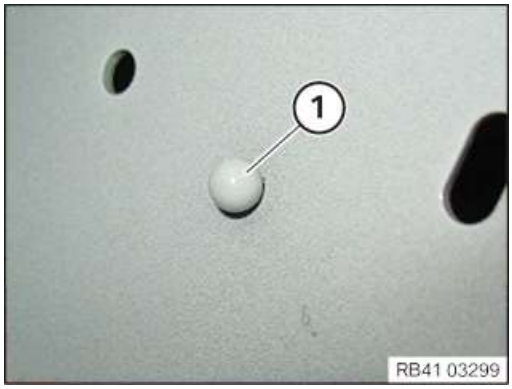
72 11 ... Checklist for front seat

Event		Check	Action
Has at least one belt tensioner and/or one side airbag been activated?	**Yes**	**Check 1 (when installed):** Check all seat adjustment options of both front seats. There must be no stiff movement, sticking or other functional problems or noises across the entire adjustment range of all the seat adjustment options. Check head restraints for damage. Check crash-active headrest for activation. **Only 2-door model:** Check backrest lock. Backrest must unlock and lock easily without any great physical effort.	If components are OK with regard to checks 1 and 2, only replace activated belt tensioner or side airbag. Otherwise, replace faulty parts on the seat/body. Replace belt tensioner, seat belt and, if necessary, side airbag.
		Check 2 (when dismounted): Check for deformation/damage on the following components: 1. All seat cross members on the body 2. Threaded support sleeves in the seat cross members 3. End fittings on the seat mechanism. Check for visible damage or deformation.	
	No	Check all adjustment options of the head restraints. Check crash-active headrest for activation.	Replace faulty parts.
Only seat with integrated seat belt:			
Does the backrest indicator light turn on when the backrest is locked and also when the backrest is shaken?	**Yes**	Check microswitch of backrest lock and renew if necessary. Check electrical lines and repair if necessary.	If there is still a fault, replace the entire seat
	No	No further action necessary.	

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41 00 513 Fix bolts on the new part

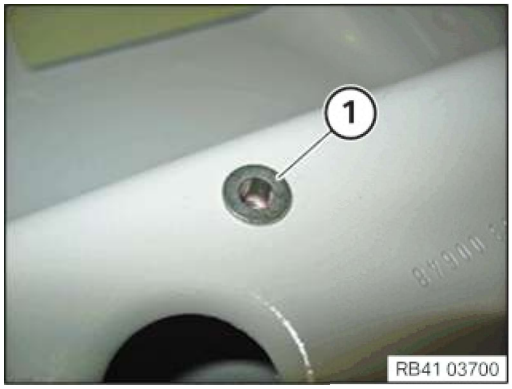
Note: On BMW and MINI bodies, various welded and pushed in bolts are being used.



Single ball/double ball (version 1):

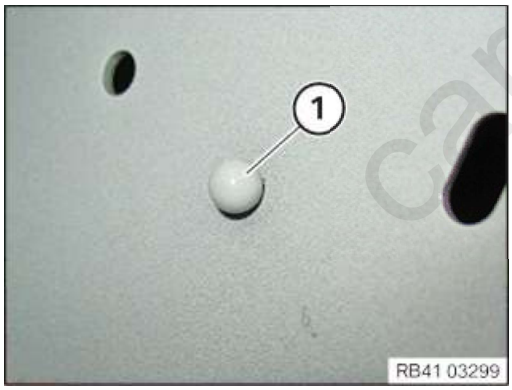
Grind off any residues of the single ball (1), if applicable.

Drill hole with diameter 7 mm.



Set blind rivet nut (1).

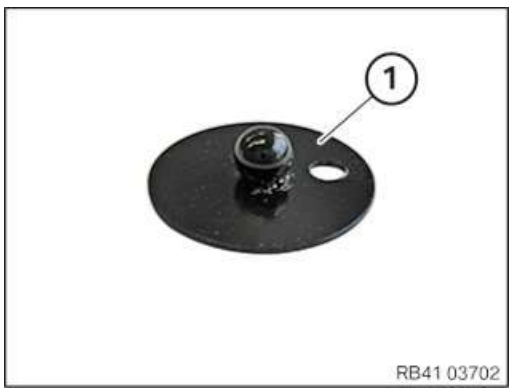
Screw in single ball with thread until a height of 5 mm (double ball 10 mm) is reached.



Single ball/double ball (version 2):

Grind off any residues of the single ball (1), if applicable.

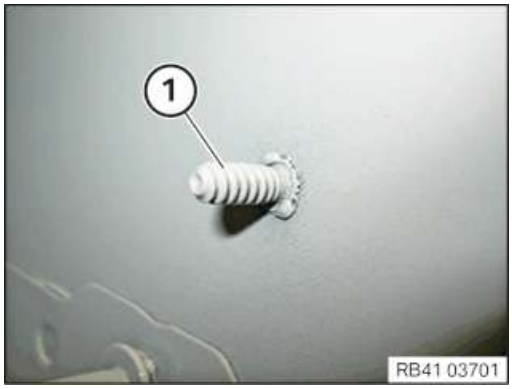
Clean area with solvent cleaner R1.



Clean bonding surface of repair element single ball (1) with solvent cleaner R1.

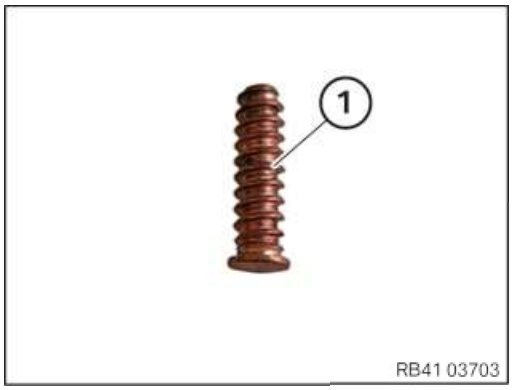
Bond repair element optionally with adhesive K1, K5 or window pane adhesive at the same position.

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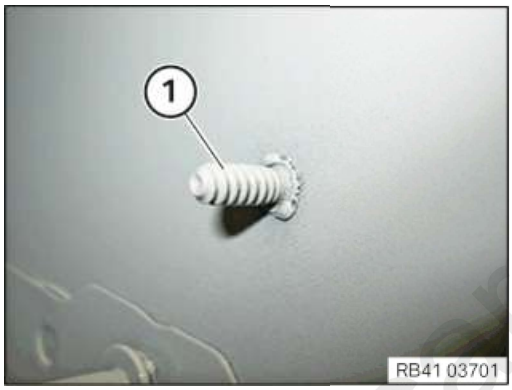


Coarse threaded bolt (version 1):

Grind off any residues of the coarse threaded bolt (1), if applicable.



Spot weld coarse threaded bolt to same position.



Coarse threaded bolt (version 2):

Grind off any residues of the coarse threaded bolt (1), if applicable.

Drill hole with diameter 7 mm.

Set blind rivet coarse threaded bolt using riveting pliers.

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41 00 ... Replacing blind rivets

Special tools required:

- 2 348 128
- 72 1 210

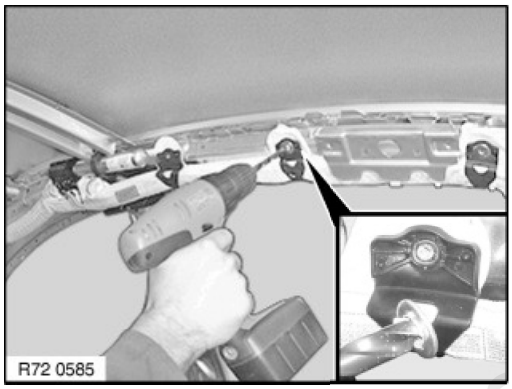


Important!

Lay out protective mats to protect the interior equipment against swarf from the drilled-out rivets and damage.

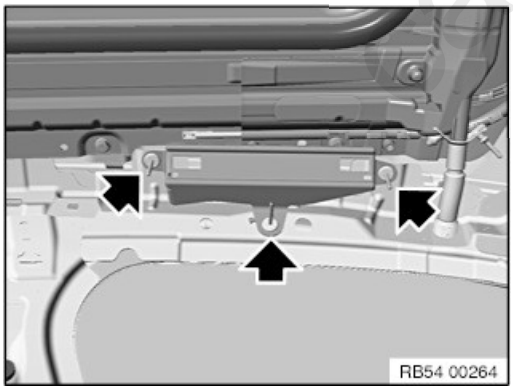
Lay out protective mats in the relevant working area:

- Instrument panel
- Entrance area
- Passenger compartment



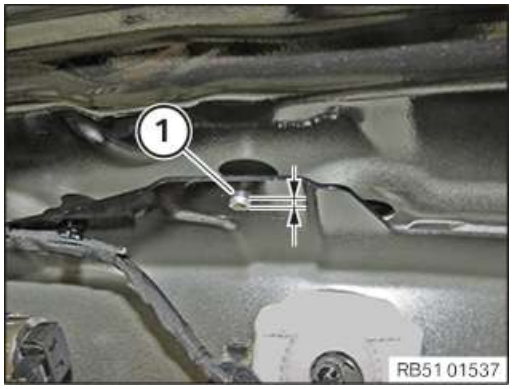
Schematic diagram of folding pack holder for head airbag:

Drill off rivet plate down to rivet shank with a 10 mm twist drill bit.



Described for grab handle holder:

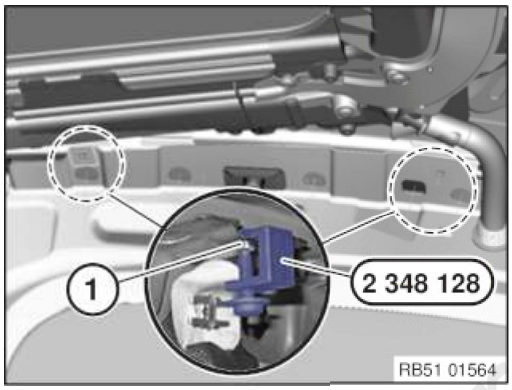
Drill off rivet plate down to rivet shank with a 10 mm twist drill bit.



Drill out all blind rivet protusions (1) up to the body.

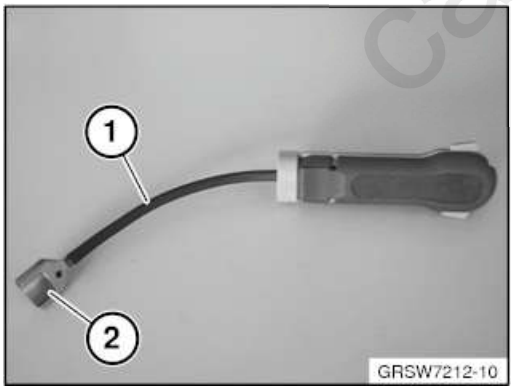
Installation note:
Apply primer to paintwork damages on side frame.
Note:
Depending on accessibility, the rivet heads will have to be removed using special tool 2 348 128 or 72 1 210 .

In areas that cannot be reached using special tools, cavity foam HS3must first be applied around the rivet head before the rivet head is then punched out immediately..



Removal of rivet head with special tool 2 348 128:

Press off rivet heads (1) using special tool 2 348 128 and remove.



Removal of rivet head with special tool 72 1 210:

Shank (1) of special tool 72 1 210 is flexible and can be adapted to the relevant body contours.

Note:
Insert butyl in the collecting tray (2) to secure rivet heads and prevent them from falling out.

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Insert special tool 72 1 210 through bore hole in body next to attachment points.

Position special tool from rear on rivet head in cavity.

Note:
A second person will be needed to help hold the special tool on the rivet head during the driving-out operation.

Make sure collecting tray is correctly fitted on rivet head.

Drive out stem with hammer and 6 mm punch.

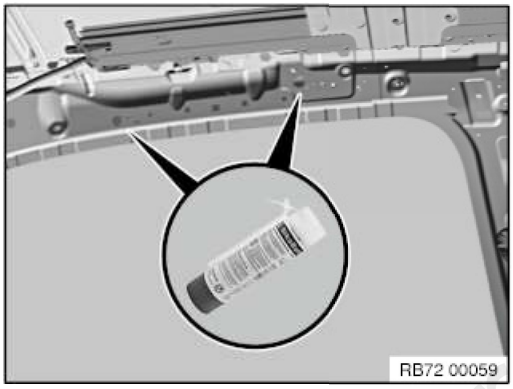
Carefully feed special tool out of body so that rivet head does not fall out of collecting tray.

Note:
If the rivet falls out of the collecting tray into the side frame when the special tool is fed out, this area must be generously filled with foam.

For details of procedure for filling cavities with foam, see further operations.

Use cavity preservation (refer to BMW Group Parts) for foam filling.

Cavity foam (refer to BMW Group Parts) may also be used if required.



Fit tube to foam can.

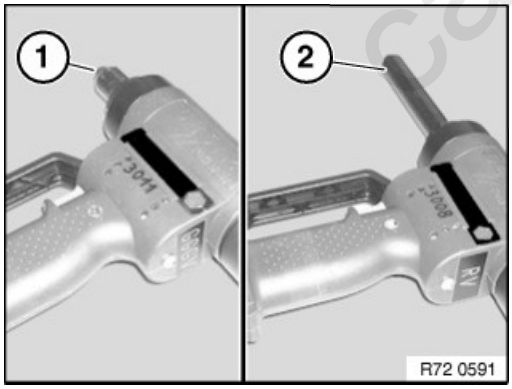
Push the hose in through the pillar holes.

Fill cavity with a filling material.

Warning!

Empty foam can completely onto cardboard and after hardening dispose of foam and can in residual waste.

Can may burst if not completely emptied.



<u>Overview of rivet gun:</u>

Riveting of gas generator housing and holders for folding pack with rivet gun (refer to BMW Workshop Catalogue).

The interchangeable head is changed for the different work operations.

Riveting of gas generator housing with:

1.) 17/36 nosepiece and short shank

Riveting of holders for folding pack:

2.) 17/40 nosepiece and long shank

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72 00 ... Replacing the seat belt clip

Special tools required:

- 00 5 040



Note:
If the position of the seat belt clip (1) cannot be identified, the position of the seat belt clip on the opposite side of the vehicle is used.

Insert the seat belt clip (1) in the previous position on the seat belt (2).



Mount the counterpiece (1).

Press the seat belt clip with special tool 00 5 040 .

Check that the seat belt clip and counterpiece (1) are firmly seated.

Note:
If the seat belt clip is pressed too firmly, the counterpiece may loosen (1).

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72 Safety information and general information

Notes on safety

> Safety regulations for handling airbag modules and pyrotechnic belt tensioners

> Notes on scrapping vehicles with gas generators

Handling electrical system and electronics

> Unlocking/locking airbag plug connections

> Repairing airbag lines

> Handling optical fibres

Check

> Check seat belt

> Checklist for seat belt

Airbag system

> See diagnosis system for FUB and check

> Deactivating airbags

> Procedure after airbag deployment .

Active pedestrian protection

> Procedure after actuator triggering

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Notes on safety

-- Safety regulations for handling airbag modules, airbag components and
> pyrotechnical seat belt tensioners

-- Notes on scrapping vehicles with gas generators
>

-- Deactivation/activation pyrotechnical components
>

Handling electrical system and electronics

-- Unlocking/locking airbag plug connections
>

-- Repairing airbag lines
>

-- Handling optical fibres
>

Check

-- Check seat belt
>

-- Checklist for seat belt
>

Airbag system

-- Functional description and checking, refer to Diagnosis system
>

-- Deactivating airbags
>

-- Procedure after airbag deployment.
>

Active pedestrian protection
AFGS

-- Procedure after actuator triggering
>

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72 00 ... Safety regulations for handling components with gas generators

It is essential to comply with the regulations as specified in the law relating to the use of explosives when working on airbag units and seat belt tensioners.

Airbags, seat belt tensioners etc. are pyrotechnical objects. Pyrotechnical objects are assigned to different danger classes on the basis of the quantity of propellant that they contain. The assignment can be ascertained from the identification marking on the product:

Important!

> Failure to comply with the warning notices and repair instructions for gas generator components can cause accidental deployment and result in injury and vehicle damage!

This applies in particular to the following components:

- Airbag modules (driver's/front passenger airbags, side airbags)
- Seat belt tensioner
- Head airbag
- Active knee protection
- Active head restraint
- Safety battery terminal

1. Regulations

The regulations quoted in the following refer to the Federal Republic of Germany.

In all other countries, the relevant legislation and regulations must be observed in each case. Country-specific legal regulations that go beyond this information or court decisions based thereon must be followed in each case or given precedence over these regulations.

The following components used by BMW:

- Pyrotechnical restraint systems are subject to danger class PT1
- Gas generators are pyrotechnical objects belonging to danger class T1

Handling, transporting and storing non-fired gas generators are subject to the "Explosive Materials Act".

The relevant trade supervisory authority must be notified at least 2 weeks before pyrotechnical objects are handled for the first time. Here the relevant authority must be notified in writing of the person responsible (e.g. dealership owner, holder of general power of attorney or if necessary workshop supervisor). A certificate of qualification, i.e. specific training, is not required for the person responsible.

2. Dismantling and installation

- Inspection, testing and installation work may only be carried out by expert trained personnel in BMW Service.
- Work on components of the airbag system should only ever be carried out with the battery disconnected, the negative terminal post covered and the plug connection of the cable leading to the gas generator disconnected. If only the battery is disconnected, the following prescribed waiting period must be observed without fail:
  - 1 mins.
- In the event of breaks in work, a component with a gas generator that has been removed must be secured against access by other persons.
- Individual components must never be repaired. Instead, always replace them.
- Do not treat airbag system components with cleaning agents or grease.
- Components of the airbag system must not be exposed to temperatures in excess of 75 °C.
- Airbag system components, including electronic diagnostic components, which have been dropped from heights in excess of 0.5 m must not be reinstalled in the vehicles.

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- Do not remove components of the airbag system from the original packaging until immediately before they are to be installed in the vehicle.
- Before installing, subject components such as housing, connector pins ,etc. of the airbag system (including diagnosis electronics) to a visual inspection for damage and replace if necessary.
- Airbag system components may only be electrically tested while they are installed and only with the BMW ISTA.
- **Danger of injury:** The airbag module may only be set down with the airbag itself facing *upwards*. Otherwise the airbag module will be thrown upwards if the alternator is ignited.
- Do not point the ignition squib of a gas generator at other persons.
- Components with gas generators must not be fired while they are removed. They must be disposed of by special disposal companies or returned to BMW in the packaging of the new components.
- When carrying out straightening and welding work with an electric welder:
  - Disconnect battery
  - Cover negative terminal (post)
- Avoid all contact with the skin when removing a fired airbag module - wear gloves. Wash with water after contact with the skin.

3. Transport

- Components with gas generators must be sent off in the packaging of the new components.

4. Storage

- Observe the regulations of the relevant trade supervisory authority and the applicable national regulations.

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72 11 ... Check list for automatic seat belt

Was the automatic seat belt with lower strap replaced after an accident, e.g. frontal and/or oblique collision in which the impact absorbers/deformation elements were permanently deformed? **(only while seat belt was fastened)**	**No**	**Replace complete automatic seat belt** **The following must also be checked and replaced, if necessary:** **seatbelt mounts on the vehicle body** **seatbelt mounts on the seat** **seat rails.**
Yes		
Does seat belt lock when pulled out suddenly?	No	Replace automatic seat belt (upper seat belt).
Does the automatic reel eliminate the belt slack?	No	Replace automatic seat belt (upper seat belt).
Yes		
Yes		
Can the seat belt strap be pulled out without jamming?	No	Automatic reel is loose - tighten reel. If fault persists: Return spring broken - replace automatic seat belt (upper seat belt).
Yes		
Does the strap on the front seat belts retract automatically? Does the strap on the rear seat belts retract automatically, a small remaining loop is acceptable if this remaining loop is fully retracted when the seat belt strap is readjusted.	No	Automatic reel is loose - tighten reel. Excessive friction in belt guides - replace automatic seat belt (upper strap). Return spring broken - replace automatic seat belt (upper seat belt).
Yes		
Does automatic reel make a squeaking noise when belt is fastened or unfastened?	Yes	Excessive friction in belt guides - replace automatic seat belt (upper strap). Automatic reel is loose - tighten reel. Return spring broken - replace automatic seat belt (upper seat belt).
No		

Is the plastic casing on the belt tongue free from damage in the area of the belt opening?	**No**	**Replace complete automatic seat belt**
Yes		

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Is the fully extended seat belt strap free from pinches, burn marks, tears and cuts, creasing and unravelling?	No	Replace complete automatic seat belt
Yes		
When the seat belt is fastened, is the belt tongue ejected by spring pressure from the buckle when the ”red button” is pressed?	No	Replace complete automatic seat belt
Yes		
Does fastened seat belt lock during emergency braking on a dry roadway at double walking speed?	No	Replace complete automatic seat belt
Yes		
Is fully pulled-out seat belt strap free of serious dirt and other marks?	No	If dirt and marks cannot be removed with commercially available mild detergent, the automatic seat belt (upper seat belt) must be replaced.
Yes		
In the case of seat-integrated seat belts, is front tongue of reclining mechanism or seat rail free of deformation?	No	Replace both damaged parts and complete automatic-reel seat belt. The following must also be checked and replaced, if necessary: seatbelt mounts on the vehicle body seatbelt mounts on the seat seat rails.
Yes		
The automatic seat belt is OK!		

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72 11 ... Check the 3-point automatic-reel belt

General considerations when checking seat belts:

1. After replacing the EMA/REMA* automatic reel

* EMA = electromotive automatic (seat belt) reel

*REMA = reversible electromotive reel

Check the additional functions for function when replacing the EMA/REMA automatic reel after programming / encoding the vehicle.

For the EMA/REMA automatic reel functional check, it is sufficient to check that the belt slack* has been eliminated.

* Belt slack is seat belt play when the seat belt is fastened. When the seat belt is fastened, it does not immediately lie taut against the body.

Check if belt slack was eliminated for **EMA to 07/12**:

- Get in, close the doors and latch the left seat belt buckle contact
- EMA eliminates belt slack

If belt slack was not eliminated, the procedure described below must be followed:

- Allow vehicle to assume complete sleep mode and repeat the functional check.
- All doors must be closed!
- EMA, left, must be installed and connected correctly.
- Work through all fault code entries before the repeating the functional check

Check if belt slack was eliminated for **REMA from 07/12 onwards**:

- Lock left seat belt buckle contact and perform function check with diagnosis system.
- Alternatively, take a test drive at a speed of > 10 km/h

The automatic reel is completely maintenance-free and must not be opened.

2. After an accident

The seat belts must be checked after an accident.

At the beginning of the check, attempt to obtain information about the occupation of the seats in the vehicle that was involved in an accident. If this is not possible, check all of the seat belts in the vehicle and replace them if necessary.

In the event of deformations on the vehicle, you must subject the components of the restraint system affected in this area such as e.g.

- Seat belt
- Anchor fitting tensioner
- Seat belt height adjustment
- Seat belt tensioner
- Impact sensor
- etc.

to a function check and a visual inspection.

If you are in any doubt as to the unimpaired operability of restraint system components, these components must be replaced in the interests of safety!

If a seat belt has to be replaced following an accident (e.g. in the event of a frontal and/or oblique collision with permanently deformed impact absorbers/deformation elements or cross-members), the complete seat belt must be replaced! The complete seat belt comprises:

- Upper seat belt
- Lower strap

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- Anchor fitting tensioner
- Seat belt buckle (belt tensioner)
- Seat belt height adjustment
- Mounting bolts of all components

The following must also be checked and replaced, if applicable:

- Belt coding on the body
- Belt coding on the seat
- seat rails.
- Seat structure (frame, etc.)

Alignment tests on the seat and the seat rails are not permitted!

The following explanations and the check list for the 3-point automatic-reel seat belt may be helpful.

An unusable seat belt or a seat belt worn in a serious accident should be destroyed immediately after removal to guarantee that it can not be used again.

Check the automatic reel and seat belt strap:

The automatic reel has two independent activation systems for seat-belt locking.

The first activation system locks the automatic reel when driving quickly around curves, driving in tight curves, on extreme inclinations (vehicle rolls over) and during sharp braking or crash.

To check, the backrest must be placed in the upright position and both hands held in a supporting position close to the steering wheel. The brakes are then operated with full intensity while driving on a dry roadway and at double walking speed.

The seat belt must lock.

The second activation system provides additional safety and is controlled by inertia mass.

If the reel locks when the seat belt strap is pulled out suddenly, this system is also OK.

In addition, the automatic reel (EMA/REMA) must eliminate belt slack.

Check whether an attempt was made to eliminate belt slack:

- Get in, close the doors and latch the left seat belt buckle contact
- EMA/REMA eliminates belt slack

If belt slack was not eliminated, the procedure described below must be followed:

- Allow vehicle to assume complete sleep mode and repeat the functional check.
- All doors must be closed!
- EM/REMALI must be installed and connected correctly
- Work through all fault entries before the functional check is carried out again.

Replace the faulty or activated automatic reel.

The automatic reel is completely maintenance-free and must not be opened.

Precondition for complete, problem-free retraction of seat belt straps:

- The seat belt straps must not be twisted!
- The seat belt straps must not be damaged!

When placed to one side, the seat belt straps of the front seats must retract fully.

With the seat belt straps in the seat bench, a small remaining loop in the seat belt strap is acceptable due to increased friction between the seat belt strap and the seat bench cover if:

- this remaining loop is fully retracted when the seat belt strap is re-guided.

The seat belt strap should only be cleaned with a lukewarm soap solution or a commercial mild detergent.

Seat belt strap must never be cleaned chemically or dyed.

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The automatic reel and seat belt strap must be replaced in the event of:

1. creasing
2. unravelling
3. pinches
4. cracks and tears
5. traces of melting
6. Traces of wear on the coating of the buckle tongue or on the seat belt guide loop.

Check the lower strap (belt tensioner):

To fasten a seat belt, the buckle tongue should insert easily and engage in the seat belt buckle with an audible click.

When the "Red button" is pressed, the buckle tongue must be ejected from the seat belt buckle under spring pressure.

If the seat belt buckle cover is missing or damaged, the lower strap must be replaced.

Replace the activated belt tensioner including the complete seat belt with seat belt height adjustment and mounting bolts and check the

- Belt coding on the body
- Belt coding on the seat
- seat rails.
- Seat structure

Criteria for an activated mechanical belt tensioner:

- very low position of seat belt buckle (comparisons with new part).

Criteria for an activated pyrotechnic belt tensioner:

- very low position of seat belt buckle (comparisons with new part).
- Airbag indicator light permanently lit: read out airbag system fault memory.

The belt tensioners can be activated under certain circumstances even when the seat is not occupied. If it is definite that the seat belt system was not used (seat was not occupied), there is no need to replace the following components after a check.

- Upper seat belt
- Add-on parts (seat belt height adjustment, screws)
- Belt coding on the body
- Belt coding on the seat
- seat rails.

Checking end fitting pretensioner:

Replace the triggered end fitting pretensioner including the complete seat belt with seat belt height adjustment, lower strap and mounting bolts and check the

- Belt coding on the body
- Belt coding on the seat
- seat rails.
- Seat structure

Criteria for a triggered end fitting pretensioner:

- A triggered end fitting pretensioner can be recognised from the wrapped seat belt strap around the shaft.
- Airbag indicator light permanently lit: read out airbag system fault memory.

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72 11 ... Checking automatic seat belt

General considerations when checking seat belts:

The seat belts must be checked after an accident.

For the check, you should start by trying to get information on which seats in the vehicle involved in the accident were occupied. If this is not possible, check *all* the seat belts in the vehicle and replace them if necessary.

In the event of deformations on the vehicle, you must subject the components of the restraint system affected in this area such as e.g.

- Seat belt
- Anchor fitting tensioner
- Seat belt height adjustment
- Belt buckle tensioner
- Triggering sensors
- etc.

to a function check and a visual inspection.

If you are in any doubt as to the unimpaired operability of restraint system components, these components must be replaced in the interests of safety!

If a seat belt has to be replaced following an accident (e.g. in the event of a frontal and/or oblique collision with permanently deformed impact absorbers/deformation elements or cross-members), the complete seat belt must be replaced! The complete seat belt comprises:

- Upper seat belt
- Lower strap
- Anchor fitting tensioner
- Seat belt buckle (buckle tensioner)
- Seat belt height adjustment
- Mounting bolts of all components

The following must also be checked and if necessary replaced:

- seatbelt mounts on the vehicle body
- Seatbelt mounts on the seat
- seat rails.
- Seat structure (frame, etc.)

Alignment tests on the seat and the seat rails are not permitted!

The following explanations and the checklist for the automatic seat belt can provide help.

An unusable seat belt or a seat belt worn in a serious accident should be destroyed immediately after removal to guarantee that it can not be used again.

Checking automatic reel and seat belt strap:

The automatic reel has two independent activation systems for seat-belt locking.

The first activation system locks the automatic reel when driving quickly around curves, driving in tight curves, on extreme inclinations (vehicle rolls over) and during sharp braking or crash.

To check, the seat backrest must be placed in the upright position and both hands held in a supporting position close to the steering wheel. The brakes are then operated with full intensity while driving on a dry roadway and at double walking speed.

The seat belt must lock.

The second activation system provides additional safety and is controlled by inertia mass.

If the reel locks when the seat belt strap is pulled out suddenly, this system is also OK.

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In addition, the automatic electric reel (EMA) must eliminate belt slack.

Check whether an attempt was made to eliminate belt slack:

- Enter, close doors and latch seat belt buckle contact, left
- EMA eliminates belt slack

If belt slack was not eliminated, the procedure described below must be followed:

- Allow vehicle to assume complete sleep mode and repeat the functional check.
- All doors must be closed!
- EMA, left, must be installed and connected correctly.
- Work through all fault entries before the functional check is carried out again.

Replace defective or actuated automatic electric reels.

Automatic reel does not require servicing and must not be opened.

Precondition for complete, problem-free retraction of seat belt straps:

- The seat belt straps must not be twisted!
- The seat belt straps must not be damaged!

When placed to one side, the seat belt straps of the front seats must retract fully.

With the seat belt straps in the rear seat bench, a small remaining loop is acceptable due to increased friction between the strap and the rear seat bench cover if:

- this remaining loop is fully retracted when the seat belt strap is reguided.

Seat belt strap should only be cleaned with a lukewarm soap solution or a commercial mild detergent.

Seat belt strap must never be cleaned chemically or dyed.

The automatic reel and seat belt strap must be replaced in the event of:

1. creasing
2. unravelling
3. pinches
4. cracks and tears
5. traces of melting
6. traces of wear on coating of buckle tongue or on seat belt guide loop.

Checking lower strap (belt buckle tensioner):

To fasten a seat belt, the buckle tongue should insert easily and with a loud click in the lock.

When the "Red button" is pressed, the buckle tongue must be ejected from the lock under spring pressure.

If the seat belt buckle cover is missing or damaged, the lower strap must be replaced.

Replace the triggered belt buckle tensioner including the complete seat belt with seat belt height adjustment and mounting bolts and check the

- seatbelt mounts on the vehicle body
- Seatbelt mounts on the seat
- seat rails.
- Seat structure

Criteria for a triggered mechanical belt buckle tensioner:

- very low position of seat belt buckle (comparisons with new part).

Criteria for a triggered pyrotechnical belt buckle tensioner:

- very low position of seat belt buckle (comparisons with new part).
- Airbag indicator light permanently lit: read out airbag system fault memory.

The belt buckle tensioners can be triggered under certain circumstances even when the seat is not occupied.

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If it is definite that the seat belt system was not used (seat was not occupied), there is no need to replace the

- Upper seat belt
- Add-on parts (seat belt height adjustment, screws)
- seatbelt mounts on the vehicle body
- Seatbelt mounts on the seat
- seat rails.

after a check.

Checking end fitting pretensioner:

Replace the triggered end fitting pretensioner including the complete seat belt with seat belt height adjustment, lower strap and mounting bolts and check the

- seatbelt mounts on the vehicle body
- Seatbelt mounts on the seat
- seat rails.
- Seat structure

Criteria for a triggered end fitting pretensioner:

- A triggered end fitting pretensioner can be recognised from the wrapped seat belt strap around the shaft.
- Airbag indicator light permanently lit: read out airbag system fault memory.

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72 11 ... Checklist for front seat

Event		Check	Action
Has at least one belt tensioner and/or one side airbag been activated?	**Yes**	**Check 1 (when installed):** Check all seat adjustment options of both front seats. There must be no stiff movement, sticking or other functional problems or noises across the entire adjustment range of all the seat adjustment options. Check head restraints for damage. Check crash-active headrest for activation. **Only 2-door model:** Check backrest lock. Backrest must unlock and lock easily without any great physical effort.	If components are OK with regard to checks 1 and 2, only replace activated belt tensioner or side airbag. Otherwise, replace faulty parts on the seat/body. Replace belt tensioner, seat belt and, if necessary, side airbag.
		Check 2 (when dismounted): Check for deformation/damage on the following components: 1. All seat cross members on the body 2. Threaded support sleeves in the seat cross members 3. End fittings on the seat mechanism. Check for visible damage or deformation.	
	No	Check all adjustment options of the head restraints. Check crash-active headrest for activation.	Replace faulty parts.
Only seat with integrated seat belt:			
Does the backrest indicator light turn on when the backrest is locked and also when the backrest is shaken?	**Yes**	Check microswitch of backrest lock and renew if necessary. Check electrical lines and repair if necessary.	If there is still a fault, replace the entire seat
	No	No further action necessary.	

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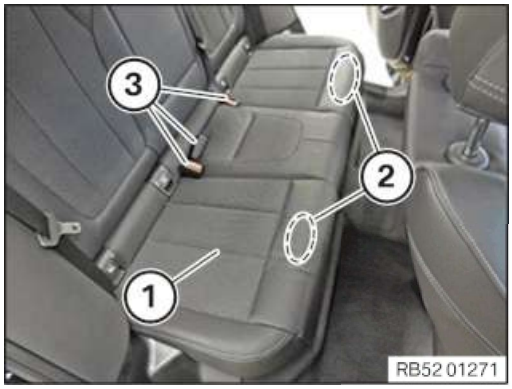
72 11 900 Replace front left upper seat belt

NOTICE

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

PRELIMINARY WORK

1 – Removing seat bench



- Disengage the seat bench (1) in area (2) in an upward direction.
- Feed out the seat belt buckle (3) from the seat bench.

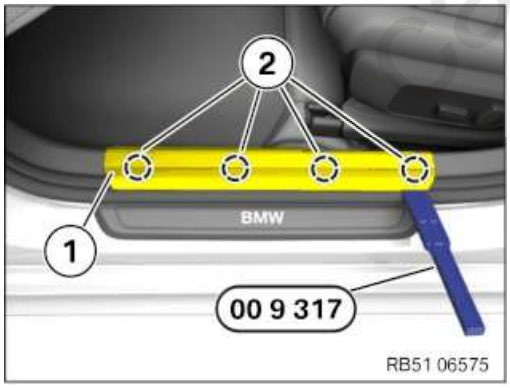


- Pull the seat bench (1) further forward.
- Release screw (2) on the end fitting and guide out belt (3).

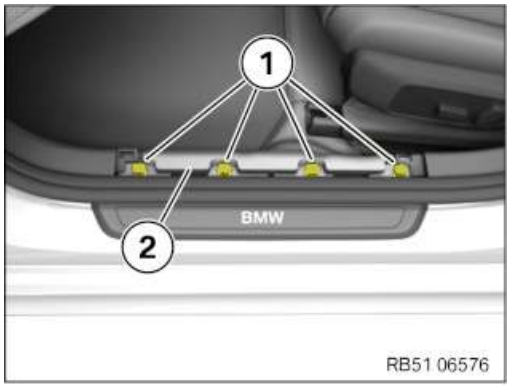
Note: If there is a belt lock on the belt, the screw on the end fitting must not be released.

- If necessary, disconnect the present plug connections.
- Lift the seat bench (1) out of the vehicle.

2 – Remove door sill cover strip



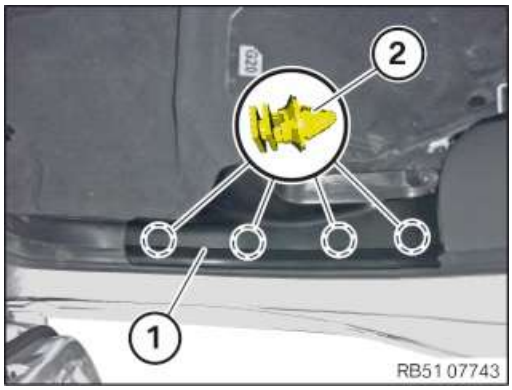
- Detach the door sill cover strip(1) using the special tool 0 490 534 (00 9 317) from the clips (2) in the floor panel.



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

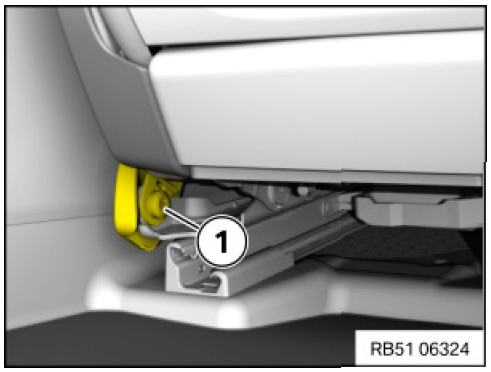
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3 – Removing rear entrance cover strip

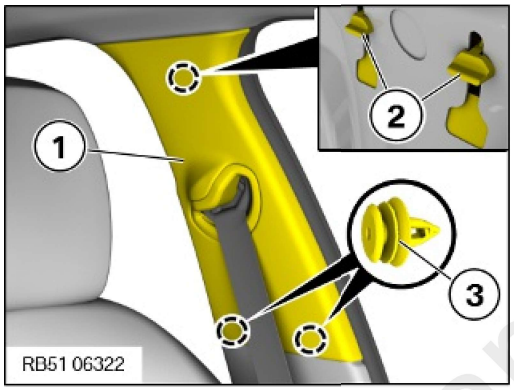


- Release the door sill cover strip (1) using the special tool 0 490 534 (00 9 317) from the clips (2) in the floor panel.
- If required, remove the clips (2) remaining in the body and mount them on the door sill cover strip.

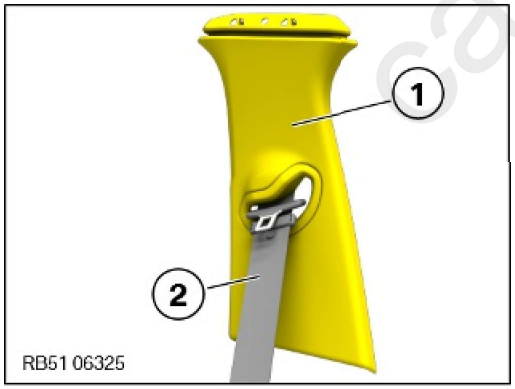
4 – Remove the B-pillar trim panel



- Fully position the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).



- Unclip clips (3).
- Feed B-pillar trim panel (1) out of the front and rear lip of edge protections and the guides (2).



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

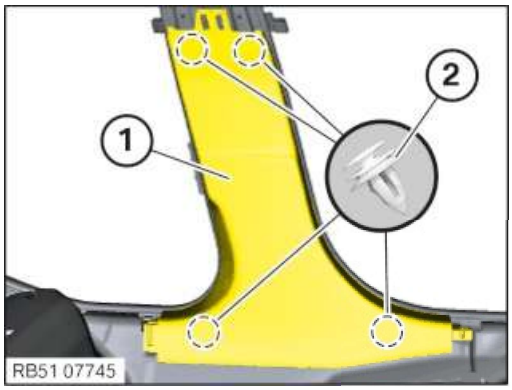
5 – Disconnecting all battery earth leads

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- See additional information.

6 – Remove the lower B-pillar trim panel



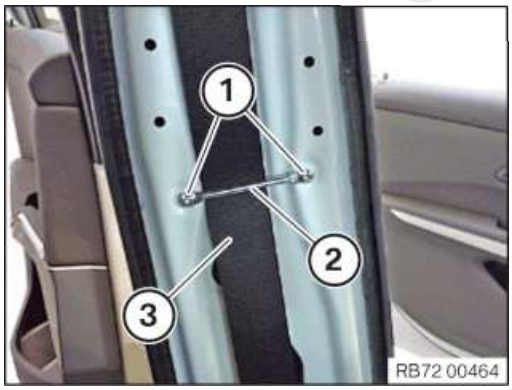
- Unclip the B-pillar trim panel (1) with the special tool 0 496 569 (00 9 325) at the clips (2).
- Feed out and remove the B-pillar trim panel (1) at the front and rear edge protection.

MAIN WORK

7 – Removing the front upper seat belt

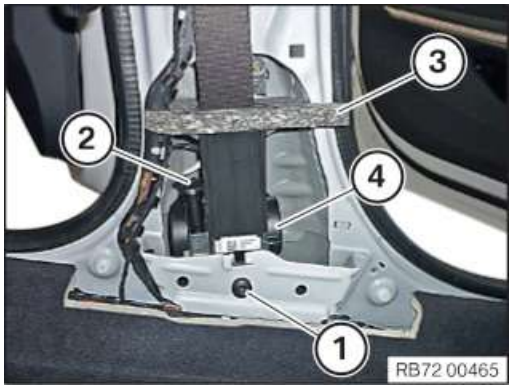


- Loosen screw (1).
- Remove seat belt guide loop (2).



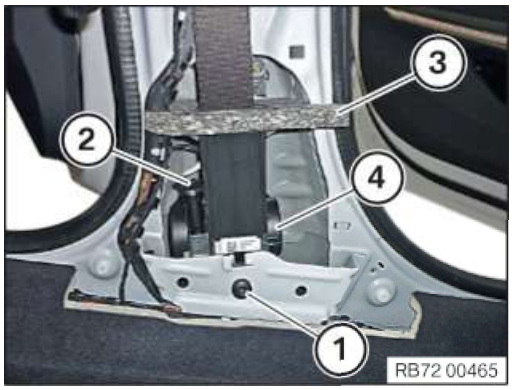
- Loosen screws (1).
- Remove the slide bar (2).
- Remove seat belt (3).

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- Loosen screw (1).
- Unlock plug connection (2) and disconnect.
- Thread out the inertia reel (4).
- Thread out the foam part (3).

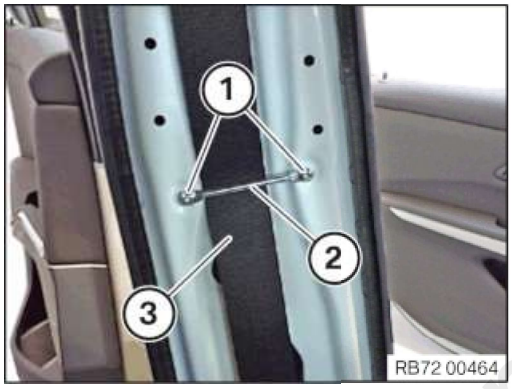
8 – Installing the front upper seat belt



- Feed in the foam part (3) and position correctly.
- Feed in the belt retractor (4) and position correctly.
- Connect connectors (2) and lock.
- Tighten down screw (1).

Inertia reel to body

Screw		Tightening torque	42 Nm



- Position seat belt (3) correctly.
- Position the slide bar (2) correctly.
- Tighten the screws (1).

Slide bar to body (B-pillar)

Screw		Tightening torque	4 Nm



- Position the seat belt guide loop (2) correctly.
- Tighten down screw (1).

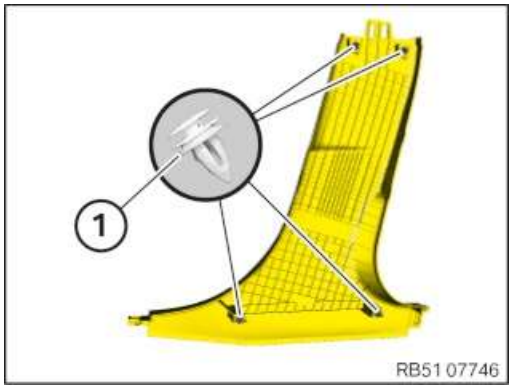
Seat belt guide loop on body

Screw		Tightening torque	42 Nm

POSTPROCESSES

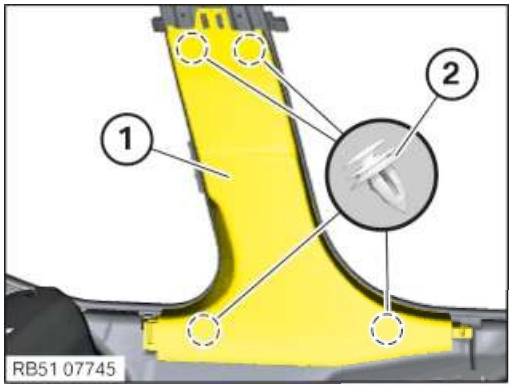
9 – Installing the lower B-pillar trim panel

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- Check the clips (1) for damage.

  Replace broken for missing clips (1).



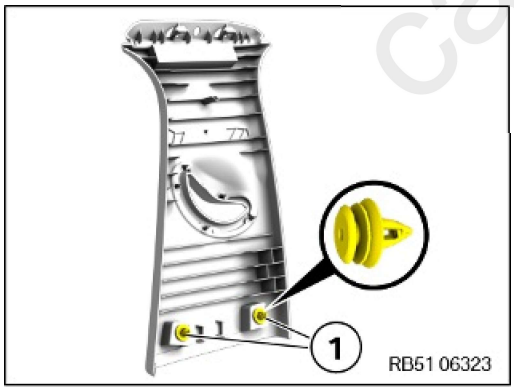
- Insert and correctly position B-pillar trim panel (1) on the front and rear edge protection.
- Clip in the B-pillar trim panel (1) at the clips (2).

10 – Disconnecting all battery earth leads

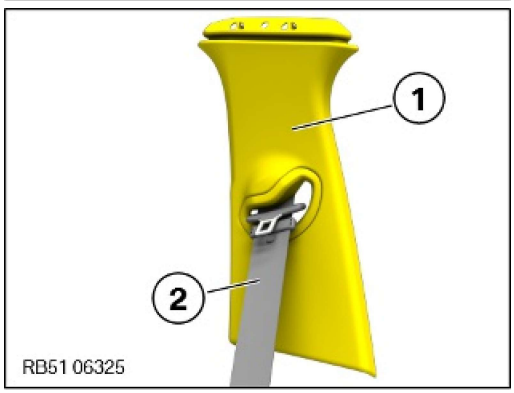


- See additional information.

11 – Install the B-pillar trim panel

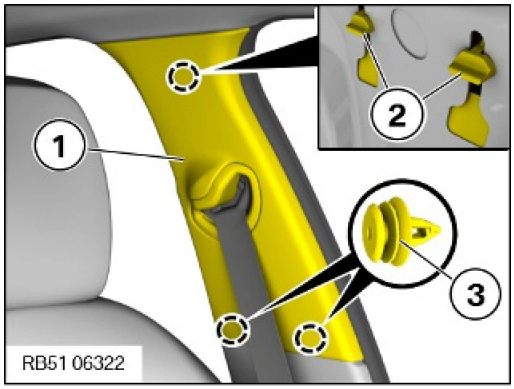


- Check the clips (1) for damage and renew if necessary.

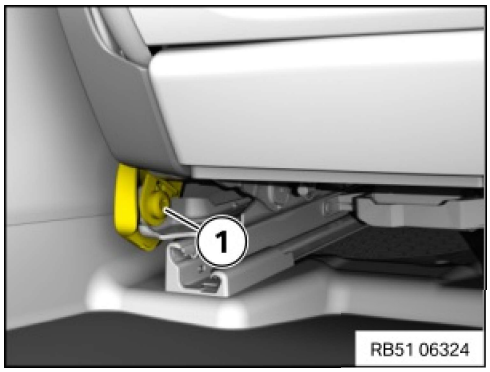


- Guide upper seat belt (2) in B-pillar trim panel (1).

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- Insert B-pillar trim panel (1) into guides (2) and under the front and rear lips of edge protection.
- Clip in the B-pillar trim panel (1) with the clips (3).



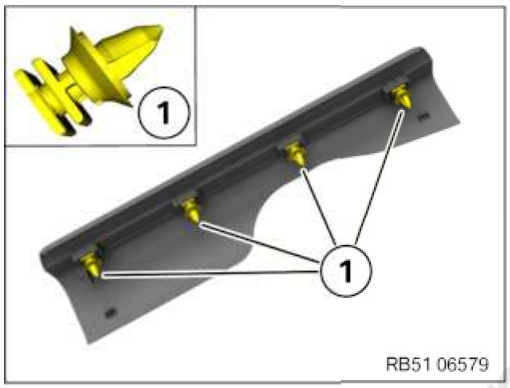
- Fully position the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

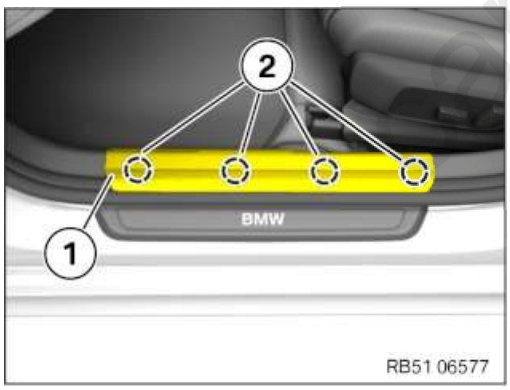
End fitting to seat mechanism

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

12 – Install the door sill cover strip

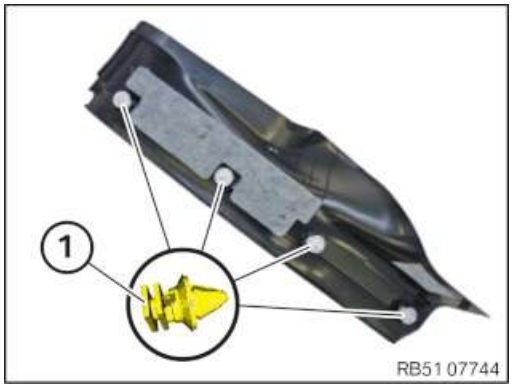


- Check the clips (1) for damage and renew if necessary.



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

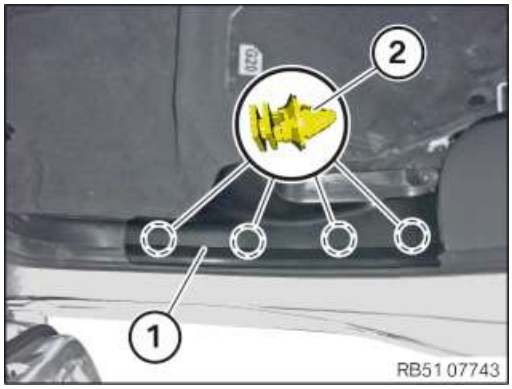
13 – Installing the rear door sill cover strip



- Check the clips (1) for damage.

  Replace broken for missing clips (1).

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- Position the door sill cover strip (1) correctly and clip in at the clips (2).

14 – Installing rear seat bench



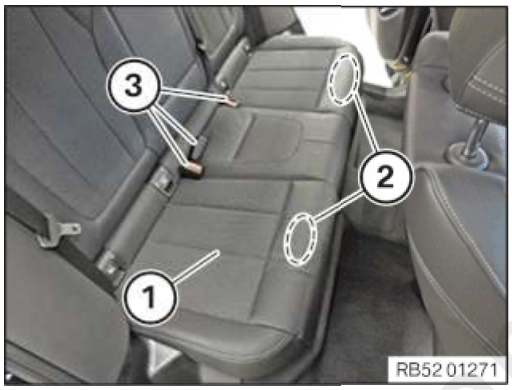
- Lift the seat bench (1) into the vehicle.
- Insert the seat belt (3).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear upper seat belt to bottom body

Screw	Renew screw.	Tightening torque	42 Nm

- Connect available connectors.



- Insert seat bench (1).
- Thread seat belt buckles (3) into the seat bench.
- Engage the seat bench (1) in the area (2).

Additional Information

Overview of Tightening Torques

Inertia reel to body — Used in step 8

Screw		Tightening torque	42 Nm

Slide bar to body (B-pillar) — Used in step 8

Screw		Tightening torque	4 Nm

Seat belt guide loop on body — Used in step 8

Screw		Tightening torque	42 Nm

End fitting to seat mechanism — Used in step 11

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

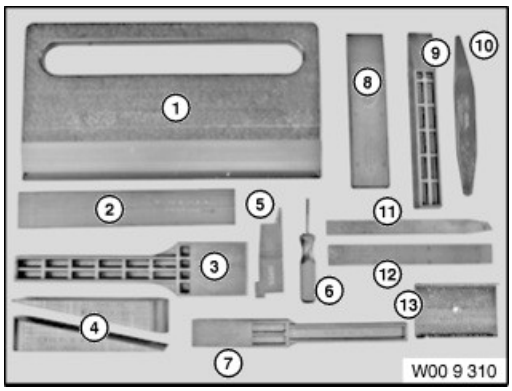
Rear upper seat belt to bottom body — Used in step 14

Screw	Renew screw.	Tightening torque	42 Nm

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Overview of Special Tools

0 490 534 (00 9 317) Wedge



Common	Used in step 23
Usage	(Trim wedge) Replaced by special tool 00 9 325 from 11/2008 (quality improvement due to new material) Replaced by 00 9 325 (0 496 569)
Included in the tool or work	0 490 527
Storage location	
Replaced by	
In connection with	
SI-Number	

0 496 569 (00 9 325) Wedge



Common	Used in step 6
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	510
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	510
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
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61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	510
61 20 900 Disconnecting and connecting battery earth lead	510
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61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510
61 20 900 Disconnecting and connecting battery earth lead	510

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72 11 432 Replace rear centre lower strap

PRELIMINARY WORK

1 – Removing seat bench



- Disengage the seat bench (1) in area (2) in an upward direction.
- Feed out the seat belt buckle (3) from the seat bench.



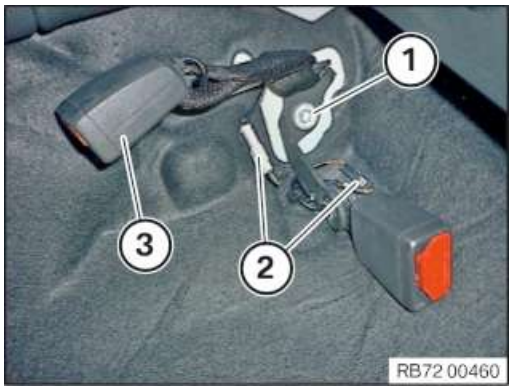
- Pull the seat bench (1) further forward.
- Release screw (2) on the end fitting and guide out belt (3).

Note: If there is a belt lock on the belt, the screw on the end fitting must not be released.

- If necessary, disconnect the present plug connections.
- Lift the seat bench (1) out of the vehicle.

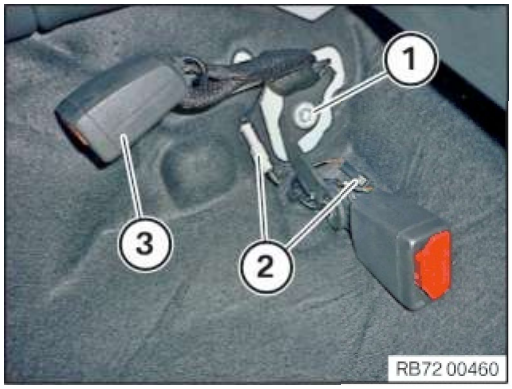
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2 – Remove rear middle lower strap



- Loosen screw (1).
- Unlock and disconnect plug connections (2).
- Feed rear central lower seat belt (3) out.

3 – Installing the central rear lower strap



TECHNICAL INFORMATION

Component is encoded against incorrect assembly.

- Feed rear centre lower seat belt (3) and position correctly.
- Connect connectors (2) and lock.
- Tighten down screw (1).

Lower strap to body

Screw	Renew screw.		42 Nm

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4 – Installing rear seat bench



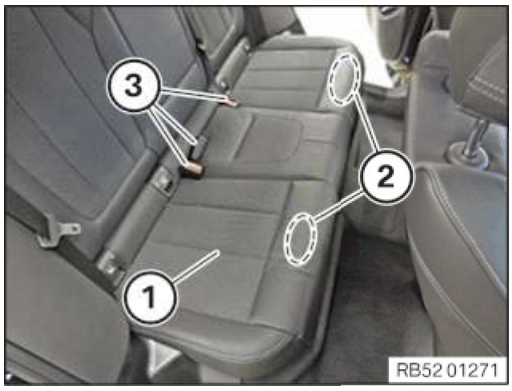
- Lift the seat bench (1) into the vehicle.
- Insert the seat belt (3).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear upper seat belt to bottom body

Screw	Renew screw.	Tightening torque	42 Nm

- Connect available connectors.



- Insert seat bench (1).
- Thread seat belt buckles (3) into the seat bench.
- Engage the seat bench (1) in the area (2).

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Additional Information

Overview of Tightening Torques

Lower strap to body Used in step 3

Screw	Renew screw.		42 Nm

Rear upper seat belt to bottom body Used in step 4

Screw	Renew screw.	Tightening torque	42 Nm

72 11 422 Replace rear centre upper seat belt

PRELIMINARY WORK

1 – Removing seat bench



- Disengage the seat bench (1) in area (2) in an upward direction.
- Feed out the seat belt buckle (3) from the seat bench.

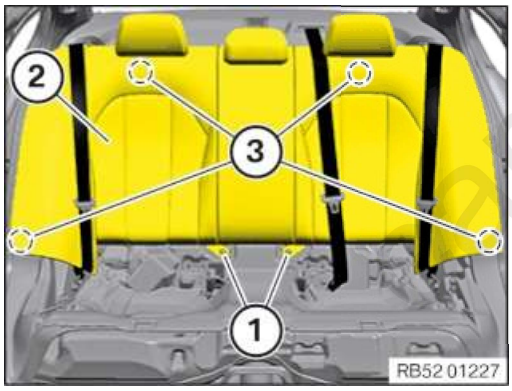


- Pull the seat bench (1) further forward.
- Release screw (2) on the end fitting and guide out belt (3).

Note: If there is a belt lock on the belt, the screw on the end fitting must not be released.

- If necessary, disconnect the present plug connections.
- Lift the seat bench (1) out of the vehicle.

2 – Remove rear seat backrest



- Loosen screws (1).
- Detach the rear seat backrest (2) upwards out of the guides (3).
- Guide the rear seat backrest (2) out of the seat belts and remove it.

3 – Remove both C-pillar trim panels

NOTICE

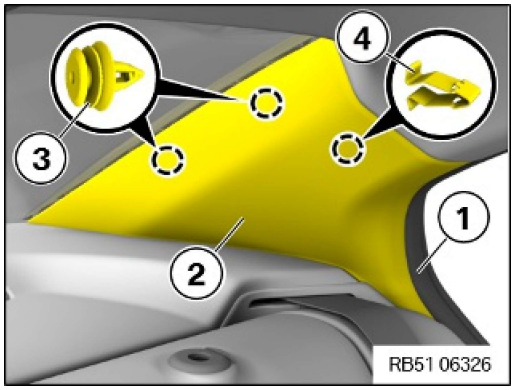
Description is for left component only. Procedure on the right side is identical.

▸ **Remove C-pillar trim panel**

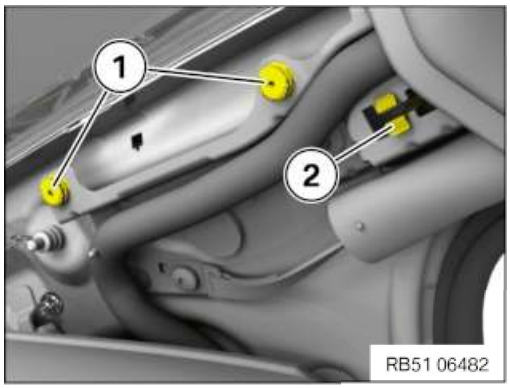
NOTICE

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

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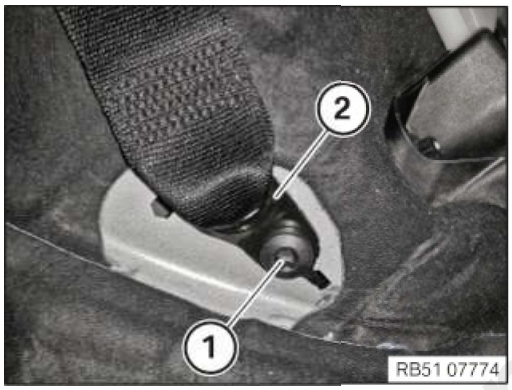


- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).



- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

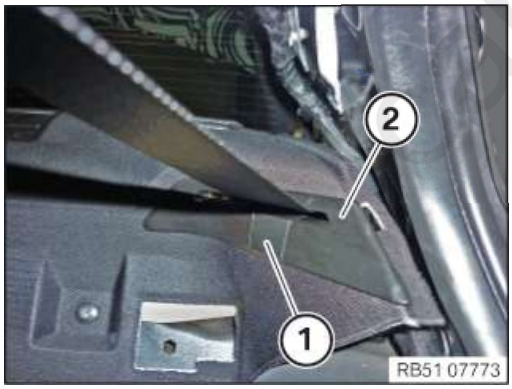
4 – Remove the trim panel for the storage shelf



NOTICE

Perform the operations on the left and right side.

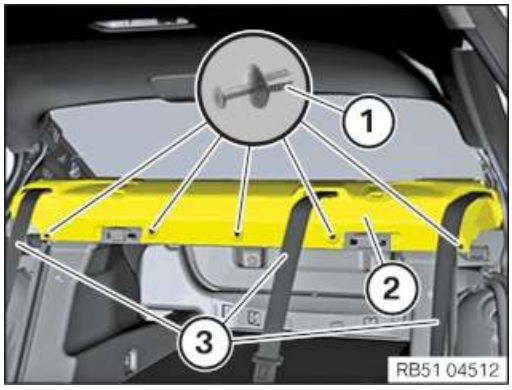
- Release screws (1) on end fitting (2) at rear left and right.
- Feed out the end fitting (2) from the body at rear left and right.



NOTICE

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

- Unclip the cover (1) forwards.
- Unclip the outer belt feed trim (2) starting from front and feed it out.

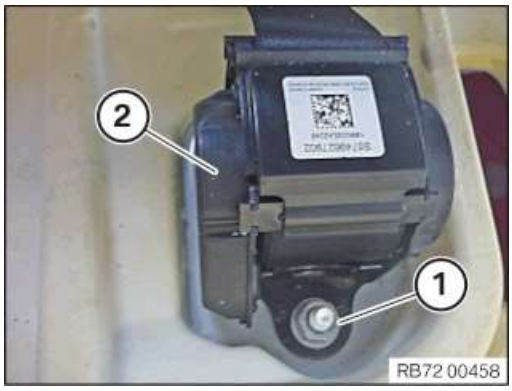


- Loosen the expanding rivet (1).
- Lift the trim panel for the storage shelf (2) a little and disconnect the underlying plug connections.
- Remove the trim panel for the storage shelf (2) to the front and feed out the seat belt (3).

mdiag.com

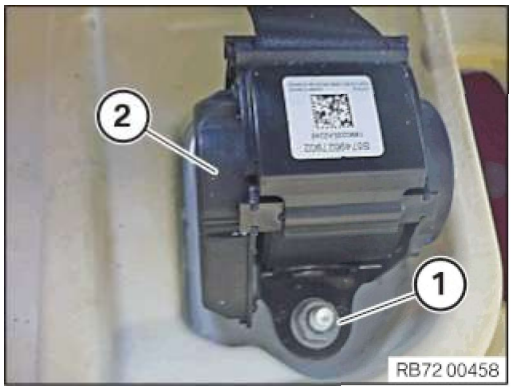
MAIN WORK

5 – Remove upper seat belt on rear centre



- Loosen nut (1).
- Thread out the inertia reel (2).

6 – Install the rear centre upper seat belt



TECHNICAL INFORMATION

Component is encoded against incorrect assembly.

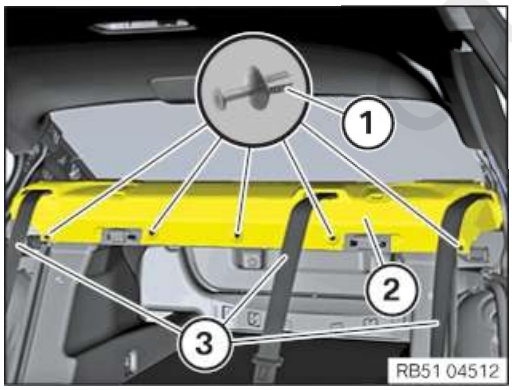
- Feed in the belt retractor (2) and position correctly.
- Tighten nut (1).

Rear centre inertia reel to body

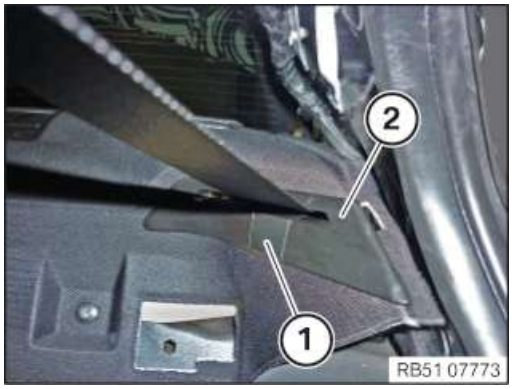
Nut		Tightening torque	42 Nm

POSTPROCESSES

7 – Install the trim panel for the storage shelf



- Install the trim panel for the storage shelf (2) and feed in the seat belts (3).
- Lift the trim panel for the storage shelf (2) a little and connect the underlying connectors.
- Feed in the trim panel for the storage shelf (2) on the rear guide and position it correctly.
- Mount the expanding rivets (1).

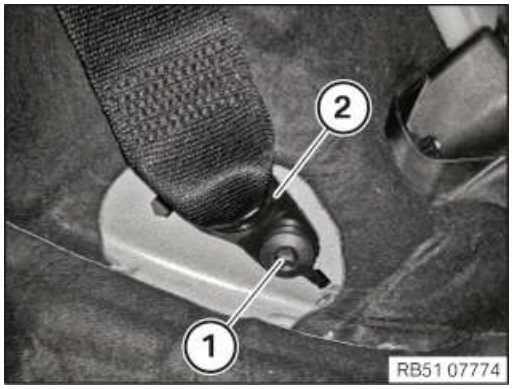


NOTICE

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

- Insert the belt feed trim (2).
- Clip in the cover (1).

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NOTICE

Perform the operations on the left and right side.

- Insert the end fitting (2) on the left and right into the body.
- Renew screws (1).

  Parts: Bolts
- Tighten screws (1) on left and right.

End fitting to body

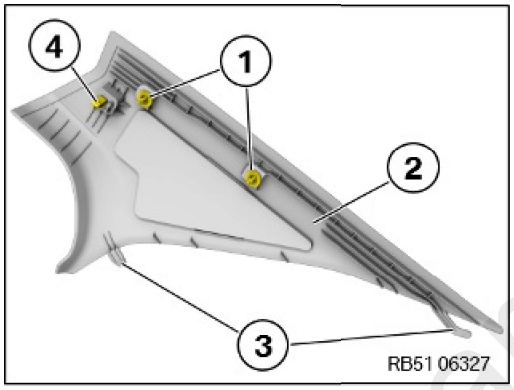
M10	Renew screw.		42 Nm

8 – Install both C-pillar trim panels

NOTICE

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

▸ **Installing C-pillar trim panel**



Check

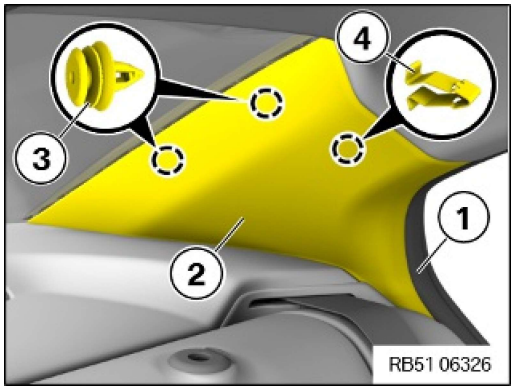
- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .



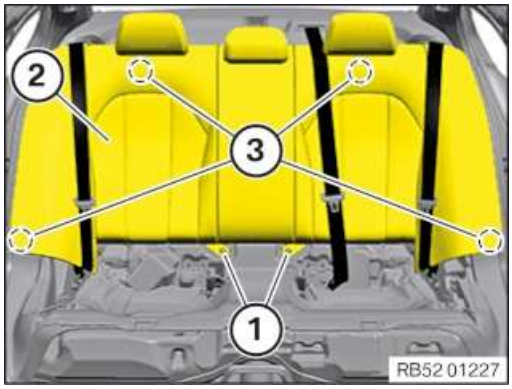
NOTICE

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

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

9 – Remove rear seat backrest

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- Guide the rear seat backrest (2) into the seat belts and position it.
- Attach the rear seat backrest (2) in the guides (3) from the top.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Rear seat backrest on body

Screw	Renew screw.	Tightening torque	42 Nm

10 – Installing rear seat bench



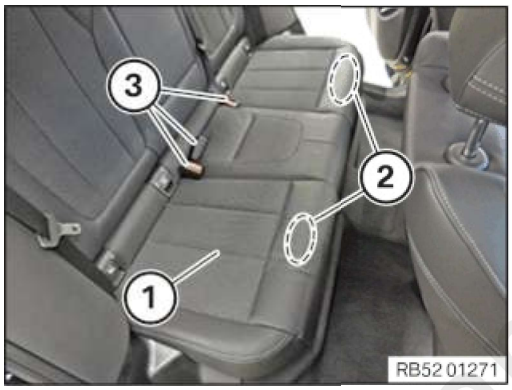
- Lift the seat bench (1) into the vehicle.
- Insert the seat belt (3).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear upper seat belt to bottom body

Screw	Renew screw.	Tightening torque	42 Nm

- Connect available connectors.



- Insert seat bench (1).
- Thread seat belt buckles (3) into the seat bench.
- Engage the seat bench (1) in the area (2).

Additional Information

Overview of Tightening Torques

Rear centre inertia reel to body — Used in step 6

Nut		Tightening torque	42 Nm

End fitting to body — Used in step 7

M10	Renew screw.		42 Nm

Rear seat backrest on body — Used in step 9

Screw	Renew screw.	Tightening torque	42 Nm

Rear upper seat belt to bottom body — Used in step 10

Screw	Renew screw.	Tightening torque	42 Nm

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72 11 430 Replace rear left lower strap

PRELIMINARY WORK

1 – Removing seat bench



- Disengage the seat bench (1) in area (2) in an upward direction.
- Feed out the seat belt buckle (3) from the seat bench.



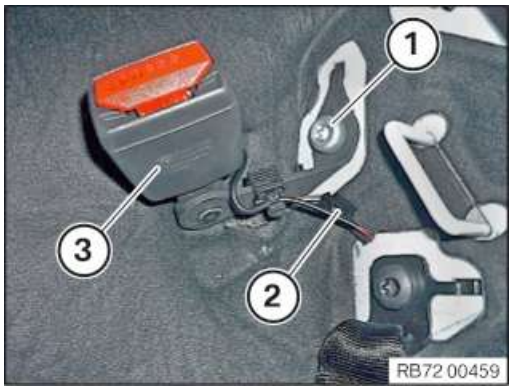
- Pull the seat bench (1) further forward.
- Release screw (2) on the end fitting and guide out belt (3).

Note: If there is a belt lock on the belt, the screw on the end fitting must not be released.

- If necessary, disconnect the present plug connections.
- Lift the seat bench (1) out of the vehicle.

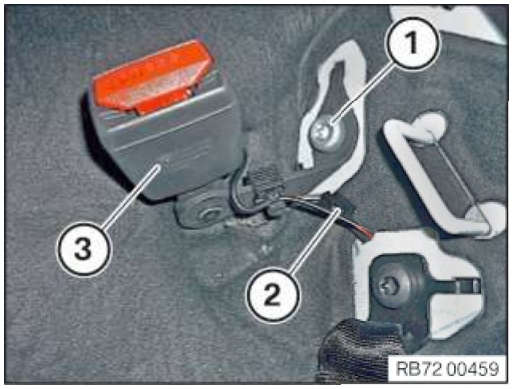
cardiagn.com

2 – Remove rear left lower strap



- Loosen screw (1).
- Unlock plug connection (2) and disconnect.
- Feed out lower strap (3).

3 – Install the rear left lower strap



TECHNICAL INFORMATION

Component is encoded against incorrect assembly.

- Guide in the lower strap (3) and position correctly.
- Tighten down screw (1).

Lower strap to body

Screw	Renew screw.		42 Nm

- Connect connectors (2) and lock.

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4 – Installing rear seat bench



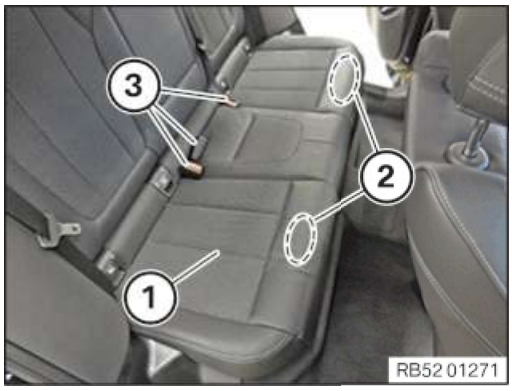
- Lift the seat bench (1) into the vehicle.
- Insert the seat belt (3).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear upper seat belt to bottom body

Screw	Renew screw.	Tightening torque	42 Nm

- Connect available connectors.



- Insert seat bench (1).
- Thread seat belt buckles (3) into the seat bench.
- Engage the seat bench (1) in the area (2).

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Additional Information

Overview of Tightening Torques

Lower strap to body Used in step 3

Screw	Renew screw.		42 Nm

Rear upper seat belt to bottom body Used in step 4

Screw	Renew screw.	Tightening torque	42 Nm

72 11 420 Replace rear left upper seat belt

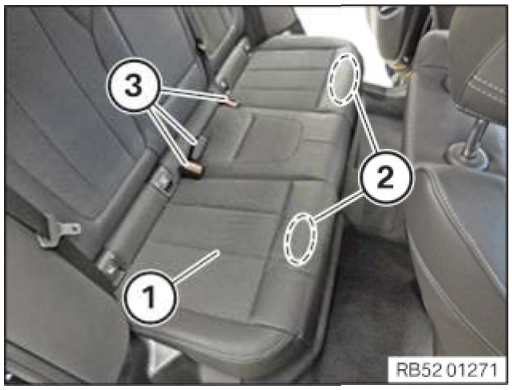
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

2 – Removing seat bench



- Disengage the seat bench (1) in area (2) in an upward direction.
- Feed out the seat belt buckle (3) from the seat bench.

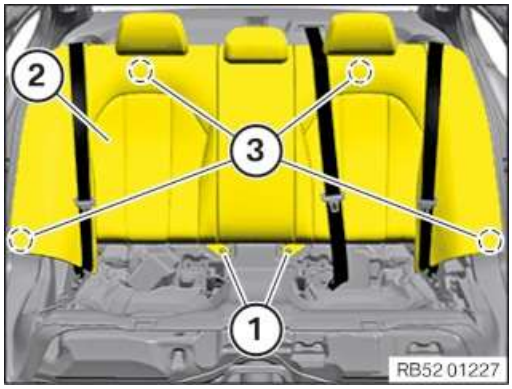


- Pull the seat bench (1) further forward.
- Release screw (2) on the end fitting and guide out belt (3).

Note: If there is a belt lock on the belt, the screw on the end fitting must not be released.

- If necessary, disconnect the present plug connections.
- Lift the seat bench (1) out of the vehicle.

3 – Remove rear seat backrest



- Loosen screws (1).
- Detach the rear seat backrest (2) upwards out of the guides (3).
- Guide the rear seat backrest (2) out of the seat belts and remove it.

4 – Remove both C-pillar trim panels

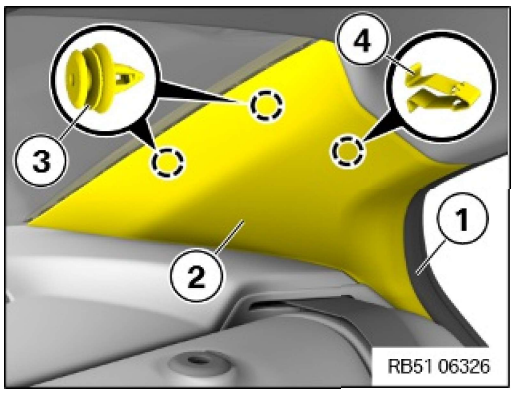
NOTICE

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

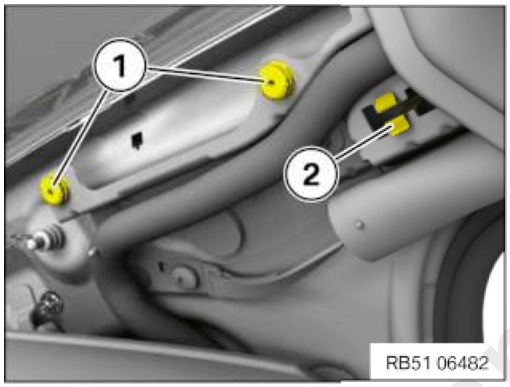
▸ **Remove C-pillar trim panel**

NOTICE

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

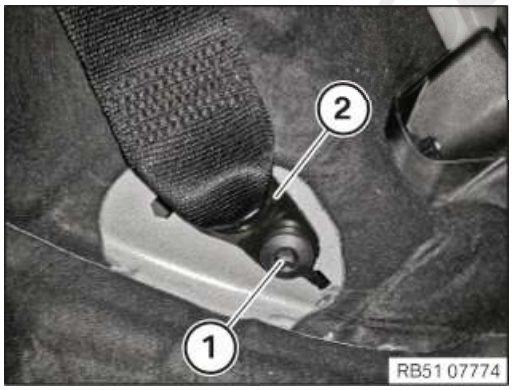


- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).



- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

5 – Remove the trim panel for the storage shelf

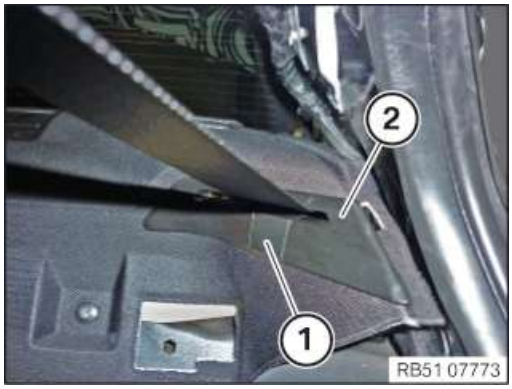


NOTICE

Perform the operations on the left and right side.

- Release screws (1) on end fitting (2) at rear left and right.
- Feed out the end fitting (2) from the body at rear left and right.

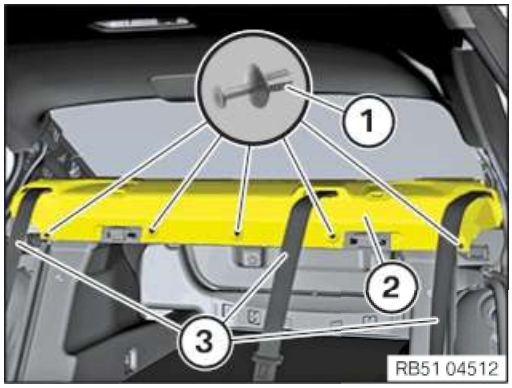
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NOTICE

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

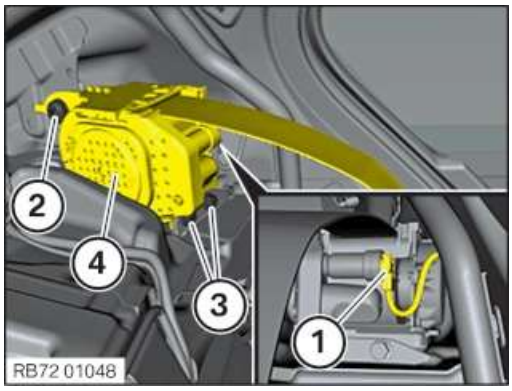
- Unclip the cover (1) forwards.
- Unclip the outer belt feed trim (2) starting from front and feed it out.



- Loosen the expanding rivet (1).
- Lift the trim panel for the storage shelf (2) a little and disconnect the underlying plug connections.
- Remove the trim panel for the storage shelf (2) to the front and feed out the seat belt (3).

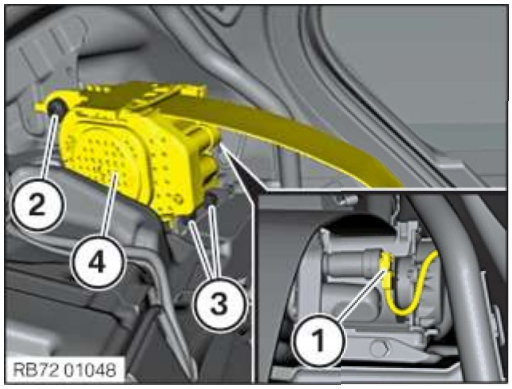
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6 – Remove rear upper seat belt



- Unlock plug connection (1) and disconnect.
- Loosen screw (2).
- Loosen screws (3).
- Feed out inertia reel (4) towards the front.

7 – Install rear upper seat belt



TECHNICAL INFORMATION

Component is encoded against incorrect assembly.

- Feed in and position the inertia reel (4).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear inertia reel to body

M10	Renew screw.		42 Nm

- Tighten down screws (3).

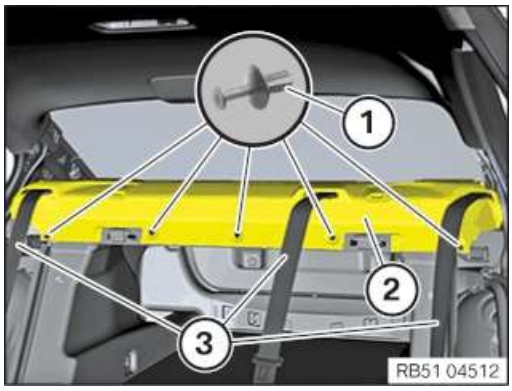
Additional connection of rear inertia reel to body

M6			8 Nm

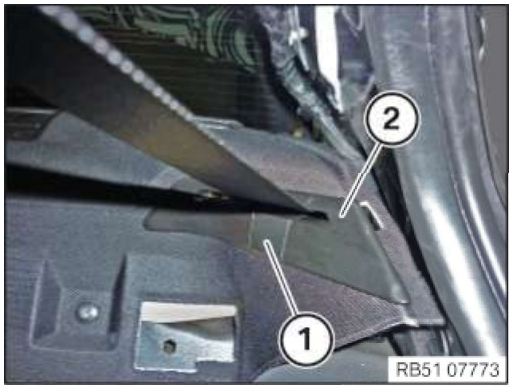
- Connect plug connection (1) and lock.

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8 – Install the trim panel for the storage shelf



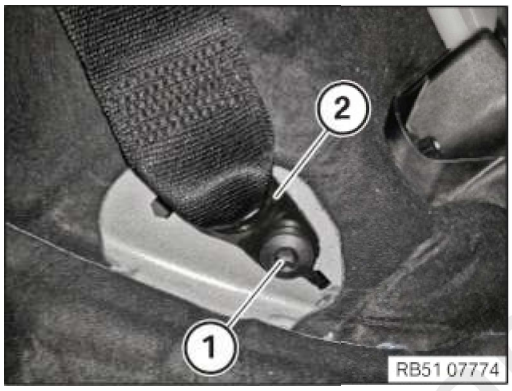
- Install the trim panel for the storage shelf (2) and feed in the seat belts (3).
- Lift the trim panel for the storage shelf (2) a little and connect the underlying connectors.
- Feed in the trim panel for the storage shelf (2) on the rear guide and position it correctly.
- Mount the expanding rivets (1).



NOTICE

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

- Insert the belt feed trim (2).
- Clip in the cover (1).



NOTICE

Perform the operations on the left and right side.

- Insert the end fitting (2) on the left and right into the body.
- Renew screws (1).

  Parts: Bolts
- Tighten screws (1) on left and right.

End fitting to body

M10	Renew screw.		42 Nm

9 – Install both C-pillar trim panels

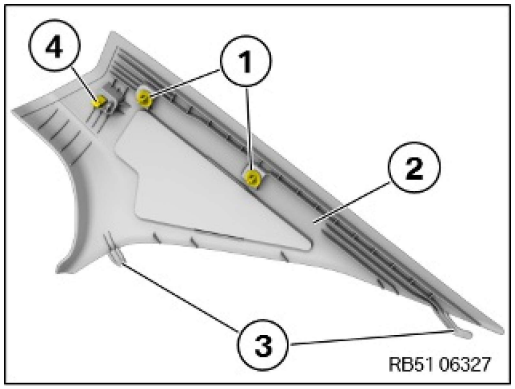
NOTICE

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

▸ **Installing C-pillar trim panel**

Check

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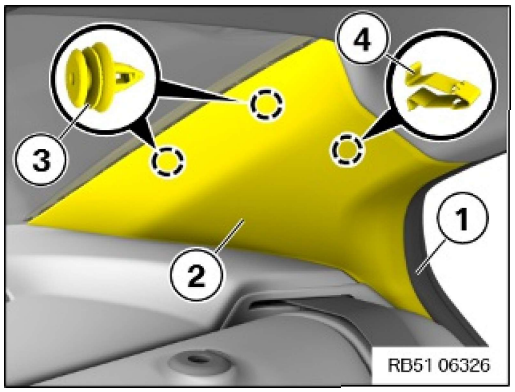
- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .

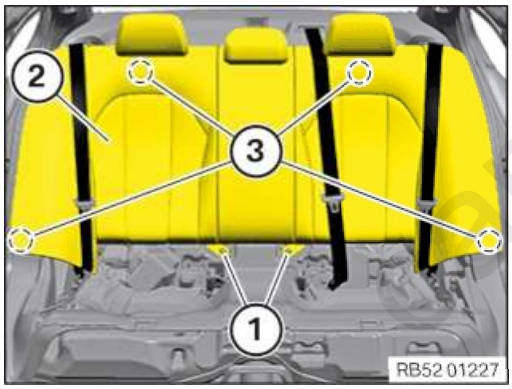


NOTICE

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

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

10 – Remove rear seat backrest



- Guide the rear seat backrest (2) into the seat belts and position it.
- Attach the rear seat backrest (2) in the guides (3) from the top.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Rear seat backrest on body

Screw	Renew screw.	Tightening torque	42 Nm

11 – Installing rear seat bench



- Lift the seat bench (1) into the vehicle.
- Insert the seat belt (3).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear upper seat belt to bottom body

Screw	Renew screw.	Tightening torque	42 Nm

- Connect available connectors.



- Insert seat bench (1).
- Thread seat belt buckles (3) into the seat bench.
- Engage the seat bench (1) in the area (2).

12 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Rear inertia reel to body			Used in step 7
M10	Renew screw.		42 Nm

Additional connection of rear inertia reel to body			Used in step 7
M6			8 Nm

End fitting to body			Used in step 8
M10	Renew screw.		42 Nm

Rear seat backrest on body			Used in step 10
Screw	Renew screw.	Tightening torque	42 Nm

Rear upper seat belt to bottom body			Used in step 11
Screw	Renew screw.	Tightening torque	42 Nm

Links

Repair instructions	**Used in step**
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112

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61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	112
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	112
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
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61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	112
61 20 900 Disconnecting and connecting battery earth lead	112
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61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112

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72 11 431 Replace rear right lower strap

PRELIMINARY WORK

1 – Removing seat bench



- Disengage the seat bench (1) in area (2) in an upward direction.
- Feed out the seat belt buckle (3) from the seat bench.



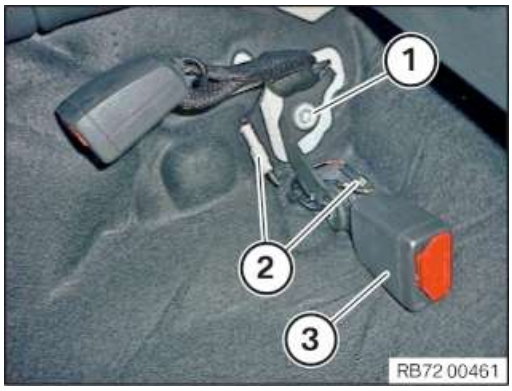
- Pull the seat bench (1) further forward.
- Release screw (2) on the end fitting and guide out belt (3).

Note: If there is a belt lock on the belt, the screw on the end fitting must not be released.

- If necessary, disconnect the present plug connections.
- Lift the seat bench (1) out of the vehicle.

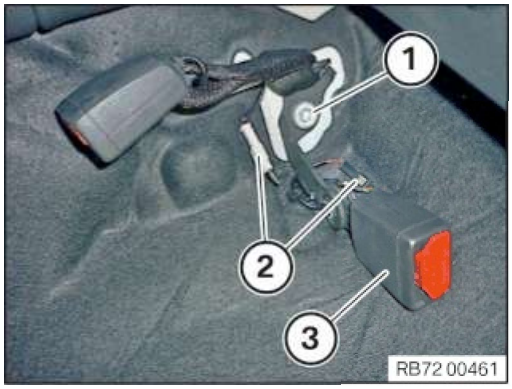
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2 – Remove rear right lower strap



- Loosen screw (1).
- Unlock and disconnect plug connections (2).
- Feed out rear right lower strap (3).

3 – Install the rear right lower strap



TECHNICAL INFORMATION

Component is encoded against incorrect assembly.

- Guide in rear right lower strap (3) and position it correctly.
- Connect connectors (2) and lock.
- Tighten down screw (1).

Lower strap to body

Screw	Renew screw.		42 Nm

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4 – Installing rear seat bench



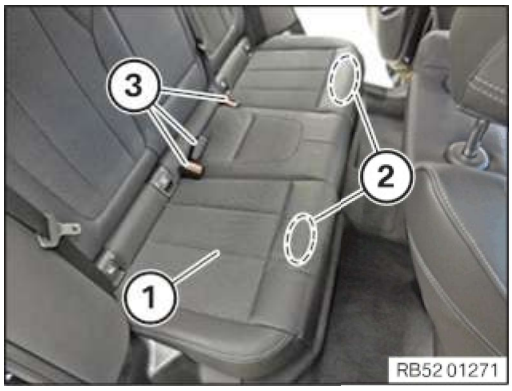
- Lift the seat bench (1) into the vehicle.
- Insert the seat belt (3).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear upper seat belt to bottom body

Screw	Renew screw.	Tightening torque	42 Nm

- Connect available connectors.



- Insert seat bench (1).
- Thread seat belt buckles (3) into the seat bench.
- Engage the seat bench (1) in the area (2).

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Additional Information

Overview of Tightening Torques

Lower strap to body Used in step 3

Screw	Renew screw.		42 Nm

Rear upper seat belt to bottom body Used in step 4

Screw	Renew screw.	Tightening torque	42 Nm

72 11 421 Replace rear right upper seat belt

NOTICE

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

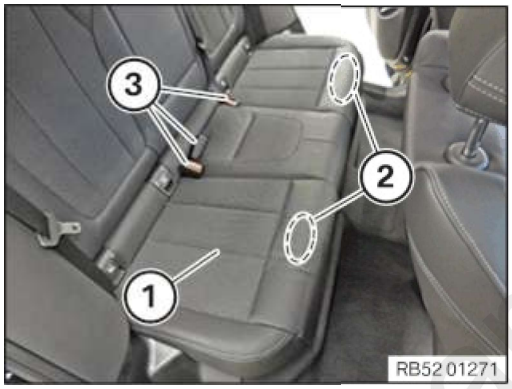
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

2 – Removing seat bench



- Disengage the seat bench (1) in area (2) in an upward direction.
- Feed out the seat belt buckle (3) from the seat bench.

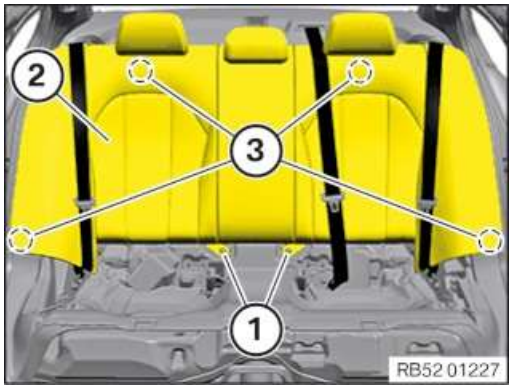


- Pull the seat bench (1) further forward.
- Release screw (2) on the end fitting and guide out belt (3).

Note: If there is a belt lock on the belt, the screw on the end fitting must not be released.

- If necessary, disconnect the present plug connections.
- Lift the seat bench (1) out of the vehicle.

3 – Remove rear seat backrest



- Loosen screws (1).
- Detach the rear seat backrest (2) upwards out of the guides (3).
- Guide the rear seat backrest (2) out of the seat belts and remove it.

4 – Remove both C-pillar trim panels

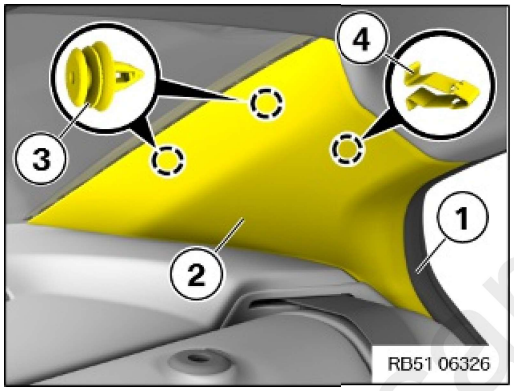
NOTICE

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

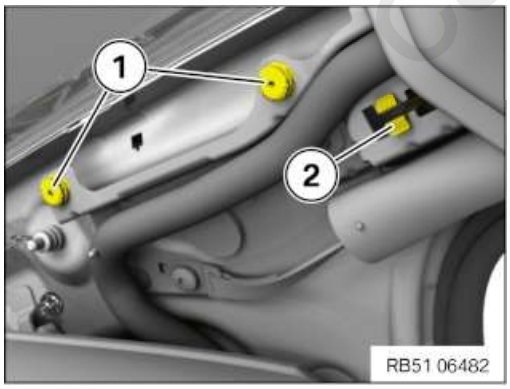
▸ **Remove C-pillar trim panel**

NOTICE

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



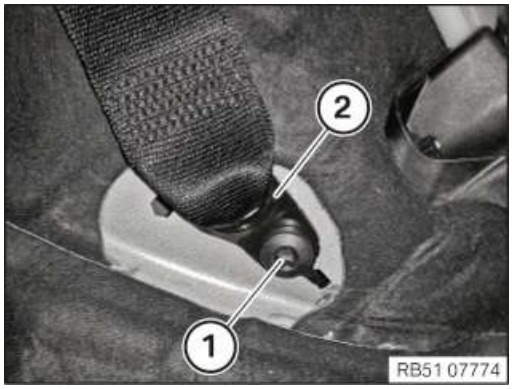
- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).



- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

5 – Remove the trim panel for the storage shelf

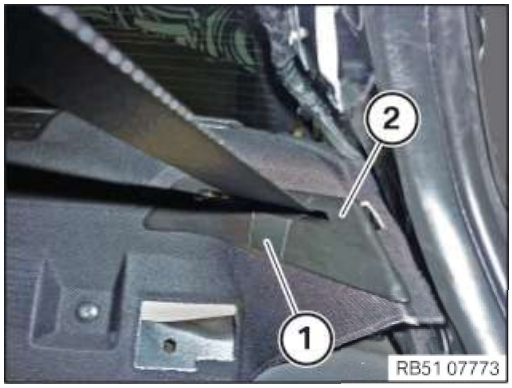
obdiagn.com



NOTICE

Perform the operations on the left and right side.

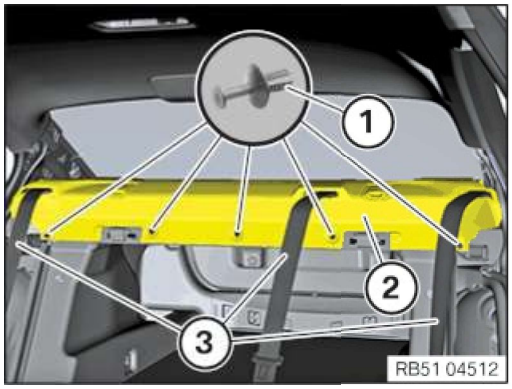
- Release screws (1) on end fitting (2) at rear left and right.
- Feed out the end fitting (2) from the body at rear left and right.



NOTICE

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

- Unclip the cover (1) forwards.
- Unclip the outer belt feed trim (2) starting from front and feed it out.

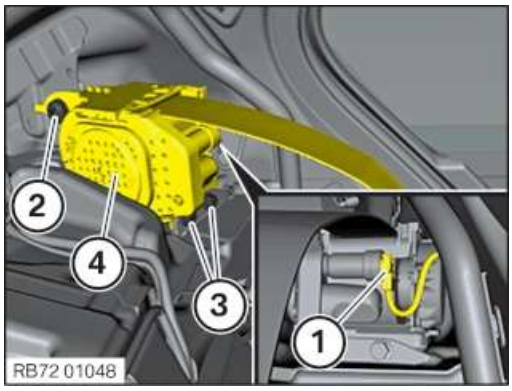


- Loosen the expanding rivet (1).
- Lift the trim panel for the storage shelf (2) a little and disconnect the underlying plug connections.
- Remove the trim panel for the storage shelf (2) to the front and feed out the seat belt (3).

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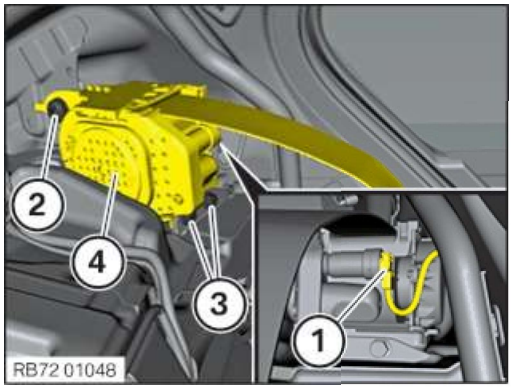
MAIN WORK

6 – Remove rear upper seat belt



- Unlock plug connection (1) and disconnect.
- Loosen screw (2).
- Loosen screws (3).
- Feed out inertia reel (4) towards the front.

7 – Install rear upper seat belt



TECHNICAL INFORMATION

Component is encoded against incorrect assembly.

- Feed in and position the inertia reel (4).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear inertia reel to body

M10	Renew screw.		42 Nm

- Tighten down screws (3).

Additional connection of rear inertia reel to body

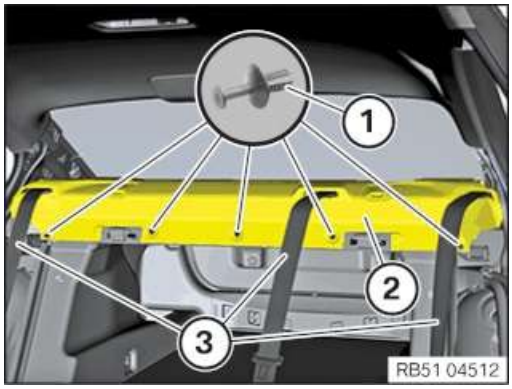
M6			8 Nm

- Connect plug connection (1) and lock.

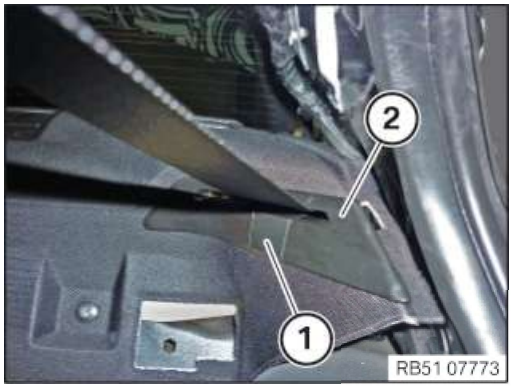
cardiagn.com

POSTPROCESSES

8 – Install the trim panel for the storage shelf



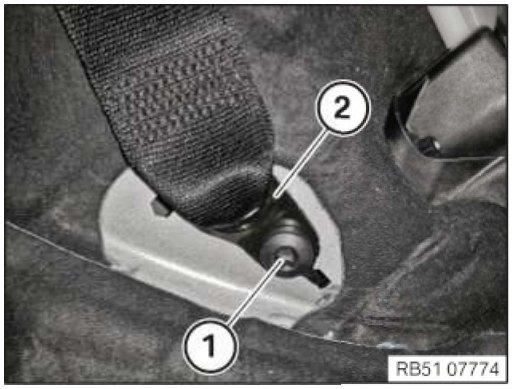
- Install the trim panel for the storage shelf (2) and feed in the seat belts (3).
- Lift the trim panel for the storage shelf (2) a little and connect the underlying connectors.
- Feed in the trim panel for the storage shelf (2) on the rear guide and position it correctly.
- Mount the expanding rivets (1).



NOTICE

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

- Insert the belt feed trim (2).
- Clip in the cover (1).



NOTICE

Perform the operations on the left and right side.

- Insert the end fitting (2) on the left and right into the body.
- Renew screws (1).

  Parts: Bolts
- Tighten screws (1) on left and right.

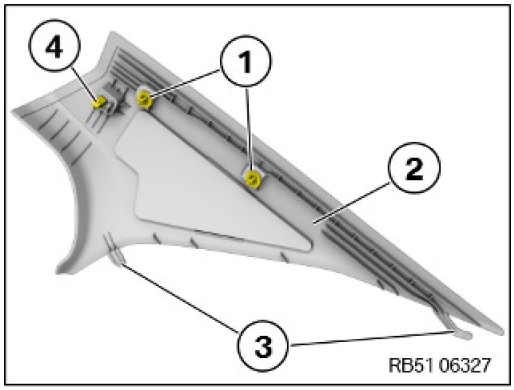
End fitting to body

M10	Renew screw.		42 Nm

9 – Install both C-pillar trim panels

NOTICE

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



▸ **Installing C-pillar trim panel**

Check

- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

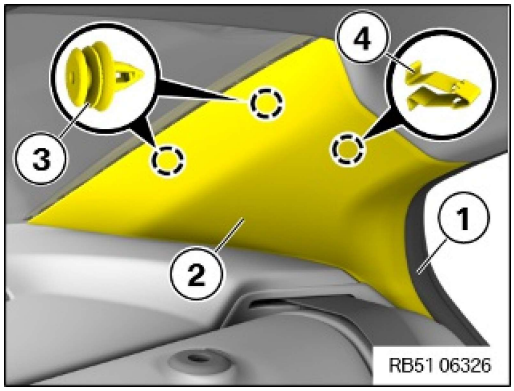
carflagn.com

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .

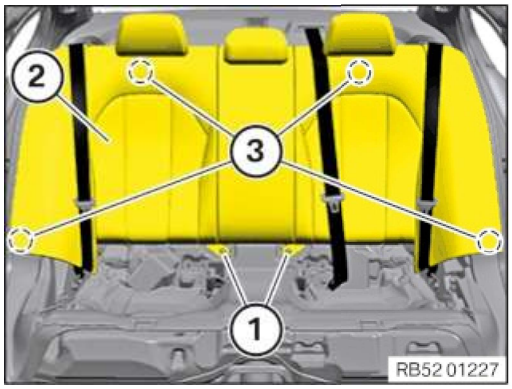


NOTICE

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

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

10 – Remove rear seat backrest



- Guide the rear seat backrest (2) into the seat belts and position it.
- Attach the rear seat backrest (2) in the guides (3) from the top.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Rear seat backrest on body

Screw	Renew screw.	Tightening torque	42 Nm

11 – Installing rear seat bench



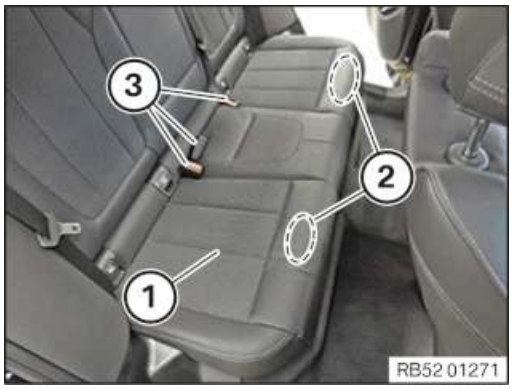
- Lift the seat bench (1) into the vehicle.
- Insert the seat belt (3).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear upper seat belt to bottom body

Screw	Renew screw.	Tightening torque	42 Nm

- Connect available connectors.



- Insert seat bench (1).
- Thread seat belt buckles (3) into the seat bench.
- Engage the seat bench (1) in the area (2).

12 – Disconnecting all battery earth leads

rdiagn.com



- See additional information.

Additional Information

Overview of Tightening Torques

Rear inertia reel to body			Used in step 7
M10	Renew screw.		42 Nm

Additional connection of rear inertia reel to body			Used in step 7
M6			8 Nm

End fitting to body			Used in step 8
M10	Renew screw.		42 Nm

Rear seat backrest on body			Used in step 10
Screw	Renew screw.	Tightening torque	42 Nm

Rear upper seat belt to bottom body			Used in step 11
Screw	Renew screw.	Tightening torque	42 Nm

Links

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	112
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	112
61 20 900 Disconnecting and connecting battery earth lead	112
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	112
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	112
61 20 900 Disconnecting and connecting battery earth lead	112
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	112
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61 20 900 Disconnecting and connecting battery earth lead	112
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61 20 900 Disconnecting and connecting battery earth lead	112

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72 11 905 Replacing front left lower belt

PRELIMINARY WORK

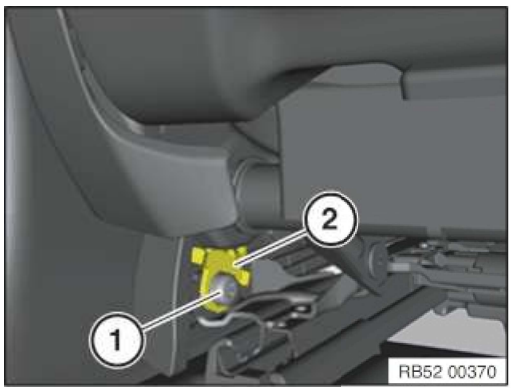
1 – Remove front seat

WARNING

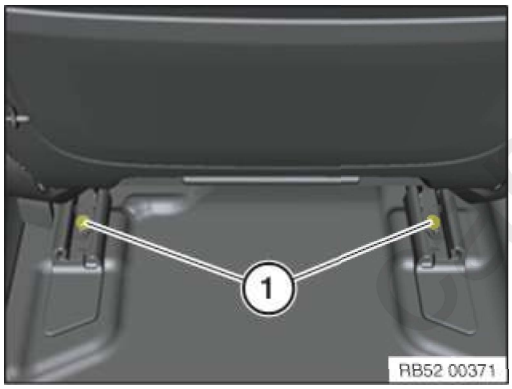
Pyrotechnic components.

Danger! Life-threatening injuries!

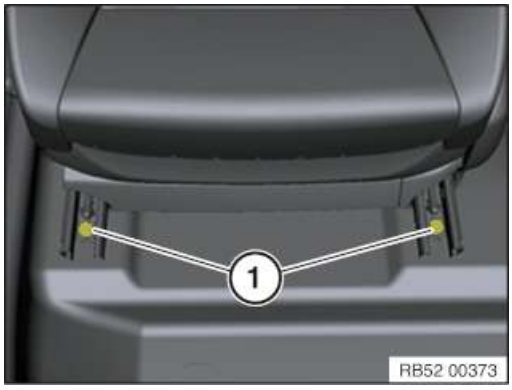
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Fully adjust the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).



- Loosen screws (1).



- Loosen screws (1).
- Adjust the front seat to the centre position.
- **When removing the driver's seat:**

  Completely retract the steering column

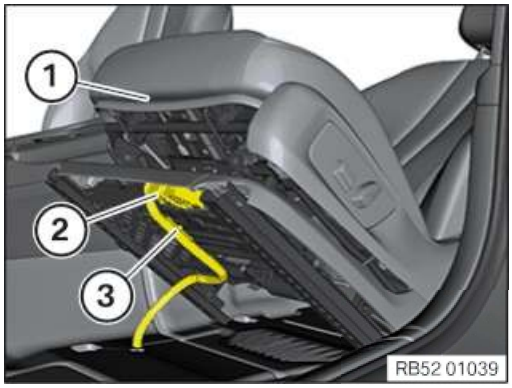
  Adjust the steering column completely upwards.

▸ **Disconnecting all battery earth leads**

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- See additional information.



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

- Cover the door sill using protective covers.
- Place front seat (1) to the rear.
- Unlock plug connection (2) and disconnect.
- Loosen the cable clip (3).

RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

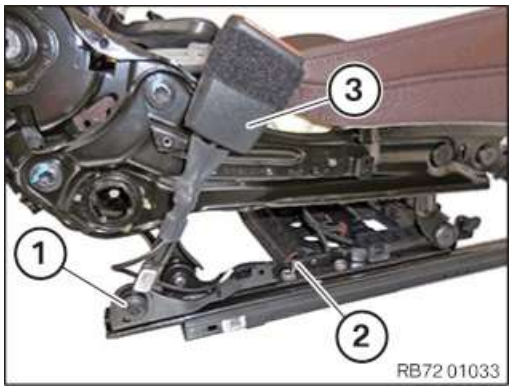
- Remove and install heavy components with the aid of another person/other persons.

- Lift out front seat (1) with the assistance of a second person.

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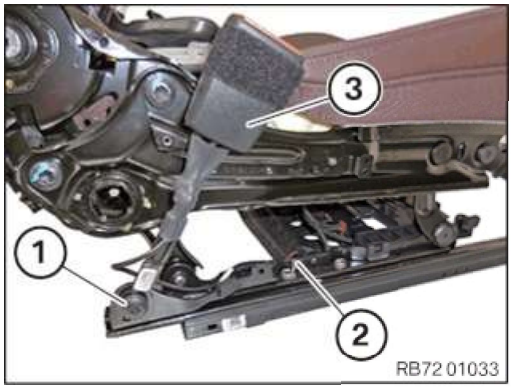
MAIN WORK

2 – Removing front lower strap



- Loosen screw (1).
- Disconnect the plug connection (2) and unclip available cable clips.
- Guide out and remove the lower strap (3) .

3 – Installing the front lower strap



- Thread in the lower strap (3) and position it.
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

Lower strap to seat mechanism

M10 screw	Renew screw.		42 Nm

- Connect the plug connection (2) and clip in the existing cable clips.

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POSTPROCESSES

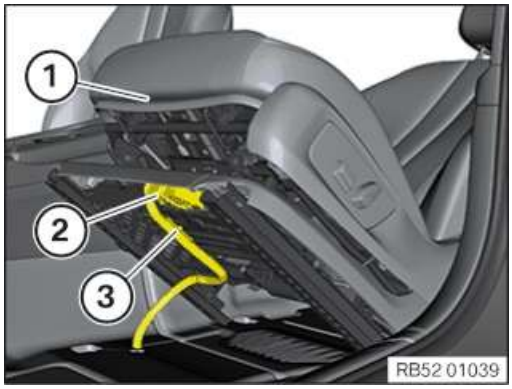
4 – Install front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

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



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

- Cover the door sill using protective covers.

RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

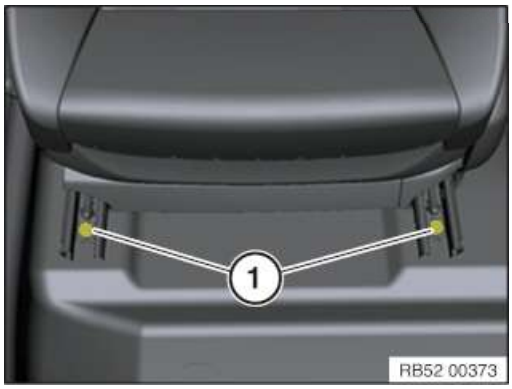
- Remove and install heavy components with the aid of another person/other persons.

- Lift front seat (1) into the vehicle with the assistance of a second person.
- Place front seat (1) to the rear.
- Connect connector (2).
- Attach the cable clip (3).

▶ **Disconnecting all battery earth leads**



- See additional information.



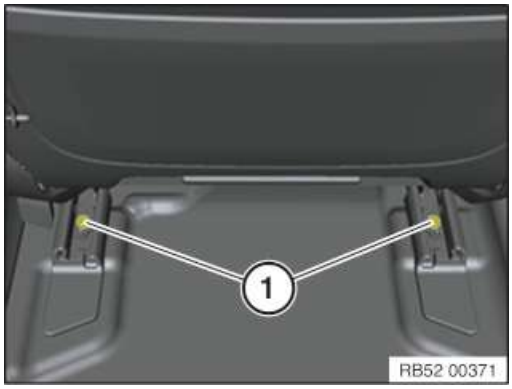
- Adjust the front seat to the rear.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

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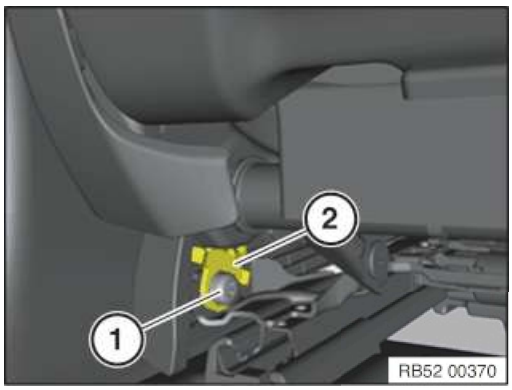


- Move front seat forwards.
- Renew screws (1).

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm



- Fully adjust the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

End fitting to seat mechanism

M10	Renew screw.	Tightening torque	42 Nm

Additional Information

Overview of Tightening Torques

Lower strap to seat mechanism Used in step 3

M10 screw	Renew screw.		42 Nm

Seat to body Used in step 4

M10	Renew screw.	Tightening torque	42 Nm

End fitting to seat mechanism Used in step 4

M10	Renew screw.	Tightening torque	42 Nm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	14

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	14
61 20 900 Disconnecting and connecting battery earth lead	14
61 20 900 Disconnecting and connecting battery earth lead	14
61 20 900 Disconnecting and connecting battery earth lead	14
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	14
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	14
61 20 900 Disconnecting and connecting battery earth lead	14

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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	14
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	14
61 20 900 Disconnecting and connecting battery earth lead	14
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61 20 900 Disconnecting and connecting battery earth lead	14
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72 Safety information and general information

Notes on safety

> Safety regulations for handling airbag modules and pyrotechnic belt tensioners

> Notes on scrapping vehicles with gas generators

Handling electrical system and electronics

> Unlocking/locking airbag plug connections

> Repairing airbag lines

> Handling optical fibres

Check

> Check seat belt

> Checklist for seat belt

Airbag system

> See diagnosis system for FUB and check

> Deactivating airbags

> Procedure after airbag deployment .

Active pedestrian protection

> Procedure after actuator triggering

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Notes on safety

-- Safety regulations for handling airbag modules, airbag components and
> pyrotechnical seat belt tensioners

-- Notes on scrapping vehicles with gas generators
>

-- Deactivation/activation pyrotechnical components
>

Handling electrical system and electronics

-- Unlocking/locking airbag plug connections
>

-- Repairing airbag lines
>

-- Handling optical fibres
>

Check

-- Check seat belt
>

-- Checklist for seat belt
>

Airbag system

-- Functional description and checking, refer to Diagnosis system
>

-- Deactivating airbags
>

-- Procedure after airbag deployment.
>

Active pedestrian protection
AFGS

-- Procedure after actuator triggering
>

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72 12 ... Notes on scrapping vehicles with gas generators (airbag system)

The gas generator is a pyrotechnic component and is for the most part permanently mounted on the following components:

- Airbag module
  - Driver's/ front passenger airbag
  - Side airbag
  - Head airbag
  - Knee airbag
- Electromotive automatic reel
- Belt end fitting tensioner
- Seat belt tensioner
- Safety battery terminal
- Active head restraint

In accordance with accident prevention regulations and specific national regulations, gas generators must be rendered unusable before they are scrapped. This is necessary because pyrotechnical objects can cause injury if improperly activated (e.g. scrapping with flame cutters).

In vehicles intended for scrapping it is paramount prior to draining and further stripping work to ensure that all gas generators **in the vehicle** have been activated. The fired gas generators can then be scrapped together with the vehicle.

Gas generators that have not fired constitute a hazard (also to the environment)!

Ignition failure:

If correct ignition is not possible, the relevant components must be removed and disposed of by special waste disposal companies!

Comply with safety regulations **for handling airbag system components**.

If an ignition has failed:

- Disconnect the igniter from the vehicle battery and
- Wait a few minutes before approaching the vehicle

The components of an airbag system must always be disposed of. Such components must not be sold on as used parts.

ignition:

Ignition of the gas generators may only be carried out by expert personnel and under the supervision of a responsible person. Other standard accident prevention regulations (safety goggles, ear defenders etc.) must also be observed.

The gas generators must be fired from the outside in this vehicle which has been earmarked for scrapping. In this process

- the doors must be closed
- the tailgate must be open
- the side windows must be open and
- Slide/tilt sunroof open

.

Use igniters with the appropriate cables to activate the gas generators.

Warning!

> Once gas generators have been fired, observe a ventilation period of 10 minutes with the doors opened. Only then is it permitted to continue work inside the vehicle.

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Wear protective goggles and protective gloves when handling a fired gas generator!

The burning of solid propellant will heat up the airbag unit - danger of burns!

Wash skin with water after contact with fired gas generators!

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72 12 ... Procedure after airbag deployment as result of an accident

Replace all components that were affected by the accident and check all others!

Check and/or replace following components after airbag deployment:

- Components
  - Sensor B-pillar (left/right)
  - Sensor front door (left/right)
  - Sensor seat, Driver-/passenger's side
  - Airbag control unit, vehicle interior
  - Sensor, pedestrian protection
  - Front sensor (engine compartment)
- Procedure
  - Inspect visually for mechanical damage (housing, plug connections). Replace damaged components.
  - Connect BMW diagnosis system
  - Read fault memory
  - Disconnect the vehicle battery and adhere to the waiting period (at least 30 seconds)
  - Rectify faults
  - Reconnect the vehicle battery and adhere to the waiting period (at least 10 seconds)
  - Delete fault memory
  - Switch off ignition and wait at least 2 minutes (no consumers may be switched on during this period such as interior light, radio, etc.)
  - Switch the ignition on (wait for at least 10 seconds)
  - Delete fault memory
  - If you cannot delete the fault memory: Replace the component that is causing the fault

Replace the airbag control unit in the following cases only:

- In the case of visible external damage
- In the case of a corresponding fault memory entry (airbag indicator light is illuminated)

Cables and connectors

- Components and procedure
  - Check cables and connectors for damage, replace if necessary.
    (e. g. corrosion, correct engagement, bent pin)

Seat belt system

- Components
  - Automatic reel
  - Seat belt tensioner
  - Seat belt height adjustment
  - End fitting pretensioner
  - Seat belt buckle
- Procedure
  - Check components, replace if necessary
  - Additional door lock: Check for foreign body, remove it if necessary.

Seats

- Components
  - Seat
  - Airbag module
  - Active head restraint
- Procedure
  - Check seats (functional check of seat mechanism), replace if necessary

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    - Check seat connection
    - Replace gas generator of active head restraint

      If the severity of the crash has not caused any other damage to the seat, only the triggered gas generator needs to be replaced.
      External feature: The triggered head restraint is folded forwards and engaged.
      The repair work can be carried out in the vehicle with the rear panel removed. The entire system can be pushed back into its original position and the new gas generator installed.
      The gas generator can be replaced up to 5 times.
    - Replace airbag module and seat cover with upholstery

Driver's airbag

- Components
    - Airbag module
    - Steering wheel
    - Steering column (if damaged)
- Procedure
    - Check components, replace if necessary
    - Replace steering wheel
    - Only with M Sport steering wheel: Replacing impact plate

Front passenger airbag

- Components
    - Airbag module
    - Dashboard trim panel (must be replaced!)
    - Supporting tube (if damaged)
- Procedure
    - Check components, replace if necessary

Side airbag, front/rear

- Components
    - Airbag module
    - Door trim panel
    - Door in white
    - Seat
- Procedure
    - Check components; replace if necessary

Head airbag

- Components
    - Airbag module
    - A-pillar trim panel
    - Roofliner
    - Cover, B-pillar (if damaged)
    - C-pillar trim panel (if damaged)
    - Connection/mount (on side frame)
- Procedure
    - Check components, replace if necessary

Knee airbag

- Components
    - Trim panel (driver's side)
    - Lower section of glove box
    - Knee protection(Driver- and passenger's side)
- Procedure

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- Check components, replace if necessary

Passive knee protection

- Components
  - Trim panel (driver's side)
  - Glove box incl. knee protection (passenger's side)
- Procedure
  - Check components for damage, replace if necessary
  - Check retaining elements

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72 12 050 Remove and install/replace the side airbag for the front left or right seat

Prerequisite

- The front seat is adjusted fully forward

PRELIMINARY WORK

1 – Disconnecting all battery earth leads

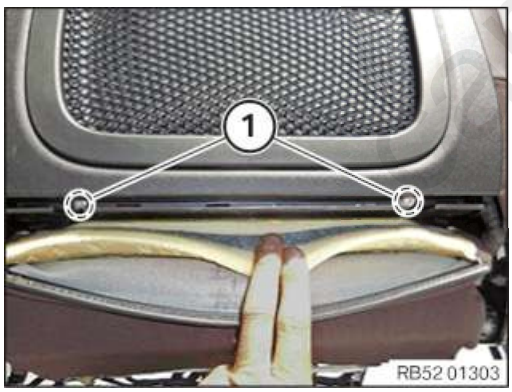


- See additional information.

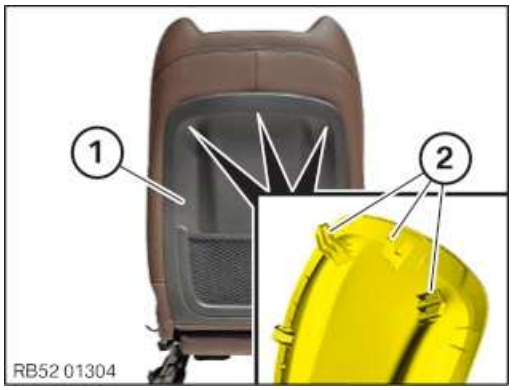
2 – Removing rear panel of front seat backrest



- Unclip the welts of the seat cover in area (1) with a suitable tool.

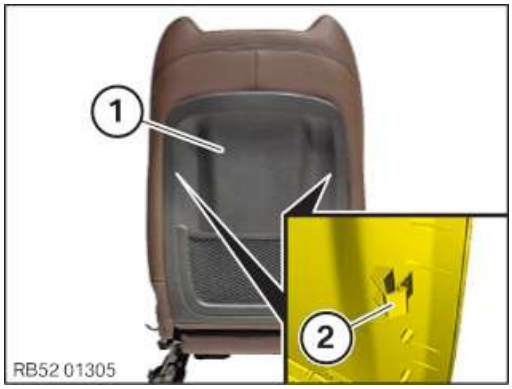


- Loosen screw (1).



- Slide the rear panel (1) down and guide it out at the guides (2).

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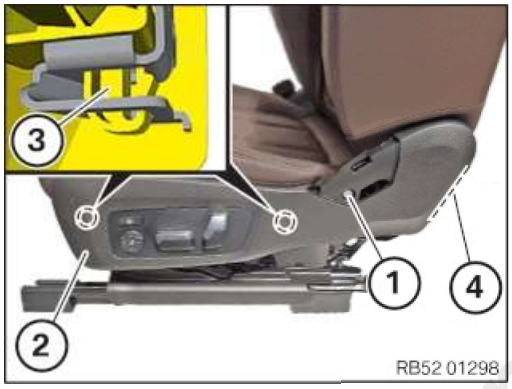


- Unclip the rear panel (1) from the clamps (2) and remove.

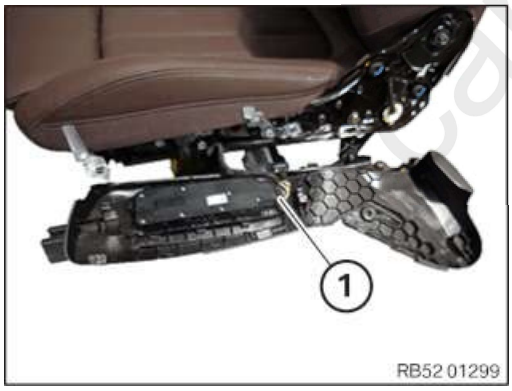
3 – Remove outer cover on front seat



- Unclip the cover (1).



- Loosen screw (1).
- Disengage the cover (2) at the latch mechanisms (3) toward the top.
- Guide out and remove the cover (2) in the area (4).



- Disconnect plug connection (1) and, if necessary, unclip the cable clip.

4 – Partially removing the backrest cover with the cushion for the front seat

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

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WARNING

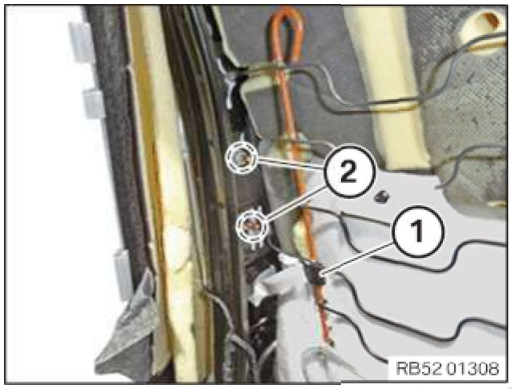
Pyrotechnic components.

Danger! Life-threatening injuries!

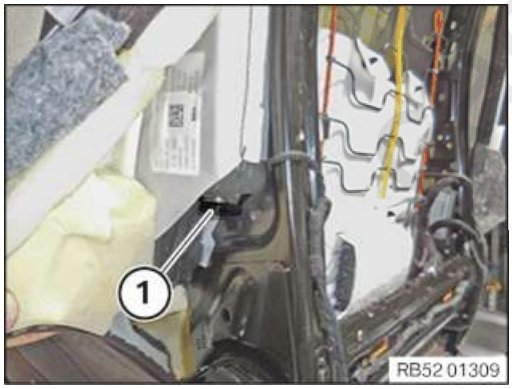
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Detach the backrest cover (1) in this area (2).
- Disconnect the plug connection (3) and unclip the existing cable clips.



- Detach the holder (1).
- Loosen nuts (2).

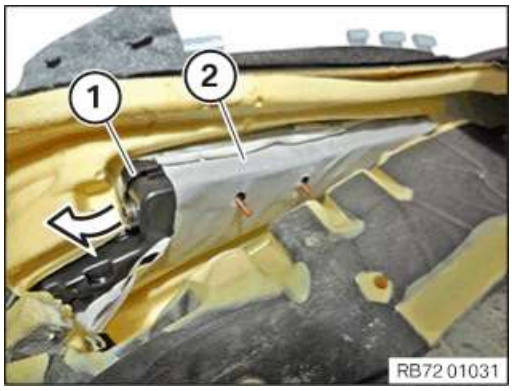


- Unlock plug connection (1) and disconnect.

diagn.com

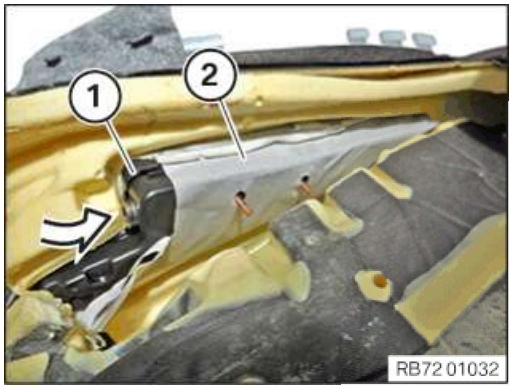
MAIN WORK

5 – Remove side airbag from front seat



- Guide the side airbag (1) out of the fabric pocket (2) on the backrest cover.

6 – Install side airbag on front seat

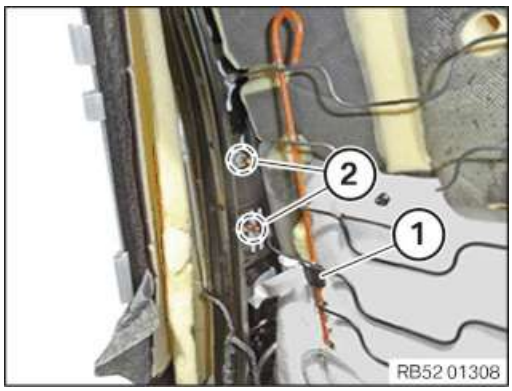


- Guide the side airbag (1) into the fabric pocket (2) on the backrest cover and position it.

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POSTPROCESSES

7 – Partly installing backrest cover with cushion for front seat

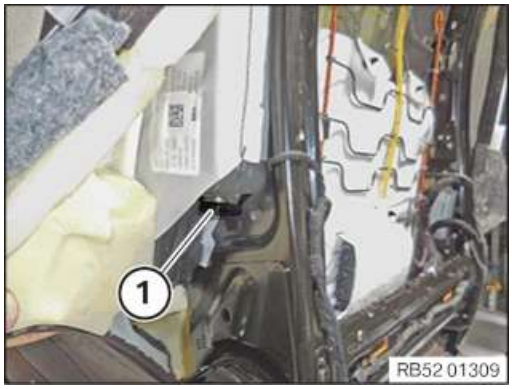


- Attach the holder (1).
- Renew nuts (2).

  Parts: Nuts
- Tighten nuts (2).

Airbag on backrest frame

Nut	Renew nut.	Tightening torque	6,5 Nm

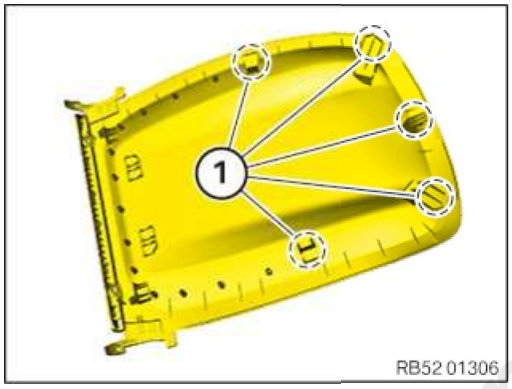


- Connect plug connection (1) and lock.

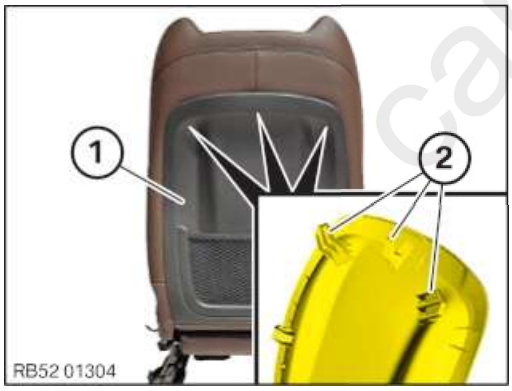


- Attach the backrest cover (1) in this area (2).
- Connect the plug connection (3) and clip in the existing cable clips.

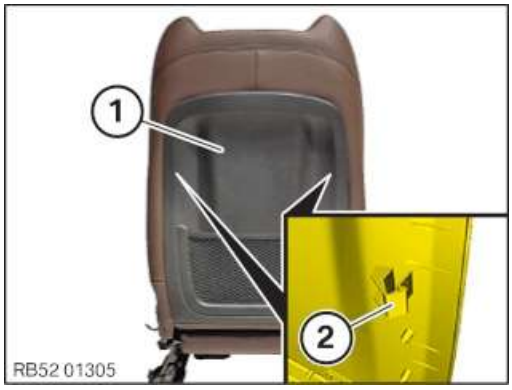
8 – Mount the rear panel on the front seat backrest



- Check the guides and clamps (1) for damage and renew the cover as needed.

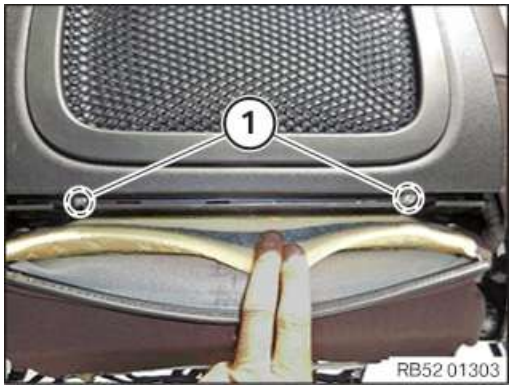


- Thread the rear panel (1) in at the clamps (2).



- Position the rear panel (1) and clip it in at the clamps (2).

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- Tighten down screw (1).

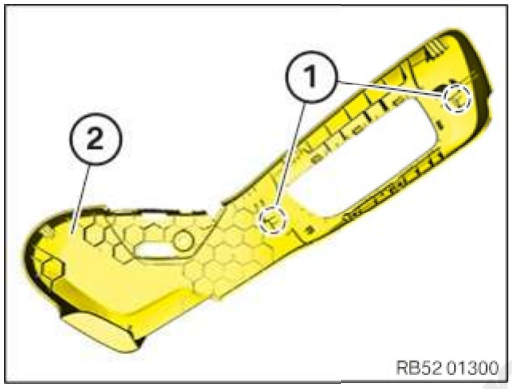
Rear panel to seat frame

Sheet metal screw	Tightening torque		3 Nm

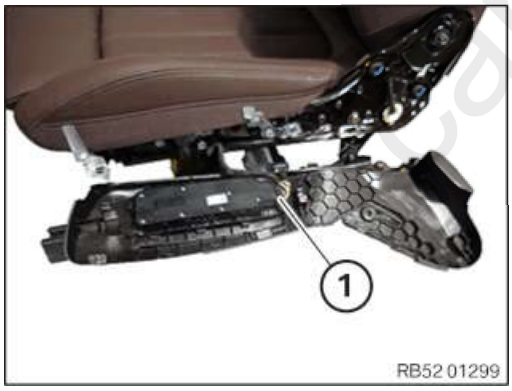


- Attach the edge stripping of the seat cover in this area (1).

9 – Install outer cover on front seat



- Check the locking units (1) for damages, and replace the cover if necessary (2).



- Connect the connector (1) and if necessary clip the cable holder in.



- Insert the cover (2) in the area (4) and position it.
- Engage the cover (2) at the latch mechanisms (3).
- Tighten down screw (1).

Seat trim to seat frame

Sheet metal screw		Tightening torque	2.5 Nm

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- Clip in the cover (1).

10 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Airbag on backrest frame			Used in step 7
Nut	Renew nut.	Tightening torque	6,5 Nm

Rear panel to seat frame			Used in step 8
Sheet metal screw	Tightening torque		3 Nm

Seat trim to seat frame			Used in step 9
Sheet metal screw		Tightening torque	2.5 Nm

Links

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

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61 20 900 Disconnecting and connecting battery earth lead	110
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72 12 000 Removing and installing or replacing airbag module on passenger's side

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.

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

PRELIMINARY WORK

1 – Adjust the steering column position



- Adjust the length of the steering column to the maximum length in the direction of arrow (1).
- Move the steering column to the lowest steering column position in the direction of arrow (2).

2 – Remove cupholder



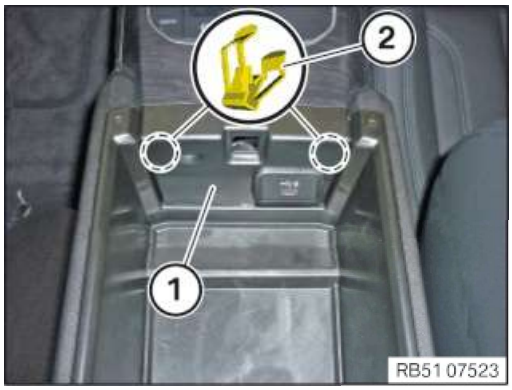
- Remove the insert (1).

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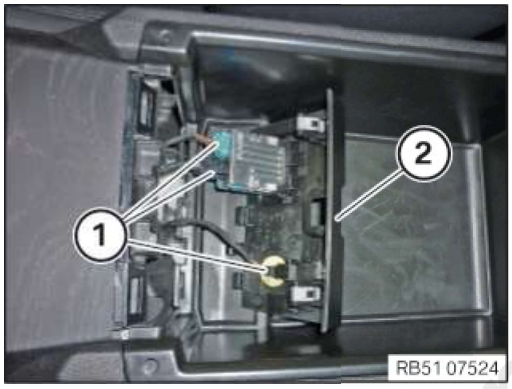


- Loosen screws (1).
- Feed the cup holder (2) out to the top.
- Unlock associated plug connections and disconnect.

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



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



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

4 – Remove the centre console trim

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



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

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

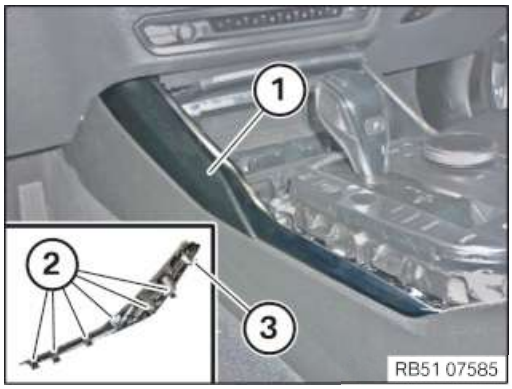
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5 – Removing the decorative trim on the centre console trim on the left and right

▸ **Remove decorative trim on centre console**

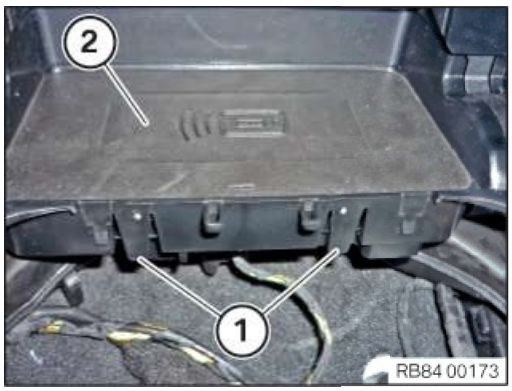
NOTICE

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

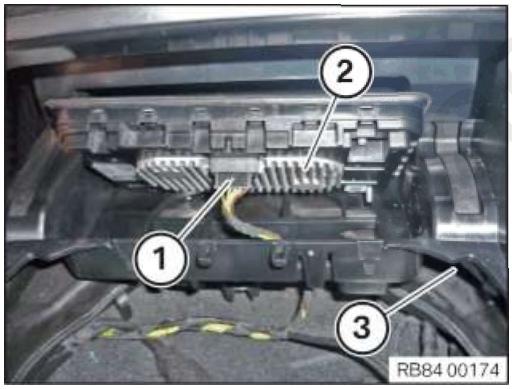


- Lever out the rear decorative trim (1) from the latch mechanisms (2) starting from the top.
- Feed out the decorative trim (1) backwards out of the guide (3) and remove.

6 – Removing the wireless charging station



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



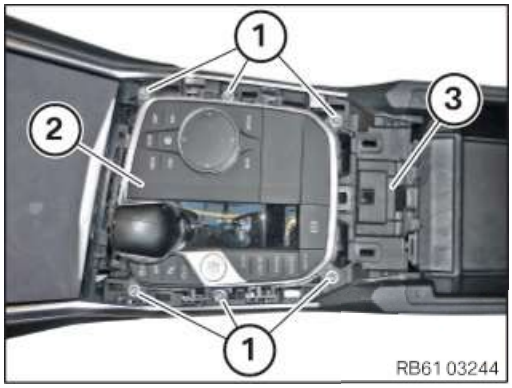
- Disconnect the connector (1) and remove the wireless charging station (2) from the centre console (3).

7 – Remove the operating facility in the centre console

▸ **Disconnecting all battery earth leads**

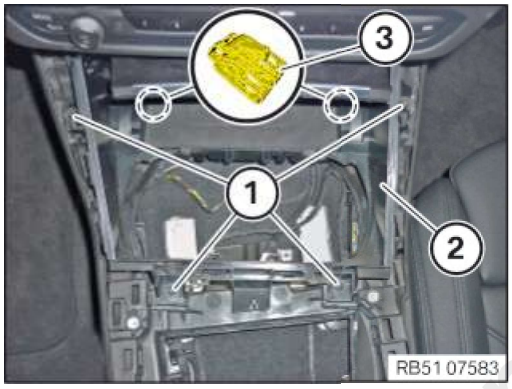


- See additional information.

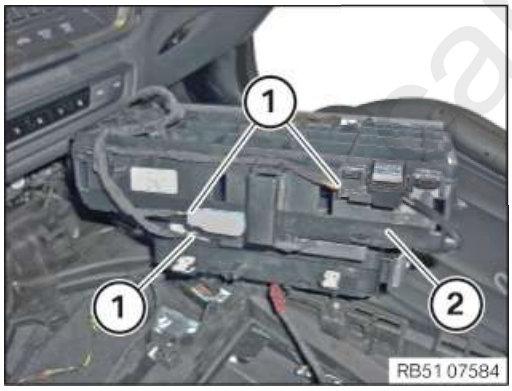


- Loosen screws (1).
- Remove the operating facility in the centre console (2) from the centre console (3).

8 – Removing the storage compartment of the front centre console



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



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

9 – Removing the rear centre console trim

RISK OF DAMAGE

Scratches.

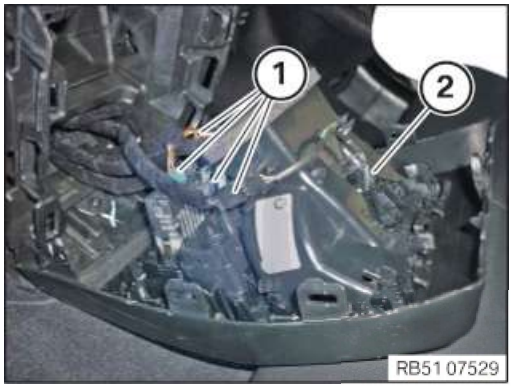
Tools and sharp-edged components can cause scratches.

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

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

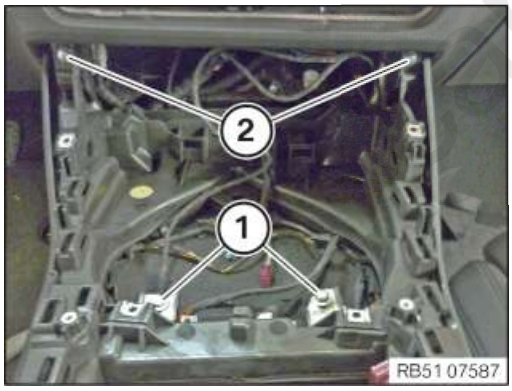


- Unlock and disconnect plug connections (1).
- Remove the centre console trim (2).

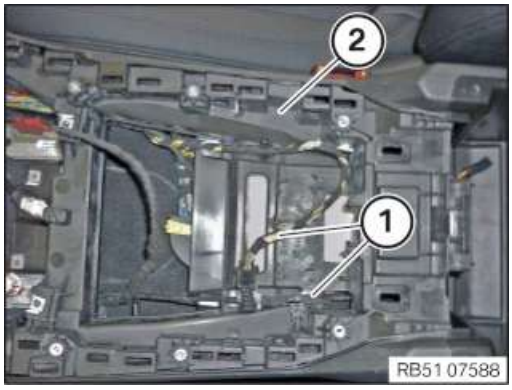
10 – Removing the centre console



- Loosen screws (1).

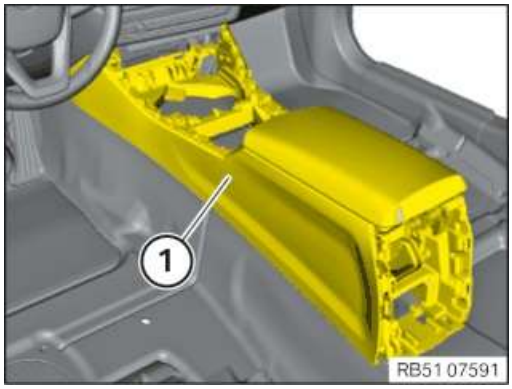


- Loosen screws (1) and (2).



- Release the wiring harness (1) from the centre console (2).

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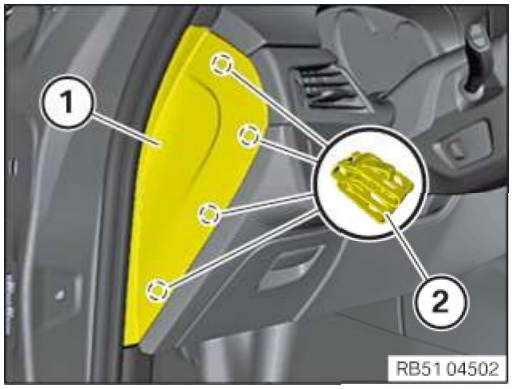


NOTICE

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

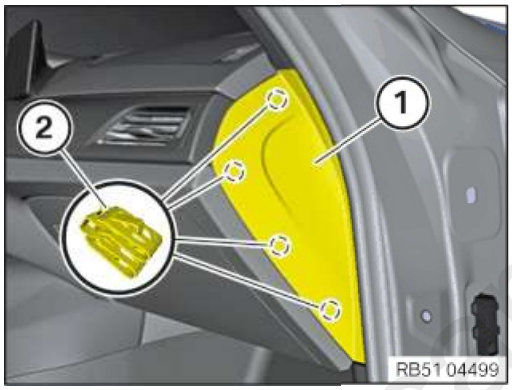
- Carefully raise rear centre console (1).
- Feed out wiring harness from the centre console (1) and unlock and disconnect existing plug connections, if required.
- Feed out and remove the centre console (1) on the instrument panel .

11 – Remove the side panel on the left instrument panel



- Unclip and remove the side panel (1) towards the outside from the clamps (2).

12 – Remove the side panel on the right instrument panel



- Unclip and remove the side panel (1) towards the outside from the clamps (2).
- If necessary, unlock associated plug connection and disconnect.

13 – Remove both 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

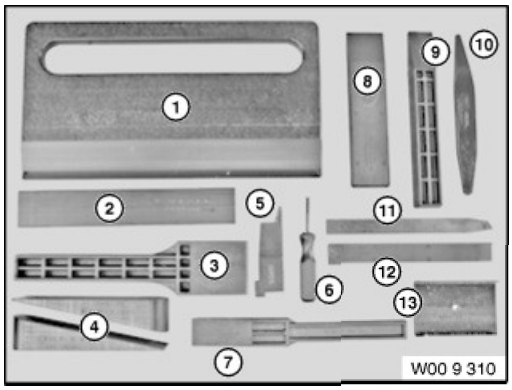
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WARNING

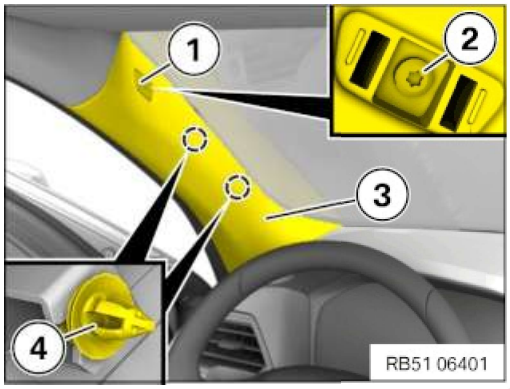
Pyrotechnic components.

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.

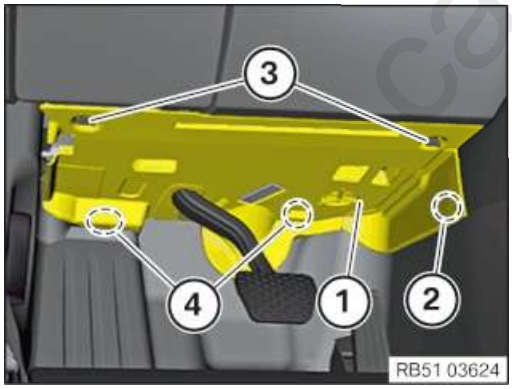


- Have the set of special tools 0 493 752 (00 9 329) ready.



- Unclip the cover (1) with suitable tools.
- Loosen screw (2).
- Unclip A-pillar trim panel (3) with clips (4) and guide it out upwards.

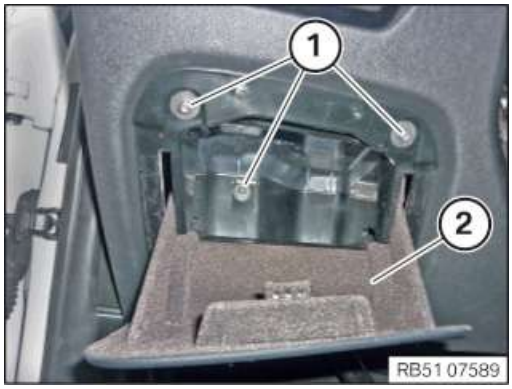
14 – Removing the trim panel for pedal mechanism



- Unclip the trim panel for the pedal mechanism (1) towards the inside in this area (2).
- Turn the locks (3) by 90°.
- Detach the trim panel for the pedal mechanism (1) inwards out of the guides (4).
- Unlock associated plug connection and disconnect.

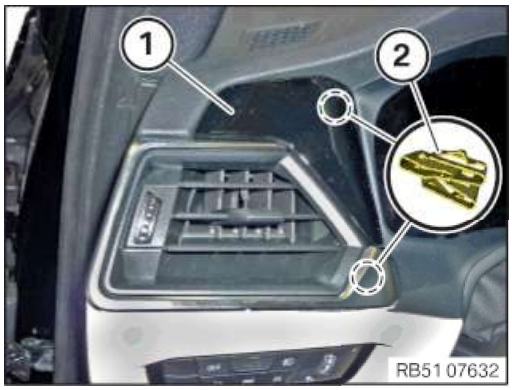
15 – Removing the left fold-down compartment

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- Loosen screws (1).
- Remove the fold-down compartment (2) toward the bottom.

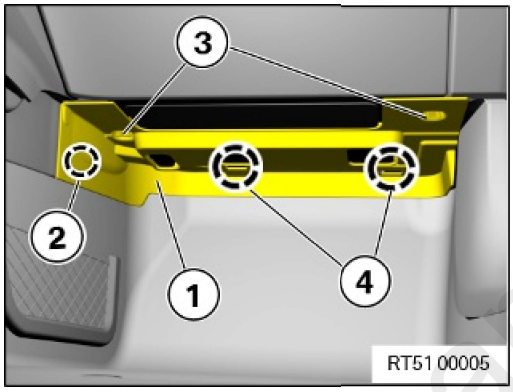
16 – Remove the finisher on the instrument panel on the left



- Unclip decorative strip (1) to the rear out of the clamps (2).
- Unlock associated plug connection and disconnect.

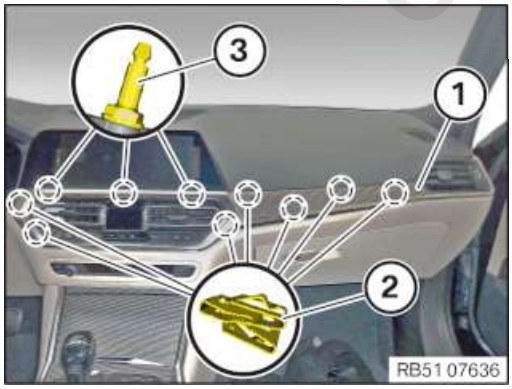
  Remove the decorative strip (1).

17 – Remove the right footwell trim



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

18 – Remove the finisher on the right instrument panel



- Unclip the decorative strip (1) towards rear at the clamps (2) and the pins (3).
- Unlock associated plug connection and disconnect.

  Remove the decorative strip (1).

19 – Remove Central Information Display (CID)

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RISK OF DAMAGE

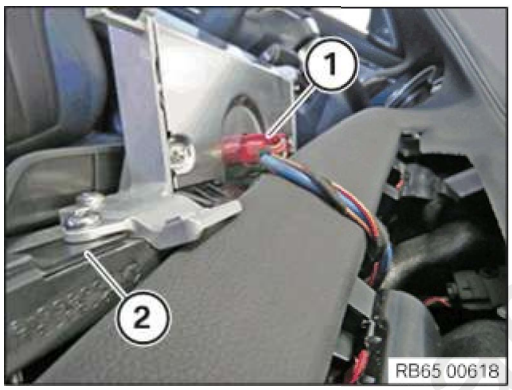
Electrostatic discharge.

Damage to or destruction of electrical components.

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



- Loosen screws (1).
- Pull out central information display (CID) (2) slightly off the instrument panel.



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

20 – Removing the airbag unit

WARNING

Airbag unit.

Danger! Life-threatening injuries!

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

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RISK OF DAMAGE

Damage to the steering wheel.

Incorrect handling of the tool may damage the steering wheel.

- Ensure the tool is positioned correctly (angle and inclination).
- When unlocking, do not use "levering" action. Instead, press in the Torx screwdriver toward the centre of steering wheel only.

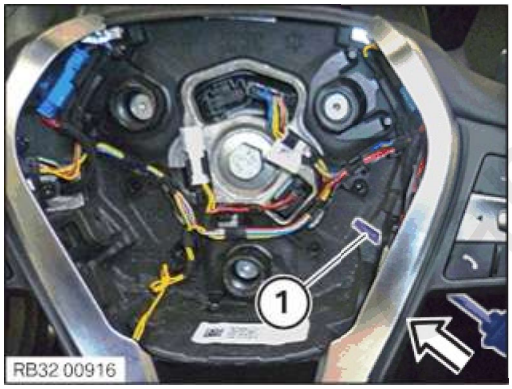
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

▸ **Version A: Removing the airbag unit (sports steering wheel)**



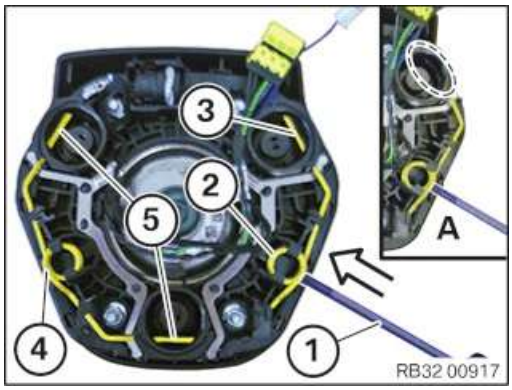
- Insert Torx screwdriver T25 (1) diagonally upwards in the hidden opening (2) on the rear side of the steering wheel until a spring resistance is felt.



NOTICE

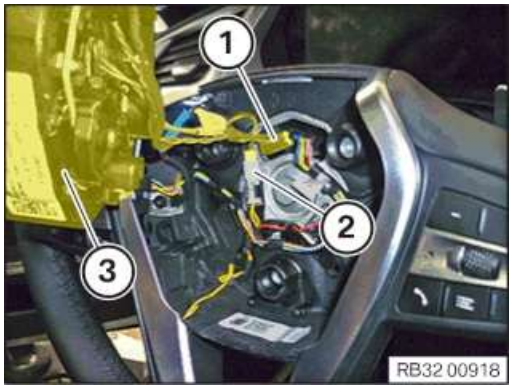
To provide a better overview: Diagram with airbag unit removed.

- To unlock the airbag unit, press Torx screwdriver T25 (1) diagonally upwards in the direction of the arrow to the centre of the steering wheel.



- Press the airbag unit over a large area of the steering wheel.
- Use Torx screwdriver T25 (1) to press wire spring clip (2) in the direction of the arrow towards the centre of the steering wheel and release lock (3).

  (A): Wire spring clip (2) is unlocked.
- Then use Torx screwdriver T25 (1) to press wire spring clip (4) in the direction of the arrow towards the centre of the steering wheel and release locks (5).
- Carefully raise the airbag unit.

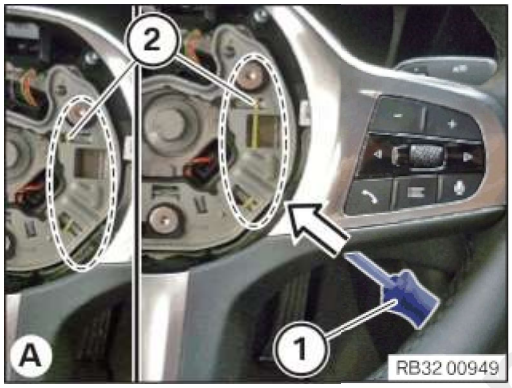


- Unlock and disconnect the plug connections (1) and (2).
- Remove airbag unit (3).

▸ **Version B: Removing airbag unit (M Sport steering wheel)**



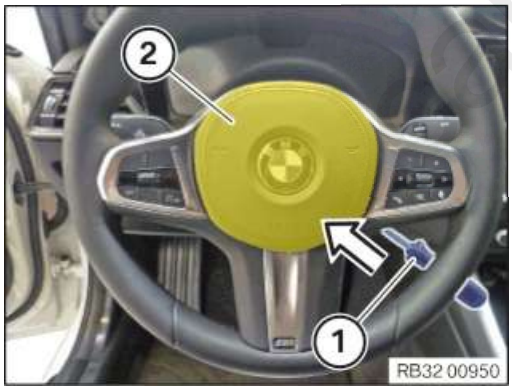
- Locate the pre-punched bore hole (1) on the rear side of the steering wheel by touch.
- Insert the Torx screwdriver T27 (2) diagonally upwards in the pre-punched bore hole (1) on the rear side of the steering wheel until a springing kind of resistance can be felt.



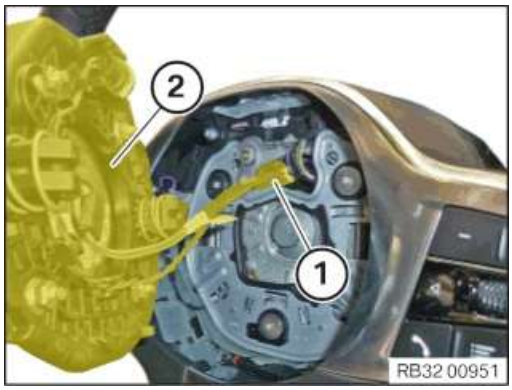
NOTICE

To provide a better overview: Diagram with airbag unit removed.

- Press in Torx screwdriver T27(1) straight in direction of arrow towards the centre of the steering wheel in order to unlock the wire spring clip (2) or to unlock the airbag unit (A).



- Press in Torx screwdriver T27 (1) straight in direction of arrow towards the centre of the steering wheel and lift airbag unit (2) on the unlocked side.
- Repeat procedure on left side and carefully remove airbag unit (2) in direction of arrow off the steering wheel.



- Unlock and disconnect plug connection (1) and remove the airbag unit (2).

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- Move the steering wheel and wheels to the straight-ahead position.
- Unlock plug connection (1) and disconnect.
- If installed: Unlock plug connection (2) and disconnect.
- Release the screw (3) and pull off and remove the steering wheel.

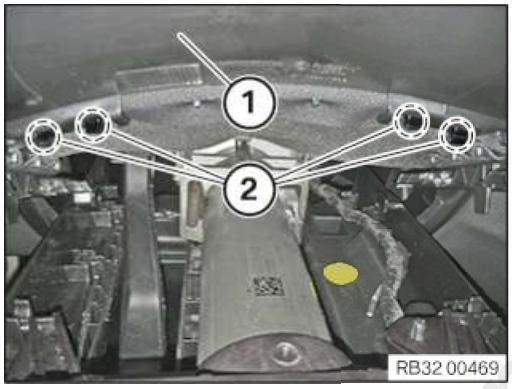
22 – Removing steering column shroud upper section



NOTICE

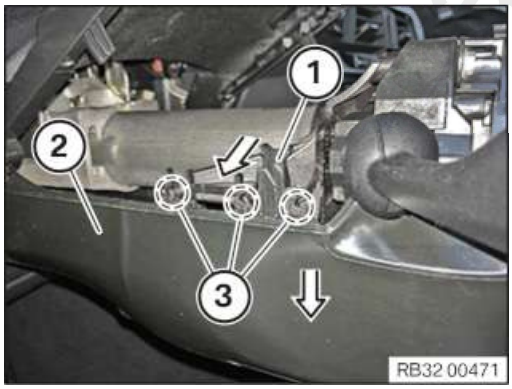
Perform the operations on the left and right side.

- Unlock the steering column shroud upper section (1) with the special tool 2 298 504 and fold up.



- Unclip the steering column shroud upper section (1) from the brackets (2).
- Remove the steering column shroud upper section (1).

23 – Removing steering column shroud lower section



NOTICE

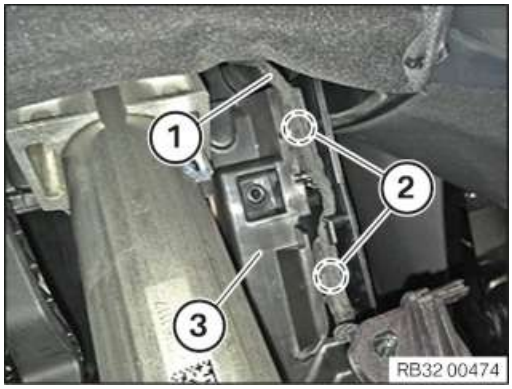
Perform the operations on the left and right side.

- Push the retaining lug (1) to the outside in the direction of the arrow and unclip the steering column shroud lower section (2) from the holders (3) in the direction of the arrow to the bottom at the same time.



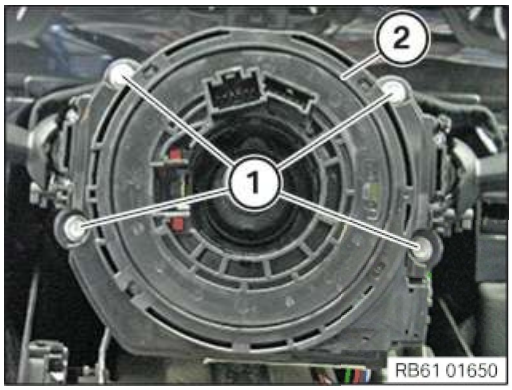
- Fold the steering column shroud lower section down.
- Unlock and disconnect connector (1).

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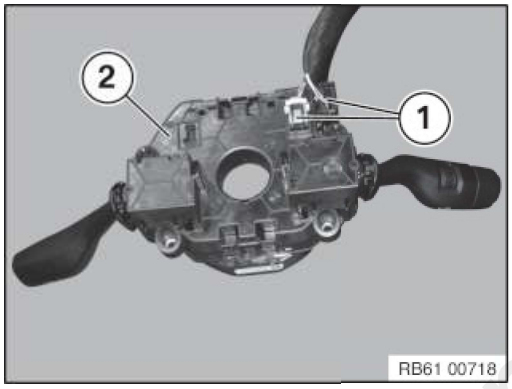


- Detach the cable (1) from the brackets (2).
- Remove the steering column shroud lower section (3).

24 – Removing the steering column switch cluster (SZL)



- Loosen screws (1).
- Remove the steering column switch cluster (SZL) (2).



- Unlock and disconnect the connector (1) on the steering column switch cluster (SZL) (2).

25 – Removing the instrument cluster (KOMBI)

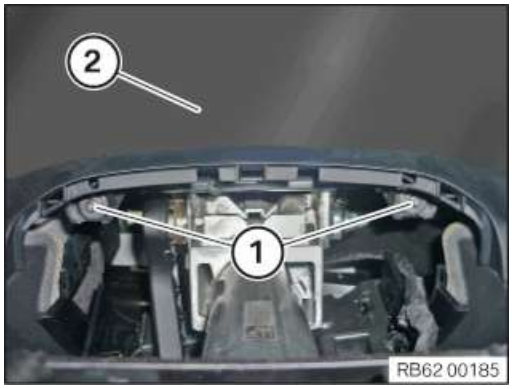


- Loosen screw (1).

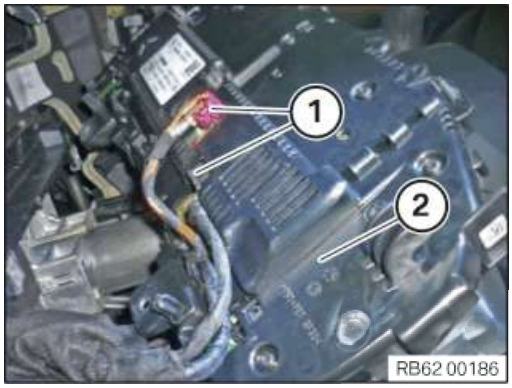


- Loosen screw (1).

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- Loosen screws (1).
- Feed out instrument cluster (KOMBI) (2).



RISK OF DAMAGE

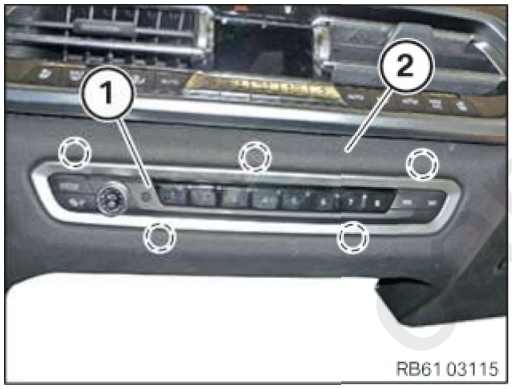
Damage to the instrument cluster (KOMBI)

While releasing and connecting the cable, it could lead to a ground offset. Thereby, currents could arise, that make the instrument cluster (KOMBI) useless.

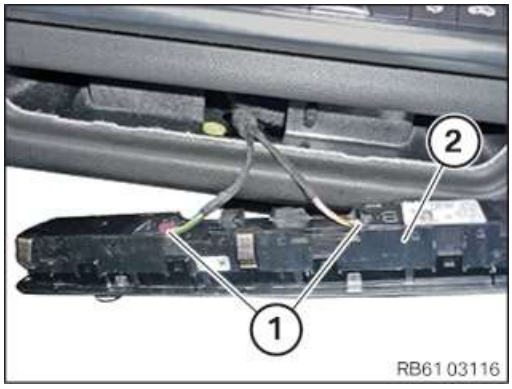
- While releasing: Release APIX data cable (blue) first.
- While connecting: Connect APIX data cable (blue) at the last.

- **If installed:** Release the blue plug connection first.
- Unlock and disconnect plug connections (1) from instrument cluster (KOMBI) (2).
- Remove the instrument cluster (KOMBI) (2).

26 – Remove the audio operating unit



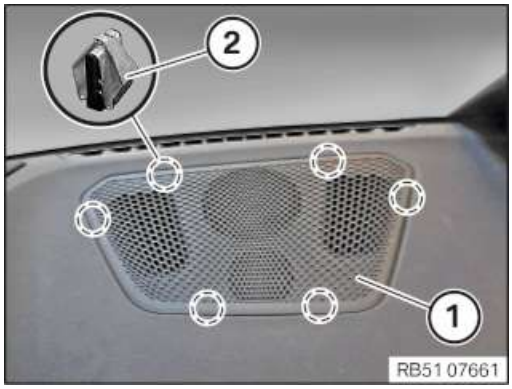
- Unclip the audio operating unit (1) from the instrument panel (2) at the points marked using special tool 0 496 571 (00 9 327).



- Disconnect plug connections (1) and remove the audio operating unit (2).

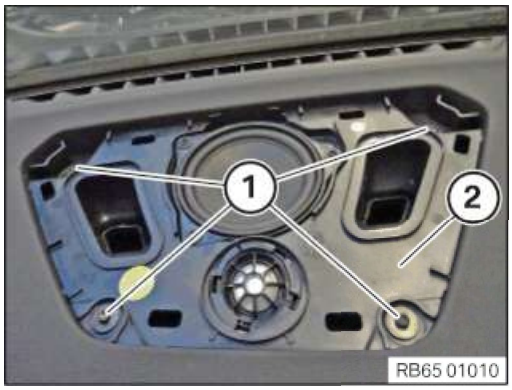
27 – Remove the speaker trim at the instrument panel

carfdiagn.com

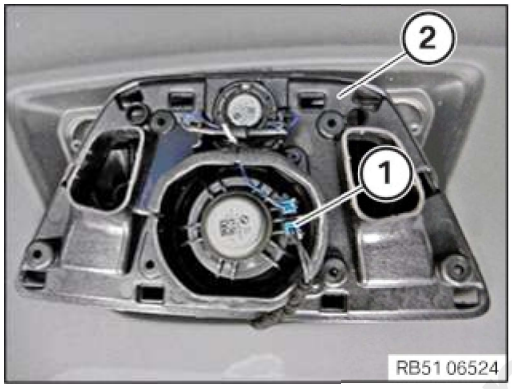


- Lever out the speaker trim (1) with the special tool 0 496 569 (00 9 325) from the clamps (2) toward the top and remove.

28 – Remove the speaker holder at the instrument panel

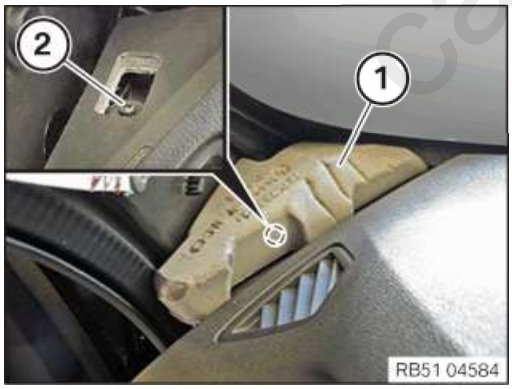


- Loosen screws (1).
- Pull out speaker holder (2) slightly with the loudspeakers and tilt it to the side.



- Unlock plug connection (1) and disconnect.
- Remove the speaker holder (2).

29 – Remove the instrument panel trim panel



NOTICE

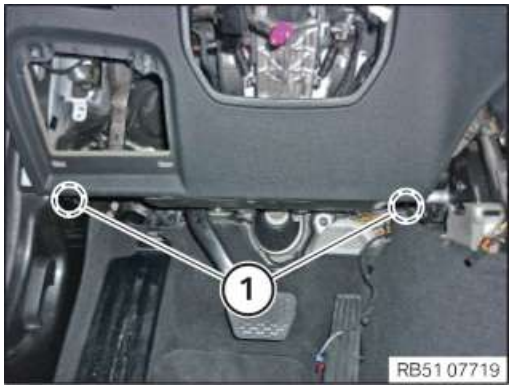
Perform the operations on the left and right side.

- Remove the sound insulation (1).
- Loosen screw (2).

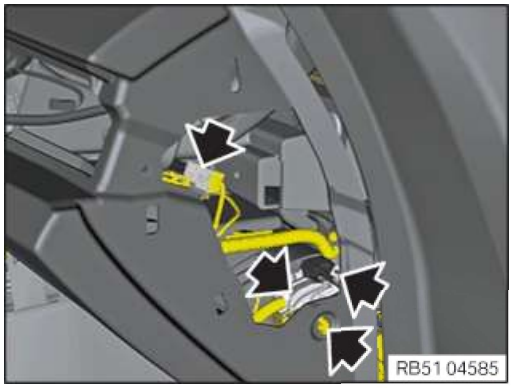


- Loosen screws (1).

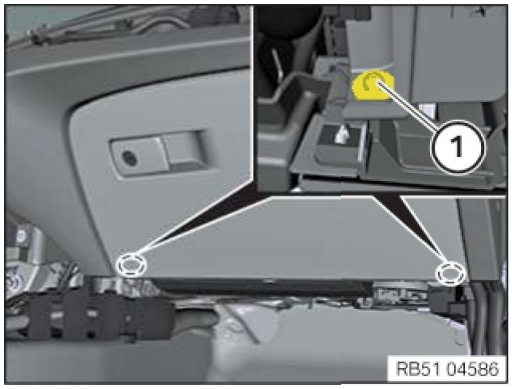
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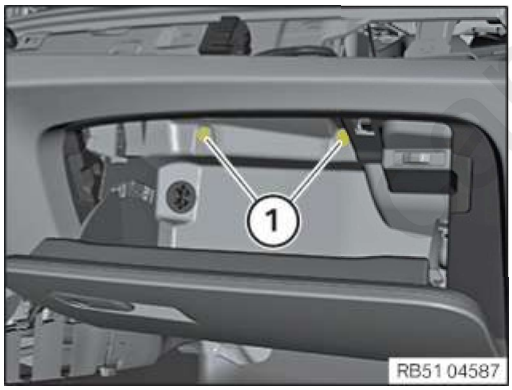
- Loosen screws (1).



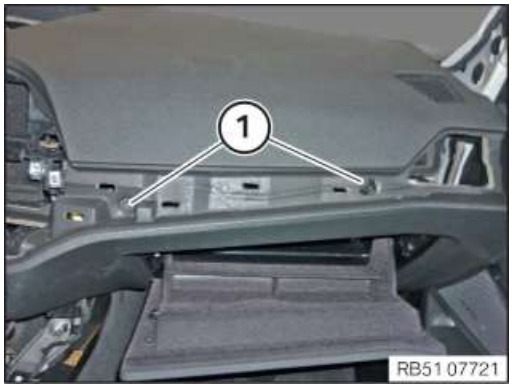
- Release all plug connections and cable clips (arrows) behind the glove box.



- Release the screws (1) on the lower side of the glove box.

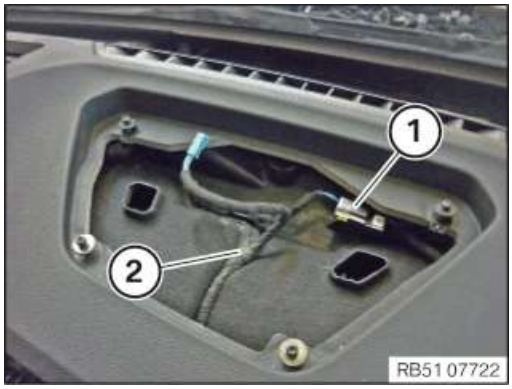


- Open glovebox.
- Loosen screws (1).



- Loosen screws (1).

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- Unlock plug connection (1) and disconnect.
- Release the wiring harness (2) on the holders.



- Unlock the plug connection (1) on the light operating unit and disconnect it.



- Loosen screws (1).

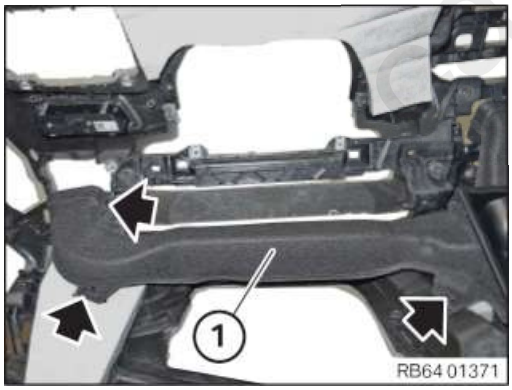
TECHNICAL INFORMATION

Conduct the following operation with the assistance of a second person.

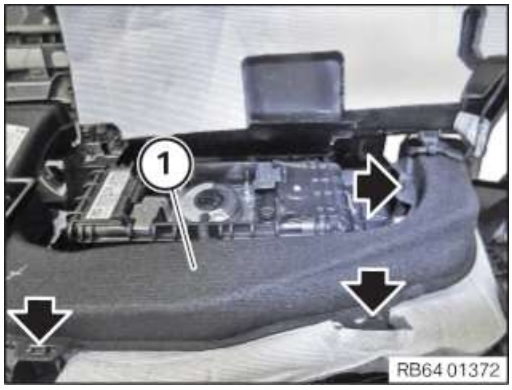
- Pull the instrument panel trim back slightly.

  If necessary, unlock and disconnect additional plug connections.
- Remove the instrument panel trim from the vehicle.

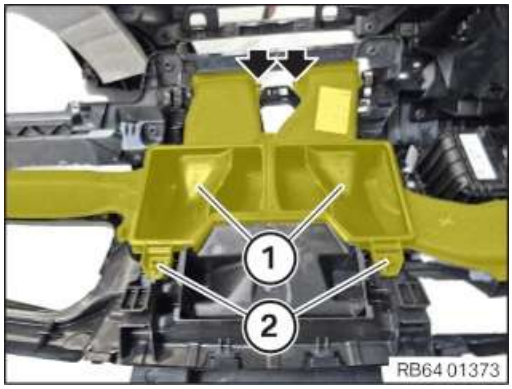
30 – Removing the air duct in the instrument panel



- Disengage left air duct (1) from latch mechanisms (arrows).



- Disengage right air duct (1) from latch mechanisms (arrows).



- Disengage air ducts (1) from latch mechanisms (arrows).
- Disengage the air ducts (1) from the latch mechanisms (2) towards the top.
- Feed the air ducts (1) out of the instrument panel and remove it.

MAIN WORK

31 – Remove front passenger airbag

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

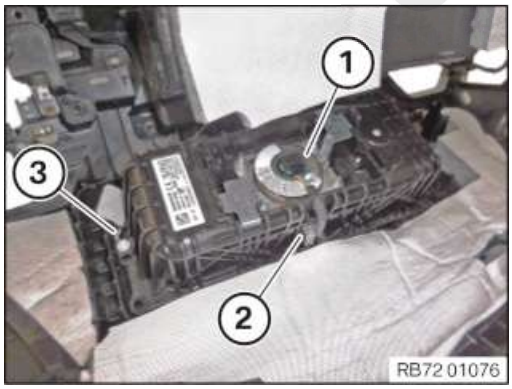
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

Airbag unit.

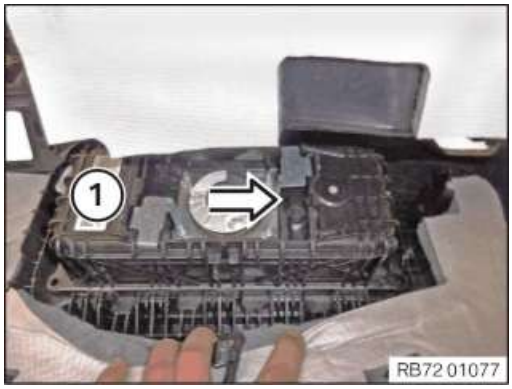
Danger! Life-threatening injuries!

- 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



- Unlock plug connection (1) and disconnect.
- Unclip the cable clip (2).
- Loosen screw (3).

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- Unlock front passenger airbag (1) in direction of arrow and remove upwards.

32 – Installing front passenger airbag

WARNING

Airbag unit.

Danger! Life-threatening injuries!

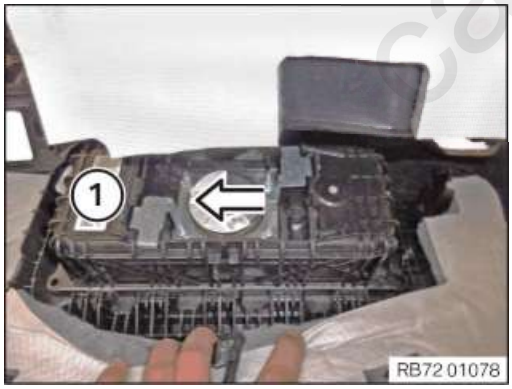
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

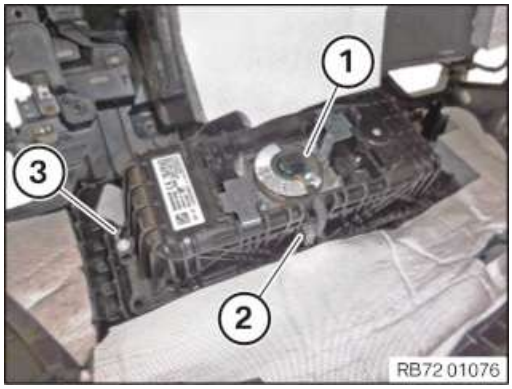
Pyrotechnic components.

Danger! Life-threatening injuries!

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



- Correctly position front passenger airbag (1) correctly and lock in the direction of the arrow.



- Tighten down screw (3).

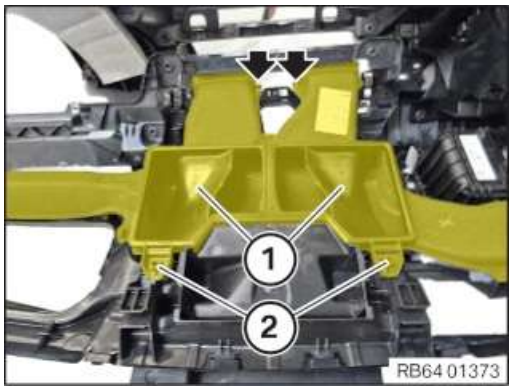
Front passenger airbag on instrument panel trim

Screw		Tightening torque	2,6 Nm

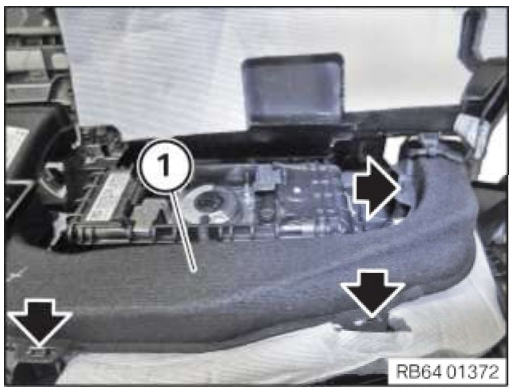
- Clip in the cable clip (2).
- Connect plug connection (1) and lock.

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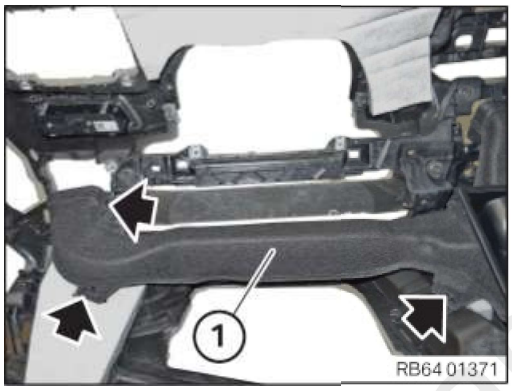
33 – Installing air ducts in the instrument panel



- Guide in and position air ducts (1) in the instrument panel.
- Engage the air ducts (1) into the latch mechanisms (2) from the top.
- Engage the air ducts (1) into the latch mechanisms (arrows).



- Engage the right air duct (2) into the latch mechanisms (arrows).



- Engage the left air duct (1) into the latch mechanisms (arrows).

34 – Install the trim panel for the instrument panel



TECHNICAL INFORMATION

Conduct the following operation with the assistance of a second person.

- Insert the instrument panel trim in the vehicle and position it at the support.
- Insert the associated wiring harnesses and connect the connectors.
- Tighten the screws (1).

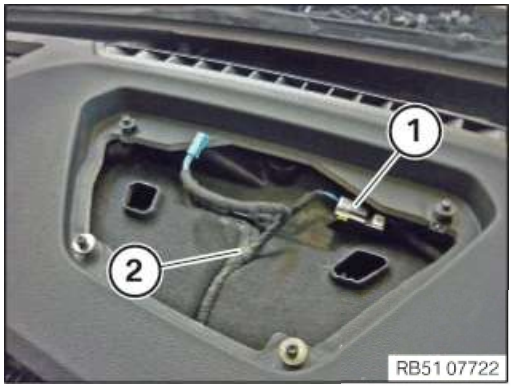
Dashboard to support

Screw		Tightening torque	2,4 Nm

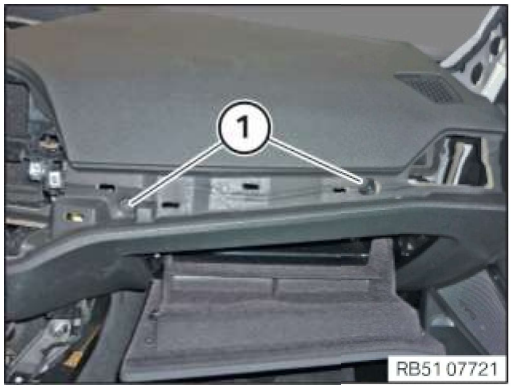
carsdiagn.com



- Connect connector (1) to the light operating unit and lock.



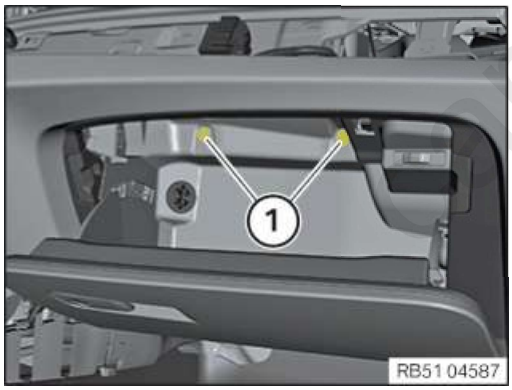
- Secure the wiring harness (2) on the holders.
- Connect plug connection (1) and lock.



- Tighten the screws (1).

Dashboard to support

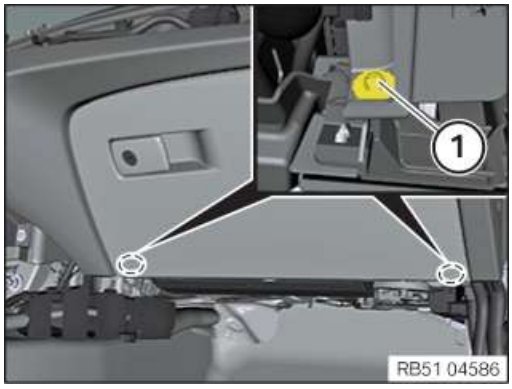
Screw		Tightening torque	2,4 Nm



- Open glovebox.
- Tighten the screws (1).

Dashboard to support

Screw		Tightening torque	2,4 Nm

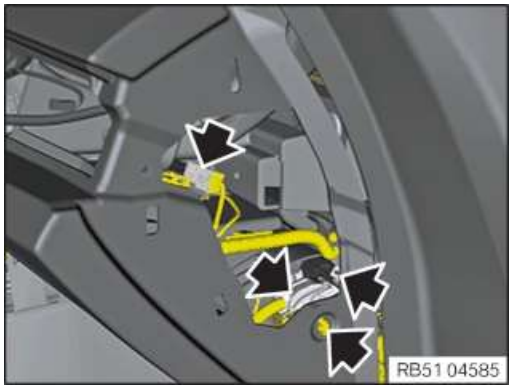


- Tighten the screws (1) on the lower side of the glove box button.

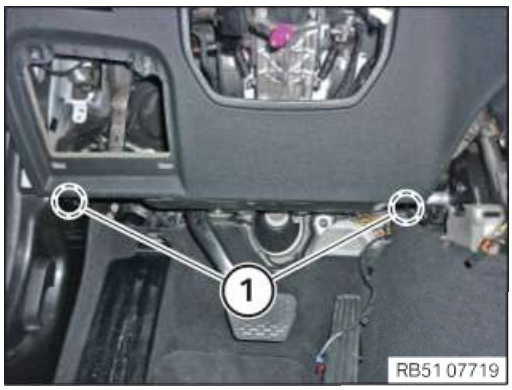
Dashboard to support

Screw		Tightening torque	2,4 Nm

mdiagn.com



- Connect all plug connections and cable clips (arrows) behind the glove box.



- Tighten the screws (1).

Dashboard to support

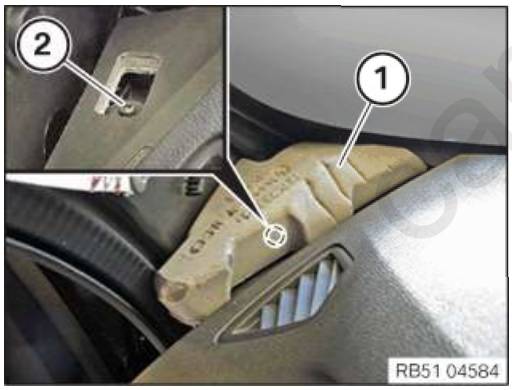
Screw		Tightening torque	2,4 Nm



- Tighten the screws (1).

Dashboard to support

Screw		Tightening torque	2,4 Nm



NOTICE

Perform the operations on the left and right side.

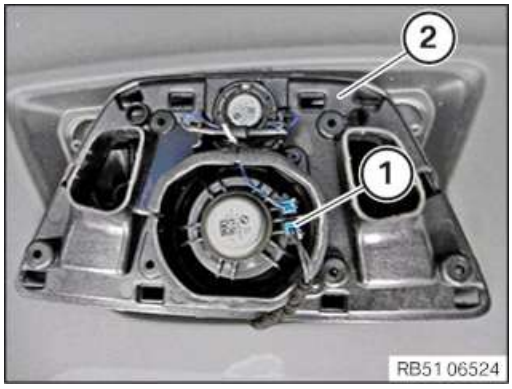
- Tighten down screw (2).

Dashboard to support

Screw		Tightening torque	2,4 Nm

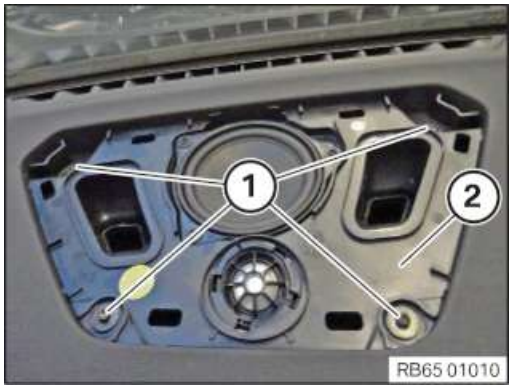
- Use sound insulation (1).

35 – Install the speaker holder at the instrument panel



- Position the speaker holder (2).
- Connect connector (1).

carldiagn.com

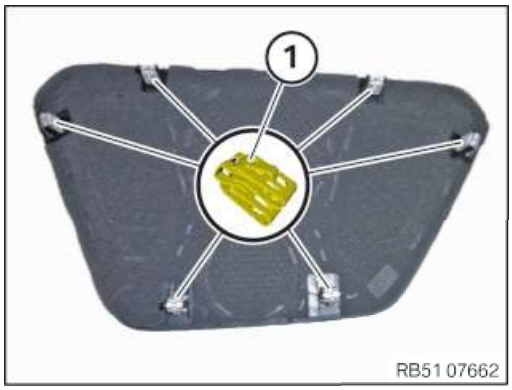


- Install the speaker holder (2).
- Tighten the screws (1).

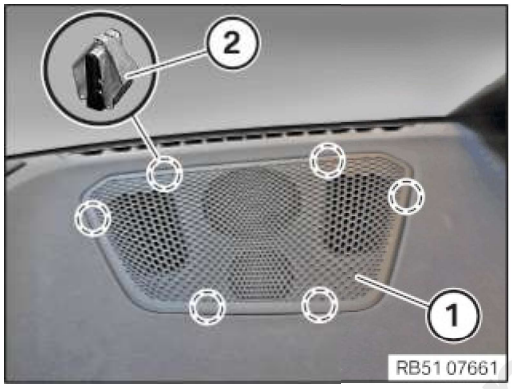
Speaker to support / support to instrument panel / support to body

Screw		Tightening torque	1,8 Nm

36 – Install the speaker trim at the instrument panel

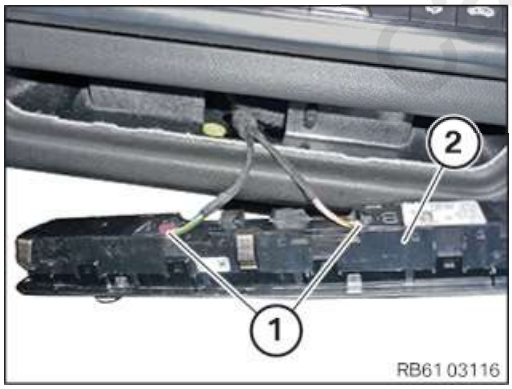


- Check clamps (1) for damage.
- Replace broken or missing clamps (1).

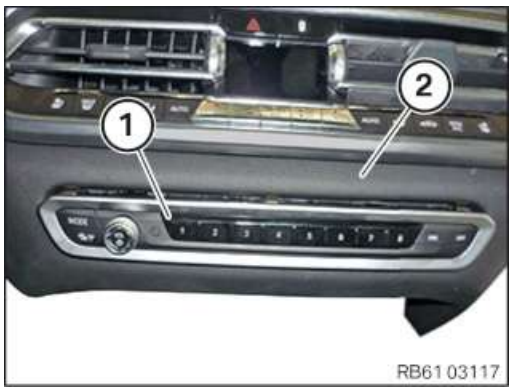


- Position the speaker trim (1) correctly and engage it at the clamps (2).

37 – Install the audio operating unit



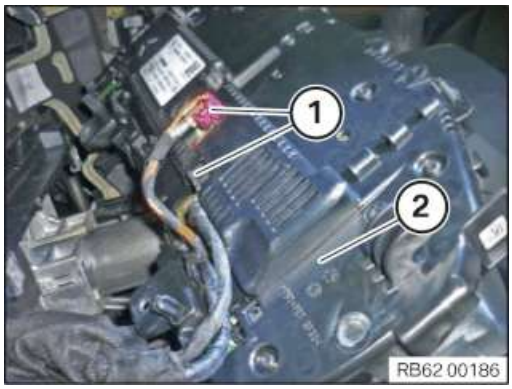
- Connect the connector (1) to the audio operating unit (2).



- Correctly position the audio operating unit (1) and install in the instrument panel(2).

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38 – Installing the instrument cluster (KOMBI)



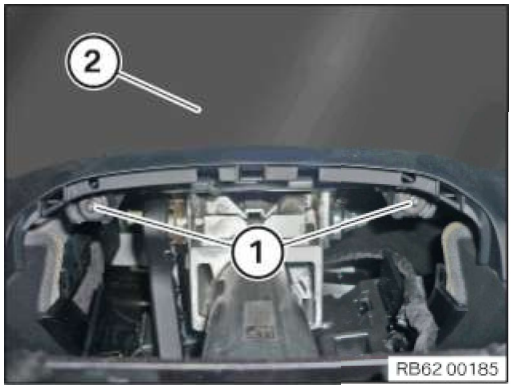
RISK OF DAMAGE

Damage to the instrument cluster (KOMBI)

While releasing and connecting the cable, it could lead to a ground offset. Thereby, currents could arise, that make the instrument cluster (KOMBI) useless.

- While releasing: Release APIX data cable (blue) first.
- While connecting: Connect APIX data cable (blue) at the last.

- **If installed:** Connect the blue connector at the last and lock it.
- Connect and lock connector (1) to the instrument cluster (KOMBI) (2).



- Feed in and position the instrument cluster (KOMBI) (2).
- Tighten the screws (1).

Instrument cluster (KOMBI) to support

Oval-head screw		Tightening torque	1,8 Nm



- Tighten down screw (1).

Instrument cluster (KOMBI) to support

Oval-head screw		Tightening torque	1,8 Nm

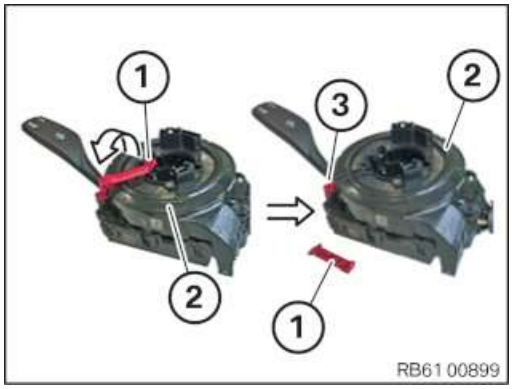


- Tighten down screw (1).

Instrument cluster (KOMBI) to support

Oval-head screw		Tightening torque	1,8 Nm

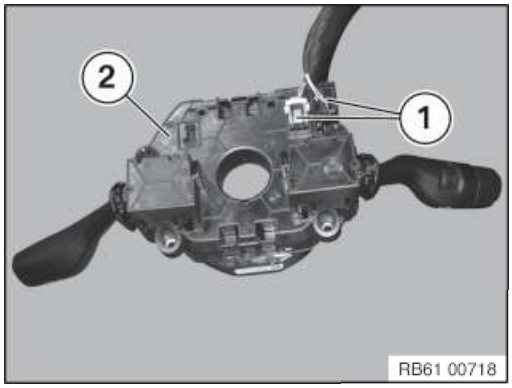
39 – Installing the steering column switch cluster (SZL)



- **Replacement:**

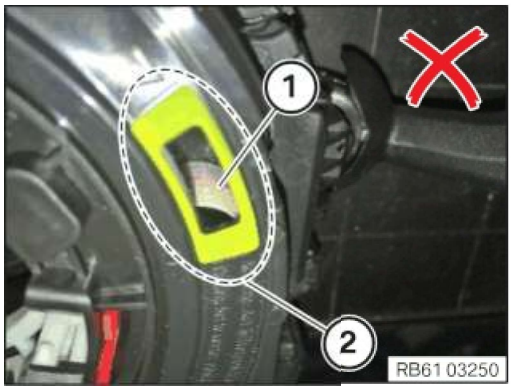
  Break off the transportation retainer (1) on the steering column switch cluster (SZL) (2) in direction of arrow.

  The broken off piece (3) of the transportation retainer (1) remains in the steering column switch cluster (SZL) (2).



- Connect the connector (1) with the steering column switch cluster (SZL) (2).

Check



- **Version A:**

  Check whether the correct marking (1) is seen in inspection glass (2).

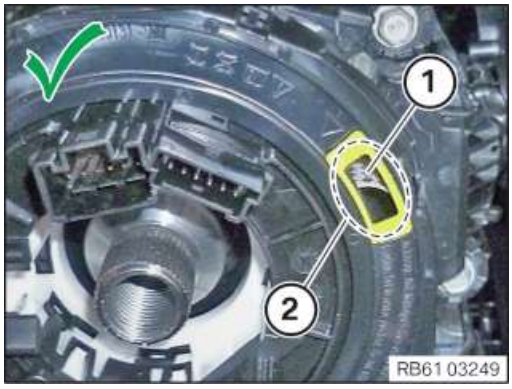
Result

» Ensure that no incorrect marking (1) is seen in inspection glass (2).

Measure

- Turn the coil spring cassette until the right mark (1) becomes visible in the inspection glass (2).

Check



- **Version A:**

  Check whether the correct marking (1) is seen in inspection glass (2).

Result

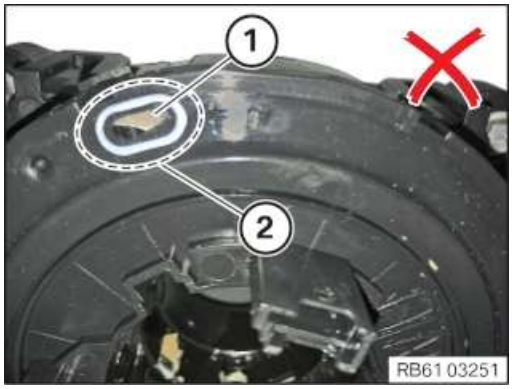
» Correct marking (1) is seen in inspection glass (2).

Measure

- Continue with the next step.

Check

cardiagn.com



- **Version B:**

  Check whether the correct marking (1) is seen in inspection glass (2).

Result

» Ensure that no incorrect marking (1) is seen in inspection glass (2).

Measure

- Turn the coil spring cassette until the right mark (1) becomes visible in the inspection glass (2).

Check



- **Version B:**

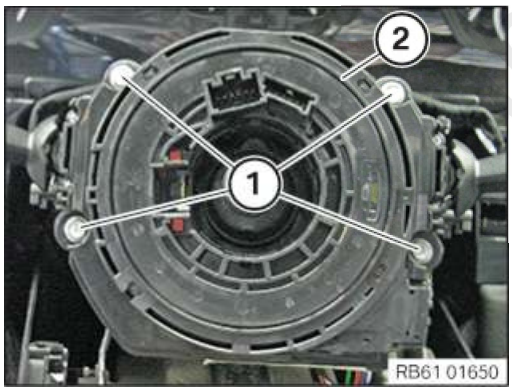
  Check whether the correct marking (1) is seen in inspection glass (2).

Result

» Correct marking (1) is seen in inspection glass (2).

Measure

- Continue with the next step.

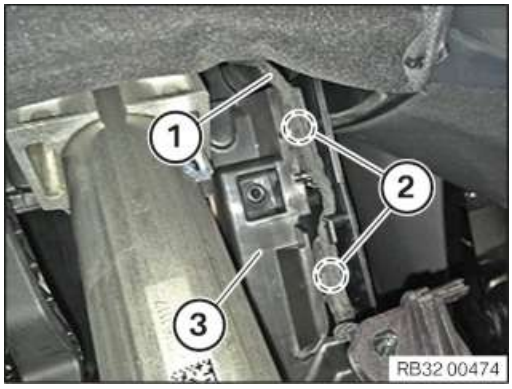


- Position the steering column switch cluster (SZL) (2).
- Tighten the screws (1).

Steering column switch cluster (SZL) on the steering column

Screw TS5x20		Tightening torque	3 Nm

40 – Install steering column shroud lower section

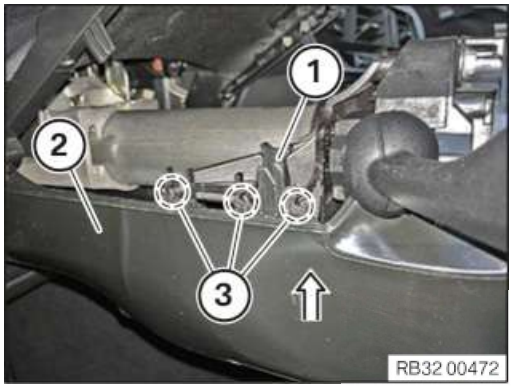


- Position the steering column shroud lower section (3).
- Secure the line (1) on the brackets (2).

vwdiagn.com



- Connect the connector (1).

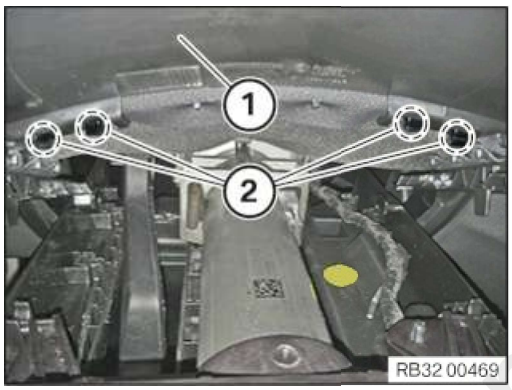


NOTICE

Perform the operations on the left and right side.

- Align the steering column shroud lower section (2) to the steering column using the retaining lug (1).
- Push the steering column shroud lower section (2) up in the direction of the arrow until the brackets (3) engage.

41 – Fit steering column shroud upper section



- Clip in the steering column shroud upper section (1) at the brackets (2).



NOTICE

Perform the operations on the left and right side.

- Clip in the steering column shroud upper section (1)into the guide (2).



NOTICE

Perform the operations on the left and right side.

- Press the upper section of the steering column shroud (1) downwards in direction of arrow.

  The upper section of the steering column shroud must engage audibly and perceptibly.

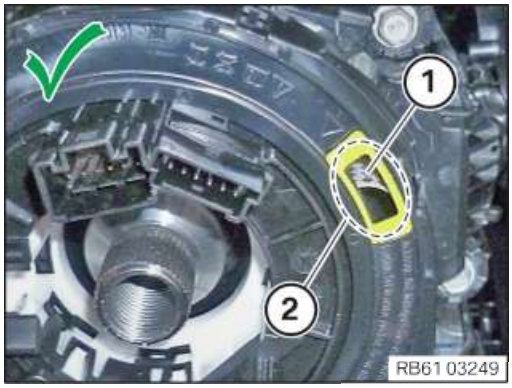
42 – Installing the steering wheel (sports steering wheel)

diag.com

▸ **Check the neutral position of the clock spring**

TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



Check

- **Version A:**

  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).



Check

- **Version B:**

  Check the mark (1) on the coil spring in the inspection glass (2).

Result

» The mark (1) on the coil spring is not visible.

Measure

- Turn the coil spring cassette until the mark (1) on the coil spring becomes visible in the inspection glass (2).



Check

- A micro-encapsulated screw (3) may be fitted.
- Check the screw connection.

Result

» Screw is (3) micro-encapsulated.

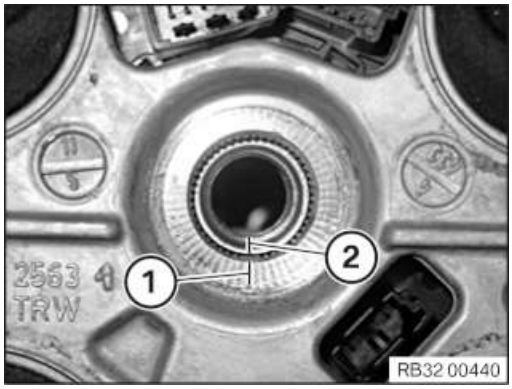
carfdiagn.com

Measure

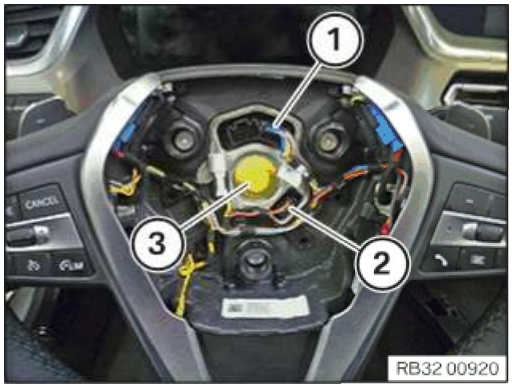
- Clean thread in the steering column.

  Renew the screw (3).

  Parts: Screw



- Align mark (1) on steering wheel to mark (2) on steering column.
- Connect steering wheel.



- Connect connectors (1) and lock.
- If installed: Connect connectors (2) and lock.
- Tighten screw (3) .

Steering wheel to steering column

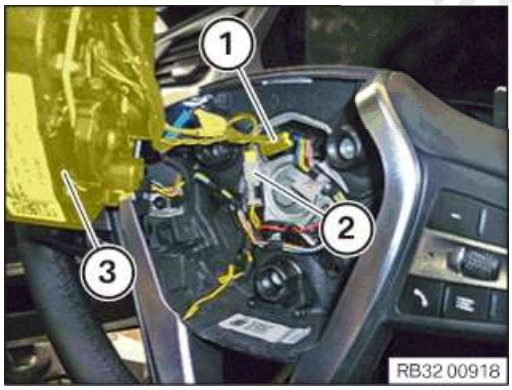
M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

43 – Installing the airbag unit

TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

▸ **Version A: Installing the airbag unit (sports steering wheel)**



- Position airbag unit (3).
- Connect connectors (1) and (2) lock.



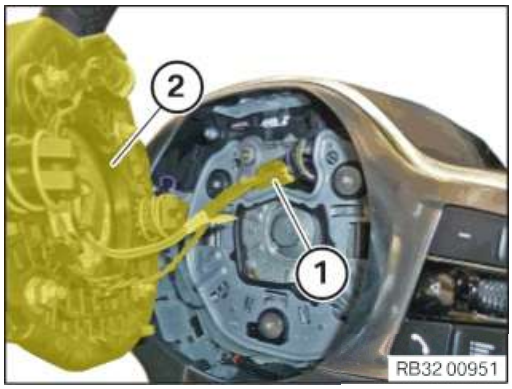
- Press the airbag unit (1) with even pressure in the direction of the arrow into the steering wheel.

  The airbag unit (1) must engage audibly and perceptibly.

arcdiagn.com

TECHNICAL INFORMATION

After replacing the airbag unit (M-sports steering wheel) or after a possible conversion of standard steering wheel and airbag unit to M-sports steering wheel, a software update or a programming/encoding via ISTA must be performed!



- Connect and lock connector (1) of the airbag unit (2).



- Press the airbag unit (1) with even pressure in the direction of the arrow into the steering wheel.

  The airbag unit (1) must engage audibly and perceptibly.

44 – Install the central information display (CID)

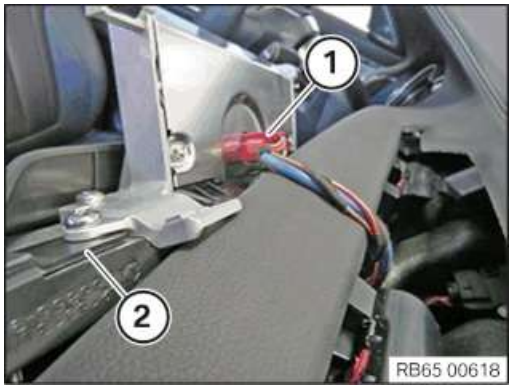
RISK OF DAMAGE

Electrostatic discharge.

Damage to or destruction of electrical components.

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

cardiagn.com



- Position Central Information Display (CID) (2).
- Connect plug connection (1) and lock.

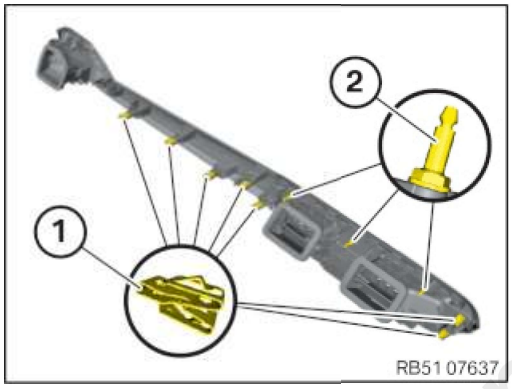


- Insert the central information display (CID) (2) in the instrument panel and position correctly.
- Tighten the screws (1).

Central information display to instrument panel

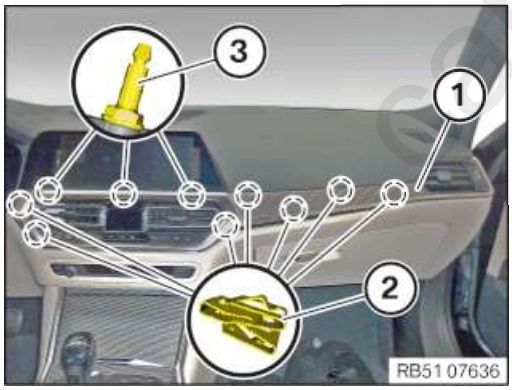
Screw		Tightening torque	1,8 Nm

45 – Install the finisher on the right instrument panel



- Check the clamps (1).

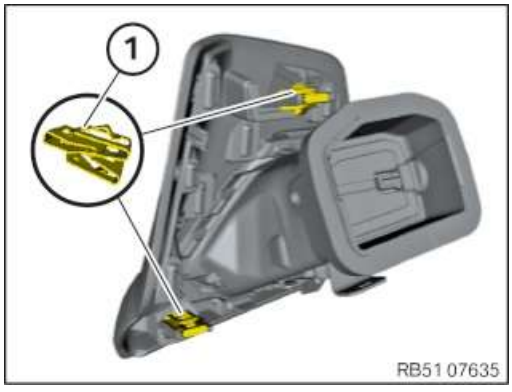
  Replace broken or missing clamps (1).
- Check the pins (2) and the corresponding clamps on the instrument panel trim and renew if necessary.



- Install the decorative strip (1).

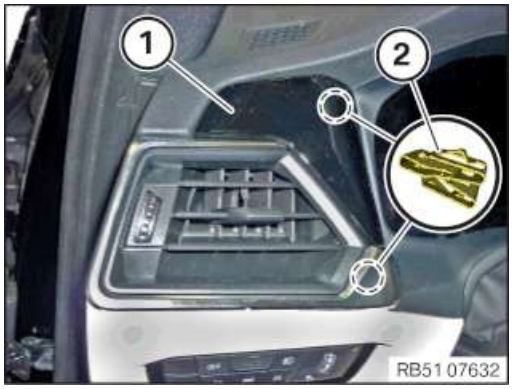
  Connect and lock the associated connectors.
- Correctly position the decorative strip (1) and at the clamps (2) and clip in the pins (3).

46 – Install the finisher on the instrument panel on the left



- Check the clamps (1).

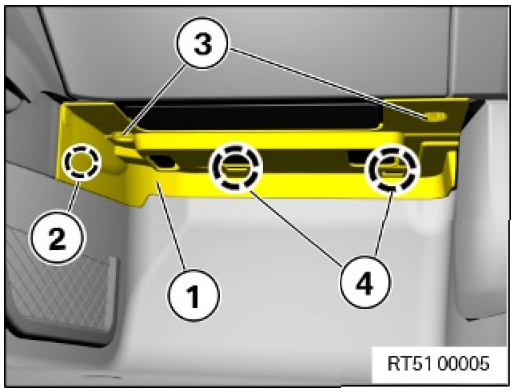
  Replace broken or missing clamps (1).



- Install the decorative strip (1).

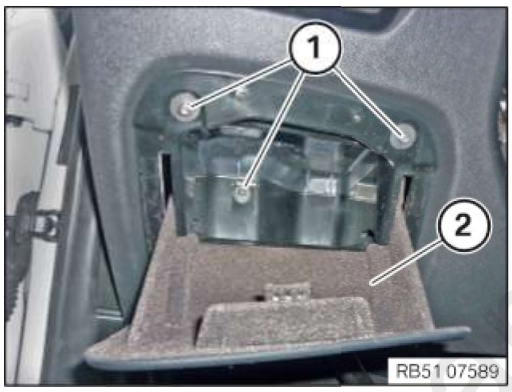
  Connect and lock the associated connectors.
- Clip decorative strip (1) into clamps (2).

47 – Install the right footwell trim panel



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

48 – Installing the left fold-down compartment

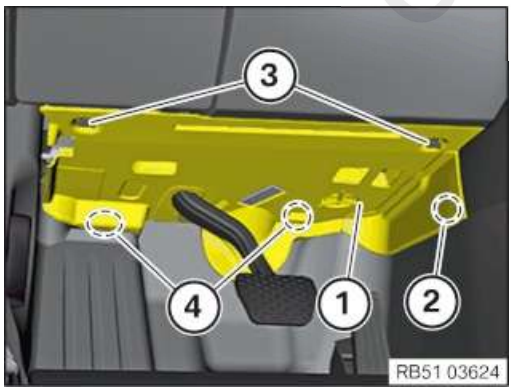


- Install the fold-down compartment (2).
- Tighten the screws (1).

Fold-down compartment to instrument panel

Oval-head screw		Tightening torque	1,8 Nm

49 – Installing the trim panel for the pedal mechanism



- Connect associated connector.
- Attach the trim panel for the pedal mechanism (1) in the guides (4) and fold it up.
- Clip the trim panel for the pedal mechanism (1) into the centre console in this area (2).
- Insert locks (3) correctly and turn 90°.

50 – Install both A-pillar trim panels

NOTICE

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

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▸ **Installing the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

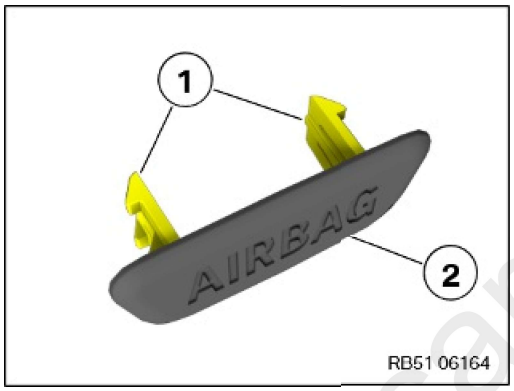
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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.



Check

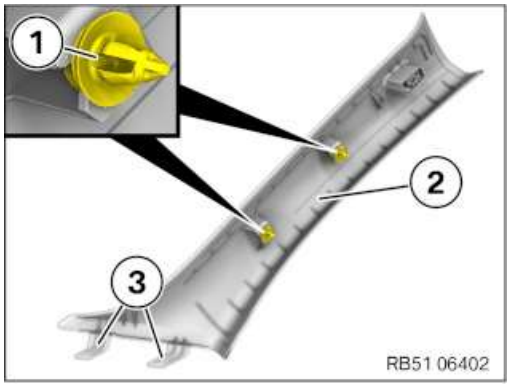
- Check retaining lugs (1) of cover (2) for damage.

Result

» Retaining lug is damaged.

Measure

- Renew the cover.



Check

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

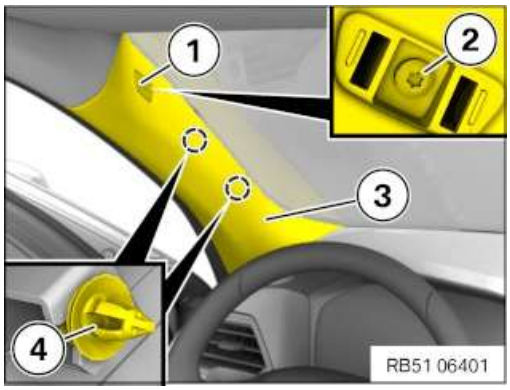
Result

» Guide is damaged.

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Measure

- Renew the A-pillar trim panel.



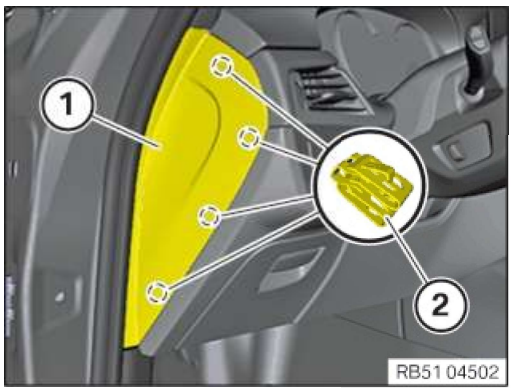
- Guide in A-pillar trim panel (3) downwards and clip it in with clips (4).
- Tighten down screw (2).

A-pillar trim panel to body

Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

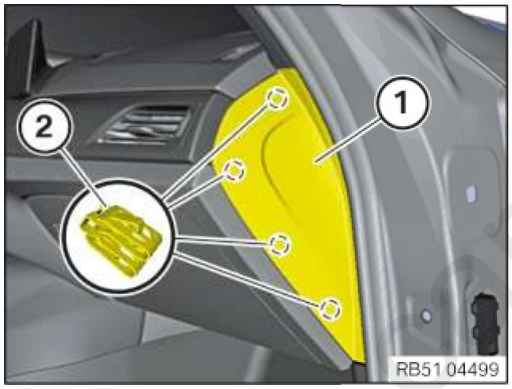
- Clip in the cover (1).

51 – Install the side panel on left instrument panel



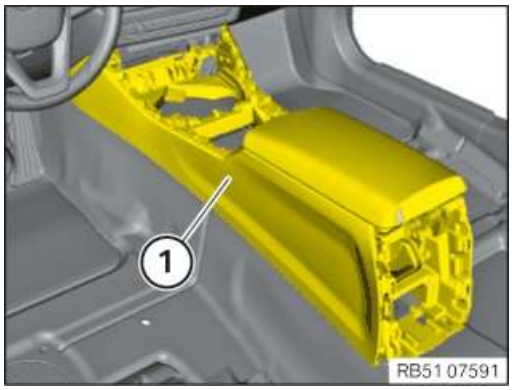
- Feed in the side panel (1) and clip it in at the clamps (2).

52 – Install the side panel on instrument panel on the right



- If required, connect the associated connector.
- Feed in the side panel (1) and clip it in at the clamps (2).

53 – Installing the centre console

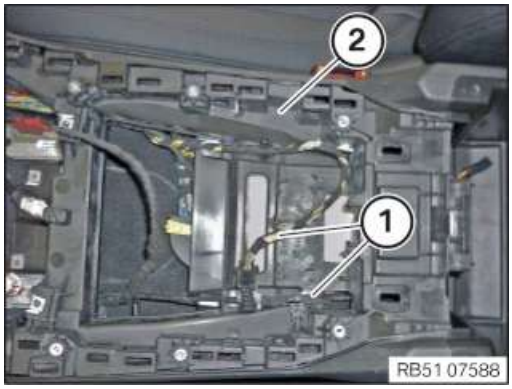


NOTICE

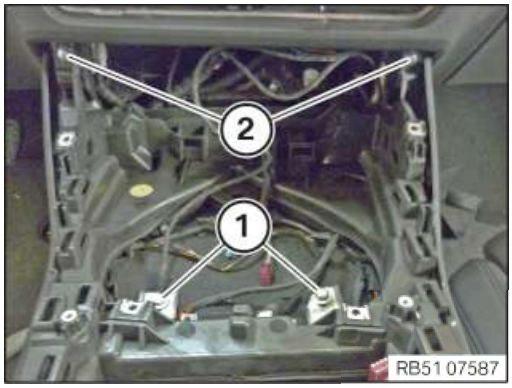
To provide a better overview: Schematic diagram with partially hidden components.

- Install centre console (1) and thereby feed in the wiring harness.
- Feed in the centre console (1) to the instrument panel and position correctly.

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- Secure the wiring harness to the centre console (1) and connect and lock the existing plug connections.



- Tighten the screws (1).

Centre console on tunnel

M6x18 Hexagon screw		Tightening torque	4,6 Nm

- Tighten the screws (2).

Centre console to instrument panel

Oval-head screw		Tightening torque	1,8 Nm

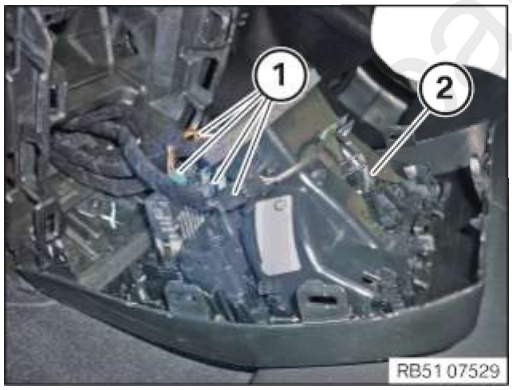


- Tighten the screws (1).

Centre console on tunnel

M6x18 Hexagon screw		Tightening torque	4,6 Nm

54 – Installing the rear centre console trim



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

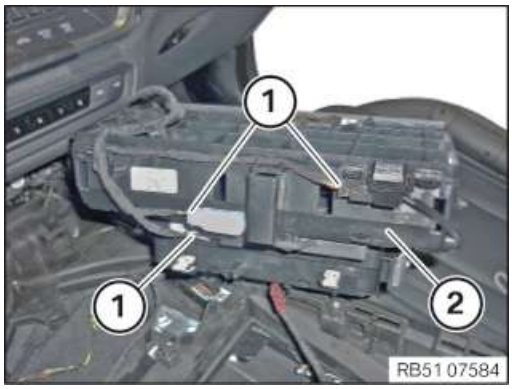


- Position centre console trim (1) and engage at the latch mechanisms at the side.

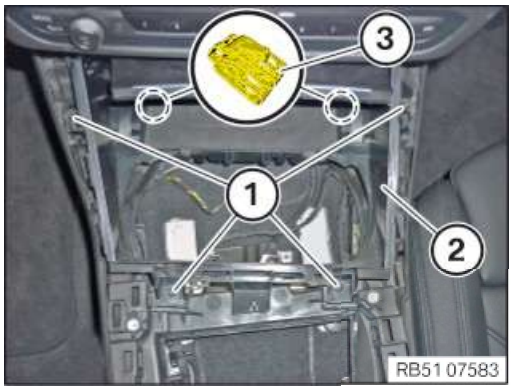
55 – Installing the storage compartment of the front centre console

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55 – Installing the storage compartment of the front centre console



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

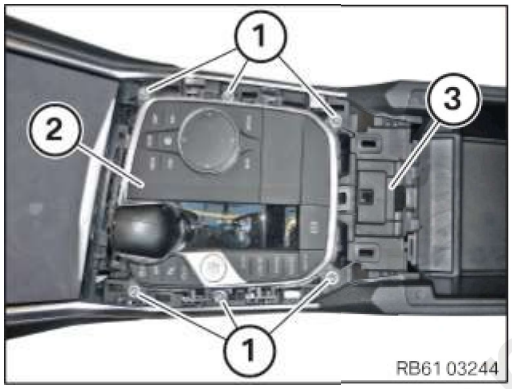


- Engage rear storage compartment trim (2) into clamps (3).
- Tighten the screws (1).

Storage compartment to centre console

Oval-head screw		Tightening torque	1,8 Nm

56 – Install the operating facility in the centre console



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

Gear selector switch to centre console trim

Screw	Tightening torque	1,8 Nm

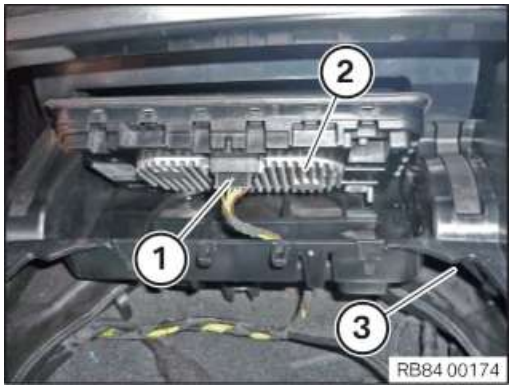
▸ **Disconnecting all battery earth leads**



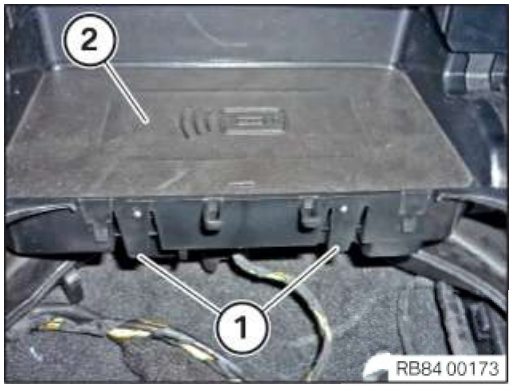
- See additional information.

57 – Installing the wireless charging station

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



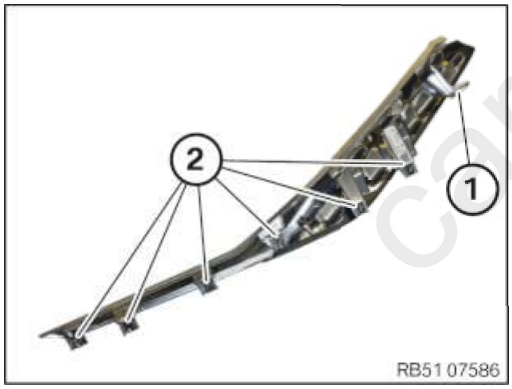
- Press the wireless charging station (2) down till the locking units (1) are engaged correctly.

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

▸ Installing the decorative trim to centre console

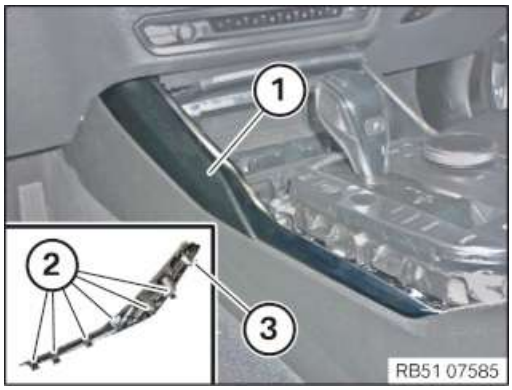
NOTICE

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



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

  Renew defective decorative trim.



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

59 – Installing the centre console trim

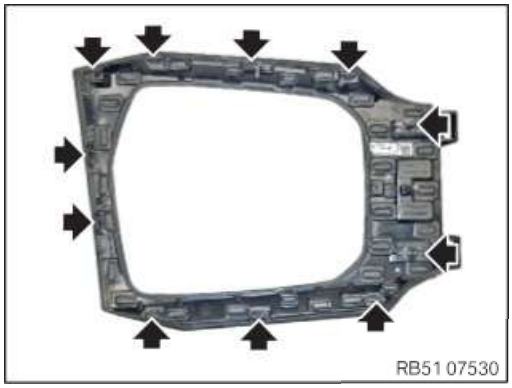
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RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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

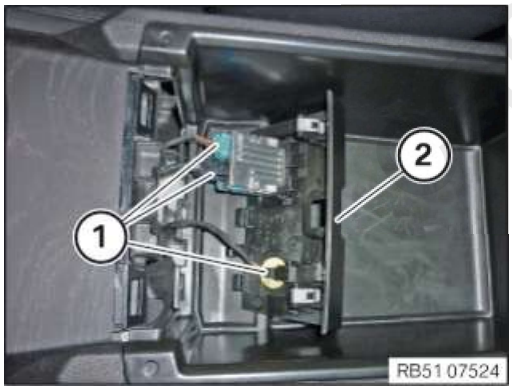


- Check all the latch mechanisms or clamps (arrows).
- In case the latch mechanisms or the clamps (arrows) are faulty, renew the centre console trim .

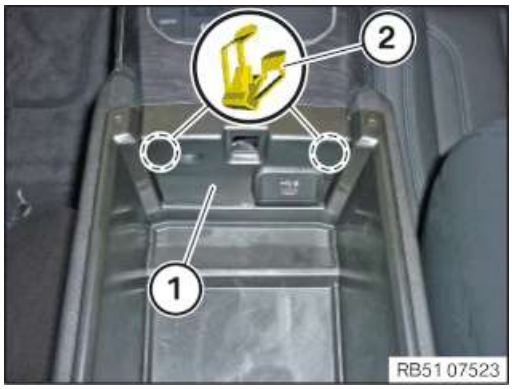


- Correctly position the centre console trim (1) and engage at the latch mechanisms.

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



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



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

61 – Install the cup holder



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

Cup holder to centre console

Oval-head screw		Tightening torque	1,8 Nm



- Insert the insert (1).

Additional Information

Overview of Tightening Torques

Front passenger airbag on instrument panel trim — Used in step 32

Screw		Tightening torque	2,6 Nm

Dashboard to support — Used in step 34

Screw		Tightening torque	2,4 Nm

Speaker to support / support to instrument panel / support to body — Used in step 35

Screw		Tightening torque	1,8 Nm

Instrument cluster (KOMBI) to support — Used in step 38

Oval-head screw		Tightening torque	1,8 Nm

Steering column switch cluster (SZL) on the steering column — Used in step 39

Screw TS5x20		Tightening torque	3 Nm

Steering wheel to steering column — Used in step 42

M14	Only for a micro-encapsulated screw: Renew screw.	Tightening torque	62,5 Nm

Central information display to instrument panel — Used in step 44

Screw		Tightening torque	1,8 Nm

Fold-down compartment to instrument panel — Used in step 48

Oval-head screw		Tightening torque	1,8 Nm

A-pillar trim panel to body — Used in step 50

Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

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Centre console on tunnel			Used in step 53
M6x18 Hexagon screw		Tightening torque	4,6 Nm

Centre console to instrument panel			Used in step 53
Oval-head screw		Tightening torque	1,8 Nm

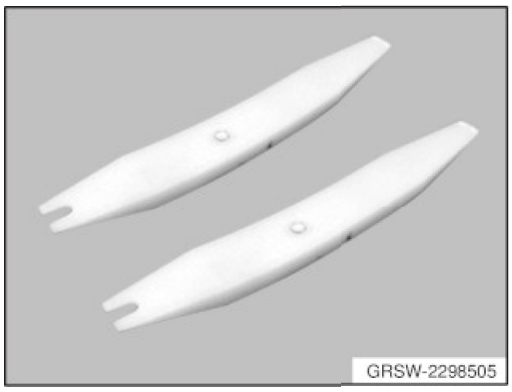
Storage compartment to centre console			Used in step 55
Oval-head screw		Tightening torque	1,8 Nm

Gear selector switch to centre console trim			Used in step 56
Screw		Tightening torque	1,8 Nm

Cup holder to centre console			Used in step 61
Oval-head screw		Tightening torque	1,8 Nm

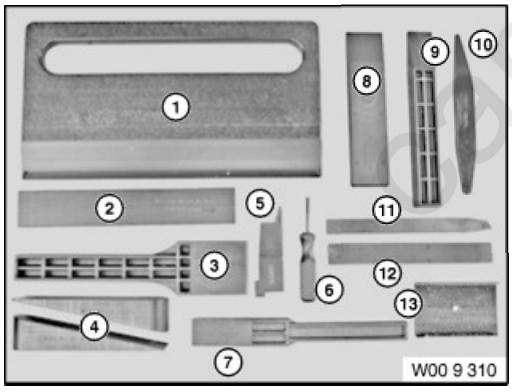
Overview of Special Tools

2 298 505 Wedge



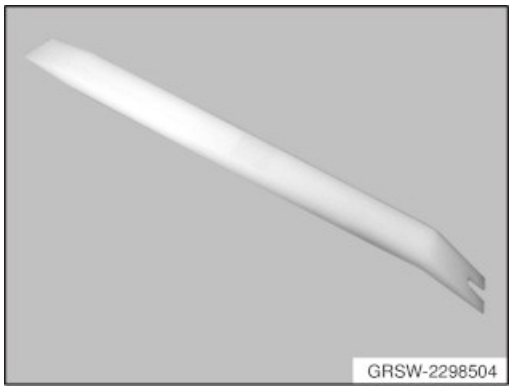
Common	Used in step 34
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

0 493 752 (00 9 329) Case



Common	Used in step 13
Usage	(Case) with insert not incl. panel wedges
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

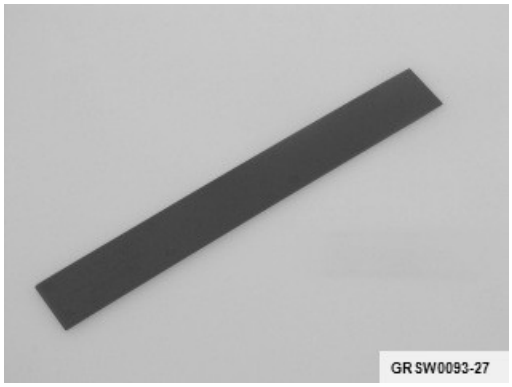
2 298 504 Wedge



Common	Used in step 22
Usage	Wedge with angled lug
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

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0 496 571 (00 9 327) Wedge



Common	Used in step 26
Usage	(Cleaning wedge) From 11/2008 this special tool replaces panel wedge 00 9 323 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common	Used in step 27
Usage	(Panel wedge) From 11/2008 this special tool replaces panel wedge 00 9 317 (different material)
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	41 01 09 (507)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	1320
72 00 ... Safety regulations for handling components with gas generators	13

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	756
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	756
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
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61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 20 900 Disconnecting and connecting battery earth lead	756
61 35 ... Notes on ESD protection (Electro Static Discharge)	1944

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72 12 004 Removing and installing/replacing airbag module for driver's knee protection

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.

WARNING

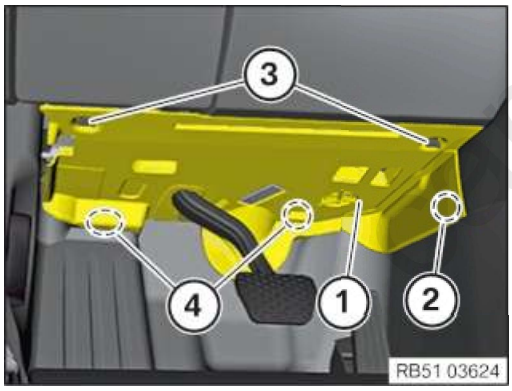
Airbag unit.

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

PRELIMINARY WORK

1 – Removing the trim panel for pedal mechanism



- Unclip the trim panel for the pedal mechanism (1) towards the inside in this area (2).
- Turn the locks (3) by 90°.
- Detach the trim panel for the pedal mechanism (1) inwards out of the guides (4).
- Unlock associated plug connection and disconnect.

2 – Disconnecting all battery earth leads



- See additional information.

MAIN WORK

3 – Removing knee airbag

WARNING

Airbag unit.

Danger! Life-threatening injuries!

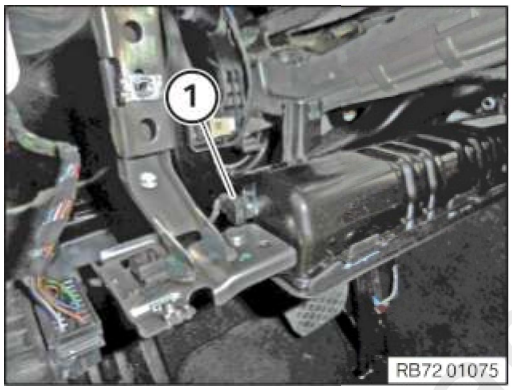
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

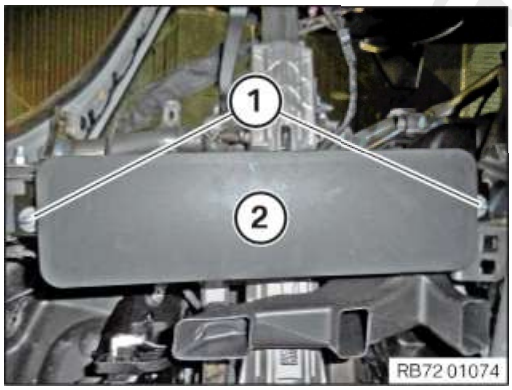
Pyrotechnic components.

Danger! Life-threatening injuries!

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



- Unlock plug connection (1) and disconnect.



- Loosen nuts (1).
- Remove knee airbag (2).

4 – Installing knee airbag

WARNING

Airbag unit.

Danger! Life-threatening injuries!

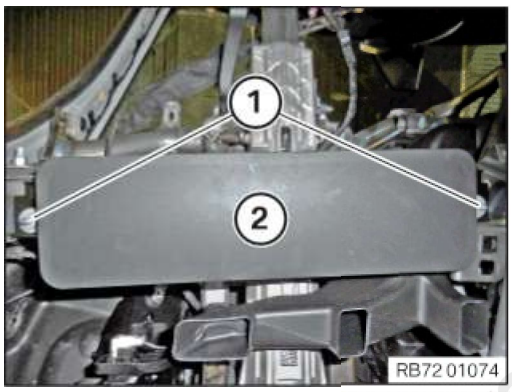
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

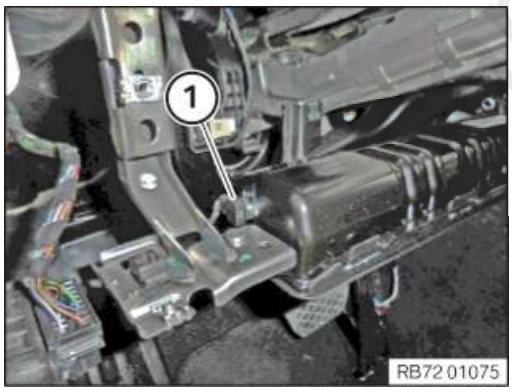
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.



- Position knee airbag (2) correctly.
- Tighten nuts (1).

Knee airbag on support structure

Nut		Tlghtening torque	8 Nm



- Connect connectors (1) and lock.

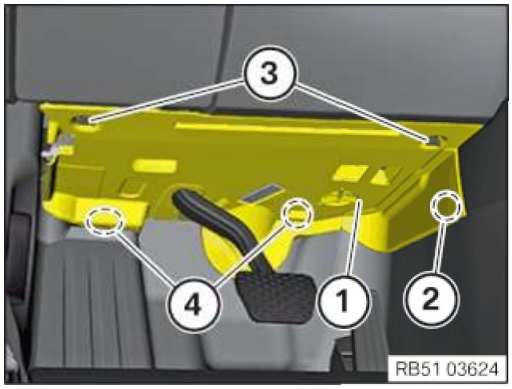
carsdiagn.com

5 – Disconnecting all battery earth leads



- See additional information.

6 – Installing the trim panel for the pedal mechanism



- Connect associated connector.
- Attach the trim panel for the pedal mechanism (1) in the guides (4) and fold it up.
- Clip the trim panel for the pedal mechanism (1) into the centre console in this area (2).
- Insert locks (3) correctly and turn 90°.

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Additional Information

Overview of Tightening Torques

Knee airbag on support structure			Used in step 4
Nut		Tlghtening torque	8 Nm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	34

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25

61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	25
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61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	25
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	25
61 20 900 Disconnecting and connecting battery earth lead	25
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61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	25
61 20 900 Disconnecting and connecting battery earth lead	25
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61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25

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72 12 006 Removing and installing/replacing airbag module for passenger knee protection

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.

WARNING

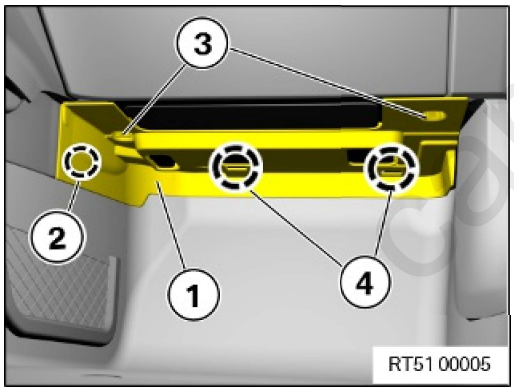
Airbag unit.

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

PRELIMINARY WORK

1 – Remove the right footwell trim



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

2 – Disconnecting all battery earth leads



- See additional information.

MAIN WORK

3 – Removing the right knee airbag

WARNING

Airbag unit.

Danger! Life-threatening injuries!

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

WARNING

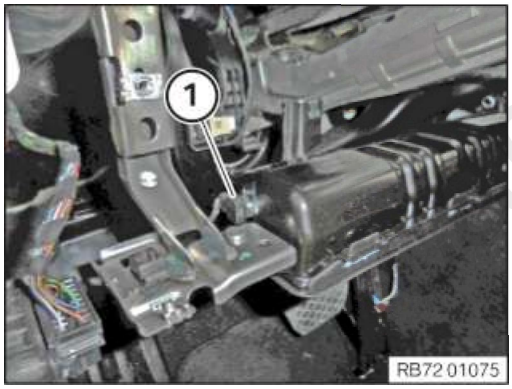
Pyrotechnic components.

Danger! Life-threatening injuries!

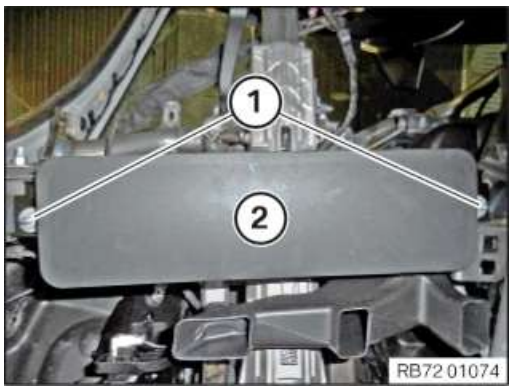
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

NOTICE

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



- Unlock plug connection (1) and disconnect.



- Loosen nuts (1).
- Remove knee airbag (2).

4 – Installing the right knee airbag

WARNING

Airbag unit.

Danger! Life-threatening injuries!

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

WARNING

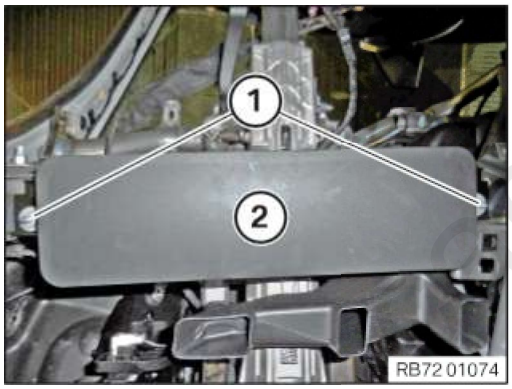
Pyrotechnic components.

Danger! Life-threatening injuries!

- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
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NOTICE

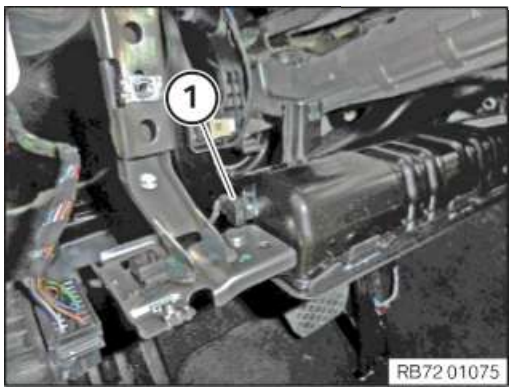
Description is for left component only. Procedure on the right side is identical.



- Position knee airbag (2) correctly.
- Tighten nuts (1).

Knee airbag on support structure

Nut		Tlghtening torque	8 Nm



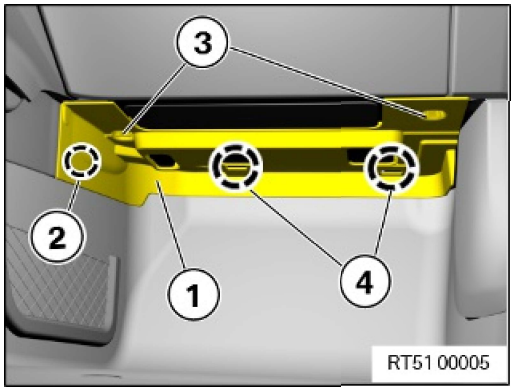
- Connect connectors (1) and lock.

5 – Disconnecting all battery earth leads



- See additional information.

6 – Install the right footwell trim panel



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

Additional Information

Overview of Tightening Torques

Knee airbag on support structure			Used in step 4
Nut		Tlghtening torque	8 Nm

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	34

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	25
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	25

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61 20 900 Disconnecting and connecting battery earth lead	25
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	25
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	25
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72 Safety information and general information

Notes on safety

> Safety regulations for handling airbag modules and pyrotechnic belt tensioners

> Notes on scrapping vehicles with gas generators

Handling electrical system and electronics

> Unlocking/locking airbag plug connections

> Repairing airbag lines

> Handling optical fibres

Check

> Check seat belt

> Checklist for seat belt

Airbag system

> See diagnosis system for FUB and check

> Deactivating airbags

> Procedure after airbag deployment .

Active pedestrian protection

> Procedure after actuator triggering

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Notes on safety

-- Safety regulations for handling airbag modules, airbag components and
> pyrotechnical seat belt tensioners

-- Notes on scrapping vehicles with gas generators
>

-- Deactivation/activation pyrotechnical components
>

Handling electrical system and electronics

-- Unlocking/locking airbag plug connections
>

-- Repairing airbag lines
>

-- Handling optical fibres
>

Check

-- Check seat belt
>

-- Checklist for seat belt
>

Airbag system

-- Functional description and checking, refer to Diagnosis system
>

-- Deactivating airbags
>

-- Procedure after airbag deployment.
>

Active pedestrian protection
AFGS

-- Procedure after actuator triggering
>

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72 00 ... Safety regulations for handling components with gas generators

It is essential to comply with the regulations as specified in the law relating to the use of explosives when working on airbag units and seat belt tensioners.

Airbags, seat belt tensioners etc. are pyrotechnical objects. Pyrotechnical objects are assigned to different danger classes on the basis of the quantity of propellant that they contain. The assignment can be ascertained from the identification marking on the product:

Important!

> Failure to comply with the warning notices and repair instructions for gas generator components can cause accidental deployment and result in injury and vehicle damage!

This applies in particular to the following components:

- Airbag modules (driver's/front passenger airbags, side airbags)
- Seat belt tensioner
- Head airbag
- Active knee protection
- Active head restraint
- Safety battery terminal

1. Regulations

The regulations quoted in the following refer to the Federal Republic of Germany.

In all other countries, the relevant legislation and regulations must be observed in each case. Country-specific legal regulations that go beyond this information or court decisions based thereon must be followed in each case or given precedence over these regulations.

The following components used by BMW:

- Pyrotechnical restraint systems are subject to danger class PT1
- Gas generators are pyrotechnical objects belonging to danger class T1

Handling, transporting and storing non-fired gas generators are subject to the "Explosive Materials Act".

The relevant trade supervisory authority must be notified at least 2 weeks before pyrotechnical objects are handled for the first time. Here the relevant authority must be notified in writing of the person responsible (e.g. dealership owner, holder of general power of attorney or if necessary workshop supervisor). A certificate of qualification, i.e. specific training, is not required for the person responsible.

2. Dismantling and installation

- Inspection, testing and installation work may only be carried out by expert trained personnel in BMW Service.
- Work on components of the airbag system should only ever be carried out with the battery disconnected, the negative terminal post covered and the plug connection of the cable leading to the gas generator disconnected. If only the battery is disconnected, the following prescribed waiting period must be observed without fail:
  - 1 mins.
- In the event of breaks in work, a component with a gas generator that has been removed must be secured against access by other persons.
- Individual components must never be repaired. Instead, always replace them.
- Do not treat airbag system components with cleaning agents or grease.
- Components of the airbag system must not be exposed to temperatures in excess of 75 °C.
- Airbag system components, including electronic diagnostic components, which have been dropped from heights in excess of 0.5 m must not be reinstalled in the vehicles.

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- Do not remove components of the airbag system from the original packaging until immediately before they are to be installed in the vehicle.
- Before installing, subject components such as housing, connector pins ,etc. of the airbag system (including diagnosis electronics) to a visual inspection for damage and replace if necessary.
- Airbag system components may only be electrically tested while they are installed and only with the BMW ISTA.
- **Danger of injury:** The airbag module may only be set down with the airbag itself facing *upwards*. Otherwise the airbag module will be thrown upwards if the alternator is ignited.
- Do not point the ignition squib of a gas generator at other persons.
- Components with gas generators must not be fired while they are removed. They must be disposed of by special disposal companies or returned to BMW in the packaging of the new components.
- When carrying out straightening and welding work with an electric welder:
  - Disconnect battery
  - Cover negative terminal (post)
- Avoid all contact with the skin when removing a fired airbag module - wear gloves. Wash with water after contact with the skin.

3. Transport

- Components with gas generators must be sent off in the packaging of the new components.

4. Storage

- Observe the regulations of the relevant trade supervisory authority and the applicable national regulations.

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72 12 ... Unlocking/locking airbag plug connections

Warning!

Read and comply with safety regulations for handling airbag modules and pyrotechnical belt tensioners.

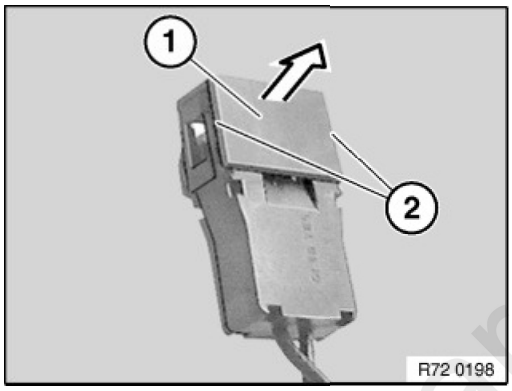
Attention!

An airbag plug connection must be replaced if it is damaged.

Sourcing reference for airbag repair instructions (with plug connection), see Electronic Parts Catalogue.

Following versions of plug connections on airbag module/gas generator are possible:

- Airbag plug connection on gas generator/airbag module is offset by 90°
- Airbag plug connection on gas generator/airbag module is straight (3 versions)

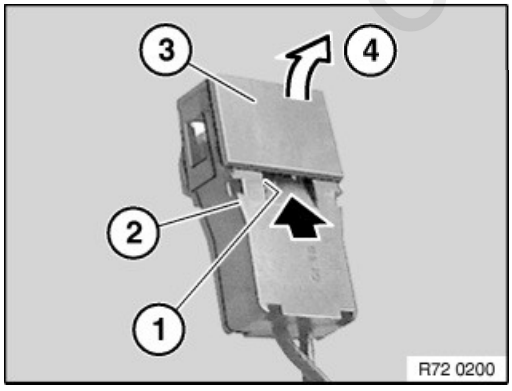


Airbag plug connection on gas generator/airbag module offset by 90°:

There are two ways of unlocking this airbag plug connection on the gas generator/airbag module:

Method 1:

Simultaneously pull cover (1) upwards at lugs on left and right (2).

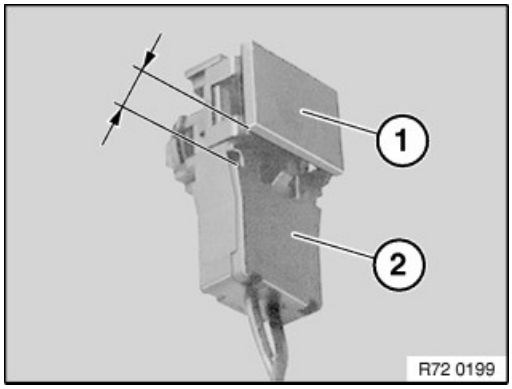


Method 2:

Insert a narrow screwdriver into recess (1) in housing (2).

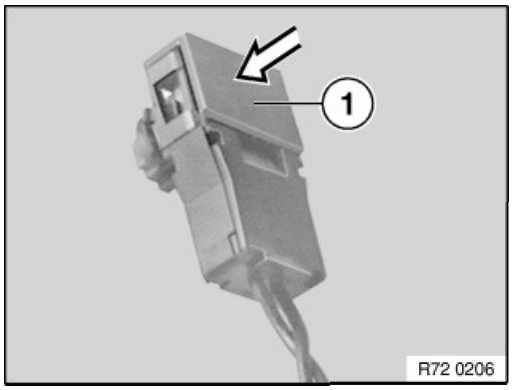
Carefully prise cover (3) off (4).

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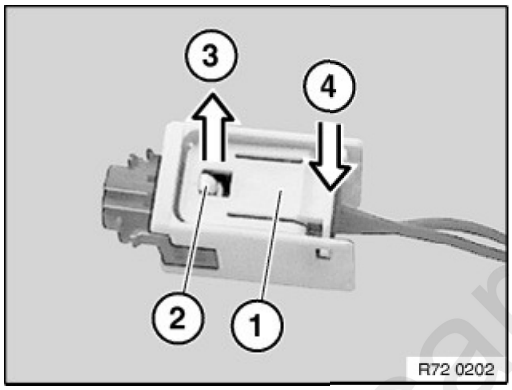
Cover (1) is not positioned higher than housing (2).

The airbag plug connection is unlocked and can now be detached from the gas generator/airbag module.



Installation note:
After attaching airbag plug connection to gas generator/airbag module, press cover (1) downwards until it rests flat on housing.

Check that it catches properly.

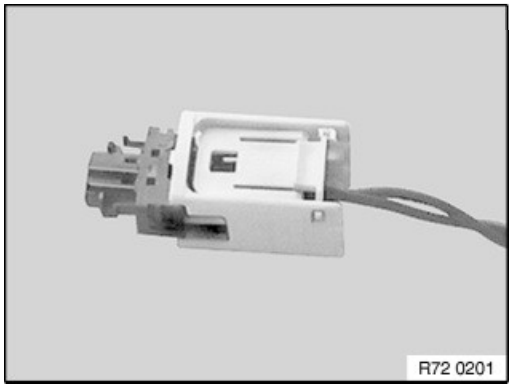


Airbag plug connection on gas generator/airbag module is straight (2 versions)

Version 1:

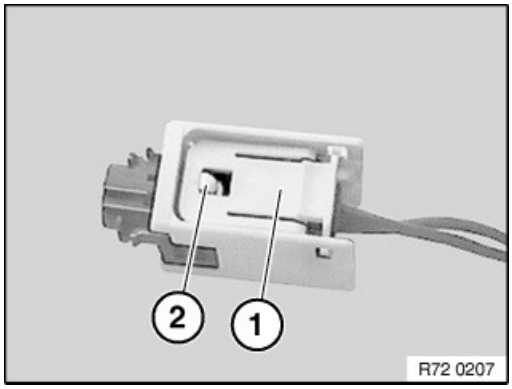
Press locking/unlocking plate (1) at edge (4).

Locking/unlocking plate (1) snaps upwards at opposite edge (3) and releases detent lug (2).



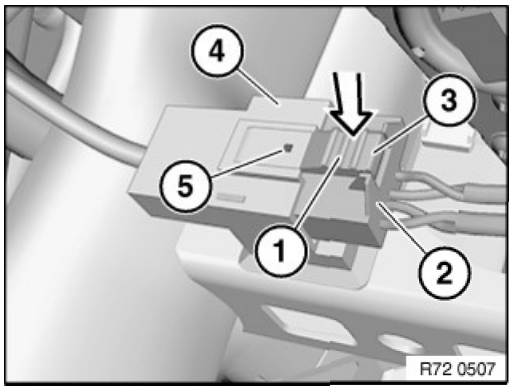
The airbag plug connection is unlocked and can now be detached from the gas generator/airbag module.

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Installation note:
After attaching airbag plug connection to gas generator/airbag module, check whether detent lug (2) is visible in opening of locking/unlocking plate (1).

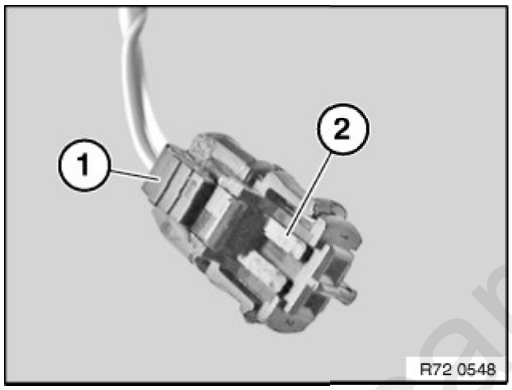
Only if the detent lug (2) is visible will the airbag plug connection gas generator/airbag module be correctly engaged.



Version 2:

Press locking/unlocking plate (1) on edge (3) and pull plug (2) out of plug housing (4).

Installation note:
Only if the detent lug is visible in opening (5) will the gas generator/airbag module plug connection be correctly engaged.



Version 3:

Press the lock (1) and pull out the connector (2) up to initial engagement position.

Detach connector (2) from firing pellet.

Installation note:
Insert plug connection in initial engagement position in gas generator/airbag module and engage in final engagement position.

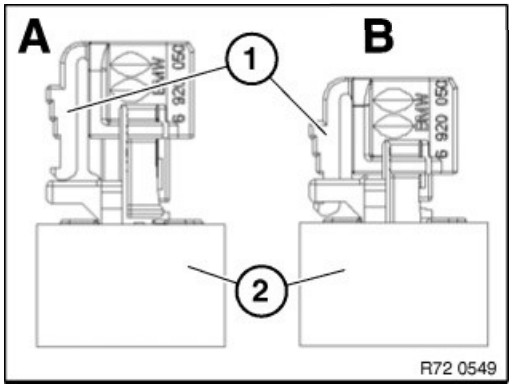
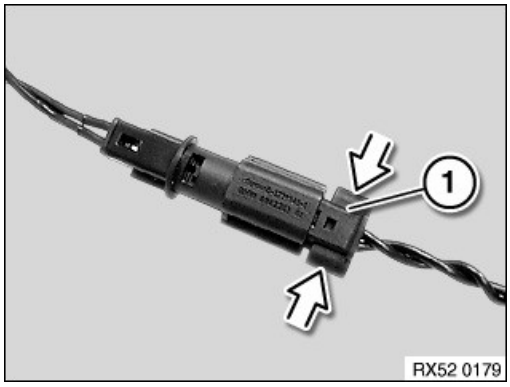


Illustration of version 3 with gas generator:

A. Initial engagement position
B. Final engagement position

1. Lock
2. Gas generator

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Version 4 - crash-active headrest:

Press locking clip at edge and disconnect plug (1).

Installation note:
Check for correct engagement.

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00 00 ... Microencapsulated screws



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

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61 00 ... Parking-residing-driving

Vehicles of the G series feature a new type of terminal control:

Functional description of the parking-residing-driving terminal control

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72 Safety information and general information

Notes on safety

> Safety regulations for handling airbag modules and pyrotechnic belt tensioners

> Notes on scrapping vehicles with gas generators

Handling electrical system and electronics

> Unlocking/locking airbag plug connections

> Repairing airbag lines

> Handling optical fibres

Check

> Check seat belt

> Checklist for seat belt

Airbag system

> See diagnosis system for FUB and check

> Deactivating airbags

> Procedure after airbag deployment .

Active pedestrian protection

> Procedure after actuator triggering

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Notes on safety

-- Safety regulations for handling airbag modules, airbag components and
> pyrotechnical seat belt tensioners

-- Notes on scrapping vehicles with gas generators
>

-- Deactivation/activation pyrotechnical components
>

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-- Unlocking/locking airbag plug connections
>

-- Repairing airbag lines
>

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>

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>

Airbag system

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>

-- Procedure after airbag deployment.
>

Active pedestrian protection
AFGS

-- Procedure after actuator triggering
>

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84 10 012 Remove & install/replace telematics control unit emergency battery

Prerequisite

- The front seats have been fully adjusted towards the bottom.

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

WARNING

Working on 12 V vehicle electrical system.

Risk of short circuits! Risk of fire!

- Detach battery earth lead from battery.
- For additional batteries: Detach all battery earth leads from additional batteries.

RISK OF DAMAGE

Electrostatic discharge.

Damage to or destruction of electrical components.

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

PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

2 – Remove both C-pillar trim panels

NOTICE

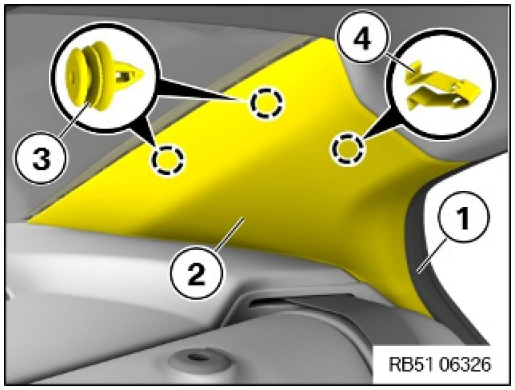
Description is for left component only. Procedure on the right side is identical.

▸ **Remove C-pillar trim panel**

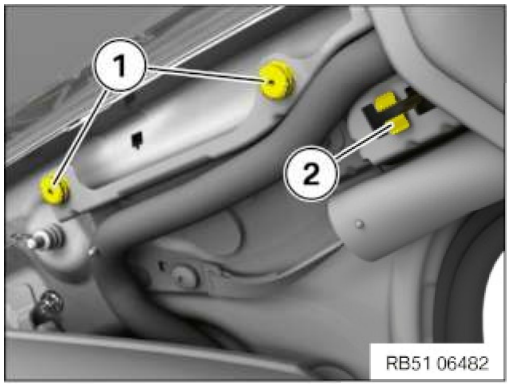
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NOTICE

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



- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).



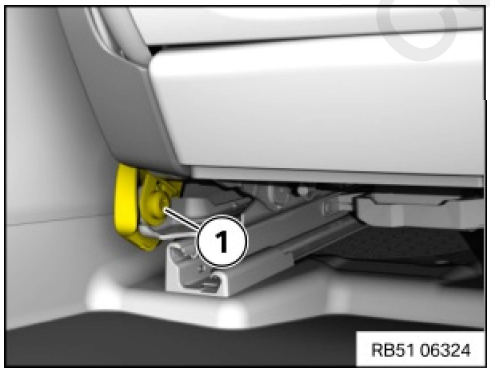
- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

3 – Removing both B-pillar trim panels

NOTICE

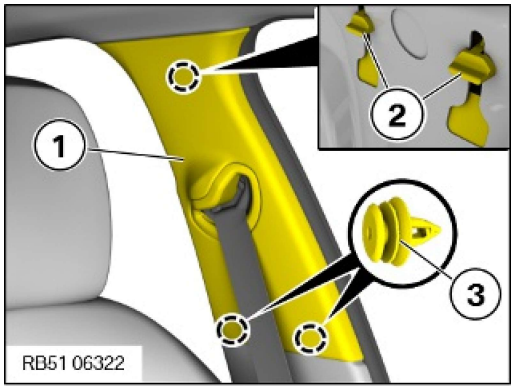
Description is for left component only. Procedure on the right side is identical.

► **Remove the B-pillar trim panel**

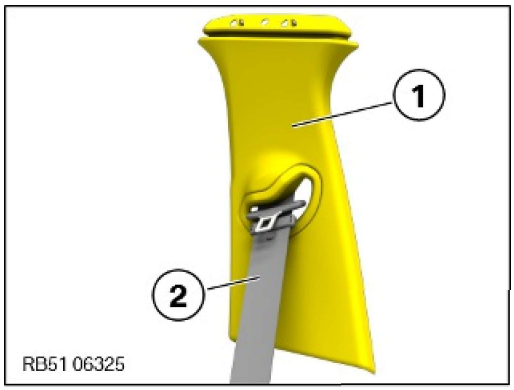


- Fully position the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).

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- Unclip clips (3).
- Feed B-pillar trim panel (1) out of the front and rear lip of edge protections and the guides (2).



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

4 – Remove both 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

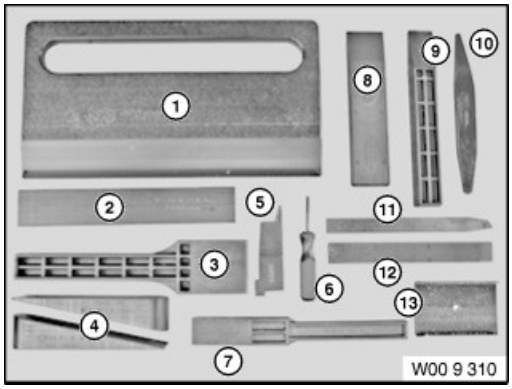
WARNING

Pyrotechnic components.

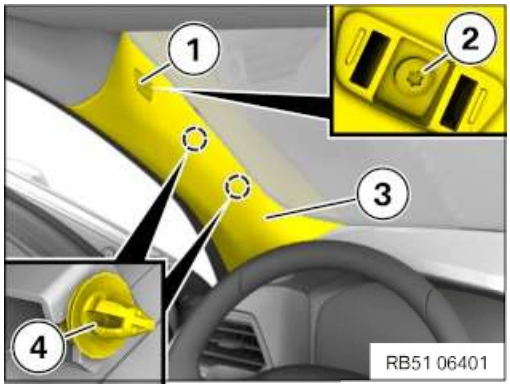
Danger! Life-threatening injuries!

- 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.

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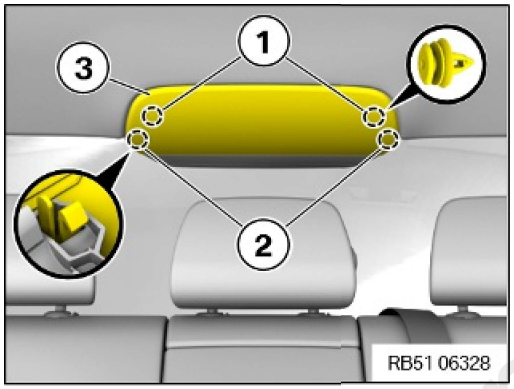


- Have the set of special tools 0 493 752 (00 9 329) ready.



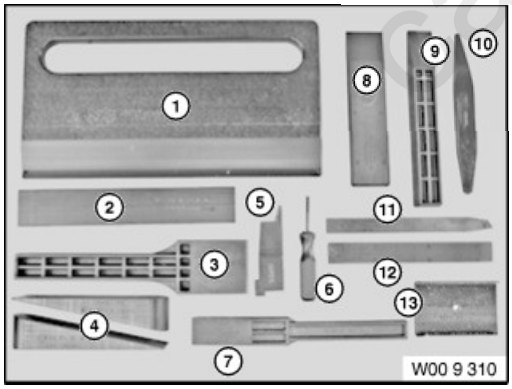
- Unclip the cover (1) with suitable tools.
- Loosen screw (2).
- Unclip A-pillar trim panel (3) with clips (4) and guide it out upwards.

5 – Removing the trim of the additional brake light

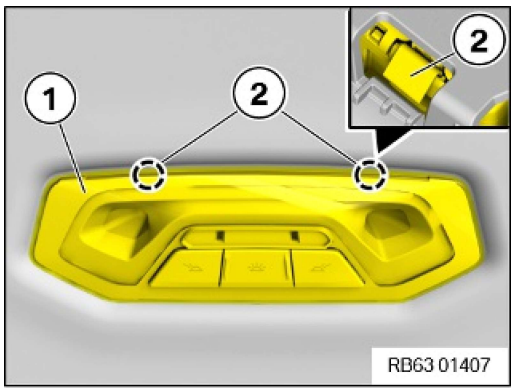


- Loosen the clips (1).
- Release the latch mechanisms (2) and remove the trim of the additional brake light (3).

6 – 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.

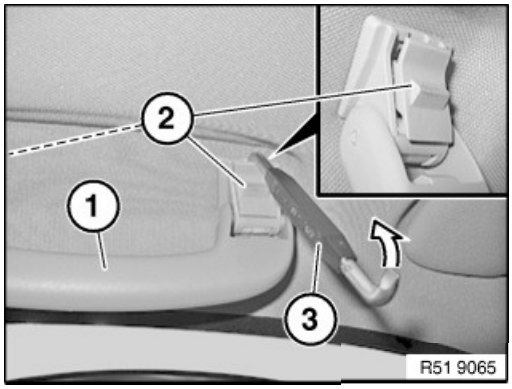
cardiagn.com

7 – Removing all grab handles

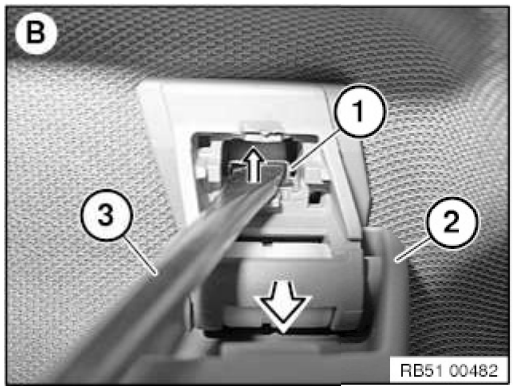
NOTICE

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).

8 – 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.

9 – Remove both counter supports for the sun visors

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NOTICE

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

▸ **Remove the counter support for the sun visor**



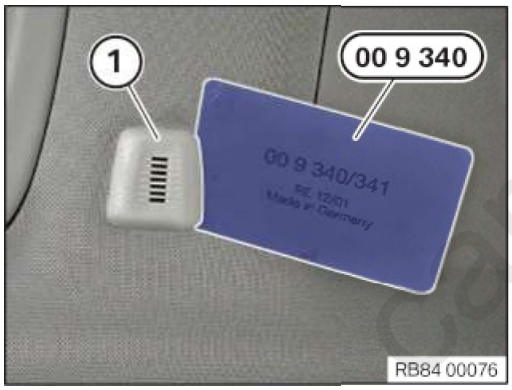
- Pull out the cover (1).
- Push the clamps (2) together and pull the counter support (3) out of the headlining.

10 – Remove both microphones

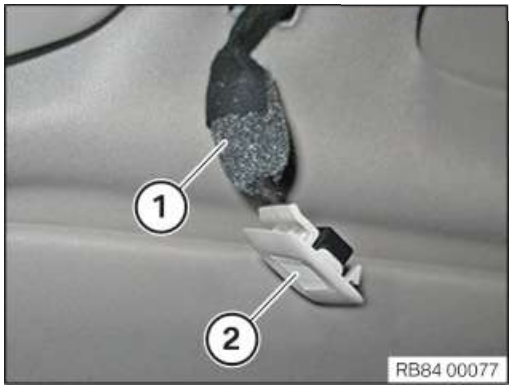
NOTICE

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

▸ **Removing hands-free microphone**



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



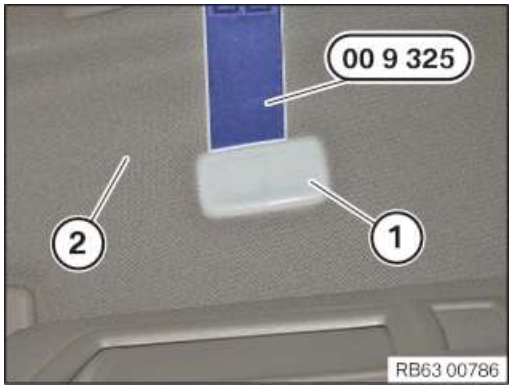
- Open insulation (1).
- Disconnect plug connection.
- Remove hands-free microphone (2).

11 – Removing front vanity mirror light

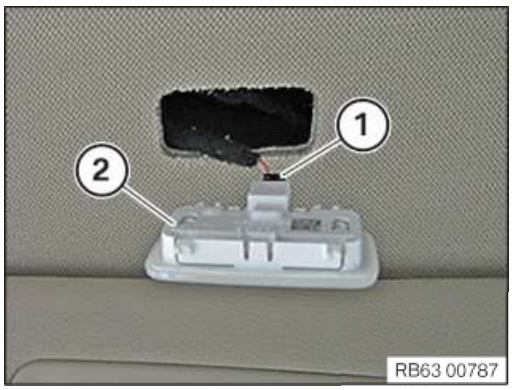
NOTICE

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

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



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

12 – Removing the roof function centre (FZD)



- Unclip the cover (1).

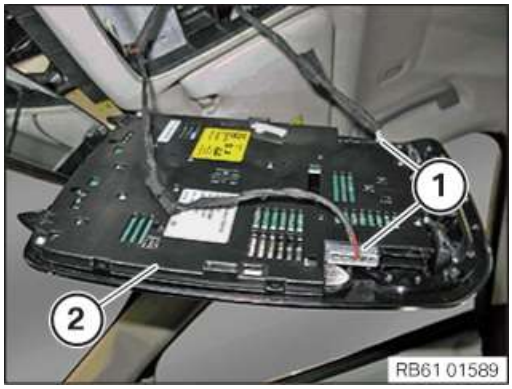


- Loosen screws (1).



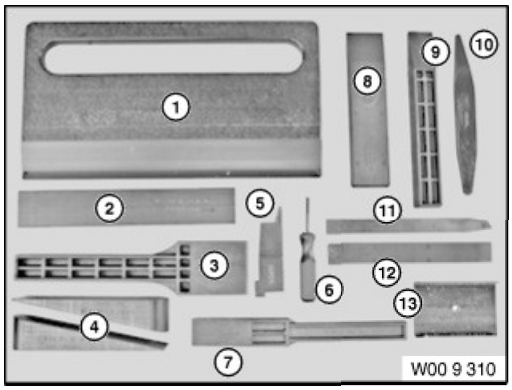
- Unclip the roof function centre (FZD) (1) from the clamps (2).
- Thread the roof function centre (FZD) (1) out of the guides (3).

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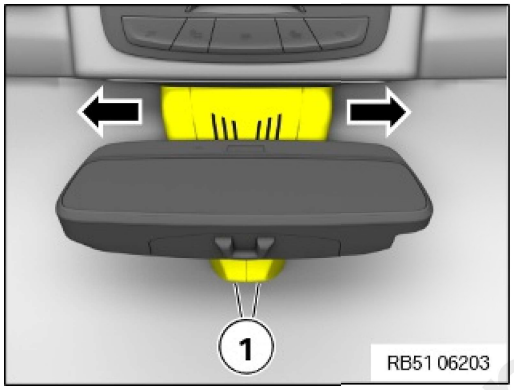


- Unlock and disconnect plug connections (1).
- Unclip the cable for the roof function centre (FZD) (2) from the cable clip.

13 – Removing end caps

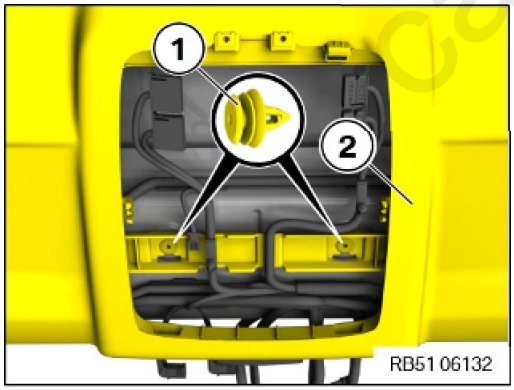


- Have the set of special tools 0 493 752 (00 9 329) ready.

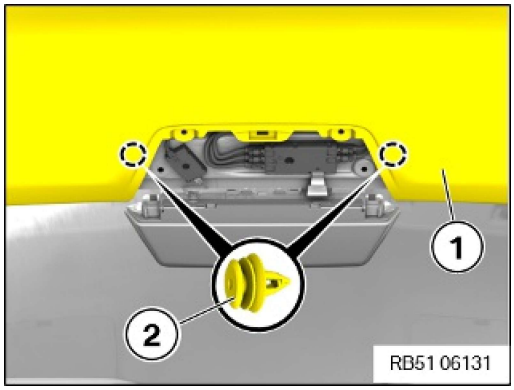


- Remove the end caps (1) in direction of arrow with a suitable tool.

14 – Placing the headlining in the vehicle aside



- Release the clips (1) at the headlining (2).



- Unclip the headlining (1) from the clips (2) downward.

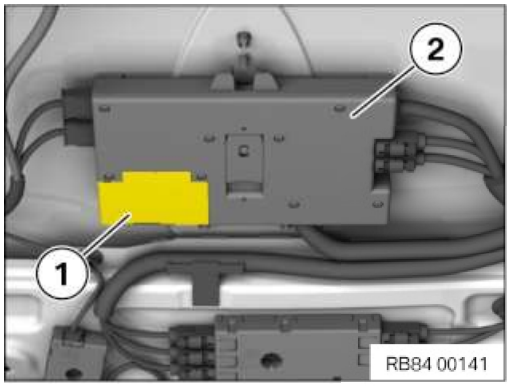
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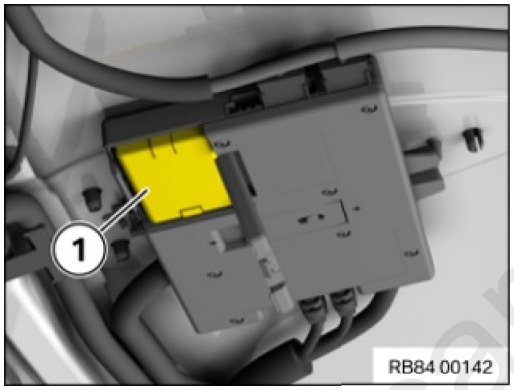
- Place the headlining (1) in the vehicle with the help of an auxiliary person.

MAIN WORK

15 – Replacing the emergency battery for the telematics control unit

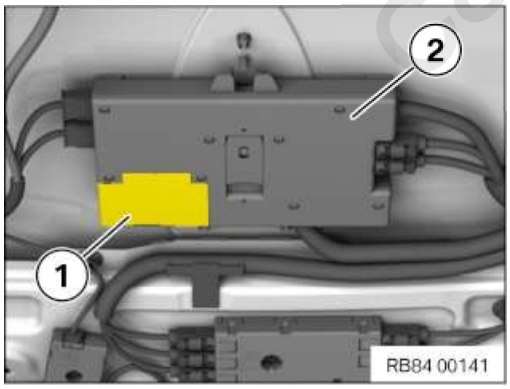


- Unlock and open battery compartment (1) on telematic control unit (2).



- Guide out the emergency battery for telematics control unit (1) from the battery compartment and renew it.

  Parts: Emergency battery

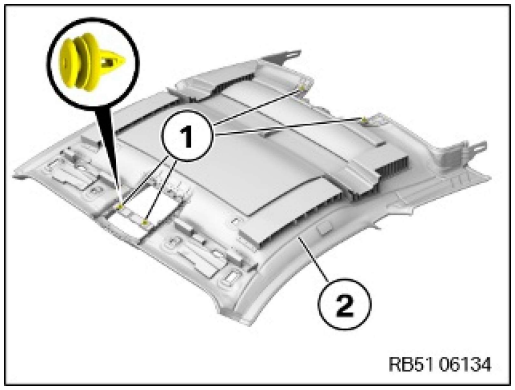


- Shut battery compartment (1) on telematics control unit (2) and lock.

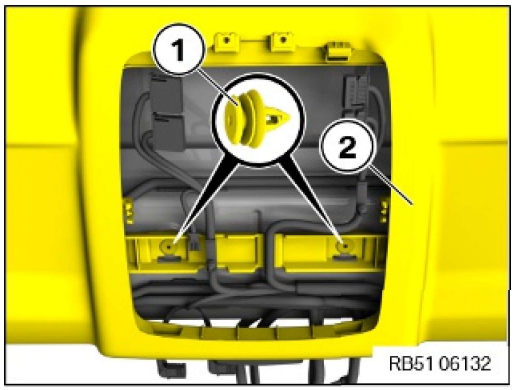
POSTPROCESSES

16 – Attaching the headlining in the vehicle

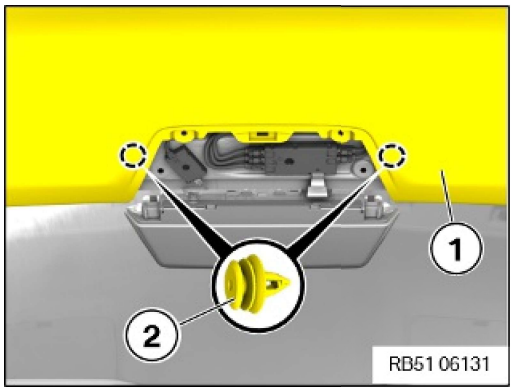
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- Check the clips (1) on the headlining (2) for damage and renew if necessary.

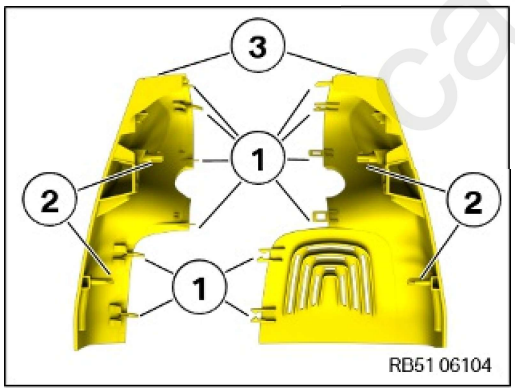


- Position the headlining (2) on the clips (1) and clip it in.



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

17 – Installing the end caps



Check

- Check the latch mechanisms (1) and guides (2) on both end caps (3) for damage.

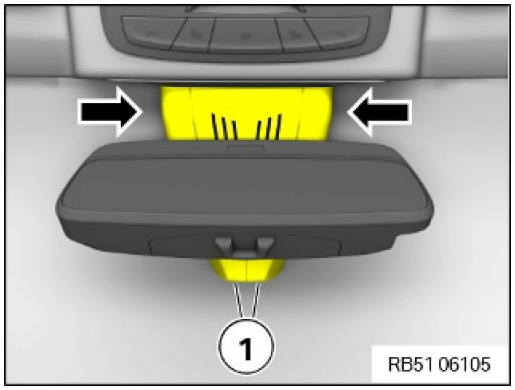
Result

» The latch mechanisms (1) or guides (2) are damaged.

Measure

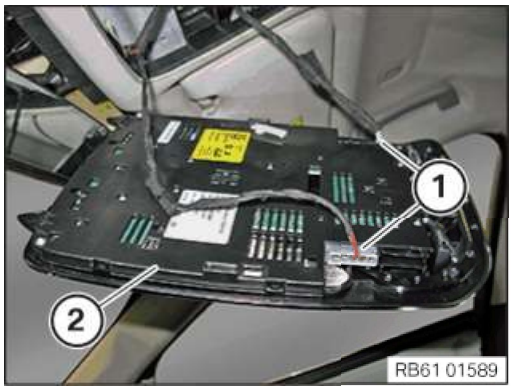
- Renew the end caps (3).

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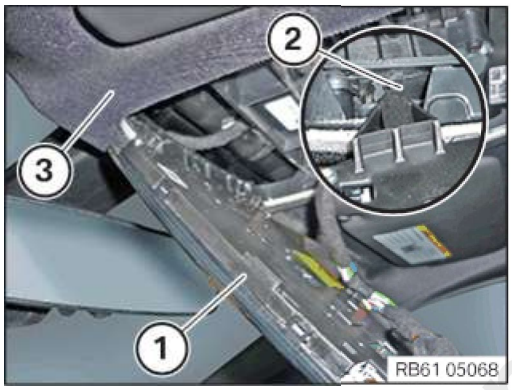


- Clip in the end caps (1) on the mirror base in direction of arrow.

18 – 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.



- Thread the roof function centre (FZD) (1) as shown at a steep angle into the two guides (2) on the headlining (3).

  Make sure the headlining is not deformed during this operation.



- Clip the roof function centre (FZD) (1) upwards into the clamps (2).



- Pass through the FZD frame and headlining with the special tool 2 298 505 and adjust the headlining correctly.

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- Tighten the screws (1).

Roof function centre

	Tightening torque	1,2 Nm

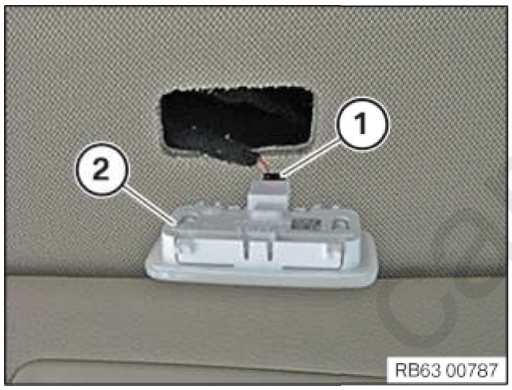


- Clip in the cover (1).

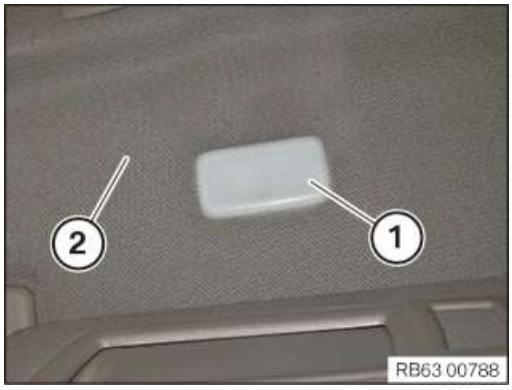
19 – Installing front vanity mirror light

NOTICE

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



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



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

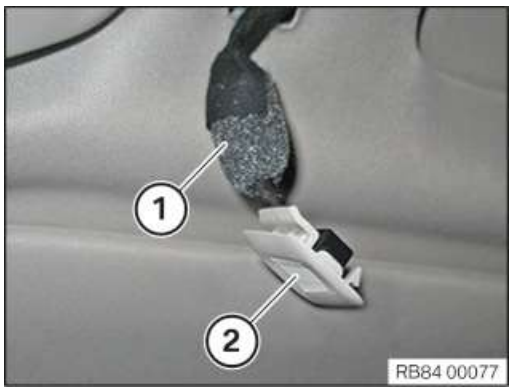
20 – Install both microphones

NOTICE

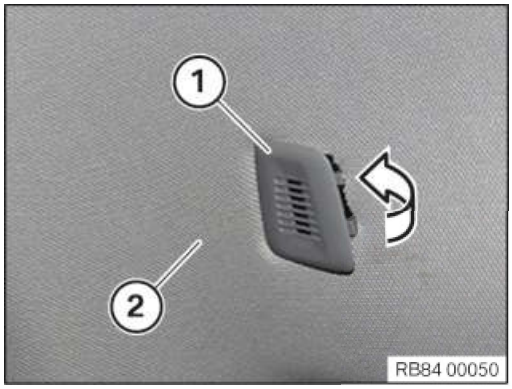
Description is for left component only. Procedure on the right side is identical.

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▶ **Installing the hands-free microphone**



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



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

21 – Install both counter supports for the sun visors

NOTICE

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

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



- Insert the counter support (3) into the headlining.
- Make sure the clamps (2) are engaged correctly.
- Use cover (1).

22 – Install both sun visors

NOTICE

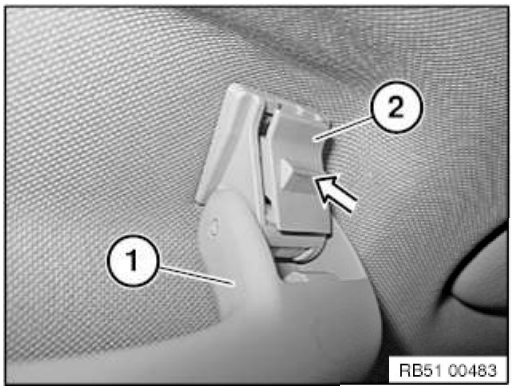
Description is for left component only. Procedure on the right side is identical.

▶ **Install the sun visor**



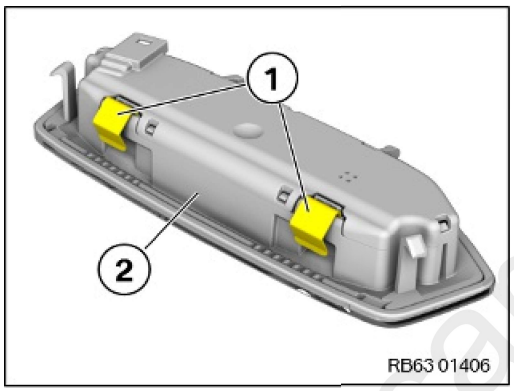
- Connect the sun visor (2) with the corresponding connector.
- Guide the sun visor (2) into the headlining.
- Use cover (1).
- Attach the sun visor (2) on the counter support.

23 – 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).

24 – Install interior roof light



Check

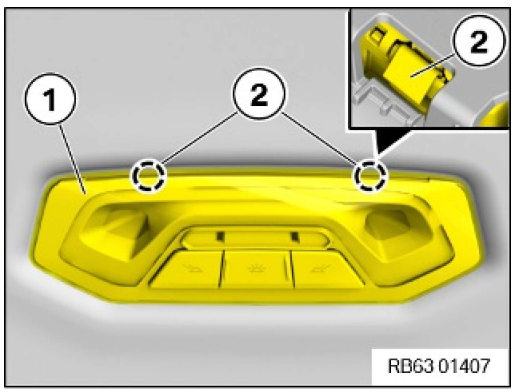
- Check the clamps (1) for damage.

Result

» Clamps (1) are damaged.

Measure

- Renew the interior roof light (2).

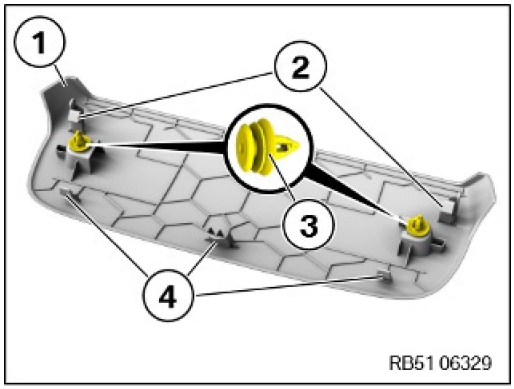


- Connect connectors and lock.
- Clip in the interior roof light (1) with clamps (2).

25 – Installing trim for additional brake light

Check

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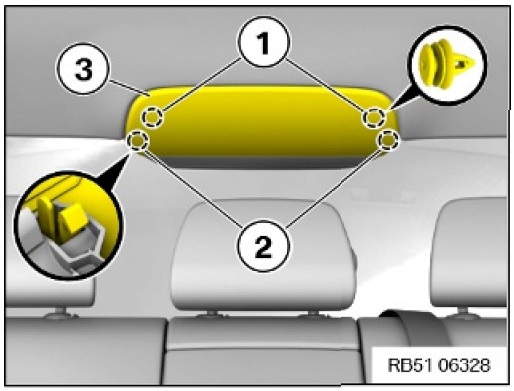
- Check the clips (3) for damage and renew if necessary.
- Check latch mechanisms (2) and guides (4) for damage.

Result

» The latch mechanism or the guide is damaged.

Measure

- Renew the trim for the additional brake light.



- Position trim for additional brake light (1) from the bottom and clip it in with latch mechanisms (2).
- Clip in clips (1).

26 – Install both A-pillar trim panels

NOTICE

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

▸ **Installing 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

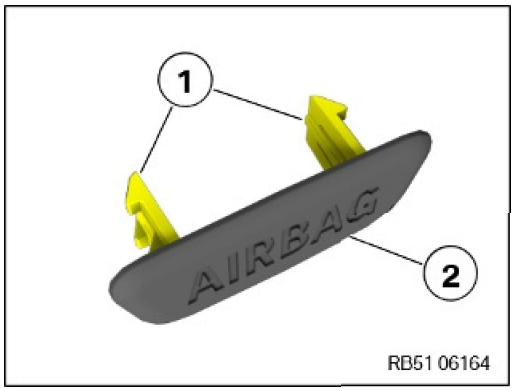
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WARNING

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.



Check

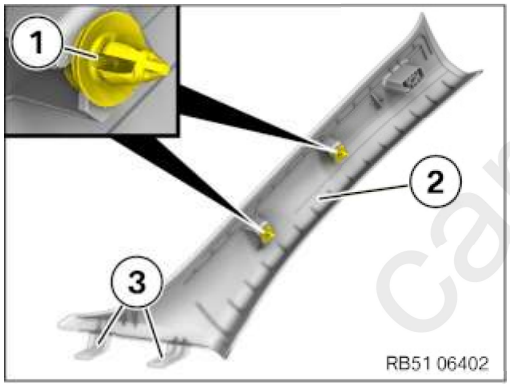
- Check retaining lugs (1) of cover (2) for damage.

Result

» Retaining lug is damaged.

Measure

- Renew the cover.



Check

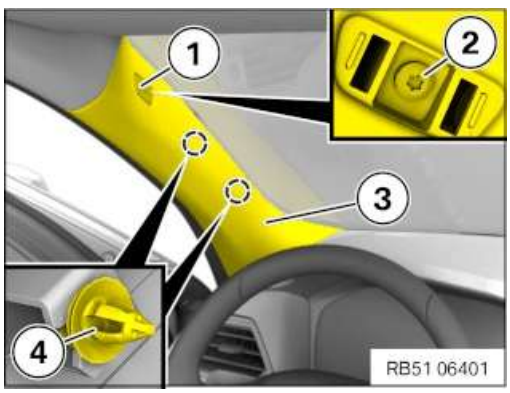
- Check the clips (1) for damage and renew if necessary.
- Check the guides (3) for damage.

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).

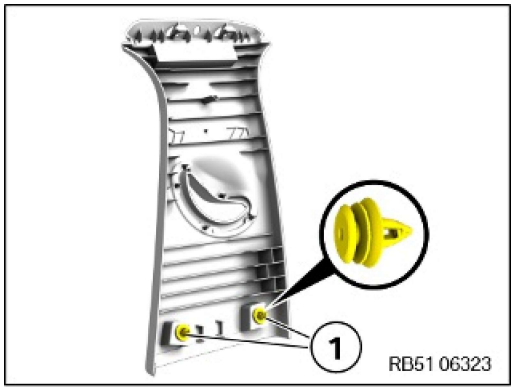
27 – Installing both B-pillar trim panels

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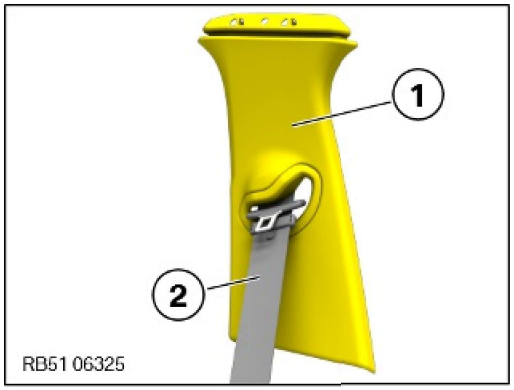
NOTICE

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

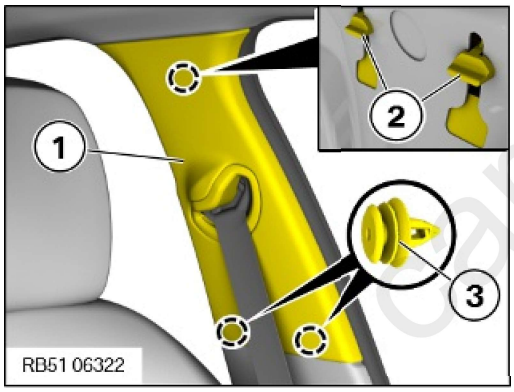
▶ **Install the B-pillar trim panel**



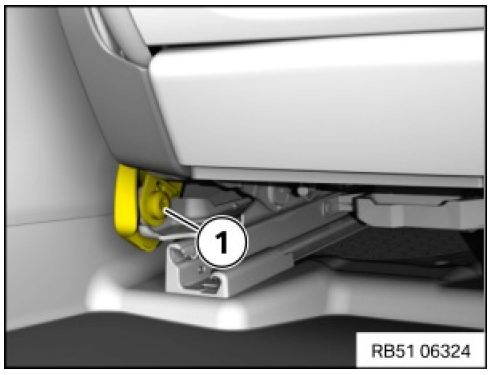
- Check the clips (1) for damage and renew if necessary.



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



- Insert B-pillar trim panel (1) into guides (2) and under the front and rear lips of edge protection.
- Clip in the B-pillar trim panel (1) with the clips (3).



- Fully position the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

End fitting to seat mechanism

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

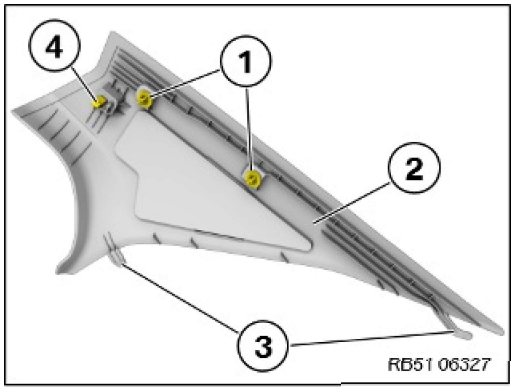
28 – Install both C-pillar trim panels

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NOTICE

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

▸ **Installing C-pillar trim panel**



Check

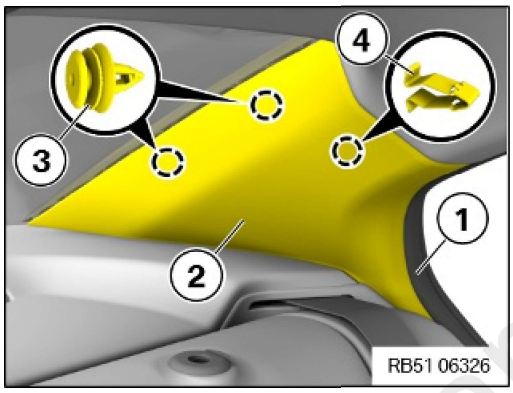
- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel.



NOTICE

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

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

29 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Roof function centre Used in step 18

	Tightening torque	1,2 Nm

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A-pillar trim panel to body Used in step 26

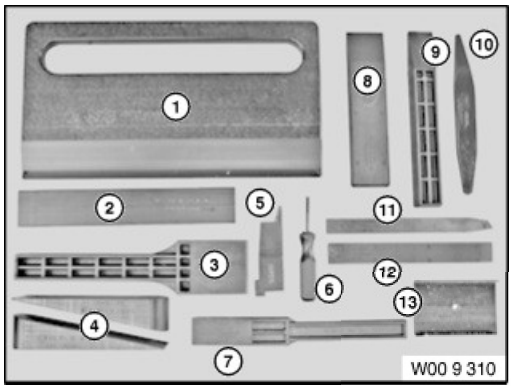
Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

End fitting to seat mechanism Used in step 27

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

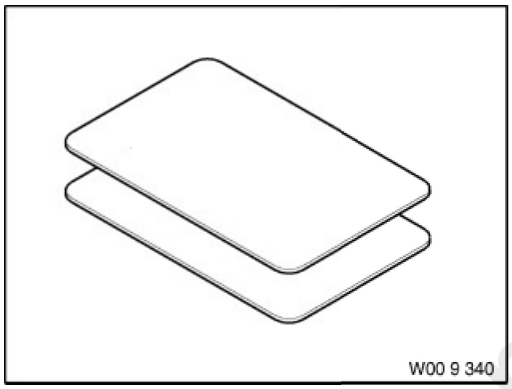
0 493 752 (00 9 329) Case



Common Used in step 4613

Usage	(Case) with insert not incl. panel wedges
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 493 687 (00 9 340) Removal aid



Common Used in step 10

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).	

0 496 569 (00 9 325) Wedge

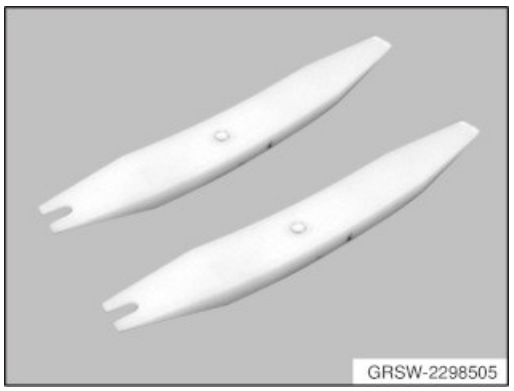


Common Used in step 11

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)

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2 298 505 Wedge



Common	Used in step 18
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	4
72 00 ... Safety regulations for handling components with gas generators	4

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	129
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	129
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
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61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129
61 20 900 Disconnecting and connecting battery earth lead	129

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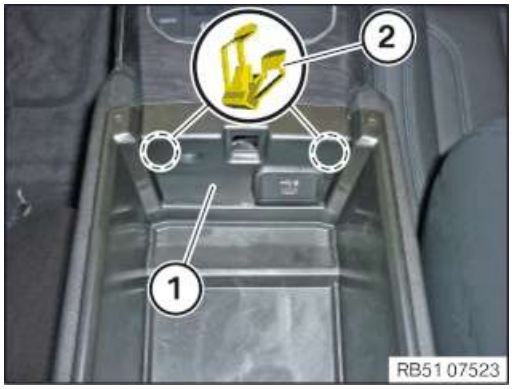
61 20 900 Disconnecting and connecting battery earth lead 129
61 35 ... Notes on ESD protection (Electro Static Discharge)

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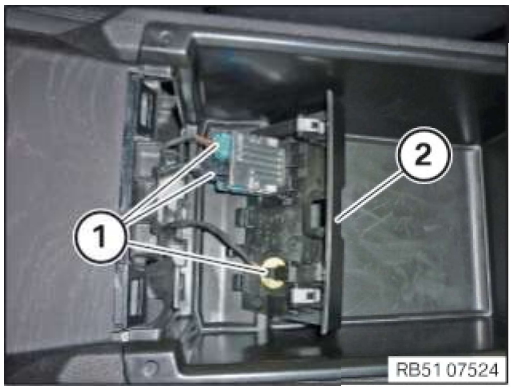
84 10 050 Removing and installing / replacing USB hub

PRELIMINARY WORK

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



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



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

2 – Remove the centre console trim

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



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

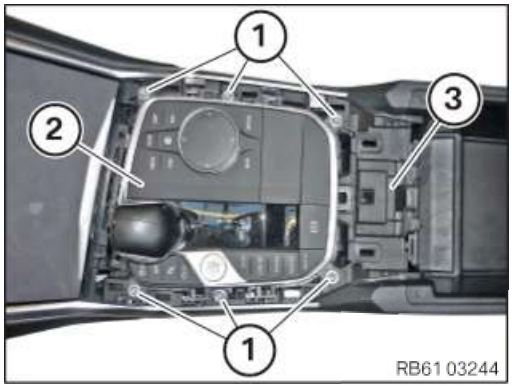
3 – Remove the operating facility in the centre console

▸ **Disconnecting all battery earth leads**

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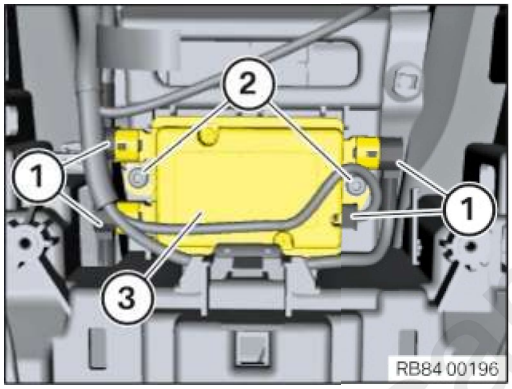
- See additional information.



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

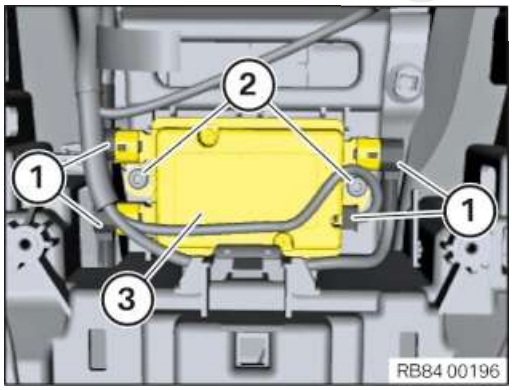
MAIN WORK

4 – Removing the USB hub



- Unlock and disconnect connector (1).
- Loosen screws (2).
- Remove the USB hub (3).

5 – Installing the USB hub



- Position USB hub (3).
- Tighten the screws (2).

USB hub

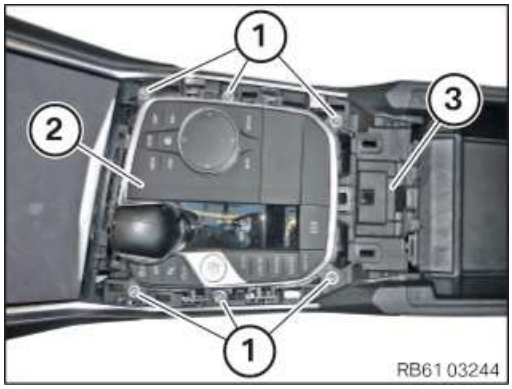
Oval-head screw		Tightening torque	8.8 Nm

- Connect connector (1).

POSTPROCESSES

6 – Install the operating facility in the centre console

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

Gear selector switch to centre console trim

Screw		Tightening torque	1,8 Nm

▶ **Disconnecting all battery earth leads**



- See additional information.

7 – Installing the centre console trim

RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



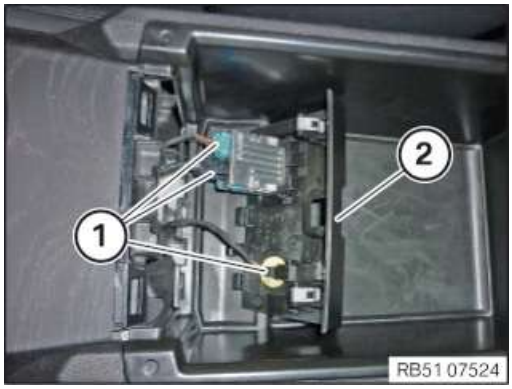
- Check all the latch mechanisms or clamps (arrows).
- In case the latch mechanisms or the clamps (arrows) are faulty, renew the centre console trim .



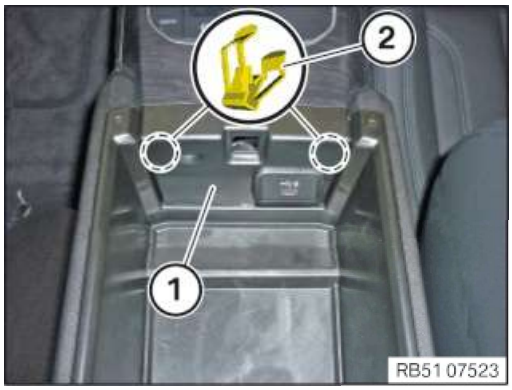
- Correctly position the centre console trim (1) and engage at the latch mechanisms.

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



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



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

Additional Information

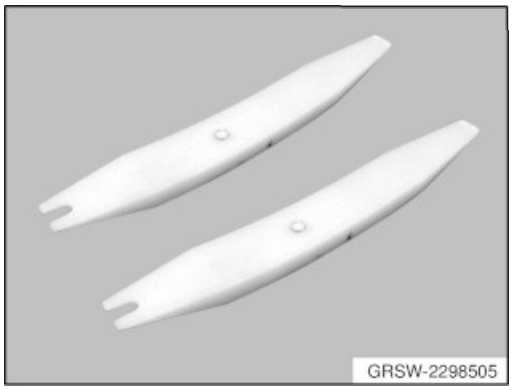
Overview of Tightening Torques

USB hub			Used in step 5
Oval-head screw		Tightening torque	8.8 Nm

Gear selector switch to centre console trim			Used in step 6
Screw		Tightening torque	1,8 Nm

Overview of Special Tools

2 298 505 Wedge



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

Links

Repair instructions	**Used in step**
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36

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61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	36
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
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61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36
61 20 900 Disconnecting and connecting battery earth lead	36

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84 10 330 Removing and installing the telematics control unit under the headlining

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.

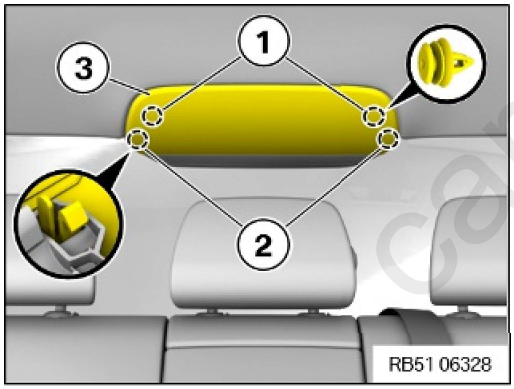
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

2 – Removing the trim of the additional brake light



- Loosen the clips (1).
- Release the latch mechanisms (2) and remove the trim of the additional brake light (3).

3 – Remove both C-pillar trim panels

NOTICE

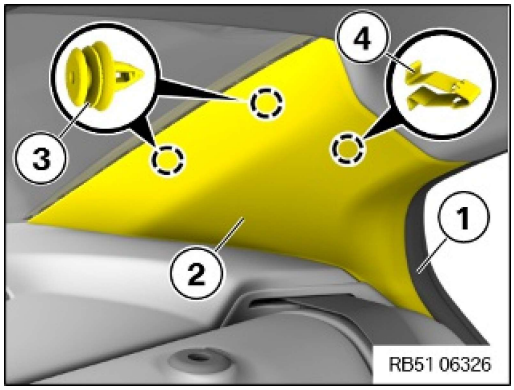
Description is for left component only. Procedure on the right side is identical.

▸ **Remove C-pillar trim panel**

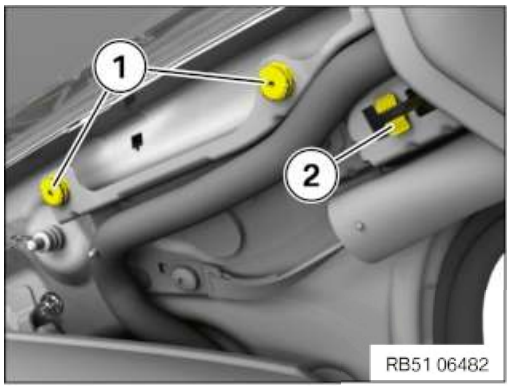
NOTICE

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

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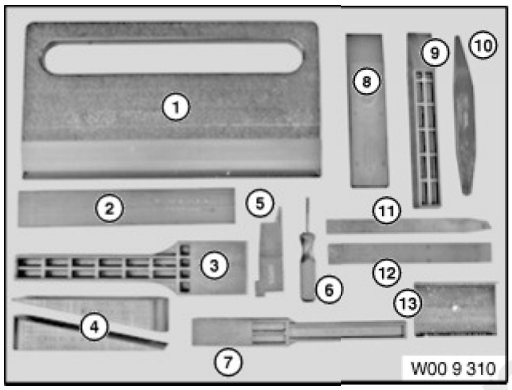


- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).

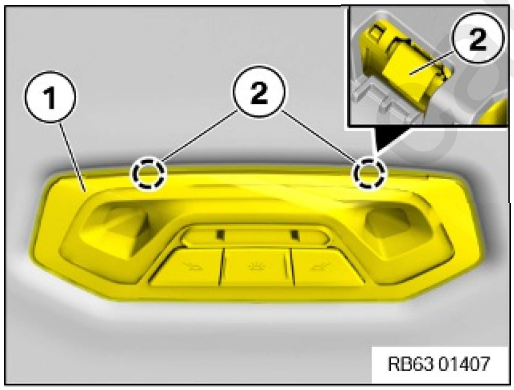


- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

4 – Remove interior roof light



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



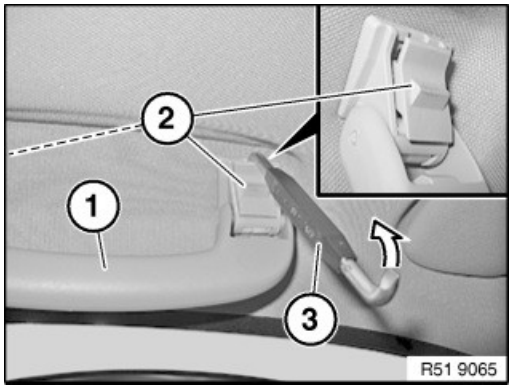
- Lever interior roof light (1) out of clamps (2) using a suitable tool.
- Unlock plug connection and disconnect.

5 – Removing all grab handles

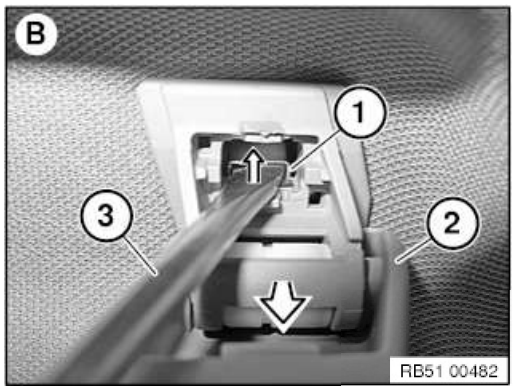
NOTICE

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.



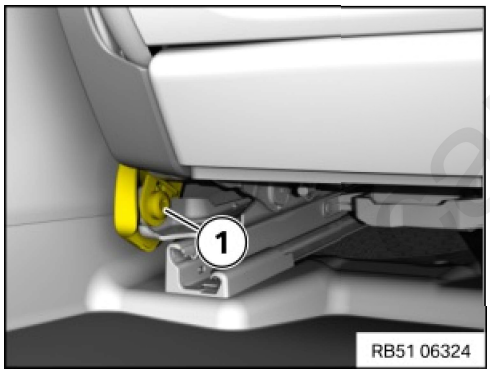
- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

6 – Removing both B-pillar trim panels

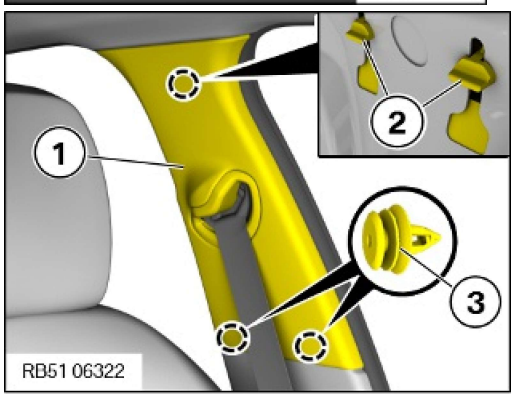
NOTICE

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

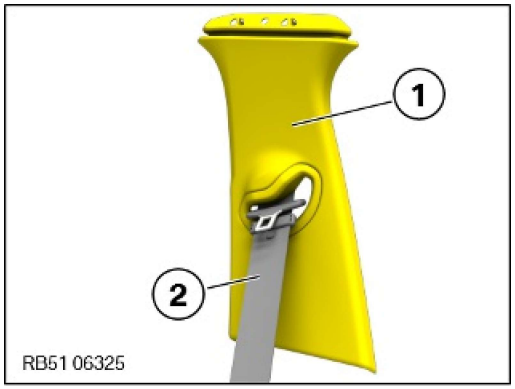
▸ Remove the B-pillar trim panel



- Fully position the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).



- Unclip clips (3).
- Feed B-pillar trim panel (1) out of the front and rear lip of edge protections and the guides (2).



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

7 – Remove both 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!

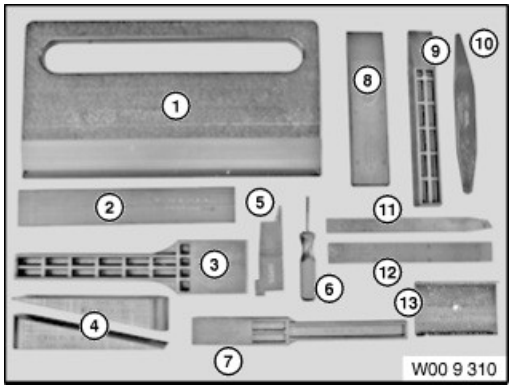
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

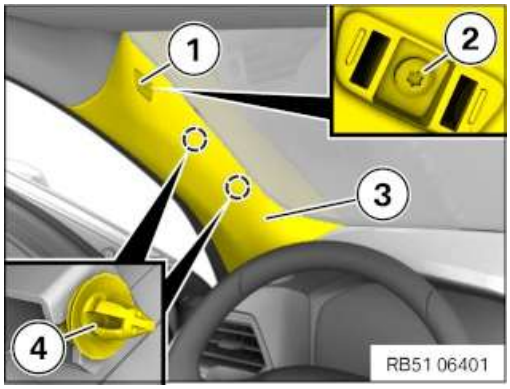
Danger! Life-threatening injuries!

- 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.



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

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- Unclip the cover (1) with suitable tools.
- Loosen screw (2).
- Unclip A-pillar trim panel (3) with clips (4) and guide it out upwards.

8 – 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.

9 – Remove both counter supports for the sun visors

NOTICE

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

▸ Remove the counter support for the sun visor



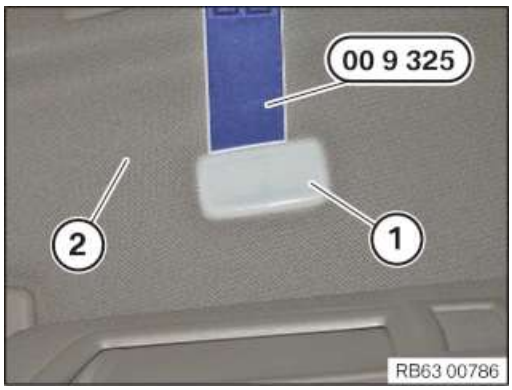
- Pull out the cover (1).
- Push the clamps (2) together and pull the counter support (3) out of the headlining.

10 – Removing front vanity mirror light

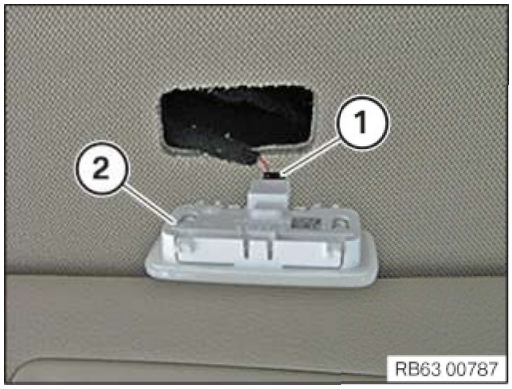
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NOTICE

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



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



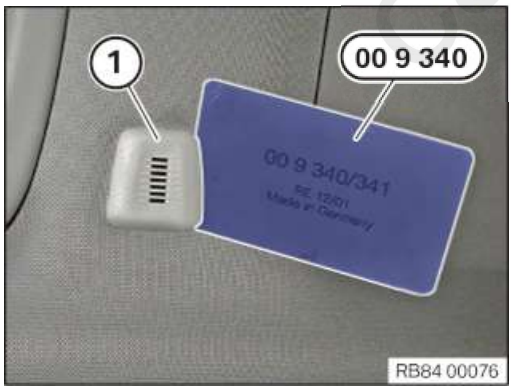
- Unlock and disconnect connector (1).
- Remove the front vanity mirror light (2).

11 – Remove both microphones

NOTICE

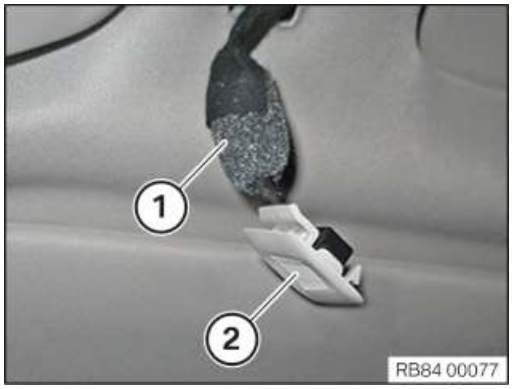
Description is for left component only. Procedure on the right side is identical.

▸ **Removing hands-free microphone**



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

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

12 – Removing the roof function centre (FZD)



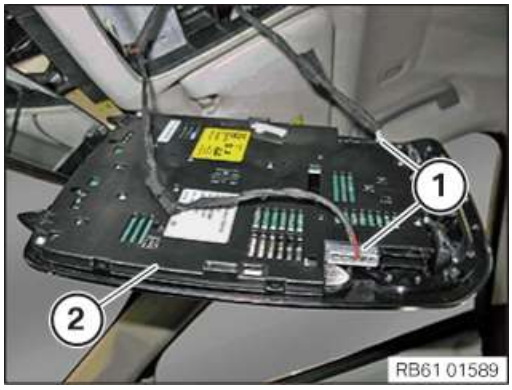
- Unclip the cover (1).



- Loosen screws (1).



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

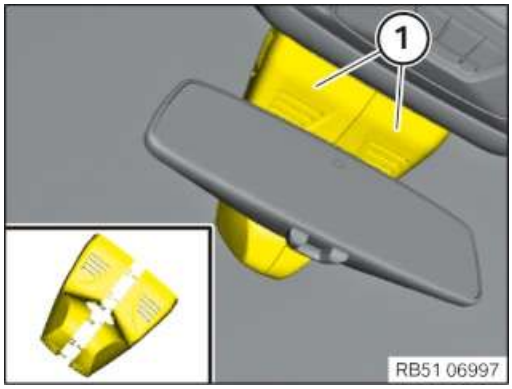


- Unlock and disconnect plug connections (1).
- Unclip the cable for the roof function centre (FZD) (2) from the cable clip.

13 – Removing the covers for the interior mirror

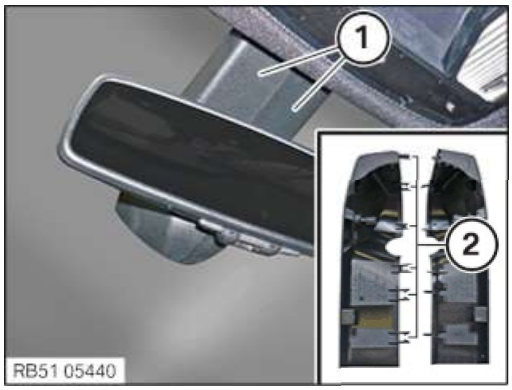
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- **Version A:**



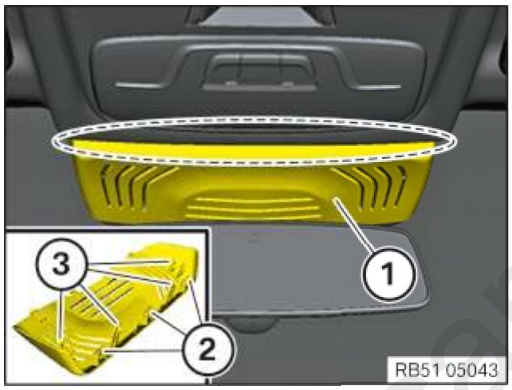
- Release the cover (1) at the centre from the latch mechanisms (2) with a suitable plastic wedge and remove.

- **Version B:**

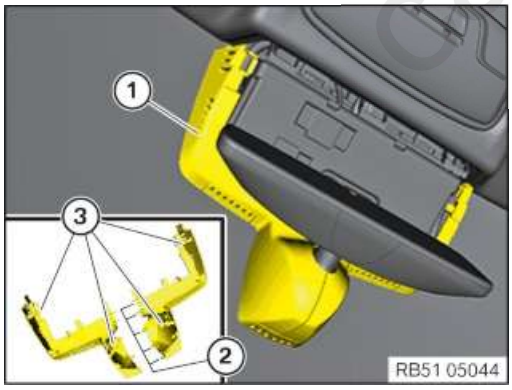


- Release the cover (1) from the latch mechanisms (2) with a suitable plastic wedge and remove sideways.

- **Version C:**



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



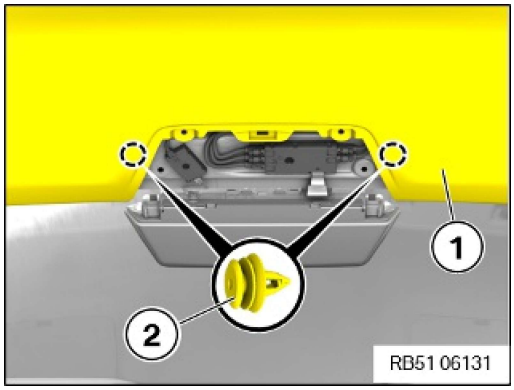
- Release cover (1) from the latch mechanisms (2) and (3) and remove sideways.
- Remove cover (1) from mirror base (2).

14 – Lower roofliner

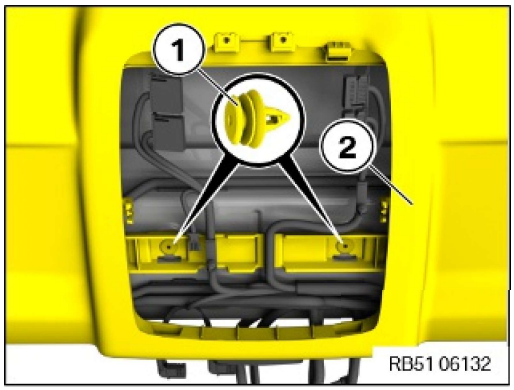
Prerequisite

The front seats have been fully adjusted towards the bottom.

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



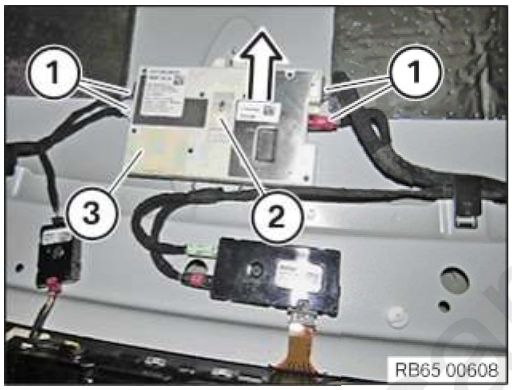
- Unclip the headlining (1) from the clips (2) downward.



- Release the clips (1) at the headlining (2).
- Feed out headlining (2) with the help of an auxiliary person at the respective edge protection and place it on the seats.

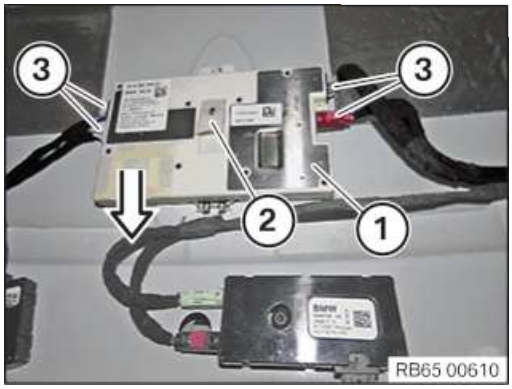
MAIN WORK

15 – Removing the telematics control unit



- Unlock plug connection (1) and disconnect.
- Unlock the lock (2) downward.
- Slide the telematics control unit (3) in the direction of the arrow and remove it.

16 – Install the telematics control unit

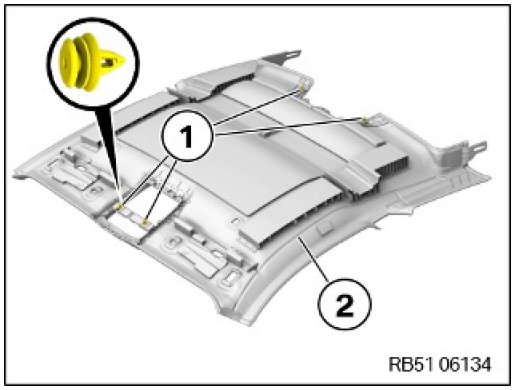


- Correctly position the telematics control unit (1) and push it in the direction of the arrow until the lock (2) engages.
- Position and connect the connectors (3).

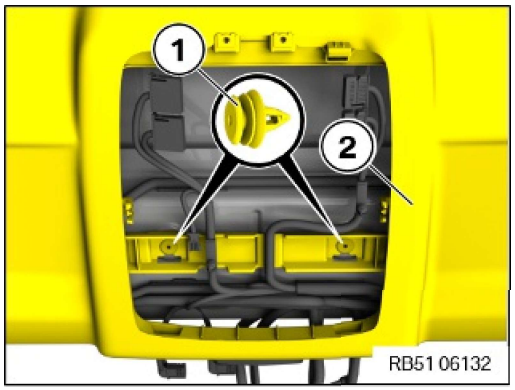
POSTPROCESSES

17 – Install the headlining (lowered)

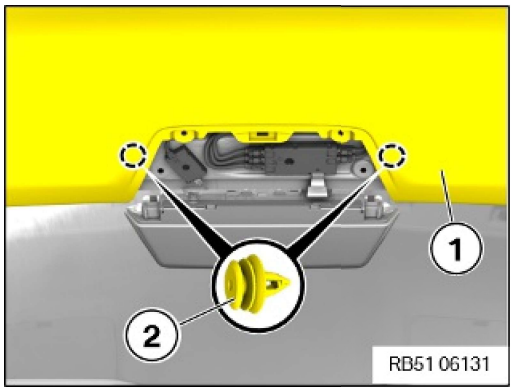
cardiagn.com



- Check the clips (1) on the headlining (2) for damage and renew if necessary.



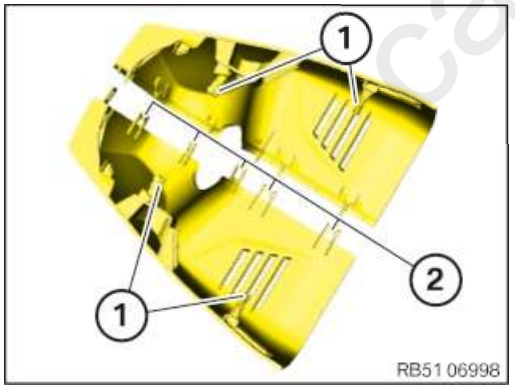
- Feed in the headlining (1) with the help of an auxiliary person on the respective edge protection.
- Position the headlining (2) on the clips (1) and clip it in.



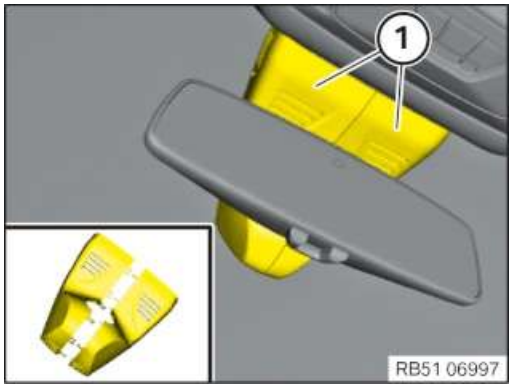
- Clip in clips (2) on the headlining (1).

18 – Installing the covers for the interior mirror

- **Version A:**



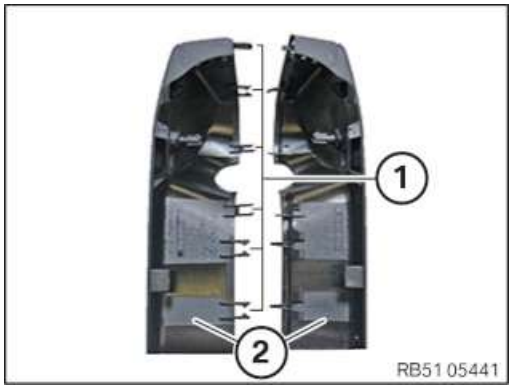
- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.



- Feed cover (1) in and lock.

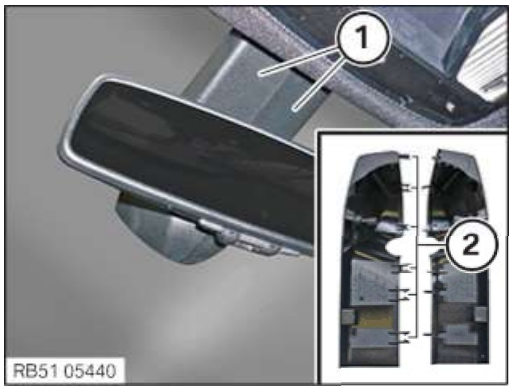
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- **Version B:**



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

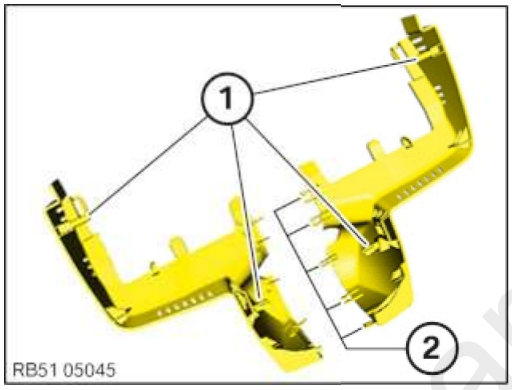
  The covers (2) must not be damaged or missing.



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

- **Version C:**

Check



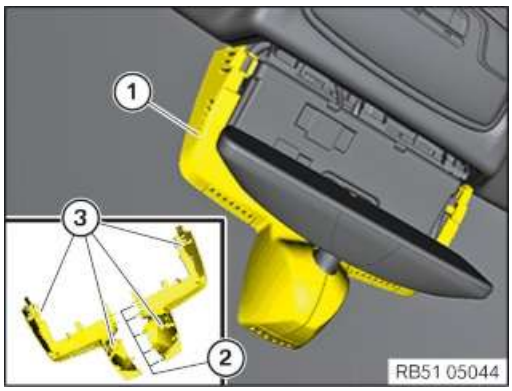
- Check the latch mechanisms (1) and (2) of the covers for damage.

Result

» The latch mechanism is damaged.

Measure

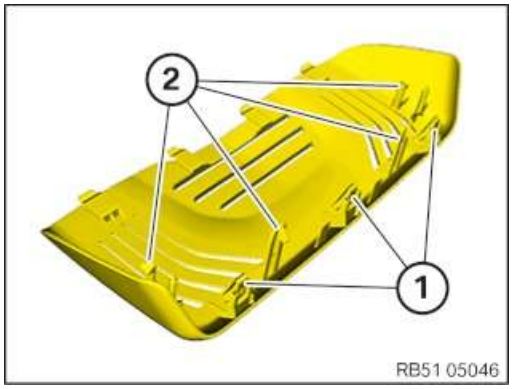
- Renew the cover.



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

Check

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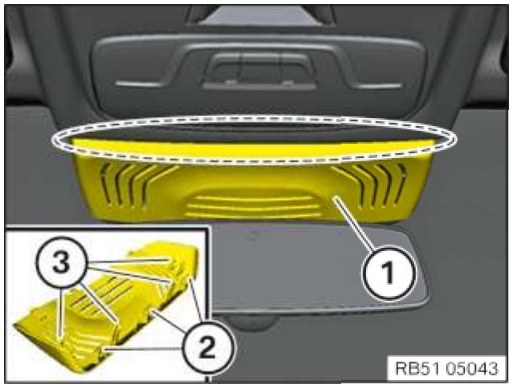
- Check clamps (1) for damage; renew if necessary.
- Check latch mechanisms (2) for damage.

Result

» The latch mechanism is damaged.

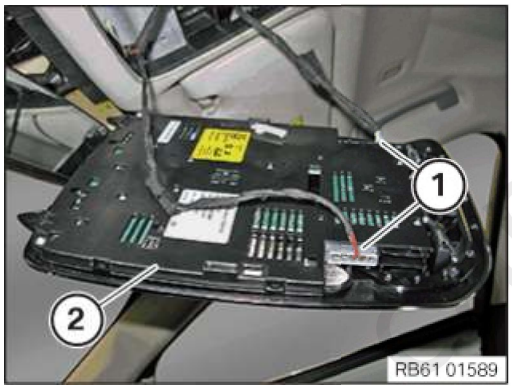
Measure

- Renew the cover.

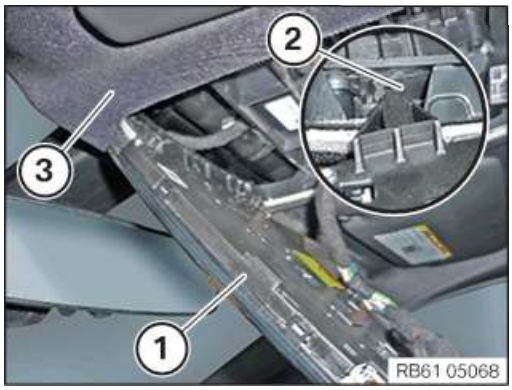


- Guide cover (1) into front guides and engage using retaining lugs (3) and clamps (2).

19 – 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.



- Thread the roof function centre (FZD) (1) as shown at a steep angle into the two guides (2) on the headlining (3).

  Make sure the headlining is not deformed during this operation.

fdiagn.com



- Clip the roof function centre (FZD) (1) upwards into the clamps (2).



- Pass through the FZD frame and headlining with the special tool 2 298 505 and adjust the headlining correctly.



- Tighten the screws (1).

Roof function centre

	Tightening torque	1,2 Nm



- Clip in the cover (1).

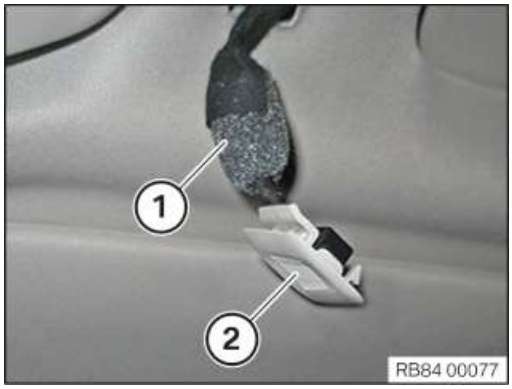
20 – Install both microphones

NOTICE

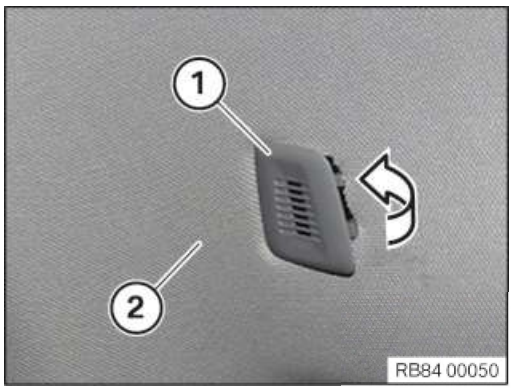
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the hands-free microphone**

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

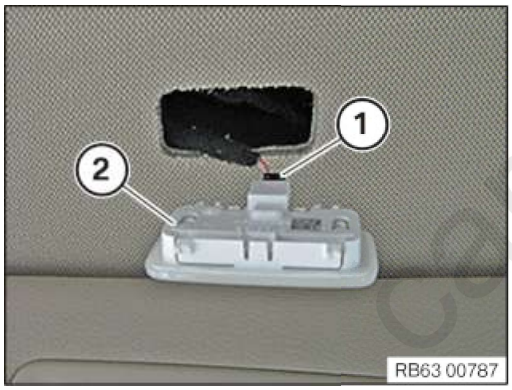


- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

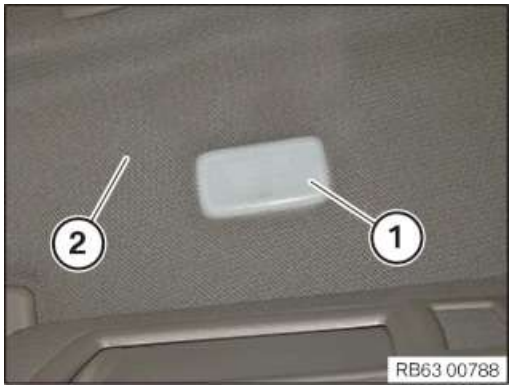
21 – Installing front vanity mirror light

NOTICE

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



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



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

22 – Install both counter supports for the sun visors

NOTICE

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

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▸ **Install the counter support for the sun visor**



- Insert the counter support (3) into the headlining.
- Make sure the clamps (2) are engaged correctly.
- Use cover (1).

23 – 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.

24 – Install both A-pillar trim panels

NOTICE

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

▸ **Installing 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

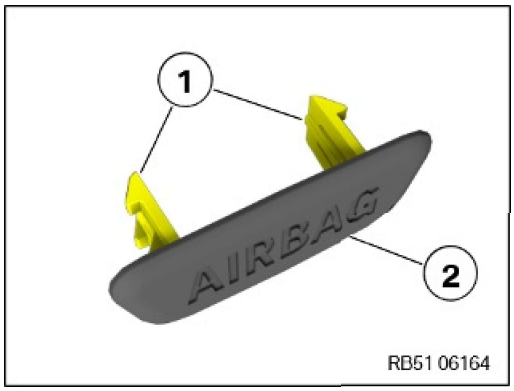
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WARNING

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.



Check

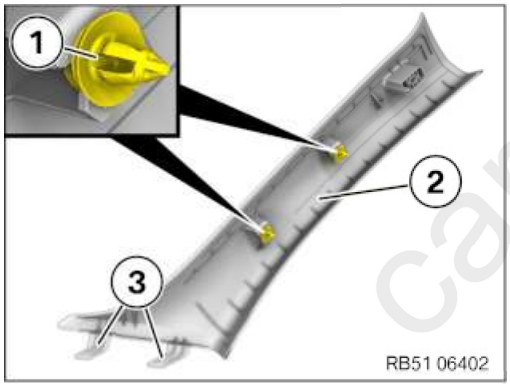
- Check retaining lugs (1) of cover (2) for damage.

Result

» Retaining lug is damaged.

Measure

- Renew the cover.



Check

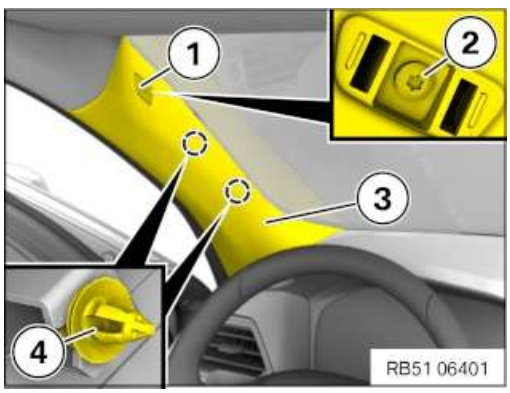
- Check the clips (1) for damage and renew if necessary.
- Check the guides (3) for damage.

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).

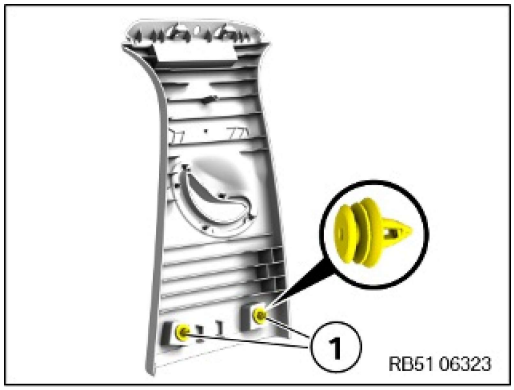
25 – Installing both B-pillar trim panels

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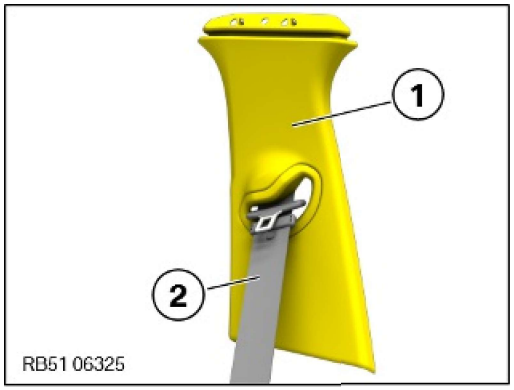
NOTICE

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

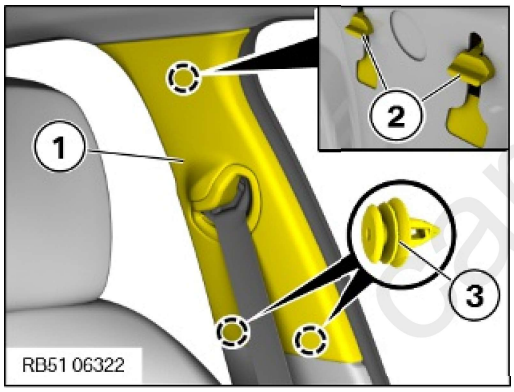
▶ **Install the B-pillar trim panel**



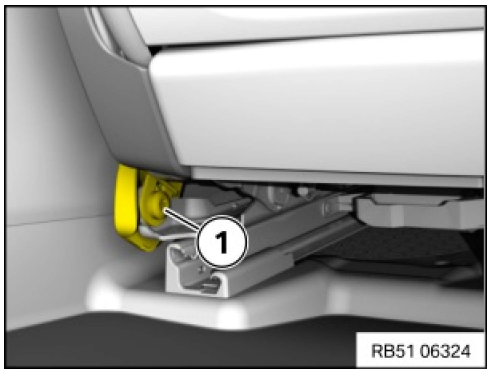
- Check the clips (1) for damage and renew if necessary.



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



- Insert B-pillar trim panel (1) into guides (2) and under the front and rear lips of edge protection.
- Clip in the B-pillar trim panel (1) with the clips (3).



- Fully position the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

End fitting to seat mechanism

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

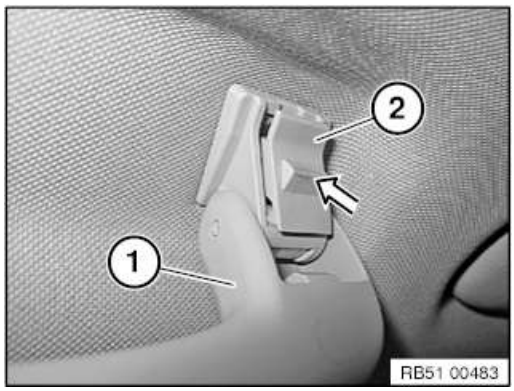
26 – Installing all grab handles

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NOTICE

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

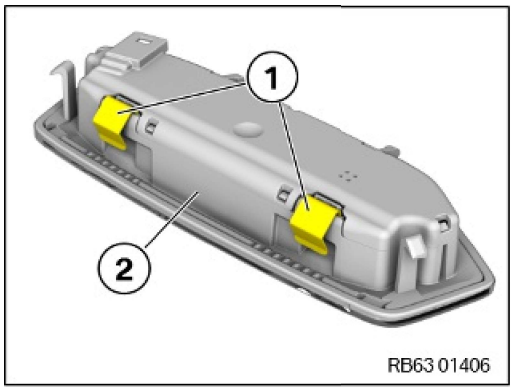
▸ **Installing the grab handle**



- 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).

27 – Install interior roof light

Check



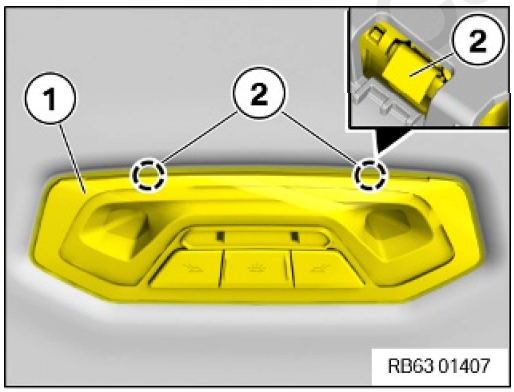
- Check the clamps (1) for damage.

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).

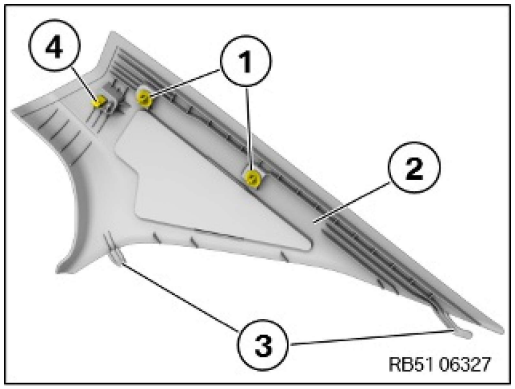
28 – Install both C-pillar trim panels

NOTICE

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

▸ **Installing C-pillar trim panel**

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Check

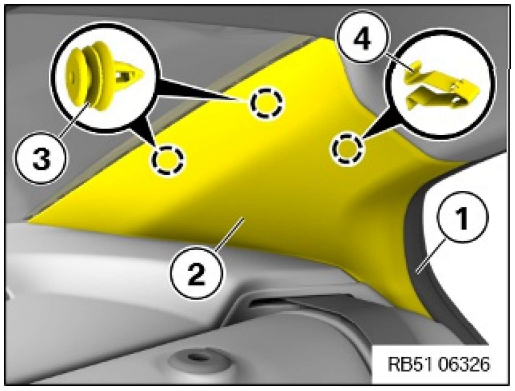
- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .

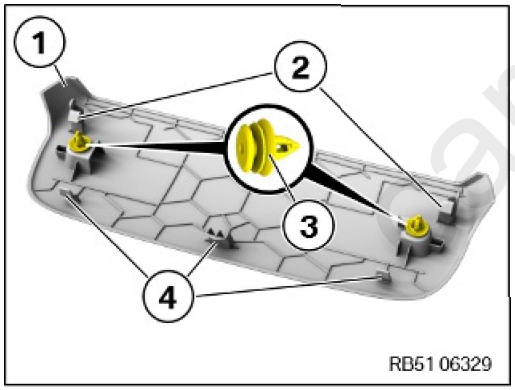


NOTICE

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

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

29 – Installing trim for additional brake light



Check

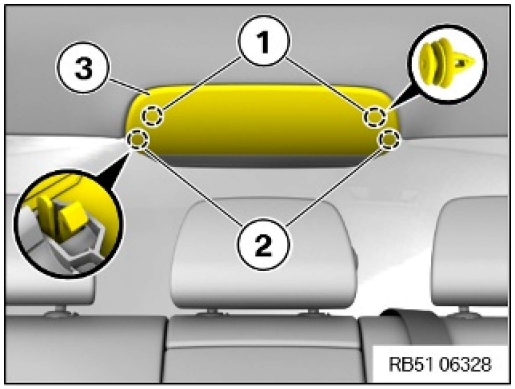
- Check the clips (3) for damage and renew if necessary.
- Check latch mechanisms (2) and guides (4) for damage.

Result

» The latch mechanism or the guide is damaged.

Measure

- Renew the trim for the additional brake light.



- Position trim for additional brake light (1) from the bottom and clip it in with latch mechanisms (2).
- Clip in clips (1).

30 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

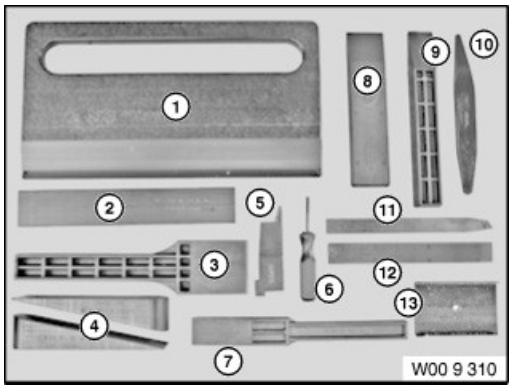
Roof function centre			Used in step 19
		Tightening torque	1,2 Nm

A-pillar trim panel to body			Used in step 24
Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

End fitting to seat mechanism			Used in step 25
Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

0 493 752 (00 9 329) Case



Common	Used in step 47
Usage	(Case) with insert not incl. panel wedges
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

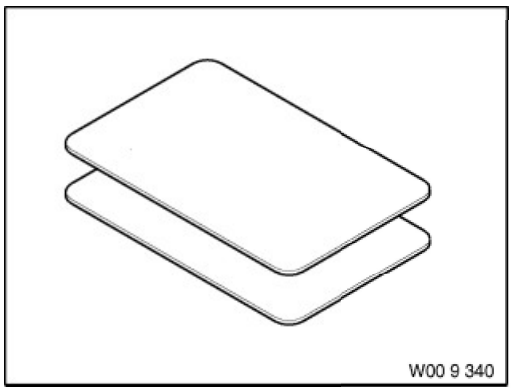
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0 496 569 (00 9 325) Wedge



Common	Used in step 10
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

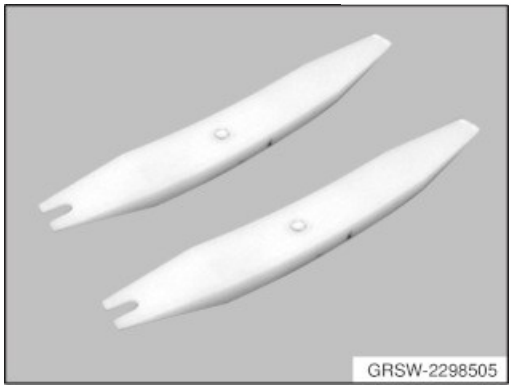


Common	Used in step 11
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

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).	

2 298 505 Wedge



Common	Used in step 19
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	7
72 00 ... Safety regulations for handling components with gas generators	7

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Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	130
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	130
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
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61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130

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84 10 331 Removing and installing the telematics control unit under the headlining

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.

PRELIMINARY WORK

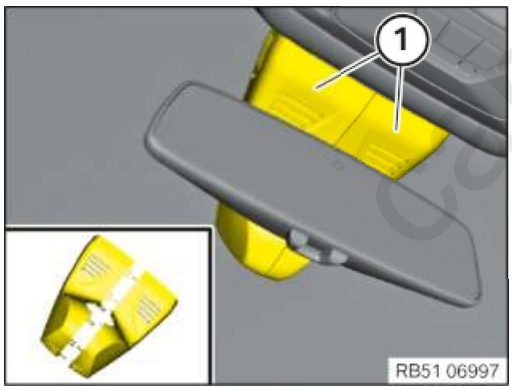
1 – Disconnecting all battery earth leads



- See additional information.

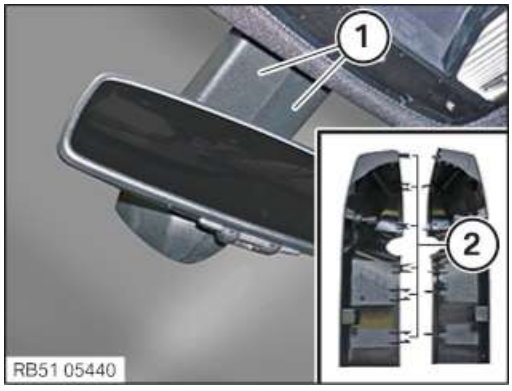
2 – Removing the covers for the interior mirror

- **Version A:**



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

- **Version B:**



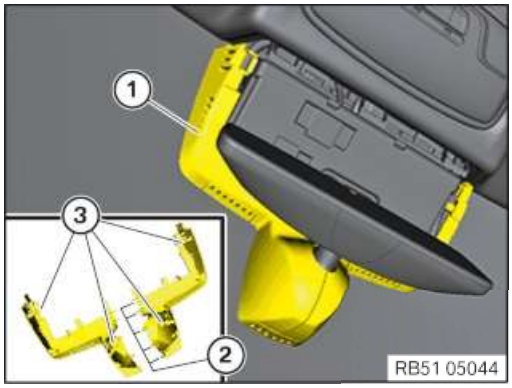
- Release the cover (1) from the latch mechanisms (2) with a suitable plastic wedge and remove sideways.

- **Version C:**

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



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

3 – Remove both 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

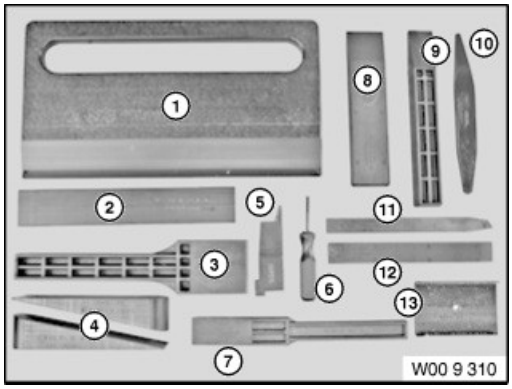
WARNING

Pyrotechnic components.

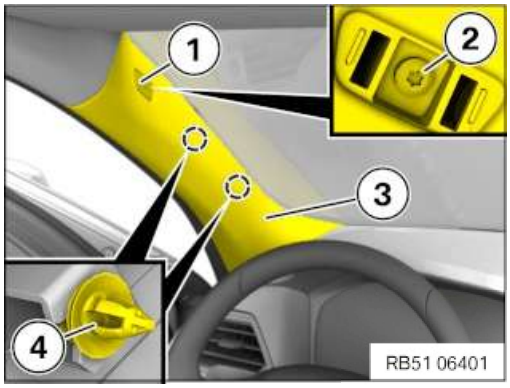
Danger! Life-threatening injuries!

- 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.

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



- Unclip the cover (1) with suitable tools.
- Loosen screw (2).
- Unclip A-pillar trim panel (3) with clips (4) and guide it out upwards.

4 – 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.

5 – Remove both counter supports for the sun visors

NOTICE

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

▶ **Remove the counter support for the sun visor**

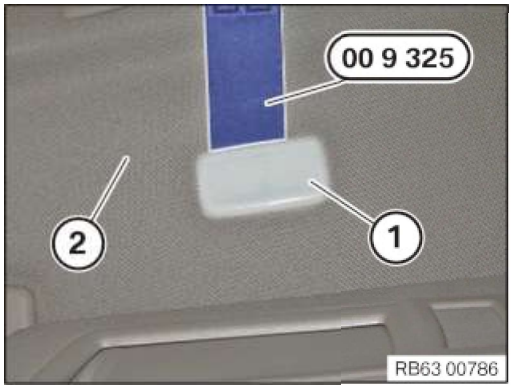


- Pull out the cover (1).
- Push the clamps (2) together and pull the counter support (3) out of the headlining.

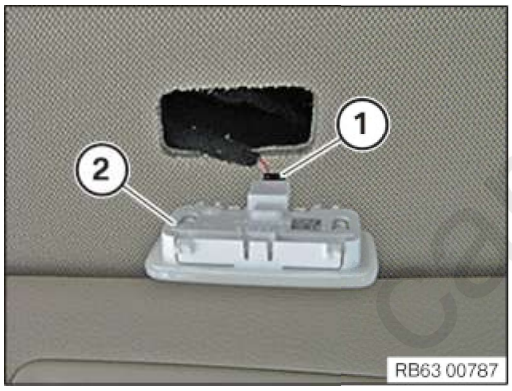
6 – Removing front vanity mirror light

NOTICE

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



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



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

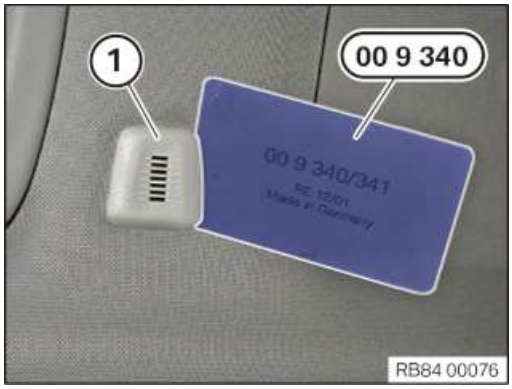
7 – Remove both microphones

NOTICE

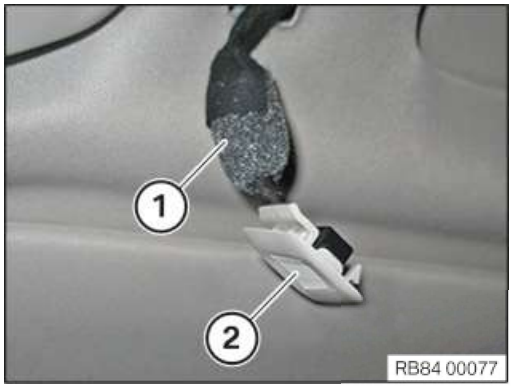
Description is for left component only. Procedure on the right side is identical.

▸ **Removing hands-free microphone**

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- 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).

8 – Removing the roof function centre (FZD)



- Unclip the cover (1).

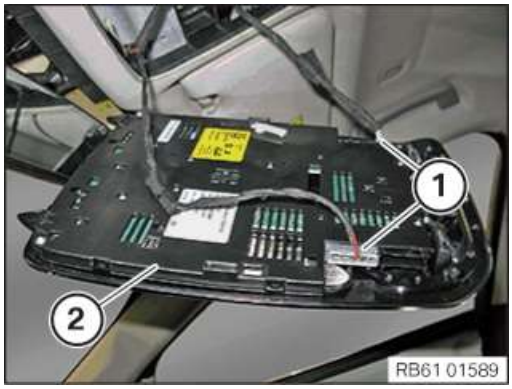


- Loosen screws (1).



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

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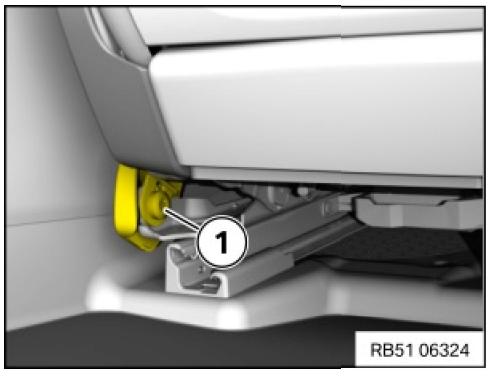
- Unlock and disconnect plug connections (1).
- Unclip the cable for the roof function centre (FZD) (2) from the cable clip.

9 – Removing both B-pillar trim panels

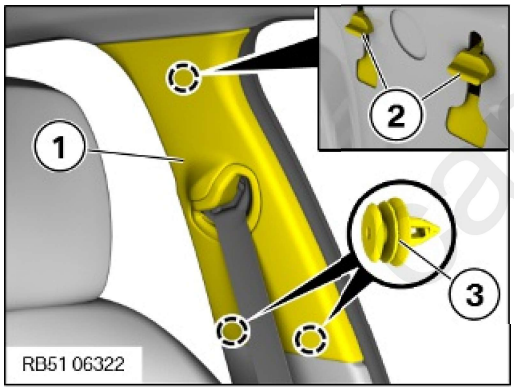
NOTICE

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

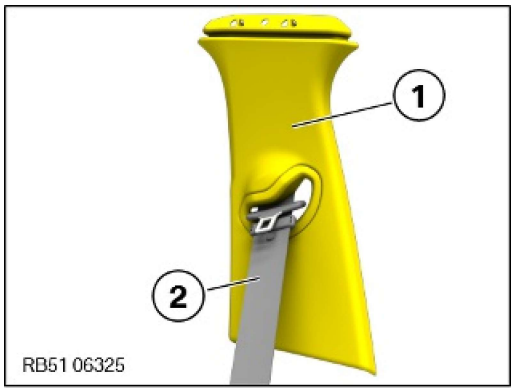
▶ **Remove the B-pillar trim panel**



- Fully position the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).



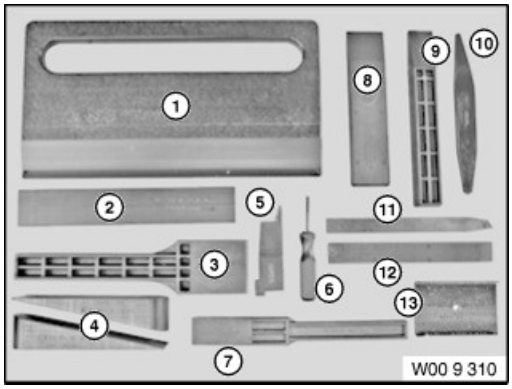
- Unclip clips (3).
- Feed B-pillar trim panel (1) out of the front and rear lip of edge protections and the guides (2).



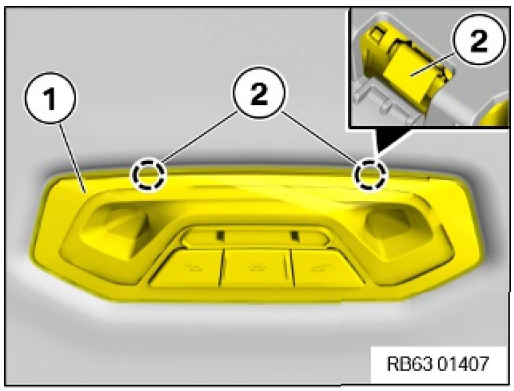
- Feed upper seat belt (2) out of B-pillar trim panel (1).

10 – Remove interior roof light

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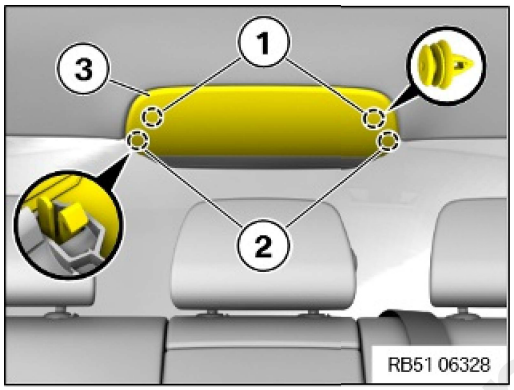


- Have the set of special tools 0 493 752 (00 9 329) ready.



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

11 – Removing the trim of the additional brake light



- Loosen the clips (1).
- Release the latch mechanisms (2) and remove the trim of the additional brake light (3).

12 – Remove both C-pillar trim panels

NOTICE

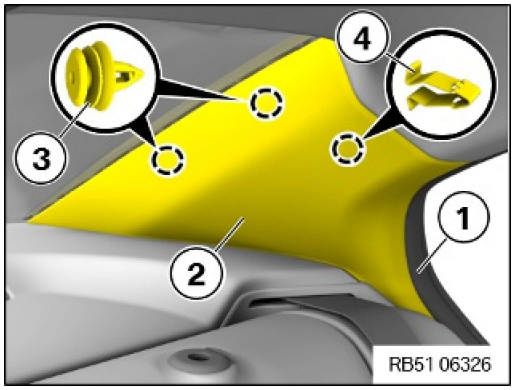
Description is for left component only. Procedure on the right side is identical.

▸ **Remove C-pillar trim panel**

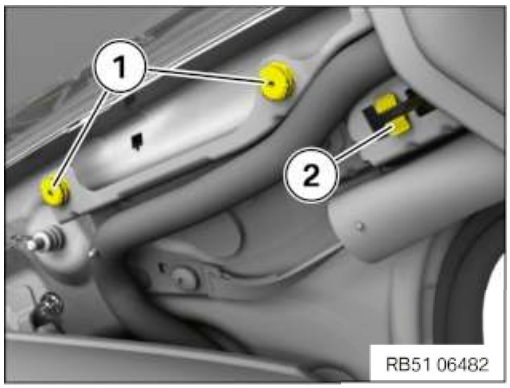
NOTICE

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

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- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).



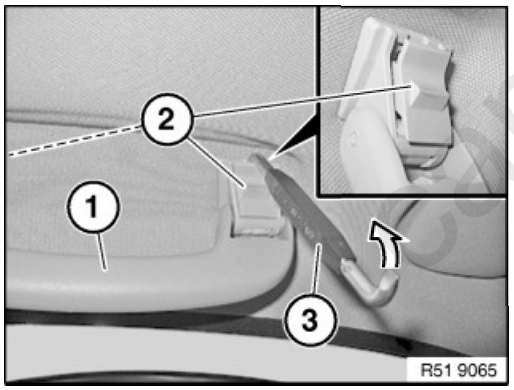
- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

13 – Removing all grab handles

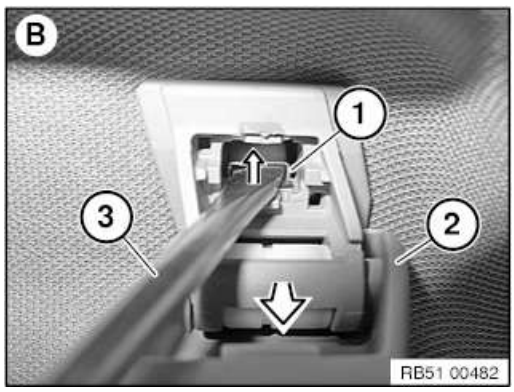
NOTICE

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 – Lower the headlining (with SHD)

Prerequisite

The front seats have been fully adjusted towards the bottom.

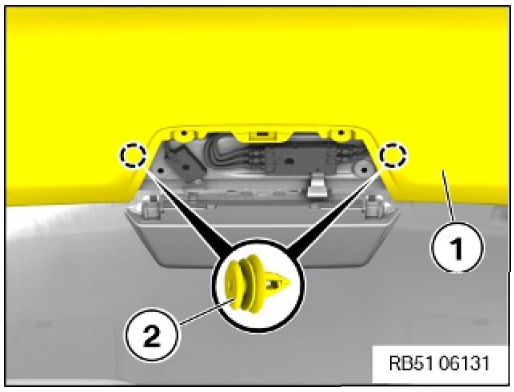
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

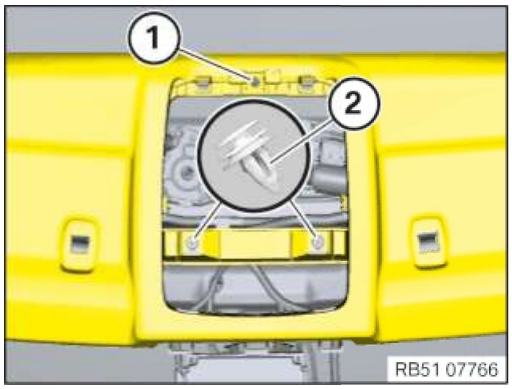
Fold the headlining.

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.



- Unclip the headlining (1) on the clips (2) downwards.



- Loosen screw (1).
- Unclip the headlining on the clips (2) downwards.

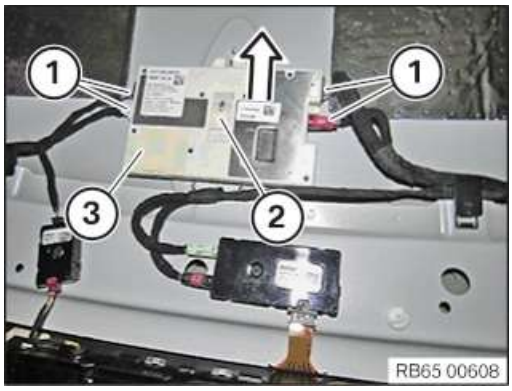


- Carefully unclip headlining (1) from the slide/tilt sunroof unit and clamps (2) in the area of the dotted line.
- Feed out headlining (1) with the help of an auxiliary person on the particular edge protection and place it on the seats.

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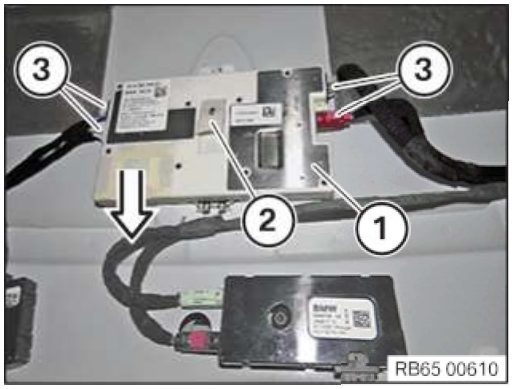
MAIN WORK

15 – Removing the telematics control unit



- Unlock plug connection (1) and disconnect.
- Unlock the lock (2) downward.
- Slide the telematics control unit (3) in the direction of the arrow and remove it.

16 – Install the telematics control unit



- Correctly position the telematics control unit (1) and push it in the direction of the arrow until the lock (2) engages.
- Position and connect the connectors (3).

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POSTPROCESSES

17 – Install the headlining (with slide/tilt sunroof) (lowered)

Prerequisite

The front seats have been fully adjusted towards the bottom.

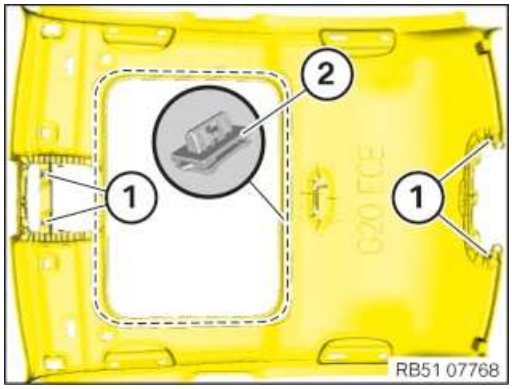
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

Fold the headlining.

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

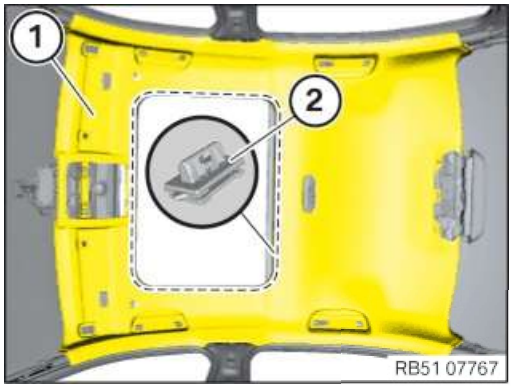
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



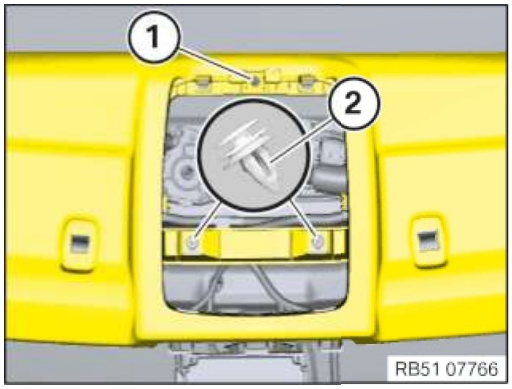
- Check the clips (1) on the headlining (2) for damage.

  Replace broken for missing clips (1).
- Check the clamps (2) along the dotted line.

  Replace broken or missing clamps (2).



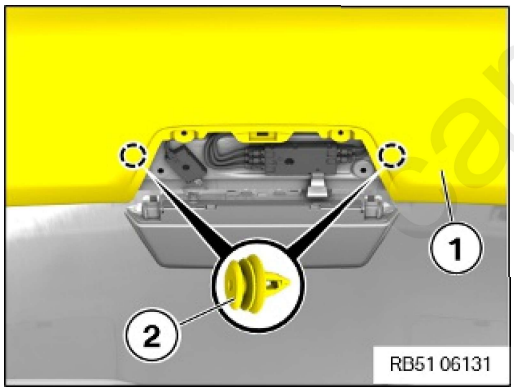
- Feed in the headlining (1) with the help of an auxiliary person on the respective edge protection.
- Clip headlining (1) into the slide/tilt sunroof unit and clamps (2) in the area of the dotted line.



- Clip headlining to the clips (2).
- Tighten down screw (1).

Headlining to frame

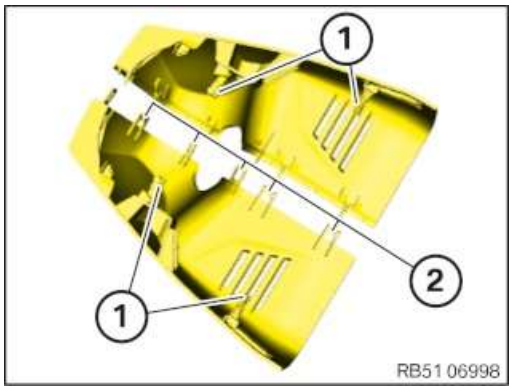
Oval-head screw		Tightening torque	1,5 Nm



- Clip headlining (1) to the clips (2).

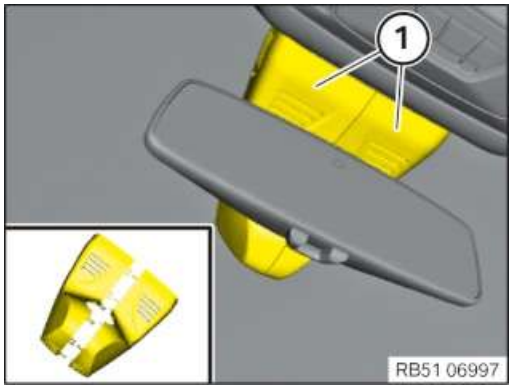
18 – Installing the covers for the interior mirror

- **Version A:**



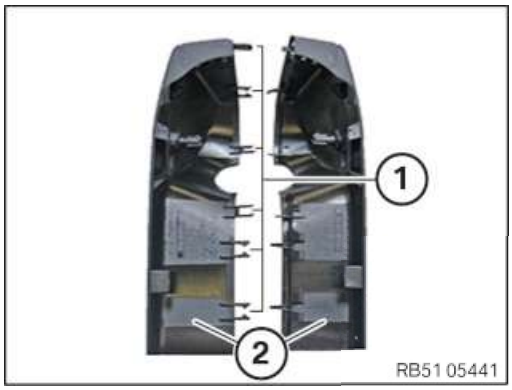
- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.

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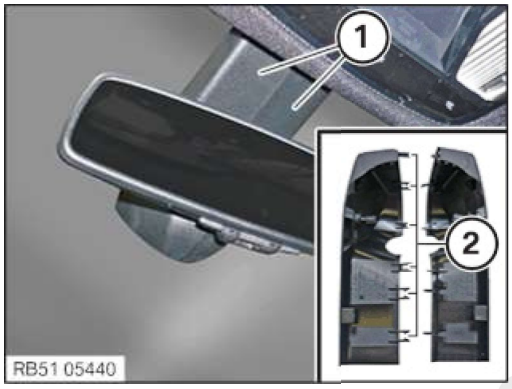
- Feed cover (1) in and lock.

- **Version B:**



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

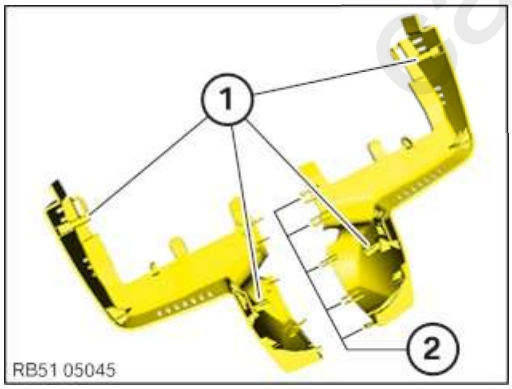
  The covers (2) must not be damaged or missing.



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

- **Version C:**

Check



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

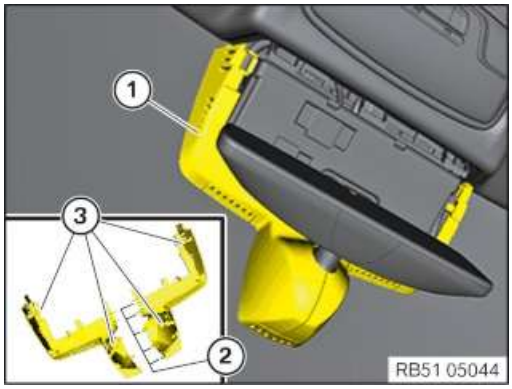
Result

» The latch mechanism is damaged.

Measure

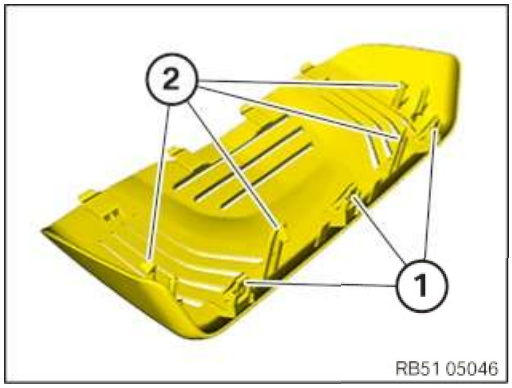
- Renew the cover.

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

Check



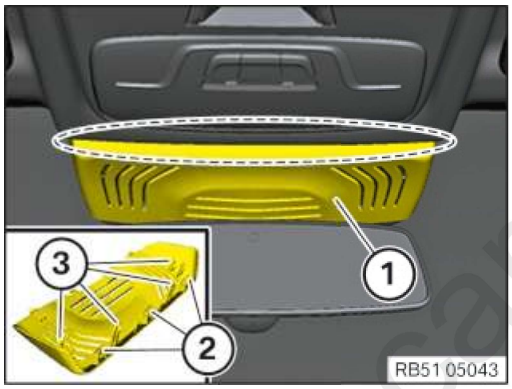
- Check clamps (1) for damage; renew if necessary.
- Check latch mechanisms (2) for damage.

Result

» The latch mechanism is damaged.

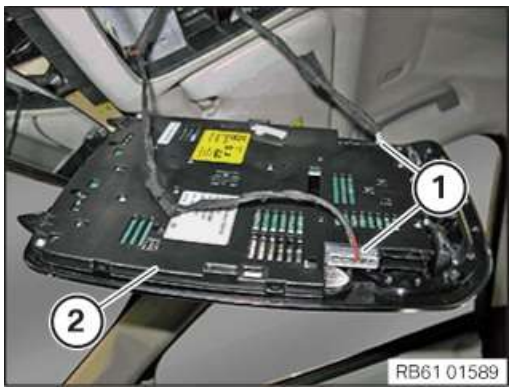
Measure

- Renew the cover.



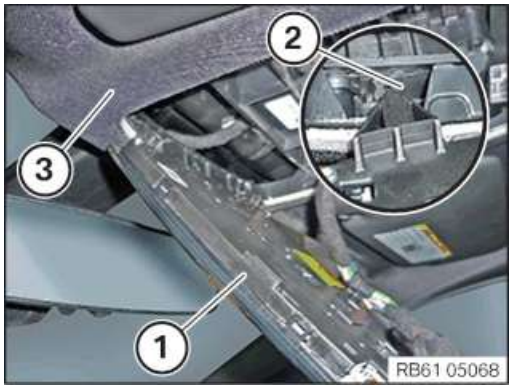
- Guide cover (1) into front guides and engage using retaining lugs (3) and clamps (2).

19 – 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.

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- Thread the roof function centre (FZD) (1) as shown at a steep angle into the two guides (2) on the headlining (3).

  Make sure the headlining is not deformed during this operation.



- Clip the roof function centre (FZD) (1) upwards into the clamps (2).



- Pass through the FZD frame and headlining with the special tool 2 298 505 and adjust the headlining correctly.



- Tighten the screws (1).

Roof function centre

	Tightening torque	1,2 Nm



- Clip in the cover (1).

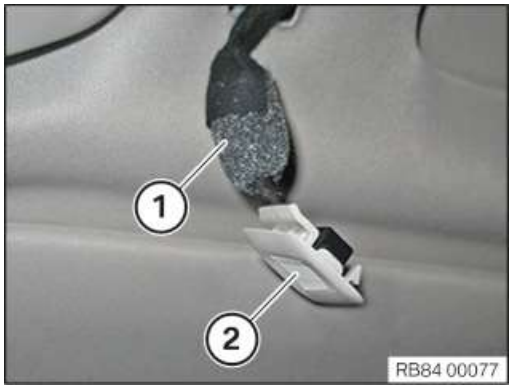
20 – Install both microphones

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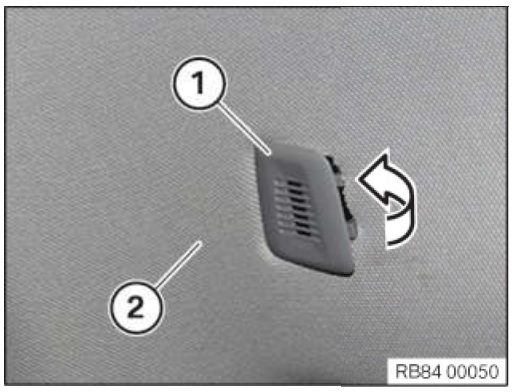
NOTICE

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).

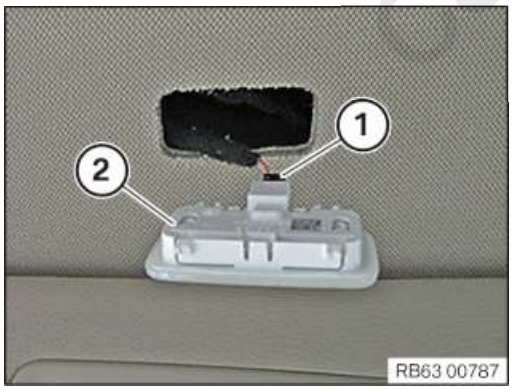


- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

21 – Installing front vanity mirror light

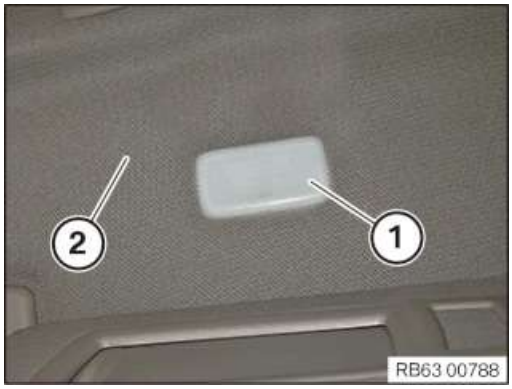
NOTICE

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



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

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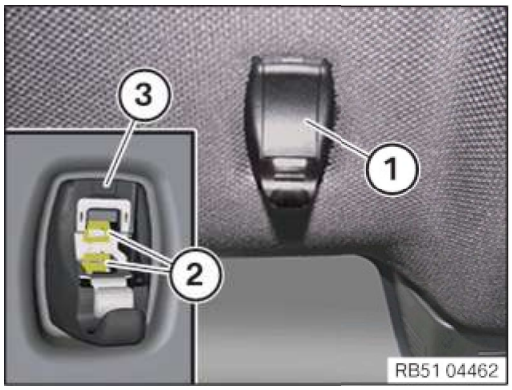


- Position the front vanity mirror light (1) in the headlining (2).

22 – Install both counter supports for the sun visors

NOTICE

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



▸ **Install the counter support for the sun visor**

- Insert the counter support (3) into the headlining.
- Make sure the clamps (2) are engaged correctly.
- Use cover (1).

23 – 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.

24 – Install both A-pillar trim panels

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NOTICE

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

▸ **Installing the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

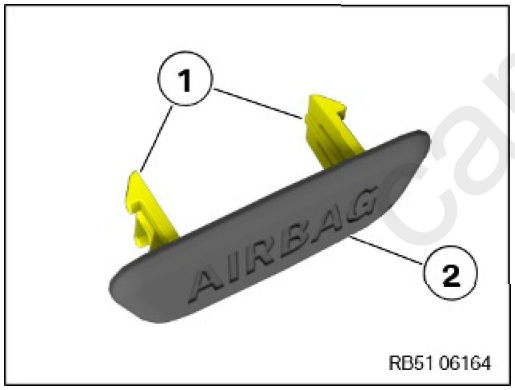
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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.



Check

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

Result

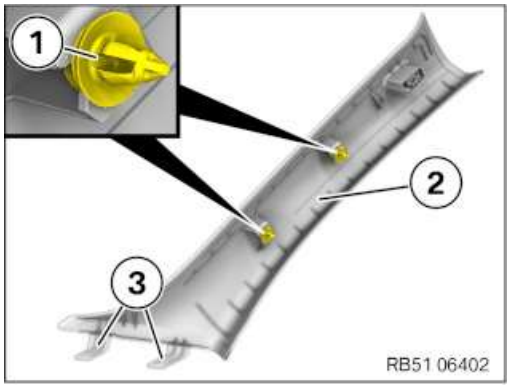
» Retaining lug is damaged.

Measure

- Renew the cover.

Check

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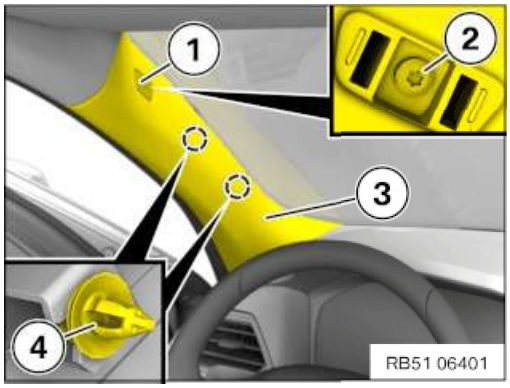
- Check the clips (1) for damage and renew if necessary.
- Check the guides (3) for damage.

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

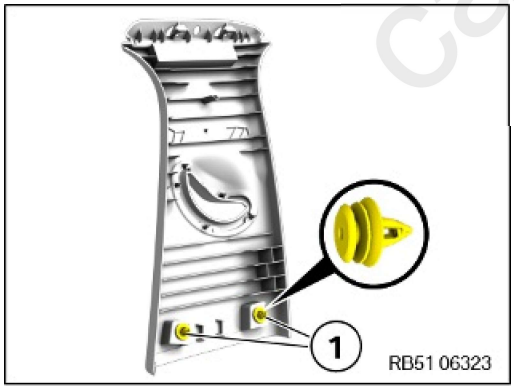
- Clip in the cover (1).

25 – Installing both B-pillar trim panels

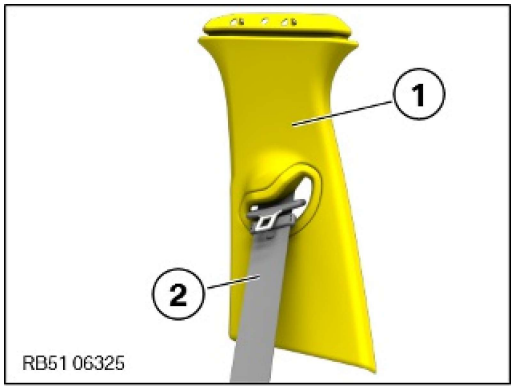
NOTICE

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

▸ **Install the B-pillar trim panel**

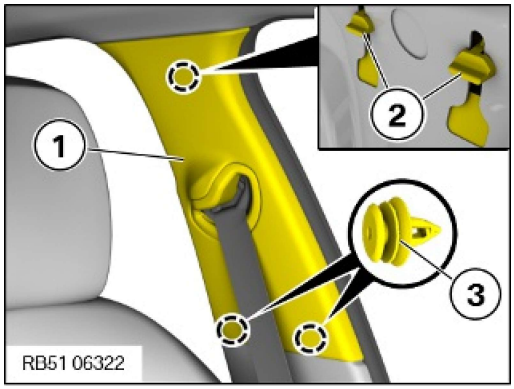


- Check the clips (1) for damage and renew if necessary.

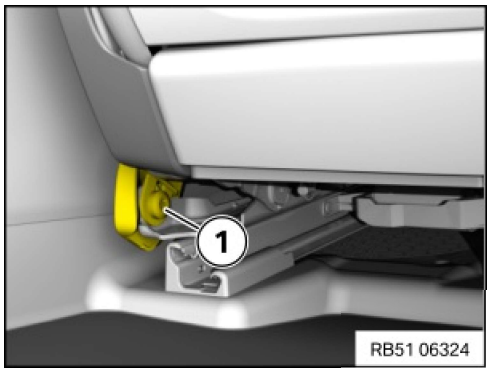


- Guide upper seat belt (2) in B-pillar trim panel (1).

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- Insert B-pillar trim panel (1) into guides (2) and under the front and rear lips of edge protection.
- Clip in the B-pillar trim panel (1) with the clips (3).



- Fully position the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

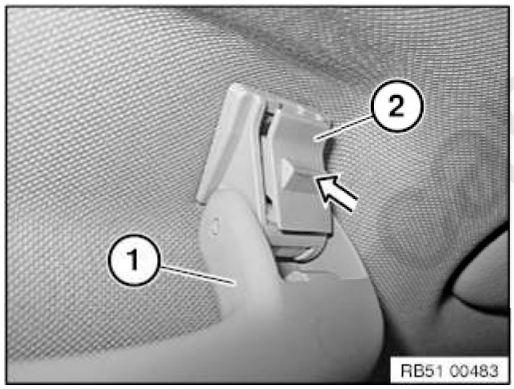
End fitting to seat mechanism

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

26 – Installing all grab handles

NOTICE

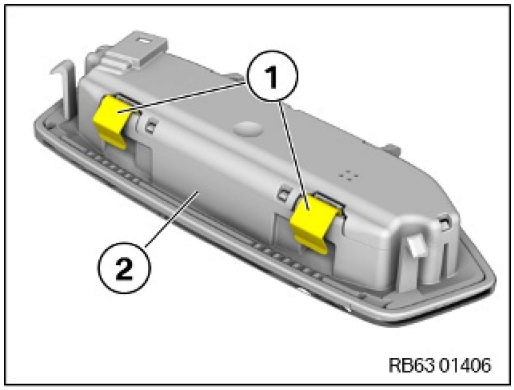
The description is for one component only. The procedure is identical for all further components.



▸ **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).

27 – Install interior roof light



Check

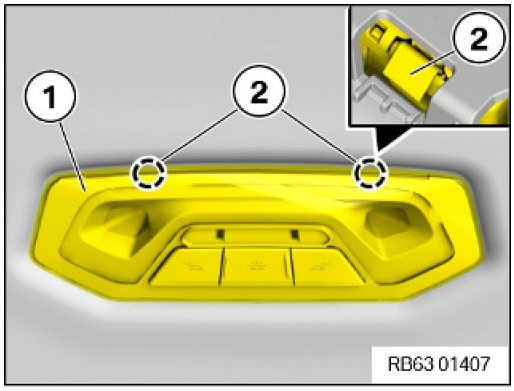
- Check the clamps (1) for damage.

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).

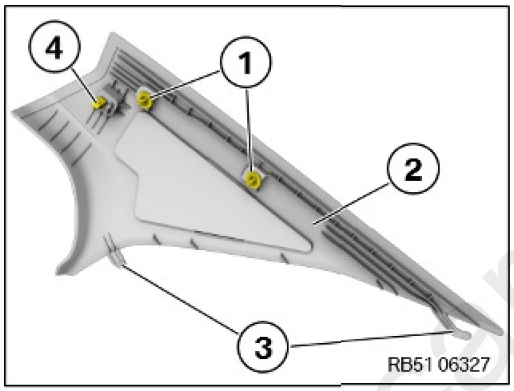
28 – Install both C-pillar trim panels

NOTICE

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

▸ **Installing C-pillar trim panel**

Check



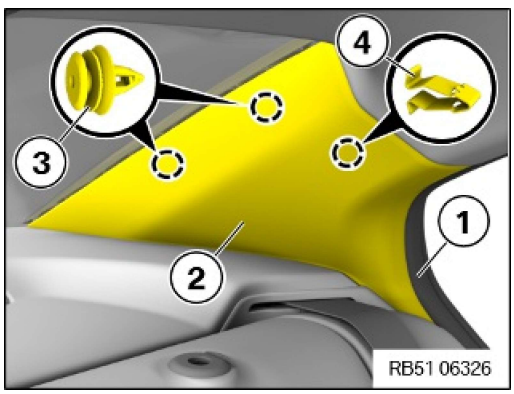
- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .



NOTICE

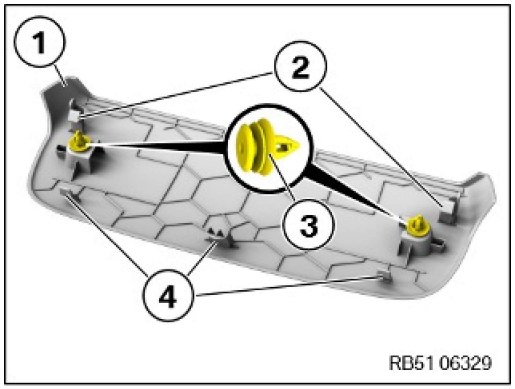
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

29 – Installing trim for additional brake light

Check

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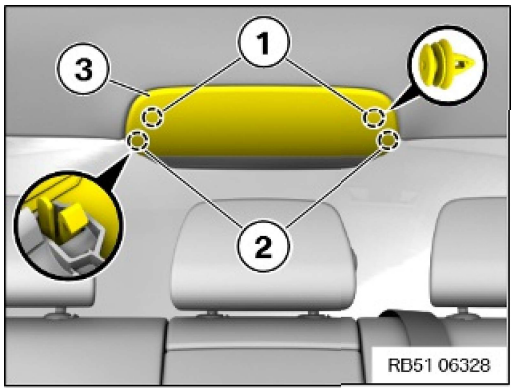
- Check the clips (3) for damage and renew if necessary.
- Check latch mechanisms (2) and guides (4) for damage.

Result

» The latch mechanism or the guide is damaged.

Measure

- Renew the trim for the additional brake light.



- Position trim for additional brake light (1) from the bottom and clip it in with latch mechanisms (2).
- Clip in clips (1).

30 – Disconnecting all battery earth leads



- See additional information.

Additional Information

Overview of Tightening Torques

Headlining to frame — Used in step 17

Oval-head screw		Tightening torque	1,5 Nm

Roof function centre — Used in step 19

		Tightening torque	1,2 Nm

A-pillar trim panel to body — Used in step 24

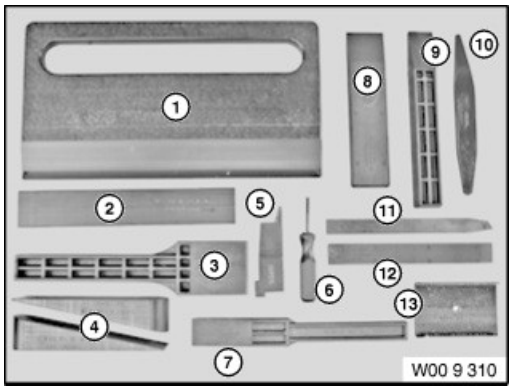
Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

carldiagn.com

End fitting to seat mechanism			Used in step 25
Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

0 493 752 (00 9 329) Case



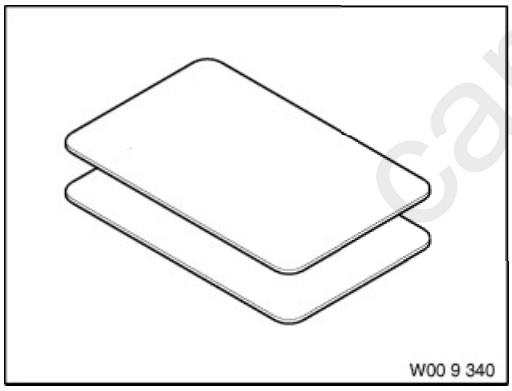
Common	Used in step 310
Usage	(Case) with insert not incl. panel wedges
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

0 496 569 (00 9 325) Wedge



Common	Used in step 6
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



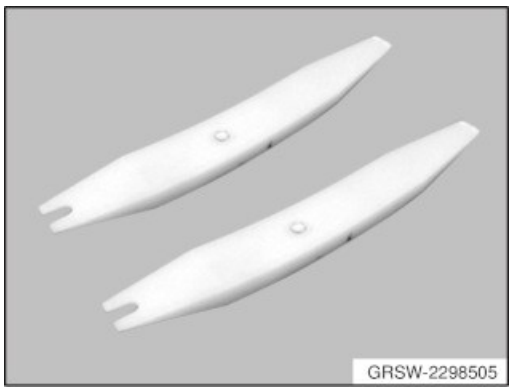
Common	Used in step 7
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

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).	

cardiagn.com

2 298 505 Wedge



Common	Used in step 19
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	3
72 00 ... Safety regulations for handling components with gas generators	3

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	130
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	130
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
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61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
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61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130
61 20 900 Disconnecting and connecting battery earth lead	130

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84 10 590 Removing and installing/replacing LTE line compensator

PRELIMINARY WORK

1 – Removing seat bench



- Disengage the seat bench (1) in area (2) in an upward direction.
- Feed out the seat belt buckle (3) from the seat bench.



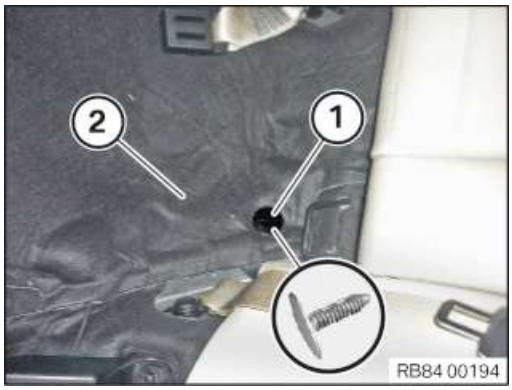
- Pull the seat bench (1) further forward.
- Release screw (2) on the end fitting and guide out belt (3).

Note: If there is a belt lock on the belt, the screw on the end fitting must not be released.

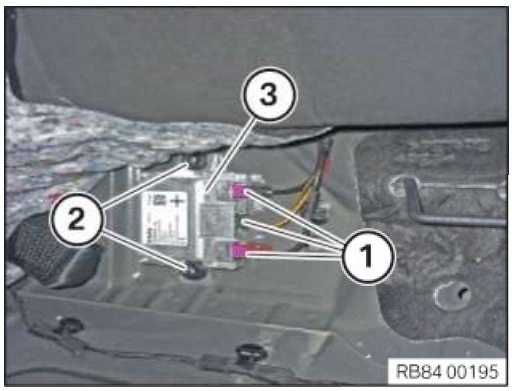
- If necessary, disconnect the present plug connections.
- Lift the seat bench (1) out of the vehicle.

cardiagn.com

2 – Removing the LTE compensator

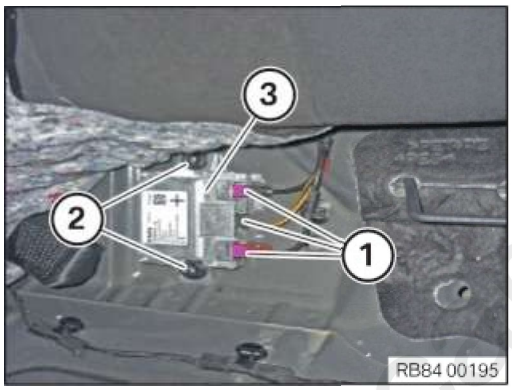


- Release clip (1) and flip up the sound insulation (2).



- Unlock and disconnect connector (1).
- Loosen nuts (2).
- Remove the LTE compensator (3).

3 – Installing the LET compensator



- Position the LTE compensator (3).
- Tighten nuts (2).

Nut to LTE compensator

Plastic nut			3 Nm

- Connect connectors (1) and lock.



- Position sound insulation (2) and install the clip (1).

carfdiag.com

4 – Installing rear seat bench



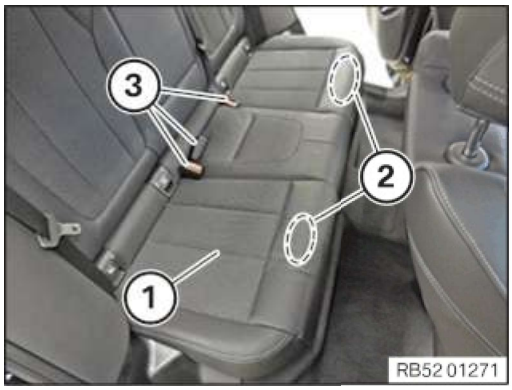
- Lift the seat bench (1) into the vehicle.
- Insert the seat belt (3).
- Renew the screw (2).

  Parts: Screw
- Tighten down screw (2).

Rear upper seat belt to bottom body

Screw	Renew screw.	Tightening torque	42 Nm

- Connect available connectors.



- Insert seat bench (1).
- Thread seat belt buckles (3) into the seat bench.
- Engage the seat bench (1) in the area (2).

Additional Information

Overview of Tightening Torques

Nut to LTE compensator Used in step 3

Plastic nut			3 Nm

Rear upper seat belt to bottom body Used in step 4

Screw	Renew screw.	Tightening torque	42 Nm

cardiagn.com

84 10 059 Removing and installing/replacing USB port in centre console storage compartment

Prerequisite

- The lid of the centre armrest is open.

RISK OF DAMAGE

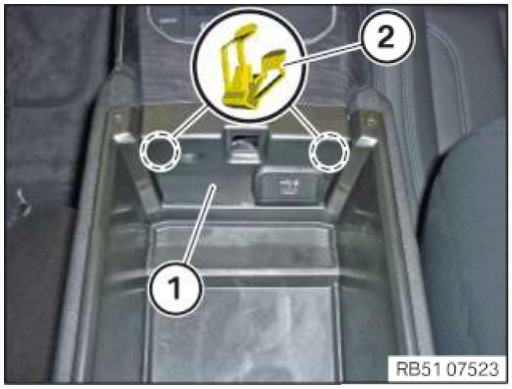
Damage of high-quality surfaces.

Plastic wedges can damage high-quality surfaces.

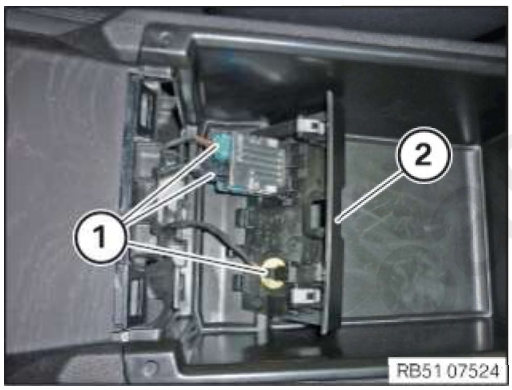
- Protect surfaces from damage.

PRELIMINARY WORK

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



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

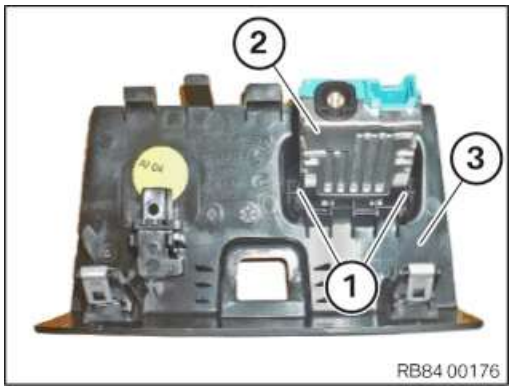


- Unlock and disconnect the plug connections (1) and remove the trim (2) .

partdiagn.com

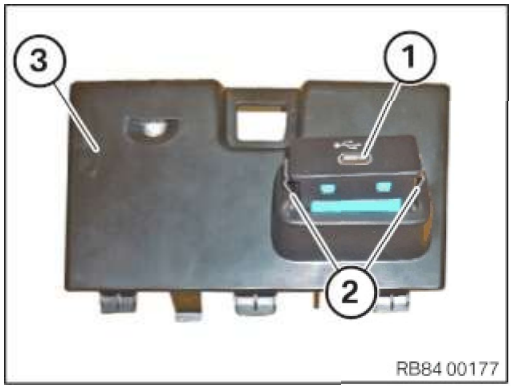
MAIN WORK

2 – Remove USB connecting socket in storage compartment of the centre console



- Loosen the latch mechanisms (1).
- Remove USB connecting socket (2) from the trim (3).

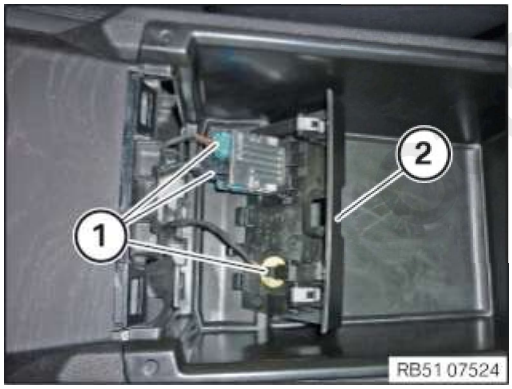
3 – Install the USB connecting socket in the storage compartment of the centre console



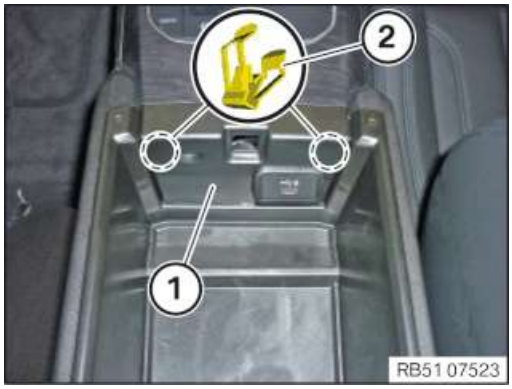
- Position the USB connecting socket (1) and install in the trim (3).
- Engage latch mechanisms (2) correctly.

POSTPROCESSES

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



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



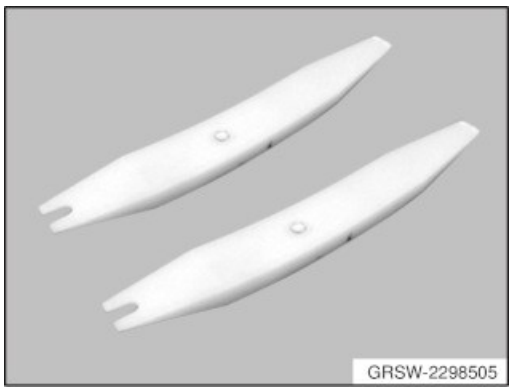
- Correctly position trim (1) and snap into the clamps (2).

Additional Information

autodiagn.com

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)

cardiagn.com

84 10 060 Removing and installing/replacing USB port in the centre console

Prerequisite

- The lid of the front storage compartment is open.

PRELIMINARY WORK

1 – Remove cupholder



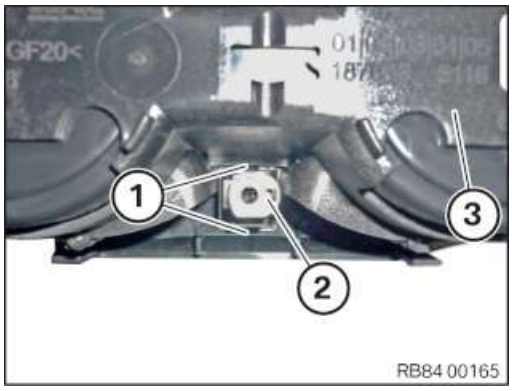
- Remove the insert (1).



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

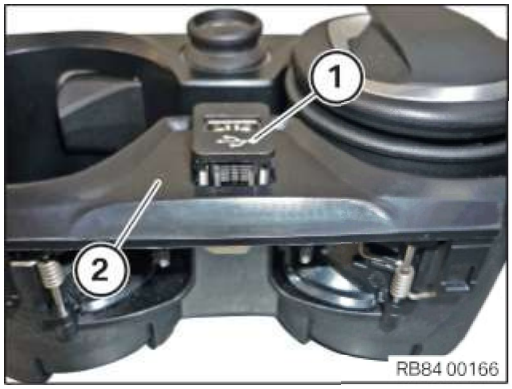
cardiagn.com

2 – Remove the connecting socket of the USB audio interface in cup holder



- Loosen the latch mechanisms (1).
- Remove the connecting socket of the USB audio interface (2) from the cup holder (3) to the front.

3 – Install the connecting socket of the USB audio interface in the cup holder.



- Position the connecting socket of the USB audio interface (1) and push it into the cup holder (2).

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4 – Install the cup holder



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

Cup holder to centre console

Oval-head screw		Tightening torque	1,8 Nm



- Insert the insert (1).

Additional Information

Overview of Tightening Torques

Cup holder to centre console Used in step 4

Oval-head screw		Tightening torque	1,8 Nm

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84 10 120 Removing and installing/replacing wireless charging station

Prerequisite

- The lid of the front storage compartment is open.

PRELIMINARY WORK

1 – Remove cupholder



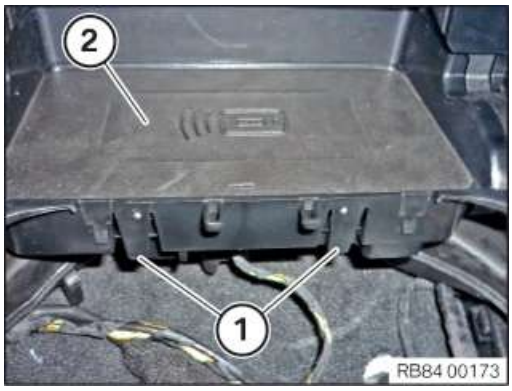
- Remove the insert (1).



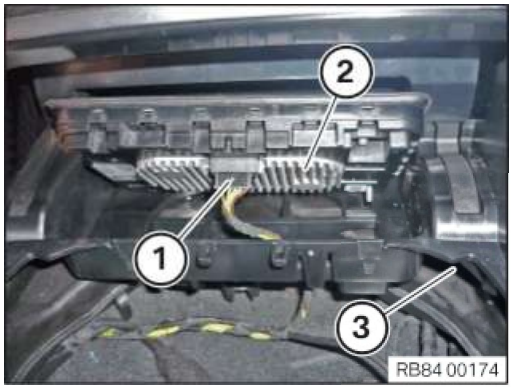
- Loosen screws (1).
- Feed the cup holder (2) out to the top.
- Unlock associated plug connections and disconnect.

cardiagn.com

2 – Removing the wireless charging station

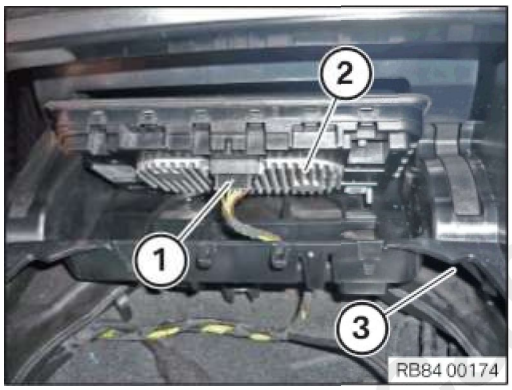


- Loosen the latch mechanisms (1) and push out the wireless charging station (2) upwards.

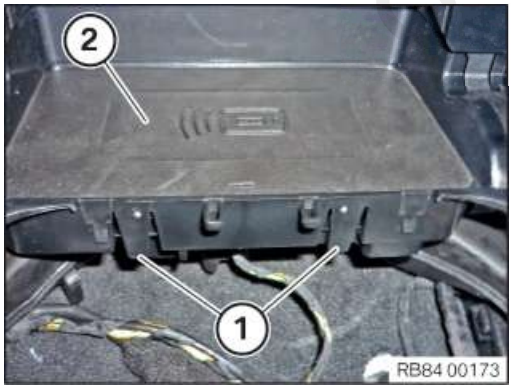


- Disconnect the connector (1) and remove the wireless charging station (2) from the centre console (3).

3 – Installing the wireless charging station



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



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

rdiag.com

4 – Install the cup holder



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

Cup holder to centre console

Oval-head screw		Tightening torque	1,8 Nm



- Insert the insert (1).

Additional Information

Overview of Tightening Torques

Cup holder to centre console Used in step 4

Oval-head screw		Tightening torque	1,8 Nm

cardiagn.com

84 10 058 Removing/installing/replacing USB port in rear centre console trim

RISK OF DAMAGE

Damage of high-quality surfaces.

Plastic wedges can damage high-quality surfaces.

- Protect surfaces from damage.

PRELIMINARY WORK

1 – Removing the rear centre console trim

RISK OF DAMAGE

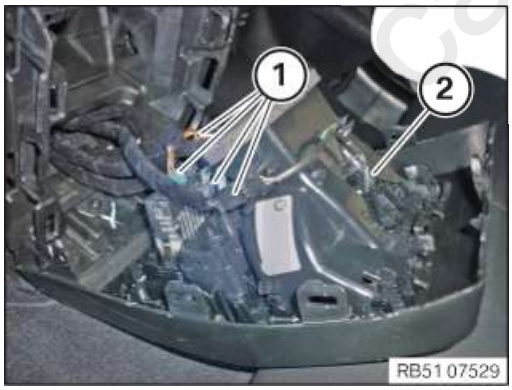
Scratches.

Tools and sharp-edged components can cause scratches.

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



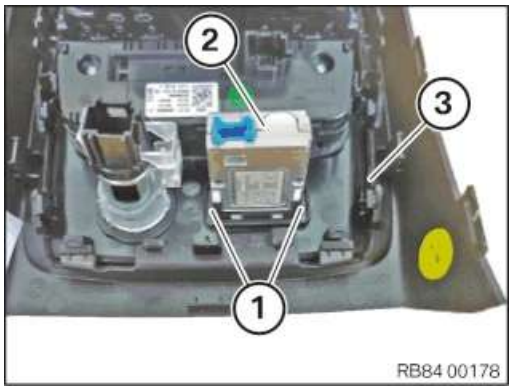
- Release centre console trim (1) backwards from the latch mechanisms at the side and pull it a little way towards the rear.



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

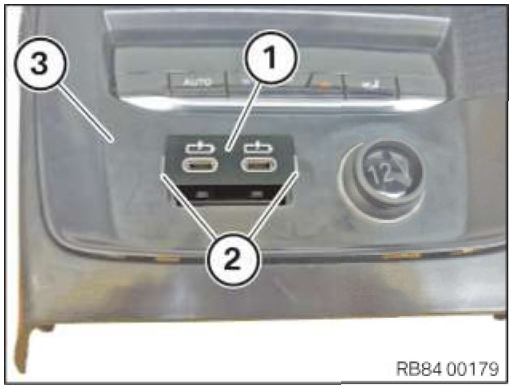
Cardiagn.com

2 – Remove the USB connector socket from the rear centre console trim panel



- Loosen the latch mechanisms (1).
- Remove the USB connector socket (2) from the centre console time panel (3).

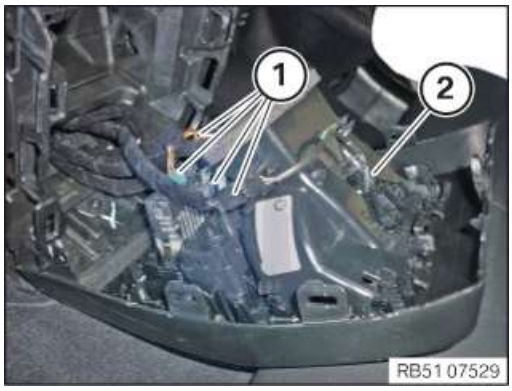
3 – Install the USB connection socket in the rear centre console cover



- Position the USB connection socket (1) and install in the centre console trim (3).
- Engage latch mechanisms (2) correctly.

cardiagn.com

4 – Installing the rear centre console trim



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



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

cardiagn.com

84 10 520 Replacing the emergency battery for the telematics control unit under the headlining

RISK OF DAMAGE

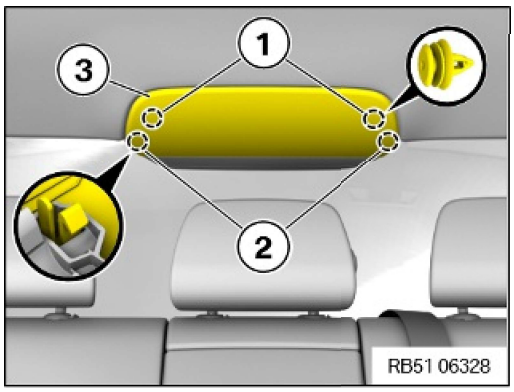
Fold the headlining.

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.

PRELIMINARY WORK

1 – Removing the trim of the additional brake light



- Loosen the clips (1).
- Release the latch mechanisms (2) and remove the trim of the additional brake light (3).

2 – Remove both C-pillar trim panels

NOTICE

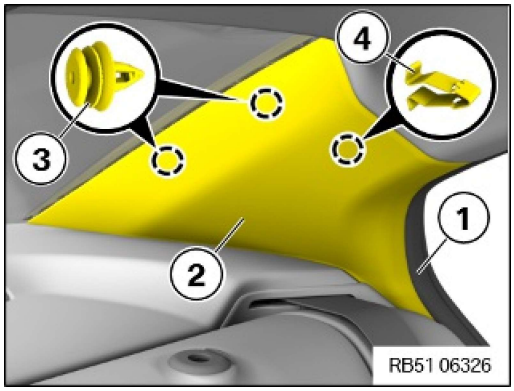
Description is for left component only. Procedure on the right side is identical.

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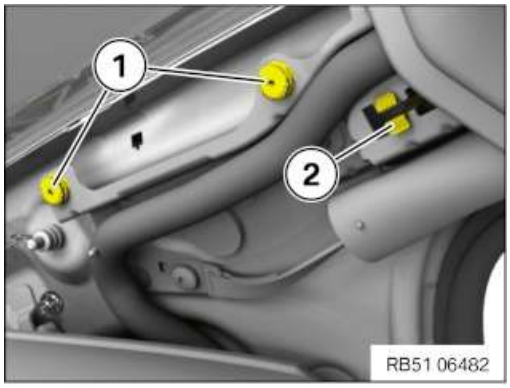
▸ **Remove C-pillar trim panel**

NOTICE

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

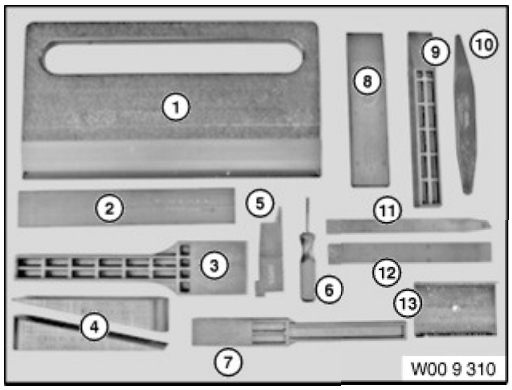


- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).

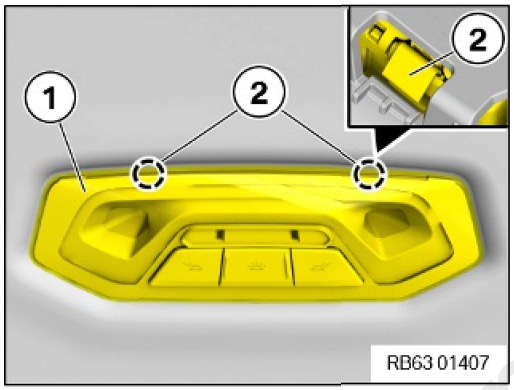


- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

3 – Remove interior roof light



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



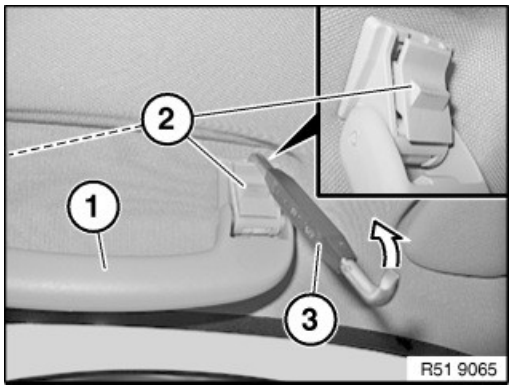
- Lever interior roof light (1) out of clamps (2) using a suitable tool.
- Unlock plug connection and disconnect.

4 – Removing all grab handles

NOTICE

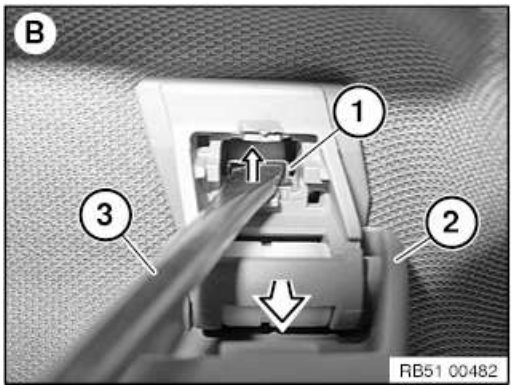
The description is for one component only. The procedure is identical for all further components.

▶ **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.

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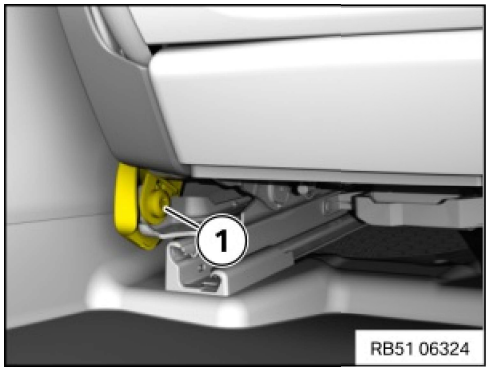
- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

5 – Removing both B-pillar trim panels

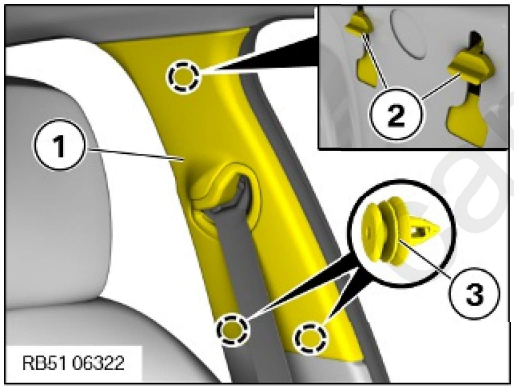
NOTICE

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

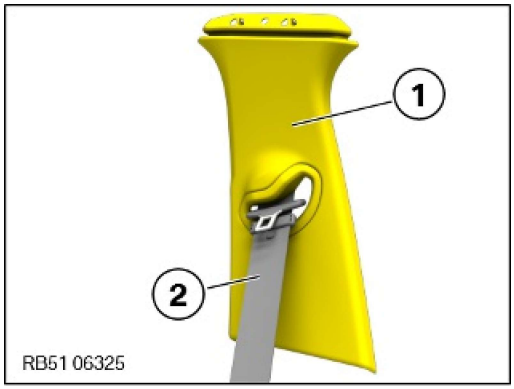
▸ **Remove the B-pillar trim panel**



- Fully position the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).



- Unclip clips (3).
- Feed B-pillar trim panel (1) out of the front and rear lip of edge protections and the guides (2).



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

6 – Remove both A-pillar trim panels

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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!

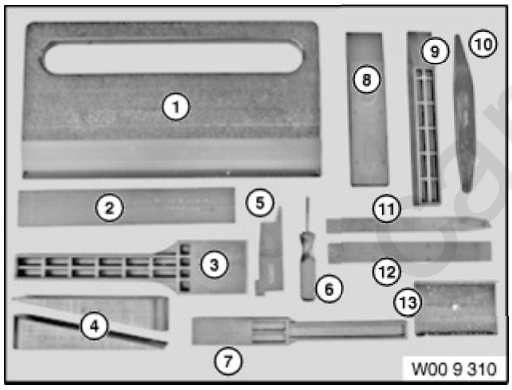
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

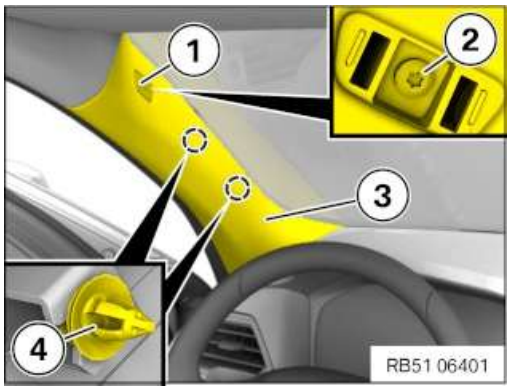
Pyrotechnic components.

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.



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



- Unclip the cover (1) with suitable tools.
- Loosen screw (2).
- Unclip A-pillar trim panel (3) with clips (4) and guide it out upwards.

7 – Remove both sun visors

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NOTICE

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

▸ **Remove sun visor**



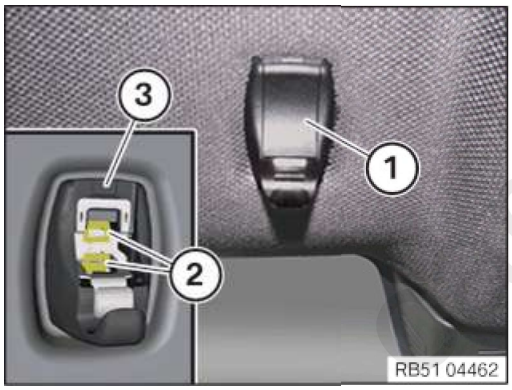
- Pull out the cover (1).
- Detach the sun visor (2) from the counter support .
- Disengage the sun visor (2) in front to the bottom and thread it out of the headlining at the rear.
- Unlock associated plug connection and disconnect.

8 – Remove both counter supports for the sun visors

NOTICE

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

▸ **Remove the counter support for the sun visor**

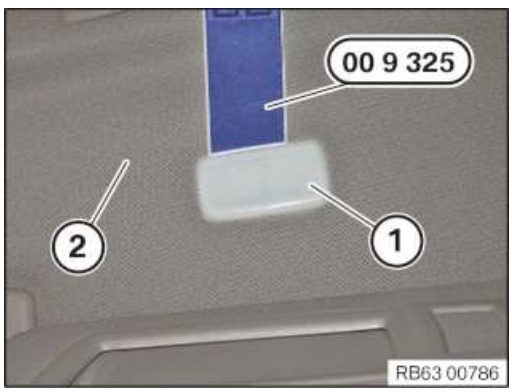


- Pull out the cover (1).
- Push the clamps (2) together and pull the counter support (3) out of the headlining.

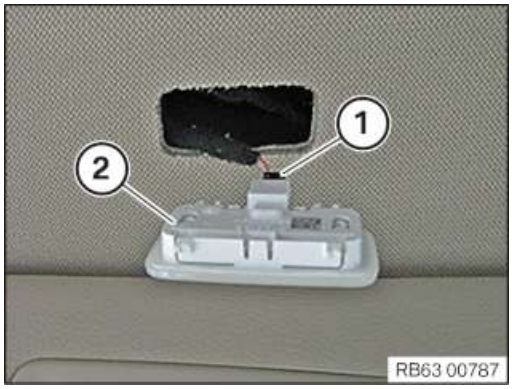
9 – Removing front vanity mirror light

NOTICE

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



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



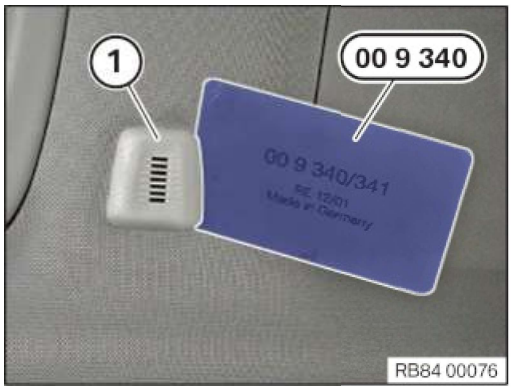
- Unlock and disconnect connector (1).
- Remove the front vanity mirror light (2).

10 – Remove both microphones

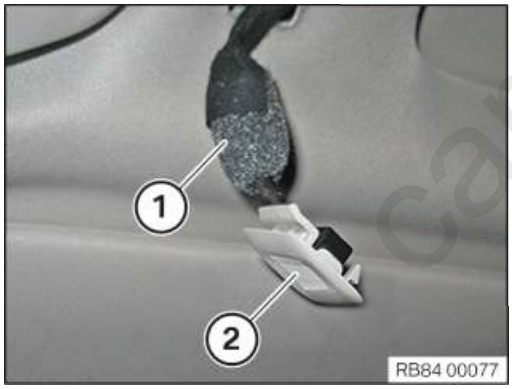
NOTICE

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

▸ **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).

11 – Removing the roof function centre (FZD)



- Unclip the cover (1).

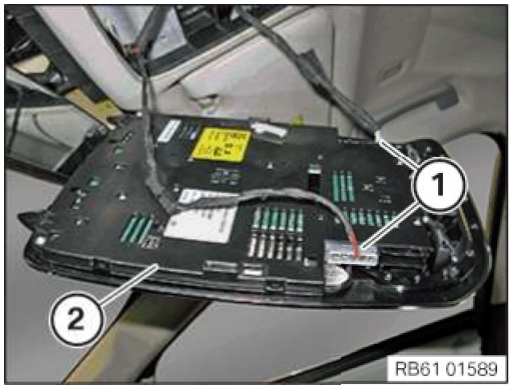
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- Loosen screws (1).



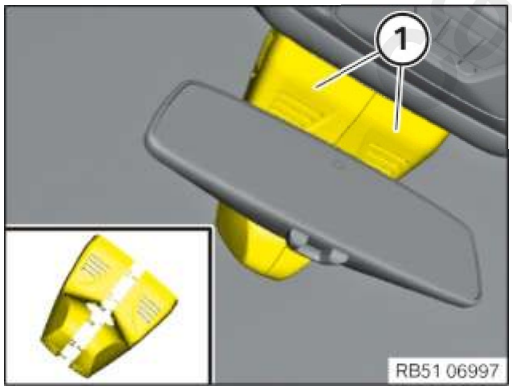
- Unclip the roof function centre (FZD) (1) from the clamps (2).
- Thread the roof function centre (FZD) (1) out of the guides (3).



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

12 – Removing the covers for the interior mirror

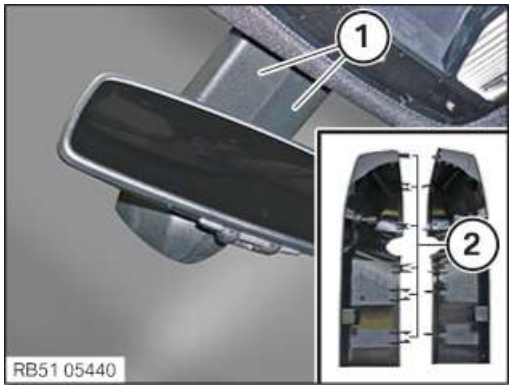
- **Version A:**



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

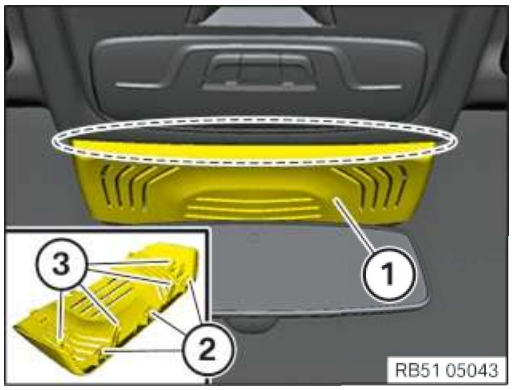
- **Version B:**

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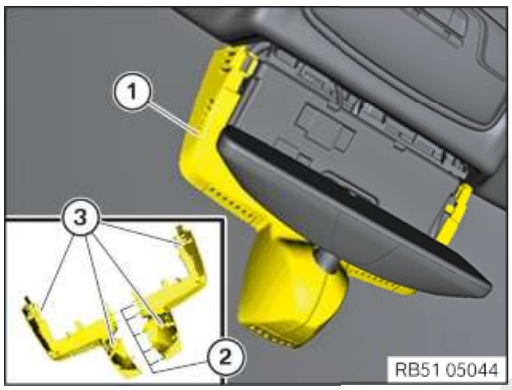


- Release the cover (1) from the latch mechanisms (2) with a suitable plastic wedge and remove sideways.

- **Version C:**



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



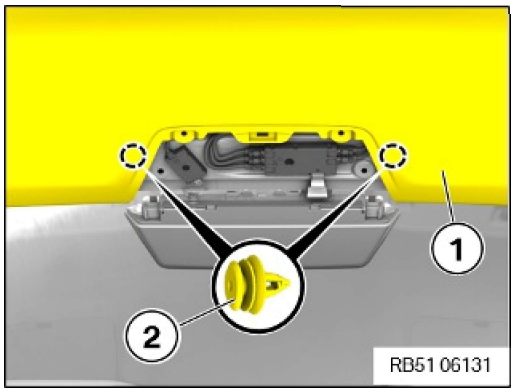
- Release cover (1) from the latch mechanisms (2) and (3) and remove sideways.
- Remove cover (1) from mirror base (2).

13 – Lower roofliner

Prerequisite

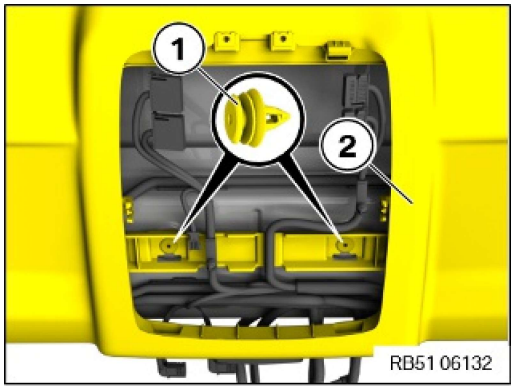
The front seats have been fully adjusted towards the bottom.

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



- Unclip the headlining (1) from the clips (2) downward.

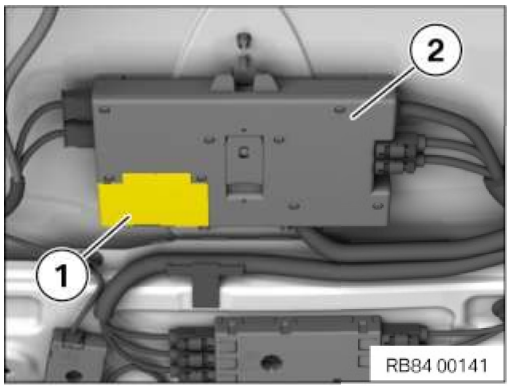
cardiagn.com



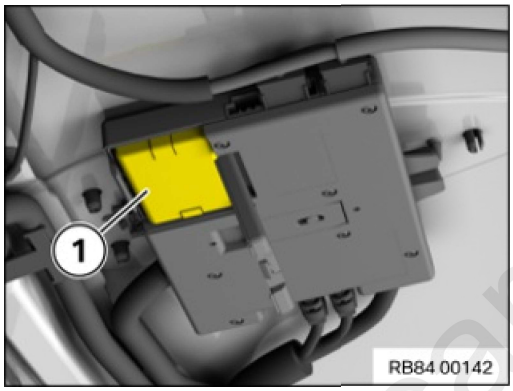
- Release the clips (1) at the headlining (2).
- Feed out headlining (2) with the help of an auxiliary person at the respective edge protection and place it on the seats.

MAIN WORK

14 – Replacing the emergency battery for the telematics control unit

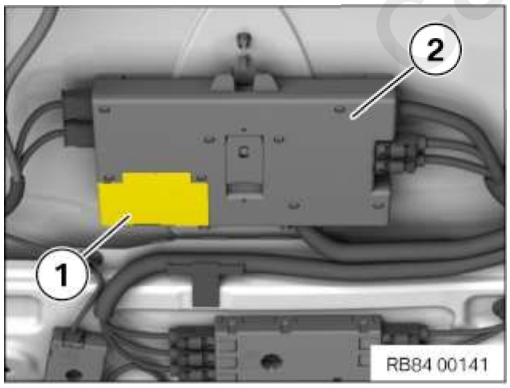


- Unlock and open battery compartment (1) on telematic control unit (2).



- Guide out the emergency battery for telematics control unit (1) from the battery compartment and renew it.

  Parts: Emergency battery

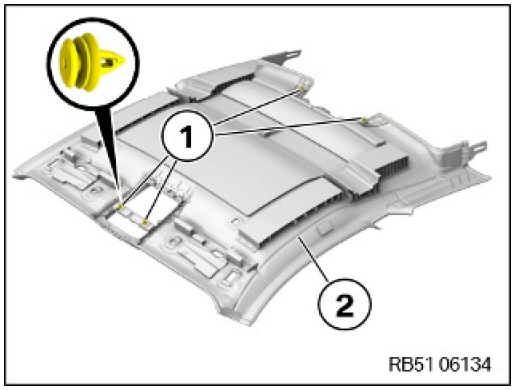


- Shut battery compartment (1) on telematics control unit (2) and lock.

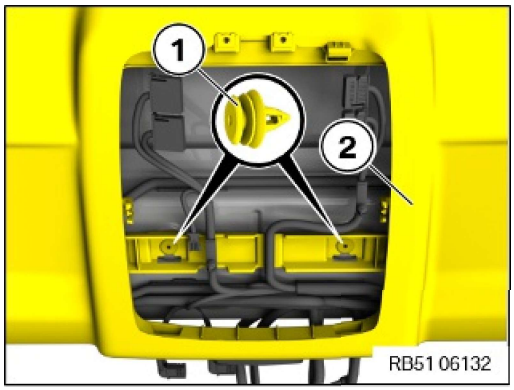
POSTPROCESSES

15 – Install the headlining (lowered)

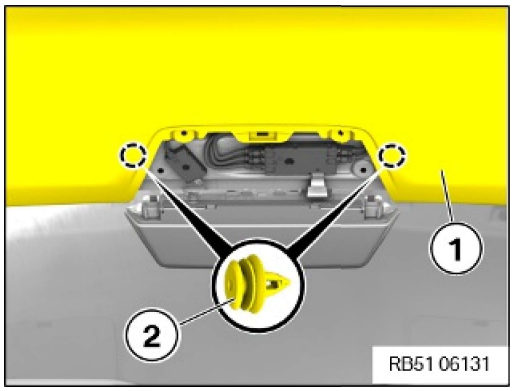
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- Check the clips (1) on the headlining (2) for damage and renew if necessary.



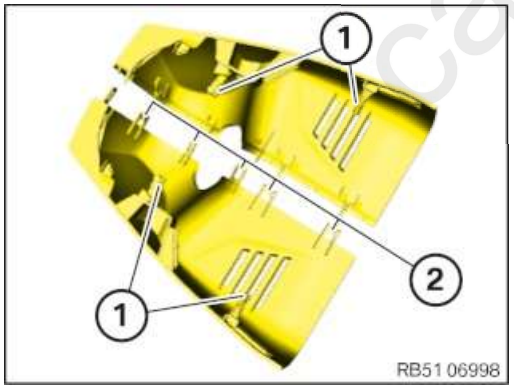
- Feed in the headlining (1) with the help of an auxiliary person on the respective edge protection.
- Position the headlining (2) on the clips (1) and clip it in.



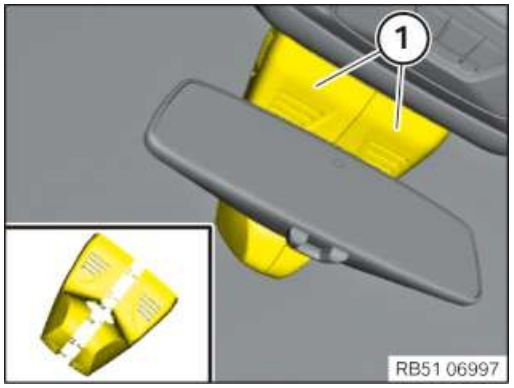
- Clip in clips (2) on the headlining (1).

16 – Installing the covers for the interior mirror

- **Version A:**



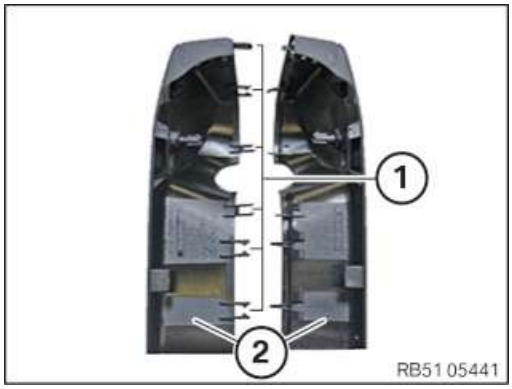
- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.



- Feed cover (1) in and lock.

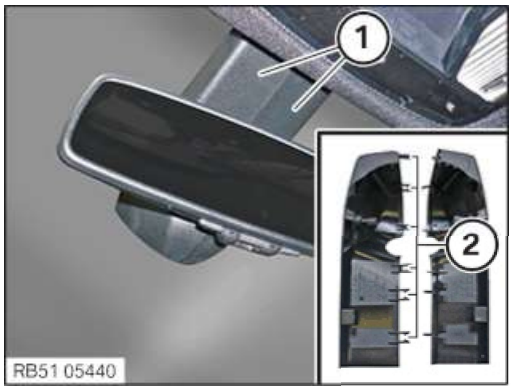
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- **Version B:**



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

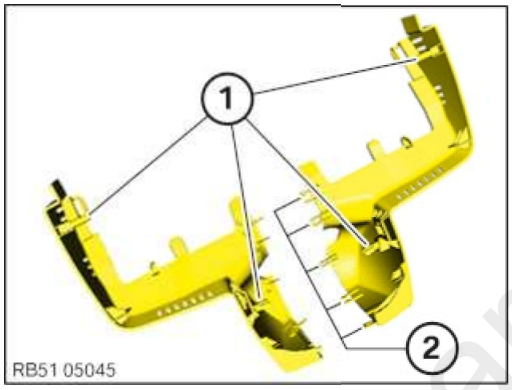
  The covers (2) must not be damaged or missing.



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

- **Version C:**

Check



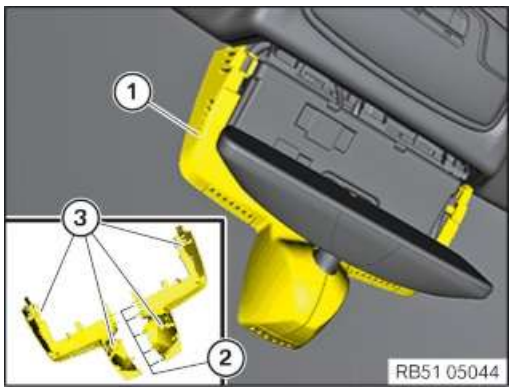
- Check the latch mechanisms (1) and (2) of the covers for damage.

Result

» The latch mechanism is damaged.

Measure

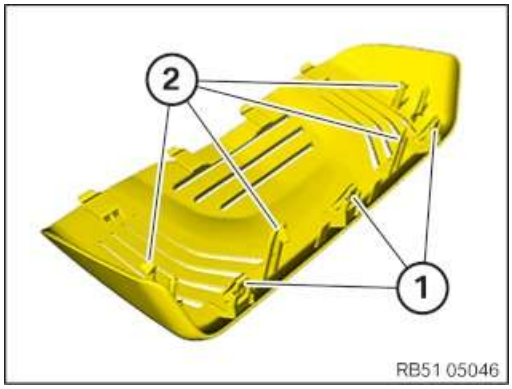
- Renew the cover.



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

Check

cardiagn.com



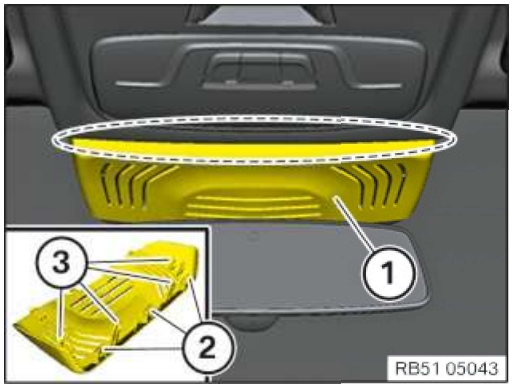
- Check clamps (1) for damage; renew if necessary.
- Check latch mechanisms (2) for damage.

Result

» The latch mechanism is damaged.

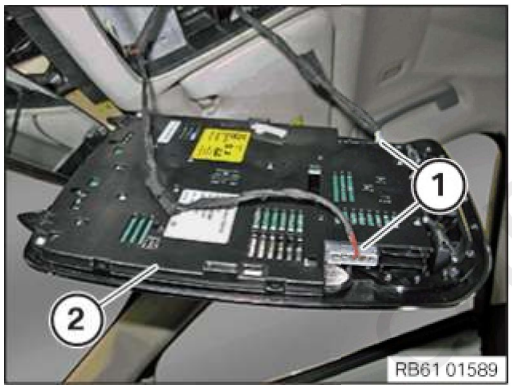
Measure

- Renew the cover.

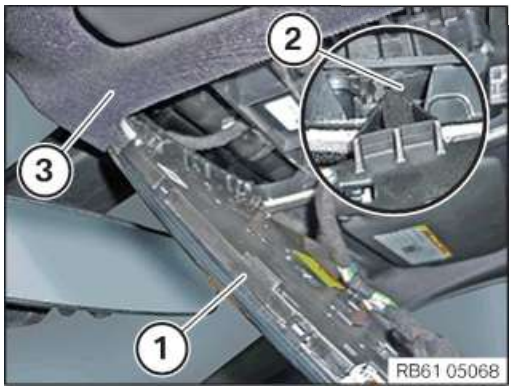


- Guide cover (1) into front guides and engage using retaining lugs (3) and clamps (2).

17 – 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.



- Thread the roof function centre (FZD) (1) as shown at a steep angle into the two guides (2) on the headlining (3).

  Make sure the headlining is not deformed during this operation.

fdiagn.com



- Clip the roof function centre (FZD) (1) upwards into the clamps (2).



- Pass through the FZD frame and headlining with the special tool 2 298 505 and adjust the headlining correctly.



- Tighten the screws (1).

Roof function centre

	Tightening torque	1,2 Nm



- Clip in the cover (1).

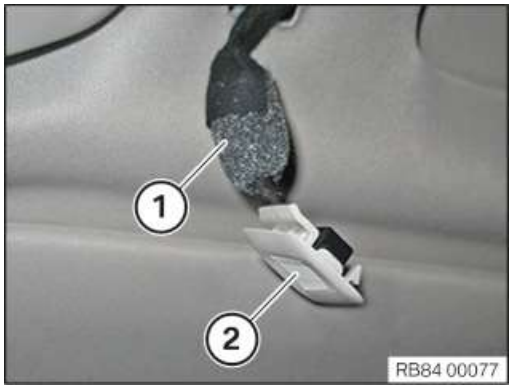
18 – Install both microphones

NOTICE

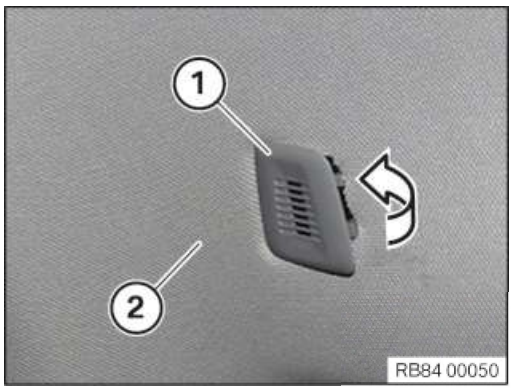
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the hands-free microphone**

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

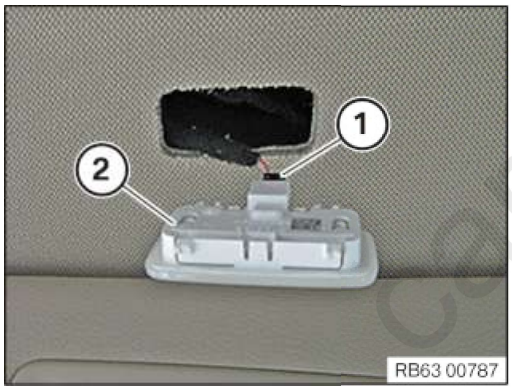


- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

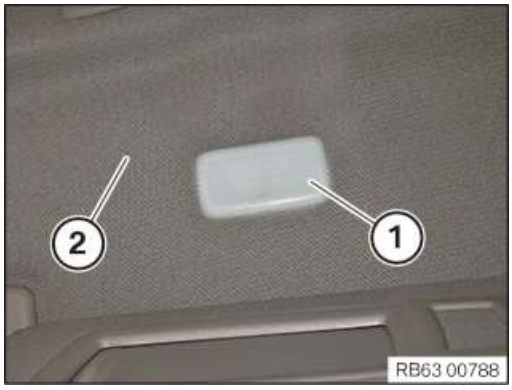
19 – Installing front vanity mirror light

NOTICE

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



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



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

20 – Install both counter supports for the sun visors

NOTICE

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

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▸ **Install the counter support for the sun visor**



- Insert the counter support (3) into the headlining.
- Make sure the clamps (2) are engaged correctly.
- Use cover (1).

21 – 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.

22 – Install both A-pillar trim panels

NOTICE

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

▸ **Installing 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

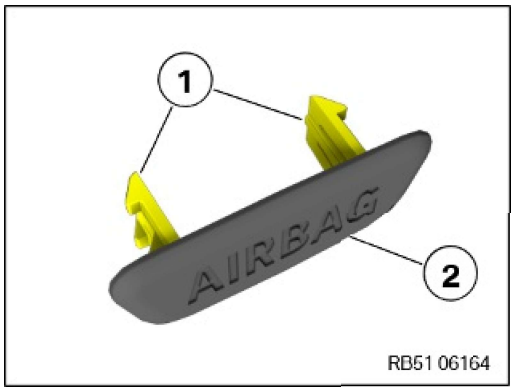
cardiagn.com

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.



Check

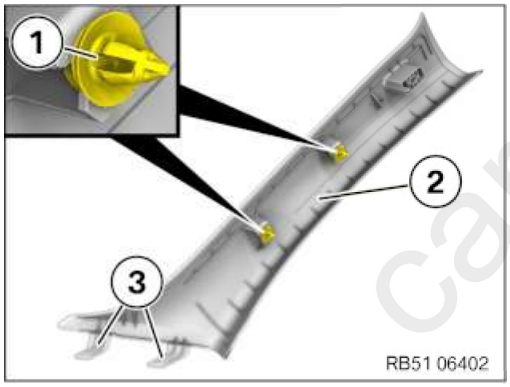
- Check retaining lugs (1) of cover (2) for damage.

Result

» Retaining lug is damaged.

Measure

- Renew the cover.



Check

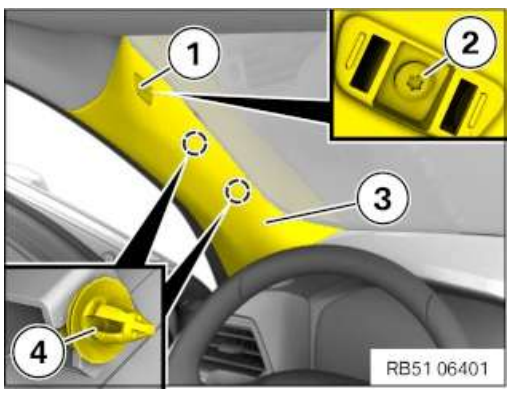
- Check the clips (1) for damage and renew if necessary.
- Check the guides (3) for damage.

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).

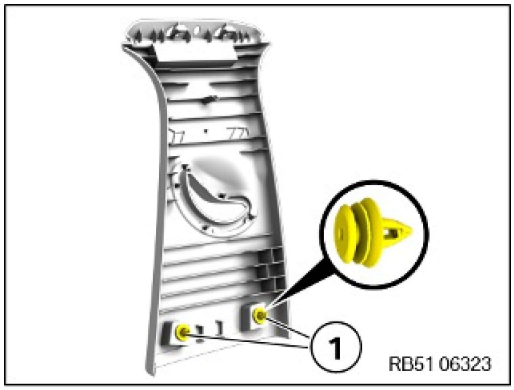
23 – Installing both B-pillar trim panels

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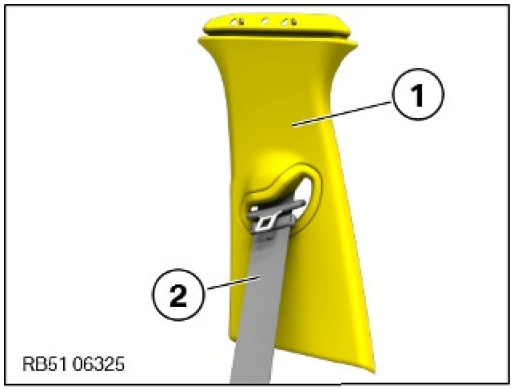
NOTICE

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

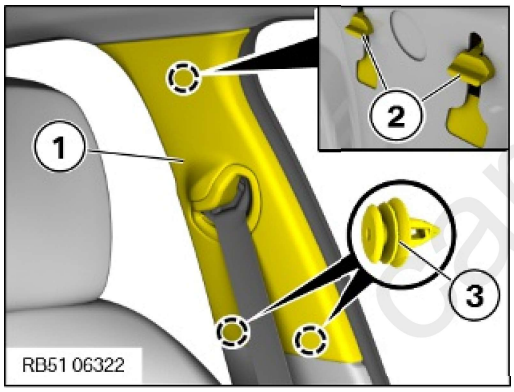
▶ **Install the B-pillar trim panel**



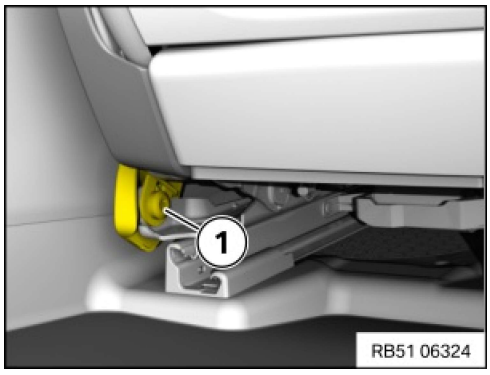
- Check the clips (1) for damage and renew if necessary.



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



- Insert B-pillar trim panel (1) into guides (2) and under the front and rear lips of edge protection.
- Clip in the B-pillar trim panel (1) with the clips (3).



- Fully position the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

End fitting to seat mechanism

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

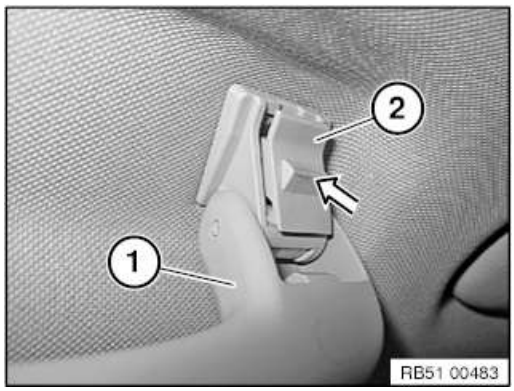
24 – Installing all grab handles

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NOTICE

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

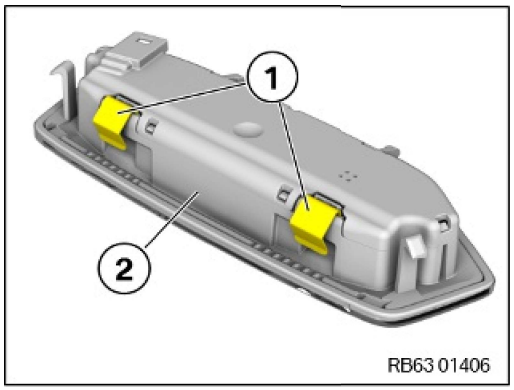
▸ **Installing the grab handle**



- 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).

25 – Install interior roof light

Check



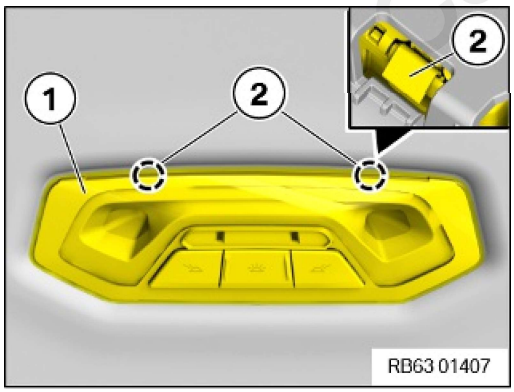
- Check the clamps (1) for damage.

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).

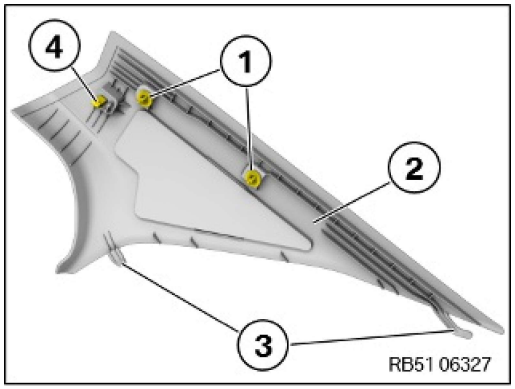
26 – Install both C-pillar trim panels

NOTICE

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

▸ **Installing C-pillar trim panel**

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Check

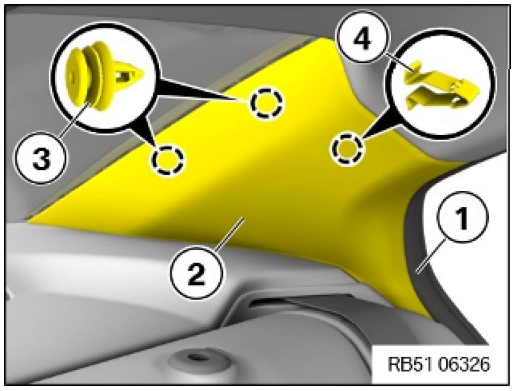
- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .

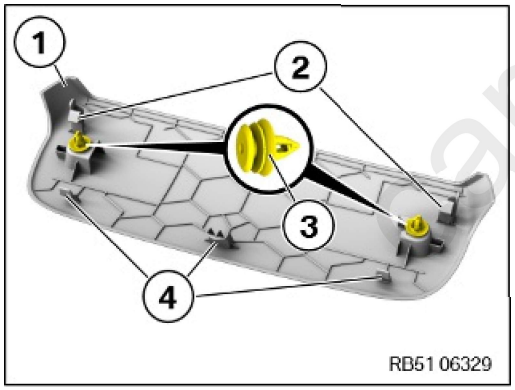


NOTICE

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

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

27 – Installing trim for additional brake light



Check

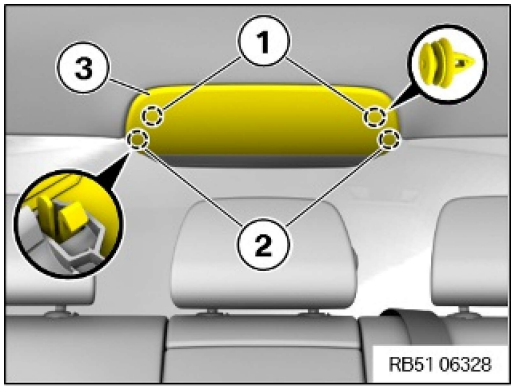
- Check the clips (3) for damage and renew if necessary.
- Check latch mechanisms (2) and guides (4) for damage.

Result

» The latch mechanism or the guide is damaged.

Measure

- Renew the trim for the additional brake light.



- Position trim for additional brake light (1) from the bottom and clip it in with latch mechanisms (2).
- Clip in clips (1).

Additional Information

Overview of Tightening Torques

Roof function centre — Used in step 17

		Tightening torque	1,2 Nm

A-pillar trim panel to body — Used in step 22

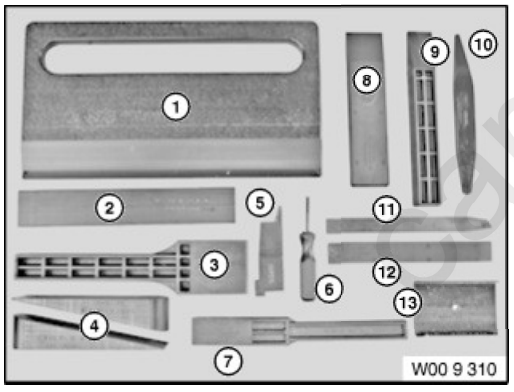
Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

End fitting to seat mechanism — Used in step 23

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

0 493 752 (00 9 329) Case



Common	Used in step 36
Usage	(Case) with insert not incl. panel wedges
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

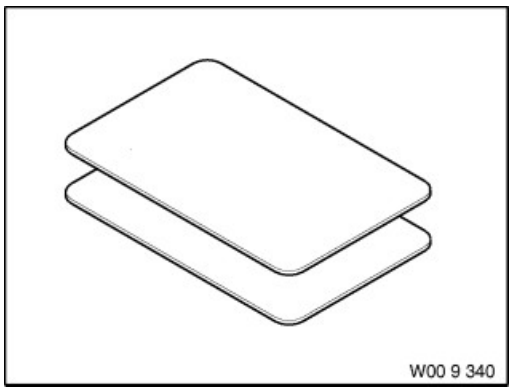
0 496 569 (00 9 325) Wedge



Common	Used in step 9
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)

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0 493 687 (00 9 340) Removal aid



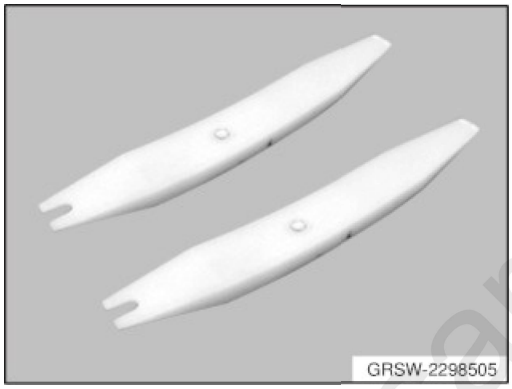
Common Used in step 10

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).	

2 298 505 Wedge



Common Used in step 17

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

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	6
72 00 ... Safety regulations for handling components with gas generators	6

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84 10 521 Replacing the emergency battery for the telematics control unit under the headlining

RISK OF DAMAGE

Fold the headlining.

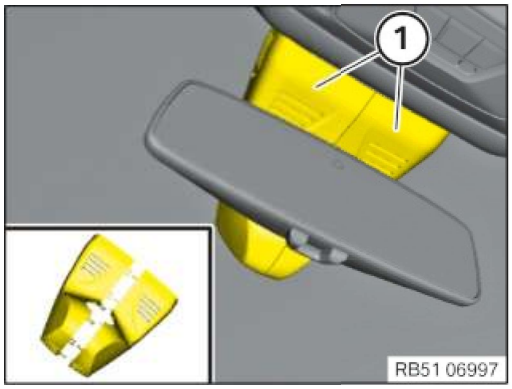
If the headlining is folded, it may have to be replaced.

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

PRELIMINARY WORK

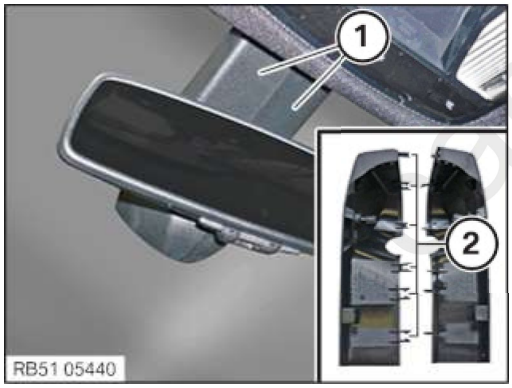
1 – Removing the covers for the interior mirror

- **Version A:**



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

- **Version B:**

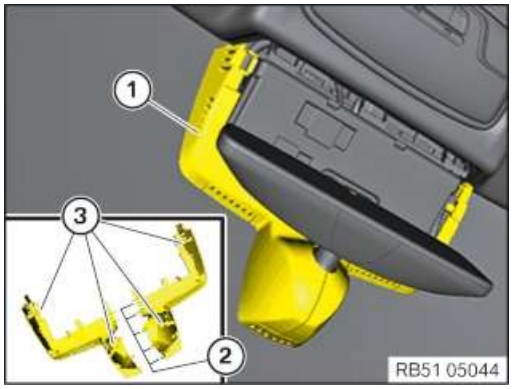


- Release the cover (1) from the latch mechanisms (2) with a suitable plastic wedge and remove sideways.

- **Version C:**



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



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

2 – Remove both 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!

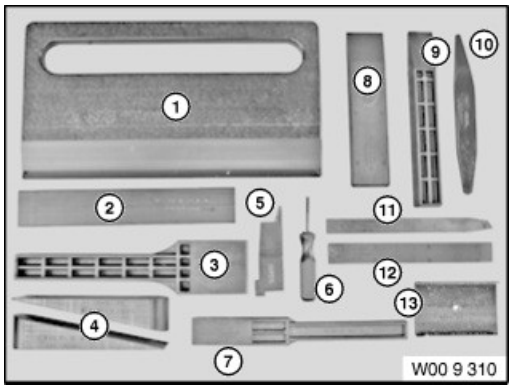
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

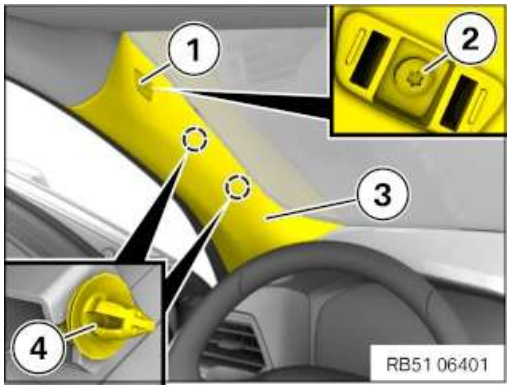
Danger! Life-threatening injuries!

- 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.



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

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- Unclip the cover (1) with suitable tools.
- Loosen screw (2).
- Unclip A-pillar trim panel (3) with clips (4) and guide it out upwards.

3 – 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.

4 – Remove both counter supports for the sun visors

NOTICE

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



▸ **Remove the counter support for the sun visor**

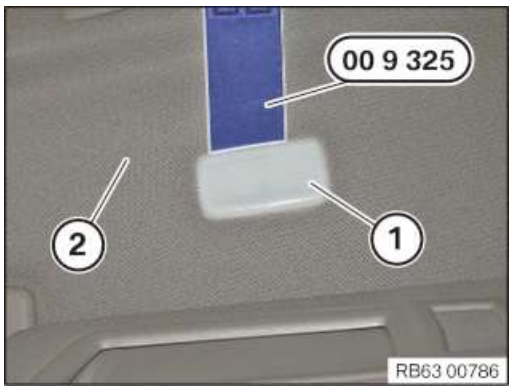
- Pull out the cover (1).
- Push the clamps (2) together and pull the counter support (3) out of the headlining.

5 – Removing front vanity mirror light

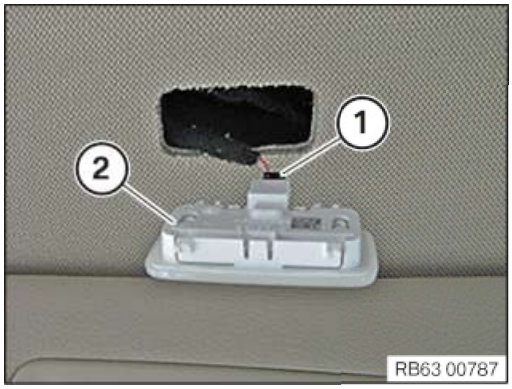
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NOTICE

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



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



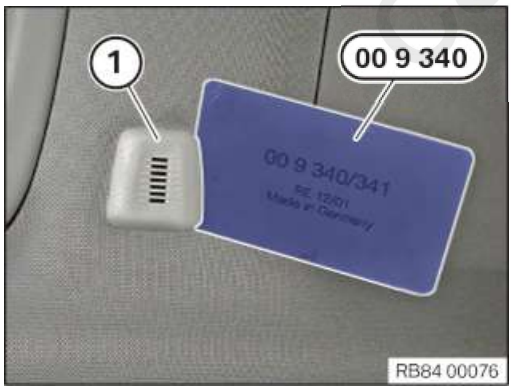
- Unlock and disconnect connector (1).
- Remove the front vanity mirror light (2).

6 – Remove both microphones

NOTICE

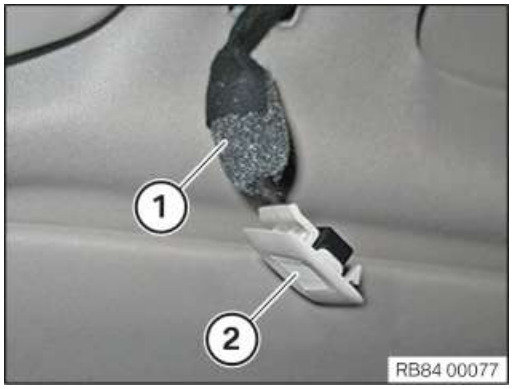
Description is for left component only. Procedure on the right side is identical.

▸ **Removing hands-free microphone**



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

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

7 – Removing the roof function centre (FZD)



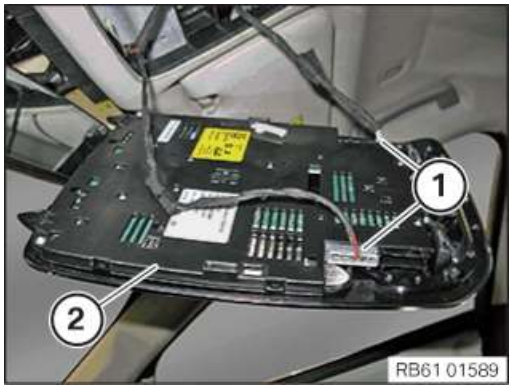
- Unclip the cover (1).



- Loosen screws (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 for the roof function centre (FZD) (2) from the cable clip.

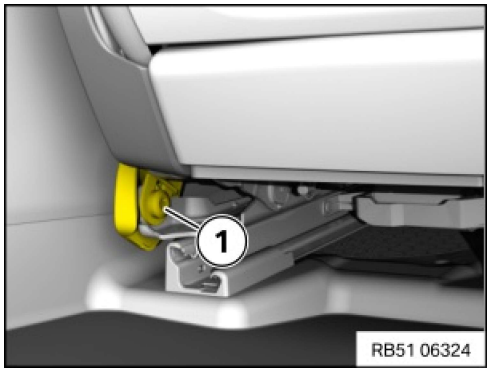
8 – Removing both B-pillar trim panels

audiagn.com

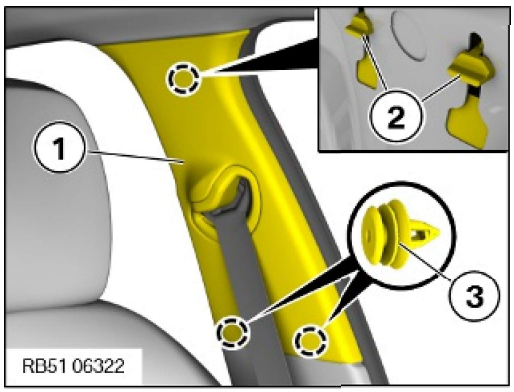
NOTICE

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

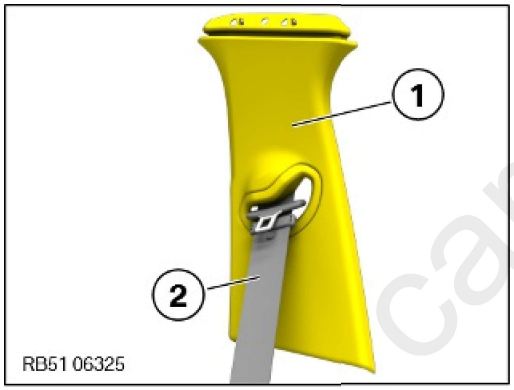
▶ **Remove the B-pillar trim panel**



- Fully position the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).

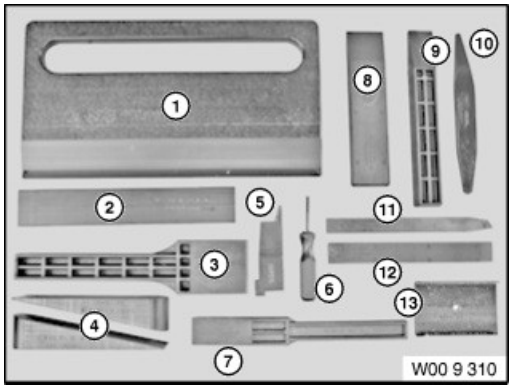


- Unclip clips (3).
- Feed B-pillar trim panel (1) out of the front and rear lip of edge protections and the guides (2).



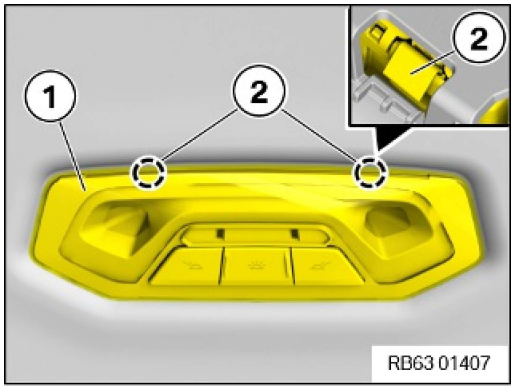
- Feed upper seat belt (2) out of B-pillar trim panel (1).

9 – Remove interior roof light



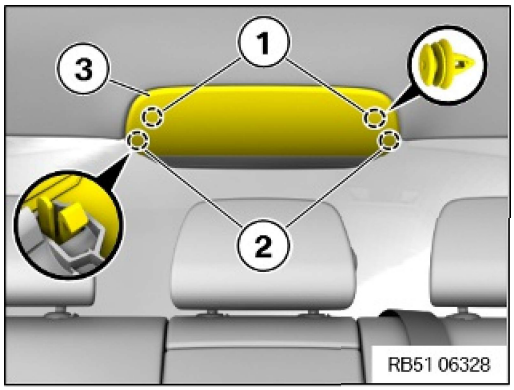
- Have the set of special tools 0 493 752 (00 9 329) ready.

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

10 – Removing the trim of the additional brake light



- Loosen the clips (1).
- Release the latch mechanisms (2) and remove the trim of the additional brake light (3).

11 – Remove both C-pillar trim panels

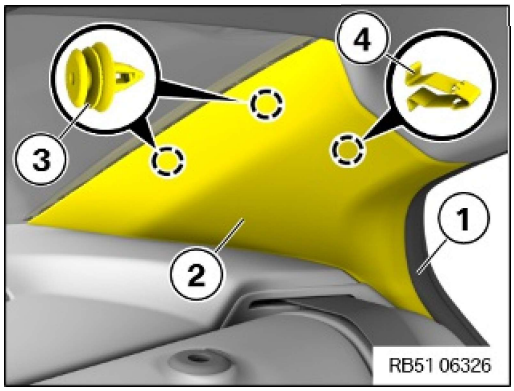
NOTICE

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

▸ **Remove C-pillar trim panel**

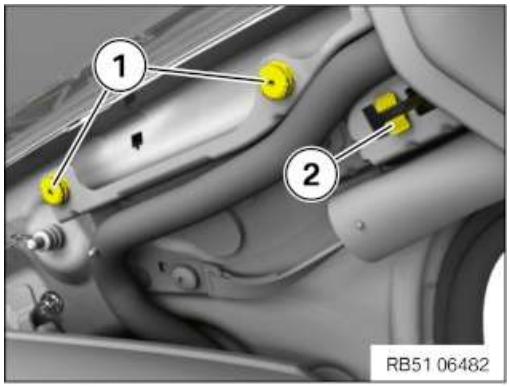
NOTICE

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



- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).

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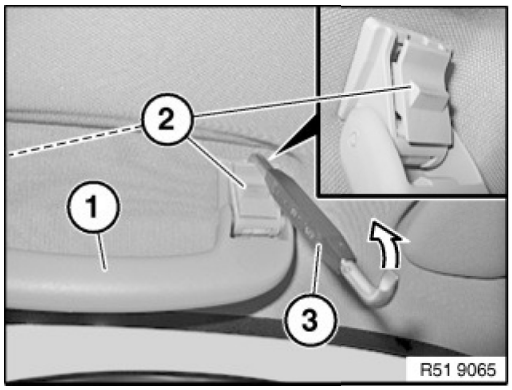
- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

12 – Removing all grab handles

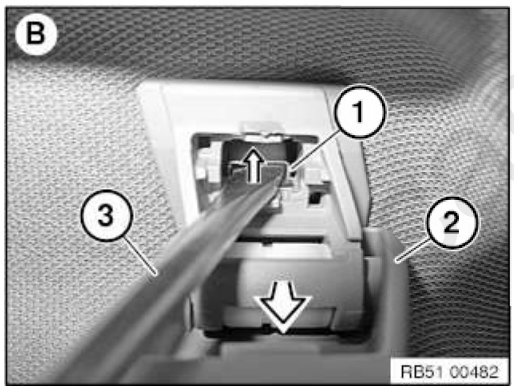
NOTICE

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 – Lower the headlining (with SHD)

Prerequisite

The front seats have been fully adjusted towards the bottom.

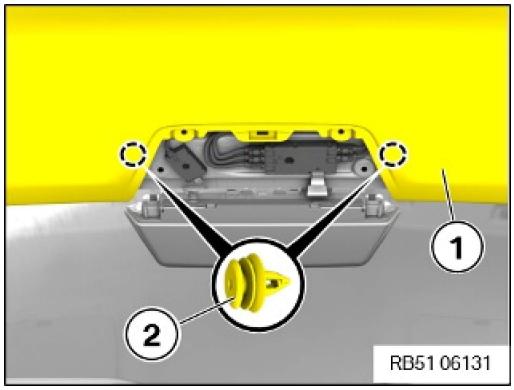
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

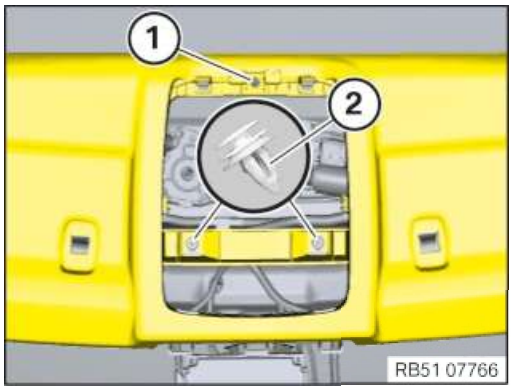
Fold the headlining.

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

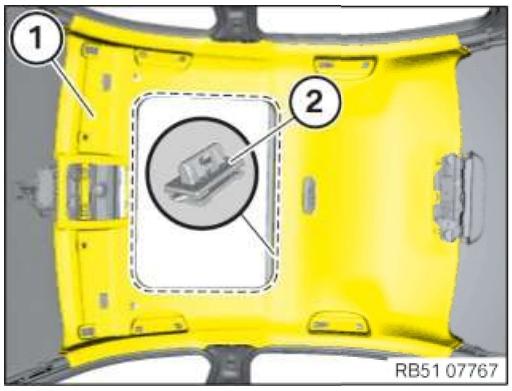
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



- Unclip the headlining (1) on the clips (2) downwards.



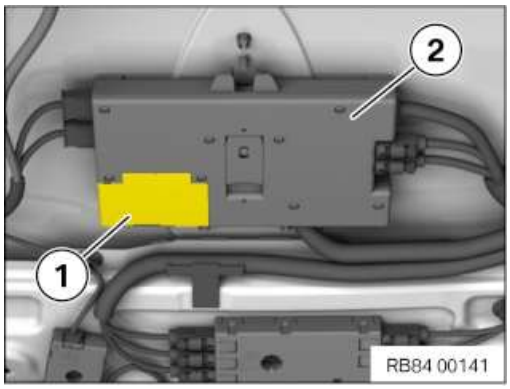
- Loosen screw (1).
- Unclip the headlining on the clips (2) downwards.



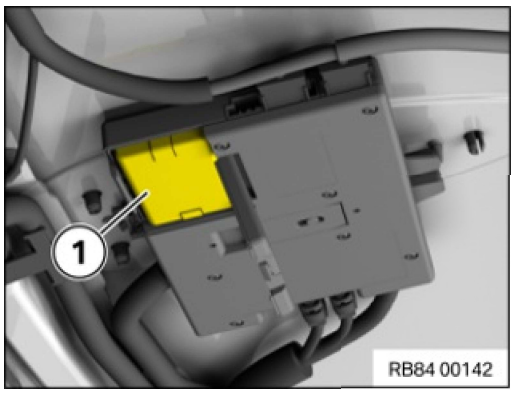
- Carefully unclip headlining (1) from the slide/tilt sunroof unit and clamps (2) in the area of the dotted line.
- Feed out headlining (1) with the help of an auxiliary person on the particular edge protection and place it on the seats.

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14 – Replacing the emergency battery for the telematics control unit

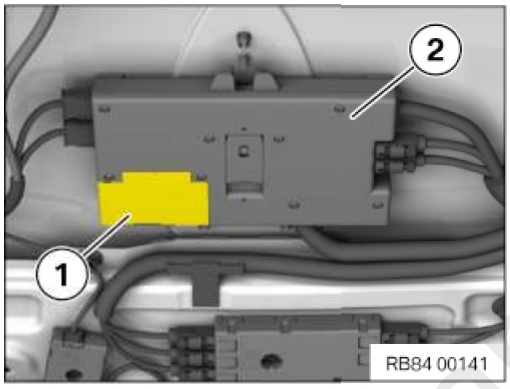


- Unlock and open battery compartment (1) on telematic control unit (2).



- Guide out the emergency battery for telematics control unit (1) from the battery compartment and renew it.

  Parts: Emergency battery



- Shut battery compartment (1) on telematics control unit (2) and lock.

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POSTPROCESSES

15 – Install the headlining (with slide/tilt sunroof) (lowered)

Prerequisite

The front seats have been fully adjusted towards the bottom.

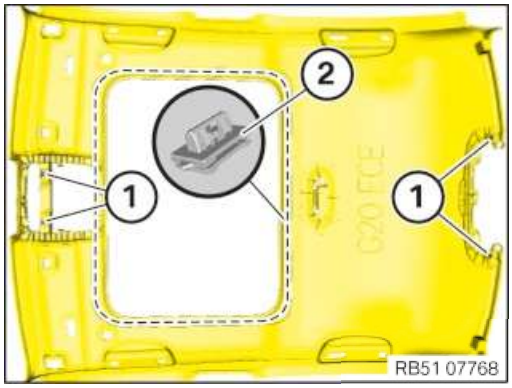
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

Fold the headlining.

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

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



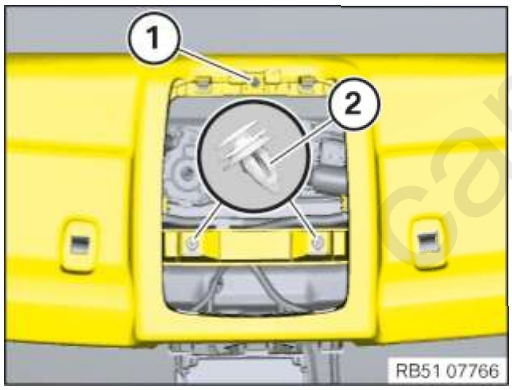
- Check the clips (1) on the headlining (2) for damage.

  Replace broken for missing clips (1).
- Check the clamps (2) along the dotted line.

  Replace broken or missing clamps (2).



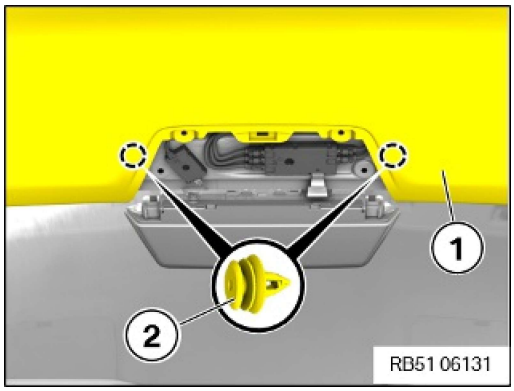
- Feed in the headlining (1) with the help of an auxiliary person on the respective edge protection.
- Clip headlining (1) into the slide/tilt sunroof unit and clamps (2) in the area of the dotted line.



- Clip headlining to the clips (2).
- Tighten down screw (1).

Headlining to frame

Oval-head screw		Tightening torque	1,5 Nm

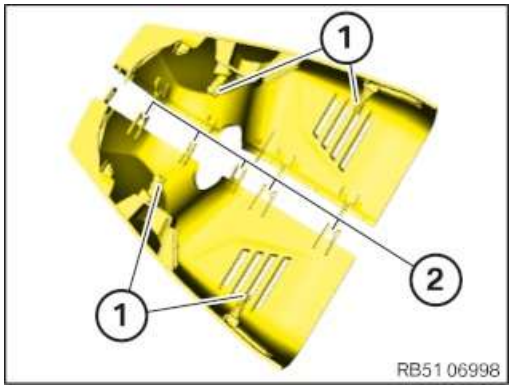


- Clip headlining (1) to the clips (2).

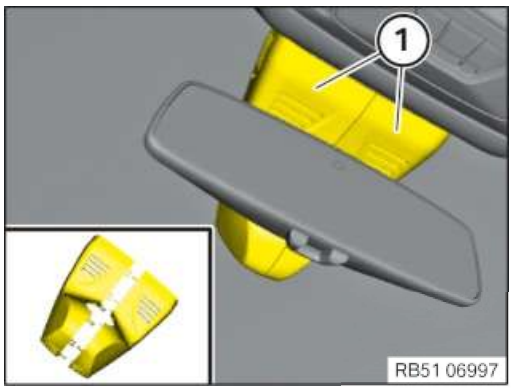
16 – Installing the covers for the interior mirror

- **Version A:**

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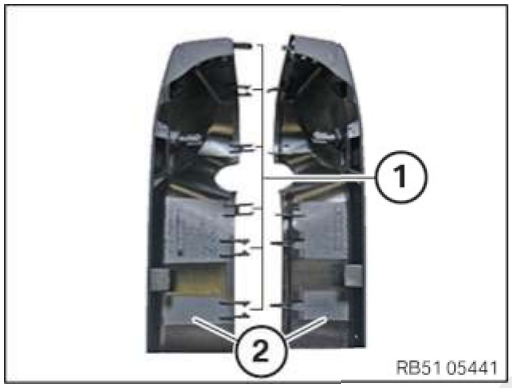


- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.



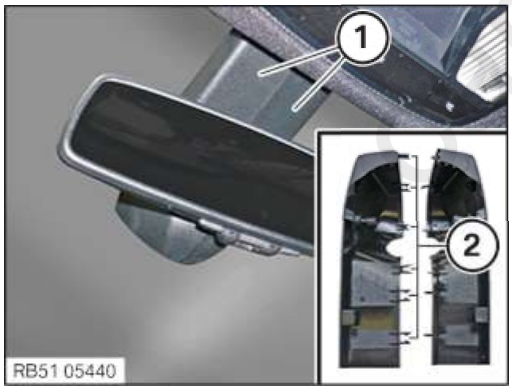
- Feed cover (1) in and lock.

- **Version B:**



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

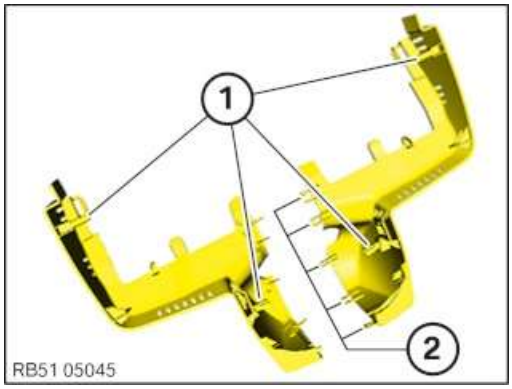
  The covers (2) must not be damaged or missing.



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

- **Version C:**

Check



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

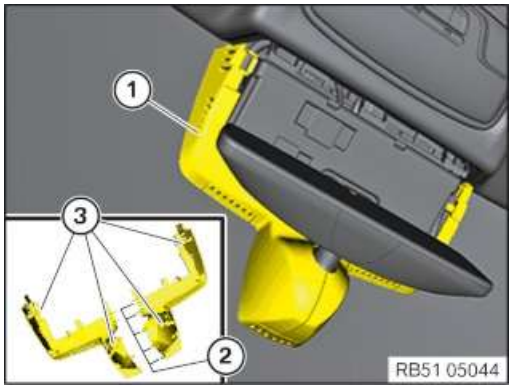
mdiagn.com

Result

» The latch mechanism is damaged.

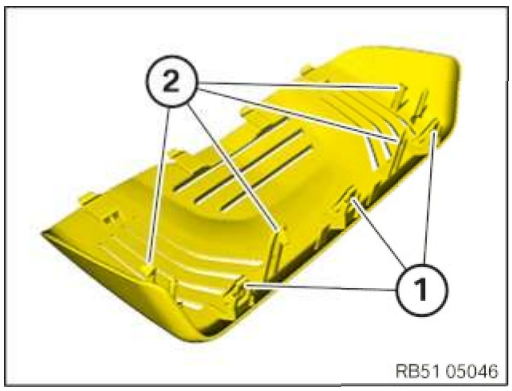
Measure

- Renew the cover.



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

Check



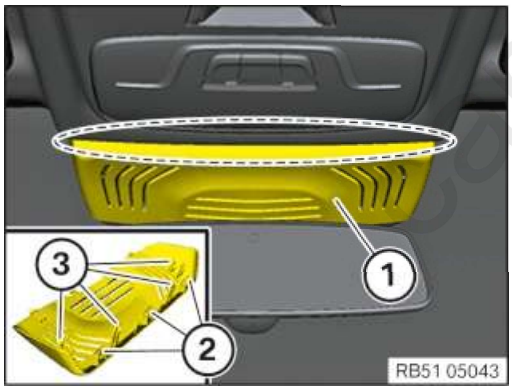
- Check clamps (1) for damage; renew if necessary.
- Check latch mechanisms (2) for damage.

Result

» The latch mechanism is damaged.

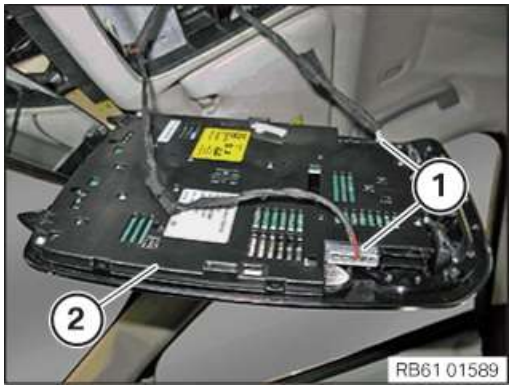
Measure

- Renew the cover.



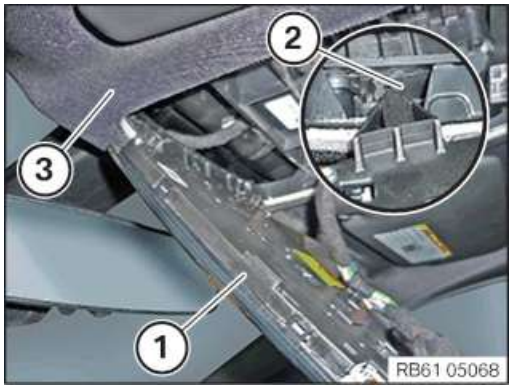
- Guide cover (1) into front guides and engage using retaining lugs (3) and clamps (2).

17 – 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.

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- Thread the roof function centre (FZD) (1) as shown at a steep angle into the two guides (2) on the headlining (3).

  Make sure the headlining is not deformed during this operation.



- Clip the roof function centre (FZD) (1) upwards into the clamps (2).



- Pass through the FZD frame and headlining with the special tool 2 298 505 and adjust the headlining correctly.



- Tighten the screws (1).

Roof function centre

	Tightening torque	1,2 Nm



- Clip in the cover (1).

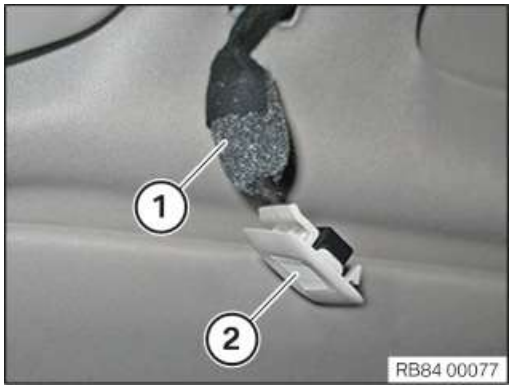
18 – Install both microphones

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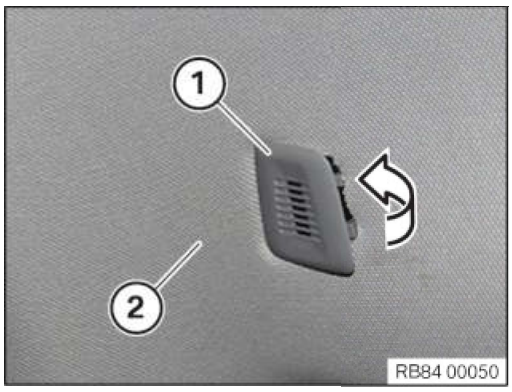
NOTICE

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).

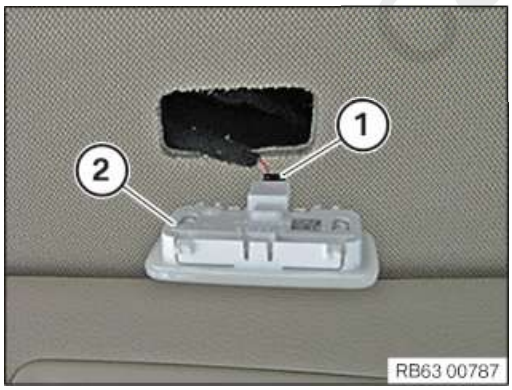


- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

19 – Installing front vanity mirror light

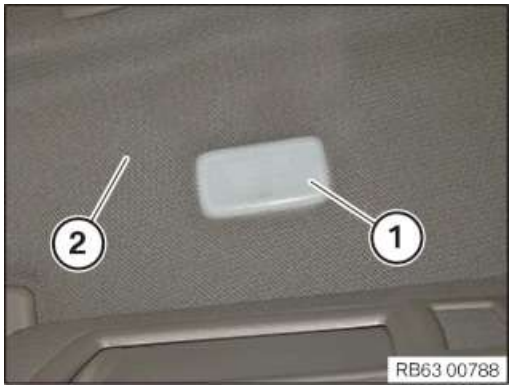
NOTICE

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



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

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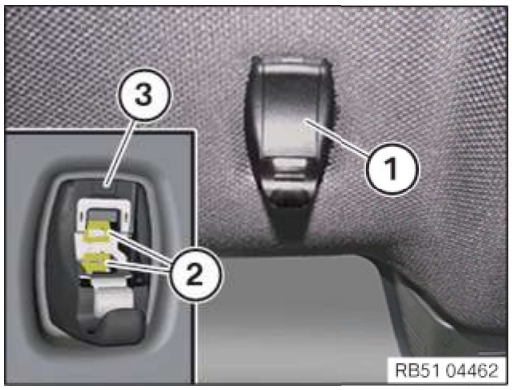


- Position the front vanity mirror light (1) in the headlining (2).

20 – Install both counter supports for the sun visors

NOTICE

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



▸ **Install the counter support for the sun visor**

- Insert the counter support (3) into the headlining.
- Make sure the clamps (2) are engaged correctly.
- Use cover (1).

21 – 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.

22 – Install both A-pillar trim panels

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NOTICE

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

▸ **Installing the A-pillar trim panel**

WARNING

Airbag unit.

Danger! Life-threatening injuries!

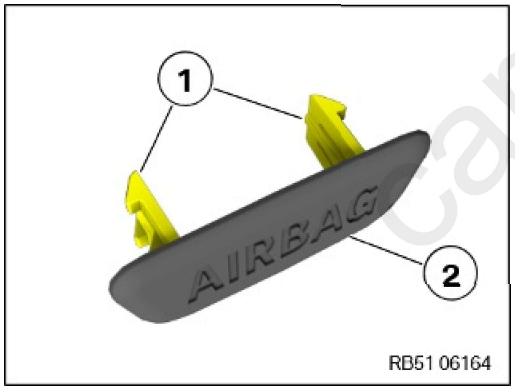
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

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.



Check

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

Result

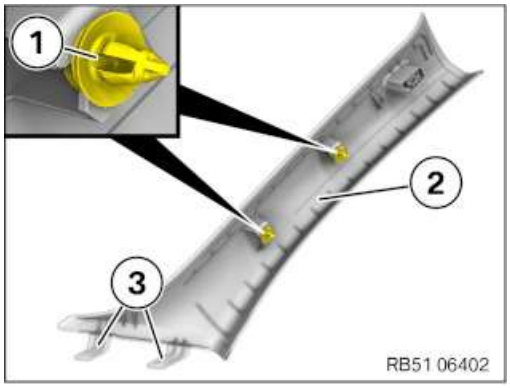
» Retaining lug is damaged.

Measure

- Renew the cover.

Check

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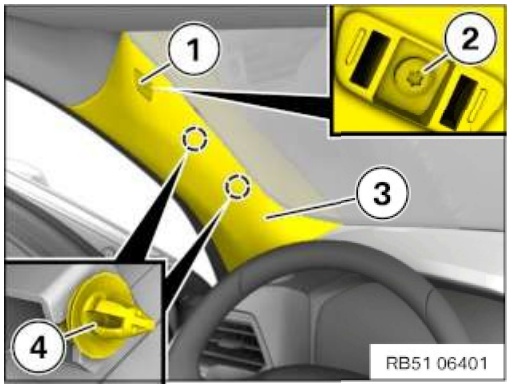
- Check the clips (1) for damage and renew if necessary.
- Check the guides (3) for damage.

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

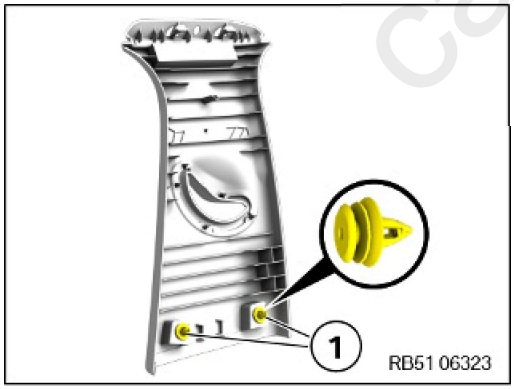
- Clip in the cover (1).

23 – Installing both B-pillar trim panels

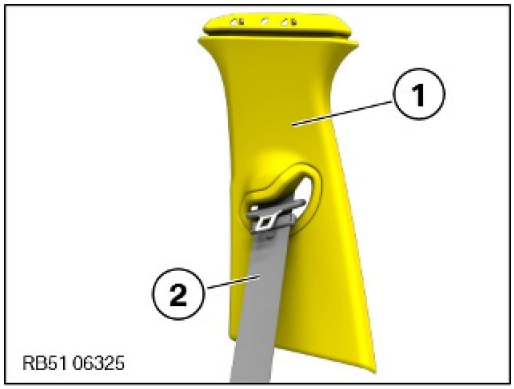
NOTICE

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

▸ **Install the B-pillar trim panel**

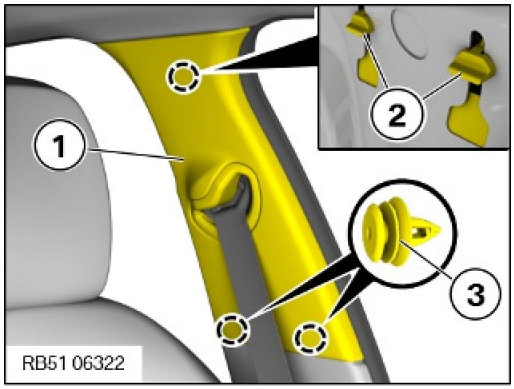


- Check the clips (1) for damage and renew if necessary.

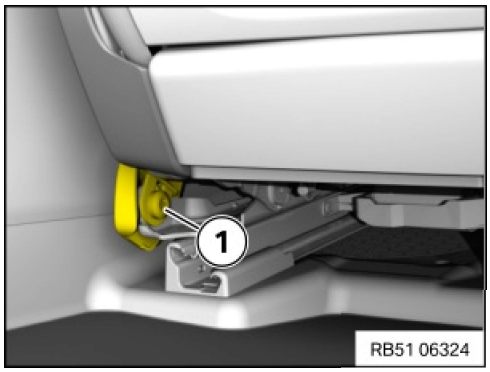


- Guide upper seat belt (2) in B-pillar trim panel (1).

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- Insert B-pillar trim panel (1) into guides (2) and under the front and rear lips of edge protection.
- Clip in the B-pillar trim panel (1) with the clips (3).



- Fully position the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

End fitting to seat mechanism

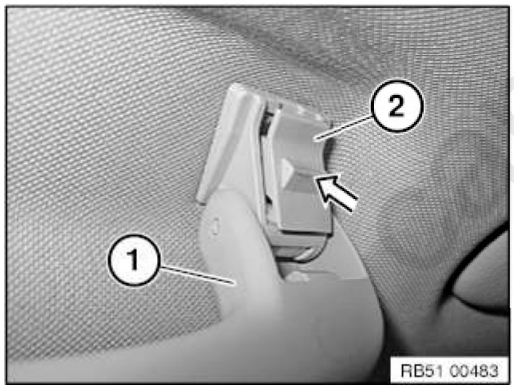
Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

24 – Installing all grab handles

NOTICE

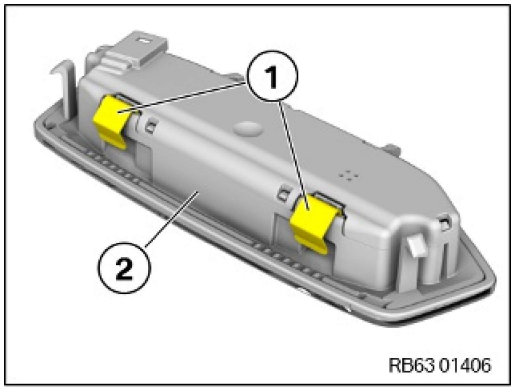
The description is for one component only. The procedure is identical for all further components.

▸ **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).

25 – Install interior roof light



Check

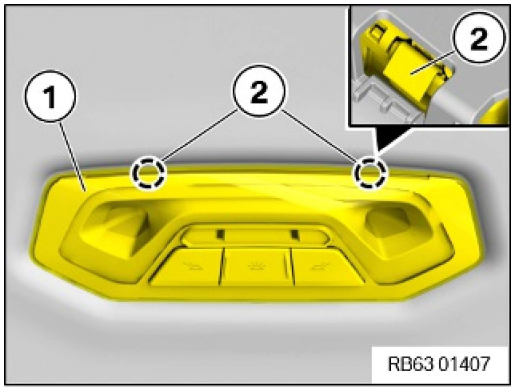
- Check the clamps (1) for damage.

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).

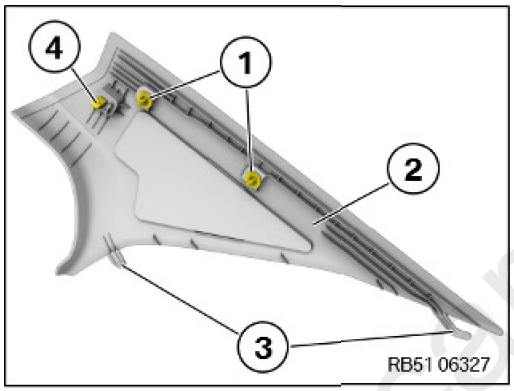
26 – Install both C-pillar trim panels

NOTICE

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

▸ **Installing C-pillar trim panel**

Check



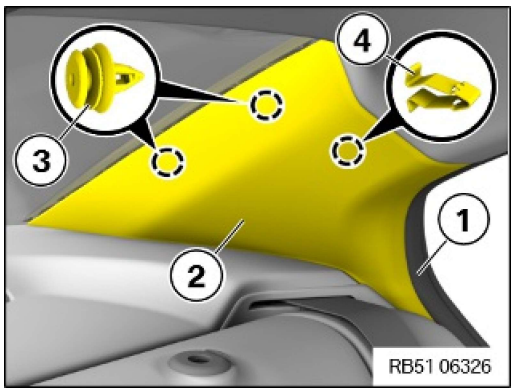
- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .



NOTICE

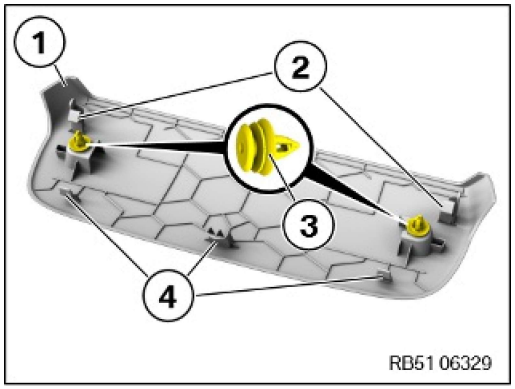
Schematic diagram is for example purposes. Some parts may differ in certain details.

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

27 – Installing trim for additional brake light

Check

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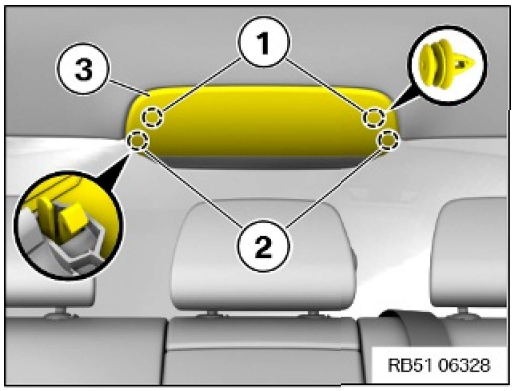
- Check the clips (3) for damage and renew if necessary.
- Check latch mechanisms (2) and guides (4) for damage.

Result

» The latch mechanism or the guide is damaged.

Measure

- Renew the trim for the additional brake light.



- Position trim for additional brake light (1) from the bottom and clip it in with latch mechanisms (2).
- Clip in clips (1).

Additional Information

Overview of Tightening Torques

Headlining to frame			Used in step 15
Oval-head screw		Tightening torque	1,5 Nm

Roof function centre			Used in step 17
		Tightening torque	1,2 Nm

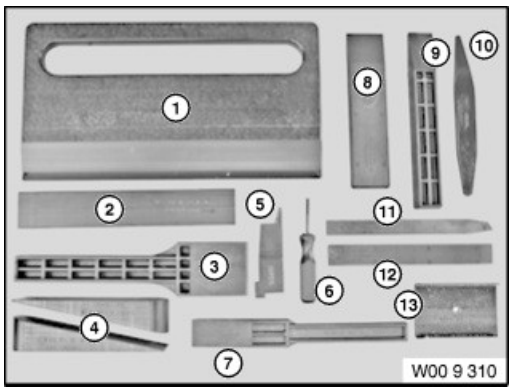
A-pillar trim panel to body			Used in step 22
Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

End fitting to seat mechanism			Used in step 23
Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

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0 493 752 (00 9 329) Case



Common	Used in step 29
Usage	(Case) with insert not incl. panel wedges
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

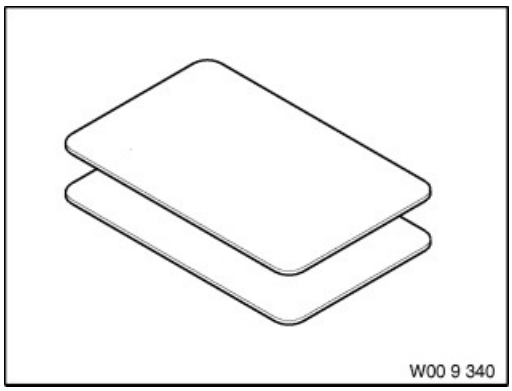
0 496 569 (00 9 325) Wedge



Common	Used in step 5
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)

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0 493 687 (00 9 340) Removal aid



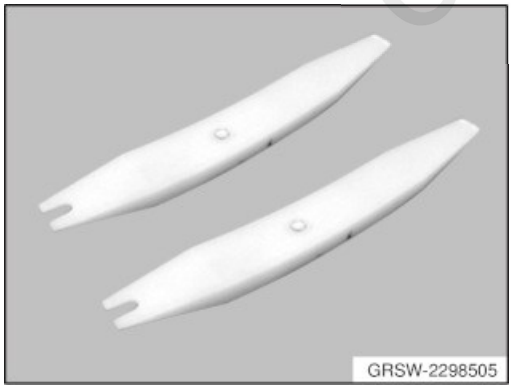
Common Used in step 6

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).	

2 298 505 Wedge



Common Used in step 17

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

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2
72 00 ... Safety regulations for handling components with gas generators	2

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84 10 851 Replacing the telematics control unit under the headlining

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.

PRELIMINARY WORK

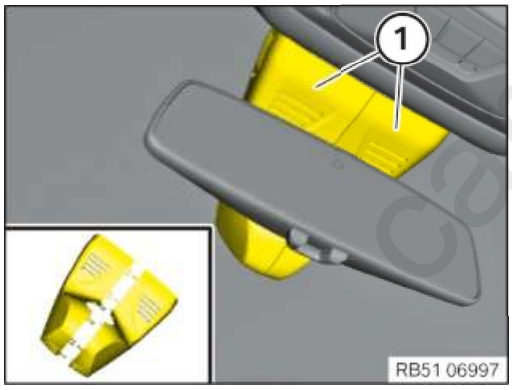
1 – Disconnecting all battery earth leads



- See additional information.

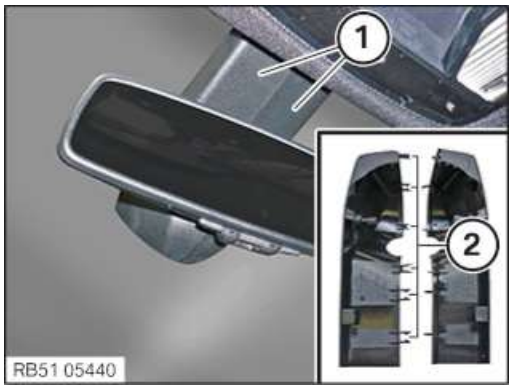
2 – Removing the covers for the interior mirror

- **Version A:**



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

- **Version B:**



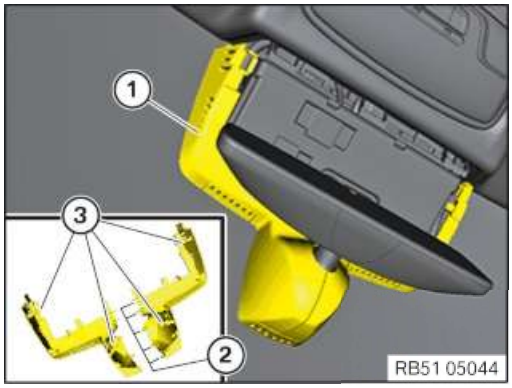
- Release the cover (1) from the latch mechanisms (2) with a suitable plastic wedge and remove sideways.

- **Version C:**

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



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

3 – Remove both 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

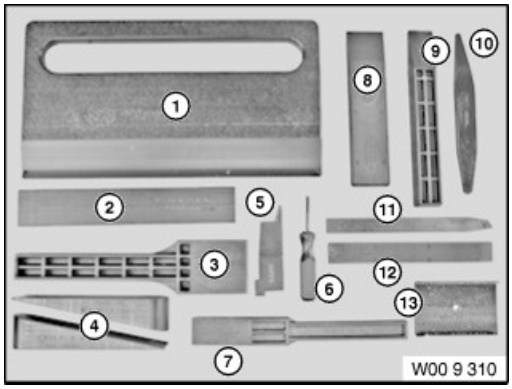
WARNING

Pyrotechnic components.

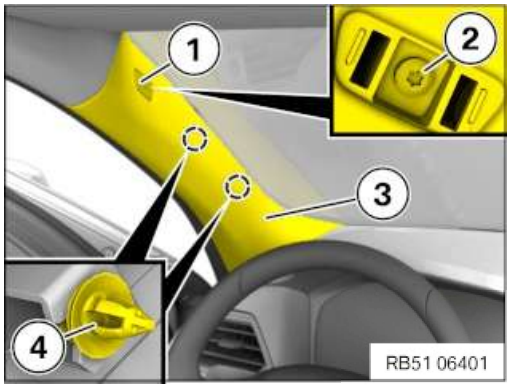
Danger! Life-threatening injuries!

- 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.

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



- Unclip the cover (1) with suitable tools.
- Loosen screw (2).
- Unclip A-pillar trim panel (3) with clips (4) and guide it out upwards.

4 – 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.

5 – Remove both counter supports for the sun visors

NOTICE

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

▶ **Remove the counter support for the sun visor**

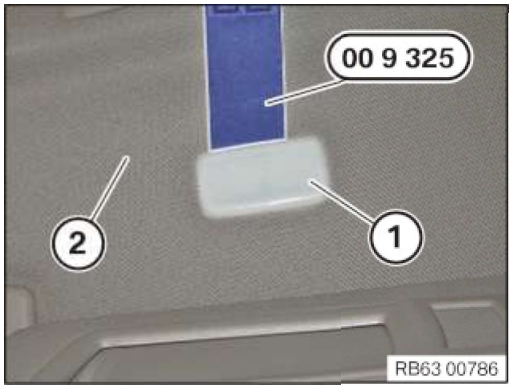


- Pull out the cover (1).
- Push the clamps (2) together and pull the counter support (3) out of the headlining.

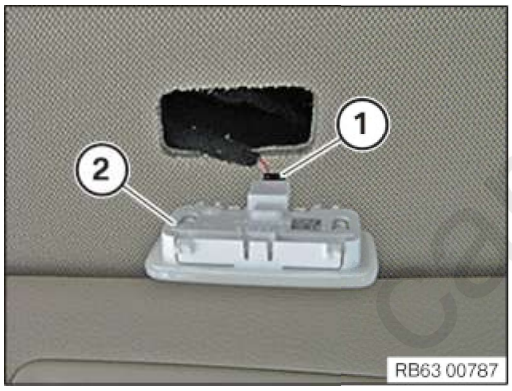
6 – Removing front vanity mirror light

NOTICE

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



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



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

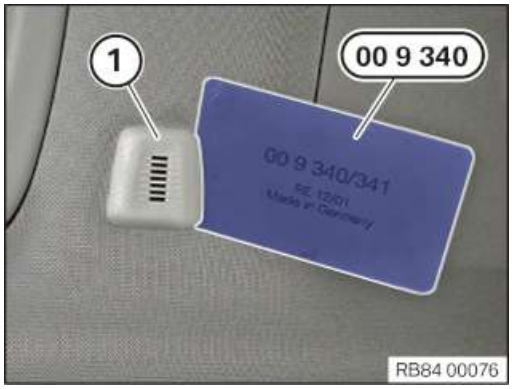
7 – Remove both microphones

NOTICE

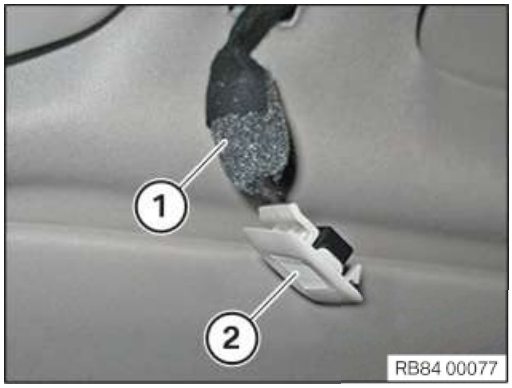
Description is for left component only. Procedure on the right side is identical.

▸ **Removing hands-free microphone**

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- 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).

8 – Removing the roof function centre (FZD)



- Unclip the cover (1).

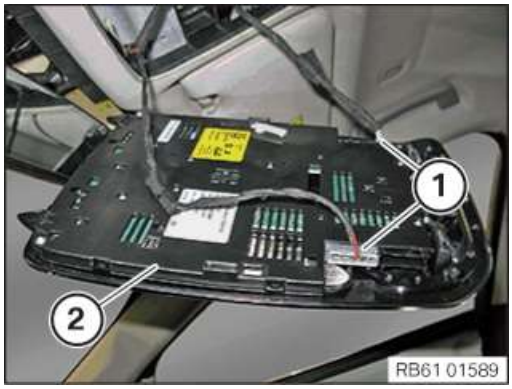


- Loosen screws (1).



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

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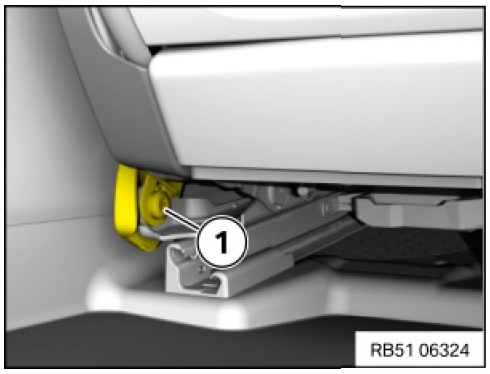
- Unlock and disconnect plug connections (1).
- Unclip the cable for the roof function centre (FZD) (2) from the cable clip.

9 – Removing both B-pillar trim panels

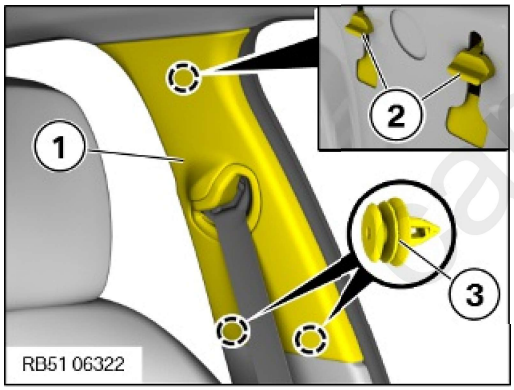
NOTICE

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

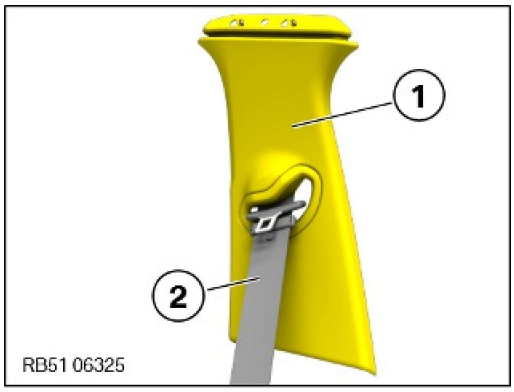
▶ **Remove the B-pillar trim panel**



- Fully position the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).



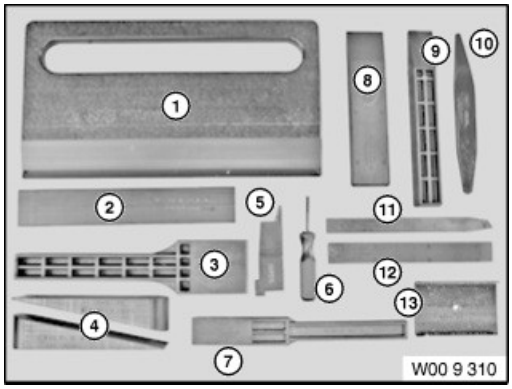
- Unclip clips (3).
- Feed B-pillar trim panel (1) out of the front and rear lip of edge protections and the guides (2).



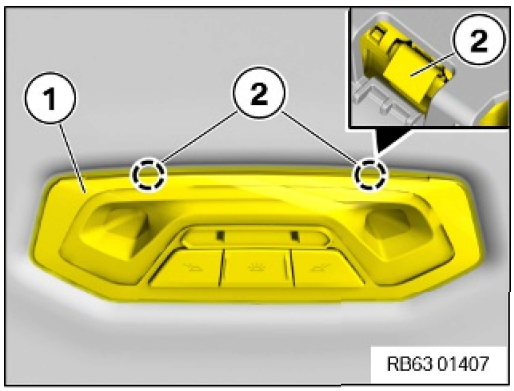
- Feed upper seat belt (2) out of B-pillar trim panel (1).

10 – Remove interior roof light

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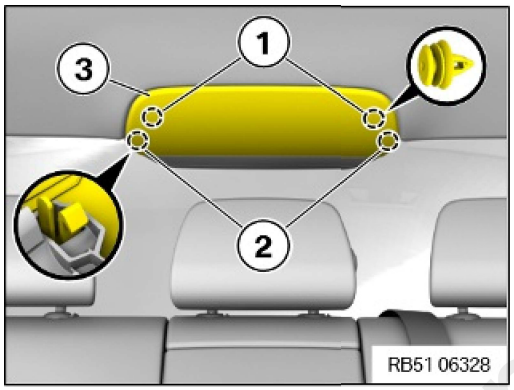


- Have the set of special tools 0 493 752 (00 9 329) ready.



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

11 – Removing the trim of the additional brake light



- Loosen the clips (1).
- Release the latch mechanisms (2) and remove the trim of the additional brake light (3).

12 – Remove both C-pillar trim panels

NOTICE

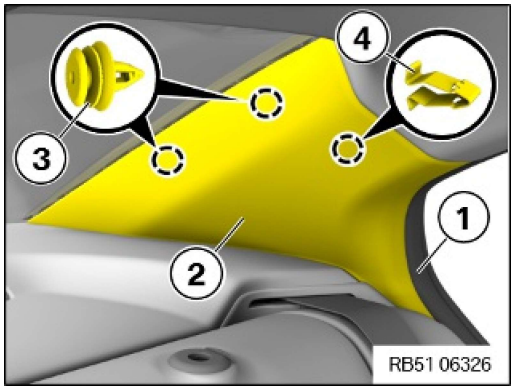
Description is for left component only. Procedure on the right side is identical.

▸ **Remove C-pillar trim panel**

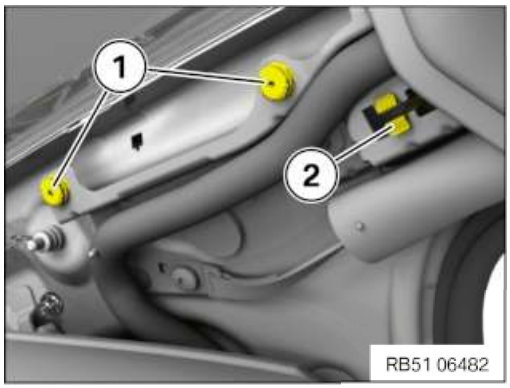
NOTICE

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

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- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).



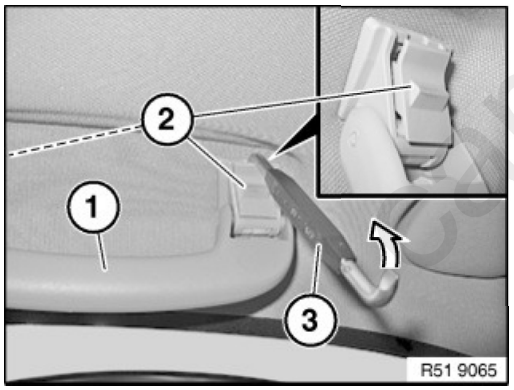
- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

13 – Removing all grab handles

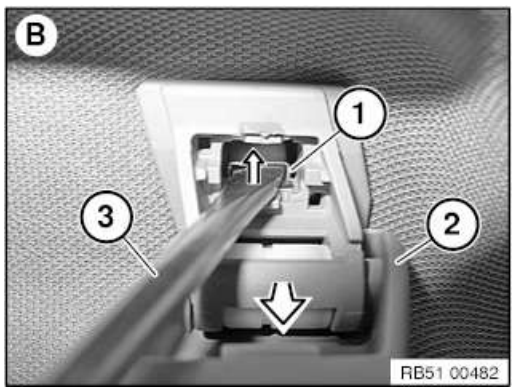
NOTICE

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 – Lower the headlining (with SHD)

Prerequisite

The front seats have been fully adjusted towards the bottom.

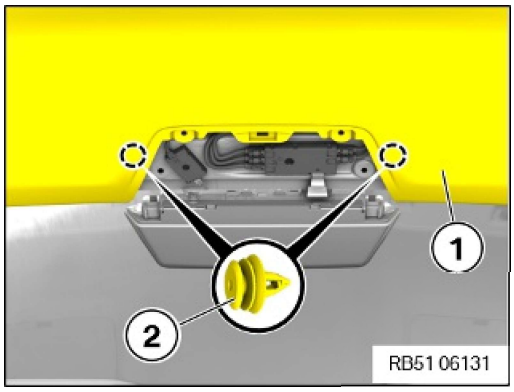
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

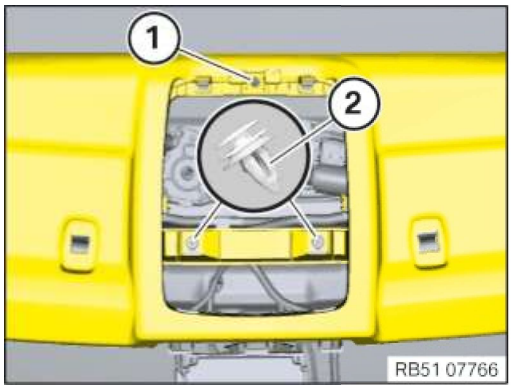
Fold the headlining.

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.



- Unclip the headlining (1) on the clips (2) downwards.



- Loosen screw (1).
- Unclip the headlining on the clips (2) downwards.

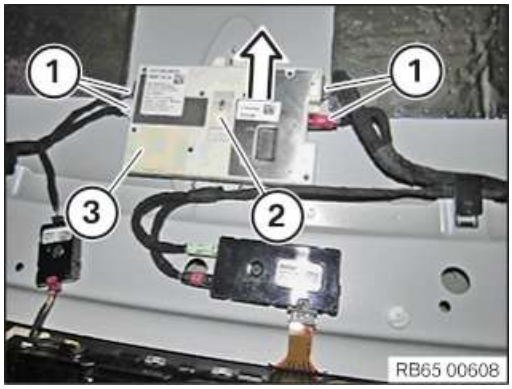


- Carefully unclip headlining (1) from the slide/tilt sunroof unit and clamps (2) in the area of the dotted line.
- Feed out headlining (1) with the help of an auxiliary person on the particular edge protection and place it on the seats.

MAIN WORK

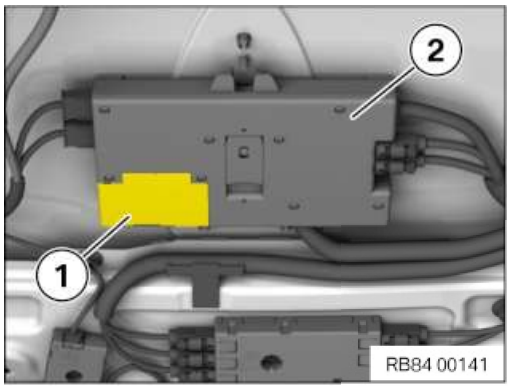
15 – Removing the telematics control unit

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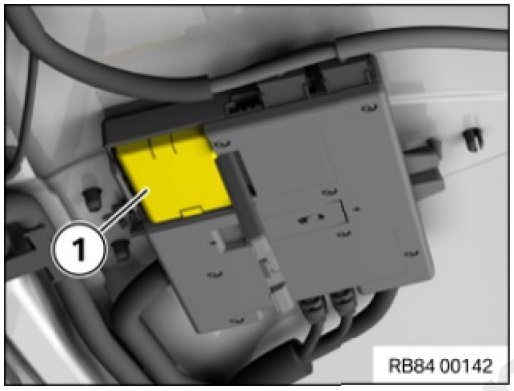


- Unlock plug connection (1) and disconnect.
- Unlock the lock (2) downward.
- Slide the telematics control unit (3) in the direction of the arrow and remove it.

16 – Replacing the emergency battery for the telematics control unit

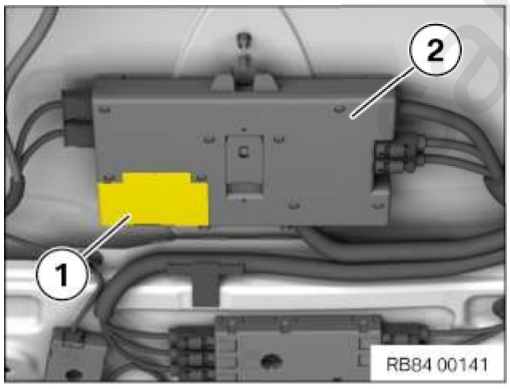


- Unlock and open battery compartment (1) on telematic control unit (2).



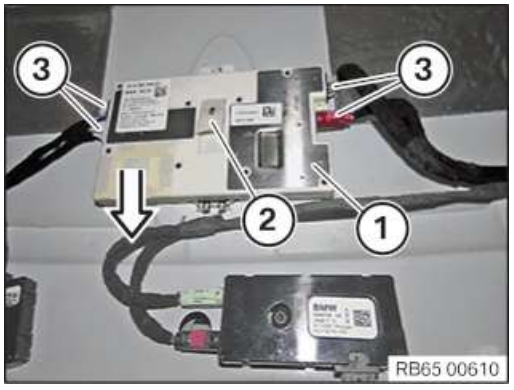
- Guide out the emergency battery for telematics control unit (1) from the battery compartment and renew it.

  Parts: Emergency battery



- Shut battery compartment (1) on telematics control unit (2) and lock.

17 – Install the telematics control unit



- Correctly position the telematics control unit (1) and push it in the direction of the arrow until the lock (2) engages.
- Position and connect the connectors (3).

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18 – Install the headlining (with slide/tilt sunroof) (lowered)

Prerequisite

The front seats have been fully adjusted towards the bottom.

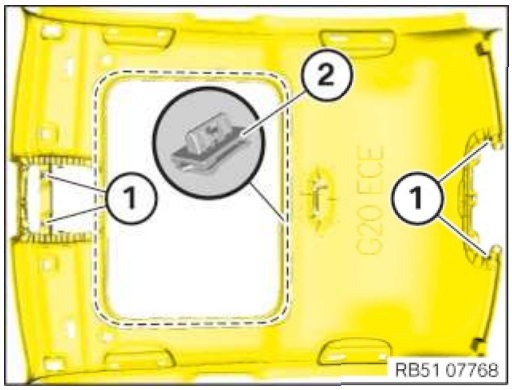
The front seat backrests have been fully adjusted towards the rear.

RISK OF DAMAGE

Fold the headlining.

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

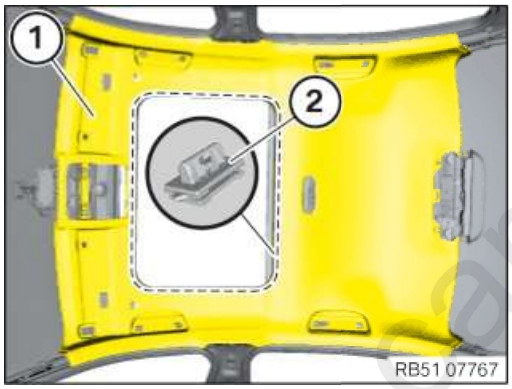
- Carry out tasks with a second person to assist.
- Support the headlining at the front and back.



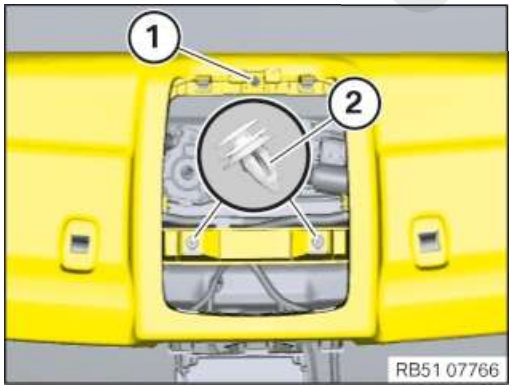
- Check the clips (1) on the headlining (2) for damage.

  Replace broken for missing clips (1).
- Check the clamps (2) along the dotted line.

  Replace broken or missing clamps (2).



- Feed in the headlining (1) with the help of an auxiliary person on the respective edge protection.
- Clip headlining (1) into the slide/tilt sunroof unit and clamps (2) in the area of the dotted line.

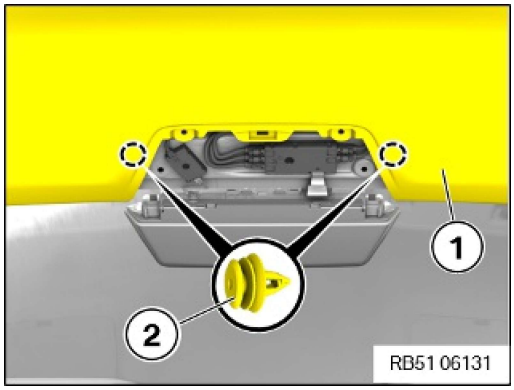


- Clip headlining to the clips (2).
- Tighten down screw (1).

Headlining to frame

Oval-head screw		Tightening torque	1,5 Nm

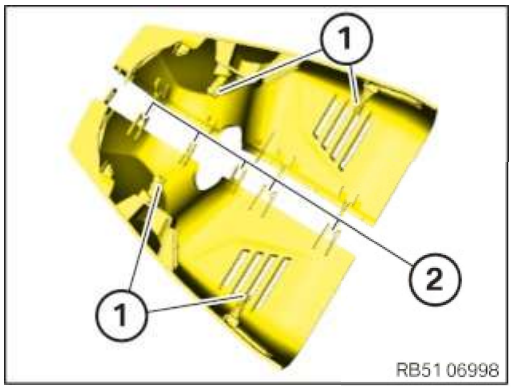
cardiagn.com



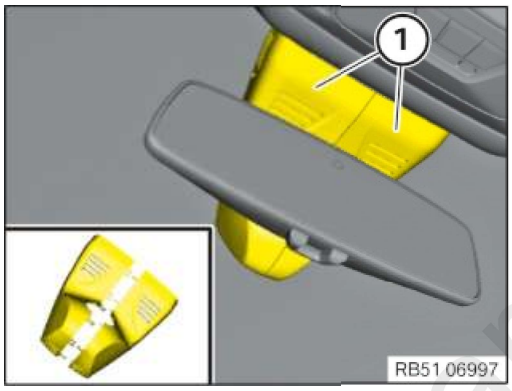
- Clip headlining (1) to the clips (2).

19 – Installing the covers for the interior mirror

- **Version A:**

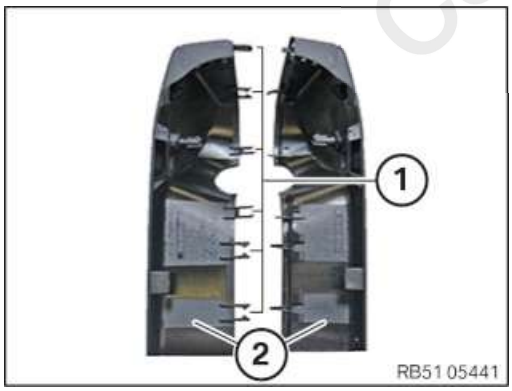


- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.



- Feed cover (1) in and lock.

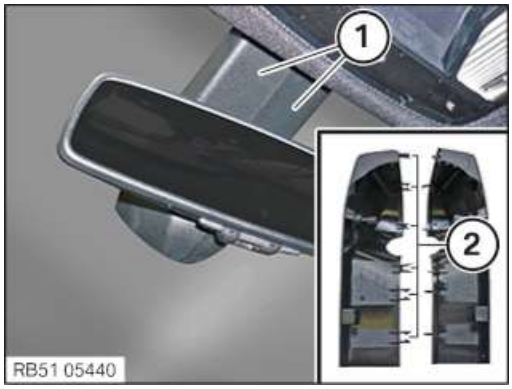
- **Version B:**



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

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

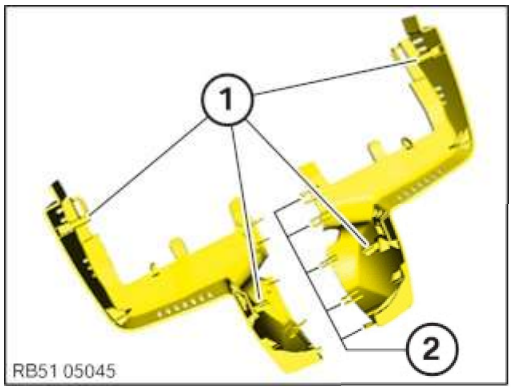
cardiagn.com



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

- **Version C:**

Check



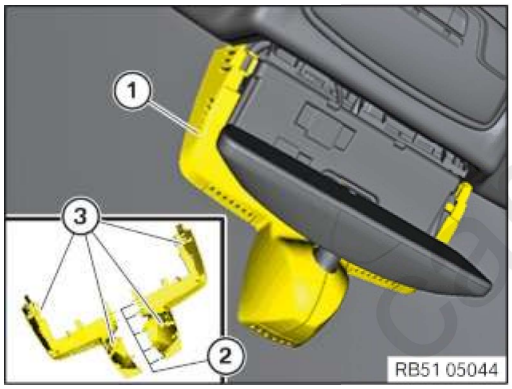
- Check the latch mechanisms (1) and (2) of the covers for damage.

Result

» The latch mechanism is damaged.

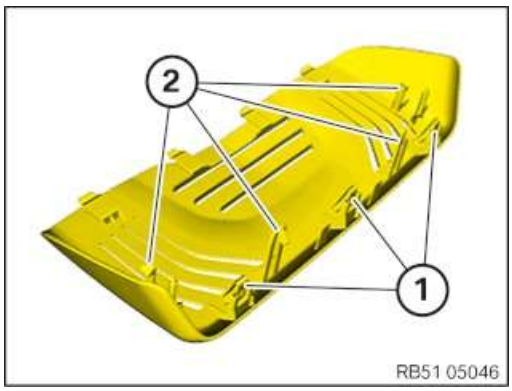
Measure

- Renew the cover.



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

Check



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

Result

» The latch mechanism is damaged.

Measure

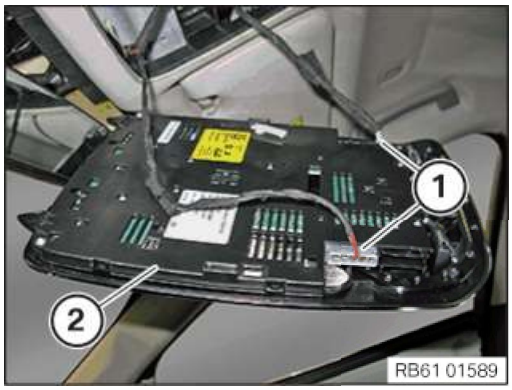
- Renew the cover.

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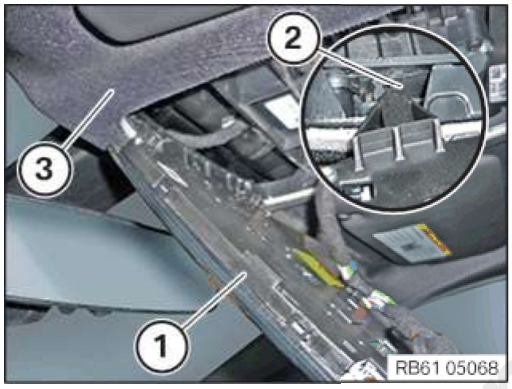


- Guide cover (1) into front guides and engage using retaining lugs (3) and clamps (2).

20 – 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.



- Thread the roof function centre (FZD) (1) as shown at a steep angle into the two guides (2) on the headlining (3).

  Make sure the headlining is not deformed during this operation.



- Clip the roof function centre (FZD) (1) upwards into the clamps (2).



- Pass through the FZD frame and headlining with the special tool 2 298 505 and adjust the headlining correctly.

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- Tighten the screws (1).

Roof function centre

	Tightening torque	1,2 Nm



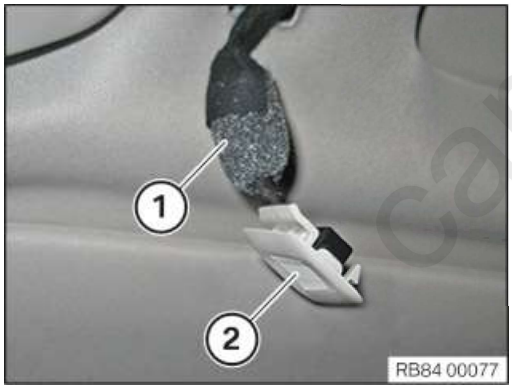
- Clip in the cover (1).

21 – Install both microphones

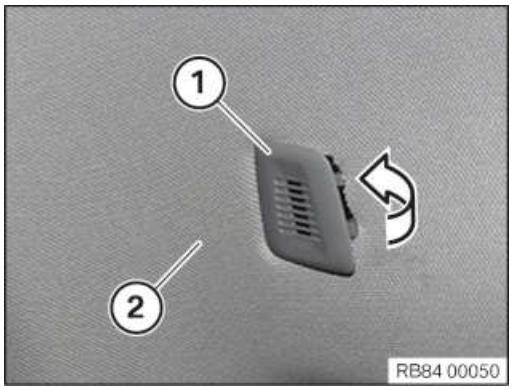
NOTICE

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).



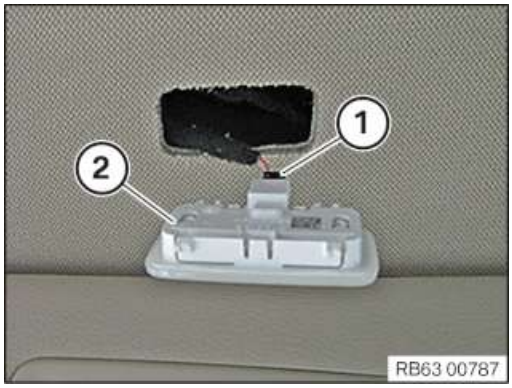
- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

22 – Installing front vanity mirror light

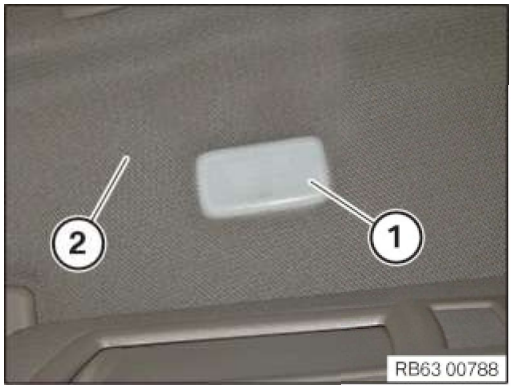
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NOTICE

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



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



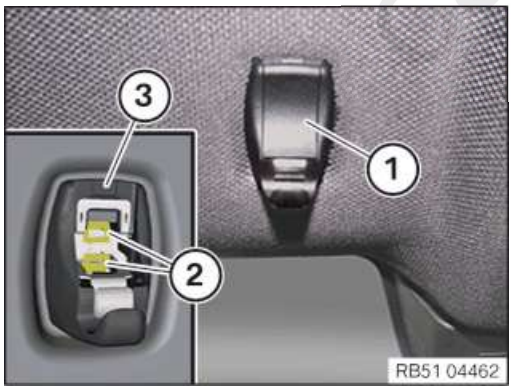
- Position the front vanity mirror light (1) in the headlining (2).

23 – Install both counter supports for the sun visors

NOTICE

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

▸ **Install the counter support for the sun visor**



- Insert the counter support (3) into the headlining.
- Make sure the clamps (2) are engaged correctly.
- Use cover (1).

24 – 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.

25 – Install both A-pillar trim panels

NOTICE

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

▸ **Installing 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

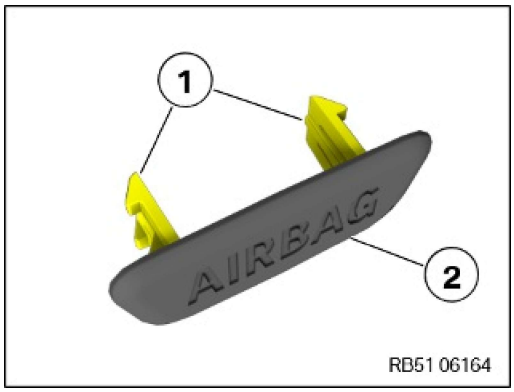
Pyrotechnic components.

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.

Check

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



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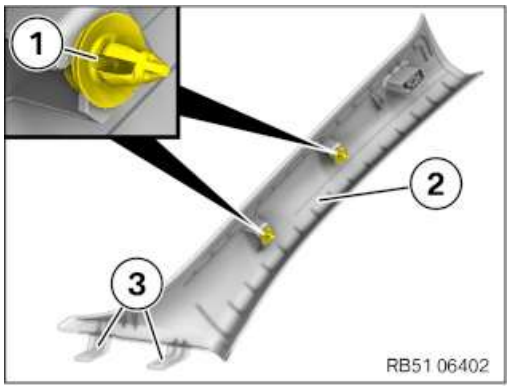
Result

» Retaining lug is damaged.

Measure

- Renew the cover.

Check



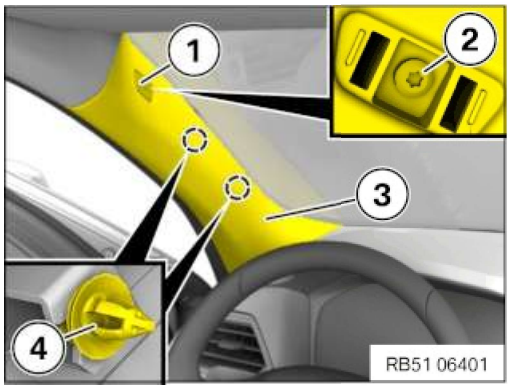
- Check the clips (1) for damage and renew if necessary.
- Check the guides (3) for damage.

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

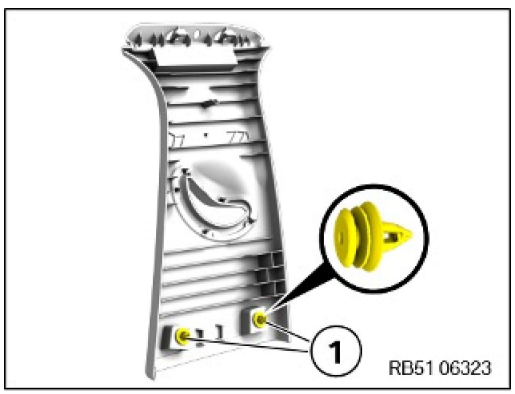
- Clip in the cover (1).

26 – Installing both B-pillar trim panels

NOTICE

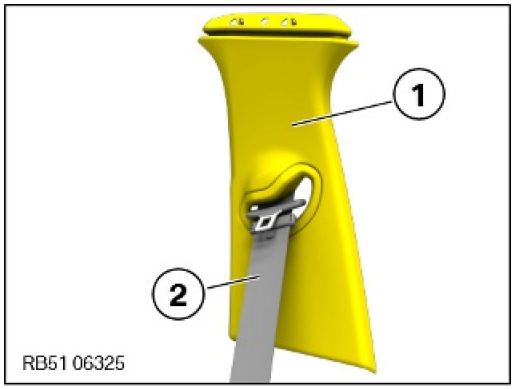
Description is for left component only. Procedure on the right side is identical.

▸ **Install the B-pillar trim panel**

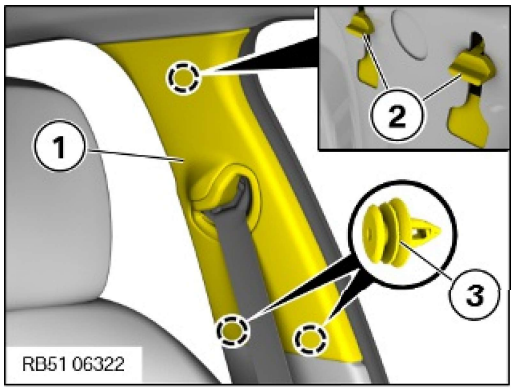


- Check the clips (1) for damage and renew if necessary.

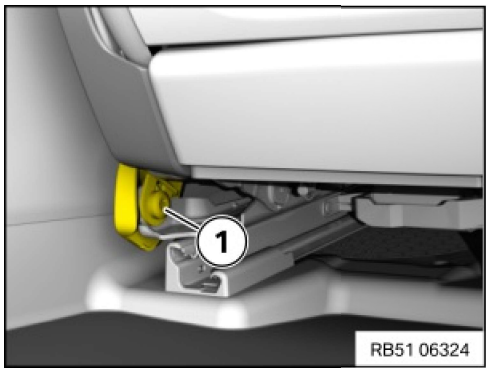
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- Guide upper seat belt (2) in B-pillar trim panel (1).



- Insert B-pillar trim panel (1) into guides (2) and under the front and rear lips of edge protection.
- Clip in the B-pillar trim panel (1) with the clips (3).



- Fully position the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

End fitting to seat mechanism

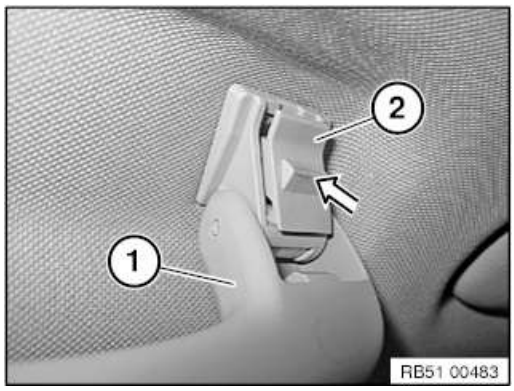
Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

27 – Installing all grab handles

NOTICE

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

▸ **Installing the grab handle**

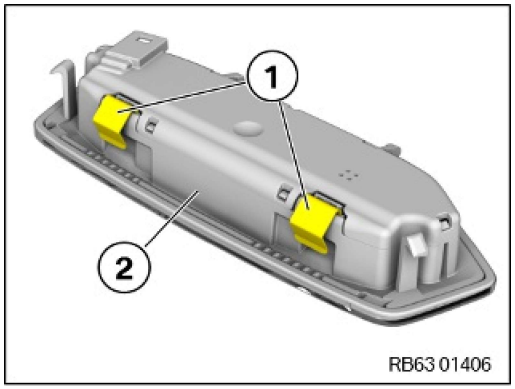


- Insert the grab handle (1) into body.
- Correctly clamp in the grab handle (1), as otherwise the locking inserts (2) on the grab handle (1) cannot correctly engage.
- Engage the locking inserts (2) on both sides of the grab handle (1).

28 – Install interior roof light

Check

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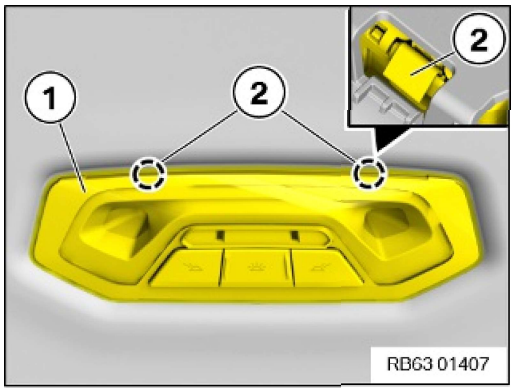
- Check the clamps (1) for damage.

Result

» Clamps (1) are damaged.

Measure

- Renew the interior roof light (2).



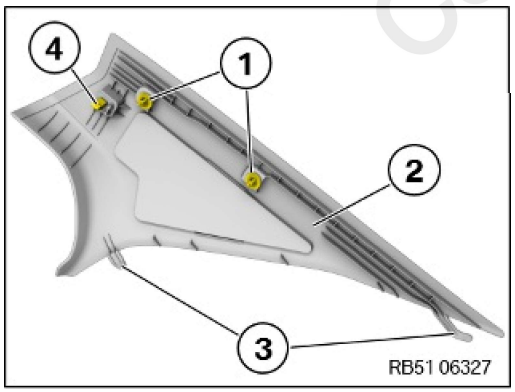
- Connect connectors and lock.
- Clip in the interior roof light (1) with clamps (2).

29 – Install both C-pillar trim panels

NOTICE

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

▸ **Installing C-pillar trim panel**



Check

- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

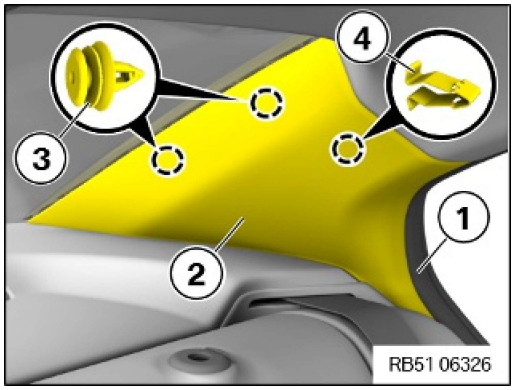
Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .

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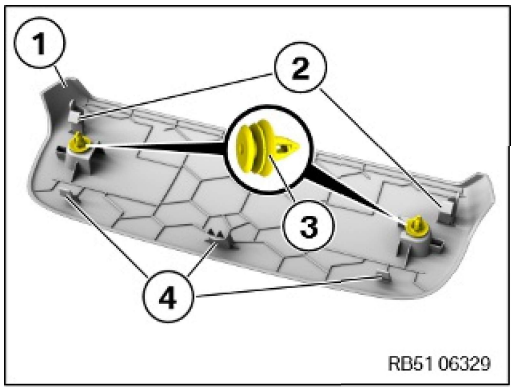


NOTICE

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

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

30 – Installing trim for additional brake light



Check

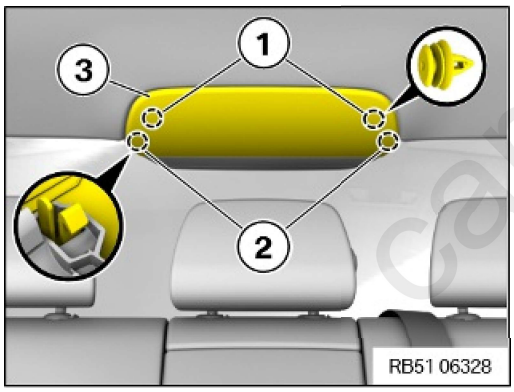
- Check the clips (3) for damage and renew if necessary.
- Check latch mechanisms (2) and guides (4) for damage.

Result

» The latch mechanism or the guide is damaged.

Measure

- Renew the trim for the additional brake light.



- Position trim for additional brake light (1) from the bottom and clip it in with latch mechanisms (2).
- Clip in clips (1).

31 – Disconnecting all battery earth leads



- See additional information.

32 – Encode/program control unit(s)

Prerequisite

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Replacement of component.

TECHNICAL INFORMATION

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

TECHNICAL INFORMATION

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

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

Additional Information

Overview of Tightening Torques

Headlining to frame — Used in step 18

Oval-head screw		Tightening torque	1,5 Nm

Roof function centre — Used in step 20

		Tightening torque	1,2 Nm

A-pillar trim panel to body — Used in step 25

Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

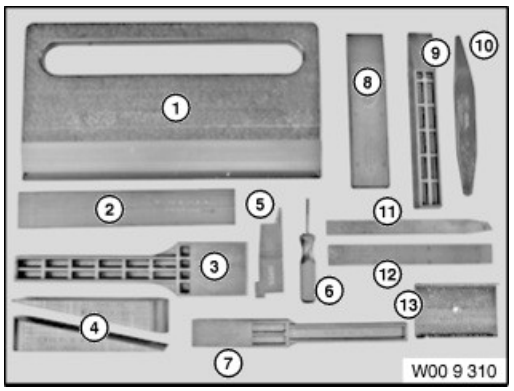
End fitting to seat mechanism — Used in step 26

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

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0 493 752 (00 9 329) Case



Common Used in step 310

Usage	(Case) with insert not incl. panel wedges
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

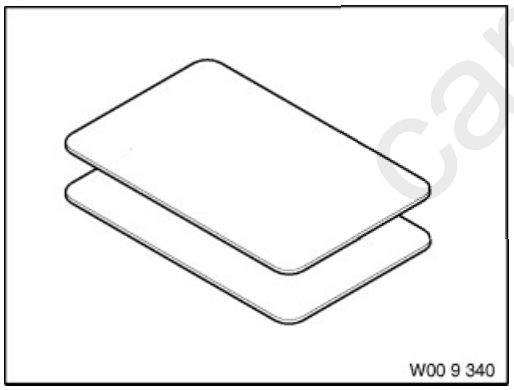
0 496 569 (00 9 325) Wedge



Common Used in step 6

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



Common Used in step 7

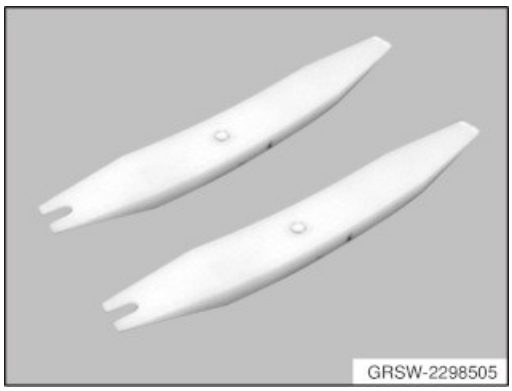
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

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).	

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2 298 505 Wedge



Common	Used in step 20
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	3
72 00 ... Safety regulations for handling components with gas generators	3

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	131
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	131
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
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61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	131
61 20 900 Disconnecting and connecting battery earth lead	131

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61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131

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84 10 850 Replacing the telematics control unit under the headlining

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.

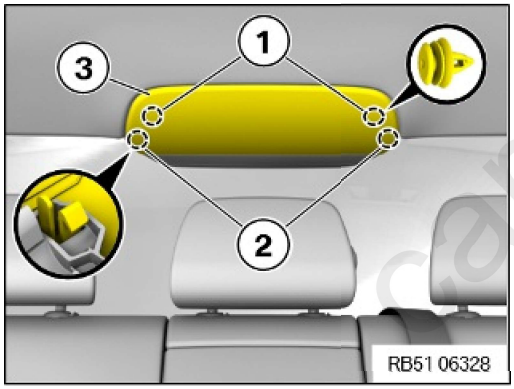
PRELIMINARY WORK

1 – Disconnecting all battery earth leads



- See additional information.

2 – Removing the trim of the additional brake light



- Loosen the clips (1).
- Release the latch mechanisms (2) and remove the trim of the additional brake light (3).

3 – Remove both C-pillar trim panels

NOTICE

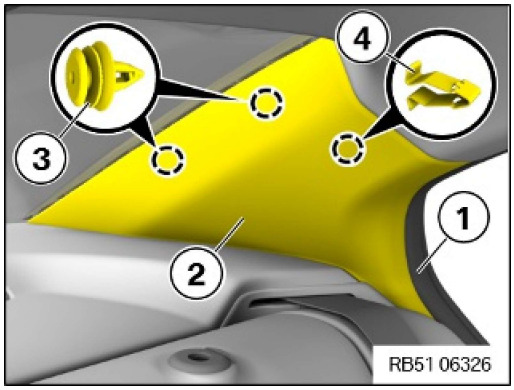
Description is for left component only. Procedure on the right side is identical.

▸ **Remove C-pillar trim panel**

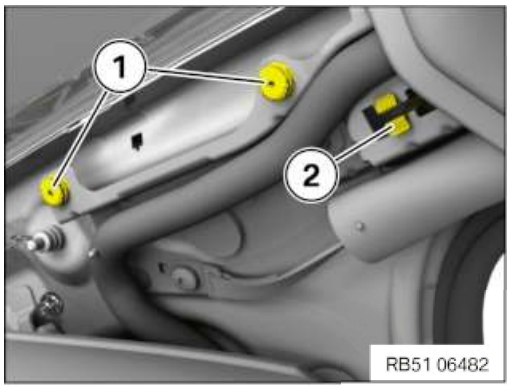
NOTICE

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

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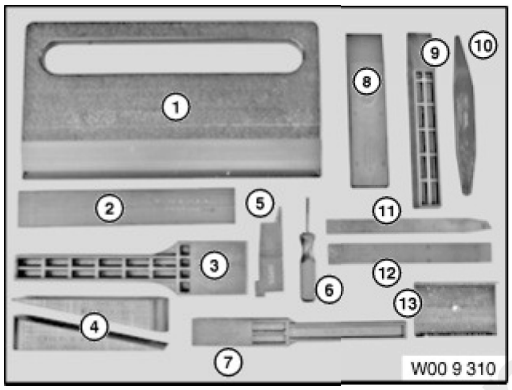


- Unclip clamp (4).
- Unclip clips (3).
- Feed out C-pillar trim panel (2) from the guides to the front.
- Thread out C-pillar trim panel (2) from the lip of edge protection (1).

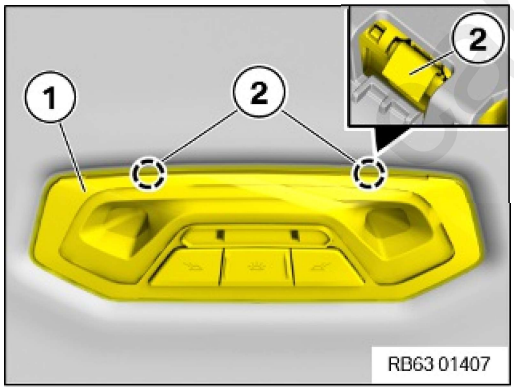


- If required, remove the clips (1) and the clamp (2) and connect it to the trim panel.

4 – Remove interior roof light



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



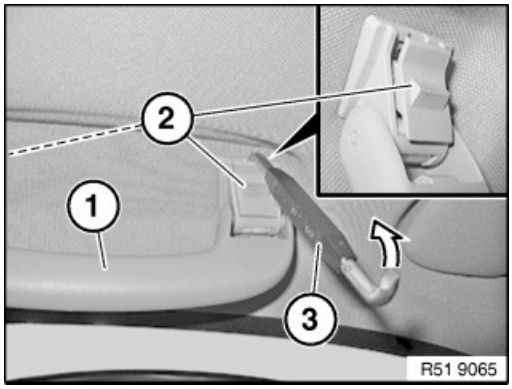
- Lever interior roof light (1) out of clamps (2) using a suitable tool.
- Unlock plug connection and disconnect.

5 – Removing all grab handles

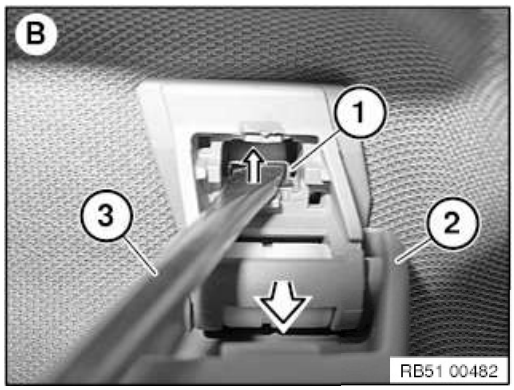
NOTICE

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.



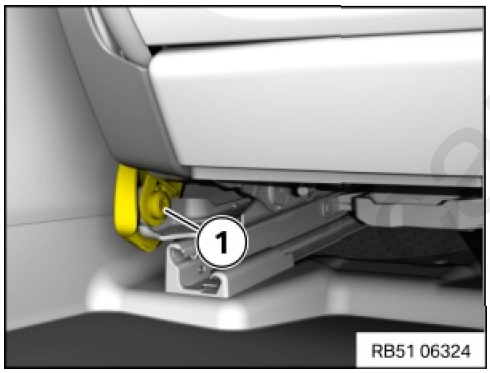
- Pull the grab handle (2) slightly to the inside and hold it.
- Use a suitable screwdriver (3) to detach the upper and lower release tabs (1).
- Guide the grab handle (2) out.
- Repeat the operation on the other side of the grab handle (2).

6 – Removing both B-pillar trim panels

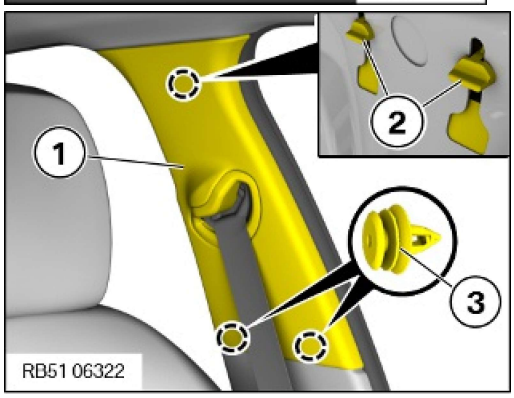
NOTICE

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

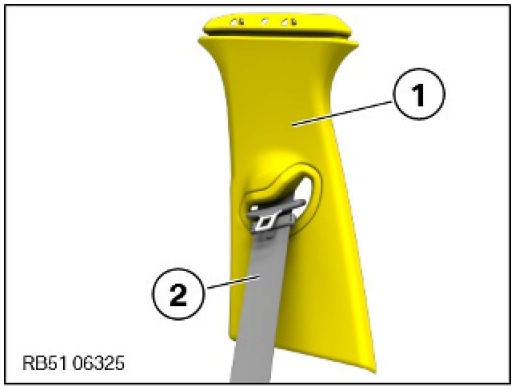
▸ Remove the B-pillar trim panel



- Fully position the front seat to the front and top.
- Loosen screw (1).
- Remove end fitting (2).



- Unclip clips (3).
- Feed B-pillar trim panel (1) out of the front and rear lip of edge protections and the guides (2).



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

7 – Remove both 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!

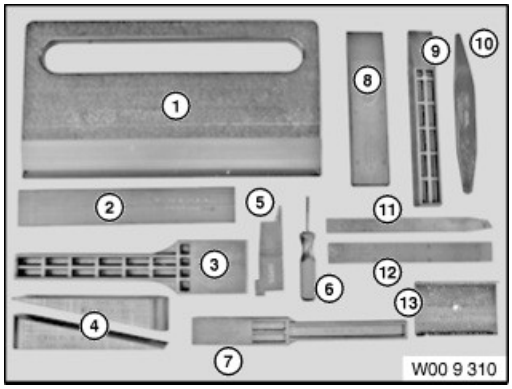
- Before performing any work on the airbag, always disconnect the battery earth lead from the battery.
- Airbag unit may only be set down with the cushion (airbag itself) facing upwards.
- For additional information see: 72 00 ... Safety regulations on handling airbag system components/gas generators

WARNING

Pyrotechnic components.

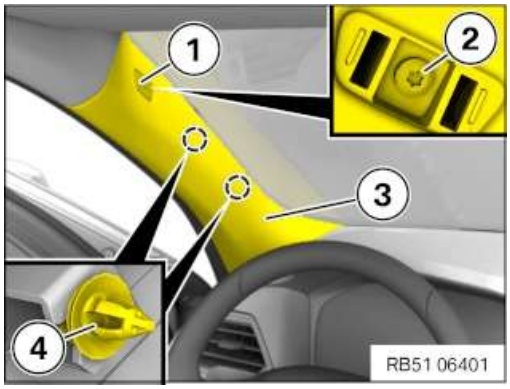
Danger! Life-threatening injuries!

- 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.



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

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- Unclip the cover (1) with suitable tools.
- Loosen screw (2).
- Unclip A-pillar trim panel (3) with clips (4) and guide it out upwards.

8 – 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.

9 – Remove both counter supports for the sun visors

NOTICE

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

▸ Remove the counter support for the sun visor



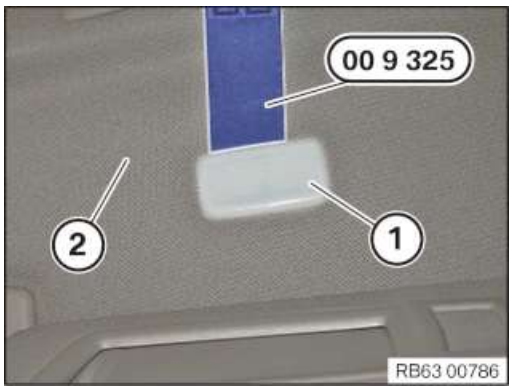
- Pull out the cover (1).
- Push the clamps (2) together and pull the counter support (3) out of the headlining.

10 – Removing front vanity mirror light

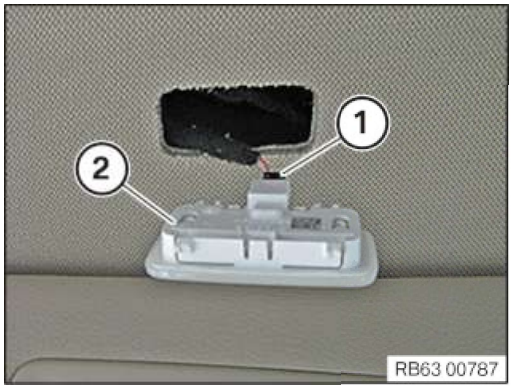
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NOTICE

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



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



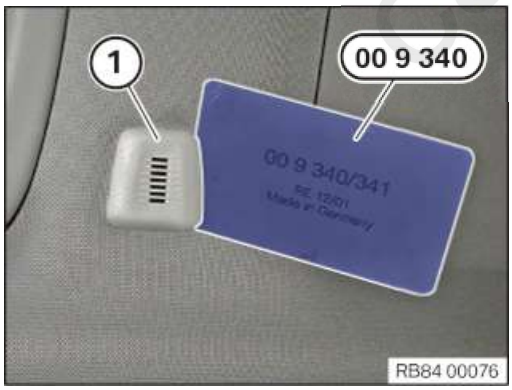
- Unlock and disconnect connector (1).
- Remove the front vanity mirror light (2).

11 – Remove both microphones

NOTICE

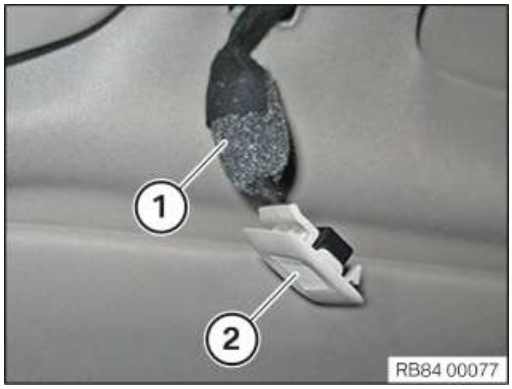
Description is for left component only. Procedure on the right side is identical.

▸ **Removing hands-free microphone**



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

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

12 – Removing the roof function centre (FZD)



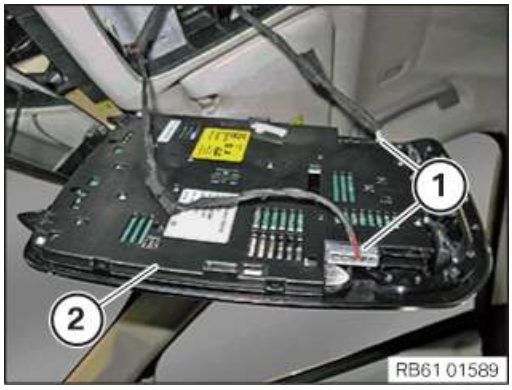
- Unclip the cover (1).



- Loosen screws (1).



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

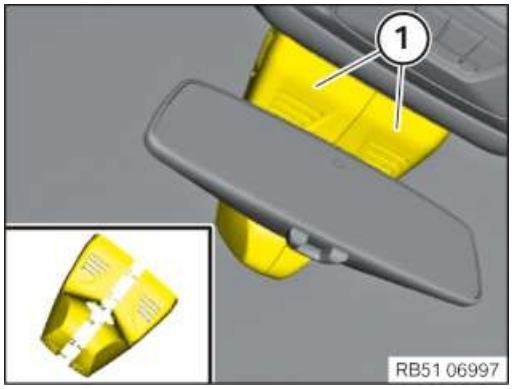


- Unlock and disconnect plug connections (1).
- Unclip the cable for the roof function centre (FZD) (2) from the cable clip.

13 – Removing the covers for the interior mirror

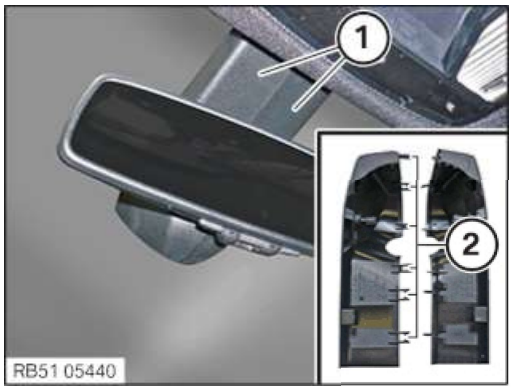
audiagn.com

- **Version A:**



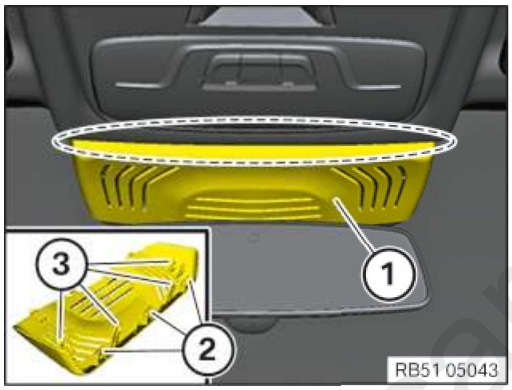
- Release the cover (1) at the centre from the latch mechanisms (2) with a suitable plastic wedge and remove.

- **Version B:**

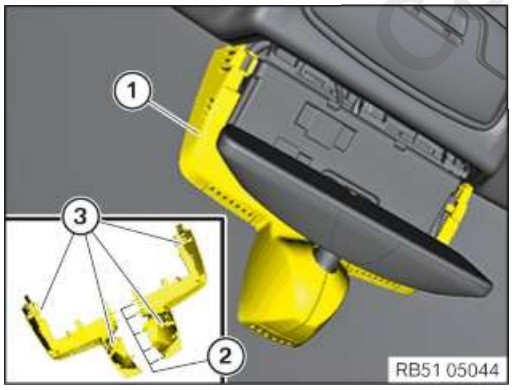


- Release the cover (1) from the latch mechanisms (2) with a suitable plastic wedge and remove sideways.

- **Version C:**



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



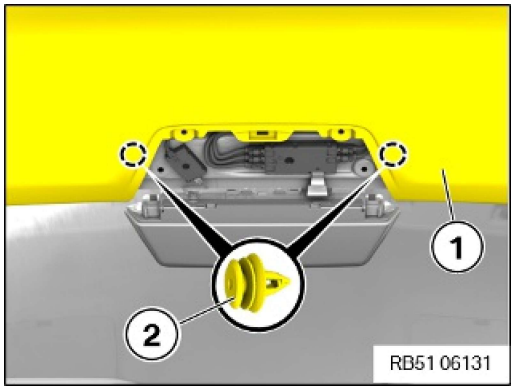
- Release cover (1) from the latch mechanisms (2) and (3) and remove sideways.
- Remove cover (1) from mirror base (2).

14 – Lower roofliner

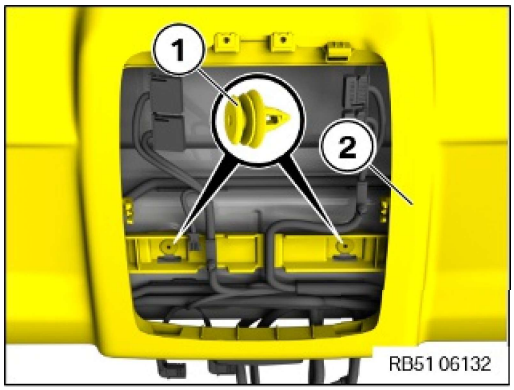
Prerequisite

The front seats have been fully adjusted towards the bottom.

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



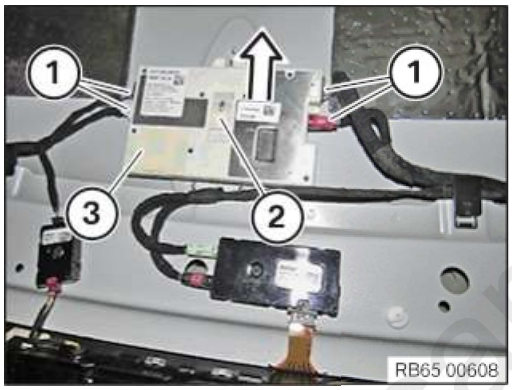
- Unclip the headlining (1) from the clips (2) downward.



- Release the clips (1) at the headlining (2).
- Feed out headlining (2) with the help of an auxiliary person at the respective edge protection and place it on the seats.

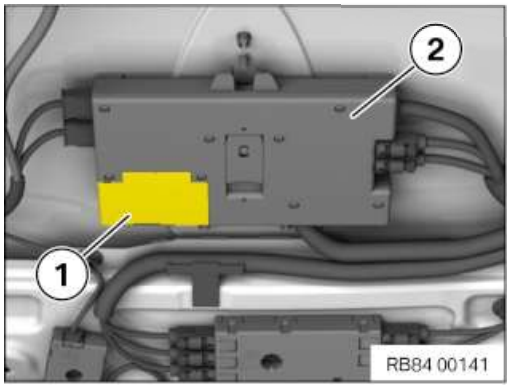
MAIN WORK

15 – Removing the telematics control unit



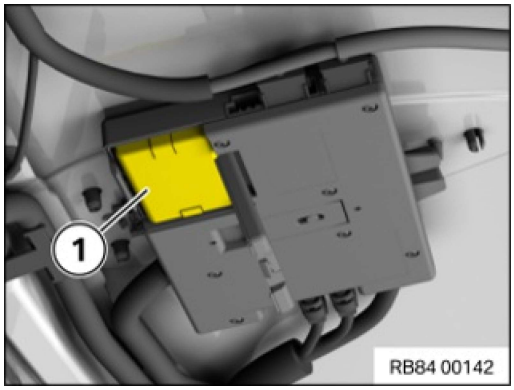
- Unlock plug connection (1) and disconnect.
- Unlock the lock (2) downward.
- Slide the telematics control unit (3) in the direction of the arrow and remove it.

16 – Replacing the emergency battery for the telematics control unit



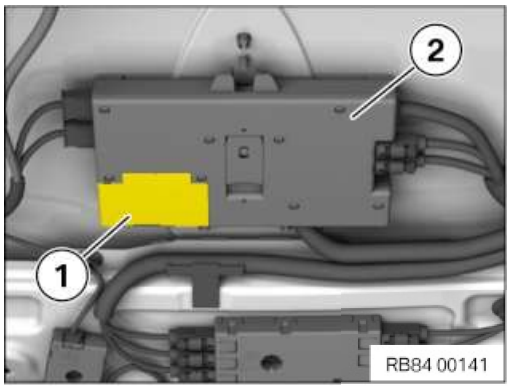
- Unlock and open battery compartment (1) on telematic control unit (2).

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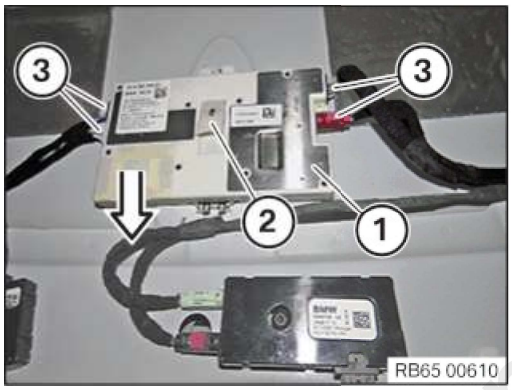
- Guide out the emergency battery for telematics control unit (1) from the battery compartment and renew it.

  Parts: Emergency battery



- Shut battery compartment (1) on telematics control unit (2) and lock.

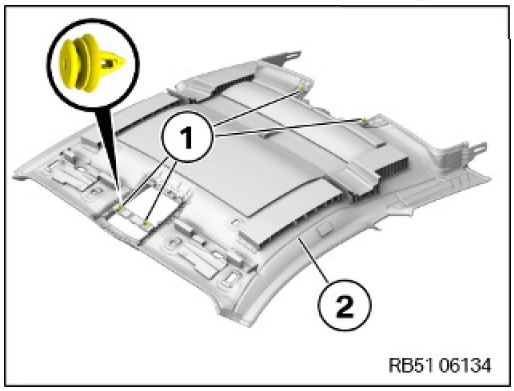
17 – Install the telematics control unit



- Correctly position the telematics control unit (1) and push it in the direction of the arrow until the lock (2) engages.
- Position and connect the connectors (3).

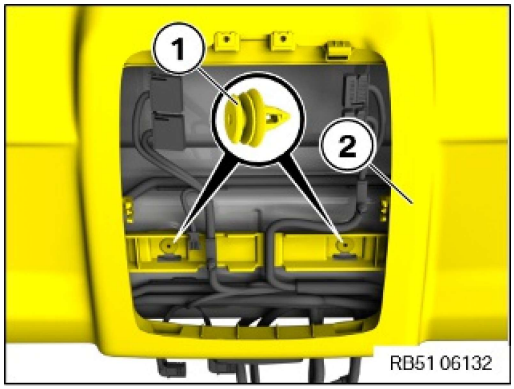
POSTPROCESSES

18 – Install the headlining (lowered)

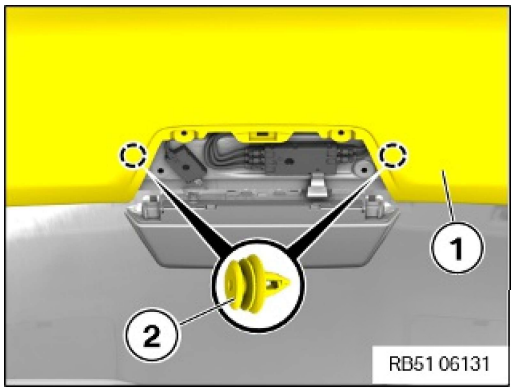


- Check the clips (1) on the headlining (2) for damage and renew if necessary.

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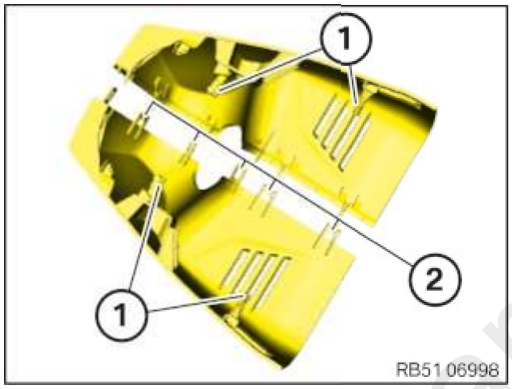
- Feed in the headlining (1) with the help of an auxiliary person on the respective edge protection.
- Position the headlining (2) on the clips (1) and clip it in.



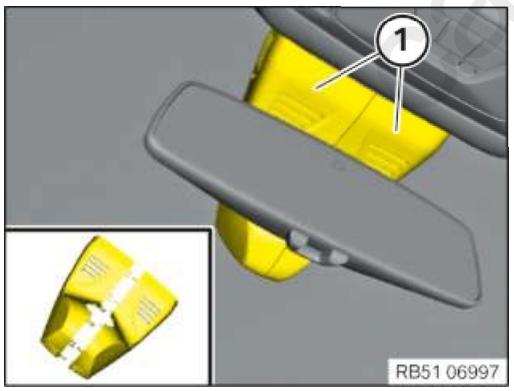
- Clip in clips (2) on the headlining (1).

19 – Installing the covers for the interior mirror

- **Version A:**

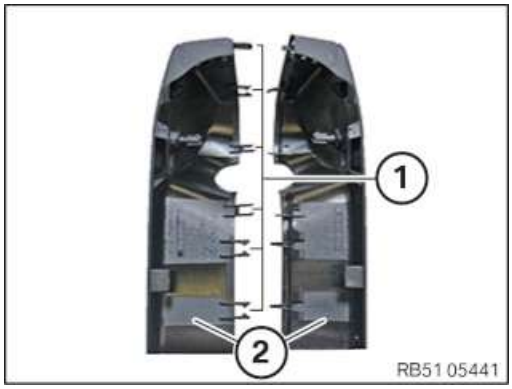


- Check latch mechanisms (1) and (2).
- If the latch mechanisms (1) or (2) are faulty, renew the covers.



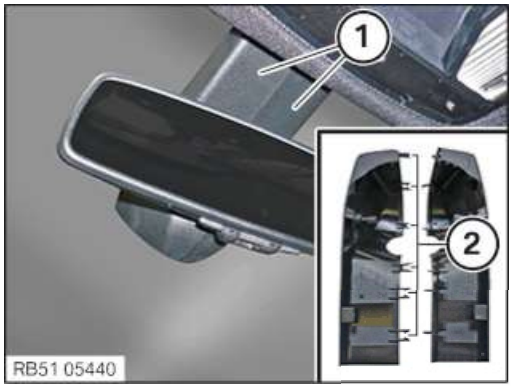
- Feed cover (1) in and lock.
- **Version B:**

carmanualsdiagram.com



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

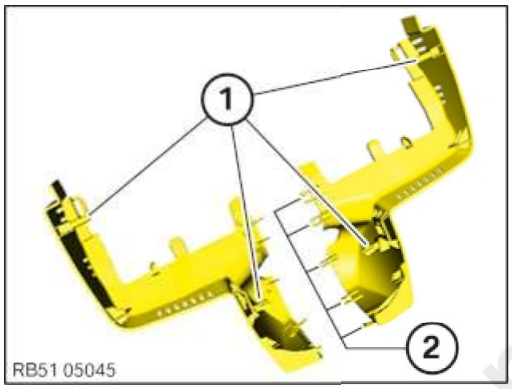
  The covers (2) must not be damaged or missing.



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

- **Version C:**

Check



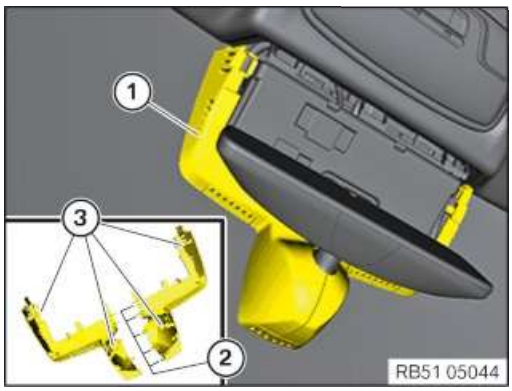
- Check the latch mechanisms (1) and (2) of the covers for damage.

Result

» The latch mechanism is damaged.

Measure

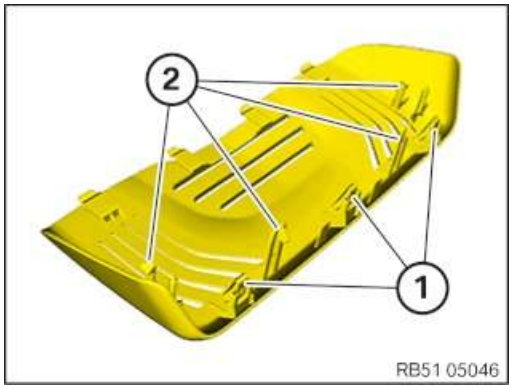
- Renew the cover.



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

Check

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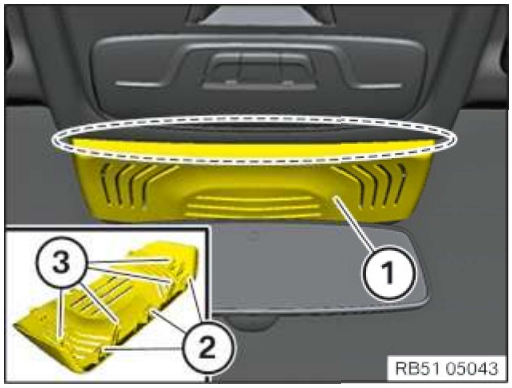
- Check clamps (1) for damage; renew if necessary.
- Check latch mechanisms (2) for damage.

Result

» The latch mechanism is damaged.

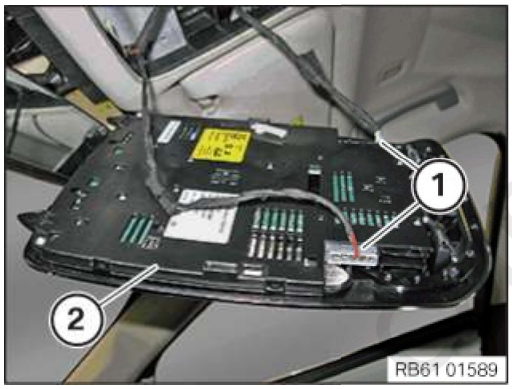
Measure

- Renew the cover.

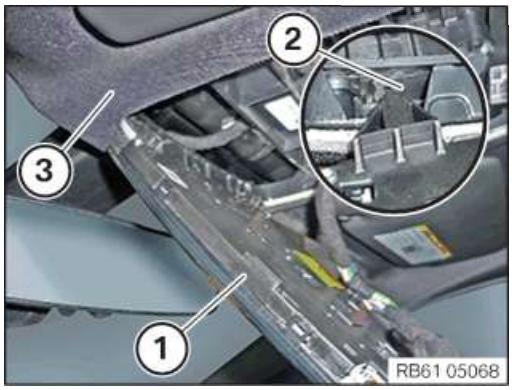


- Guide cover (1) into front guides and engage using retaining lugs (3) and clamps (2).

20 – 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.



- Thread the roof function centre (FZD) (1) as shown at a steep angle into the two guides (2) on the headlining (3).

  Make sure the headlining is not deformed during this operation.

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- Clip the roof function centre (FZD) (1) upwards into the clamps (2).



- Pass through the FZD frame and headlining with the special tool 2 298 505 and adjust the headlining correctly.



- Tighten the screws (1).

Roof function centre

	Tightening torque	1,2 Nm



- Clip in the cover (1).

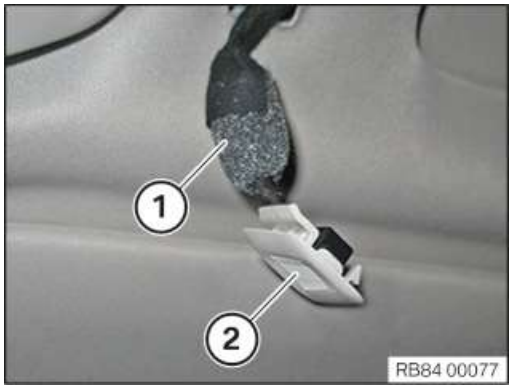
21 – Install both microphones

NOTICE

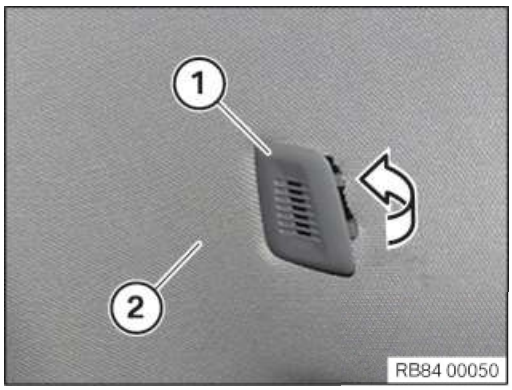
Description is for left component only. Procedure on the right side is identical.

▸ **Installing the hands-free microphone**

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

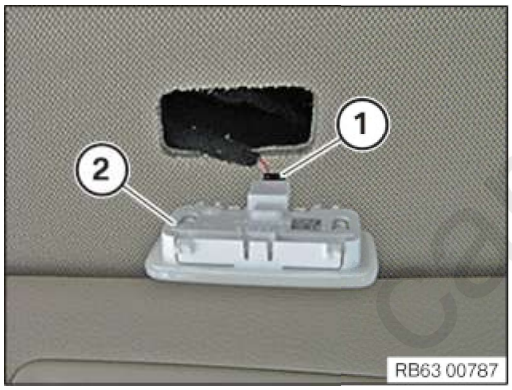


- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

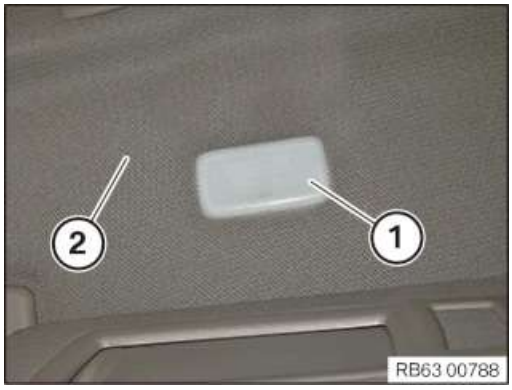
22 – Installing front vanity mirror light

NOTICE

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



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



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

23 – Install both counter supports for the sun visors

NOTICE

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

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▸ **Install the counter support for the sun visor**



- Insert the counter support (3) into the headlining.
- Make sure the clamps (2) are engaged correctly.
- Use cover (1).

24 – 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.

25 – Install both A-pillar trim panels

NOTICE

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

▸ **Installing 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

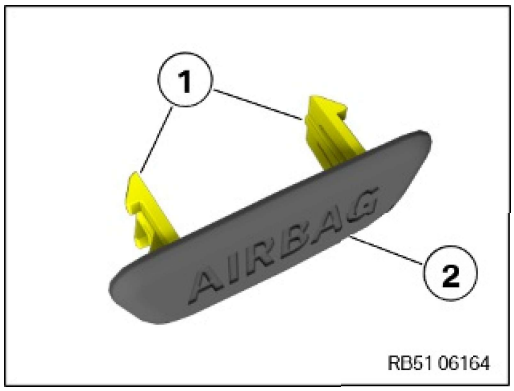
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WARNING

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.



Check

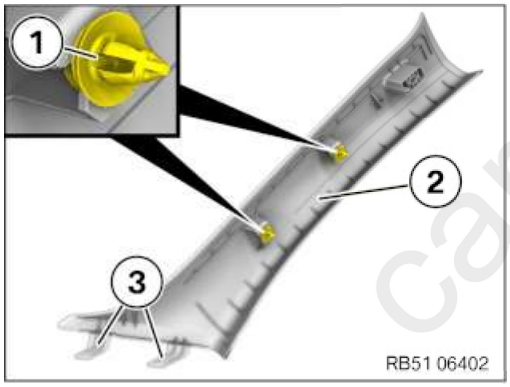
- Check retaining lugs (1) of cover (2) for damage.

Result

» Retaining lug is damaged.

Measure

- Renew the cover.



Check

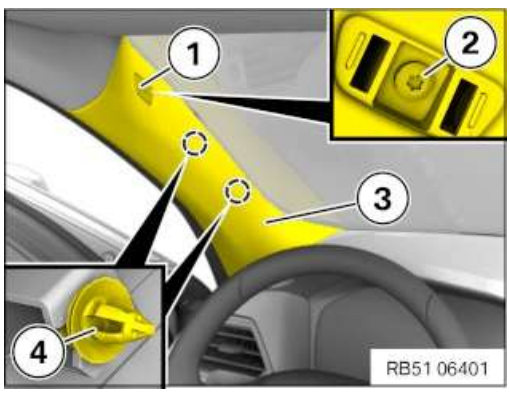
- Check the clips (1) for damage and renew if necessary.
- Check the guides (3) for damage.

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).

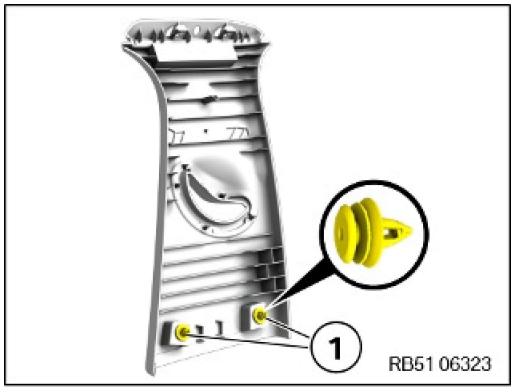
26 – Installing both B-pillar trim panels

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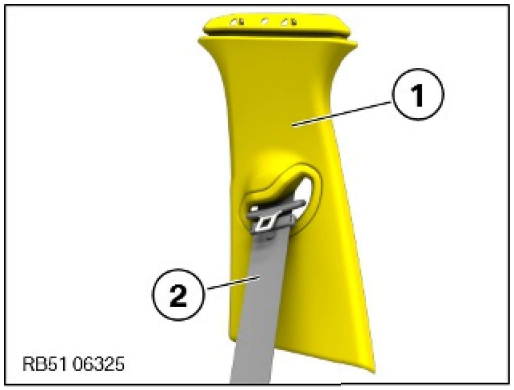
NOTICE

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

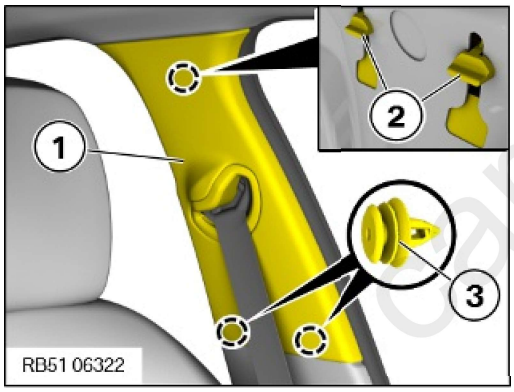
▶ **Install the B-pillar trim panel**



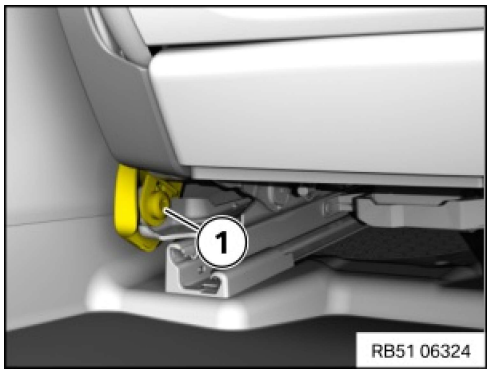
- Check the clips (1) for damage and renew if necessary.



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



- Insert B-pillar trim panel (1) into guides (2) and under the front and rear lips of edge protection.
- Clip in the B-pillar trim panel (1) with the clips (3).



- Fully position the front seat to the front and top.
- Insert the end fitting (2).
- Renew the screw (1).

  Parts: Screw
- Tighten down screw (1).

End fitting to seat mechanism

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

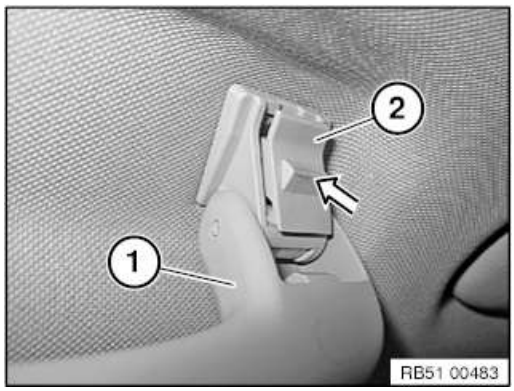
27 – Installing all grab handles

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NOTICE

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

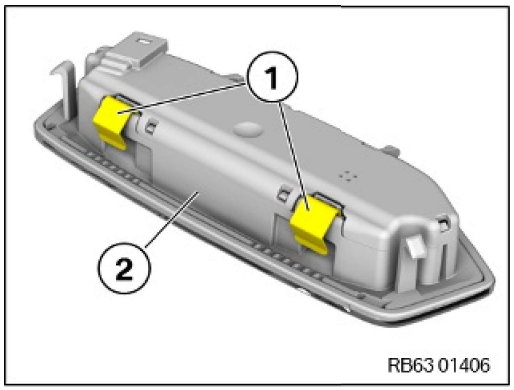
▸ **Installing the grab handle**



- 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).

28 – Install interior roof light

Check



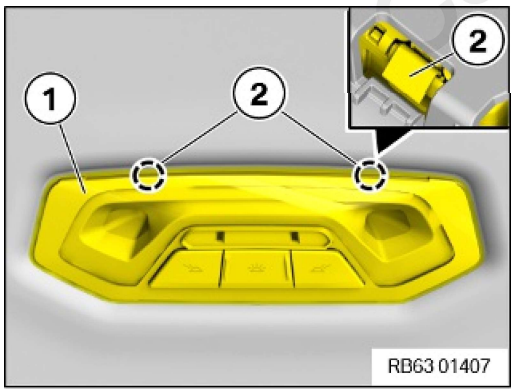
- Check the clamps (1) for damage.

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).

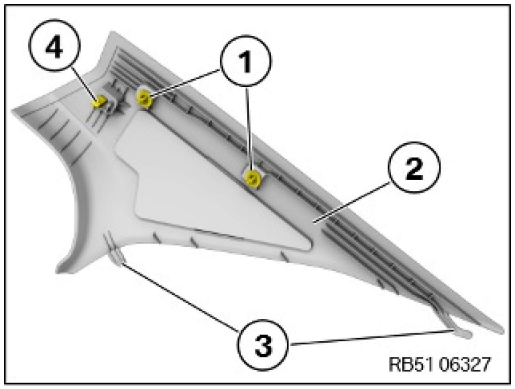
29 – Install both C-pillar trim panels

NOTICE

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

▸ **Installing C-pillar trim panel**

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Check

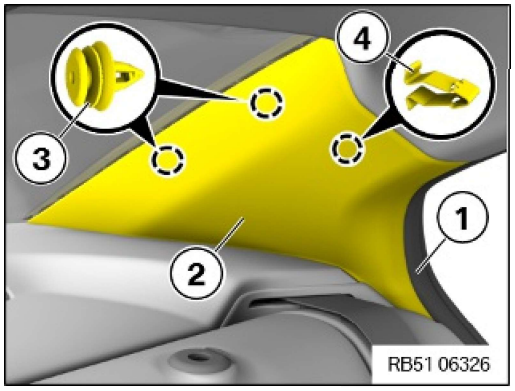
- Check clips (1) and clamp (4) for damage, renew if necessary.
- Check the guides (3) for damage.

Result

» Guide is damaged.

Measure

- Renew the C-pillar trim panel .

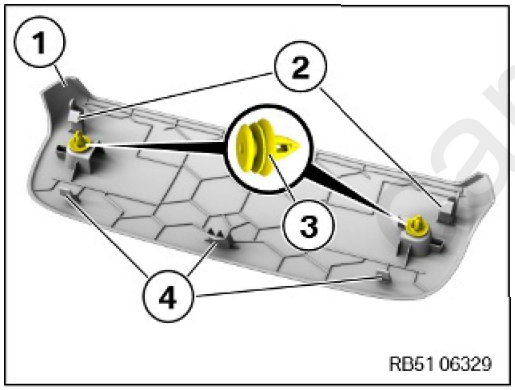


NOTICE

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

- Feed C-pillar trim panel (2) into guides towards the rear.
- Clip in clips (3).
- Clip in clamp (4).
- Guide in C-pillar trim panel (2) under the lip of edge protection (1).

30 – Installing trim for additional brake light



Check

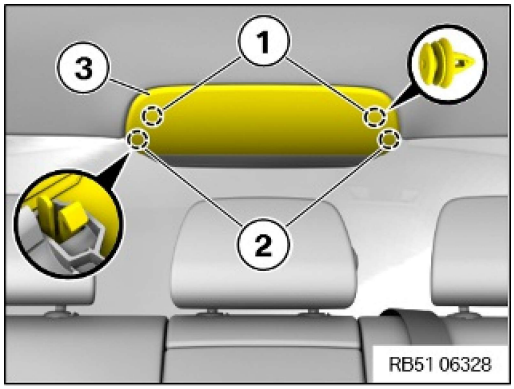
- Check the clips (3) for damage and renew if necessary.
- Check latch mechanisms (2) and guides (4) for damage.

Result

» The latch mechanism or the guide is damaged.

Measure

- Renew the trim for the additional brake light.



- Position trim for additional brake light (1) from the bottom and clip it in with latch mechanisms (2).
- Clip in clips (1).

31 – Disconnecting all battery earth leads



- See additional information.

32 – Encode/program control unit(s)

Prerequisite

Replacement of component.

TECHNICAL INFORMATION

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

TECHNICAL INFORMATION

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

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

Additional Information

Overview of Tightening Torques

Roof function centre — Used in step 20

		Tightening torque	1,2 Nm

A-pillar trim panel to body — Used in step 25

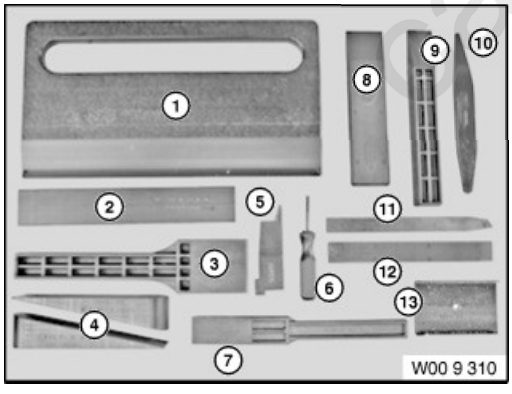
Sheet metal screw 4,8x38		Tightening torque	2,6 Nm

End fitting to seat mechanism — Used in step 26

Flat-head screwM10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

0 493 752 (00 9 329) Case



Common — Used in step 47

Usage	(Case) with insert not incl. panel wedges
Included in the tool or work	0 490 527
Storage location	Individual
Replaced by	
In connection with	
SI-Number	01 07 09 (530)

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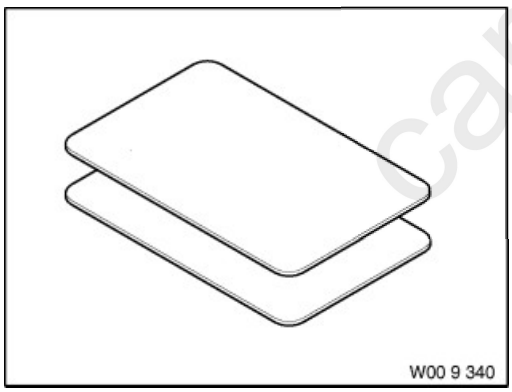
0 496 569 (00 9 325) Wedge



Common Used in step 10

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



Common Used in step 11

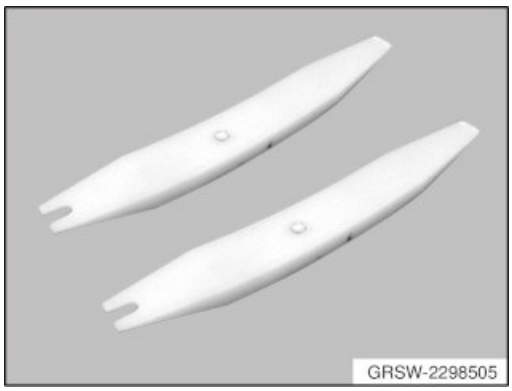
Usage	(Removal aid (2 x)) For levering out switch block on driver's door.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)

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).	

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2 298 505 Wedge



Common	Used in step 20
Usage	Set (delivery of 2 pieces)
Included in the tool or work	
Storage location	C34
Replaced by	
In connection with	
SI-Number	01 03 12 (792)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	7
72 00 ... Safety regulations for handling components with gas generators	7

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	131
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	131
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
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61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	131
61 20 900 Disconnecting and connecting battery earth lead	131

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61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131
61 20 900 Disconnecting and connecting battery earth lead	131

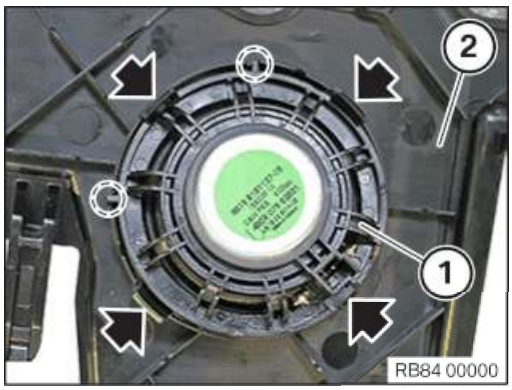
cardiagn.com

84 31 020 Removing and installing emergency loudspeaker of hands-free system

PRELIMINARY WORK

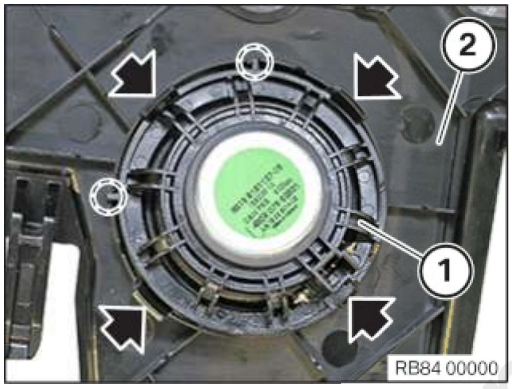
MAIN WORK

1 – Remove emergency loudspeaker



- Unclip the emergency loudspeaker (1) from the trim panel for pedal mechanism (2).

2 – Install emergency loudspeaker



- Clip in the emergency loudspeaker (1) in the trim panel for pedal mechanism (2).
- Check that the emergency loudspeaker (1)is engaged correctly (arrows).

POSTPROCESSES

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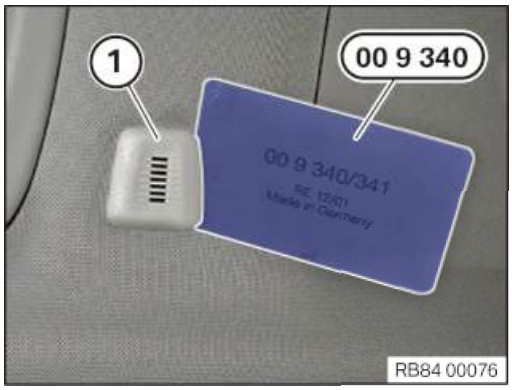
84 31 552 Removing and installing/replacing both hands-free microphones on the driver's and passenger's side

1 – Remove both microphones

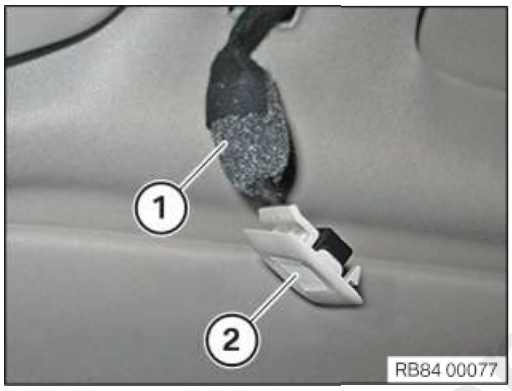
NOTICE

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

▶ **Removing hands-free microphone**



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



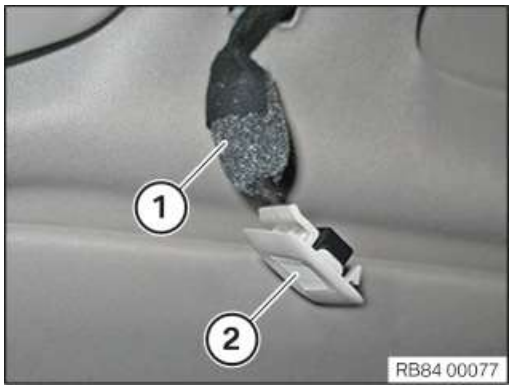
- Open insulation (1).
- Disconnect plug connection.
- Remove hands-free microphone (2).

2 – Install both microphones

NOTICE

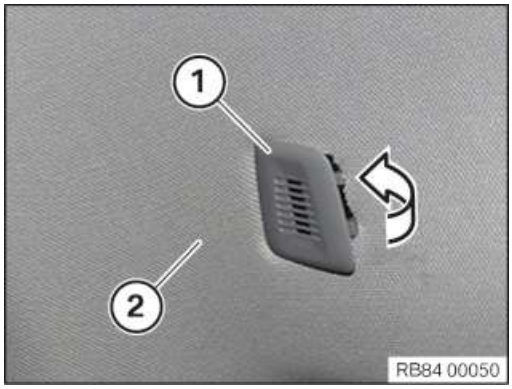
Description is for left component only. Procedure on the right side is identical.

▶ **Installing the hands-free microphone**



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

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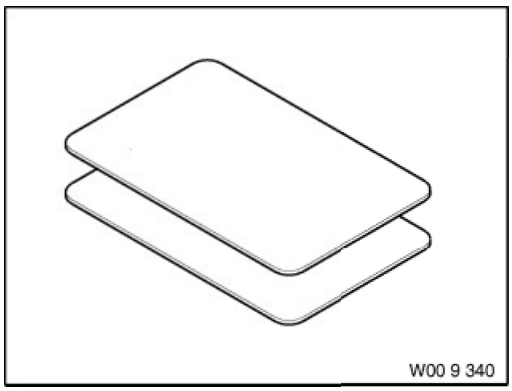


- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

Additional Information

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).	

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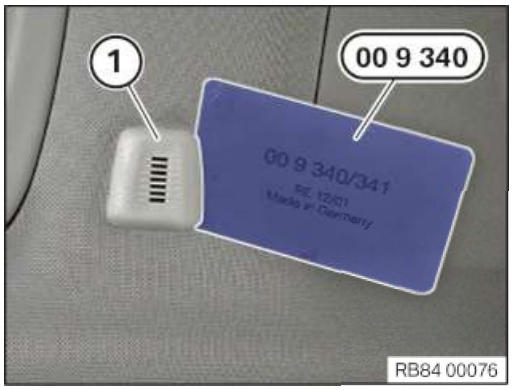
84 31 552 Removing and installing/replacing both hands-free microphones on the driver's and passenger's side

1 – Remove both microphones

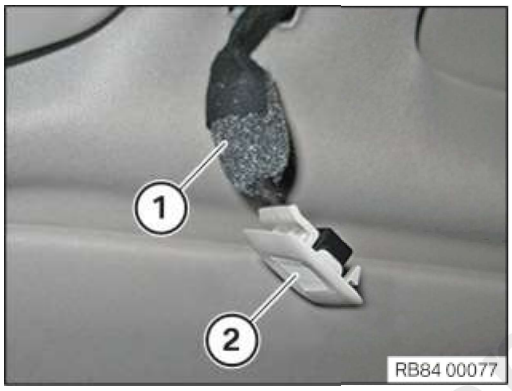
NOTICE

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

▶ **Removing hands-free microphone**



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



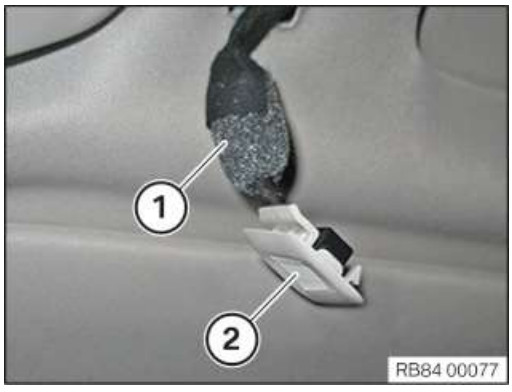
- Open insulation (1).
- Disconnect plug connection.
- Remove hands-free microphone (2).

2 – Install both microphones

NOTICE

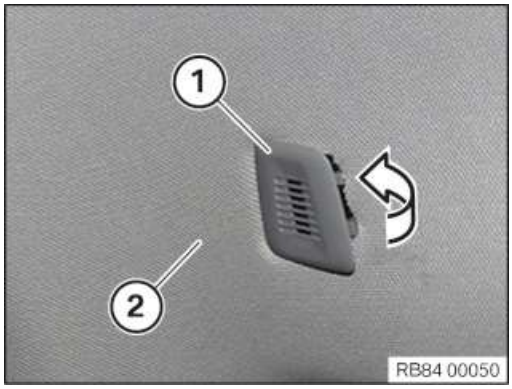
Description is for left component only. Procedure on the right side is identical.

▶ **Installing the hands-free microphone**



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

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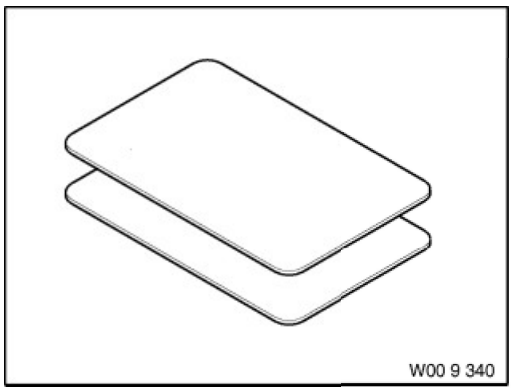


- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

Additional Information

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)

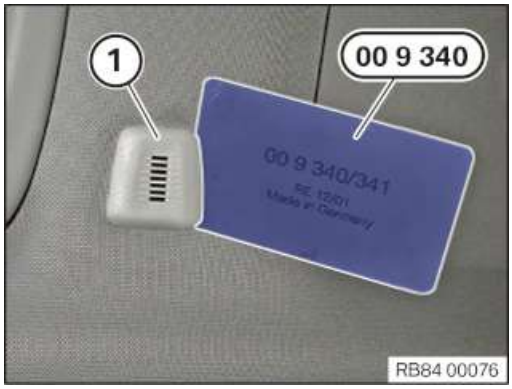
Consisting of

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).	

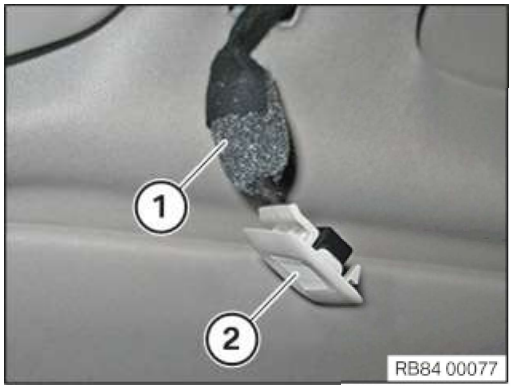
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84 31 550 Removing and installing/replacing hands-free microphone, driver's side

1 – Removing hands-free microphone

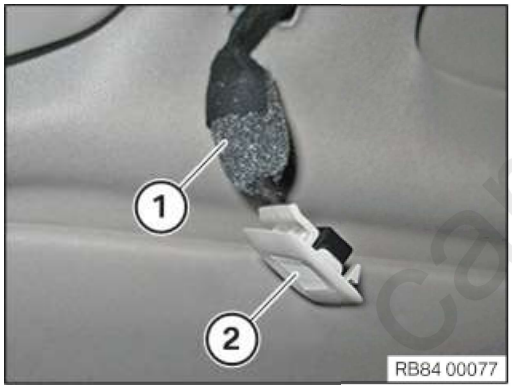


- Lever out the hands-free microphone (1) with the special tool 0 493 687 (00 9 340).

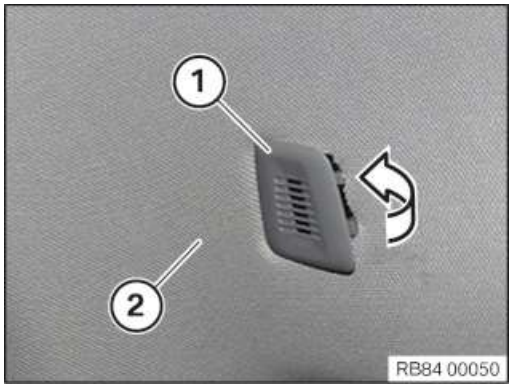


- Open insulation (1).
- Disconnect plug connection.
- Remove hands-free microphone (2).

2 – Installing the hands-free microphone



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



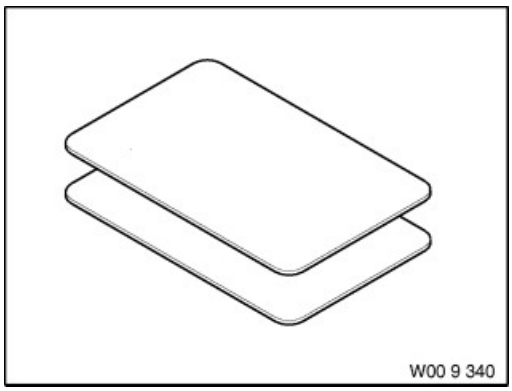
- Position hands-free microphone (1) in headlining (2) in the direction of the arrow.

Additional Information

Overview of Special Tools

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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)

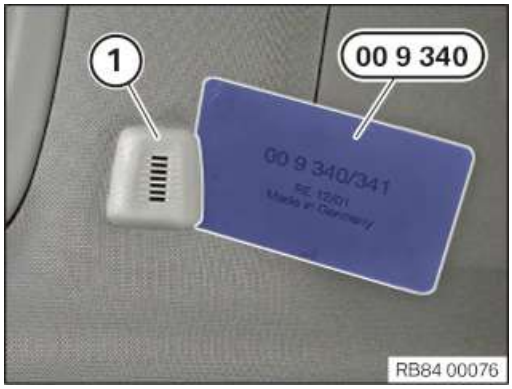
Consisting of

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).	

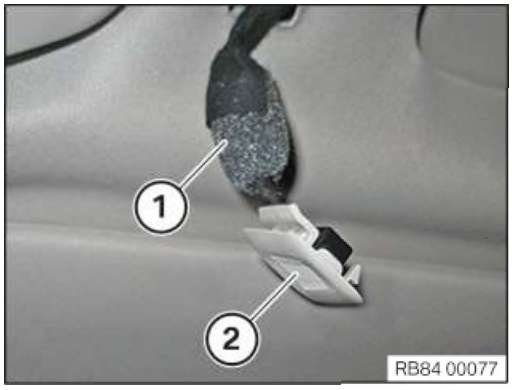
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84 31 551 Removing and installing/replacing hands-free microphone, passenger's side

1 – Removing the right hands-free microphone

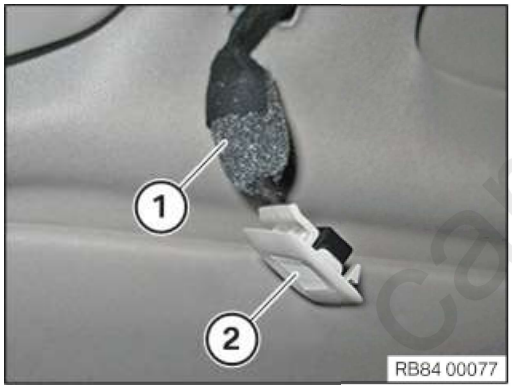


- Lever out the hands-free microphone (1) with the special tool 0 493 687 (00 9 340).

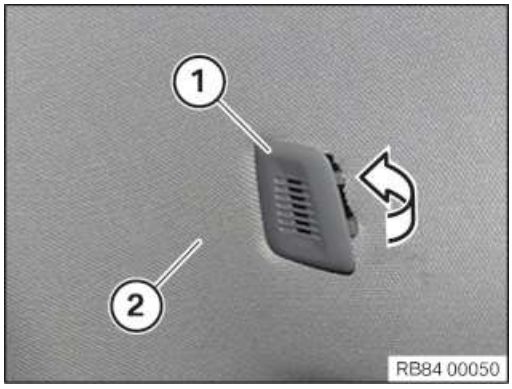


- Open insulation (1).
- Unlock plug connection and disconnect.
- Remove hands-free microphone (2).

2 – Installing the right hands-free microphone



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



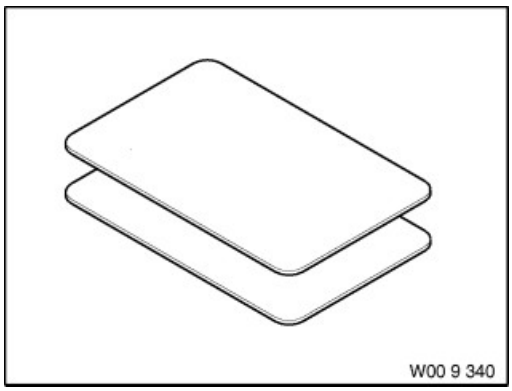
- Position hands-free microphone (1) in headlining in the direction of the arrow (2).

Additional Information

Overview of Special Tools

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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).	

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61 00 ... Notes on handling wiring harnesses and cables



The following applies in general:

To avoid damage, observe the following instructions:

- Avoid compressive and tensile loads
- To ensure professional repairs, perform repair work only with BMW-approved or recommended special tools and spare parts
- Make sure cables are laid without kinks or abrasions
- Ensure non-contacting routing at sharp-edged body parts; use edge protection if necessary
- Secure additionally laid cables/leads with cable ties

The following additionally applies:

Shielded lines

Interference radiation and interference resistance can lead to neutral zones at contact points in the shielding. Consequently, distinctions have to be drawn between the following types:

Coaxial lines

- Shielded coaxial cables RTK031 may only be repaired with a special crimping tool.
- For aerial lines only the bushing contact may be repaired.
- RG174 Lines and the bushing contact may not be repaired.

CVBS lines

- CVBS cables may not be repaired.
- CVBS cables must be replaced in their entirety.

HSD lines

- HSD cables may not be repaired.
- HSD cables must be replaced in their entirety.

Optical fibre cable:

Note:
Fibre-optic cables are coloured differently as follows:

- Green = **MOST** (**M**edia **O**riented **S**ystems **T**ransport) optical fibres
- Yellow = **ISIS** (**I**ntelligent **S**afety and **I**ntegration **S**ystem) optical fibres
- Orange=repair fibre-optic cables

Attention!

- Optical fibres are permitted to show only one junction point (bridge). Replace optical fibres if necessary
- Smallest permissible bending radius is 25 mm
- Avoid effects of heat ≥ 85 °

Treating cables and fibre-optic cables

FlexRay (twisted cables):

It is possible to repair the FlexRay. In the event of damage, the cables can be joined with conventional butt connectors and heat-shrink tubing.

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Note:

- FlexRay lines may only reveal one separation point (bride); renew complete line if necessary.
- If possible, maintain twisted cable after repair.
- After repairs, twist cables as close as possible to the connector/separation point.
- Twisting must be as symmetrical as possible.

Airbag lines:

Repairing airbag cables

Ribbon cables:

Repairing ribbon cables

Replacing wiring harnesses

Repair wiring harnesses mainly cover the full equipment of the vehicle. If certain optional equipment is not installed in the vehicle, note the following:

- If necessary, secure the remaining connectors.
- If necessary, seal the remaining connectors outside the vehicle interior, for example, with butyl tape in such a way that moisture ingress can be eliminated permanently.
- If necessary, repin the connector of the repair wiring harness.

Note:
Repair wiring harnesses can be equipped with an **additional socket housing** (30-pin, for example), **which was not provided on the previous vehicle-side wiring harness**. This socket housing also cannot be found in the wiring diagram.

Procedure

The separation point between the vehicle-side wiring harness and the repair wiring harness is located **in the vehicle interior** (in the footwell, for example):

- Cut the additional socket housing and connect the lines to the vehicle-side wiring harness using a butt connector.
- Alternatively, a suitable pin housing can be fitted on the vehicle-side wiring harness and connected to the additional socket housing.

  However, this is permitted only if the following conditions are met:
  - Carpets must not protrude visibly or become deformed due to the installation of the additional plug connection.
  - It must be possible to install the adjacent components (for example, trims, trim panels, etc.) correctly after installing the additional plug connection.
  - All the attachment points of the adjacent components (for example, trims, trim panels, etc.) must engage correctly.
  - There must be no rattling noise due to the installation of the additional plug connection.
  - The additional plug connection must not damage the adjacent components/wiring harnesses, etc..

The separation point between the vehicle-side wiring harness and the repair wiring harness is located **outside the vehicle interior** (in the

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wheel arch, for example):

- Cut the additional socket housing and connect the lines to the vehicle-side wiring harness using a butt connector.
- **Using the additional socket housing is not permitted with a separation point outside the vehicle interior.**

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61 00 ... Parking-residing-driving

Vehicles of the G series feature a new type of terminal control:

Functional description of the parking-residing-driving terminal control

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64 00 ... Information on using cleaning agent/paints (personal protection equipment)



Warning!

Use of cleaning agents/paints not compliant with instructions can cause serious injuries or burns!

Handling cleaning agents/paints can trigger allergic skin and respiratory reactions!



Important!

Observe following instructions:

- Store cleaning agents/paints only in a secure cabinet.
- Keep cleaning agents/paints away from naked flames and other sources of ignition.
- Protect cleaning agents/paints from high temperatures and direct sunlight.
- Always keep an eye douche on hand, change the water regularly (once a month).



Important!

Observe following instructions before use:

- Manufacturer's instructions (on container/packaging)
- Hazard warnings (on container/packaging)
- Manufacturer's instructions on package insert
- Material safety data sheet of manufacturer
- Product information in EPC
- National market regulations



Important!

Observe following instructions during use:

- Do not eat, drink or smoke while working with these products.
- Avoid direct contact with skin and eyes.
- Wear personal protective clothing/equipment.
- Ensure that all enclosed areas are well ventilated or extract fumes directly.
- Immediately change working clothes soiled with cleaning agent/paint.
- After finishing work, wash your hands and apply protective skin cream.



Important!

Follow hazard warnings and wear personal protection equipment!

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First Aid:

- If product comes in contact with eyes, immediately flush with running water for about 10 - 15 minutes. Seek the advice of eye specialist.
- In the event of skin contact and where applicable an allergic skin reaction, clean the affected areas immediately with soap and water and then apply silicone-free skin cream. Seek advice of physician.
- If an adhesive product is swallowed, rinse mouth/parts of mouth thoroughly with running water. Drink 1-2 glasses of water. Do not induce vomiting. Consult a doctor.
- After inhaling vapours ensure ample supply of fresh air. Keep calm, keep respiratory tracks clear and call doctor.



Recycling:

Dispose of cleaning agents/paints in a professional manner!

Observe national/country-specific disposal regulations.

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99 00 ... General instructions on paintwork

General instructions and classification of paint stages are described on the KSD CD (under Notes, General information on flat rate unit data, Passenger car explanation for FRU specifications for paintwork).

The marked area shows the basis of area calculation for creating the flat rate unit. The marked area does not show the area actually to be painted. If touching up is required, the painter defines the precise position as he sees fit.

Special procedure for matte paintwork:

Matte paintwork cannot be touched up since the painted surface cannot be polished.

For further information, see also the BMW painting handbook and the Aftersales Assistance Portal.

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41 00 ... Information/warning labels

Missing or damaged labels (e. g. tyre pressure) must be replaced.

--> overview via the installation location

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61 00 ... Notes on handling the high pressure cleaner



Warning!

Only used a high pressure cleaner approved by BMW!

Only specially trained persons of 16 years of age or older may work with the high pressure cleaner.

Check the high pressure cleaner and electrical wiring for visible damage.

Only use at a suitable location.



Attention!

Pay attention to following hazard warnings:

- Danger of injury due to water jet
- Contact with hazardous substances in spray
- Risk of skidding on wet floor
- Risk of stumbling due to hoses and cables
- Comply with notes and instructions on handling cleaning agents !
- Risk of scalding when cleaning with hot water.
- On electric or hybrid cars, the safety instructions for handling with hybrid cars are to be complied with.



Warning!

The following personal protective equipment is to be used:

- Safety goggles/face guard
- Suitable gloves
- Apron
- Rubber boots
- Ear protectors
- Safety shoes



Attention!

Notes on washing a vehicle with a high pressure cleaner:

- Do not wash directly on gaskets and control units during engine

  washes.
- A minimum distance of 30 cm must be adhered to for tyres and tyre valves.
- A minimum distance of 30 cm must be adhered to for the soft top and painted parts.
- Do not use if engine is still hot.
- Do not exceed maximum water temperature of 60 degrees.
- Do not spray directly onto cameras/sensors.

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Attention!

- For your own safety, we recommend that you do not wash on the high-voltage components in electric or hybrid vehicles.

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99 Notes on using temperature-controlled infra-red radiators

When using temperature-controlled infrared radiators, damage to adhesive bonds, paint and vehicle components can occur when drying spatula and filler.

The temperature sensors in the infrared radiator only operate reliably on large, even surfaces.

On small surfaces such as C-pillars or sills, often only a colder, adjacent area is measured.

This leads to actual surface temperatures of up to 130°C, even if only 70°C is set on the infrared radiator.

When the rear side walls are partially replaced by bonding and riveting, these high temperatures can lead to a visible pattern in the area of the joint.

Remedy:

Check the surface temperatures on small component surfaces during the drying process with an external temperature sensor.

The general rule is: The surface temperatures must not exceed 85°C.

Important!

Do not use infrared radiators on carbon parts!

Risk of component destruction.

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99 00 ... Touching up paintwork damage

These notes apply to paintwork damage on the body aperture that occurred when detaching bonded window glass.

To ensure long-term corrosion protection, it is absolutely essential to touch up damage to paintwork!

The "BMW Color System" painting handbook forms the basis of these repair instructions and must be observed without fail.

Ground down damage to paintwork on body aperture and touch up with BMW multibase filler.

Grind larger areas or damage down to the bare sheet metal and coat with BMW multibase filler (layer thickness 30 to 40 µm).

Hardening time:

- With infrared, at least 10 minutes
- Without infrared for at least 60 °C, at least 30 minutes
- Without infrared for at least 20 °C, at least 24 hours

If a complete build-up of paint is required in the visible area:

- Tape off primed adhesive flange before applying top coat

Important!

Observe hardening time of BMW multibase filler otherwise a perfect bond cannot be guaranteed!

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