

00 Safety information for working on vehicles with automatic engine start-stop function (MSA)



Warning!

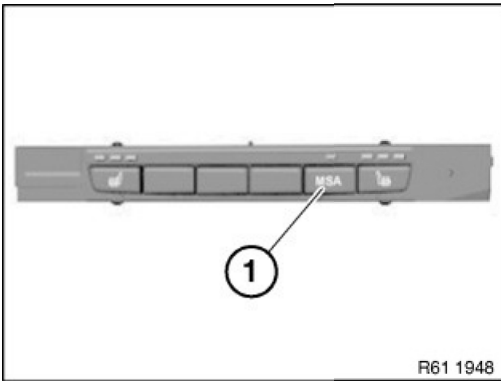
If the engine hood/bonnet contact is pulled upwards (workshop mode), the information "switch closed" is output. The automatic engine start-stop function is active.

An automatic engine start is possible.

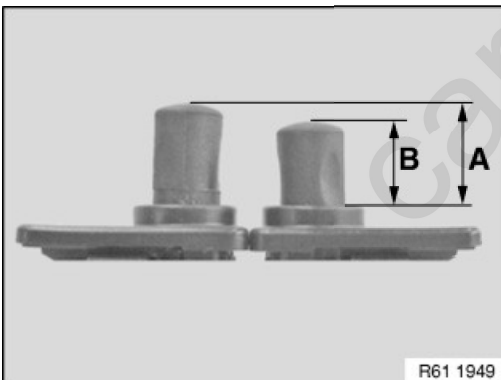
Observe safety precautions when working on MSA vehicles.

Before carrying out practical work on the engine, always ensure that the MSA functionality is deactivated so as to prevent automatic engine starting while work is being carried out in the engine compartment.

MSA function is deactivated by:



- Deactivate MSA by means of button (1) in passenger compartment
- Open seat belt buckle and driver's door



- Open engine bonnet/hood and ensure that engine hood/bonnet contact is not in workshop mode
 - Workshop mode
 $A = 10 \text{ mm}$
 - Basic setting (engine hood/bonnet open)
 $B = 7 \text{ mm}$

To make sure that the engine hood/bonnet contact is at the basic setting, if necessary press the hood/bonnet contact up to the limit position before starting work and slowly release.



When working with diagnosis tools:

- Observe instructions in diagnosis tool





Note:

For further information on automatic engine start-stop function (MSA):

- Refer to the Service Information (bulletin) (for manual transmissions) Service Information (bulletin) 61 01 07 335
- Refer to the Service Information (bulletin) (for automatic transmissions or twin-clutch gearboxes) Service Information (bulletin) 61 01 10 629

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67 11 510 Removing and installing/replacing actuator drive for front left or right door central locking drive



Note:

The controller drive for the central locking drive is integrated in the door lock in the front door.

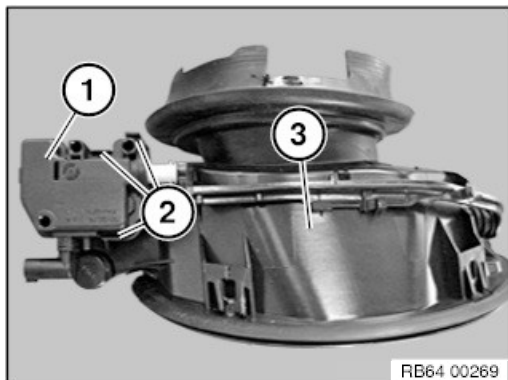
The procedure is explained in the document Remove and install/replace the door lock for the left or right front door.

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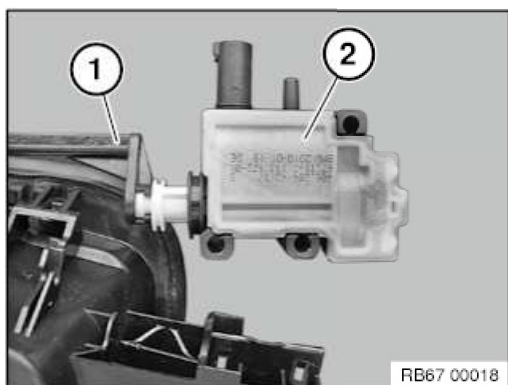


**Necessary preliminary tasks:**

- Remove cover housing



Unlock retaining lugs (2) with a suitable tool.
Remove actuator drive (1) from cover pot (3).



Release the actuator drive (2) by simultaneously turning and pressing the locking pin (1). *Installation note:*
Make sure the setting for the actuator drive (2) for the fuel filler flap is correct. It must be possible to lock or unlock the fuel filler flap completely.



67 11 530 Removing and installing/replacing actuator drive for rear left or right central locking



Note:

Actuator drive of central locking drive can only be replaced in conjunction with door lock.

This operation is described in:

Remove and install/replace the door lock on the rear door.

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This operation is described in:
"Removing tailgate lock"

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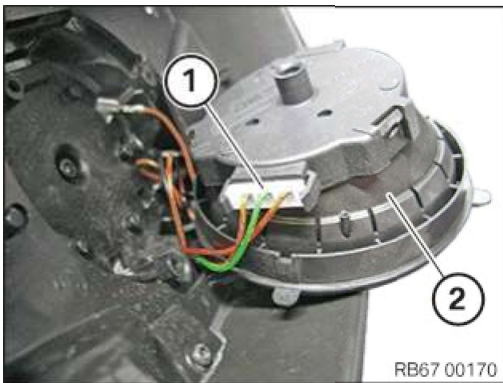


Necessary preliminary tasks:

- Remove mirror glass for inside mirror



Release screw (1) and move the drive (2) slightly to the front.
Tightening torque 51 16 7AZ.



Unfasten plug connection (1) and disconnect.
Remove electric motor (2).



67 13 030 Replacing the mirror electronics for both electrically adjustable, exterior mirrors



Attention!

Read and comply with notes on protection against electrostatic discharge (ESD protection).



Necessary preliminary tasks:

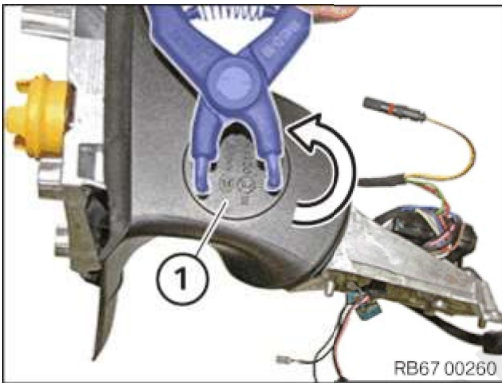
- Remove and disassemble the mirror

Note:

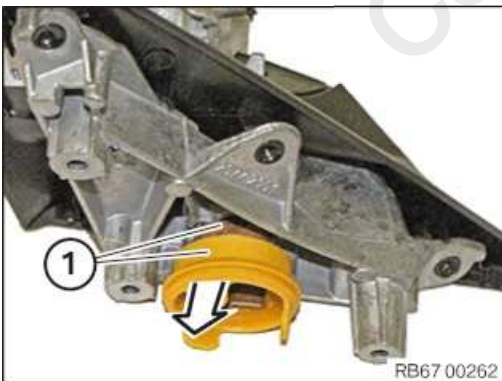
The number of wires/connectors may vary depending on the equipment specification.



Removal:



Use a suitable tool to twist the lid (1) slightly in anticlockwise direction and remove it.

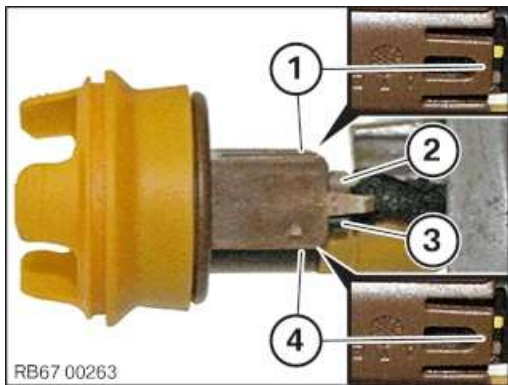


Pull out the grommet with connector holder (1) in the direction of the arrow. *Note:*

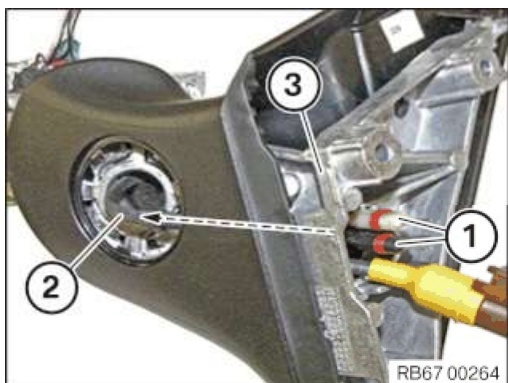
A retaining lug may potentially break off the connector holder (1) when pulling it out.

In this case, it is **not required** to replace the connector holder (1)!

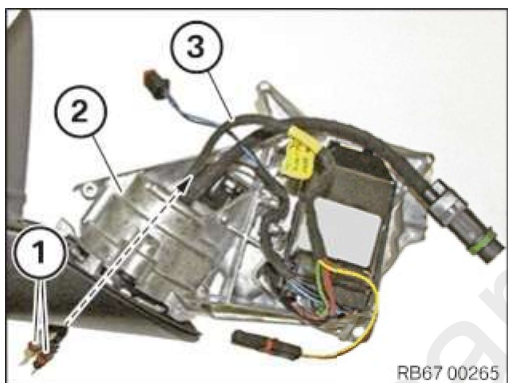




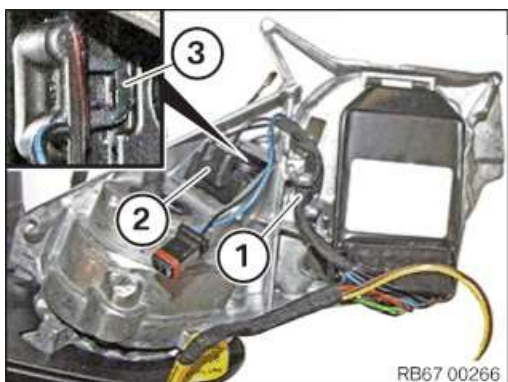
Carefully lift the retaining lug (1) and loosen the connector (2).
Carefully lift the retaining lug (4) and loosen the connector (3).



Pull out the connector (1) including the wire (2) from the housing (3) in the direction of the arrow.

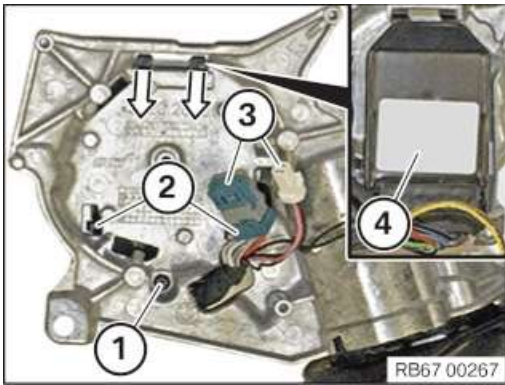


Pull out the connector (1) including the wire (3) from the housing (2) in the direction of the arrow.



Remove the line (1).
Slightly lift the retaining lug (3).
Disconnect plug connection (2).





Release screw (1).

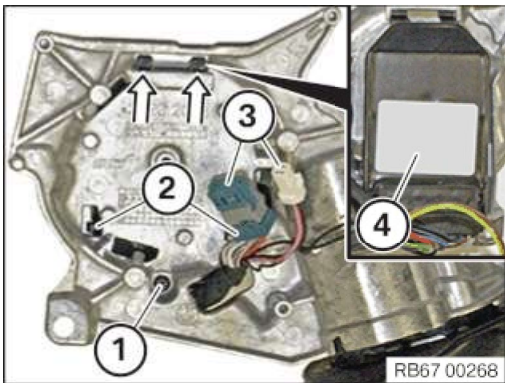
Simultaneously press both retaining lugs (2) and lift the mirror electronics (4) in this area.

Remove the mirror electronics (4) in the direction of the arrow.

Remove the wires (3).



Installation:



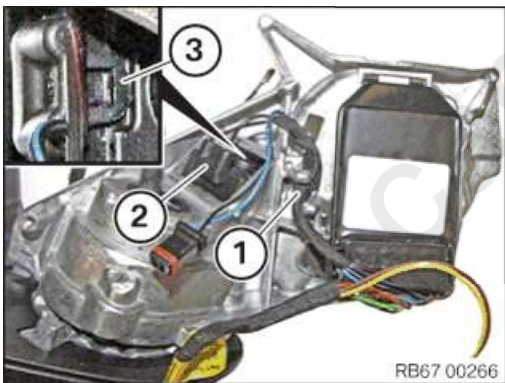
Remove the wires (3).

Install the mirror electronics (4) in the direction of the arrow.

Carefully press in the mirror electronics (4) until both retaining lugs (2) have engaged correctly.

Tighten screw (1).

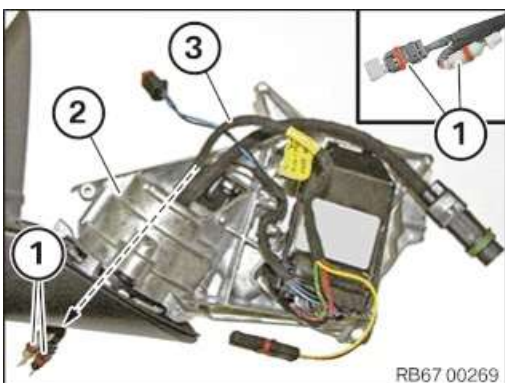
Tightening torque 51 16 6AZ.



Carefully connect the plug connection (2).

The retaining lug (3) must engage correctly.

Position the cable (1) as illustrated.

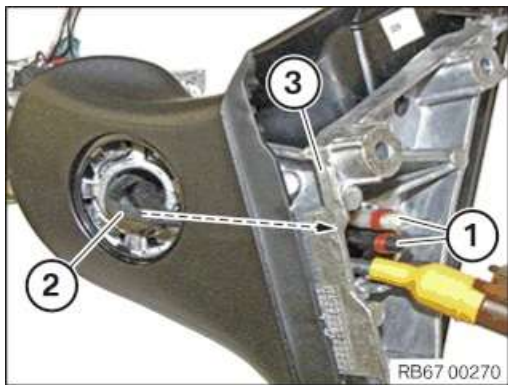


Insert the connector (1) including the cable (3) into the housing (2) in the direction of the arrow. *Note:*

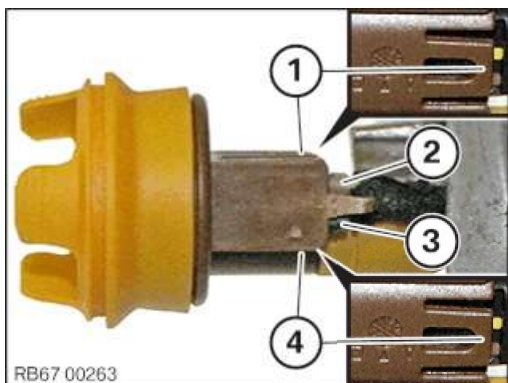
Thread the connector (1) as illustrated for better installation.

The protective caps of the connector (1) must be removed first before installation into the connector housing.



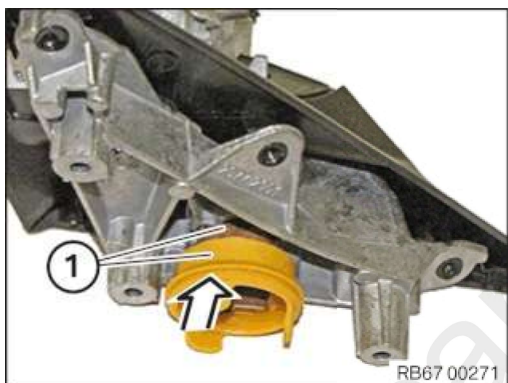


Insert the connector (1) including the cable (2) into the housing (3) in the direction of the arrow.

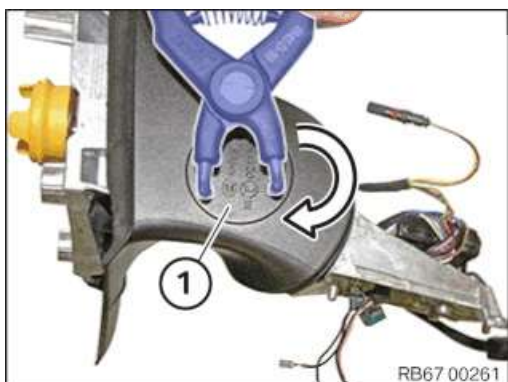


Correctly connect the connector (2) until the retaining lug (1) engages correctly.

Connect the connector (3) until the retaining lug (4) engages correctly.

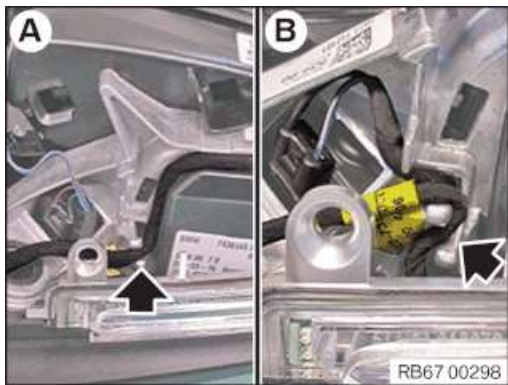


Install the grommet including the connector holder (1) in the direction of the arrow.



Position the lid (1) and twist in clockwise direction using a suitable tool.





Ensure correct cable routing.

A Version with camera

B Version without camera



Required follow-up work:

- Assemble and install the mirror

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*Note:*

Initialization is carried out at the adjusting switch of the relevant seat.

In this process, the end positions of the relevant electric seat actuator drive are recorded and stored.

An initialisation must be performed:

- After replacing a drive unit for seat adjustment.
- After replacing/programming control unit for seat adjustment.

Operating procedure for initialisation:

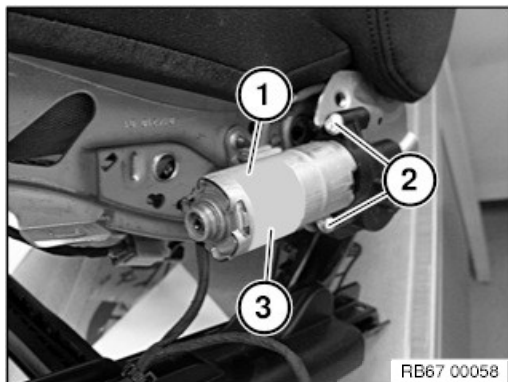
Move corresponding seat actuator drive(s) into both end positions.

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**Necessary preliminary tasks:**

- Remove covers on front seat



Unfasten plug connection (1) and disconnect.

Unfasten screws (2).

Remove electric motor (3).

**Note:**

Carry out a function check.

Replacement:

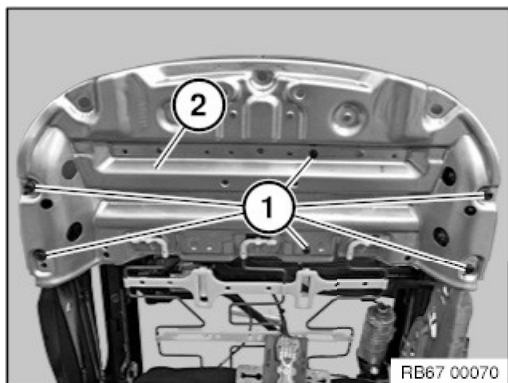
Initialise backrest adjustment motor.





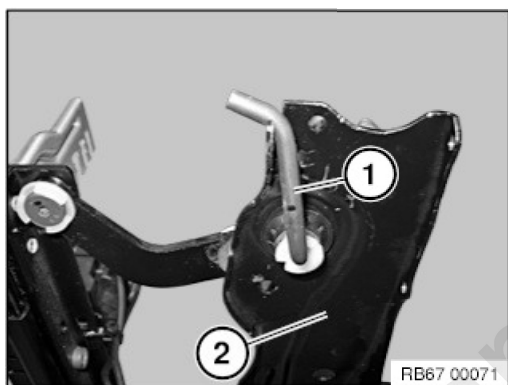
Necessary preliminary tasks:

- Remove driver's or front passenger seat
- Remove front seat cover

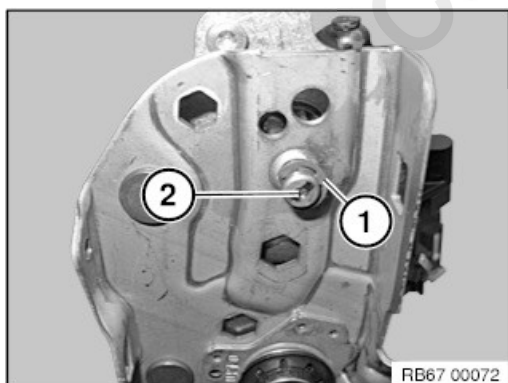


Release screws (1).

Remove cushion shell (2).

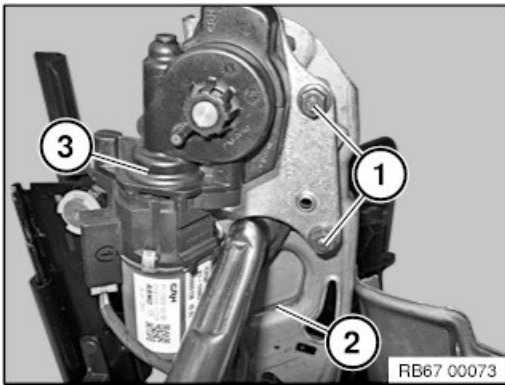


Detach spring (1) at seat frame (2).



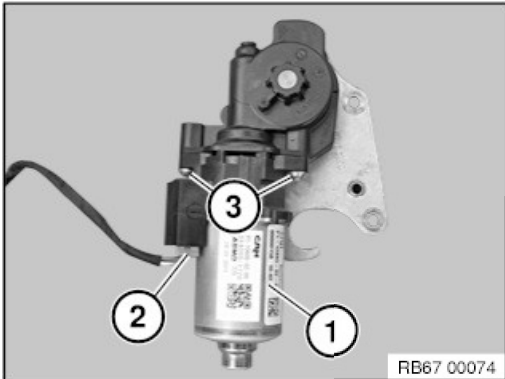
Remove fuse (1) from shaft (2).





Unscrew nuts (1).

Pull drive with transmission (3) out of seat frame (2) and remove.



Unfasten plug connection (2) and disconnect.

Release screws (3).

Tightening torque 67 31 1AZ.

Remove drive unit for seat cushion tilt adjustment (1).



Note:

Carry out a function check.

Replacement:

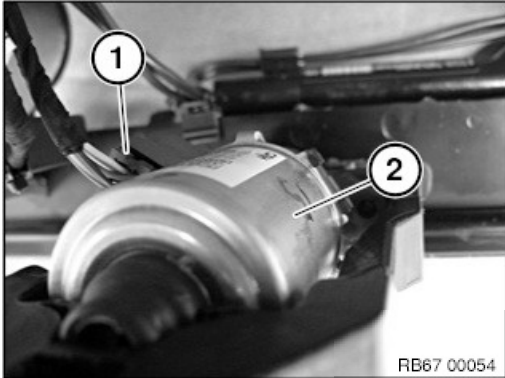
Initialise seat height adjustment drive unit.





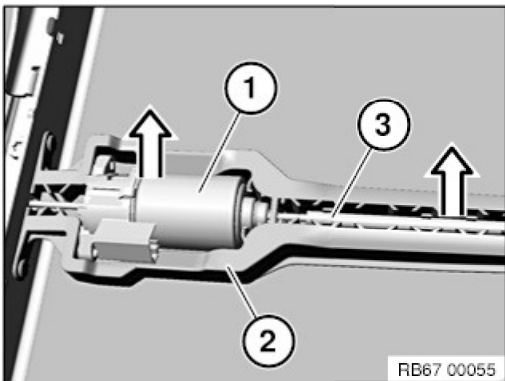
Necessary preliminary work:

- Raise front seat as far up as possible



Removal of electric motor for forward/back seat adjustment:

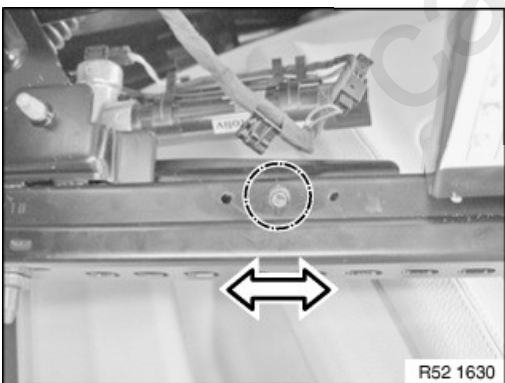
Unfasten plug connection (1) and disconnect.



Lift long flex shaft (3) out of guide in direction of arrow.

Pull out flex shaft (3) from electric motor for forward/back seat adjustment (1).

Remove electric motor for forward/back seat adjustment (1) in direction of arrow from holder (2).

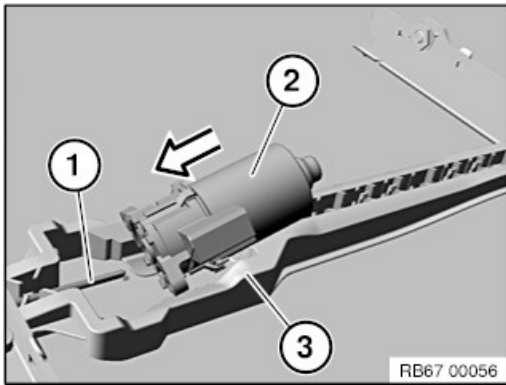


Installation of electric motor for forward/back seat adjustment:

Slide seat rail with opening forwards or back until bushing for flex shaft mounting of worm gear is flush.

Insert short flex shaft.





Connect electric motor for forward/back seat adjustment (2) to short flex shaft (1).

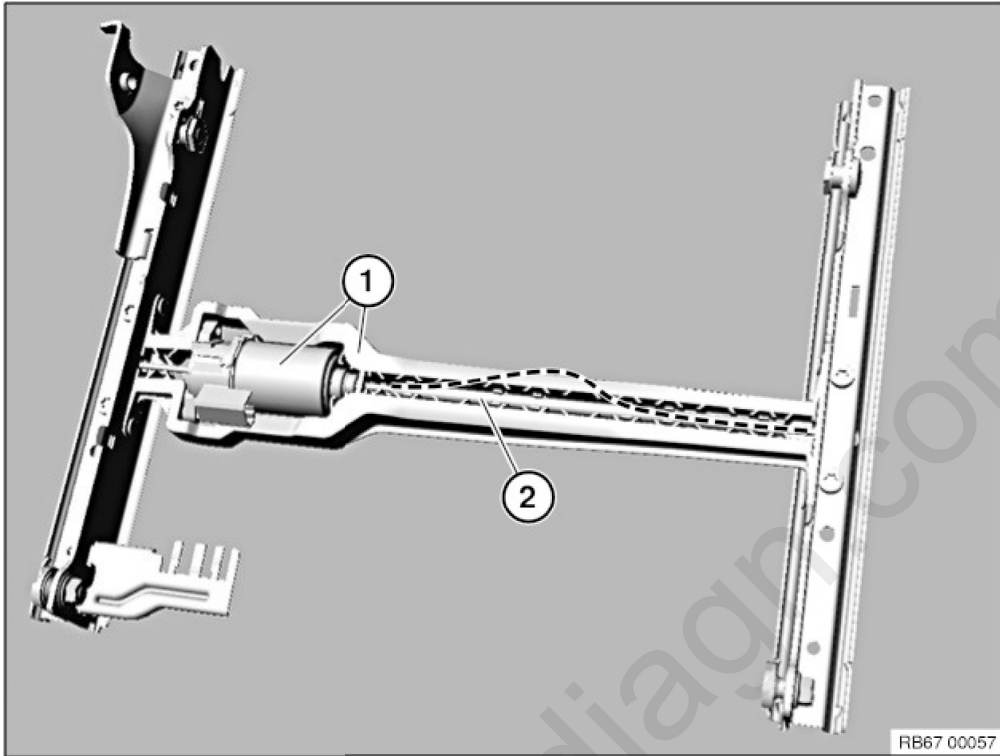
Installation note:

Make sure flex shaft (1) is correctly seated in electric motor (2) and seat rail mounting.

Clip in electric motor for forward/back seat adjustment (2) into holder (3).

Installation note:

Electric motor for forward/back seat adjustment (2) must audibly engage in holder (3).



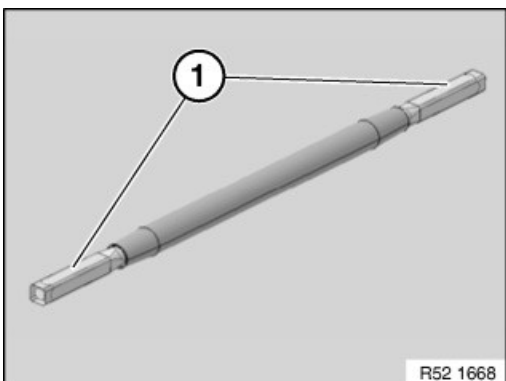
Insert long flex shaft (2) in worm gear on seat rail.

Bend long flex shaft (2) upwards and slide into electric motor for forward/back seat adjustment (1).

Clip in flex shaft into carrier plate.

Installation note:

Make sure flex shaft (2) is correctly seated in electric motor (1) and seat rail mounting.



Installation note:

PTFE hoses are shrink-fitted onto end pieces.

Check that hoses are free from damage.





Note:

Carry out a function check.

Replacement:

Initialize drive unit for forward/back seat adjustment.

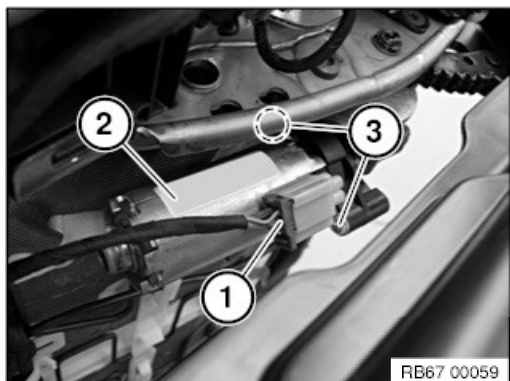
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Necessary preliminary tasks:

- Remove driver's or front passenger seat



Set down front seat sideways on a suitable surface.

Unfasten plug connection (1) and disconnect.

Release screws (3).

Tightening torque 67 31 1AZ.

Feed out seat height adjustment drive unit (2) and remove.



Note:

Carry out a function check.

Replacement:

Initialise seat height adjustment drive unit.

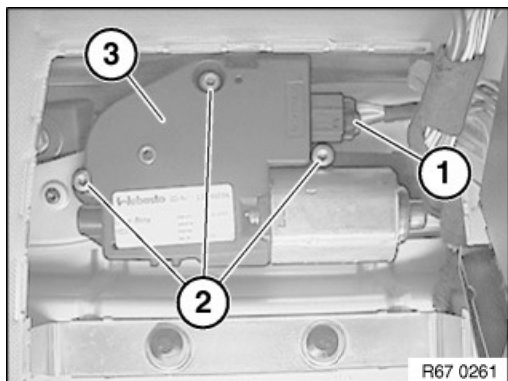


67 61 515 Replacing electric motor with gearbox (front) for operation of slide/tilt sunroof



Necessary preliminary tasks:

- Remove roof switch cluster



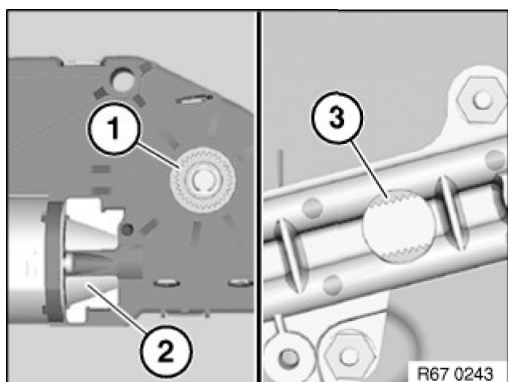
Note:

Secure drive with gearbox for actuating slide/tilt sunroof (3) against falling out.

Unfasten plug connection (1) and disconnect.

Release screws (2), tightening torque 54 13 1AZ.

Remove drive with gearbox for actuating slide/tilt sunroof (3).



Installation note:

Insert gear (1) of electric motor with gearbox for operation of slide/tilt sunroof (2) exactly in gearing (3).



Installation note:

- Initialise slide/tilt sunroof.



*Note:*

Initialization is carried out at the adjusting switch of the relevant seat.

In this process, the end positions of the relevant electric seat actuator drive are recorded and stored.

An initialisation must be performed:

- After replacing a drive unit for seat adjustment.
- After replacing/programming control unit for seat adjustment.

Operating procedure for initialisation:

Move corresponding seat actuator drive(s) into both end positions.

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Note:

Initialisation is performed on the power window switch of the relevant door.

Initialisation comprises:

- Normalisation
- Learning characteristic curve

With normalisation, the mechanical end stops of the power window regulator are recorded and stored.

The characteristic curve is learnt immediately after normalisation.

When the characteristic curve is learnt, the mechanical closing forces of the power windows are recorded and stored for correct operation of the anti-trapping mechanism.

Initialisation, i.e. normalisation and learning of characteristic curve, is performed in a continuous operation.



Note:

An **initialisation** must be performed:

- In the event of malfunctions, e.g. no one-touch function, no opening or no convenience function possible.
- After the power windows drive or door module has been replaced.
- After work is carried out on the power windows mechanism.



Warning!

There is no anti-trap mechanism during initialisation.



Necessary preliminary work:

- Vehicle stationary
- Sufficient battery voltage available / connect charger if necessary
- Terminal "15" switched on
- All doors closed
- F12 up to 02/2012 soft top open, from 03/2012 soft top closed





Operating procedure for initialisation (manual):

Deleting the initialisation:

- Move side window into lower end position.
- Press and hold switch in "Open one-touch function" position (second switch position) for between 15 and 25 seconds.

Note:

Deletion of initialisation was successful if toll function and anti-trap mechanism have been rendered inoperative.

Performing initialisation:

- Move side window to upper end position
- Pull and hold switch in "Close one-touch function" (2nd switch position) during the entire process.

Note:

Re-initialisation was successful if toll function and anti-trap mechanism function flawlessly.



Alternatively, initialisation of the power window regulation can also be carried out via the Service function in ISTA.

Selection via:

- Body
 - Locking and security functions
 - Power window regulator
 - Initialise power window regulators



67 62 000 Remove and install / replace the flat motor for the front left or right power window regulator \PREMIUM



RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



TECHNICAL INFORMATION

Notes on power window initialisation must be strictly observed for these repair instructions.

Additional information, see 67 62 ... Information on power window initialisation.



NOTICE

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

PRELIMINARY WORK

1 – Remove front left or right door handle cover

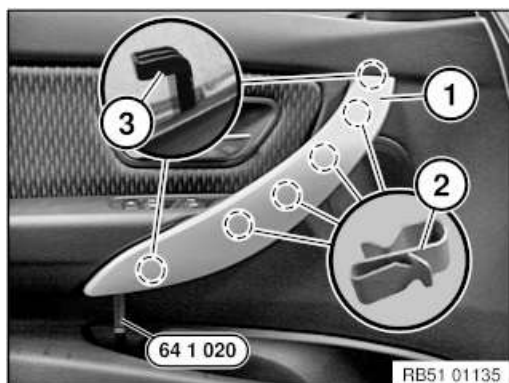


RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



- Unclip cover (1) starting from below using special tool [0 493 681 \(64 1 020\)](#) from clamps (2) and latch mechanisms.
- Remove cover (1) from tail hook (3).

2 – Removing the switch trim on left or right front door trim panel



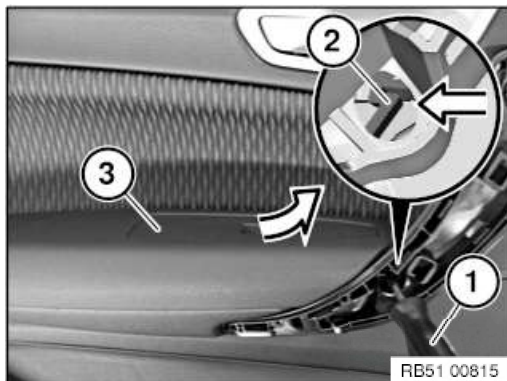


RISK OF DAMAGE

Scratches.

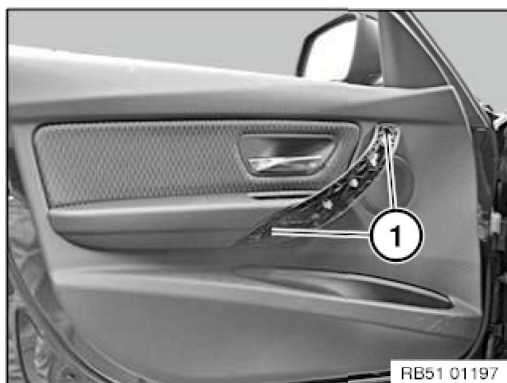
Tools and sharp-edged components can cause scratches.

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



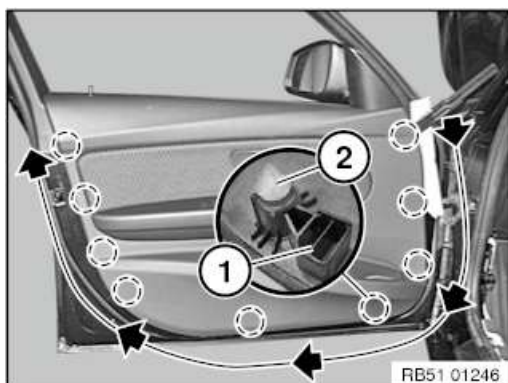
- With a suitable tool (1), release the latch mechanism (2) of the switch trim (3) in direction of arrow.
- Release switch trim (3) from the door trim panel towards front/top.
- Disconnect plug connection and remove the switch trim (3).

3 – Remove front door trim panel on left or right



- Loosen screws (1).





RISK OF DAMAGE

Bending of plastic parts.

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

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

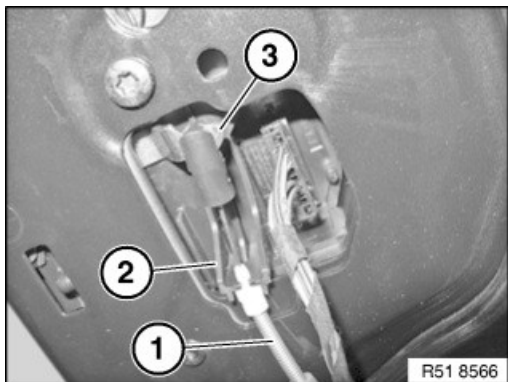
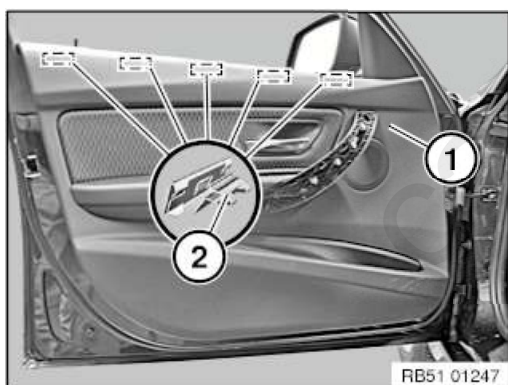


RISK OF DAMAGE

Damage to the folding compartments.

If the folding compartment is pulled on, there is a risk of the folding compartment being ripped out or the door trim panel being damaged.

- Do not pull on the folding compartment.
- Insert the special tool [0 496 569 \(00 9 325\)](#) in the area of the A-pillar at the height of the mirror triangle between the door trim panel and the door.
- Lever door trim panel inward mildly.
- Grab the door trim panel with your free hand.
- Directly position special tool [0 496 569 \(00 9 325\)](#) on the reinforcement (1) of the first clip (2).
- Release the door trim panel by levering against the reinforcement (1) of the first clip (2).
- Release additional clips (2) in direction of arrow. At the same time, use your free hand to pull the door trim panel slightly inward.
- Pull off the door trim panel (1) inwards from the clamps (2).



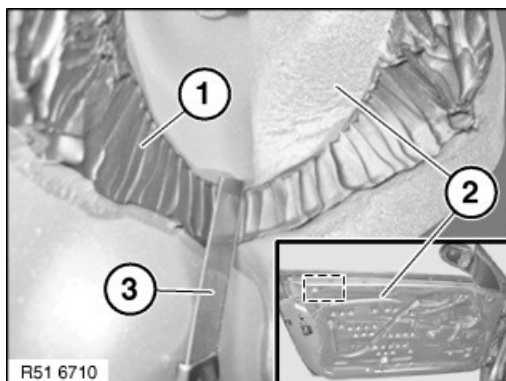
- Detach the Bowden cable (1) for the release lever from the counter support (2).
- Detach the Bowden cable (1) for the release lever on the door lock (3).
- Feed out door wiring harness from all mountings.
- Unlock all plug connections and disconnect.
- Remove door trim panel.

4 – Removing the sound insulation from the front door

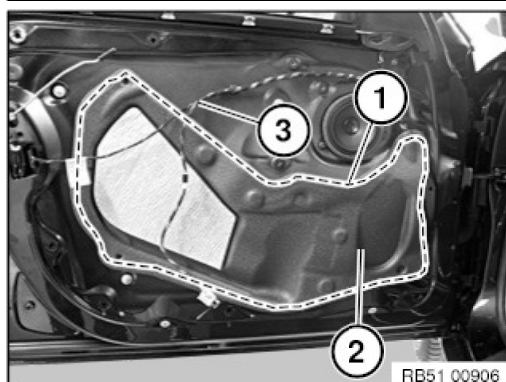


Notes on the sound insulation must be strictly observed for these repair instructions.

For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

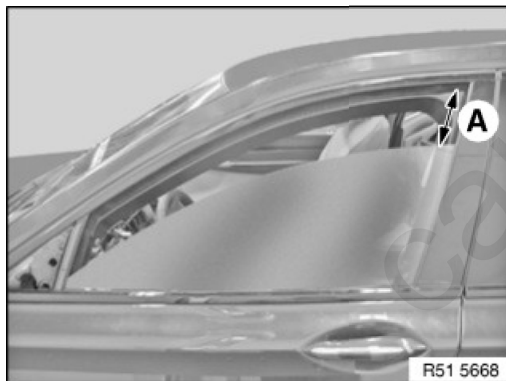


- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area to be loosened.
- Make sure when cutting through the sealing bead (1) not to damage the sound insulation (2) and the cables.

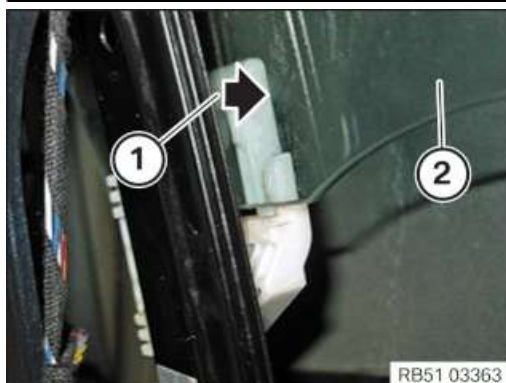


- Observe the position of the sealing bead (1).
- Remove the sound insulation (2) from the cable (3) and put to one side.

5 – Removing power window regulator

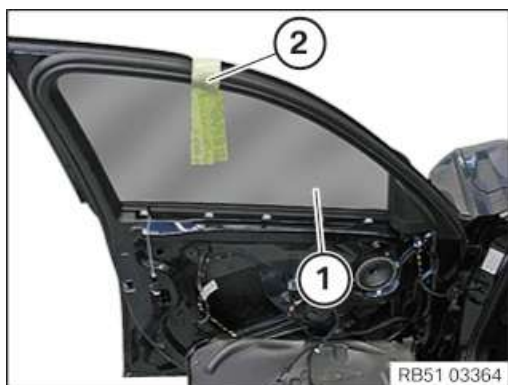


- Lower the door window glass to dimension (A).
- A: 145 mm

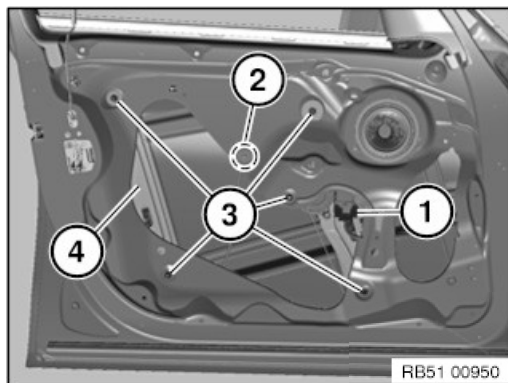


- Carefully unlock the latch mechanism on the sliding block (1) of the power window in the direction of the arrow.
- Slightly press the door window glass (2) upwards and completely disengage the sliding block (1).





- Fully push the door window glass (1) upwards and secure with adhesive tape (2).

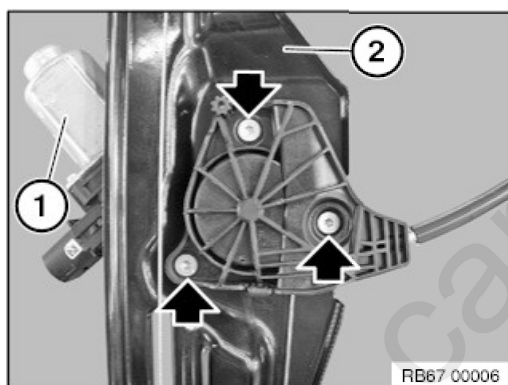


- Unlock plug connection (1) and disconnect.
- Loosen the Bowden cable from the cable clip in this area (2).
- Loosen the nut (3) and remove the power window (4).

MAIN WORK

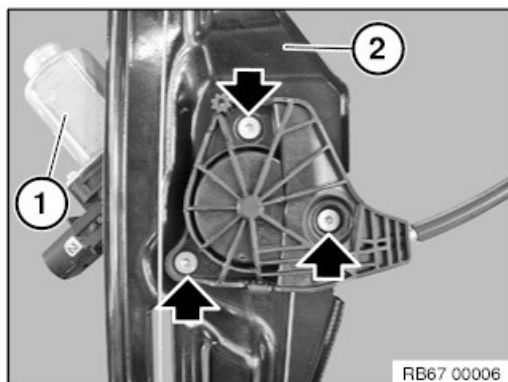
6 – Remount the flat motor for the front power window regulator

► Remove the flat motor for the front power window regulator



- Unscrew the bolts (arrows) and remove the flat motor (1) from the power window regulator (2).

► Install the flat motor for the front power window regulator



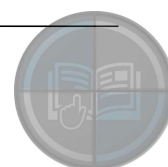
- Insert the flat motor (1) into the power window (2).
- Tighten screws (arrows).

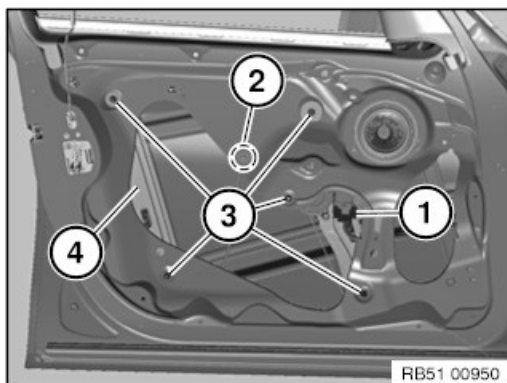
Flat motor on power windows

			6 Nm
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POSTPROCESSES

7 – Installing the power windows



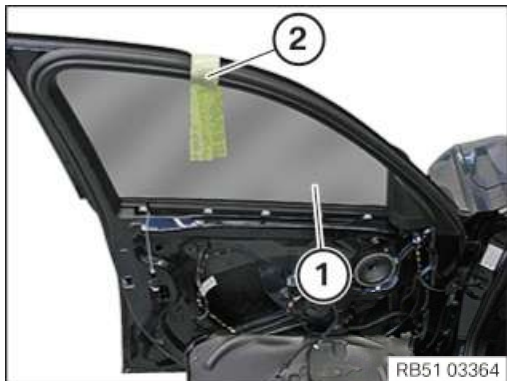


- Guide the power window regulator (4) in and tighten the nuts (3).

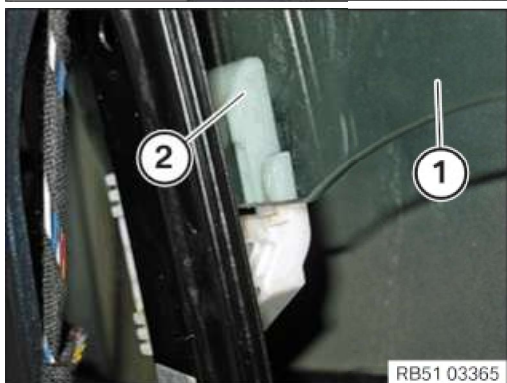
Power window on door

9,5 Nm

- Secure the Bowden cable in the area (2) on cable clip.
- Connect connector (1).



- Remove adhesive tape (2) from the door window glass (1).



- Press door window glass (1) down into latch mechanism on the sliding block (2).

8 – Installing sound insulation on front door



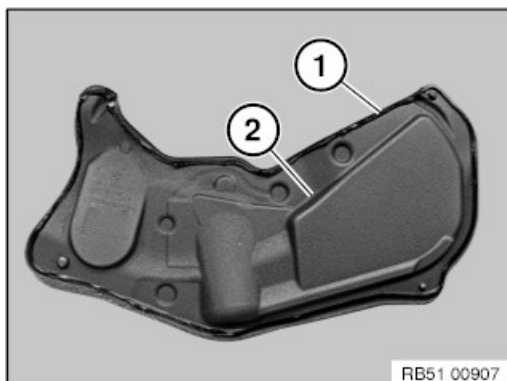
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.

For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

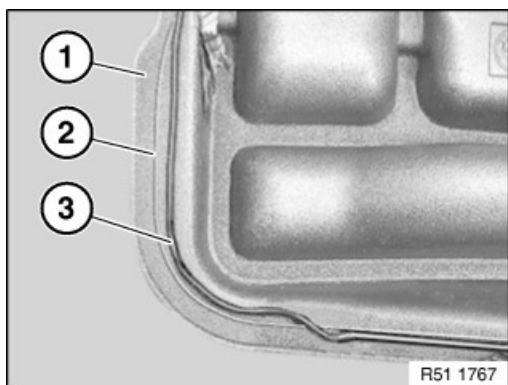
► Reinstalling the sound insulation

- Check the sound insulation (2) for damage and replace if necessary.
- Route the butyl rope with Ø 4 mm (sourcing reference BMW Group Parts) along the previous routing of the butyl rope (1).



► Replacing the sound insulation



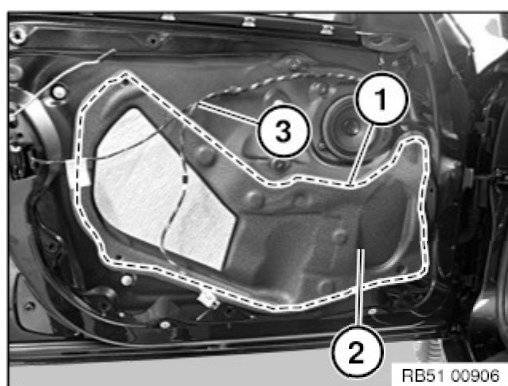


i

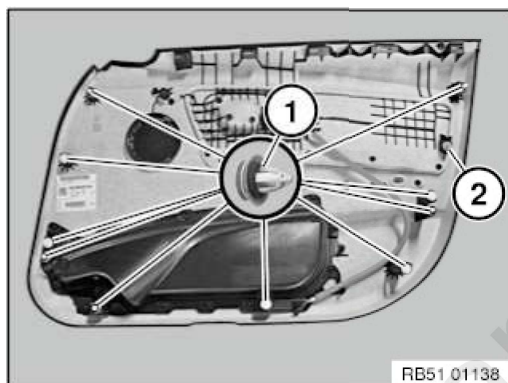
TECHNICAL INFORMATION

Bonding surfaces must be dry and free of dust and grease. After the adhesive area has been cleaned, it must no longer be touched with bare hands.

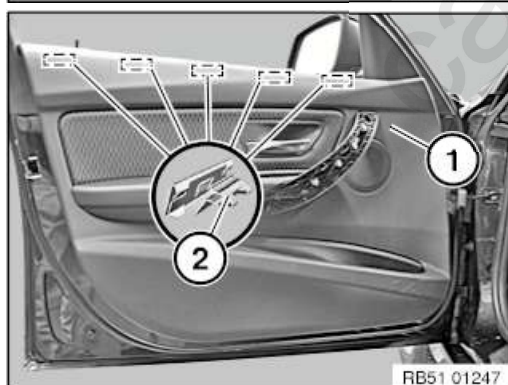
- Remove any butyl rope residue from the door and clean the adhesive area.
- Observe 1 min air drying time.
- Attach the 6 mm butyl rope (3) (sourcing reference: BMW Group Parts) on the mark (2) of the sound insulation (1).
- Heat up butyl rope (1) with hot air blower and press on sound insulation (2) all around with hand roller.
- Lay cable (3).



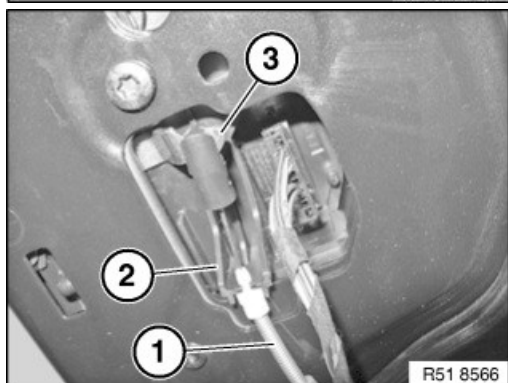
9 – Install the front door trim panel on left or right



- Check the clips (1) and (2) for damage and renew where required. The clips (1) are naturally coloured and have a sealing washer. The clip (2) is beige.

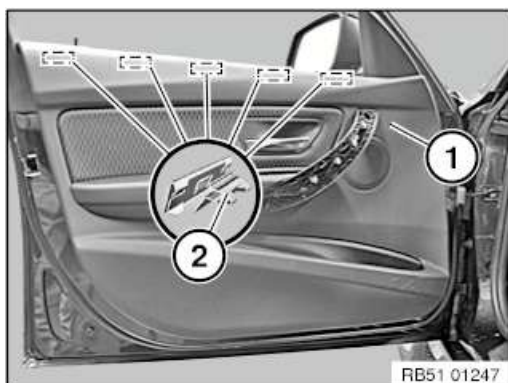


- Check clamps (2) for damage; renew if necessary.

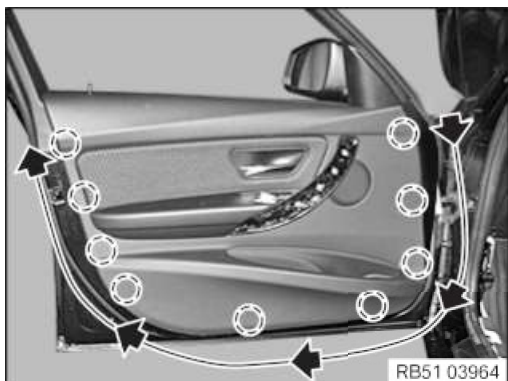


- Attach the Bowden cable (1) for the release lever on the door lock (3).
- Attach the Bowden cable (1) for the release lever on the counter support (2).
- Route and secure the door wiring harness.
- Connect all connectors.
- Position door trim panel.

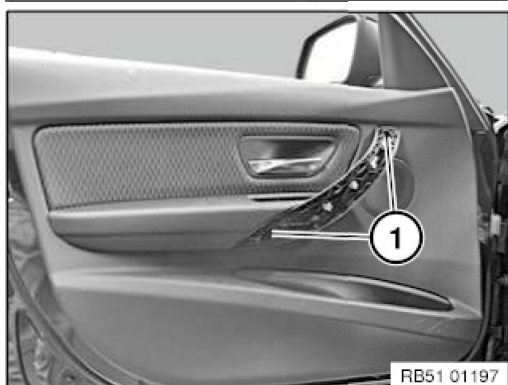




- Clip in the door trim panel (1) into the clamps (2).



- Clip in the door trim panel in the direction of the arrow.



- Tighten the screws (1).

Door trim panel to front door

			2,6 Nm
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10 – Installing switch trim on the front left or right front door trim panel



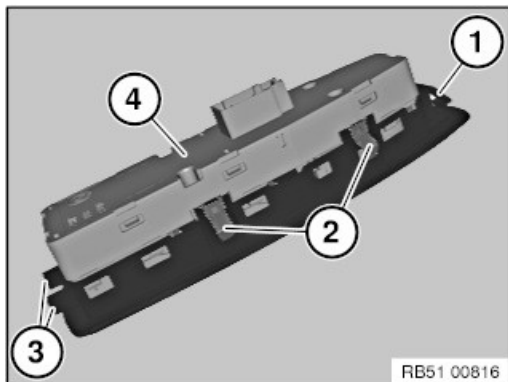
RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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





TECHNICAL INFORMATION

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

- Check latch mechanism (1), retaining clip (2) and guide (3) of the switch unit (4) for damages.



TECHNICAL INFORMATION

The switch trim must be replaced if the latch mechanisms, clamps or guides are damaged.

For more information see: 6131117-F30 Removing and installing/replacing power window switch on the driver's side

- Connect connector.
- Position and clip in switch trim.

11 – Fix front left or right door handle cover

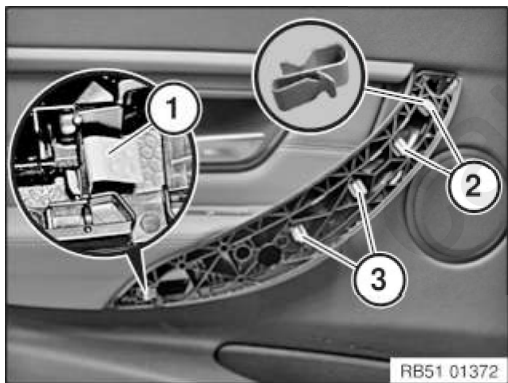


RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



- If clamp (1) is bent up, bend it back by approx. 45°.
- Replace faulty clamps.



TECHNICAL INFORMATION

Disassemble the door handle to replace the clamp.

For more information see: 5142019 Removing and installing or replacing door handle on door trim, rear left or right.

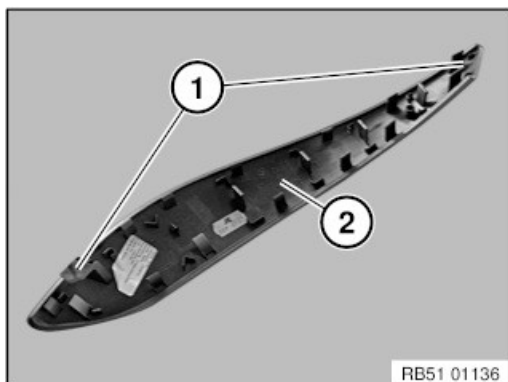
- Make sure clamps (2) and (3) are installed in correct positions.
 - Clamps (2) silver
 - Clamps (3) black

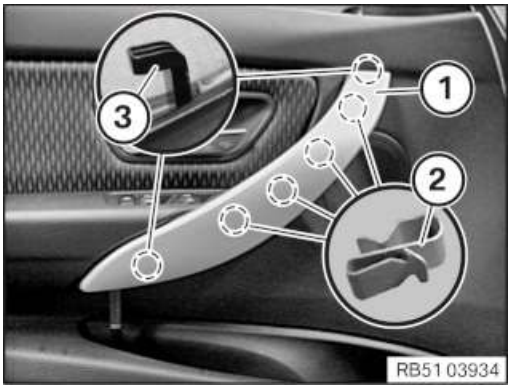


TECHNICAL INFORMATION

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

- Check retaining hooks (1) and latch mechanisms on cover (2) for damage, replace if necessary.





- Feed in cover (1) on top retaining hook (3).
- Feed in cover (1) on bottom retaining hook (3).
- Clip in cover (1) on door trim panel with clamps (2).

12 – Functional check of the power window

Check

- Run a functional check of the power window.

Result

» Malfunctions, e.g. no one-touch function available, does not open or no convenience function available.

Measure

- Initialise power window.

67 62 ... Notes on initializing power windows

67 62 ... Notes on initializing power windows

Additional Information

Overview of Tightening Torques

Flat motor on power windows

Used in step 6

			6 Nm
--	--	--	------

Power window on door

Used in step 7

			9,5 Nm
--	--	--	--------

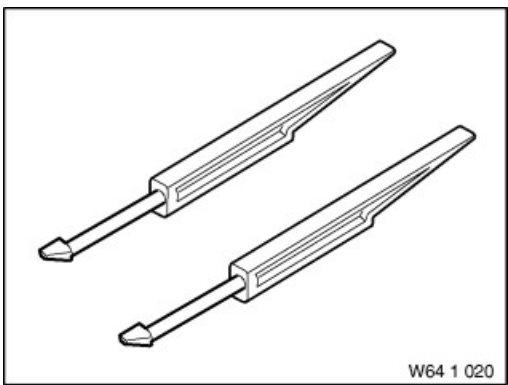
Door trim panel to front door

Used in step 9

			2,6 Nm
--	--	--	--------

Overview of Special Tools

0 493 681 (64 1 020) Hook



Common

Used in step 1

Usage	(release hook) For releasing and removing fresh air grille. For removing various covers.
Included in the tool or work	
Storage location	C2
Replaced by	
In connection with	
SI-Number	01 15 99 (483)



0 496 569 (00 9 325) Wedge



Common

Used in step 3

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

51 48 ... Notes for bonding sound insulation (SI), doors	48
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Repair instructions

Used in step

61 31 117 Removing and installing/replacing power window switch (driver's side)	10
51 41 019 Removing and installing or replacing door handle on door trim, front left or right	11
67 62 ... Notes on initializing power windows	12
67 62 ... Notes on initializing power windows	12

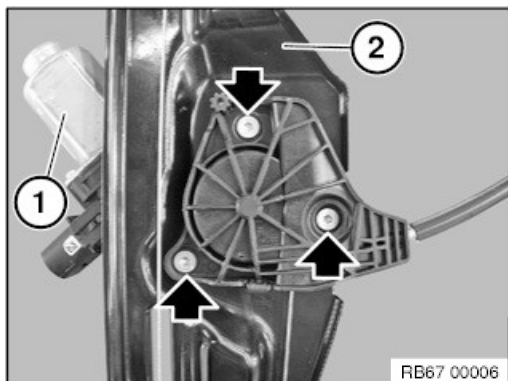


67 62 000 Removing and installing or replacing flat motor for front left or right power window regulator



Necessary preliminary tasks:

- Remove front power window regulator



Release screws and detach flat motor (1) from power window regulator (2).



After installation:

An initialisation must be carried out in order to activate anti-trap mechanism.

Read and comply with notes on initialisation of power window regulator.

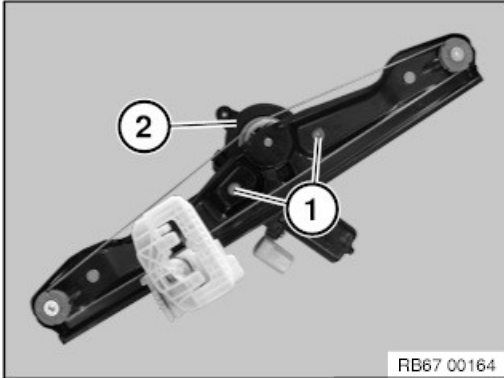


67 62 020 Removing and installing/replacing flat motor for rear left or right power window regulator



Necessary preliminary tasks:

- Remove rear power window regulator



Release screw connections (1).

Remove flat motor (2) from power window regulator.

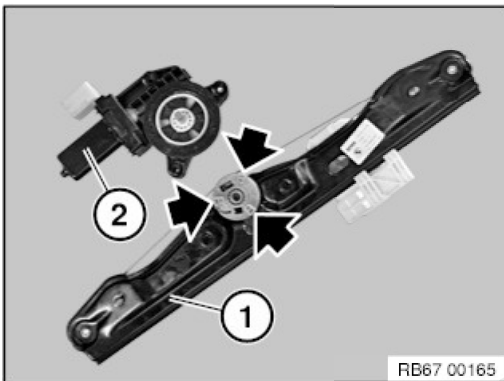
Cable must not come loose from power window.

Installation note:

Simultaneously tighten both screw connections (1).

The shaft of the flat motor (2) must be pulled into the holder of the power window regulator under slight tension.

Tightening torque 51 35 1AZ.



Flat motor (2) must engage exactly at the marked points of the power window regulator (1). **Important!**

Ensure that the flat motor (2) is assembled without tension.



After installation:

An initialisation must be carried out in order to activate anti-trap mechanism.

Read and comply with notes on initialisation of power window regulator.



67 62 020 Removing and installing/replacing flat motor for rear left or right power window regulator \PREMIUM



TECHNICAL INFORMATION

Notes on power window initialisation must be strictly observed for these repair instructions.

Additional information, see 67 62 ... Information on power window initialisation.



NOTICE

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

PRELIMINARY WORK

1 – Removing the rocker switch for rear side window operation

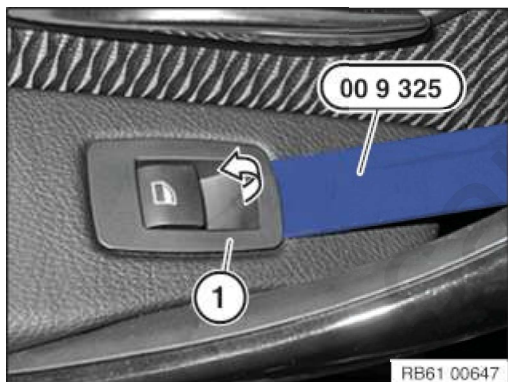


RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



- Lever the rocker switch (1) for the rear side window operation out of the armrest [0 496 569 \(00 9 325\)](#) in the direction of the arrow using the special tool.
- Disconnect the associated plug connection and remove the rocker switch (1) for the rear side window operation.

2 – Removing the cover on the rear left or right door handle



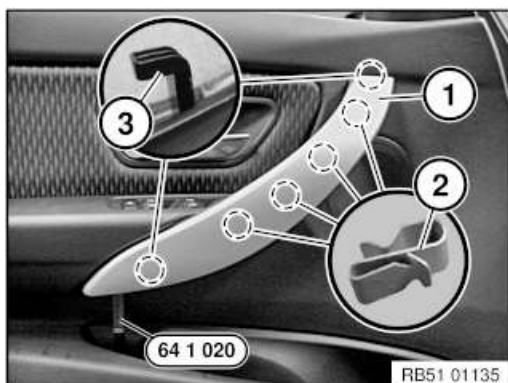
RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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





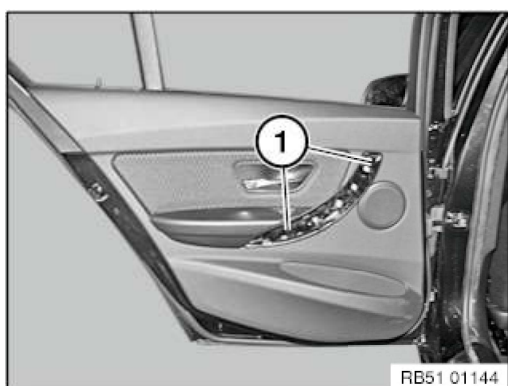
- Unclip cover (1) starting from below using special tool [0 493 681 \(64 1 020\)](#) from clamps (2) and latch mechanisms.
- Remove cover (1) from tail hook (3).

3 – Removing rear door trim panel on the left or right



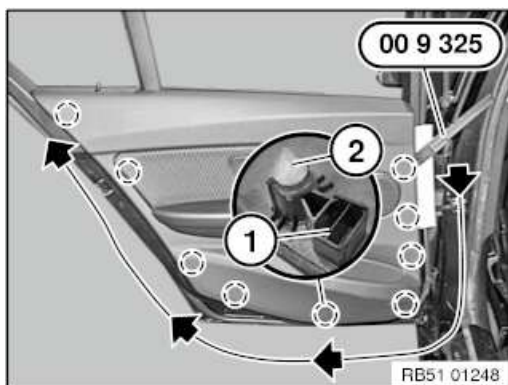
NOTICE

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



- Loosen screws (1).





RISK OF DAMAGE

Bending of plastic parts.

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

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

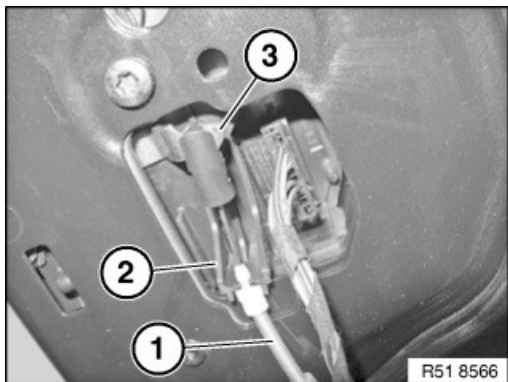
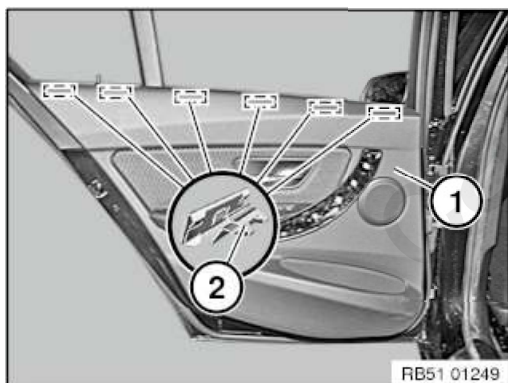


RISK OF DAMAGE

Damage to the folding compartments.

If the folding compartment is pulled on, there is a risk of the folding compartment being ripped out or the door trim panel being damaged.

- Do not pull on the folding compartment.
- Insert special tool [0 496 569 \(00 9 325\)](#) around the B-pillar at the top, between the door trim panel and the rear door.
- Lever door trim panel inward mildly.
- Grab the door trim panel with your free hand.
- Directly position special tool [0 496 569 \(00 9 325\)](#) on the reinforcement (1) of the first clips (2).
- Release the door trim panel by levering against the reinforcement (1) of the first clip (2).
- Release the remaining clips (2) in direction of arrow, pulling the door trim panel slightly inwards with your free hand.
- Pull off the door trim panel (1) inwards from the clamps (2).



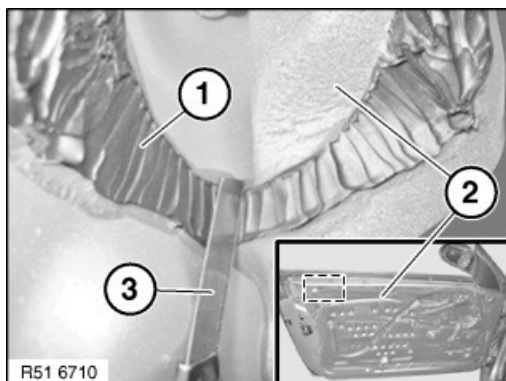
- Detach the Bowden cable (1) for the release lever on the counter support (2).
- Detach the Bowden cable (1) for the release lever on the door lock (3).
- Feed out door wiring harness from all brackets.
- Unlock all plug connections and disconnect.
- Remove door trim panel.

4 – Removing the sound insulation on the rear door

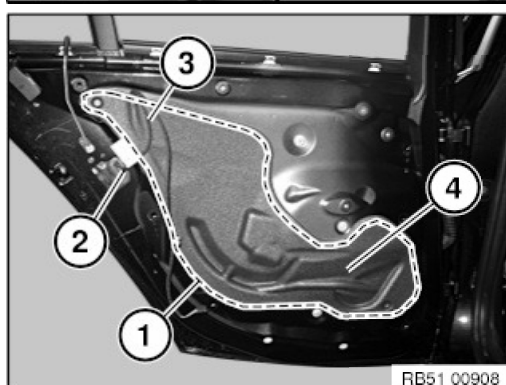


Notes on the sound insulation must be strictly observed for these repair instructions.

For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

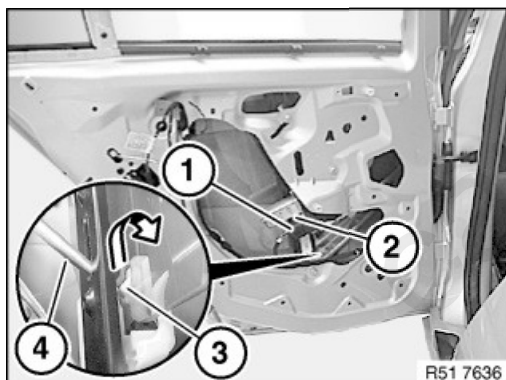


- Use a suitable, sharp cutting tool (3) to cut through the sealing bead (1) of the sound insulation (2) in the corresponding area.
- Make sure when cutting through the sealing bead (1) not to damage the sound insulation (2) and the cables.



- Observe the position of the sealing bead (1).
- Disconnect the plug connection (2) and remove the lines (3) from the sound insulation (4).

5 – Remove rear power window regulator

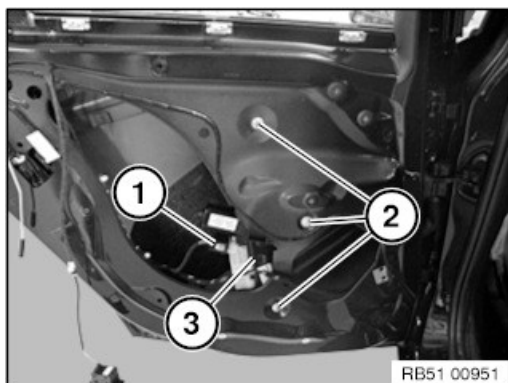


- Lower the door window glass until the stop (3) can be operated via the recess on the guide rail.
- Disconnect the plug connection (1) on the flat motor (2).
- Lever out the stop (3) in the direction of the arrow using a screwdriver (4).



- Fully push the door window glass (1) upwards and secure with adhesive tape .

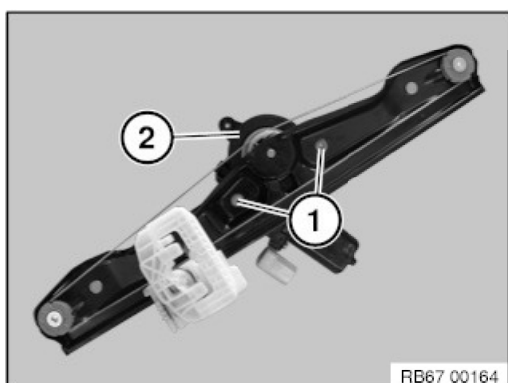




- Disconnect plug connection (1).
- Loosen the nut (2) and remove the power window (3).

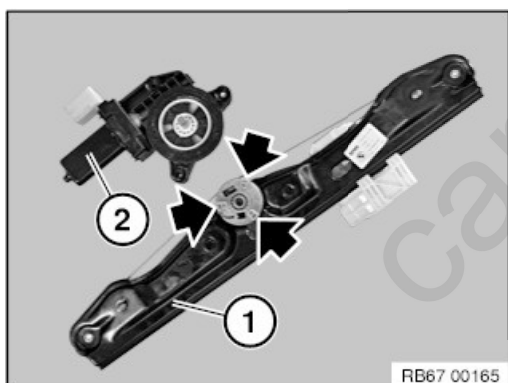
MAIN WORK

6 – Remounting the flat motor for the rear power window



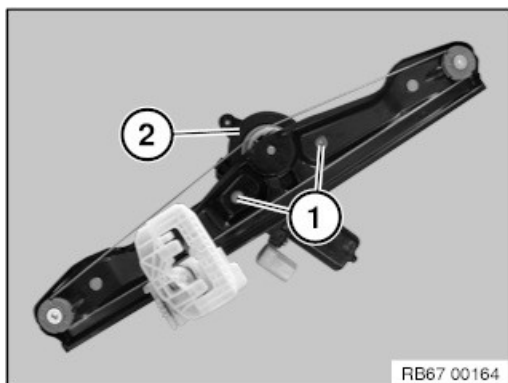
► Removing flat motor for rear power window

- Loosen screws (1).
 - Remove flat motor (2) from the power window regulator.
- Cable must not come loose from power window.



► Installing the flat motor for the rear power windows

- Engage the flat motor (2) in the highlighted areas (arrows) on the power window regulator (1) without applying any tension.



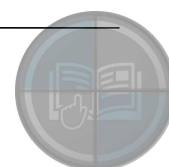
- Slightly tighten the flat motor (2).
- Evenly tighten the screws (1).

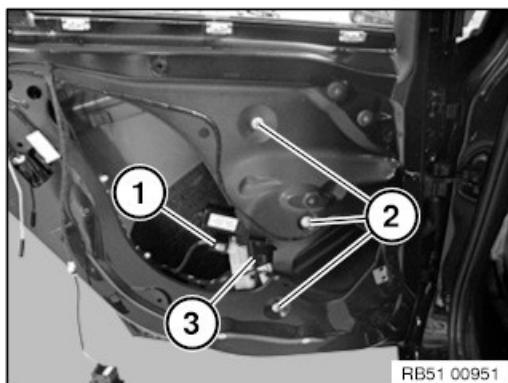
Flat motor to rear power window

			9,5 Nm
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POSTPROCESSES

7 – Installing rear power window regulator



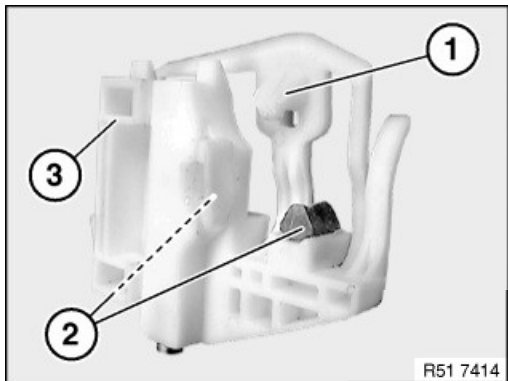


- Insert the power window regulator (3) and tighten the nuts (2).

Power window to rear door

9,5 Nm

- Connect connector (1).



- Check latch mechanism (1) and the stop pad (2) on the window guide (3) for damage and replace if necessary.
- Press door window glass down into latch mechanism (1) on the window guide (3).

8 – Installing the sound insulation on the rear door



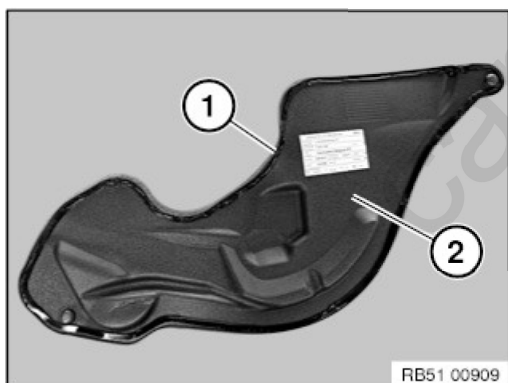
TECHNICAL INFORMATION

Notes on the sound insulation must be strictly observed for these repair instructions.

For more information see: 51 48 ... Notes on bonding the sound insulation (SI) in doors

► Reinstalling the sound insulation (rear door)

- Check the sound insulation (2) for damage and replace if necessary.
- Route the butyl rope with Ø 4 mm (sourcing reference BMW Group Parts) along the previous routing of the butyl rope (1).



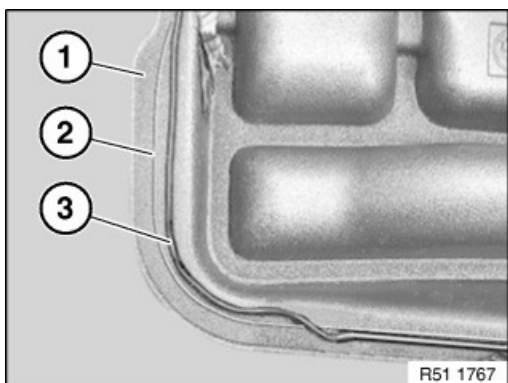
► Replacing the sound insulation

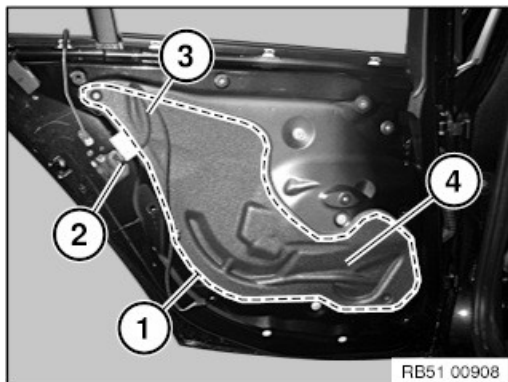


TECHNICAL INFORMATION

Bonding surfaces must be dry and free of dust and grease. After the adhesive area has been cleaned, it must no longer be touched with bare hands.

- Remove any butyl rope residue from the door and clean the adhesive area.
- Observe 1 min air drying time.
- Attach the 6 mm butyl rope (3) (sourcing reference: BMW Group Parts) on the mark (2) of the sound insulation (1).





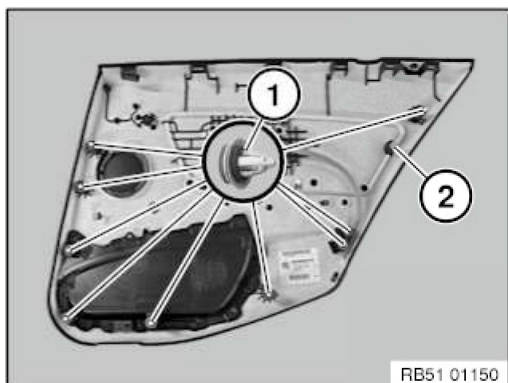
- Heat up the butyl rope (1) with the hot air blower and press on the sound insulation (4) all around using a hand roller.
- Route lines (3) and connect the connector (2).

9 – Installing the left or right rear door trim panel

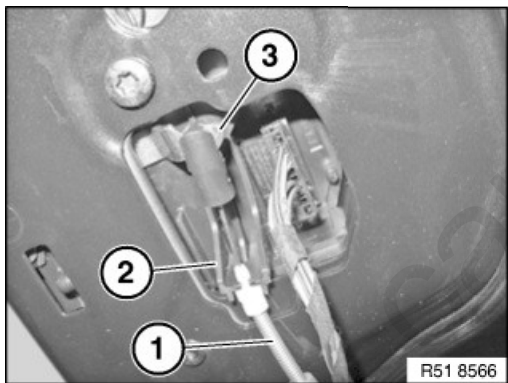


NOTICE

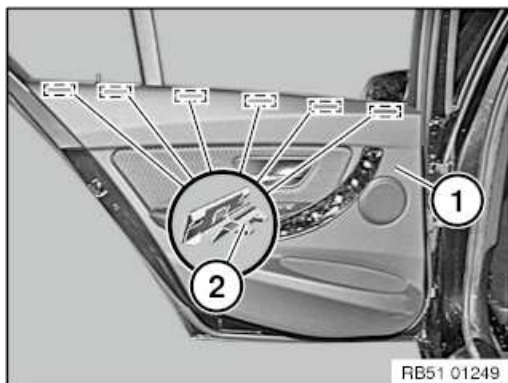
Description is for left component only. Procedure on the right side is identical.



- Renew faulty clips (1) and (2).
- Renew the faulty clips (1) (natural) with the sealing washer.
- Renew the faulty clips (2) (beige).

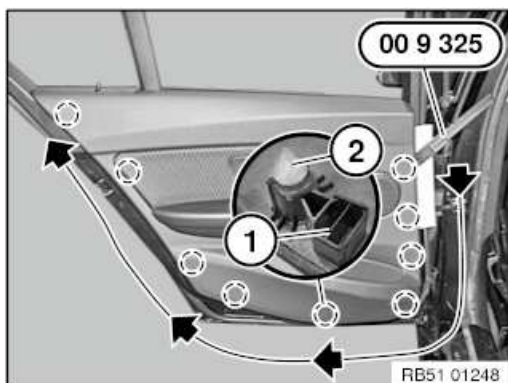


- Attach the Bowden cable (1) for the release lever on the door lock (3).
- Attach the Bowden cable (1) for the release lever on the counter support (2).
- Feed in door wiring harness in all mountings.
- Connect all the connectors and position the door trim panel.

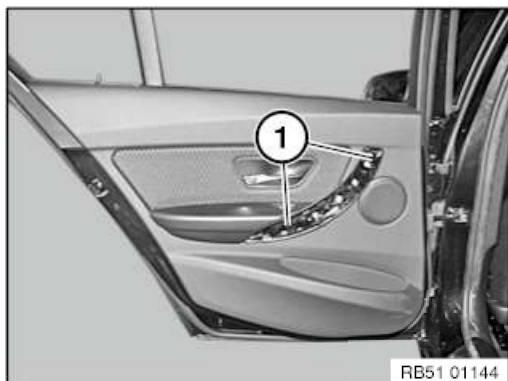


- Renew defective clamps (2).
- Clip in the door trim panel (1) into the clamps (2).





- Clip in the door trim panel.



- Tighten the screws (1).

Door trim panel to front door

			2,6 Nm
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10 – Installing the cover on the rear left or right door handle

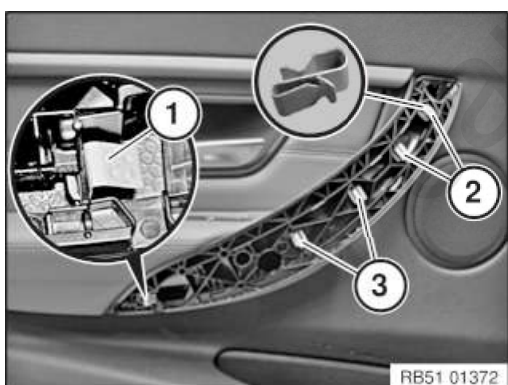


RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



- If the clamp (1) has been bent upwards: Bend the clamp (1) back to approximately 45°.
- Replace faulty clamps.



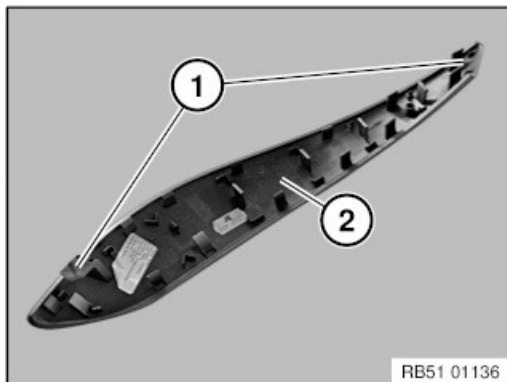
TECHNICAL INFORMATION

Disassemble the door handle to replace the clamp.

For more information see: 5142019 Removing and installing or replacing door handle on door trim, rear left or right.

- Make sure clamps (2) and (3) are installed in correct positions.
 - Clamps (2) silver
 - Clamps (3) black

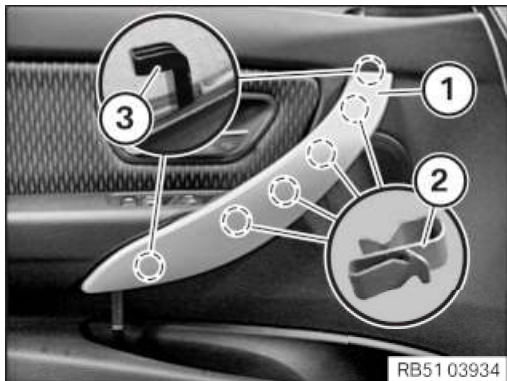




TECHNICAL INFORMATION

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

- Check retaining hooks (1) and latch mechanisms on cover (2) for damage, replace if necessary.
- Feed in cover (1) on top retaining hook (3).
- Feed in cover (1) on bottom retaining hook (3).
- Clip in cover (1) on door trim panel with clamps (2).



11 – Installing the rocker switch for rear side window operation

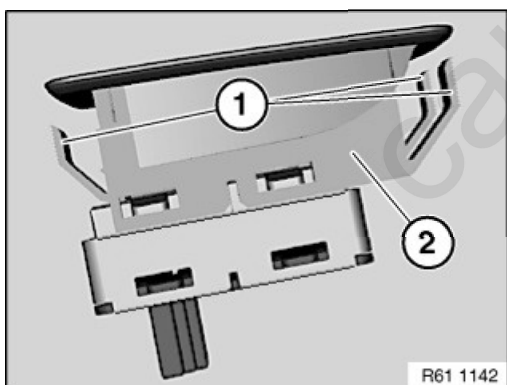


RISK OF DAMAGE

Scratches.

Tools and sharp-edged components can cause scratches.

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



TECHNICAL INFORMATION

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

- Check the retaining hook (1) of the rocker switch (2) for side window operation for damage; if necessary, renew the rocker switch and/or the switch trim.
- Connect connector.
- Clip in the rocker switch (2) for side window operation into the armrest.

12 – Functional check of the power window

Check

- Run a functional check of the power window.

Result

» Malfunctions, e.g. no one-touch function available, does not open or no convenience function available.

Measure

- Initialise power window.

67 62 ... Notes on initializing power windows

67 62 ... Notes on initializing power windows



Additional Information

Overview of Tightening Torques

Flat motor to rear power window	Used in step	6
		9,5 Nm
Power window to rear door	Used in step	7
		9,5 Nm
Door trim panel to front door	Used in step	9
		2,6 Nm

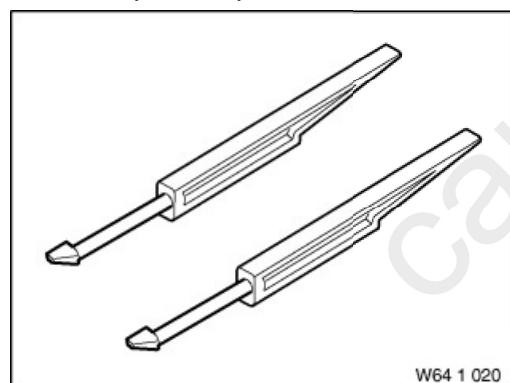
Overview of Special Tools

0 496 569 (00 9 325) Wedge



Common	Used in step	13
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)	

0 493 681 (64 1 020) Hook



Common	Used in step	2
Usage	(release hook) For releasing and removing fresh air grille. For removing various covers.	
Included in the tool or work		
Storage location	C2	
Replaced by		
In connection with		
SI-Number	01 15 99 (483)	

Links

General repair instructions	Used in step
51 48 ... Notes for bonding sound insulation (SI), doors	48
Repair instructions	Used in step
51 42 019 Removing and installing or replacing door handle on door trim, rear left or right	10
67 62 ... Notes on initializing power windows	12
67 62 ... Notes on initializing power windows	12

Parts



Parts required

Designation

Used in step

3 mm and 6 mm butyl rope

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*Note:*

The wiper motor can only be replaced in conjunction with the wiper console.

Procedure is described in the document "Removing and installing complete wiper console".

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