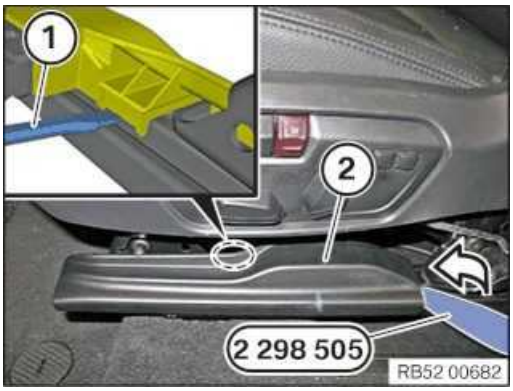
52 13 ... Remove and install/replace trim on left or right front seat

Special tools required:

- 2 298 505

Removal:

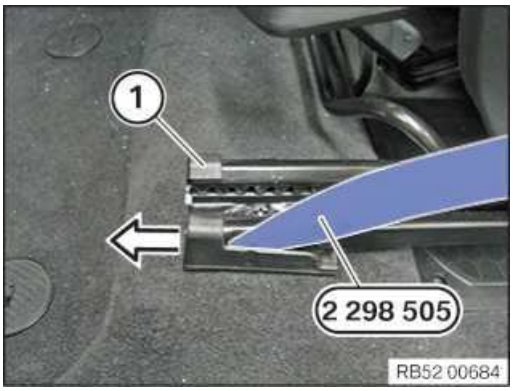


Side trim (for electric seat):

Slide screwdriver (1) from rear into marked area under the trim (2).

Raise trim (2) slightly using screwdriver (1).

Position special tool 2 298 505 at rear onto trim (1) and unclip forwards.

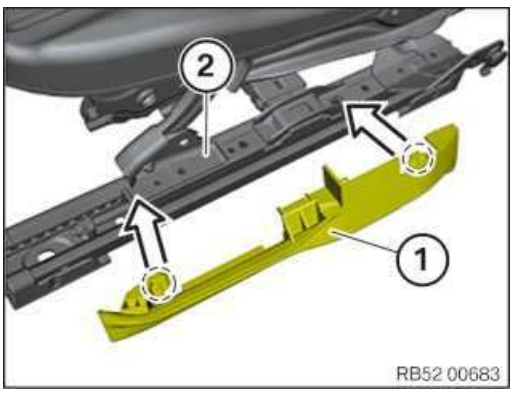


Seat rail trim:

Insert special tool 2 298 505 at side into trim (1).

Unclip cover (1) towards front.

Installation:

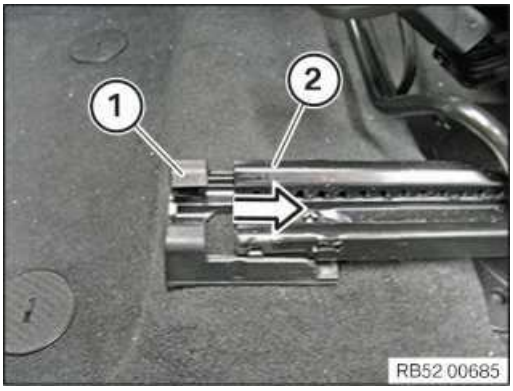


Side trim (for electric seat):

Position trim (1) from front with guides onto seat mechanism (2).

Clip trim (1) to rear into seat mechanism (2).

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Seat rail trim:

Slide trim (1) from front onto seat rail (2).

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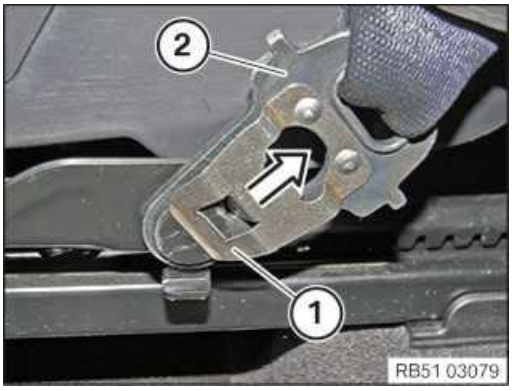
52 13 001 Removing and installing driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

MAIN WORK

2 – 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.

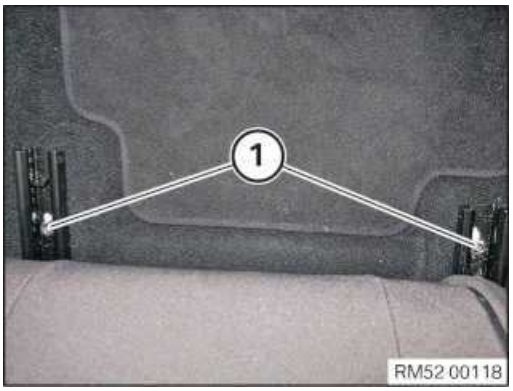
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



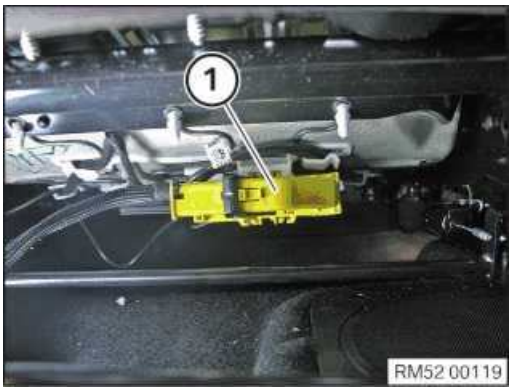
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

▸ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

3 – Install front seat

TECHNICAL INFORMATION

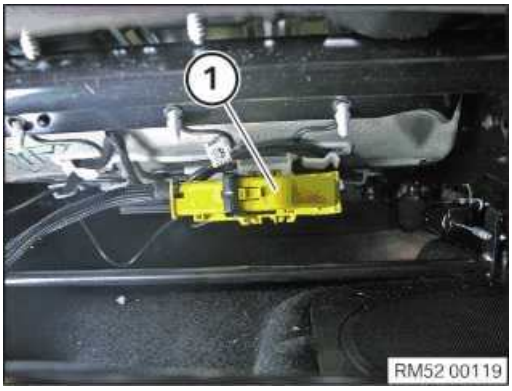
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.

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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.

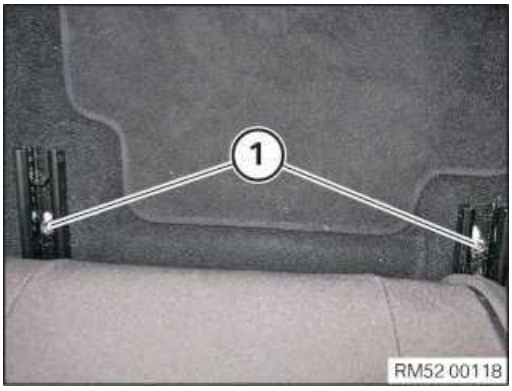
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**

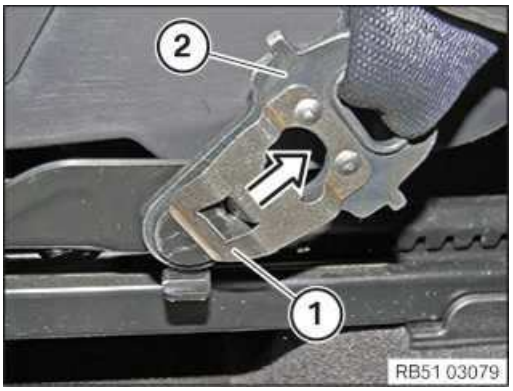
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- See additional information.

POSTPROCESSES

4 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

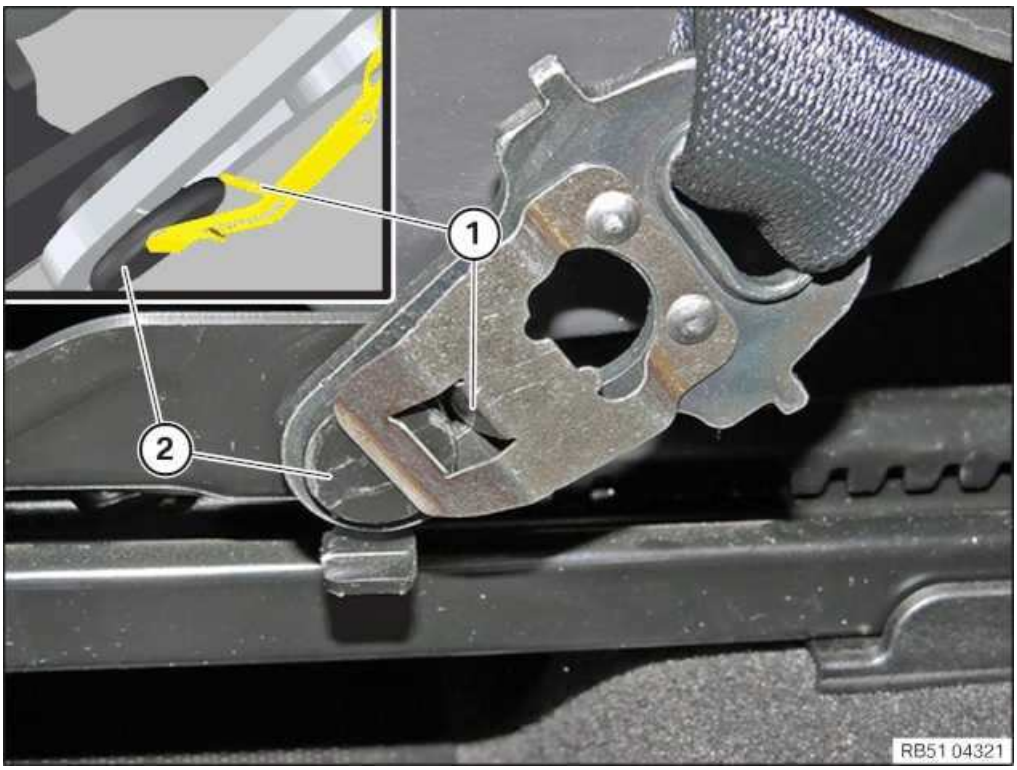
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body			Used in step 3
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid



Common	Used in step 2 3
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

Links

General repair instructions	Used in step

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72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 3
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 3
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
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61 20 900 Disconnecting and connecting battery earth lead	2 3

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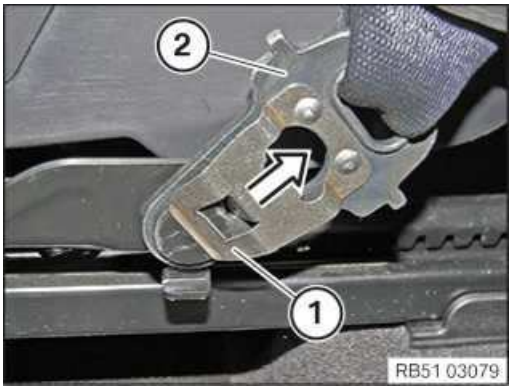
52 13 002 Removing and installing front passenger seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

MAIN WORK

2 – 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.

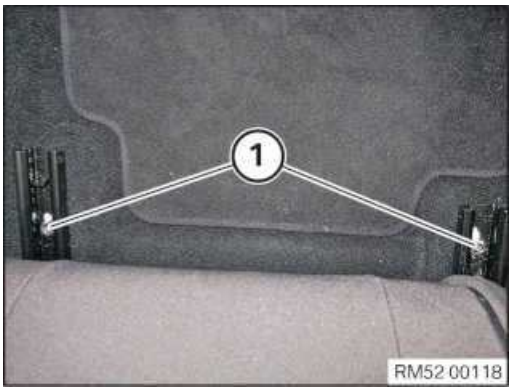
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



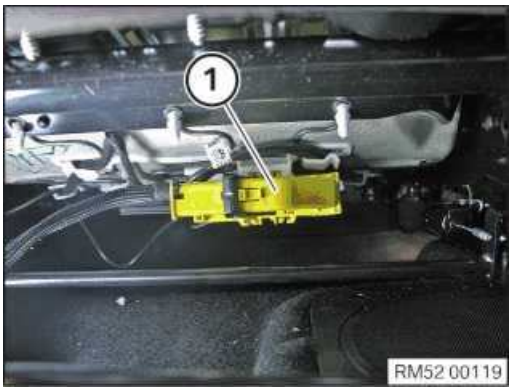
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

▸ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

3 – Install front seat

TECHNICAL INFORMATION

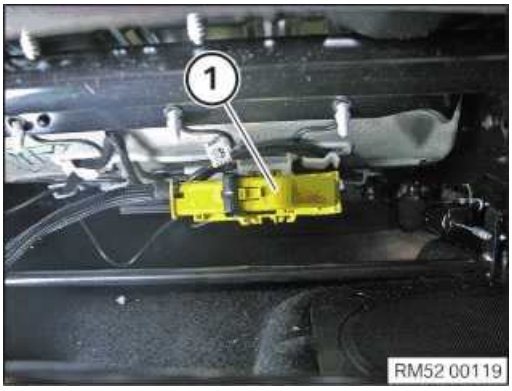
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.

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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.

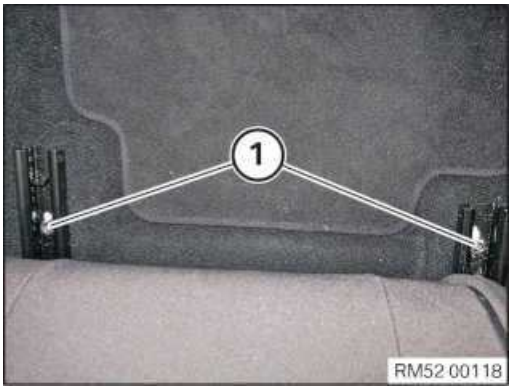
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**

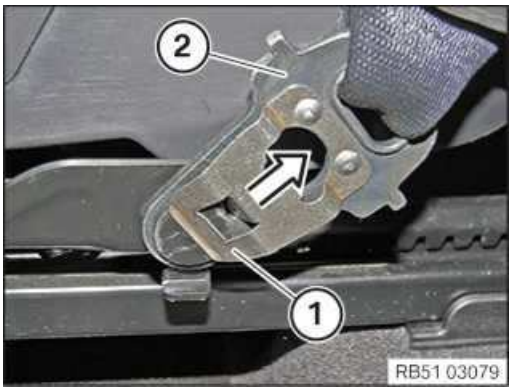
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- See additional information.

POSTPROCESSES

4 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

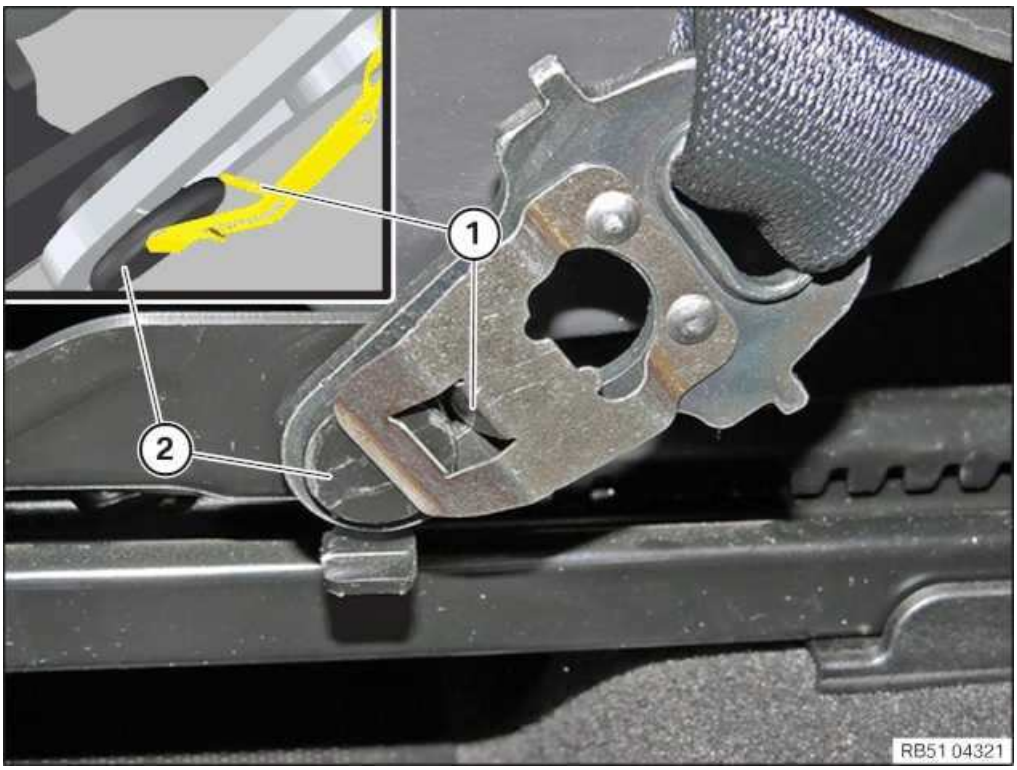
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body			Used in step 3
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid



Common	Used in step 2 3
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

Links

General repair instructions	Used in step

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72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
61 20 900 Disconnecting and connecting battery earth lead	2 3
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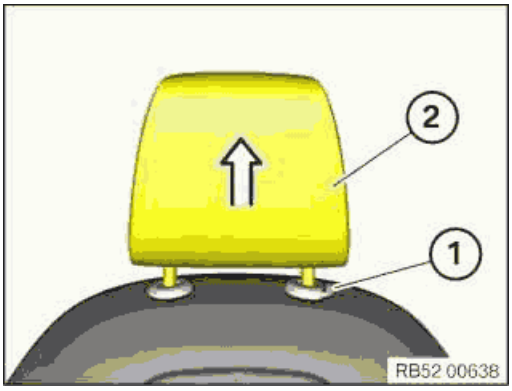
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52 13 390 Removing and installing or replacing front left or right head restraint

NOTICE

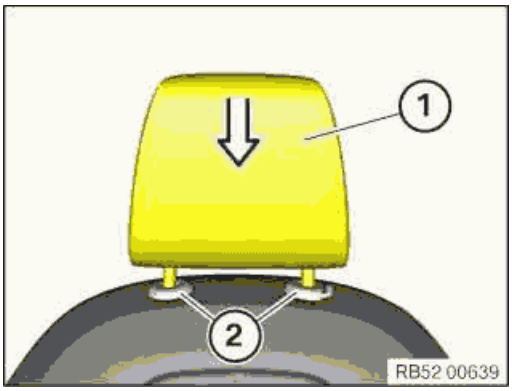
Description is for left component only. Procedure on the right side is identical.

1 – Remove front head restraint



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

2 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

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52 13 041 Removing and installing or replacing inner cover on left or right front seat

NOTICE

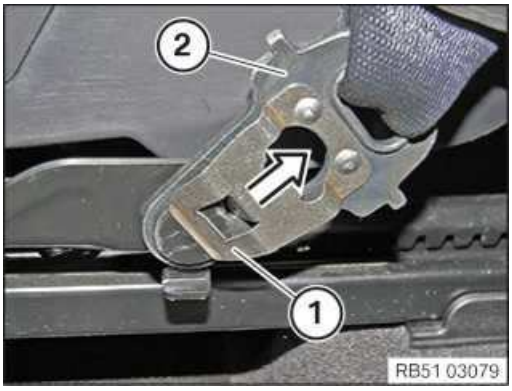
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

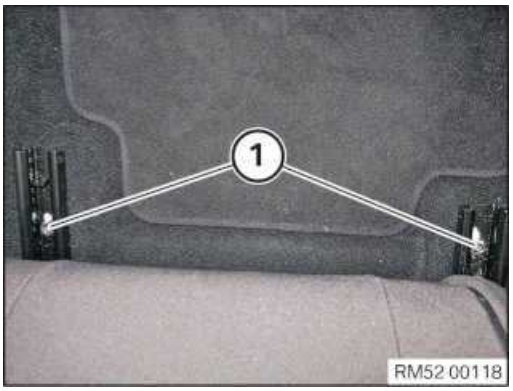
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



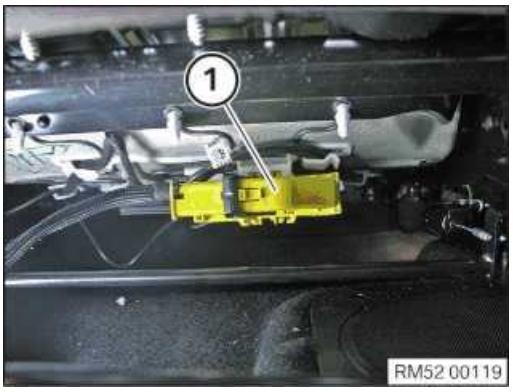
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

▶ **Mounting the front seat on the universal seat mount**



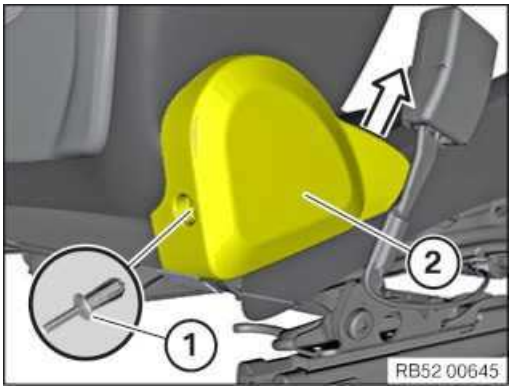
- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

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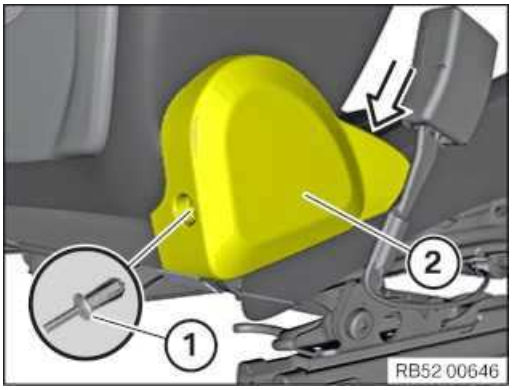
MAIN WORK

3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

POSTPROCESSES

5 – Install front seat

TECHNICAL INFORMATION

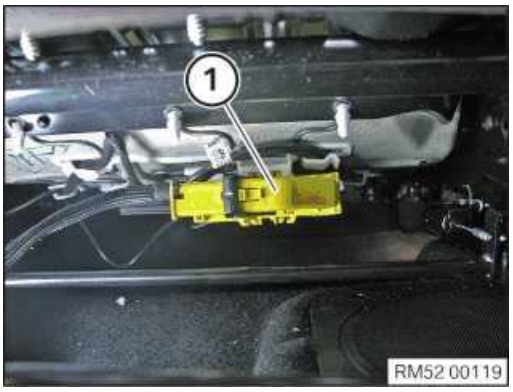
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

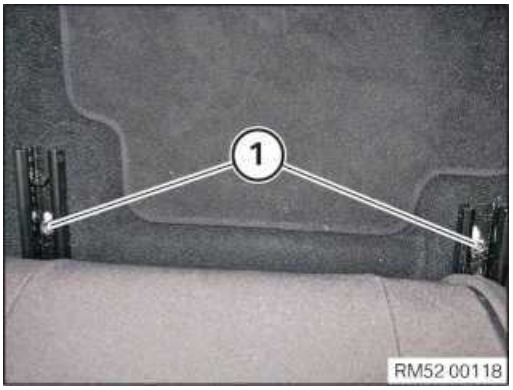
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

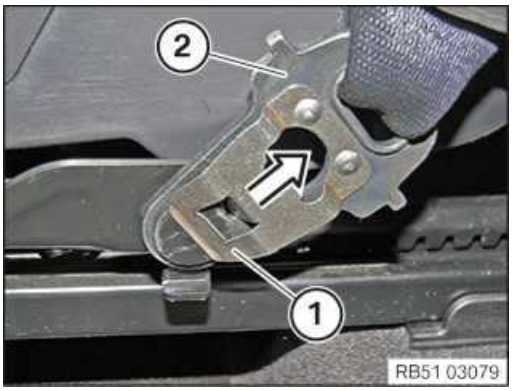
▸ **Disconnecting all battery earth leads**

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- See additional information.

6 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

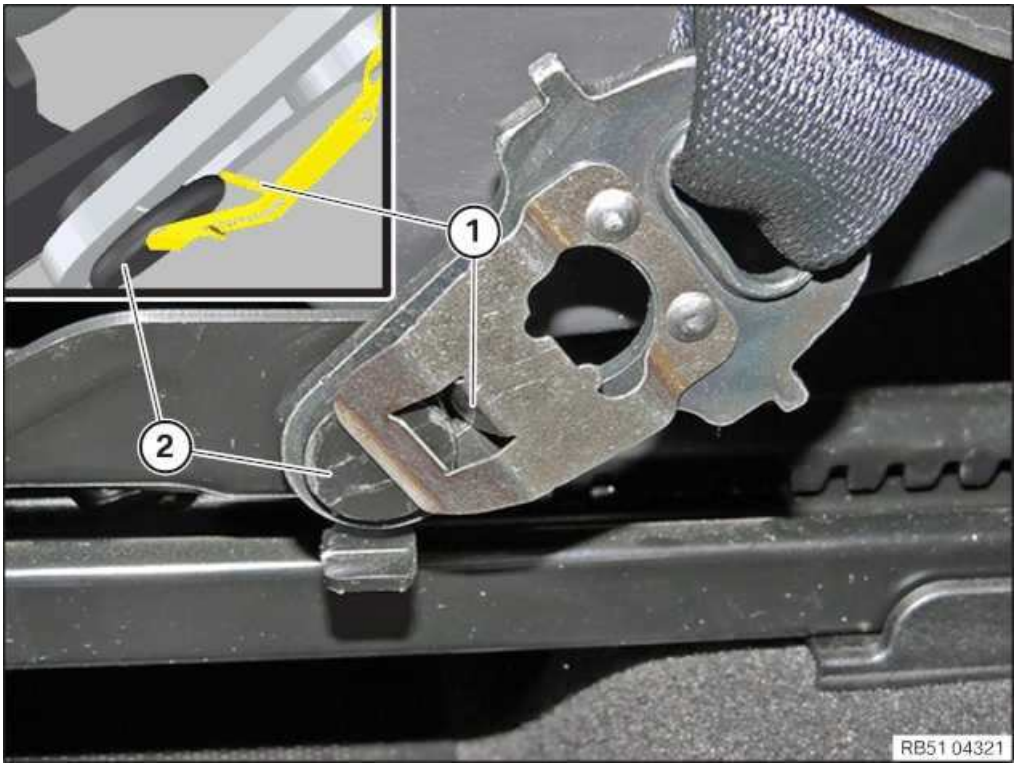
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body			Used in step 5
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid



Common	Used in step 2 5
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

Links

General repair instructions	Used in step

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72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 5
61 20 900 Disconnecting and connecting battery earth lead	2 5
61 20 900 Disconnecting and connecting battery earth lead	2 5
61 20 900 Disconnecting and connecting battery earth lead	2 5
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61 20 900 Disconnecting and connecting battery earth lead	2 5
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 5
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 5
61 20 900 Disconnecting and connecting battery earth lead	2 5
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52 13 198 Removing and installing or replacing rear panel on left or right front seat backrest

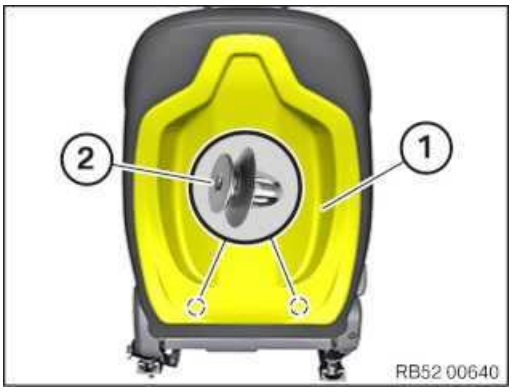
NOTICE

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

1 – Remove rear panel on front seat backrest



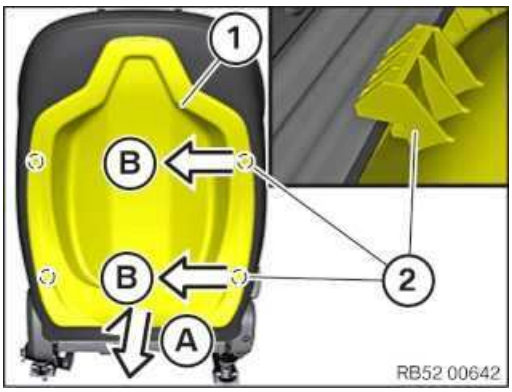
- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.



- Release the rear panel (1) toward the rear from the clips (2).



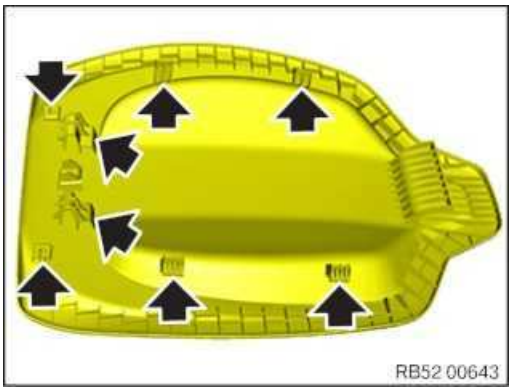
- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

2 – Install the rear panel on the front seat backrest

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- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).



- Clip in the rear panel (1) at the clips (2).



- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

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52 13 ... Removing and installing/exchanging guide for left or right front seat head restraint

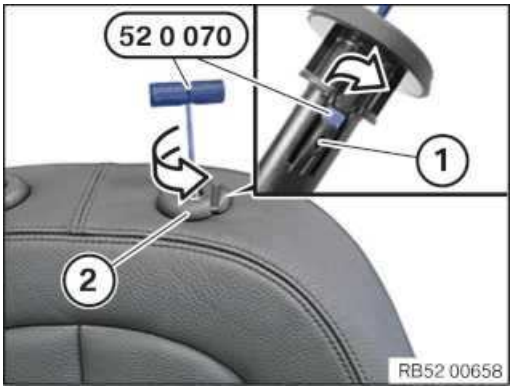
Special tools required:

- 52 0 070

Necessary preliminary tasks:

- Remove head restraint

Removal:

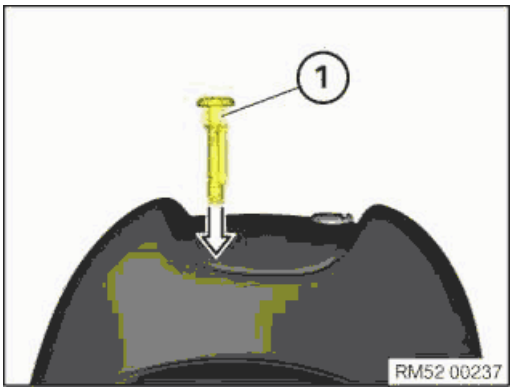


Insert special tool 52 0 070 into guide hole of sleeve (2) up to upper area of retaining lug.

Feed in unlocking tab of special tool behind the latch mechanism (1).

Turn tool to release sleeve (2) and pull out by lifting upwards.

Installation:



Insert guide (1) from above and engage.

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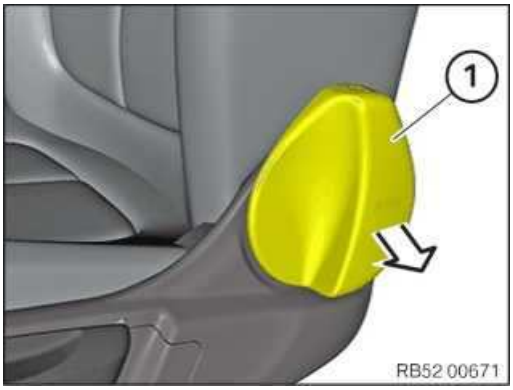
Required reworking:

- Install head restraint

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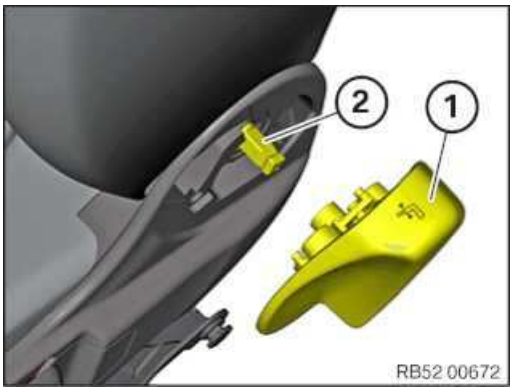
52 13 031 Removing and installing/replacing backrest adjustment lever on left or right front seat

Removal:



Unclip lever (1) outwards.

Installation:



Connect lever (1) to shaft (2) and latch into place.

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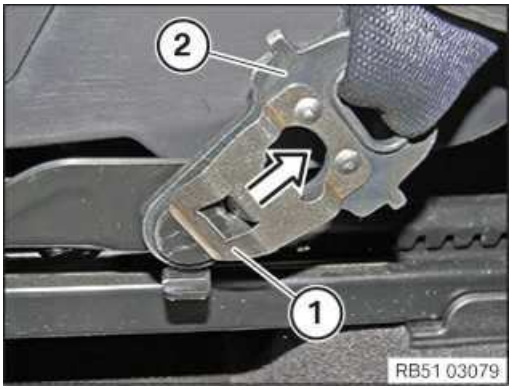
52 13 530 Removing and installing/replacing backrest frame on left or right front seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

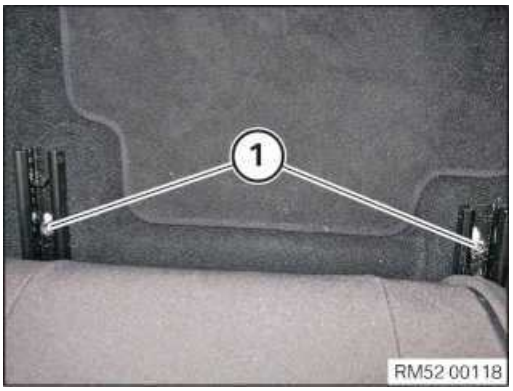
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



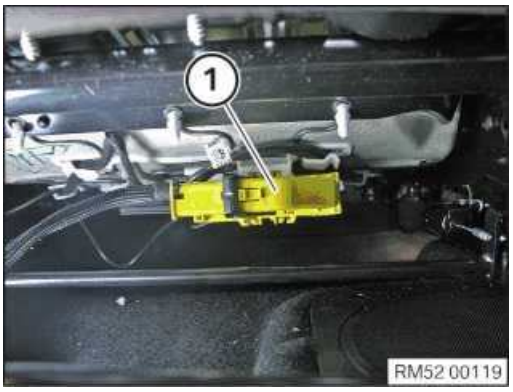
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

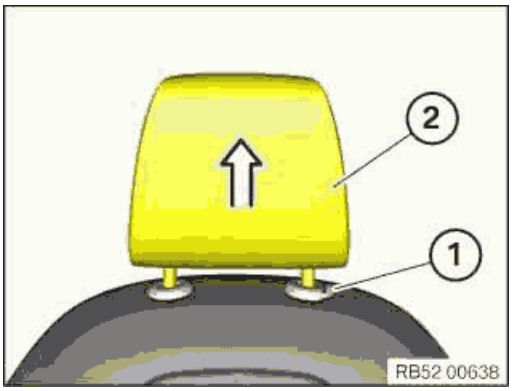
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

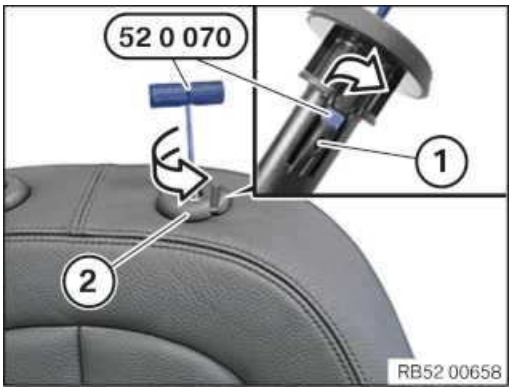
3 – Remove front head restraint



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

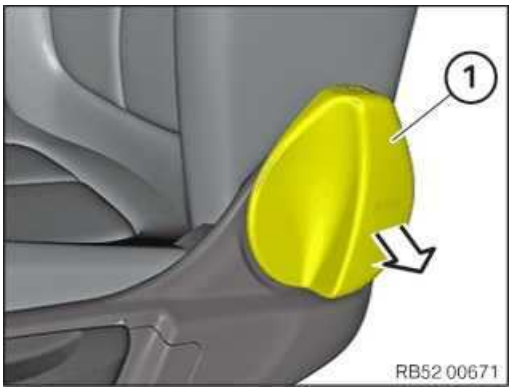
4 – Removing the guide sleeve for the front head restraint

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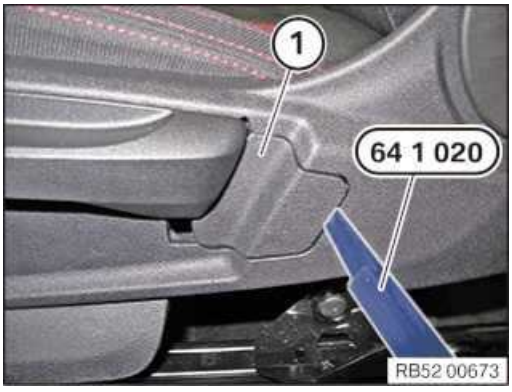
- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing lever for backrest adjustment on front seat

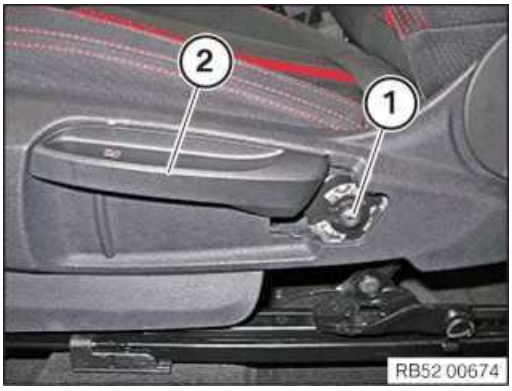


- Unclip the lever (1) outwards.

6 – Remove lever for seat height adjustment on front seat



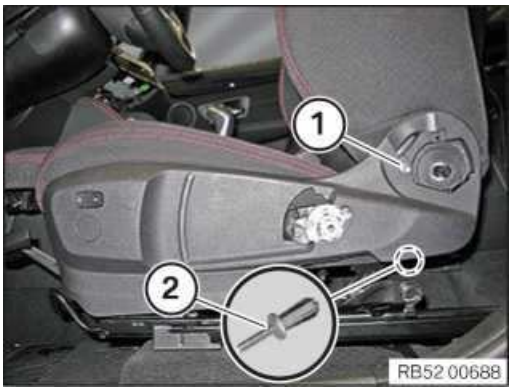
- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.



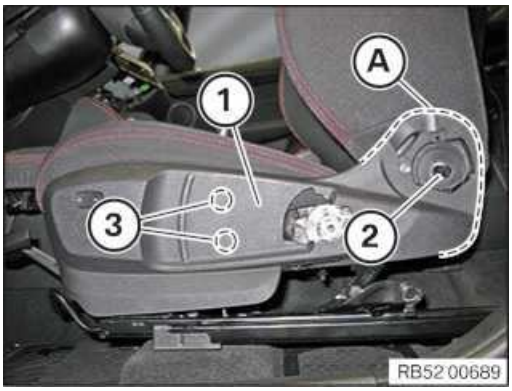
- Loosen screw (1).
- Remove the lever (2).

7 – Remove the outer cover of the front seat (mechanical)

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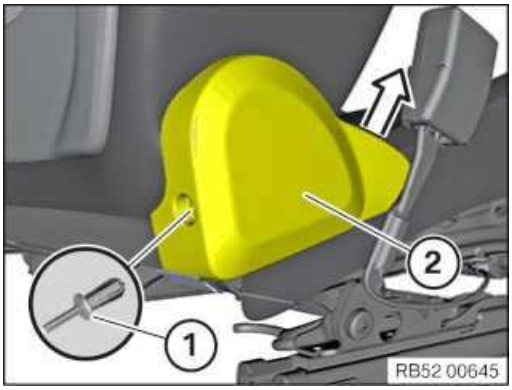


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

8 – Remove inner cover on front seat

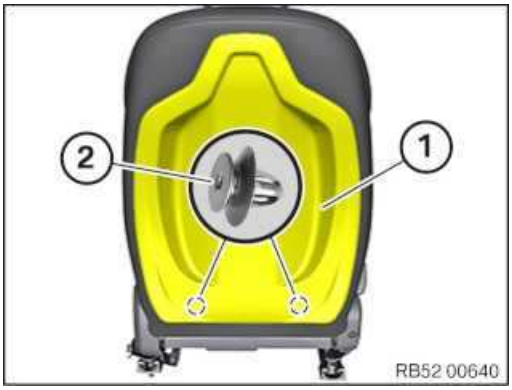


- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

9 – Remove rear panel on front seat backrest



- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.

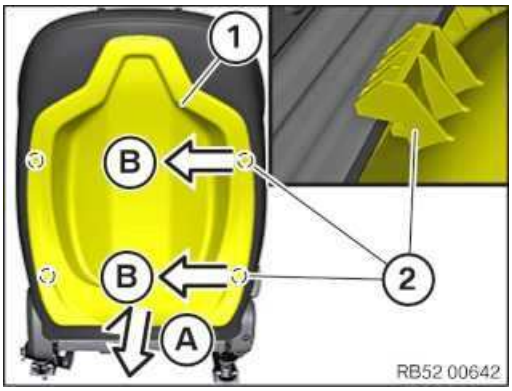


- Release the rear panel (1) toward the rear from the clips (2).

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- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

10 – Remove side airbag in front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

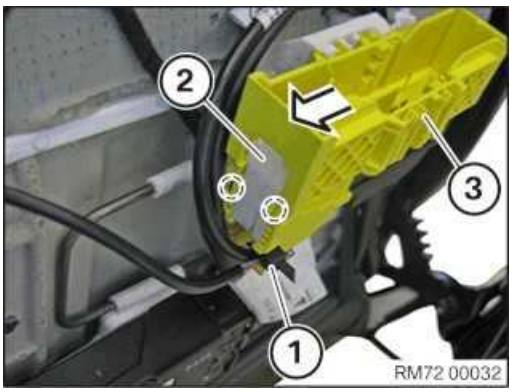
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

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



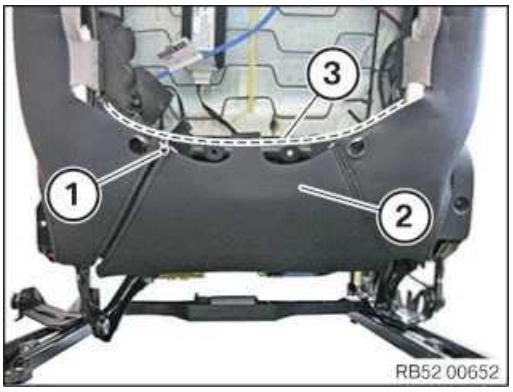
- If necessary detach the cable strap (1).

TECHNICAL INFORMATION

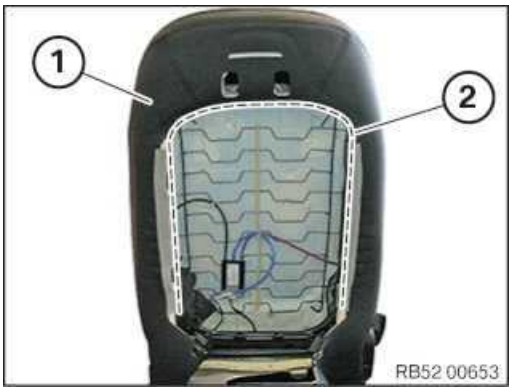
Different variants may be installed depending on the vehicle equipment.

- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).

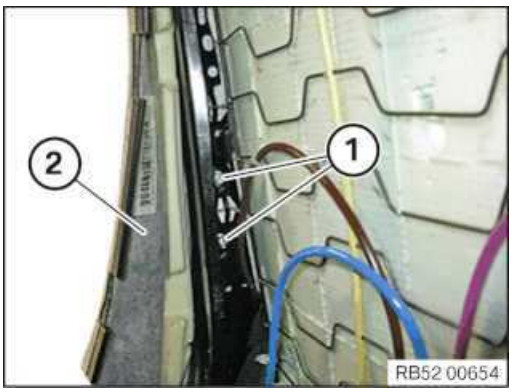
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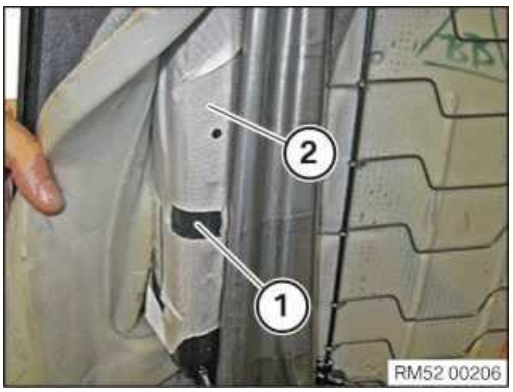
- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).



- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).



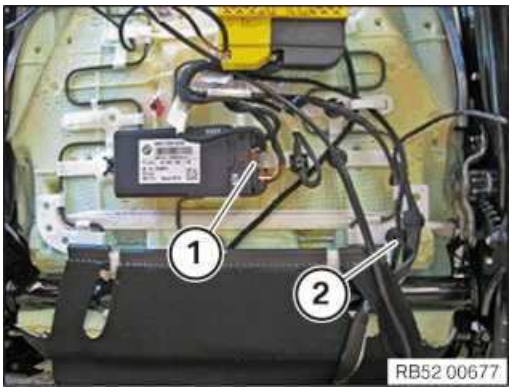
- Slide the side airbag (1) down and out of the cover pocket (2).

11 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.

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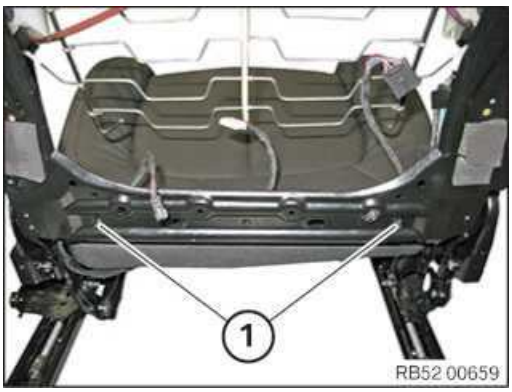
- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



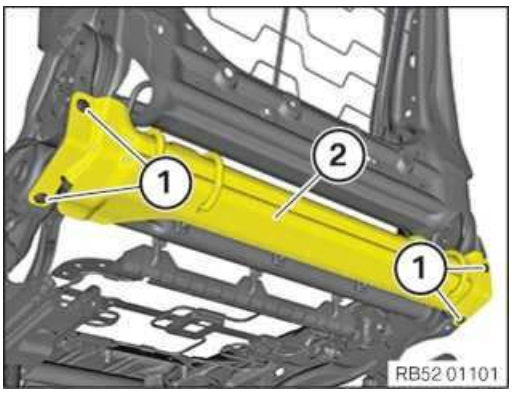
- Guide out the backrest cover (1) complete with the cushion toward the top.

MAIN WORK

12 – Remove the backrest frame from front seat-backrest

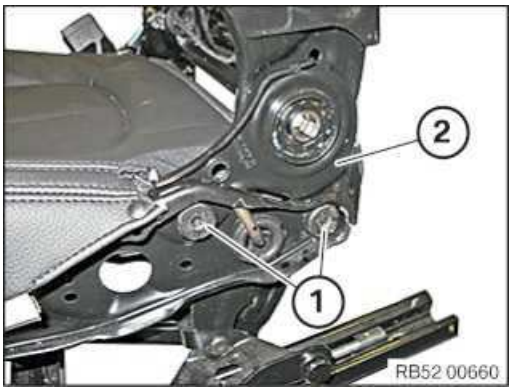


- Release the vehicle wiring harness on the clips (1) from the backrest frame.
- Feed wiring harness out of backrest frame.



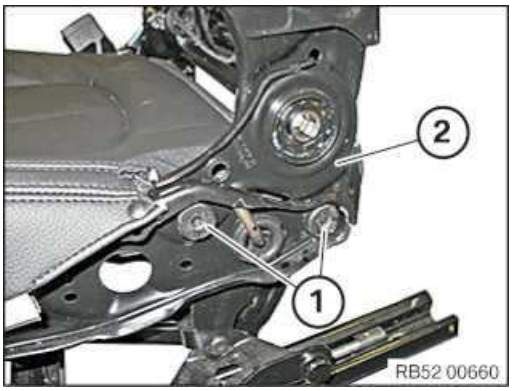
- **Only for equipment specification with Isofix:**
- Drill out rivet (1).
- Remove the holder (2).
- Remove remnants of rivets.

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- Loosen left and right screw (1).
- Remove the backrest frame (2).

13 – Install the backrest frame of the front seat backrest

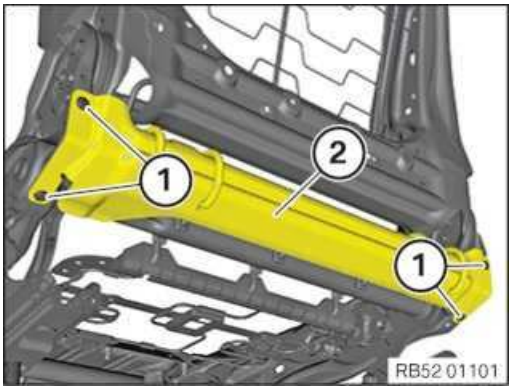


- Position the backrest frame (2).
- Renew screws (1).

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

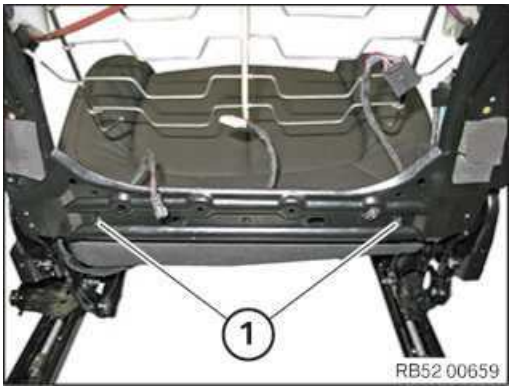
Backrest frame to seat mechanism

Screw	Renew screw.	Tightening torque	44 Nm



- **Only for equipment specification with Isofix:**

  Secure the holder (2) with the rivets (1).



- Feed in wiring harness on backrest frame.
- Fasten the vehicle wiring harness on the backrest frame with the clips (1).

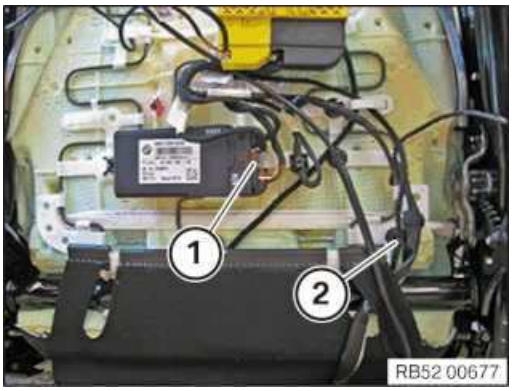
POSTPROCESSES

14 – Install the backrest cover with the cushion for the front seat

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- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

15 – Installing side airbag in the 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.

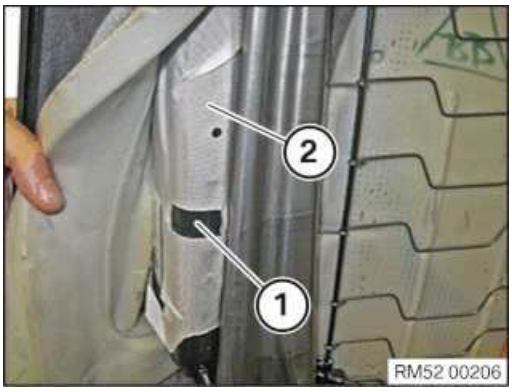
WARNING

Airbag unit.

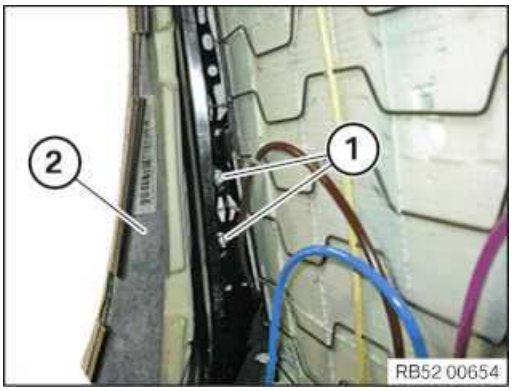
Danger! Life-threatening injuries!

- 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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- Feed the side airbag (1) upwards into the lining pocket (2).

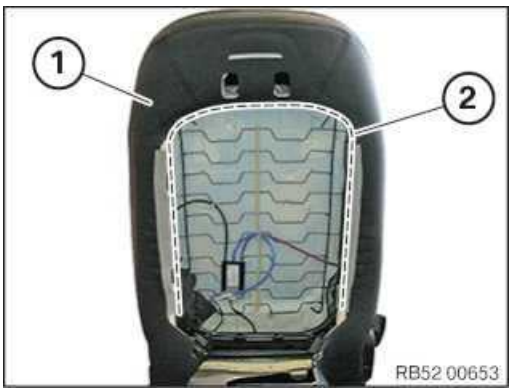


- Fold the backrest cover (2) to the side.
- Replace nuts.

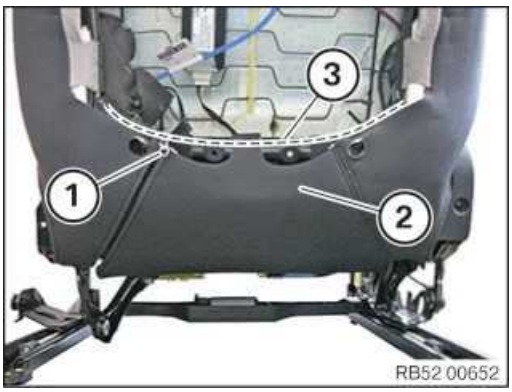
  Parts: Nuts
- Tighten nuts (1).

Side airbag to seat frame

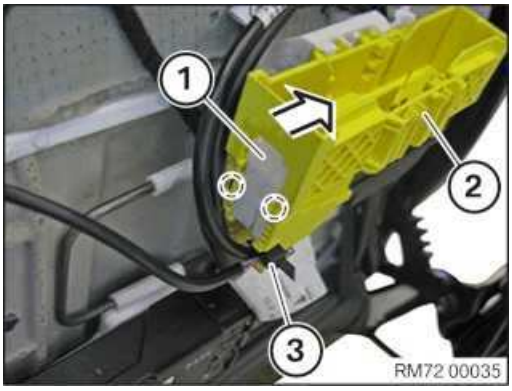
Hexagon nut		Renew nut.	6,5 Nm



- Attach the seat cover (1) in this area (2) to the backrest frame.



- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).



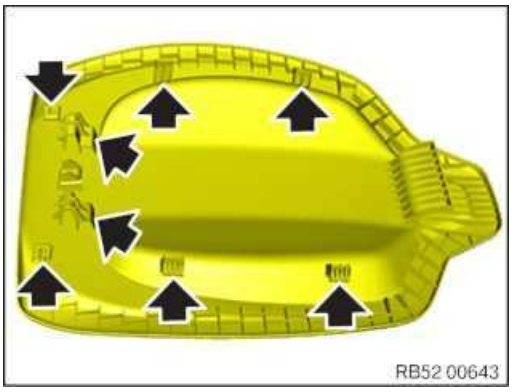
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

16 – Install the rear panel on the front seat backrest

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- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).

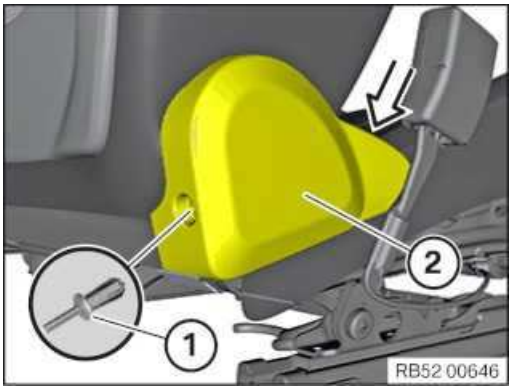


- Clip in the rear panel (1) at the clips (2).



- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

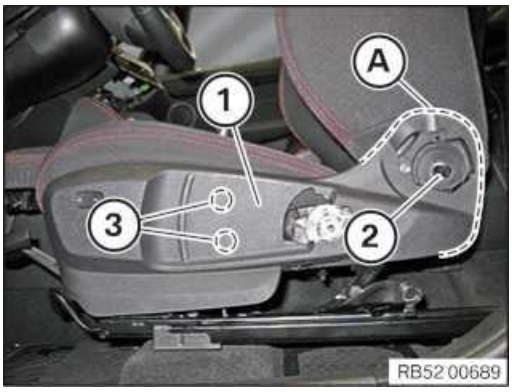
17 – Installing the inner cover on the front seat



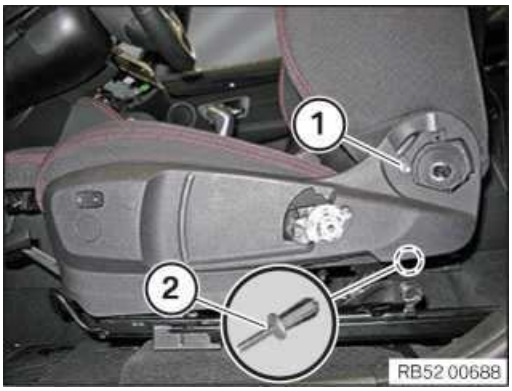
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

18 – Install the outside cover for the front seat (mechanical)

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- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



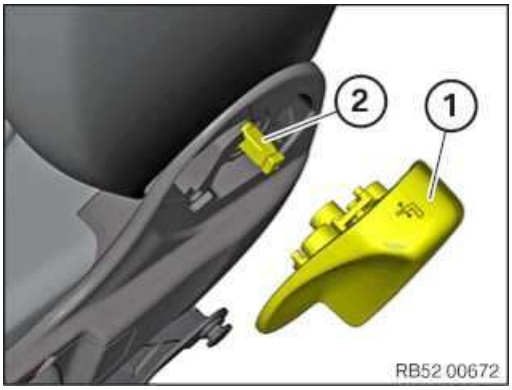
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

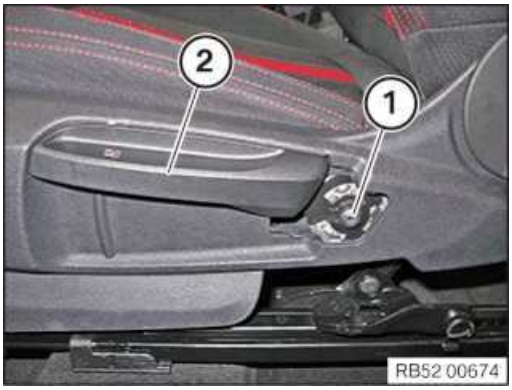
- Fasten expanding rivet (2).

19 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

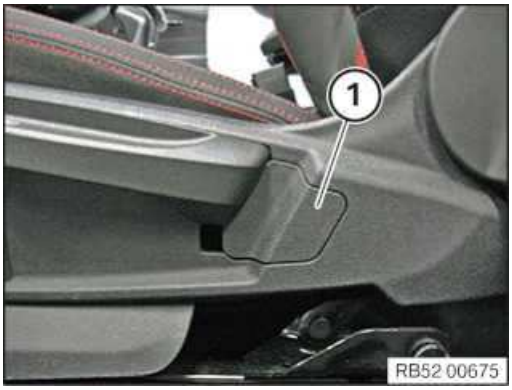
20 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

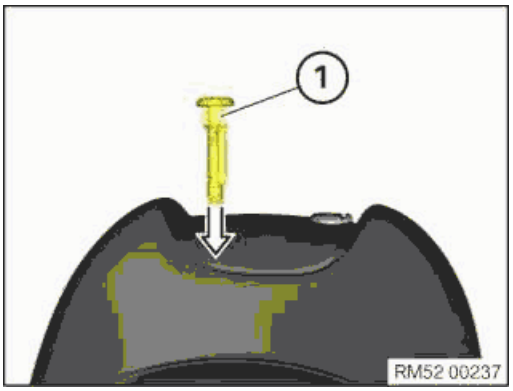
Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

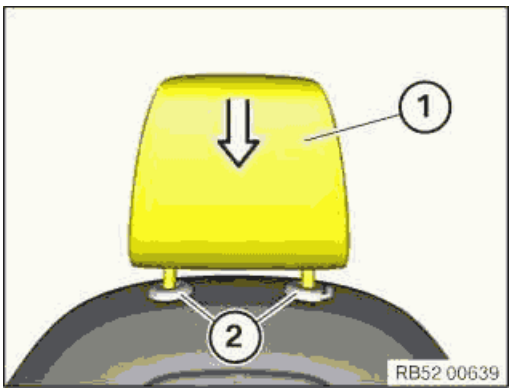
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21 – Installing the guide sleeve for the front head restraint



- Insert guide (1) from above and engage.

22 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

23 – Install front seat

TECHNICAL INFORMATION

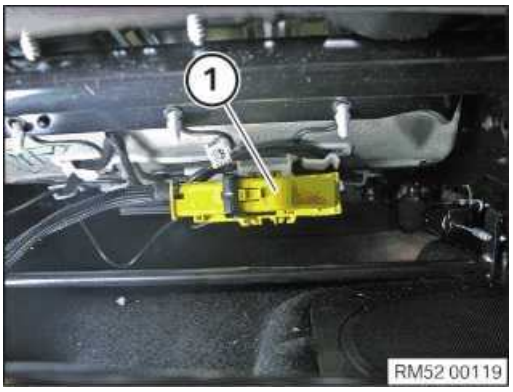
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

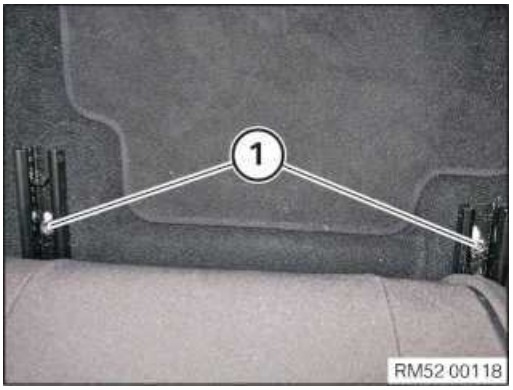
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

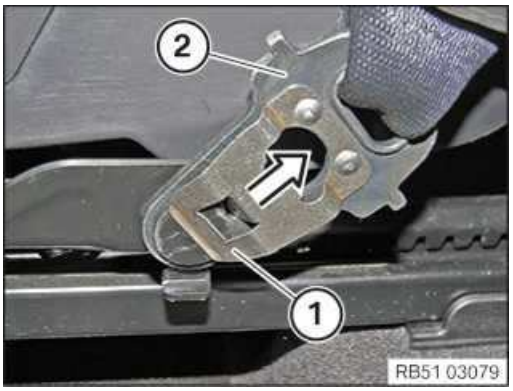
▸ **Disconnecting all battery earth leads**

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- See additional information.

24 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

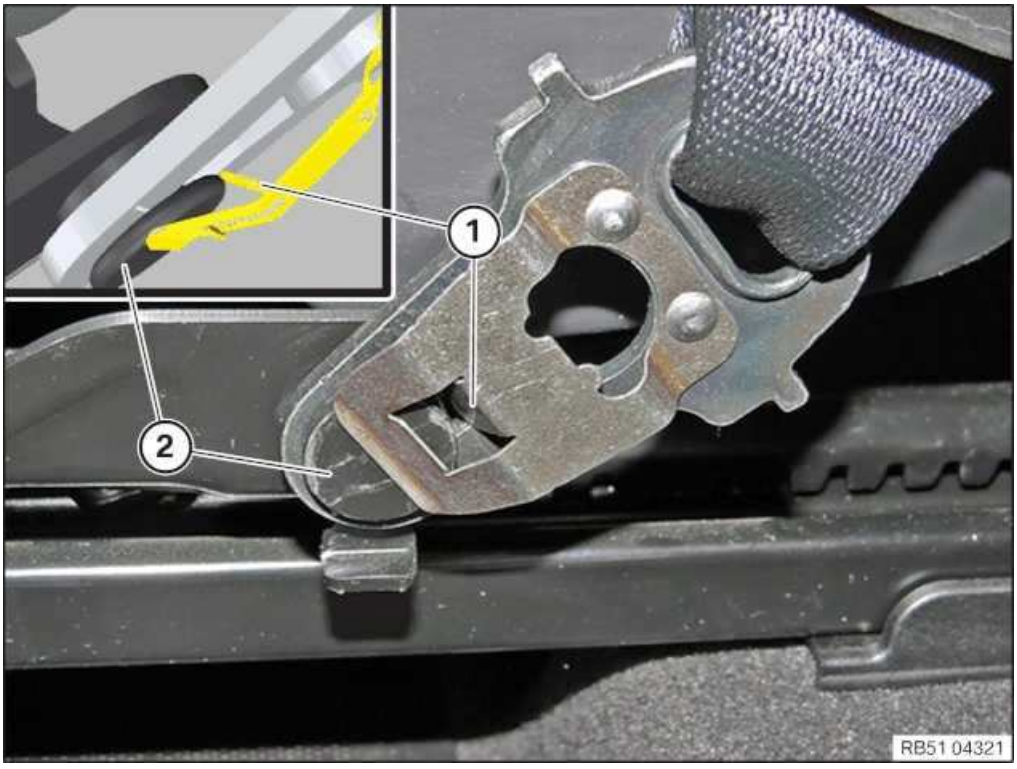
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Backrest frame to seat mechanism			Used in step 13
Screw	Renew screw.	Tightening torque	44 Nm

Side airbag to seat frame			Used in step 15
Hexagon nut		Renew nut.	6,5 Nm

Outer cover to front seat			Used in step 18
Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism			Used in step 20
Screw		Tightening torque	19,5 Nm

Seat to body			Used in step 23
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

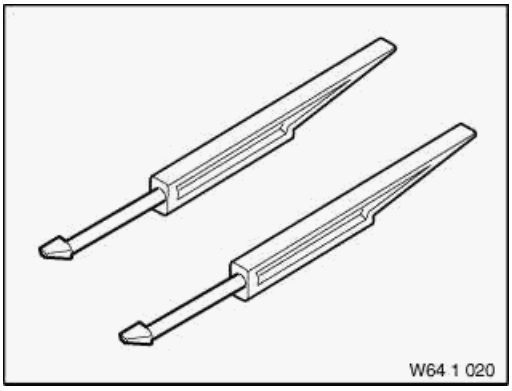
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2 154 711 Fitting aid



Common	Used in step 2 23
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 493 681 (64 1 020) Hook



Common	Used in step 6
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
72 00 ... Safety regulations for handling components with gas generators	2
72 00 ... Safety regulations for handling components with gas generators	10 15

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 23
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 23

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61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
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61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23
61 20 900 Disconnecting and connecting battery earth lead	2	23

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52 13 526 Removing and installing/replacing left or right seat mechanism

NOTICE

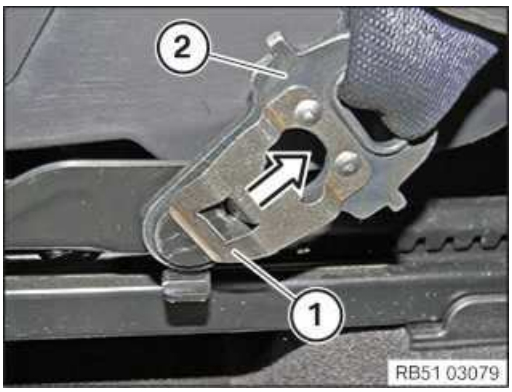
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

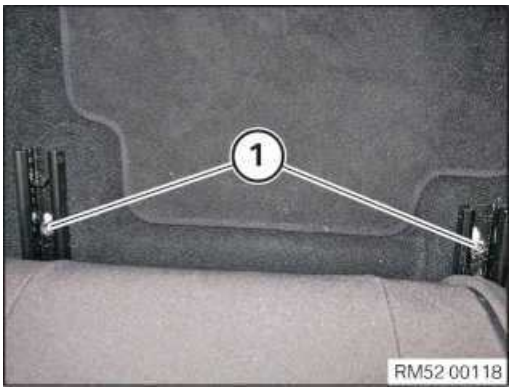
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



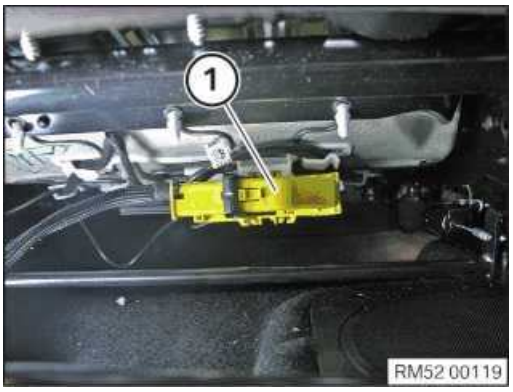
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

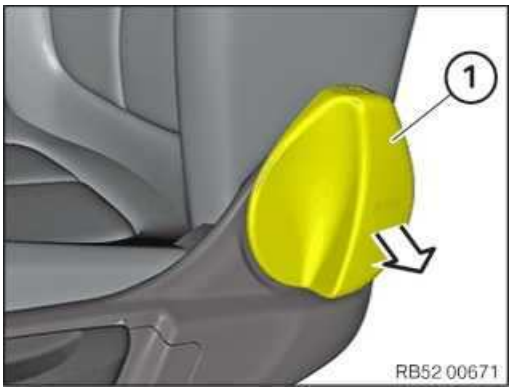
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

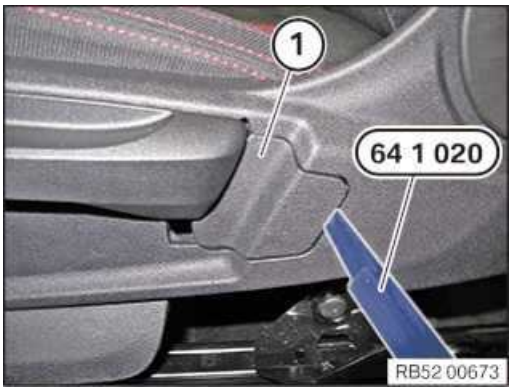
3 – Removing lever for backrest adjustment on front seat



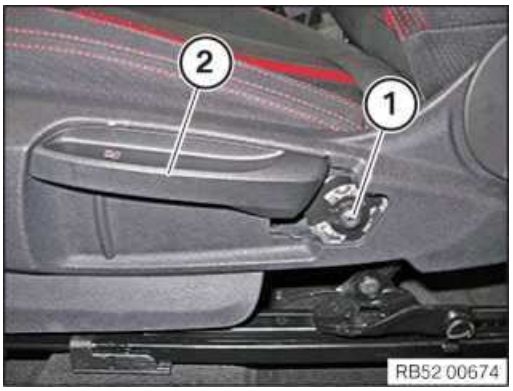
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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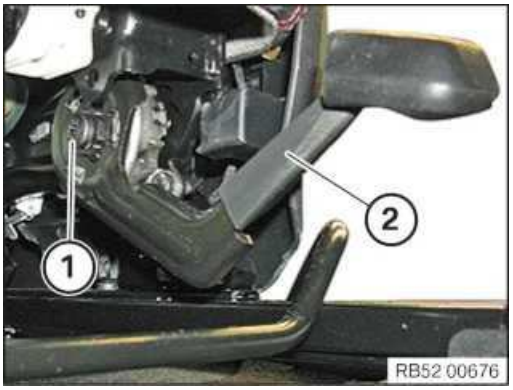


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.



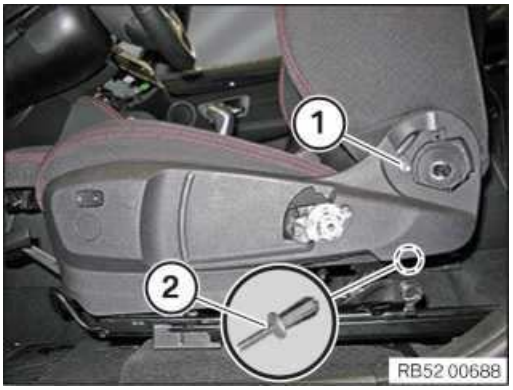
- Loosen screw (1).
- Remove the lever (2).

5 – Remove the lever for the seat angle adjustment on the front seat

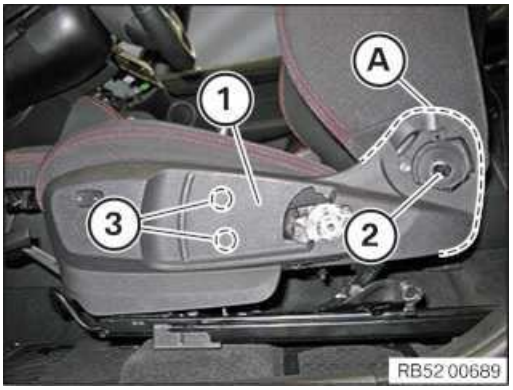


- Loosen screw (1).
- Remove the lever (2).

6 – Remove the outer cover of the front seat (mechanical)



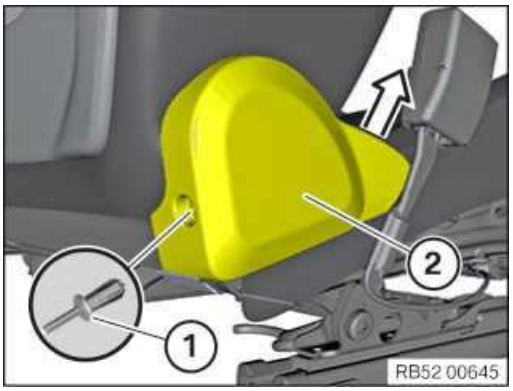
- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

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7 – Remove inner cover on front seat

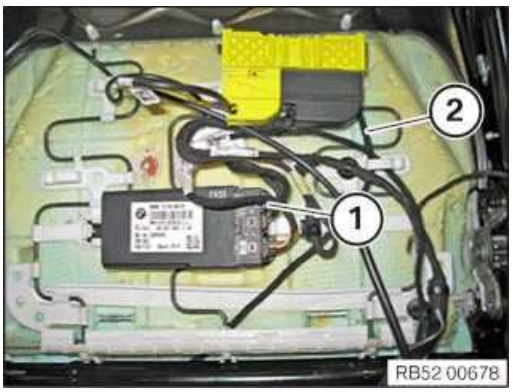


- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

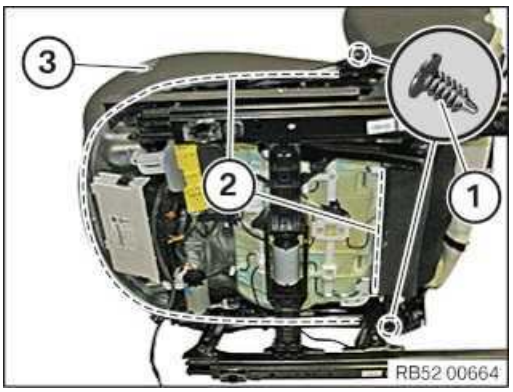
8 – Remove the seat cover with the cushion for the front seat



- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

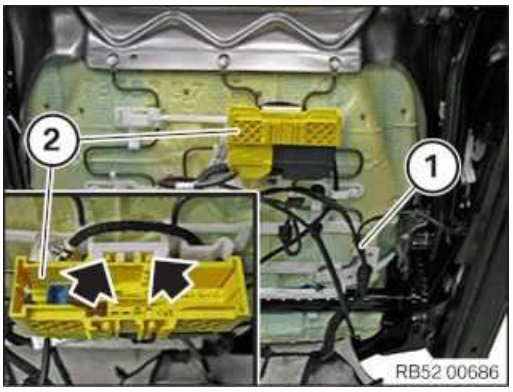


- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

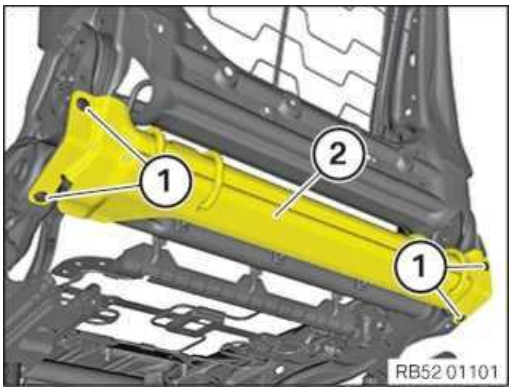
MAIN WORK

9 – Remove the seat mechanism of the front seat

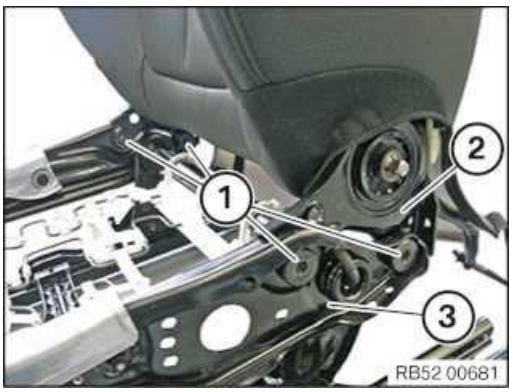
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- Loosen the wiring harness (1) on all cable clips.
- Unlock connector housing (2) and detach from seat mechanism to rear.
- Feed out the wiring harness (1) from the seat mechanism toward the rear.

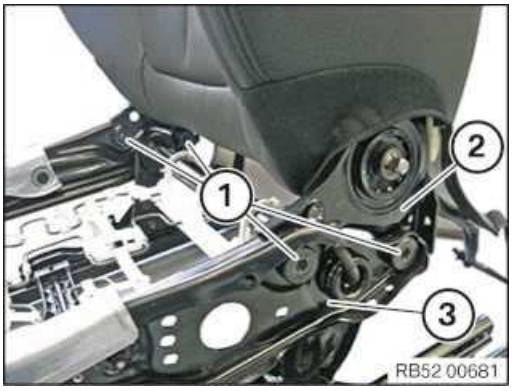


- **Only for equipment specification with Isofix:**
- Drill out rivet (1).
- Remove the holder (2).
- Remove remnants of rivets.



- Loosen screws (1).
- Remove the backrest frame (2) from the seat frame (3).

10 – Install the seat mechanism of front seat

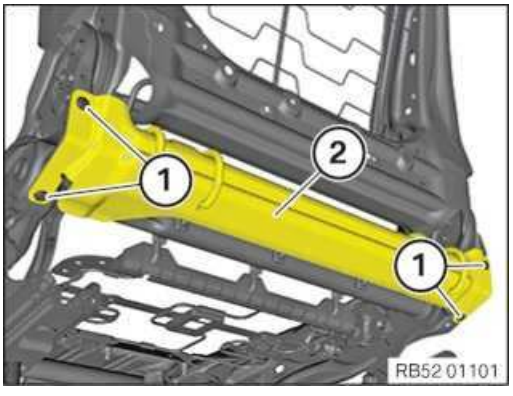


- Position the backrest frame (2).
- Renew screws (1).

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

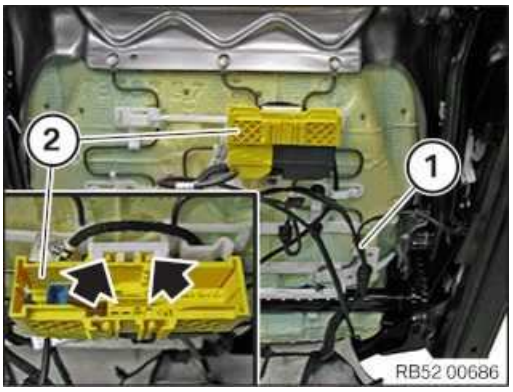
Backrest frame to seat mechanism

Screw	Renew screw.	Tightening torque	44 Nm



- **Only for equipment specification with Isofix:**
- Fasten the holder (2) with a rivet (1).

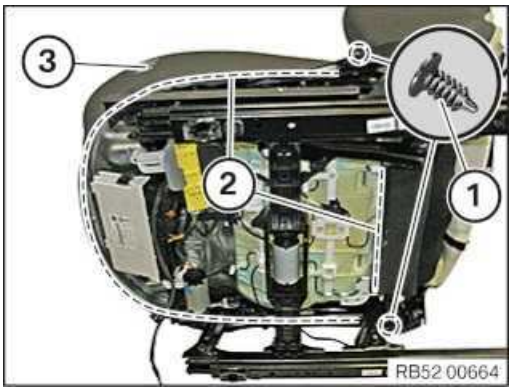
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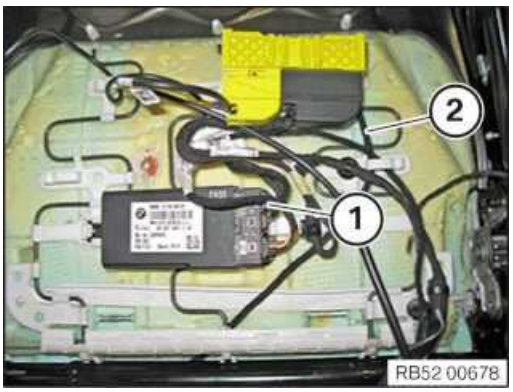
- Insert the wiring harness (1).
- Engage connector housing (2) into seat mechanism.
- Secure the wiring harness (1) to all cable clips.

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



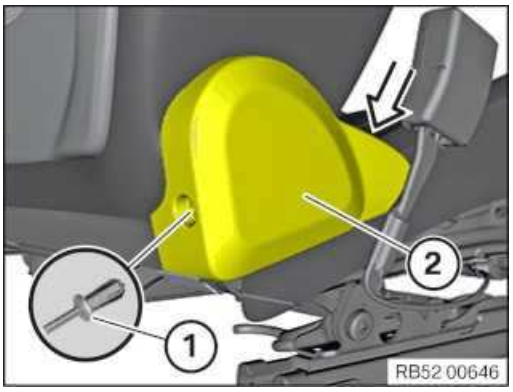
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



- Fasten retaining strap (1) to the seat mechanism at the left and right.

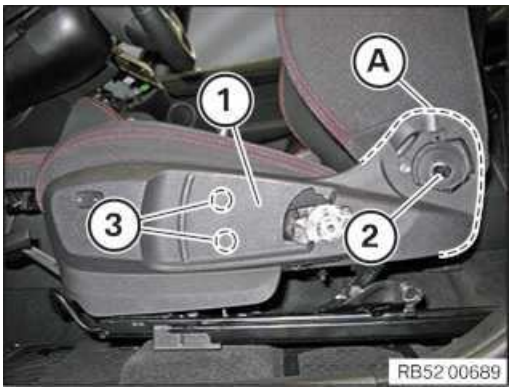
12 – Installing the inner cover on the front seat

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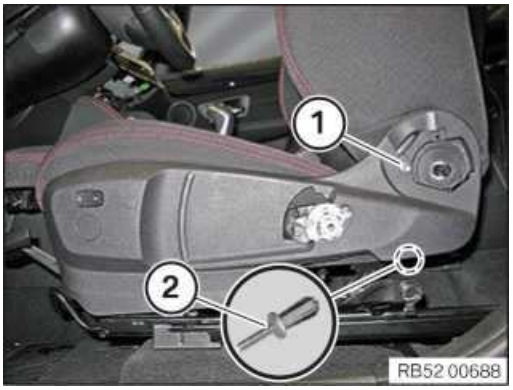


- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

13 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



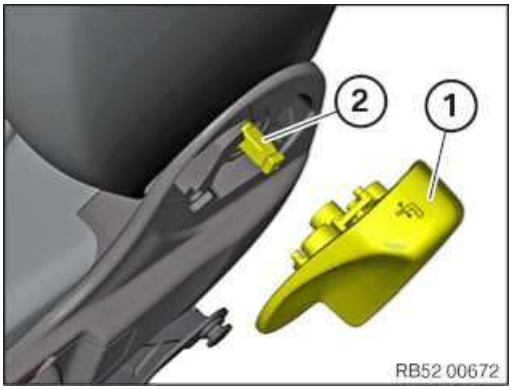
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

- Fasten expanding rivet (2).

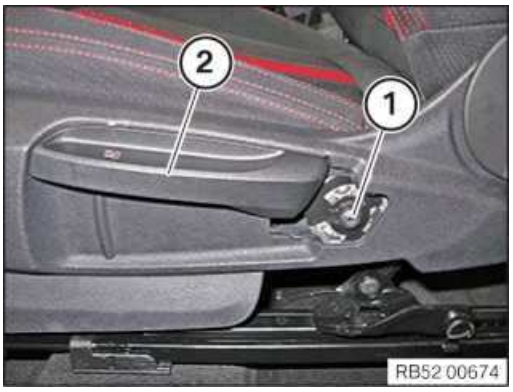
14 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

15 – Install the lever for the seat height adjustment on the front seat

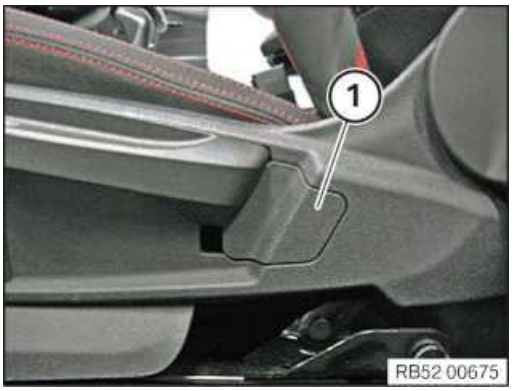
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- Position the lever (2).
- Tighten down screw (1).

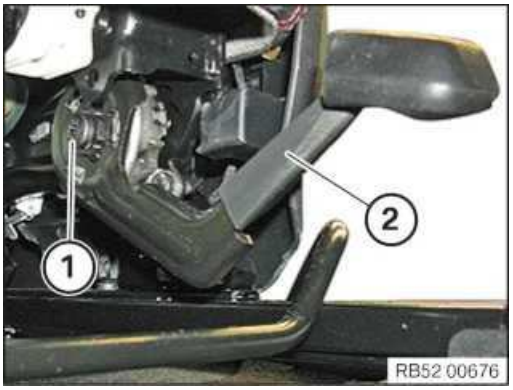
Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

16 – Install the lever for the seat angle adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Seat angle adjustment lever on seat mechanism

Screw		Tightening torque	19,5 Nm

17 – Install front seat

TECHNICAL INFORMATION

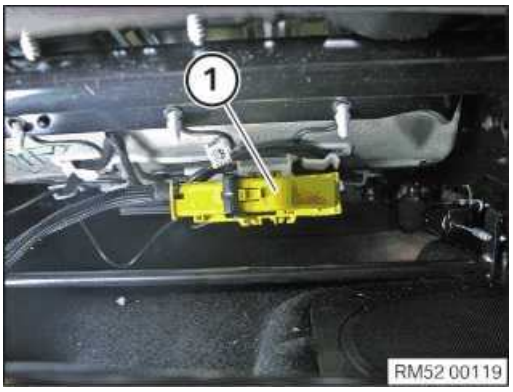
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

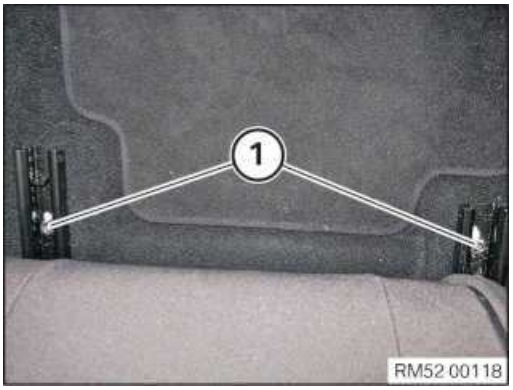
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

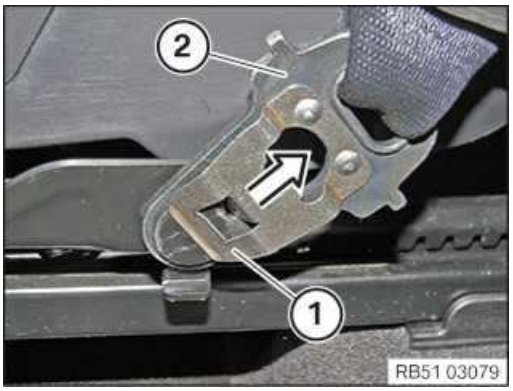
▸ **Disconnecting all battery earth leads**

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- See additional information.

18 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

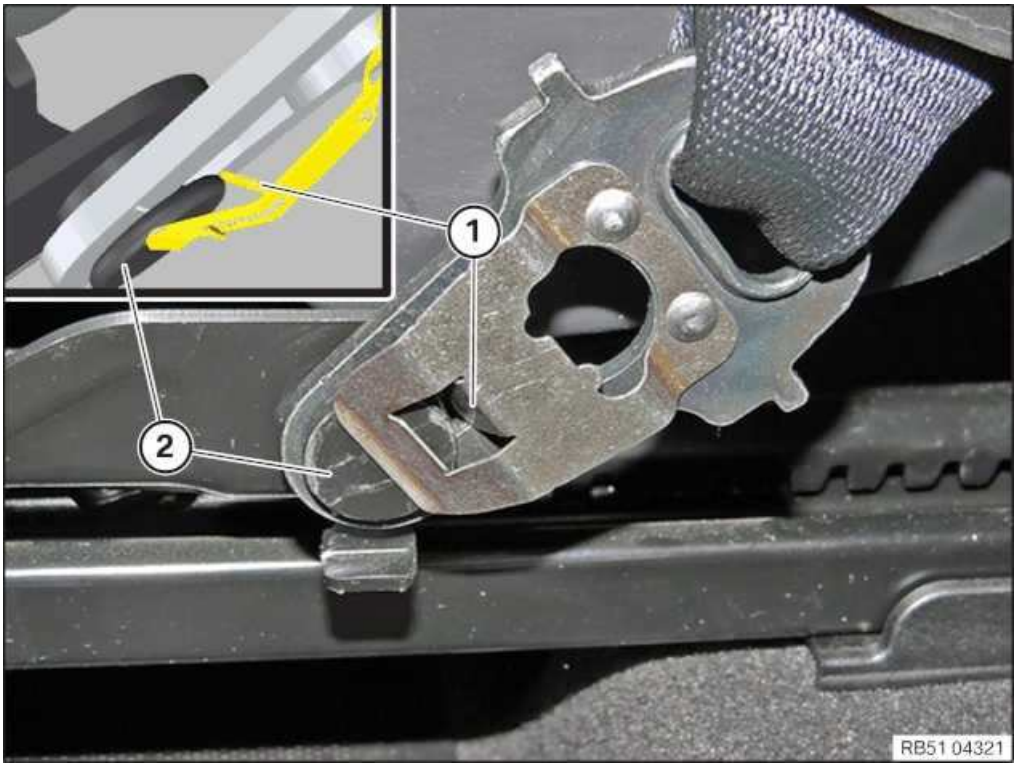
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Backrest frame to seat mechanism — Used in step 10

Screw	Renew screw.	Tightening torque	44 Nm

Outer cover to front seat — Used in step 13

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 15

Screw		Tightening torque	19,5 Nm

Seat angle adjustment lever on seat mechanism — Used in step 16

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 17

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

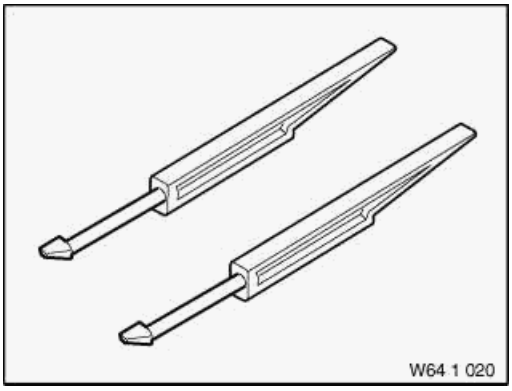
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2 154 711 Fitting aid



Common	Used in step 2 17
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 493 681 (64 1 020) Hook



Common	Used in step 4
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
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 17

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61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
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61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
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61 20 900 Disconnecting and connecting battery earth lead	2	17
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61 20 900 Disconnecting and connecting battery earth lead	2	17

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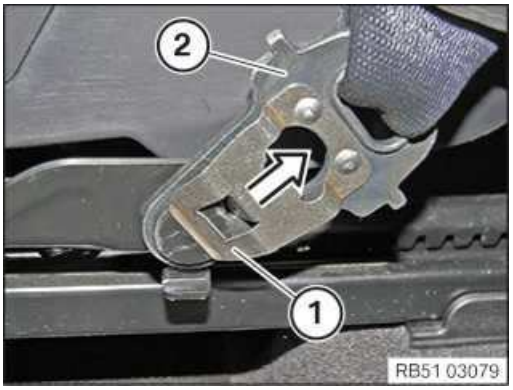
52 13 040 Removing and installing/replacing outer cover on left or right front seat

PRELIMINARY WORK

1 – Remove the front end fitting

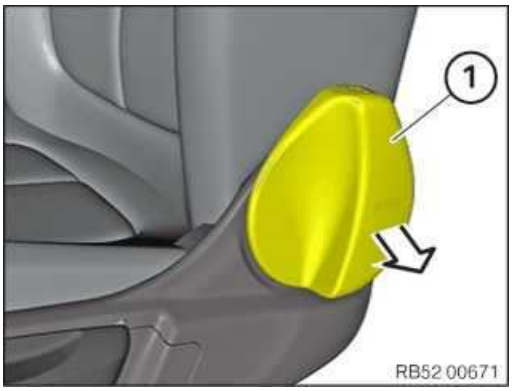


- Slide the cover (1) on the seat belt (2) in an upward direction.



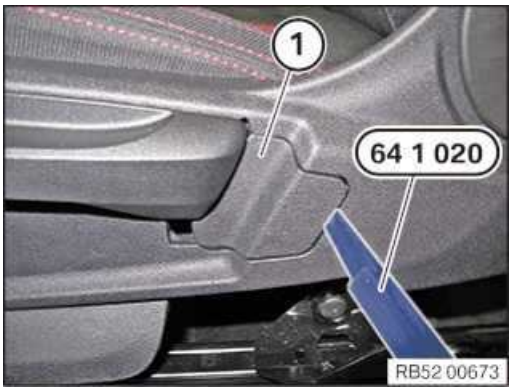
- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – Removing lever for backrest adjustment on front seat



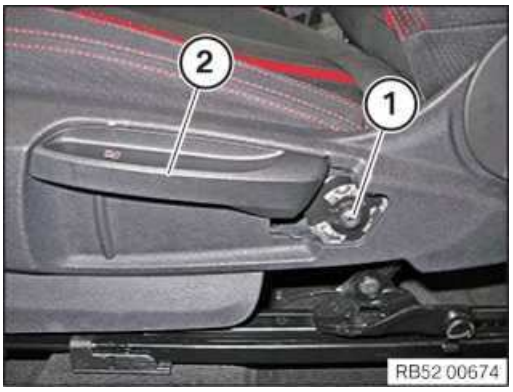
- Unclip the lever (1) outwards.

3 – Remove lever for seat height adjustment on front seat



- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

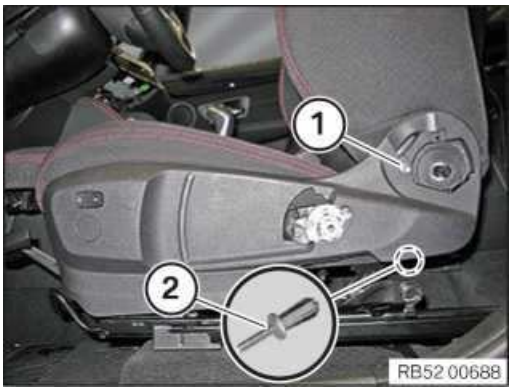
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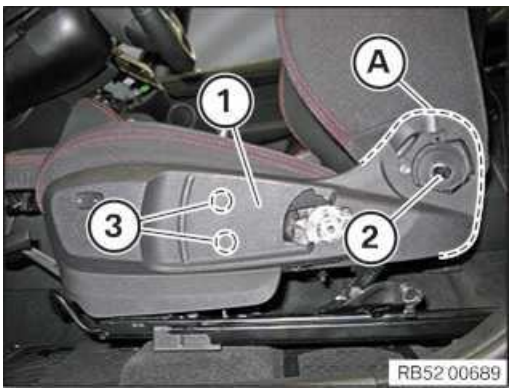
- Loosen screw (1).
- Remove the lever (2).

MAIN WORK

4 – Remove the outer cover of the front seat (mechanical)

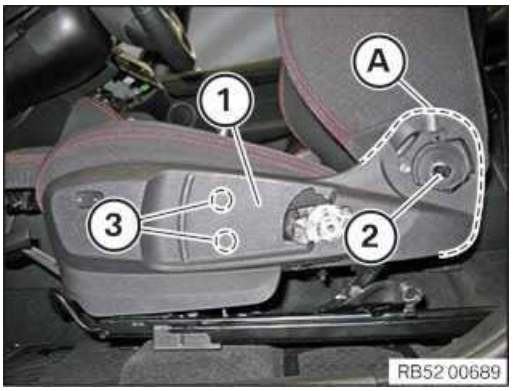


- Loosen screw (1).
- Loosen expanding rivet (2).



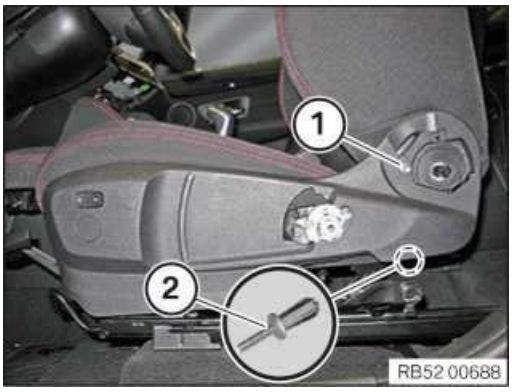
- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

5 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).

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- Tighten down screw (1).

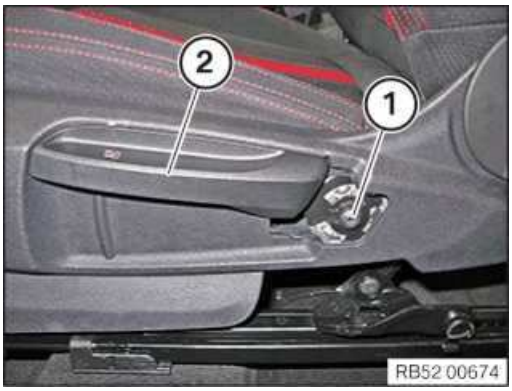
Outer cover to front seat

Screw		Tightening torque	1,5 Nm

- Fasten expanding rivet (2).

POSTPROCESSES

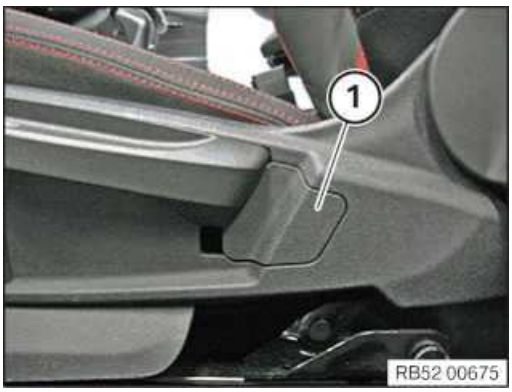
6 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

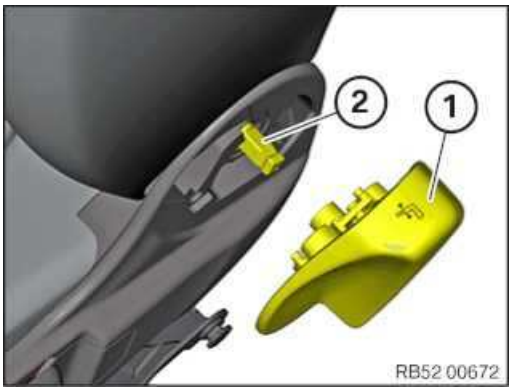
Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

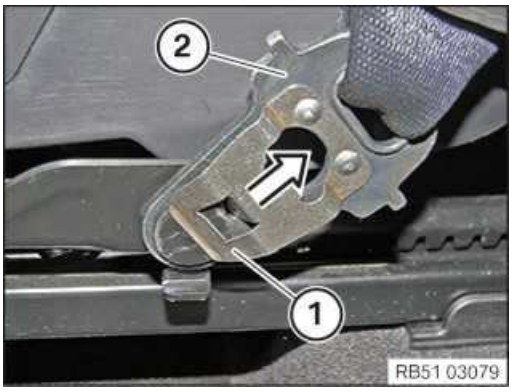
7 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

8 – Install front end fitting

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- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

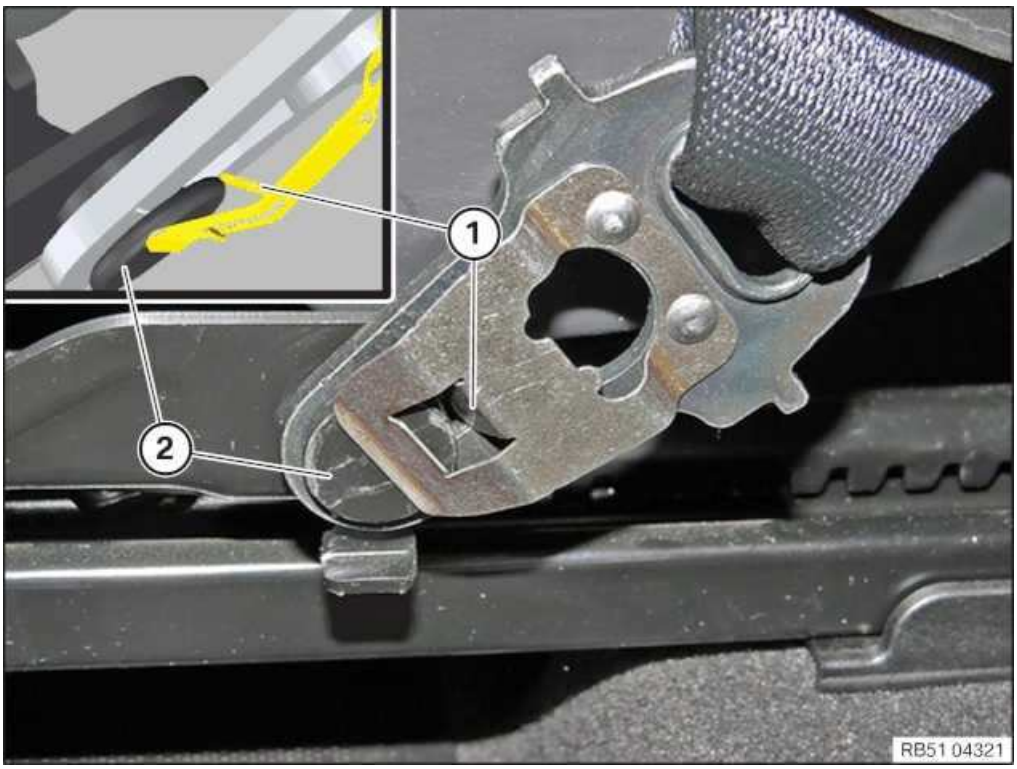
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Outer cover to front seat — Used in step 5

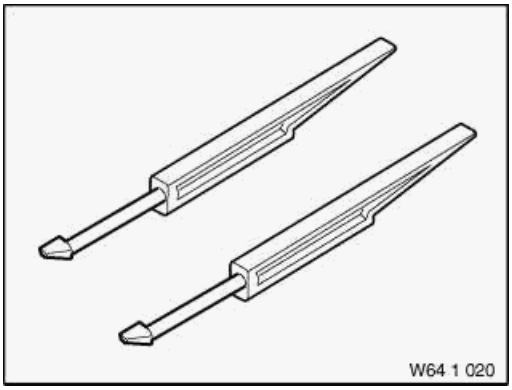
Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 6

Screw		Tightening torque	19,5 Nm

Overview of Special Tools

0 493 681 (64 1 020) Hook



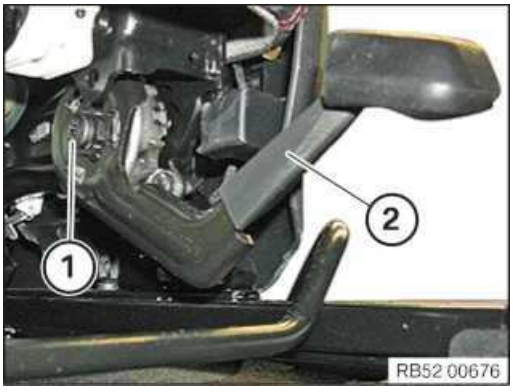
Common — Used in step 3

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)

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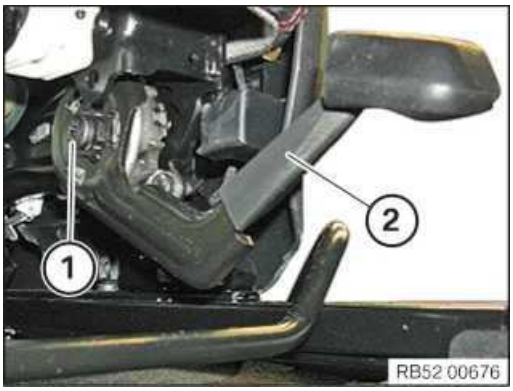
52 13 ... Removing and installing/replacing seat angle adjustment lever on left or right front seat

Removal:



Loosen screw (1) and remove lever (2).

Installation:



Position lever (2) and tighten screw (1).

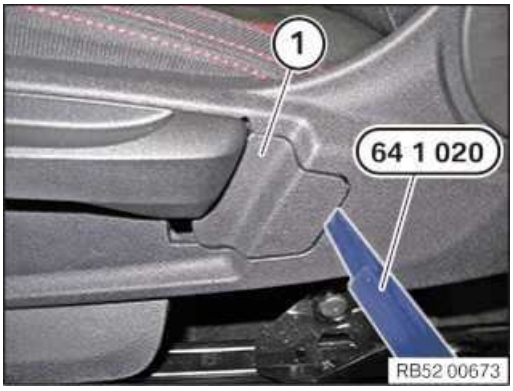
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52 13 ... Removing and installing/replacing seat height adjustment lever on left or right front seat

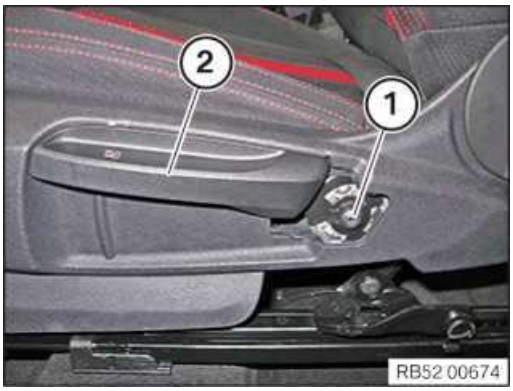
Special tools required:

- 64 1 020

Removal:



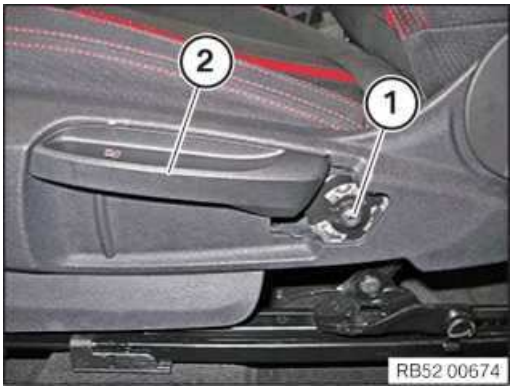
Unclip cover (1) with special tool 64 1 020 .



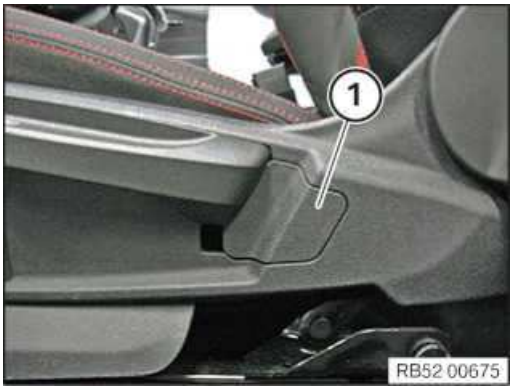
Loosen screw (1) and remove lever (2).

INSTALLATION:

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Position lever (2) and tighten screw (1).



Clip in cover (1).

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52 13 408 Replace backrest cover for passenger's side

NOTICE

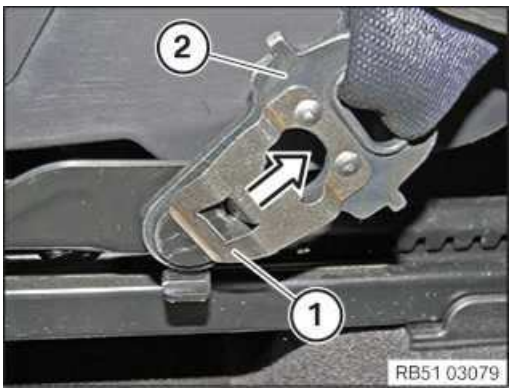
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

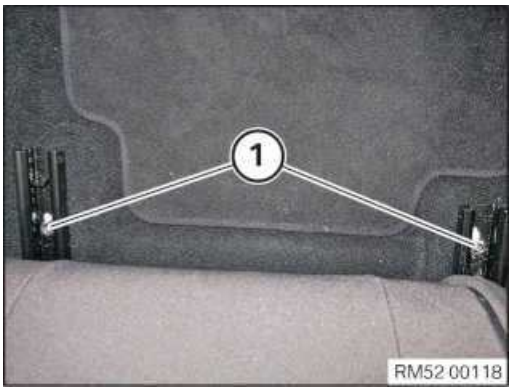
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



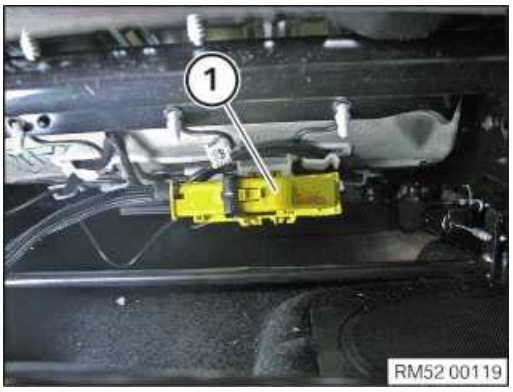
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

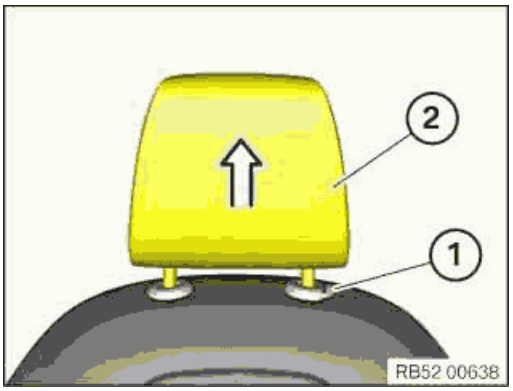
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

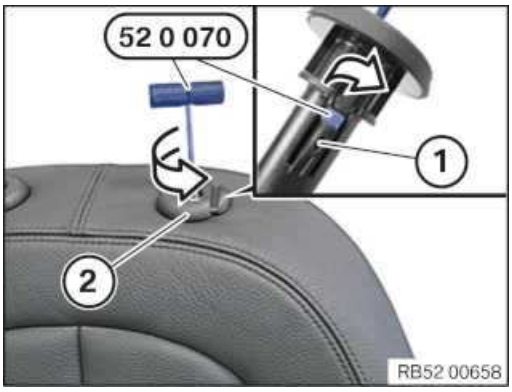
3 – Remove front head restraint



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

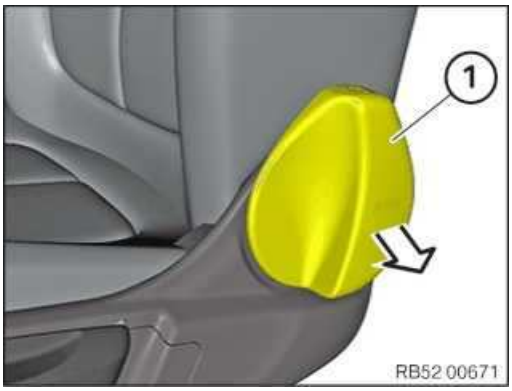
4 – Removing the guide sleeve for the front head restraint

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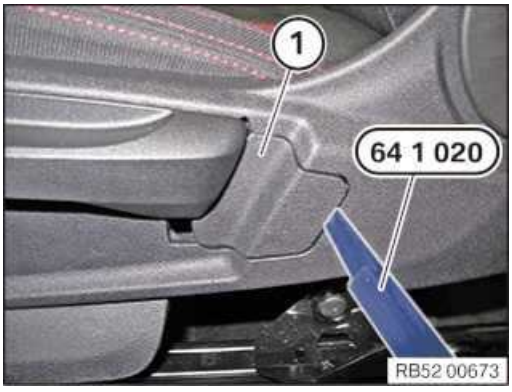
- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing lever for backrest adjustment on front seat

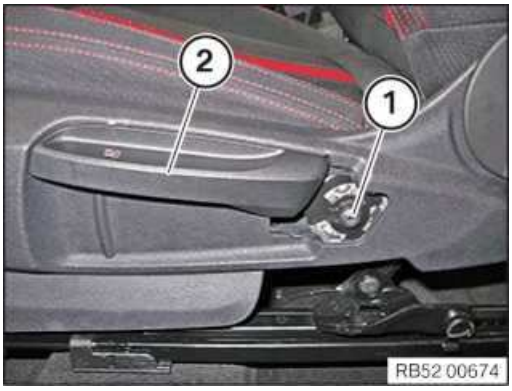


- Unclip the lever (1) outwards.

6 – Remove lever for seat height adjustment on front seat



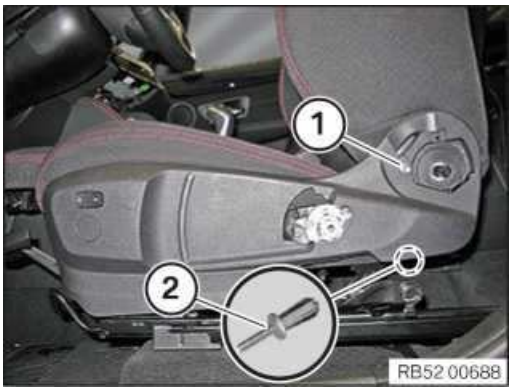
- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.



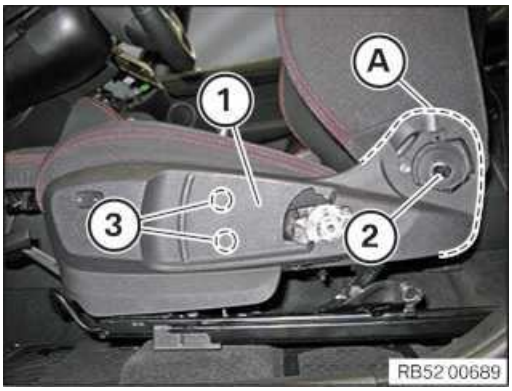
- Loosen screw (1).
- Remove the lever (2).

7 – Remove the outer cover of the front seat (mechanical)

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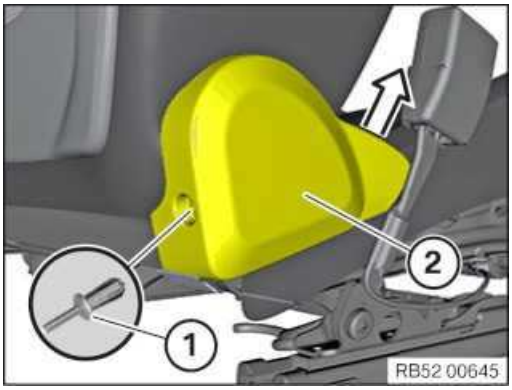


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

8 – Remove inner cover on front seat

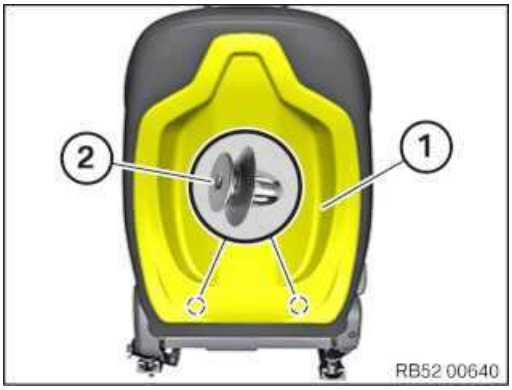


- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

9 – Remove rear panel on front seat backrest



- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.

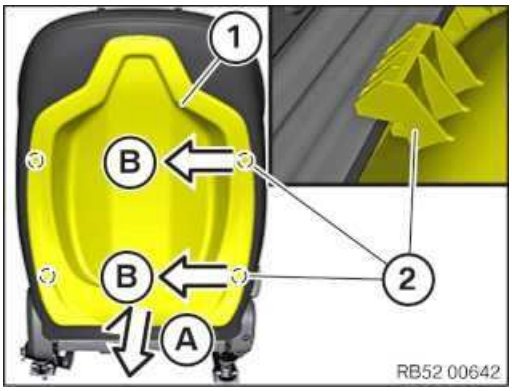


- Release the rear panel (1) toward the rear from the clips (2).

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- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

10 – Remove side airbag in front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

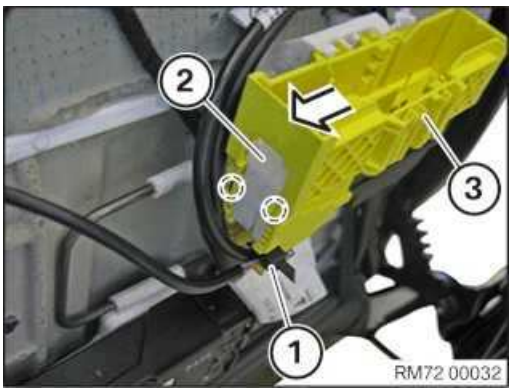
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

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



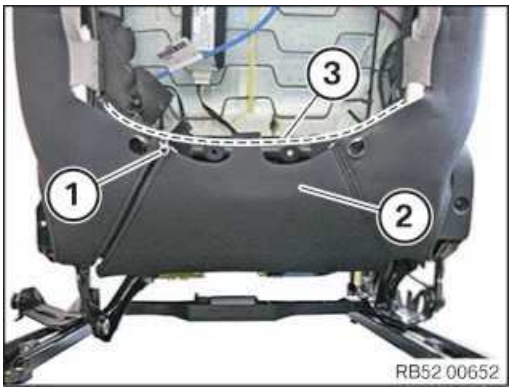
- If necessary detach the cable strap (1).

TECHNICAL INFORMATION

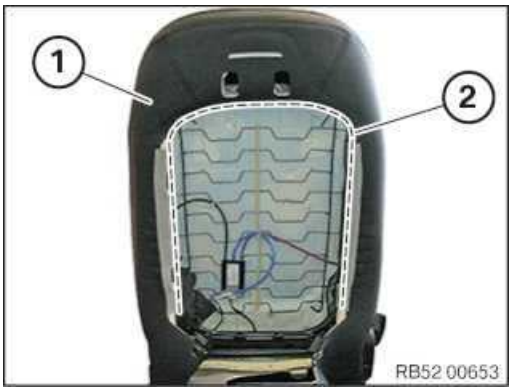
Different variants may be installed depending on the vehicle equipment.

- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).

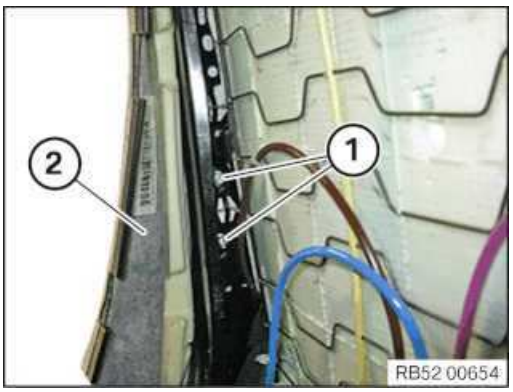
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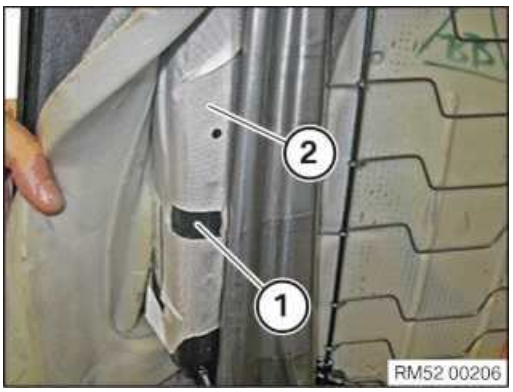
- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).



- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).



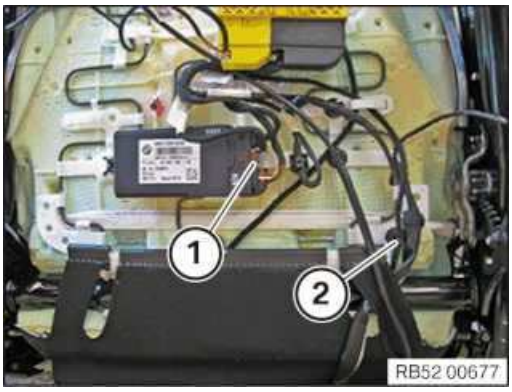
- Slide the side airbag (1) down and out of the cover pocket (2).

11 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.

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- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



- Guide out the backrest cover (1) complete with the cushion toward the top.

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MAIN WORK

12 – Remove the backrest cover from front seat-backrest

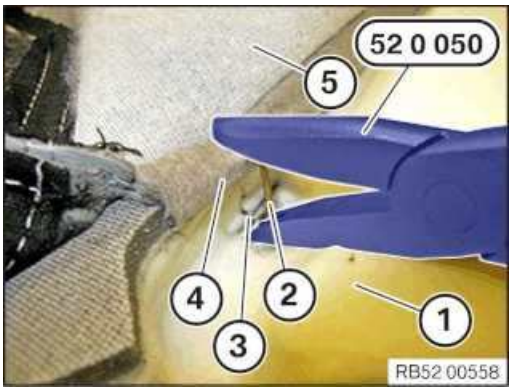


- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

13 – Install the backrest cover of the front seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.



- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.

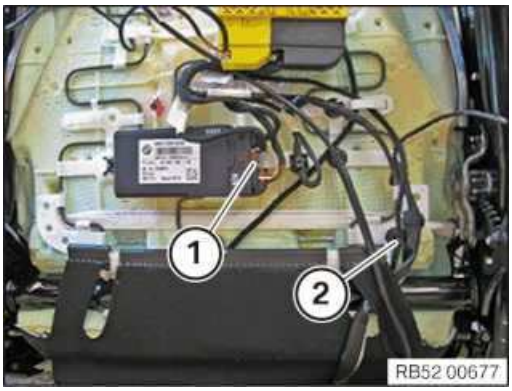
POSTPROCESSES

14 – Install the backrest cover with the cushion for the front seat

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- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

15 – Installing side airbag in the 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.

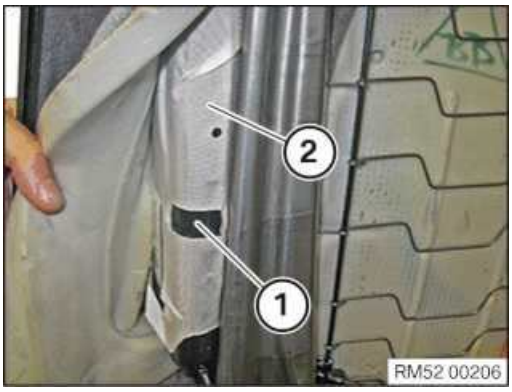
WARNING

Airbag unit.

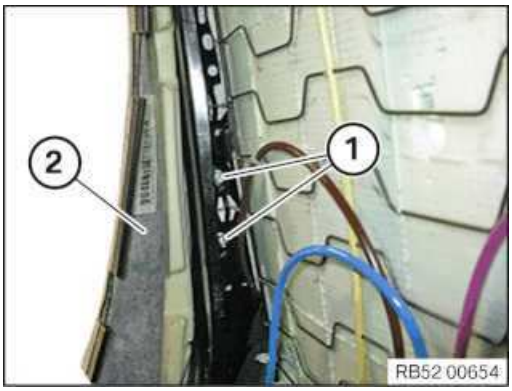
Danger! Life-threatening injuries!

- 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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- Feed the side airbag (1) upwards into the lining pocket (2).

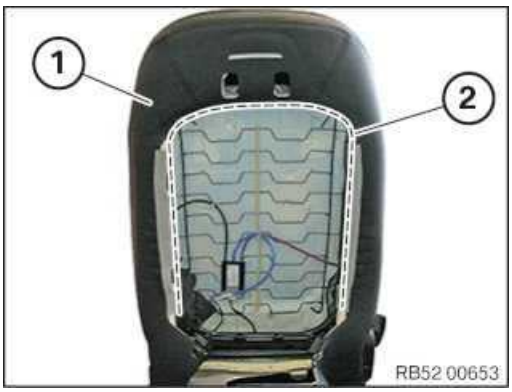


- Fold the backrest cover (2) to the side.
- Replace nuts.

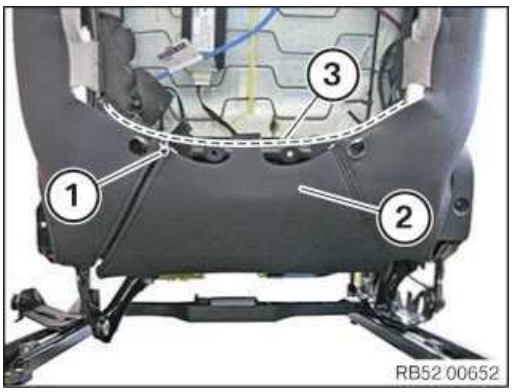
  Parts: Nuts
- Tighten nuts (1).

Side airbag to seat frame

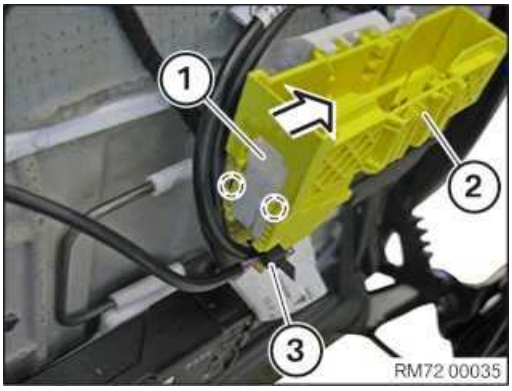
Hexagon nut		Renew nut.	6,5 Nm



- Attach the seat cover (1) in this area (2) to the backrest frame.



- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).



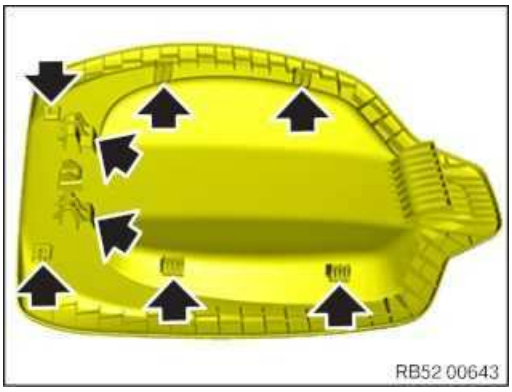
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

16 – Install the rear panel on the front seat backrest

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- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).

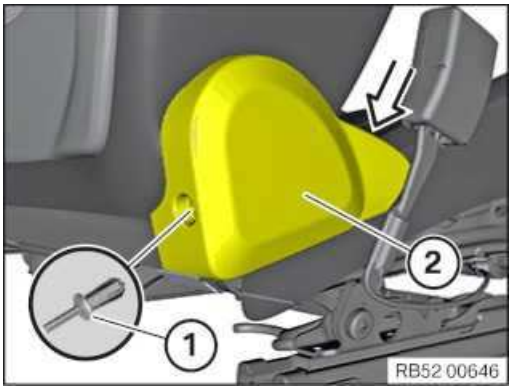


- Clip in the rear panel (1) at the clips (2).



- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

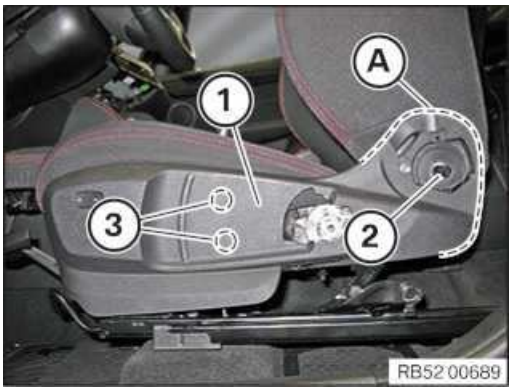
17 – Installing the inner cover on the front seat



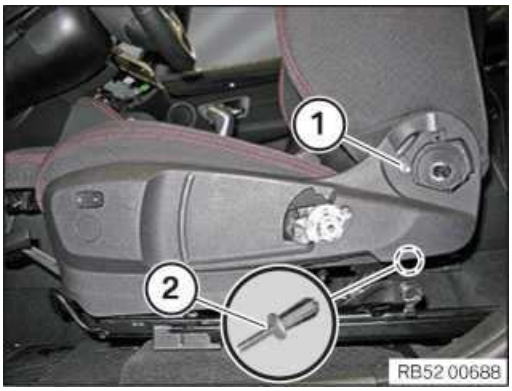
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

18 – Install the outside cover for the front seat (mechanical)

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- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



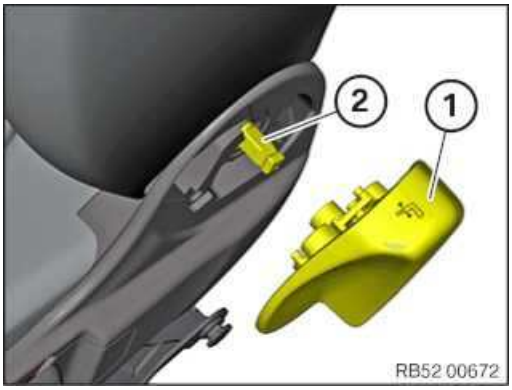
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

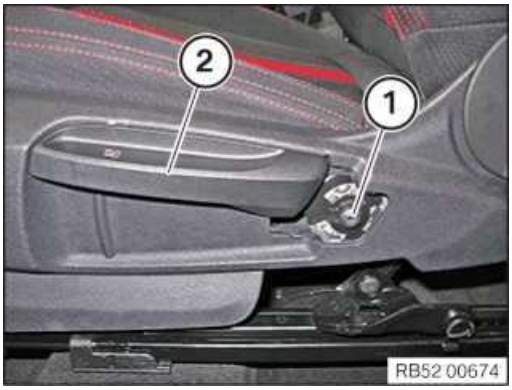
- Fasten expanding rivet (2).

19 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

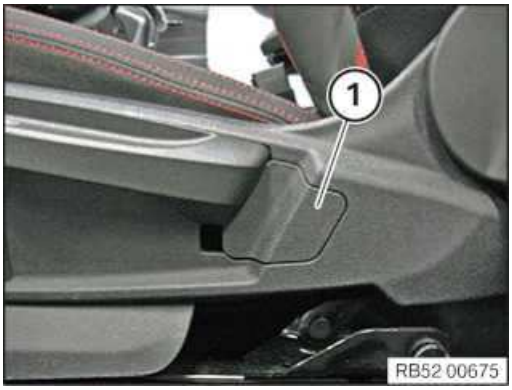
20 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

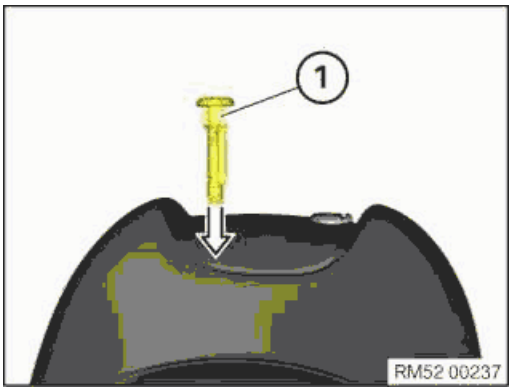
Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

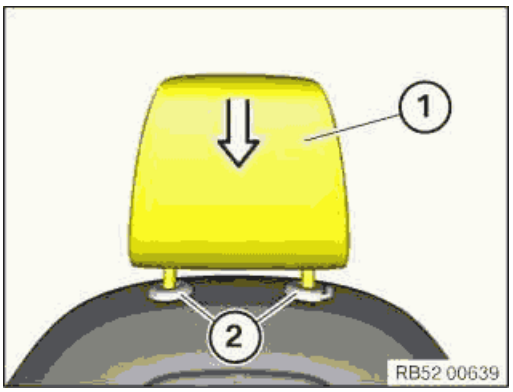
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21 – Installing the guide sleeve for the front head restraint



- Insert guide (1) from above and engage.

22 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

23 – Install front seat

TECHNICAL INFORMATION

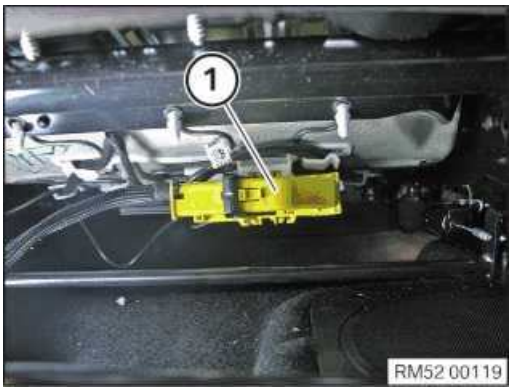
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

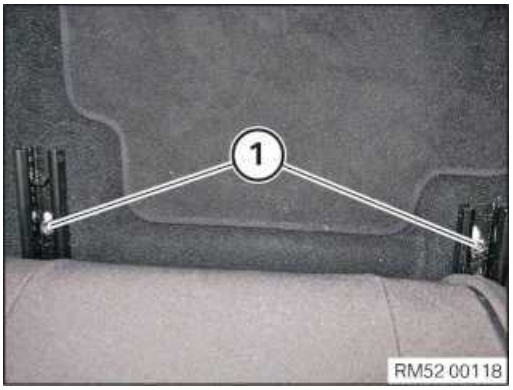
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

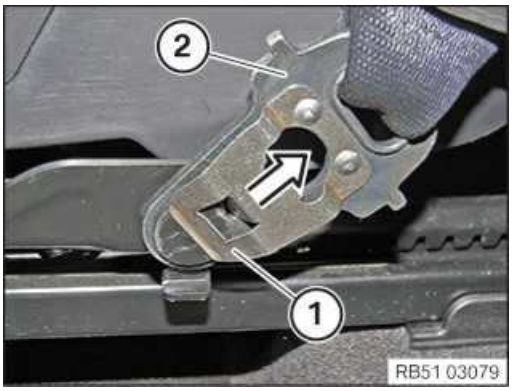
▸ **Disconnecting all battery earth leads**

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- See additional information.

24 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

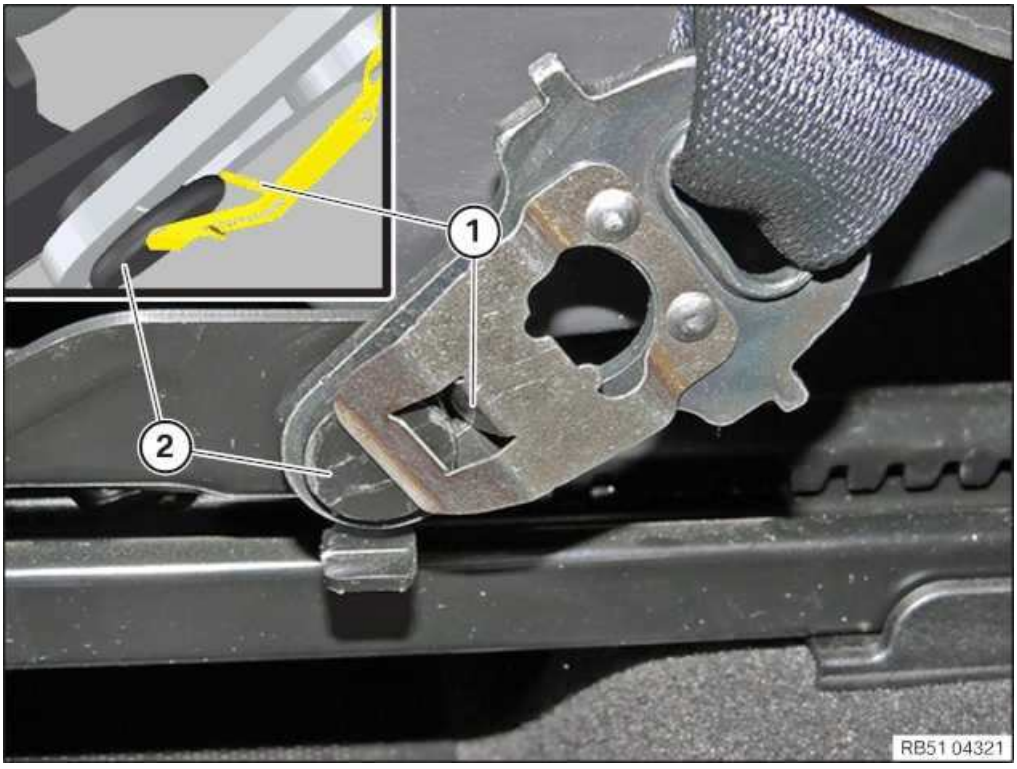
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Side airbag to seat frame — Used in step 15

Hexagon nut		Renew nut.	6,5 Nm

Outer cover to front seat — Used in step 18

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 20

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 23

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

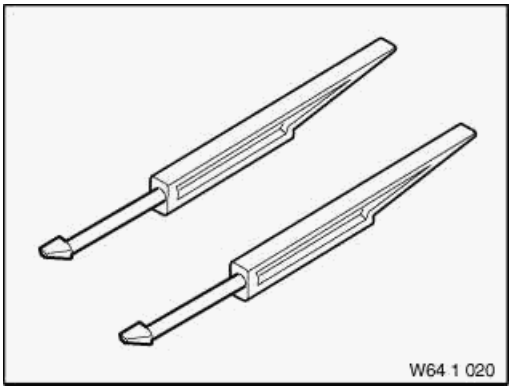
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2 154 711 Fitting aid



Common	Used in step 2 23
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

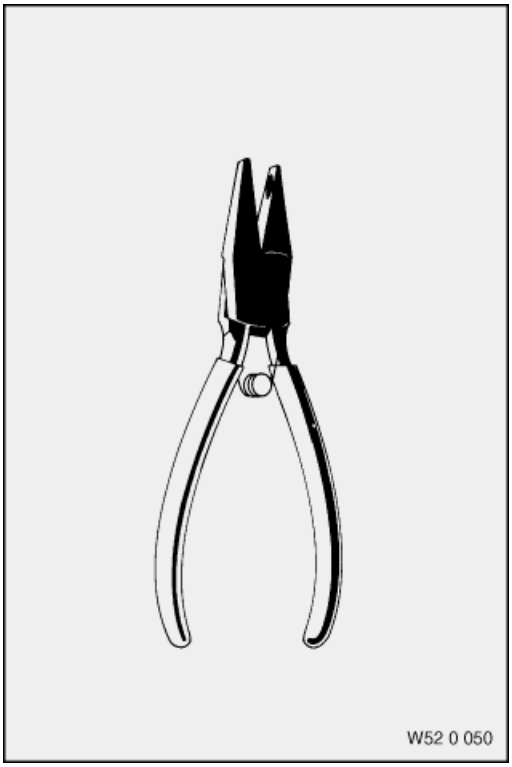
0 493 681 (64 1 020) Hook



Common	Used in step 6
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)

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0 492 668 (52 0 050) Pliers



Common	Used in step 13
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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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	10 15

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 23
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 23
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 23
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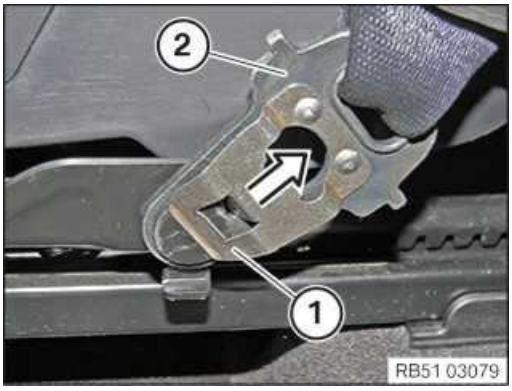
52 13 407 Replacing backrest cover for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

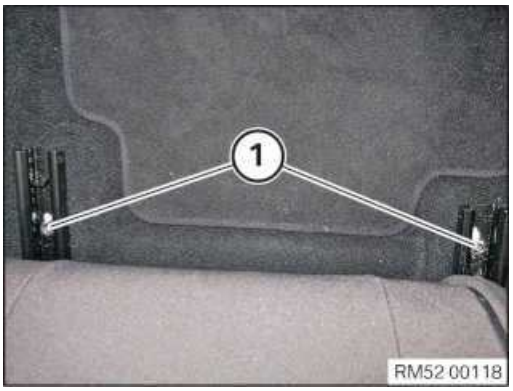
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



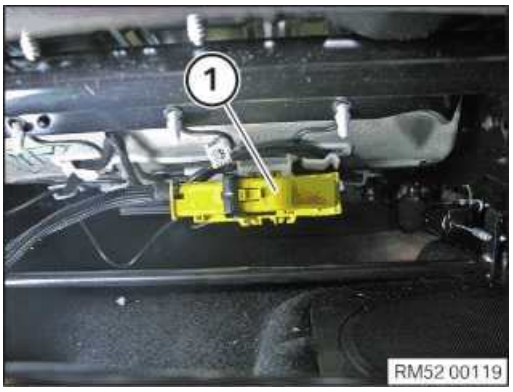
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

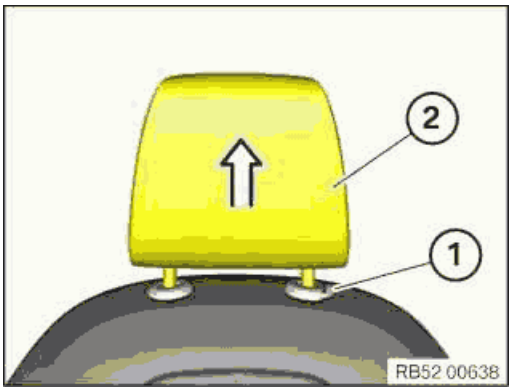
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

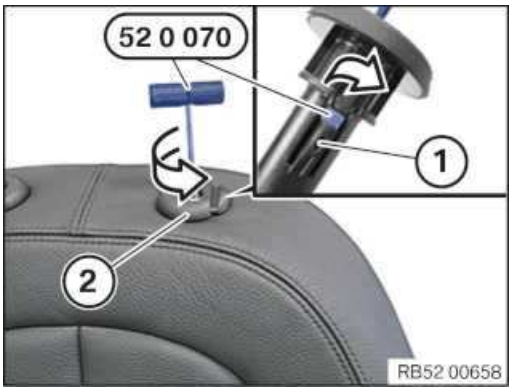
3 – Remove front head restraint



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

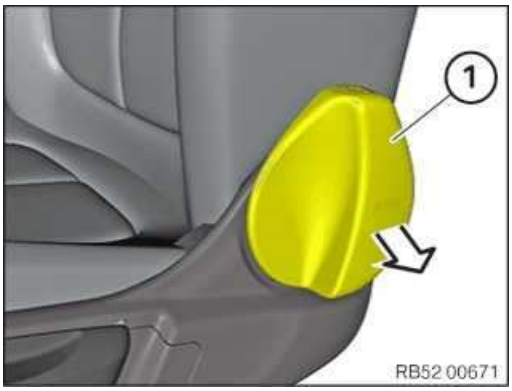
4 – Removing the guide sleeve for the front head restraint

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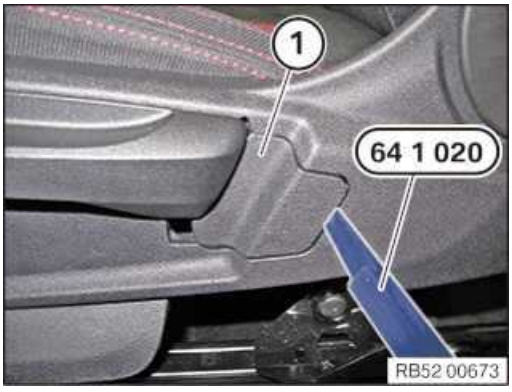
- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing lever for backrest adjustment on front seat

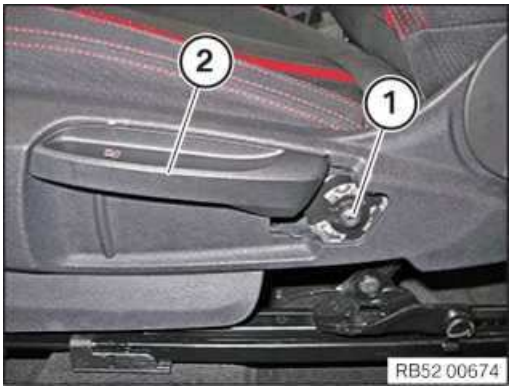


- Unclip the lever (1) outwards.

6 – Remove lever for seat height adjustment on front seat



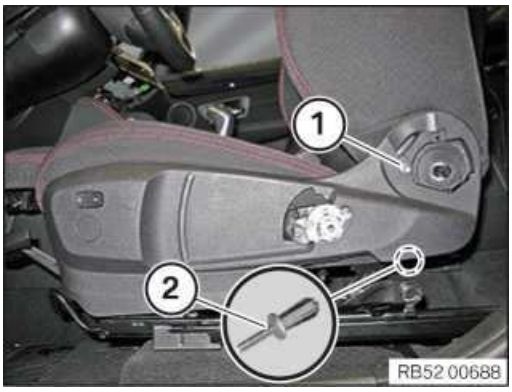
- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.



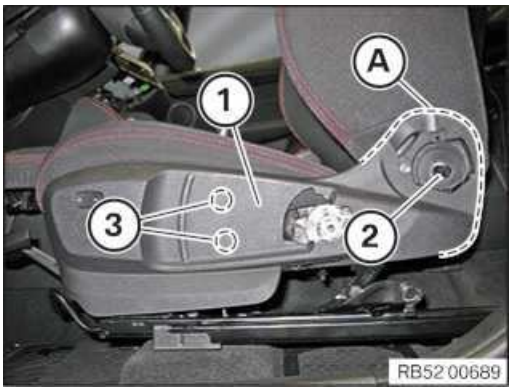
- Loosen screw (1).
- Remove the lever (2).

7 – Remove the outer cover of the front seat (mechanical)

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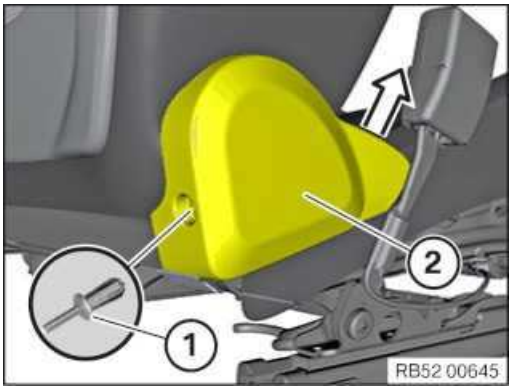


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

8 – Remove inner cover on front seat

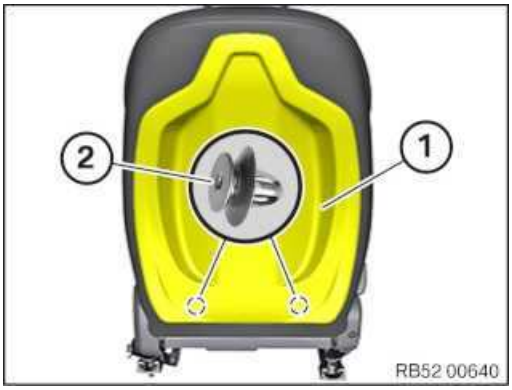


- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

9 – Remove rear panel on front seat backrest



- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.

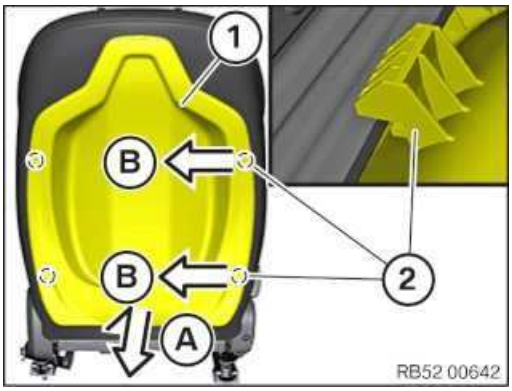


- Release the rear panel (1) toward the rear from the clips (2).

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- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

10 – Remove side airbag in front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

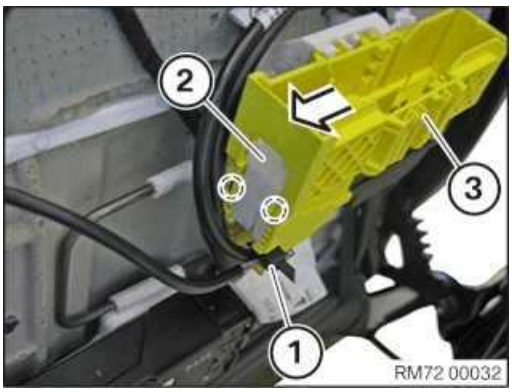
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

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



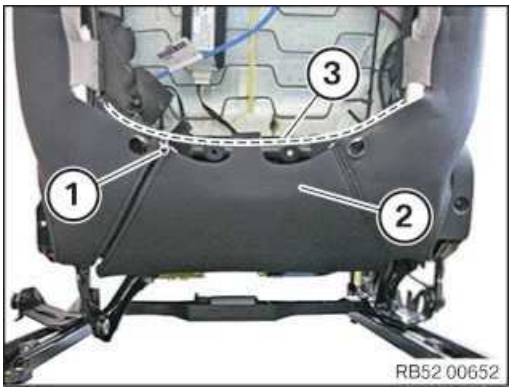
- If necessary detach the cable strap (1).

TECHNICAL INFORMATION

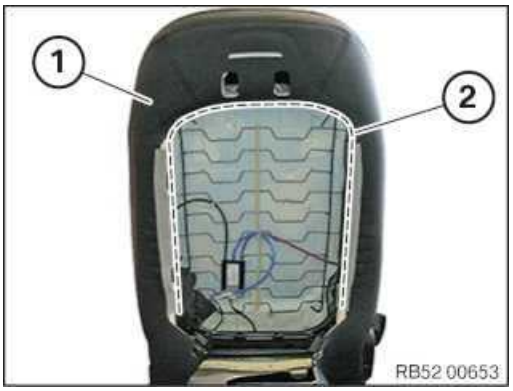
Different variants may be installed depending on the vehicle equipment.

- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).

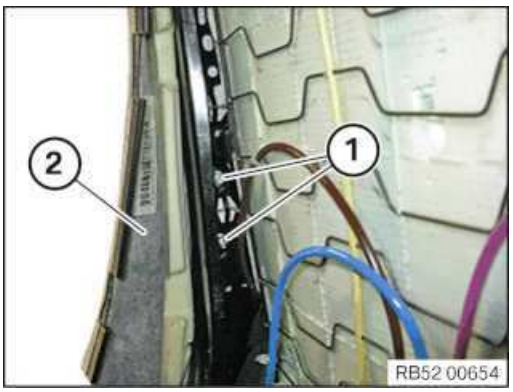
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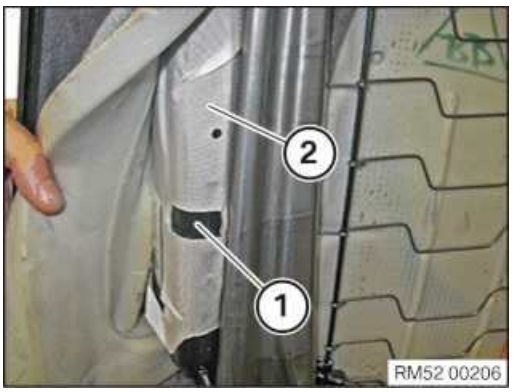
- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).



- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).



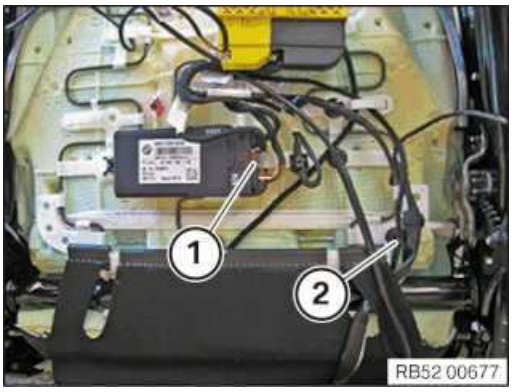
- Slide the side airbag (1) down and out of the cover pocket (2).

11 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.

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- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



- Guide out the backrest cover (1) complete with the cushion toward the top.

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MAIN WORK

12 – Remove the backrest cover from front seat-backrest

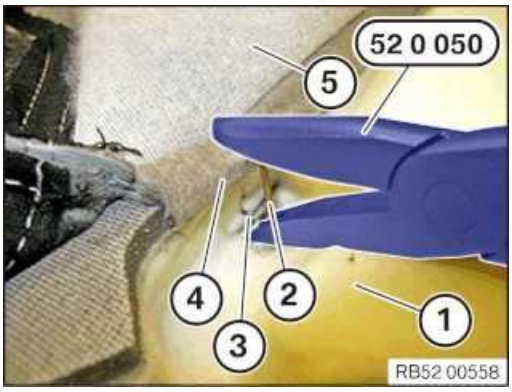


- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

13 – Install the backrest cover of the front seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.



- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.

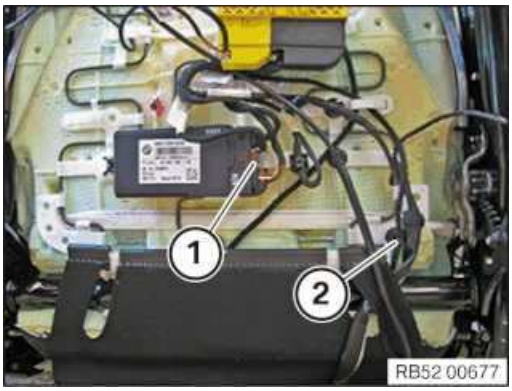
POSTPROCESSES

14 – Install the backrest cover with the cushion for the front seat

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- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

15 – Installing side airbag in the 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.

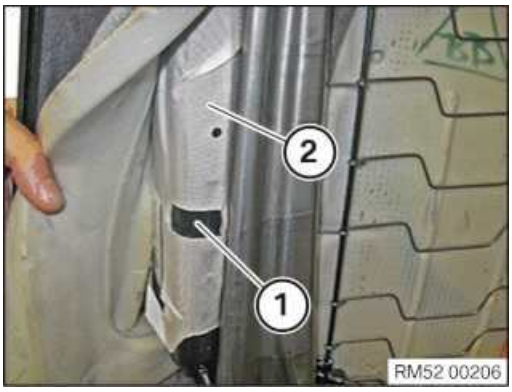
WARNING

Airbag unit.

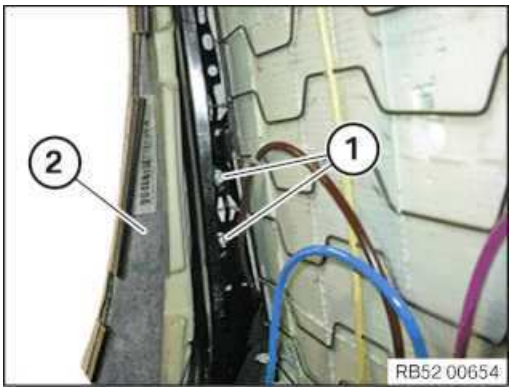
Danger! Life-threatening injuries!

- 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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- Feed the side airbag (1) upwards into the lining pocket (2).

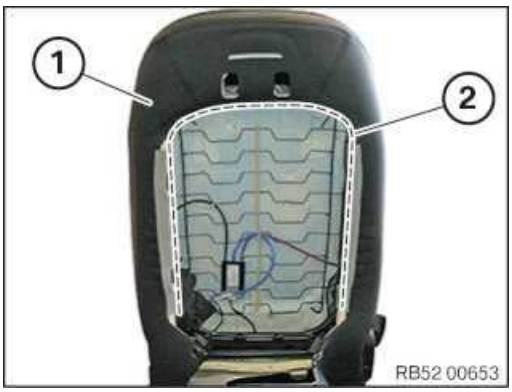


- Fold the backrest cover (2) to the side.
- Replace nuts.

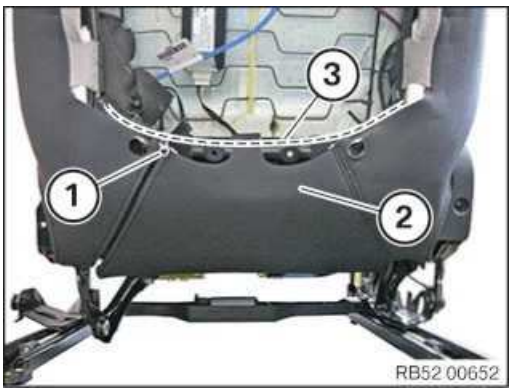
  Parts: Nuts
- Tighten nuts (1).

Side airbag to seat frame

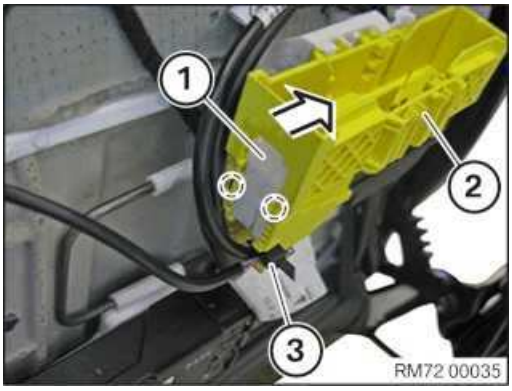
Hexagon nut		Renew nut.	6,5 Nm



- Attach the seat cover (1) in this area (2) to the backrest frame.



- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).



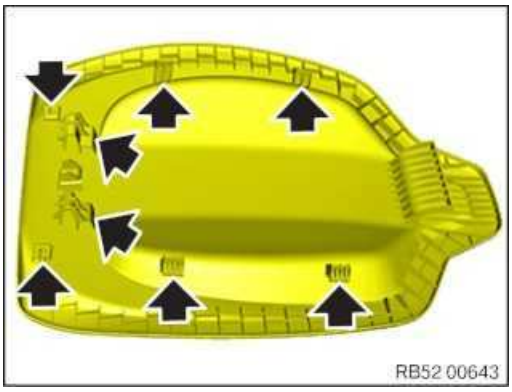
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

16 – Install the rear panel on the front seat backrest

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- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).

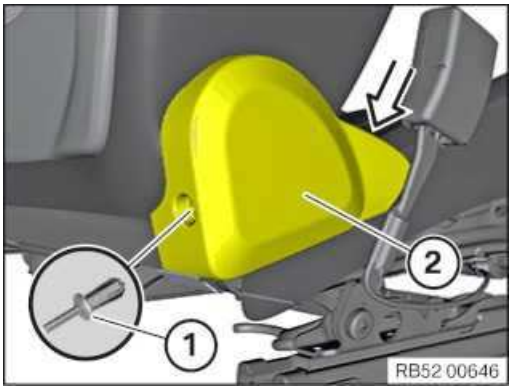


- Clip in the rear panel (1) at the clips (2).



- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

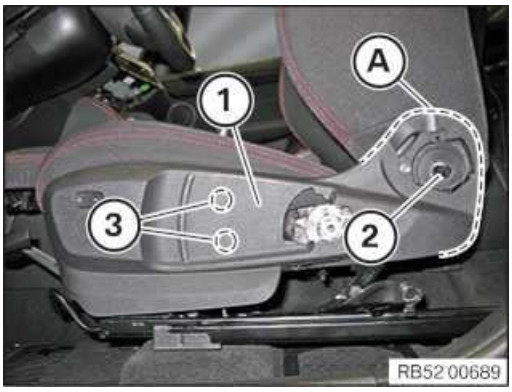
17 – Installing the inner cover on the front seat



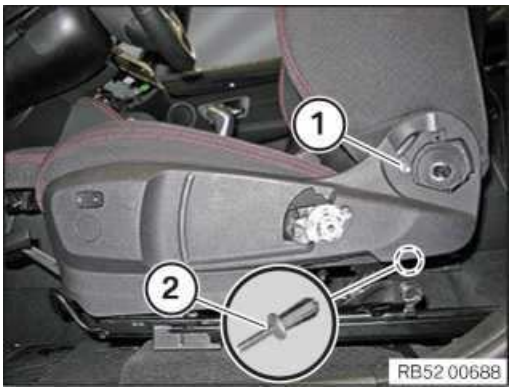
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

18 – Install the outside cover for the front seat (mechanical)

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- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



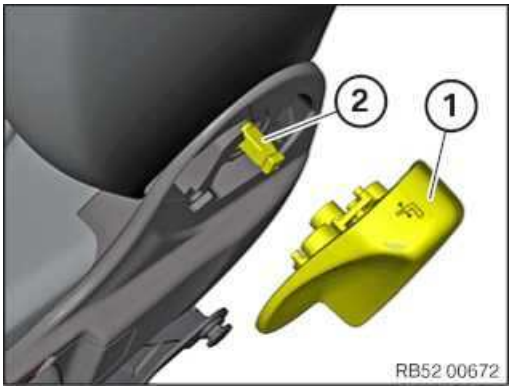
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

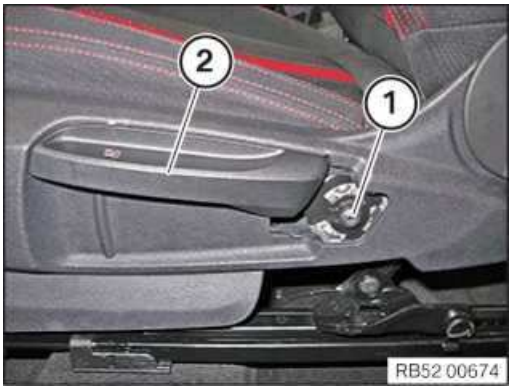
- Fasten expanding rivet (2).

19 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

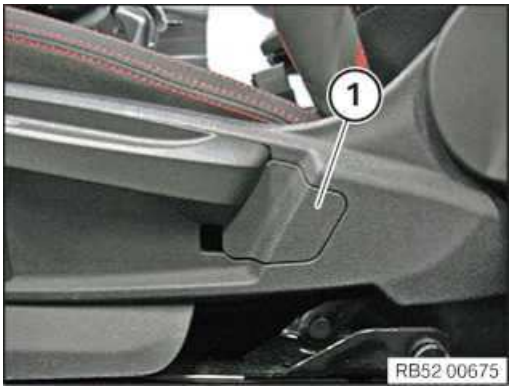
20 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

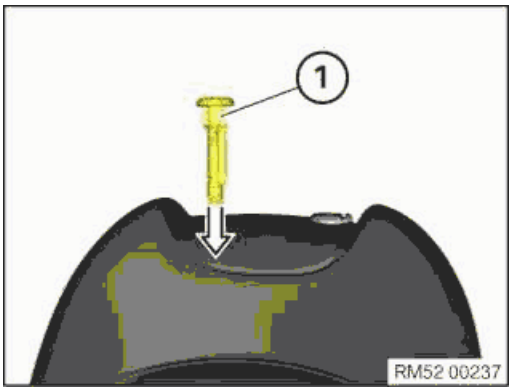
Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

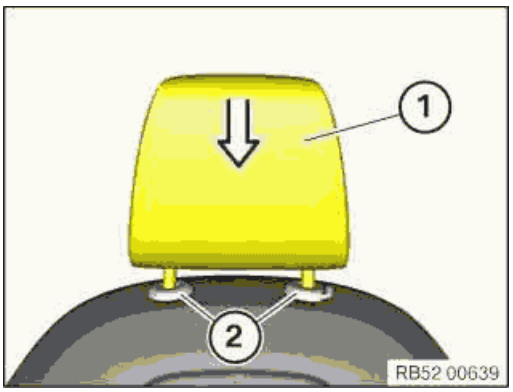
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21 – Installing the guide sleeve for the front head restraint



- Insert guide (1) from above and engage.

22 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

23 – Install front seat

TECHNICAL INFORMATION

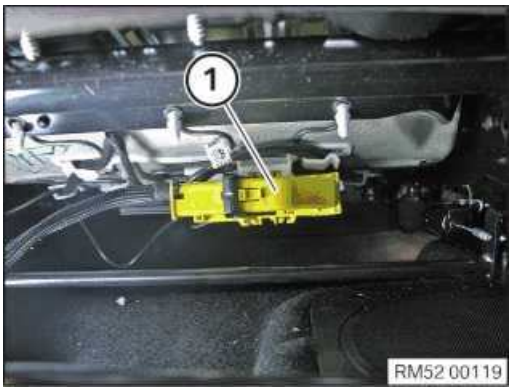
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

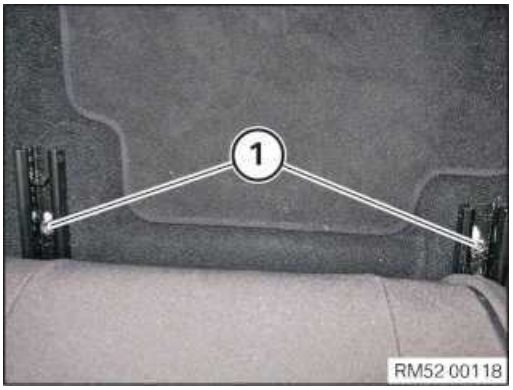
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

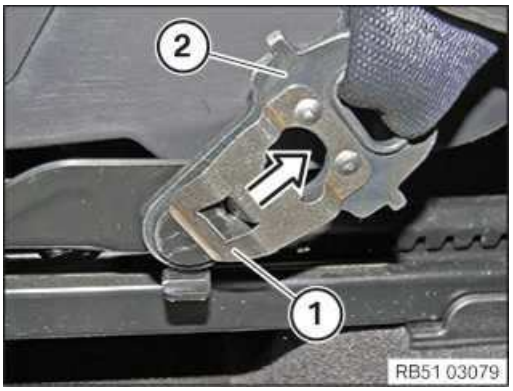
▸ **Disconnecting all battery earth leads**

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- See additional information.

24 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

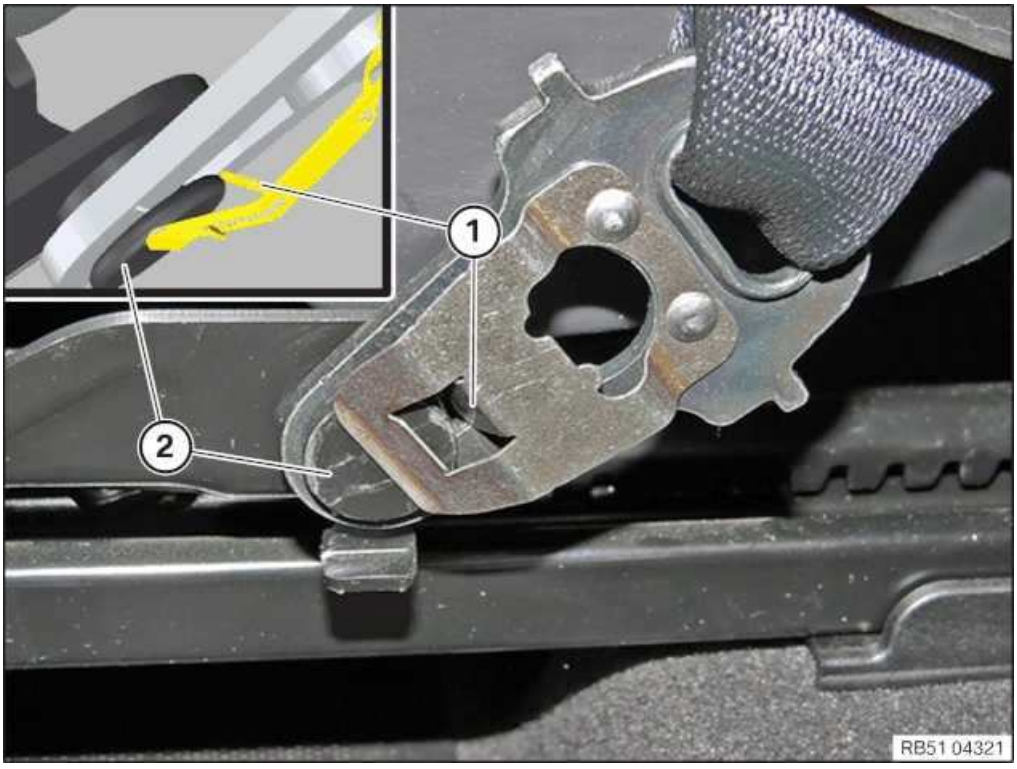
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Side airbag to seat frame — Used in step 15

Hexagon nut		Renew nut.	6,5 Nm

Outer cover to front seat — Used in step 18

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 20

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 23

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

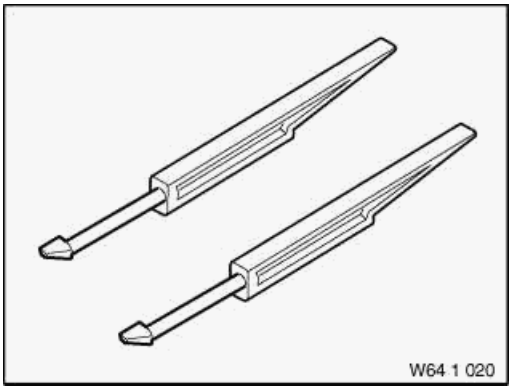
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2 154 711 Fitting aid



Common	Used in step 2 23
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

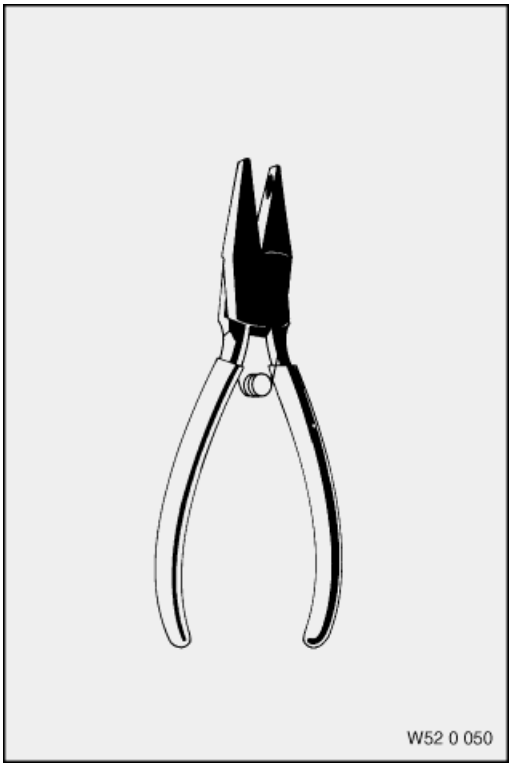
0 493 681 (64 1 020) Hook



Common	Used in step 6
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)

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0 492 668 (52 0 050) Pliers



Common	Used in step 13
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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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	10 15

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
61 20 900 Disconnecting and connecting battery earth lead	2 23
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 23
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 23
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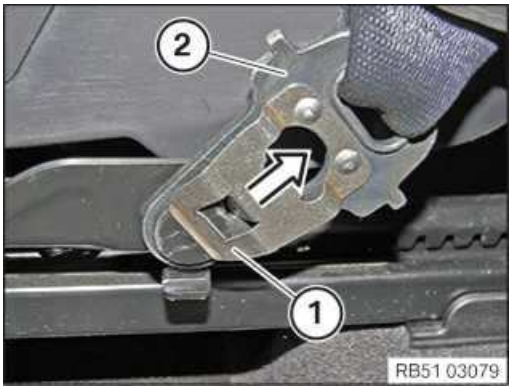
52 13 402 Replacing seat cover for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

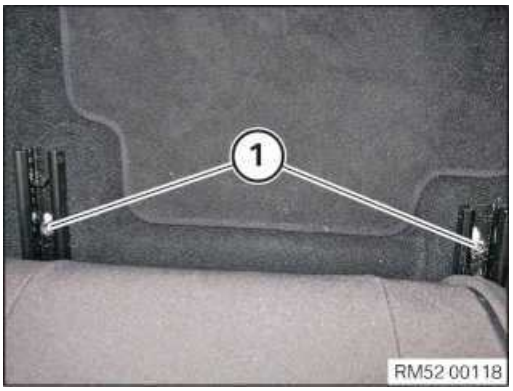
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



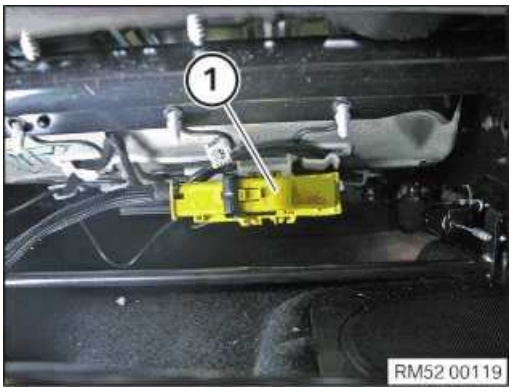
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

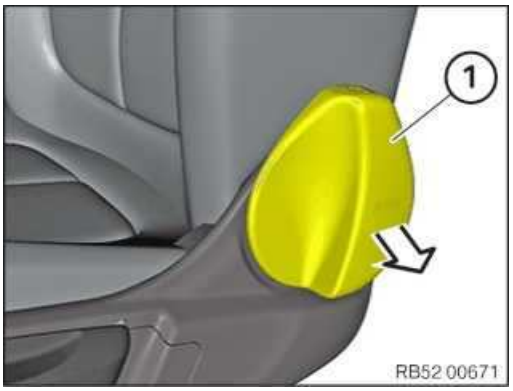
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

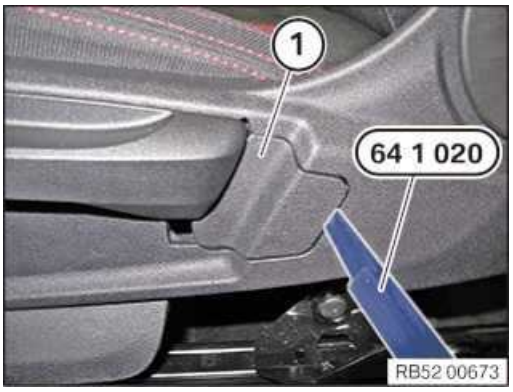
3 – Removing lever for backrest adjustment on front seat



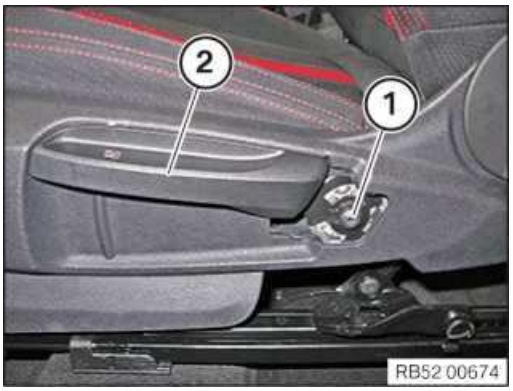
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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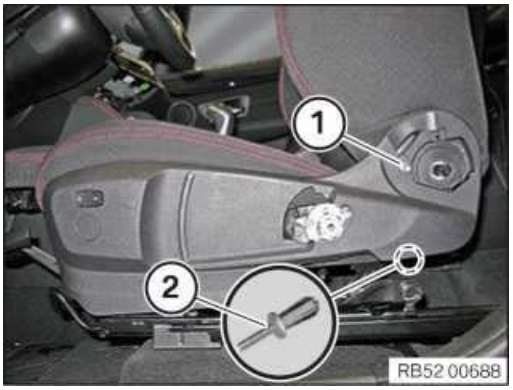


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

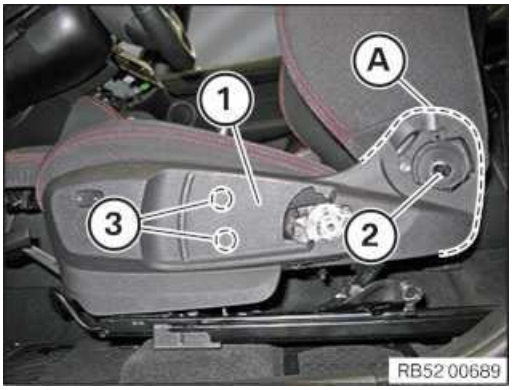


- Loosen screw (1).
- Remove the lever (2).

5 – Remove the outer cover of the front seat (mechanical)

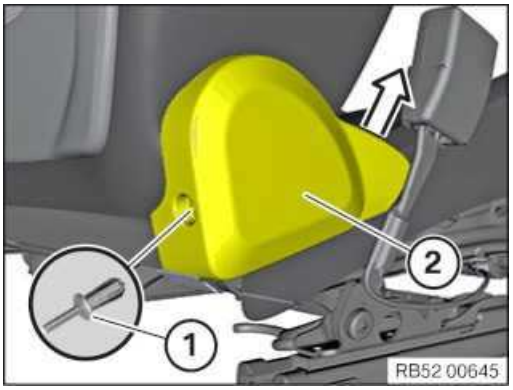


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

6 – Remove inner cover on front seat



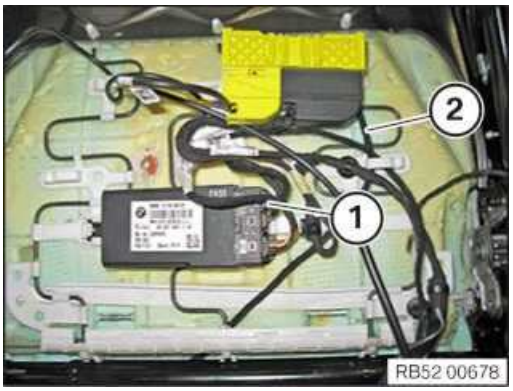
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

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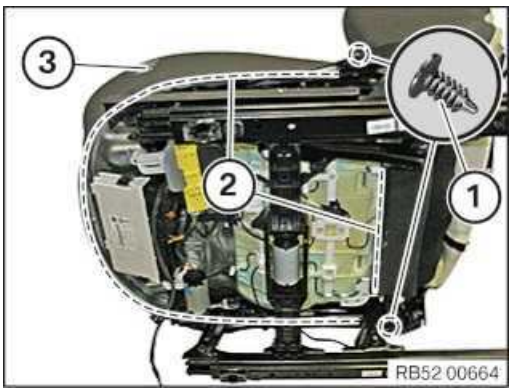
7 – Remove the seat cover with the cushion for the front seat



- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

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MAIN WORK

8 – Removing seat cover for front seat (basic)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

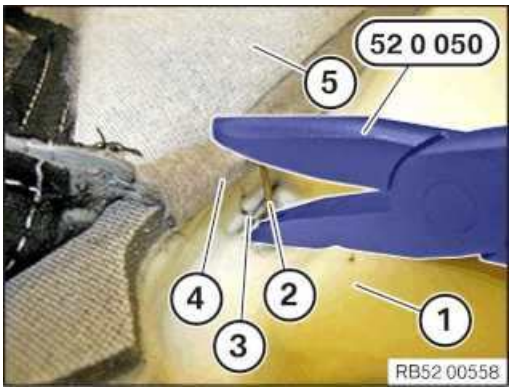
9 – Install the seat cover for the front seat (basic)

NOTICE

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



- Place the seat cover on the cushion.
- Secure all trim wires with clamps.



- Renew the clamps (2).

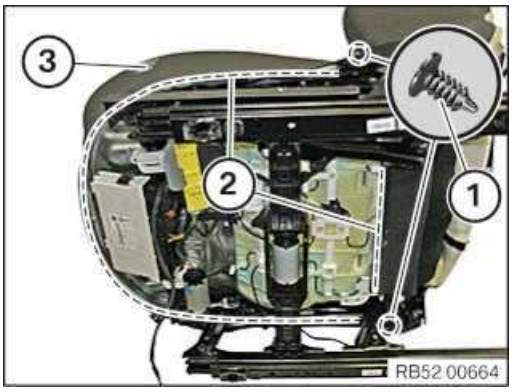
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

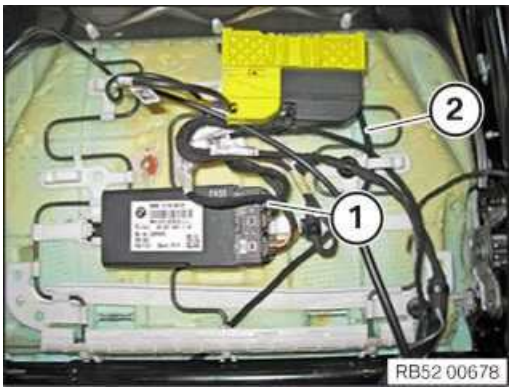
POSTPROCESSES

10 – Fit the seat cover with the upholstery for the front seat

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- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

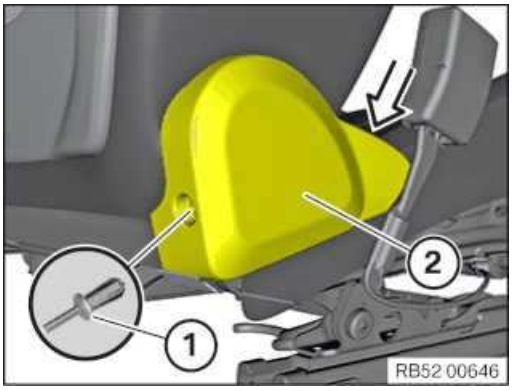


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



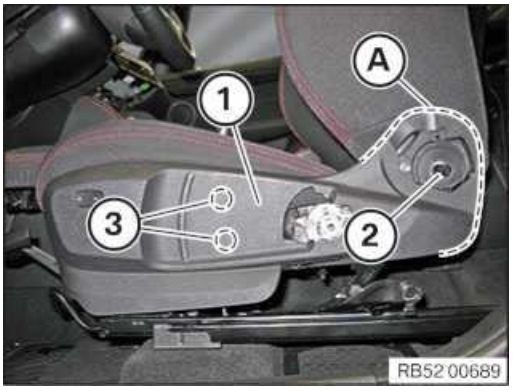
- Fasten retaining strap (1) to the seat mechanism at the left and right.

11 – Installing the inner cover on the front seat



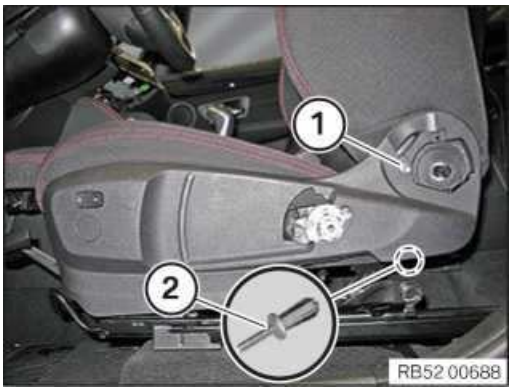
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

12 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).

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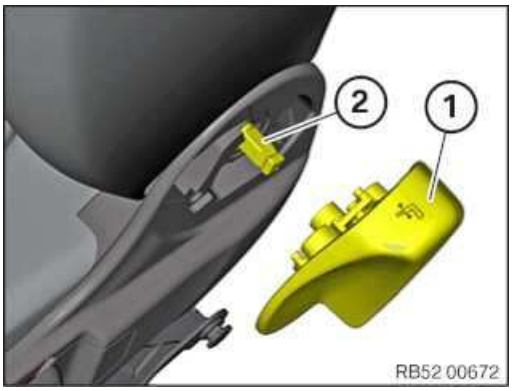
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

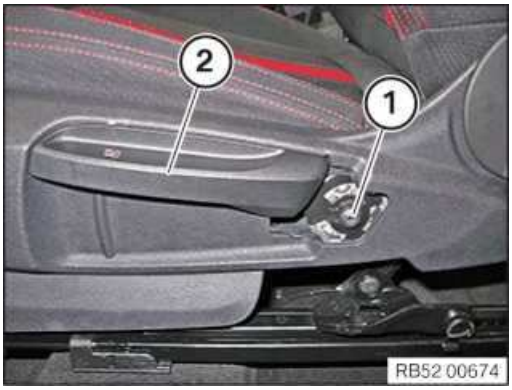
- Fasten expanding rivet (2).

13 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

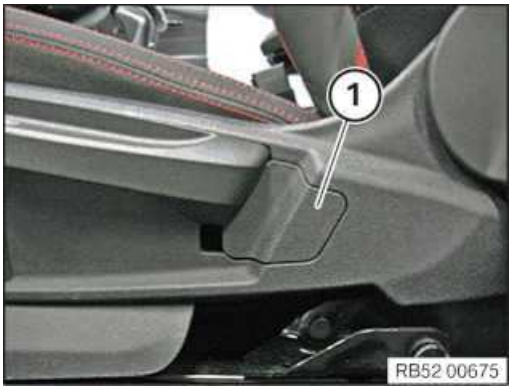
14 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

15 – Install front seat

TECHNICAL INFORMATION

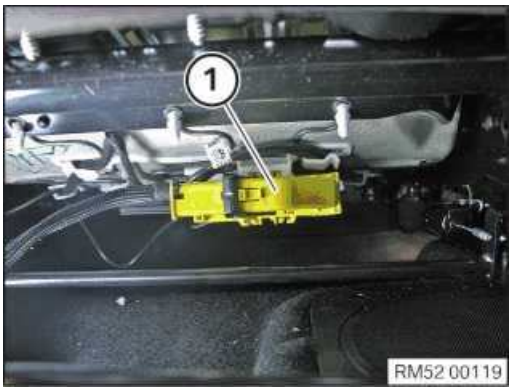
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**

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- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-



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.

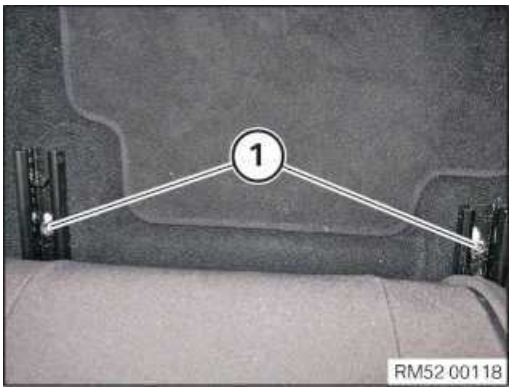
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

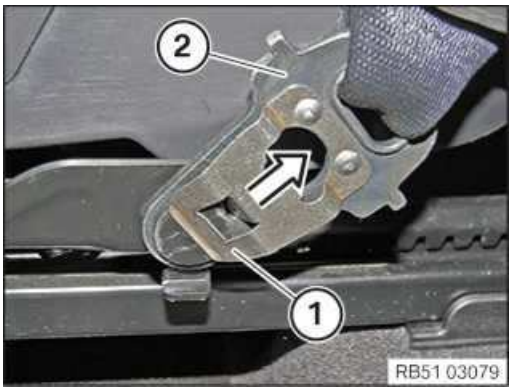
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▸ **Disconnecting all battery earth leads**



- See additional information.

16 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

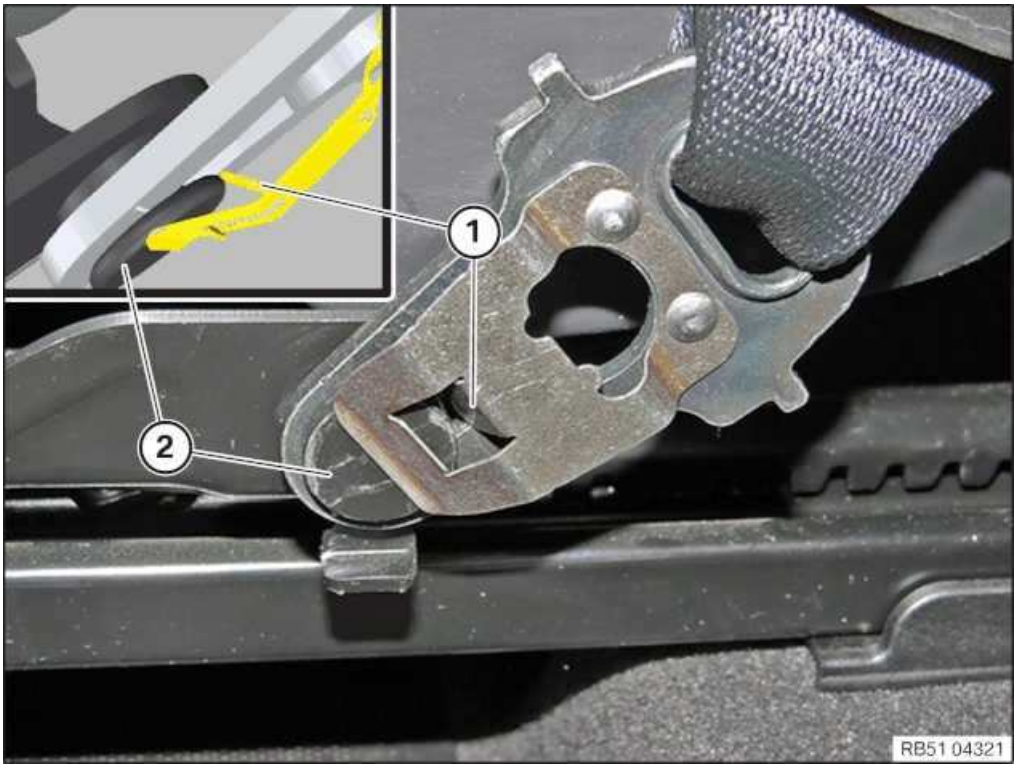
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Outer cover to front seat — Used in step 12

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 14

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 15

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

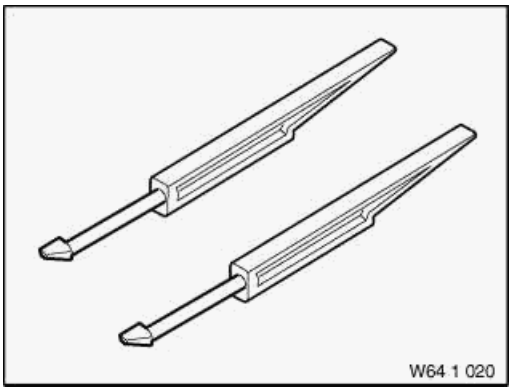
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2 154 711 Fitting aid



Common	Used in step 2 15
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

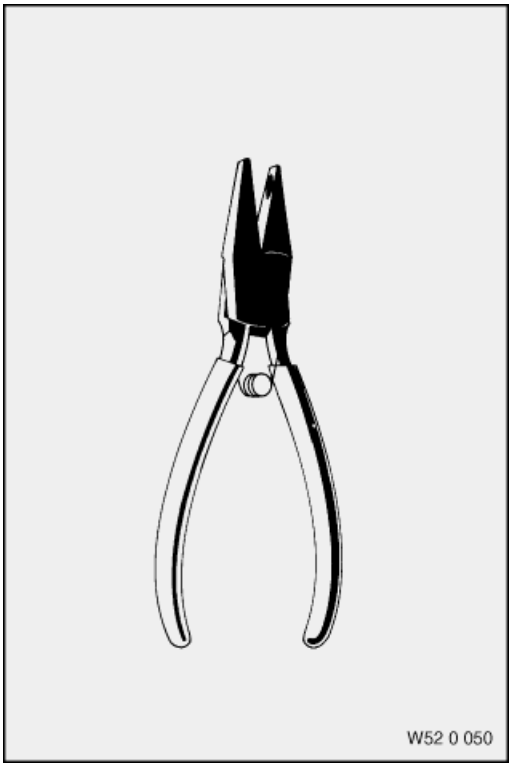
0 493 681 (64 1 020) Hook



Common	Used in step 4
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)

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0 492 668 (52 0 050) Pliers



Common

Used in step 9

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 15
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 15
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52 13 403 Replacing seat cover for front passenger seat

NOTICE

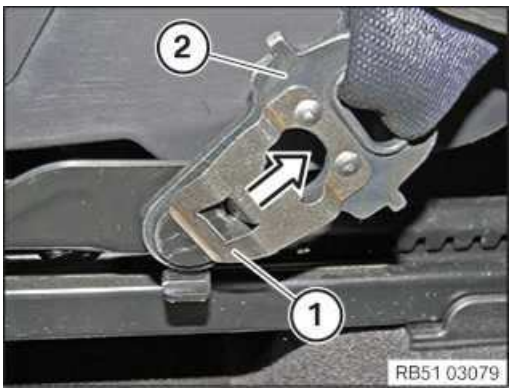
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

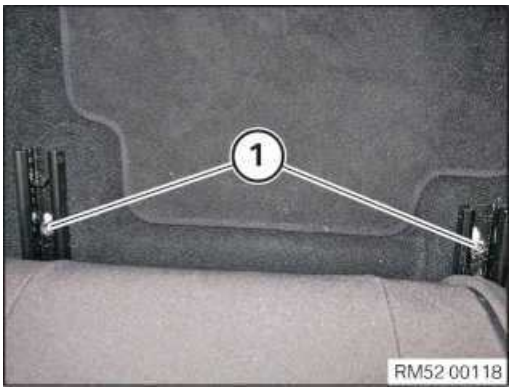
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



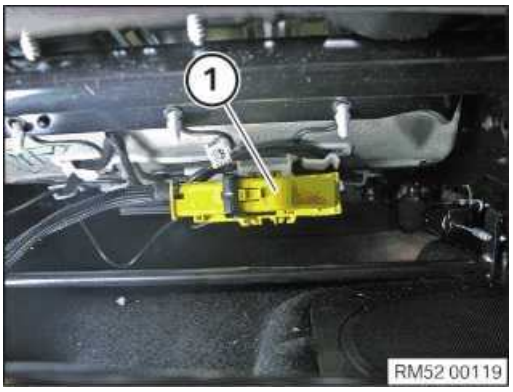
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

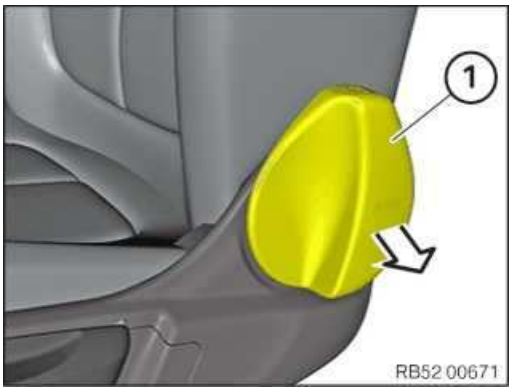
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

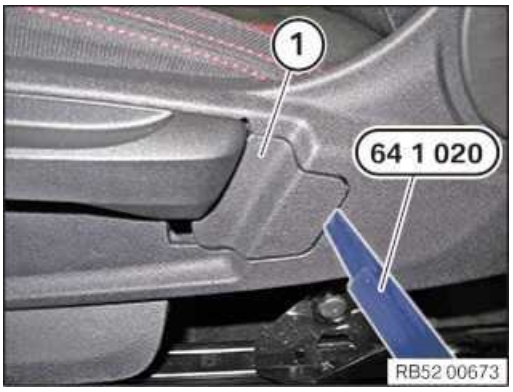
3 – Removing lever for backrest adjustment on front seat



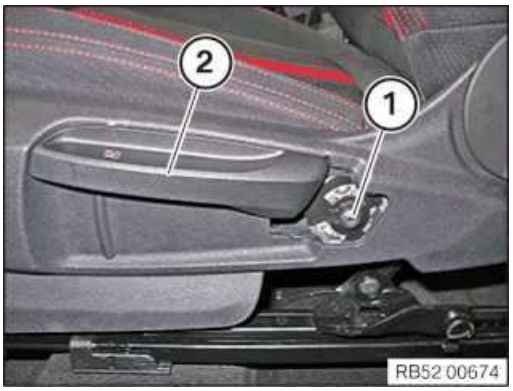
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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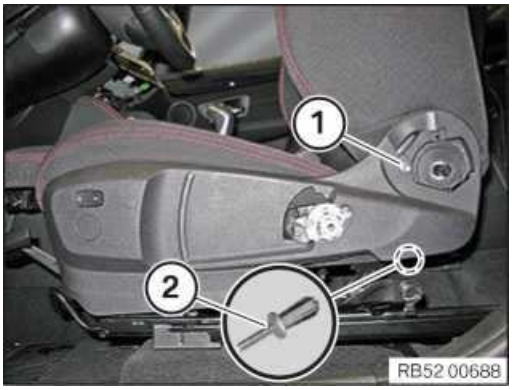


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

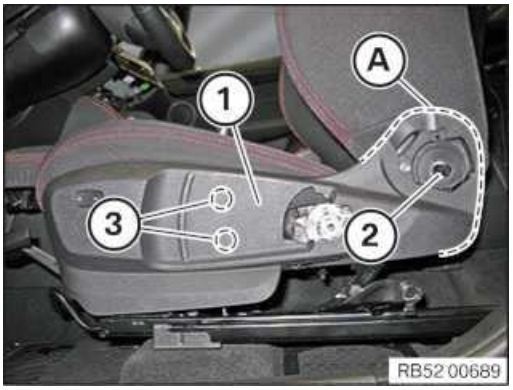


- Loosen screw (1).
- Remove the lever (2).

5 – Remove the outer cover of the front seat (mechanical)

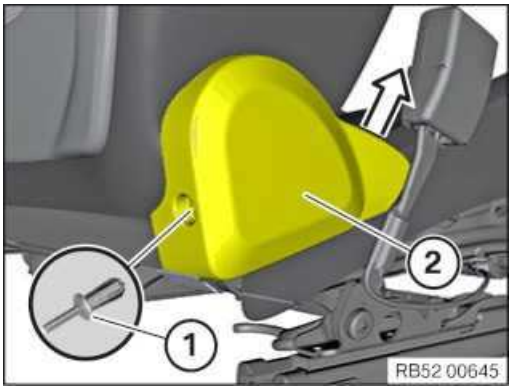


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

6 – Remove inner cover on front seat



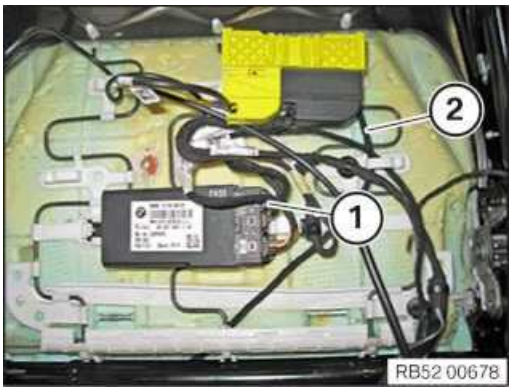
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

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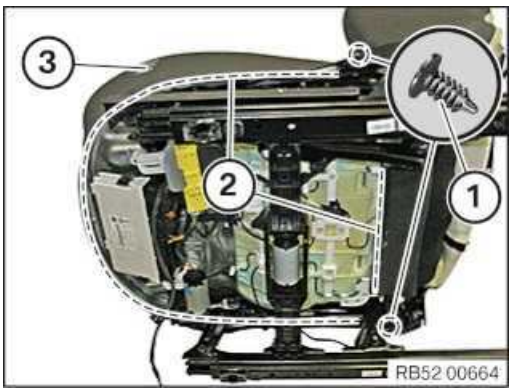
7 – Remove the seat cover with the cushion for the front seat



- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

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MAIN WORK

8 – Removing seat cover for front seat (basic)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

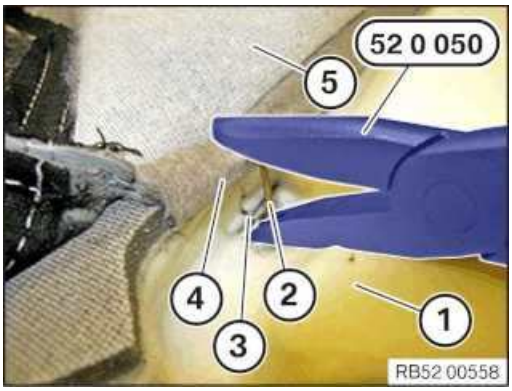
9 – Install the seat cover for the front seat (basic)

NOTICE

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



- Place the seat cover on the cushion.
- Secure all trim wires with clamps.



- Renew the clamps (2).

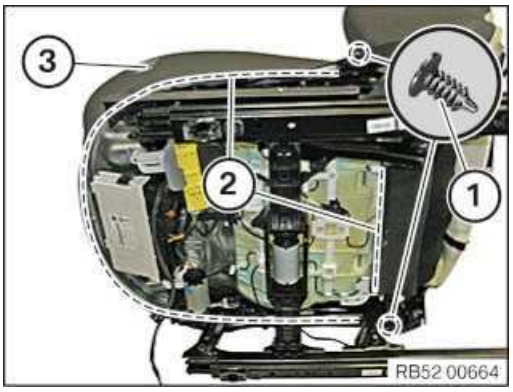
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

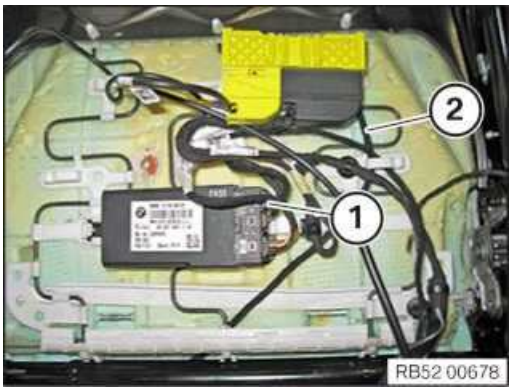
POSTPROCESSES

10 – Fit the seat cover with the upholstery for the front seat

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- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

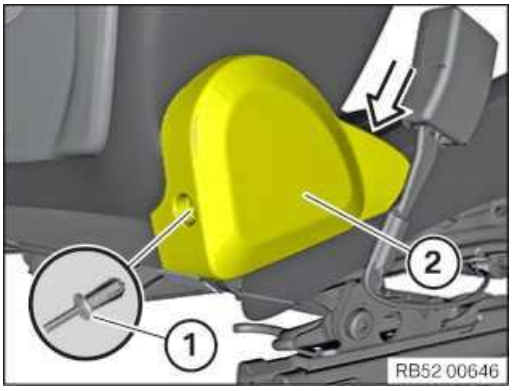


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



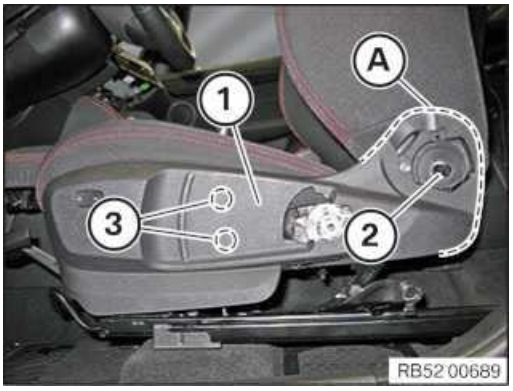
- Fasten retaining strap (1) to the seat mechanism at the left and right.

11 – Installing the inner cover on the front seat



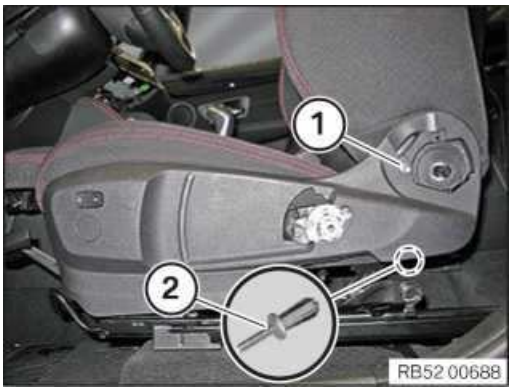
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

12 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).

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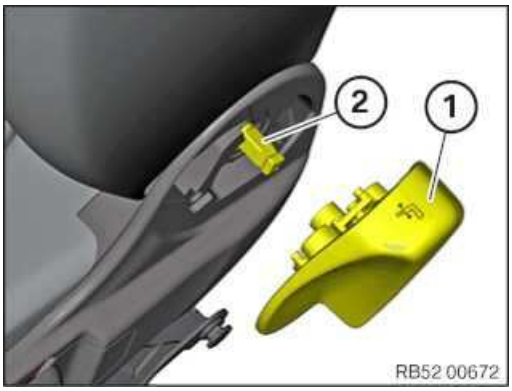
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

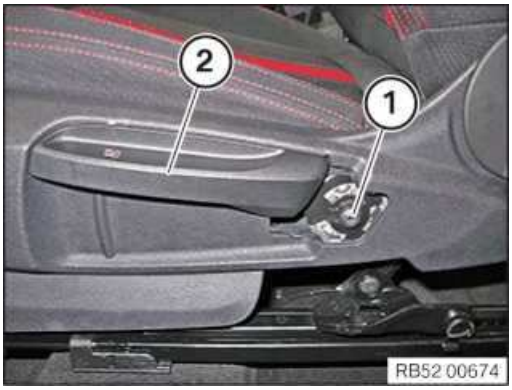
- Fasten expanding rivet (2).

13 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

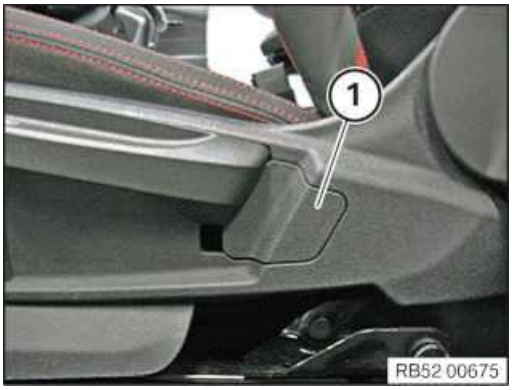
14 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

15 – Install front seat

TECHNICAL INFORMATION

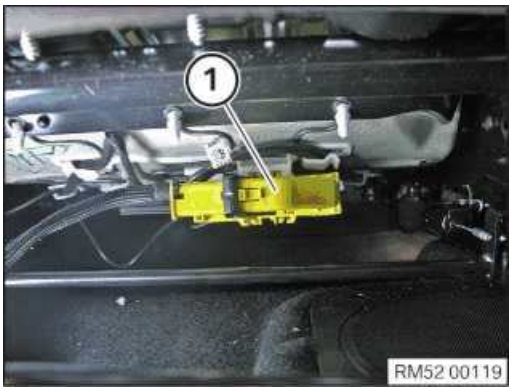
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**

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- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-



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.

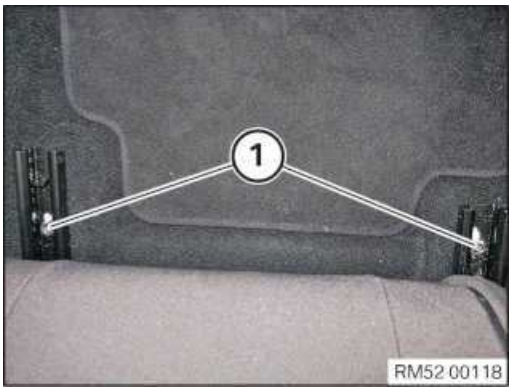
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

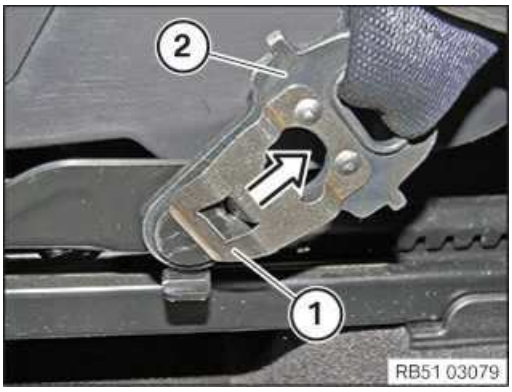
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▸ **Disconnecting all battery earth leads**



- See additional information.

16 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

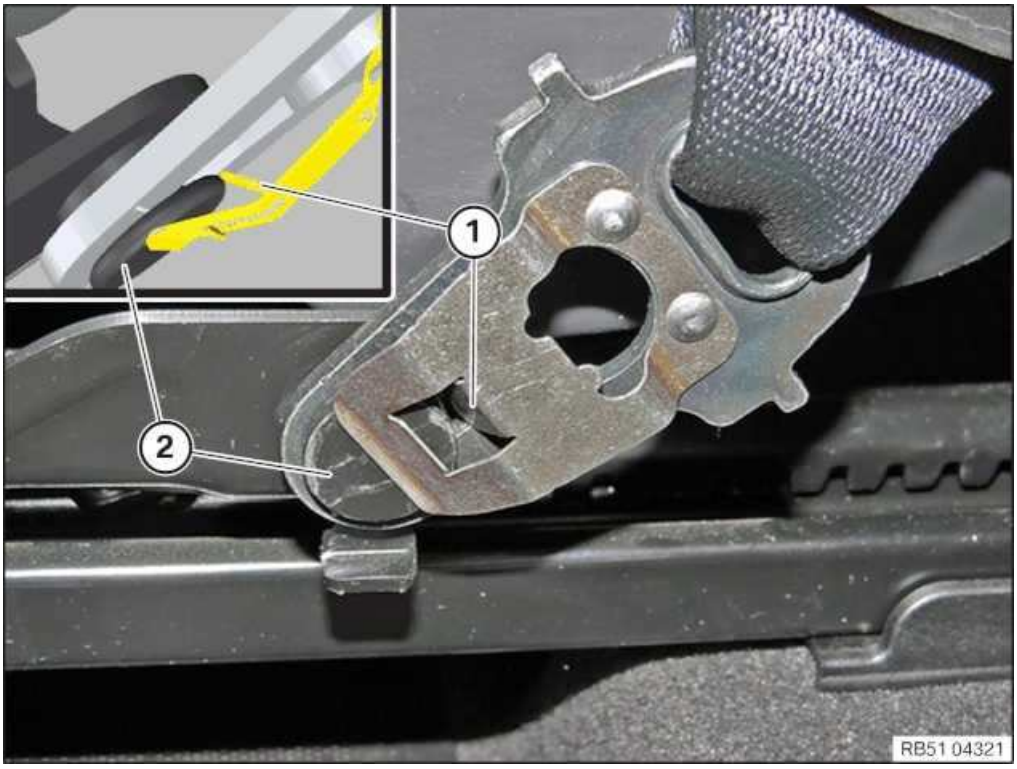
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Outer cover to front seat — Used in step 12

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 14

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 15

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

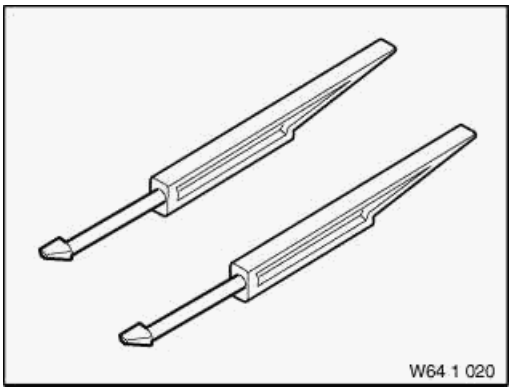
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2 154 711 Fitting aid



Common	Used in step 2 15
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

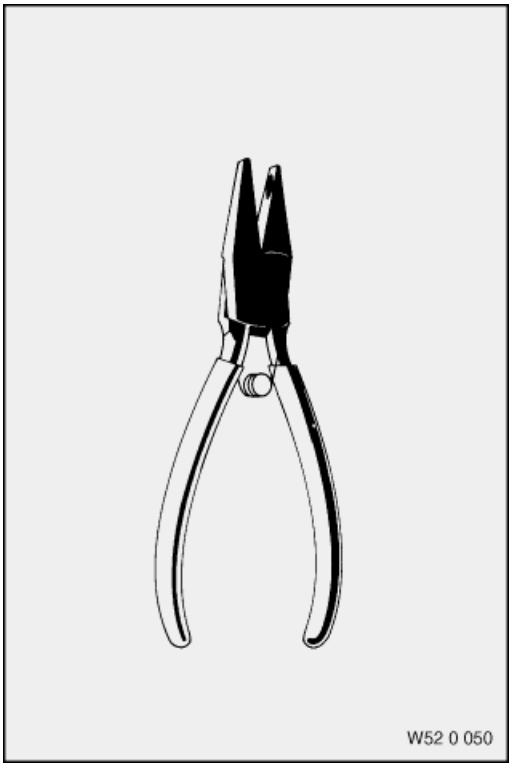
0 493 681 (64 1 020) Hook



Common	Used in step 4
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)

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0 492 668 (52 0 050) Pliers



Common

Used in step 9

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 15
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61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 15
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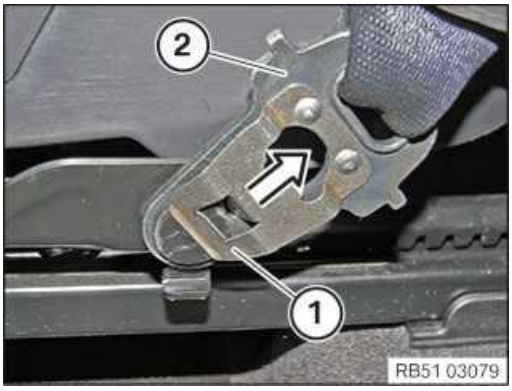
52 13 417 Replacing upholstery for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

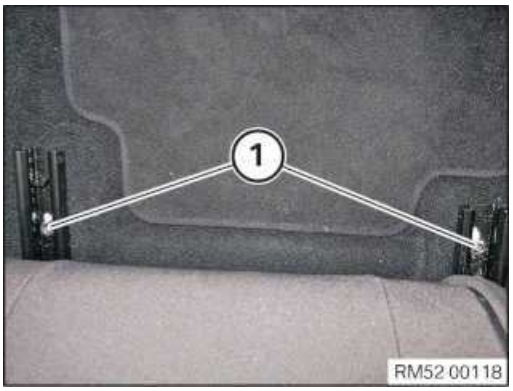
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



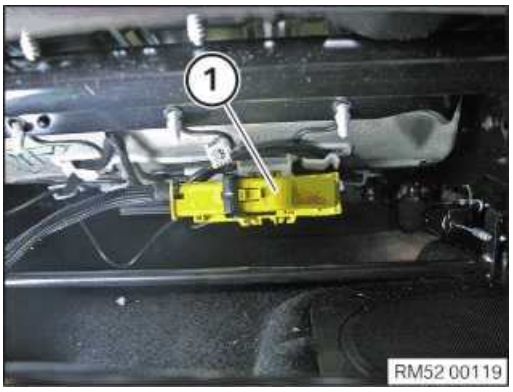
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

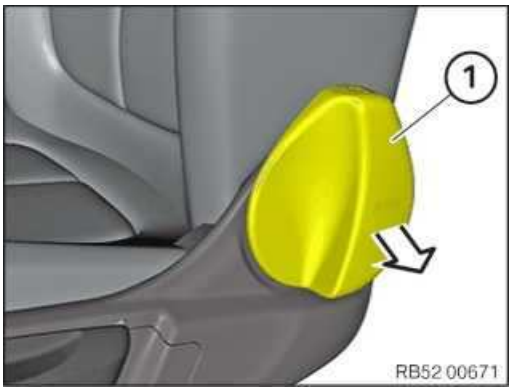
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

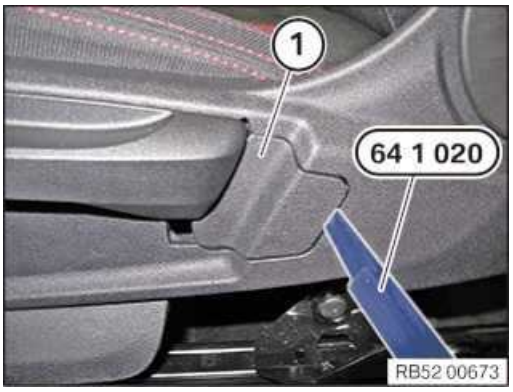
3 – Removing lever for backrest adjustment on front seat



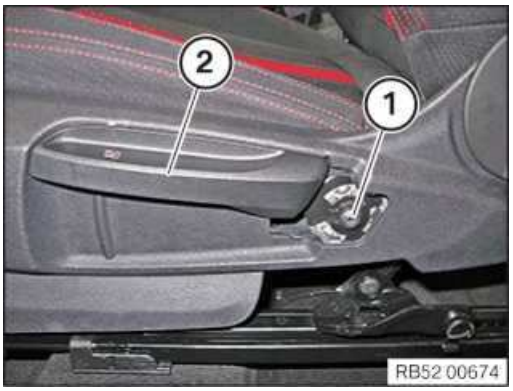
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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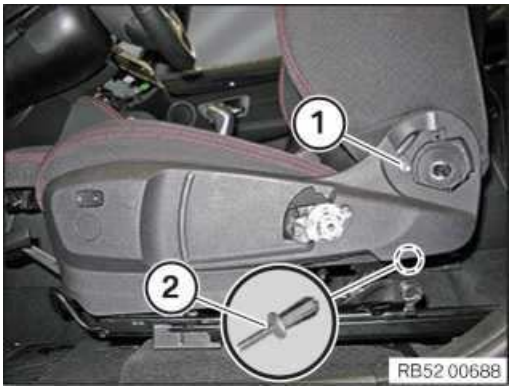


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

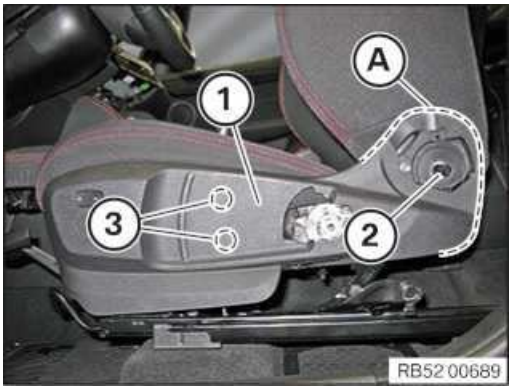


- Loosen screw (1).
- Remove the lever (2).

5 – Remove the outer cover of the front seat (mechanical)

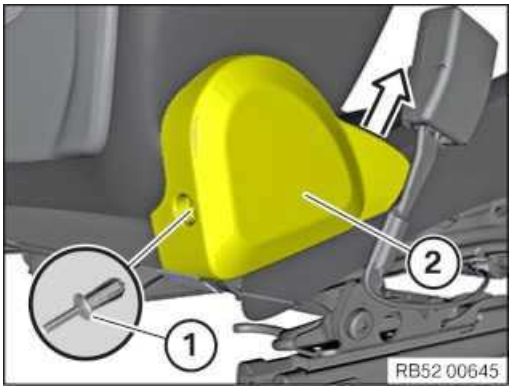


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

6 – Remove inner cover on front seat



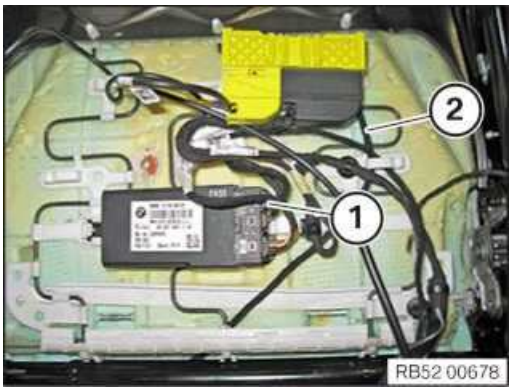
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

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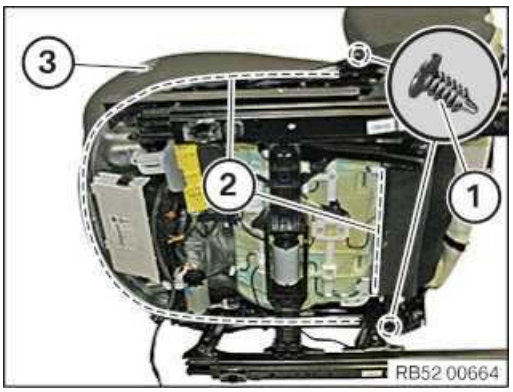
7 – Remove the seat cover with the cushion for the front seat



- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

8 – Removing seat cover for front seat (basic)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

9 – Renewing cushion for front seat

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TECHNICAL INFORMATION

Only US/Canadian version of front passenger seat with seat occupancy mat (CIS):

The seat occupancy mat is bonded to the entire surface of the upholstery and can only be replaced together with the upholstery.

If the seat occupancy mat or upholstery is defective, both parts must always be replaced together.

Full operability can only be guaranteed with the Original BMW replacement part.

After fitting the seat cover, enable the seat occupancy mat using the BMW programming system.

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.

When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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



- **Equipment specification with seat heating**

  Position the heating mat (1) on the cushion and align.

  Bond the heating mat (1) to the cushion in these areas (2).

10 – Install the seat cover for the front seat (basic)

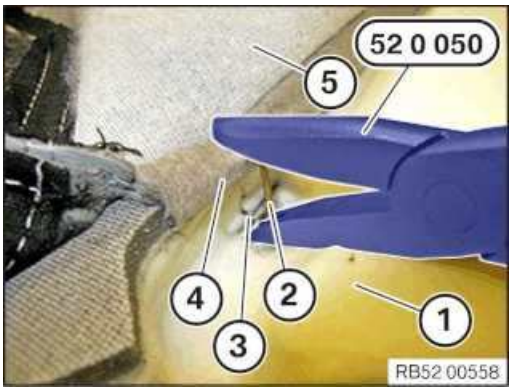
NOTICE

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



- Place the seat cover on the cushion.
- Secure all trim wires with clamps.

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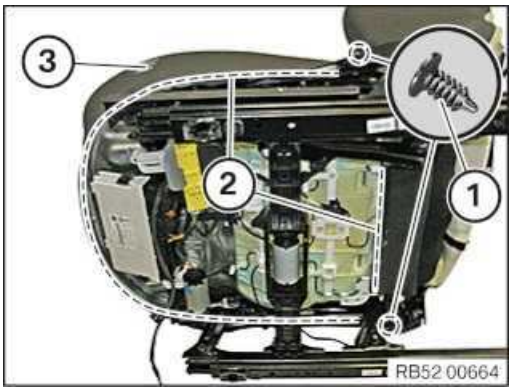
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

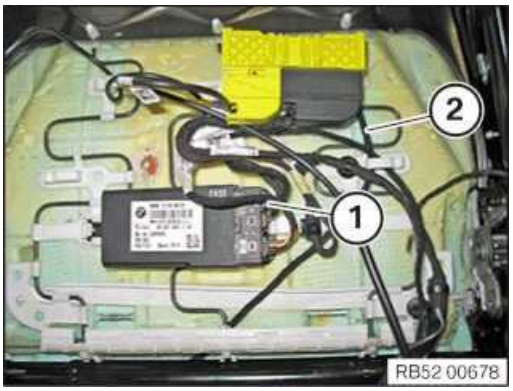
1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



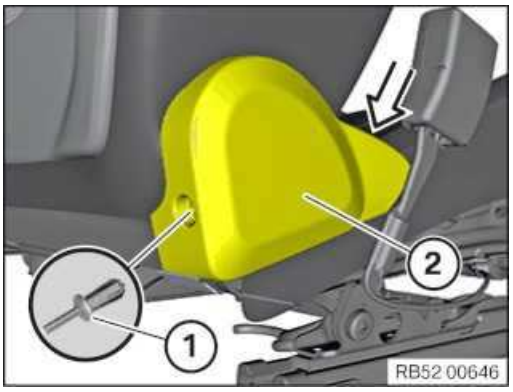
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



- Fasten retaining strap (1) to the seat mechanism at the left and right.

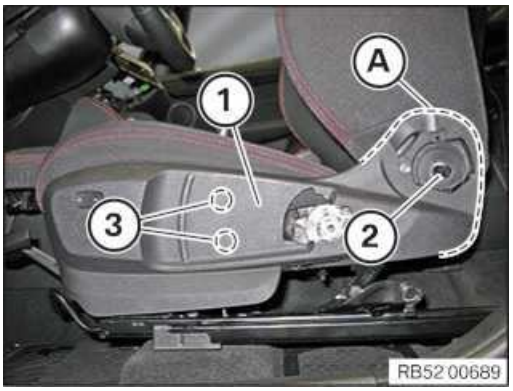
12 – Installing the inner cover on the front seat

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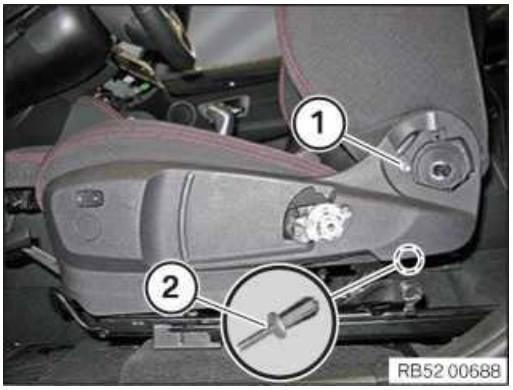


- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

13 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



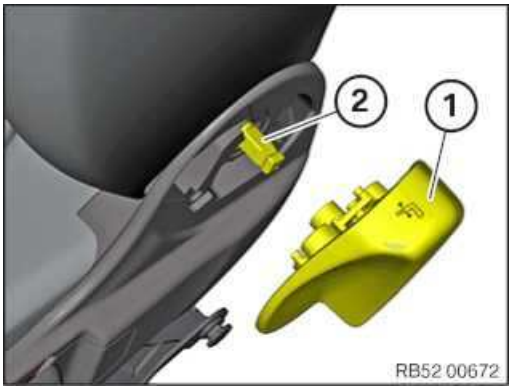
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

- Fasten expanding rivet (2).

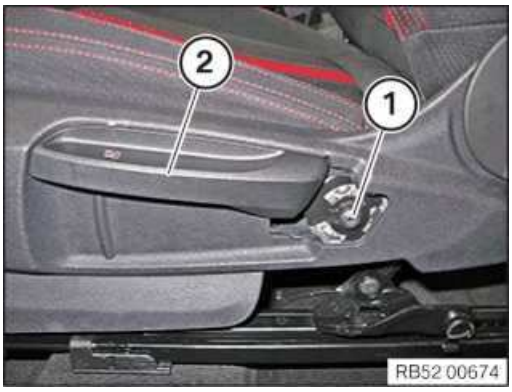
14 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

15 – Install the lever for the seat height adjustment on the front seat

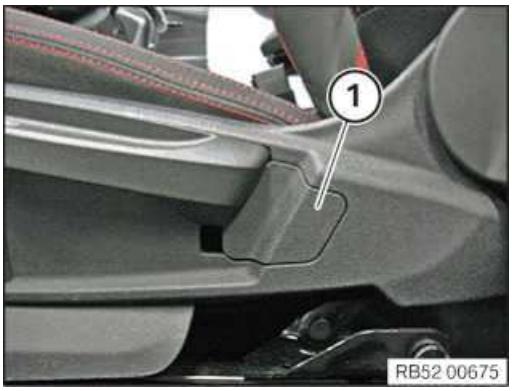
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- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

16 – Install front seat

TECHNICAL INFORMATION

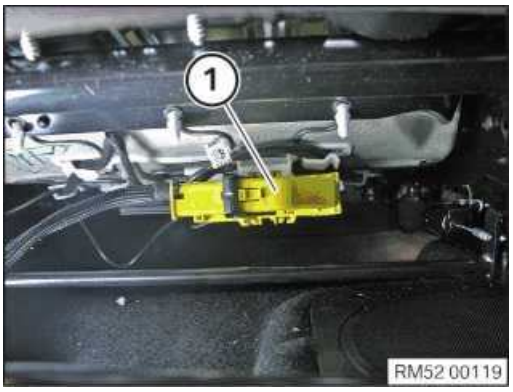
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

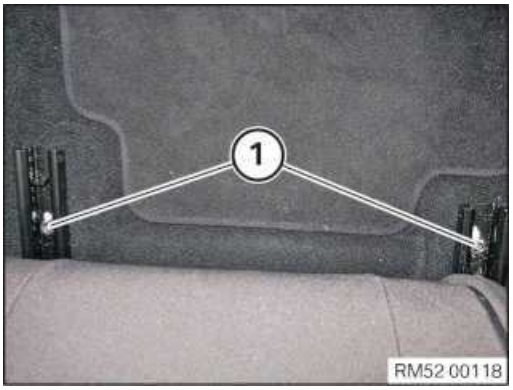
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

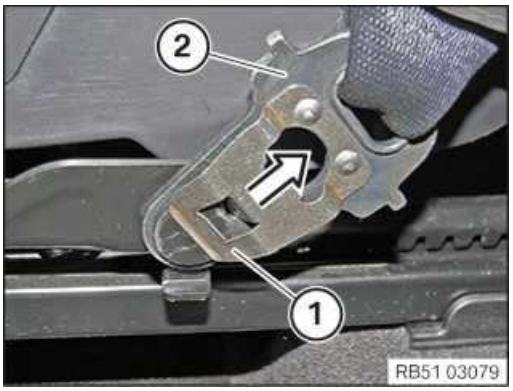
▸ **Disconnecting all battery earth leads**

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- See additional information.

17 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

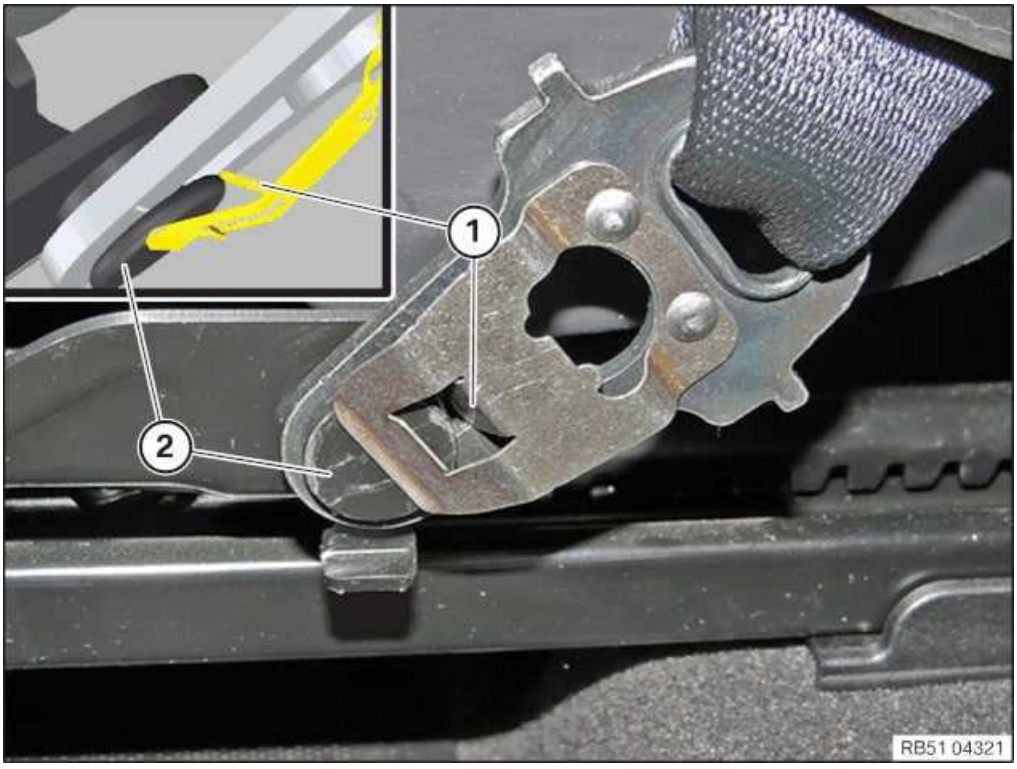
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Outer cover to front seat — Used in step 13

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 15

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 16

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

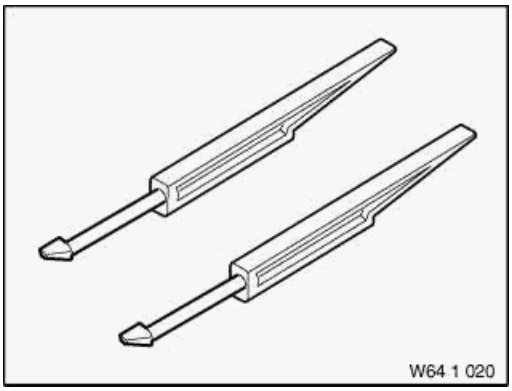
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2 154 711 Fitting aid



Common	Used in step 2 16
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

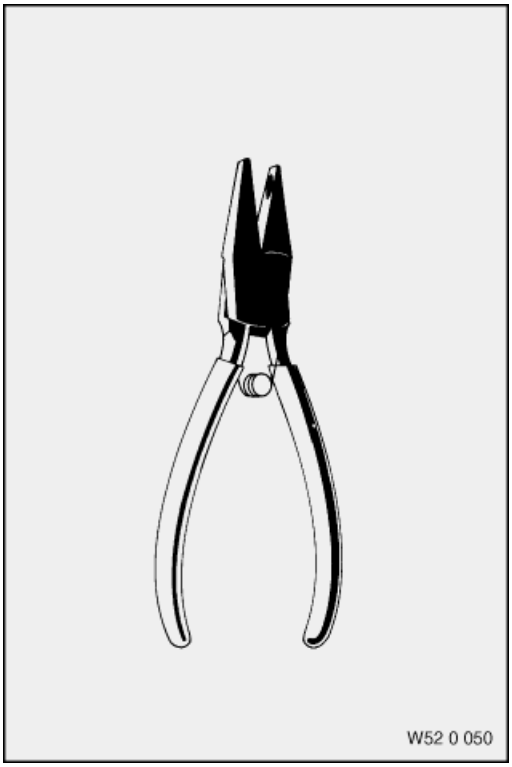
0 493 681 (64 1 020) Hook



Common	Used in step 4
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)

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0 492 668 (52 0 050) Pliers



Common

Used in step 10

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 16
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61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 16
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
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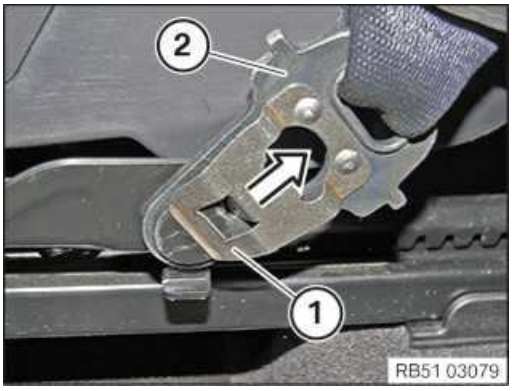
52 13 422 Replacing upholstery for driver's seat backrest

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

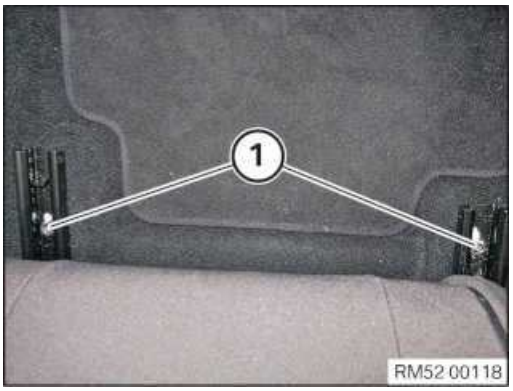
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



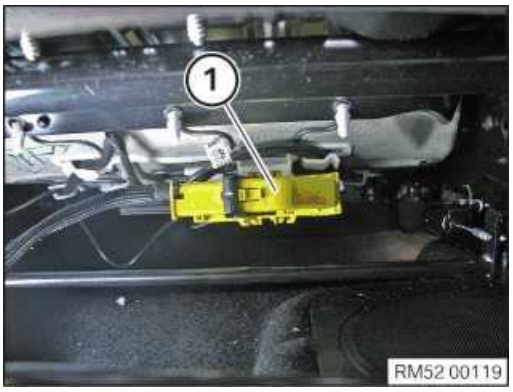
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

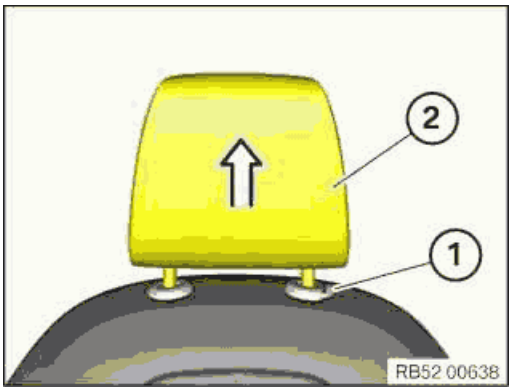
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

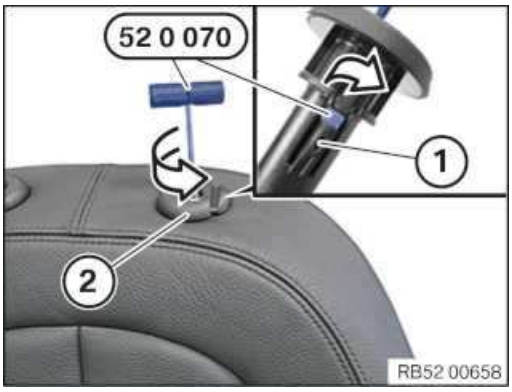
3 – Remove front head restraint



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

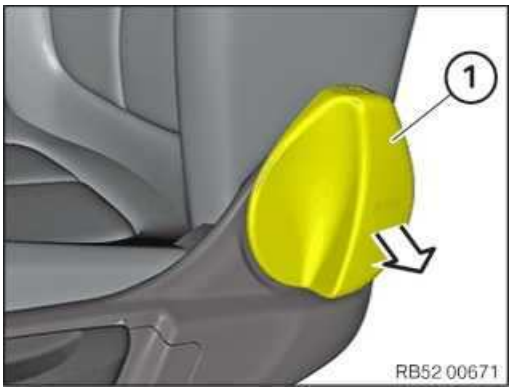
4 – Removing the guide sleeve for the front head restraint

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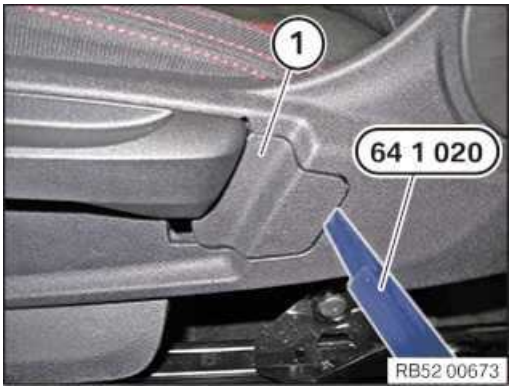
- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing lever for backrest adjustment on front seat

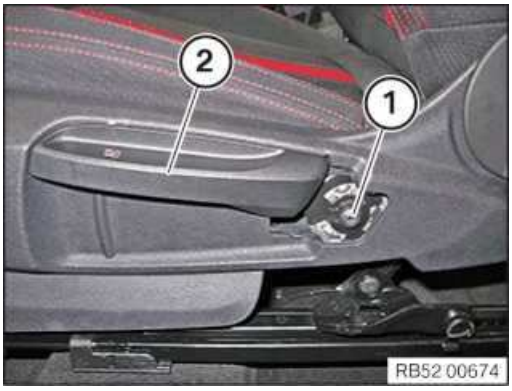


- Unclip the lever (1) outwards.

6 – Remove lever for seat height adjustment on front seat



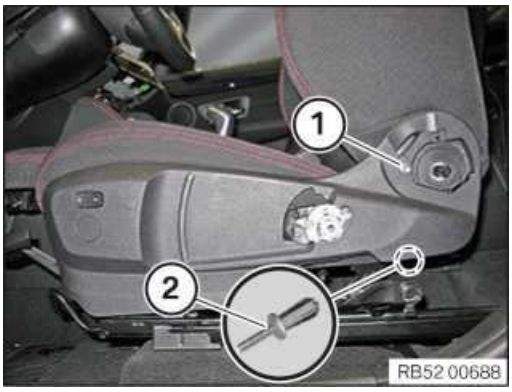
- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.



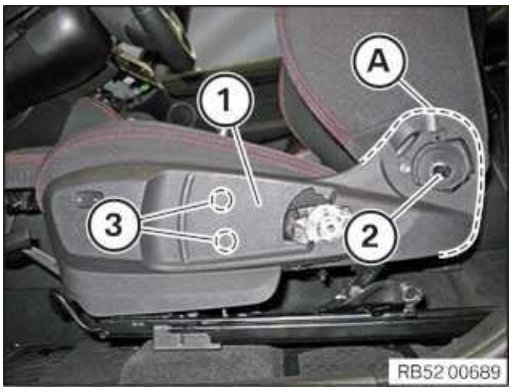
- Loosen screw (1).
- Remove the lever (2).

7 – Remove the outer cover of the front seat (mechanical)

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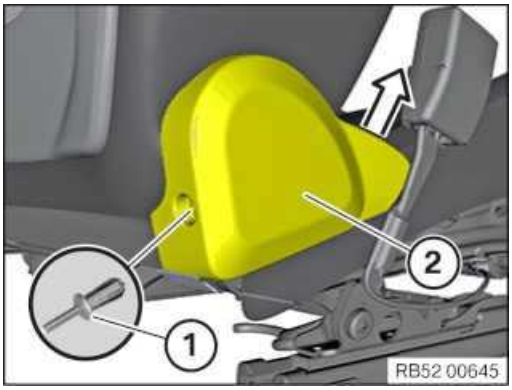


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

8 – Remove inner cover on front seat

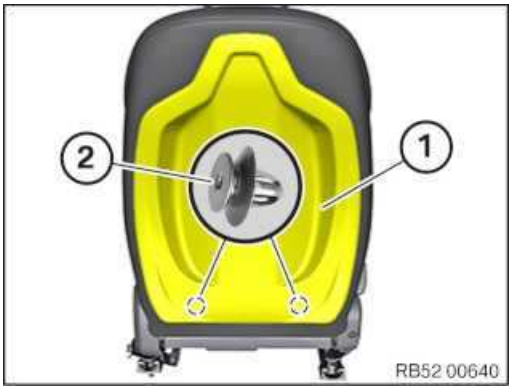


- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

9 – Remove rear panel on front seat backrest



- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.

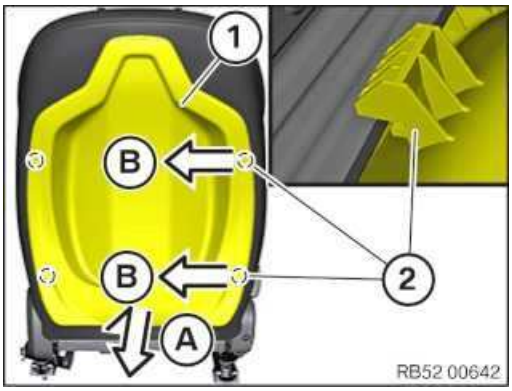


- Release the rear panel (1) toward the rear from the clips (2).

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- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

10 – Remove side airbag in front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

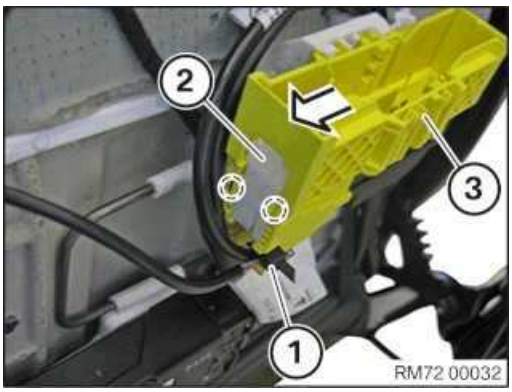
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

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



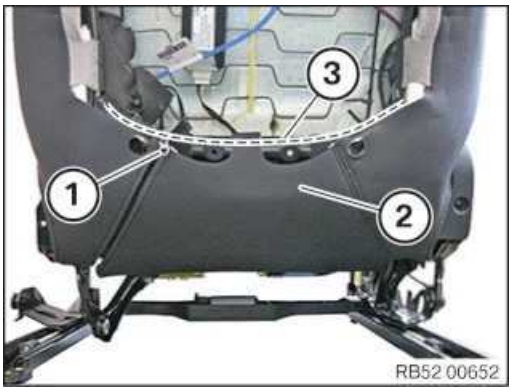
- If necessary detach the cable strap (1).

TECHNICAL INFORMATION

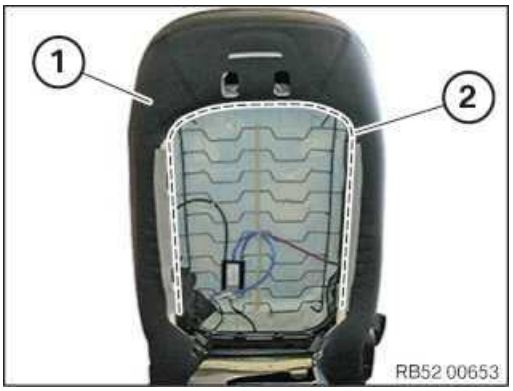
Different variants may be installed depending on the vehicle equipment.

- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).

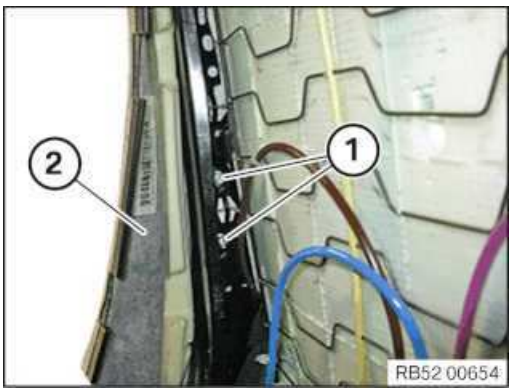
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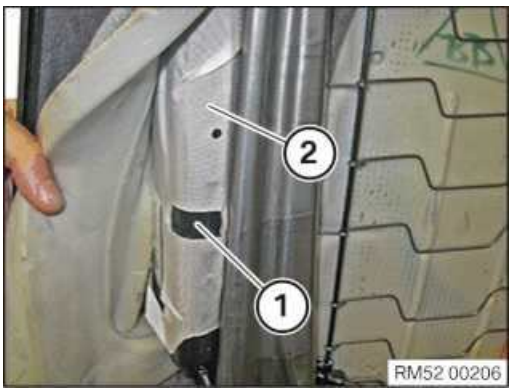
- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).



- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).



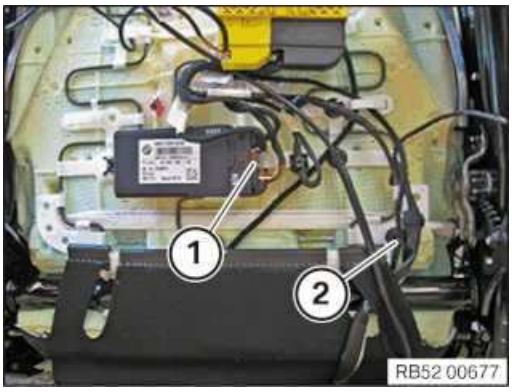
- Slide the side airbag (1) down and out of the cover pocket (2).

11 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.

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- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



- Guide out the backrest cover (1) complete with the cushion toward the top.

MAIN WORK

12 – Remove the backrest cover from front seat-backrest



- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

13 – Renewing the cushion for the front seat backrest

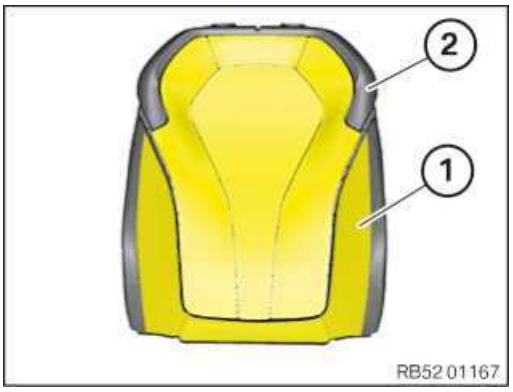
TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.
When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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

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- **Equipment specification with seat heating**

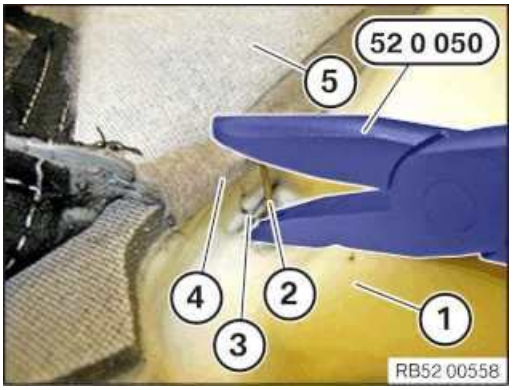
  Position and align the heating mat (1) on the upholstery (2).

  Bond the heating mat (1) with the upholstery (2).

14 – Install the backrest cover of the front seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.



- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.

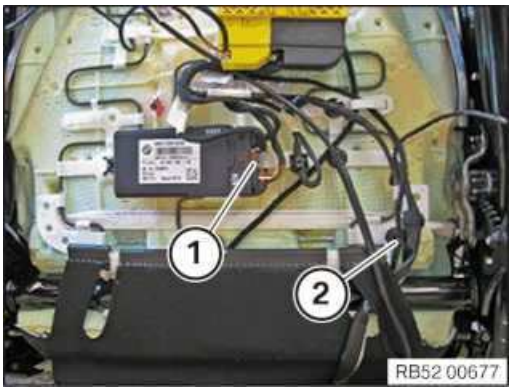
POSTPROCESSES

15 – Install the backrest cover with the cushion for the front seat



- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.

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- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

16 – Installing side airbag in the front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

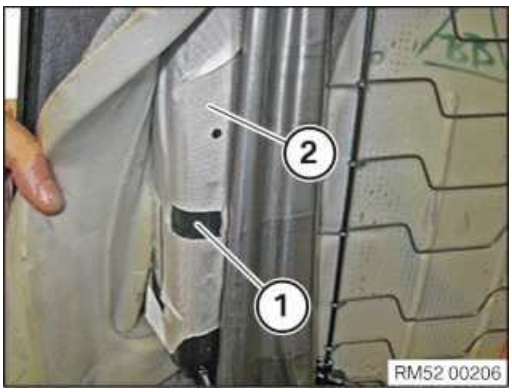
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

Airbag unit.

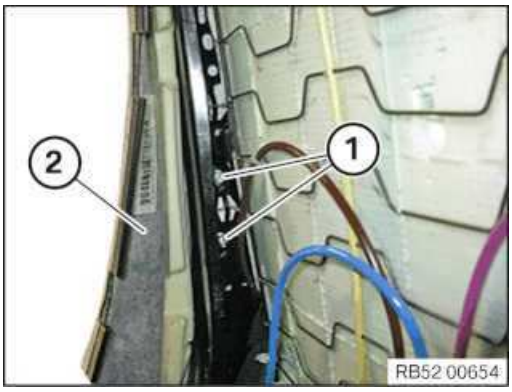
Danger! Life-threatening injuries!

- 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



- Feed the side airbag (1) upwards into the lining pocket (2).

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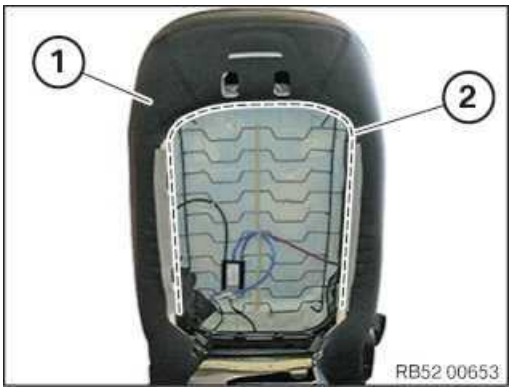


- Fold the backrest cover (2) to the side.
- Replace nuts.

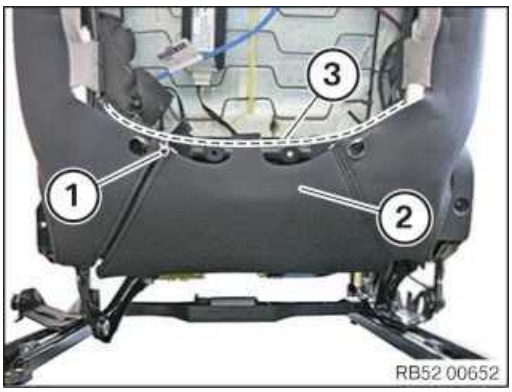
  Parts: Nuts
- Tighten nuts (1).

Side airbag to seat frame

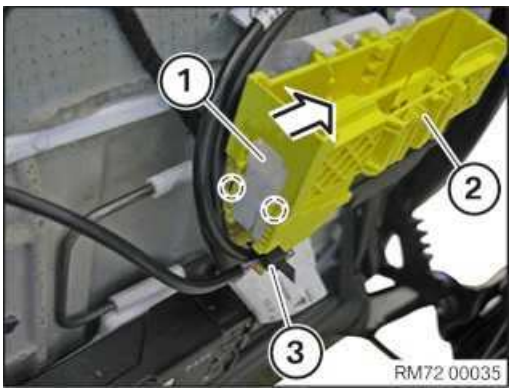
Hexagon nut		Renew nut.	6,5 Nm



- Attach the seat cover (1) in this area (2) to the backrest frame.



- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).

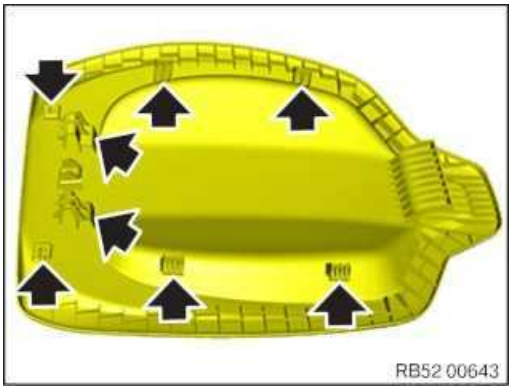


TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

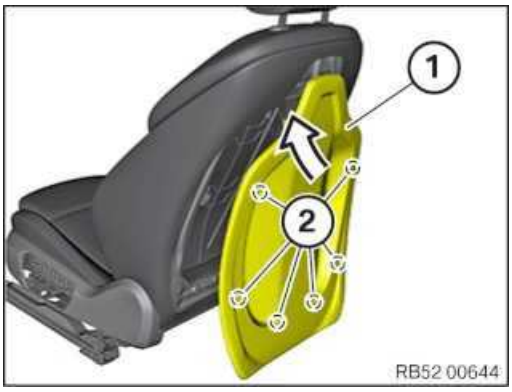
- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

17 – Install the rear panel on the front seat backrest

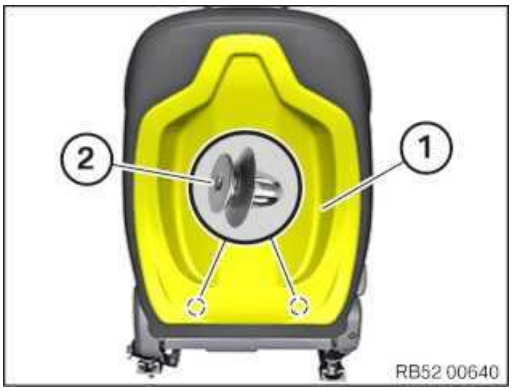


- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.

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- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).

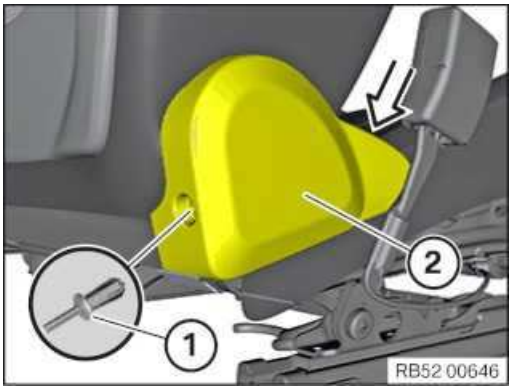


- Clip in the rear panel (1) at the clips (2).



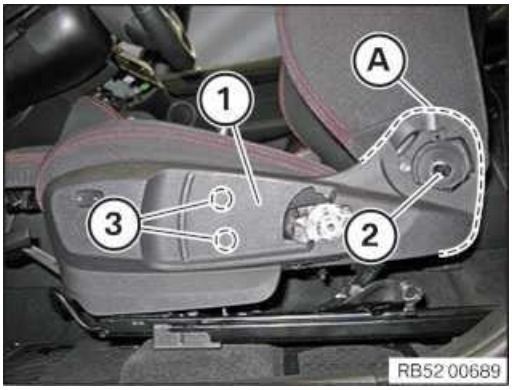
- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

18 – Installing the inner cover on the front seat



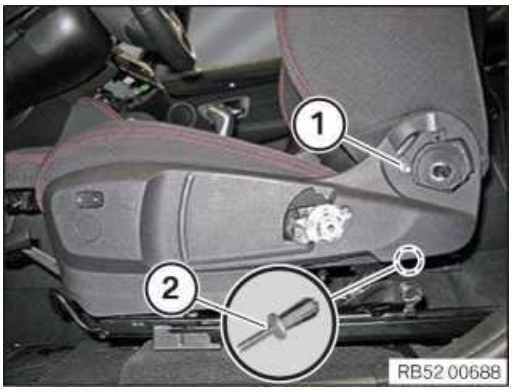
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

19 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).

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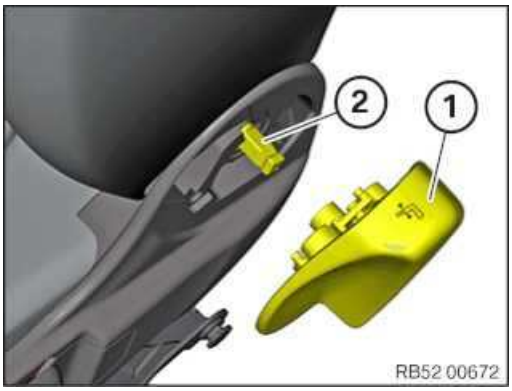
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

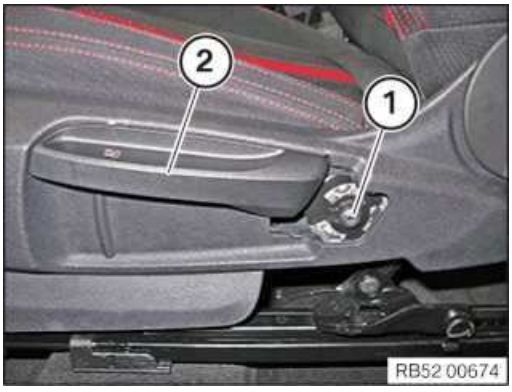
- Fasten expanding rivet (2).

20 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

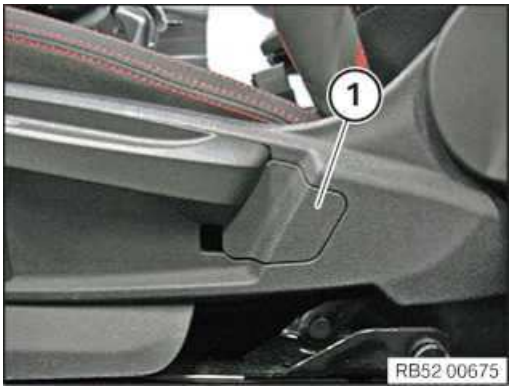
21 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

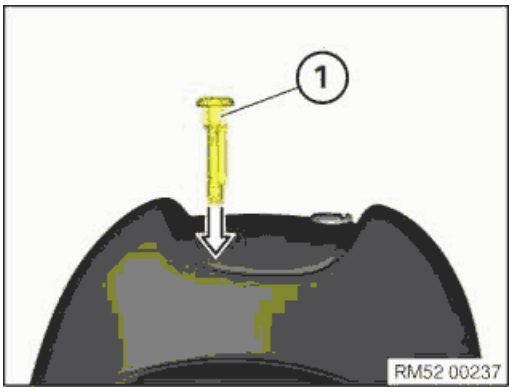
Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

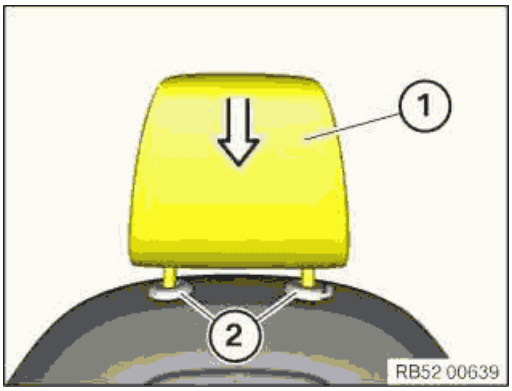
22 – Installing the guide sleeve for the front head restraint

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- Insert guide (1) from above and engage.

23 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

24 – Install front seat

TECHNICAL INFORMATION

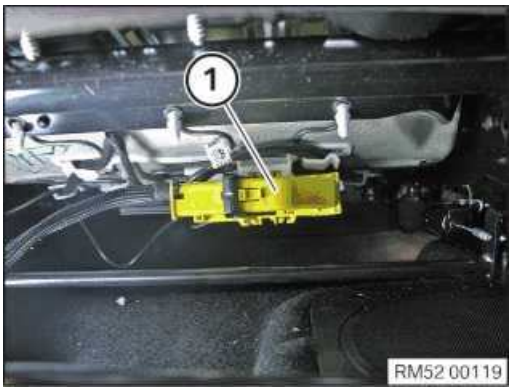
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

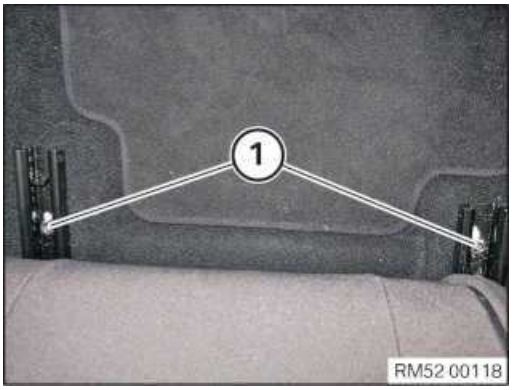
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

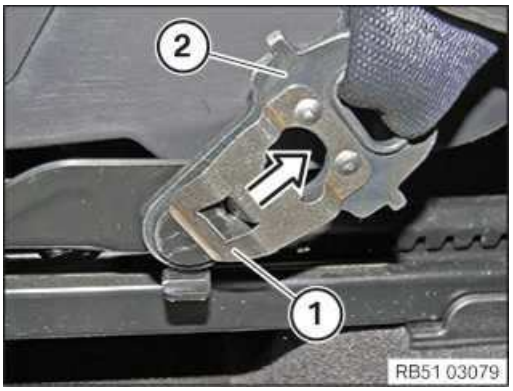
▸ **Disconnecting all battery earth leads**

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- See additional information.

25 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

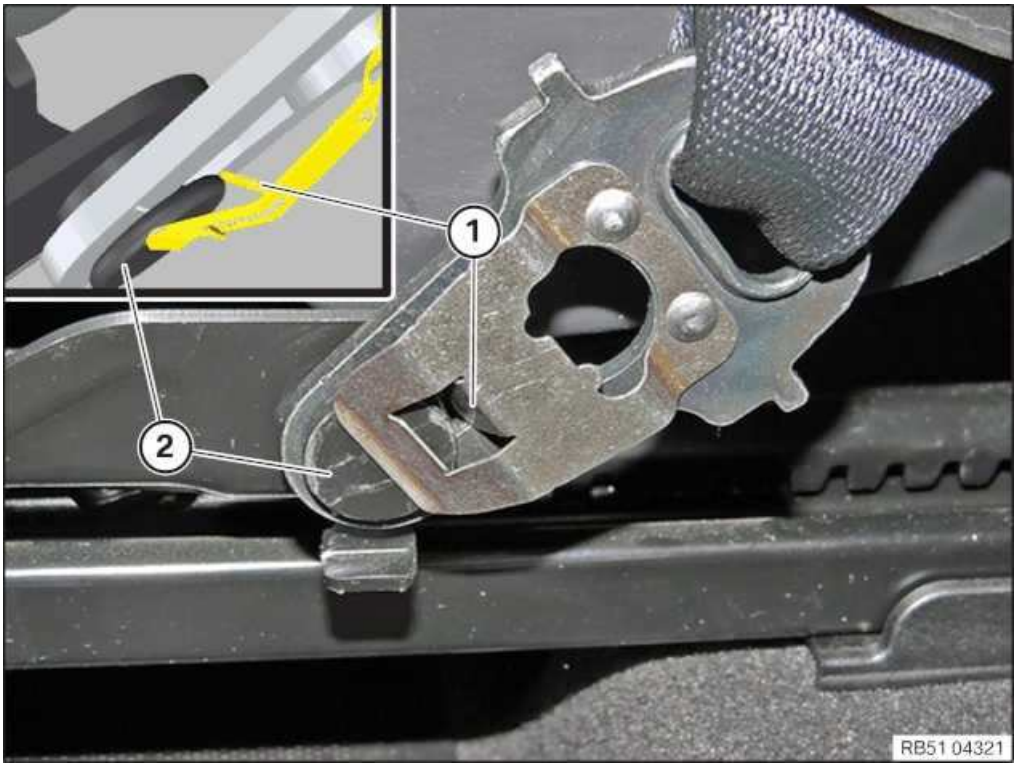
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Side airbag to seat frame			Used in step 16
Hexagon nut		Renew nut.	6,5 Nm

Outer cover to front seat			Used in step 19
Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism			Used in step 21
Screw		Tightening torque	19,5 Nm

Seat to body			Used in step 24
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

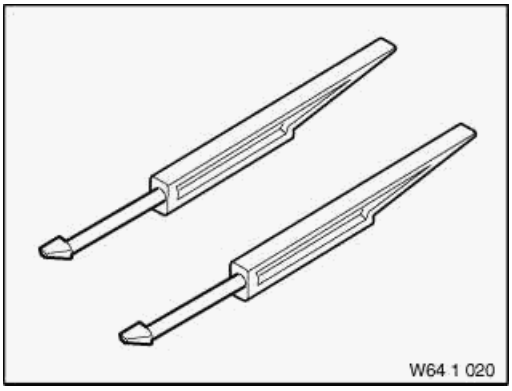
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2 154 711 Fitting aid



Common	Used in step 2 24
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

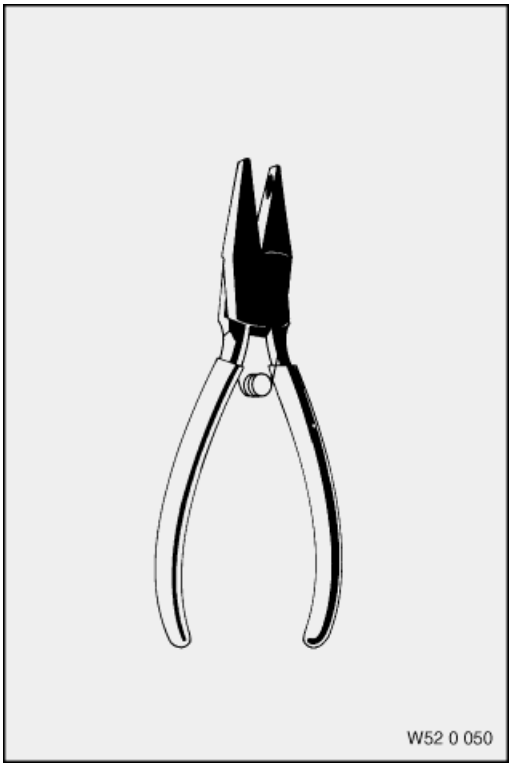
0 493 681 (64 1 020) Hook



Common	Used in step 6
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)

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0 492 668 (52 0 050) Pliers



Common	Used in step 14
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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	10 16

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Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 24
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 24
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 24
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52 13 418 Replacing upholstery for front passenger seat

NOTICE

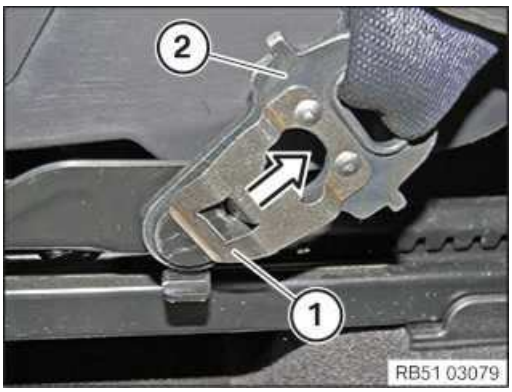
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

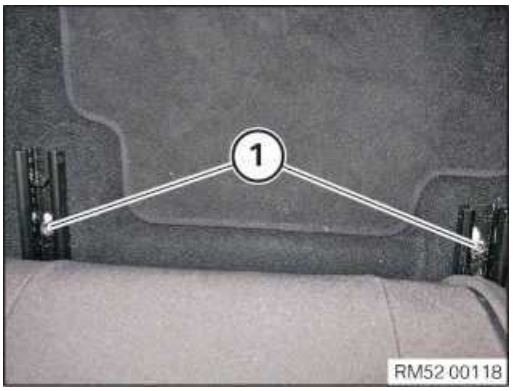
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



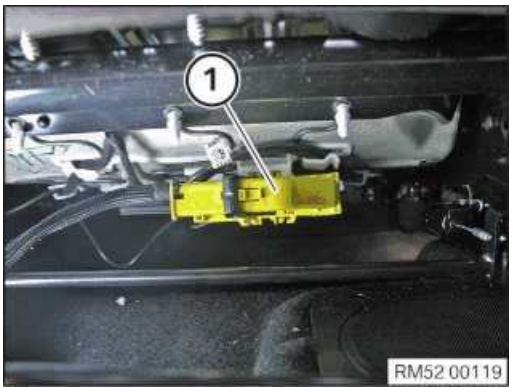
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

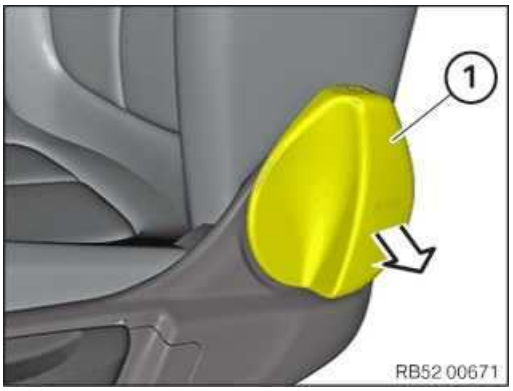
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

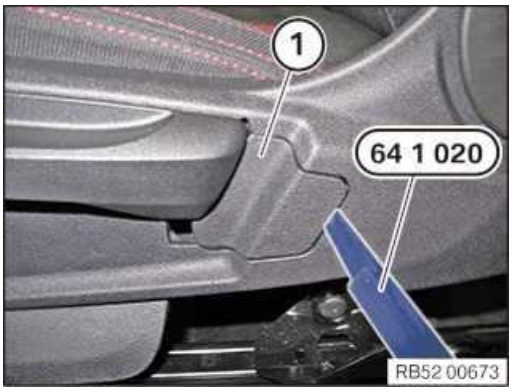
3 – Removing lever for backrest adjustment on front seat



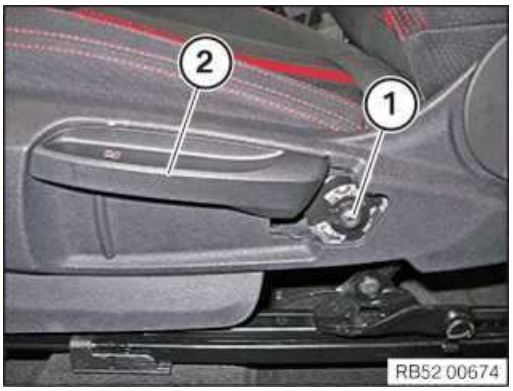
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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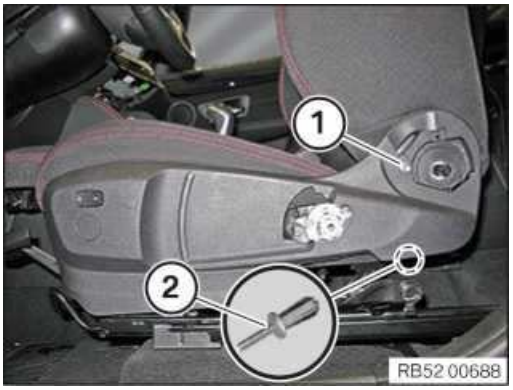


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

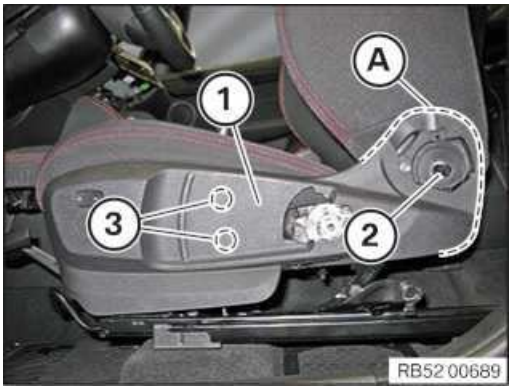


- Loosen screw (1).
- Remove the lever (2).

5 – Remove the outer cover of the front seat (mechanical)

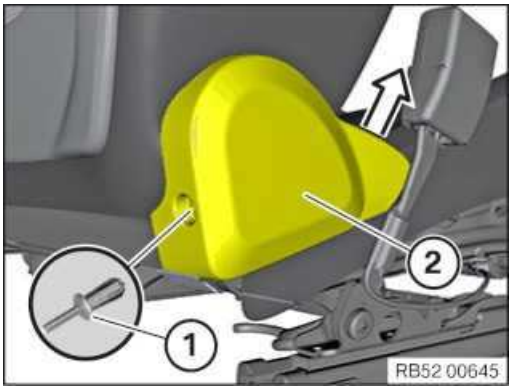


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

6 – Remove inner cover on front seat



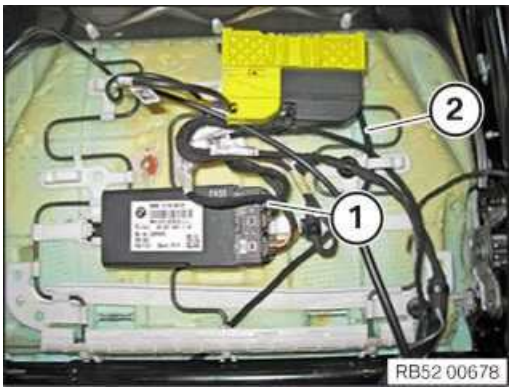
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

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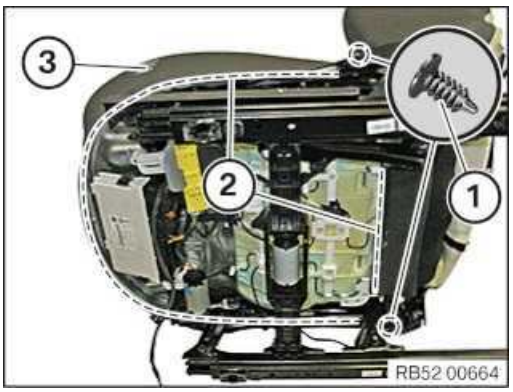
7 – Remove the seat cover with the cushion for the front seat



- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

8 – Removing seat cover for front seat (basic)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

9 – Renewing cushion for front seat

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TECHNICAL INFORMATION

Only US/Canadian version of front passenger seat with seat occupancy mat (CIS):

The seat occupancy mat is bonded to the entire surface of the upholstery and can only be replaced together with the upholstery.

If the seat occupancy mat or upholstery is defective, both parts must always be replaced together.

Full operability can only be guaranteed with the Original BMW replacement part.

After fitting the seat cover, enable the seat occupancy mat using the BMW programming system.

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.

When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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



- **Equipment specification with seat heating**

  Position the heating mat (1) on the cushion and align.

  Bond the heating mat (1) to the cushion in these areas (2).

10 – Install the seat cover for the front seat (basic)

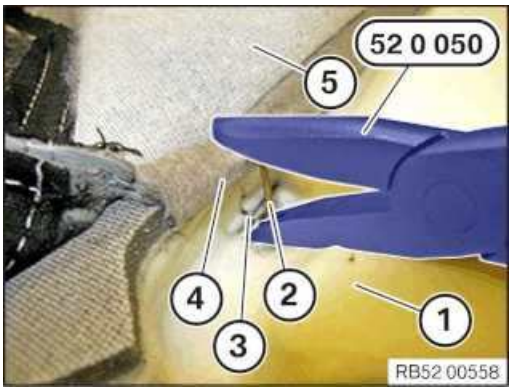
NOTICE

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



- Place the seat cover on the cushion.
- Secure all trim wires with clamps.

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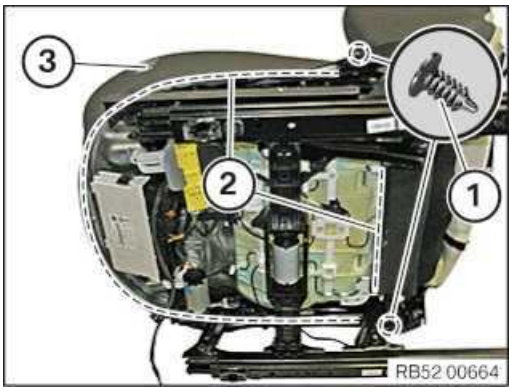
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

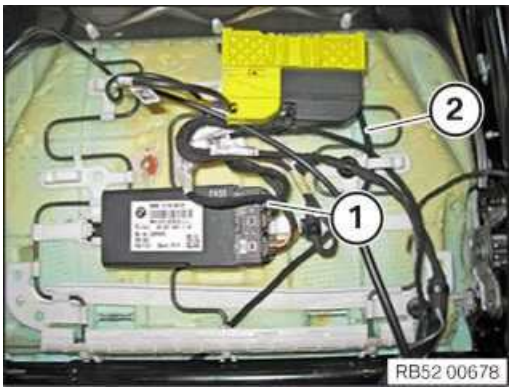
1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



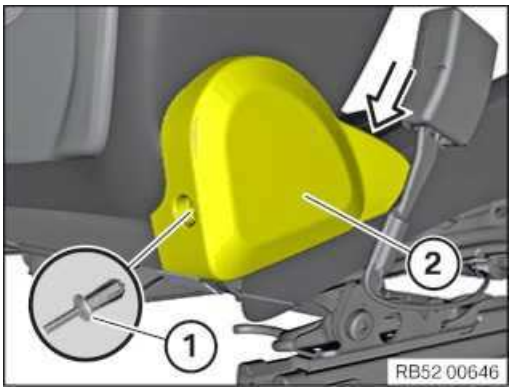
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



- Fasten retaining strap (1) to the seat mechanism at the left and right.

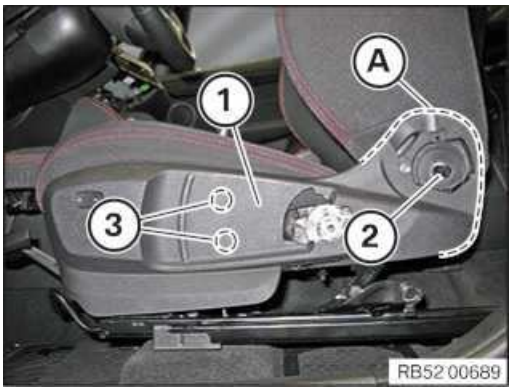
12 – Installing the inner cover on the front seat

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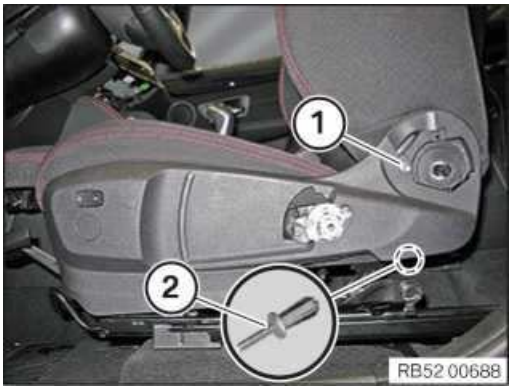


- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

13 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



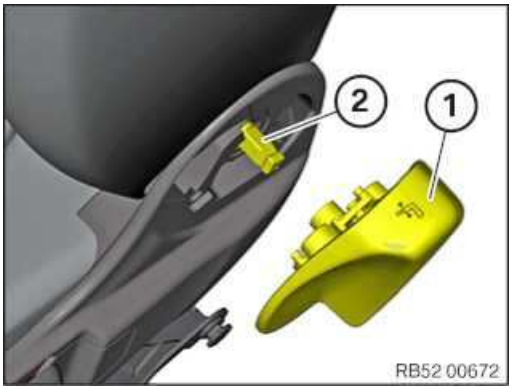
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

- Fasten expanding rivet (2).

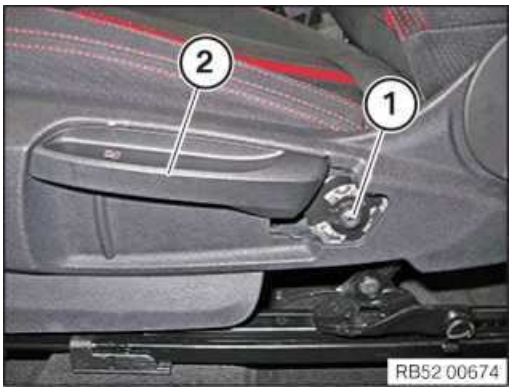
14 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

15 – Install the lever for the seat height adjustment on the front seat

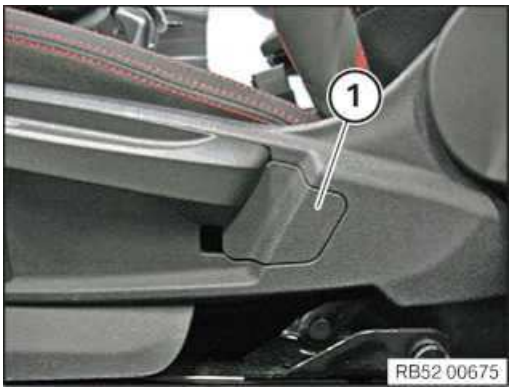
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- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

16 – Install front seat

TECHNICAL INFORMATION

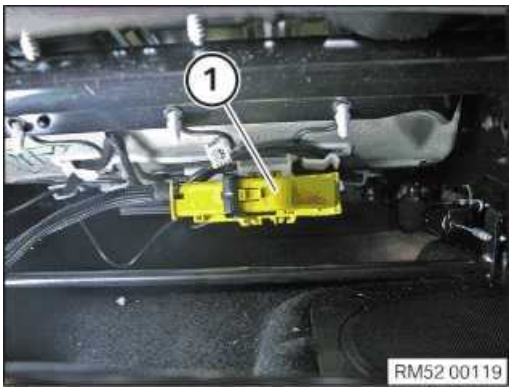
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

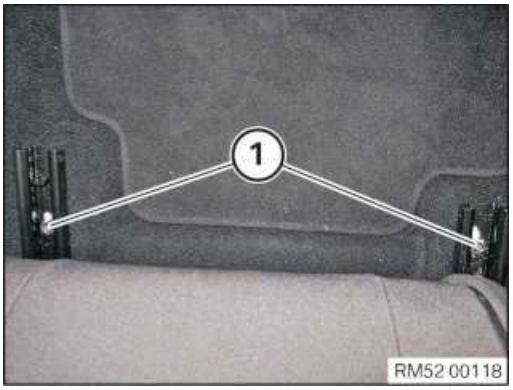
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

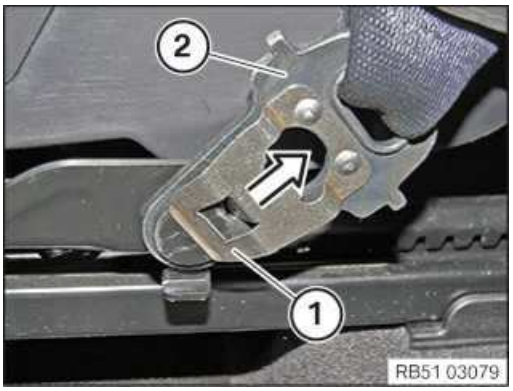
▸ **Disconnecting all battery earth leads**

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- See additional information.

17 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

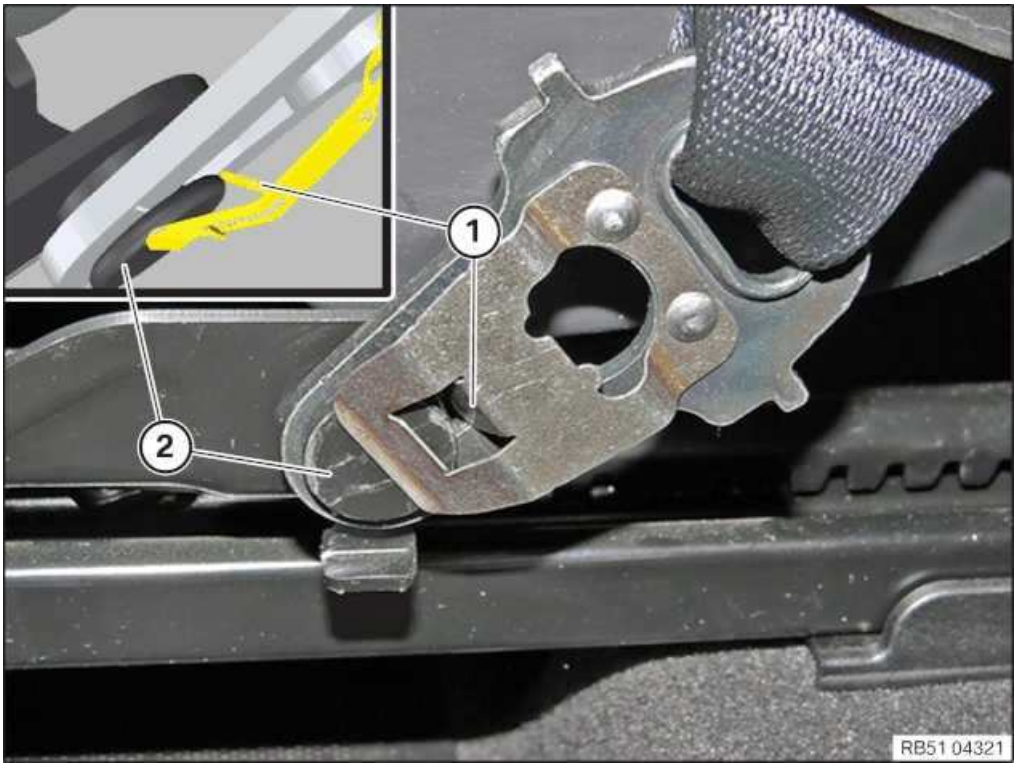
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Outer cover to front seat — Used in step 13

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 15

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 16

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

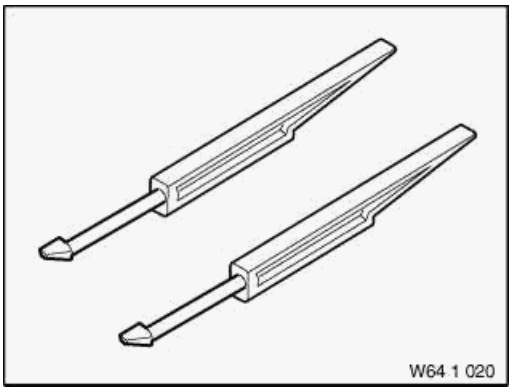
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2 154 711 Fitting aid



Common	Used in step 2 16
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

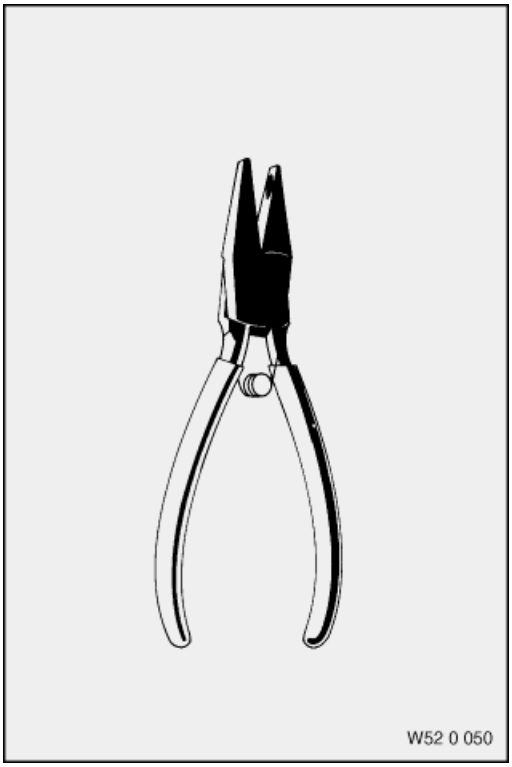
0 493 681 (64 1 020) Hook



Common	Used in step 4
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)

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0 492 668 (52 0 050) Pliers



Common

Used in step 10

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 16
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 16
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52 13 423 Replacing upholstery for front passenger seat backrest

NOTICE

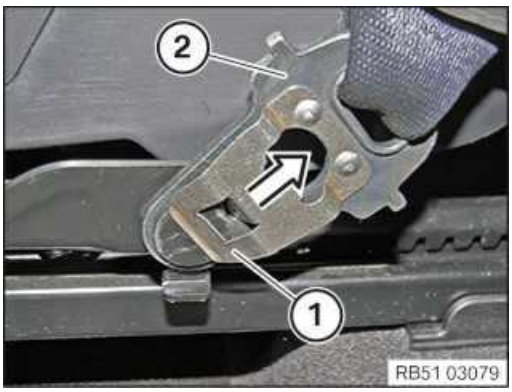
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

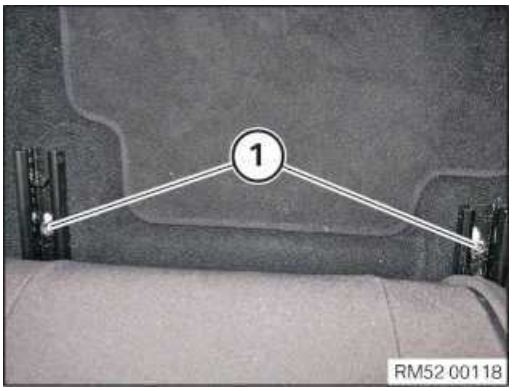
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



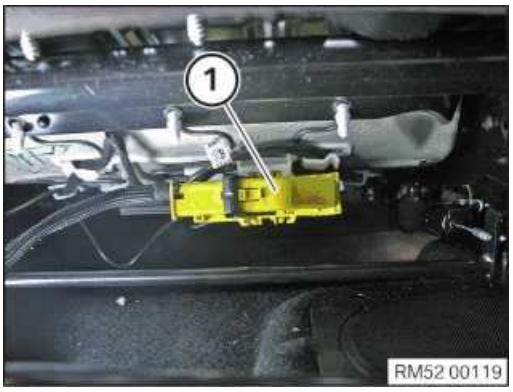
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

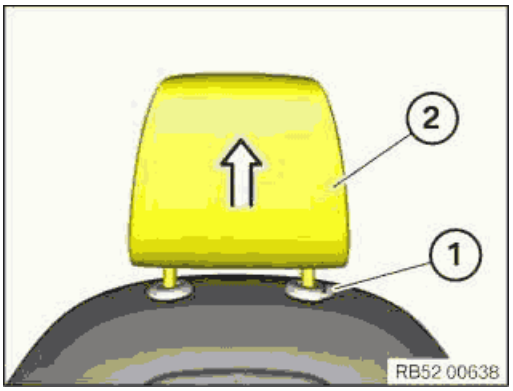
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

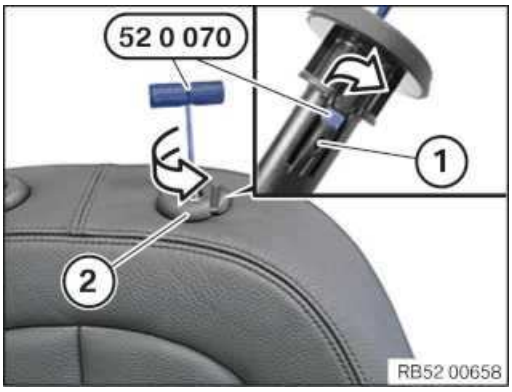
3 – Remove front head restraint



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

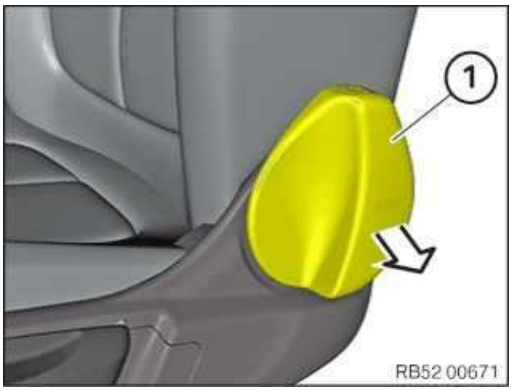
4 – Removing the guide sleeve for the front head restraint

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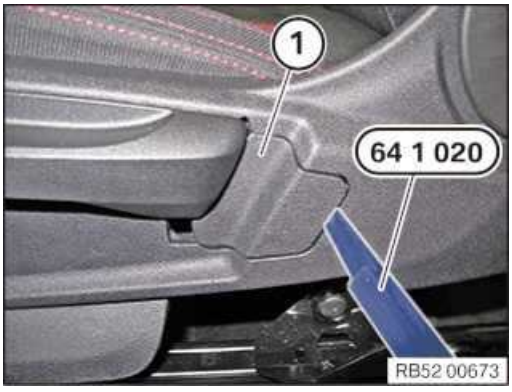
- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing lever for backrest adjustment on front seat

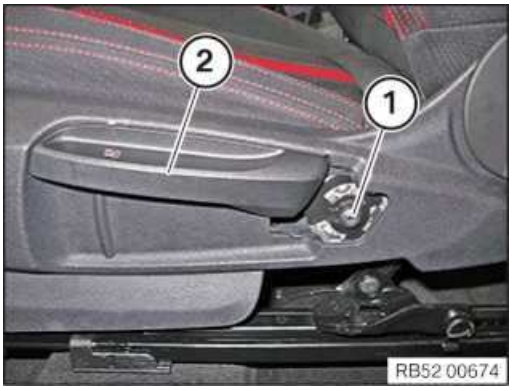


- Unclip the lever (1) outwards.

6 – Remove lever for seat height adjustment on front seat



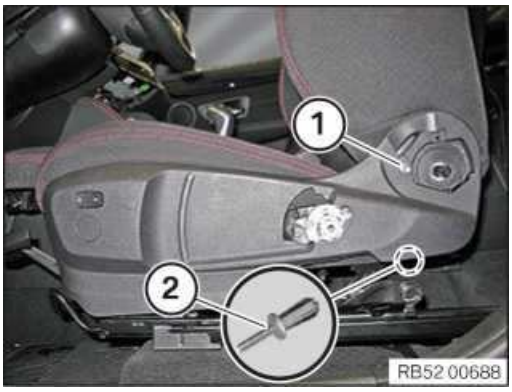
- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.



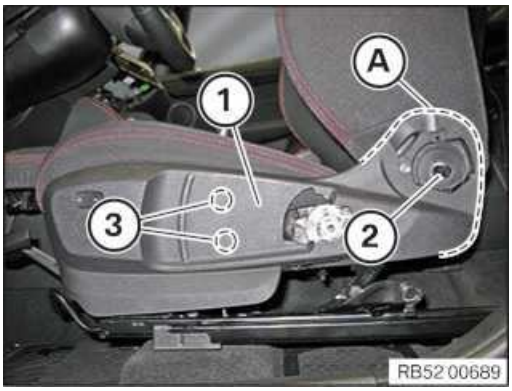
- Loosen screw (1).
- Remove the lever (2).

7 – Remove the outer cover of the front seat (mechanical)

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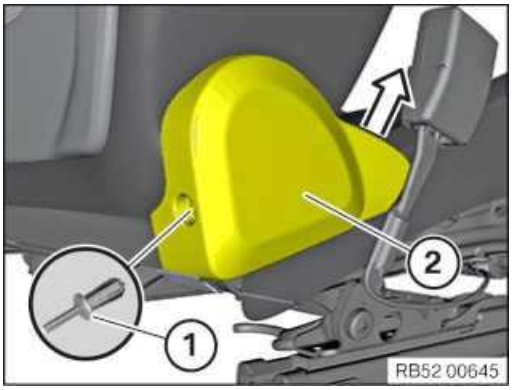


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

8 – Remove inner cover on front seat

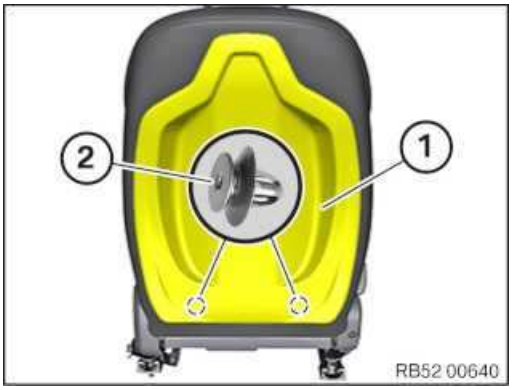


- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

9 – Remove rear panel on front seat backrest



- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.

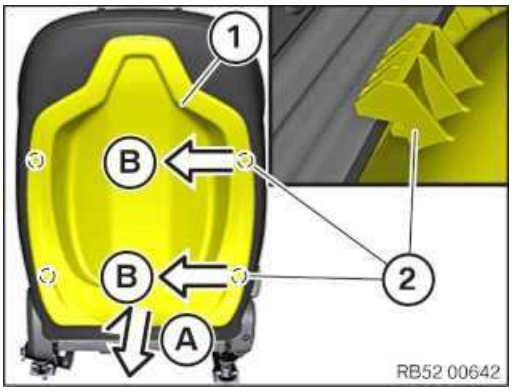


- Release the rear panel (1) toward the rear from the clips (2).

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- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

10 – Remove side airbag in front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

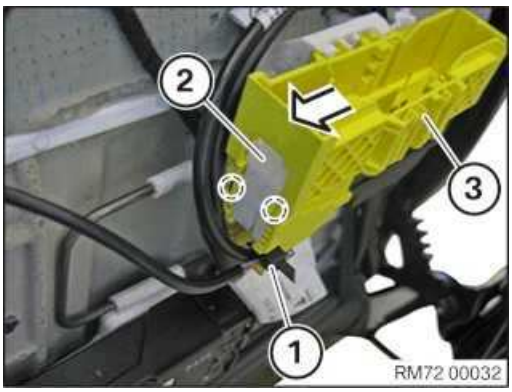
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

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



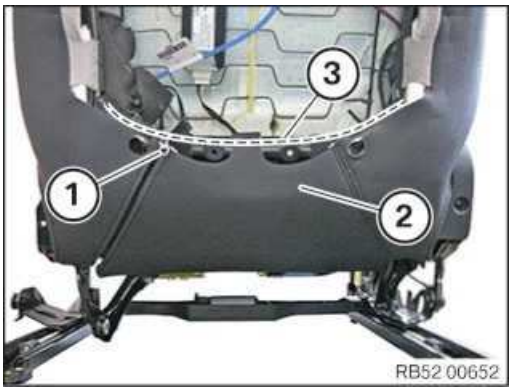
- If necessary detach the cable strap (1).

TECHNICAL INFORMATION

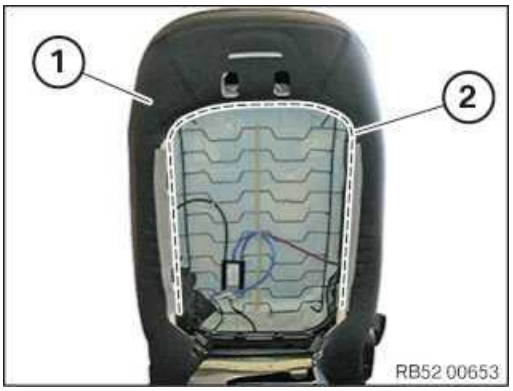
Different variants may be installed depending on the vehicle equipment.

- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).

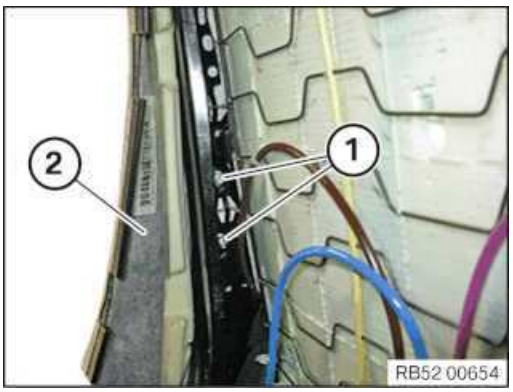
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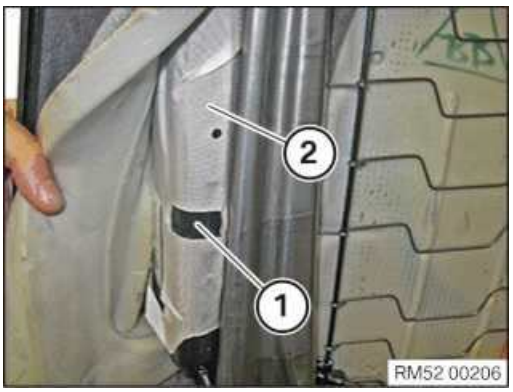
- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).



- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).



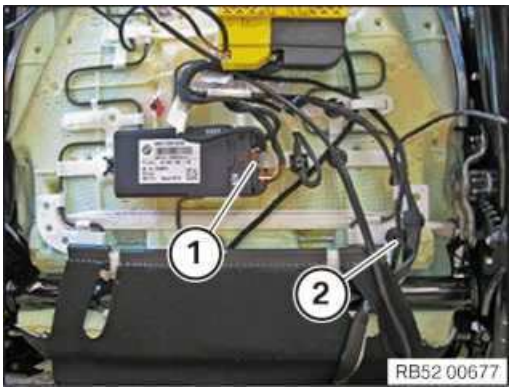
- Slide the side airbag (1) down and out of the cover pocket (2).

11 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.

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- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



- Guide out the backrest cover (1) complete with the cushion toward the top.

MAIN WORK

12 – Remove the backrest cover from front seat-backrest



- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

13 – Renewing the cushion for the front seat backrest

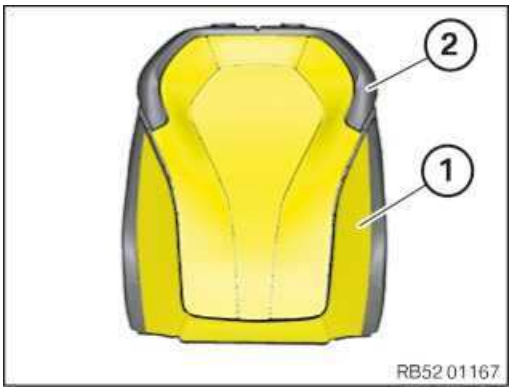
TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.
When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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

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- **Equipment specification with seat heating**

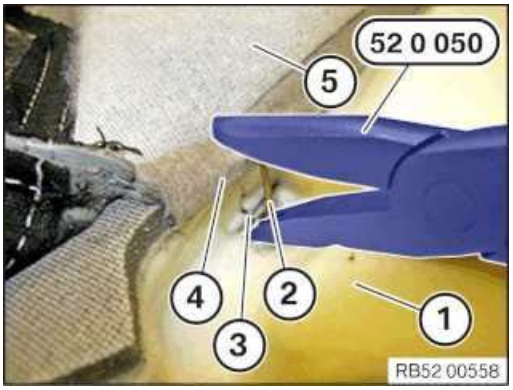
  Position and align the heating mat (1) on the upholstery (2).

  Bond the heating mat (1) with the upholstery (2).

14 – Install the backrest cover of the front seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.



- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.

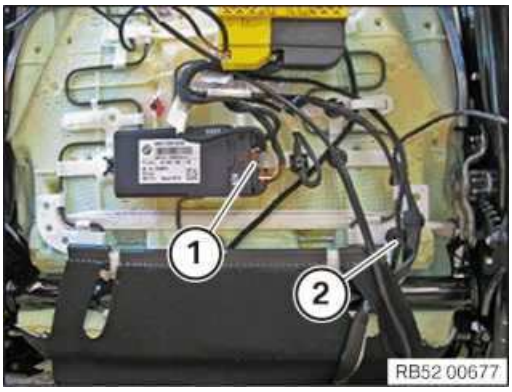
POSTPROCESSES

15 – Install the backrest cover with the cushion for the front seat



- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.

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- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

16 – Installing side airbag in the front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

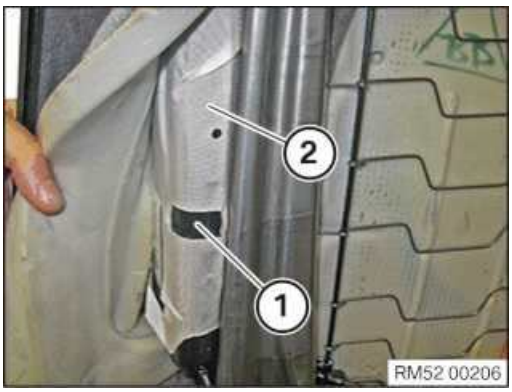
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

Airbag unit.

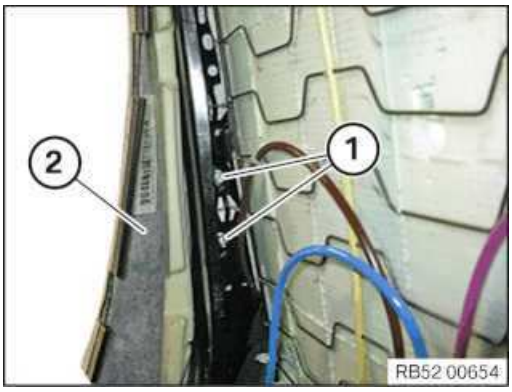
Danger! Life-threatening injuries!

- 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



- Feed the side airbag (1) upwards into the lining pocket (2).

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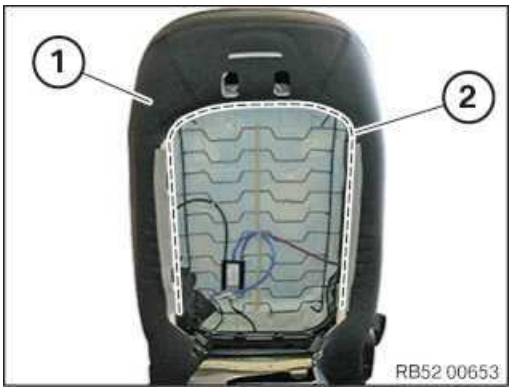


- Fold the backrest cover (2) to the side.
- Replace nuts.

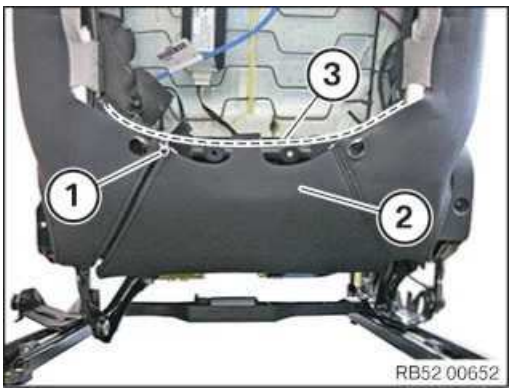
  Parts: Nuts
- Tighten nuts (1).

Side airbag to seat frame

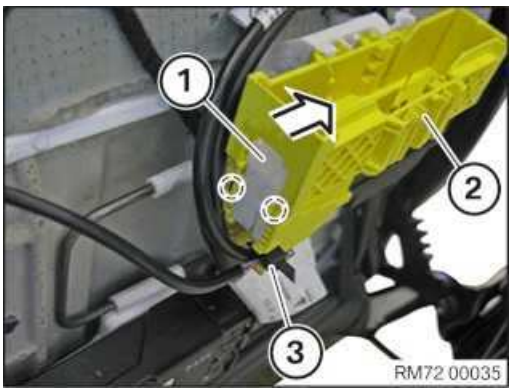
Hexagon nut		Renew nut.	6,5 Nm



- Attach the seat cover (1) in this area (2) to the backrest frame.



- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).

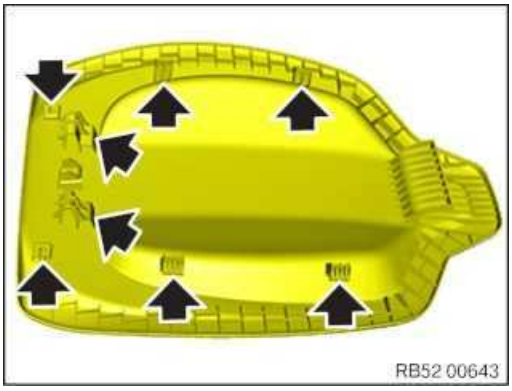


TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

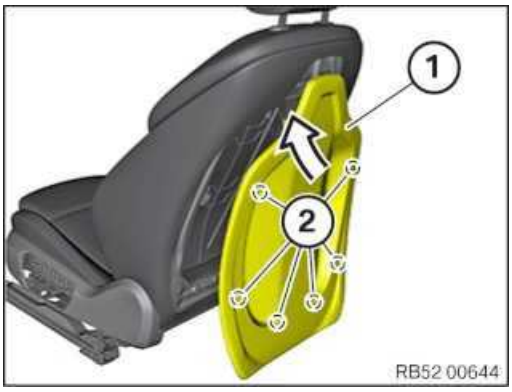
- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

17 – Install the rear panel on the front seat backrest

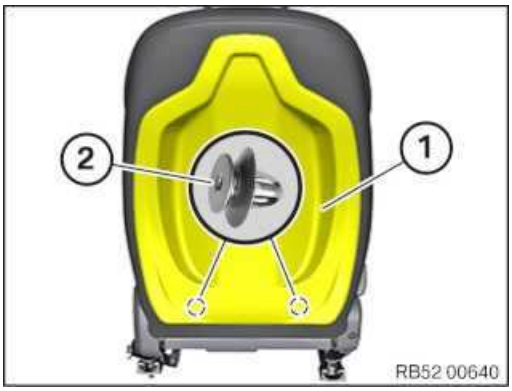


- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.

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- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).

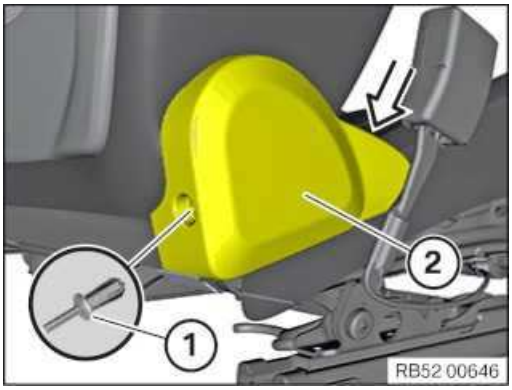


- Clip in the rear panel (1) at the clips (2).



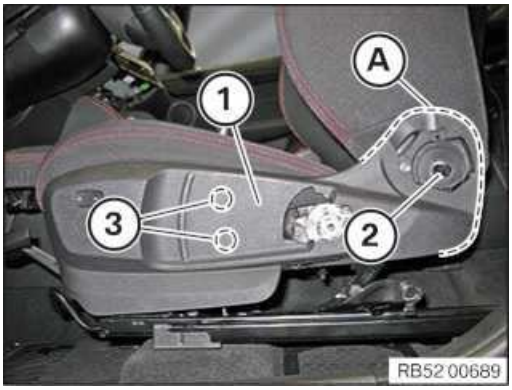
- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

18 – Installing the inner cover on the front seat



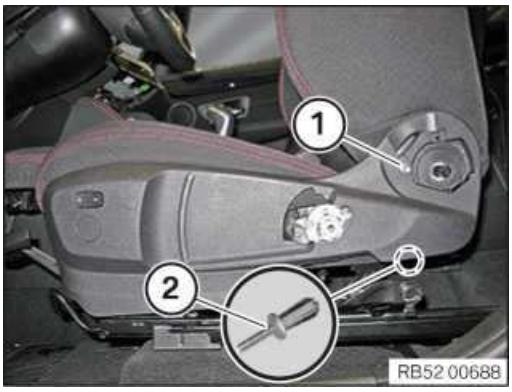
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

19 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).

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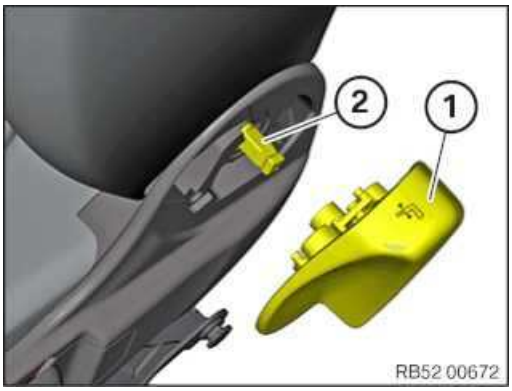
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

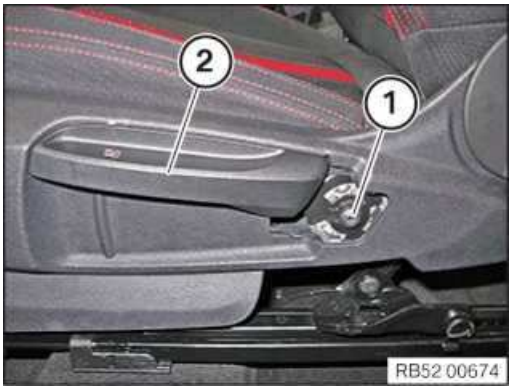
- Fasten expanding rivet (2).

20 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

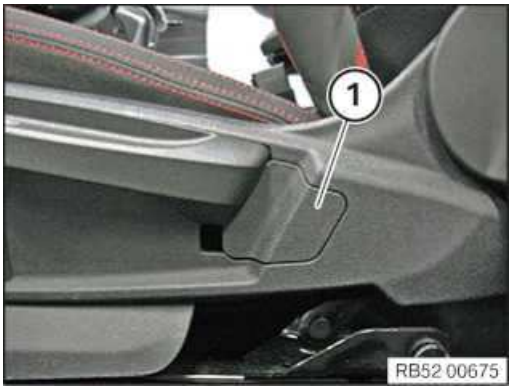
21 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

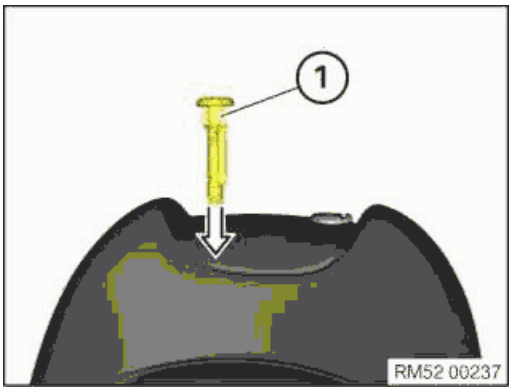
Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

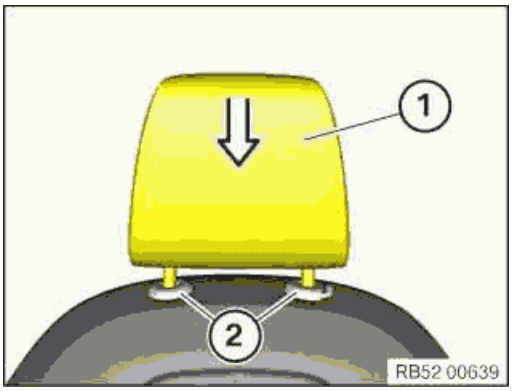
22 – Installing the guide sleeve for the front head restraint

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- Insert guide (1) from above and engage.

23 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

24 – Install front seat

TECHNICAL INFORMATION

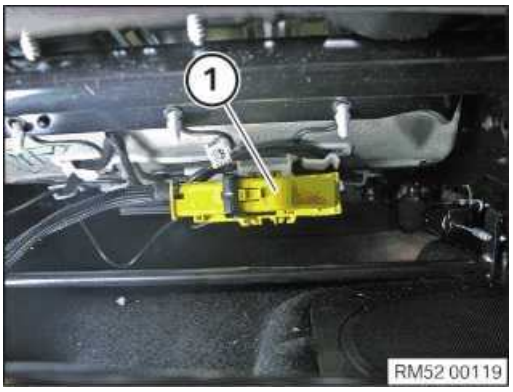
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

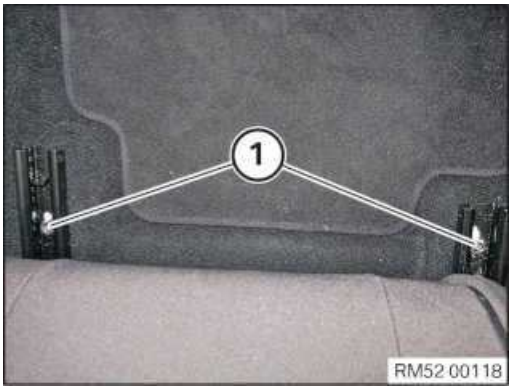
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

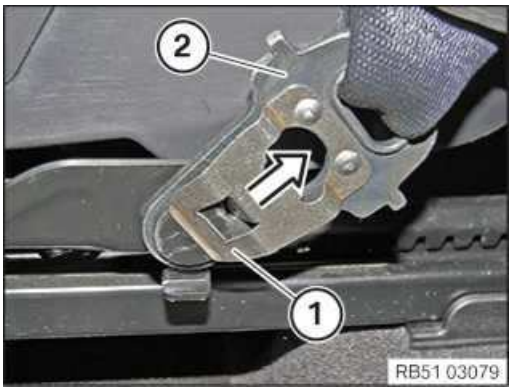
▸ **Disconnecting all battery earth leads**

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- See additional information.

25 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

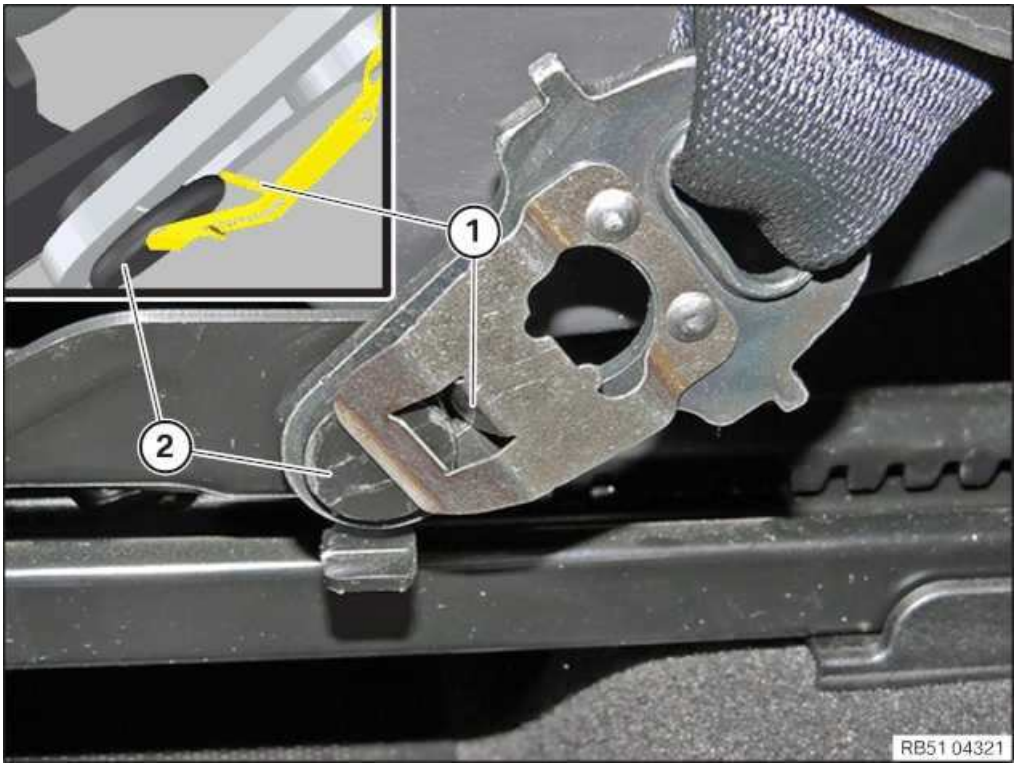
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Side airbag to seat frame			Used in step 16
Hexagon nut		Renew nut.	6,5 Nm

Outer cover to front seat			Used in step 19
Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism			Used in step 21
Screw		Tightening torque	19,5 Nm

Seat to body			Used in step 24
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

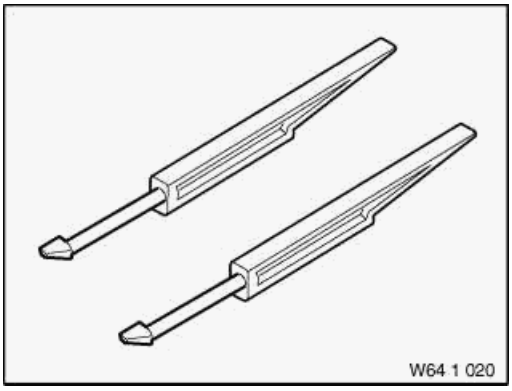
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2 154 711 Fitting aid



Common	Used in step 2 24
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

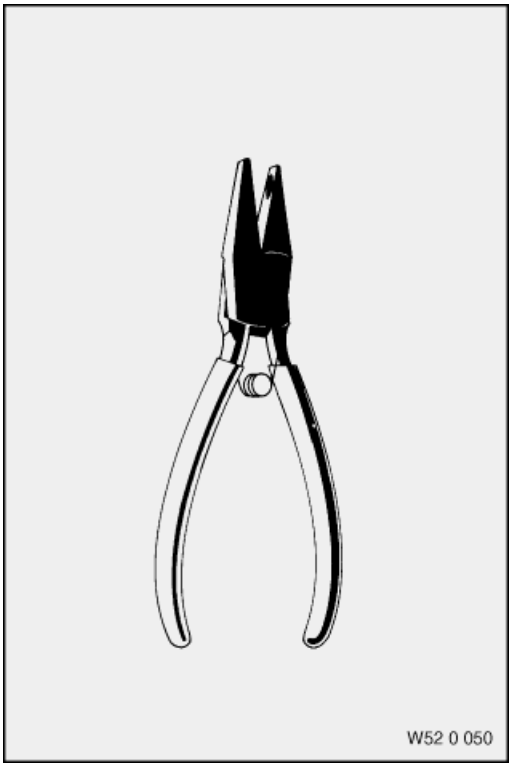
0 493 681 (64 1 020) Hook



Common	Used in step 6
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)

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0 492 668 (52 0 050) Pliers



Common	Used in step 14
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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	10 16

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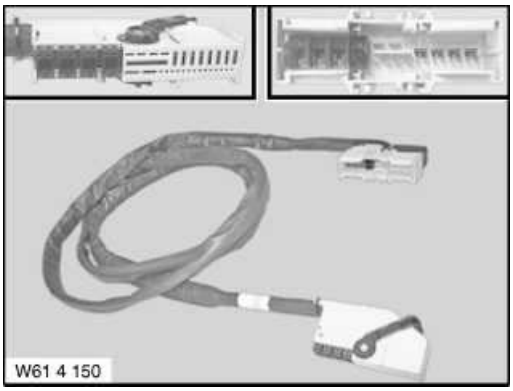
Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 24
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 24
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 24
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 24
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61 20 900 Disconnecting and connecting battery earth lead	2 24
61 20 900 Disconnecting and connecting battery earth lead	2 24

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52 14 ... Performing function check with adapter cable (for seat repairs)

Special tools required:

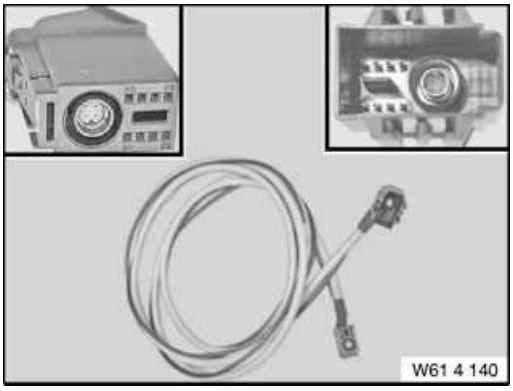
- 61 4 140
- 61 4 150



Seat function check: *Note:*
The function check on a repaired driver's or front passenger seat can be performed outside the vehicle by using adapter cable 61 4 150 .

Application:

Adapter cable is connected to vehicle wiring harness and removed seat 61 4 150 .



RSE (rear passenger compartment monitor) function check *Note:*
The function check of the RSE (rear passenger compartment monitor) on a repaired driver's or front passenger seat can be performed outside the vehicle by using adapter cable 61 4 140 .

Application:

Adapter cable is connected to vehicle wiring harness and removed seat 61 4 140 .

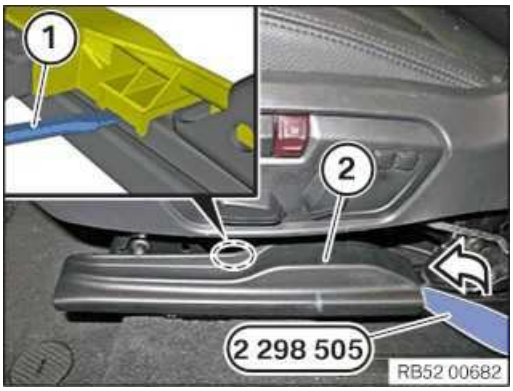
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52 13 ... Remove and install/replace trim on left or right front seat

Special tools required:

- 2 298 505

Removal:

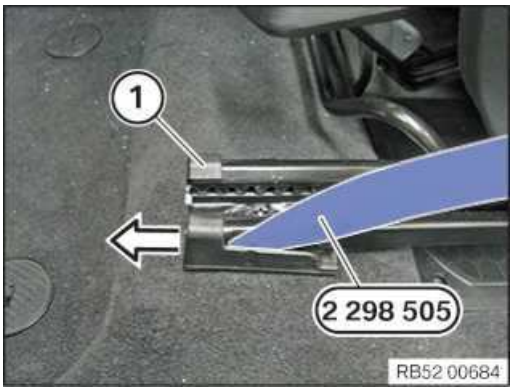


Side trim (for electric seat):

Slide screwdriver (1) from rear into marked area under the trim (2).

Raise trim (2) slightly using screwdriver (1).

Position special tool 2 298 505 at rear onto trim (1) and unclip forwards.

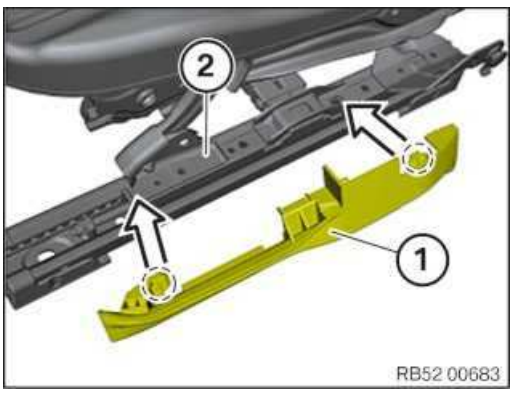


Seat rail trim:

Insert special tool 2 298 505 at side into trim (1).

Unclip cover (1) towards front.

Installation:

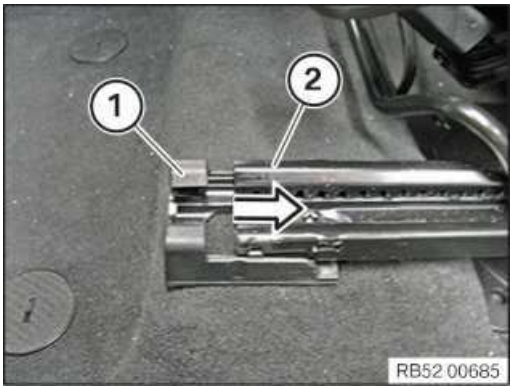


Side trim (for electric seat):

Position trim (1) from front with guides onto seat mechanism (2).

Clip trim (1) to rear into seat mechanism (2).

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Seat rail trim:

Slide trim (1) from front onto seat rail (2).

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52 13 ... Removing and installing/exchanging guide for left or right front seat head restraint

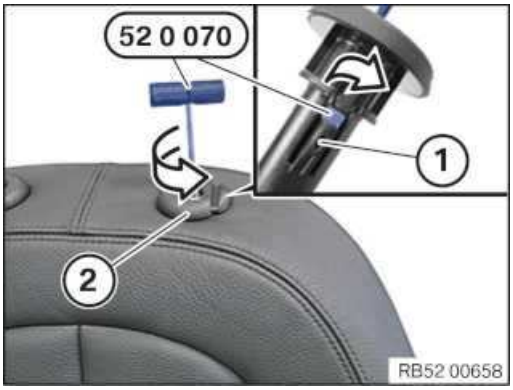
Special tools required:

- 52 0 070

Necessary preliminary tasks:

- Remove head restraint

Removal:

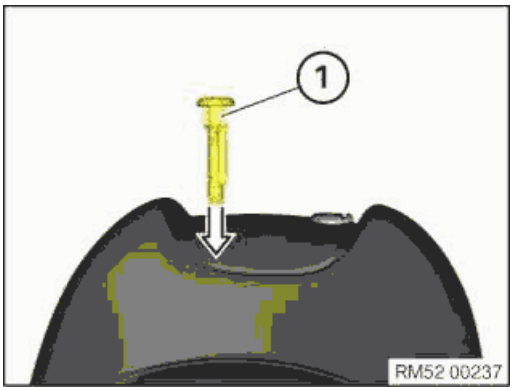


Insert special tool 52 0 070 into guide hole of sleeve (2) up to upper area of retaining lug.

Feed in unlocking tab of special tool behind the latch mechanism (1).

Turn tool to release sleeve (2) and pull out by lifting upwards.

Installation:



Insert guide (1) from above and engage.

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Required reworking:

- Install head restraint

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52 14 530 Removing and installing/replacing backrest frame on left or right front seat

NOTICE

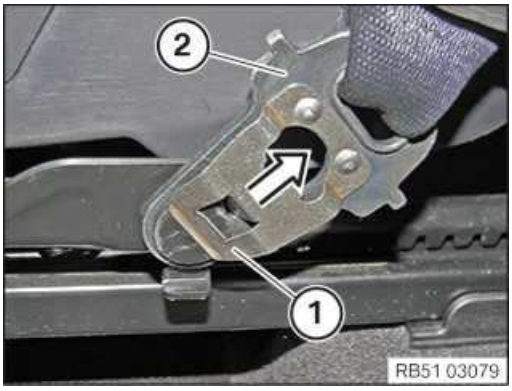
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

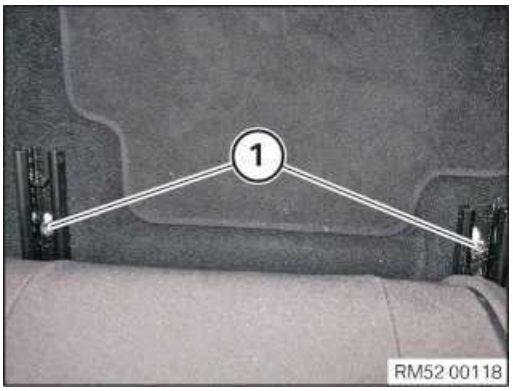
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



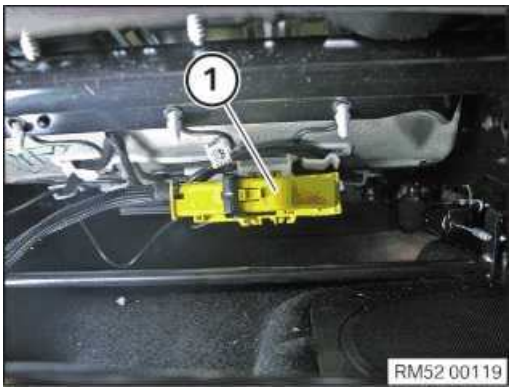
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

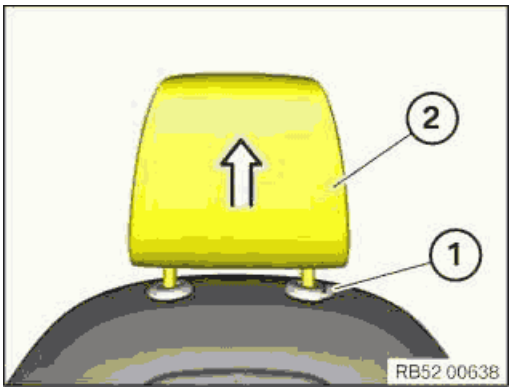
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

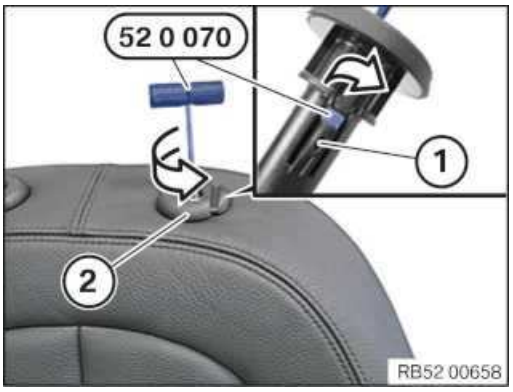
3 – Remove front head restraint



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

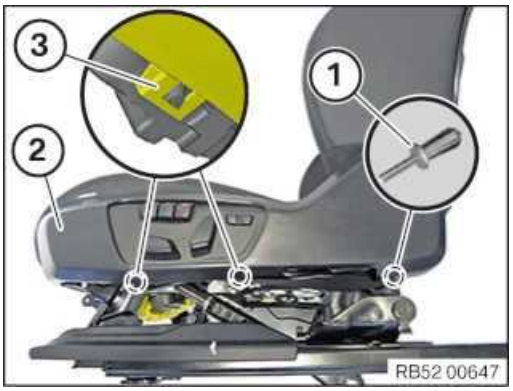
4 – Removing the guide sleeve for the front head restraint

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- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing the outer cover on the front electrical seat

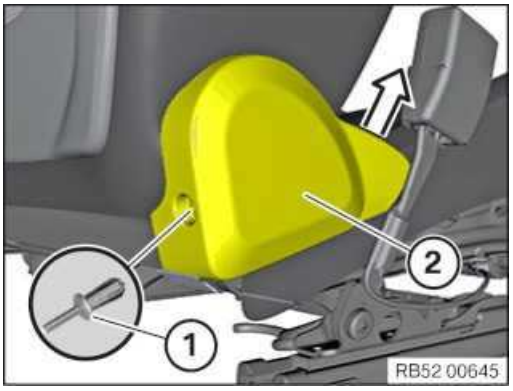


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

6 – Remove inner cover on front seat



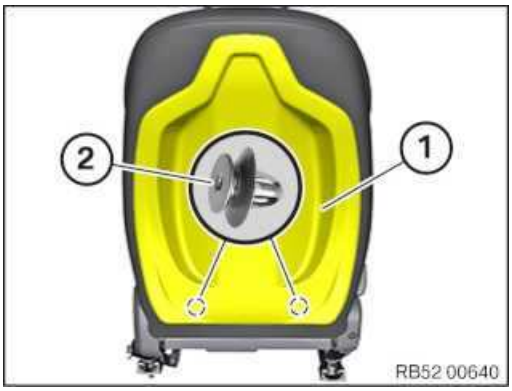
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

7 – Remove rear panel on front seat backrest

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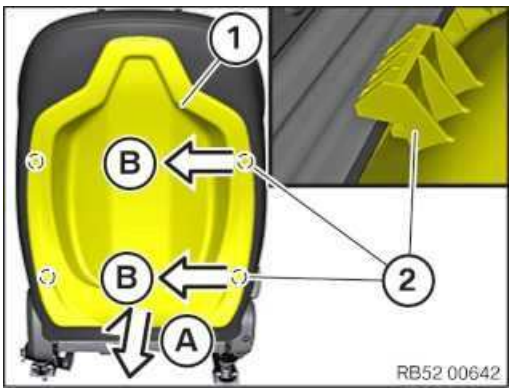
- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.



- Release the rear panel (1) toward the rear from the clips (2).



- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

8 – Remove side airbag in 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.

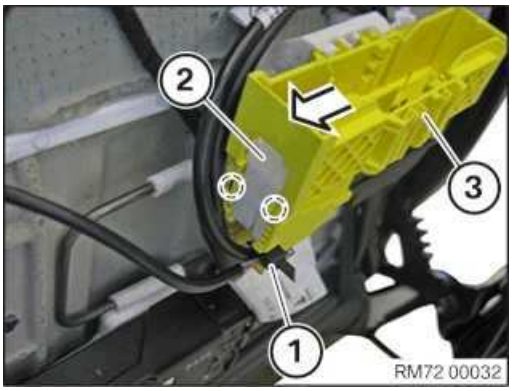
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WARNING

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

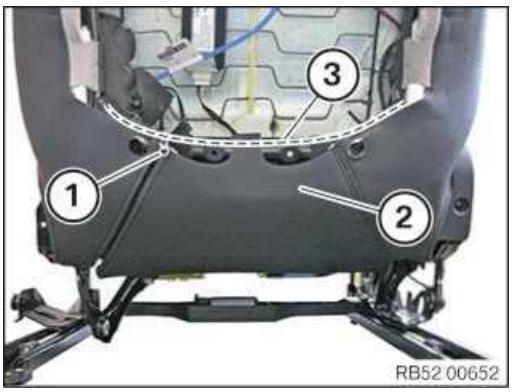


- If necessary detach the cable strap (1).

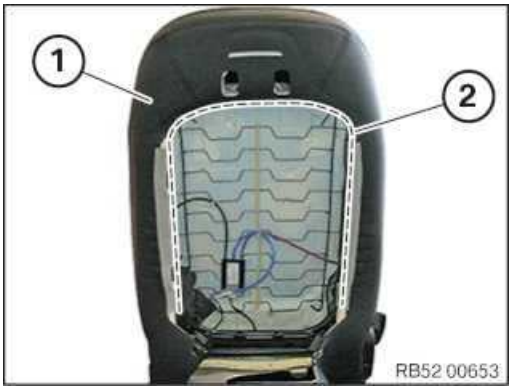
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

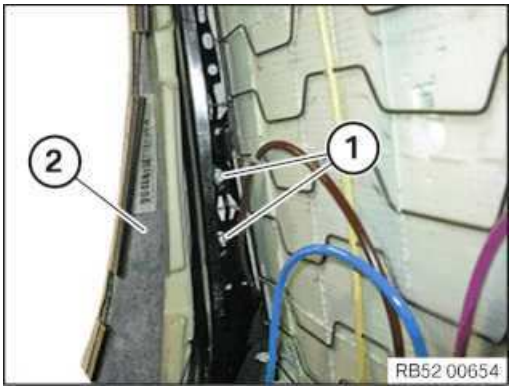
- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).



- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).

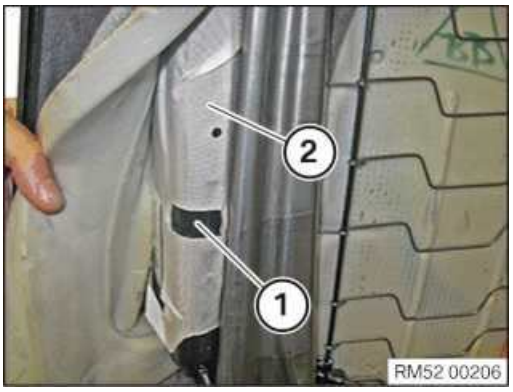


- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).

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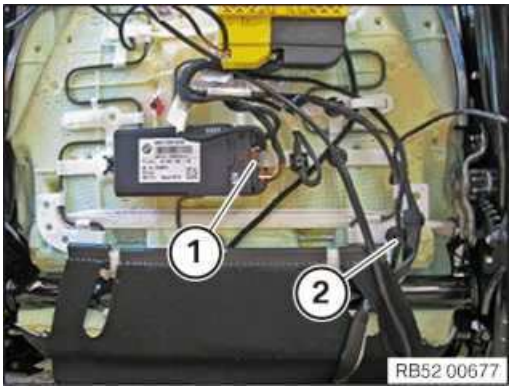


- Slide the side airbag (1) down and out of the cover pocket (2).

9 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.

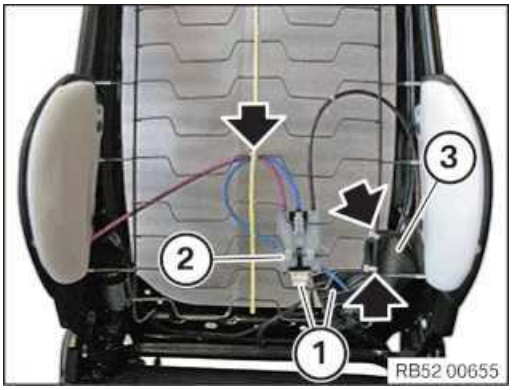


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



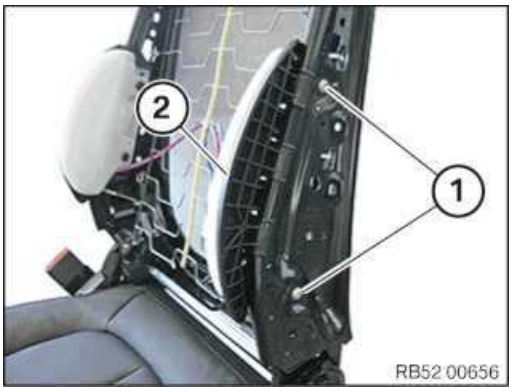
- Guide out the backrest cover (1) complete with the cushion toward the top.

10 – Remove backrest width adjustment with valve

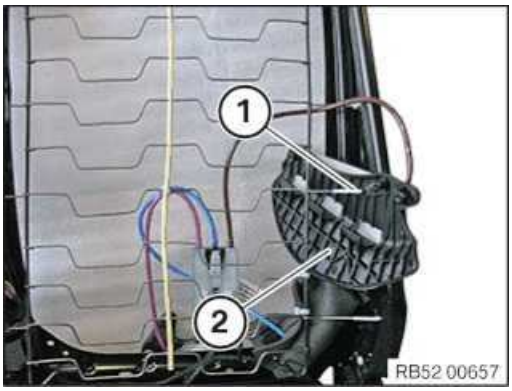


- Release the cable strap at the marked areas.
- Unlock and disconnect plug connections (1).
- Detach the valve unit (2) from the spring wire.
- Feed out the pump (3).

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- Release the screws (1) on the left and right air cushion (2).



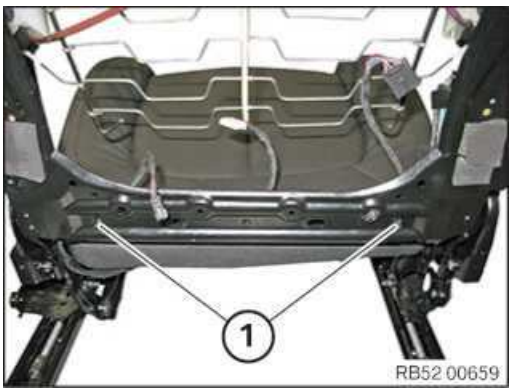
NOTICE

Perform the operations on the left and right side.

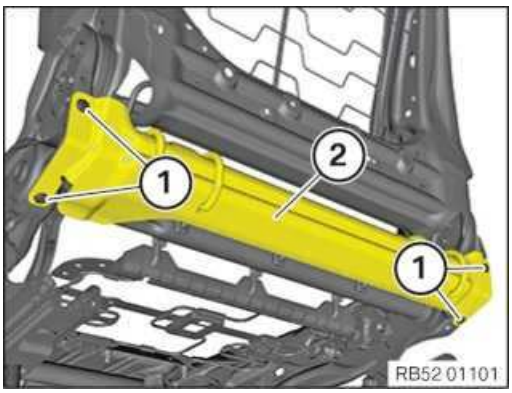
- Detach the spring wire (1) from the backrest frame.
- Feed out the air cushion (2) towards the rear.

MAIN WORK

11 – Remove the backrest frame from front seat-backrest

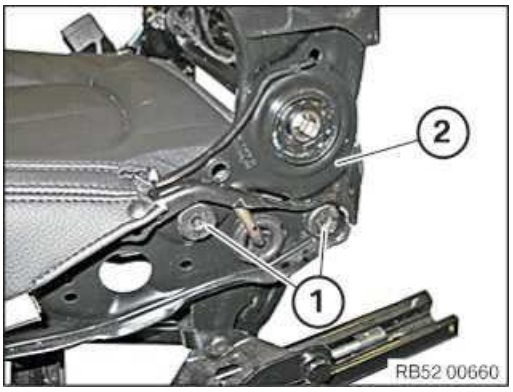


- Release the vehicle wiring harness on the clips (1) from the backrest frame.
- Feed wiring harness out of backrest frame.



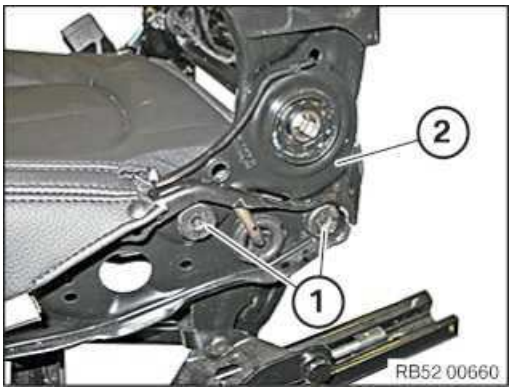
- **Only for equipment specification with Isofix:**
- Drill out rivet (1).
- Remove the holder (2).
- Remove remnants of rivets.

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- Loosen left and right screw (1).
- Remove the backrest frame (2).

12 – Install the backrest frame of the front seat backrest

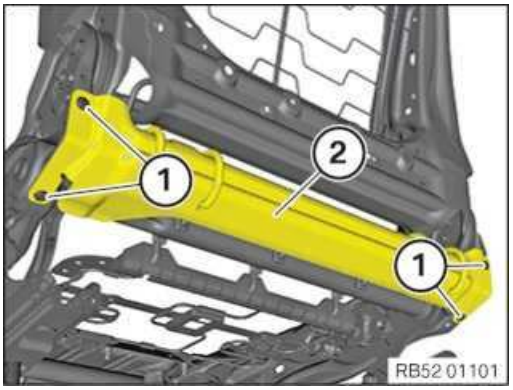


- Position the backrest frame (2).
- Renew screws (1).

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

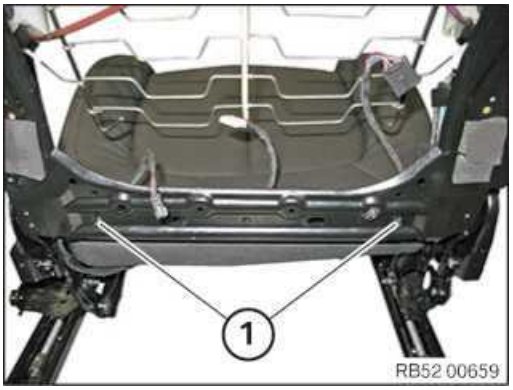
Backrest frame to seat mechanism

Screw	Renew screw.	Tightening torque	44 Nm



- **Only for equipment specification with Isofix:**

  Secure the holder (2) with the rivets (1).

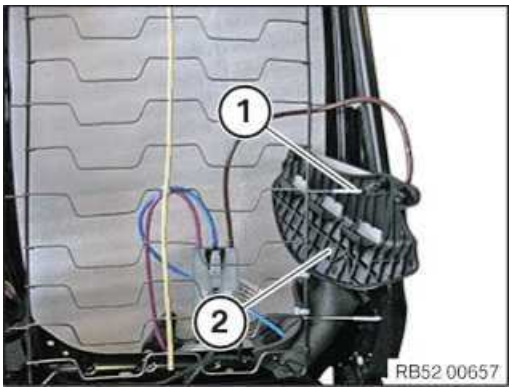


- Feed in wiring harness on backrest frame.
- Fasten the vehicle wiring harness on the backrest frame with the clips (1).

POSTPROCESSES

13 – Install backrest width adjustment with valve

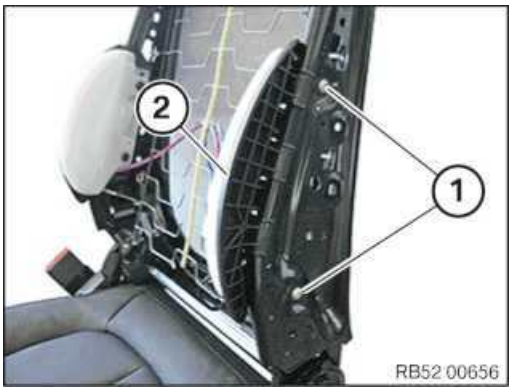
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NOTICE

Perform the operations on the left and right side.

- Insert the air cushion (2) from the rear.
- Attach the spring wire (1) to the backrest frame.

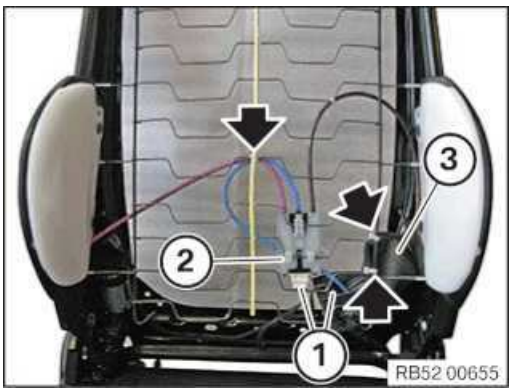


- Renew screws (1).

  Parts: Screw
- Tighten screws (1) on the left and right air cushion (2).

Backrest width adjustment on backrest frame

Oval-head screw	Renew screw.	Tightening torque	1,7 Nm

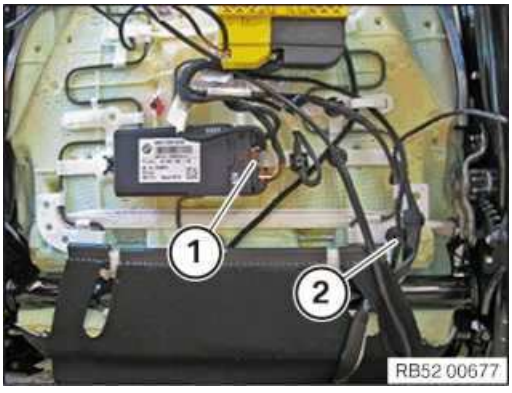


- Thread in the pump (3).
- Attach the valve unit (2) on the spring wire.
- Connect and lock the plug connections (1).
- Fit cable straps at the marked points.

14 – Install the backrest cover with the cushion for the front seat



- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.

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- Attach the retaining strap (1) on the seat mechanism on the left and right.

15 – Installing side airbag in the front seat

WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

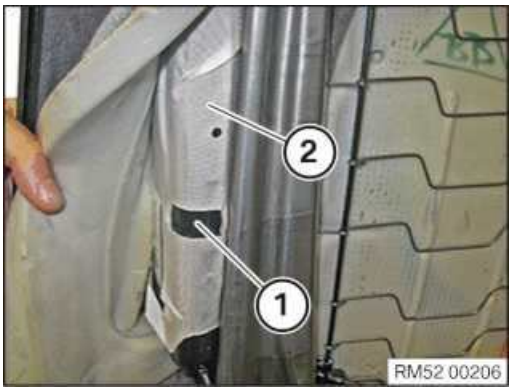
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

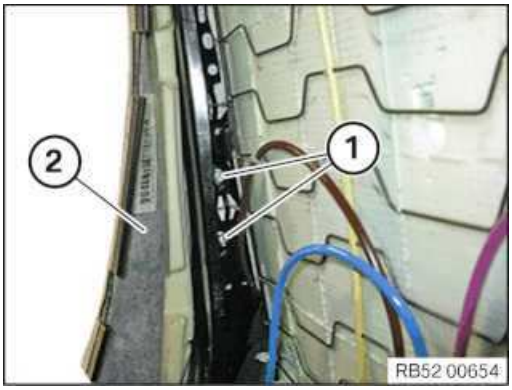
Airbag unit.

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



- Feed the side airbag (1) upwards into the lining pocket (2).



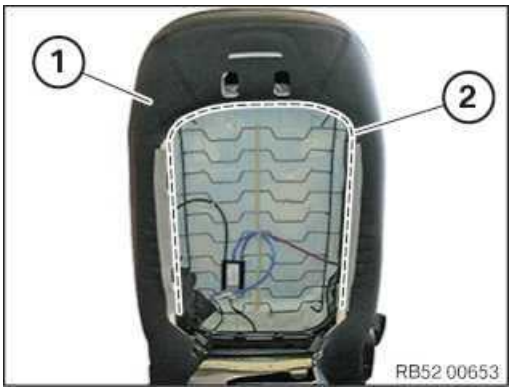
- Fold the backrest cover (2) to the side.
- Replace nuts.

  Parts: Nuts
- Tighten nuts (1).

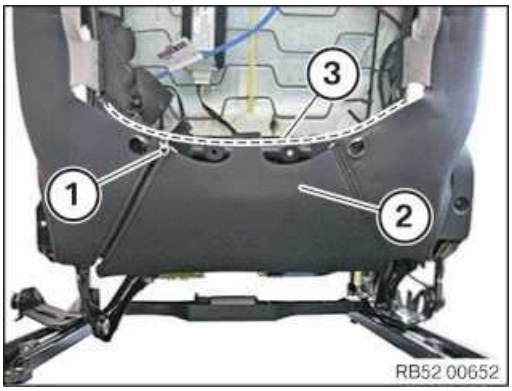
Side airbag to seat frame

Hexagon nut		Renew nut.	6,5 Nm

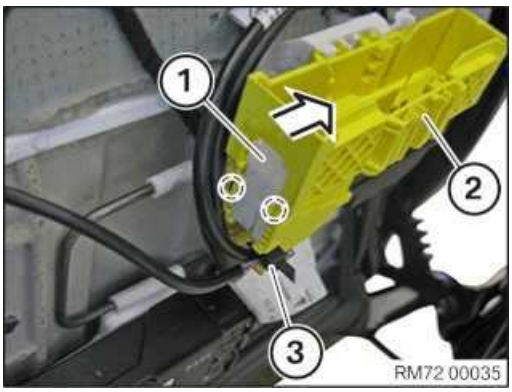
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- Attach the seat cover (1) in this area (2) to the backrest frame.



- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).

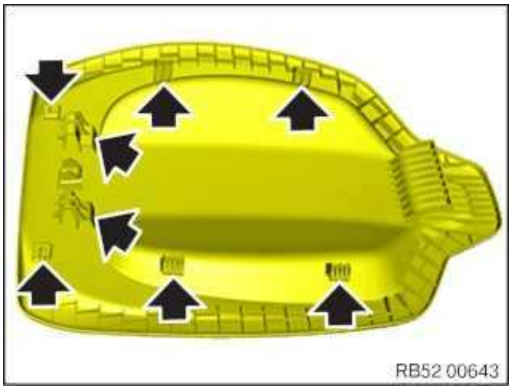


TECHNICAL INFORMATION

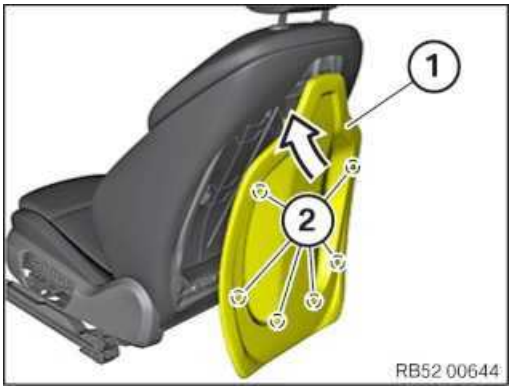
Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

16 – Install the rear panel on the front seat backrest

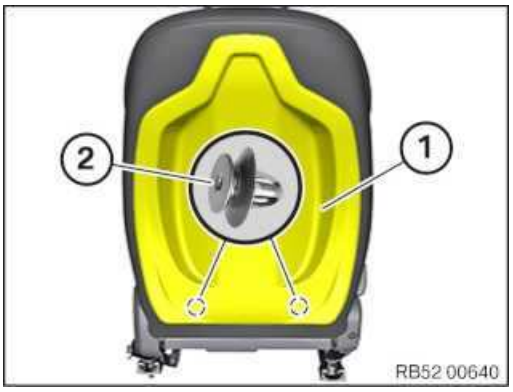


- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).

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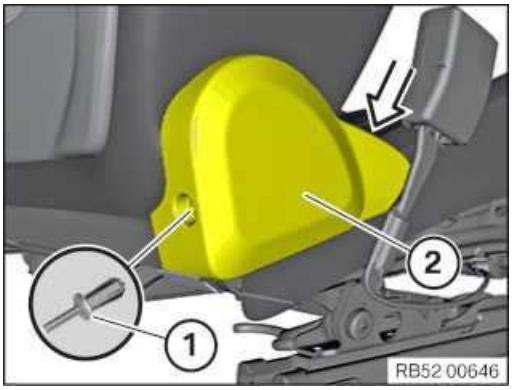


- Clip in the rear panel (1) at the clips (2).



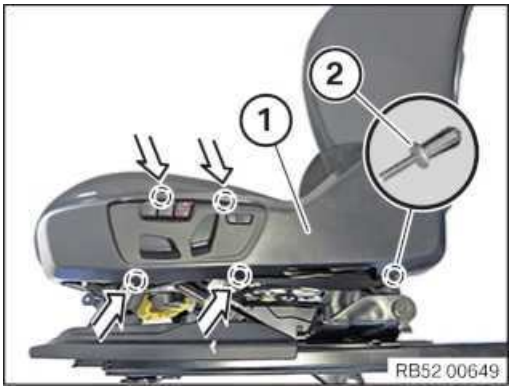
- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

17 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

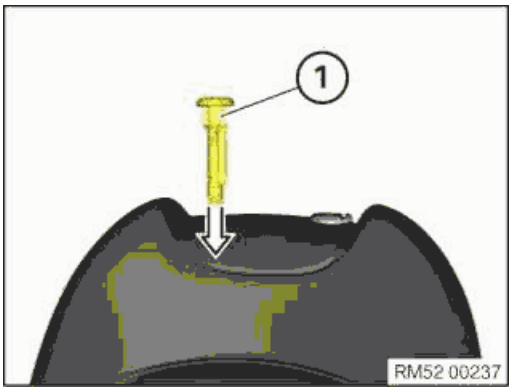
18 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

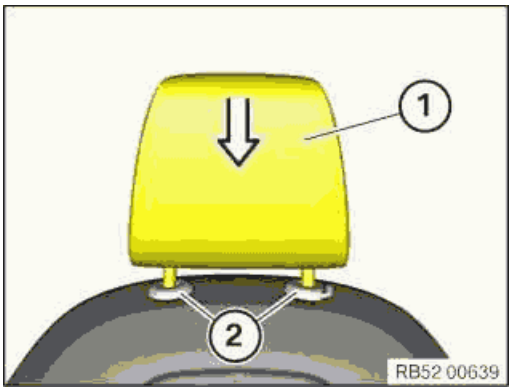
19 – Installing the guide sleeve for the front head restraint

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- Insert guide (1) from above and engage.

20 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

21 – Install front seat

TECHNICAL INFORMATION

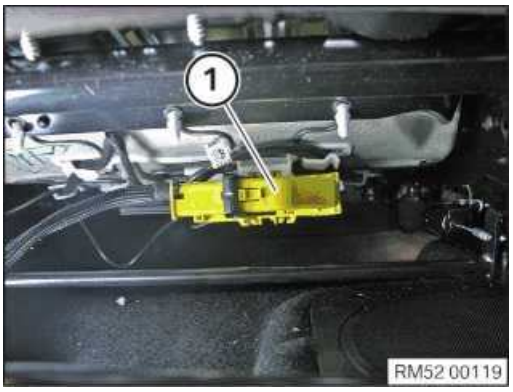
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

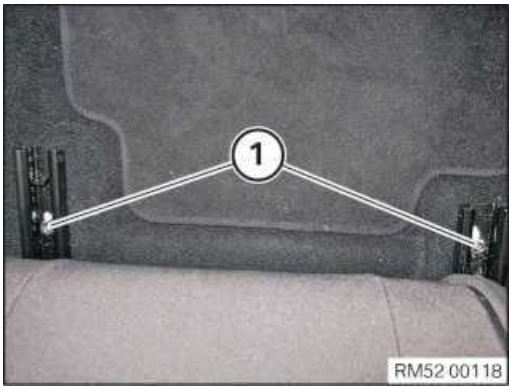
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

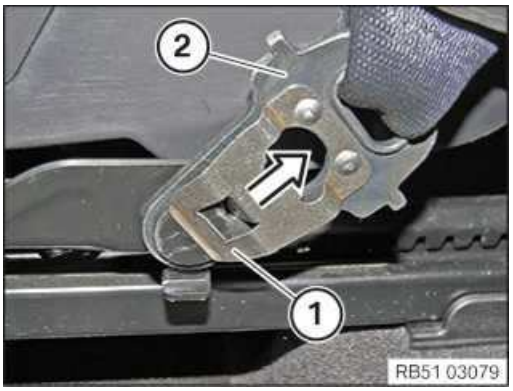
▸ **Disconnecting all battery earth leads**

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- See additional information.

22 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

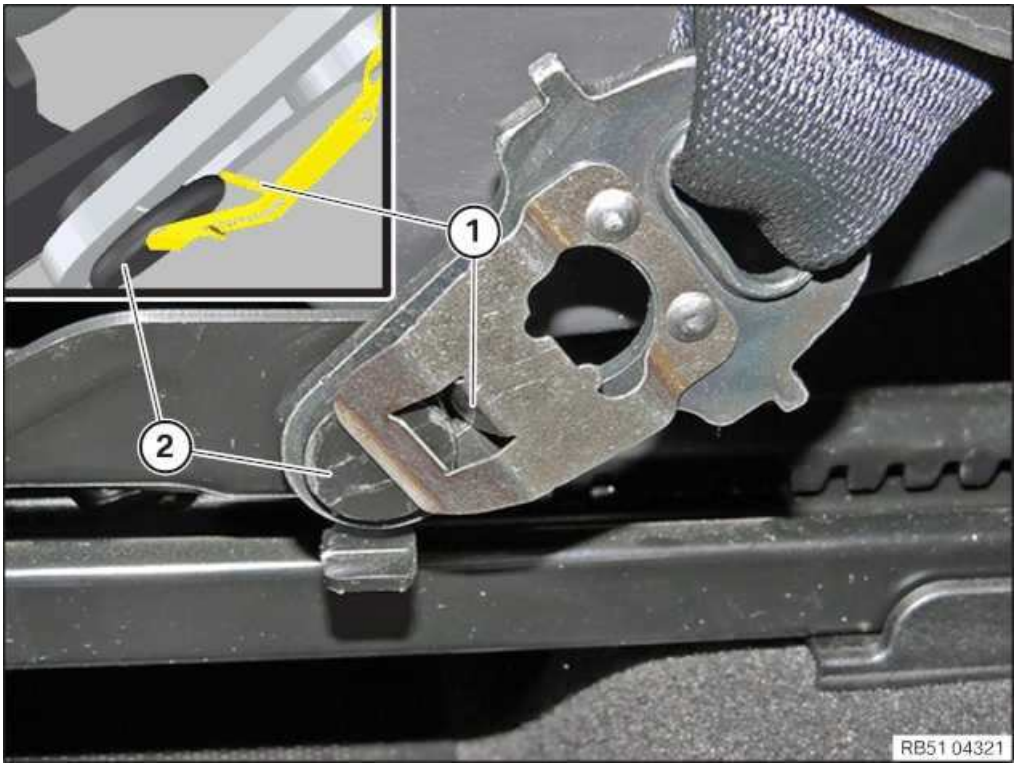
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Backrest frame to seat mechanism — Used in step 12

Screw	Renew screw.	Tightening torque	44 Nm

Backrest width adjustment on backrest frame — Used in step 13

Oval-head screw	Renew screw.	Tightening torque	1,7 Nm

Side airbag to seat frame — Used in step 15

Hexagon nut		Renew nut.	6,5 Nm

Seat to body — Used in step 21

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

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2 154 711 Fitting aid



Common	Used in step 2 21
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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	8 15

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 21
61 20 900 Disconnecting and connecting battery earth lead	2 21
61 20 900 Disconnecting and connecting battery earth lead	2 21
61 20 900 Disconnecting and connecting battery earth lead	2 21
61 20 900 Disconnecting and connecting battery earth lead	2 21
61 20 900 Disconnecting and connecting battery earth lead	2 21
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 21
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 21
61 20 900 Disconnecting and connecting battery earth lead	2 21
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 21
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 21
61 20 900 Disconnecting and connecting battery earth lead	2 21
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 21
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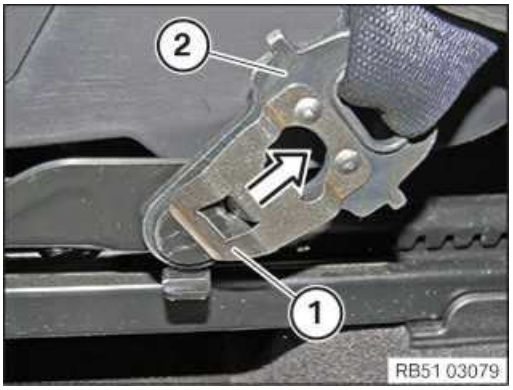
52 14 040 Removing and installing/replacing outer cover on left or right front seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.

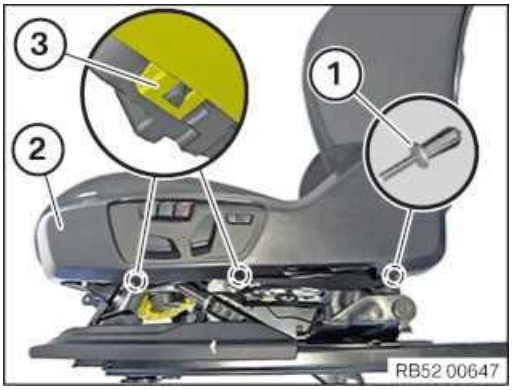


- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

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MAIN WORK

2 – Removing the outer cover on the front electrical seat

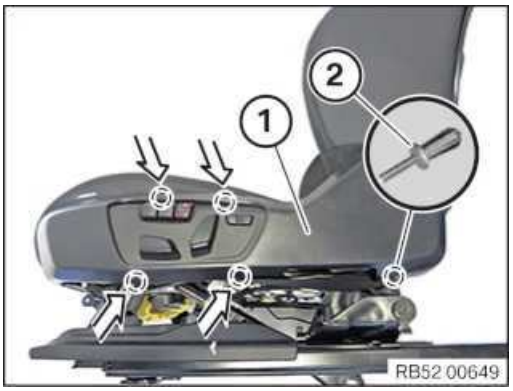


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

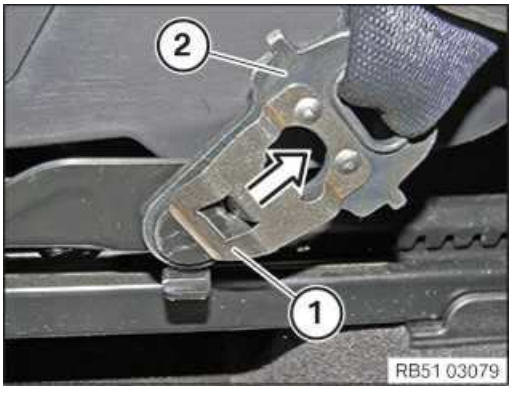
3 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

POSTPROCESSES

4 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

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Result

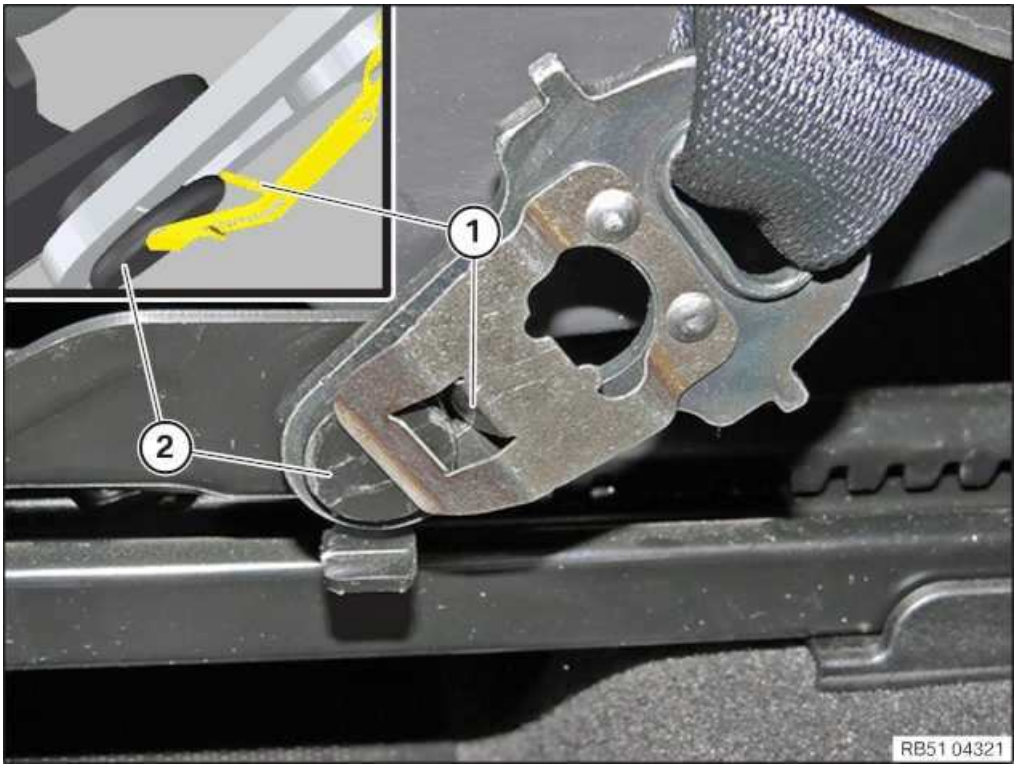
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

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52 14 526 Removing and installing/replacing seat mechanism on left or right front seat

NOTICE

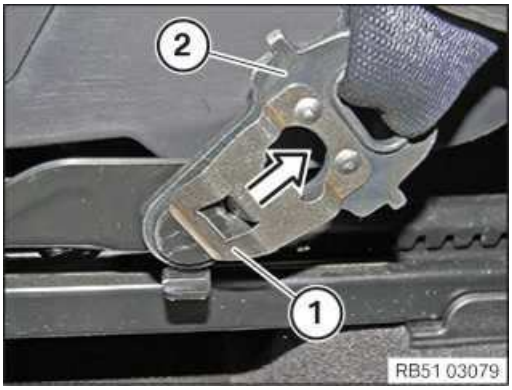
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

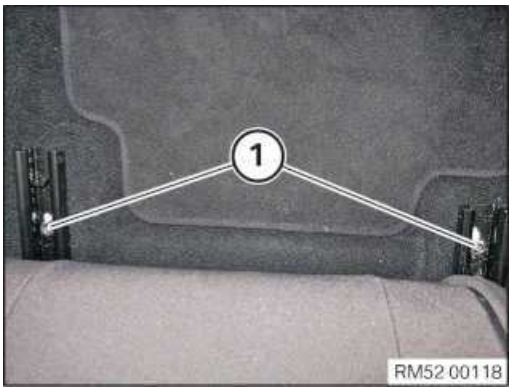
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



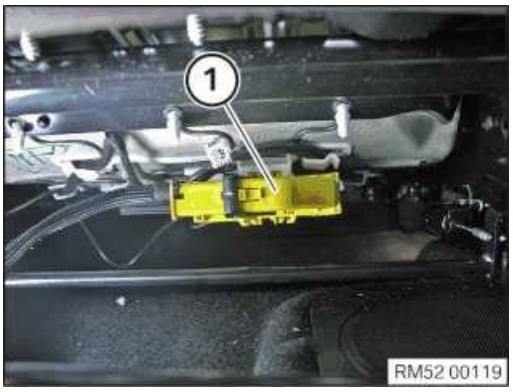
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

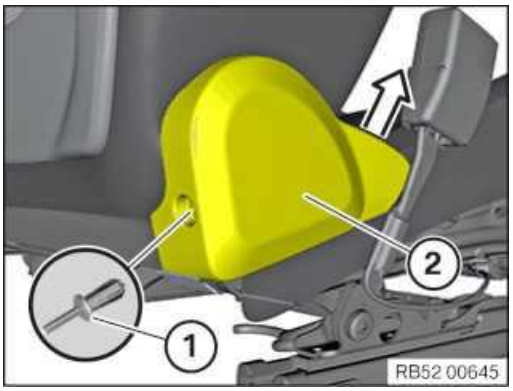
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

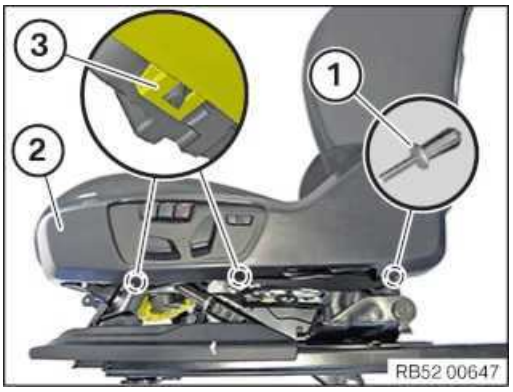
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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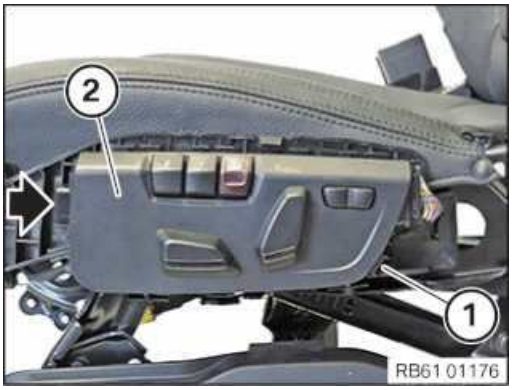


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



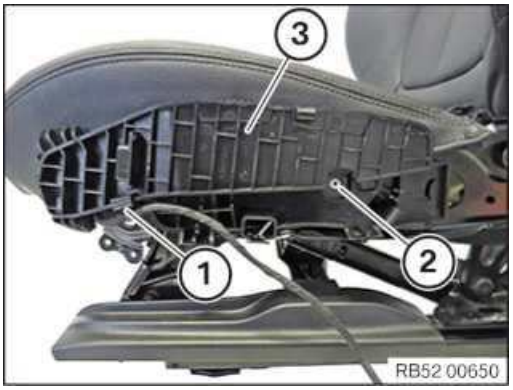
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

6 – Remove the support for the operating unit for the seat adjustment



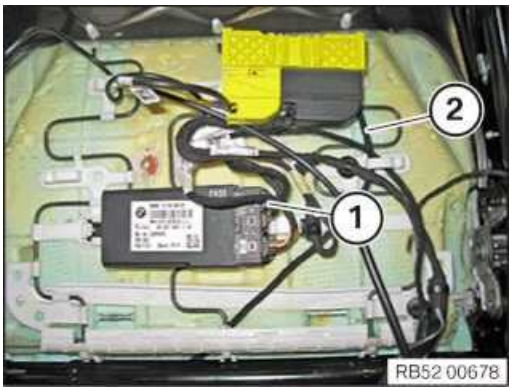
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Remove the seat cover with the cushion for the front seat

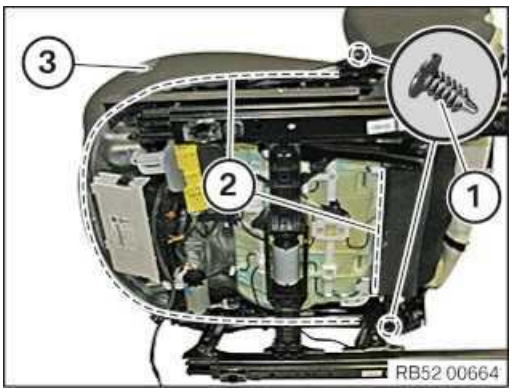
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- Detach retaining strap (1) at the left and right from the seat mechanism.



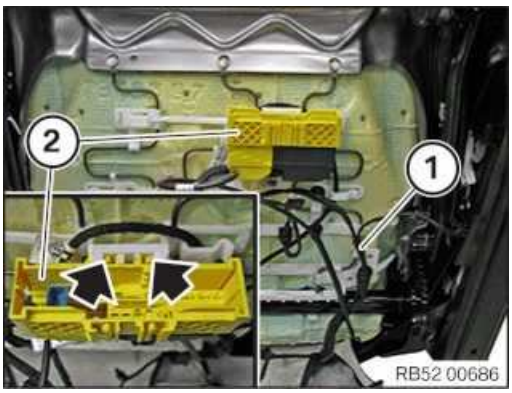
- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

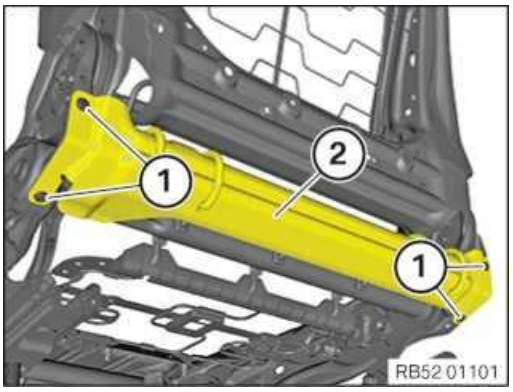
MAIN WORK

8 – Remove the seat mechanism of the front seat

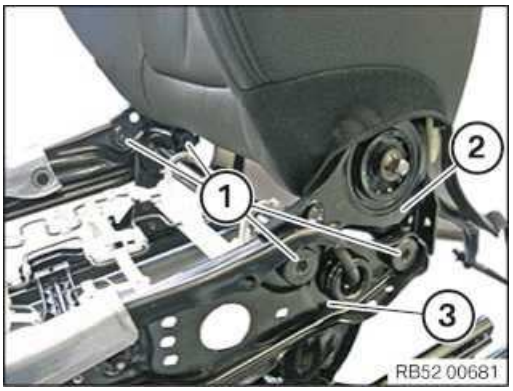


- Loosen the wiring harness (1) on all cable clips.
- Unlock connector housing (2) and detach from seat mechanism to rear.
- Feed out the wiring harness (1) from the seat mechanism toward the rear.

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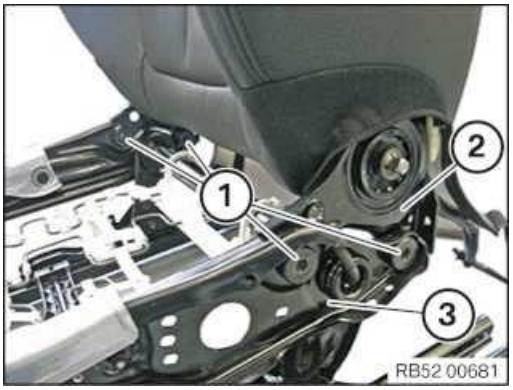


- **Only for equipment specification with Isofix:**
- Drill out rivet (1).
- Remove the holder (2).
- Remove remnants of rivets.



- Loosen screws (1).
- Remove the backrest frame (2) from the seat frame (3).

9 – Install the seat mechanism of front seat

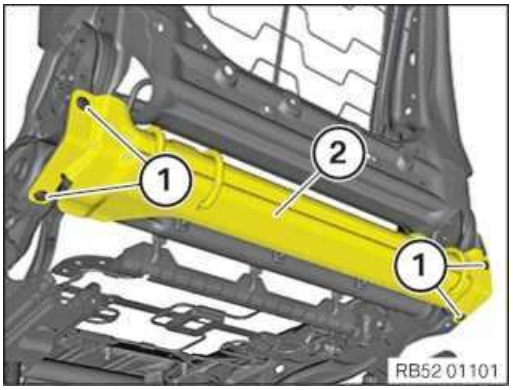


- Position the backrest frame (2).
- Renew screws (1).

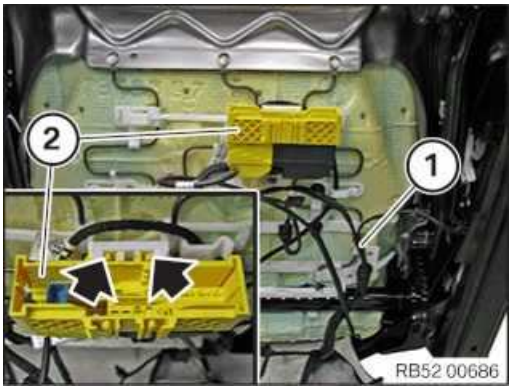
  Parts: Bolts
- Tighten screws (1) on left and right.

Backrest frame to seat mechanism

Screw	Renew screw.	Tightening torque	44 Nm



- **Only for equipment specification with Isofix:**
- Fasten the holder (2) with a rivet (1).

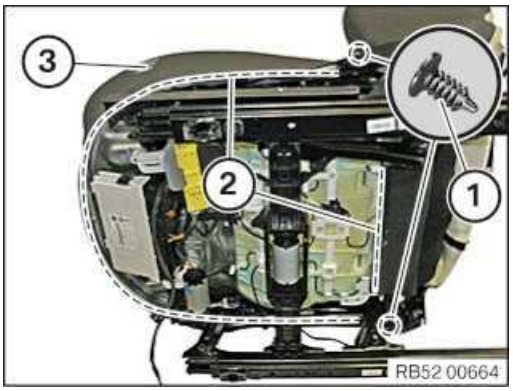


- Insert the wiring harness (1).
- Engage connector housing (2) into seat mechanism.
- Secure the wiring harness (1) to all cable clips.

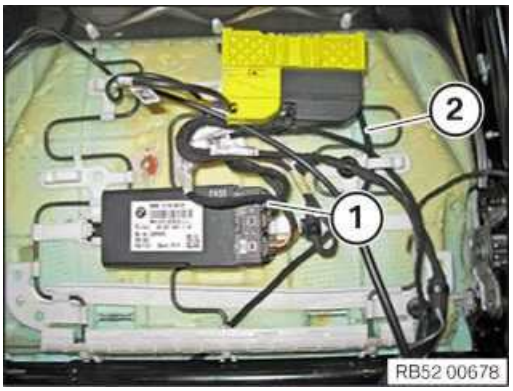
POSTPROCESSES

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10 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

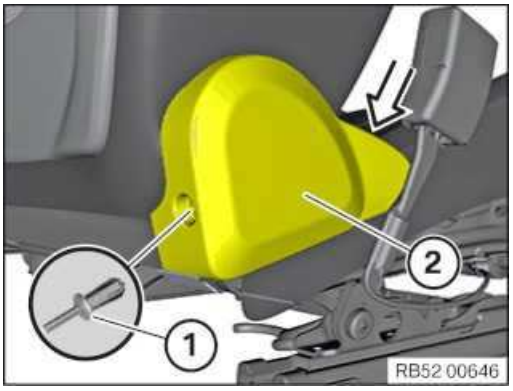


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



- Fasten retaining strap (1) to the seat mechanism at the left and right.

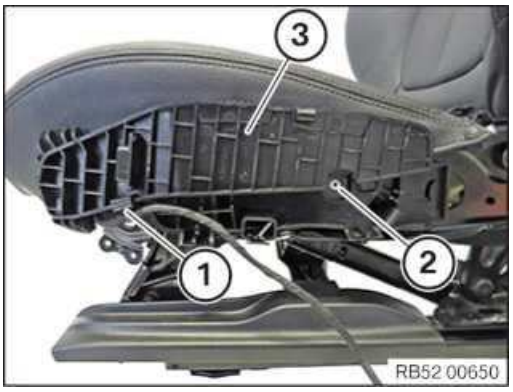
11 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

12 – Installing support for seat adjustment operating unit

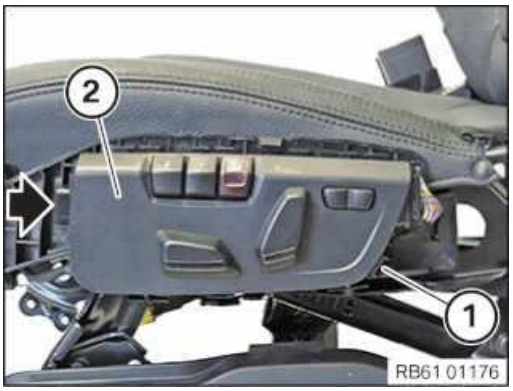
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- Insert support (3) from the front and position.
- Renew the blind rivet (2).

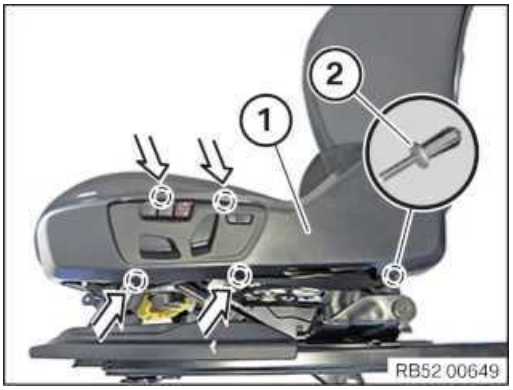
  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

13 – Install operating unit for seat adjustment



- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

14 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

15 – Install front seat

TECHNICAL INFORMATION

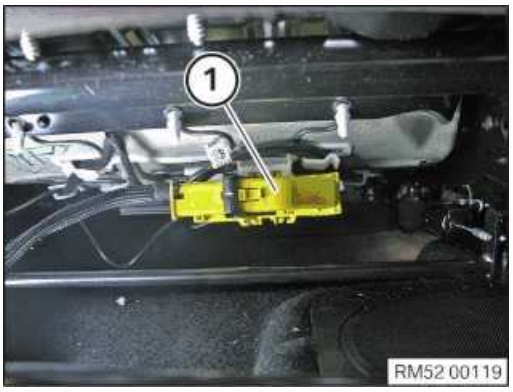
Different variants may be installed depending on the vehicle equipment.

▶ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

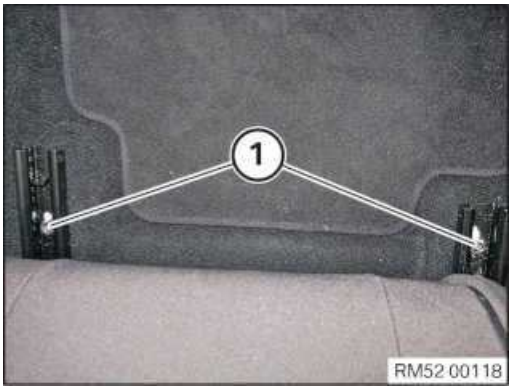
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

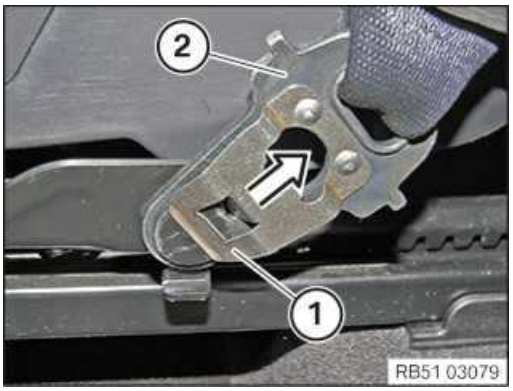
▸ **Disconnecting all battery earth leads**

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- See additional information.

16 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

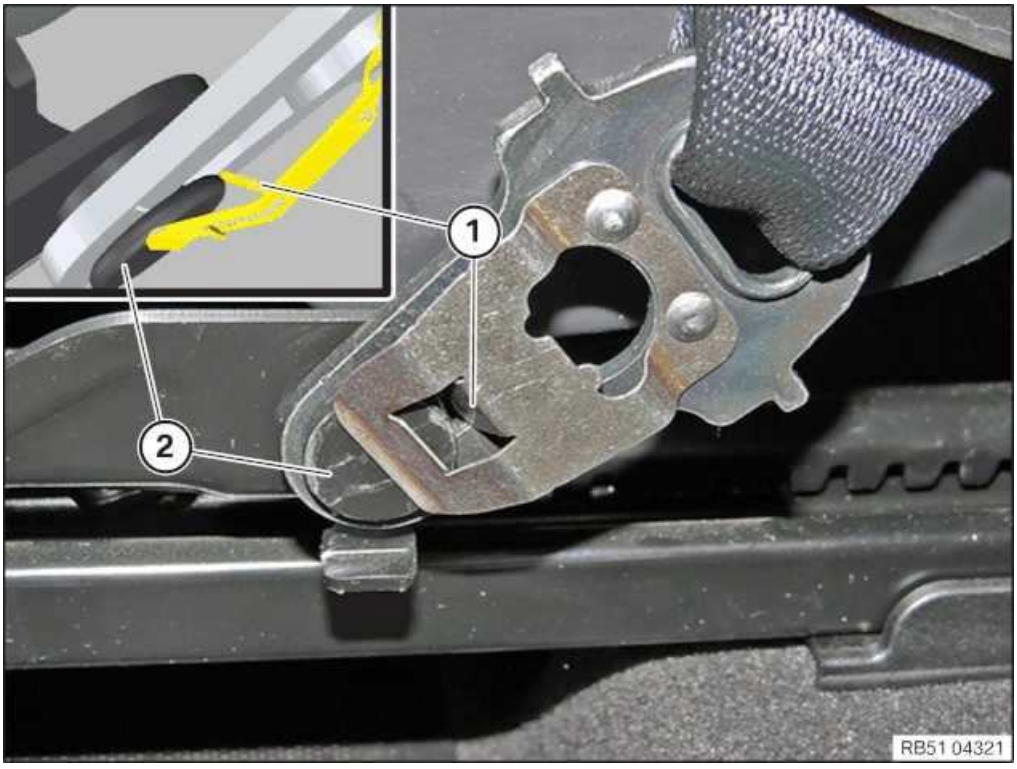
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Backrest frame to seat mechanism — Used in step 9

Screw	Renew screw.	Tightening torque	44 Nm

Seat to body — Used in step 15

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid



Common — Used in step 2 15

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
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61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 15
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61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 15
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 15
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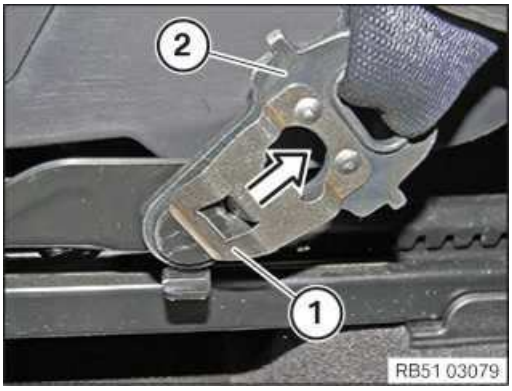
52 14 407 Replacing backrest cover for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

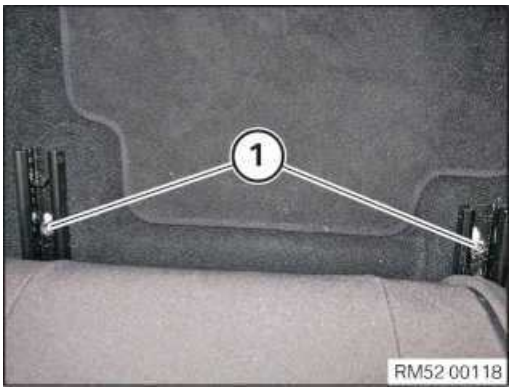
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



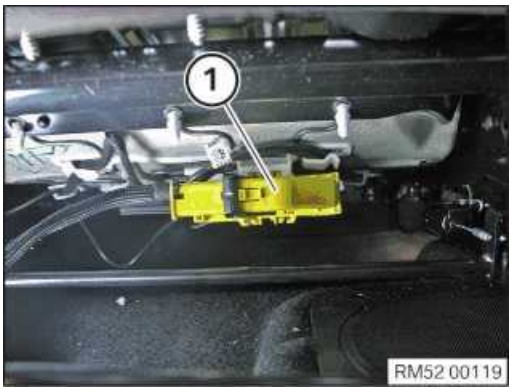
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

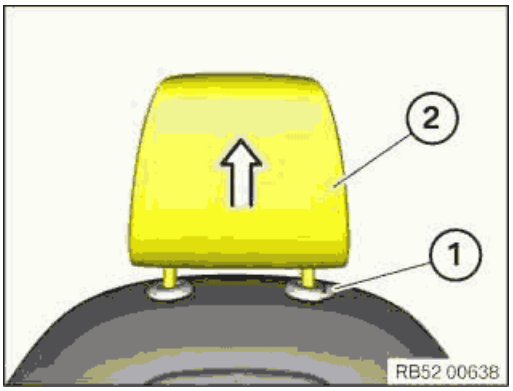
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

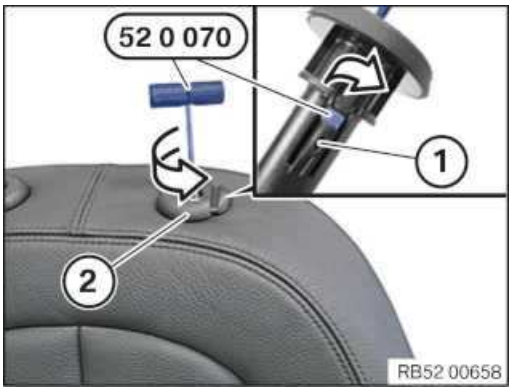
3 – Remove front head restraint



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

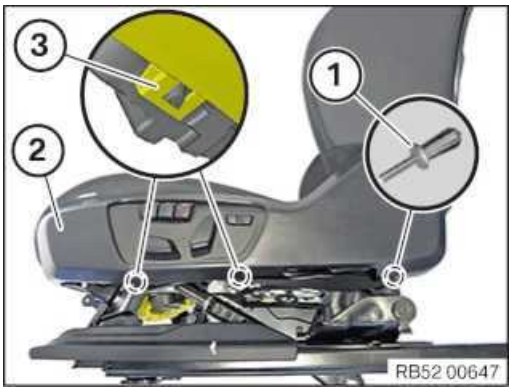
4 – Removing the guide sleeve for the front head restraint

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- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing the outer cover on the front electrical seat

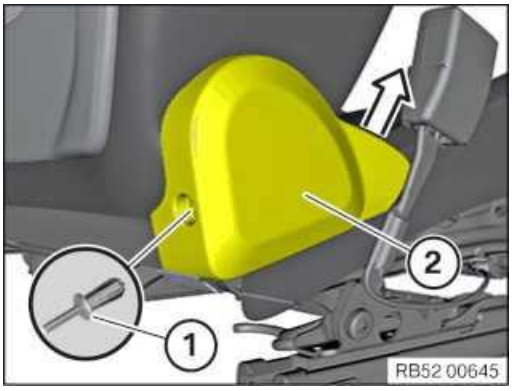


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

6 – Remove inner cover on front seat



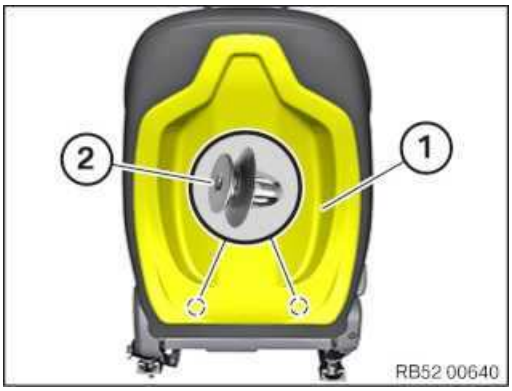
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

7 – Remove rear panel on front seat backrest

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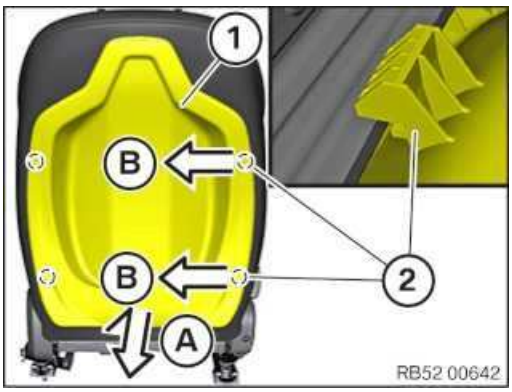
- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.



- Release the rear panel (1) toward the rear from the clips (2).



- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

8 – Remove side airbag in 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.

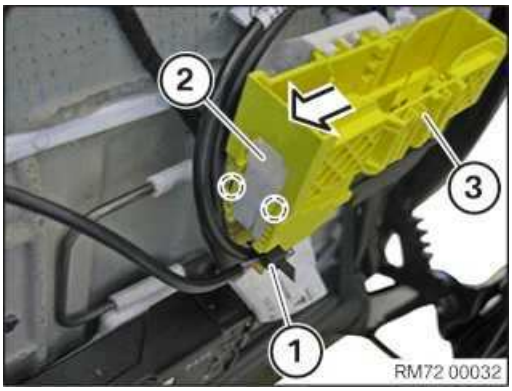
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WARNING

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

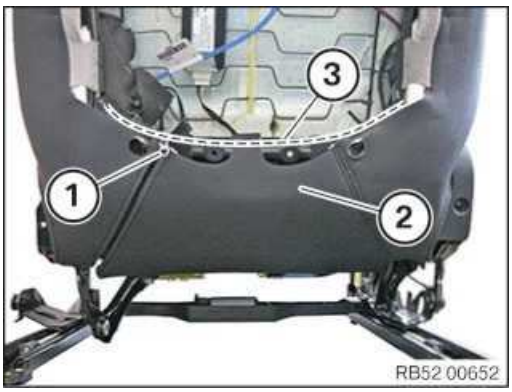


- If necessary detach the cable strap (1).

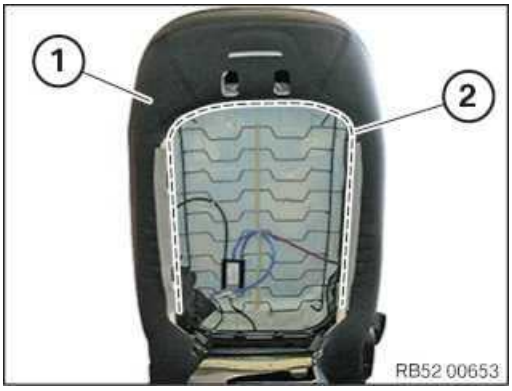
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

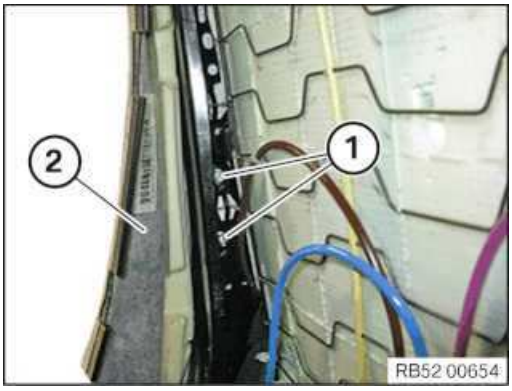
- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).



- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).

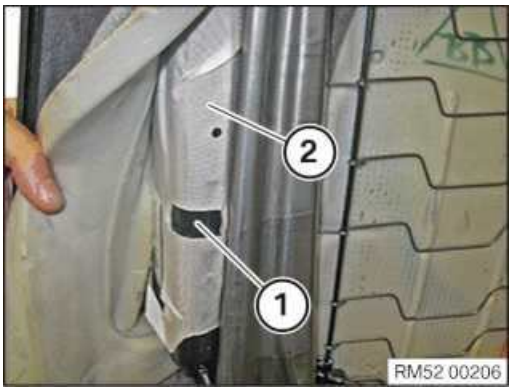


- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).

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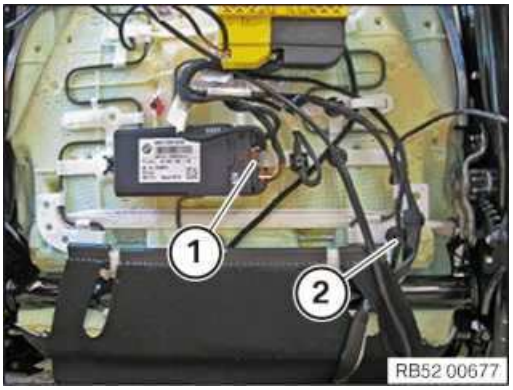


- Slide the side airbag (1) down and out of the cover pocket (2).

9 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



- Guide out the backrest cover (1) complete with the cushion toward the top.

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MAIN WORK

10 – Remove the backrest cover from front seat-backrest

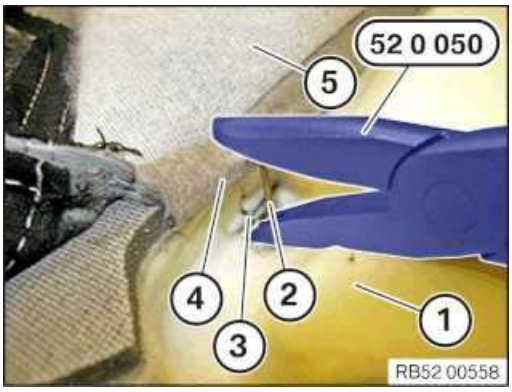


- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

11 – Install the backrest cover of the front seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.



- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.

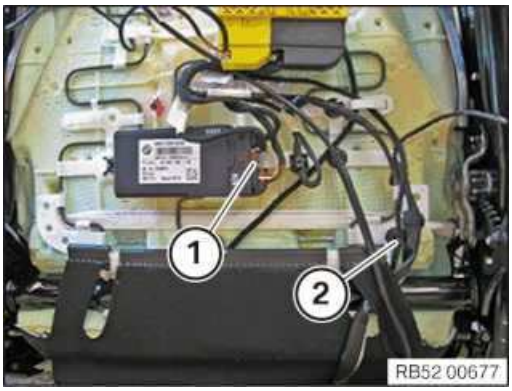
POSTPROCESSES

12 – Install the backrest cover with the cushion for the front seat

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- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

13 – Installing side airbag in the 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.

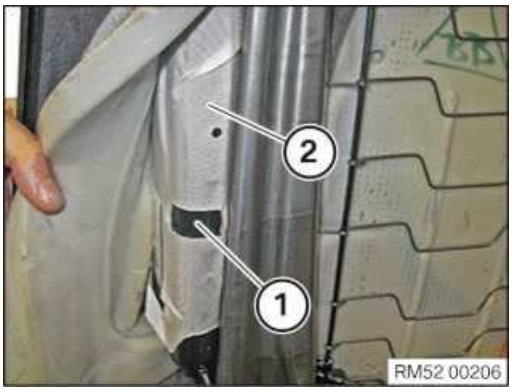
WARNING

Airbag unit.

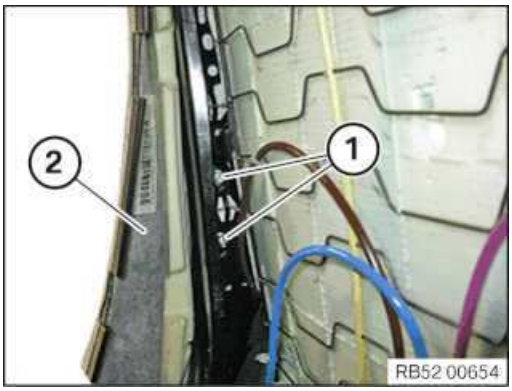
Danger! Life-threatening injuries!

- 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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- Feed the side airbag (1) upwards into the lining pocket (2).

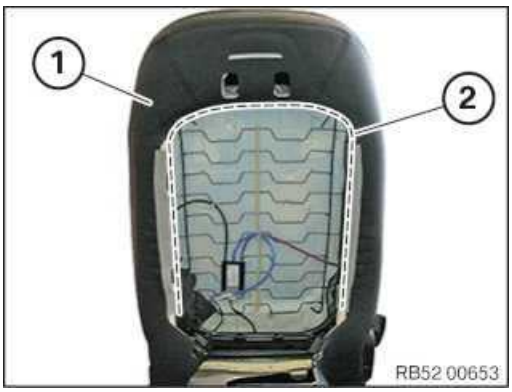


- Fold the backrest cover (2) to the side.
- Replace nuts.

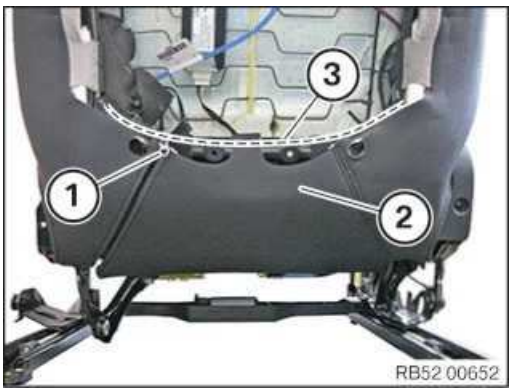
  Parts: Nuts
- Tighten nuts (1).

Side airbag to seat frame

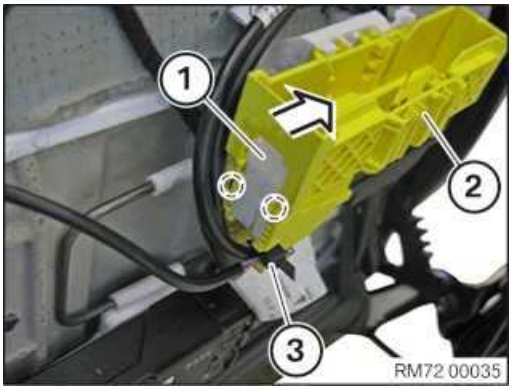
Hexagon nut		Renew nut.	6,5 Nm



- Attach the seat cover (1) in this area (2) to the backrest frame.



- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).



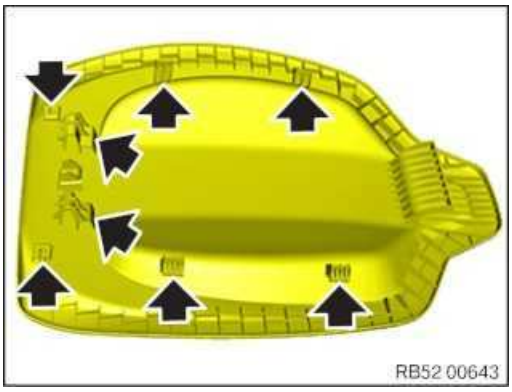
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

14 – Install the rear panel on the front seat backrest

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- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).

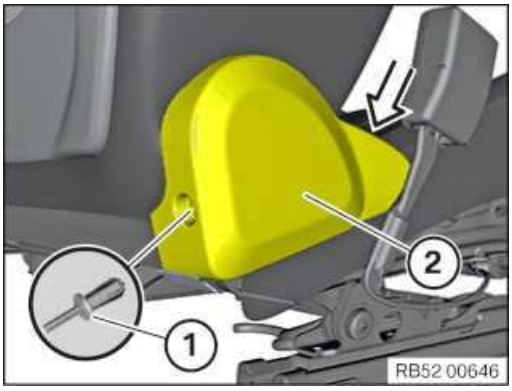


- Clip in the rear panel (1) at the clips (2).



- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

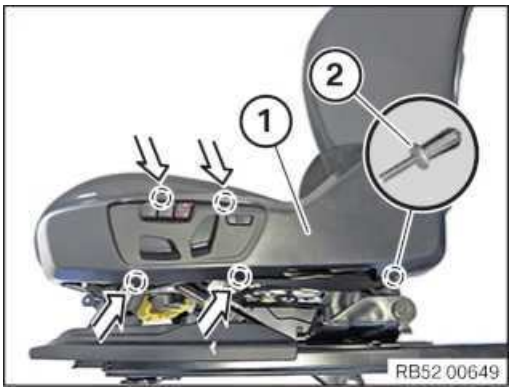
15 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

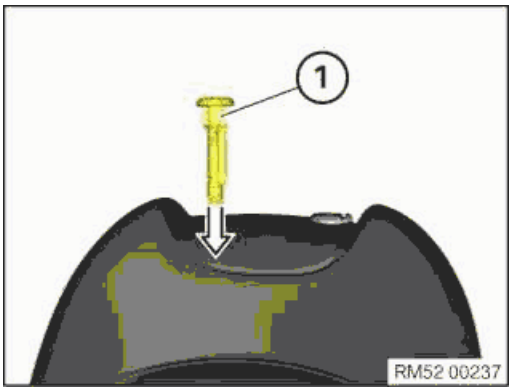
16 – Installing the outer cover on the electrical front seat

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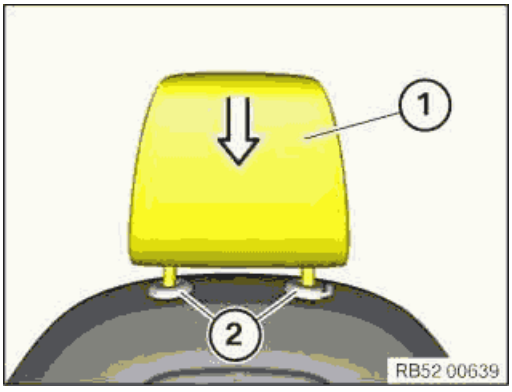
- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

17 – Installing the guide sleeve for the front head restraint



- Insert guide (1) from above and engage.

18 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

19 – Install front seat

TECHNICAL INFORMATION

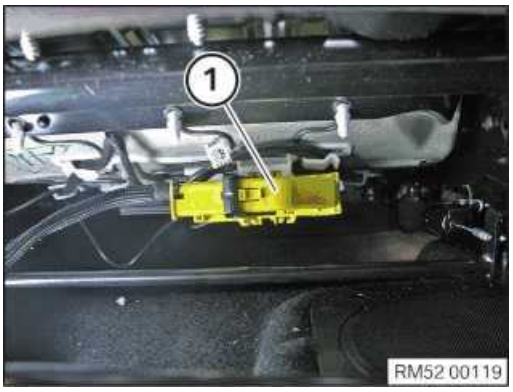
Different variants may be installed depending on the vehicle equipment.

▶ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

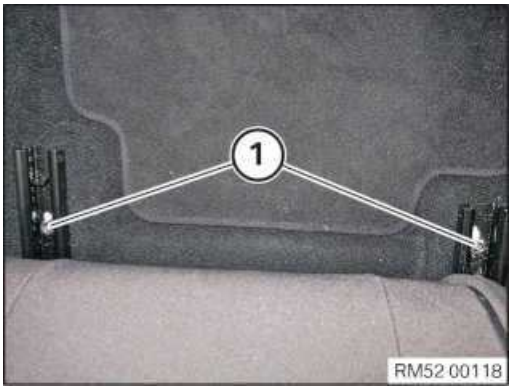
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

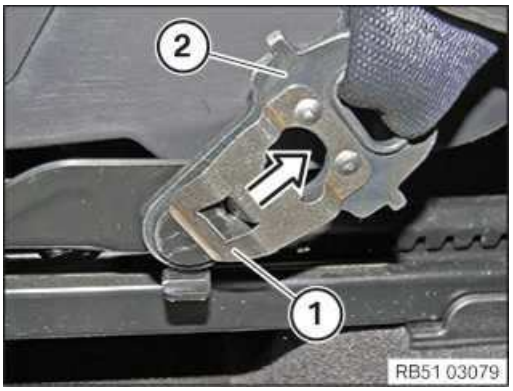
▸ **Disconnecting all battery earth leads**

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- See additional information.

20 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

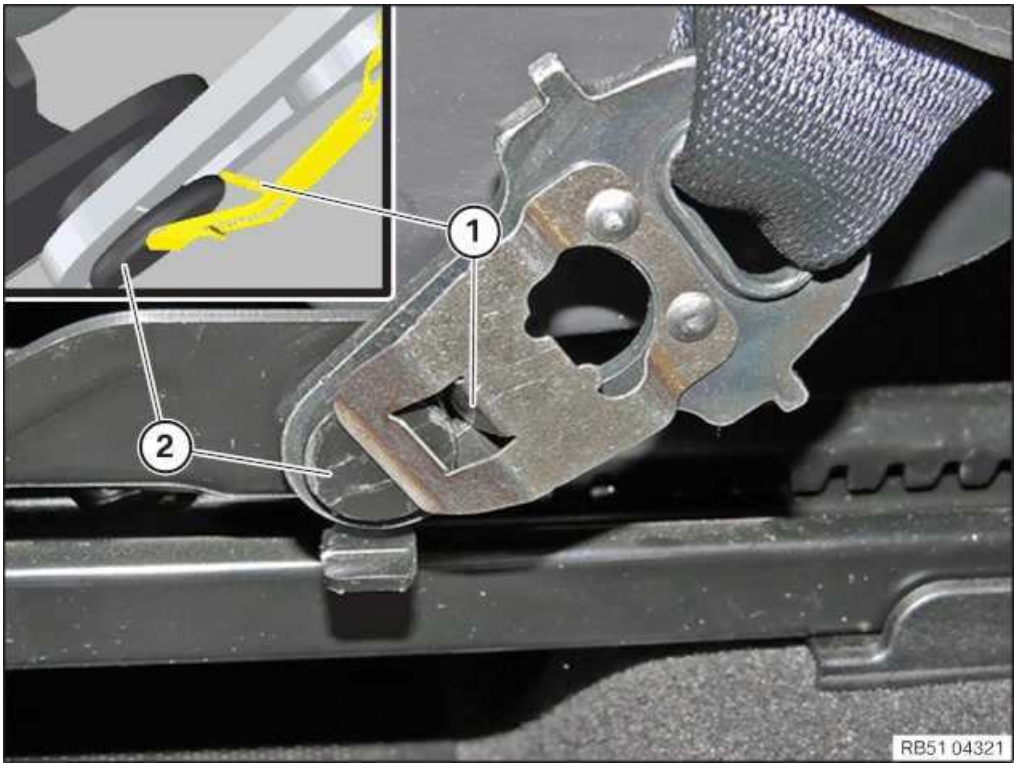
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Side airbag to seat frame — Used in step 13

Hexagon nut		Renew nut.	6,5 Nm

Seat to body — Used in step 19

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid

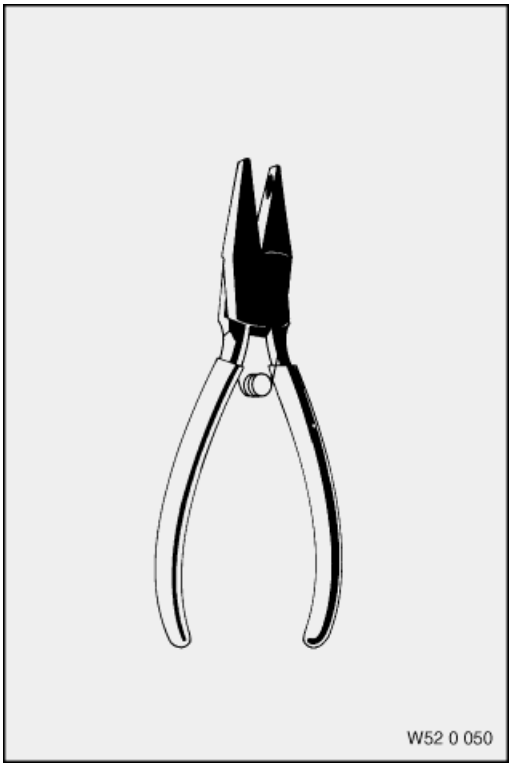


Common — Used in step 2 19

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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0 492 668 (52 0 050) Pliers



Common	Used in step 11
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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	8 13

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 19
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61 20 900 Disconnecting and connecting battery earth lead	2	19
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
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61 20 900 Disconnecting and connecting battery earth lead	2	19
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61 20 900 Disconnecting and connecting battery earth lead	2	19

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52 14 408 Replacing backrest cover for front passenger seat

NOTICE

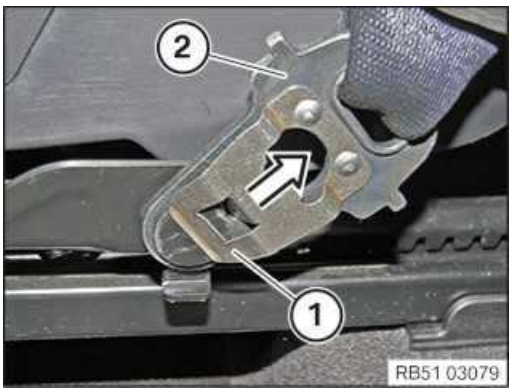
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

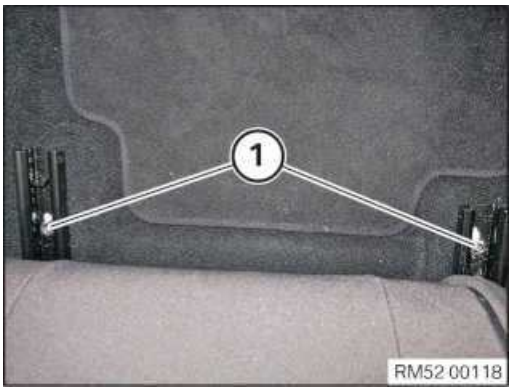
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



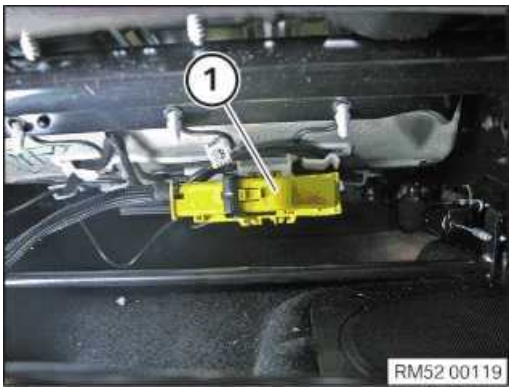
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

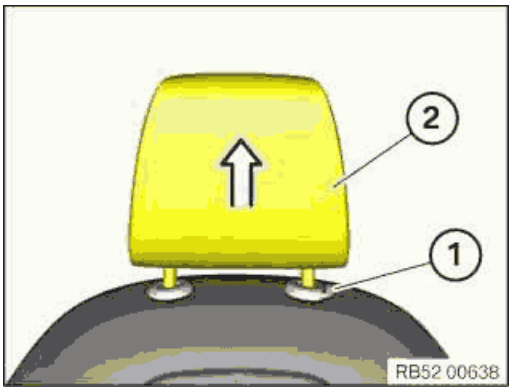
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

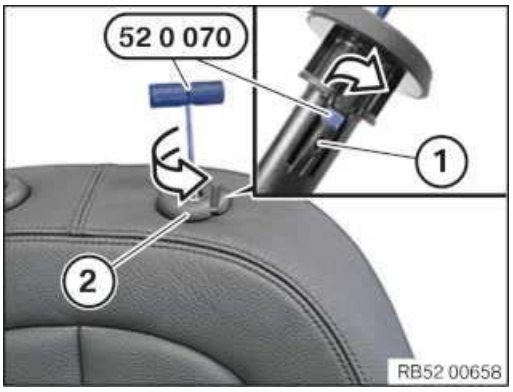
3 – Remove front head restraint



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

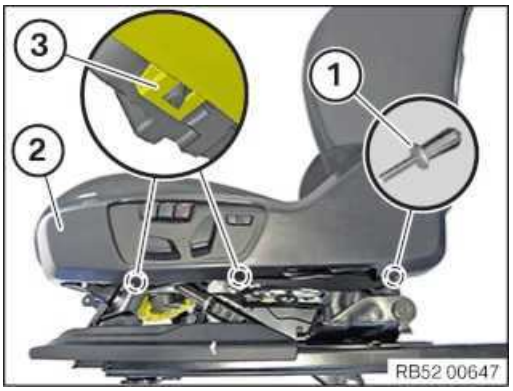
4 – Removing the guide sleeve for the front head restraint

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- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing the outer cover on the front electrical seat

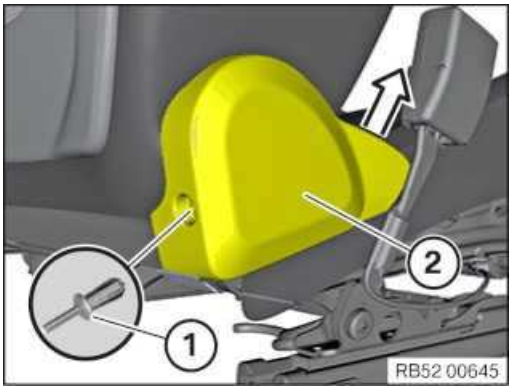


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

6 – Remove inner cover on front seat



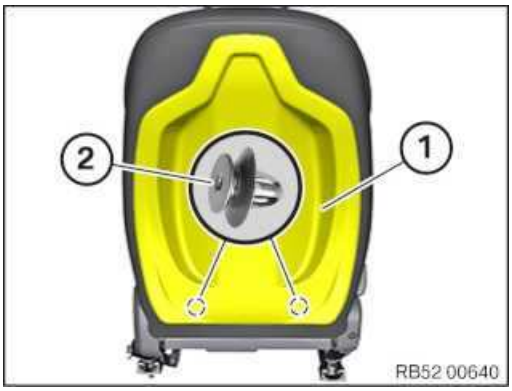
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

7 – Remove rear panel on front seat backrest

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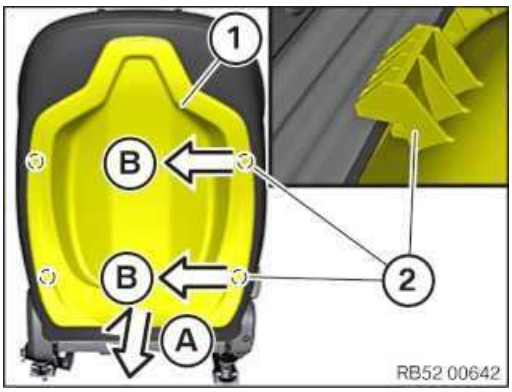
- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.



- Release the rear panel (1) toward the rear from the clips (2).



- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

8 – Remove side airbag in 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.

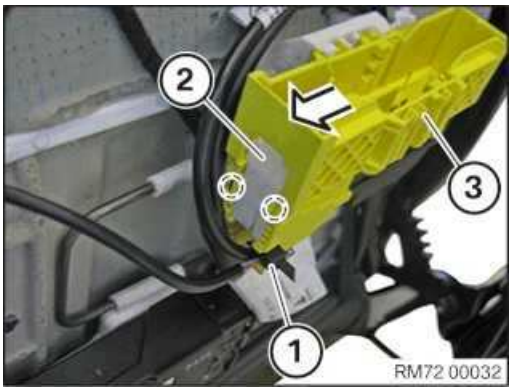
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WARNING

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

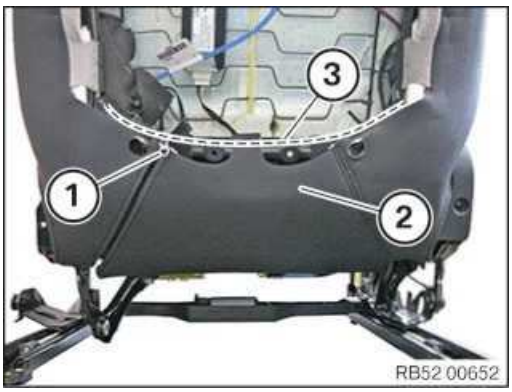


- If necessary detach the cable strap (1).

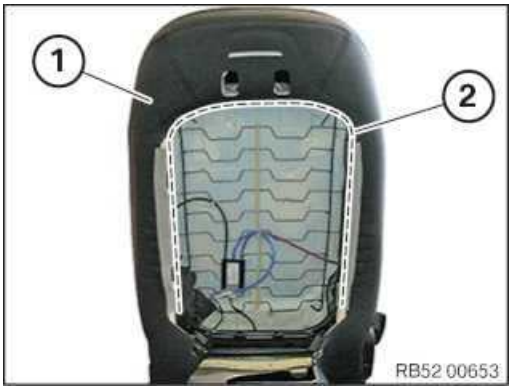
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

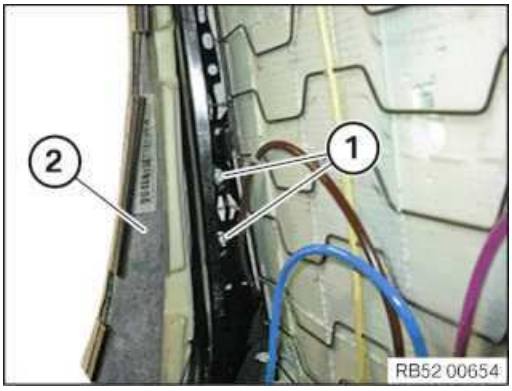
- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).



- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).

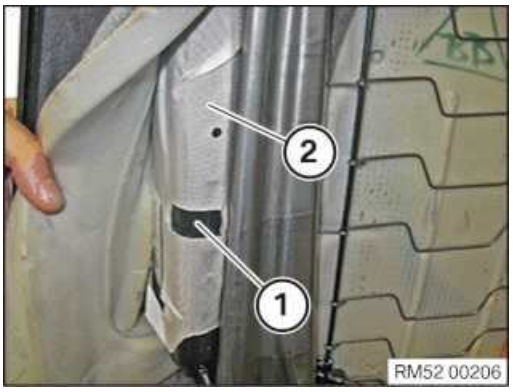


- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).

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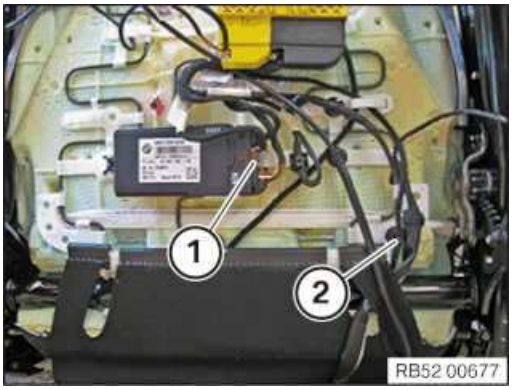


- Slide the side airbag (1) down and out of the cover pocket (2).

9 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



- Guide out the backrest cover (1) complete with the cushion toward the top.

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MAIN WORK

10 – Remove the backrest cover from front seat-backrest

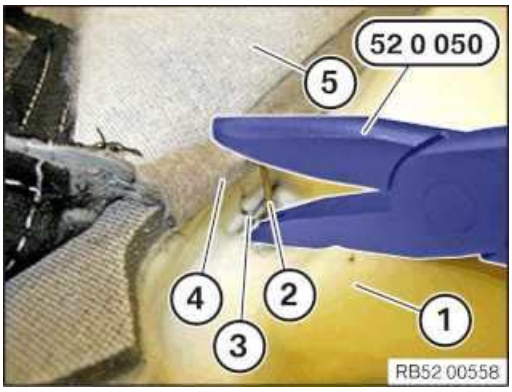


- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

11 – Install the backrest cover of the front seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.



- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.

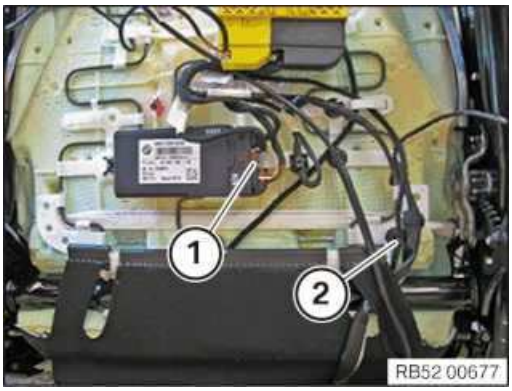
POSTPROCESSES

12 – Install the backrest cover with the cushion for the front seat

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- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

13 – Installing side airbag in the 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.

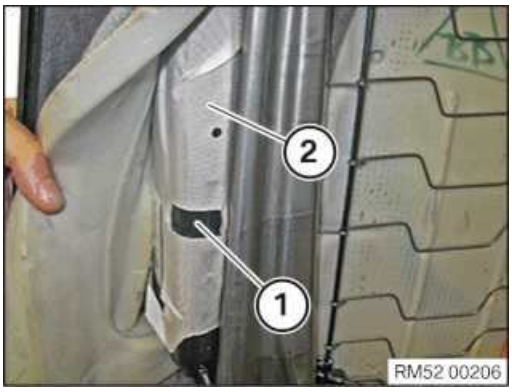
WARNING

Airbag unit.

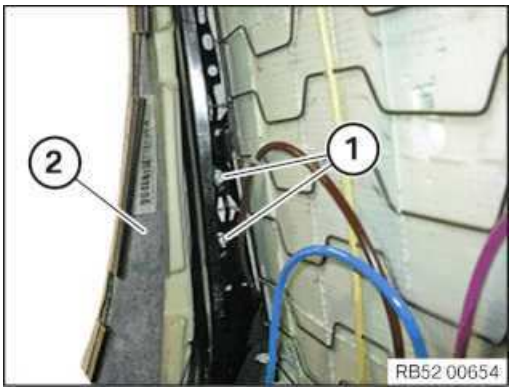
Danger! Life-threatening injuries!

- 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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- Feed the side airbag (1) upwards into the lining pocket (2).

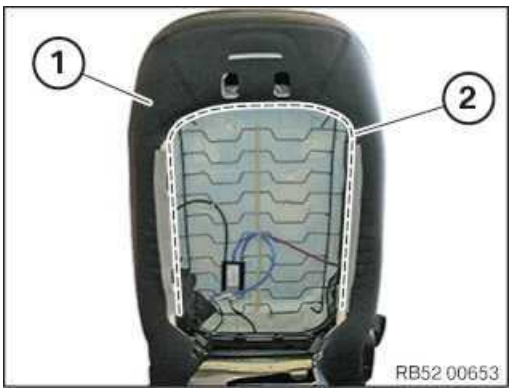


- Fold the backrest cover (2) to the side.
- Replace nuts.

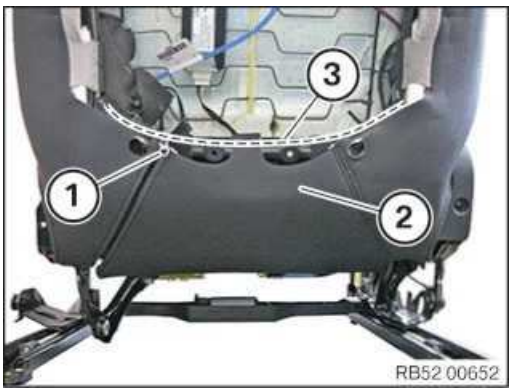
  Parts: Nuts
- Tighten nuts (1).

Side airbag to seat frame

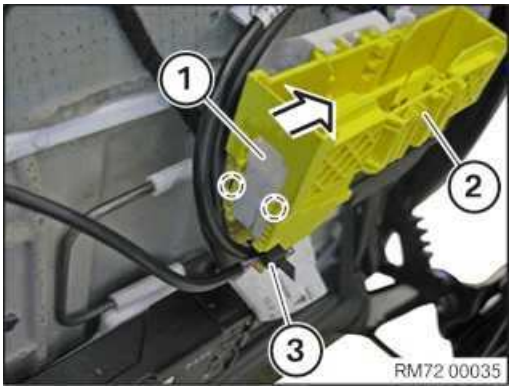
Hexagon nut		Renew nut.	6,5 Nm



- Attach the seat cover (1) in this area (2) to the backrest frame.



- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).



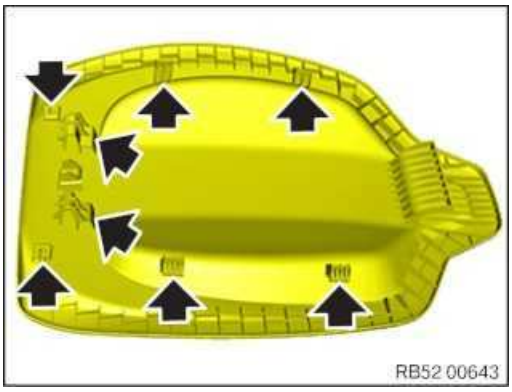
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

14 – Install the rear panel on the front seat backrest

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- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).

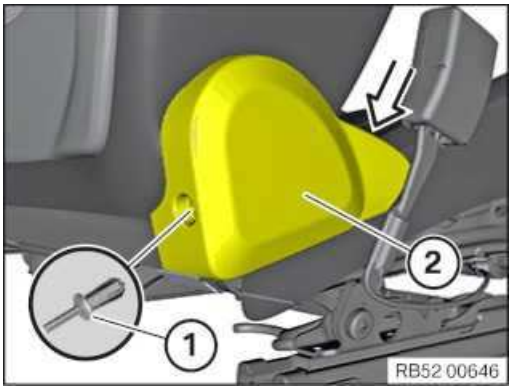


- Clip in the rear panel (1) at the clips (2).



- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

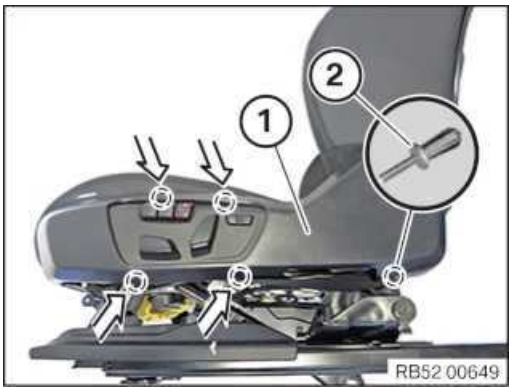
15 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

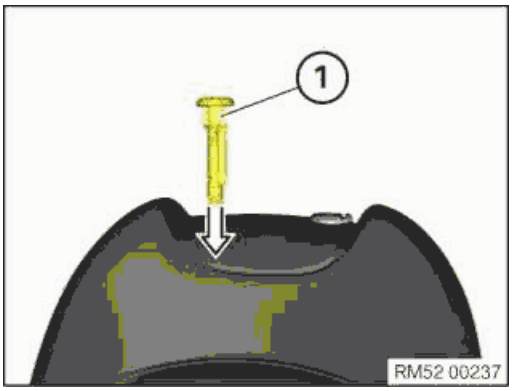
16 – Installing the outer cover on the electrical front seat

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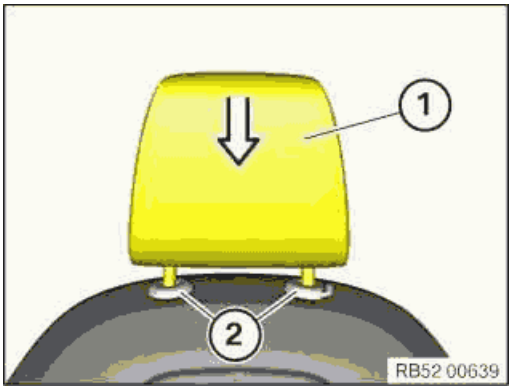
- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

17 – Installing the guide sleeve for the front head restraint



- Insert guide (1) from above and engage.

18 – Install the front head restraint



- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

19 – Install front seat

TECHNICAL INFORMATION

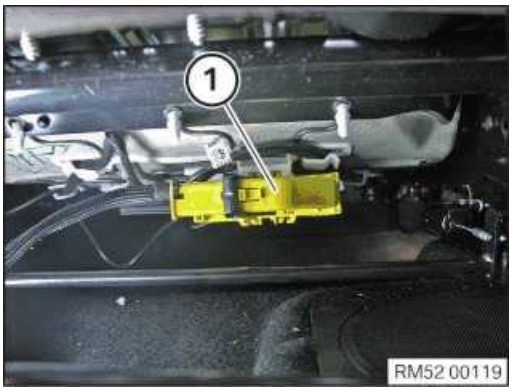
Different variants may be installed depending on the vehicle equipment.

▶ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

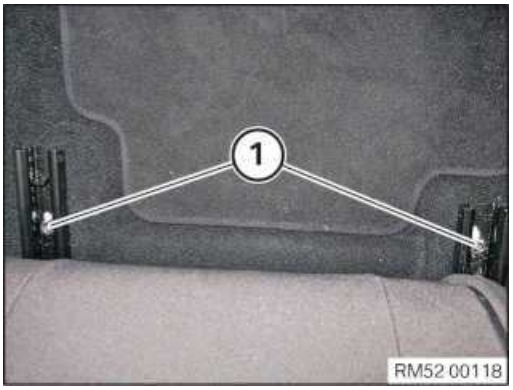
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

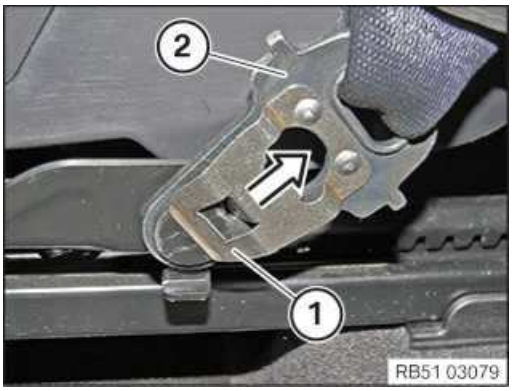
▸ **Disconnecting all battery earth leads**

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- See additional information.

20 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

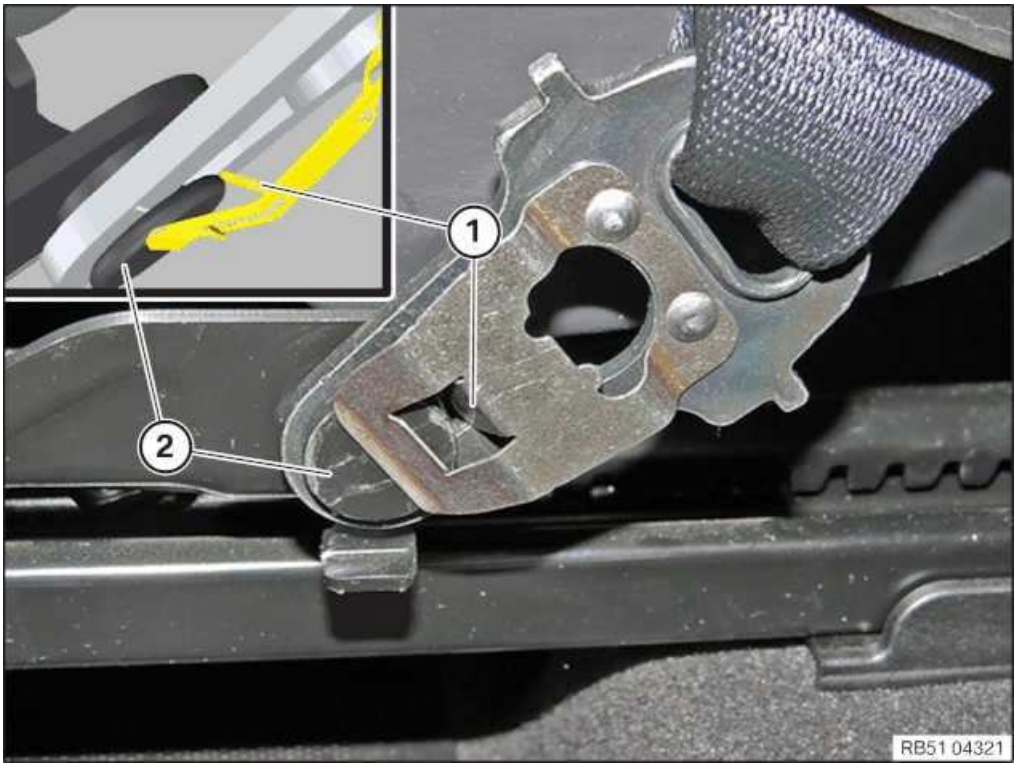
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Side airbag to seat frame — Used in step 13

Hexagon nut		Renew nut.	6,5 Nm

Seat to body — Used in step 19

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid

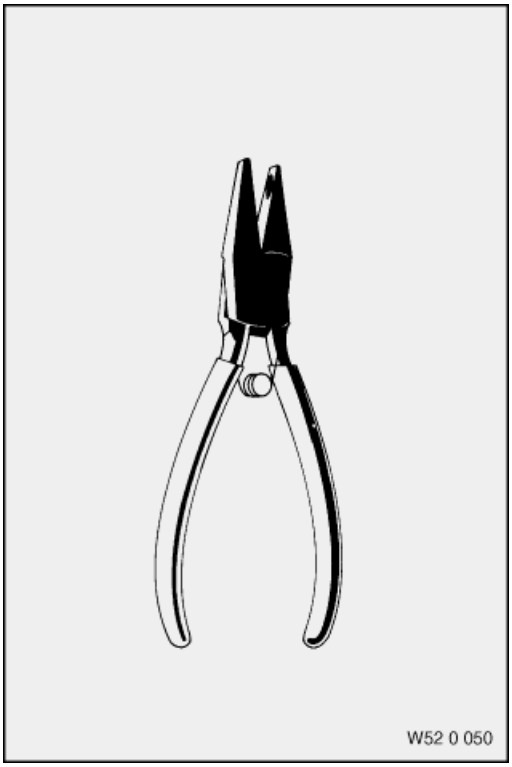


Common — Used in step 2 19

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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0 492 668 (52 0 050) Pliers



Common	Used in step 11
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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	8 13

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
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61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
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61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19

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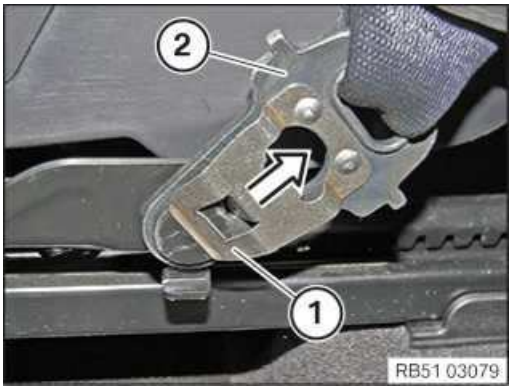
52 14 402 Replacing seat cover for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

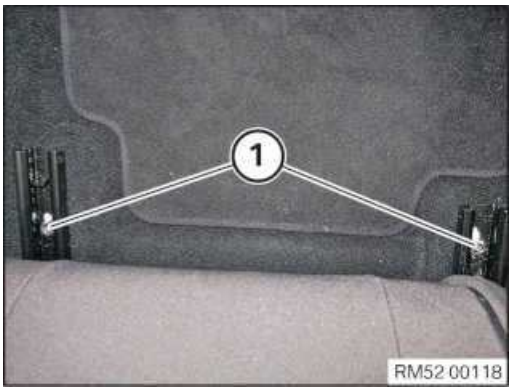
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



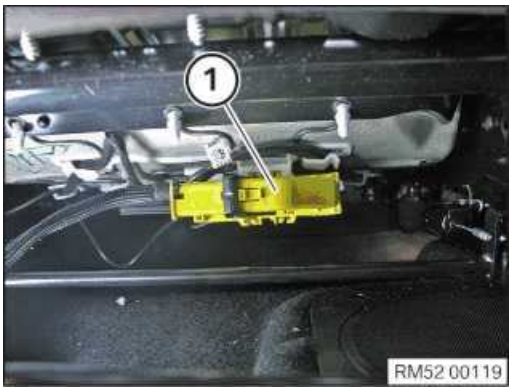
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

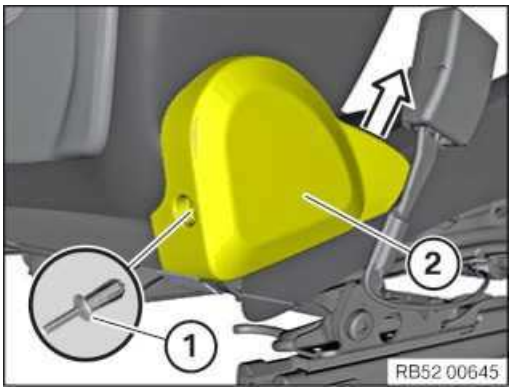
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

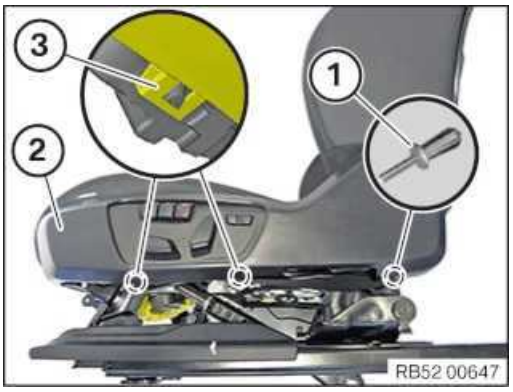
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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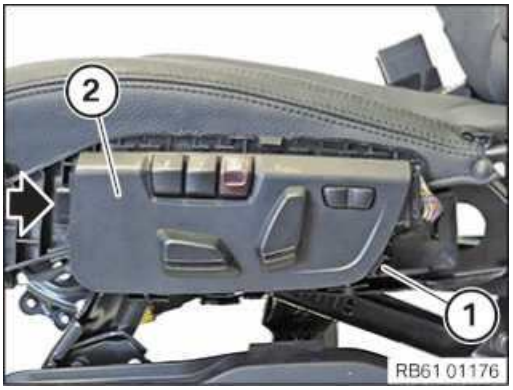


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



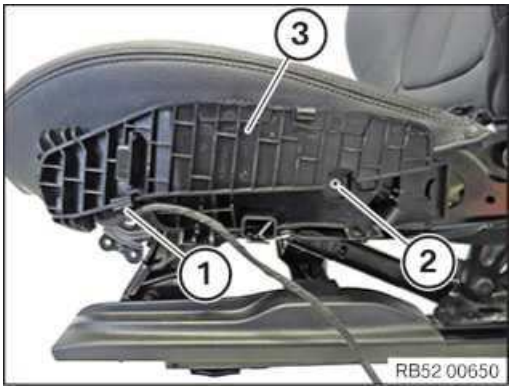
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

6 – Remove the support for the operating unit for the seat adjustment



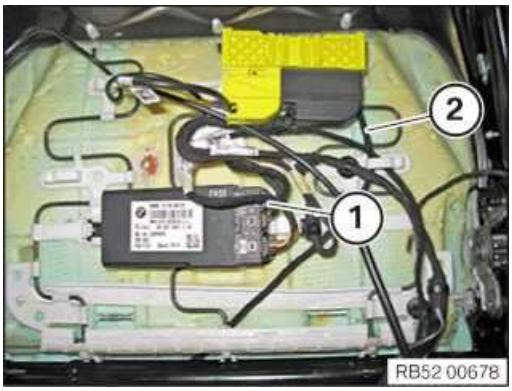
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Remove the seat cover with the cushion for the front seat

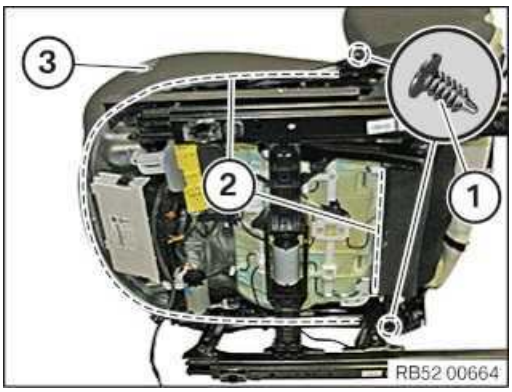
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- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

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MAIN WORK

8 – Removing seat cover for front seat (basic)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

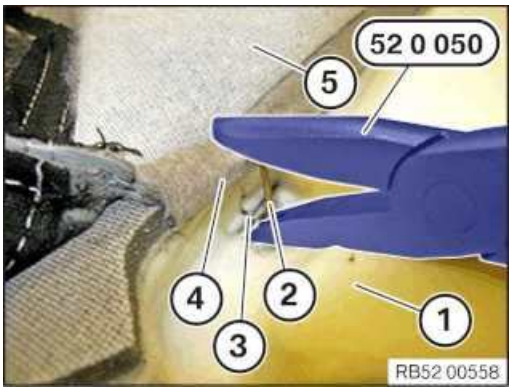
9 – Install the seat cover for the front seat (basic)

NOTICE

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



- Place the seat cover on the cushion.
- Secure all trim wires with clamps.



- Renew the clamps (2).

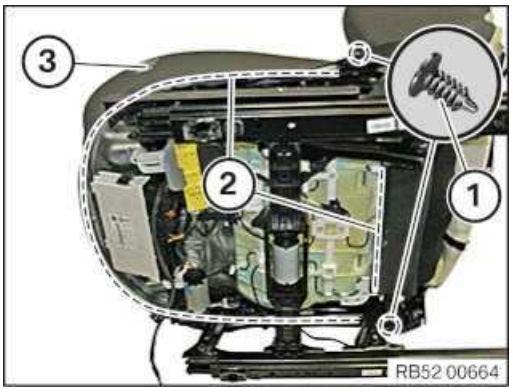
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

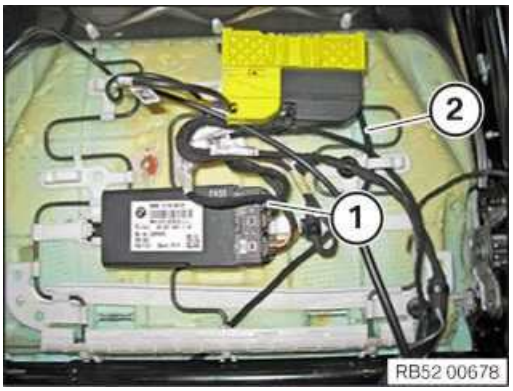
POSTPROCESSES

10 – Fit the seat cover with the upholstery for the front seat

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- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

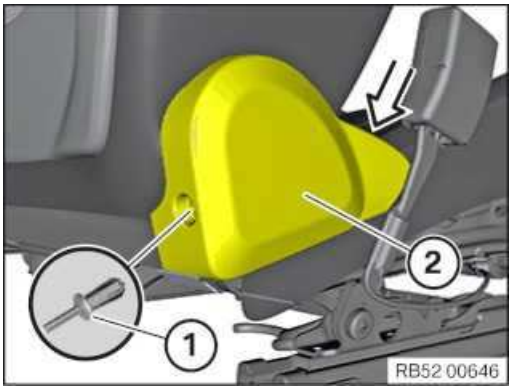


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



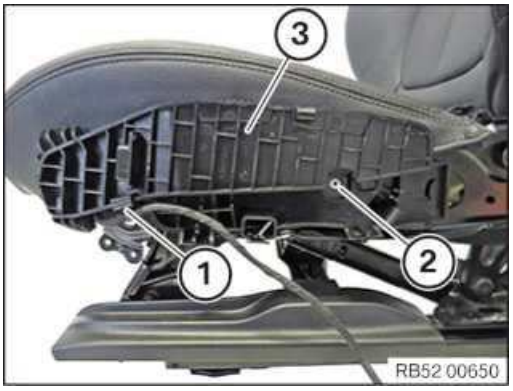
- Fasten retaining strap (1) to the seat mechanism at the left and right.

11 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

12 – Installing support for seat adjustment operating unit

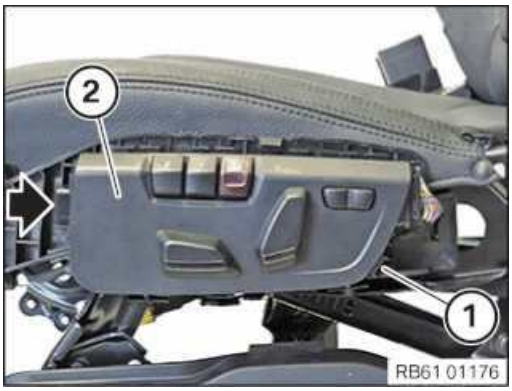


- Insert support (3) from the front and position.
- Renew the blind rivet (2).

  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

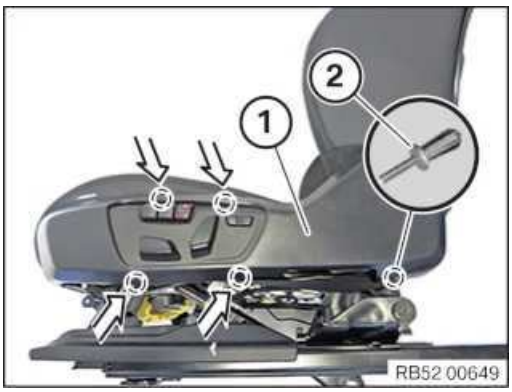
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13 – Install operating unit for seat adjustment



- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

14 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

15 – Install front seat

TECHNICAL INFORMATION

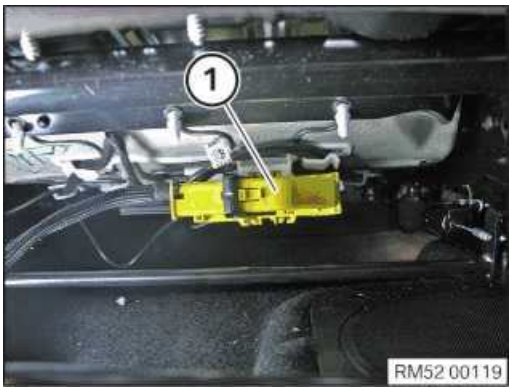
Different variants may be installed depending on the vehicle equipment.



▸ **Removing the front seat from the universal seat mount .**

- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

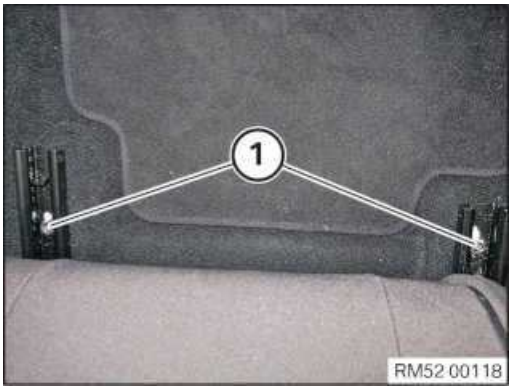
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

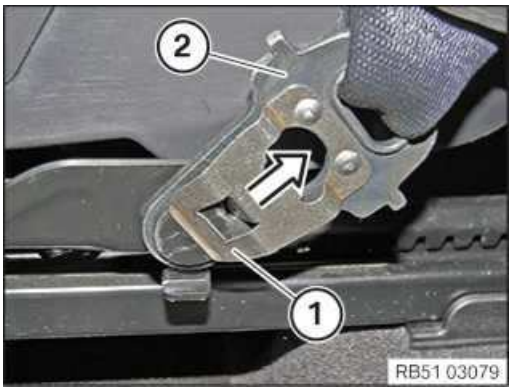
▸ **Disconnecting all battery earth leads**

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- See additional information.

16 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

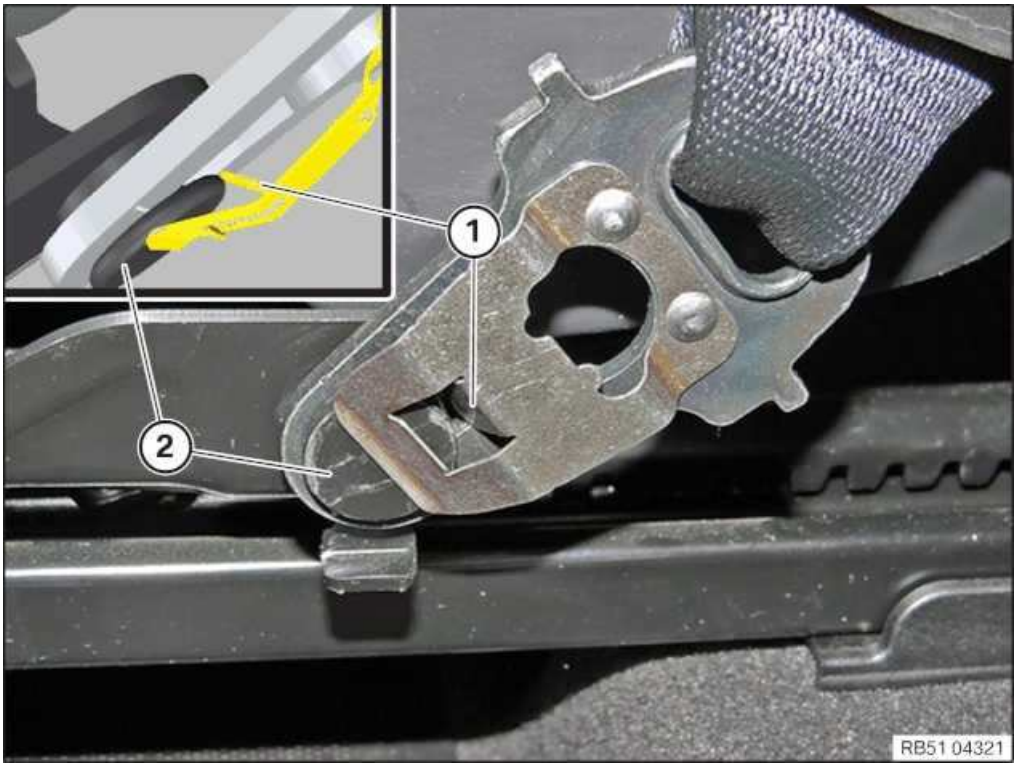
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body			Used in step 15
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

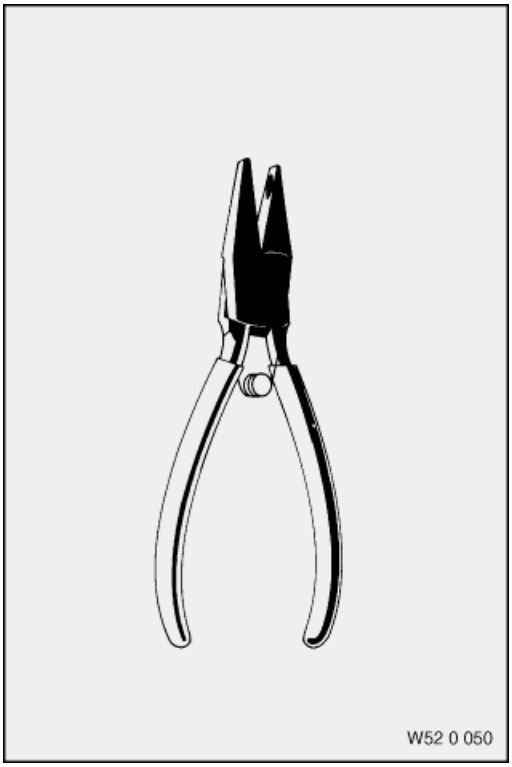
2 154 711 Fitting aid



Common	Used in step 2 15
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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0 492 668 (52 0 050) Pliers



Common		Used in step 9
Usage	For securing clamps on seat cover	
Included in the tool or work		
Storage location	C14	
Replaced by		
In connection with		
SI-Number	52 06 87 (808)	

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
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61 20 900 Disconnecting and connecting battery earth lead	2 15
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 15
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
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61 20 900 Disconnecting and connecting battery earth lead	2	15
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61 20 900 Disconnecting and connecting battery earth lead	2	15

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52 14 403 Replacing seat cover for front passenger seat

NOTICE

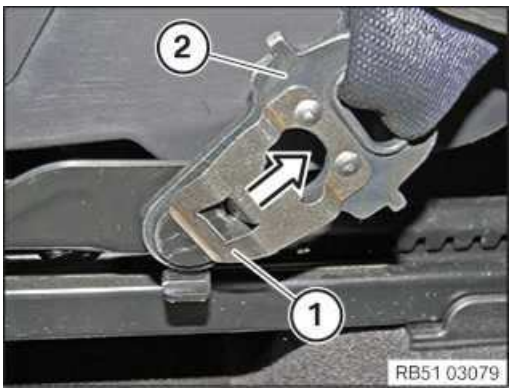
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

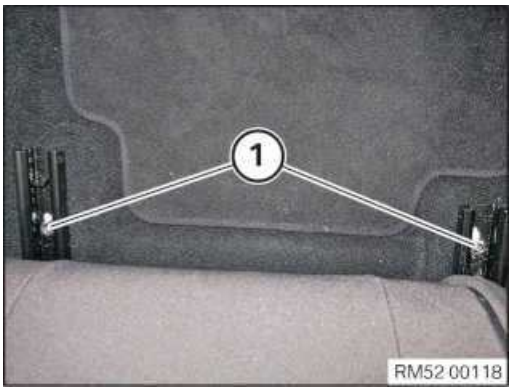
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



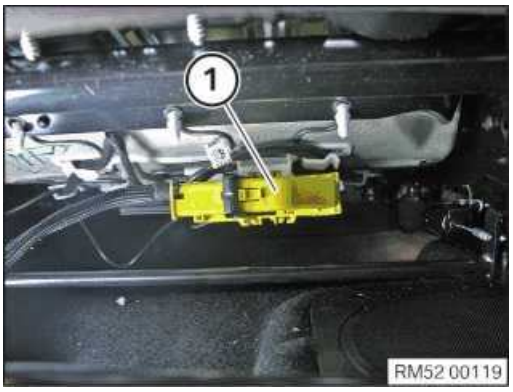
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

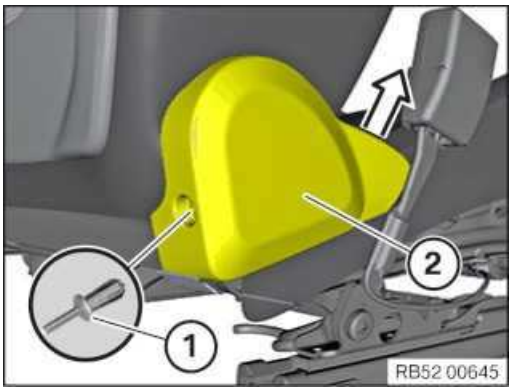
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

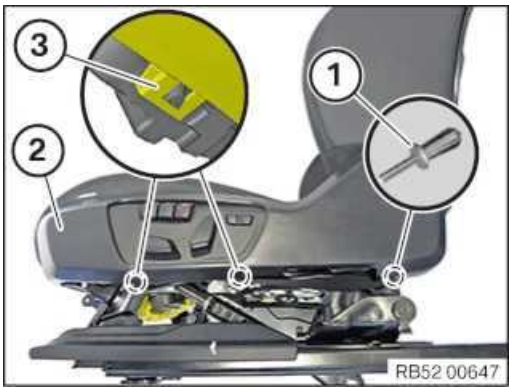
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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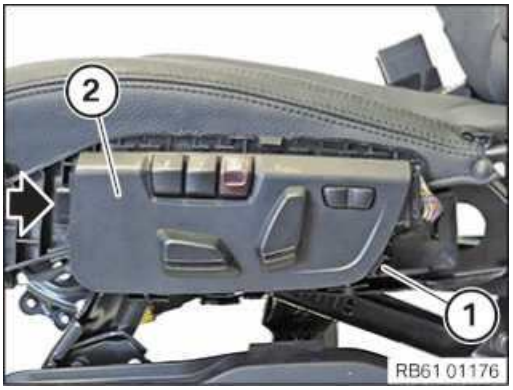


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



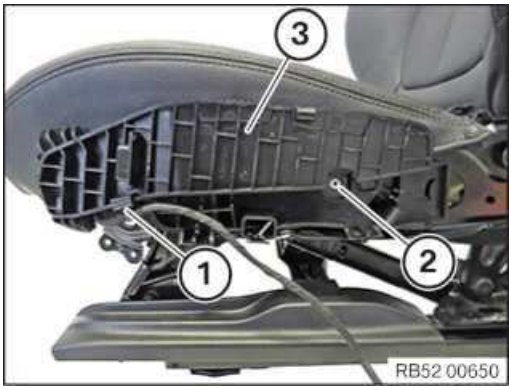
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

6 – Remove the support for the operating unit for the seat adjustment



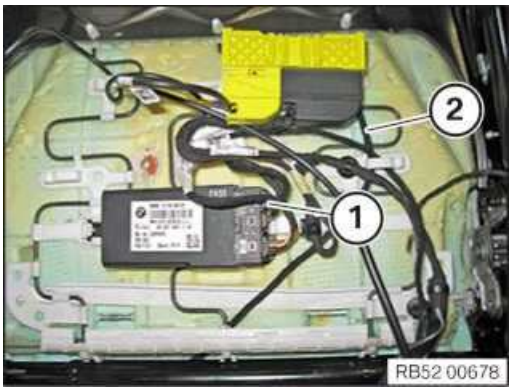
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Remove the seat cover with the cushion for the front seat

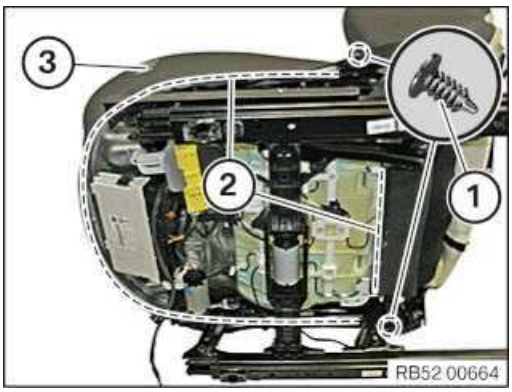
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- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

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MAIN WORK

8 – Removing seat cover for front seat (basic)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

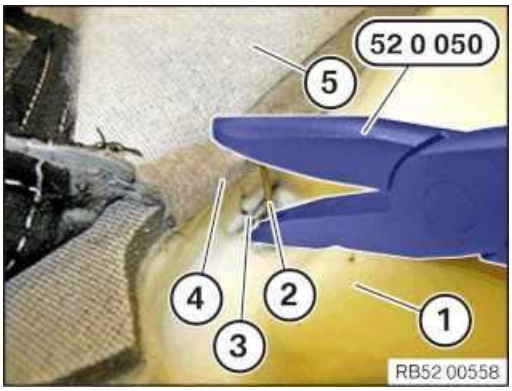
9 – Install the seat cover for the front seat (basic)

NOTICE

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



- Place the seat cover on the cushion.
- Secure all trim wires with clamps.



- Renew the clamps (2).

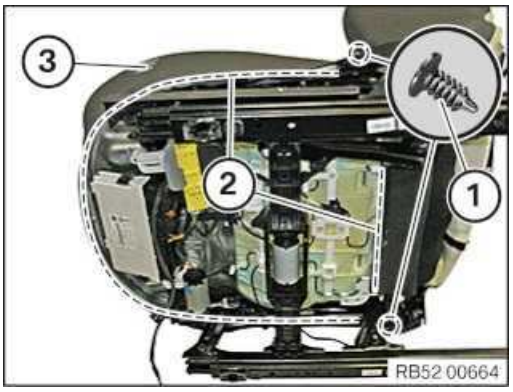
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

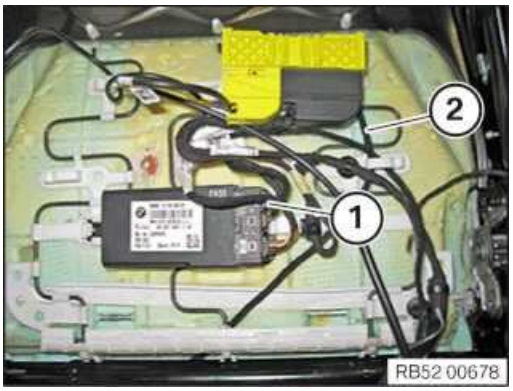
POSTPROCESSES

10 – Fit the seat cover with the upholstery for the front seat

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- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

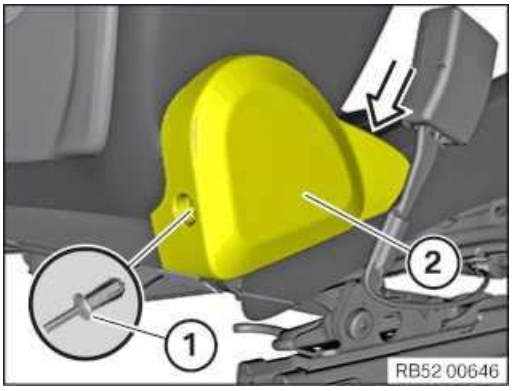


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



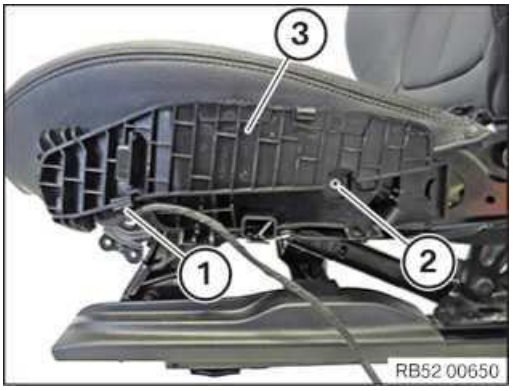
- Fasten retaining strap (1) to the seat mechanism at the left and right.

11 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

12 – Installing support for seat adjustment operating unit

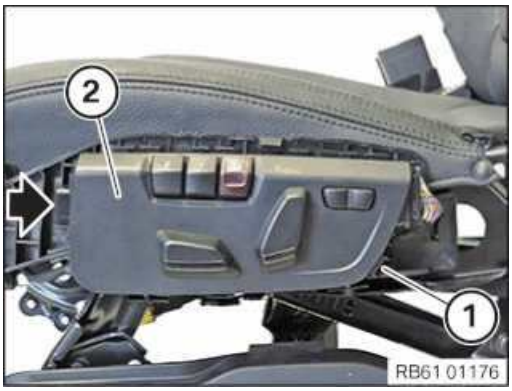


- Insert support (3) from the front and position.
- Renew the blind rivet (2).

  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

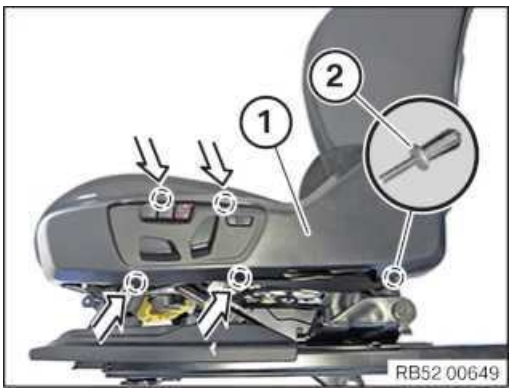
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13 – Install operating unit for seat adjustment



- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

14 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

15 – Install front seat

TECHNICAL INFORMATION

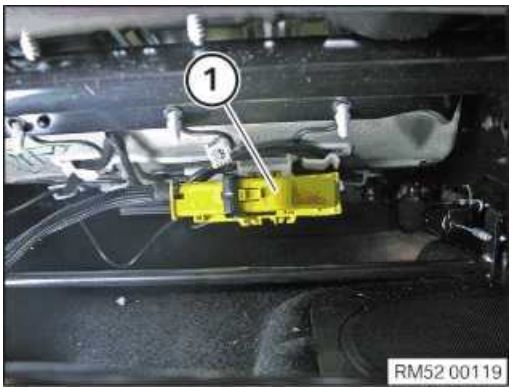
Different variants may be installed depending on the vehicle equipment.



▸ **Removing the front seat from the universal seat mount .**

- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

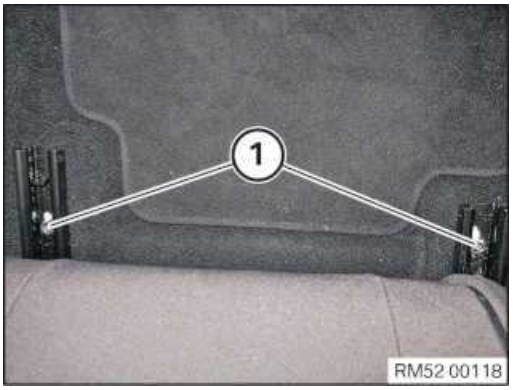
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

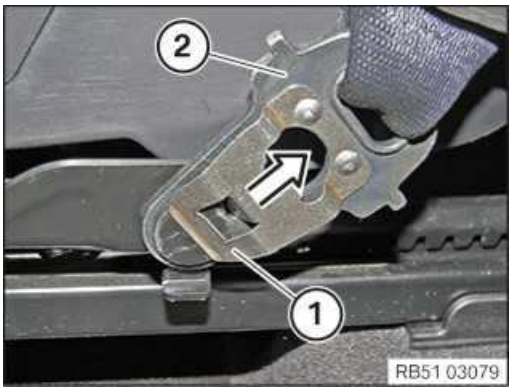
▸ **Disconnecting all battery earth leads**

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- See additional information.

16 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

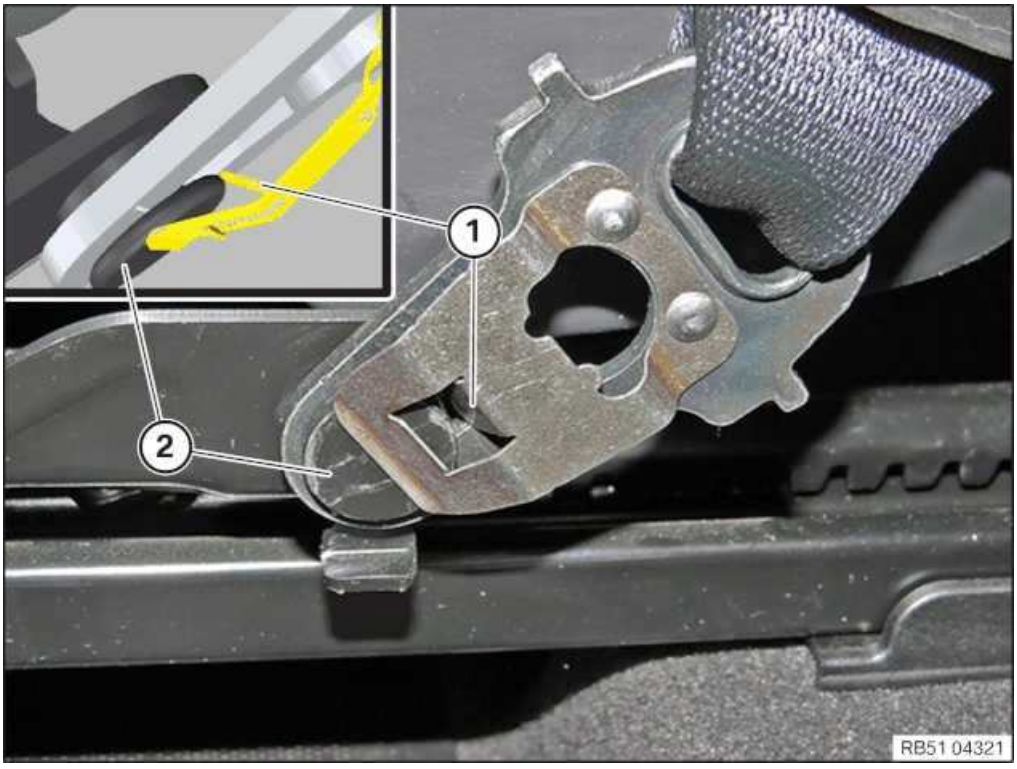
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body			Used in step 15
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

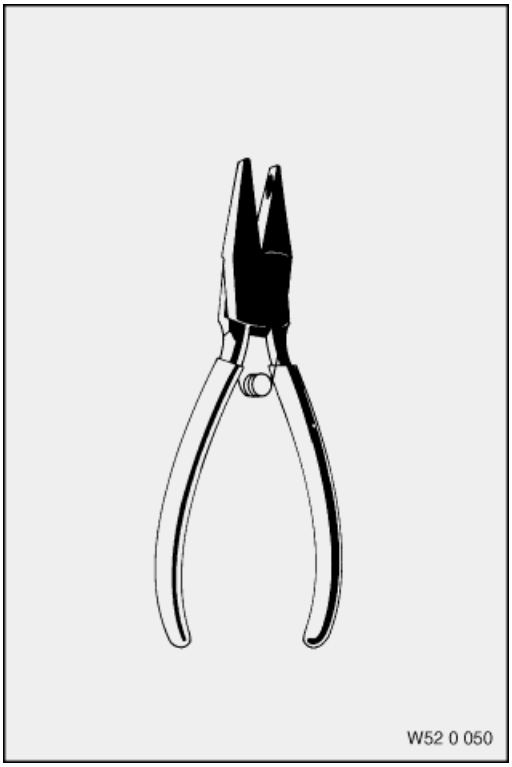
2 154 711 Fitting aid



Common	Used in step 2 15
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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0 492 668 (52 0 050) Pliers



Common		Used in step 9
Usage	For securing clamps on seat cover	
Included in the tool or work		
Storage location	C14	
Replaced by		
In connection with		
SI-Number	52 06 87 (808)	

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
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61 20 900 Disconnecting and connecting battery earth lead	2 15
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61 20 900 Disconnecting and connecting battery earth lead	2 15
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 15
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 15
61 20 900 Disconnecting and connecting battery earth lead	2 15
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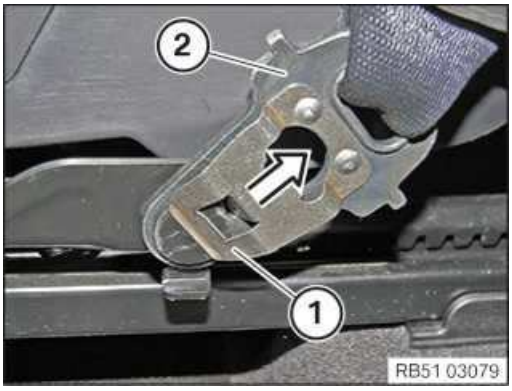
52 14 417 Replacing upholstery for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.
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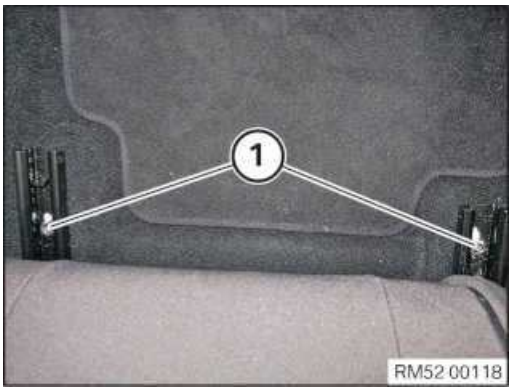
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



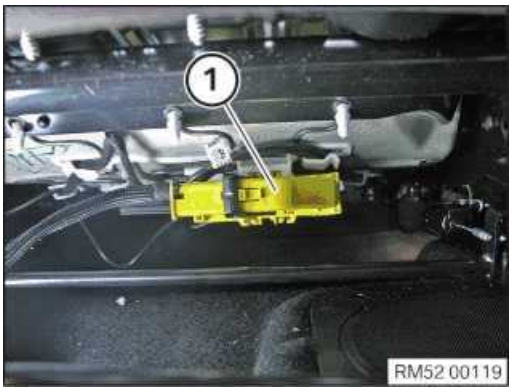
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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RISK OF DAMAGE

Scratches.

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

- Cover the door sill using protective covers.
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Heavy components can lead to injury or damage.

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- Remove the front seat with the assistance of an auxiliary person.

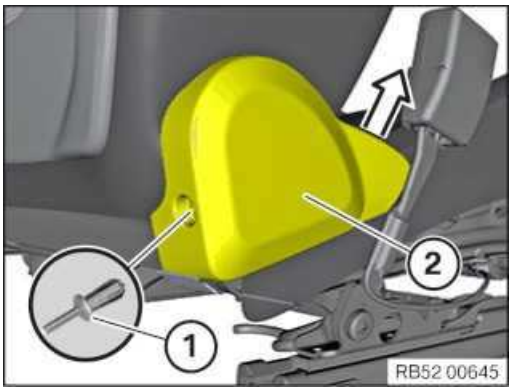
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

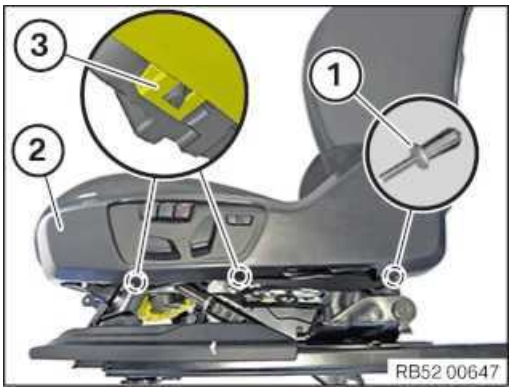
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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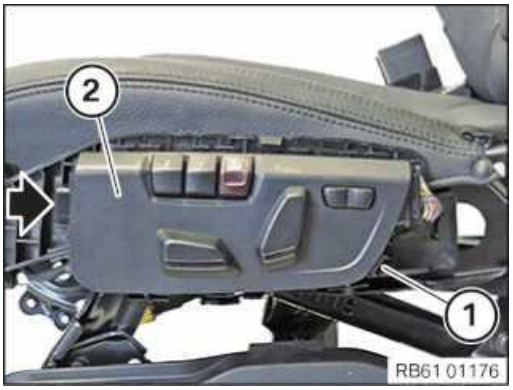


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



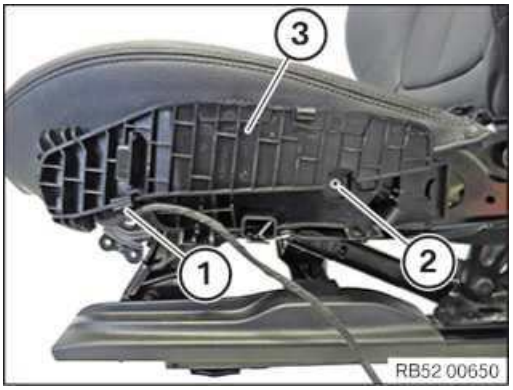
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

6 – Remove the support for the operating unit for the seat adjustment



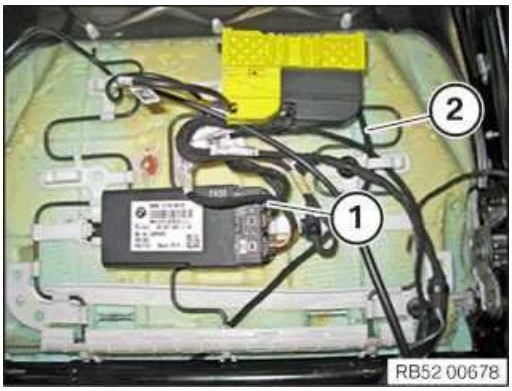
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Remove the seat cover with the cushion for the front seat

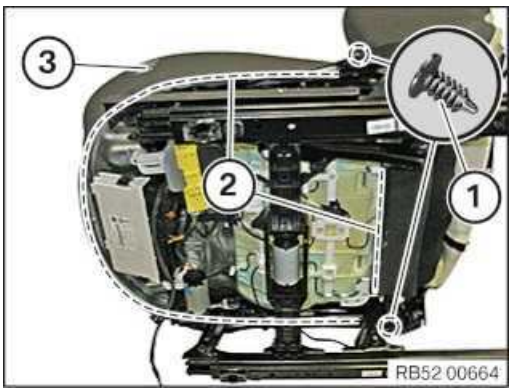
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- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

8 – Removing seat cover for front seat (basic)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

9 – Renewing cushion for front seat

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TECHNICAL INFORMATION

Only US/Canadian version of front passenger seat with seat occupancy mat (CIS):

The seat occupancy mat is bonded to the entire surface of the upholstery and can only be replaced together with the upholstery.

If the seat occupancy mat or upholstery is defective, both parts must always be replaced together.

Full operability can only be guaranteed with the Original BMW replacement part.

After fitting the seat cover, enable the seat occupancy mat using the BMW programming system.

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.

When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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



- **Equipment specification with seat heating**

  Position the heating mat (1) on the cushion and align.

  Bond the heating mat (1) to the cushion in these areas (2).

10 – Install the seat cover for the front seat (basic)

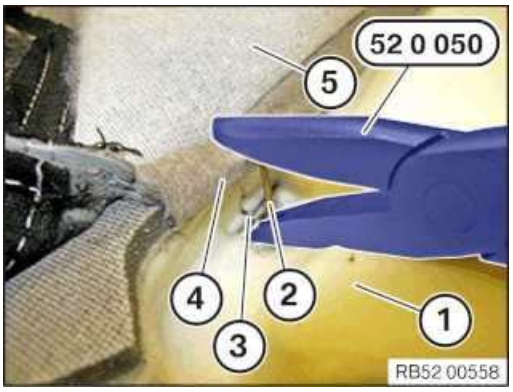
NOTICE

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



- Place the seat cover on the cushion.
- Secure all trim wires with clamps.

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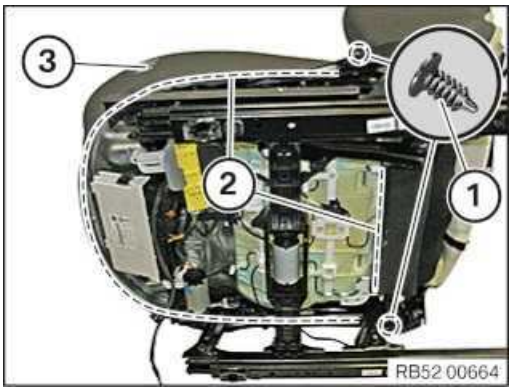
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

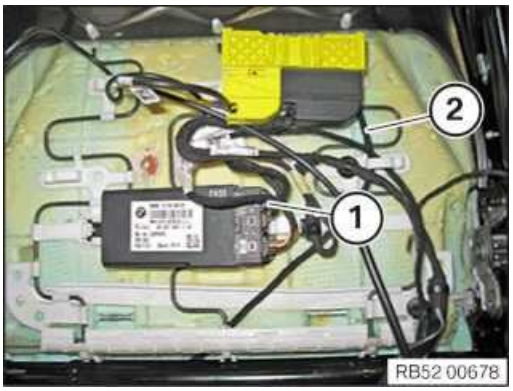
1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



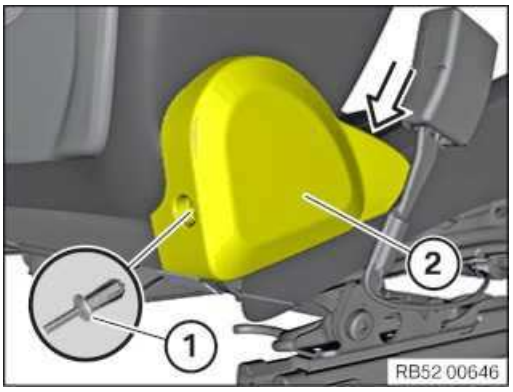
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



- Fasten retaining strap (1) to the seat mechanism at the left and right.

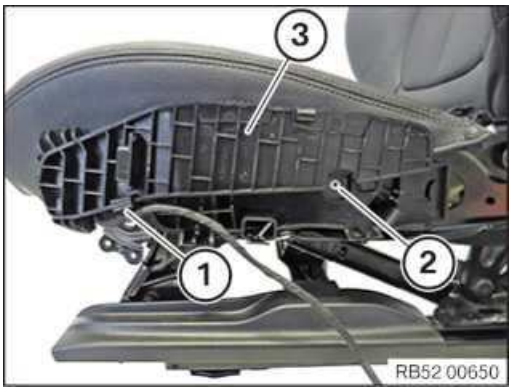
12 – Installing the inner cover on the front seat

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- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

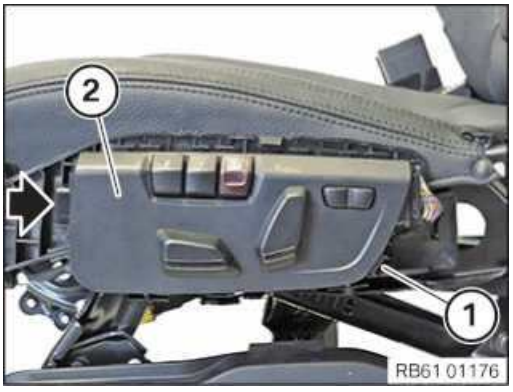
13 – Installing support for seat adjustment operating unit



- Insert support (3) from the front and position.
- Renew the blind rivet (2).

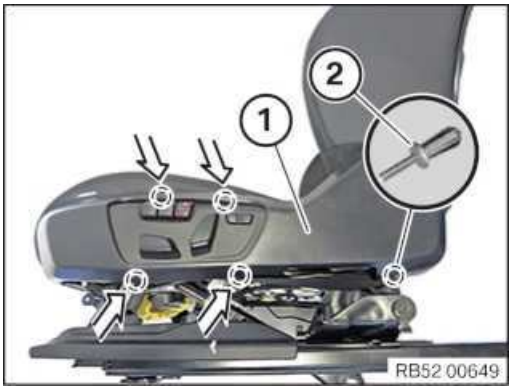
  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

14 – Install operating unit for seat adjustment



- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

15 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

16 – Install front seat

TECHNICAL INFORMATION

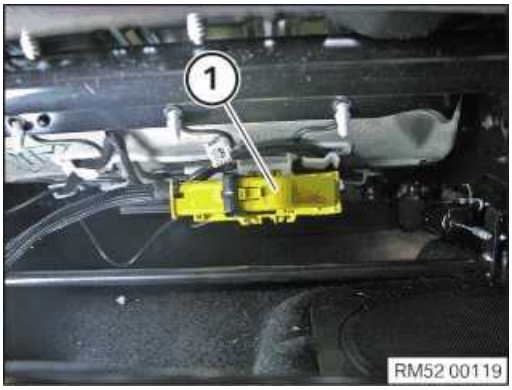
Different variants may be installed depending on the vehicle equipment.

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▶ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-



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.

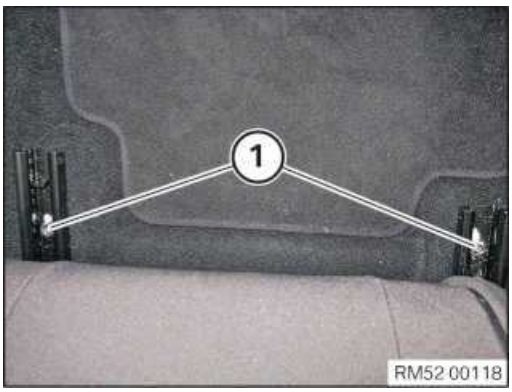
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

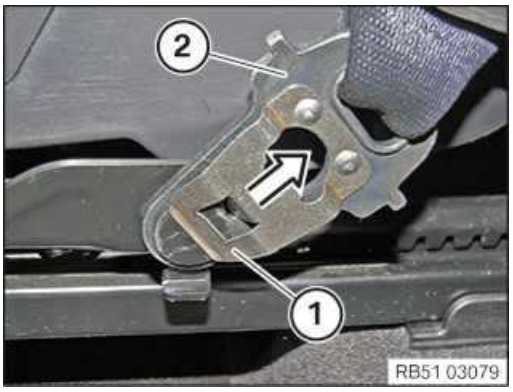
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

17 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

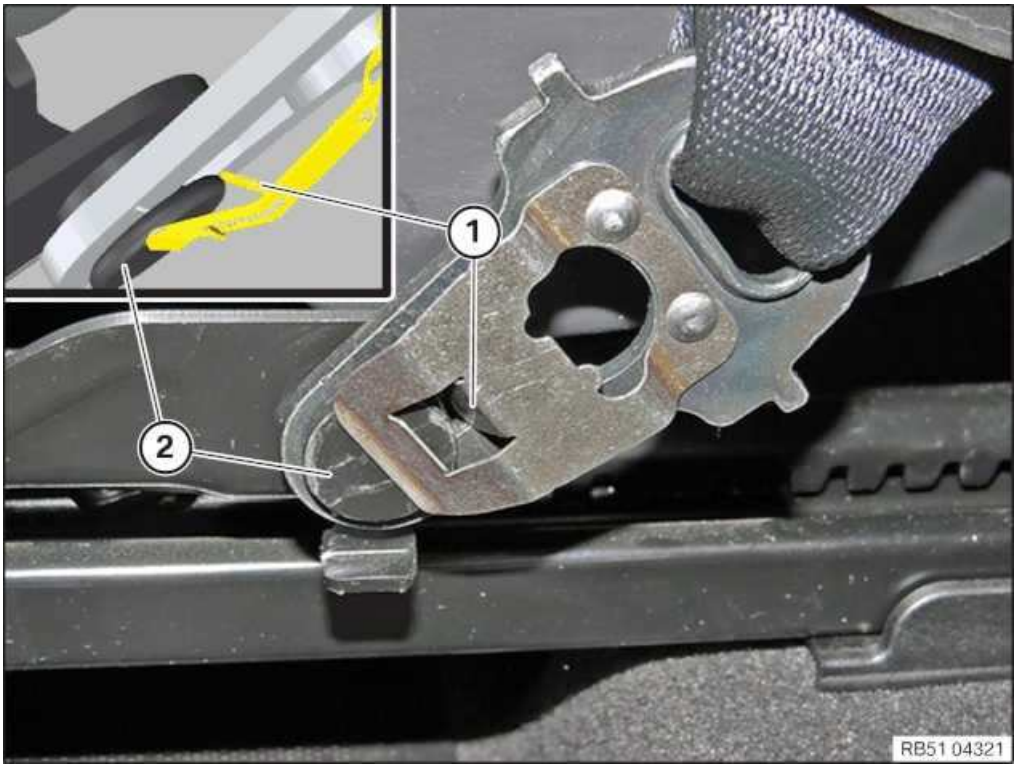
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Seat to body			Used in step 16
M10	Renew screw.	Tightening torque	42 Nm

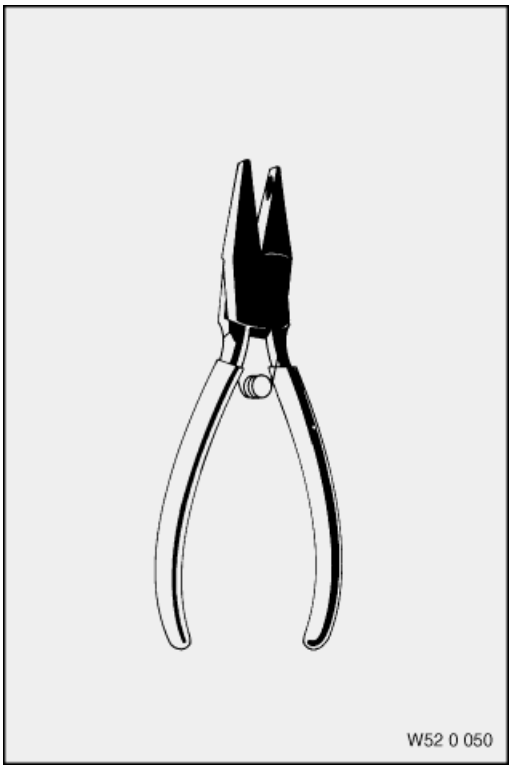
Overview of Special Tools

2 154 711 Fitting aid



Common	Used in step 2 16
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 492 668 (52 0 050) Pliers



Common	Used in step 10
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16

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61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	16
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	16
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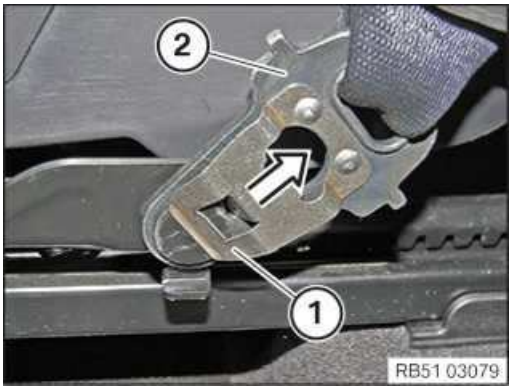
52 14 422 Replacing upholstery for driver's seat backrest

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

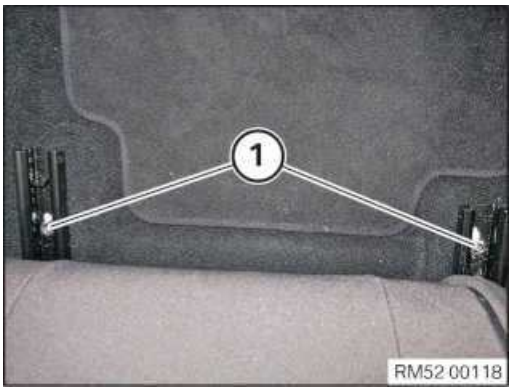
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



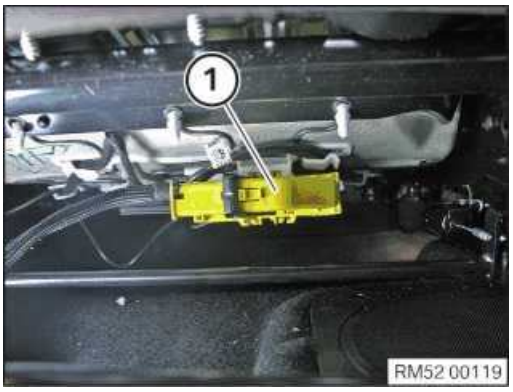
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

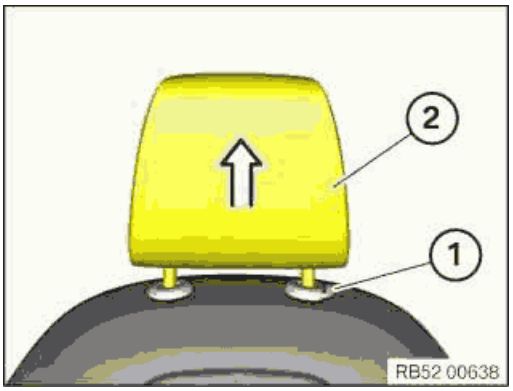
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

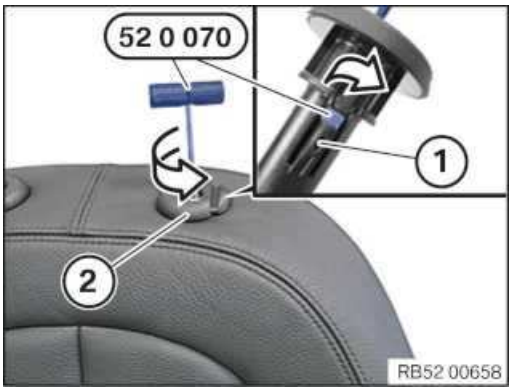
3 – Remove front head restraint



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

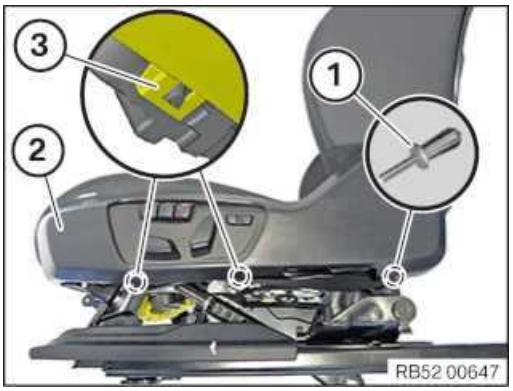
4 – Removing the guide sleeve for the front head restraint

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- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing the outer cover on the front electrical seat

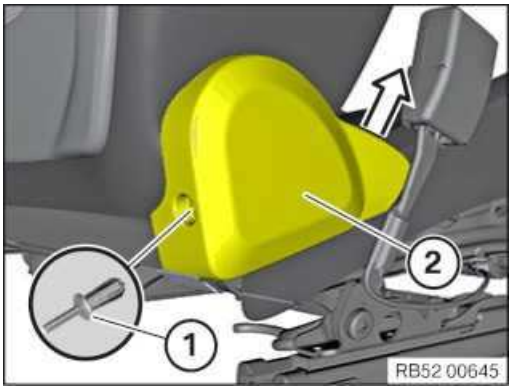


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

6 – Remove inner cover on front seat



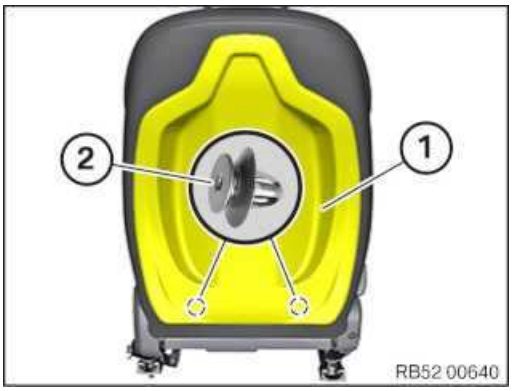
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

7 – Remove rear panel on front seat backrest

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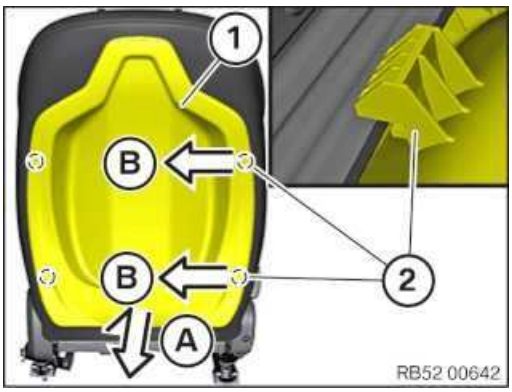
- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.



- Release the rear panel (1) toward the rear from the clips (2).



- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

8 – Remove side airbag in 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.

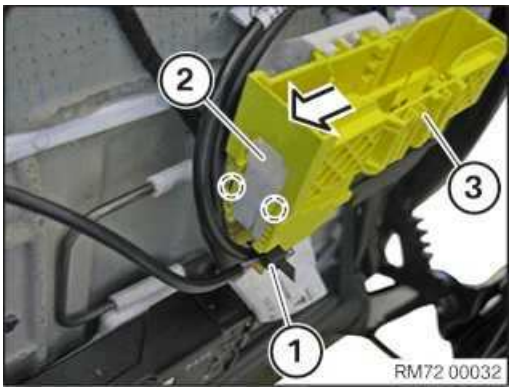
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WARNING

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

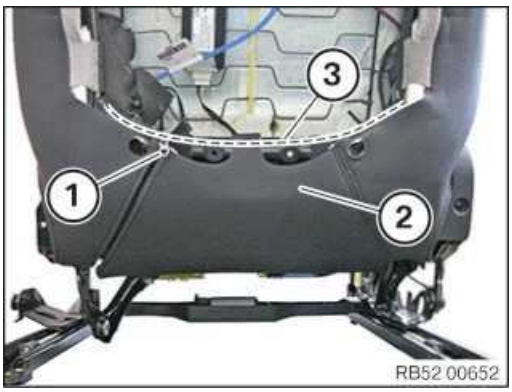


- If necessary detach the cable strap (1).

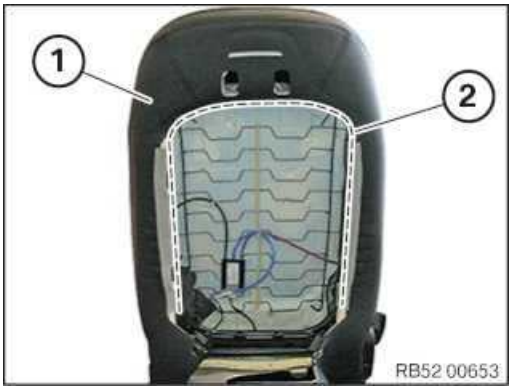
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

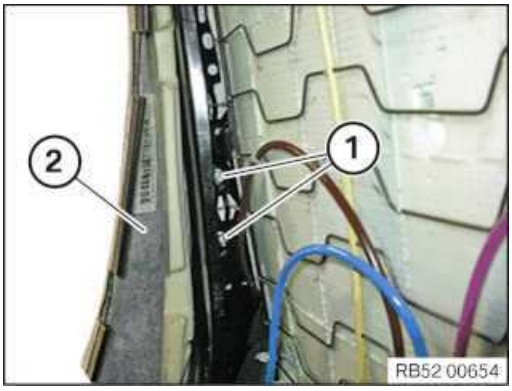
- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).



- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).

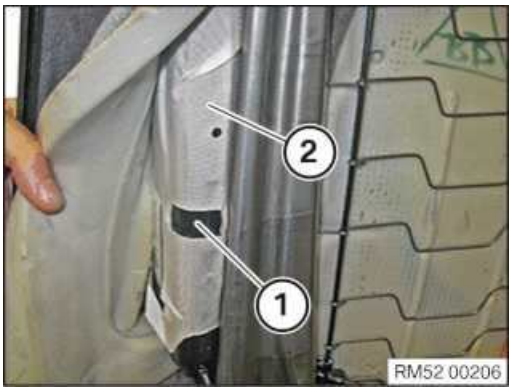


- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).

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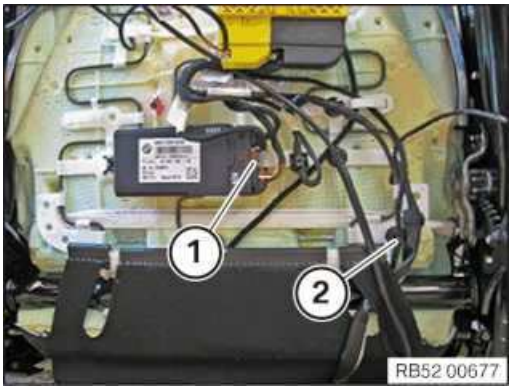


- Slide the side airbag (1) down and out of the cover pocket (2).

9 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



- Guide out the backrest cover (1) complete with the cushion toward the top.

MAIN WORK

10 – Remove the backrest cover from front seat-backrest

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- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

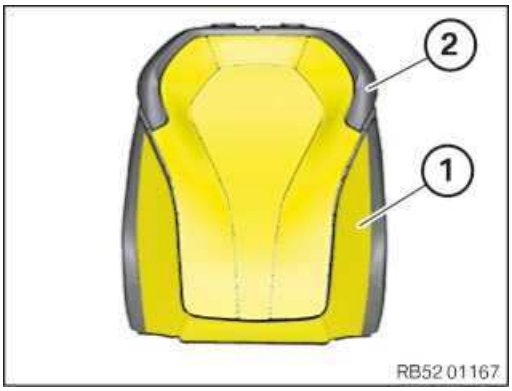
11 – Renewing the cushion for the front seat backrest

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.
When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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



- **Equipment specification with seat heating**

  Position and align the heating mat (1) on the upholstery (2).

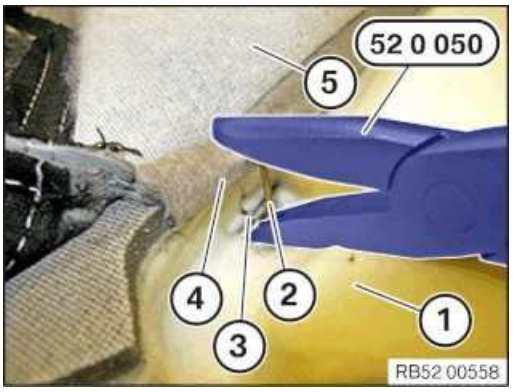
  Bond the heating mat (1) with the upholstery (2).

12 – Install the backrest cover of the front seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.

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- Renew the clamps (2).

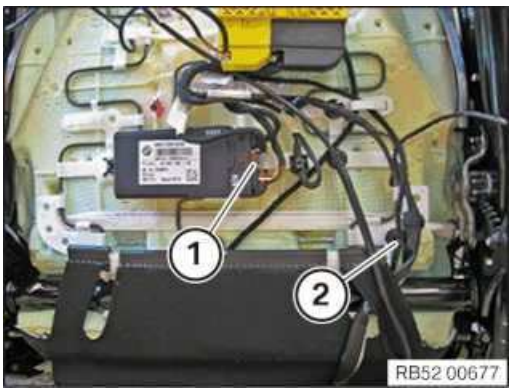
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.

POSTPROCESSES

13 – Install the backrest cover with the cushion for the front seat



- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

14 – Installing side airbag in the front seat

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WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

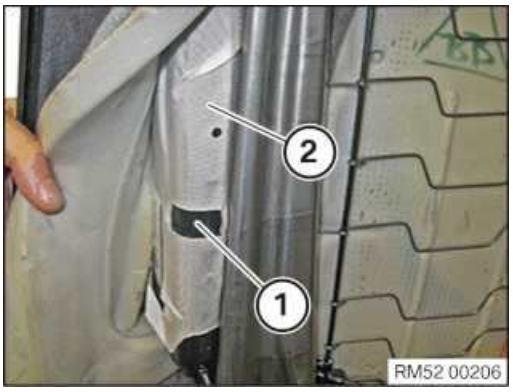
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

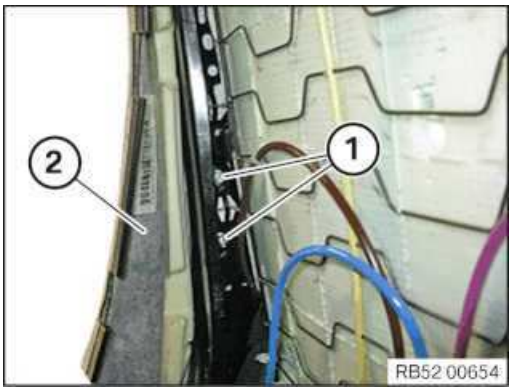
Airbag unit.

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



- Feed the side airbag (1) upwards into the lining pocket (2).

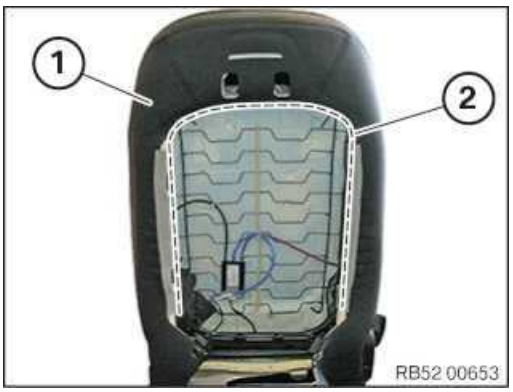


- Fold the backrest cover (2) to the side.
- Replace nuts.

  Parts: Nuts
- Tighten nuts (1).

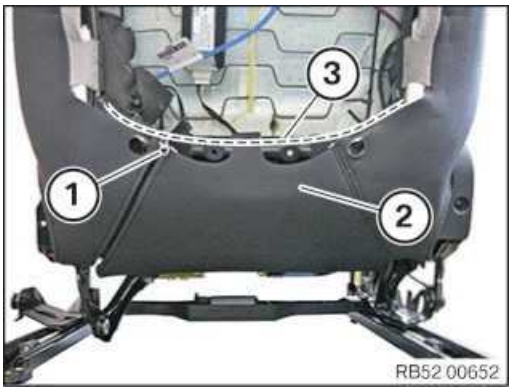
Side airbag to seat frame

Hexagon nut		Renew nut.	6,5 Nm

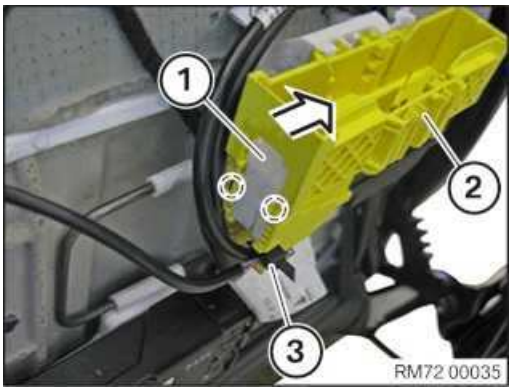


- Attach the seat cover (1) in this area (2) to the backrest frame.

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- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).

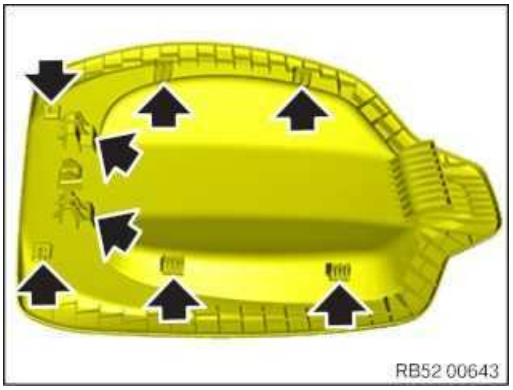


TECHNICAL INFORMATION

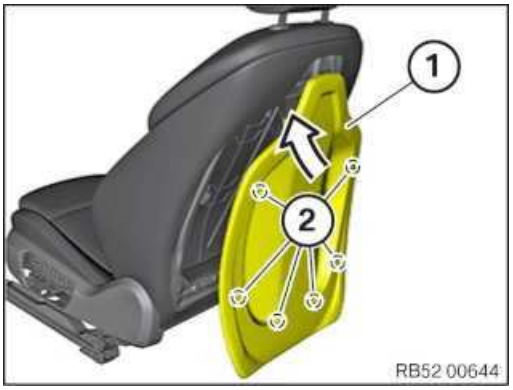
Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

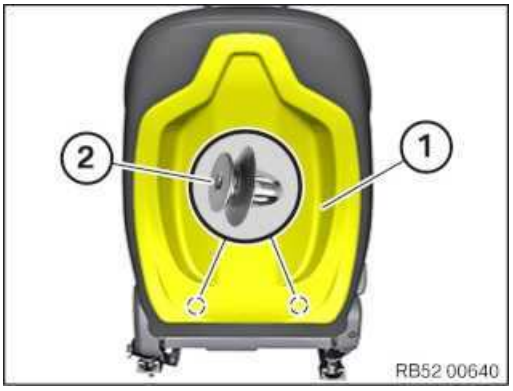
15 – Install the rear panel on the front seat backrest



- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).



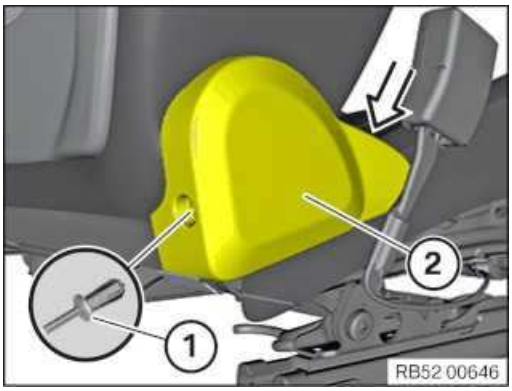
- Clip in the rear panel (1) at the clips (2).

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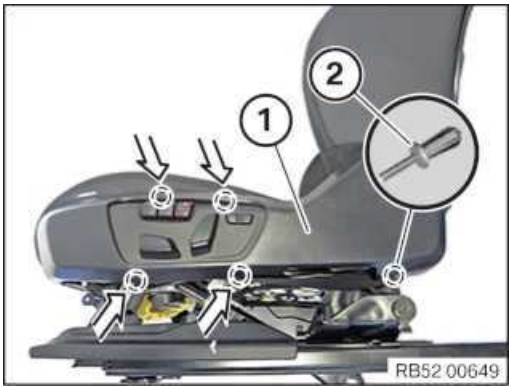
- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

16 – Installing the inner cover on the front seat



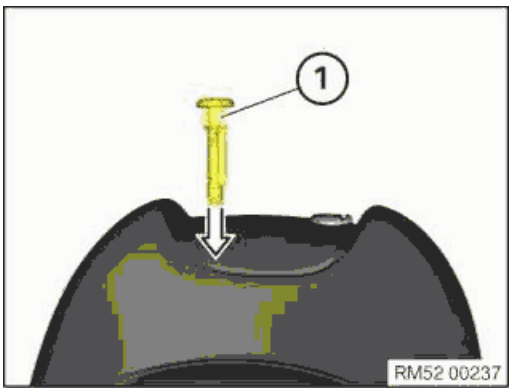
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

17 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

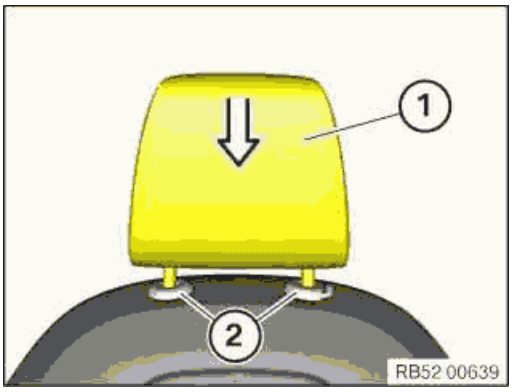
18 – Installing the guide sleeve for the front head restraint



- Insert guide (1) from above and engage.

19 – Install the front head restraint

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- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

20 – Install front seat

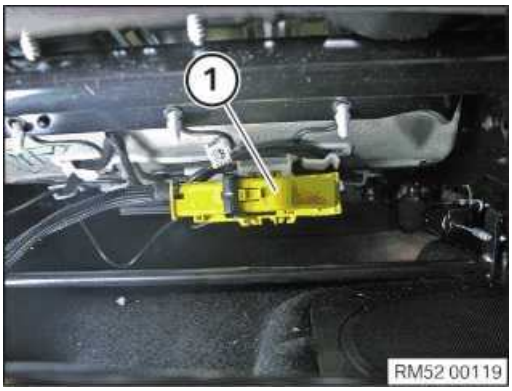
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-



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

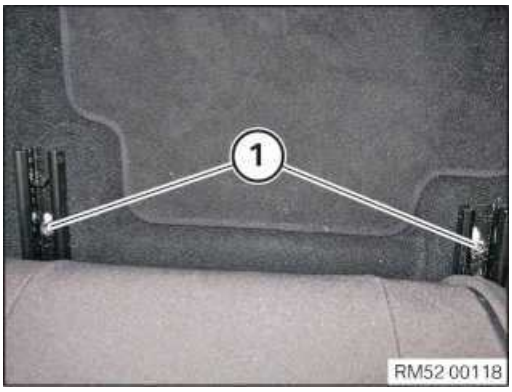
Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .

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- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

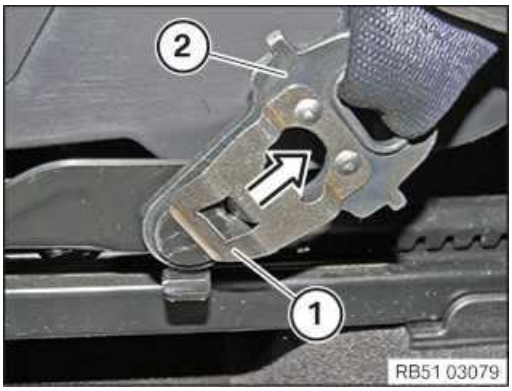
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

21 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

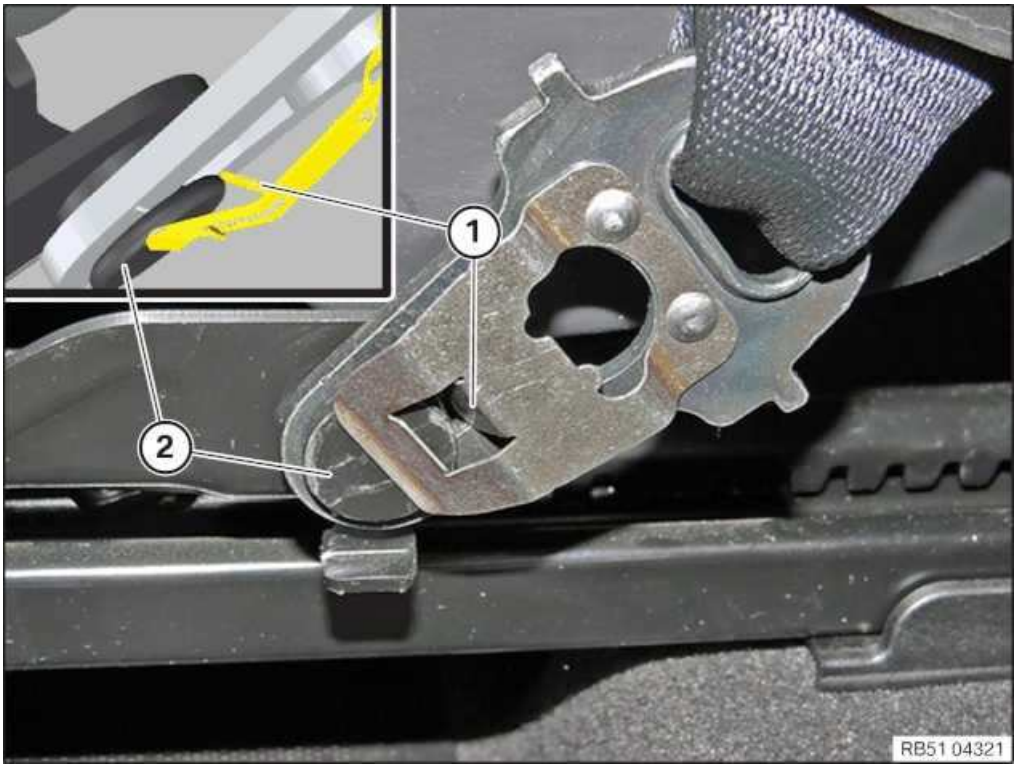
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Side airbag to seat frame Used in step 14

Hexagon nut		Renew nut.	6,5 Nm

Seat to body Used in step 20

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

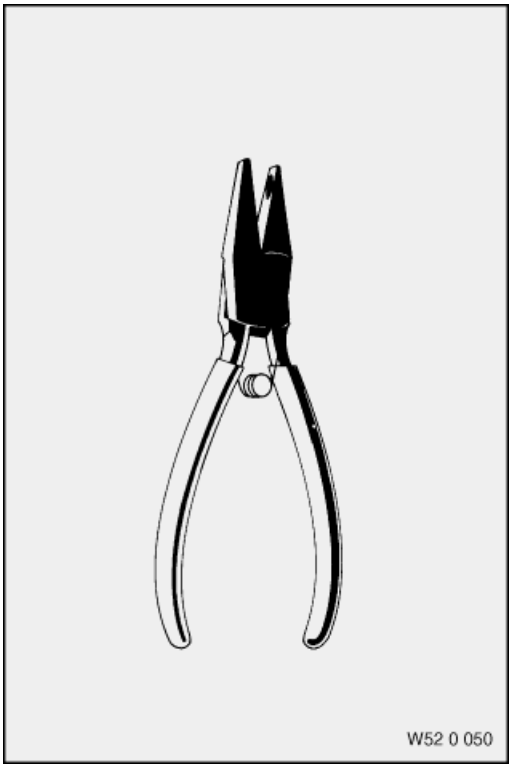
2 154 711 Fitting aid



Common Used in step 2 20

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 492 668 (52 0 050) Pliers



Common Used in step 12

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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	8 14

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 20

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61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	20
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	20
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	20
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	20
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61 20 900 Disconnecting and connecting battery earth lead	2	20

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52 14 418 Replacing upholstery for front passenger seat

NOTICE

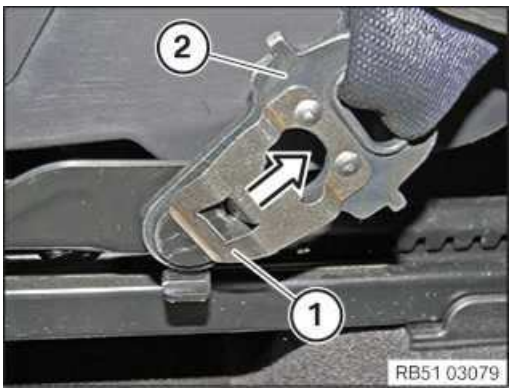
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

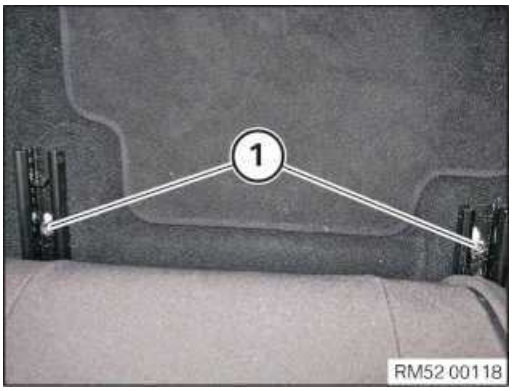
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



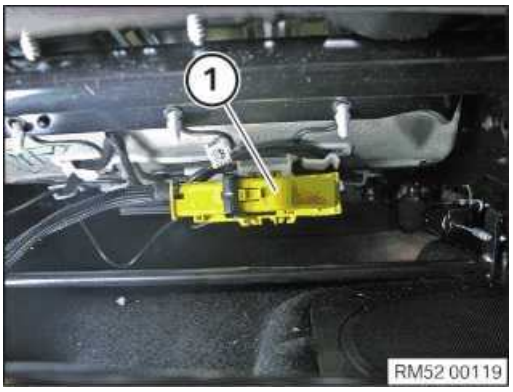
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

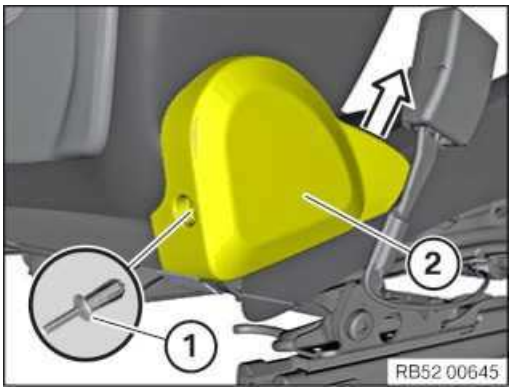
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

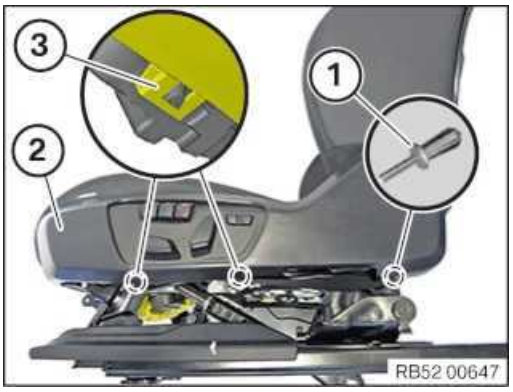
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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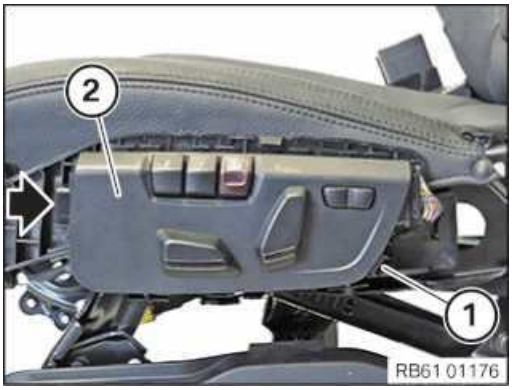


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



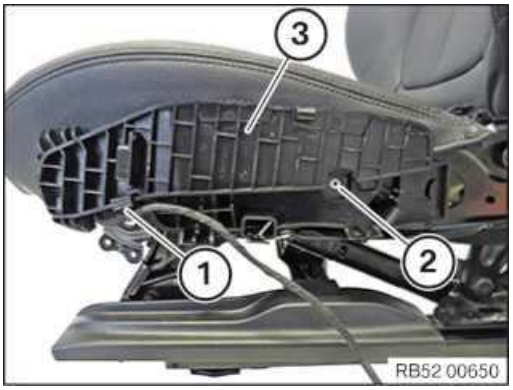
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

6 – Remove the support for the operating unit for the seat adjustment



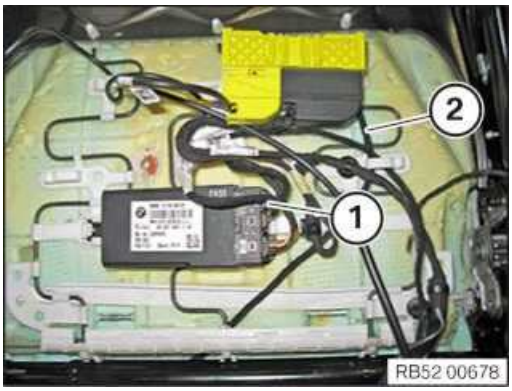
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Remove the seat cover with the cushion for the front seat

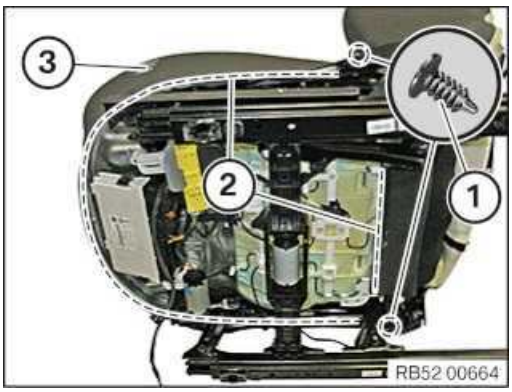
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- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

8 – Removing seat cover for front seat (basic)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

9 – Renewing cushion for front seat

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TECHNICAL INFORMATION

Only US/Canadian version of front passenger seat with seat occupancy mat (CIS):

The seat occupancy mat is bonded to the entire surface of the upholstery and can only be replaced together with the upholstery.

If the seat occupancy mat or upholstery is defective, both parts must always be replaced together.

Full operability can only be guaranteed with the Original BMW replacement part.

After fitting the seat cover, enable the seat occupancy mat using the BMW programming system.

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.

When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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



- **Equipment specification with seat heating**

  Position the heating mat (1) on the cushion and align.

  Bond the heating mat (1) to the cushion in these areas (2).

10 – Install the seat cover for the front seat (basic)

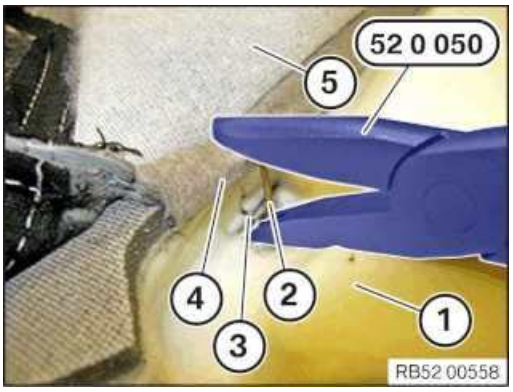
NOTICE

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



- Place the seat cover on the cushion.
- Secure all trim wires with clamps.

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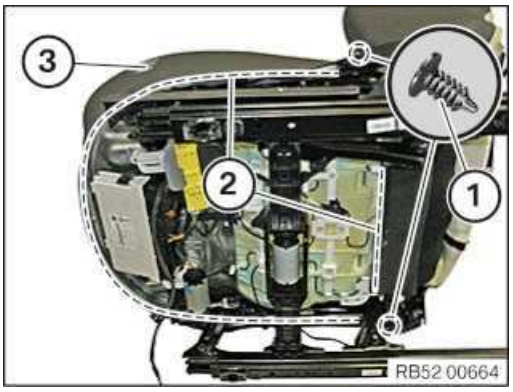
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

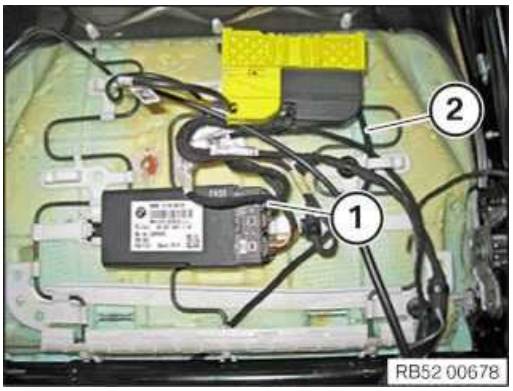
1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



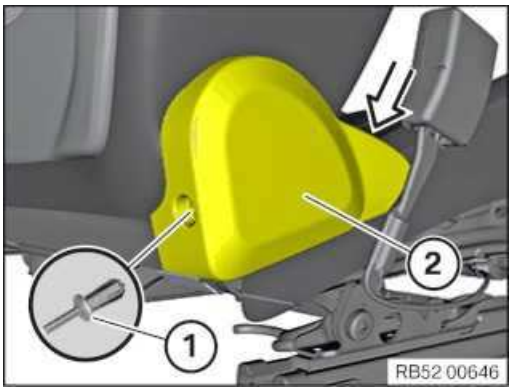
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



- Fasten retaining strap (1) to the seat mechanism at the left and right.

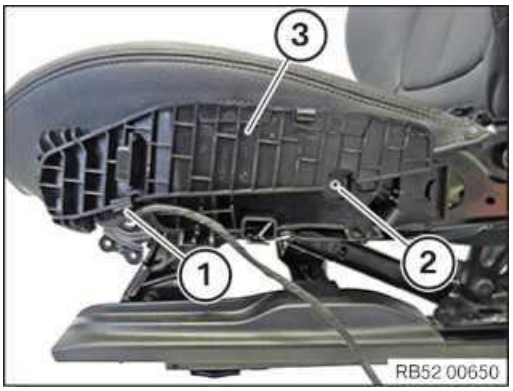
12 – Installing the inner cover on the front seat

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- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

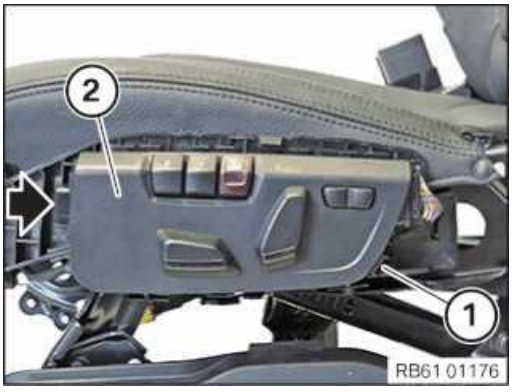
13 – Installing support for seat adjustment operating unit



- Insert support (3) from the front and position.
- Renew the blind rivet (2).

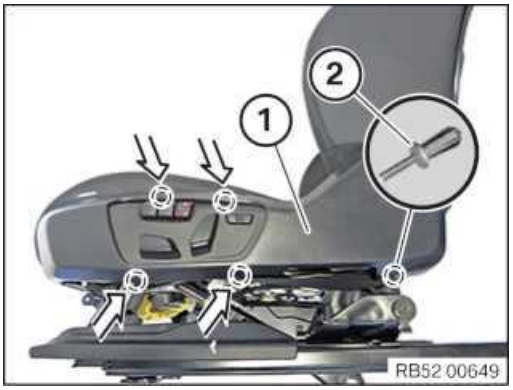
  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

14 – Install operating unit for seat adjustment



- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

15 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

16 – Install front seat

TECHNICAL INFORMATION

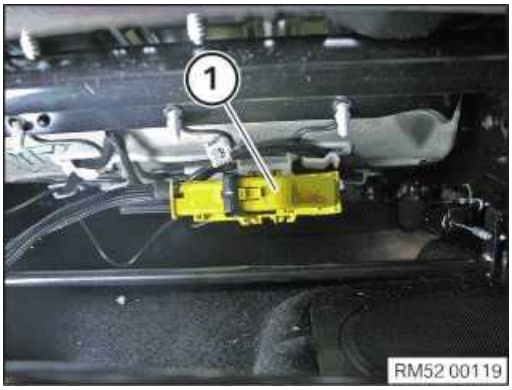
Different variants may be installed depending on the vehicle equipment.

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▶ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-



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.

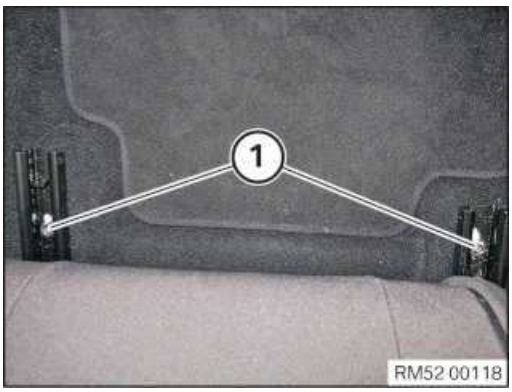
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

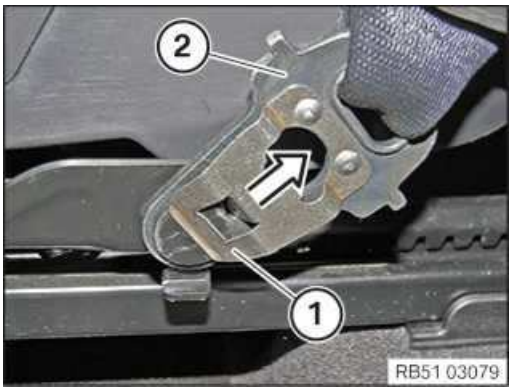
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

17 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

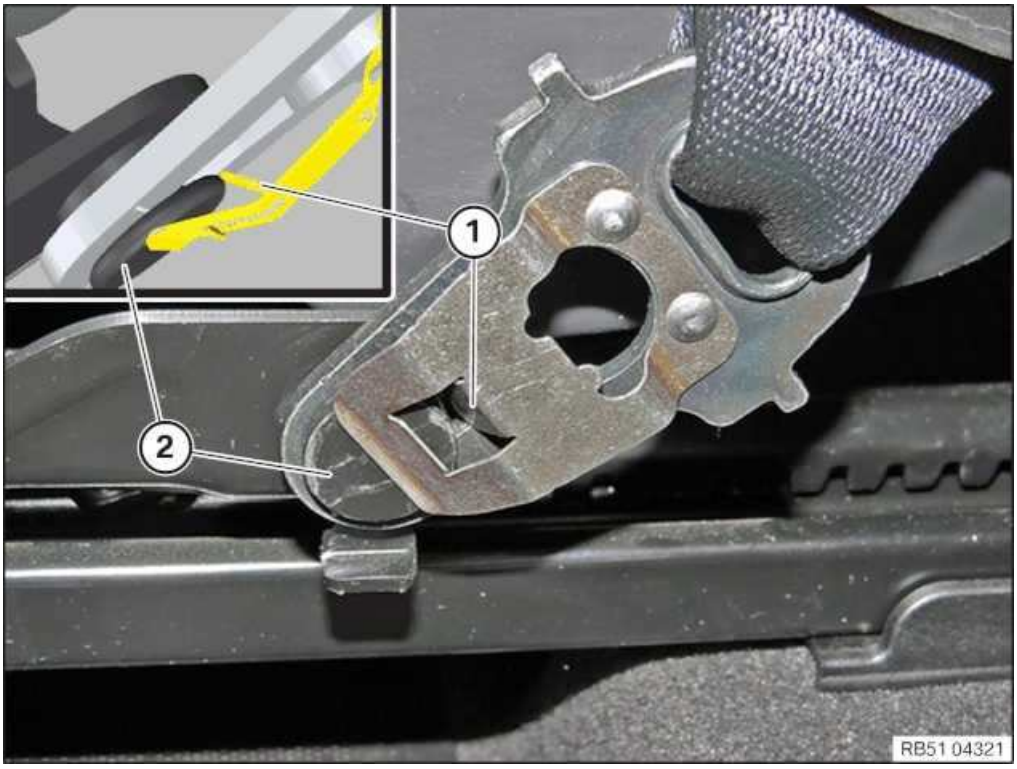
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Seat to body			Used in step 16
M10	Renew screw.	Tightening torque	42 Nm

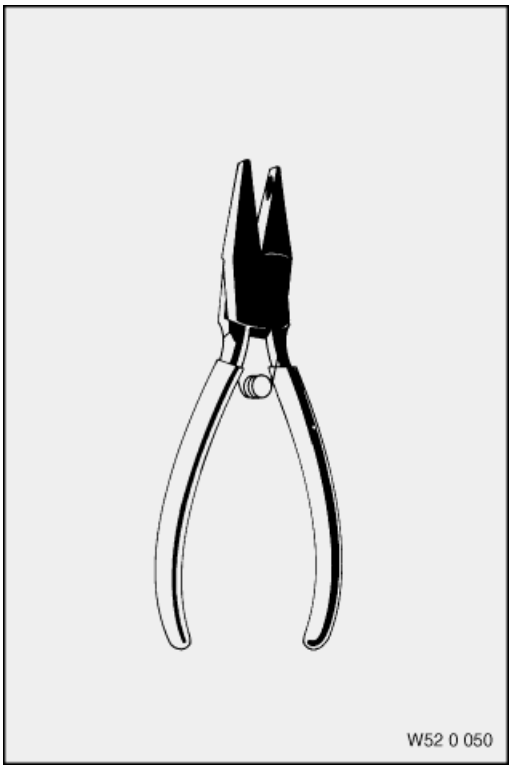
Overview of Special Tools

2 154 711 Fitting aid



Common	Used in step 2 16
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 492 668 (52 0 050) Pliers



Common	Used in step 10
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16
61 20 900 Disconnecting and connecting battery earth lead	2 16

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61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	16
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
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61 20 900 Disconnecting and connecting battery earth lead	2	16
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61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16
61 20 900 Disconnecting and connecting battery earth lead	2	16

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52 14 423 Replacing upholstery for front passenger seat backrest

NOTICE

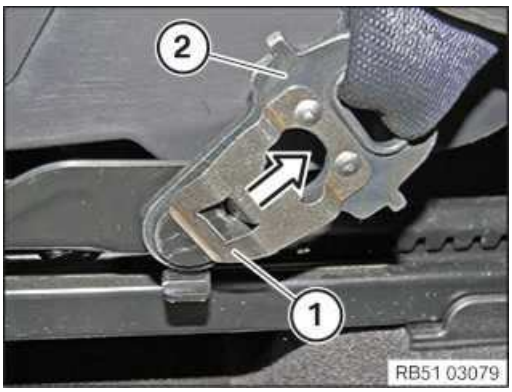
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

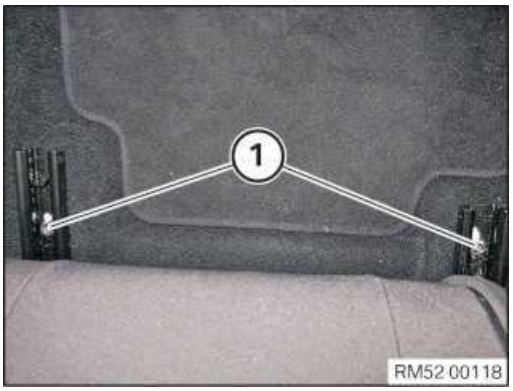
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



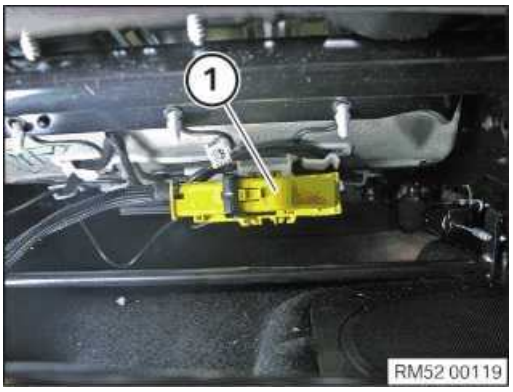
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

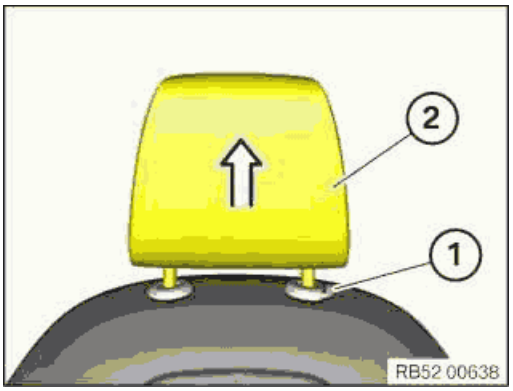
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

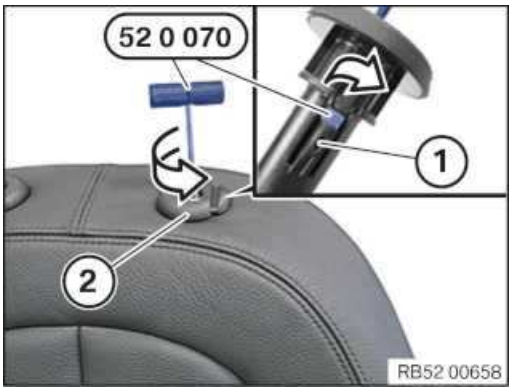
3 – Remove front head restraint



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

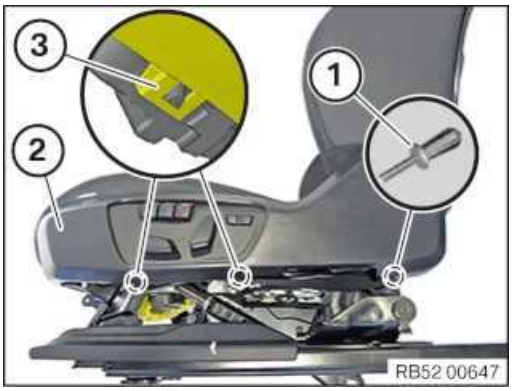
4 – Removing the guide sleeve for the front head restraint

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- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing the outer cover on the front electrical seat

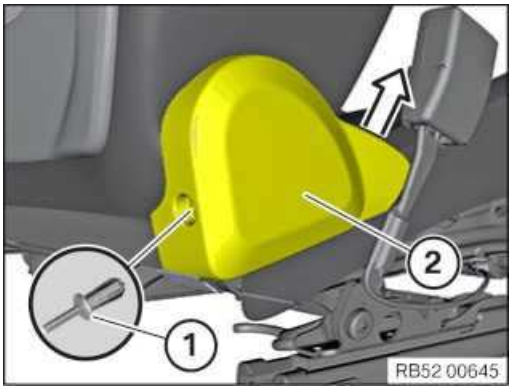


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

6 – Remove inner cover on front seat



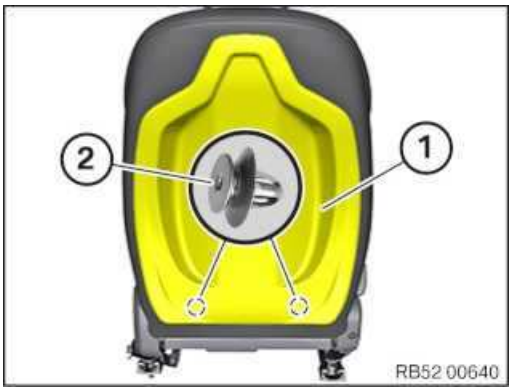
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

7 – Remove rear panel on front seat backrest

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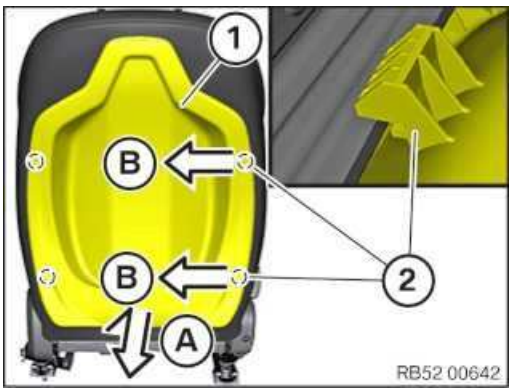
- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.



- Release the rear panel (1) toward the rear from the clips (2).



- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

8 – Remove side airbag in 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.

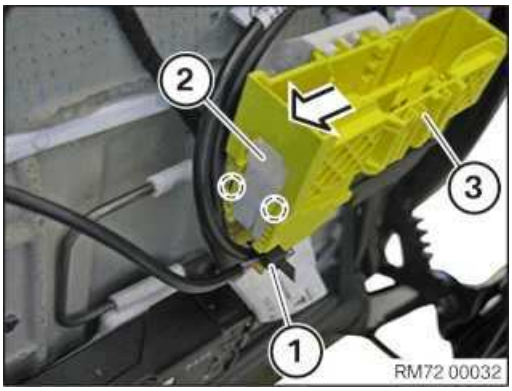
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WARNING

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

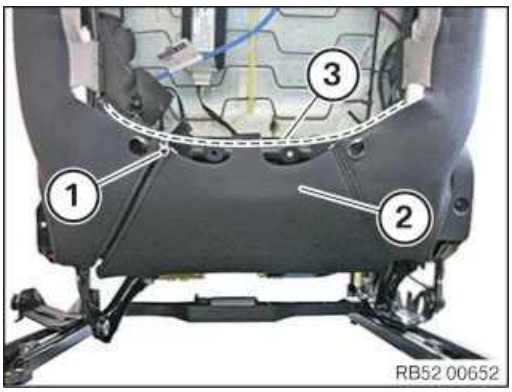


- If necessary detach the cable strap (1).

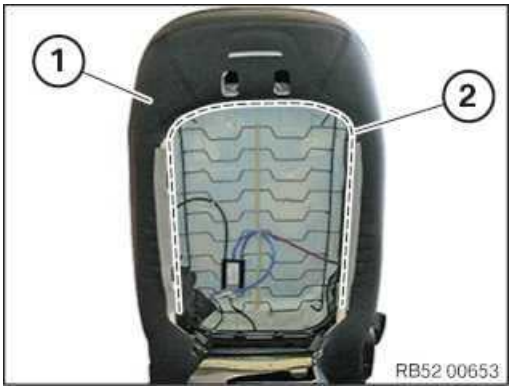
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

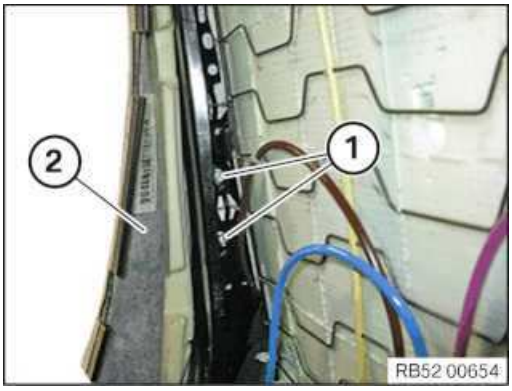
- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).



- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).

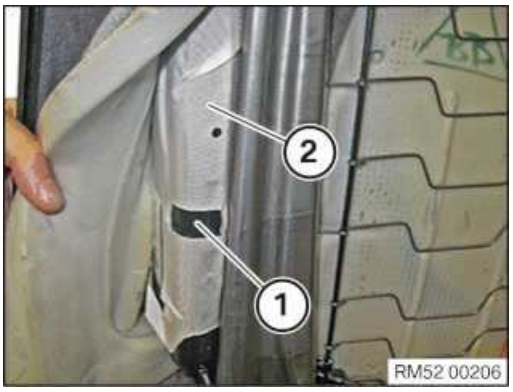


- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).

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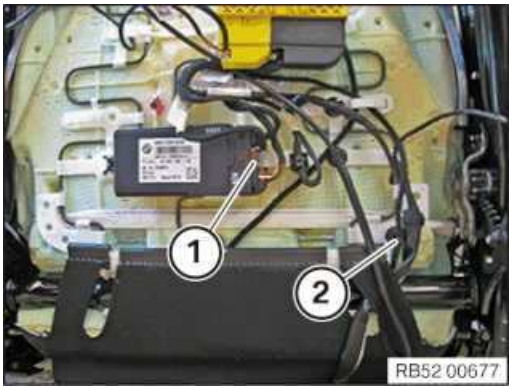


- Slide the side airbag (1) down and out of the cover pocket (2).

9 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.



- Guide out the backrest cover (1) complete with the cushion toward the top.

MAIN WORK

10 – Remove the backrest cover from front seat-backrest

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- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

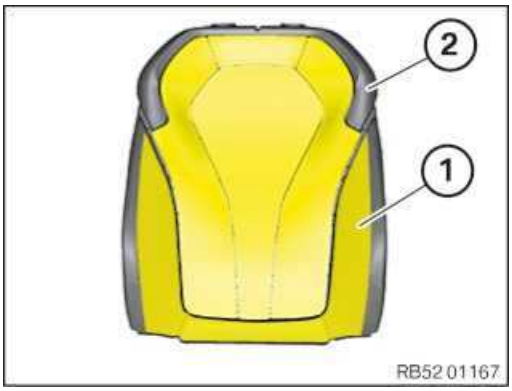
11 – Renewing the cushion for the front seat backrest

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.
When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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



- **Equipment specification with seat heating**

  Position and align the heating mat (1) on the upholstery (2).

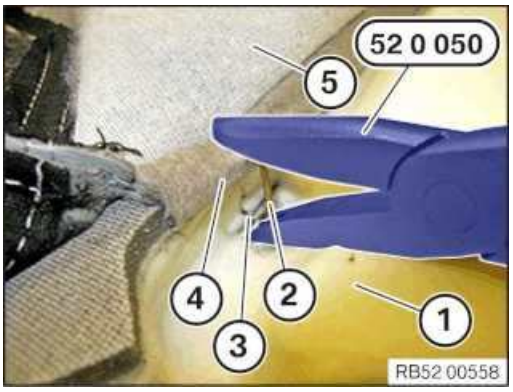
  Bond the heating mat (1) with the upholstery (2).

12 – Install the backrest cover of the front seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.

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- Renew the clamps (2).

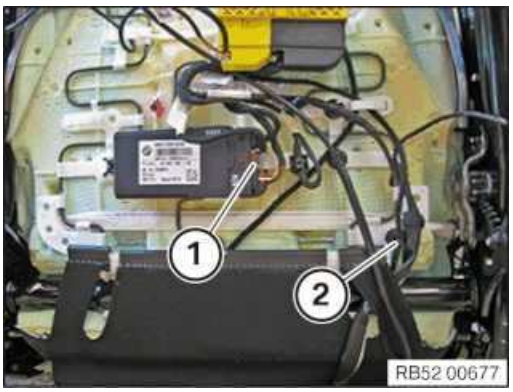
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.

POSTPROCESSES

13 – Install the backrest cover with the cushion for the front seat



- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

14 – Installing side airbag in the front seat

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WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

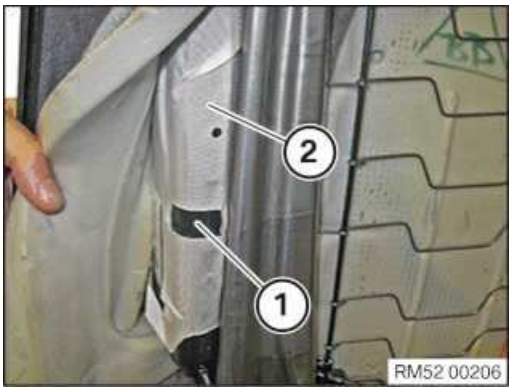
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

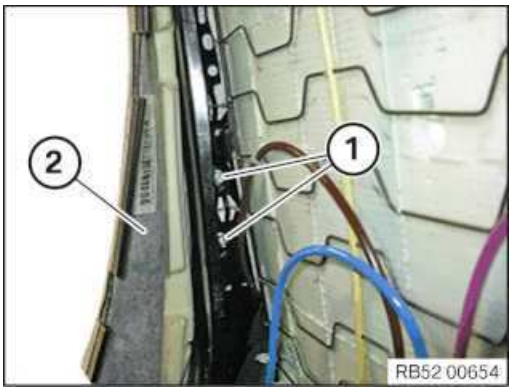
Airbag unit.

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



- Feed the side airbag (1) upwards into the lining pocket (2).

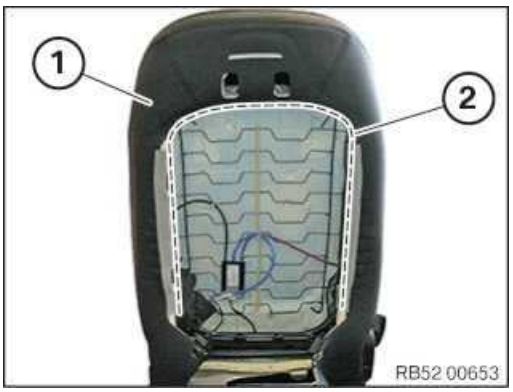


- Fold the backrest cover (2) to the side.
- Replace nuts.

  Parts: Nuts
- Tighten nuts (1).

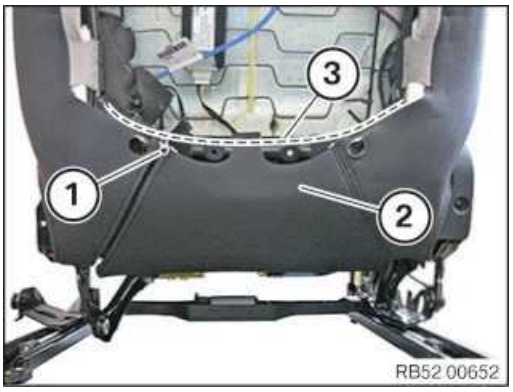
Side airbag to seat frame

Hexagon nut		Renew nut.	6,5 Nm

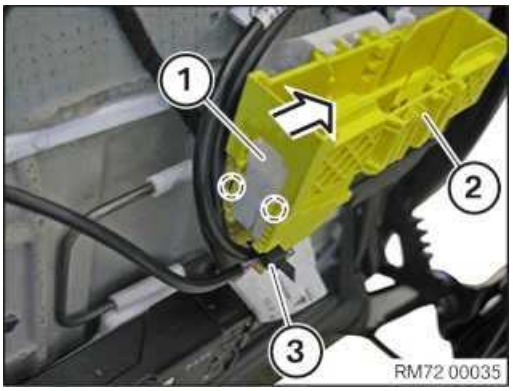


- Attach the seat cover (1) in this area (2) to the backrest frame.

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- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).

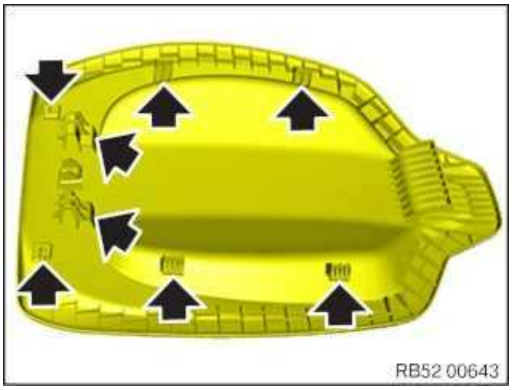


TECHNICAL INFORMATION

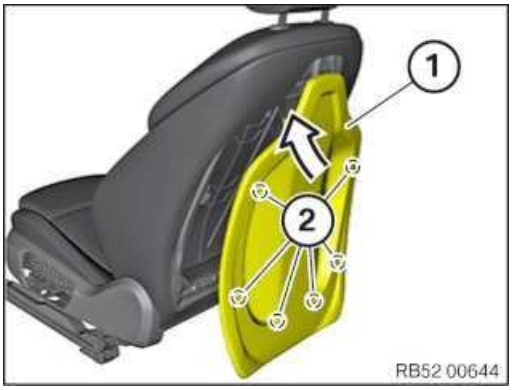
Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

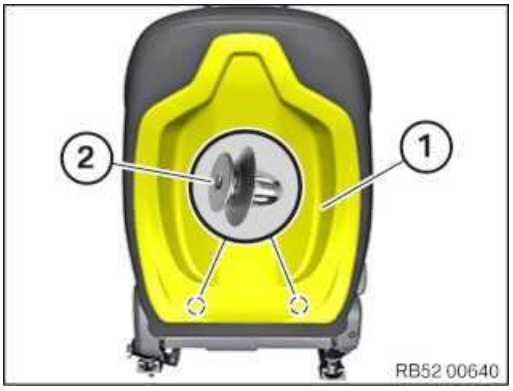
15 – Install the rear panel on the front seat backrest



- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).



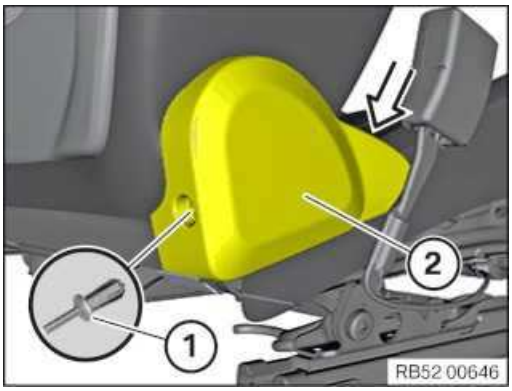
- Clip in the rear panel (1) at the clips (2).

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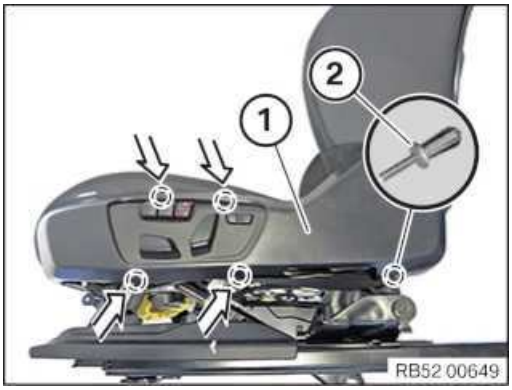
- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

16 – Installing the inner cover on the front seat



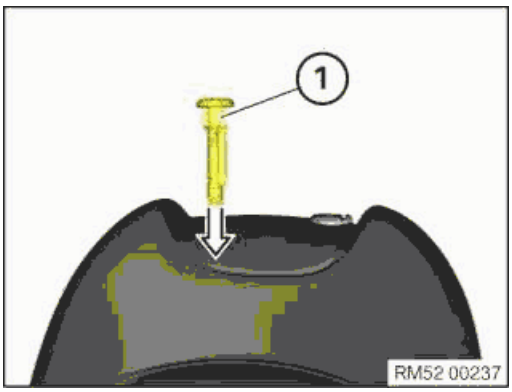
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

17 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

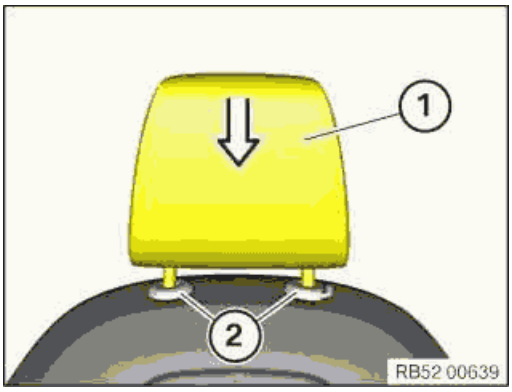
18 – Installing the guide sleeve for the front head restraint



- Insert guide (1) from above and engage.

19 – Install the front head restraint

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- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

20 – Install front seat

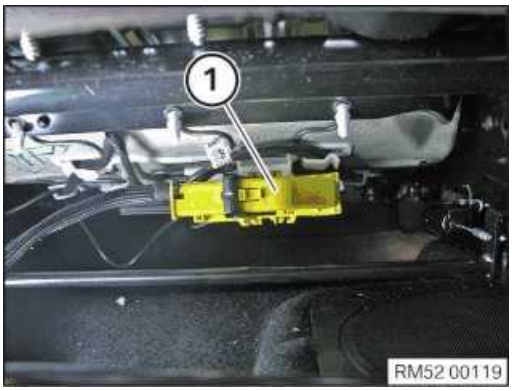
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-



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

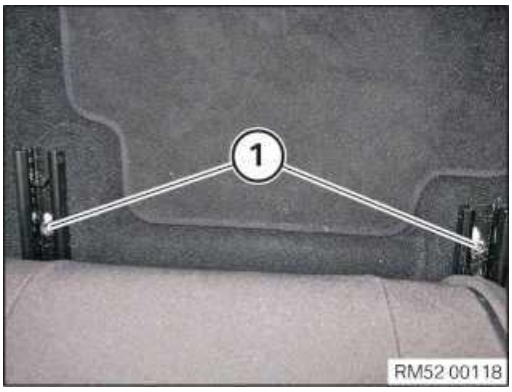
Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .

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- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

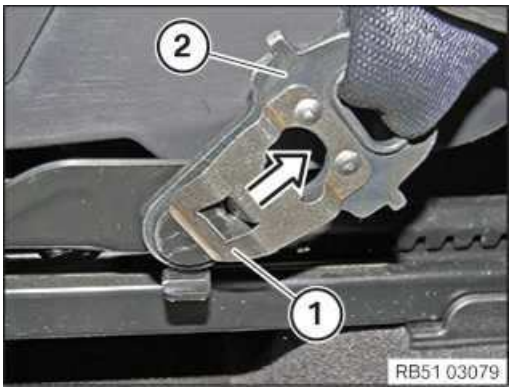
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

21 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

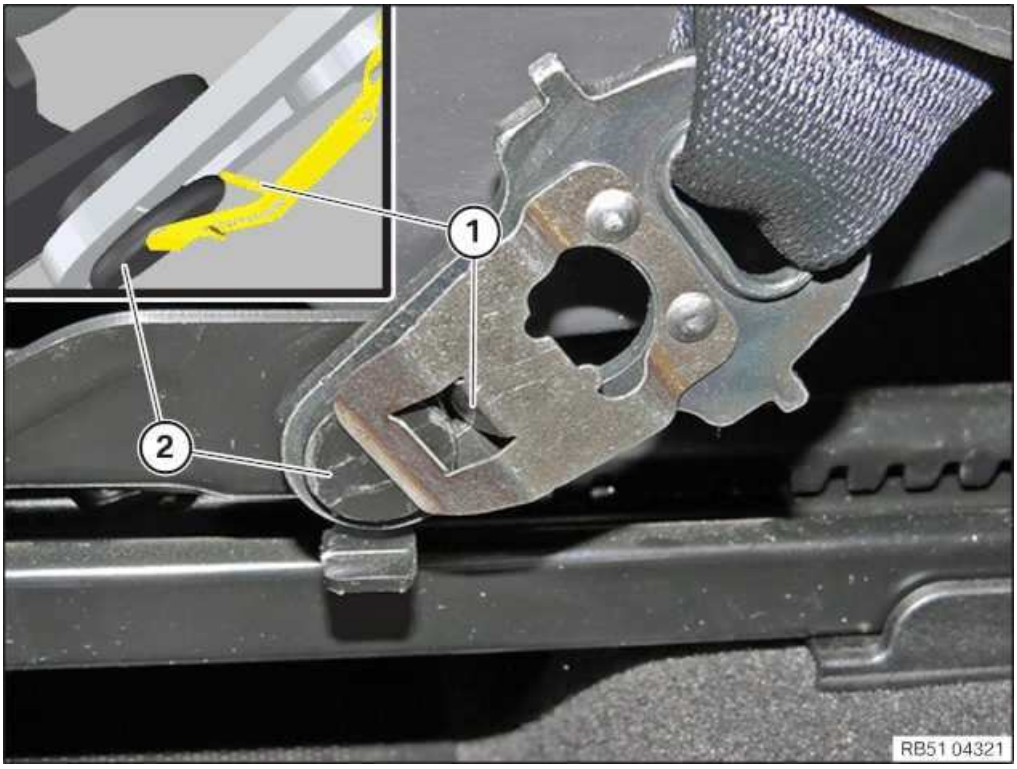
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Side airbag to seat frame Used in step 14

Hexagon nut		Renew nut.	6,5 Nm

Seat to body Used in step 20

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

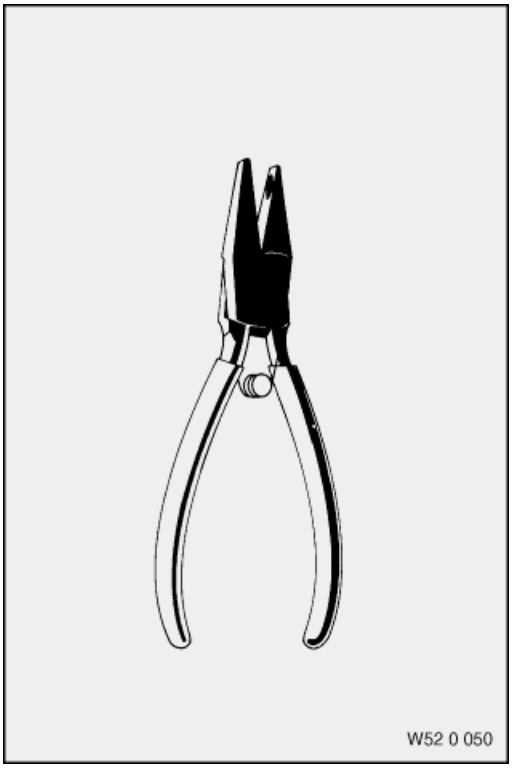
2 154 711 Fitting aid



Common Used in step 2 20

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 492 668 (52 0 050) Pliers



Common Used in step 12

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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	8 14

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 20

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61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	20
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	20
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting battery earth lead	2	20
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61 20 900 Disconnecting and connecting battery earth lead	2	20
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	20
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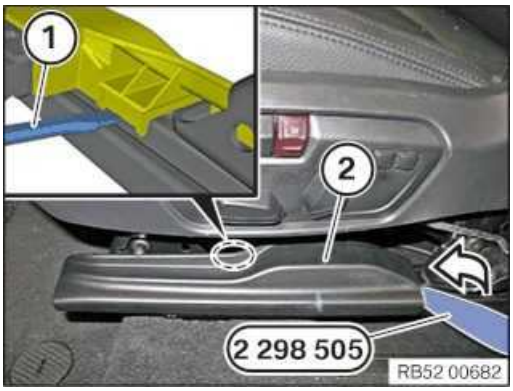
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52 13 ... Remove and install/replace trim on left or right front seat

Special tools required:

- 2 298 505

Removal:

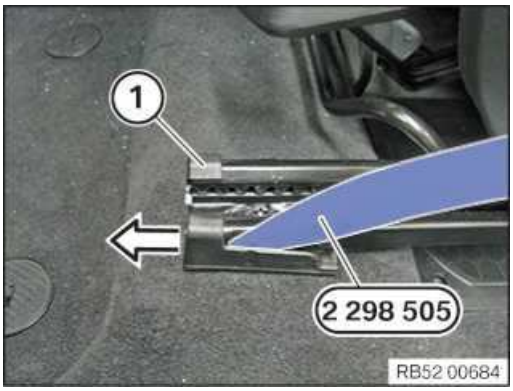


Side trim (for electric seat):

Slide screwdriver (1) from rear into marked area under the trim (2).

Raise trim (2) slightly using screwdriver (1).

Position special tool 2 298 505 at rear onto trim (1) and unclip forwards.

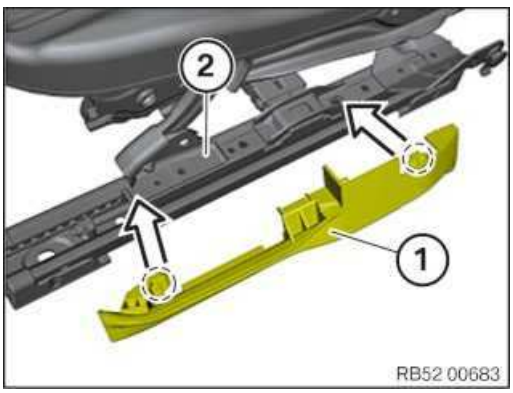


Seat rail trim:

Insert special tool 2 298 505 at side into trim (1).

Unclip cover (1) towards front.

Installation:

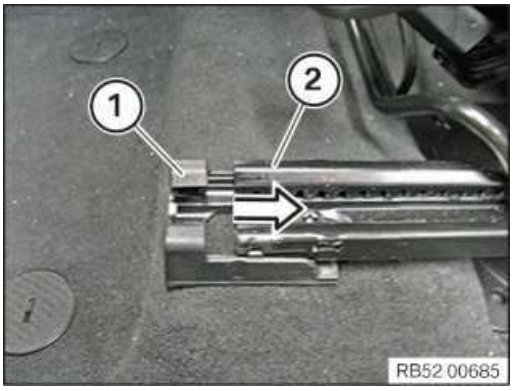


Side trim (for electric seat):

Position trim (1) from front with guides onto seat mechanism (2).

Clip trim (1) to rear into seat mechanism (2).

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Seat rail trim:

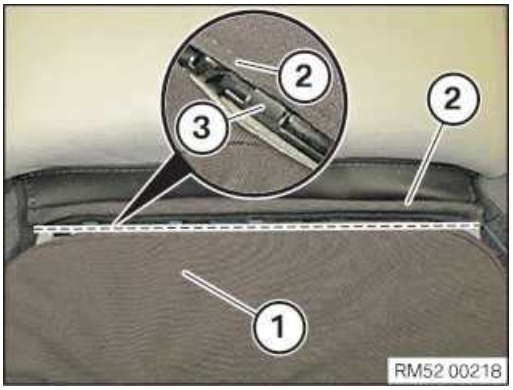
Slide trim (1) from front onto seat rail (2).

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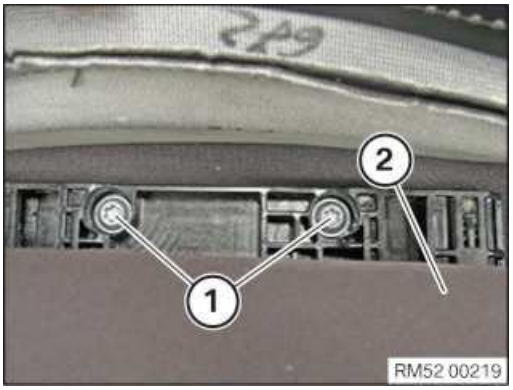
52 15 403 Removing and installing / replacing thigh support cover on the left or right front seat

PRELIMINARY WORK

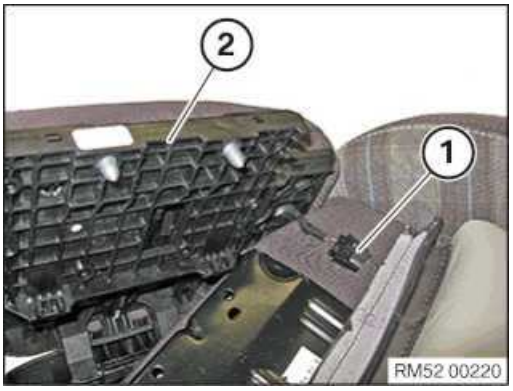
1 – Removing the thigh support on the front seat



- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



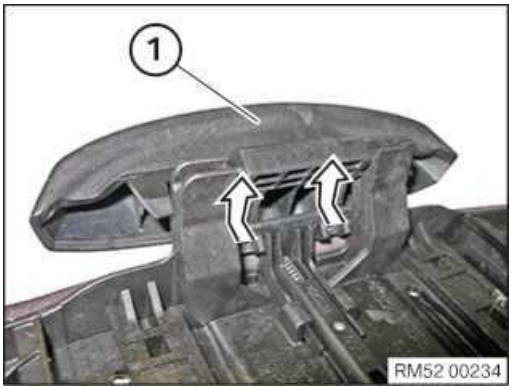
- Loosen screws (1).
- Detach the thigh support (2) forward and remove.



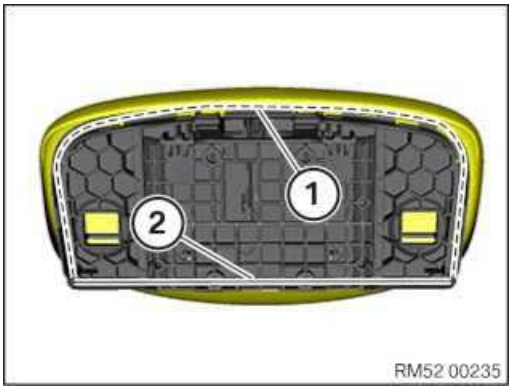
- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

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2 – Removing the cover of the front seat thigh support

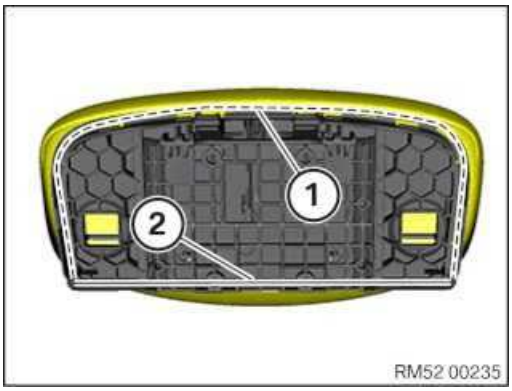


- Detach handle (1) in direction of arrow and remove.

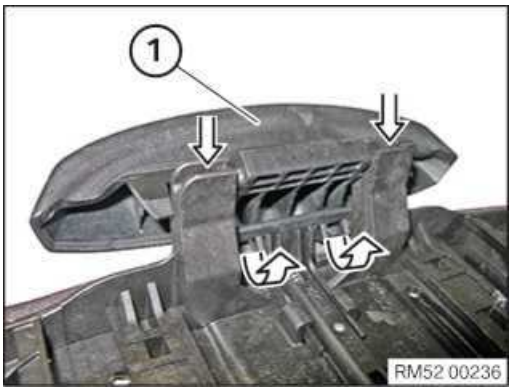


- Lever out cover welt in marked area (1).
- Detach trim wire in marked area (2) from thigh support.

3 – Installing the cover of the front seat thigh support



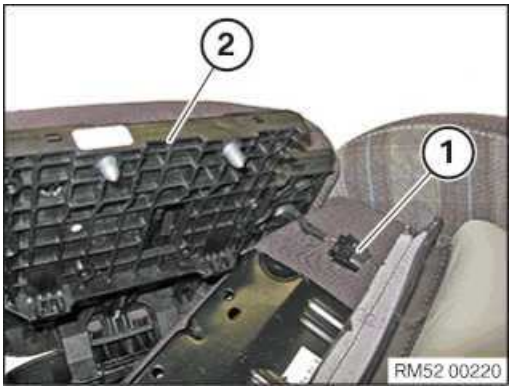
- Attach cover welt in marked area (1).
- Attach trim wire to thigh support in marked area (2).



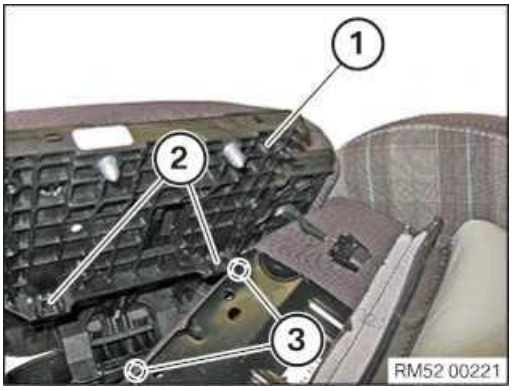
- Attach handle (1) in the direction of the arrow.

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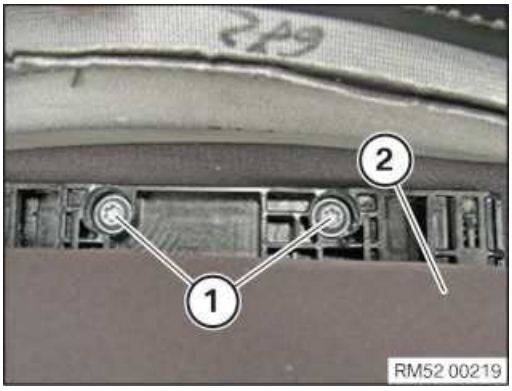
4 – Installing thigh support on the front seat



- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

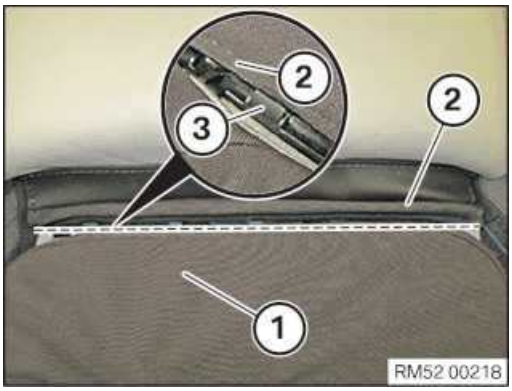


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).

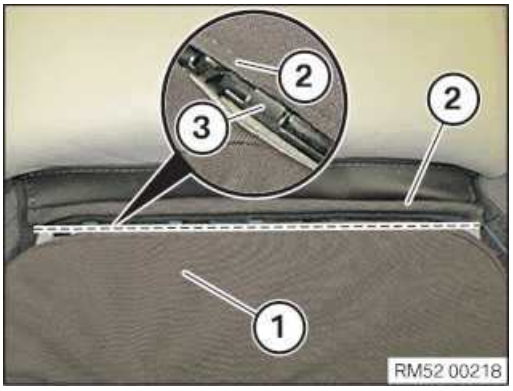


- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

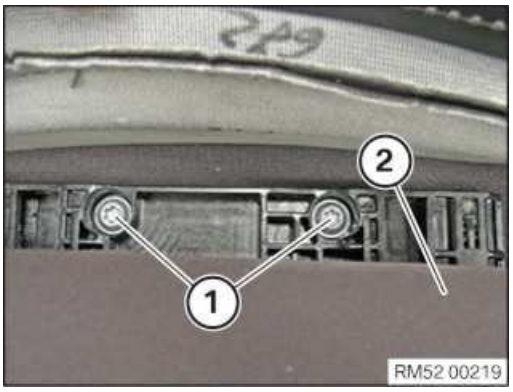
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52 15 050 Removing and installing thigh support on left or right front seat

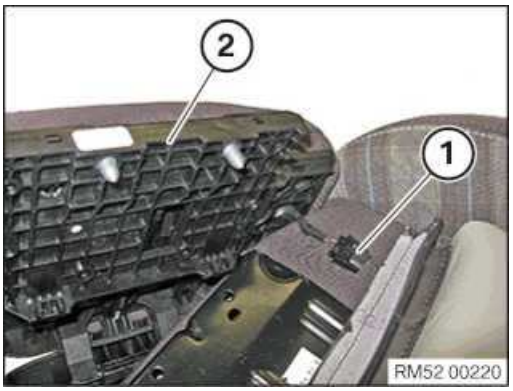
1 – Removing the thigh support on the front seat



- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).

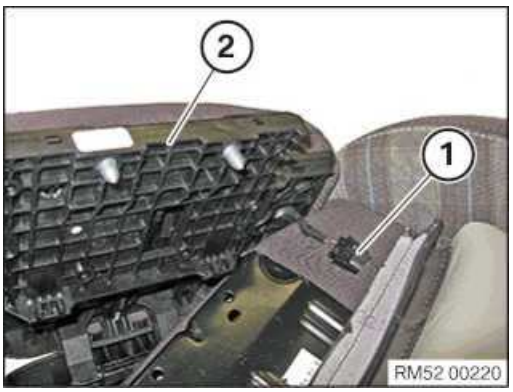


- Loosen screws (1).
- Detach the thigh support (2) forward and remove.



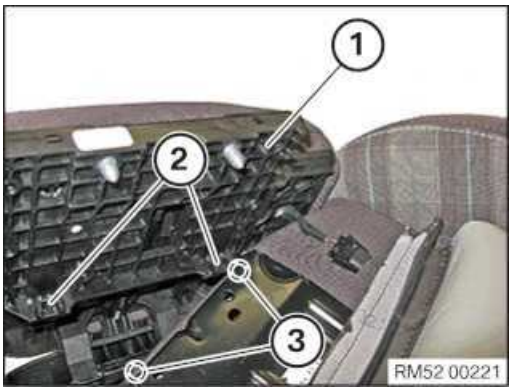
- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

2 – Installing thigh support on the front seat

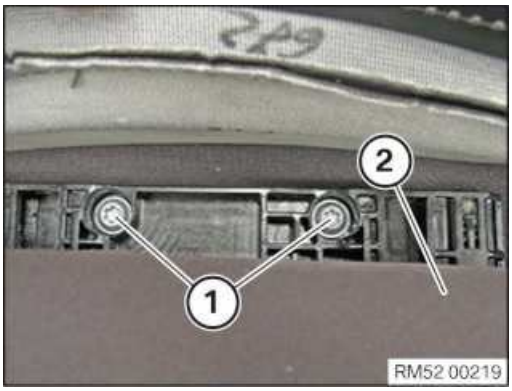


- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).

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- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

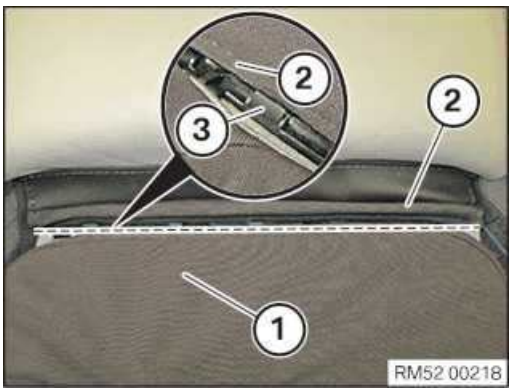


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

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52 13 ... Removing and installing/exchanging guide for left or right front seat head restraint

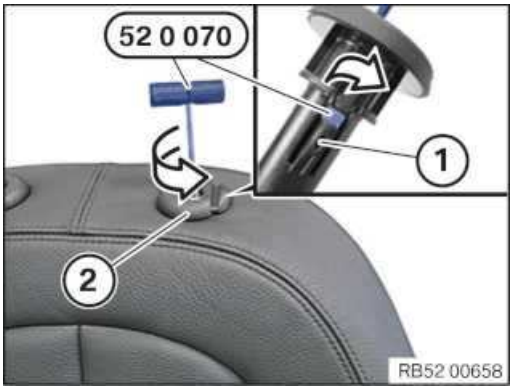
Special tools required:

- 52 0 070

Necessary preliminary tasks:

- Remove head restraint

Removal:

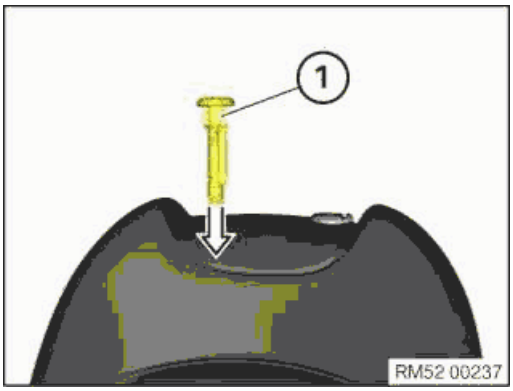


Insert special tool 52 0 070 into guide hole of sleeve (2) up to upper area of retaining lug.

Feed in unlocking tab of special tool behind the latch mechanism (1).

Turn tool to release sleeve (2) and pull out by lifting upwards.

Installation:



Insert guide (1) from above and engage.

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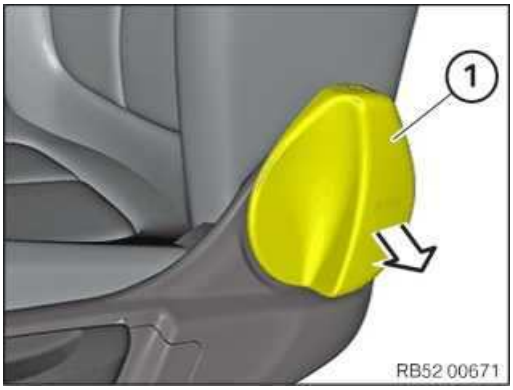
Required reworking:

- Install head restraint

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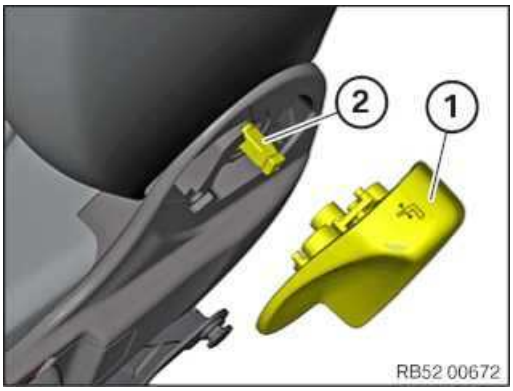
52 13 031 Removing and installing/replacing backrest adjustment lever on left or right front seat

Removal:



Unclip lever (1) outwards.

Installation:



Connect lever (1) to shaft (2) and latch into place.

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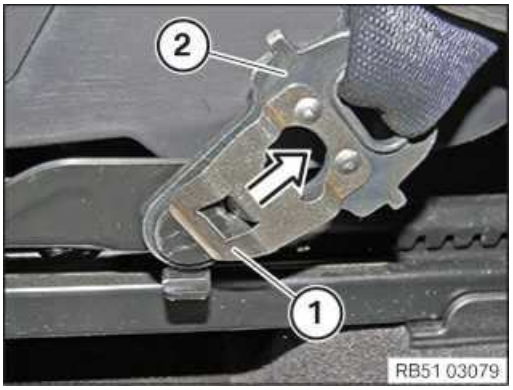
52 15 062 Removing and installing/replacing backrest width adjustment with valve on front seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

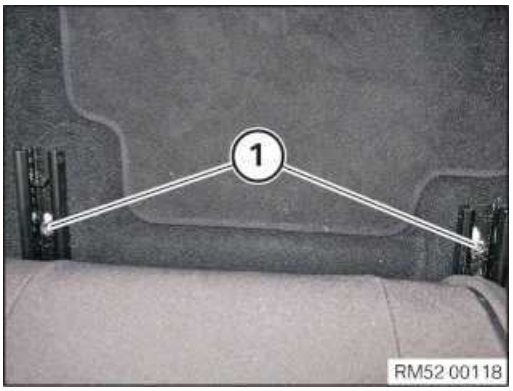
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



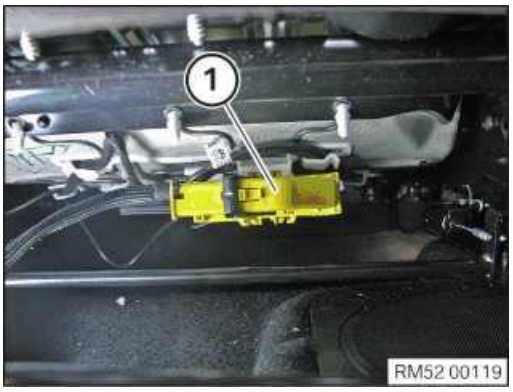
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

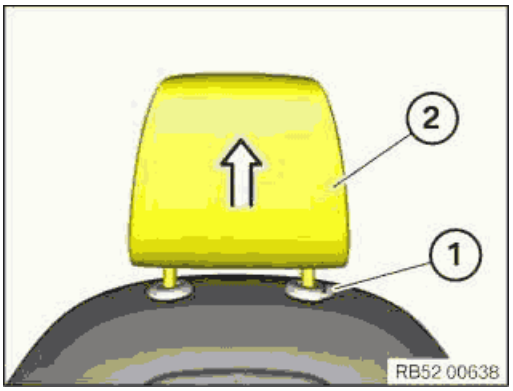
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

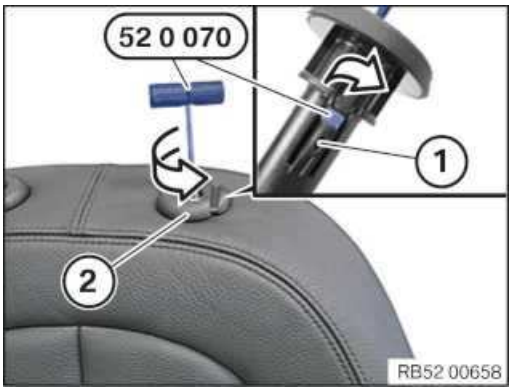
3 – Remove front head restraint



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

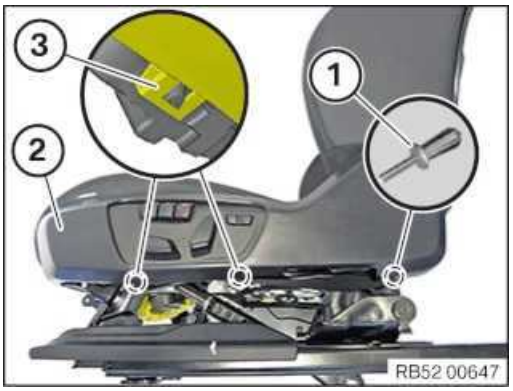
4 – Removing the guide sleeve for the front head restraint

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- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

5 – Removing the outer cover on the front electrical seat

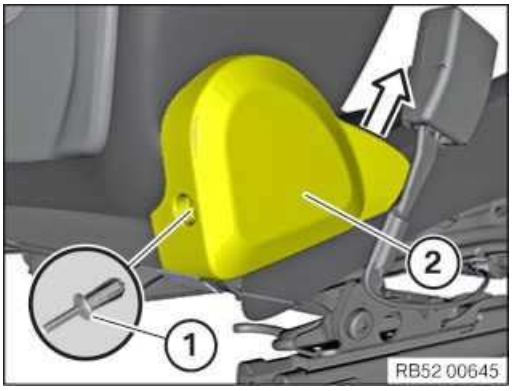


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

6 – Remove inner cover on front seat



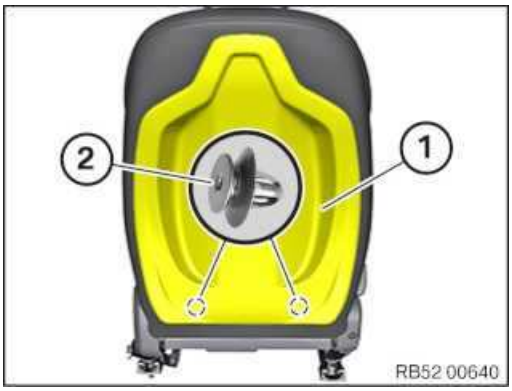
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

7 – Remove rear panel on front seat backrest

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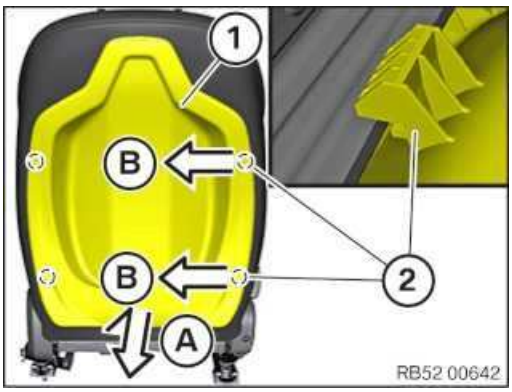
- **For equipment specification with folding table only:**
- Press the lock together and completely move the folding table (1) upwards.
- Detach the folding table (1) from the rail.



- Release the rear panel (1) toward the rear from the clips (2).



- Reach behind the rear panel (1) and push the latch mechanisms (2) upwards.
- Hold the rear panel (1) toward the rear under tension.



- Pull the rear panel (1) in the lower area slightly to the rear/down, direction of arrow (A).
- Press the rear panel (1) in direction of arrow (B) and release the latch mechanisms (2).

8 – Remove side airbag in 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.

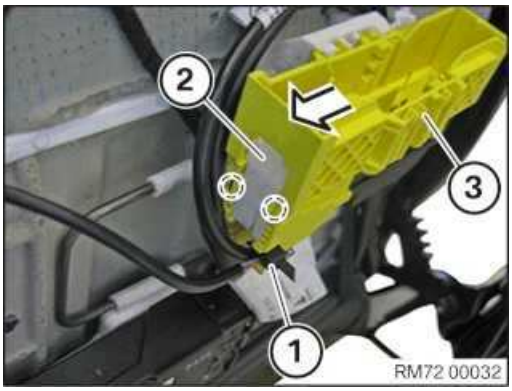
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WARNING

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

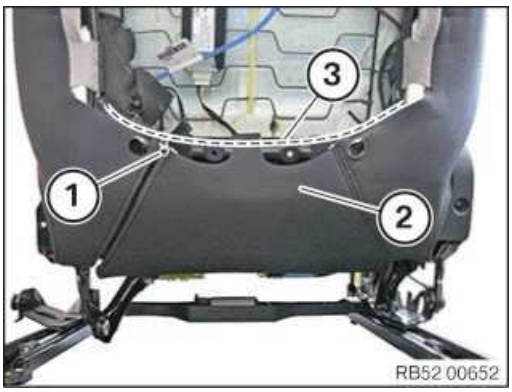


- If necessary detach the cable strap (1).

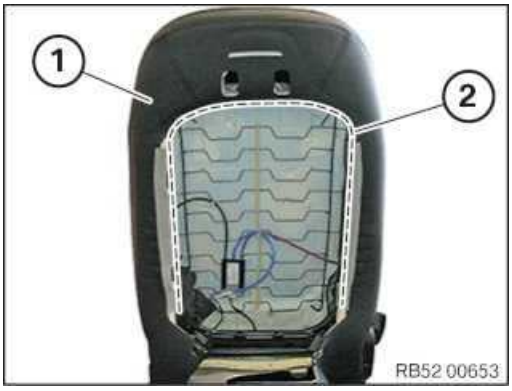
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

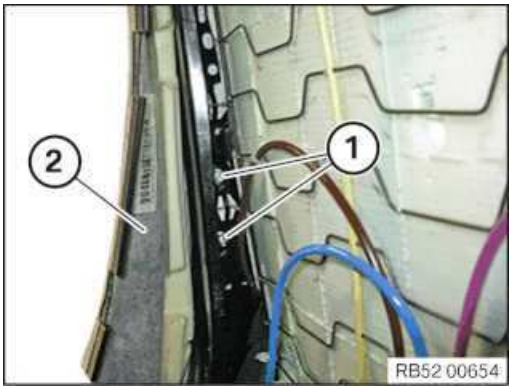
- Unlock the latch mechanisms and slide the connectors (2) in direction of arrow out of the connector housing (3).



- Open the zip fastener (1).
- Detach the seat cover (2) from the backrest frame in area (3).

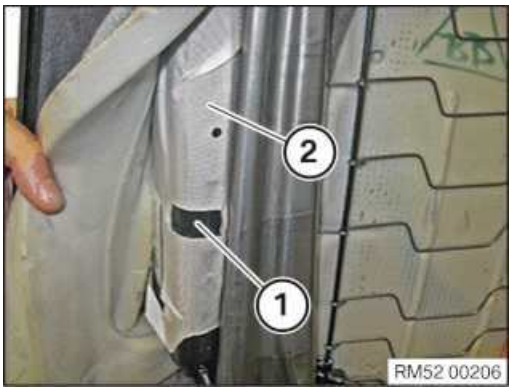


- Detach the seat cover (1) from the backrest frame in area (2).



- Fold the backrest cover (2) to the side.
- Loosen nuts (1).

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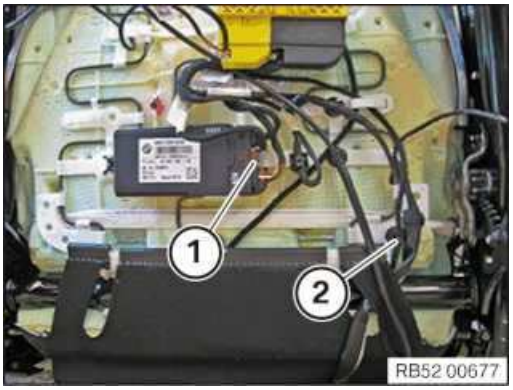


- Slide the side airbag (1) down and out of the cover pocket (2).

9 – Remove the backrest cover with the cushion for the front seat



- Detach retaining strap (1) on the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Release cable clip (2) and thread out the cable.

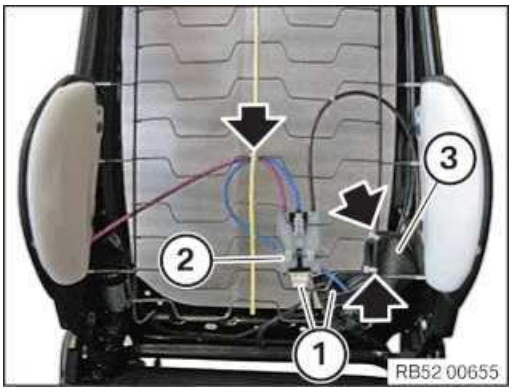


- Guide out the backrest cover (1) complete with the cushion toward the top.

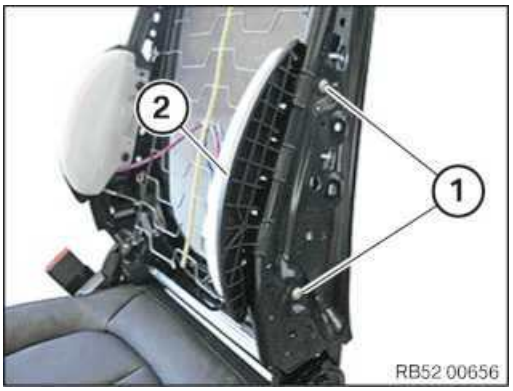
MAIN WORK

10 – Remove backrest width adjustment with valve

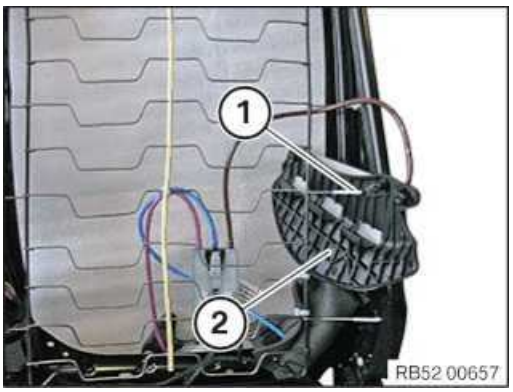
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- Release the cable strap at the marked areas.
- Unlock and disconnect plug connections (1).
- Detach the valve unit (2) from the spring wire.
- Feed out the pump (3).



- Release the screws (1) on the left and right air cushion (2).

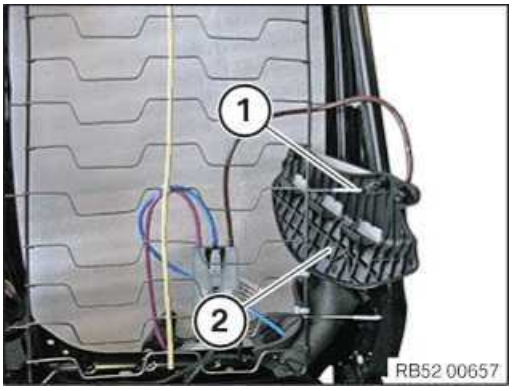


NOTICE

Perform the operations on the left and right side.

- Detach the spring wire (1) from the backrest frame.
- Feed out the air cushion (2) towards the rear.

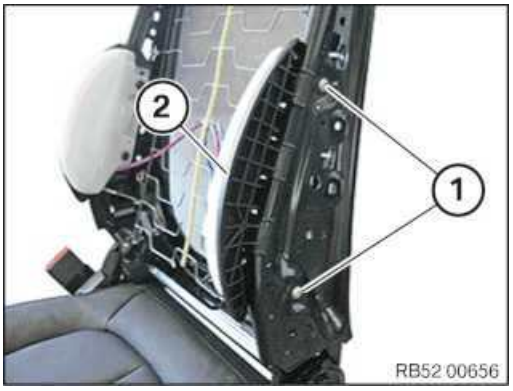
11 – Install backrest width adjustment with valve



NOTICE

Perform the operations on the left and right side.

- Insert the air cushion (2) from the rear.
- Attach the spring wire (1) to the backrest frame.



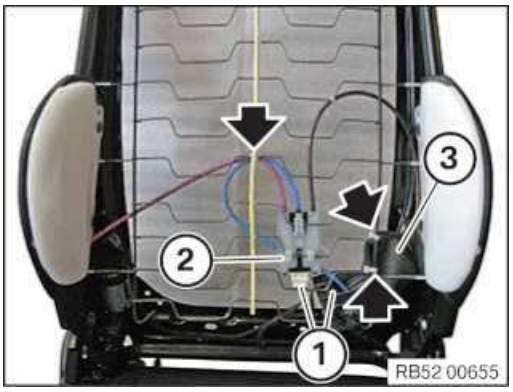
- Renew screws (1).

  Parts: Screw
- Tighten screws (1) on the left and right air cushion (2).

Backrest width adjustment on backrest frame

Oval-head screw	Renew screw.	Tightening torque	1,7 Nm

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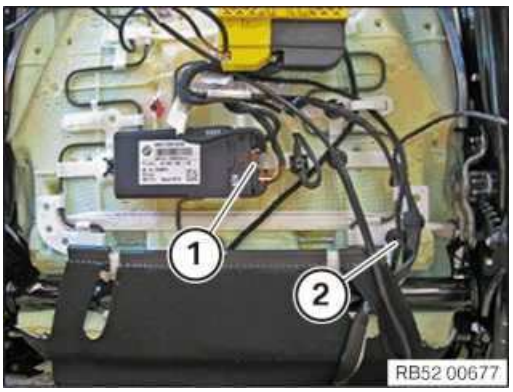
- Thread in the pump (3).
- Attach the valve unit (2) on the spring wire.
- Connect and lock the plug connections (1).
- Fit cable straps at the marked points.

POSTPROCESSES

12 – Install the backrest cover with the cushion for the front seat



- Guide in the backrest cover (1) complete with the cushion on the backrest frame in the direction of the arrow.



- **Version with seat heating only:**
- Thread in the cable and fasten the cable clip (2).
- Connect plug connection (1) and lock.



- Attach the retaining strap (1) on the seat mechanism on the left and right.

13 – Installing side airbag in the front seat

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WARNING

Pyrotechnic components.

Danger! Life-threatening injuries!

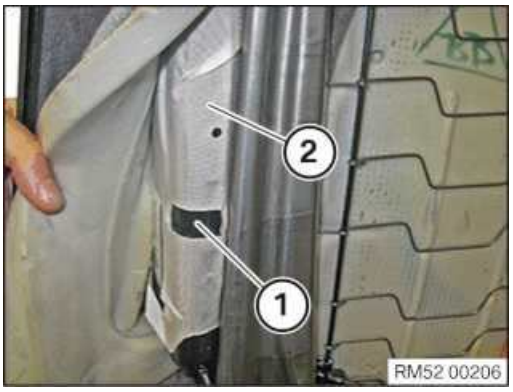
- All work on pyrotechnic parts may be carried out by technically experienced and appropriately trained personnel only.
- Replace any damaged part or ones that have been dropped.
- For additional information see: 72 00 Safety regulations on handling components with gas generators.

WARNING

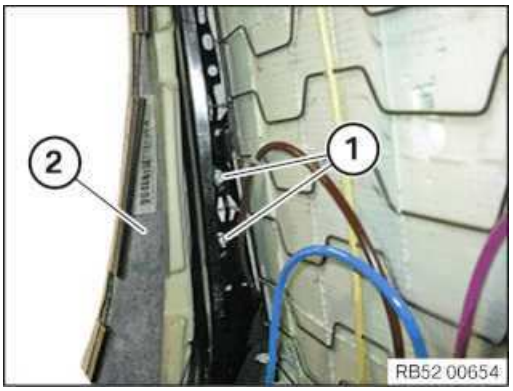
Airbag unit.

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



- Feed the side airbag (1) upwards into the lining pocket (2).

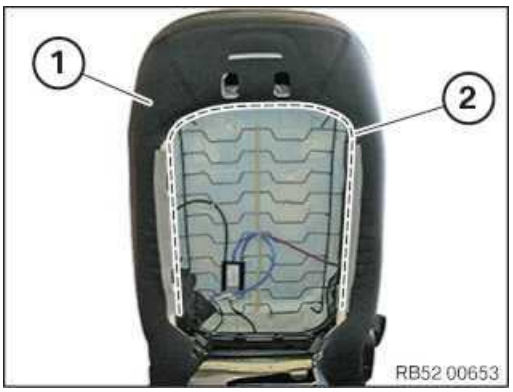


- Fold the backrest cover (2) to the side.
- Replace nuts.

  Parts: Nuts
- Tighten nuts (1).

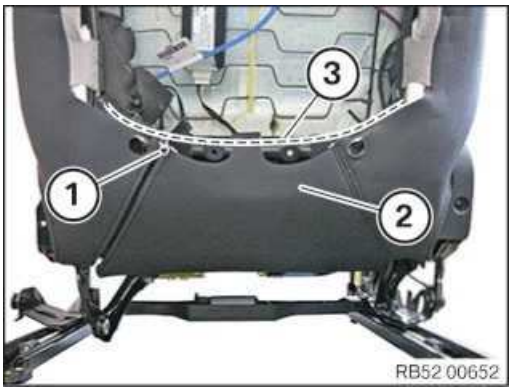
Side airbag to seat frame

Hexagon nut		Renew nut.	6,5 Nm

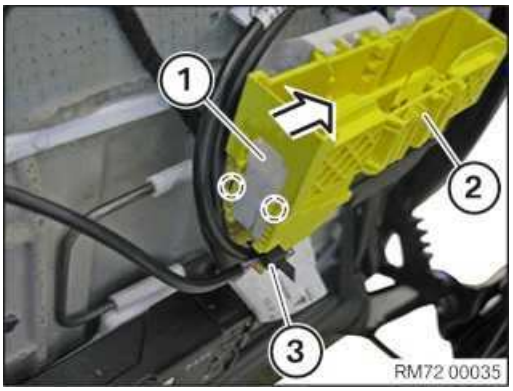


- Attach the seat cover (1) in this area (2) to the backrest frame.

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- Attach the seat cover (2) in this area (3) to the backrest frame.
- Close the zip fastener (1).

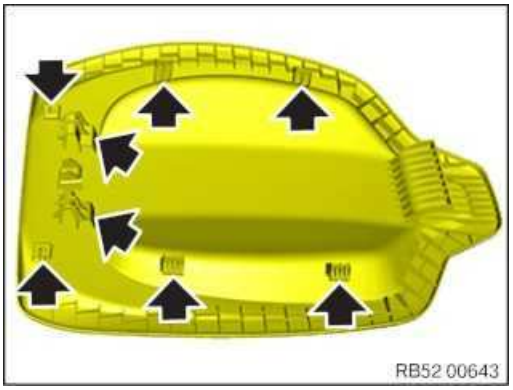


TECHNICAL INFORMATION

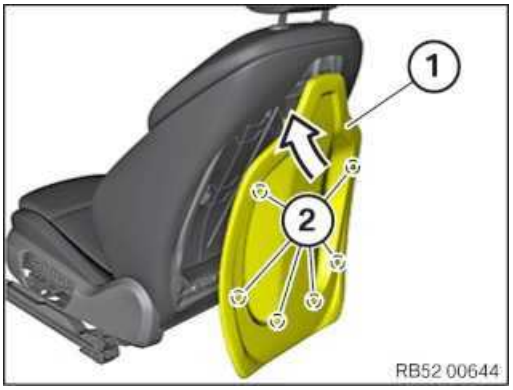
Different variants may be installed depending on the vehicle equipment.

- Insert connector (1) into the connector housing (2).
- Make sure the connector (1) correctly engages in the connector housing (2).
- Fasten the cable with the cable strap (3) on the connector housing (2).

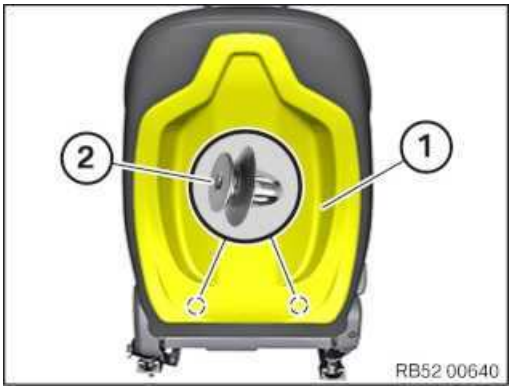
14 – Install the rear panel on the front seat backrest



- Check the latch mechanisms and clips for damage, if necessary renew the rear panel.



- Slide the rear panel into the seat and clip it in at the latch mechanisms (2).



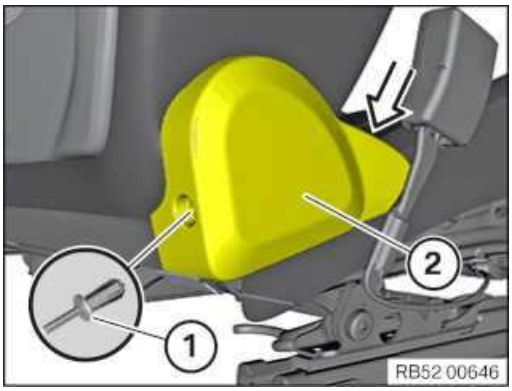
- Clip in the rear panel (1) at the clips (2).

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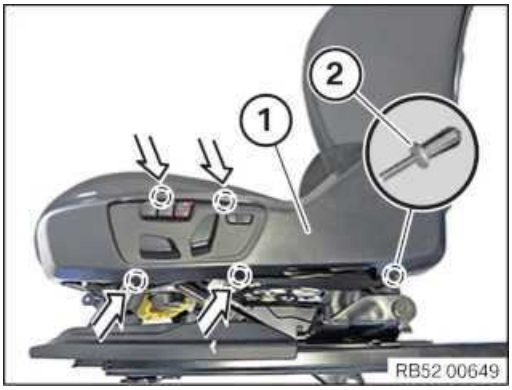
- **For equipment specification with folding table only:**
- Press together the lock and insert the folding table (1) into the rail at the very top.

15 – Installing the inner cover on the front seat



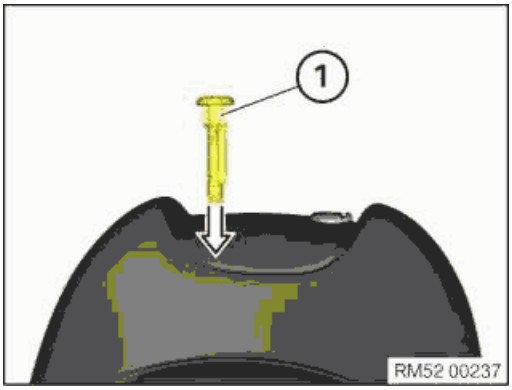
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

16 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

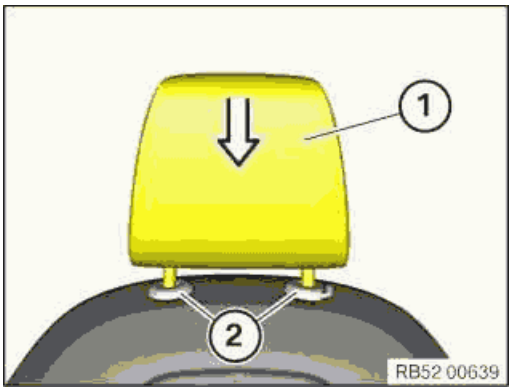
17 – Installing the guide sleeve for the front head restraint



- Insert guide (1) from above and engage.

18 – Install the front head restraint

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- Slide the head restraint (1) into the guide sleeves (2) from the top and engage.

19 – Install front seat

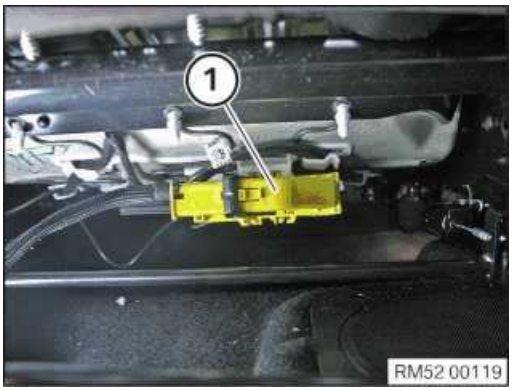
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.



-

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

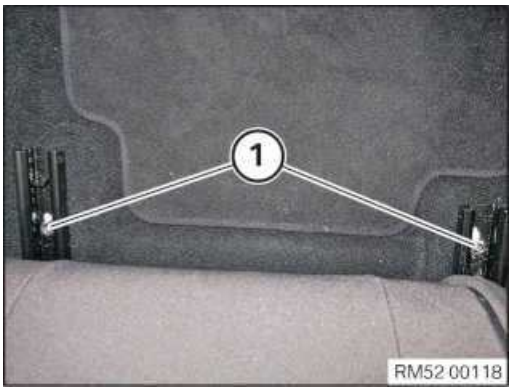
Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .

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- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

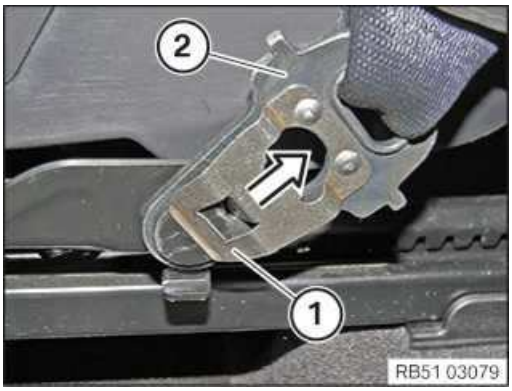
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

20 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

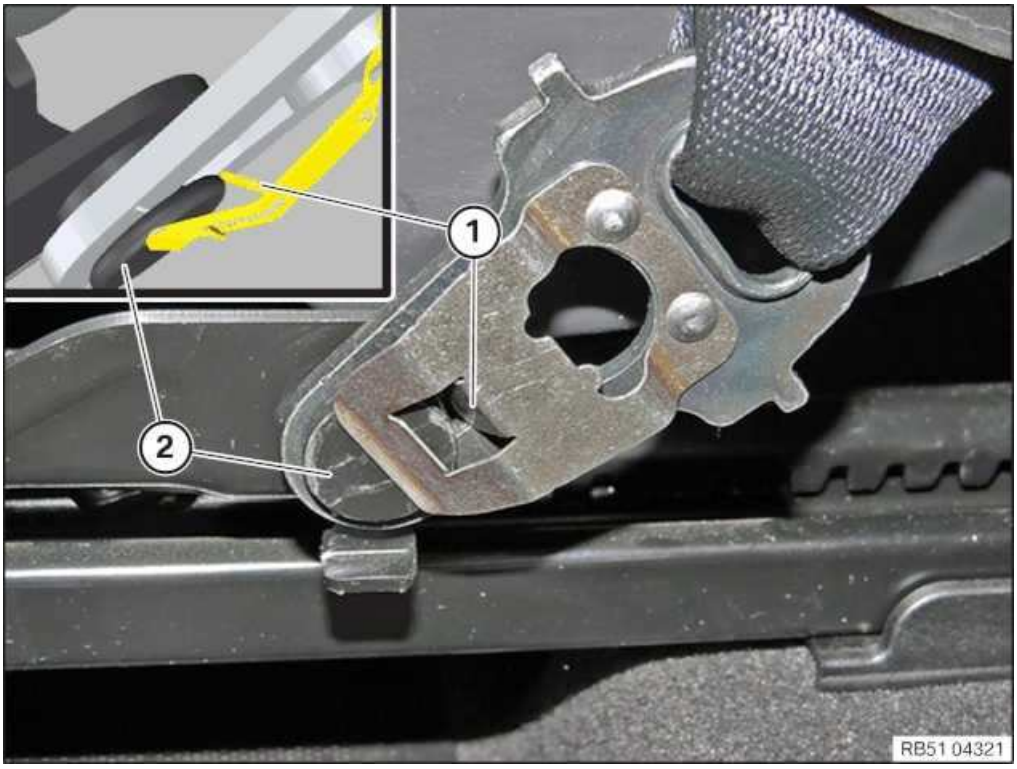
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Backrest width adjustment on backrest frame			Used in step 11
Oval-head screw	Renew screw.	Tightening torque	1,7 Nm

Side airbag to seat frame			Used in step 13
Hexagon nut		Renew nut.	6,5 Nm

Seat to body			Used in step 19
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid



Common	Used in step 2 19
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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	8 13

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 19
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
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61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19

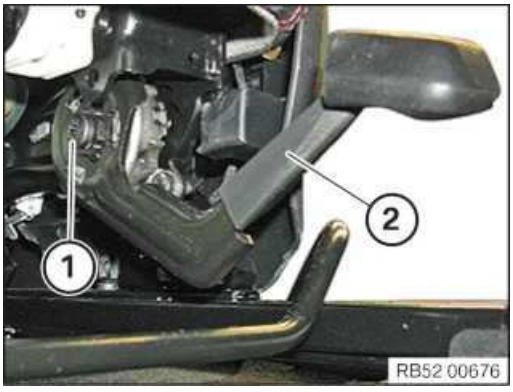
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61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
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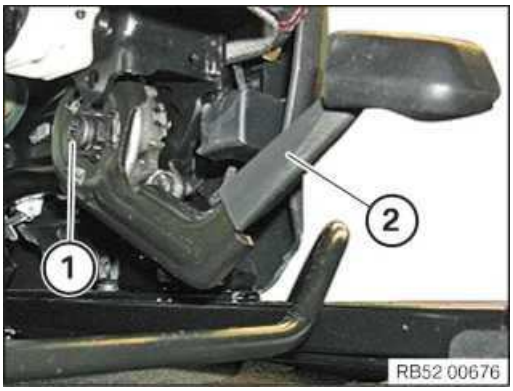
52 13 ... Removing and installing/replacing seat angle adjustment lever on left or right front seat

Removal:



Loosen screw (1) and remove lever (2).

Installation:



Position lever (2) and tighten screw (1).

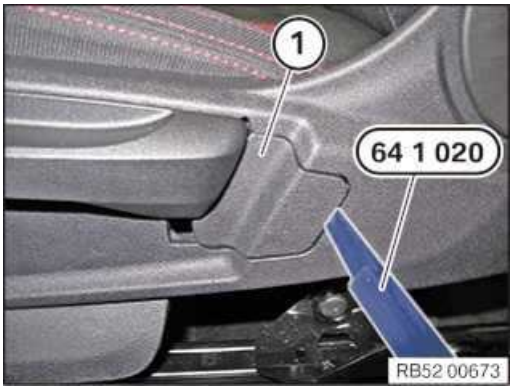
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52 13 ... Removing and installing/replacing seat height adjustment lever on left or right front seat

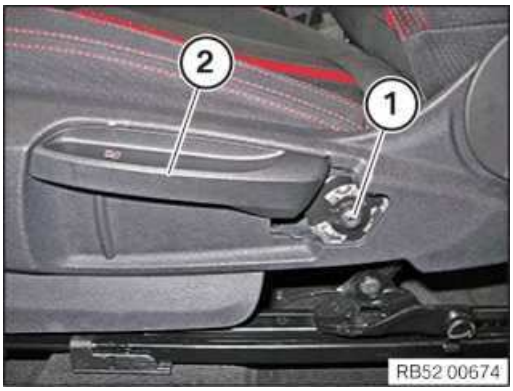
Special tools required:

- 64 1 020

Removal:



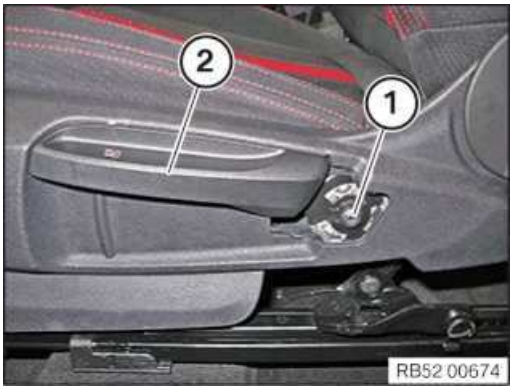
Unclip cover (1) with special tool 64 1 020 .



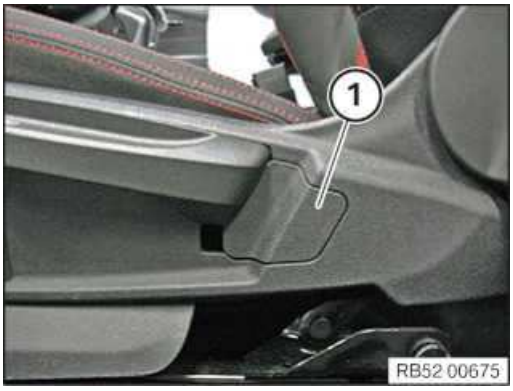
Loosen screw (1) and remove lever (2).

INSTALLATION:

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Position lever (2) and tighten screw (1).



Clip in cover (1).

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52 15 526 Removing and installing/replacing seat mechanism on left or right front seat

NOTICE

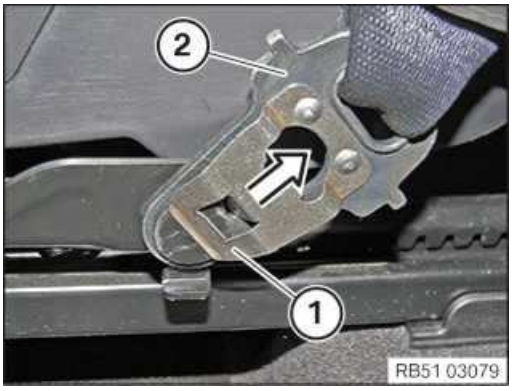
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

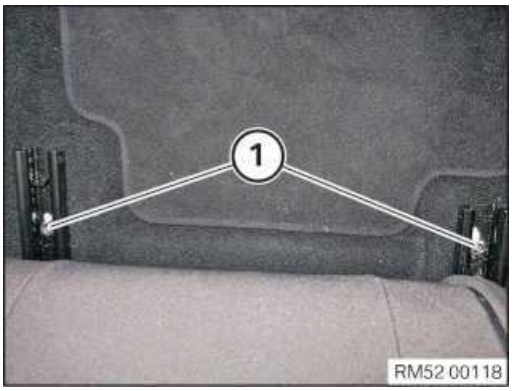
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



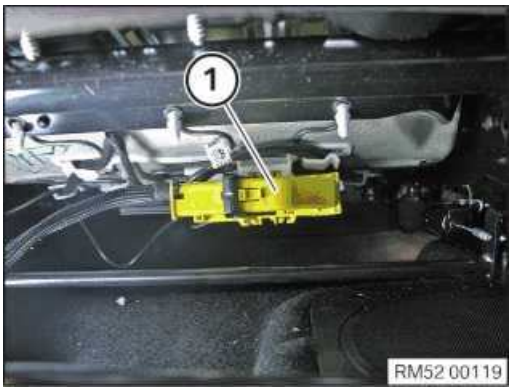
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

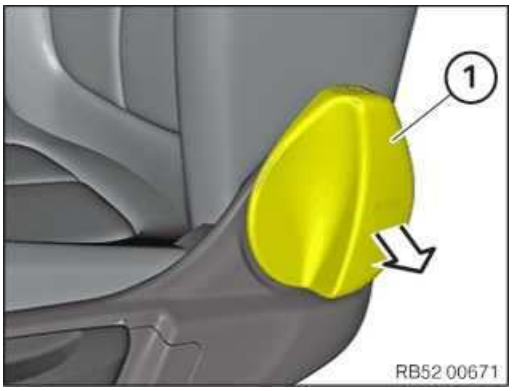
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

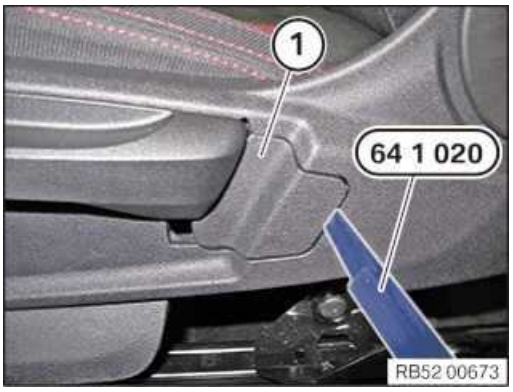
3 – Removing lever for backrest adjustment on front seat



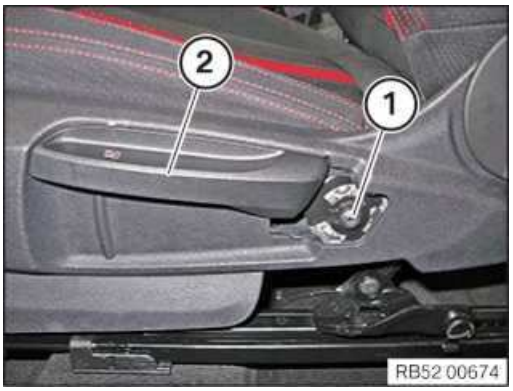
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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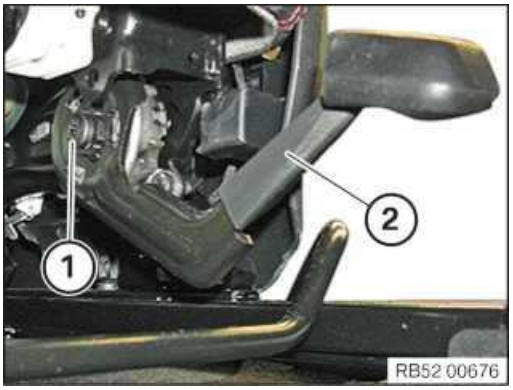


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.



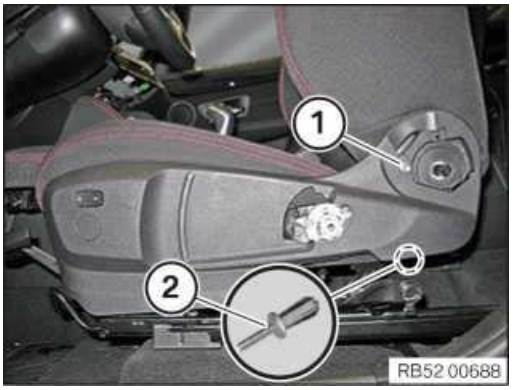
- Loosen screw (1).
- Remove the lever (2).

5 – Remove the lever for the seat angle adjustment on the front seat

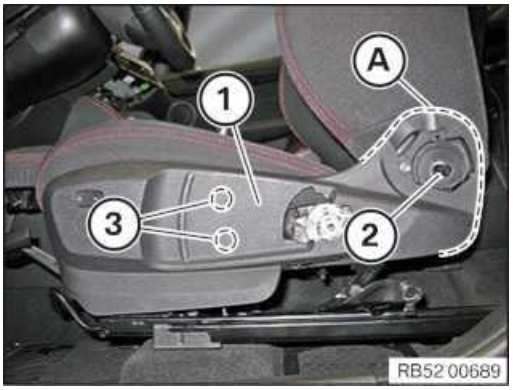


- Loosen screw (1).
- Remove the lever (2).

6 – Remove the outer cover of the front seat (mechanical)



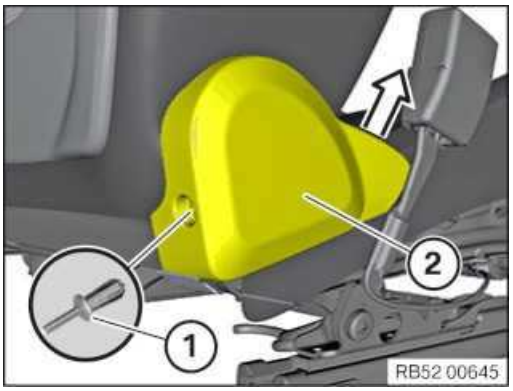
- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

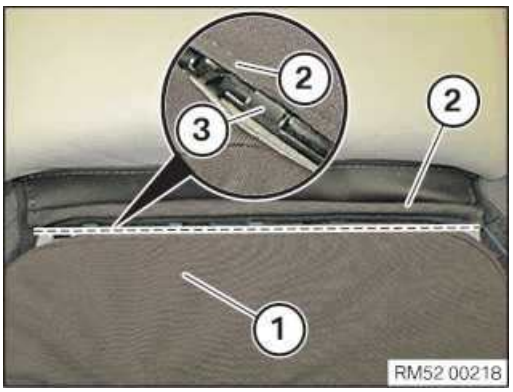
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7 – Remove inner cover on front seat

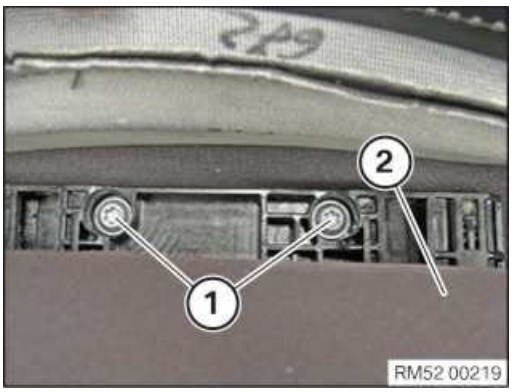


- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

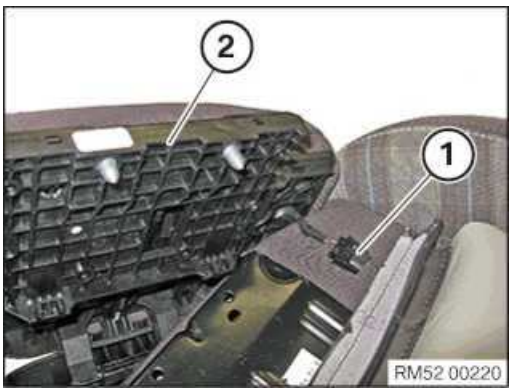
8 – Removing the thigh support on the front seat



- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.



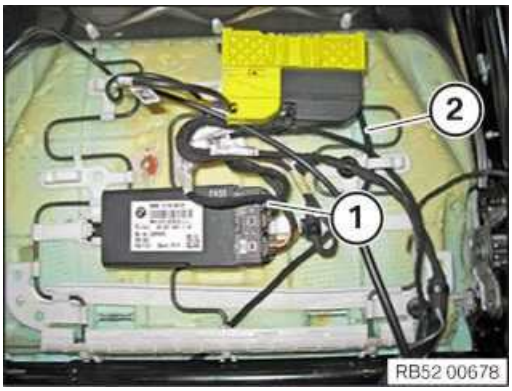
- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

9 – Remove the seat cover with the cushion for the front seat

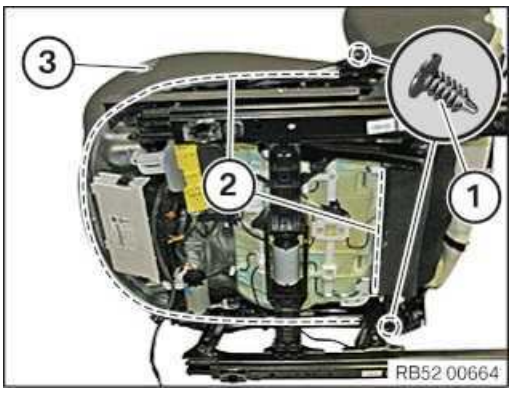
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- Detach retaining strap (1) at the left and right from the seat mechanism.



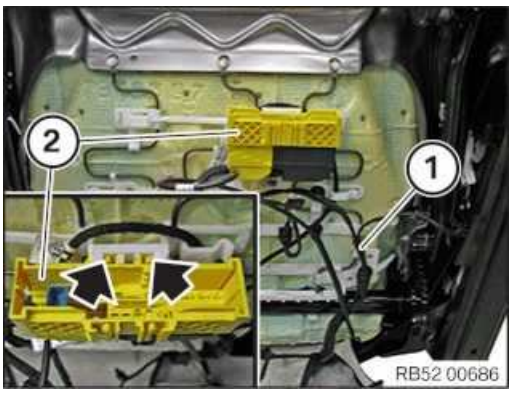
- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).



- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

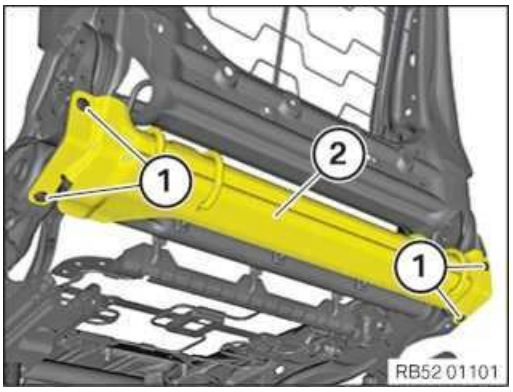
MAIN WORK

10 – Remove the seat mechanism of the front seat

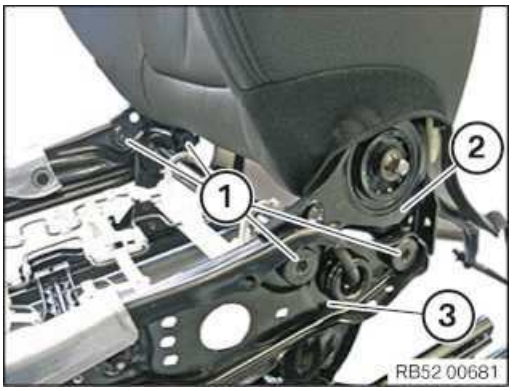


- Loosen the wiring harness (1) on all cable clips.
- Unlock connector housing (2) and detach from seat mechanism to rear.
- Feed out the wiring harness (1) from the seat mechanism toward the rear.

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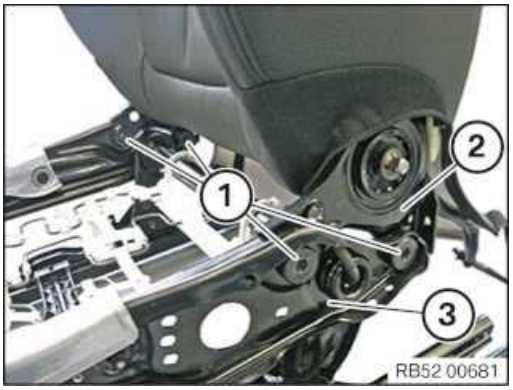


- **Only for equipment specification with Isofix:**
- Drill out rivet (1).
- Remove the holder (2).
- Remove remnants of rivets.



- Loosen screws (1).
- Remove the backrest frame (2) from the seat frame (3).

11 – Install the seat mechanism of front seat

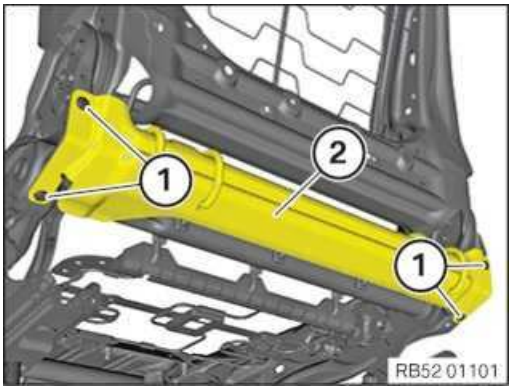


- Position the backrest frame (2).
- Renew screws (1).

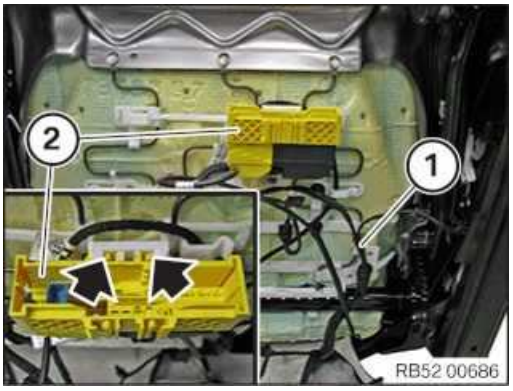
  Parts: Bolts
- Tighten screws (1) on left and right.

Backrest frame to seat mechanism

Screw	Renew screw.	Tightening torque	44 Nm



- **Only for equipment specification with Isofix:**
- Fasten the holder (2) with a rivet (1).

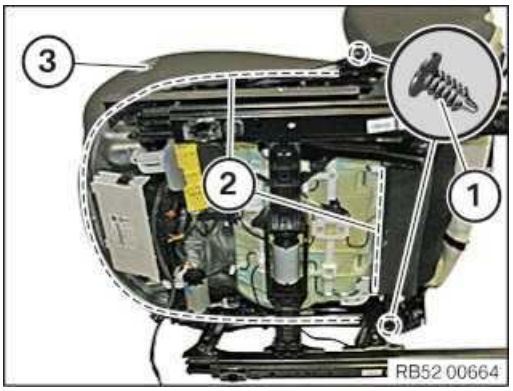


- Insert the wiring harness (1).
- Engage connector housing (2) into seat mechanism.
- Secure the wiring harness (1) to all cable clips.

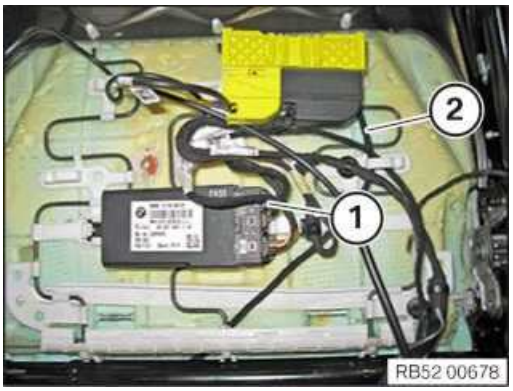
POSTPROCESSES

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12 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

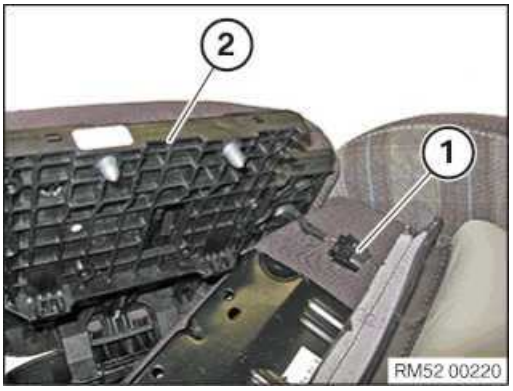


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



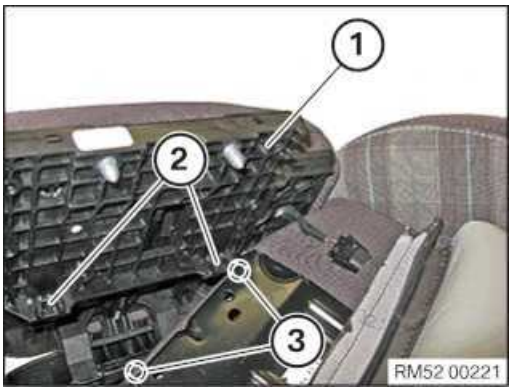
- Fasten retaining strap (1) to the seat mechanism at the left and right.

13 – Installing thigh support on the front seat

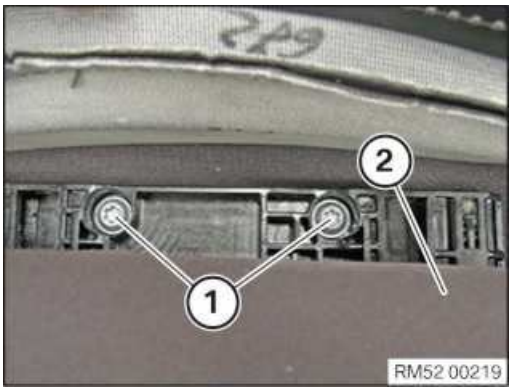


- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).

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- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

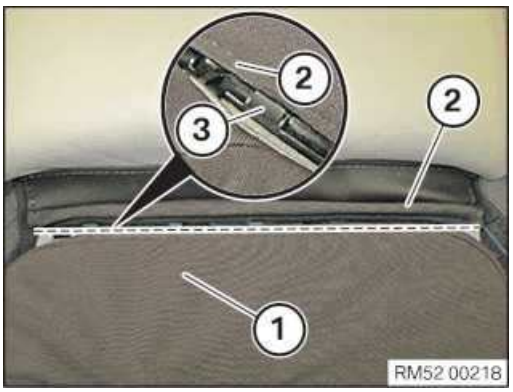


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

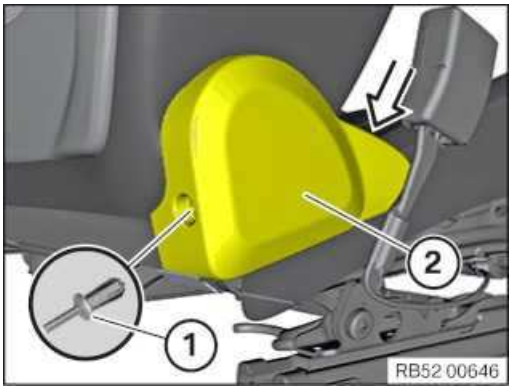
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



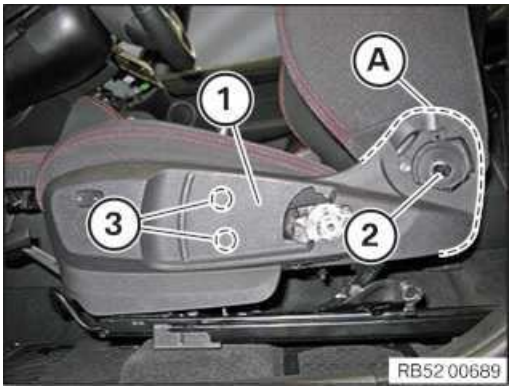
- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

14 – Installing the inner cover on the front seat



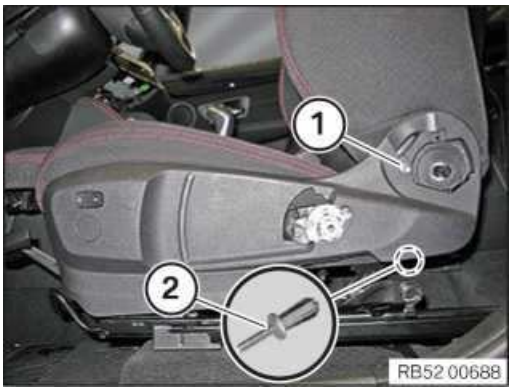
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

15 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).

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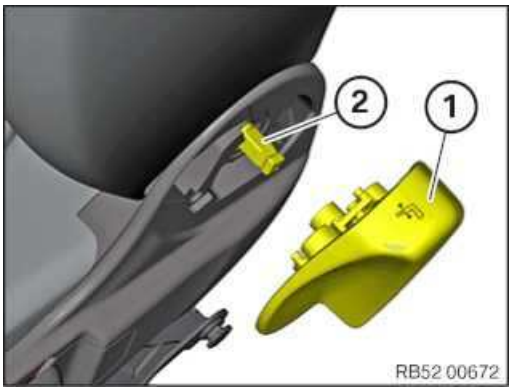
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

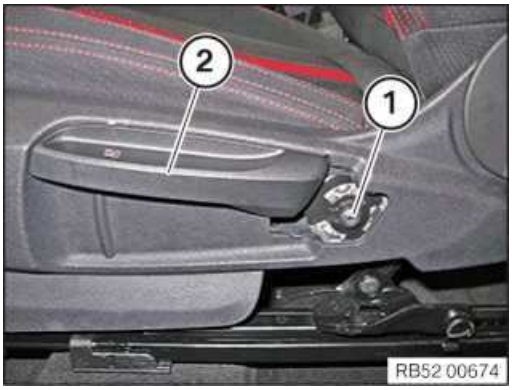
- Fasten expanding rivet (2).

16 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

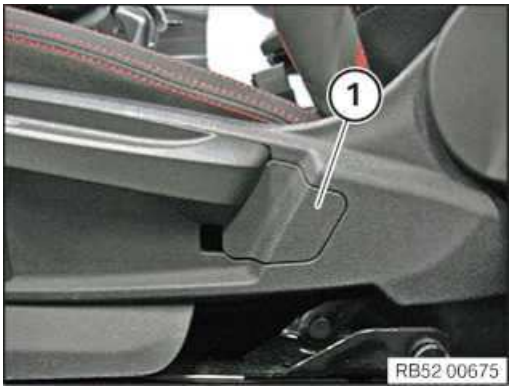
17 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

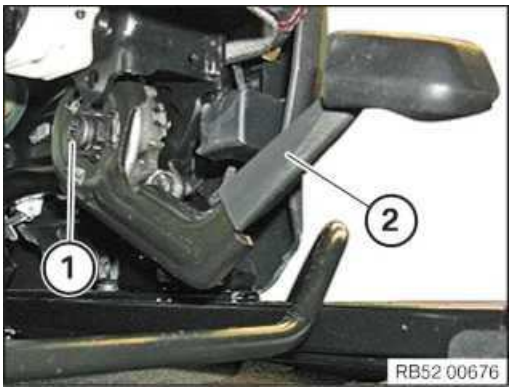
Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

18 – Install the lever for the seat angle adjustment on the front seat

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- Position the lever (2).
- Tighten down screw (1).

Seat angle adjustment lever on seat mechanism

Screw		Tightening torque	19,5 Nm

19 – Install front seat

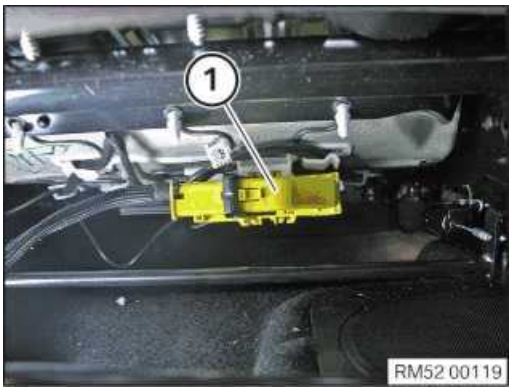
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-



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

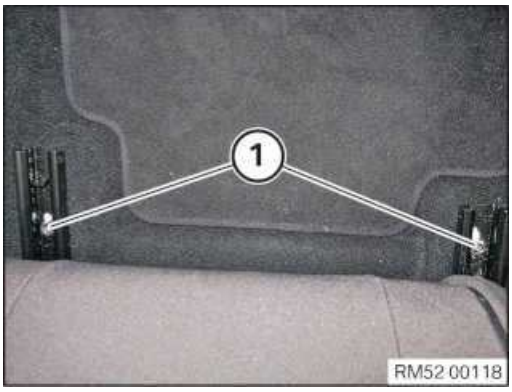
Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .

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- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

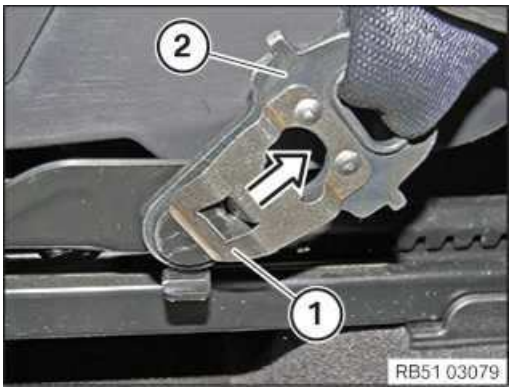
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

20 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

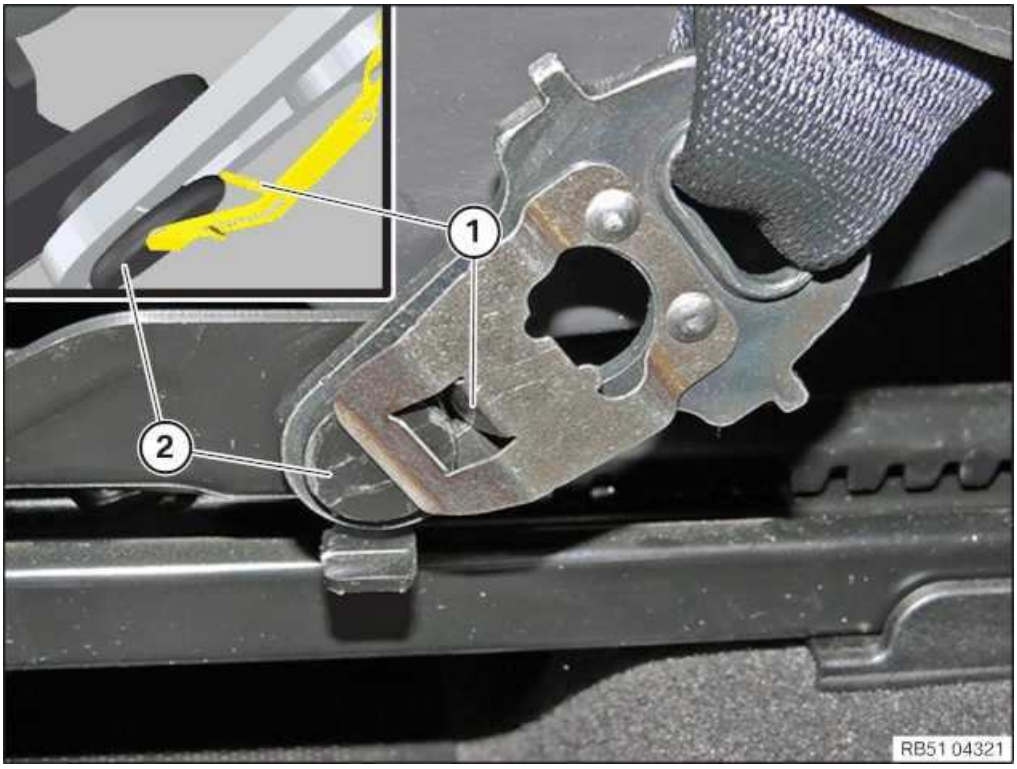
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Backrest frame to seat mechanism — Used in step 11

Screw	Renew screw.	Tightening torque	44 Nm

Outer cover to front seat — Used in step 15

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 17

Screw		Tightening torque	19,5 Nm

Seat angle adjustment lever on seat mechanism — Used in step 18

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 19

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

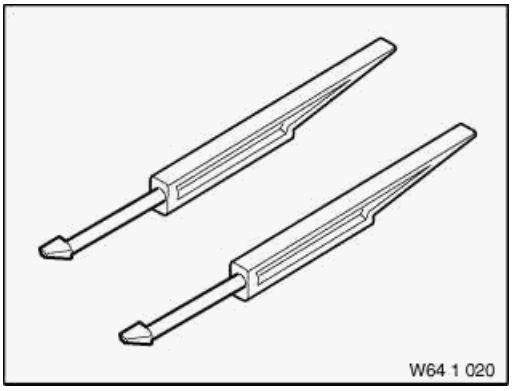
2 154 711 Fitting aid



Common — Used in step 2 19

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 493 681 (64 1 020) Hook



Common — Used in step 4

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
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19
61 20 900 Disconnecting and connecting battery earth lead	2 19

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61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	19
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
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61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19
61 20 900 Disconnecting and connecting battery earth lead	2	19

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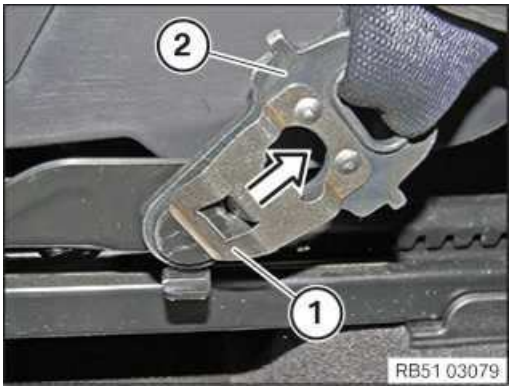
52 15 402 Replacing seat cover for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

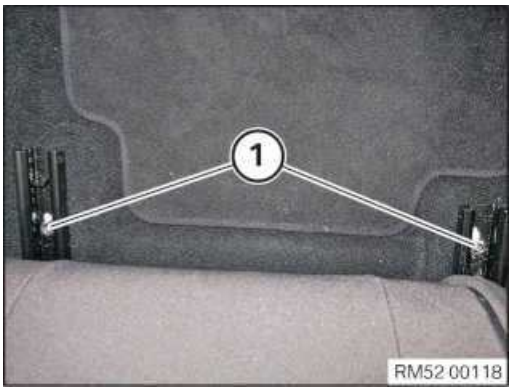
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



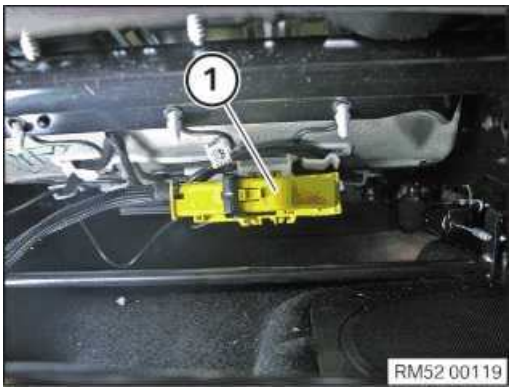
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

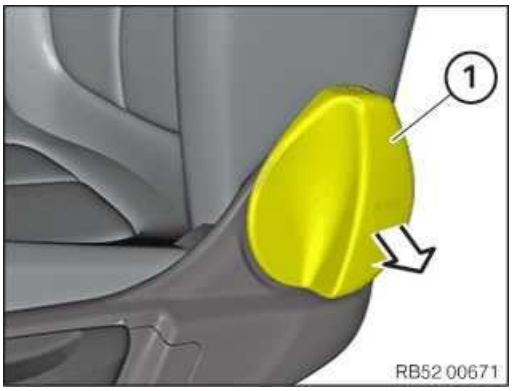
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

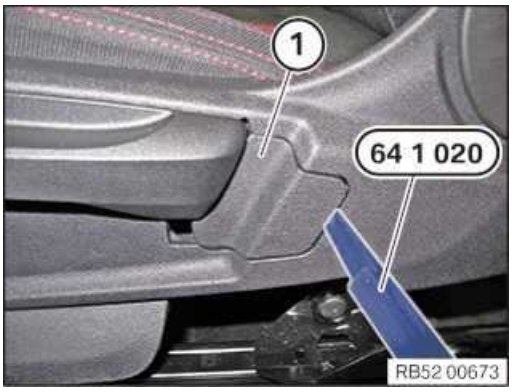
3 – Removing lever for backrest adjustment on front seat



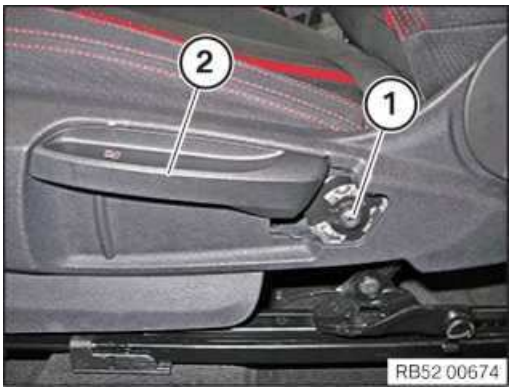
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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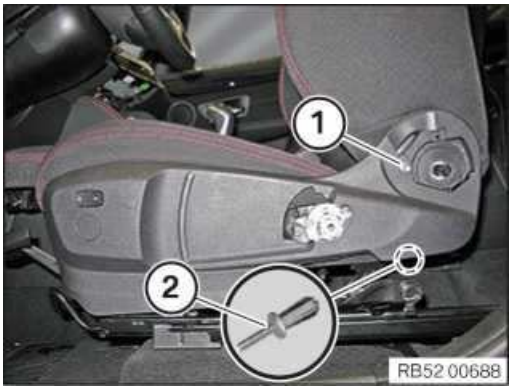


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

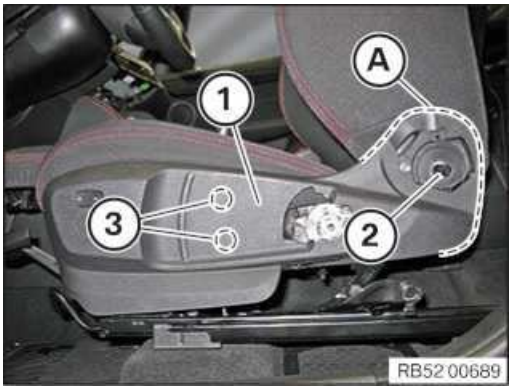


- Loosen screw (1).
- Remove the lever (2).

5 – Remove the outer cover of the front seat (mechanical)

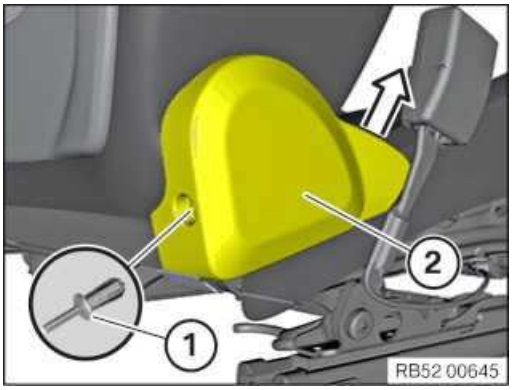


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

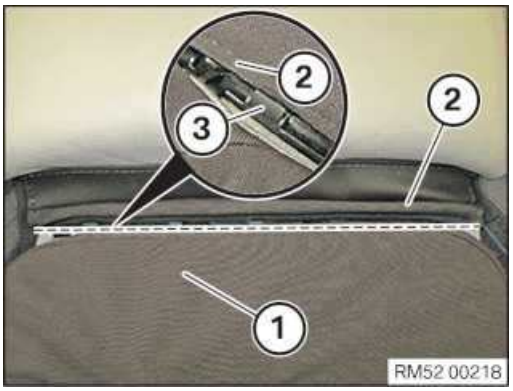
6 – Remove inner cover on front seat



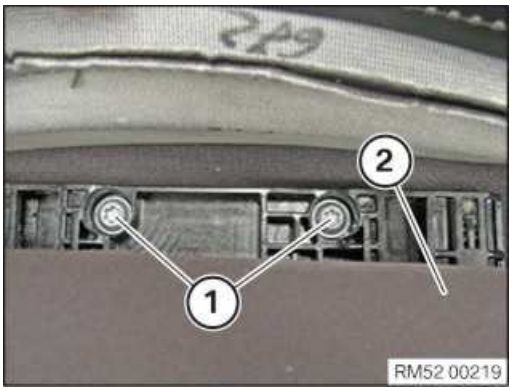
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

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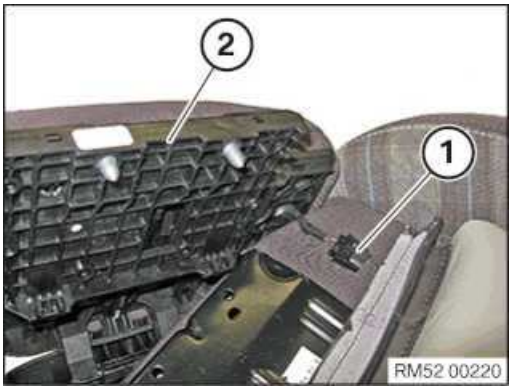
7 – Removing the thigh support on the front seat



- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

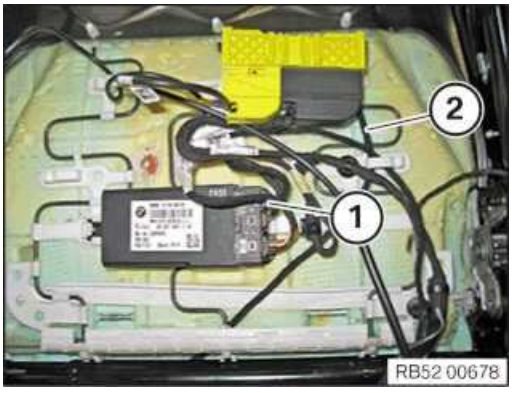


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

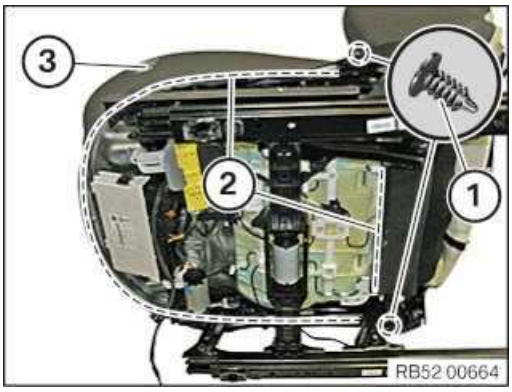


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

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- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

9 – Removing the seat cover for the front seat (sport)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

10 – Install the seat cover for the front seat (Sport)

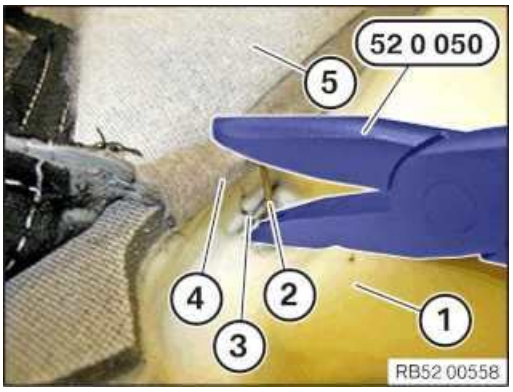
NOTICE

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



- Place the seat cover on the upholstery.
- Secure all trim wires with clamps.

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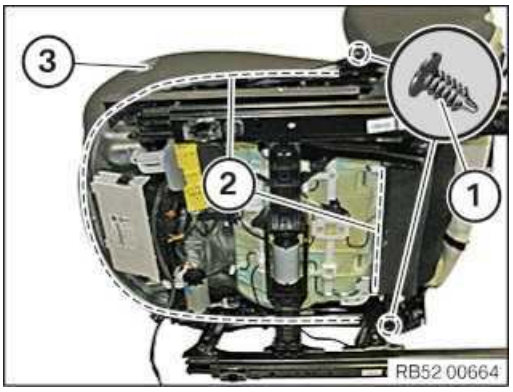
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

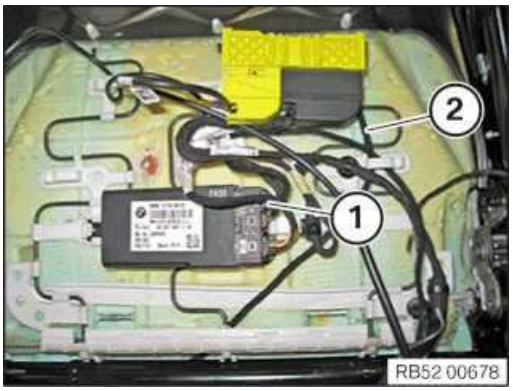
1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



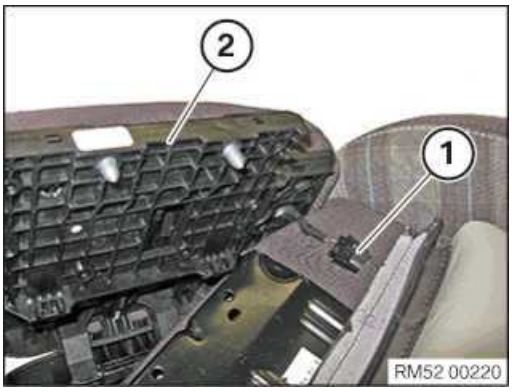
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



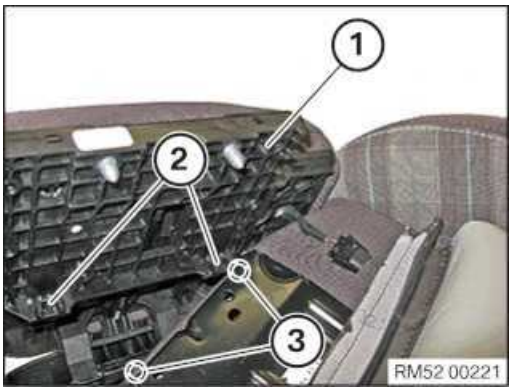
- Fasten retaining strap (1) to the seat mechanism at the left and right.

12 – Installing thigh support on the front seat

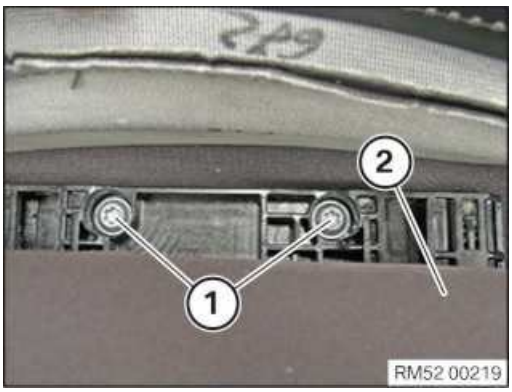
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- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

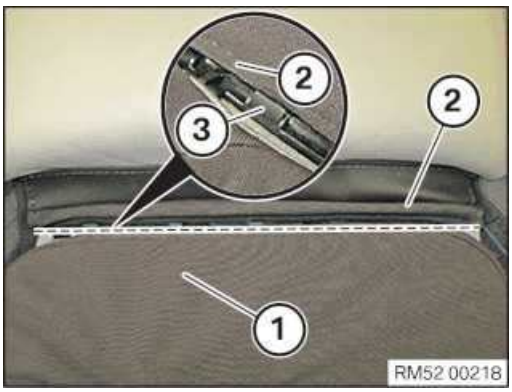


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

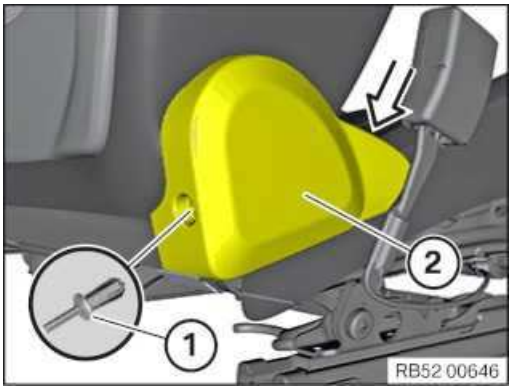
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

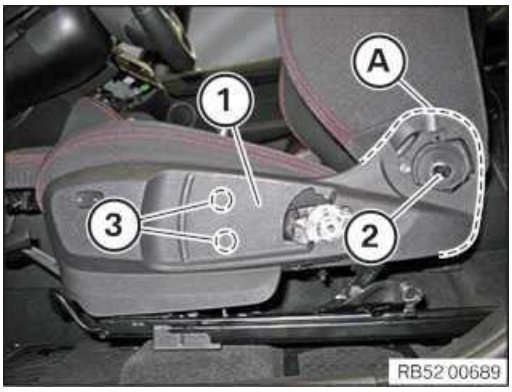
13 – Installing the inner cover on the front seat



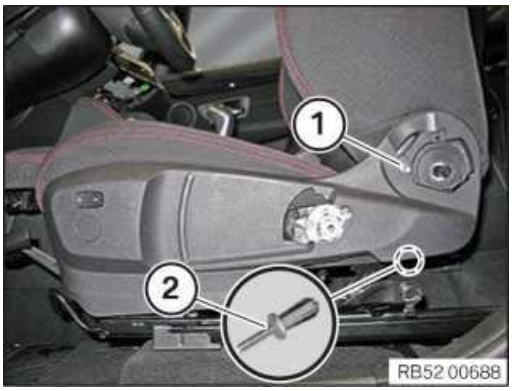
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

14 – Install the outside cover for the front seat (mechanical)

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- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



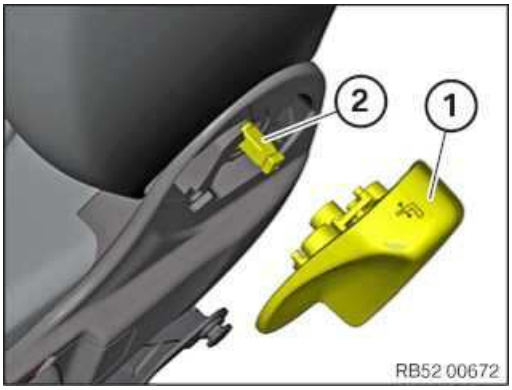
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

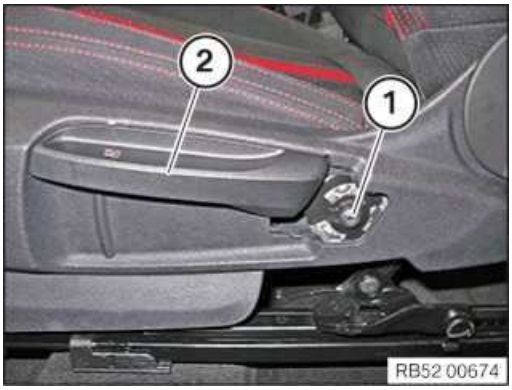
- Fasten expanding rivet (2).

15 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

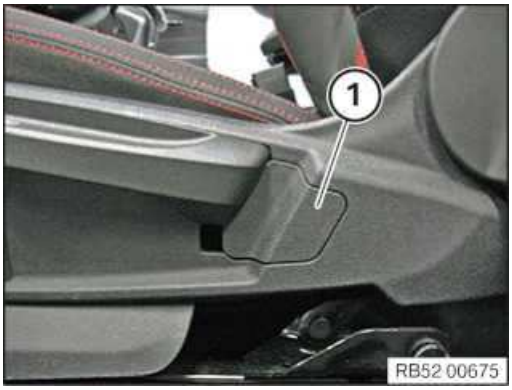
16 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

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17 – Install front seat

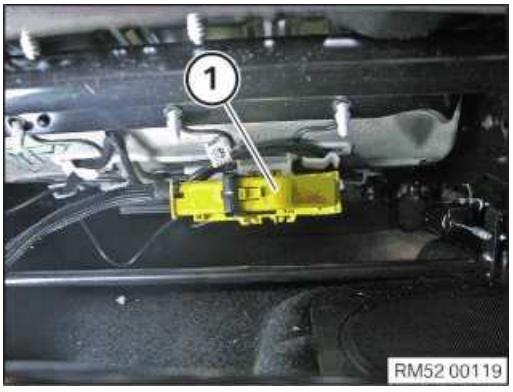
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



▶ **Removing the front seat from the universal seat mount .**

- Removing the seat from the special tool (universal seat mount) **2 154 711**.



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.

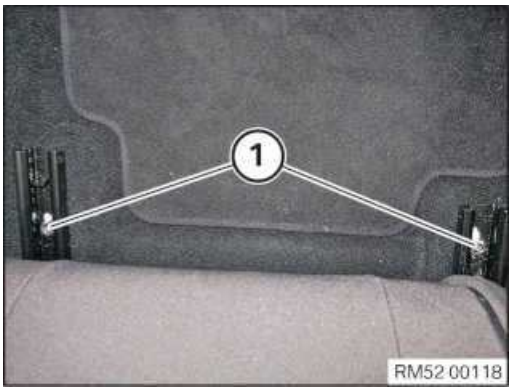
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

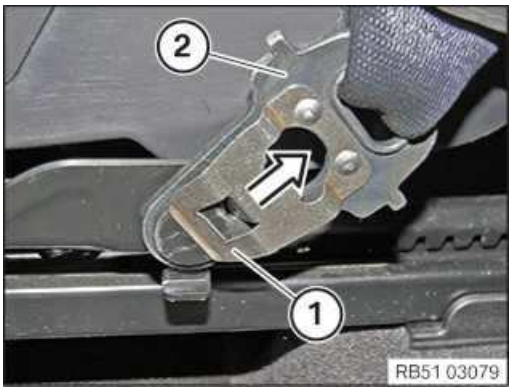
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

18 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

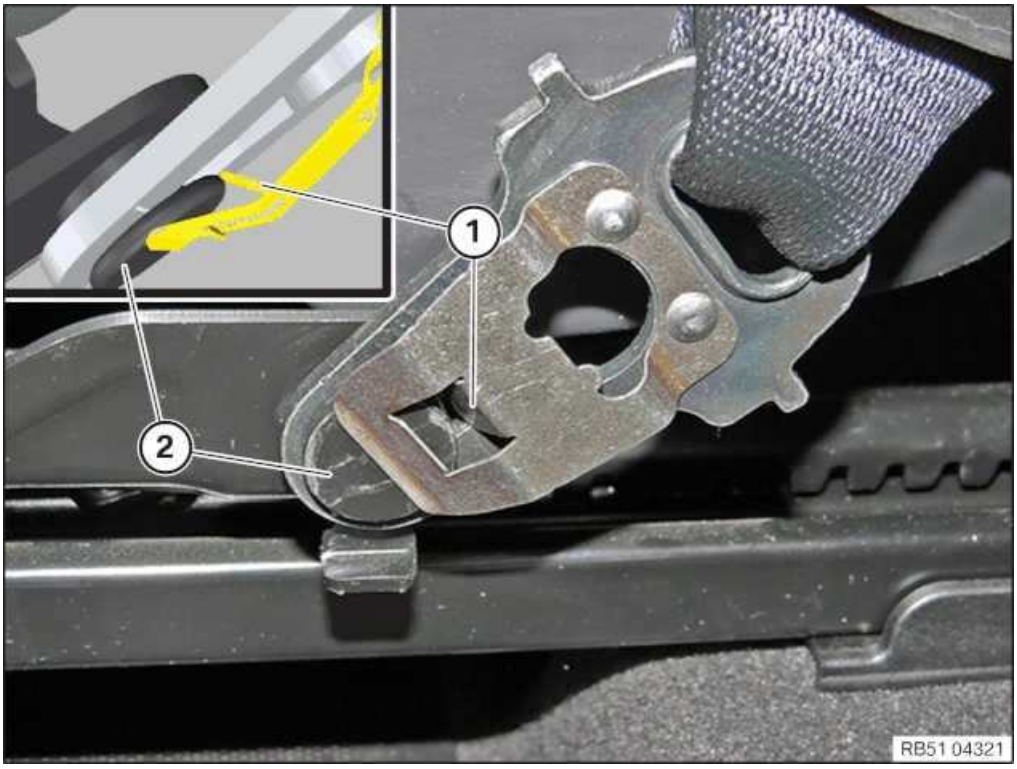
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Outer cover to front seat Used in step 14

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism Used in step 16

Screw		Tightening torque	19,5 Nm

Seat to body Used in step 17

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

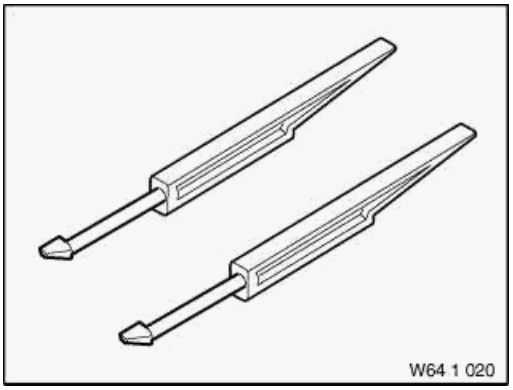
2 154 711 Fitting aid



Common Used in step 2 17

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 493 681 (64 1 020) Hook



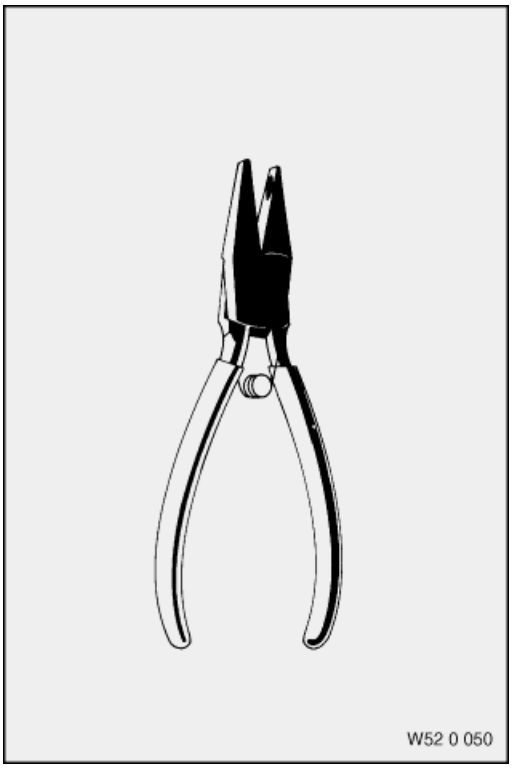
Common Used in step 4

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)

0 492 668 (52 0 050) Pliers

Used in step 10

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Common	
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17

61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	17
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
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52 15 404 Replacing seat cover for front passenger seat

NOTICE

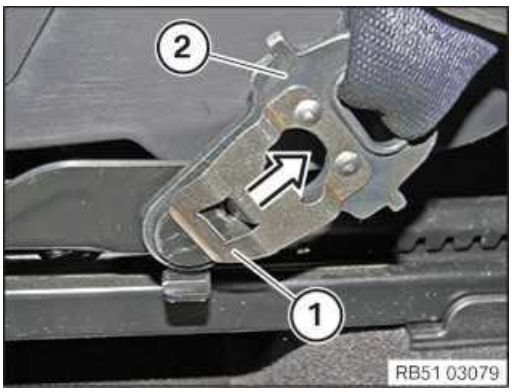
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

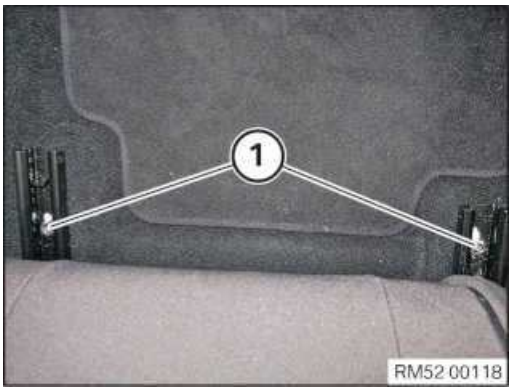
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



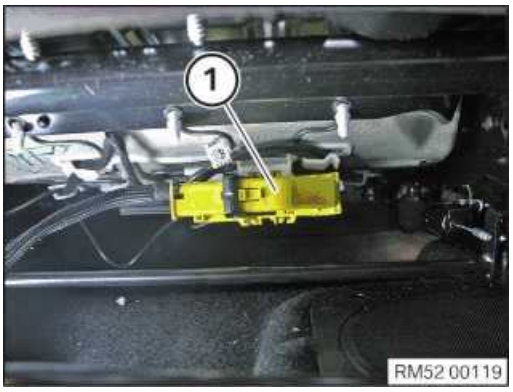
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

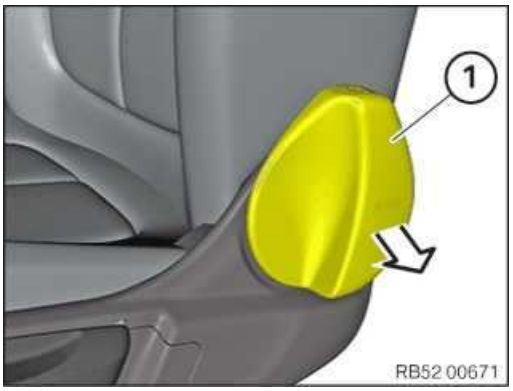
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

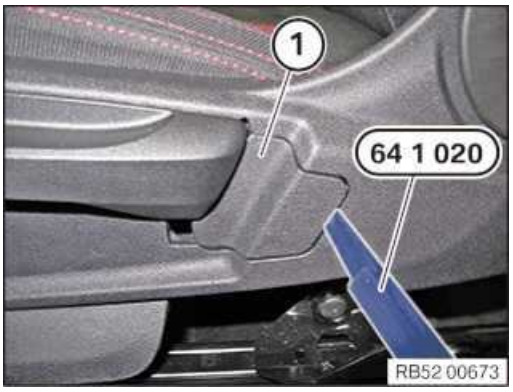
3 – Removing lever for backrest adjustment on front seat



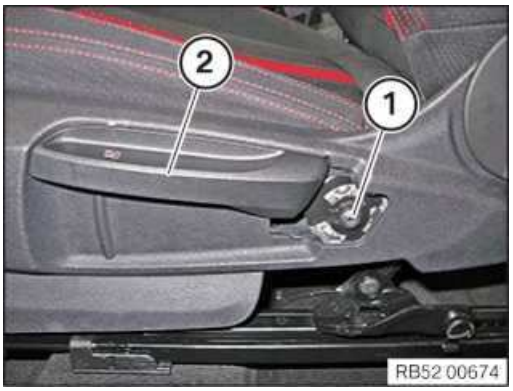
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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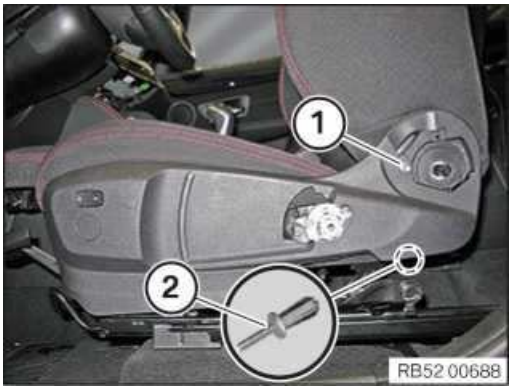


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

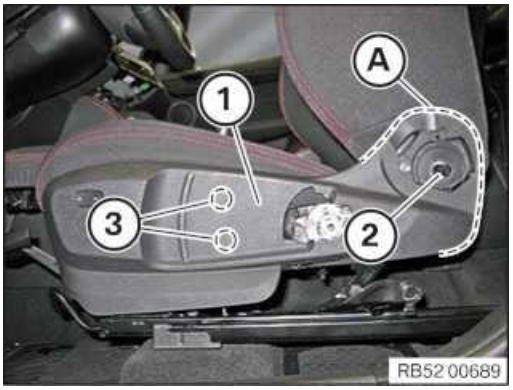


- Loosen screw (1).
- Remove the lever (2).

5 – Remove the outer cover of the front seat (mechanical)

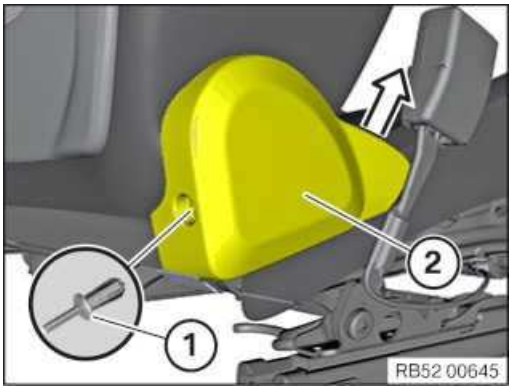


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

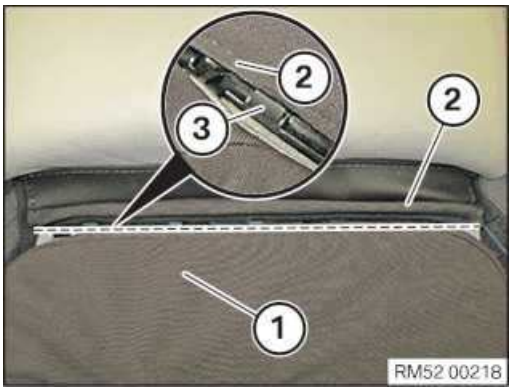
6 – Remove inner cover on front seat



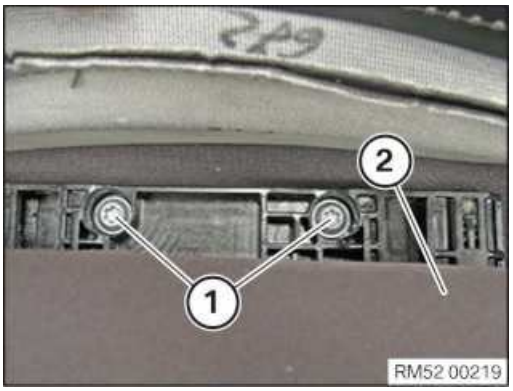
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

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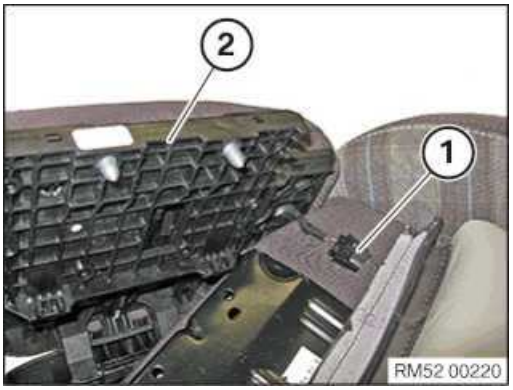
7 – Removing the thigh support on the front seat



- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

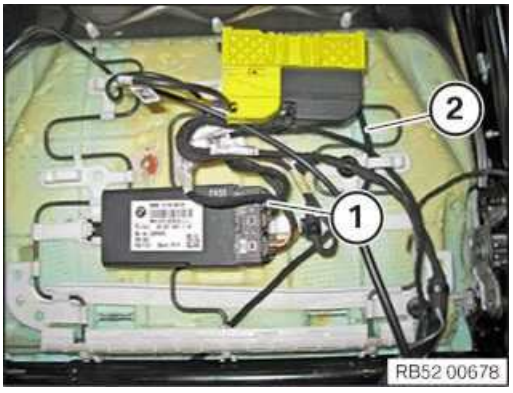


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

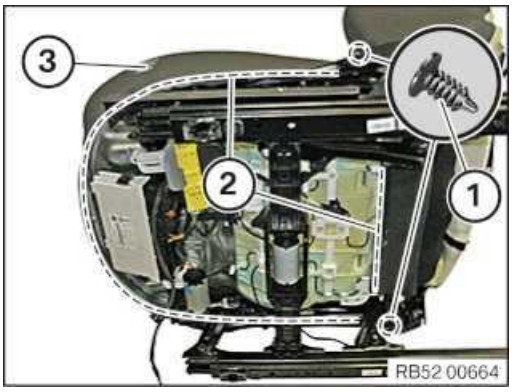


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

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- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

9 – Removing the seat cover for the front seat (sport)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

10 – Install the seat cover for the front seat (Sport)

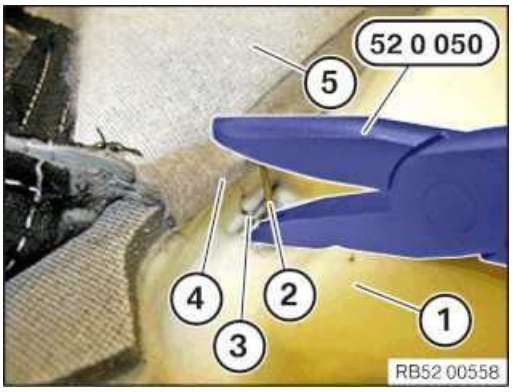
NOTICE

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



- Place the seat cover on the upholstery.
- Secure all trim wires with clamps.

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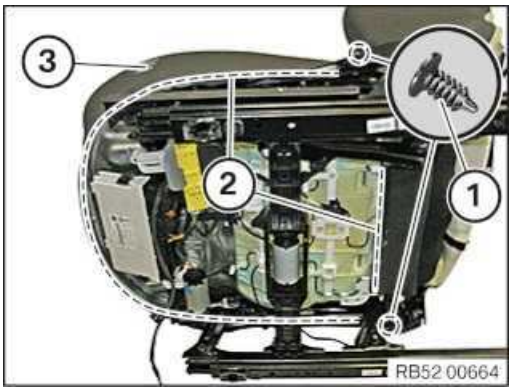
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

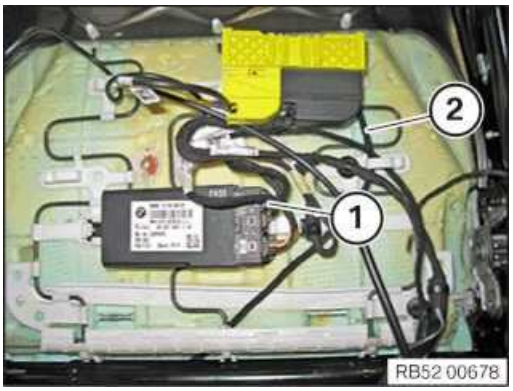
1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



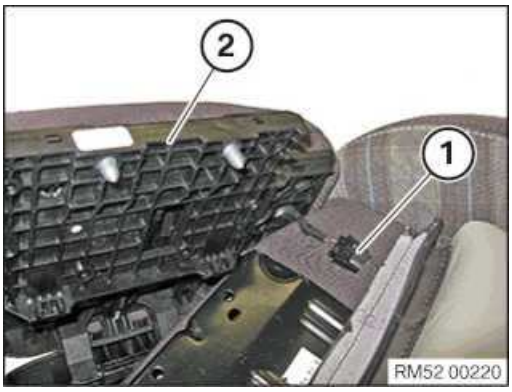
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



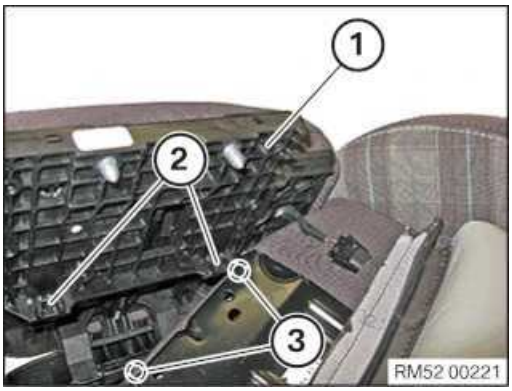
- Fasten retaining strap (1) to the seat mechanism at the left and right.

12 – Installing thigh support on the front seat

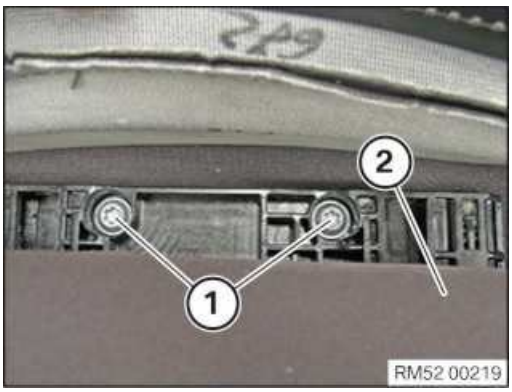
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- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

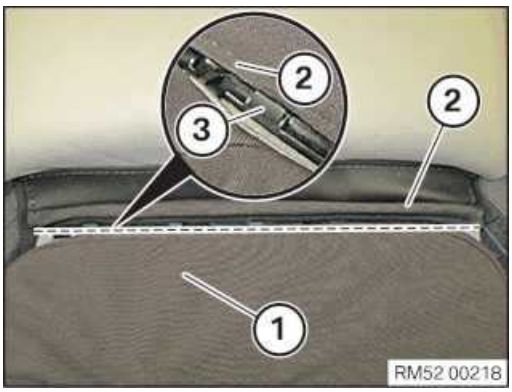


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

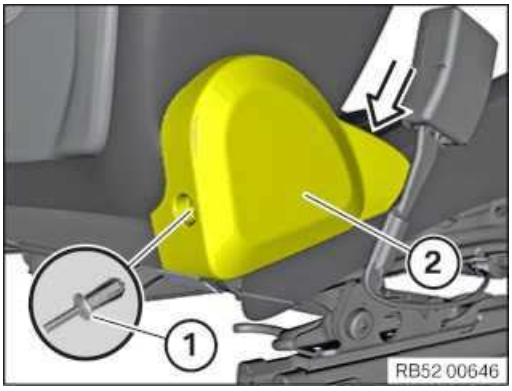
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

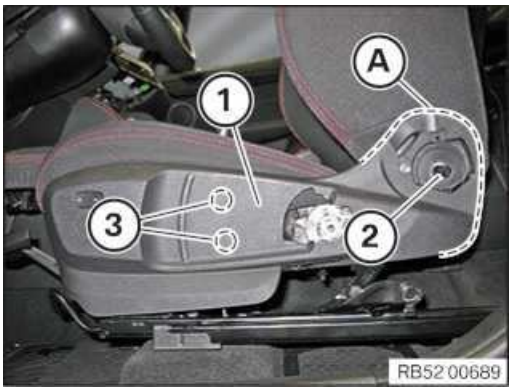
13 – Installing the inner cover on the front seat



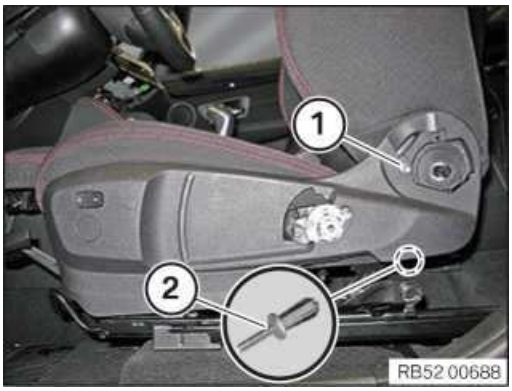
- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

14 – Install the outside cover for the front seat (mechanical)

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- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



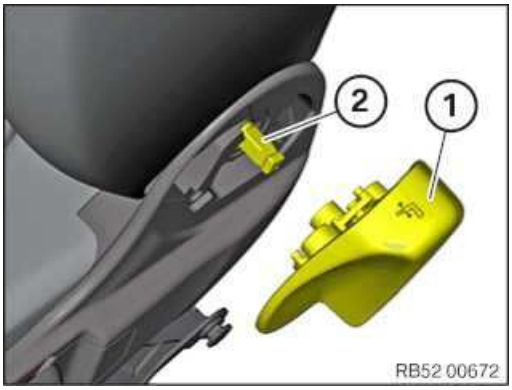
- Tighten down screw (1).

Outer cover to front seat

Screw		Tightening torque	1,5 Nm

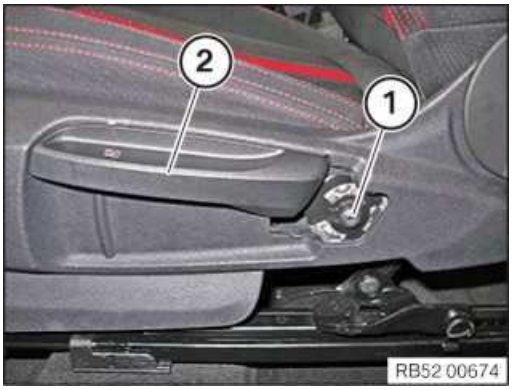
- Fasten expanding rivet (2).

15 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

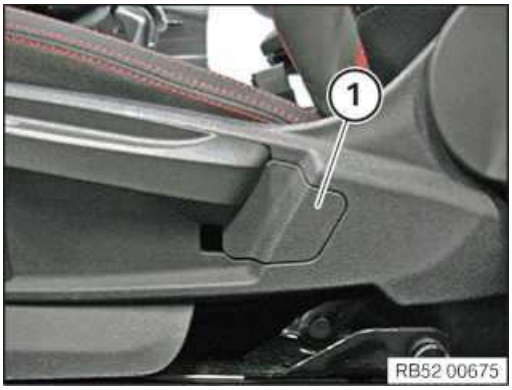
16 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

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17 – Install front seat

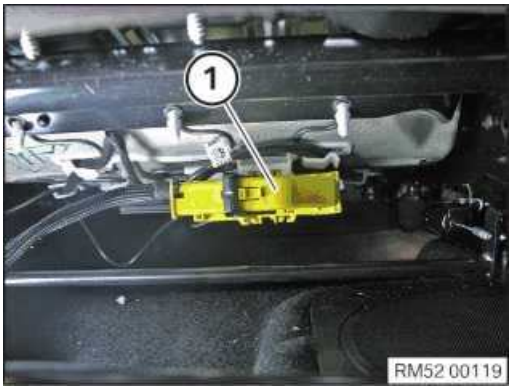
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.



▶ **Removing the front seat from the universal seat mount .**

- Removing the seat from the special tool (universal seat mount) **2 154 711**.



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.

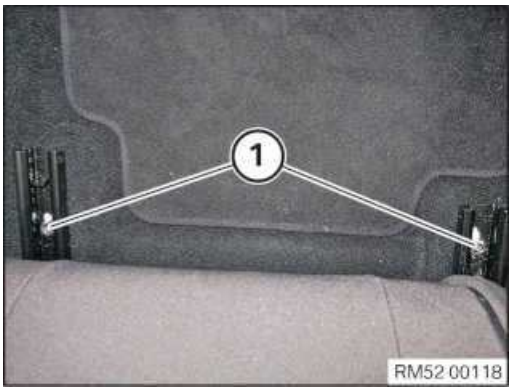
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

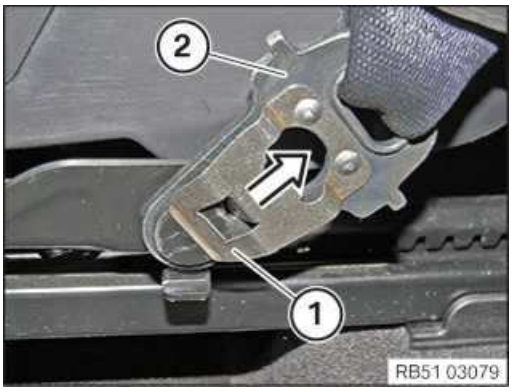
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

18 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

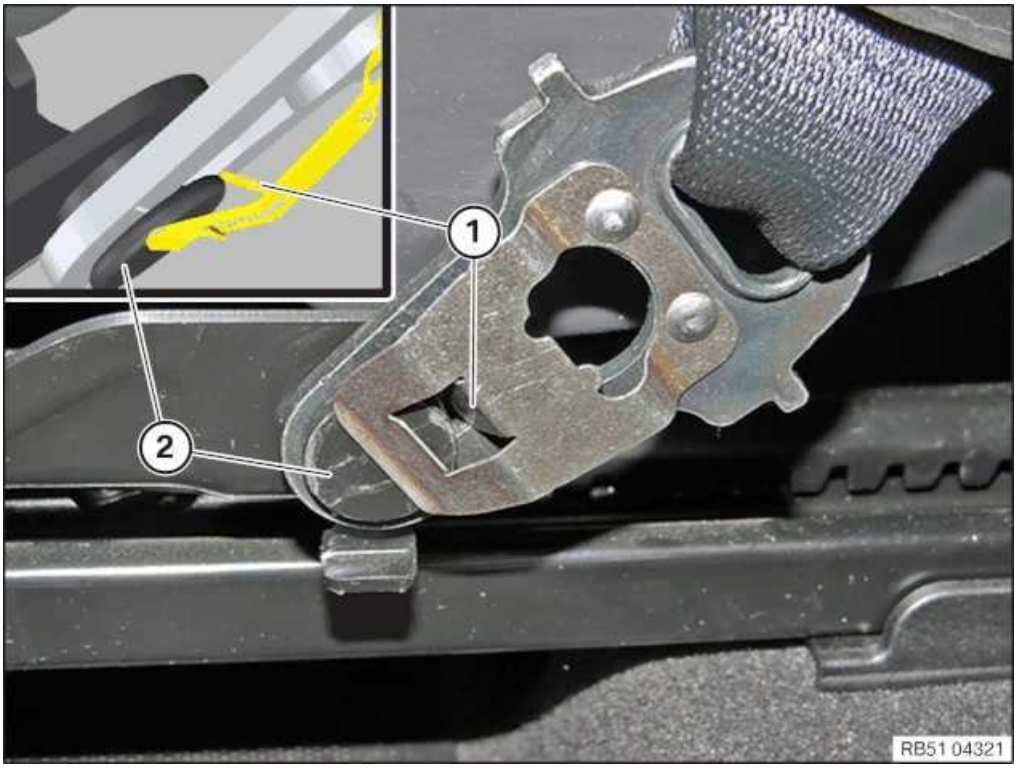
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Outer cover to front seat Used in step 14

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism Used in step 16

Screw		Tightening torque	19,5 Nm

Seat to body Used in step 17

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

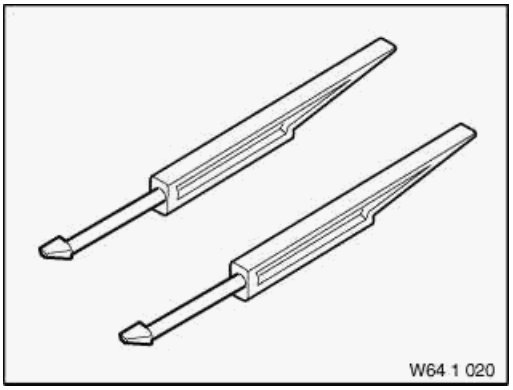
2 154 711 Fitting aid



Common Used in step 2 17

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

0 493 681 (64 1 020) Hook



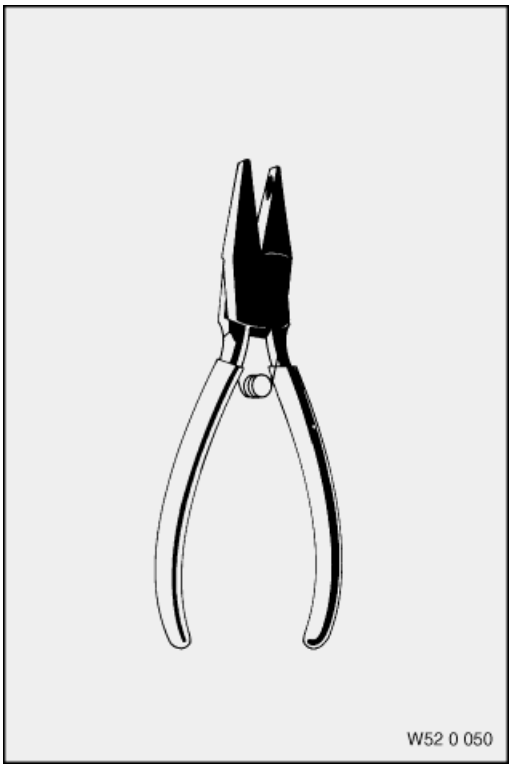
Common Used in step 4

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)

0 492 668 (52 0 050) Pliers

Used in step 10

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Common	
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17

61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	17
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
61 20 900 Disconnecting and connecting battery earth lead	2	17
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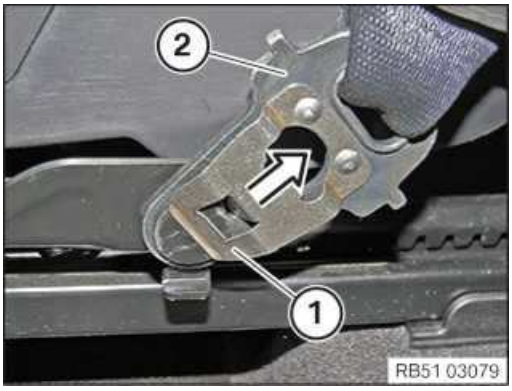
52 15 425 Replacing upholstery for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

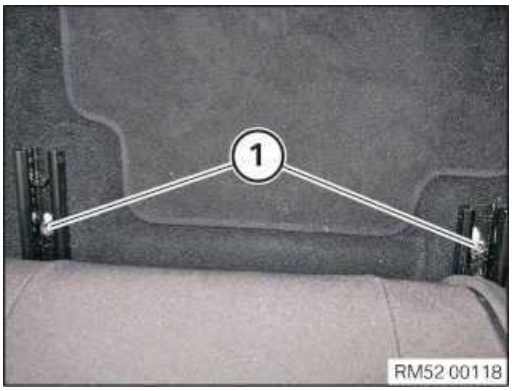
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



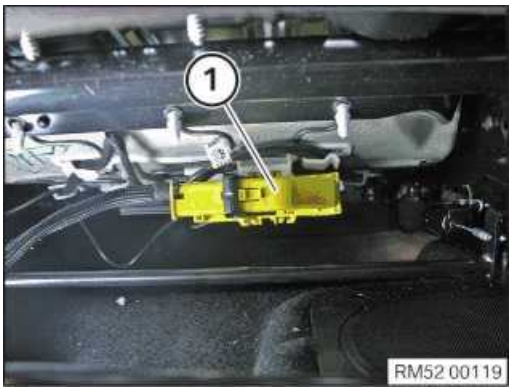
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

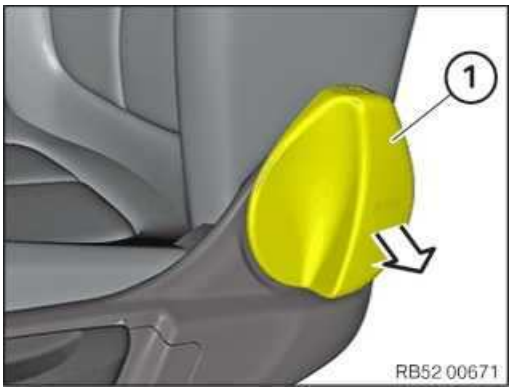
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

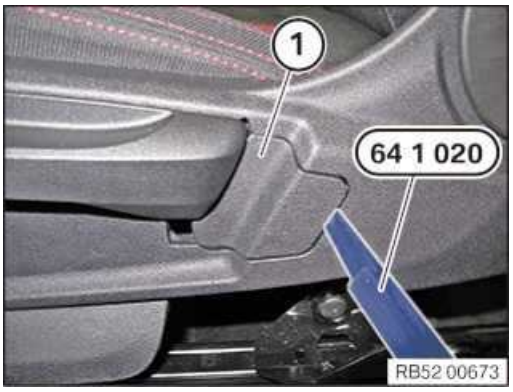
3 – Removing lever for backrest adjustment on front seat



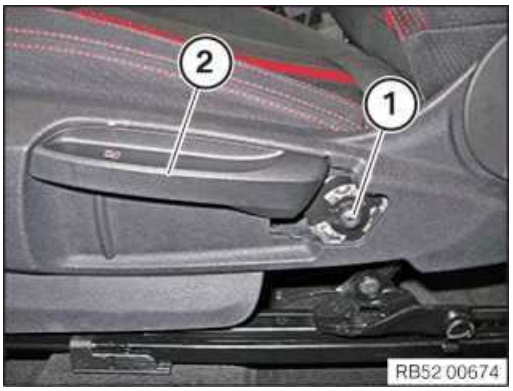
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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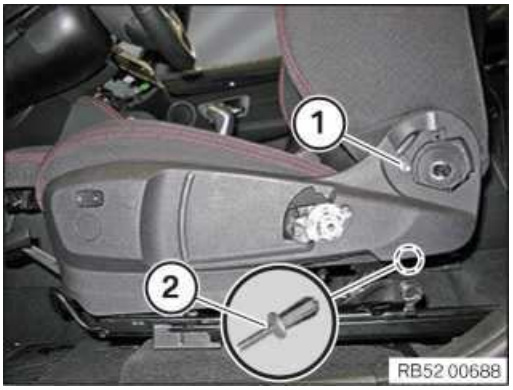


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

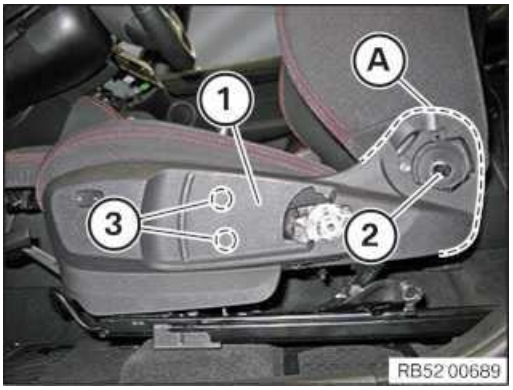


- Loosen screw (1).
- Remove the lever (2).

5 – Remove the outer cover of the front seat (mechanical)

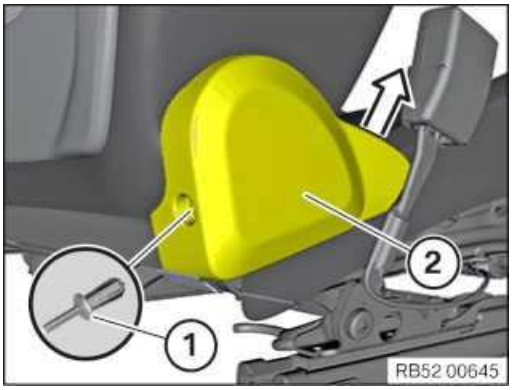


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

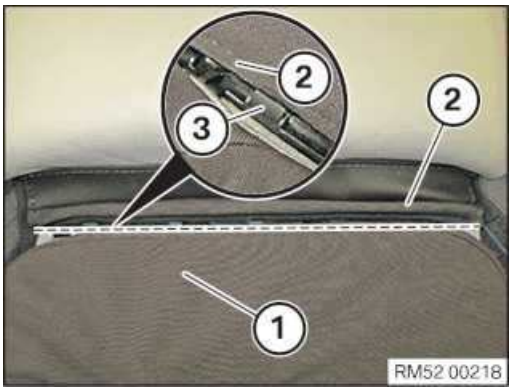
6 – Remove inner cover on front seat



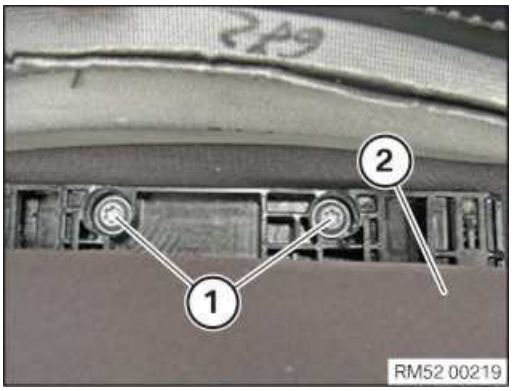
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

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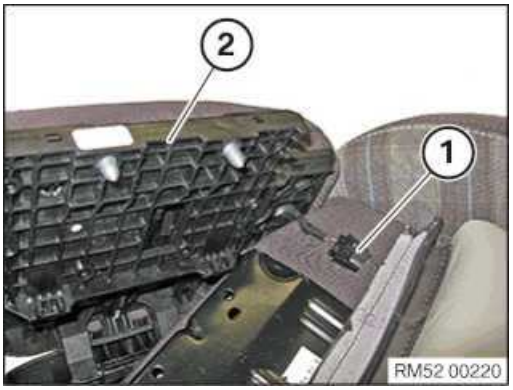
7 – Removing the thigh support on the front seat



- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

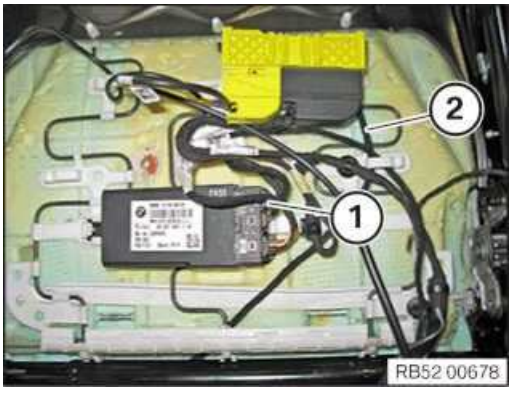


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

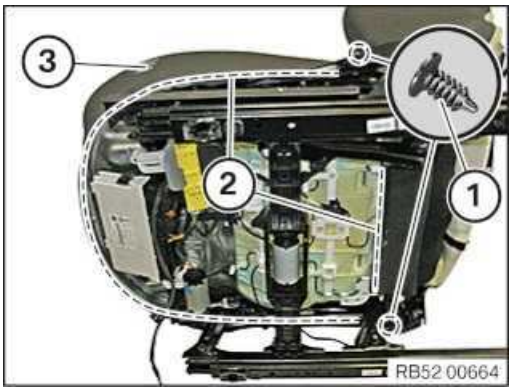


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

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- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

9 – Removing the seat cover for the front seat (sport)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

10 – Renewing cushion for front seat

TECHNICAL INFORMATION

Only US/Canadian version of front passenger seat with seat occupancy mat (CIS):

The seat occupancy mat is bonded to the entire surface of the upholstery and can only be replaced together with the upholstery.

If the seat occupancy mat or upholstery is defective, both parts must always be replaced together.

Full operability can only be guaranteed with the Original BMW replacement part.

After fitting the seat cover, enable the seat occupancy mat using the BMW programming system.

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.

When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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

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- **Equipment specification with seat heating**

  Position the heating mat (1) on the cushion and align.

  Bond the heating mat (1) to the cushion in these areas (2).

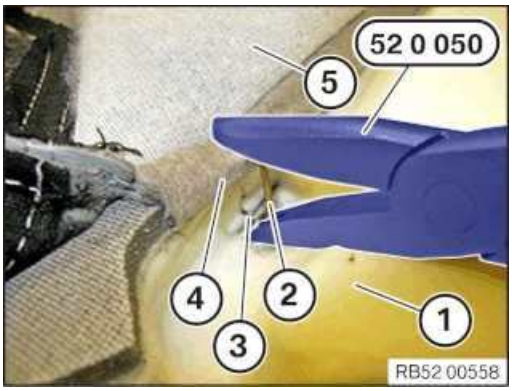
11 – Install the seat cover for the front seat (Sport)

NOTICE

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



- Place the seat cover on the upholstery.
- Secure all trim wires with clamps.



- Renew the clamps (2).

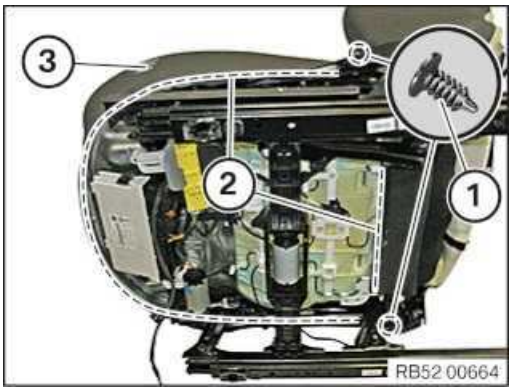
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

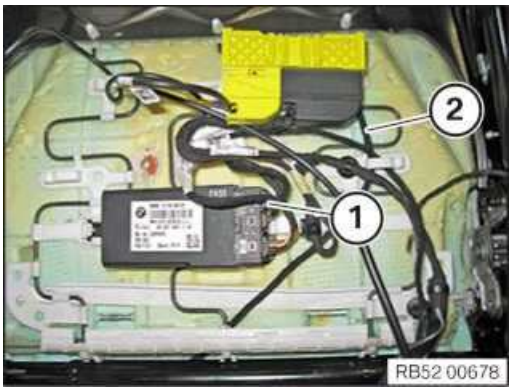
POSTPROCESSES

12 – Fit the seat cover with the upholstery for the front seat

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- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

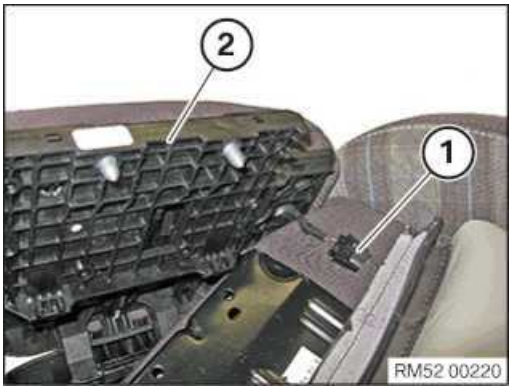


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.

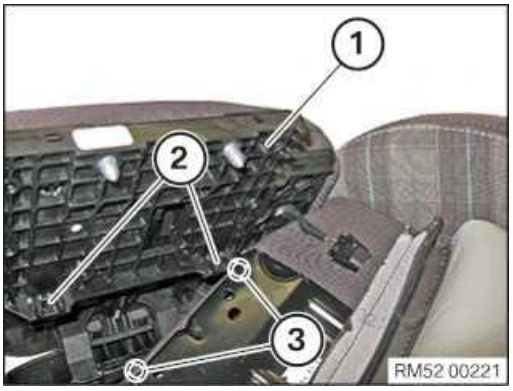


- Fasten retaining strap (1) to the seat mechanism at the left and right.

13 – Installing thigh support on the front seat

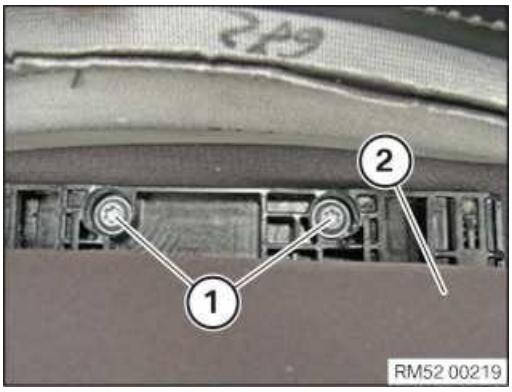


- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

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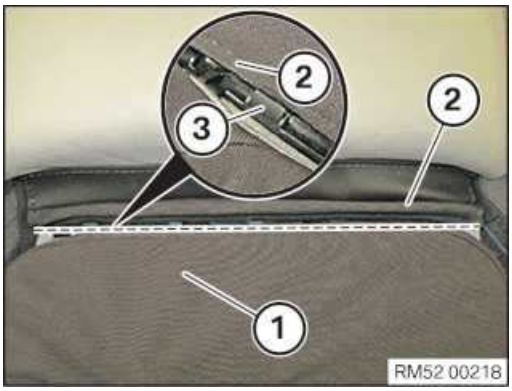


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

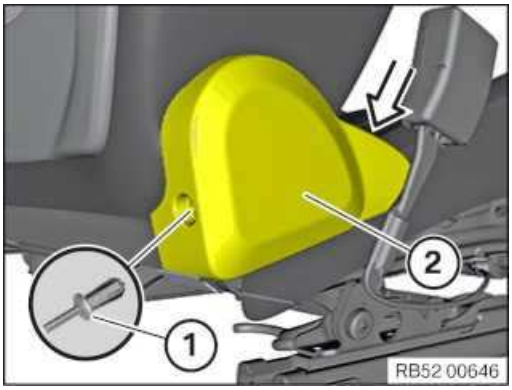
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



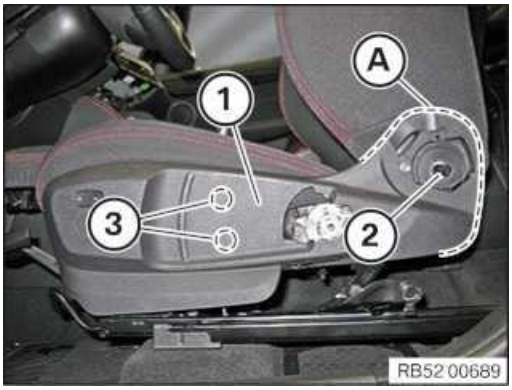
- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

14 – Installing the inner cover on the front seat

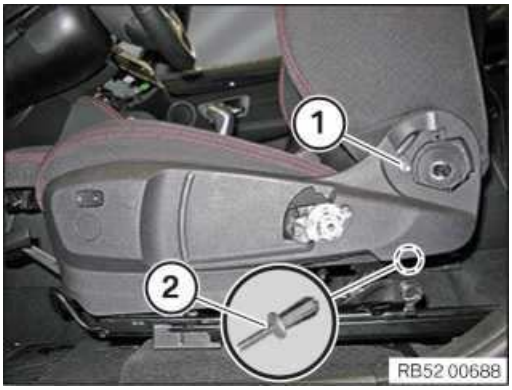


- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

15 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



- Tighten down screw (1).

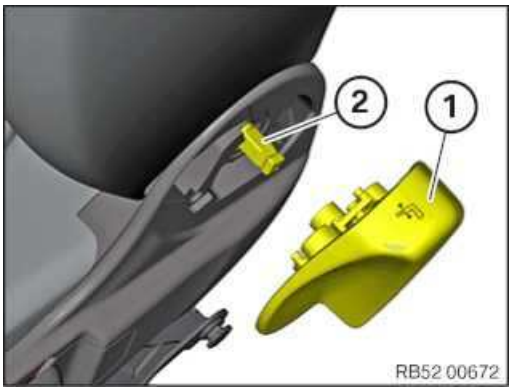
Outer cover to front seat

Screw		Tightening torque	1,5 Nm

- Fasten expanding rivet (2).

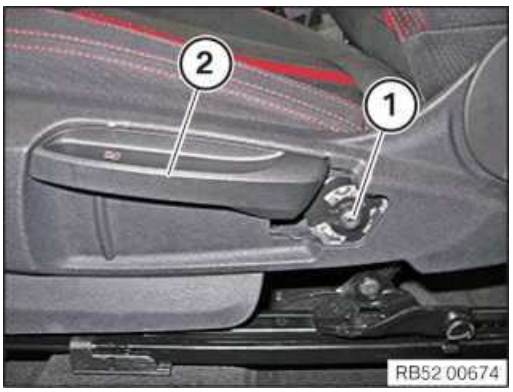
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16 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

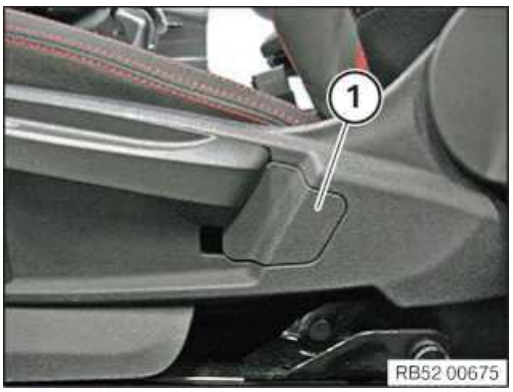
17 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

18 – Install front seat

TECHNICAL INFORMATION

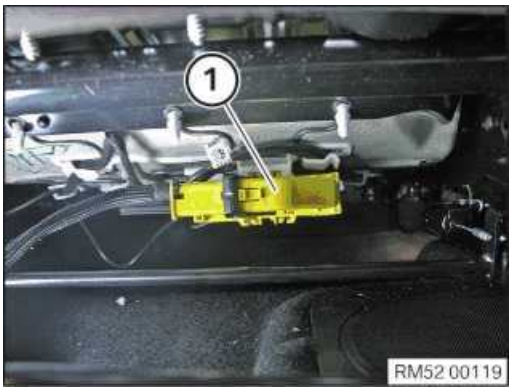
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

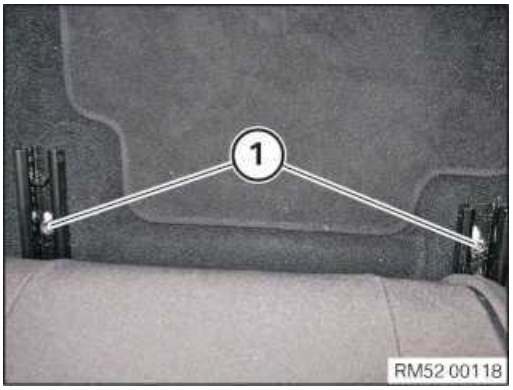
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

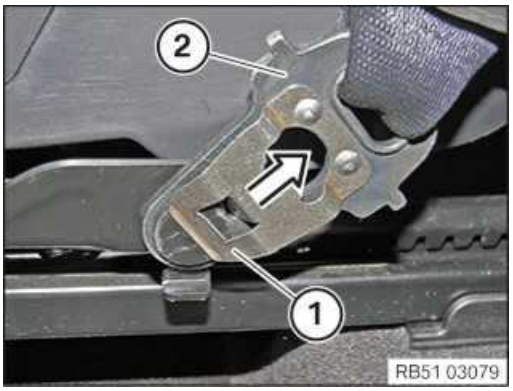
▸ **Disconnecting all battery earth leads**

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- See additional information.

19 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

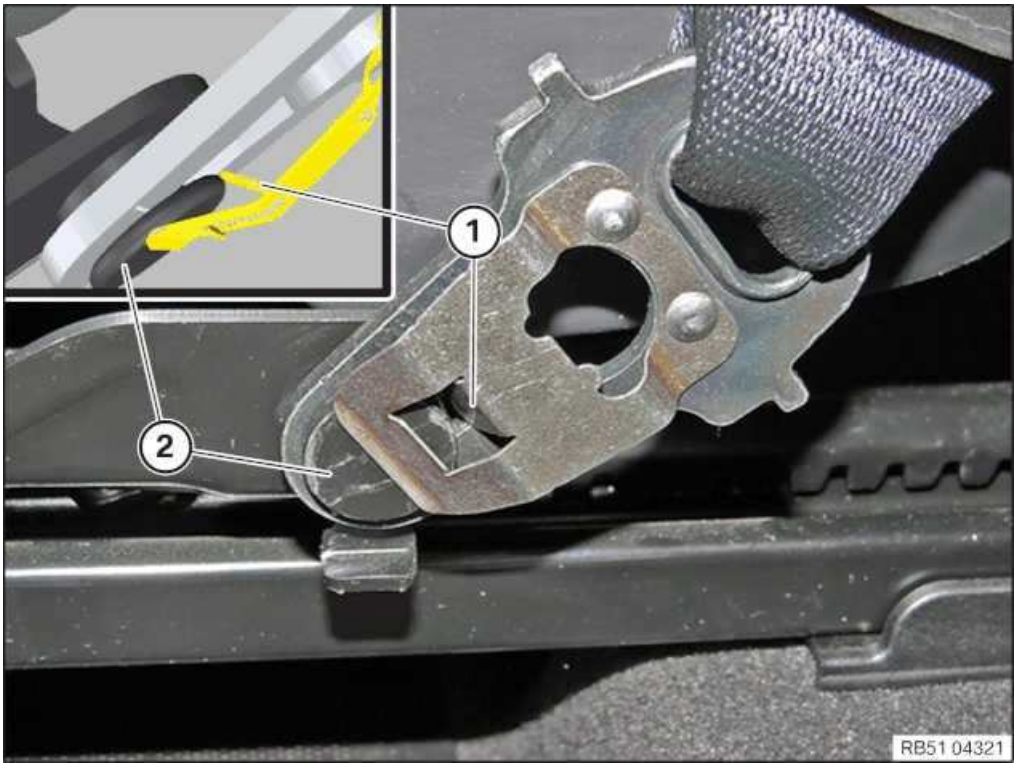
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Outer cover to front seat — Used in step 15

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 17

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 18

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

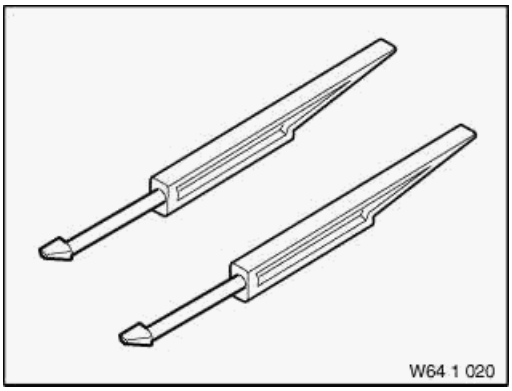
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2 154 711 Fitting aid



Common	Used in step 2 18
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

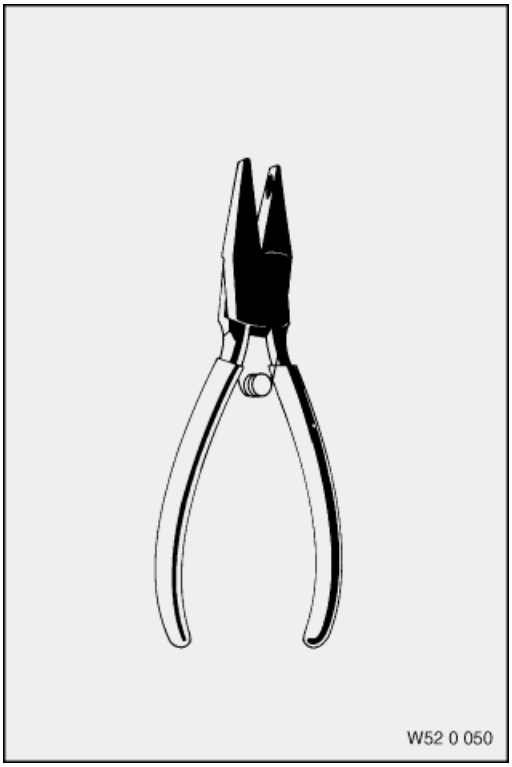
0 493 681 (64 1 020) Hook



Common	Used in step 4
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)

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0 492 668 (52 0 050) Pliers



Common

Used in step 11

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 18
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52 15 426 Replacing upholstery for front passenger seat

NOTICE

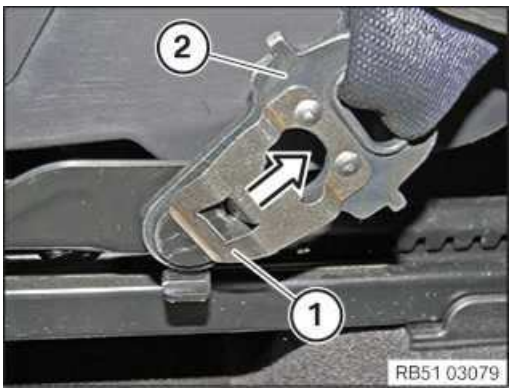
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

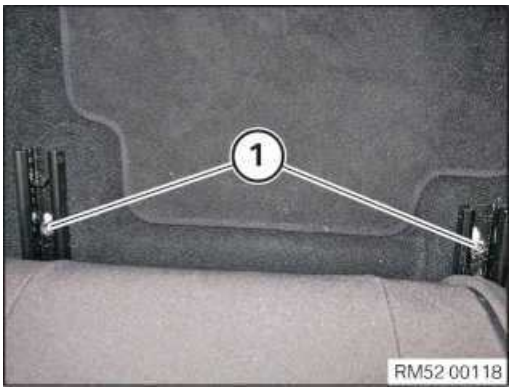
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



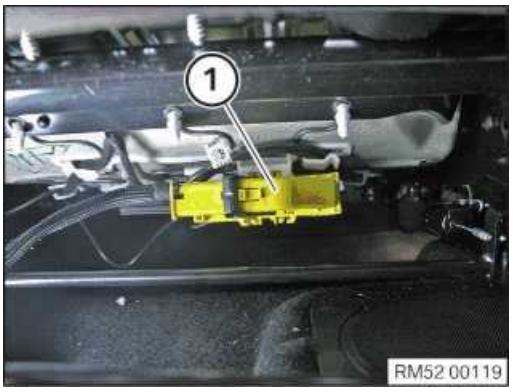
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

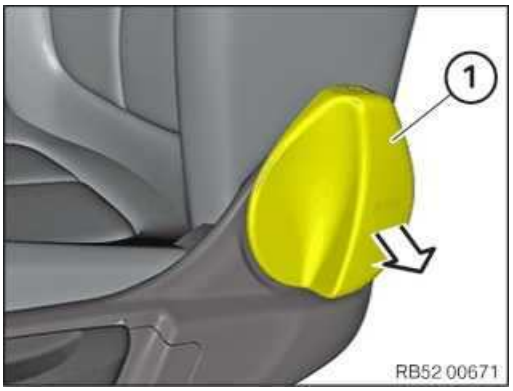
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

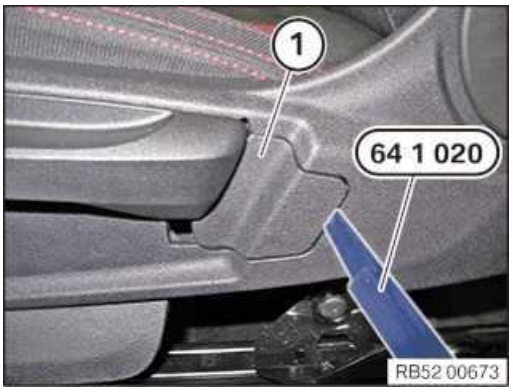
3 – Removing lever for backrest adjustment on front seat



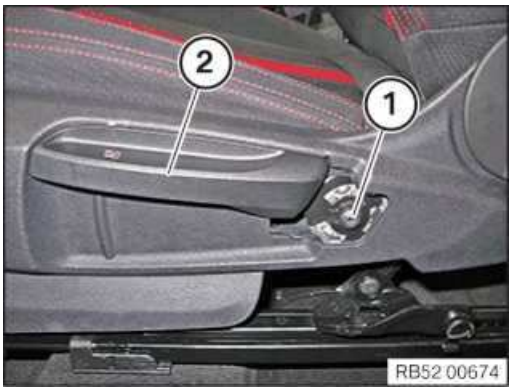
- Unclip the lever (1) outwards.

4 – Remove lever for seat height adjustment on front seat

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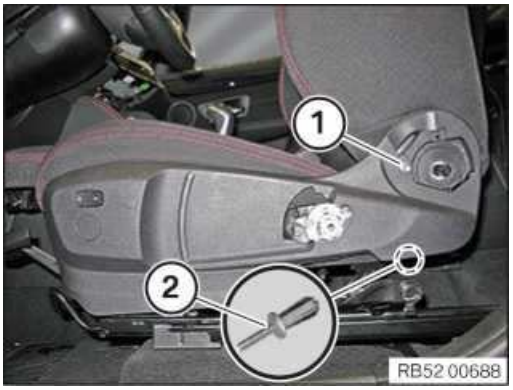


- Unclip the cover (1) with the special tool **0 493 681 (64 1 020)**.

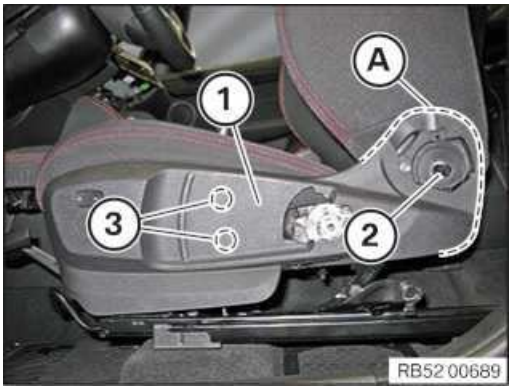


- Loosen screw (1).
- Remove the lever (2).

5 – Remove the outer cover of the front seat (mechanical)

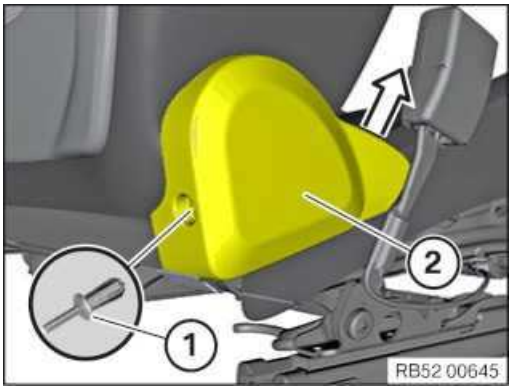


- Loosen screw (1).
- Loosen expanding rivet (2).



- Lift the cover (1) in area (A) over the shaft (2).
- Detach the cover (1) forwards from the guides (3).
- Disconnect existing plug connections where required.

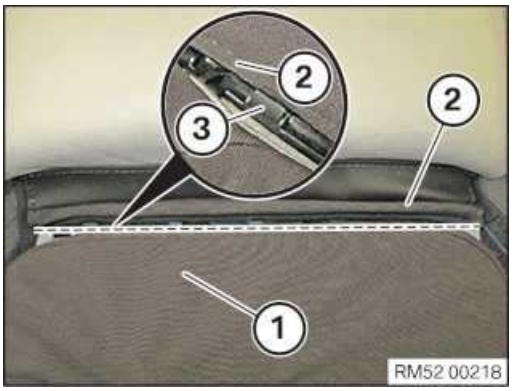
6 – Remove inner cover on front seat



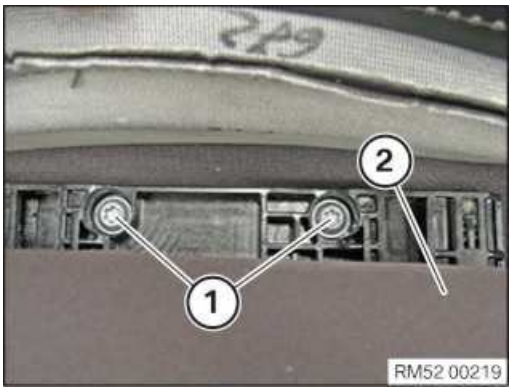
- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

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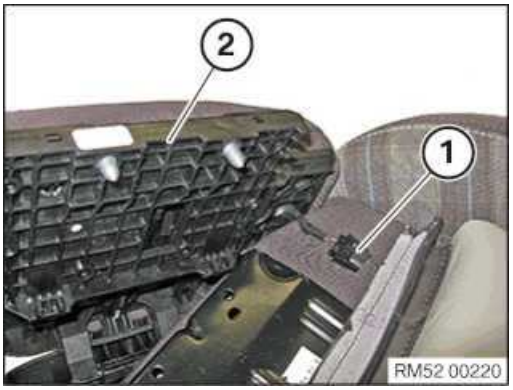
7 – Removing the thigh support on the front seat



- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

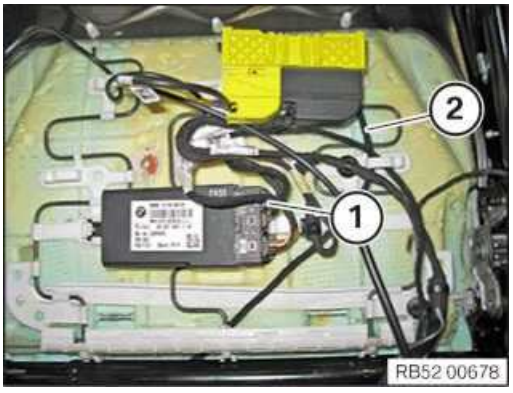


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

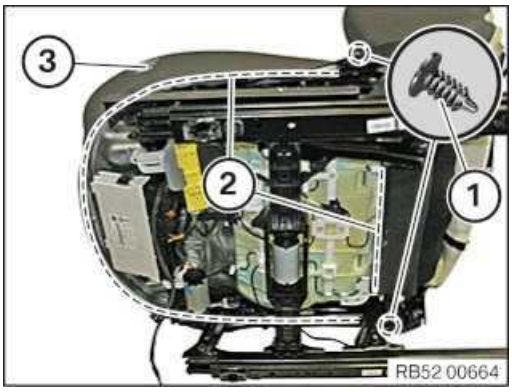


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

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- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

9 – Removing the seat cover for the front seat (sport)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

10 – Renewing cushion for front seat

TECHNICAL INFORMATION

Only US/Canadian version of front passenger seat with seat occupancy mat (CIS):

The seat occupancy mat is bonded to the entire surface of the upholstery and can only be replaced together with the upholstery.

If the seat occupancy mat or upholstery is defective, both parts must always be replaced together.

Full operability can only be guaranteed with the Original BMW replacement part.

After fitting the seat cover, enable the seat occupancy mat using the BMW programming system.

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.

When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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

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- **Equipment specification with seat heating**

  Position the heating mat (1) on the cushion and align.

  Bond the heating mat (1) to the cushion in these areas (2).

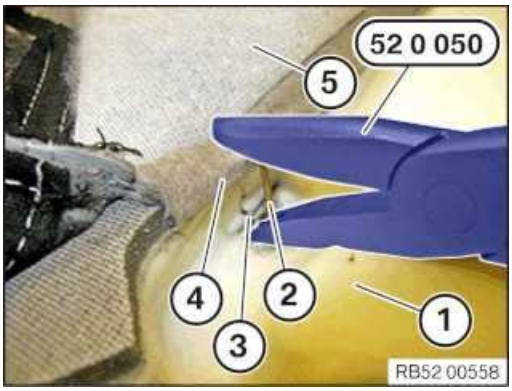
11 – Install the seat cover for the front seat (Sport)

NOTICE

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



- Place the seat cover on the upholstery.
- Secure all trim wires with clamps.



- Renew the clamps (2).

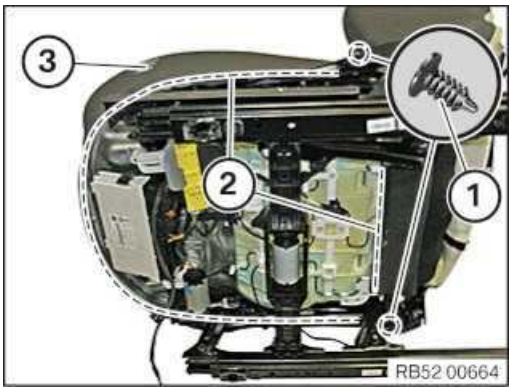
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

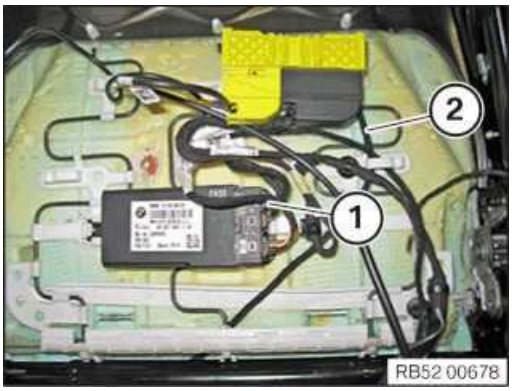
POSTPROCESSES

12 – Fit the seat cover with the upholstery for the front seat

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- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

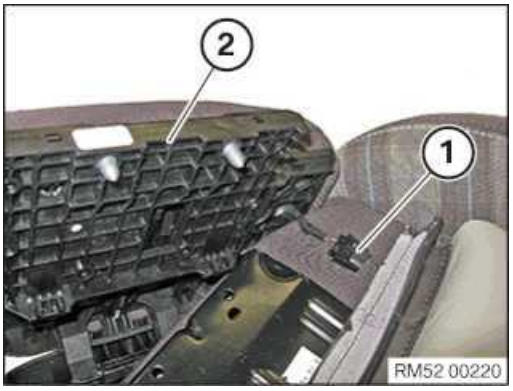


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.

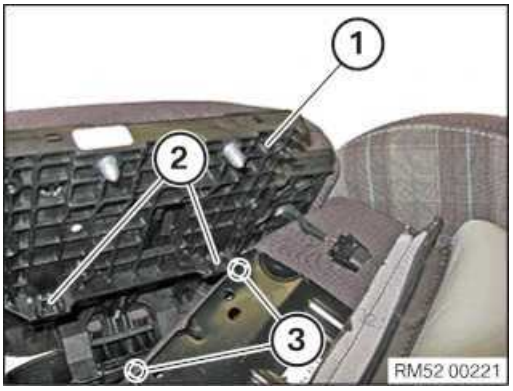


- Fasten retaining strap (1) to the seat mechanism at the left and right.

13 – Installing thigh support on the front seat

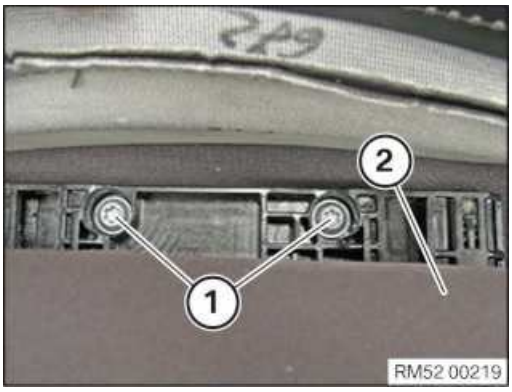


- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

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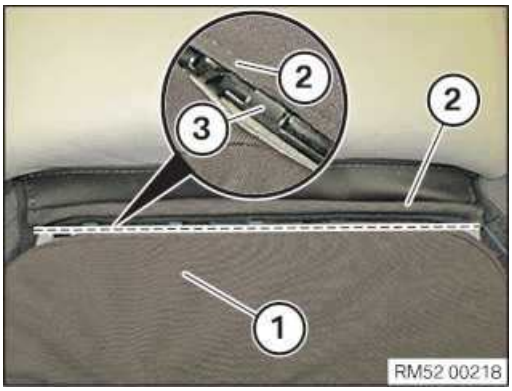


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

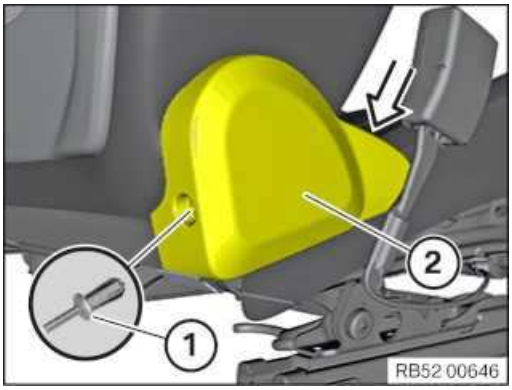
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



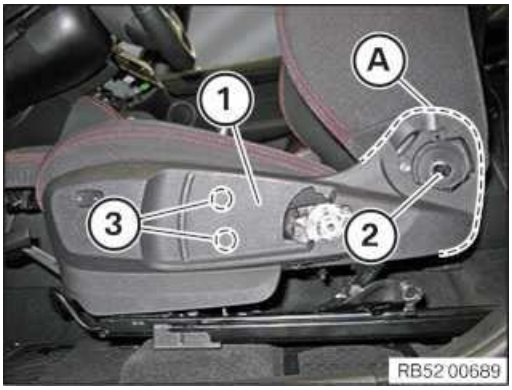
- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

14 – Installing the inner cover on the front seat

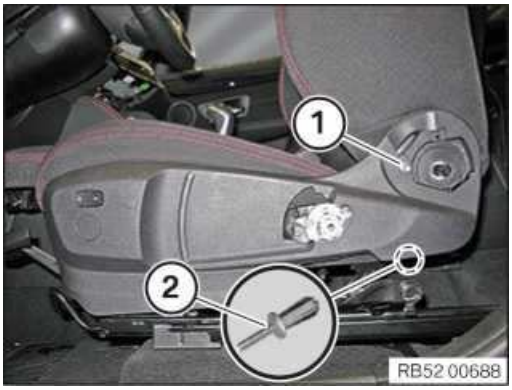


- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

15 – Install the outside cover for the front seat (mechanical)



- If necessary, connect any available plug connections.
- Attach the cover (1) in front at the guides (3).
- Raise the cover (1) in area (A) over the shaft (2).



- Tighten down screw (1).

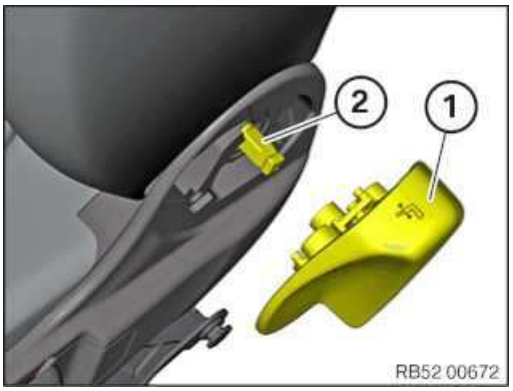
Outer cover to front seat

Screw		Tightening torque	1,5 Nm

- Fasten expanding rivet (2).

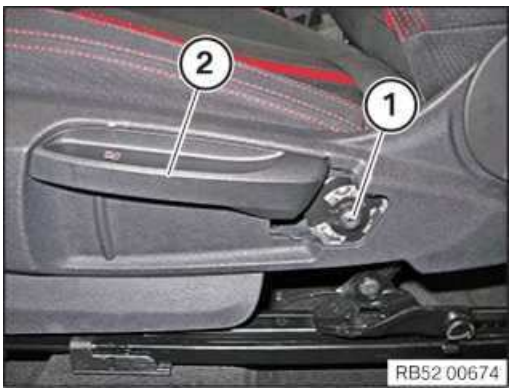
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16 – Install lever for backrest adjustment on the front seat



- Attach lever (1) to the shaft (2) and engage.

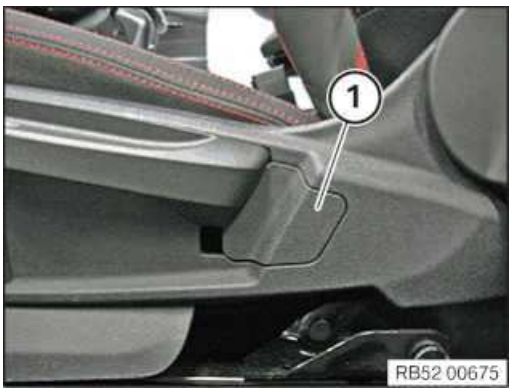
17 – Install the lever for the seat height adjustment on the front seat



- Position the lever (2).
- Tighten down screw (1).

Lever for seat height adjustment on seat mechanism

Screw		Tightening torque	19,5 Nm



- Clip in the cover (1) .

18 – Install front seat

TECHNICAL INFORMATION

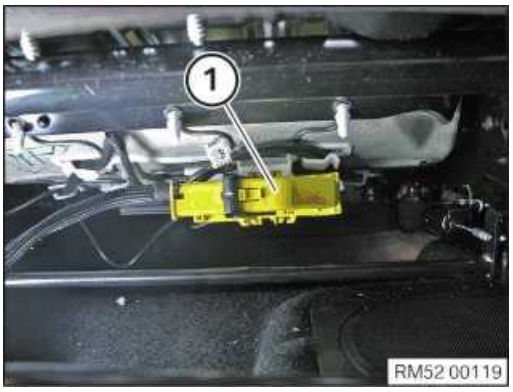
Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

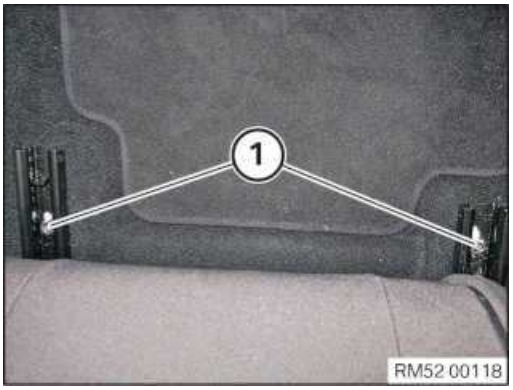
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

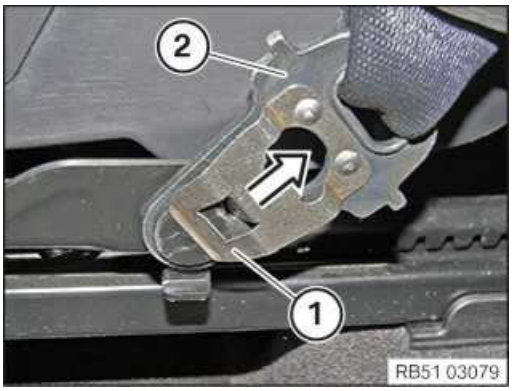
▸ **Disconnecting all battery earth leads**

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- See additional information.

19 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

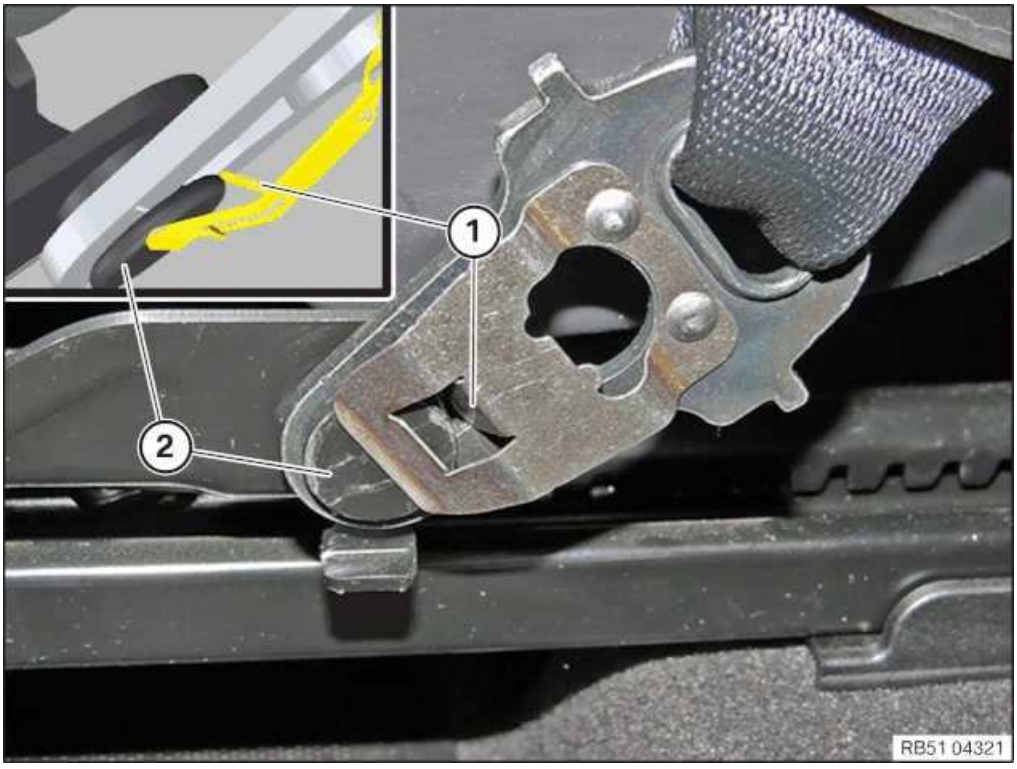
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Outer cover to front seat — Used in step 15

Screw		Tightening torque	1,5 Nm

Lever for seat height adjustment on seat mechanism — Used in step 17

Screw		Tightening torque	19,5 Nm

Seat to body — Used in step 18

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

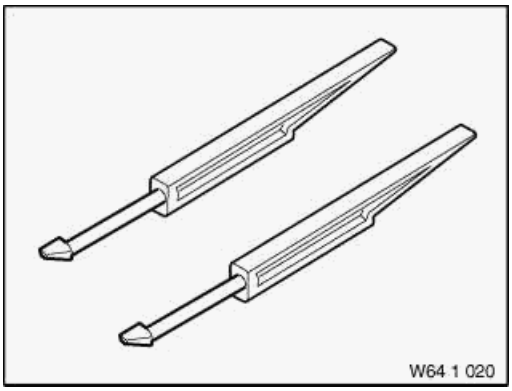
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2 154 711 Fitting aid



Common	Used in step 2 18
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

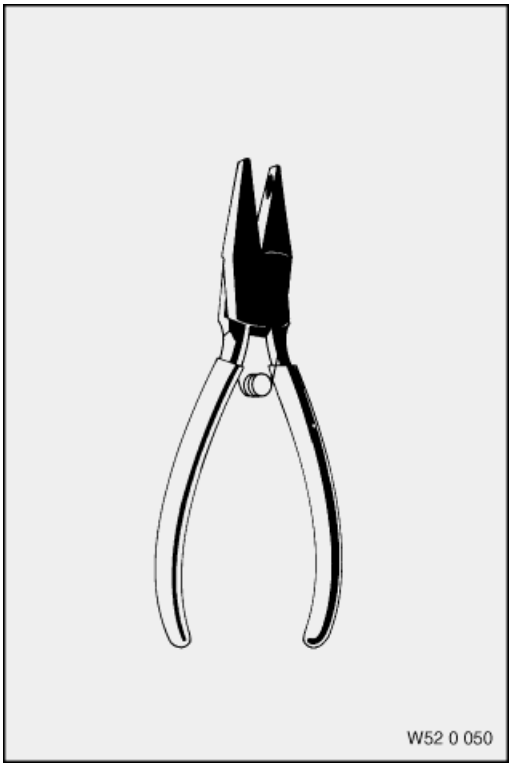
0 493 681 (64 1 020) Hook



Common	Used in step 4
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)

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0 492 668 (52 0 050) Pliers



Common

Used in step 11

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

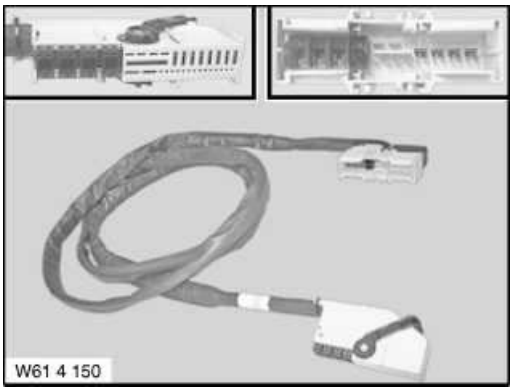
Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
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61 20 900 Disconnecting and connecting battery earth lead	2 18
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61 20 900 Disconnecting and connecting battery earth lead	2 18
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61 20 900 Disconnecting and connecting battery earth lead	2 18

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52 14 ... Performing function check with adapter cable (for seat repairs)

Special tools required:

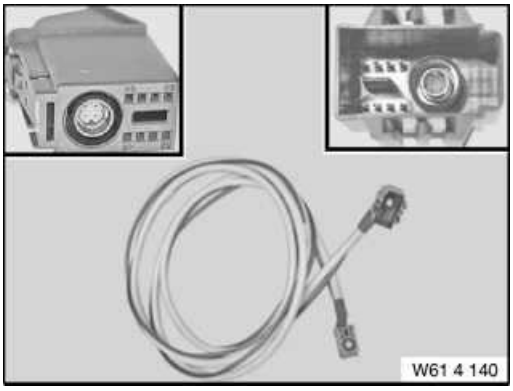
- 61 4 140
- 61 4 150



Seat function check: *Note:*
The function check on a repaired driver's or front passenger seat can be performed outside the vehicle by using adapter cable 61 4 150 .

Application:

Adapter cable is connected to vehicle wiring harness and removed seat 61 4 150 .



RSE (rear passenger compartment monitor) function check *Note:*
The function check of the RSE (rear passenger compartment monitor) on a repaired driver's or front passenger seat can be performed outside the vehicle by using adapter cable 61 4 140 .

Application:

Adapter cable is connected to vehicle wiring harness and removed seat 61 4 140 .

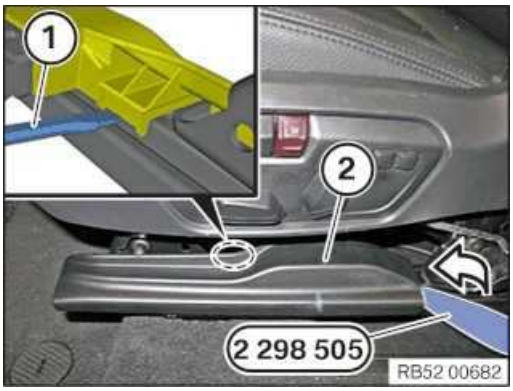
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52 13 ... Remove and install/replace trim on left or right front seat

Special tools required:

- 2 298 505

Removal:

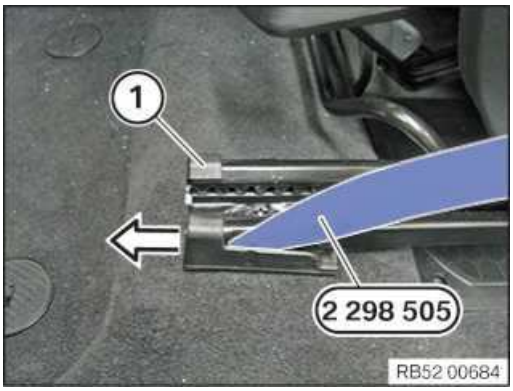


Side trim (for electric seat):

Slide screwdriver (1) from rear into marked area under the trim (2).

Raise trim (2) slightly using screwdriver (1).

Position special tool 2 298 505 at rear onto trim (1) and unclip forwards.

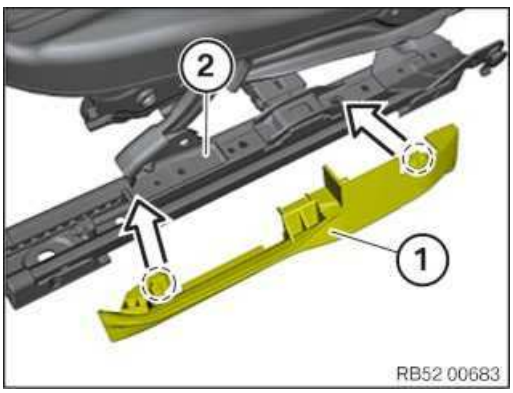


Seat rail trim:

Insert special tool 2 298 505 at side into trim (1).

Unclip cover (1) towards front.

Installation:

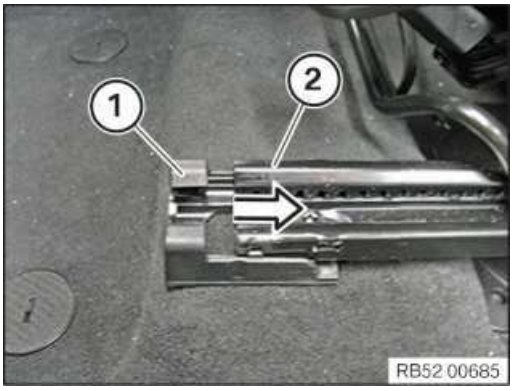


Side trim (for electric seat):

Position trim (1) from front with guides onto seat mechanism (2).

Clip trim (1) to rear into seat mechanism (2).

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Seat rail trim:

Slide trim (1) from front onto seat rail (2).

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52 13 ... Removing and installing/exchanging guide for left or right front seat head restraint

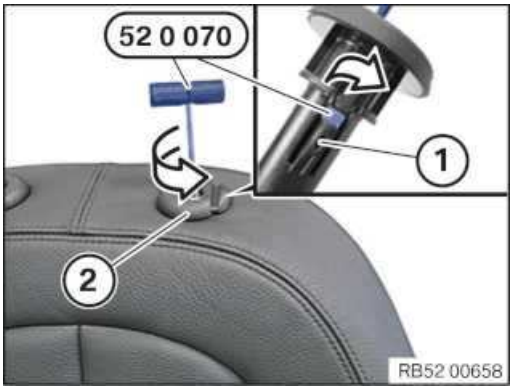
Special tools required:

- 52 0 070

Necessary preliminary tasks:

- Remove head restraint

Removal:

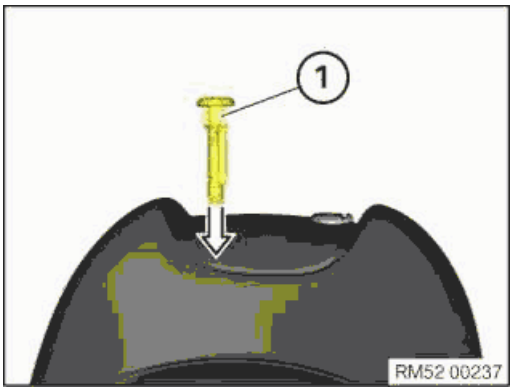


Insert special tool 52 0 070 into guide hole of sleeve (2) up to upper area of retaining lug.

Feed in unlocking tab of special tool behind the latch mechanism (1).

Turn tool to release sleeve (2) and pull out by lifting upwards.

Installation:



Insert guide (1) from above and engage.

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Required reworking:

- Install head restraint

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52 16 526 Removing and installing/replacing seat mechanism on left or right front seat

NOTICE

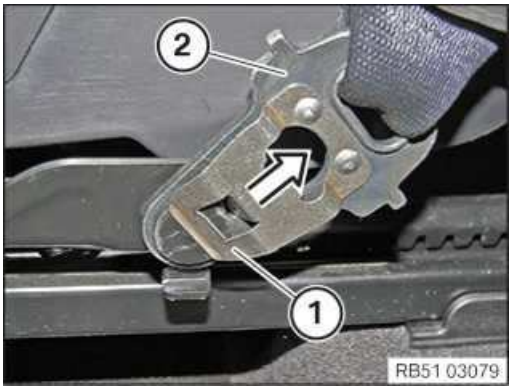
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

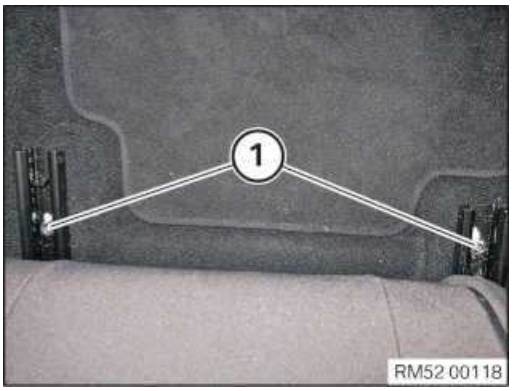
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



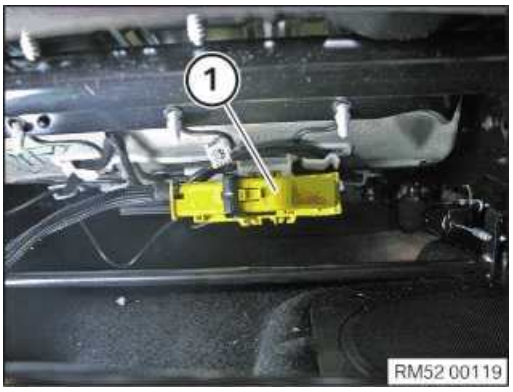
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

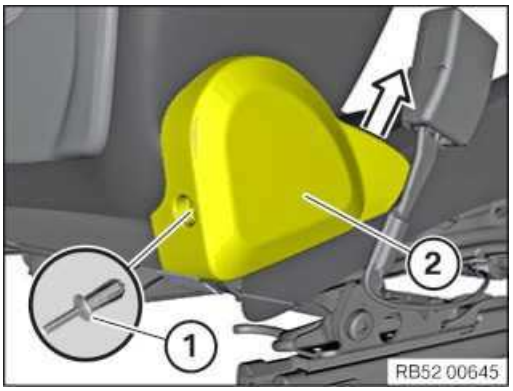
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

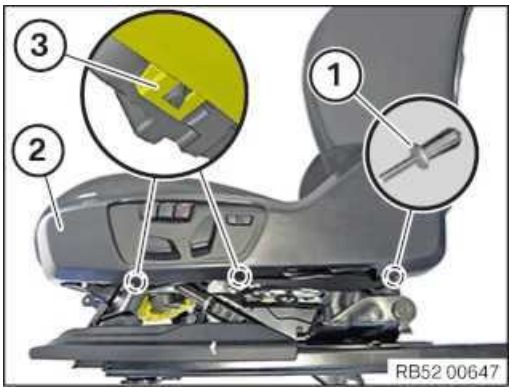
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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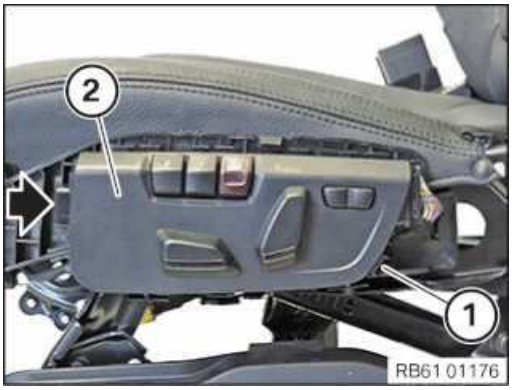


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



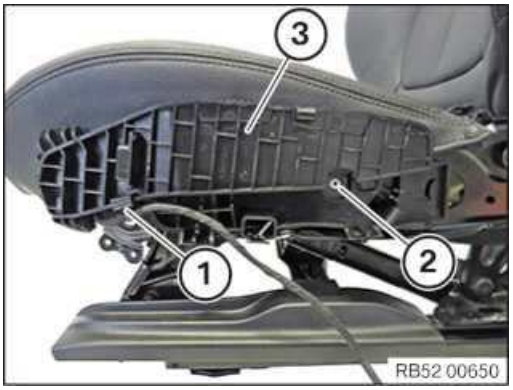
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

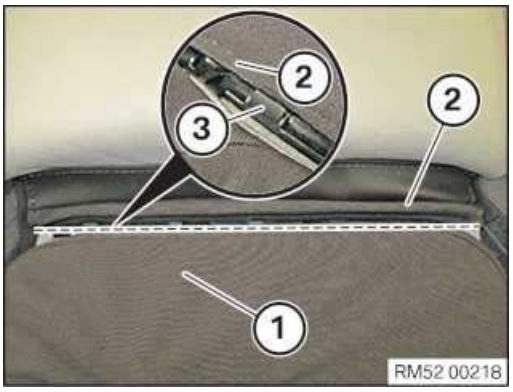
6 – Remove the support for the operating unit for the seat adjustment



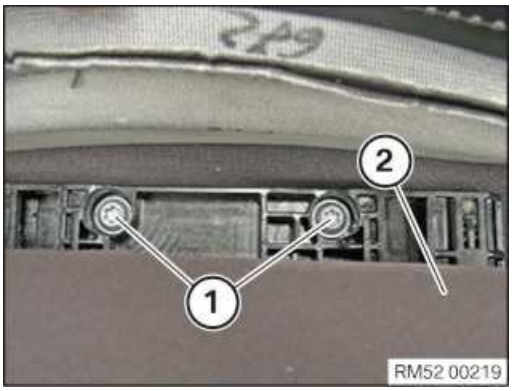
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Removing the thigh support on the front seat

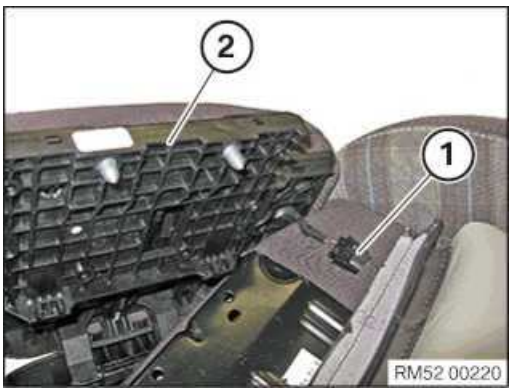
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- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

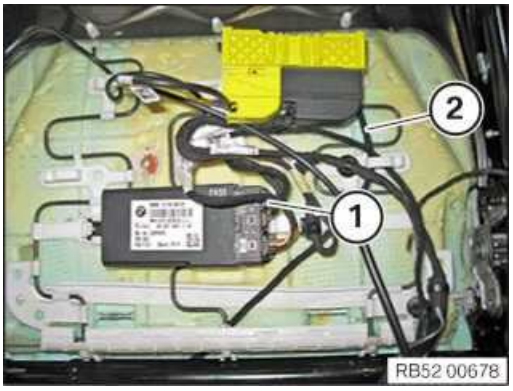


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

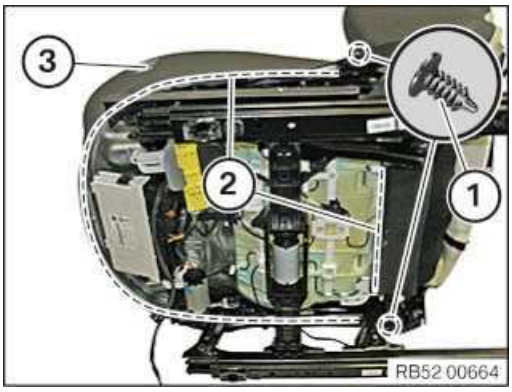


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

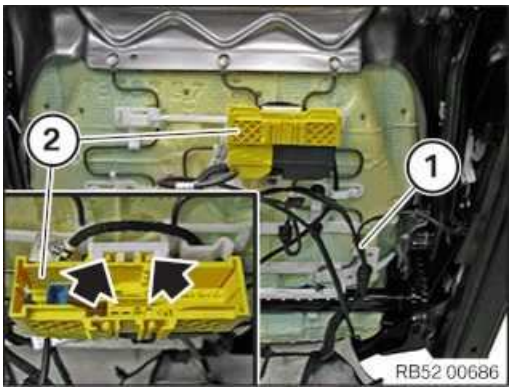
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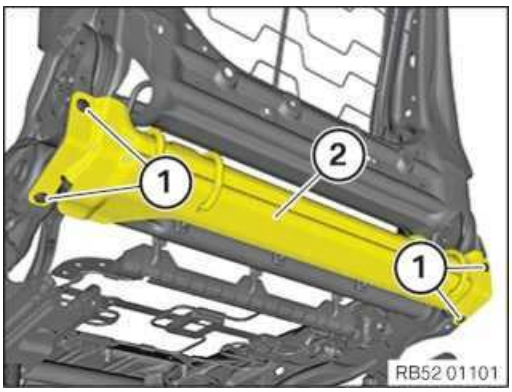
- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

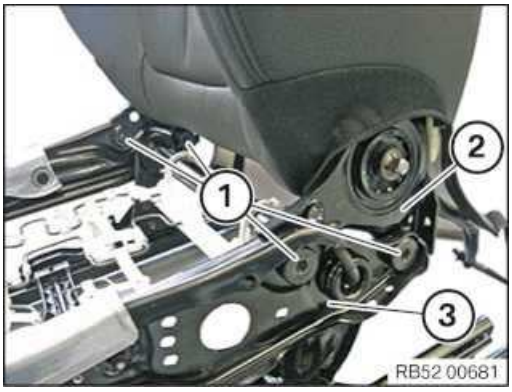
9 – Remove the seat mechanism of the front seat



- Loosen the wiring harness (1) on all cable clips.
- Unlock connector housing (2) and detach from seat mechanism to rear.
- Feed out the wiring harness (1) from the seat mechanism toward the rear.



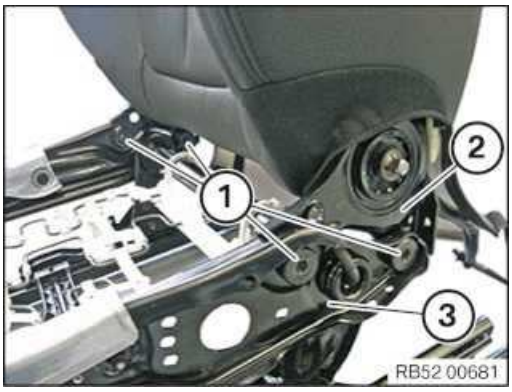
- **Only for equipment specification with Isofix:**
- Drill out rivet (1).
- Remove the holder (2).
- Remove remnants of rivets.



- Loosen screws (1).
- Remove the backrest frame (2) from the seat frame (3).

10 – Install the seat mechanism of front seat

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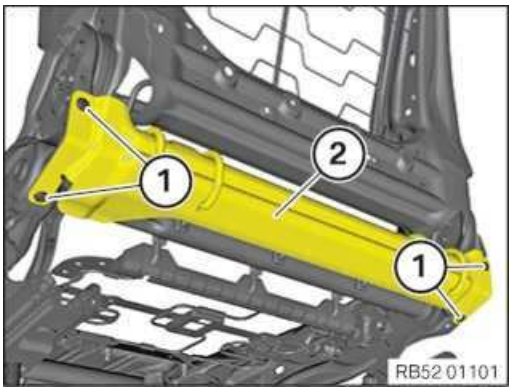


- Position the backrest frame (2).
- Renew screws (1).

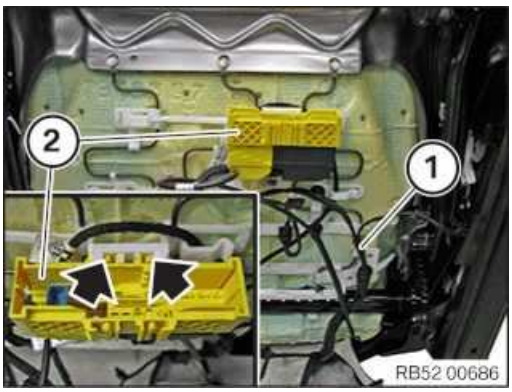
  Parts: Bolts
- Tighten screws (1) on left and right.

Backrest frame to seat mechanism

Screw	Renew screw.	Tightening torque	44 Nm



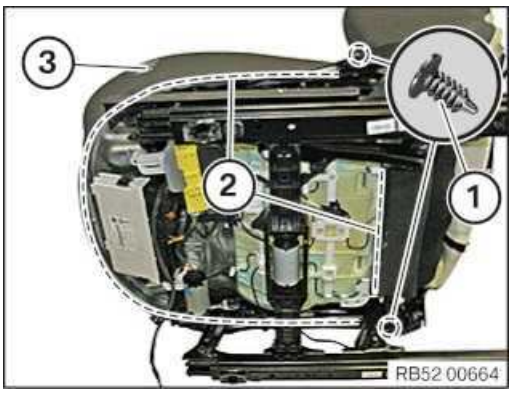
- **Only for equipment specification with Isofix:**
- Fasten the holder (2) with a rivet (1).



- Insert the wiring harness (1).
- Engage connector housing (2) into seat mechanism.
- Secure the wiring harness (1) to all cable clips.

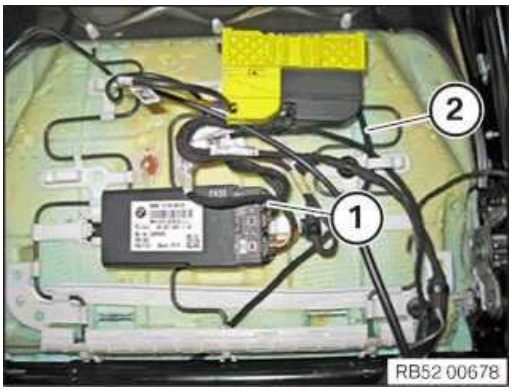
POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

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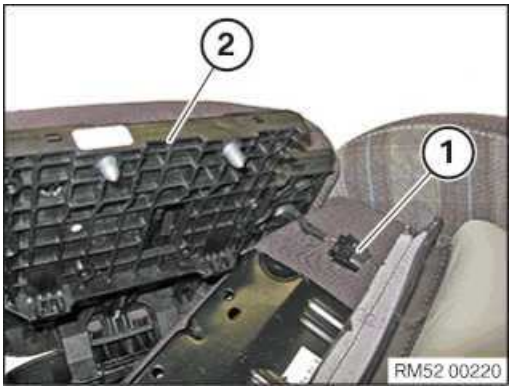


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.

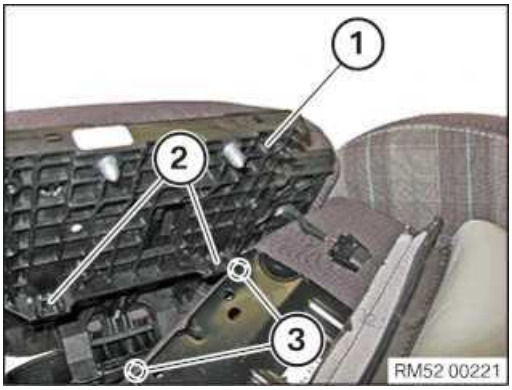


- Fasten retaining strap (1) to the seat mechanism at the left and right.

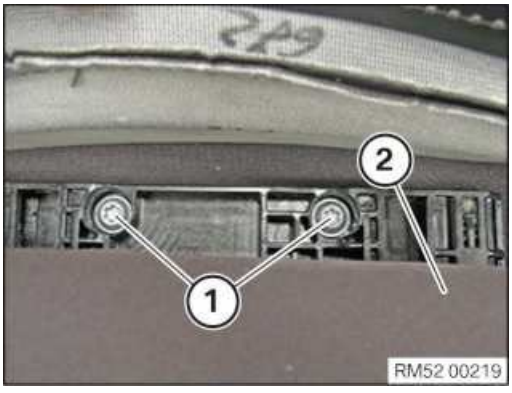
12 – Installing thigh support on the front seat



- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).



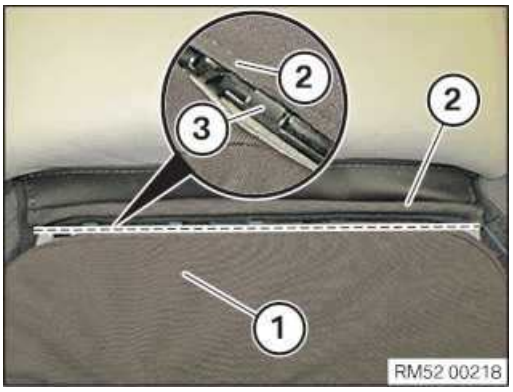
TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

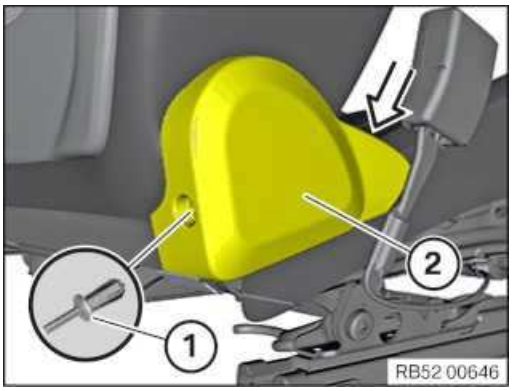
- Tighten the screws (1).

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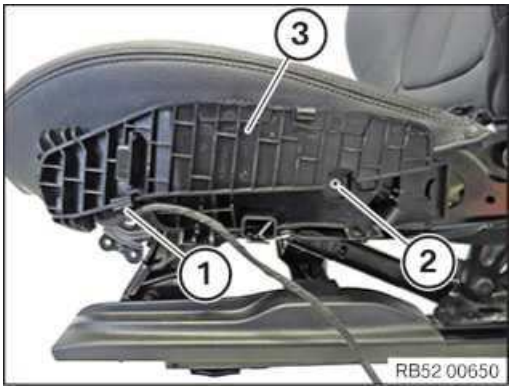
- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

13 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

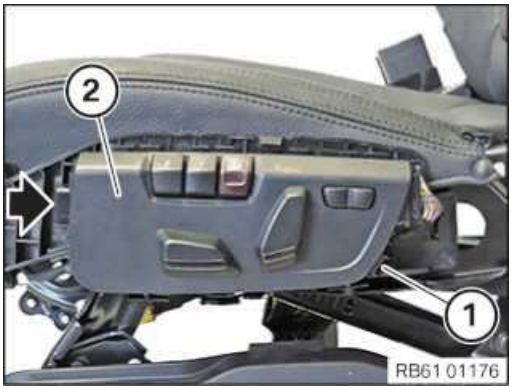
14 – Installing support for seat adjustment operating unit



- Insert support (3) from the front and position.
- Renew the blind rivet (2).

  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

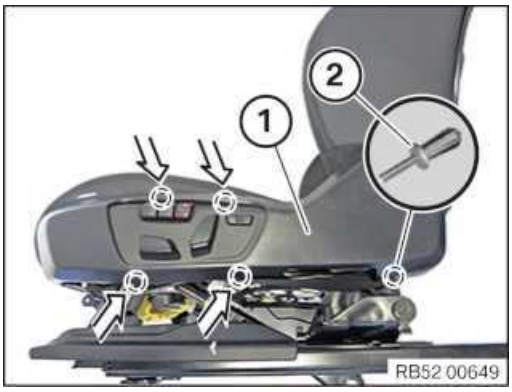
15 – Install operating unit for seat adjustment



- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

16 – Installing the outer cover on the electrical front seat

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- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

17 – Install front seat

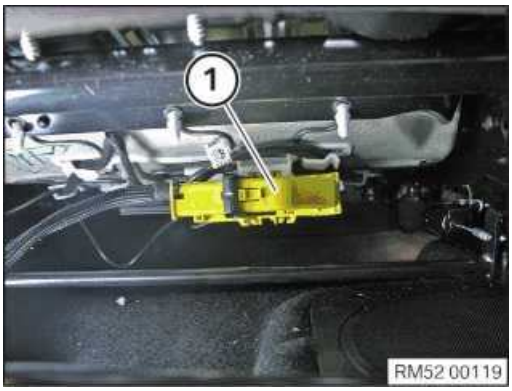
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

▸ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-



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

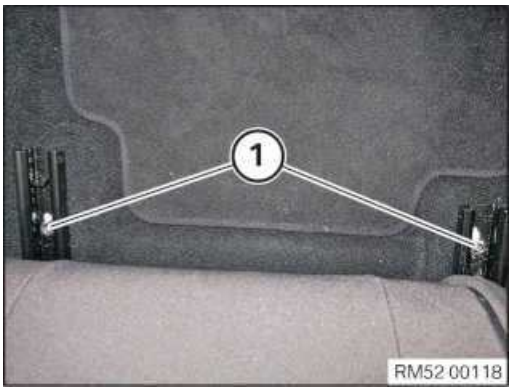
Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .

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- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

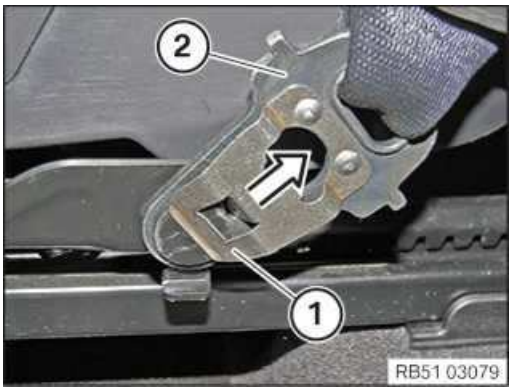
M10	Renew screw.	Tightening torque	42 Nm

▸ **Disconnecting all battery earth leads**



- See additional information.

18 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

» The end fitting cannot be turned.

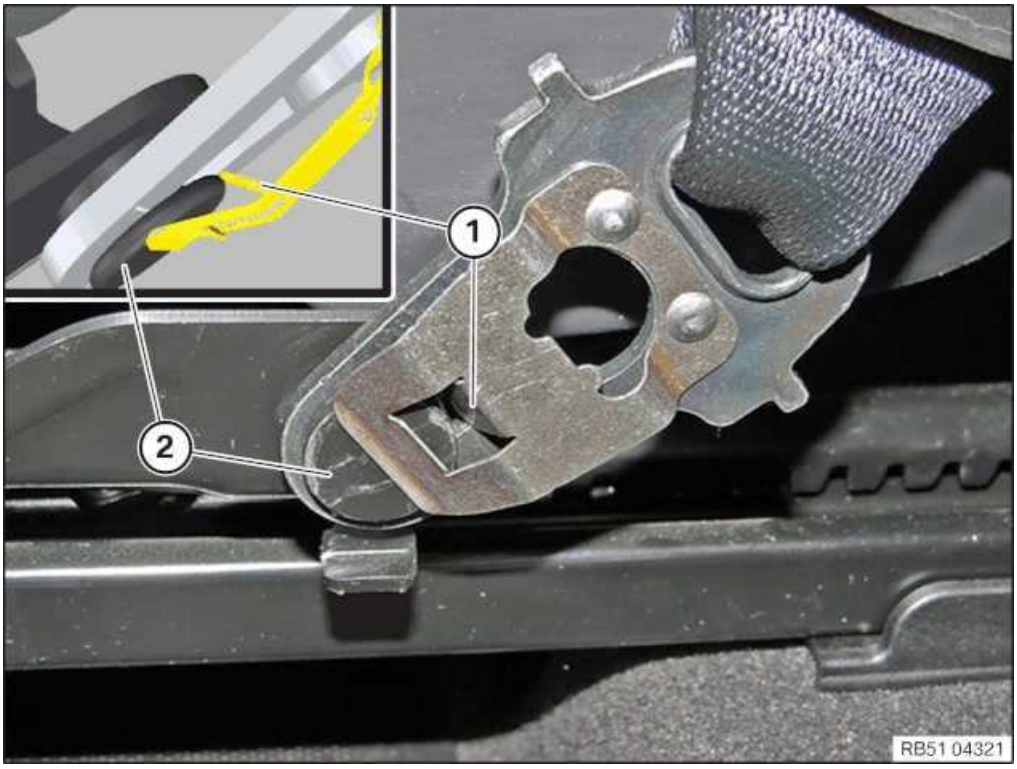
Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

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End fitting



- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

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Backrest frame to seat mechanism			Used in step 10
Screw	Renew screw.	Tightening torque	44 Nm

Seat to body			Used in step 17
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid



Common	Used in step 2 17
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
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61 20 900 Disconnecting and connecting battery earth lead	2	17
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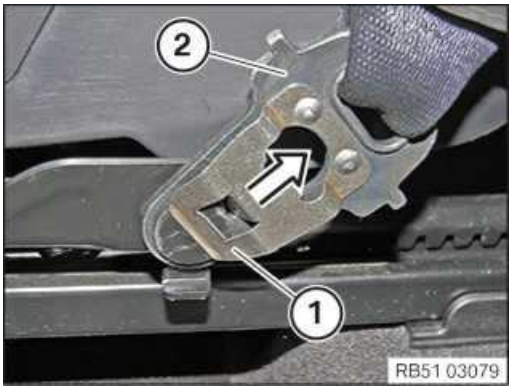
52 16 402 Replacing seat cover for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

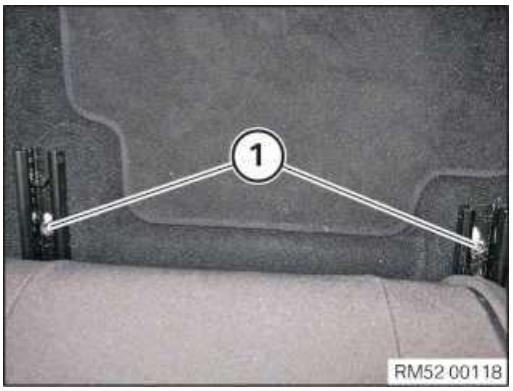
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



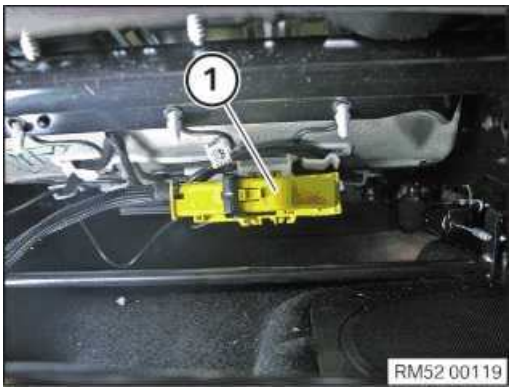
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

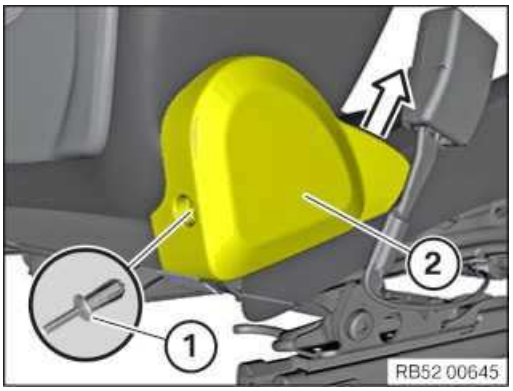
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

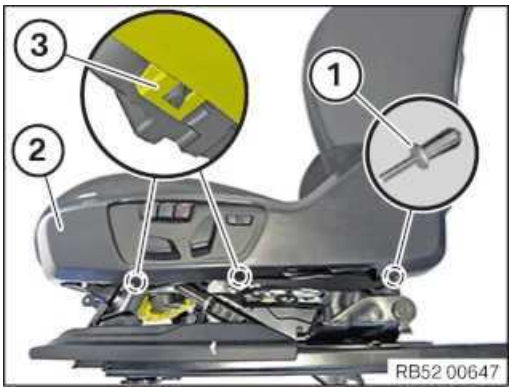
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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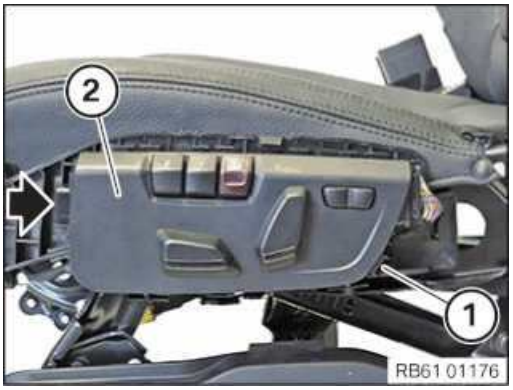


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



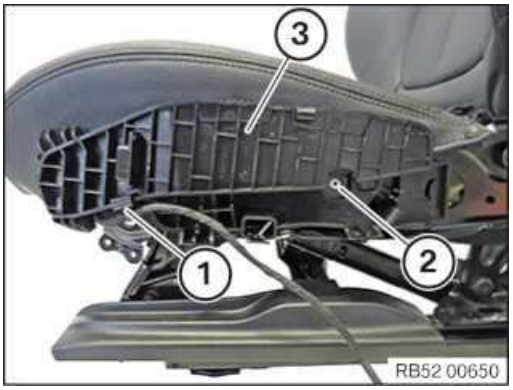
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

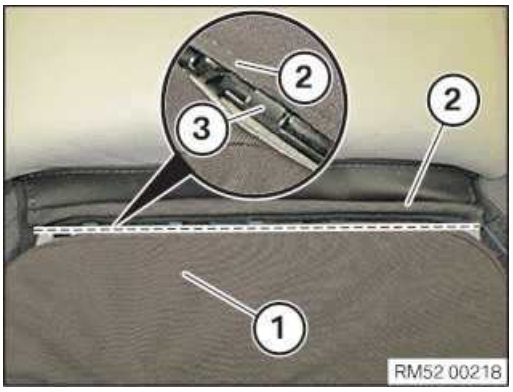
6 – Remove the support for the operating unit for the seat adjustment



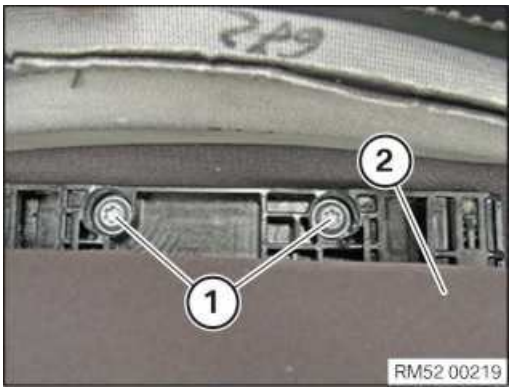
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Removing the thigh support on the front seat

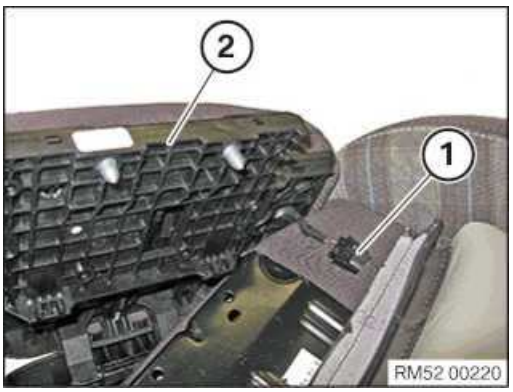
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- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

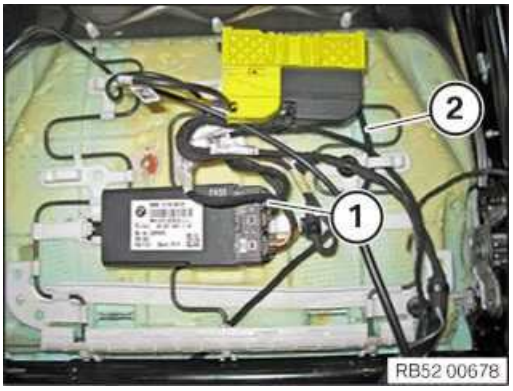


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

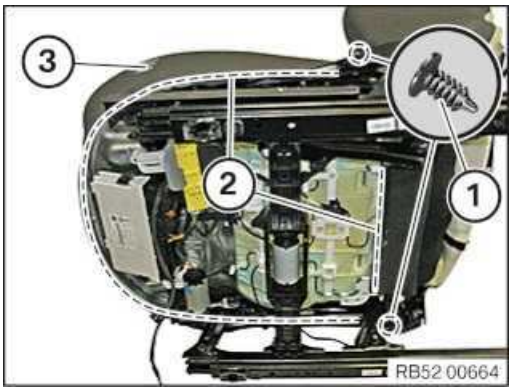


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

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- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

9 – Removing the seat cover for the front seat (sport)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

10 – Install the seat cover for the front seat (Sport)

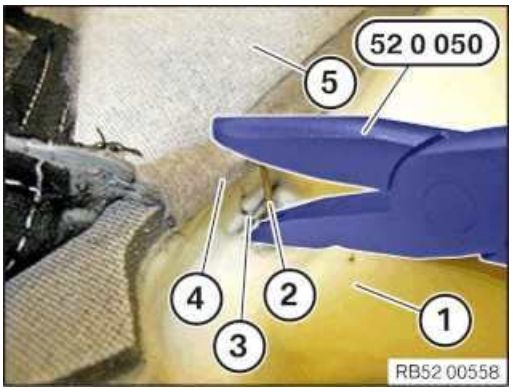
NOTICE

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



- Place the seat cover on the upholstery.
- Secure all trim wires with clamps.

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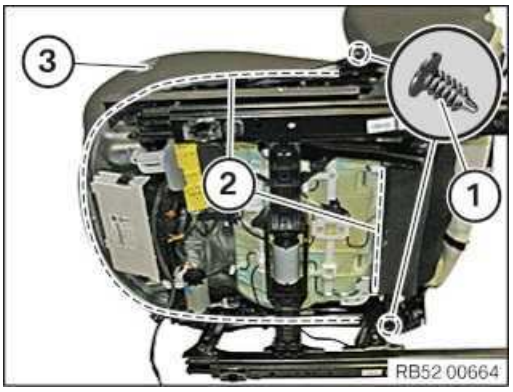
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

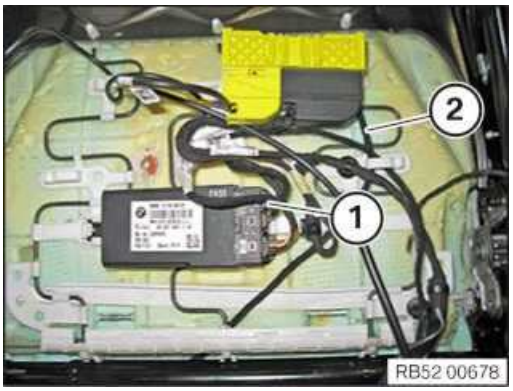
1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



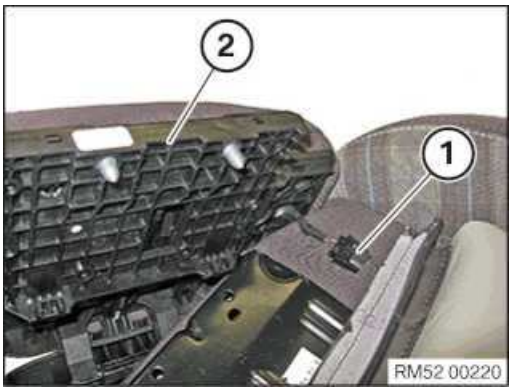
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



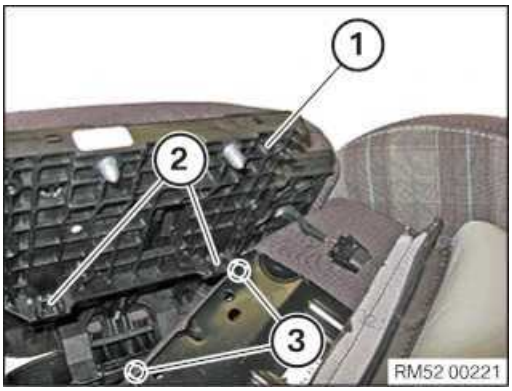
- Fasten retaining strap (1) to the seat mechanism at the left and right.

12 – Installing thigh support on the front seat

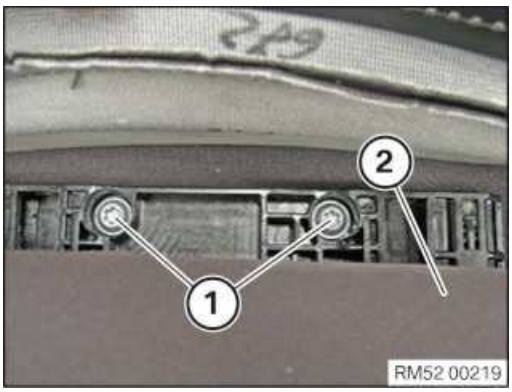
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- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

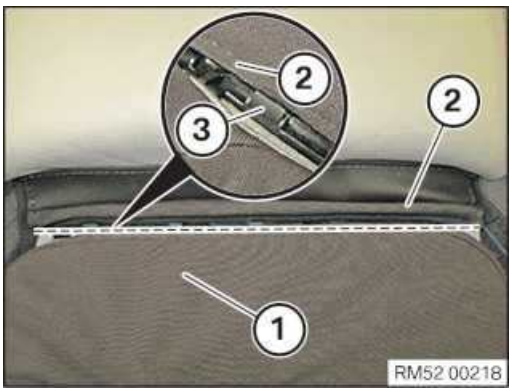


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

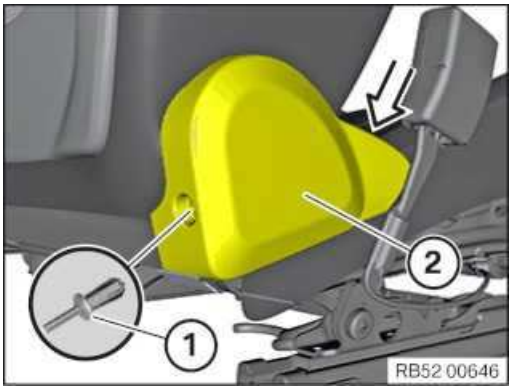
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

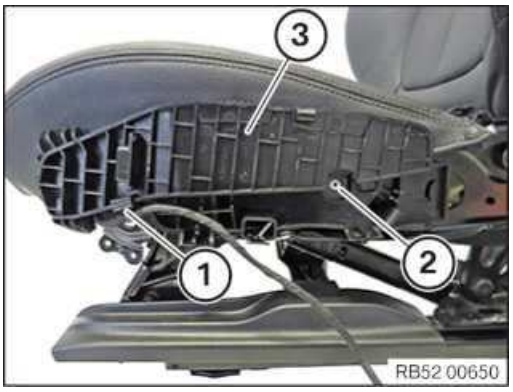
13 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

14 – Installing support for seat adjustment operating unit

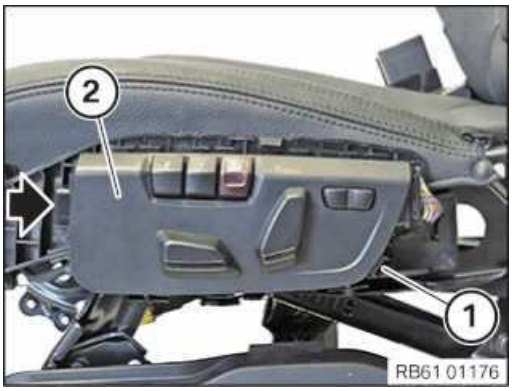
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- Insert support (3) from the front and position.
- Renew the blind rivet (2).

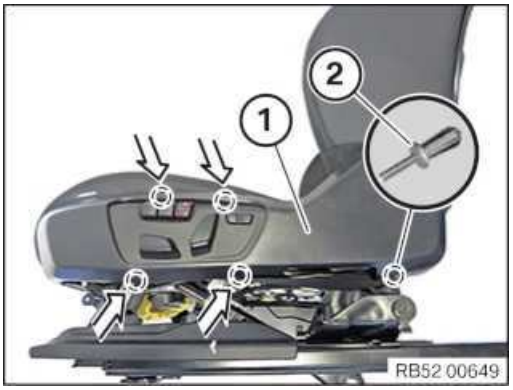
  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

15 – Install operating unit for seat adjustment



- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

16 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

17 – Install front seat

TECHNICAL INFORMATION

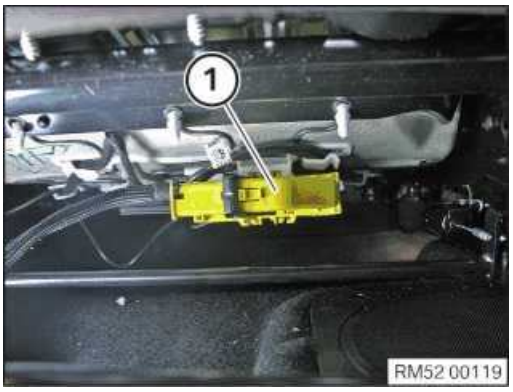
Different variants may be installed depending on the vehicle equipment.

▶ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

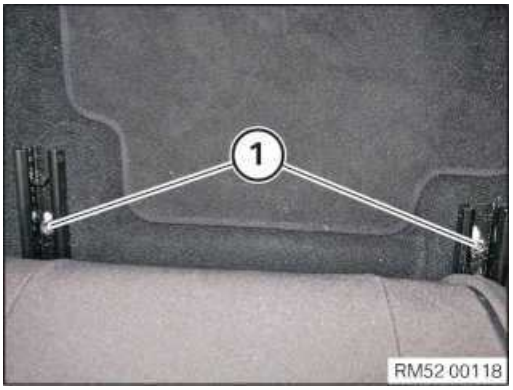
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

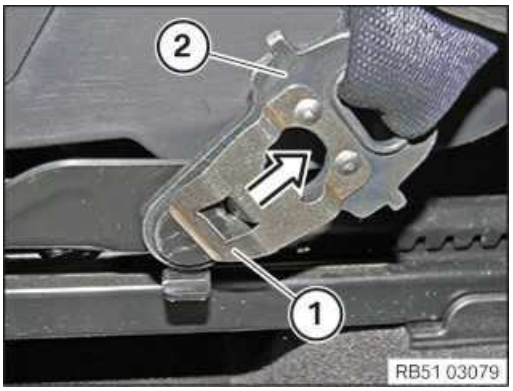
▸ **Disconnecting all battery earth leads**

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- See additional information.

18 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

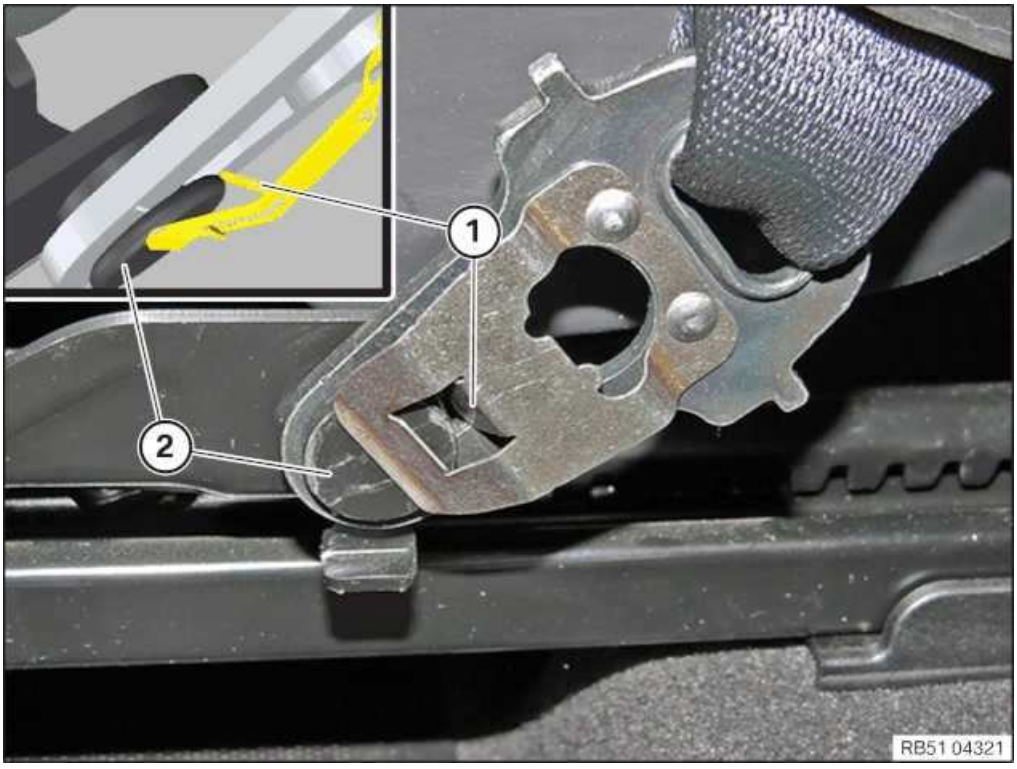
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body Used in step 17

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid

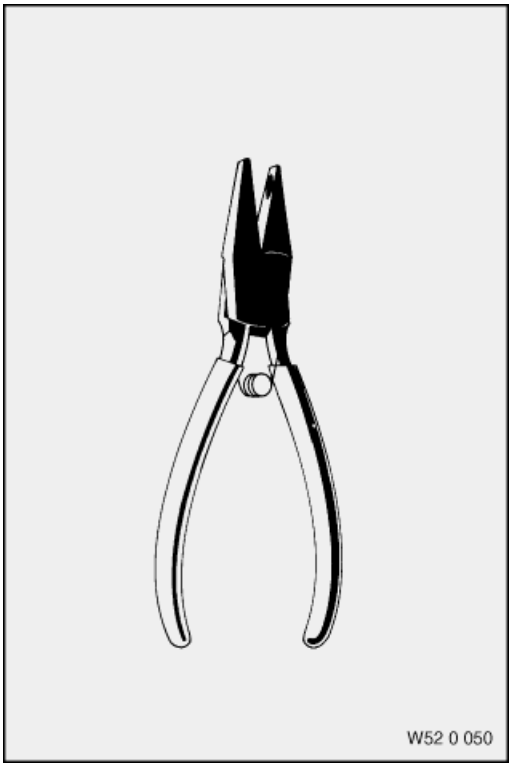


Common Used in step 2 17

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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0 492 668 (52 0 050) Pliers



Common		Used in step 10
Usage	For securing clamps on seat cover	
Included in the tool or work		
Storage location	C14	
Replaced by		
In connection with		
SI-Number	52 06 87 (808)	

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
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61 20 900 Disconnecting and connecting battery earth lead	2	17
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52 16 404 Replacing seat cover for front passenger seat

NOTICE

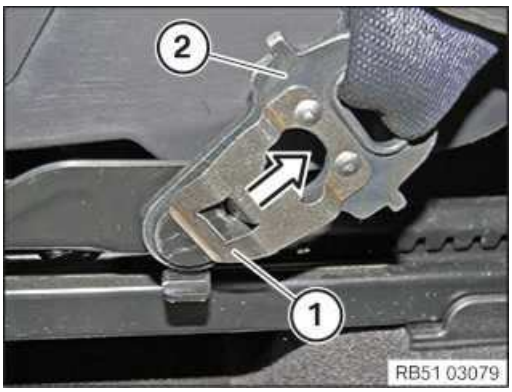
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

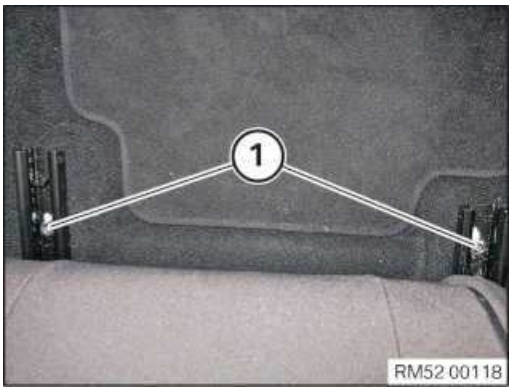
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



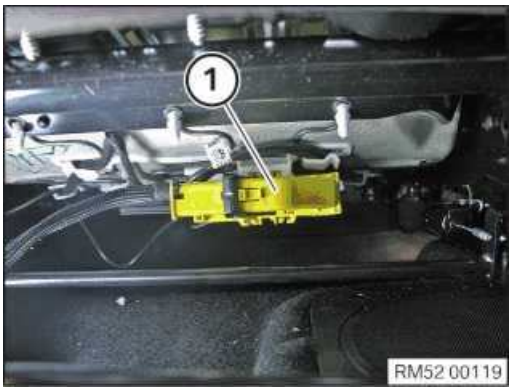
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

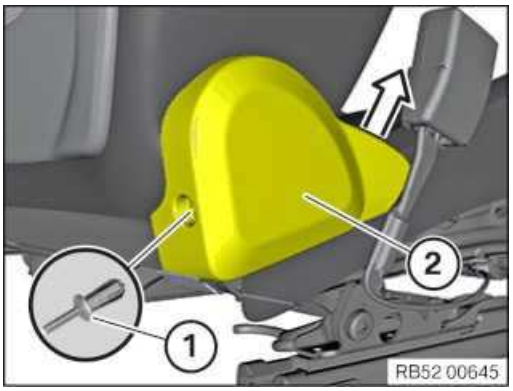
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

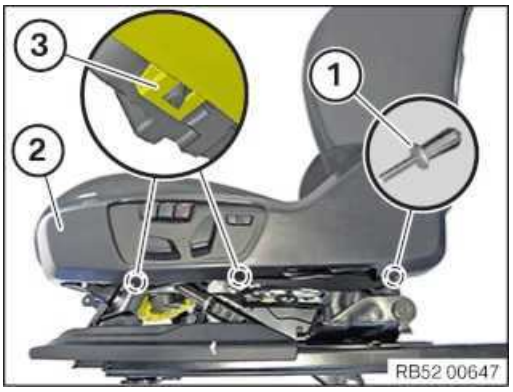
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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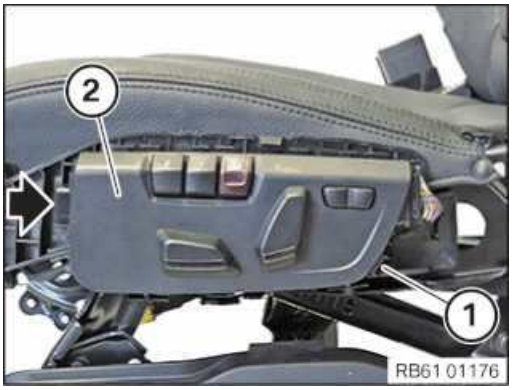


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



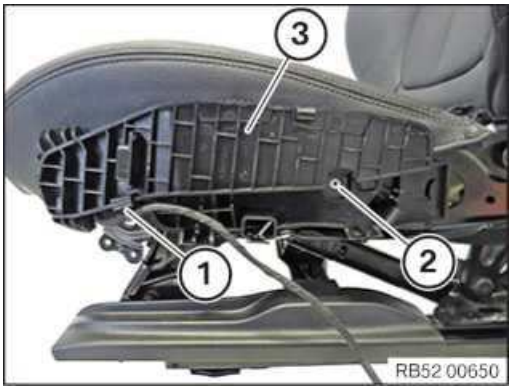
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

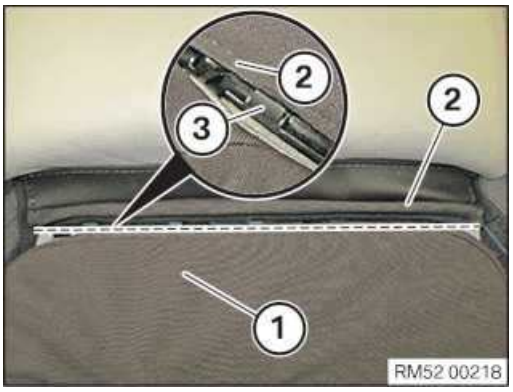
6 – Remove the support for the operating unit for the seat adjustment



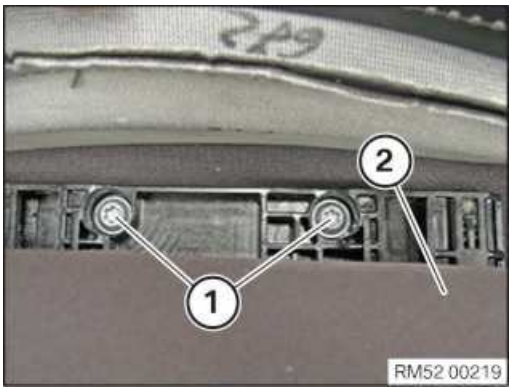
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Removing the thigh support on the front seat

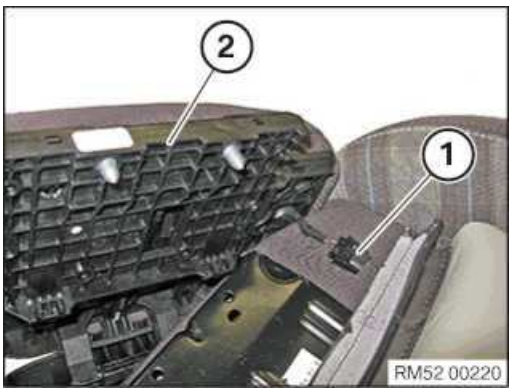
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- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

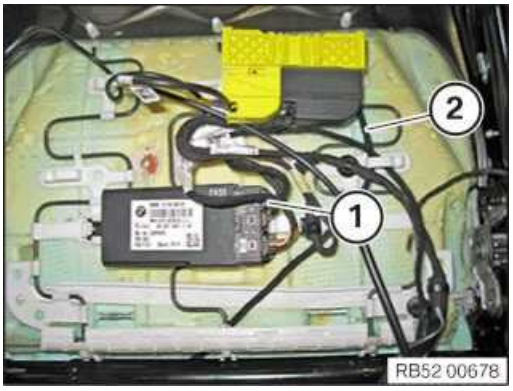


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

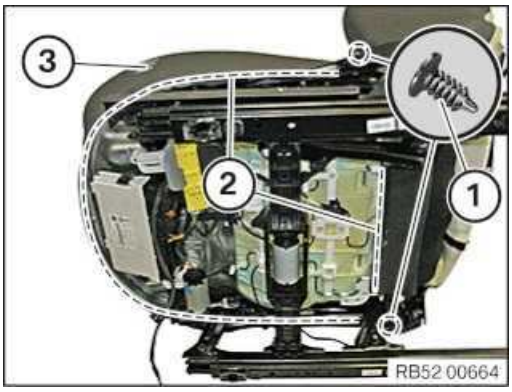


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

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- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

9 – Removing the seat cover for the front seat (sport)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

10 – Install the seat cover for the front seat (Sport)

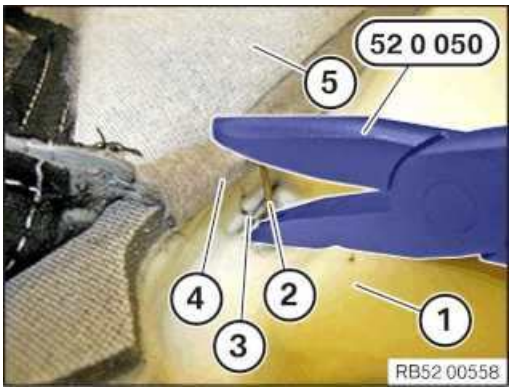
NOTICE

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



- Place the seat cover on the upholstery.
- Secure all trim wires with clamps.

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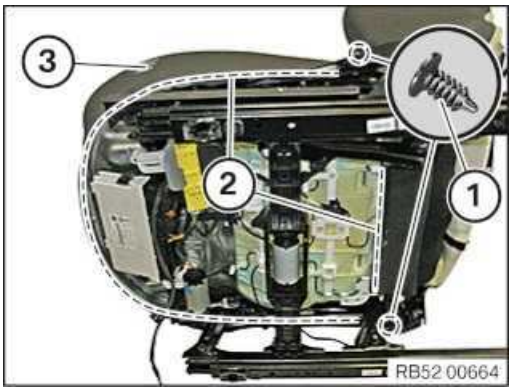
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

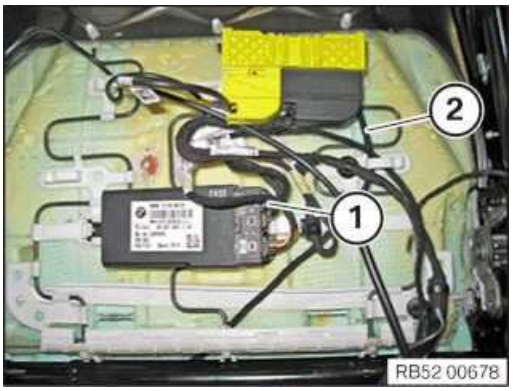
1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

POSTPROCESSES

11 – Fit the seat cover with the upholstery for the front seat



- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).



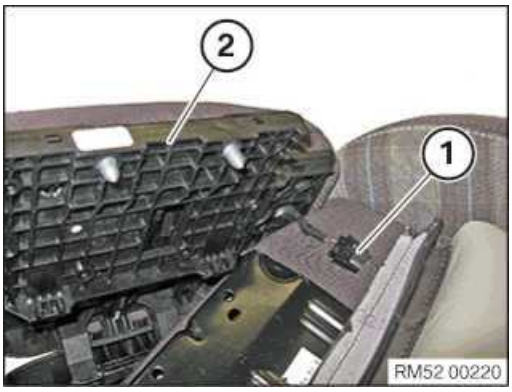
- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.



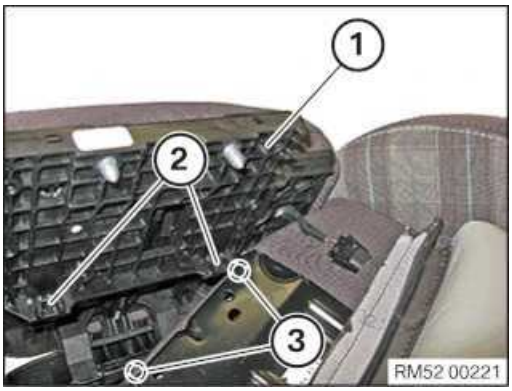
- Fasten retaining strap (1) to the seat mechanism at the left and right.

12 – Installing thigh support on the front seat

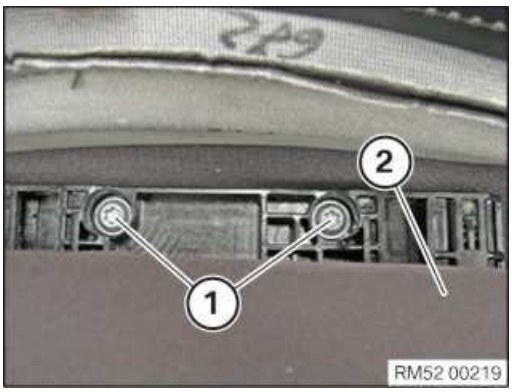
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- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

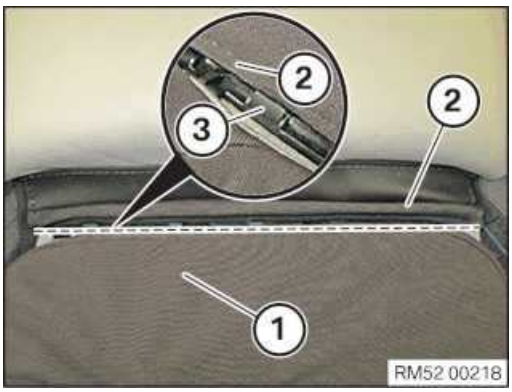


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

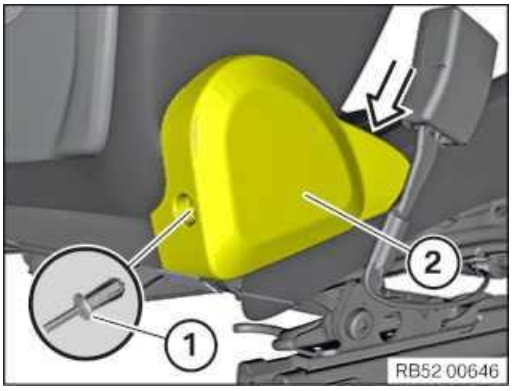
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

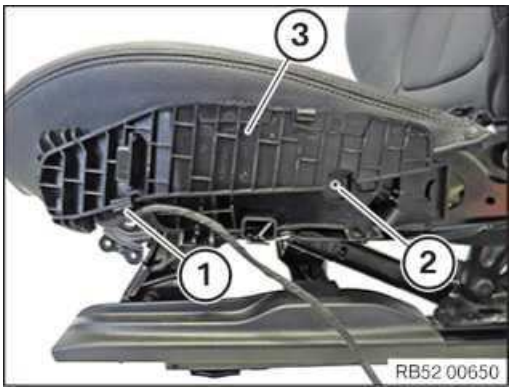
13 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

14 – Installing support for seat adjustment operating unit

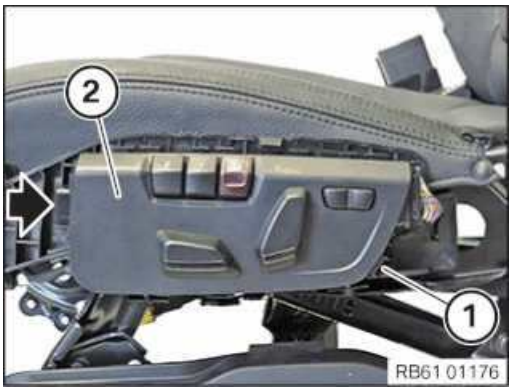
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- Insert support (3) from the front and position.
- Renew the blind rivet (2).

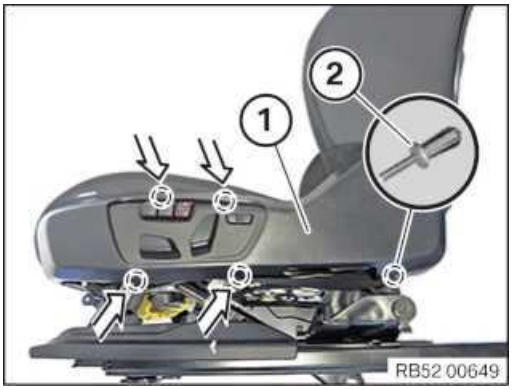
  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

15 – Install operating unit for seat adjustment



- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

16 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

17 – Install front seat

TECHNICAL INFORMATION

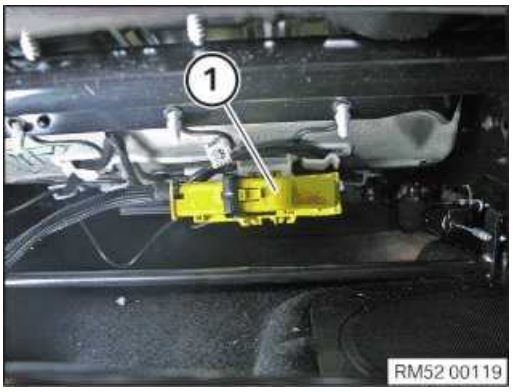
Different variants may be installed depending on the vehicle equipment.

▶ **Removing the front seat from the universal seat mount .**



- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

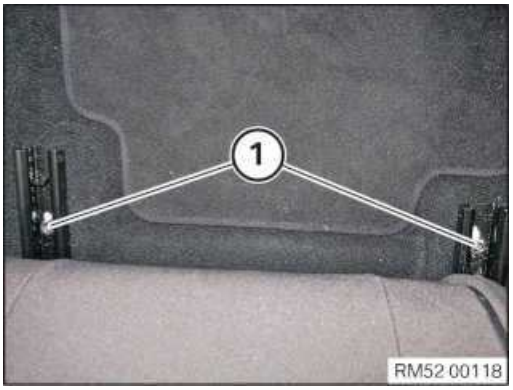
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

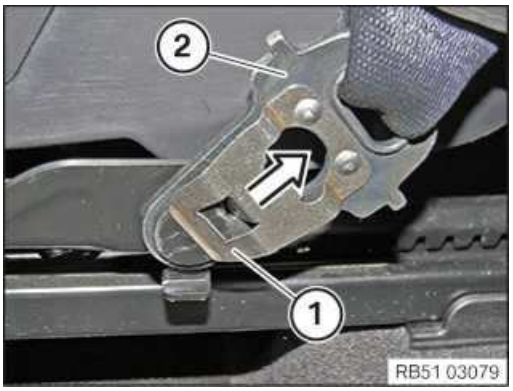
▸ **Disconnecting all battery earth leads**

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- See additional information.

18 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

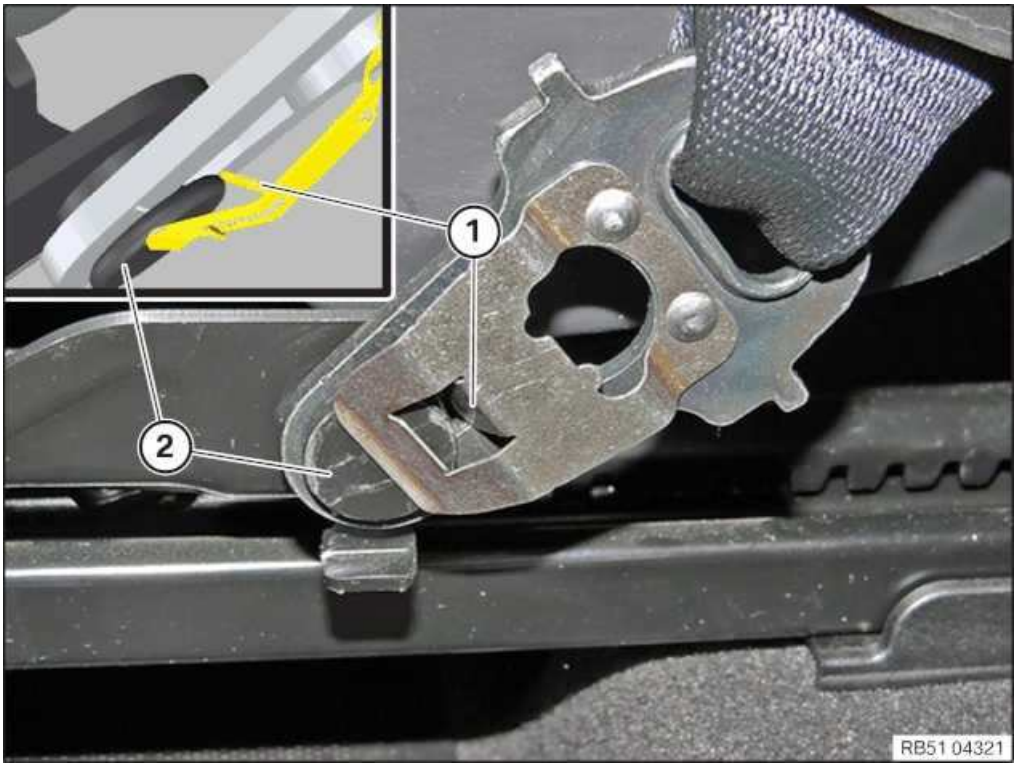
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body Used in step 17

M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

2 154 711 Fitting aid

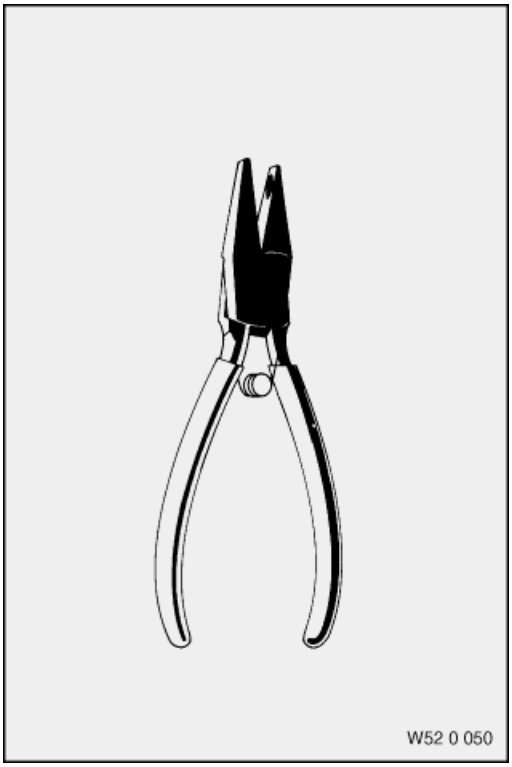


Common Used in step 2 17

Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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0 492 668 (52 0 050) Pliers



Common		Used in step 10
Usage	For securing clamps on seat cover	
Included in the tool or work		
Storage location	C14	
Replaced by		
In connection with		
SI-Number	52 06 87 (808)	

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
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61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 17
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 17
61 20 900 Disconnecting and connecting battery earth lead	2 17
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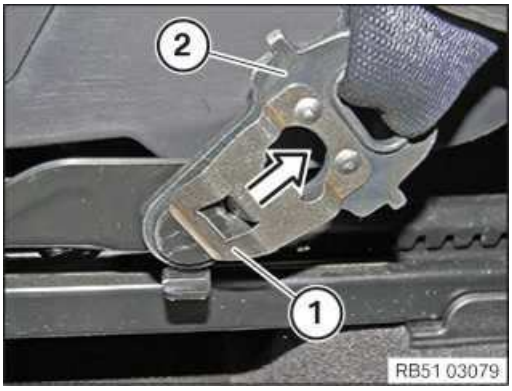
52 16 425 Replacing upholstery for driver's seat

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

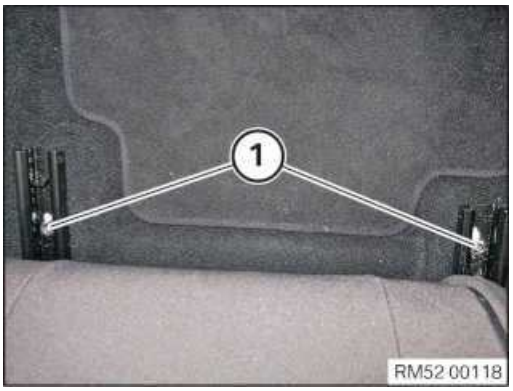
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



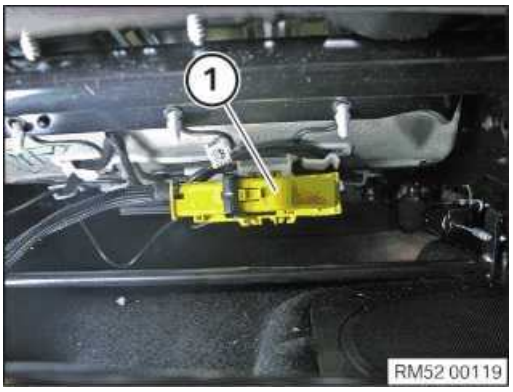
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

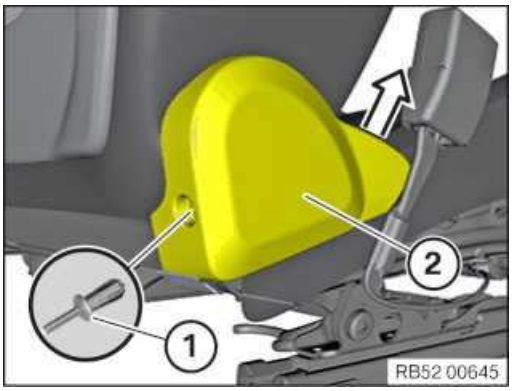
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

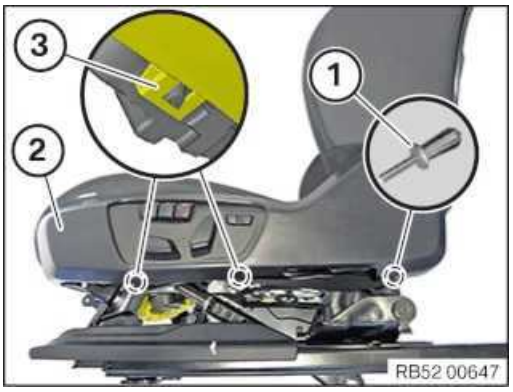
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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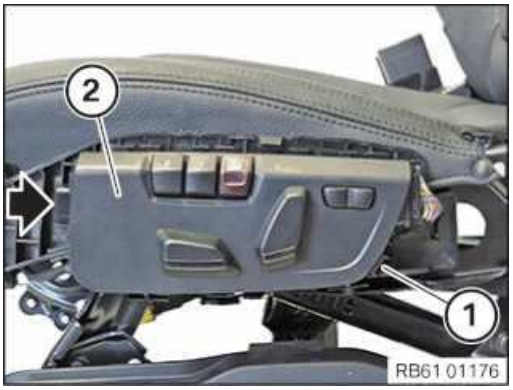


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



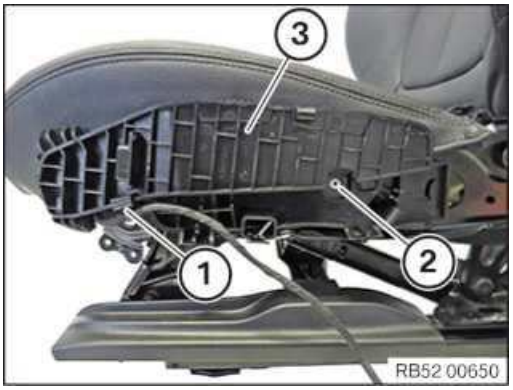
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

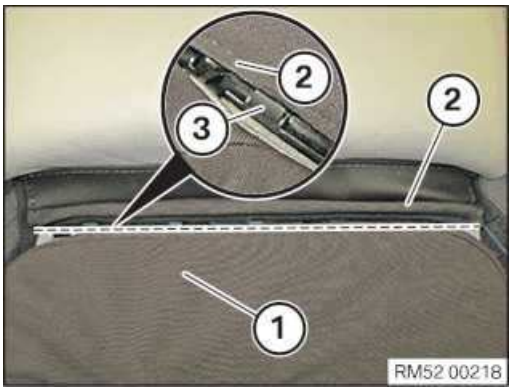
6 – Remove the support for the operating unit for the seat adjustment



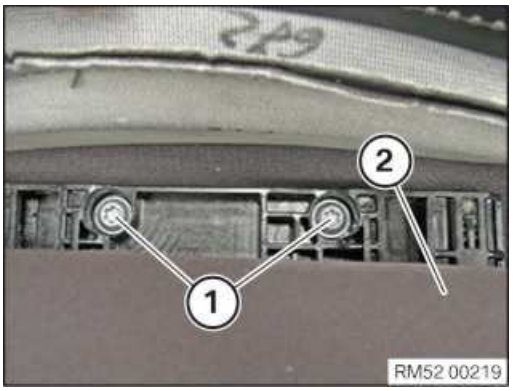
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Removing the thigh support on the front seat

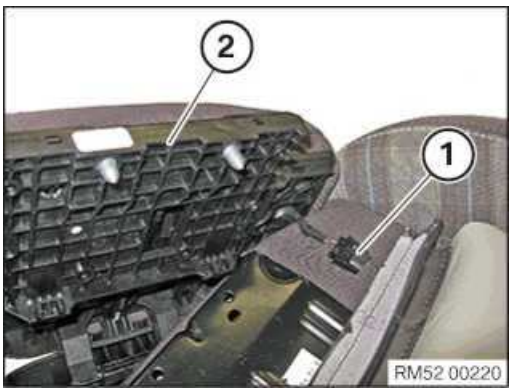
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- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

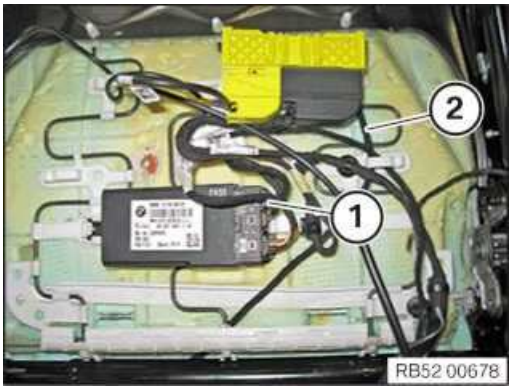


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

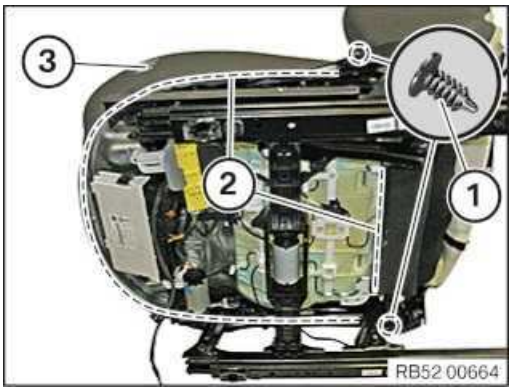


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

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- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

9 – Removing the seat cover for the front seat (sport)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

10 – Renewing cushion for front seat

TECHNICAL INFORMATION

Only US/Canadian version of front passenger seat with seat occupancy mat (CIS):

The seat occupancy mat is bonded to the entire surface of the upholstery and can only be replaced together with the upholstery.

If the seat occupancy mat or upholstery is defective, both parts must always be replaced together.

Full operability can only be guaranteed with the Original BMW replacement part.

After fitting the seat cover, enable the seat occupancy mat using the BMW programming system.

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.

When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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

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- **Equipment specification with seat heating**

  Position the heating mat (1) on the cushion and align.

  Bond the heating mat (1) to the cushion in these areas (2).

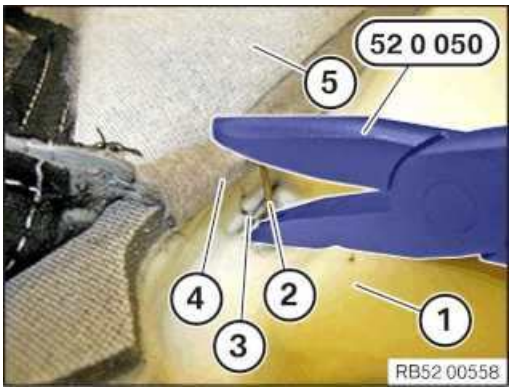
11 – Install the seat cover for the front seat (Sport)

NOTICE

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



- Place the seat cover on the upholstery.
- Secure all trim wires with clamps.



- Renew the clamps (2).

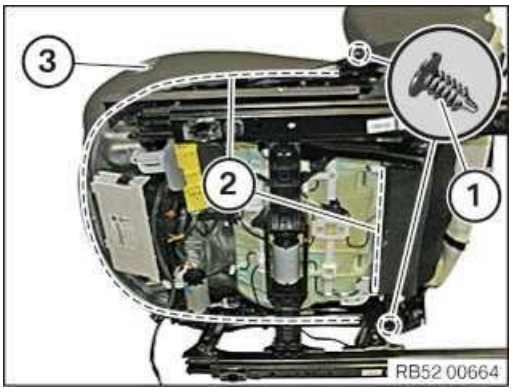
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

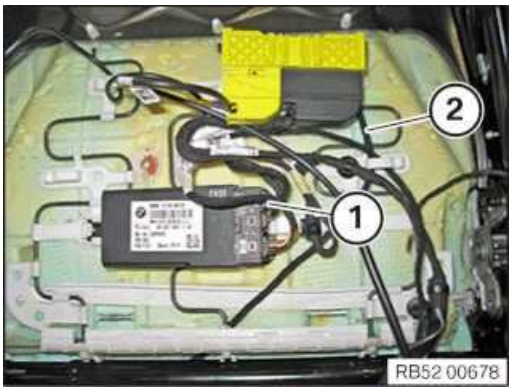
POSTPROCESSES

12 – Fit the seat cover with the upholstery for the front seat

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- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

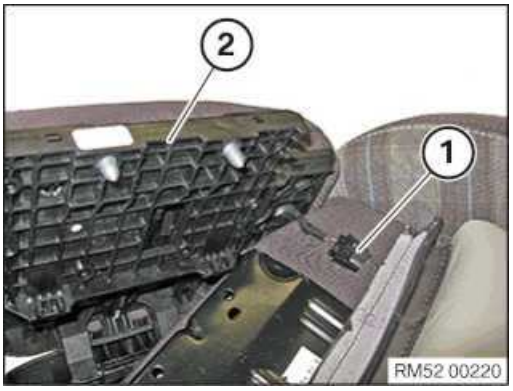


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.

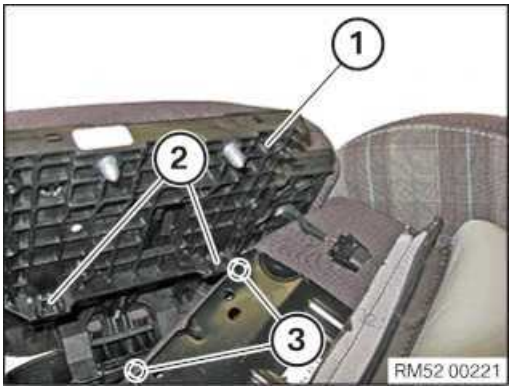


- Fasten retaining strap (1) to the seat mechanism at the left and right.

13 – Installing thigh support on the front seat

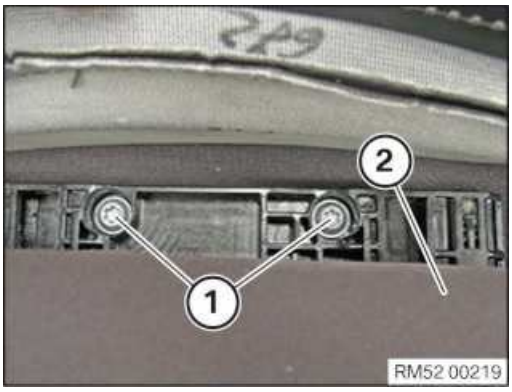


- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

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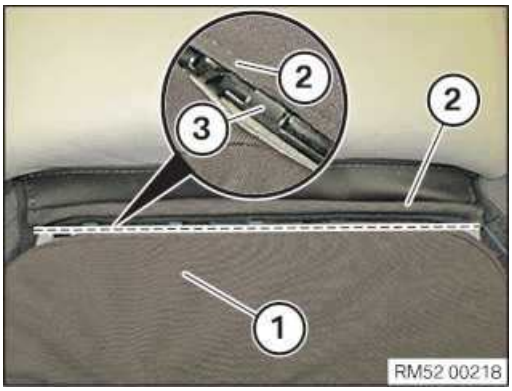


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

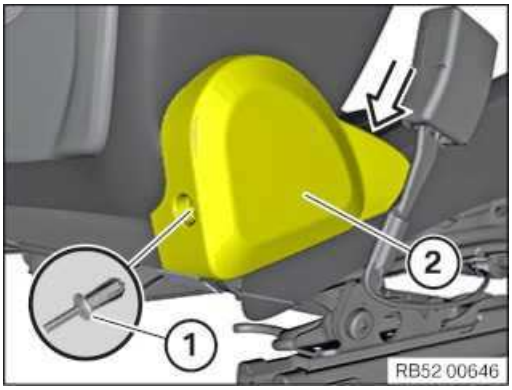
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



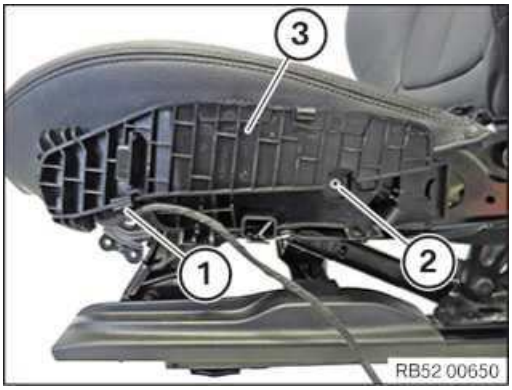
- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

14 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

15 – Installing support for seat adjustment operating unit

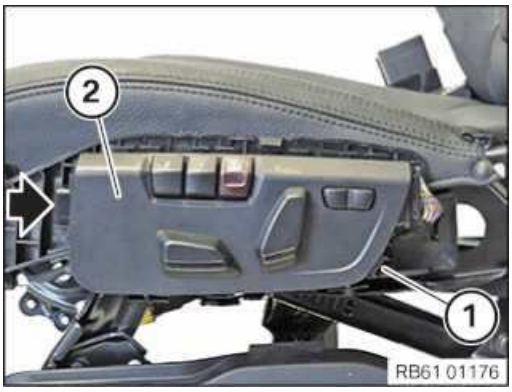


- Insert support (3) from the front and position.
- Renew the blind rivet (2).

  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

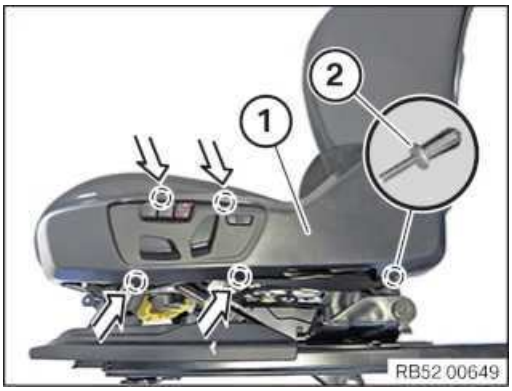
16 – Install operating unit for seat adjustment

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- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

17 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

18 – Install front seat

TECHNICAL INFORMATION

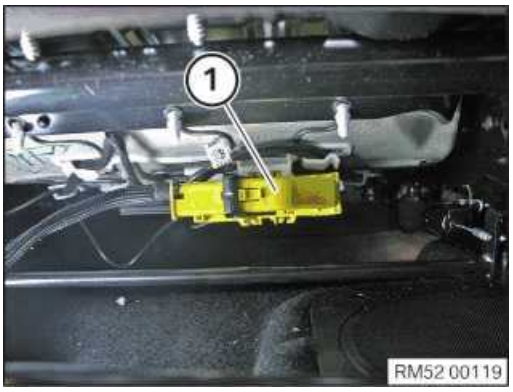
Different variants may be installed depending on the vehicle equipment.



▸ **Removing the front seat from the universal seat mount .**

- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

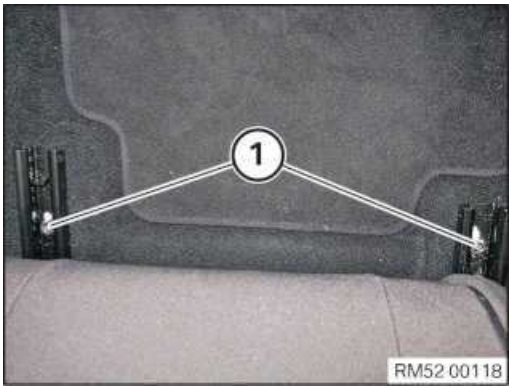
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

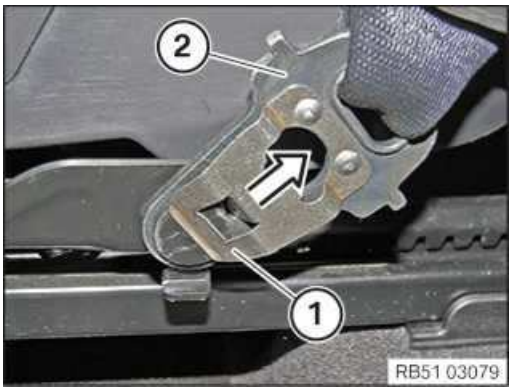
▸ **Disconnecting all battery earth leads**

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- See additional information.

19 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

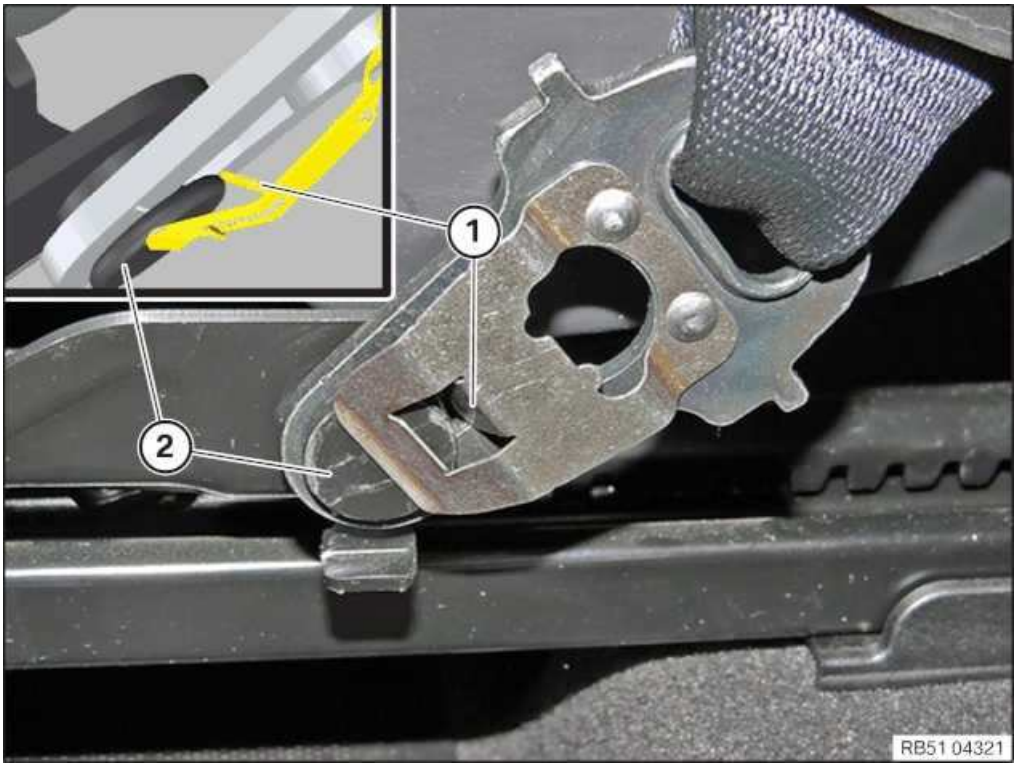
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body			Used in step 18
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

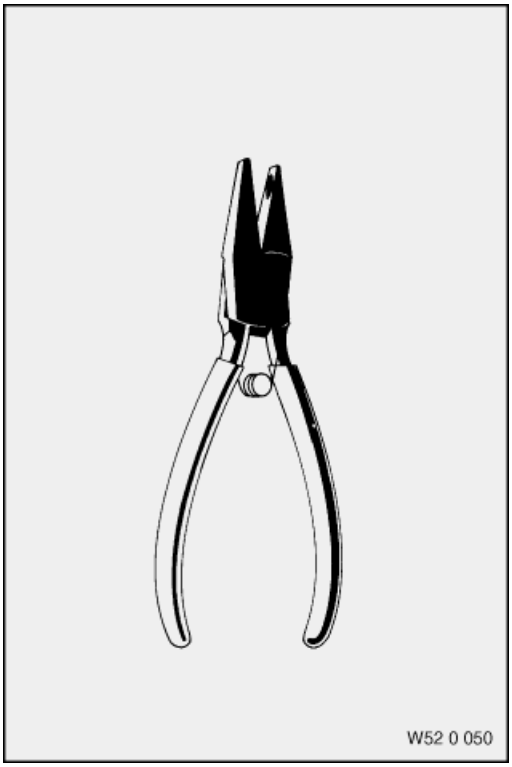
2 154 711 Fitting aid



Common	Used in step 2 18
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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0 492 668 (52 0 050) Pliers



Common		Used in step 11
Usage	For securing clamps on seat cover	
Included in the tool or work		
Storage location	C14	
Replaced by		
In connection with		
SI-Number	52 06 87 (808)	

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
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61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 18
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61 20 900 Disconnecting and connecting battery earth lead	2	18

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52 16 426 Replacing upholstery for front passenger seat

NOTICE

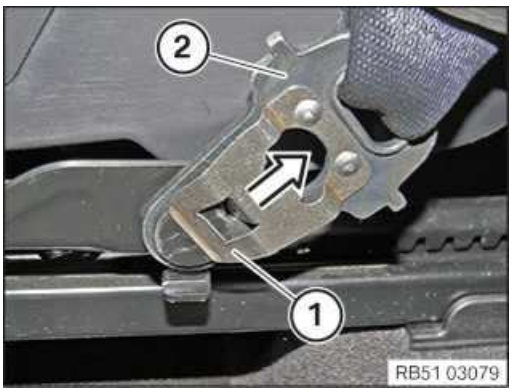
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove the front end fitting



- Slide the cover (1) on the seat belt (2) in an upward direction.



- Turn the end fitting (2) to the rear.
- Carefully pull the lock plate (1) outward and simultaneously feed out the end fitting (2) to the front.
- Remove the end fitting (2) outward.

2 – 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.

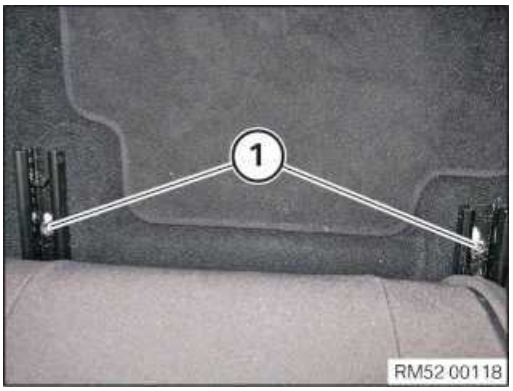
TECHNICAL INFORMATION

Different variants may be installed depending on the vehicle equipment.

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



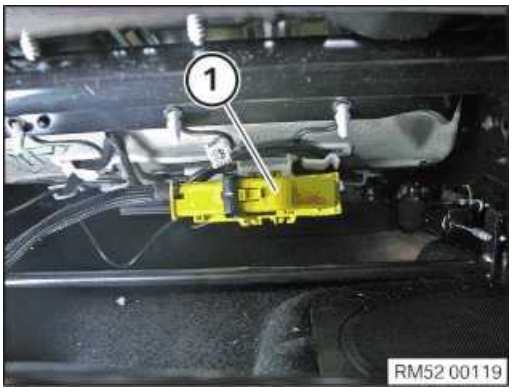
- Adjust front seat completely to the front.
- Loosen screws (1).

▶ **Disconnecting all battery earth leads**



- See additional information.

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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.
- Fold the front seat back and disconnect the plug connection (1).

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.

- Remove the front seat with the assistance of an auxiliary person.

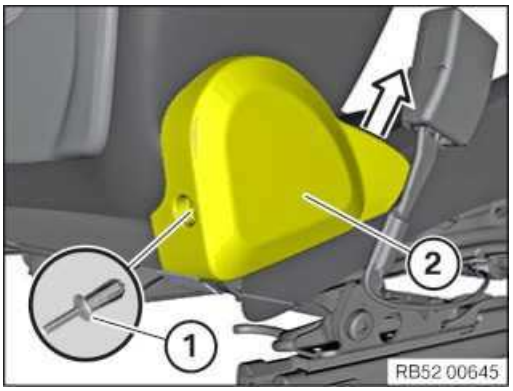
▶ **Mounting the front seat on the universal seat mount**



- Mounting the front seat on the special tool (universal seat mount)**2 154 711**.

  To guarantee a professional repair, use of special tool (universal seat mount) **2 154 711** is recommended.

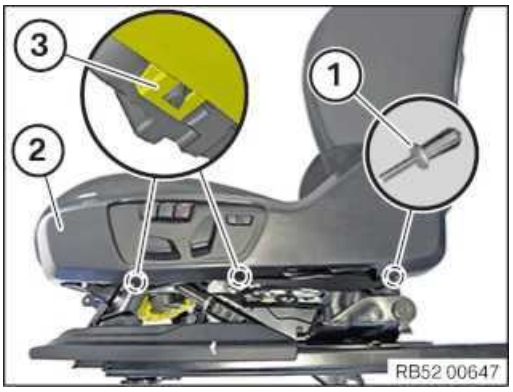
3 – Remove inner cover on front seat



- Loosen expanding rivet (1).
- Remove the cover (2) in the direction of the arrow.

4 – Removing the outer cover on the front electrical seat

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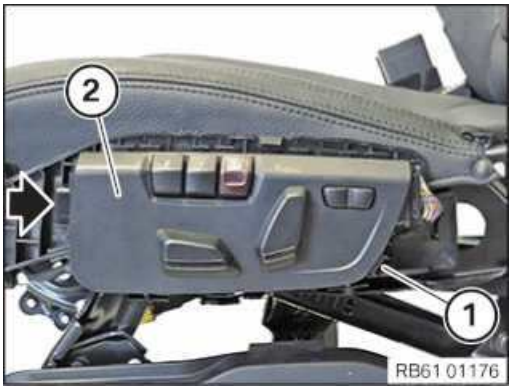


- Loosen expanding rivet (1).
- Release cover (2) outward from the latch mechanisms (3).



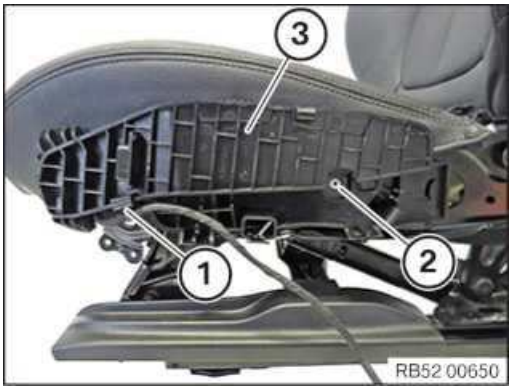
- Pull cover (1) in the lower area out slightly and disengage it upward from the latch mechanisms (2).

5 – Remove operating unit for seat adjustment



- Loosen the lock (1).
- Feed out the operating unit (2) from the guide pin (arrow).
- Disconnect associated connector.

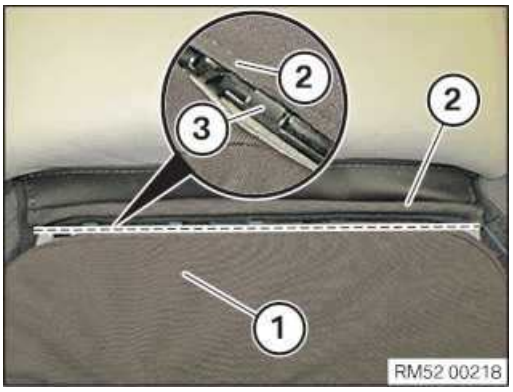
6 – Remove the support for the operating unit for the seat adjustment



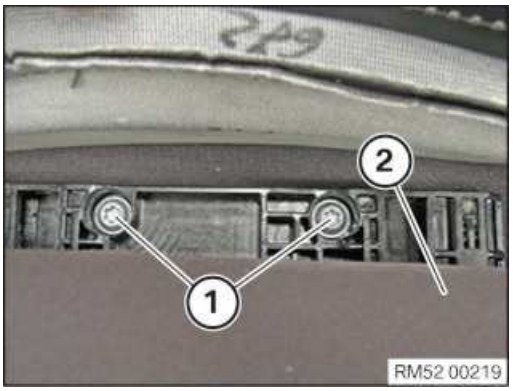
- Loosen the cable clip (1).
- Cover the area around the rivet head (2).
- Drill out the rivet head (2).
- Remove the support (3) toward the front.
- Remove all rivet remnants.

7 – Removing the thigh support on the front seat

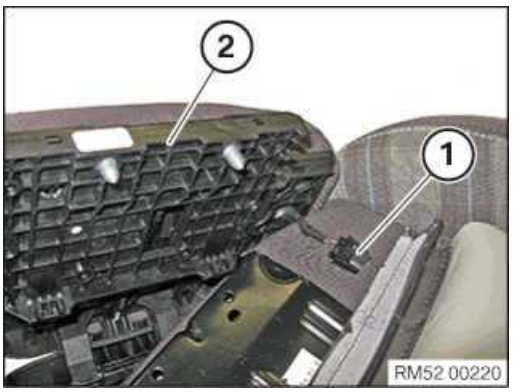
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- Adjust the thigh support (1) forward.
- Lever the edge stripping (2) of the seat cover out of the bracket (3).



- Loosen screws (1).
- Detach the thigh support (2) forward and remove.

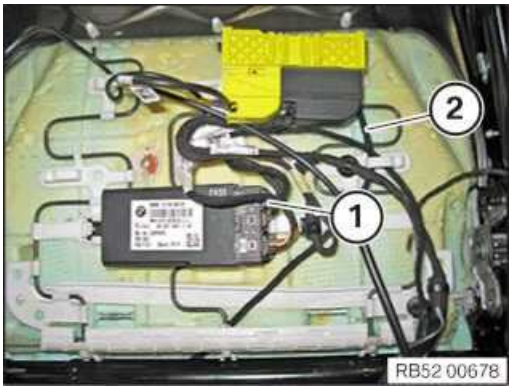


- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Remove thigh support (2).

8 – Remove the seat cover with the cushion for the front seat

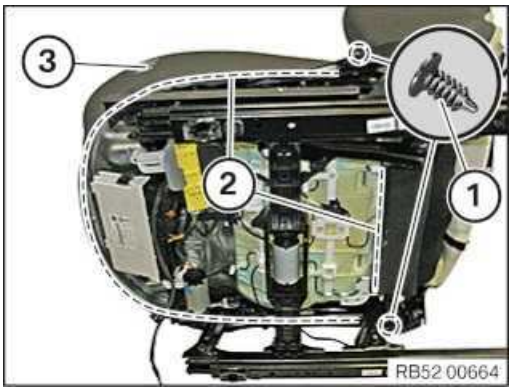


- Detach retaining strap (1) at the left and right from the seat mechanism.



- **Version with seat heating only:**
- Unlock plug connection (1) and disconnect.
- Feed back corresponding cable (2).

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- Loosen the clips (1).
- Detach the welt in this marked area (2).
- Feed out the seat cover (3) with the cushion and remove.

MAIN WORK

9 – Removing the seat cover for the front seat (sport)



- Release all clamps at the trim wires in the marked area.
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

10 – Renewing cushion for front seat

TECHNICAL INFORMATION

Only US/Canadian version of front passenger seat with seat occupancy mat (CIS):

The seat occupancy mat is bonded to the entire surface of the upholstery and can only be replaced together with the upholstery.

If the seat occupancy mat or upholstery is defective, both parts must always be replaced together.

Full operability can only be guaranteed with the Original BMW replacement part.

After fitting the seat cover, enable the seat occupancy mat using the BMW programming system.

TECHNICAL INFORMATION

The heating element is bonded to the upholstery and it cannot be removed without destroying it.

When replaced, a new heating element must always be fitted with new upholstery.

NOTICE

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

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- **Equipment specification with seat heating**

  Position the heating mat (1) on the cushion and align.

  Bond the heating mat (1) to the cushion in these areas (2).

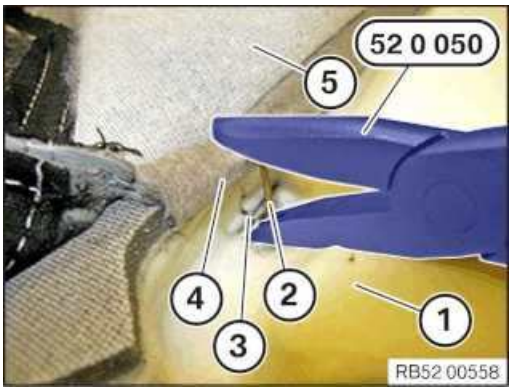
11 – Install the seat cover for the front seat (Sport)

NOTICE

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



- Place the seat cover on the upholstery.
- Secure all trim wires with clamps.



- Renew the clamps (2).

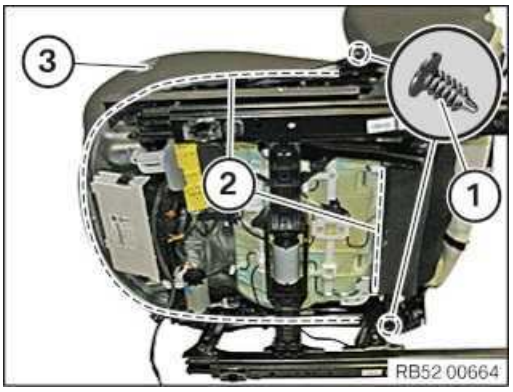
  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover with the clamp (2) and bend the clamp (2) to close it.

1	Upholstery
2	Clamp
3	Trim wire in cushion
4	Trim wire in seat cover
5	Seat cover

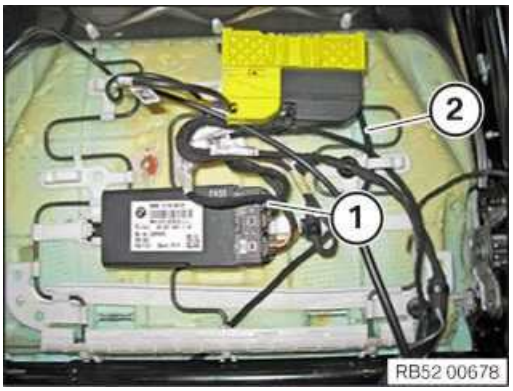
POSTPROCESSES

12 – Fit the seat cover with the upholstery for the front seat

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- Feed in the seat cover (3) with the cushion and position.
- Attach welt in marked area (2).
- Secure the clips (1).

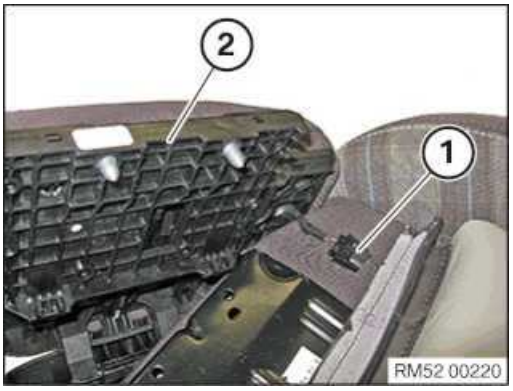


- **Version with seat heating only:**
- Feed in cable (2).
- Connect plug connection (1) and lock.

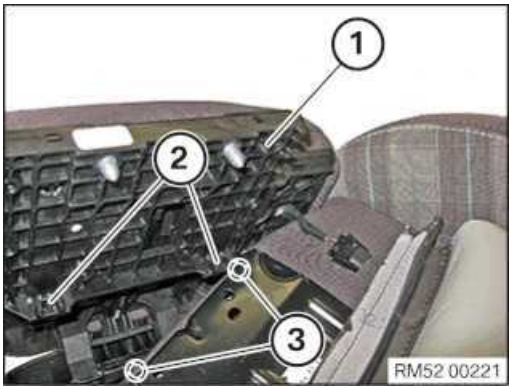


- Fasten retaining strap (1) to the seat mechanism at the left and right.

13 – Installing thigh support on the front seat

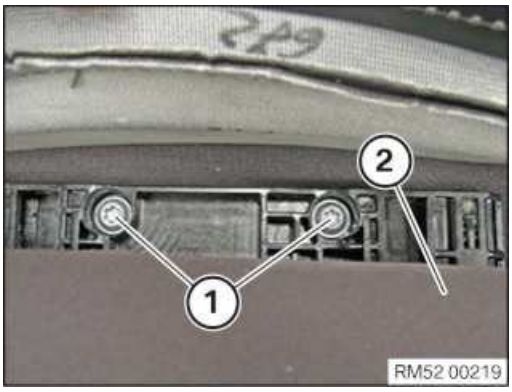


- **Version with seat heating only:**
- Connect plug connection (1) and lock.
- Position the thigh support (2).



- Slide the thigh support (1) with the guides (2) into the respective openings on the seat frame (3).

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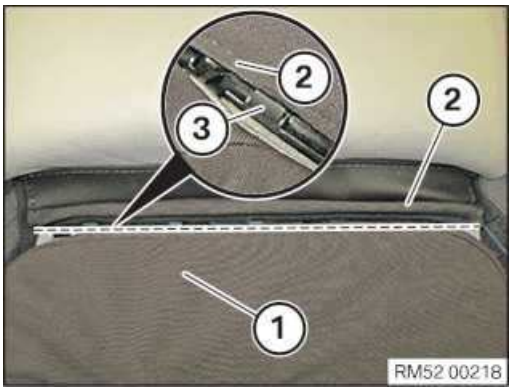


TECHNICAL INFORMATION

Microencapsulated screws must be replaced and may not be reused.

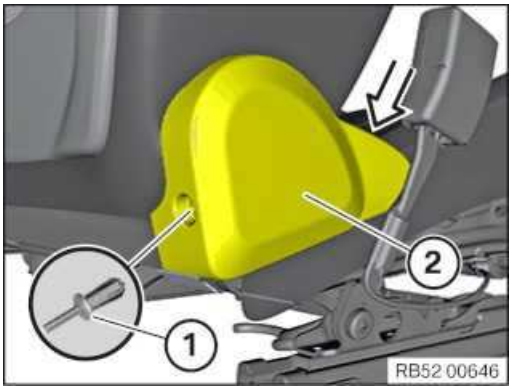
The screw fitting must be completed within 10 minutes, as the hardening begins after this time period. Microencapsulated screws must not be retightened.

- Tighten the screws (1).



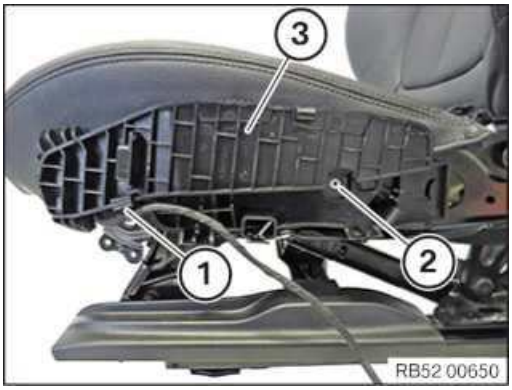
- Adjust the thigh support (1) forward.
- Attach the edge stripping (2) of the seat cover in the bracket (3).

14 – Installing the inner cover on the front seat



- Install the cover (2) in the direction of the arrow.
- Fasten expanding rivet (1).

15 – Installing support for seat adjustment operating unit

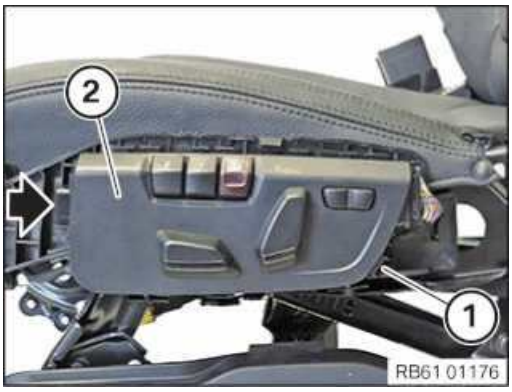


- Insert support (3) from the front and position.
- Renew the blind rivet (2).

  Parts: Blind rivet
- Secure support (3) with the blind rivet (2).
- Secure the cable clips (1).

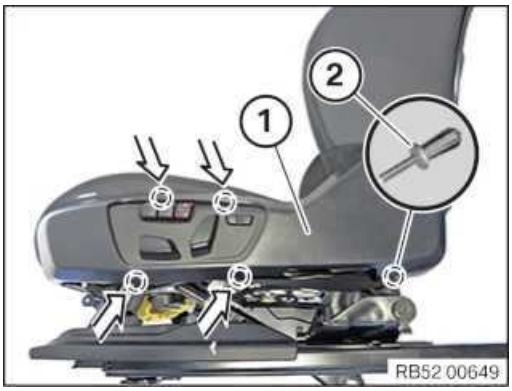
16 – Install operating unit for seat adjustment

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- Insert operating unit (2) into the guide (arrow) and snap into the catch mechanism (1).
- Connect associated connector.

17 – Installing the outer cover on the electrical front seat



- Position cover (1) on the front seat and fasten with the upper and lower latch mechanisms.
- Insert the expanding rivet (1).

18 – Install front seat

TECHNICAL INFORMATION

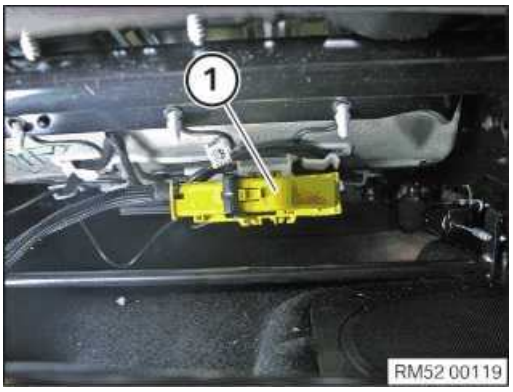
Different variants may be installed depending on the vehicle equipment.



▸ **Removing the front seat from the universal seat mount .**

- Removing the seat from the special tool (universal seat mount) **2 154 711**.
-

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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.

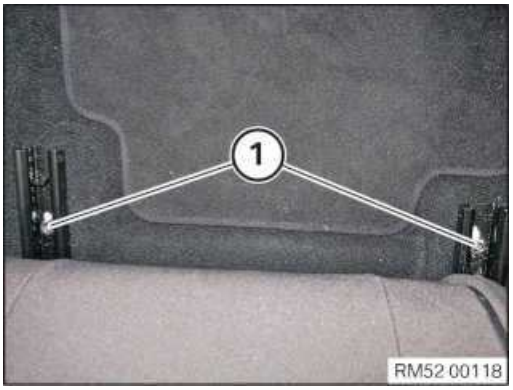
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

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

- Lift the front seat into the vehicle with an auxiliary person and position it.
- Lay the front seat back and connect connector (1) .



- 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



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

  Parts: Bolts
- Tighten the screws (1).

Seat to body

M10	Renew screw.	Tightening torque	42 Nm

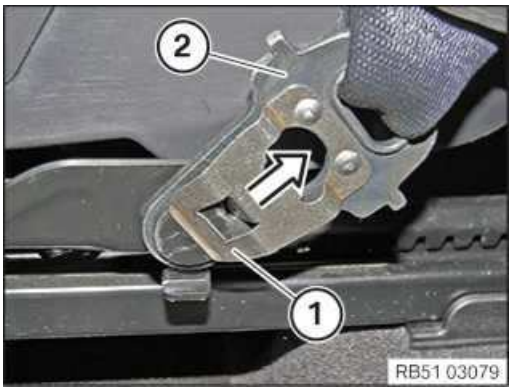
▸ **Disconnecting all battery earth leads**

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- See additional information.

19 – Install front end fitting



- Feed in end fitting (2) and engage.
- Pull the end fitting (2) in direction of arrow until the lock plate (1) engages audibly.

  The end fitting can be turned on the bolt if the lock plate is engaged correctly.

Check

- Check if the end fitting can be turned on the bolt.

Result

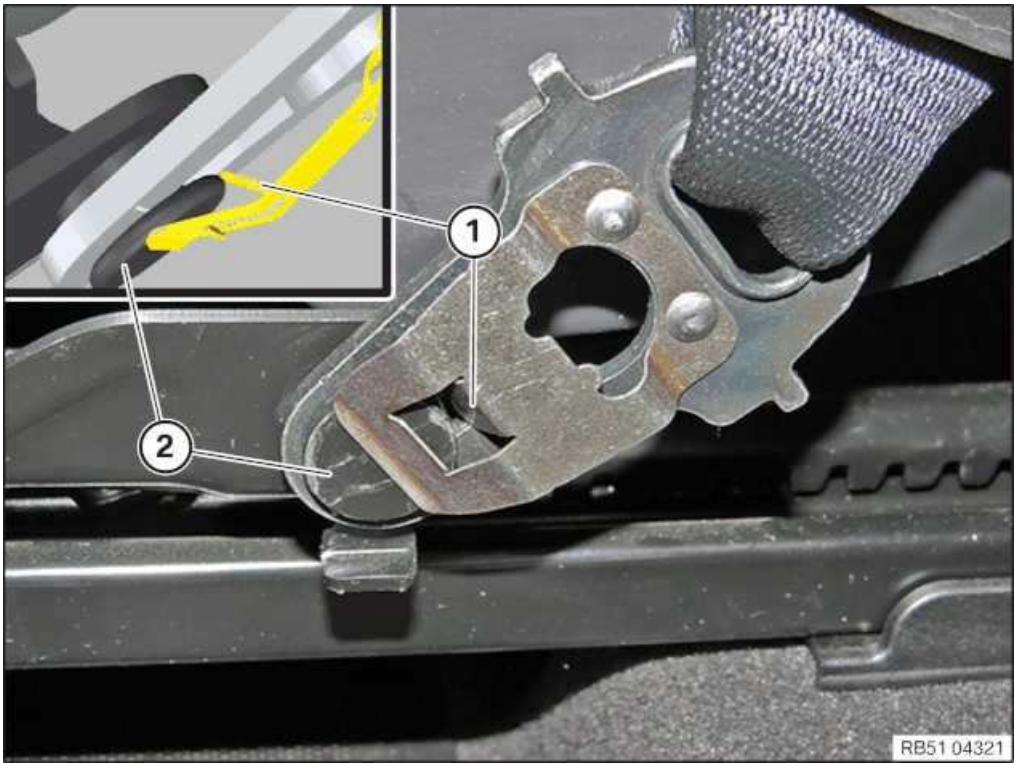
» The end fitting cannot be turned.

Measure

- Engage lock plate into place again.

▸ **Correctly mount the front end fitting**

End fitting



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- Make sure that the retaining tab (1) correctly engages behind the bolt (2).

WARNING

Malfunction with incorrectly secured components.

Danger of injury!

- Ask a second person to check the torque or latch mechanism (four-eyes principle).
- Both persons must document that the work has been carried out correctly in the vehicle records.

- Observe the following animation:

Your browser doesn't support HTML5 video.



- Slide the cover (1) on the seat belt (2) in a downward direction.
- Perform the concluding check: Pull end fitting forward, upward and backward.

Additional Information

Overview of Tightening Torques

Seat to body			Used in step 18
M10	Renew screw.	Tightening torque	42 Nm

Overview of Special Tools

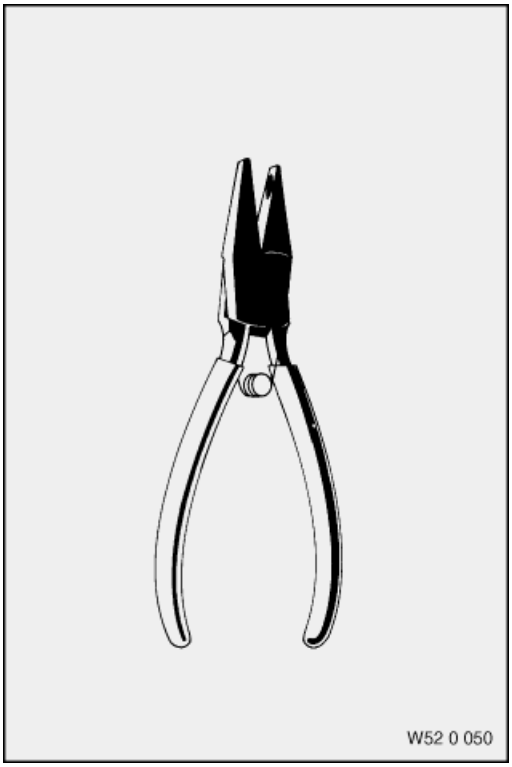
2 154 711 Fitting aid



Common	Used in step 2 18
Usage	This universal seat fixture is intended for professional repairs of vehicle seats. Universal seat fixture to be used only in conjunction with engine assembly stand with SWZ number 00 2 300.
Included in the tool or work	
Storage location	
Replaced by	
In connection with	Engine assembly stand with SWZ number 0495187
SI-Number	08 18 08 (495)

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0 492 668 (52 0 050) Pliers



Common		Used in step 11
Usage	For securing clamps on seat cover	
Included in the tool or work		
Storage location	C14	
Replaced by		
In connection with		
SI-Number	52 06 87 (808)	

Links

General repair instructions	Used in step
72 00 ... Safety regulations for handling components with gas generators	2

Repair instructions	Used in step
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2 18
61 20 900 Disconnect and connect battery earth lead (Plug-in Hybrid Electric Vehicle)	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18
61 20 900 Disconnecting and connecting battery earth lead	2 18

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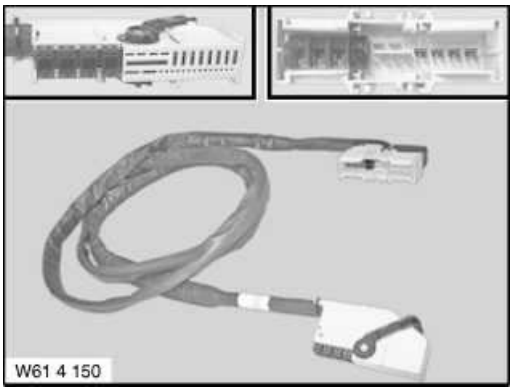
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting the battery earth lead (all battery earth leads)	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
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61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18
61 20 900 Disconnecting and connecting battery earth lead	2	18

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52 14 ... Performing function check with adapter cable (for seat repairs)

Special tools required:

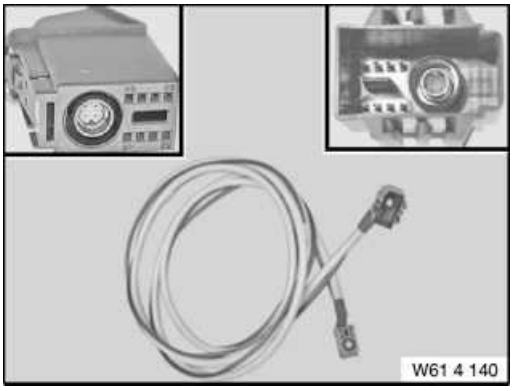
- 61 4 140
- 61 4 150



Seat function check: *Note:*
The function check on a repaired driver's or front passenger seat can be performed outside the vehicle by using adapter cable 61 4 150 .

Application:

Adapter cable is connected to vehicle wiring harness and removed seat 61 4 150 .



RSE (rear passenger compartment monitor) function check *Note:*
The function check of the RSE (rear passenger compartment monitor) on a repaired driver's or front passenger seat can be performed outside the vehicle by using adapter cable 61 4 140 .

Application:

Adapter cable is connected to vehicle wiring harness and removed seat 61 4 140 .

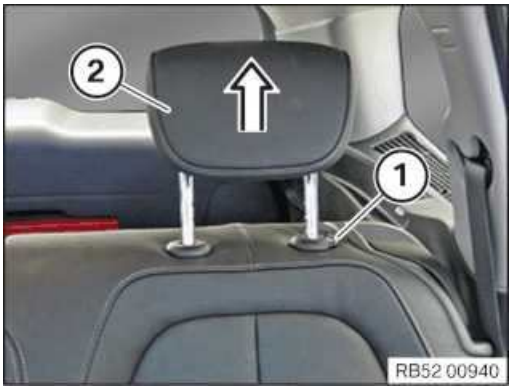
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52 26 390 Removing and installing or replacing left or right rear head restraint

1 – Remove rear head restraint

NOTICE

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



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

2 – Installing rear head restraint

NOTICE

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



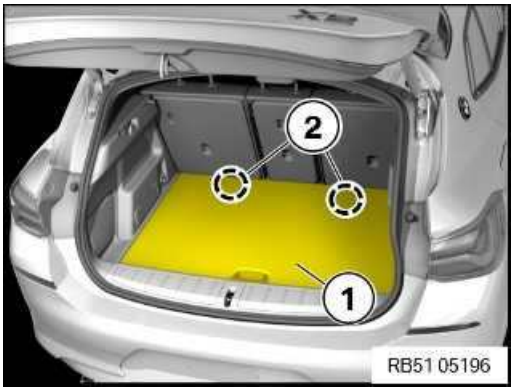
- Insert and engage head restraint (1) into the guide sleeves from above.

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52 26 002 Removing and installing seat bench

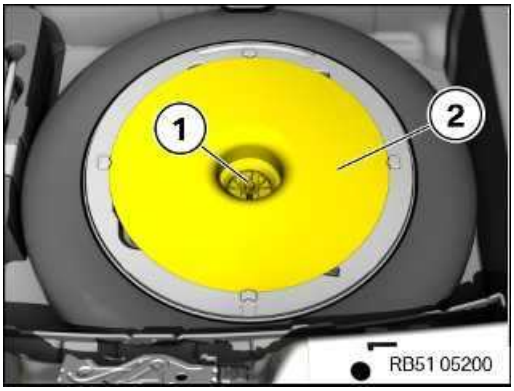
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel

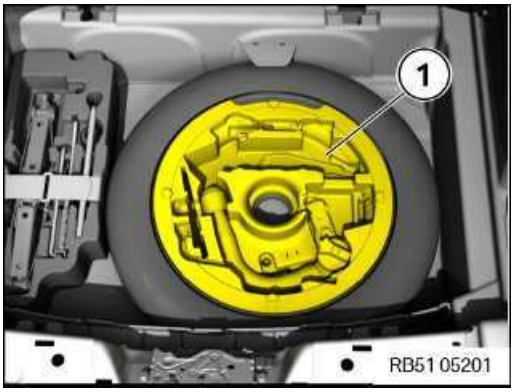


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

2 – Removing the compact spare wheel



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



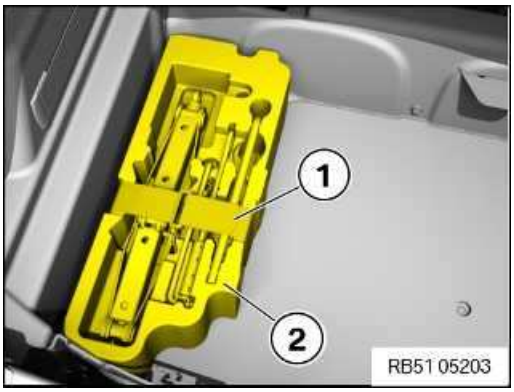
- Remove the oddments tray from the emergency wheel (1).



- Remove the emergency wheel (1).

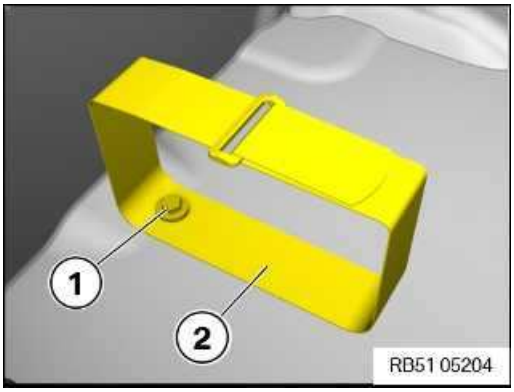
3 – Remove the tool kit

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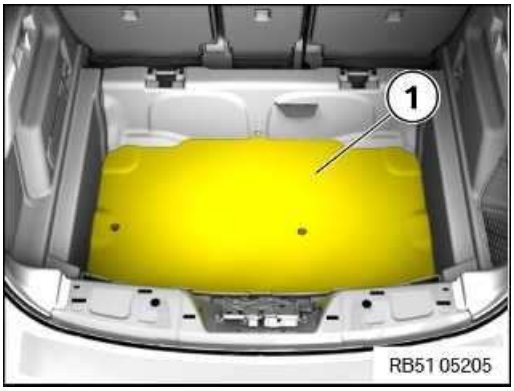
- Open the hook and loop tape (1).
- Remove the tool kit (2).

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



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

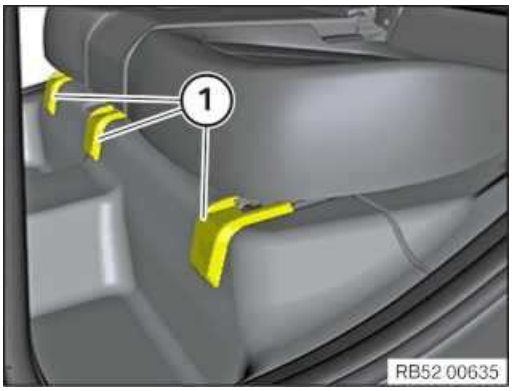
5 – Removing the luggage compartment floor trim panel



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

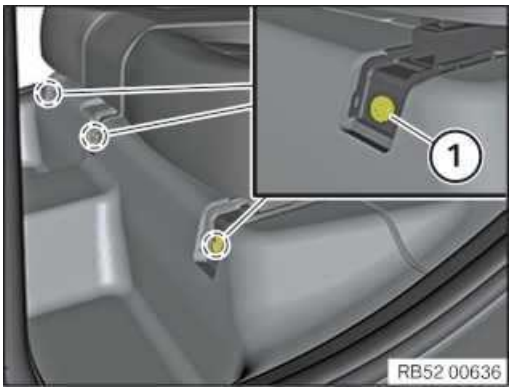
MAIN WORK

6 – Remove seat bench

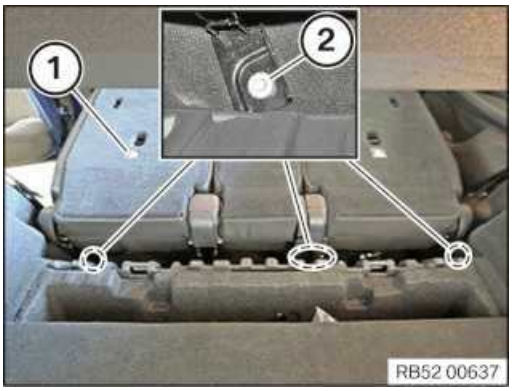


- Unclip the cover (1) forwards.

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- Loosen screws (1).



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.
- Fold down rear seat backrest (1) on left and right.
- Loosen screws (2).
- Disconnect existing plug connections where required.

RISK OF DAMAGE

Heavy component.

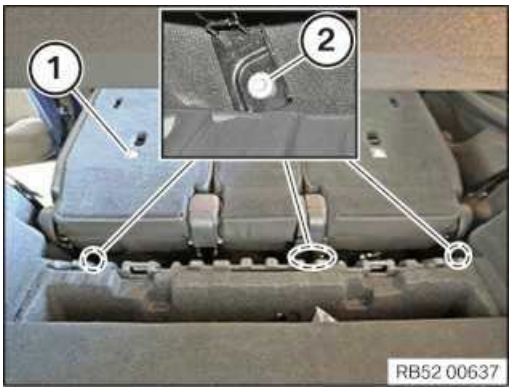
Heavy components can lead to injury or damage.

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

- Lift out rear seat bench with the assistance of a second person.

7 – Install rear seat bench

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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.

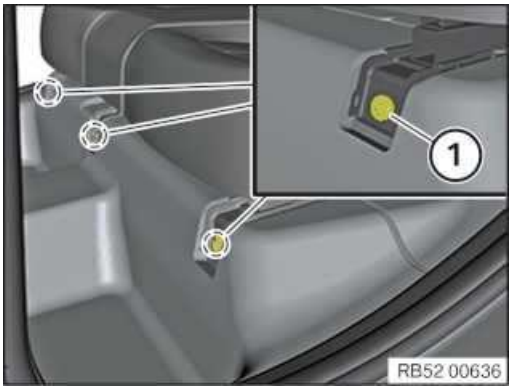
RISK OF DAMAGE

Heavy component.

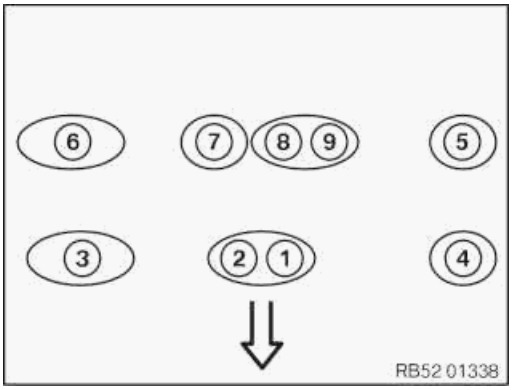
Heavy components can lead to injury or damage.

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

- Insert the rear seat bench into the vehicle and position it with the assistance of a second person.
- If necessary, connect any available plug connections.
- Screw the bolts (2) in a few turns.



- Screw the bolts (1) in a few turns.

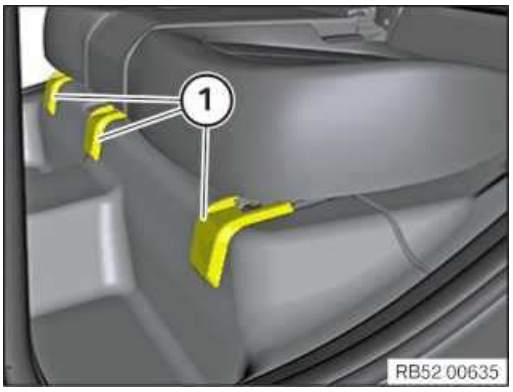


- Tighten the screws in a sequence from 1-9.

Seat bench to body

Oval-head screw		42 Nm

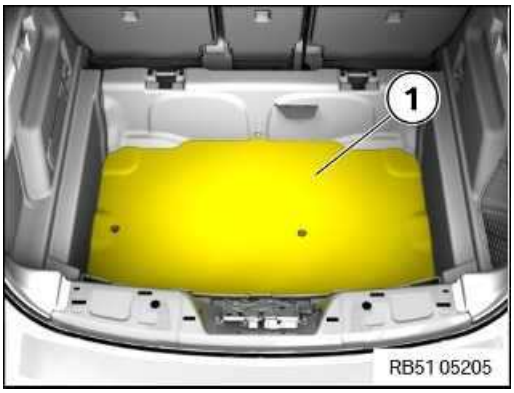
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- Clip in the covers (1).

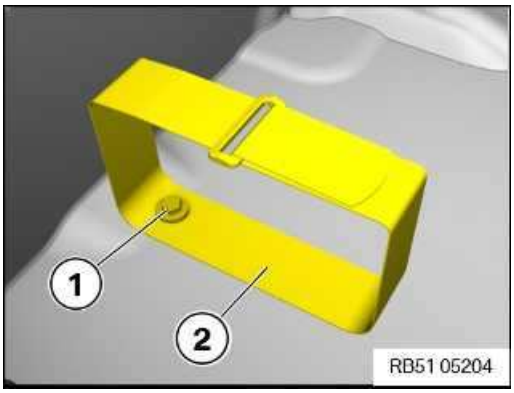
POSTPROCESSES

8 – Installing the luggage compartment floor trim panel



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

9 – Inserting the Velcro fastener for the toolkit

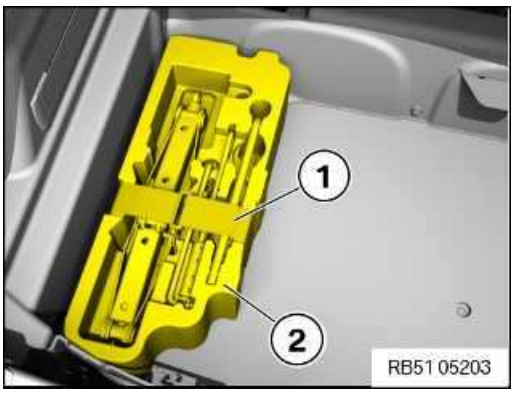


- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

10 – Install the tool kit



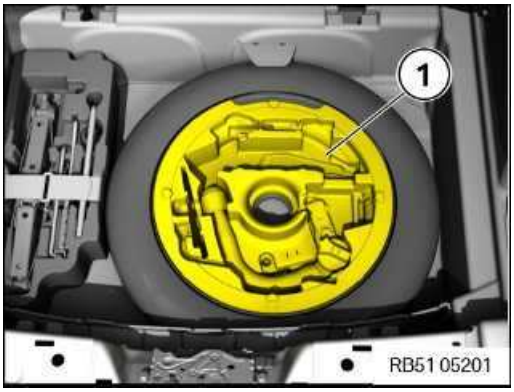
- Install the tool kit (2).
- Close the hook and loop tape (1).

11 – Install the emergency wheel

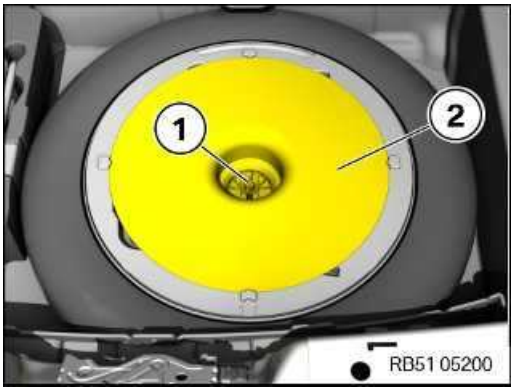
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- Insert compact spare wheel(1).

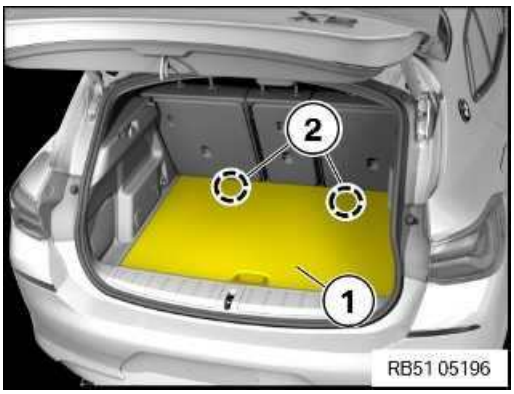


- Insert oddments tray into the compact spare wheel (1).



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

12 – Installing the luggage compartment removable panel



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

Additional Information

Overview of Tightening Torques

Seat bench to body — Used in step 7

Oval-head screw		42 Nm

Toolkit hook and loop tape to body — Used in step 9

Bolt M6 x 20		Tightening torque	4 Nm

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52 26 ... Removing and installing/replacing all guide sleeves for rear head restraints

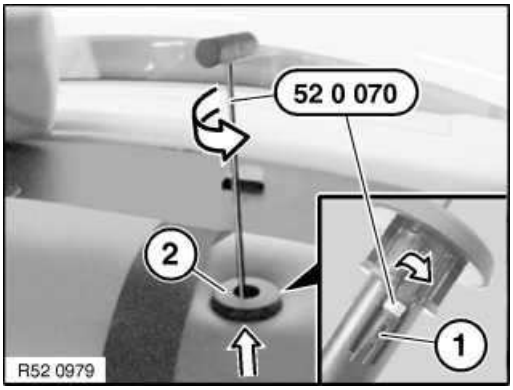
Special tools required:

- 52 0 070

Necessary preliminary tasks:

- Remove head restraints from rear seat

Removal:



Insert special tool 52 0 070 into guide hole of sleeve (2) up to upper area of retaining lug.

Feed release tongue of special tool into rear gap on retaining lug (1).

Turn tool to release sleeve (2) and pull out by lifting upwards.

Installation:



Install guide sleeves as follows:

1 Guide sleeves with lock

2 Guide sleeves without lock

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Required follow-up work:

- Install head restraints in rear seat

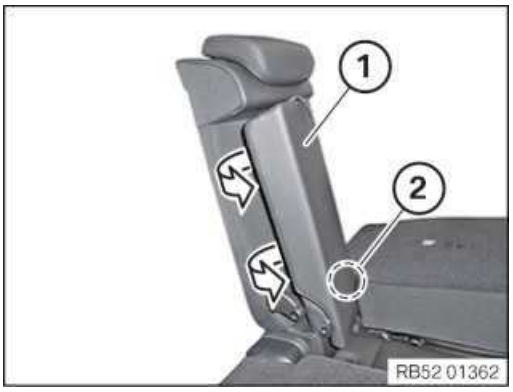
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52 26 030 Removing and installing/replacing centre armrest

1 – Removing the centre armrest



- Loosen screw (1).



- Feed out and remove the centre armrest (1) from the journal in area (2).

2 – Installing the centre armrest



- Feed in and position the centre armrest (1) with the journal (2).



- Tighten down screw (1).

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52 26 388 Removing and installing/replacing rear middle head restraint

1 – Removing the rear middle head restraint



- Press the height adjustment (1) in the direction of the arrow and pull out the head rest (2) in the direction of arrow.

2 – Installing the head restraint at the rear centre



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

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52 26 202 Removing and installing/replacing rear panel on central rear seat backrest

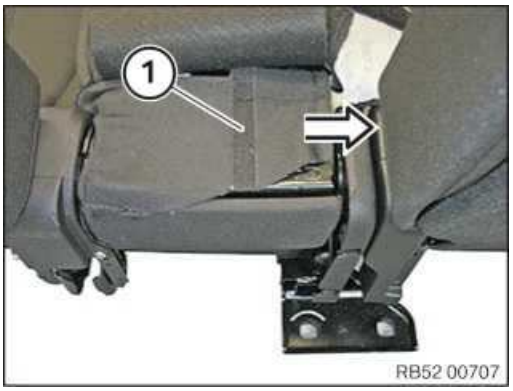
Prerequisite

- Fold rear seat backrest towards front.

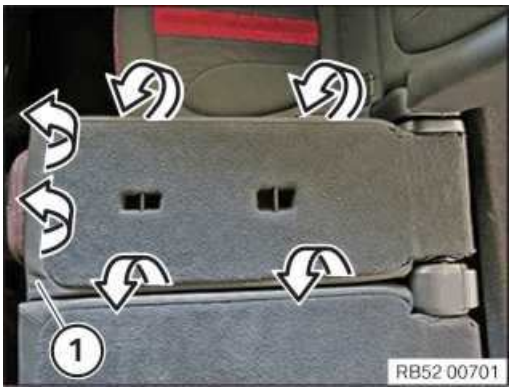
1 – Removing rear panel on centre rear seat backrest



- Carefully feed out the rear panel in the marked area (1) using a suitable tool.



- Release the hook and loop fastener (1) and feed out the backrest cover in direction of arrow.



- Use a suitable tool to feed out the backrest cover (1) all around the backrest frame.



- Remove the rear panel (1) from the rear seat backrest.

2 – Installing the rear panel on the rear seat backrest in the centre

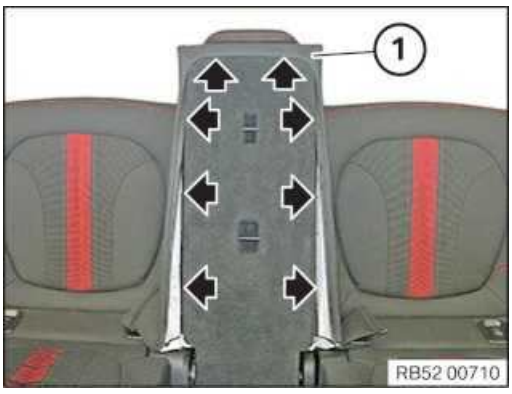
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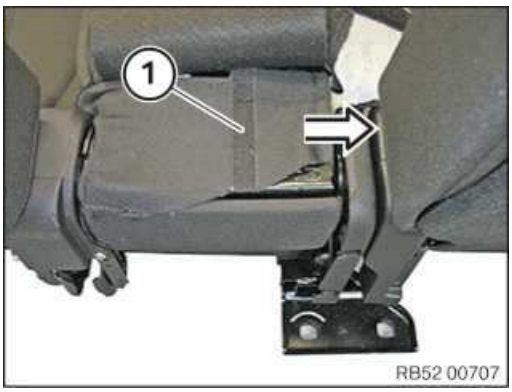
- Ensure that the rear panel engages noticeably in the backrest frame (1).



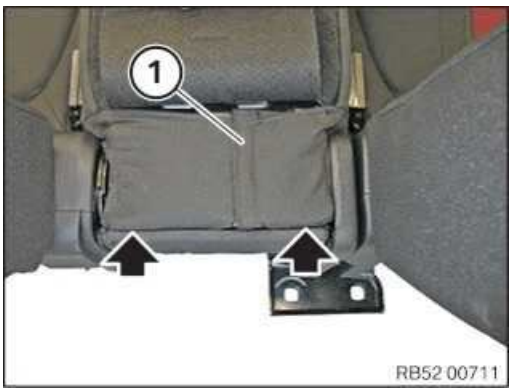
- Feed the rear panel (1) into the rear seat backrest.



- Feed in edge stripping of the backrest cover (1) beginning from the top.



- Attach the backrest cover (1) in the direction of the arrow.



- Position the backrest cover and close the hook and loop fastener (1).

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- Press the edge stripping from the backrest cover (1) into the frame at the marked area.

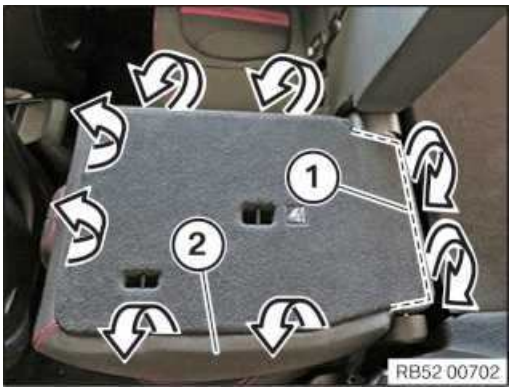
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52 26 199 Removing and installing/replacing rear panel on left rear seat backrest

Prerequisite

- Fold rear seat backrest towards front.

1 – Removing rear panel on rear seat backrest, left



- Carefully feed out the rear panel in the marked area (1) using a suitable tool.
- Feed out the backrest cover (2) all round out of the backrest frame.



- Remove the rear panel (1) from the rear seat backrest.

2 – Installing the rear panel of the left rear seat backrest

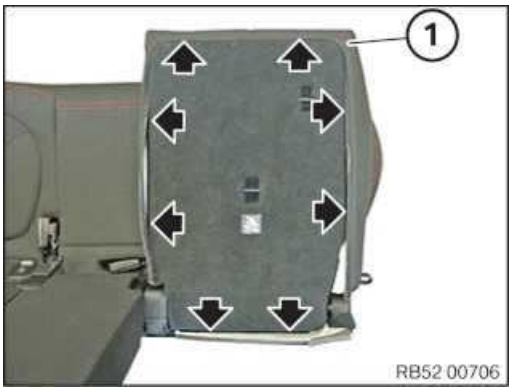


- Ensure that the rear panel engages audibly in backrest frame (1).



- Guide the rear panel (1) into the rear seat backrest and position it.

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- Guide in the edge stripping of backrest cover (1) starting from the top.

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52 26 200 Removing and installing/replacing rear panel on right rear seat backrest

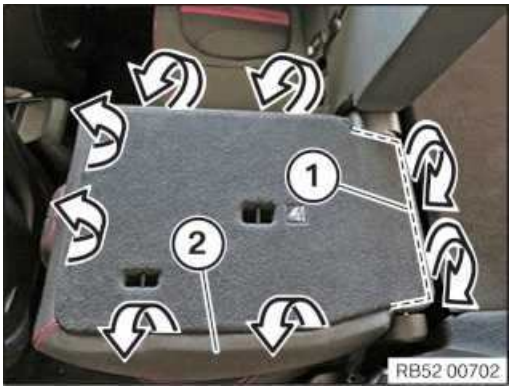
Prerequisite

› Fold rear seat backrest towards front.

1 – Removing rear panel on right rear seat backrest

NOTICE

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



- Carefully feed out the rear panel in the marked area (1) using a suitable tool.
- Feed out the backrest cover (2) all round out of the backrest frame.

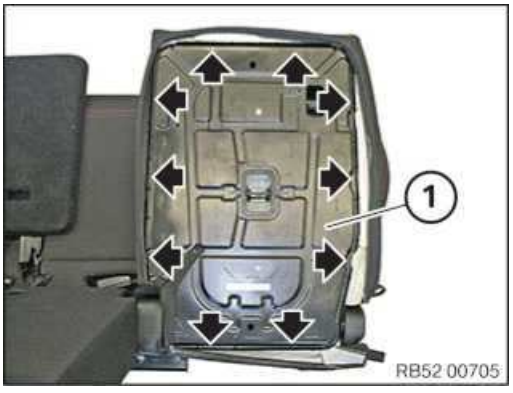


- Remove the rear panel (1) from the rear seat backrest.

2 – Installing rear panel on rear seat backrest, right

NOTICE

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

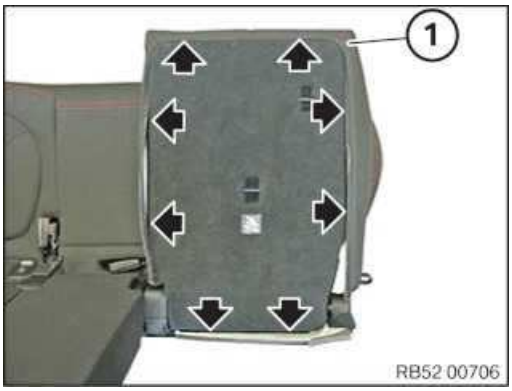


- Make sure that the rear panel engages audibly into the backrest frame (1).

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- Guide the rear panel (1) into the rear seat backrest and position it.



- Feed in welt of backrest cover (1), beginning from the top.

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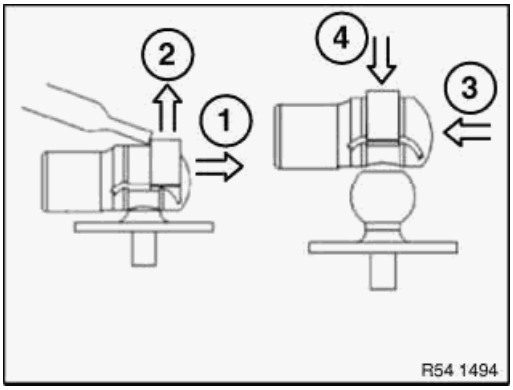
51 23 ... Removing/installing ball sockets with clip

Warning!

Danger of injury! When installed, the gas pressurised shock absorber is under preload. Minimise preload as far as possible before removing.

Important!

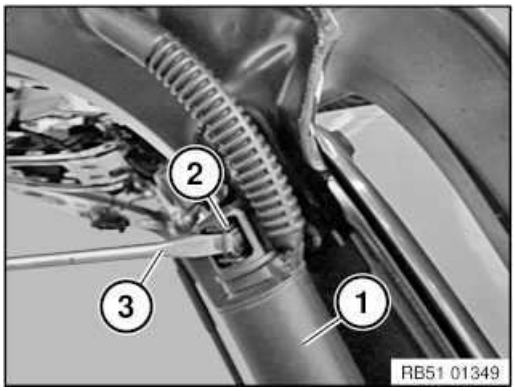
Never lift off ball socket with engaged clamp.



Version A:

1. Push on clamp in direction of groove with screwdriver
2. Lift off ball socket from ball pin
3. Slide clamp back
4. Fit ball socket on ball stud and snap into place with force

Installation note:
Pack grease into two opposite positions in socket. The grease spreads after installation on the ball pin all round in the ball socket.



Version B:

Important!

Risk of damage!

If you are not careful, retaining spring (2) may be bent to such an extent that the entire drive spindle will have to be replaced.

Press drive spindle (1) against ball pin in order to relieve strain on retaining spring (2) at ball pin.

Pull out retaining spring (2) approx. 2-3 mm with screwdriver (3).

Pull off spindle foot.

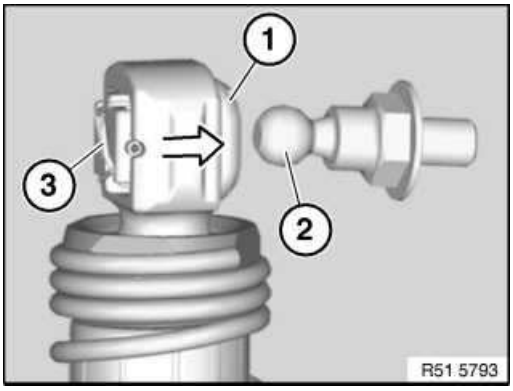
Warning!

Observe warning notices on the damper.

Electrical spindle drive for tailgate is under mechanical spring load!

The component must be secured against falling down.

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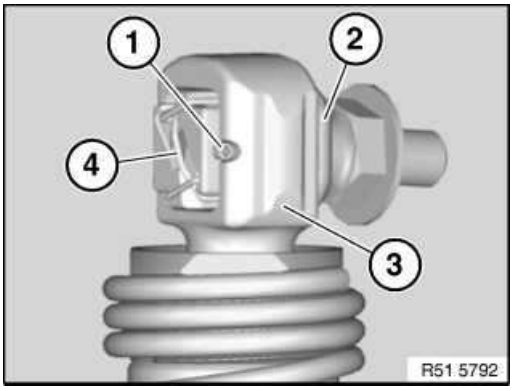


Attention!

Risk of damage!

Do not press on spindle drive at an angle or twisted.

Installation note:
Press ball socket (1) onto ball pin (2) until retaining spring (3) engages correctly (clicking sound).



Important!

If retaining spring (4) is damaged!

Release pin (1).

Remove spindle drive (3).

Remove ball socket (2).

Remove retaining spring (4) and replace if necessary.

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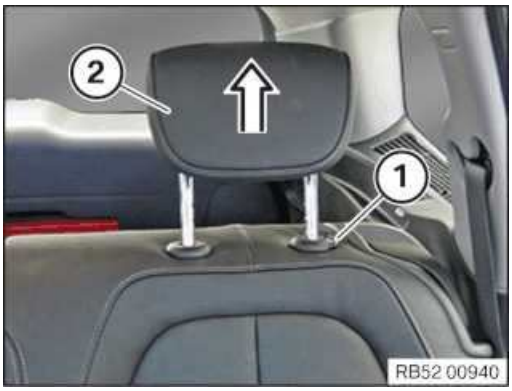
52 26 411 Replacing backrest cover for left rear seat

PRELIMINARY WORK

1 – Remove rear head restraint

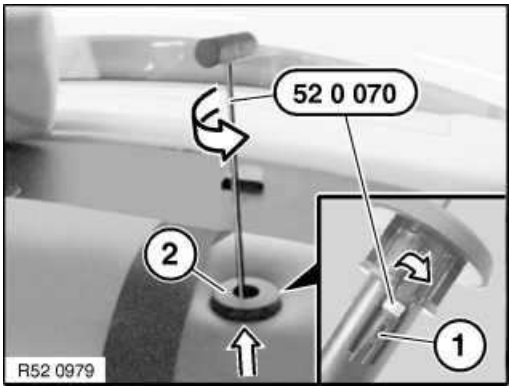
NOTICE

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



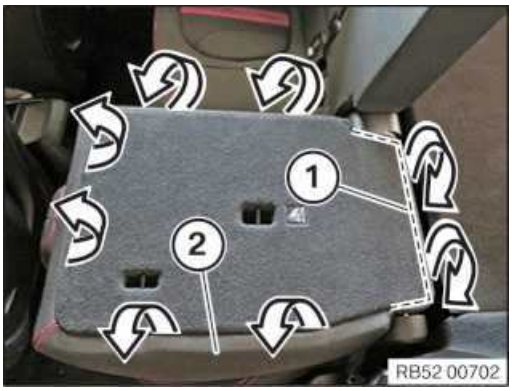
- Press the height adjustment (1) and pull the head restraint (2) out towards the top.

2 – Removing the guide sleeve for the rear head restraint



- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

3 – Removing rear panel on rear seat backrest, left



- Carefully feed out the rear panel in the marked area (1) using a suitable tool.
- Feed out the backrest cover (2) all round out of the backrest frame.

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- Remove the rear panel (1) from the rear seat backrest.

MAIN WORK

4 – Remove the backrest cover from the rear seat backrest



- Release the clip (1) on the rubber band.



- Put on the backrest cover (1) and remove forwards in bottom area (2).



- Including the backrest cover (1). Remove the cushion (2) upwards.

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- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

5 – Renew the backrest cover of the rear seat backrest

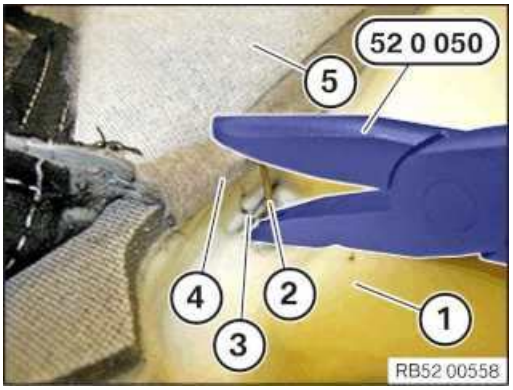


- Pull out all the trim wires from the old cover.
- If necessary, cut pockets in the new cover for the trim wires.
- Push the trim wires into the new cover pockets.

6 – Install the backrest cover of the rear seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.



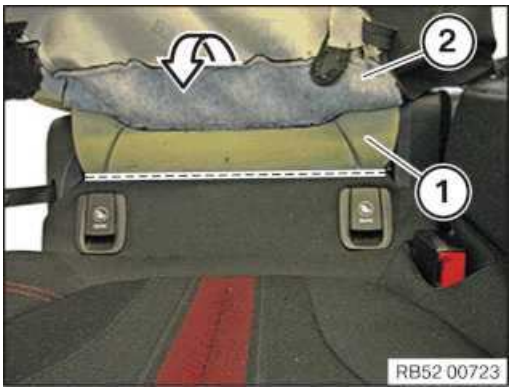
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.



- Make sure that the cushion (1) rests flush on the backrest frame at the marked location.
- Position the cushion (1) including cover (2) from the top in direction of arrow.

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- Position the cushion (1) at the marked location.
- Feed in the backrest cover (2) in the bottom area toward the rear in direction of arrow.

POSTPROCESSES

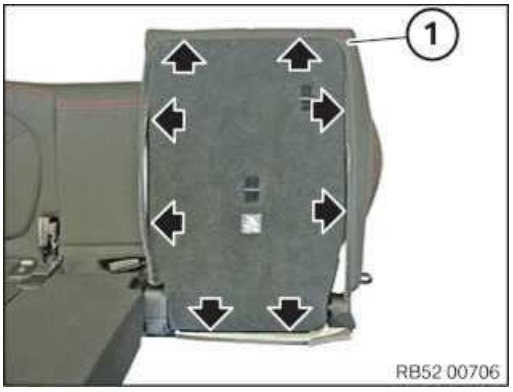
7 – Installing the rear panel of the left rear seat backrest



- Ensure that the rear panel engages audibly in backrest frame (1).



- Guide the rear panel (1) into the rear seat backrest and position it.



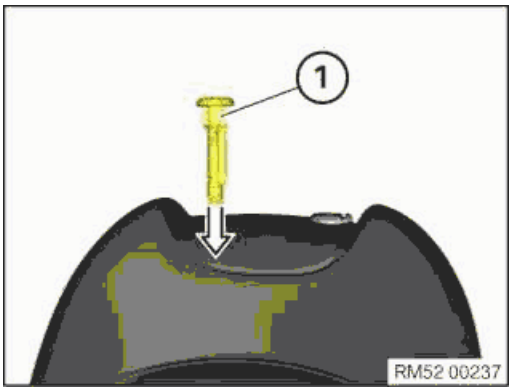
- Guide in the edge stripping of backrest cover (1) starting from the top.

8 – Installing the guide sleeve for the rear head restraint

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- Install guide sleeves as follows:
  (1)Guide sleeves with lock
  (2)Guide sleeves without lock



- Insert guide sleeve (1) from above and engage.

9 – Installing rear head restraint

NOTICE

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



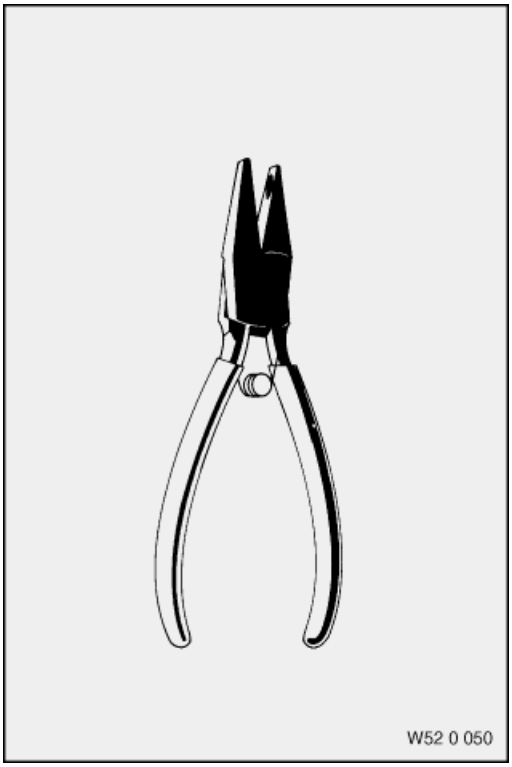
- Insert and engage head restraint (1) into the guide sleeves from above.

Additional Information

Overview of Special Tools

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0 492 668 (52 0 050) Pliers



Common

Used in step 6

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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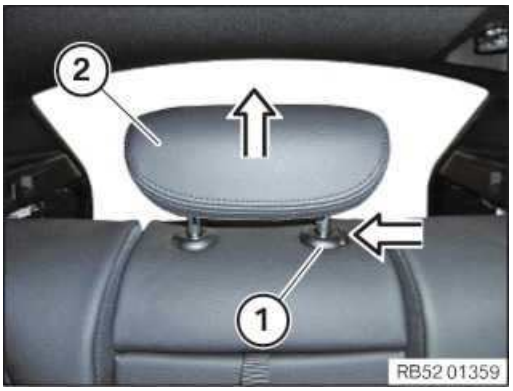
52 26 414 Replacing backrest cover for rear seat, centre

Prerequisite

- Fold rear seat backrest towards front.

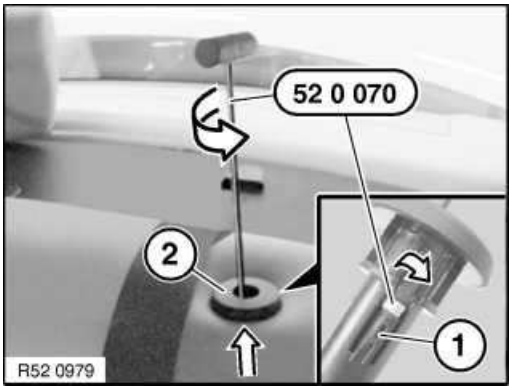
PRELIMINARY WORK

1 – Removing the rear middle head restraint



- Press the height adjustment (1) in the direction of the arrow and pull out the head rest (2) in the direction of arrow.

2 – Removing the guide sleeve for the rear head restraint

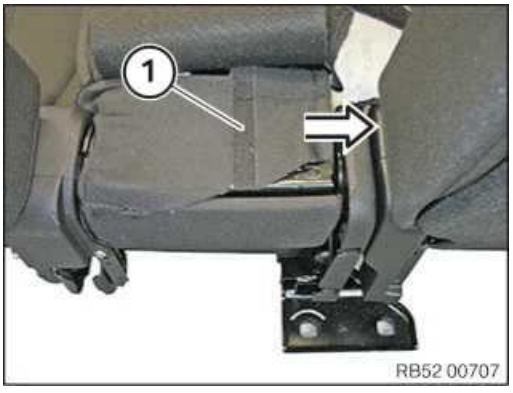


- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

3 – Removing rear panel on centre rear seat backrest

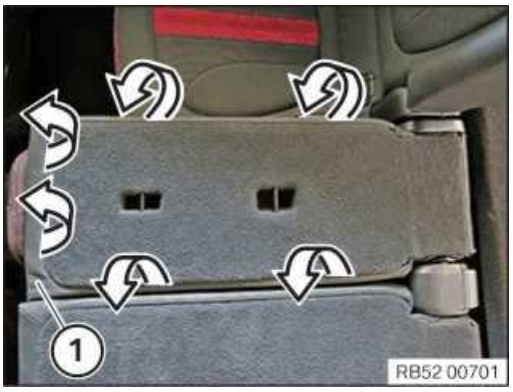


- Carefully feed out the rear panel in the marked area (1) using a suitable tool.



- Release the hook and loop fastener (1) and feed out the backrest cover in direction of arrow.

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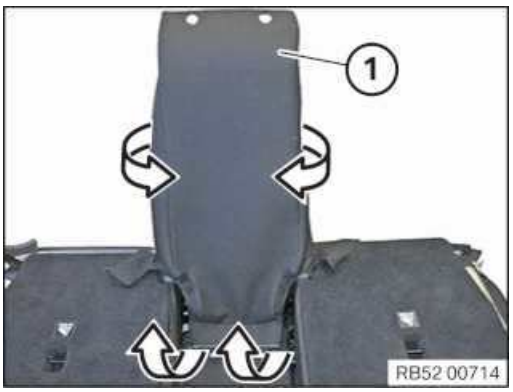
- Use a suitable tool to feed out the backrest cover (1) all around the backrest frame.



- Remove the rear panel (1) from the rear seat backrest.

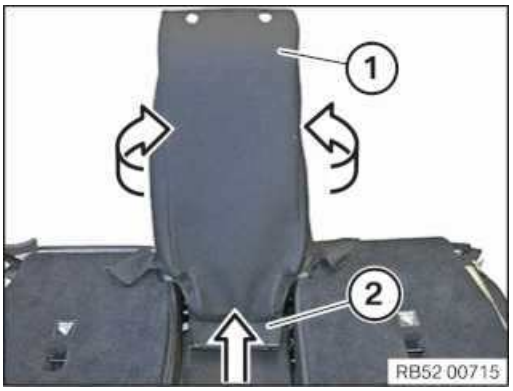
MAIN WORK

4 – Remove the backrest cover from the center rear seat backrest



- Remove backrest cover (1) in direction of the arrow starting from below.

5 – Install the backrest cover of the centre rear seat backrest



- Attach the backrest cover (1) starting from the top and in direction of the arrow.
- Guide the backrest cover (1) in the lower area (2) towards the rear.

POSTPROCESSES

6 – Installing the rear panel on the rear seat backrest in the centre

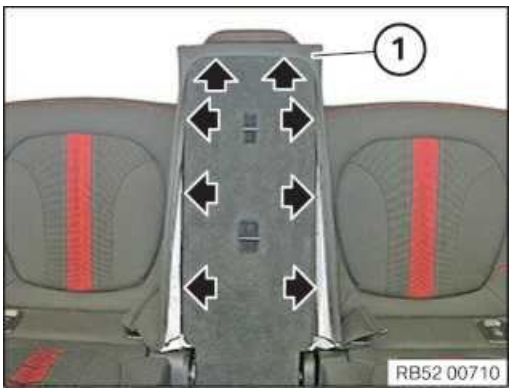
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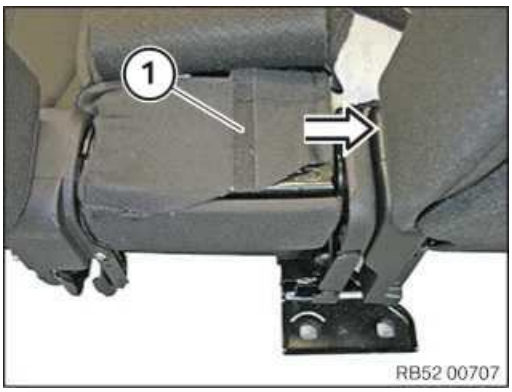
- Ensure that the rear panel engages noticeably in the backrest frame (1).



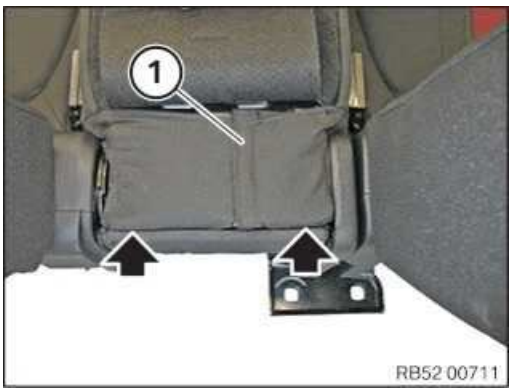
- Feed the rear panel (1) into the rear seat backrest.



- Feed in edge stripping of the backrest cover (1) beginning from the top.



- Attach the backrest cover (1) in the direction of the arrow.



- Position the backrest cover and close the hook and loop fastener (1).

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- Press the edge stripping from the backrest cover (1) into the frame at the marked area.

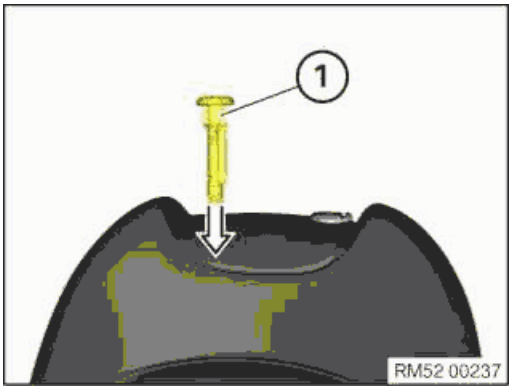
7 – Installing the guide sleeve for the rear head restraint



- Install guide sleeves as follows:

  (1)Guide sleeves with lock

  (2)Guide sleeves without lock



- Insert guide sleeve (1) from above and engage.

8 – Installing the head restraint at the rear centre



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

Additional Information

Overview of Special Tools

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52 26 412 Replacing backrest cover for right rear seat

NOTICE

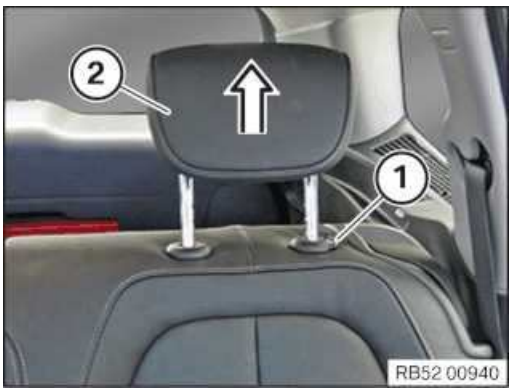
Description is for left component only. Procedure on the right side is identical.

PRELIMINARY WORK

1 – Remove rear head restraint

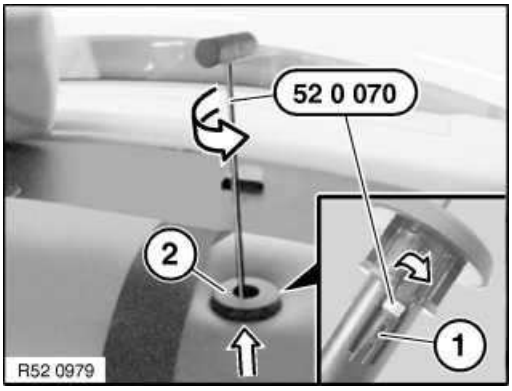
NOTICE

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



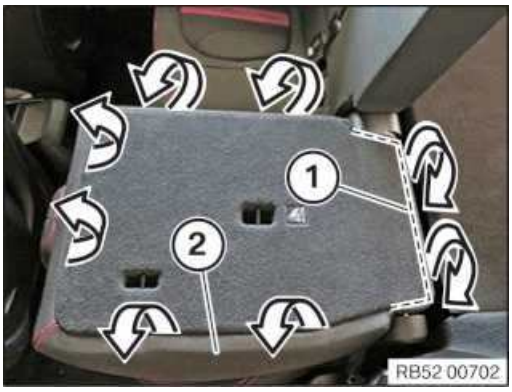
- Press the height adjustment (1) and pull the head restraint (2) out towards the top.

2 – Removing the guide sleeve for the rear head restraint



- Insert the special tool in the guide hole of the sleeve (2) to the upper area of the retaining lug.
- Feed in the unlocking tab of the special tool behind the latch mechanism (1).
- Turn the tool to unlock the sleeve (2) and pull it out upward.

3 – Removing rear panel on rear seat backrest, left



- Carefully feed out the rear panel in the marked area (1) using a suitable tool.
- Feed out the backrest cover (2) all round out of the backrest frame.

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- Remove the rear panel (1) from the rear seat backrest.

MAIN WORK

4 – Remove the backrest cover from the rear seat backrest



- Release the clip (1) on the rubber band.



- Put on the backrest cover (1) and remove forwards in bottom area (2).



- Including the backrest cover (1). Remove the cushion (2) upwards.

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- Release all clamps on the trim wires in the marked area.
- Remove the backrest cover from the upholstery.
- Completely remove the clamps from the backrest cover and the cushion.

5 – Renew the backrest cover of the rear seat backrest

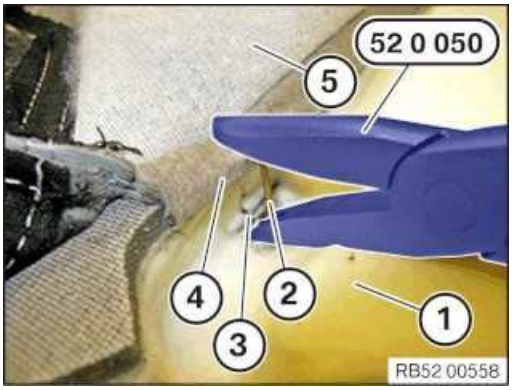


- Pull out all the trim wires from the old cover.
- If necessary, cut pockets in the new cover for the trim wires.
- Push the trim wires into the new cover pockets.

6 – Install the backrest cover of the rear seat backrest



- Place the backrest cover onto the upholstery.
- Secure all trim wires in the marked area on the cushion with the clamps.



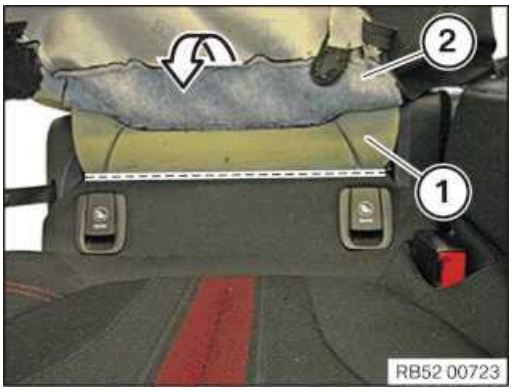
- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the backrest cover (5) with the clamp (2) and bend the clamp (2) to close it.



- Make sure that the cushion (1) rests flush on the backrest frame at the marked location.
- Position the cushion (1) including cover (2) from the top in direction of arrow.

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- Position the cushion (1) at the marked location.
- Feed in the backrest cover (2) in the bottom area toward the rear in direction of arrow.

POSTPROCESSES

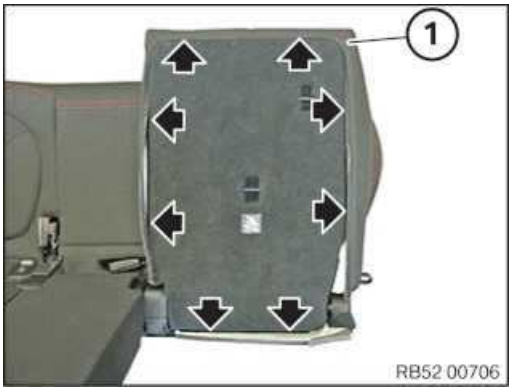
7 – Installing the rear panel of the left rear seat backrest



- Ensure that the rear panel engages audibly in backrest frame (1).



- Guide the rear panel (1) into the rear seat backrest and position it.



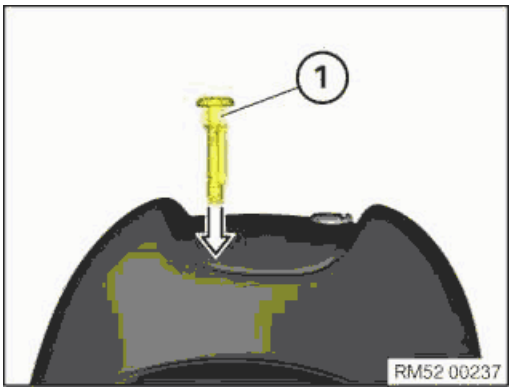
- Guide in the edge stripping of backrest cover (1) starting from the top.

8 – Installing the guide sleeve for the rear head restraint

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- Install guide sleeves as follows:
  (1)Guide sleeves with lock
  (2)Guide sleeves without lock



- Insert guide sleeve (1) from above and engage.

9 – Installing rear head restraint

NOTICE

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



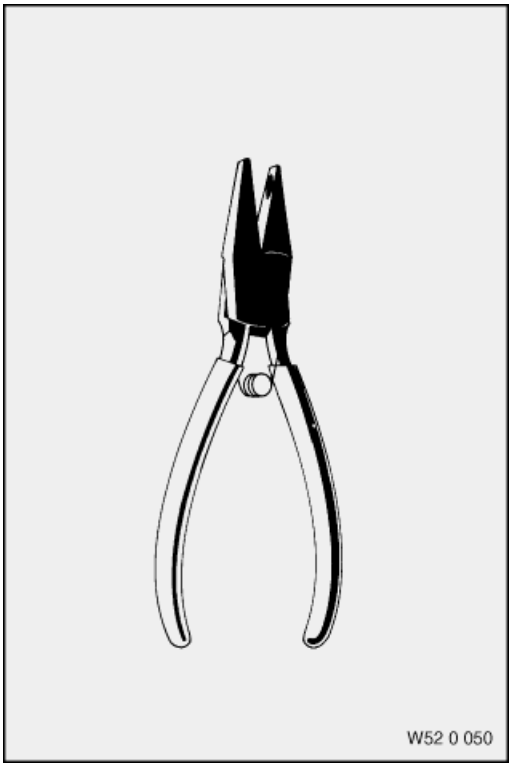
- Insert and engage head restraint (1) into the guide sleeves from above.

Additional Information

Overview of Special Tools

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0 492 668 (52 0 050) Pliers



Common

Used in step 6

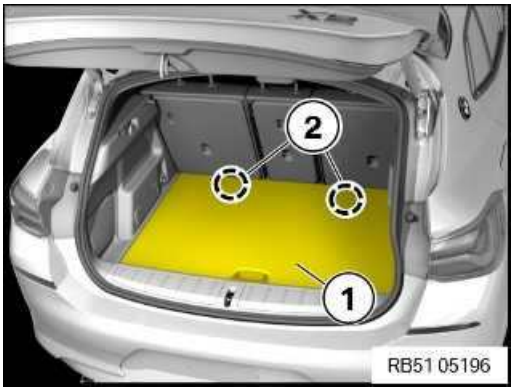
Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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52 26 400 Replacing seat cover for rear seat

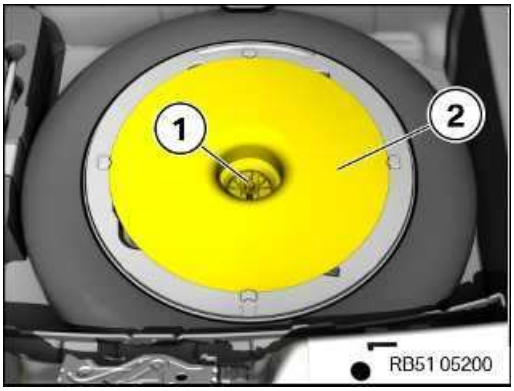
PRELIMINARY WORK

1 – Removing the luggage compartment removable panel

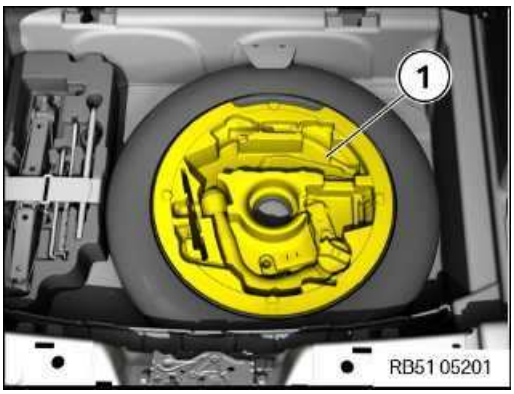


- Raise the luggage compartment removable panel (1) slightly at the handle, detach it from the latch mechanisms (2) and remove it toward the back.

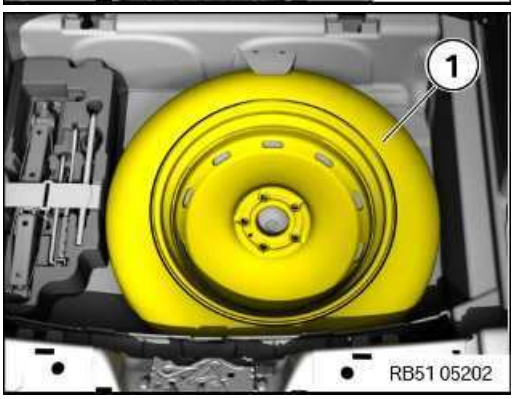
2 – Removing the compact spare wheel



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



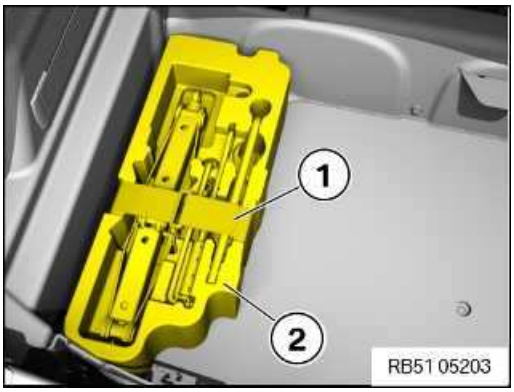
- Remove the oddments tray from the emergency wheel (1).



- Remove the emergency wheel (1).

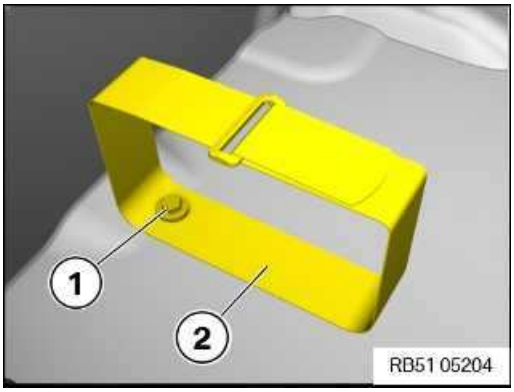
3 – Remove the tool kit

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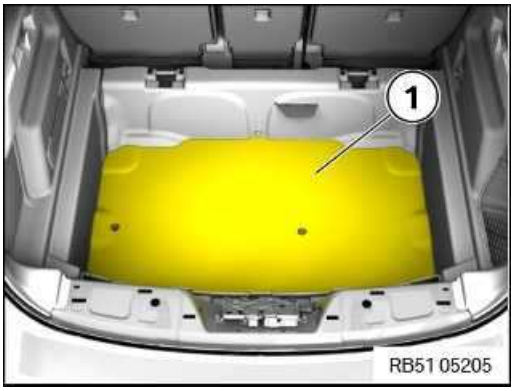
- Open the hook and loop tape (1).
- Remove the tool kit (2).

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



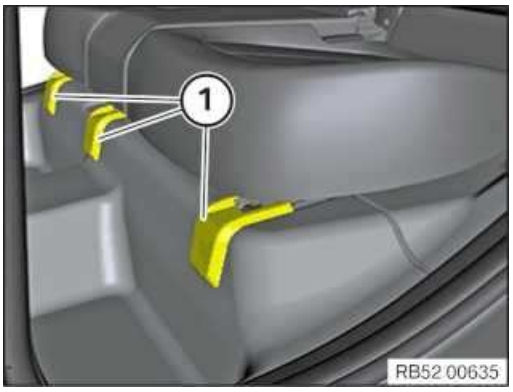
- Loosen screw (1).
- Remove the hook and loop tape (2).

5 – Removing the luggage compartment floor trim panel



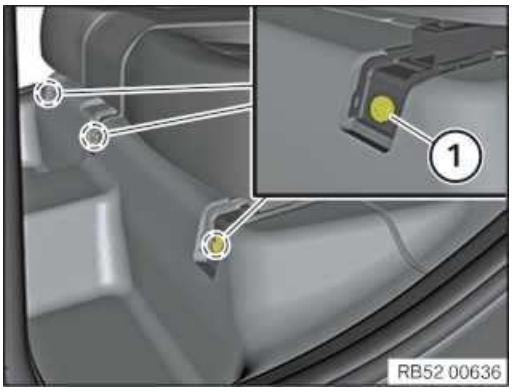
- Remove the luggage compartment floor trim panel (1) upwards.

6 – Remove seat bench

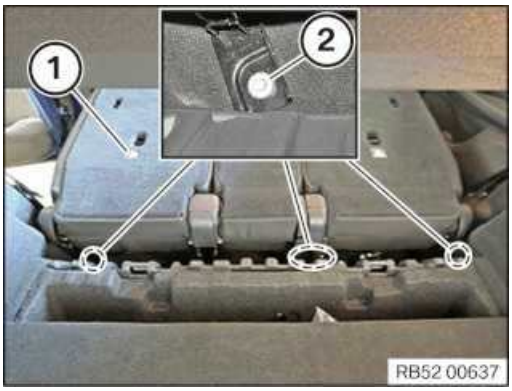


- Unclip the cover (1) forwards.

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- Loosen screws (1).



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.
- Fold down rear seat backrest (1) on left and right.
- Loosen screws (2).
- Disconnect existing plug connections where required.

RISK OF DAMAGE

Heavy component.

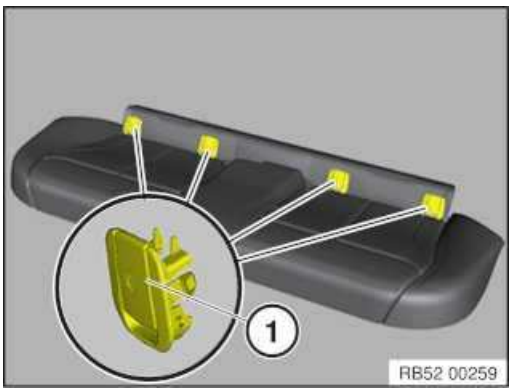
Heavy components can lead to injury or damage.

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

- Lift out rear seat bench with the assistance of a second person.

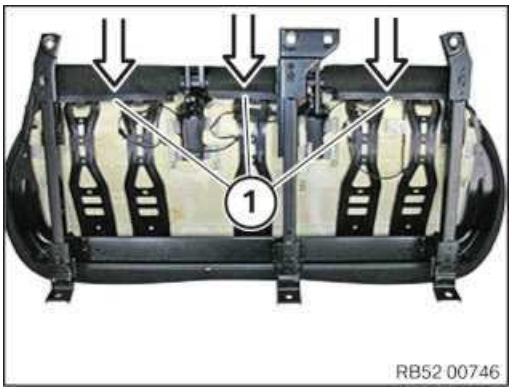
MAIN WORK

7 – Removing seat cover for the rear seat



- Unclip ISOFIX cover caps (1).

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- Unclip seat cover (1)in the direction of the arrow.



- Lever out the edge stripping in the marked area using a suitable tool.
- Remove seat fabric.



- Release all clamps on the trim wires (marks).
- Remove any remaining clamp from the seat cover and the upholstery.
- Remove the seat cover from the cushion.

8 – Installing seat cover for the rear seat



- **Replacement:**

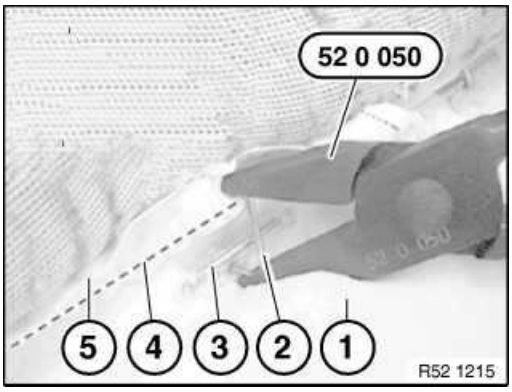
  Slide the trim wires into the new seat cover.

  If necessary, cut in mounting for the trim wires of the new cover.



- Secure all trim wires with the clamps.

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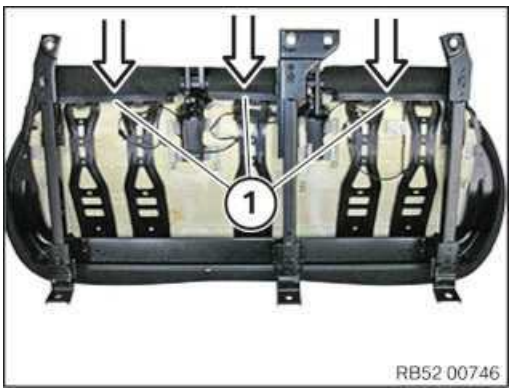


- Renew the clamps (2).

  Parts: Clamps
- Insert the clamp (2) with the special tool **0 492 668 (52 0 050)**.
- Surround the trim wire (3) of the cushion (1) and the trim wire (4) of the seat surface cover (5) with the clamp (2) and bend the clamp (2) to close it.



- Feed in seat cover over the seat frame in direction of arrow.



- Clip in the seat cover (1) in the direction of the arrow.



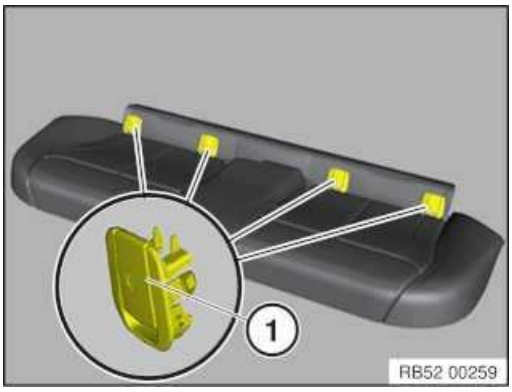
- Make sure the clamps (marks) are available and have not been damaged.

  The clamps must audibly engage.



- Clip in the edge stripping in the marked area.

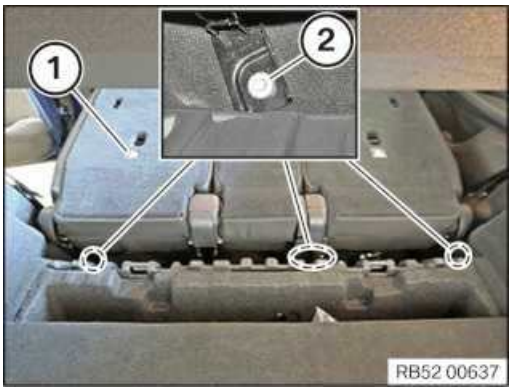
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- Pull the seat cover fasteners in the Isofix openings through the foam pad.
- Clip in the ISOFIX cover caps (1).
- Make sure the ISOFIX cover caps (1) are latched correctly.

POSTPROCESSES

9 – Install rear seat bench



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.

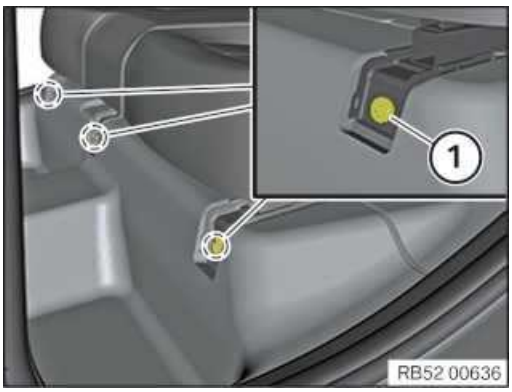
RISK OF DAMAGE

Heavy component.

Heavy components can lead to injury or damage.

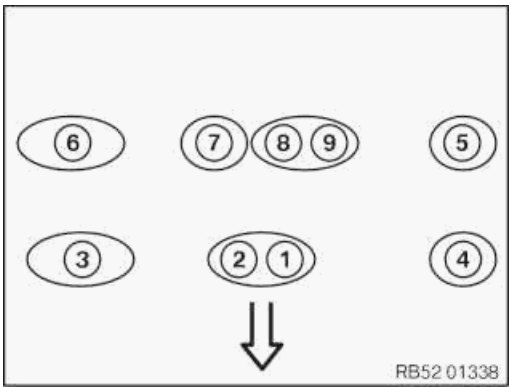
- Remove and install heavy components with the aid of another person/other persons.

- Insert the rear seat bench into the vehicle and position it with the assistance of a second person.
- If necessary, connect any available plug connections.
- Screw the bolts (2) in a few turns.



- Screw the bolts (1) in a few turns.

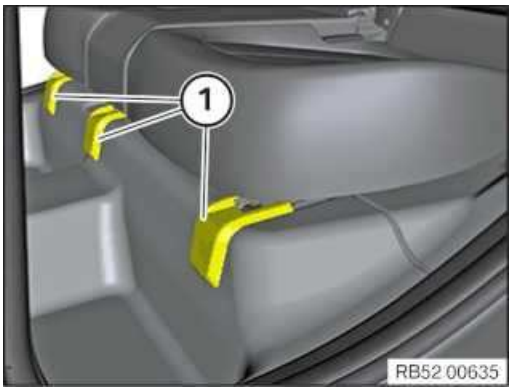
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- Tighten the screws in a sequence from 1-9.

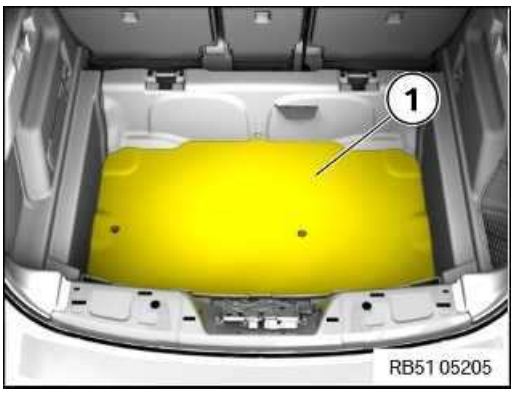
Seat bench to body

Oval-head screw		42 Nm



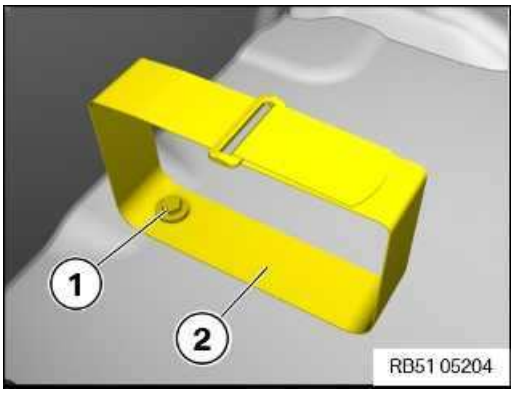
- Clip in the covers (1).

10 – Installing the luggage compartment floor trim panel



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

11 – Inserting the Velcro fastener for the toolkit



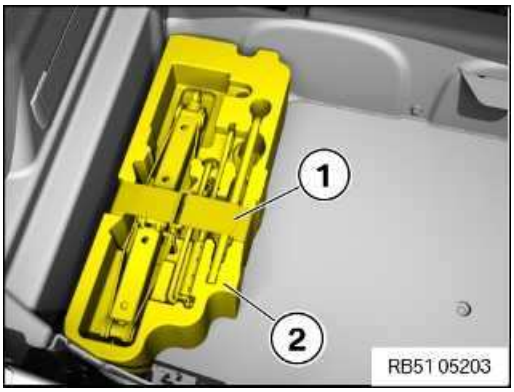
- Insert Velcro fastener (2).
- Tighten down screw (1).

Toolkit hook and loop tape to body

Bolt M6 x 20		Tightening torque	4 Nm

12 – Install the tool kit

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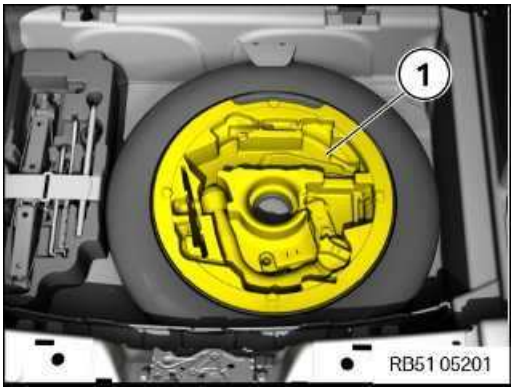


- Install the tool kit (2).
- Close the hook and loop tape (1).

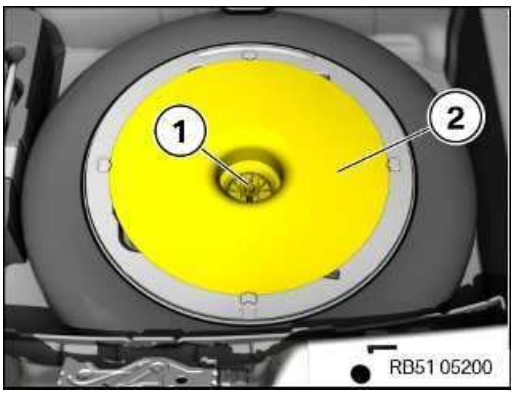
13 – Install the emergency wheel



- Insert compact spare wheel(1).

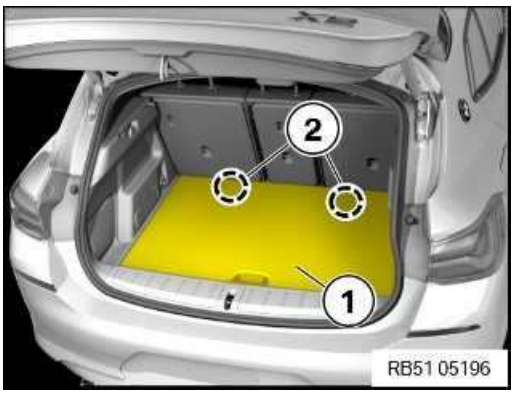


- Insert oddments tray into the compact spare wheel (1).



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

14 – Installing the luggage compartment removable panel



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

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Additional Information

Overview of Tightening Torques

Seat bench to body

Used in step 9

Oval-head screw		42 Nm

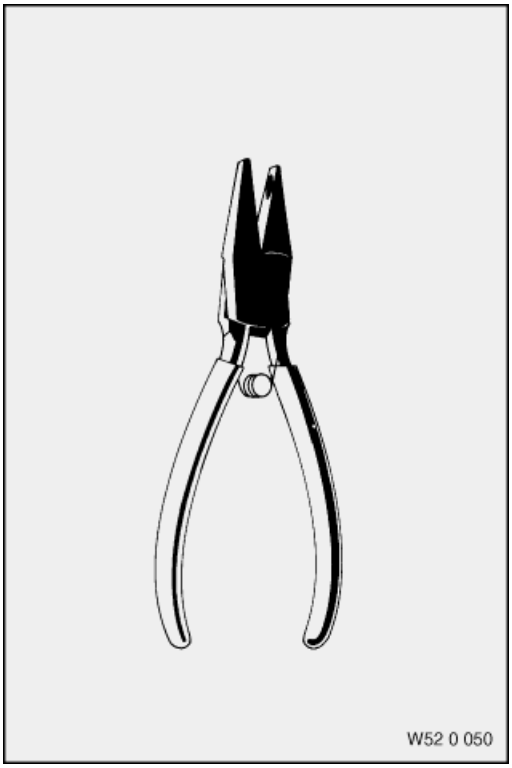
Toolkit hook and loop tape to body

Used in step 11

Bolt M6 x 20		Tightening torque	4 Nm

Overview of Special Tools

0 492 668 (52 0 050) Pliers



Common

Used in step 8

Usage	For securing clamps on seat cover
Included in the tool or work	
Storage location	C14
Replaced by	
In connection with	
SI-Number	52 06 87 (808)

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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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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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