

## 51 44 001 Removing and installing/replacing headlining



**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.



**Careless handling of tools and sharp-edged components.**

**Scratch, surface damage.**

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



**Electrostatic discharge.**

**Damage to or destruction of electrical components.**

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



Perform window removal using the "spider".

For additional information see: 51 31 ... Window glass removal using "spider"





Ads by Google

Stop seeing this ad

Why this ad?

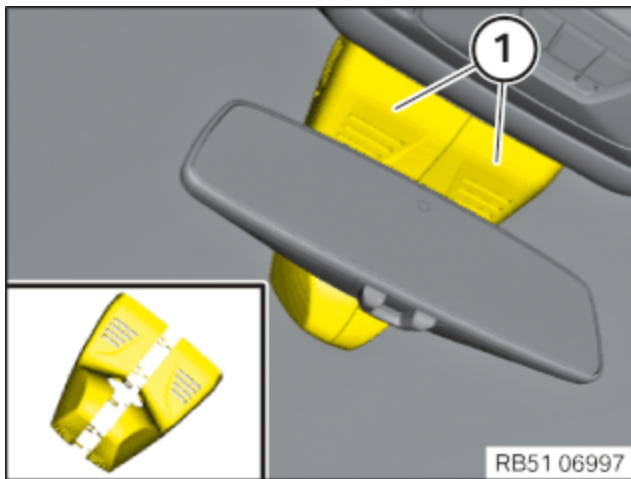
window glass

## PRELIMINARY WORK

### 1 – Removing the covers for the interior mirror

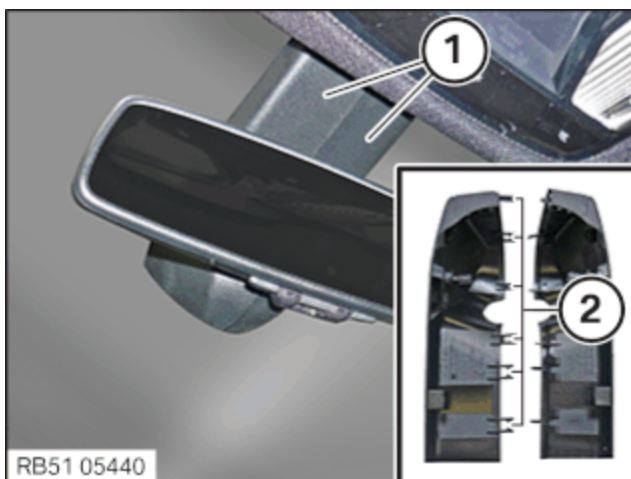
- **Version A:**

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



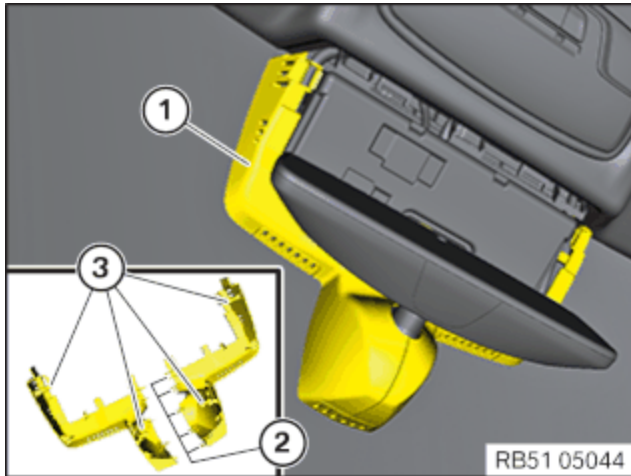
- **Version B:**

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



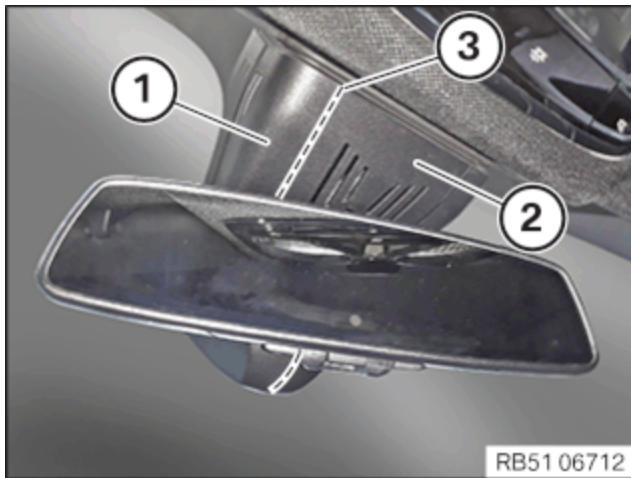
- **Version C:**



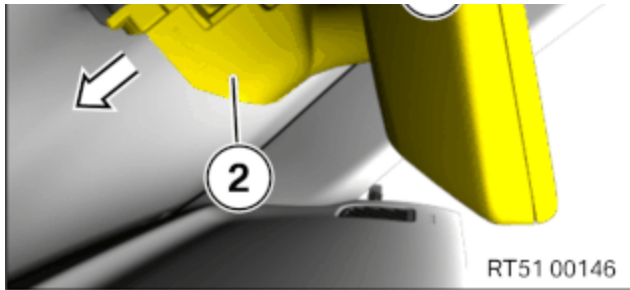


- Release cover (1) from the latch mechanisms (2) and (3) and remove sideways.
- Remove cover (1) from mirror base (2).

• **Version D:**



- Release covers (1) and (2) using a suitable plastic wedge at the separation point (3) and remove from the side.



- Unlock plug connection (1) and disconnect.



**Damage to the component.**

**Excessive force may damage the component.**

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

### 3 – Remove KAFAS camera

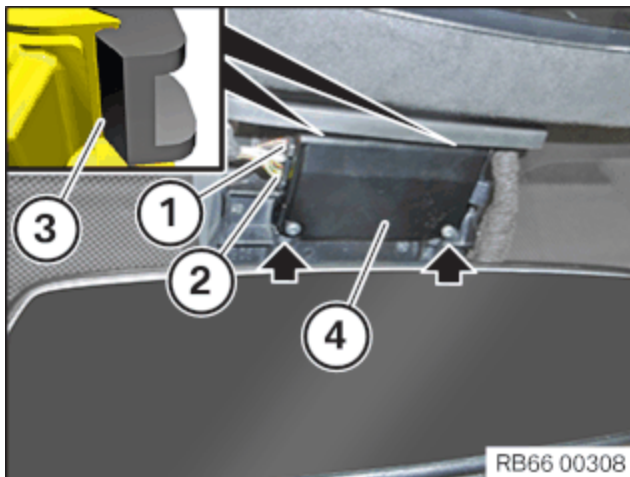
#### ► Remove KAFAS camera (Mid variant)



**Improper unlocking of the KAFAS camera.**

**Damage to the retaining hooks of the KAFAS camera holder.**

- Unlock the retaining hook with a suitable tool **carefully** .



- Unlock plug connection (1) and disconnect.
- Unlock plug connection (2) and disconnect.
- Unlock the retaining lugs (3).
- Thread out KAFAS camera (4) at the guides (arrows) and remove.





## 5 – Remove left and right A-pillar trim panel



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

### ► Remove the A-pillar trim panel



#### **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.



#### **Damage to the head airbag.**

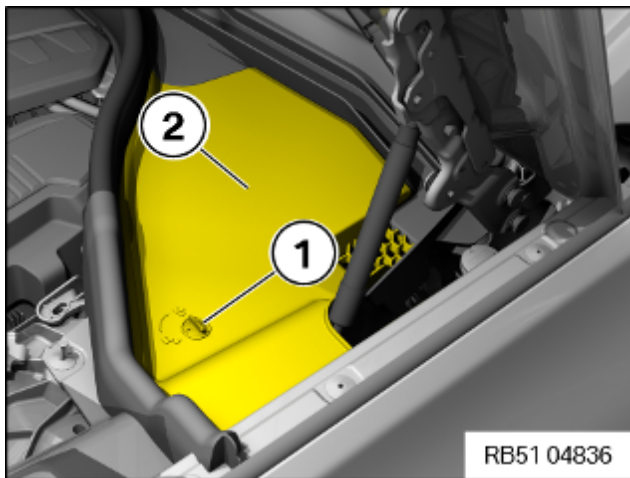
#### **Improper use of a tool when removing the trim panel may damage the head airbag.**

- Do not use sharp-edged tools when removing the trim panel.



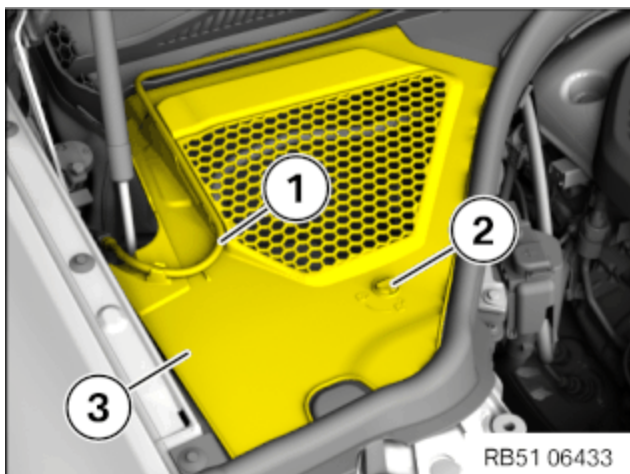


## 6 – Remove the cover of the engine compartment at the rear left



- Loosen the lock (1).
- Remove the cover (2) of the rear left engine compartment.

## 7 – Remove the cover of the rear right engine compartment



- Release washer fluid hose (1) from the guides.
- Loosen the lock (2).
- Remove the cover (3) of the rear right engine compartment.

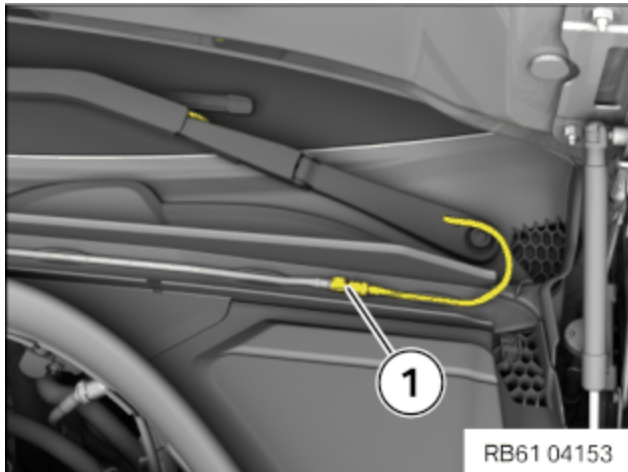
## ► Remove the wiper arm



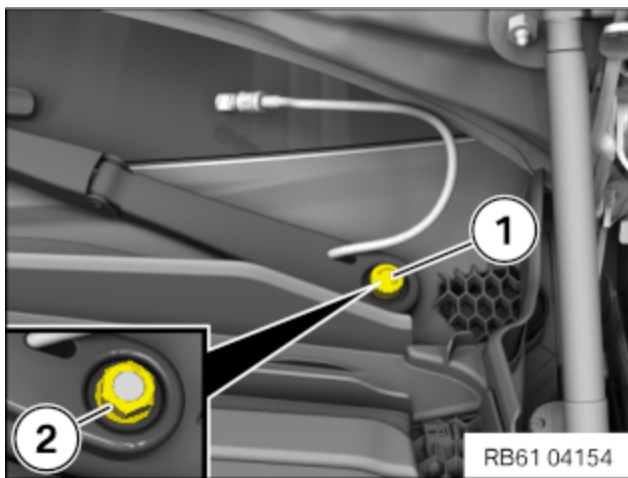
### Damage to wiper console.

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

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



- Disconnect the washer fluid hose (1) at the separation point and feed out from the cowl panel guide.



- Remove the protective cap (1).
- Loosen nut (2).





## 9 – Remove the gutter strip on the windscreen on the left and right



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

### ► Remove the gutter strip on the windscreen

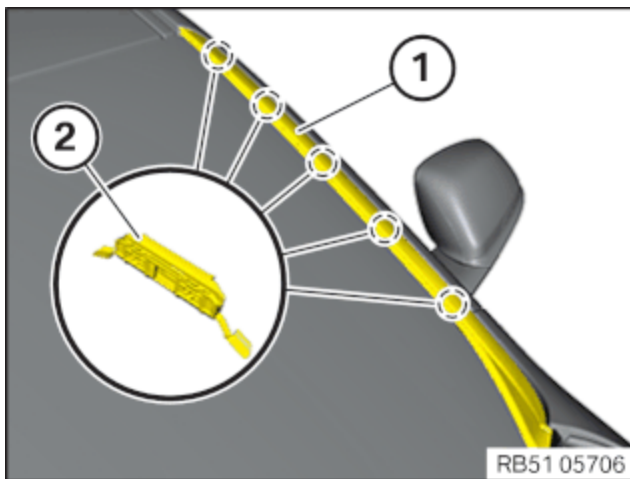


**Careless handling of tools and sharp-edged components.**

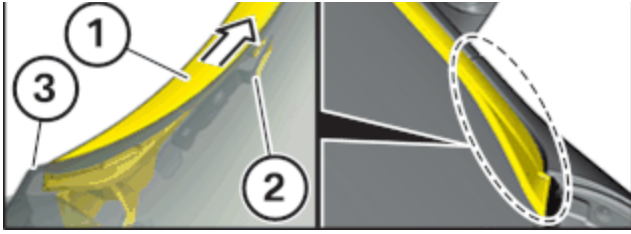
**Scratch, surface damage.**

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

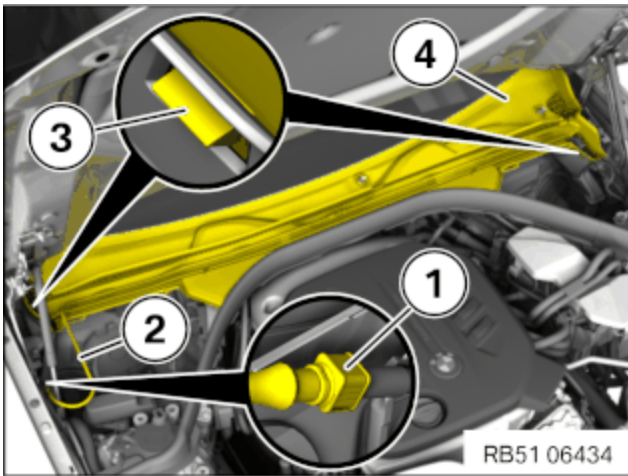
- Unclip gutter strip on the windscreen(1) from the clamps(2) starting at the roof and working upwards.



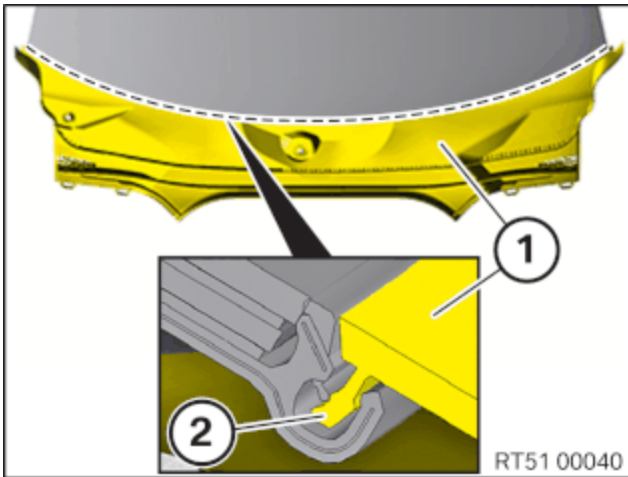




## 10 – Remove cowl panel cover

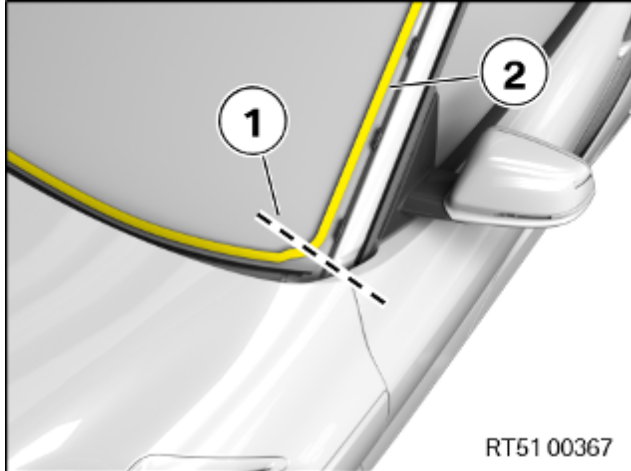


- Release snap fastener (1) of the washer fluid hose (2) and put the washer fluid hose (2) to one side.
- Unclip clips (3) on the cowl panel cover (4).



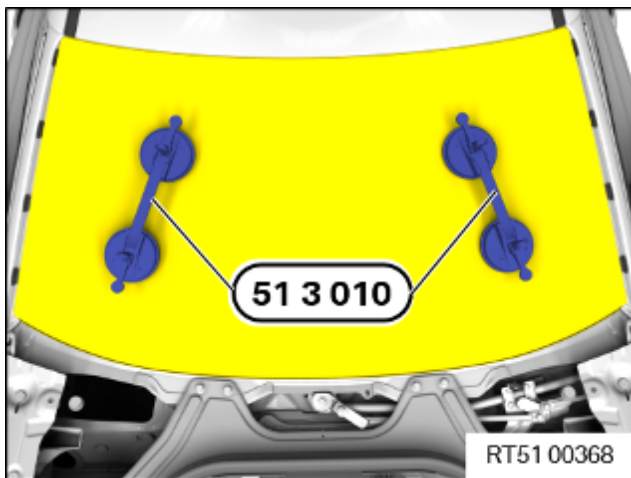
- Pull the cowl panel cover (1) upward out of the latch mechanism (2) beginning on the side.





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

- Tape off body in area of piercing point with fabric adhesive tape.
- Push the thread along the line (1) through the adhesive bead (2) from the inside.
- Cut out the windscreen with the spider.



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

- Remove windscreen with the special tool .

## 12 – Checking the sign

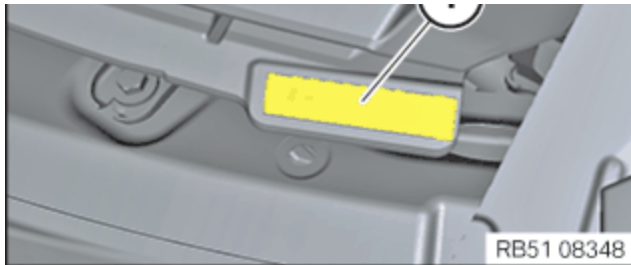


Schematic diagram is for example purposes. Some parts may differ in certain details.



The following work step(s) is / are to be carried out if the specified component(s) is/are fitted.





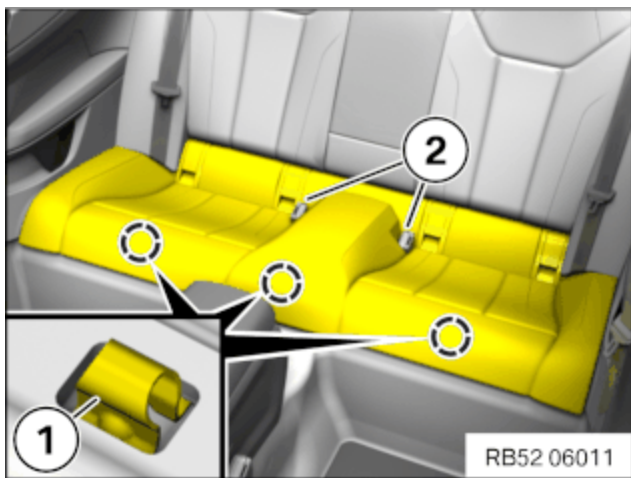
### Result

» Sign (1) is damaged.

### Measure

- Renew sign (1).

## 13 – Remove rear seat bench



- Unclip the rear seat bench upwards from clamps (1) and guide out seat belt buckles (2).
- Remove the rear seat bench.

## 14 – Remove backrest side section on left and right



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

► **Remove armrest side section**

▷ **Remove armrest side section**





## ▷ Deactivating the 48 V electrical system

### Prerequisite

Ignition is switched off.



#### Deactivation of the 12 V vehicle electrical system.

##### Risk of short circuits! Risk of fire!

- Make sure that **no battery charger** is connected to the jump start terminal point in the engine compartment.
- For vehicles with additional electrical systems (48 V electrical system, high-voltage vehicle electrical system), it is mandatory to deactivate them **before** disconnecting the vehicle battery.



#### Deactivation of the 48 V electrical system.

##### Risk of short circuits! Risk of fire!

- Make sure that **no charger** is connected to the jump start support point in the engine compartment.



#### Damage to 48-V battery

**If a 48-V battery that is disconnected from the electrical system is activated, the battery electronics will be damaged.**

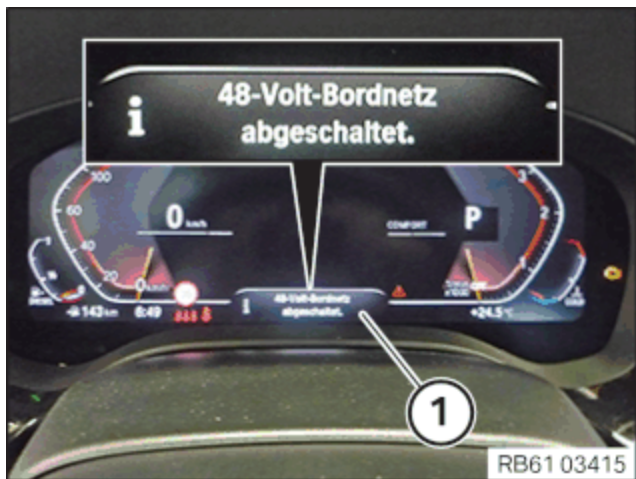
- Only carry out activation of the 48V electrical system with a completely connected 48-V battery.





bonnet.

The deactivation takes place automatically.



### Check



Zero voltage (48V electrical system is switched off) is displayed only in PAD mode.

- Press the START-STOP button quickly 3 times without stepping on the brake pedal to establish the PAD mode.
- Check isolation from the supply in the instrument cluster in PAD mode.



system switched off." (1). Work is not permitted to be started.

### Measure

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

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

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

### Result

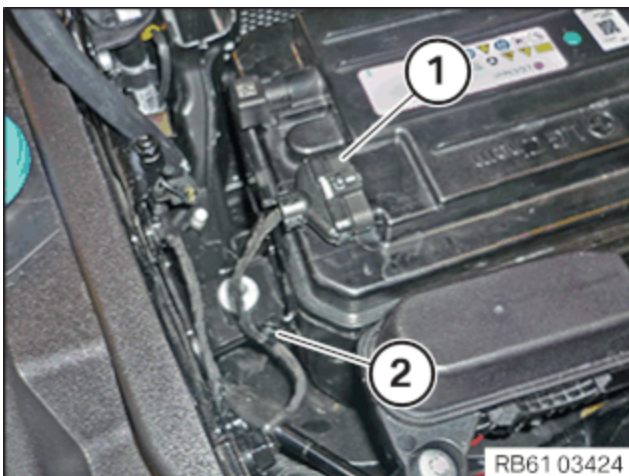
- » The Check Control message signals that the 48V electrical system has been switched off.

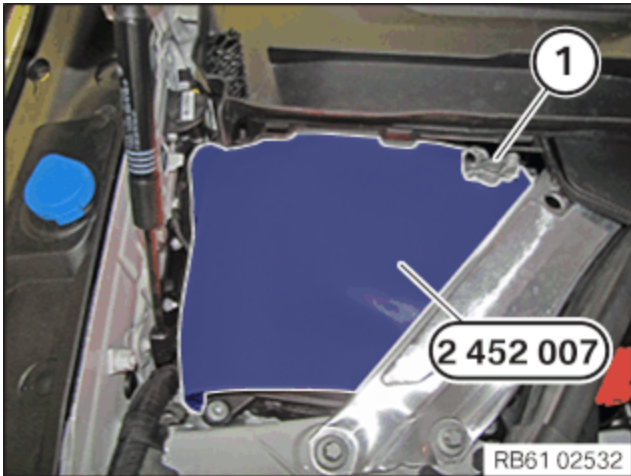
### Measure

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

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

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





**Unprotected battery terminals.**

**Risk of short circuits! Risk of fire!**

- Cover the vehicle battery.

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



▷ **Disconnecting all battery earth leads**

- See additional information.



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



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



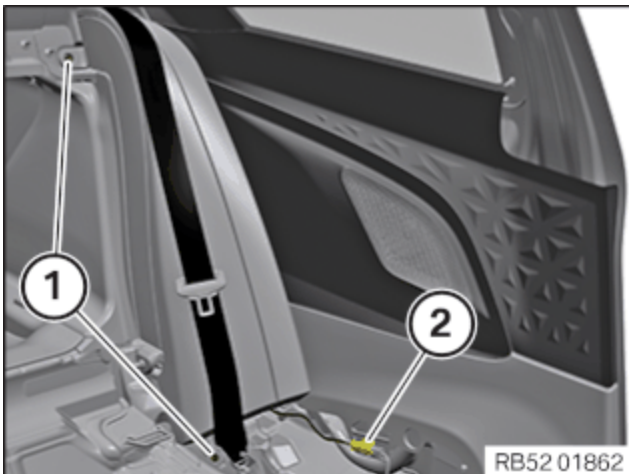
### Pyrotechnic components.

#### 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.



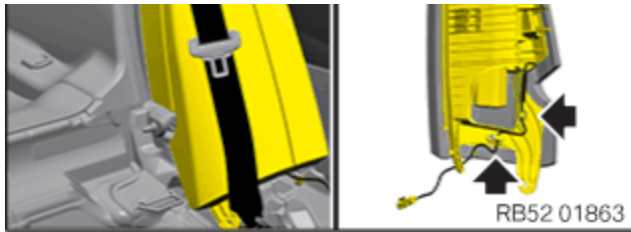
To provide a better overview: Schematic diagram with partially hidden components.



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







## 15 – Removing the inner door sill cover strip on the left and right



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

### ► Removing the inner door sill cover strip



#### **Bending of plastic parts.**

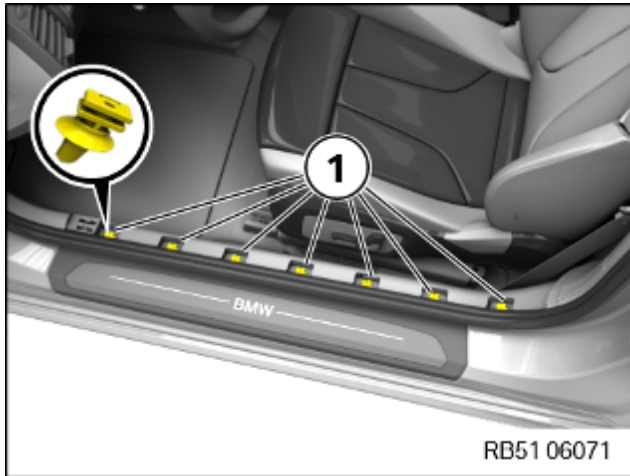
#### **Application of too much force can lead to bending of plastic parts.**

- Place special tool directly beside the mounting clip.
- Continue unclipping the part without using the tool if possible.



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





- If necessary, remove clips (1) and connect them to the door sill cover strip.

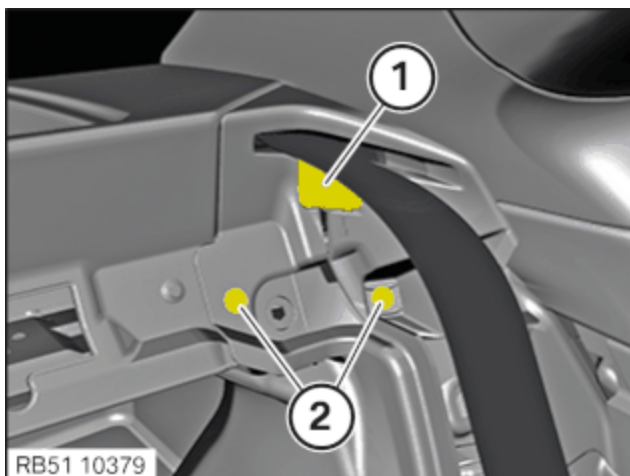
## 16 – Removing the left and right belt feed trim



Perform the operations on the left and right side.

### ► Remove the belt feed trim

- Unclip the trim (1) with a suitable tool.
- Release the expanding rivet (2).





## 17 – Remove side trim panel, rear left and right

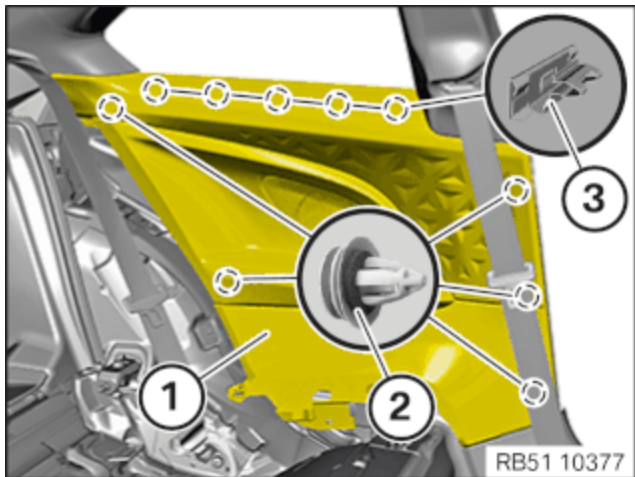


Perform the operations on the left and right side.

### ► Remove rear side trim panel

#### Prerequisite

Rear seat bench is folded.



- Unclip the rear side trim panel (1) at the clips (2) with a suitable tool.
- Unclip the rear side trim panel (1) from the clamps (3) with a suitable tool and feed out.
- Unlock and disconnect all the plug connections of the wiring harness on the rear side trim panel (1).





## 19 – Removing left and right B-pillar trim panel

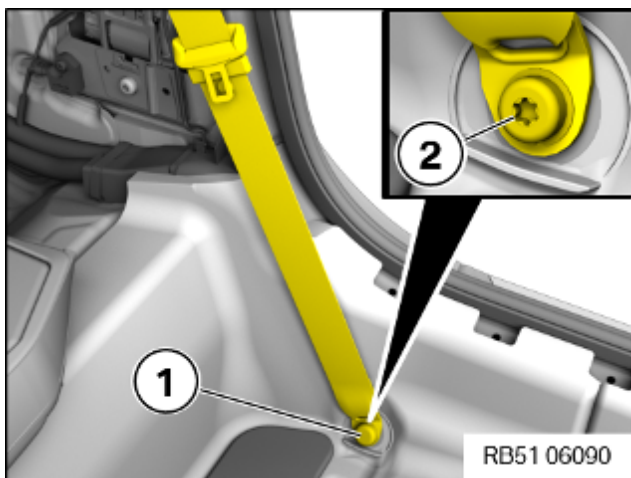


Perform the operations on the left and right side.

### ► Remove the B-pillar trim panel

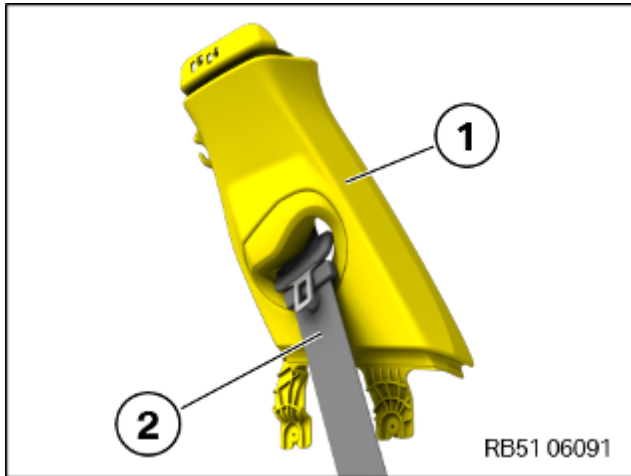
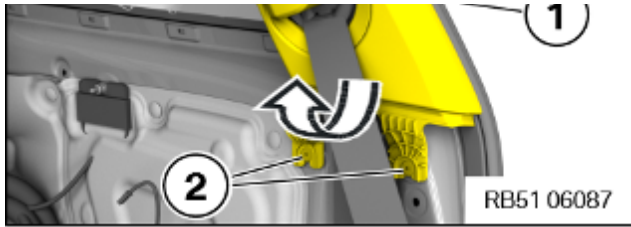


Schematic diagram is for example purposes. Some parts may differ in certain details.



- Remove cover cap (1) and release screw (2).





- Feed upper seat belt (2) out of B-pillar trim panel (1).

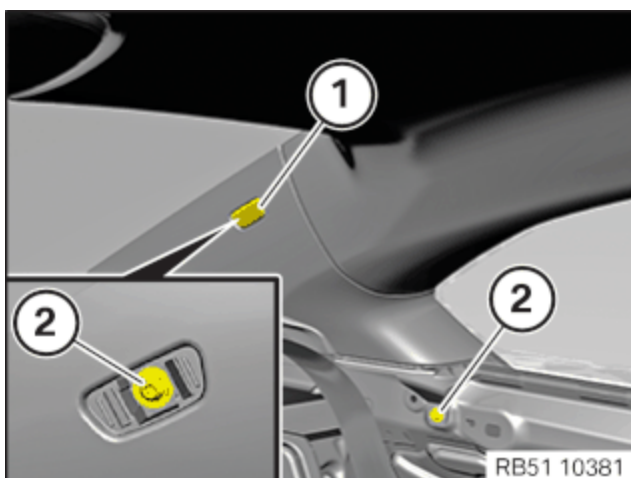
## 20 – Remove the C-pillar trim panel, left and right



Perform the operations on the left and right side.

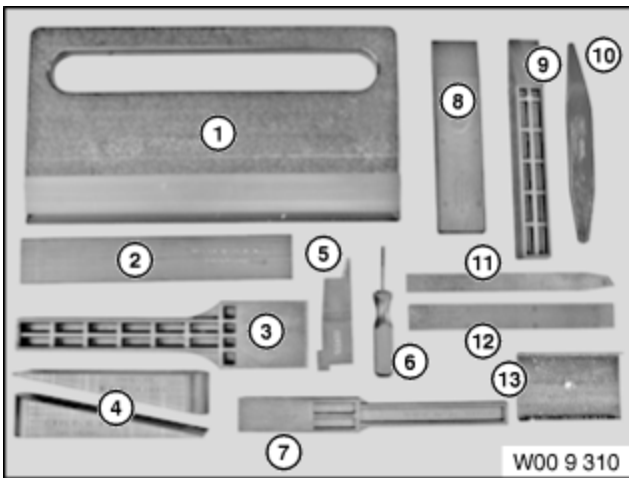
### ► Remove C-pillar trim panel

- Unclip the cover (1).
- Loosen screws (2).

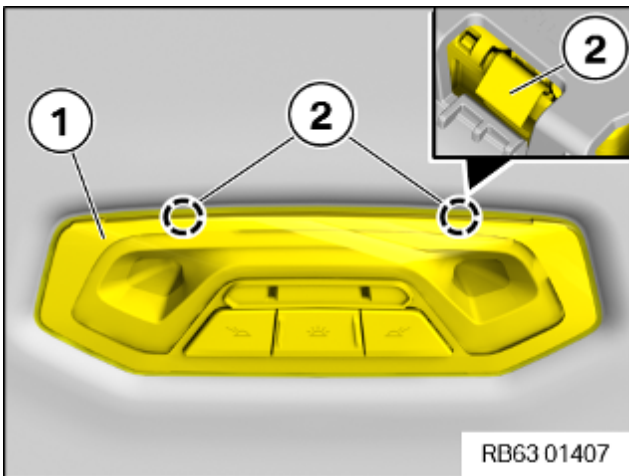




## 21 – Remove interior roof light



- Have the set of special tools **0 493 752 (00 9 329)** ready.



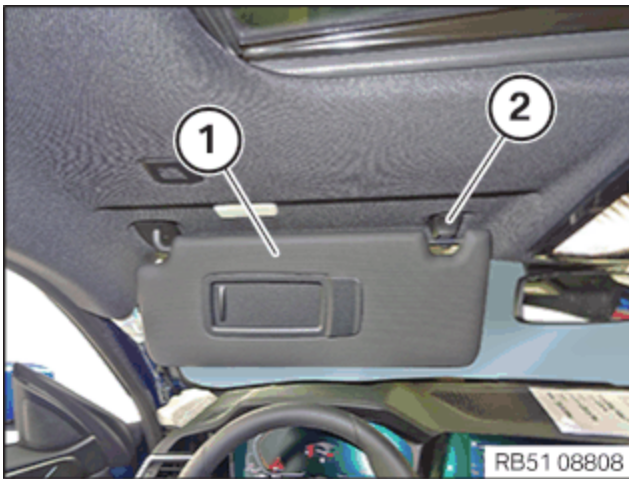
- Lever interior roof light (1) out of clamps (2) using a suitable tool.
- Unlock plug connection and disconnect.



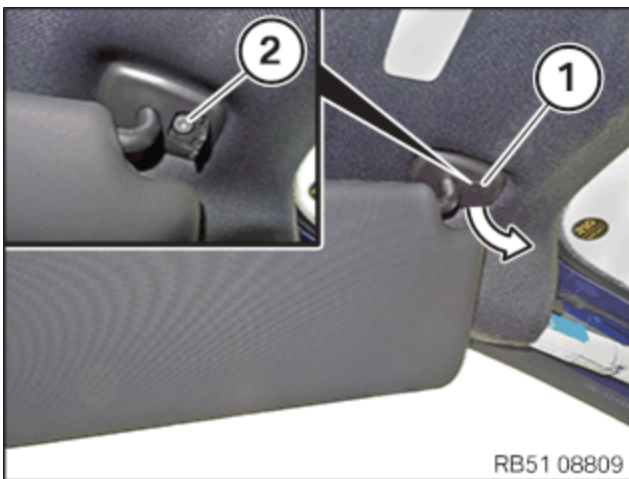
### ► Remove sun visor



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



- Detach sun visors (1) from end support (2) and swivel to the side.



- Fold the cover (1) up in direction of arrow.
- Loosen screw (2).
- Remove sun visor and unlock and disconnect the associated plug connection.

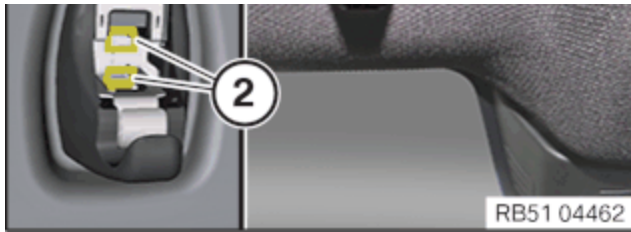
### 23 – Removing counter supports for sun visor on left and right



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

### ► Remove the counter support for the sun visor

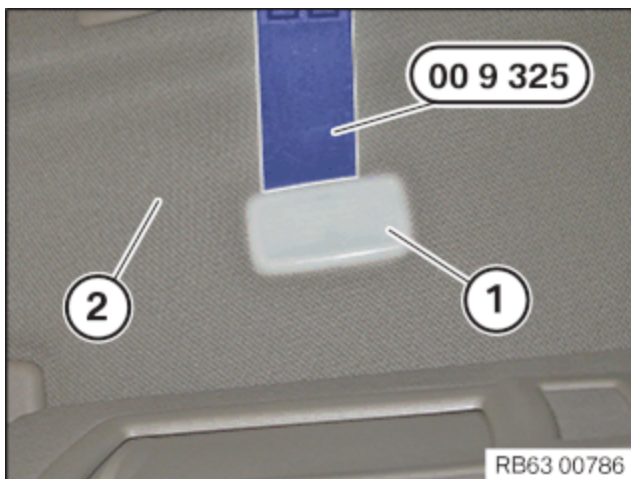




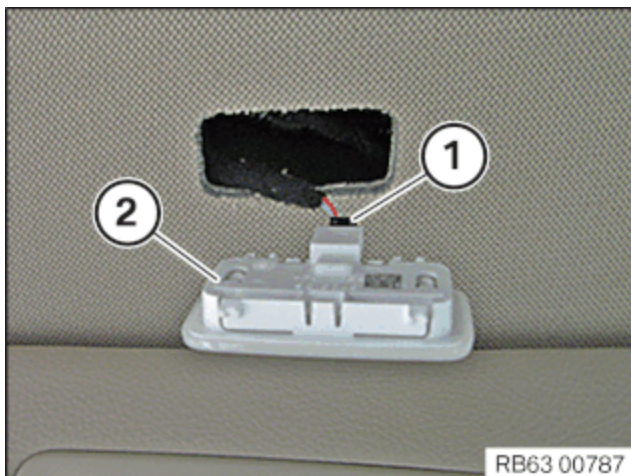
## 24 – Removing front vanity mirror light



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



- Lever out the front vanity mirror light (1) with the special tool **0 496 569 (00 9 325)** from the headlining (2).



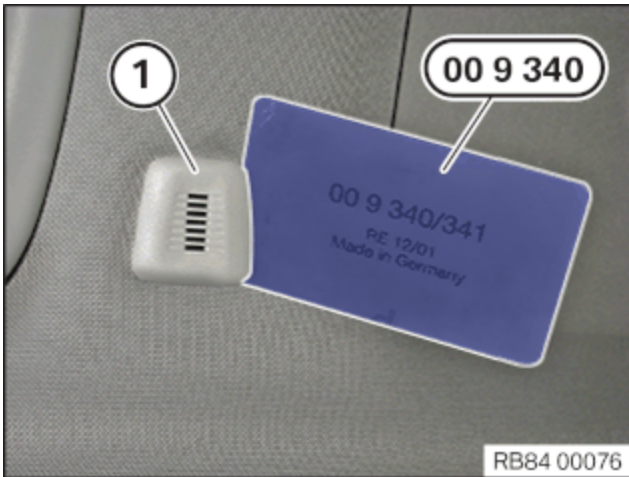
- Unlock plug connection (1) and disconnect.
- Remove the front vanity mirror light (2).



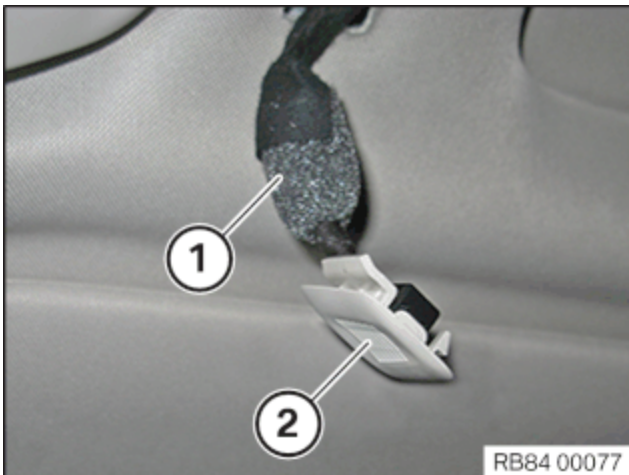


### ► Removing hands-free microphone

- Lever out the hands-free microphone (1) with the special tool **0 493 687 (00 9 340)**.



- Open insulation (1).
- Disconnect plug connection.
- Remove hands-free microphone (2).



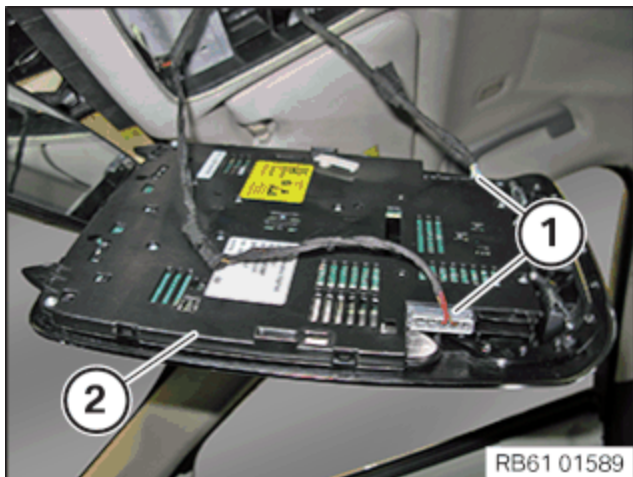
### 26 – Removing the roof function centre (FZD)

- Unclip the cover (1).





- Unclip the roof function centre (FZD) (1) from the clamps (2).
- Thread the roof function centre (FZD) (1) out of the guides (3).



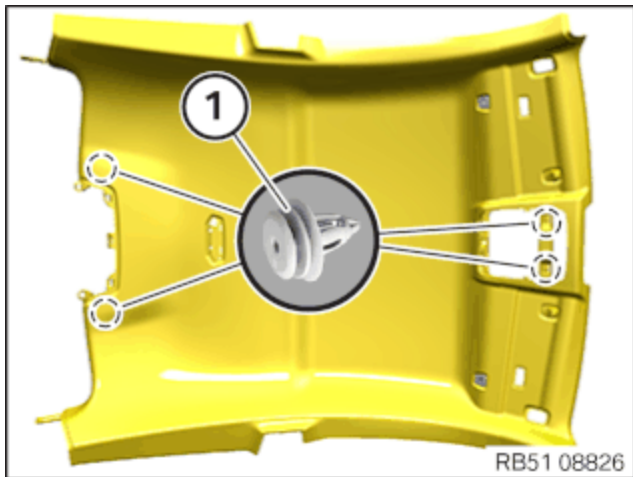
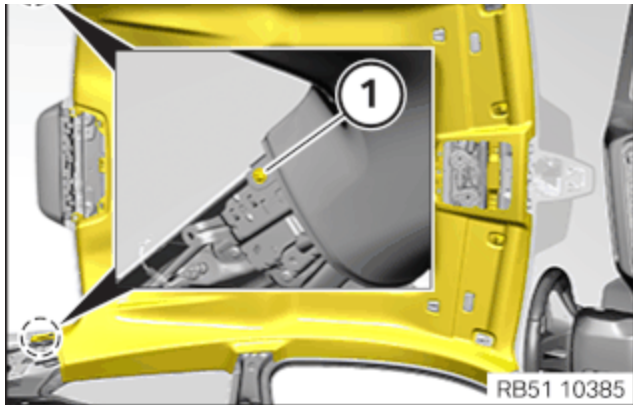
- Unlock and disconnect plug connections (1).
- Unclip the cable clip from roof function centre (FZD) (2) and remove the roof function centre (FZD) (2).

## MAIN WORK

### 27 – Removing the headlining

#### Prerequisite



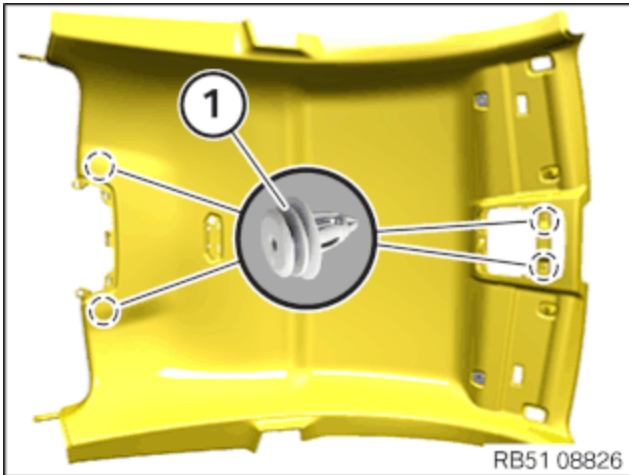
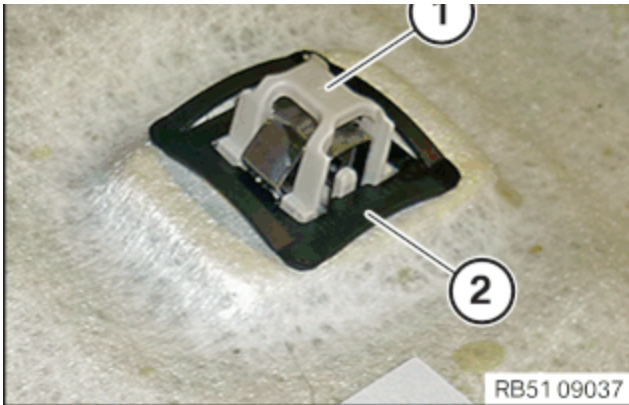


- Unclip the headlining at the clips (1) downwards.
- Feed out the headlining from the respective lips of edge protection with the help of an auxiliary person.
- Remove the headlining from the vehicle through the windscreen aperture with the help of an auxiliary person.

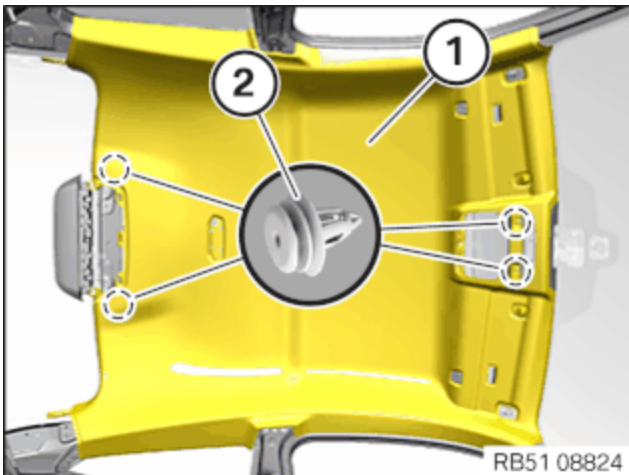
## 28 – Fitting the roof lining

### Prerequisite



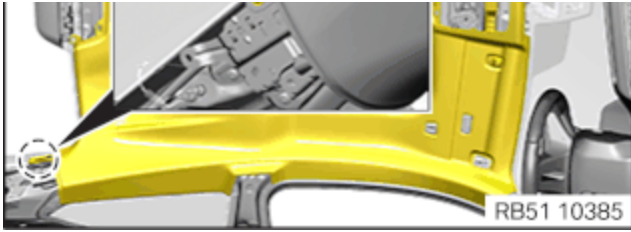


- Check the clips (1) on the headlining for damage. Defective or missing clips (1) must be renewed.



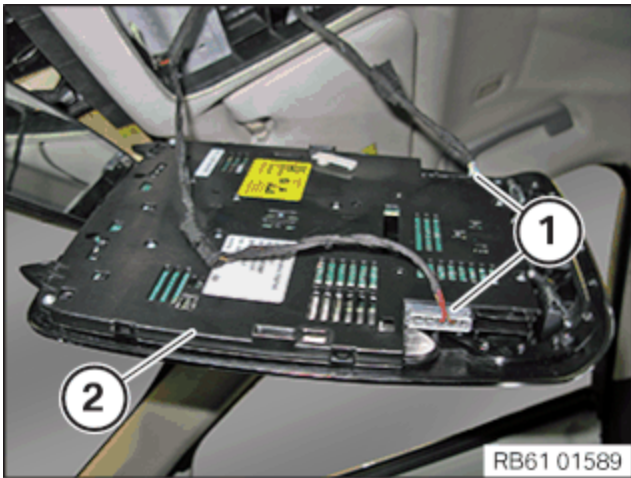
- With a support person, insert the headlining (1) into the vehicle through the windscreen opening.
- Insert the headlining (1) with the help of an auxiliary person onto the respective edge protection.
- Clip in headlining (1) on the clips (2).



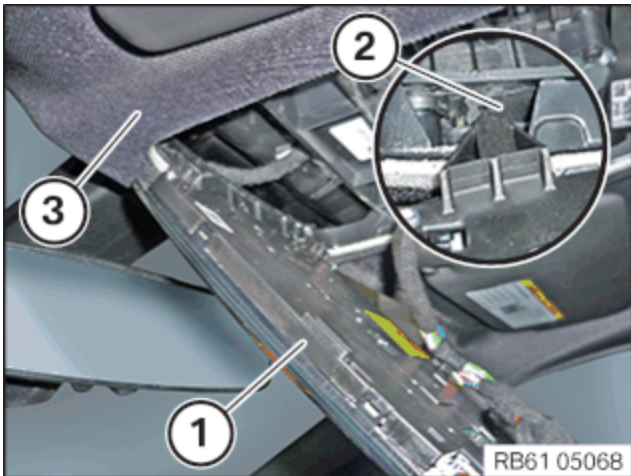


## POSTPROCESSES

### 29 – Installing roof function centre (FZD)

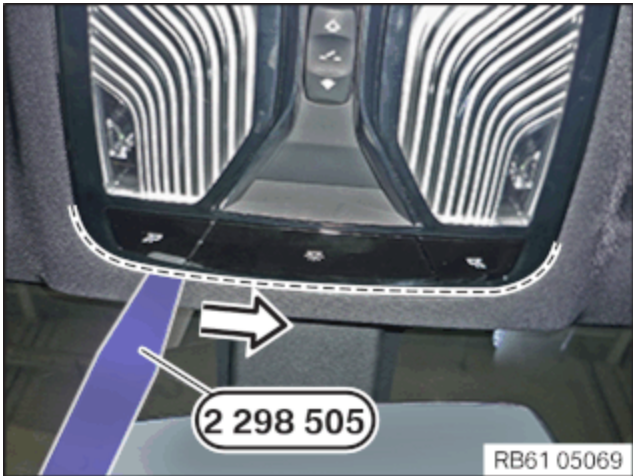


- Connect connectors (1) and lock.
- Clip in the cable for the roof function centre (FZD) (2) in the cable clip.

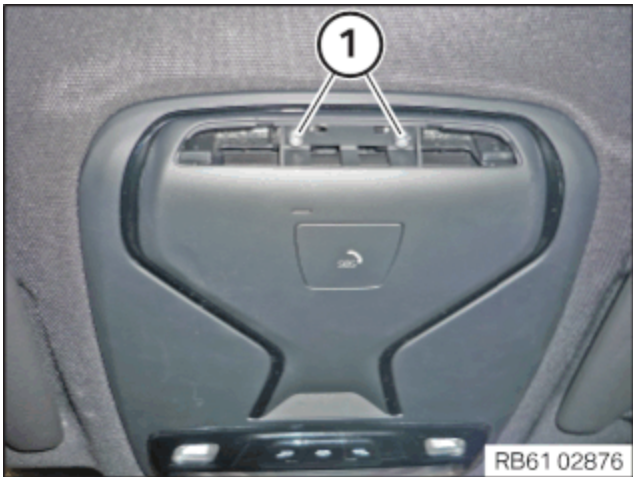


- Insert the roof function centre (FZD) (1) as shown at a steep angle in the two guides (2) on the headlining (3).
- Make sure the headlining is not deformed during this operation.





- Slide the special tool **2 298 505** in the direction of arrow between the FZD frame and the headlining along the dotted line to adjust the headlining correctly.



- Tighten the screws (1).

**Roof function centre (FZD)**

---

Tightening torque	1.2 Nm
-------------------	--------



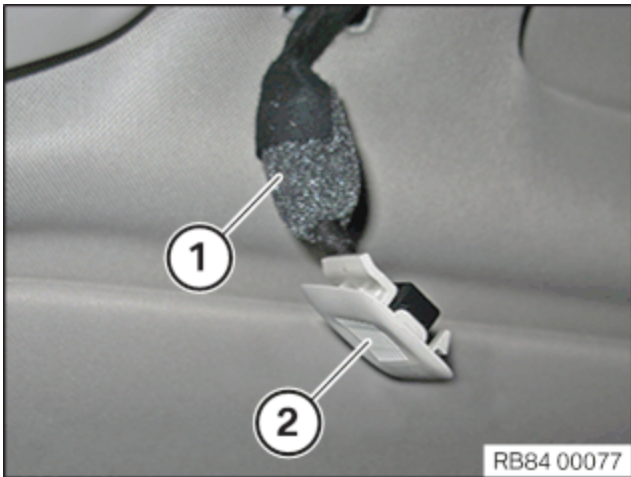


### 30 – Installing the hands-free microphone on the left and right

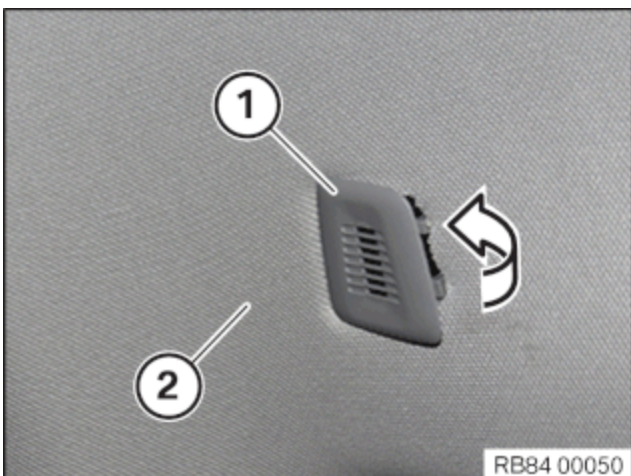


Description is for left component only. Procedure on the right side is identical.

#### ► Installing the hands-free microphone

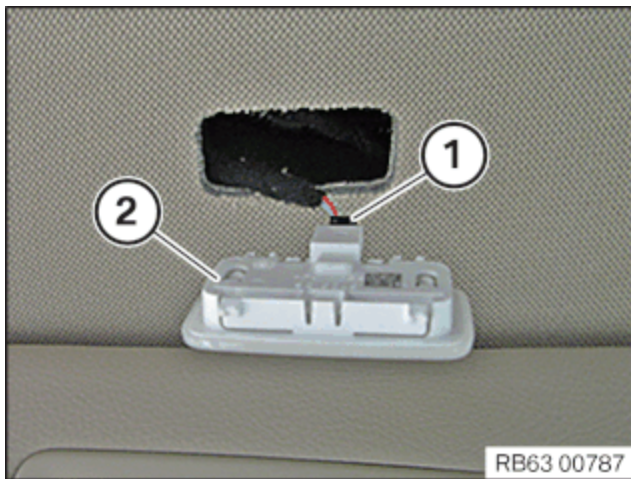


- Connect the connector to the hands-free microphone (2).
- Close the insulation (1).

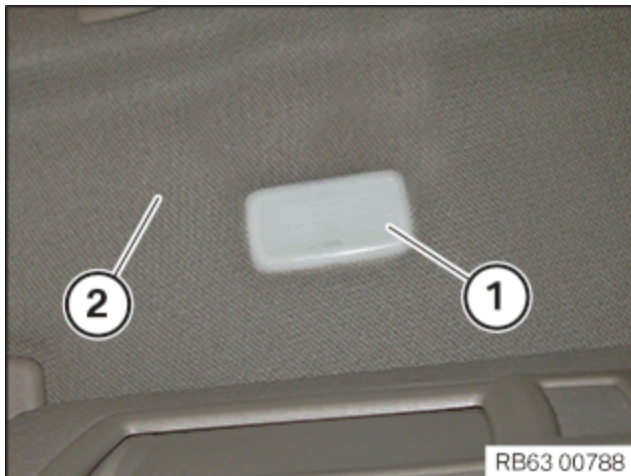


- Insert the hands-free microphone (1) in the direction of arrow in the headlining (2).





- Connect the connector (1) to the front vanity mirror light (2).



- Clip in the front vanity mirror light (1) in the headlining (2).

## 32 – Installing counter supports for the sun visor on left and right

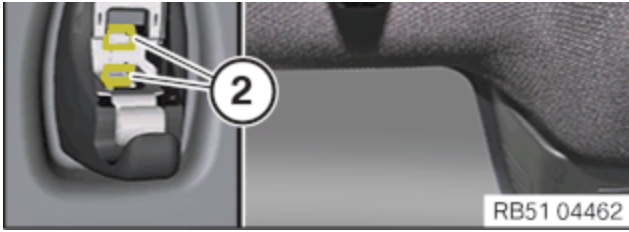


Description is for left component only. Procedure on the right side is identical.

- ▶ **Install the counter support for the sun visor**







### 33 – Install the sun visor on the left and right

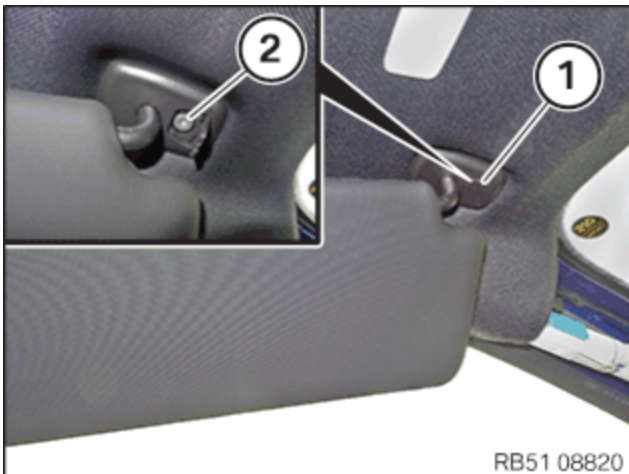


Perform the operations on the left and right side.

#### ► Install the sun visor



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

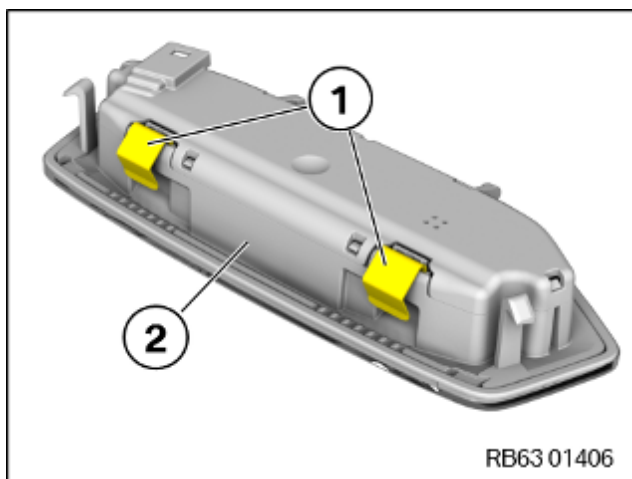


- Connect and lock corresponding connectors.
- Install the sun visors.
- Tighten down screw (2).
- Close the cover (1).





### 34 – Install interior roof light



#### Check

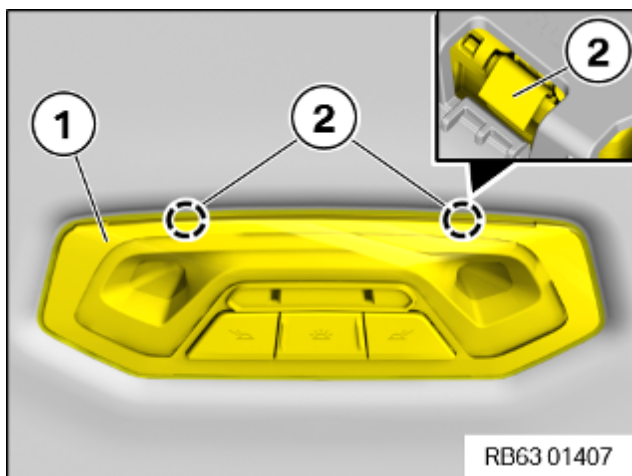
- Check the clamps (1) for damage.

#### Result

» Clamps (1) are damaged.

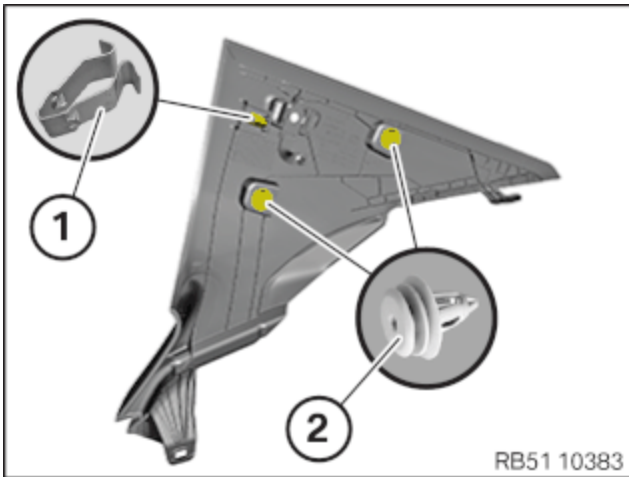
#### Measure

- Renew the interior roof light (2).
- Connect connectors and lock.
- Clip in the interior roof light (1) with clamps (2).

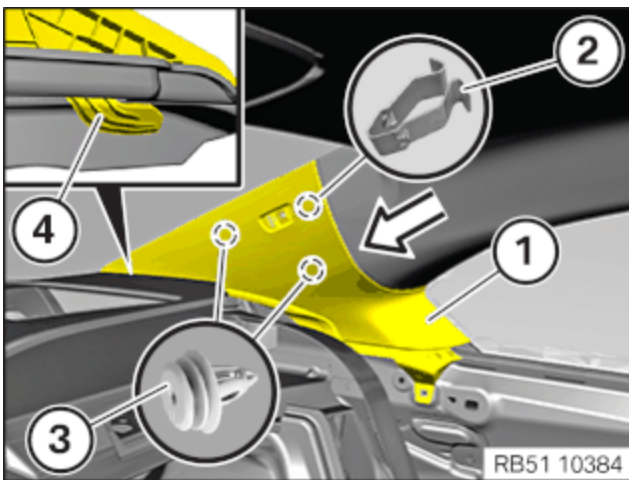


► **Installing C-pillar trim panel**

- Check the clamp (1) and the clips (2) for damage and correct fit, renew if necessary.



- Position the C-pillar trim panel (1) on the guide (4) and feed in the direction of arrow.
- Clip in the C-pillar trim panel (1) at the clamp (2) and at the clips (3).

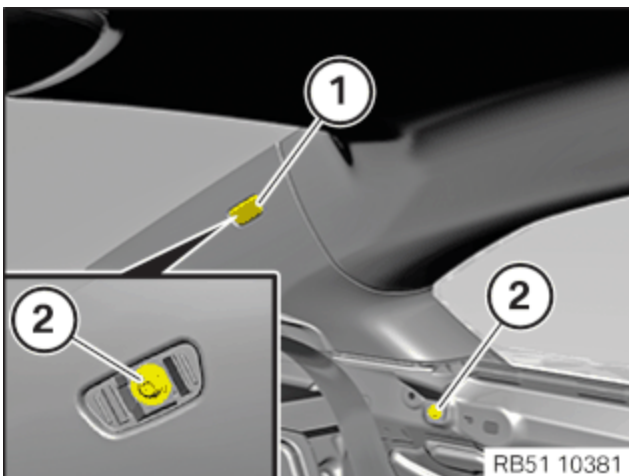


- Tighten the screws (2).

**C-pillar trim panel to body**

Sheet metal screw	Tightening torque	2 Nm
-------------------	-------------------	------

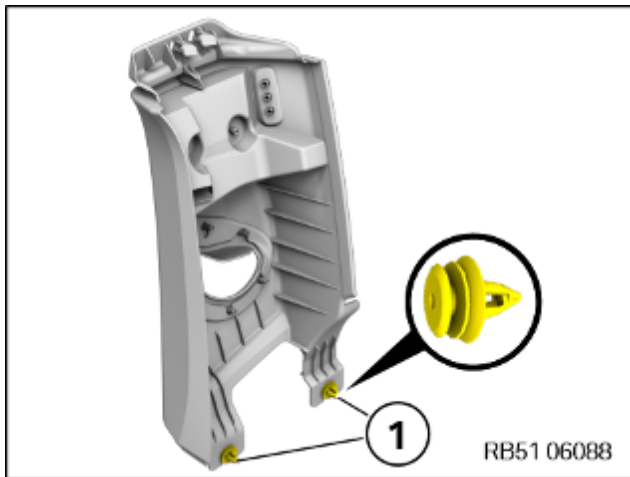
- Clip in the cover (1).



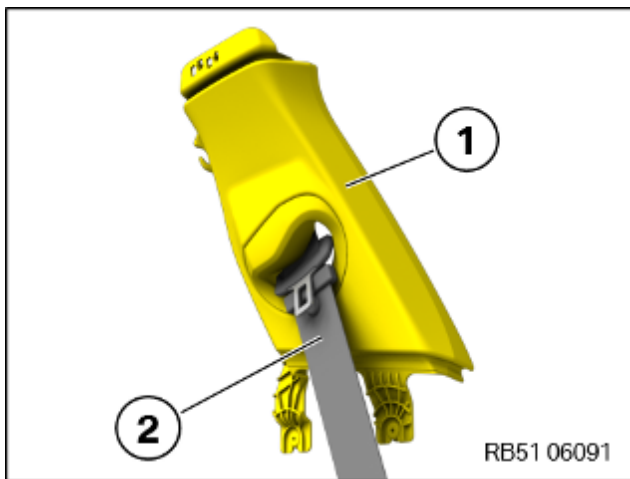
## ► Install the B-pillar trim panel



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

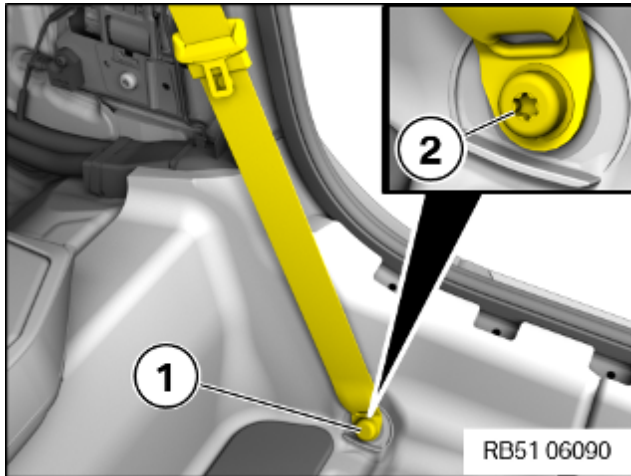
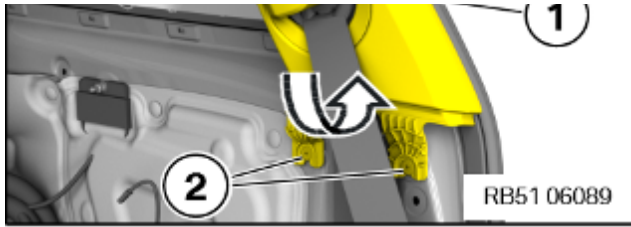


- Check clips (1) for damage and renew if necessary.



- Guide upper seat belt (2) in B-pillar trim panel (1).





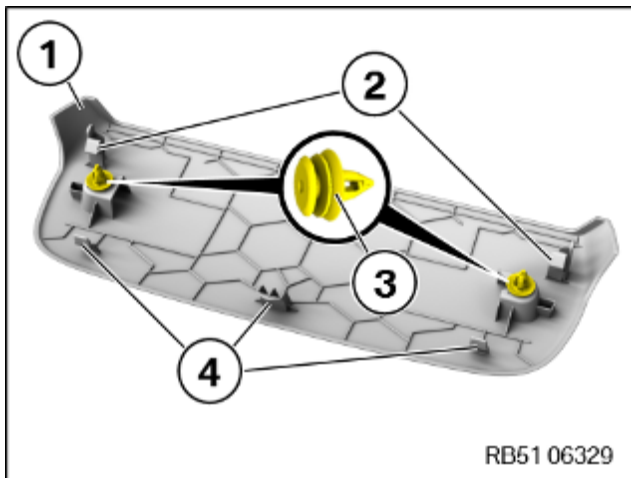
- Tighten down screw (2).

**End fitting to body**

Screw	Tightening torque	42 Nm
-------	-------------------	-------

- Install the protective cap (1).

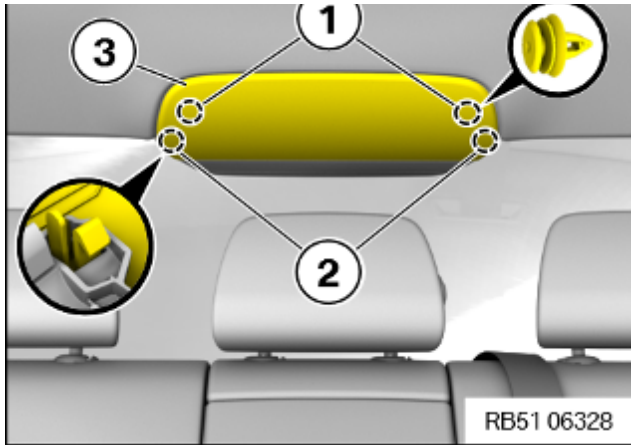
**37 – Installing trim for additional brake light**



**Check**

- Check the clips (3) for damage and renew if necessary.
- Check latch mechanisms (2) and guides (4) for damage.





- bottom and clip it in with latch mechanisms (2).
- Clip in clips (1).

### 38 – Install side trim panel, rear left and right

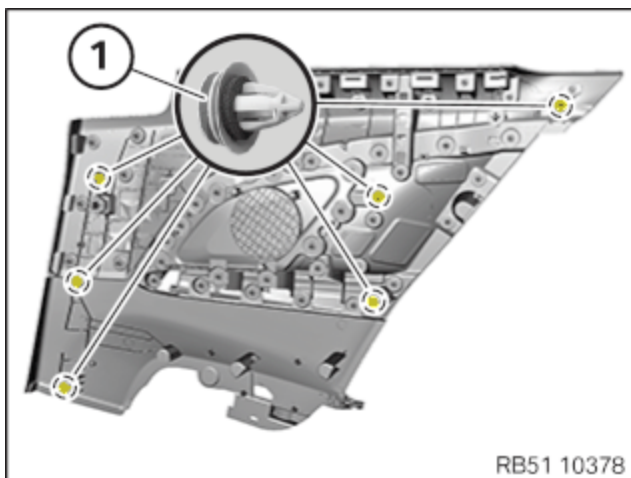


Perform the operations on the left and right side.

#### ► Install rear side trim panel

#### Prerequisite

Rear seat bench is folded.



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



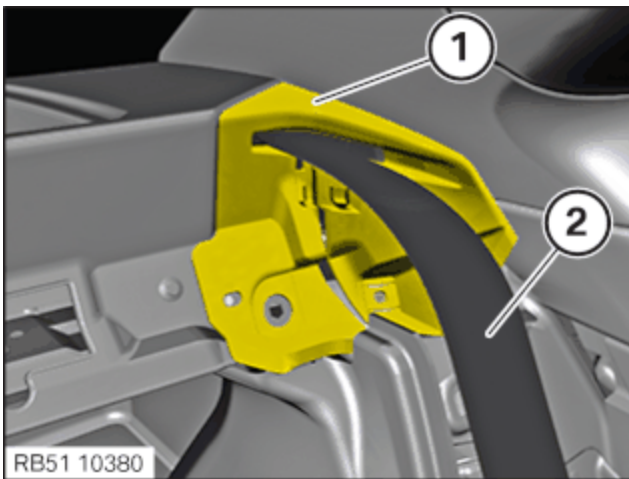


### 39 – Install the left and right belt feed trims

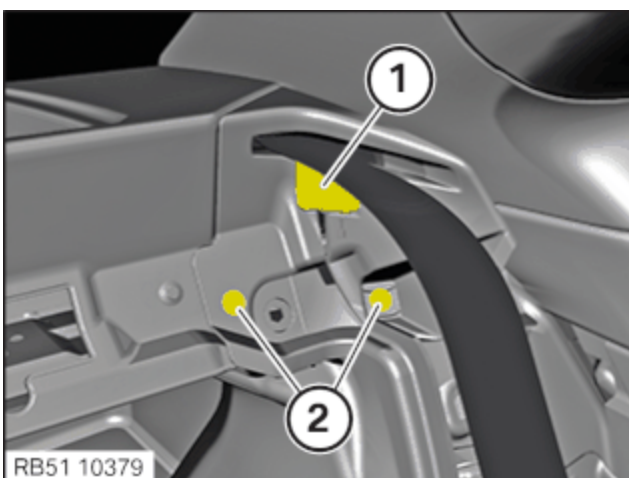


Perform the operations on the left and right side.

#### ► Installing the belt feed trim



- Feed in the seat belt feed trim (1) at the seat belt (2).
- Position the seat belt feed trim (1) and clip it in.



- Secure expanding rivet (2).
- Clip in the trim (1).

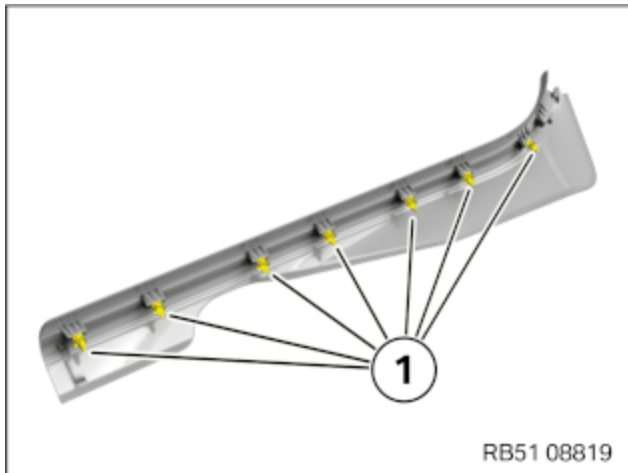


### ► Installing the inner door sill cover strip

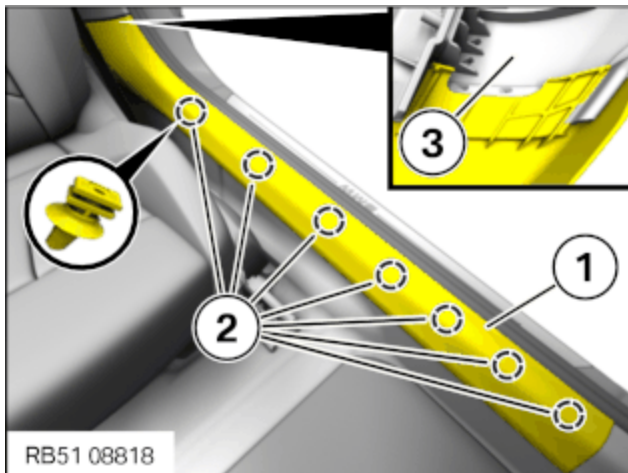


Schematic diagram is for example purposes. Some parts may differ in certain details.

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



- Insert the door sill cover strip (1) below the rear side trim panel (3).
- Clip the door sill cover strip (1) in with the clips (2).



### 41 – Install the backrest side section on the left and right



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

### ► Installing backrest side section

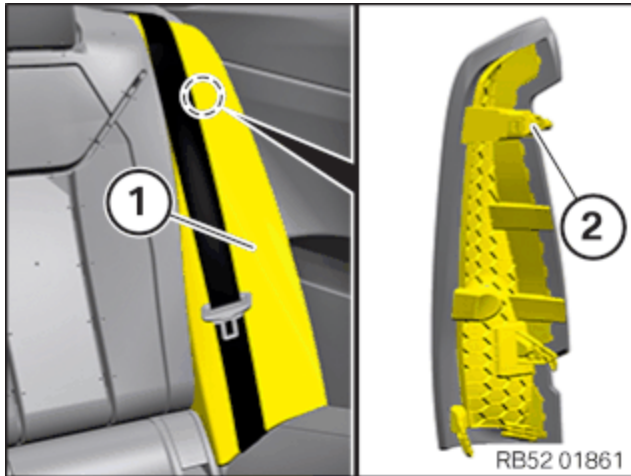
### ▷ Installing backrest side section







- Fit mounting element (1) on the backrest side section.



- Insert lower backrest side section (1) into the guide and position it correctly.
- Clip in backrest side section (1) to mounting element (2).



- ▷ **Installing the backrest side section with side airbag**



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



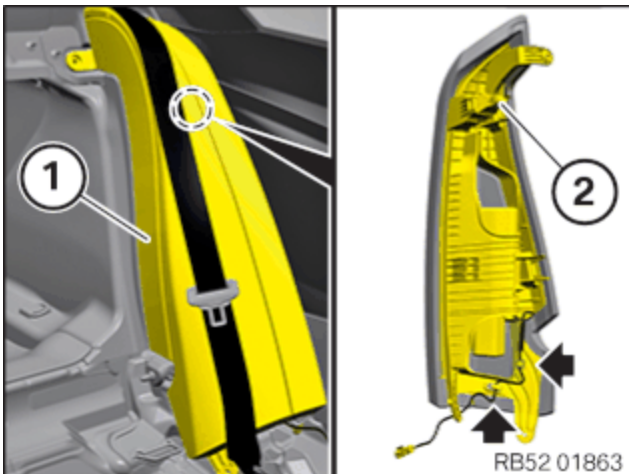
### Pyrotechnic components.

#### 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.

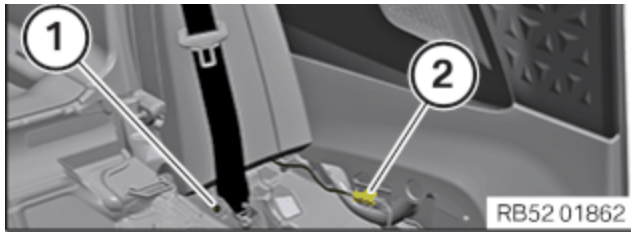


To provide a better overview: Schematic diagram with partially hidden components.



- Check the cable (arrows) for correct fit.
- Feed the backrest side section (1) into the bottom guide and position it correctly.
- Clip in backrest side section (1) to mounting element (2).





- Connect connectors (2) and lock.
- The connector (2) must engage audibly.



### ▷ Connecting all battery earth leads

- See additional information.



### ▷ Activating the 48 V electrical system

#### Prerequisite

Ignition is switched off.

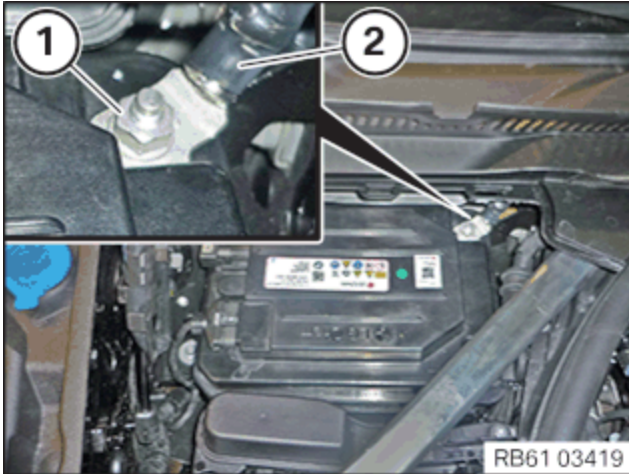


#### Damage to 48-V battery

**If a 48-V battery that is disconnected from the electrical system is activated, the battery electronics will be damaged.**

- Only carry out activation of the 48V electrical system with a completely connected 48-V battery.





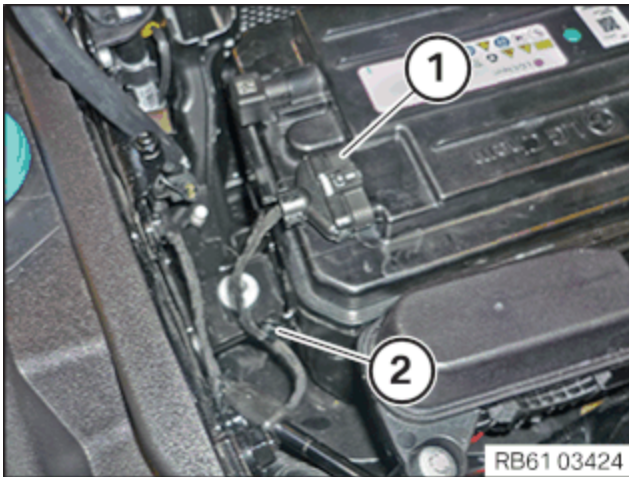
- Release the negative battery cable (2) of the 48-V battery from the mounting.
- Position the negative battery cable (2) of the 48-V battery on the negative battery terminal.
- Tighten nut (1).

#### **Negative battery cable to 48-V battery**

Nut M8

Tightening  
torque

19 Nm

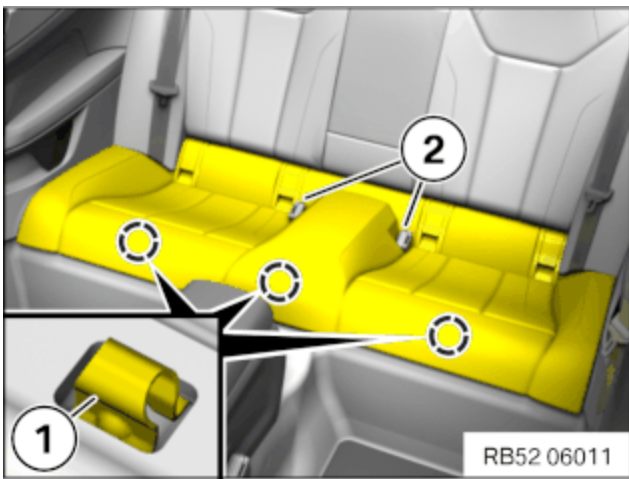


- Connect the connector (1) of the CAN bus and lock it.
- Clip in clip (2).



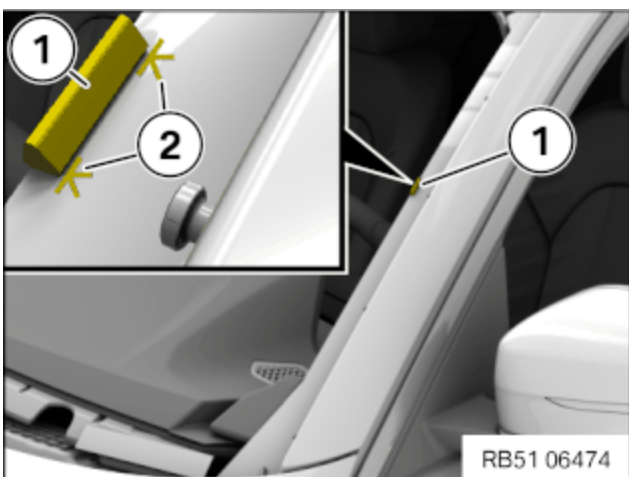


## 42 – Installing the rear seat bench



- Feed in the seat belt buckles (2).
- Position the rear seat bench and clip into the clamps (1).

## 43 – Replace the spacer

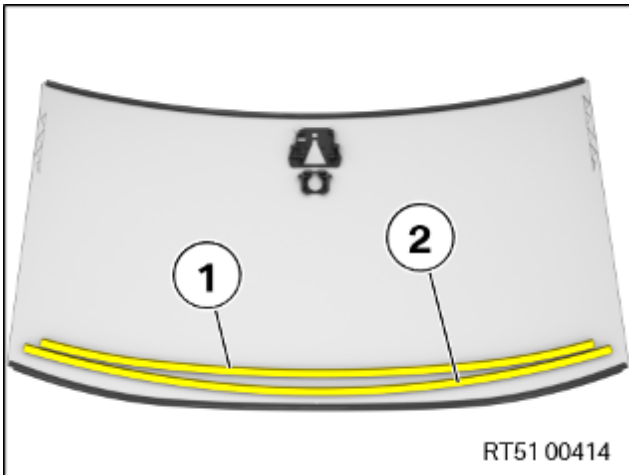
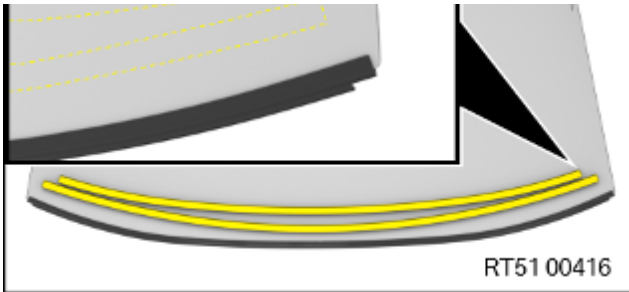


Description is for left component only. Procedure on the right side is identical.

- Remove adhesive residues from the body when installing the windscreen and clean the adhesive area.
- Completely remove the existing spacer (1).
- Bond the spacer (1) in the centre on the embossed marks (2) on the body side.

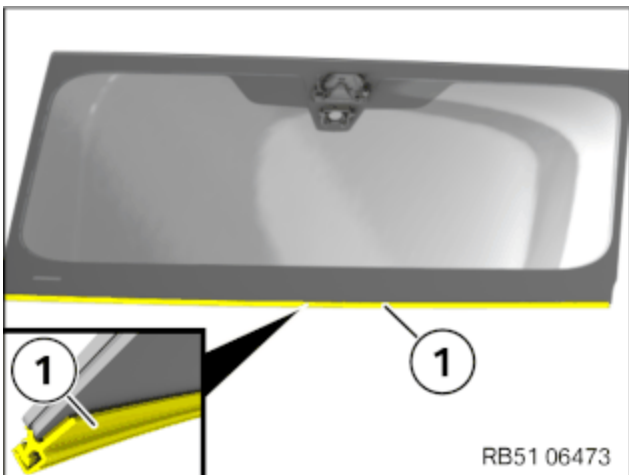
**Parts:** Spacer





- Attach expanding foam tapes (1) and (2) along the marks on the edge of windscreen.

**Parts:** Expanding foam tape



#### Check

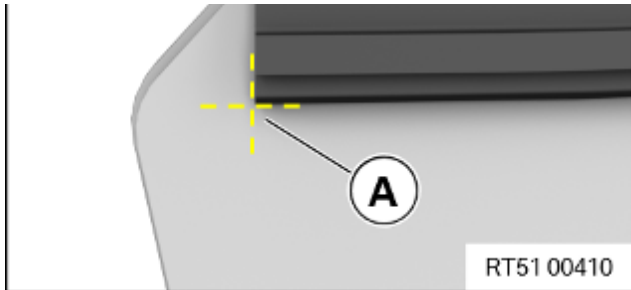
- Check the guide (1) for the cowl panel cover for damage.

#### Result

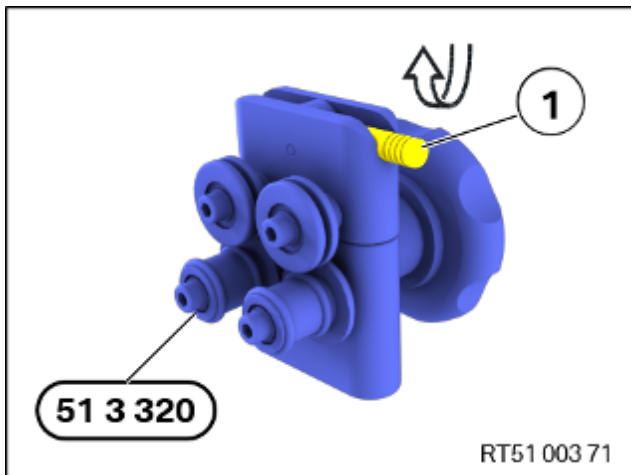
- » Guide for cowl panel cover is damaged.

#### Measure

- Renew windscreen.

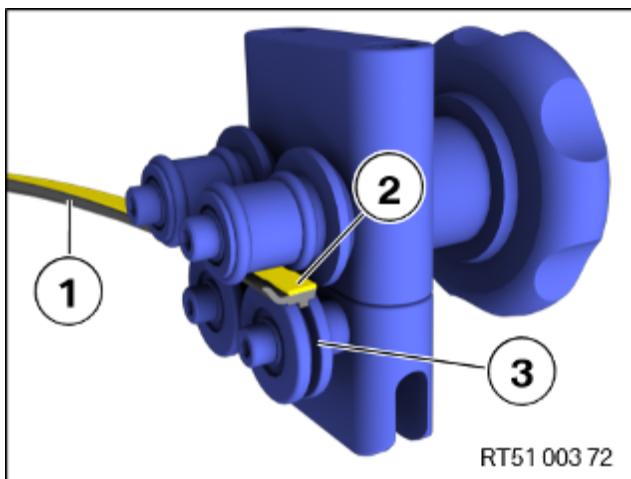


- Observe marks (A) for the windscreen rubber frame (1).



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

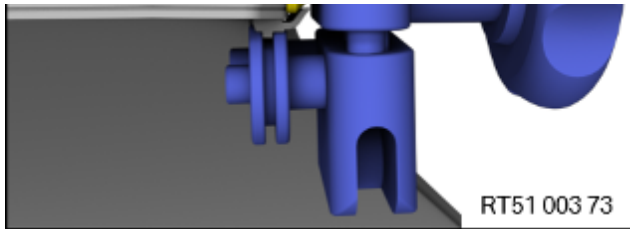
- Reposition lever (1) in direction of arrow and open it using the special tool .



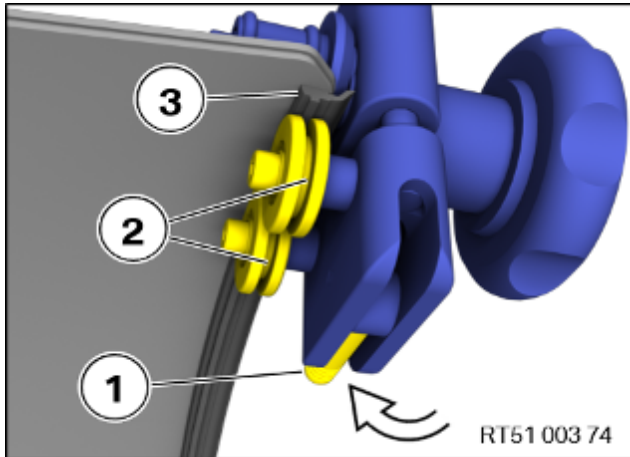
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Pull off protective film (2) in stages from adhesive tape.
- Insert the cover (1) into the guides (3).



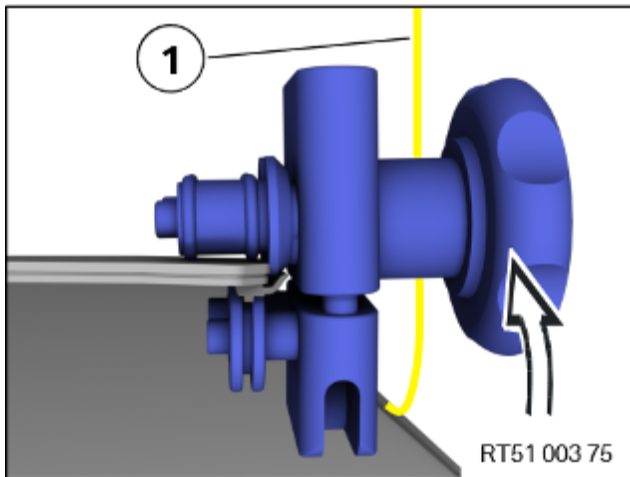


- Place the special tool with the pressure rollers (1) up against the window edge.
- Align the cover with the outer edge of the windscreen.
- Fit the cover and visually check for perfect fit.



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

- Reposition the lever (1) in direction of arrow to close the special tool.
- Ensure the correct positioning of the cover (3) in the guide pulleys (2).



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

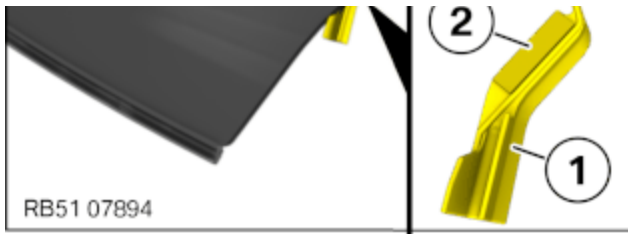
- Continue to pull off protective film (1) in stages from adhesive tape.
- Pull the special tool in the direction of arrow with the handwheel over the entire upper edge of the window glass.

## 46 – Installing the windscreen.

### ► Installing the water guide element on the left and right



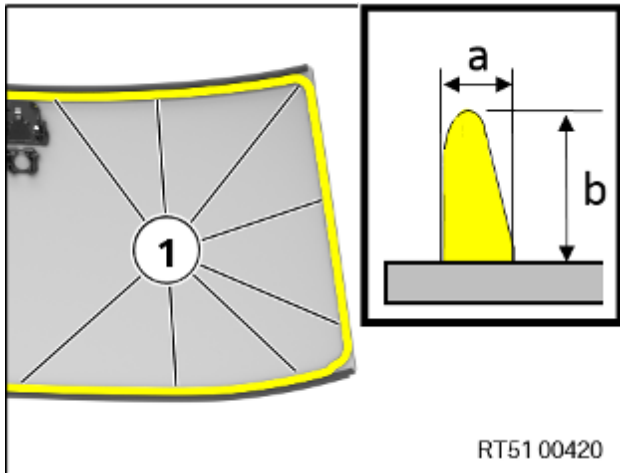
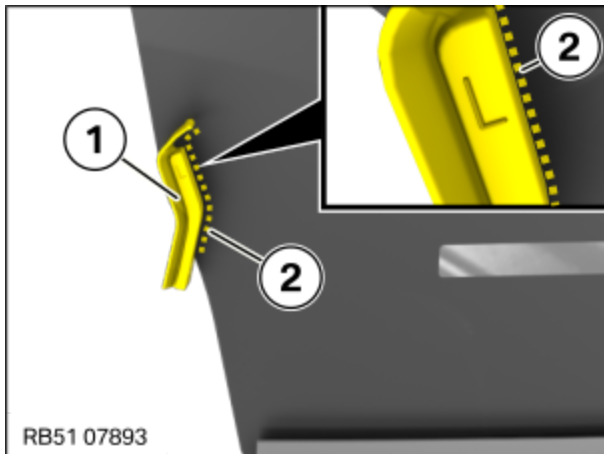




### Expendable materials

Cleaning agent R2	500 ml	83190417324
-------------------	--------	-------------

- Remove liner (2) from the water guide element (1) and position on the windscreen (3).
- Position water guide element (1) at the mark (2) and press it down.



Perform the operations on the left and right side.

- Prepare the glue cartridge with the standard nozzle C.
- Apply adhesive bead within the marks (1) on the windscreen.



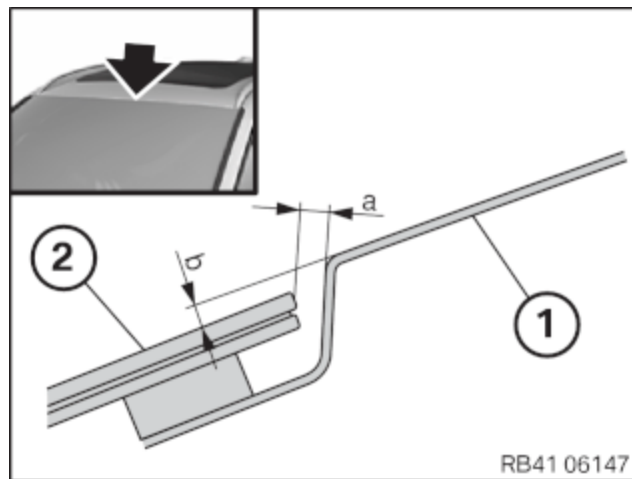


- Press the windscreen towards the top until the rubber frame of the windscreen is evenly in contact with the roof.
- Secure the windscreen in this installation position using the two yellow plastic adhesive tapes (1).

### Gap dimension windscreen to roof outer skin

1 windscreen; 2 roof outer skin

a	3,8 ( 2.6 - 5.0) mm
b	2.8 ( 1.4 - 4.2) mm



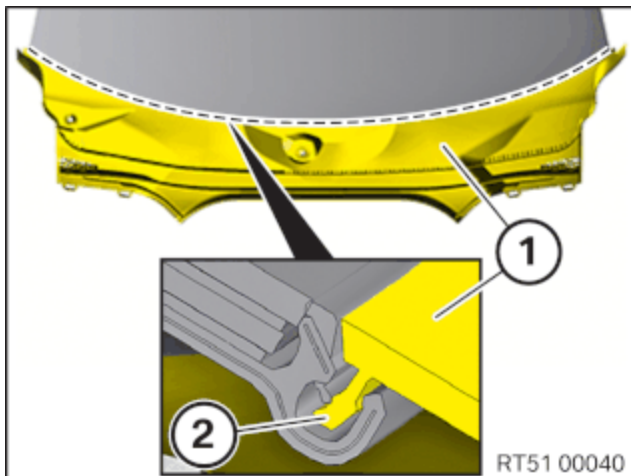
### corrosion.

- Ensure correct installation of the components.
- Only use undamaged components.

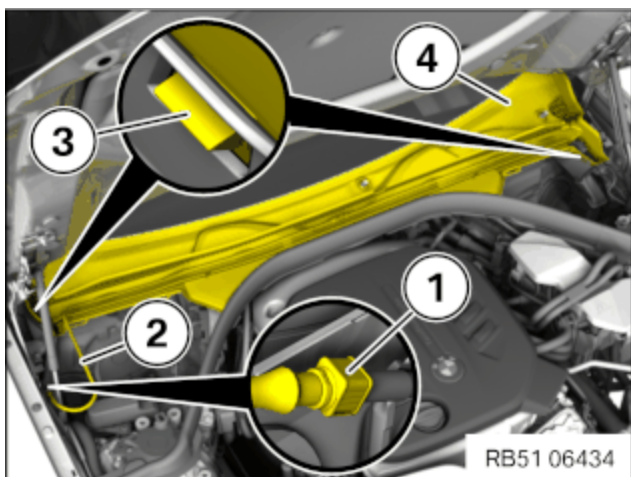
## i

**Before installing** the cowl panel cover it is **mandatory** to check that the 48 V line is routed correctly and fitted tightly.

An incorrectly laid or attached 48 V line can be damaged by the wiper kinematics.



- Push the cowl panel cover (1) into the latch mechanism (2) beginning on the side.



- Clip cowl panel cover (4) in by means of the latch mechanisms (3).
- Position windscreen wash hose (2) and connect windscreen wash hose (1) quick lock.



## ► Install the gutter strip on the windscreen



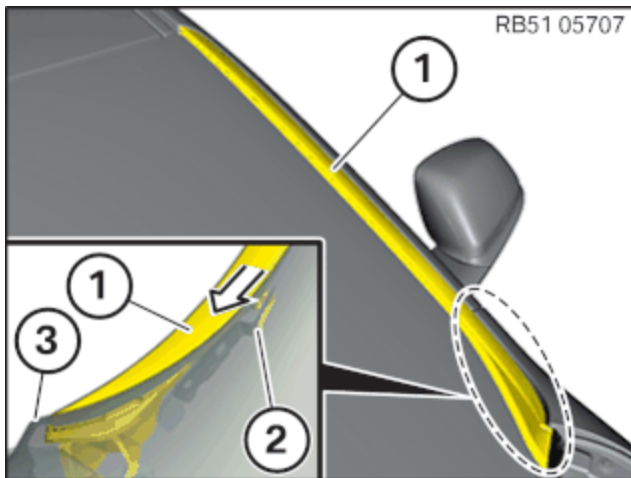
### Careless handling of tools and sharp-edged components.

#### Scratch, surface damage.

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



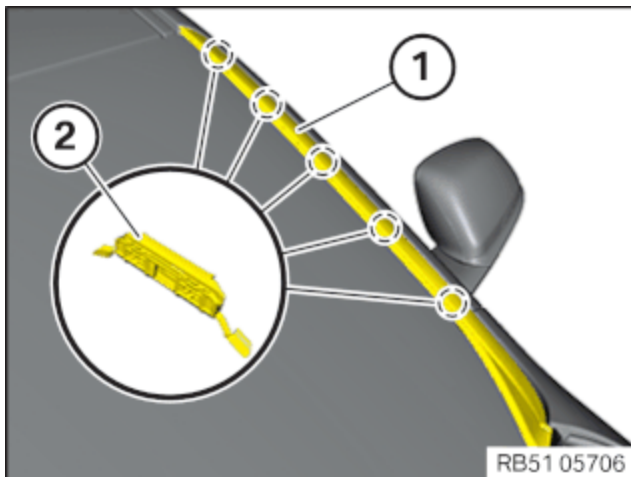
Latch mechanisms, guides and mounting elements must not be damaged or missing.



- Renew gutter strip on the windscreen (1) and paint if necessary.

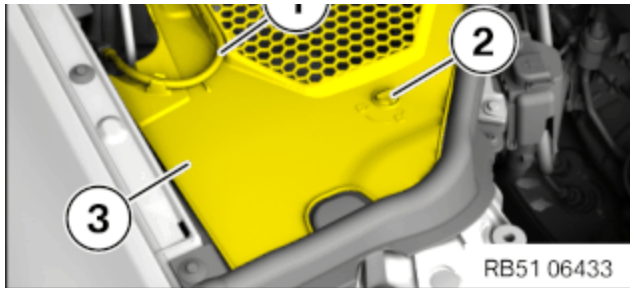
#### Parts: Gutter strip

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

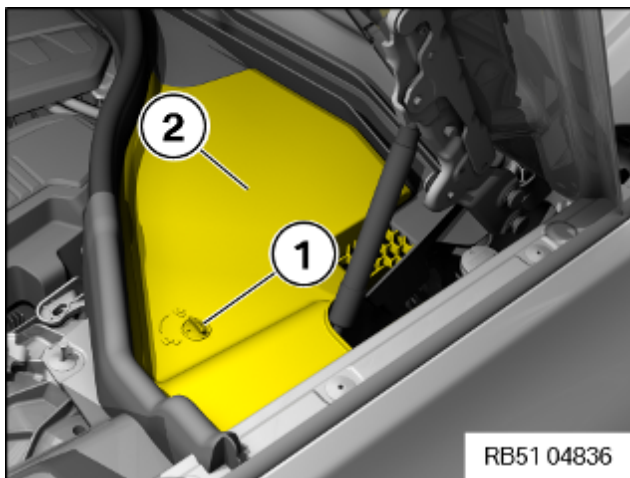


- Clip in the windscreen gutter strip (1) starting at bottom at the clamps (2).





### 50 – Install the cover of the engine compartment on the rear left



- Position the engine compartment cover at the rear left (2) .
- Close lock (1).

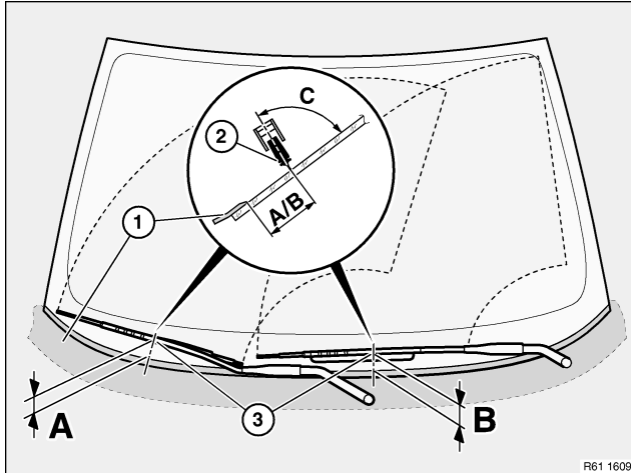
### 51 – Install left and right wiper arm



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

#### ► Installing left and right wiper arm

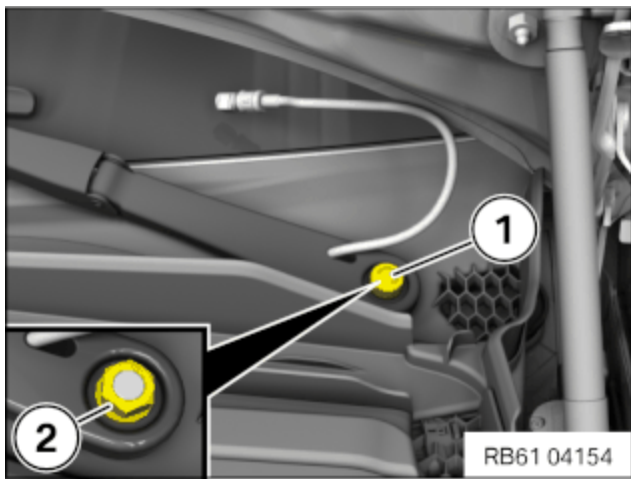




- Connect the wiper arm (3).
- Correctly position the wiper arm (2) in relation to the window edge (1).

**Distance from window pane edge to wiper blade**

Wiper arm right (A)	57,5 ± 5 mm
Wiper arm left (B)	63,3 ± 4 mm

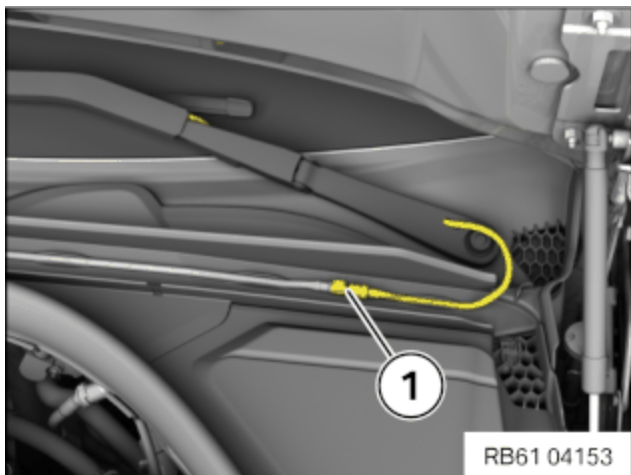


- Tighten nut (2).

**Windscreen wiper arm**

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

- Connect the protective cap (1).



- Feed washer fluid hose (1) into the cowl panel guide and connect at the separation point.

## ► Installing the A-pillar trim panel



### 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.



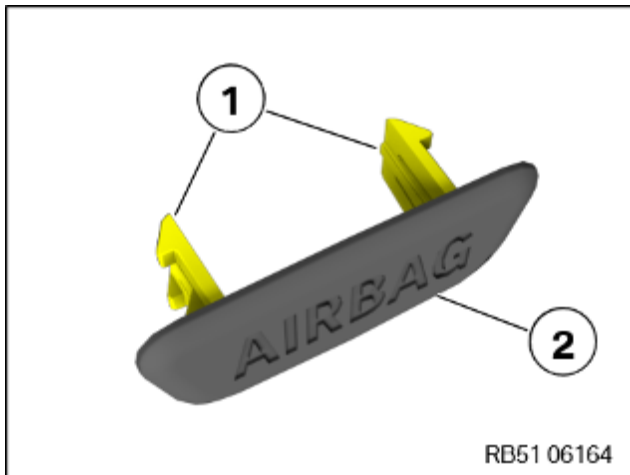
### Damage to the head airbag.

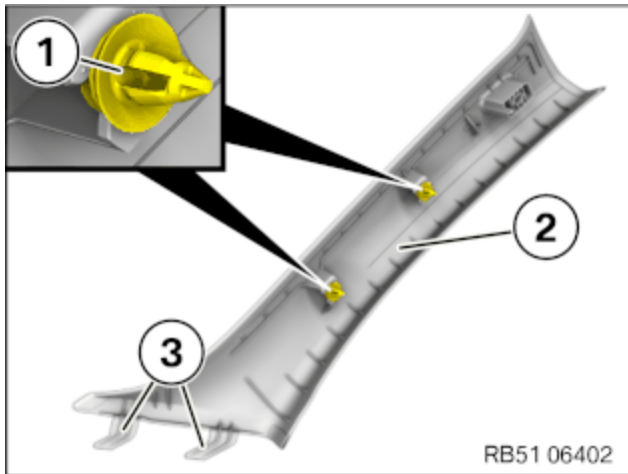
#### **Improper use of a tool when removing the trim panel may damage the head airbag.**

- Do not use sharp-edged tools when removing the trim panel.

#### **Check**

- Check retaining lugs (1) of cover (2) for damage.





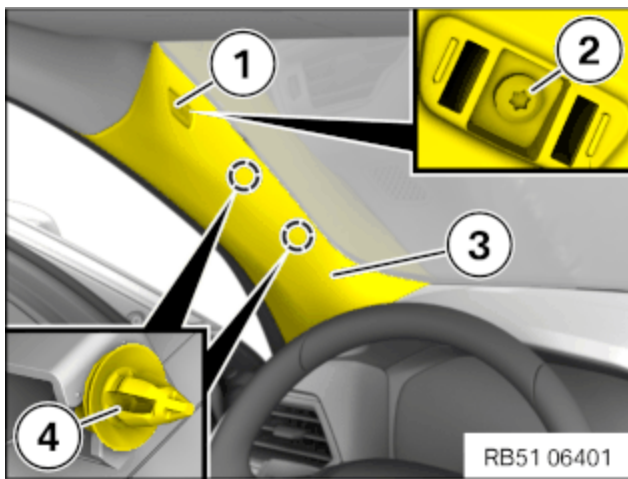
- Check the clips (1) for damage and renew if necessary.
- Check the guides (3) for damage.

### Result

» Guide is damaged.

### Measure

- Renew the A-pillar trim panel.



- Guide in A-pillar trim panel (3) downwards and clip it in with clips (4).
- Tighten down screw (2).

### A-pillar trim panel to body

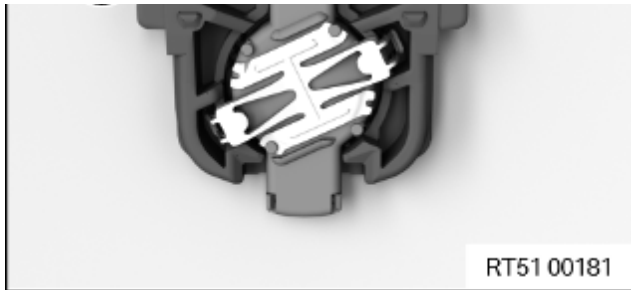
Sheet metal screw  
4,8x38

Tightening torque

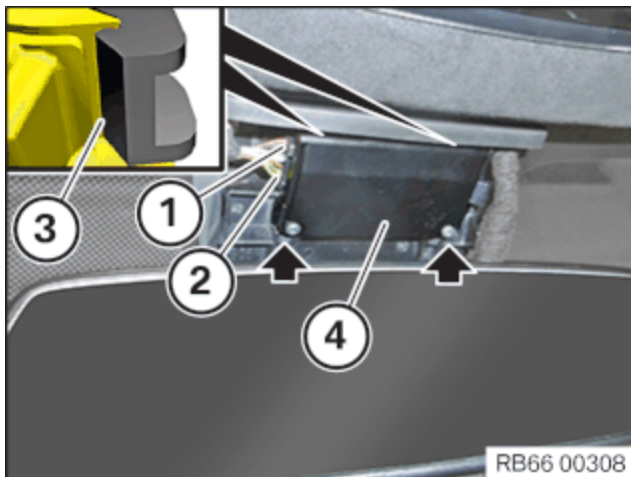
2,6 Nm

- Clip in the cover (1).





## 54 – Install KAFAS camera



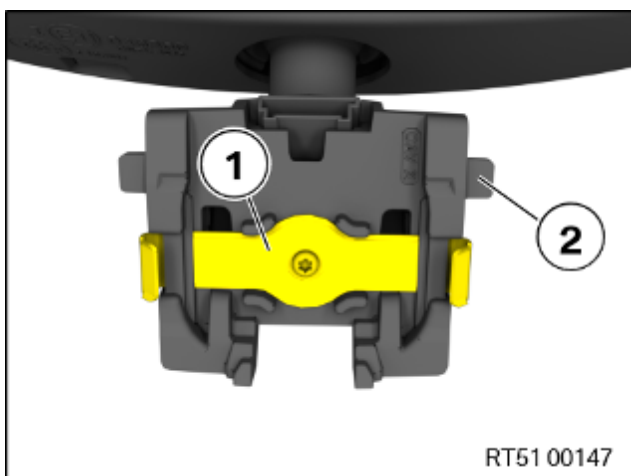
### ► Install KAFAS camera (Mid variant)



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

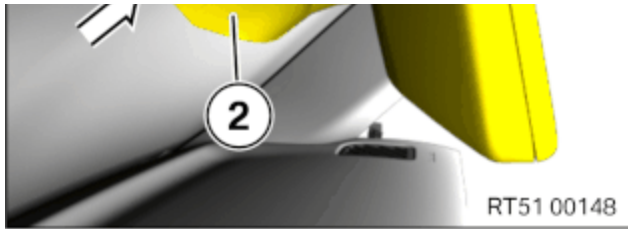
- Feed in KAFAS camera (4) on the guides (arrows) and engage the retaining lugs (3).
- Make sure that the KAFAS camera (4) engages correctly in the retaining lugs (3).
- Connect connectors (2) and lock.
- Connect connectors (1) and lock.

## 55 – Install interior mirror



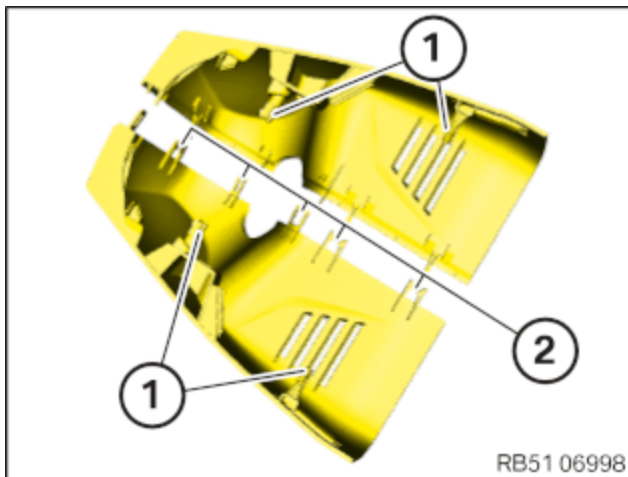
- Check the clamp (1) on both sides of the mirror base (2) for damage and renew as needed.



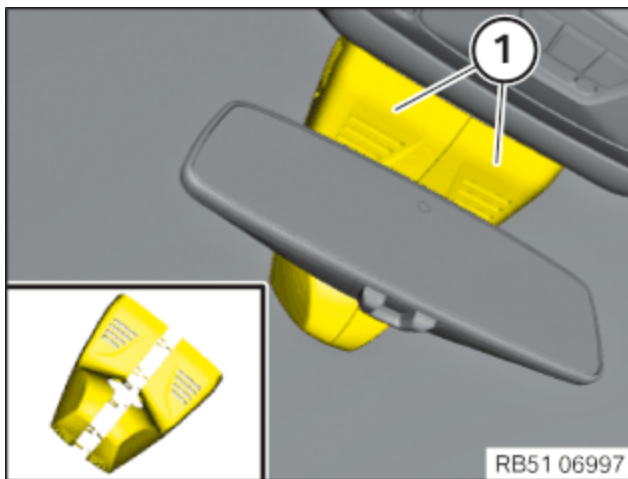


- Position the interior mirror (2) at the mirror base and slide it on in direction of the arrow.
- Check the correct installation position of the interior mirror (2) at the mirror base (3).
- Connect connectors (1) and lock.

## 56 – Installing the covers for the interior mirror

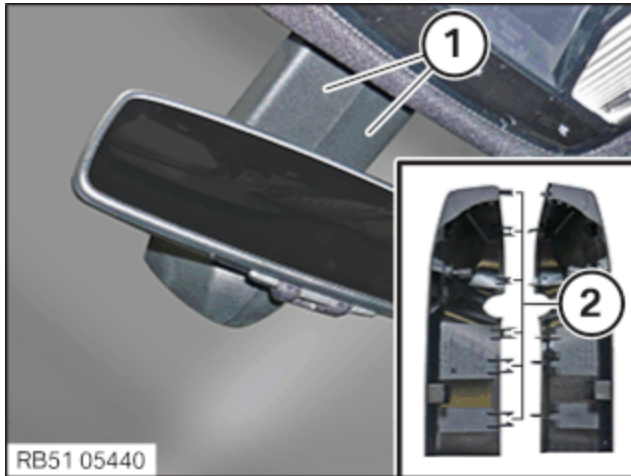
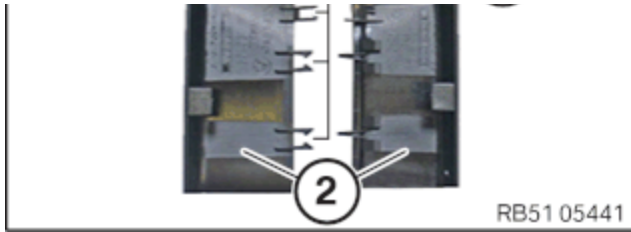


- **Version A:**
- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.



- Feed cover (1) in and lock.

- **Version B:**

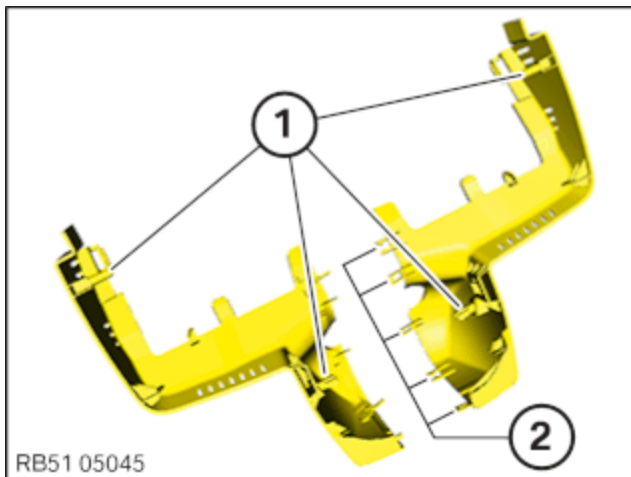


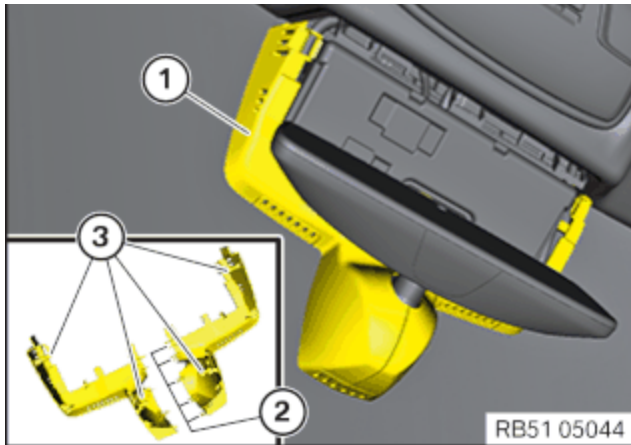
- Position the covers (1) correctly on the mirror and engage with the latch mechanisms (2).

- **Version C:**

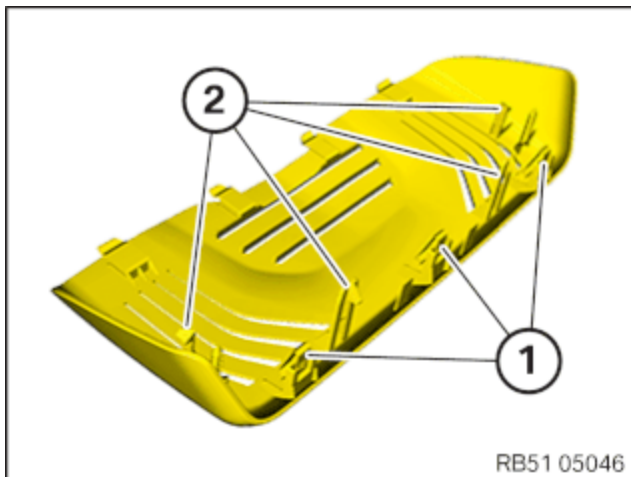
- **Check**

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





latch mechanisms (2) and (3).



#### Check

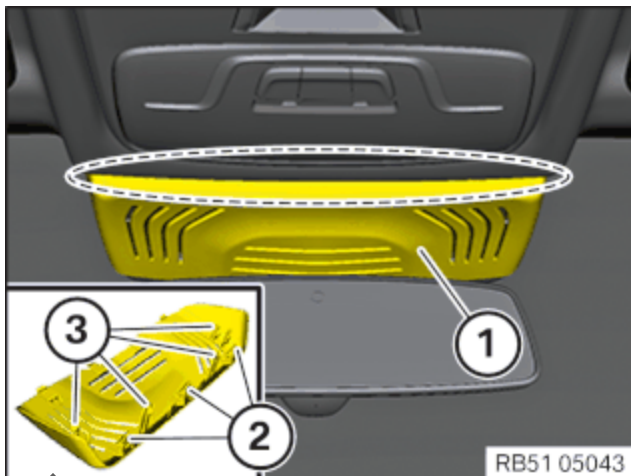
- Check clamps (1) for damage; renew if necessary.
- Check latch mechanisms (2) for damage.

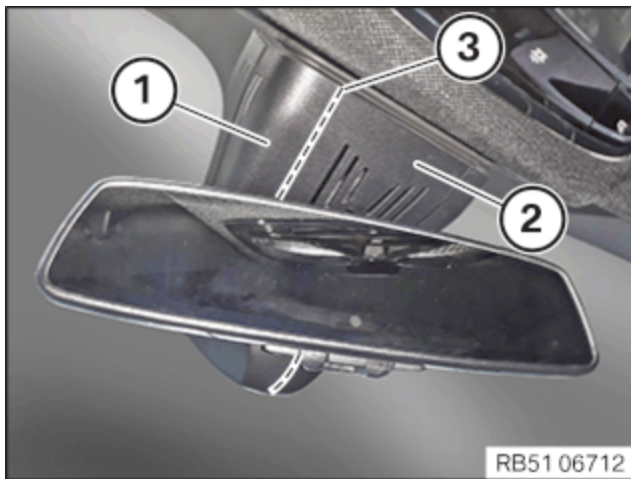
#### Result

» The latch mechanism is damaged.

#### Measure

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





- Position covers (1) and (2) correctly on the mirror and engage at the separation point (3).

## 57 – Calibrate KAFAS camera



The calibration process of the KAFAS camera is not complete until the vehicle drives in traffic. Tell the customer that some assistance systems are temporarily unavailable after vehicle pick-up.

- Perform camera calibration using diagnosis system.  
Under Service Functions menu:
  - Driver assistance
  - Camera-based driver assistance systems
  - Calibration of camera-based driver support systems

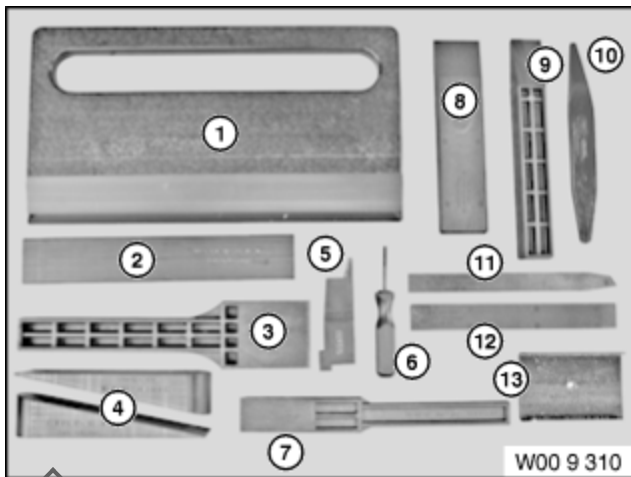
## Additional Information



<b>Roof transition centre (122)</b>	Used in step	20
	Tightening torque	1.2 Nm
<b>C-pillar trim panel to body</b>	Used in step	35
Sheet metal screw	Tightening torque	2 Nm
<b>End fitting to body</b>	Used in step	36
Screw	Tightening torque	42 Nm
<b>Backrest side section to body</b>	Used in step	41
M6x30	Tightening torque	8 Nm
<b>Negative battery cable to 48-V battery</b>	Used in step	41
Nut M8	Tightening torque	19 Nm
<b>Windscreen wiper arm</b>	Used in step	51
Combination hexagon nut	Tightening torque	35 Nm
<b>A-pillar trim panel to body</b>	Used in step	52
Sheet metal screw 4,8x38	Tightening torque	2,6 Nm

## Overview of Special Tools

### 0 493 752 (00 9 329) Case

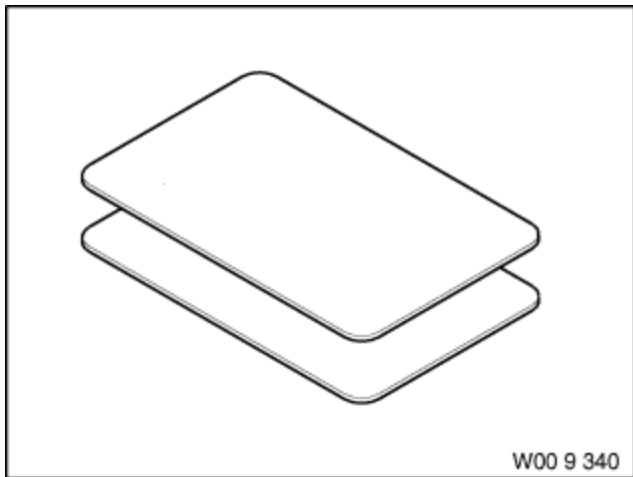


<b>Common</b>	Used in step	5	15	21
Usage	(Case) with insert without mounting wedges, delivery while stocks last - as of 02/2019.			
Included in the tool or work	0 490 527			
Storage location	Individual			
Replaced by				



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)

**0 493 687 (00 9 340) Removal aid**



<b>Common</b>	Used in step <a href="#">25</a>
Usage	(Dismantling aid (2 pieces))
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	<a href="#">0 496 289 (00 9 341)</a>		<b>Removal aid</b> Only available as a set (2 tools) under 00 9 340 (= 83 30 0 493 687).	





WORK

Storage location C34

Replaced by

In connection with

SI-Number 01 03 12 (792)

## Overview Technical Data

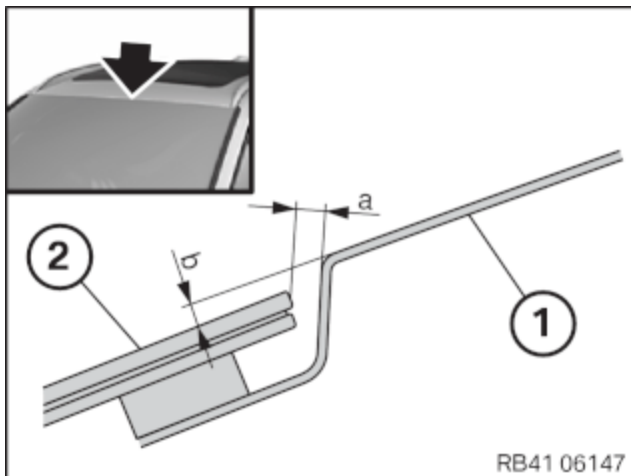
### Gap dimension windscreen to roof outer skin

Used in step 46

1 windscreen; 2 roof outer skin

a 3,8 ( 2.6 - 5.0) mm

b 2.8 ( 1.4 - 4.2) mm



### Distance from window pane edge to wiper blade

Used in step 51

Wiper arm right (A) 57,5 ± 5 mm

Wiper arm left (B) 63,3 ± 4 mm

## Links

### Repair instructions (PRE)

Used in step

[Notes on 48-V battery](#)

14 41





[51 31 ... materials for bonding window](#)

11

## Repair instructions

## Used in step

<a href="#">61 35 ... Notes on ESD protection (Electro Static Discharge)</a>	
<a href="#">61 35 ... Notes on ESD protection (Electro Static Discharge)</a>	
<a href="#">51 31 ... Removing windows with a "Spider"</a>	11
<a href="#">61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting battery earth lead</a>	14 41
<a href="#">61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</a>	14 41

<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41
<a href="#"><u>61 20 900 Disconnecting and connecting battery earth lead</u></a>	14 41

For informational purposes only. The information on this website is provided AS-IS with no warranties, express or implied, and is not guaranteed to be error-free, up-to-date or complete. NewTIS and BMW assume no liability for any loss or damage arising from the use or reliance on the information and content on this website. The content on this website is subject to change without notice.

