

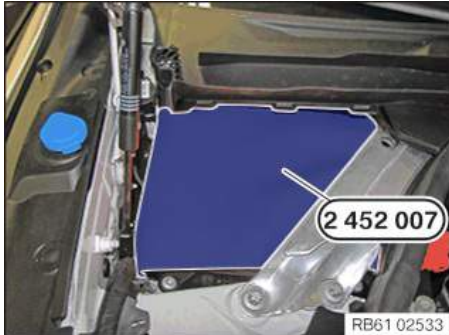


WARNING

Unprotected battery terminals.

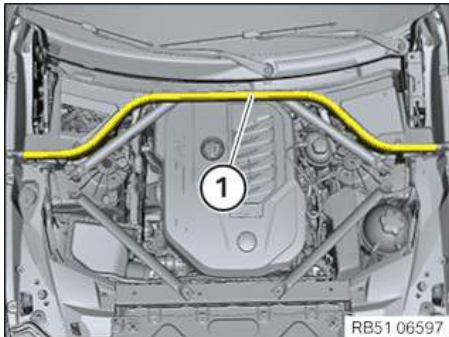
Risk of short circuits! Risk of fire!

- Cover the vehicle battery.



- Cover the vehicle battery with the special tool as shown.

11 – Remove the seal for the rear bonnet



- Pull off rear bonnet seal (2) to the front and remove it.
Rear bonnet seal (2) consists of three separate components.

12 – Remove left and right wiper arm



RISK OF DAMAGE

Damage to wiper console.

While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do **not** lever off the wiper arm because otherwise the wiper console may break at the predetermined breaking point for active pedestrian protection.



NOTICE

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

- ▶ **Remove the wiper arm**



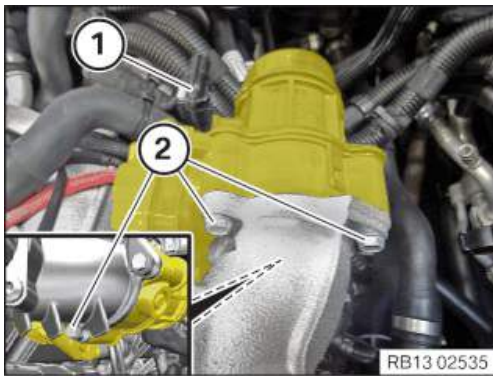
RISK OF DAMAGE

Damage to wiper console.

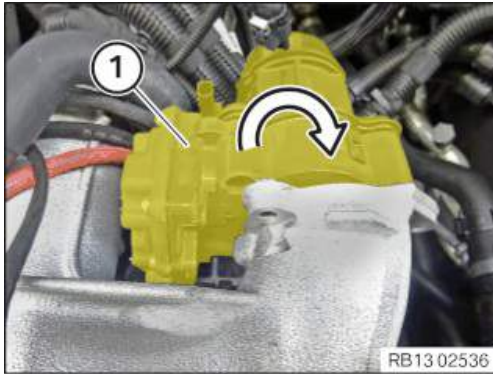
While removing the wiper arms without using special tool, the wiper console can break.

- Removing the wiper arms must be carried out only using the prescribed special tool.
- Do **not** lever off the wiper arm because otherwise the wiper console may break at the predetermined breaking point for active pedestrian protection.

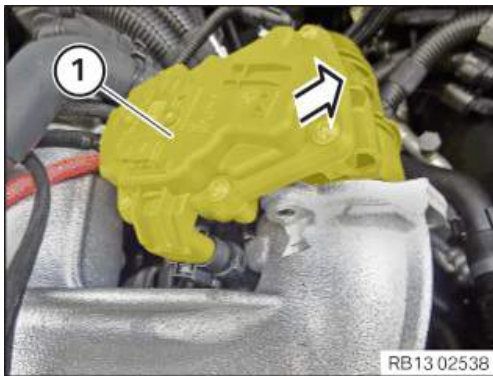




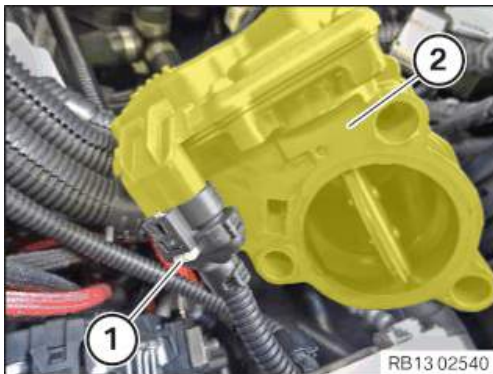
- Unlock plug connection (1) and disconnect.
- Loosen screws (2).



- Turn throttle body (1) in direction of arrow.



- Guide out throttle body (1) in direction of arrow and set aside.



- Unlock plug connection (1) and disconnect.
- Remove the throttle bodies (2).

24 – Releasing the wiring harness section from the intake plenum

Prerequisite

Mounting plate sensor system is removed.



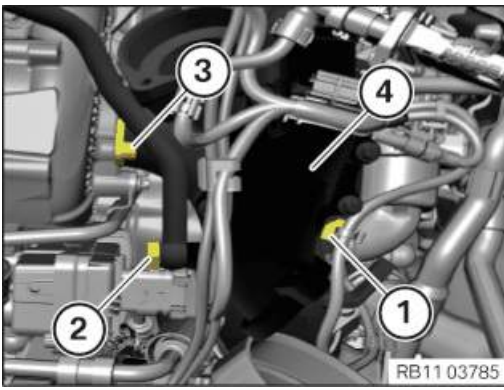
RISK OF DAMAGE

Damage to wires when disconnecting connectors and plug connections.

Sheared wires can cause a short circuit.

- Do not pull on the wires when disconnecting connectors and plug connections.





- Insert and install connecting pipe of the compressor bypass (4).
- Insert the screw (3) with the retaining plate and install.
- Tighten down screw (3).

Connecting pipe of compressor bypass to high-pressure stage exhaust turbocharger

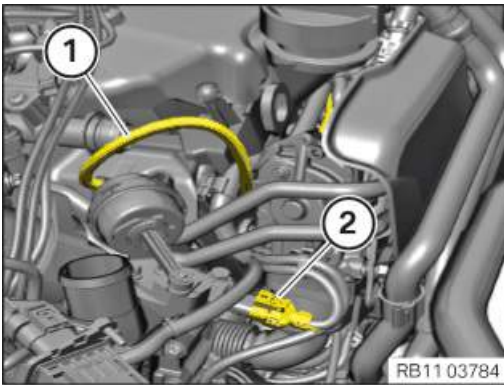
M6x12		Tightening torque	10 Nm
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- Install banjo bolt (2) with new sealing rings.
- Tighten the banjo bolt (2).

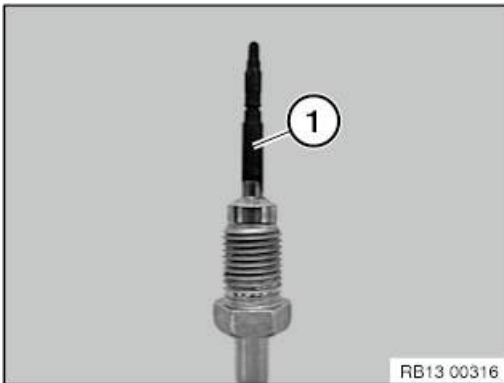
Differential pressure at connecting pipe of compressor bypass

M12		Tightening torque	30 Nm
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- Secure the cable clip (1) to the compressor bypass.
- Connect plug connections (2) and lock audibly.
- Connect vacuum hose (1).



25 – Install the exhaust temperature sensor for low-pressure exhaust-gas recirculation



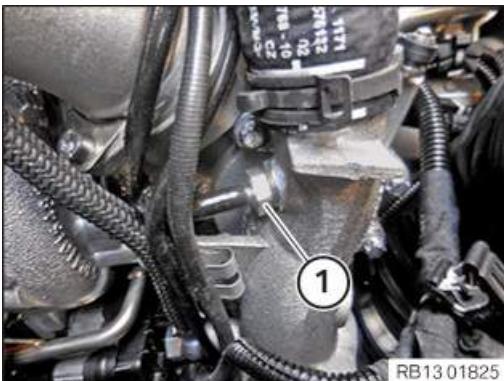
RISK OF DAMAGE

Damage of exhaust temperature sensor.

Damage to exhaust temperature sensors leads to malfunctions.

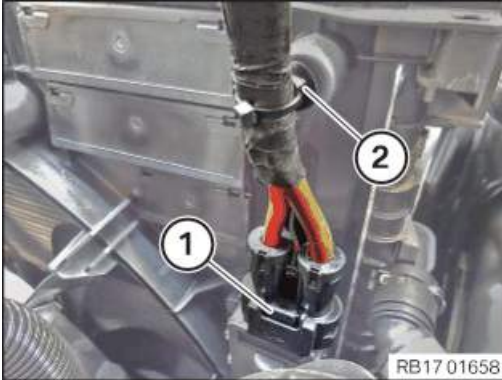
- Make sure that the gauge tip is not damaged.

- Check the gauge tip (1) for damage and renew the exhaust temperature sensor as needed.
- Feed in and install the exhaust temperature sensor (1).

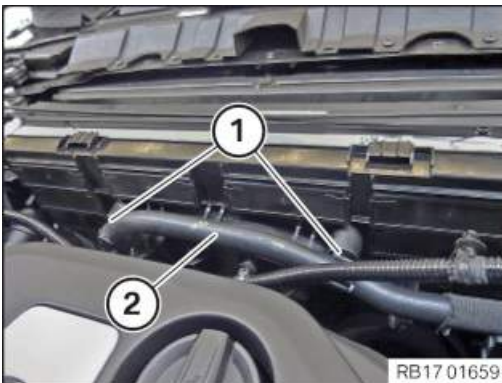




- When the engine is stopped after the end of the journey, it may be necessary to run the electric fan. In rare cases, operation of the electric fan can last up to 11 min. This protects the components. In this case, replacing the electric fan will not remedy the problem!



- Loosen clamp (2).
- Unlock plug connection (2) and disconnect.

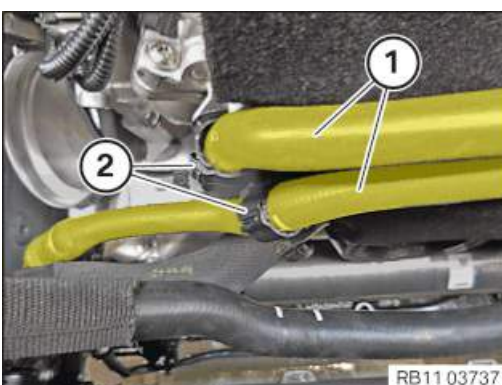


- Loosen clamps (1).
- Feed out coolant line (2) and place to one side.



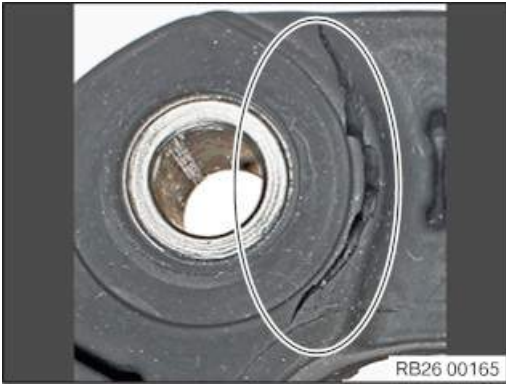
- Unlock the locks (1).
- Guide out fan cowl (2) in direction of arrow and remove.

7 – Removing the acoustic cover for the engine at the front



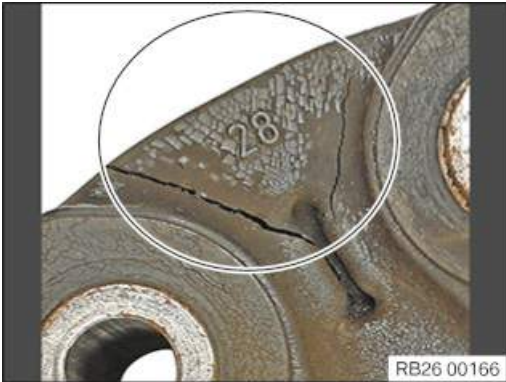
- Release the coolant lines (1) from the holders (2).





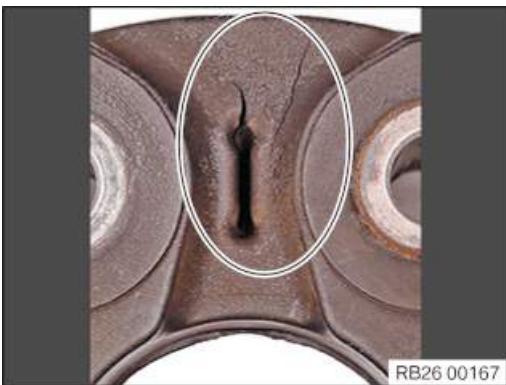
Evaluation OK

→ No replacement required



Evaluation OK

→ No replacement required



Evaluation OK

→ No replacement required



The following figures show the evaluation criteria of flexible discs, according to which these should **be replaced!**

Evaluation not OK

- Cracks in the rubber part **and** isolated threads are visible.
- Component with restricted operability
- Remaining service life expected <50% of the total service life





RISK OF DAMAGE

Damage to the flange nut.

Failure to observe the installation specifications may lead to serious damage to the flange nut and the rear axle differential.

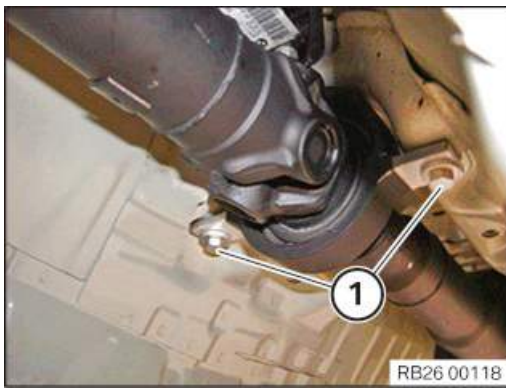
- Do not use the double hexagon flange nut as counter support.
- Screw in the recessed nut within 5 minutes.

- Tighten the recessed nut **anti-clockwise in the direction of arrow** with the special tools [0 495 554 \(33 5 070\)](#) and .
- While doing so, do not counter-support on the twelve-point flange nut (1).

Propeller shaft on the rear axle differential

Insert nut	Replace insert nut.	Tightening torque	100 Nm
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- **After the propeller shaft is installed and the recessed nut is screwed in, strictly observe a hardening time of minimum 3 hours.**
- Do not move or push the vehicle during this time!**

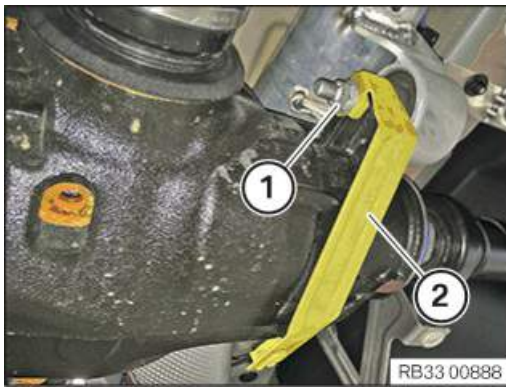


- Tighten the screws (1).

Centre mount to body

M8		Tightening torque	19 Nm
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18 – If installed: Installing the rear axle cover

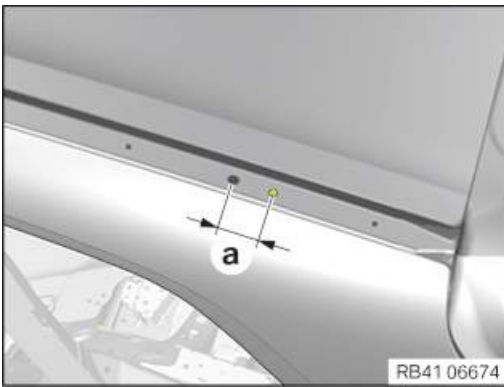


- Position holder (2).
- Tighten nut (1).

Rear axle cover holder on rear axle differential suspension

M12		Tightening torque	18 Nm
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NOTICE

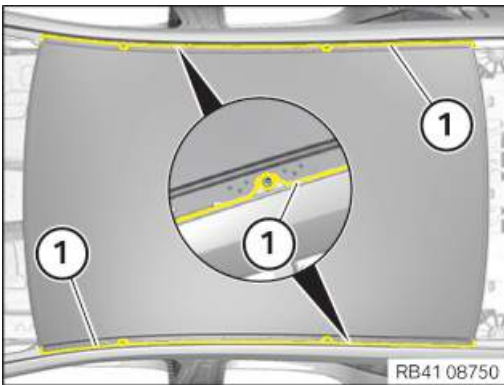
Perform the operations on the left and right side.

- After the adhesive has hardened, insert an EMC screw according to dimension a.
Dimension (a) = approx. 45 mm from the centre of the mounting bore on the roof rails.

Expendable materials

Screw		83190301639
EMC screw, SF Plus, M5x15		

► **Sealing the outer roof panel**



NOTICE

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

- Seal the outer roof panel on both roof frames with sealant(1), in line with series production.

Expendable materials

Sealant D1 (seam sealing)	310 ml	83422409985
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Additional Information

Links

General repair instructions

Used in step

41 00 ... Overview of consumables (Electronic Parts Catalogue)	1
41 00 ... Opening bonded connections	2
41 00 ... BMW/MINI bonding instructions	3
41 00 ... Repair techniques, repair stage 2	





- See additional information.

MAIN WORK

4 – Remove the actuator on the bonnet hinge



WARNING

Pyrotechnic components.

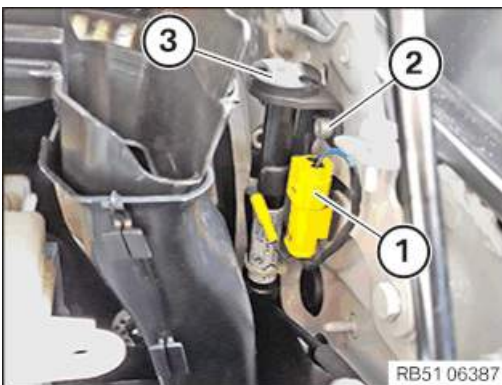
Danger! Life-threatening injuries!

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



NOTICE

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



- Unlock plug connection (1) and disconnect.
- Loosen screw (2).
- Guide out the actuator (3) towards the front and remove.

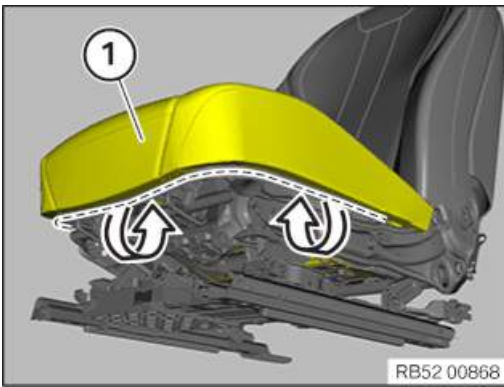
5 – Install the actuator on the bonnet hinge



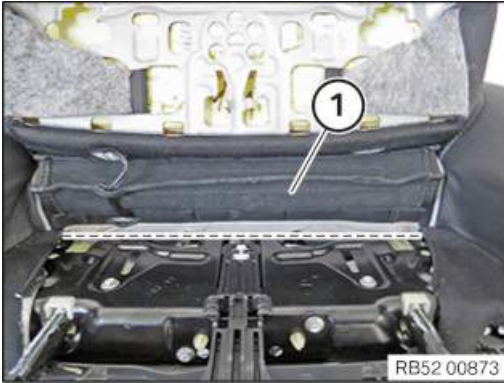
NOTICE

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

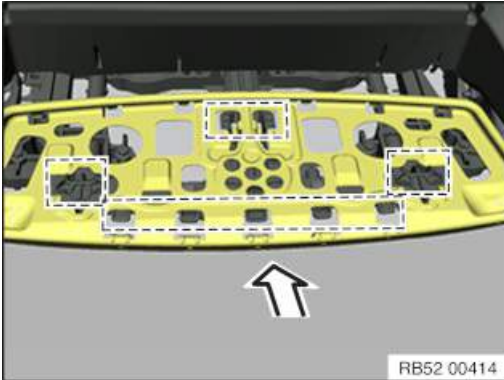




- Place the seat cover (1) with the upholstery onto the seat mechanism. If necessary, insert the associated wiring harness.
- Attach the edge stripping to the seat mechanism in the direction of arrow.



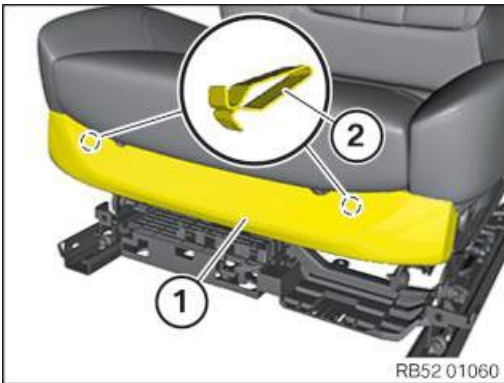
- Attach the seat cover (1) in the highlighted area.



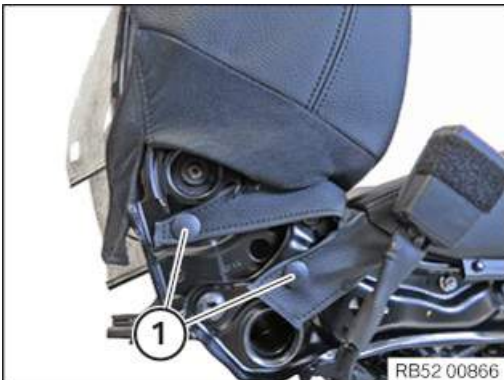
NOTICE

For a better overview the removed condition is shown here.

- Insert and lock the support for the thigh support correctly in the guides, in the direction of arrow.



- Attach the trim (1) from the bottom and clip in using the clamps (2).

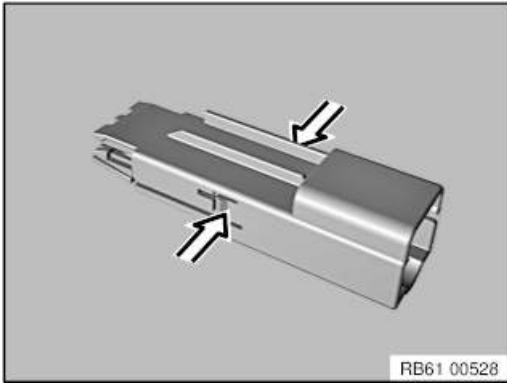


NOTICE

Perform the operations on the left and right side.

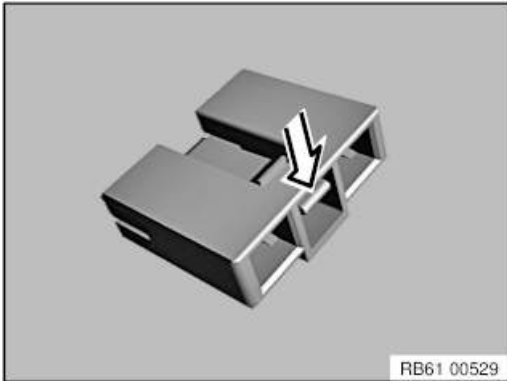
- Attach the clips (1) on the left and right.





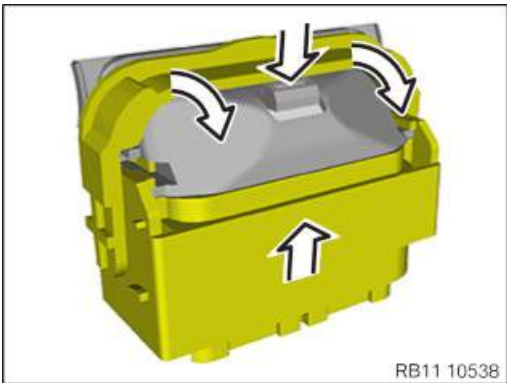
12.

Press the lock on both sides and detach plug connection.



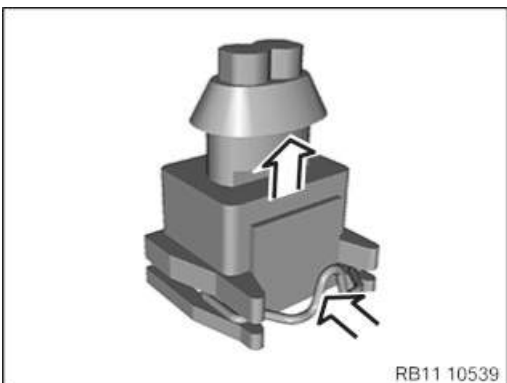
13.

Press the lock and detach plug connection.



14.

Press lock and open release clip in direction of arrow.
Disconnect plug connection.



15.

Press the lock and detach plug connection.



Measure

- Carry out the service function "48 V electrical system deactivation".
 - Vehicle management > Service functions > Voltage supply > Deactivate 48 V electrical system

Only when the Check Control message "48 V electrical system switched off." (1) is displayed in the instrument cluster is it permitted to disconnect the 12 V battery.

If the absence of voltage is not indicated clearly, contact Technical Support.

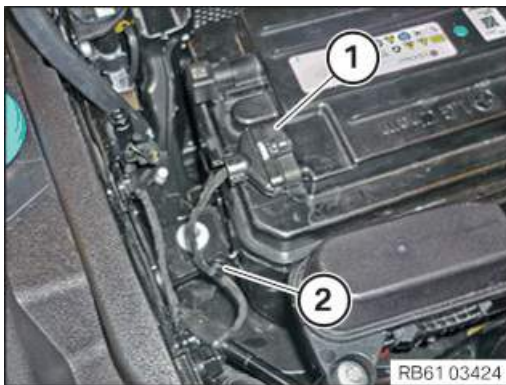
Result

- » The Check Control message signals that the 48V electrical system has been switched off.

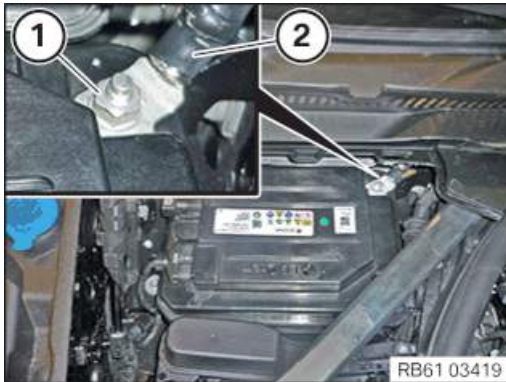
Measure

- Exit PAD mode by pressing the START-STOP button once without depressing the brake pedal.

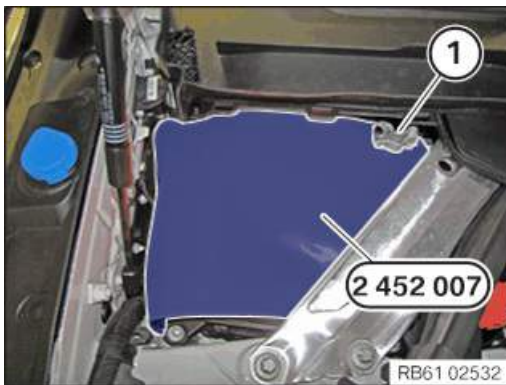
The work "Disconnecting the negative battery cable of the 48-V battery" can be started.



- Unlock and disconnect plug connection (1) of the CAN bus.
- Release the clip (2).



- Loosen nut (1).
- Pull off negative battery cable (2) of the 48-V battery from the negative battery terminal, set it aside and secure it.



WARNING

Unprotected battery terminals.

Risk of short circuits! Risk of fire!

- Cover the vehicle battery.
- Cover the vehicle battery with the special tool as shown.
- Position the battery earth lead (1) as shown.

◀

▷ **Disconnecting all battery earth leads**

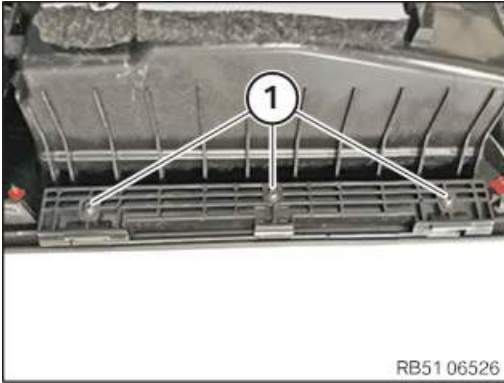




- Guide glove box into the instrument panel, connecting and locking all the connectors.
- Lift glove box lid (1) slightly as shown and tighten screws (2).

Glove box to instrument panel

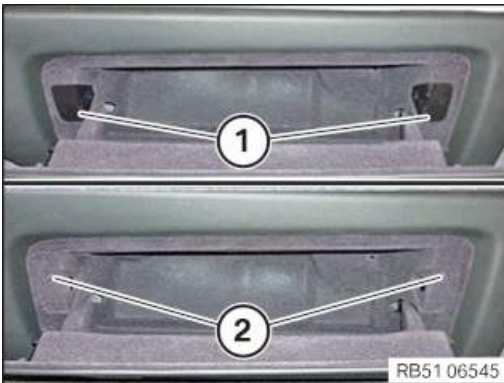
Screw	Tightening torque
	1,8 Nm



- Tighten screws (1) from the rear on the glove box hinge.

Glove box to instrument panel

Screw	Tightening torque
	1,8 Nm



- Tighten down screws (2).

Glove box to instrument panel

Screw	Tightening torque
	1,8 Nm

- Mount covers (1) on the glove box.



- Tighten the screws (1).

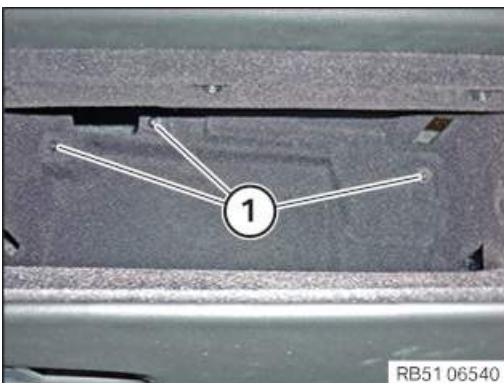
Glove box to instrument panel

Screw	Tightening torque
	1,8 Nm

- Tighten screws (1) in the glove box.

Glove box to instrument panel

Screw	Tightening torque
	1,8 Nm





- See additional information.

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▷ **Removing backrest side section with side airbag**



WARNING

Airbag unit.

Danger! Life-threatening injuries!

- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

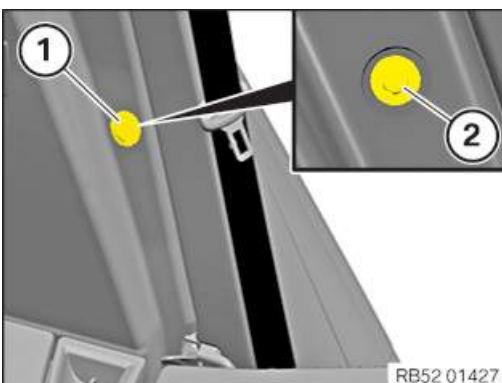


WARNING

Pyrotechnic components.

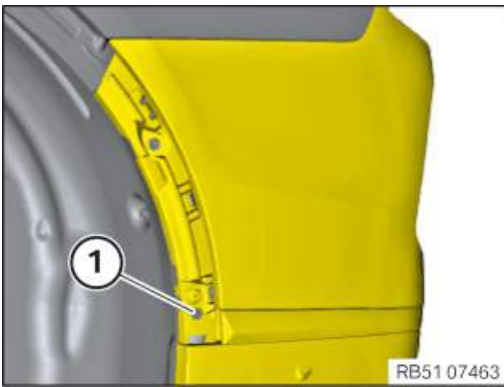
Danger! Life-threatening injuries!

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



- Release trim (1).
- Loosen screw (2).



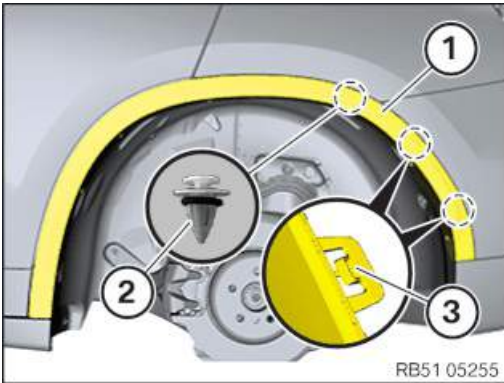


RB51 07463

- **Only for G07:**
- Tighten down screw (1).

Bumper trim, rear

Hexagon screw		Tightening torque	3,0 Nm
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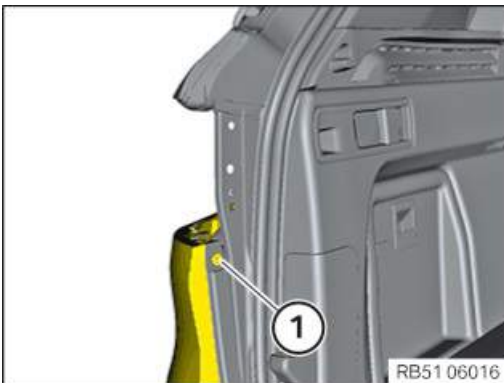
RB51 05255



NOTICE

Perform the operations on the left and right side.

- Check the clip (2), it must not be damaged or missing. Install **clip (2), always install with the sealing ring.**
- Check latch mechanisms (3), they must not be damaged or missing.
- Clip in the wheel arch trim (1) with the clip (2).
- Engage the wheel arch trim (1) to the latch mechanisms (3) in the area of the bumper panel.



RB51 06016



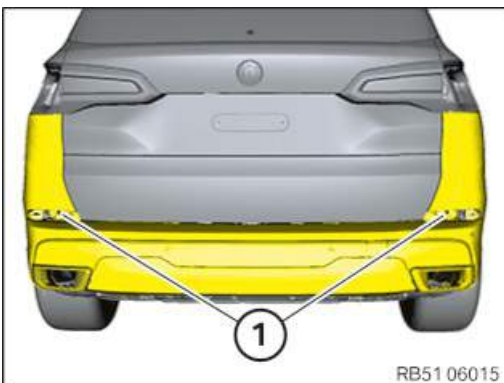
NOTICE

Perform the operations on the left and right side.

- Tighten down screw (1).

Bumper trim, rear

Hexagon screw		Tightening torque	3,0 Nm
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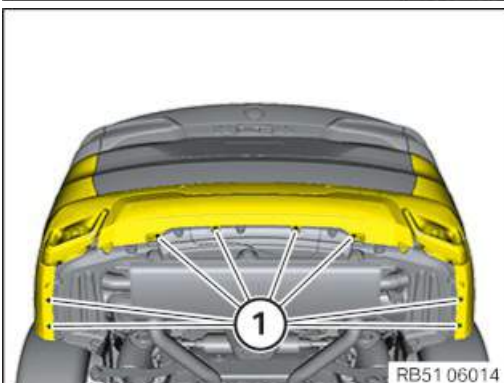


RB51 06015

- Tighten the screws (1).

Bumper trim, rear

Hexagon screw		Tightening torque	3,0 Nm
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RB51 06014

- Loosen screws (1).

Bumper trim, rear

Hexagon screw		Tightening torque	3,0 Nm
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6321 Overview of tightening torques

Rear light at tailgate

M5 nut

Tightening torque

2,3Nm

Rear light to side panel

Screw

Tightening torque

3,6Nm

Rear light to side panel

Nut

Tightening torque

3Nm

