

41 00 ... Notes on the water drain hose of the slide/tilt sunroof

The water drain hoses for the slide/tilt sunroof are partially permanently integrated in the body and cannot be replaced individually.

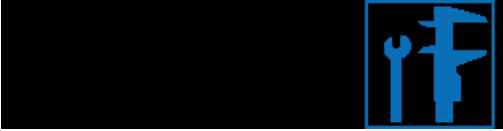
These water drain hoses can only be completely replaced with extensive body repair work (e. g. after an accident).

Component	Vehicle	Individually replaceable
Water drain hose, front	All BMW	No
	All MINI	
Rear water drain hose	E60, F34	No
	All other BMWs	Yes
	All MINI	Yes

An individual solution is required for damage that was not caused by an accident.

Contact national hotline.

54 10 ... Repair instructions for bonded seals



Special tools required:

- [00 9 327](#)

1 General remarks on handling rubber seal profiles:

- If seals reveal partly detached protective film on delivery, they must not be bonded.
- Store seals at 5 °C to 40 °C.
- If, during the handling, the protective film has come off before bonding, it can still be bonded.
- Bonding at room and object temperature 25° ±5° C. Temperatures between 40 and 50 °C significantly increase initial adhesion.
- Seals, which are subjected to temperatures above 80 °C after bonding, will be very difficult to remove.
- Maximum storage time for replacement: see identification of the expiry date on packaging

2 Damage pattern, repair and replacement

A partially released bonding (rubber part adhesive tape or adhesive tape paint) up to 120 mm may be finished. Continue with Point 2.1.

A partially released bonding (rubber part adhesive tape or adhesive tape paint) above 120 mm may **not** be finished. Gasket must be replaced. Continue with Point 2.2.

2.1 Repair of partially released bonding (adhesive tape rubber part or adhesive tape paint)

2.1.1 Clean faulty areas

- Release adhesive area of paint side from recesses and degrease with [cleaning agent R2](#). Stick to air drying time > of 1 minute. Never use paint thinner!
- This will usually partially destroy intact edge adhesive areas.
- When removing, it is important to wipe off the adhesive area of the adhesive tape with a lint-free disposable cloth. (e.g. blue Kimtex)
- Carefully wipe off the adhesive areas.

Note:

Use necessary cotton- or fluff-free paper towel once only.

Do not touch the adhesive area after cleaning.

2.1.2 Apply adhesive

- Apply [profile rubber adhesive](#) evenly as a thin layer first on the gasket and then on the painted surface.
- Stick to air drying time of 2 to 3 minutes.

Attention:

Avoid contact with skin!

Do not apply adhesive to visible painted surfaces.

2.1.3 Press in rubber seal

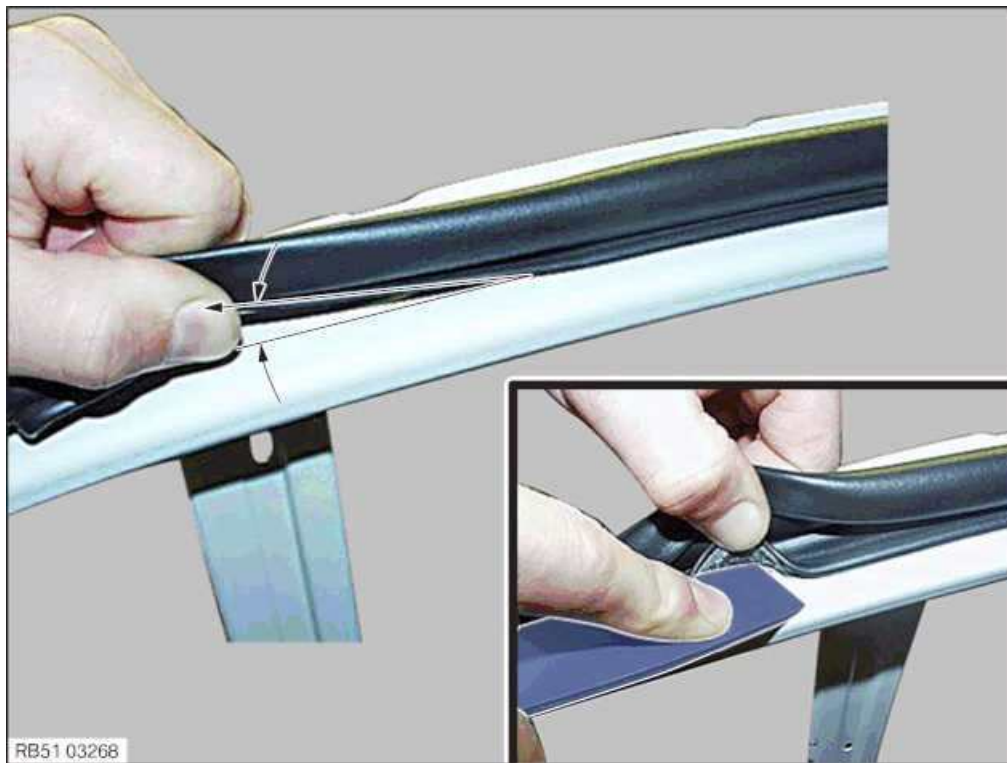
- Press down gasket using contact pressure (forced pressure not necessary) for > 1 minute.

Attention:

Load can be applied to the bonding only after a period of 2 minutes. This waiting time is absolutely essential.

2.2 Replacement

2.2.1 Peeling off the faulty rubber seal



- Remove bonded connection with fingers or cleaning agent liner [00 9 327](#).
- Overstretch gasket below an angle of maximum 20° very slowly under even tensile stress. If the gasket is pulled off too quickly, the adhesive tape can tear off and remain on the painted surface. The adhesive tape remaining on the painted surface must be removed with high cleaning costs.

Note:

When the adhesive tape separates from the gasket, the adhesive tape remaining on the paint must be fully separated at one location by approx. 10 mm until it is easy to grip.

Pull off the adhesive tape by pulling strongly at an angle of approx. 20°.

When existing gaskets are being peeled off with a hot air blower: Do not damage paintwork.

2.2.2 Clean bonding surface

- if required, remove adhesive remains with [eraser disk](#) or [cleaning agent R2](#). do not damage paint. Stick to air drying time > of 1 minute.
- Before a new bond, treat the entire adhesive area with [Sika Aktivator 205](#). Stick to air drying time > of 1 minute.

Note:

Use necessary cotton- or fluff-free paper towel once only.

Do not touch the adhesive area after cleaning.

2.2.3 Pull off protective film of the bonding surface

- Pull off the protective film off of the new gasket by approx. 15 cm using the tab.

Attention:

Once the protective film has been removed, do not under any circumstances touch the exposed bonding surface.

2.2.4 Apply rubber seal

- Press on the gasket by hand continuously while pulling off the liner slightly at the same time.

Note:

If positioned incorrectly, the gasket can still be pulled off, repositioned and pressed on again.

Always ensure that you do not touch the bonding surface with your fingers or contaminate it in any way.

- Press gasket while moving in a straight line without compression or over-stretching.
- Compress the gasket the corners; never stretch it. (critical area)

2.2.5 Establish sealing joint

- Where the beginning and end meet, a mark is created from pressing the loose end onto the beginning of the gasket.
Cut off the gasket vertically along the marked line (use sharp knife or special scissors) and press in place.
- Visually check the pre-bonded gasket.

Note:

Small areas of gasket can remain stuck to adhesive tape of loose end.

2.2.6 Press gasket

- Always press gasket vertically to the bonding surface
- Press gasket by hand or hand roller
- Adhesive tape width up to 5 mm, contact pressure $> 5 \text{ N/cm}^2$
- Adhesive tape width up to 10 mm, contact pressure $> 10 \text{ N/cm}^2$

Note:

Firm thumb pressure has approx. 35 N/cm^2

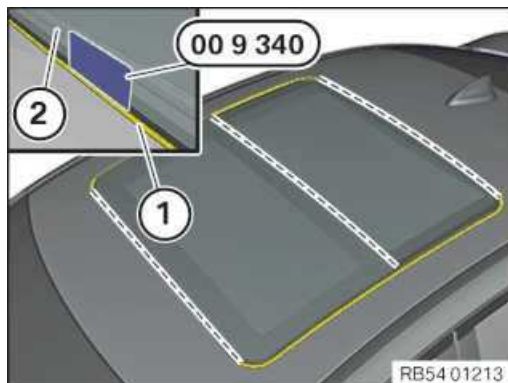
3 Checking the rubber seal

- Check the bonded gaskets for correct positioning and perfect adhesion. The bonding can be checked by pressing back the sealing lip.
- The peel strength of the gasket must be greater than 10 N/cm^2 for about 15 min after bonding.

54 13 002 Adjusting both glass slide/tilt sunroof panel

PRELIMINARY WORK

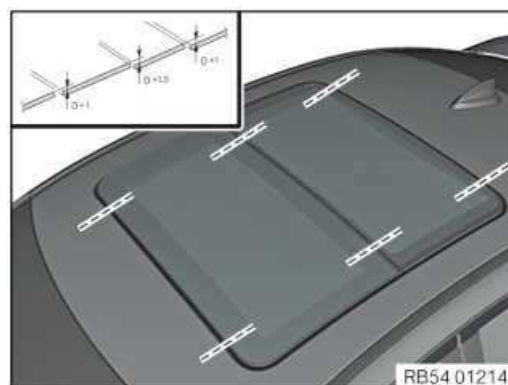
1 – Checking the adjustment of the panorama glass roof



- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.

- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).

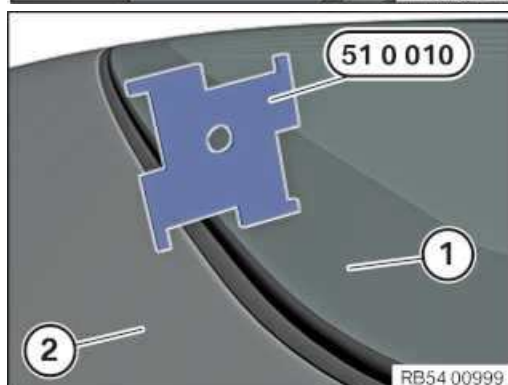
The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.

- Make sure the front of the lid is flush to 1.5 mm higher than the rear of the lid.

- Make sure the rear of the lid is flush to 1 mm higher than the rear of the roof outer skin.



- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

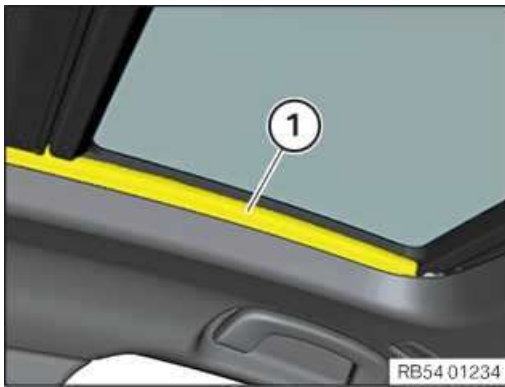
MAIN WORK

2 – Adjusting the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



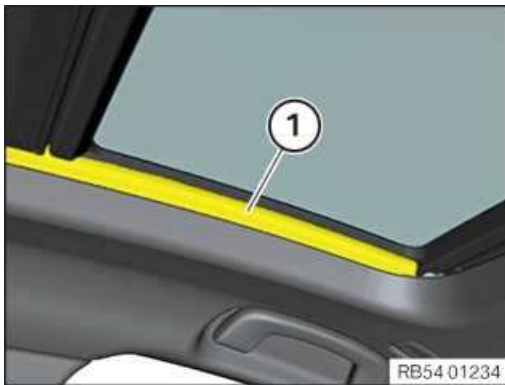
- Close the panorama glass roof panel and open the roller sunblind.
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
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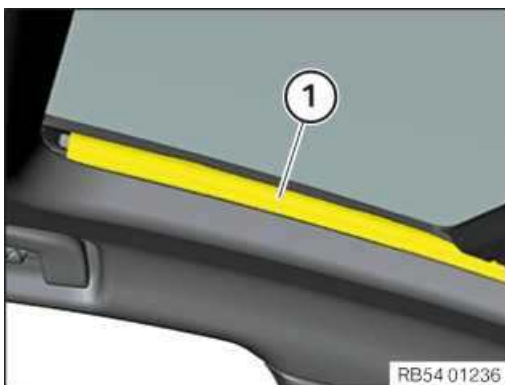
- Insert the seal (1) around the panorama glass roof panel.

3 – Adjusting rear panorama glass roof lid

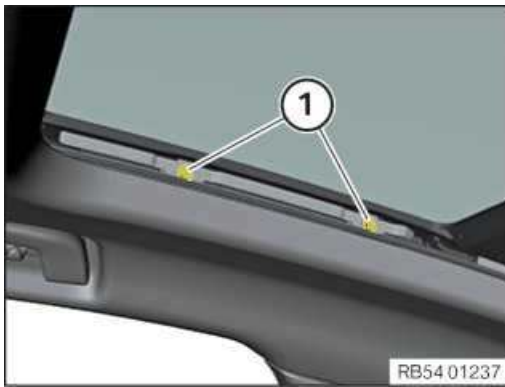


NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



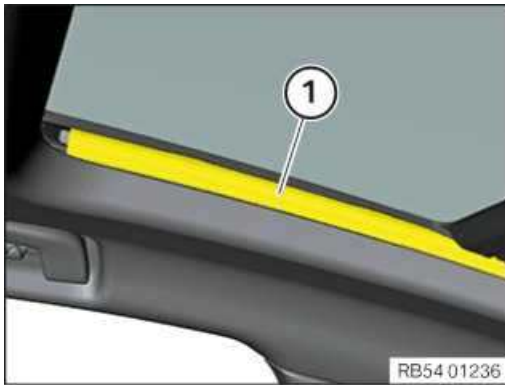
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
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- Insert the seal (1) around the panorama glass roof panel.

POSTPROCESSES

4 – Initialise panorama glass roof



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



TECHNICAL INFORMATION

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

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

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

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

Additional Information

Overview of Tightening Torques

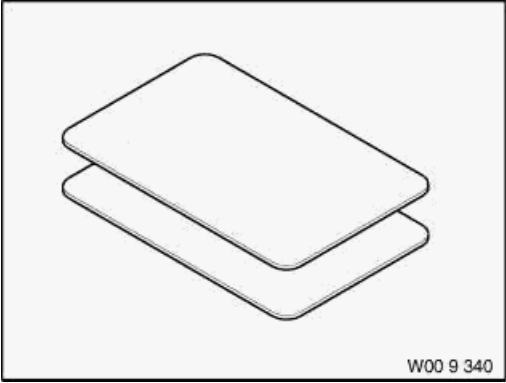
Panorama glass roof lid to mechanics

Used in step 2 3

M5	Replace screws.	5 Nm
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Overview of Special Tools

0 493 687 (00 9 340) Removal aid

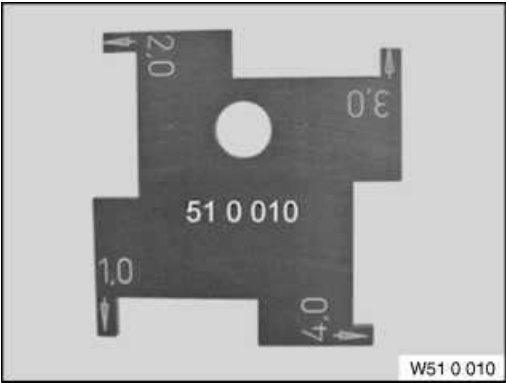


Common		Used in step	1
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		Removal aid Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

0 495 259 (51 0 010) Gauge



Common		Used in step	1
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

Overview Technical Data

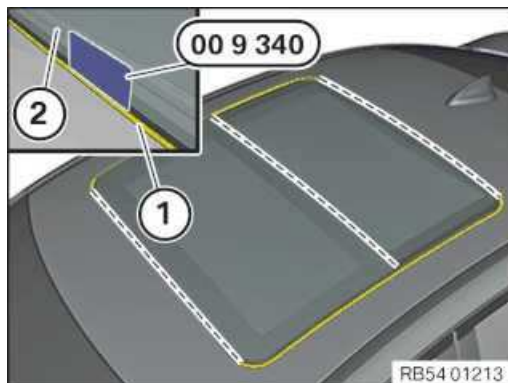
Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	1

54 13 001 Adjusting front glass slide/tilt sunroof panel

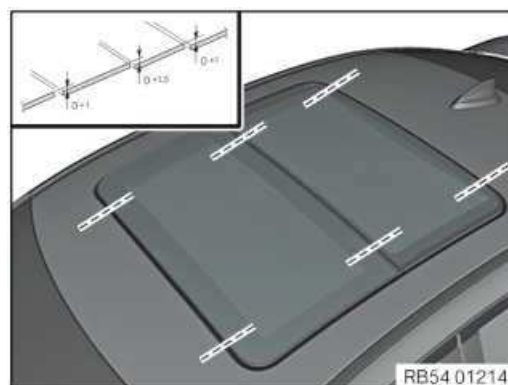
PRELIMINARY WORK

1 – Checking the adjustment of the panorama glass roof

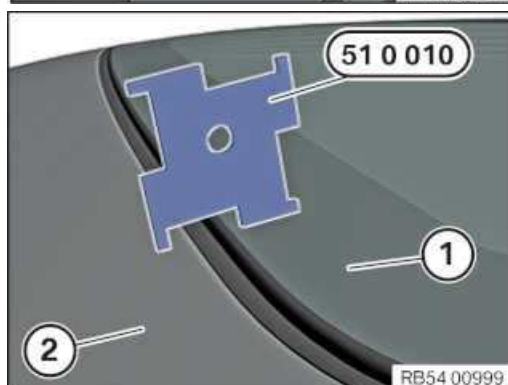


- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.
- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).

The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.
- Make sure the front of the lid is flush to 1.5 mm higher than the rear of the lid.
- Make sure the rear of the lid is flush to 1 mm higher than the rear of the roof outer skin.



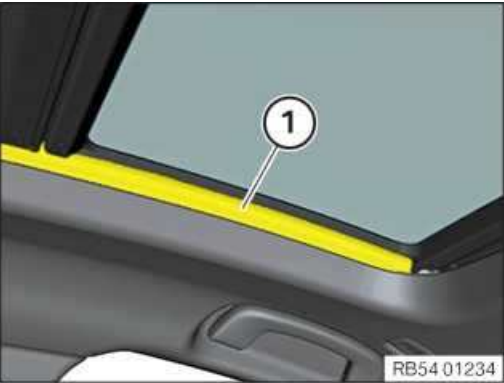
- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

2 – Adjusting the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.



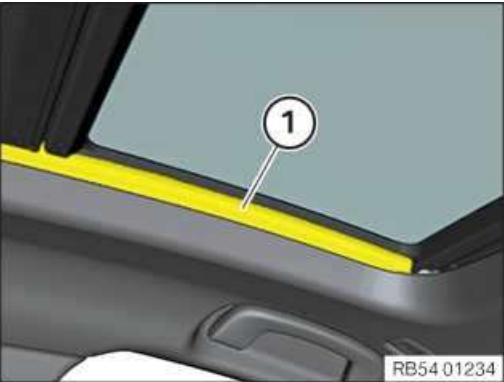
- Pull off the seal (1) around the panorama glass roof panel towards the inside.



- Close the panorama glass roof panel and open the roller sunblind.
 - Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
 - Move the panorama glass roof panel until the ideal position is reached.
 - Renew screws.
- Parts:** Bolts
- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
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- Insert the seal (1) around the panorama glass roof panel.

3 – Initialise panorama glass roof



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

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TECHNICAL INFORMATION

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

- Keep pressing the switch during the entire procedure (approx. 50 s):
 - Initialisation starts approx. 15 s after the button is pressed.
 - The glass roof and the roller sunblind are each opened and closed completely.
- Initialisation is complete once the glass roof and the roller sunblind are completely closed. The button can then be released.
- Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).
 - Clear fault memory in FZD control unit.

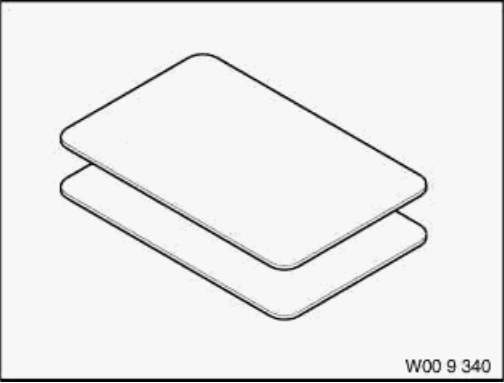
Additional Information

Overview of Tightening Torques

Panorama glass roof lid to mechanics		Used in step 2
M5	Replace screws.	5 Nm

Overview of Special Tools

0 493 687 (00 9 340) Removal aid

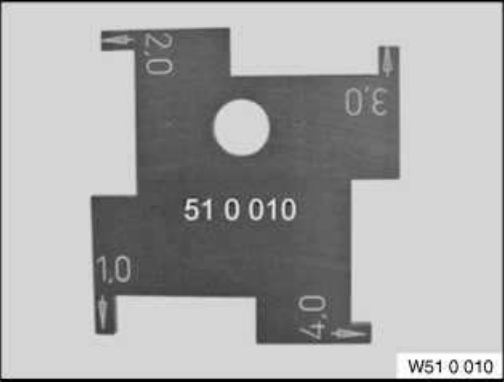


Common		Used in step	1
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
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0 495 259 (51 0 010) Gauge



Common		Used in step	1
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

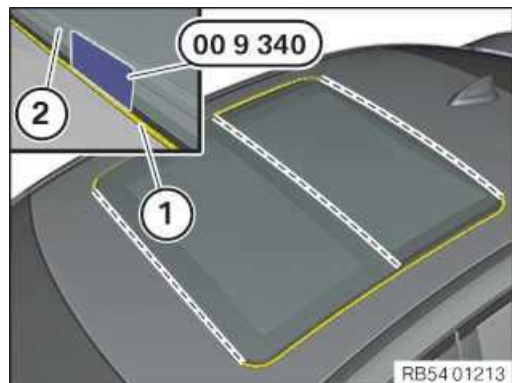
Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	1

54 13 007 Adjusting rear glass slide/tilt sunroof panel

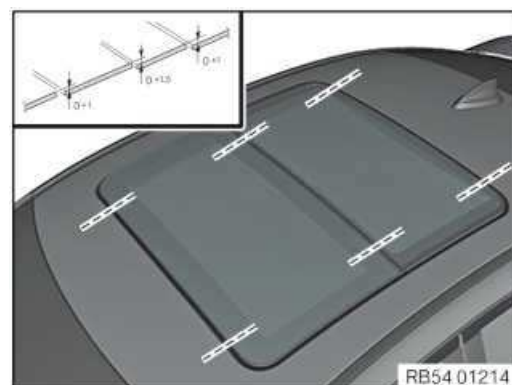
PRELIMINARY WORK

1 – Checking the adjustment of the panorama glass roof

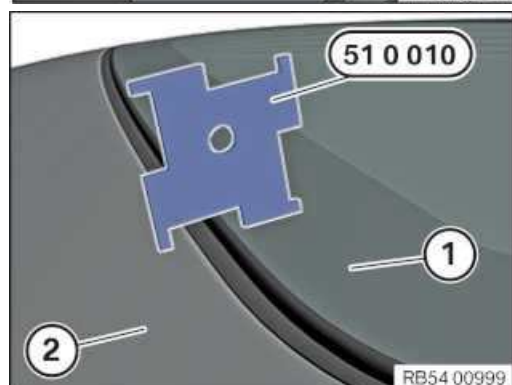


- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.
- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).

The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.
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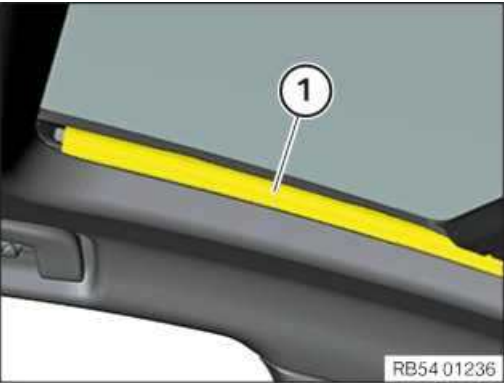
- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

2 – Adjusting rear panorama glass roof lid

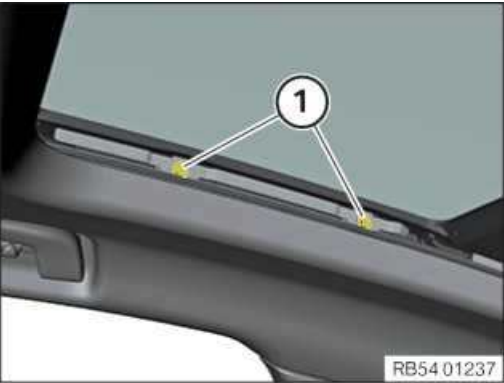


NOTICE

Perform the operations on the left and right side.



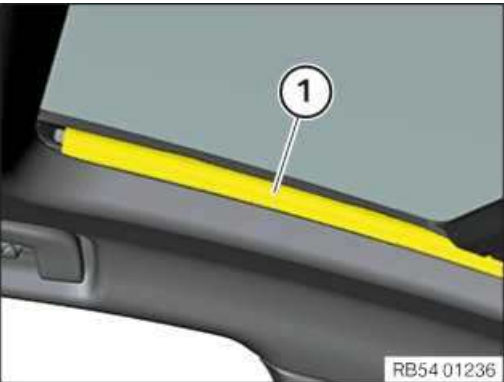
- Pull off the seal (1) around the panorama glass roof panel towards the inside.



- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
 - Move the panorama glass roof panel until the ideal position is reached.
 - Renew screws.
- Parts:** Bolts
- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
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- Insert the seal (1) around the panorama glass roof panel.

3 – Initialise panorama glass roof



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

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TECHNICAL INFORMATION

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

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

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

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

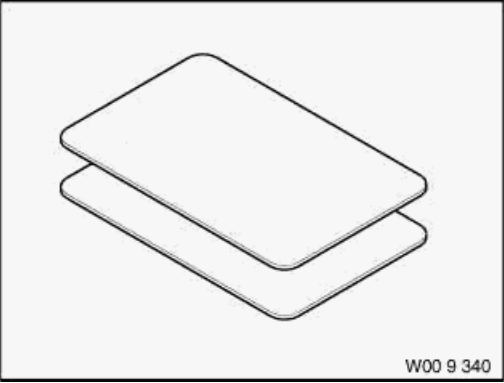
Additional Information

Overview of Tightening Torques

Panorama glass roof lid to mechanics		Used in step 2
M5	Replace screws.	5 Nm

Overview of Special Tools

0 493 687 (00 9 340) Removal aid

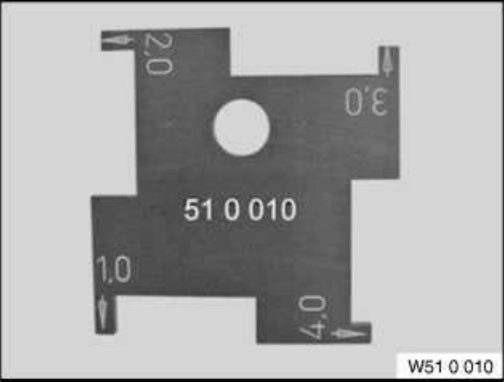


Common		Used in step	1
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
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0 495 259 (51 0 010) Gauge



Common		Used in step	1
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

Overview Technical Data

Links

[Gap dimensions, body](#)

41 00 ... Notes on the water drain hose of the slide/tilt sunroof

The water drain hoses for the slide/tilt sunroof are partially permanently integrated in the body and cannot be replaced individually.

These water drain hoses can only be completely replaced with extensive body repair work (e. g. after an accident).

Component	Vehicle	Individually replaceable
Water drain hose, front	All BMW	No
	All MINI	
Rear water drain hose	E60, F34	No
	All other BMWs	Yes
	All MINI	Yes

An individual solution is required for damage that was not caused by an accident.

Contact national hotline.

54 13 086 Removing and installing panoramic glass sunroof



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

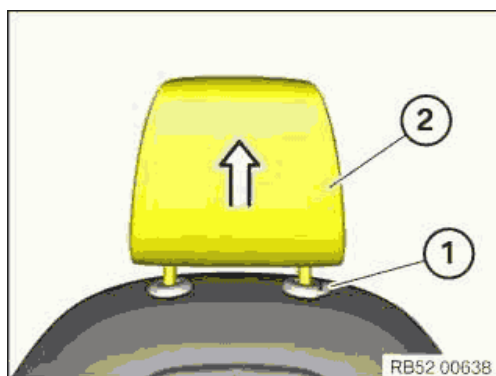
PRELIMINARY WORK

1 – Remove both front head restraints



NOTICE

Perform the operations on the left and right side.



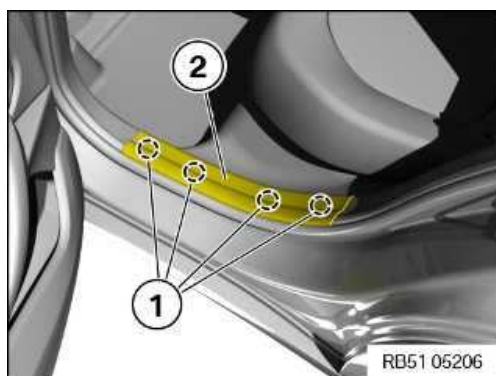
- Press the height adjustment (1) and pull the head restraint (2) out towards the top.

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



NOTICE

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



► Remove rear entrance cover strip

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

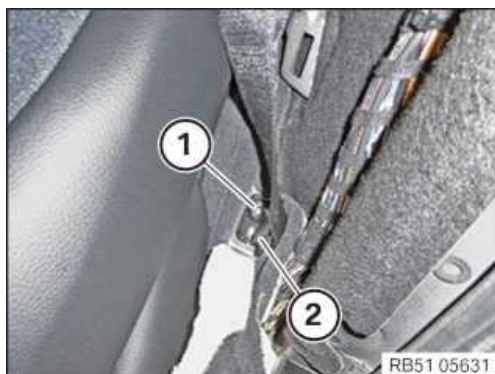
3 – Removing the bottom left and right C-pillar trim panels



NOTICE

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

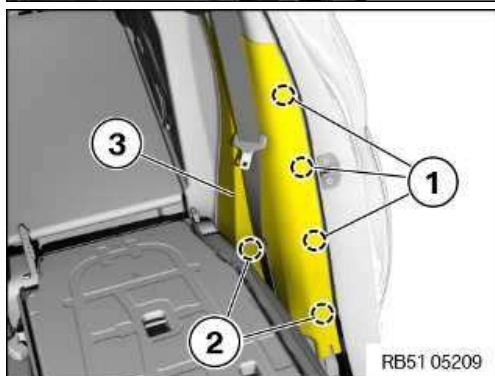
► Remove the bottom C-pillar trim panel



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

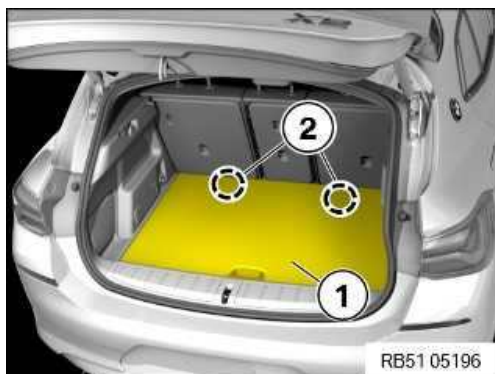


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



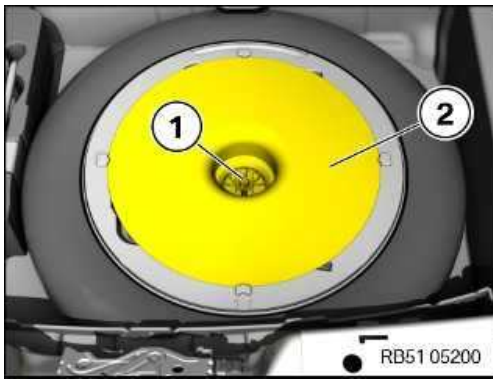
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

4 – Removing the luggage compartment removable panel

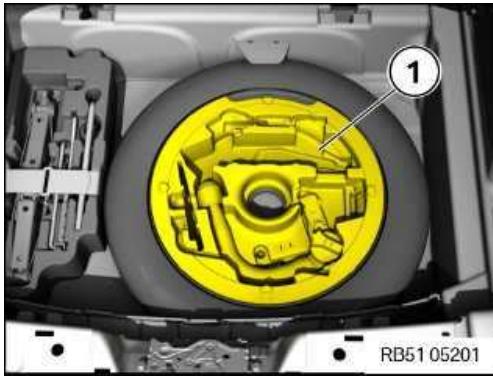


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

5 – Removing the compact spare wheel



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

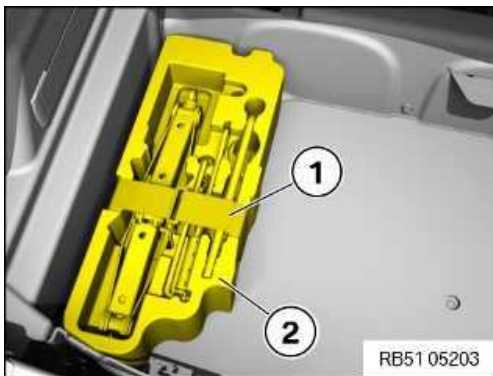


- Remove the oddments tray from the emergency wheel (1).



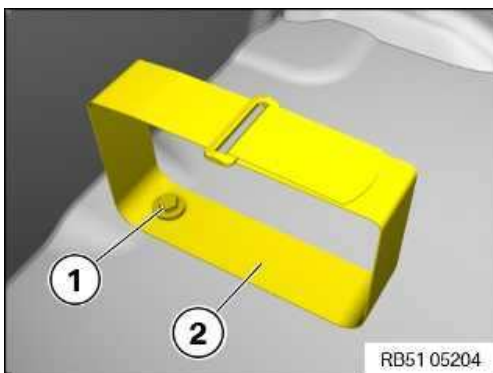
- Remove the emergency wheel (1).

6 – Remove the tool kit



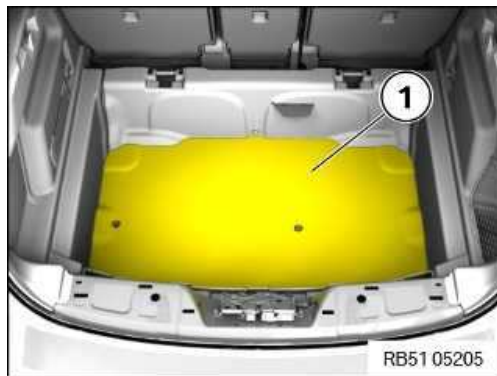
- Open the hook and loop tape (1).
- Remove the tool kit (2).

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



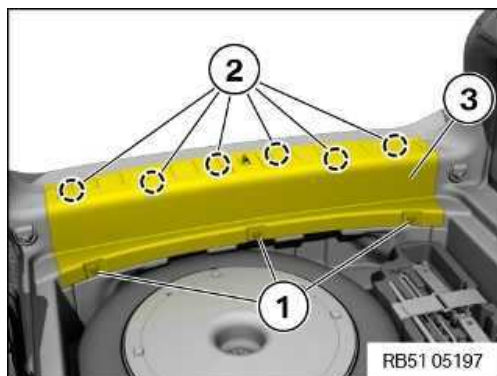
- Loosen screw (1).
- Remove the hook and loop tape (2).

8 – Removing the luggage compartment floor trim panel



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

9 – Removing the loading edge trim

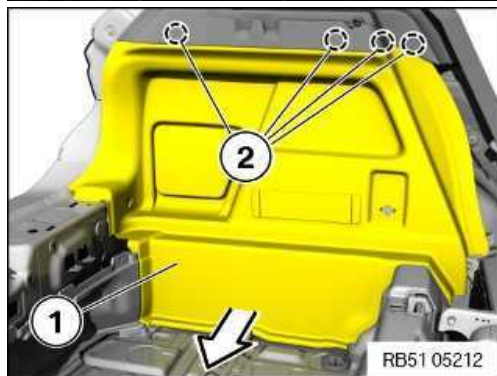


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

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



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

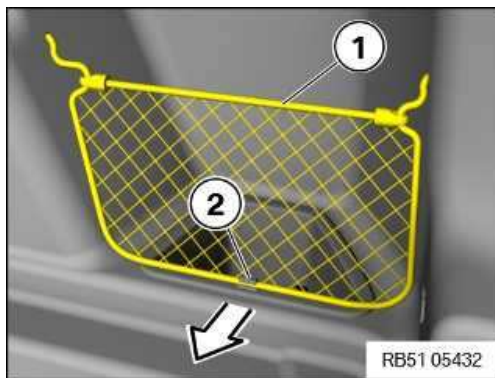


NOTICE

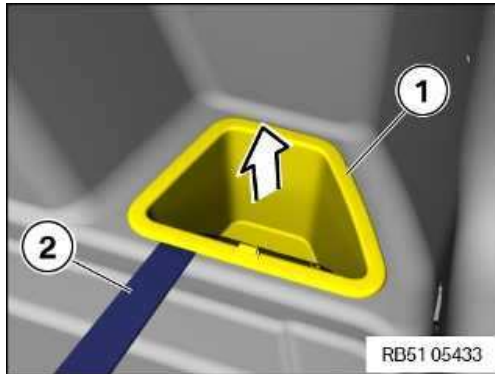
Schematic diagram is for example purposes. Some parts may differ in certain details.

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

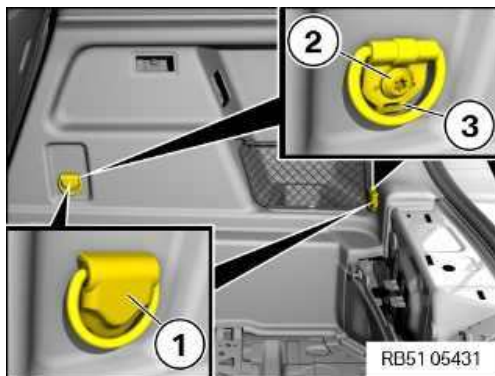
11 – Removing right luggage compartment wheel arch trim panel



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



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



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



NOTICE

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

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

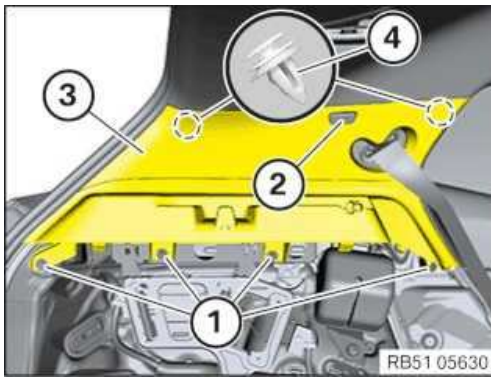
12 – Remove the trim panel of the luggage compartment capping on the left and right



NOTICE

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

- Remove the trim panel of the luggage compartment capping



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

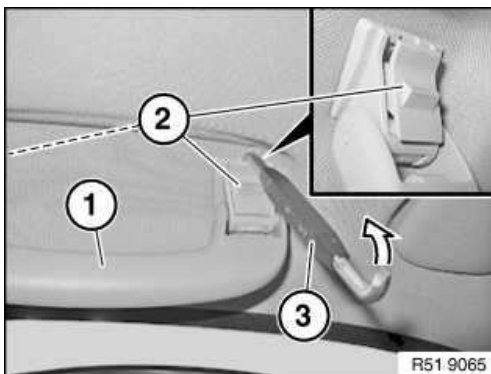
13 – Removing all grab handles



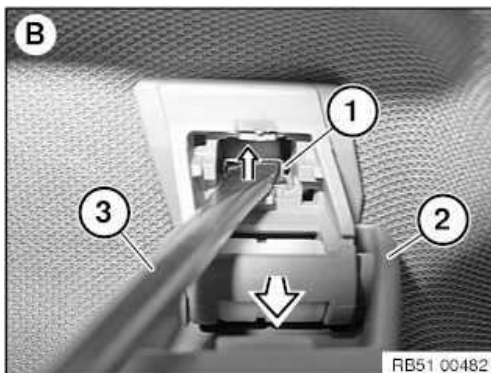
NOTICE

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

► Removing the grab handle

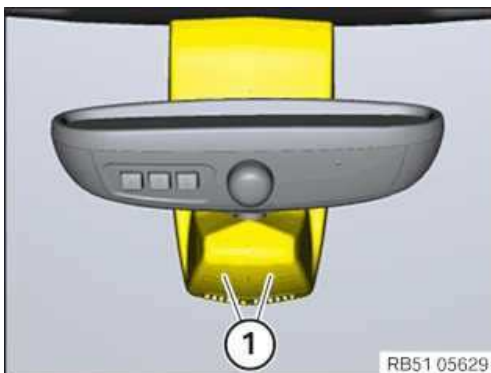


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

14 – Remove the cover on the inside mirror



- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

15 – Remove both sun visors



NOTICE

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

► Remove sun visor



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

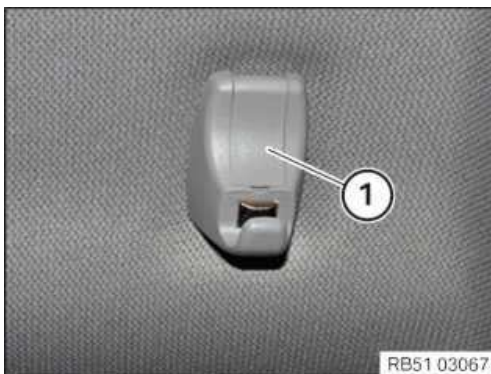
16 – Removing counter supports for sun visor on left and right



NOTICE

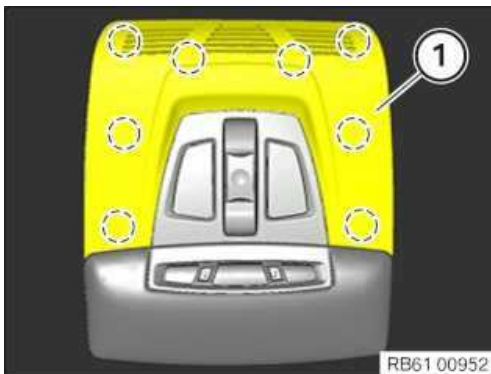
Description is for left component only. Procedure on the right side is identical.

► Remove the counter support for the sun visor

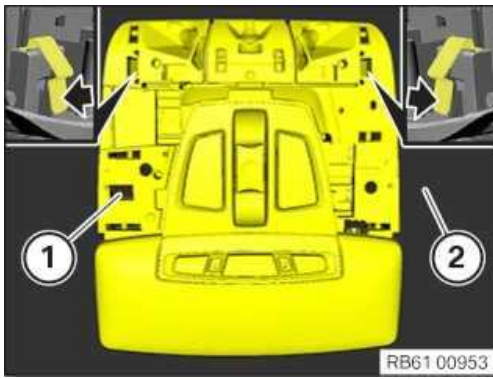


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

17 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool 0 496 569 (00 9 325).



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

18 – Removing the left and right A-pillar trim panels



NOTICE

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

► Remove the A-pillar trim panel



WARNING

Airbag unit.

Danger! Life-threatening injuries!

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



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

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



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

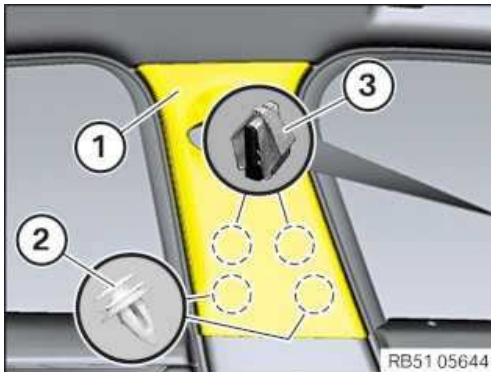
19 – Removing the B-pillar trim panels at top left and right



NOTICE

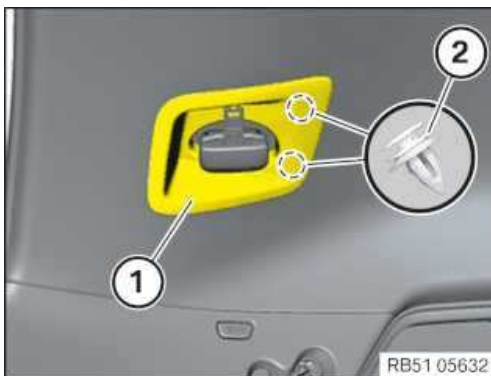
Description is for left component only. Procedure on the right side is identical.

► Partially removing upper B-pillar trim panel



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

20 – Remove the belt feed trim



- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

21 – Lowering the headlining (with panorama glass roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

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

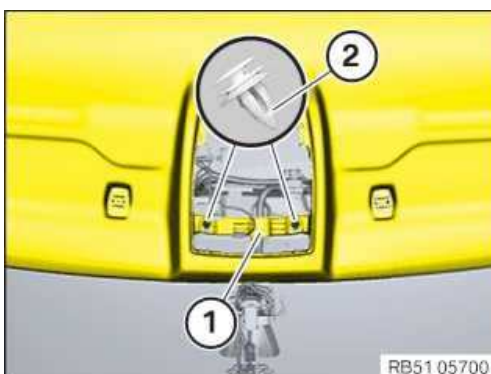


RISK OF DAMAGE

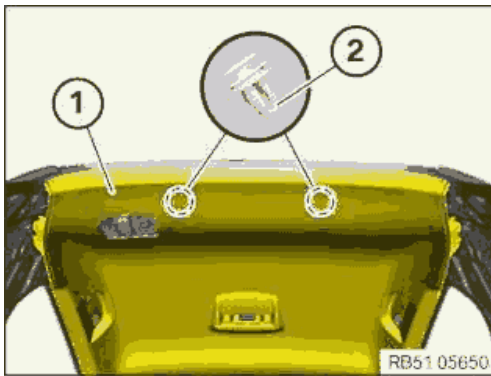
Fold the headlining.

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

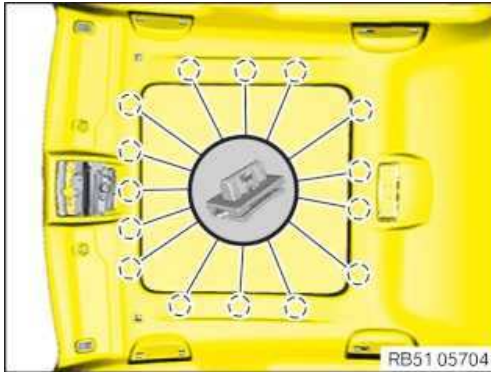
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



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



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

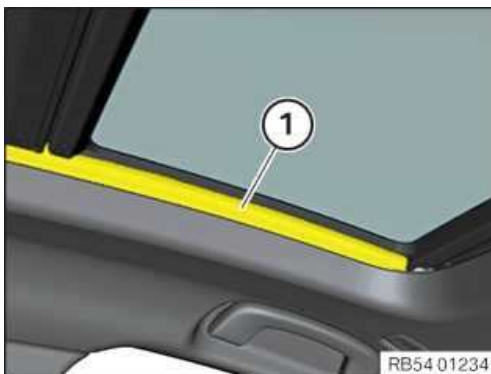


- Carefully release the headlining with a suitable plastic wedge from the clamps (1) in a downwards direction.



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

22 – Removing the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

- Pull off the seal (1) around the front panorama glass roof panel towards the inside.

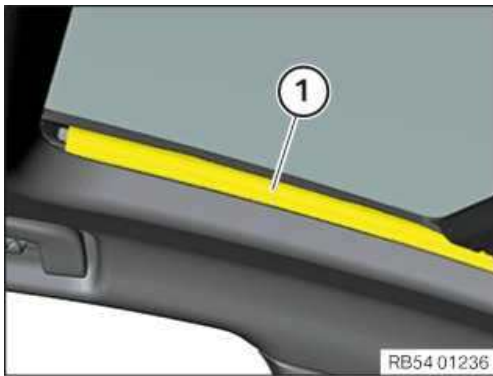


NOTICE

Perform the operations on the left and right side.

- Loosen screws (1).
- Remove the panorama glass roof lid upwards.

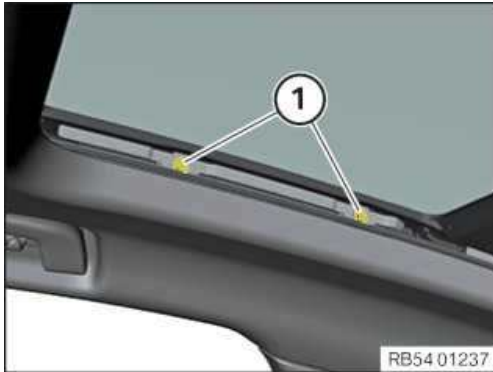
23 – Removing the rear panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

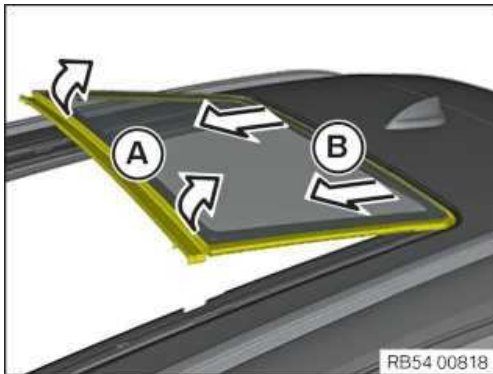
- Pull off the seal (1) around the front panorama glass roof panel towards the inside.



NOTICE

Perform the operations on the left and right side.

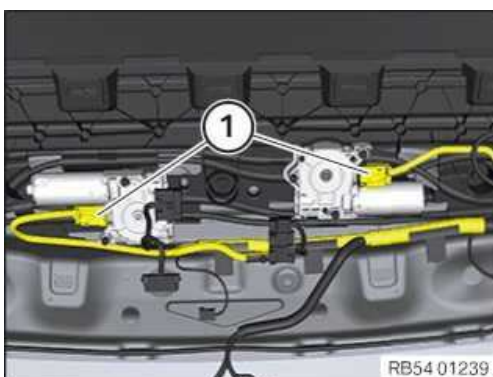
- Loosen screws (1).



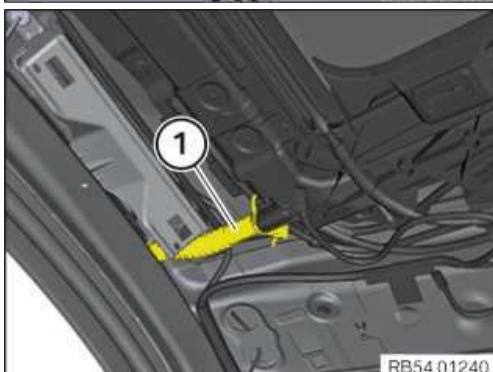
- Lift up front panorama glass roof panel in direction of arrow (A).
- Guide rear panorama glass roof panel with water channel out of roof in direction of arrow (B).

MAIN WORK

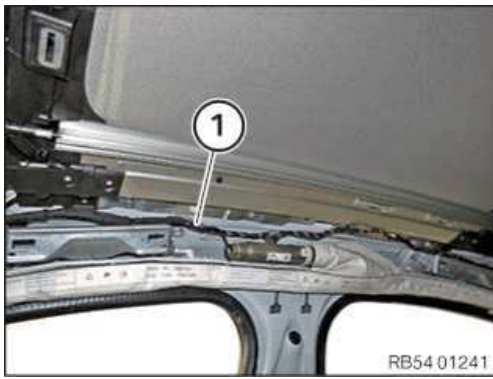
24 – Remove complete panorama glass roof



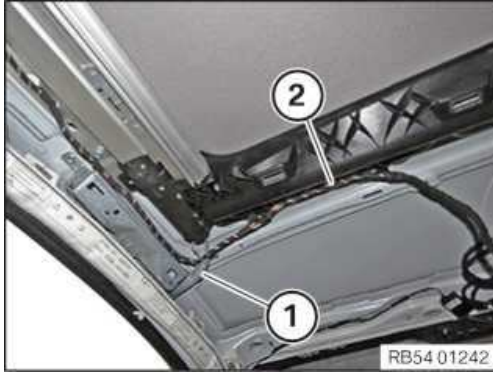
- Unlock and disconnect plug connections (1). Unclip the respective wiring harness from the panorama glass roof.



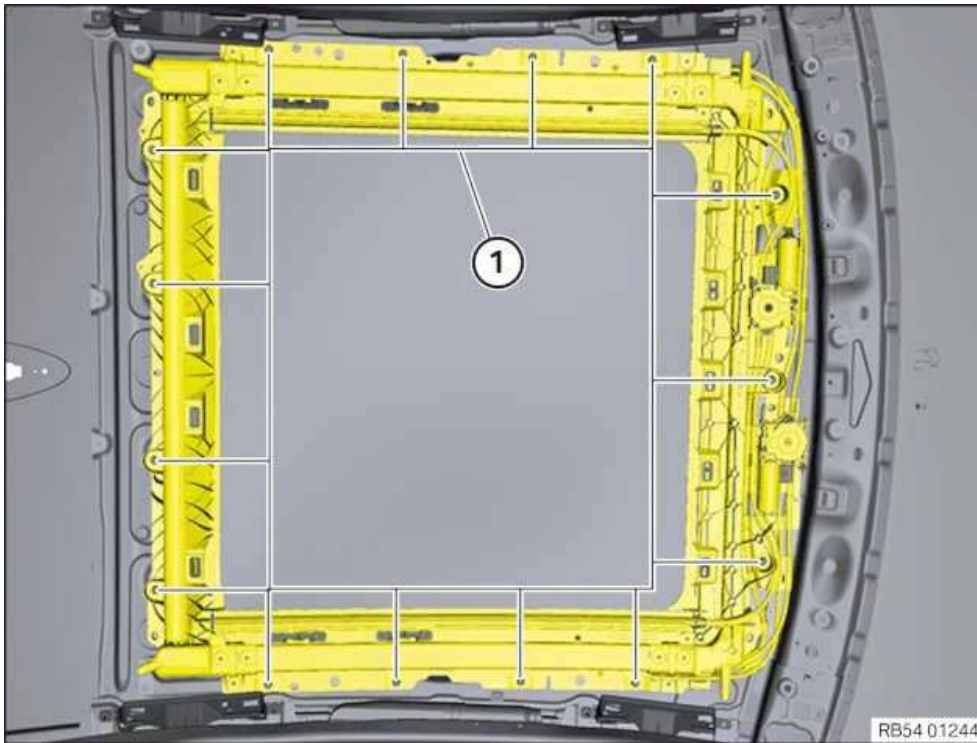
- Detach the front water drain hose (1) on the left/right.



- Detach the wiring harness (1) from the panorama glass roof.



- Detach the rear water drain hose (1) on the left/right. Detach the wiring harness (2) from the panorama glass roof.



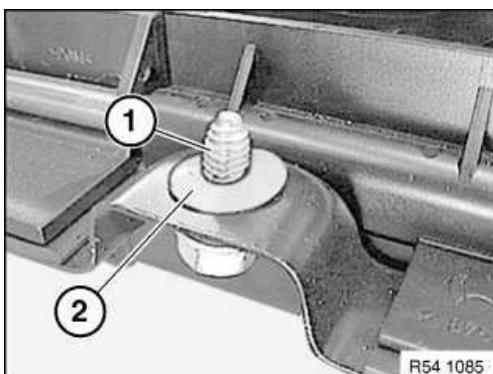
RISK OF DAMAGE

Heavy component.

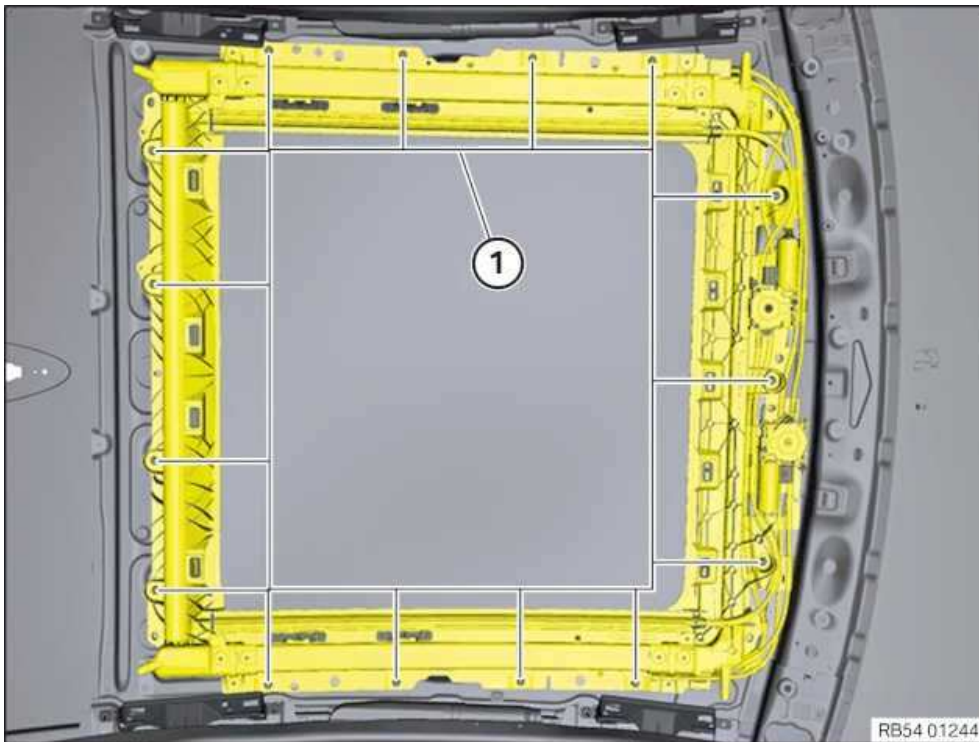
Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Secure panorama glass roof from falling with the help of an auxiliary person.
- Release screws along line (1).
- Lower the panorama glass roof with the assistance of an auxiliary person and remove from the vehicle towards the rear.

25 – Install complete panorama glass roof



- In order to prevent groaning noises, all bolts (1) must be secured with the plastic washers (2) prior to installation.



RB54 01244

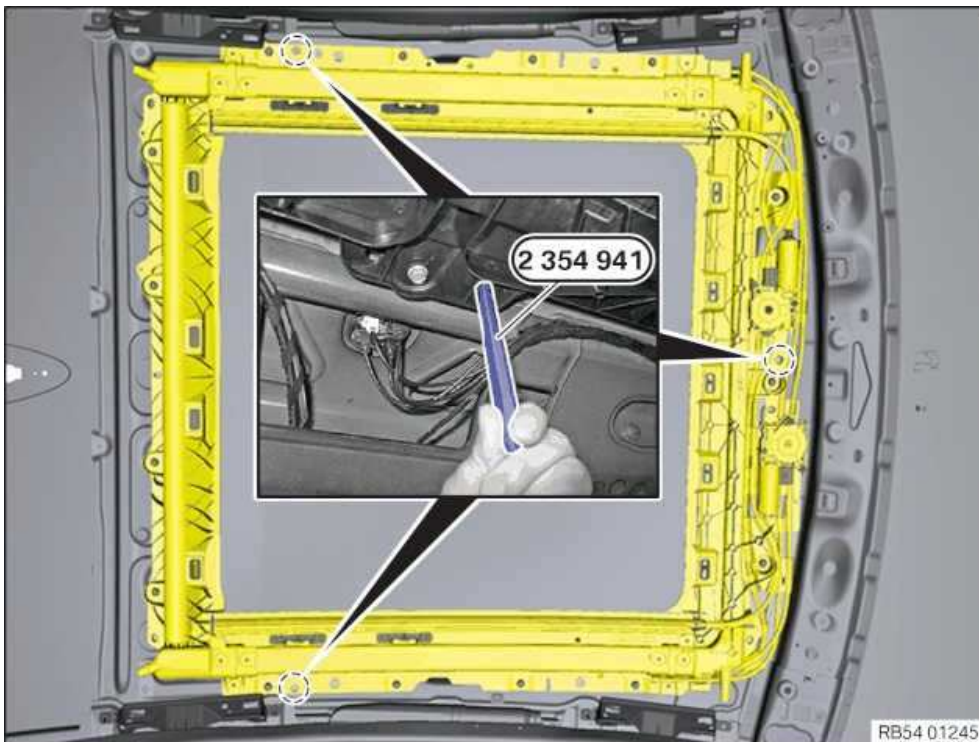


RISK OF DAMAGE

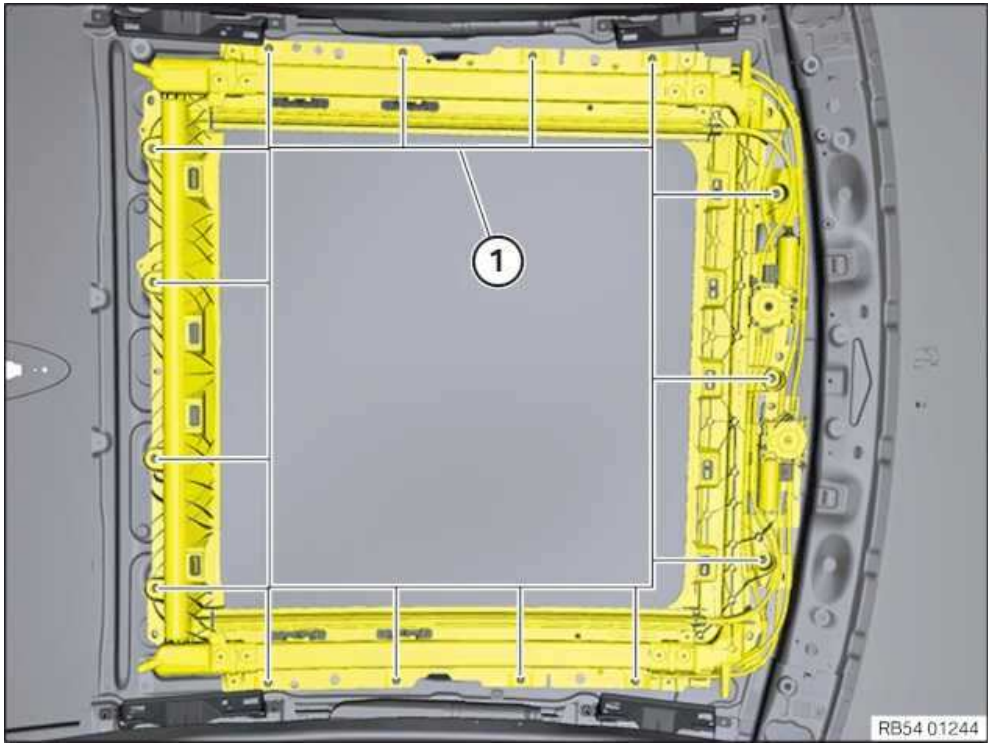
Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Insert the panorama glass roof into the vehicle and position it with the assistance of a second person.
- Screw in all screws along the line (1) by several turns.
- Insert the special tool **2 354 941** and align the panorama glass roof (1) with the roof.



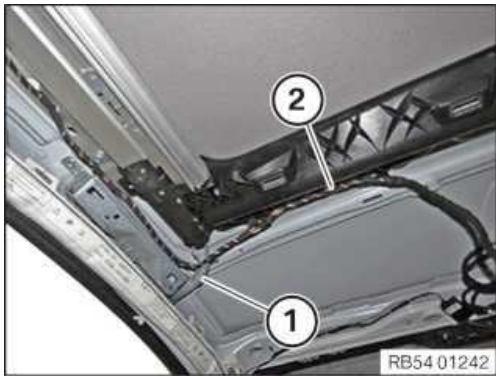
RB54 01245



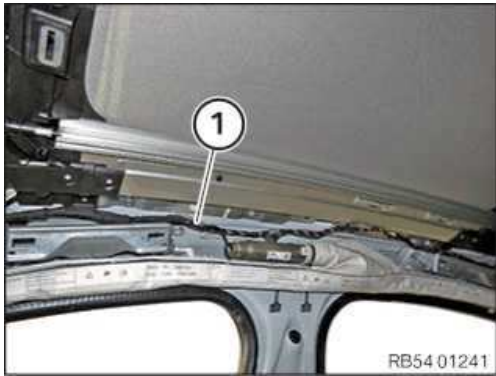
- Tighten all bolts (1).

Slide/tilt sunroof frame to body

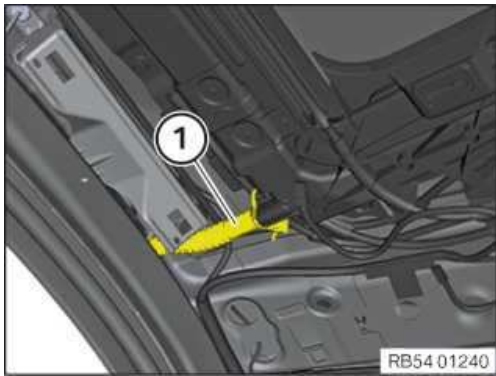
Hexagon screw		Tightening torque	5, Nr
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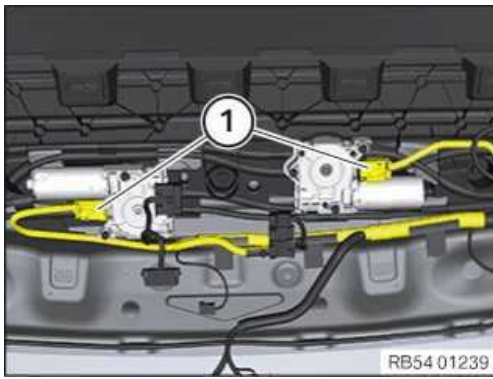
- Attach rear water drain hose (1) on left/right.
Make sure that all water drain hoses (1) are pushed up to their limit position.



- Fasten vehicle wiring harness (1) on the panorama glass roof.



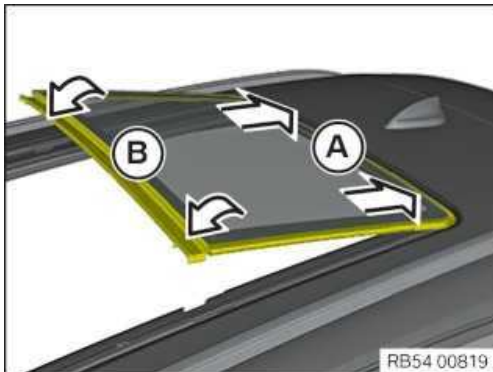
- Attach front water drain hose (1) on left/right.
Make sure that all water drain hoses (1) are pushed up to their limit position.



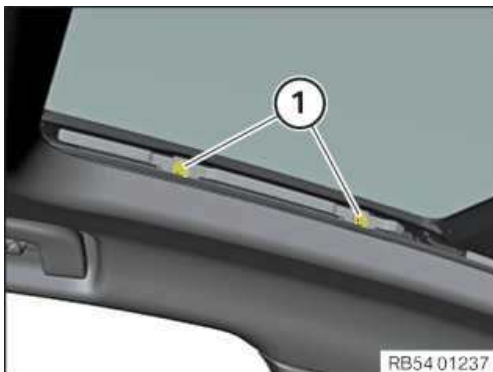
- Connect connector (1).
- Fasten corresponding vehicle wiring harness on the panorama glass roof.

POSTPROCESSES

26 – Installing the rear panorama glass roof lid



- Feed the rear panorama glass roof lid into the roof with the water channel in direction of arrow. (A)
- Fold down the panorama glass roof lid in direction of arrow. (B)



NOTICE

Perform the operations on the left and right side.

- Renew screws (1).
- Parts:** Bolts
- Tap the screws (1), do not tighten.

27 – Installing the front panorama glass roof panel

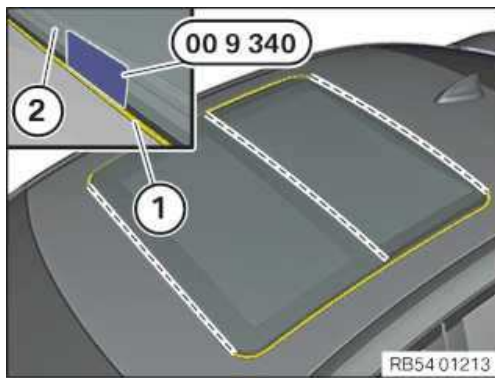


NOTICE

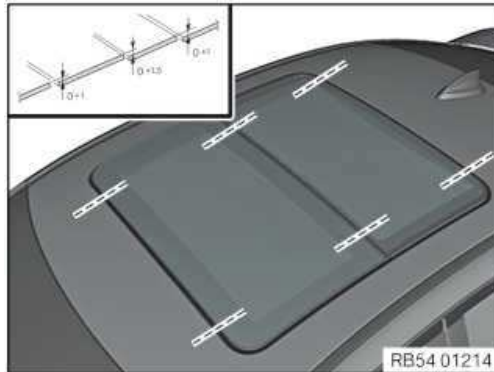
Perform the operations on the left and right side.

- Insert the panorama glass roof lid.
- Renew screws (1).
- Parts:** Bolts
- Screw the bolts (1) in but do not tighten.

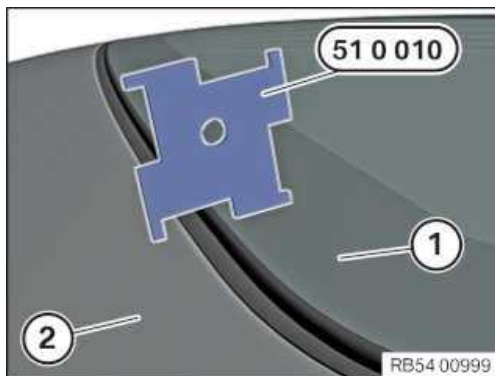
28 – Checking the adjustment of the panorama glass roof



- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.
- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).
The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.
- Make sure the front of the lid is flush to 1.5 mm higher than the rear of the lid.
- Make sure the rear of the lid is flush to 1 mm higher than the rear of the roof outer skin.



- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

29 – Adjusting the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.



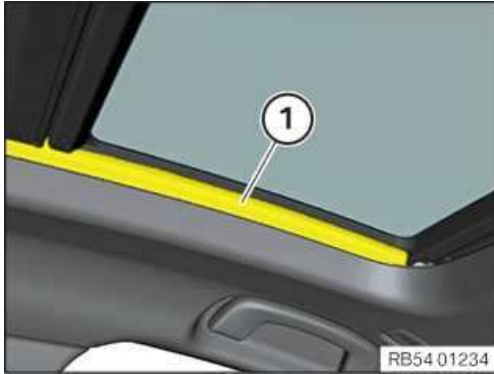
- Pull off the seal (1) around the panorama glass roof panel towards the inside.



- Close the panorama glass roof panel and open the roller sunblind.
 - Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
 - Move the panorama glass roof panel until the ideal position is reached.
 - Renew screws.
- Parts:** Bolts
- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
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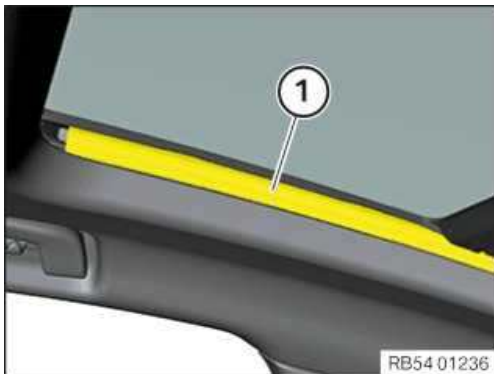
- Insert the seal (1) around the panorama glass roof panel.

30 – Adjusting rear panorama glass roof lid

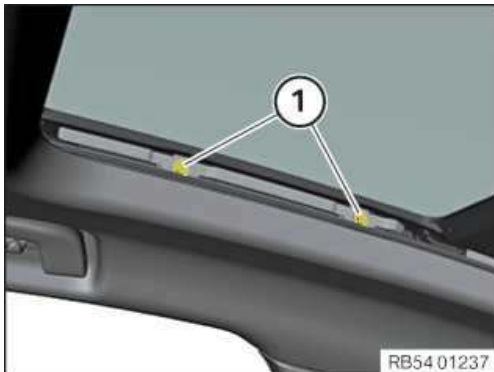


NOTICE

Perform the operations on the left and right side.



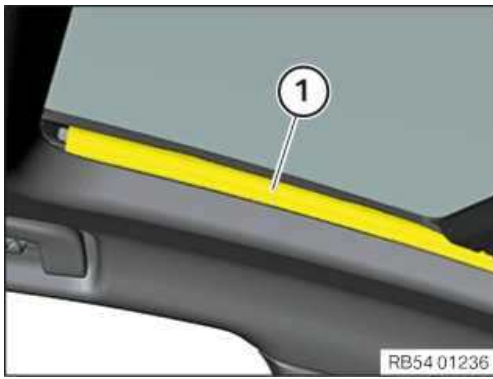
- Pull off the seal (1) around the panorama glass roof panel towards the inside.



- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
 - Move the panorama glass roof panel until the ideal position is reached.
 - Renew screws.
- Parts:** Bolts
- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
----	-----------------	------



- Insert the seal (1) around the panorama glass roof panel.

31 – Check the roller sunblind and the glass roof for function

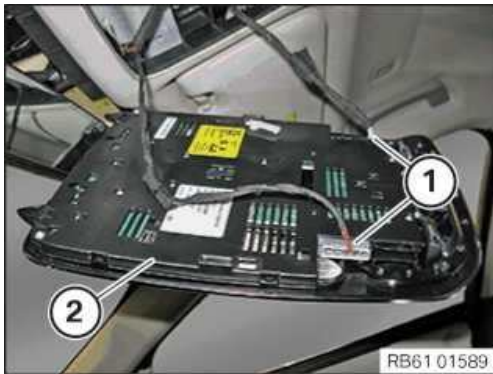


RISK OF DAMAGE

Damage to the sun blind rollers.

After the installation an initialised sun blind roller can be damaged during the first start-up.

- Perform initialisation before start-up.



- Connect the connector (1) with the roof function centre (FZD) (2).



► Initialise panorama glass roof

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



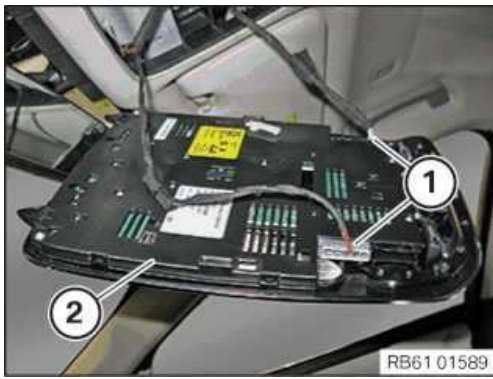
TECHNICAL INFORMATION

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

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

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

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



- Disconnect the connector (1) at the roof function centre (FZD) (2).

32 – Install the headlining (lowered with panorama roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

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



RISK OF DAMAGE

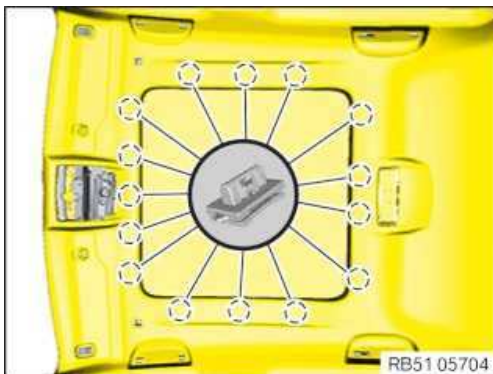
Fold the headlining.

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

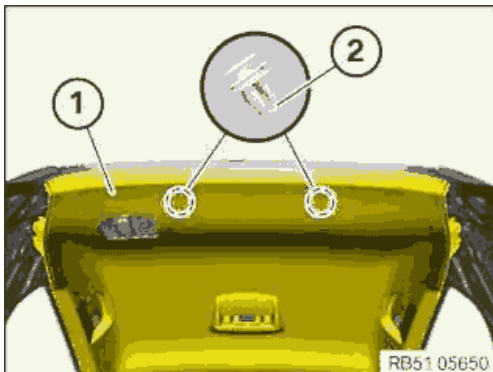
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



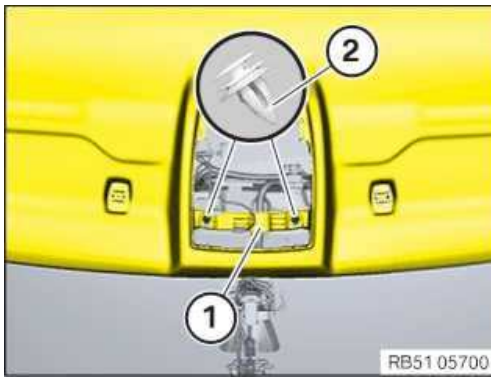
- Install the headlining (1) and carefully insert it at the respective edge protection.



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

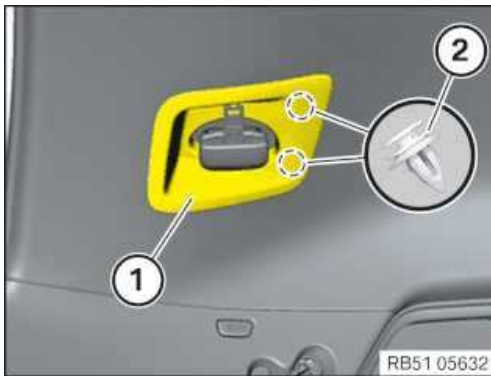


- Clip in the headlining (1) using the clips (2).



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

33 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

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



NOTICE

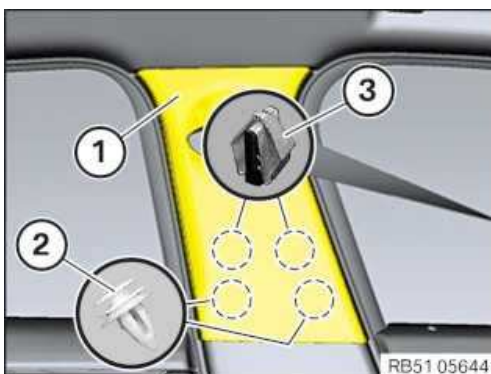
Description is for left component only. Procedure on the right side is identical.

► Partially installing upper B-pillar trim panel



TECHNICAL INFORMATION

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



- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

35 – Installing the left and right A-pillar trim panels



NOTICE

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

► Install the A-pillar trim panel



WARNING

Airbag unit.

Danger! Life-threatening injuries!

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



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

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



TECHNICAL INFORMATION

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



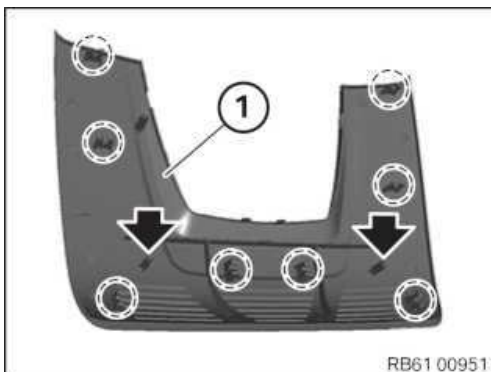
- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
 - Renew screw.
- Parts:** Screw
- Tighten down screw.

A-pillar trim panel to body

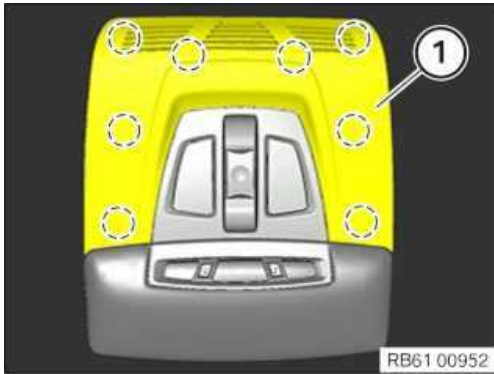
M5x42 screw	Renew screw	Tightening torque	2,2 Nm
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- Clip in the cover (1).

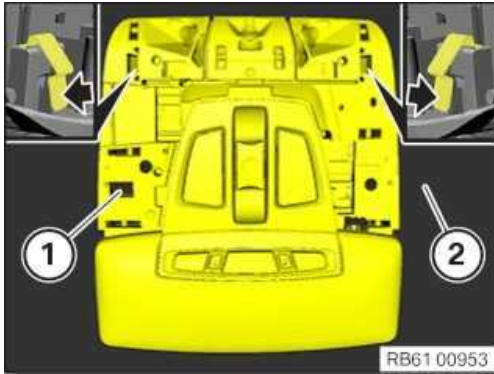
36 – Install the roof function centre



- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.



NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

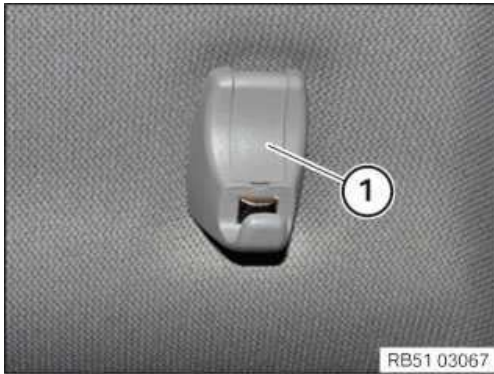
- Connect associated connector.
- Join the roof function centre (1) to the headlining (2).

37 – Install the counter supports for the sun visor on left and right



NOTICE

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



► Install the counter support for the sun visor

- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

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

38 – Install both sun visors



NOTICE

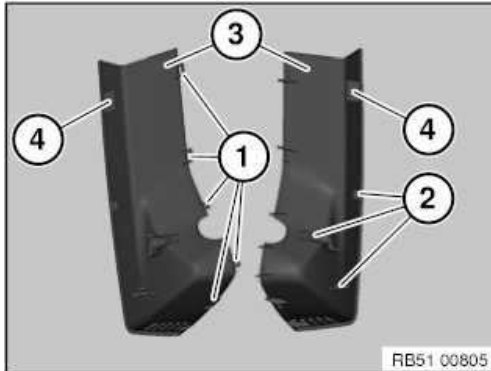
Description is for left component only. Procedure on the right side is identical.

► Install the sun visor



- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

39 – Install the cover on the inside mirror

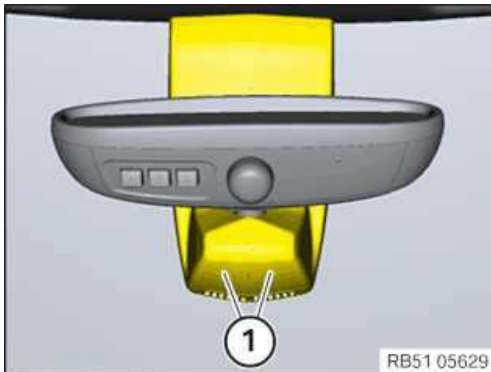


- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.

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

- Check the spacers (4).

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



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

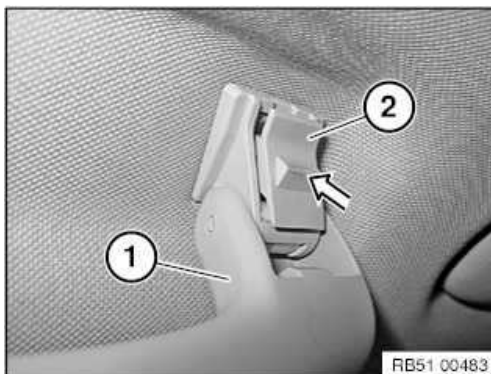
40 – Installing all grab handles



NOTICE

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

► Installing the grab handle



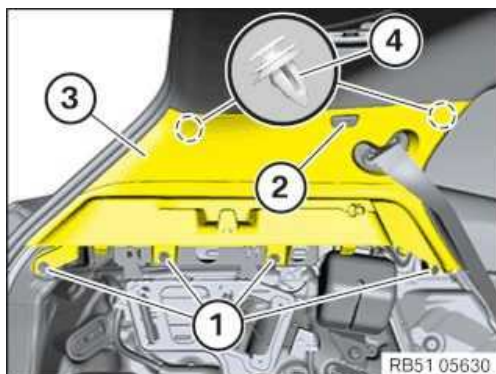
- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

41 – Install the trim panel for left and right the luggage compartment capping



NOTICE

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



► Install the trim panel for the luggage compartment capping

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

Trim panel of luggage compartment capping

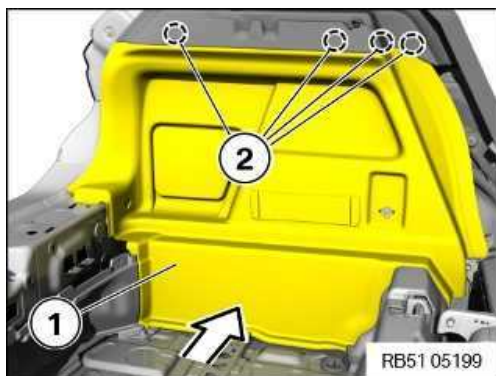
Self-tapping screw		Tightening torque	4 Nm
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- Tighten the screws (1).

Trim panel of luggage compartment capping to body

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

42 – Install luggage compartment wheel arch trim panel at left



NOTICE

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

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

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

Lashing eye in luggage compartment

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

- Clip in the covers (1).



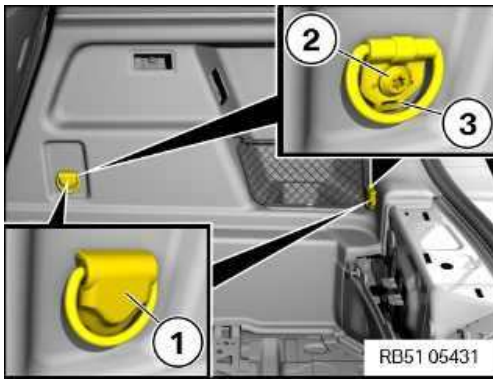
43 – Installing the luggage compartment wheel arch trim panel on the right



NOTICE

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

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



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

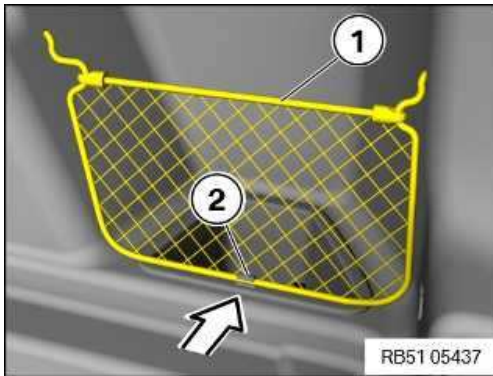
Lashing eye in luggage compartment

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

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



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

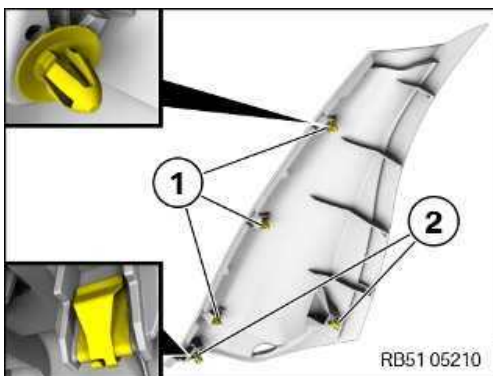
44 – Install C-pillar trim panel at bottom left and right



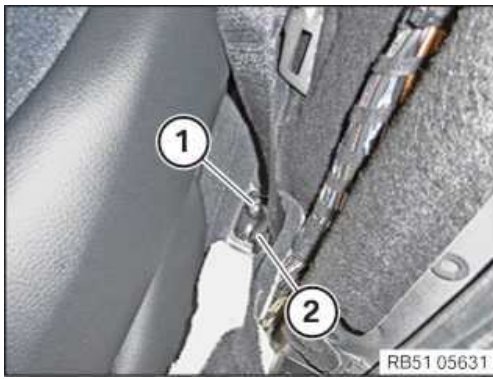
NOTICE

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

► Install the bottom C-pillar trim panel



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

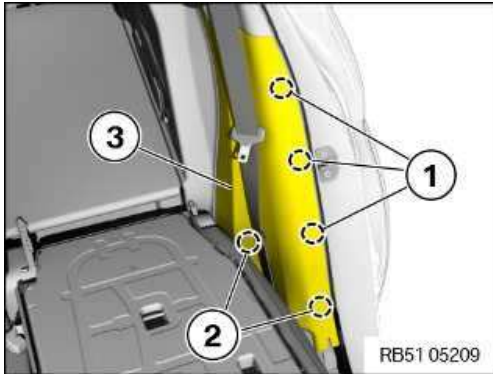


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm
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- Install the carpet correctly.



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



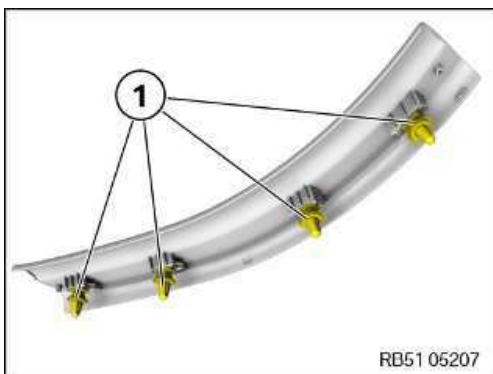
- Position the edge protection (1) correctly in the area of the bottom C-pillar trim.

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



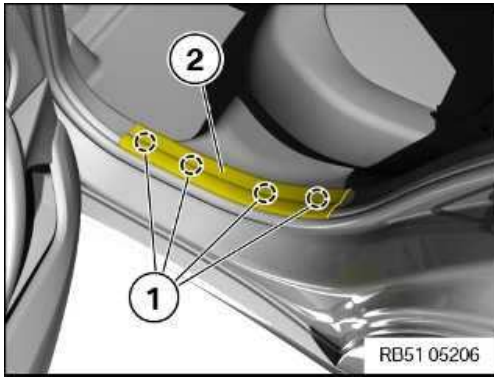
NOTICE

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



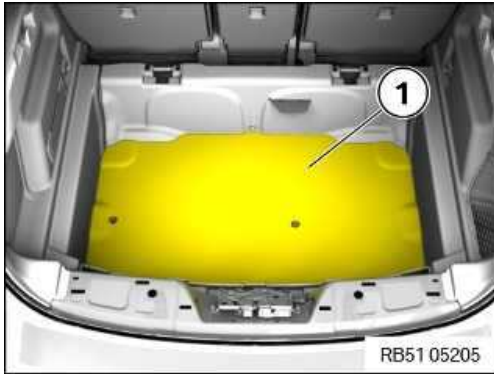
► Installing the rear door sill cover strip

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



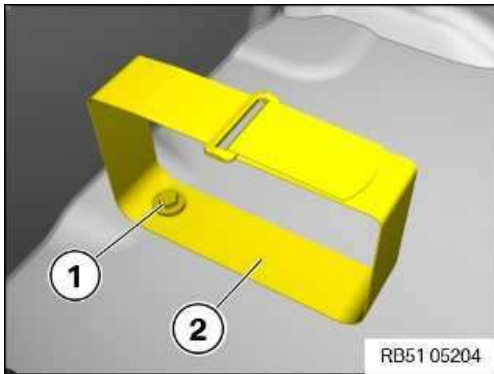
- Clip in the door sill cover strip (2) with the clips (1).

46 – Installing the luggage compartment floor trim panel



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

47 – Inserting the Velcro fastener for the toolkit

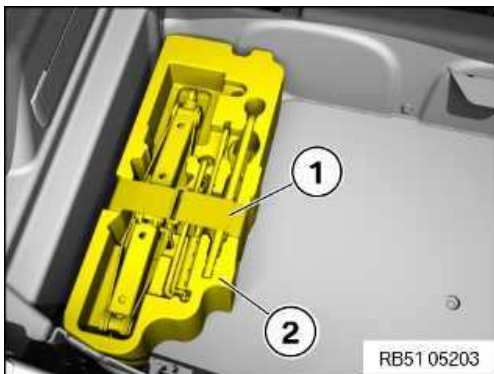


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

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

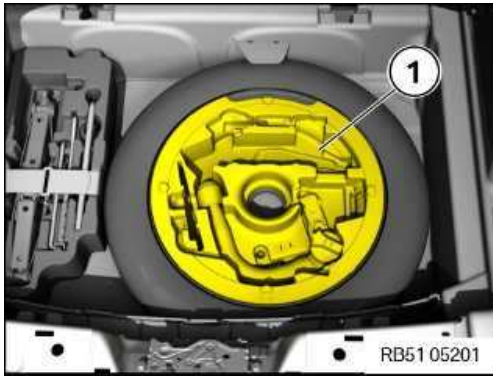


- Install the tool kit (2).
- Close the hook and loop tape (1).

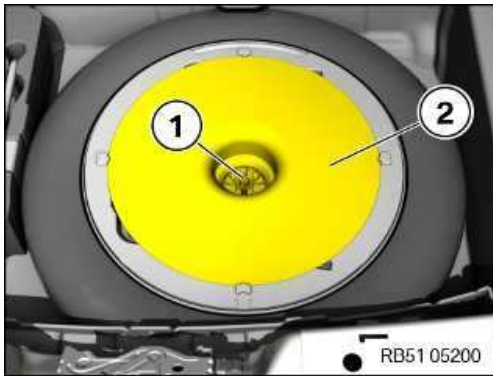
49 – Install the emergency wheel



- Insert compact spare wheel(1).

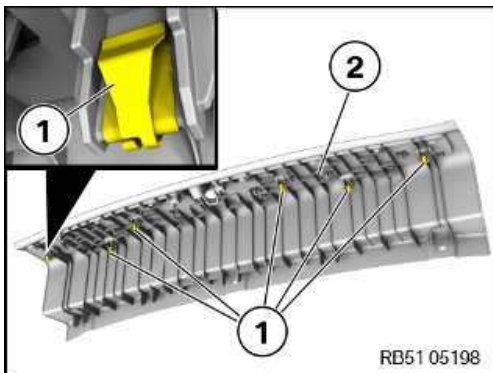


- Insert oddments tray into the compact spare wheel (1).

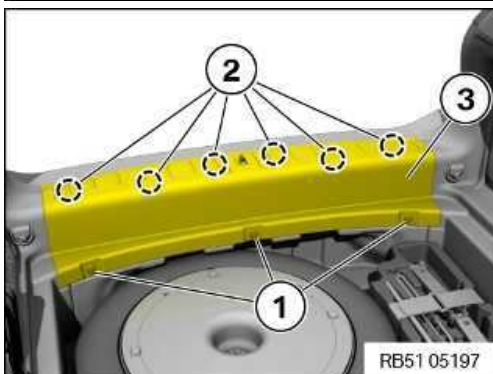


- Insert the lid (2).
- Hand-tighten the bolt (1).

50 – Installing loading edge trim

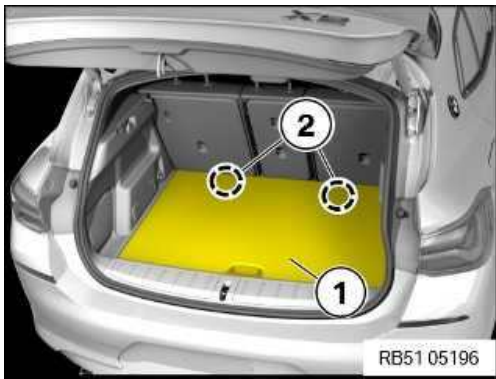


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

51 – Installing the luggage compartment removable panel



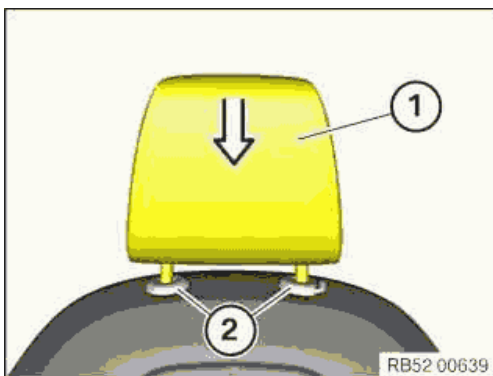
- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

52 – Install both front head restraints



NOTICE

Perform the operations on the left and right side.



- Insert and engage head restraint (1) into the guide sleeves (2) from above.

Additional Information

Overview of Tightening Torques

Slide/tilt sunroof frame to body

Used in step [25](#)

Hexagon screw	Tightening torque	5,4 Nm
---------------	-------------------	--------

Panorama glass roof lid to mechanics

Used in step [29](#) [30](#)

M5	Replace screws.	5 Nm
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A-pillar trim panel to body

Used in step [35](#)

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

Used in step [37](#)

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

Trim panel of luggage compartment capping

Used in step [41](#)

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

Trim panel of luggage compartment capping to body

Used in step [41](#)

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

Lashing eye in luggage compartment

Used in step [42](#) [43](#)

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

End fitting to body

Used in step [44](#)

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

Toolkit hook and loop tape to body

Used in step [47](#)

Bolt M6 x 20		Tightening torque	4 Nm
--------------	--	-------------------	------

Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common

Used in step [17](#) [19](#)

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

2 354 941 Pin

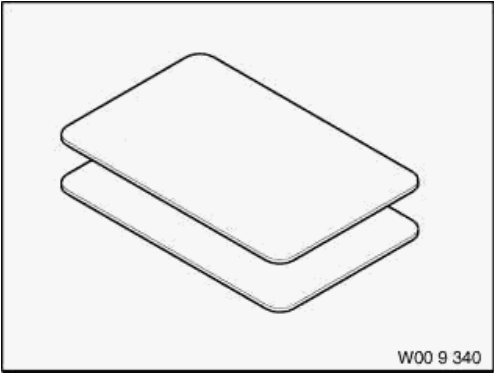


Common

Used in step [25](#)

Usage	For centring the slide/tilt sunroof frame. Contour-graphic silhouette foil is included in the delivery specification. Further information on the contour-graphic silhouette foil is included in service information 00 22 13 (969).
Included in the tool or work	
Storage location	A74
Replaced by	
In connection with	
SI-Number	01 30 13 (999)

0 493 687 (00 9 340) Removal aid

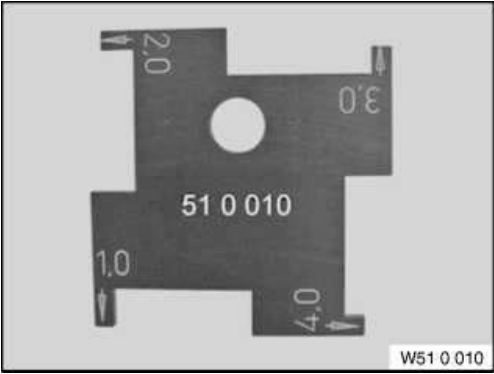


Common		Used in step	28
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		Removal aid Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

0 495 259 (51 0 010) Gauge



Common		Used in step	28
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

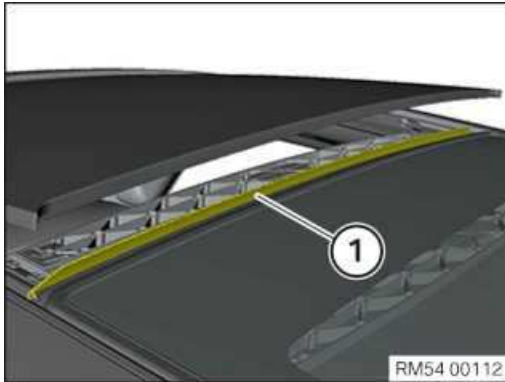
Overview Technical Data

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	28
General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	18 35

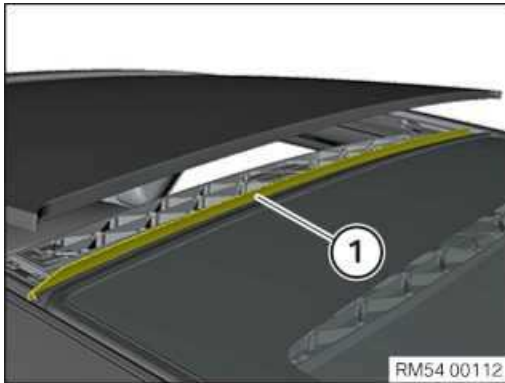
54 13 056 Removing and installing/renewing gasket for water channel

1 – Remove the seal for the water channel



- Move front glass slide/tilt sunroof panel fully upwards.
- Pull the seal (1) off toward the front.

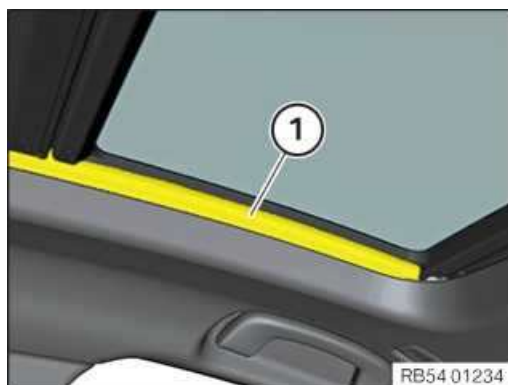
2 – Install the seal for the water channel



- Connect the seal (1) to the water channel from the front.

54 13 240 Removing and installing/replacing front glass slide/tilt sunroof panel

1 – Removing the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

- Pull off the seal (1) around the front panorama glass roof panel towards the inside.



NOTICE

Perform the operations on the left and right side.

- Close the panorama glass roof panel and open the roller sunblind.
- Loosen screws (1).
- Remove the panorama glass roof lid upwards.

2 – Installing the front panorama glass roof panel



NOTICE

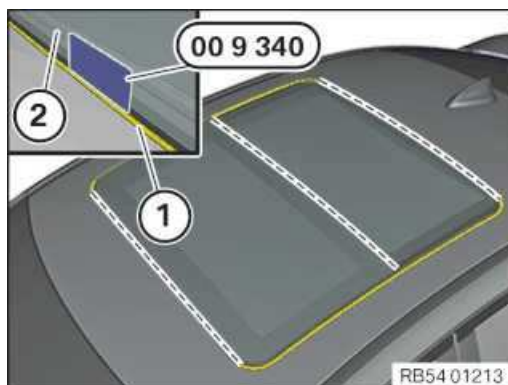
Perform the operations on the left and right side.

- Insert the panorama glass roof lid.

Parts: Bolts

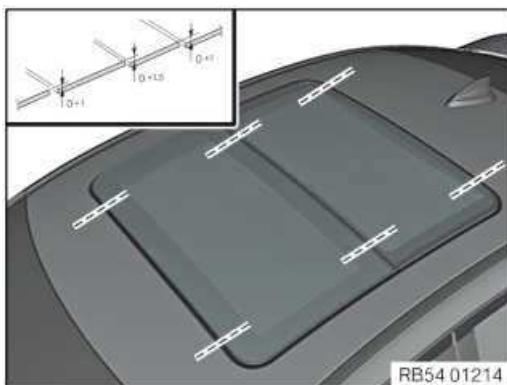
- Renew screws (1).
- Screw the bolts (1) in but do not tighten.

3 – Checking the adjustment of the panorama glass roof

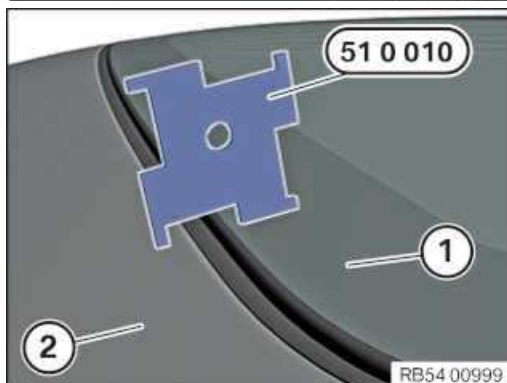


- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.
- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).

The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.
- Make sure the front of the lid is flush to 1.5 mm higher than the rear of the lid.
- Make sure the rear of the lid is flush to 1 mm higher than the rear of the roof outer skin.



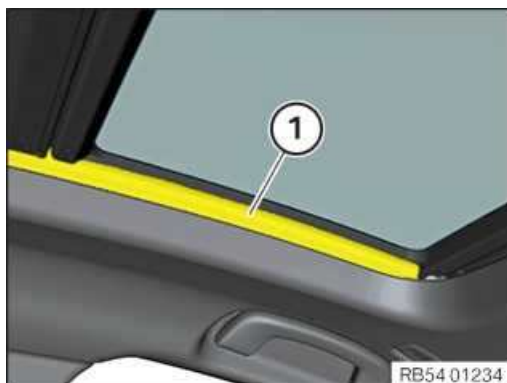
- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

4 – Adjusting the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



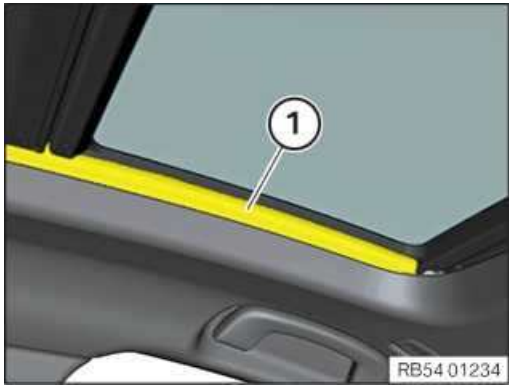
- Close the panorama glass roof panel and open the roller sunblind.
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
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- Insert the seal (1) around the panorama glass roof panel.

5 – Initialise panorama glass roof



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

i

TECHNICAL INFORMATION

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

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

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

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

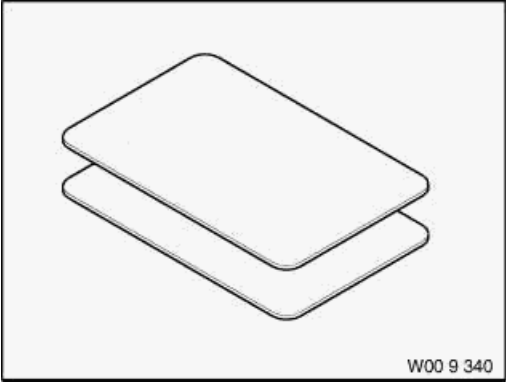
Additional Information

Overview of Tightening Torques

Panorama glass roof lid to mechanics		Used in step 4
M5	Replace screws.	5 Nm

Overview of Special Tools

0 493 687 (00 9 340) Removal aid

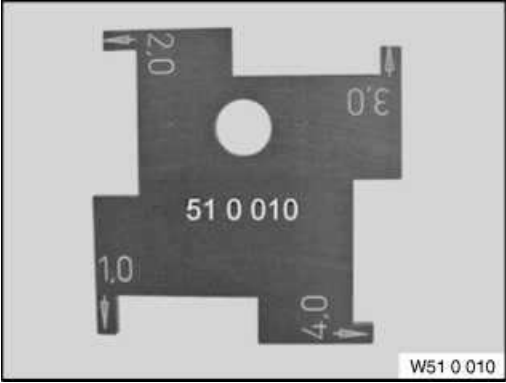


Common		Used in step	3
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		Removal aid Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

0 495 259 (51 0 010) Gauge



Common		Used in step	3
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

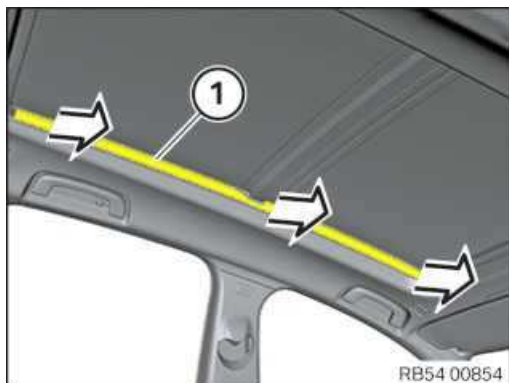
Overview Technical Data

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	3

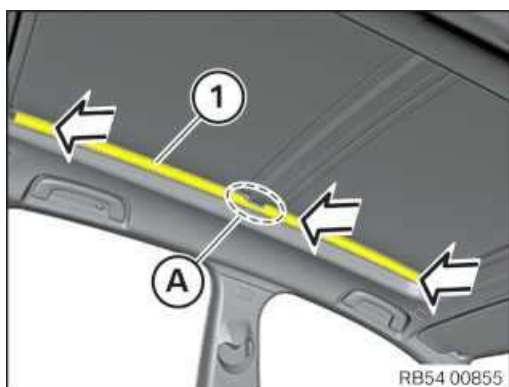
54 13 047 Removing and installing/replacing inside left or right gasket on the slide/tilt sunroof

1 – Remove the gasket on the inner slide/tilt sunroof



- Pull the seal (1) off the slide/tilt sunroof frame.

2 – Install the seal on the inside of the slide/tilt sunroof



- Insert the seal (1) in the slide/tilt sunroof frame.

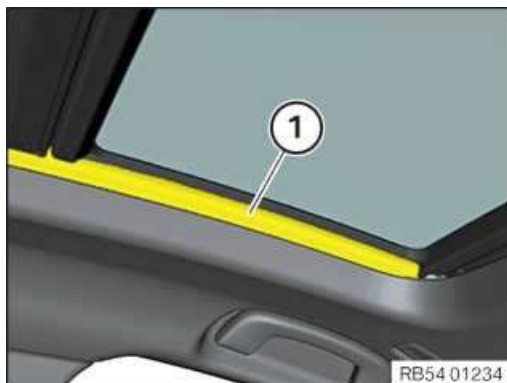
Note: To facilitate installation, coat gasket (1) with water.

- Check the correct positioning in the area (A) and correct the position as needed.

54 13 250 Removing and installing/replacing rear glass slide/tilt sunroof panel

PRELIMINARY WORK

1 – Removing the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

- Pull off the seal (1) around the front panorama glass roof panel towards the inside.

- Close the panorama glass roof panel and open the roller sunblind.



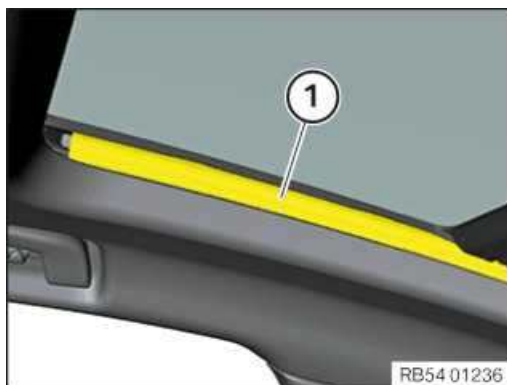
NOTICE

Perform the operations on the left and right side.

- Loosen screws (1).
- Remove the panorama glass roof lid upwards.

MAIN WORK

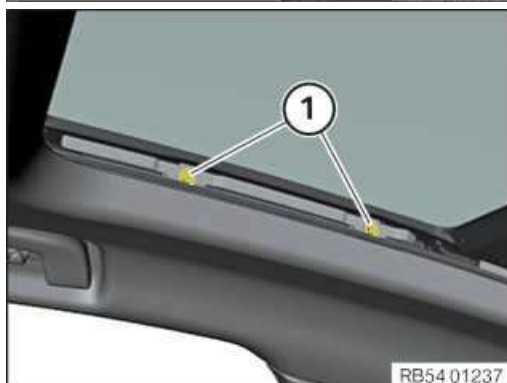
2 – Removing the rear panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

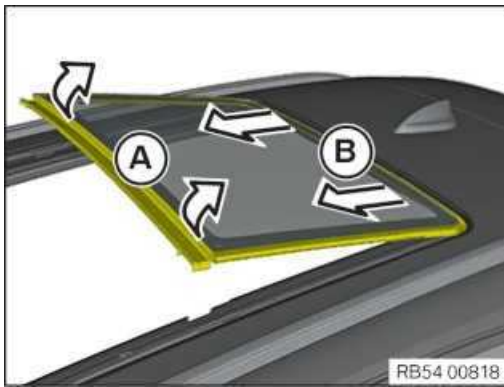
- Pull off the seal (1) around the front panorama glass roof panel towards the inside.



NOTICE

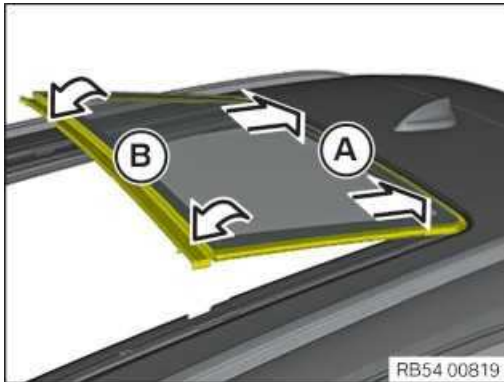
Perform the operations on the left and right side.

- Loosen screws (1).

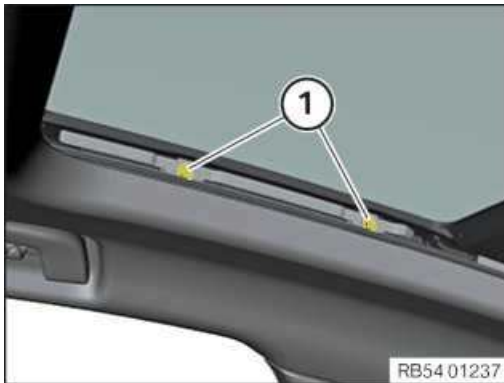


- Lift up front panorama glass roof panel in direction of arrow (A).
- Guide rear panorama glass roof panel with water channel out of roof in direction of arrow (B).

3 – Installing the rear panorama glass roof lid



- Feed the rear panorama glass roof lid into the roof with the water channel in direction of arrow. (A)
- Fold down the panorama glass roof lid in direction of arrow. (B)



NOTICE

Perform the operations on the left and right side.

- Renew screws (1).
- Parts:** Bolts
- Tap the screws (1), do not tighten.

POSTPROCESSES

4 – Installing the front panorama glass roof panel



- Insert the panorama glass roof lid.

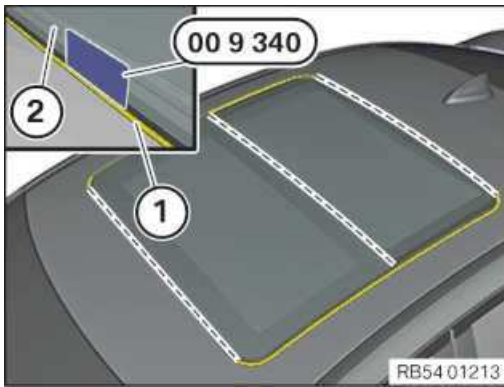


NOTICE

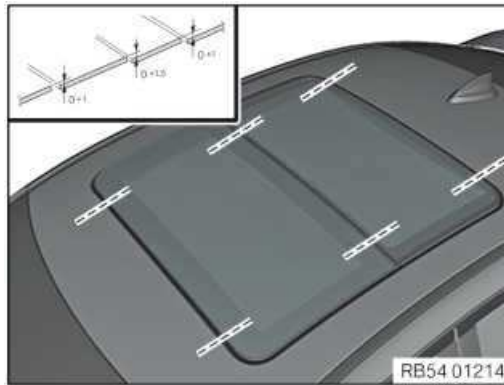
Perform the operations on the left and right side.

- Renew screws (1).
- Parts:** Bolts
- Screw the bolts (1) in but do not tighten.

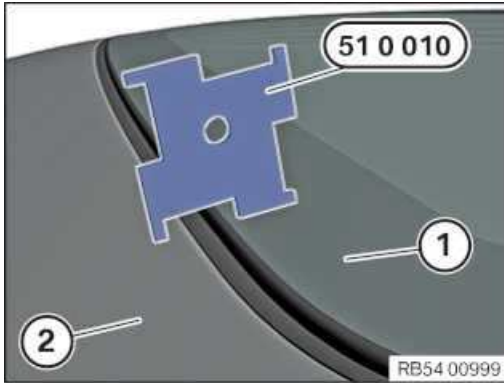
5 – Checking the adjustment of the panorama glass roof



- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.
- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).
The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.
- Make sure the front of the lid is flush to 1.5 mm higher than the rear of the lid.
- Make sure the rear of the lid is flush to 1 mm higher than the rear of the roof outer skin.



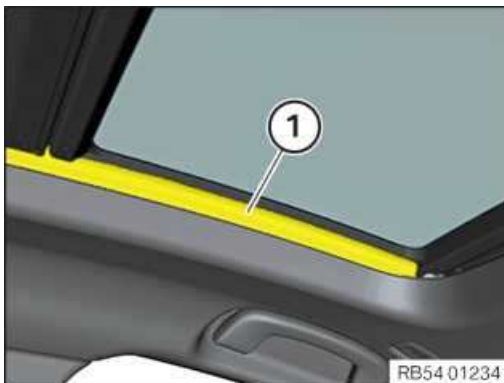
- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

6 – Adjusting the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.



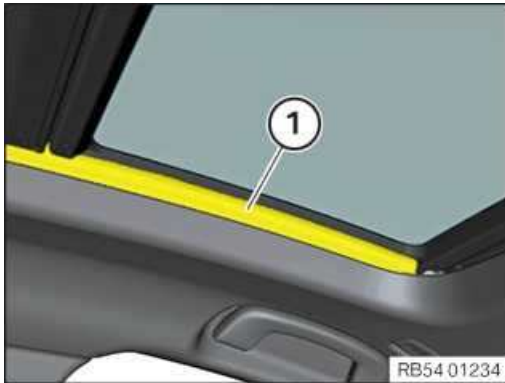
- Pull off the seal (1) around the panorama glass roof panel towards the inside.



- Close the panorama glass roof panel and open the roller sunblind.
 - Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
 - Move the panorama glass roof panel until the ideal position is reached.
 - Renew screws.
- Parts:** Bolts
- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
----	-----------------	------



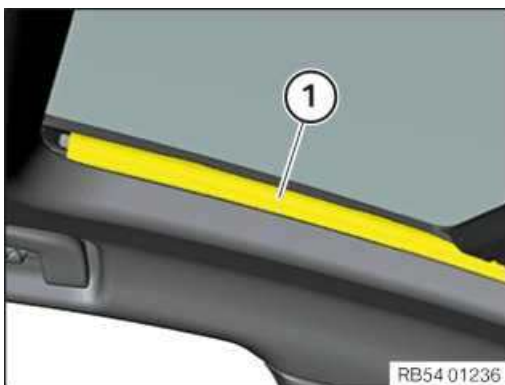
- Insert the seal (1) around the panorama glass roof panel.

7 – Adjusting rear panorama glass roof lid

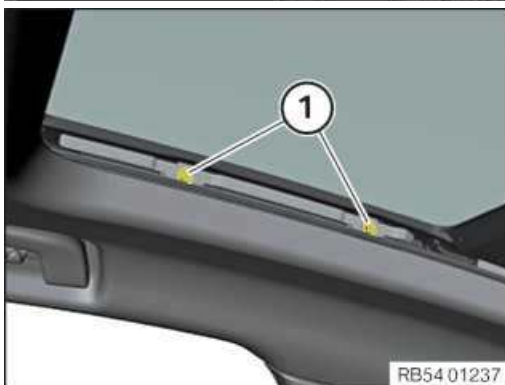


NOTICE

Perform the operations on the left and right side.



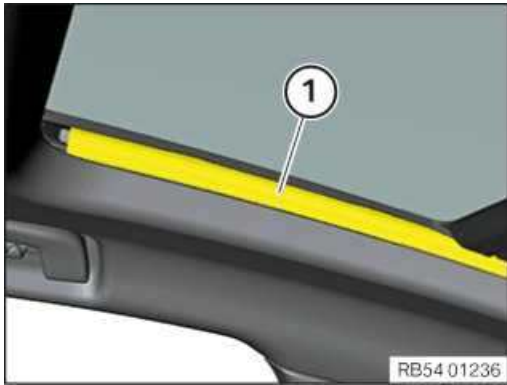
- Pull off the seal (1) around the panorama glass roof panel towards the inside.



- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
 - Move the panorama glass roof panel until the ideal position is reached.
 - Renew screws.
- Parts:** Bolts
- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
----	-----------------	------



- Insert the seal (1) around the panorama glass roof panel.

8 – Initialise panorama glass roof



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

i

TECHNICAL INFORMATION

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

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

Initialisation is complete once the glass roof and the roller sunblind are completely closed. The button can then be released.
- Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).
- Clear fault memory in FZD control unit.

Additional Information

Overview of Tightening Torques

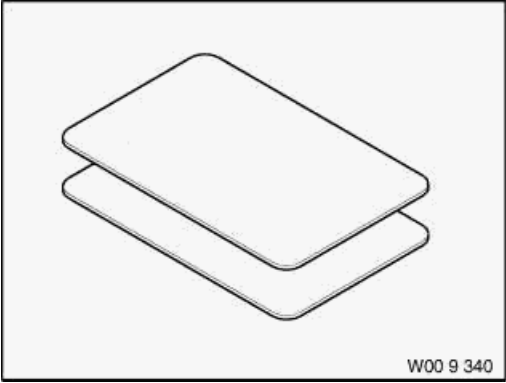
Panorama glass roof lid to mechanics

Used in step 6 7

M5	Replace screws.	5 Nm
----	-----------------	------

Overview of Special Tools

0 493 687 (00 9 340) Removal aid

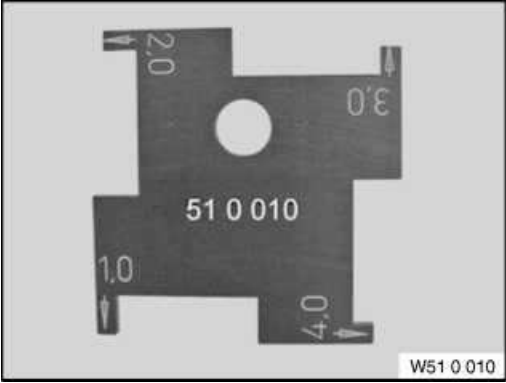


Common		Used in step	5
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		Removal aid Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

0 495 259 (51 0 010) Gauge



Common		Used in step	5
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

Overview Technical Data

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	5

54 13 046 Removing and installing/replacing the roller sunblind



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

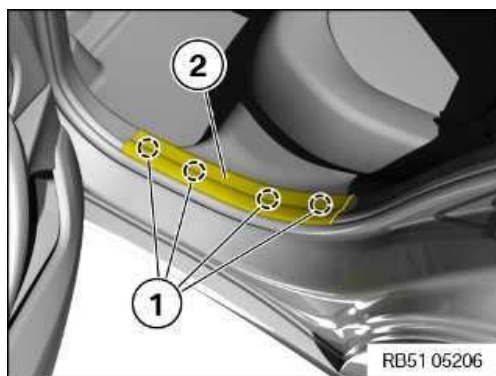
PRELIMINARY WORK

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



NOTICE

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



► Remove rear entrance cover strip

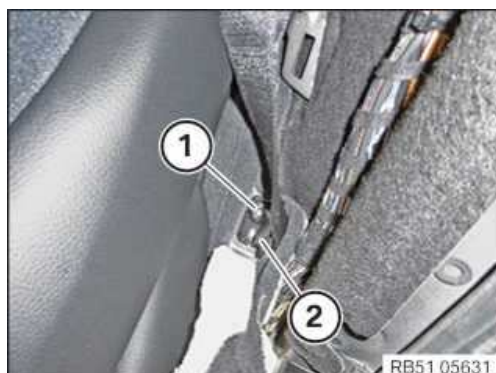
- Unclip the clips (1) of the door sill cover strip (2).
- Remove the door sill cover strip (2).

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



NOTICE

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

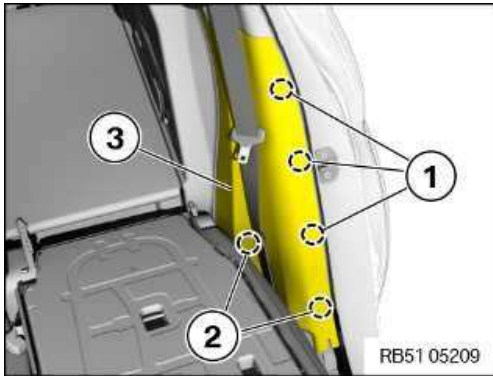


► Remove the bottom C-pillar trim panel

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

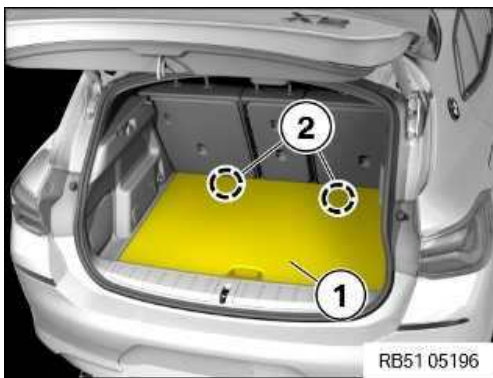


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



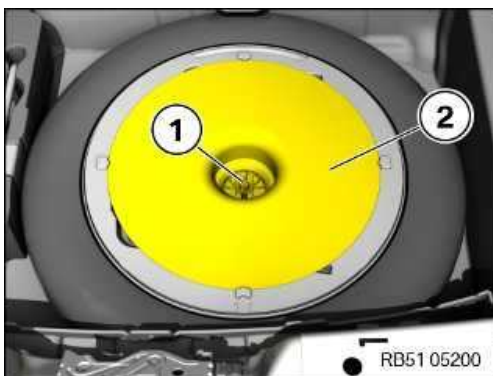
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

3 – Removing the luggage compartment removable panel

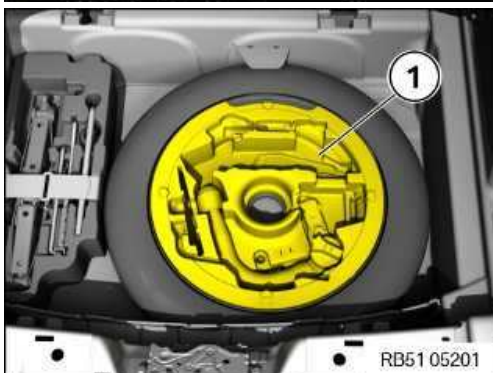


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

4 – Removing the compact spare wheel



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

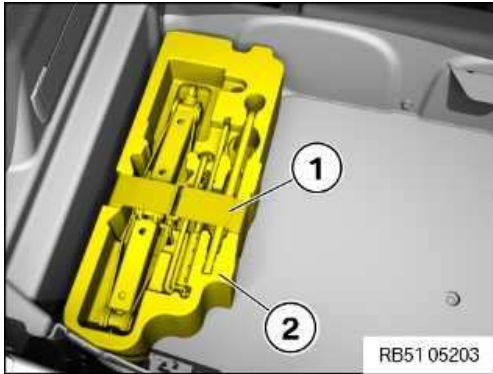


- Remove the oddments tray from the emergency wheel (1).



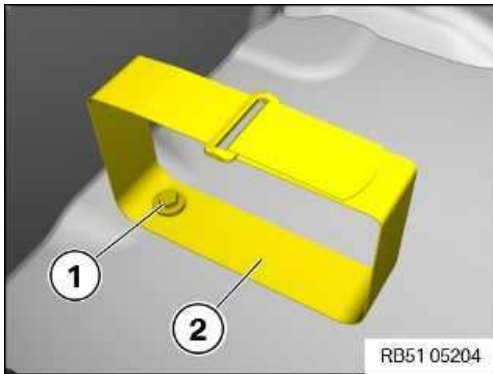
- Remove the emergency wheel (1).

5 – Remove the tool kit



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

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



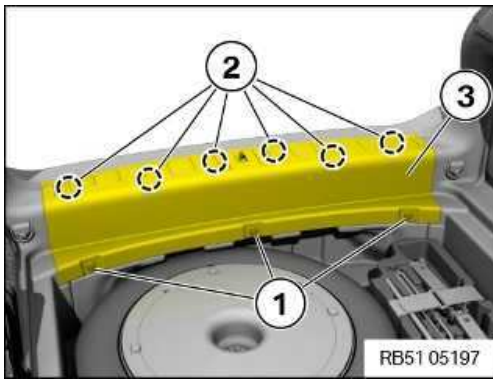
- Loosen screw (1).
- Remove the hook and loop tape (2).

7 – Removing the luggage compartment floor trim panel



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

8 – Removing the loading edge trim

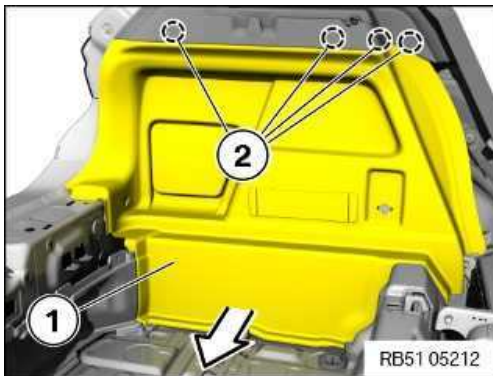


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

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



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

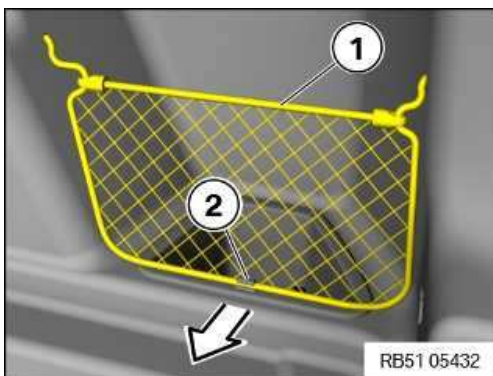


NOTICE

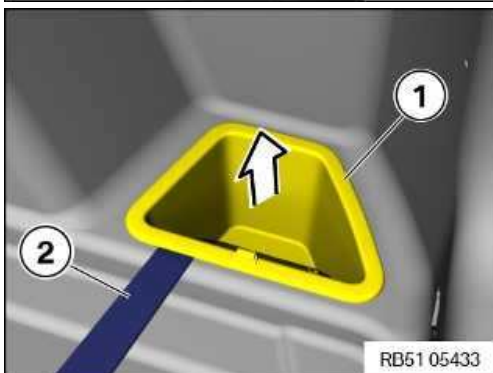
Schematic diagram is for example purposes. Some parts may differ in certain details.

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

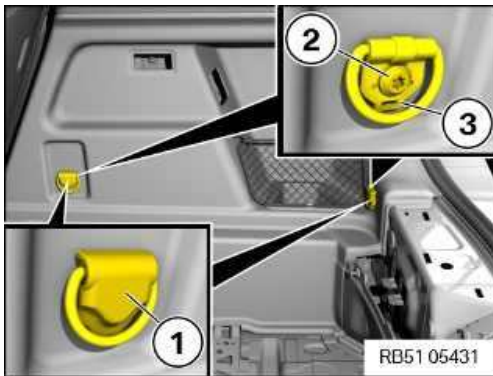
10 – Removing right luggage compartment wheel arch trim panel



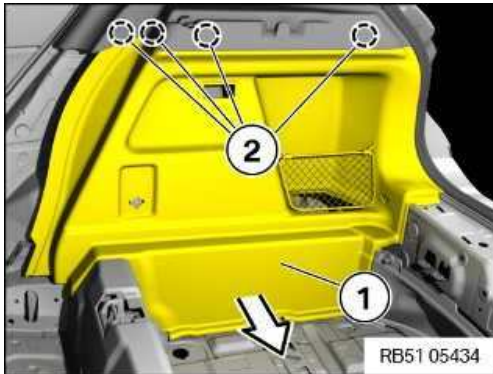
- Release the storage net (1) from the latch mechanism (2) in the direction of arrow and fold up.



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



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



NOTICE

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

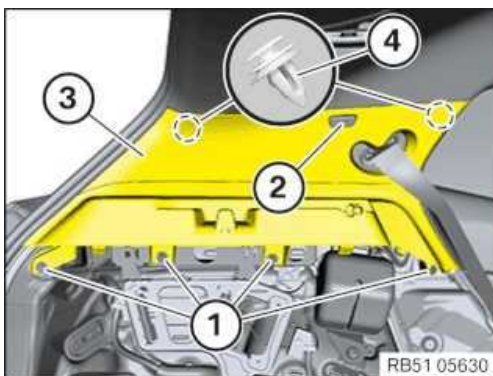
- Pull the luggage compartment wheel arch trim panel (1) on the bottom in the direction of the arrow and guide it out of the guides (2) and the C-pillar trim panel and remove.

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



NOTICE

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



► Remove the trim panel of the luggage compartment capping

- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

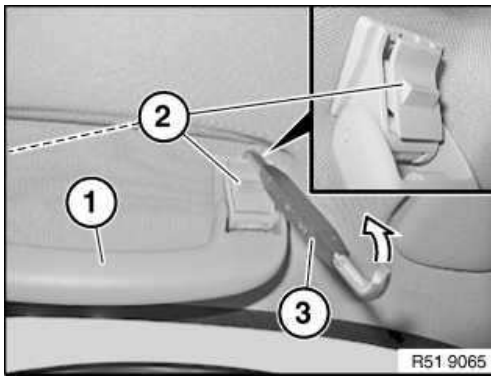
12 – Removing all grab handles



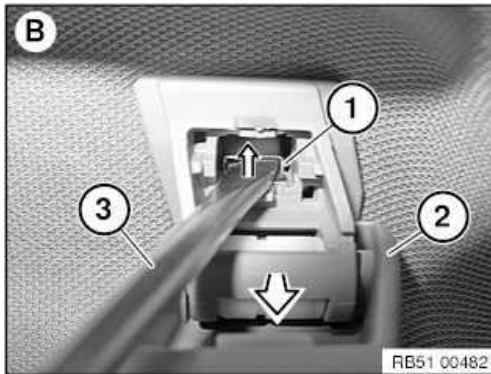
NOTICE

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

► Removing the grab handle

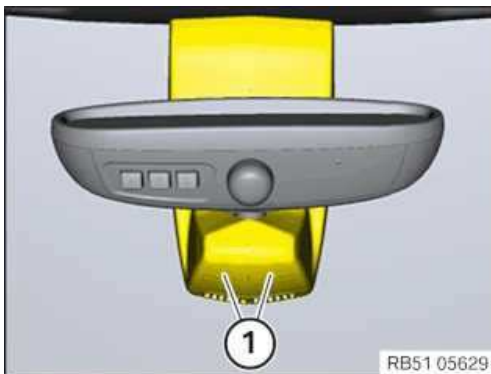


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

13 – Remove the cover on the inside mirror



- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

14 – Remove both sun visors



NOTICE

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

► Remove sun visor



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

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

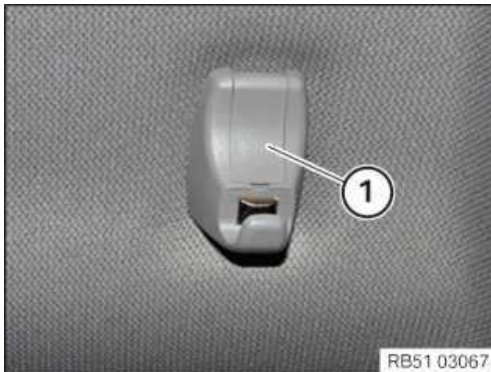


NOTICE

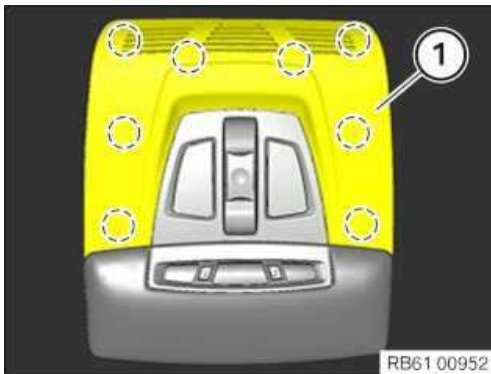
Description is for left component only. Procedure on the right side is identical.

► Remove the counter support for the sun visor

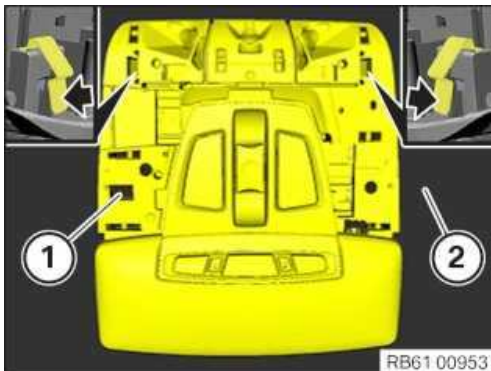
- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.



16 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool **0 496 569 (00 9 325)**.



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

17 – Removing the left and right A-pillar trim panels



NOTICE

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

► Remove the A-pillar trim panel



WARNING

Airbag unit.

Danger! Life-threatening injuries!

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

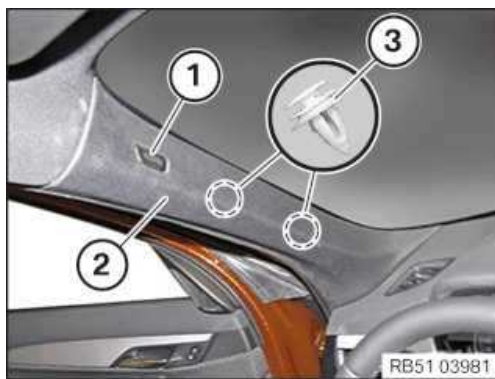


WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

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



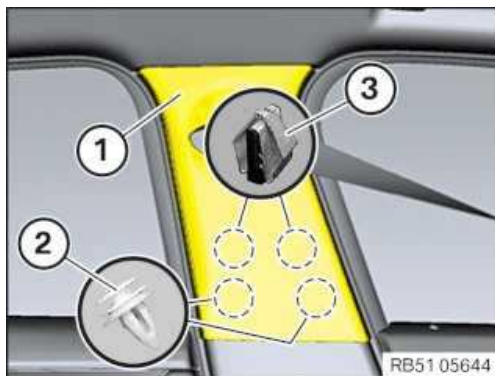
- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

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



NOTICE

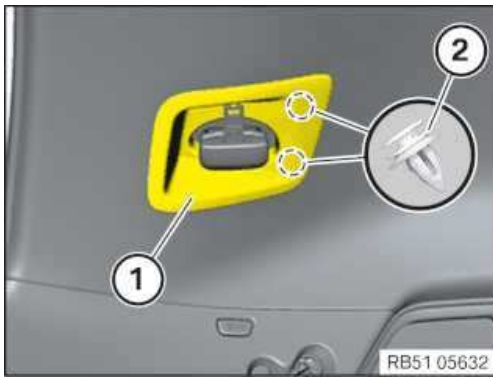
Description is for left component only. Procedure on the right side is identical.



► Partially removing upper B-pillar trim panel

- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

19 – Remove the belt feed trim



- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

20 – Lowering the headlining (with panorama glass roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

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

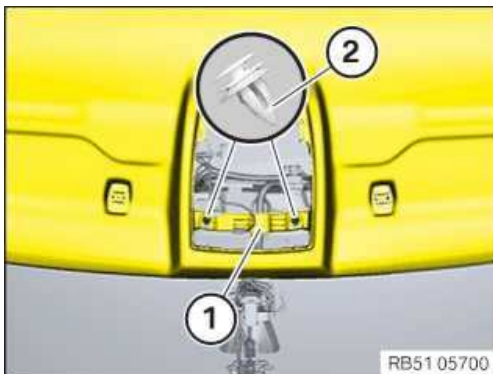


RISK OF DAMAGE

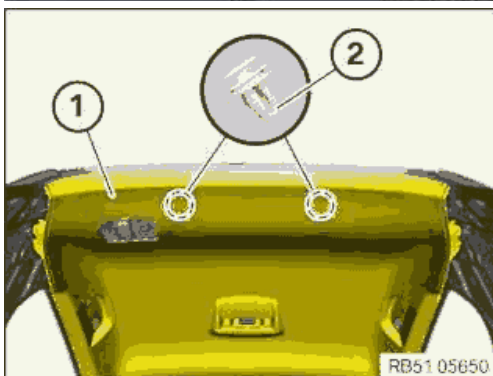
Fold the headlining.

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

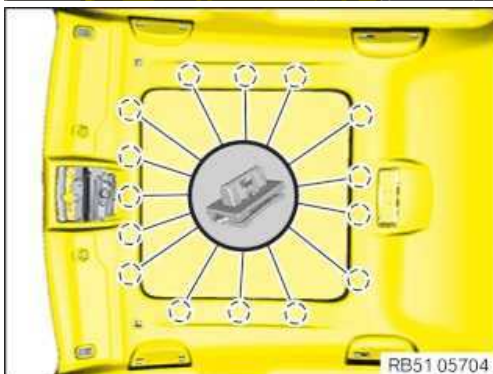
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



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



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

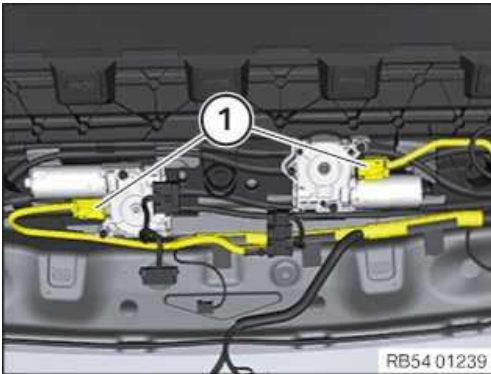


- Carefully release the headlining with a suitable plastic wedge from the clamps (1) in a downwards direction.

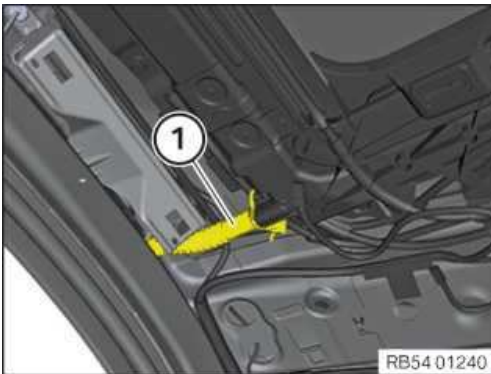


- Carefully guide out the headlining (1) at the respective edge protection and place it onto the seats in the vehicle.

21 – Remove complete panorama glass roof



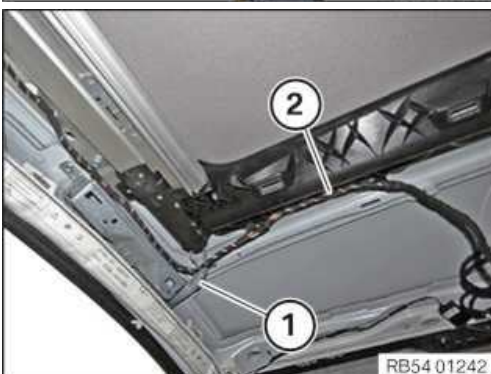
- Unlock and disconnect plug connections (1). Unclip the respective wiring harness from the panorama glass roof.



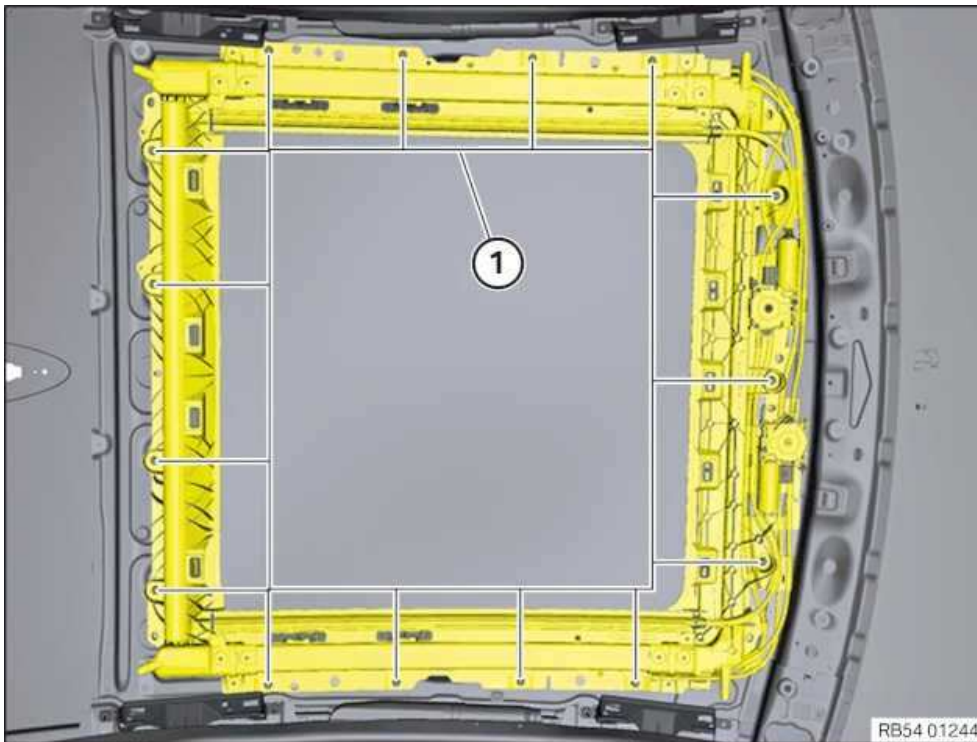
- Detach the front water drain hose (1) on the left/right.



- Detach the wiring harness (1) from the panorama glass roof.



- Detach the rear water drain hose (1) on the left/right. Detach the wiring harness (2) from the panorama glass roof.



RISK OF DAMAGE

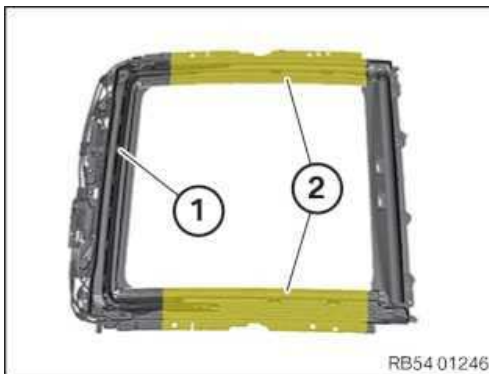
Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Secure panorama glass roof from falling with the help of an auxiliary person.
- Release screws along line (1).
- Lower the panorama glass roof with the assistance of an auxiliary person and remove from the vehicle towards the rear.

MAIN WORK

22 – Remove roller sunblind



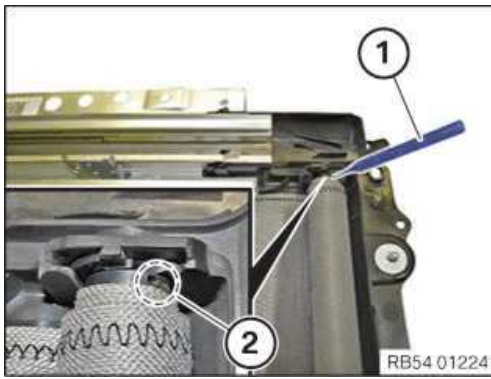
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Always carry the panorama glass roof (1) with an auxiliary person and only in the marked areas (2).
- Manually open roller sunblind (1) until it is in the area of the notch (2).





RISK OF DAMAGE

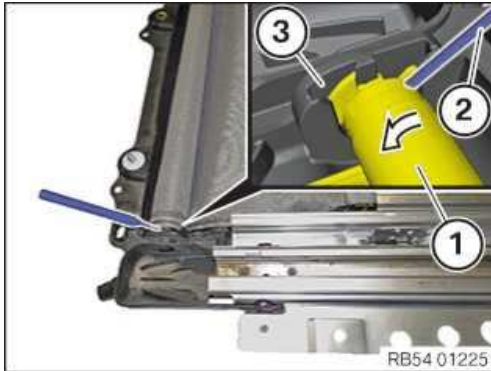
Damage to the sun blind rollers.

The preloaded spring of the automatic reel will detach when the roller sunblind is not disconnected.

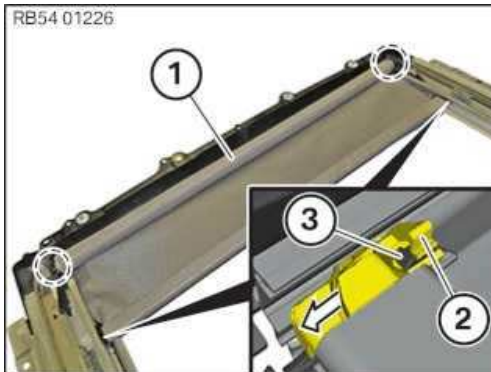
- Disconnect the roller sunblind with a suitable tool with Ø 2 mm .

- Insert holding fixture (1) fully in opening (2).
- If required, move the roller sunblind manually until the holding fixture (1) can be inserted completely.

The preload cannot be restored subsequently.



- Open roller sunblinds (1) further by approx. 2 cm manually.
- Turn roller sunblind (1) with the holding fixture (2) on the right fixture (3) in direction of arrow and thread out upwards.



- Detach roller sunblind (1) from the left and right mounting.
- Raise tab (2) on the slider slightly and lift it via the latch mechanism (3) of the driver.
- Pull slider forward off the driver.



- Feed out roller sunblind (1) from the frame.
- Carefully place the roller sunblind (1) on the lowered headliner.

23 – Install roller sunblind

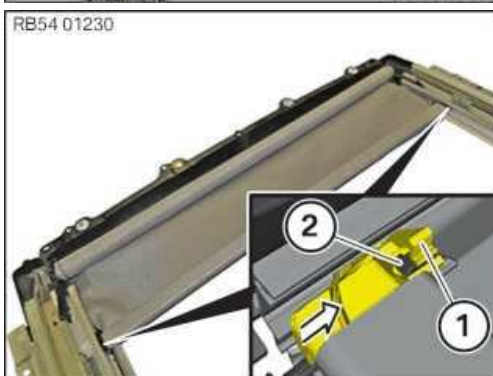


- Renew the sleeve(1).

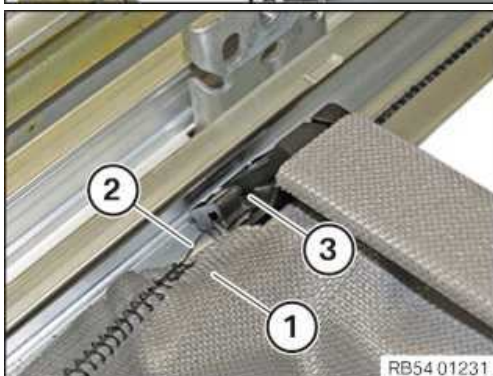
Parts: Holding sleeve



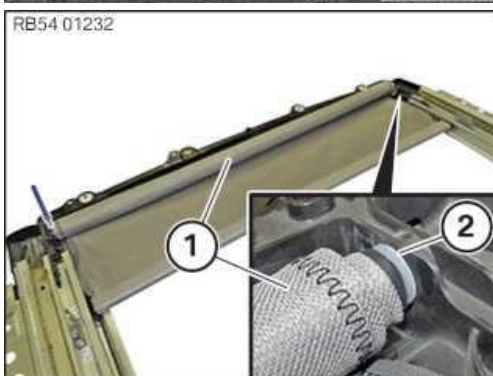
- Attach slider (1) to the frame.



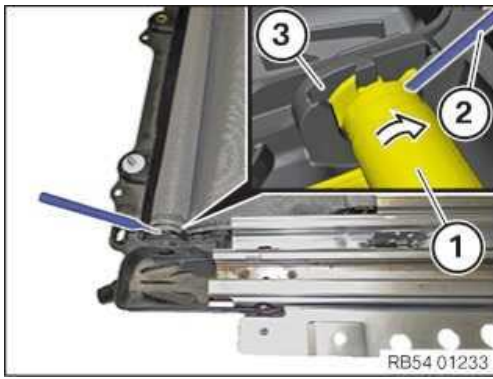
- Engage slider (1) to the rear into the driver (2).



- Make sure that the roller sunblinds(1) and the cable (2) are not trapped from the slider (3) .



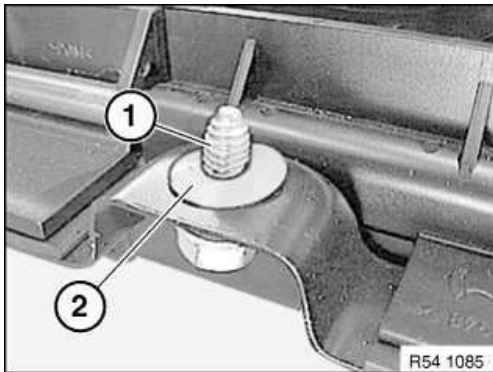
- Insert roller sunblind (1) into the sleeve (2).



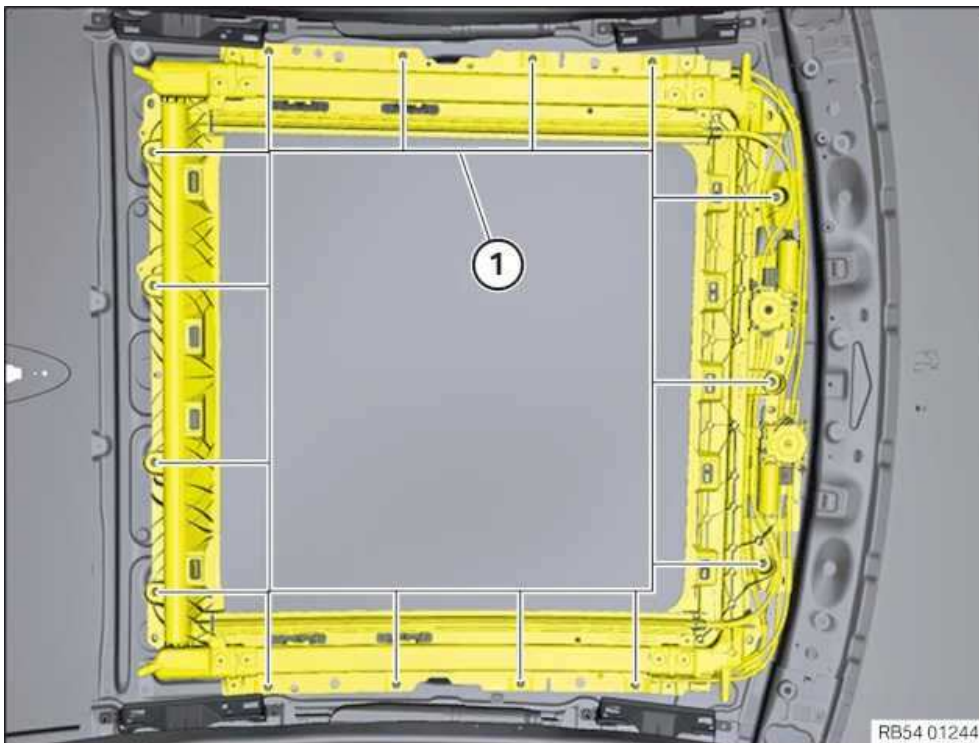
- Insert roller sunblind (1) with the holding fixture (2) into the fixture (3) and engage in direction of arrow.
- Remove holding fixture (2).

POSTPROCESSES

24 – Install complete panorama glass roof



- In order to prevent groaning noises, all bolts (1) must be secured with the plastic washers (2) prior to installation.

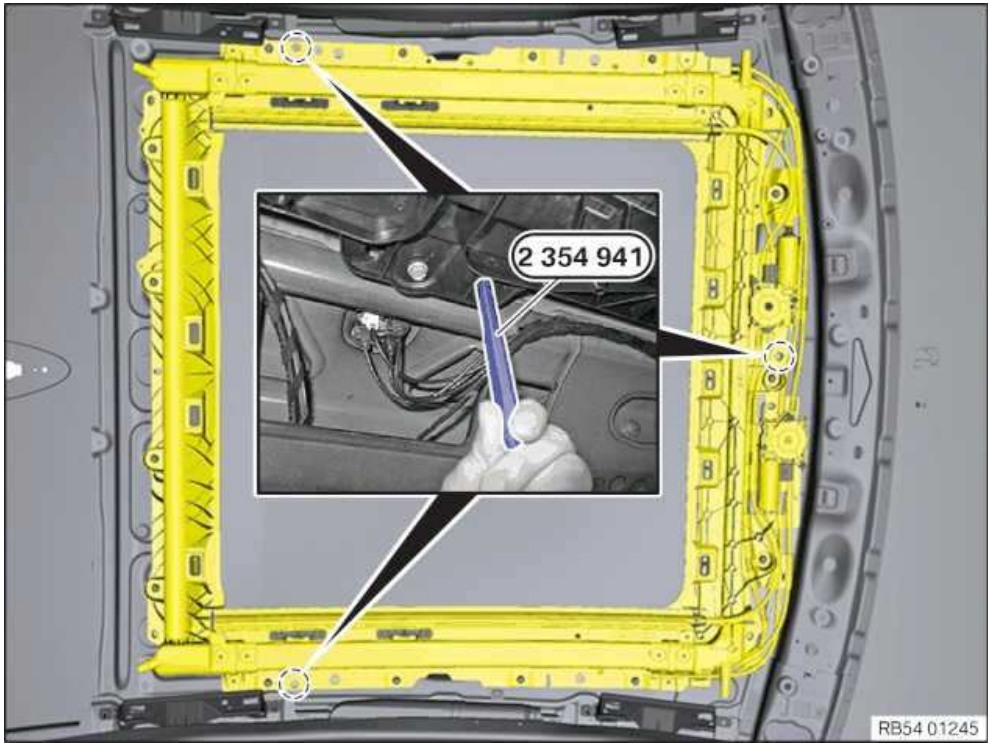


RISK OF DAMAGE

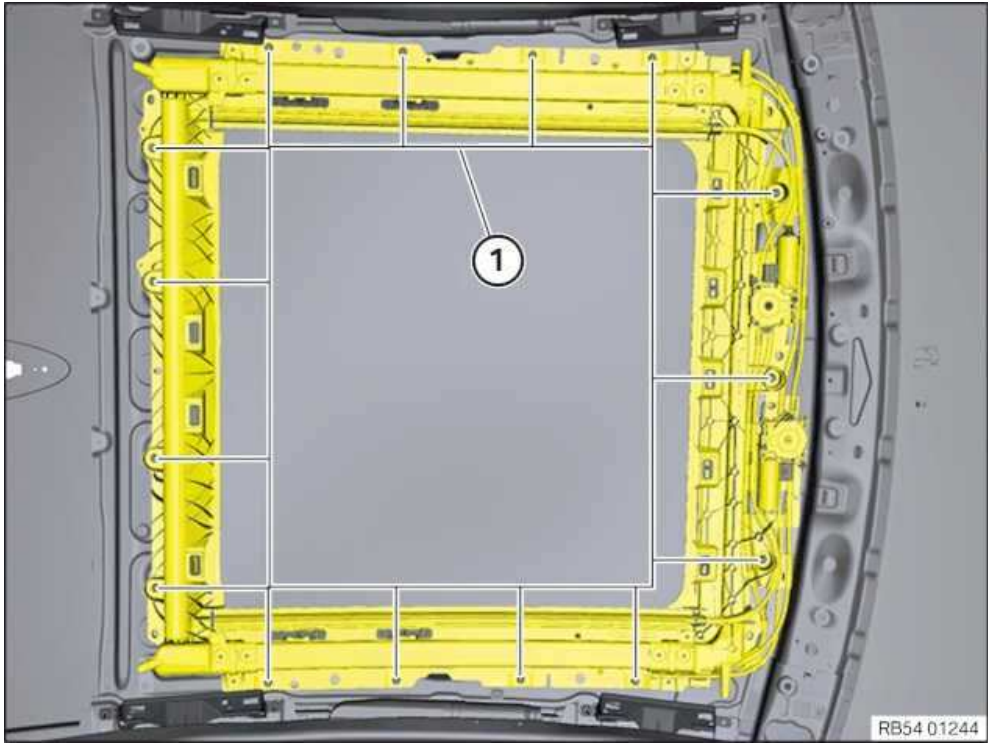
Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Insert the panorama glass roof into the vehicle and position it with the assistance of a second person.
- Screw in all screws along the line (1) by several turns.



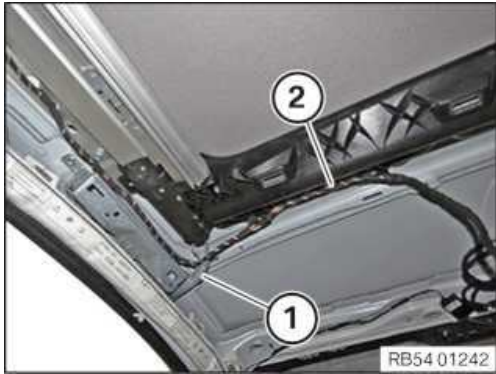
- Insert the special tool **2 354 941** and align the panorama glass roof (1) with the roof.



- Tighten all bolts (1).

Slide/tilt sunroof frame to body

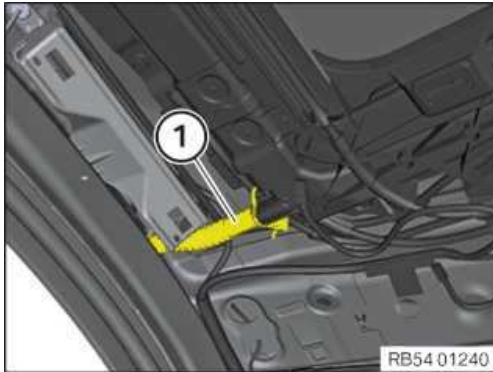
Hexagon screw		Tightening torque	5, Nr
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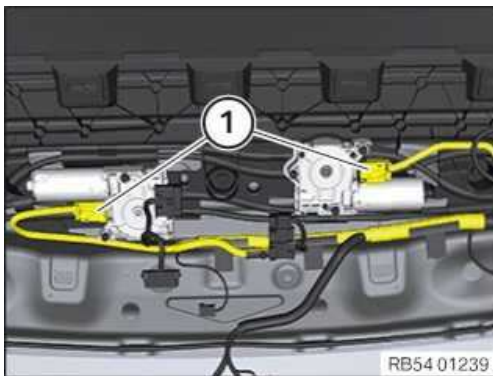
- Attach rear water drain hose (1) on left/right.
Make sure that all water drain hoses (1) are pushed up to their limit position.



- Fasten vehicle wiring harness (1) on the panorama glass roof.



- Attach front water drain hose (1) on left/right.
Make sure that all water drain hoses (1) are pushed up to their limit position.



- Connect connector (1).
- Fasten corresponding vehicle wiring harness on the panorama glass roof.

25 – Install the headlining (lowered with panorama roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

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



RISK OF DAMAGE

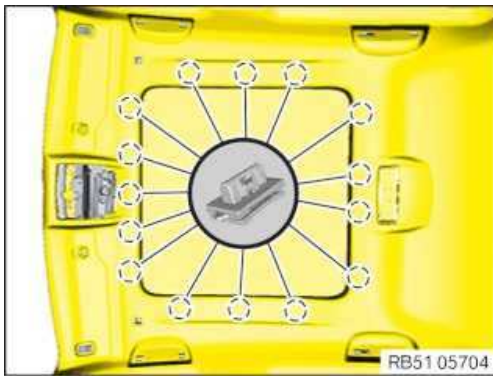
Fold the headlining.

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

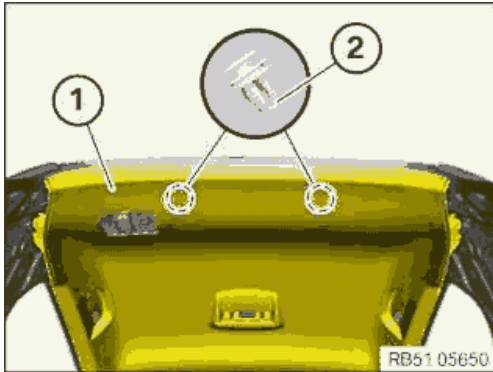
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



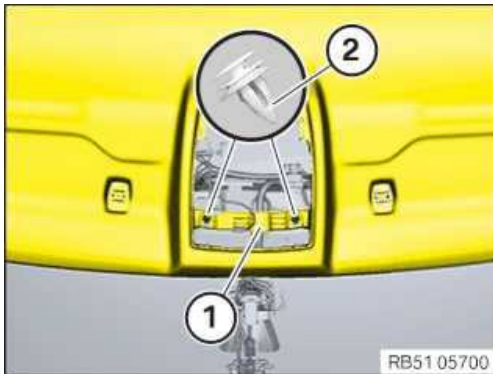
- Install the headlining (1) and carefully insert it at the respective edge protection.



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

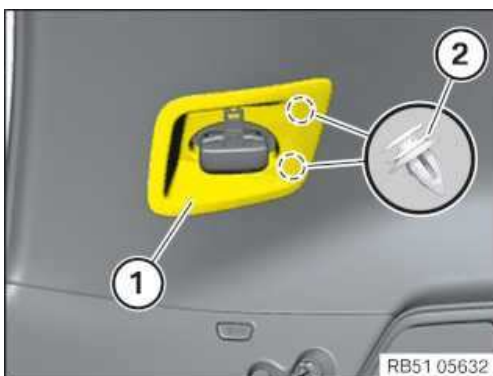


- Clip in the headlining (1) using the clips (2).



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

26 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

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



NOTICE

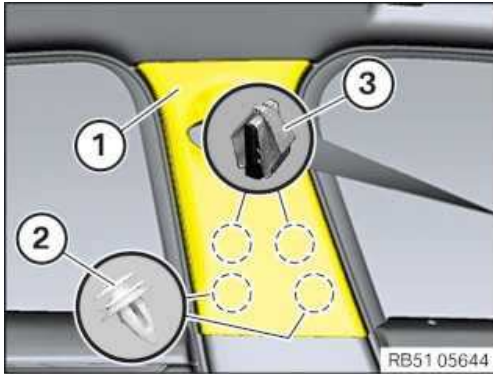
Description is for left component only. Procedure on the right side is identical.

- Partially installing upper B-pillar trim panel



TECHNICAL INFORMATION

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



- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

28 – Installing the left and right A-pillar trim panels



NOTICE

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

► Install the A-pillar trim panel



WARNING

Airbag unit.

Danger! Life-threatening injuries!

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



WARNING

Pyrotechnic components.

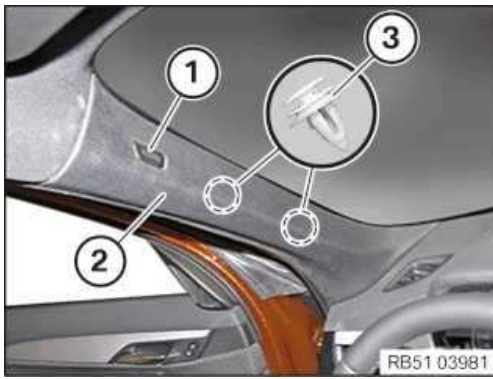
Danger! Life-threatening injuries!

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



TECHNICAL INFORMATION

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



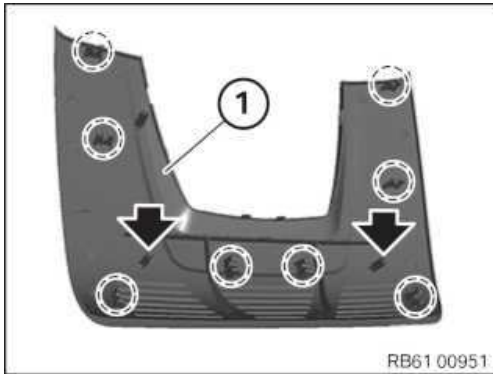
- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.
- Tighten down screw.

A-pillar trim panel to body

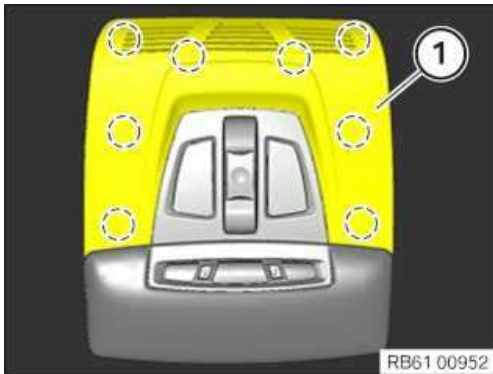
M5x42 screw	Renew screw	Tightening torque	2,2 Nm
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- Clip in the cover (1).

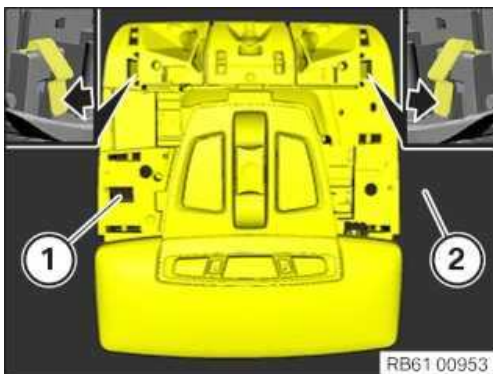
29 – Install the roof function centre



- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.



NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

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

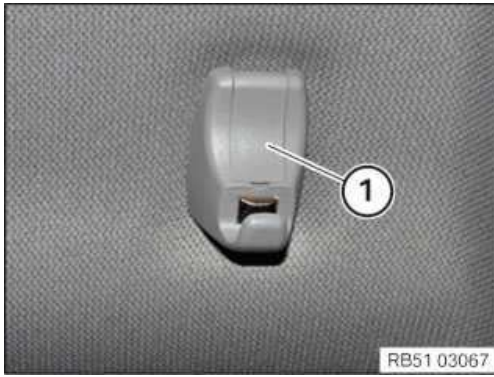
30 – Install the counter supports for the sun visor on left and right



NOTICE

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

- Install the counter support for the sun visor



- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

Screw		Tightening torque	2,5 Nm
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31 – Install both sun visors



NOTICE

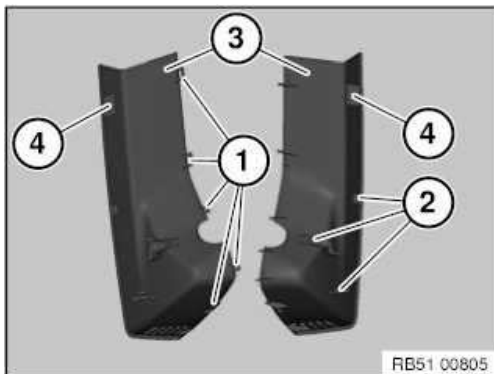
Description is for left component only. Procedure on the right side is identical.



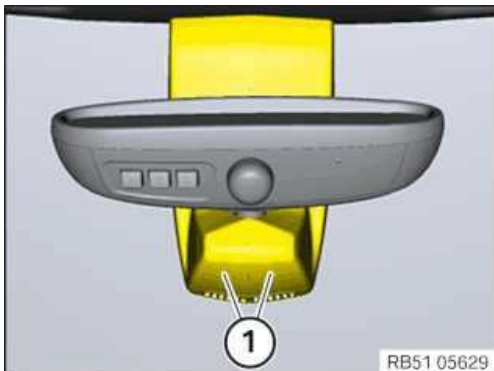
► Install the sun visor

- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

32 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.
The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).
The spacers (4) must not be damaged or missing.



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

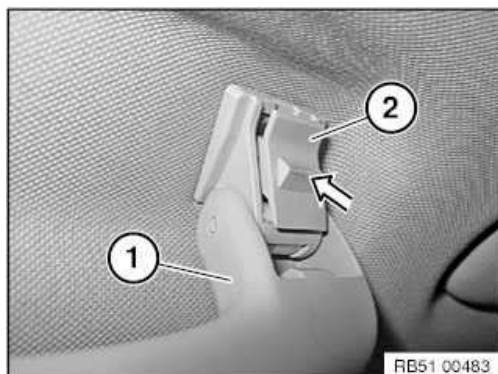
33 – Installing all grab handles



NOTICE

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

► Installing the grab handle



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

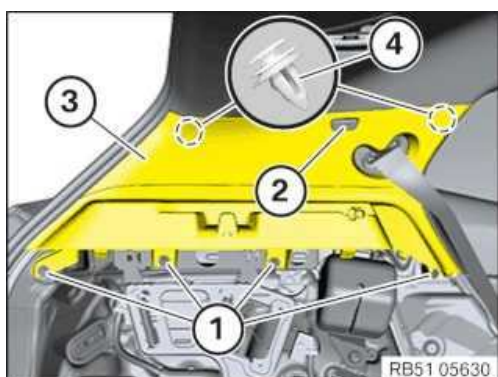
34 – Install the trim panel for left and right the luggage compartment capping



NOTICE

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

► Install the trim panel for the luggage compartment capping



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

Trim panel of luggage compartment capping

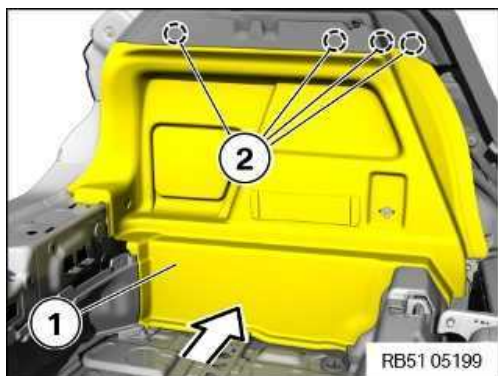
Self-tapping screw		Tightening torque	4 Nm
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- Tighten the screws (1).

Trim panel of luggage compartment capping to body

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

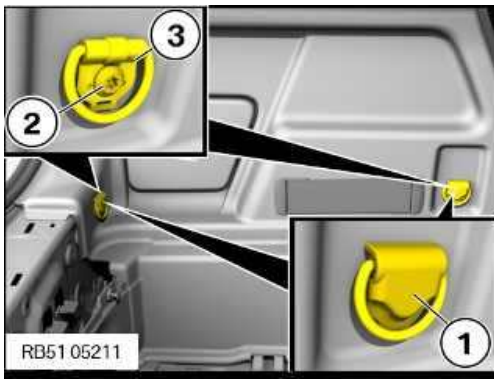
35 – Install luggage compartment wheel arch trim panel at left



NOTICE

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

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



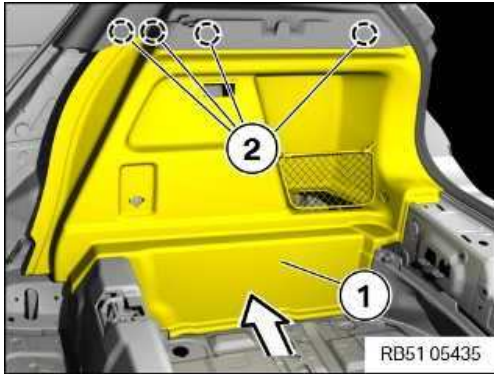
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

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

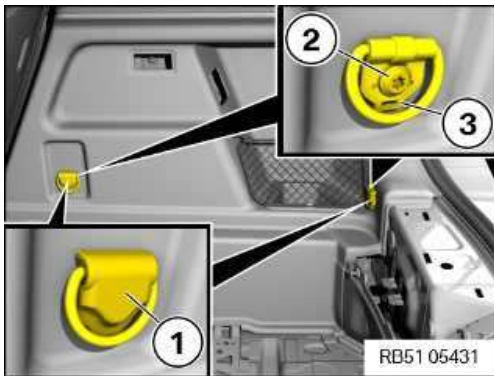
36 – Installing the luggage compartment wheel arch trim panel on the right



NOTICE

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

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



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

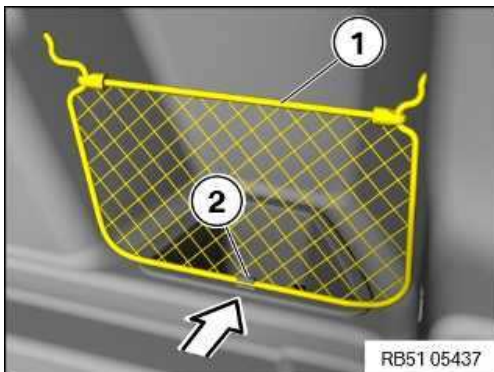
Lashing eye in luggage compartment

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



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



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

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

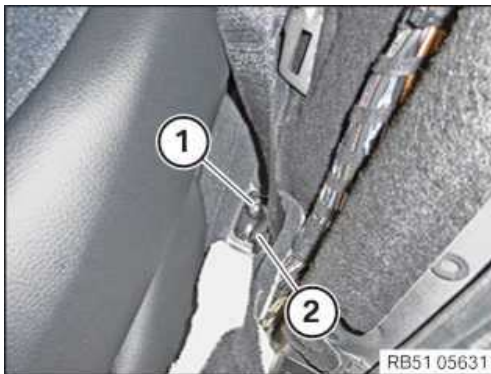
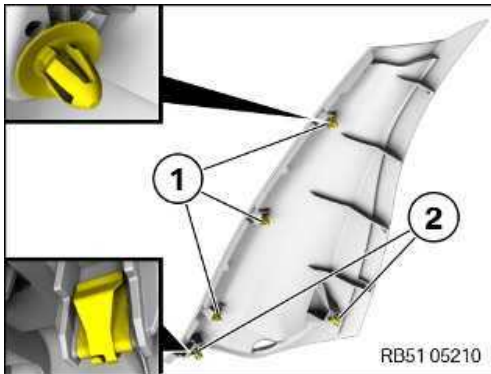


NOTICE

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

► Install the bottom C-pillar trim panel

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

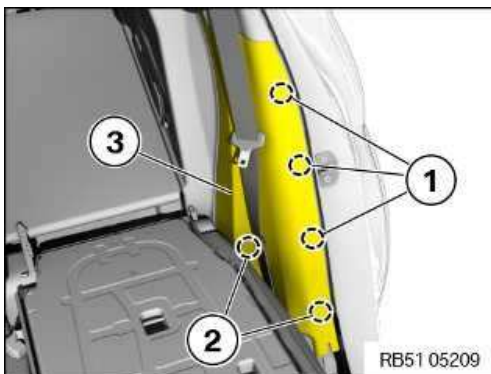


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

Screw	Renew screw.	Tightening torque	42 Nm
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- Install the carpet correctly.



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



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

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

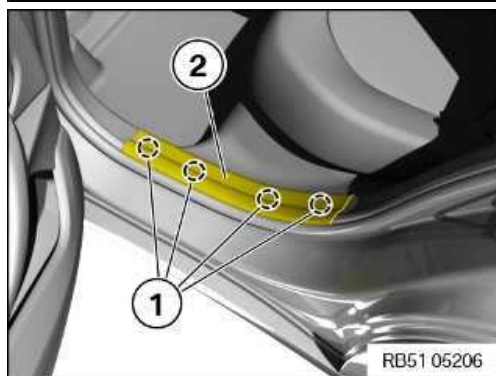
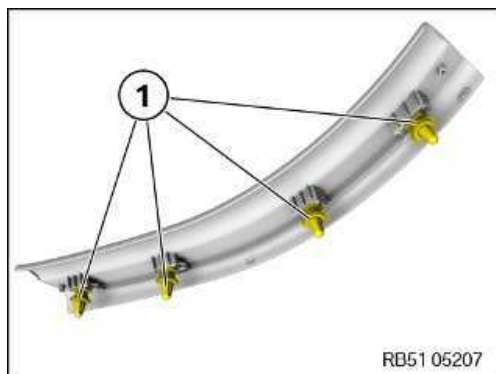


NOTICE

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

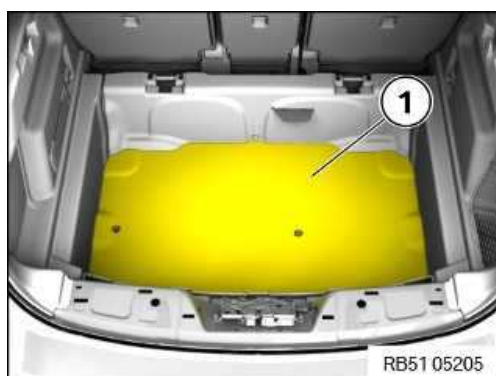
► Installing the rear door sill cover strip

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



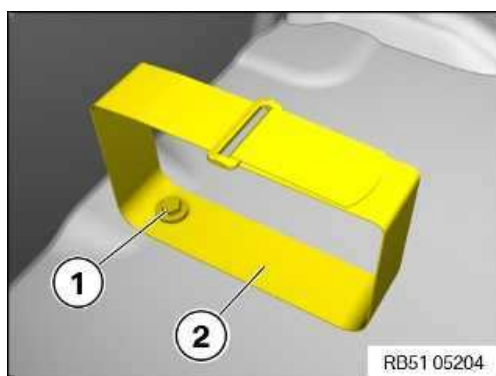
- Clip in the door sill cover strip (2) with the clips (1).

39 – Installing the luggage compartment floor trim panel



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

40 – Inserting the Velcro fastener for the toolkit

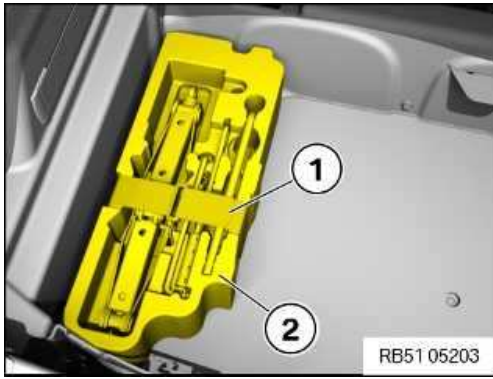


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

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

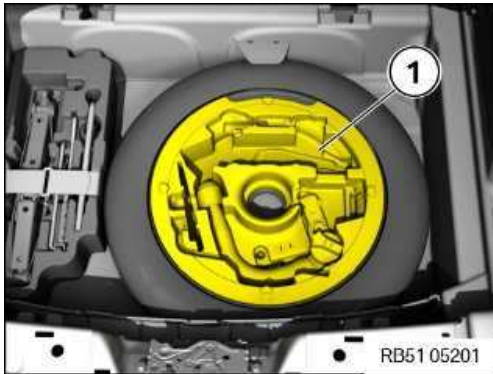


- Install the tool kit (2).
- Close the hook and loop tape (1).

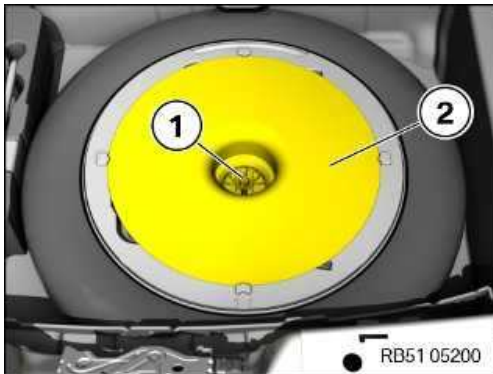
42 – Install the emergency wheel



- Insert compact spare wheel (1).

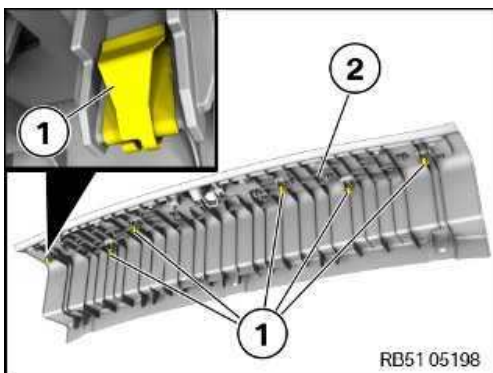


- Insert oddments tray into the compact spare wheel (1).

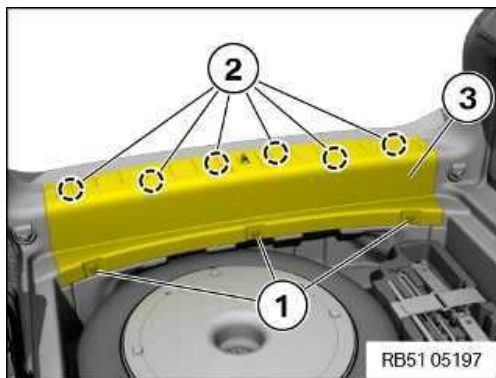


- Insert the lid (2).
- Hand-tighten the bolt (1).

43 – Installing loading edge trim

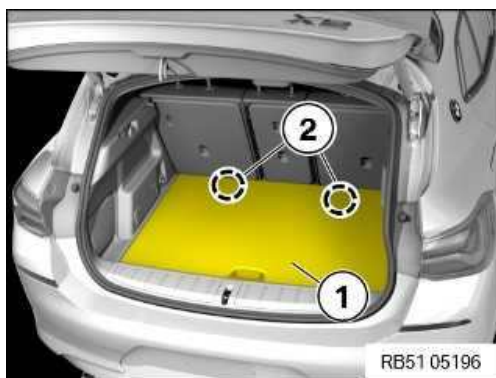


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

44 – Installing the luggage compartment removable panel



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

Additional Information

Overview of Tightening Torques

Slide/tilt sunroof frame to body

Used in step [24](#)

Hexagon screw		Tightening torque	5,4 Nm
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A-pillar trim panel to body

Used in step [28](#)

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

Used in step [30](#)

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

Used in step [34](#)

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

Used in step [34](#)

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

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

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

Used in step [37](#)

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

Used in step [40](#)

Bolt M6 x 20		Tightening torque	4 Nm
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Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common		Used in step	16	18
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)			
Included in the tool or work	0 490 527			
Storage location	Individual			
Replaced by				
In connection with				
SI-Number	41 01 09 (507)			

2 354 941 Pin



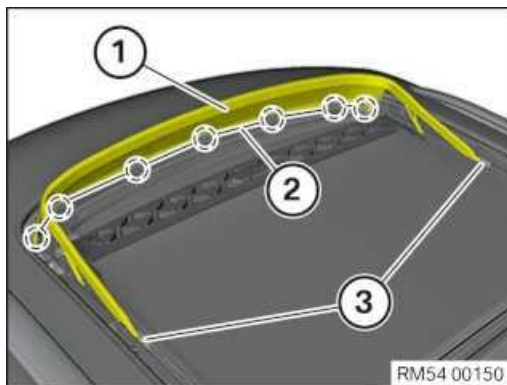
Common		Used in step	24
Usage	For centring the slide/tilt sunroof frame. Contour-graphic silhouette foil is included in the delivery specification. Further information on the contour-graphic silhouette foil is included in service information 00 22 13 (969).		
Included in the tool or work			
Storage location	A74		
Replaced by			
In connection with			
SI-Number	01 30 13 (999)		

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	17 28

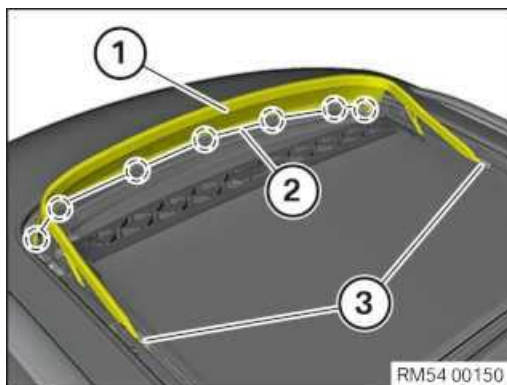
54 13 090 Removing and installing/replacing wind deflector

1 – Remove wind deflector



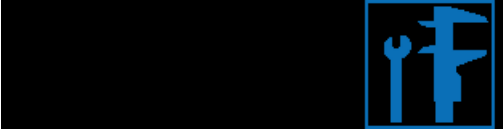
- Open glass slide/tilt sunroof.
- Carefully detach the wind deflector (1) from the latch mechanisms (2).
- Tip the wind deflector (2) up and detach it from the side holders (3).

2 – Install wind deflector



- Attach the wind deflector (1) to the side holders (3).
- Fold the wind deflector (1) up and attach it to the latch mechanisms (2).

54 10 ... Repair instructions for bonded seals



Special tools required:

- [00 9 327](#)

1 General remarks on handling rubber seal profiles:

- If seals reveal partly detached protective film on delivery, they must not be bonded.
- Store seals at 5 °C to 40 °C.
- If, during the handling, the protective film has come off before bonding, it can still be bonded.
- Bonding at room and object temperature 25° ±5° C. Temperatures between 40 and 50 °C significantly increase initial adhesion.
- Seals, which are subjected to temperatures above 80 °C after bonding, will be very difficult to remove.
- Maximum storage time for replacement: see identification of the expiry date on packaging

2 Damage pattern, repair and replacement

A partially released bonding (rubber part adhesive tape or adhesive tape paint) up to 120 mm may be finished. Continue with Point 2.1.

A partially released bonding (rubber part adhesive tape or adhesive tape paint) above 120 mm may **not** be finished. Gasket must be replaced. Continue with Point 2.2.

2.1 Repair of partially released bonding (adhesive tape rubber part or adhesive tape paint)

2.1.1 Clean faulty areas

- Release adhesive area of paint side from recesses and degrease with [cleaning agent R2](#). Stick to air drying time > of 1 minute. Never use paint thinner!
- This will usually partially destroy intact edge adhesive areas.
- When removing, it is important to wipe off the adhesive area of the adhesive tape with a lint-free disposable cloth. (e.g. blue Kimtex)
- Carefully wipe off the adhesive areas.

Note:

Use necessary cotton- or fluff-free paper towel once only.

Do not touch the adhesive area after cleaning.

2.1.2 Apply adhesive

- Apply [profile rubber adhesive](#) evenly as a thin layer first on the gasket and then on the painted surface.
- Stick to air drying time of 2 to 3 minutes.

Attention:

Avoid contact with skin!

Do not apply adhesive to visible painted surfaces.

2.1.3 Press in rubber seal

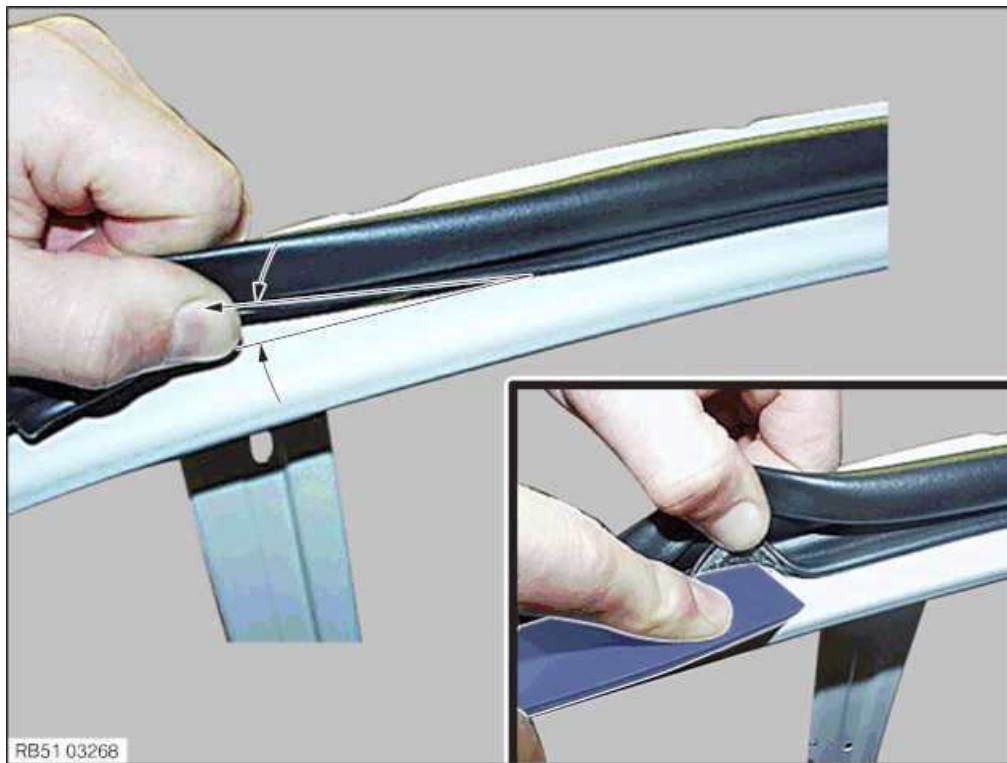
- Press down gasket using contact pressure (forced pressure not necessary) for > 1 minute.

Attention:

Load can be applied to the bonding only after a period of 2 minutes. This waiting time is absolutely essential.

2.2 Replacement

2.2.1 Peeling off the faulty rubber seal



- Remove bonded connection with fingers or cleaning agent liner [00 9 327](#).
- Overstretch gasket below an angle of maximum 20° very slowly under even tensile stress. If the gasket is pulled off too quickly, the adhesive tape can tear off and remain on the painted surface. The adhesive tape remaining on the painted surface must be removed with high cleaning costs.

Note:

When the adhesive tape separates from the gasket, the adhesive tape remaining on the paint must be fully separated at one location by approx. 10 mm until it is easy to grip.

Pull off the adhesive tape by pulling strongly at an angle of approx. 20°.

When existing gaskets are being peeled off with a hot air blower: Do not damage paintwork.

2.2.2 Clean bonding surface

- if required, remove adhesive remains with [eraser disk](#) or [cleaning agent R2](#). do not damage paint. Stick to air drying time > of 1 minute.
- Before a new bond, treat the entire adhesive area with [Sika Aktivator 205](#). Stick to air drying time > of 1 minute.

Note:

Use necessary cotton- or fluff-free paper towel once only.

Do not touch the adhesive area after cleaning.

2.2.3 Pull off protective film of the bonding surface

- Pull off the protective film off of the new gasket by approx. 15 cm using the tab.

Attention:

Once the protective film has been removed, do not under any circumstances touch the exposed bonding surface.

2.2.4 Apply rubber seal

- Press on the gasket by hand continuously while pulling off the liner slightly at the same time.

Note:

If positioned incorrectly, the gasket can still be pulled off, repositioned and pressed on again.

Always ensure that you do not touch the bonding surface with your fingers or contaminate it in any way.

- Press gasket while moving in a straight line without compression or over-stretching.
- Compress the gasket the corners; never stretch it. (critical area)

2.2.5 Establish sealing joint

- Where the beginning and end meet, a mark is created from pressing the loose end onto the beginning of the gasket.
Cut off the gasket vertically along the marked line (use sharp knife or special scissors) and press in place.
- Visually check the pre-bonded gasket.

Note:

Small areas of gasket can remain stuck to adhesive tape of loose end.

2.2.6 Press gasket

- Always press gasket vertically to the bonding surface
- Press gasket by hand or hand roller
- Adhesive tape width up to 5 mm, contact pressure $> 5 \text{ N/cm}^2$
- Adhesive tape width up to 10 mm, contact pressure $> 10 \text{ N/cm}^2$

Note:

Firm thumb pressure has approx. 35 N/cm^2

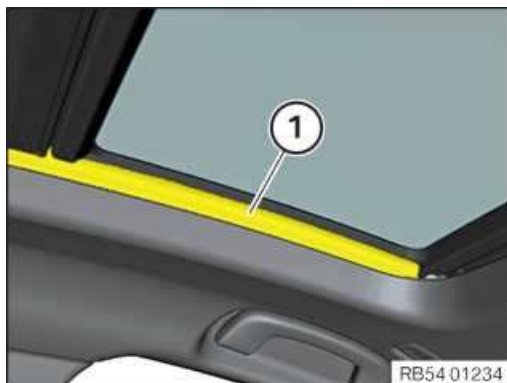
3 Checking the rubber seal

- Check the bonded gaskets for correct positioning and perfect adhesion. The bonding can be checked by pressing back the sealing lip.
- The peel strength of the gasket must be greater than 10 N/cm^2 for about 15 min after bonding.

54 13 055 Replace gasket for panorama glass roof frame

PRELIMINARY WORK

1 – Removing the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

- Pull off the seal (1) around the front panorama glass roof panel towards the inside.

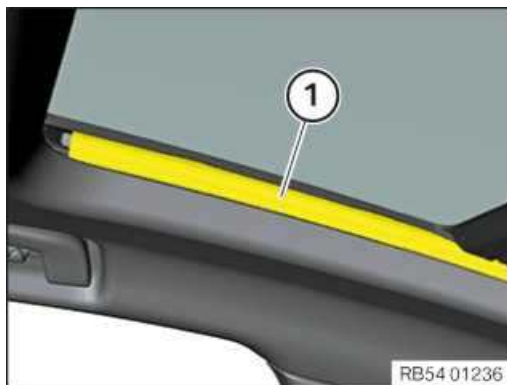


NOTICE

Perform the operations on the left and right side.

- Close the panorama glass roof panel and open the roller sunblind.
- Loosen screws (1).
- Remove the panorama glass roof lid upwards.

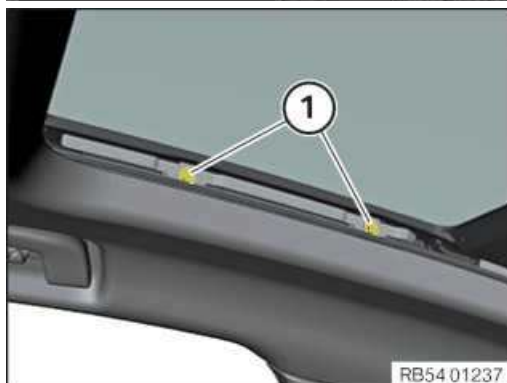
2 – Removing the rear panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

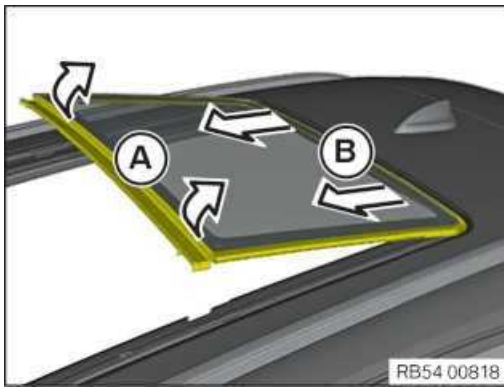
- Pull off the seal (1) around the front panorama glass roof panel towards the inside.



NOTICE

Perform the operations on the left and right side.

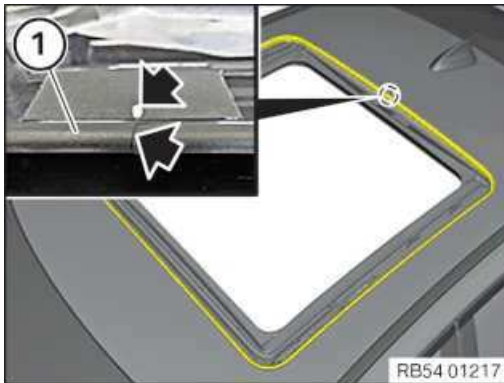
- Loosen screws (1).



- Lift up front panorama glass roof panel in direction of arrow (A).
- Guide rear panorama glass roof panel with water channel out of roof in direction of arrow (B).

MAIN WORK

3 – Removing seal for panorama glass roof



- Apply adhesive tape in the area of the sealing joint on the roof.
- Mark the sealing joint on the adhesive tape (arrows).
- Peel the gasket (1) on the sealing joint off beginning from the body.

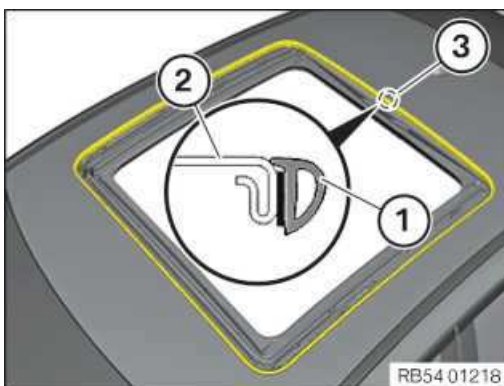
4 – Installing seal for panorama glass roof



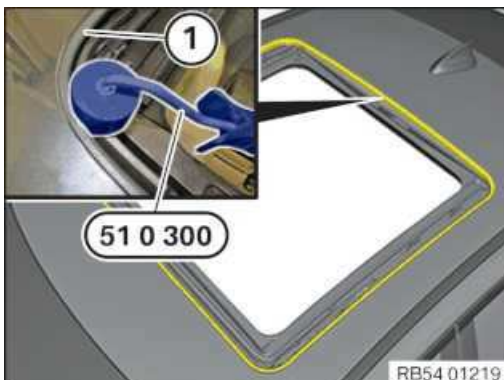
TECHNICAL INFORMATION

Notes on component bonding using adhesive tape form the basis for these repair instructions and must be observed without fail.

For more information see: 51 00 ... Notes on component bonding with adhesive tape

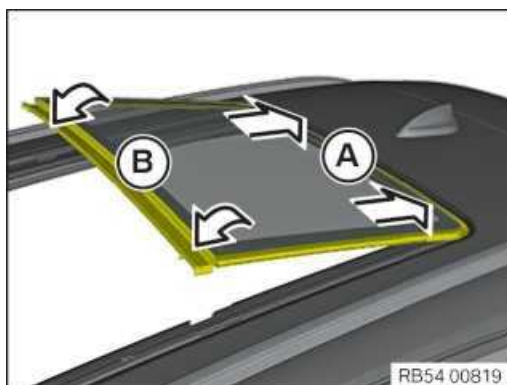


- Clean the bonding surface completely.
- Begin bonding the gasket (1) at the mark for the sealing joint (3).
- Bond the gasket (1) in sections and flush with the roof outer skin (2). Bond the seal (1) without stretching (slightly compressed). Press on the seal (1) only lightly so that the position can be corrected if necessary. Produce a gap-free sealing joint.
- Check that the seal (1) is positioned correctly and correct the position if necessary.

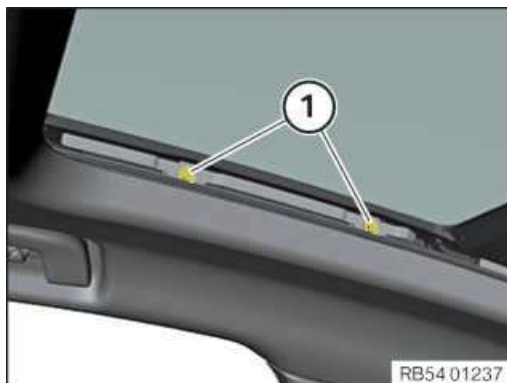


- Press the seal (1) onto the roof outer skin using the special tool **0 495 505 (51 0 300)**.
- Apply additional pressure to the corners of the gasket (1).

5 – Installing the rear panorama glass roof lid



- Feed the rear panorama glass roof lid into the roof with the water channel in direction of arrow. (A)
- Fold down the panorama glass roof lid in direction of arrow. (B)



NOTICE

Perform the operations on the left and right side.

- Renew screws (1).
- Parts:** Bolts
- Tap the screws (1), do not tighten.

6 – Installing the front panorama glass roof panel



- Insert the panorama glass roof lid.

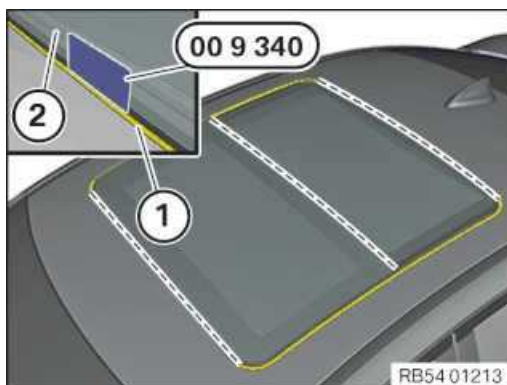


NOTICE

Perform the operations on the left and right side.

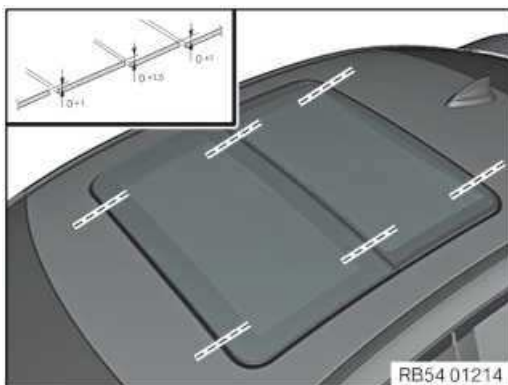
- Renew screws (1).
- Parts:** Bolts
- Screw the bolts (1) in but do not tighten.

7 – Checking the adjustment of the panorama glass roof

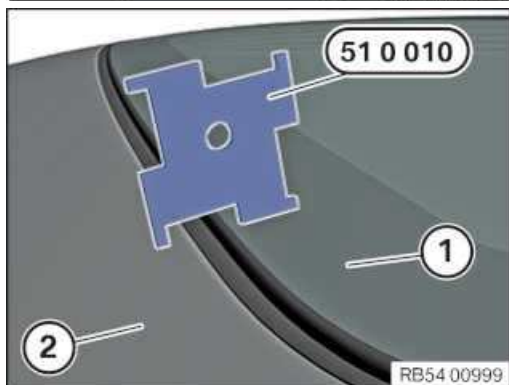


- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.
- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).

The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.
- Make sure the front of the lid is flush to 1.5 mm higher than the rear of the lid.
- Make sure the rear of the lid is flush to 1 mm higher than the rear of the roof outer skin.



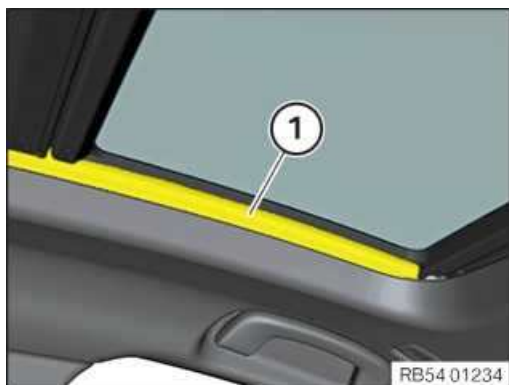
- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

8 – Adjusting the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



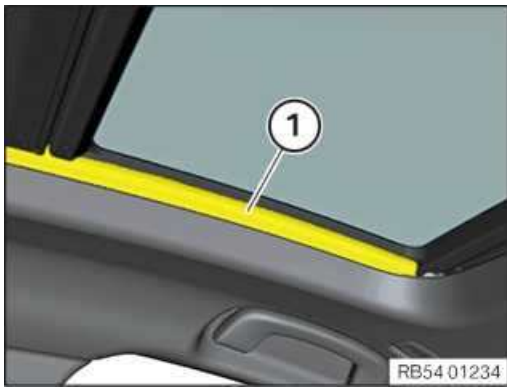
- Close the panorama glass roof panel and open the roller sunblind.
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
----	-----------------	------



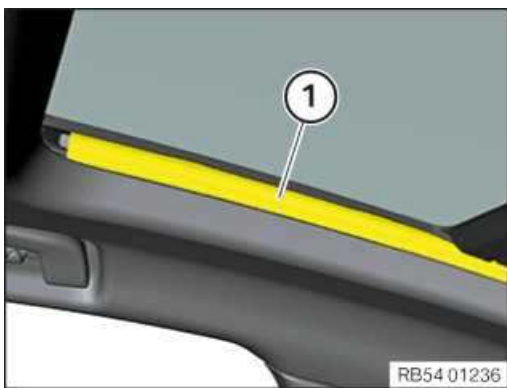
- Insert the seal (1) around the panorama glass roof panel.

9 – Adjusting rear panorama glass roof lid

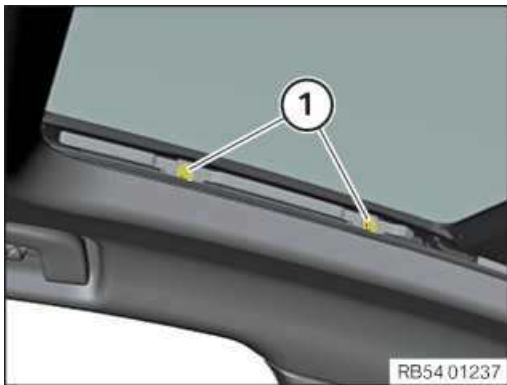


NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



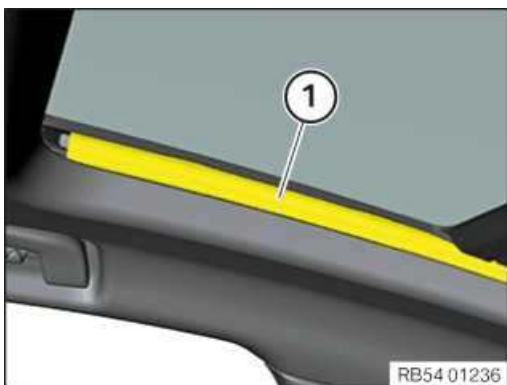
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
----	-----------------	------



- Insert the seal (1) around the panorama glass roof panel.

10 – Initialise panorama glass roof



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



TECHNICAL INFORMATION

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

- Keep pressing the switch during the entire procedure (approx. 50 s):
 - Initialisation starts approx. 15 s after the button is pressed.
 - The glass roof and the roller sunblind are each opened and closed completely.
- Initialisation is complete once the glass roof and the roller sunblind are completely closed. The button can then be released.
- Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).
 - Clear fault memory in FZD control unit.

Additional Information

Overview of Tightening Torques

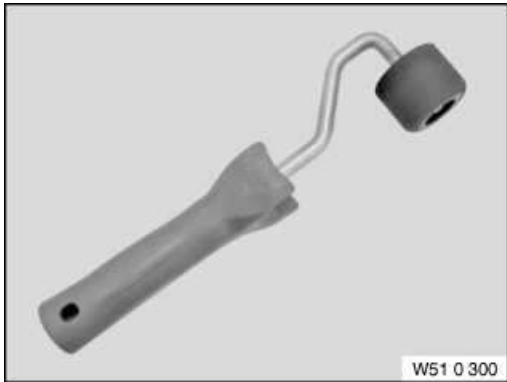
Panorama glass roof lid to mechanics

Used in step 8 9

M5	Replace screws.	5 Nm
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Overview of Special Tools

0 495 505 (51 0 300) Roller



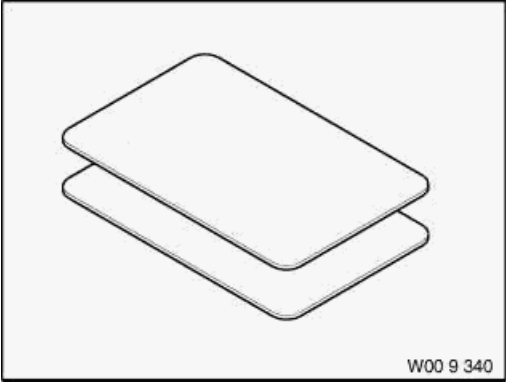
Common Used in step 4

Usage	(Contact roller) For pressing sound insulation into doors; various rubber seals and covers		
Included in the tool or work			
Storage location	B20		
Replaced by			
In connection with			
SI-Number	01 12 06 (271)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 495 843 (51 0 301)		Handle Only available as part of complete tool 51 0 300.	
2	0 495 844 (51 0 302)		Roller Only available as part of complete tool 51 0 300.	

0 493 687 (00 9 340) Removal aid

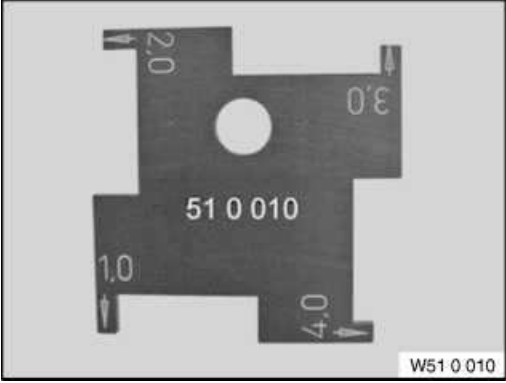


Common		Used in step	7
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		Removal aid Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

0 495 259 (51 0 010) Gauge



Common		Used in step	7
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

Overview Technical Data

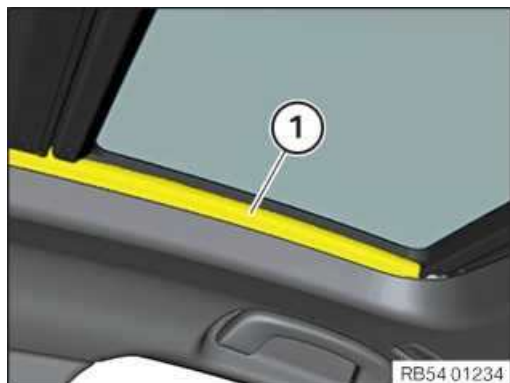
Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	7
General repair instructions	Used in step
51 00 ... Notes on component bonding using adhesive tape	4

54 13 050 Replacing gasket on rear glass slide/tilt sunroof panel

PRELIMINARY WORK

1 – Removing the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

- Pull off the seal (1) around the front panorama glass roof panel towards the inside.

- Close the panorama glass roof panel and open the roller sunblind.



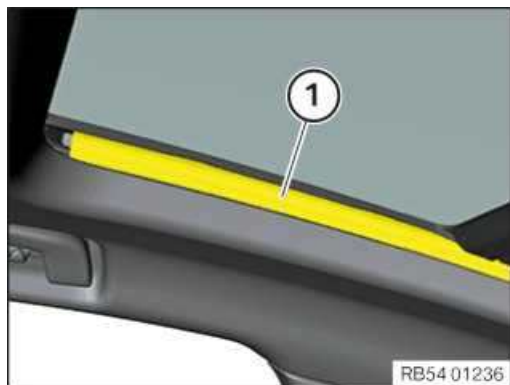
NOTICE

Perform the operations on the left and right side.

- Loosen screws (1).
- Remove the panorama glass roof lid upwards.



2 – Removing the rear panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

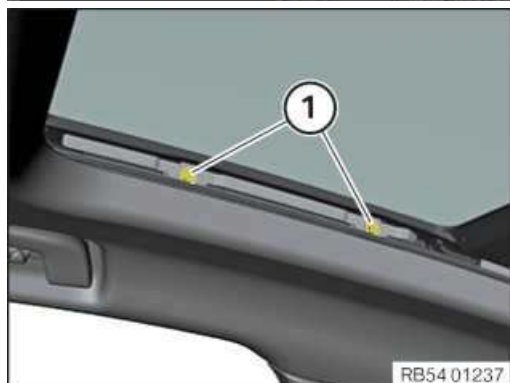
- Pull off the seal (1) around the front panorama glass roof panel towards the inside.

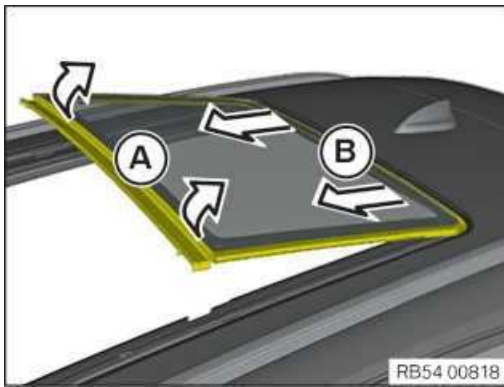


NOTICE

Perform the operations on the left and right side.

- Loosen screws (1).

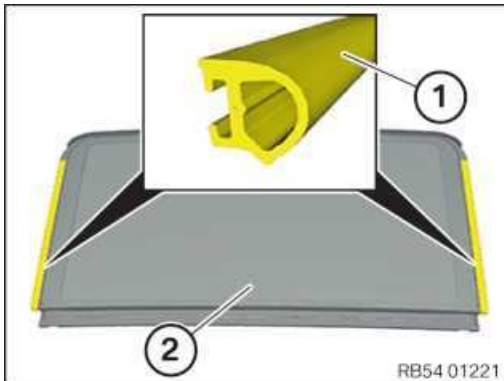




- Lift up front panorama glass roof panel in direction of arrow (A).
- Guide rear panorama glass roof panel with water channel out of roof in direction of arrow (B).

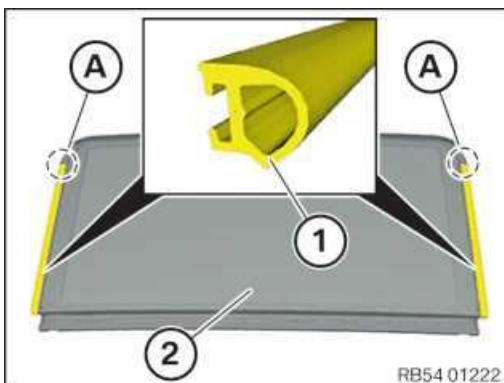
MAIN WORK

3 – Removing the seal on the rear panorama glass roof panel



- Guide out seals (1) from panorama glass roof panel (2).

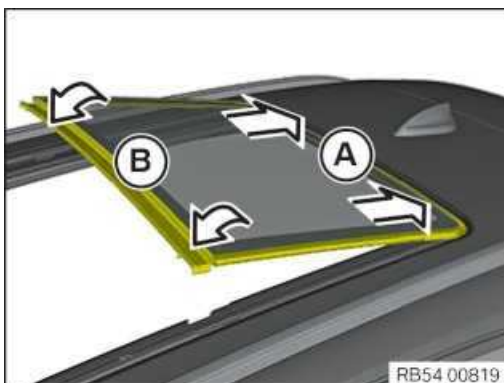
4 – Installing the seal at the rear panorama glass roof lid



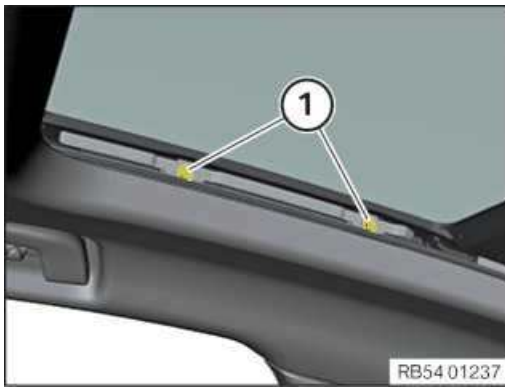
- Attach the seals (1) to the panorama glass roof lid (2) beginning from the rear.
Position the seals (1) in the area (A) without gaps.

POSTPROCESSES

5 – Installing the rear panorama glass roof lid



- Feed the rear panorama glass roof lid into the roof with the water channel in direction of arrow. (A)
- Fold down the panorama glass roof lid in direction of arrow. (B)



NOTICE

Perform the operations on the left and right side.

- Renew screws (1).
- Parts:** Bolts
- Tap the screws (1), do not tighten.

6 – Installing the front panorama glass roof panel

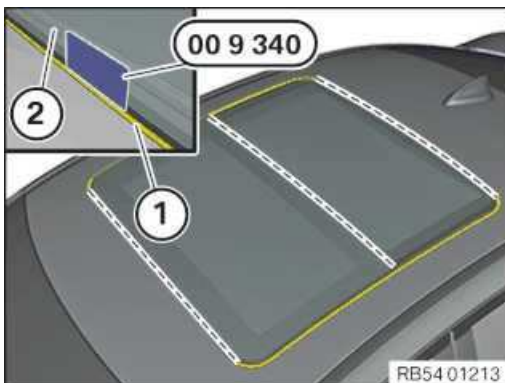


NOTICE

Perform the operations on the left and right side.

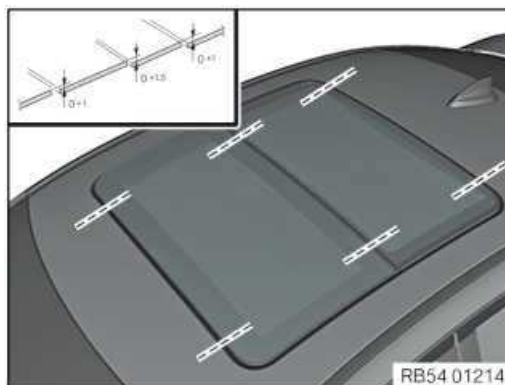
- Insert the panorama glass roof lid.
- Parts:** Bolts
- Screw the bolts (1) in but do not tighten.

7 – Checking the adjustment of the panorama glass roof

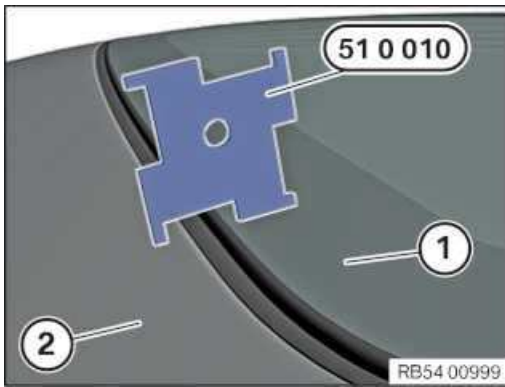


- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.
- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).

The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.
- Make sure the front of the lid is flush to 1.5 mm higher than the rear of the lid.
- Make sure the rear of the lid is flush to 1 mm higher than the rear of the roof outer skin.



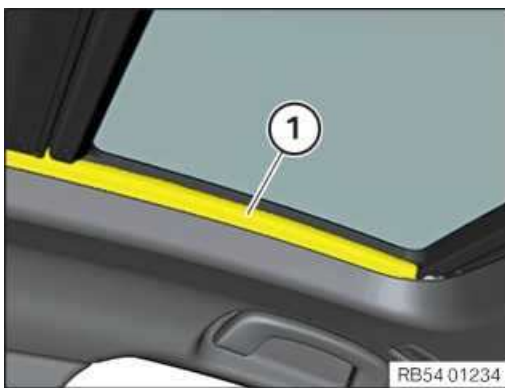
- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

8 – Adjusting the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



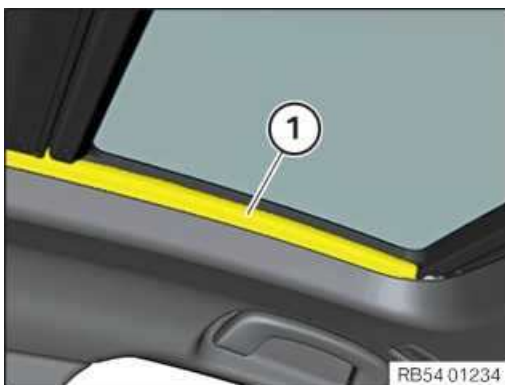
- Close the panorama glass roof panel and open the roller sunblind.
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
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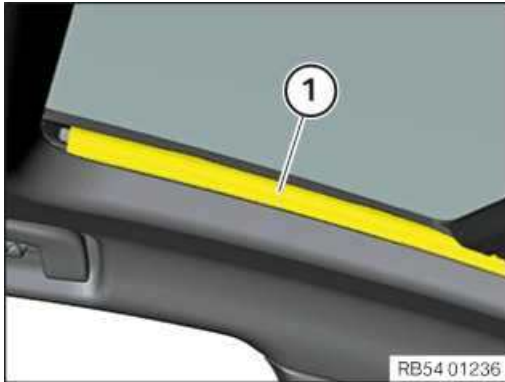
- Insert the seal (1) around the panorama glass roof panel.

9 – Adjusting rear panorama glass roof lid

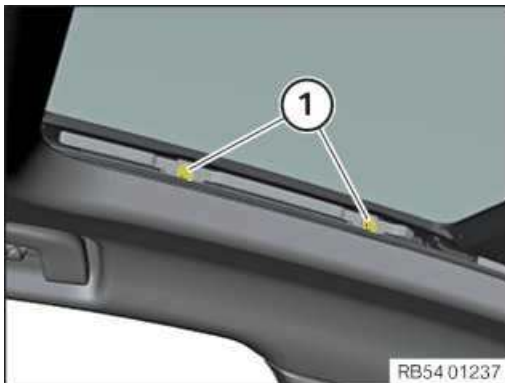


NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



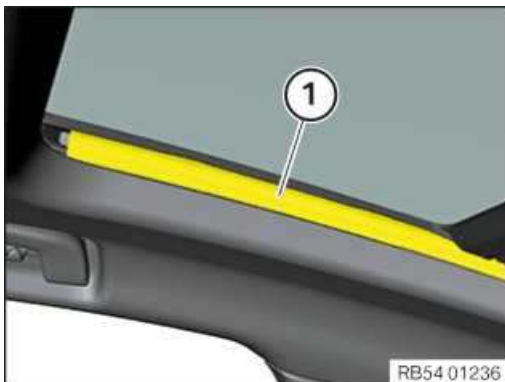
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
----	-----------------	------



- Insert the seal (1) around the panorama glass roof panel.

10 – Initialise panorama glass roof



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



TECHNICAL INFORMATION

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

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

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

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

Additional Information

Overview of Tightening Torques

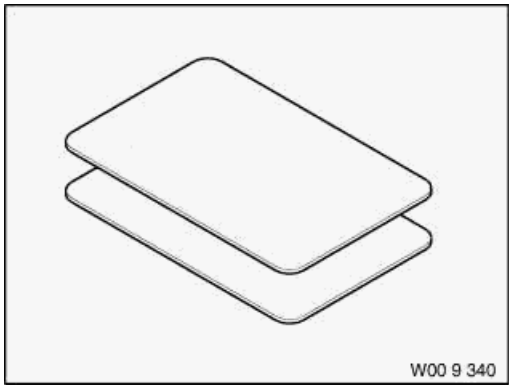
Panorama glass roof lid to mechanics

Used in step 8 9

M5	Replace screws.	5 Nm
----	-----------------	------

Overview of Special Tools

0 493 687 (00 9 340) Removal aid



Common

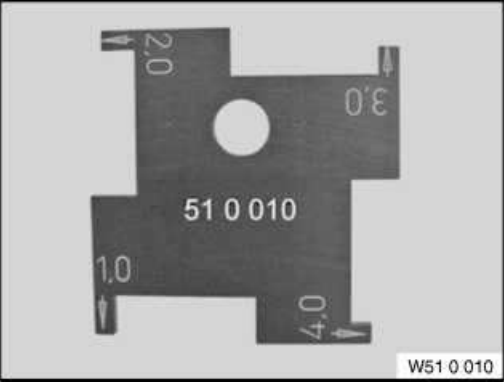
Used in step 7

Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		Removal aid Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

0 495 259 (51 0 010) Gauge



Common		Used in step	7
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

Overview Technical Data

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	7

54 13 087 Replacing panoramic glass sunroof



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

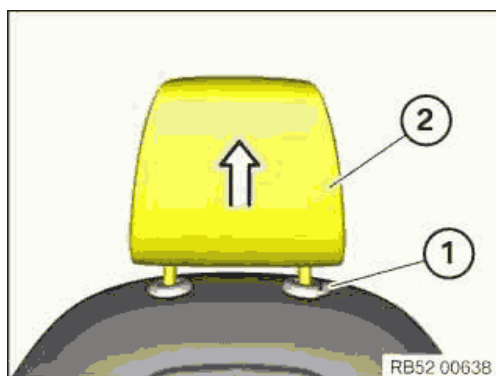
PRELIMINARY WORK

1 – Remove both front head restraints



NOTICE

Perform the operations on the left and right side.



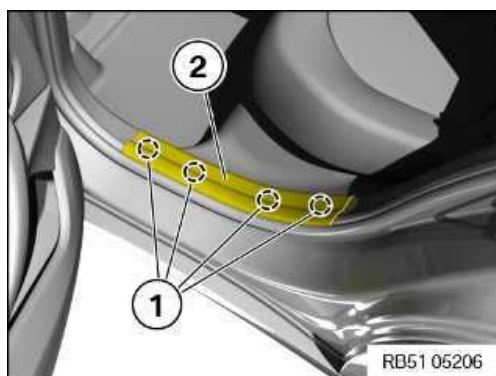
- Press the height adjustment (1) and pull the head restraint (2) out towards the top.

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



NOTICE

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



► Remove rear entrance cover strip

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

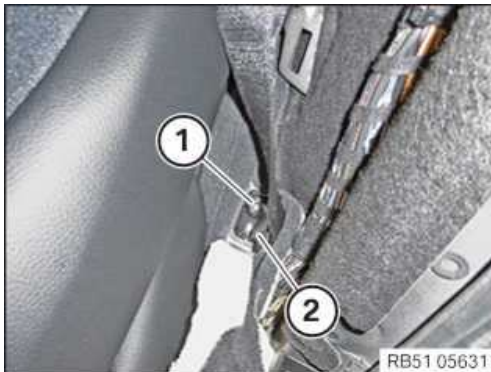
3 – Removing the bottom left and right C-pillar trim panels



NOTICE

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

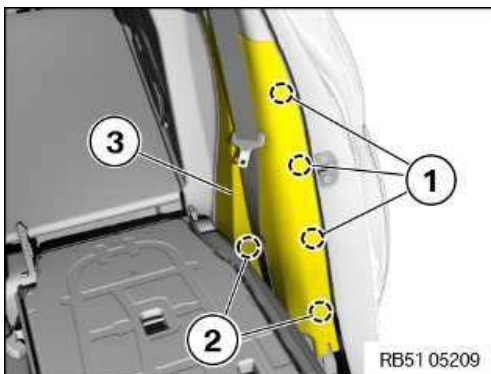
► Remove the bottom C-pillar trim panel



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

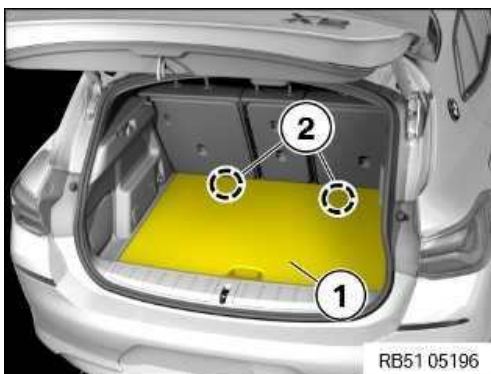


- Release the edge protection (1) in area of the bottom C-pillar trim panel.



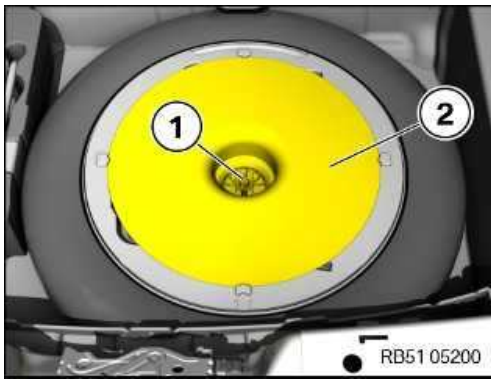
- Clip in the C-pillar trim panel (3) on the bottom with the clamps (1) and the clips (2).
- Detach end fitting and remove the bottom C-pillar trim panel (3).

4 – Removing the luggage compartment removable panel

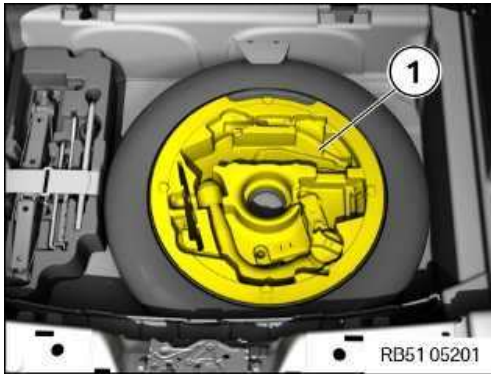


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

5 – Removing the compact spare wheel



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

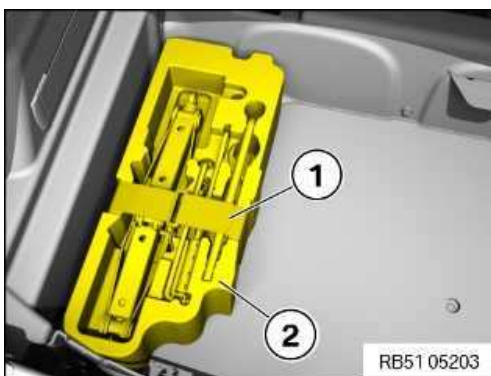


- Remove the oddments tray from the emergency wheel (1).



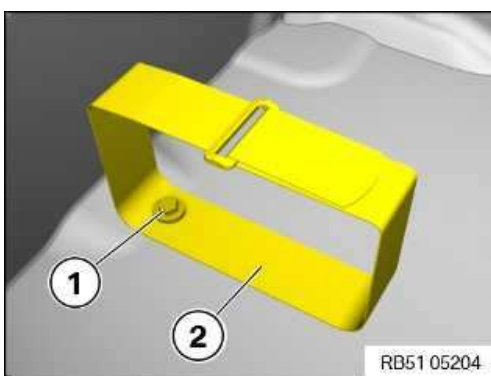
- Remove the emergency wheel (1).

6 – Remove the tool kit



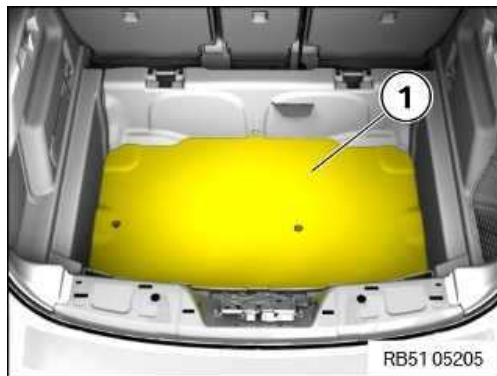
- Open the hook and loop tape (1).
- Remove the tool kit (2).

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



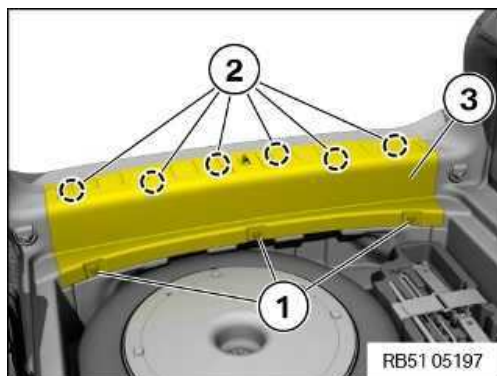
- Loosen screw (1).
- Remove the hook and loop tape (2).

8 – Removing the luggage compartment floor trim panel



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

9 – Removing the loading edge trim

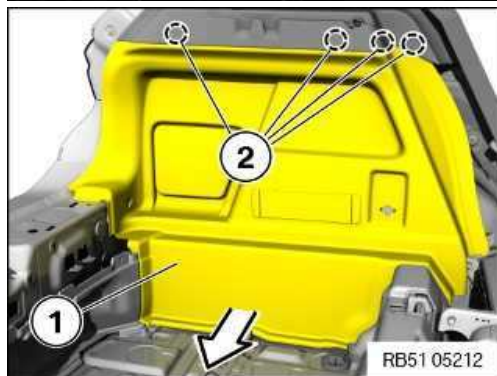


- Loosen the expanding rivet (1).
- Unclip the loading edge trim (3) from the clamps (2) toward the top and remove.

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



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

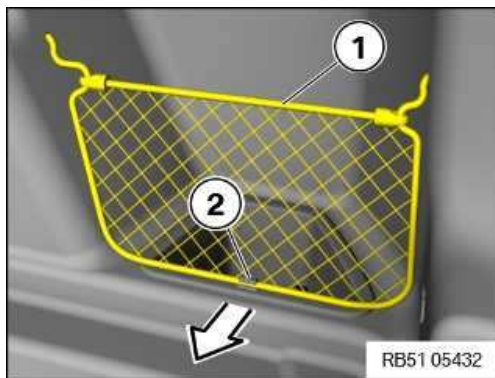


NOTICE

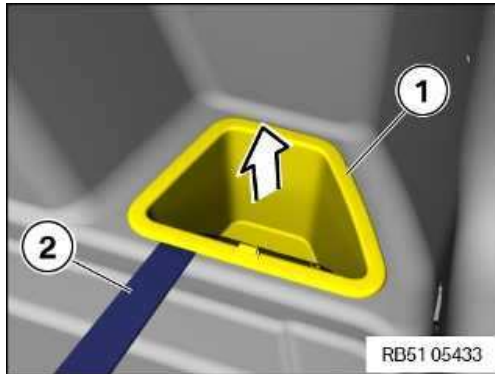
Schematic diagram is for example purposes. Some parts may differ in certain details.

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

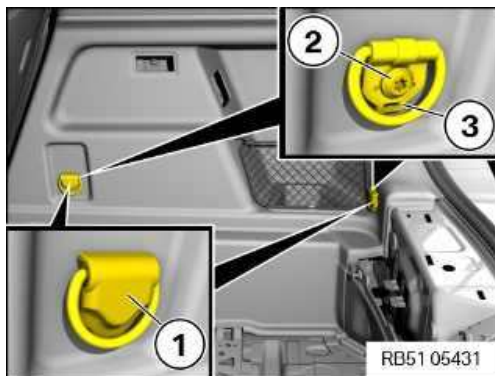
11 – Removing right luggage compartment wheel arch trim panel



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



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



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



NOTICE

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

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

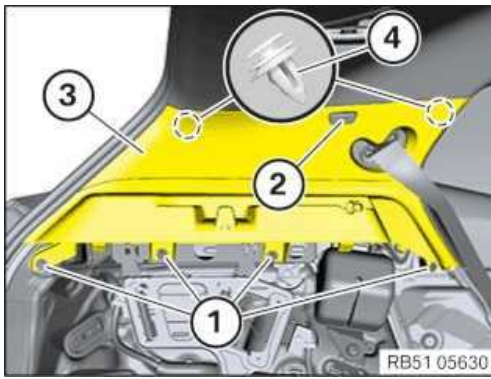
12 – Remove the trim panel of the luggage compartment capping on the left and right



NOTICE

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

- Remove the trim panel of the luggage compartment capping



- Loosen screws (1).
- Remove the cover (2) with a suitable plastic wedge and unscrew the screw below it.
- Detach the trim panel of the luggage compartment capping (3) from the clips (4).
- Feed out the end fitting and remove the trim panel of the luggage compartment capping (3).

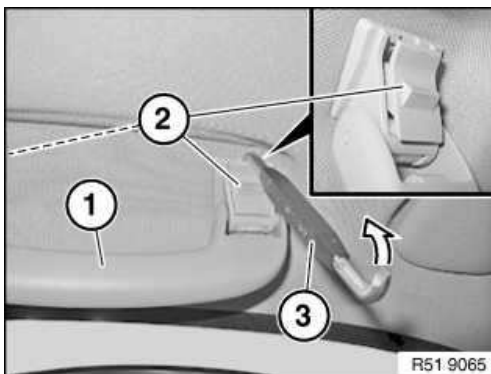
13 – Removing all grab handles



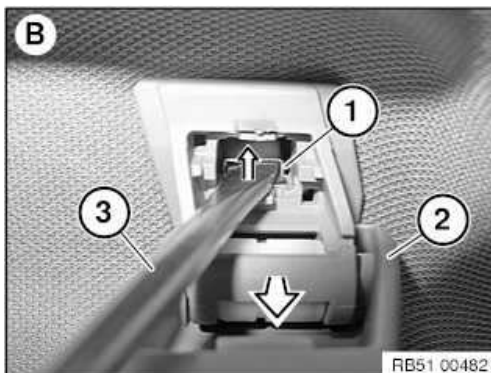
NOTICE

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

► Removing the grab handle

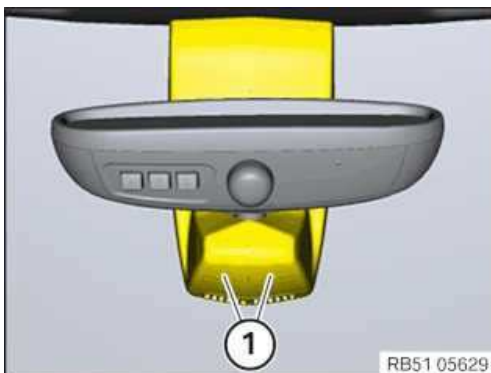


- Expand the grab handle (1) towards the bottom.
- Disengage and remove the locking insert (2) with an angle screwdriver (3) as shown.



- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

14 – Remove the cover on the inside mirror



- Unclip the covers on the interior mirror (1) outward with a suitable plastic wedge in the center and remove.

15 – Remove both sun visors



NOTICE

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

► Remove sun visor



- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

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



NOTICE

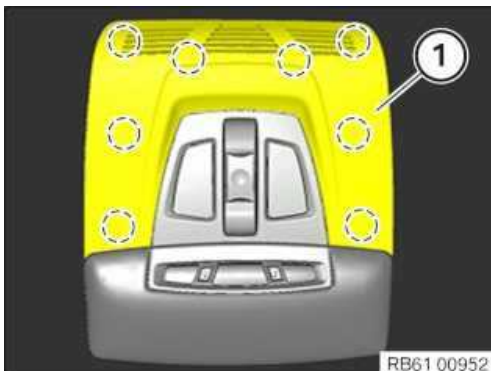
Description is for left component only. Procedure on the right side is identical.

► Remove the counter support for the sun visor

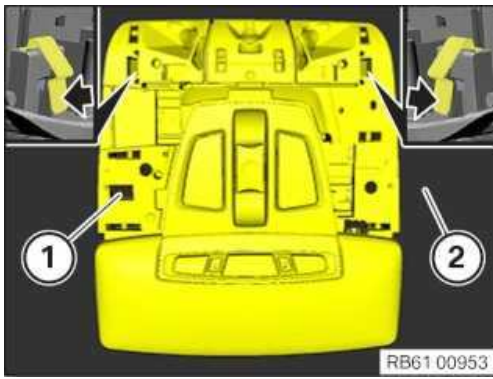


- Open the cover (1) and release the screw underneath.
- Remove the counter support downward.

17 – Remove the roof function centre



- Carefully unclip and remove the trim (1) with the special tool 0 496 569 (00 9 325).



- Unlock the left/right retaining lugs using a screwdriver in direction of the arrow.
- Remove the roof function centre (1) from the headlining (2).
- Unlock and disconnect associated connector.

18 – Removing the left and right A-pillar trim panels



NOTICE

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

► Remove the A-pillar trim panel



WARNING

Airbag unit.

Danger! Life-threatening injuries!

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



WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

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



- Unclip cover (1) and unscrew the screw below it.
- Release the A-pillar trim panel (2) from the clips (3) and guide out upwards.

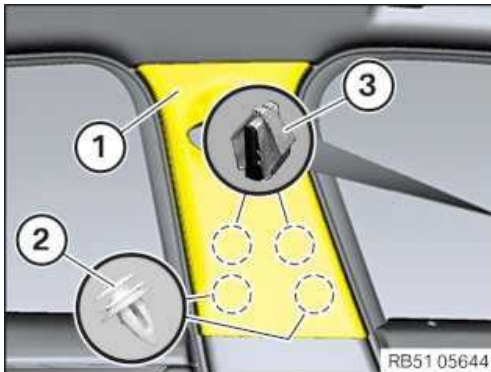
19 – Removing the B-pillar trim panels at top left and right



NOTICE

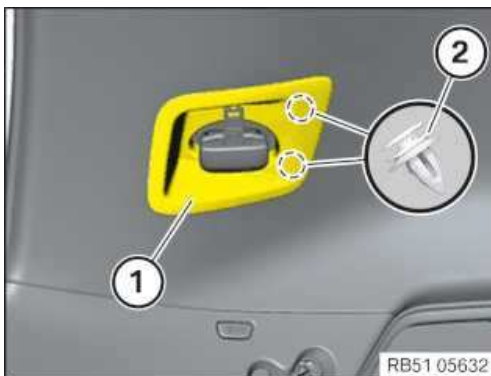
Description is for left component only. Procedure on the right side is identical.

► Partially removing upper B-pillar trim panel



- Carefully release the B-pillar trim panel (1) from the clips (2) and the clamps (3) with the special tool **0 496 569 (00 9 325)** and guide it out of the headlining in a downwards direction.

20 – Remove the belt feed trim



- Unclip the belt feed trim (1) at the clips (2) and slide it forward and out of the headliner.
- Slide out the seat belt and remove the belt feed trim (1).

21 – Lowering the headlining (with panorama glass roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

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

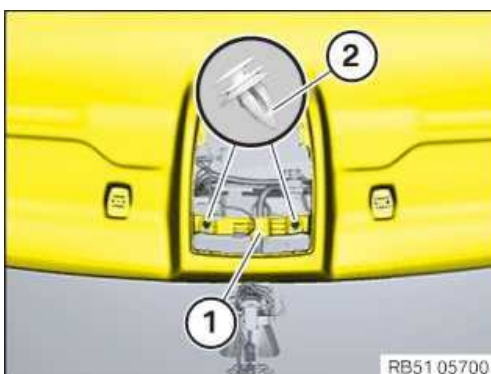


RISK OF DAMAGE

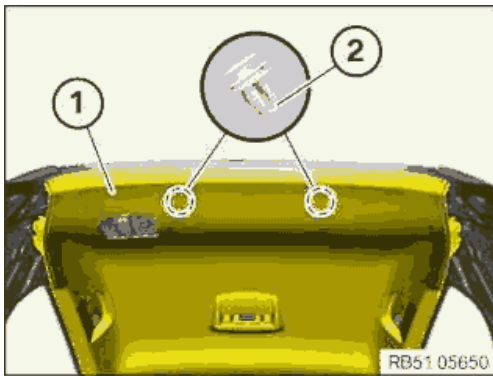
Fold the headlining.

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

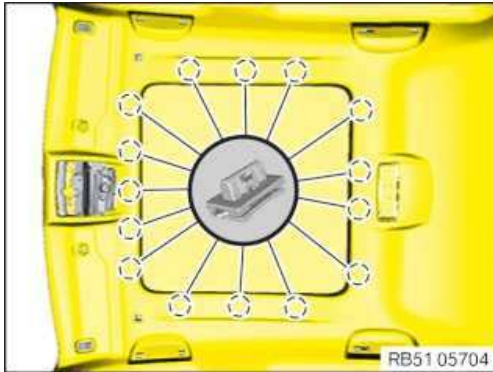
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



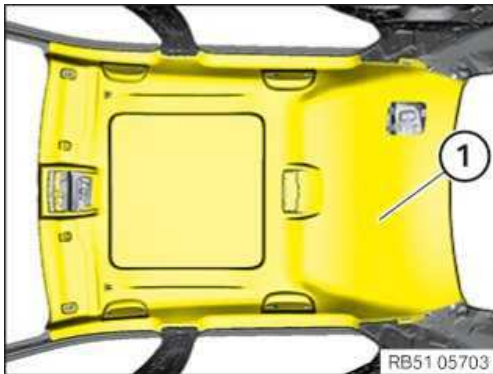
- Loosen the frame (1) at the clips (2).
- If necessary, loosen the cable clip from the frame (1).



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

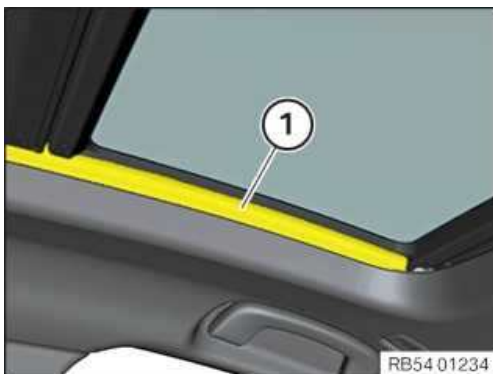


- Carefully release the headlining with a suitable plastic wedge from the clamps (1) in a downwards direction.



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

22 – Removing the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

- Pull off the seal (1) around the front panorama glass roof panel towards the inside.

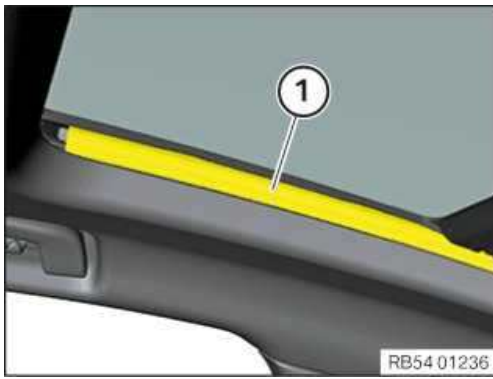


NOTICE

Perform the operations on the left and right side.

- Close the panorama glass roof panel and open the roller sunblind.
- Loosen screws (1).
- Remove the panorama glass roof lid upwards.

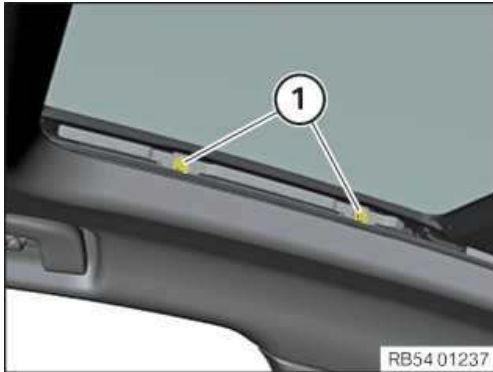
23 – Removing the rear panorama glass roof panel



NOTICE

Perform the operations on the left and right side.

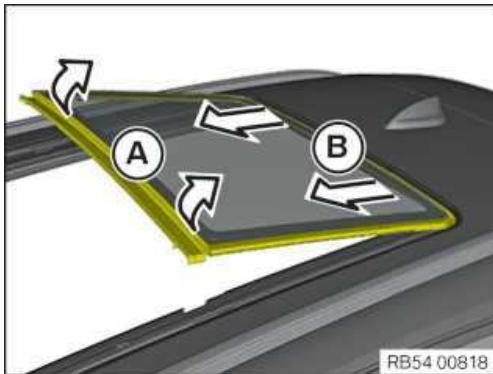
- Pull off the seal (1) around the front panorama glass roof panel towards the inside.



NOTICE

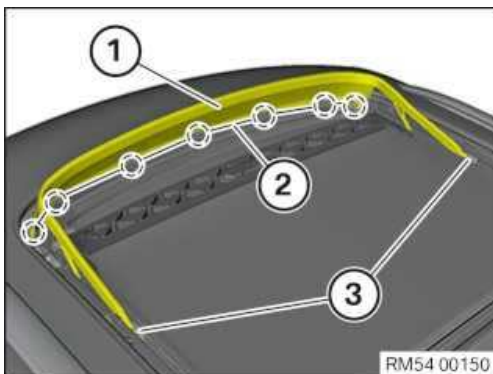
Perform the operations on the left and right side.

- Loosen screws (1).



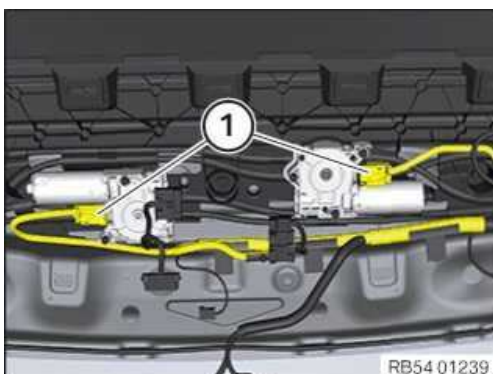
- Lift up front panorama glass roof panel in direction of arrow (A).
- Guide rear panorama glass roof panel with water channel out of roof in direction of arrow (B).

24 – Remove wind deflector



- Open glass slide/tilt sunroof.
- Carefully detach the wind deflector (1) from the latch mechanisms (2).
- Tip the wind deflector (2) up and detach it from the side holders (3).

25 – Remove complete panorama glass roof



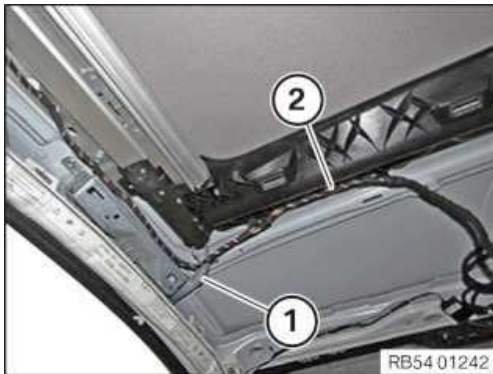
- Unlock and disconnect plug connections (1). Unclip the respective wiring harness from the panorama glass roof.



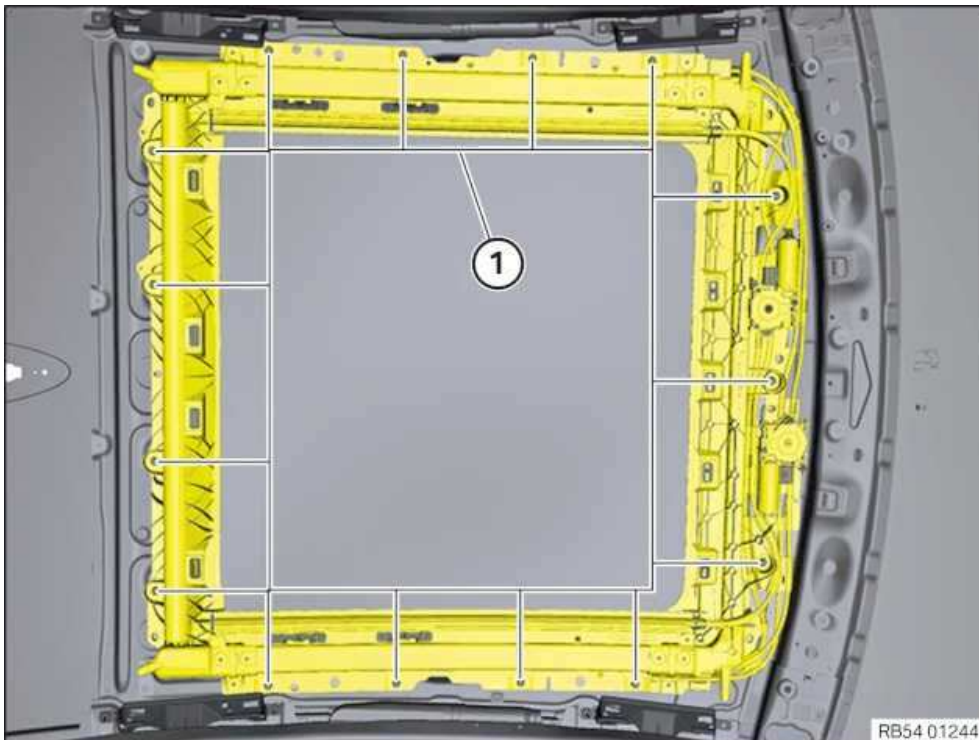
- Detach the front water drain hose (1) on the left/right.



- Detach the wiring harness (1) from the panorama glass roof.



- Detach the rear water drain hose (1) on the left/right. Detach the wiring harness (2) from the panorama glass roof.



RISK OF DAMAGE

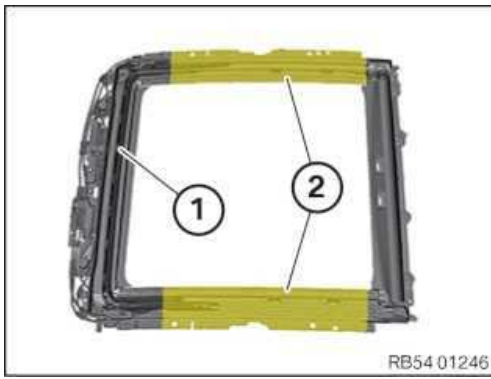
Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Secure panorama glass roof from falling with the help of an auxiliary person.
- Release screws along line (1).
- Lower the panorama glass roof with the assistance of an auxiliary person and remove from the vehicle towards the rear.

MAIN WORK

26 – Remove roller sunblind



RISK OF DAMAGE

Heavy component.

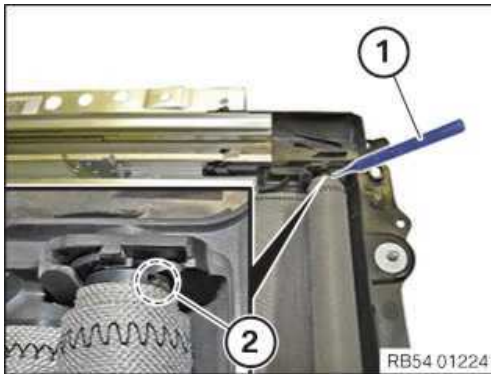
Heavy components can lead to injury or damage.

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

- Always carry the panorama glass roof (1) with an auxiliary person and only in the marked areas (2).



- Manually open roller sunblind (1) until it is in the area of the notch (2).



RISK OF DAMAGE

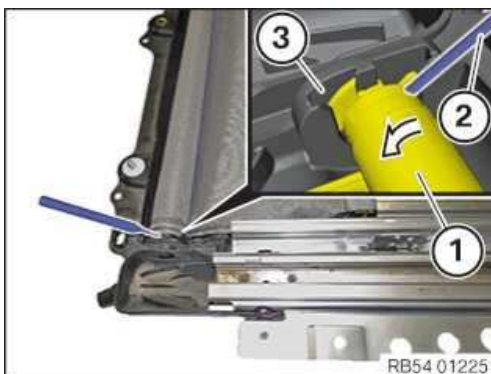
Damage to the sun blind rollers.

The preloaded spring of the automatic reel will detach when the roller sunblind is not disconnected.

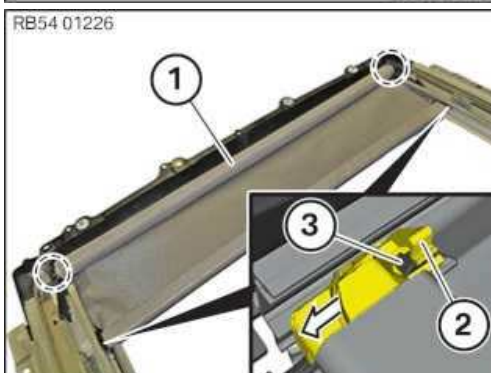
- Disconnect the roller sunblind with a suitable tool with Ø 2 mm .

- Insert holding fixture (1) fully in opening (2).
- If required, move the roller sunblind manually until the holding fixture (1) can be inserted completely.

The preload cannot be restored subsequently.



- Open roller sunblinds (1) further by approx. 2 cm manually.
- Turn roller sunblind (1) with the holding fixture (2) on the right fixture (3) in direction of arrow and thread out upwards.



- Detach roller sunblind (1) from the left and right mounting.
- Raise tab (2) on the slider slightly and lift it via the latch mechanism (3) of the driver.
- Pull slider forward off the driver.



- Feed out roller sunblind (1) from the frame.
- Carefully place the roller sunblind (1) on the lowered headliner.

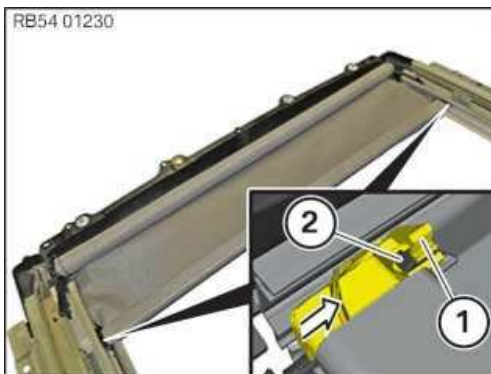
27 – Install roller sunblind



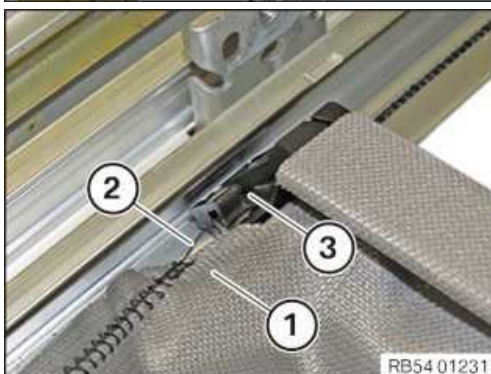
- Renew the sleeve(1).
- Parts:** Holding sleeve



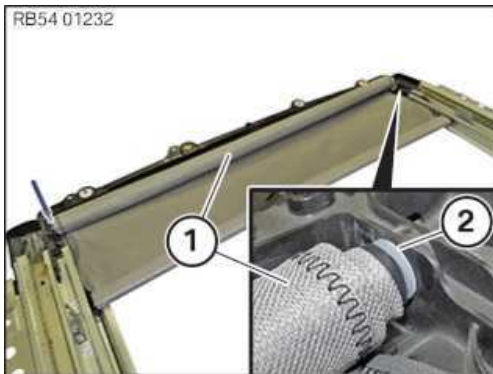
- Attach slider (1) to the frame.



- Engage slider (1) to the rear into the driver (2).



- Make sure that the roller sunblinds(1) and the cable (2) are not trapped from the slider (3) .

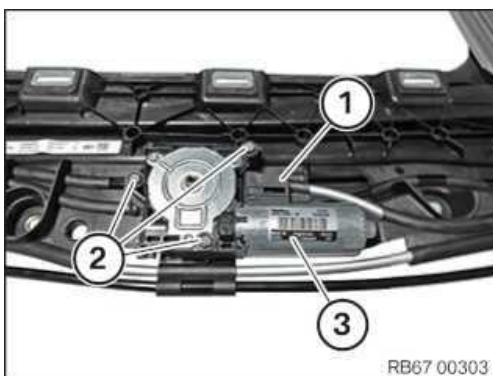


- Insert roller sunblind (1) into the sleeve (2).



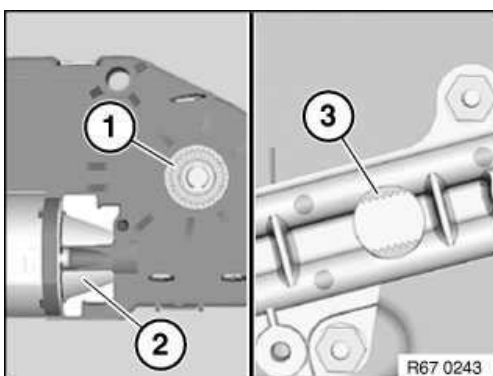
- Insert roller sunblind (1) with the holding fixture (2) into the fixture (3) and engage in direction of arrow.
- Remove holding fixture (2).

28 – Remove electric motor for roller sunblind

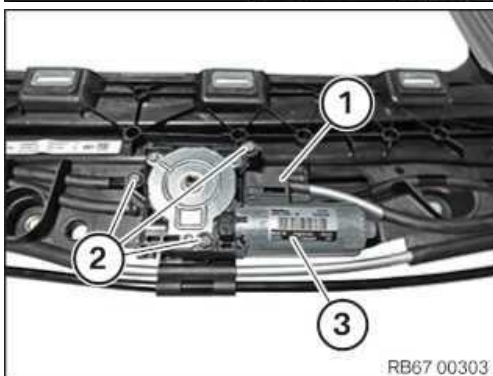


- Unlock plug connection (1) and disconnect.
- Loosen screws (2).
- Remove drive (3).

29 – Install the roller sunblind drive

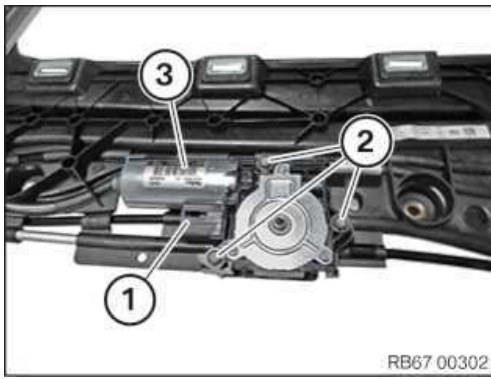


- Precisely insert the gear (1) for the drive of the roller sunblind (2) in the gearing (3).



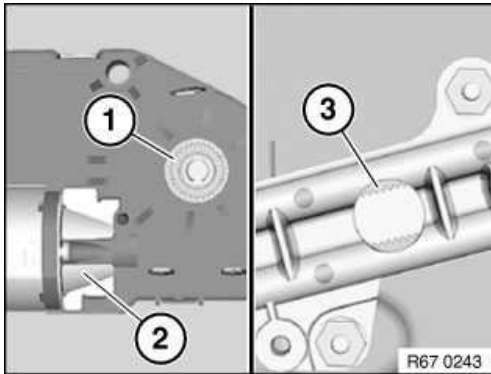
- Position the drive (3) correctly.
- Tighten down screws (2).
- Connect connectors (1) and lock.

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

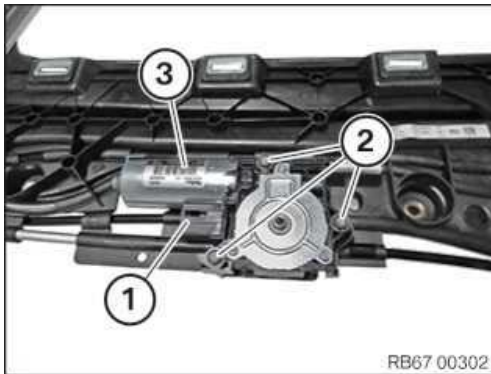


- Unlock plug connection (1) and disconnect.
- Loosen screws (2).
- Remove drive (3).

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



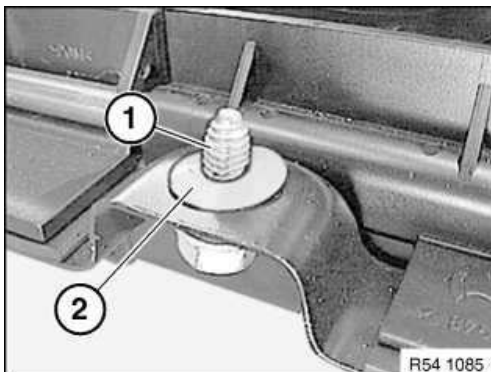
- Insert the gear (1) of the drive for the roller sunblind (2) precisely in the gearing (3).



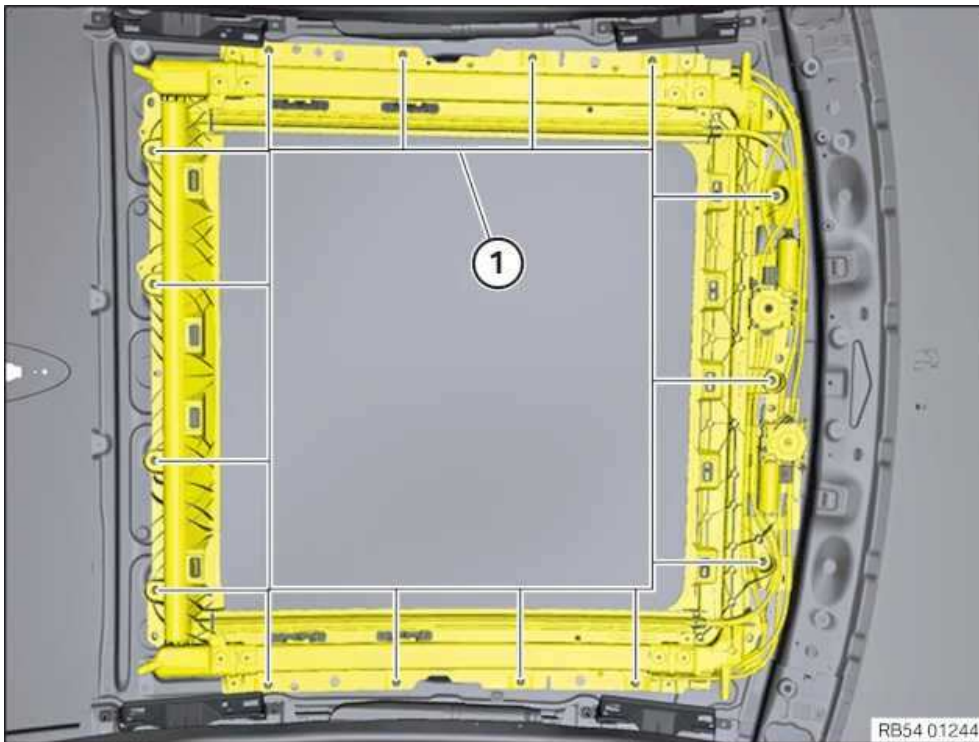
- Position the drive (3) correctly.
- Tighten down screws (2).
- Connect connectors (1) and lock.

POSTPROCESSES

32 – Install complete panorama glass roof



- In order to prevent groaning noises, all bolts (1) must be secured with the plastic washers (2) prior to installation.

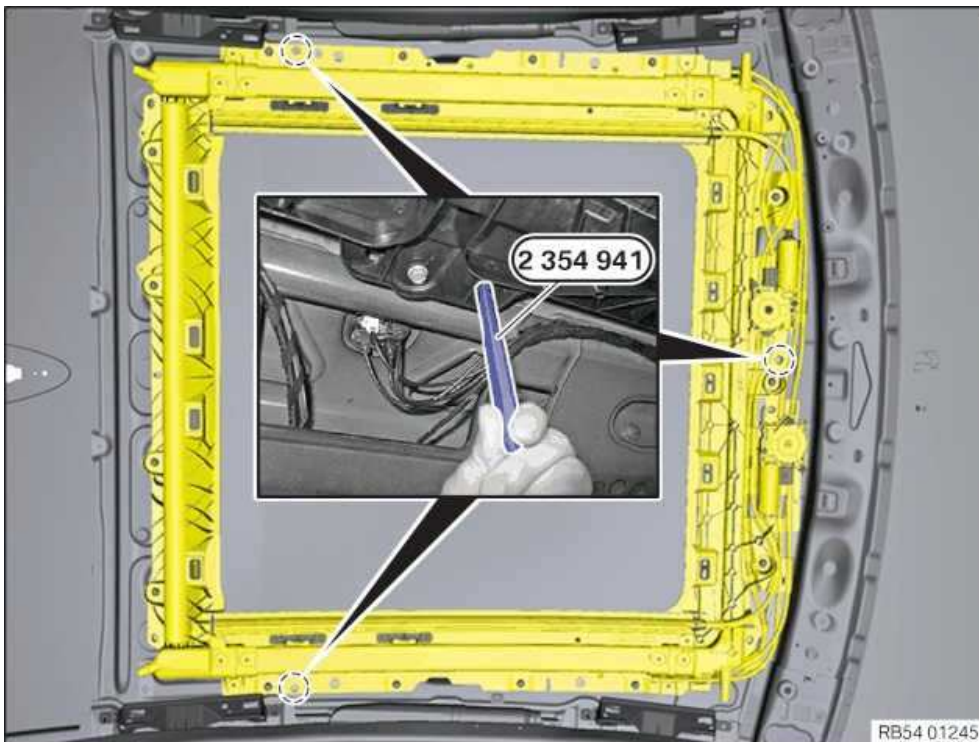


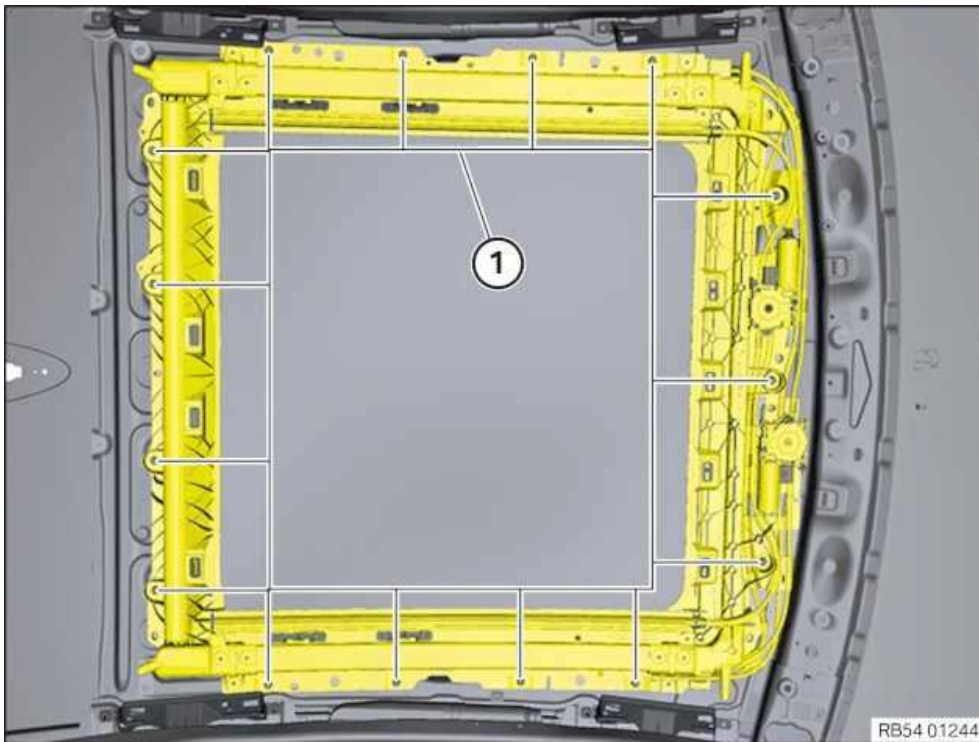
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

- Remove and install heavy components with the aid of another person/other persons.
- Insert the panorama glass roof into the vehicle and position it with the assistance of a second person.
- Screw in all screws along the line (1) by several turns.
- Insert the special tool **2 354 941** and align the panorama glass roof (1) with the roof.

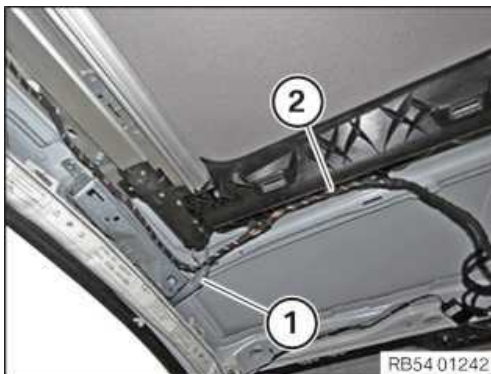




- Tighten all bolts (1).

Slide/tilt sunroof frame to body

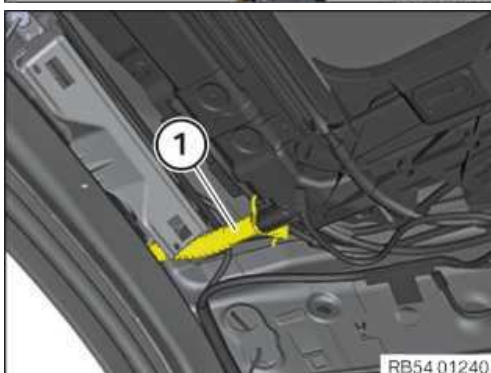
Hexagon screw		Tightening torque	5, Nr
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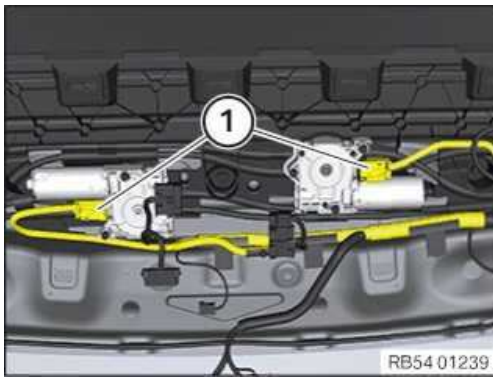
- Attach rear water drain hose (1) on left/right.
Make sure that all water drain hoses (1) are pushed up to their limit position.



- Fasten vehicle wiring harness (1) on the panorama glass roof.

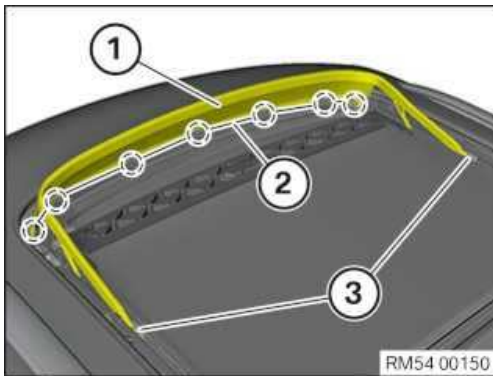


- Attach front water drain hose (1) on left/right.
Make sure that all water drain hoses (1) are pushed up to their limit position.



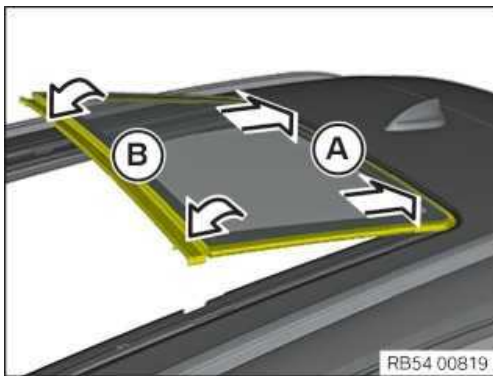
- Connect connector (1).
- Fasten corresponding vehicle wiring harness on the panorama glass roof.

33 – Install wind deflector

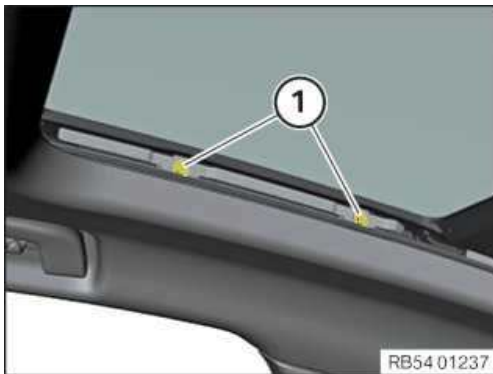


- Attach the wind deflector (1) to the side holders (3).
- Fold the wind deflector (1) up and attach it to the latch mechanisms (2).

34 – Installing the rear panorama glass roof lid



- Feed the rear panorama glass roof lid into the roof with the water channel in direction of arrow. (A)
- Fold down the panorama glass roof lid in direction of arrow. (B)



NOTICE

Perform the operations on the left and right side.

- Renew screws (1).
- Parts:** Bolts
- Tap the screws (1), do not tighten.

35 – Installing the front panorama glass roof panel



- Insert the panorama glass roof lid.



NOTICE

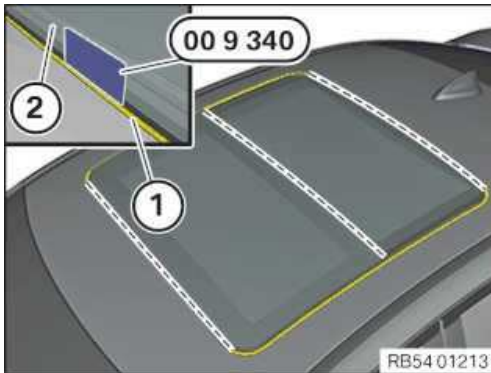
Perform the operations on the left and right side.

- Renew screws (1).

Parts: Bolts

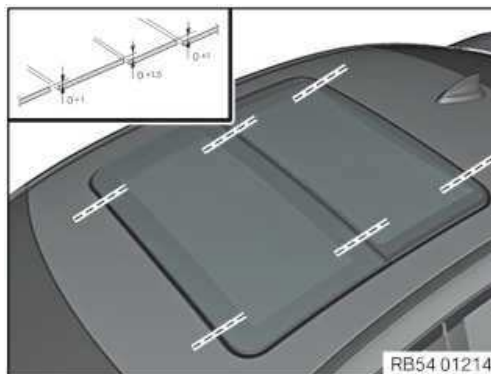
- Screw the bolts (1) in but do not tighten.

36 – Checking the adjustment of the panorama glass roof

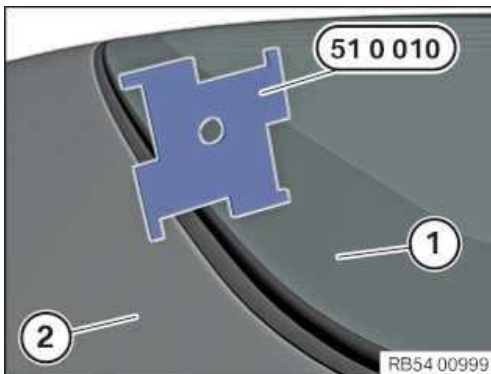


- Check if the distance of the panorama glass roof lid to the roof is the same at the front and rear.
- Insert special tool **0 493 687 (00 9 340)** between the seal (1) and the panorama glass roof lid (2).

The resistance when moving the special tool must be the same at the front and rear.



- Make sure the front of the lid is flush to 1 mm lower in relation to the roof outer skin at the front.
- Make sure the front of the lid is flush to 1.5 mm higher than the rear of the lid.
- Make sure the rear of the lid is flush to 1 mm higher than the rear of the roof outer skin.



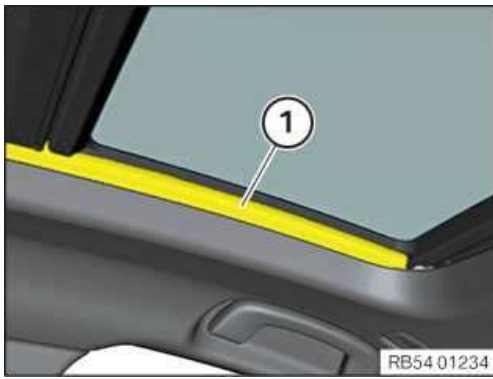
- Measure the height of the panorama glass roof lid (1) to the roof (2) with the special tool **0 495 259 (51 0 010)**.

37 – Adjusting the front panorama glass roof panel



NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



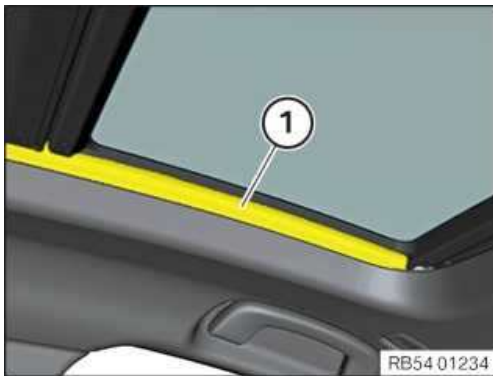
- Close the panorama glass roof panel and open the roller sunblind.
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
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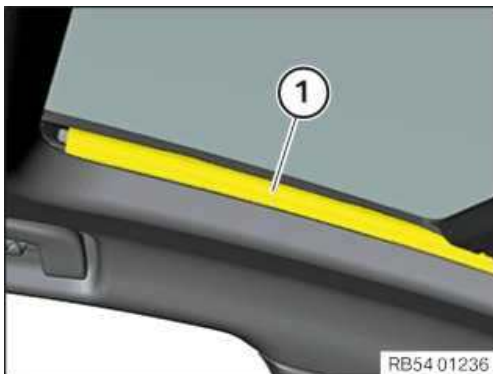
- Insert the seal (1) around the panorama glass roof panel.

38 – Adjusting rear panorama glass roof lid

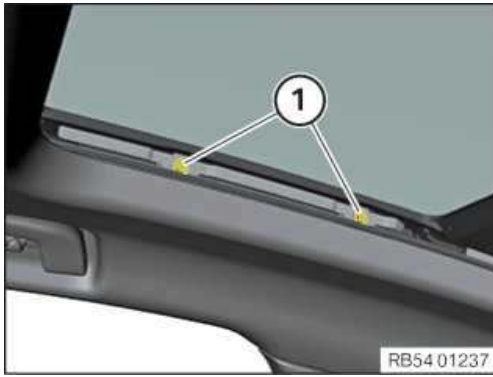


NOTICE

Perform the operations on the left and right side.



- Pull off the seal (1) around the panorama glass roof panel towards the inside.



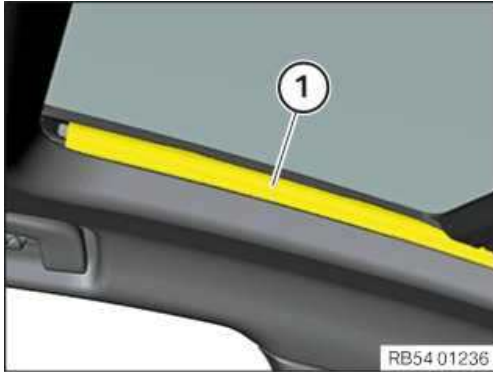
- Slacken the screws (1) until the panorama glass roof panel can barely still be moved.
- Move the panorama glass roof panel until the ideal position is reached.
- Renew screws.

Parts: Bolts

- Tighten the screws (1).

Panorama glass roof lid to mechanics

M5	Replace screws.	5 Nm
----	-----------------	------



- Insert the seal (1) around the panorama glass roof panel.

39 – Check the roller sunblind and the glass roof for function

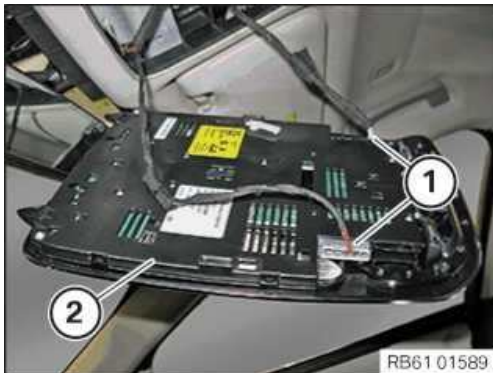


RISK OF DAMAGE

Damage to the sun blind rollers.

After the installation an initialised sun blind roller can be damaged during the first start-up.

- Perform initialisation before start-up.



- Connect the connector (1) with the roof function centre (FZD) (2).

► **Initialise panorama glass roof**



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



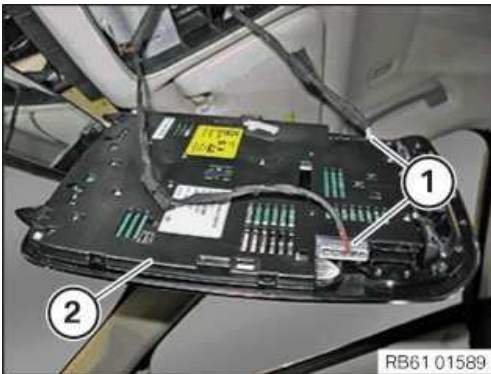
TECHNICAL INFORMATION

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

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

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

- Carry out function check (one-touch function, anti-trapping protection and, if necessary, comfort function).
- Clear fault memory in FZD control unit.
- Disconnect the connector (1) at the roof function centre (FZD) (2).



40 – Install the headlining (lowered with panorama roof)

Prerequisite

The front seats have been fully adjusted towards the bottom.

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



RISK OF DAMAGE

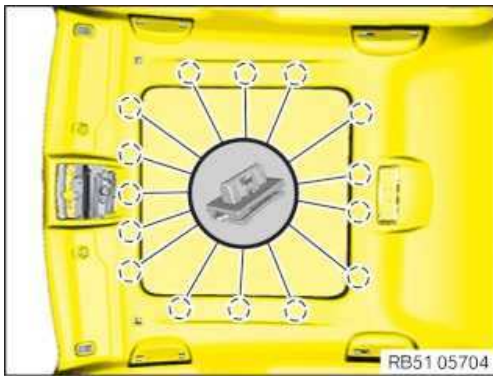
Fold the headlining.

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

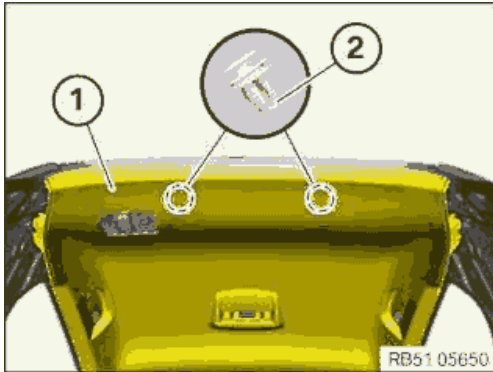
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



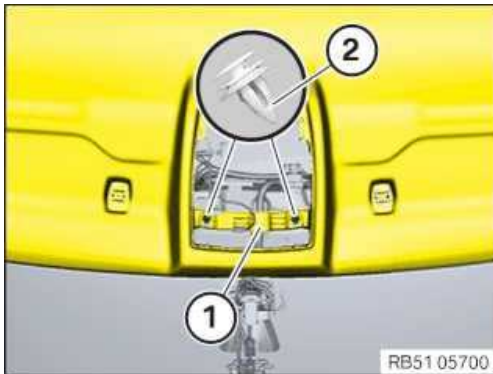
- Install the headlining (1) and carefully insert it at the respective edge protection.



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

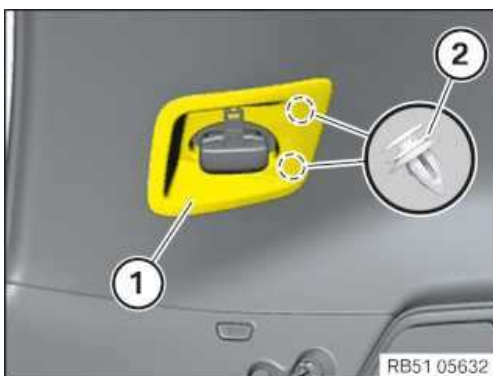


- Clip in the headlining (1) using the clips (2).



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

41 – Install the belt feed trim



- Feed in the seat belt on the belt feed trim (1).
- Feed in the belt feed trim (1) toward the rear on the headliner and clip in at the clips (2).

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



NOTICE

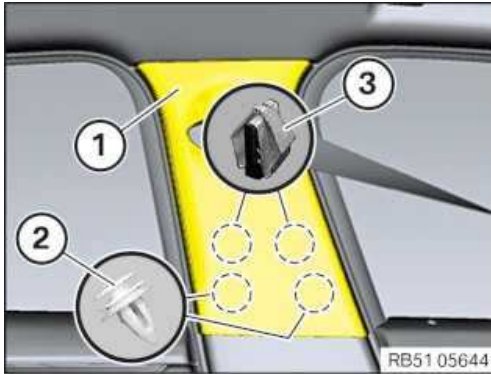
Description is for left component only. Procedure on the right side is identical.

- Partially installing upper B-pillar trim panel



TECHNICAL INFORMATION

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



- Insert the B-pillar trim panel (1) into the headlining and lock it at the clips (2) and the clamps (3).
- Make sure that the B-pillar trim panel (1) is correctly positioned at the respective edge protection.

43 – Installing the left and right A-pillar trim panels



NOTICE

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

► Install the A-pillar trim panel



WARNING

Airbag unit.

Danger! Life-threatening injuries!

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



WARNING

Pyrotechnic components.

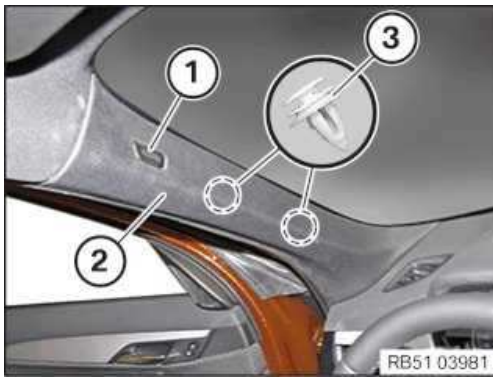
Danger! Life-threatening injuries!

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



TECHNICAL INFORMATION

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



- Thread in the A-pillar trim panel (2) and clip it in at the clips (3).
- Renew screw.
- Tighten down screw.

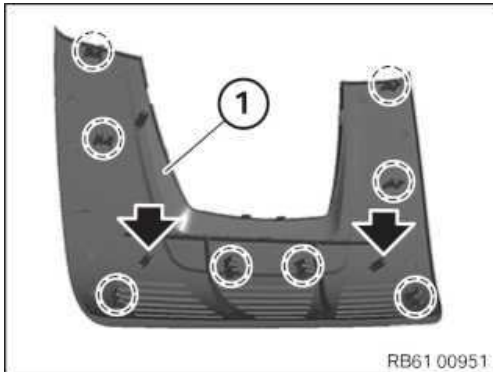
Parts: Screw

A-pillar trim panel to body

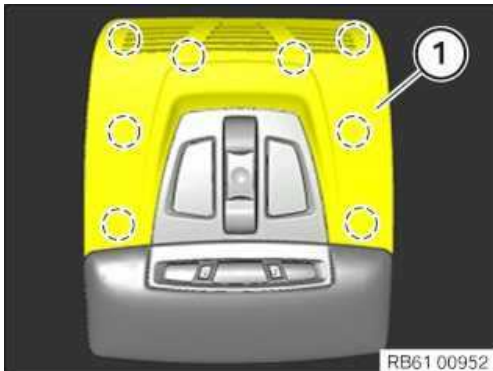
M5x42 screw	Renew screw	Tightening torque	2,2 Nm
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- Clip in the cover (1).

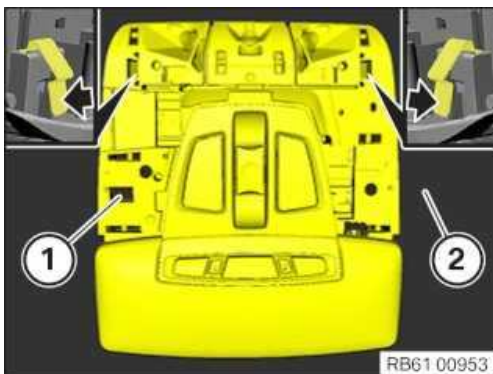
44 – Install the roof function centre



- The retaining lugs and guides on the trim (1) must not be damaged or missing.



- Carefully engage the trim (1) in the roof function centre.



NOTICE

To provide a better overview: Schematic diagram with partially hidden components.

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

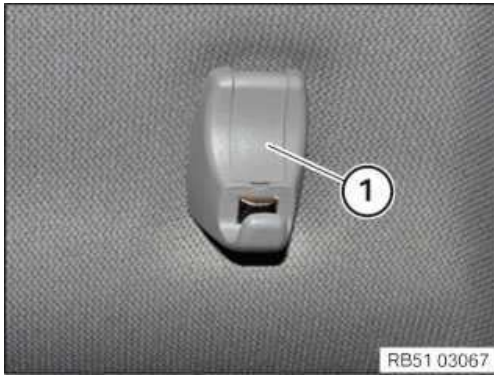
45 – Install the counter supports for the sun visor on left and right



NOTICE

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

- Install the counter support for the sun visor



- Install the counter support.
- Tighten screw and close the cover (1).

Counter support on body

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

46 – Install both sun visors



NOTICE

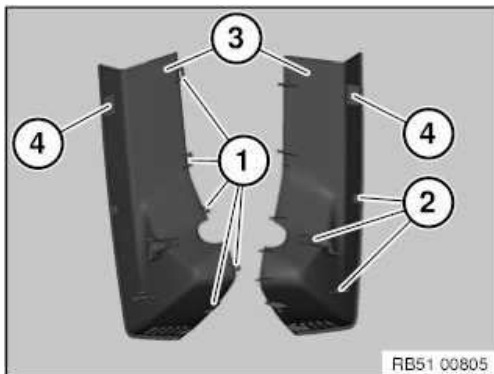
Description is for left component only. Procedure on the right side is identical.



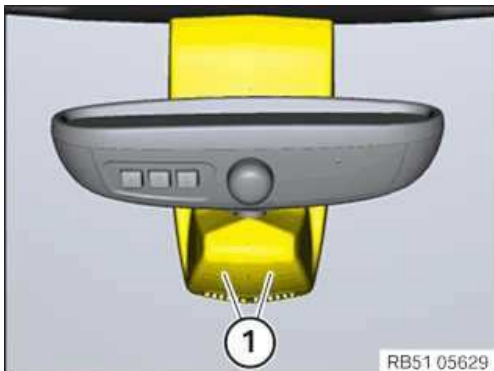
► Install the sun visor

- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

47 – Install the cover on the inside mirror



- Check the latch mechanisms (1) and guides (2) on the two covers (3) for damage, renew if necessary.
The latch mechanisms (1) and guides (2) must not be damaged.
- Check the spacers (4).
The spacers (4) must not be damaged or missing.



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

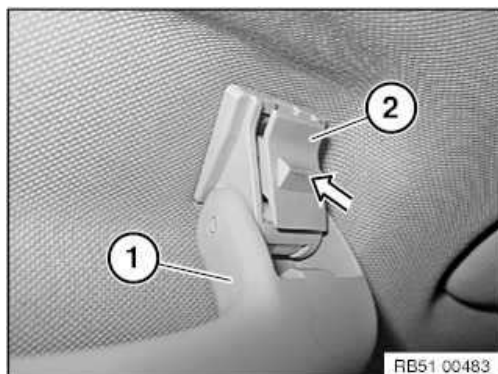
48 – Installing all grab handles



NOTICE

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

► Installing the grab handle



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

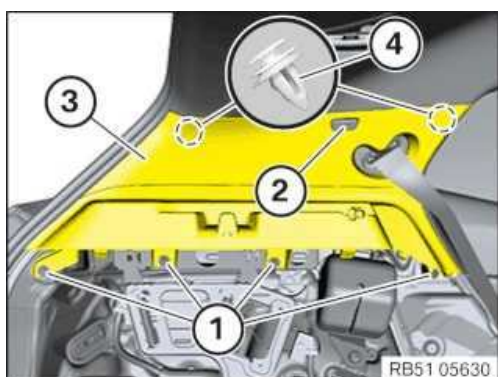
49 – Install the trim panel for left and right the luggage compartment capping



NOTICE

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

► Install the trim panel for the luggage compartment capping



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

Trim panel of luggage compartment capping

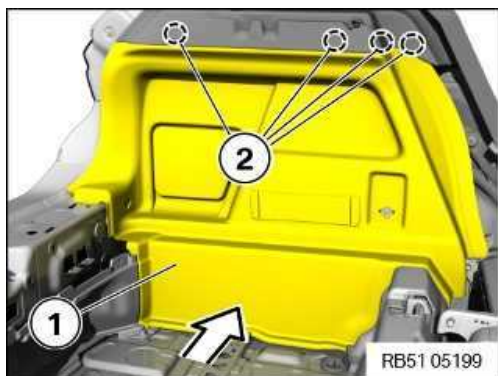
Self-tapping screw		Tightening torque	4 Nm
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- Tighten the screws (1).

Trim panel of luggage compartment capping to body

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

50 – Install luggage compartment wheel arch trim panel at left



NOTICE

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

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



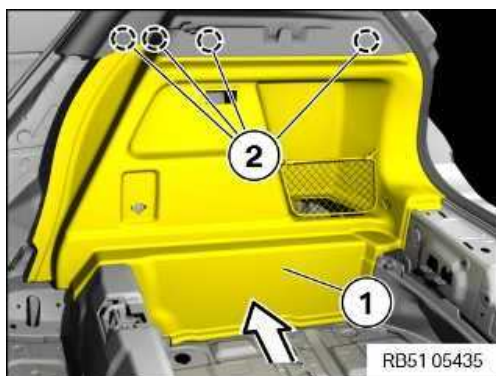
- Position the lashing eyes (3) and tighten the screws (2).

Lashing eye in luggage compartment

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

- Clip in the covers (1).

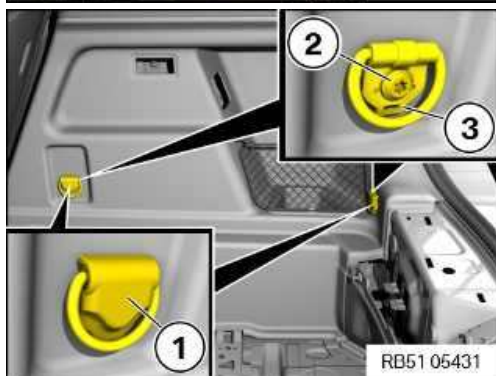
51 – Installing the luggage compartment wheel arch trim panel on the right



NOTICE

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

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



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

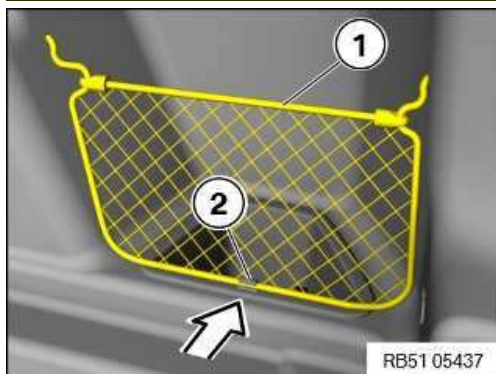
Lashing eye in luggage compartment

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

- Clip in the covers (1).



- Install the storage compartment (1) in the luggage compartment wheel arch trim panel in direction of arrow.



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

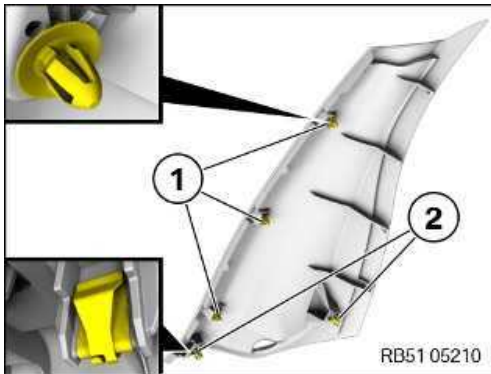
52 – Install C-pillar trim panel at bottom left and right



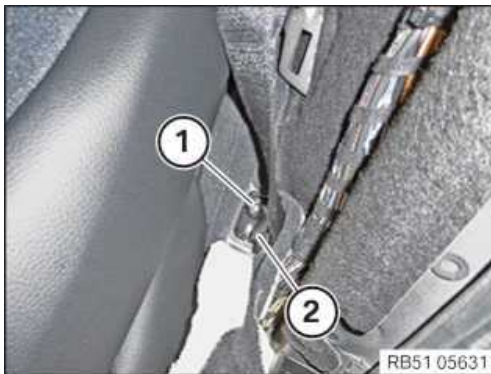
NOTICE

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

► Install the bottom C-pillar trim panel



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

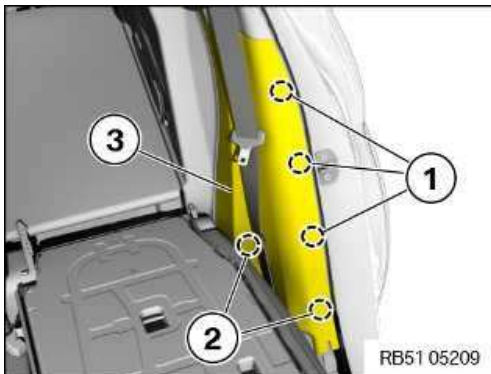


- Insert the end fitting (2) through the C-pillar trim panel.
- Mount the end fitting (2) and tighten the screw (1).

End fitting to body

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

- Install the carpet correctly.



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



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

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

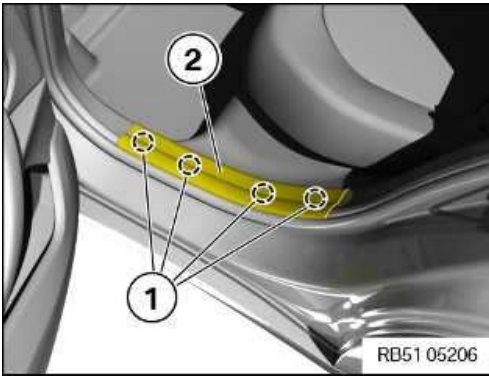
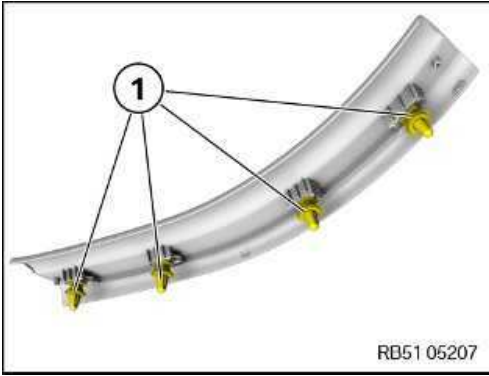


NOTICE

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

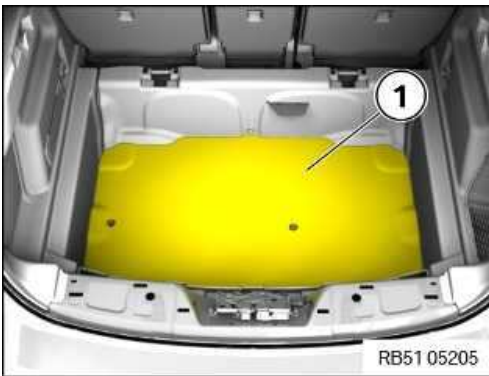
► Installing the rear door sill cover strip

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



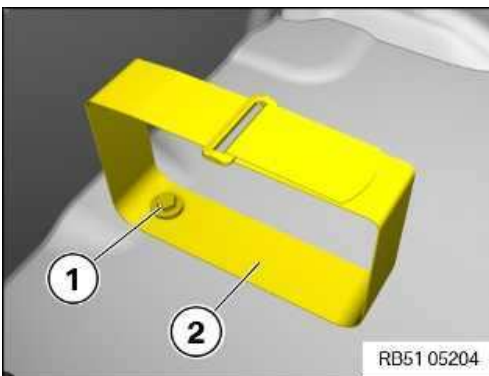
- Clip in the door sill cover strip (2) with the clips (1).

54 – Installing the luggage compartment floor trim panel



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

55 – Inserting the Velcro fastener for the toolkit

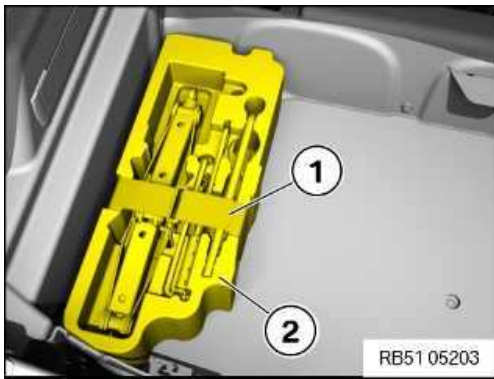


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20	Tightening torque	4 Nm
--------------	-------------------	------

56 – Install the tool kit

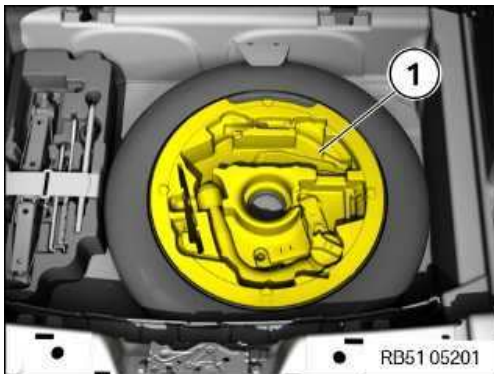


- Install the tool kit (2).
- Close the hook and loop tape (1).

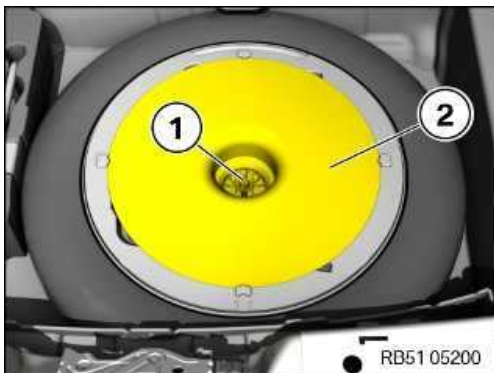
57 – Install the emergency wheel



- Insert compact spare wheel (1).

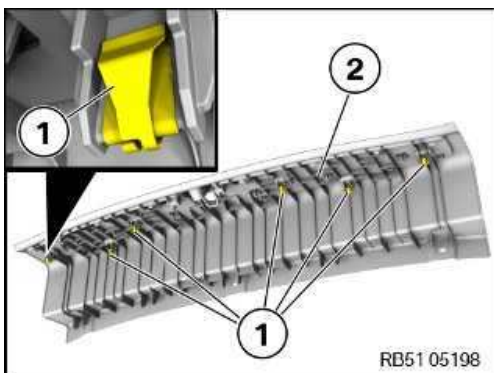


- Insert oddments tray into the compact spare wheel (1).

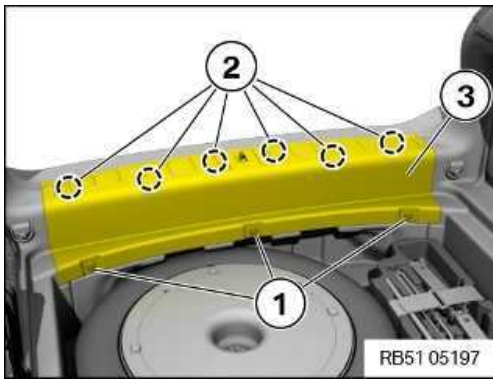


- Insert the lid (2).
- Hand-tighten the bolt (1).

58 – Installing loading edge trim

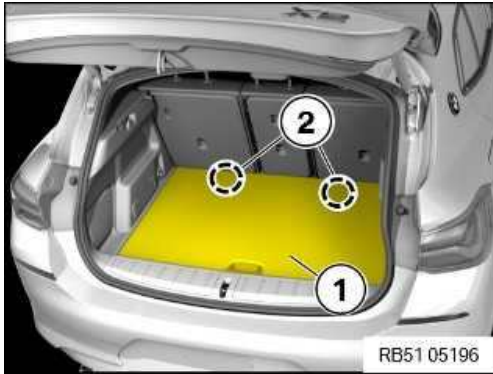


- Check the clamps (1) at the loading edge trim (2) for damage and renew if necessary.



- Insert the loading edge trim (3) in the area of the expanding rivets (1) into the underlying rear luggage compartment trim panel.
- Guide in the loading edge trim (3) under the sealing lip of the seal for the tailgate and clip it in with the clamps (2).
- Secure expanding rivet (1).

59 – Installing the luggage compartment removable panel



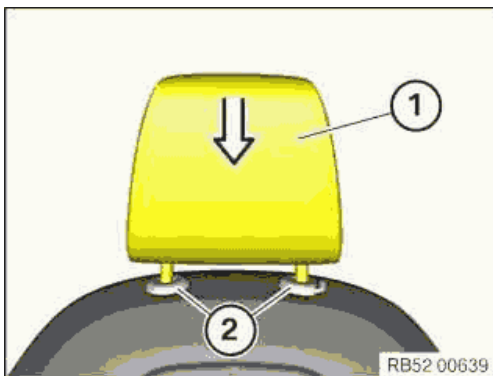
- Clip luggage compartment removable panel (1) into latch mechanisms (2) and set down.

60 – Install both front head restraints



NOTICE

Perform the operations on the left and right side.



- Insert and engage head restraint (1) into the guide sleeves (2) from above.

61 – Initialise panorama glass roof



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



TECHNICAL INFORMATION

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

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

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

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

Additional Information

Overview of Tightening Torques

Slide/tilt sunroof frame to body

Used in step [32](#)

Hexagon screw		Tightening torque	5,4 Nm
---------------	--	-------------------	--------

Panorama glass roof lid to mechanics

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

M5	Replace screws.		5 Nm
----	-----------------	--	------

A-pillar trim panel to body

Used in step [43](#)

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

Used in step [45](#)

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

Trim panel of luggage compartment capping

Used in step [49](#)

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

Used in step [49](#)

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

Lashing eye in luggage compartment

Used in step [50](#) [51](#)

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

End fitting to body

Used in step [52](#)

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

Used in step [55](#)

Bolt M6 x 20		Tightening torque	4 Nm
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Overview of Special Tools

0 496 569 (00 9 325) Wedge



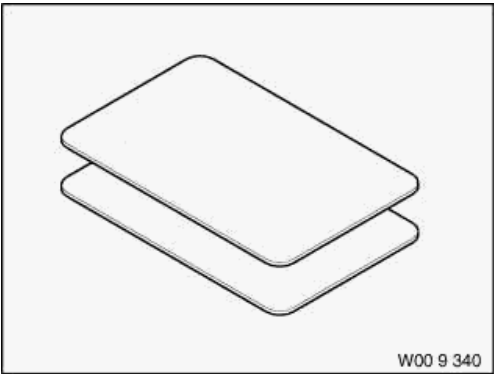
Common		Used in step	17	19
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)			
Included in the tool or work	0 490 527			
Storage location	Individual			
Replaced by				
In connection with				
SI-Number	41 01 09 (507)			

2 354 941 Pin



Common		Used in step	32
Usage	For centring the slide/tilt sunroof frame. Contour-graphic silhouette foil is included in the delivery specification. Further information on the contour-graphic silhouette foil is included in service information 00 22 13 (969).		
Included in the tool or work			
Storage location	A74		
Replaced by			
In connection with			
SI-Number	01 30 13 (999)		

0 493 687 (00 9 340) Removal aid

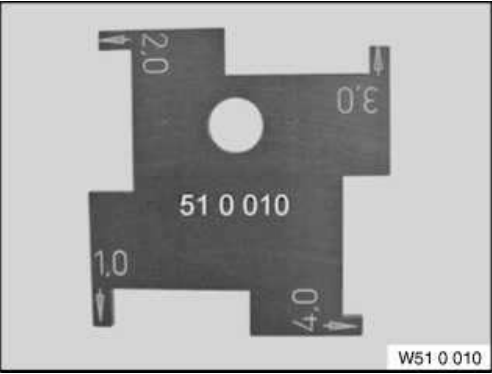


Common		Used in step	36
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

Consisting of

Pos	BMW Order number	Replaced by	Designation	In Connection with
1	0 496 289 (00 9 341)		Removal aid Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	

0 495 259 (51 0 010) Gauge



Common		Used in step	36
Usage	(test gauge for installing windscreen and rear window) (replaces special tool 51 3 210 from 06/2005)		
Included in the tool or work			
Storage location	B2		
Replaced by			
In connection with			
SI-Number	01 10 05 (189)		

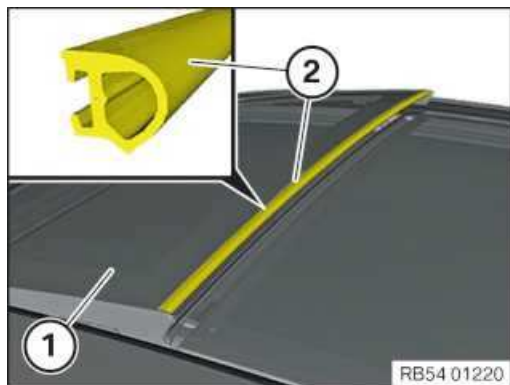
Overview Technical Data

Links

Repair instructions (PRE)	Used in step
Gap dimensions, body	36
General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	18 43

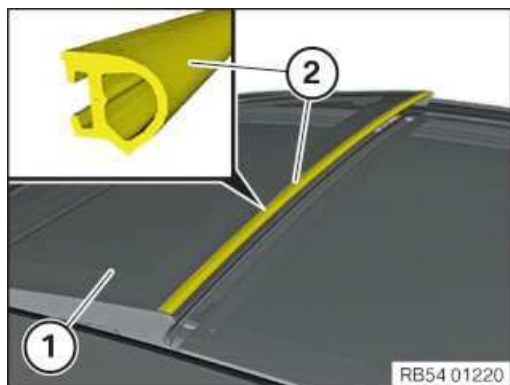
54 13 052 Replacing seal on front glass slide/tilt sunroof panel

1 – Removing the seal at the front panorama glass roof lid



- Open the panorama glass roof lid (1).
- Feed seal (2) out of the panorama glass roof lid (1).

2 – Installing the seal at the front panorama glass roof lid

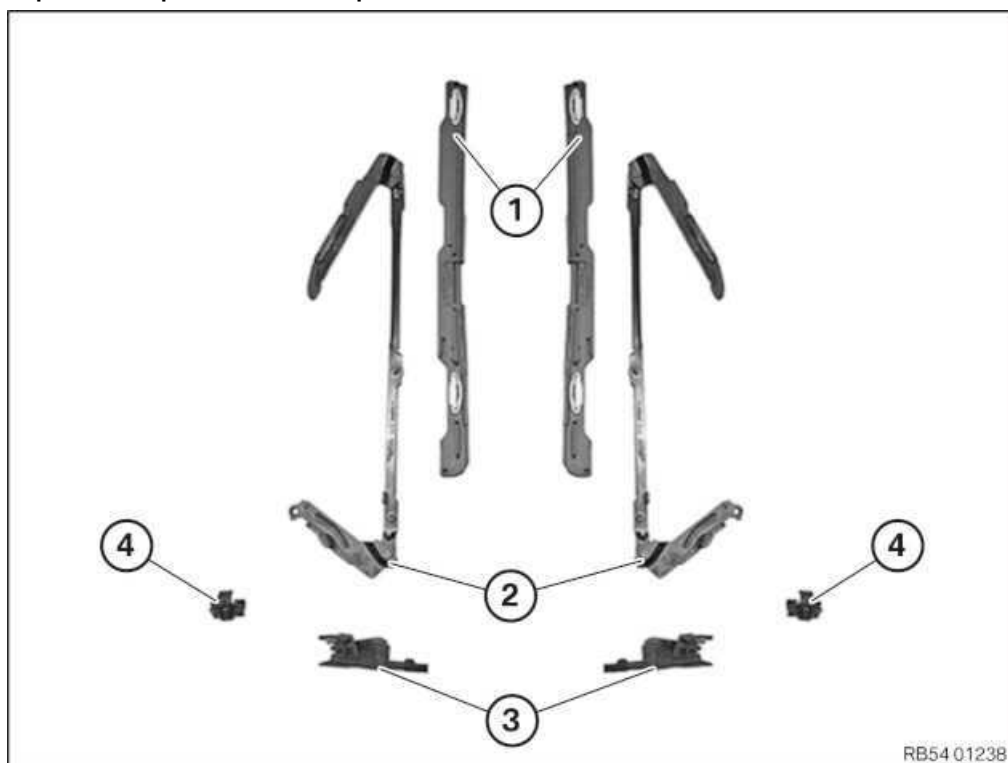


- Open the panorama glass roof lid (1).
- Attach the seal (2) in the panorama glass roof lid (1).

54 13 515 Replacing the mechanism for glass slide/tilt sunroof panel

1 – Removing mechanism for the panorama glass roof lid

Separate components of the repair kit for mechanics



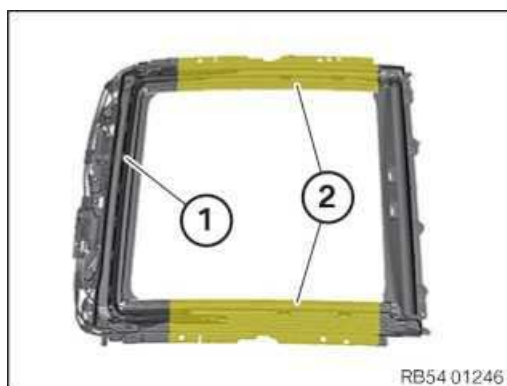
- 1 Gate
- 2 Mechanism
- 3 Guide
- 4 Sliders



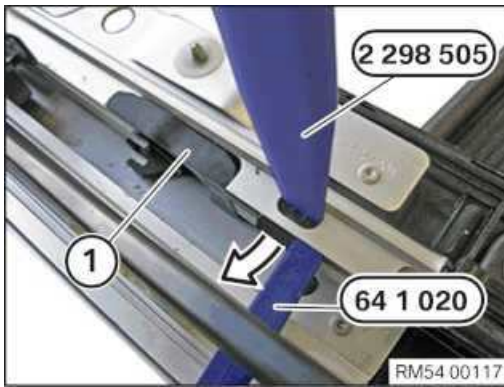
TECHNICAL INFORMATION

Always install all parts of the repair kit.

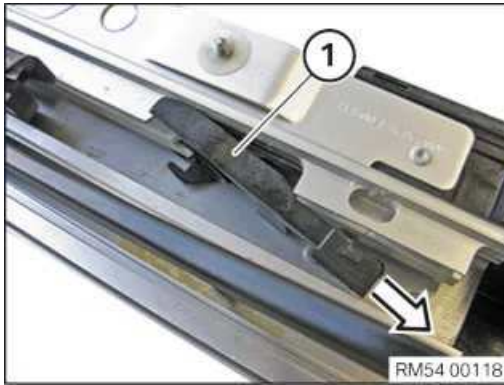
Carry out the work on one side first and then move on to the other side.



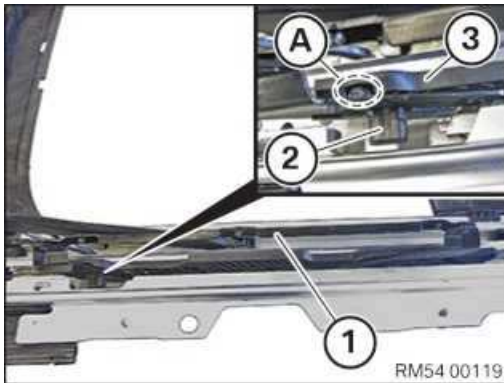
- Always carry the panorama glass roof (1) with the assistance of an auxiliary person and only inside the marked areas (2).



- Move the mechanism manually until the guide (1) is accessible.
- Unclip the guide (1) with special tools **2 298 505** and **0 493 681 (64 1 020)** in the direction of the arrow.



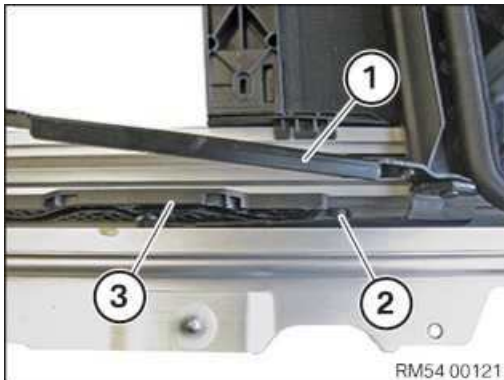
- Feed the guide (1) out in the direction of the arrow.



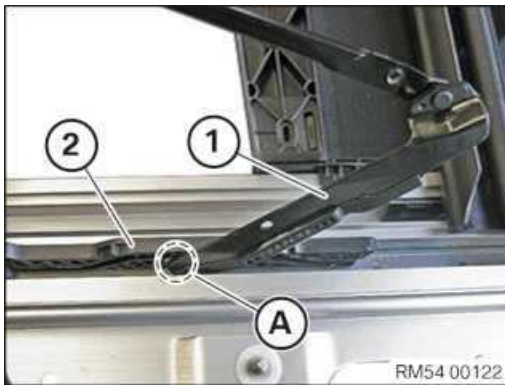
- Move the mechanism (1) manually until the slider (2) becomes visible above the aperture.
- Detach the mechanism (1) in area (A) from the rail (3) toward the top.



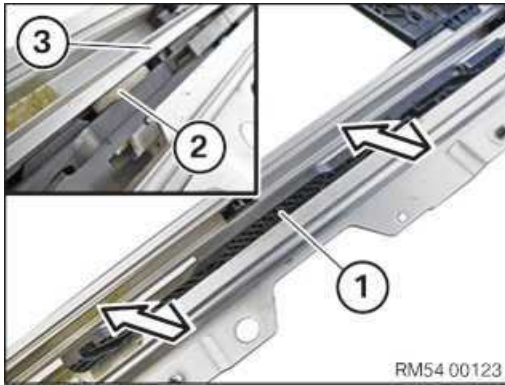
- Feed the guide (1) out of the rail (2).



- Slide the mechanism (1) to the back until the slider (2) exits the rail (3).

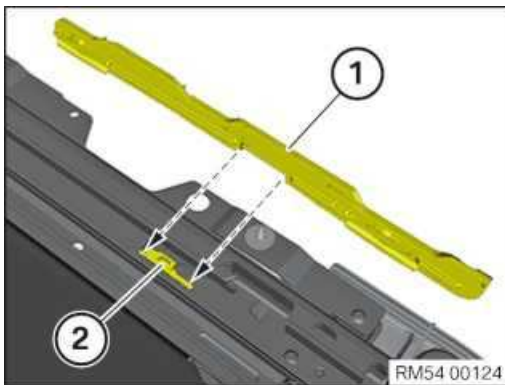


- Tip the mechanism (1) up and feed it out of area (A) from the rail (2).

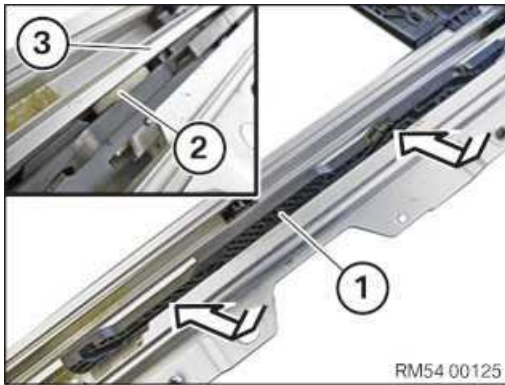


- Flip the gate (1) outward until the slider (2) exits the rail (3).
- Feed out gate (1) upwards in direction of arrow.

2 – Installing the mechanics for the panorama glass roof lid



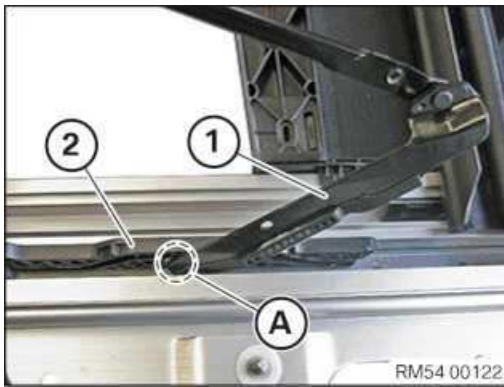
- Insert the gate (1) correctly in the driver (2).



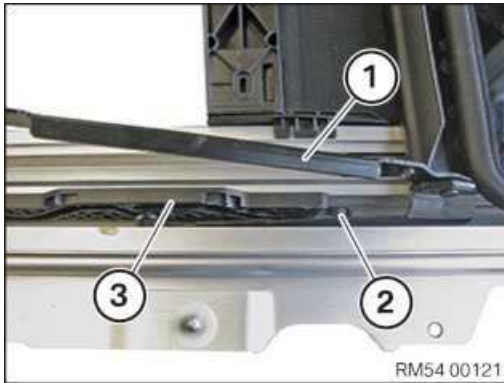
- Insert the gate (1) from the top.
When guiding the gate (1) in, the sliders (2) must be guided correctly into the rail (3).



- Install the new slider (1) on the new mechanism (2).



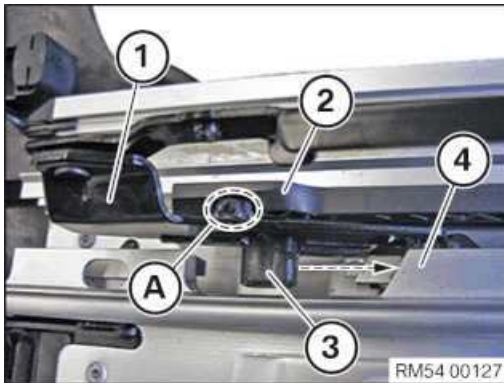
- Guide the mechanism (1) in area (A) into the rail (2).



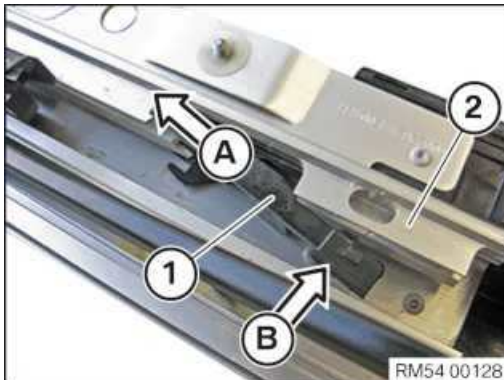
- Slide the mechanism (1) forward and guide the slider (2) into the rail (3).



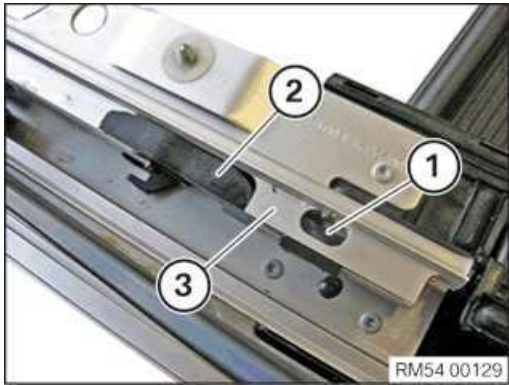
- Guide the guide (1) into the rail (2).



- Insert the mechanism (1) in area (A) into the gate (2).
- Move the mechanism (1) manually until the slider (3) is guided into the rail (4).



- If necessary, move the mechanism manually until the opening for the guide (1) is open.
- Insert the guide (1).
(A) First, guide it into the back of the rail (2).
(B) Next, clip it into the rail (2).

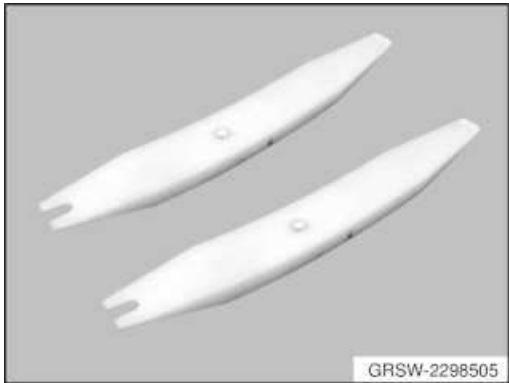


- Make sure that the guide (1) latches (2) correctly in the rail (3).
- Move the mechanism completely to the end in both directions by hand.
Check smooth and noise-free running of mechanism.

Additional Information

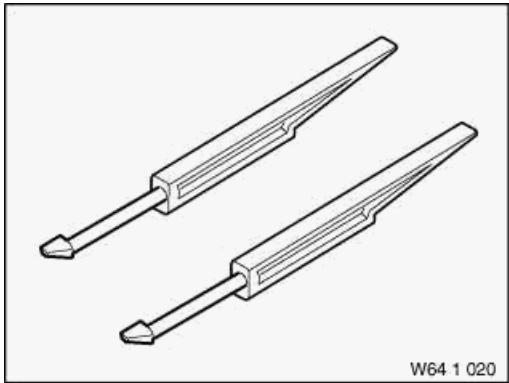
Overview of Special Tools

2 298 505 Wedge



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

0 493 681 (64 1 020) Hook



Common		Used in step	1
Usage	(release hook) For releasing and removing fresh air grille. For removing various covers.		
Included in the tool or work			
Storage location	C2		
Replaced by			
In connection with			
SI-Number	01 15 99 (483)		

51 23 ... Removing/installing ball sockets with clip



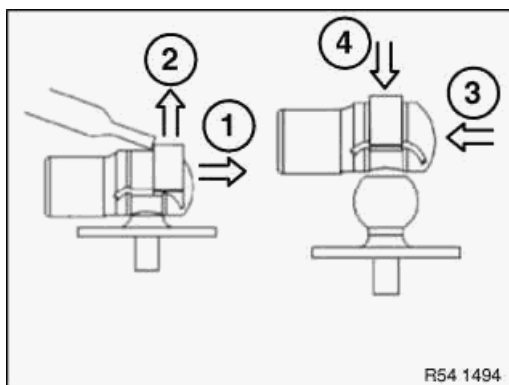
Warning!

Danger of injury! When installed, the gas pressurised shock absorber is under preload. Minimise preload as far as possible before removing.



Important!

Never lift off ball socket with engaged clamp.

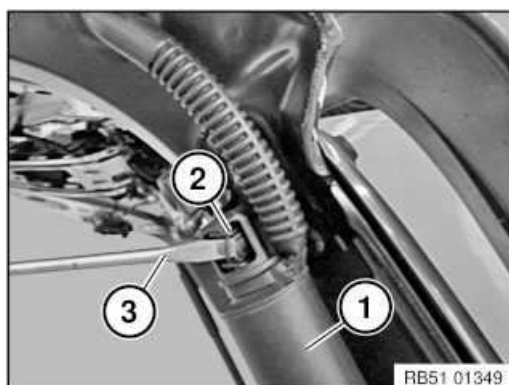


Version A:

1. Push on clamp in direction of groove with screwdriver
2. Lift off ball socket from ball pin
3. Slide clamp back
4. Fit ball socket on ball stud and snap into place with force

Installation note:

Pack grease into two opposite positions in socket. The grease spreads after installation on the ball pin all round in the ball socket.



Version B:

Important!

Risk of damage!

If you are not careful, retaining spring (2) may be bent to such an extent that the entire drive spindle will have to be replaced.

Press drive spindle (1) against ball pin in order to relieve strain on retaining spring (2) at ball pin.

Pull out retaining spring (2) approx. 2-3 mm with screwdriver (3).

Pull off spindle foot.

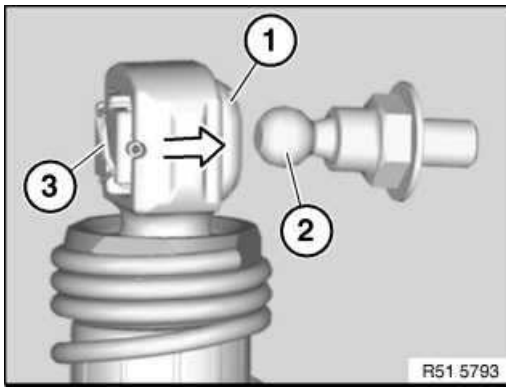


Warning!

Observe warning notices on the damper.

Electrical spindle drive for tailgate is under mechanical spring load!

The component must be secured against falling down.



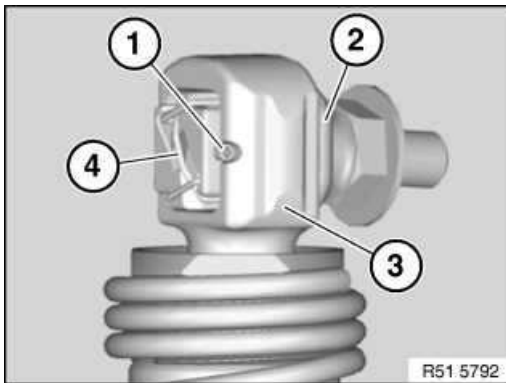
Attention!

Risk of damage!

Do not press on spindle drive at an angle or twisted.

Installation note:

Press ball socket (1) onto ball pin (2) until retaining spring (3) engages correctly (clicking sound).



Important!

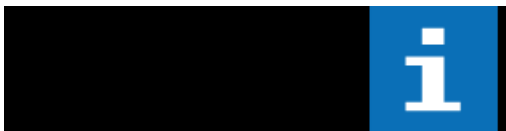
If retaining spring (4) is damaged!

Release pin (1).

Remove spindle drive (3).

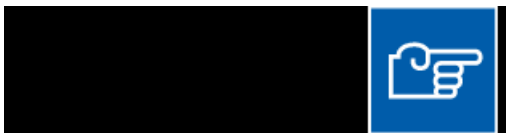
Remove ball socket (2).

Remove retaining spring (4) and replace if necessary.



Screw securing adhesive is a means of preventing a screwed connection from being loosened by external influences.

Once the screw has been coated with adhesive, the adhesive remains inactive until such time that it is activated by the encapsulation breaking when the screw is inserted and then cures (hardens) at room temperature.



Installation note:

- Screw connection must be completed within 20 mins. (start of curing)
- Microencapsulated screws must not be retightened
- Thread of nut must be cleaned beforehand in event of repeated use