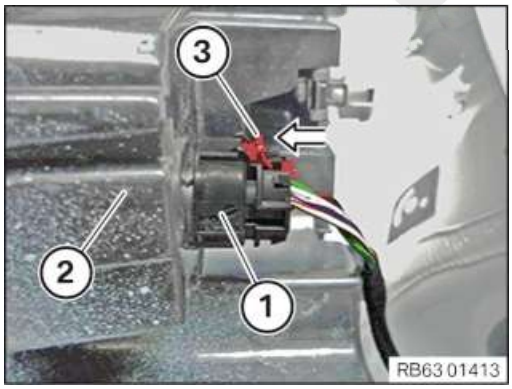
- Check the seal (1) for damage and renew if necessary.
- Check the threaded inserts (2) for damage.

Result

» The threaded inserts are damaged.

Measure

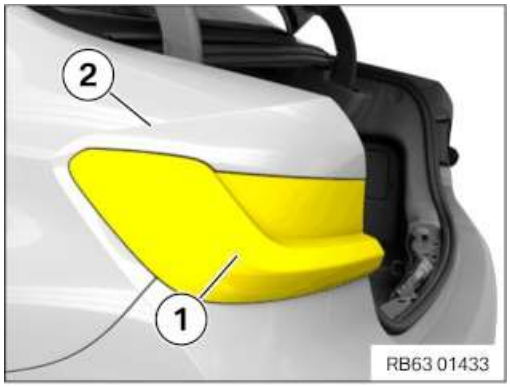
- Replace rear light.



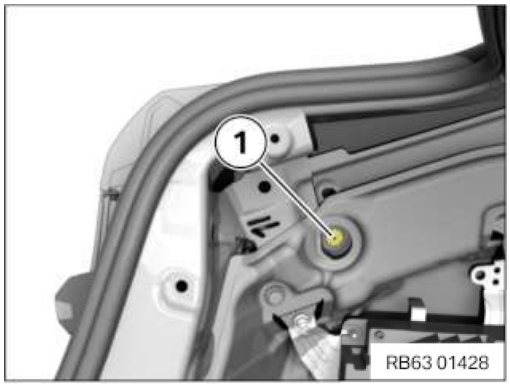
- Connect the connector (1) to the rear light on the side panel (2).

  The connector (1) must engage audibly.
- Lock the lock in direction of arrow (3).

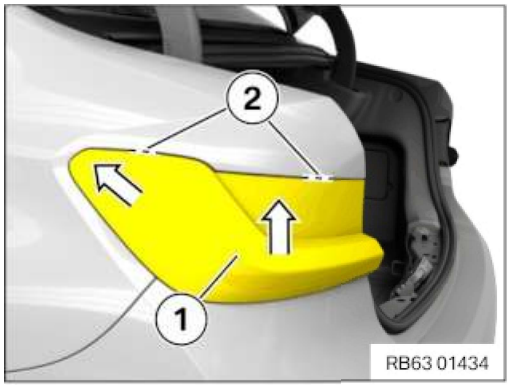
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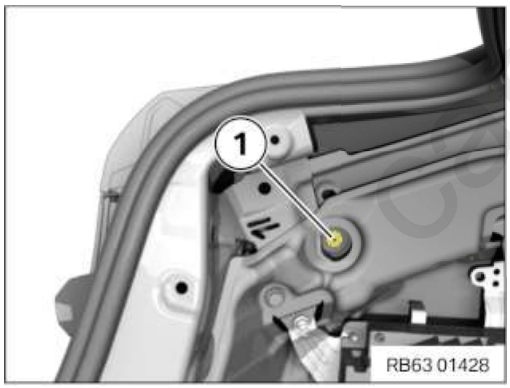
- Position the rear light on the side panel (1) on the side panel (2).



- Position the nut (1).



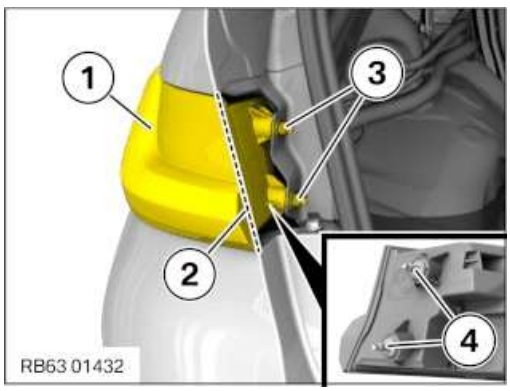
- Position the rear light on the side panel (1) to the front at the top.
- Move the contact surfaces (2) of the rear light on the side panel (1) upwards (arrow) so that they are in place.
- Hold the rear light on the side panel (1) in position.



- Tighten nut (1).

Rear light to side panel

Nut M5, AF 8		Tightening torque	3 Nm



- Position nuts (3).
- Align rear light on the side panel (1) with the connecting line (2).

  The alignment is done through threaded inserts (4) on the rear light on the side panel (2).
- If necessary, correct the position of the rear light on the side panel (1) by twisting threaded inserts (4).
- Tighten nuts (3).

Rear light to side panel

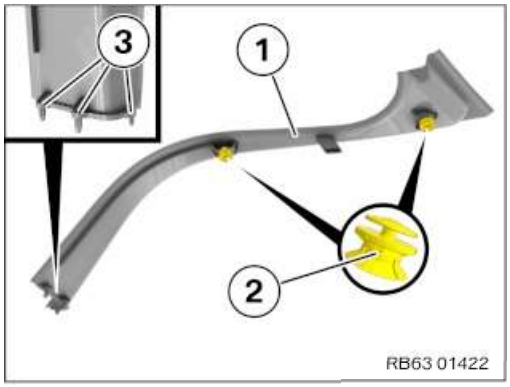
Nut M5, AF 10		Tightening torque	4 Nm

13 – Installing both trims of the water channel

NOTICE

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

▸ **Install the trim in the water channel**



Check

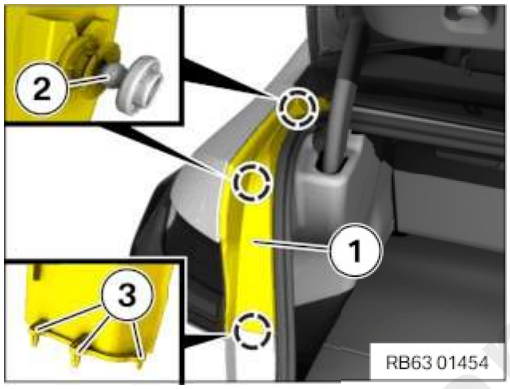
- Check the clips (2) for damage and renew if necessary.
- Check the guides (3) for damage.

Result

» The guides are damaged.

Measure

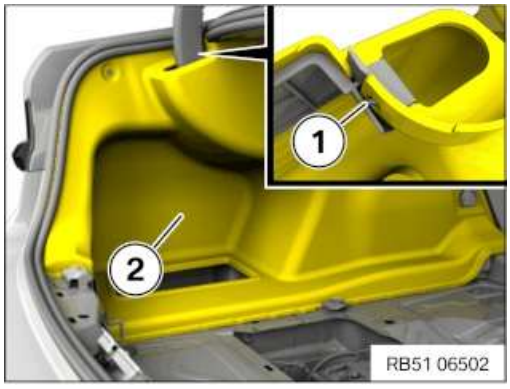
- Renew trim in the water channel .



- Insert the trim in the water channel (1) in the guides (3).
- Clip in the water channel trim (1) from the front into the ball pin (2).

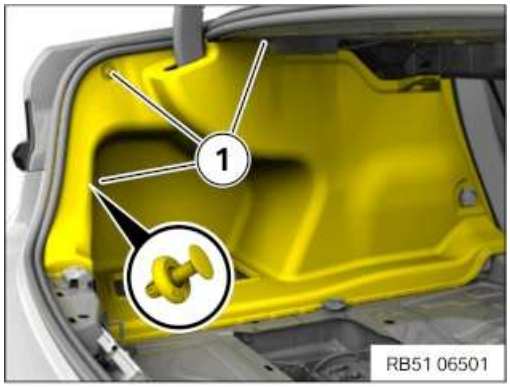
14 – Installing both luggage compartment wheel arch trim panels partially

▸ **Partially installing the left luggage compartment wheel arch trim panel**



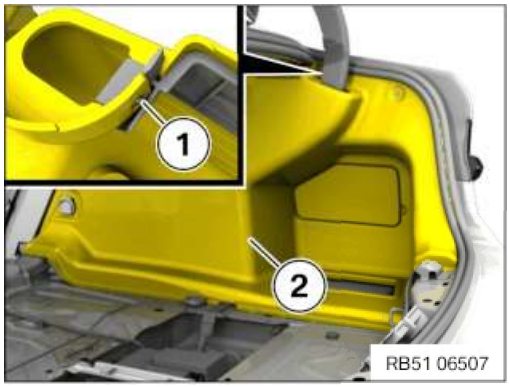
- Feed the luggage compartment wheel arch trim panel (2) in the rear area under the sealing lip of the seal of the tailgate.
- Feed the tab of the luggage compartment wheel arch trim panel (2) on the outer side of the hinge into the stop on the trim (1).

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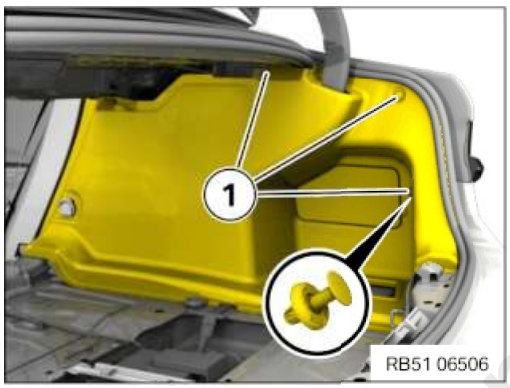


- Secure expanding rivet (1).

▶ **Partially installing right luggage compartment wheel arch trim panel**

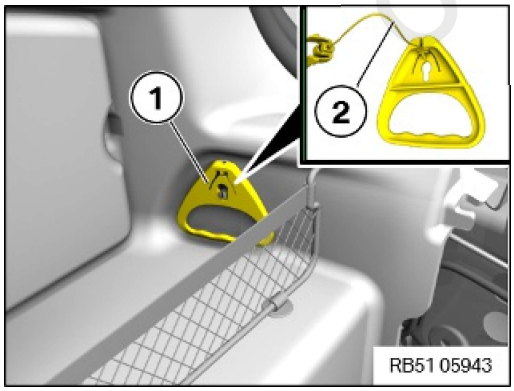


- Guide luggage compartment wheel arch trim panel (2) in the rear area under the sealing lip of the seal for tailgate.
- Feed the tab of the luggage compartment wheel arch trim panel (2) on the outer side of the hinge into the stop on the trim (1).



- Secure expanding rivet (1).

▷ **If installed: Installing the emergency tailgate release handle (additional work for US version)**

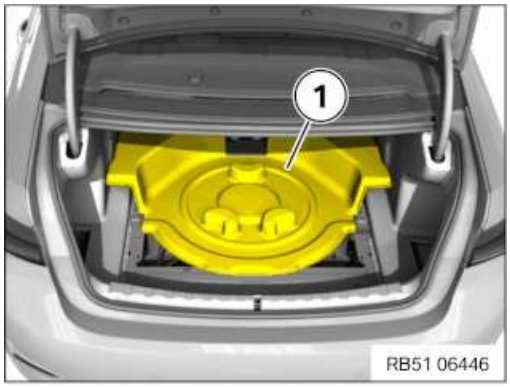


- Attach the Bowden cable (2).
- Fasten emergency tailgate release handle (1) to the bracket.

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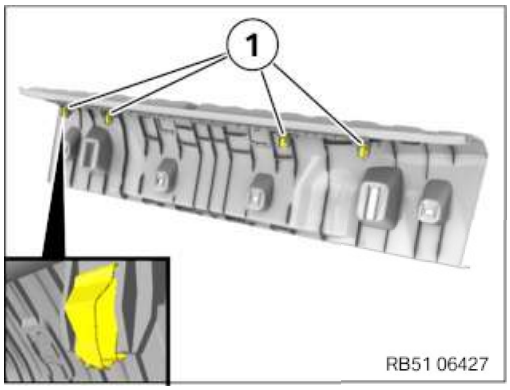
15 – Install the luggage compartment well in front

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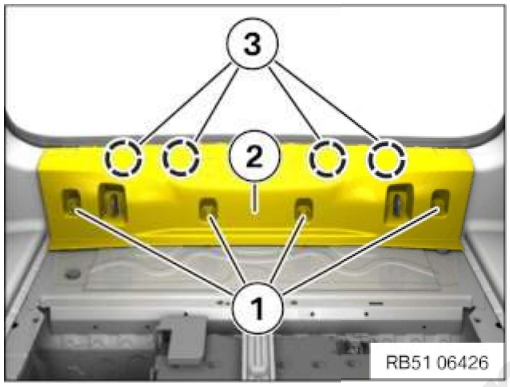


- Feed in and insert front luggage compartment well (1) on the seat belt strap.

16 – Installing loading edge trim

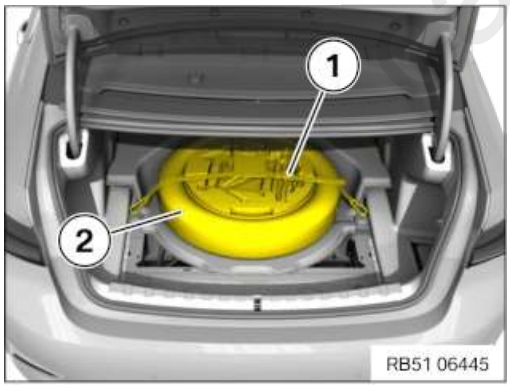


- Check the clamps (1) for damage and renew if necessary.



- Insert the loading edge trim (2) under the sealing lip of the tailgate seal.
- Fit the trim of the loading edge (2) at the latch mechanisms (3) and clip it in to the bottom.
- Secure expanding rivet (1).

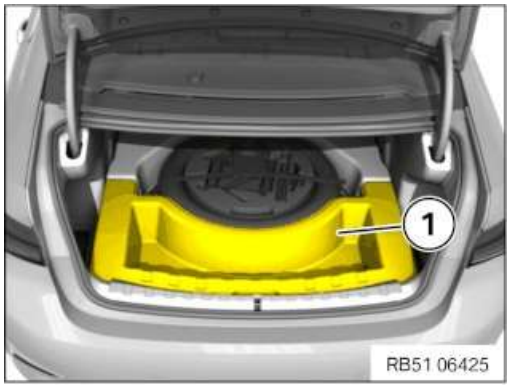
17 – If installed: Install the emergency wheel



- Install the emergency wheel (2) with the insert.
- Position the seat belt strap above the emergency wheel and close the buckle on the seat belt strap (1).

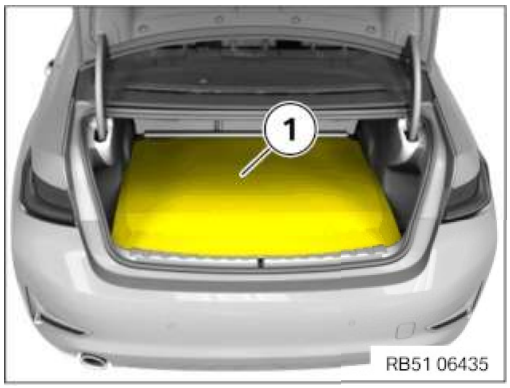
► **Installing rear luggage compartment well**

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- Install rear luggage compartment well (1).

18 – Installing the luggage compartment floor trim panel



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

Additional Information

Overview of Tightening Torques

Mounting for rear bumper panel on support for rear bumper panel			Used in step 1011
Hexagon screw for thermoplastic		Tightening torque	2,6 Nm

Rear bumper panel guide on rear centre guide			Used in step 11
Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

Rear bumper panel to rear side panel			Used in step 11
Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

Rear light to side panel			Used in step 12
Nut M5, AF 8		Tightening torque	3 Nm

Rear light to side panel			Used in step 12
Nut M5, AF 10		Tightening torque	4 Nm

Links

Repair instructions	**Used in step**
61 13 ... Unlocking and disconnecting different plug connections	7

cardiagn.com

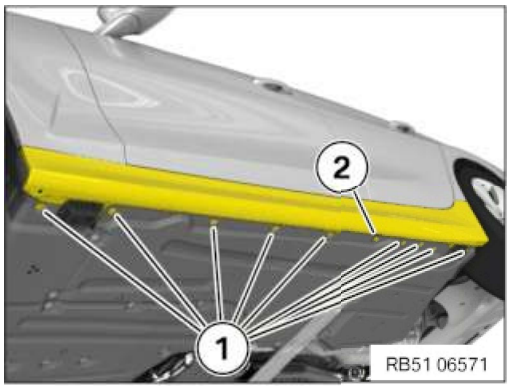
61 35 980 Removing and installing/replacing aerial for Comfort Access on left or right

NOTICE

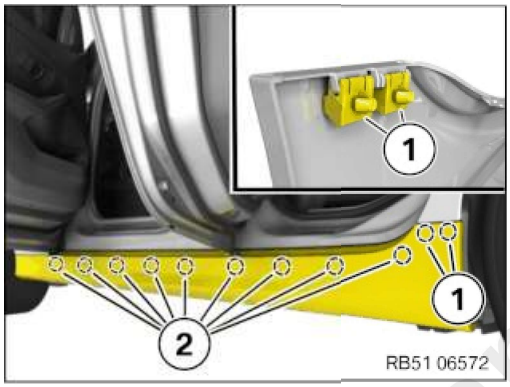
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

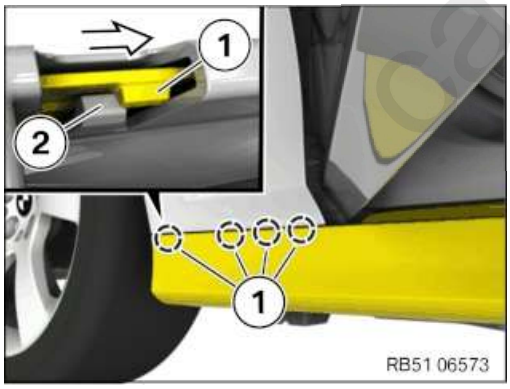
1 – Removing the side sill trim panel



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



- Using a suitable tool, unclip the side sill trim panel starting from the rear with holding clips (1) and from holding clips (2).

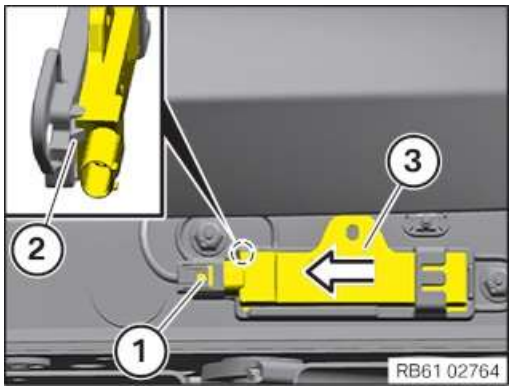


- Slide the side sill trim panel to the front in the direction of the arrow to release latch mechanisms (1) from supporting strip (2).
- Remove the side sill trim panel with the assistance of a second person.

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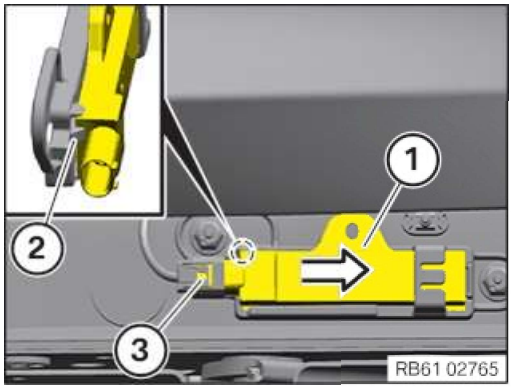
MAIN WORK

2 – Removing aerial for Car Access System (CAS)



- Unlock and disconnect connector (1).
- Release the latch mechanism (2) and remove the aerial (3) in direction of arrow.

3 – Install the aerial for the Car Access System (CAS)

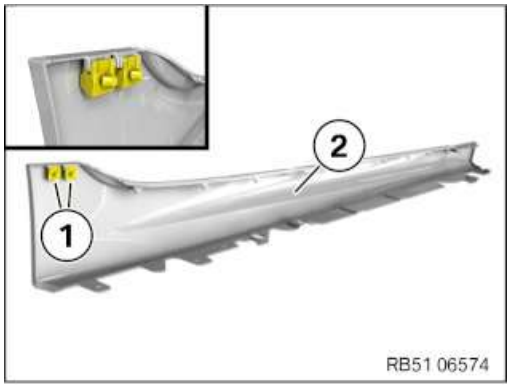


- Install the aerial (2) in the direction of the arrow.
- Check the latch mechanism (2) is fitted correctly.
- Connect connector (3).

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POSTPROCESSES

4 – Installing the side sill trim panel



Check

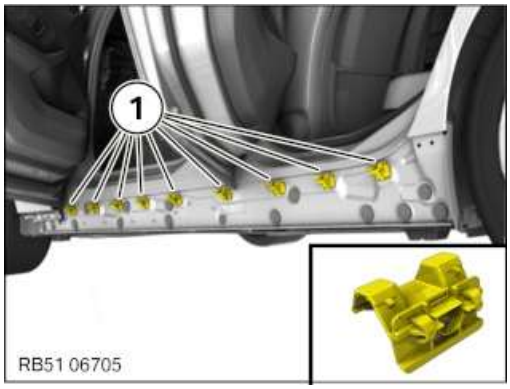
- Check holding clips (1) on the side sill trim panel (2) for damage.

Result

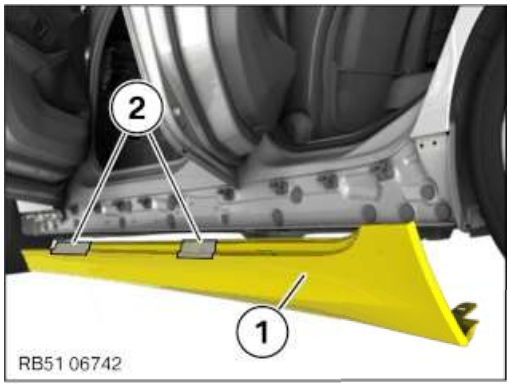
» Holding clip is damaged.

Measure

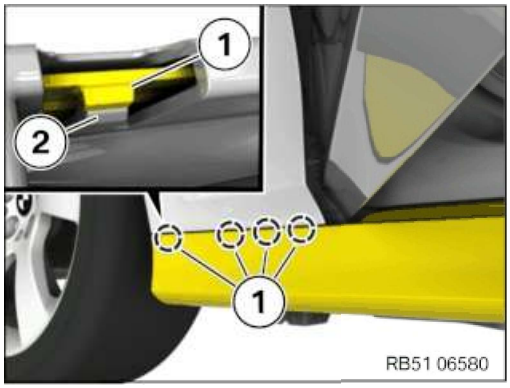
- Replace retaining clip.



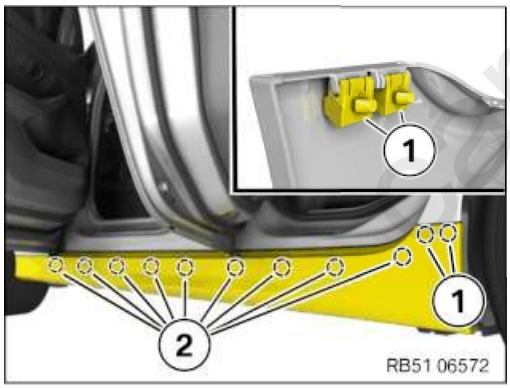
- Check the holding clips (1) for damage and renew if necessary.
- If necessary, clip the holding clips (1) into the body.



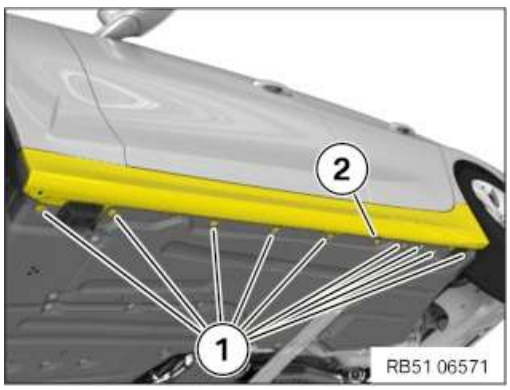
- Mask off side sill trim panel (1) in the areas (2) with adhesive tape.



- Position the side sill trim panel.
- Clip front side sill trim panel with the latch mechanisms (1) into the supporting strip (2).



- Continue to clip side sill trim panel into the holding clips (2) at the rear.
- Clip side sill trim panel with clips (1) into the body.



- Tighten nut (2).

Side sill trim panel to body

Plastic nut with flange for coarse thread		Tightening torque	2,5 Nm

- Tighten the screws (1).

Side sill trim panel to body

Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

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- Remove the adhesive tape (1).

Additional Information

Overview of Tightening Torques

Side sill trim panel to body — Used in step 4

Plastic nut with flange for coarse thread		Tightening torque	2,5 Nm

Side sill trim panel to body — Used in step 4

Hexagon screw for thermoplastic		Tightening torque	2,5 Nm

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61 35 970 Removing and installing/replacing luggage compartment aerial for Comfort Access

PRELIMINARY WORK

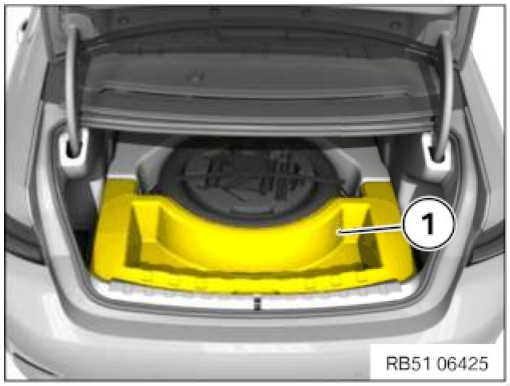
1 – Removing the luggage compartment floor trim panel



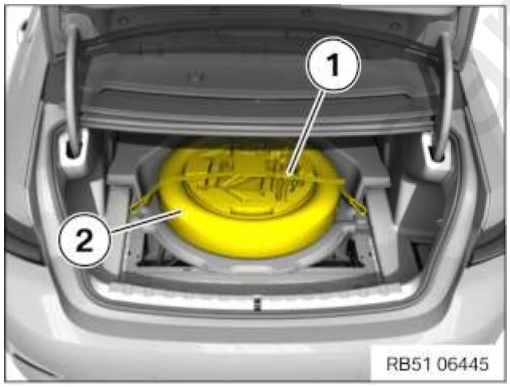
- Remove luggage compartment floor trim panel (1).

2 – If installed: Removing the compact spare wheel

▶ **Removing rear luggage compartment well**

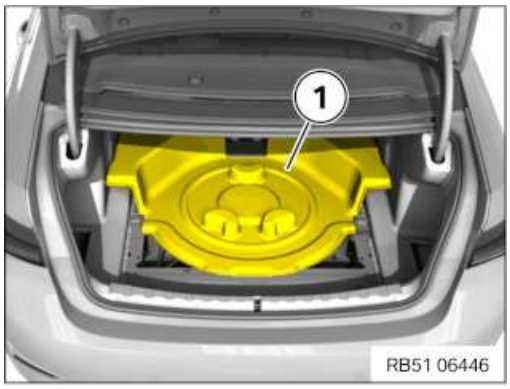


- Remove rear luggage compartment well (1).



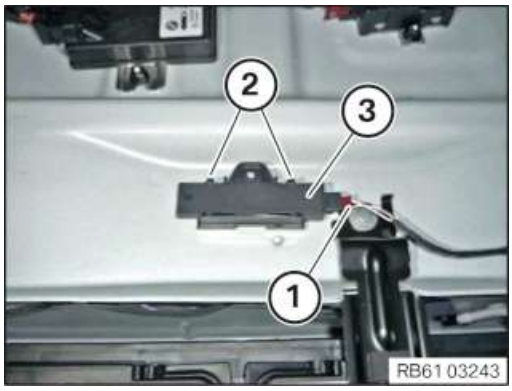
- Open buckle on seat belt strap (1) and set it aside.
- Remove emergency wheel (2) with the insert.

3 – Removing front luggage compartment well



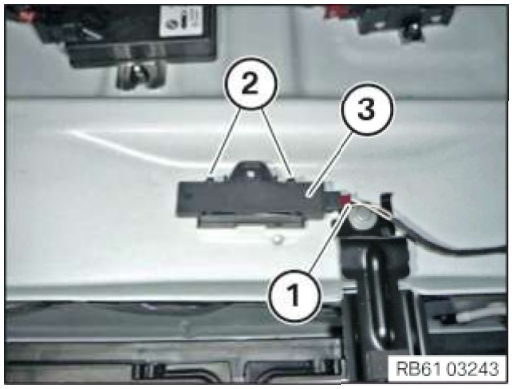
- Guide out and remove front luggage compartment well (1) on the seat belt strap.

4 – Removing the luggage compartment aerial



- Disconnect the connector (1) .
- Unlock the latch mechanisms (2).
- Remove the luggage compartment aerial (3).

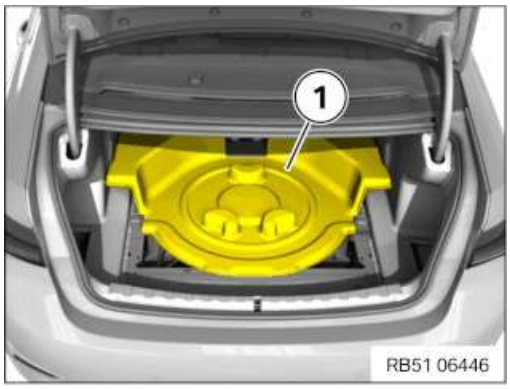
5 – Installing the luggage compartment aerial



- Correctly position the luggage compartment aerial (3) and install it in the latch mechanism (2).
- Connect connector (1).

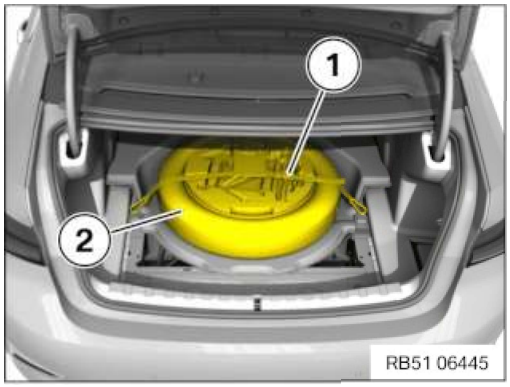
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6 – Install the luggage compartment well in front



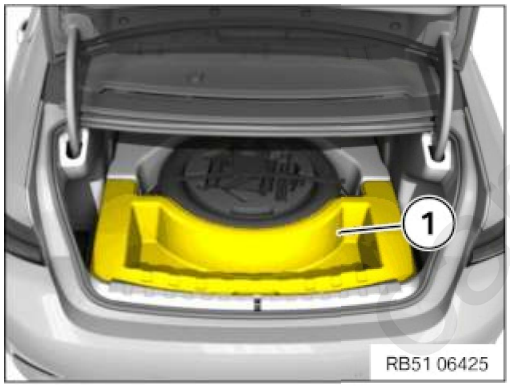
- Feed in and insert front luggage compartment well (1) on the seat belt strap.

7 – If installed: Install the emergency wheel



- Install the emergency wheel (2) with the insert.
- Position the seat belt strap above the emergency wheel and close the buckle on the seat belt strap (1).

▸ **Installing rear luggage compartment well**



- Install rear luggage compartment well (1).

8 – Installing the luggage compartment floor trim panel



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

carfdiagn.com

61 35 021 Removing and installing/replacing storage tray near field communication (NFC)

Prerequisite

- The lid of the front storage compartment is open.

PRELIMINARY WORK

1 – Remove cupholder



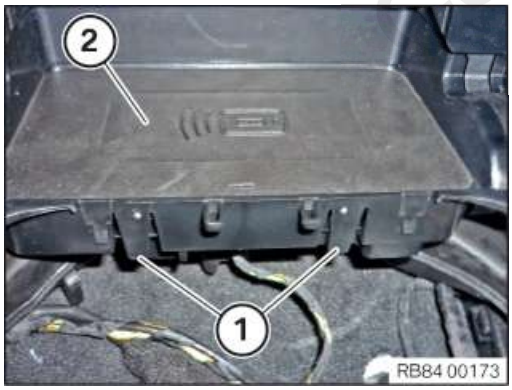
- Remove the insert (1).



- Loosen screws (1).
- Feed the cup holder (2) out to the top.
- Unlock associated plug connections and disconnect.

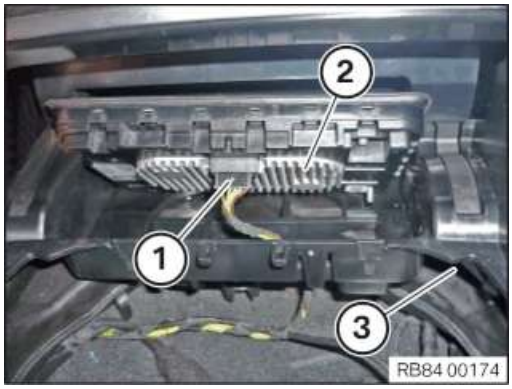
MAIN WORK

2 – Removing the storage tray for near field communication (NFC)



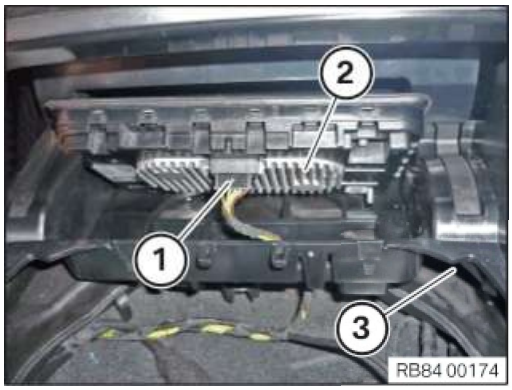
- Loosen the latch mechanisms (1) and push out the near field communication storage tray(2) upwards.

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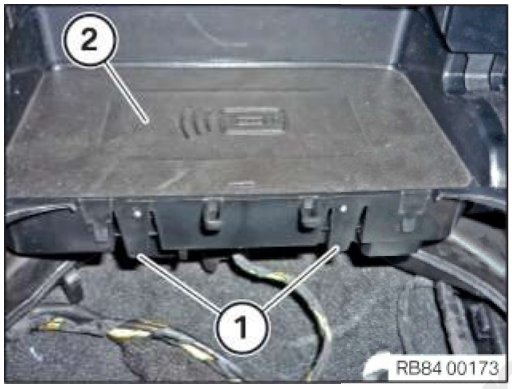


- Disconnect the connector (1) and remove the near field communication storage tray(2) from the centre console (3).

3 – Install storage tray for Near Field Communication (NFC)



- Connect connector (1).
- Position the near-field communication utility box (2) in the centre console (3).



- Push the near-field communication utility box (2) downwards until the catch mechanisms (1) are correctly engaged.

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4 – Install the cup holder



- Fix the cup holder (1) and the belonging connectors.
- Correctly position cup holder (1).
- Tighten the screws (2).

Cup holder to centre console

Oval-head screw		Tightening torque	1,8 Nm



- Insert the insert (1).

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Additional Information

Overview of Tightening Torques

Cup holder to centre console Used in step 4

Oval-head screw		Tightening torque	1,8 Nm

61 35 779 Replace Body Domain Controller control unit (BDC) (after vehicle diagnosis) (flat rate specification without programming/encoding, see 61 00 ...)

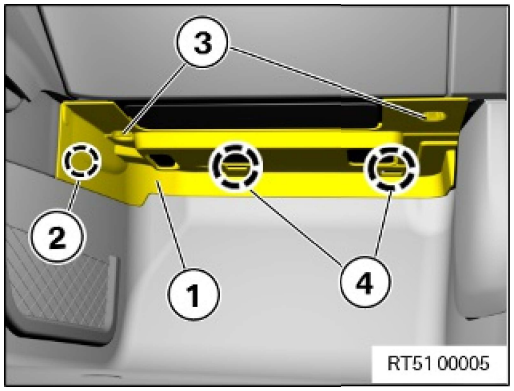
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

2 – Remove the right footwell trim



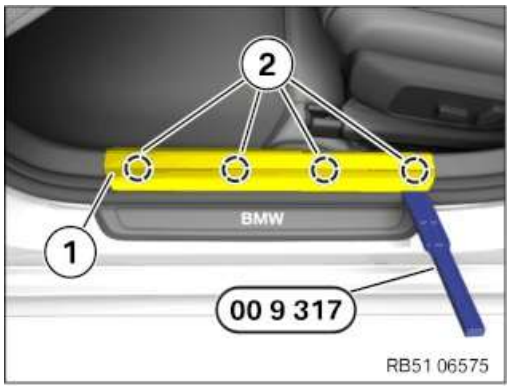
- Turn the locks (3) by 90°.
- Feed the footwell trim (1) out of the guide (2).
- Detach the footwell trim (1) inward out of the guides (4).
- Unlock associated plug connection and disconnect.

3 – Remove right door sill cover strip

NOTICE

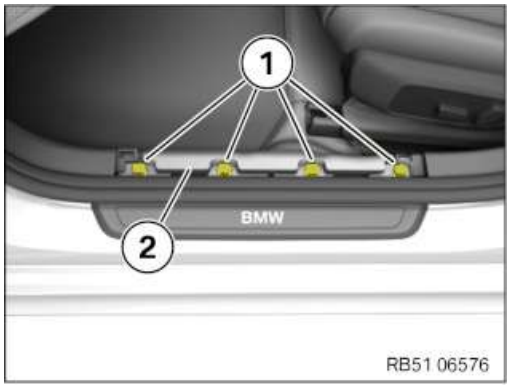
Description is for left component only. Procedure on the right side is identical.

▸ **Remove door sill cover strip**



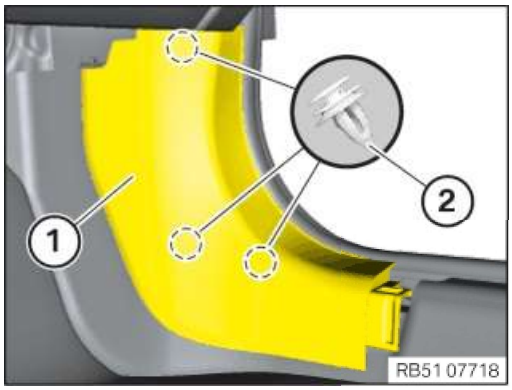
- Detach the door sill cover strip(1) using the special tool 0 490 534 (00 9 317) from the clips (2) in the floor panel.

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- If necessary, remove the clips (1) from the floor panel (2) and attach to the door sill cover strip.

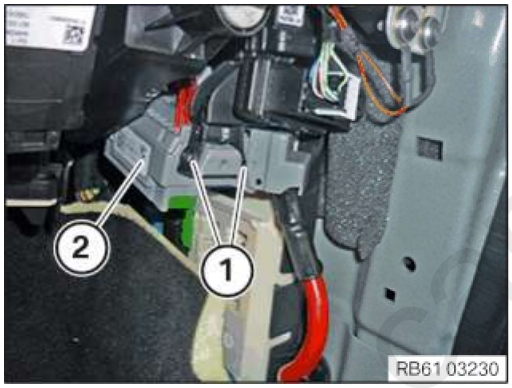
4 – Removing the side trim panel in the footwell at the right-hand A-pillar



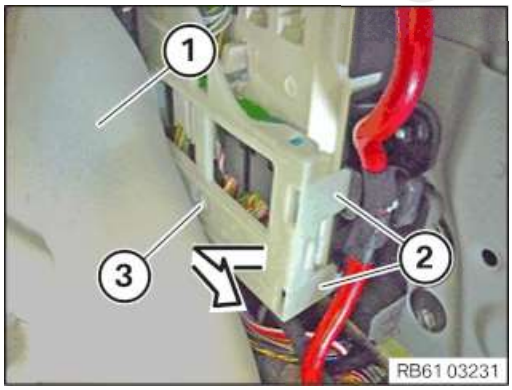
- Loosen the side trim panel (1) at the clips (2) and remove it toward the inside.

MAIN WORK

5 – Remove the BDC control unit

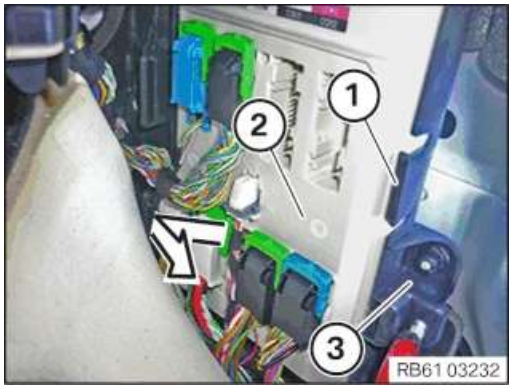


- Unlock the latch mechanisms (1) and remove the power distribution box (2) downwards.



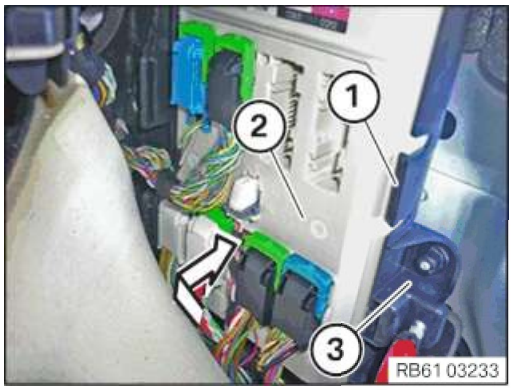
- Fold the carpet (1) to the side.
- Loosen the latch mechanisms (2).
- Guide cover (3) out in direction of arrow.

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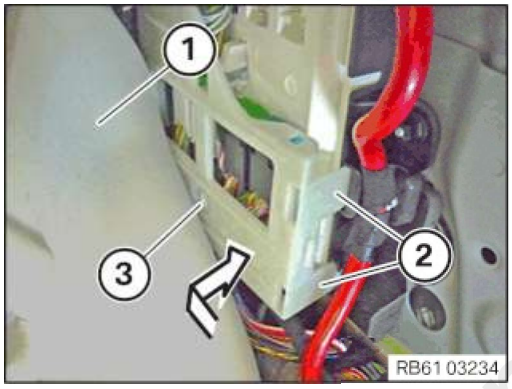


- Unlock and disconnect all connectors.
- Loosen latch mechanism (1).
- Guide out the BDC control unit (2) from the bracket(3) in the direction of the arrow.

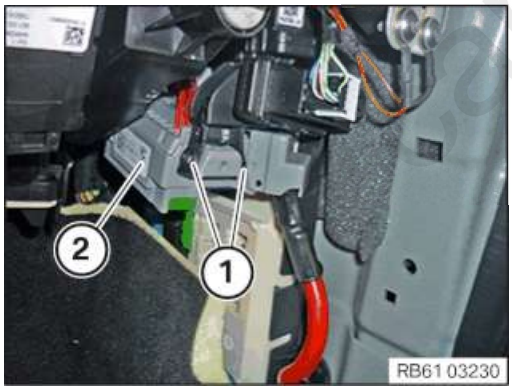
6 – Install the BDC control unit



- Guide in the BDC control unit (2) in the holder (3) in the direction of the arrow.
- Clip BDC control unit (2) into the latch mechanism (1).
- Connect all connectors and lock.



- Guide in the cover (3) in the direction of the arrow and clip into the latch mechanisms (2).
- Position the carpet (1).

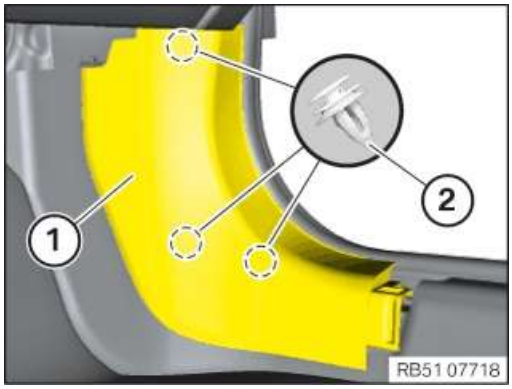


- Guide in the power distribution bow (2) upwards and correctly clip in the latching mechanisms (1).

POSTPROCESSES

7 – Installing side trim panel in footwell on right A-pillar

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- Check the clips (2) for damage.

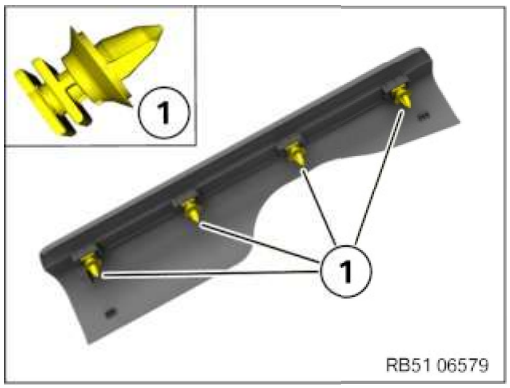
  Renew damaged or missing clips (2).
- Correctly position the side trim panel (1) and clip in to the clips (2).
- Make sure that the side trim panel (1) is correctly fitted against edge protection.

8 – Install right door sill cover strip

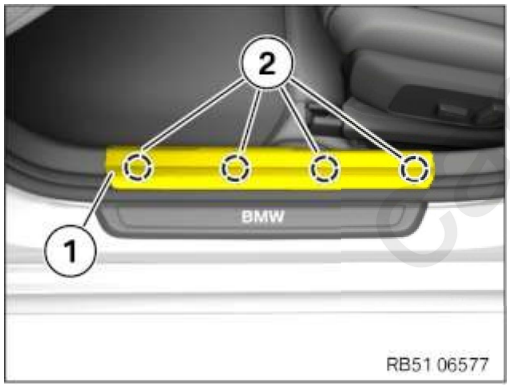
NOTICE

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

▸ **Install the door sill cover strip**

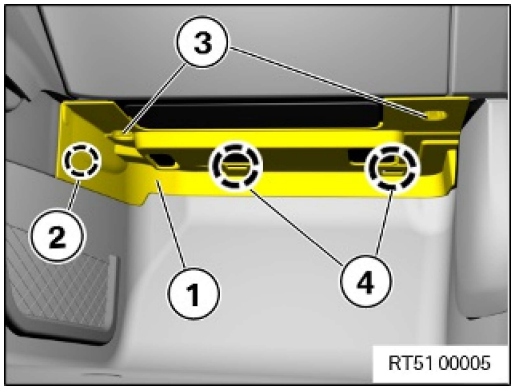


- Check the clips (1) for damage and renew if necessary.



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

9 – Install the right footwell trim panel



- Connect associated connector.
- Attach the footwell trim (1) to the guides (4) and fold up.
- Guide the footwell trim (1) into the guide (2) of the centre console.
- Position locks (3) correctly and turn by 90°.

10 – Disconnecting all battery earth leads

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- See additional information.

11 – Encode/program control unit(s)

Prerequisite

Replacement of component.

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.

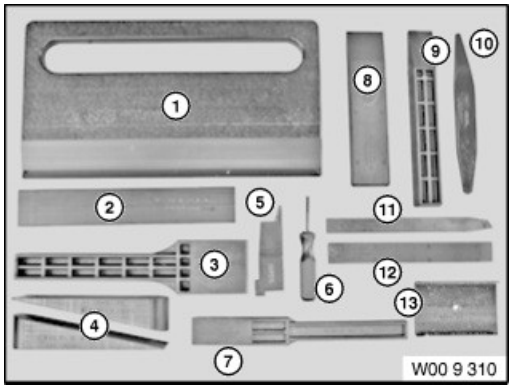
- Connect the battery charger to the vehicle.
- Connect the programming system with the vehicle.
- Determine the action plan.
- Accept and fully process the measures plan.
- If applicable, connect the workshop system to the vehicle, depending on the reworking list.
- Carry out vehicle test.
- Delete 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 Special Tools

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0 490 534 (00 9 317) Wedge



Common	Used in step 3
Usage	(Trim wedge) Replaced by special tool 00 9 325 from 11/2008 (quality improvement due to new material) Replaced by 00 9 325 (0 496 569)
Included in the tool or work	0 490 527
Storage location	
Replaced by	
In connection with	
SI-Number	

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	110
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	110
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
61 20 900 Disconnecting and connecting battery earth lead	110
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61 35 697 Replacing control unit for automatic tailgate operation

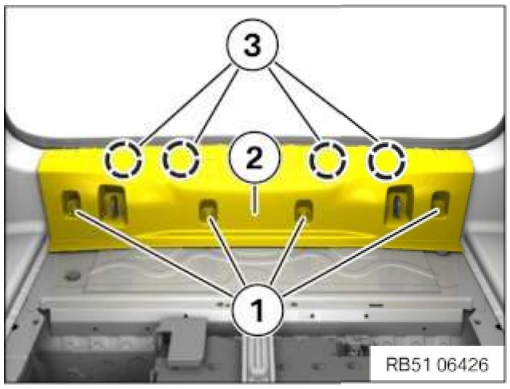
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



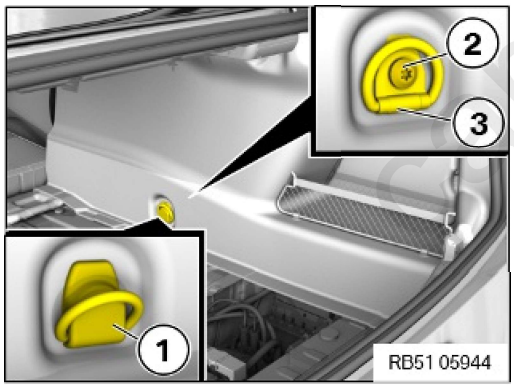
- See additional information.

2 – Removing the loading edge trim



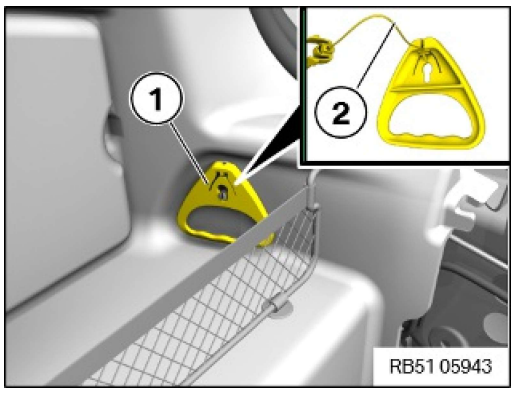
- Loosen the expanding rivet (1).
- Unclip loading edge trim(2) upwards from latch mechanisms (3).
- Guide out and remove loading edge trim (2) under the sealing lip of the tailgate seal.

3 – Removing right luggage compartment wheel arch trim panel

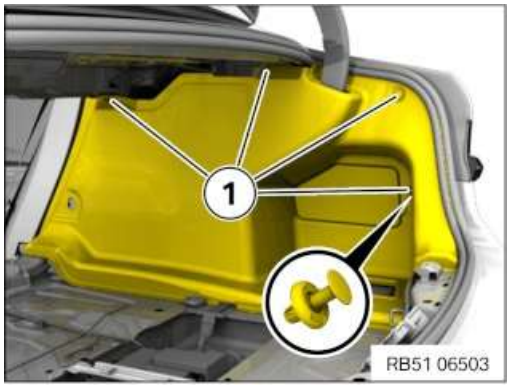


- Remove the cover (1).
- Loosen screw (2).
- Remove the lashing eye (3).

▸ If installed: Remove the emergency release handle for the tailgate (additional work in the US version)

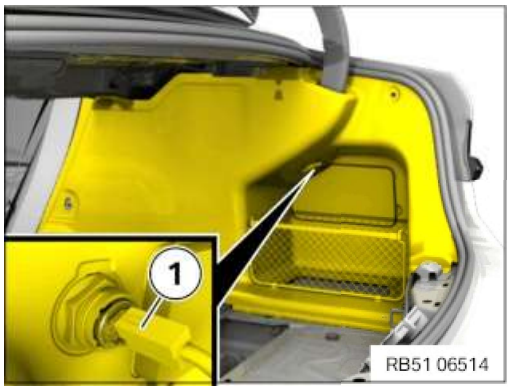


- Release the emergency release handle for tailgate (1) from the holder.
- Detach Bowden cable (2) and remove the emergency release handle for tailgate (1).

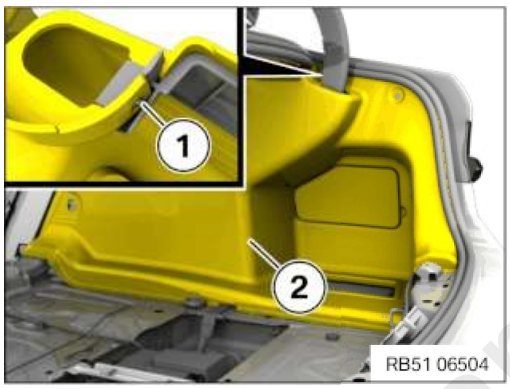


- Reposition the right rear seat backrest.
- Loosen the expanding rivet (1).

▸ If installed: Disconnect plug connection of the 12 V connection (additional work with storage package equipment specification)



- Unlock and disconnect the plug connection (1) of the 12 V power socket.

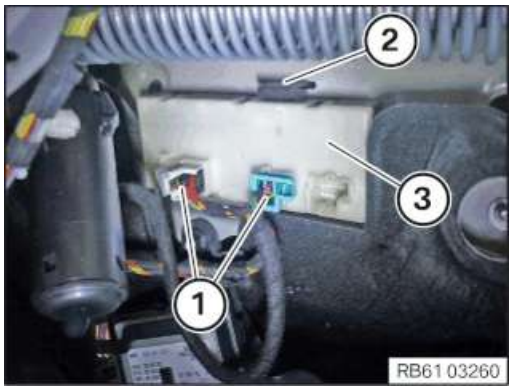


- Press the tab for luggage compartment wheel arch trim panel (2) on the outer side of the hinge to the front using the stop on trim (1).
- Guide out luggage compartment wheel arch trim panel (2) under the sealing lip for the tailgate and the side trim panel in the rear passenger compartment.
- Remove luggage compartment wheel arch trim panel (2).

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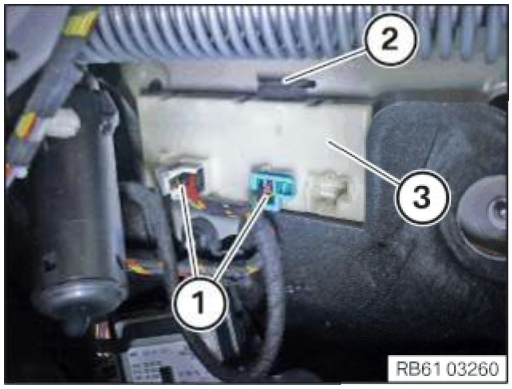
MAIN WORK

4 – Remove the control unit for the automatic tailgate operation



- Unlock and disconnect plug connections (1).
- Unlock the latch mechanism (2) and remove the control unit for the tailgate lift (3).

5 – Install the control unit for the automatic tailgate operation



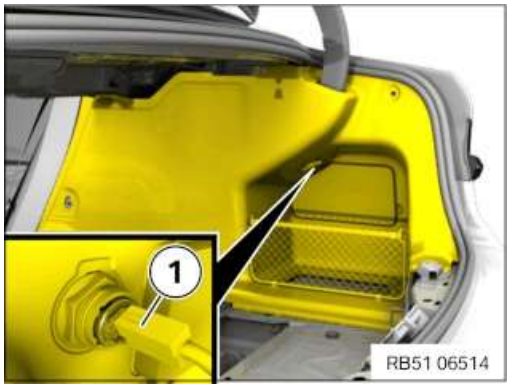
- Correctly position the control unit for the tailgate lift (3) and engage it with the latch mechanism (2).
- Connect connectors (1) and lock.

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POSTPROCESSES

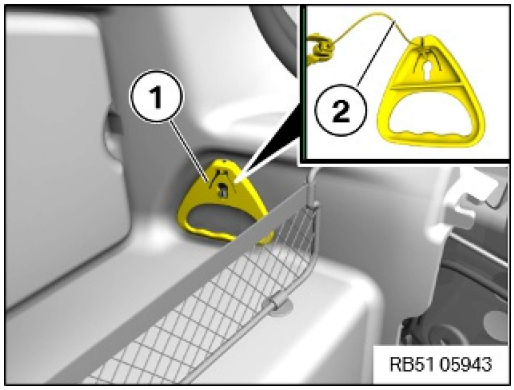
6 – Installing the luggage compartment wheel arch trim panel on the right

▸ If installed: Connecting plug of the 12 V power socket (additional work for equipment specification with storage package)

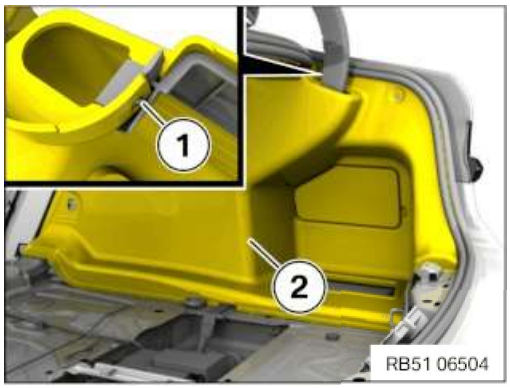


- Connect and lock connector (1) of the 12 V power socket.

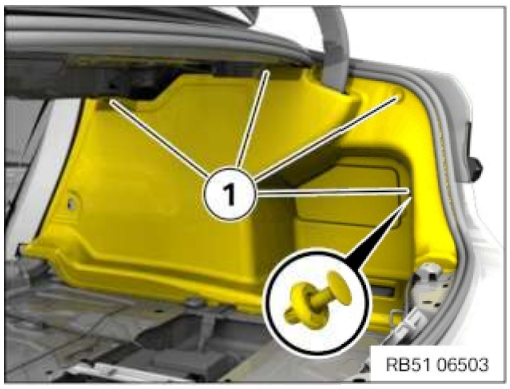
▸ If installed: Installing the emergency tailgate release handle (additional work for US version)



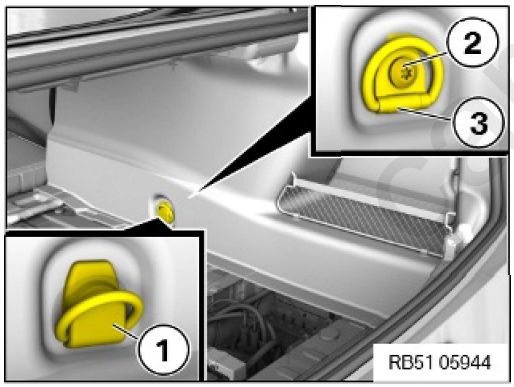
- Attach the Bowden cable (2).
- Fasten emergency tailgate release handle (1) to the bracket.



- Feed luggage compartment wheel arch trim panel (2) under the side trim panel in the rear passenger compartment and the sealing lip for the tailgate.
- Feed the tab of the luggage compartment wheel arch trim panel (2) on the outer side of the hinge into the stop on the trim (1).



- Secure expanding rivet (1).
- Raise the right rear seat backrest.



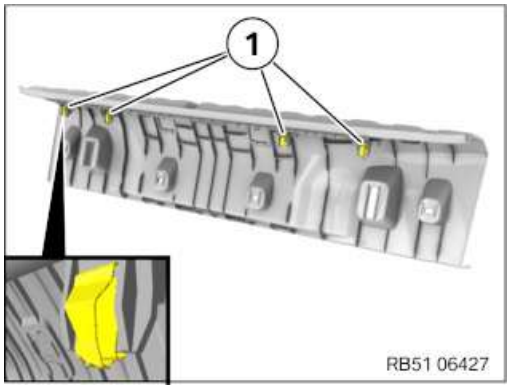
- Position the lashing eye (3).
- Tighten down screw (2).

Lashing eye to body

	Tightening torque	19 Nm

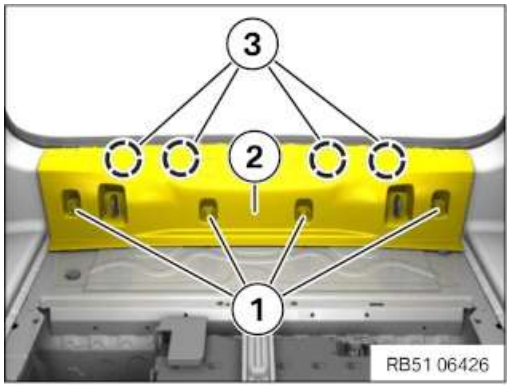
- Install the cover (1).

7 – Installing loading edge trim



- Check the clamps (1) for damage and renew if necessary.

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- Insert the loading edge trim (2) under the sealing lip of the tailgate seal.
- Fit the trim of the loading edge (2) at the latch mechanisms (3) and clip it in to the bottom.
- Secure expanding rivet (1).

8 – Disconnecting all battery earth leads



- See additional information.

9 – Encode/program control unit(s)

Prerequisite

Replacement of component.

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.

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- 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

Lashing eye to body Used in step 6

	Tightening torque	19 Nm

Links

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