



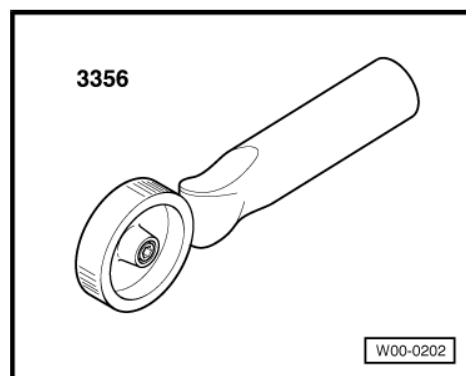
60 – Sunroof

1 Panoramic sliding sunroof

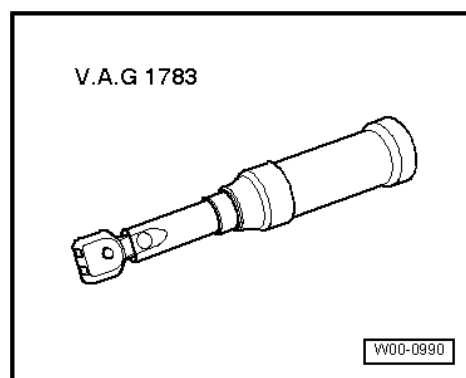
1.1 Tools

Special tools and workshop equipment required

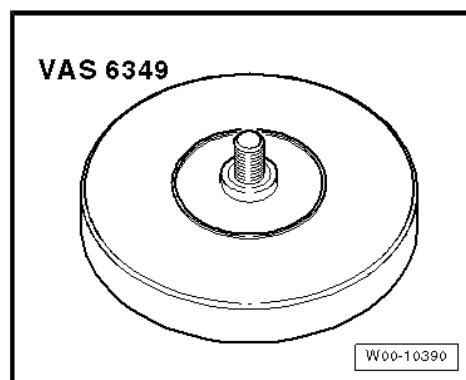
- ◆ Roller for door insulation foil - 3356-



- ◆ Torque wrench - V.A.G 1783-



- ◆ Adhesive residue remover - VAS 6349-



1.2 Function

All actions of the panoramic sliding roof can be performed with ignition switched on.

After the ignition is switched off, actions can be performed until either the driver or front passenger door is opened.



Opening of front glass panel can be preselected using rotary knob -1-.

Opening glass panel to the so called comfort position -4-, prevents to a large extent wind noise while driving, which can occur when roof is fully open.

Glass panel can be tilted and closed using pull and push function on rotary switch.

Sun blind opening button -2- and sun blind closing button -3- are integrated into rotary knob -1-.

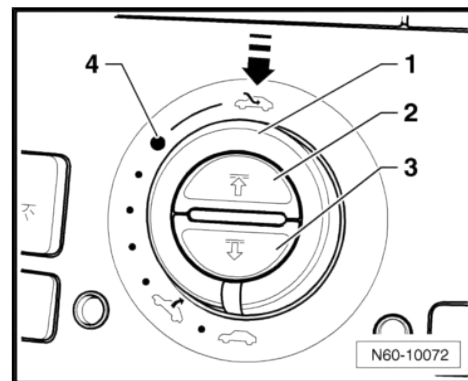
The panoramic sliding roof is equipped with a force limitation (anti-trap) mechanism. If the glass panel encounters an obstruction while closing from tilting or sliding position, it will open automatically.

In addition, there is an emergency closure function. If problems occur during closure, panoramic sliding roof can be forced to close by pulling rear end -arrow- of rotary knob. Rotary knob must therefore be in "Sliding sunroof closed" position.

The roll-back function is disabled when the emergency closure function is active.

The sliding roof motor is equipped with overheating protection, whose activation depends on various parameters. The sliding sunroof motor is functional again after a cooling-off phase.

In the event of power failure, front glass panel and sunroof sun blind can be moved manually ⇒ [page 180](#) .



1.3 Basic setting, panoramic sliding sunroof



Note

After renewal of the glass panel, a motor, the tilting mechanism or the sunroof sun blind, basic setting must be carried out for the respective drive.

Adaptation is carried out using the vehicle diagnostic tester - VAS 5051 A- .

– In the vehicle diagnostics tester -VAS 5051 A- , select "Guided functions".

◆ Onboard supply control unit 2

◆ Basic setting, panoramic sliding sunroof

1.4 Assembly overview - panoramic sliding roof

1 - Exterior seal

- ❑ Renewing ⇒ [page 149](#)

2 - Rear glass panel

- ❑ Removing and installing ⇒ [page 145](#)
- ❑ Adjusting ⇒ [page 146](#)

3 - Front glass panel

- ❑ Removing and installing ⇒ [page 143](#)
- ❑ Adjusting ⇒ [page 146](#)

4 - Assembly frame

- ❑ Assembly overview ⇒ [page 165](#)
- ❑ Removing and installing ⇒ [page 169](#)

5 - Sun blind

- ❑ Removing and installing ⇒ [page 158](#)

6 - Sunroof sun blind motor

- ❑ Removing and installing ⇒ [page 158](#)
- ❑ Initialising ⇒ [page 141](#) .

7 - Sliding sunroof motor

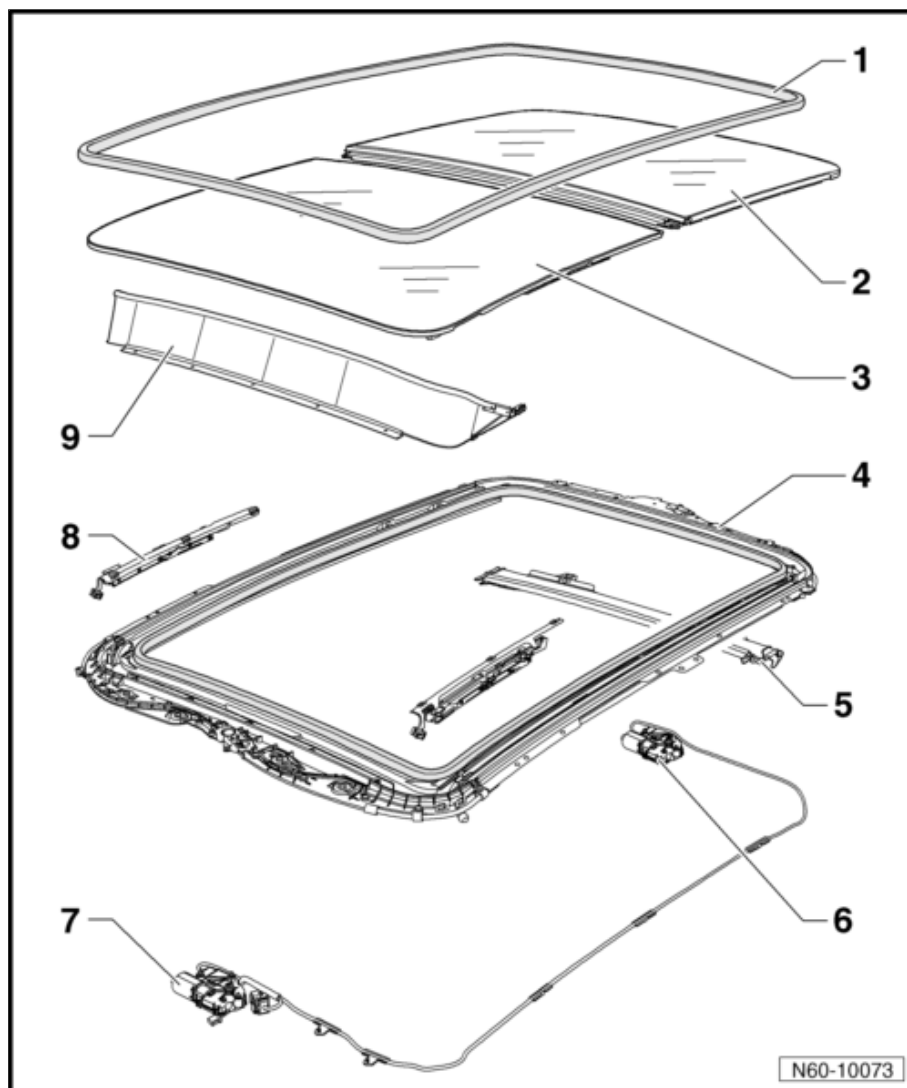
- ❑ Removing and installing ⇒ [page 155](#)
- ❑ Initialising ⇒ [page 141](#) .

8 - Tilting mechanism

- ❑ Removing and installing ⇒ [page 176](#)

9 - Wind deflector

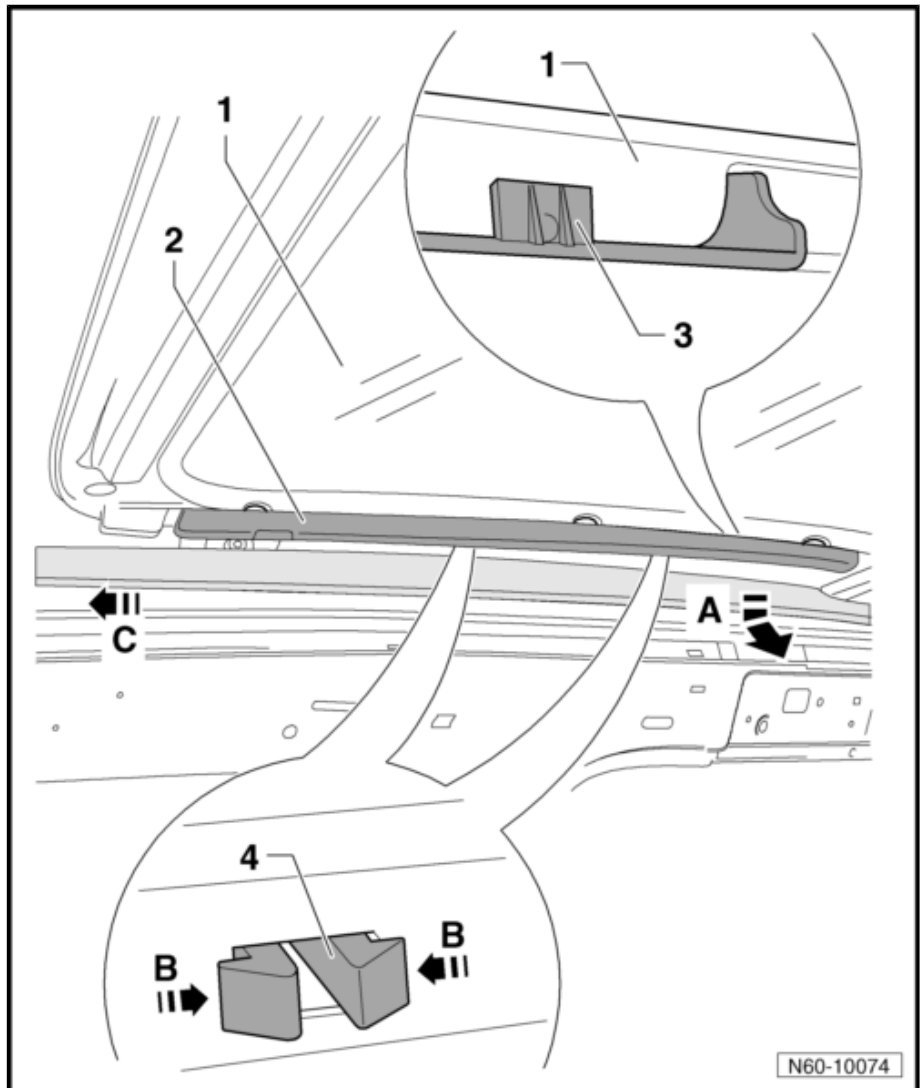
- ❑ Removing and installing ⇒ [page 151](#)





1.5 Removing and installing front glass panel

1.5.1 Removing



- Open glass panel -1- until trim -2- is accessible.
- Pull trim -2- in direction of -arrow A- downwards and carefully detach retaining lug -3- on back.
- Unclip locking lugs -4- by pressing together in direction of -arrow B- on back.
- Push trim -2- forwards in direction of -arrow C- and remove.



- Unscrew bolts -2- from glass panel -1- on left and right.



Note

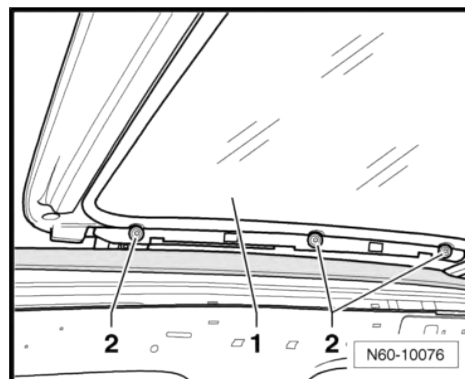
To unscrew bolts, use a magnetic tool so that bolts do not fall into mechanism of panoramic sliding sunroof.

- Lift out glass panel upwards.



Caution

Do not operate tilting mechanism when glass panel has been removed as otherwise the wind deflector may be damaged (scratches)



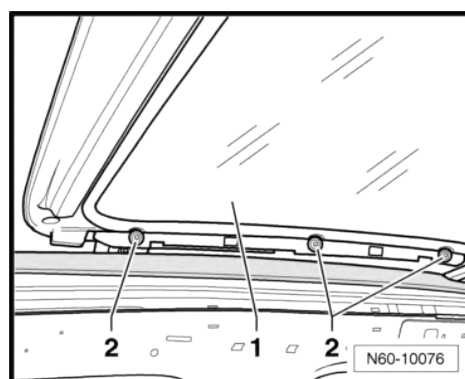
1.5.2 Installing



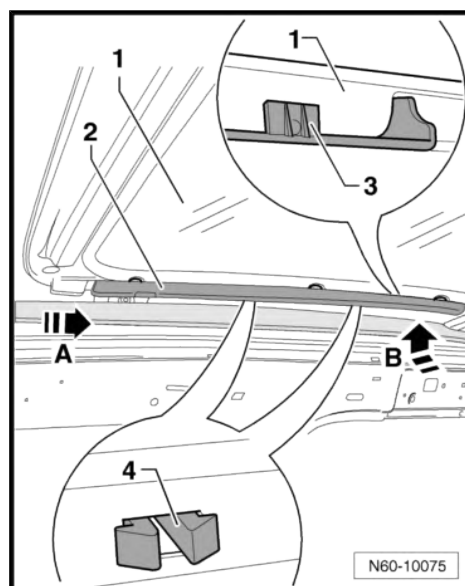
Note

- ♦ *New bolts must always be used when installing glass panel.*
- ♦ *To screw bolts in, use a magnetic tool so that bolts do not fall into guide of panoramic sliding sunroof.*

- Insert glass panel -1- from above and screw in screws -2- but do not tighten them firmly.
- Adjusting front glass panel ⇒ [page 146](#) .
- Tighten bolts -2-, 5 Nm.



- Fit front trim -2- into glass panel -1- and slide in direction of -arrow A-.
- Clip locking lugs -4- in place.
- Attach retaining lug -3- on rear -arrow B-.
- On completion of all work, operate the sliding sunroof motor to establish reference points ⇒ [page 141](#) .





1.6 Removing and installing rear glass panel

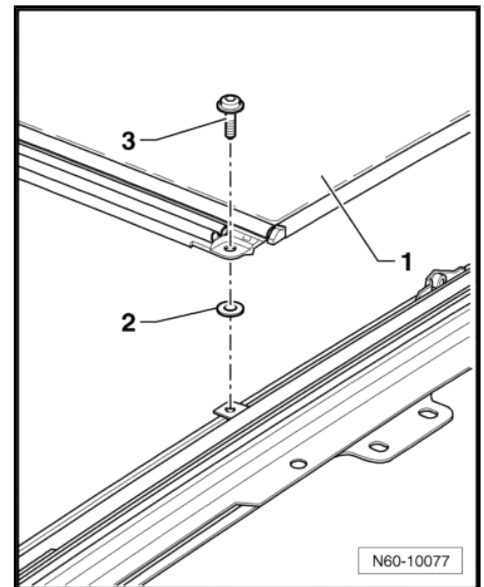
1.6.1 Removing



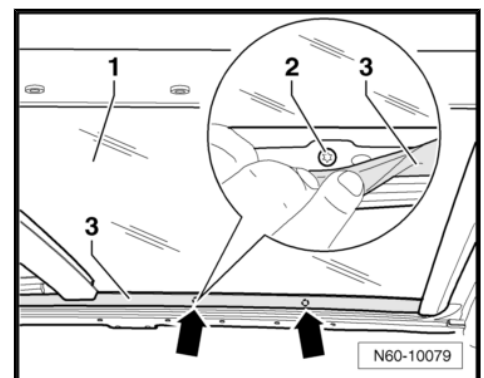
Note

To unscrew bolts, use a magnetic tool so that bolts do not fall into guide of panoramic sliding sunroof.

- Open front glass panel completely by pressing rotary knob beyond comfort position.
- Undo and remove bolts -3- of rear glass panel -1-.
- Remove spacer -2- under glass panel.
- Operate front glass panel until it is in "tilted-open" position.



- Pull inner seal -3- inwards slightly at the points -arrow- and undo screws -2-.
- Lift out rear glass panel -1- upwards.



1.6.2 Installing

Installation is carried out in the reverse sequence of removal.

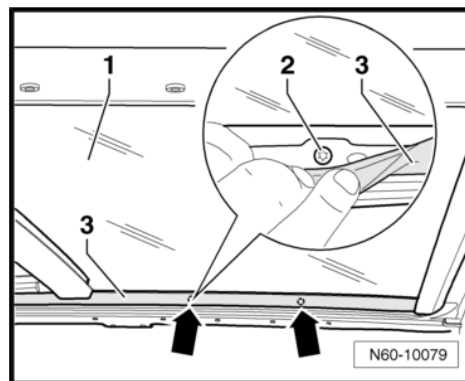


Note

- ◆ *New bolts must always be used when installing glass panel.*
- ◆ *To screw bolts in, use a magnetic tool so that bolts do not fall into guide of panoramic sliding sunroof.*
- Insert glass panel into roof from above.



- Pull inner seal -3- inwards slightly at the points -arrow- and screw in screws -2- but do not tighten completely.
- Adjust rear glass panel ⇒ [page 146](#) .
- After adjusting rear glass panel, tighten screws, 5 Nm.
- After completing all work, carry out normalisation run for sliding roof motor ⇒ [page 141](#) .



1.7 Adjusting height of front and rear glass panel



Note

- ♦ *Front glass panel must only be adjusted on front edge and rear glass panel on rear edge.*
- ♦ *To achieve the best possible optical appearance, ensure that adjustments on left and right are as far as is possible uniform (symmetric).*

Checking height adjustment

- Check adjustment of front glass panel -1- and rear glass panel -2- with a depth gauge.
- ♦ Dimension -a-: 1.5 ± 1 mm
- ♦ Dimension -b-: 1 ± 1 mm
- ♦ Dimension -c-: 1 ± 1 mm

If measured values differ from specifications, respective glass panel must be adjusted.

- ♦ Adjusting front glass panel ⇒ [page 146](#)
- ♦ Adjusting rear glass panel ⇒ [page 147](#)

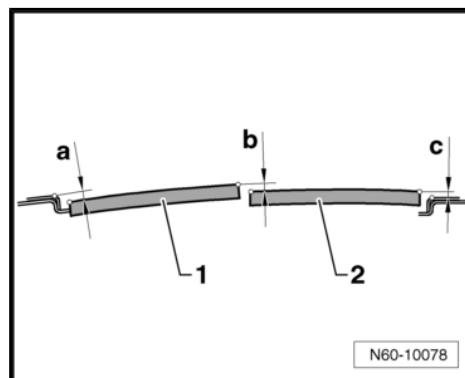
Adjusting front glass panel



Note

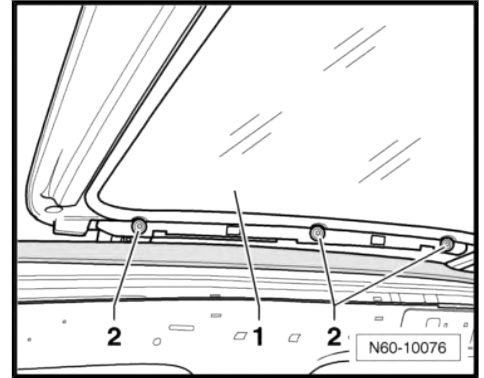
The glass panel height adjustment is performed after the glass panel has been closed from slide open position.

- Remove trim ⇒ [page 143](#) .



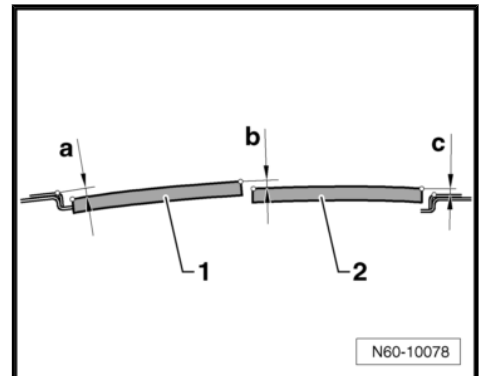


- Loosen only both front bolts -2- on left and right for glass panel -1-.
- Close glass panel.

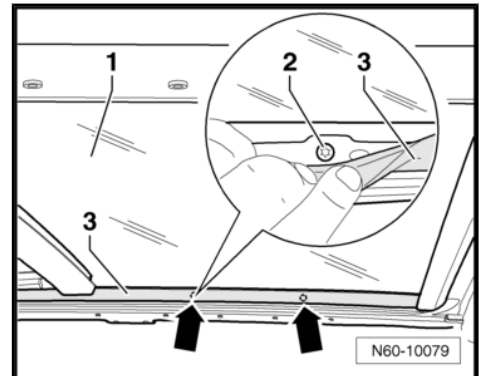


- Adjust glass panel -1- according to illustration.
- ◆ Dimension -a-: 1.5 ± 1 mm
- ◆ Dimension -b-: 1 ± 1 mm
- ◆ Dimension -c-: 1 ± 1 mm
- Insert and tighten screws on left and right, 5 Nm.
- Installing trim [⇒ page 144](#) .

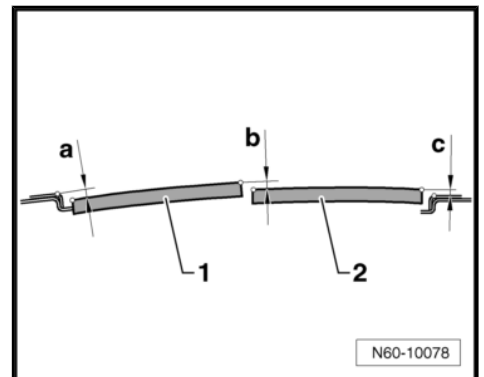
Adjusting rear glass panel



- Pull inner seal -3- slightly backwards at -arrow- positions and remove bolts -2- of rear glass panel -1-.



- Adjust rear glass panel -2- according to illustration.
- ◆ Dimension -a-: 1.5 ± 1 mm
- ◆ Dimension -b-: 1 ± 1 mm
- ◆ Dimension -c-: 1 ± 1 mm
- Tighten bolts, 5 Nm.



1.8 Renewing seals for rear glass panel

- Remove rear glass panel [⇒ page 145](#) .



Renew front and inner seals

- Pull respective seal -1- off rear glass panel.
- ◆ 2 - front seal
- ◆ 3 - inner seal
- Remove existing adhesive residues using adhesive residue remover - VAS 6349- .
- Bonding surface on glass panel must be free of dust and grease.
- Clean bonding surface completely using cleaning solution - D 009 401 04- .
- Wipe bonding surfaces of rear glass panel with supplied primer tissue.



Note

Observe drying time of supplied primer tissue.

- Remove protective foil from adhesive tape of new seal and press on seal at both ends.
- Sprain any seal excess length evenly.
- Press in seal evenly using roller for door insulation foil - 3356- .
- Install rear glass panel ⇒ [page 145](#) .

Removing side seal

- Remove side seal -2- from profile of rear glass panel -1-.



Note

New seal is supplied in excess length. Cut new seal to appropriate length. It is recommended to leave new seal 1-2 mm longer than it should be and to compress any excess length.

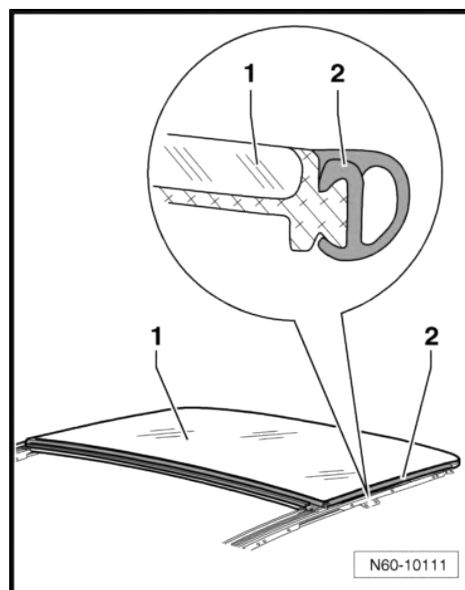
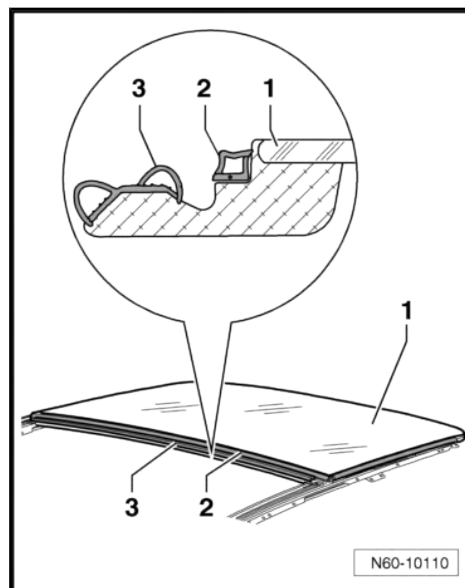
- Remove existing adhesive residues using adhesive residue remover - VAS 6349- .
- Bonding surface on glass panel must be free of dust and grease.
- Clean bonding surface completely using cleaning solution - D 009 401 04- .
- Wipe bonding surfaces of rear glass panel with supplied primer tissue.



Note

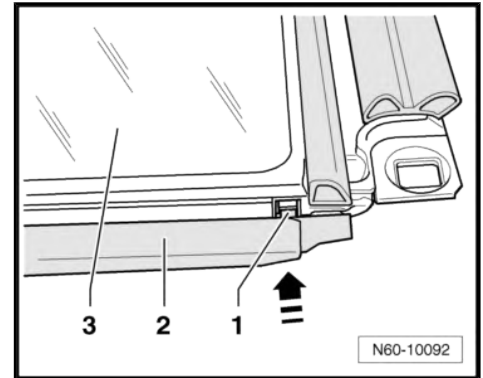
Observe drying time of supplied primer tissue.

- Pull off protective foil from adhesive tape of new seal.

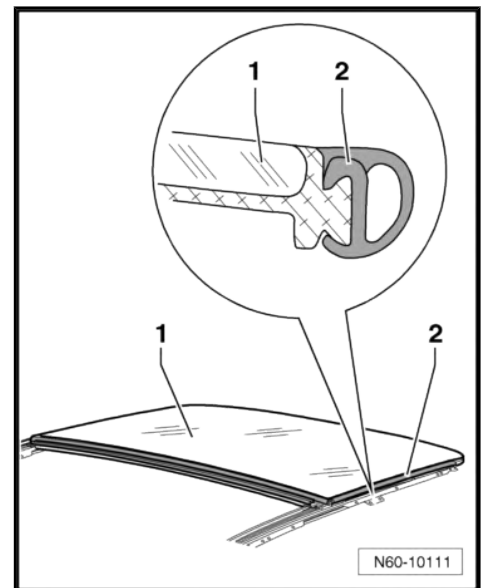




- Set new seal -2- with fastener -1- on glass panel -3-.
- Press seal on both ends.

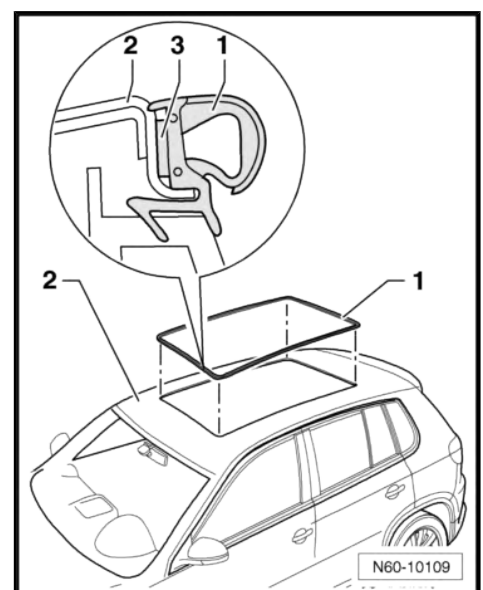


- Press seal -2- onto profile of glass panel -1- and sprain any excess length evenly.
- Press in seal evenly using roller for door insulation foil - 3356- .
- Install rear glass panel ⇒ [page 145](#) .



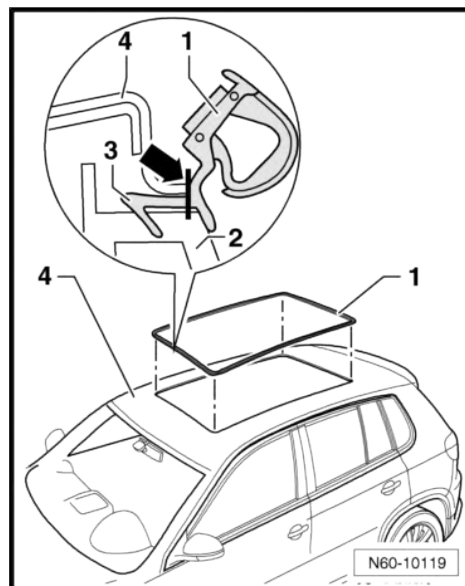
1.9 Renewing outer seal

- Remove front glass panel ⇒ [page 143](#) .
- Remove rear glass panel ⇒ [page 145](#) .
- Pull outer seal -1- with bonding surface -3- from roof -2-.

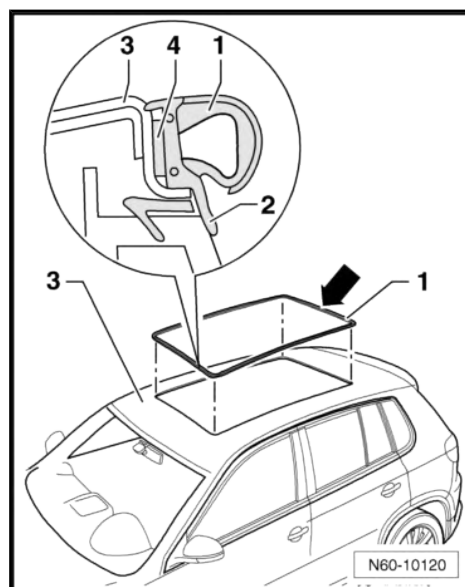




- Cut off all round profile of outer seal -1- in -arrow- area, flush with edge of roof -4-.
- Remaining part -3- stays between roof -4- and assembly frame -2-.
- Remove existing adhesive residues using adhesive residue remover - VAS 6349- .
- Entire bonding surface on roof cut-out must be free of dust and grease.
- Clean bonding surface completely using cleaning solution - D 009 401 04- .
- Prime bonding areas on roof cut-out using plastic primer - D 366 PR1 A1- .
- Observe flash-off time of 10 minutes.



- Centre new outer seal -1- with butt -arrow- on rear centre of roof cut-out.
- Pull protective foil from adhesive tape -4- of new outer seal -1- and press seal on roof -2-.
- Sprain any excess length of outer seal evenly.
- Press in outer seal evenly and all round twice using roller for door insulation foil - 3356- .
- Install rear glass panel ⇒ [page 145](#) .
- Install front glass panel ⇒ [page 143](#) .

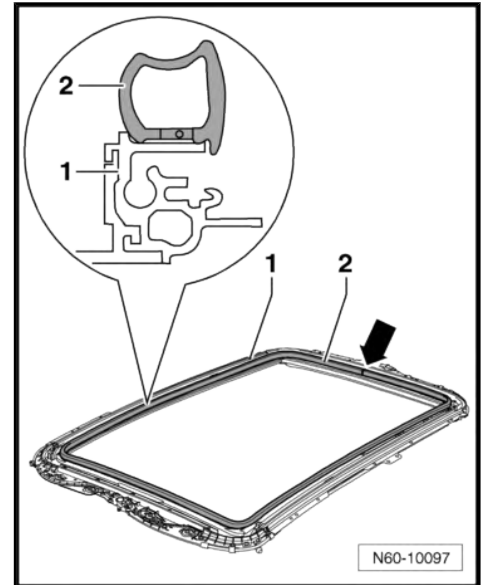


1.10 Renewing inner seal

- Remove front glass panel ⇒ [page 143](#) .
- Remove rear glass panel ⇒ [page 145](#) .



- Pull inner seal -2- off assembly frame -1-.
- Remove existing adhesive residues using adhesive residue remover - VAS 6349- .
- The bonding surface must be free of dust and grease.
- Clean bonding surface completely using cleaning solution - D 009 401 04- .
- Wipe bonding surfaces of assembly frame with supplied primer tissue.
- Place inner seal -2- with butt positioned on rear centre of roof cut-out, onto bonding surface of assembly frame -1-.
- Pull protective foil from adhesive tape of new inner seal section by section and press it on.
- Sprain any excess length of inner seal evenly.
- Press in inner seal evenly and all round twice using roller for door insulation foil - 3356- .
- Install rear glass panel ⇒ [page 145](#) .
- Install front glass panel ⇒ [page 143](#) .

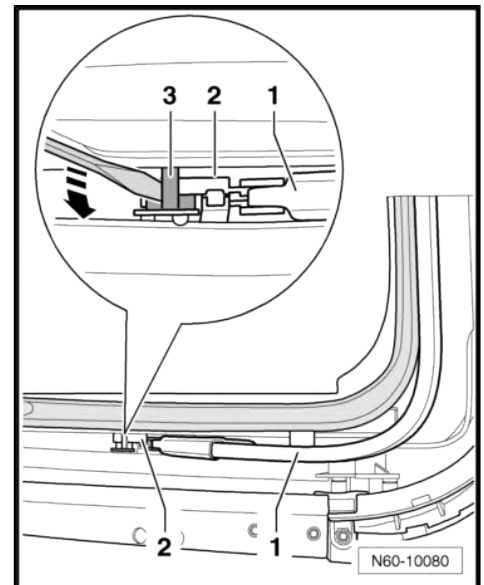


1.11 Removing and installing wind deflector

1.11.1 Removing and installing, old version

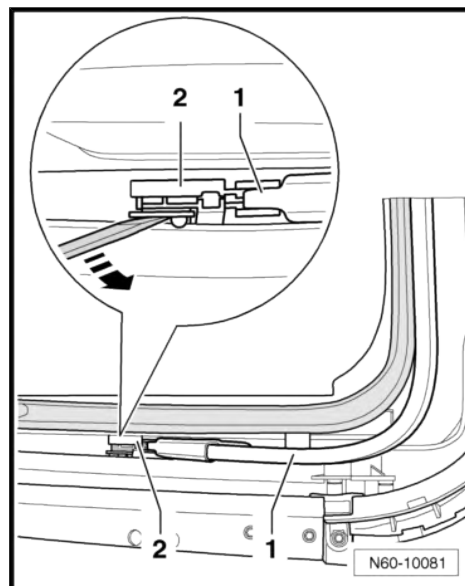
Removing

- Open front glass panel completely.
- Using a screwdriver, unclip securing clip -3- over mounting bracket -2- of wind deflector -1-.





- Using a screwdriver, unclip mounting bracket -2- and wind deflector -1-.



- Remove bolts -2- from wind deflector -1-.
- Remove wind deflector -1- upwards.

Installing

Installation is carried out in the reverse sequence of removal.

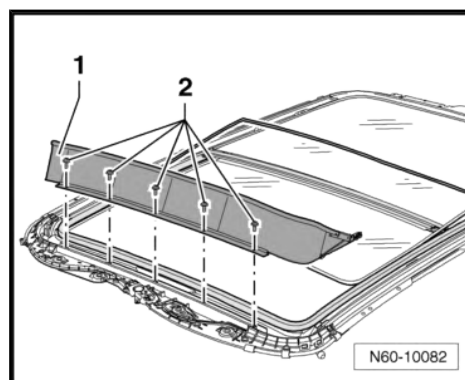
Specified torque

Wind deflector bolts 2 Nm



Note

- ◆ *Wind deflector mounting bracket must engage audibly.*
- ◆ *Securing clip of mounting bracket must always be renewed after removal.*



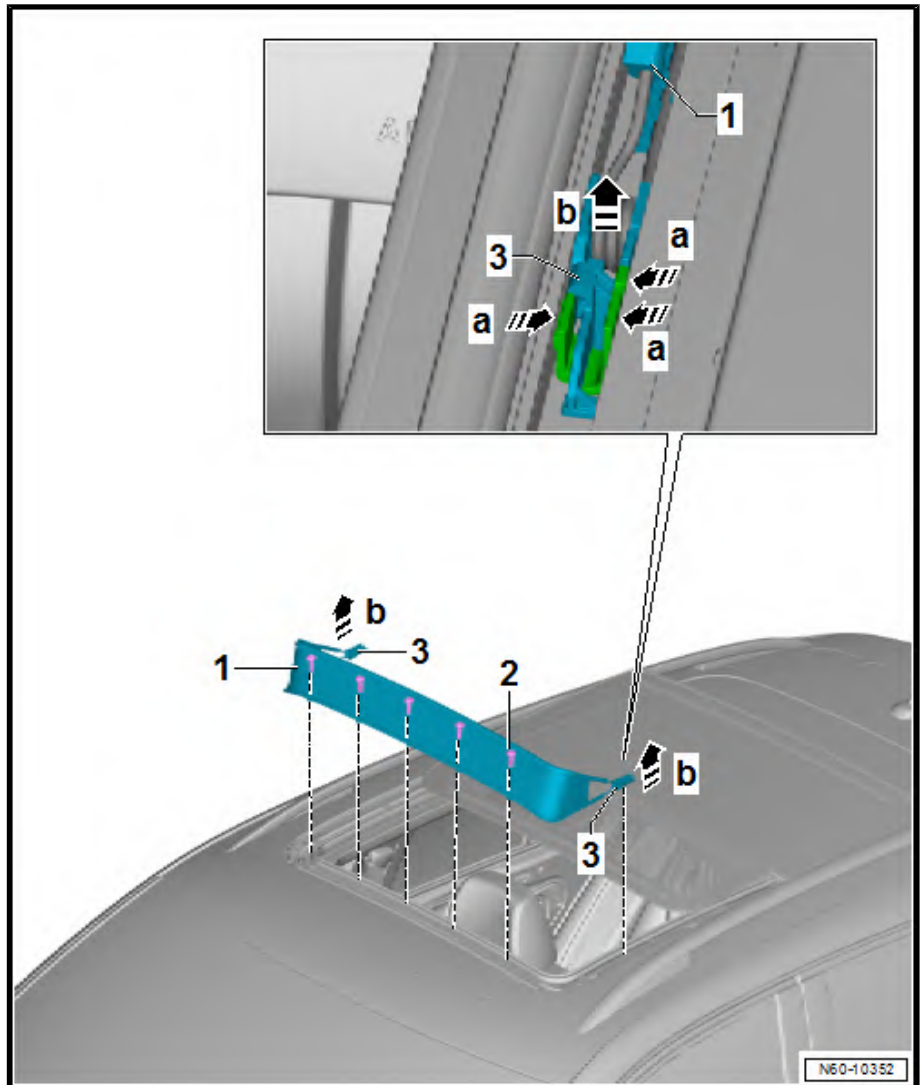
1.11.2 Removing and installing, new version

Removing



Note

- ◆ *The locking hooks on the wind deflector may break off during removal.*
- ◆ *The wind deflector -3- is available as an individual Genuine part and must be renewed.*



- Open front glass panel completely.
- Press the locking hooks on the wind deflector -3- together -arrow a-.
- Lift wind deflector out of assembly frame -arrows b-.
- Remove bolts -2- from wind deflector -1-.
- Remove wind deflector -1- upwards.

Installing

Installation is carried out in the reverse sequence of removal.

Specified torque

Wind deflector bolts 2 Nm



Note

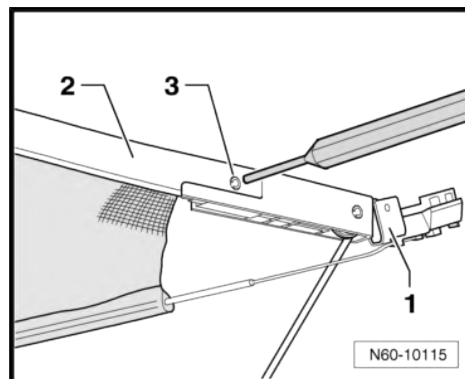
Locking lugs of wind deflector -3- must engage audibly.



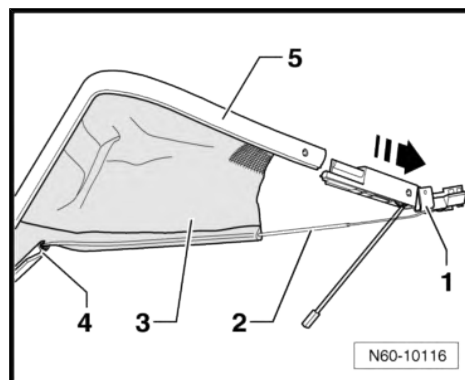
1.12 Removing and installing wind deflector bracket

1.12.1 Removing

- Remove wind deflector ➔ [page 151](#) .
- Using a drift, drive dowel pin -3- out of upper net strip -2- and wind deflector bracket -1-.



- Pull wind deflector bracket -1- out of net strip -5- in direction of -arrow-.
- Pull tensioning wire -2- out of lower net strip -4- and net -3-.



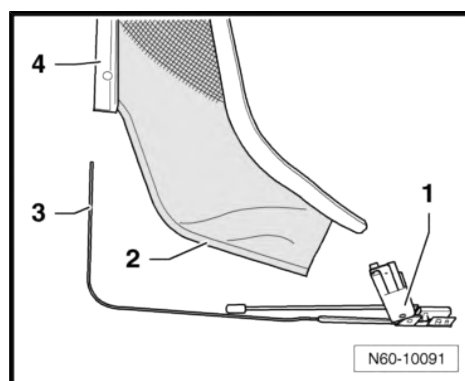
1.12.2 Installing

- Carefully push tensioning wire -3- through net -2- up to lower net strip -4-.

The remaining installation steps are carried out in the reverse sequence of removal.

Use a new dowel pin to secure wind deflector bracket.

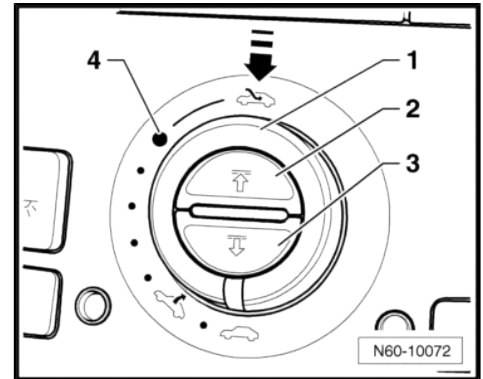
- Install wind deflector ➔ [page 151](#) .





1.13 Removing and installing preselector for glass panel and sunroof sun blind

- Removing preselector for panoramic sliding roof glass panel
⇒ Electrical system; Rep. gr. 96 ; Lights and switches in roof trim .



1.14 Removing and installing sliding sunroof motor

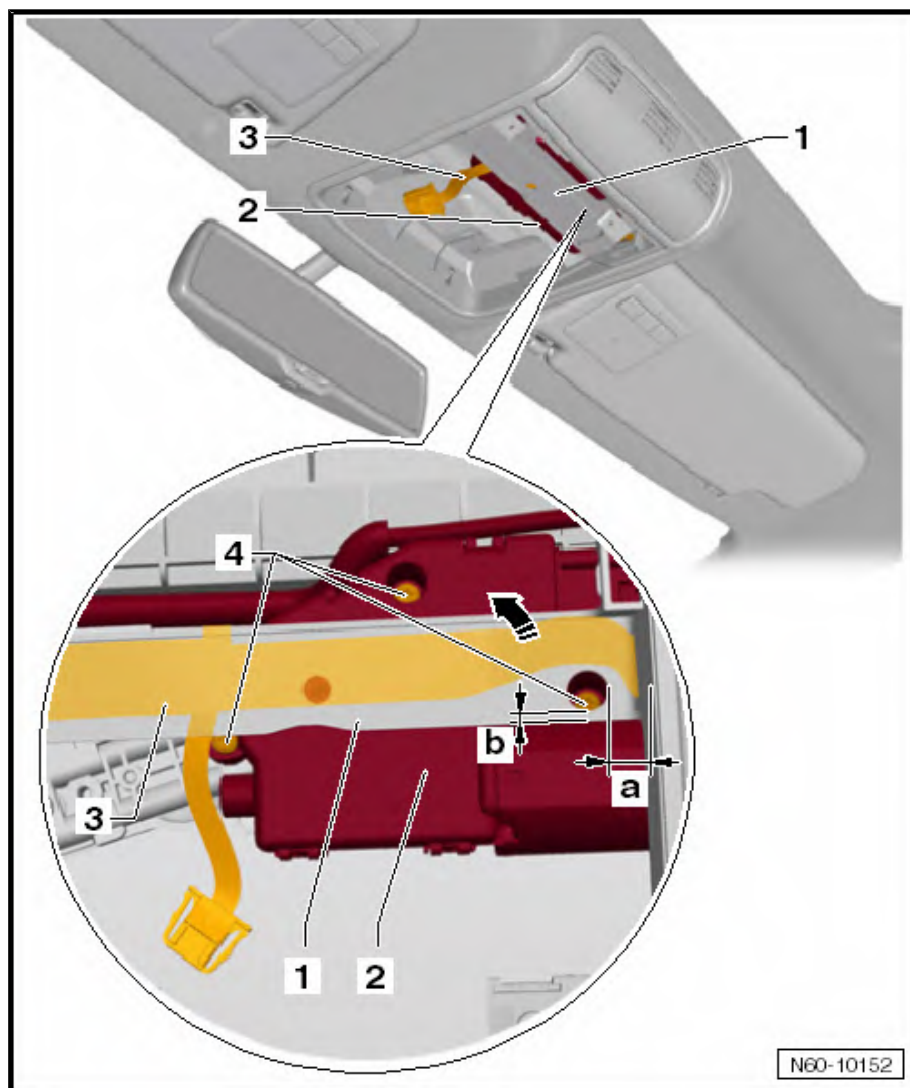
1.14.1 Removing

- Removing lights and front operating unit ⇒ Electrical system;
Rep. gr. 96 ; Lights and switches in roof trim .



WARNING

On some models, a ribbon cable is bonded to the light cut-out web. Before removing sliding sunroof motor, carefully detach ribbon cable from web and push it to side. Ensure that ribbon cable is not damaged when doing this.



- Carefully detach ribbon cable -3- (if fitted) from web -1- and pull it to side -arrow-.

To access right bolt -4- of sliding sunroof motor -2- with tool, drill a hole of 10 mm in diameter in web -1-.

Dimension -a- = 10 mm

Dimension -b- = 2 mm



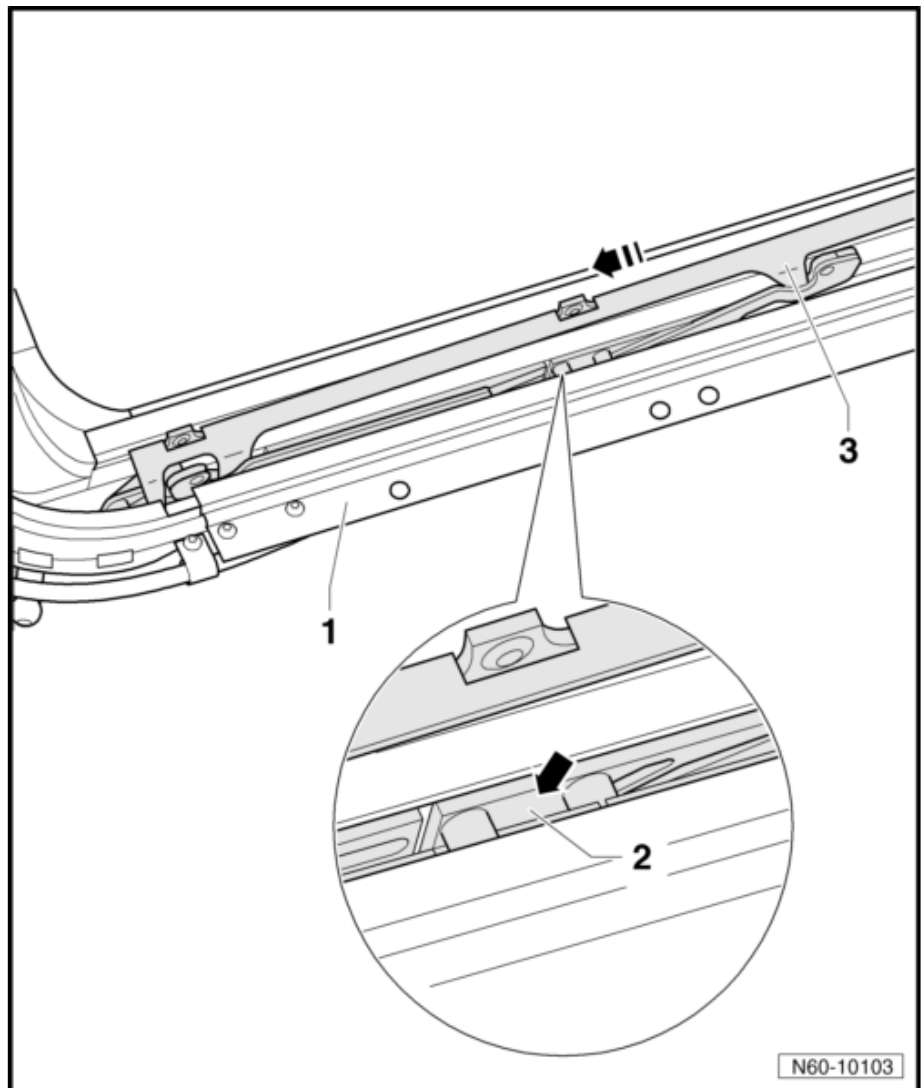
Caution

Ensure when drilling hole that sliding roof motor underneath is not damaged. If necessary, use a drill with depth-control stop and set drilling depth to 3 mm.

- Unscrew bolts -4-.
- Slightly lower sliding sunroof motor and tilt it out forwards.
- Disconnect connector.



1.14.2 Installing

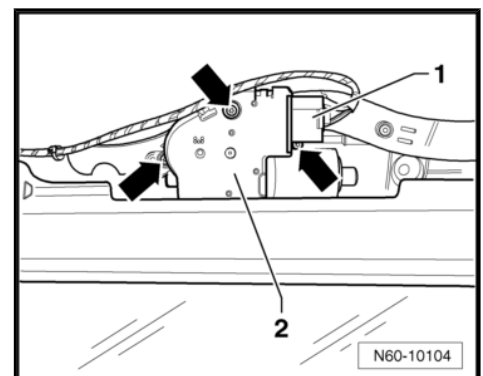


With front glass panel removed:

- Pull tilting mechanism fully forwards on both sides until it is completely lowered.
- Push tilting mechanism on -arrow- areas of slider -2- not on guide plate -3-.

With front glass panel installed:

- Remove Sliding sunroof motor -2- and tighten bolts -arrow- (3,5 Nm).
- Connect connector -1- to sliding sunroof motor -2-.
- Install moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims .
- On completion of work, establish reference points of sliding sunroof motor ⇒ [page 141](#) .

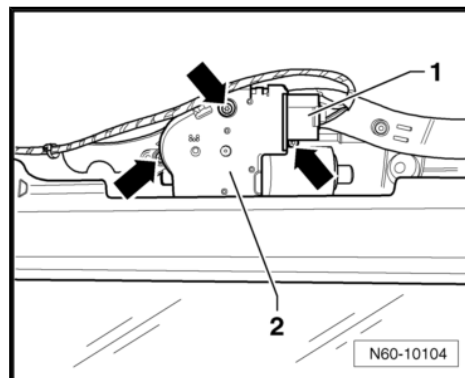




1.15 Removing and installing sun blind motor

1.15.1 Removing

- Remove moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims .
- Disconnect connector -1- on sun blind motor -2-.
- Remove bolts -arrow- from sun blind motor -2-.
- Remove sun blind motor -2-.



1.15.2 Installing

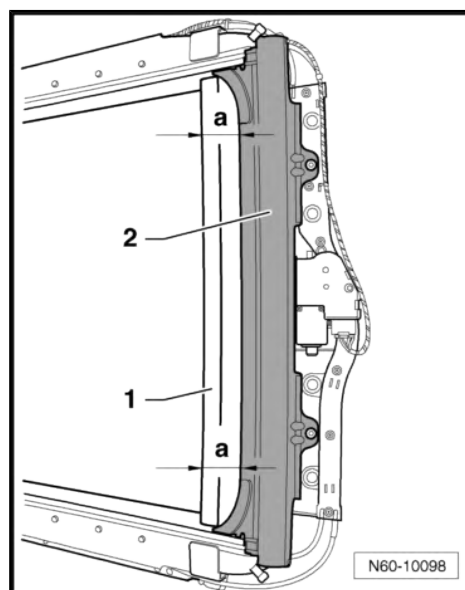
Installation is carried out in the reverse sequence of removal.

- Before installing motor, adjust sun blind by ensuring parallel distance -a- between sun blind cross strut -1- and sun blind housing -2-.

Specified torque

Bolts 3.5 Nm

- On completion of work, establish reference points of sun blind motor ⇒ [page 141](#) .



1.16 Removing and installing sun blind

1.16.1 Removing

- Run sun blind to fully open position.



Note

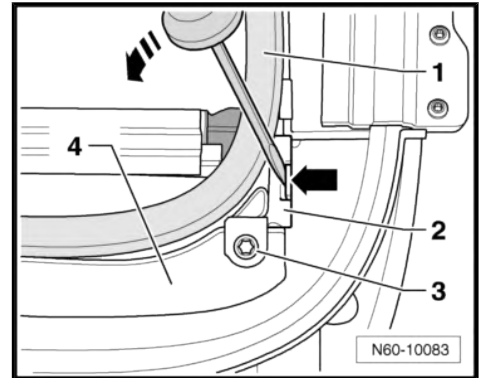
In the event of power failure, the sunroof sun blind can be moved by turning the sunroof sun blind motor with a commercially available hexagon key to removal position (fully open). ⇒ [page 180](#)

- Remove moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims .
- Remove rear glass panel ⇒ [page 145](#) .



- Remove bolt -3- from cover cap -2- (2 Nm).
- Using a screwdriver, unclip fastener -arrow- of cover cap -2- from rear part -4- and tilt cover cap -2- upwards.

Inner seal -1- must not be removed for this.



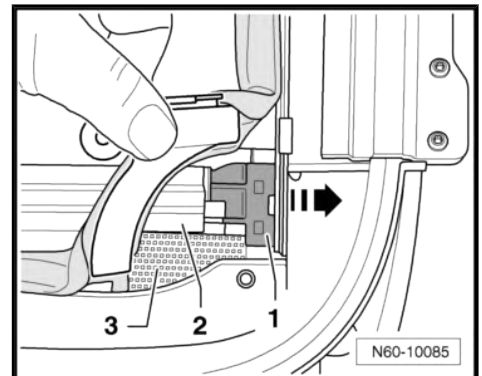
- Carefully lift sun blind cross strut -2- with sun blind slide -1-.

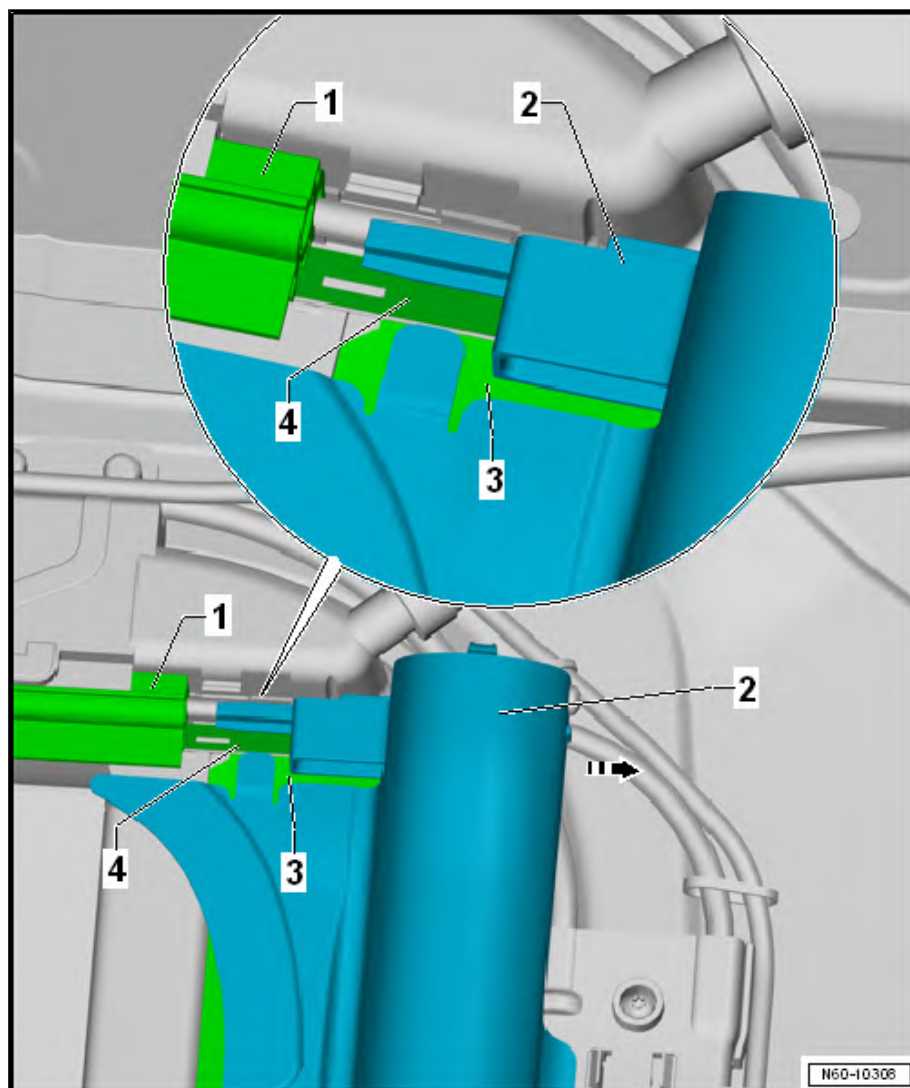


Note

Ensure that sun blind fabric -3- is not damaged.

- Pull sun blind slide -1- in direction of -arrow- on side of cross strut for sun blind -2-.





- Unscrew bolts of sun blind housing -2- (3.5 Nm).
- The aid of a second mechanic is required for the steps below.
- Pull sun blind housing -2- evenly and slightly downwards to get past sun blind motor -3-.



Note

Ensure that sun blind fabric -3- is not damaged.

- Pull sun blind housing -2- parallel with sun blind steel strap -4- in -direction of arrow- out of sun blind rail -1-.



Sun blind cross strut can be renewed when sun blind is removed.

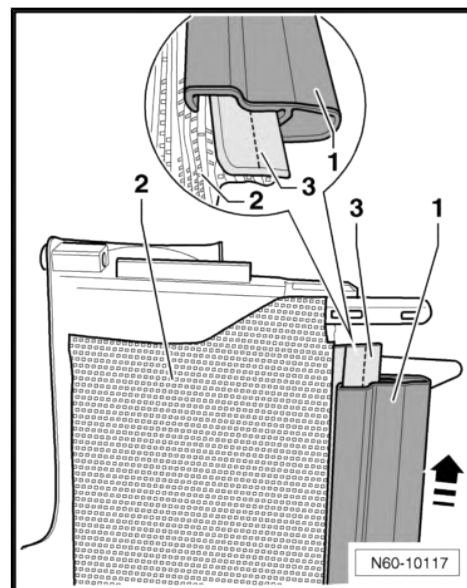
- Carefully pull sun blind cross strut -1- in direction of -arrow- out of beading -3- of sun blind fabric -2-.
- Carefully slide sun blind cross strut -1- on beading -3-.



Note

Ensure that sun blind fabric -2- is not damaged.

+

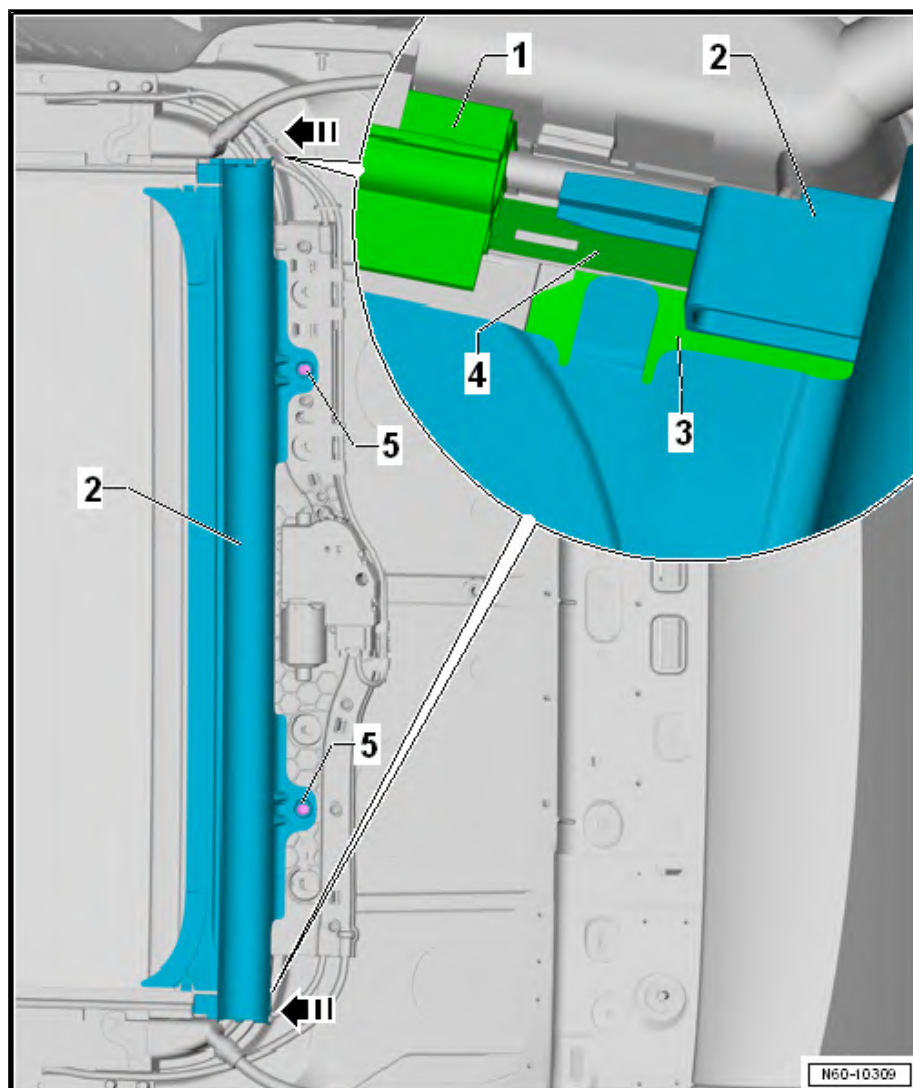


1.16.2 Installing



Note

- ◆ *The replacement part is delivered in the sun blind housing.*
- ◆ *Do not grease sunroof sun blind slide or sunroof sun blind cables.*
- ◆ *The aid of a second mechanic is required for the steps below.*



- Push sun blind housing -2- parallel with sun blind steel strap -4- in -direction of arrow- into sun blind rail -1-.

The lug of sun blind housing -2- must be inserted under sun blind rail -1-.

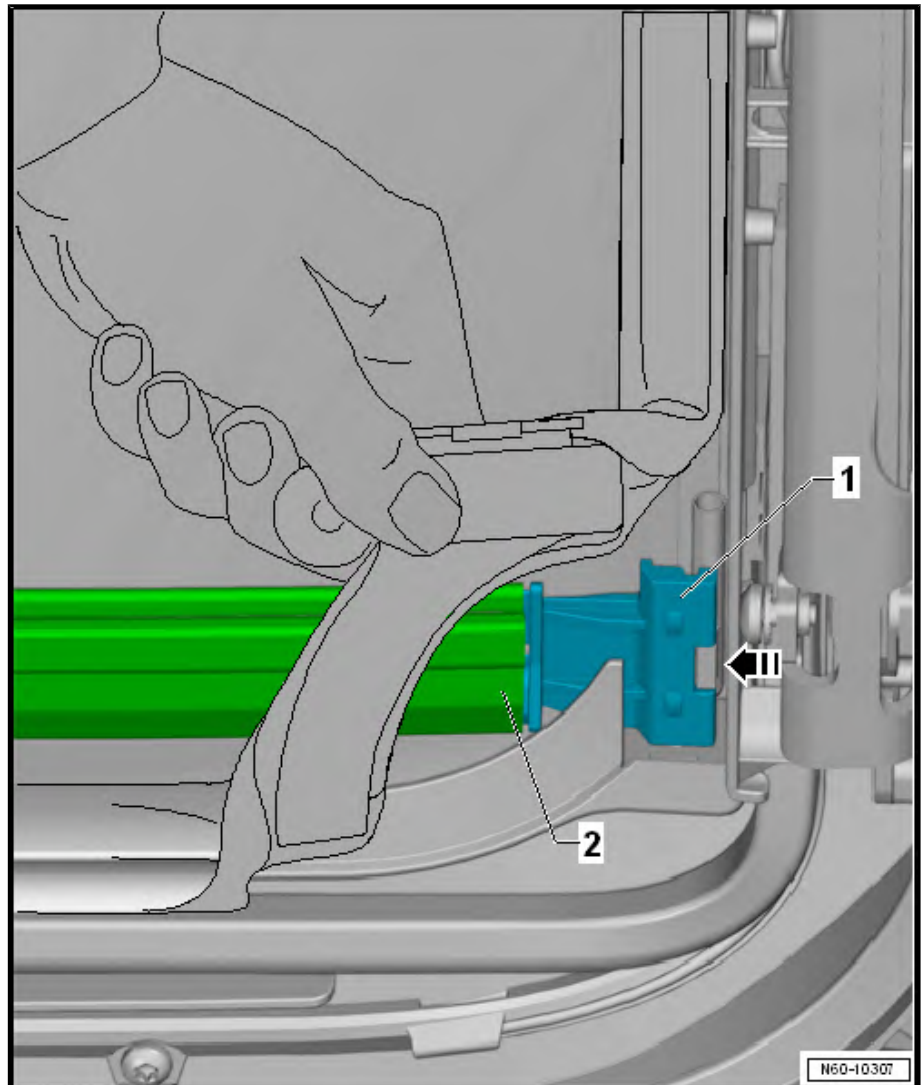


Note

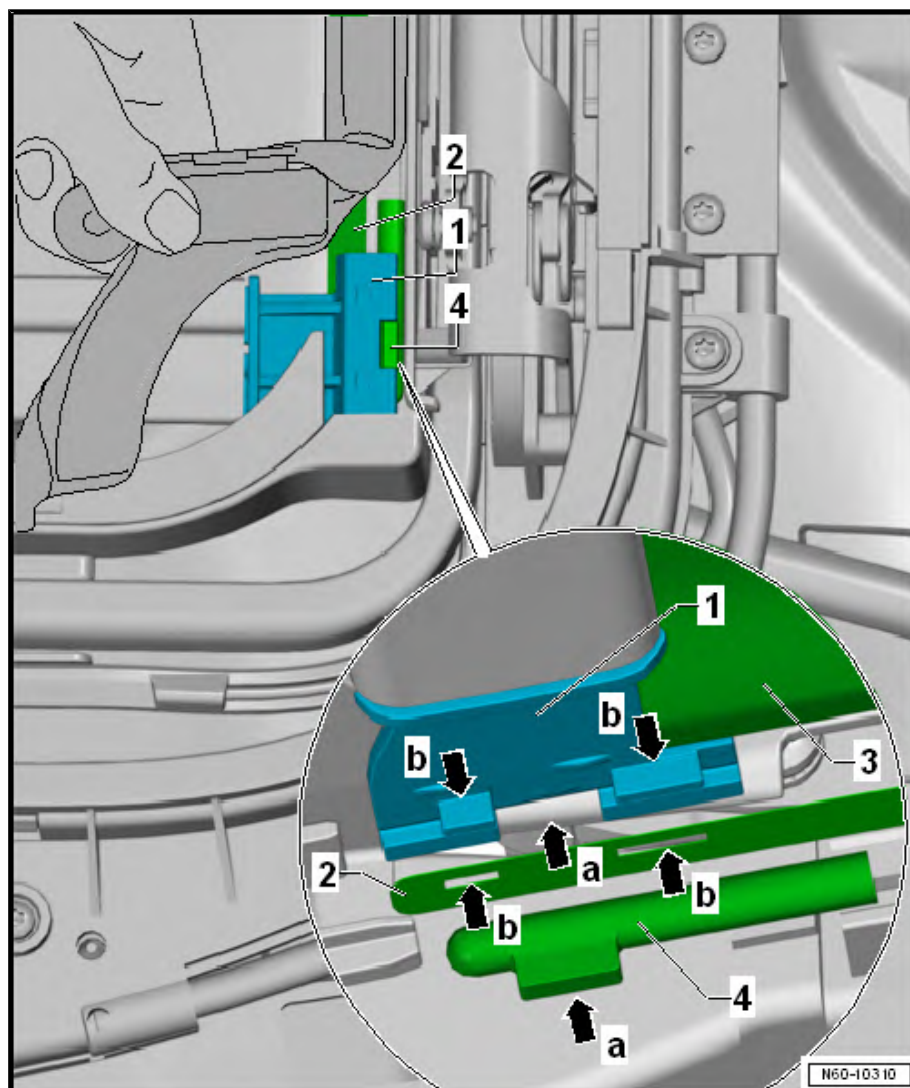
Ensure that sun blind fabric -3- is not damaged.

Specified torques

Bolt for sun blind housing -5-: 3.5 Nm.



- Push sun blind slide -1- in direction of -arrow- into sun blind cross strut -2-.



i Note

The work steps below are first carried out on one side and the components must then be held in position. After that, the parts on the other side are assembled by a second mechanic.

- The recess -arrow a- in sun blind slide -1- must be aligned with guide -arrow a- on cable -4-.
- The openings -arrows b- of steel strap -2- must be aligned with guides -arrows b- in sun blind slide -1-.

Specified torques

Cover cap bolt 2 Nm

i Note

- ◆ *After installation, check sun blind for balanced operation and ease of movement. To do this, move by hand sun blind drive on motor using a commercially available hexagon key and avoid wrinkling and deformation of sun blind fabric.*
- ◆ *Move sun blind to rearmost position by hand. The adaptation starts at the rearmost position.*



The remaining installation steps are carried out in the reverse sequence of removal.

- Install moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims .
- Install rear glass panel ⇒ [page 145](#) .
- On completion of work, establish reference points of sun blind motor ⇒ [page 141](#) .

1.17 Assembly overview - assembly frame

1 - Sunroof sun blind rail

- ☐ Cannot be renewed individually

2 - Guide rail

- ☐ Cannot be renewed individually
- ☐ Attached to front part

3 - Bolt

- ☐ 2 Nm

4 - Rear part

- ☐ Removing and installing ⇒ [page 171](#)

5 - Rear motor plate

- ☐ Removing and installing ⇒ [page 166](#)

6 - Front motor plate

- ☐ Removing and installing ⇒ [page 176](#)

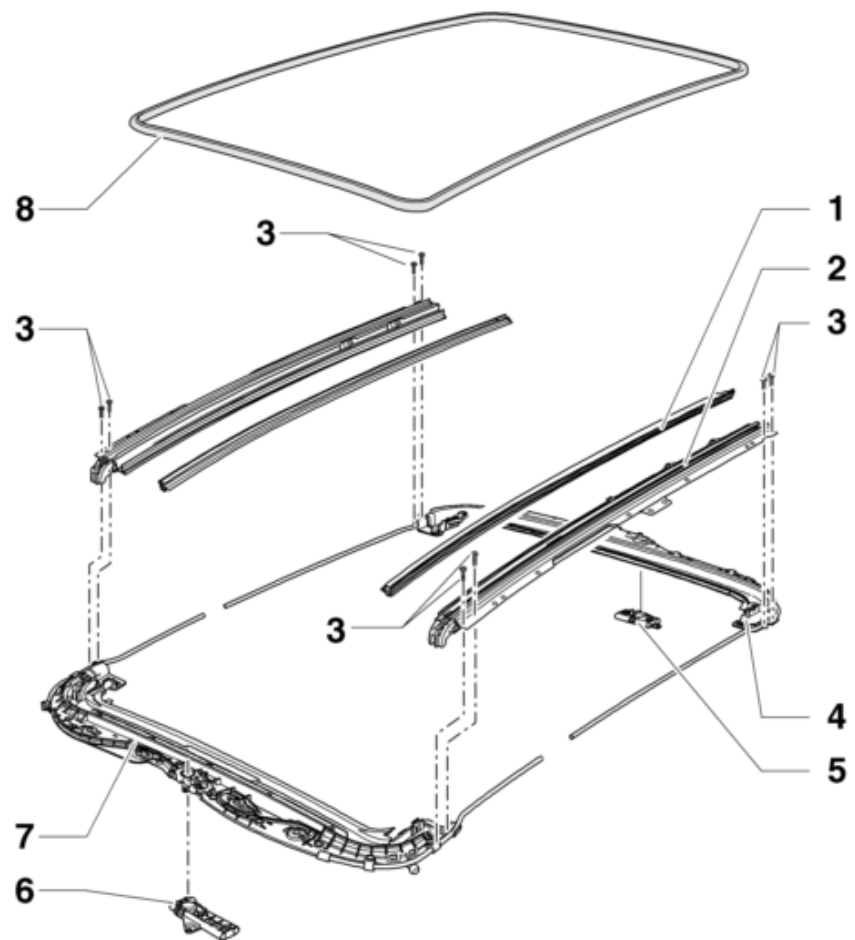
7 - Front part

- ☐ Cannot be renewed individually
- ☐ Attached to guide rail.

8 - Inner seal

- ☐ Renewing ⇒ [page 150](#)

Volkswagen Technical Site: <https://vwts.ru>

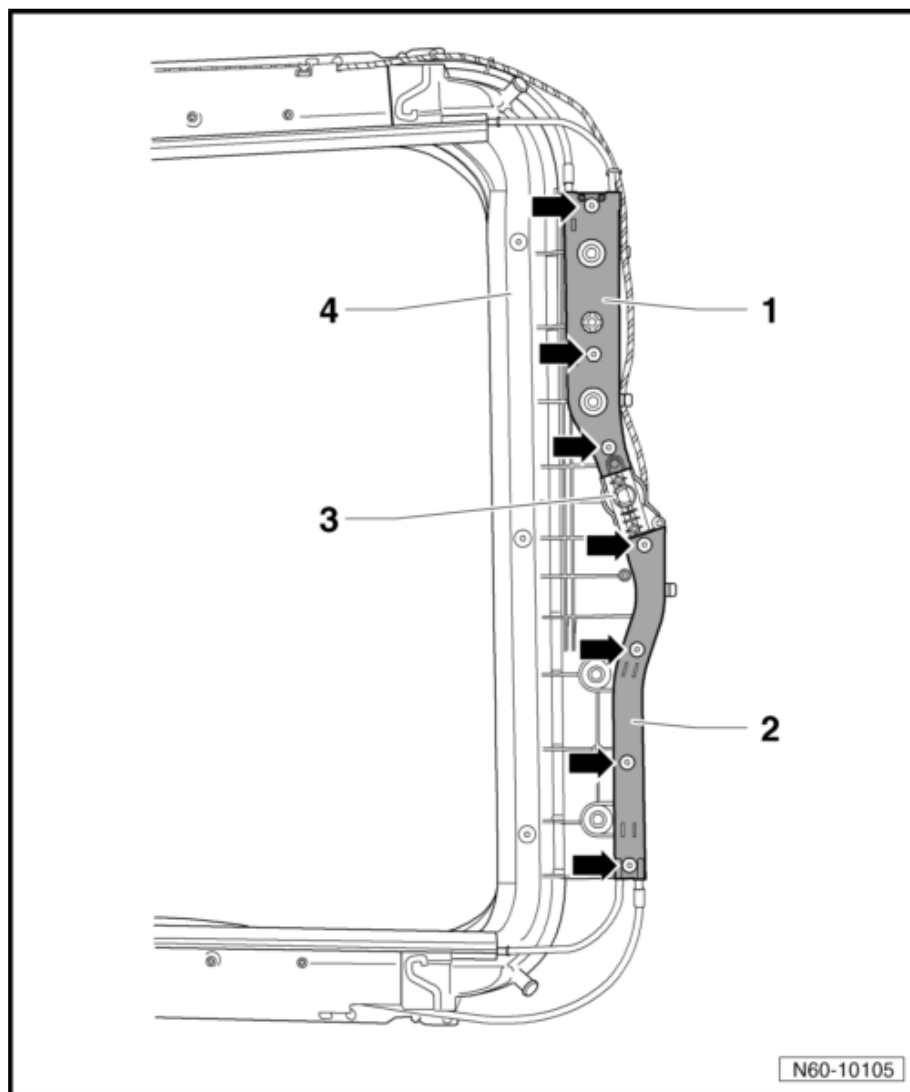


N60-10088

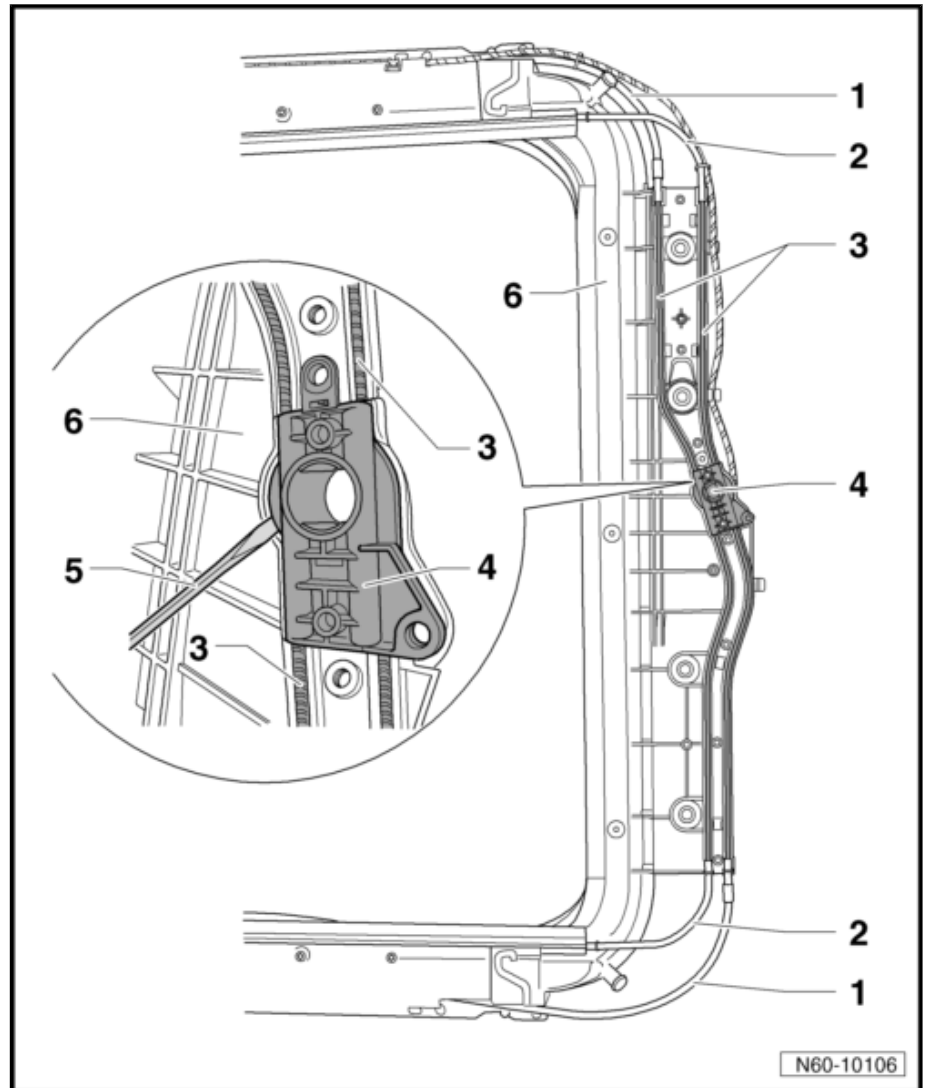


1.18 Installing and removing motor plate and sun blind cable

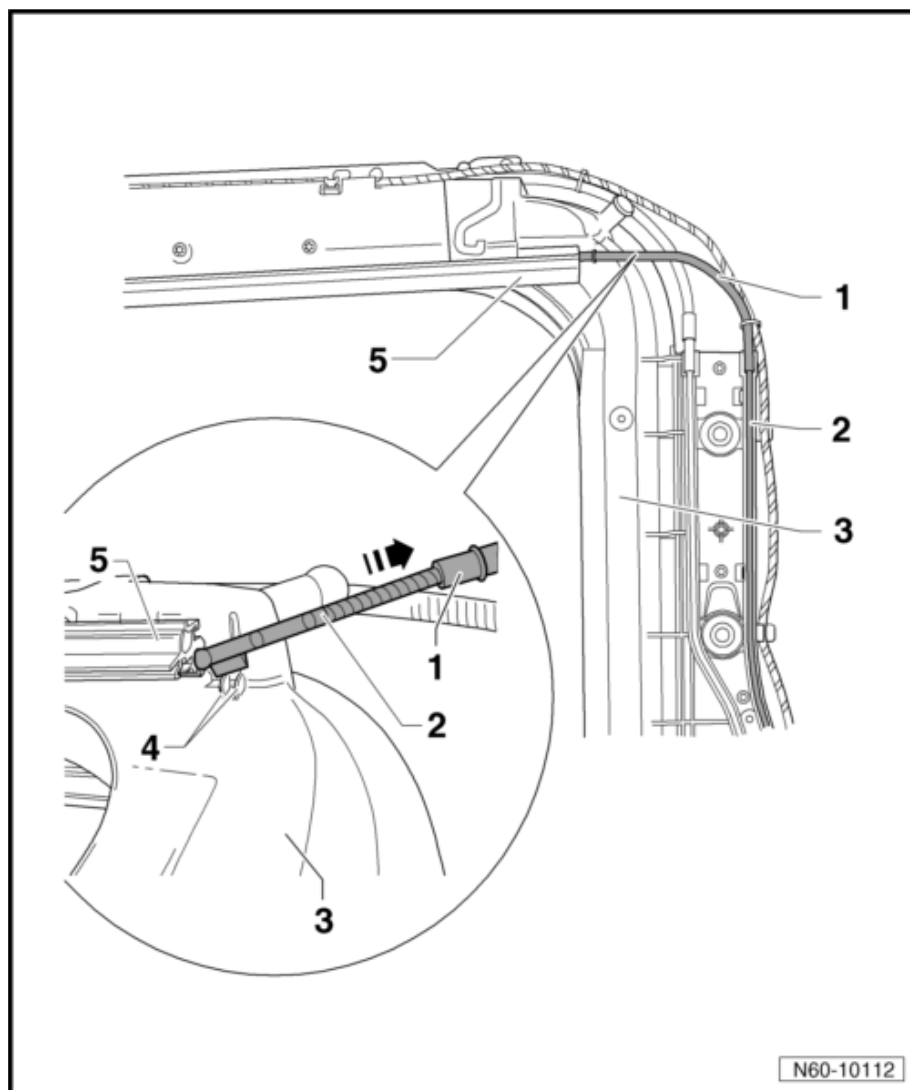
1.18.1 Removing



- Remove moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims .
- Remove sun blind motor ⇒ [page 158](#) .
- Remove sun blind ⇒ [page 158](#) .
- Remove bolts -arrows- of cable covers -1- and -2- (2 Nm).
- Remove cable covers -1- and -2- from rear part -4-.



- Pull sun blind cables -3- out of discharge tubes -1- and motor plate -4-.
- Using an appropriate screwdriver -5-, lever motor plate -5- out of rear part -6-.



- Lever guide tube -1- out of cable support bracket -4- of rear part -3-.
- Remove cable -2- from sun blind rail -5-.

1.18.2 Installing

Installation is carried out in the reverse sequence of removal.



Note

Do not grease motor plate and sunroof sun blind cables.

- Install sun blind ➔ [page 161](#) .
- Install sun blind motor ➔ [page 158](#) .
- Install moulded headliner ➔ General body repairs, interior;
Rep. gr. 70 ; Roof trims .
- On completion of all work, carry out a normalisation run for all panoramic sliding roof drives ➔ [page 141](#) .



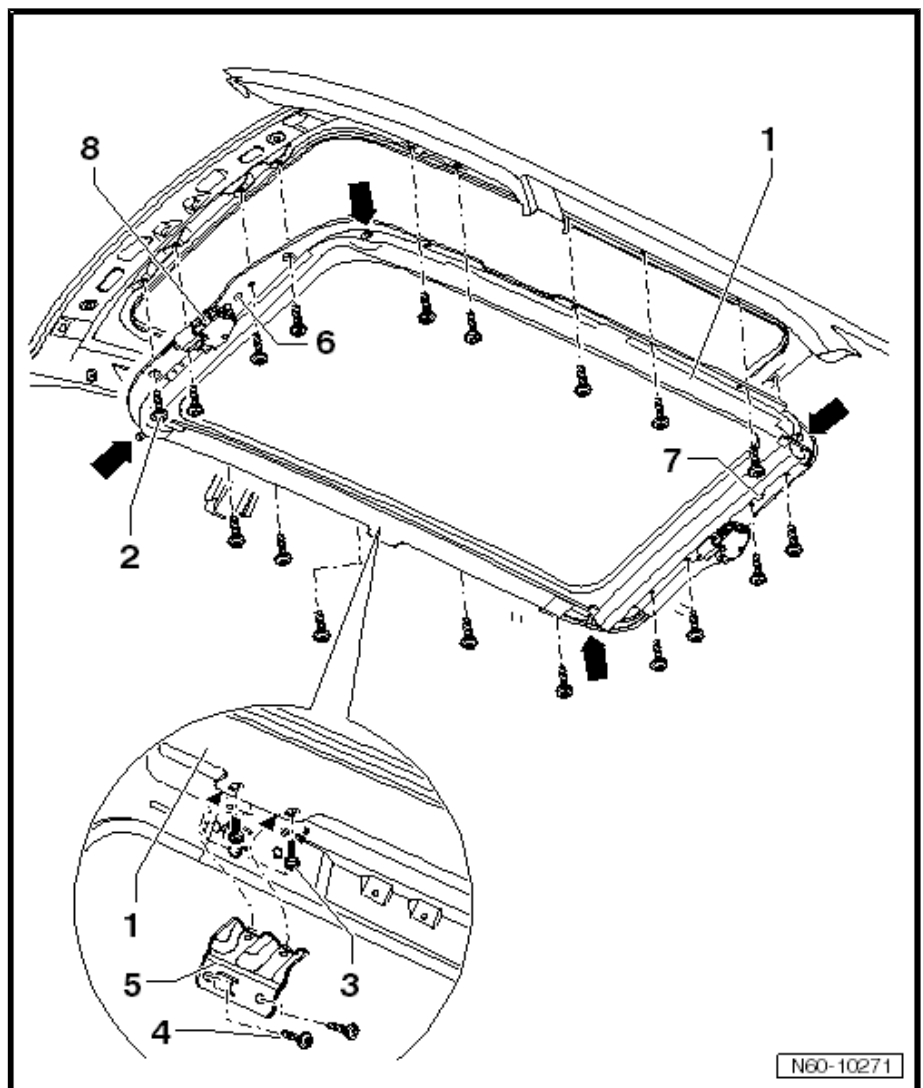
1.19 Removing and installing assembly frame

1.19.1 Removing



Note

A second mechanic is required for removing and installing assembly frame.



- Remove moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims .

Vehicles with net partition:

- Remove net partition mounting ⇒ General body repairs, interior; Rep. gr. 68 ; Net partition .

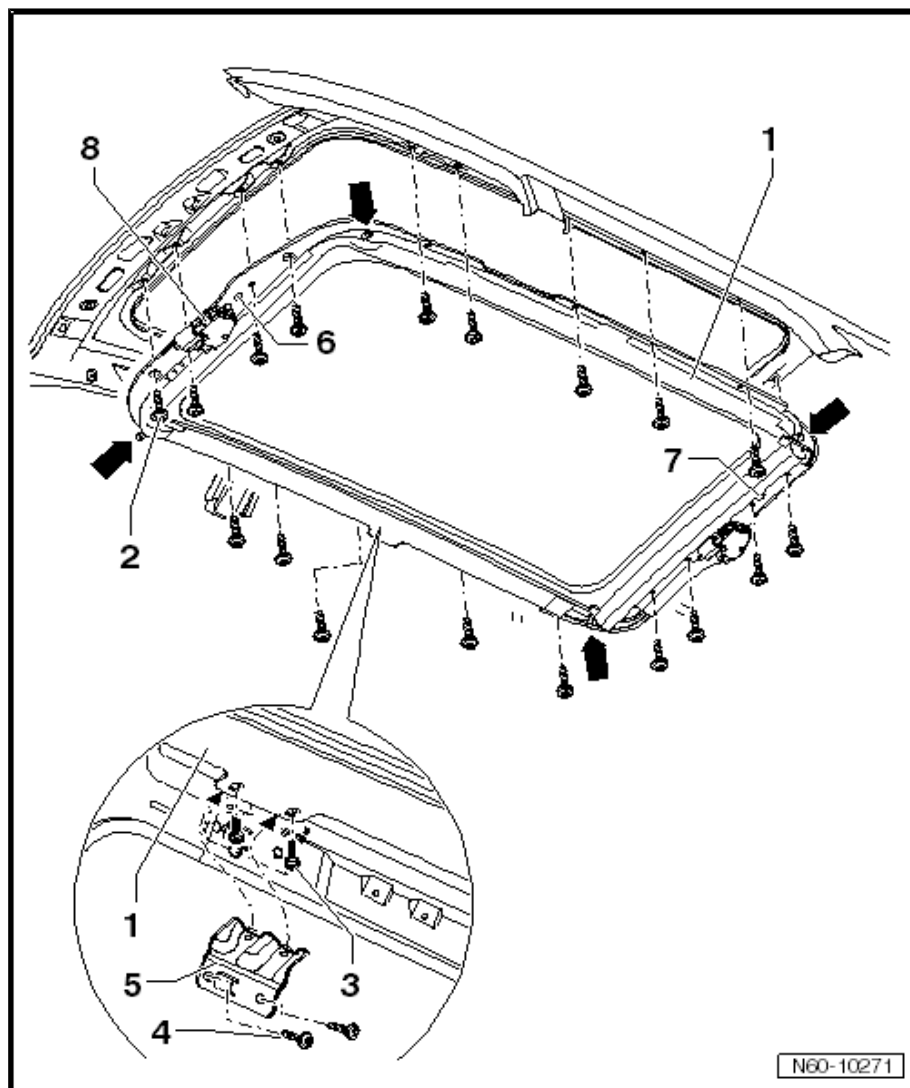
All vehicles:

- Remove grab handle mounting (roof) ⇒ General body repairs, interior; Rep. gr. 68 ; Grab handles .



- Pull off water drain hoses from connections -arrows- of assembly frame -1-.
- Disconnect connector to wiring harness of sliding roof motor -8-.
- Remove bolts -3- and -3- of console -5- and take off console.
- Unscrew bolts -2- of assembly frame -1- and remove assembly frame from vehicle with the help of at least one mechanic.

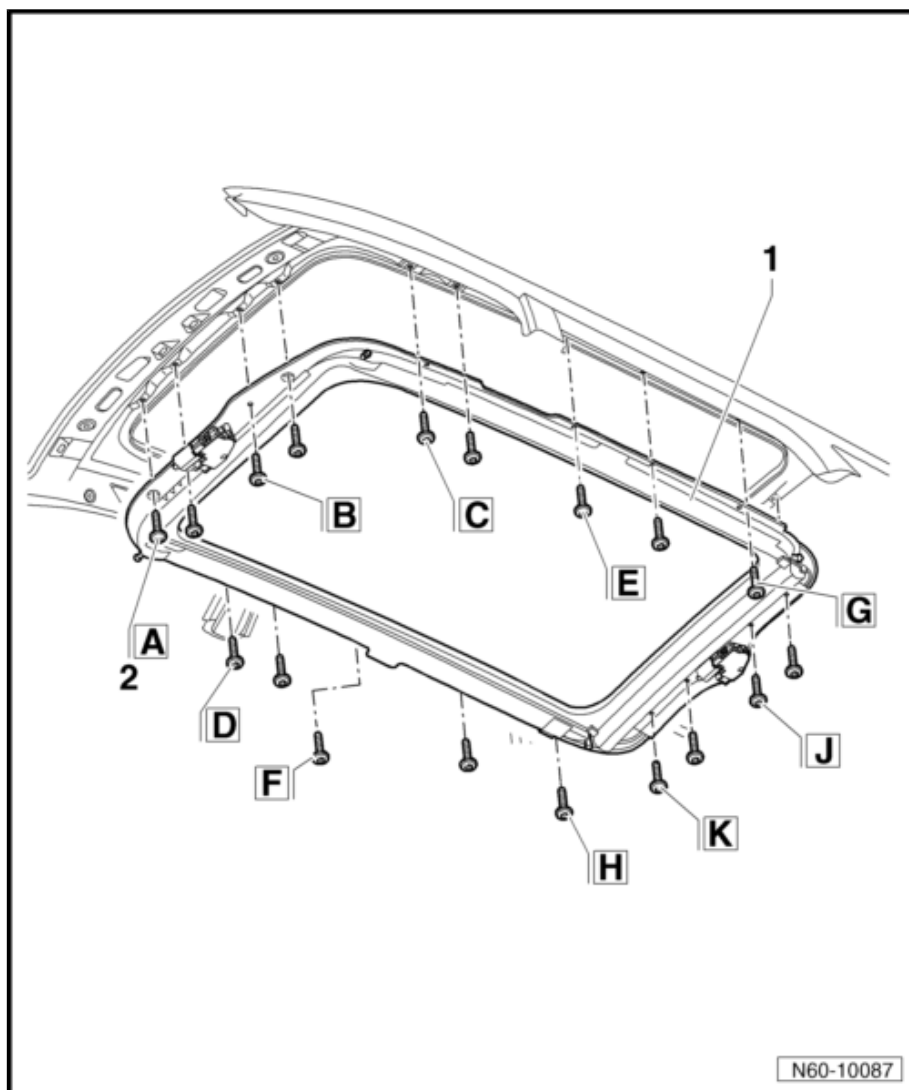
1.19.2 Installing



- Lift assembly frame -1- into vehicle with the help of at least a second mechanic.
- When screwing, align assembly frame with roof using 2 cylindrical pins (shank end of drill) in centring holes -6- and -7-.

There are additional centring holes on left and right sides of assembly frame.

- Screw bolts -2- in, but do not tighten.
- Tighten bolts -3- to 8 Nm.
- Tighten bolts -4- to 4.5 Nm.



- First tighten letter marked bolts -2- in alphabetic order to 8 Nm.
- Tighten then remaining bolts -2- of assembly frame -1- to 8 Nm.

The remaining installation steps are carried out in the reverse sequence of removal.

Vehicles with net partition:

- Install net partition mounting ⇒ General body repairs, interior; Rep. gr. 68 ; Net partition .

All vehicles:

- Install grab handle mounting (roof) ⇒ General body repairs, interior; Rep. gr. 68 ; Grab handles .
- Install moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims .

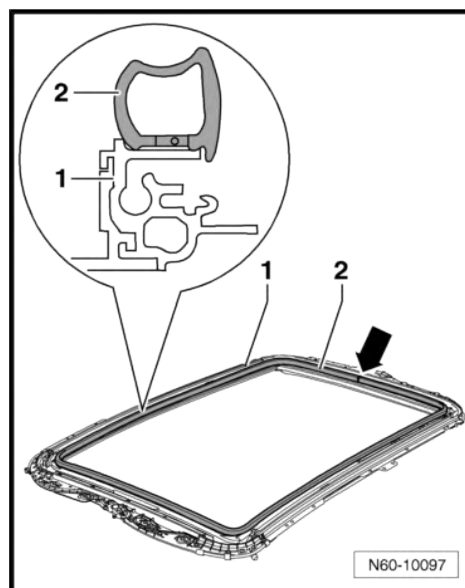
1.20 Removing and installing rear part

1.20.1 Removing

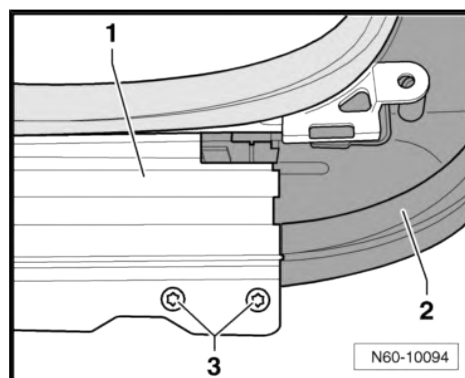
- Remove assembly frame from vehicle ⇒ [page 169](#) .



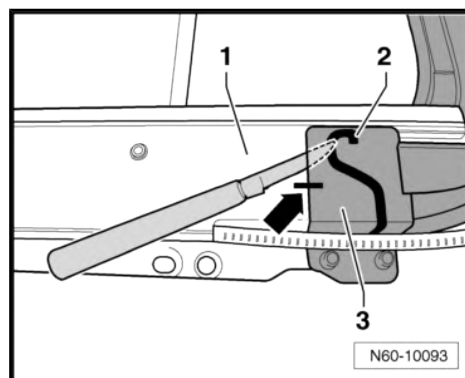
- Pull inner seal -2- off assembly frame -1-.
- Remove sun blind ➔ [page 158](#) .
- Loosen wiring harness from rear part.



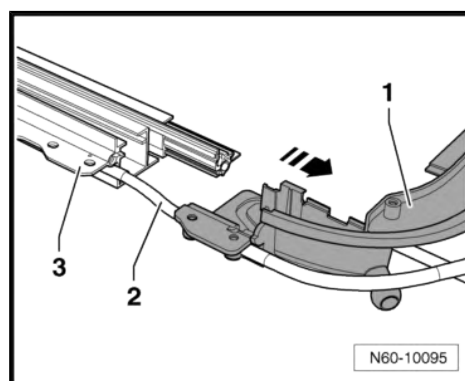
- Remove bolts -3- of rear part -2- on guide rail -1-.



- Mark position -arrow- of rear part -3- for further assembly.
- Separate adhesive bonding -2- between guide rail -1- and rear part -3- using a knife.



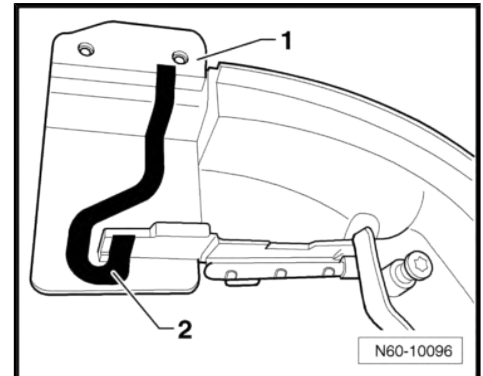
- Pull entire rear part -1- with discharge tubes -2- in direction of -arrow- out of guide rail -3-.



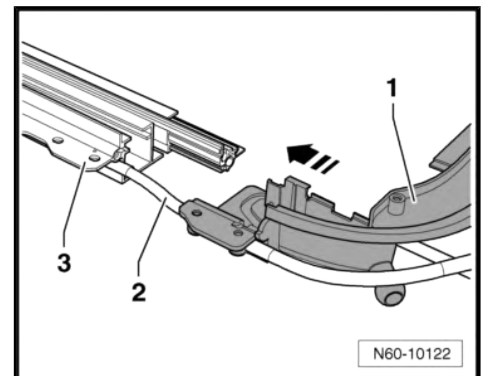


1.20.2 Installing

- Remove existing adhesive residue using adhesive strip remover - VAS 6349- .
- Clean bonding surfaces on rear part and guide rails with cleaner -D 009 401 04- .
- Press butyl adhesive sealing cord - AKD 497 010 04 R10- of 3.5 mm in diameter as shown in illustration -2- into adhesive canal on rear part -1-.



- Push entire rear part -1- with discharge tubes -2- in direction of -arrow- onto guide rail -3-.

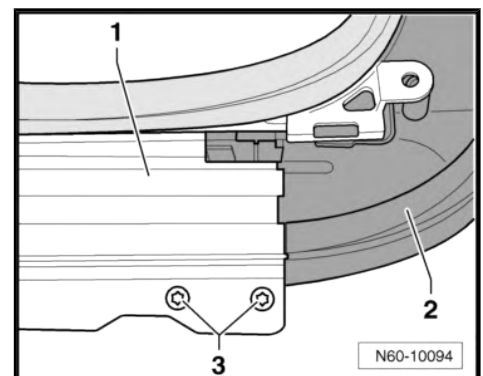


- Tighten bolts -3- of rear part -2- on guide rail -1- to 2 Nm.

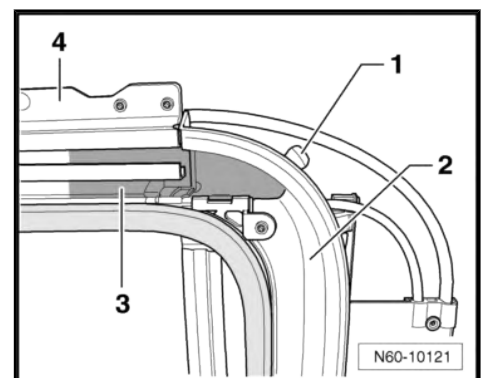


Note

Before installation, checking assembly frame for leaks is recommended.



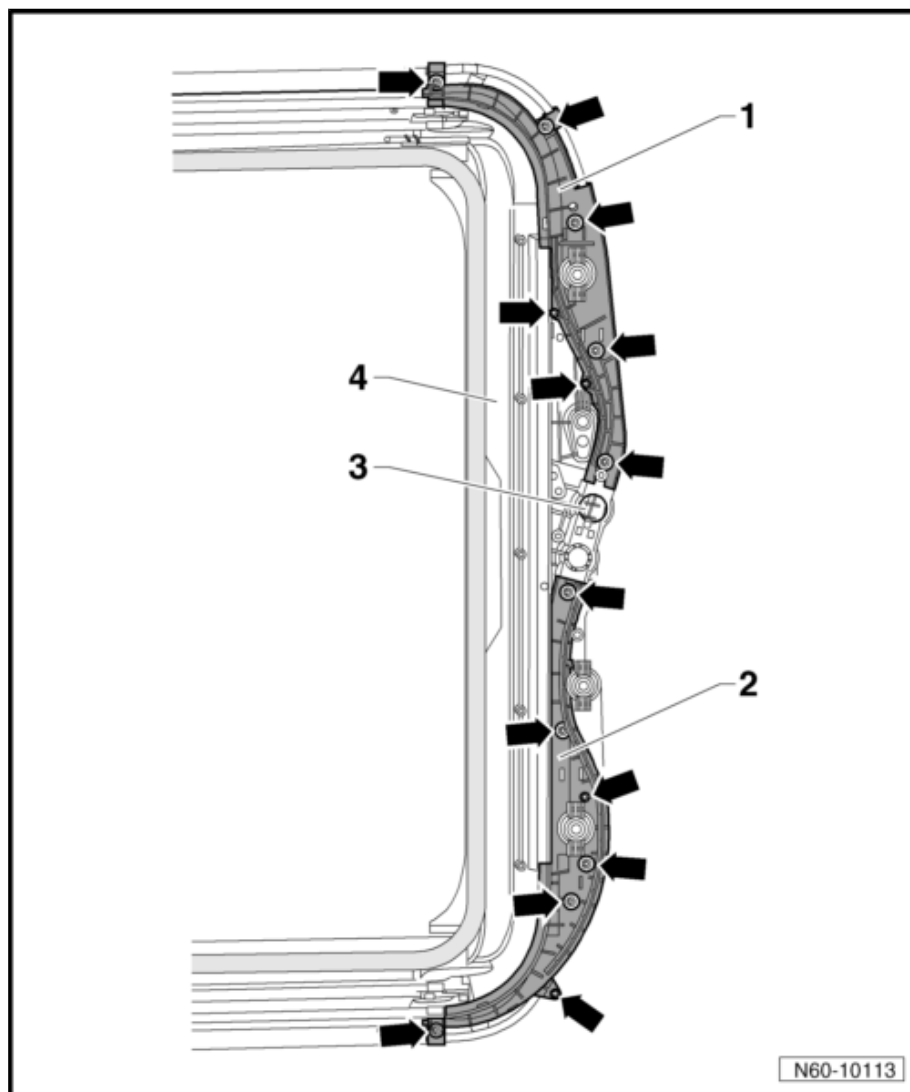
- Seal water drain hoses -1-.
- Fill marked area -3- between rear part -2- and guide rail -4- with water.
- Wait for at least 5 minutes before checking for leaks.
- Seal any leaks with butyl sealing cord - AKD 497 010 04 R10- .
- Install sun blind ➔ [page 158](#) .
- Install sun blind motor ➔ [page 158](#) .
- Install a new inner seal ➔ [page 150](#) .
- Install assembly frame ➔ [page 170](#) .
- On completion of all work, carry out a normalisation run for all panoramic sliding roof drives ➔ [page 141](#) .



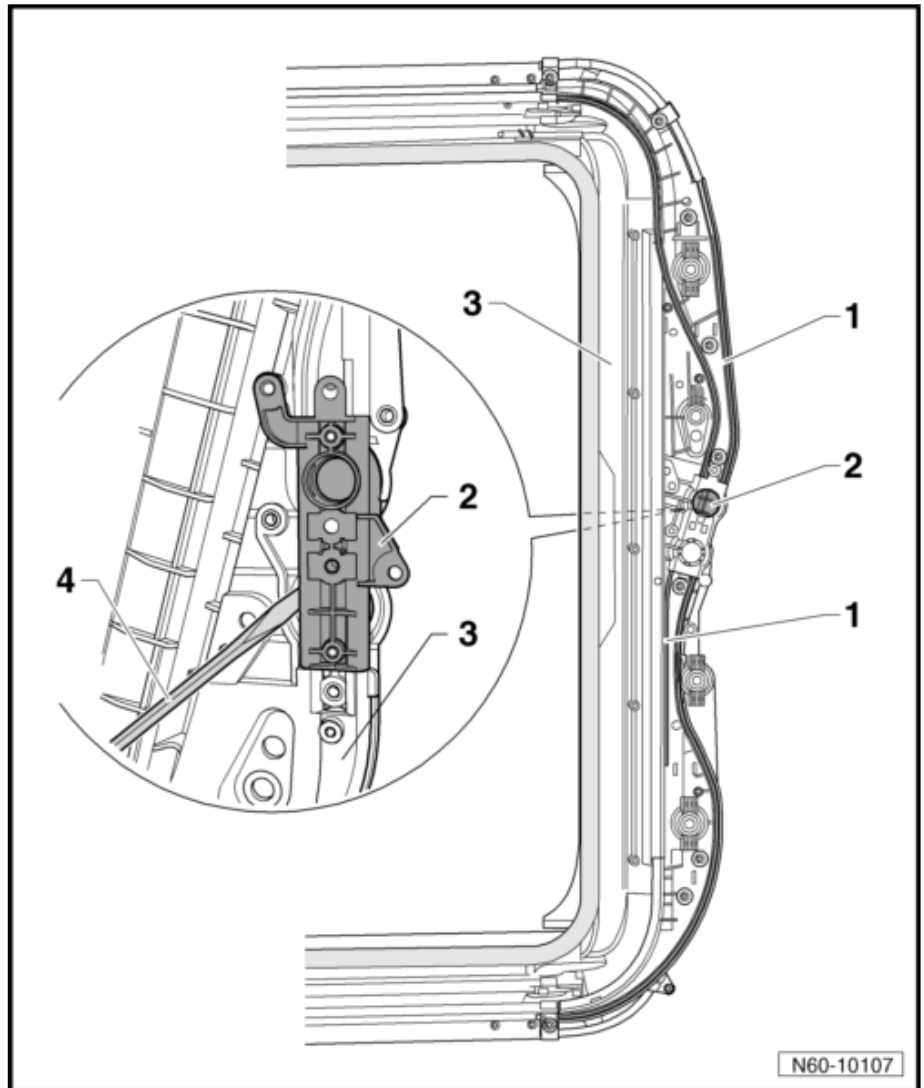


1.21 Removing and installing front motor plate

1.21.1 Removing



- Remove assembly frame from vehicle ⇒ [page 169](#) .
- Remove sliding sunroof motor ⇒ [page 158](#) .
- Remove bolts -arrows- (2 Nm).
- Remove cable covers -1 and 2- from rear part -4-.



- Pull ends of cable -1- out of motor plate -2-.
- Using appropriate screwdriver -4-, lever motor plate -1- out of front part -2-.

1.21.2 Installing

Installation is carried out in the reverse sequence of removal.

Note

Do not grease motor plate and cables.

- Install sliding sunroof motor ⇒ [page 155](#) .
- Install assembly frame ⇒ [page 170](#) .
- On completion of work, establish reference points of sun blind motor ⇒ [page 141](#) .



1.22 Removing and installing tilting mechanism and front glass panel cable

1.22.1 Removing

- Remove front glass panel ⇒ [page 143](#) .
- Remove rear glass panel ⇒ [page 145](#) .
- Remove assembly frame from vehicle ⇒ [page 169](#) .
- Remove sliding sunroof motor ⇒ [page 158](#) .
- Remove rear part of assembly frame ⇒ [page 171](#) .

After removal of rear part, tilting mechanism can be slid out backwards.

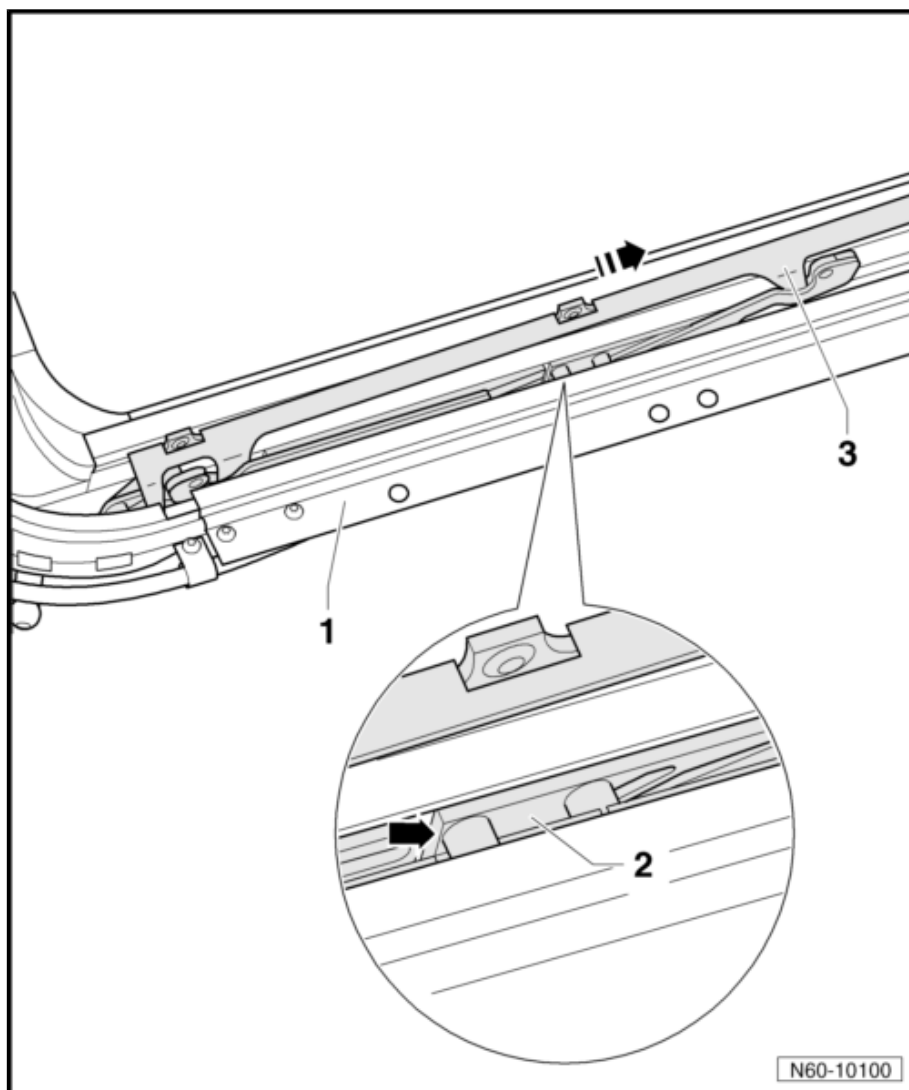
To do this, proceed as follows:



Caution

Observe position of Bowden cables before removal to avoid any errors when installing.

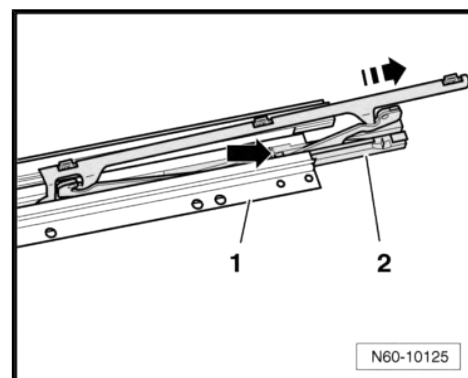
Do not pull or push tilting mechanism guide plate.



- Push glass panel tilting mechanism only on areas -arrow- of slider -2-, not on guide plate -3-.

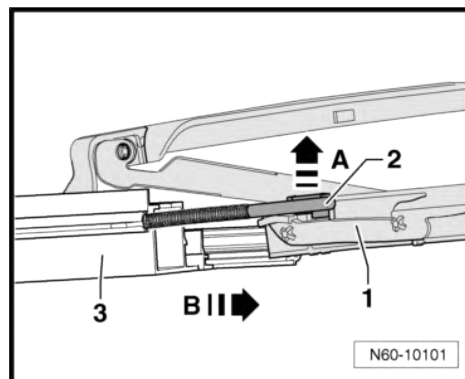
Tilting mechanism tilts when moving.

- Using appropriate screwdriver, push tilting mechanism -2- on slider -arrow- backwards out of guide rails -1-.





- Unhook cable -2- out of slider -1- in direction of -arrow A-.
- Pull tilting mechanism -1- in direction of -arrow B- out of guide rails -3-.
- Pull cable -2- in direction of -arrow B- out of guide rails -3-.



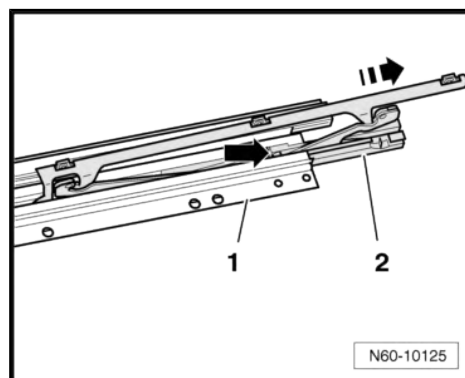
1.22.2 Installing



Note

- ◆ *Guide rails must only be cleaned if heavily soiled.*
- ◆ *To do this, use cleaner -D 009 401 04- .*
- ◆ *Then grease guide rail in guide areas with lubricating paste - G 060 751 A2- → [page 179](#) .*
- ◆ *Do not grease cables.*

- Slide tilting mechanism -3- into guide rail -1-.
- Ensure that slides -2- face towards rear when slid into guide rail -1-.

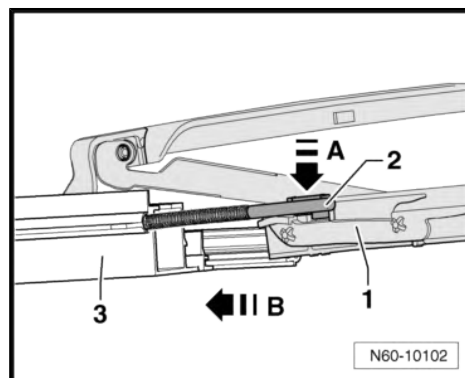


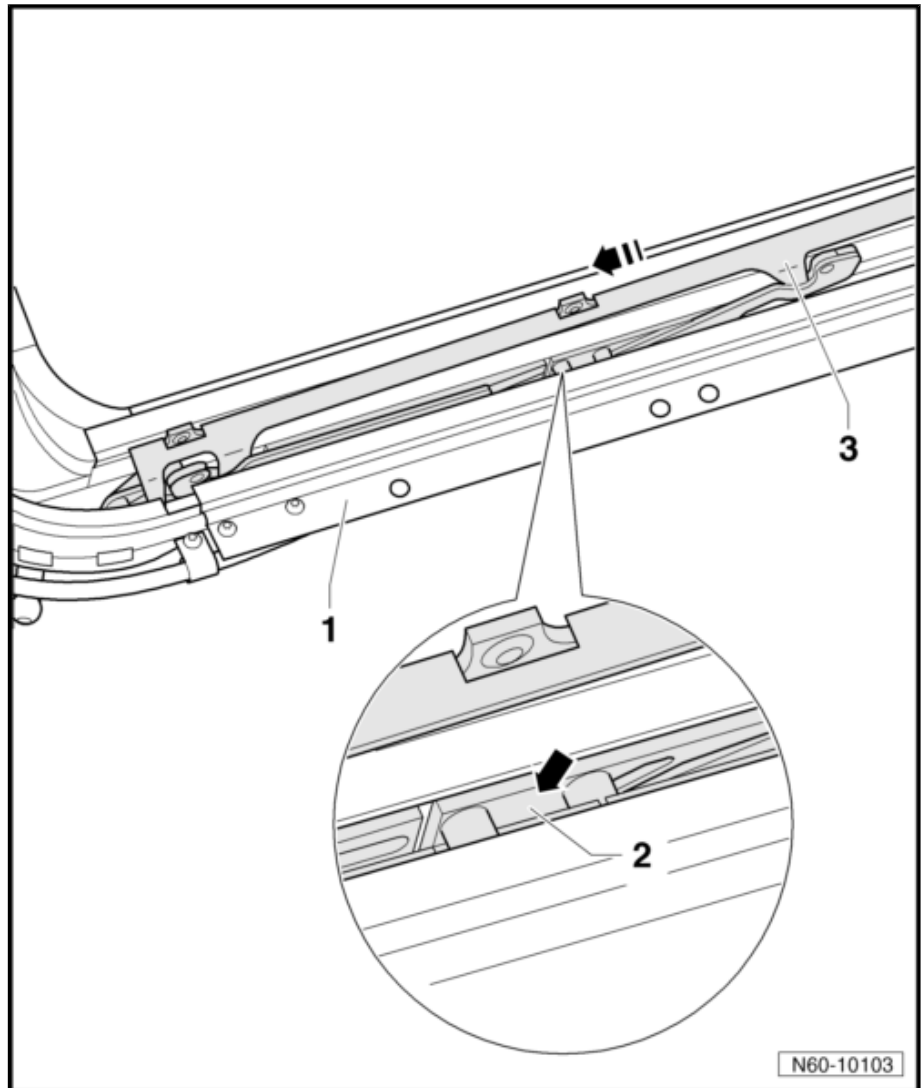
- Push cable -2- in direction of -arrow B- into guide rail -3-.
- Hang cable -2- in direction of -arrow A- into slider -1-.



Note

Do not pull or push tilting mechanism guide plate.





- Pull tilting mechanism fully forwards on both sides until it is completely lowered.
- Push tilting mechanism on -arrow- areas of slider -2- not on guide plate -3-.
- Install rear part on assembly frame ➔ [page 173](#) .
- Install sliding sunroof motor ➔ [page 157](#) .
- Install assembly frame into vehicle ➔ [page 170](#) .
- Install rear glass panel ➔ [page 145](#) .
- Install front glass panel ➔ [page 143](#) .
- On completion of all work, carry out a normalisation run for all panoramic sliding roof drives ➔ [page 141](#) .

1.23 Maintenance and care

Servicing at regular intervals is generally not required for the panorama sliding roof.

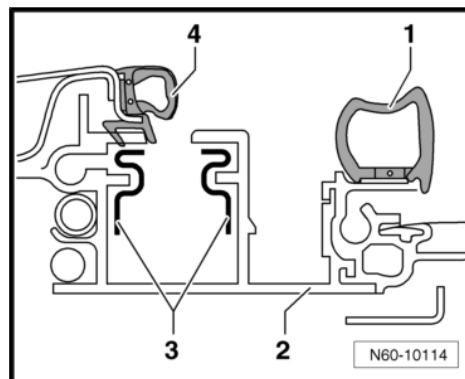
If cleaning is necessary because it is heavily soiled, use cleaner -D 009 401 04- .



Sliding areas -3- of guide rail -2- must then be greased again with lubricating paste - G 060 751 A2- .

Inner seal -1- and outer seal -4- have a solid film lubricant coating and must not be greased.

Do not grease cables and motor plate.



1.24 Operating without current

1.24.1 Glass panel



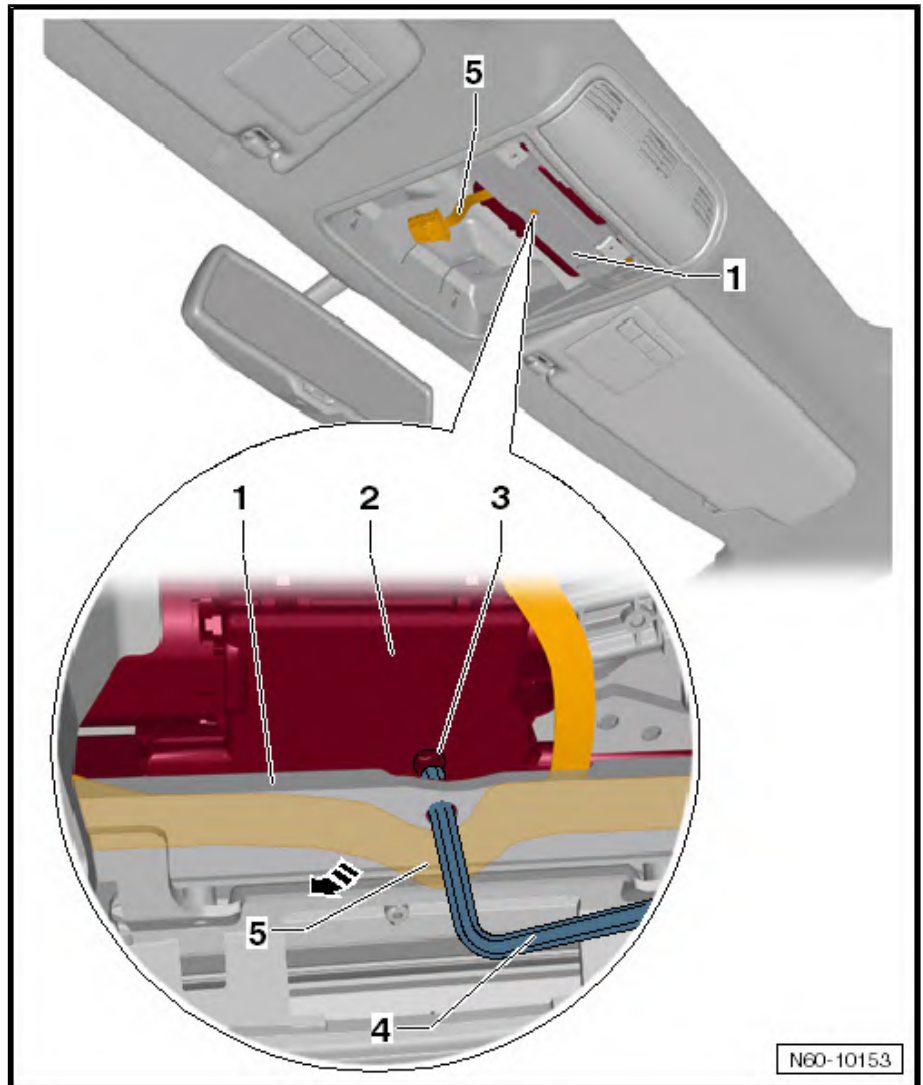
Note

- ◆ In the event of power failure, front glass panel near to sliding sunroof motor can be moved by hand using a commercially available hexagon key.
- ◆ Front glass panel must only be moved manually until its front edge is flush with front edge of rear glass panel. If glass panel is moved further backwards, mechanism cables may hook off.



WARNING

On some models, a ribbon cable is bonded to the light cut-out web. Before removing sliding sunroof motor, carefully detach ribbon cable from web and push it to side. Ensure that ribbon cable is not damaged when doing this.



- Removing lights and front operating unit ⇒ Electrical system; Rep. gr. 96 ; Lights and switches in roof trim .
- Carefully detach ribbon cable -5- from web -1-.
- Pull ribbon cable to side -arrow- using a commercially available hexagon key -4- until access is made possible through hole in web -3-.
- Guide hexagon key -4- through hole in web -1- into bolt -3- of sliding sunroof motor -2-.

When turning by hand, greater force is necessary since motor is not uncoupled from drive.

1.24.2 Sun blind



Note

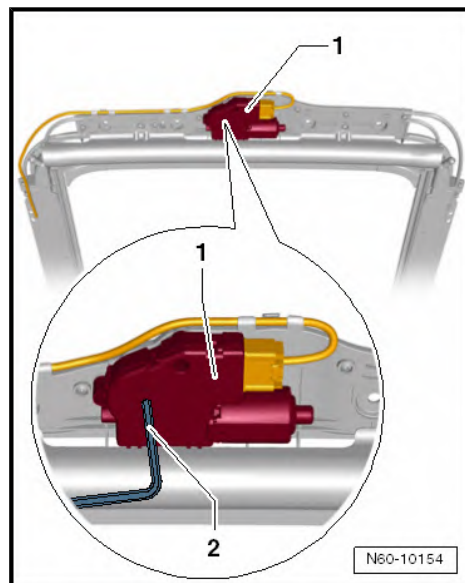
In the event of power failure, sunroof sun blind can be moved by hand on sunroof sun blind motor using a commercially available hexagon key.

- Remove moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims .



- Insert hexagon key -2- into bolt of sun blind motor -1-.

When turning by hand, greater force is necessary since motor is not uncoupled from drive.

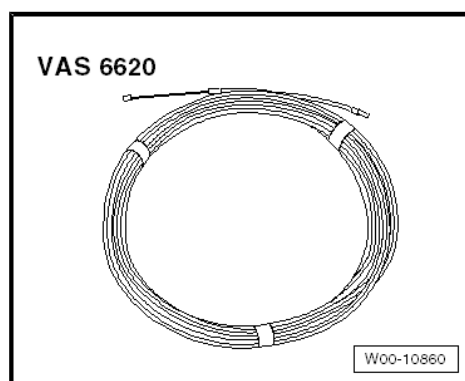


1.25 Cleaning water drainage hoses

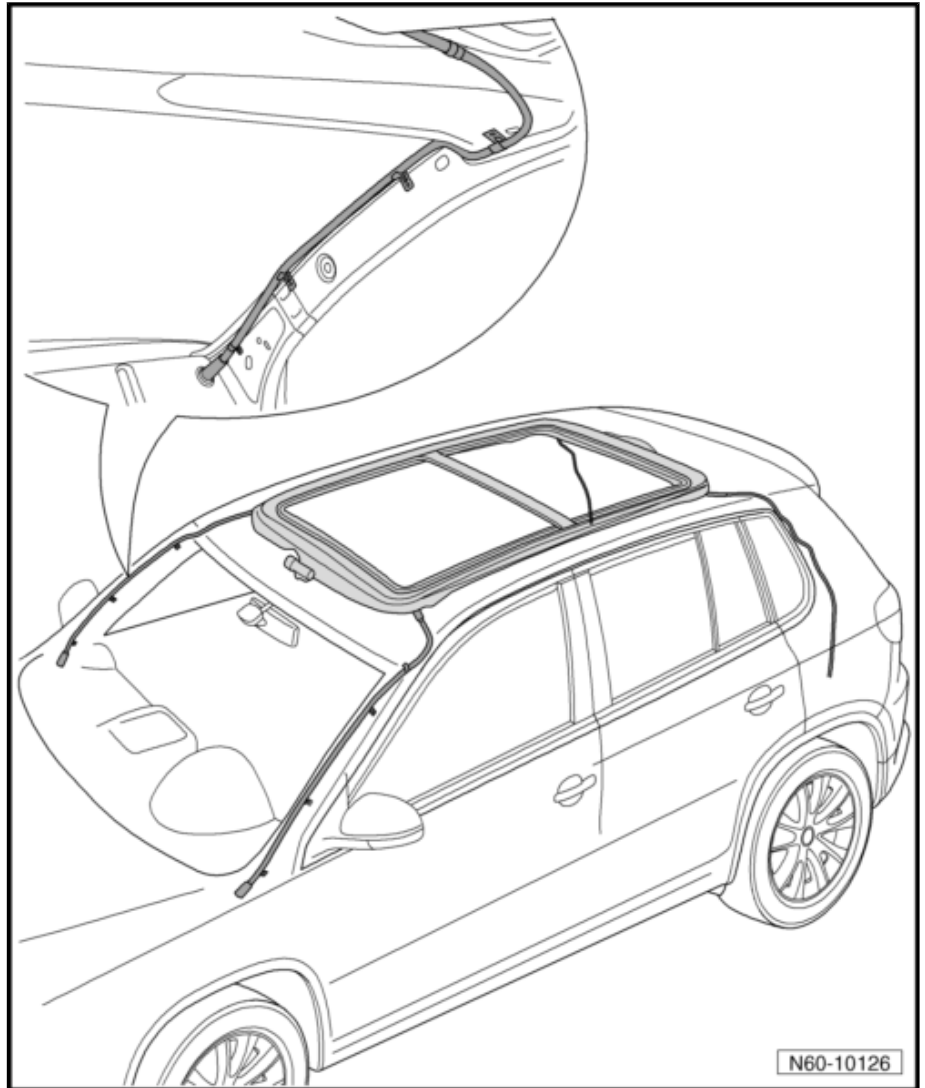
1.25.1 Tools

Special tools and workshop equipment required

- ◆ Cleaning and fitting tool - VAS 6620-



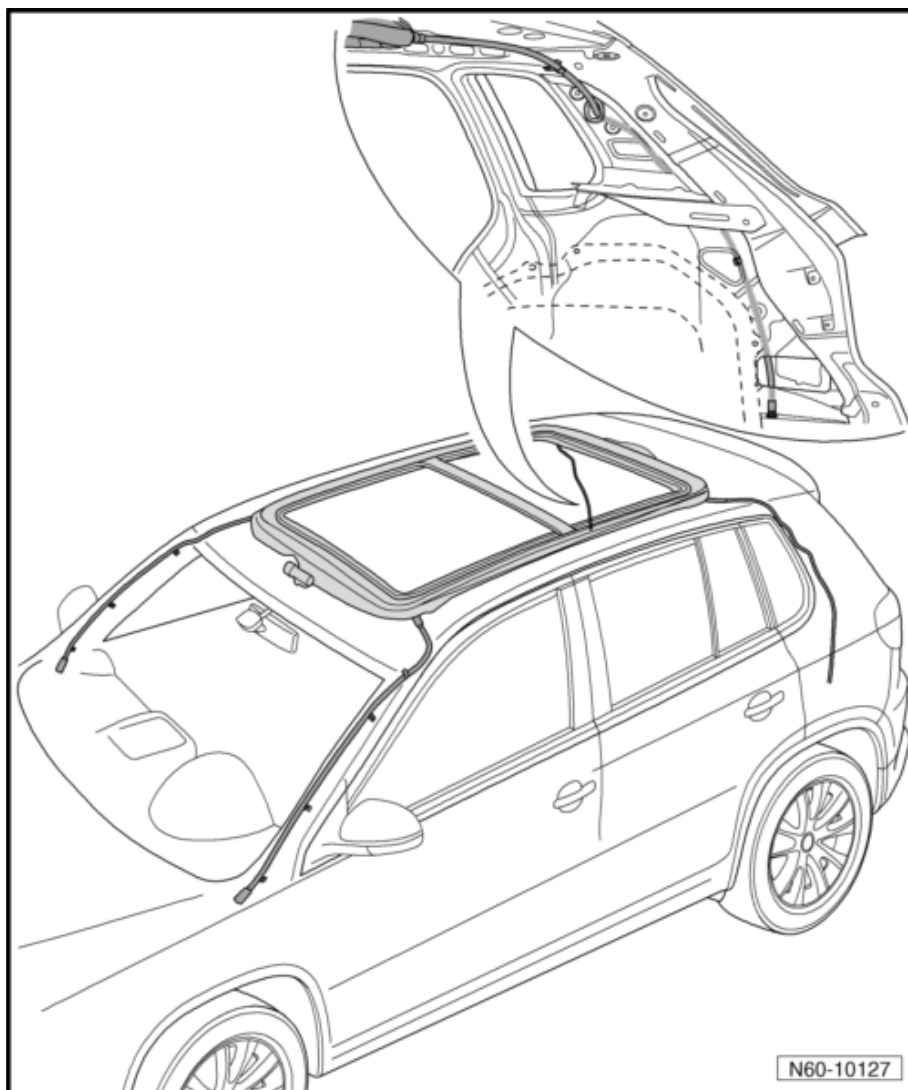
1.25.2 Front water drain hoses



The front water drain hoses are routed in the A-pillars and end in the plenum chamber. Cleaning is done from panorama sliding roof cut-out.



1.25.3 Rear water drain hoses



The rear water drain hoses run through the D-pillars and end in the rear wheel housings. Cleaning is done from the wheel housing. The wheel housing liner must be removed.