

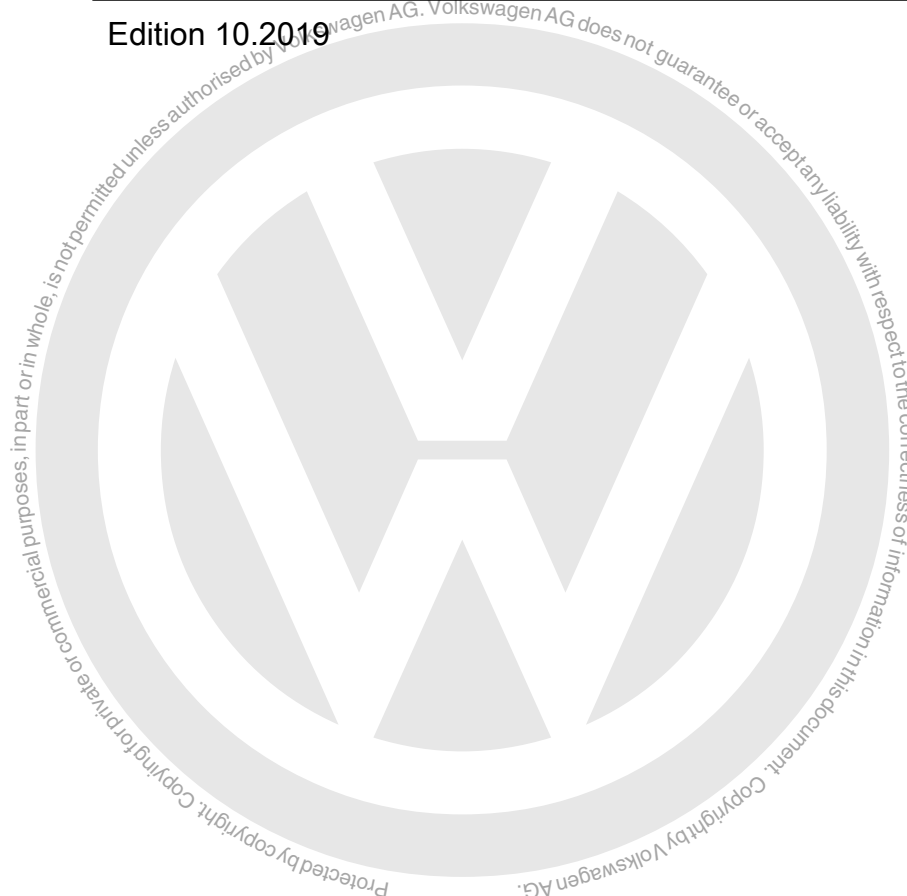


Workshop Manual

e-up! 2014 ➤ , e-up! 2017 ➤ ,
e-up! 2020 ➤ , up! 2012 ➤ , up! 2017 ➤ ,
up! 2020 ➤

General body repairs, exterior

Edition 10.2019





List of Workshop Manual Repair Groups

Repair Group

- 50 - Body - front
- 55 - Bonnet, rear lid
- 57 - Front doors, door components, central locking
- 58 - Rear doors, door components
- 60 - Sunroof
- 63 - Bumpers
- 64 - Glazing
- 66 - Exterior equipment

Technical information should always be available to the foremen and mechanics, because their careful and constant adherence to the instructions is essential to ensure vehicle road-worthiness and safety. In addition, the normal basic safety precautions for working on motor vehicles must, as a matter of course, be observed.



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50 – Body - front

1 Lock carrier

(VRL013528; Edition 10.2019)

⇒ [“1.1 Assembly overview – lock carrier”, page 1](#)

⇒ [“1.2 Moving to and back from service position”, page 1](#)

⇒ [“1.3 Removing and installing lock carrier”, page 5](#)

1.1 Assembly overview – lock carrier

1 - Lock carrier with add-on parts

- ☐ Removing and installing
⇒ [page 5](#)
- ☐ Service position
⇒ [page 1](#)

2 - Bolt

- ☐ Qty. 3 on each side
- ☐ Specified torque: 8 Nm

3 - Mounting plate

- ☐ Left

4 - Air guide

- ☐ Left

5 - Bolt

- ☐ Qty. 2 on each side
- ☐ Specified torque: 8 Nm
- ☐ For fastening bumper carrier -9- to lock carrier -1-.

6 - Bolt

- ☐ Qty. 3 on each side
- ☐ Specified torque: 20 Nm

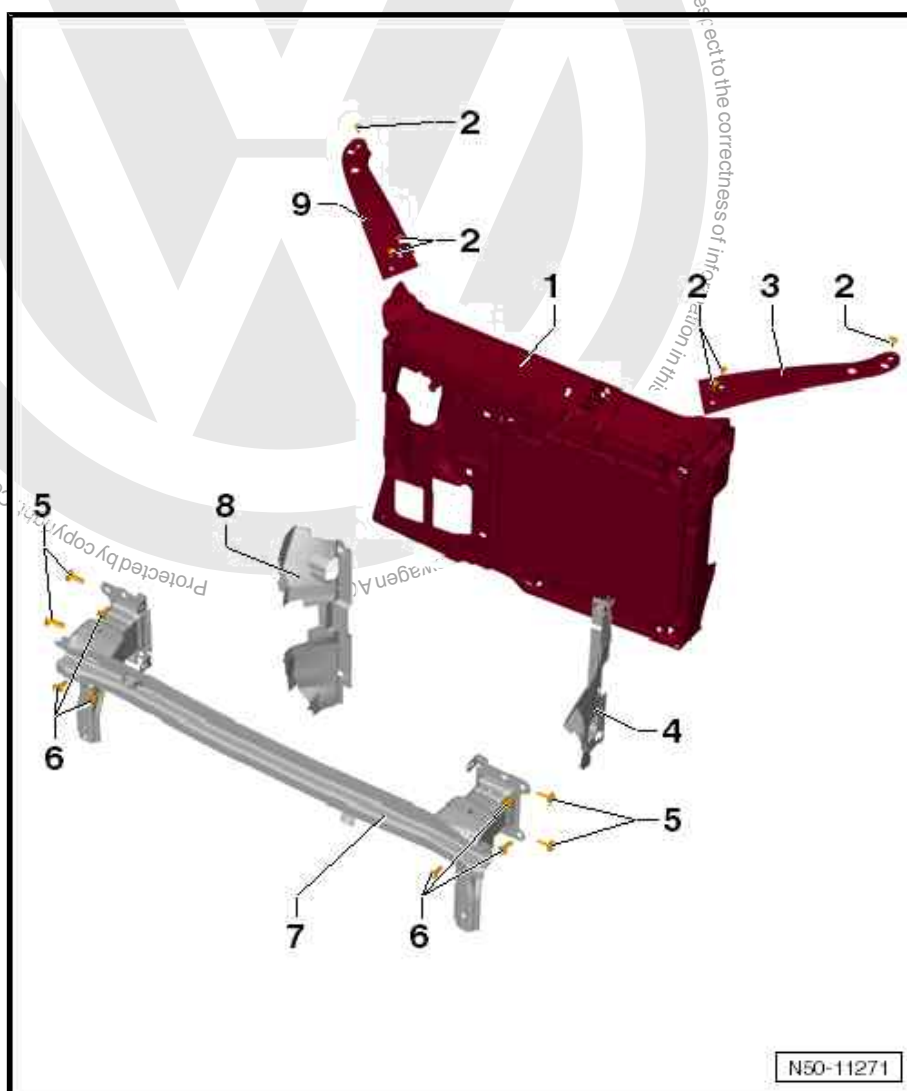
7 - Bumper carrier

8 - Air guide

- ☐ Right

9 - Mounting plate

- ☐ Right

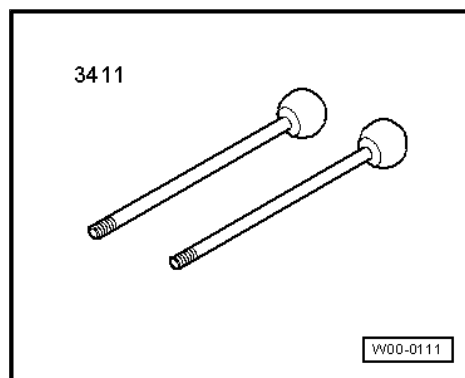


1.2 Moving to and back from service position

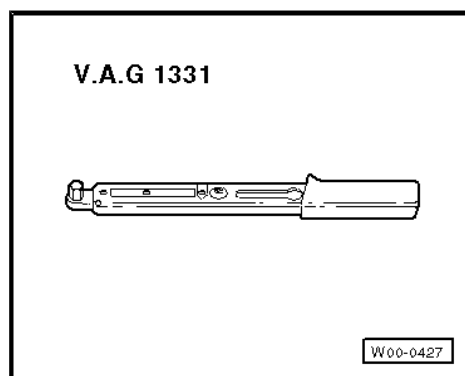
Special tools and workshop equipment required



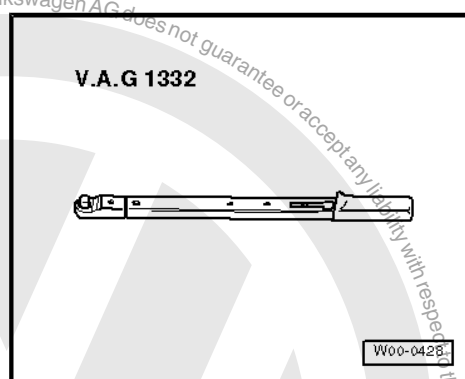
◆ Guide pins - 3411-



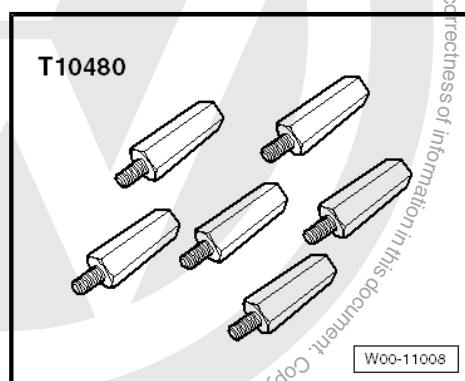
◆ Torque wrench - V.A.G 1331-



◆ Torque wrench - V.A.G 1332-



◆ T10480 - Adapter-



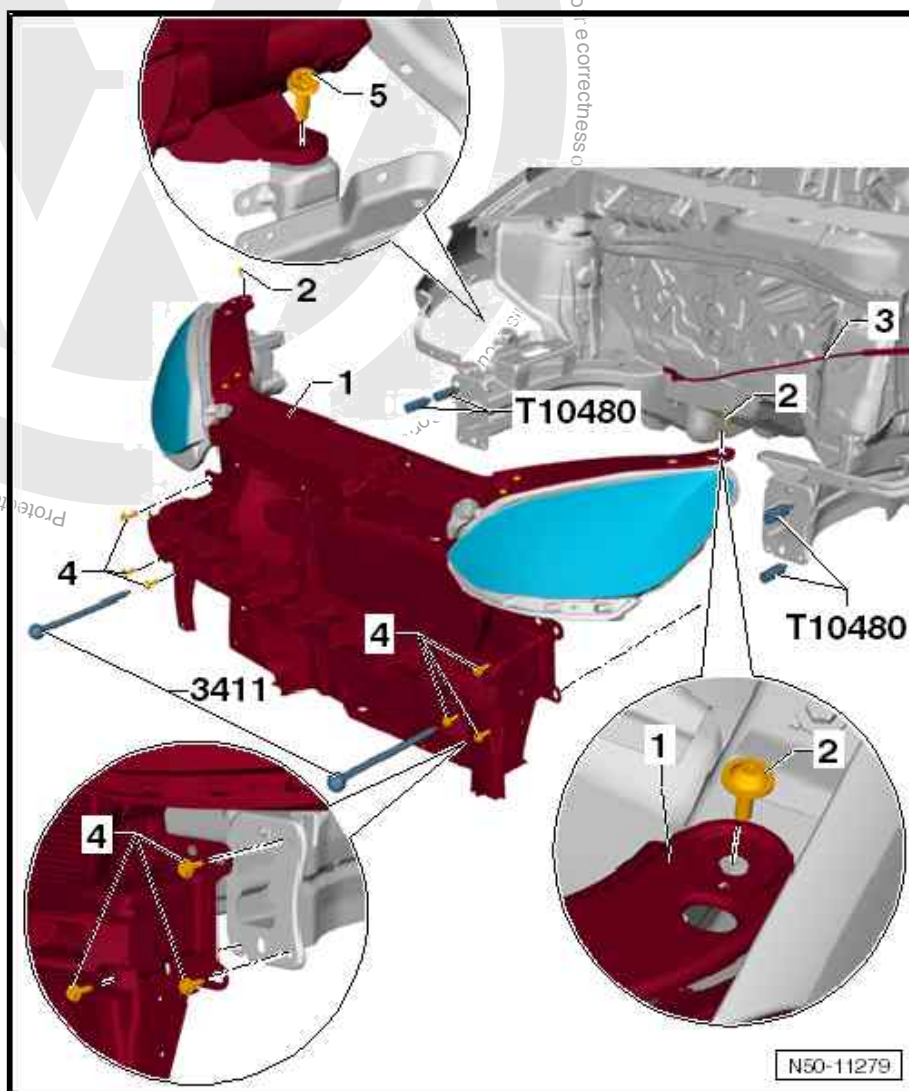


Moving to service position



Note

- ◆ There's very limited space between lock carrier and wings.
- ◆ There is a high risk of damage to the wings.
- ◆ It is essential to protect the wing ends against damage accordingly.

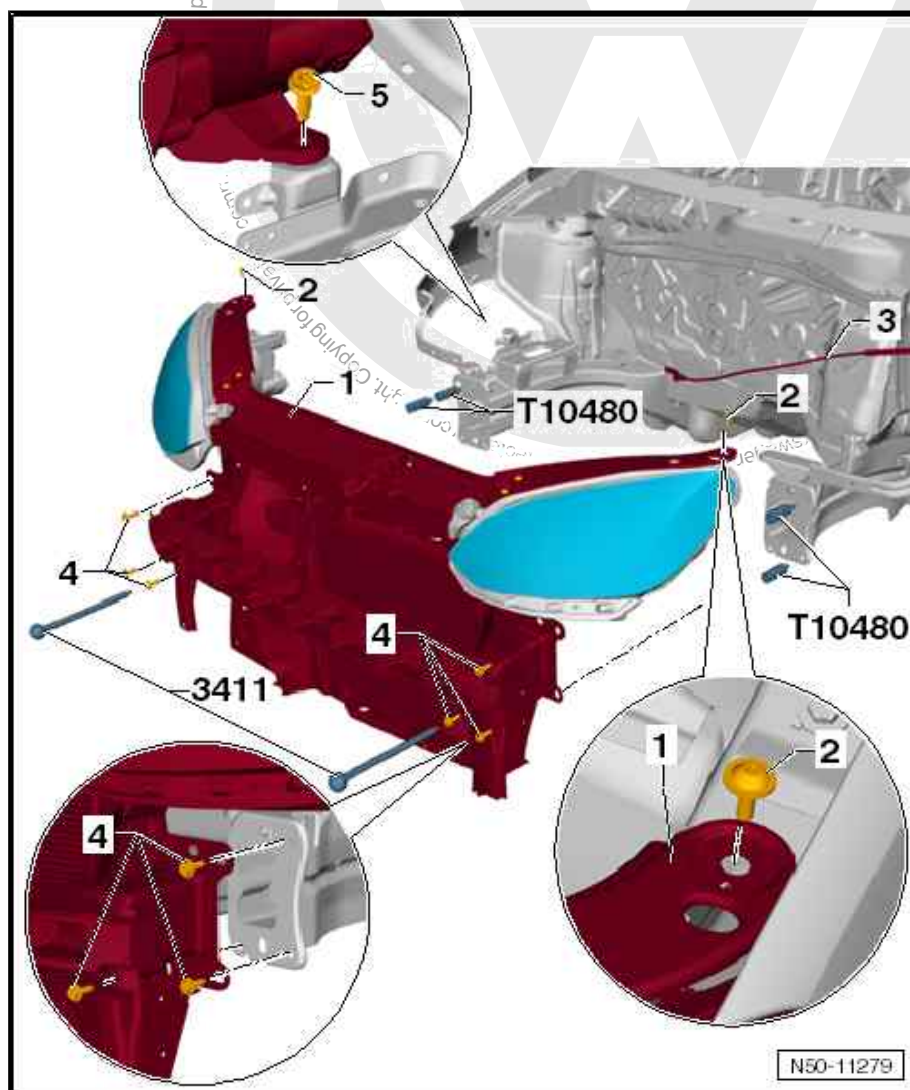


- Remove front bumper cover ➤ [page 214](#) .
- Unscrew bolt -5- from headlight.
- Detach cable -3- from bonnet lock ➤ [page 37](#) .
- For vehicles ➤ 05.2016, detach filler neck of washer fluid reservoir ➤ Electrical system; Rep. gr. 92 ; Windscreen washer system; Removing and installing washer fluid reservoir .
- If fitted, remove electrical vacuum pump ➤ brake system ; Rep. gr. 47 ; Vacuum system; Removing and installing electrical vacuum pump .
- Only remove one bolt -4- on left and right side of each longitudinal member.



- Screw in special tool guide pins - 3411- to left and right longitudinal members where the bolts were previously located.
- Unscrew bolts -2-.
- Remove remaining bolts -4- on left and right side of longitudinal members.
- The lock carrier with add-on parts -1- can be pulled forwards about 10 cm on the special tool guide pins - T 10093- . When doing this, be careful with the electrical wires/cables leading to lock carrier and, if necessary, detach connectors.
- Install special tool T10480 - adapter- on left and right between bumper carrier and longitudinal member.

Moving from service position



Perform the following steps:

- Remove special tool T10480 - adapter- on left and right from between bumper carrier and longitudinal member.
- Push lock carrier together with add-on parts -1- on the guide pins - 3411- and onto the longitudinal member.
- Start bolts -2 and 4-.



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

- Align lock carrier together with add-on parts -1- to longitudinal members and between wings ➔ Body Repairs; Rep. gr. 00 ; Body gaps/shut lines; Body - front .

Specified torque for bolts -2 and 4- ➔ [page 1](#) .

- Adjust headlights ➔ Electrical system; Rep. gr. 94 ; Headlights; Adjusting headlights .

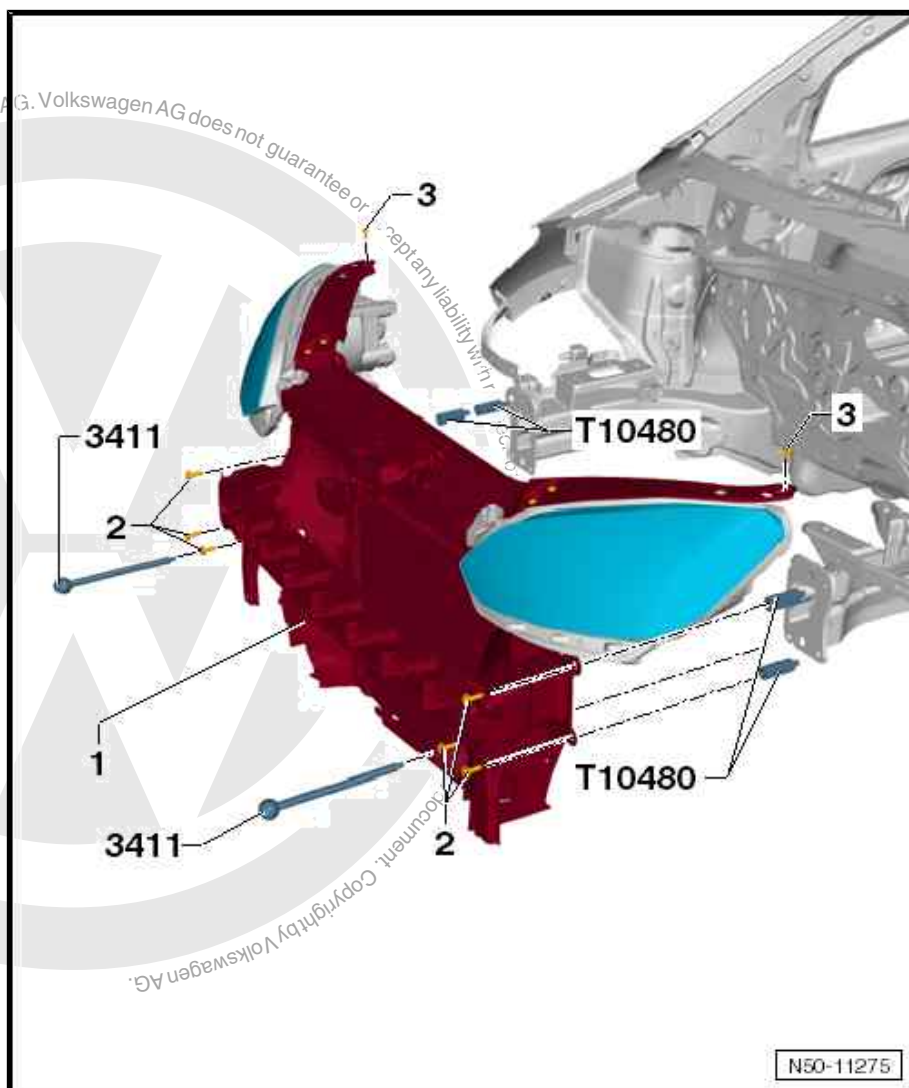
1.3 Removing and installing lock carrier

Removing



Note

- ◆ *The lock carrier is a safety-relevant component. The lock carrier must not be repaired for this reason.*
- ◆ *In the event of damage, renew lock carrier.*



Perform the following steps:

- Move to service position ➔ [page 1](#) .



- Disconnect any electrical connectors.
- Drain coolant and disconnect coolant lines ⇒ Rep. gr. 19 ;
Cooling system, coolant; Draining and filling coolant .
- Disconnect refrigerant lines for condenser ⇒ Heating, air conditioning; Rep. gr. 87 ; Refrigerant circuit; Removing and installing condenser .
- Unscrew special tool T10480 - adapter - .
- Remove guide pins - 3411- from left and right longitudinal members -2- with the aid of a second mechanic. Lift out lock carrier -1- with attachments.



WARNING

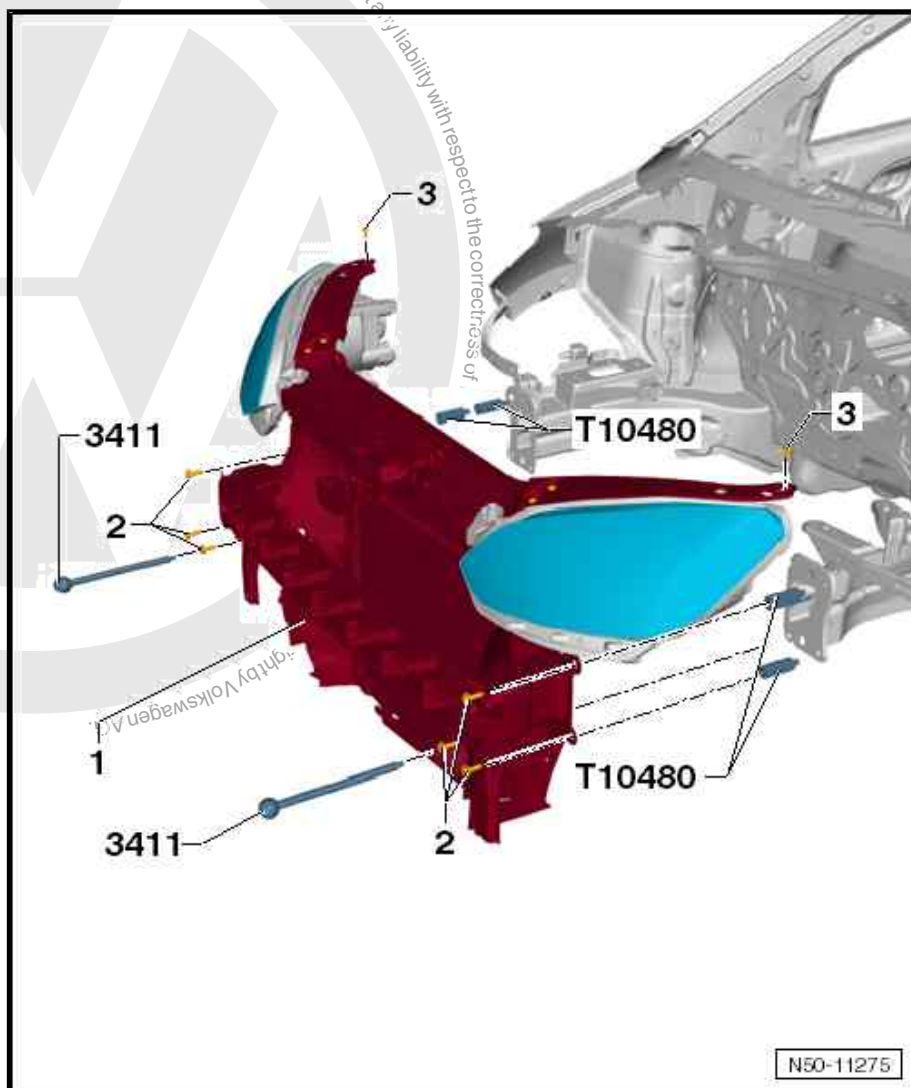
Do not start the engine if the air conditioning system and/or the coolant system lines are disconnected.



Note

- ◆ *Do not hang condenser and hydraulic oil cooler from lines.*
- ◆ *Do not kink lines for condenser and hydraulic systems.*

Installing



Perform the following steps:

- Fit lock carrier -1- on longitudinal members -2-.
- Screw in guide pins - 3411- on left and right sides.
- Move back from service position ➤ [page 1](#) .

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

- During assembly, ensure that all connectors and hose connections are properly fitted.
- Align lock carrier together with add-on parts -1- to longitudinal members and between wings ➤ Body Repairs; Rep. gr. 00 ; Body gaps/shut lines; Body - front .
- Adjust headlights ➤ Electrical system; Rep. gr. 94 ; Headlights; Adjusting headlights .



2 Wings

⇒ ["2.1 Assembly overview - wing", page 8](#)

⇒ ["2.2 Removing and installing wing", page 8](#)

2.1 Assembly overview - wing



Note

The illustrations show the left-hand side. The right side is similar.

1 - Wings

- ❑ Removing and installing
⇒ [page 8](#)

2 - A-pillar trim

- ❑ Removing and installing

3 - Insulation for rib section

- ❑ Inserted between wing and A-pillar.

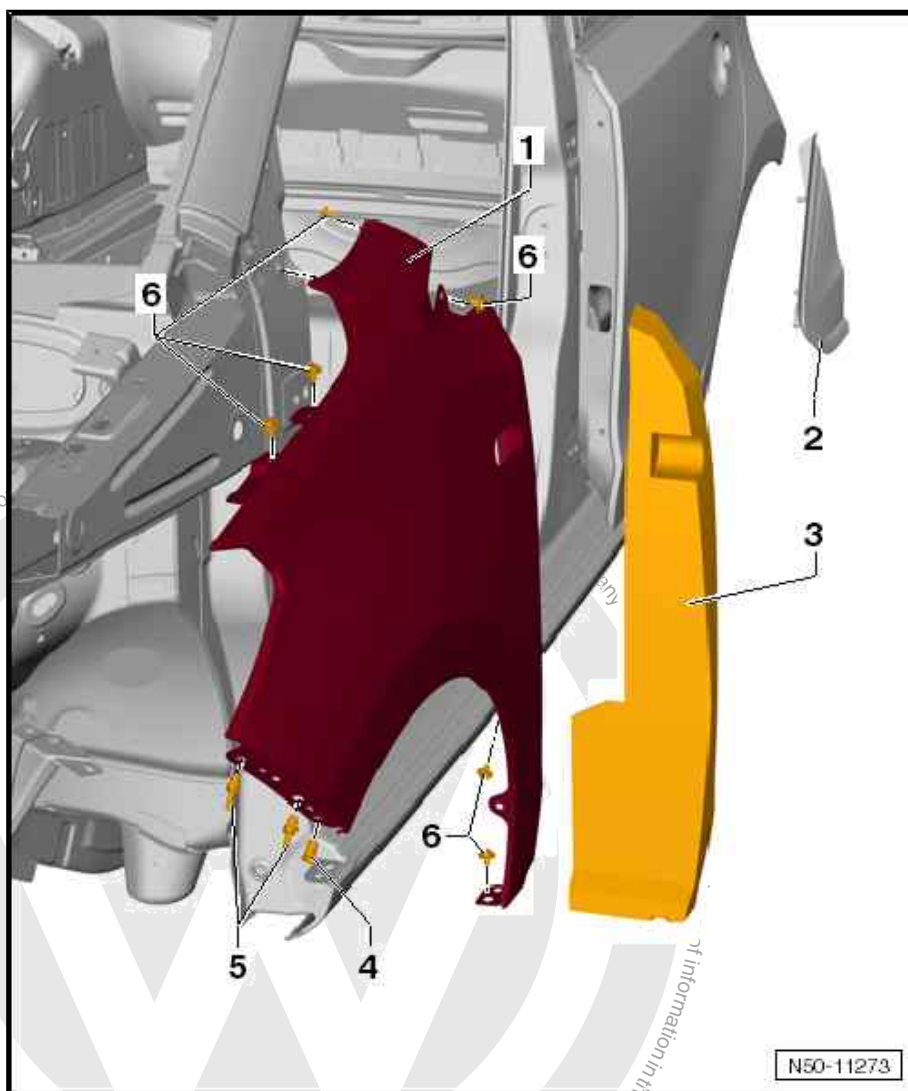
4 - Spreader rivet

5 - Bolt

- ❑ Qty. 2
- ❑ Specified torque: 6 Nm

6 - Bolt

- ❑ Qty. 2, A-pillar
- ❑ Qty. 1, wheel housing
- ❑ Qty. 1, side member
- ❑ Qty. 2, wing connection piece
- ❑ Specified torque: 6 Nm



2.2 Removing and installing wing

⇒ ["2.2.1 Removing and installing wing", page 8](#)

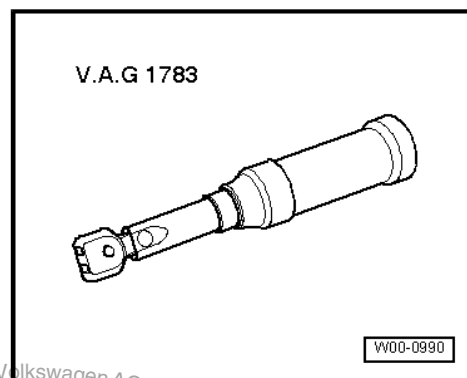
⇒ ["2.2.2 Removing and installing wing bracket", page 12](#)

2.2.1 Removing and installing wing

Special tools and workshop equipment required



- ◆ Torque wrench - V.A.G 1783-

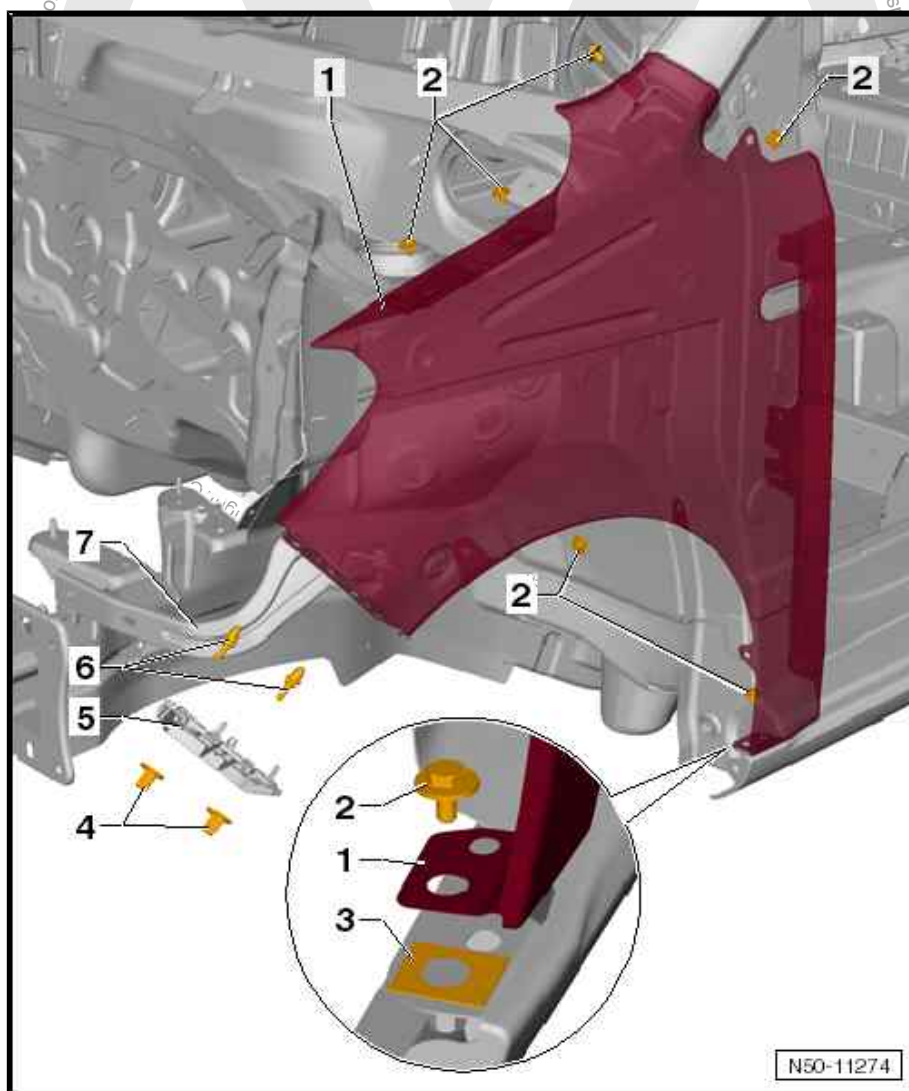


Removing



Note

Removal and installation are described only for the left wing. Removal and installation of the right wing are similar.



- Remove A-pillar trim ➔ [page 300](#) .



- Remove front wheel housing liner ⇒ [page 364](#) .
- Remove turn signal repeater ⇒ Electrical system; Rep. gr. 94 ; Turn signal repeater; Removing and installing turn signal repeater .
- Remove front bumper cover ⇒ [page 214](#) .
- Remove guide -5- at side for front bumper cover ⇒ [page 213](#) .
- Removing plenum chamber cover ⇒ [page 15](#) .
- Pull out insulation for rib section ⇒ [Item 3 \(page 8\)](#) .
- Remove bolts -2 and 6-



Note

Loosen bolt -2- on windscreen by 1 or 2 turns only, do not unscrew.

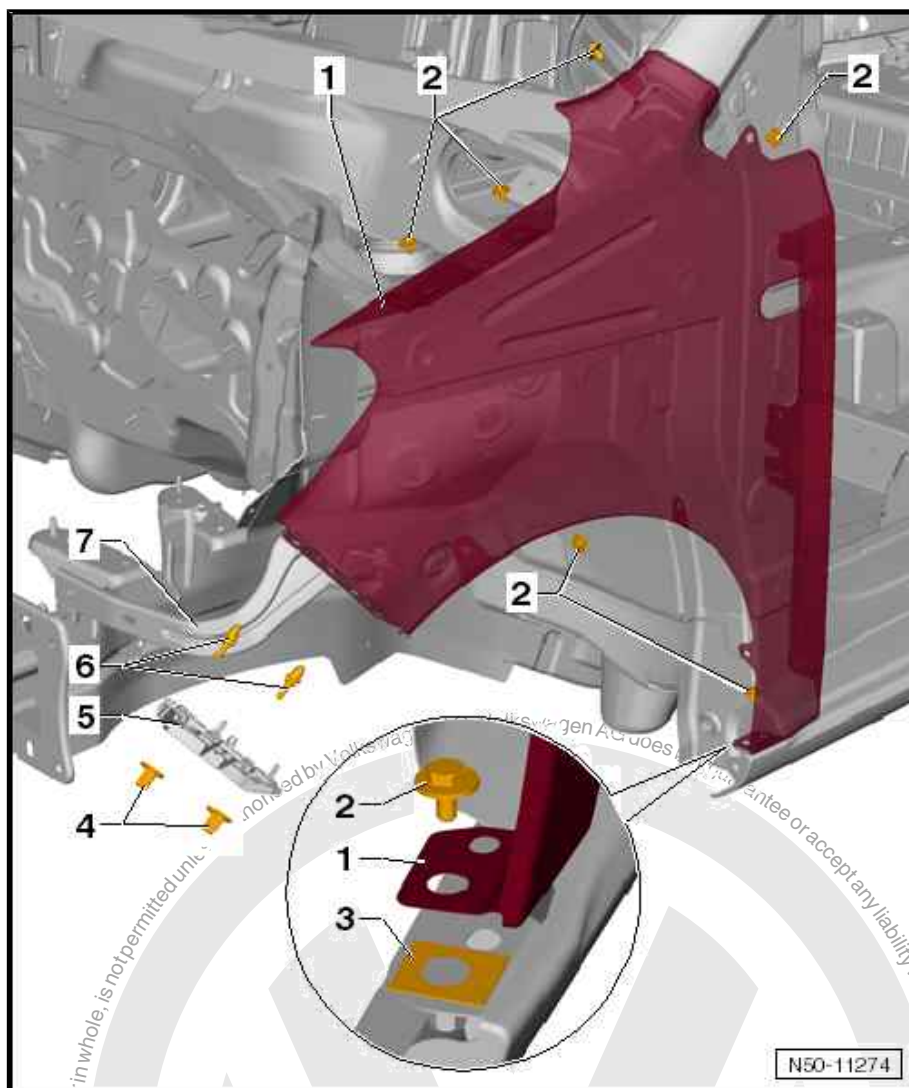
- Remove wing -1- carefully.

Installing



Note

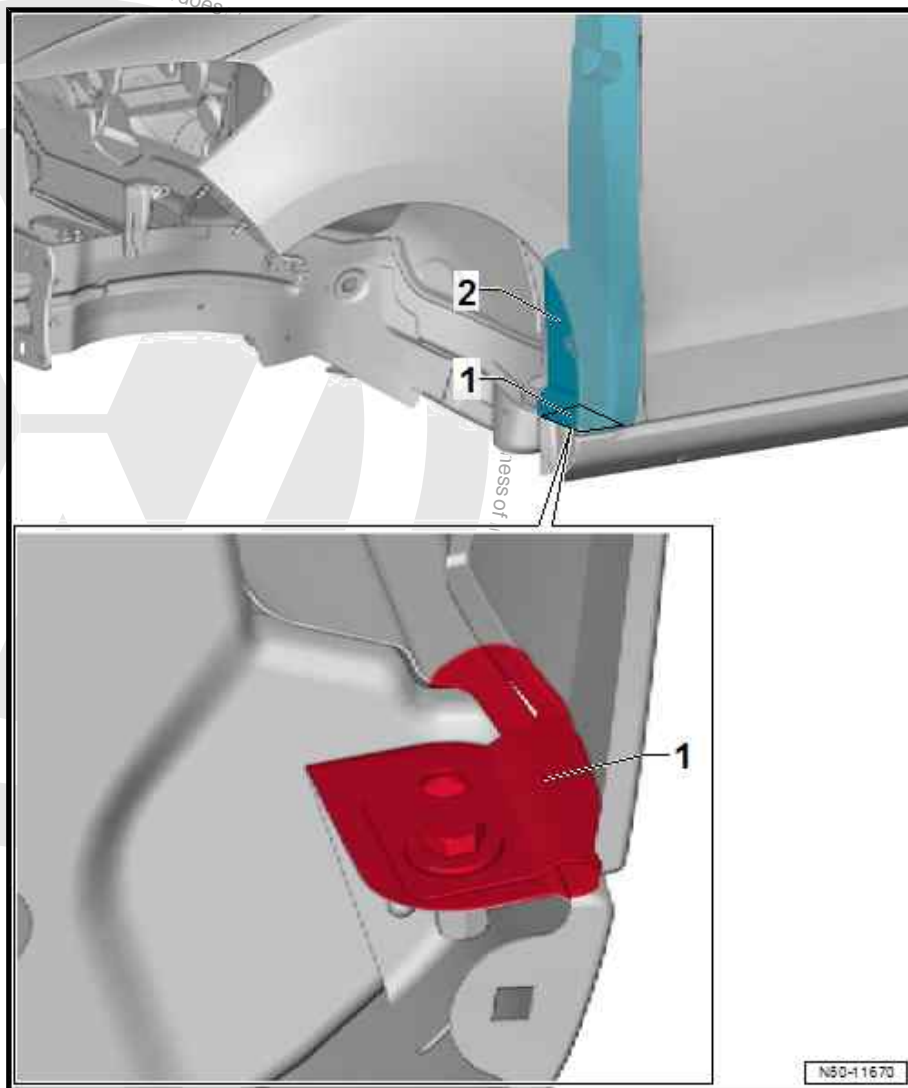
Install wing -1- without subjecting it to tensile stress.



Perform the following steps:

Installation of the wing -1- is carried out in reverse order of removal.

- Wing is aligned free of stress with wing bracket loosened ➤ [page 12](#) .
- Always insert zinc intermediate piece, AKL 381 035 50- between wing and side member.
- Specified torques for bolts -2 and 6- ➤ [page 8](#) .
- Ensure joints are parallel and shut lines are equal ➤ Body Repairs; Rep. gr. 00 ; Body gaps; Body, front .

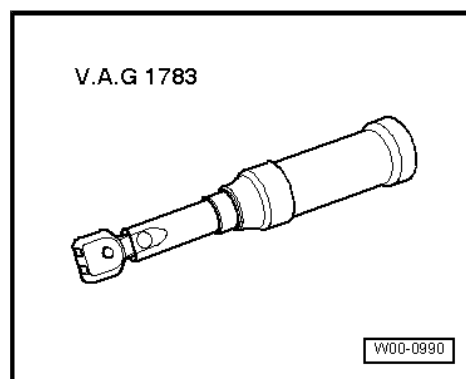


- Thoroughly wax area -1- of wing in which insulation -2- is installed.
- Once wax has dried, insulation -2- can be installed.
- Install wheel housing liner ➤ [page 364](#) .

2.2.2 Removing and installing wing bracket

Special tools and workshop equipment required

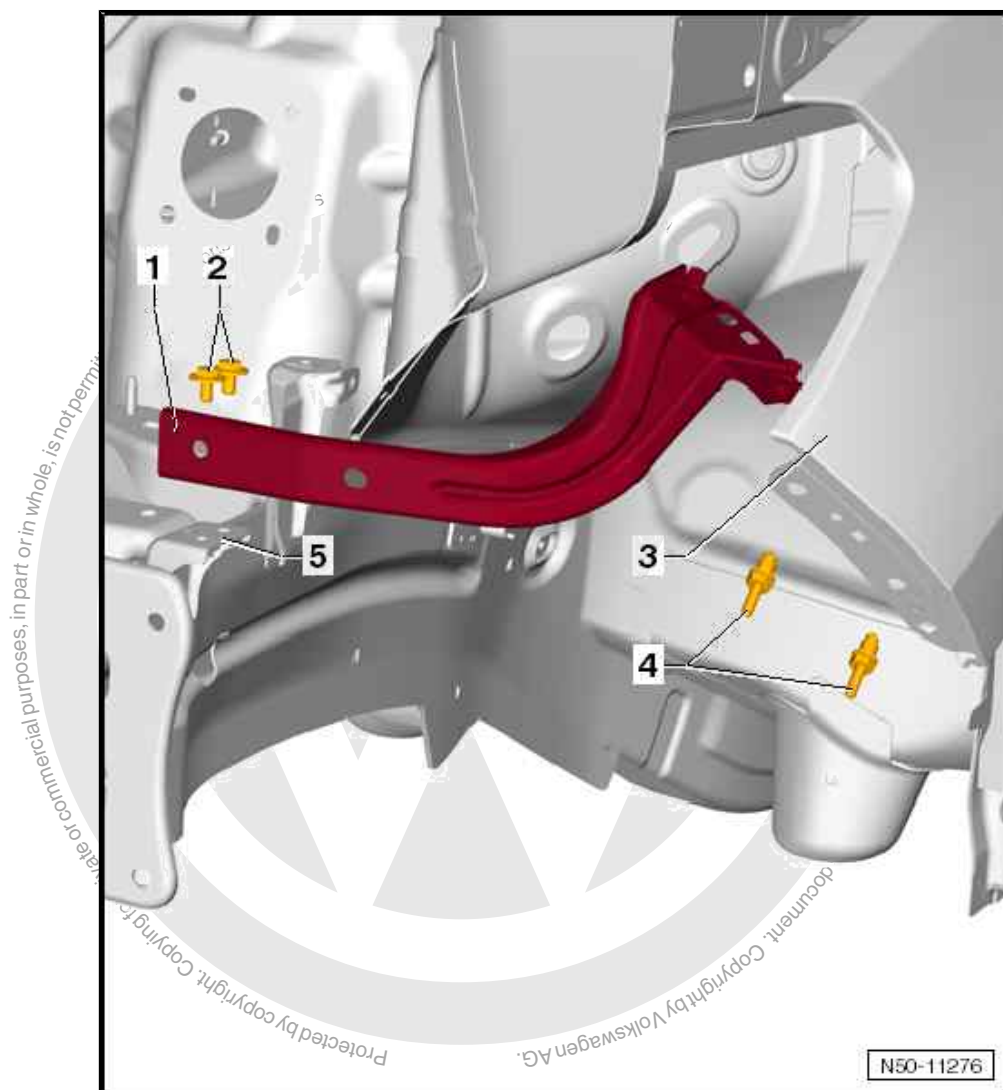
- ◆ Torque wrench - V.A.G 1783-





i Note

Removal and installation are described only for the left wing bracket. Removal and installation of the right wing bracket are similar.



Removing

- Remove front bumper cover ➔ [page 214](#) .
- Remove guide at side for front bumper cover ➔ [page 213](#) .
- Unscrew securing bolts -4- securing front part of wing to wing brace.
- Unscrew bolts -2- and remove wing bracket -1-.

Installing

- Wing bracket is fitted together with wing to bonnet and bumper
➔ Body Repairs; Rep. gr. 00 ; Body panel gaps/shut lines;
Body - front .

Specified torque for bolts -2-: 6 Nm



3 Bulkhead

⇒ ["3.1 Assembly overview - plenum chamber bulkhead", page 14](#)

⇒ ["3.2 Assembly overview - plenum chamber cover", page 15](#)

⇒ ["3.3 Removing and installing plenum chamber cover", page 15](#)

3.1 Assembly overview - plenum chamber bulkhead



Note

The bulkhead -1- is bolted and also bonded in place with butyl adhesive sealant -4-.

1 - Bulkhead

- ❑ Removing:
 - After unscrewing bolts -3-, cut through adhesive bead -4- using workshop equipment.

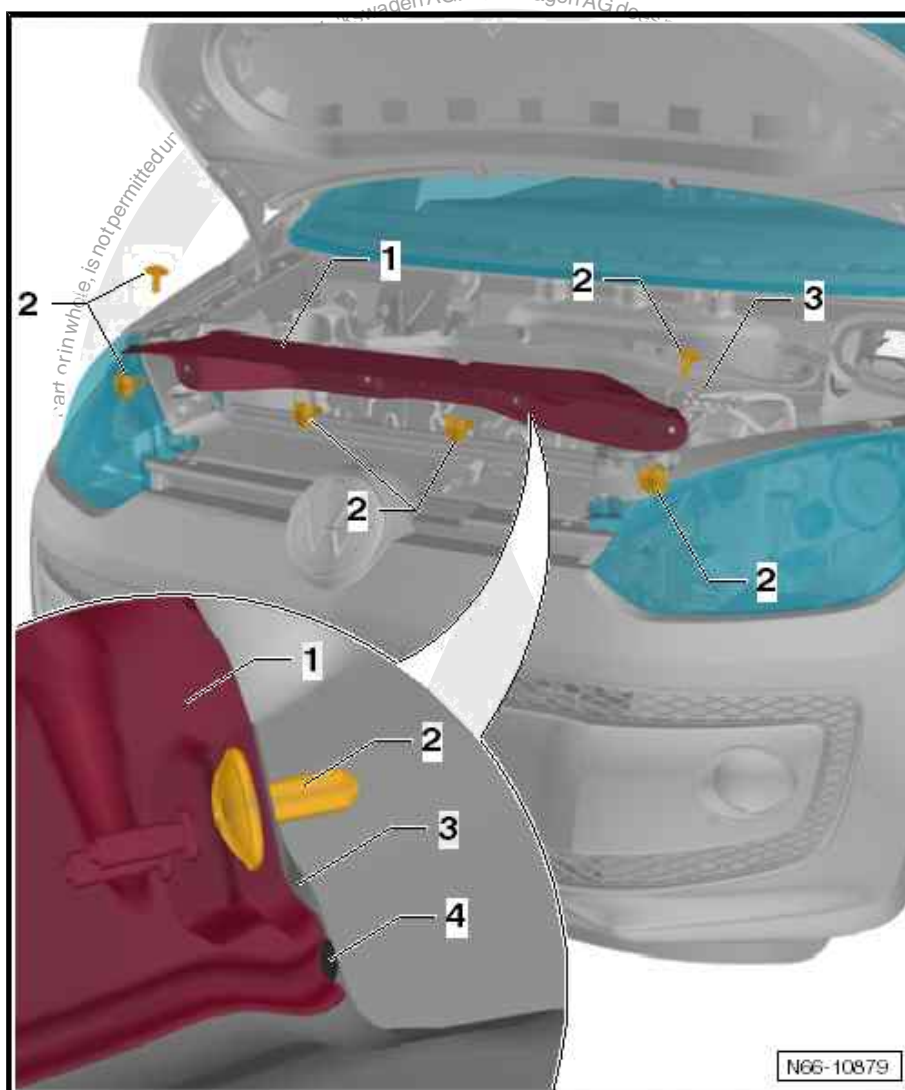
2 - Bolt

- ❑ Qty. 6
- ❑ Specified torque: 25 Nm

3 - Body flange

4 - Butyl adhesive sealant

- ❑ If necessary, mix based on D 450 273 A2.





3.2 Assembly overview - plenum chamber cover

1 - Plenum chamber cover

- ☐ Right side
- ☐ Removing and installing
⇒ [page 15](#)

2 - Plenum chamber cover

- ☐ Left side
- ☐ Removing and installing
⇒ [page 15](#)

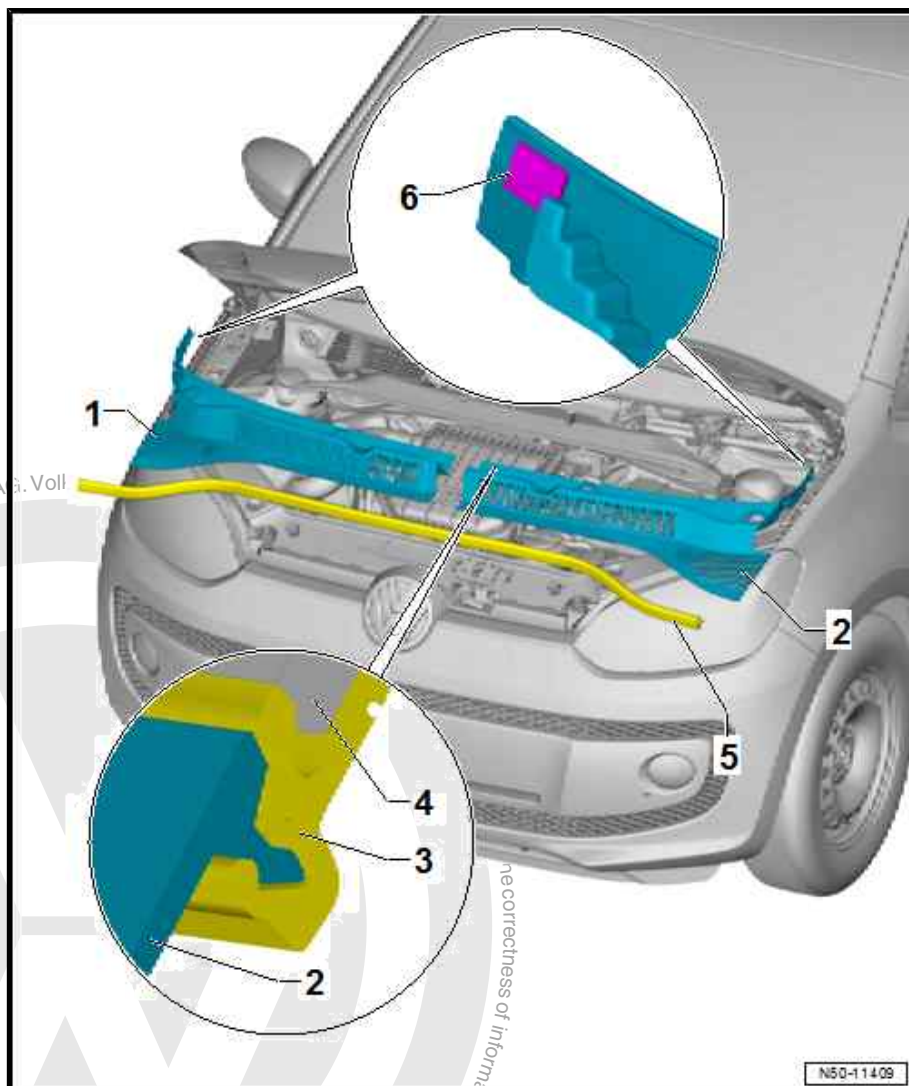
3 - Windscreen seal

- ☐ Part of windscreen

4 - Windscreen

5 - Seal

6 - Adhesive tape



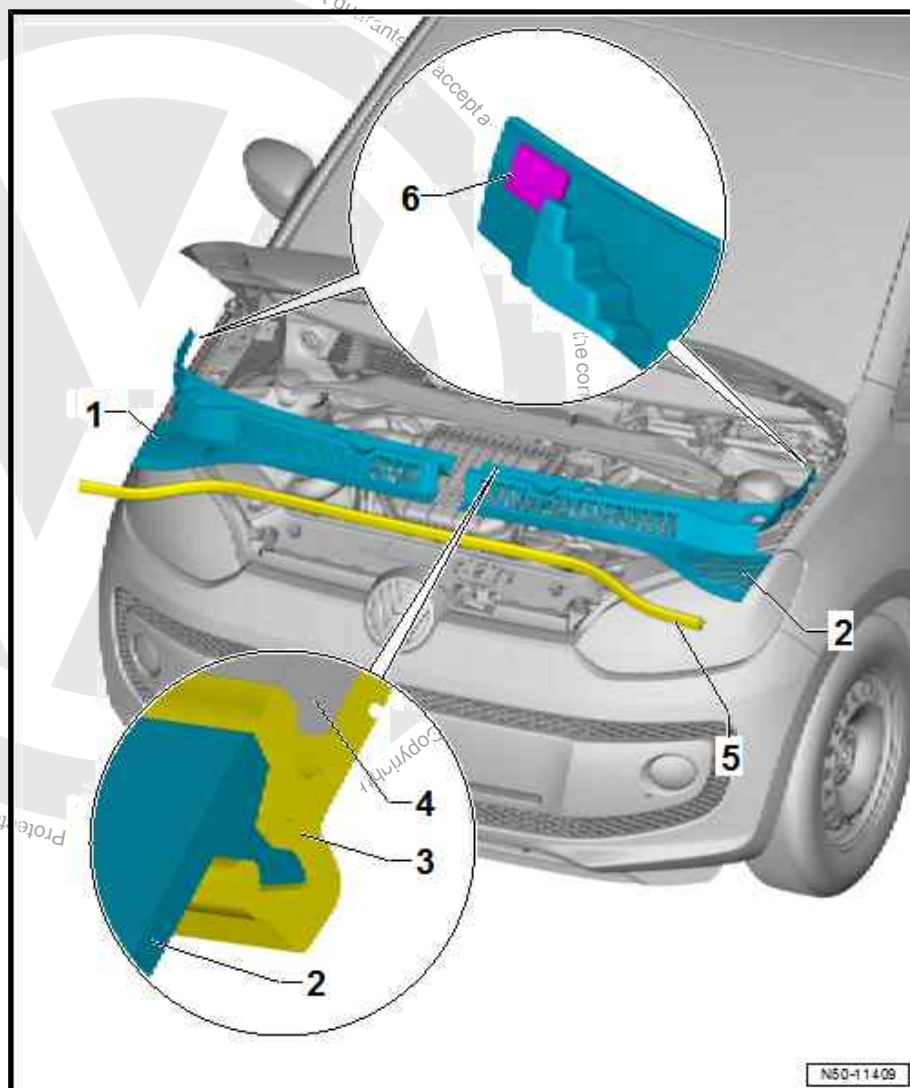
3.3 Removing and installing plenum chamber cover

Removing



Note

The procedures for removing and installing the plenum chamber covers may have to be modified slightly depending on model variants.



Perform the following steps:

- Remove wiper arms ⇒ Electrical system; Rep. gr. 92 ; Wind-screen wiper system; Removing and installing wiper arms .
- Pull entire length of seal -5- off plenum chamber covers -1 and 2-.



Caution

The windscreen -4- could be destroyed. The plenum chamber cover -1- must not be levered off with a tool (screwdriver, wedge). If you do, the windscreen -4- will be damaged and may subsequently crack.

- First pull plenum chamber cover -2-, starting from middle, upwards from windscreen seal -3-.
- Pull plenum chamber covers -2- forwards out of wing and remove.
- Then pull plenum chamber cover -1-, starting from middle, upwards from windscreen seal -3-.
- Heat areas around adhesive tape -6- using hot air blower - V.A.G 1416- and pull off plenum chamber covers -1 and 2-.



- Pull plenum chamber covers -1- forwards out of wing and remove.

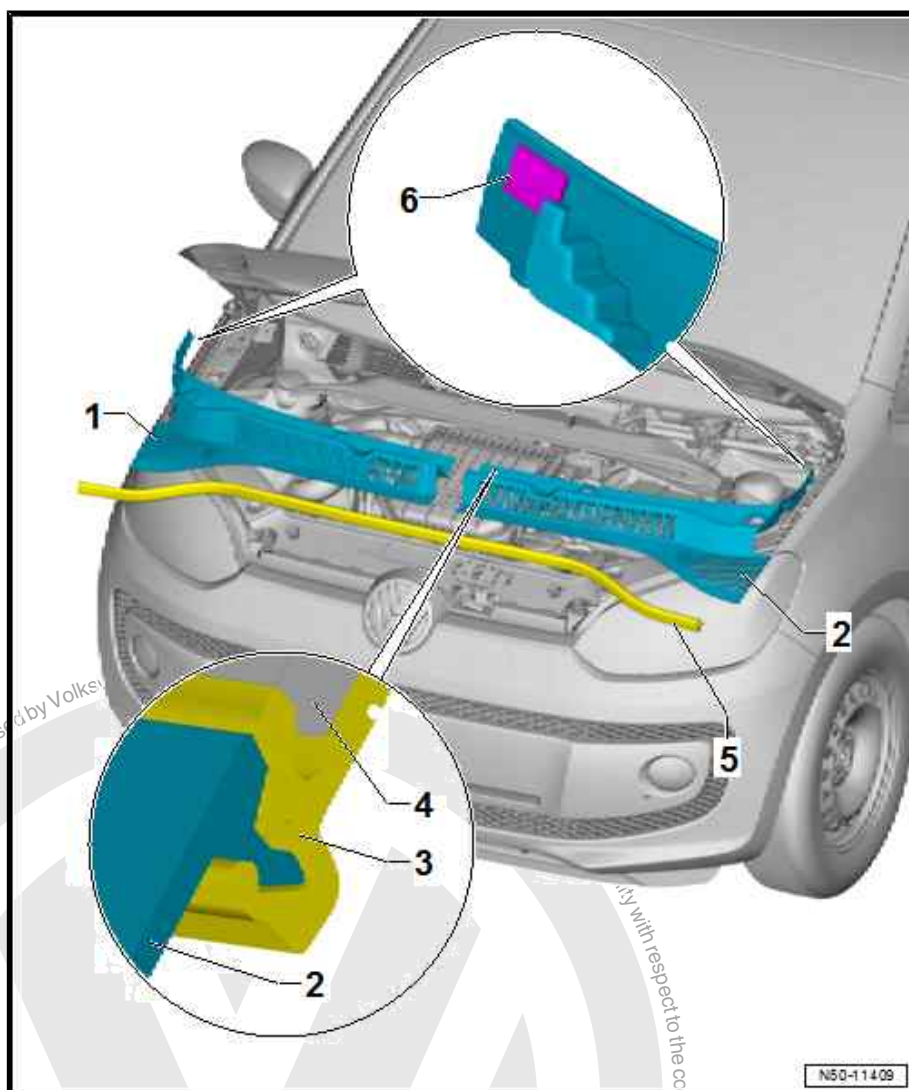
Installing



Caution

The windscreen -4- could be destroyed.

If the plenum chamber cover -1- is knocked into the windscreen seal -3-, the windscreen -4- may crack.



Note

- ◆ An insert is fitted in windscreen seal of new windscreens. Remove this insert before installing plenum chamber cover.
- ◆ Push the plenum chamber cover into the windscreen seal by hand using only slight force. Never force it in by hitting or using tools.



Perform the following steps:

- Spray windscreen seal -3- with a soapy solution so that plenum chamber covers -1 and 2- are easier to press in.
- First insert plenum chamber cover -1- into wing.
- Place plenum chamber covers -1- on windscreen seal -3-. Starting from the outside, press into beading -3- by applying light pressure.
- Then insert plenum chamber cover -2- into wing.
- Place plenum chamber covers -2- on windscreen seal -3-. Starting from the outside, press into beading -3- by applying light pressure.
- Press plenum chamber covers -1 and 2- onto wing in vicinity of adhesive tape -6-.
- Fit seal -5- to plenum chamber covers -1 and 2-.
- Install wiper arms ⇒ Electrical system; Rep. gr. 92 ; Windscreen wiper system; Removing and installing wiper arms .



55 – Bonnet, rear lid

1 Bonnet

⇒ [“1.1 Assembly overview - bonnet”, page 19](#)

⇒ [“1.2 Removing and installing bonnet”, page 22](#)

⇒ [“1.3 Adjusting bonnet”, page 26](#)

⇒ [“1.4 Removing and installing hinges”, page 31](#)

⇒ [“1.5 Removing and installing support rod”, page 33](#)

⇒ [“1.6 Removing and installing bonnet seals”, page 36](#)

⇒ [“1.7 Removing and installing bonnet lock”, page 37](#)

⇒ [“1.8 Removing and installing bonnet release lever”, page 39](#)

1.1 Assembly overview - bonnet

⇒ [“1.1.1 Assembly overview - bonnet”, page 19](#)

⇒ [“1.1.2 Assembly overview - bonnet lock and release components”, page 21](#)

⇒ [“1.1.3 Assembly overview - release lever and mounting bracket”, page 22](#)

1.1.1 Assembly overview - bonnet



1 - Bonnet

- ☐ Removing and installing
⇒ [page 22](#)
- ☐ Adjusting ⇒ [page 26](#)

2 - Striker

- ☐ Removing and installing
⇒ [page 25](#)
- ☐ Adjusting ⇒ [page 30](#)

3 - Adjusting buffer

- ☐ Qty. 2

4 - Hinge

- ☐ Removing and installing
⇒ [page 31](#)
- ☐ Adjusting ⇒ [page 26](#)

5 - Support rod

- ☐ Removing and installing
⇒ [page 33](#)

6 - Seal

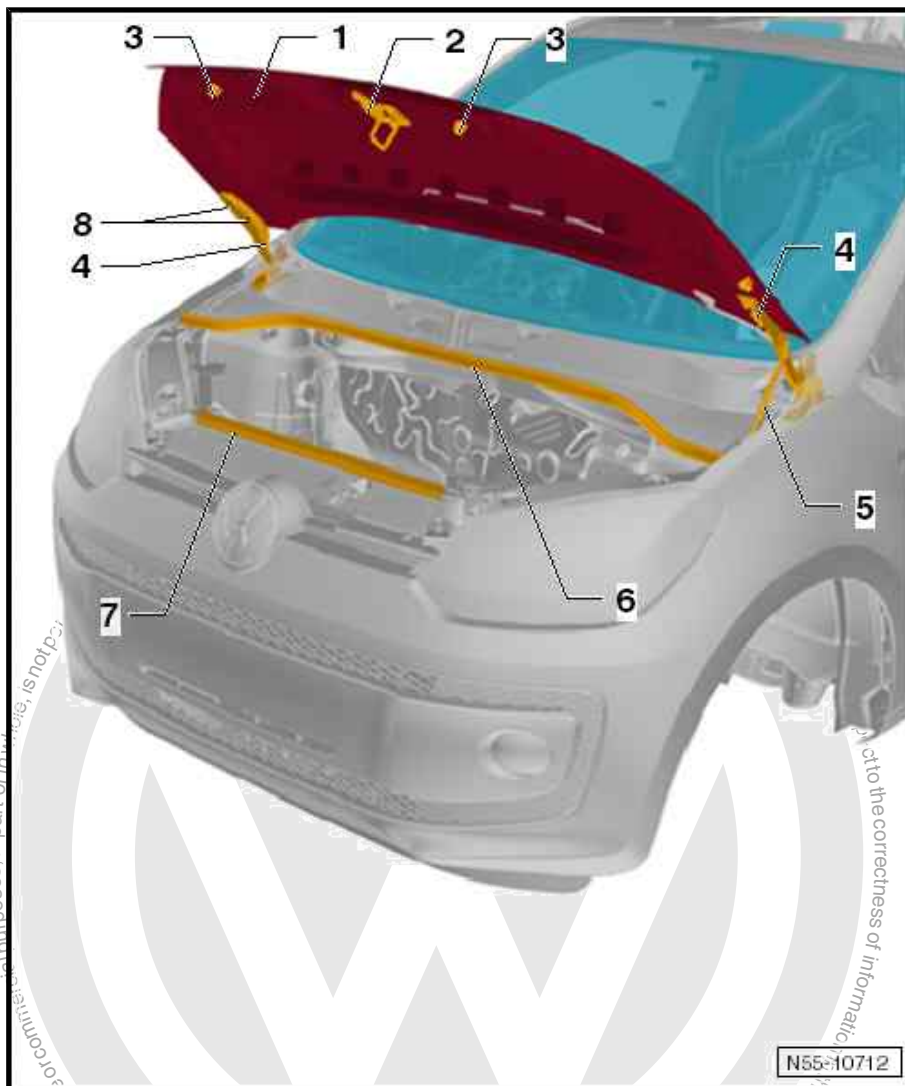
- ☐ On plenum chamber

7 - Seal

- ☐ Pushed onto lock carrier.

8 - Hexagon nut

- ☐ Qty. 2 on each side
- ☐ 20 Nm





1.1.2 Assembly overview - bonnet lock and release components

1 - Striker

- ☐ Removing and installing
⇒ [page 25](#)
- ☐ Adjusting ⇒ [page 30](#)

2 - Operating lever

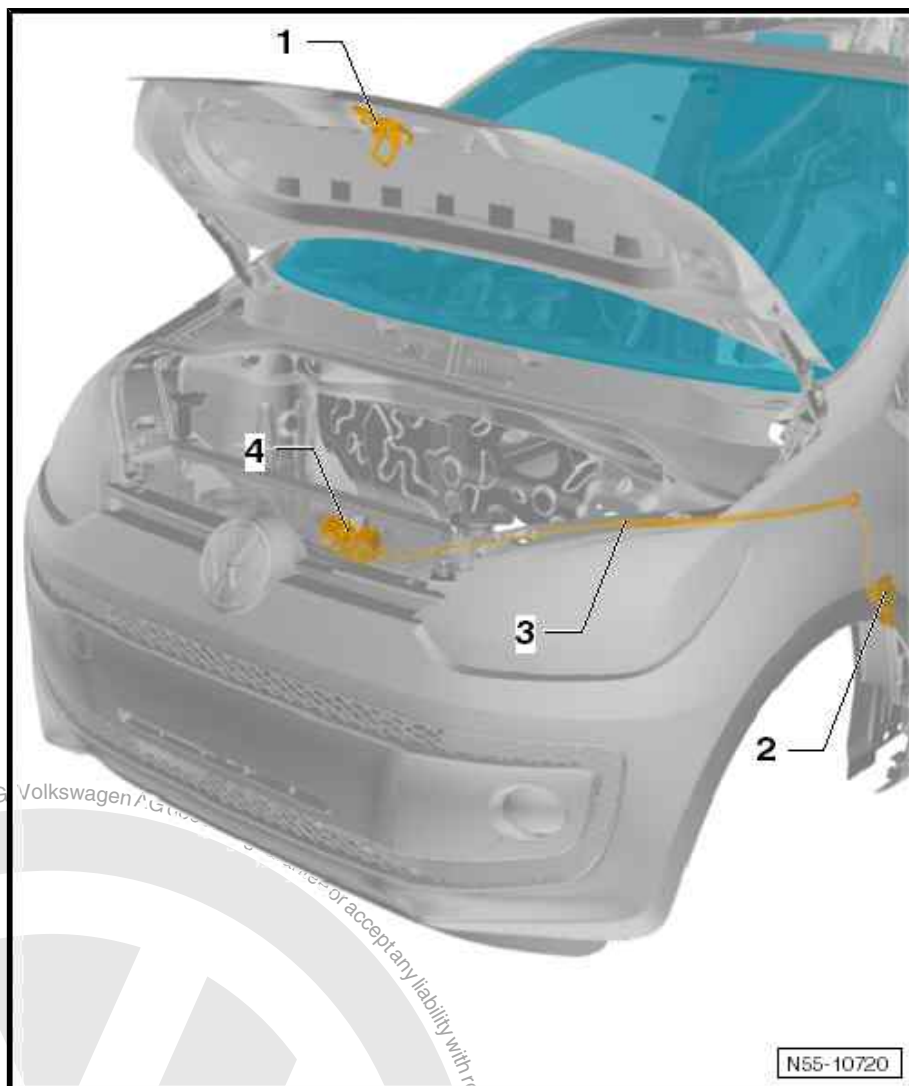
- ☐ Removing and installing
⇒ [page 39](#)

3 - Bowden cable

- ☐ From release lever -2- to
bonnet lock -4-.
- ☐ Removing and installing

4 - Bonnet lock

- ☐ Removing and installing
bonnet lock
⇒ [page 37](#)
- ☐ Adjusting ⇒ [page 28](#)





1.1.3 Assembly overview - release lever and mounting bracket

1 - Mounting bracket

2 - Expansion nut

- Qty. 2

3 - Bowden cable

- Installing:

- Insert ball of cable into holder on mounting bracket -arrow a-.
- Swivel cable upwards and engage in mounting bracket -b- -arrow b-.

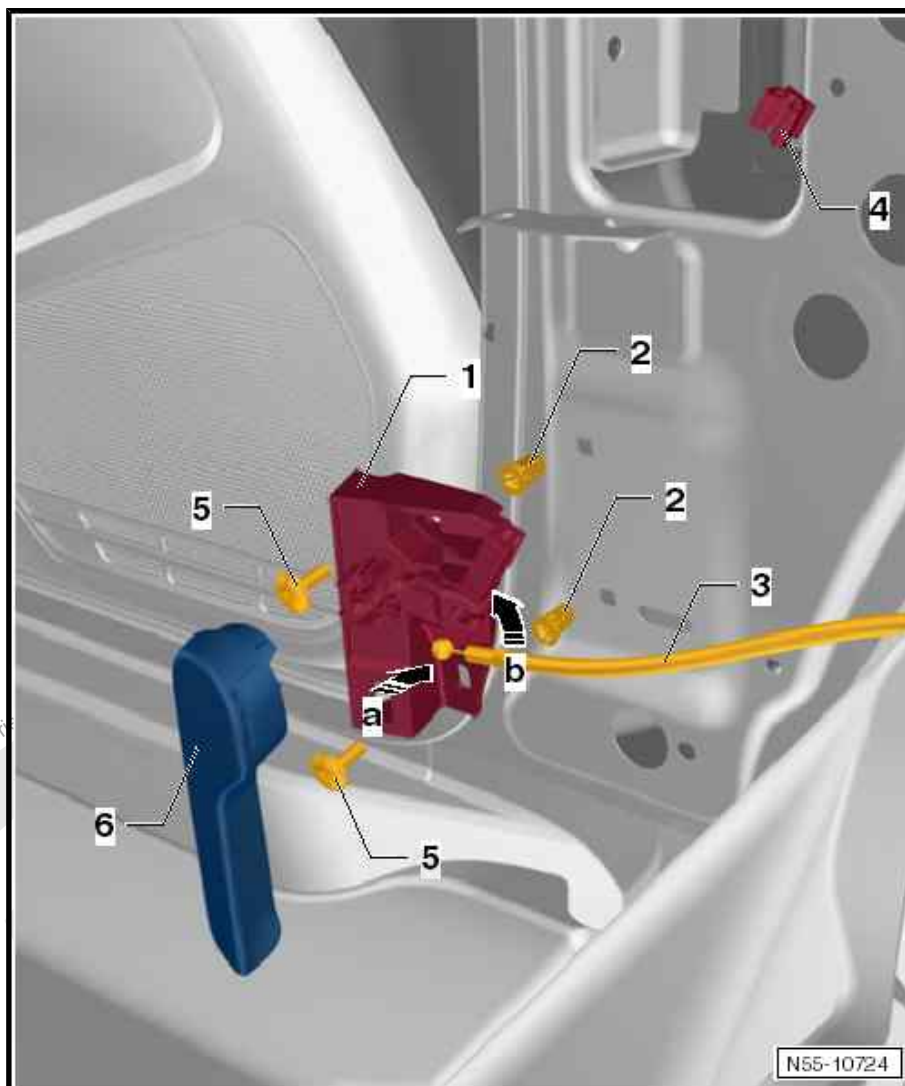
4 - Clip

5 - Bolt

- Qty. 2
- Specified torque:
1.5 Nm

6 - Operating lever

- Removing and installing
⇒ [page 39](#)



1.2 Removing and installing bonnet

⇒ ["1.2.1 Removing and installing bonnet", page 22](#)

⇒ ["1.2.2 Removing and installing striker pin", page 25](#)

1.2.1 Removing and installing bonnet

Special tools and workshop equipment required



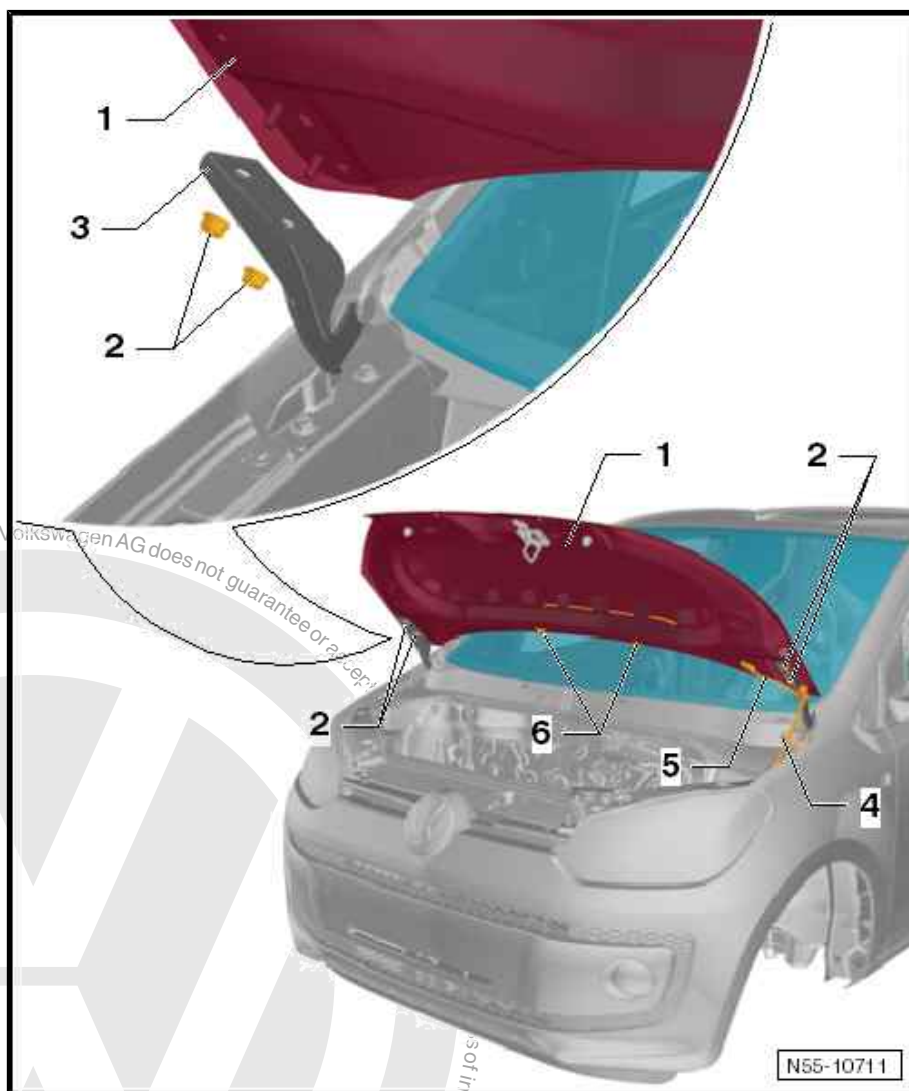
◆ Torque wrench - V.A.G 1331-

V.A.G 1331



W00-0427

Removing



Perform the following steps:

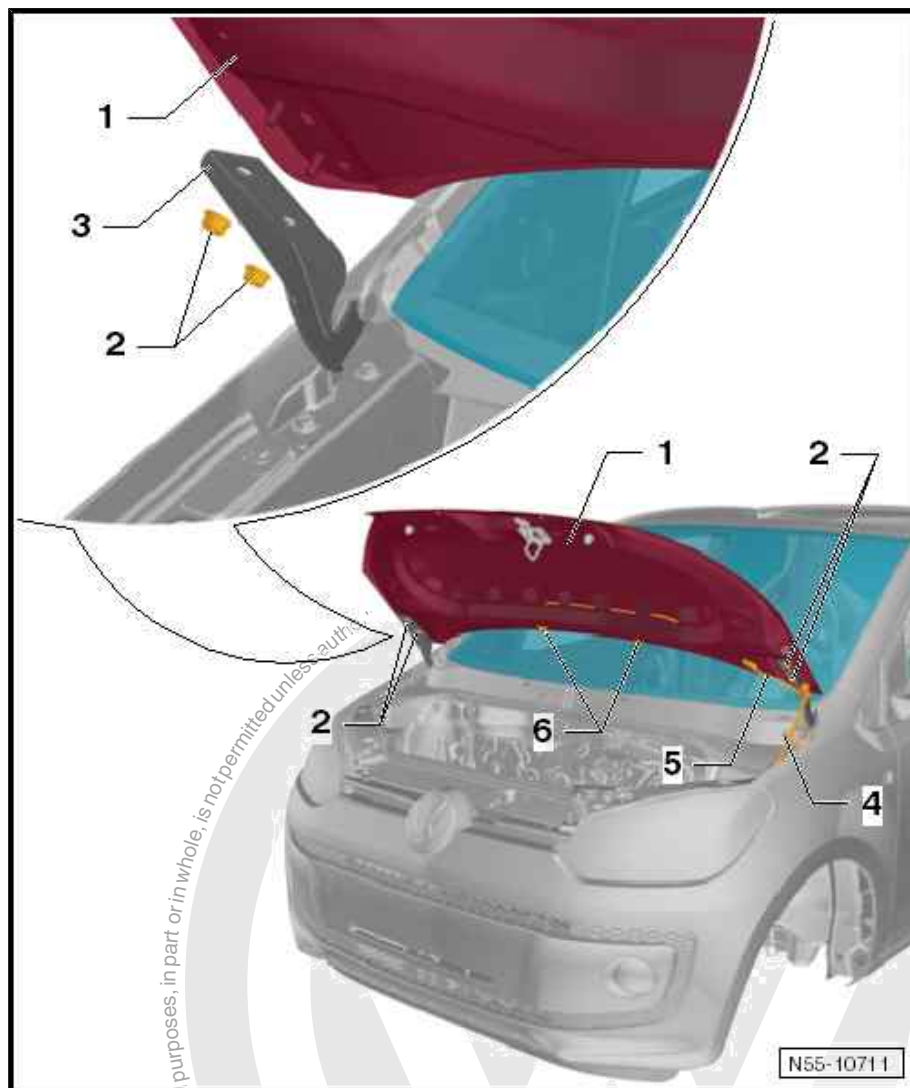
- Remove spray jets -6- ➔ Electrical system; Rep. gr. 92 ; Window washer system; Removing and installing spray jets .
- Pull line -5- out of opening in bonnet -1-.
- Loosen hexagon nuts -2- in left and right hinges -2- (do not remove).



Further dismantling requires the assistance of a second mechanic.

- Fold in support rod -4-.
- Now, and only now, unscrew and remove hexagon nuts -2- and lift bonnet -1- out of hinges -3-.

Installing



Perform the following steps:

Installation of bonnet -1- is carried out accordingly in reverse order of removal.



Note

Install the line -5- in a curve. If line is installed twisted it will kink.

- Adjusting bonnet -1- ➤ [page 26](#) .

Specified torque

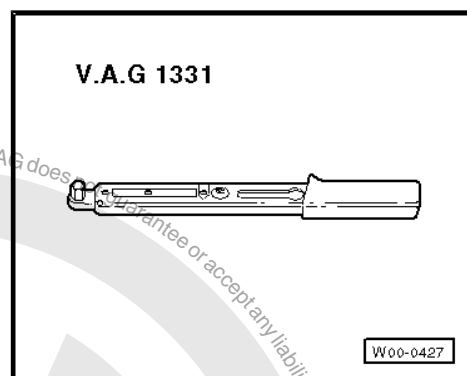
Specified torque for hexagon nuts -2-
➤ [“1.1.1 Assembly overview - bonnet”, page 19](#) .



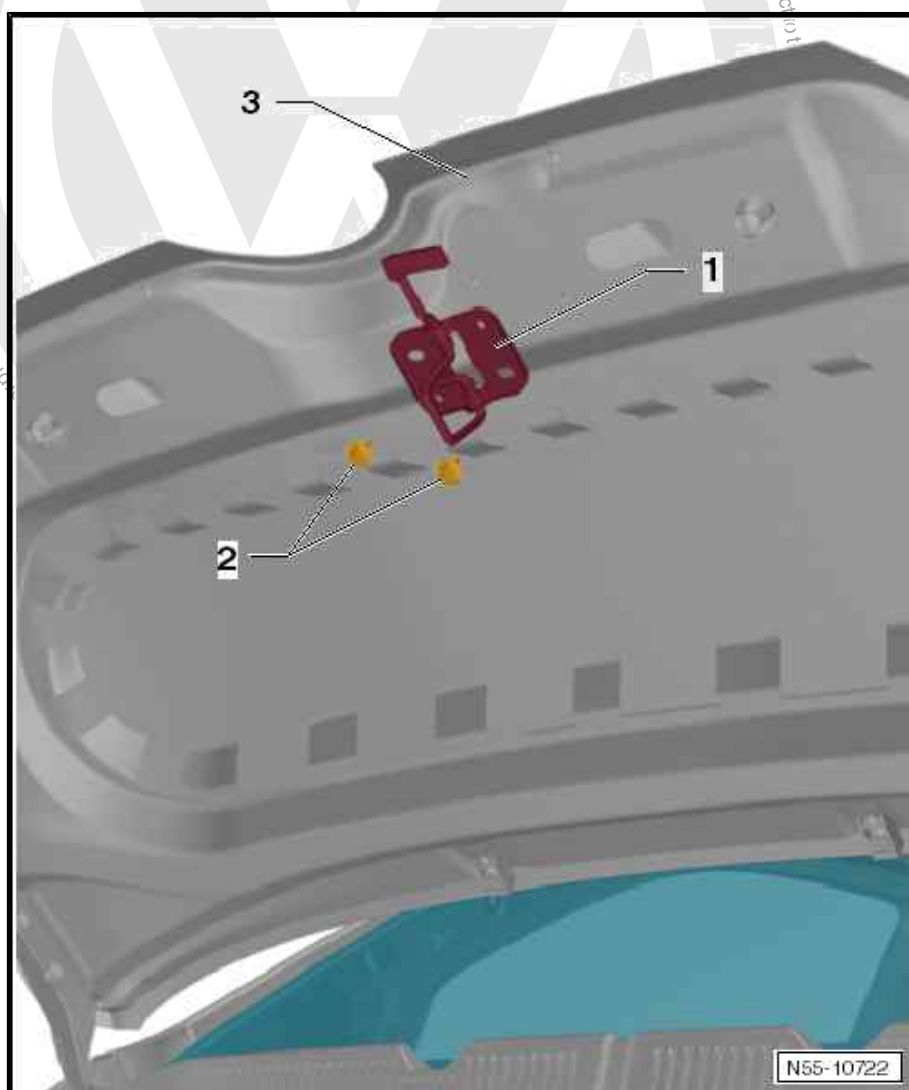
1.2.2 Removing and installing striker pin

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-



Removing



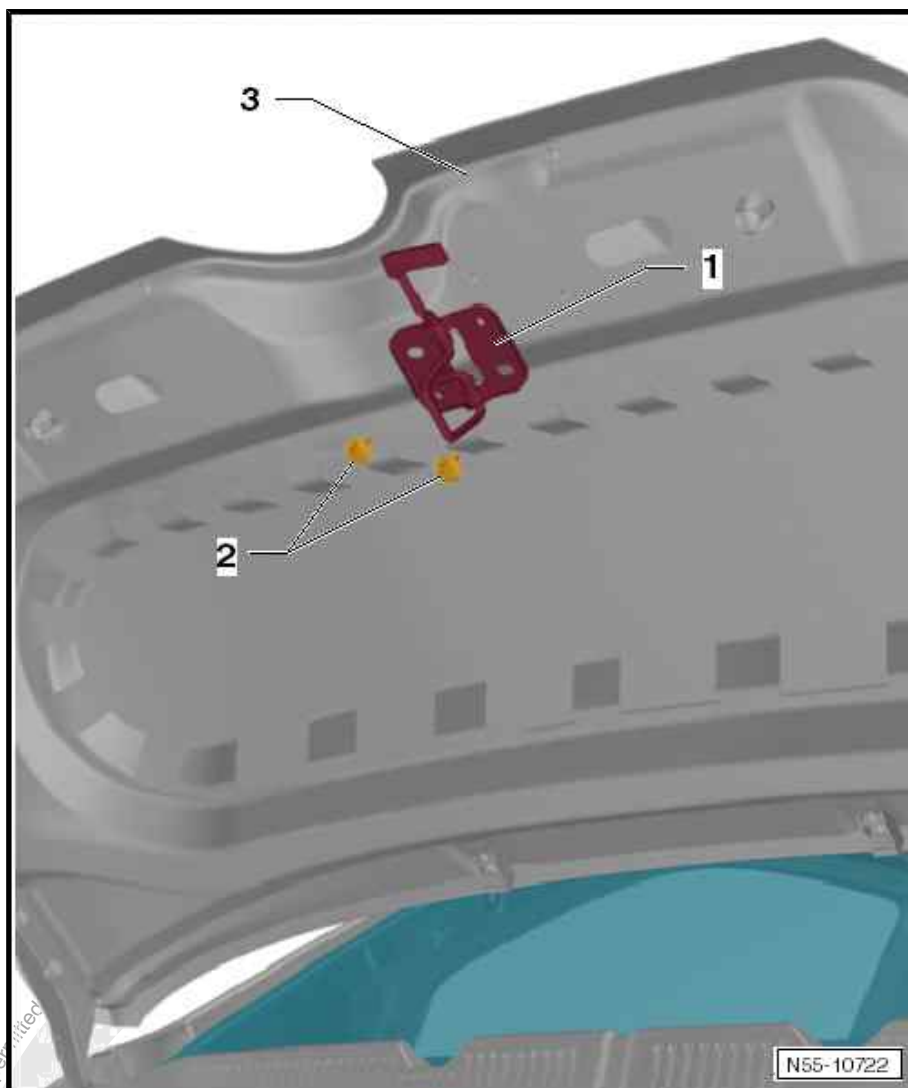
Perform the following steps:

- Open bonnet -3-.
- Unscrew bolts -2-.



- Remove striker pin -1- from bonnet -3-.

Installing



Perform the following steps:

Installation of the striker pin -1- is carried out in the reverse order of removal.

Specified torque for bolts -2-: 12 Nm

- Adjust striker pin ⇒ [page 25](#) .

1.3 Adjusting bonnet

⇒ [“1.3.1 Adjusting bonnet”, page 26](#)

⇒ [“1.3.2 Adjusting lid lock”, page 28](#)

⇒ [“1.3.3 Adjusting striker pin”, page 30](#)

1.3.1 Adjusting bonnet

Special tools and workshop equipment required



◆ Torque wrench - V.A.G 1331-

V.A.G 1331

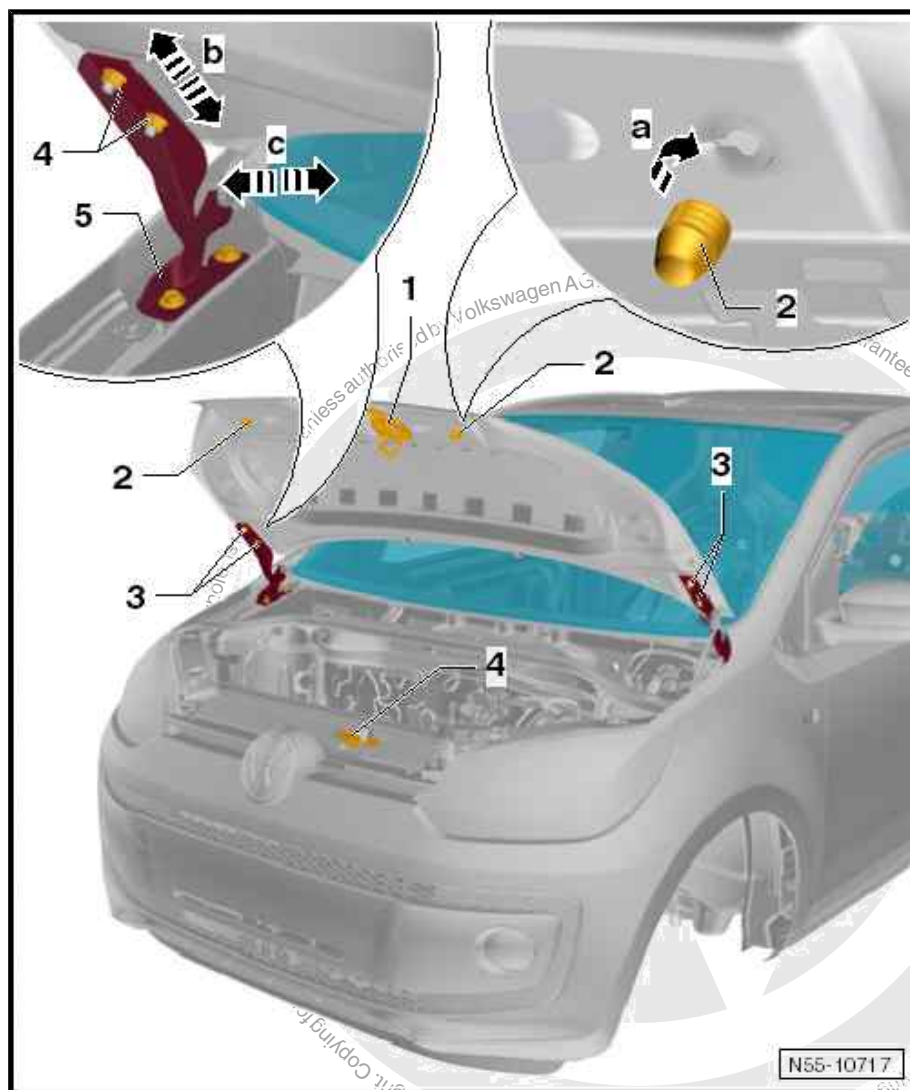


W00-0427



Note

- ◆ *Vehicle must be standing on its wheels to enable bonnet to be adjusted.*
- ◆ *The adjusting buffers -2- on the left and right sides cannot be used to adjust the rear lid. They have the function of stabilising and damping the bonnet.*
- ◆ *The bonnet is correctly adjusted when all shut lines are even when closed. The bonnet must not protrude too far inwards or outwards. The contours must also be flush with each other.*
- ◆ *The bonnet must engage into the lid lock without excessive force.*
- ◆ *Only loosen bolts -4-; do not remove them completely.*



Perform the following steps:

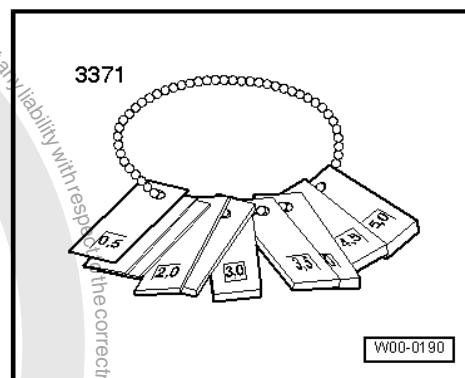
- Remove striker pin -1- ➤ [page 25](#) .
- Bonnet can be centred between wings by loosening (not removing) bolts -3- on left and right bonnet hinges -5-.
- Ensure that gaps are uniform ➤ Body Repairs; Rep. gr. 00 ; Technical data; Body panel gaps/shut lines; Body - front .
- After adjusting, carry out corrosion protection measures on bonnet hinges -5- and bolts -3-.
- Turn adjusting buffer -2- to adjust -arrow a-.
- After bonnet has been adjusted, striker pin -1- can be reinstalled and adjusted ➤ [page 30](#) .
- Front part of bonnet can be adjusted in height to wings by means of lid lock -4- ➤ [page 28](#) .

1.3.2 Adjusting lid lock

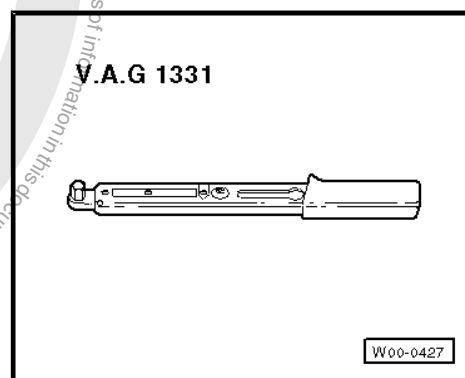
Special tools and workshop equipment required



◆ Setting gauge - 3371-

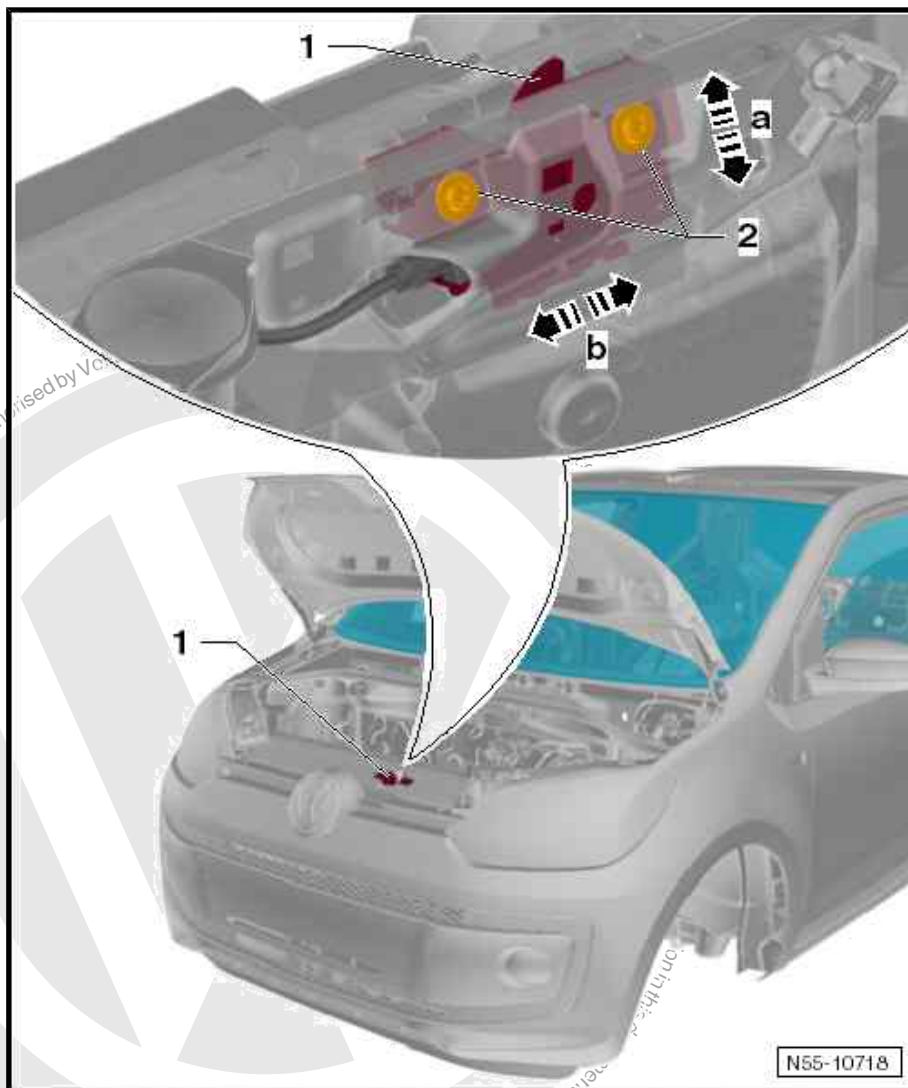


◆ Torque wrench - V.A.G 1331-



Note

New bolts are to be used when adjusting the bonnet lock.



Perform the following steps:

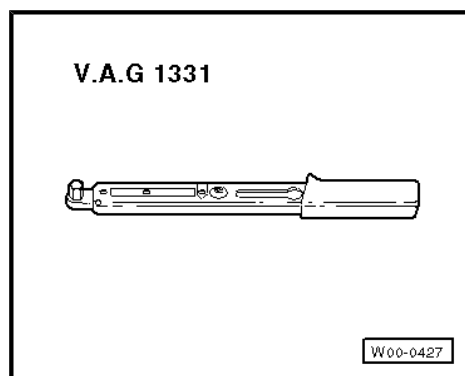
- Loosen bolts -2- to adjust bonnet lock -1- relative to bonnet laterally -arrow b- and vertically -arrows a- ➔ Body Repairs; Rep. gr. 00 ; Body panel gaps/shut lines; Body - front .

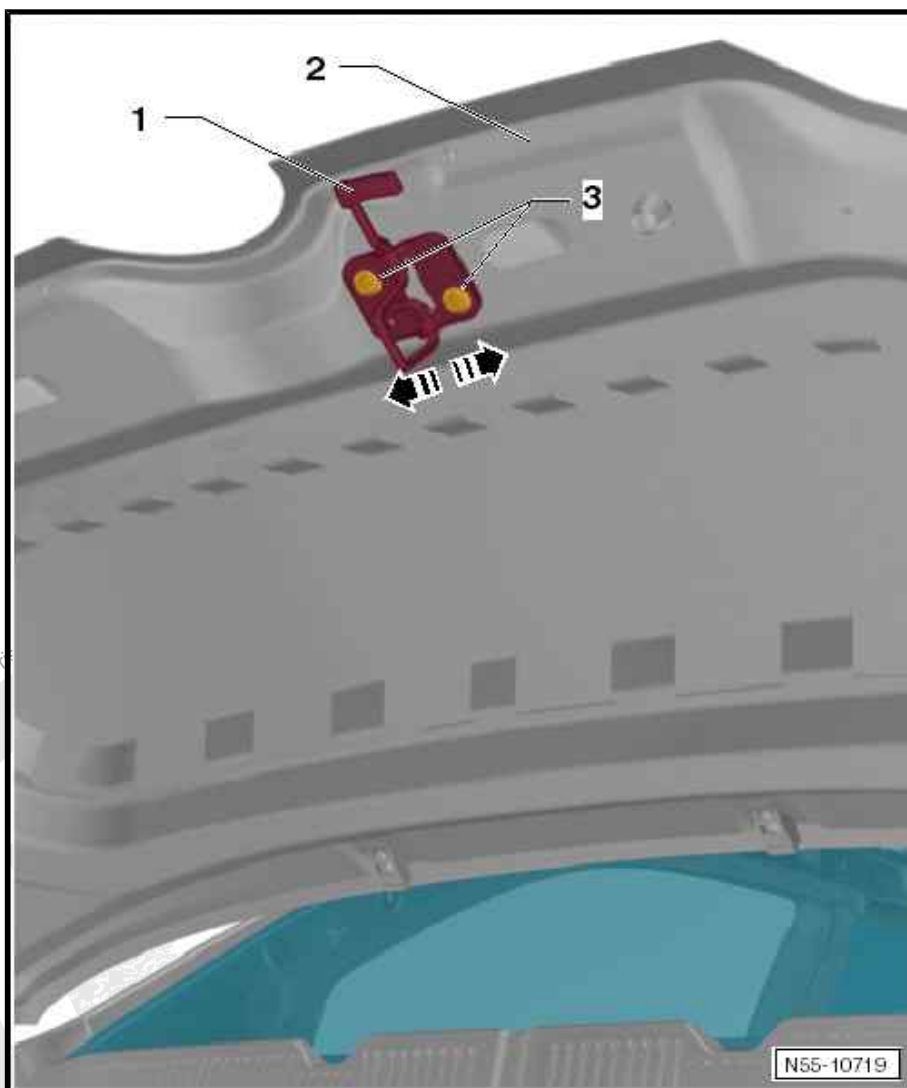
Specified torque for bolts -2-: 12 Nm

1.3.3 Adjusting striker pin

Special tools and workshop equipment required

- ♦ Torque wrench - V.A.G 1331-





Perform the following steps:

- Loosen bolts -3-.
- Striker pin -1- can now be adjusted on bonnet -2- in oversized holes.

Specified torque for bolts -3-: 12 Nm

1.4 Removing and installing hinges

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-

V.A.G 1331



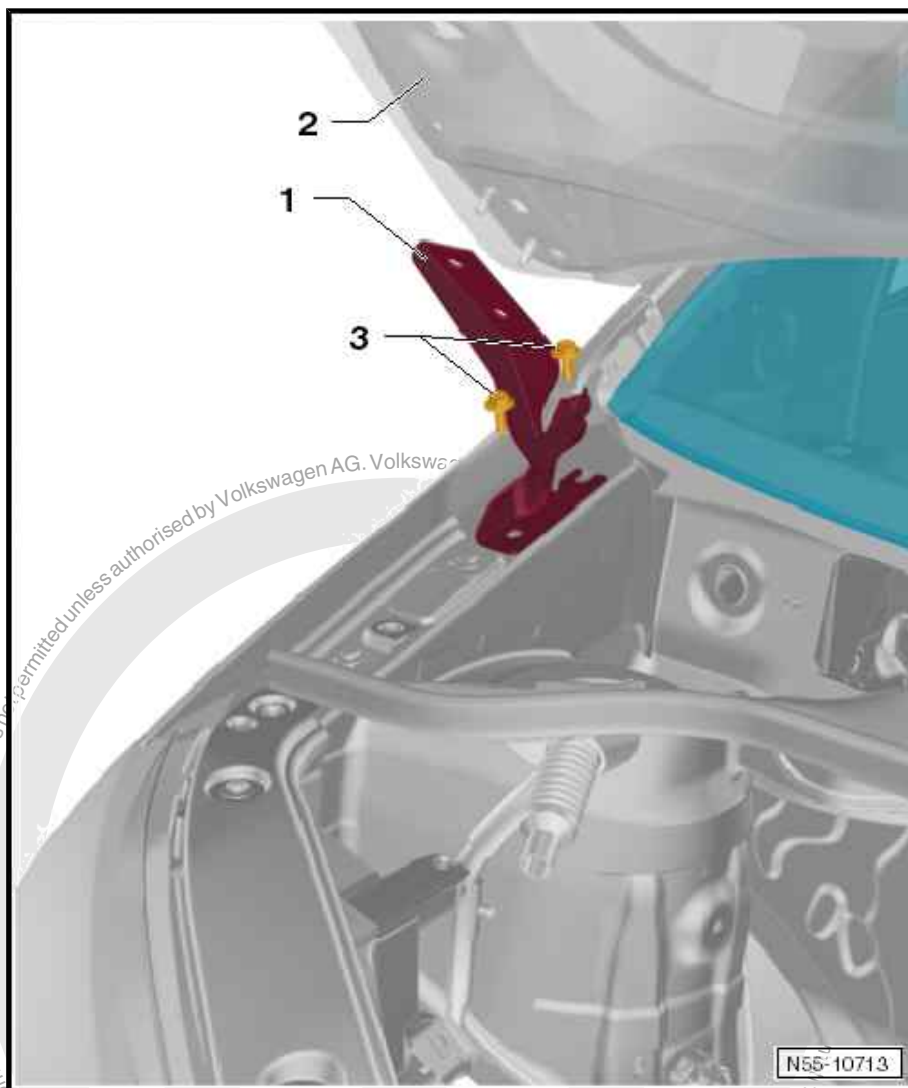
W00-0427



Note

*Removal and installation are described for the right hinge only.
Removal and installation of the left hinge are similar.*

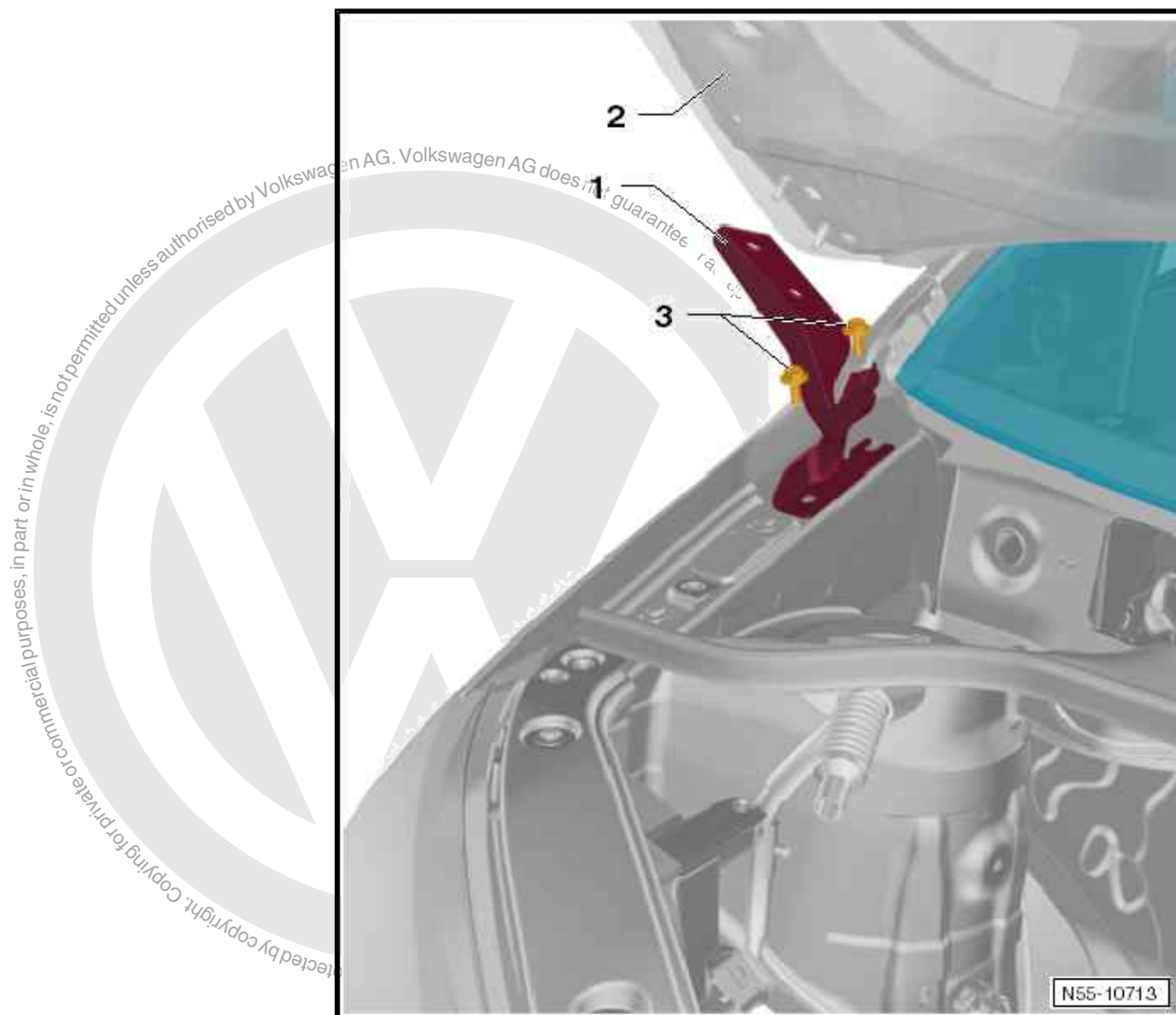
Removing



Perform the following steps:

- Remove bonnet -2- ➤ [page 22](#) .
- Removing plenum chamber cover ➤ [page 15](#) .
- Unscrew bolts -3-.
- Pull off hinge -1-.

Installing



Perform the following steps:

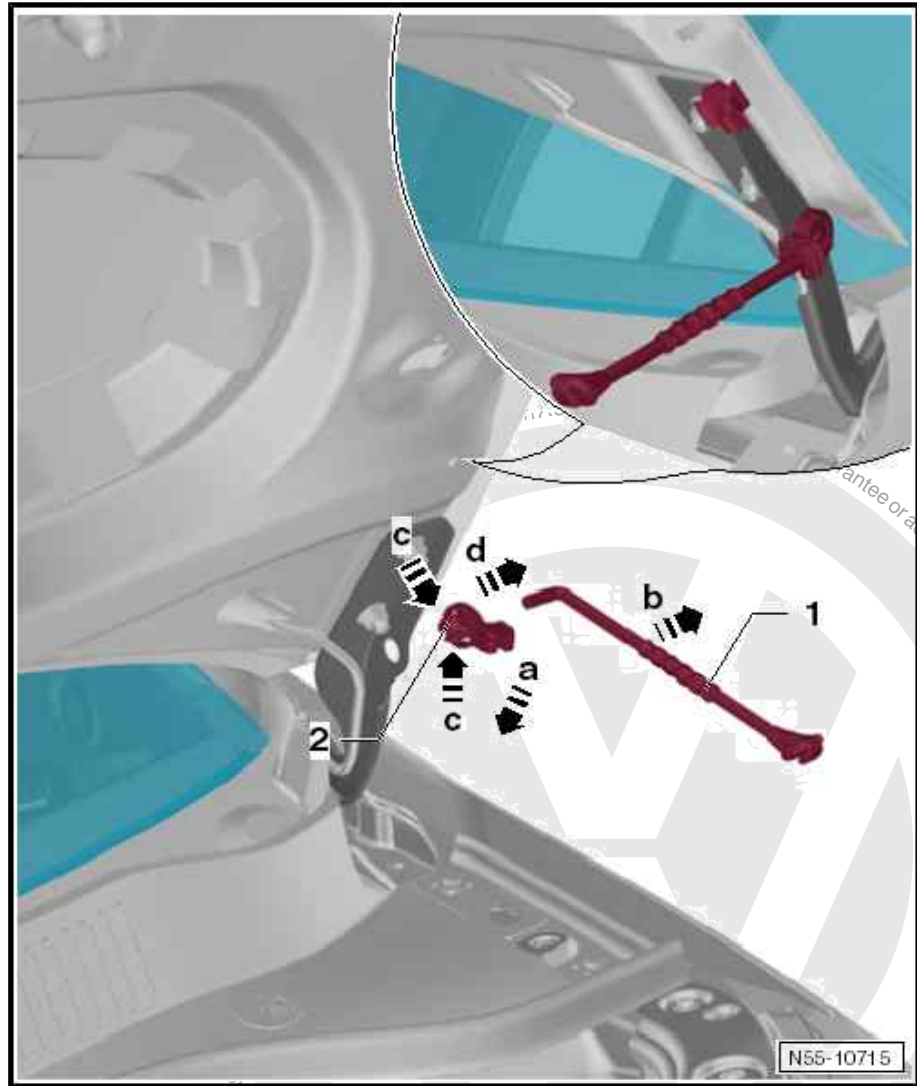
Installation of the hinge -1- is carried out in the reverse order of removal.

Specified torque for bolts -3-: 20 Nm

- Install bonnet -2- ➔ [page 22](#) .

1.5 Removing and installing support rod

Removing



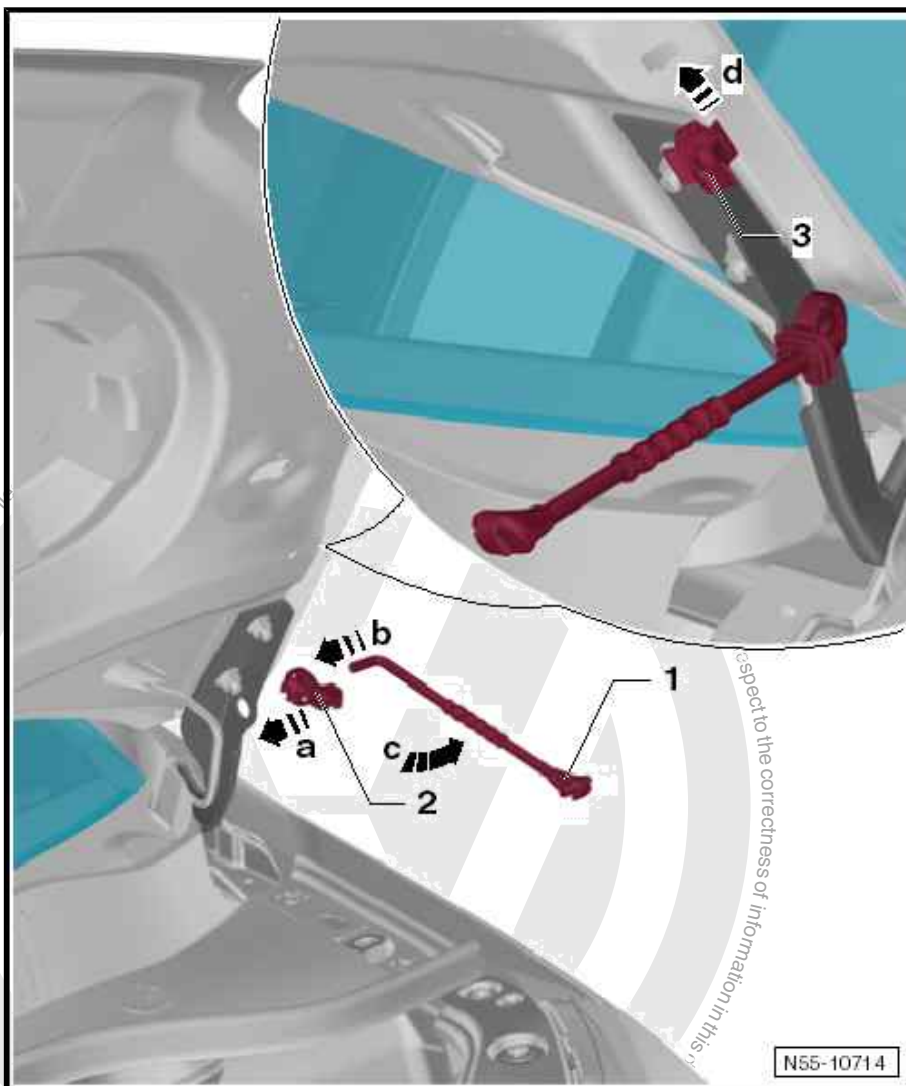
Perform the following steps:

- Brace the bonnet open.
- Swing out support rod -1- from its mounting in clip -2- -arrow a-.
- Pull support rod -1- out of clip -2- -arrow b-.

The clip can also be removed.

- Press together locking hook -arrows c- and pull clip out of bonnet -arrow d-.

Installing

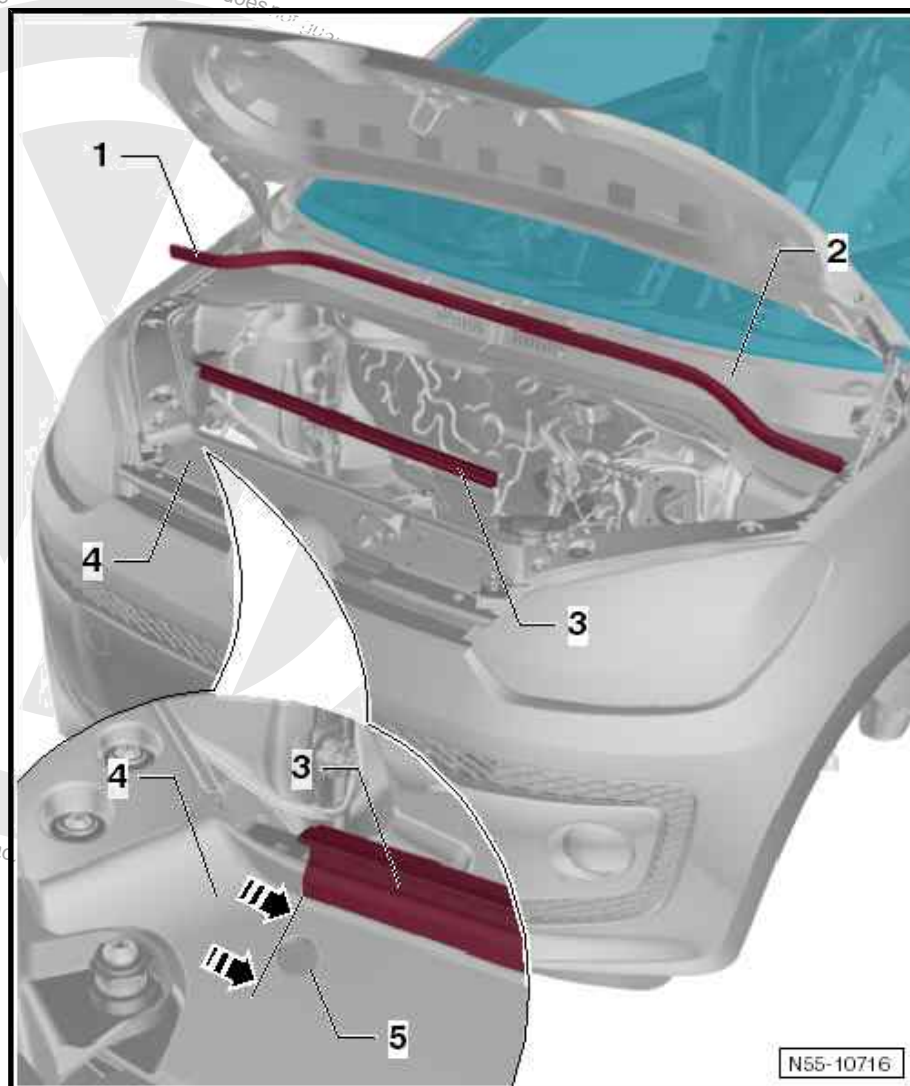


Perform the following steps:

- Check clip -2- for damage, renew if necessary.
- Insert clip -2- into hinge -arrow a-.
- Insert support rod into clip -arrow b- and swing support rod into its mounting in clip -arrow c-.
- Check mounting bracket -3- for damage, renew if necessary.
- Insert mounting bracket -3- into respective hole in bonnet and move it in -direction of arrow d-.



1.6 Removing and installing bonnet seals



Seal -1- is attached to plenum chamber cover -2-.

- Removing: Pull seal off plenum chamber cover.
- Installing: Slide seal onto plenum chamber cover.

Seal -3- is attached to lock carrier -4-.

- Removing: Pull seal off lock carrier.
- Installing: Slide seal onto lock carrier.



Note

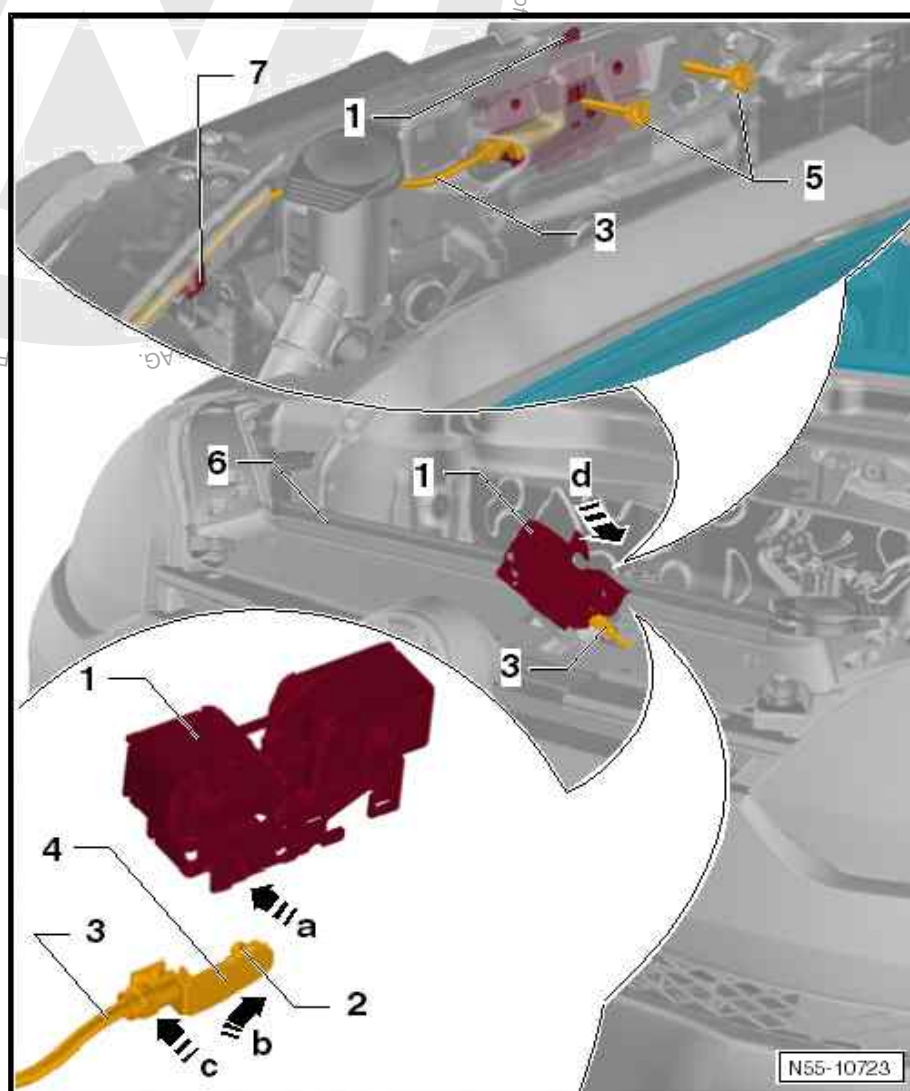
Seal -3- must be aligned with hole -5- in lock carrier -arrows-.



Perform the following steps:

- Detach coolant expansion tank from lock carrier. To do this, refer to ➤ Rep. gr. 19 ; Cooling system/coolant; Connection diagram - coolant hoses .
- Detach cable retainer from lock carrier.
- If fitted, disconnect connector for anti-theft alarm system from right headlight.
- Unscrew bolts -5- from lock carrier and remove bonnet lock -1- upwards -arrow c-.
- Unclip retainer -3- from lid lock.
- Slightly remove retainer -3- from bonnet lock -1- -arrow b- and unhook cable -arrow a-.

Installing



Perform the following steps:

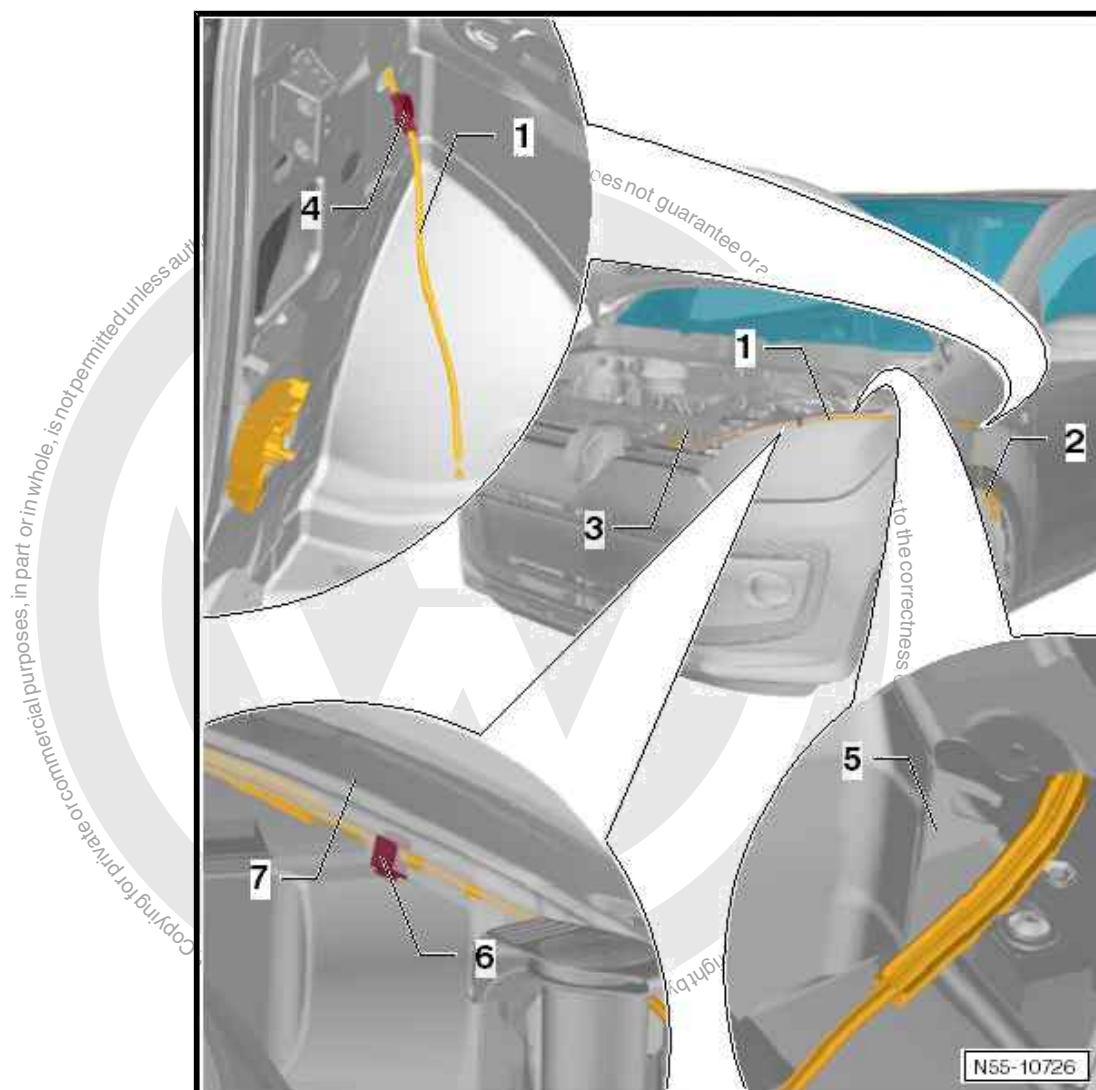
- Hook in cable -2- -arrow a- and clip retainer -3- into bonnet lock -1- -arrow c-.
- Insert lid lock -1- into lock carrier -arrow d-.
- Screw in bolts -3-.



Specified torque for bolts -4-: 12 Nm

- Adjust lid lock ➤ [page 28](#) .
- Before closing bonnet, check function of release lever and cable.

1.7.2 Routing bonnet release cable



The cable -1- is attached to the mounting bracket -2- and is guided into A-pillar through grommet -4-.

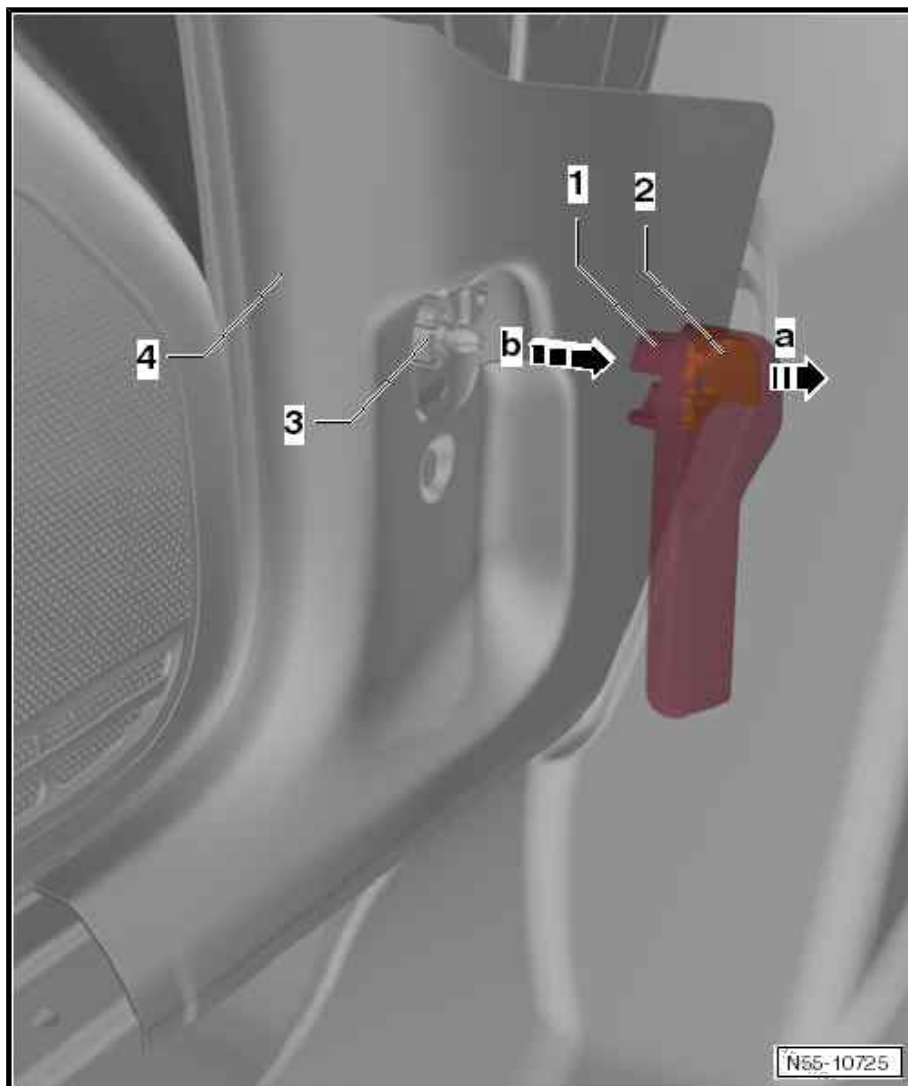
On top of longitudinal member the cable -1- is attached to retainer -5-.

On lock carrier -7- the cable -1- is attached to retainer -6-.

The other end of cable -1- is attached to bonnet lock -3-.

1.8 Removing and installing bonnet release lever

Removing

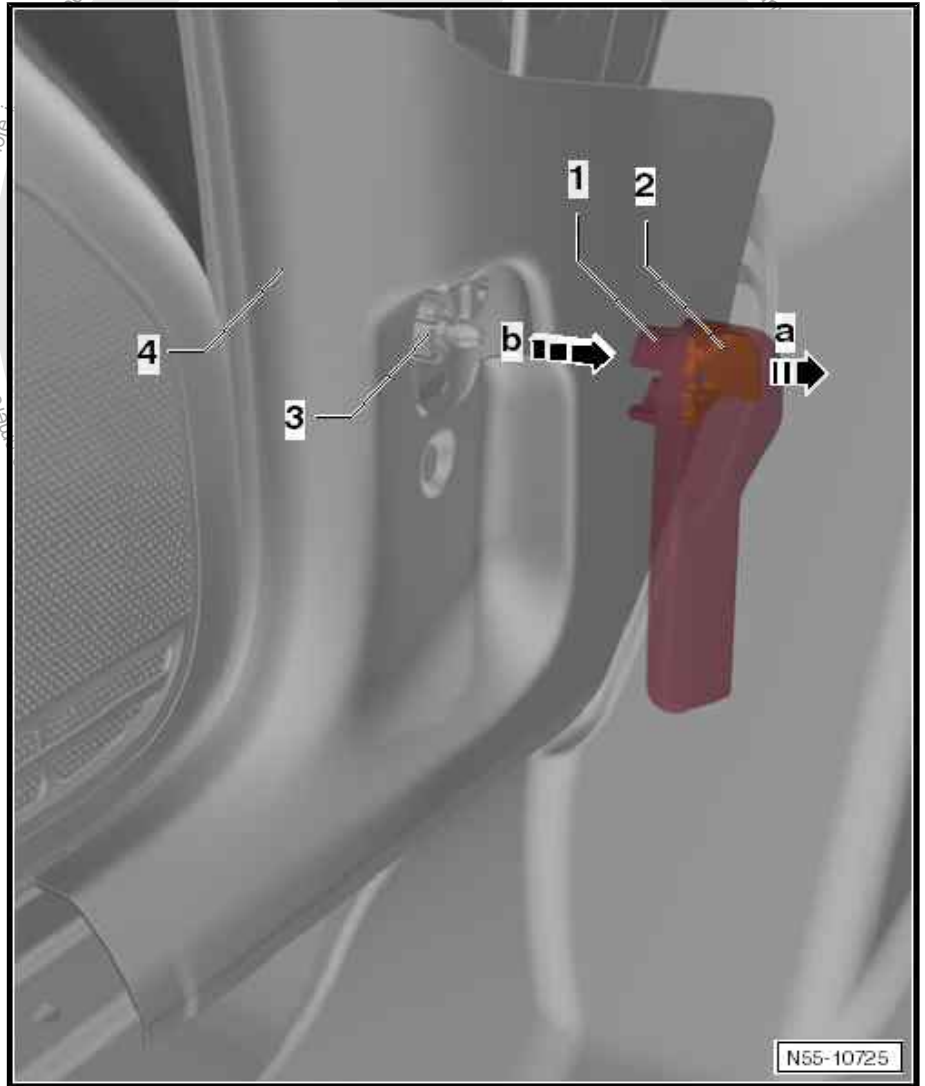


Perform the following steps:

- Slightly pull operating lever -1-, and unlock bonnet.
- Insert a small screwdriver in gap between release lever -1- and retaining clip -2-.
- Lever retaining clip -2- out of release lever -1- -arrow a-, and pull release lever off mounting bracket -3- -arrow b-.

For further work on mounting bracket -3- remove lower A-pillar trim -4- ➔ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Removing and installing A-pillar trim .

Installing



Perform the following steps:

- Lower A-pillar trim -4- is installed.
- Push retaining clip -2- into release lever -1-.
- Press release lever -1- onto mounting bracket -3-.
- Before closing bonnet, check function of release lever and cable.



2 Rear lid

⇒ [“2.1 Assembly overview - rear lid”, page 42](#)

⇒ [“2.2 Removing and installing rear lid”, page 44](#)

⇒ [“2.3 Adjusting rear lid”, page 47](#)

⇒ [“2.4 Removing and installing hinges”, page 54](#)

⇒ [“2.5 Removing and installing gas strut”, page 57](#)

⇒ [“2.6 Removing and installing operating mechanism”, page 60](#)

⇒ [“2.7 Removing and installing bonnet lock”, page 62](#)

⇒ [“2.8 Removing and installing rear lid seal”, page 65](#)

2.1 Assembly overview - rear lid

⇒ [“2.1.1 Assembly overview - rear lid”, page 42](#)

⇒ [“2.1.2 Assembly overview - gas strut”, page 43](#)

⇒ [“2.1.3 Assembly overview - locking and release components”, page 44](#)

2.1.1 Assembly overview - rear lid

1 - Rear lid

- ☐ Removing and installing
⇒ [page 44](#)
- ☐ Adjusting ⇒ [page 47](#)

2 - Adjusting buffer

- ☐ Left and right
- ☐ Adjusting ⇒ [page 50](#)
- ☐ Removing and installing
⇒ [page 51](#)

3 - Gas strut

- ☐ Removing and installing
⇒ [page 57](#)
- ☐ Releasing gas
⇒ [page 60](#)

4 - Hinge

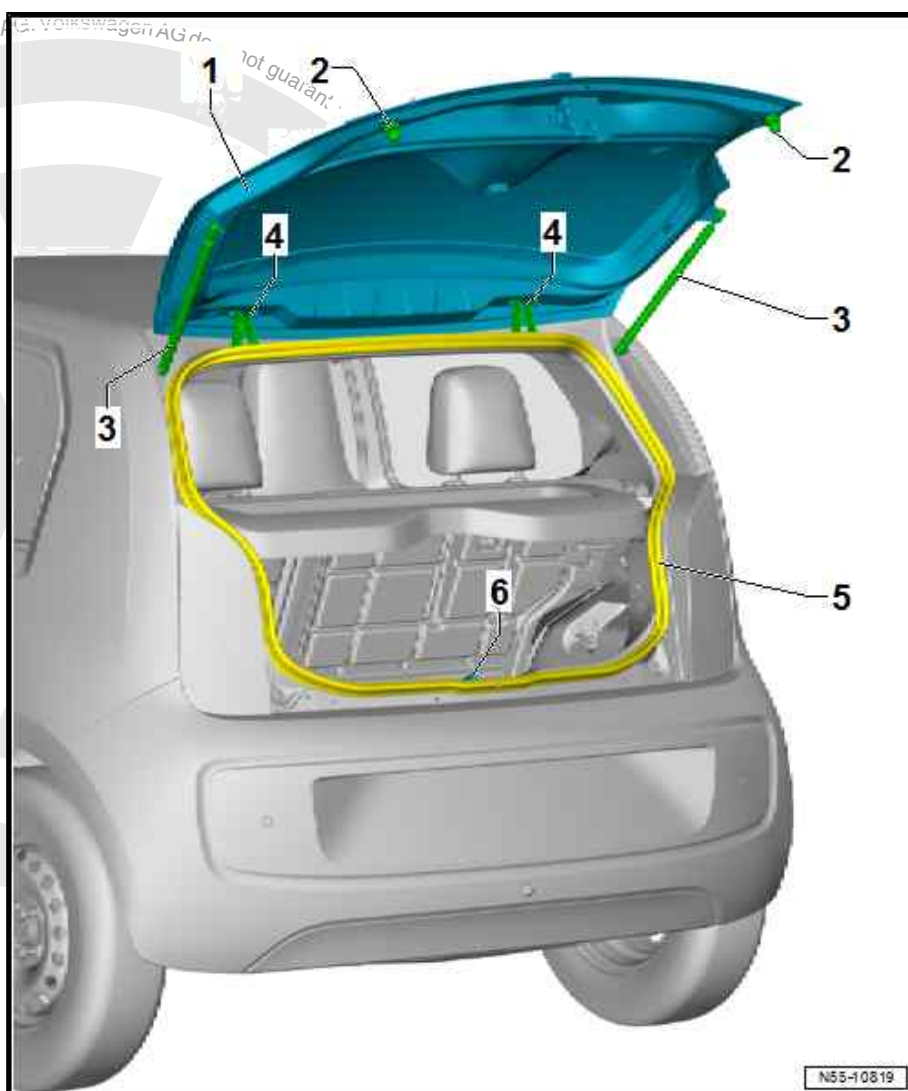
- ☐ Left and right
- ☐ Removing and installing
⇒ [page 54](#)

5 - Seal

- ☐ Removing and installing
⇒ [page 65](#)

6 - Striker

- ☐ Removing and installing
⇒ [page 64](#)





- ❑ Adjusting ➤ [page 52](#)

2.1.2 Assembly overview - gas strut

1 - Gas strut

- ❑ Removing and installing
➤ [page 57](#)
- ❑ Releasing gas
➤ [page 60](#)

2 - Ball pin

- ❑ Bolted to lock side panel.
- ❑ Specified torque: 20 Nm
+45°

3 - Retaining bracket with ball-head pin

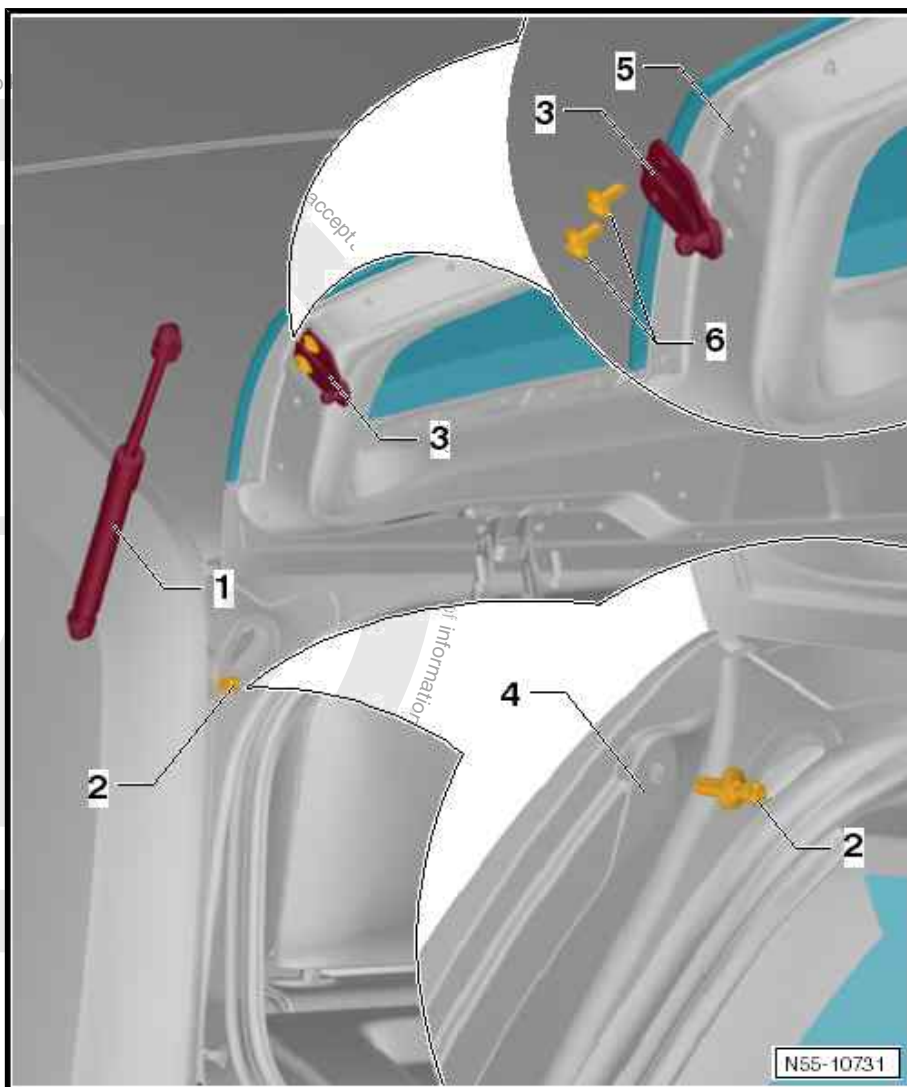
- ❑ Bolted to rear lid.

4 - Side panel

5 - Rear lid

6 - Bolt

- ❑ Specified torque: 10 Nm
+45°





2.1.3 Assembly overview - locking and release components

1 - Button to release rear lid

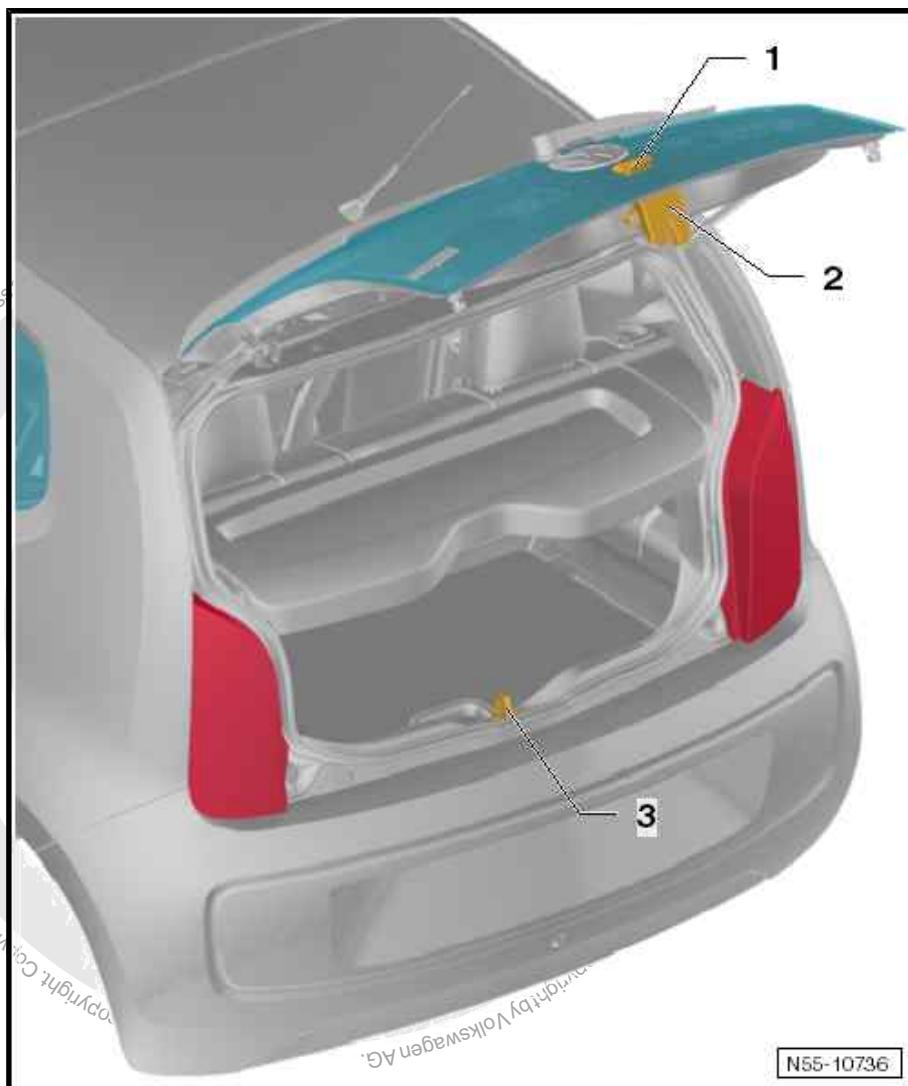
- ❑ Removing and installing
⇒ [page 60](#)

2 - Bonnet lock

- ❑ With emergency re-
lease function ⇒ Oper-
ating manual .
- ❑ Removing and installing
⇒ [page 62](#)

3 - Striker

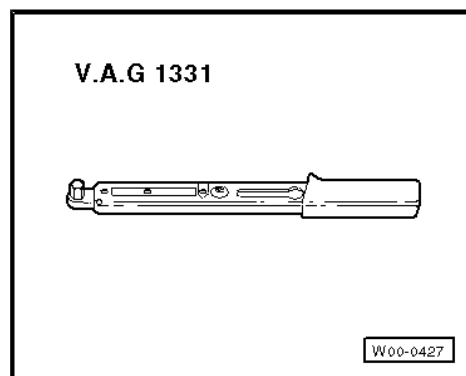
- ❑ Removing and installing
⇒ [page 64](#)
- ❑ Adjusting ⇒ [page 52](#)



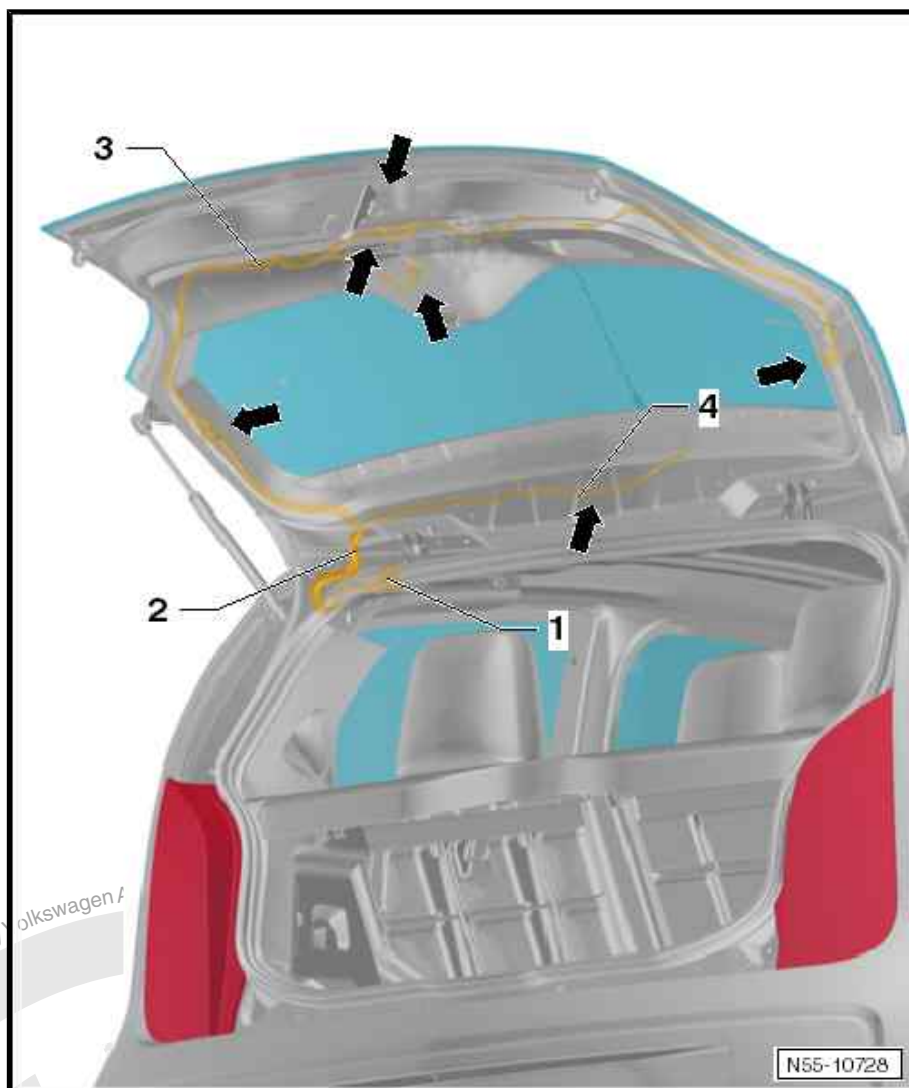
2.2 Removing and installing rear lid

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-



Removing



Perform the following steps:

- Remove rear lid trim ⇒ General body repairs, interior; Rep. gr. 70; Luggage compartment trims; Removing and installing lower rear lid trim .
- Disconnect connectors from all installed electrical components -arrows-.
- Guide wires -3 and 4- with rubber grommet -2- out of rear lid.



Note

The connectors -1- for wires -3 and 4- are located on left C-pillar.



- Loosen bolts -2- of left and right hinges -4- but do not undo completely yet.

Further dismantling requires the assistance of a second mechanic.

- Remove gas struts -3- ➔ [page 57](#) .
- Now, and only now, remove bolts -2- completely and then remove rear lid -1-.

Installing

- Before closing rear lid, check function of lid release components.



Perform the following steps:

- Install rear lid -1- with the aid of a 2nd mechanic.

Specified torque of bolts -2-: 12 Nm.

- Install gas struts -3- ➤ [page 57](#) .
- Guide wires into rear lid and attach rubber grommet.
- Connect connectors of all installed electrical components.

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

- Adjusting rear lid ➤ [page 47](#) .

2.3 Adjusting rear lid

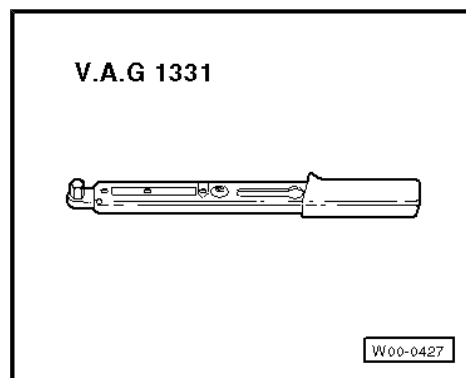
➤ [“2.3.1 Adjusting rear lid”, page 48](#)

➤ [“2.3.2 Adjusting striker pin”, page 52](#)

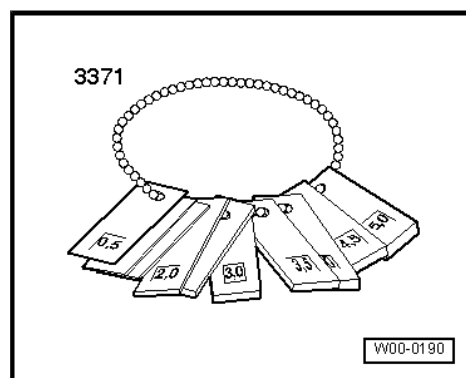
Special tools and workshop equipment required



- ◆ Torque wrench - V.A.G 1331-



- ◆ Setting gauge - 3371-

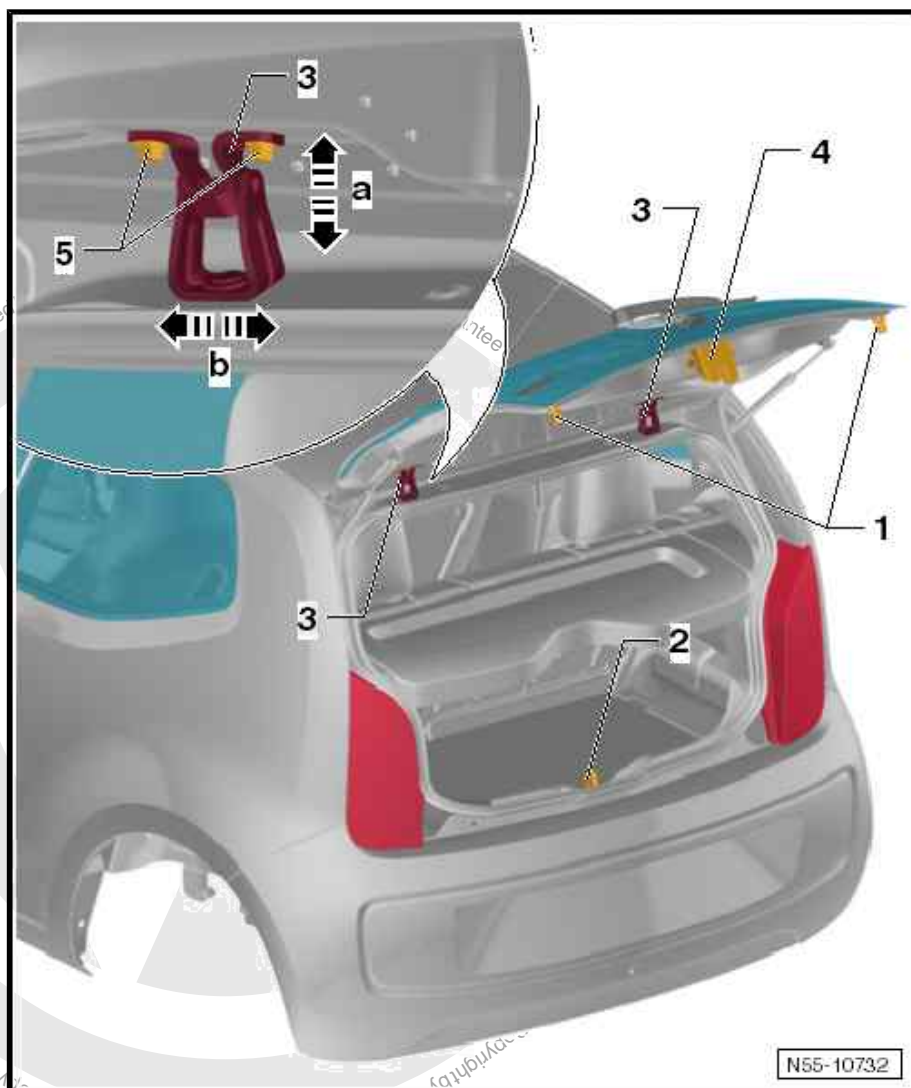


2.3.1 Adjusting rear lid



Note

- ◆ *Vehicle must be standing on its wheels to enable rear lid to be adjusted.*
- ◆ *The rear lid lock -3- is bolted directly to the rear lid -4-. The rear lid lock cannot be adjusted.*
- ◆ *The adjusting buffers -1- on the left and right sides cannot be used to adjust the rear lid. They have the function of stabilising and damping the rear lid.*
- ◆ *The rear lid is correctly adjusted when all shut lines are even when closed. it is not protruding too far inwards or outwards, and when the contours are flush with each other.*
- ◆ *The rear lid must engage in the striker plate without excessive force being applied.*



Perform the following steps:

Use the setting gauge - 3371- ⇒ Body Repairs; Rep. gr. 00 ;
Bodywork gaps/shut lines; Rear body to check or set the gap dimensions.

- Loosen striker pin and adjust after adjustment of hinges and adjustment buffers ⇒ [page 52](#) .
- If bolts -5- are loosened on left and right, it is possible to adjust rear lid -1- in the oversized holes of hinge -3- -arrows a- and -arrows b-.

Specified torque for bolts -4-: 10 Nm.

- On completion of adjustment work, anti-corrosion measures must be performed on hinge -3- and bolts -5-.
- Adjust adjustment buffer.

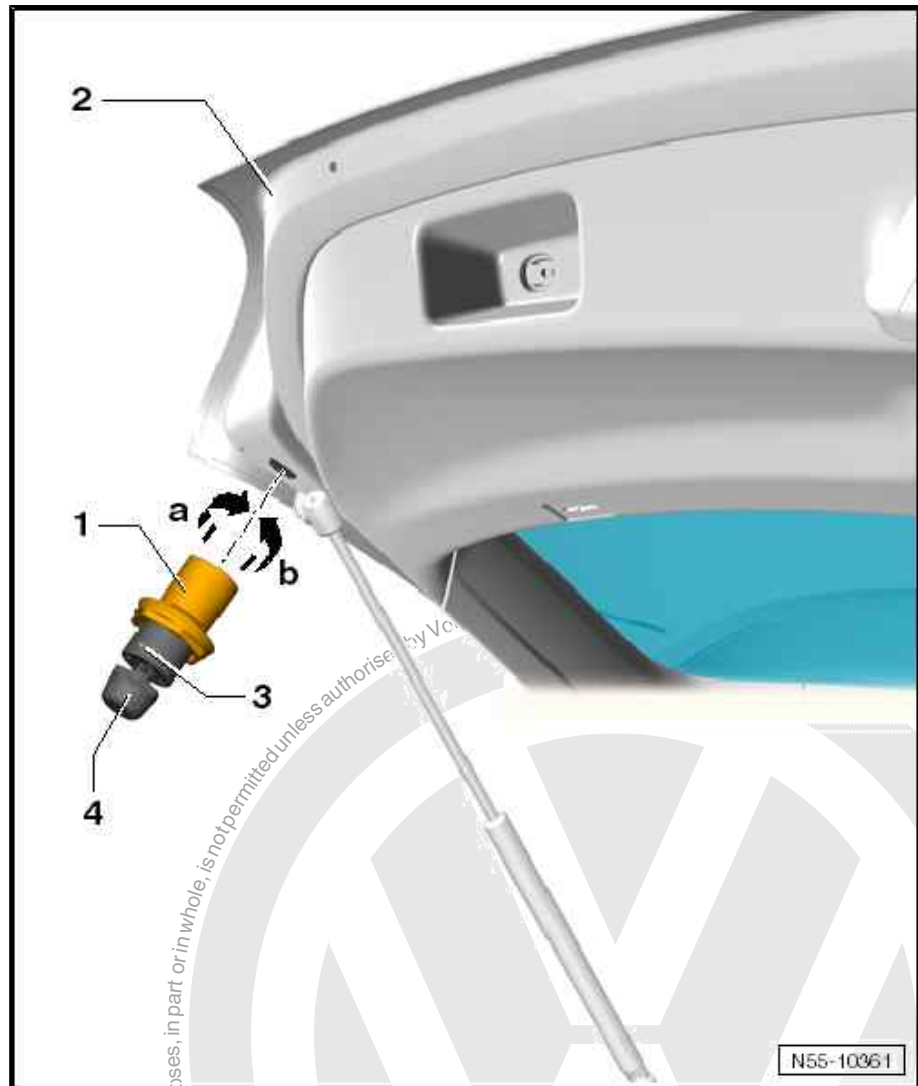


Adjusting adjusting buffer



Note

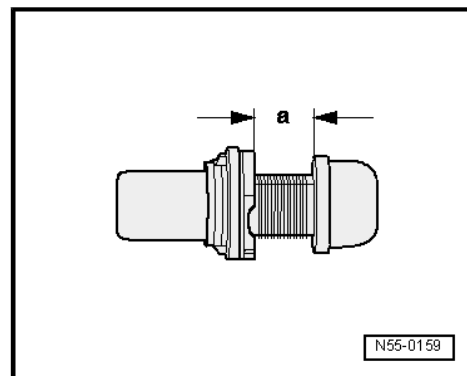
- ◆ Only the adjustment for the right adjustment buffer is described. The adjustment for the left adjustment buffer is similar.
- ◆ To remove and install turn complete adjustment buffer -1- through 90°.
- ◆ If necessary, renew adjusting buffer ➔ [page 51](#) .



- Loosen clamping bolt -4- until it is visible in rubber buffer.
- Pull detent slide -3- out of adjusting buffer -1-

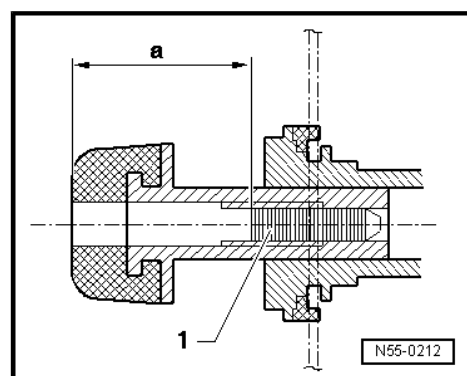


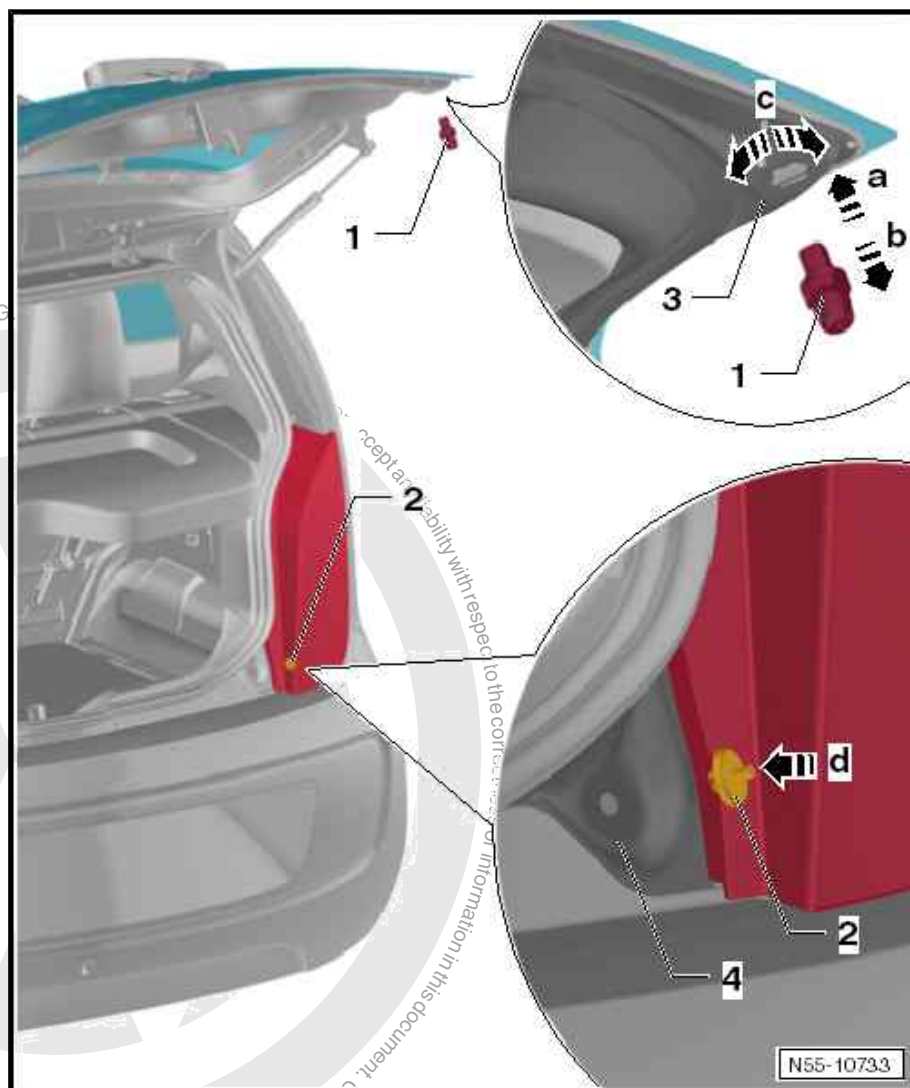
- Adjust detent slide to dimension -a- = 12.5 mm.
- Close rear lid in preliminary detent position with slight pressure in the middle.



- Open rear lid again.
- Screw in adjustment buffer clamping screw -1- to a depth of -a- = 20 mm.
- Check the adjustment.

Renew adjustment buffer.





Removing

- To remove adjustment buffer, turn entire stop buffers -1- through 90° -arrow c-.
- Remove stop buffers from rear lid -3- -arrow b-.

Installing

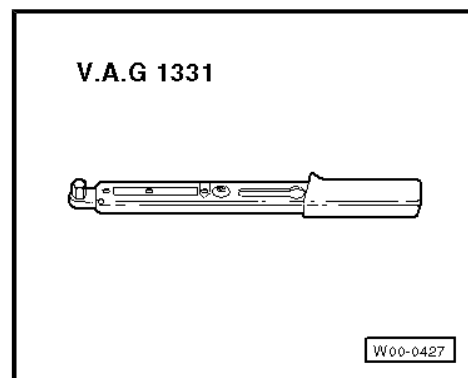
- Carefully check that stop -2- is correctly seated in side panel -4-.
- To install, insert entire stop buffer -1- at right-angle into rear lid -arrow a-.
- Turn stop buffer -1- through 90° -arrow c-.
- Adjust adjustment buffer -1- ➔ [page 50](#) .

2.3.2 Adjusting striker pin

Special tools and workshop equipment required

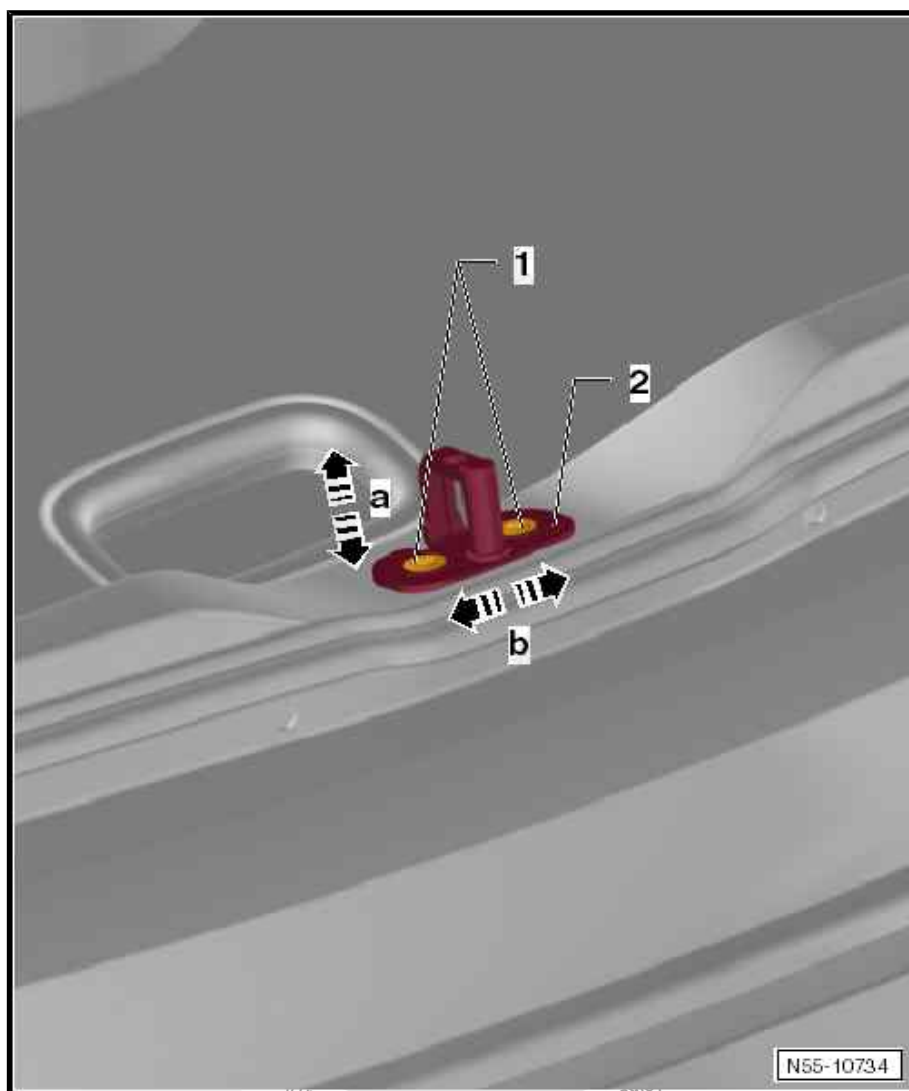


◆ Torque wrench - V.A.G 1331-



Note

- ◆ If bolts -1- are loosened, the striker pin -2- may be adjusted in the oversized holes -arrows a- and -arrows b-.
- ◆ Adjust striker pin -2- so that the recess of the rear lid lock with rotary latch is centred relative to the striker pin -2- when it engages.





Perform the following steps:

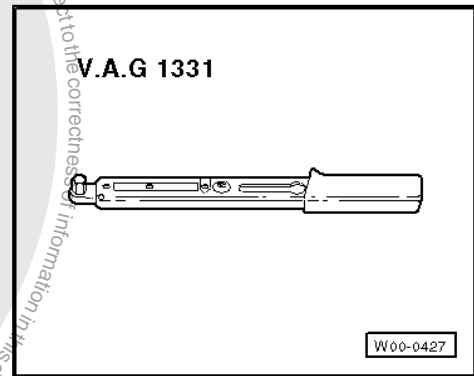
- Loosen bolts -1-.
- Move striker pin -2- into upper position and tighten bolts -1-.
- Close rear lid and make sure adjustment has been carried out correctly.

Specified torque for bolts -1-: 20 Nm

2.4 Removing and installing hinges

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-



Note

*The removal and installation sequence is only for the left hinge.
Removal and installation of the right hinge are similar.*

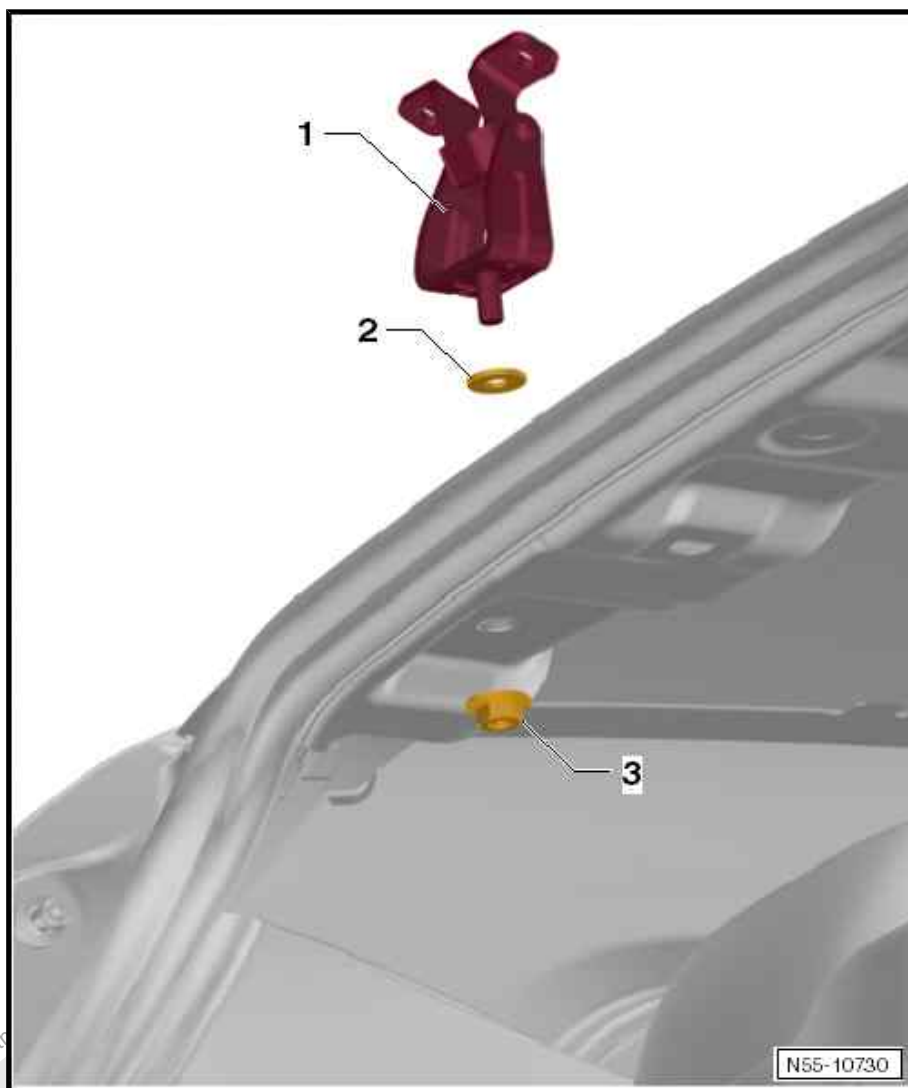
Removing



Perform the following steps:

- Remove rear lid ➔ [page 44](#) .
- Lower moulded headliner in area of hinge mounting ➔ General body repairs, interior; Rep. gr. 70 ; Roof trims; Removing and installing moulded headliner .
- Moulded headliner can now be lowered sufficiently to allow hexagon nut to be unscrewed without damage occurring to moulded headliner.
- Unscrew hexagon nut -3- and remove hinge -1-.

Installing



Perform the following steps:

Hinge -2- installation is carried out in reverse order of removal.



Note

- ◆ *Make sure that washer -2- is correctly seated.*
- ◆ *Recreate all seals which have been broken.*

Specified torque for bolts -3-: 24 Nm

- Before closing rear lid, check function of lid release components.



2.5 Removing and installing gas strut

⇒ ["2.5.1 Removing and installing gas strut", page 57](#)

⇒ ["2.5.2 Releasing gas from gas strut", page 60](#)

2.5.1 Removing and installing gas strut

Removing



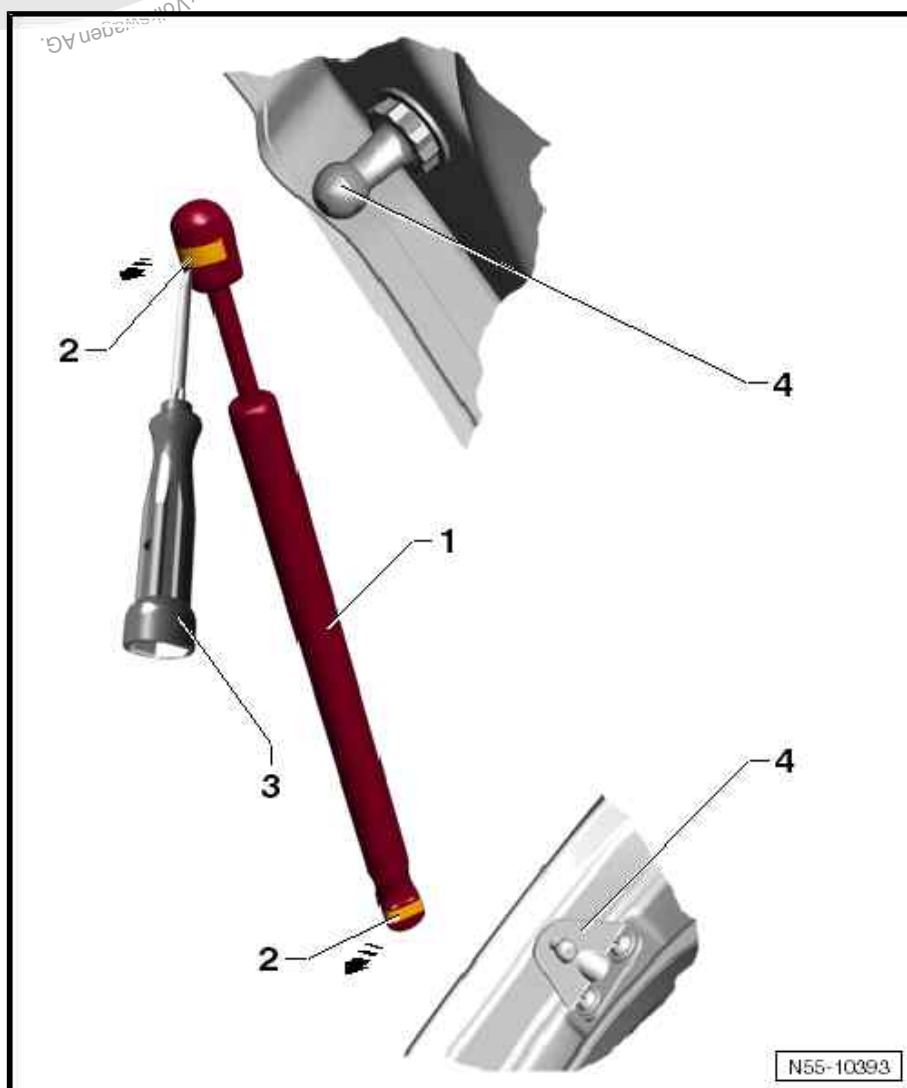
Note

The rear lid must be supported when a gas strut is removed. One gas strut alone cannot support an open rear lid.



WARNING

Proceed with care if gas strut is reused. Spring clip must not be levered completely out of ball socket as it will otherwise be damaged. Gas strut will spring out of mounting, causing damage or injury to operator.





Perform the following steps:

- Open rear lid and brace it open.
- Position a small screwdriver -3- beneath spring clips -2-.
- Raise spring clips -2- until spring clips can be moved over ball sockets.
- Pull gas strut -1- off ball-head pin -4-.

After removing gas strut, slide spring clips -2- back immediately.



WARNING

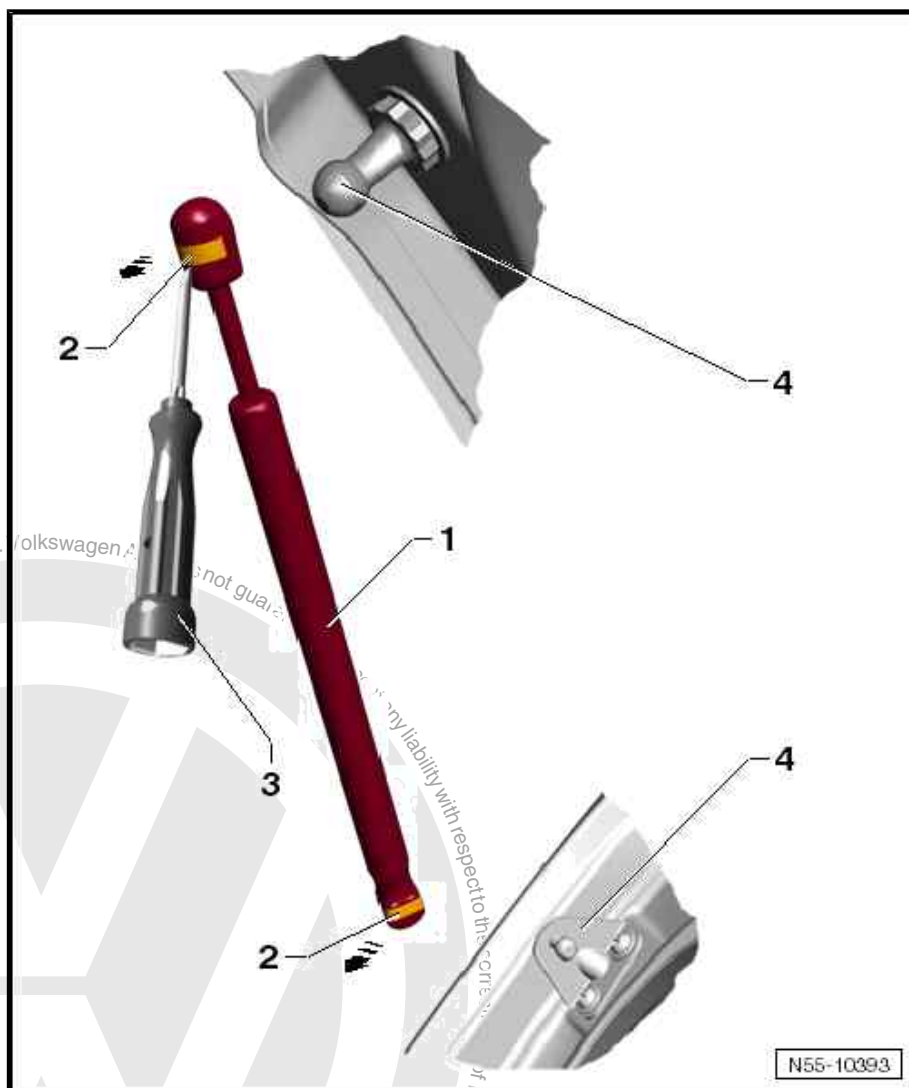
Proceed with care if gas strut is reused. Spring clip must not be levered completely out of ball socket as it will otherwise be damaged. Gas strut will spring out of mounting, causing damage or injury to operator.



Note

- ◆ Specified torque for bolts on ball head pin retaining bracket: 10 Nm + 45°.
- ◆ Releasing gas from gas strut ➔ [page 60](#).

Installing



Perform the following steps:



WARNING

Proceed with care if gas strut is reused. Spring clip must not be levered completely out of ball socket as it will otherwise be damaged and the gas strut will spring out of its mounting, causing damage or injury to the operator.

- The spring clips -2- are pushed onto the ball sockets of the gas strut -1-.
- Push ball sockets of gas strut -1- onto ball-head pins -4- until ball sockets engage audibly with the ball-head pins.



2.5.2 Releasing gas from gas strut

- Clamp gas strut in vice in area $x = 50$ mm.



WARNING

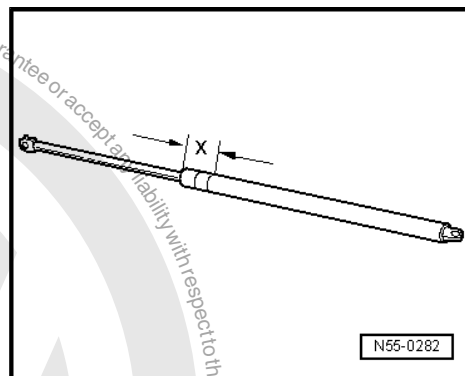
Clamp gas-filled strut only within area -x-. Otherwise an accident may occur!

- Saw open strut cylinder in first third of total cylinder length, starting from the reference edge on the piston rod side.



Note

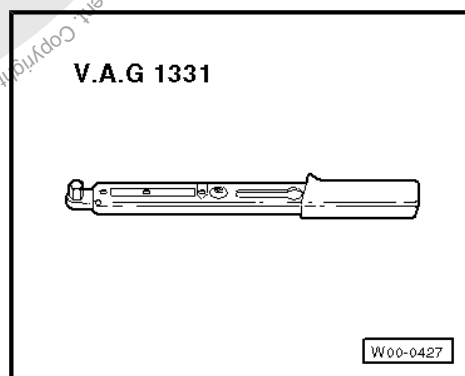
- ◆ Wear eye protection when sawing.
- ◆ Cover area of saw cut with a cloth.
- ◆ Dispose of oil and cloth via existing disposal channels.

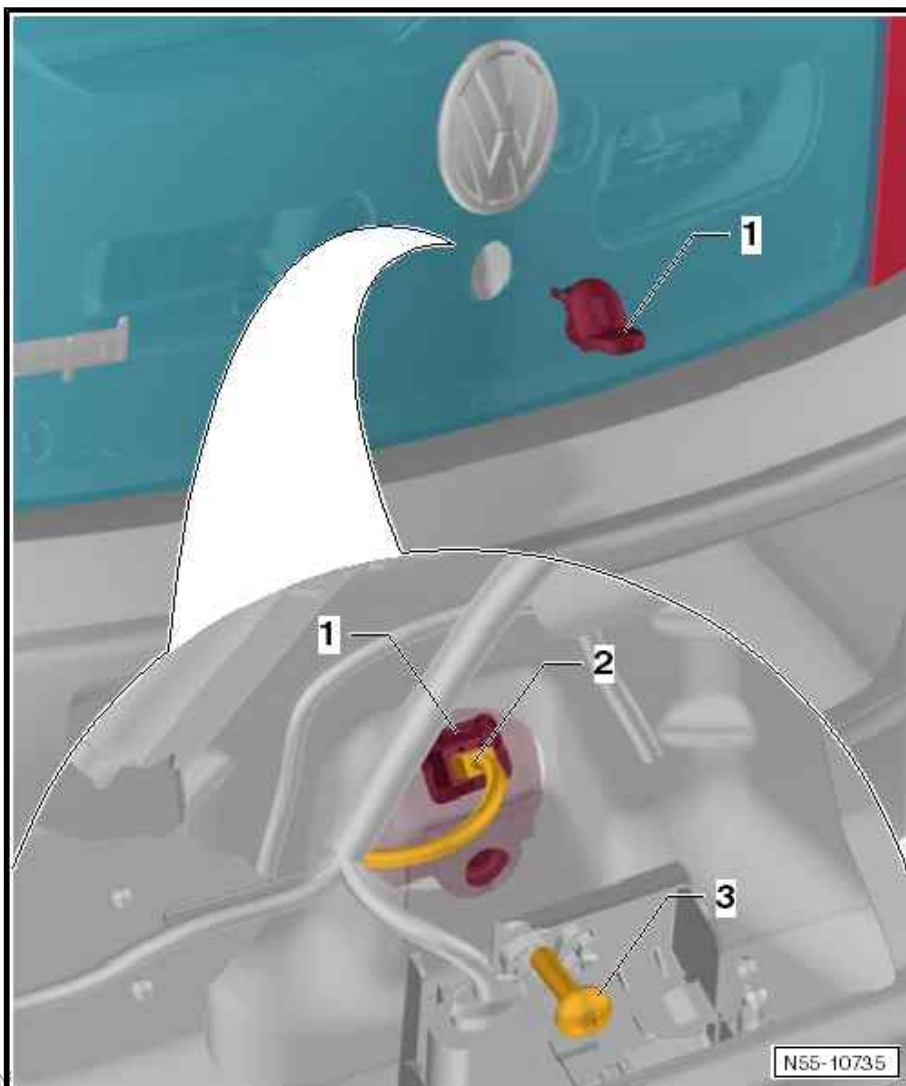


2.6 Removing and installing operating mechanism

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-





Removing

Perform the following steps:

- Remove rear lid trim ➤ General body repairs, interior; Rep. gr. 70 Luggage compartment trims; Removing and installing lower rear lid trim .
- Remove bonnet lock ➤ [page 62](#) .
- Detach connector -2- from button connection -1-.
- Unscrew bolt -3-.
- Remove button -1- from rear lid.

In case of electrical malfunction, rear lid can be opened using lock emergency release. Emergency release is accessible through an aperture in rear lid trim.

Installing

Perform the following steps:

Installation is carried out in the reverse order of removal.

Specified torque for bolts -1-: 5 Nm.

- Before closing rear lid, check function of lid release components.



2.7 Removing and installing bonnet lock

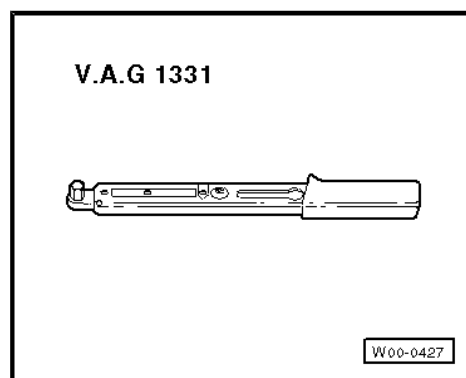
⇒ ["2.7.1 Removing and installing bonnet lock", page 62](#)

⇒ ["2.7.2 Removing and installing striker pin", page 64](#)

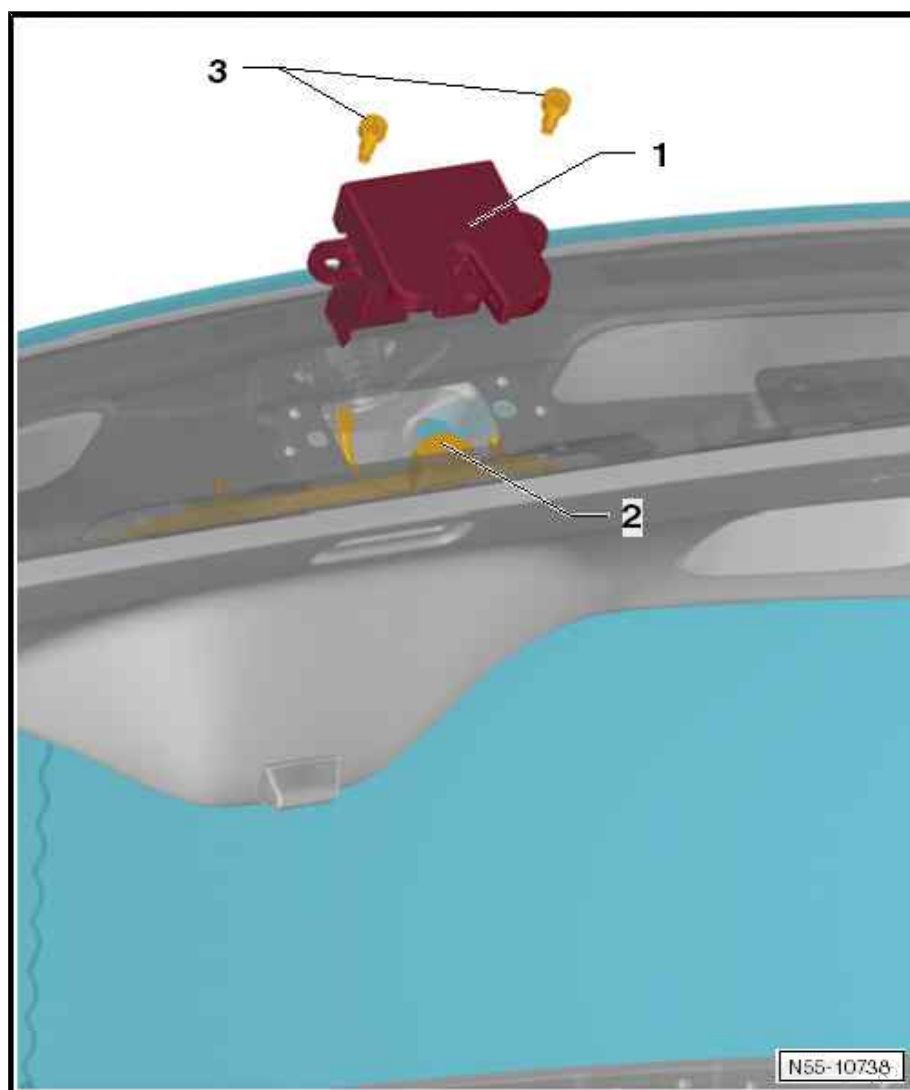
2.7.1 Removing and installing bonnet lock

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-



Removing





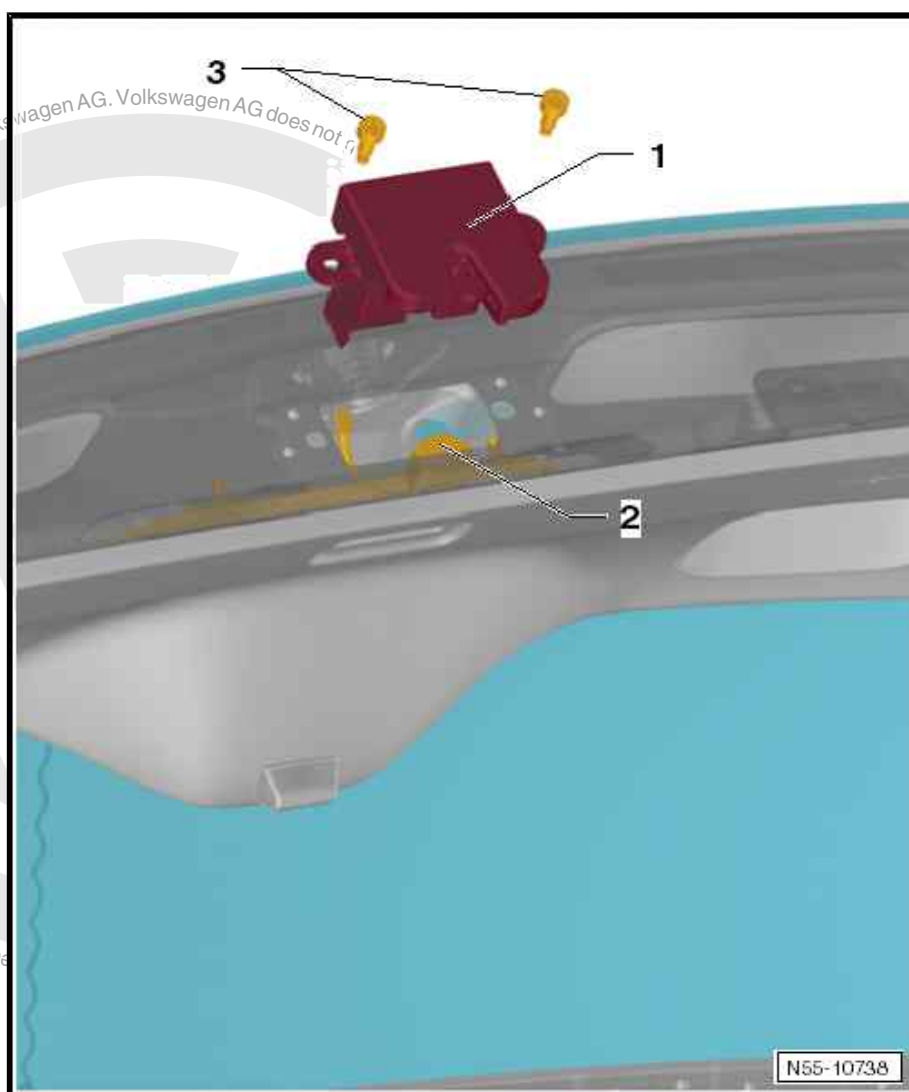
i Note

If the rear lid does not open, it can be opened in an emergency by reaching through the rear lid trim and actuating the emergency release -5- by hand ➔ Operating Manual .

Perform the following steps:

- Separate electrical connector -2- from lid lock -1-.
- Unscrew bolts -3- and remove rear lid lock -1- from rear lid.

Installing



Perform the following steps:

- Position rear lid lock -1- on rear lid and screw in bolts -3-.

Specified torque for bolts -3-: 20 Nm

- Fit electrical connector -2- on lid lock -1-.
- Before closing rear lid, check function of lid release components.



2.7.2 Removing and installing striker pin

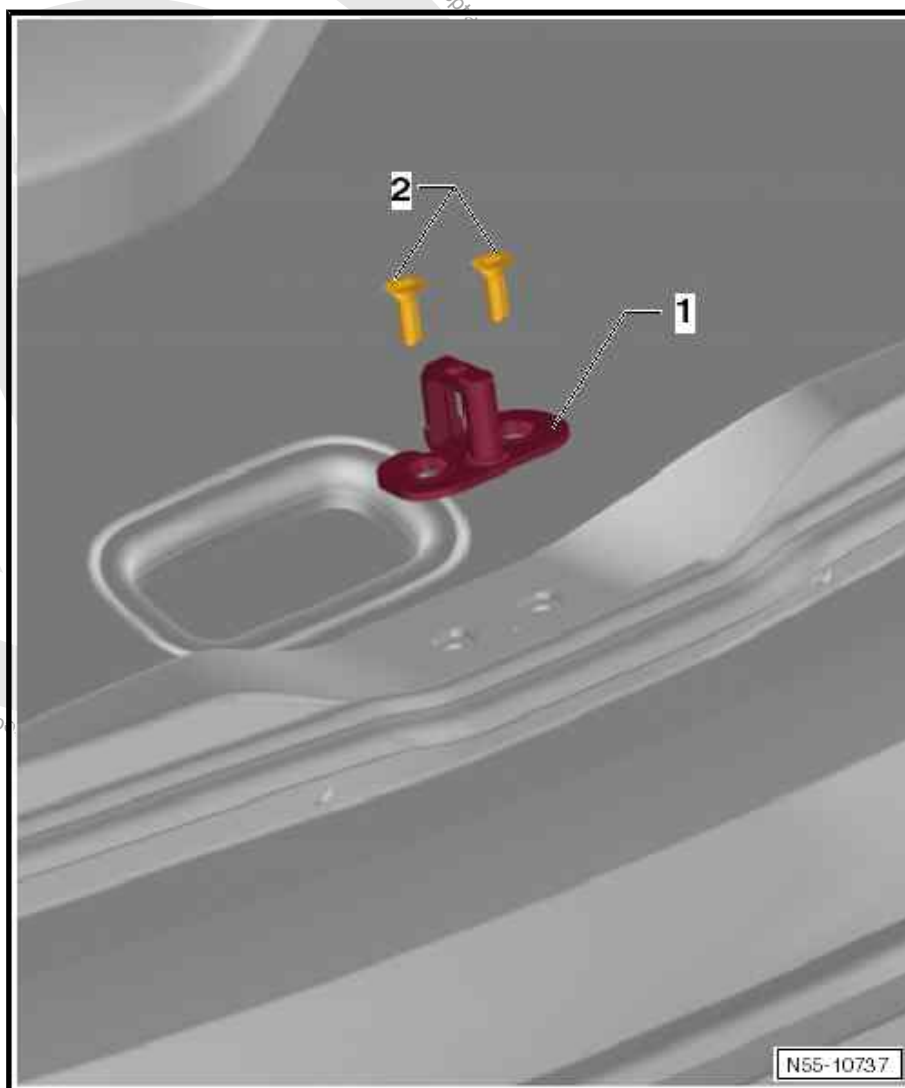
Special tools and workshop equipment required

- ♦ Torque wrench - V.A.G 1331-

V.A.G 1331



W00-0427



N55-10737

Removing

- Unscrew bolts -2- and remove striker pin -1- from lock carrier.

Installing

- Mount striker pin -1- with bolts -2- on lock carrier.



Specified torque for bolts -2-: 20 Nm

– Adjust striker pin ➤ [page 52](#) .

2.8 Removing and installing rear lid seal

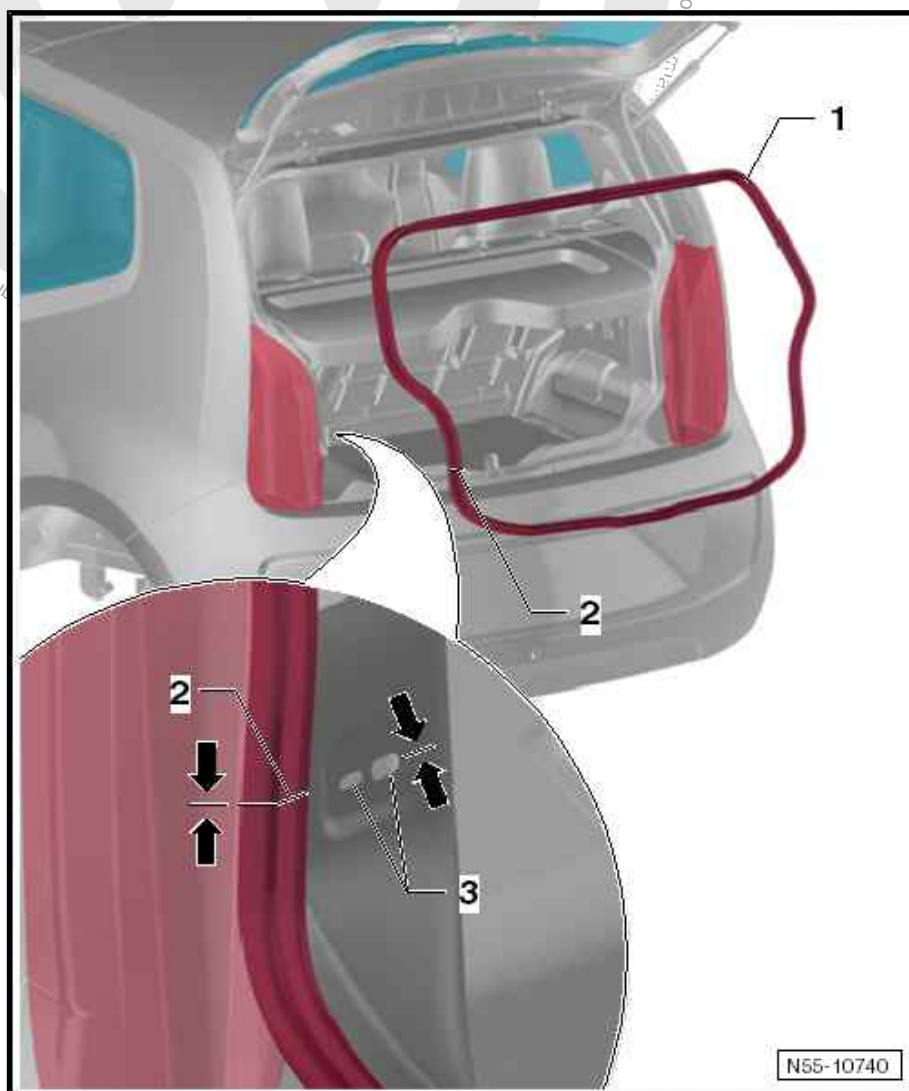
In the factory a sealant is applied to the rear lid seal, the seal is fitted to the body flange and then rolled on.



Note

- ◆ *When the seal is removed, the sealant on the inside of the seal will be spread and the flanks will be bent out slightly. If the seal is then refitted, sealing and firm seating are no longer guaranteed.*
- ◆ *Therefore, each seal that is completely removed must be replaced with a seal known as a "tap-on seal".*
- ◆ *If a seal has been partially removed, squeeze sides of seal together before installing.*

Removing

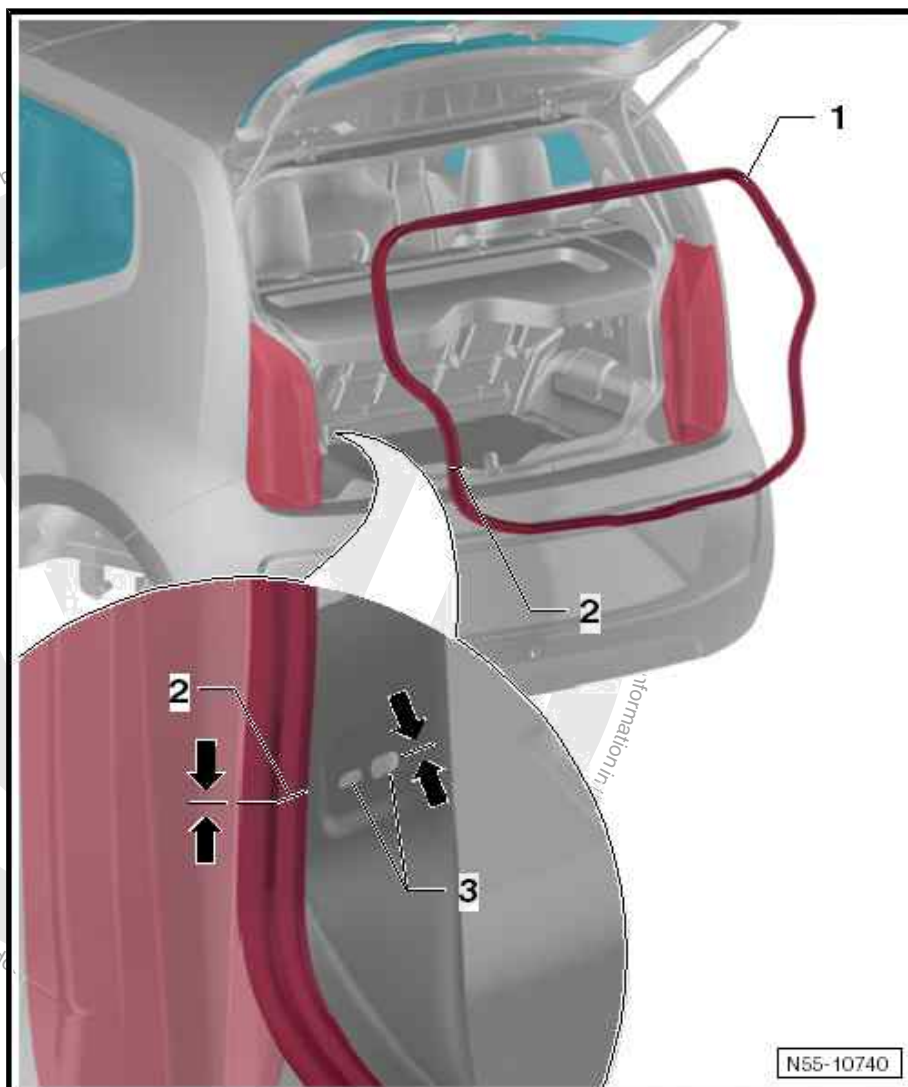




Perform the following steps:

- Pull seal -1- off body flange.

Installing



Perform the following steps:

- Align junction -2- of seal -1- with holes in side panel -3-.
- Press seal -1- evenly onto body flange by hand.



3 Tank flap unit

⇒ ["3.1 Assembly overview - tank flap unit", page 67](#)

⇒ ["3.2 Removing and installing tank flap unit", page 67](#)

3.1 Assembly overview - tank flap unit

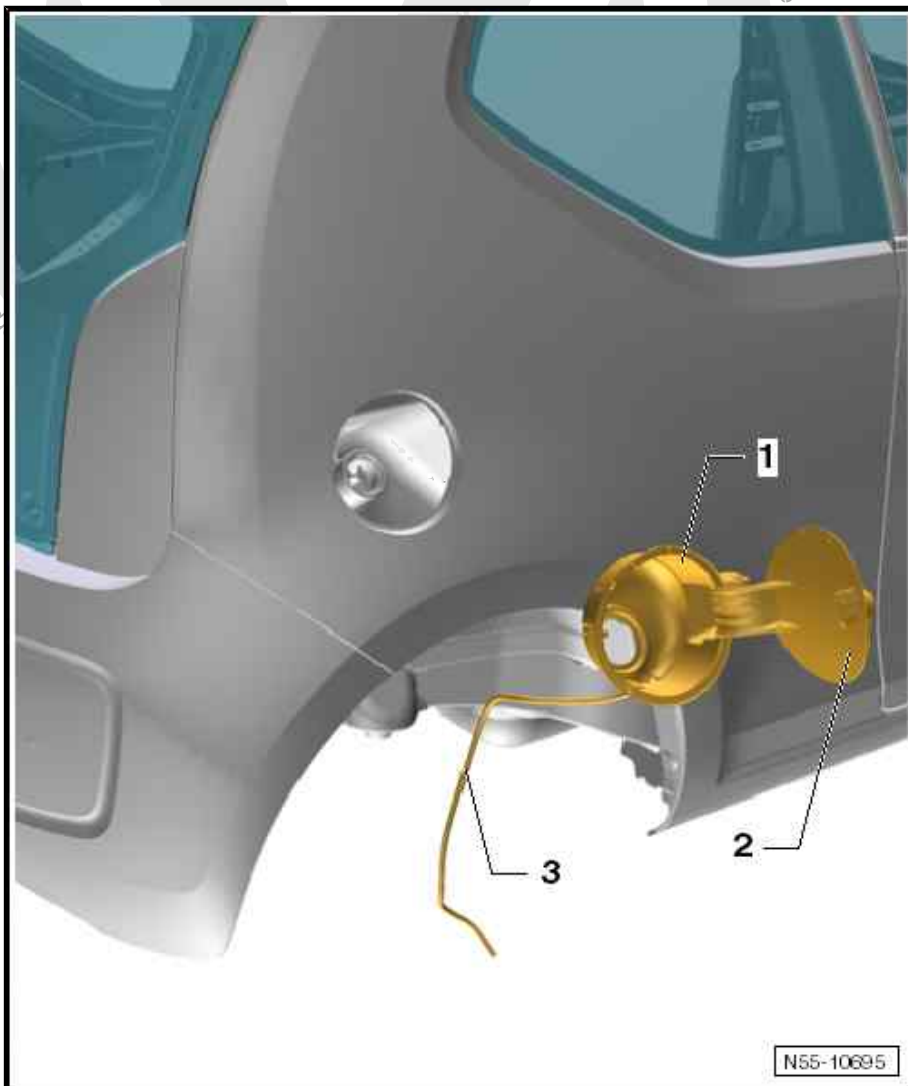
1 - Tank flap unit

- ❑ Removing and installing
⇒ [page 67](#)

2 - Tank flap

3 - Water drain hose

- ❑ Routed between wheel
housing and wheel
housing liner



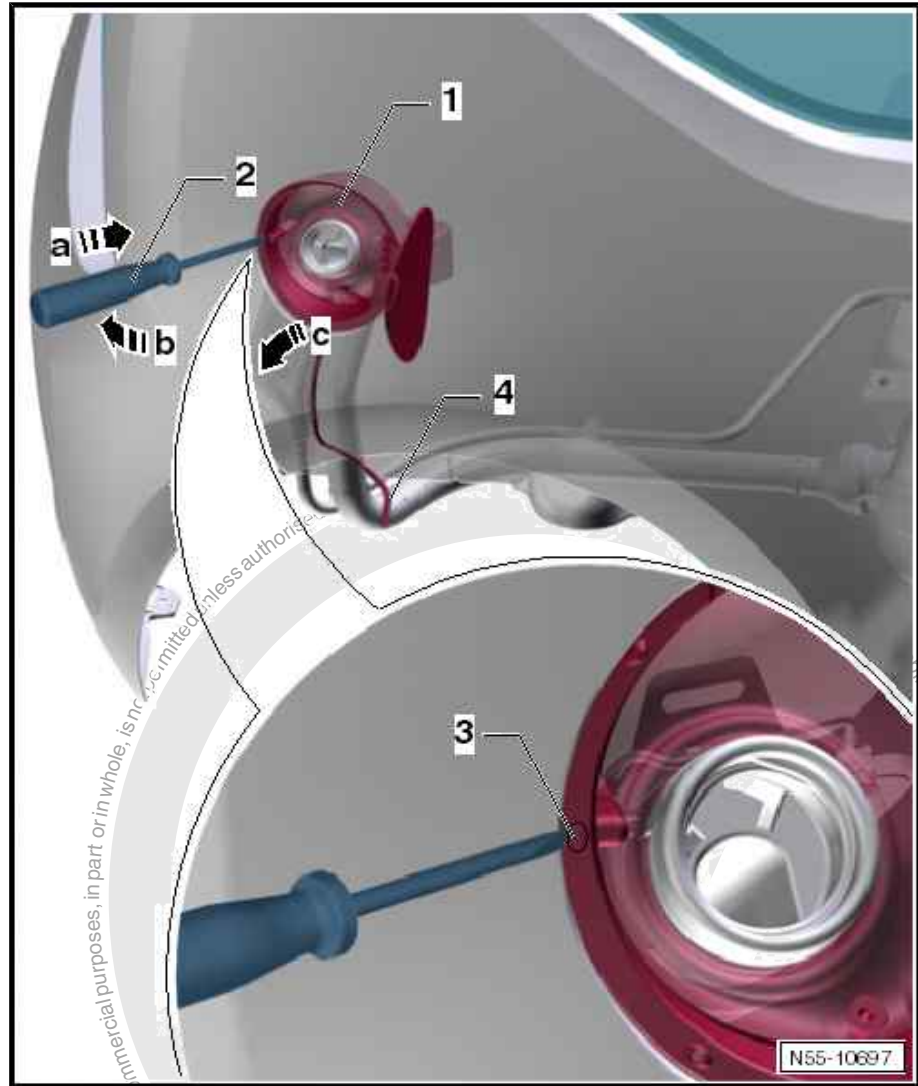
3.2 Removing and installing tank flap unit

Removing



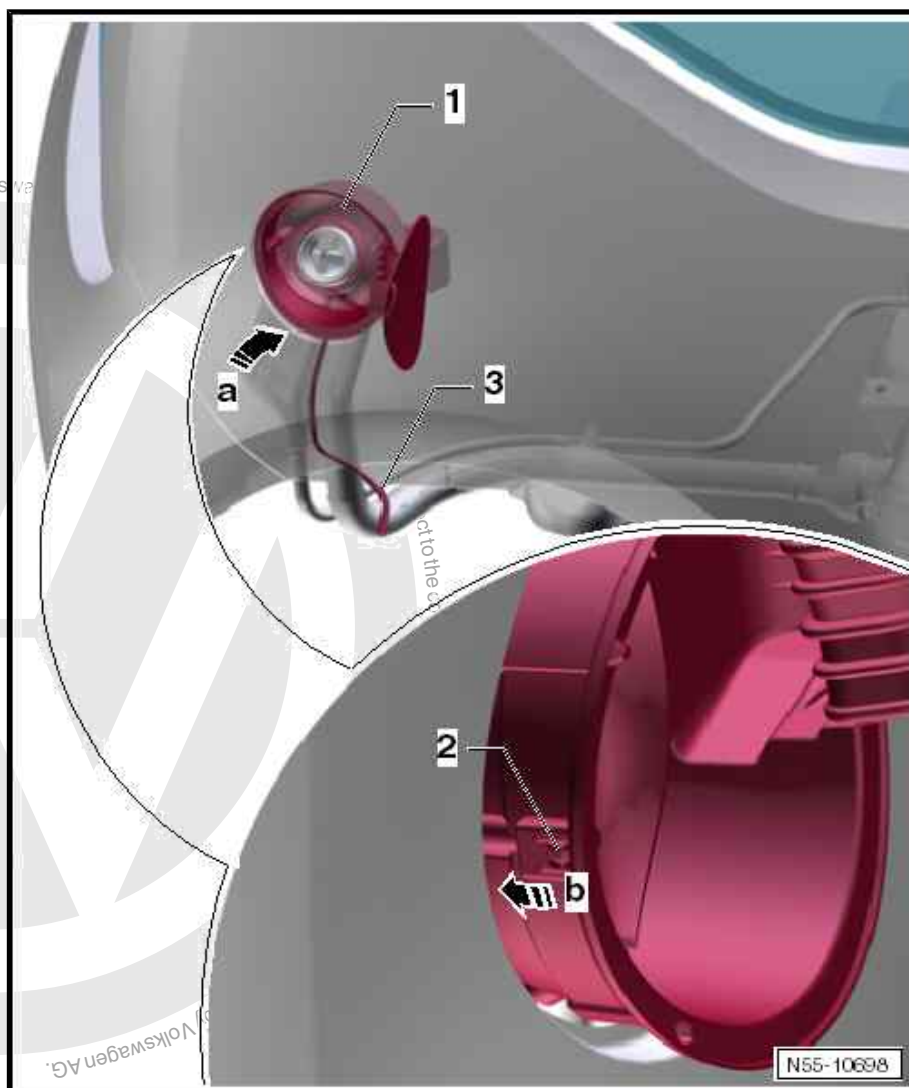
Note

- ◆ The tank flap unit may be engaged in side panel with 1 or 2 locking hooks.
- ◆ Accordingly, there are 1 or 2 markings on the tank flap unit.
- ◆ In the illustrations the version with 1 locking hooks is shown.



- Screw off tank cover.
- Insert a screwdriver -2- into the marked opening -3-.
- Release locking hook -arrow b-.
- Swing tank flap unit -1- out of side panel -arrow c-.
- Guide water drain hose -4- together with tank flap unit out of side panel.

Installing



- Insert water drain hose -3- through opening in tank flap unit -1- and then pull it through as far as it will go.
- Push water drainage hose -3- into side panel.
- Swing tank flap unit -1- into side panel and pull sleeve over filler neck.
- Then insert tank flap unit into side panel completely. Make sure that locking hook -2- engages correctly in side panel.
- Perform functional check of release components.



4 Tailgate unit

⇒ ["4.2 Removing and installing tailgate unit", page 71](#)

⇒ ["4.1 Assembly overview - tailgate unit", page 70](#)

4.1 Assembly overview - tailgate unit

1 - Tailgate unit

- ❑ Removing and installing
⇒ [page 71](#)

2 - Tailgate

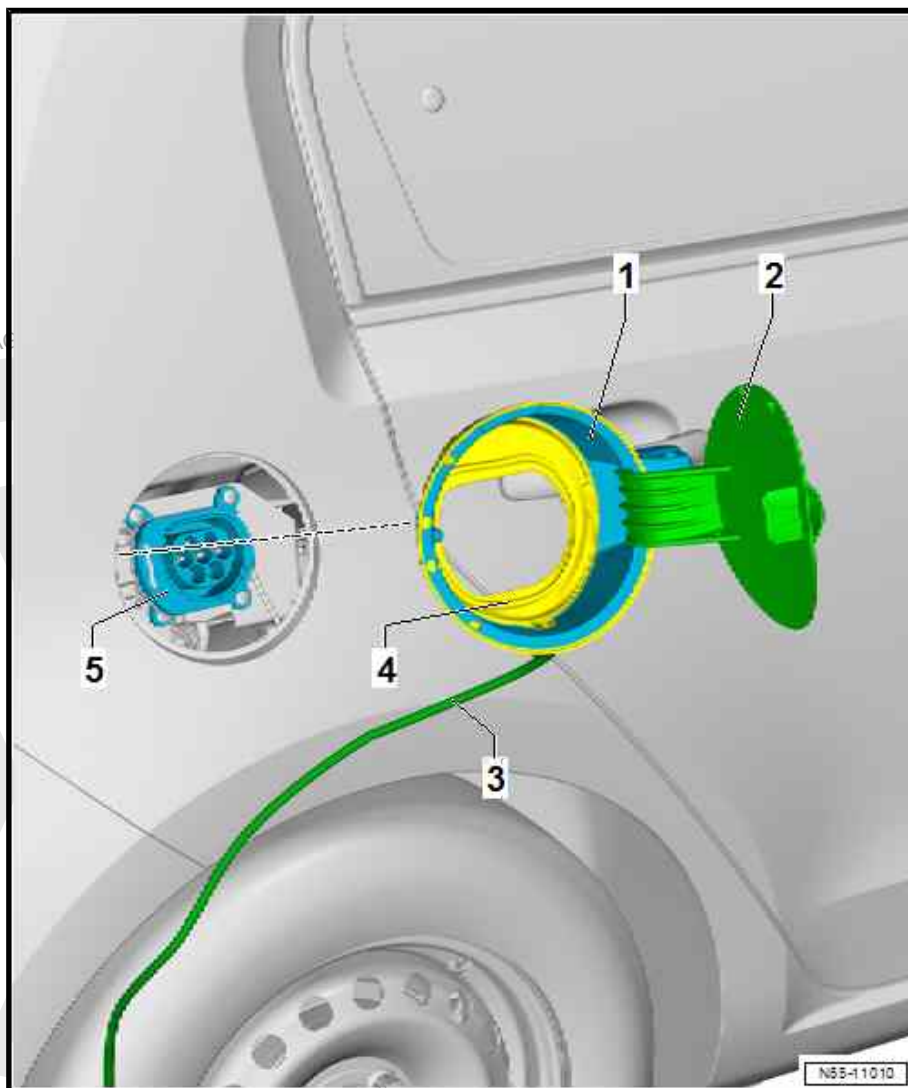
3 - Water drain hose

- ❑ Routed between wheel housing and wheel housing liner

4 - Boot

5 - Charging socket

For specifications and work instructions, refer to ⇒ Electrical system; Rep. gr. 93 ; Charging socket





4.2 Removing and installing tailgate unit

⇒ ["4.2.1 Removing and installing tailgate unit \(for AC charging systems\)", page 71](#)

⇒ ["4.2.2 Removing and installing tailgate unit \(for DC charging systems\)", page 73](#)

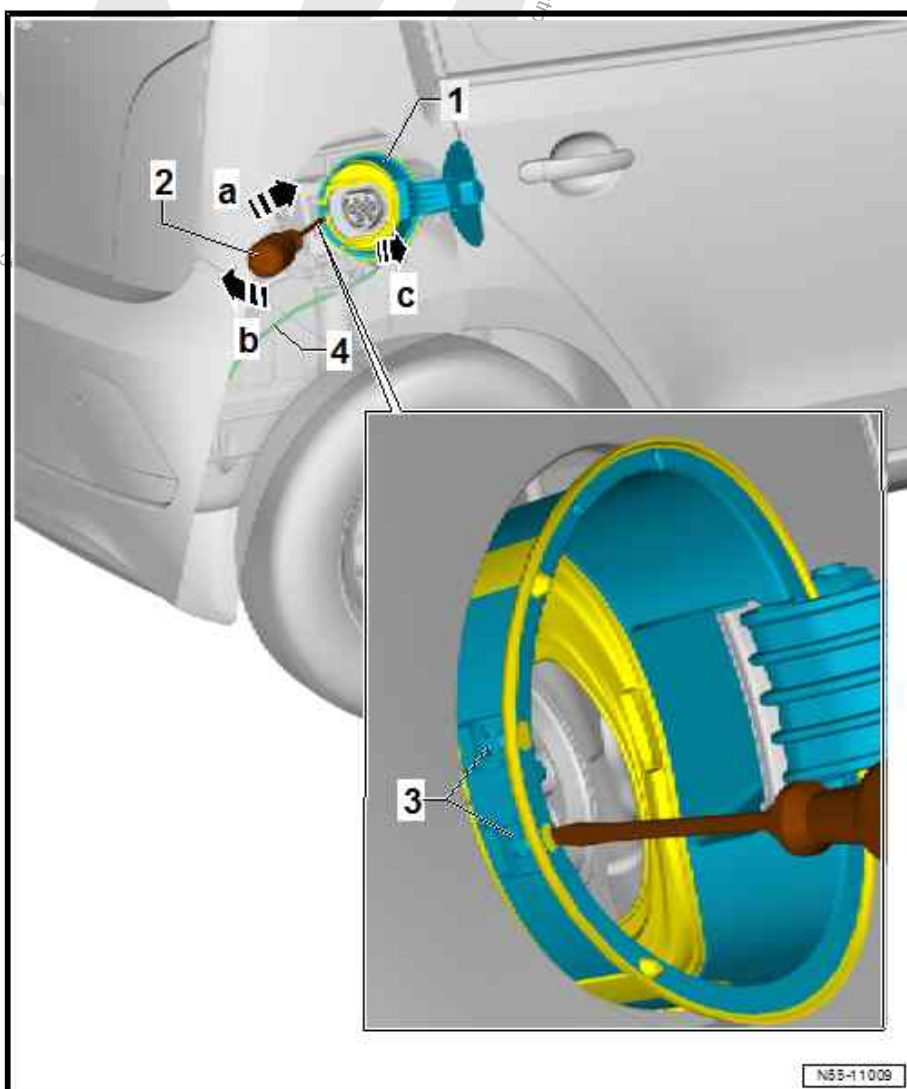
4.2.1 Removing and installing tailgate unit (for AC charging systems)

Removing



Note

- ◆ The charging socket unit may be engaged in side panel with 1 or 2 locking hooks.
- ◆ Accordingly, there are 1 or 2 markings on the tank flap unit.
- ◆ In the illustrations the version with 2 locking hooks is shown.

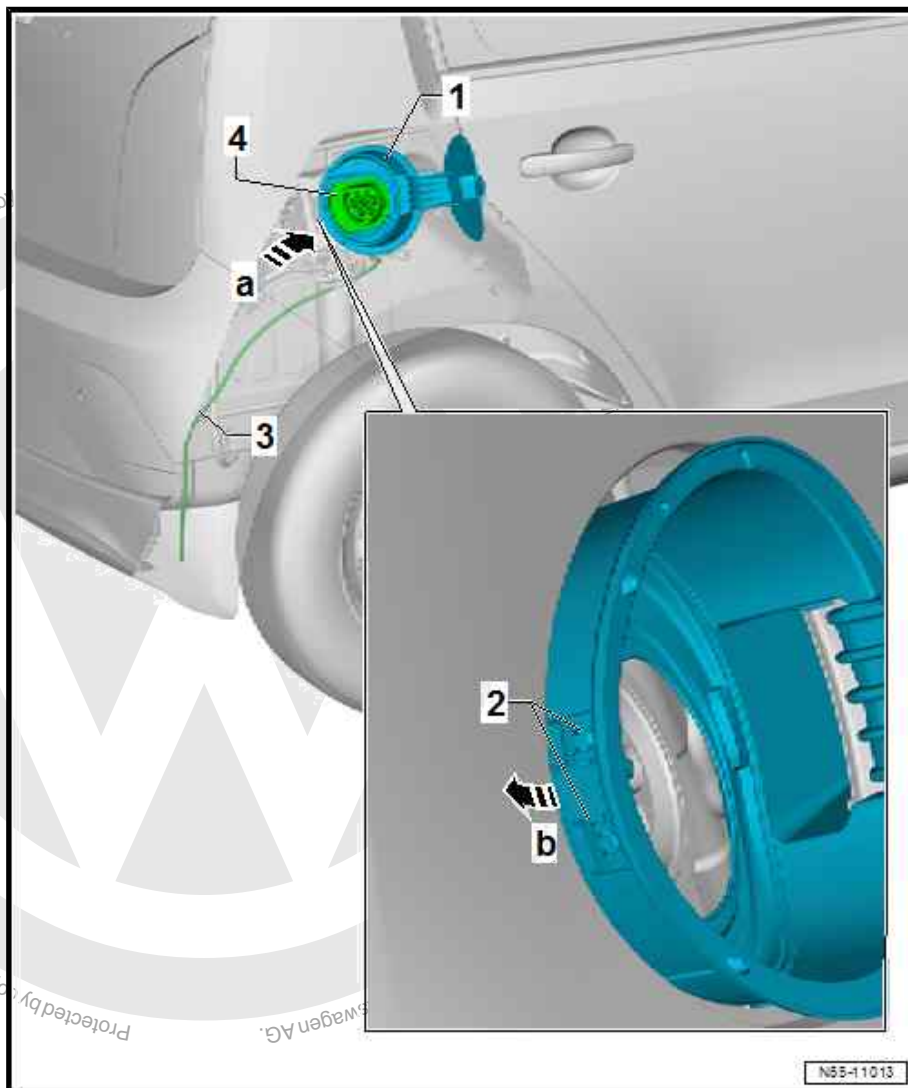


- Remove charging socket cover.



- Guide screwdriver -2- through the marked opening -arrow a-.
- Release locking hook -3- -arrow b-.
- Swing charging socket unit -1- out of side panel -arrow c-.
- Guide water drain hose -4- together with tank flap unit out of side panel.

Installing



- Insert water drain hose -3- through opening in charging socket unit -1- and then pull it through until stop.
- Push water drainage hose -3- into side panel.
- Swing charging socket unit -1- into side panel and pull sleeve over charging socket -4-.
- Then insert charging socket unit into side panel completely. Make sure that locking hook -2- engages correctly in side panel.
- Perform functional check of release components.

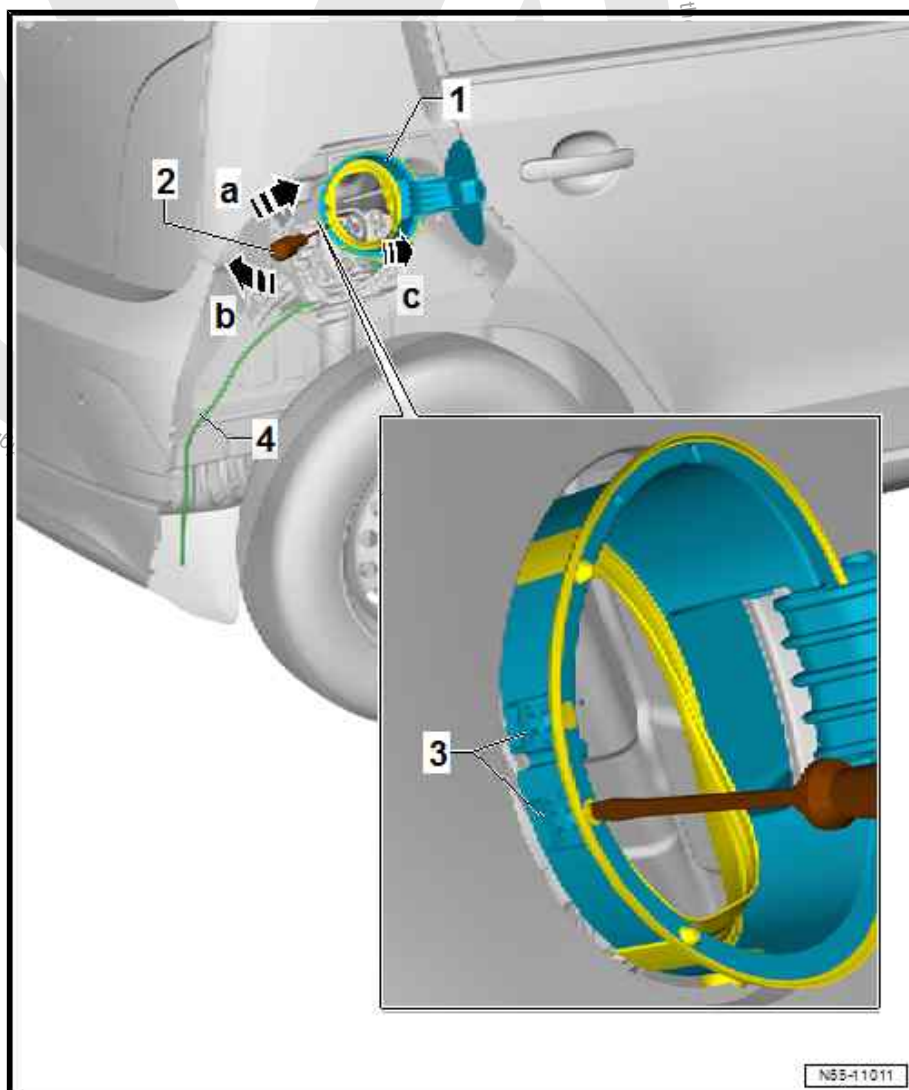
4.2.2 Removing and installing tailgate unit (for DC charging systems)

Removing



Note

- ◆ The charging socket unit may be engaged in side panel with 1 or 2 locking hooks.
- ◆ Accordingly, there are 1 or 2 markings on the tank flap unit.
- ◆ In the illustrations the version with 2 locking hooks is shown.

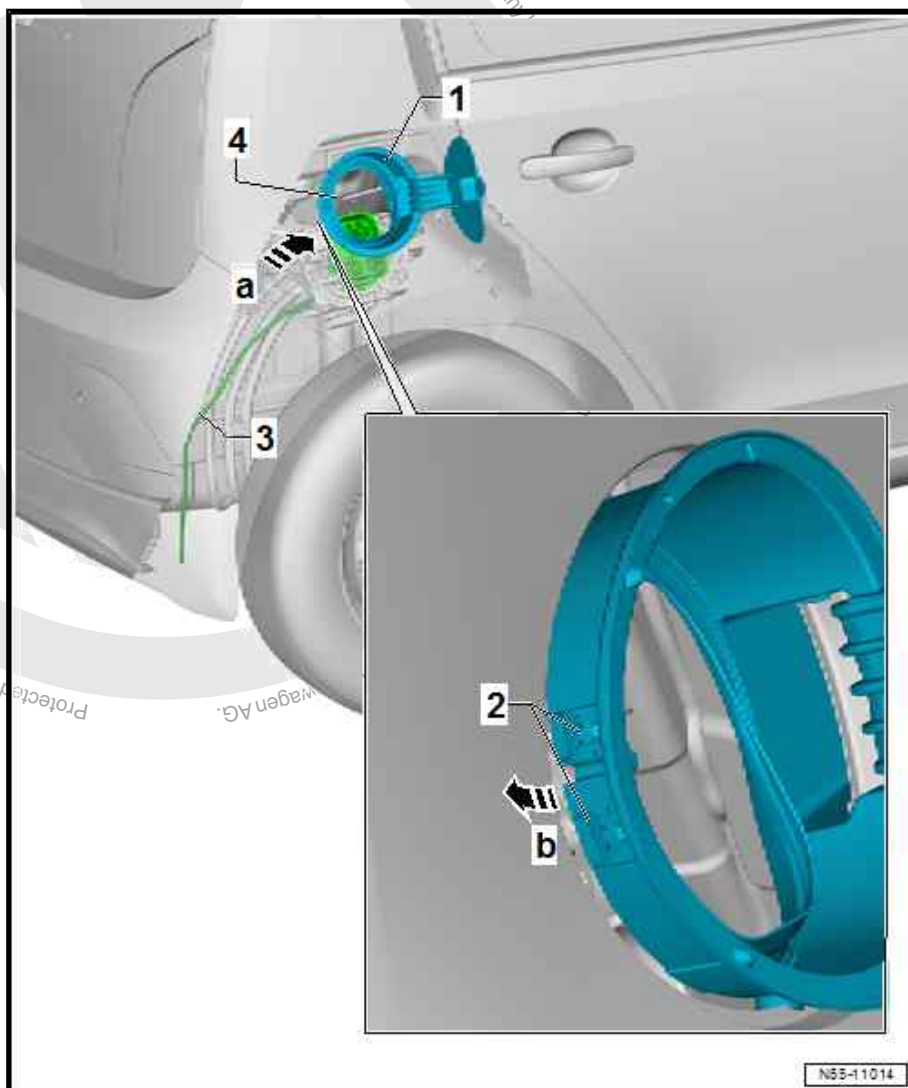


- Detach high-voltage battery charging socket 1 - UX4- , and move it downwards slightly ⇒ Electrical system; Rep. gr. 93 ; Charging socket .
- Guide screwdriver -2- through the marked opening.
- Release locking hook -3- -arrow b-.
- Swing charging socket unit -1- out of side panel -arrow c-.



- Guide water drain hose -4- together with tank flap unit out of side panel.

Installing



- Insert water drain hose -3- through opening in charging socket unit -1- and then pull it through until stop.
- Push water drainage hose -3- into side panel.
- Swing charging socket unit -1- into the side panel.
- Make sure that locking hooks -2- engage correctly in side panel.
- Install high-voltage battery charging socket 1 - UX4- ➔ Electrical system; Rep. gr. 93 ; Charging socket .
- Pull sleeve over charging socket.
- Perform functional check of release components.



57 – Front doors, door components, central locking

1 Door

⇒ ["1.1 Assembly overview - door", page 75](#)

⇒ ["1.2 Removing and installing door", page 77](#)

⇒ ["1.3 Adjusting door", page 81](#)

⇒ ["1.4 Adjusting striker pin", page 84](#)

1.1 Assembly overview - door



Note

- ◆ The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.
- ◆ The hinge bolts must always be renewed after they have been loosened.

1 - Rear door

- ❑ Removing and installing
⇒ [page 77](#)
- ❑ Adjusting ⇒ [page 81](#)

2 - Bolt

- ❑ Always renew, loosening it once to adjust door is allowed.
- ❑ Specified torque: 50 Nm
- ❑ After renewal of A-pillar the specified torque changes ⇒ [page 80](#).
- ❑ Specified torque after renewal of A-pillar: 20 Nm + 90°

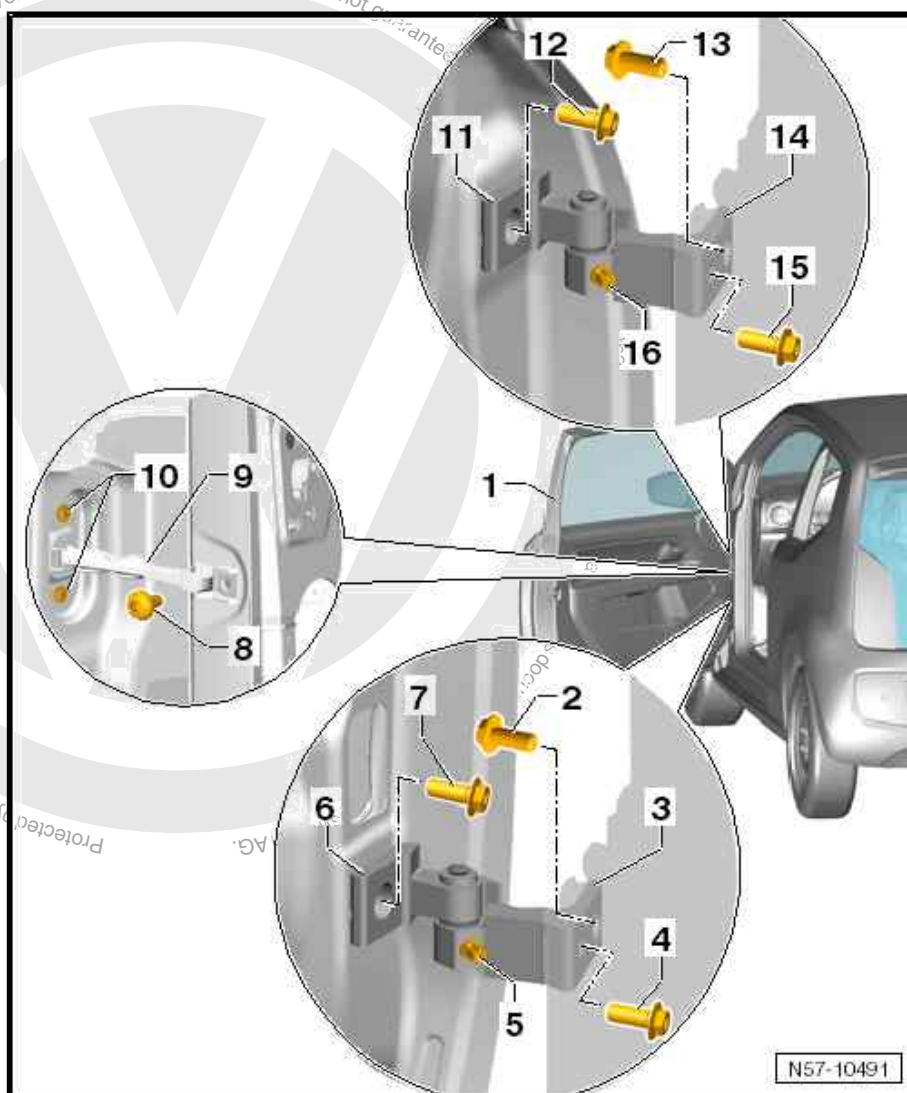
3 - Door hinge

- ❑ The hinge is split.
- ❑ Lower part is secured to hinge upper part with bolt -5-.

4 - Bolt

- ❑ Always renew, loosening it once to adjust door is allowed.
- ❑ Specified torque: 50 Nm
- ❑ Installed from inside vehicle.
- ❑ For removal and installation, A-pillar lower trim must be removed ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Removing and installing A-pillar gap cover .

- ❑ After renewal of A-pillar the specified torque changes ⇒ [page 80](#) .
- ❑ Specified torque after renewal of A-pillar: 20 Nm + 90°





5 - Bolt

- ☐ Connects upper part of hinge -3- to bottom part of hinge -6-
- ☐ Specified torque: 23 Nm

6 - Door hinge

- ☐ The hinge is split.
- ☐ Upper part is secured to hinge lower part with bolt -5-.

7 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm

8 - Bolt

- ☐ Specified torque: 30 Nm

9 - Door retaining strap

- ☐ Removing and installing ⇒ [page 93](#)

10 - Bolt

- ☐ Qty. 2
- ☐ Specified torque: 9 Nm

11 - Door hinge

- ☐ The hinge is split.
- ☐ Upper part is secured to hinge lower part with bolt -16-.

12 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm

13 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm
- ☐ After renewal of A-pillar the specified torque changes ⇒ [page 80](#) .
- ☐ Specified tightening torque after renewal of A-pillar: 20 Nm + 90°

14 - Door hinge

- ☐ The hinge is split.
- ☐ Lower part is secured to hinge upper part with bolt -16-.

15 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm
- ☐ Installed from inside vehicle.
- ☐ To remove and install, the dash panel must be removed ⇒ General body repairs, interior; Rep. gr. 70 ; Dash panel; Removing and installing dash panel
- ☐ After renewal of A-pillar the specified torque changes ⇒ [page 80](#) .
- ☐ Specified tightening torque after renewal of A-pillar: 20 Nm + 90°

16 - Bolt

- ☐ Connects upper part of hinge -3- to bottom part of hinge -6-
- ☐ Specified torque: 23 Nm



1.2 Removing and installing door

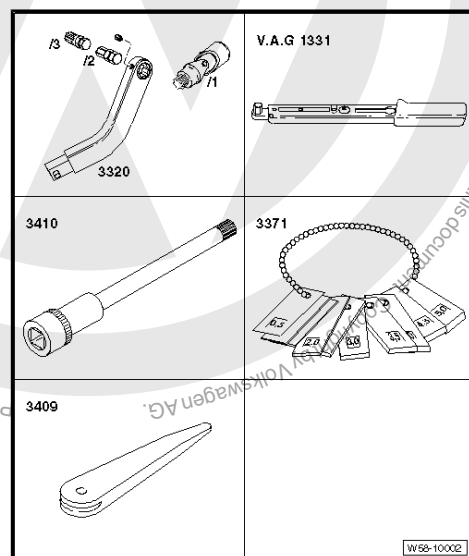


Note

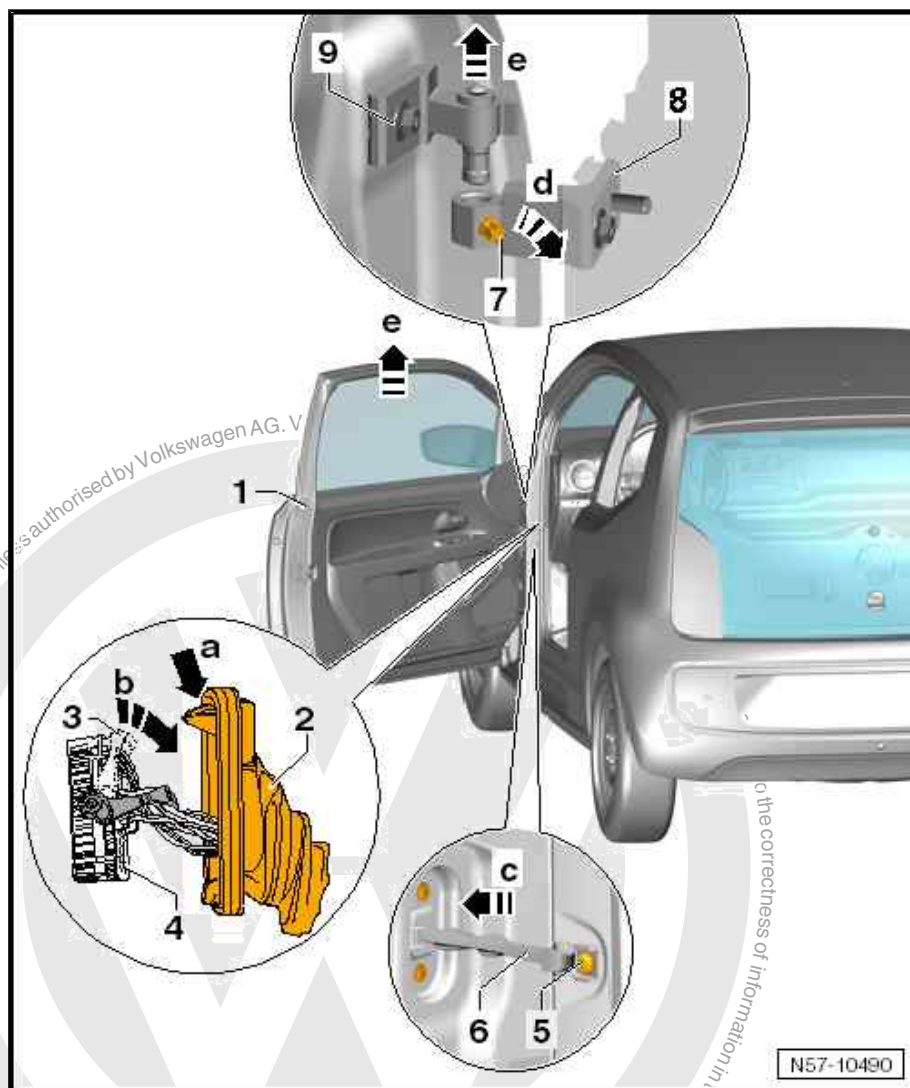
*The removal and installation sequence is for the rear left door.
Removal and installation of the rear right door are similar.*

Special tools and workshop equipment required

- ◆ Key (for door alignment) - 3320-
- ◆ Universal joint for 3320 - 3320/1-
- ◆ Bit for 3320 - 3320/2-
- ◆ Bit for 3320 - 3320/3-
- ◆ Torque wrench - V.A.G 1331-
- ◆ Socket insert - 3410-
- ◆ Setting gauge - 3371-
- ◆ Removal wedge - 3409-



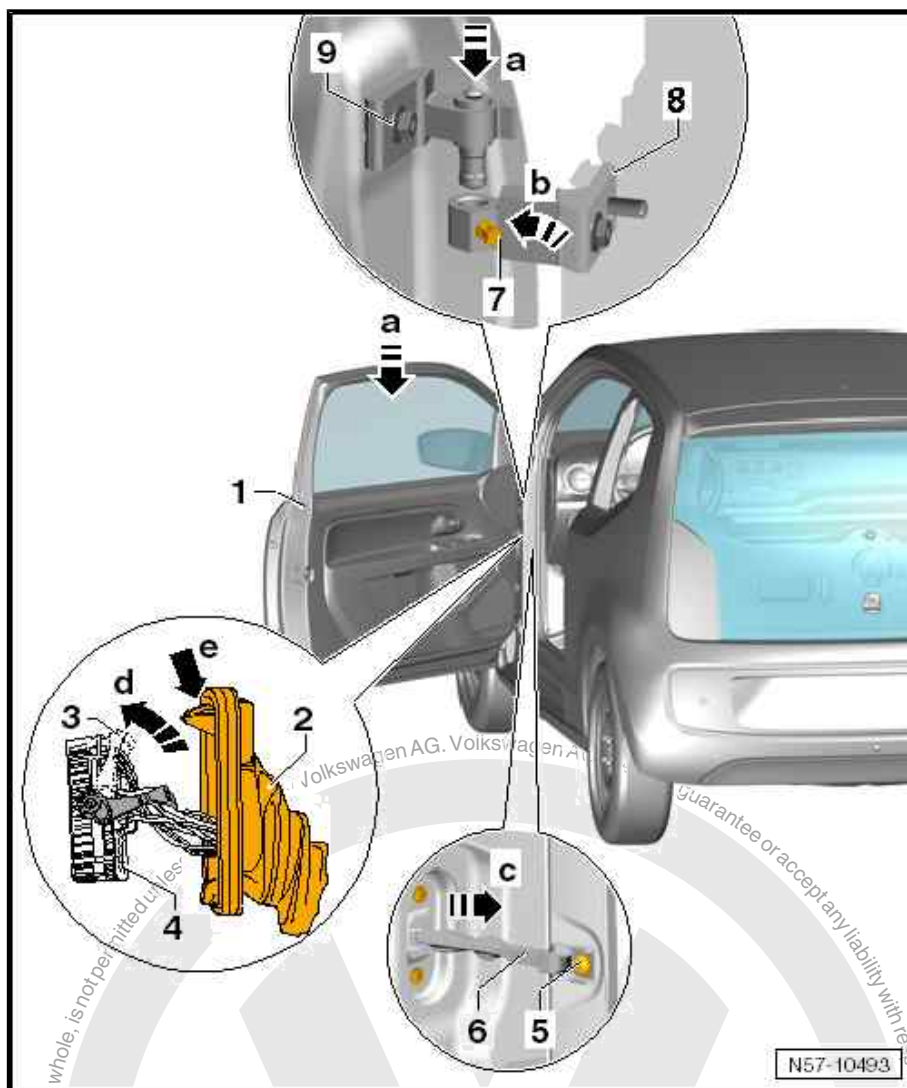
Removing



Perform the following steps:

- Release boot -2- by pressing fastener -arrow a- and pull off A-pillar.
- Swing release lever -3- downwards -arrow b- and disconnect electrical connector -4- from coupling station.
- Undo screws -7- from hinges.
- Unscrew bolt -5- for door arrester -6-.
- Push door retaining strap -6- inwards -arrow c-.
- Lift rear door -1- upwards -arrow e- with hinges -9- out of hinges -8-.

Installing



Perform the following steps:

Installation is carried out in the reverse order of removal. To this end, the following should be observed:



Caution

Prior to installing the front door, the door retaining strap must be folded towards the inside of the vehicle in order to avoid damage to the paintwork.

Specified torque for bolts -5-: 30 Nm

Specified torque for bolts -7-: 23 Nm



Note

After door installation the hinge arms must be flush one above the other.

- Adjust front door -1- ➔ [page 81](#) .
- Observe front door shut lines -1- ➔ Body Repairs; Rep. gr. 00 ; Body panel gaps/shut lines; Body - middle .



1.2.1 Installing after renewing A-pillar



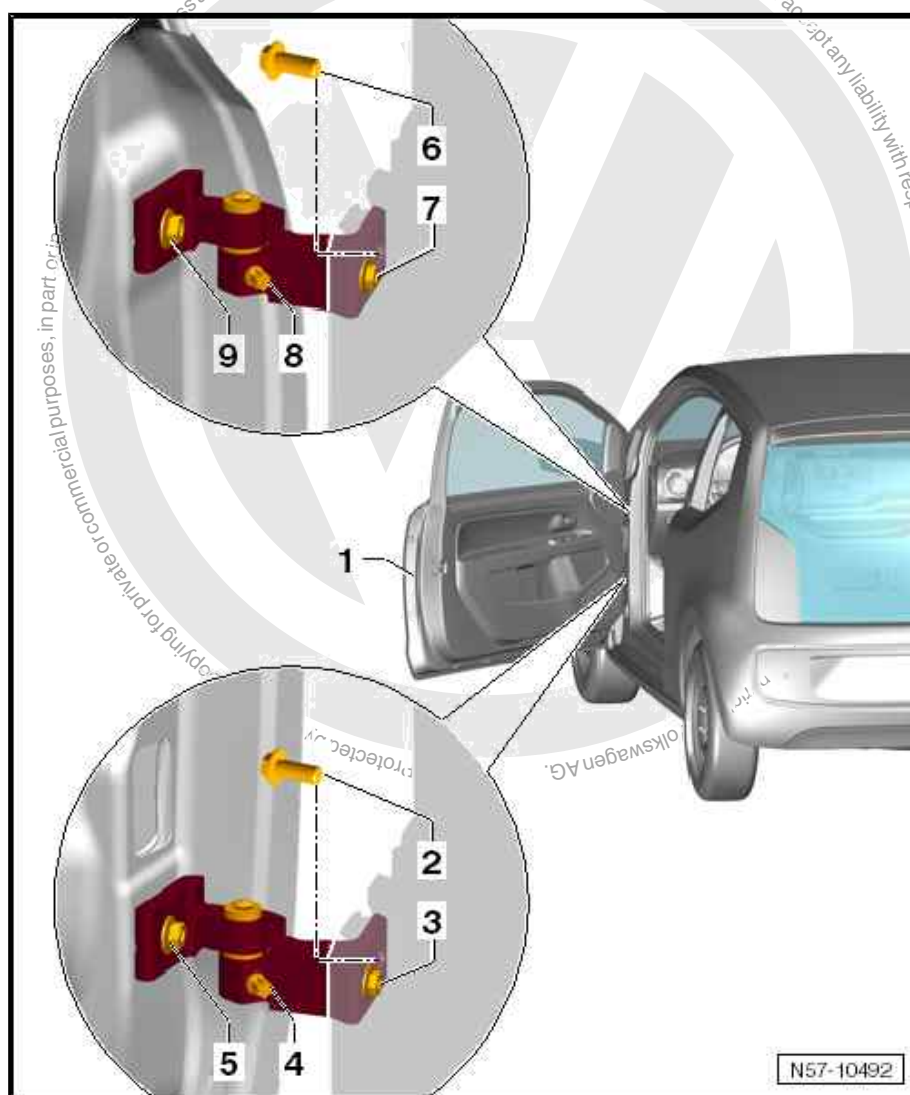
Note

The installation sequence after renewal of A-pillar is for the front left door. Installation of the front right door after renewal of A-pillar is similar.



WARNING

If A-pillar is renewed, it is essential that bolts on A-pillar are tightened as described in the following.



Perform the following steps:

- A-pillar has been renewed.
- Always renew bolts. Loosening it once to adjust door is allowed.



Installation is carried out in the reverse order of removal. To this end, the following should be observed:

- Insert front door -1- and tighten bolts -2-, -3-, -6- and -7-.
Specified torque: 20 Nm + 90°.

Specified torque for bolts -2-: 20 Nm + 90°.

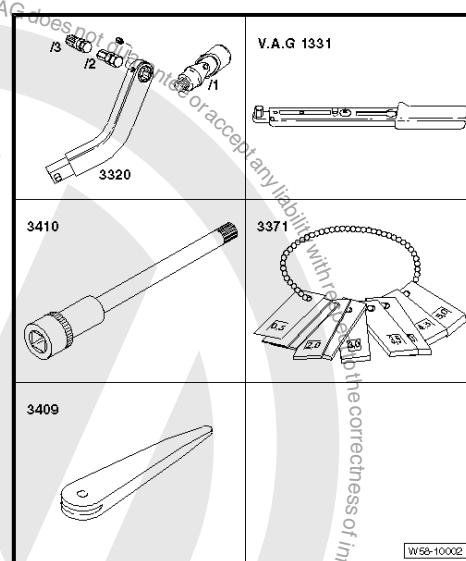
Specified torque for bolts -4-: 23 Nm

- Adjust front door ⇒ [page 81](#) .
- Observe front door gaps ⇒ Body Repairs; Rep. gr. 00 ; Body panel gaps/shut lines; Body - middle .

1.3 Adjusting door

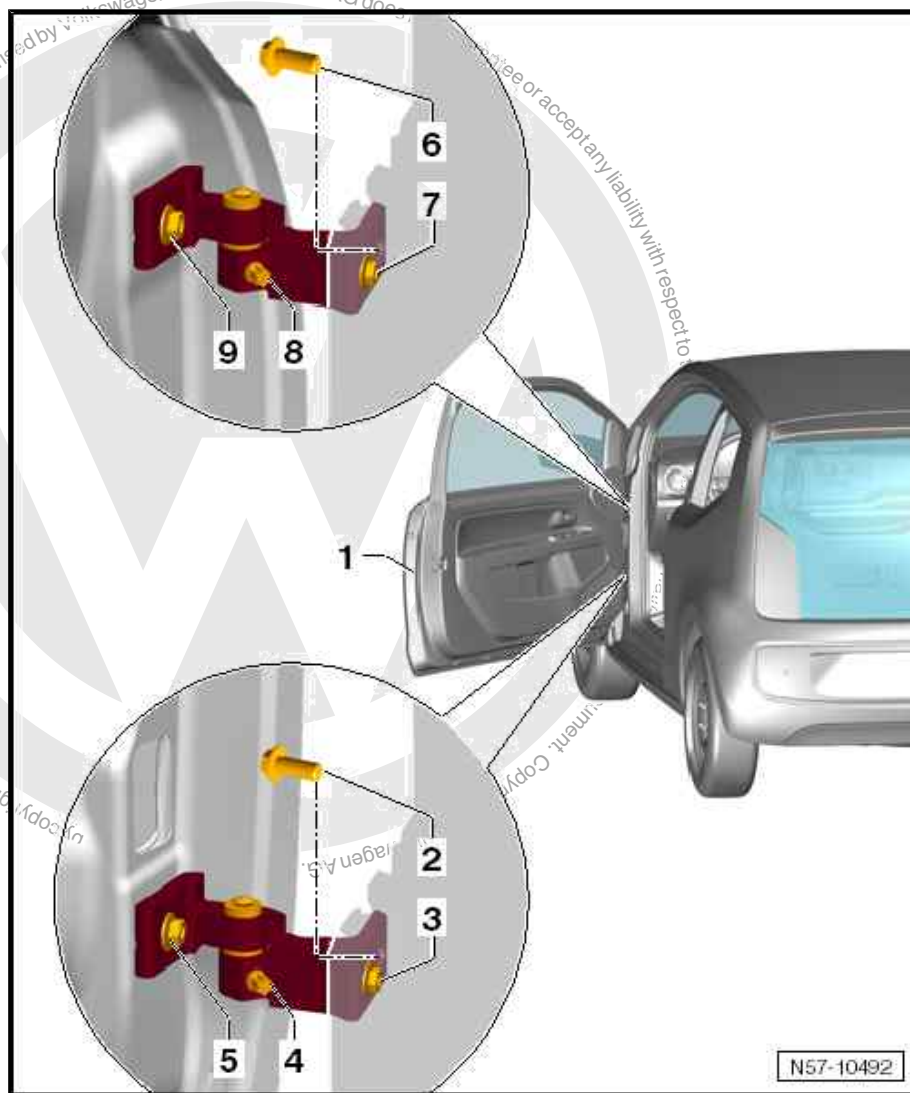
Special tools and workshop equipment required

- ◆ Key (for door alignment) - 3320-
- ◆ Universal joint for 3320 - 3320/1-
- ◆ Bit for 3320 - 3320/2-
- ◆ Bit for 3320 - 3320/3-
- ◆ Torque wrench - V.A.G 1331-
- ◆ Socket insert - 3410-
- ◆ Setting gauge - 3371-
- ◆ Removal wedge - 3409-



Note

- ◆ Only the adjustment for the left front door is described. The adjustment of the right front door is similar.
- ◆ Vehicle must be standing on its wheels when front door adjustment is performed.
- ◆ The front door is correctly adjusted when all shut lines are even when closed, it is not protruding too far inwards or outwards, and when the contours are flush with each other.
- ◆ For checking gaps/shut lines refer to ⇒ Body Repairs; Rep. gr. 00 ; Body panel gaps/shut lines; Body - middle .
- ◆ After installing or alignment, carry out corrosion protection measures on hinges and screws/bolts.



Perform the following steps:

Adjusting shut lines

To be able to adjust shut lines correctly, bolts -2-, -3-, -6- and -7- in A-pillar must be loosened.

- For bolt -7-, dash panel must be removed ⇒ General body repairs, interior; Rep. gr. 70 ; Dash panel; Removing and installing dash panel .
- For loosening bolt -3-, lower A-pillar trim must be removed ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Removing and installing A-pillar gap cover .

Adjusting for flush fitting

In order to adjust flushness correctly, bolts -5- and -9- must be loosened.

Use door alignment tool - 3320- with appropriate bit for this.

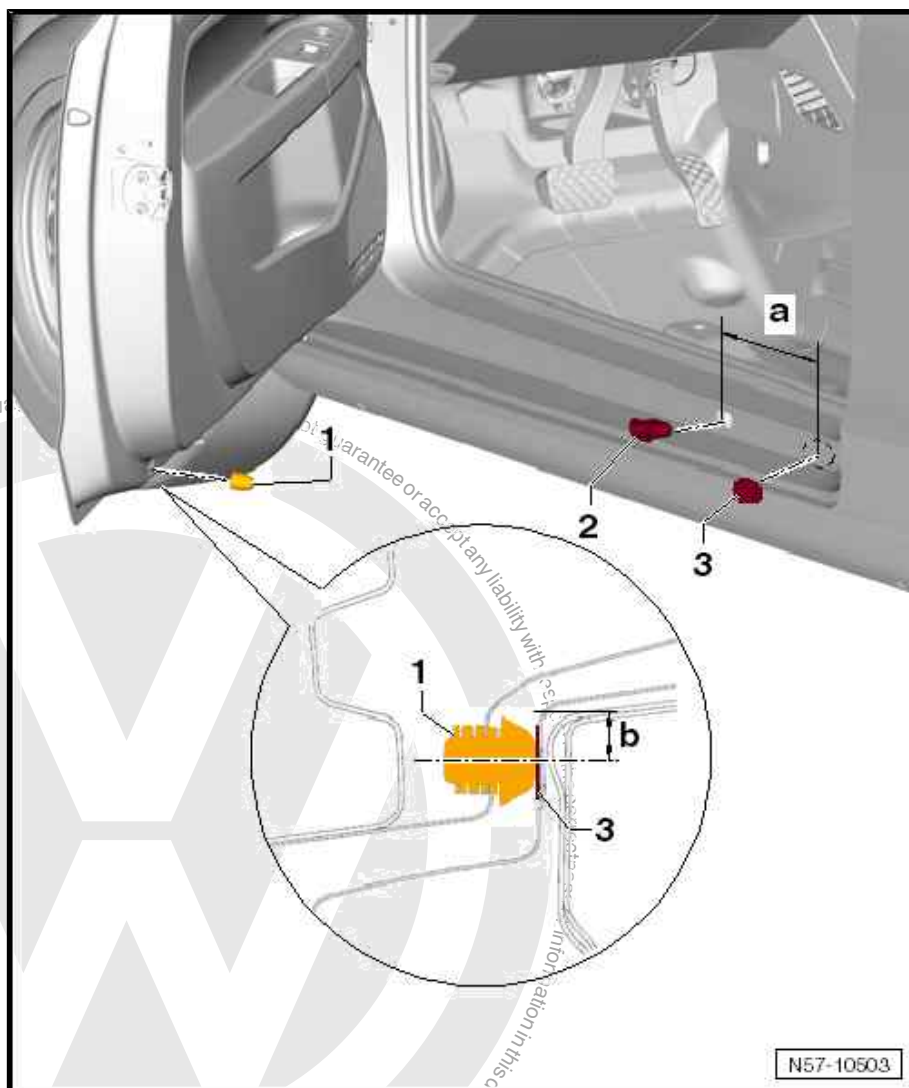


Note

Other measures, such as raising the front door, will prove pointless. Subsequent pressure from above will cause the front door to sack again.

Adjust striker pin ➤ [page 84](#) .

Adjusting adjusting buffer



Adjusting adjusting buffer

- Adjustment buffer -1- is adjusted by turning.

Protective sheet

- Check protective film -3- for damage and renew if necessary.
- The protective film -3- must be cut out of film sheet -AKL 448 300 04- .

Dimensions:

- ◆ Diameter 22 mm
- ◆ Dimension -a- from edge of grommet to centre of protective film is 165 mm.
- ◆ Dimension -b- from upper edge of side member to centre of protective film is 14 mm.

Grommet

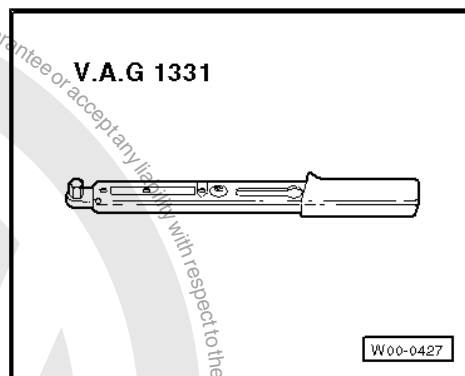
- Check grommet -2- for damage and renew if necessary.



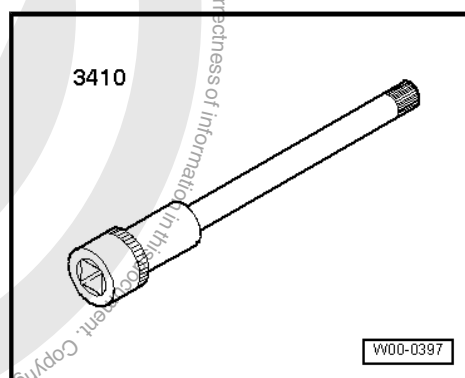
1.4 Adjusting striker pin

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331

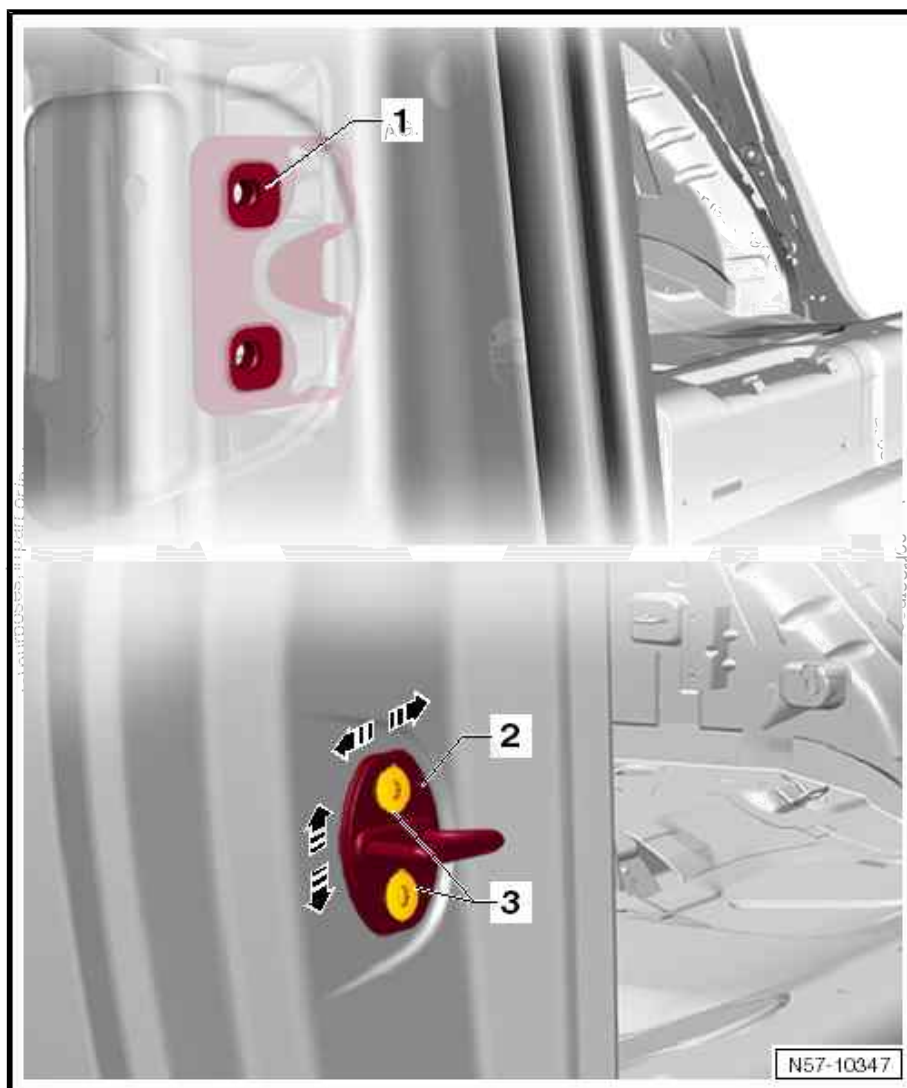


- ◆ Socket insert - 3410



Note

- ◆ Threaded plate -1- of striker pin is secured in pillar using a method which differs from the previous method.
- ◆ Bow outside of threaded plate is welded firmly to pillar. Webs to threaded plate are plastically deformable.
- ◆ Greater force has to be applied so that position of striker pin -2- can be adjusted when bolts -3- are loosened.



i Note

- ◆ Only the adjustment for the left front door is described. The adjustment of the right front door is similar.
- ◆ The front door must lock fully when closing without any additional force being required and must not have any play.
- ◆ The front door must not be pushed up or down as a result of the striker pin adjustment.

By adjusting the striker pin the alignment of the front door with the side panel or the rear door can be adjusted -arrows a- and -arrows b- (wind noise).

Perform the following steps:

- Loosen striker pin -1- by loosening bolts -2- in B-pillar.

i Note

Greater force has to be applied so that position of striker pin -1- can be adjusted when bolts -2- are loosened.

- Tighten bolts -2- of striker pin -1-.

Specified torque for bolts -2-: 20 Nm



2 Door components

⇒ [“2.1 Assembly overview - components”, page 86](#)

⇒ [“2.2 Assembly overview - door handle and door lock”, page 90](#)

⇒ [“2.3 Removing and installing components”, page 91](#)

⇒ [“2.4 Removing and installing door handle”, page 97](#)

⇒ [“2.5 Removing and installing door lock”, page 109](#)

⇒ [“2.6 Removing and installing door seal”, page 112](#)

2.1 Assembly overview - components

⇒ [“2.1.1 Assembly overview - components”, page 86](#)

⇒ [“2.1.2 Assembly overview - fabric strip”, page 88](#)

⇒ [“2.1.3 Assembly overview - adhesive pad”, page 89](#)

2.1.1 Assembly overview - components



Note

The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.



1 - Rear door

- ☐ Removing and installing
⇒ [page 77](#)
- ☐ Adjusting ⇒ [page 81](#)

2 - Hinges

3 - Door retaining strap

- ☐ Removing and installing
⇒ [page 93](#)

4 - Loudspeakers

- ☐ Riveted into door.

5 - Cover

- ☐ Removing and installing
⇒ [page 91](#)

6 - Door lock

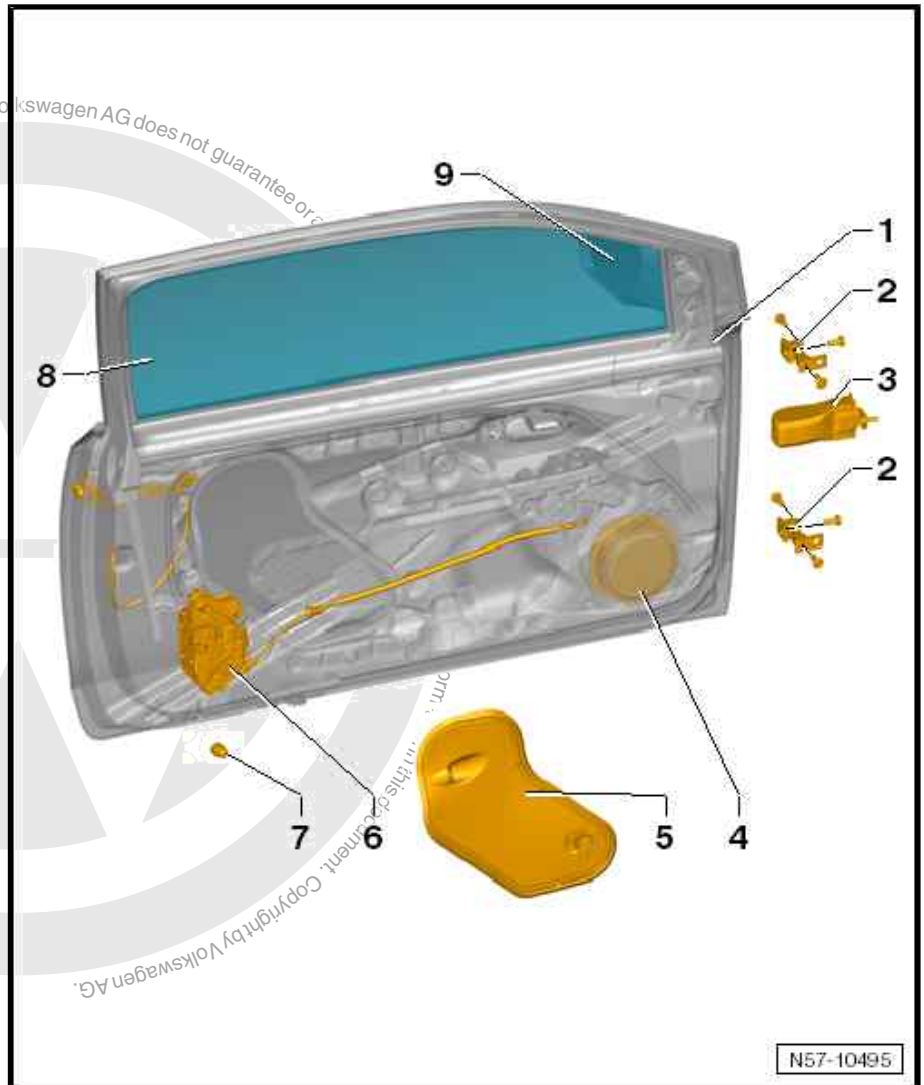
- ☐ Removing and installing
⇒ [page 109](#)

7 - Buffer stop

8 - Door window

- ☐ Removing and installing
⇒ [page 254](#)

9 - Exterior mirror





2.1.2 Assembly overview - fabric strip



Note

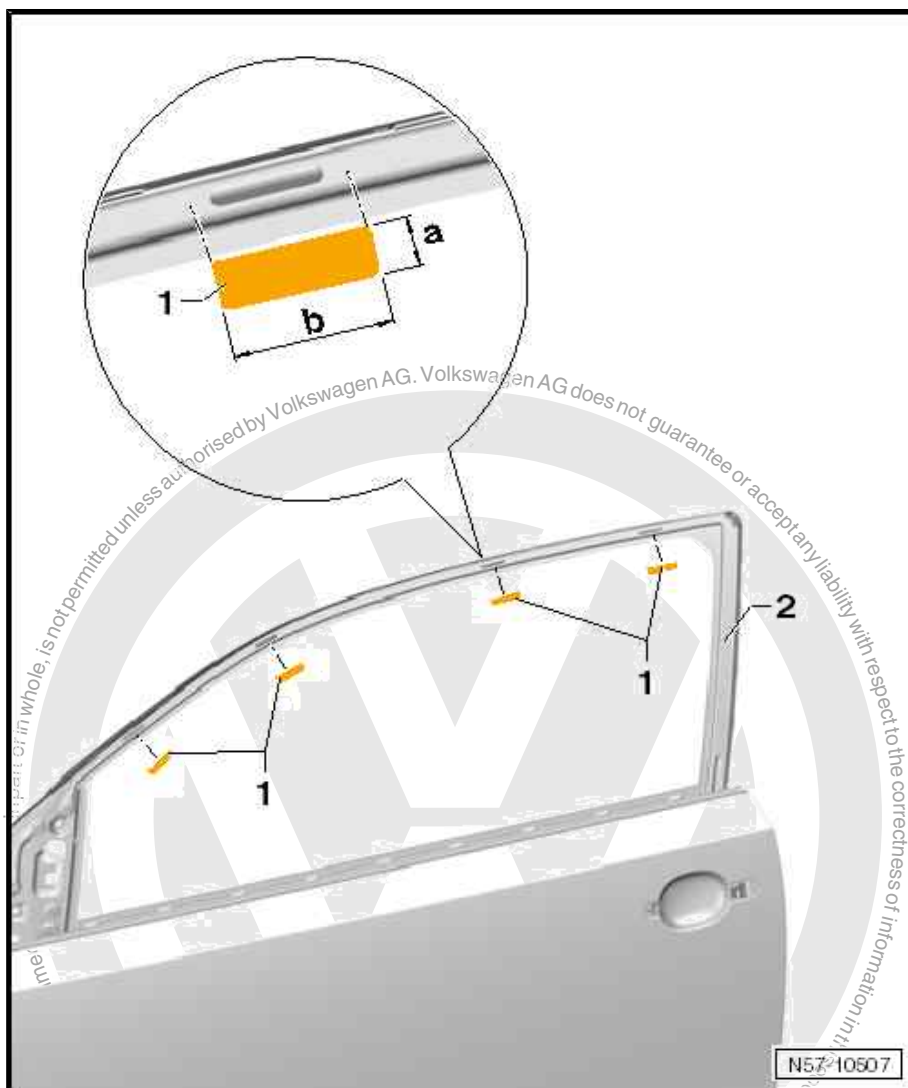
The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.

1 - Fabric tape

- ☐ Cut off fabric strip from reel and cut out the required dimensions.
- ☐ Dimensions: Dimension -a- 15 mm, Dimension -b- 60 mm.
- ☐ Qty. 4 for 2-door models.
- ☐ Qty. 3 for 4-door models.
- ☐ Self-adhesive

2 - Door frame

- ☐ Elongated holes must be covered completely.





2.1.3 Assembly overview - adhesive pad



Note

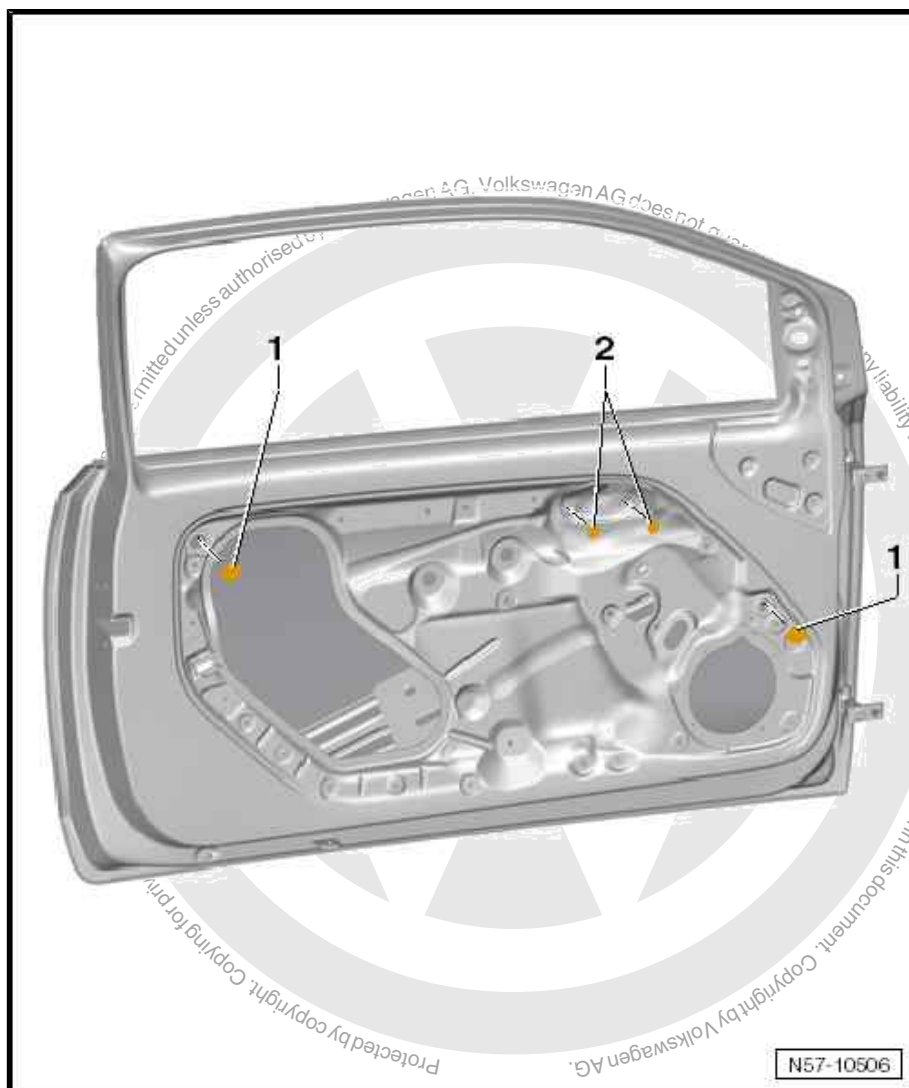
The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.

1 - Adhesive pad

- ☐ Qty. 2 per front door
- ☐ If necessary, manufacture using commercially available adhesive fabric strip.
- ☐ Dimensions: front adhesive pad 30 mm Ø, rear adhesive pad 40 mm Ø

2 - Adhesive pad

- ☐ Qty. 2 per front door
- ☐ If necessary, manufacture using commercially available adhesive fabric strip.
- ☐ Dimension: 19 mm Ø





2.2 Assembly overview - door handle and door lock



Note

The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.

1 - Door lock

- ❑ Removing and installing
⇒ [page 109](#)

2 - Bolt

- ❑ Specified torque: 3 Nm
- ❑ For lock cylinder.

3 - Mounting bracket

- ❑ Removing and installing
⇒ [page 106](#)

4 - Lock cylinder

- ❑ Removing and installing
⇒ [page 103](#)
- ❑ Not always installed in front passenger door, depending on the extras in vehicle

5 - Carrier

6 - Cap

- ❑ Removing and installing with lock cylinder
⇒ [page 100](#)
- ❑ Removing and installing without lock cylinder
⇒ [page 100](#)

7 - Door handle

- ❑ Removing and installing
⇒ [page 97](#)

8 - Bolt

- ❑ Specified torque: 1.5 Nm
- ❑ Bearing plate is loosened from door when this bolt is loosened

9 - Bowden cable

- ❑ From door lock -1- to mounting bracket -3-

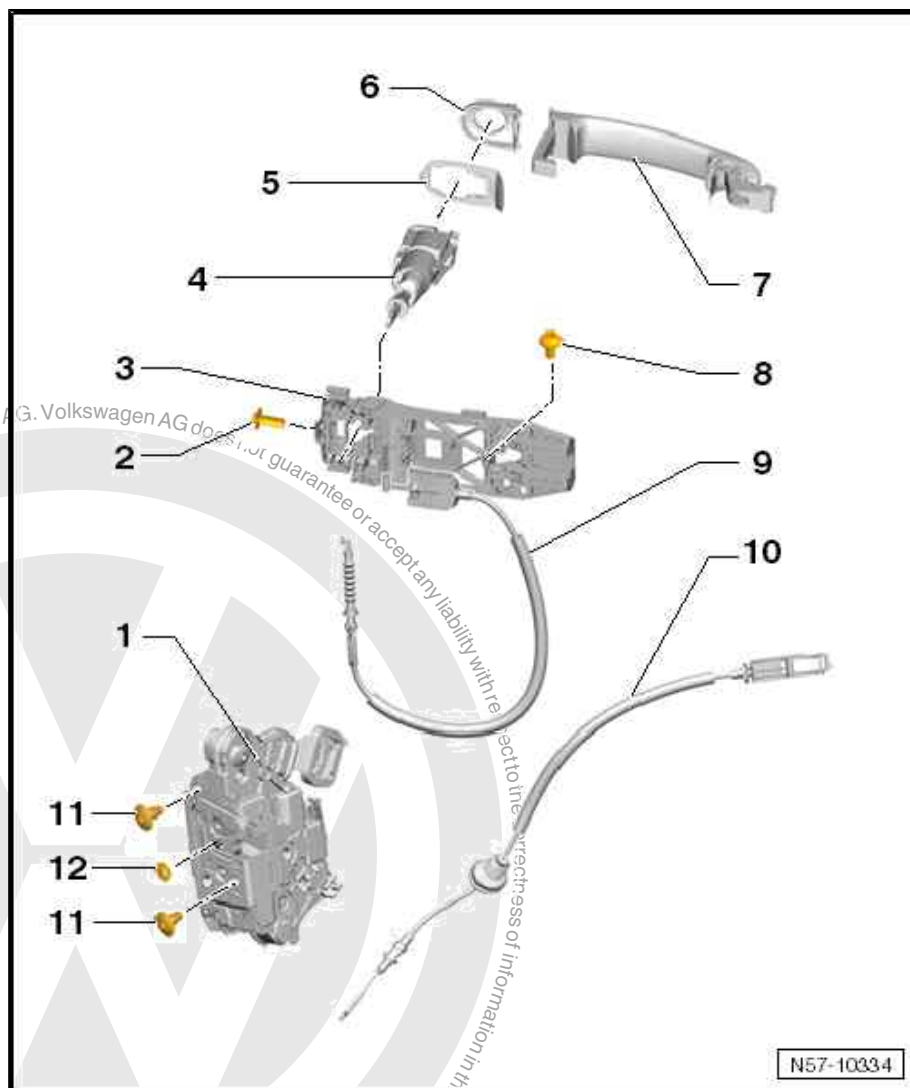
10 - Bowden cable

- ❑ From inner door handle to door lock -1-
- ❑ With grommet to passage on cover.

11 - Bolt

- ❑ Qty. 2
- ❑ Specified torque: 18 Nm

12 - Cap





2.3 Removing and installing components

⇒ [“2.3.1 Removing and installing door cover”, page 91](#)

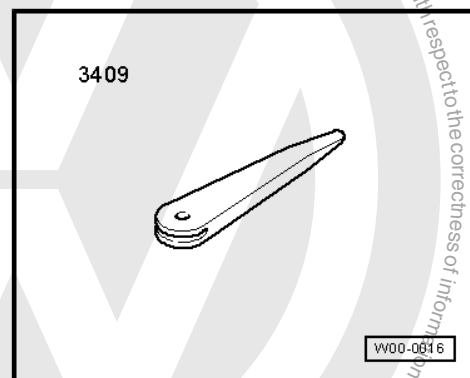
⇒ [“2.3.2 Removing and installing door retaining strap”, page 93](#)

⇒ [“2.3.3 Removing and installing striker pin”, page 96](#)

2.3.1 Removing and installing door cover

Special tools and workshop equipment required

- ◆ Removal wedge - 3409-



Note

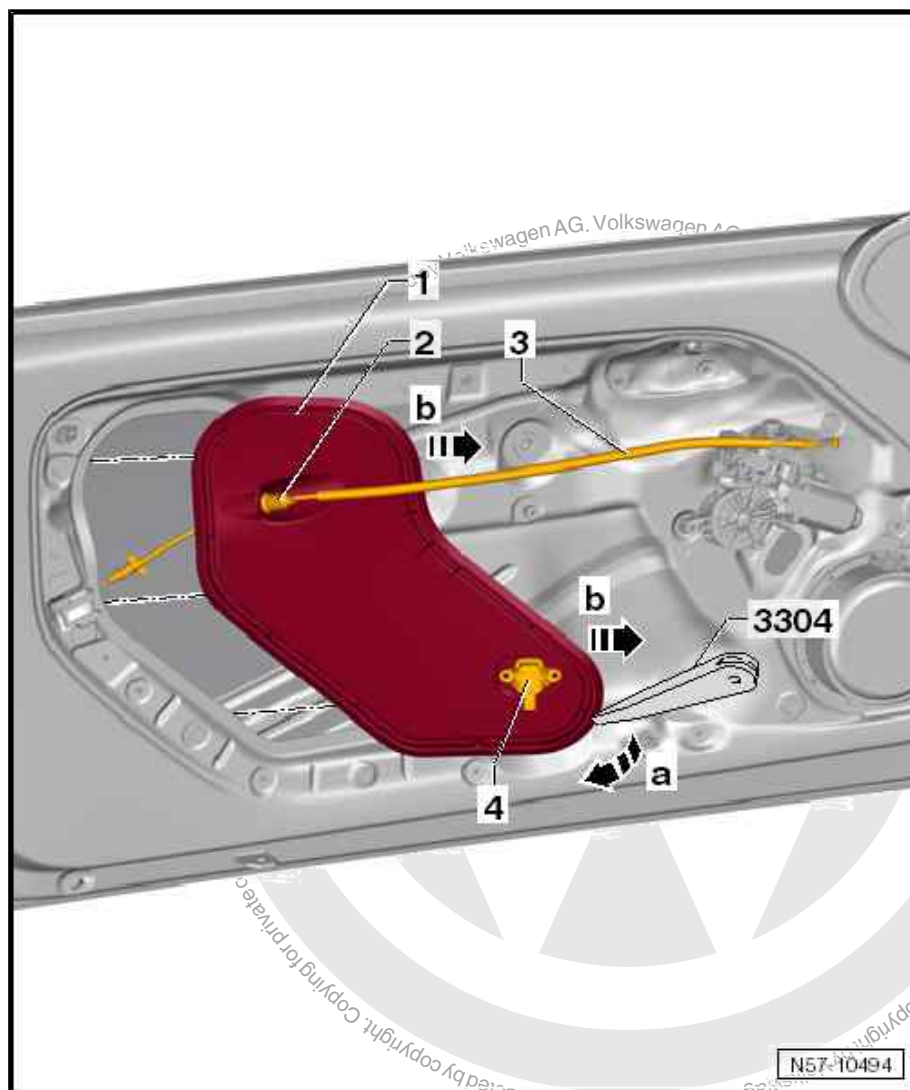
Removal and installation are described only for the left cover. The procedure for the right-hand side is basically the same.

Removing



Note

There are no special instructions for disconnecting the connector from pressure sensor -4-.



Perform the following steps:

- If window crank is fitted, remove it ⇒ [page 270](#) .
- Remove front door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- If necessary, disconnect connector from pressure sensor -4-.
- Lift lower end of cover -1- -arrow a-.
- Pull cover -1- frontwards out of door -arrows b-.



Note

If required for subsequent work, pull cable -3- with grommet -2- out of cover -1-. Separate connector at grommet (if there is one).

Installing

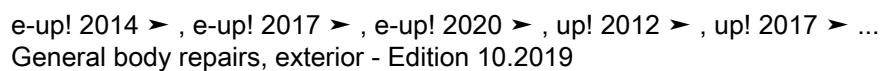


- Fit cable -3- together with grommet -2- into cover -1-.
- Attach grommet -2- to cover -1-.
- Insert cover -1- into door -2- -arrows a-.
- Engage cover -1- around circumference -arrows b-.



Check proper seating of cover by pressing with fingers around circumference.

Special tools and workshop equipment required



V.A.G 1331



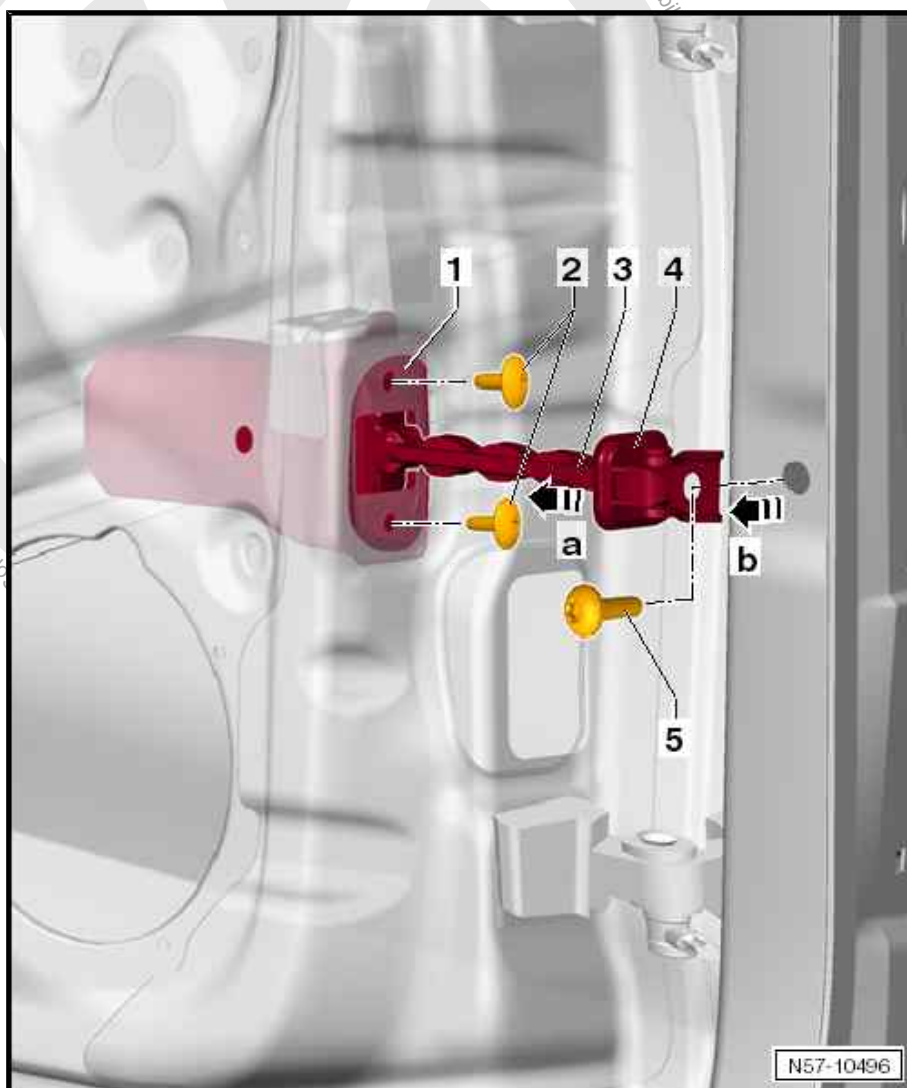
W00-0427



Note

Removal and installation are described only for the left door arrester. The procedure for the right-hand side is basically the same.

Removing



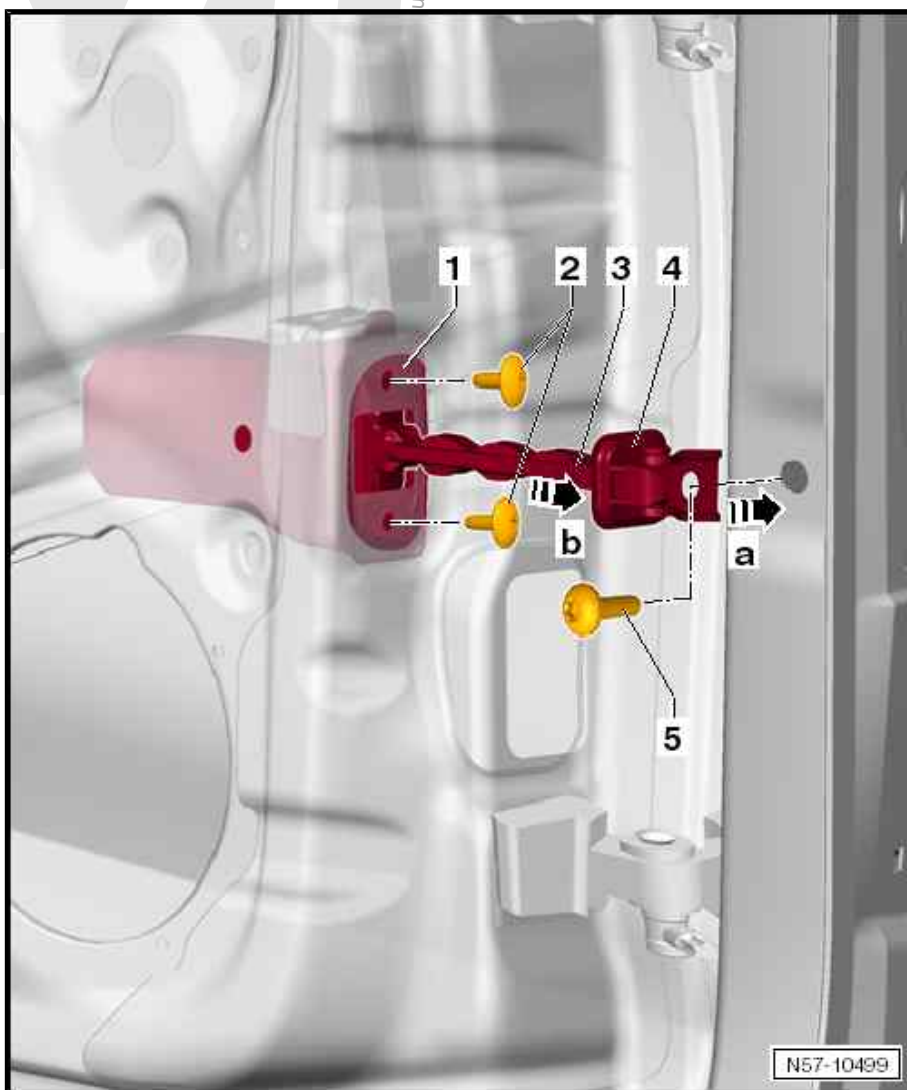
N57-10496



Perform the following steps:

- If window crank is fitted, remove it ➤ [page 270](#).
- Remove front door trim ➤ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Remove self-adhesive cover or front loudspeaker ➤ Communication; Rep. gr. 91 ; Sound system; Overview of fitting locations - sound system .
- Unscrew bolt -5- in A-pillar.
- Unscrew bolts -2- and remove door retaining strap -1- through the opening of the loudspeaker -arrow a-.

Installing



Perform the following steps:

Installation is carried out in the reverse order of removal.

Specified torque for bolts -2-: 9 Nm.

Specified torque for bolts -5-: 30 Nm

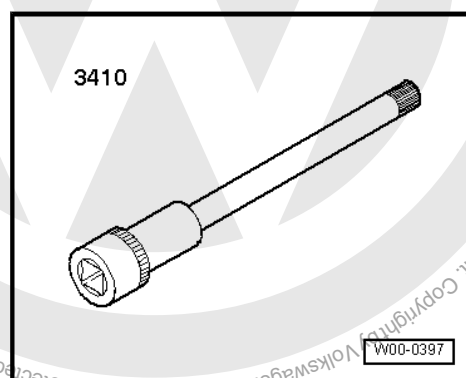
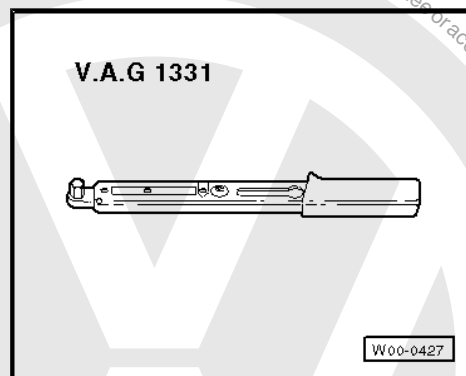


2.3.3 Removing and installing striker pin

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-

- ◆ Socket insert - 3410-



Note

Removal and installation are described only for the right door striker pin. The procedure for the right-hand side is basically the same.

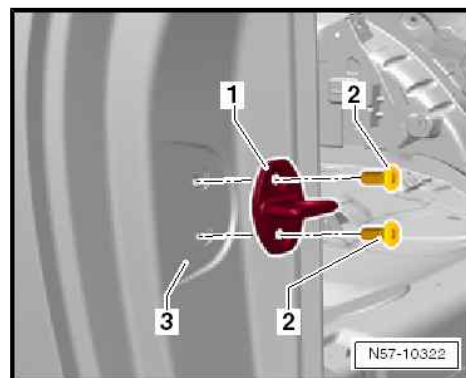
Removing

Perform the following steps:

- Unscrew bolts -2- and remove striker pin -1-.

Installing

Perform the following steps:





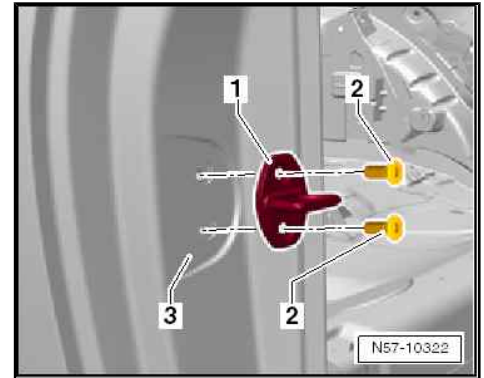
- Position striker pin -1- on B-pillar -3- and tighten bolts -2-.



WARNING

A bent striker pin (square U-shape) must be installed.

The U-shape of the striker pin points towards the inside of vehicle.



Specified torque for bolts -2-: 20 Nm

- Adjusting striker pin ➔ [page 84](#)

2.4 Removing and installing door handle

➔ [“2.4.1 Removing and installing door handle”, page 97](#)

➔ [“2.4.2 Removing and installing lock cylinder cover cap”, page 100](#)

➔ [“2.4.3 Removing and installing cover cap \(without lock cylinder\)”, page 100](#)

➔ [“2.4.4 Removing and installing lock cylinder”, page 103](#)

➔ [“2.4.5 Removing and installing mounting bracket”, page 106](#)

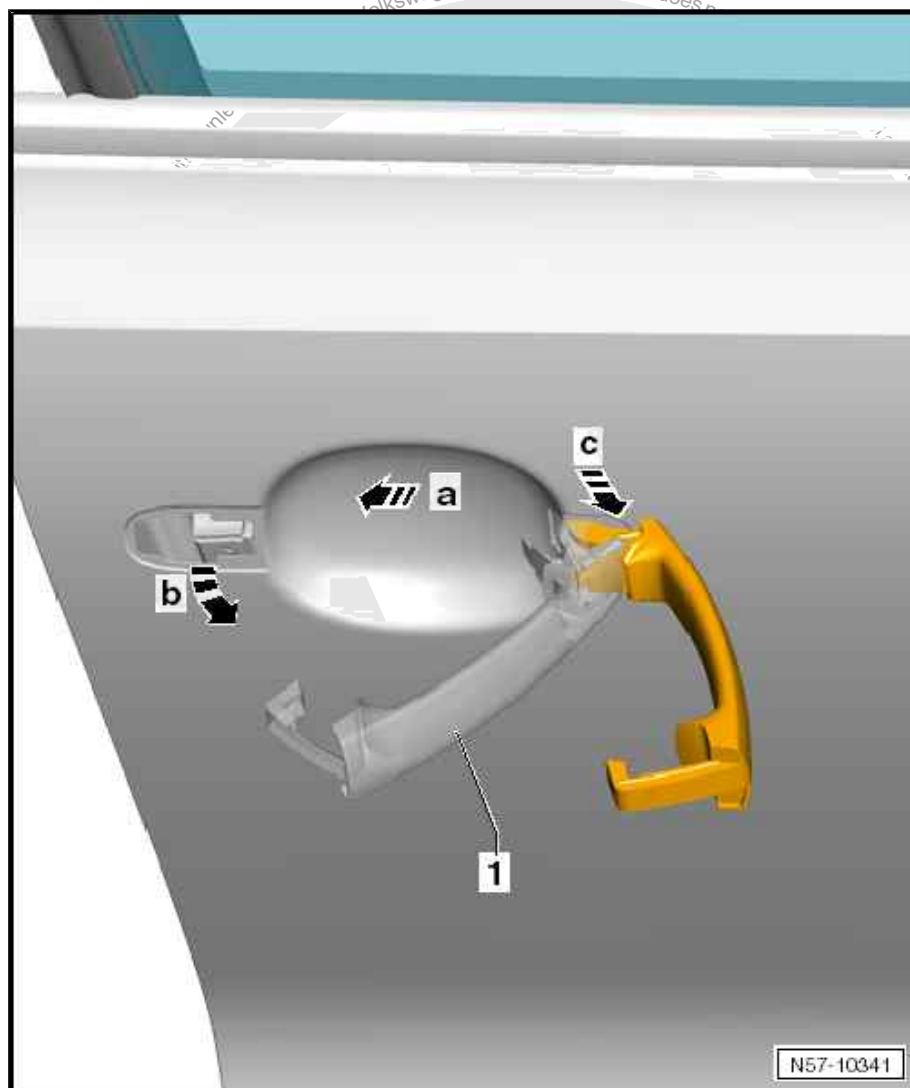
2.4.1 Removing and installing door handle



Note

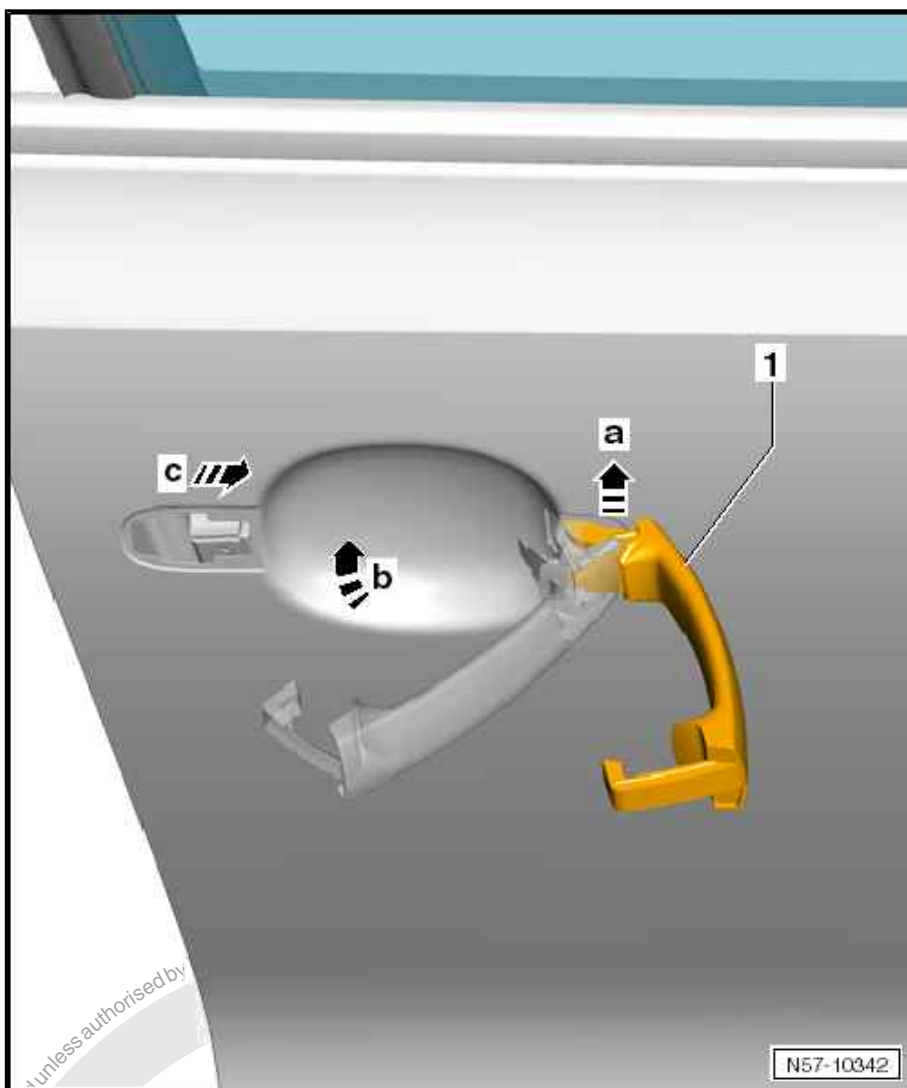
Removal and installation are described only for the right door handle. The left side is similar.

Removing



- Remove lock cylinder cover cap ➤ [page 100](#) and lock cylinder ➤ [page 103](#) on driver side.
- Remove cover cap on front passenger side ➤ [page 100](#) .
- Pull out door handle -1- backwards slightly -arrow a- from support for mounting bracket.
- Swivel door handle in direction of -arrow b-.
- Remove door handle from mounting bracket -2-, keeping door handle at right angles to mounting bracket -arrow c-.

Installing



- Insert door handle -1- at right angle -arrow a- in mounting bracket.
- Swing door handle -1- into door -arrow b-.
- Slide door handle forcibly forwards -arrow c- into support for mounting bracket.

Install lock cylinder ➔ [page 103](#) or install cover cap
➔ [page 100](#) .

- It is essential that a functional check is then performed with the door open.



2.4.2 Removing and installing lock cylinder cover cap

Removing



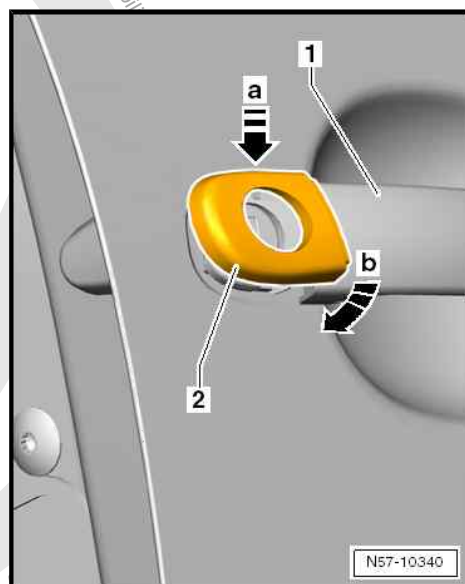
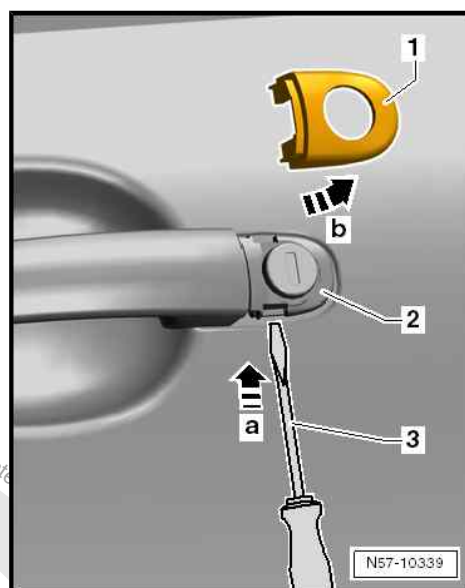
Note

- ◆ *When removing lock cylinder cover cap, the screwdriver should not be turned and the screwdriver should not be used as a lever.*
- ◆ *Lock cylinder and cover cap are only installed on the driver side.*
- Pull door handle away from door.
- Push a small screwdriver -3- slightly -arrow a- into opening on underside of lock cylinder cover cap.
- Pull lock cylinder housing cover cap -1-, together with small screwdriver, off door lightly from underside -arrow b-.
- Push cap upwards off lock cylinder.

Installing

Perform the following steps:

- Pull door handle -1- away from door.
- Push lock cylinder cover cap -2- at a slight angle from above -arrow a- onto lock cylinder.
- Push lock cylinder cover cap -2- onto door -arrow b- until cover cap engages in lock cylinder.

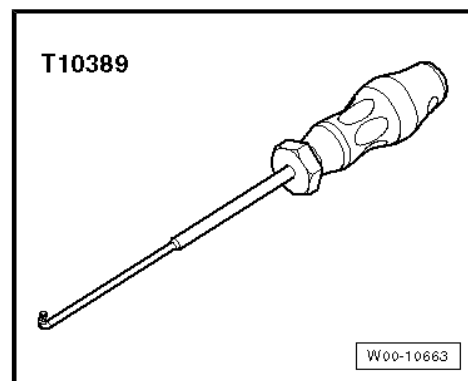


2.4.3 Removing and installing cover cap (without lock cylinder)

Special tools and workshop equipment required



◆ Assembly tool - T10389-

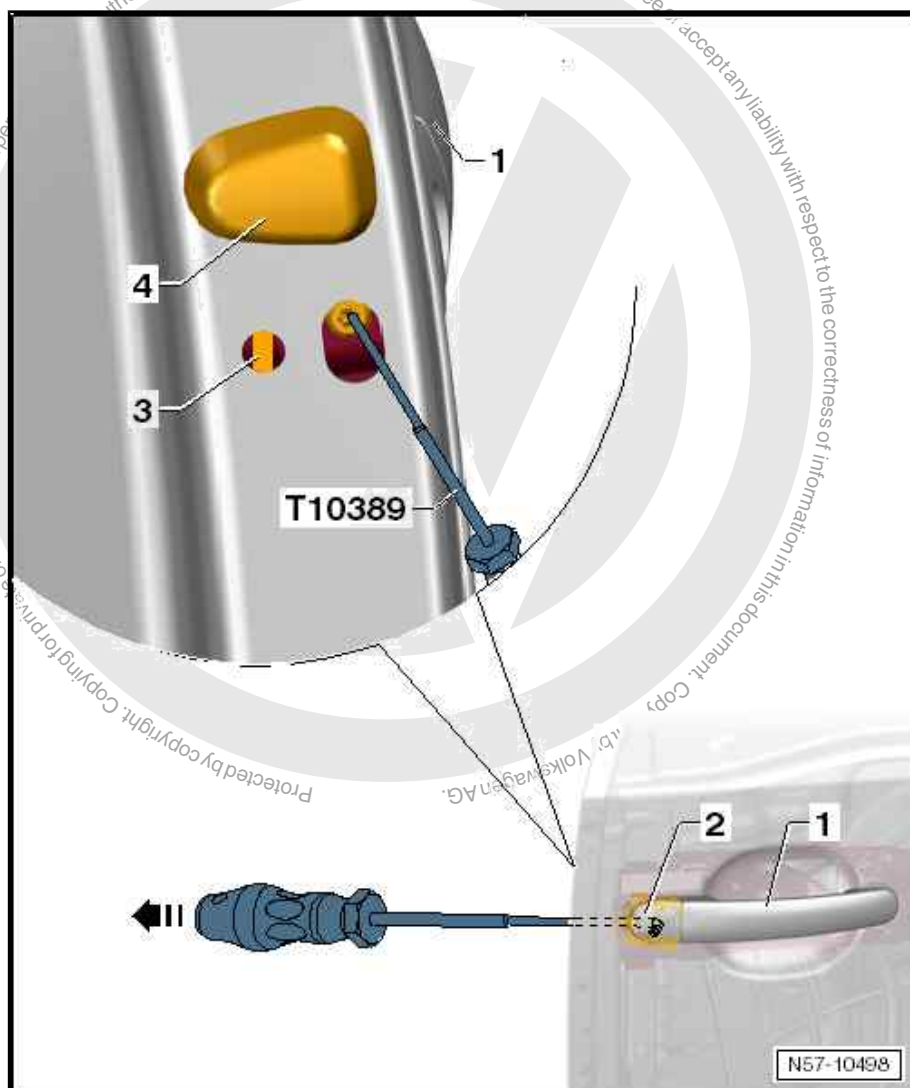


Removing



Note

Forms other than the cover shown here -4- may also be installed.



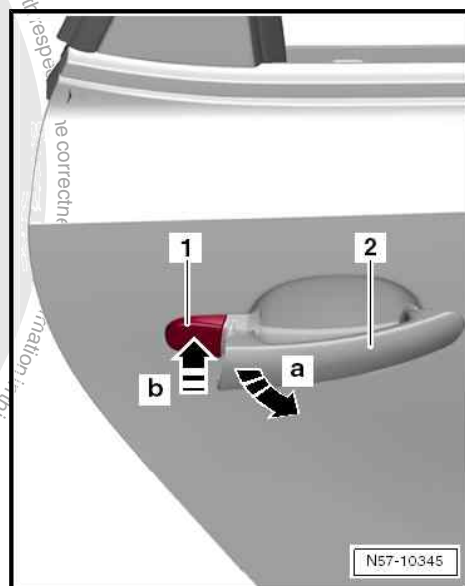
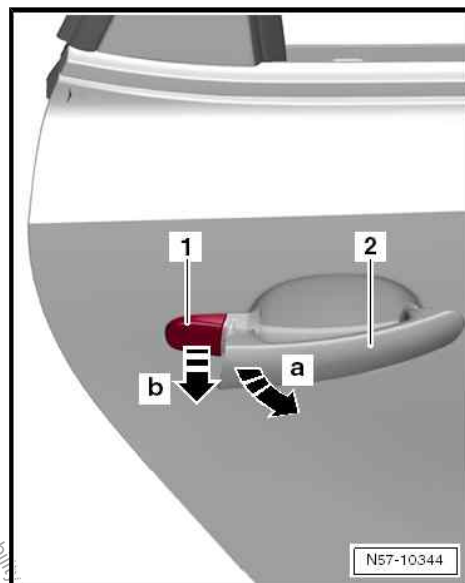
- Remove plugs -4-.



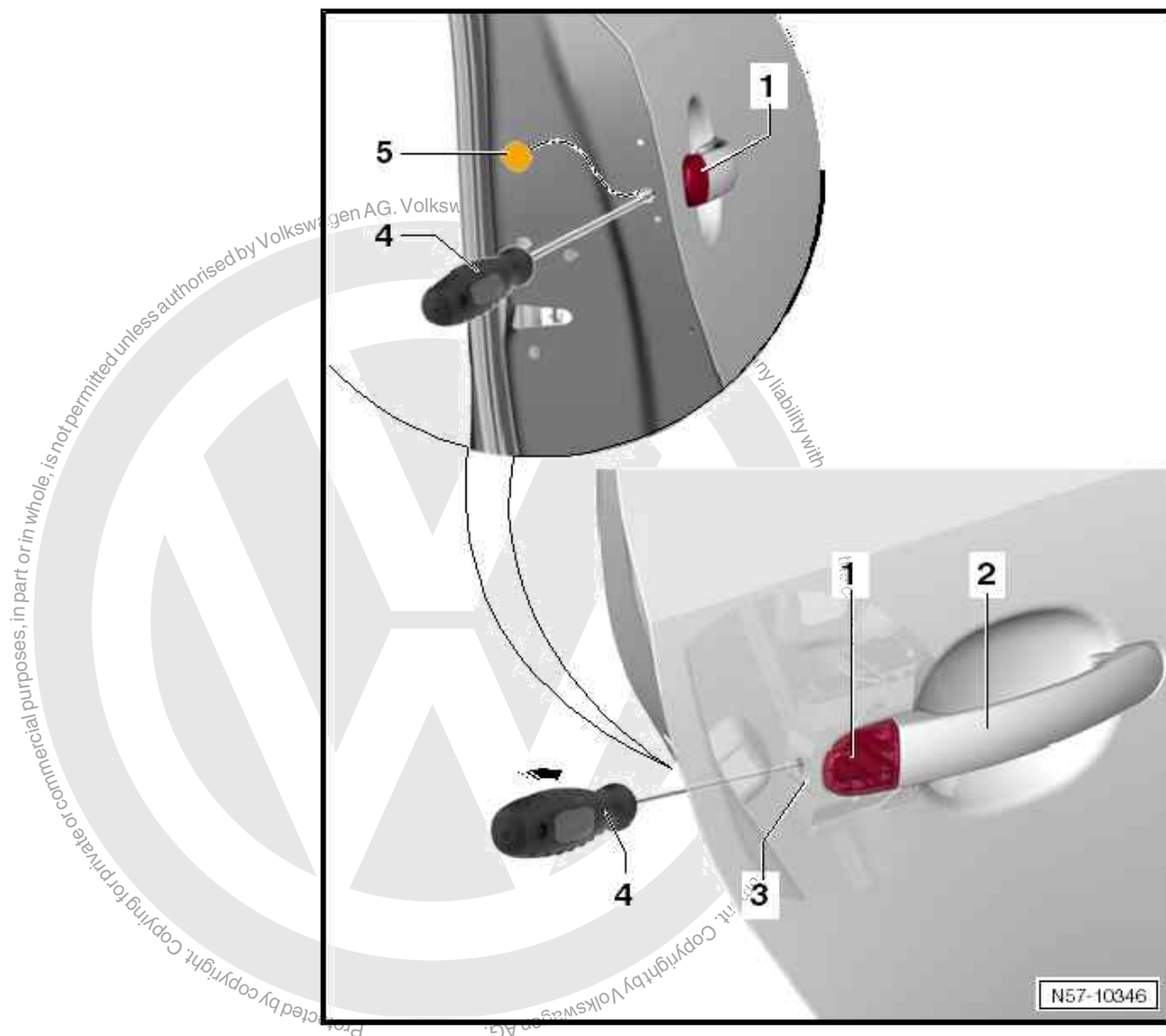
- Insert assembly tool - T10389- approx. 44 mm into the door behind locking hook -3- of the mounting bracket.
- Pull assembly tool - T10389- approx. 5 mm backwards -arrow- until hook is detached.
- Pull door handle -1- away from door.
- Pull cover cap -1- out of mounting bracket -arrow b-.

Installing

Perform the following steps:



Pull door handle -2- away from door in -direction of arrow a-.
Push cover cap -1- into mounting bracket -arrow b-.



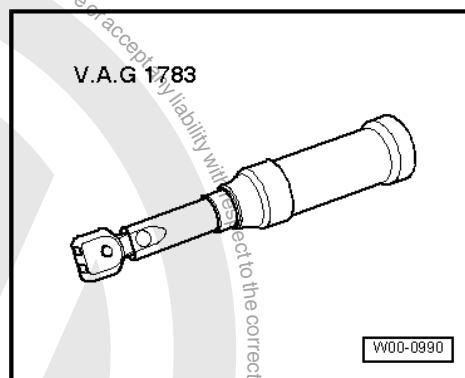
- Insert flat-bladed screwdriver -4- approx. 40 mm into mounting bracket until locking hook -3- is reached.
- Press cap -1- onto door.
- Push screwdriver approx. 5 mm into hole -arrow- until hook locks in place.
- Secure plug -5-.

2.4.4 Removing and installing lock cylinder

Special tools and workshop equipment required



◆ Torque wrench - V.A.G 1783-



Note

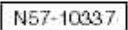
The removal and installation sequence is only for the left lock cylinder. The procedure for the right-hand side is basically the same.

Removing

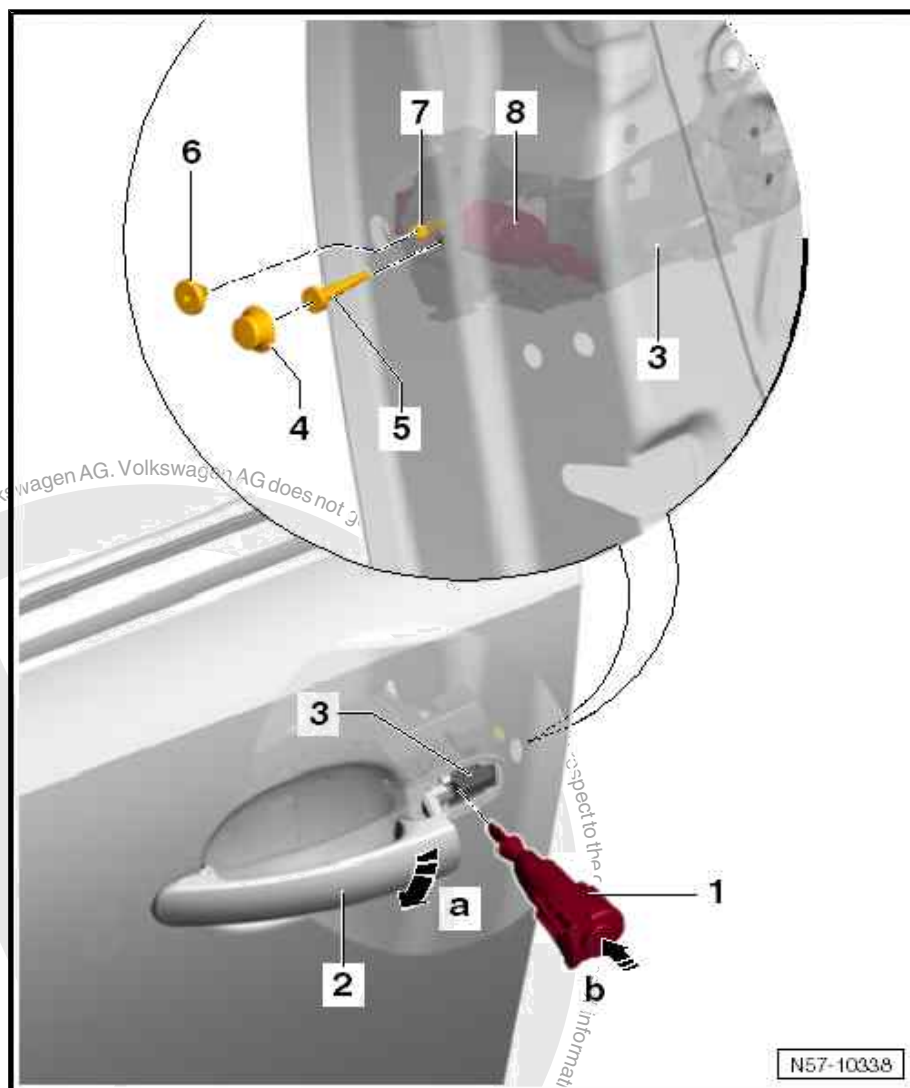


Note

Forms other than the covers -4 and 6- shown here may also be installed.



- ## Installing



- Pull off door handle -2- from door -8- -arrow a-.
- Push lock cylinder housing -1- into mounting bracket -3- at a right-angle -arrow b-.
- Screw bolts -5 and 7- into mounting bracket.
- Specified torque for bolts -5 and 7-: 3.5 Nm.



Note

During installation, lock cylinder housing must be pressed against outer door panel.

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

- It is essential that a functional check is then performed with the door open.

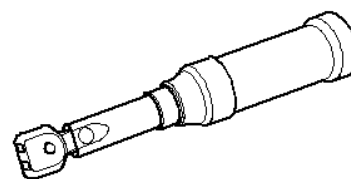
2.4.5 Removing and installing mounting bracket

Special tools and workshop equipment required



◆ Torque wrench - V.A.G 1783-

V.A.G 1783



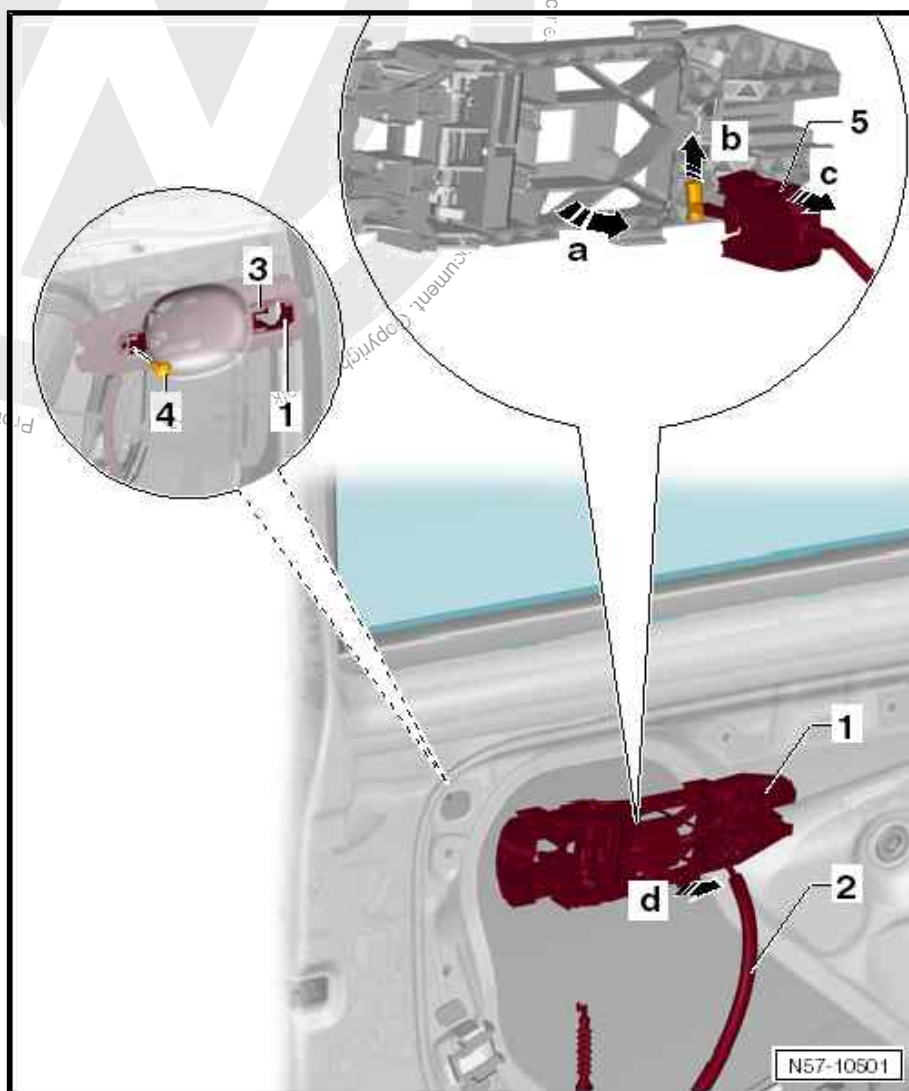
W00-0990



Note

Removal and installation are described only for the left mounting bracket. The procedure for the right-hand side is basically the same.

Removing



N57-10501



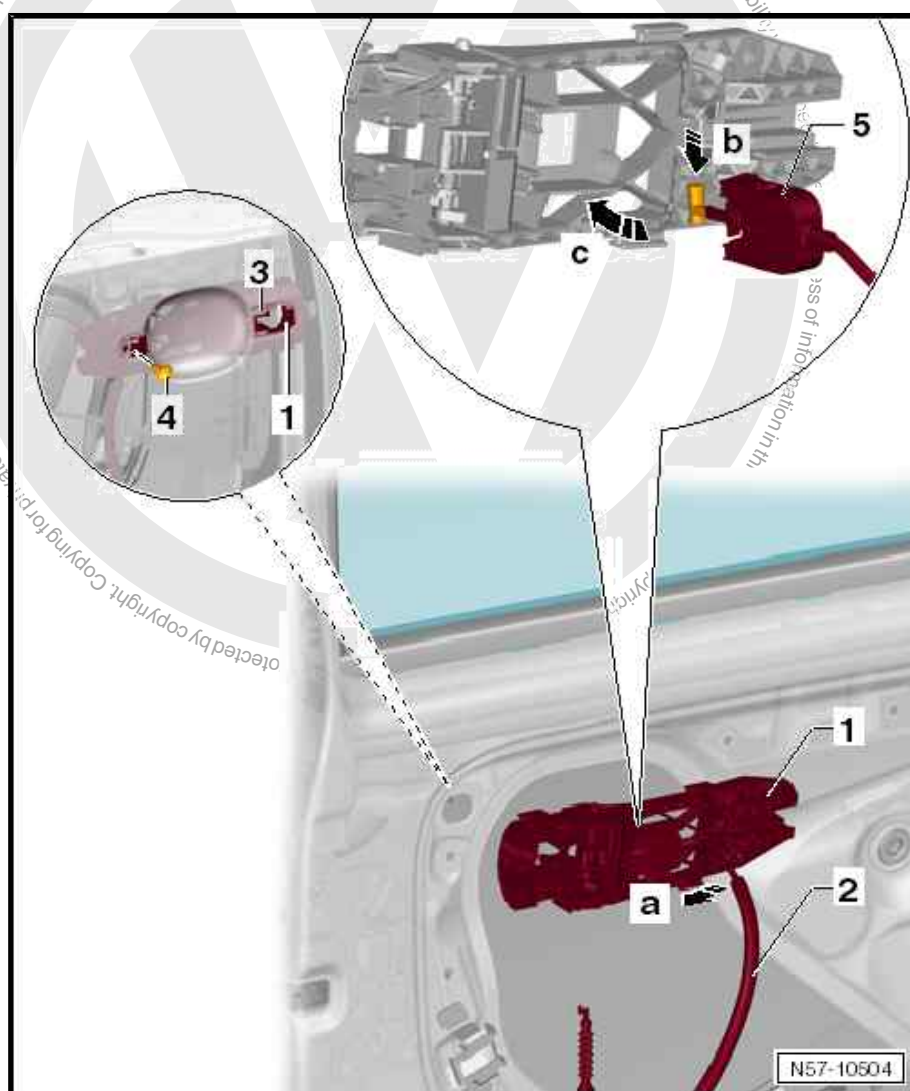
Perform the following steps:

- If window crank is fitted, remove it ➤ [page 270](#) .
- Remove front door trim ➤ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Remove cover ➤ [page 91](#) .
- Remove lock cylinder cover cap ➤ [page 100](#) and lock cylinder ➤ [page 103](#) on driver side.
- Remove cover cap on front passenger side ➤ [page 100](#) .
- Remove door handle ➤ [page 97](#) .
- Unscrew bolt -4-, and remove base -3-.
- Remove mounting bracket -1- from front door -arrow d-.

Detach cable

- Release holding device -5- and swivel it out of mounting in mounting bracket -arrow a-.
- Lift cable bolt out of mounting -arrow b-.
- Take cable -2- out of mounting bracket -1- -arrow c-.

Installing





Perform the following steps:

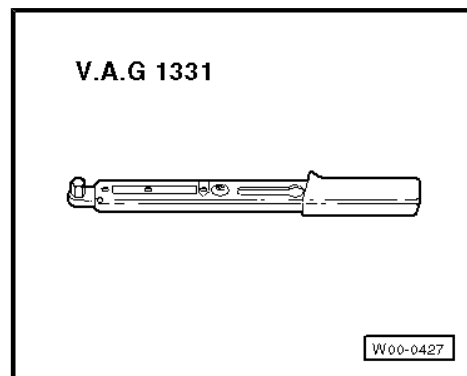
Installation is carried out in the reverse order of removal. The following should be observed:

Specified torque for bolts -4-: 1.5 Nm.

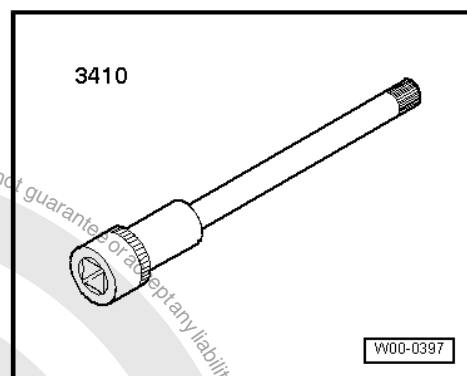
2.5 Removing and installing door lock

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-



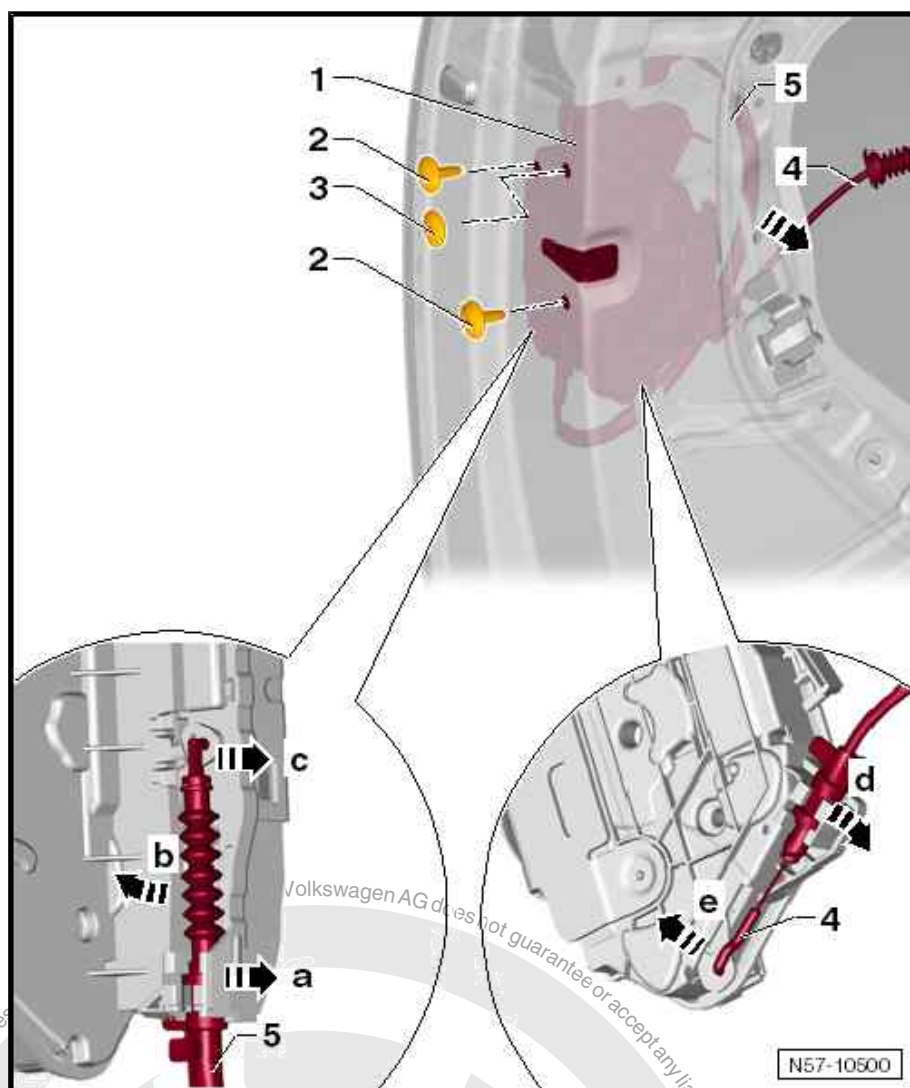
- ◆ Socket insert - 3410-



Note

*Removal and installation are described only for the left door lock.
The procedure for the right-hand side is basically the same.*

Removing



Perform the following steps:

- If window crank is fitted, remove it ➤ [page 270](#) .
- Remove front door trim ➤ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Remove cover ➤ [page 91](#) .
- Remove lock cylinder cover cap ➤ [page 100](#) and lock cylinder ➤ [page 103](#) on driver side.
- Remove cover cap on front passenger side ➤ [page 100](#) .
- If fitted, disconnect connector.
- Unscrew bolts -2-.
- Remove door lock -1- from door -arrow-.



Note

Cables can be detached if this is necessary for subsequent work.

Detach cable from mounting bracket

- Turn cable -5- by 90° and take it out of holding device.

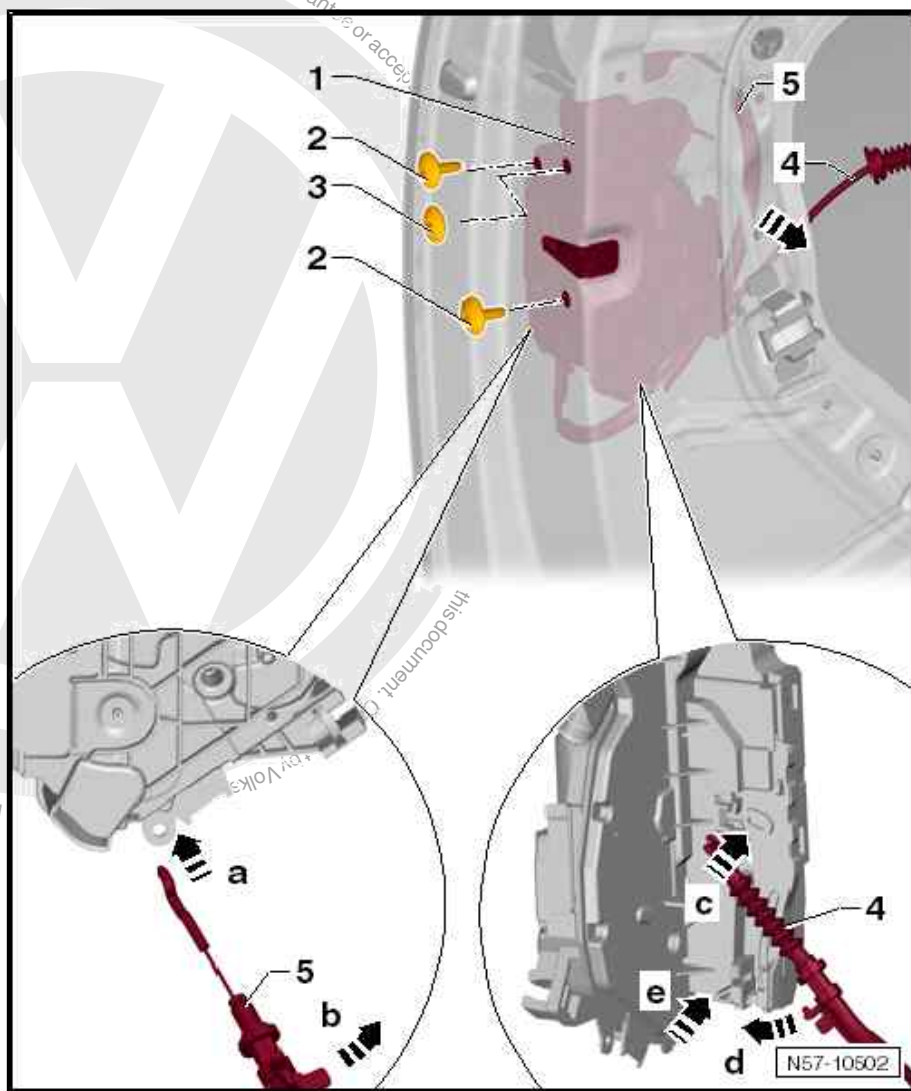


- Swivel cable -arrow b- so far until cable can be threaded out of eye in door lock -1- -arrow c-.

Detach cable from interior door handle

- Turn cable -4- by 90° and take it out of holding device.
- Swivel cable -arrow d- so far until cable can be threaded out of eye in door lock -1- -arrow e-.

Installing



Perform the following steps:

- Attach removed cables -4- and -5- to door lock -1-.
- Insert door lock -1- into door.
- If fitted, connect connector.
- Screw in bolts -2-.

Specified torque for bolts -2-: 18 Nm

- Clip cap -3- in.

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



- It is essential to perform a functional check. If the cables are not adjusted correctly and the door is closed without having performed a functional check, the door lock might not unlock and the door can't be opened.

2.6 Removing and installing door seal

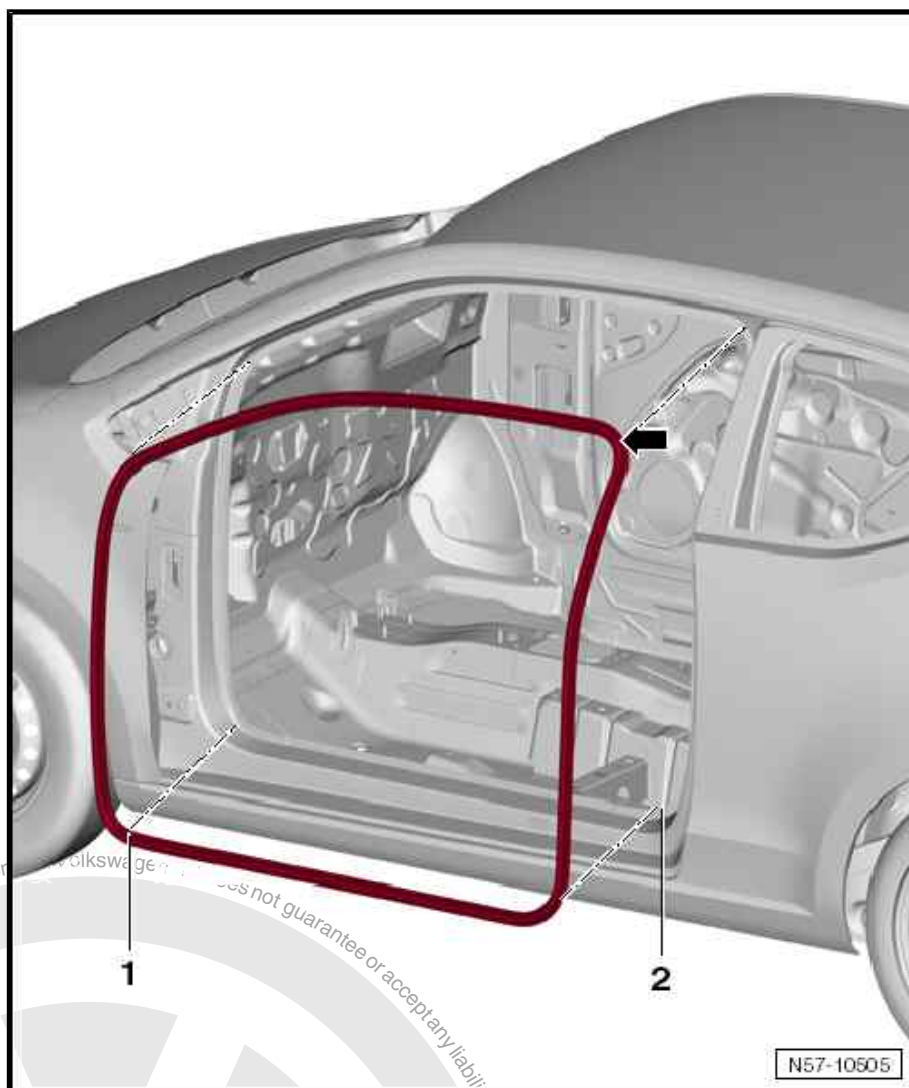
During production, a sealant is applied to the inner door seals, which are then placed on the door flange and rolled on.



Note

- ◆ *When removing the seal, the sealant is distributed across the inside of the seal. The sides are bent upwards slightly when this is being done. If the seal is then refitted, sealing and firm seating are no longer guaranteed.*
- ◆ *Therefore, each seal that is completely removed must be renewed with a so-called "tap-on seal".*
- ◆ *If a seal has been partially removed, squeeze sides of seal together before installing.*
- ◆ *Removal and installation are described only for the left door inner seal. The procedure for the right-hand side is basically the same.*
- ◆ *For reasons of clarity, the front door is shown in removed state.*

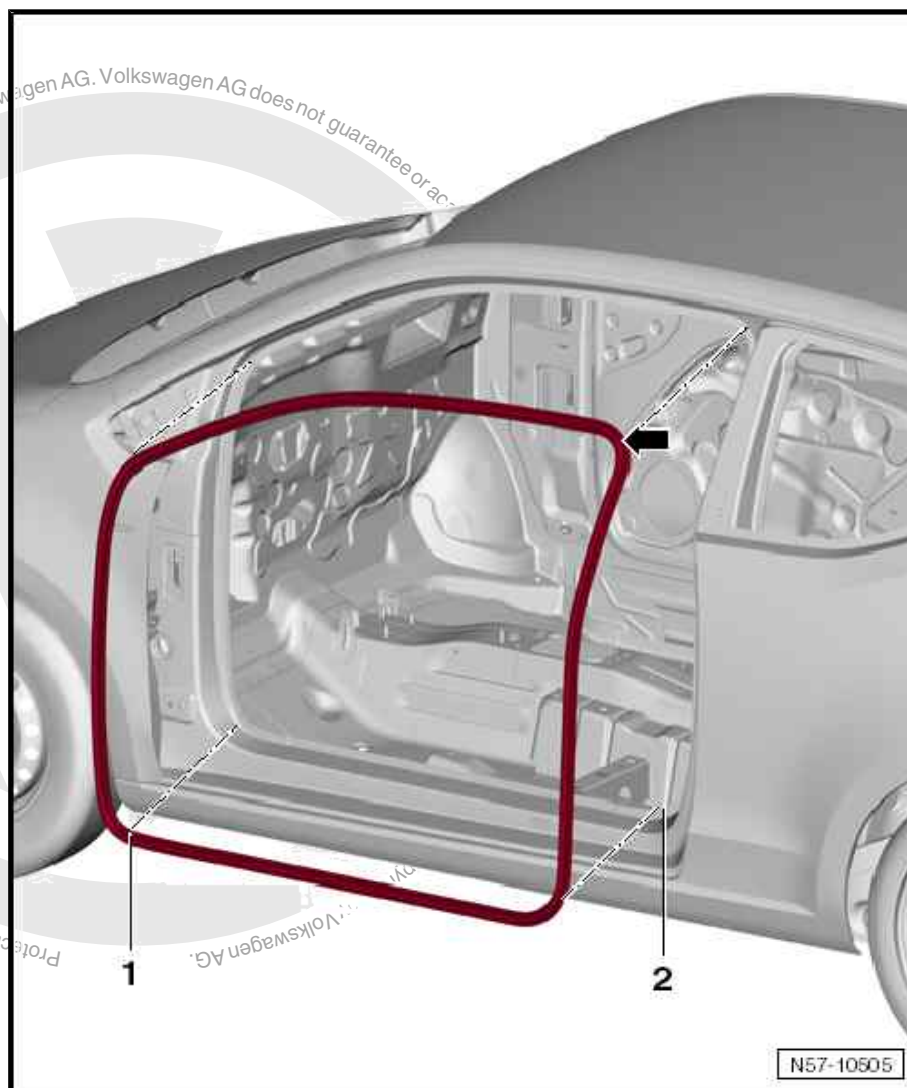
Removing



Perform the following steps:

- Remove sill panel trim ➤ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Removing and installing sill panel trim .
- To remove inner door seal, remove pillar trims as required ➤ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Overview of fitting locations – trims, interior .
- Pull off inner door seal -1- from body flange -2-.

Installing



Perform the following steps:

- Start installing door inner seal -1- at top radius of door aperture -arrow-.
- Install pillar trims ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior .
- Install sill panel strip ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Removing and installing sill panel strip .



3 Central locking

⇒ [“3.1 Assembly overview - central locking”, page 115](#)

⇒ [“3.2 Removing and installing ignition key battery”, page 117](#)

3.1 Assembly overview - central locking

⇒ [“3.1.1 Assembly overview - central locking”, page 115](#)

⇒ [“3.1.2 Assembly overview - ignition key battery”, page 117](#)

3.1.1 Assembly overview - central locking

1 - Coupling station

- ☐ Fitting location: right A-pillar
- ☐ To separate connection, loosen bellows at pillar.

2 - Front passenger door control unit - J387-

- ☒ Integrated in window regulator motor, front passenger side - V148-
- ☐ Removing and installing ⇒ [page 264](#)

3 - Door lock on front passenger side

- ☐ Door lock is secured to door inner part.
- ☒ Electric central locking is integrated in door lock.
- ☐ Removing and installing ⇒ [page 109](#)

4 - Coupling station

- ☐ Fitting location: right B-pillar.
- ☐ To separate connection, loosen bellows at pillar.

5 - Rear right door lock

- ☐ Door lock is secured to door inner part.
- ☐ Electric central locking is integrated in door lock.
- ☐ Removing and installing

6 - Rear lid handle release button - E234-

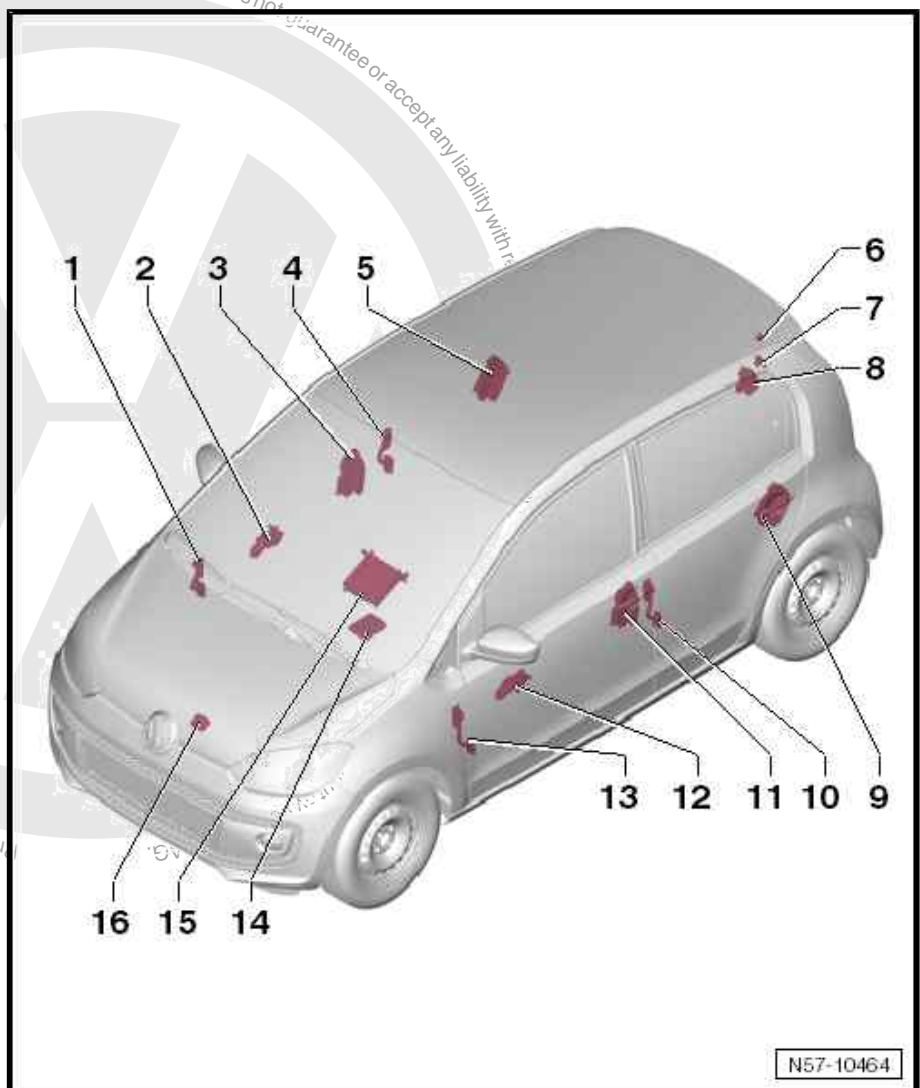
- ☐ Fitting location: on rear lid
- ☐ Removing and installing ⇒ [page 60](#)

7 - Coupling station

- ☐ Fitting location: left C-pillar, top
- ☐ To disconnect connector, remove C-pillar trim.

8 - Rear lid lock

- ☐ Fitting location: on rear lid
- ☐ Removing and installing ⇒ [page 62](#)





9 - Rear left door lock

- ☐ Door lock is secured to door inner part.
- ☐ Electric central locking is integrated in door lock.
- ☐ Removing and installing

10 - Coupling station

- ☐ Location: left B-pillar
- ☐ To separate connection, loosen bellows at pillar.

11 - Door lock on driver side

- ☐ Door lock is secured to door inner part.
- ☐ Electric central locking is integrated in door lock.
- ☐ Removing and installing ➔ [page 109](#)

12 - Driver door control unit - J386-

- ☐ Integrated in window regulator motor, driver side - V147-
- ☐ Removing and installing ➔ [page 264](#)

13 - Coupling station

- ☐ Location: left A-pillar
- ☐ To separate connection, loosen bellows at pillar.

14 - Alarm horn - H12-

- ☐ Optional
- ☐ Fitting location: in plenum chamber
- ☐ Removing and installing

15 - Onboard supply control unit - J519-

- ☐ Location: below driver side of dash panel, clipped onto relay carrier
- ☐ Removing and installing ➔ Electrical system; Rep. gr. 97 ; Control units; Removing and installing onboard supply control unit - J519-

16 - Bonnet contact switch - F266-

- ☐ Location: on lid lock.



3.1.2 Assembly overview - ignition key battery

1 - Key with variable code transponder

2 - Transmitter unit - upper part

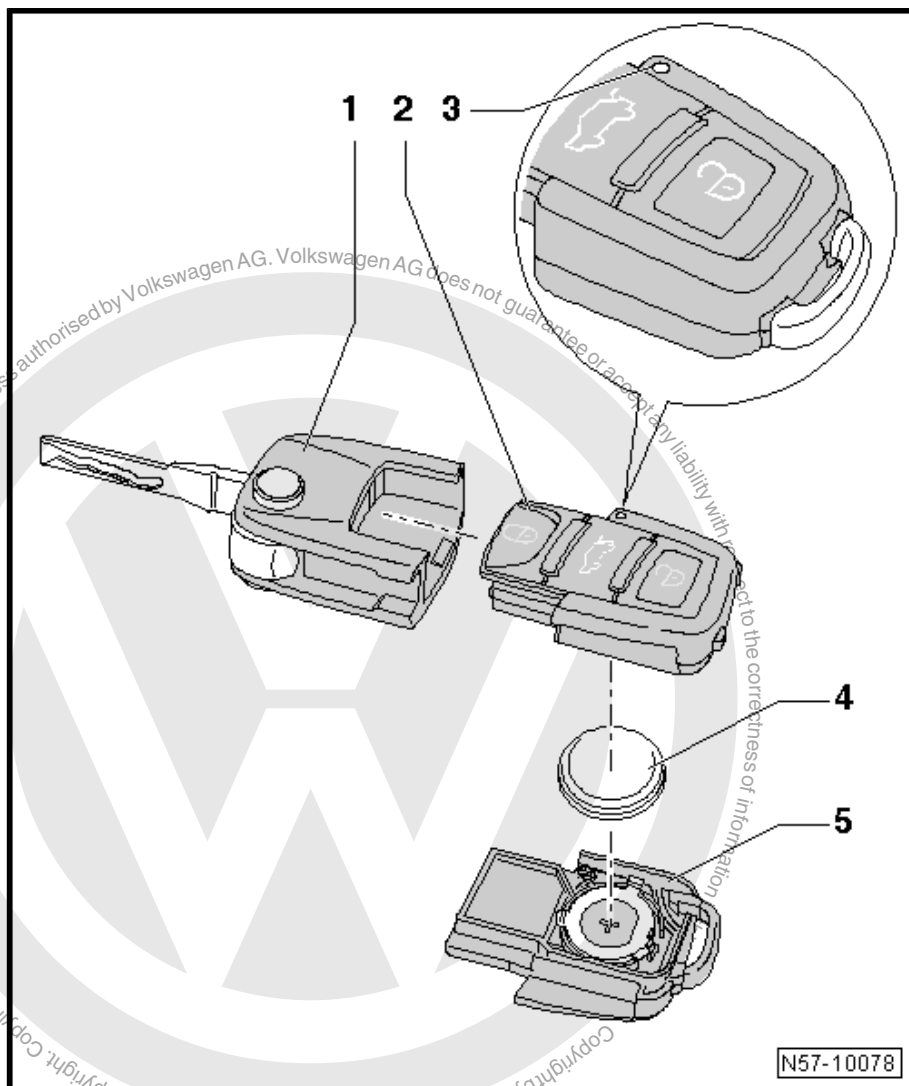
3 - LED

- ☐ When remote control is operated, this LED must light up.
- ☐ If LED does not flash during operation of remote control, battery is dead and must be renewed.

4 - Battery

- ☐ Removing and installing
⇒ [page 117](#)

5 - Transmitter unit - lower part

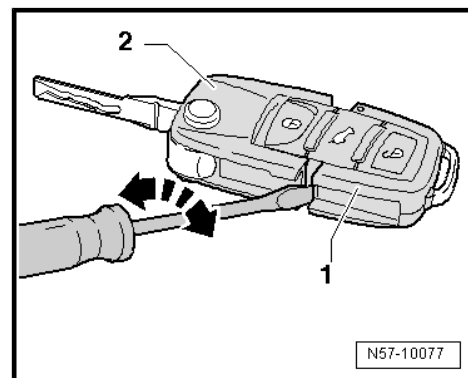


3.2 Removing and installing ignition key battery

Removing

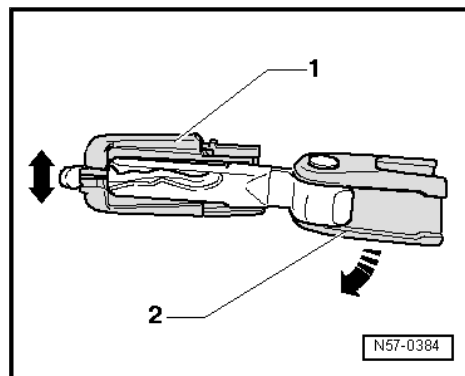
Perform the following steps:

- Insert screwdriver in slot between transmitter unit -1- and key -2-.
- Turn screwdriver in direction of -arrow- to separate transmitter unit from key.





- Press transmitter unit -1- apart using profile section of key -2-.



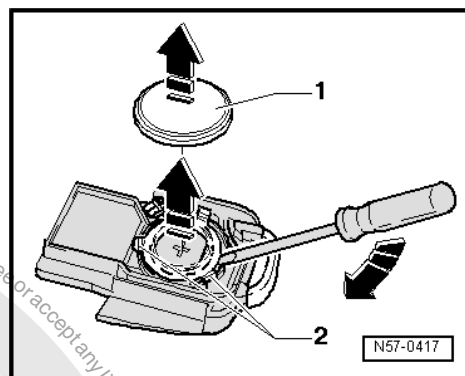
- Unclip battery -1- from the retainers -2- with a screwdriver in direction of -arrow-.

Installing



Note

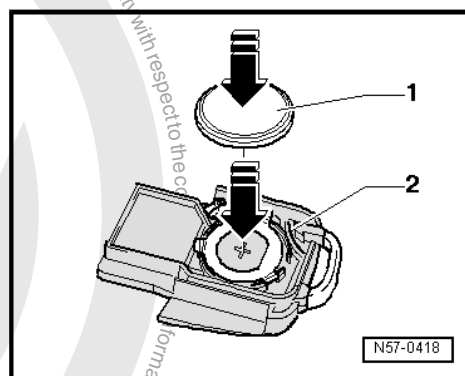
- ♦ Before installing battery, always press any key once.
- ♦ This resets the transmitter unit so that it can detect a new battery.



Perform the following steps:

Ensure correct polarity and mounting position when installing battery.

- Lay battery -1- with positive pole downwards in transmitter unit -2- (positive pole is marked on housing).
- Gently press -arrow- battery into transmitter unit until it engages.
- Attach lid and sender unit to each other (do not damage seal).
- Then engage transmitter unit in key.



Adapting ignition keys

Keys are adapted using ⇒ Vehicle diagnostic tester.

- In the vehicle diagnostics tester, select “Guided Fault Finding”.
- Press **GoTo** button and select “Function/component selection”.



58 – Rear doors, door components

1 Door

⇒ ["1.1 Assembly overview - door", page 119](#)

⇒ ["1.2 Removing and installing door", page 121](#)

⇒ ["1.3 Adjusting door", page 125](#)

⇒ ["1.4 Adjusting striker pin", page 126](#)

1.1 Assembly overview - door



Note

- ◆ The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.
- ◆ The hinge bolts must always be renewed after they have been loosened.

1 - Rear door

- ☐ Removing and installing
⇒ [page 121](#)
- ☐ Adjusting ⇒ [page 125](#)

2 - Bolt

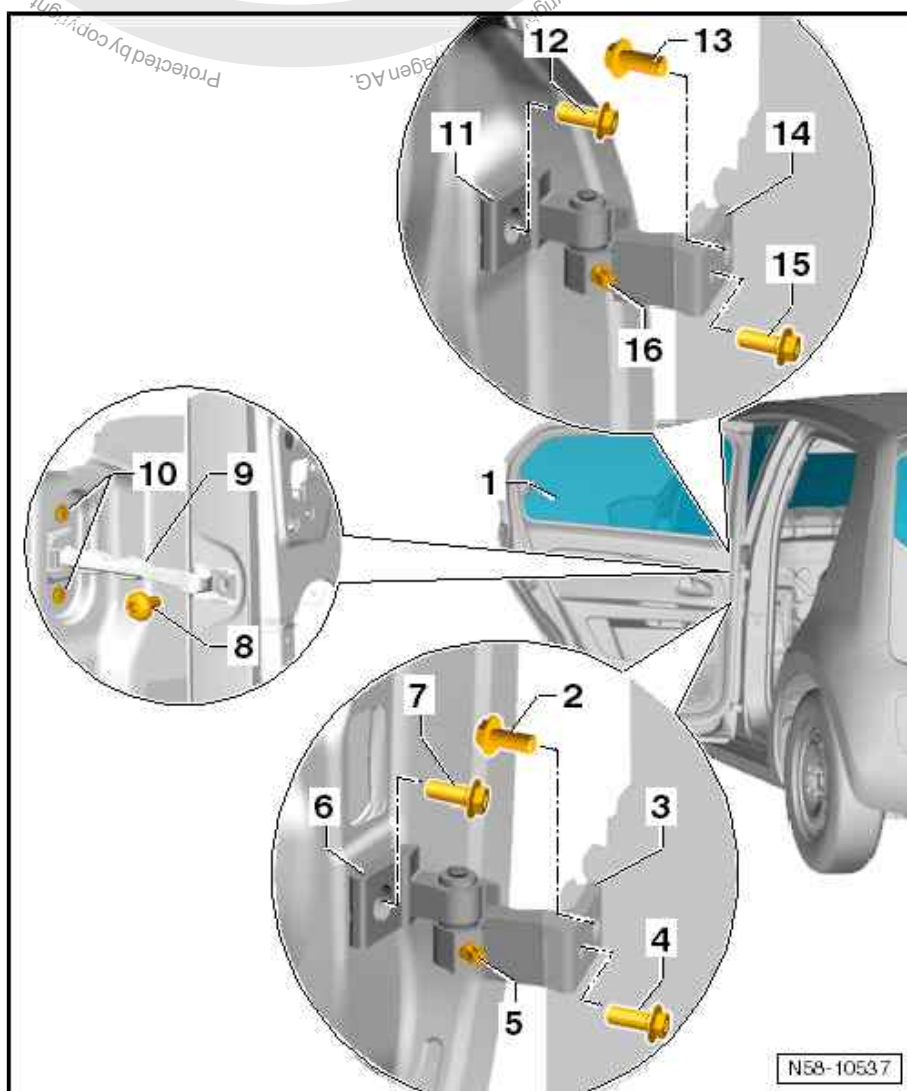
- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm
- ☐ After renewal of B-pillar, the specified tightening torques are different.
- ☐ Specified tightening torque after renewal of B-pillar: 20 Nm + 90°

3 - Door hinge

- ☐ The hinge is split.
- ☐ Lower part is secured to hinge upper part with bolt -5-.

4 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm
- ☐ Installed from inside vehicle.
- ☐ To remove and install, B-pillar lower trim must be removed first.
- ☐ After renewal of B-pillar, the specified tightening torques are different.
- ☐ Specified tightening torque after renewal of B-pillar: 20 Nm + 90°





5 - Bolt

- ☐ Connects upper part of hinge -3- to bottom part of hinge -6-
- ☐ Specified torque: 23 Nm

6 - Door hinge

- ☐ The hinge is split.
- ☐ Upper part is secured to hinge lower part with bolt -5-.

7 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm

8 - Bolt

- ☐ Specified torque: 30 Nm

9 - Door retaining strap

- ☐ Removing and installing ⇒ [page 93](#)

10 - Bolt

- ☐ Qty. 2
- ☐ Specified torque: 9 Nm

11 - Door hinge

- ☐ The hinge is split.
- ☐ Upper part is secured to hinge lower part with bolt -16-.

12 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm

13 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm
- ☐ After renewal of B-pillar, the specified tightening torques are different ⇒ [page 124](#) .
- ☐ Specified tightening torque after renewal of B-pillar: 20 Nm + 90°

14 - Door hinge

- ☐ The hinge is split.
- ☐ Lower part is secured to hinge upper part with bolt -16-.

15 - Bolt

- ☐ Always renew, loosening it once to adjust door is allowed.
- ☐ Specified torque: 50 Nm
- ☐ Installed from inside vehicle.
- ☐ To remove and install, dash panel must first be removed.
- ☐ After renewal of B-pillar, the specified tightening torques are different ⇒ [page 124](#) .
- ☐ Specified tightening torque after renewal of B-pillar: 20 Nm + 90°

16 - Bolt

- ☐ Connects upper part of hinge -3- to bottom part of hinge -6-
- ☐ Specified torque: 23 Nm



1.2 Removing and installing door

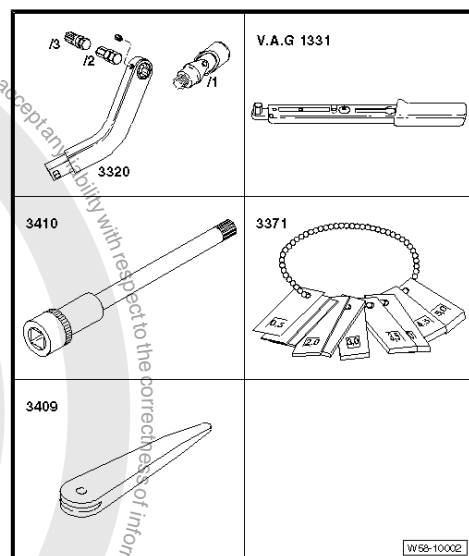


Note

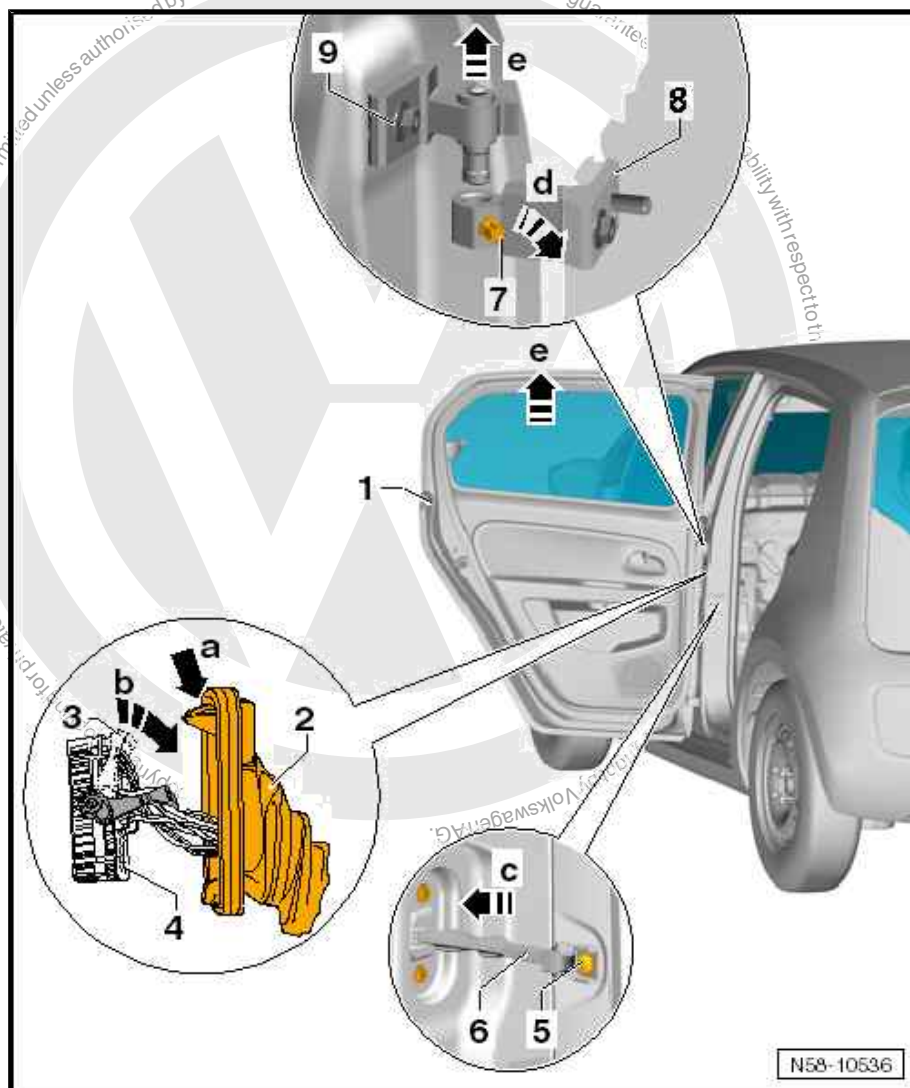
*The removal and installation sequence is for the rear left door.
Removal and installation of the rear right door are similar.*

Special tools and workshop equipment required

- ◆ Key (for door alignment) - 3320-
- ◆ Universal joint for 3320 - 3320/1-
- ◆ Bit for 3320 - 3320/2-
- ◆ Bit for 3320 - 3320/3-
- ◆ Torque wrench - V.A.G 1331-
- ◆ Socket insert - 3410-
- ◆ Setting gauge - 3371-
- ◆ Removal wedge - 3409-



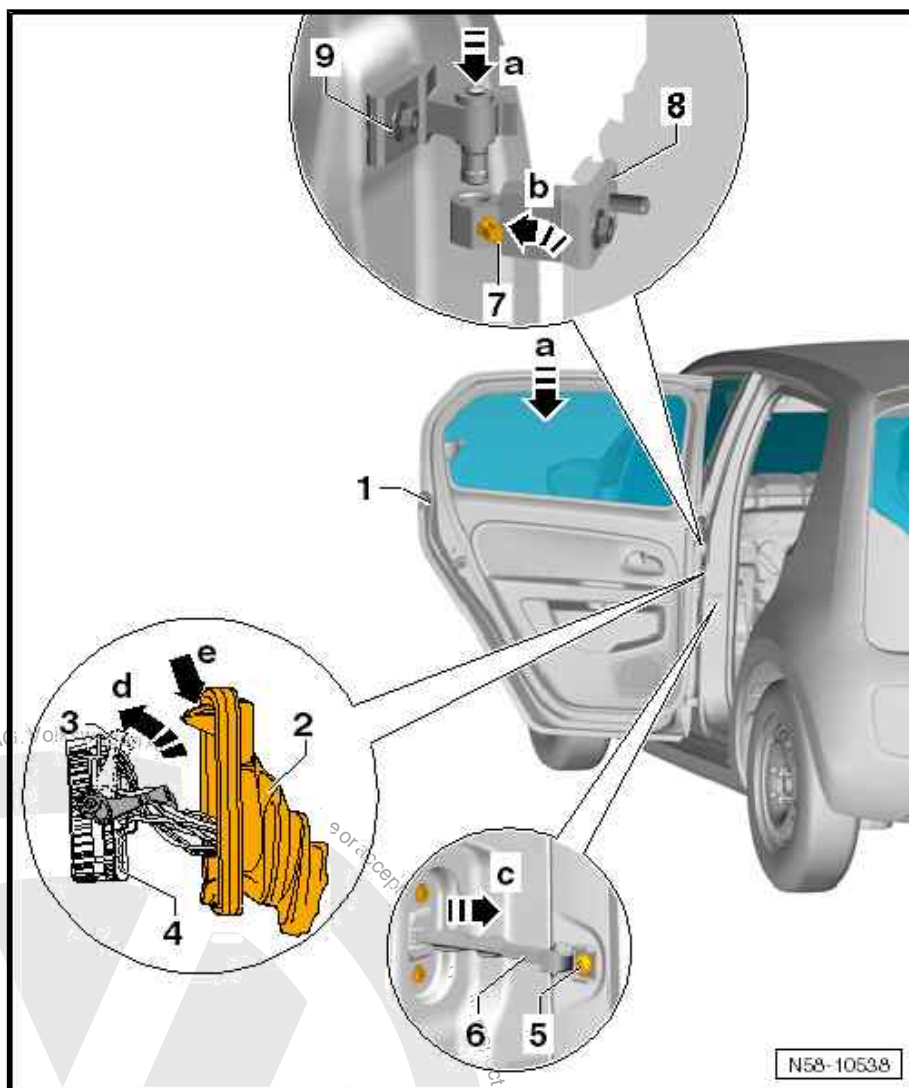
Removing



Perform the following steps:

- Release bellows -2- by pressing catch -arrow a- and pull off B-pillar.
- Swing release lever -3- downwards -arrow b- and disconnect electrical connector -4- from coupling station.
- Undo screws -7- from hinges.
- Unscrew bolt -5- for door arrester -6-.
- Push door retaining strap -6- inwards -arrow c-.
- Lift rear door -1- upwards -arrow e- with hinges -9- out of hinges -8-.

Installing



Perform the following steps:

Installation is carried out in the reverse order of removal. To this end, the following should be observed:



Caution

Prior to installing the rear door, the door retaining strap must be folded towards the inside of the vehicle in order to avoid damage to the paintwork.

Specified torque for bolts -5-: 30 Nm

Specified torque for bolts -7-: 23 Nm



Note

After door installation the hinge arms must be flush one above the other.

- Adjust rear door -1- ➔ [page 125](#) .
- Observe front door shut lines -1- ➔ Body Repairs; Rep. gr. 00 ; Body panel gaps/shut lines; Body - middle .



1.2.1 Installing after renewing B-pillar



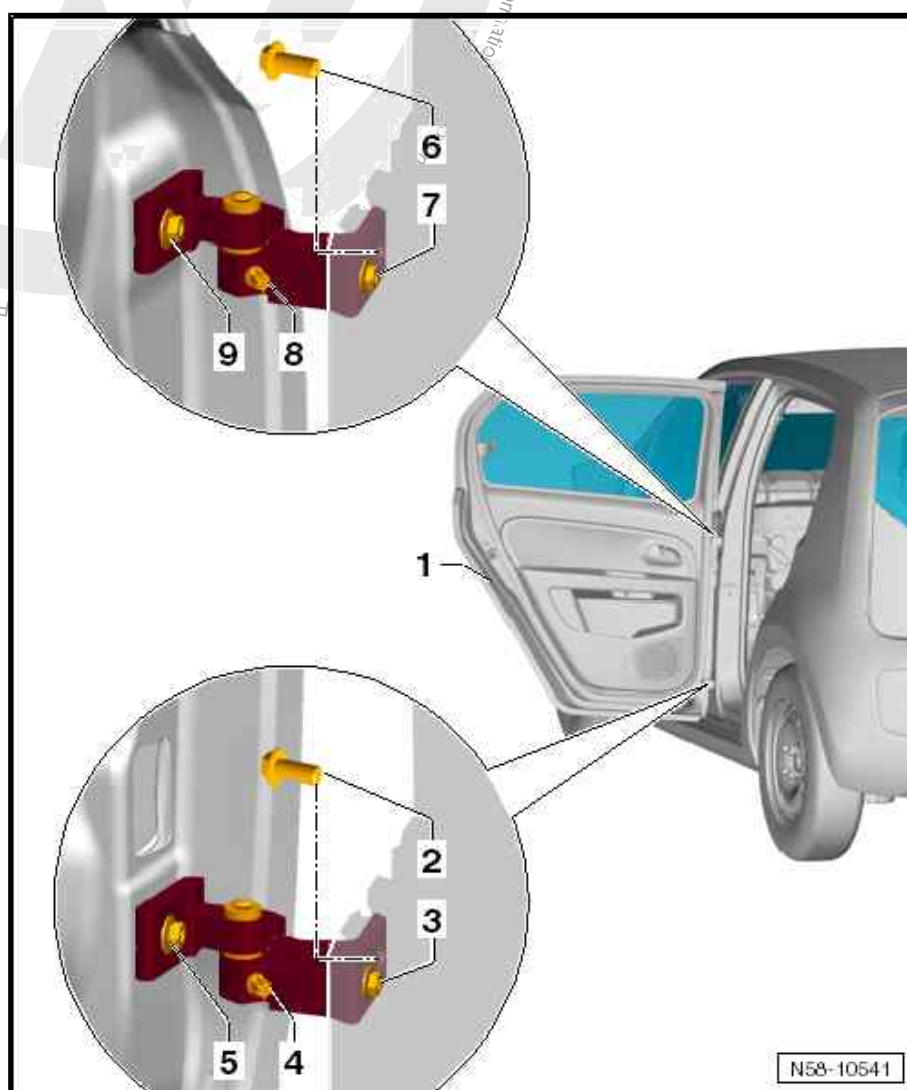
Note

The installation sequence after renewal of B-pillar is for the front left door. The installation sequence of the front right door after renewal of B-pillar is similar.



WARNING

If B-pillar is renewed, bolts on B-pillar must absolutely be tightened as described in the following.



Perform the following steps:

- B-pillar has been renewed.
- Always renew bolts. Loosening it once to adjust door is allowed.

Installation is carried out in the reverse order of removal. To this end, the following should be observed:



- Insert rear door -1- and tighten bolts -2-, -3-, -6- and -7-. Specified torque: 20 Nm + 90°.

Specified torque for bolts -2-: 20 Nm + 90°.

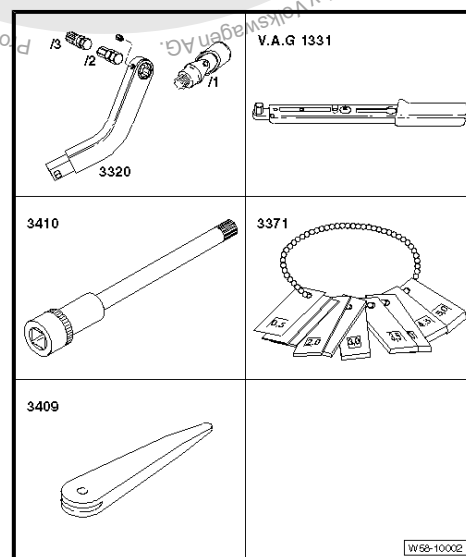
Specified torque for bolts -4-: 23 Nm

- Adjusting rear door ⇒ [page 125](#) .
- Observe rear door gaps ⇒ Body Repairs; Rep. gr. 00 ; Body panel gaps/shut lines; Body - middle

1.3 Adjusting door

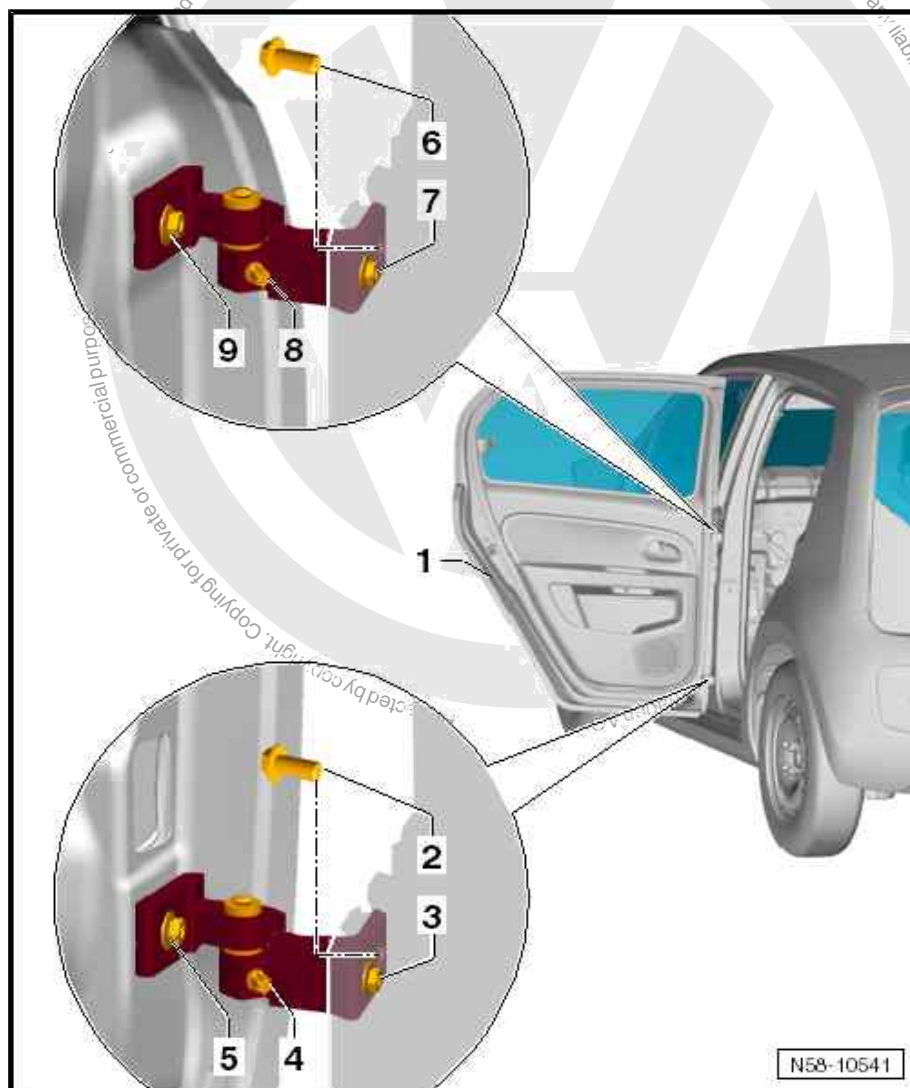
Special tools and workshop equipment required

- ◆ Key (for door alignment) - 3320-
- ◆ Universal joint for 3320 - 3320/1-
- ◆ Bit for 3320 - 3320/2-
- ◆ Bit for 3320 - 3320/3-
- ◆ Torque wrench - V.A.G 1331-
- ◆ Socket insert - 3410-
- ◆ Setting gauge - 3371-
- ◆ Removal wedge - 3409-



Note

- ◆ Only the adjustment for the left front door is described. The adjustment of the right front door is similar.
- ◆ Vehicle must be standing on its wheels when front door adjustment is performed.
- ◆ The rear door is correctly adjusted when all shut lines are even when closed. it is not protruding too far inwards or outwards, and when the contours are flush with each other.
- ◆ For checking gaps/shut lines refer to ⇒ Body Repairs; Rep. gr. 00 ; Body panel gaps/shut lines; Body - middle .
- ◆ After installing or alignment, carry out corrosion protection measures on hinges and screws/bolts.



Perform the following steps:

Adjusting shut lines

To be able to adjust gaps correctly, bolts -2-, -3-, -6- and -7- on B-pillar must be loosened.

- The B-pillar lower trim must be removed for bolts -3 and 7-.

Adjusting for flush fitting

In order to adjust flushness correctly, bolts -5- and -9- must be loosened.

Use door alignment tool - 3320- with appropriate bit for this.



Note

Other measures, such as raising the rear door, will prove pointless. Subsequent pressure from above will cause the rear door to sack again.

Adjust striker pin ⇒ [page 126](#) .

1.4 Adjusting striker pin

Special tools and workshop equipment required



◆ Torque wrench - V.A.G 1331-

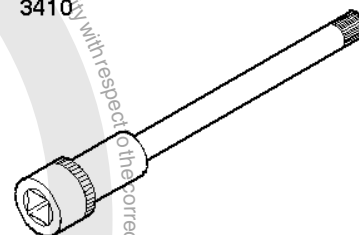
V.A.G 1331



W00-0427

◆ Socket insert - 3410-

3410



W00-0397



Note

- ◆ Threaded plate -1- of striker pin is secured in pillar using a method which differs from the previous method.
- ◆ Bow outside of threaded plate is welded firmly to pillar. Webs to threaded plate are plastically deformable.
- ◆ Greater force has to be applied so that position of striker pin -2- can be adjusted when bolts -3- are loosened.



Note

- ◆ Only the adjustment for the left front door is described. The adjustment of the right front door is similar.
- ◆ The rear door must lock fully when closing without any additional force being required and must not have any play.
- ◆ The rear door must not be pushed up or down as a result of the striker pin adjustment.

By adjusting the striker pin, the alignment of the rear edge of the door with the side panel can be adjusted -arrows a- and -arrows b- (wind noise).

Perform the following steps:

- Loosen striker -1- by loosening bolts -2- in C-pillar.



Note

Greater force has to be applied so that position of striker pin -1- can be adjusted when bolts -2- are loosened.

- Tighten bolts -2- of striker pin -1-.

Specified torque for bolts -2-: 20 Nm



2 Door components

⇒ [“2.1 Assembly overview - components”, page 129](#)

⇒ [“2.2 Assembly overview - door handle and door lock”, page 131](#)

⇒ [“2.3 Removing and installing components”, page 131](#)

⇒ [“2.4 Removing and installing door handle”, page 138](#)

⇒ [“2.5 Removing and installing door lock”, page 144](#)

⇒ [“2.6 Removing and installing door seal”, page 147](#)

2.1 Assembly overview - components

⇒ [“2.1.1 Assembly overview - components”, page 129](#)

⇒ [“2.1.2 Assembly overview - adhesive pad”, page 130](#)

2.1.1 Assembly overview - components



Note

The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.

1 - Rear door

- ☐ Removing and installing
⇒ [page 77](#)
- ☐ Adjusting ⇒ [page 81](#)

2 - Door retaining strap

- ☐ Removing and installing
⇒ [page 134](#)

3 - Loudspeakers

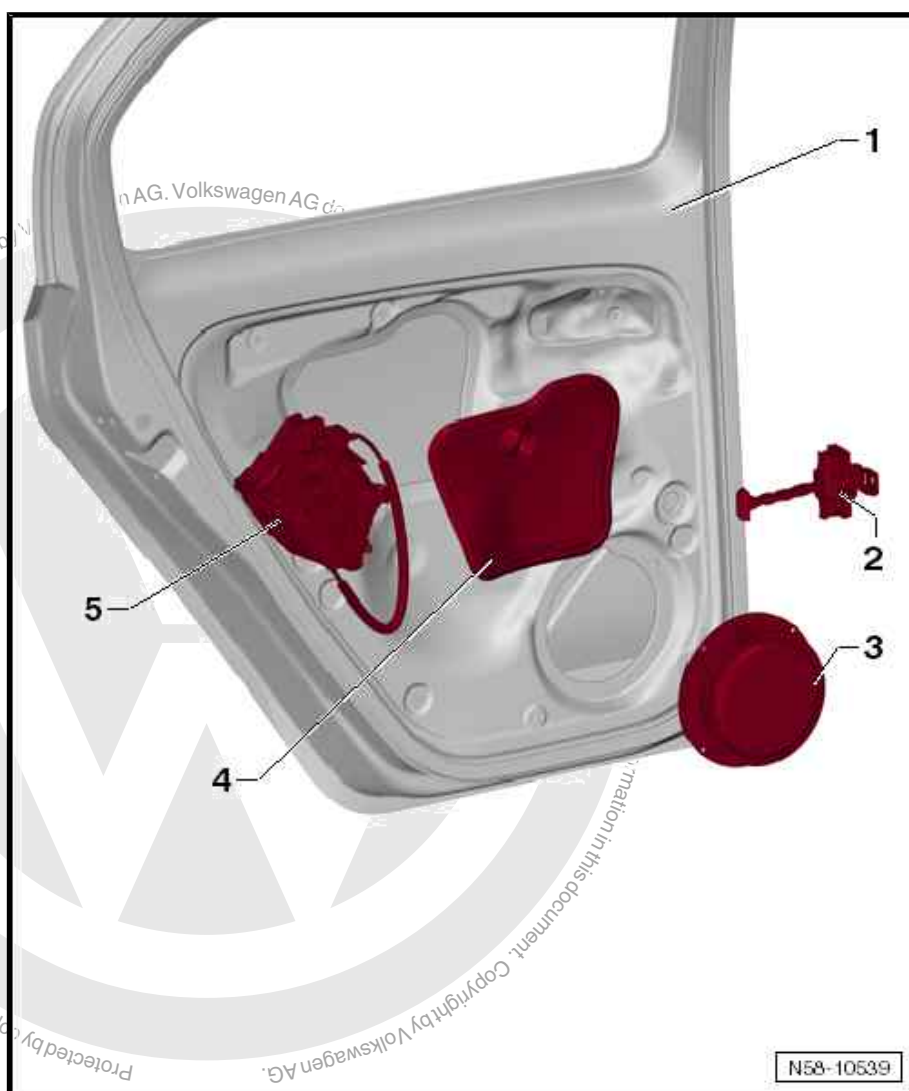
- ☐ Riveted into door.

4 - Cover

- ☐ Removing and installing
⇒ [page 131](#)

5 - Door lock

- ☐ Removing and installing





⇒ page 144

2.1.2 Assembly overview - adhesive pad



Note

The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.

1 - Fabric tape

- ☐ Qty. 2 per rear door
- ☐ If necessary, manufacture using commercially available adhesive fabric strip.
- ☐ Dimensions: Dimension -a- 15 mm, Dimension -b- 60 mm.

2 - Rear door

- ☐ Door frame from exterior.

3 - Rear door

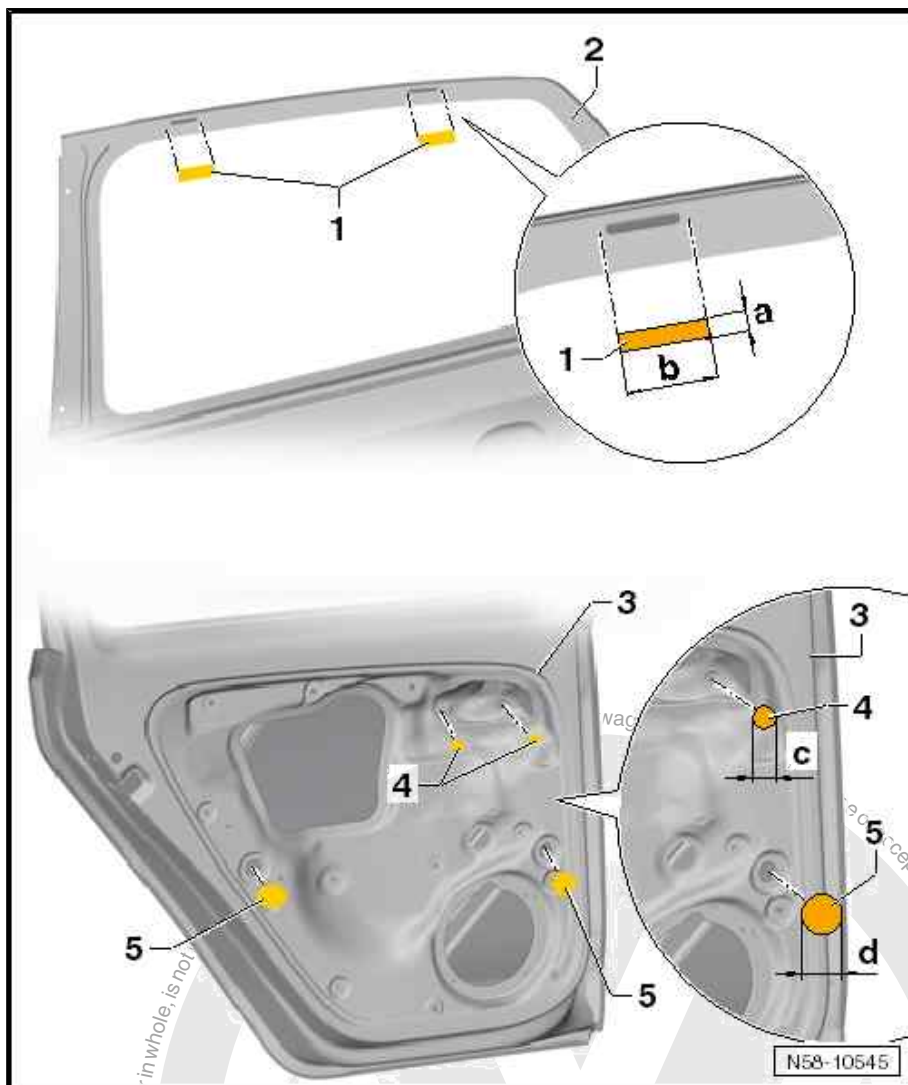
- ☐ Inner door

4 - Adhesive pad

- ☐ Qty. 2 per rear door
- ☐ If necessary, manufacture using commercially available adhesive fabric strip.
- ☐ Dimension -d-: 19 mm Ø

5 - Adhesive pad

- ☐ Qty. 2 per rear door
- ☐ If necessary, manufacture using commercially available adhesive fabric strip.
- ☐ Dimensions -c-: front adhesive pad 30 mm Ø, rear adhesive pad 40 mm Ø





2.2 Assembly overview - door handle and door lock



Note

The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.

1 - Door lock

- ☐ Removing and installing
⇒ [page 144](#)

2 - Mounting bracket

- ☐ Removing and installing
⇒ [page 141](#)

3 - Carrier

4 - Cap

- ☐ Removing and installing
⇒ [page 139](#)

5 - Door handle

- ☐ Removing and installing
⇒ [page 138](#)

6 - Bolt

- ☐ Specified torque:
1.5 Nm
- ☐ Bearing plate is loosened from door when this bolt is loosened

7 - Bowden cable

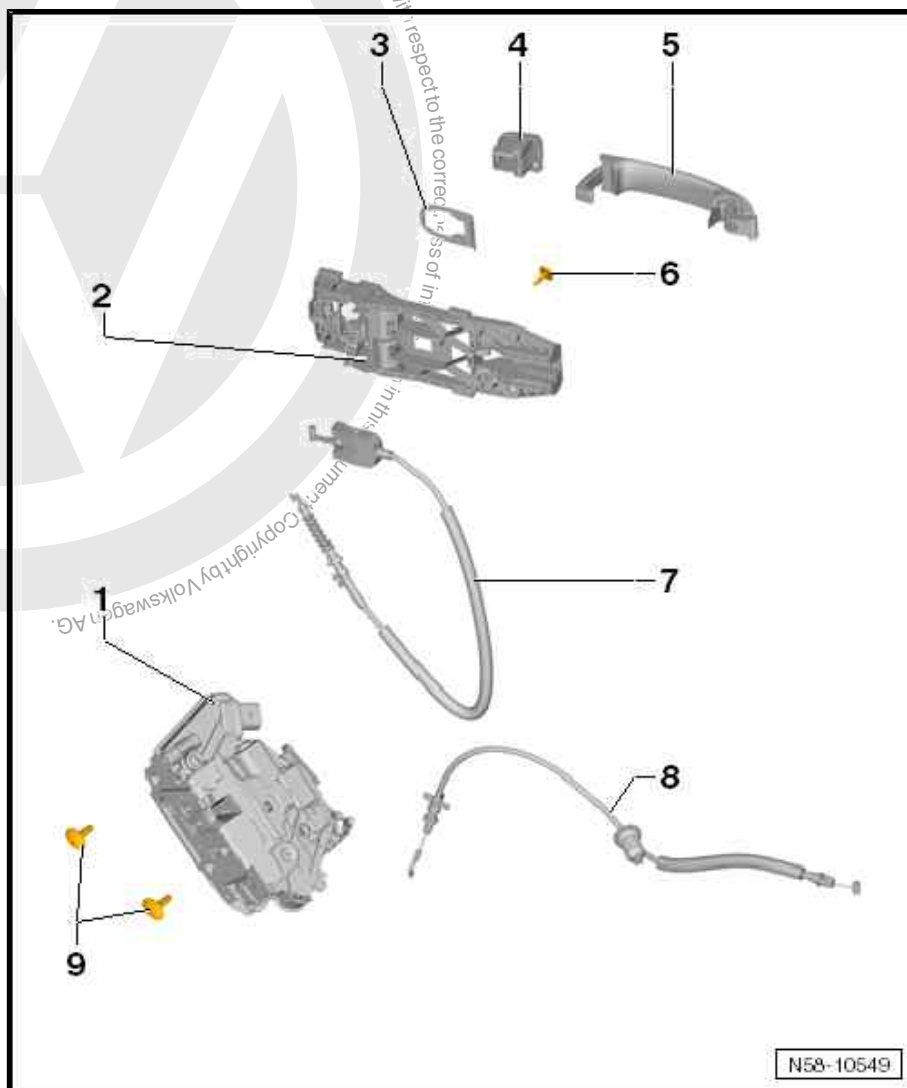
- ☐ From door lock -1- to mounting bracket -3-

8 - Bowden cable

- ☐ From inner door handle to door lock -1-
- ☐ With grommet to passage on cover.

9 - Bolt

- ☐ Qty. 2
- ☐ Specified torque: 18 Nm



N58-10549

2.3 Removing and installing components

⇒ ["2.3.1 Removing and installing door cover", page 131](#)

⇒ ["2.3.2 Removing and installing door retaining strap", page 134](#)

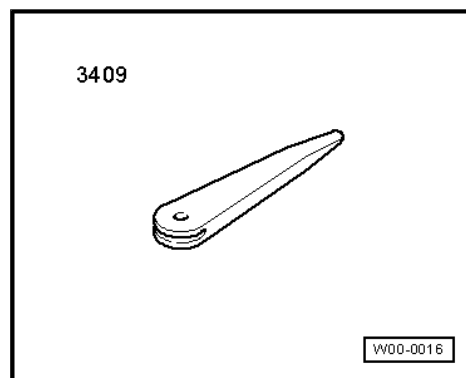
⇒ ["2.3.3 Removing and installing striker pin", page 136](#)

2.3.1 Removing and installing door cover

Special tools and workshop equipment required



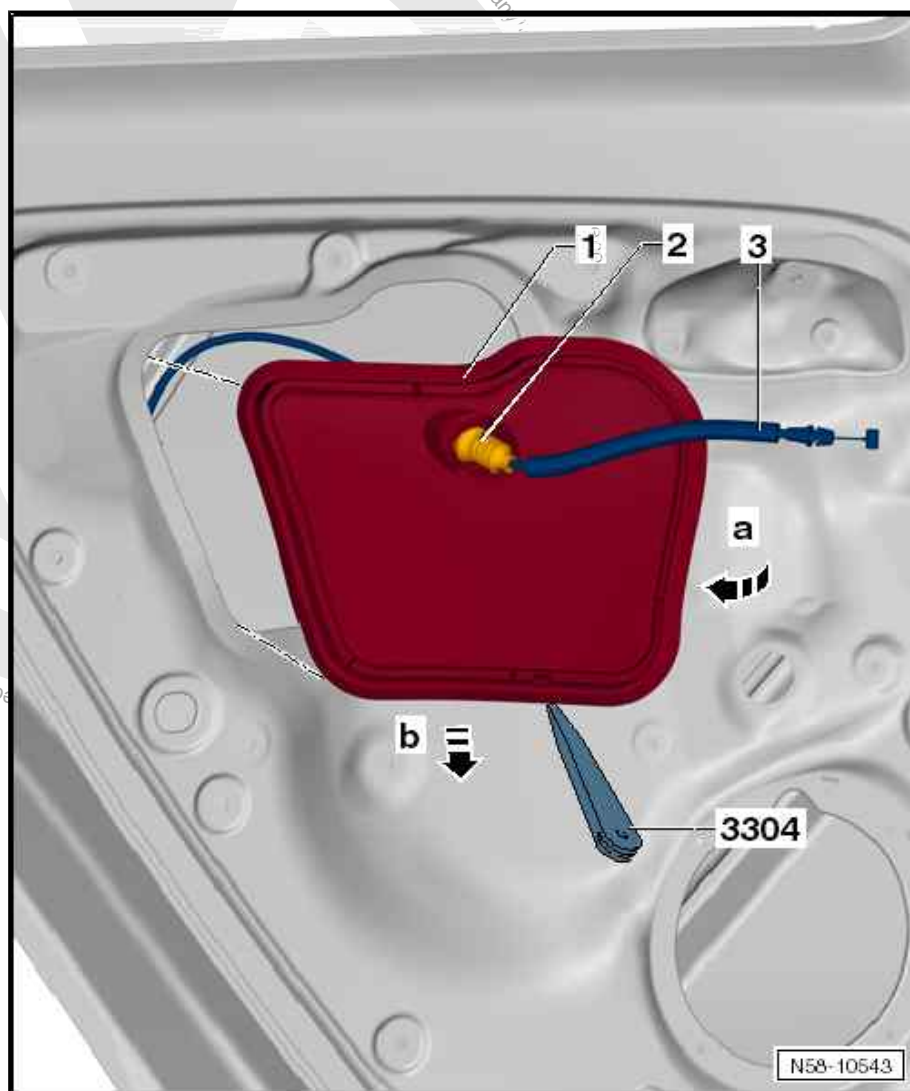
◆ Removal wedge - 3409-



Note

Removal and installation are described only for the left cover. The procedure for the right-hand side is basically the same.

Removing





Perform the following steps:

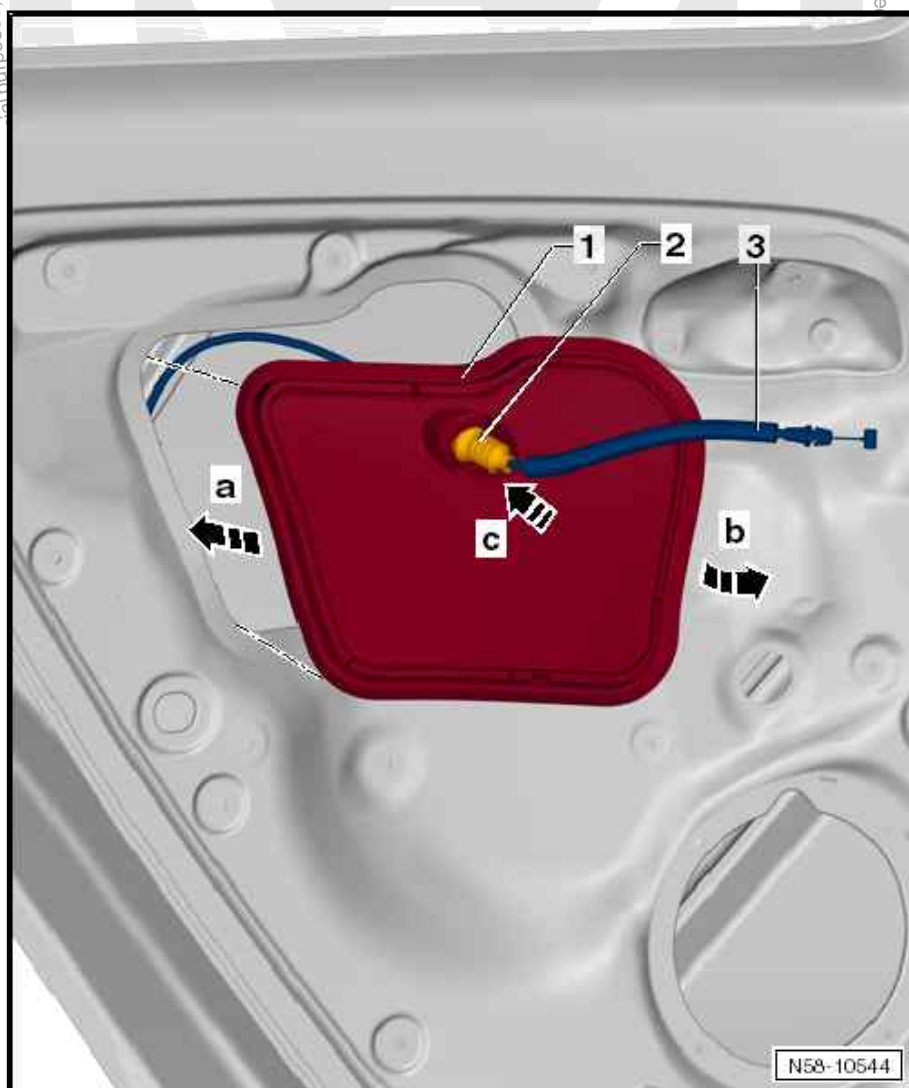
- Remove rear door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Rear door trims; Removing and installing rear door trim .
- If necessary, disconnect connector from pressure sensor -4-.
- Lift lower end of cover -1- -arrow a-.
- Pull cover -1- frontwards out of door -arrows b-.



Note

If required for subsequent work, pull cable -3- with grommet -2- out of cover -1-. Separate connector at grommet (if there is one).

Installing



Perform the following steps:

If a seal is damaged, renew it using 1-component adhesive sealing material - D 469 101 A3- .

- Fit cable -3- together with grommet -2- into cover -1-.



- Attach grommet -2- to cover -1-.
- Insert cover -1- into door -2- -arrows a-.
- Engage cover -1- around circumference -arrows b-.



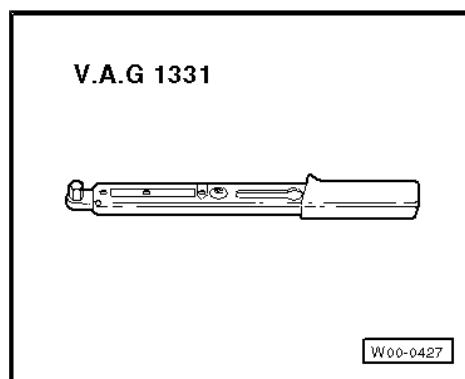
Note

Check proper seating of cover by pressing with fingers around circumference.

2.3.2 Removing and installing door retaining strap

Special tools and workshop equipment required

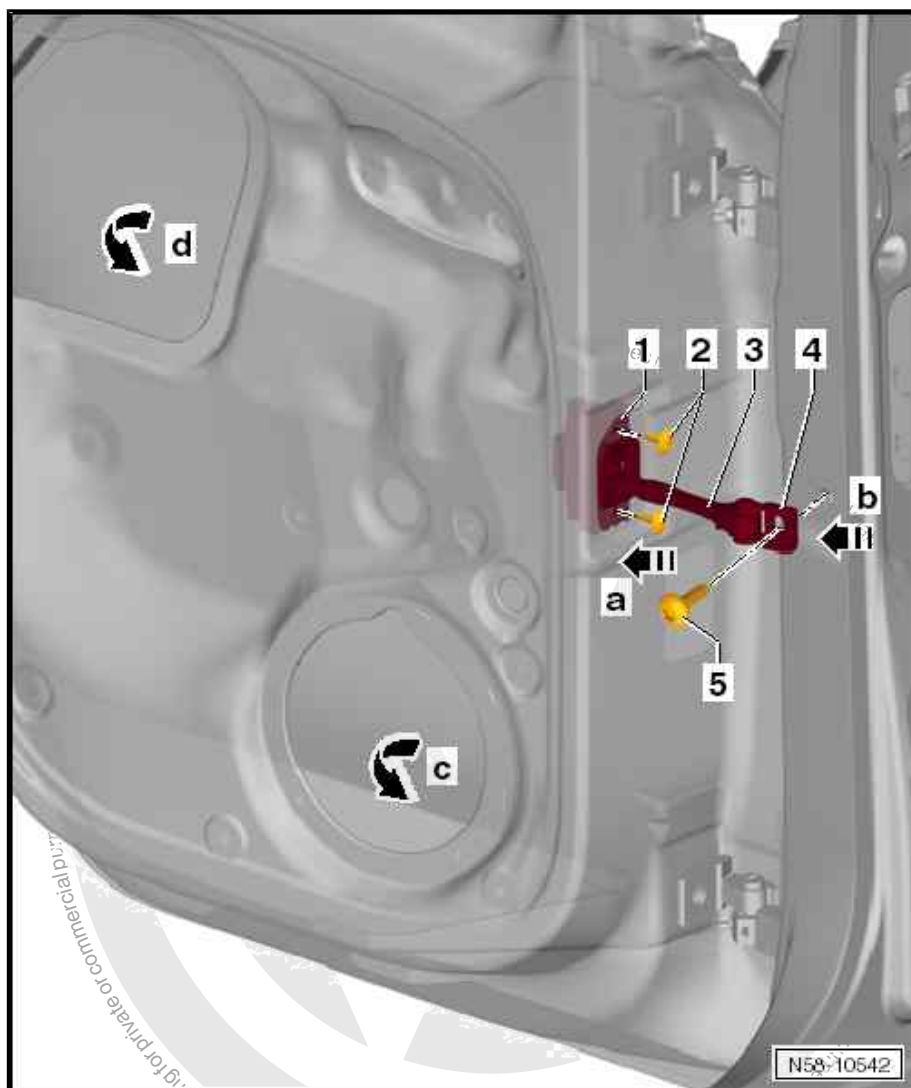
- ◆ Torque wrench - V.A.G 1331-



Note

Removal and installation are described only for the left door arrester. The procedure for the right-hand side is basically the same.

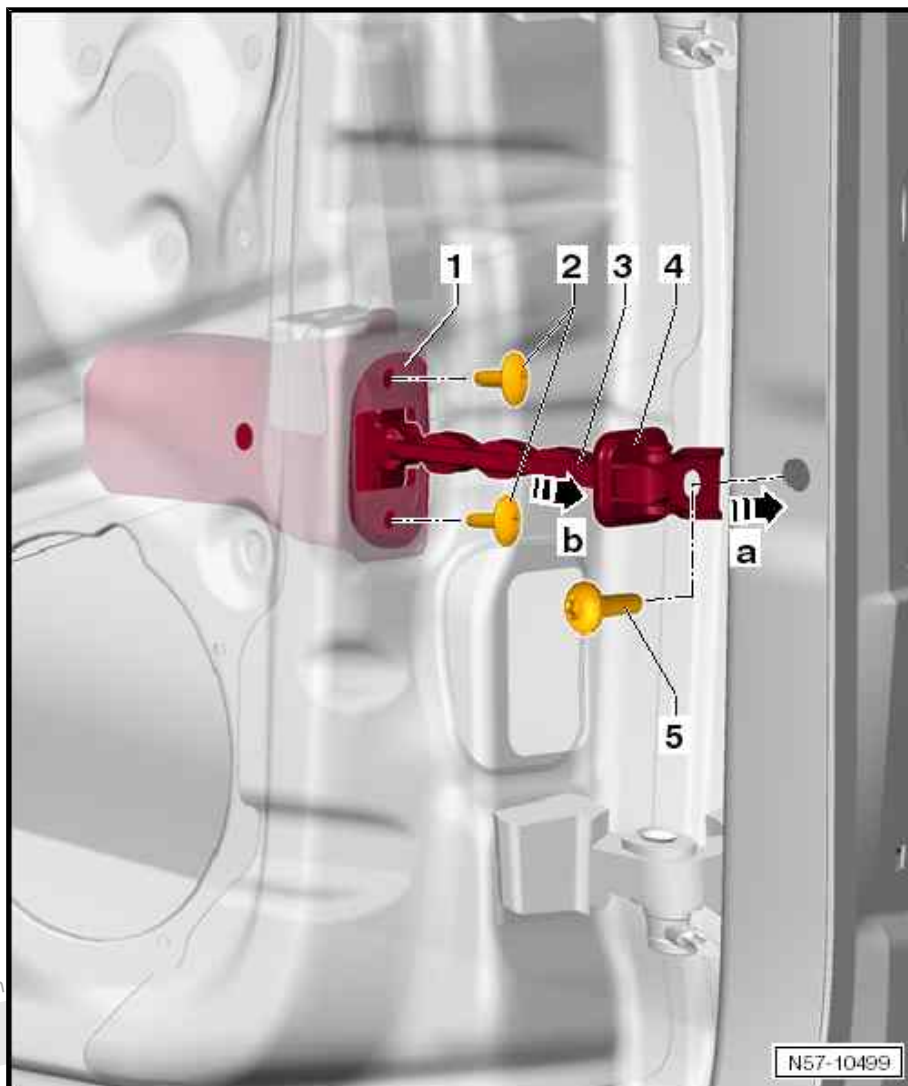
Removing



Perform the following steps:

- Remove rear door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Rear door trims; Removing and installing rear door trim .
- Remove self-adhesive cover or front loudspeaker ⇒ Communication; Rep. gr. 91 ; Sound system; Overview of fitting locations - sound system .
- Unscrew bolt -5- in B-pillar.
- Remove screws -2- and remove door retaining strap -1-.
- ◆ Models with no loudspeaker , pull off self-adhesive cover and remove door retaining strap through opening for loudspeaker -arrow c-.
- ◆ Models with loudspeaker, remove cover ⇒ [page 131](#) and remove through this opening -arrow d-.

Installing



Perform the following steps:

Installation is carried out in the reverse order of removal.

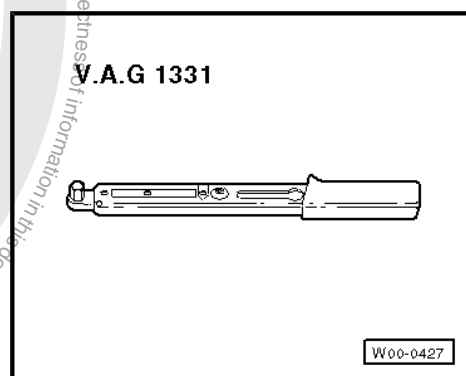
Specified torque for bolts -2-: 9 Nm.

Specified torque for bolts -5-: 30 Nm

2.3.3 Removing and installing striker pin

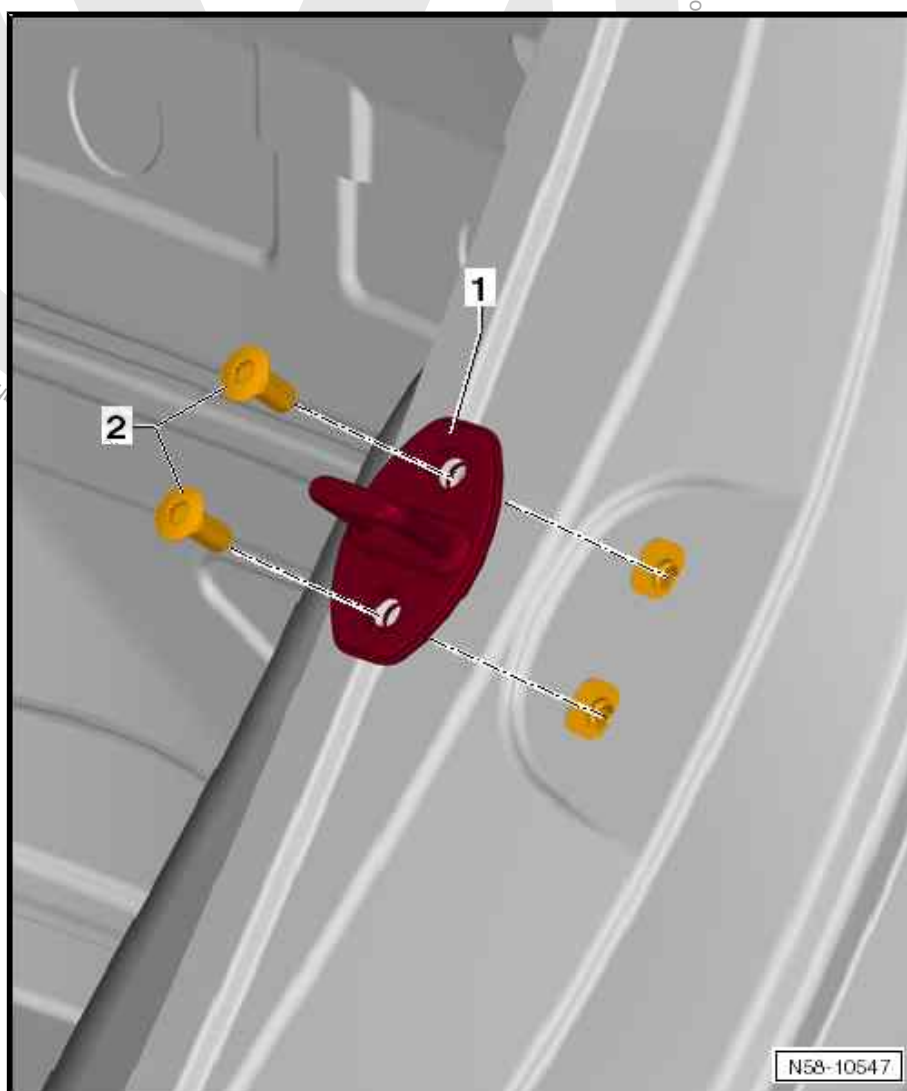
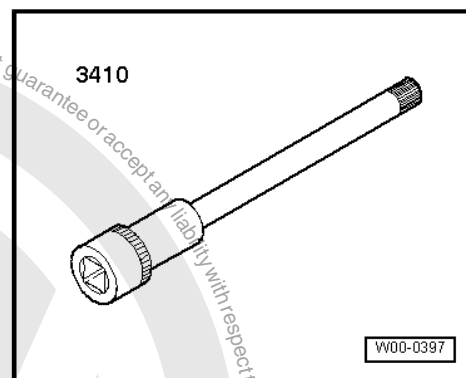
Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-





◆ Socket insert - 3410-



Removing

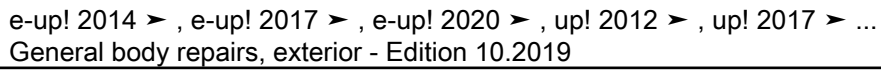
Perform the following steps:

- Unscrew bolts -2- and remove striker pin -1-.

Installing

Perform the following steps:

- Position striker pin -1- on B-pillar -3- and tighten bolts -2-.



- Adjusting striker pin ⇒ page 84

⇒ “2.4.1 Removing and installing door handle”, page 138

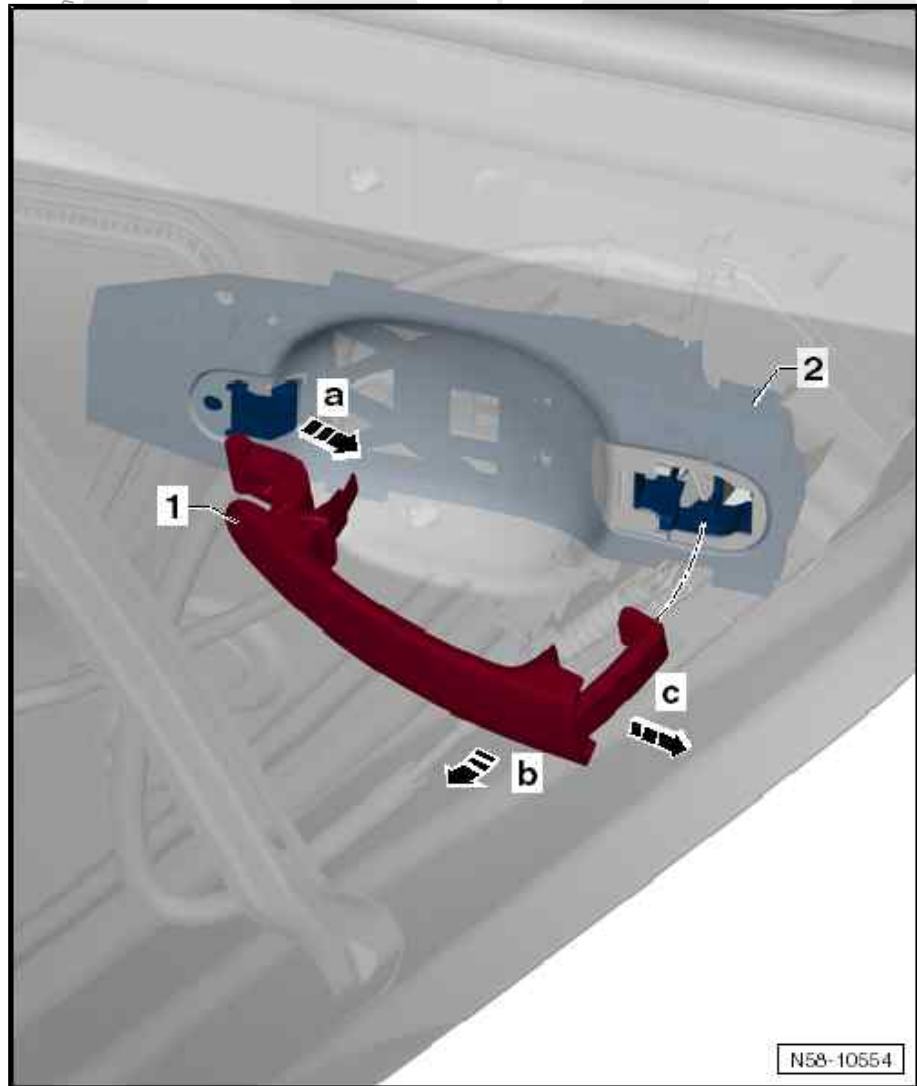
⇒ "2.4.2 Removing and installing cover cap (without lock cylinder)", page 139

⇒ **“2.4.3 Removing and installing mounting bracket”, page 141**

Note

The removal and installation sequence is only for the left door handle. The procedure for the right-hand side is basically the same.

Removing

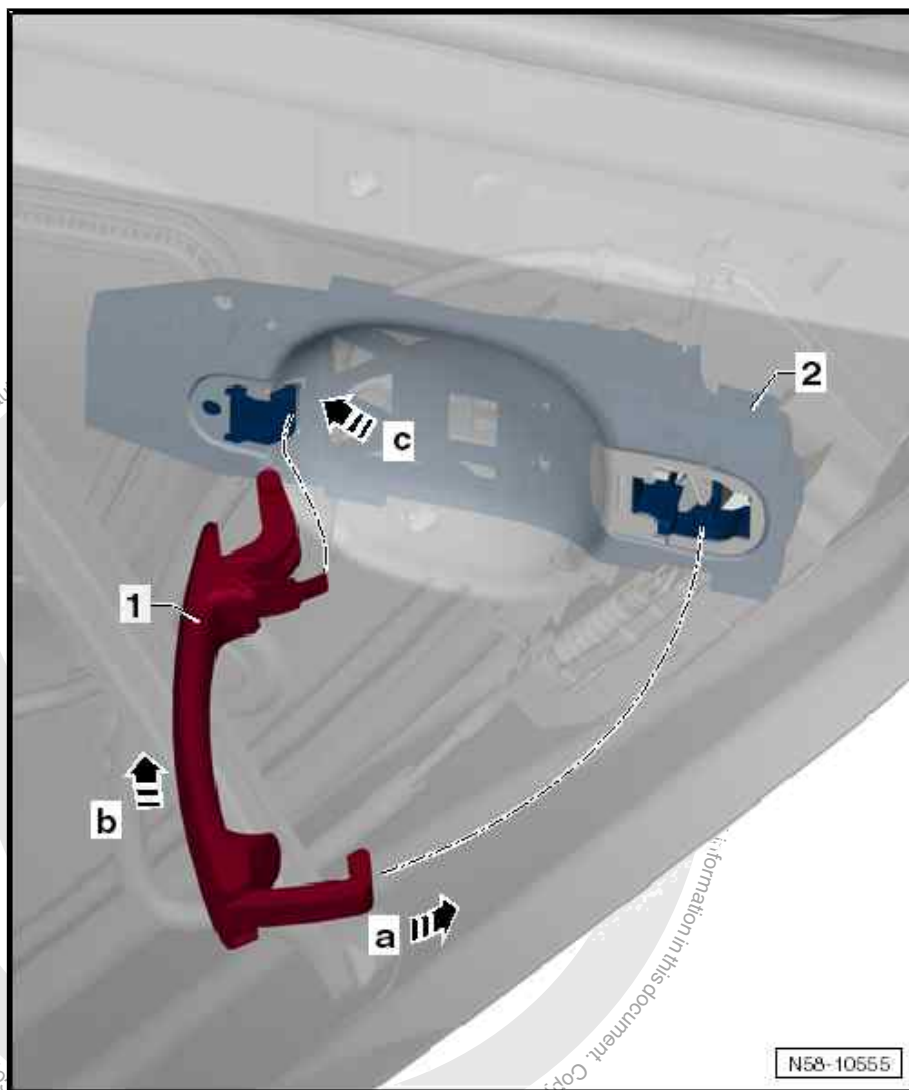


- Remove cap \Rightarrow page 139.



- Pull out door handle -1- backwards slightly -arrow a- from support for mounting bracket.
- Swivel door handle in direction of -arrow b-.
- Pull door handle out of bearing bracket -2- -arrow c-.

Installing



- Seat door handle -1- in mounting bracket, whereby handle must be at right angles to door -arrow b-.
- Swing door handle -1- into door - arrow a-.
- Slide door handle forcibly forwards -arrow c- into support for mounting bracket.

Installing cover cap ⇒ [page 139](#)

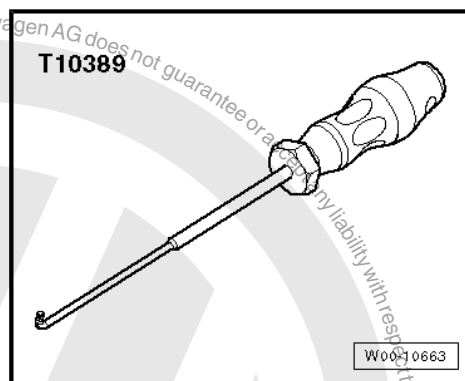
- It is essential that a functional check is then performed with the door open.

2.4.2 Removing and installing cover cap (without lock cylinder)

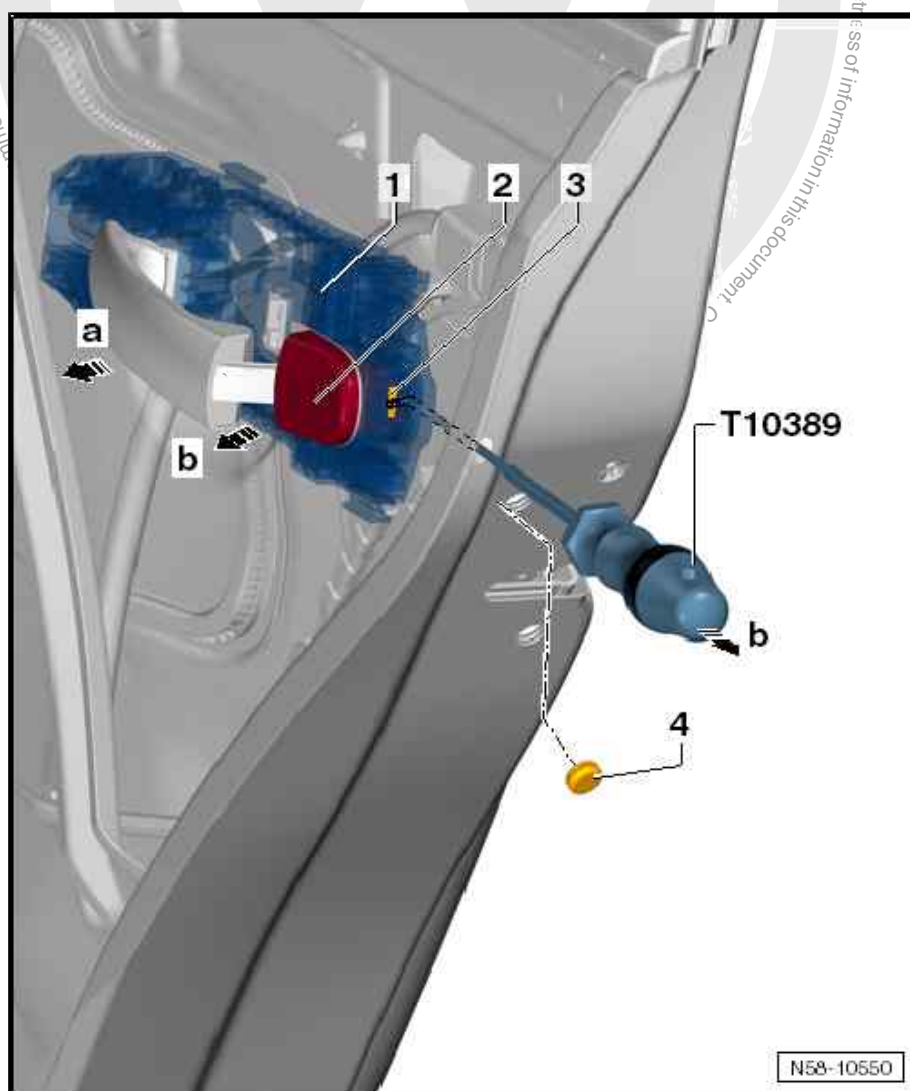
Special tools and workshop equipment required



◆ Assembly tool - T10389-



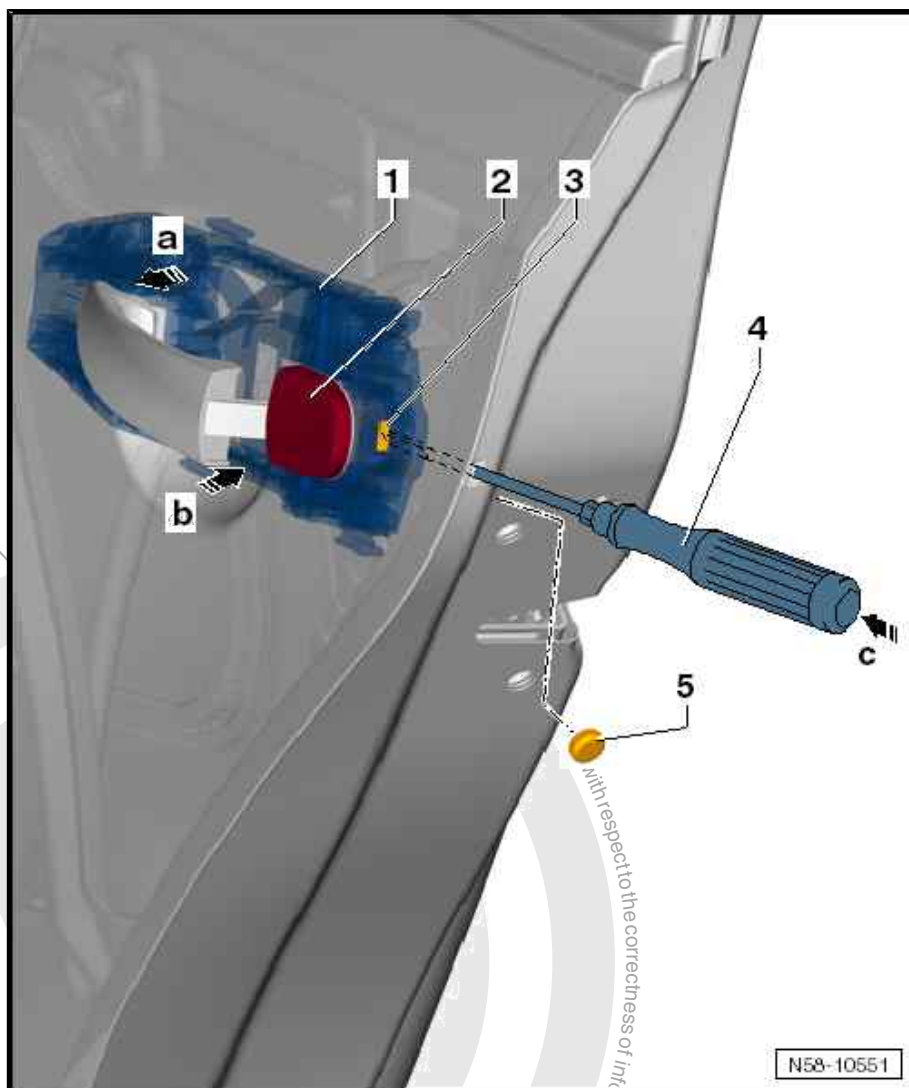
Removing



- Remove plugs -4-.
- Insert assembly tool - T10389- approx. 44 mm into the door behind locking hook -3- of the mounting bracket.
- Pull assembly tool - T10389- approx. 5 mm backwards -arrow- until hook is detached.
- Pull door handle -1- away from door.

- Pull cover cap -1- out of mounting bracket -arrow b-.

Installing



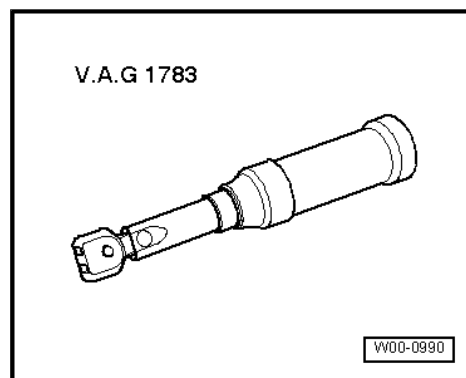
- Pull door handle -1- away from door in -direction of arrow a-.
- Push cover cap -2- into mounting bracket -arrow b-.
- Insert flat-bladed screwdriver -4- approx. 40 mm into mounting bracket until locking hook -3- is reached.
- Press cap -1- onto door.
- Push screwdriver approx. 5 mm into hole -arrow c- until hook locks in place.
- Secure plug -5-.

2.4.3 Removing and installing mounting bracket

Special tools and workshop equipment required



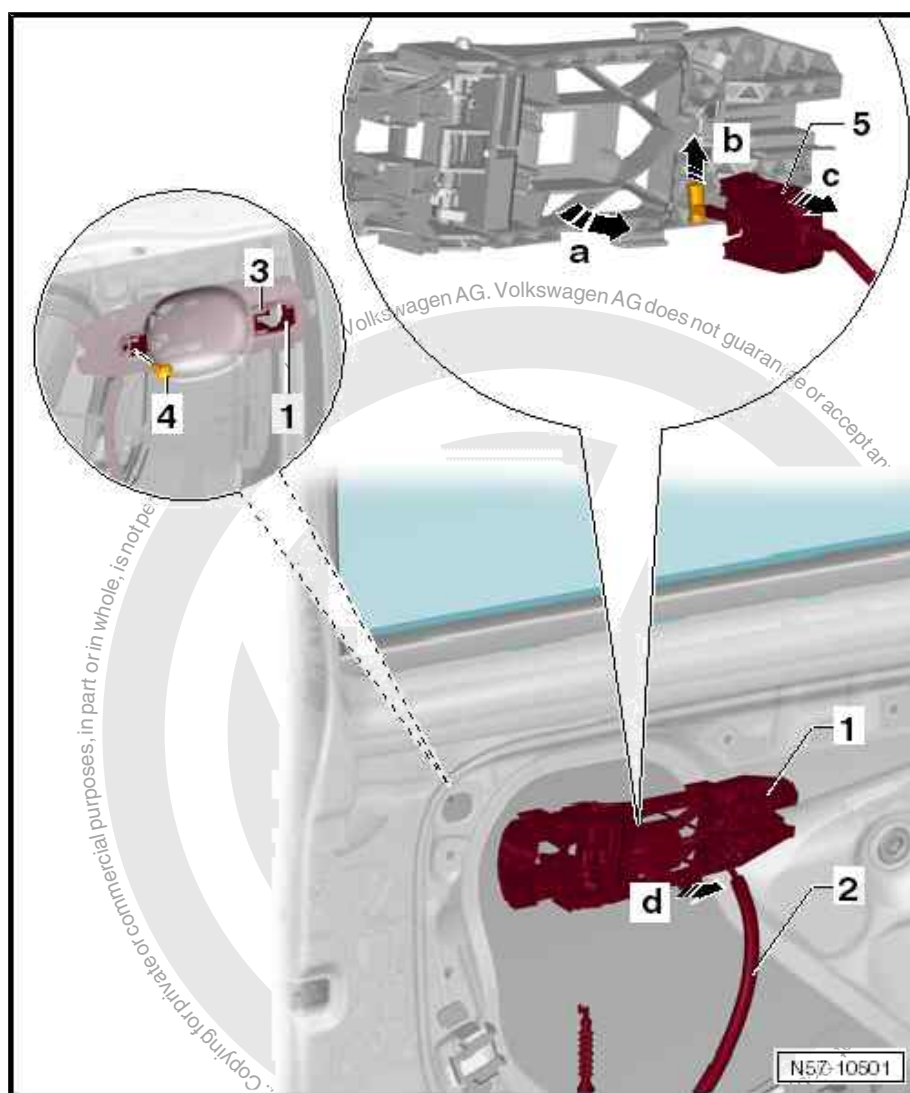
◆ Torque wrench - V.A.G 1783-



Note

Removal and installation are described only for the left mounting bracket. The procedure for the right-hand side is basically the same.

Removing





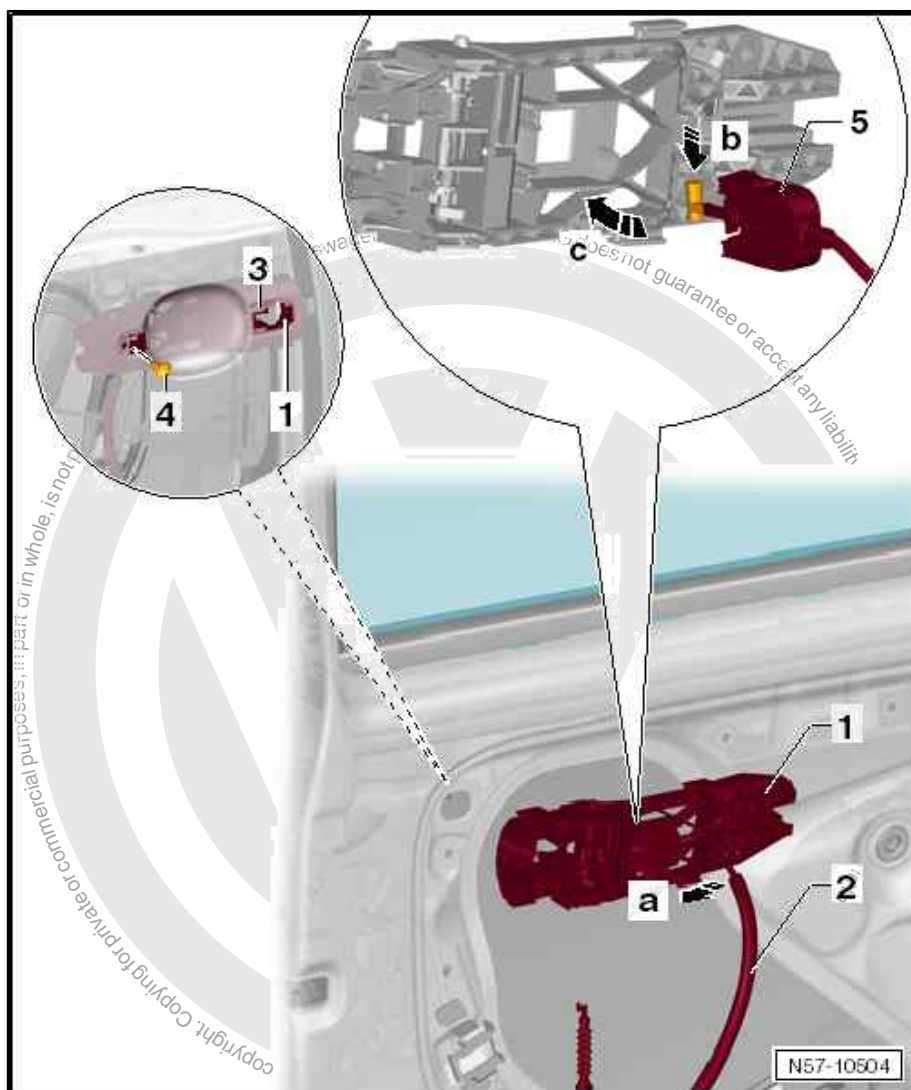
Perform the following steps:

- Remove rear door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Rear door trims; Removing and installing rear door trim .
- Remove cover ⇒ [page 131](#) .
- Remove cap ⇒ [page 139](#) .
- Remove door handle ⇒ [page 138](#) .
- Remove door lock ⇒ [page 144](#) .
- Unscrew bolt -4-, and remove base -3-.
- Remove mounting bracket -1- from front door -arrow d-.

Detach cable

- Release holding device -5- and swivel it out of mounting in mounting bracket -arrow a-.
- Lift cable bolt out of mounting -arrow b-.
- Take cable -2- out of mounting bracket -1- -arrow c-.

Installing





Perform the following steps:

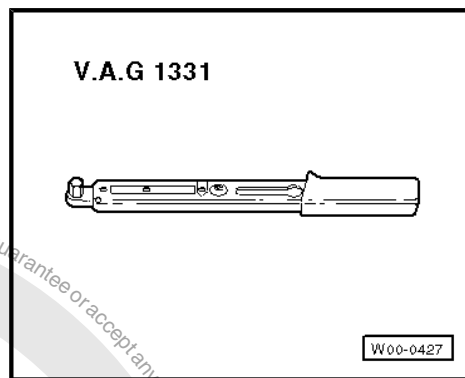
Installation is carried out in the reverse order of removal. The following should be observed:

Specified torque for bolts -4-: 1.5 Nm.

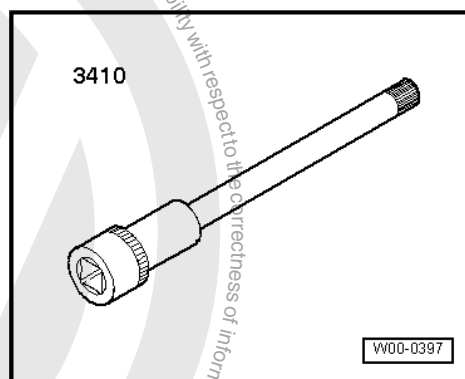
2.5 Removing and installing door lock

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-



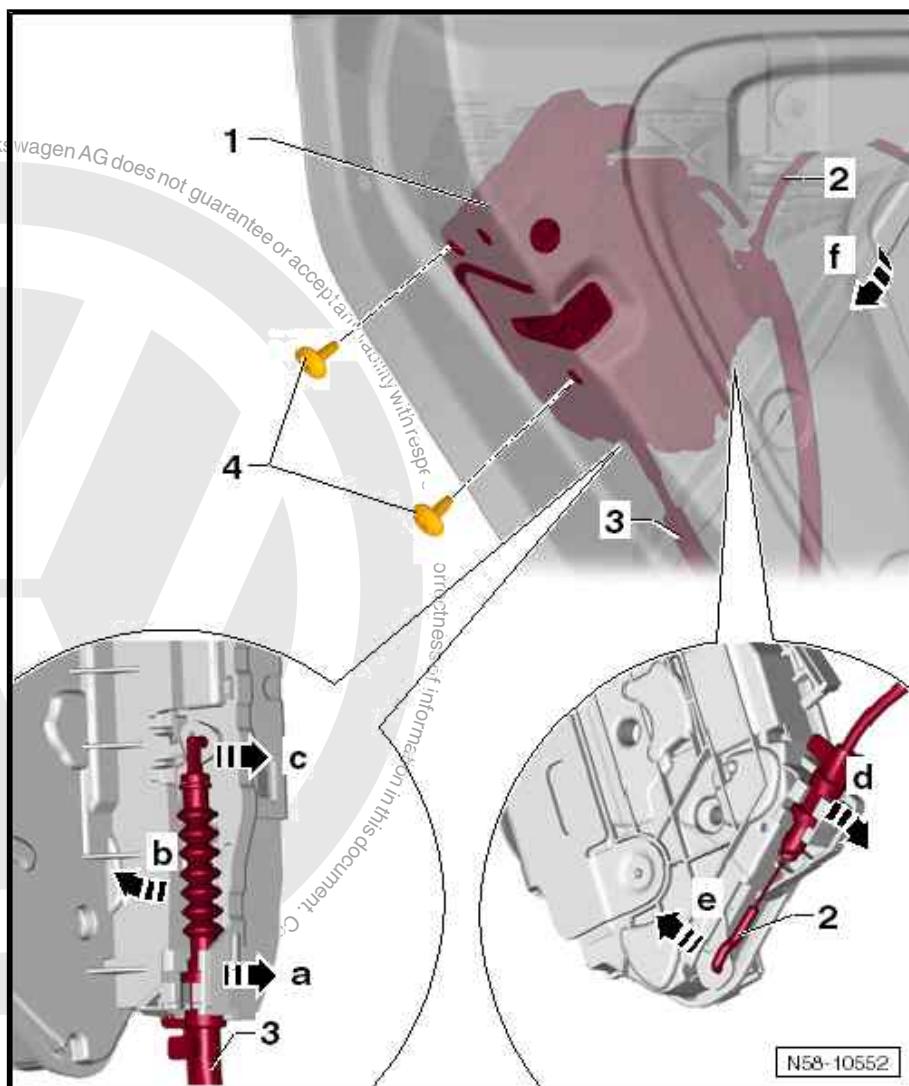
- ◆ Socket insert - 3410-



Note

*Removal and installation are described only for the left door lock.
The procedure for the right-hand side is basically the same.*

Removing



Perform the following steps:

- Remove rear door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Rear door trims; Removing and installing rear door trim .
- Remove cover ⇒ [page 131](#) .
- Remove cap ⇒ [page 139](#) .
- If fitted, disconnect connector.
- Unscrew bolts -4-.
- Remove door lock -1- from door -arrow f-.



Note

Cables can be detached if this is necessary for subsequent work.

Detach cable from mounting bracket

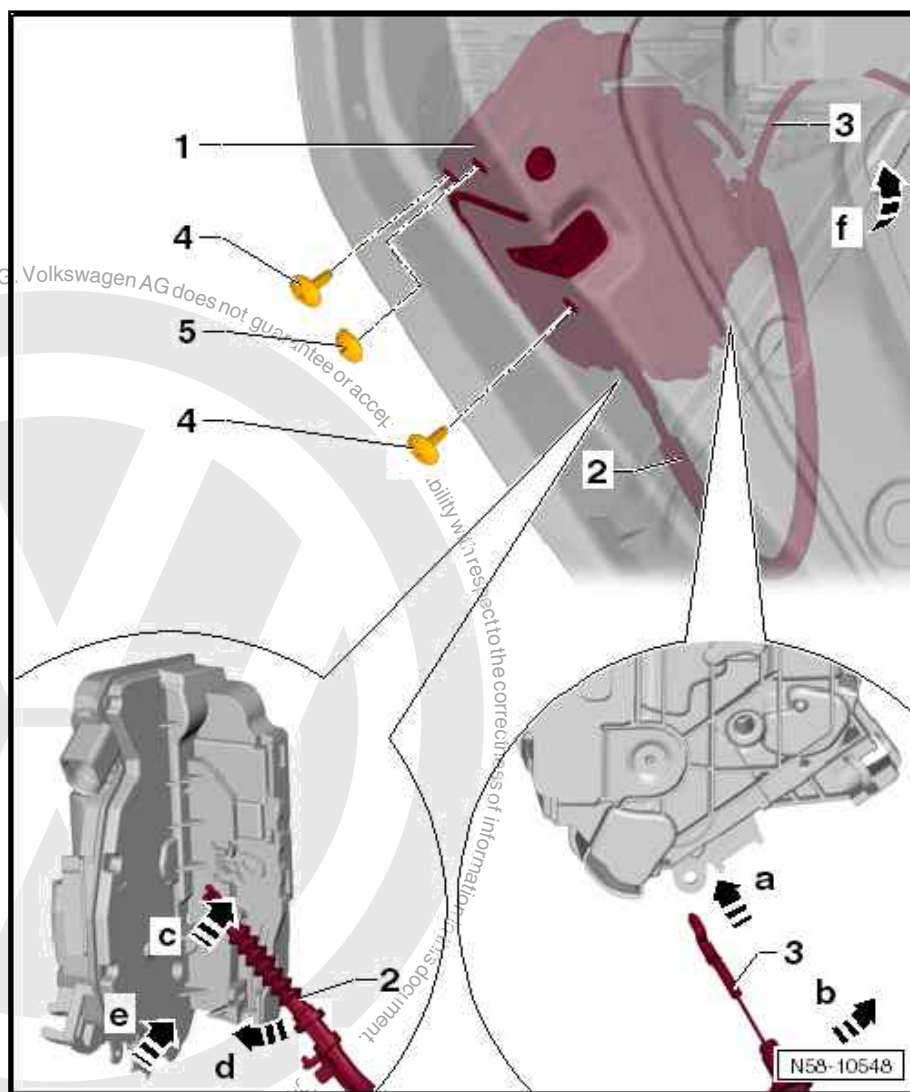
- Turn cable -3- 90° and take out of holder -arrow a-.
- Swivel cable -arrow b- so far until cable can be threaded out of eye in door lock -1- -arrow c-.



Detach cable from interior door handle

- Turn cable -2- by 90° and take it out of holding device.
- Swivel cable -arrow d- so far until cable can be threaded out of eye in door lock -1- -arrow e-.

Installing



Perform the following steps:

- Attach removed cables -2- and -3- to door lock -1-.
- Insert door lock -1- into door -arrow f-.
- If fitted, connect connector.
- Screw in bolts -4-.

Specified torque for bolts -4-: 18 Nm

- Clip cap -5- in.

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

- It is essential to perform a functional check. If the cables are not adjusted correctly and the door is closed without having



performed a functional check, the door lock might not unlock and the door can't be opened.

2.6 Removing and installing door seal

⇒ **"2.6.1 Removing and installing inner door seal", page 147**

2.6.1 Removing and installing inner door seal

During production, a sealant is applied to the inner door seals, which are then placed on the door flange and rolled on.

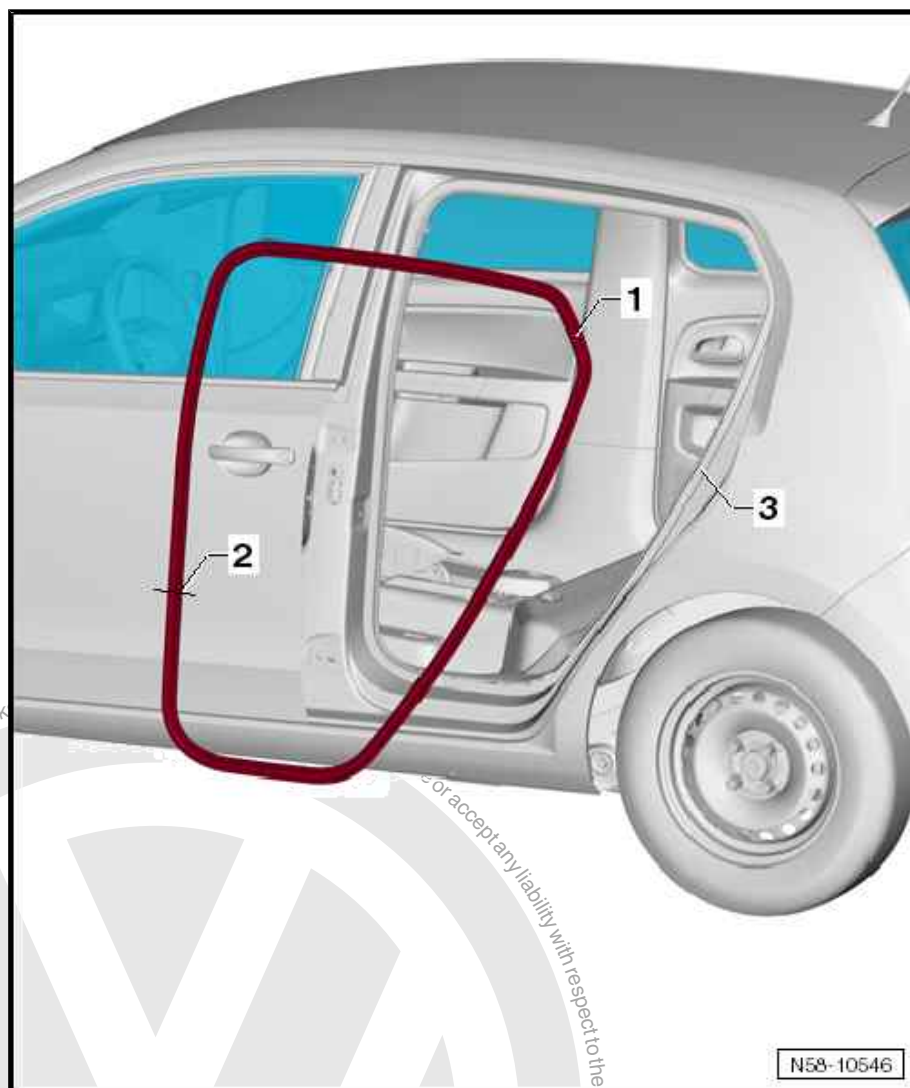


Note

- ◆ *When removing the seal, the sealant is distributed across the inside of the seal. The sides are bent upwards slightly when this is being done. If the seal is then refitted, sealing and firm seating are no longer guaranteed.*
- ◆ *Therefore, each seal that is completely removed must be renewed with a so-called "tap-on seal".*
- ◆ *If a seal has been partially removed, squeeze sides of seal together before installing.*
- ◆ *Removal and installation are described only for the left door inner seal. The procedure for the right-hand side is basically the same.*
- ◆ *For reasons of clarity the rear door is shown removed.*

Removing





Perform the following steps:

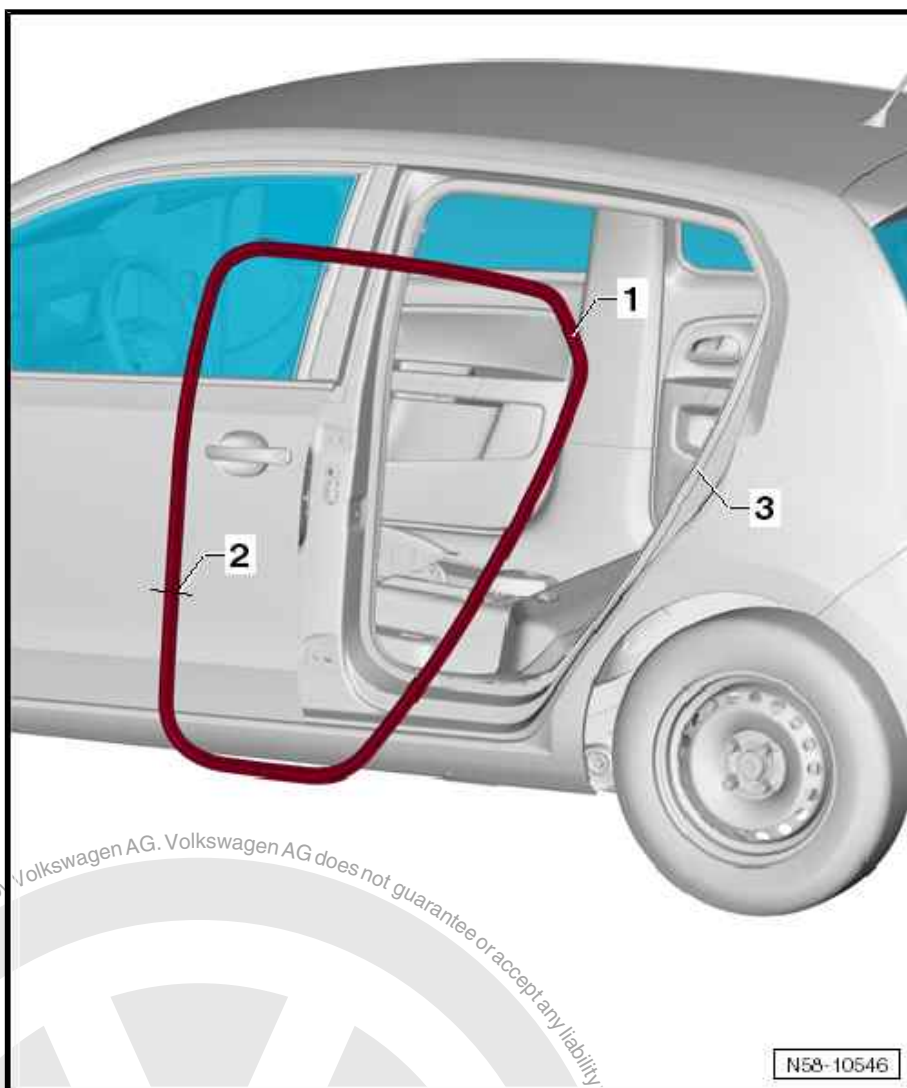
- Remove sill panel trim ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Removing and installing sill panel trim .
- To remove inner door seal, remove pillar trims as required ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Overview of fitting locations – trims, interior .
- Pull off inner door seal -1- from body flange -3-.

Installing



Note

Do not kink vulcanised point -2-.



Perform the following steps:

- Start installing inner door seal -1- in upper radius of door aperture.
- Install pillar trims ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior .
- Install sill panel strip ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Removing and installing sill panel strip .



60 – Sunroof

1 Sliding sunroof

- ⇒ [“1.1 Assembly overview - sliding sunroof”, page 150](#)
- ⇒ [“1.2 Assembly overview - sunroof roller blind”, page 153](#)
- ⇒ [“1.3 Assembly overview - sliding sunroof frame”, page 155](#)
- ⇒ [“1.4 Assembly overview - front trim”, page 156](#)
- ⇒ [“1.5 Removing sunroof panel”, page 157](#)
- ⇒ [“1.6 Adjusting sunroof panel”, page 162](#)
- ⇒ [“1.7 Removing and installing sliding sunroof adjustment control unit J245”, page 164](#)
- ⇒ [“1.8 Adapting sliding sunroof adjustment control unit J245”, page 169](#)
- ⇒ [“1.9 Removing and installing cover”, page 170](#)
- ⇒ [“1.10 Removing and installing wind deflector”, page 171](#)
- ⇒ [“1.11 Removing and installing sunroof roller blind”, page 173](#)
- ⇒ [“1.12 Removing and installing guide plate”, page 180](#)
- ⇒ [“1.13 Removing and installing sliding sunroof seals”, page 185](#)
- ⇒ [“1.14 Removing and installing sliding sunroof frame”, page 187](#)
- ⇒ [“1.15 Removing and installing front trim for sliding sunroof”, page 196](#)

1.1 Assembly overview - sliding sunroof

- ⇒ [“1.1.1 Assembly overview - sliding sunroof”, page 150](#)
- ⇒ [“1.1.2 Function”, page 152](#)

1.1.1 Assembly overview - sliding sunroof



1 - Sunroof panel (single pane safety glass)

- ☐ Removing sunroof panel ⇒ [page 157](#) .
- ☐ Removing sunroof panel in the event of a defective drive ⇒ [page 159](#)
- ☐ Installing sunroof panel ⇒ [page 160](#)
- ☐ Adjusting sunroof panel ⇒ [page 162](#)

2 - Bolt

- ☐ Bolts are microencapsulated and must always be renewed after loosening.
- ☐ Qty. 6
- ☐ 5.5 Nm

3 - Sliding sunroof seal

- ☐ Removing and installing ⇒ [page 185](#)

4 - Sunroof roller blind

- ☐ Removing and installing ⇒ [page 173](#)

5 - Sliding roof frame

- ☐ Removing and installing sliding sunroof frame ⇒ [page 187](#) .
- ☐ Guide channels are to be greased, if required, with special grease G 060 751 A2 only otherwise correct operation cannot be guaranteed.

6 - Bolt

- ☐ For the cover
- ☐ Qty. 3
- ☐ 2.5 Nm

7 - Cover

- ☐ Removing and installing ⇒ [page 170](#)

8 - Bolt

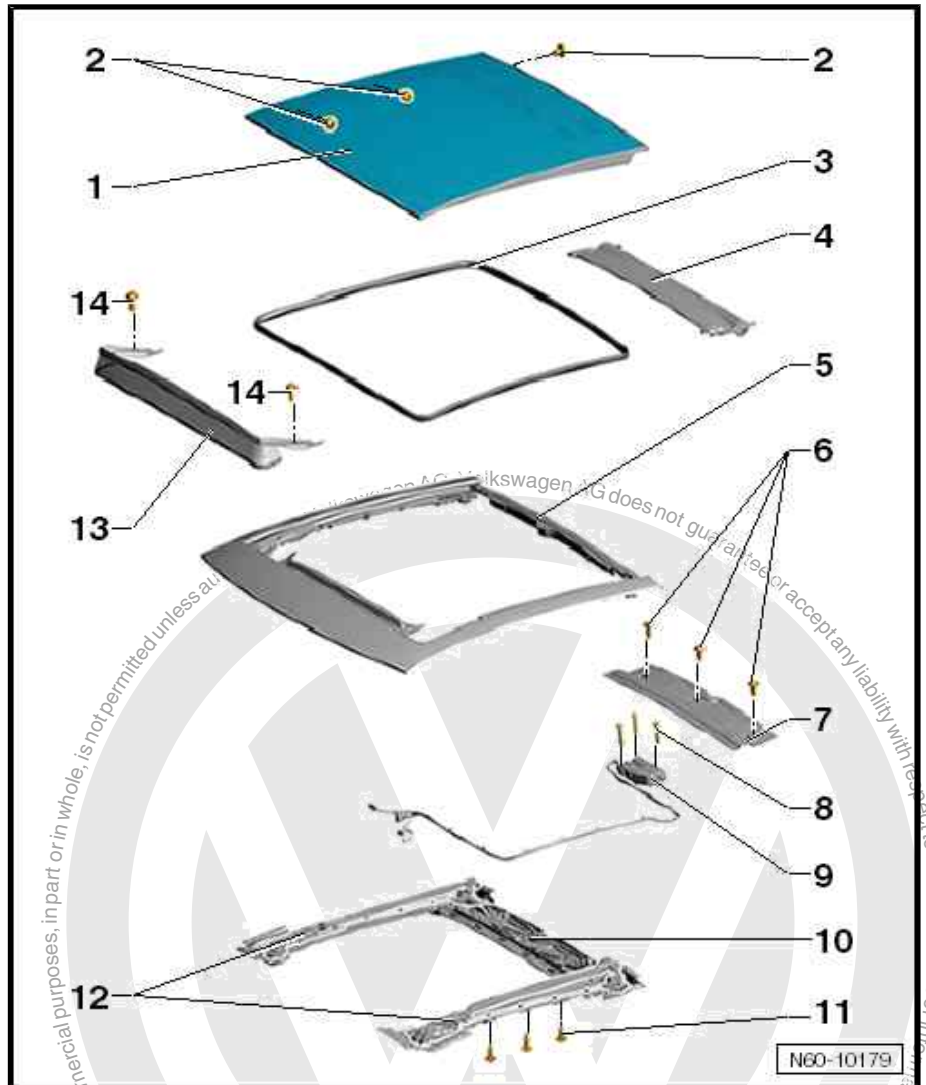
- ☐ For sliding sunroof motor.
- ☐ Qty. 3
- ☐ 4 Nm

9 - Electric drive

- ☐ Removing and installing ⇒ [page 164](#)
- ☐ Initialising the drive ⇒ [page 169](#)

10 - Securing bracket

- ☐ For sun blind and drive
- ☐ Forms one component in conjunction with guide plate.
- ☐ Removing and installing ⇒ [page 180](#)





11 - Bolt

- ☐ Bolts are microencapsulated and must always be renewed after loosening.
- ☐ Qty. 13
- ☐ 3 Nm

12 - Guide plate

- ☐ With tilting mechanism and cables
- ☐ Forms one component in conjunction with securing bracket
- ☐ Removing and installing ⇒ [page 180](#)

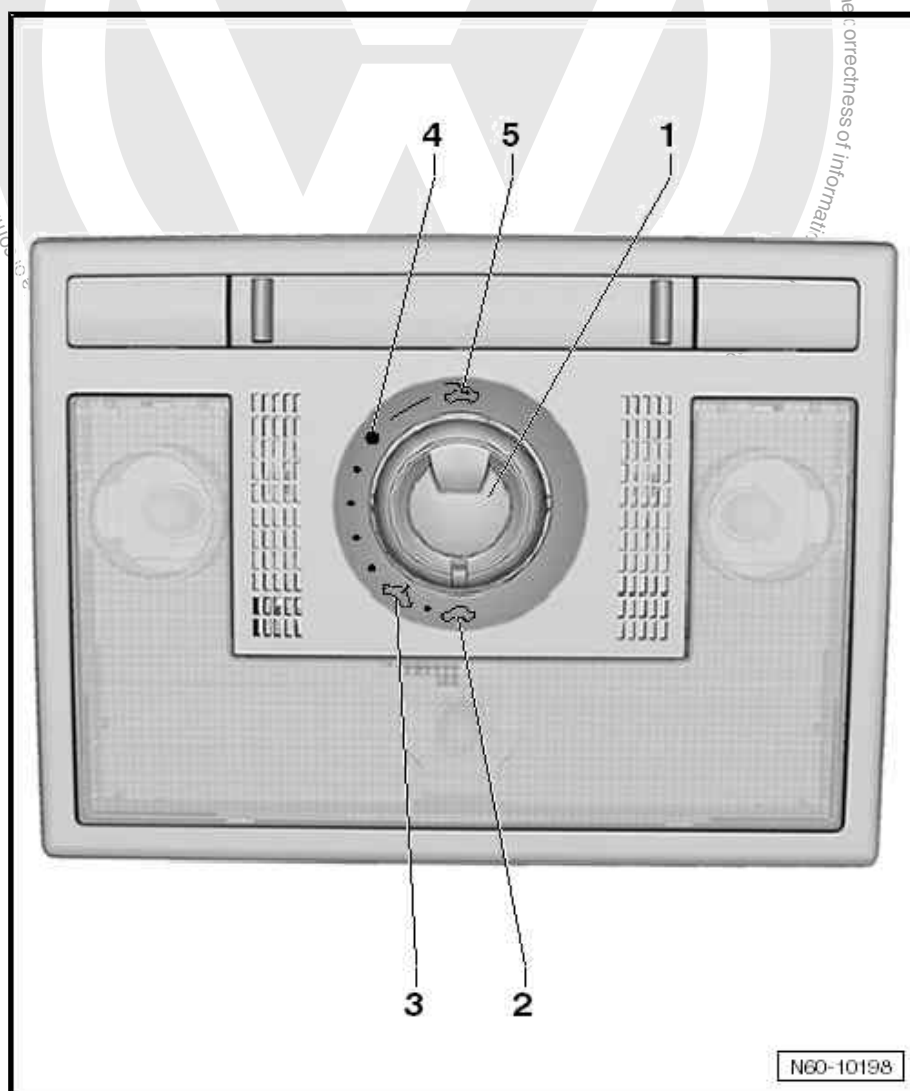
13 - Wind deflector

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

14 - Bolt

- ☐ For wind deflector.
- ☐ Qty. 2
- ☐ 2 Nm

1.1.2 Function





All actions of the panorama tilting sunroof 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.

The panorama tiling sunroof is tilted by turning the switch to -position 3-.

The panorama tilting roof is opened by turning switch to -position 4 or 5- and is closed by turning switch to -position 2-.

The glass sunroof motor is equipped with a force limitation (anti-trap) mechanism. If the sunroof encounters an obstruction while closing, it will open automatically.

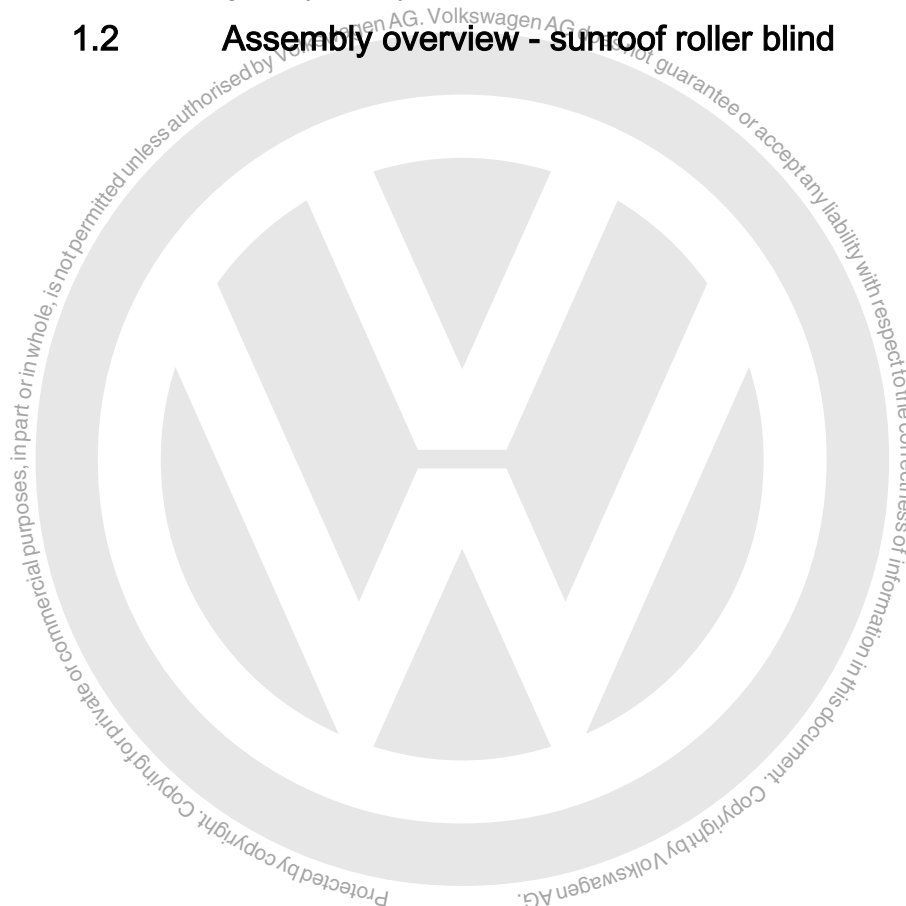
In addition, there is an emergency closure function. If closing problems occur, forced closure of the glass panel can be achieved by pulling the switch.

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

The glass panel drive is protected against overheating by a time limitation. The locking mechanism activates when the sunroof is operated continuously for approx. 2 minutes. It is functional again after a cooling-off phase.

In the event of power failure, the glass panel can be moved using a 4 mm hexagon key directly on the drive.

1.2 Assembly overview - sunroof roller blind





1 - Sunroof roller blind

- ❑ Removing and installing
⇒ [page 173](#)

2 - Support

- ❑ For sunroof roller blind fabric.

3 - Bolt

- ❑ For sunroof sun blind.
- ❑ Qty. 2
- ❑ Specified torque:
2.5 Nm

4 - Tension wire

- ❑ For securing the fabric in the tension bow

5 - Follower

6 - Roller slider

7 - Locking pins

- ❑ 2 for each roller slider

8 - Rubber buffer

- ❑ 4 for each roller slider

9 - Spring

- ❑ For the roller slider

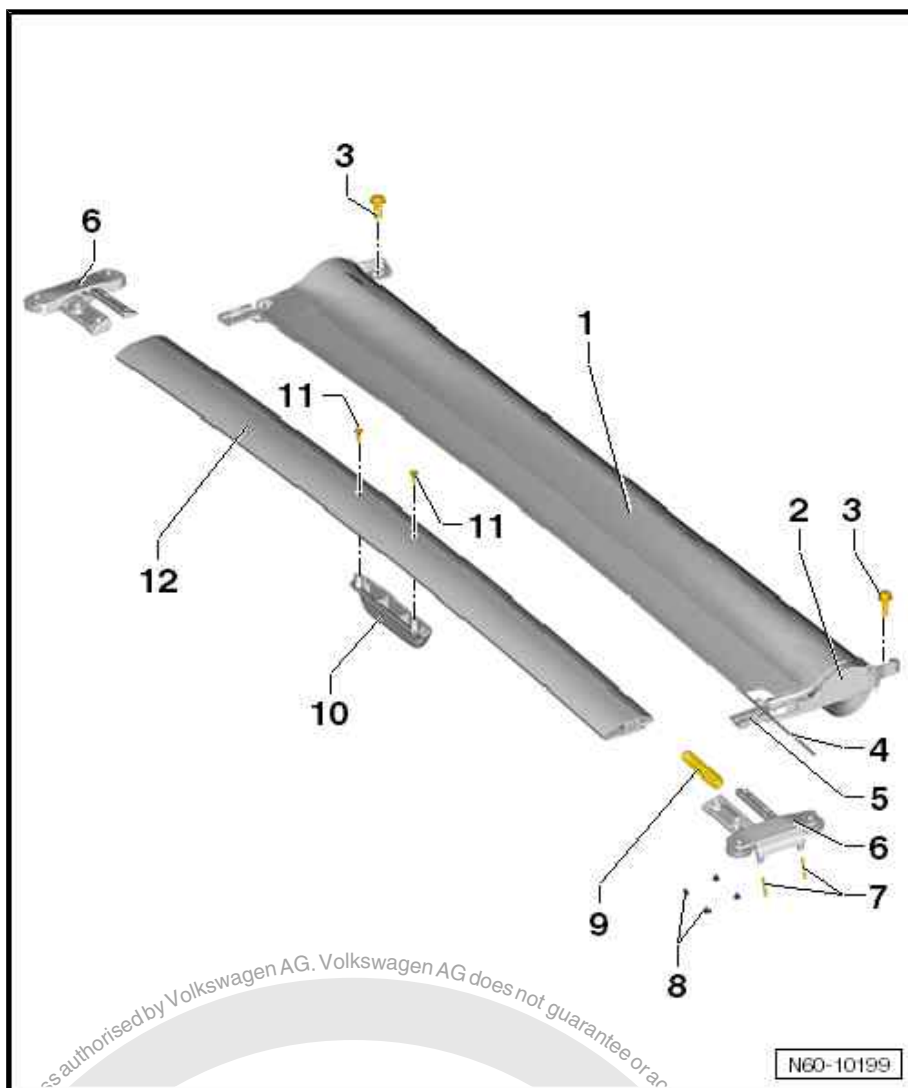
10 - Handle

11 - Bolt

- ❑ For the handle
- ❑ Qty. 2
- ❑ Specified torque: 1 Nm

12 - Tension bow

- ❑ Removing and installing ⇒ [page 178](#)





1.3 Assembly overview - sliding sunroof frame



Note

- ◆ In order to remove sliding sunroof frame -5-, the front trim -1- must first be removed.
- ◆ The front trim is damaged when it is removed and cannot be reused.

1 - Front trim

- ❑ Removing and installing
⇒ [page 196](#)

2 - Adhesive

3 - Sliding sunroof outer seal

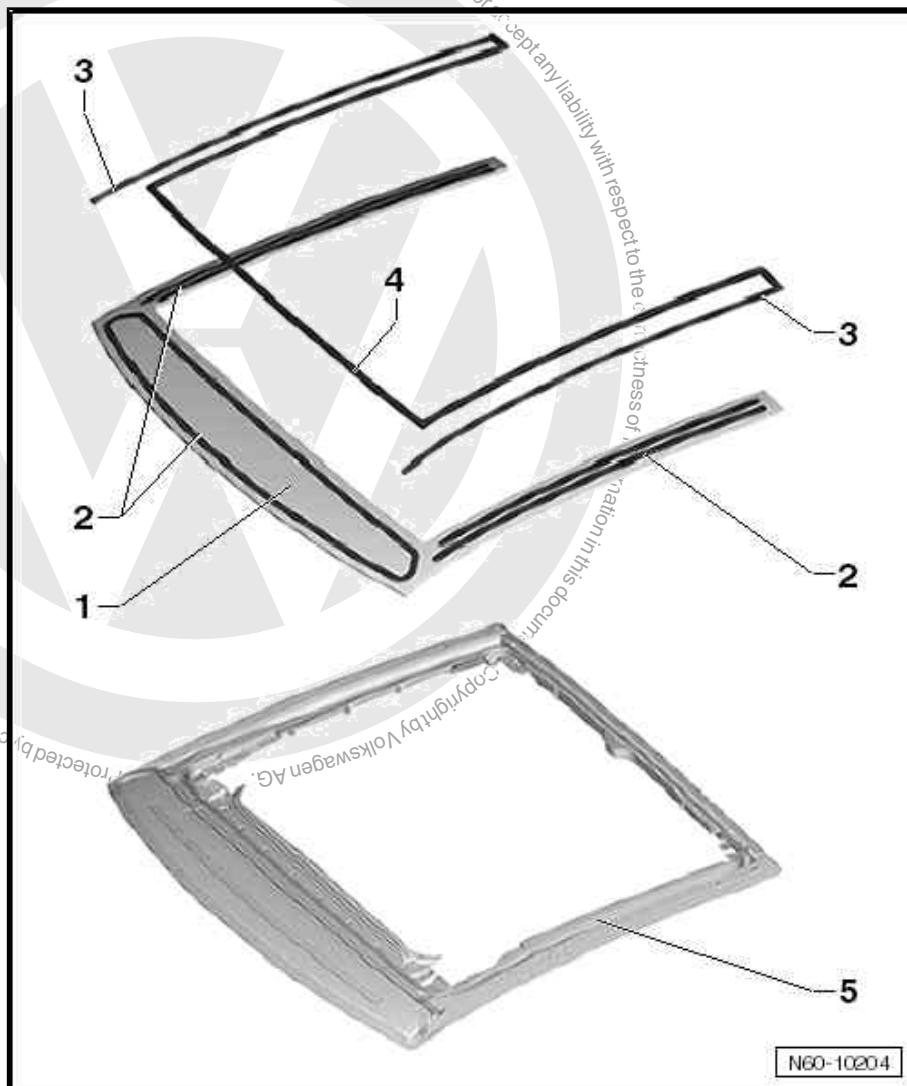
- ❑ Bonded to trim
- ❑ Cannot be replaced as an individual item

4 - Sliding sunroof inner seal

- ❑ Bonded to trim
- ❑ Cannot be replaced as an individual item

5 - Sliding roof frame

- ❑ Removing and installing
⇒ [page 187](#)



N60-10204



1.4 Assembly overview - front trim



Note

- ◆ In order to remove sliding sunroof frame -5-, the front trim -1- must first be removed.
- ◆ The front trim is damaged when it is removed and cannot be reused.

1 - Front trim

- ❑ Removing ⇒ [page 196](#)

2 - Adhesive

3 - Sliding sunroof outer seal

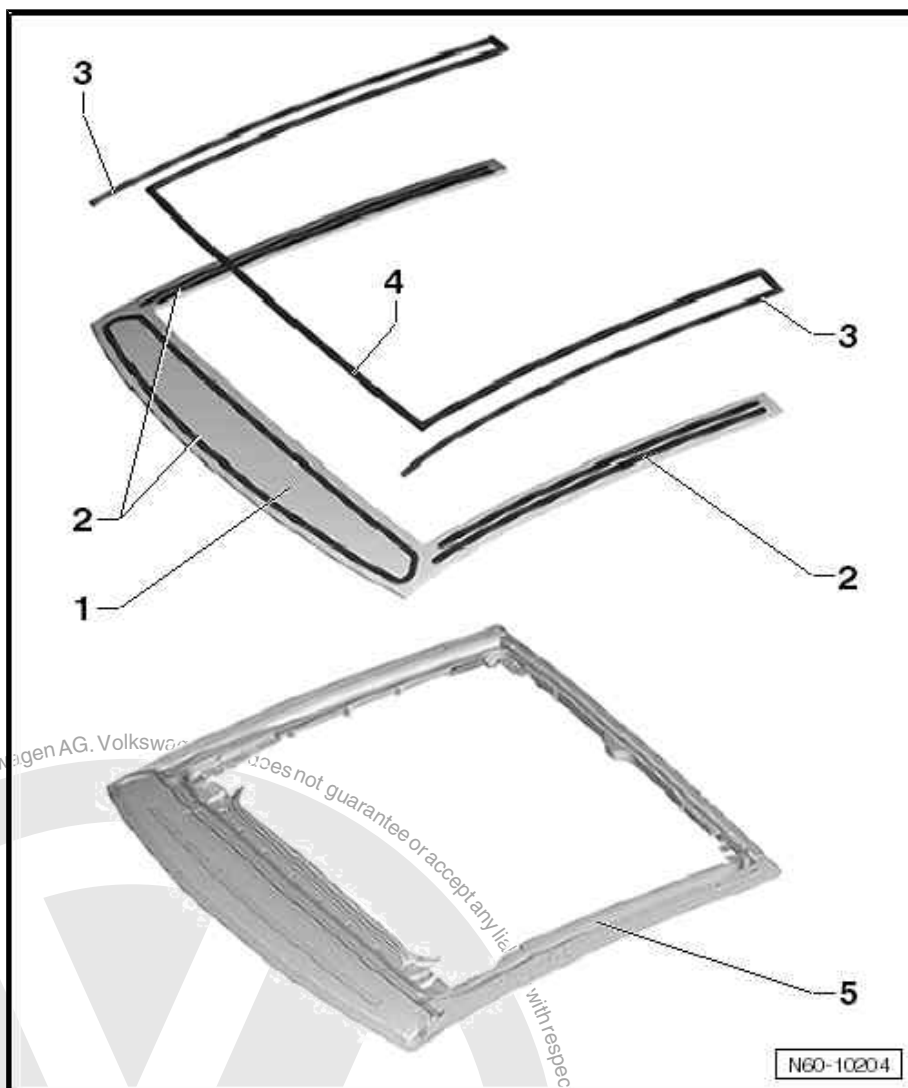
- ❑ Bonded to trim
- ❑ Cannot be replaced as an individual item

4 - Sliding sunroof inner seal

- ❑ Bonded to trim
- ❑ Cannot be replaced as an individual item

5 - Sliding roof frame

- ❑ Removing and installing
⇒ [page 187](#)





1.5 Removing sunroof panel

⇒ ["1.5.1 Removing sunroof panel", page 157](#)

⇒ ["1.5.2 Removing sunroof panel in the event of a defective drive", page 159](#)

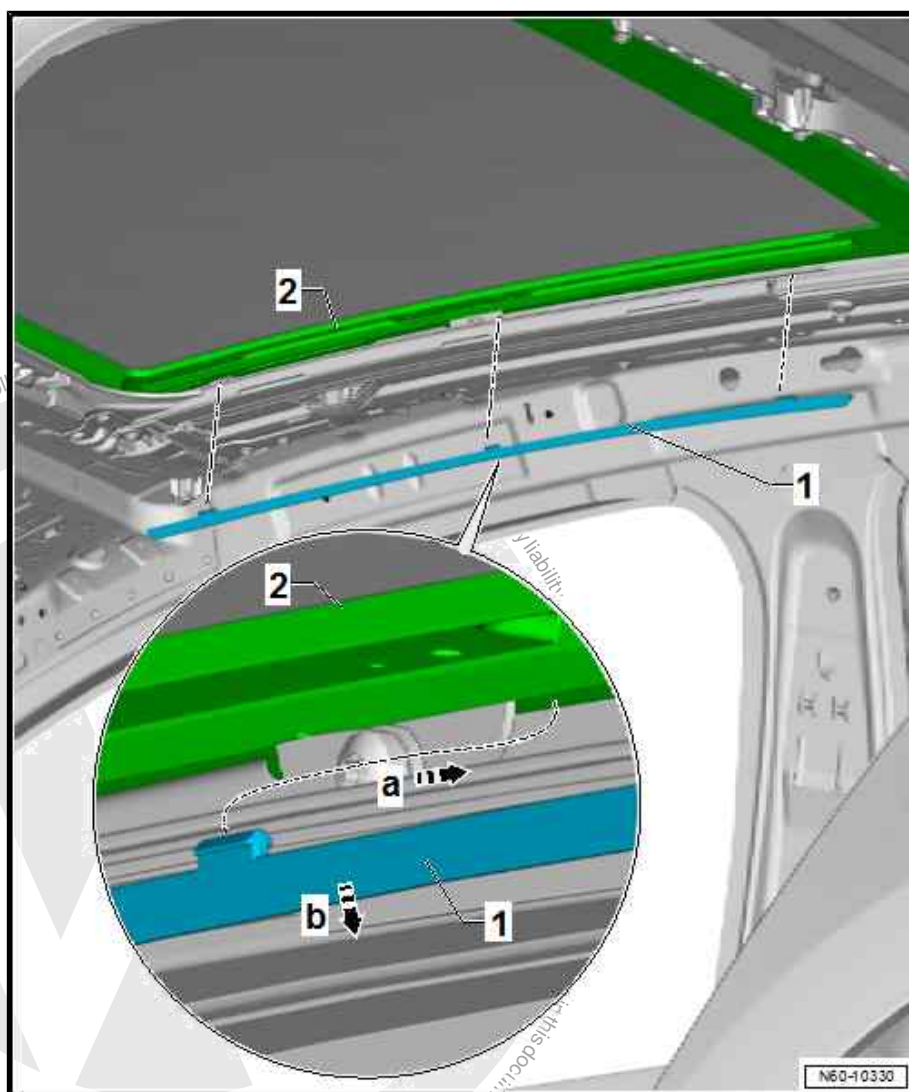
⇒ ["1.5.3 Installing sunroof panel", page 160](#)

1.5.1 Removing sunroof panel



Note

- ◆ For clarity, the moulded headliner is not shown in the illustration.
- ◆ The moulded headliner is not to be removed.



- Open sun blind completely.
- Push trim -1- slightly towards rear -arrow a-.
- Remove trim -1- from sliding sunroof frame -2- -arrow b-.



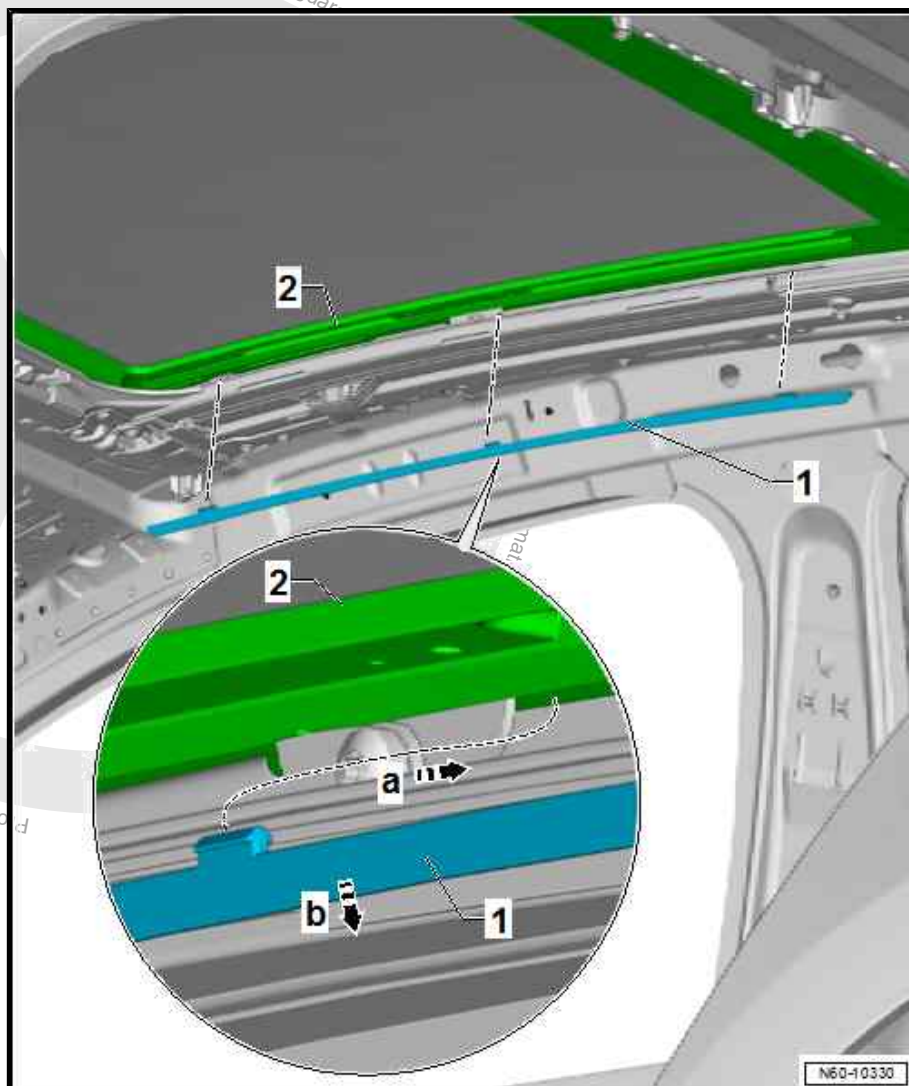
- Open sunroof panel by 150 mm -dimension a-.
- Undo rear securing bolts -2-.
- Loosen rear securing bolts -4- on left and right but do not undo completely.
- Unscrew front securing bolts -3- on left and right.
- Take out sunroof panel -1- upwards.



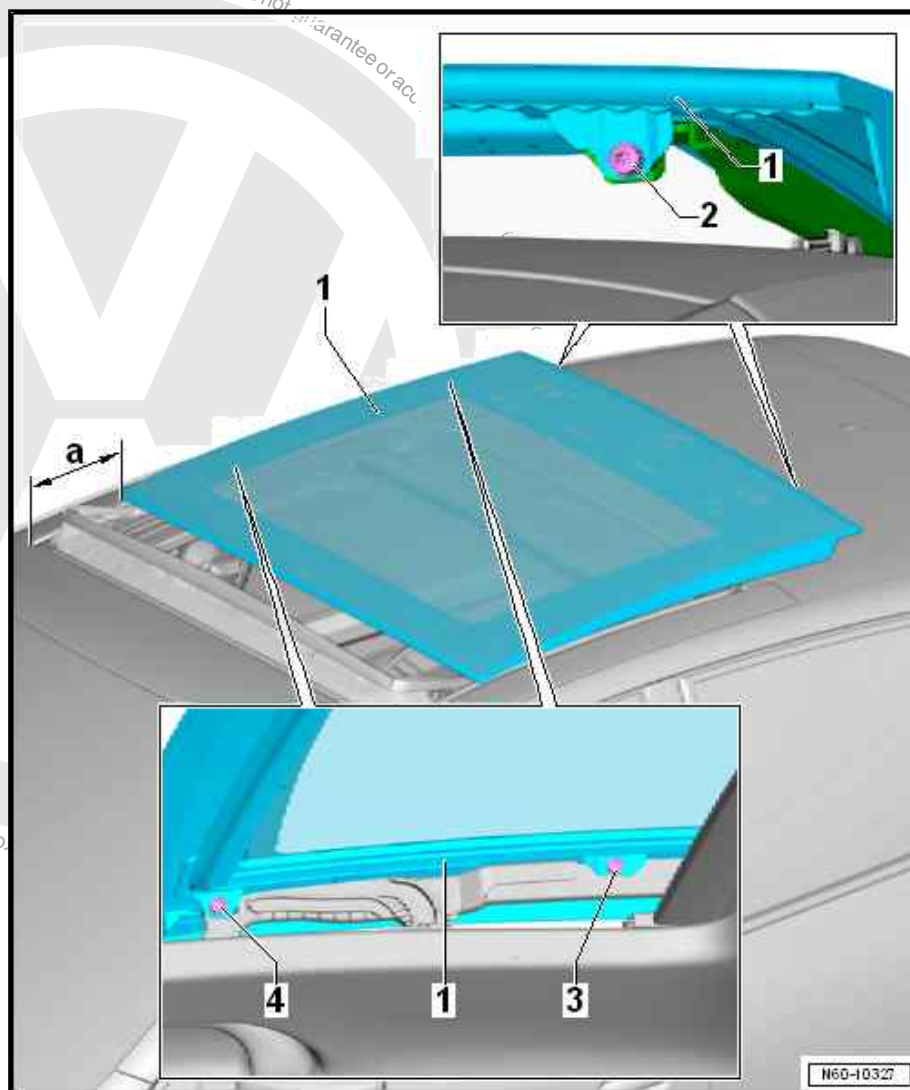
Note

In order to avoid damage during further work, close the mechanism with the push-button.

1.5.2 Removing sunroof panel in the event of a defective drive



- Open sun blind completely.
- Push trim -1- forwards slightly -arrow a-.
- Remove trim -1- from sliding sunroof frame -2- -arrow b-.



Perform the following steps:

- Open sun blind completely.
- Remove moulded headliner ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims; Removing and installing moulded headliner .
- Unscrew rear securing bolts -2-.
- Unscrew front securing bolts -4- on left and right.
- Loosen rear securing bolts -3- on left and right but do not undo completely.
- Lift out glass panel -1- upwards.



Note

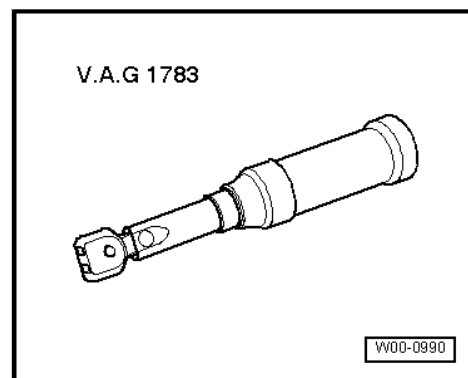
In order to avoid damage during further work, close the mechanism with the push-button.

1.5.3 Installing sunroof panel

Special tools and workshop equipment required

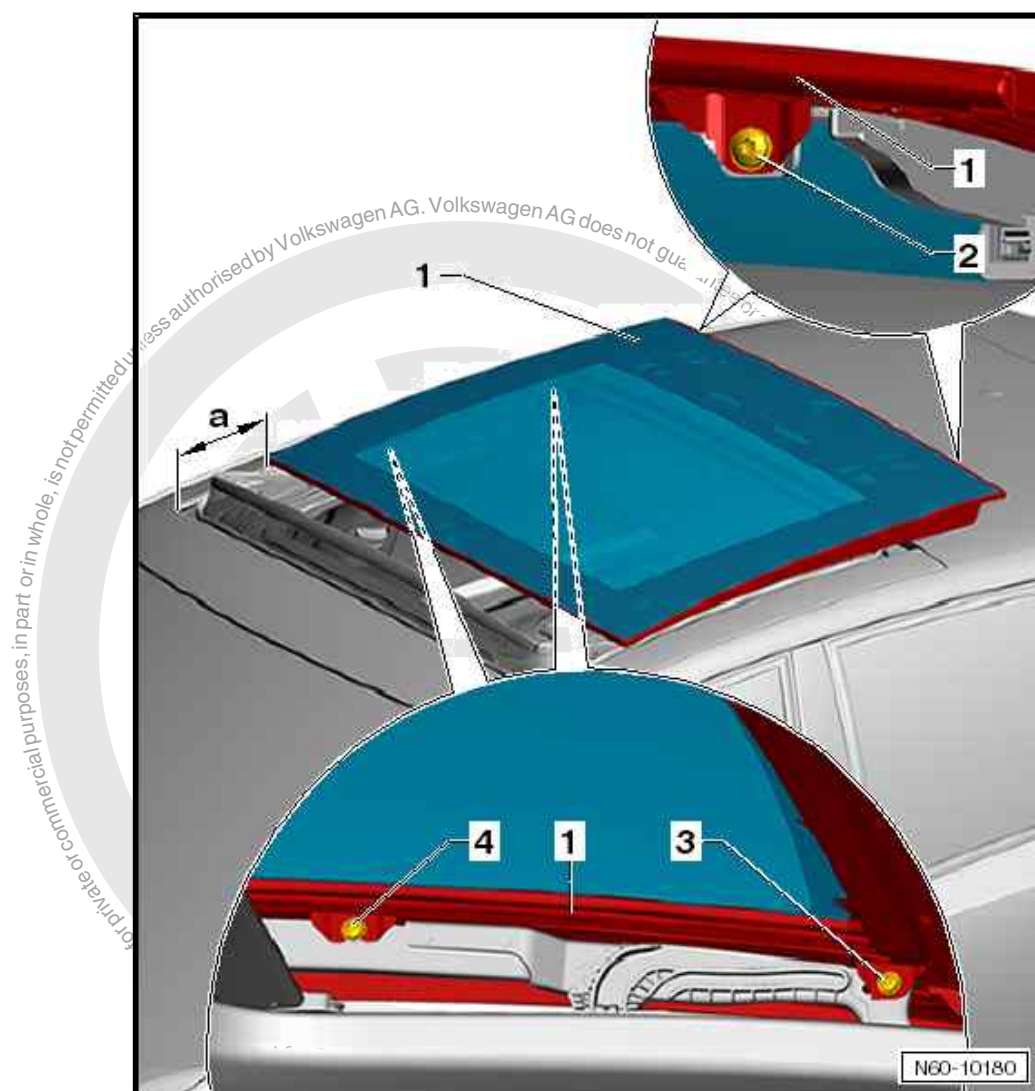


- ◆ Torque wrench 210 Nm - V.A.G 1783-



Note

Bolts are microencapsulated and must always be renewed after loosening.



Perform the following steps:

- Open mechanism by 150 mm -dimension a- with the push-button.



- Place glass panel -1- on the tilting mechanism.
- Lightly tighten securing bolts -2, 3 and 4- on left and right.
- Adjust sunroof panel (height adjustment): ➔ [page 162](#) .



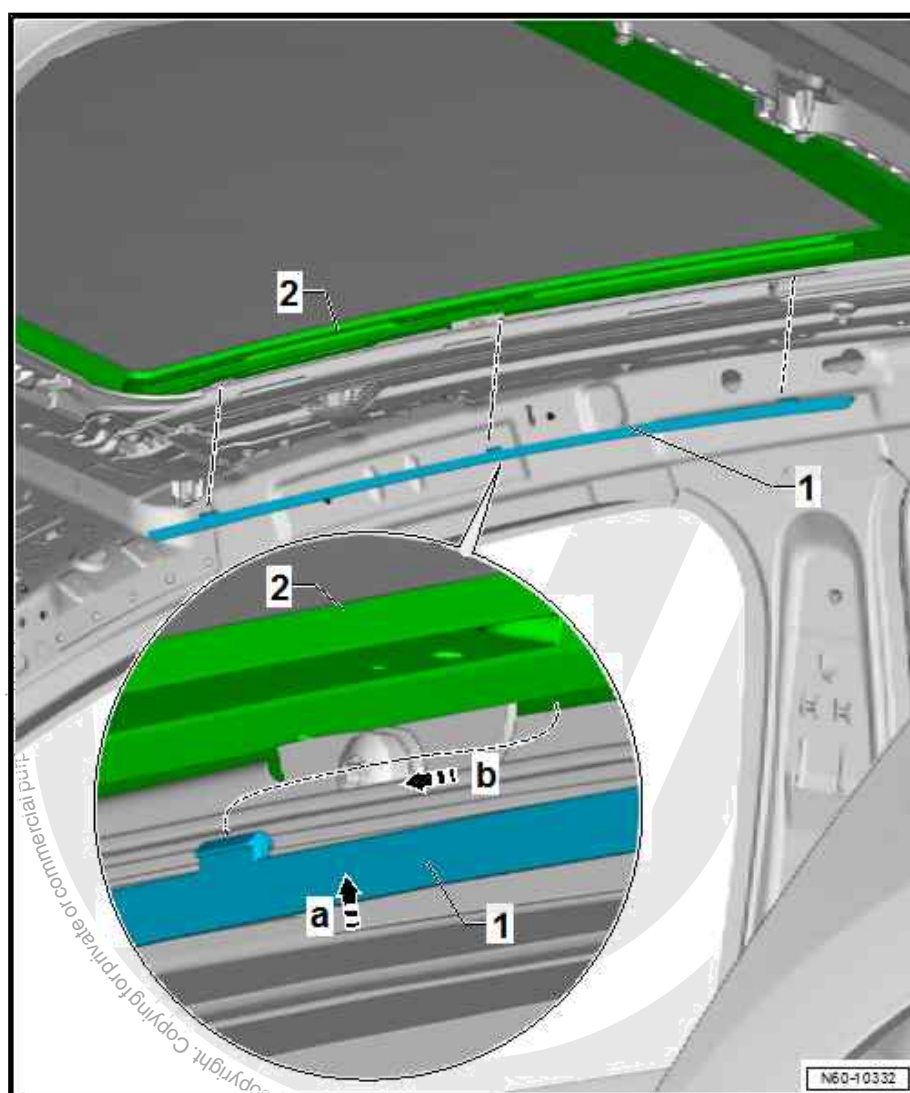
Note

After adjusting panel height, tighten securing screws -5- (5.5 Nm).



Note

- ♦ *For clarity, the moulded headliner is not shown in the illustration.*
- ♦ *The moulded headliner is not to be removed.*



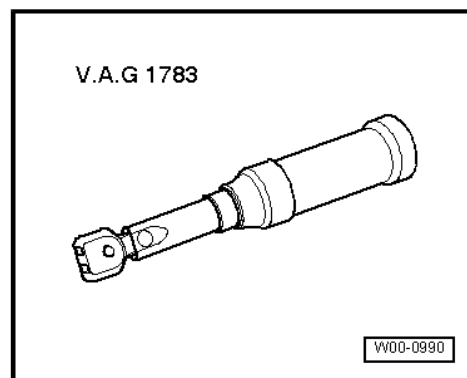
- Insert trim -1- into sliding sunroof frame -2- -arrow a-.
- Push trim -1- forwards slightly -arrow b-.

1.6 Adjusting sunroof panel

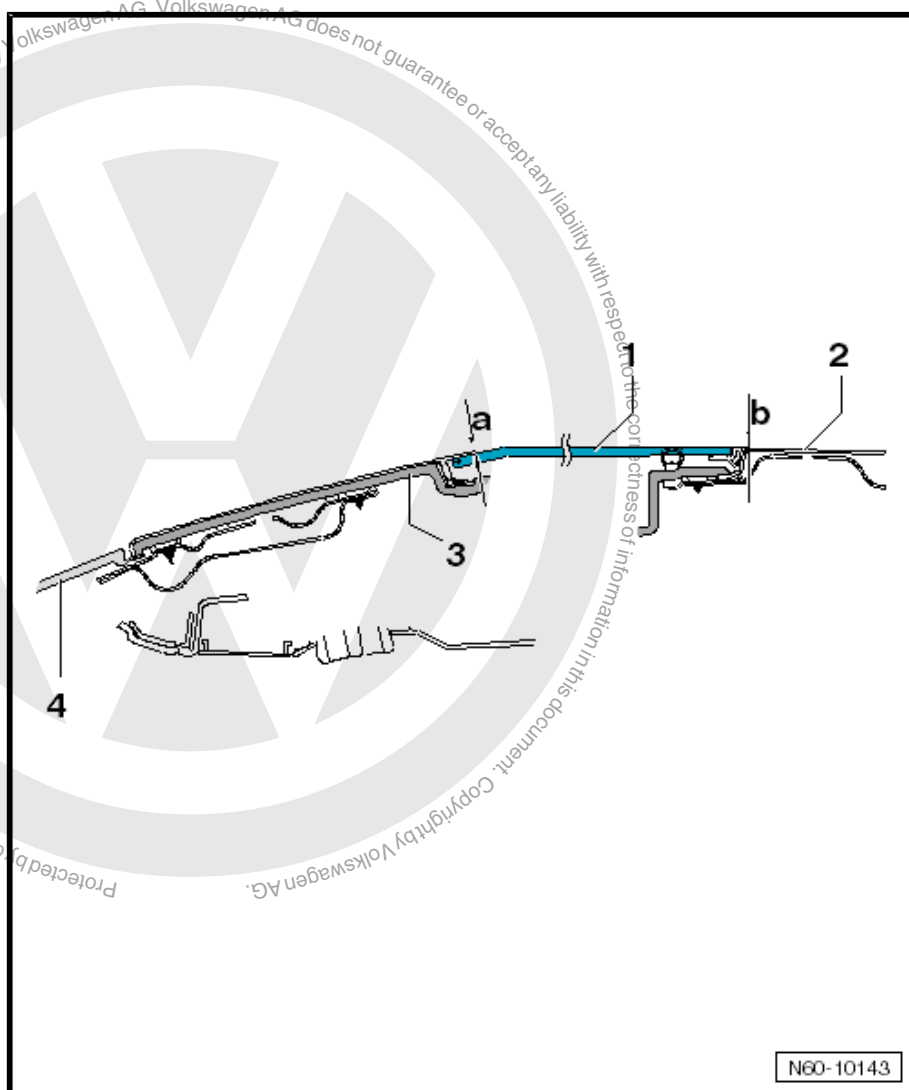
Special tools and workshop equipment required



- ◆ Torque wrench 210 Nm - V.A.G 1783-



Height-adjustment of glass panel



Perform the following steps:

- Loosen securing bolts for glass panel.
- Operate glass panel of panorama tilting roof so that it moves to “open” position.
- Operate glass panel of panorama tilting roof so that it moves to “closed” position.



- Adjust height of glass panel at front and rear on both sides as follows:

Front panel adjustment:

- Dimension a- = 1 mm lower than roof assembly frame -3-.
- Press the inner seal to one side.
- Tighten the front inside bolts (5.5 Nm).

Rear panel adjustment:

- Dimension b- = 1 mm higher than roof member -2-.
- Tighten the rear inside bolts (5.5 Nm).
- Open glass panel and tighten the rear bolts (5.5 Nm).



Note

- ♦ *To achieve the best possible optical appearance, ensure that adjustments on left and right are uniform (symmetrical).*
- ♦ *The glass panel should not be higher than the roof at any point at the front or lower than the roof at any point at the rear.*

1.7 Removing and installing sliding sunroof adjustment control unit - J245-

⇒ [“1.7.1 Operating without current”, page 167](#)

⇒ [“1.7.2 Removing and installing automatic preselector for sunroof panel”, page 168](#)

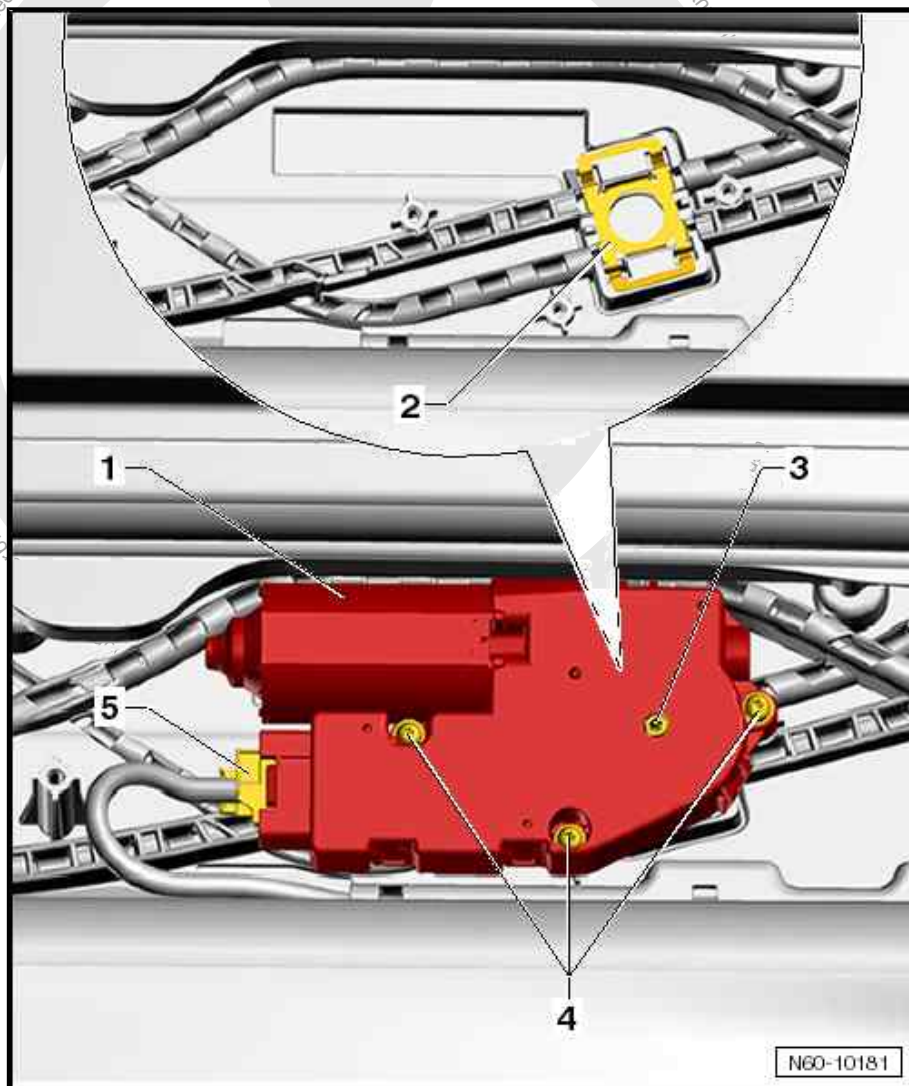
Removing



WARNING

Remove and install drive for sunroof panel only when roof is closed ("0" position).

The requirements for removing and installing drive are: Engine not running and ignition off, key not in ignition and door open.



Perform the following steps:

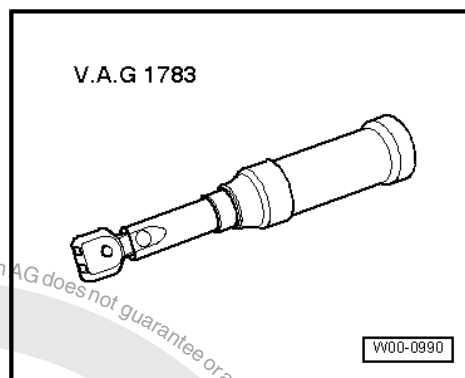
- Remove sunroof panel ➤ [page 157](#) .
- Remove sunroof panel in the event of a defective drive ➤ [page 159](#) .
- Remove cover ➤ [page 170](#) .
- Switch engine and ignition off, remove key and open door.
- This situation must be maintained until drive has been installed.
- Unscrew bolts -4-, and pull off drive -1-.
- Detach drive connector -5-.

Installing

Special tools and workshop equipment required

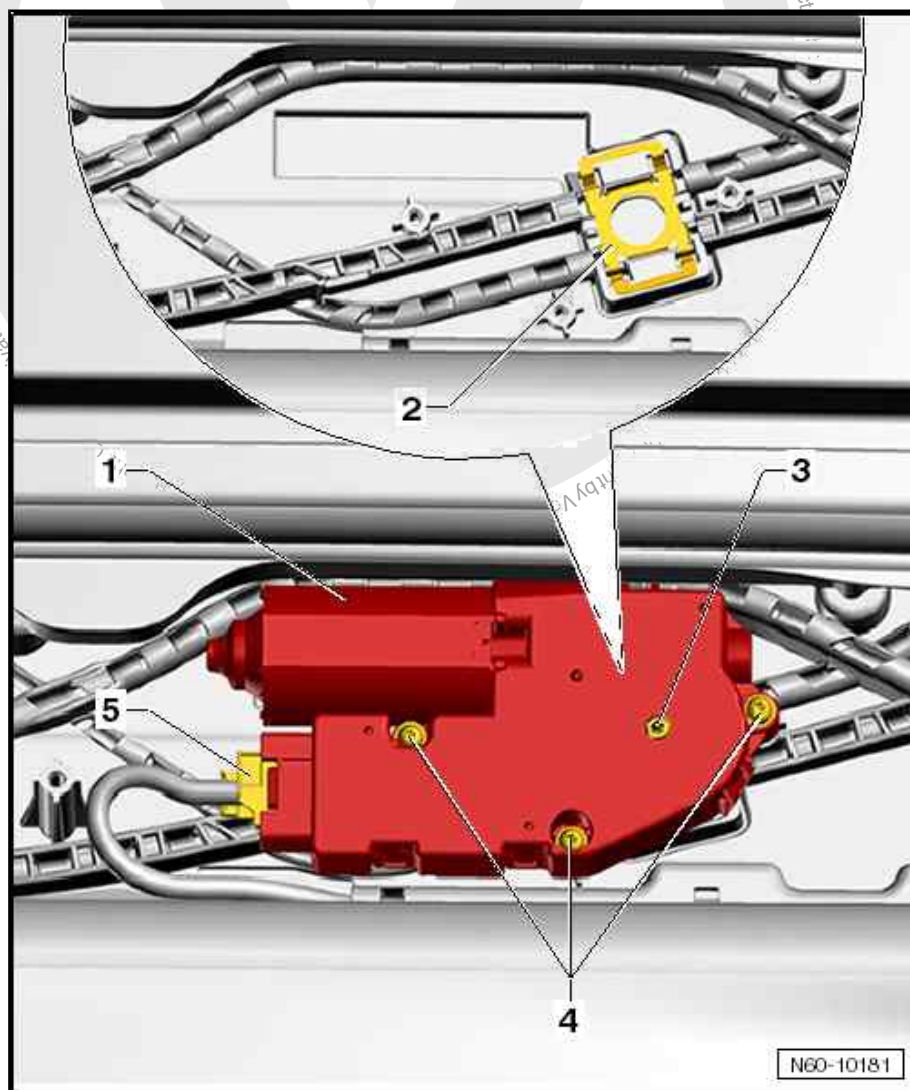


- ◆ Torque wrench 210 Nm - V.A.G 1783-



Note

The bolts for the drive are microencapsulated and must always be renewed.



Perform the following steps:

- Plug in connector -5- at drive -1-.
- Check that the clips -2- are correctly seated.



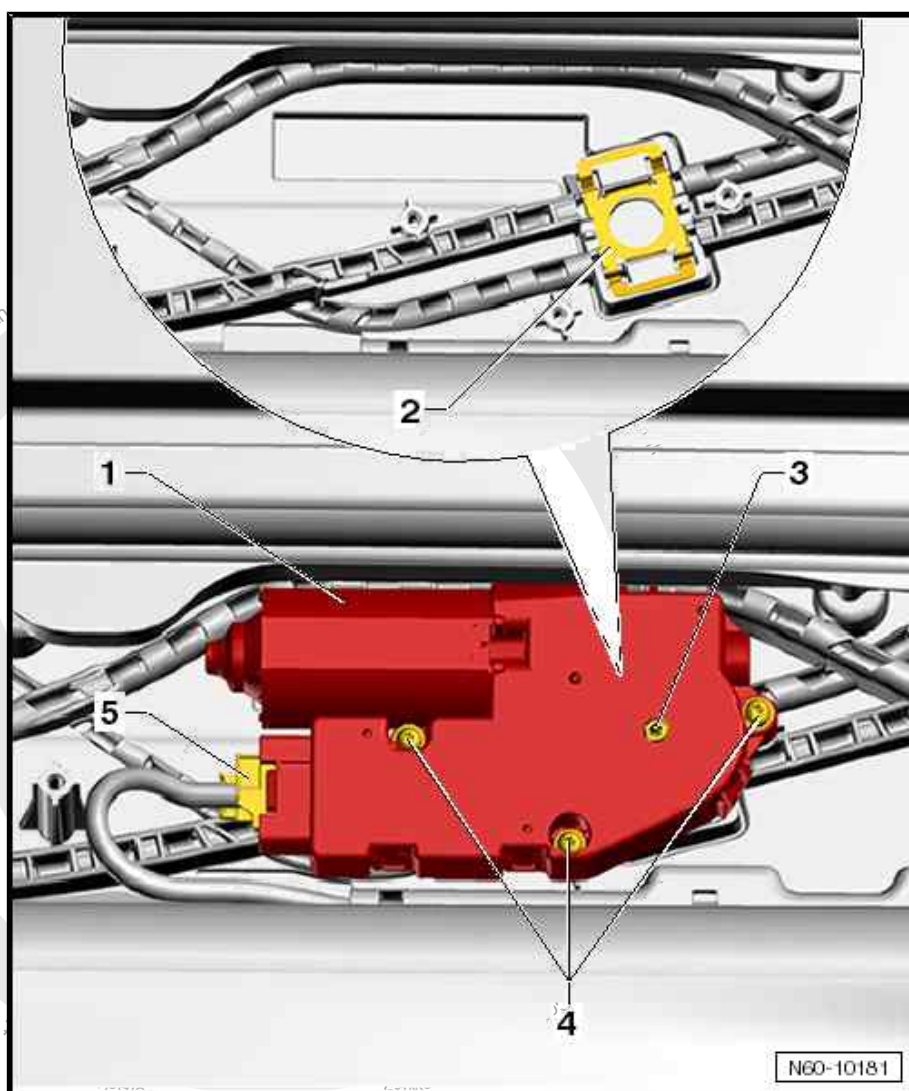
- Fit drive -1-, and tighten bolts -4-. Specified torque: 4 Nm.
- After installation, the key can be inserted in ignition and starter switch again.
- Then test for proper function.

1.7.1 Operating without current



Note

- ◆ In the event of power failure, the sunroof panel can be moved using a hexagon key directly on the drive.
- ◆ Considerable force must be used to turn the key because the drive is not decoupled from the gears.

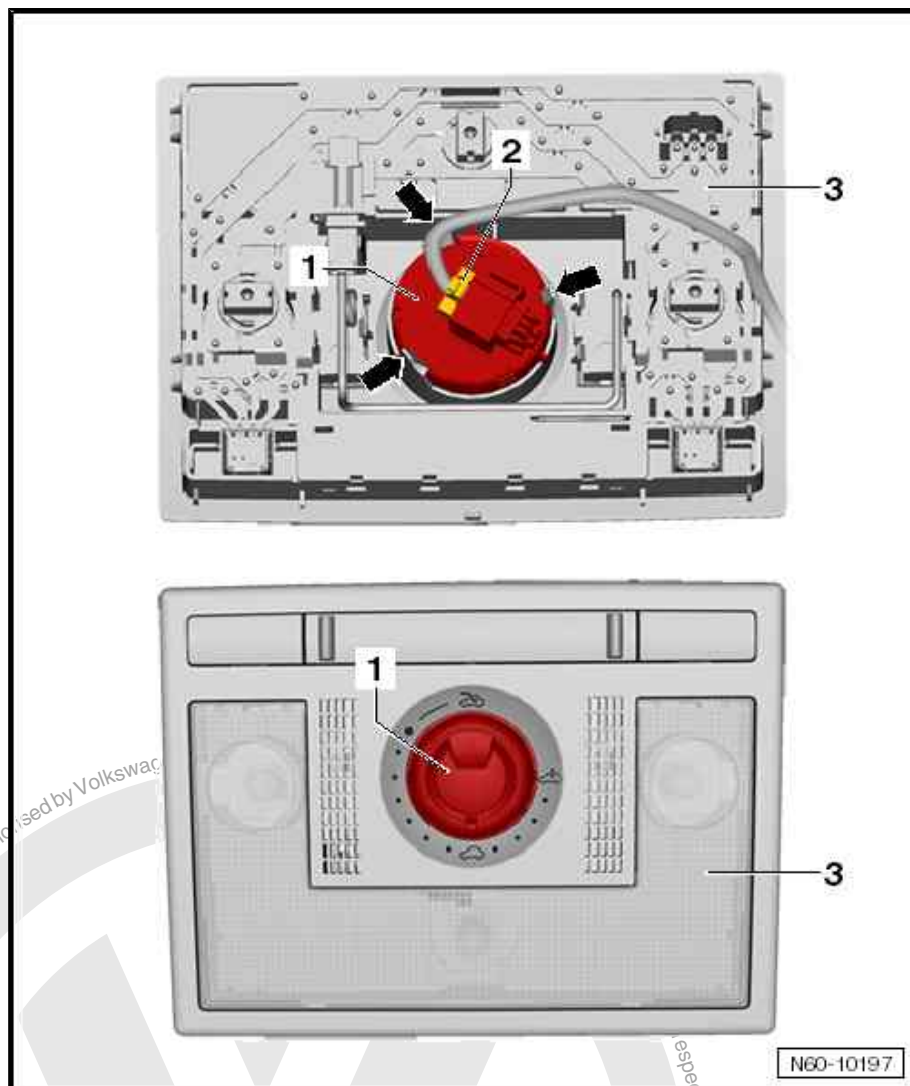


Perform the following steps:

- Remove sunroof panel ⇒ [page 157](#) .
- Remove cover ⇒ [page 170](#) .
- Insert hexagon key into the bolt -3- of the drive -1-.
- Turn the bolt -3- to close the glass panel.



1.7.2 Removing and installing automatic preselector for sunroof panel



Perform the following steps:

Removing

- Remove interior light ⇒ Electrical system; Rep. gr. 96 ; Lights; Overview of fitting locations - lights in roof trim .
- Detach switch connector -3-.
- Release switch -1- from locking lugs -arrows- and pull out interior light -3-.

Installing

- Installation is carried out in the reverse order of removal.

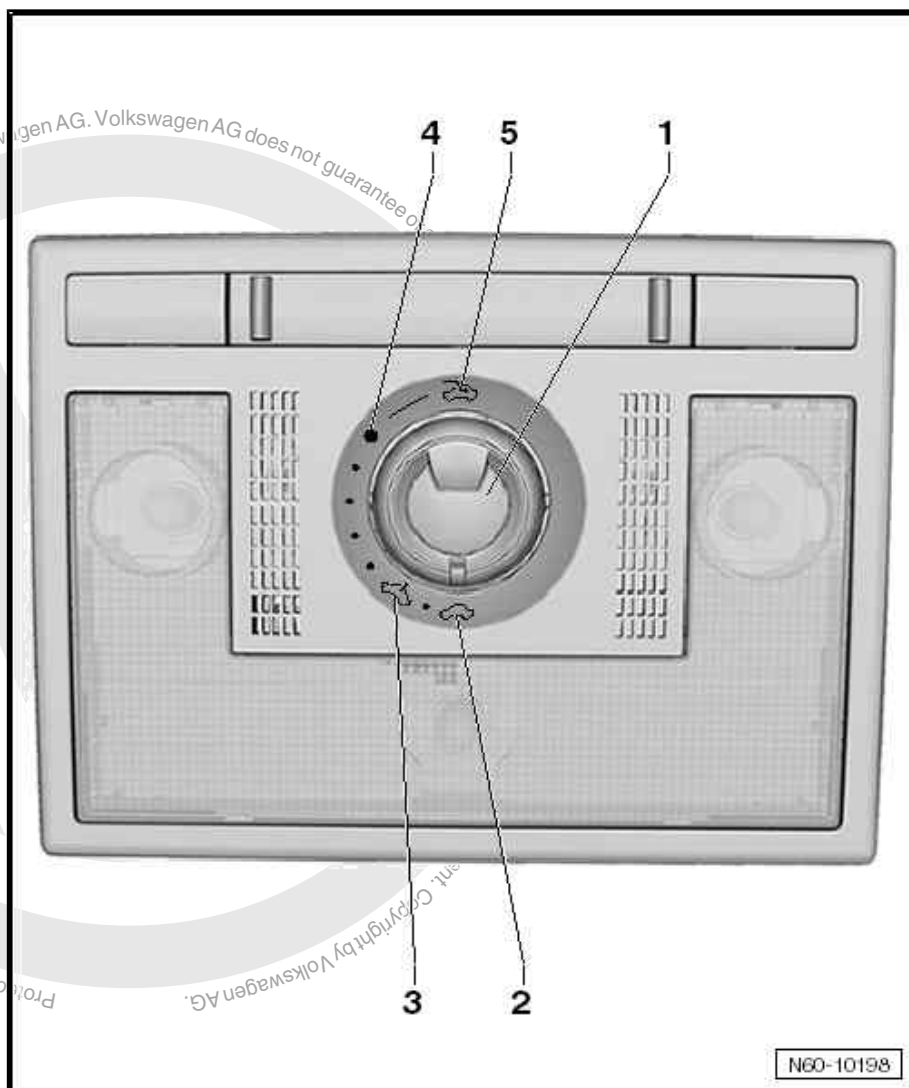


1.8 Adapting sliding sunroof adjustment control unit - J245-



Note

- ◆ If a glass panel, motor or tilting mechanism is renewed, reference points must be established.
- ◆ Roll-back function is switched off when establishing reference points.



Establishing reference points of sliding sunroof motor

Ignition is switched on.

Rotary knob must be in position -2-, "Sliding roof closed".

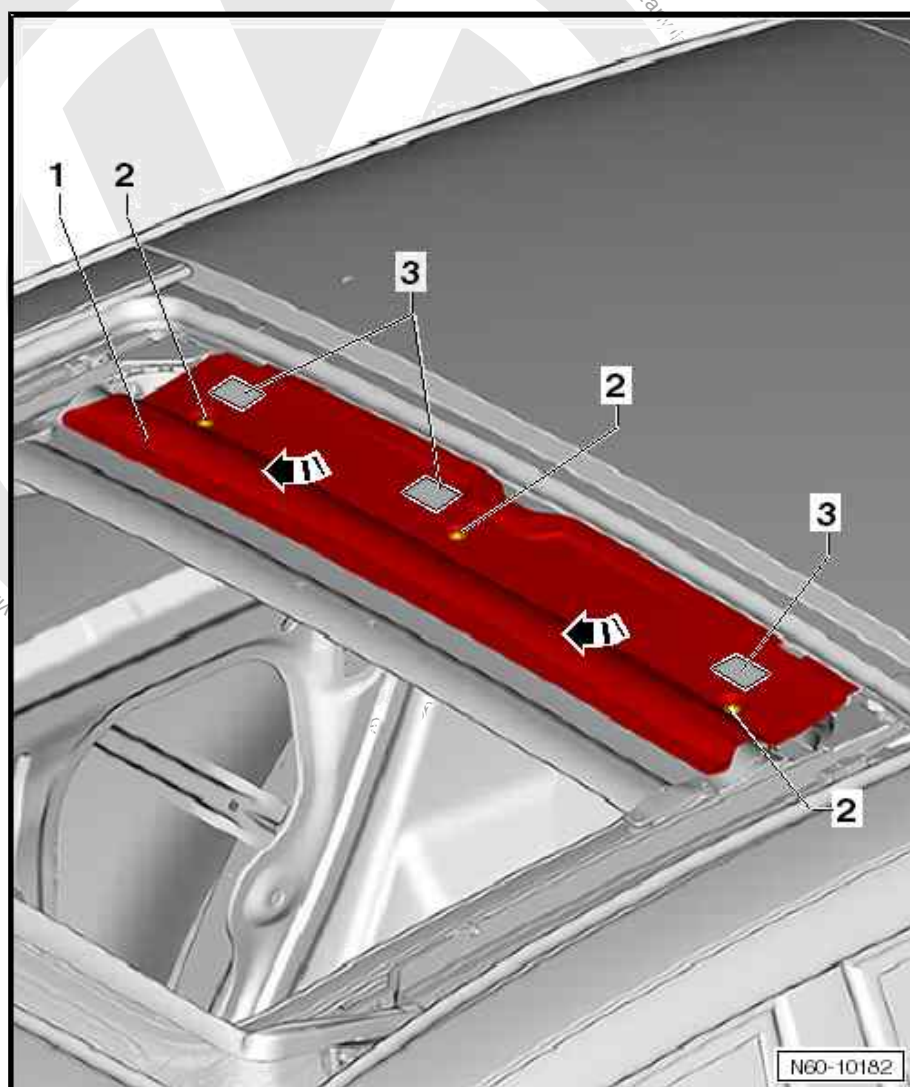
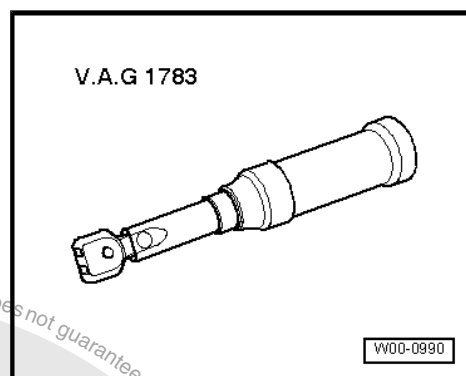
- Pull rotary knob -1- downwards and hold in this position during the entire normalisation process (approx. 20 sec).
- When establishing reference points, glass panel first closes and then moves approx. 200 mm towards the rear.
- Once glass panel has closed again, the normalisation run is finished and rotary knob can be released.



1.9 Removing and installing cover

Special tools and workshop equipment required

- ◆ Torque wrench 210 Nm - V.A.G 1783-



Removing:

- Remove glass panel ➤ [page 157](#) .
- Pull self-adhesive insulation -3- off.
- Unscrew bolts -2-.



- Pull out cover upwards at an angle -arrows-.

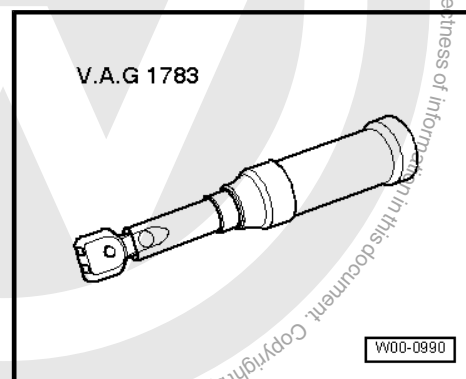
Installing:

- Push cover onto assembly frame.
- Tighten bolts -2-. Specified torque: 2.5 Nm.
- Attach self-adhesive insulation -3-.

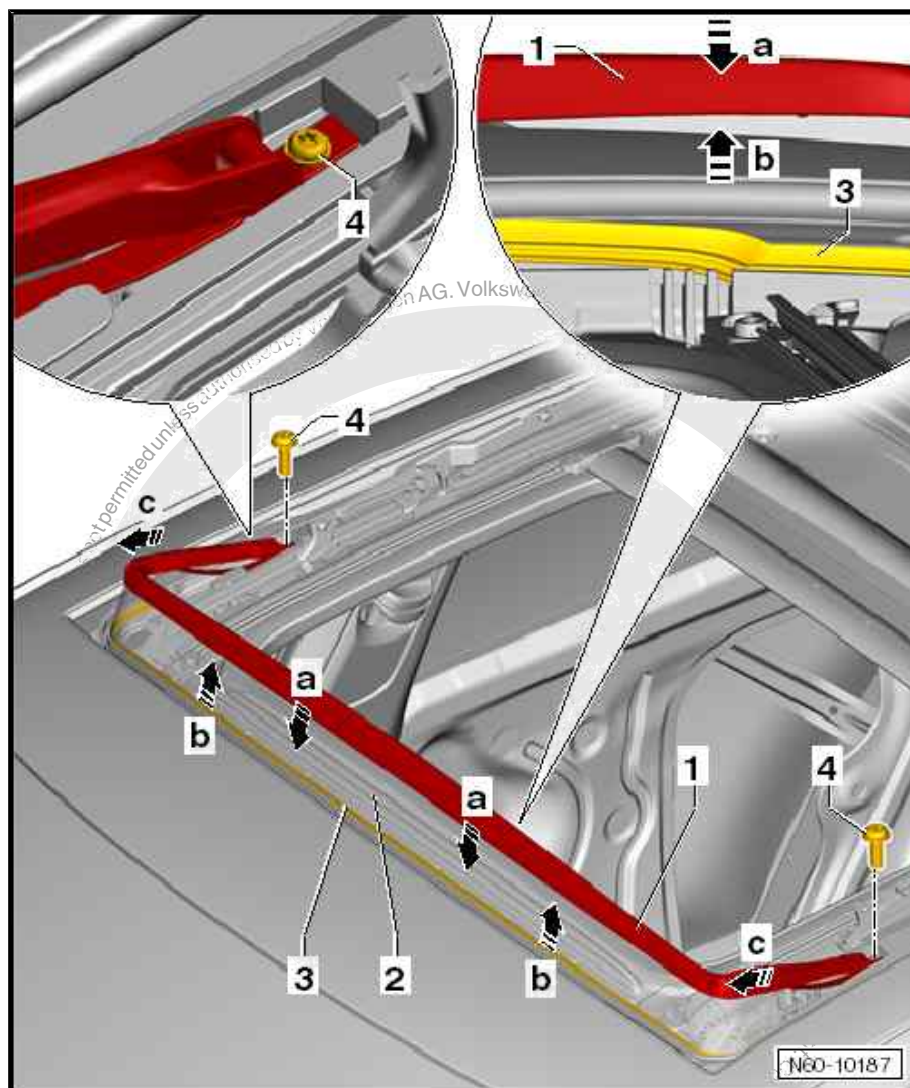
1.10 Removing and installing wind deflector

Special tools and workshop equipment required

- ◆ Torque wrench 210 Nm - V.A.G 1783-



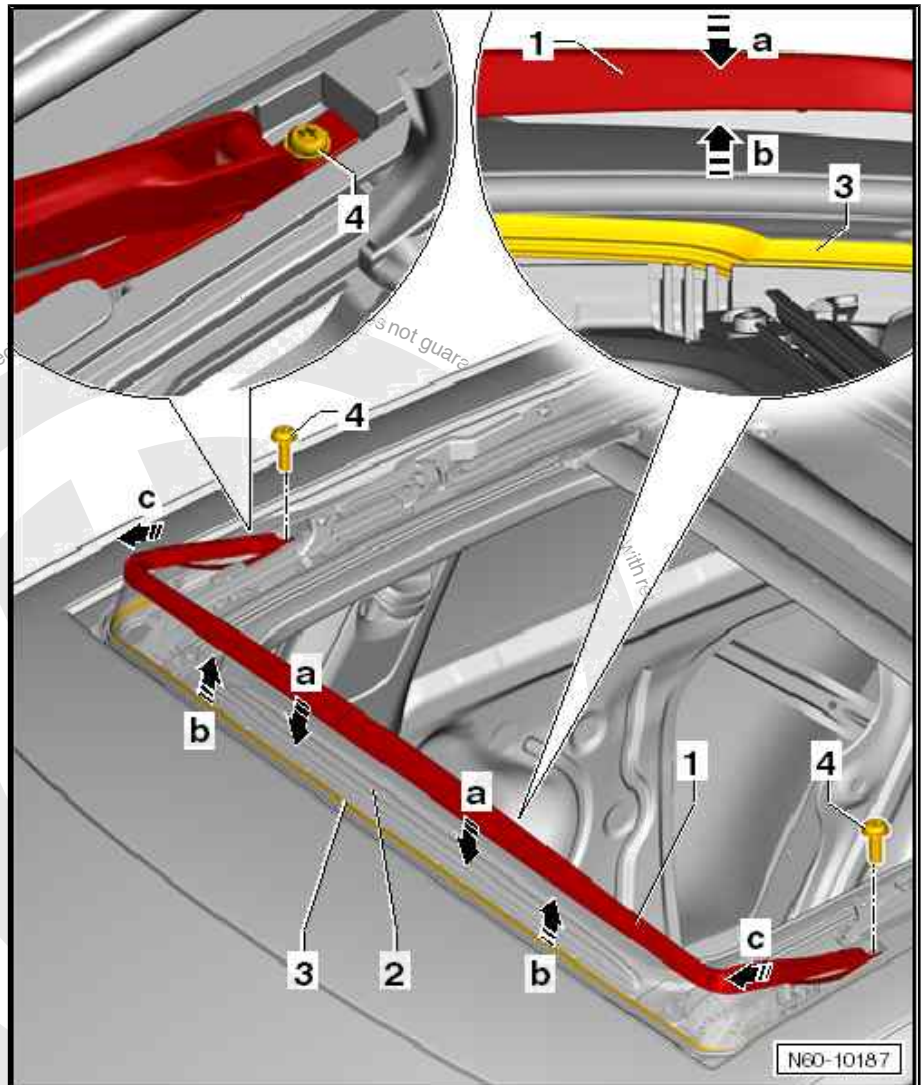
Removing



Perform the following steps:

- Open glass panel completely.
- Press wind deflector net -2- downwards -arrows a- to remove tension from it and hold it down.
- Pull welting -3- out of assembly frame -arrows b-.
- Unscrew bolts -4- on left and right.
- Pull wind deflector off assembly frame -arrow c-.

Installing

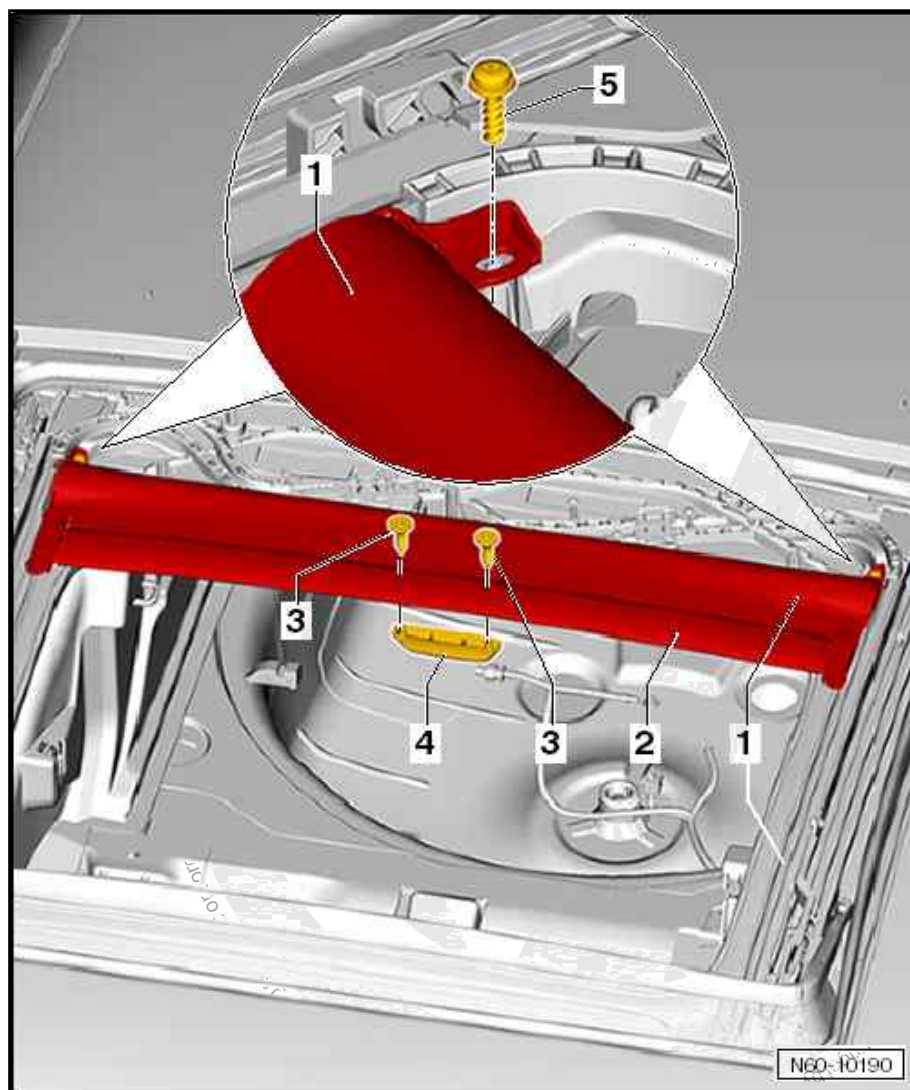


Perform the following steps:

- Push wind deflector into assembly frame.
- Insert and tighten bolts -4- on left and right, specified torque: 1.5 Nm.
- Press wind deflector net -2- downwards -arrows a- to remove tension from it and hold it down.
- Press welding -3- into assembly frame.

1.11 Removing and installing sunroof roller blind

Removing:



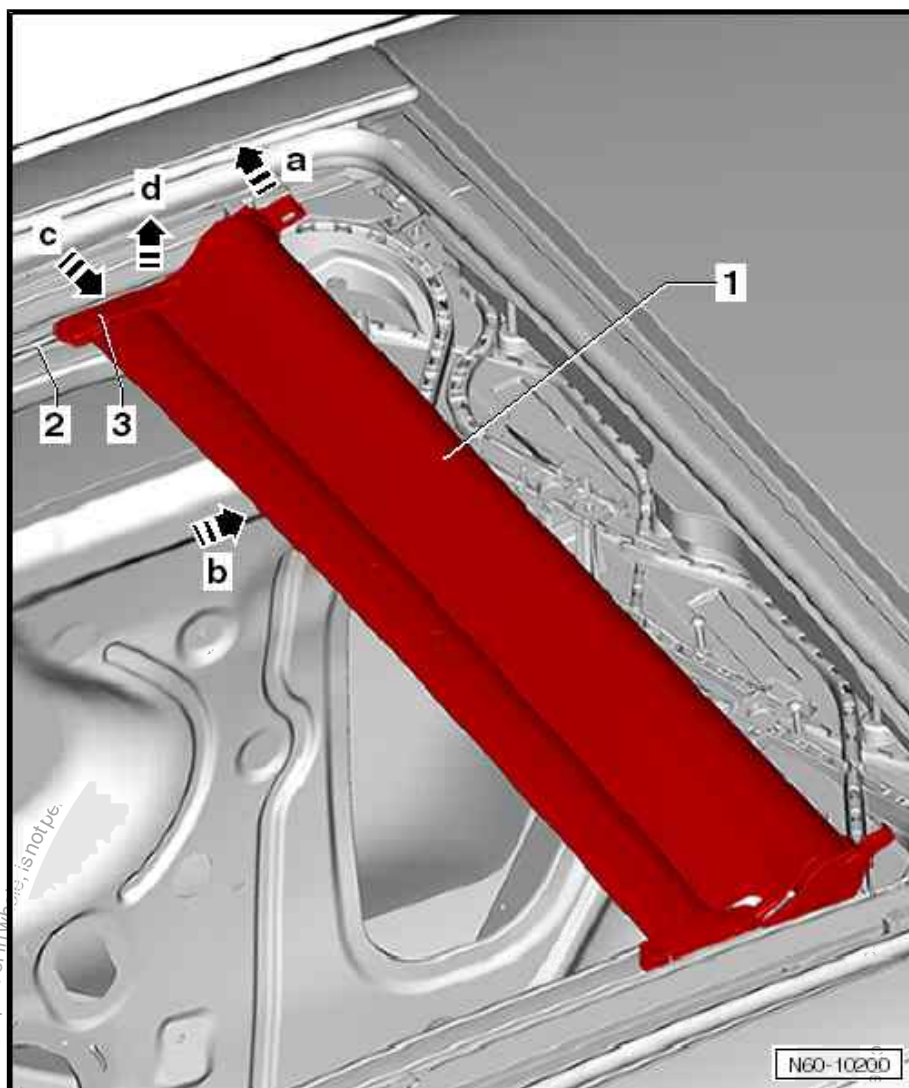
Perform the following steps:

- Remove glass panel ⇒ [page 157](#) .
- Remove cover ⇒ [page 170](#) .
- Undo screws -3- and remove handle -4-.
- Unscrew bolts -5-.



Note

- ◆ *If the sunroof sun blind is reused, ensure that the steel straps are not kinked.*
- ◆ *If the steel straps are kinked, install a new sunroof sun blind.*

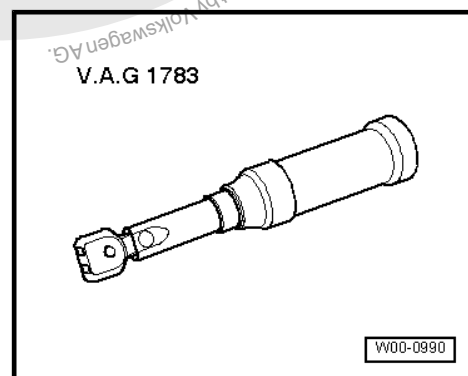


- Lift sun blind -1- at rear on right and left -arrow a-, push it uniformly towards rear -arrow b- and pull it out of guide rails -2-.
- Push roller slider -3- into rib -arrow c- and remove from guide -arrow d-.
- Remove sun blind -1- from assembly frame.

Installing:

Special tools and workshop equipment required

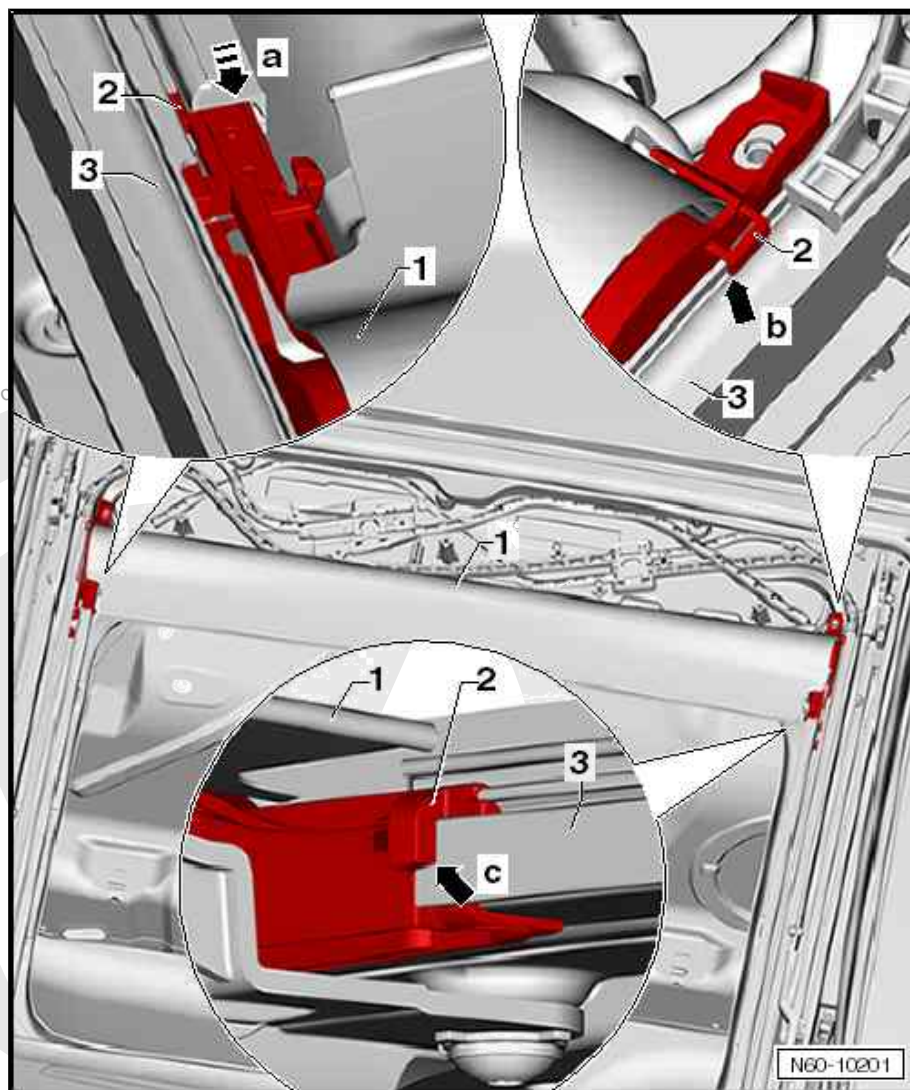
- ◆ Torque wrench 210 Nm - V.A.G 1783-





Note

- ◆ Do not kink the steel straps when installing them.
- ◆ If the steel straps are kinked, install a new sunroof sun blind.

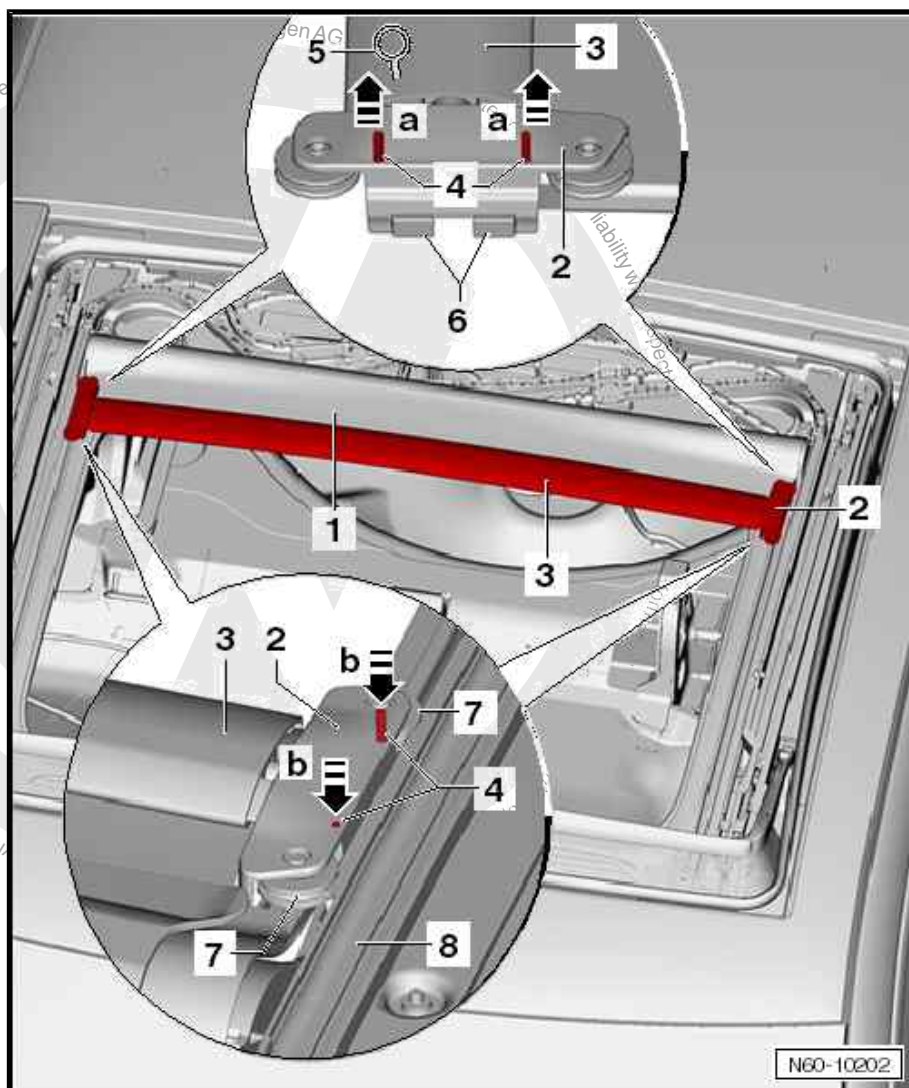


Perform the following steps:

- Insert right and left carriers -2- into guide rails -3- -arrow a-.
- Make sure that carriers are in correct position at top -arrow b- and bottom -arrow c- on guide rail.



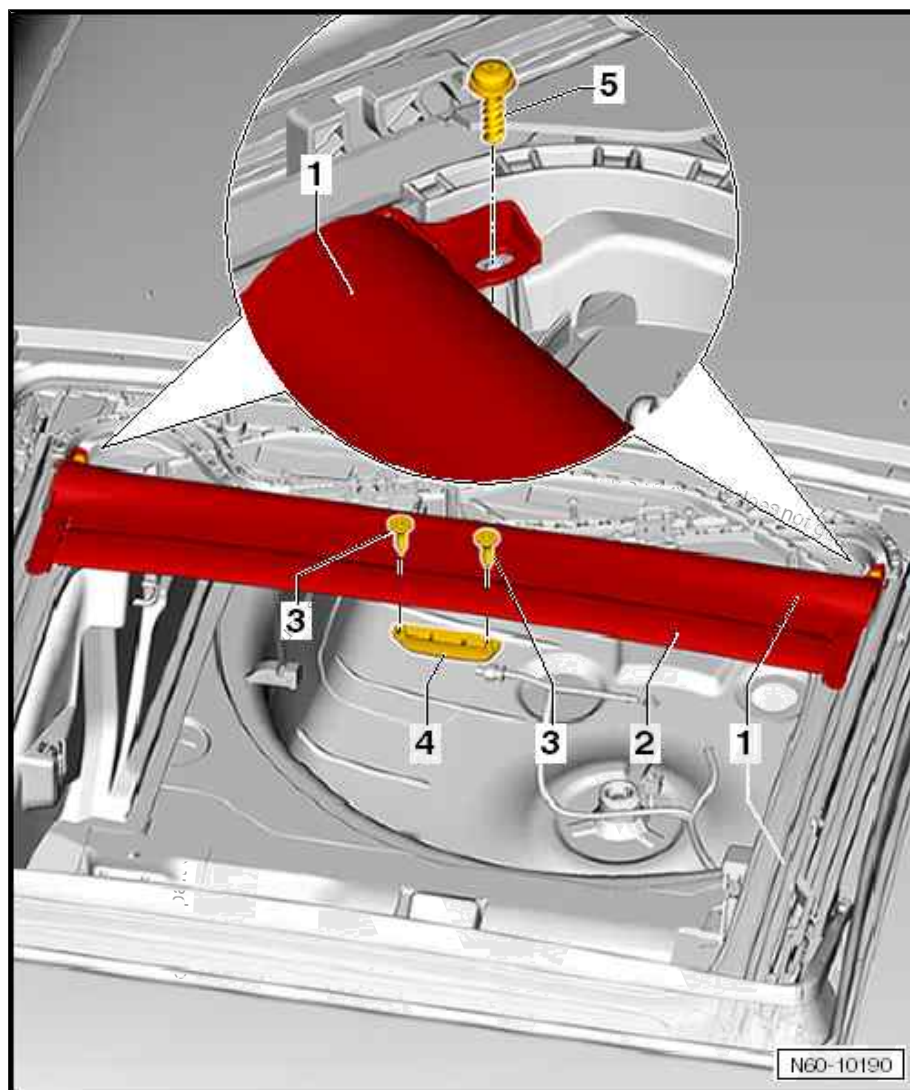
Right: Copying for private or commercial purposes, in part or in whole, is not permitted unless authorised.



- Push out centring pins -4- -arrows a-.
- Slot carriers -6- into roller sliders -2-.
- Slot roller sliders -2- into guides -8-.
- Make sure that the rollers -7- are in correct position in relation to guide rails.
- Push in centring pins -4- -arrows a-.

Only in the case of a new pulling rib:

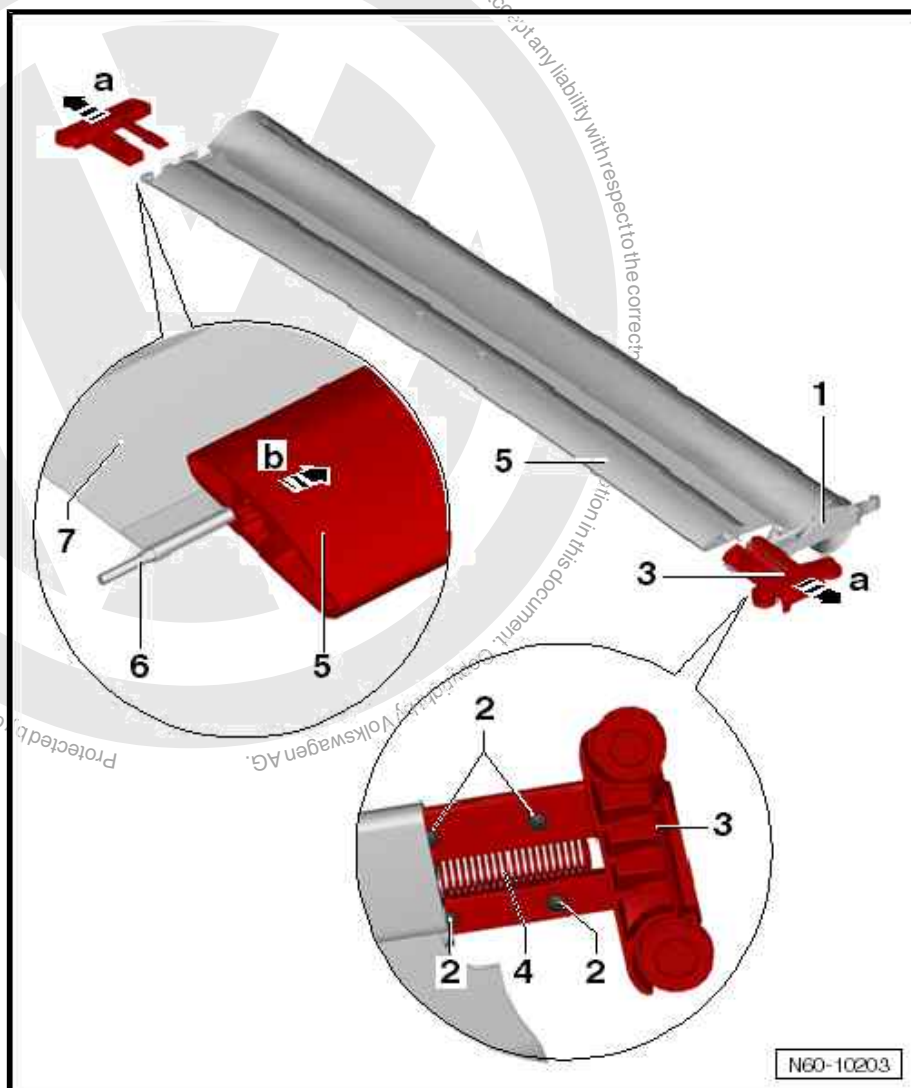
- Pull securing pin -5- out.
- Test sun blind -1- to make sure it is functioning correctly.



- Tighten bolts -5-. Specified torque: 2.5 Nm.
- Fit handle -4- and tighten screws -3-. Specified torque: 1 Nm.

1.11.1 Removing and installing tension bow

Removing:



Perform the following steps:

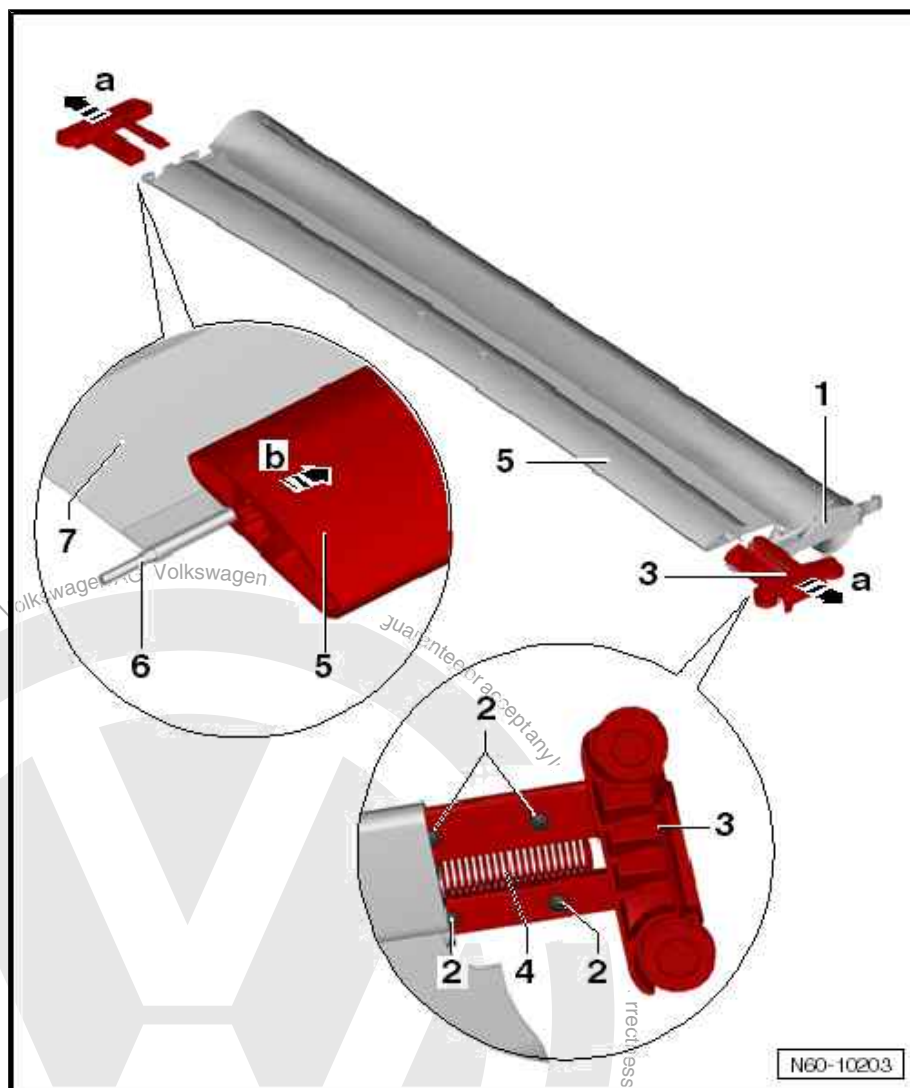
- Remove glass panel ⇒ [page 157](#) .
- Remove cover ⇒ [page 170](#) .
- Removing sliding sunroof roller blind ⇒ [page 173](#) .
- Puller roller slider -3- on left and right out of tension bow -5-
-arrows a-.
- Pull off tension bow from fabric of sliding sunroof roller blind
-7- -arrow b-.

Installing:



Note

- ◆ On new tension bows the sun blind slide with compression spring -3- is held in the tension bow by a lockwire.
- ◆ Pull out the lockwire when installing.



Perform the following steps:

- Push tensioning wire -6- into sun blind fabric -7-.
- Push tension bow -5- onto fabric of sun blind.
- Check all rubber buffers -2- on roller sliders -3- for damage and, if necessary, renew.
- Push roller slider -3- with spring -4- into tension bow.

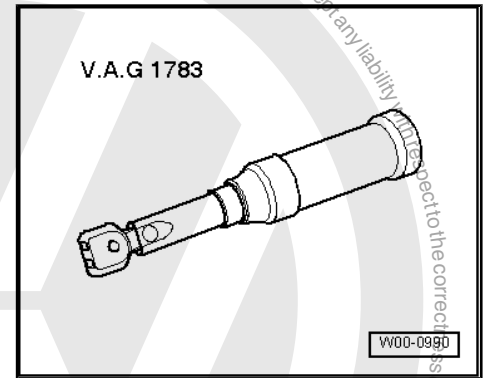
The remaining installation steps are carried out in the reverse sequence of removal.

1.12 Removing and installing guide plate

Special tools and workshop equipment required



- ◆ Torque wrench 210 Nm - V.A.G 1783-

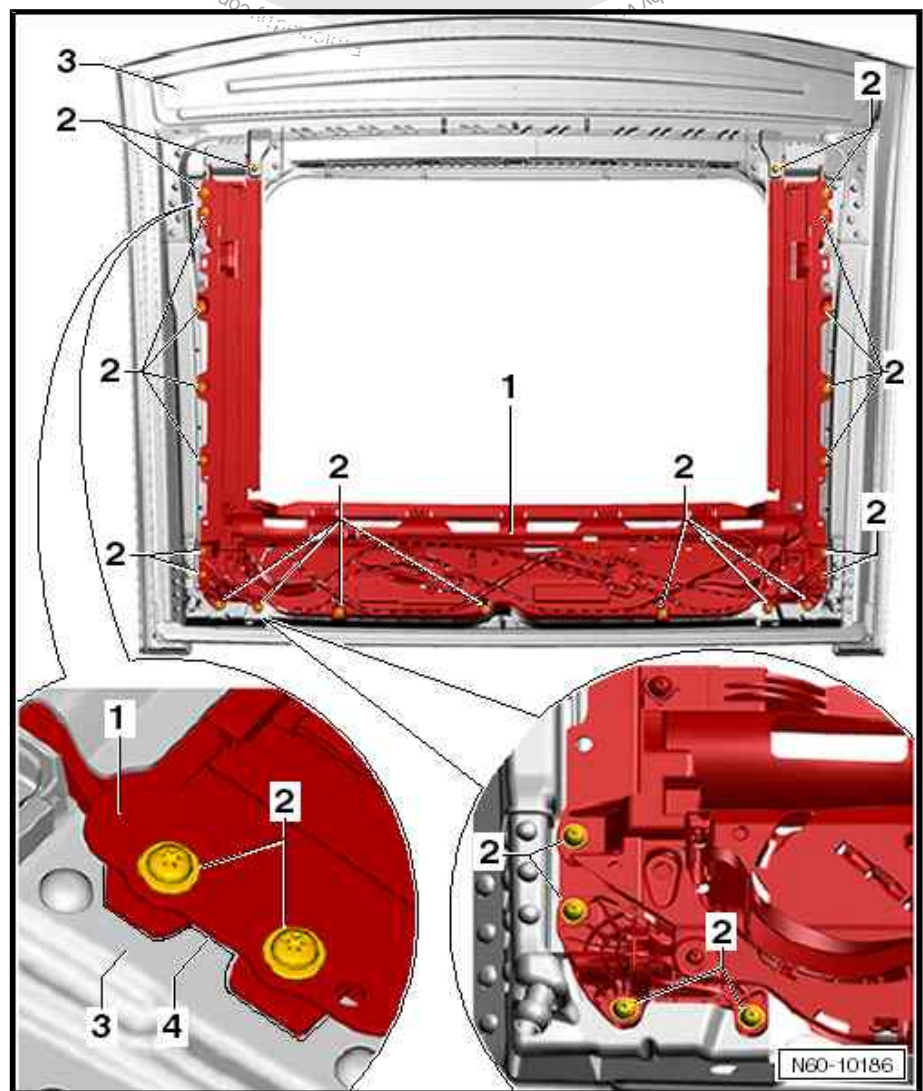


Removing



Note

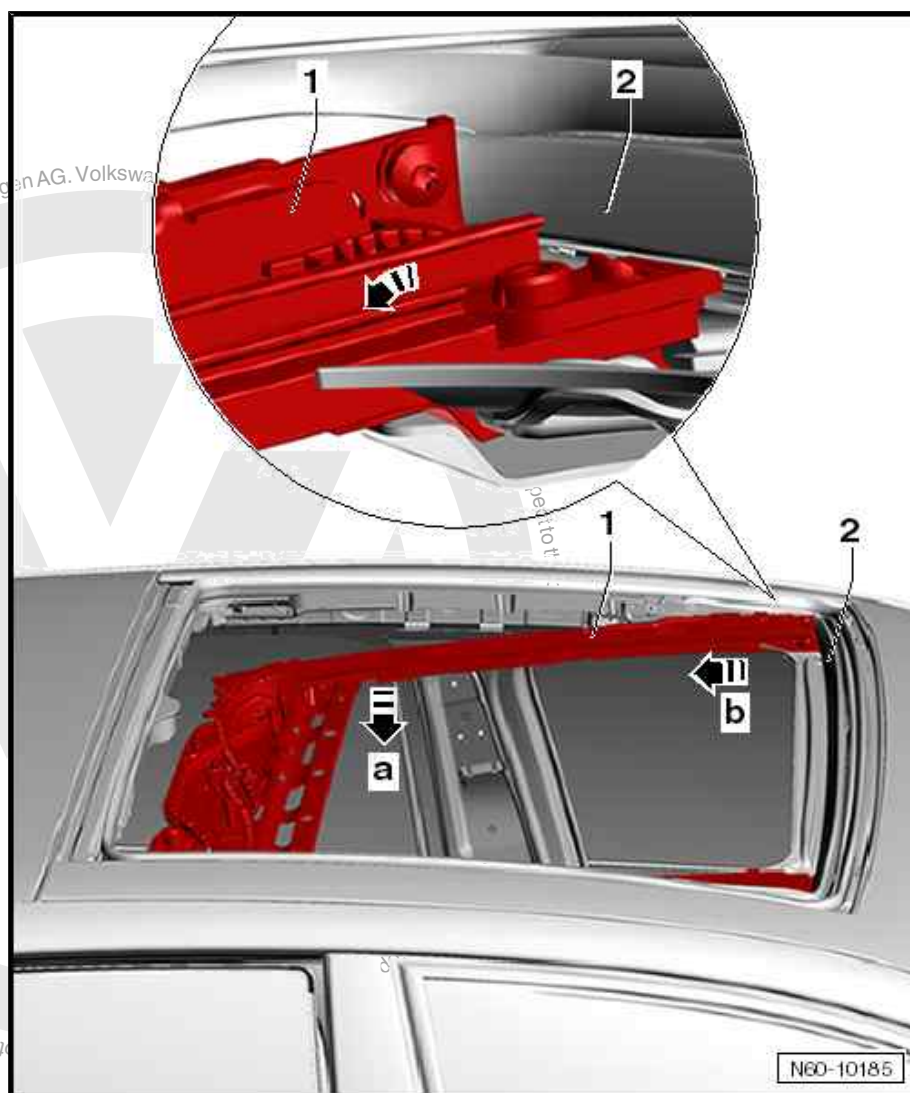
- ◆ The guide rails and the securing brackets are one component.
- ◆ The cables and the tilting mechanism are integrated in this component and cannot be replaced separately.





Perform the following steps:

- Remove moulded headliner ⇒ General body repairs, interior;
Rep. gr. 70 ; Roof trims; Removing and installing moulded
headliner .
- Remove glass panel ⇒ [page 157](#) .
- Mark the position -4- of the guide rails -1- on assembly frame
-3-.
- Unscrew bolts -2-.



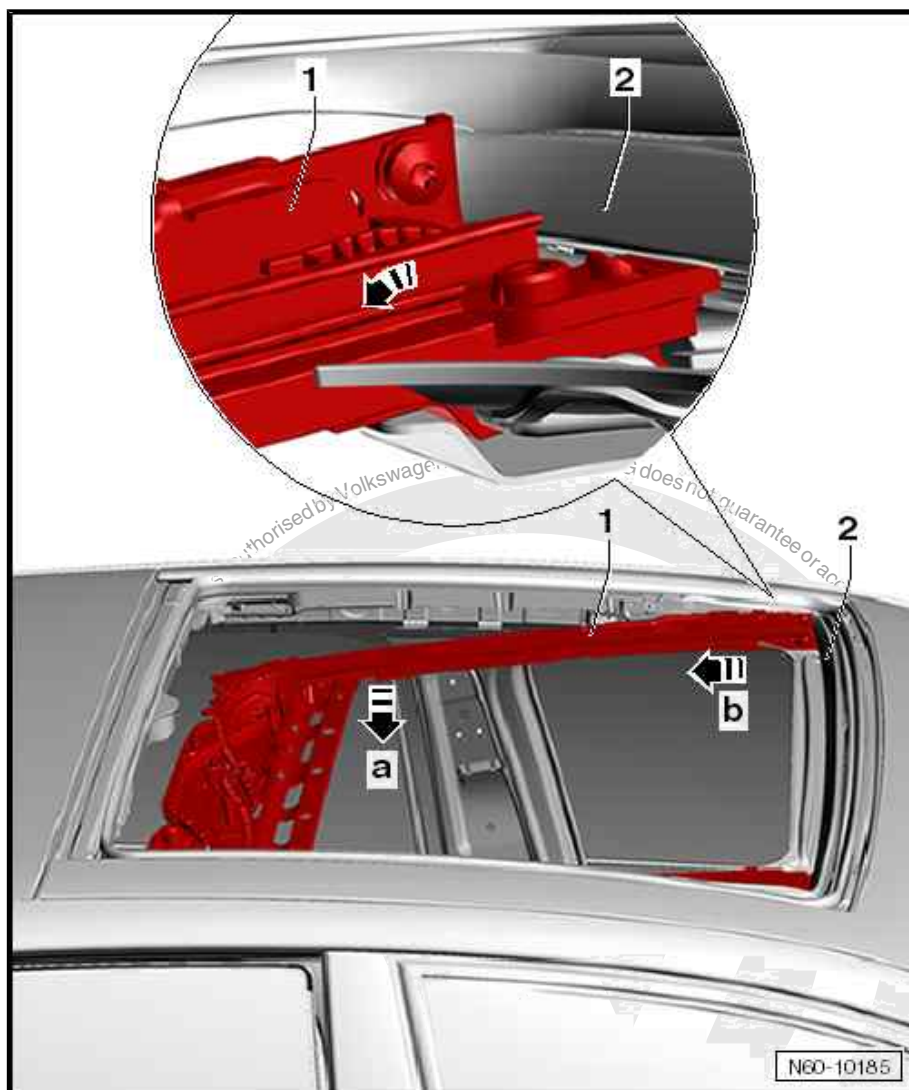
- Low guide rails -1- at rear -arrow a-.
- Pull guide rails -1- off assembly carrier -2-, keeping them parallel with each other -arrow b-.



Note

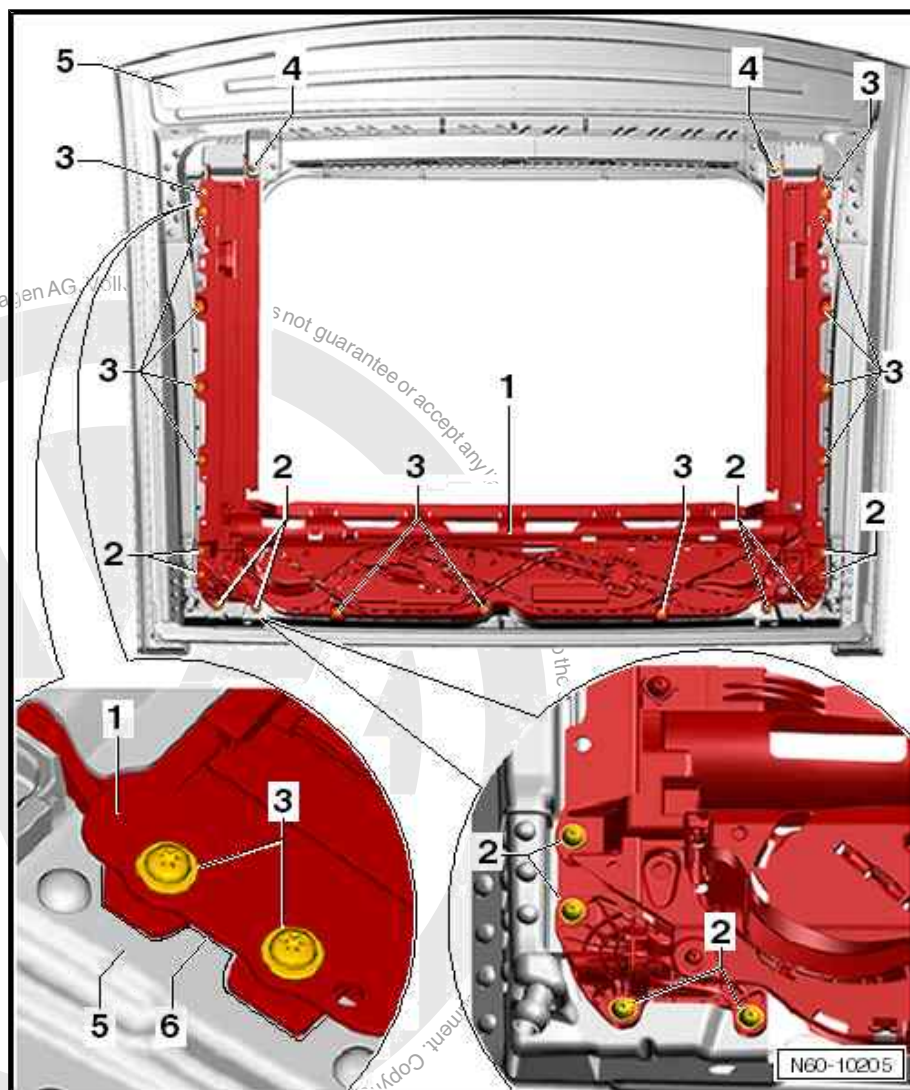
Do not twist or bend the guide rails and securing bracket as there is no strut in the front area.

Installing



Perform the following steps:

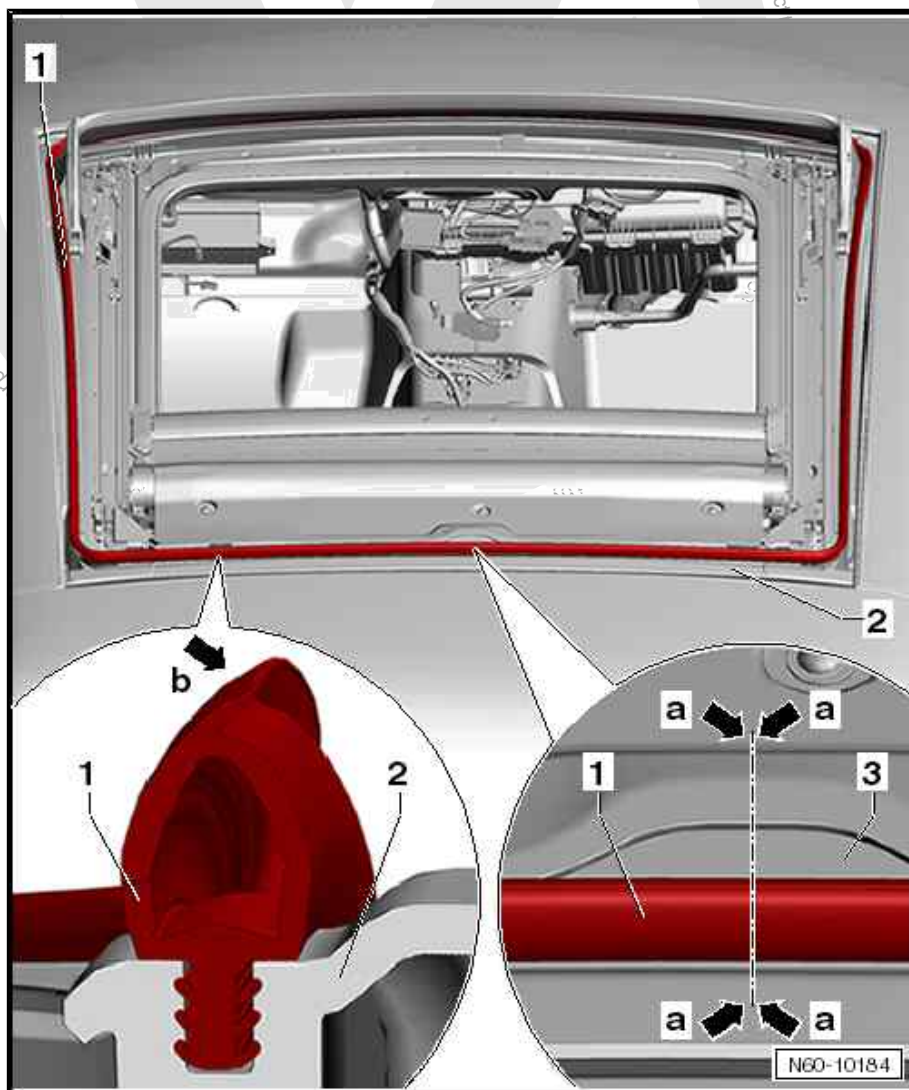
- Push guide rails -1- into assembly carrier -2-, keeping them parallel to each other.
- Fit guide rails -1- on assembly frame at rear.



- Fit all bolts -2, 3 and 4- and tighten them slightly.
- Align guide rails -1- in accordance with the marking made previously -6-.
- Tighten bolts firmly.
- ◆ Specified torque for bolts -2-: 2 Nm.
- ◆ Specified torque for bolts -3-: 3 Nm.
- ◆ Specified torque for bolts -4-: 3.5 Nm.
- The remaining installation steps are carried out in the reverse sequence of removal.

1.13 Removing and installing sliding sunroof seals

1.13.1 Removing and installing sliding sunroof seal



Removing:

- Remove glass panel ➔ [page 157](#) .
- Pull seal -1- out of assembly frame -2-.

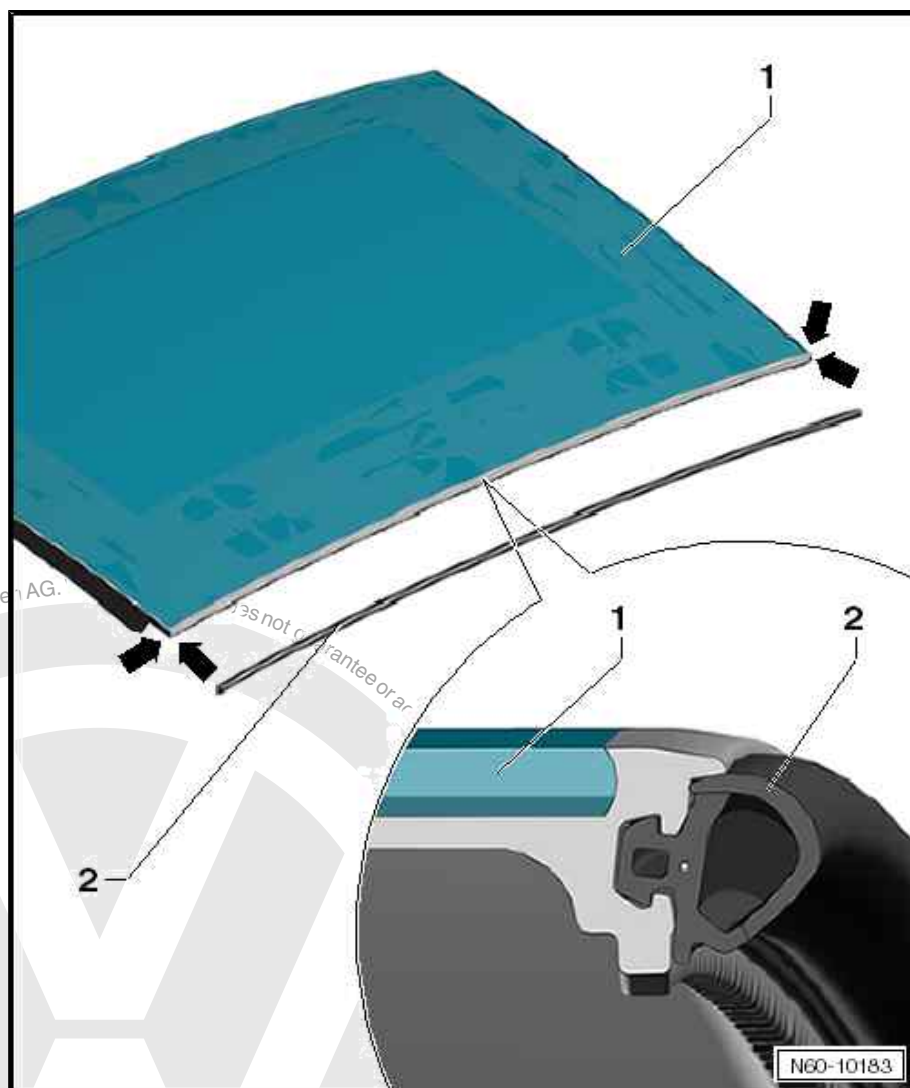
Installing:

- Align interior seal -1- with vulcanisation point facing towards curve on assembly frame -3- -arrows a-.
- Lip of seal -arrow b- must face outwards.

Press interior seal -1- uniformly into mounting slot of assembly frame -2-.



1.13.2 Removing and installing sunroof panel seal



Removing:

- Open glass panel.
- Pull seal -2- off glass panel -1-.

Installing:

- Align seal -2- on outer edges of glass panel -1- -arrows-.
- Press seal -2- into mountings of glass panel -1-.



1.14 Removing and installing sliding sunroof frame

⇒ ["1.14.1 Minimum curing period", page 187](#)

⇒ ["1.14.2 Fitting instructions", page 188](#)

⇒ ["1.14.3 Cleaning in the event of dirt caused by adhesive sealant", page 188](#)

⇒ ["1.14.4 Touching up paint damage", page 188](#)

⇒ ["1.14.5 Materials", page 188](#)

⇒ ["1.14.6 Preparing body flange for bonding", page 189](#)

⇒ ["1.14.7 Preparing sliding sunroof frame for installation", page 189](#)

⇒ ["1.14.8 Removing and installing sliding sunroof frame", page 190](#)

1.14.1 Minimum curing period



Note

- ◆ *There are special requirements for renewing bonded sliding sunroof frames.*
- ◆ *The vehicle is safe to use only after the minimum curing period has elapsed.*

2-pack window adhesive

The minimum curing period for the 2-pack window adhesive is 3 hours.

Minimum curing period is the time from bonding the sliding sunroof assembly frame until vehicle may be used. During this time, the vehicle must be standing on a level surface at room temperature (at least 15°C).

1-pack window adhesive

The minimum curing period for the 1-pack window adhesive is 24 hours.

Minimum curing period is the time from bonding the sliding sunroof assembly frame until vehicle may be used. During this time, the vehicle must be standing on a level surface at room temperature (at least 15°C).



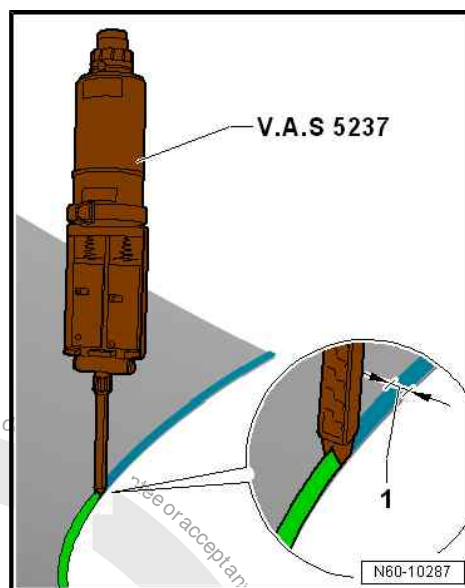
1.14.2 Fitting instructions

- Apply adhesive sealant in continuous bead, holding applicator at right angle to sliding sunroof frame.



Note

- ◆ *The sliding sunroof frame must be fitted within 10 minutes.*
- ◆ *Otherwise, the adhesive properties of the window adhesive will be impaired.*
- ◆ Insert sliding sunroof frame into aperture, align it centrally, and press in onto spacer rib.



1.14.3 Cleaning in the event of dirt caused by adhesive sealant



Note

- ◆ *When cleaning freshly installed sliding sunroof assembly frame from the inside in the vehicle, do not press assembly frame outwards.*
- ◆ *Otherwise, the adhesive bead will be detached.*
- Adhesive remover works well as a cleaning solution. Safety precautions must be observed for all work procedures.
- First, clean the painted surface roughly with a lint-free cloth. Remove residue using adhesive remover.
- Cleaning plastic trim: Allow adhesive sealant to cure (approx. 1 hour) and then peel off.

1.14.4 Touching up paint damage

If paintwork is damaged, paint structure must be restored according to specifications in "Paint" workshop manual.

1.14.5 Materials



Note

The current material numbers for the chemical materials listed should be gleaned from the Electronic parts catalogue "ETKA".

- ◆ 2-pack window adhesive 1) 1 2) 2 3) 3
- ◆ Activator 1) 1
- ◆ Primer 1) 1
- ◆ Cleaning solution 1) 1



- ◆ Applicator 1) 1
- ◆ Adhesive remover 1) 1
- ◆ Cutting cord 4) 4
- ◆ Wire reel VAS 6452/1 4) 4
- ◆ Cutting cord 6888/1 4) 4

1) Observe manufacturer's instructions enclosed in the packaging.

2) Observe minimum drying time ➔ [page 187](#).

3) Double cartridge gun - VAS 5237- must be used to apply these materials.

4) Cutting cords can be used alternatively to cutting wires, and vice versa. They are designated for single use.

1.14.6 Preparing body flange for bonding

- ◆ Cut back residual adhesive sealant to 1 ... 2 mm shortly before bonding window back in.
- ◆ When doing this, take care not to damage the primer layer.
- ◆ Keep bonding surface free of dirt and grease.
- ◆ Do not treat bonding surface with activator, glass/paint primer or cleaning solution immediately after cutting back.
- ◆ The remaining material is required as a base for better adhesion of the new adhesive sealing material to be applied.
- Cut back remaining material on body flange with U-shaped blade - V.A.G 1561/3- , but do not remove completely.

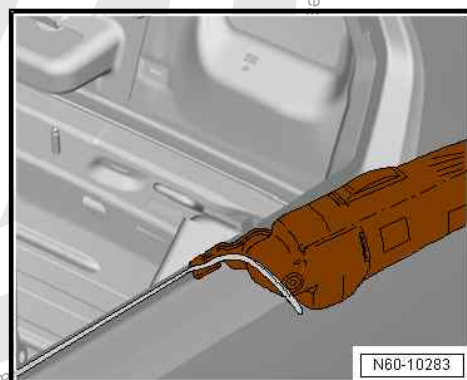
Exception: If bonding is not performed immediately after cutting back, the remaining residual material must be activated with activator .

- Apply activator evenly in one stroke using applicator .



Note

- ◆ Risk of damage to paintwork structure caused by activator.
- ◆ Apply activator precisely onto adhesive bead, and do not spill any activator.



1.14.7 Preparing sliding sunroof frame for installation

Work to be carried out on a new sliding sunroof frame:



Note

On a new sliding sunroof frame, the trim is already bonded.

Clean bonding surface -3- thoroughly, using cleaning solution .

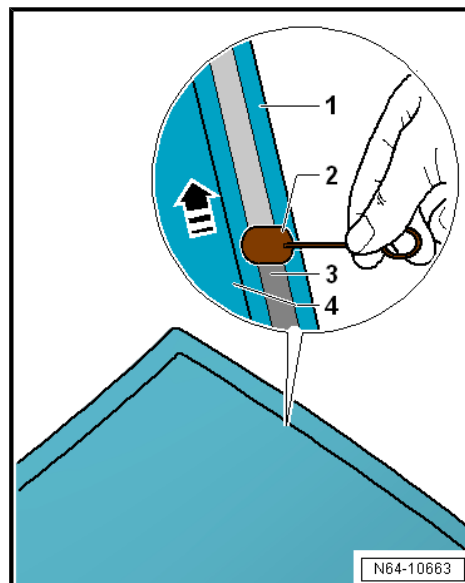
- Lightly key the bonding surface -3- with fine emery paper.
- Clean around bonding surface -3- using cleaning solution .
- Then rub primer/bonding surfaces -3- using a lint-free cloth.



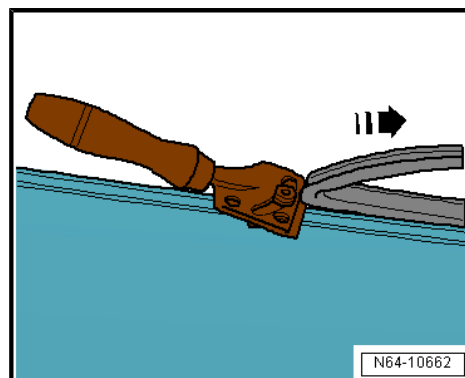
- Using applicator -2-, apply primer evenly in one pass.

Drying time for primer is 10 minutes.

Work to be carried out on a cut out sliding sunroof frame:



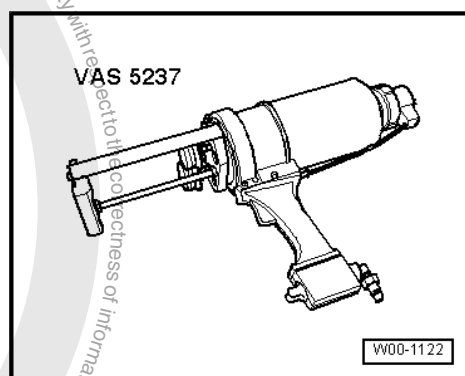
- ♦ Cut back residual adhesive sealant to 1 ... 2 mm shortly before bonding window back in.
- ♦ When doing this, take care not to damage the primer layer.
- ♦ Do not treat bonding surface with activator, glass/paint primer or cleaning solution immediately after cutting back.
- ♦ The remaining material is required as a base for better adhesion of the new adhesive sealing material to be applied.
- Cut back remaining material using scraper set - VAS 861 005- but do not remove completely.
- Exception: if bonding is performed later than one day after cutting back adhesive bead, the remaining residual material must be activated with activator.
- Apply activator evenly in one stroke using applicator .



1.14.8 Removing and installing sliding sunroof frame

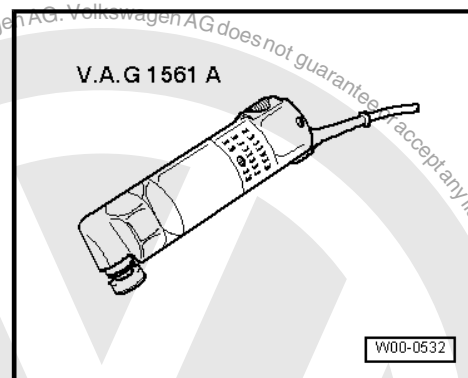
Special tools and workshop equipment required

- ♦ Double cartridge gun - VAS 5237-

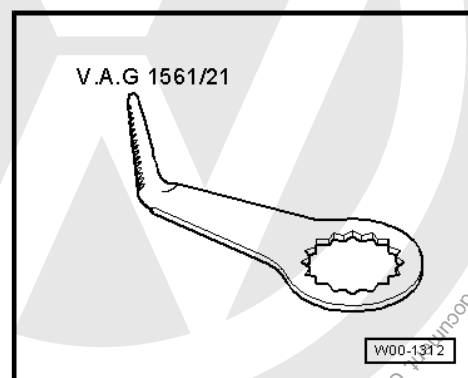




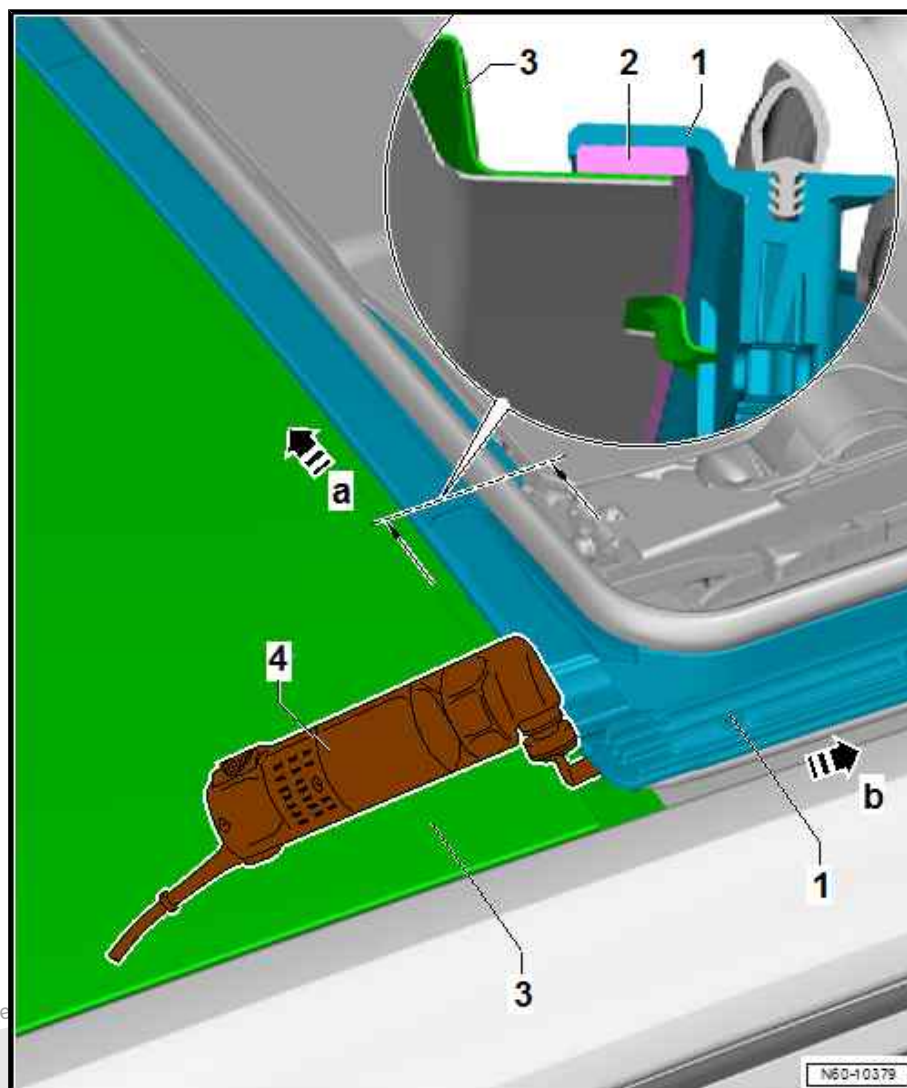
- ◆ Electric cutter - V.A.G 1561A-



- ◆ Blade (L-shape 19 mm) - V.A.G 1561/21-



Removing

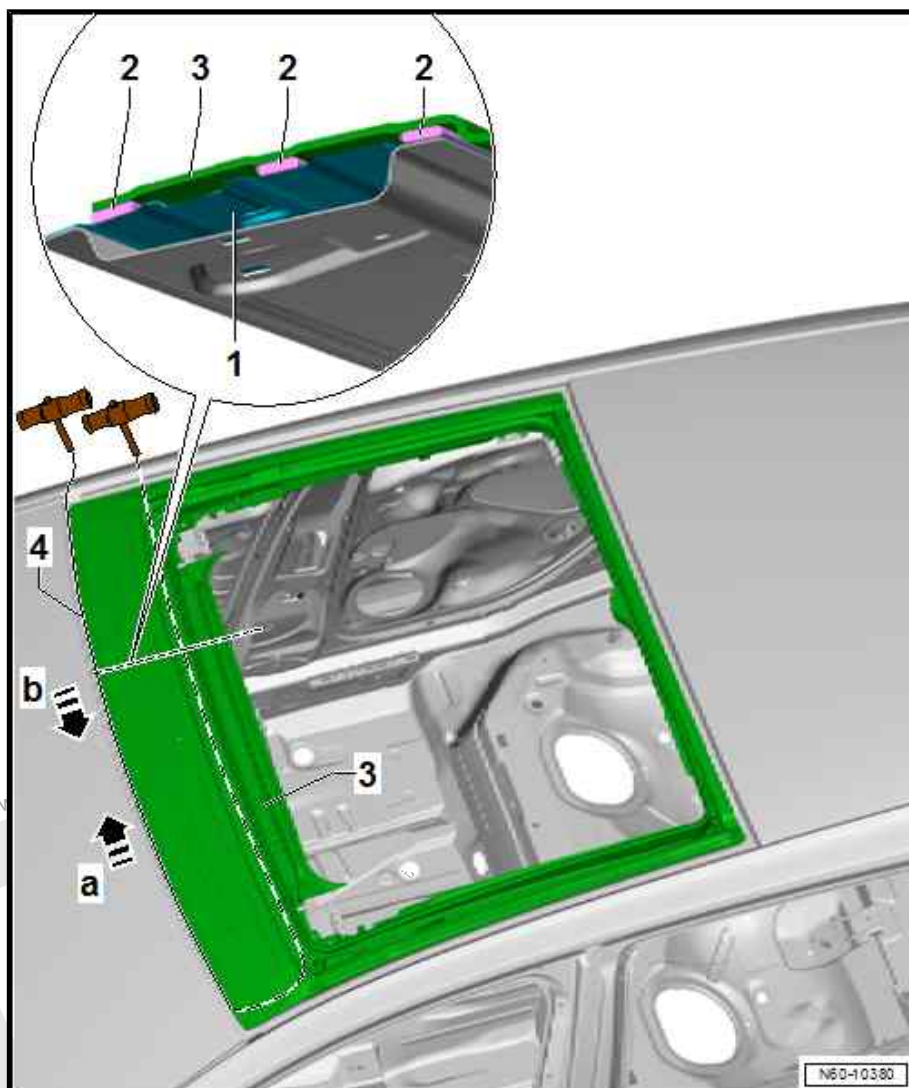


- Remove front trim ➤ [page 196](#) .
- Remove glass panel ➤ [page 157](#) .
- Remove moulded headliner ➤ General body repairs, interior; Rep. gr. 70 ; Roof trims; Removing and installing moulded headliner .
- Use masking tape to cover roof rail and edge of roof -3- in order to protect paintwork.
- Stick electric cutter - V.A.G 1561A- -4- with L-shaped 19 mm blade - V.A.G 1561/21- into rear adhesive bead -2-.
- Cut through adhesive bead -2- at right angle -arrow a- and sideways up to front -arrow b-.



Note

In the middle at the rear, there is a centring pin made of plastic.



- Secure a handle from, for example, windscreen removal kit - V.A.G 1755- to each end of the cord.

The cutting of the adhesive bead -2- is only possible with the help of a second mechanic.

- One person pulls from the outside, the other pulls from the inside.



Note

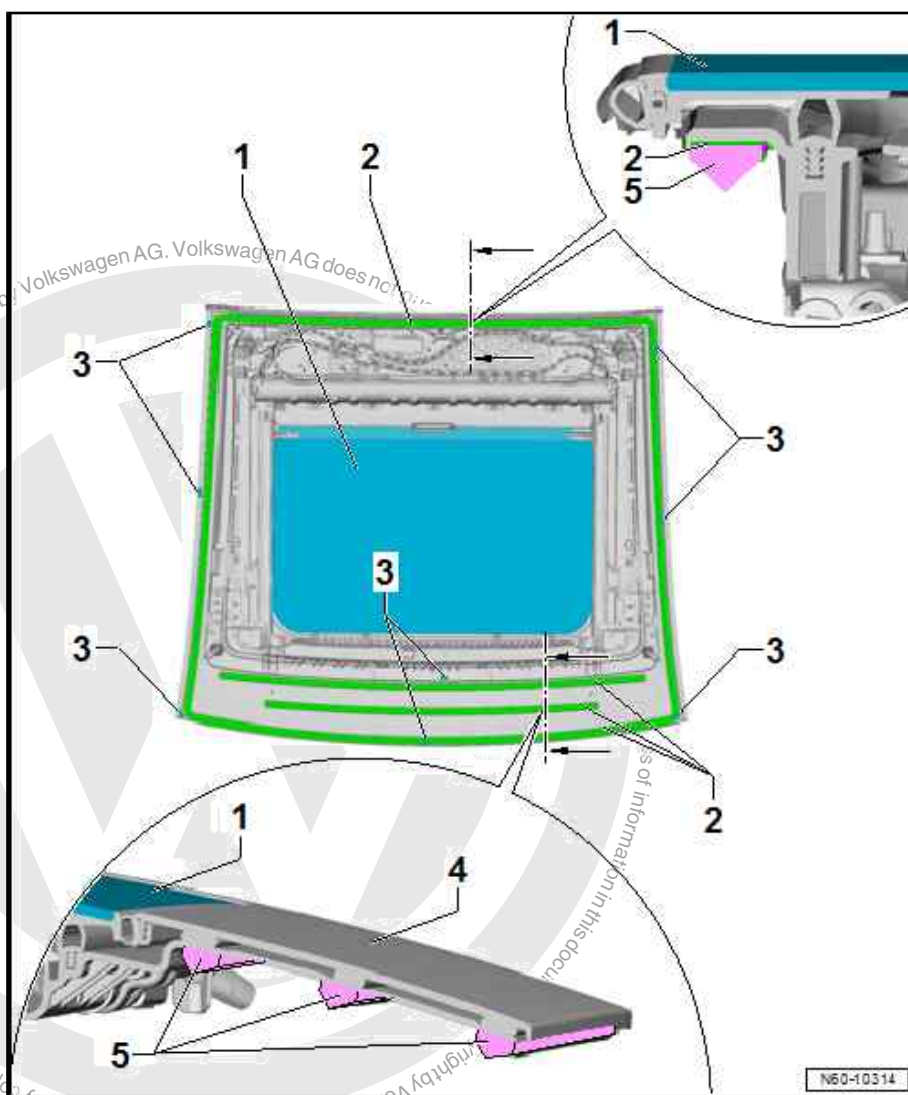
- ◆ There are 3 adhesive beads on the roof cross member and increased resistance will be encountered here.
- ◆ Keep the cord close to the assembly frame so that it is not cut by the surrounding edges.
- Adhesive bead -2- must be cut through, starting sideways -arrow a- as far as middle of roof cross member -1-.
- Move cord to other side.
- Adhesive bond is cut through as far as roof cross member, starting from side -arrow b-.
- Remove assembly frame -3-.



Note

- ◆ The exact position of the adhesive bead on the new assembly frame must be taken from the adhesive bead on the removed assembly frame.
- ◆ The position of the adhesive bead on the metal flange must also be the same if a new roof is fitted.

Installing



- Prepare body flange for installation of sliding sunroof frame
⇒ [page 189](#) .
- Prepare new sliding sunroof frame -1- for installation
⇒ [page 189](#) .
- Prepare cut out sliding sunroof frame -1- for installation
⇒ [page 190](#) .
- Installation instructions
 - The glass panel -1- has been built into the frame -4-.
 - Sliding sunroof frame can also be installed without height stops -3-.

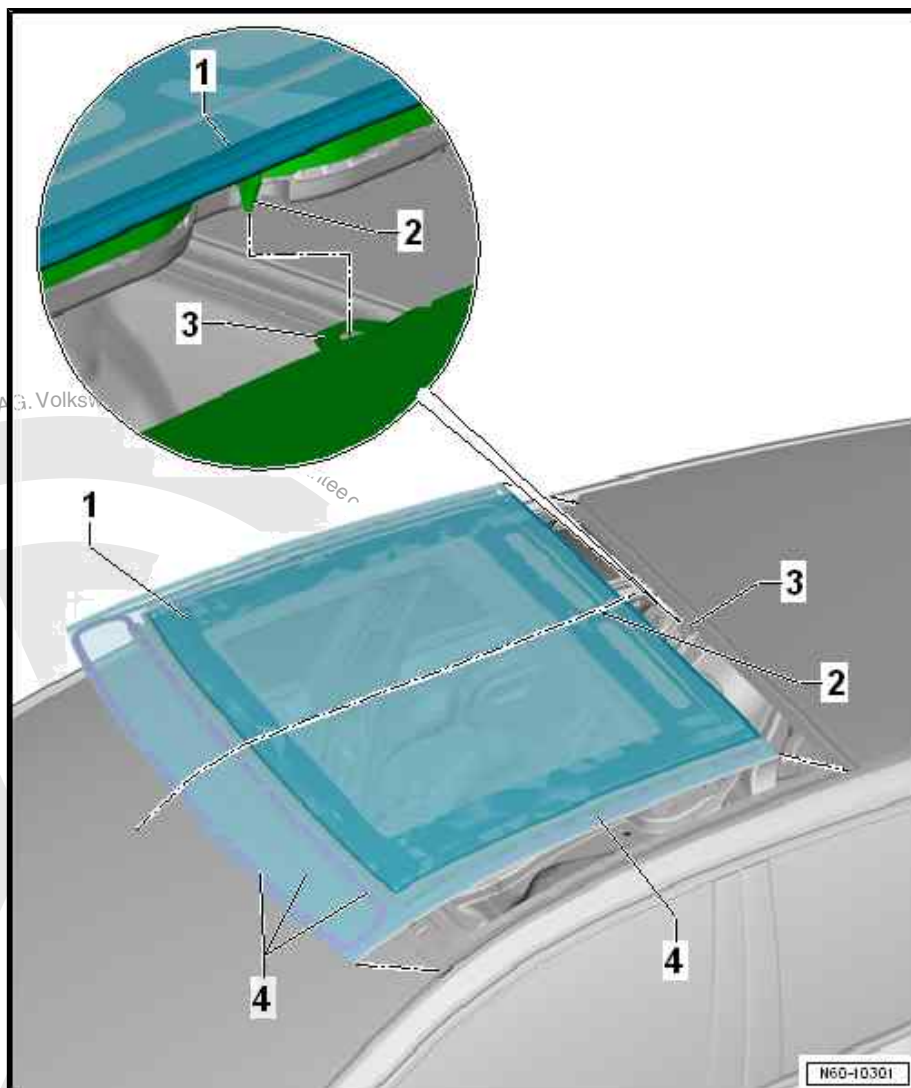


- Apply 2-component glass adhesive . Dimensions for adhesive bead -5-: width = 12 mm; height = 10 mm



Note

Frame must be installed within 10 minutes after adhesive has been applied, otherwise the adhesive properties of the adhesive sealing compound will be impaired.



- Install glass panel -1- in assembly frame before installing assembly frame.

New frame

- The centring pin -3- aligns frame within aperture.
- Press frame downwards as far as the stops, check height setting in relation to roof ➔ [page 162](#) .

Existing frame

- If the centring pin no longer exists, the frame is aligned in relation to the roof aperture -2-.
- Press frame downwards as far as the stops, check height setting in relation to roof ➔ [page 162](#) .



- Observe minimum drying time ⇒ [page 187](#) .

1.15 Removing and installing front trim for sliding sunroof

⇒ [“1.15.1 Minimum curing period”, page 196](#)

⇒ [“1.15.2 Fitting instructions”, page 196](#)

⇒ [“1.15.3 Cleaning in the event of dirt caused by adhesive sealant”, page 197](#)

⇒ [“1.15.4 Materials”, page 197](#)

⇒ [“1.15.5 Preparing front trim for installation”, page 197](#)

⇒ [“1.15.6 Preparing sliding sunroof frame for installation of front trim”, page 198](#)

⇒ [“1.15.7 Removing and installing front trim for sliding sunroof”, page 198](#)

1.15.1 Minimum curing period



Note

- ◆ *There are special requirements for renewing bonded front trims.*
- ◆ *The vehicle is safe to use only after the minimum curing period has elapsed.*

1-pack window adhesive

The minimum curing period for the 1-pack window adhesive is 24 hours.

The minimum curing period is the time from bonding the windscreen in until the vehicle may be used. During this time, the vehicle must be standing on a level surface at room temperature (at least 15°C).

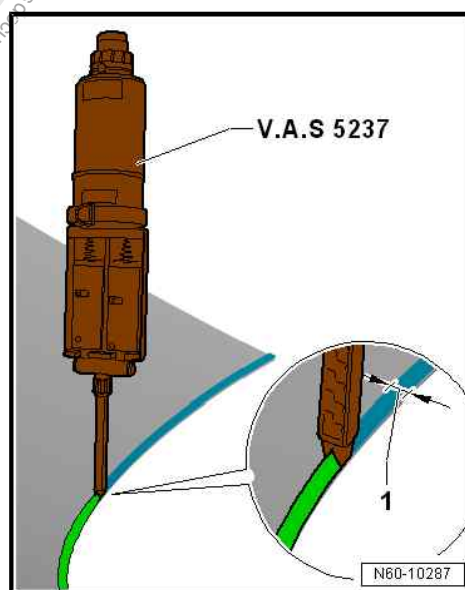
1.15.2 Fitting instructions

- Apply adhesive sealing material in continuous bead, holding applicator at right angle to front trim.



Note

- ◆ *The front trim must be fitted within 10 minutes.*
- ◆ *Otherwise, the adhesive properties of the window adhesive will be impaired.*
- ◆ Fit front trim into aperture, align it, and press it in as far as spacer rib.





1.15.3 Cleaning in the event of dirt caused by adhesive sealant

- Adhesive remover works well as a cleaning solution. Safety precautions must be observe for all work procedures.
- First, clean the painted surface roughly with a lint-free cloth. Remove residue using adhesive remover .
- Cleaning plastic trim: Allow adhesive sealant to cure (approx. 1 hour) and then peel off.

1.15.4 Materials



Note

The current material numbers for the chemical materials listed should be gleaned from the Electronic parts catalogue "ETKA".

- ◆ 1-pack assembly adhesive 5) 1 6) 2
- ◆ Primer 5) 1
- ◆ Cleaning solution 5) 1
- ◆ Applicator 5) 1
- ◆ Adhesive remover 5) 1
- ◆ Cutting cord 7)* 3
- ◆ Wire reel VAS 6452/1 7)* 3
- ◆ Cutting cord 6888/1 7)* 3

5) Observe manufacturer's instructions enclosed in the packaging.

6) Observe minimum drying time.

7) Cutting cords can be used alternatively to cutting wires, and vice versa. They are designated for single use.

1.15.5 Preparing front trim for installation

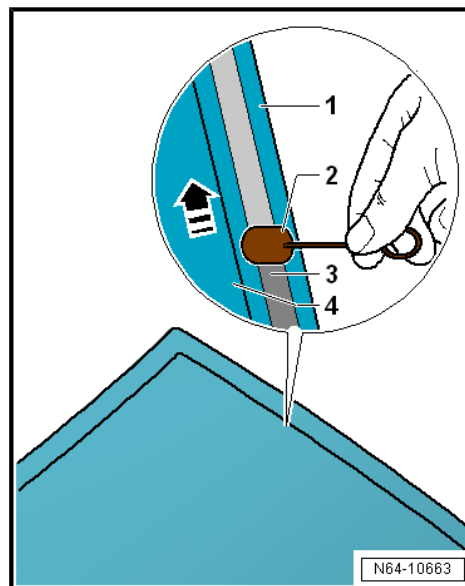


Note

- ◆ *The area in which the adhesive bead is to be applied is marked on the front trim.*
- ◆ *The application area for the adhesive bead is not precoated or primed.*
- Clean around primer/bonding surface -3- using cleaning solution .
- Then rub primer/bonding surfaces -3- using a lint-free cloth.

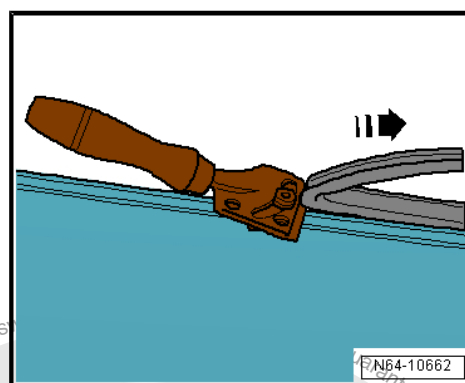


- Using applicator -2-, apply primer evenly in one pass.
- ◆ Allow to air dry for approx. 10 minutes.



1.15.6 Preparing sliding sunroof frame for installation of front trim

- ◆ Cut back residual adhesive sealant to 1 ... 2 mm shortly before bonding window back in.
- ◆ When doing this, take care not to damage the primer layer.
- ◆ Keep bonding surface free of dirt and grease.
- ◆ Do not treat bonding surface with activator, glass/paint primer or cleaning solution immediately after cutting back.
- ◆ The remaining material is required as a base for better adhesion of the new adhesive sealing material to be applied.
- Cut back remaining material using scraper set - VAS 861 005- but do not remove completely.
- Exception: if bonding is performed later than one day after cutting back adhesive bead, the remaining residual material must be activated with activator .
- Apply activator evenly in one stroke using applicator .



Note

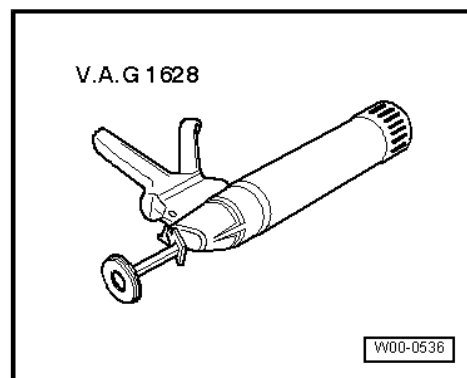
- ◆ Risk of damage to paintwork structure caused by activator.
- ◆ Apply activator precisely onto adhesive bead, and do not spill any activator.

1.15.7 Removing and installing front trim for sliding sunroof

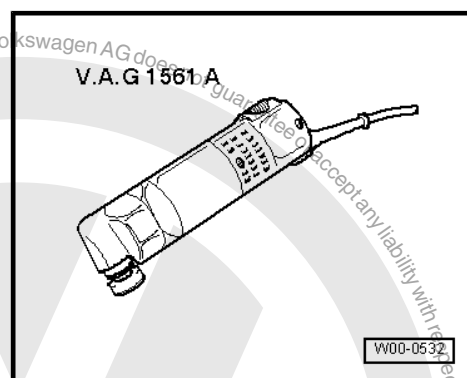
Special tools and workshop equipment required



- ◆ Hand-cartridge gun - V.A.G 1628-



- ◆ Electric cutter - V.A.G 1561A-
- ◆ Saw blade, 80 mm in diameter - V.A.G 1561/26-



- ◆ Either removal kit for flush bonded windows - V.A.G 1474 A-
- ◆ Or window removal set - VAS 6888- .
- ◆ Or wire reel - VAS 6452/1- .



- ◆ Scraper set - VAS 861 005-
- ◆ Or scraper set - VAS 852 005-



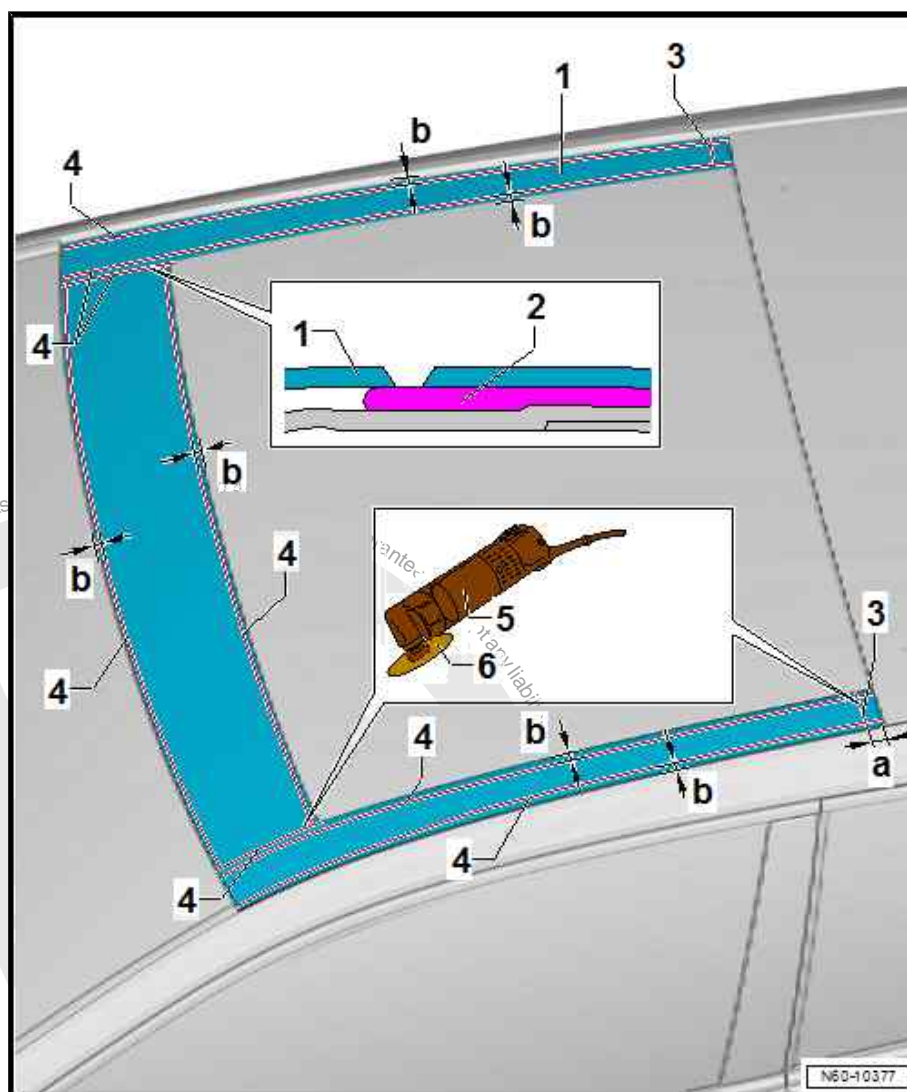


Removing



Note

- ◆ The front trim is damaged when it is removed and cannot be reused.
- ◆ Protect any surrounding components against damage.
- ◆ The glass panel is not to be removed. The installation position of the glass panel is required as a reference for determining the height when installing the front trim.



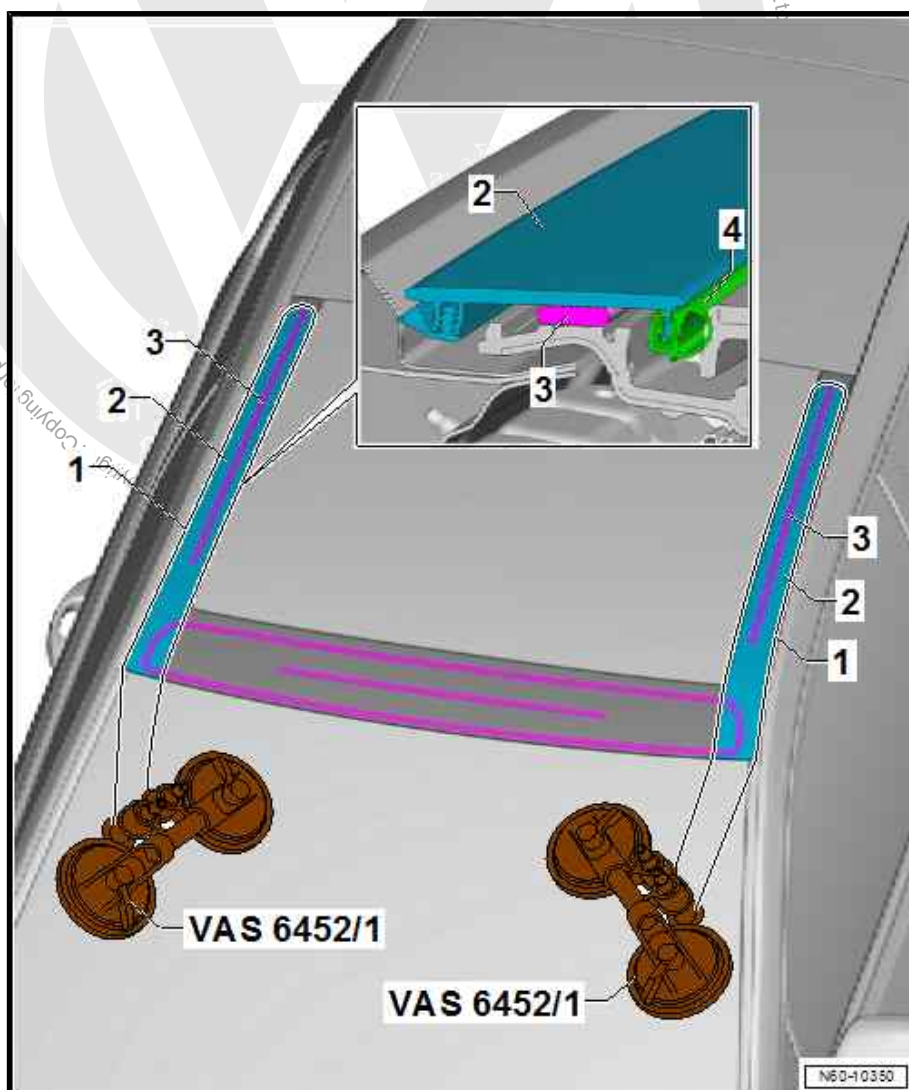
- Pull seal off front trim -1-.
- If fitted, bond windscreen seal to windscreen, and press it on firmly.
- Mark a line on the trims at a distance of -b- = 10 mm from the edges.
- Mark a line on both sides at a distance -a- = 30 mm from the rear edge.



i Note

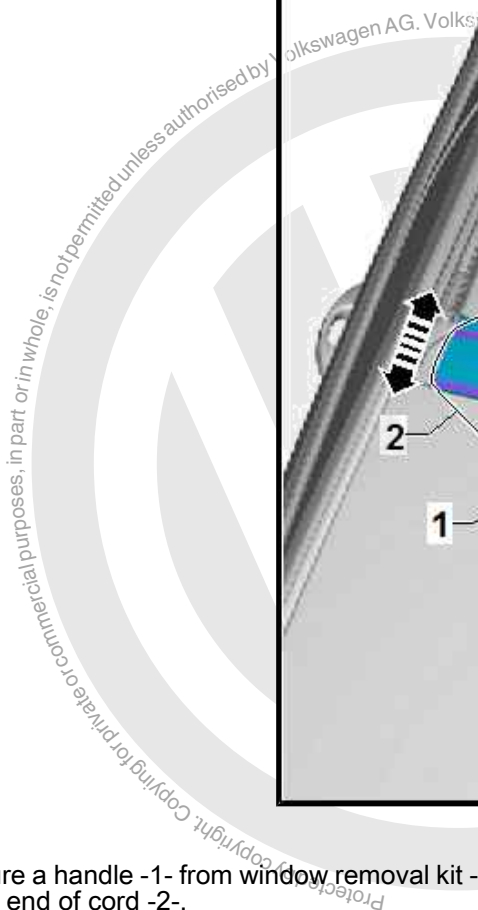
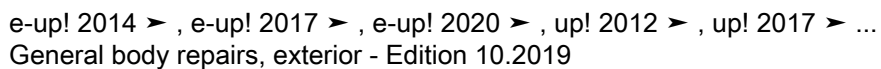
Due to the small clearance between the front trim and the frame, only make a cut with a max. depth of 5 mm.

- Using electric cutter - V.A.G 1561A- and saw blade, 63 mm in diameter - V.A.G 1561/25- , separate the front trim along the markings -3 and 4-.
- Make a cut with a width of approx. 5 mm along line -4- in front area on left and right to allow for insertion of cutting cord.
- With front trim edges removed, the adhesive beads of the trim are accessible.



Seal -4- has been pulled off.

- Insert cutting cord -1- all round on one side, and secure it to wire reel - VAS 6452/1- .
- Cut through adhesive bead -3-, and remove part of front trim -2-.
- Fit wire reel - VAS 6452/1- on other side, and repeat the procedure.



- Window removal kit - V.A.G 1755 - to

- Or work is carried out e.g. with wire reel - VAS 6452/1- -6-.

Note

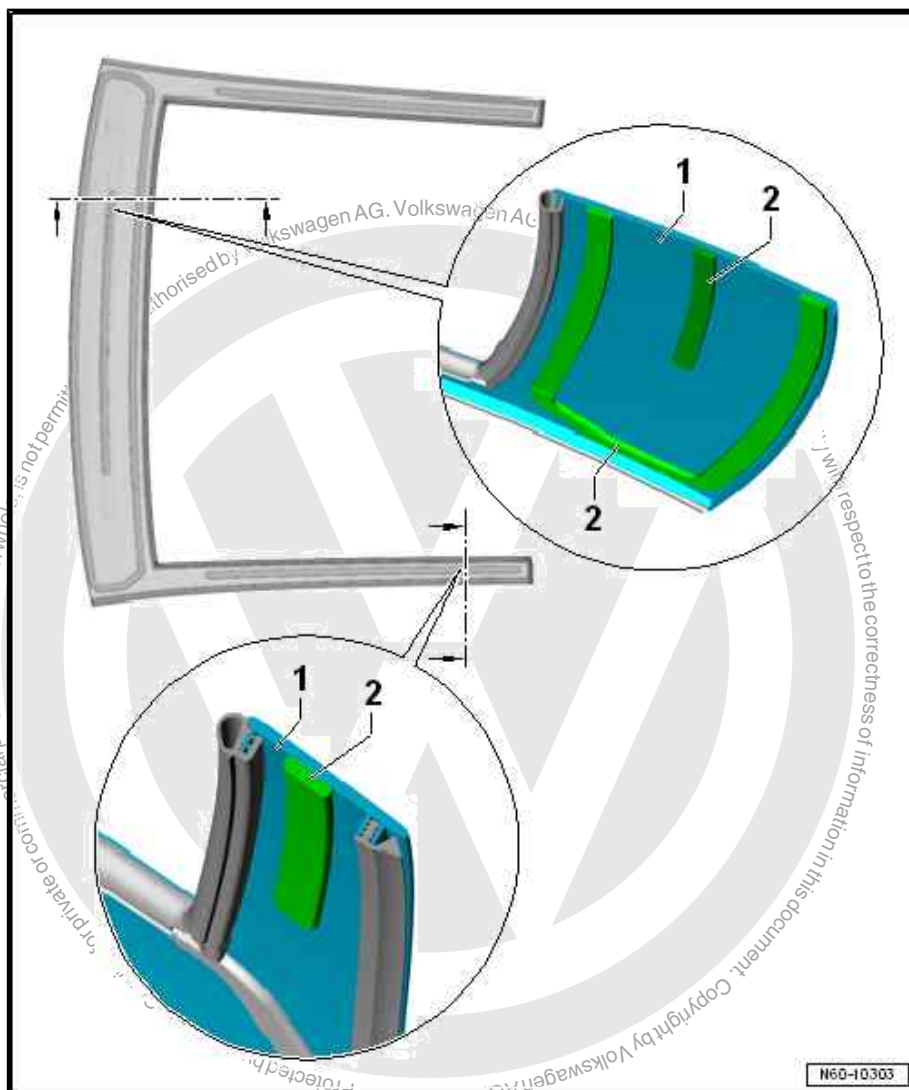
- ◆ *There are 3 adhesive beads on the roof cross member and increased resistance will be encountered here.*
- ◆ *If the handles are used, make even sawing movements -arrow-.*
- Now, cut through adhesive beads -5- on roof cross member at front as far as the middle -3- on one side.
- Then, cut through adhesive beads as far as the middle -3- on the other side.
- Remove front trim -4-.



Note

The exact positions of the adhesive beads of the piece of front trim cut out must be used for the new trim.

Installing



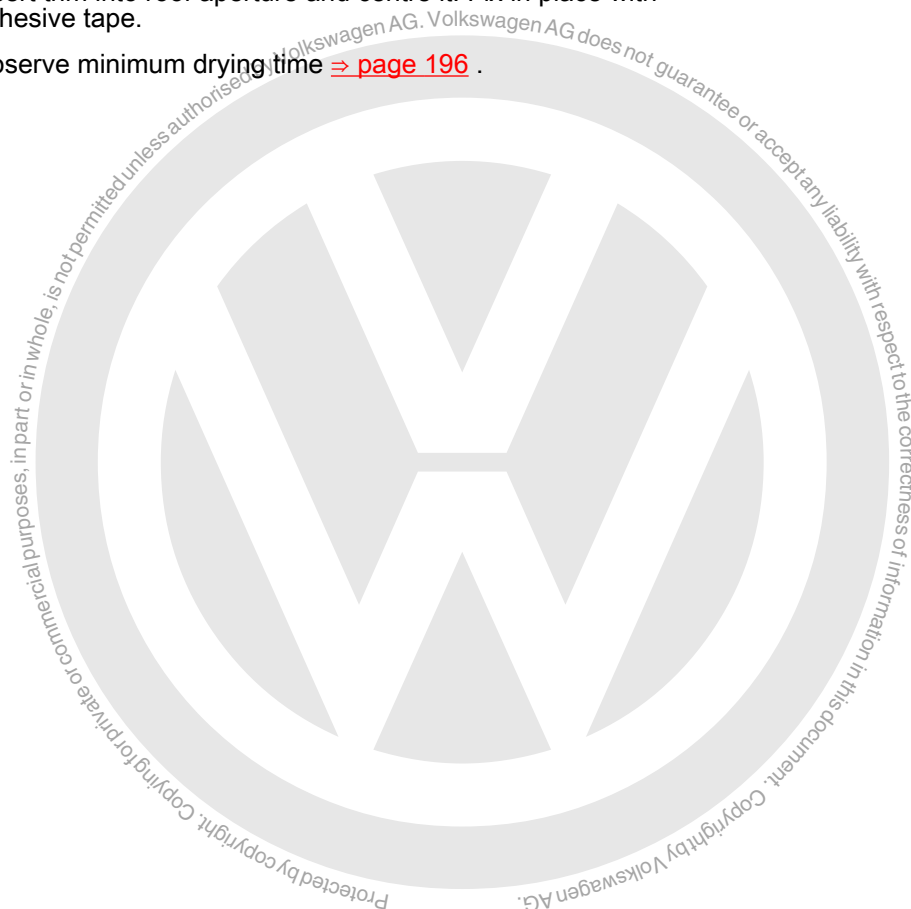
- The glass panel has been built into the frame.
- Prepare sliding sunroof frame for installation of front trim
⇒ [page 198](#) .
- Prepare front trim -1- for installation ⇒ [page 197](#) .
- Installation instructions ⇒ [page 196](#)
- Clean around bonding surface -2- thoroughly, using cleaning solution .
- Using applicator, apply primer evenly in one pass.
- Drying time for glass/paint primer is 10 minutes.
- Apply adhesive.

Width of adhesive bead: 8 mm.



Height of adhesive bead: 12 mm.

- Insert trim into roof aperture and centre it. Fix in place with adhesive tape.
- Observe minimum drying time ➤ [page 196](#) .





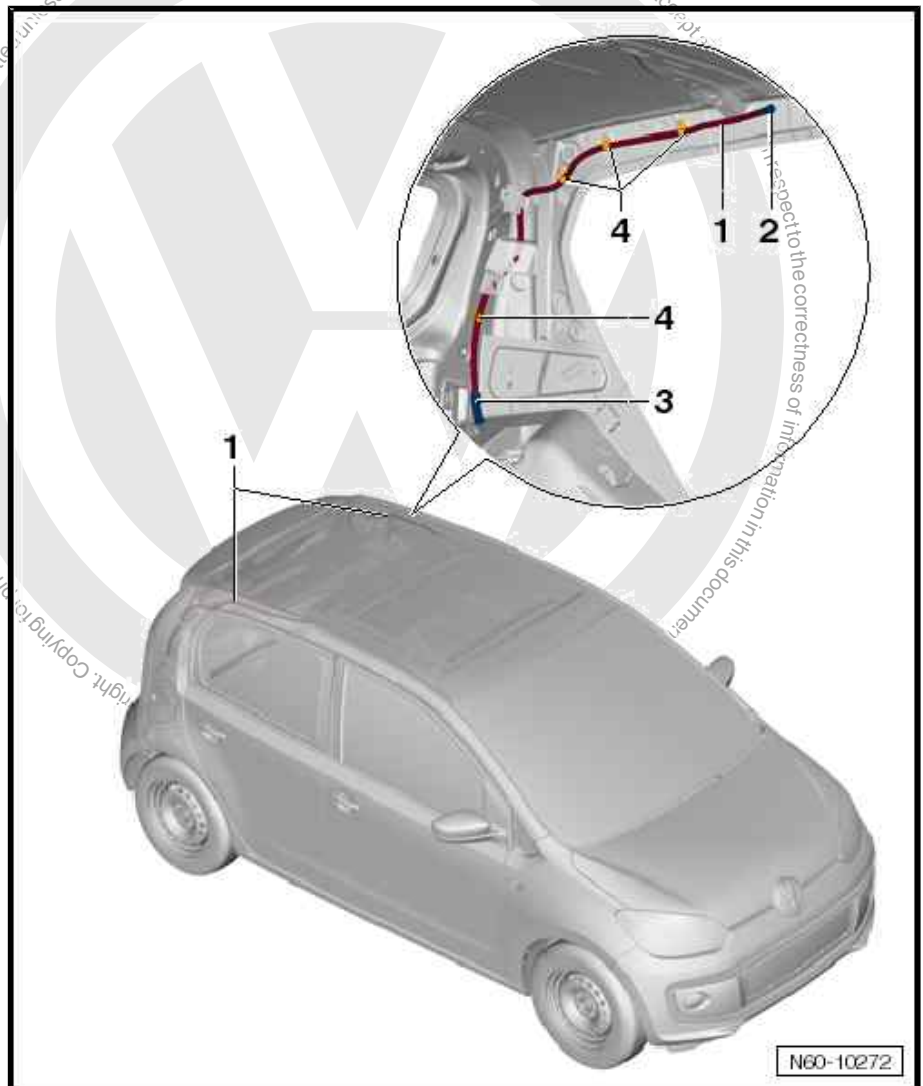
2 Water drain hoses

⇒ [“2.1 Assembly overview - water drainage hoses”, page 205](#)

⇒ [“2.2 Cleaning water drain hoses”, page 205](#)

2.1 Assembly overview - water drainage hoses

- 1 - Rear water drain hose
- 2 - Assembly frame
- 3 - Drainage grommet
- 4 - Clip

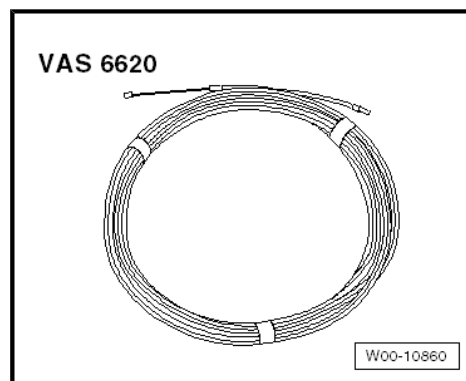


2.2 Cleaning water drain hoses

Special tools and workshop equipment required

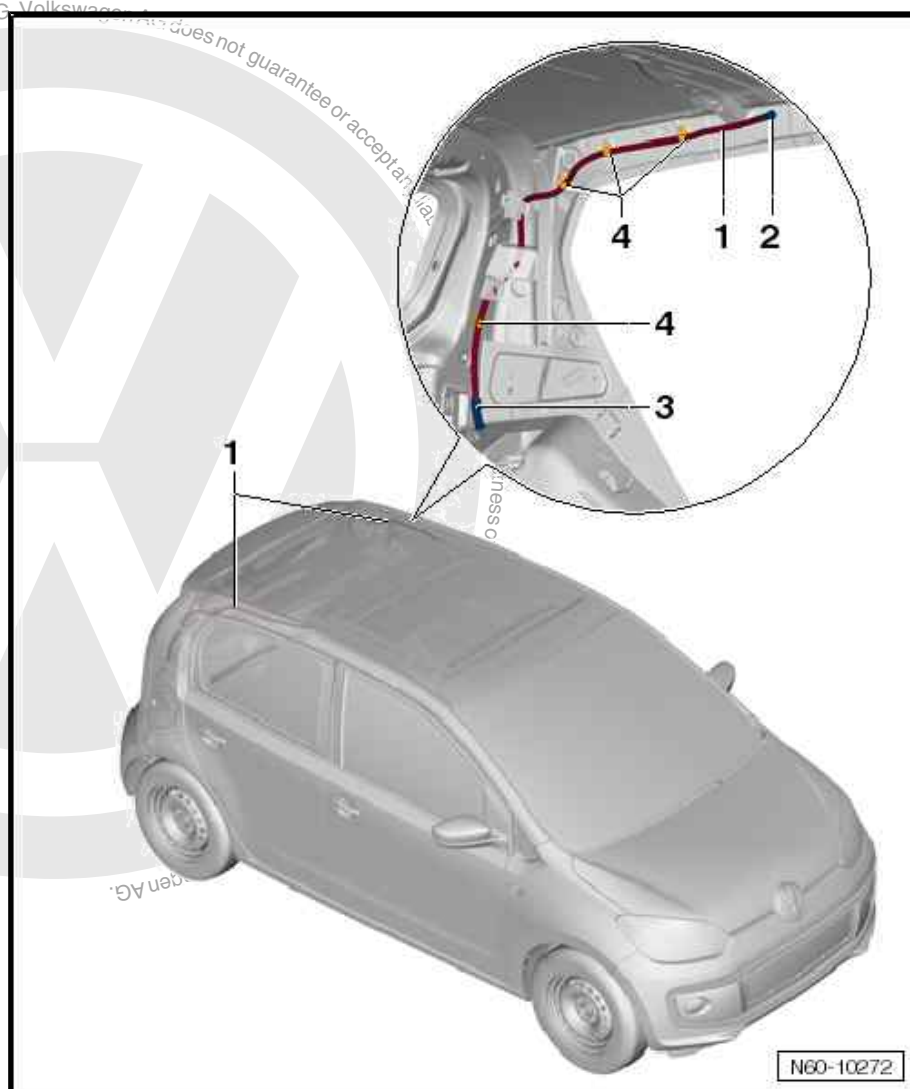


- ◆ Cleaning and fitting tool - VAS 6620-



Note

- ◆ *There are only the rear water drain hoses in the case of this sliding/tilting roof.*
- ◆ *When renewing the water drain hose, the replacement part is cut to length at the drain grommet which is not needed.*
- ◆ *For the positions of stickers and protective films please refer to old part.*





The rear water drain hoses run through the C-pillars and end in the rear outer floor panels.

- Removing rear bumper of corresponding model
⇒ [page 224](#) .
- Cleaning is carried out from below with the cleaning and pull-in cable - VAS 6620- .





63 – Bumpers

1 Bumper, front

⇒ [“1.1 Assembly overview - bumper cover”, page 208](#)

⇒ [“1.2 Removing and installing bumper cover”, page 214](#)

⇒ [“1.3 Repairing bumper cover”, page 216](#)

1.1 Assembly overview - bumper cover

⇒ [“1.1.1 Assembly overview - bumper cover”, page 208](#)

⇒ [“1.1.2 Assembly overview - attachments ➤05.2016”, page 210](#)

⇒ [“1.1.3 Assembly overview - attachments 06.2016 ➤”, page 211](#)

⇒ [“1.1.4 Assembly overview - attachments Cross up!”, page 212](#)

⇒ [“1.1.5 Assembly overview - trim ring”, page 213](#)

⇒ [“1.1.6 Assembly overview - front bumper carrier”, page 213](#)

1.1.1 Assembly overview - bumper cover



Note

There may be minor differences between bumper covers, depending on vehicle model.



1 - Front bumper cover

- ☐ Material PP/EPDM
- ☐ Removing and installing
⇒ [page 214](#)

2 - Side guide

- ☐ Left and right

3 - Bolt

- ☐ Qty. 3 to 5, depending on model
- ☐ Specified torque: 2 Nm
- ☐ Bolted to lock carrier.

4 - Locking lug

- ☐ Qty. 4
- ☐ Engaged in lock carrier

5 - Bolt

- ☐ Left and right
- ☐ Points upwards.
- ☐ Specified torque: 2 Nm

6 - Bolt

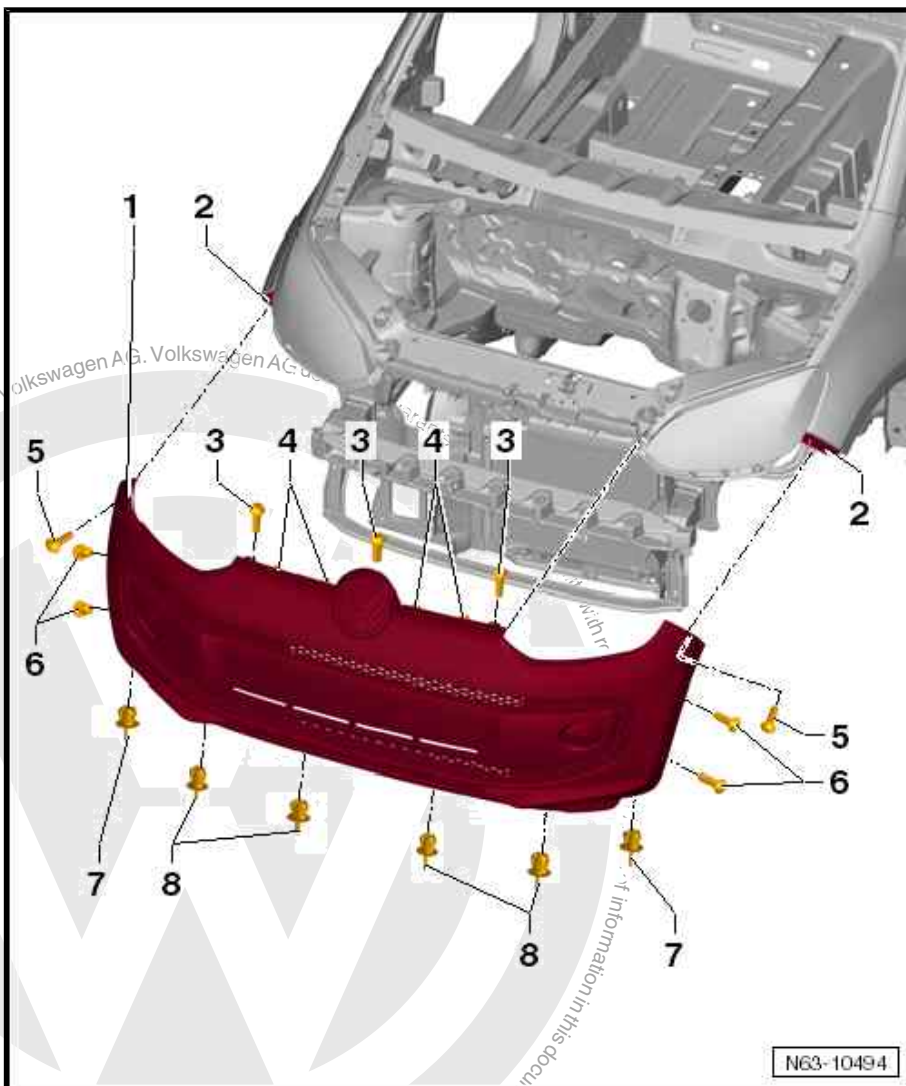
- ☐ Qty. 2 on each side
- ☐ Specified torque: 2 Nm
- ☐ Bolted to wheel housing liner.

7 - Spreader rivet

- ☐ Qty. 1 on each side
- ☐ Secured to wheel housing liner

8 - Spreader rivet

- ☐ Qty. 4
- ☐ Secured to lock carrier from below





1.1.2 Assembly overview - attachments ►05.2016



Note

The attachments may be slightly different, depending on vehicle model, and these differences must be taken into account.

1 - Front bumper cover

- ❑ Material PP/EPDM
- ❑ Removing and installing
⇒ [page 214](#)

2 - Ventilation grille

- ❑ Engaged in bumper cover
- ❑ Can be released from locking hooks only after bumper cover has been removed
- ❑ Different versions, allocation ⇒ Electronic parts catalogue "ETKA"

3 - Trim

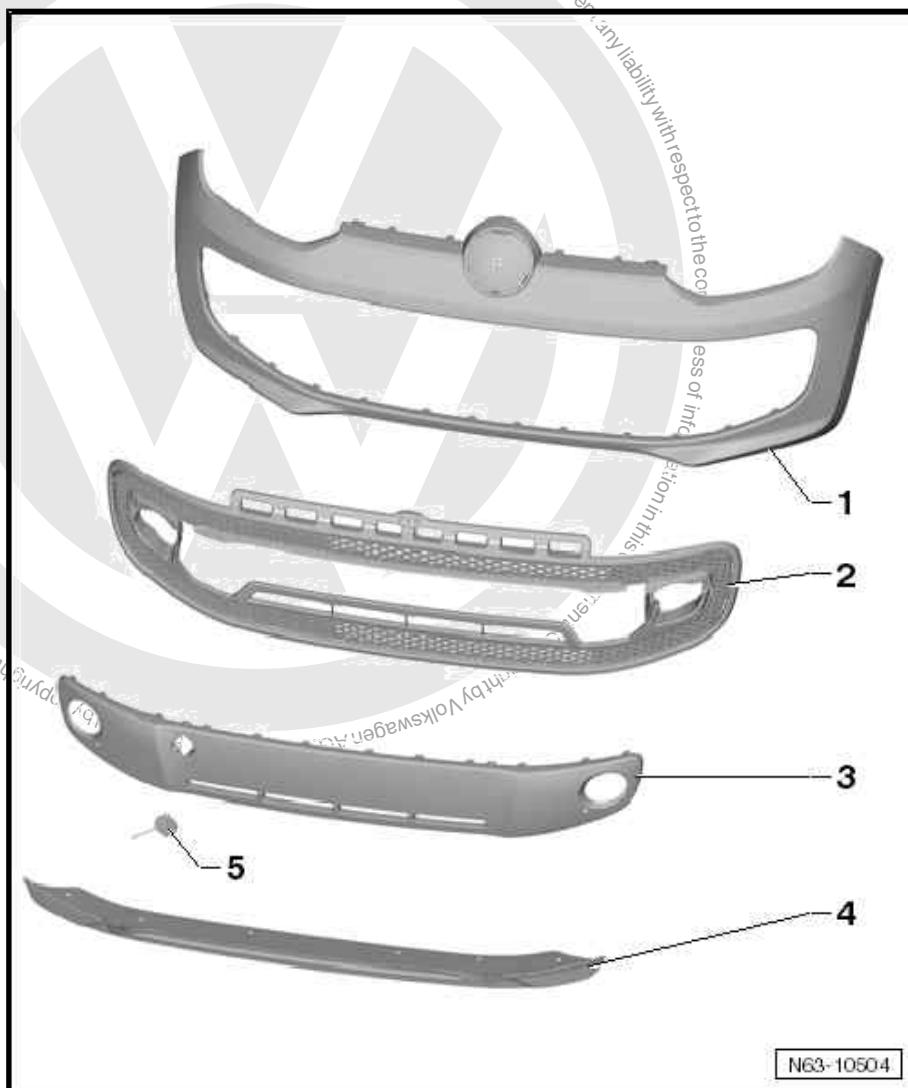
- ❑ Engaged in air intake grille
- ❑ Can be released from locking hooks only after bumper cover has been removed
- ❑ Different versions, allocation ⇒ Electronic parts catalogue "ETKA"

4 - Spoiler

- ❑ Engaged in bumper cover
- ❑ Can be released from locking hooks only after bumper cover has been removed

5 - Cap

- ❑ For towing eye





1.1.3 Assembly overview - attachments 06.2016 ➤



Note

The attachments may be slightly different, depending on vehicle model, and these differences must be taken into account.

1 - Front bumper cover

- ☐ Material PP/EPDM
- ☐ Cut off struts -8-
- ☐ Removing and installing
⇒ [page 214](#)

2 - Ventilation grille

- ☐ Engaged in bumper cover
- ☐ Can be released from locking hooks only after bumper cover has been removed
- ☐ Different versions, allocation ⇒ Electronic parts catalogue "ETKA"

3 - Trim

- ☐ Engaged in air intake grille
- ☐ Can be released from locking hooks only after bumper cover has been removed
- ☐ Different versions, allocation ⇒ Electronic parts catalogue "ETKA"

4 - Cover ring

- ☐ left and right, for vehicles with fog lamps
- ☐ Engaged in trim panel -3-
- ☐ Can be released from locking hooks only after bumper cover has been removed

5 - Spoiler

- ☐ Engaged in bumper cover
- ☐ Can be released from locking hooks only after bumper cover has been removed

6 - Cap

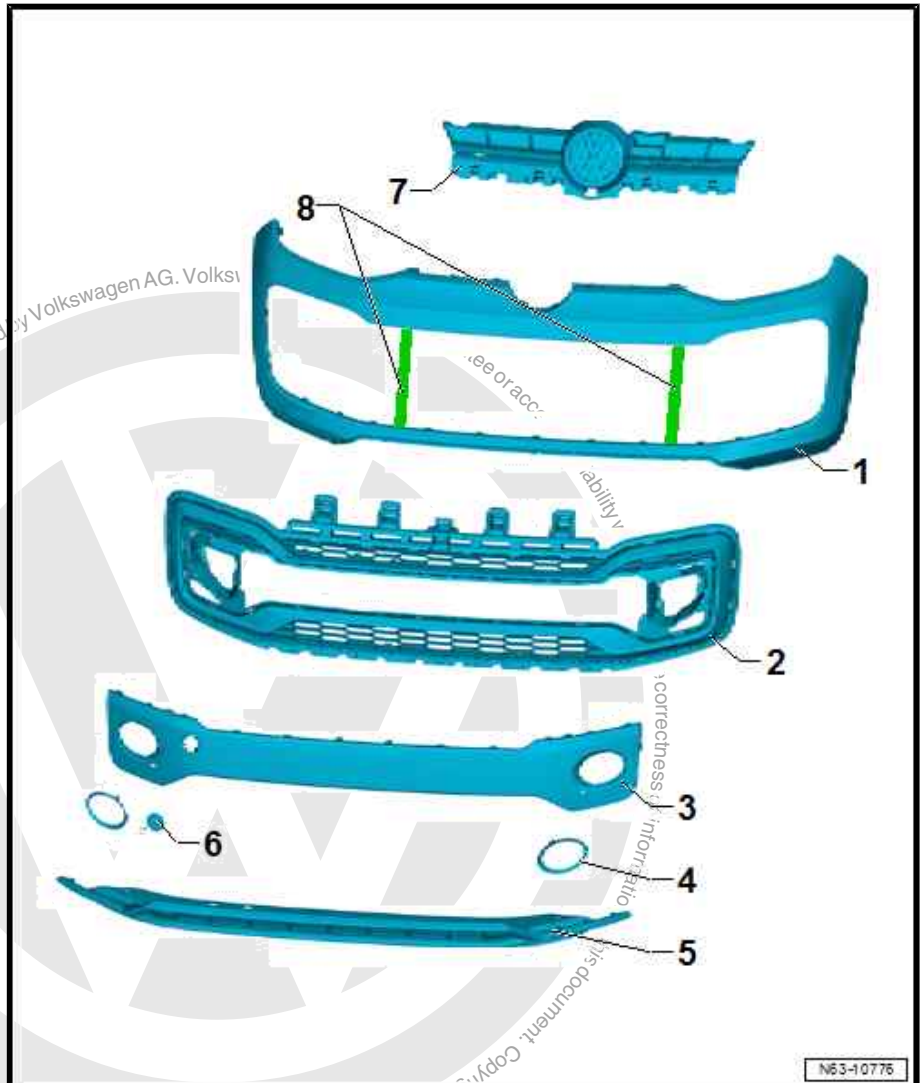
- ☐ For towing eye

7 - Radiator grille

- ☐ Engaged in bumper cover and ventilation grille
- ☐ Can be released from locking hooks only after bumper cover has been removed and ventilation grille has been detached
- ☐ Removing and installing

8 - Transport struts

- ☐ Struts must be cut off before attachments parts are installed





1.1.4 Assembly overview - attachments Cross up!

1 - Front bumper cover

- ❑ Material PP/EPDM
- ❑ Removing and installing
⇒ [page 214](#)

2 - Front wheel arch trim

- ❑ Engaged in bumper cover
- ❑ Can be released from locking hooks only after bumper cover has been removed

3 - Bracket

4 - Lower cover

- ❑ Engaged in bumper cover
- ❑ Can be released from locking hooks only after bumper cover has been removed

5 - Trim panel of skid plate

- ❑ Engaged in bumper cover and lower cover
- ❑ Can be released from locking hooks only after bumper cover has been removed

6 - Spoiler

- ❑ Engaged in bumper cover
- ❑ Can be released from locking hooks only after bumper cover has been removed

7 - Trim

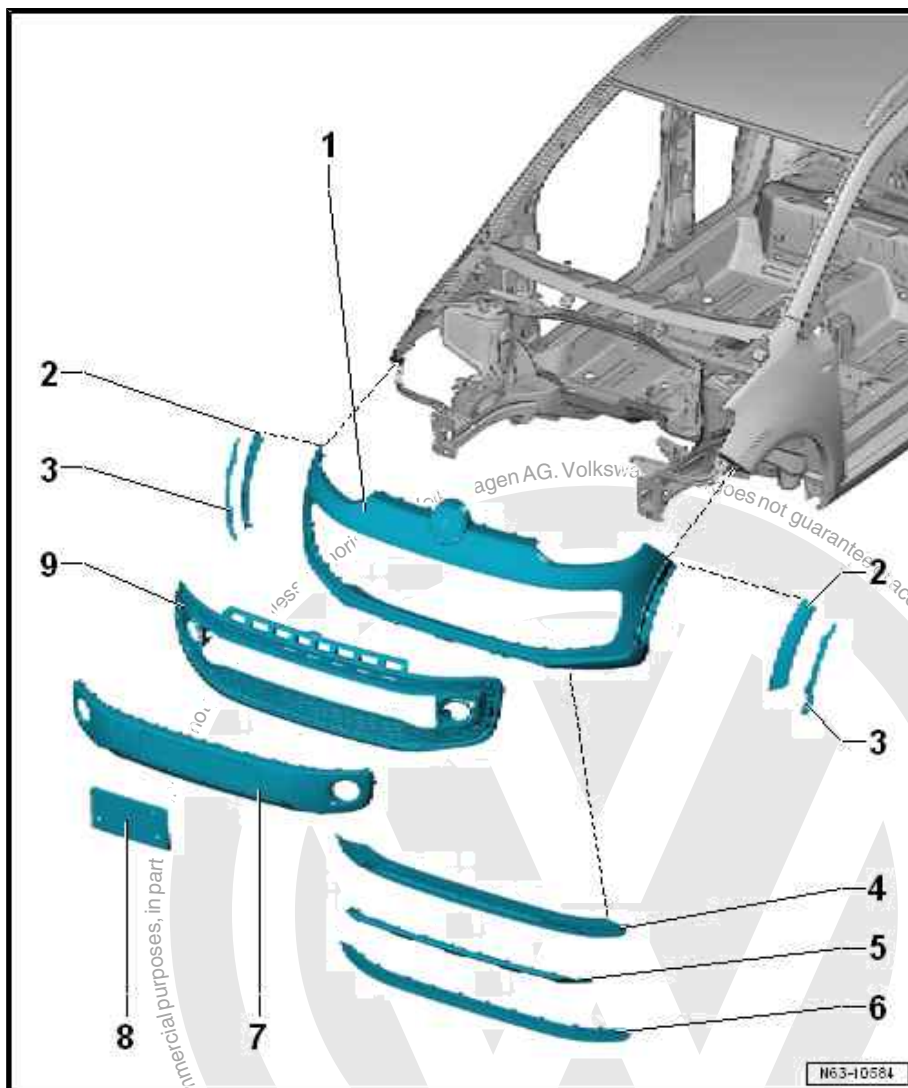
- ❑ Engaged in air intake grille
- ❑ Can be released from locking hooks only after bumper cover has been removed
- ❑ Different versions, allocation ⇒ Electronic parts catalogue "ETKA"

8 - Number plate carrier

- ❑ In different dimensions for various markets.

9 - Ventilation grille

- ❑ Engaged in bumper cover
- ❑ Can be released from locking hooks only after bumper cover has been removed
- ❑ Different versions, allocation ⇒ Electronic parts catalogue "ETKA"





1.1.5 Assembly overview - trim ring

1 - Left trim ring

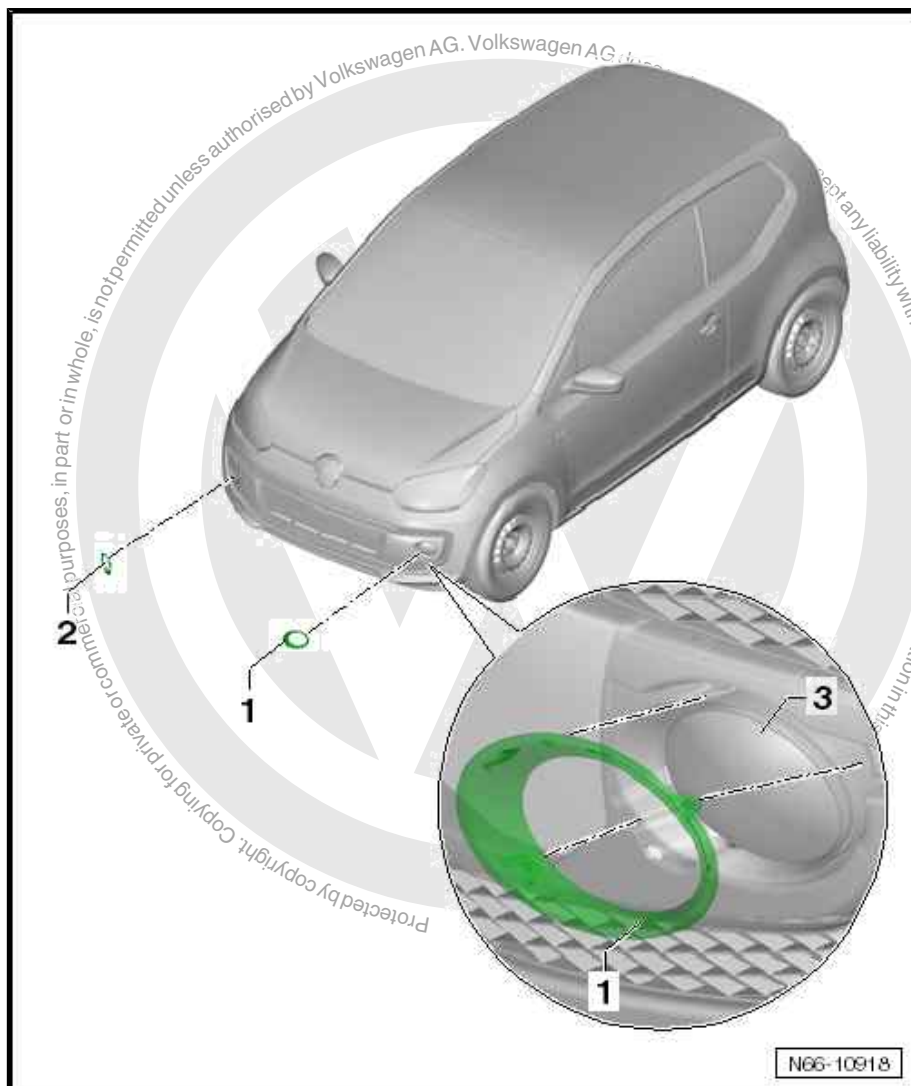
- ☐ Chromed
- ☐ For vehicles with fog lamps
- ☐ Engaged in air intake grille -3-

2 - Right trim ring

- ☐ Chromed
- ☐ For vehicles with fog lamps
- ☐ Engaged in air intake grille -3-

3 - Ventilation grille

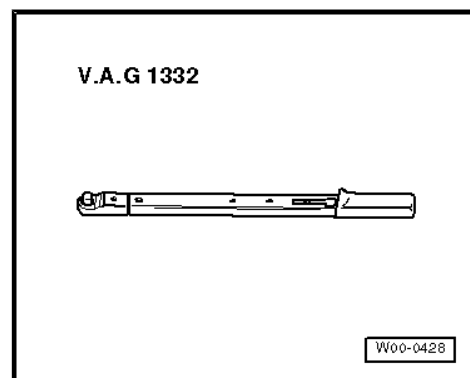
- ☐ Engaged in bumper cover
- ☐ Can be released from locking hooks only after bumper cover has been removed
- ☐ Different versions, allocation ⇒ Electronic parts catalogue "ETKA"



1.1.6 Assembly overview - front bumper carrier

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1332-





1 - Front bumper carrier

2 - Expansion nut

- Qty. 1 on each side

3 - Side guide

4 - Hexagon nut

- Qty. 2 on each side
- Specified torque: 3 Nm

5 - Bolt

- Qty. 2 on each side
- Specified torque: 8 Nm

6 - Bolt

- Qty. 3 on each side
- Specified torque: 20 Nm

7 - Foam element

- Self-adhesive
- Not installed in all model versions

8 - Bolt

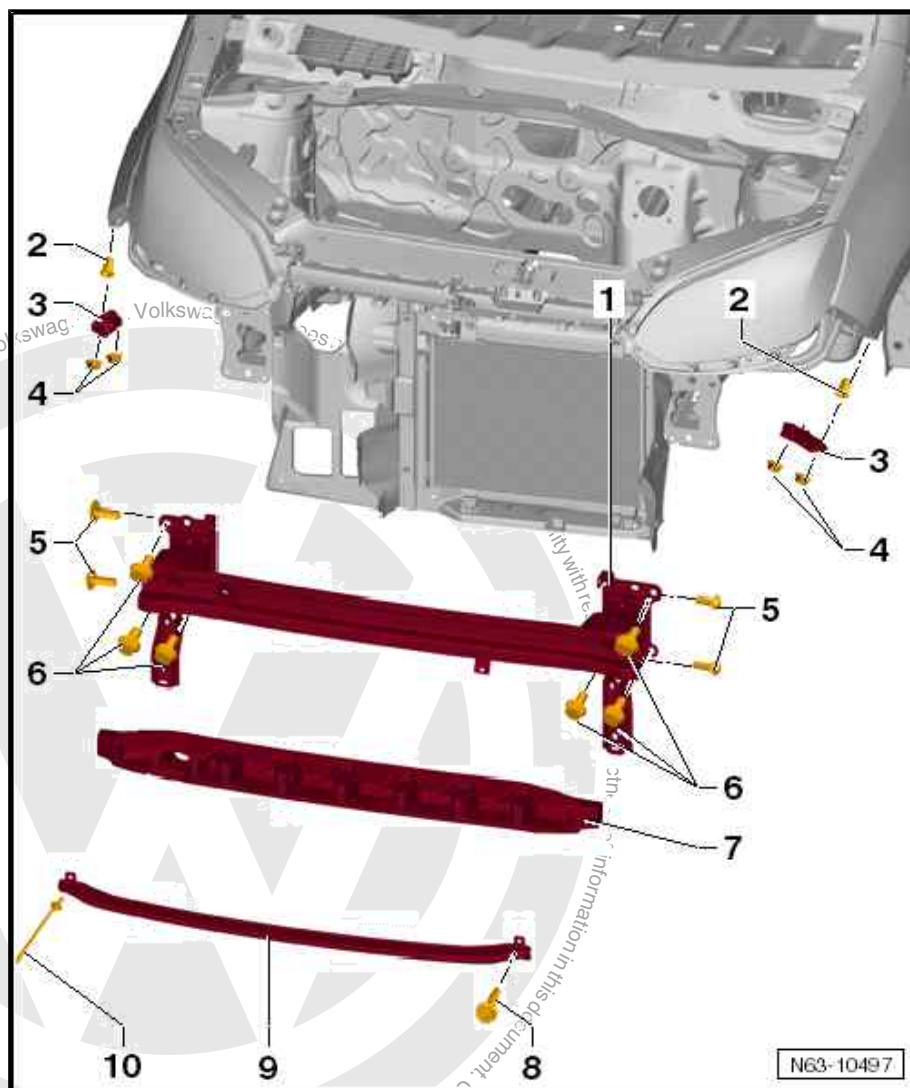
- Qty. 1
- Specified torque: 8 Nm

9 - Pedestrian protection

- Not installed in all markets

10 - Pop rivets

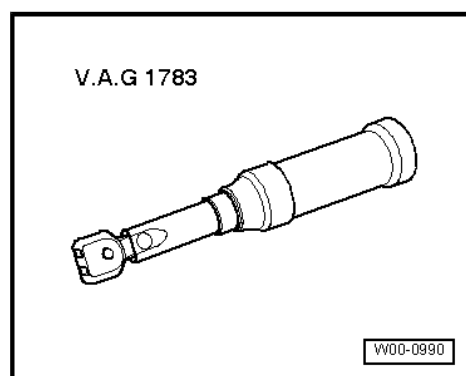
- Qty. 1



1.2 Removing and installing bumper cover

Special tools and workshop equipment required

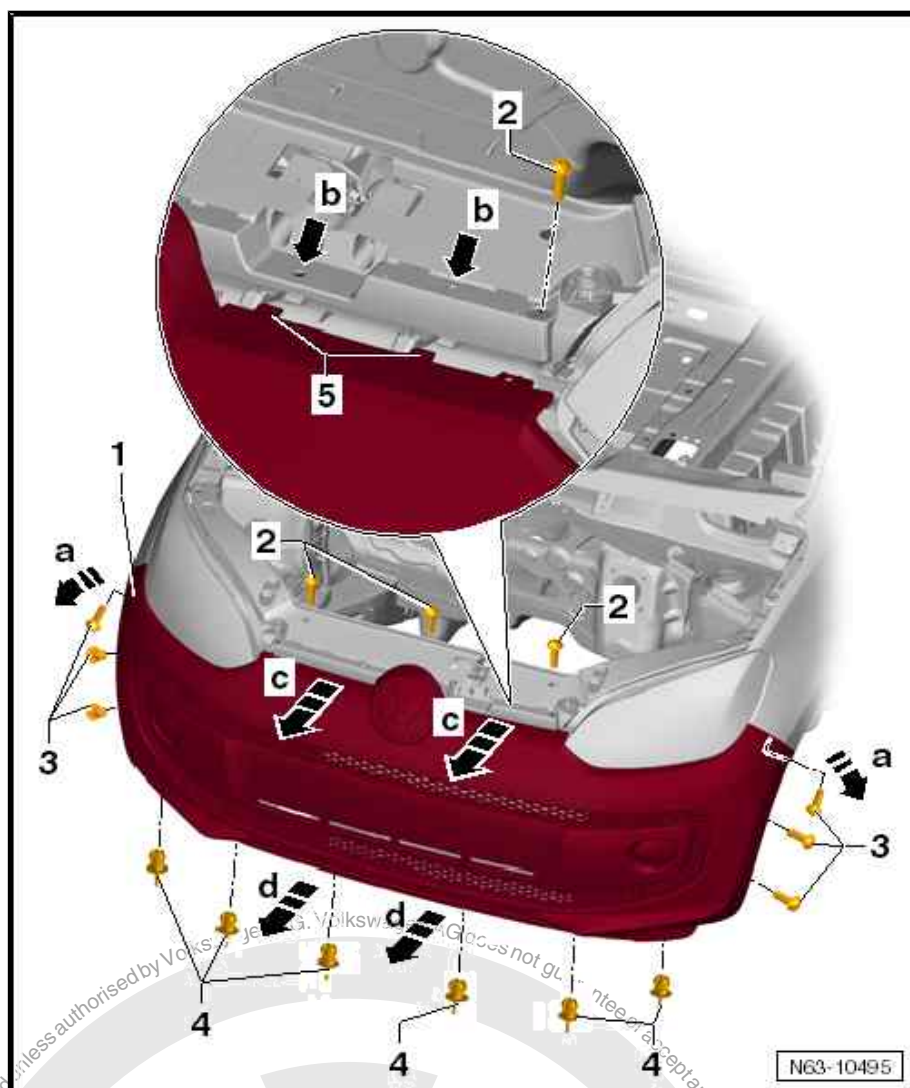
- ◆ Torque wrench - V.A.G 1783-



Note

The removal and installation procedures for front bumper cover may have to be revised slightly depending on model variations.

Removing



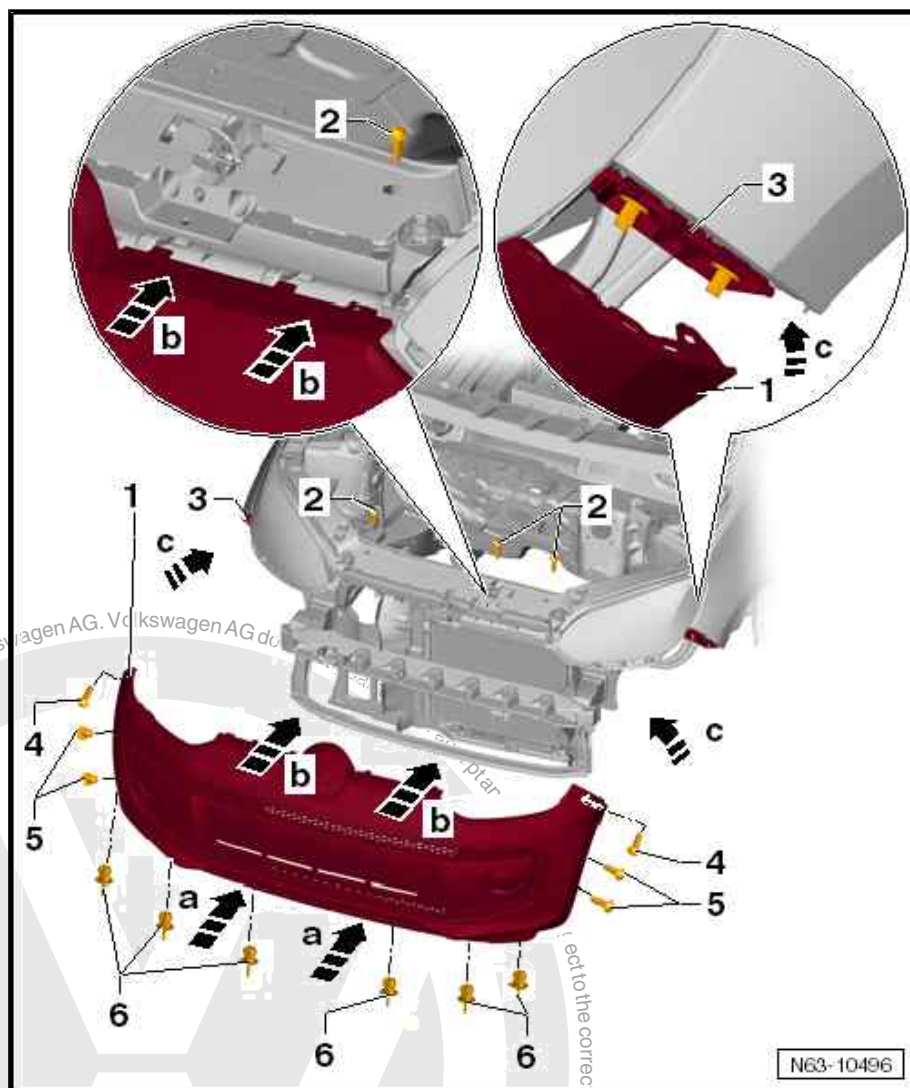
Perform the following steps:

- Unscrew bolts -2-. Qty: up to 5, depending on model
- Remove bolts -3- for fastening wheel housing liner on left and right.
- Pull out spreader rivets -4- from underneath.

Further dismantling requires the assistance of a second mechanic.

- Pull out front bumper cover -1- from fasteners of guides on left and right of wing -arrows a-.
- Release locking hooks -arrows b- from lock carrier.
- With the aid of a second mechanic, pull front bumper cover -1- parallel off vehicle -arrows c-.
- Separate connectors of electrical components (if present).

Installing



Perform the following steps:

- Connect connectors of all installed electrical components.
- Guide front bumper cover -1- parallel to lock carrier -arrow a- until locking hooks -arrows b- engage.
- Press front bumper cover -1- onto guides on left and right on wing -3- until they engage with each other -arrow c-.
- Ensure joints are parallel and shut lines are equal ⇒ Body Repairs; Rep. gr. 00 ; Body gaps; Body, front .
- Start bolts -2-, -4- and -5- and tighten them to respective specified torques ⇒ [page 208](#) .
- Secure spreader rivets -6-.

1.3 Repairing bumper cover



Note

If front bumper cover is damaged, determine whether plastic can be repaired before renewing bumper.



Description under: ⇒ General Information; Body Repairs, General
Body Repairs ; Plastic repair procedures





2 Bumper, rear

⇒ [“2.1 Assembly overview - bumper cover”, page 218](#)

⇒ [“2.2 Removing and installing bumper cover”, page 224](#)

⇒ [“2.3 Installing holder for parking aid sender”, page 227](#)

⇒ [“2.4 Repairing bumper cover”, page 232](#)

2.1 Assembly overview - bumper cover

⇒ [“2.1.1 Assembly overview - bumper cover”, page 218](#)

⇒ [“2.1.3 Assembly overview - attachments Cross up!”, page 221](#)

⇒ [“2.1.4 Assembly overview - guides for bumper cover”, page 221](#)

⇒ [“2.1.5 Assembly overview - rear bumper carrier”, page 222](#)

⇒ [“2.1.6 Assembly overview - bumper carrier, foam element”, page 224](#)

2.1.1 Assembly overview - bumper cover



Note

Depending on the vehicle model, minor differences may be encountered in the rear bumper cover.



1 - Rear bumper cover

- ☐ Material PP/EPDM
- ☐ Removing and installing
⇒ [page 224](#)

2 - Side guide

- ☐ Left and right

3 - Locking lug

- ☐ Left and right

4 - Bolt

- ☐ Qty. 1 on each side
- ☐ Angled upwards and bolted to side panel.
- ☐ Specified torque: 2 Nm

5 - Bolt

- ☐ Qty. 4
- ☐ Specified torque: 2 Nm

6 - Parking aid senders

- ☐ Qty. 3

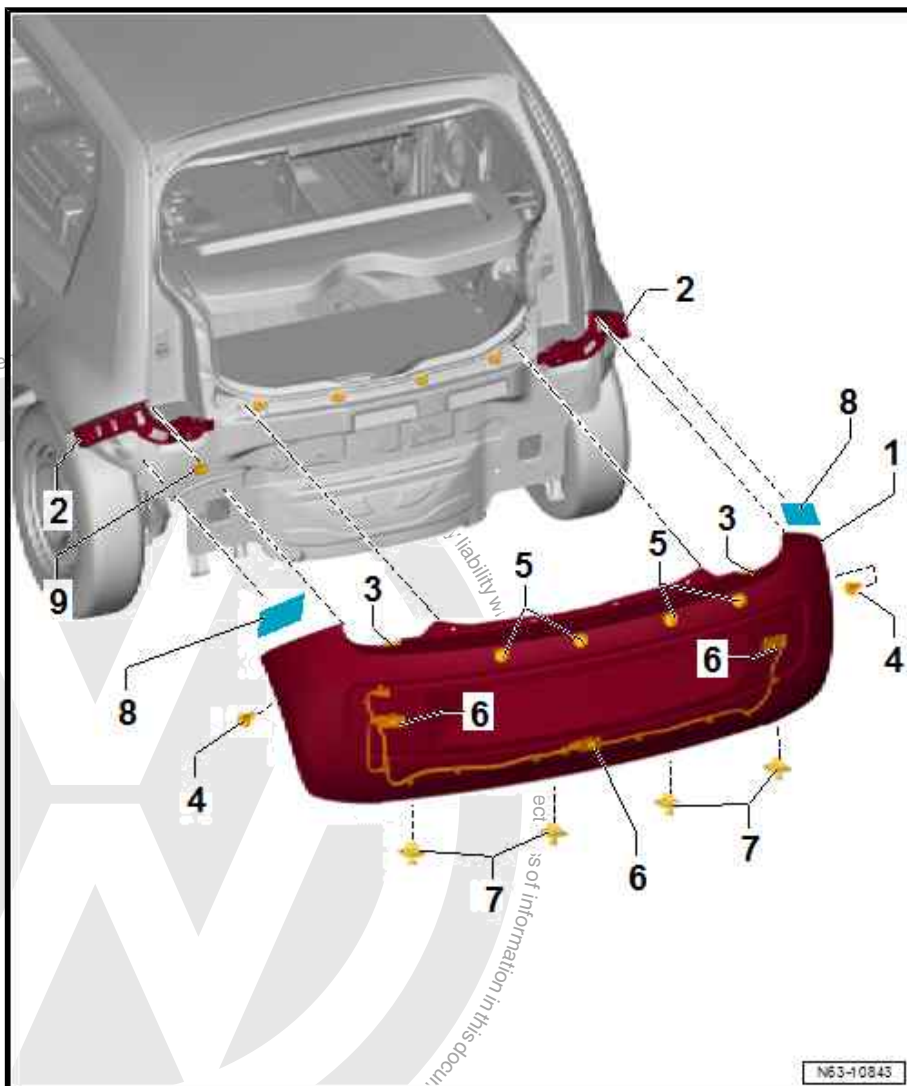
7 - Spreader rivet

- ☐ Qty. 3

8 - Protective sheet

- ☐ Transparent adhesive protective film
- ☐ 10 mm x 30 mm

9 - Electrical connector





2.1.2 Assembly overview - attachments 06.2016 ➤

1 - Rear bumper cover

- ❑ Material PP/EPDM
- ❑ Removing and installing
⇒ [page 224](#)

2 - Reflector/rear fog light

- ❑ Engages in and bolted to wing cover
- ❑ Can be released from locking hooks only after bumper cover has been removed

3 - Lower cover

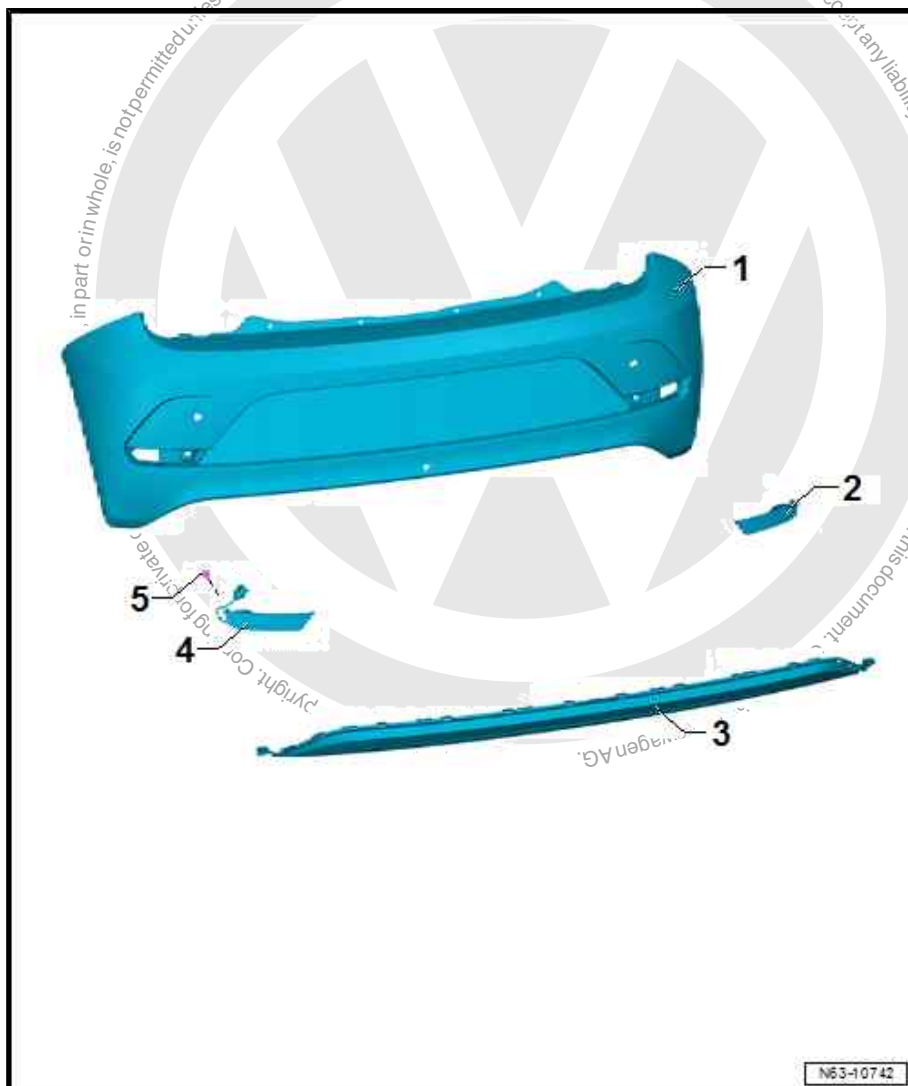
- ❑ Engaged in bumper cover
- ❑ Can be released from locking hooks only after bumper cover has been removed

4 - Reflector/rear fog light

- ❑ Engages in and bolted to wing cover
- ❑ Can be released from locking hooks only after bumper cover has been removed

5 - Bolt

- ❑ 2 Nm





2.1.3 Assembly overview - attachments Cross up!



Note

Depending on the vehicle model, minor differences may be encountered in the rear bumper cover.

1 - Rear bumper cover

- ☐ Material PP/EPDM
- ☐ Removing and installing
⇒ [page 224](#)

2 - Trim

- ☐ Engaged in bumper cover
- ☐ Can be released from locking hooks only after bumper cover has been removed
- ☐ Different versions, allocation ⇒ Electronic parts catalogue "ETKA"

3 - Lower cover

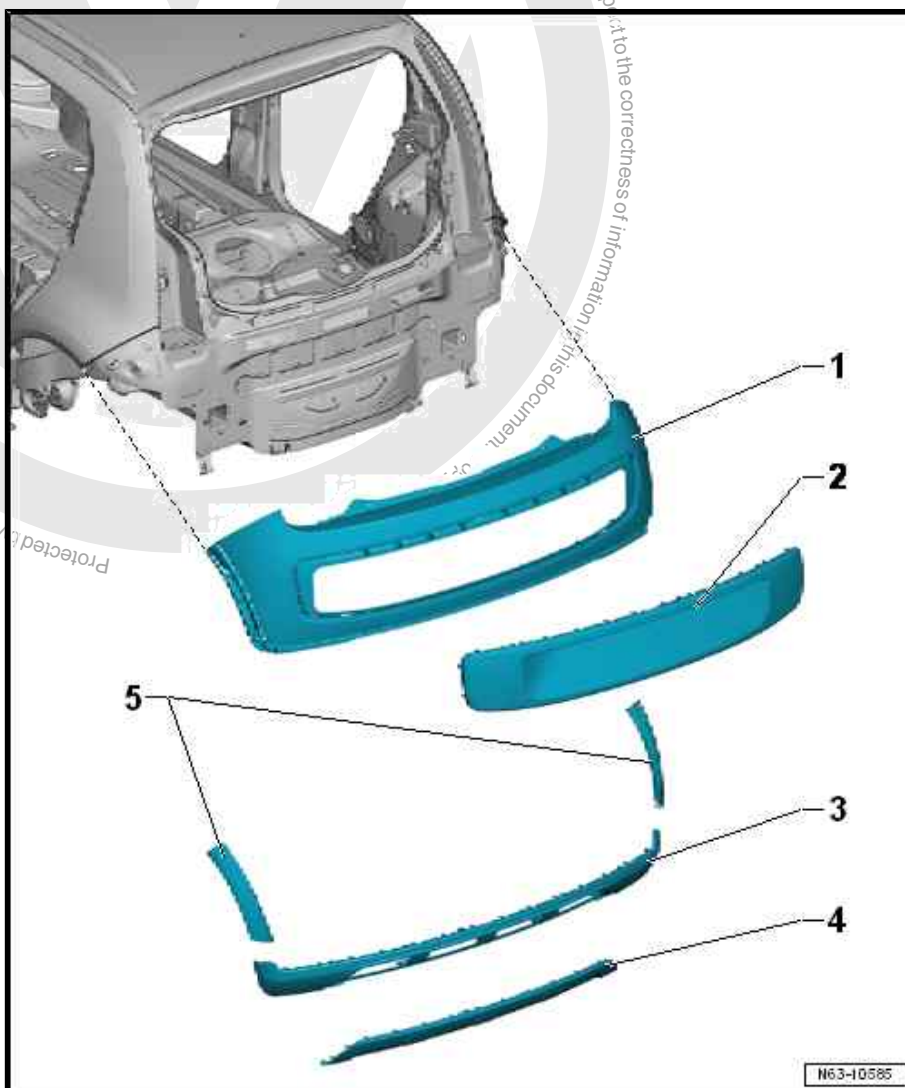
- ☐ Engaged in bumper cover
- ☐ Can be released from locking hooks only after bumper cover has been removed

4 - Trim panel of skid plate

- ☐ Engages in lower cover.
- ☐ Can be released from locking hooks only after bumper cover has been removed

5 - Rear wheel arch trim

- ☐ Engaged in bumper cover
- ☐ Can be released from locking hooks only after bumper cover has been removed

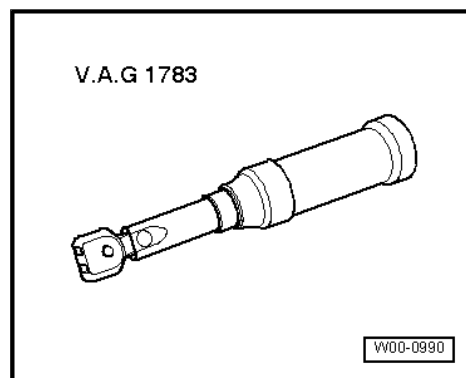


2.1.4 Assembly overview - guides for bumper cover

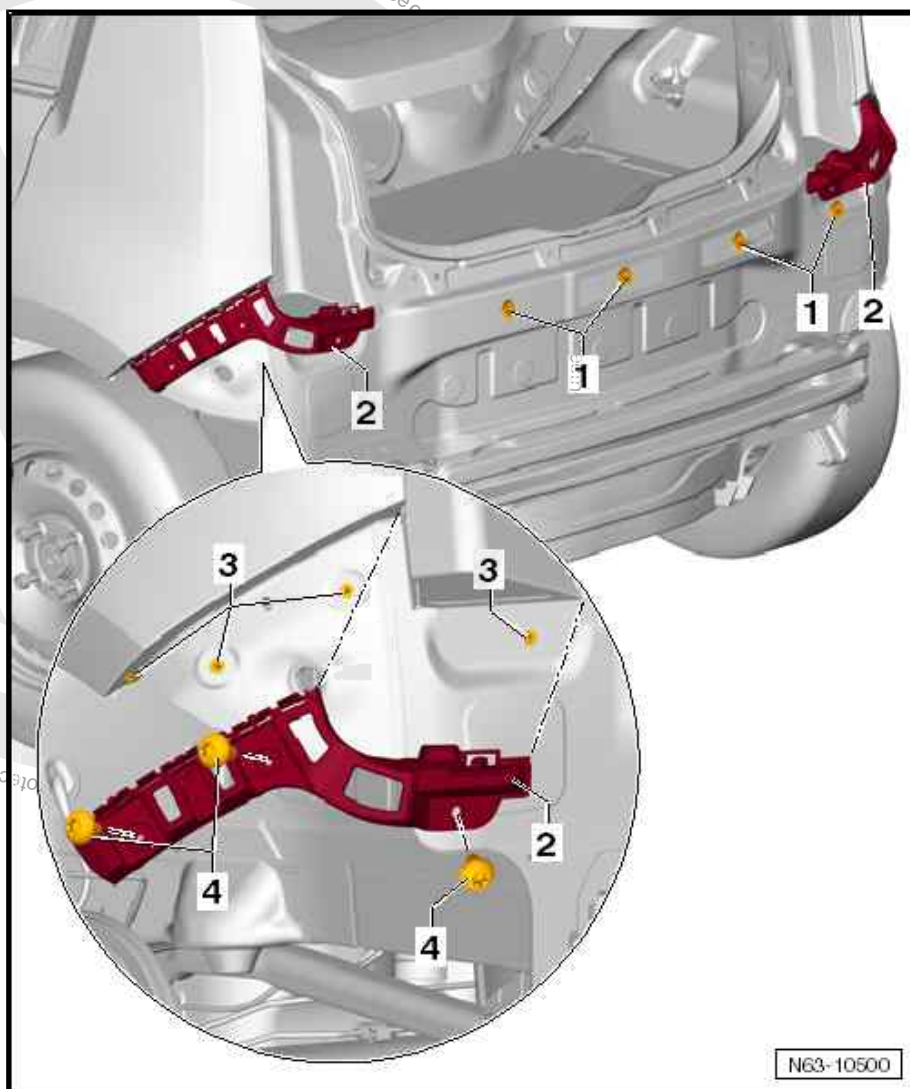
Special tools and workshop equipment required



- ◆ Torque wrench - V.A.G 1783-



- 1 - Expansion nut
☐ Qty. 4
- 2 - Guide section at side
☐ Left and right
- 3 - Expansion nut
☐ Qty. 4 on each side
- 4 - Bolt
☐ Qty. 3 on each side
☐ Specified torque: 2 Nm



2.1.5 Assembly overview - rear bumper carrier

Special tools and workshop equipment required



◆ Torque wrench - V.A.G 1331-

V.A.G 1331



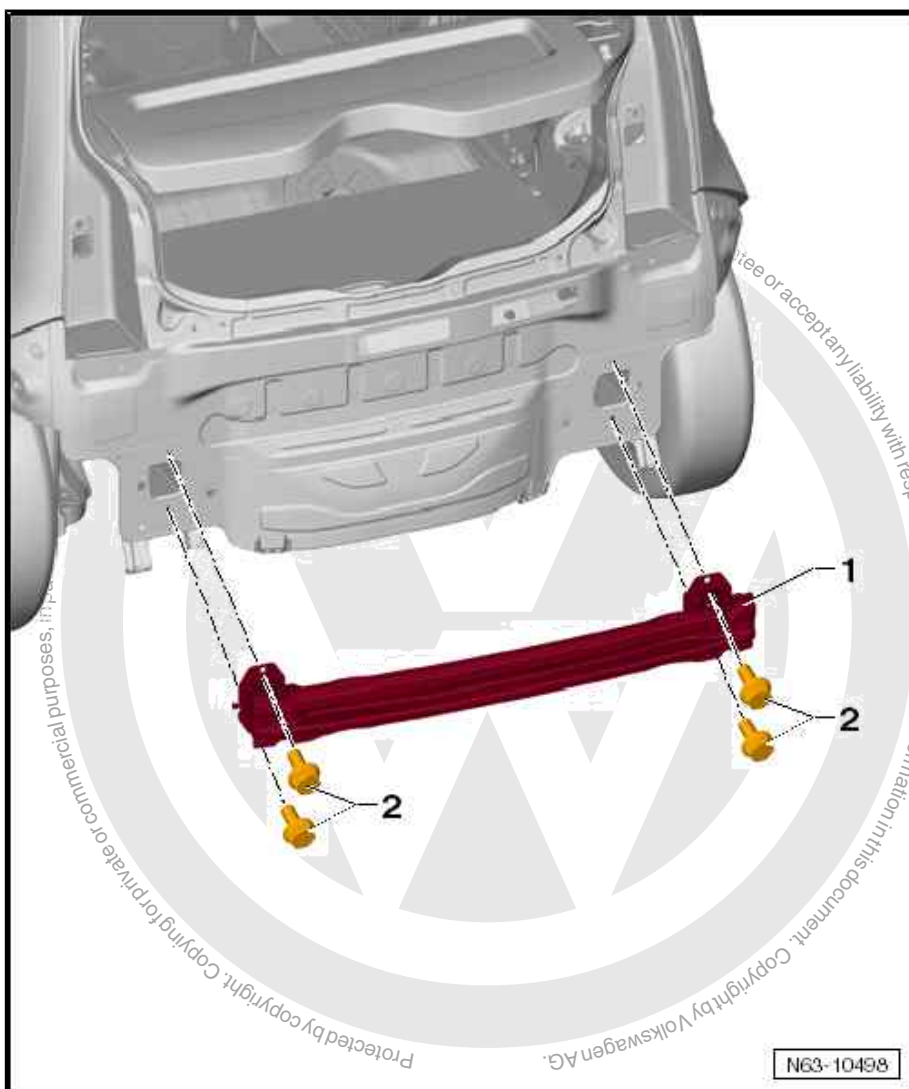
W00-0427

1 - Rear bumper carrier

- ☐ Not installed in all markets

2 - Bolt

- ☐ Qty. 2 on each side
- ☐ Specified torque: 20 Nm





2.1.6 Assembly overview - bumper carrier, foam element

1 - Rear foam element

- ☐ Not installed in all markets
- ☐ Bonded to rear panel

2 - Bolt

- ☐ Gas-tight threaded connections
- ☐ Qty. 2
- ☐ Specified torque: 20 Nm

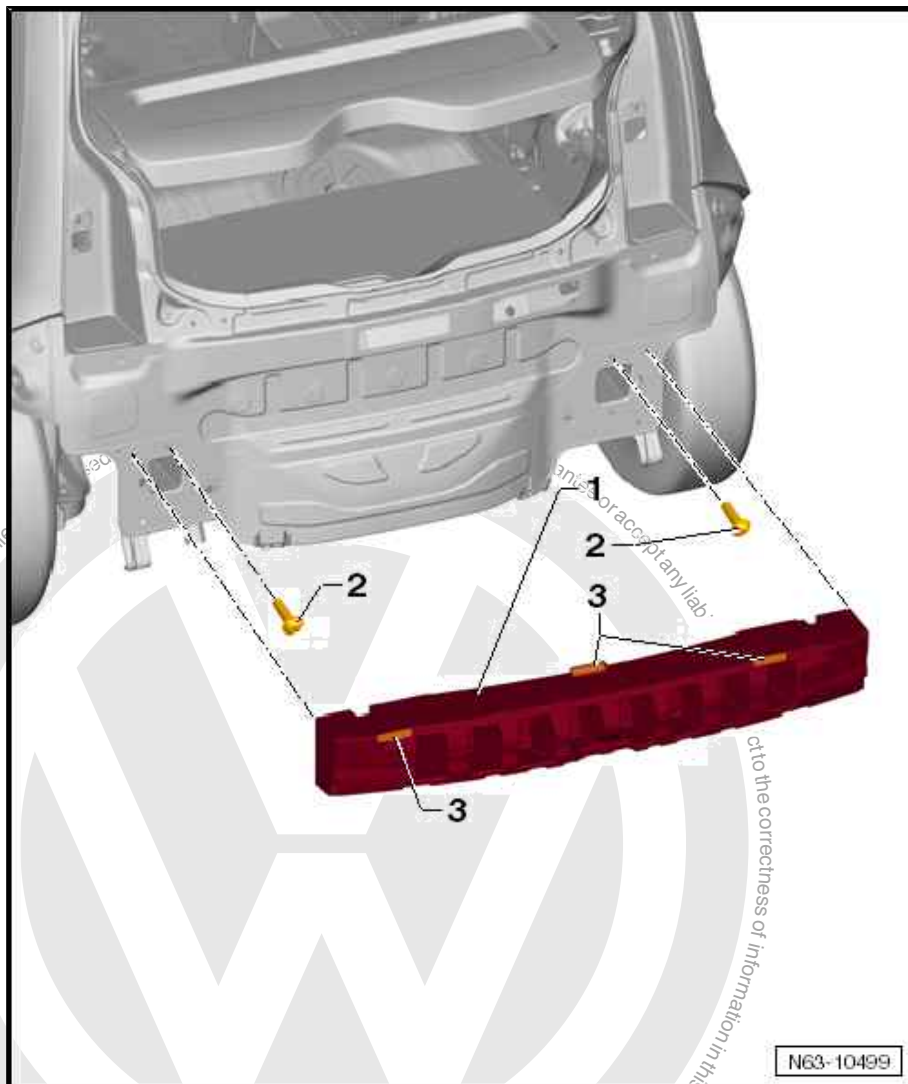


DANGER!

The bolts function as plugs and seal the passenger compartment against exhaust fumes, and must be installed without fail.

3 - Adhesive strips

- ☐ With protective film.



2.2 Removing and installing bumper cover



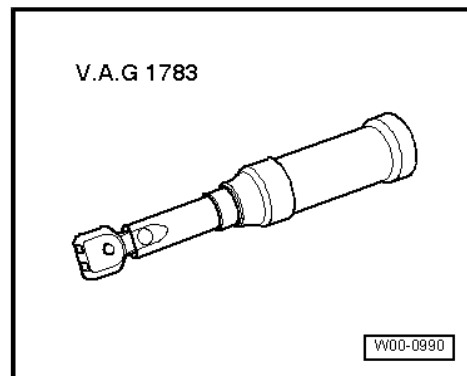
Note

The removal and installation procedures for rear bumper cover may have to be revised slightly depending on model variations.

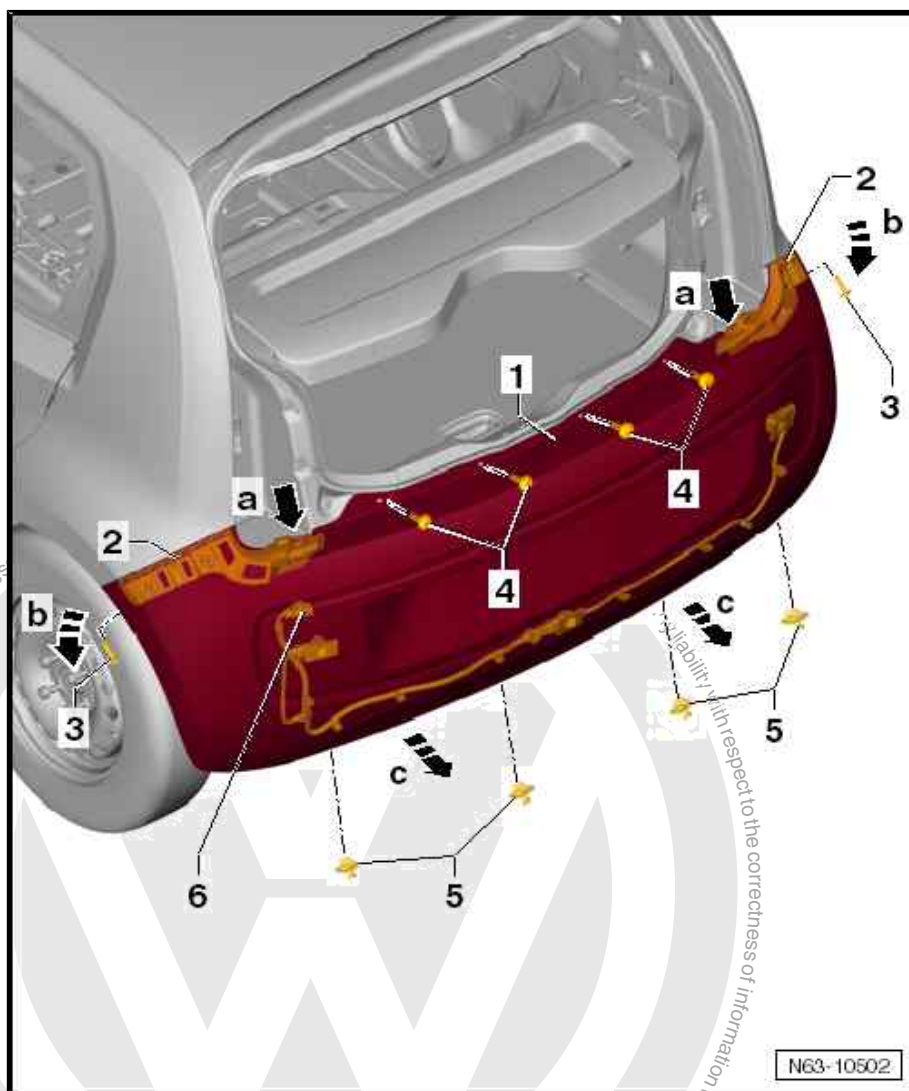
Special tools and workshop equipment required



◆ Torque wrench - V.A.G 1783-



Removing



Perform the following steps:

- Remove tail lights in side panel ➤ Electrical system; Rep. gr. 94 ; Tail lights; Removing and installing tail light .
- Unscrew bolts -4-.
- Undo bolts -3- in wheel housing (pointing upwards) on left and right.

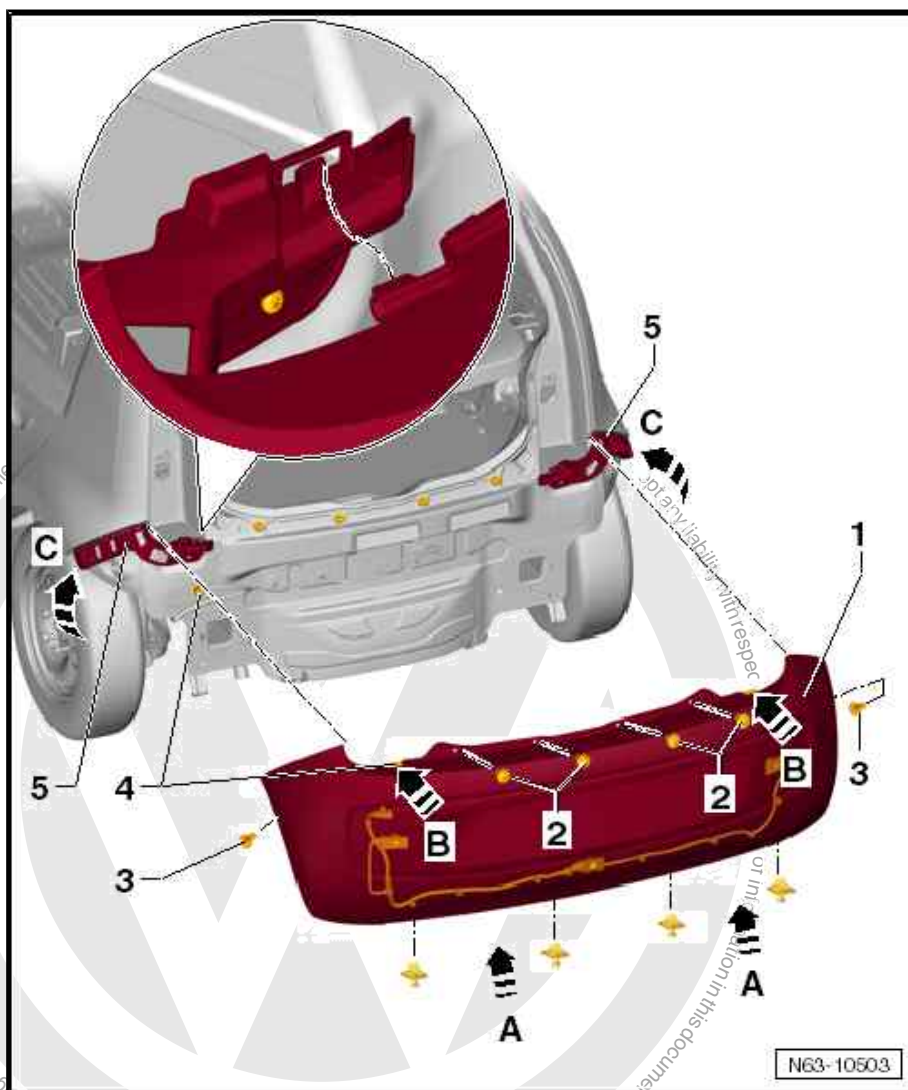


- Remove spreader rivets -5- from underneath.

Further dismantling requires the assistance of a second mechanic.

- Pull rear bumper cover -1- out of catches of guides -2- on left and right side panel -arrows b-.
- Release rear bumper cover -1- from catches -arrows a-.
- With the aid of a second mechanic, pull rear bumper cover -1- parallel off vehicle -arrows b-.
- Disconnect connectors -6- from installed electrical components.

Installing



Perform the following steps:

- Connect connectors to installed electrical components.
- Guide rear bumper cover -1- parallel to vehicle -arrows b-.
- Press rear bumper cover -1- into catches -arrows b-.
- Press rear bumper cover -1- onto guides -5- on left and right side panel until they engage with each other -arrow c-.

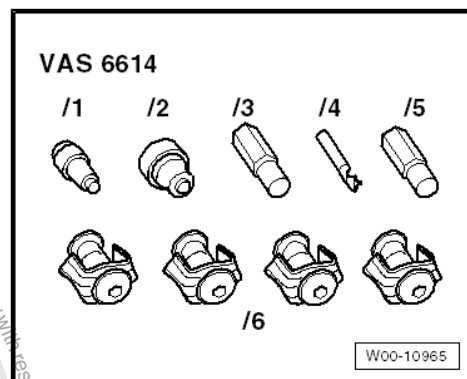


- Ensure joints are parallel and shut lines are equal ⇒ Body Repairs; Rep. gr. 00 ; Body gaps; Body, rear .
- Start bolts -2- and -3- and tighten them to respective specified torques ⇒ [page 218](#) .
- Clip in spreader rivets -3- from underneath.
- Install tail lights in side panel ⇒ Electrical system; Rep. gr. 94 ; Tail lights; Removing and installing tail lights .

2.3 Installing holder for parking aid sender

Special tools and workshop equipment required

- ◆ Installation tool for PDC bracket - VAS 6614-

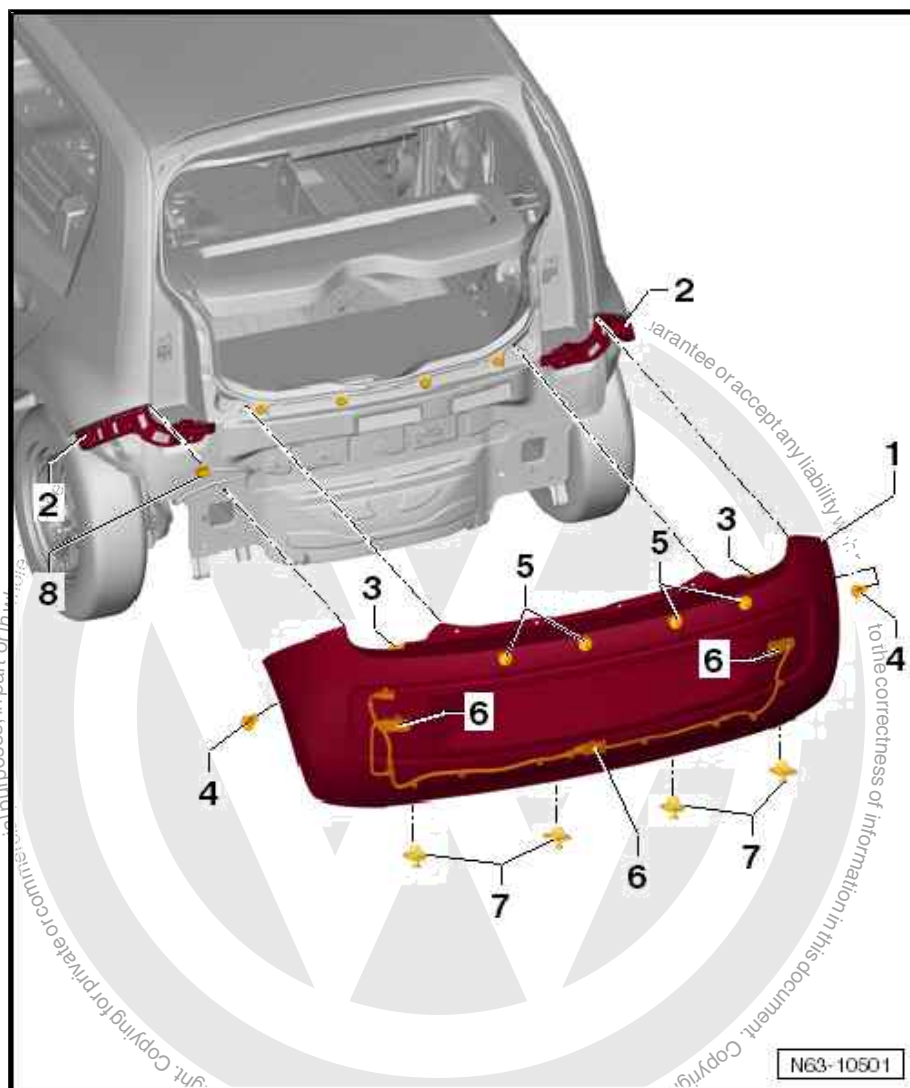


Materials

- ◆ Cleaning solution - D 009 ⁸⁾ 1
401 04-

8) Observe manufacturer's instructions enclosed in the packaging.

Installing brackets



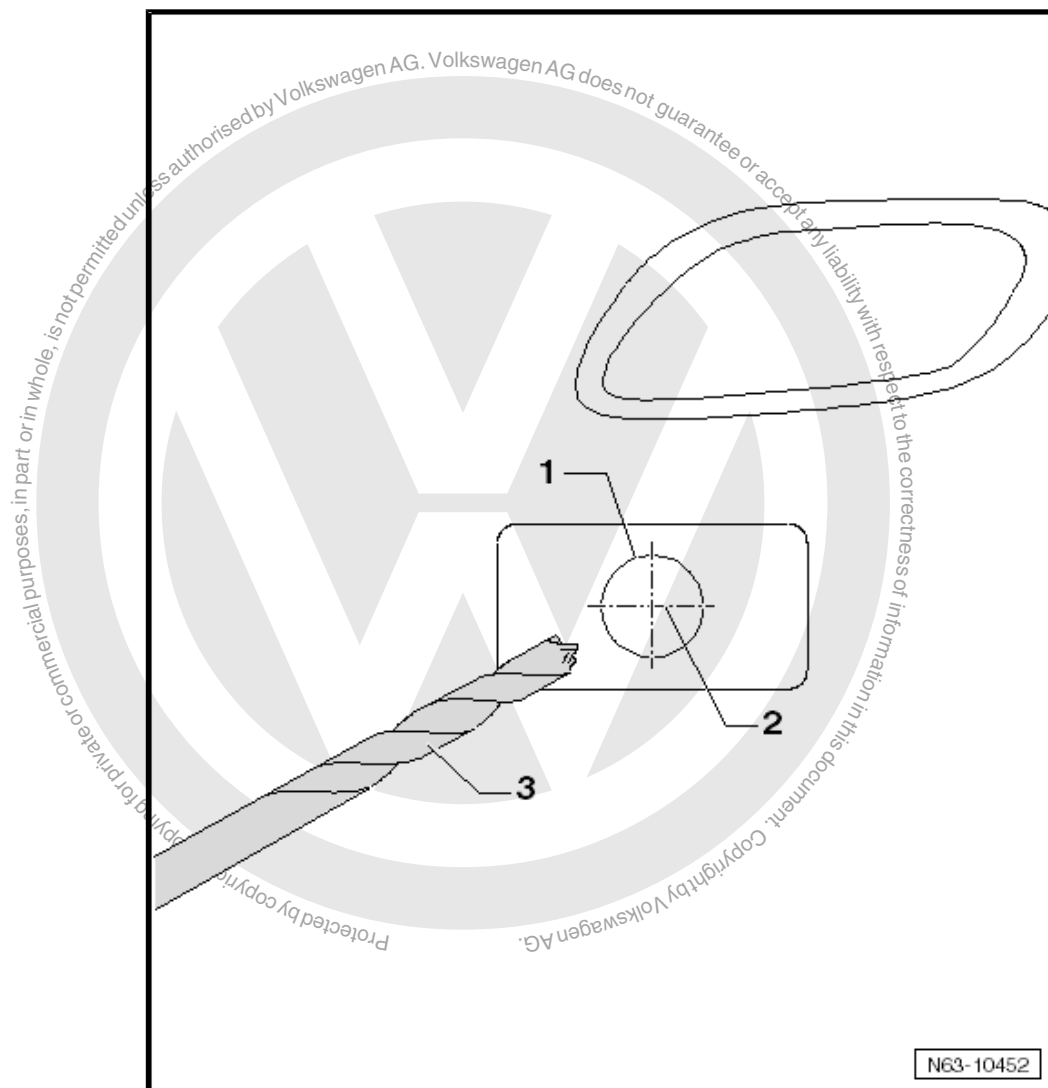
Note

- ◆ The openings for both outer sensors -6- have a diameter of 18.4 mm and are drilled with a screw-hole punch - VAS 6614/9- .
- ◆ On vehicles ► 05.2016, the opening for the centre sensor -6- has a diameter of 26.2 mm and is drilled with the screw-hole punch - VAS 6614/2- .
- ◆ On vehicles 06.2016 ► , the opening for the centre sensor -6- has a diameter of 18.4 mm and is drilled with the screw-hole punch - VAS 6614/9- .



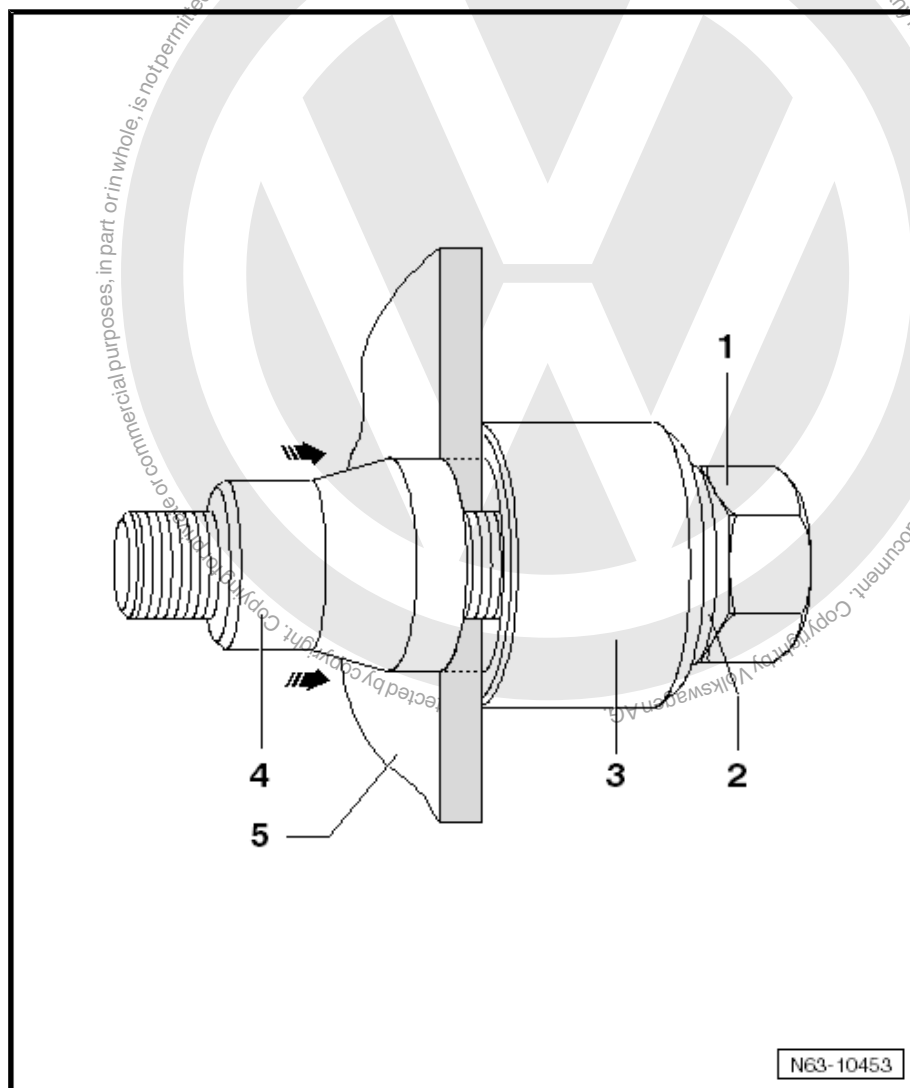
Note

The brackets are installed after the bumper cover has been painted.



The 4 markings for brackets -1- can be found on the inside of the bumper cover.

- If there are no markings, the centre point -2- must be determined.
- The holes must be drilled from the inside to the outside with the drill bit - VAS 6614/4- -3- from the supplied tool kit.



- For both outer openings fit screw-hole punch - VAS 6614/9- with bolt head -1-, washer -2- and counter-support -3- from inside of bumper cover -5-.

Vehicles ► 05.2016

- For the centre opening the procedure is done with screw-hole punch - VAS 6614/2- .

Vehicles 06.2016 ►

- For the centre opening the procedure is done with screw-hole punch - VAS 6614/9- .

All vehicles

- Screw on punch -4-, not quite as far as bumper cover.
- Press punch -4- against bumper cover.
- Tighten hole puncher -1-.

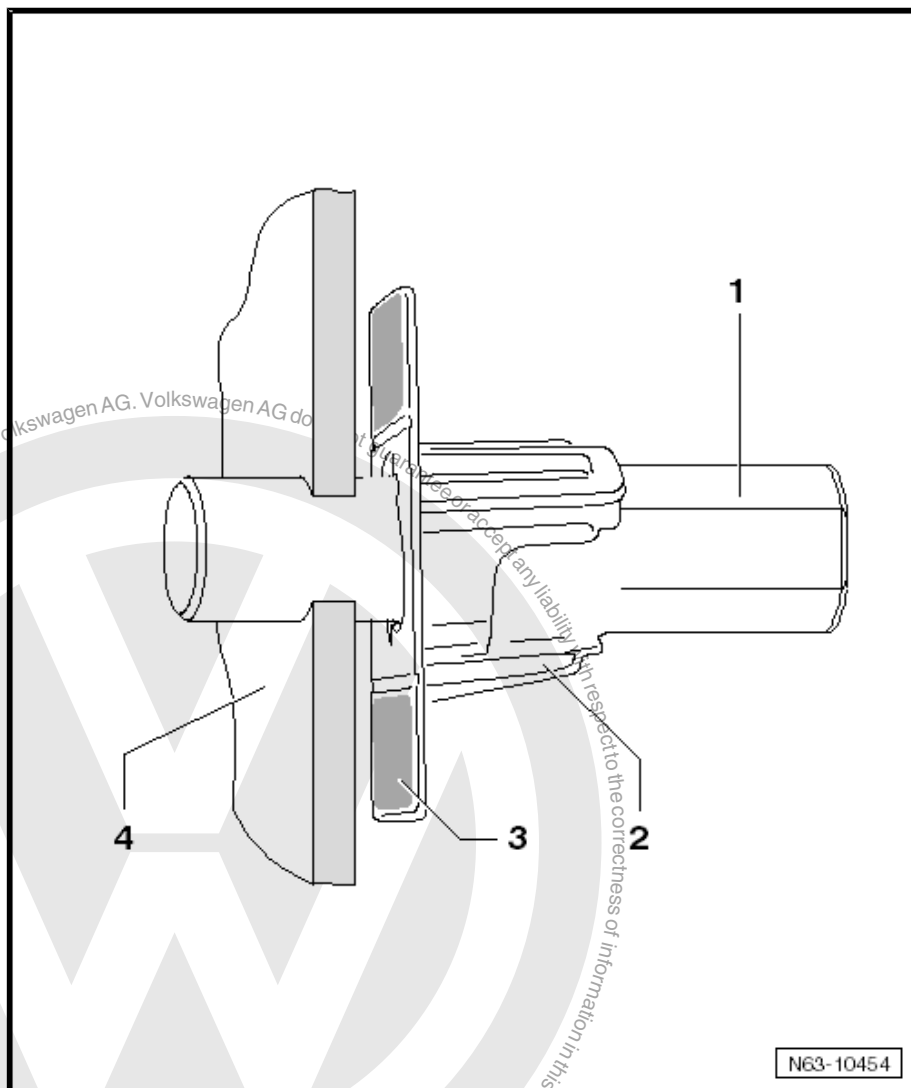


Note

Do not permit the punch -4- to turn on the paint of the bumper cover.



- Pull punch -4- through material of bumper cover -5- -arrows- by turning bolt head -1-.
- Remove hole punch and make next holes.
- Thoroughly clean bumper cover and bracket with cleaning solution.



- Thoroughly clean bonding surfaces on bumper cover -4-.
- Slide both outer retainers -2- on the centring pin - VAS 6614/3- -1-.

Vehicles ► 05.2016

- The centre retainer is automatically centred thanks to the »collar«.

Vehicles 06.2016 ►

- Push centre retainer -2- onto centring pin - VAS 6614/3- -1-.

All vehicles

- Pull off backing from double-sided adhesive tape -3- on retainer.
- Insert centring pin -1- into hole until the bracket is touching the bumper cover -4-.



- Press bracket forcefully against bonding surface -3-.
- Removing centring pin and repeat the procedure for all brackets.
- Further work can be carried out on bumper cover only after minimum curing period ⁹⁾.

9) Minimum curing period

Do not carry out any further work on the bumper cover or brackets until the minimum curing period of 2 hours has expired.

The minimum curing period must be observed so that the adhesive tape can develop its full adhesive strength.

In this time, the bumper cover must remain where it is. Do not move it.

2.4 Repairing bumper cover



Note

If rear bumper cover is damaged, determine whether plastic can be repaired before renewing bumper.

Description under: ➔ General Information; Body Repairs, General Body Repairs ; Plastic repair procedures



64 – Glazing

1 Repair notes

⇒ [“1.1 Minimum curing periods for bonded windows”, page 233](#)

⇒ [“1.2 Window repair”, page 234](#)

⇒ [“1.3 Installation instructions for bonded windows”, page 234](#)

⇒ [“1.4 Preparing old undamaged windows for fitting”, page 235](#)

⇒ [“1.5 Preparing new windows for installing”, page 236](#)

⇒ [“1.6 Preparing body flange for fitting”, page 237](#)

⇒ [“1.7 Cleaning off excess adhesive”, page 238](#)

1.1 Minimum curing periods for bonded windows



WARNING

There are special requirements for renewing bonded windows. One of these standards is, for example, that a freshly bonded windscreen must comply with the safety requirements, even in an accident, following the minimum prescribed curing period.

2-pack window adhesive

The minimum curing period for 2-pack window adhesive is 2 hours for all windows.

The specified minimum curing period remains the same even if 1-pack window adhesive needs to be used for additional residual work or for sealing purposes.

Minimum curing period is the time from bonding the window until vehicle may be used. During this time, the vehicle must be standing on a level surface at room temperature (at least 15°C).

1-pack window adhesive

The minimum curing period for 1-pack window adhesive is 6 hours for all windows.

Minimum curing period is the time from bonding the window until vehicle may be used. During this time, the vehicle must be standing on a level surface at room temperature (at least 15°C).



WARNING

The vehicle is safe to use only after the minimum curing period has elapsed.



1.2 Window repair

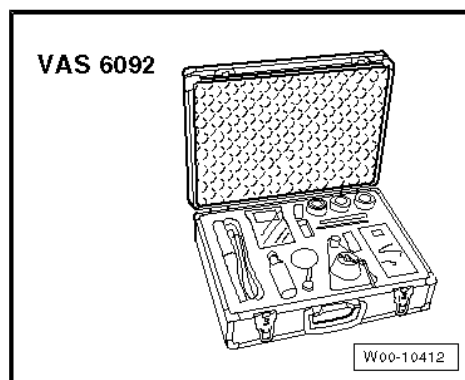


Note

- ◆ *Before renewing windscreen, explore possibilities of repairing damage to glass.*
- ◆ *Damaged windscreens can be repaired with the window repair kit - VAS 6092- .*
- ◆ *This damage must remain within a certain size or position.*
- ◆ *Each window repair kit comes with a set of instructions.*

Special tools and workshop equipment required

- ◆ Window repair kit - VAS 6092-



1.3 Installation instructions for bonded windows

⇒ ["1.3.1 Fitting instructions", page 234](#)

⇒ ["1.3.2 Materials", page 235](#)

1.3.1 Fitting instructions

Perform the following steps:

- Apply adhesive sealing material in continuous bead, holding applicator at right angle to window.

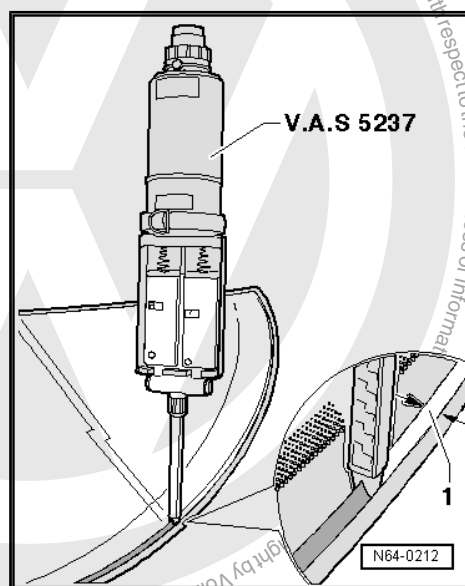


WARNING

Window must be installed within 10 minutes, or adhesive properties of glass adhesive will be impaired.

Adhesive bead should not be applied too thick and windows should not be pressed too forcibly on body flange. Windows no longer have sealing lips and therefore excessive adhesive will be visible in the joint area.

- ◆ Using 2 suction lifters - V.A.G 1344- , install glass pane in window aperture, align to centre and press in onto spacing lip.
- ◆ Replace stickers (e.g. for airbag) if there were any.





1.3.2 Materials



Note

The part numbers of the materials can be found in the ⇒ Electronic parts catalogue (ETKA) .

- ◆ 2-pack window adhesive 1) 2) 3) 6)
- ◆ 1-pack window adhesive 1) 2) 5) 6)
- ◆ Activator 1) 6)
- ◆ Glass and paint primer 1) 6)
- ◆ Cleaning solution 1) 6)
- ◆ Primer applicator 1) 6)
- ◆ Adhesive remover 1) 6)
- ◆ Cutting cord 6)

1) Observe instructions for use on the information sheet provided by the manufacturer.

2) Observe minimum curing period ⇒ [page 233](#) .

3) Double cartridge gun - VAS 5237- must be used to apply these materials.

5) Small cartridge, 180 ml, for sealing and/or when a 400 ml double cartridge alone is not sufficient.

6) The part numbers of the materials can be found in the ⇒ Electronic parts catalogue (ETKA) .

1.4 Preparing old undamaged windows for fitting

Cutting back adhesive bead

Perform the following steps:



WARNING

Keep bonding surface free of dirt and grease.

Do not treat bonding surface with activator immediately after cutting back. Do not prime. Do not treat with cleaning solution.



Note

- ◆ If an undamaged window is being re-used, cut back the residual adhesive sealant to 1 to 2 mm shortly before bonding it back in. Do not damage primer and ceramic coating when doing this.
- ◆ The remaining material is required as a base for better adhesion of the new adhesive sealing material to be applied.



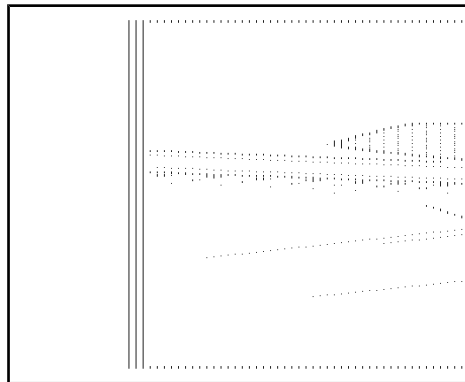
WARNING

Exception: if bonding is performed later than one day after cutting back adhesive bead, the remaining residual material must be activated with activator .

Apply activator evenly in one stroke using applicator .

The activator must not come in contact with paint, or the paint-work will be damaged.

Allow to air dry for approx. 10 minutes.



Exception: if bonding is not performed immediately after cutting back, the remaining residual material must be activated with activator .

1.5 Preparing new windows for installing

Perform the following steps:



Note

- ◆ The application area for the adhesive bead is not precoated or primed.
- ◆ The sealing lip is included with a new windscreen.
- ◆ No windows are precoated.
- Using cleaning solution , clean edge of window all round to a width of 20 mm.
- Then rub edge of window dry using a lint-free cloth.

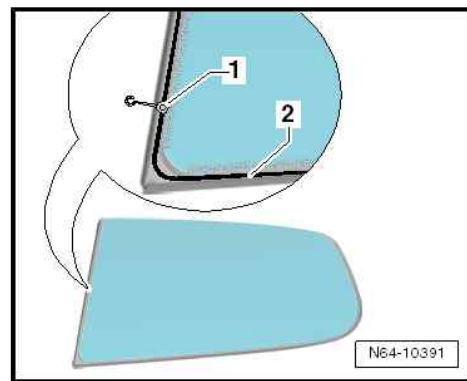


WARNING

**The ceramic coating on the window is not glass or paint primer!
The ceramic coating must be primed before application of adhesive sealing compound! Use only glass/paint primer D 009 200 02!**



- Using applicator -1-, apply glass and paint primer -2- evenly in one pass.
- ◆ Allow to air dry for approx. 10 minutes.



1.6 Preparing body flange for fitting

⇒ "1.6.1 Touching up paint damage", page 238

Perform the following steps:



WARNING

Keep bonding surface free of dirt and grease.

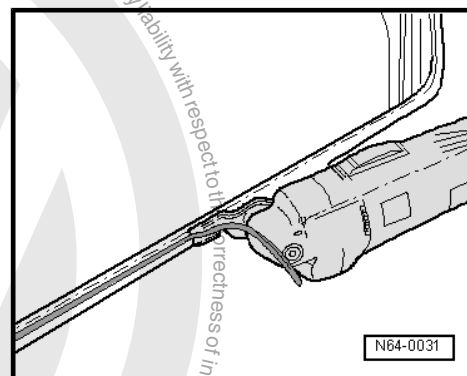
Do not treat bonding surface with activator immediately after cutting back. Do not prime. Do not treat with cleaning solution.

- Cut back remaining material on body flange with U-shaped blade - V.A.G 1561/3- , but do not remove completely.



Note

The remaining material is required as a base for better adhesion of the new adhesive sealing material to be applied. Keep adhesive surface clean and free of grease.



WARNING

Exception: if bonding is performed later than one day after cutting back adhesive bead, the remaining residual material must be activated with activator .

Apply activator evenly in one stroke using applicator .

The activator must not come in contact with paint, or the paint-work will be damaged.

Allow to air dry for approx. 10 minutes.

- ◆ If the window flange has been repaired or partially renewed, the area concerned must be cleaned and primed again after painting.

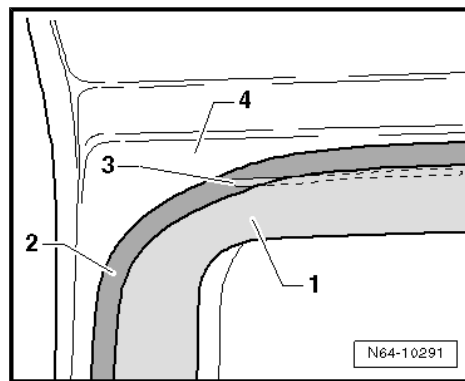


Note

It is possible that a laser weld seam lies outside the area of the adhesive bead. In this case, the exposed weld seam must be sealed with glass adhesive before bonding the window.



- If laser weld seam -3- on metal flange -4- is not covered by existing adhesive bead -1-, coat laser weld seam -3- with glass/paint primer -3-. Then fill laser weld seam with 1K glass adhesive -1-.



1.6.1 Touching up paint damage

Paint structure must be restored after damage to the paintwork according to specifications in the "Paint" workshop manual.

1.7 Cleaning off excess adhesive

Perform the following steps:

- Use adhesive remover as cleaning agent. Safety precautions must be observed for all work procedures.



WARNING

When cleaning the vehicle interior, do not press freshly installed window outwards.

- First, clean the painted surface roughly with a dry cloth. Remove residue using adhesive remover.
- Cleaning plastic trim: Allow adhesive sealant to cure (approx. 1 hour) and then peel off.



2 Windscreen

⇒ ["2.1 Assembly overview - windscreen", page 239](#)

⇒ ["2.2 Removing and installing windscreen", page 239](#)

2.1 Assembly overview - windscreen

1 - Windscreen

- ☐ Removing and installing
⇒ [page 239](#)

2 - PUR adhesive sealant

- ☐ Cross section of bead:
-width b- = 7 mm,
-height a- = 10 mm (in-
cluding precoating, re-
sidual material on win-
dow glass and window
flange).
- ☐ Minimum curing period
⇒ [page 233](#) .

3 - Body flange

- ☐ Touch up paintwork
damage ⇒ [page 238](#) .

4 - Gaps/shut lines

- ☐ Must be uniform on left
and right.

5 - Gaps/shut lines

- ☐ Must be uniform.

6 - Seal

- ☐ Only for vehicles with
panorama glass tilting
sunroof.

7 - Windscreen adjuster

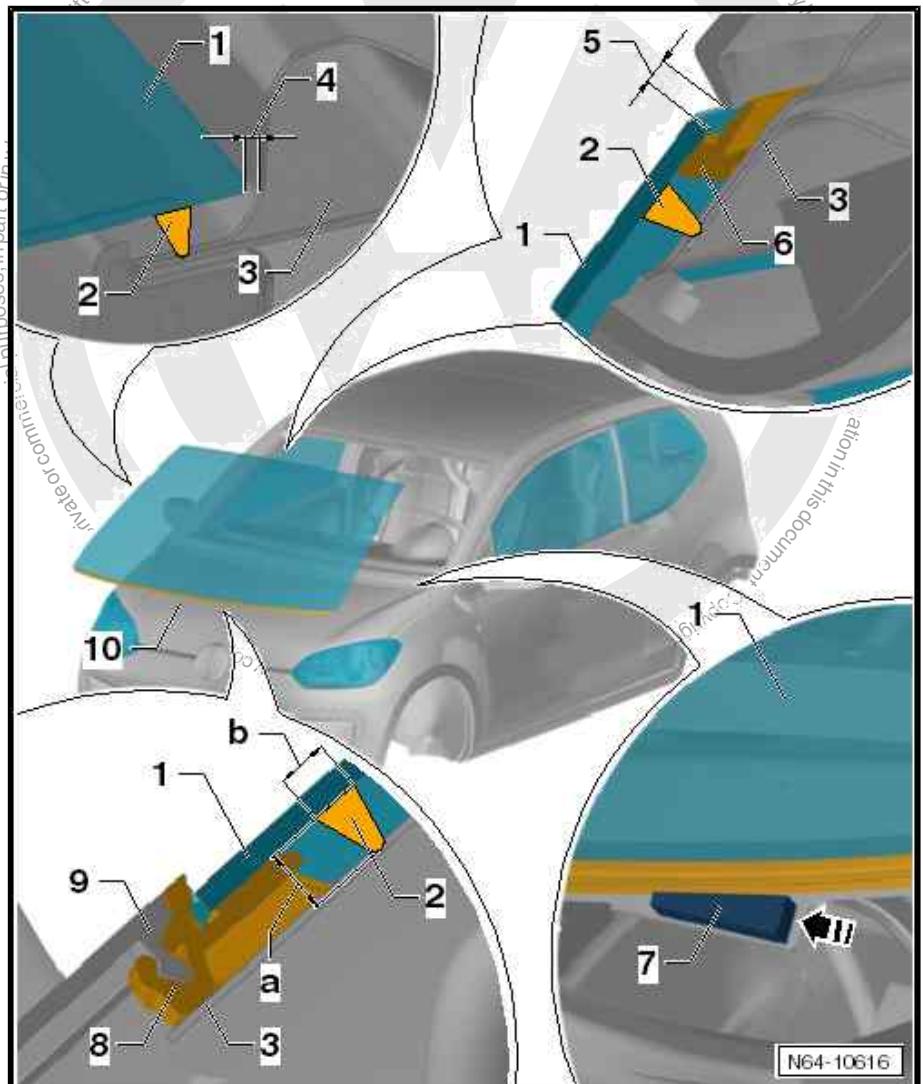
- ☐ 443 845 631 A
- ☐ Remove 2 hours after
installation of wind-
screen.

8 - Windscreen seal

- ☐ Is part of windscreen

9 - Plenum chamber cover

- ☐ Must be removed from windscreen seal by hand only.
- ☐ Removing and installing ⇒ [page 15](#)



2.2 Removing and installing windscreen



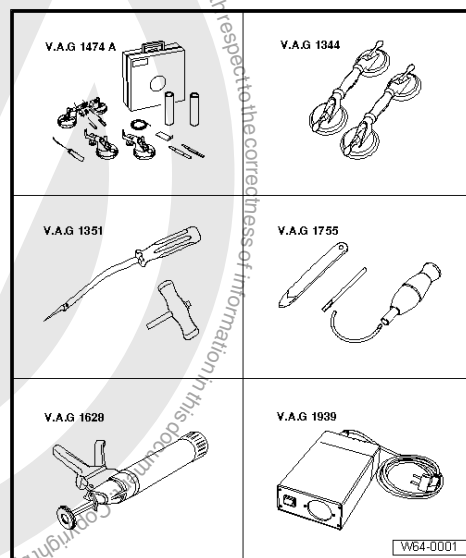
Note

The removal of a bonded window is described using the Removal kit for flush bonded windows - V.A.G 1474 A- . The respective tools from Removal kit for flush bonded windows - VAS 6452- may also be used.

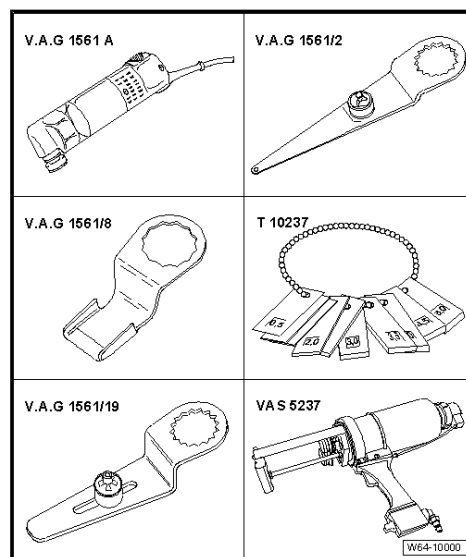


Special tools and workshop equipment required

- ◆ Removal kit for flush bonded windows - V.A.G 1474 A- or Removal kit for flush bonded windows - VAS 6452-
- ◆ Suction lifter - V.A.G 1344-
- ◆ Cutting tool - V.A.G 1351-
- ◆ Windscreen removal kit - V.A.G 1755-
- ◆ Hand-cartridge gun - V.A.G 1628-
- ◆ Cartridge heater - V.A.G 1939-



- ◆ Electric cutter - V.A.G 1561 A-
- ◆ Blade - V.A.G 1561/2-
- ◆ Blade - V.A.G 1561/8-
- ◆ Setting gauge - 3371-
- ◆ Blade - V.A.G 1561/19-
- ◆ Double cartridge gun - VAS 5237-



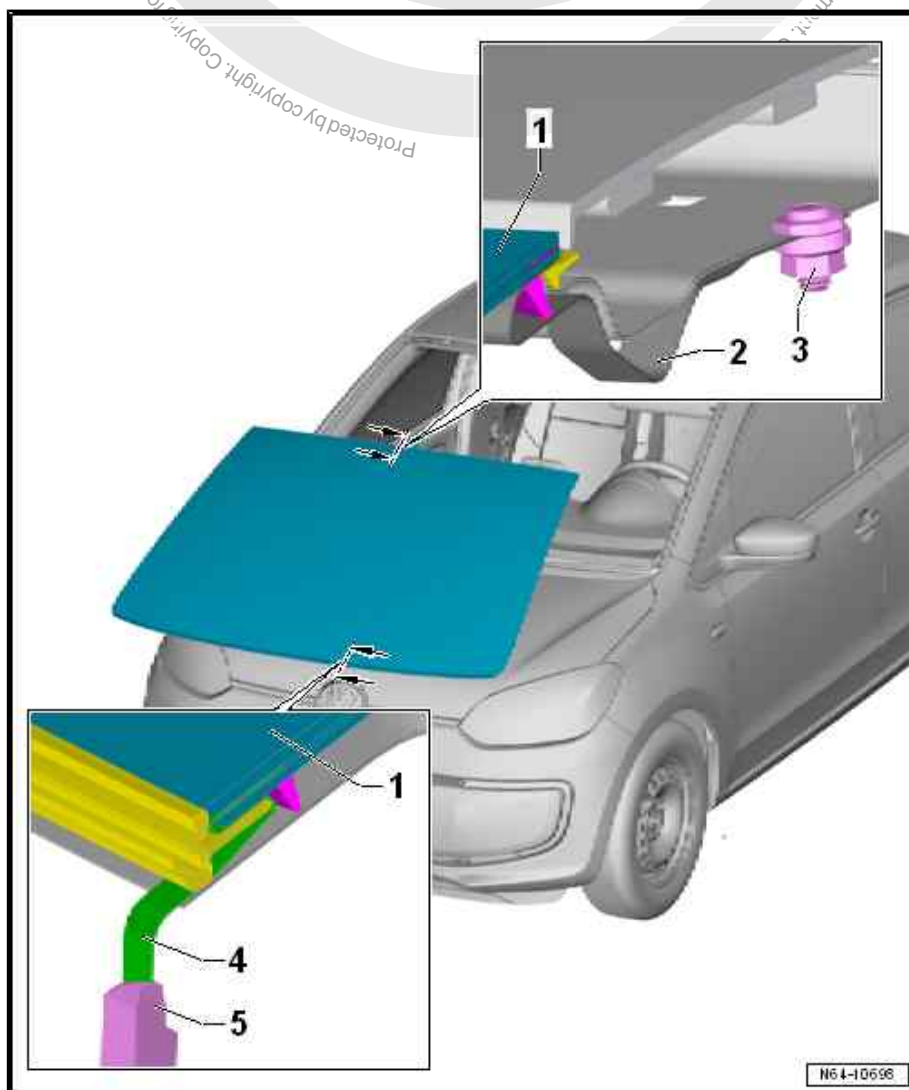
Removing

Perform the following steps:

- In vehicles with emergency braking function first remove emergency braking function sensor unit ⇒ Electrical system;



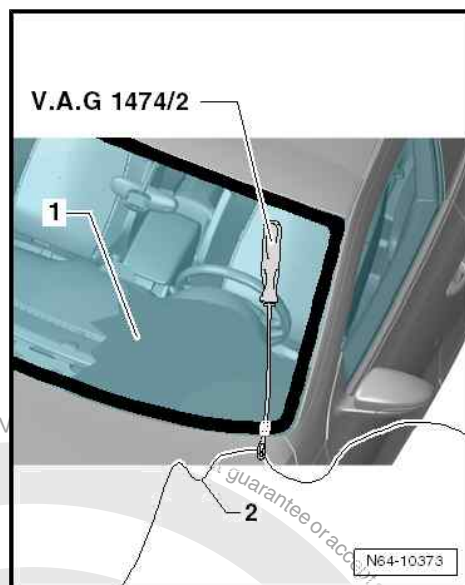
- Rep. gr. 94 ; Emergency braking function; Removing and installing emergency braking function sensor unit .
- Remove A-pillar upper trims on left and right ⇒ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Removing and installing A-pillar trim .
- Remove left and right sun visors ⇒ General body repairs, interior; Rep. gr. 68 ; Equipment; Removing and installing sun visor .
- Remove interior mirror ⇒ General body repairs, interior; Rep. gr. 68 ; Interior mirror; Removing and installing interior mirror .
- Lower moulded headliner in area of windscreen ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trims; Removing and installing moulded headliner .
- Moulded headliner can now be lowered sufficiently to allow windscreen to be cut out without damage occurring to moulded headliner.
- Removing plenum chamber cover ⇒ [page 15](#) .



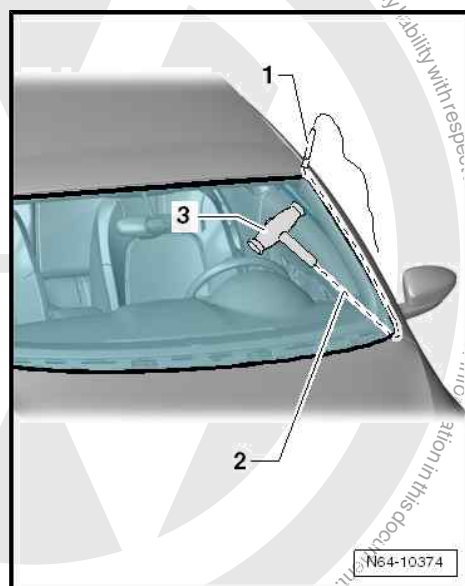
- On vehicles with heated windscreen -1-, release earth strap -2-.
- Disconnect lines -5- in plenum chamber.



- Slide protective backing - V.A.G 1474/8- -1- between front windscreen and dash panel.
- Pull end of cutting cord -2- through adhesive sealing material into inside of vehicle using awl - V.A.G 1474/2- .



- Secure inside end of cutting cord against falling out using Pull toggle - V.A.G 1351/1- -3-.
- Insert cutting cord -2- into window flange using tube -1-.
- Place cutting cord around the front windscreen.
- Ensure that cutting cord lies under front windscreen in corners.



- Secure other end of cord to reel device - V.A.G 1654 A- .
- Start reeling device - V.A.G 1654 A- in "position I".
- Turn reel device - V.A.G 1654 A- accordingly and cut windscreen free.
- Use plastic wedge to press cutting cord against windscreen while cutting in order to have clearance at window flange and dash panel.

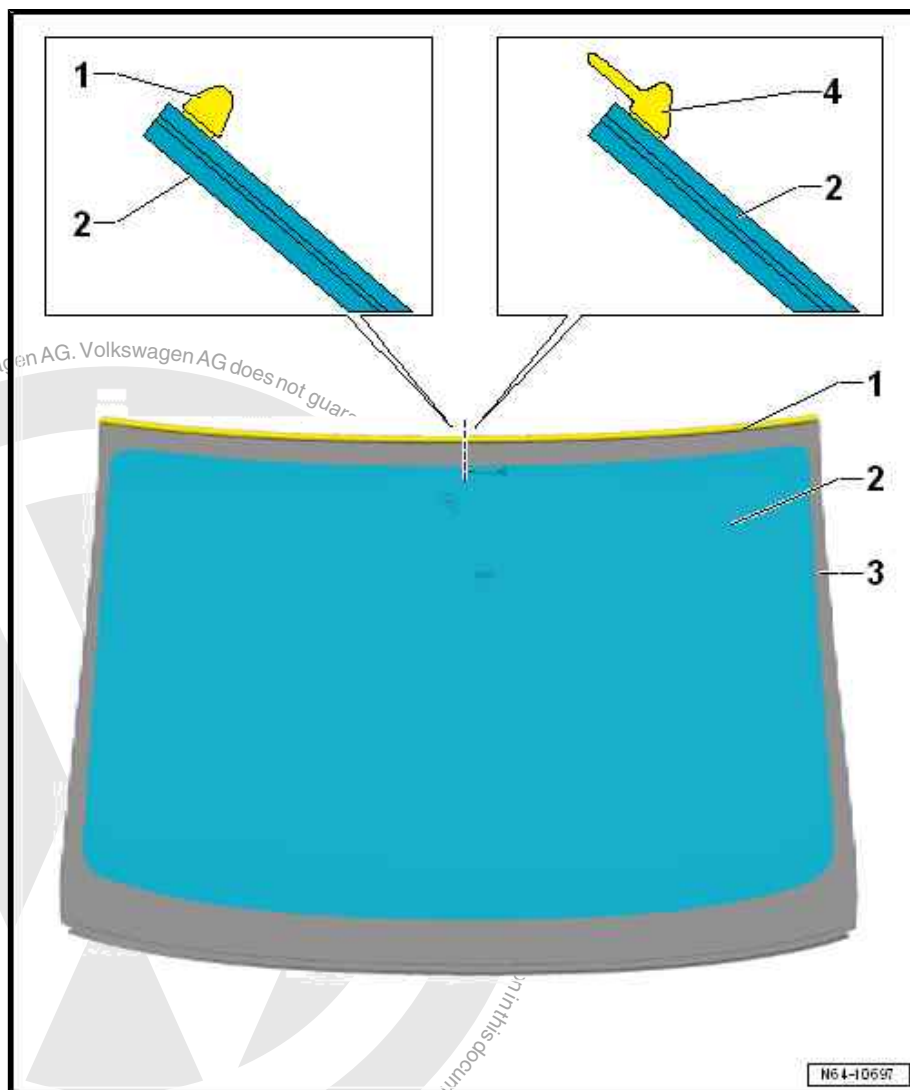
Installing





Note

- ◆ The windscreen as a genuine replacement part is delivered with spacers.
- ◆ In vehicles without panorama sliding sunroof, the spacers -1- remain installed.
- ◆ In vehicles with panorama sliding sunroof, the seal -4- must be installed.



- Separate spacers -1- with a suitable tool.
- Bond seal -4- to edge of windscreen.
- In vehicles with emergency braking function install emergency braking function sensor unit ⇒ Electrical system; Rep. gr. 94 ; Emergency braking function; Removing and installing emergency braking function sensor unit .

Preparing old undamaged window for glazing ⇒ [page 235](#) .

Preparing new window for glazing ⇒ [page 236](#) .

Preparing body flange for glazing ⇒ [page 237](#) .

Installation instructions ⇒ [page 234](#)

Minimum curing period ⇒ [page 233](#)



2.2.1 Removing broken windscreen

Removal of a broken windscreen is performed in the same manner as the removal a broken rear window ⇒ [page 249](#) .





3 Rear windscreen

⇒ "3.1 Assembly overview - rear window", page 245

⇒ "3.2 Removing and installing rear window", page 245

3.1 Assembly overview - rear window

1 - Rear windscreen

- ☐ Removing and installing
⇒ page 245
- ☐ Gap width -c- between side panel and window must be uniform on left and right.
- ☐ Gap width -d- between rear bumper cover and window must be uniform.

2 - PUR adhesive sealant

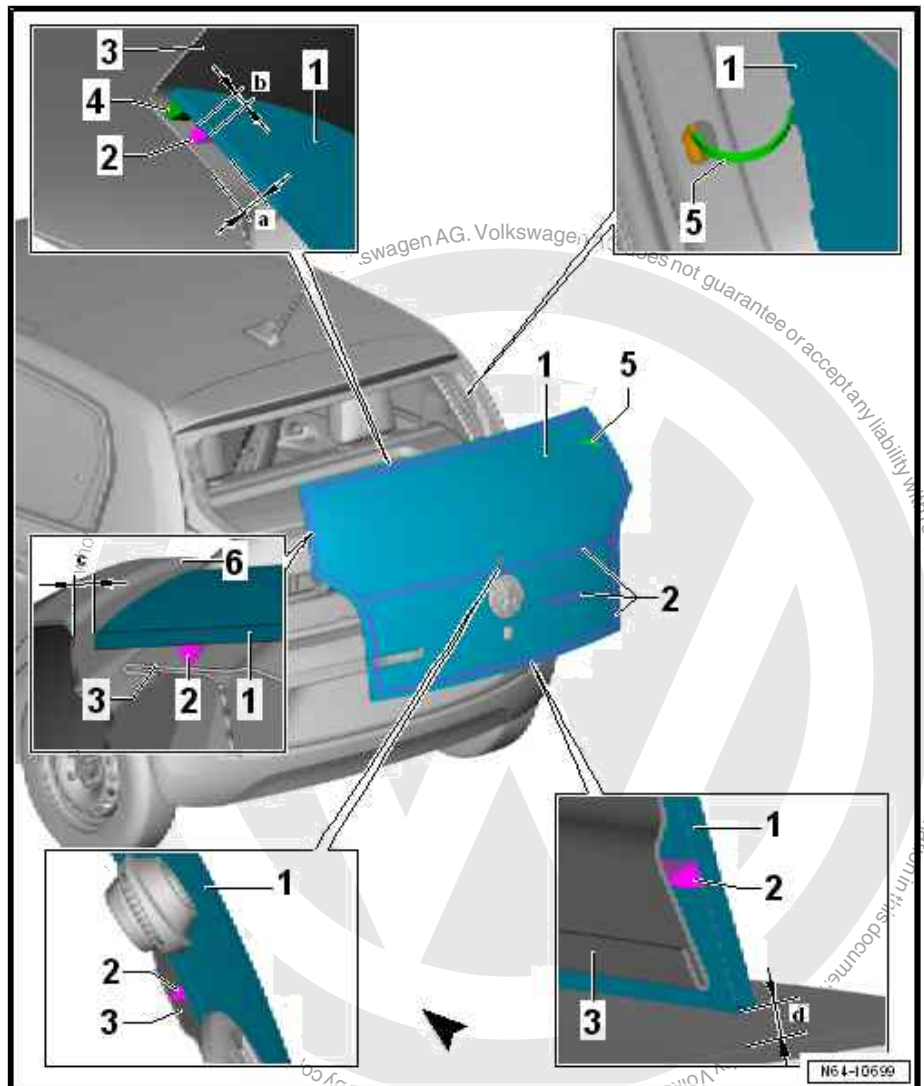
- ☐ Cross section of bead:
-width b- = 7 mm,
-height a- = 10 mm (including precoating, residual material on window glass and window flange).
- ☐ Minimum curing period
⇒ page 233 .

3 - Body flange

4 - Spacer

5 - Connection for rear window heating

6 - Side panel



3.2 Removing and installing rear window



Note

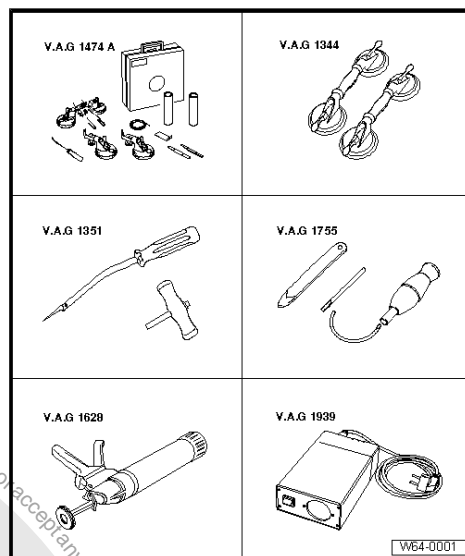
The removal of a bonded window is described using the Removal kit for flush bonded windows - V.A.G 1474 A- . The respective tools from Removal kit for flush bonded windows - VAS 6452- may also be used.

Special tools and workshop equipment required

- ◆ Removal kit for flush bonded windows - V.A.G 1474 A- or Removal kit for flush bonded windows - VAS 6452-
- ◆ Suction lifter - V.A.G 1344-



- ◆ Cutting tool - V.A.G 1351-
- ◆ Windscreen removal kit - V.A.G 1755-
- ◆ Hand-cartridge gun - V.A.G 1628-
- ◆ Cartridge heater - V.A.G 1939-

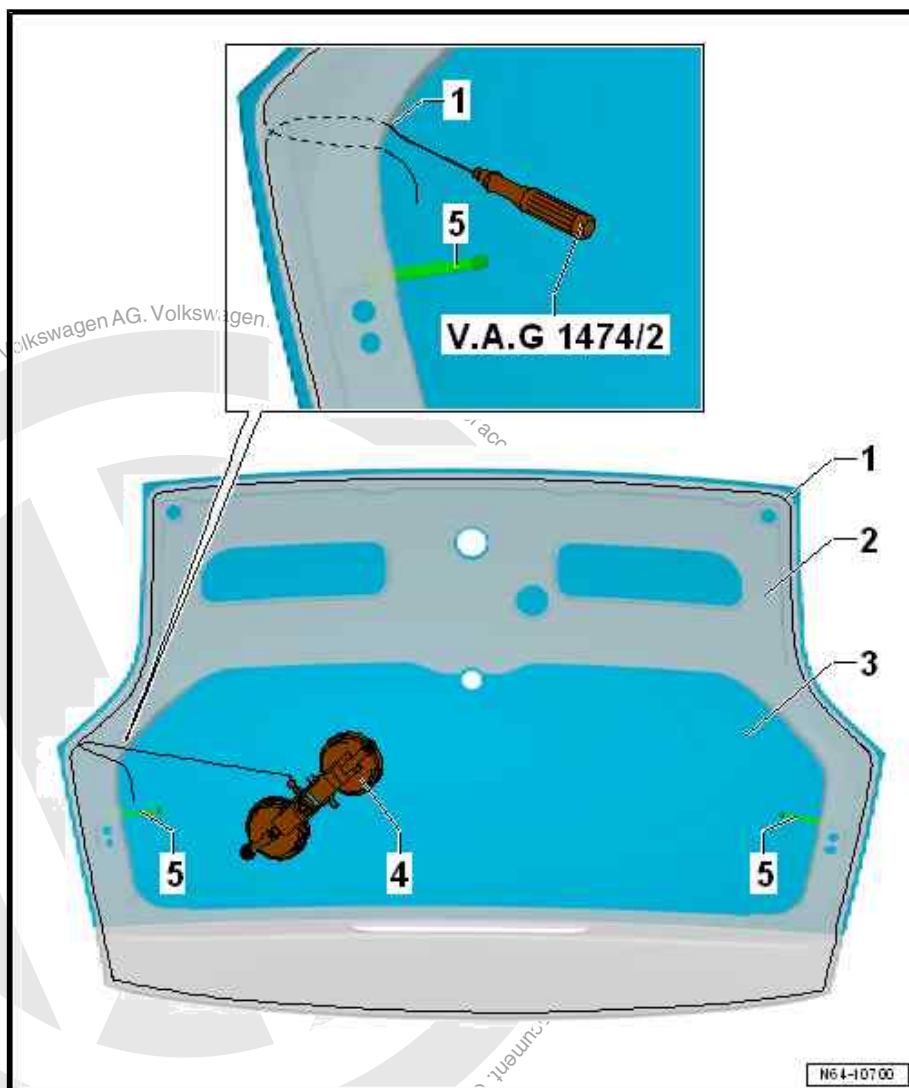


Removing



Note

If the rear window is reused, make sure that the electrical connections for the rear window heating are not damaged.



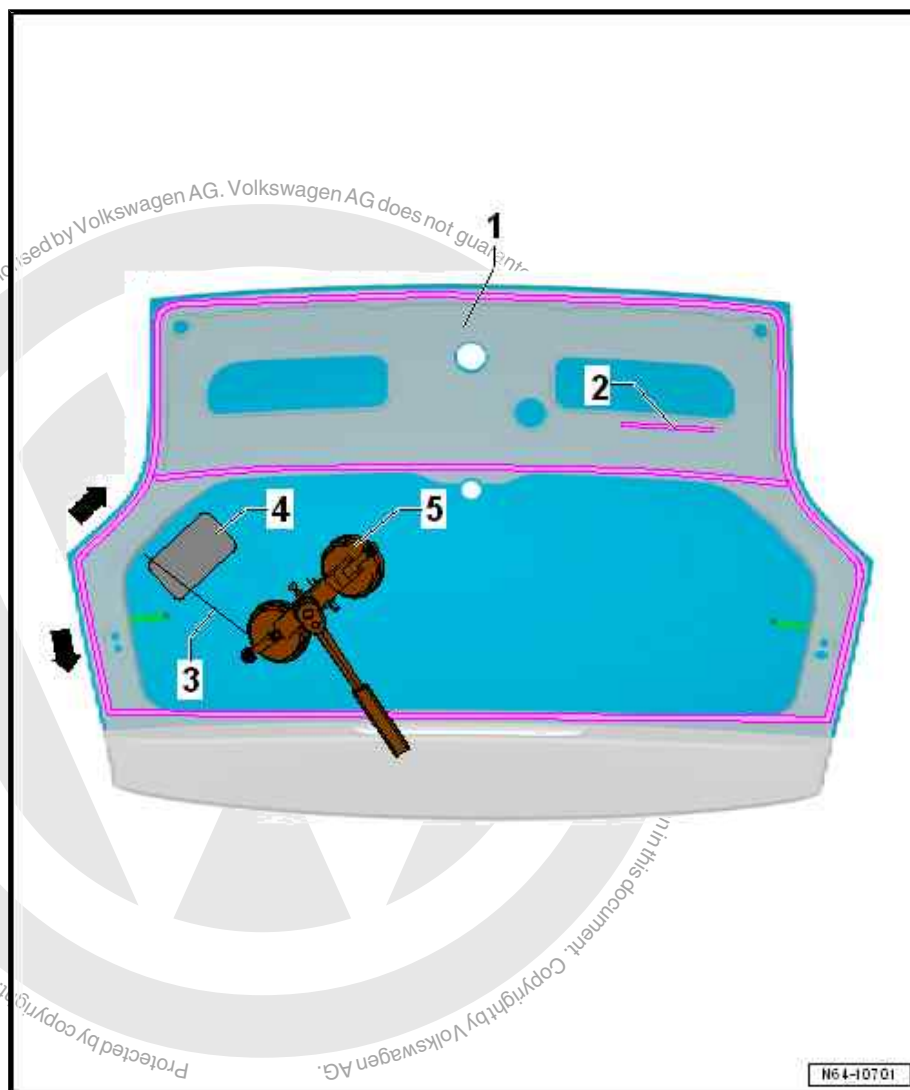
Perform the following steps:

- Pull off connectors for rear window heating -5- and window aerial, and attach them to the rear window with adhesive tape.
- Using the awl - V.A.G 1474/2- pull cutting cord -1- inwards through adhesive sealant at the location -arrow- shown in the illustration.
- Use the pull toggle - V.A.G 1351/1- to secure end of cutting cord before pulling it out.
- Lay cutting cord around rear window and guide second end of cord inwards.
- Attach end of thread to reel device - V.A.G 1654 A- .



Note

It is essential to use the protective film or the plastic strip - V.A.G 1474/15- in order to protect the metal flange.



- Carefully guide protective film -4- or plastic strip - V.A.G 1474/15- between rear window and metal flange.
- Place reel device - V.A.G 1654 A- in indicated position.
- Convert reel device - V.A.G 1654 A- accordingly and cut rear window free towards sides starting in upper area.
- Use wedge - V.A.G 1474/5- to press cutting cord -3- against rear window glass while cutting in order to have clearance at body flange.
- Then cut rear window free in lower area.
- Hold rear window on 2 suction lifters while cutting free.



Caution

In the lower area of the rear window greater force may need to be applied, since 2 adhesive beads must be cut.

- Pull rear window off rear lid using the 2 suction lifters.



Installing

Perform the following steps:

Preparing old undamaged window for glazing ⇒ [page 235](#) .

Preparing new window for glazing ⇒ [page 236](#) .

Preparing body flange for glazing ⇒ [page 237](#) .

Installation instructions ⇒ [page 234](#)

Minimum curing period ⇒ [page 233](#)

3.2.1 Removing broken rear window

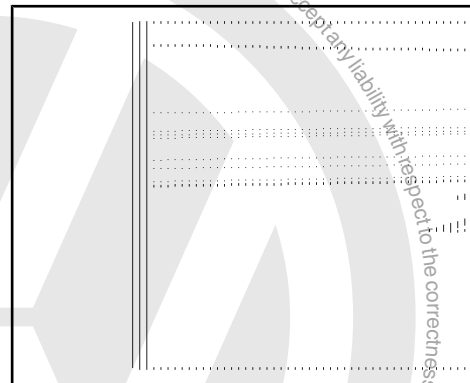
Perform the following steps:

- Protect body and interior from glass splinters.
- Remove pieces of glass up to adhesive sealing material.
- Pull off connections for rear window heating and aerial.
- Cover flange -2- all round with textile-reinforced adhesive tape.
- Cut through adhesive sealant (with glass remains) in window opening using electric cutter - V.A.G 1561 A- and U-shaped blade - V.A.G 1561- .



WARNING

Always wear safety goggles and leather gloves.





4 Side window

⇒ "4.1 Assembly overview - rear side windows", page 250

⇒ "4.2 Removing and installing rear side window", page 250

4.1 Assembly overview - rear side windows

1 - Side window

- ❑ Removing side window
⇒ page 250 .

2 - Retaining clip

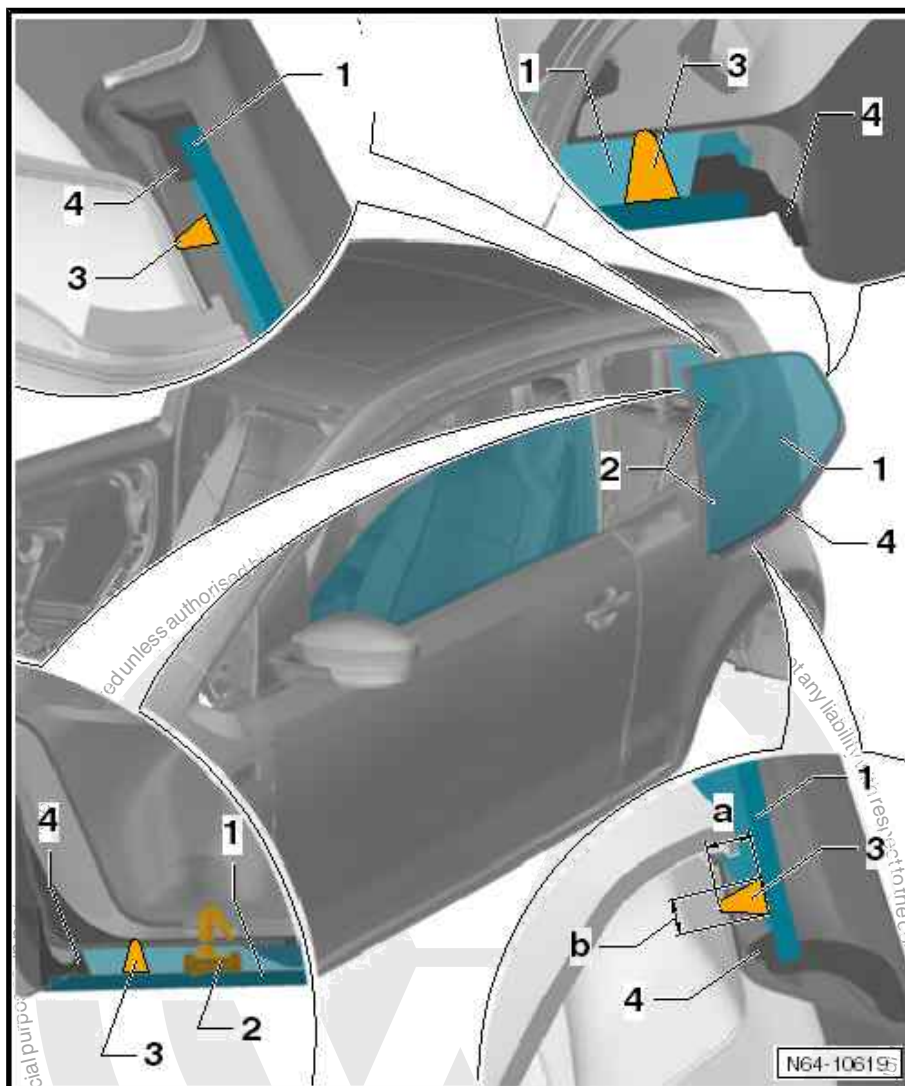
- ❑ Qty. 2
- ❑ Separated with cutting cord on removal.

3 - Seal

- ❑ Integral part of side window.

4 - PUR adhesive sealant

- ❑ Cross section of bead:
height = 10 mm
-dimension a-, width =
6.5 mm -dimension b-
(including precoat-
ing, residual material on win-
dow glass and window
flange).
- ❑ Minimum curing period
⇒ page 233 .



4.2 Removing and installing rear side window



Note

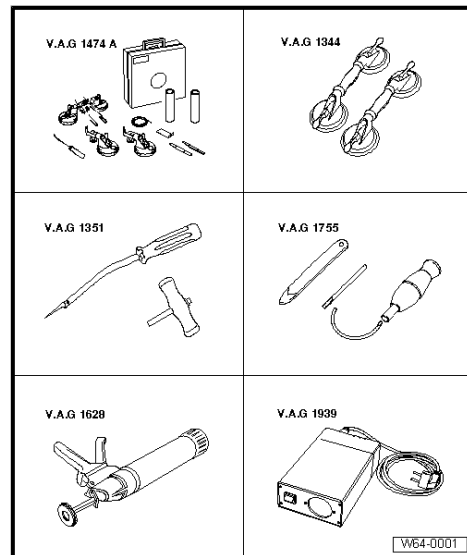
The removal of a bonded window is described using the Removal kit for flush bonded windows - V.A.G 1474 A- . The respective tools from Removal kit for flush bonded windows - VAS 6452- may also be used.

Special tools and workshop equipment required

- ◆ Removal kit for flush bonded windows - V.A.G 1474 A- or Removal kit for flush bonded windows - VAS 6452-



- ◆ Suction lifter - V.A.G 1344-
- ◆ Cutting tool - V.A.G 1351-
- ◆ Windscreen removal kit - V.A.G 1755-
- ◆ Hand-cartridge gun - V.A.G 1628-
- ◆ Cartridge heater - V.A.G 1939-



Removing undamaged window



Note

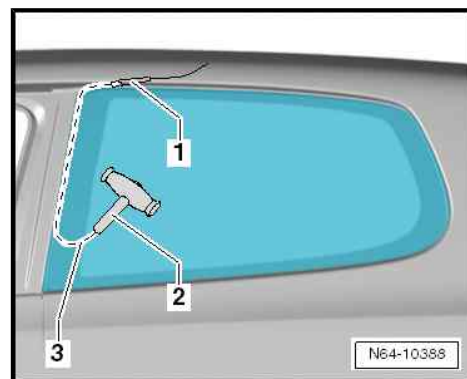
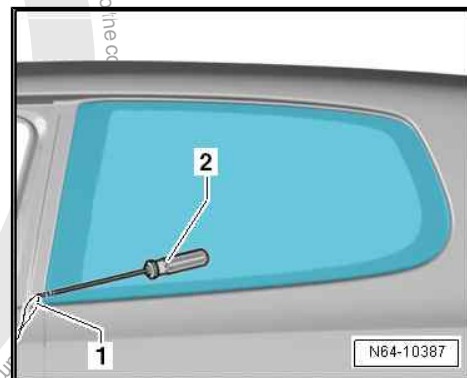
Removal and installation are described only for the left side window. Removal and installation of the right window are similar.

- Remove side trim ➤ General body repairs, interior; Rep. gr. 70 ; Trims, interior; Fitting location overview - trims, interior .

Protect surrounding parts against damage.

- Using the awl - V.A.G 1474/2- , pull cutting cord -1- through the adhesive sealant at the place shown in the illustration.
- Press seal aside so that it is not damaged.

- Insert cutting cord -3- behind seal in window flange with aid of tube -1-.





- Secure one end of cord -3- to pull handle - V.A.G 1351/1- -2- to counterhold.
 - Pull other end of cord -2- through adhesive sealant as well.
 - Secure other end of cord to reel device - V.A.G 1654 A- -3-.
 - Turn reel device - V.A.G 1654 A- -3- accordingly and cut window free.
 - Press cutting cord against window glass with plastic wedge during cutting process, in order to have clearance at window flange.
-
- Instead of reel device - V.A.G 1654- -3-, reel device - V.A.G 1654 A- -3- can be used.
 - One suction cup can be removed from the reel device - V.A.G 1654- -3- as shown in illustration. This ensures that the reel device - V.A.G 1654 A- -3- roller can be guided closer to the window flange.

Installing

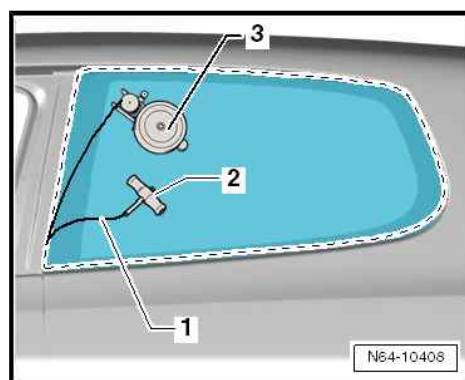
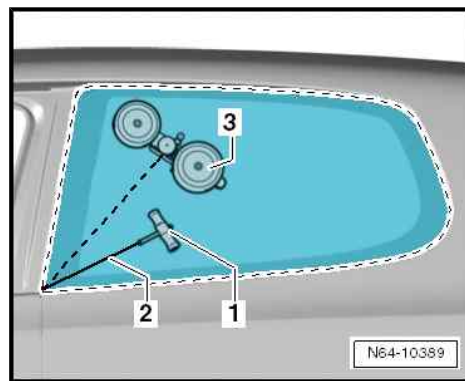
Preparing old undamaged window for glazing ⇒ [page 235](#) .

Preparing new window for glazing ⇒ [page 236](#) .

Preparing body flange for glazing ⇒ [page 237](#) .

Installation instructions ⇒ [page 234](#)

Minimum curing period ⇒ [page 233](#)



4.2.1 Removing broken side window

Removing a broken side window is performed in the same manner as removing a broken rear window ⇒ [page 249](#) .



5 Door windows

⇒ ["5.1 Assembly overview - front door window", page 253](#)

⇒ ["5.2 Assembly overview - rear door window", page 254](#)

⇒ ["5.3 Removing and installing front door window", page 254](#)

⇒ ["5.4 Removing and installing rear door window", page 258](#)

5.1 Assembly overview - front door window



Note

The illustrations show the left-hand side. The right side is similar.

1 - Door window

- ❑ Removing and installing
⇒ [page 254](#)

2 - Window channel

- ❑ Removing and installing
⇒ [page 273](#)

3 - Window regulator mechanism

- ❑ Removing and installing
⇒ [page 264](#)

4 - Window regulator motor

- ❑ Removing and installing
⇒ [page 264](#)

5 - Window regulator

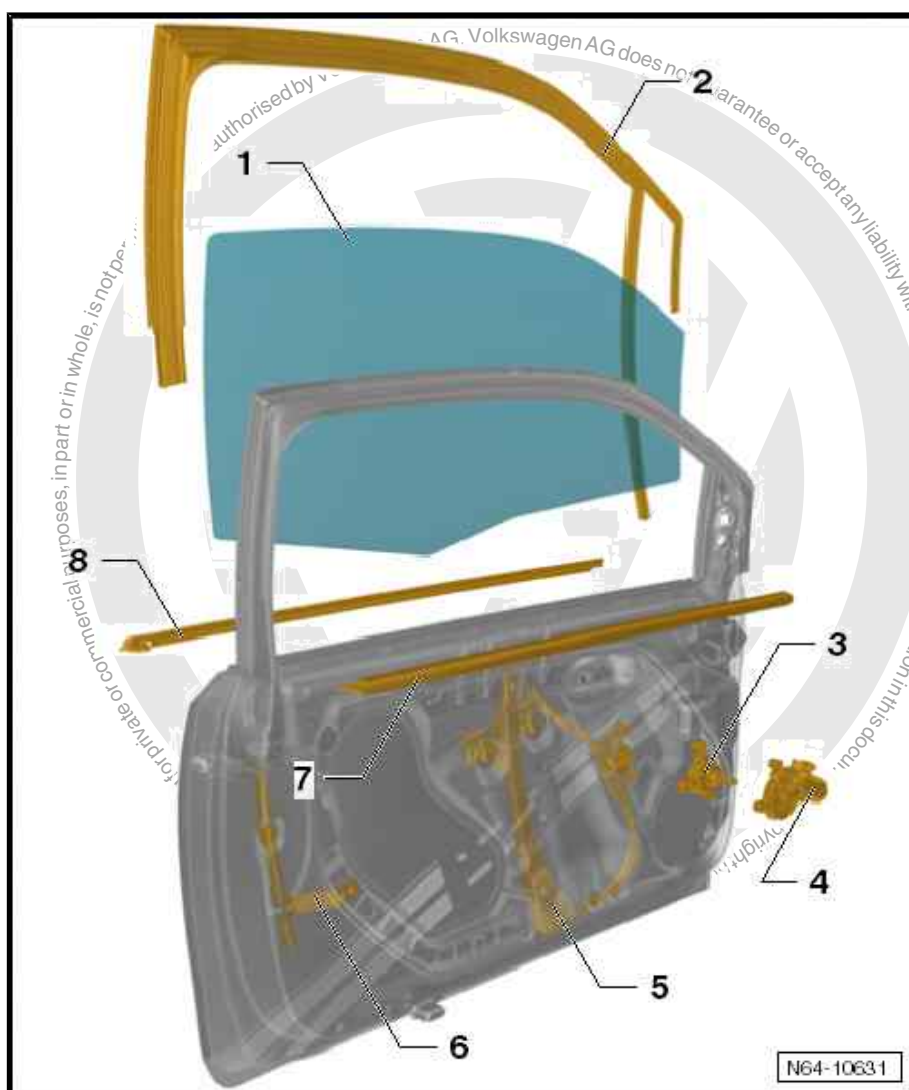
- ❑ Removing and installing
⇒ [page 262](#)

6 - Guide rail

- ❑ With additional window channel.

7 - Window slot inner seal

8 - Window slot outer seal





5.2 Assembly overview - rear door window

1 - Door window

- ❑ Removing and installing
⇒ [page 258](#)

2 - Seal

- ❑ Removing and installing

3 - Hexagon nut

- ❑ Qty. 2
- ❑ Specified torque: 8 Nm

4 - Window channel

- ❑ Removing and installing

5 - Caps

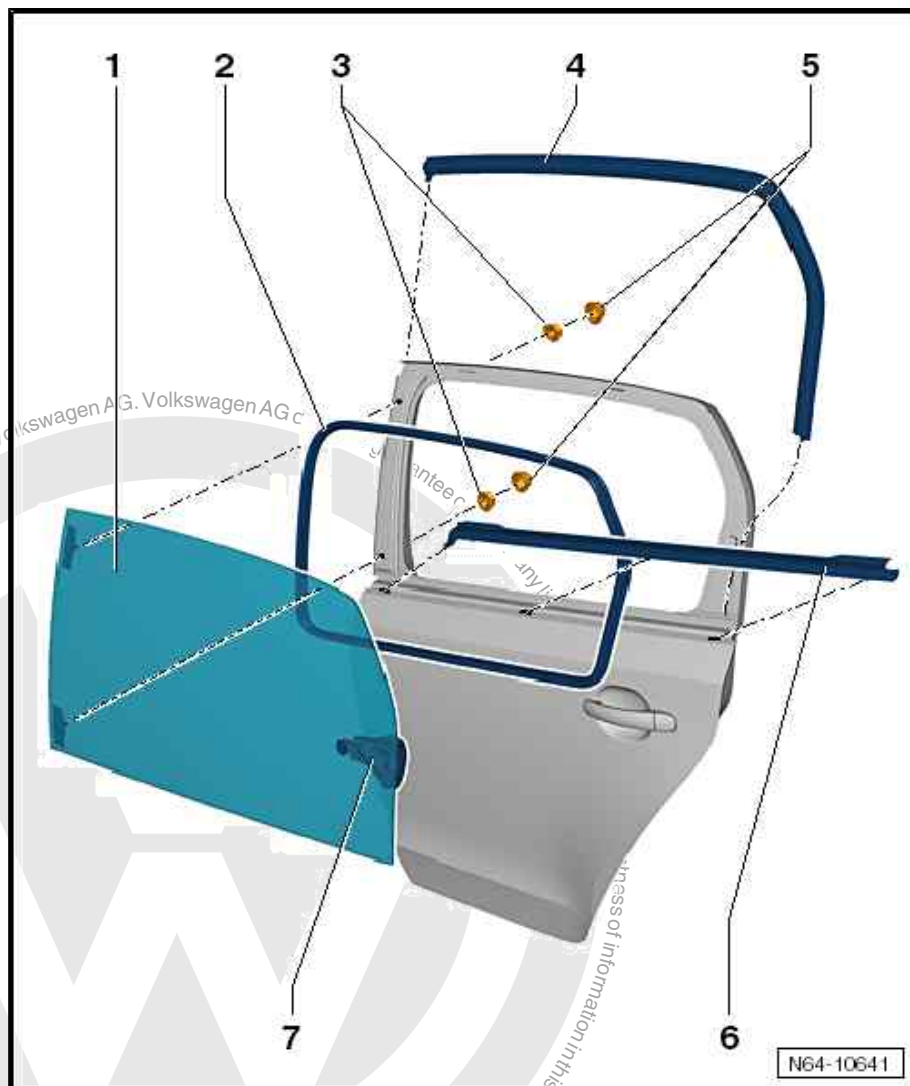
- ❑ Qty. 2

6 - Window slot outer seal

- ❑ Removing and installing

7 - Window regulator

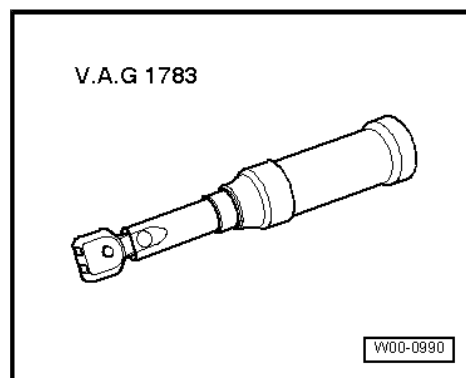
- ❑ Removing and installing
⇒ [page 270](#)



5.3 Removing and installing front door window

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1783-

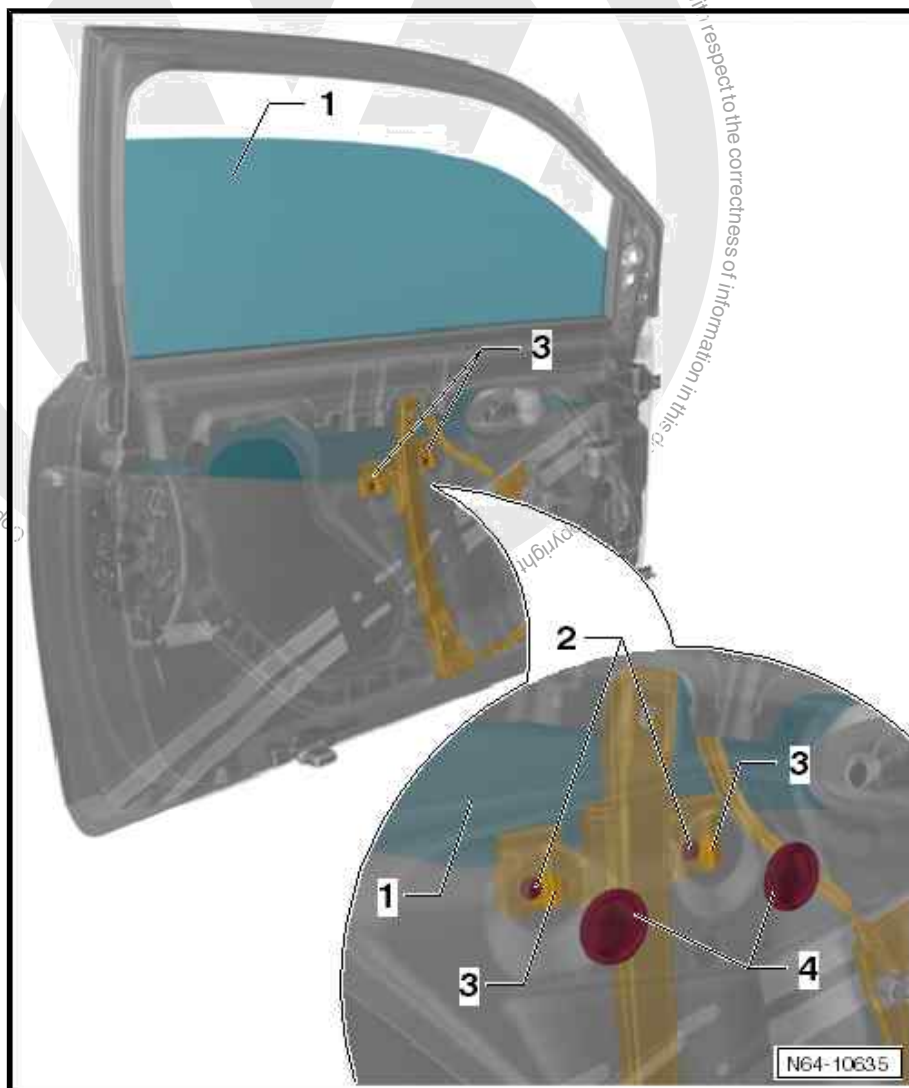




Note

Removal and installation are described only for the left door window. The right side is similar.

Removing



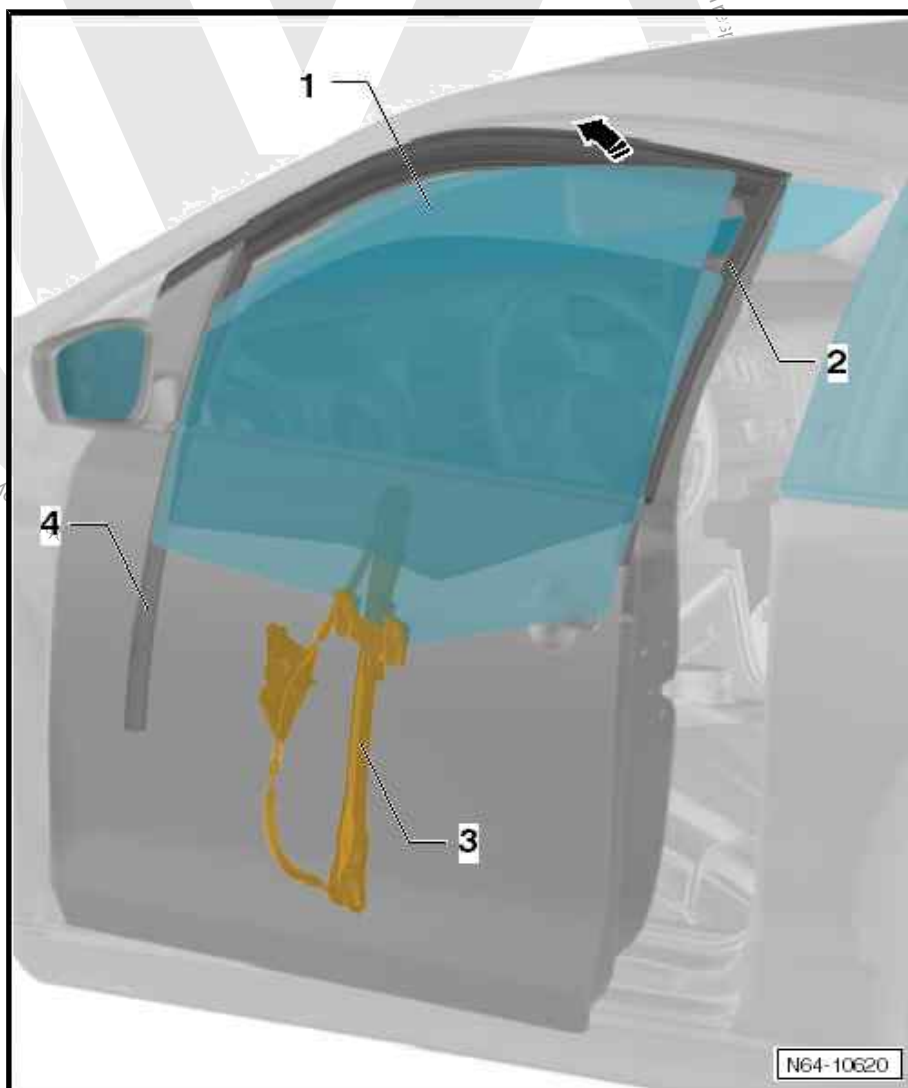
Perform the following steps:

- If window crank is fitted, remove it ➔ [page 270](#) .
- Remove front door trim ➔ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Remove cover ➔ [page 91](#) .
- Lever out cover cap -4-.
- Lower door window -1- until clamping bolts -2- for door window are accessible.



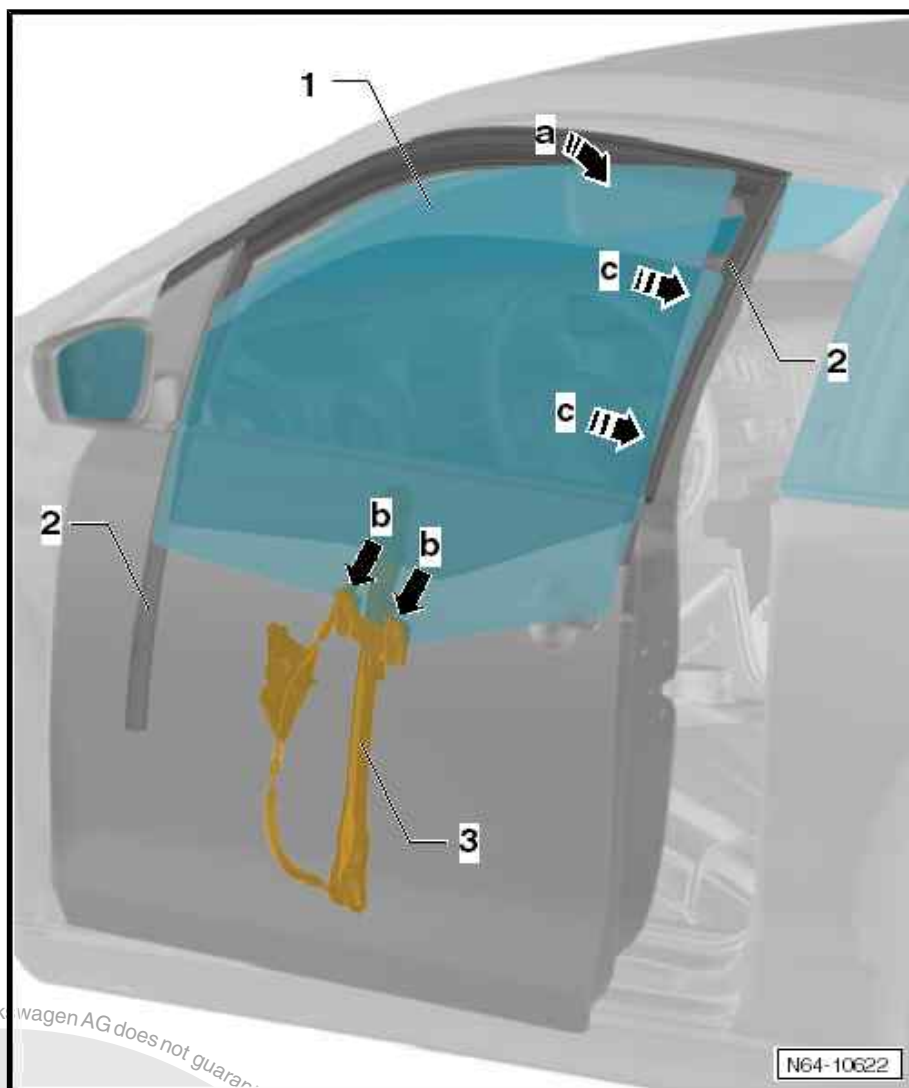
Note

- ◆ If this part of the work cannot be done due to a fault in window regulator motor, the window regulator motor can be removed ⇒ [page 264](#)
- ◆ The window can then be pushed to required working position.
- Loosen clamping bolts -2- (qty. 2), but do not unscrew completely. Press clamping jaws -3- apart.



- Lift door window -1- upwards out of window regulator -3-.
- Lift door window -1- from behind and swing forwards out of window channels -4- -arrow-.

Installing



Perform the following steps:

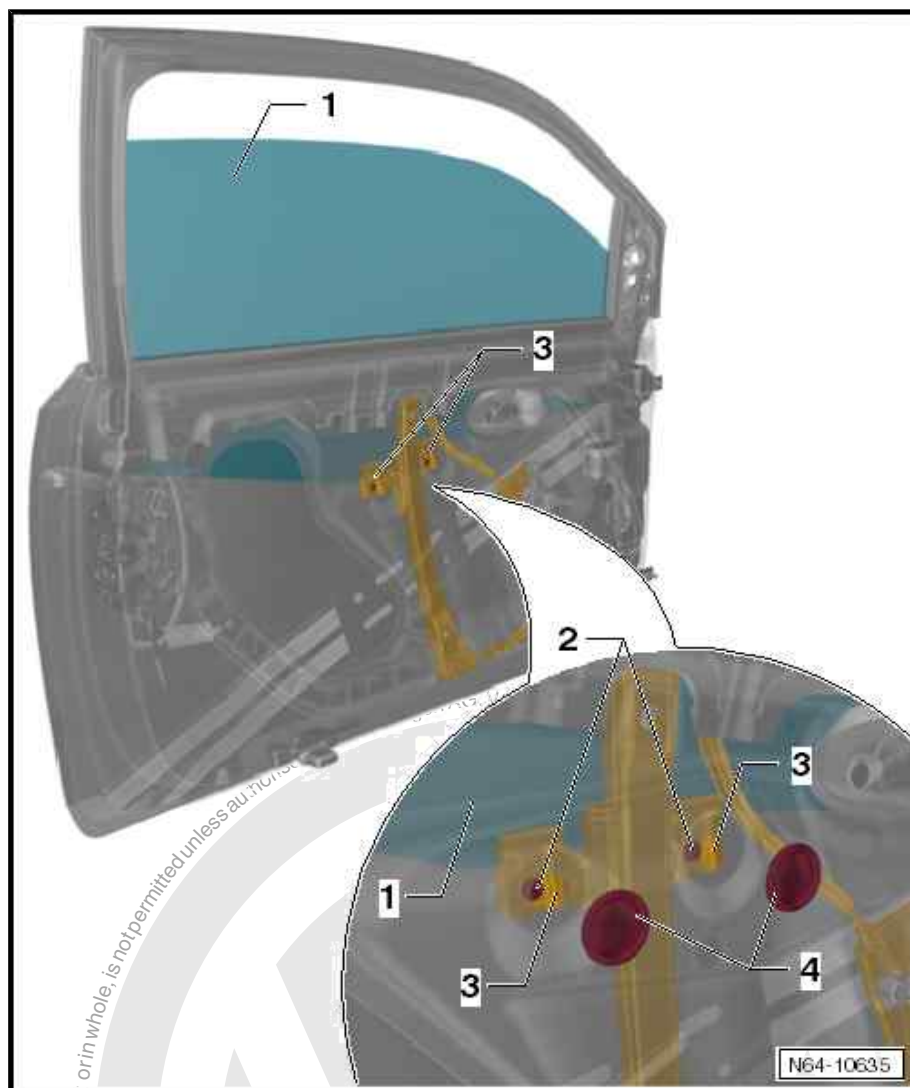
- Insert door window -1- into window channels -2- -arrow a-.



Note

Ensure that door window is properly located in window channel.

- Insert door window -arrow b- into clamping jaws -3- but do not force it in.
- Align door window with window frame -arrow c-.



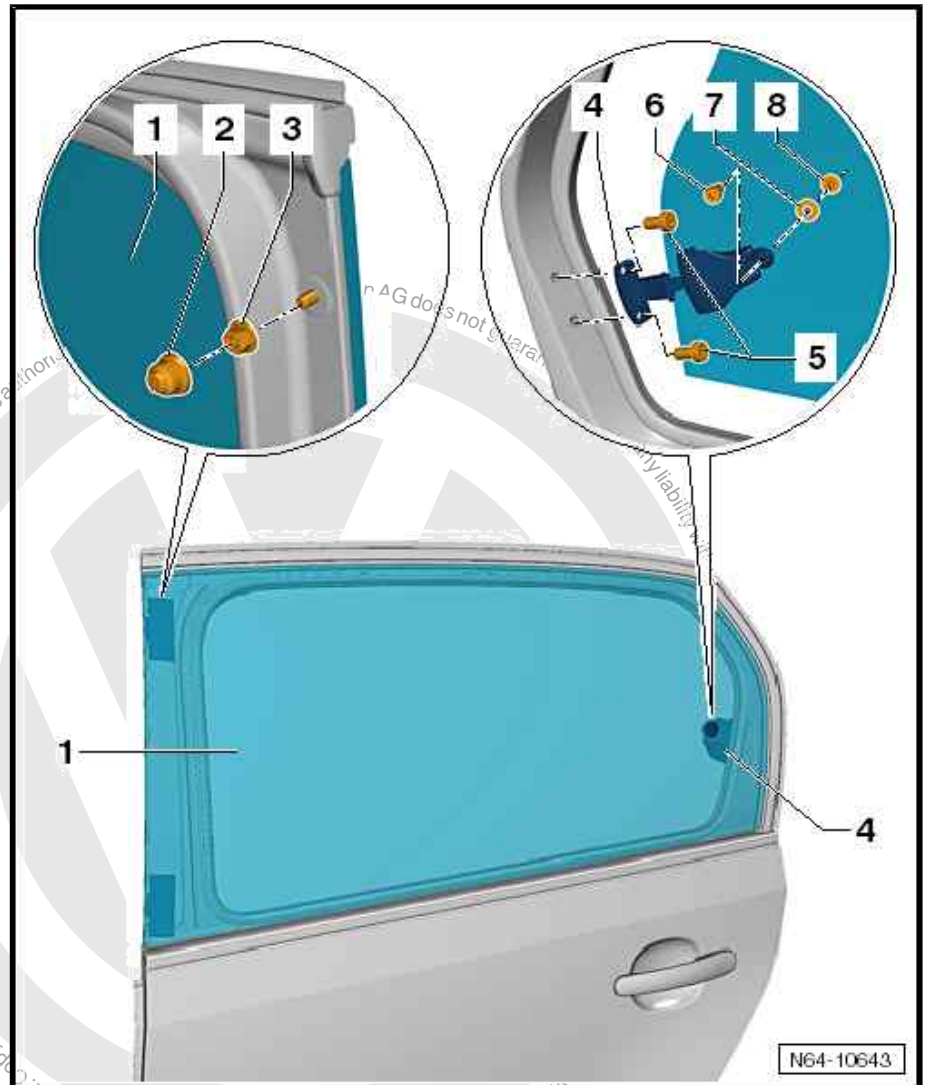
- Tighten clamping bolts -2- (qty. 2) to specified torque of 8 Nm.

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

- Before the cover cap -4-, the cover and the door trim are installed, carry out a functional test.

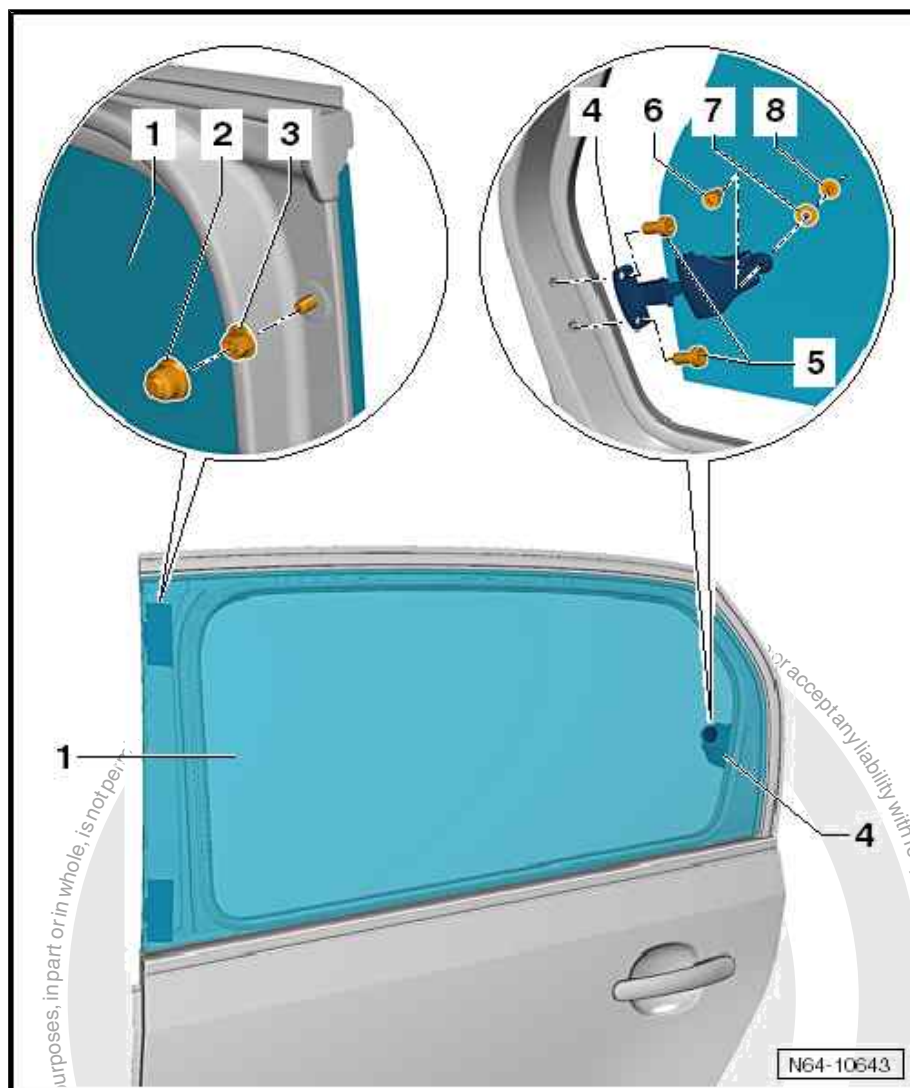
5.4 Removing and installing rear door window

Removing



- Unscrew bolts -5-.
- Pull off caps -2-.
- Unscrew hexagon nuts -3- and remove door window -1-.
- Remove window regulator -4- as required ➔ [page 270](#) .

Installing



- Window regulator -4- is installed loosely ➔ [page 270](#) .
- Insert door window -1- and tighten hexagon nuts -3- loosely.
- Align door window ➔ [page 260](#) .
- Tighten hexagon nuts -3-. Specified tightening torque: 8 Nm.
- Tighten window regulator -4- to rear door. Specified torque of bolts -5-: 8 Nm.
- Screw bolt -6- into threaded sleeve -8-. Specified torque: 4 Nm.
- Press on caps -2-.

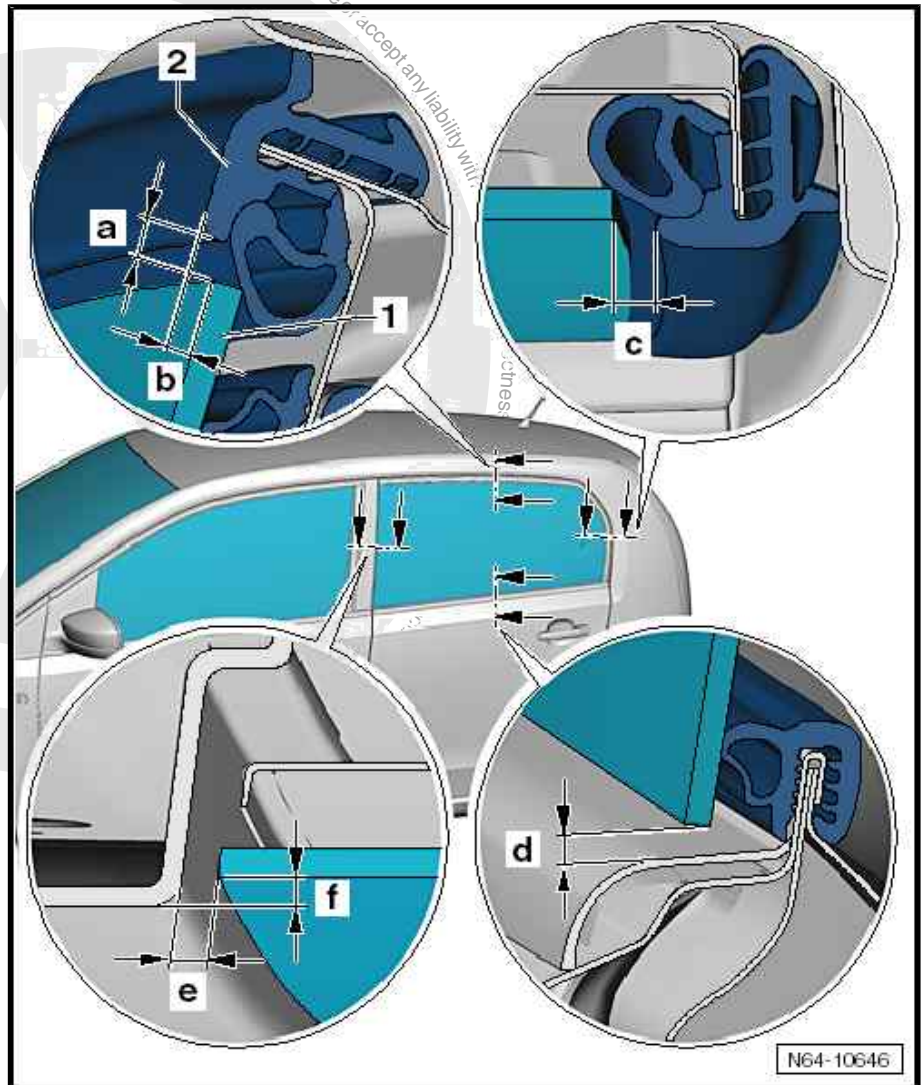
Installation dimensions



1 - Door window

- ◆ Gap -a- = $3.5 \text{ mm} \pm 1 \text{ mm}$
- ◆ Depth -b- = $3.4 \text{ mm} \pm 0.5 \text{ mm}$
- ◆ Gap -c- = $3.5 \text{ mm} \pm 0.5 \text{ mm}$
- ◆ Gap -d- = $3.8 \text{ mm} \pm 0.5 \text{ mm}$
- ◆ Gap -e- = $4.2 \text{ mm} \pm 0.5 \text{ mm}$
- ◆ Depth -f- = $4.9 \text{ mm} \pm 0.1 \text{ mm}$

2 - Window channel





6 Window regulator

⇒ [“6.1 Removing and installing front window regulator”,
page 262](#)

⇒ [“6.2 Removing and installing front window regulator motor”,
page 264](#)

⇒ [“6.3 Removing and installing front window regulator drive”,
page 267](#)

⇒ [“6.4 Removing and installing front window crank”, page 270](#)

⇒ [“6.5 Removing and installing rear window regulator”,
page 270](#)

6.1 Removing and installing front window regulator

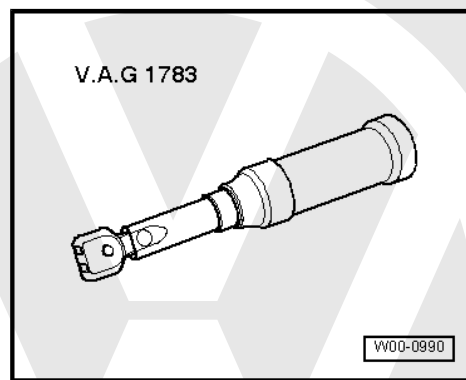
Special tools and workshop equipment required

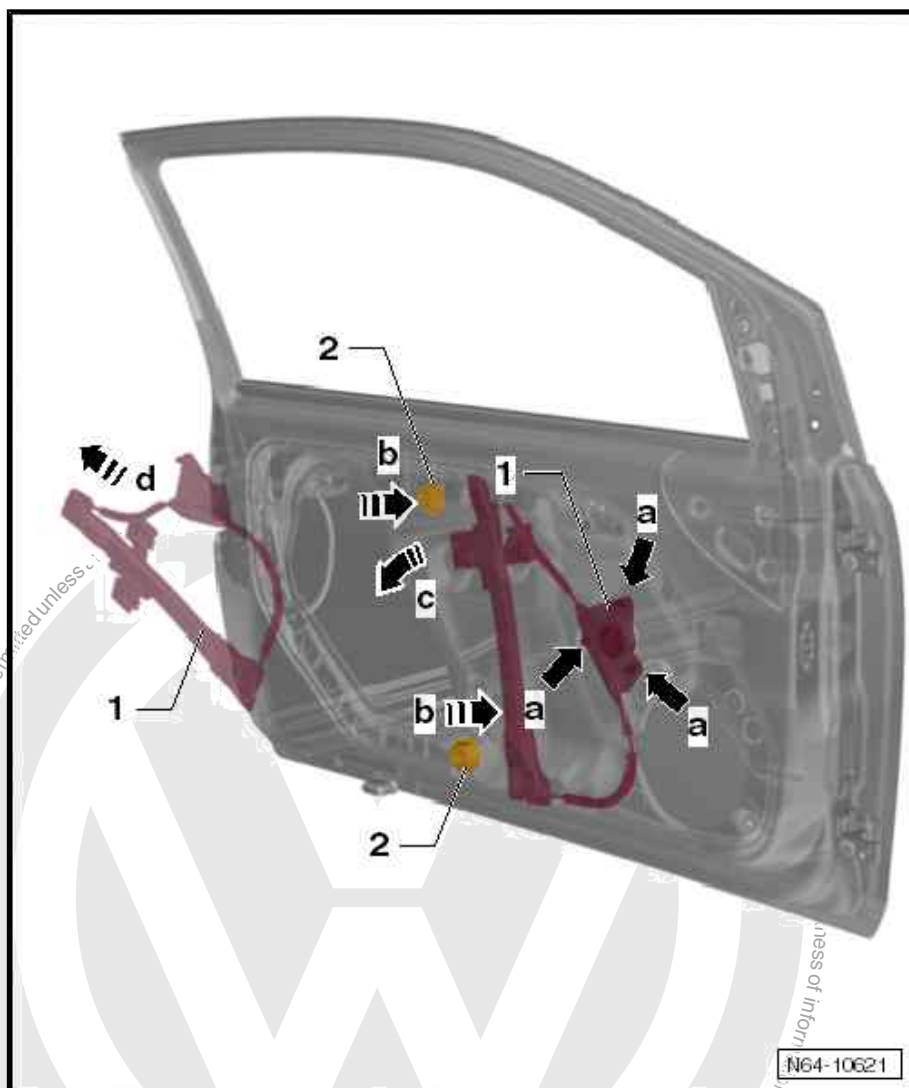
- ◆ Torque wrench - V.A.G 1783-

Note

- ◆ Removal and installation are described only for the left window regulator. Removal and installation of the right window lifter mechanism are similar.
- ◆ The existing hexagon nuts must always be renewed by new self-locking hexagon nuts. Allocation ⇒ Electronic parts catalogue “ETKA”.

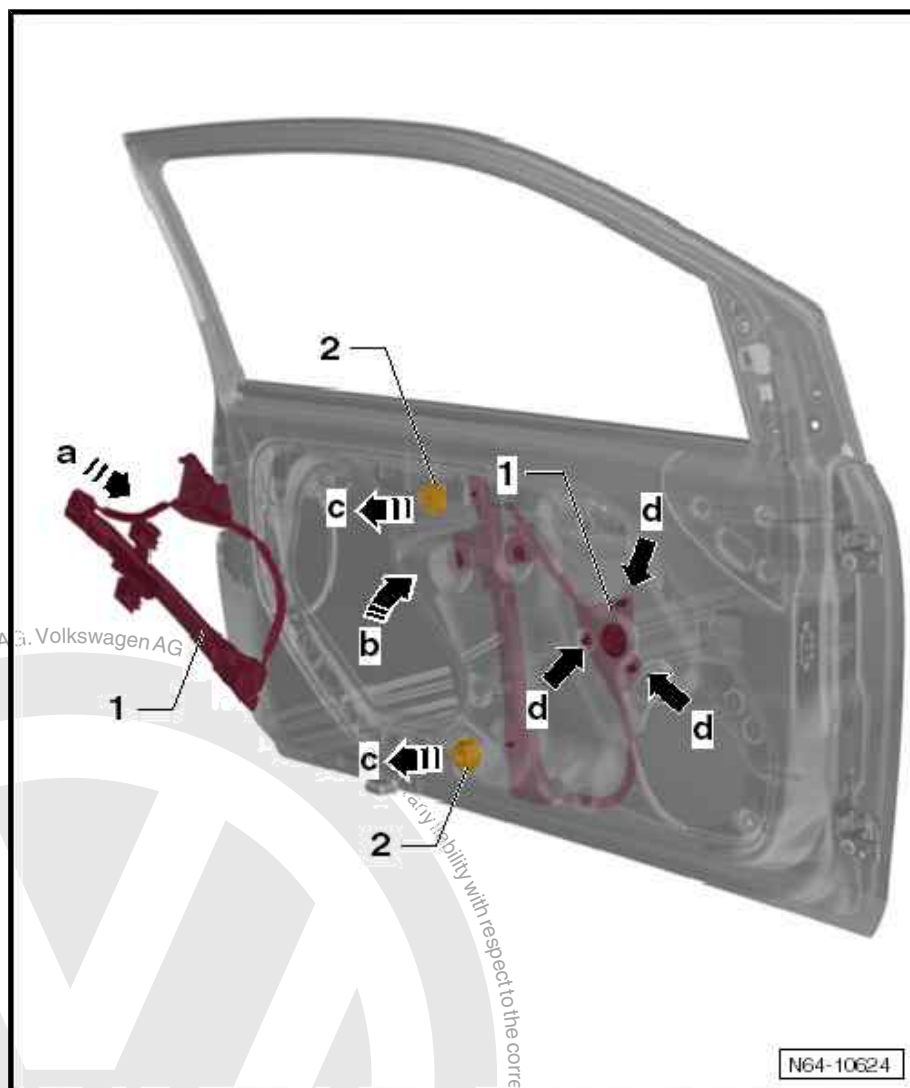
Removing





- If window crank is fitted, remove it ➤ [page 270](#) .
- Remove front door trim ➤ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Remove door window ➤ [page 254](#) .
- Remove window regulator motor ➤ [page 264](#) .
- Release locking hook of cable drum -arrows a- and insert into door.
- Unscrew hexagon nuts -2- and insert threaded studs of window regulator into door - arrows b-.
- Slightly turn window regulator inside door in -direction of arrow c-.
- Guide window regulator -1- through opening in door -arrow d- to remove.

Installing



Perform the following steps:

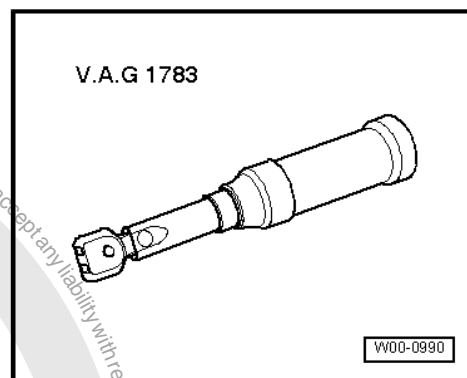
- Insert window regulator -1- through opening in door -arrow a- and move to mounting position -arrow b-.
- Insert threaded studs of window regulator into door skin -arrows c-.
- Tighten new self-locking hexagon nuts -2-. Specified torque: 8 Nm.
- Press cable drum against door inner part -arrows d- until locking hooks engage audibly.
- Install window regulator motor ➤ [page 264](#) or window lifter mechanism ➤ [page 267](#) .
- Install door window ➤ [page 254](#)

6.2 Removing and installing front window regulator motor

Special tools and workshop equipment required



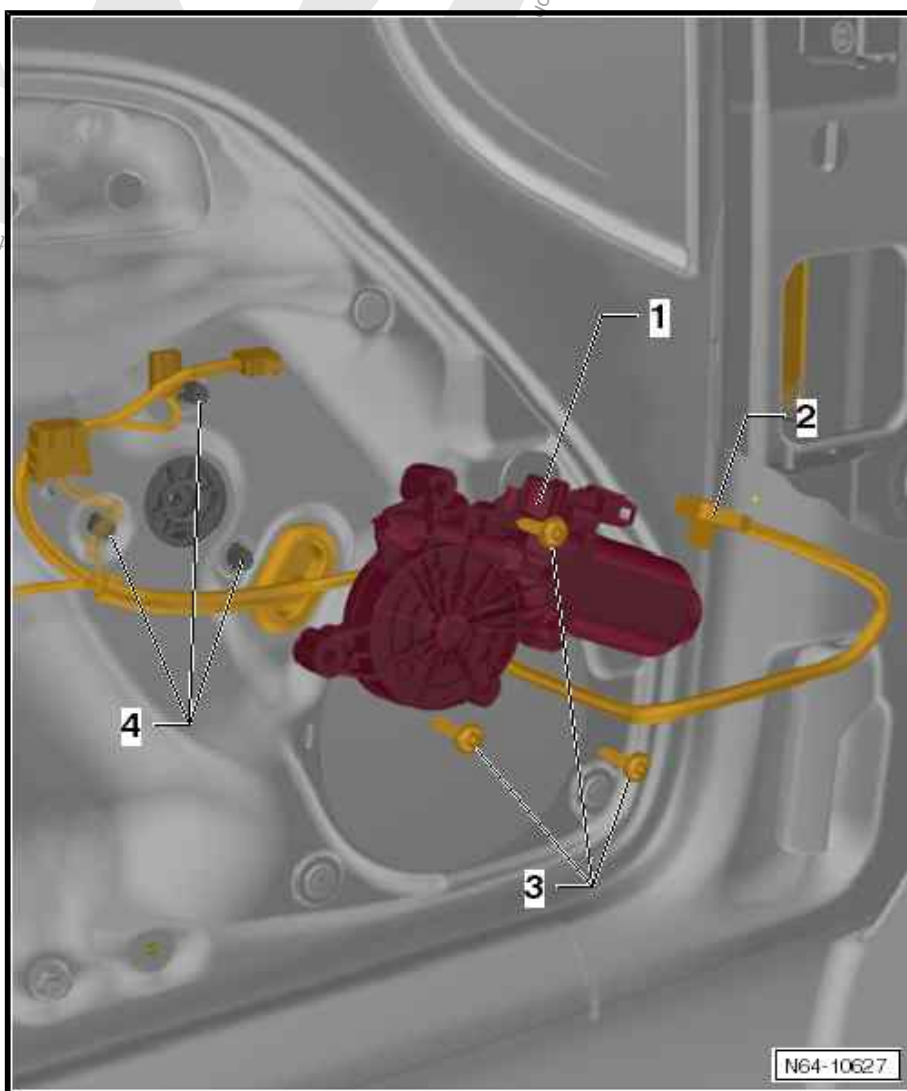
◆ Torque wrench - V.A.G 1783-



Note

Removal and installation are described only for the left window regulator motor. Removal and installation of the right window lifter mechanism are similar.

Removing





Perform the following steps:

- Remove front door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Tape up door window to prevent it from sliding down.



Caution

- ◆ **Switch off ignition and all electrical consumers.**
- ◆ **Withdraw ignition key.**

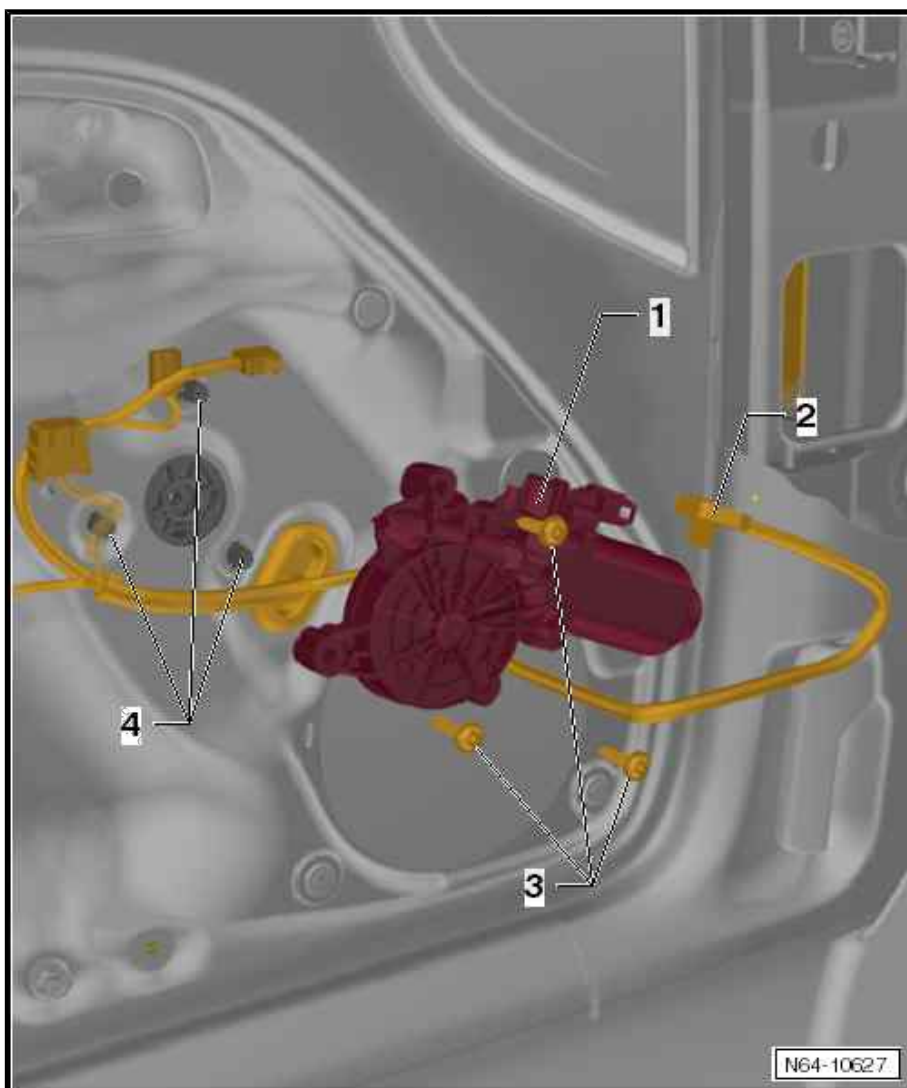
- Disconnect connector -2-.
- Remove bolts -3- (qty. 3).
- Remove window regulator motor with control unit -1- from mounting brackets of cable drum -4-.

Installing



WARNING

If a new window regulator motor is installed (door control unit), the additional functions and the excess force limitation feature have to be coded!



Perform the following steps:

- Fit window regulator motor -1- onto mounting brackets of cable drum -4-. Move door window up and down slightly so that the splines between window regulator motor and cable drum engage more easily.
- Tighten bolts -3- (qty. 3) to specified torque of 3 Nm.
- Connect connector -2-.
- A new window regulator motor must be coded using ⇒ Vehicle diagnostic tester.
- The work procedure and notes on the automatic window raising and lowering system as well as on the excess-force limitation feature can be found in ⇒ Maintenance ; Booklet .

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

6.3 Removing and installing front window regulator drive

Special tools and workshop equipment required





Torque wrench - V.A.G 1783-

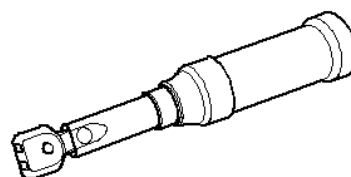
Removing



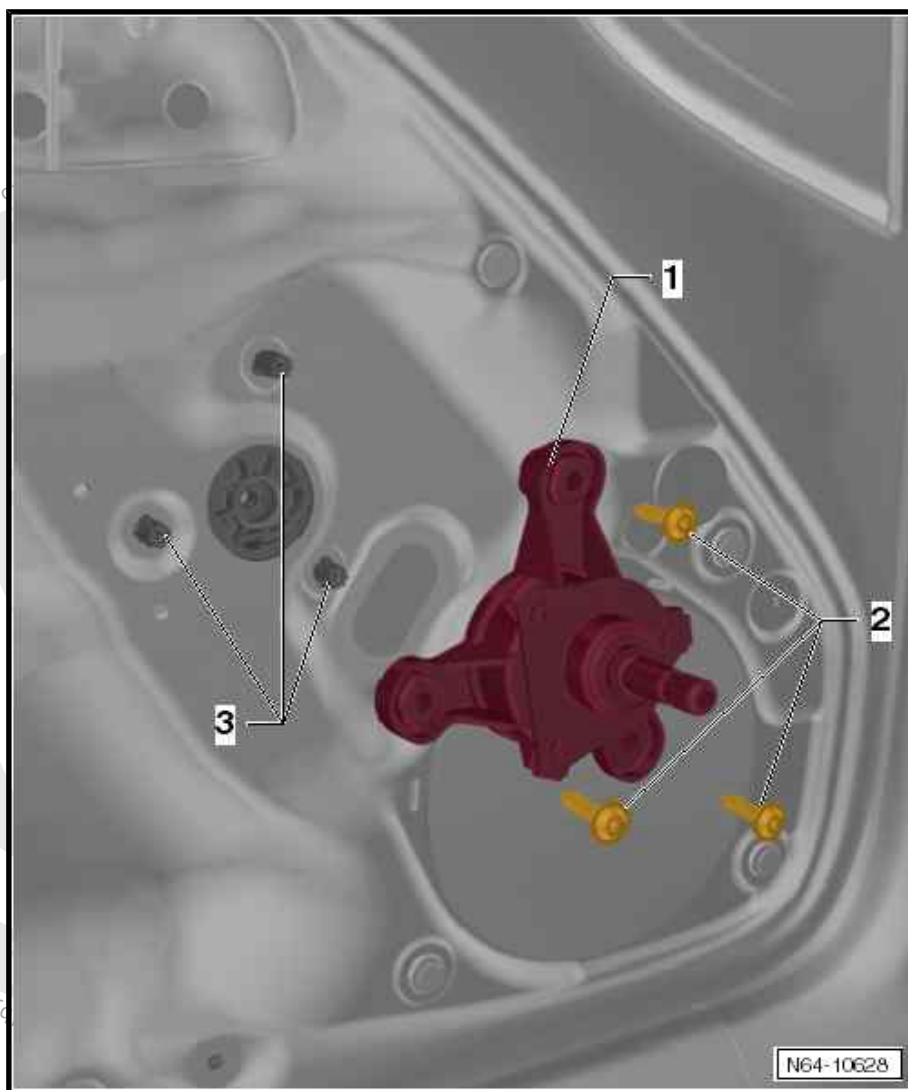
Note

Removal and installation are described only for the left window regulator. Removal and installation of the right window lifter mechanism are similar.

V.A.G 1783



VW00-0990

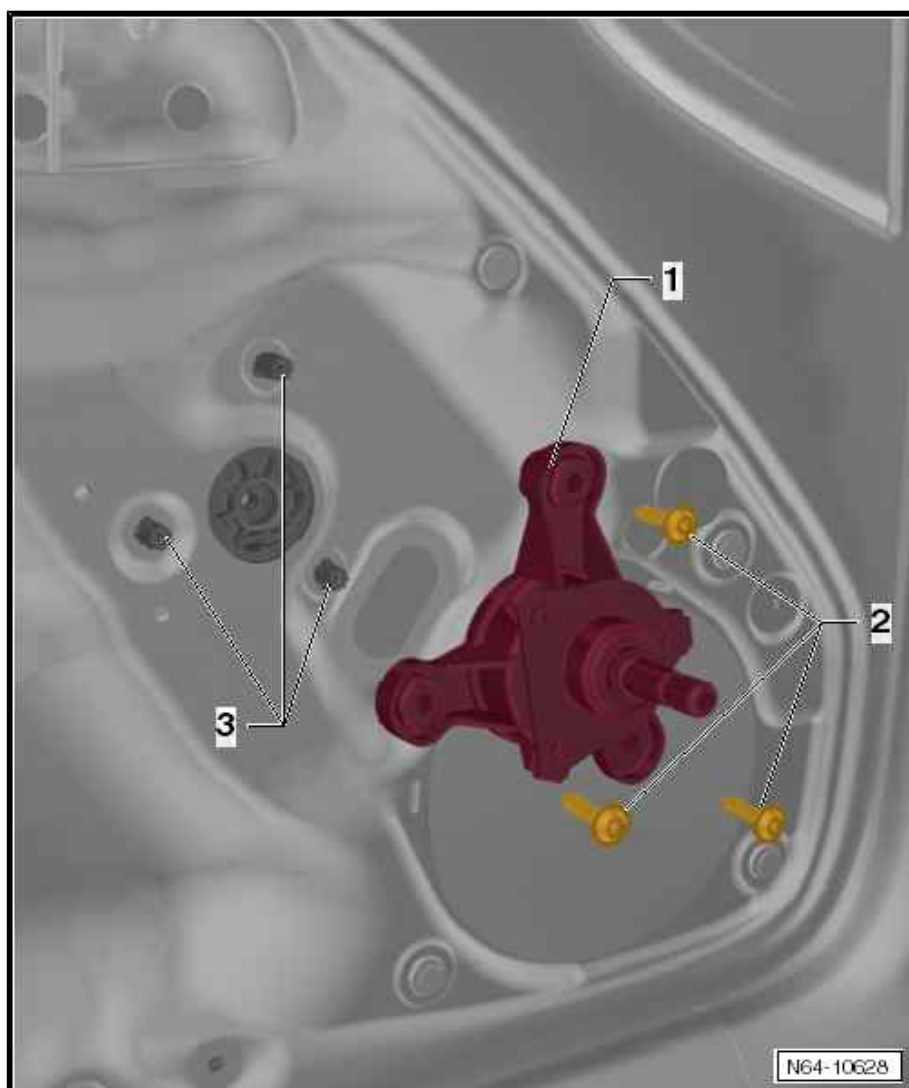


N64-10628

- If window crank is fitted, remove it ⇒ [page 270](#) .
- Remove front door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Tape up door window to prevent it from sliding down.
- Remove bolts -2- (qty. 3).
- Remove window lifter mechanism -1- from mounting brackets of cable drum -3-.



Installing



Installing

- Fit window lifter mechanism -1- onto mounting brackets of cable drum -3-. Move door window up and down slightly so that the splines between window lifter mechanism and cable drum engage more easily.
- Tighten bolts -2- (qty. 3) to specified torque of 3 Nm.



6.4 Removing and installing front window crank

Removing

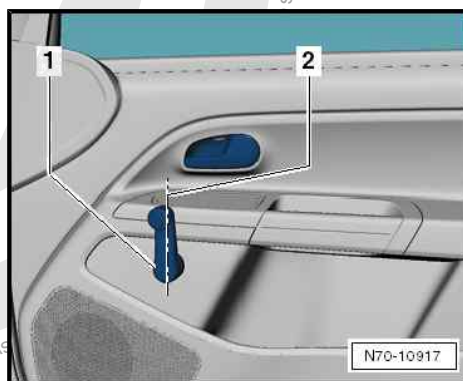
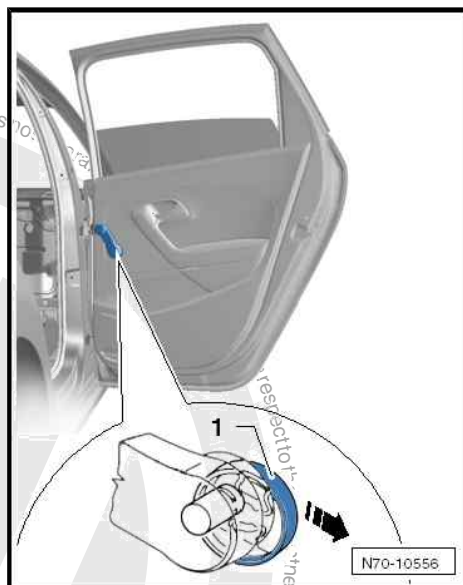
- Slide spacer ring -1- in -direction of arrow- and pull window crank off window lifter mechanism.

Installing

- Slide on spacer and press window crank onto window lifter mechanism.

The installation position of window crank -1- is upwards and vertical with window closed.

Deviation between window winders must be no more than 6°.



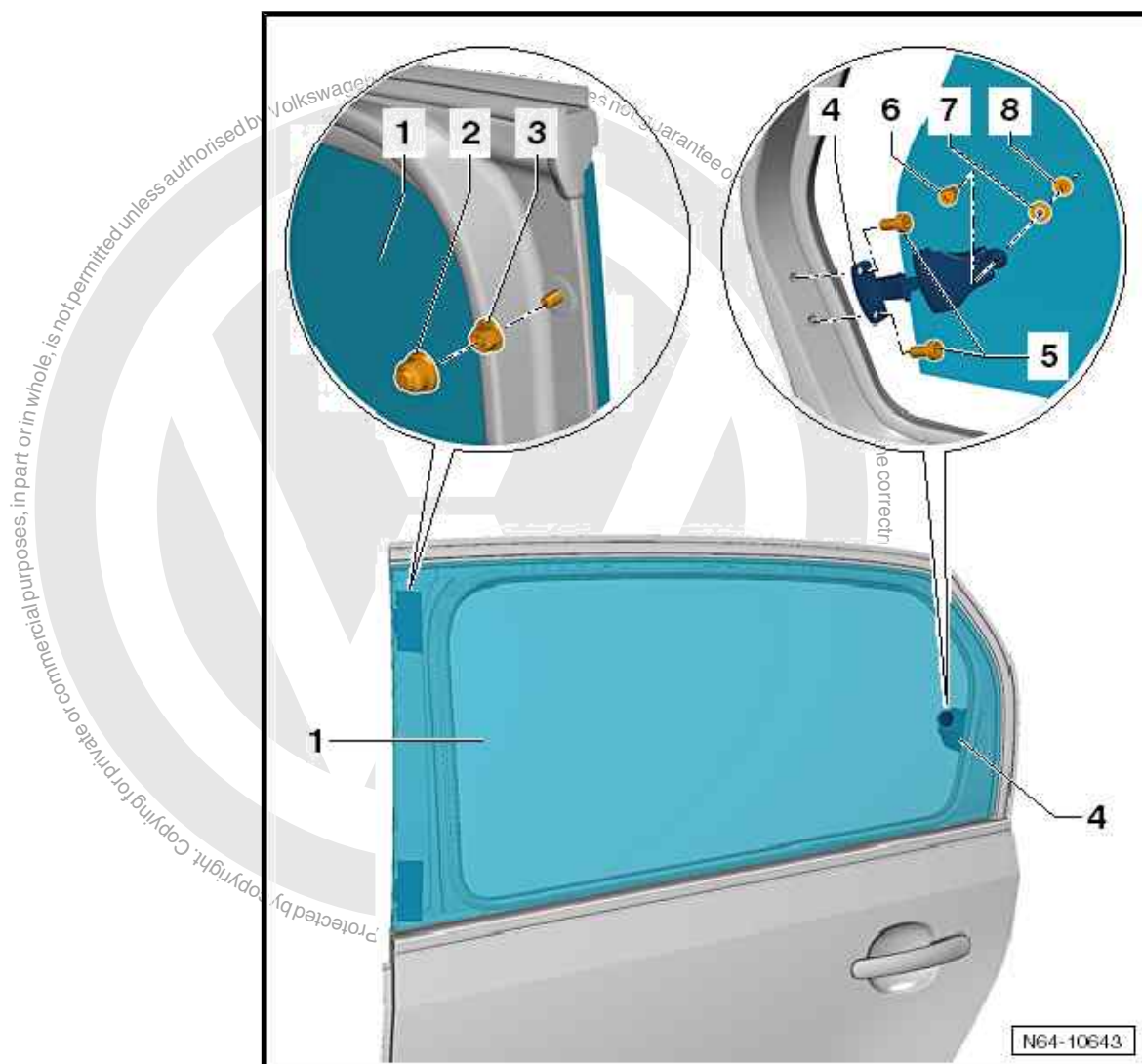
6.5 Removing and installing rear window regulator

Removing



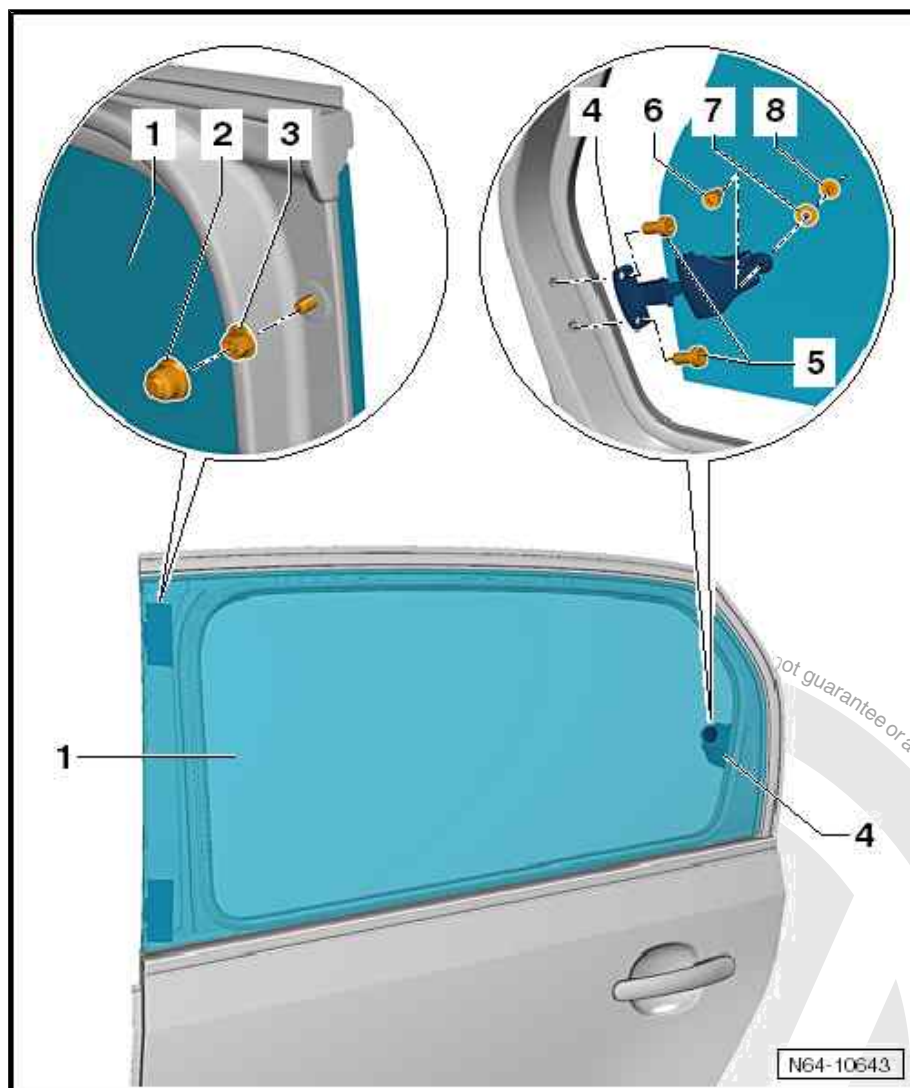
Note

The window regulator can be removed and installed when the window is installed or removed.



- Unscrew bolts -5-.
- Remove bolt -6- from threaded sleeve -8-.
- Remove window regulator -4- from door window -1-.

Installing



- If required, install door window ➤ [page 258](#).
- Insert undamaged seal -7- between door window -1- and threaded sleeve -8-.
- Install window regulator -4- to door window -1- loosely.
- Tighten window regulator -4- to rear door. Specified torque of bolts -5-: 8 Nm.
- Screw bolt -6- into threaded sleeve -8-. Specified torque: 4 Nm.



7 Window channels and seals

⇒ [“7.1 Removing and installing front window channel”, page 273](#)

⇒ [“7.2 Guide rail”, page 276](#)

⇒ [“7.3 Removing and installing rear window channel”, page 281](#)

⇒ [“7.4 Removing and installing front window slot seal”, page 282](#)

⇒ [“7.5 Removing and installing rear window slot strip”, page 286](#)

⇒ [“7.6 Removing and installing window seal”, page 288](#)

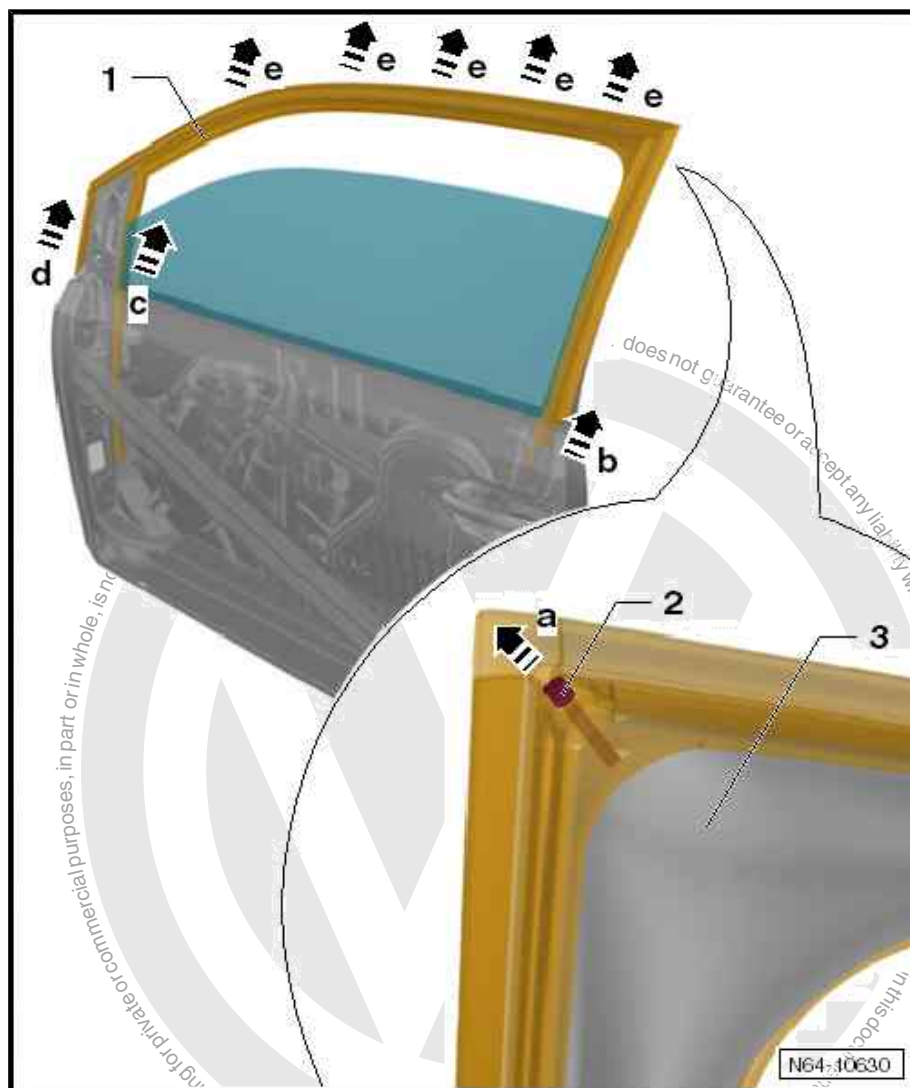
7.1 Removing and installing front window channel



Note

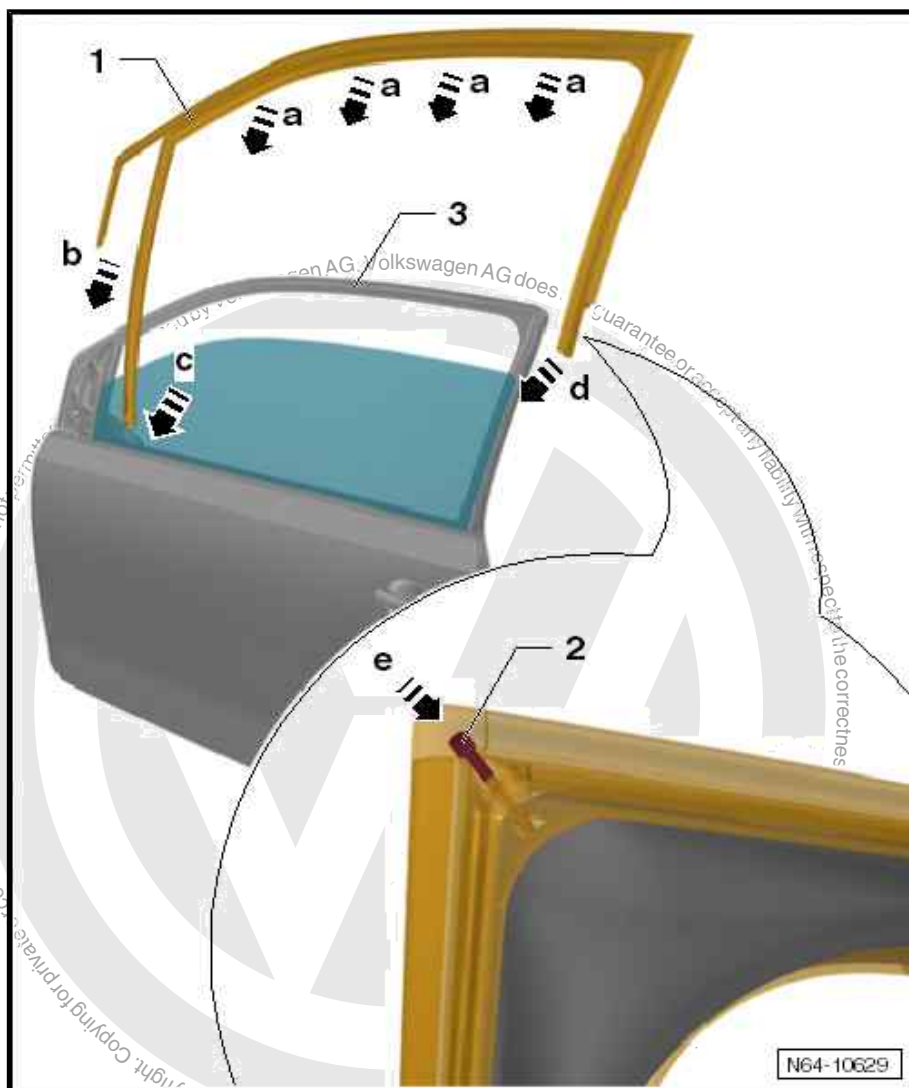
- ◆ *The removal and installation sequence is only for the left window channel. Removal and installation of the right window channel are similar.*
- ◆ *Do not bend window channel when removing!*

Removing



- Remove window slot inner seal ➤ [page 282](#) .
- Remove window slot outer seal ➤ [page 283](#) .
- Remove electrically or manually adjustable exterior mirror, depending on which is fitted ➤ [page 357](#) .
- Pull out securing pin -2- -arrow a-.
- Peel sealing lip of window channel -1- off the door flange -3- from the inside.
- Pull window channel -1- out of mountings on door -arrows b, c and d-.
- Pull window channel -1- off door flange -3- uniformly all around it -arrows e-.

Installing



- Spray window channel with soapy water to facilitate installation.
- Push window channel -1- from rear towards front onto door flange -3- -arrows a-.
- Insert window channel -1- into mountings on door -arrows b, c and d-.
- Fold sealing lip of window channel onto door flange -2- from the inside.
- Insert securing pin -2- -arrow e-.

i Note

To prevent wind noise, ensure window channel -1- seats evenly when installing.

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



7.2 Guide rail

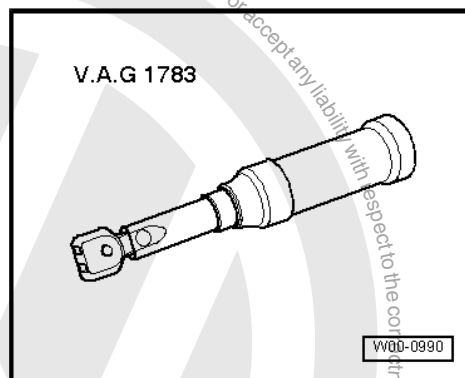
⇒ ["7.2.1 Removing and installing guide rail", page 276](#)

⇒ ["7.2.2 Removing and installing additional window channel", page 278](#)

7.2.1 Removing and installing guide rail

Special tools and workshop equipment required

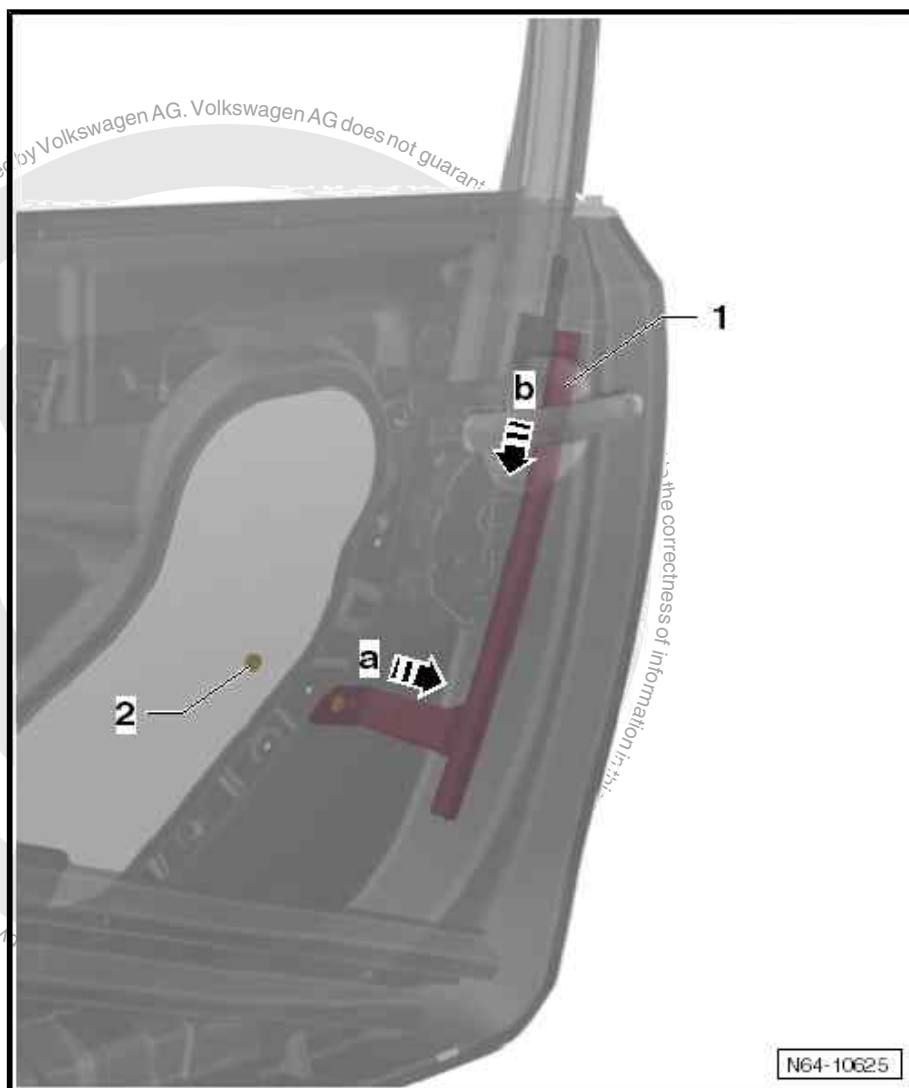
- ◆ Torque wrench - V.A.G 1783-



Note

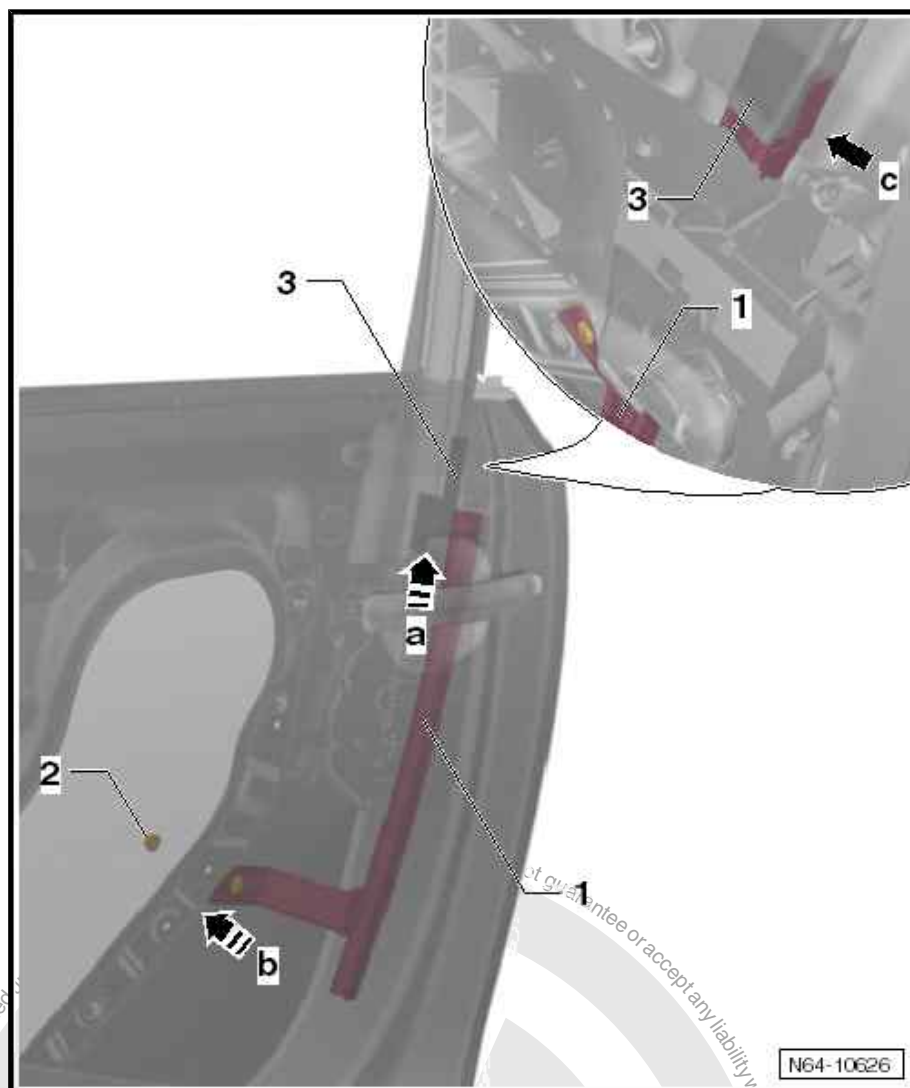
The removal and installation sequence is only for the left guide rail. Removal and installation of the right guide rail are similar.

Removing



- If window crank is fitted, remove it ⇒ [page 270](#) .
- Remove front door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Removing cover
- Undo and remove hexagon nut -2-.
- Push guide rail -1- inwards -arrow a-. And pull guide rail downwards out of window channel -arrow b-.

Installing



- Insert guide rail -1- into window channel -3- -arrow a-.
- The guide rail clip must be exactly fitted onto the window channel -arrow c-.
- Insert guide rail threaded stud into door -arrow b-.
- Tighten hexagon nut -2- to specified torque of 8 Nm.

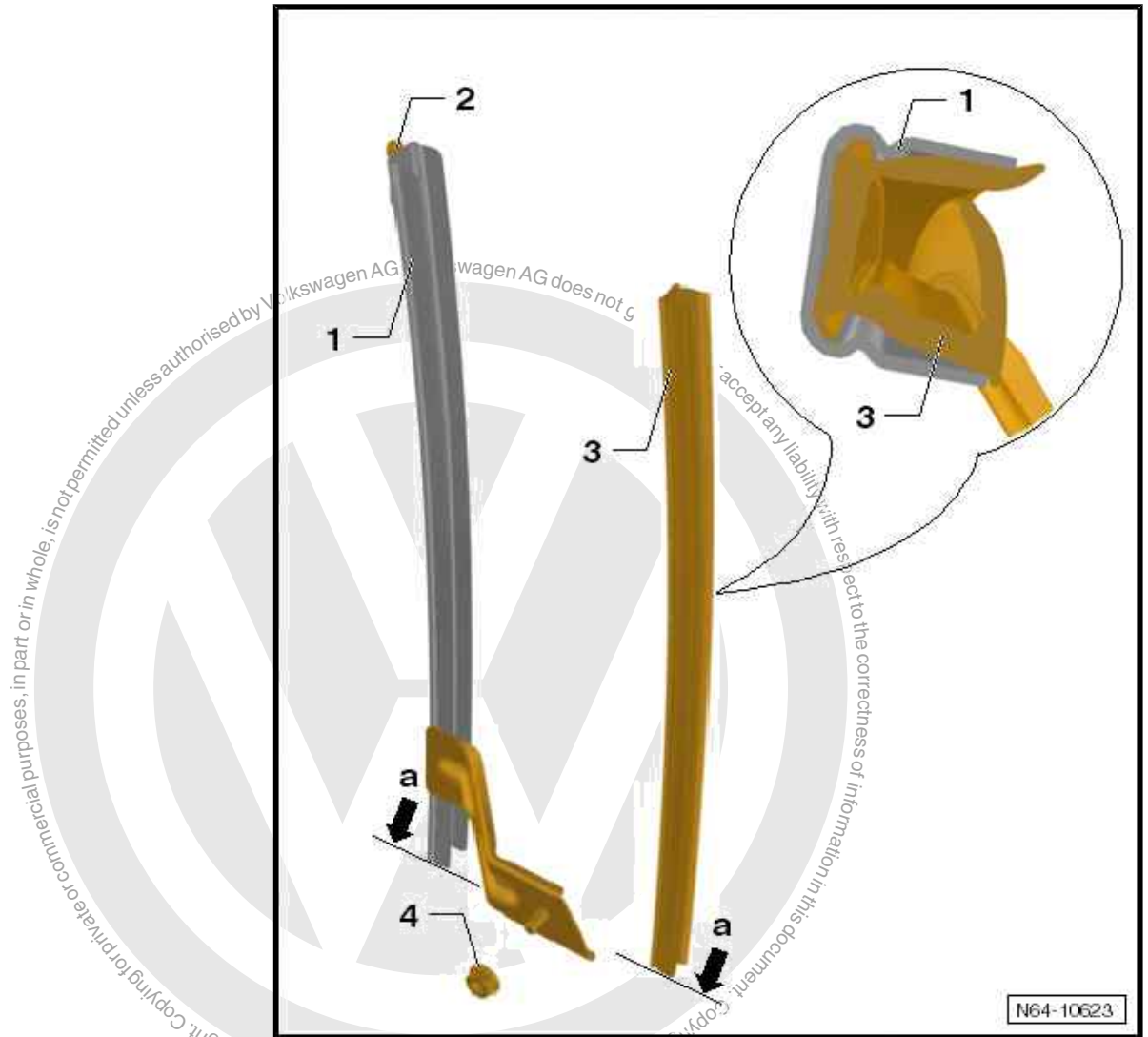
7.2.2 Removing and installing additional window channel



Note

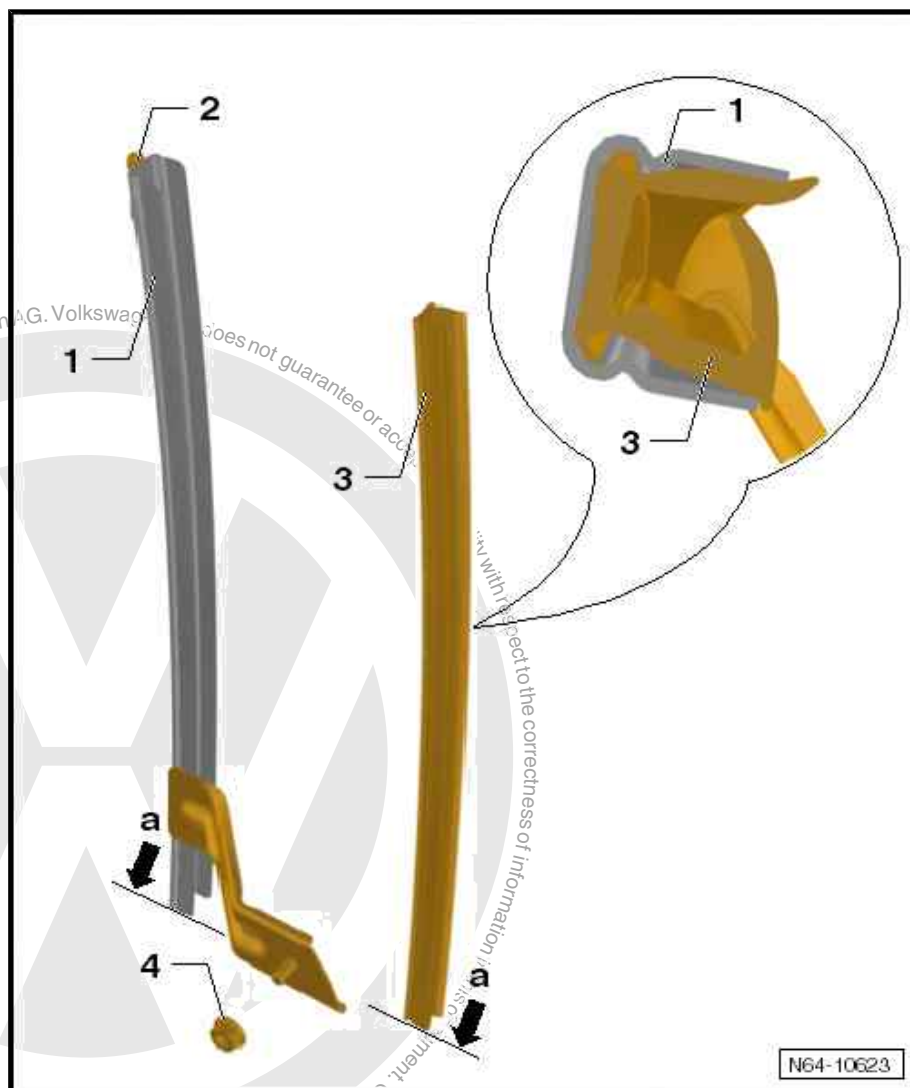
Removal and installation are only described for the left window slot inner seal. Removal and installation of the right window channel are similar.

Removing



- If window crank is fitted, remove it [page 270](#).
- Remove front door trim ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Removing cover
- Pull additional window channel -3- off guide rail -1-.

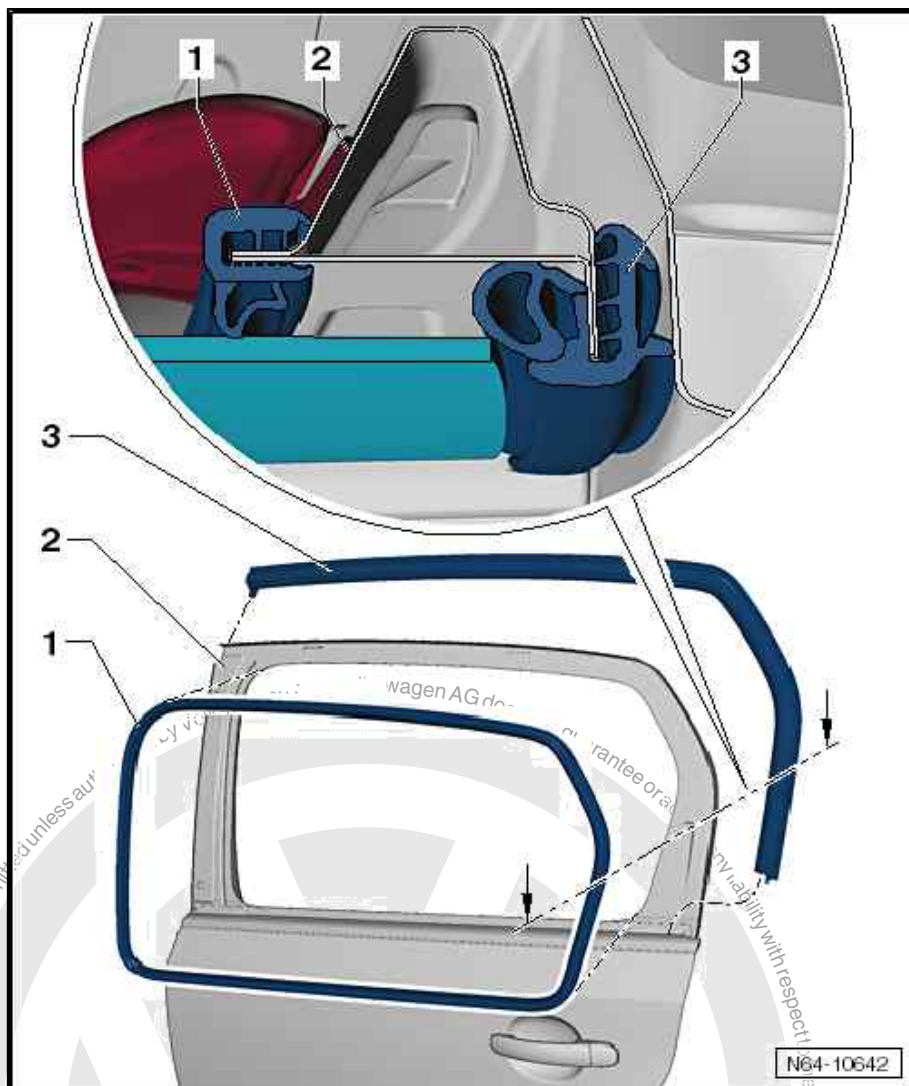
Installing



- Insert additional window channel -3- into guide rail -2-.
- Align lower edges of additional window channel and guide rail with each other -arrows a-.



7.3 Removing and installing rear window channel



Removing

- Remove rear window ➤ [page 258](#) .
- Pull window channel -3- off panel flange -2-. Do not bend it when doing this.

Installing

- Press window channel -3- onto panel flange -2-.
- Install rear door window ➤ [page 258](#) .



7.4 Removing and installing front window slot seal

⇒ ["7.4.1 Removing and installing front window slot seal, interior", page 282](#)

⇒ ["7.4.2 Removing and installing front window slot seal, exterior", page 283](#)

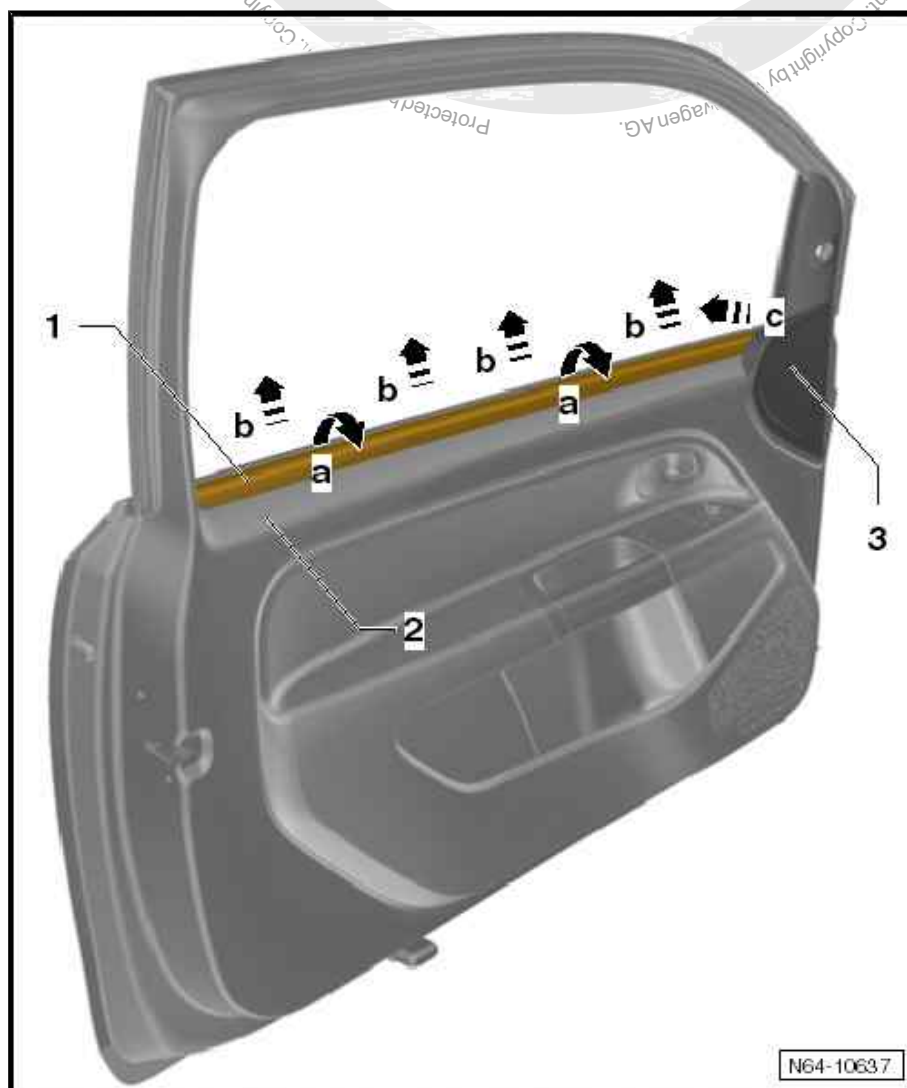
7.4.1 Removing and installing front window slot seal, interior



Note

Removal and installation are only described for the left window slot inner seal. Removal and installation of the right window slot outer seal are similar.

Removing

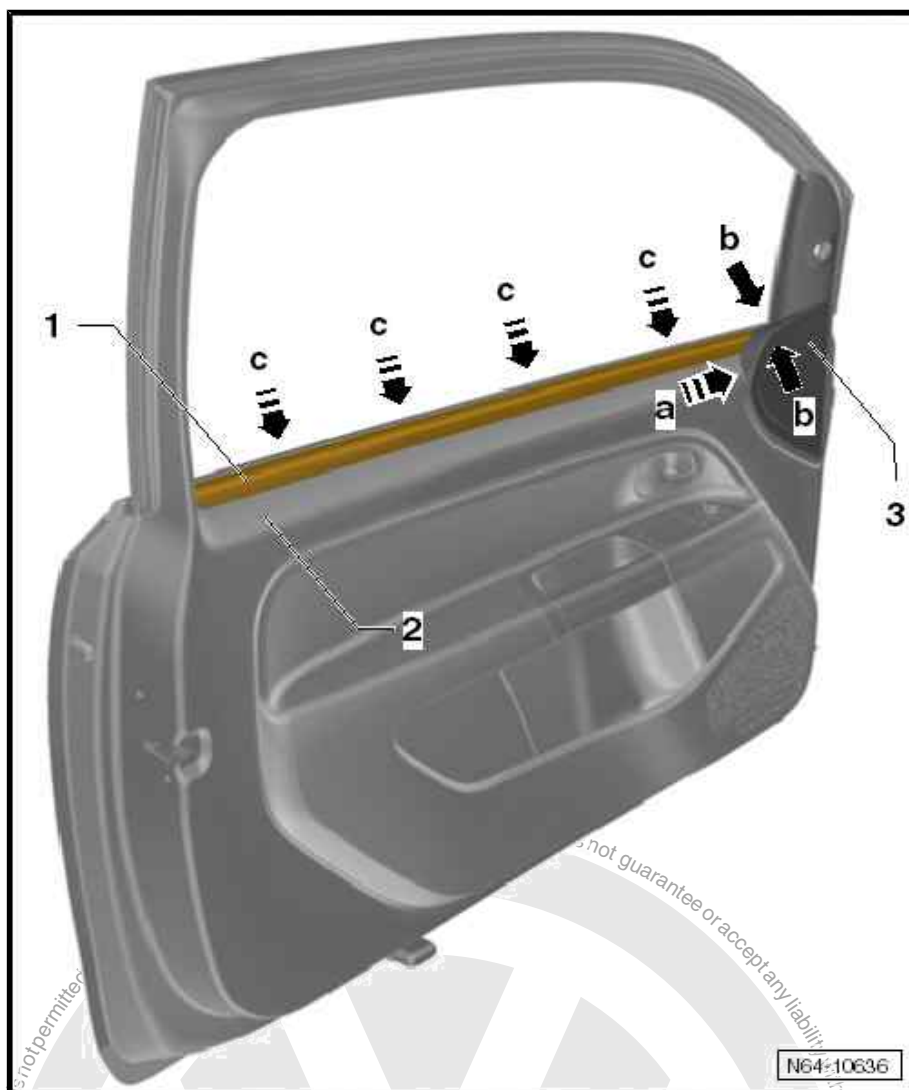


- Swivel window slot inner seal -1- out of catches in window slot -arrows a-.



- Lift off window slot inner seal -1- uniformly from flange -2- in direction of -arrows b- without bending or distorting it.
- Pull out window slot inner seal -1- from beneath cover -3- -arrow c-.

Installing



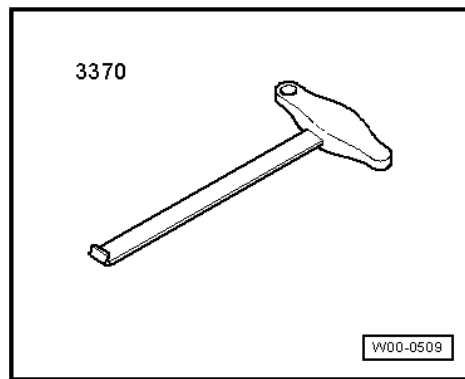
- Insert window slot inner seal -1- underneath cover -3- -arrow c-.
- Centre window slot inner seal -1- -arrows b- and press it uniformly -arrows c- and by hand onto door flange -2-.
- The window slot inner seal -1- must engage audibly in flange.

7.4.2 Removing and installing front window slot seal, exterior

Special tools and workshop equipment required



◆ Front end hook - 3370-

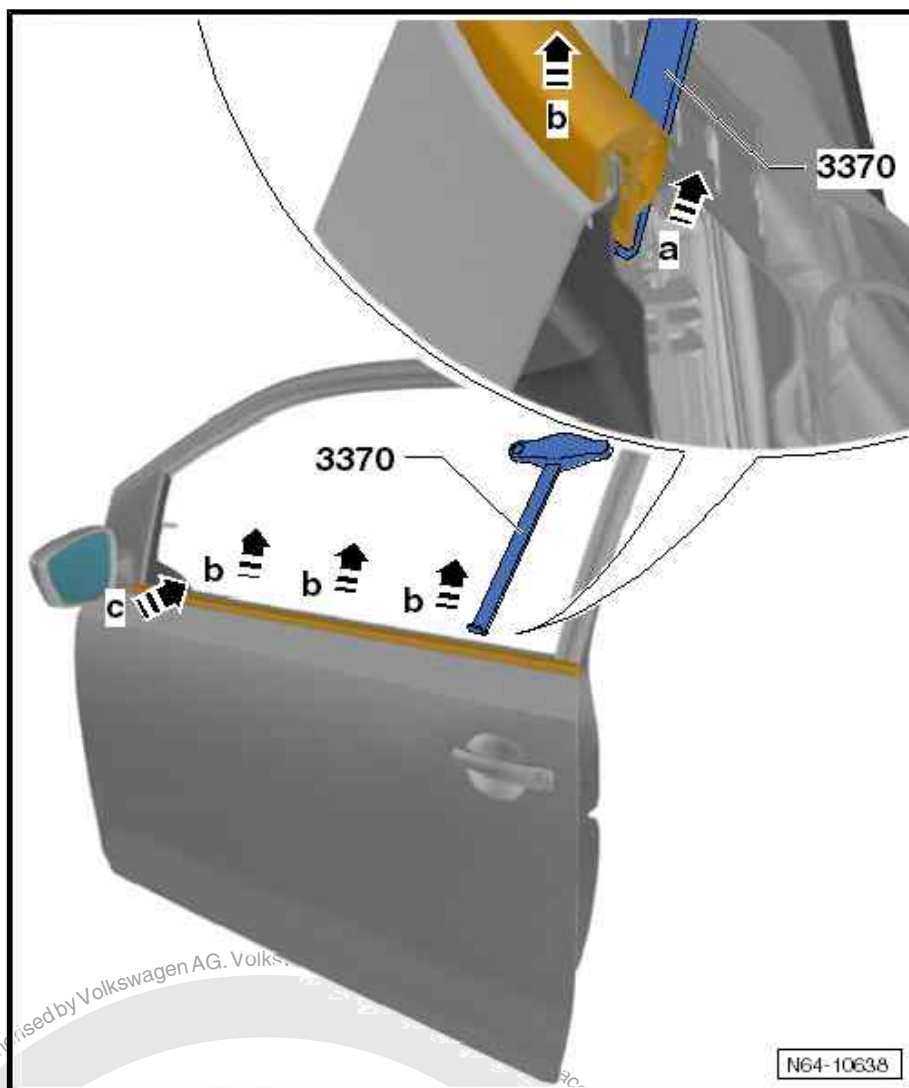


Removing



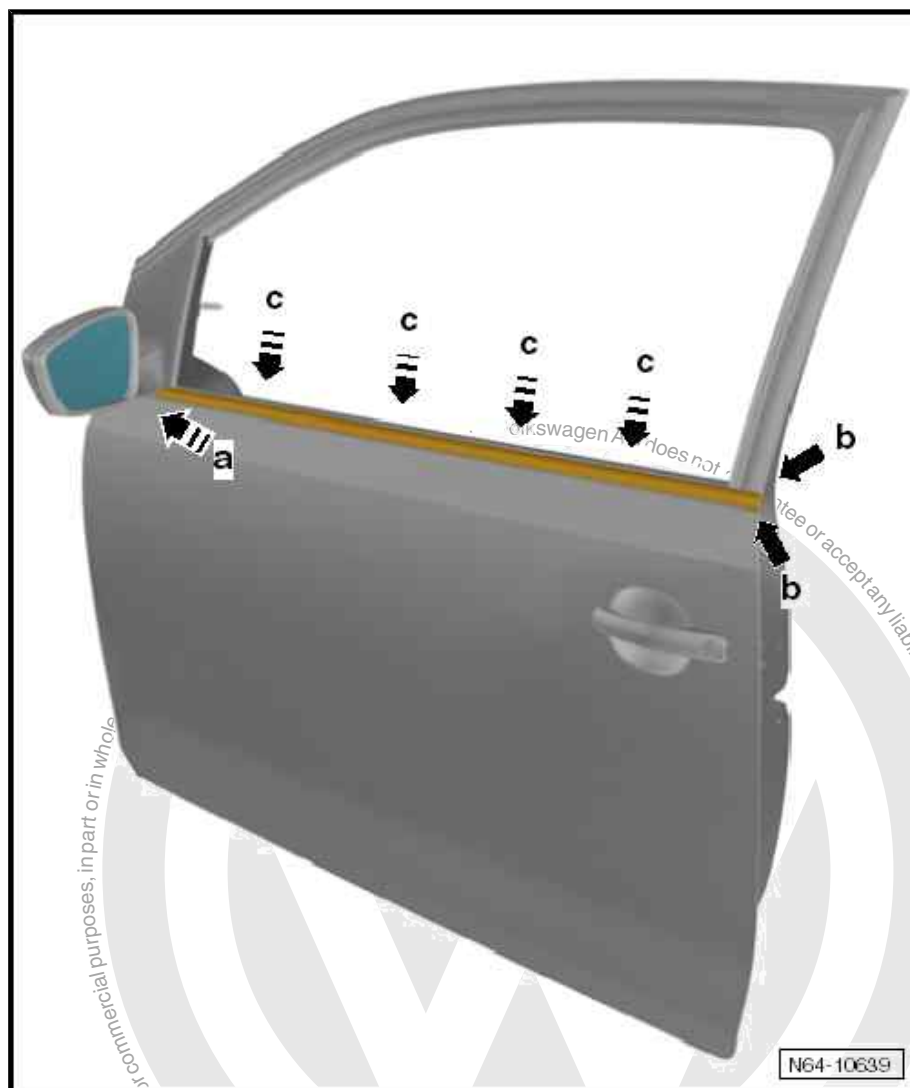
Note

- ◆ *The core of the window slot outer seal is a metal insert.*
- ◆ *If it is bent or distorted, the window slot outer seal can no longer be straightened out. It will remain "wavy".*
- ◆ *Therefore, the window slot outer seal must be pulled off and pressed on evenly, without bending or distorting it.*
- ◆ *Removal and installation are only described for the left window slot outer seal. Removal and installation of the right window slot outer seal are similar.*



- Remove window slot inner seal ➤ [page 282](#) .
- Pull window slot outer seal out of catches in flange -arrow a- using front-end hook - 3370- .
- Slightly pull window slot outer seal uniformly from front door flange -arrows b- without bending or distorting window slot outer seal.
- Pull off window slot outer seal from underneath exterior mirror -arrow c-.

Installing



Note

- ◆ The use of assembly aid is allowed.
- ◆ The use of striking tools is not allowed for installing outer window slot seal.
- Insert window slot outer seal underneath exterior mirror -arrow c-.
- Align window slot outer seal -1- with B-pillar -arrows b- and press it uniformly -arrows c- and by hand onto door flange.
- Install window slot inner seal ➔ [page 282](#) .

7.5 Removing and installing rear window slot strip



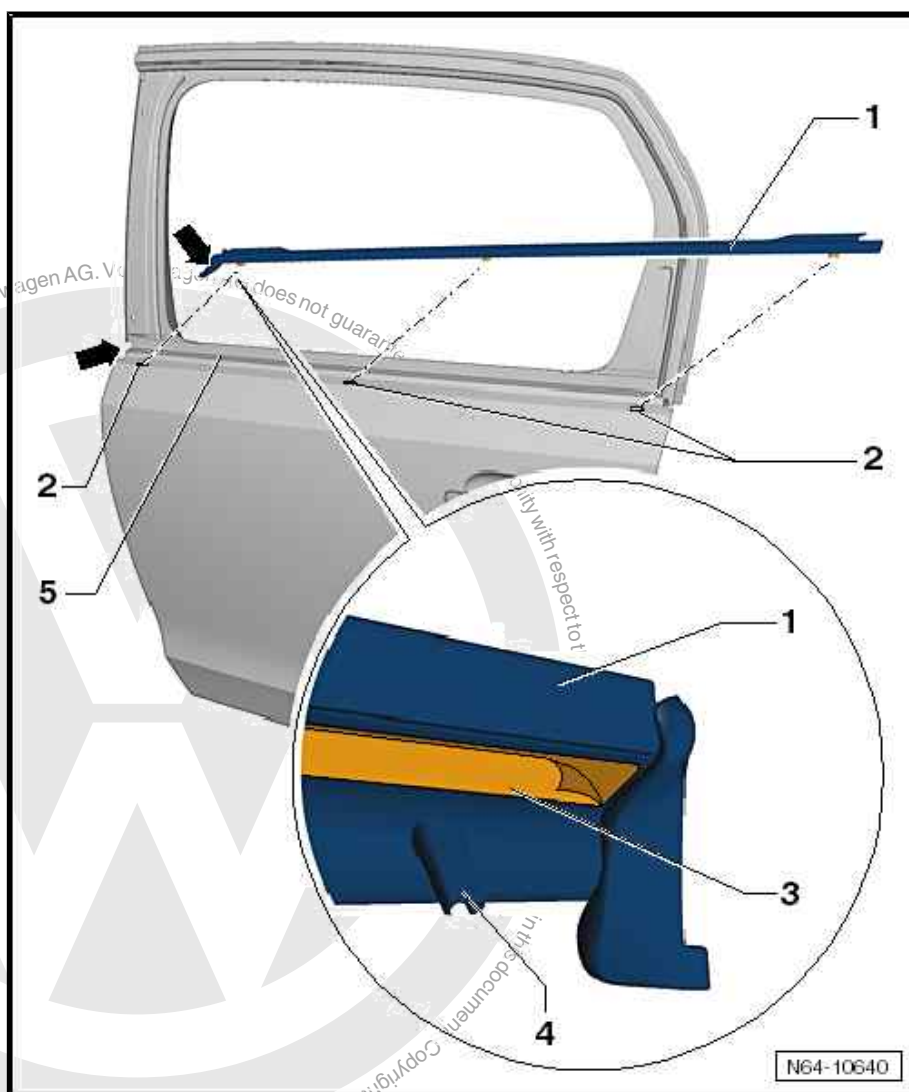
Note

The window slot trim is bonded to the rear door. Therefore the window slot trim cannot be removed undamaged.

Fitting instructions



- ◆ Before removing the window slot trim, heat trim with a hot air blower - V.A.G 1416- .
- ◆ If a window slot trim is removed and reattached, only use adhesive remover - D 002 000 10- to remove adhesive residues.
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The window slot trim must be bonded in place immediately after cleaning.
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.



Removing

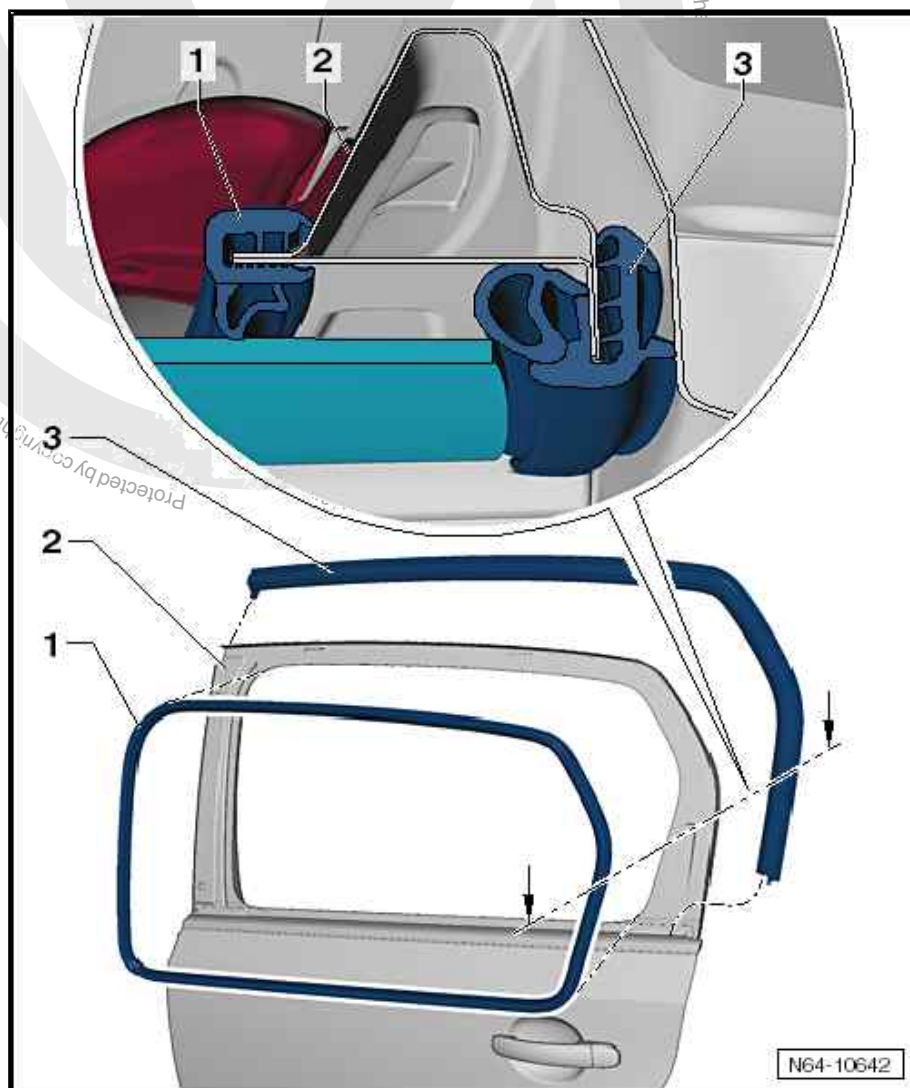
- Remove rear window ➔ [page 258](#) .
- Heat window slot trim -1-, using hot air blower - V.A.G 1416- -
- Pull window slot trim -1- off door -5-.



Installing

- Remove adhesive residue and clean bonding surface -5- using adhesive remover D 002 000 10- .
- Align window slot trim -1- with centralising pin -4- on door.
- Pull protective backing -3- off adhesive tape.
- Press window slot trim -1- forcibly onto door -5-.

7.6 Removing and installing window seal



Removing

- Remove rear window ➔ [page 258](#) .
- Pull seal -1- off panel flange -2-.

Installing

- Press seal -1- onto panel flange -2-.
- Install rear door window ➔ [page 258](#) .



66 – Exterior equipment

1 Radiator grille and front trim

⇒ [“1.2 Removing and installing radiator grille”, page 289](#)

⇒ [“1.1 Assembly overview - radiator grille”, page 289](#)

1.1 Assembly overview - radiator grille

1 - Radiator grille

- ❑ Removing and installing
⇒ [page 289](#)

2 - Bumper cover

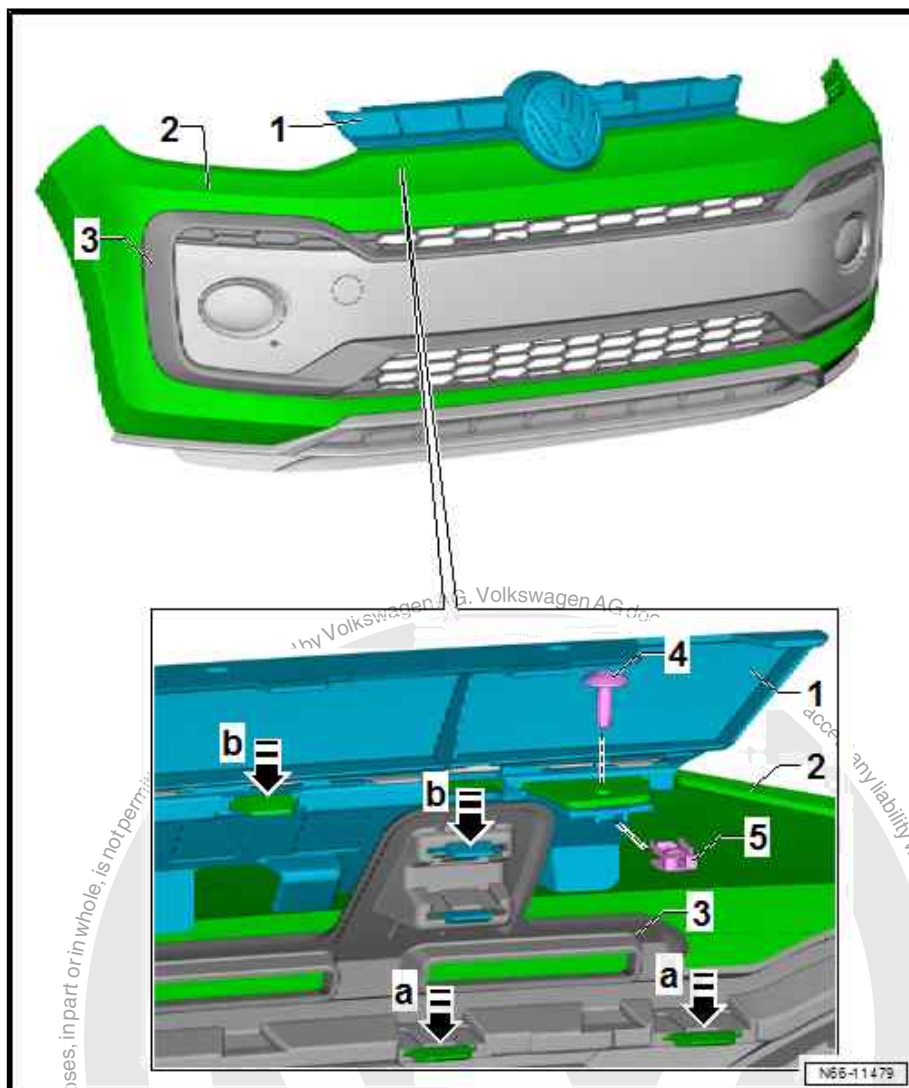
3 - Ventilation grille

4 - Bolt

- ❑ Qty. 2
- ❑ 2.0 Nm

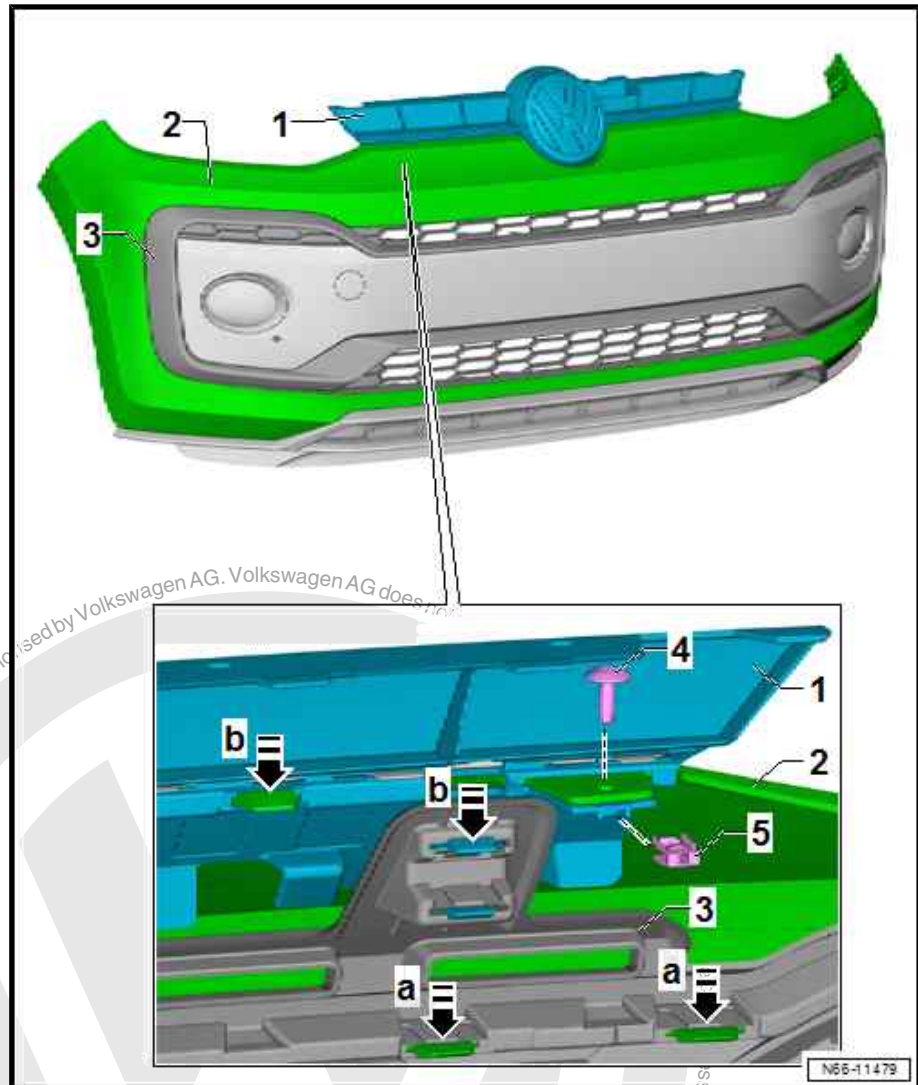
5 - Clamping nut

- ❑ Qty. 2



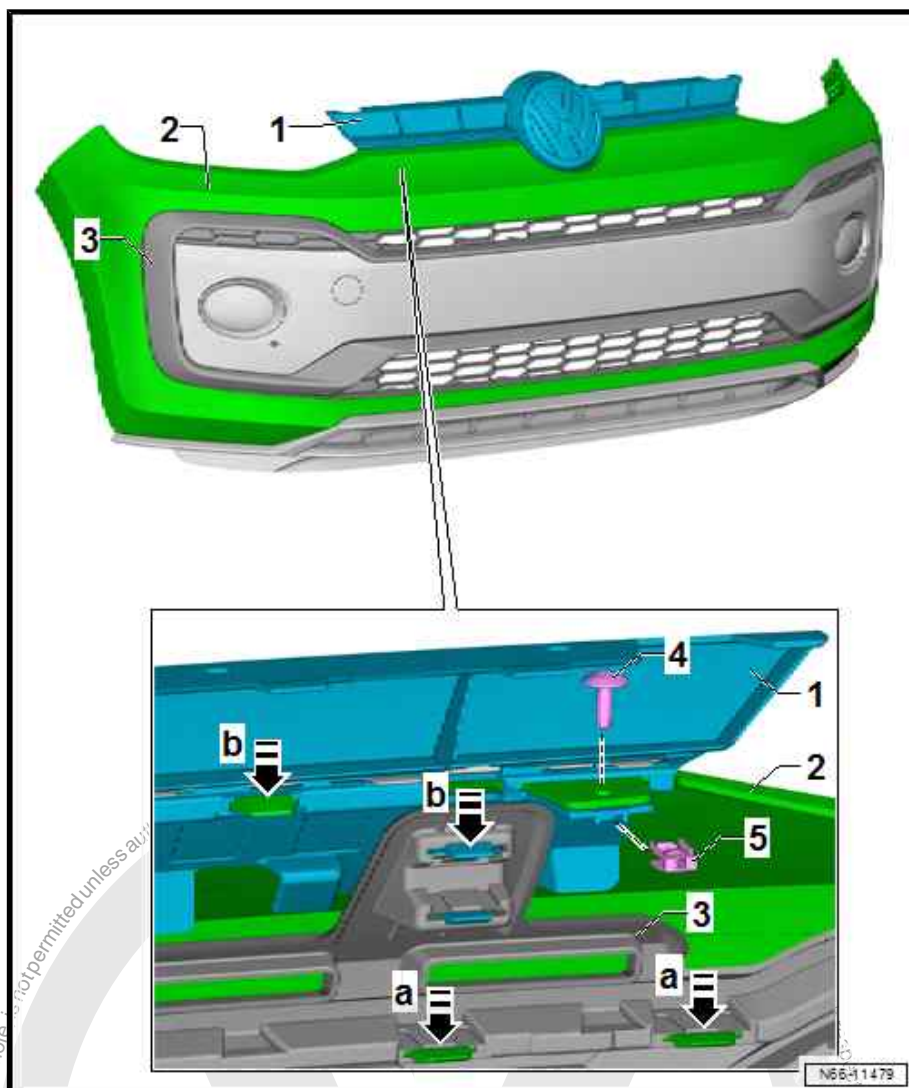
1.2 Removing and installing radiator grille

Removing



- Remove bumper cover -2- ➔ [page 214](#) .
- Unscrew bolts -4-.
- Unlock fasteners of ventilation grille -3- in the upper area -arrows a and b-.
- Pull air intake grille -3- out of fasteners in front bumper cover.
- Unlock fasteners of radiator grille -1- -arrows b-.
- Pull radiator grille -1- out of fasteners in front bumper cover.

Installing



- Insert radiator grille -1- into the front bumper cover -2- and engage all looking hooks -arrows b-.
- Insert ventilation grille -3- into the front bumper cover -2- and engage all looking hooks -arrows a and b-.
- Tighten bolts -4-.

Specified torques

- ◆ Bolts ➔ [page 289](#) .



2 Spoiler

⇒ ["2.1 Assembly overview - spoiler, GTI", page 292](#)

⇒ ["2.2 Removing and installing spoiler, GTI", page 292](#)

2.1 Assembly overview - spoiler, GTI

1 - Spoiler

- ☐ Removing and installing
⇒ [page 292](#)

2 - Pull-off tab

- ☐ For double-sided adhesive tape

3 - Adhesive tape

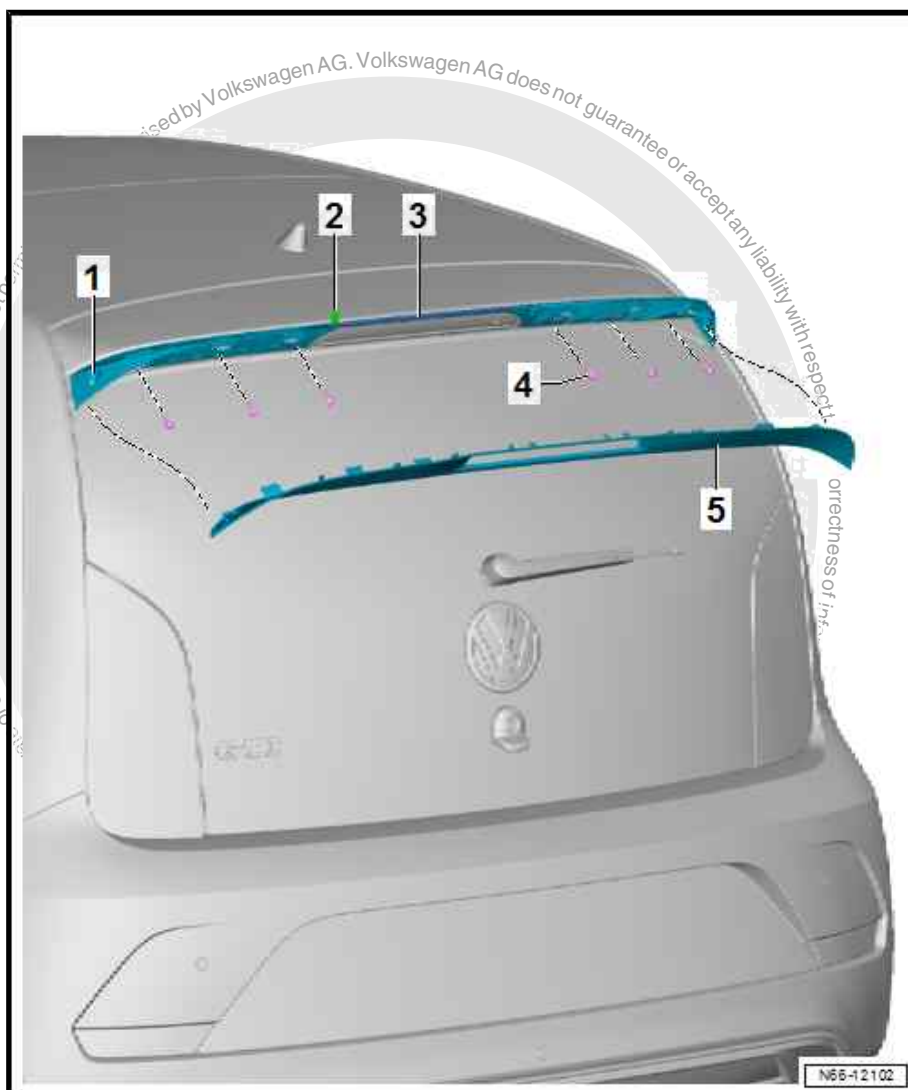
- ☐ Double-sided

4 - Bolts

- ☐ Qty. 6
- ☐ 8 Nm

5 - Trim

- ☐ Removing and installing
⇒ [page 292](#)

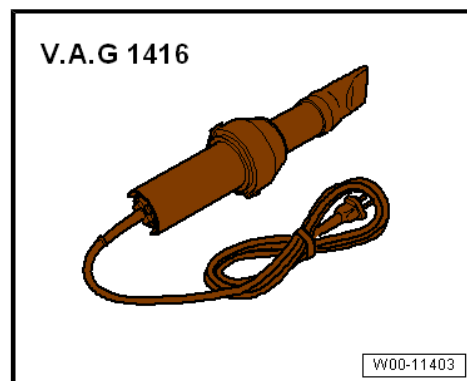


2.2 Removing and installing spoiler, GTI

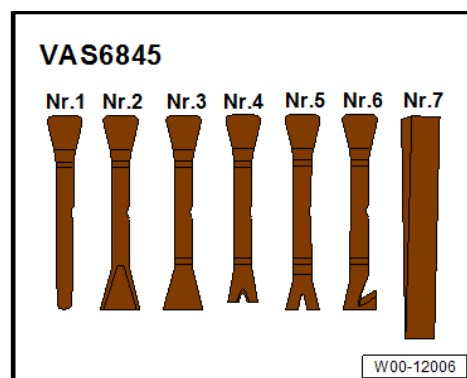
Special tools and workshop equipment required



◆ Hot-air blower - V.A.G 1416-



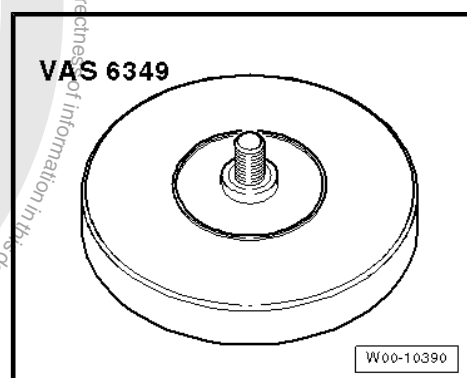
◆ Scraper set - VAS 6845-



◆ Torque wrench - V.A.G 1783-



◆ Adhesive strip remover - VAS 6349-



Installation instructions for bonded spoilers

Roof spoiler is bolted on and bonded with double-sided adhesive tape ex-factory.

If a removed side spoiler is reused, the corresponding adhesive strips need to be prepared for this.



Use an adhesive tape as per ⇒ Electronic parts catalogue ETKA .

- Cut adhesive tape to size. Make sure to leave a tab of protective film (approx. 15 mm) to allow for pulling off protective film.

The temperatures of the room, work bay and vehicle must be approximately the same (at least 15°C).

- Remove existing adhesive residues of double-sided adhesive tape with adhesive remains remover - VAS 6349- .

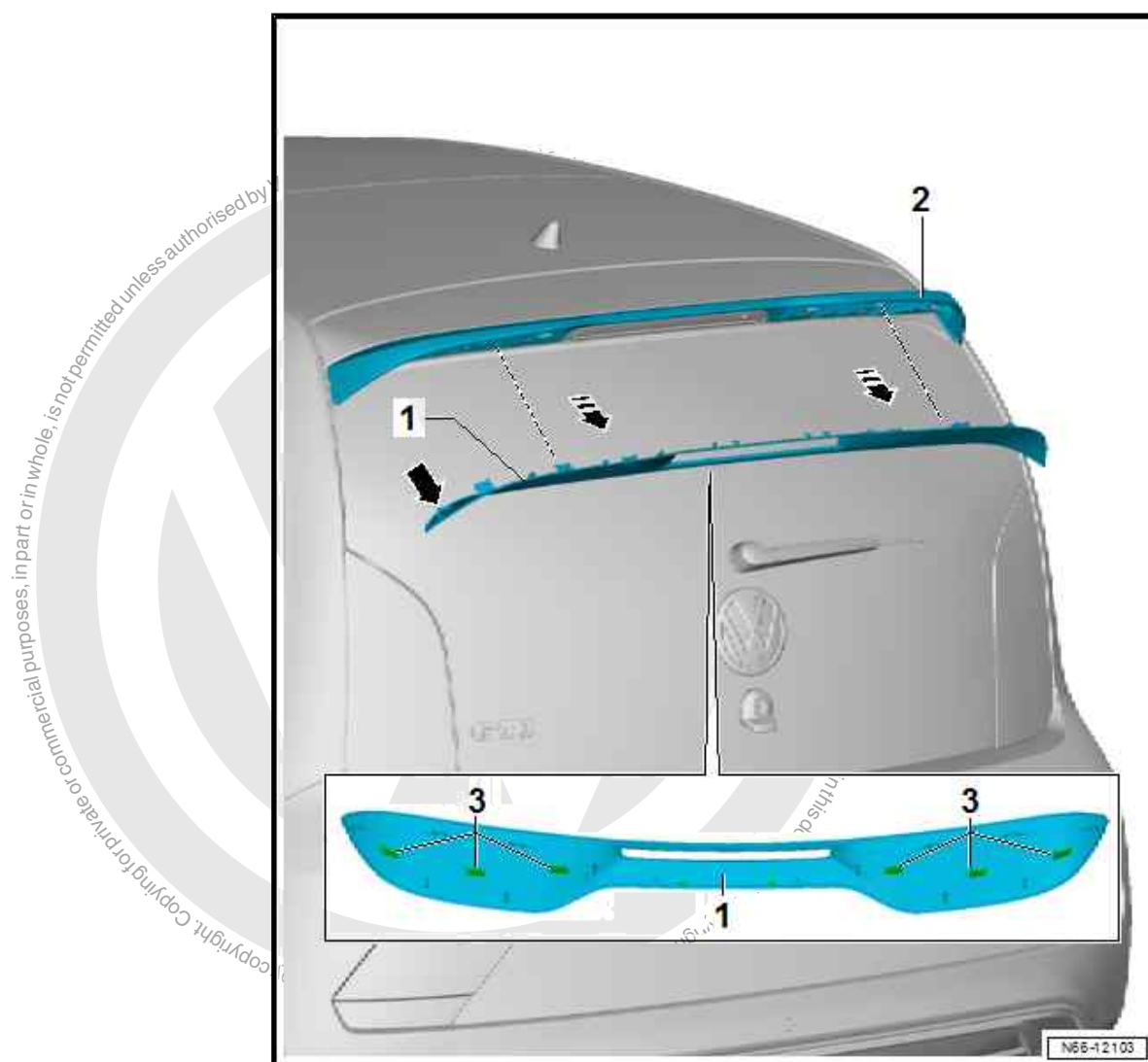
Always use a clean, lint-free cloth for cleaning.

Keep adhesive surface clean and free of grease.

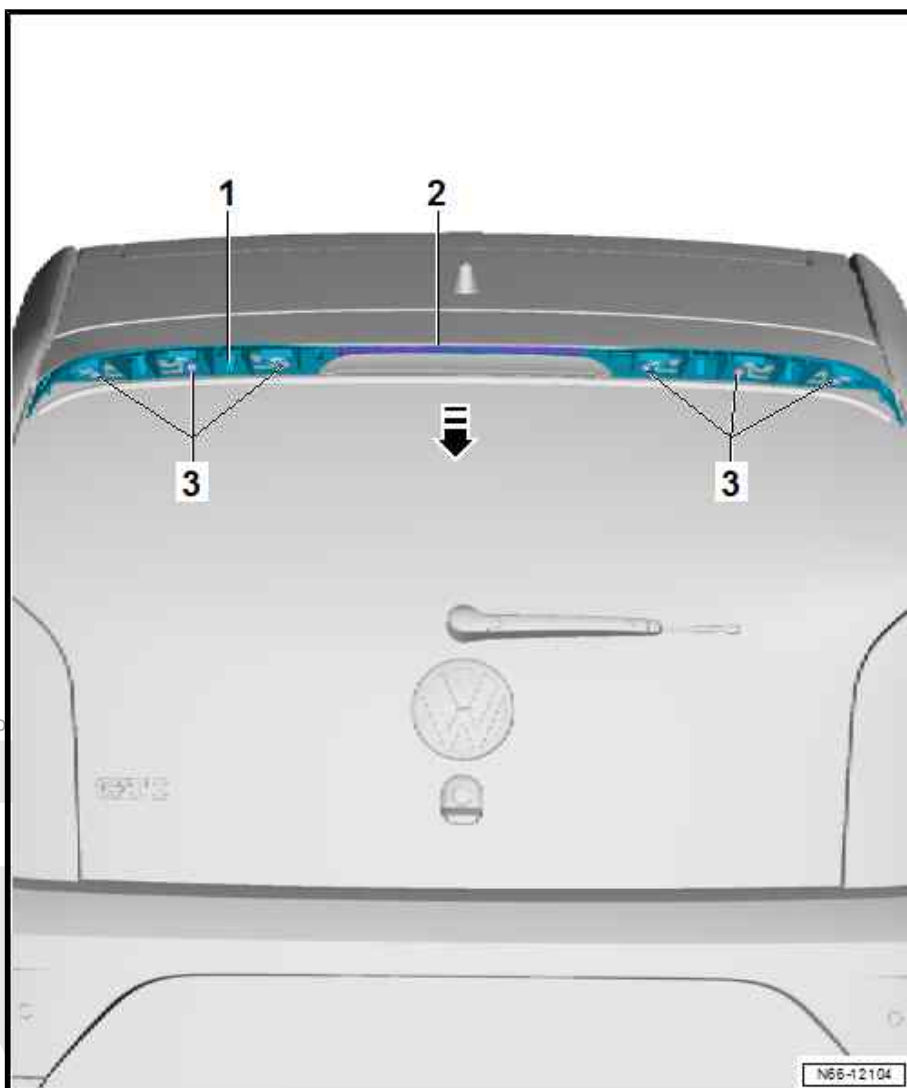
Remove backing only immediately before installation.

Handling strength for roof spoiler: 1 hour.

Removing



- Starting from outside -arrow-, unclip roof spoiler trim -1- from fasteners on left and right of roof spoiler -2- using scraper - VAS 6845 Nr.3- .
- Unclip roof spoiler trim -1- from remaining spring clips -3- in direction of -arrows-.

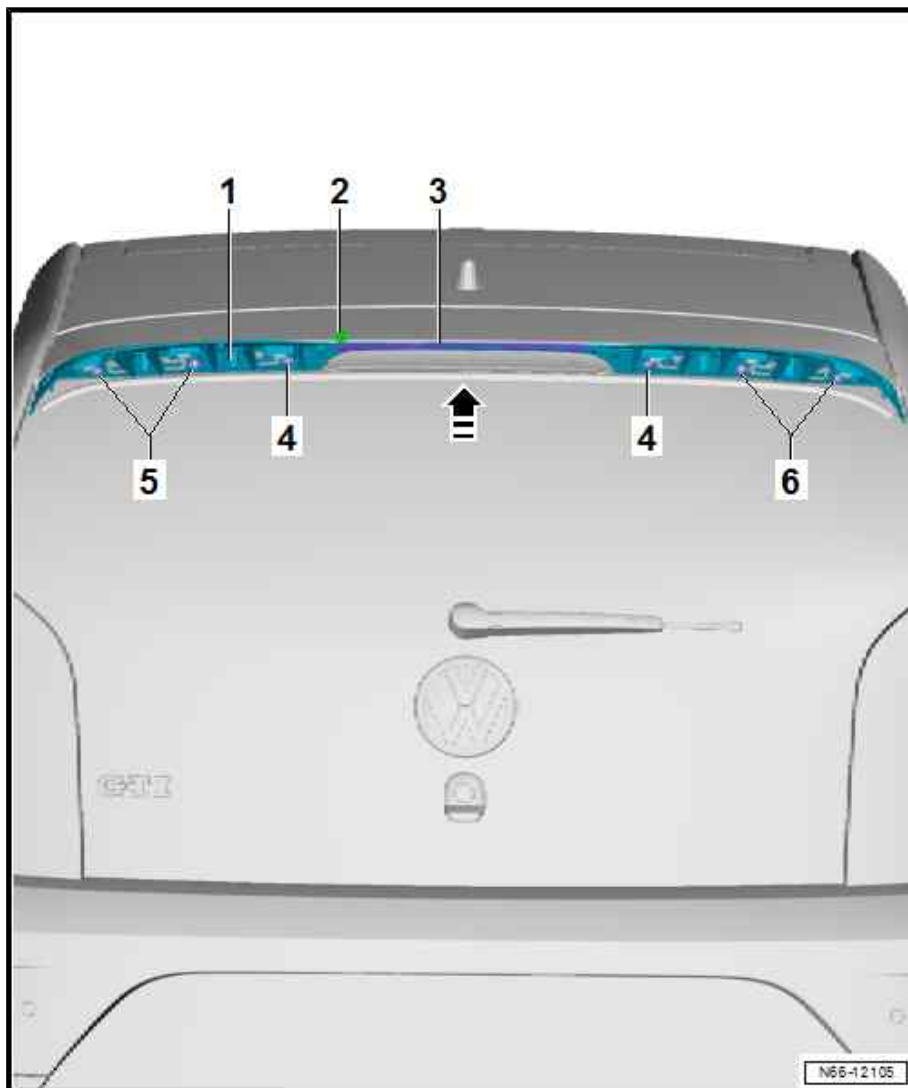


- Before removing adhesive tape -2-, heat it with hot air blower - V.A.G 1416- .
- Unscrew bolts -3-.
- Remove roof spoiler -1- in direction of -arrow-.

Installing

Preparing rear lid for bonding

- Remove existing adhesive residues of double-sided adhesive tape with adhesive remains remover - VAS 6349- .
- Ensure that the adhesive surfaces are free of dust and grease.

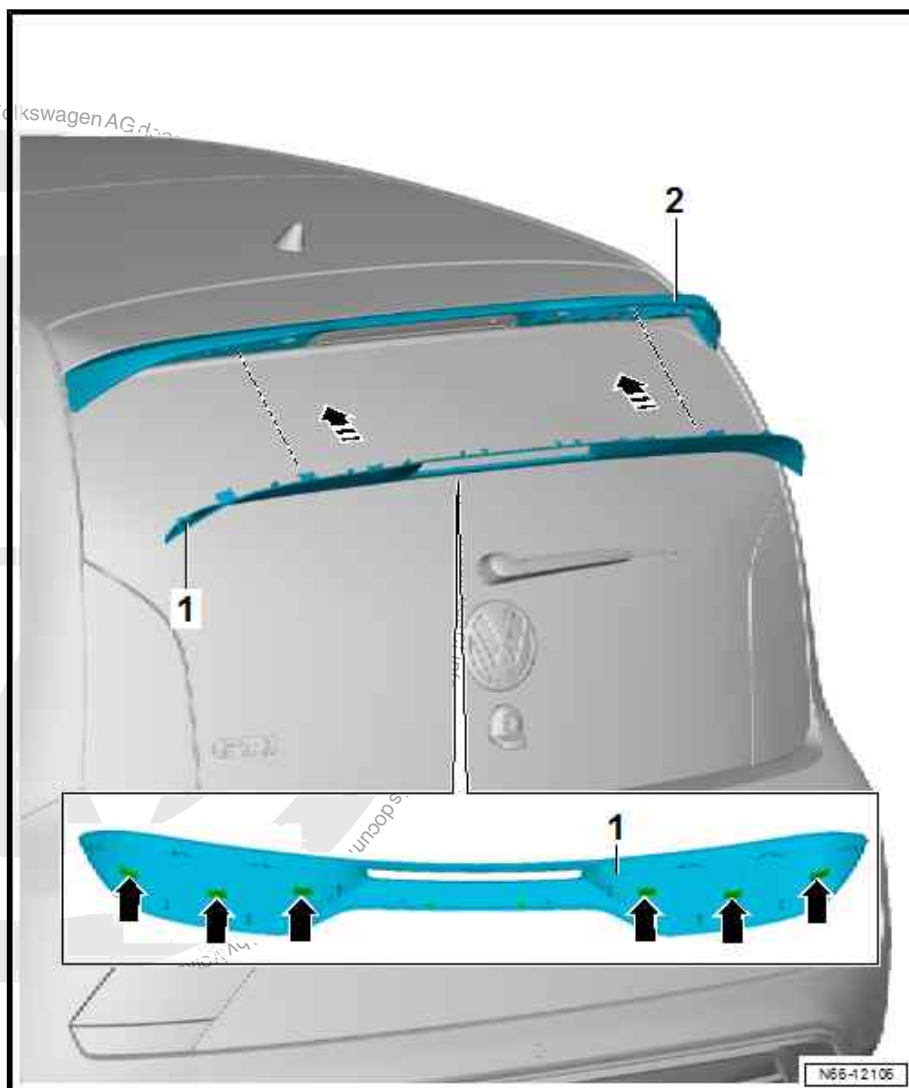


Install in reverse order of removal, observing the following:

Adhere to the installation instructions for bonded spoilers

⇒ [page 293](#) .

- Align roof spoiler -1- properly in installation position.
- Tighten bolts -4- hand-tight.
- Pull off protective liner -2- of adhesive tape -3-, and press on roof spoiler -1-.
- Tighten bolts -4-.
- Tighten bolts -5-, then tighten bolts -6-.



- Remove remaining spring clips from roof spoiler -2-, and insert them into roof spoiler trim -1- for installation.
- Clip roof spoiler trim -1- onto roof spoiler -2- at bottom and at sides.
- Engage remaining spring clips -arrows- working from inside towards outside.



Note

The spring clips must be heard to engage in the roof spoiler.

Specified torques

- ◆ ➤ [“2.1 Assembly overview - spoiler, GTI”, page 292](#)



3 Mouldings, trims, extensions

- ⇒ ["3.1 Assembly overview - side member trim", page 298](#)
- ⇒ ["3.2 Assembly overview - A-pillar trim", page 300](#)
- ⇒ ["3.3 Removing and installing side member trim", page 300](#)
- ⇒ ["3.4 Removing and installing B-pillar trim", page 312](#)
- ⇒ ["3.7 Removing and installing entry moulding", page 323](#)
- ⇒ ["3.8 Removing and installing trim strip", page 326](#)

3.1 Assembly overview - side member trim

⇒ ["3.1.1 Assembly overview - side member trim, e-up!, GTI", page 298](#)

⇒ ["3.1.2 Assembly overview - side member trim, Cross up!", page 299](#)

3.1.1 Assembly overview - side member trim, e-up!, GTI

1 - Side member trim

- ☐ Removing and installing
⇒ [page 300](#)

2 - Clip

- ☐ Part of side member trim
- ☐ Qty. 2

3 - Bolts

- ☐ Qty. 2
- ☐ 2 Nm

4 - Retaining strip

- ☐ Removing and installing

5 - Bonding surfaces

- ☐ Qty. 2

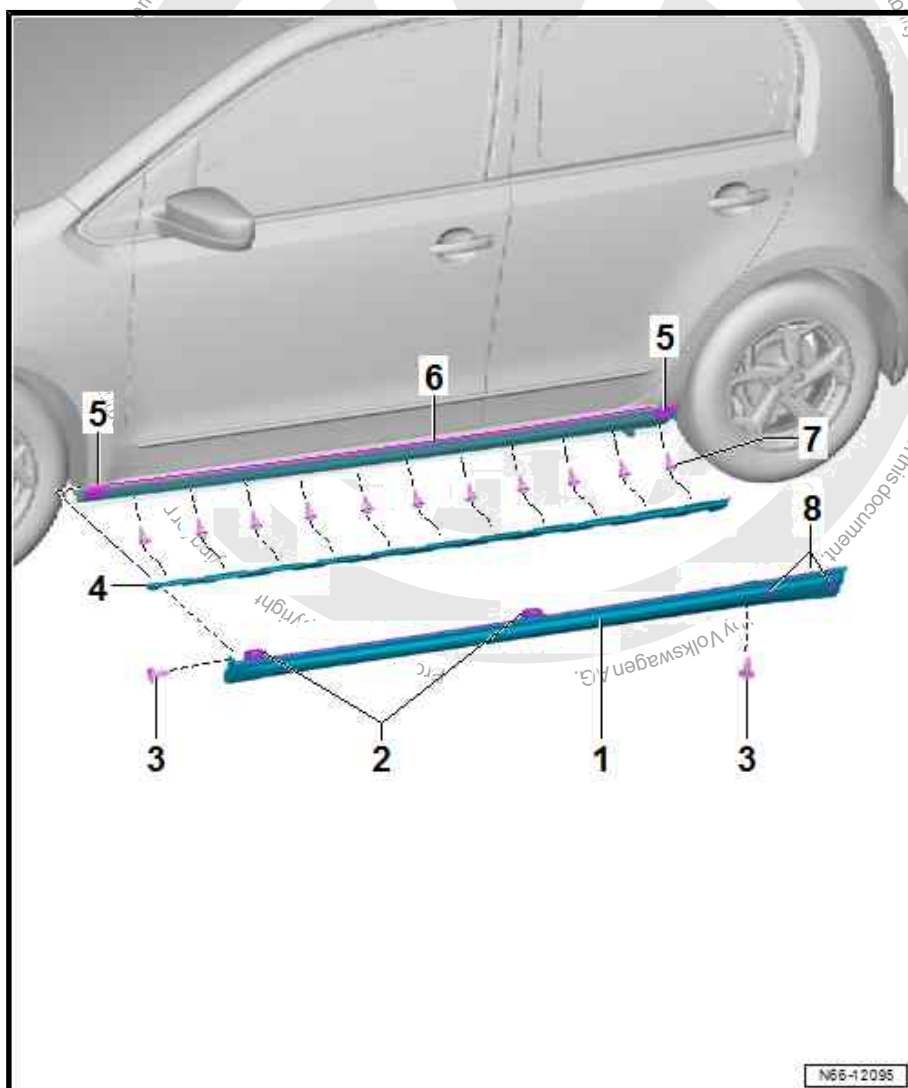
6 - Side member

7 - Bolts

- ☐ Qty. 11
- ☐ 1.2 Nm

8 - Adhesive tape

- ☐ Double-sided
- ☐ Part of side member trim





3.1.2 Assembly overview - side member trim, Cross up!

1 - Side member trim

- ☐ Removing and installing

2 - Clip

- ☐ Qty. 2
- ☐ Part of side member trim

3 - Bolt

- ☐ Qty. 2
- ☐ 2 Nm

4 - Retaining strip

- ☐ Removing and installing

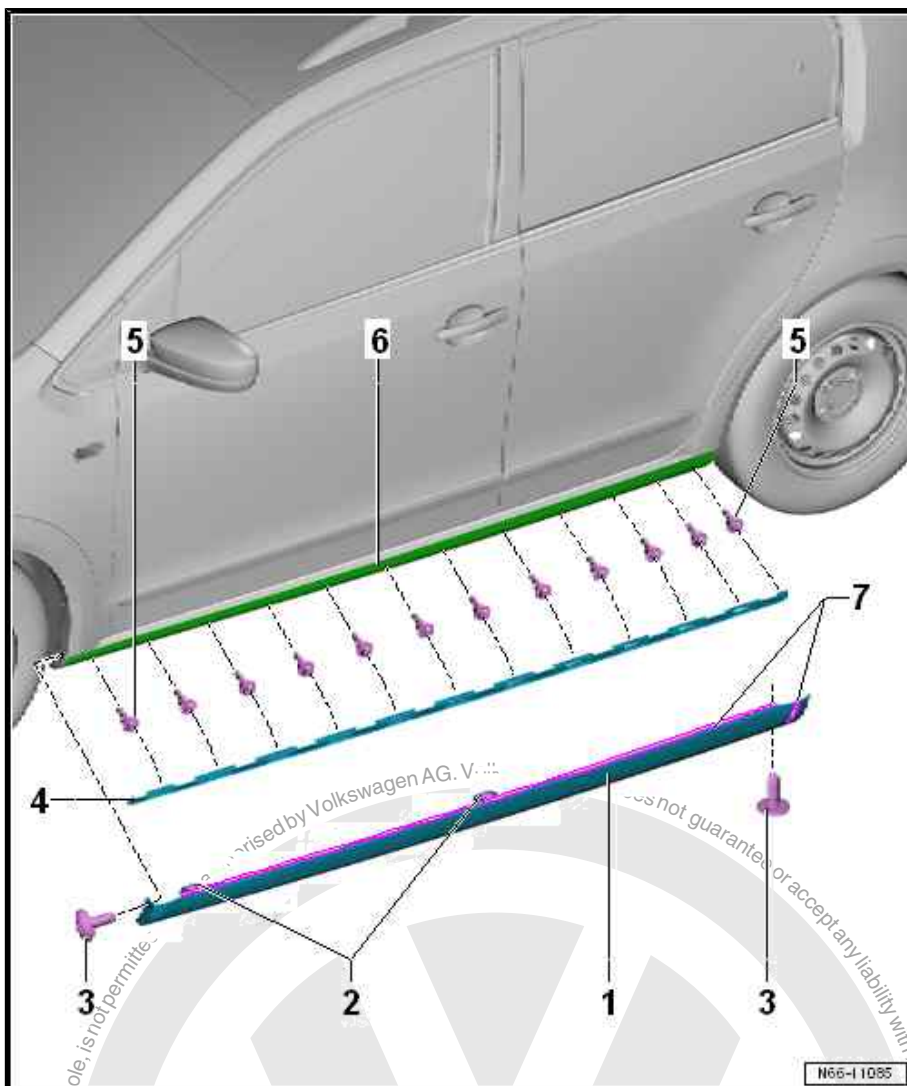
5 - Bolt

- ☐ Qty. 11
- ☐ 1.2 Nm

6 - Side member

7 - Double-sided adhesive tape

- ☐ Part of side member trim





3.2 Assembly overview - A-pillar trim

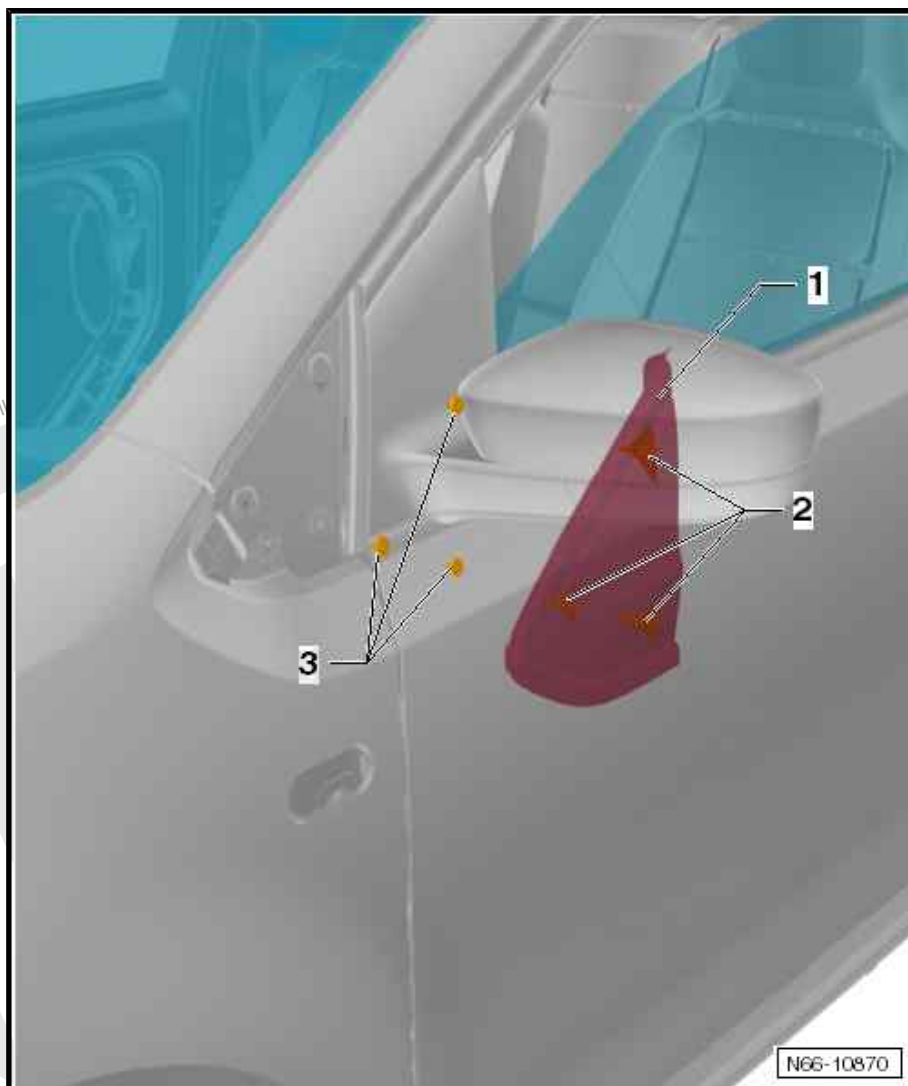
1 - A-pillar trim

- ❑ Removing: Pull trim panel out of grommets.

2 - Spreader rivet

- ❑ Component of A-pillar trim.

3 - Grommets



3.3 Removing and installing side member trim

⇒ [“3.3.1 Removing and installing side member trim, e-up!, GTI”, page 300](#)

⇒ [“3.3.2 Removing and installing retaining strip, e-up!, GTI”, page 305](#)

⇒ [“3.3.3 Removing and installing side member trim, Cross up!”, page 307](#)

3.3.1 Removing and installing side member trim, e-up!, GTI

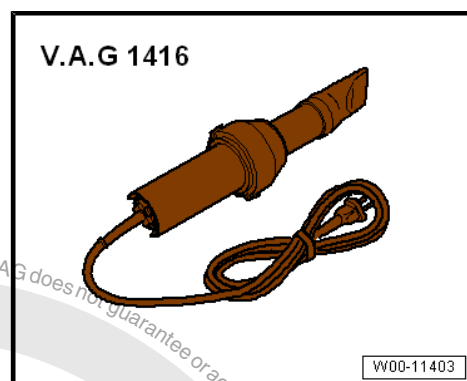
Special tools and workshop equipment required



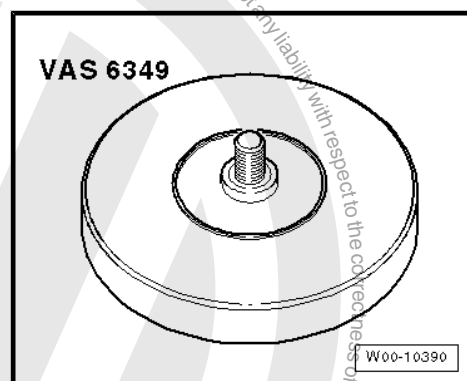
◆ Torque wrench - V.A.G 1783-



◆ Hot-air blower - V.A.G 1416-



◆ Adhesive strip remover - VAS 6349-



Installation instructions for side member trim

The side member trim cannot be removed without being damaged.

The side member trim is bonded in the factory with double-sided adhesive tape and adhesive.

- Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- If a side member trim is removed and reattached, use only adhesive remover - D 002 000 10- to remove adhesive residue.

Materials ⇒ Electronic parts catalogue (ETKA)

- Cut back residual adhesive on side member to approx. 1 mm. It is very important to not remove it completely.

Residual material serves as a primer for newly applied adhesive.

- If bonding is performed later than one day after cutting back the adhesive bead, the remaining residual material must be activated with activator .



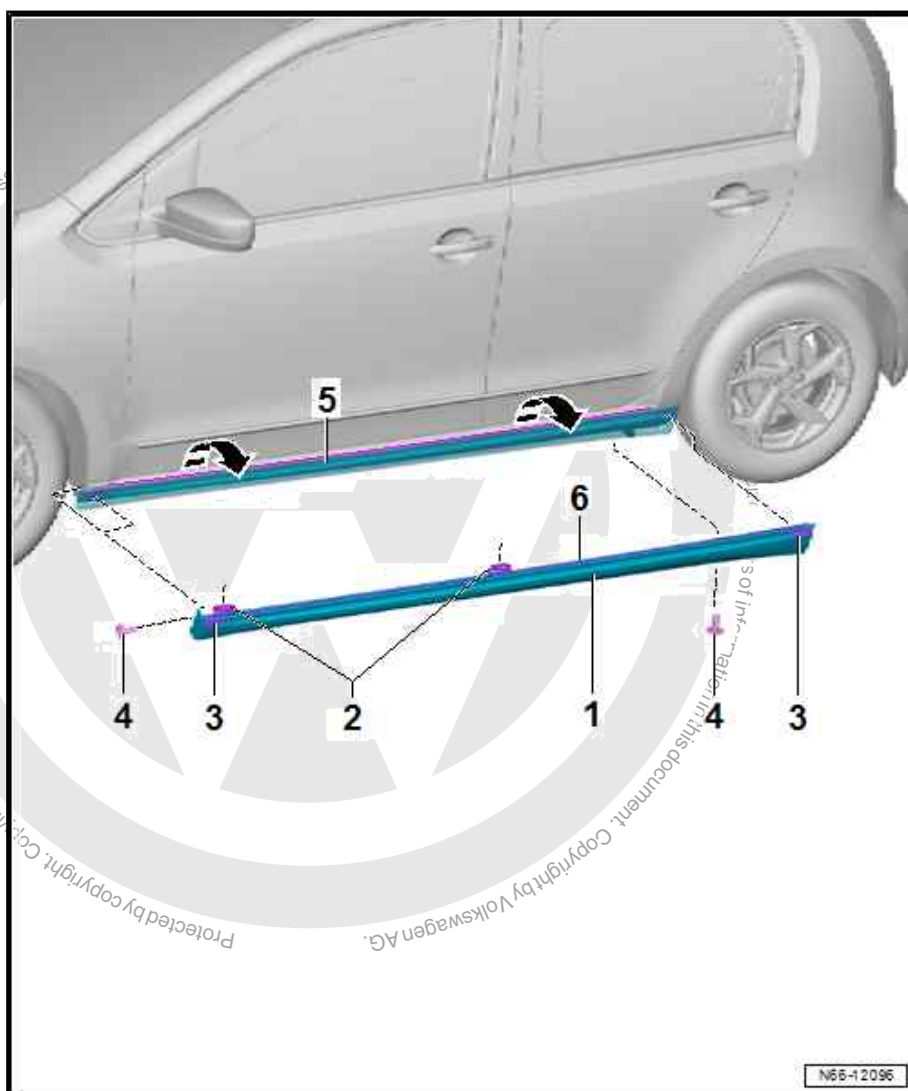
The activator must not come in contact with paint, or the paintwork will be damaged.

Drying time approx. 10 minutes.

- The new side member trim can then be installed immediately.
- If the side member has been repaired or partially renewed, the area concerned must be cleaned and primed again after painting.
- Ensure that the adhesive surfaces are free of dust and grease.
- Apply adhesive immediately before installation.
- The side member trim must be bonded in place immediately after cleaning.
- Remove backing only immediately before installation.

Working temperature is approx. 21 °C.

Removing

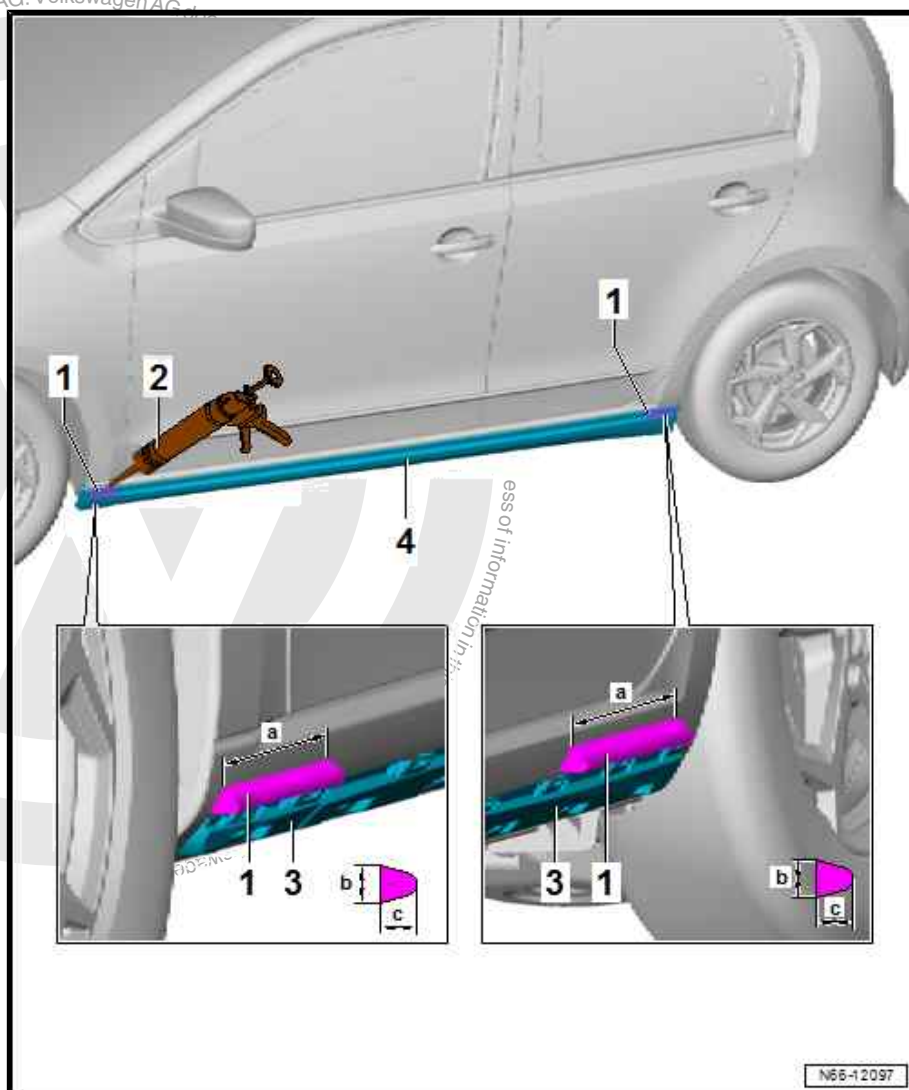


- Unscrew bolts -4-.
- Lever out spreader rivets -2-.



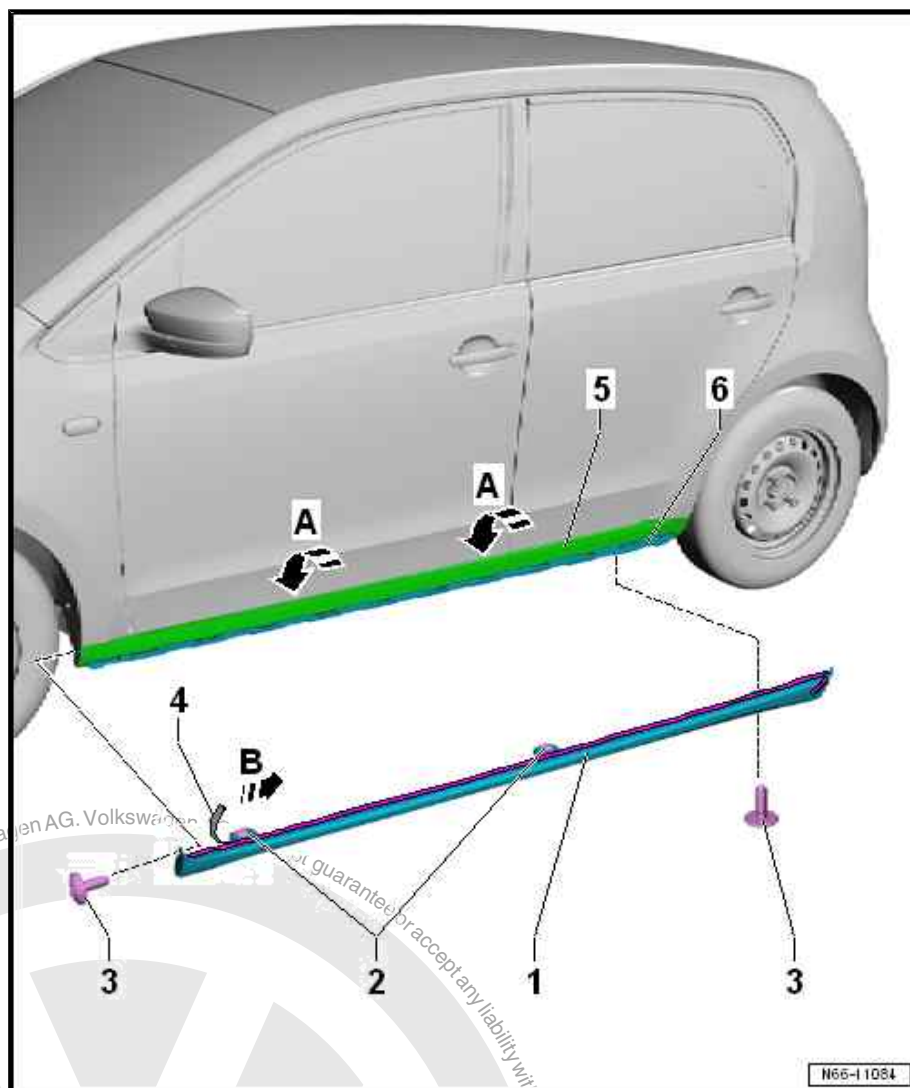
- Apply heat from hot air blower - V.A.G 1416- to upper area of double-sided adhesive tape -6- and to bonding surfaces -3-.
- Pull side member extension -1- at bonding surfaces -3- upwards and in direction of -arrows- out of retaining strip -5-.

Installing



Install in reverse order of removal, observing the following:

- Fitting notes ➤ [page 301](#) .
- Apply adhesive -1- from hand-cartridge gun - V.A.G 1628- -2- to side member -4- above retaining strip -3- at front and rear.
- ◆ Dimension -a- (length): approx. 100 mm
- ◆ Dimension -b- (width): approx. 6 mm
- ◆ Dimension -a- (height): approx. 10 mm

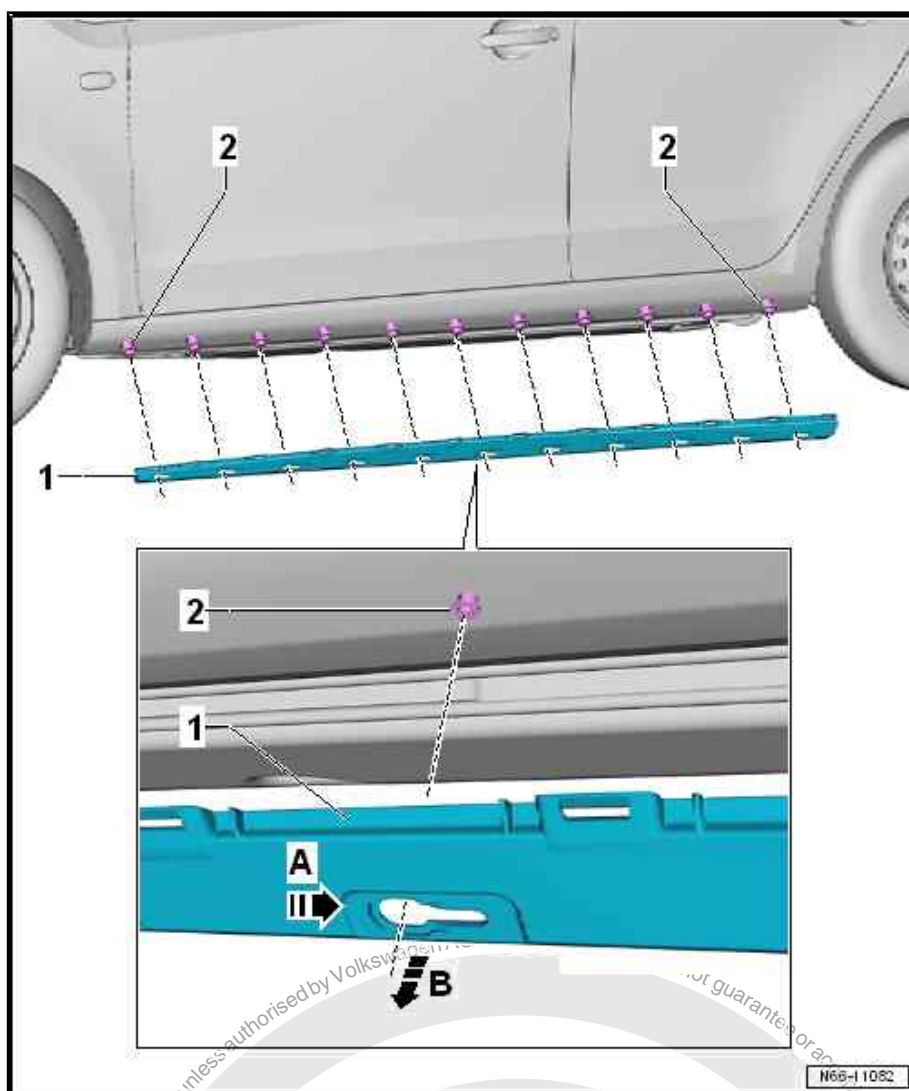


- Thoroughly clean side member -5- in area of bonding surface using cleaning solution.
- Fit side member trim -1- onto retaining strip -6-, and engage it in -direction of arrow A-.
- Align side member trim -1-.
- Tighten bolts -3-.
- Insert spreader rivet -2-.
- Pull protective backing -4- off adhesive tape -arrow B-.
- Press side member trim in area of adhesive tape forcefully on side member.

◆ ⇒ ["3.1 Assembly overview - side member trim", page 298](#)

3.3.2 Removing and installing retaining strip, e-up!, GTI

Removing



- Push retaining strip -1- in direction of -arrow A-.
- Detach retaining strip -1- from bolts -2- in direction of -arrow B-.

Installing



Note

- ◆ *The retaining strip bolts are corrosion-resistant "colour: silver". No further secondary treatment is required.*
- ◆ *If a self-tapping screw is overtightened, it is essential to replace it with a "black" oversize self-tapping screw.*
- There are no pre-drilled holes for the securing screws.
- Measure the holes according to the table below.
- Centre the holes for the securing screws.
- Drill out holes with a 1.5 mm drill bit.



Note

Dimension -a- is measured from the rear wheel housing.

Position of self-cutting screws for retaining strip

a - 1007 mm \pm 1 mm

- ❑ The dimension is measured from the rear edge of the side member.

b - 906 mm \pm 1 mm

c - 761 mm \pm 1 mm

d - 611 mm \pm 1 mm

e - 461 mm \pm 1 mm

f - 306 mm \pm 1 mm

g - 152 mm \pm 1 mm

h - 624 mm \pm 1 mm

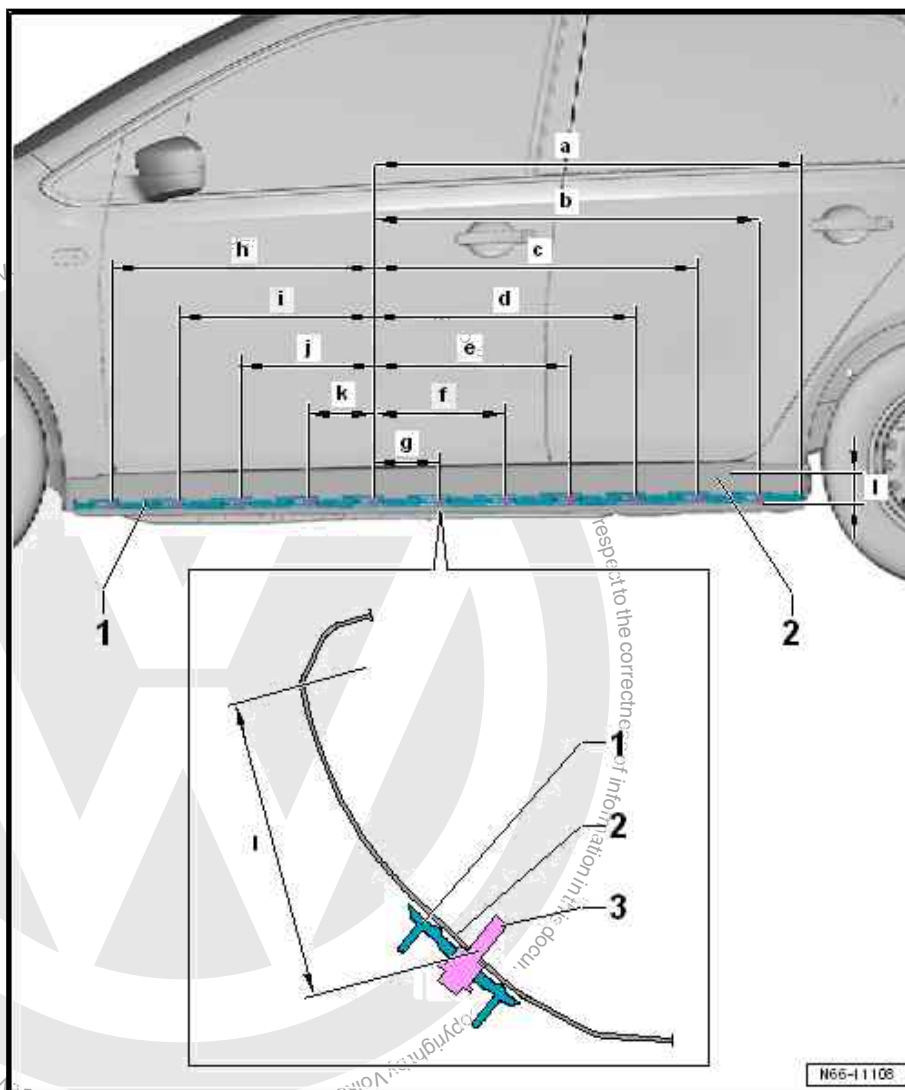
i - 469 mm \pm 1 mm

j - 314 mm \pm 1 mm

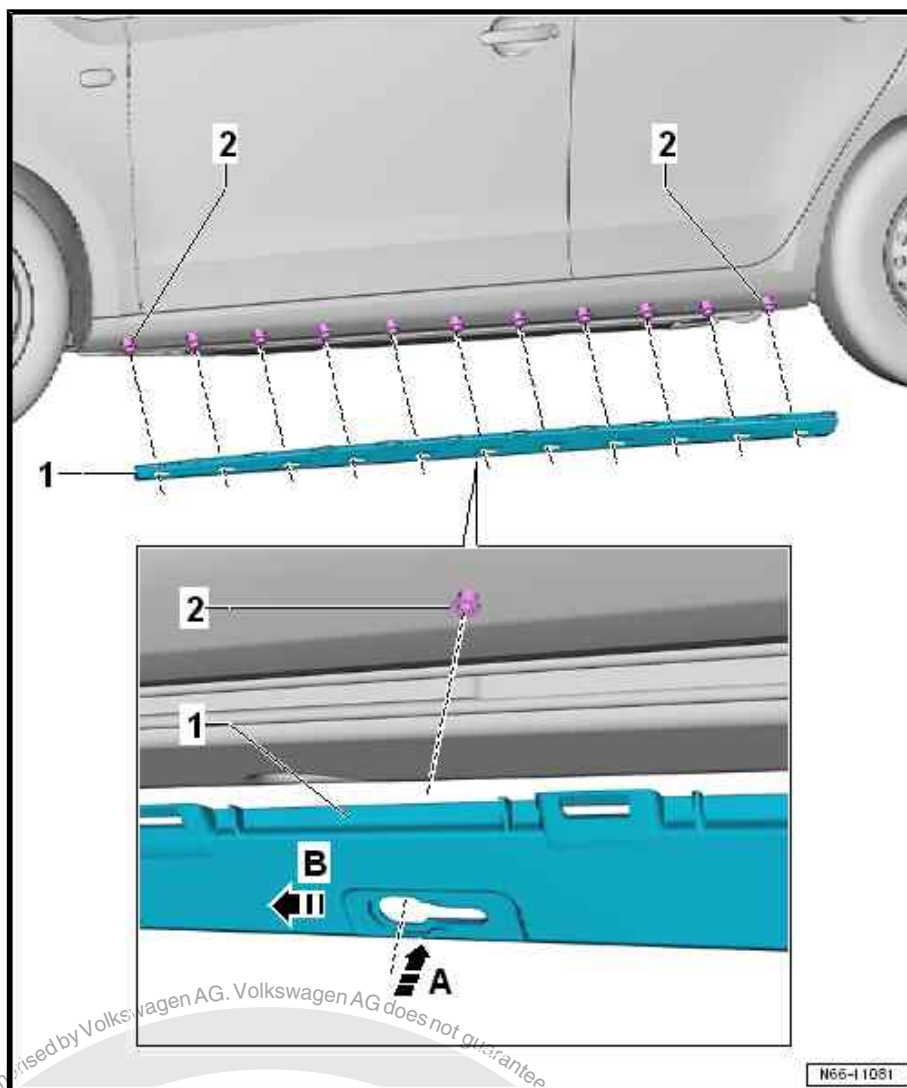
k - 159 mm \pm 1 mm

l - 65 mm - 82 mm

- ❑ Rising from front to rear



- Screw in thread cutting screws -3- until they bite.
- Tighten bolts.



- If all securing screw holes have been drilled -1-.
- Fit retaining strip -1- onto bolts -1- -arrow A-.
- Push retaining strip forcefully towards rear in -direction of arrow B- as far as stop.

3.3.3 Removing and installing side member trim, Cross up!

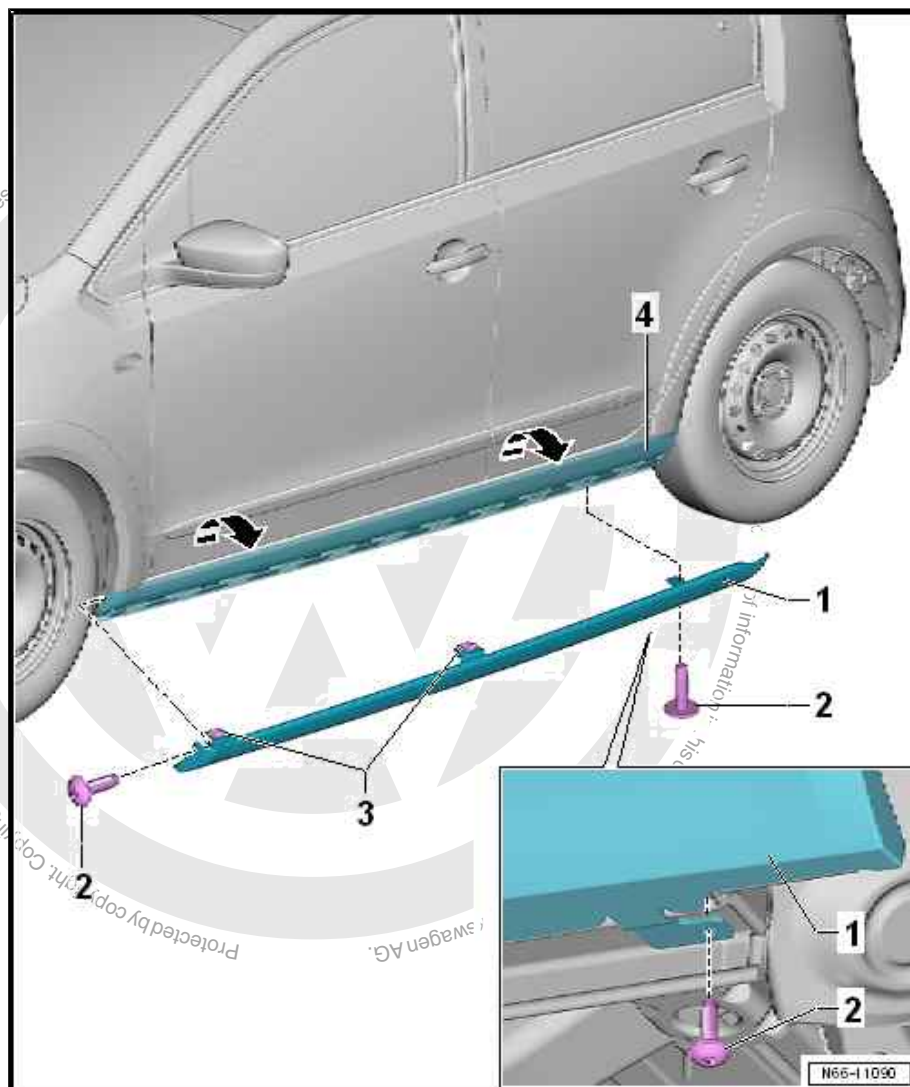
Fitting instructions

- ◆ The side member trim cannot be removed without being damaged.
- ◆ Before removal, heat side member trim in area of bonding surface using hot air blower - V.A.G 1416- .
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ If a side member trim is removed and reattached, use only adhesive remover - D 002 000 10- to remove adhesive residue.
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The side member trim must be bonded in place immediately after cleaning.



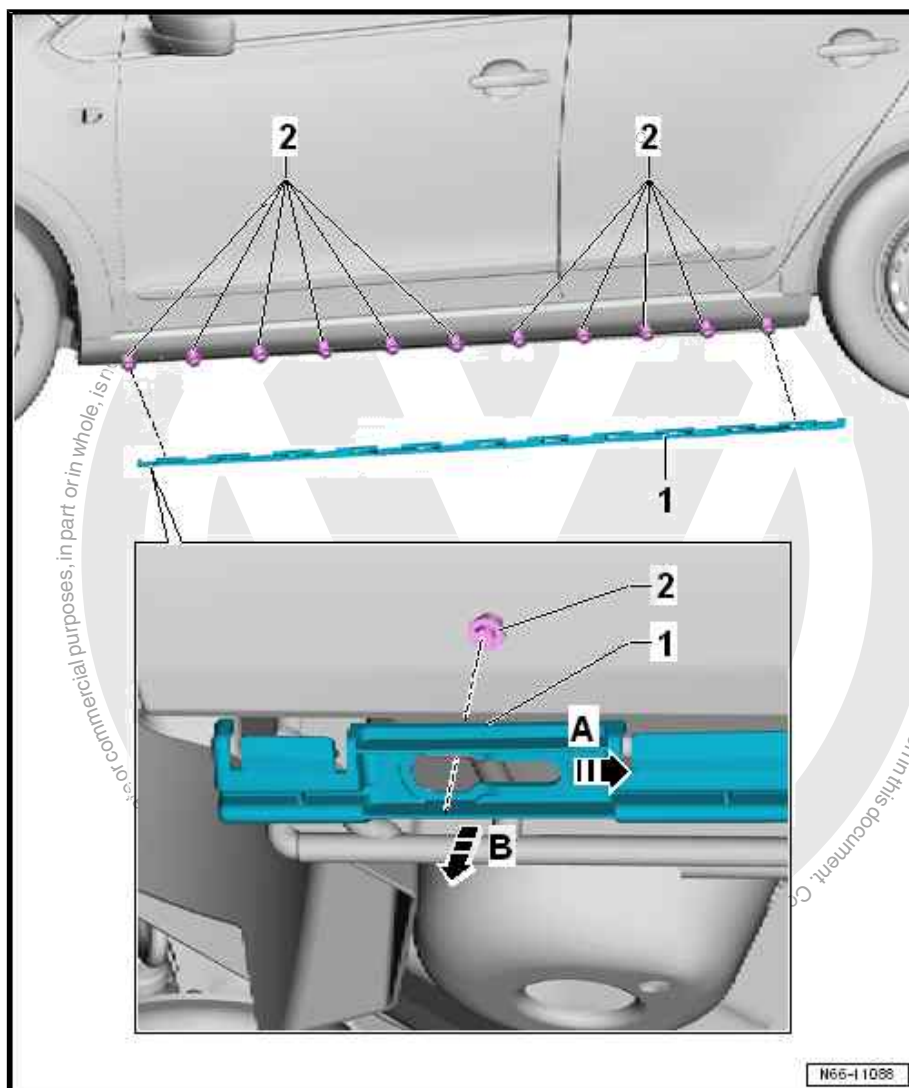
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.

Removing



- Unscrew bolt -2-.
- Lever out spreader rivet -3-.
- Warm upper area of side member extension -1- with hot air blower - V.A.G 1416- .
- Pull side member trim -1- upwards out of retaining strip -arrows-.

Removing retaining rail



- Push retaining strip -1- forcefully towards rear -arrow a-.
- Lift retaining strip -1- evenly off all bolts -2- -arrow b-.

Installing retaining rail



Note

- ◆ *The retaining strip bolts are corrosion-resistant "colour: silver". No further secondary treatment is required.*
- ◆ *If a self-tapping screw is overtightened, it is essential to replace it with a "black" oversize self-tapping screw.*
- There are no pre-drilled holes for the securing screws.
- Measure the holes according to the table below.
- Centre the holes for the securing screws.
- Drill out holes with a 1.5 mm drill bit.



Note

Dimension -a- is measured from the rear wheel housing.



Position of self-cutting screws for retaining strip

a - 1007 mm \pm 1 mm

- ❑ The dimension is measured from the rear edge of the side member.

b - 906 mm \pm 1 mm

c - 761 mm \pm 1 mm

d - 611 mm \pm 1 mm

e - 461 mm \pm 1 mm

f - 306 mm \pm 1 mm

g - 152 mm \pm 1 mm

h - 624 mm \pm 1 mm

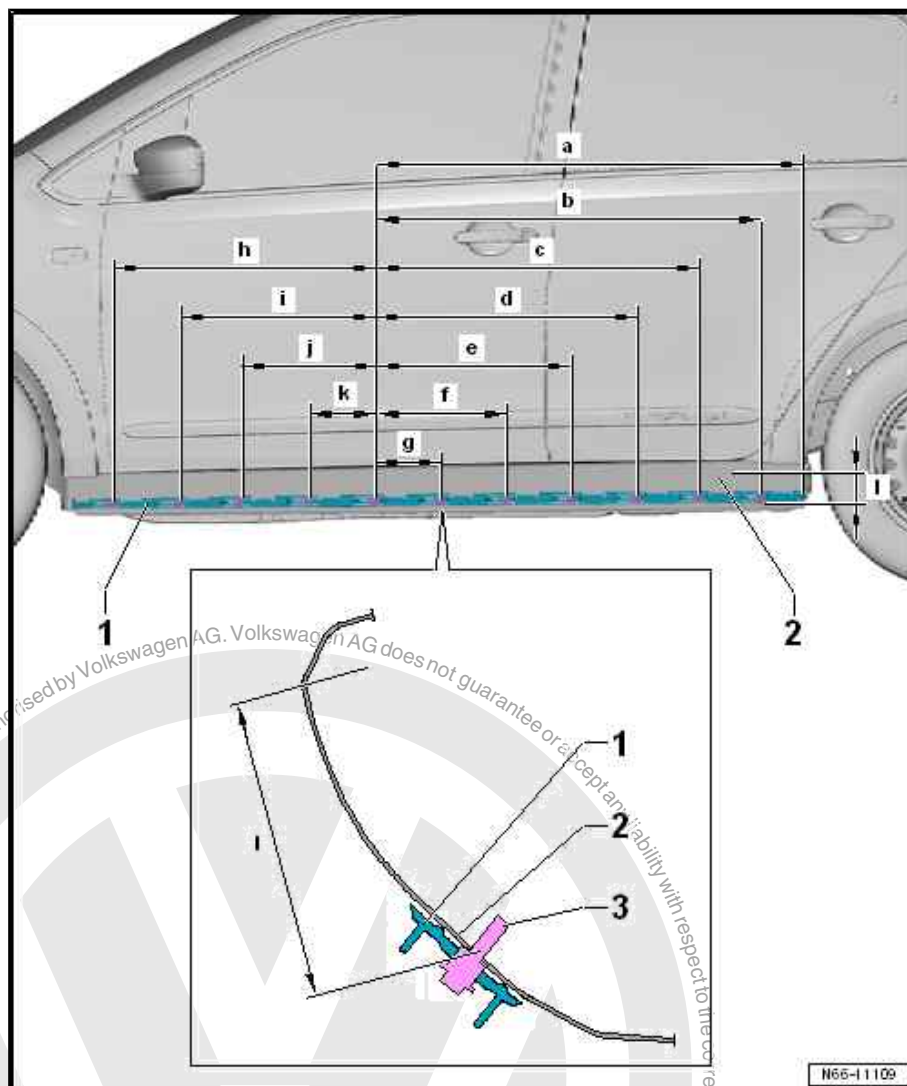
i - 469 mm \pm 1 mm

j - 314 mm \pm 1 mm

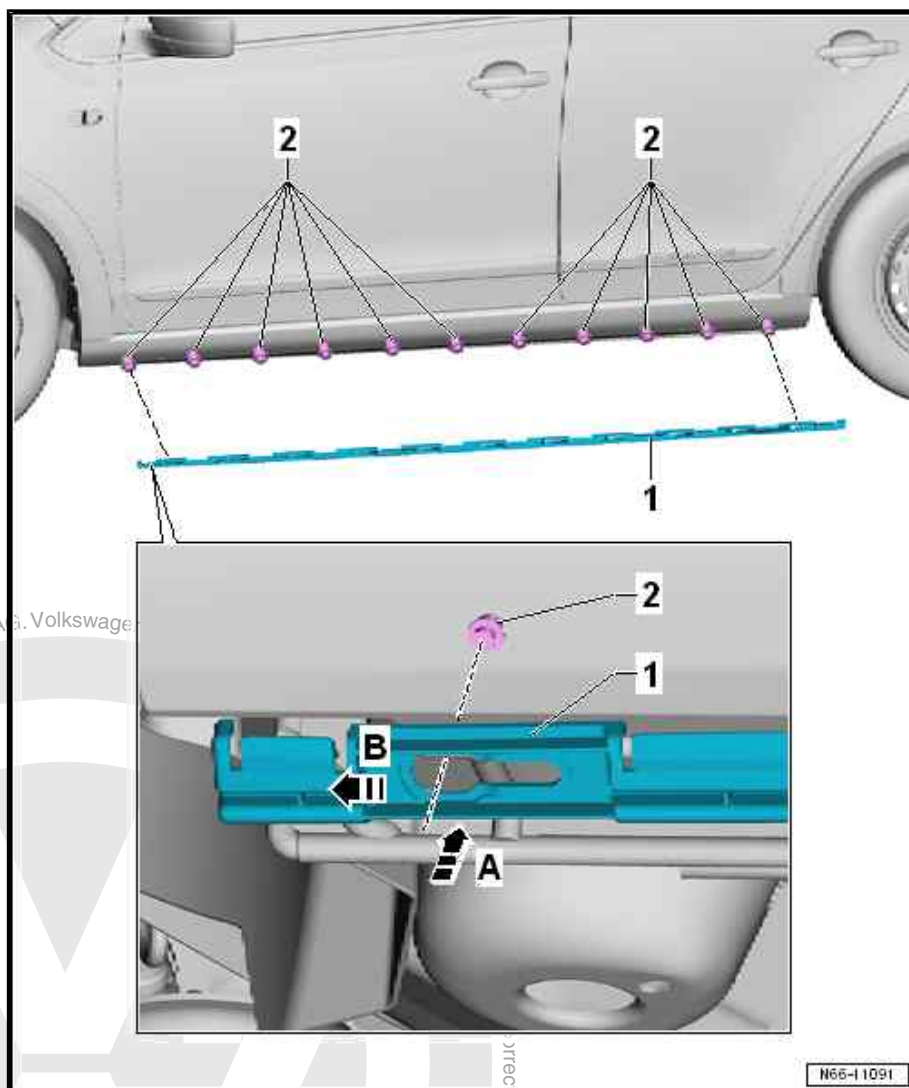
k - 159 mm \pm 1 mm

l - 65 mm - 82 mm

- ❑ Rising from front to rear

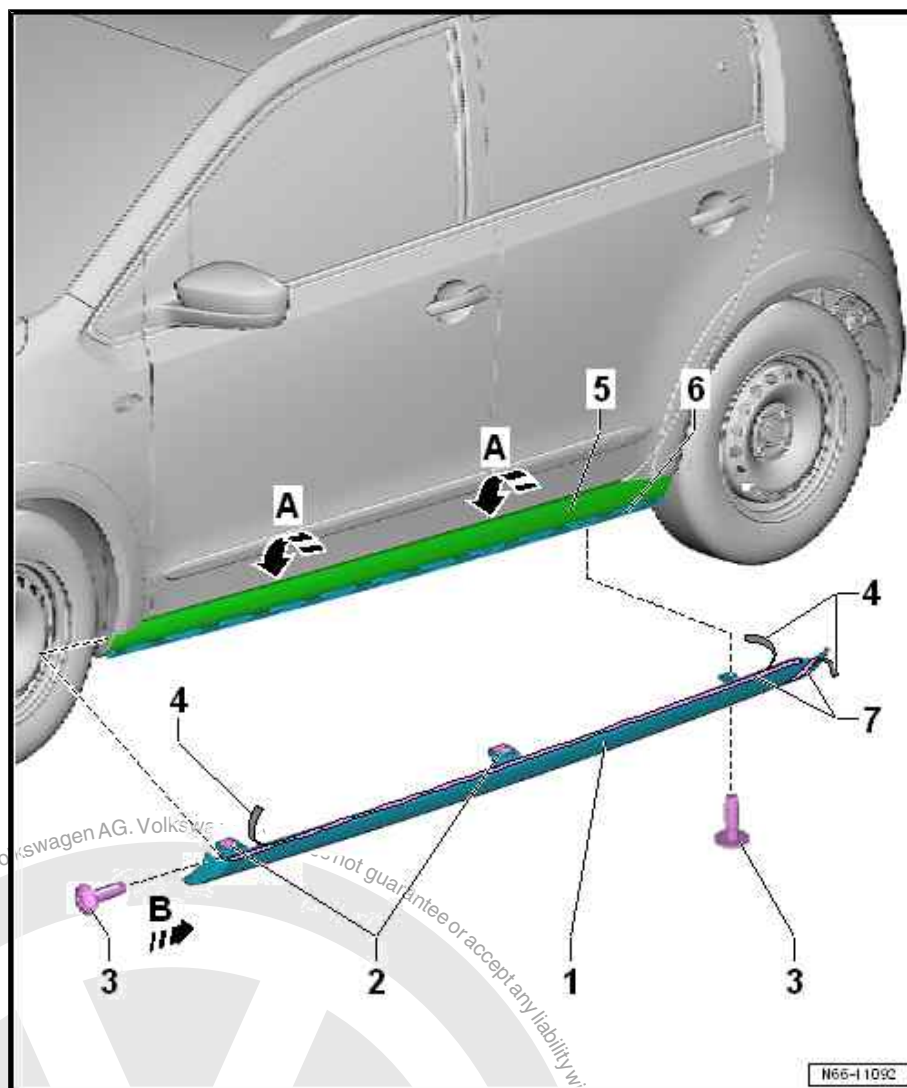


- Screw in self-tapping screws - 1- with cordless drill/driver - VAS 5036- , using the highest speed 2500 ± 500 rpm, until the screw bites. Remove cordless drill/driver - VAS 5036- immediately!
- Tighten screws with least possible torque, i.e. 1.2 Nm - 0.1 Nm, so that screws are not excessively tightened.



- If all securing screw holes have been drilled -1-.
- Fit retaining strip -1- onto bolts -1- -arrow a-.
- Push retaining strip forcefully towards rear in direction of arrow b- as far as stop.

Installing



- Assembly notes ➤ [page 307](#)
- Thoroughly clean side member -5- in area of bonding surface using cleaning solution.
- Fit side member trim -1- onto retaining strip -6-, and engage it in -direction of arrow A-.
- Align side member trim -1-.
- Tighten bolts -3-. Specified torque ➤ [Item 3 \(page 299\)](#)
- Insert spreader rivet -2-.
- Pull protective backing -4- off adhesive tape -arrow B-.
- Press side member trim in area of adhesive tape forcefully on side member.

3.4 Removing and installing B-pillar trim



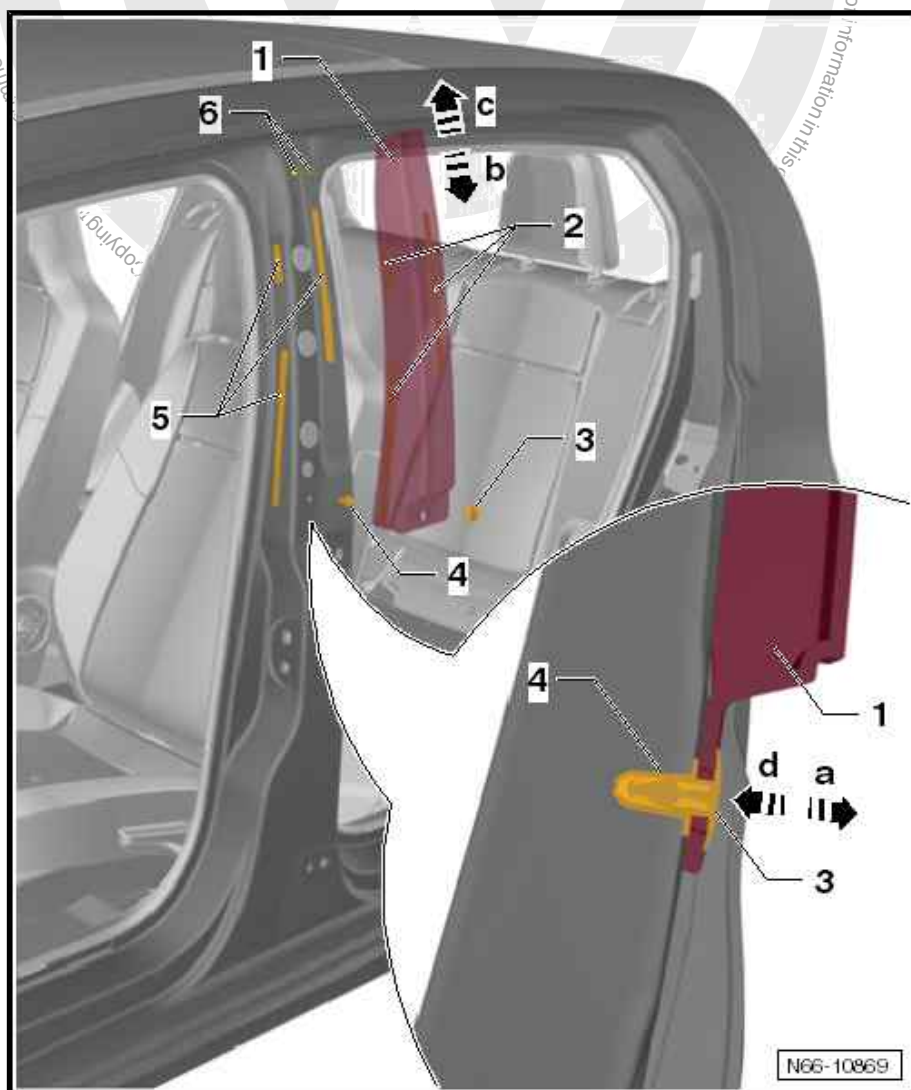
Note

The removal and installation sequence is only for the left B-pillar trim. Removal and installation of the right B-pillar trim are similar.

Fitting instructions

- ◆ The bonded trim cannot be removed without damage.
- ◆ Heat up trim in area of bonding surface using hot air blower - V.A.G 1416- prior to removal.
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349-
- ◆ If a trim is removed and reattached, only use adhesive remover - D 002 000 10- to remove the adhesive residue.
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The trim must be bonded in place immediately following cleaning.
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.

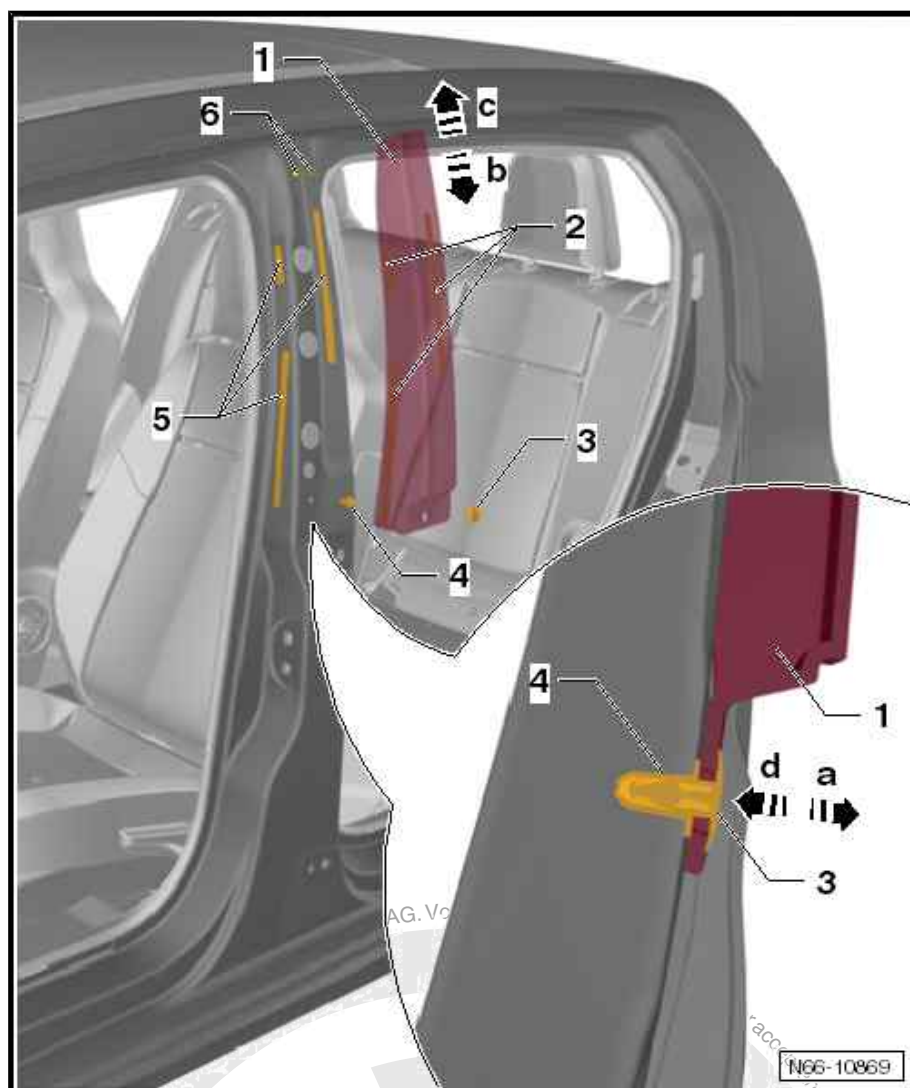
Removing



- Pull spreader rivet -3- out of grommet -4- -arrow a-.
- Follow installation instructions ⇒ [page 312](#) .
- Pull B-pillar trim -1- downwards in direction of -arrow b-.
- Pull B-pillar trim -1- off adhesive strips -5-.



Installing



- Check grommets -4- and -6- for damage and renew if necessary.
- Follow installation instructions [page 312](#).
- Clean bonding surfaces.
- Fit new adhesive strips -5- and remove protective backing.
- Insert B-pillar trim -1- in -direction of arrow c- into grommets -6-. Do not yet press onto adhesive surfaces.
- Insert spreader rivet -3- into grommet -4- -arrow d-.
- Firmly press B-pillar trim -1- onto adhesive strips -5-.



3.5 Removing and installing wheel arch covers

⇒ [“3.5.1 Removing and installing front wheel arch covers”, page 315](#)

⇒ [“3.5.2 Removing and installing rear wheel arch covers”, page 317](#)

3.5.1 Removing and installing front wheel arch covers

Fitting instructions

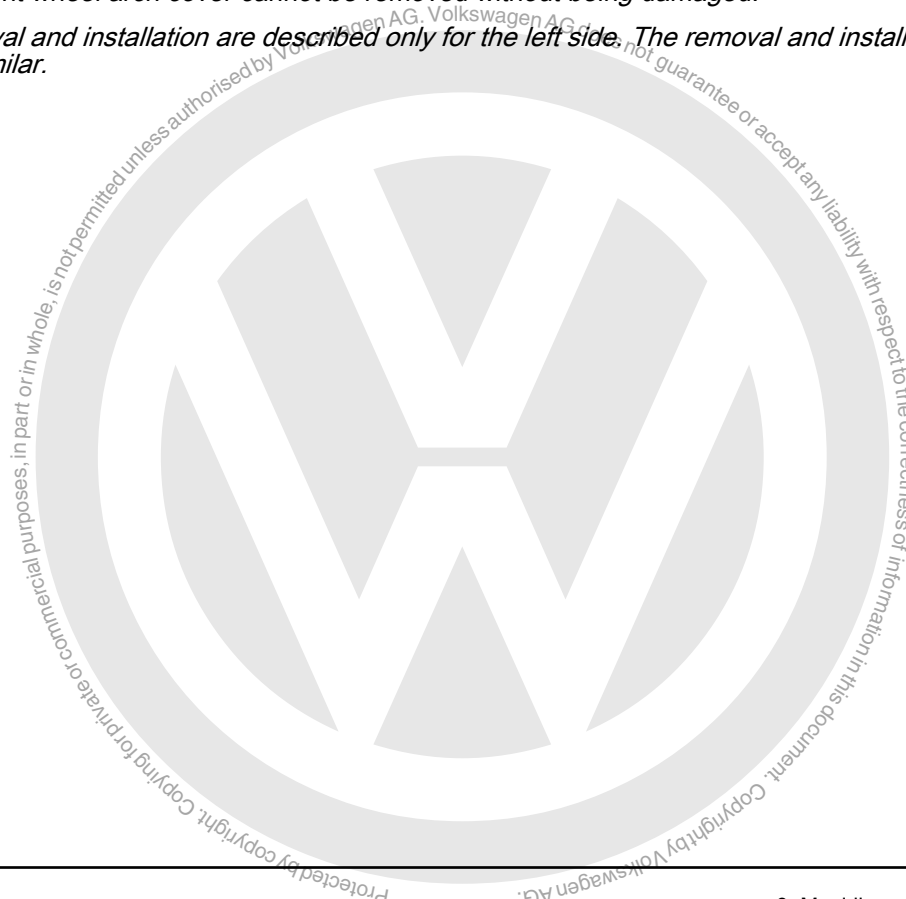
- ◆ The bonded trim cannot be removed without damage.
- ◆ Heat up trim in area of bonding surface using hot air blower - V.A.G 1416- prior to removal.
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ If a trim is removed and reattached, only use adhesive remover - D 002 000 10- to remove the adhesive residue.
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The trim must be bonded in place immediately following cleaning.
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.

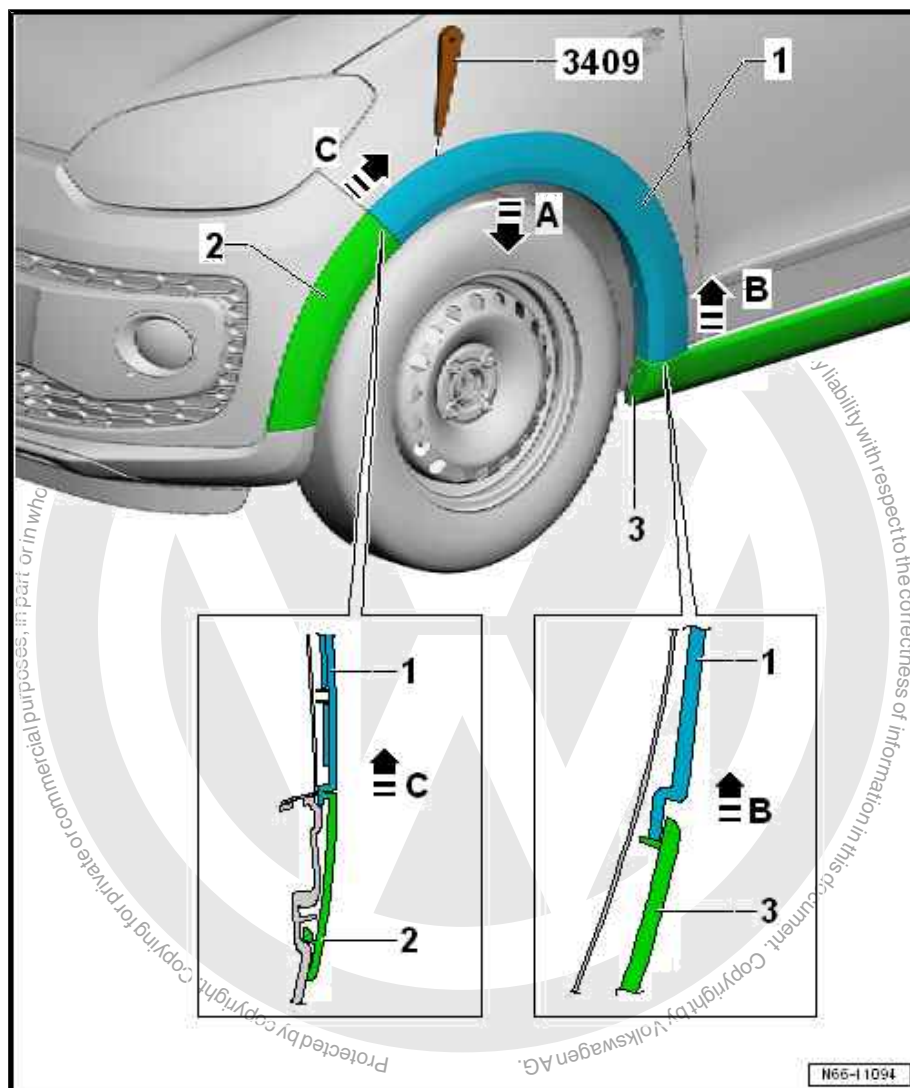
Removing



Note

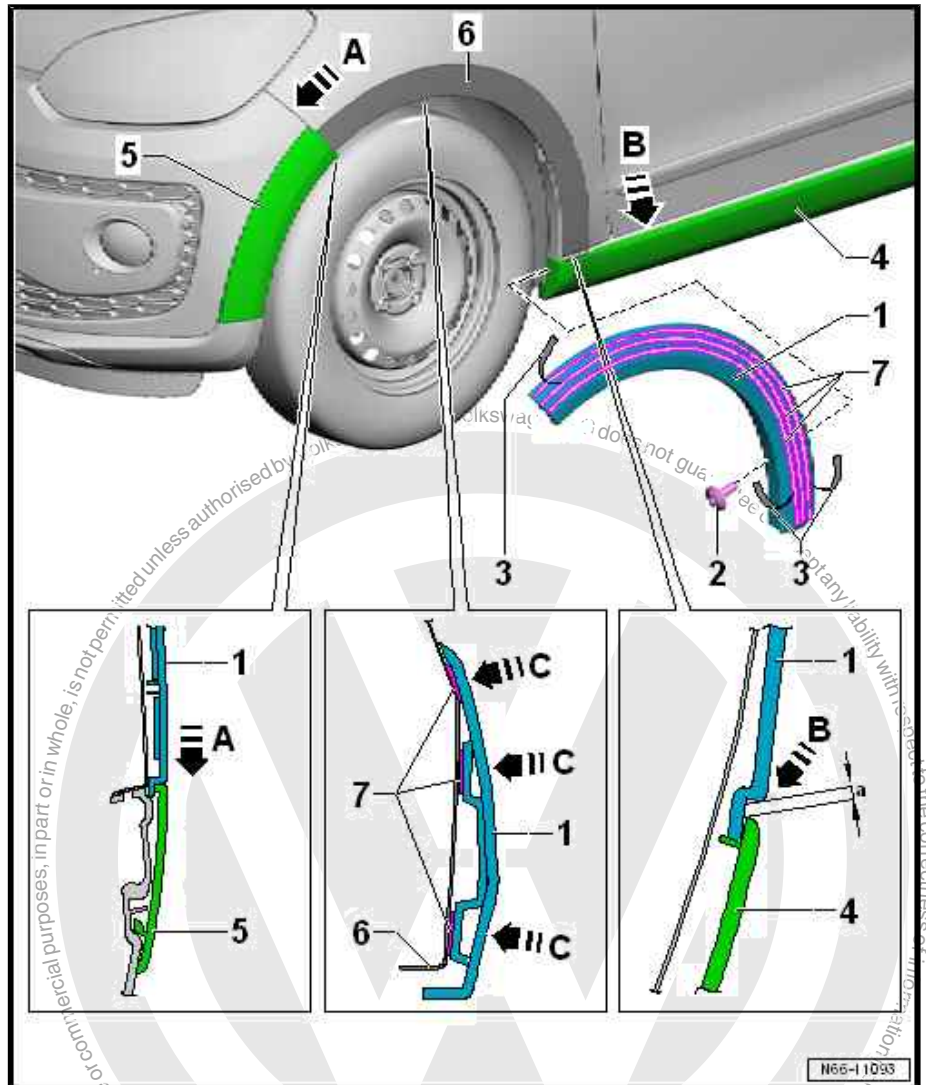
- ◆ *The front wheel arch cover cannot be removed without being damaged.*
- ◆ *Removal and installation are described only for the left side. The removal and installation of the right side are similar.*





- Tape over all adjacent painted surfaces.
- Heat front wheel arch cover -1- using hot air blower - V.A.G 1416- .
- Lift a corner of front wheel arch cover -1- using removal wedge - 3409- .
- Grasp corner and pull front wheel arch cover -1- forcefully off wing -arrow a-.
- Pull out wheel arch cover from underneath bumper trim -2- and side member trim -3- -arrows c and b-.

Installing



- Assembly notes ➔ [page 315](#)
- Guide wheel arch cover -1- under side member trim -4- and bumper trim -5- -arrows a and b-.
- Pull protective film -3- of front wheel arch trim -1-, and press wheel arc trim forcefully on wing -arrows c-.

3.5.2 Removing and installing rear wheel arch covers

Fitting instructions

- ◆ The bonded wheel arch trim cannot be removed without being damaged.
- ◆ Before removal, heat wheel arch trim in area of bonding surface using hot air blower - V.A.G 1416- .
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ If a wheel arch trim is removed and reattached, use only adhesive remover - D 002 000 10- to remove adhesive residue.
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The wheel arch trim must be bonded in place immediately after cleaning.



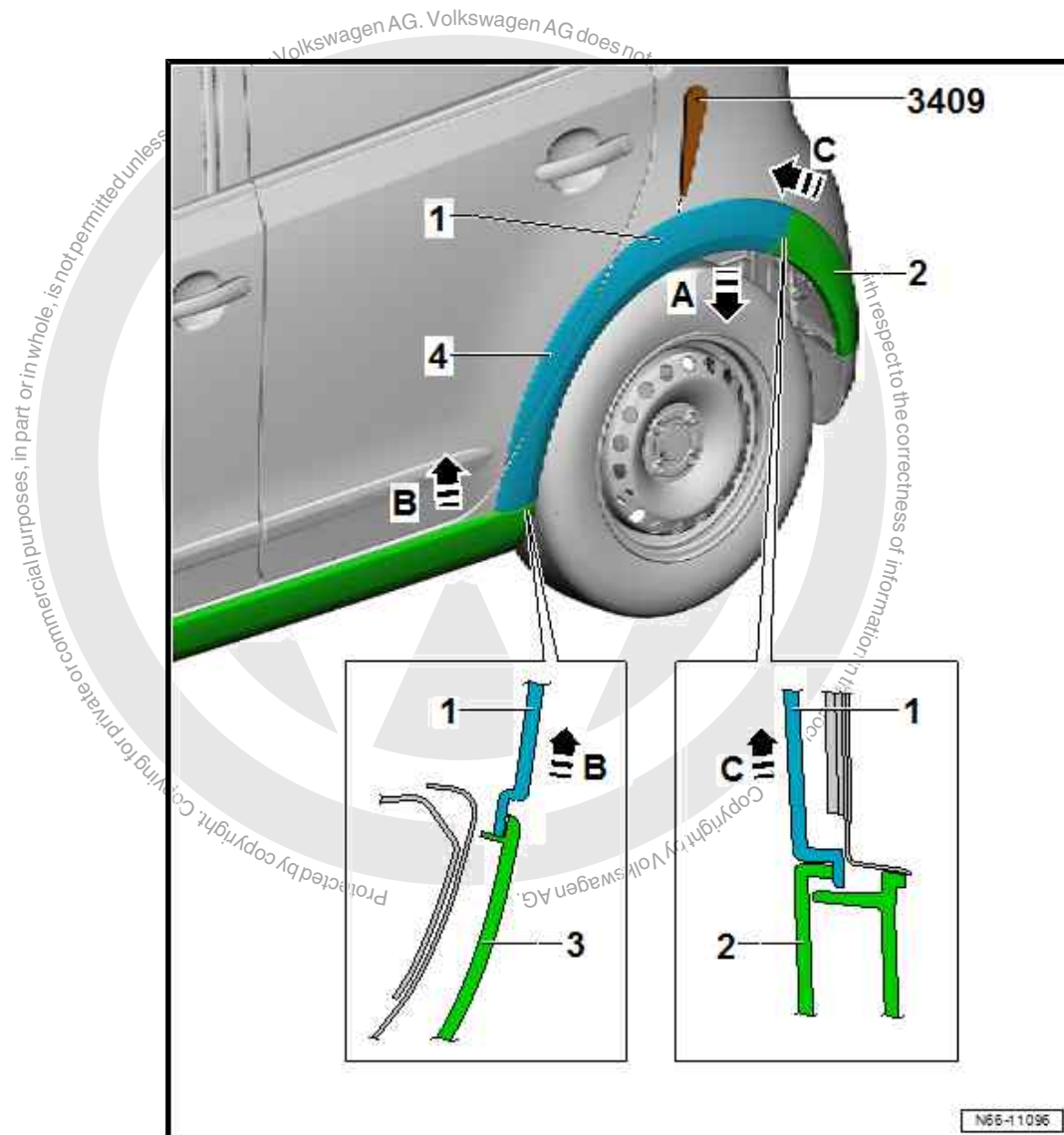
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.

Removing



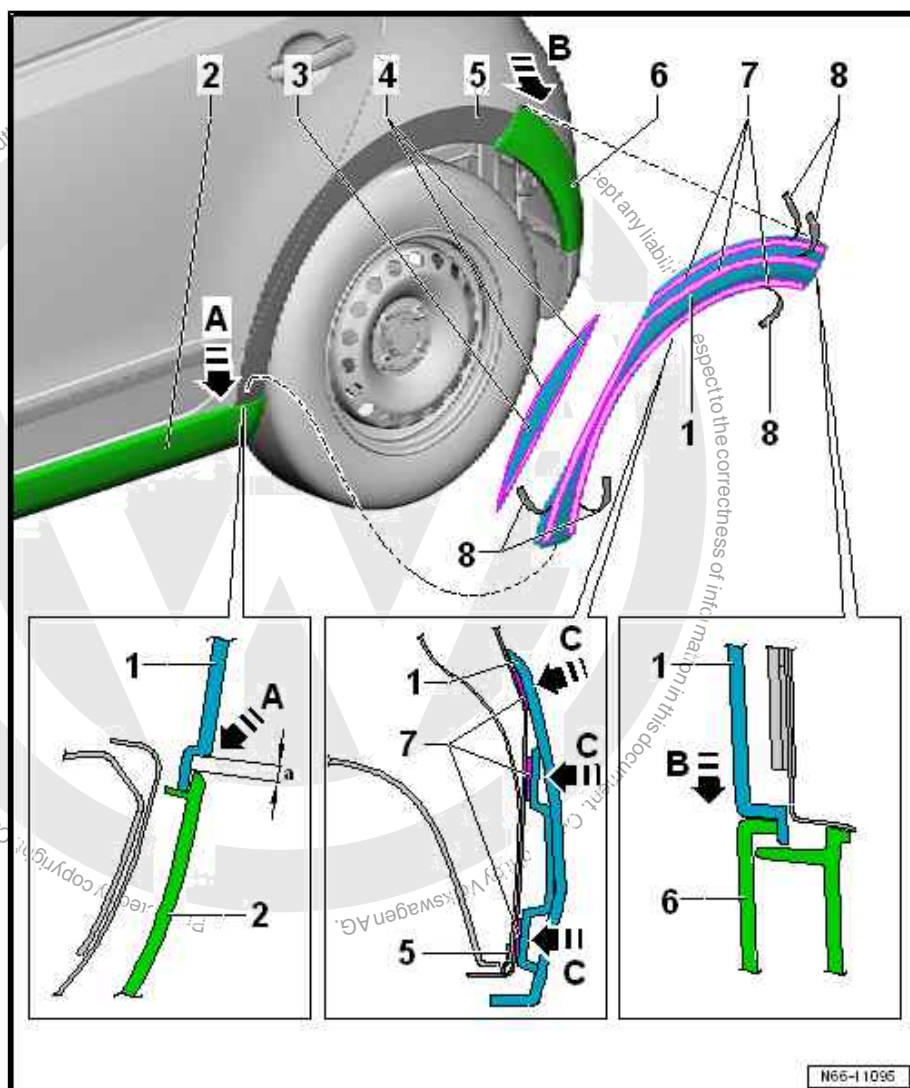
Note

- ◆ The rear wheel arch cover cannot be removed without being damaged.
- ◆ Removal and installation are described only for the left side.
The removal and installation of the right side are similar.



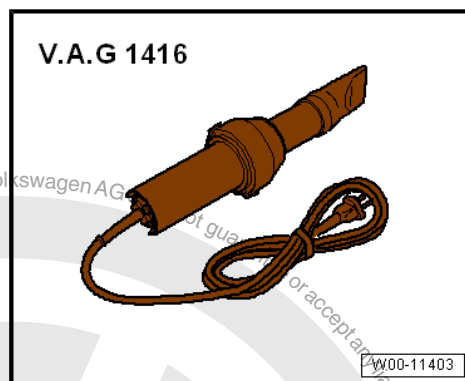
- Tape over all adjacent painted surfaces.
- Heat rear wheel arch cover -1- using hot air blower - V.A.G 1416- .
- Lift a corner of rear wheel arch cover -1- using removal wedge - 3409- .
- Grasp the corner and pull rear wheel arch cover -1- forcefully off the wing.
- The same procedure applies to the cover on door -4-.

Installing

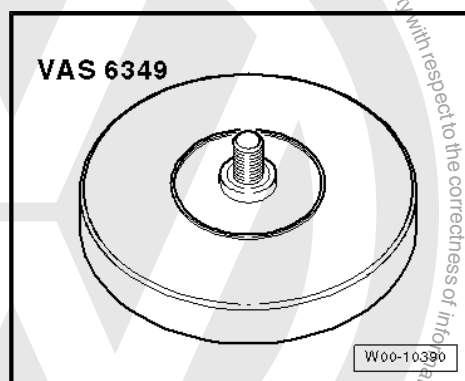




- ◆ Hot-air blower - V.A.G 1416-



- ◆ Adhesive strip remover - VAS 6349-

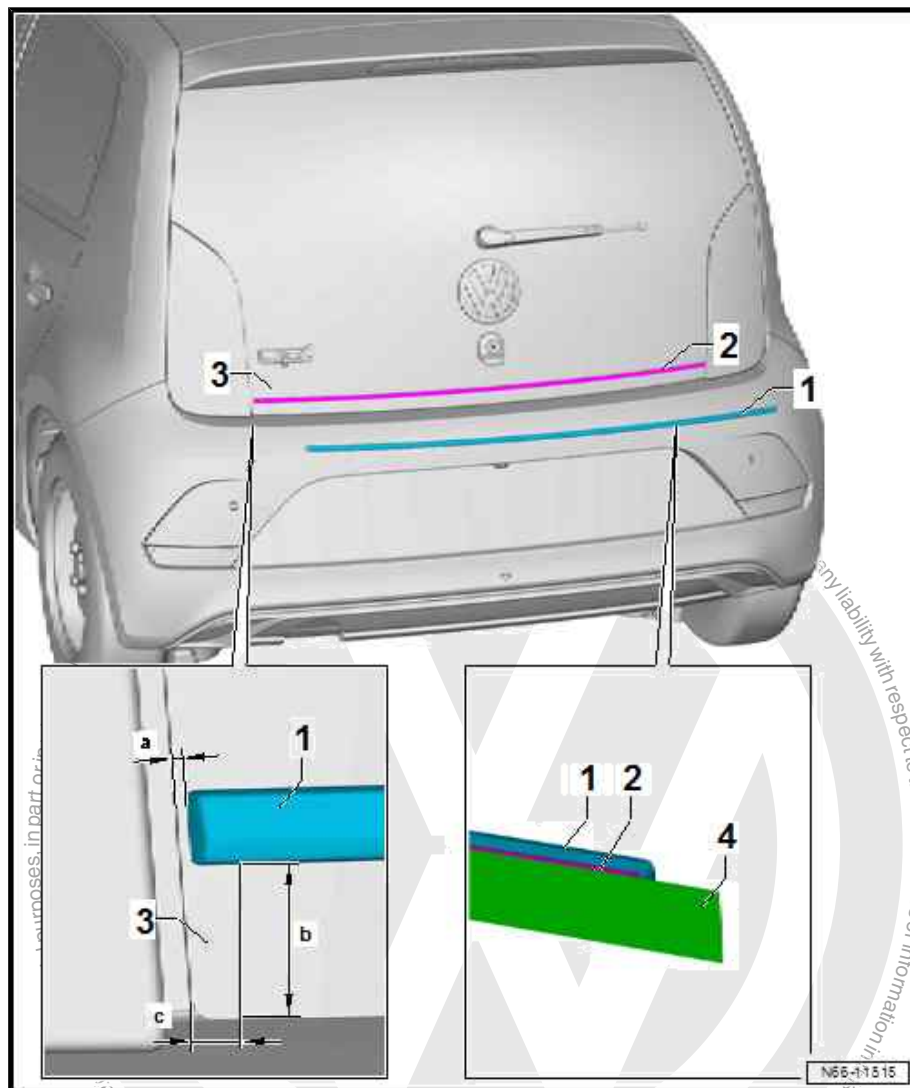


- ◆ Professional cleaning cloth - VAS 6006-

Fitting instructions

- ◆ The bonded trim strips cannot be removed without damage.
- ◆ Before removal, heat trim strip in area of bonding surface using hot air blower - V.A.G 1416- .
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ If a trim strip is removed and reattached, use only adhesive remover - D 002 000 10- to remove adhesive residue.
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The trim strip must be bonded in place immediately after cleaning.
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.

Removing



Follow installation instructions ➔ [page 320](#) .

- Use adhesive tape to mark the position of the trim strip -2- on rear lid.
- ◆ Horizontal dimension -a- = 1 to 2 mm, is centred on rear lid.
- ◆ Height dimension -b- = 23 mm, is measured with -dimension c- = 6 mm from outer edge.
- Clean rear lid -3- in marked area -2- using cleaning solution.



Note

- ◆ *The application must be performed in one motion without interruption using primer applicator.*
- ◆ *A complete film must cover the glass surface.*
- ◆ *Ensure to apply only one layer.*
- Apply transparent glass/paint primer evenly to bonding surface -2-, and wipe it off slightly using professional cleaning cloth - VAS 6006- .

Glass/paint primer flash-off time: 5 minutes.

- Pull protective film -4- off new trim strip -1-.



- Position and press on trim strip -1- firmly.

3.7 Removing and installing entry moulding

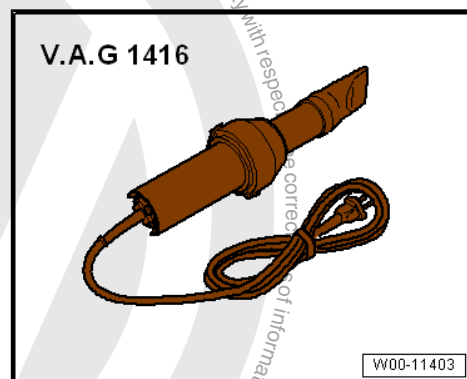


Note

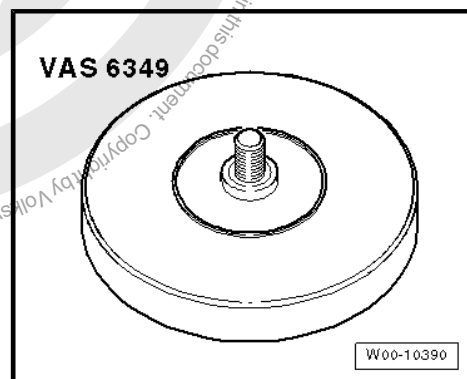
Depending on model version, either the »Black« or the »White« sill moulding is installed.

Special tools and workshop equipment required

- ◆ Hot-air blower - V.A.G 1416-



- ◆ Adhesive strip remover - VAS 6349-



Fitting instructions

- ◆ The bonded sill mouldings cannot be removed without damage.
- ◆ Heat sill moulding in area of bonding surface using hot air blower - V.A.G 1416- prior to removal.
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ If a sill moulding is removed and reattached, use only adhesive remover - D 002 000 10- to remove adhesive residue.
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The sill panel trim must be bonded in place immediately after cleaning.
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.

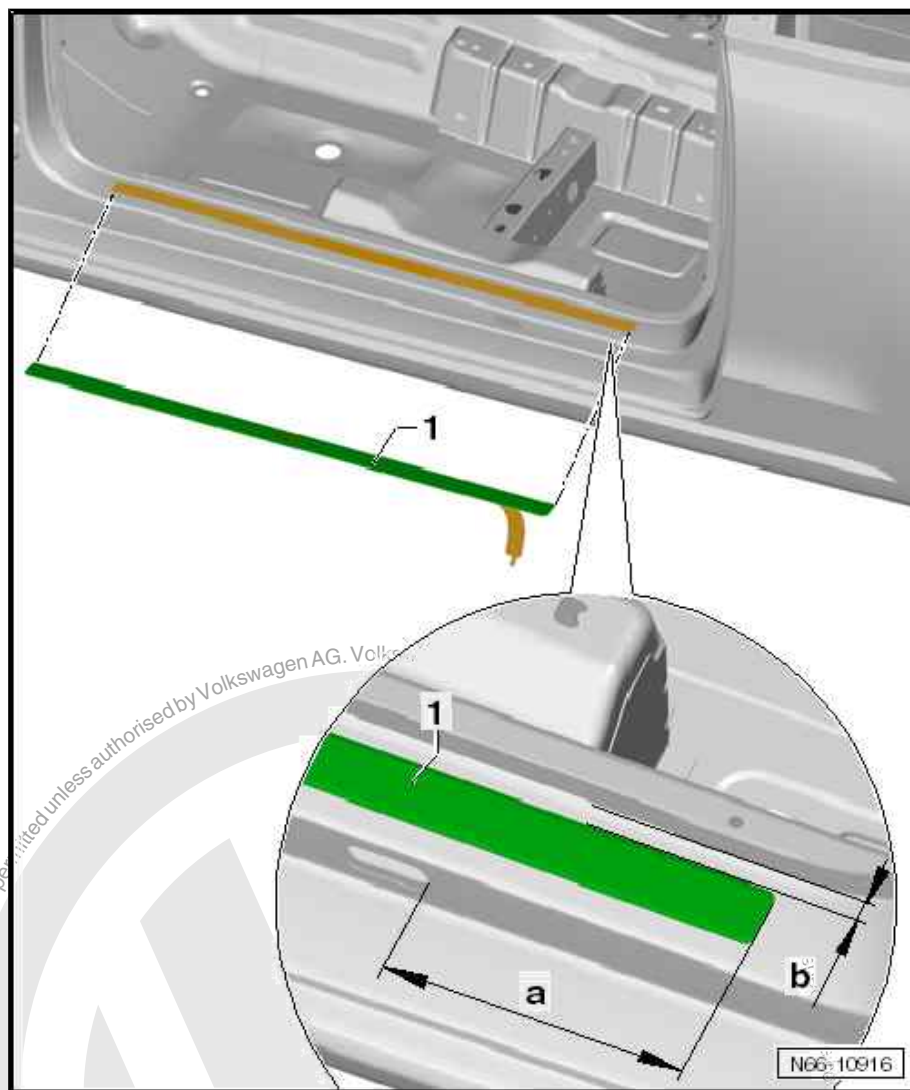


Front sill panel moulding, 2-door



Note

Installation of sill panel moulding is described for the left side. Installation of the right sill moulding is similar.



Removing

- Detach door seal ➔ [page 112](#) .
- Heat sill moulding -1- using hot air blower - V.A.G 1416- and pull it off sill.

Installing

Follow installation instructions ➔ [page 323](#) .

- Pull protective film off new sill moulding -1-.
- Bond sill moulding -1- onto sill, maintaining -dimension a = 172.5 mm-.

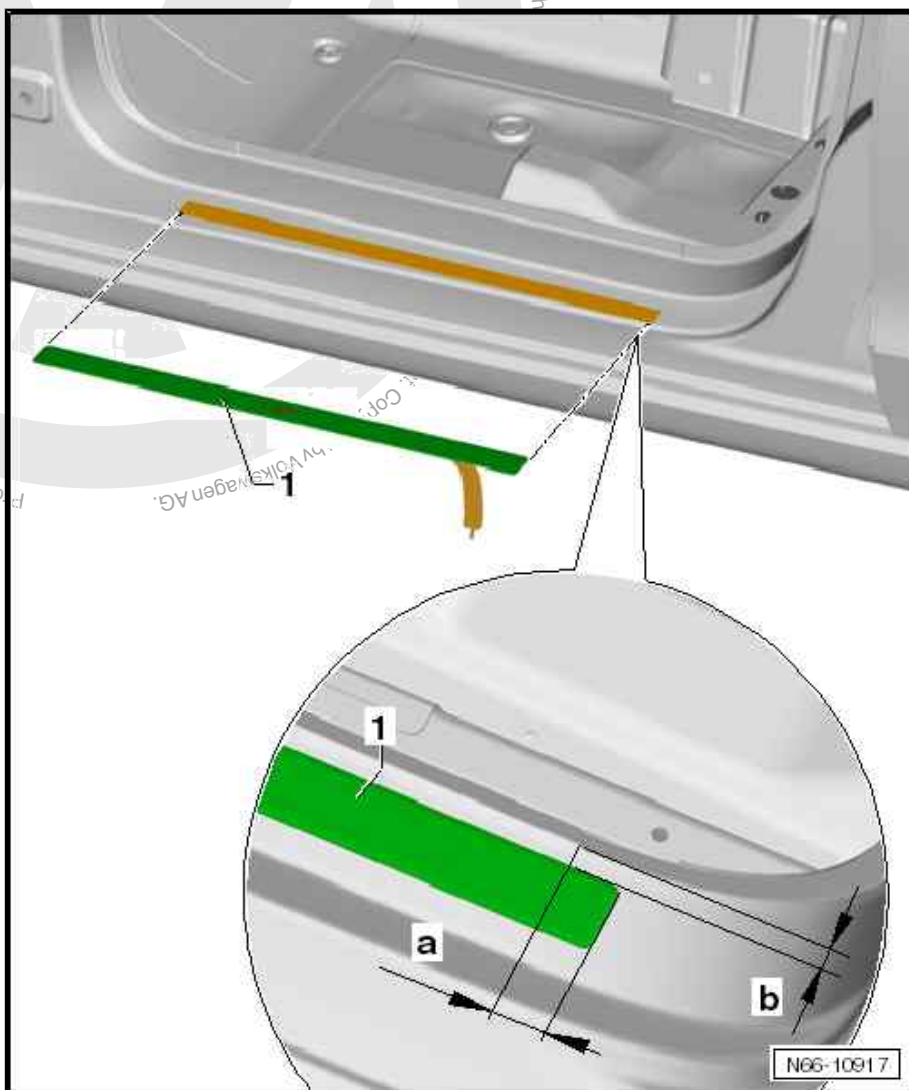
Distance of sill moulding -1- to body flange
-dimension b = 19 mm-

Sill panel moulding, 4-door



Note

Installation of sill moulding is described for the right side. Installation for the left sill moulding is analogous.



Removing

- Detach door seal ➔ [page 112](#) .
- Heat sill moulding -1- using hot air blower - V.A.G 1416- and pull it off sill.

Installing

Follow installation instructions ➔ [page 323](#) .

- Pull protective film off new sill moulding -1-.
- Bond sill moulding -1- onto sill, maintaining -dimension a = 38.5 mm-.

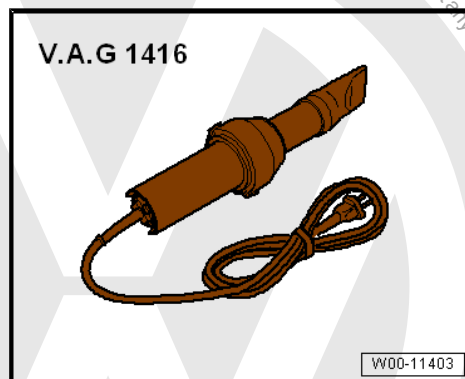
Distance of sill moulding -1- to body flange
-dimension b = 19 mm-



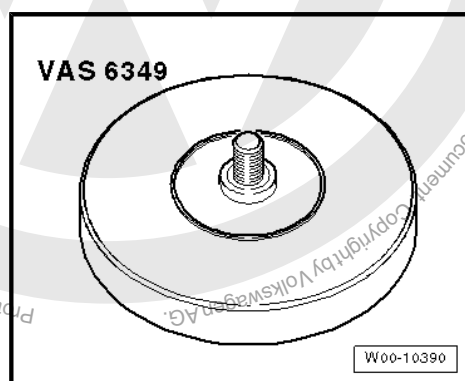
3.8 Removing and installing trim strip

Special tools and workshop equipment required

- ◆ Hot-air blower - V.A.G 1416-



- ◆ Adhesive strip remover - VAS 6349-



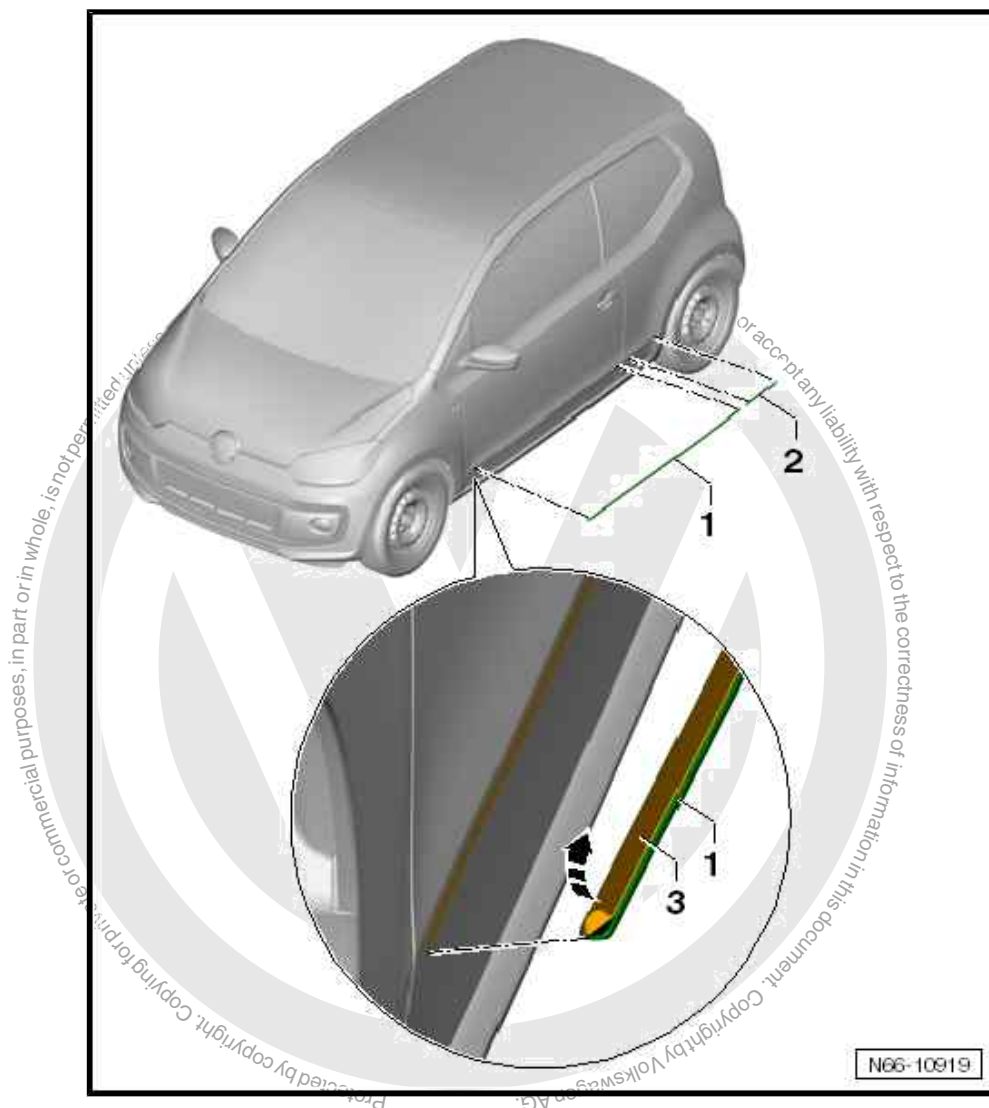
Fitting instructions

- ◆ The bonded trim strips cannot be removed without damage.
- ◆ Before removal, heat trim strips in area of bonding surface using hot air blower - V.A.G 1416- .
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ If a protective strip is removed and reattached, only use adhesive remover - D 002 000 10- to remove adhesive residue.
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The trim strips must be bonded in place immediately after cleaning.
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.



Note

Installation is described only for the left side. The right side is analogous.



Removing

- Heat protective strip for door -1- or protective strip for side panel -2- before removal using hot air blower - V.A.G 1416- and pull off.

Installing

Follow installation instructions ➔ [page 326](#) .

- Pull protective film -3- off new protective strip for door -1- or protective strip for side panel -2-.
- Position trim strips on door or edge of side panel and press on forcefully.



4 Underbody cladding

⇒ [“4.1 Assembly overview - gas tank cover”, page 328](#)

⇒ [“4.2 Overview of fitting locations - trim”, page 329](#)

⇒ [“4.3 Assembly overview - bracing on underbody”, page 331](#)

⇒ [“4.4 Removing and installing underbody cladding”, page 333](#)

4.1 Assembly overview - gas tank cover

1 - Cover

- For front gas cylinder

2 - Hexagon nut

- Qty. 4 for front gas cylinder
- Qty. 3 for rear gas cylinder
- 2 Nm

3 - Cover

- For rear gas cylinder

4 - Securing hooks

- Pushed onto gas cylinder support -arrow-.

5 - Bolt

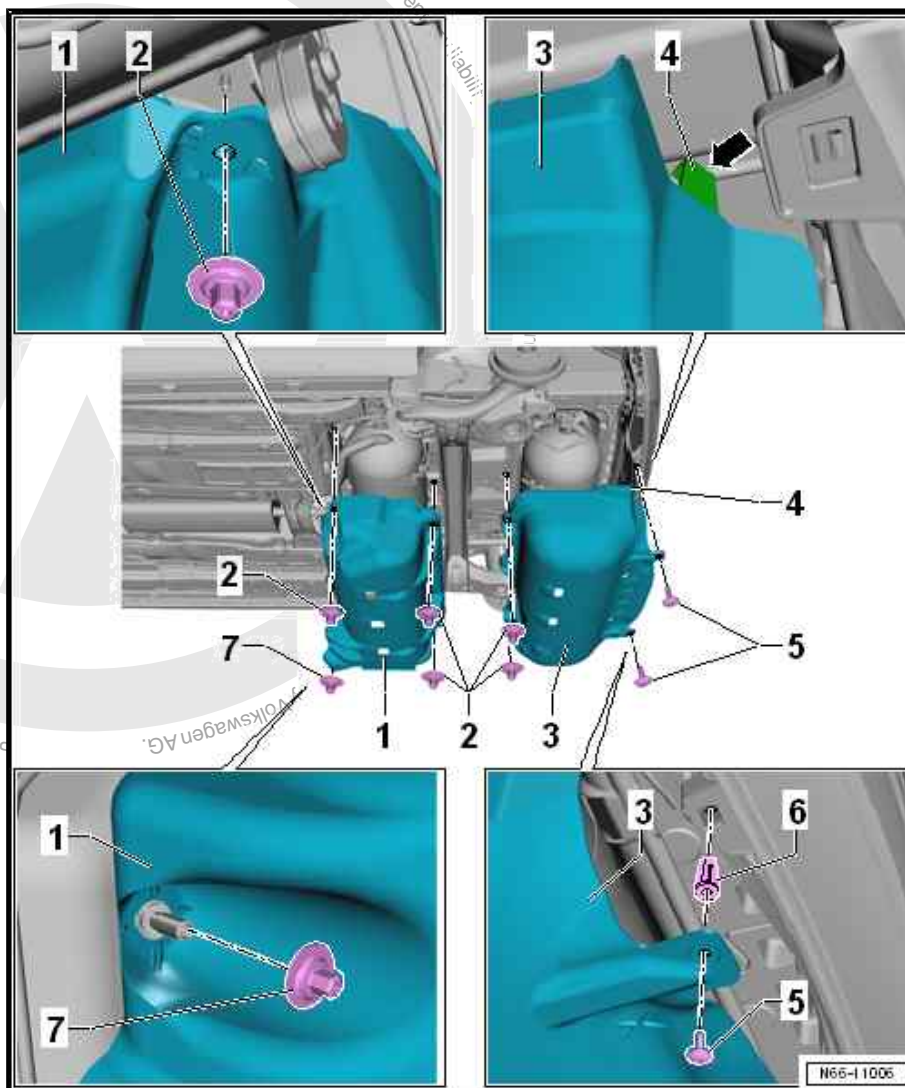
- Qty. 2
- 2 Nm

6 - Expansion nut

- Qty. 2

7 - Hexagon nut

- Qty. 1
- 2 Nm





4.2 Overview of fitting locations - trim

⇒ ["4.2.1 Assembly overview - front trim panel", page 329](#)

⇒ ["4.2.2 Assembly overview - underbody cladding, longitudinal member", page 330](#)

⇒ ["4.2.3 Assembly overview - underbody cover, e-up!", page 331](#)

4.2.1 Assembly overview - front trim panel

1 - Underbody cladding

- ☐ Only on right

2 - Bolt

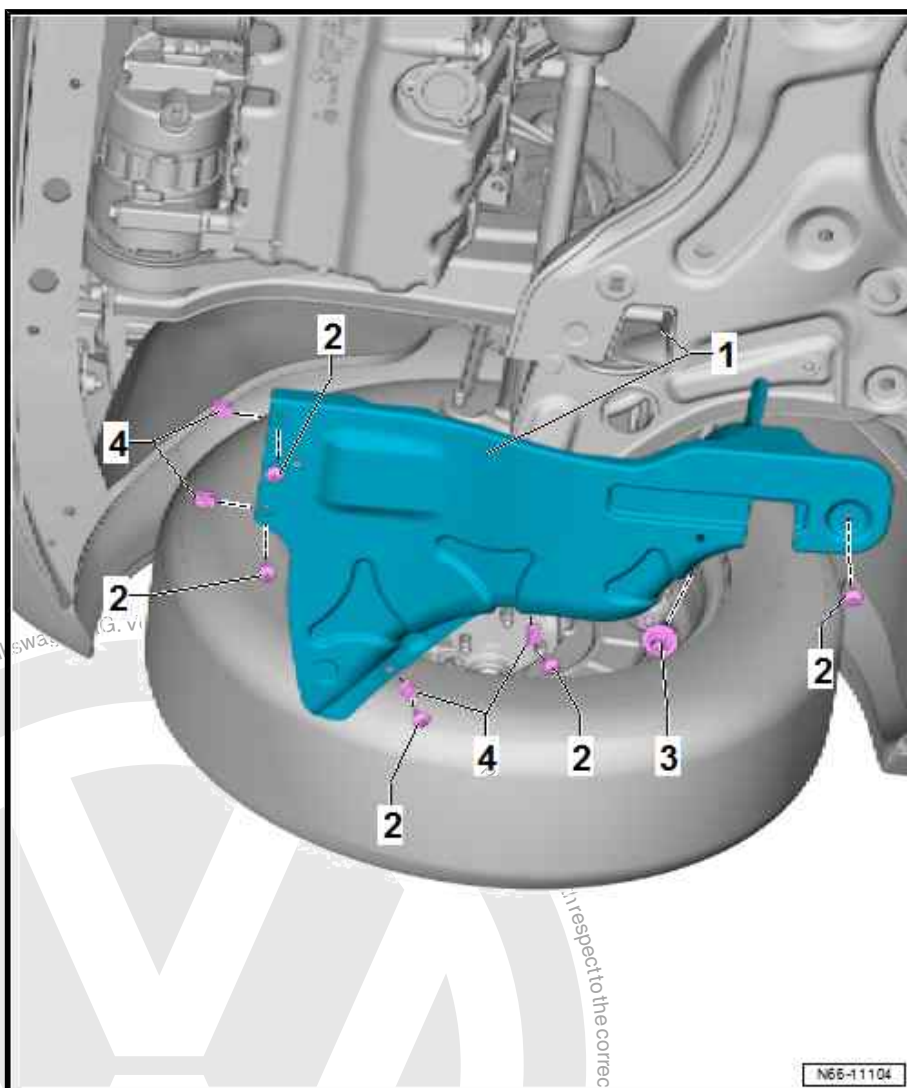
- ☐ Qty. 5
- ☐ 2 Nm

3 - Hexagon nut

- ☐ Qty. 1
- ☐ 2 Nm
- ☐ Belongs to replacement part

4 - Speed nut

- ☐ Qty. 4





4.2.2 Assembly overview - underbody cladding, longitudinal member

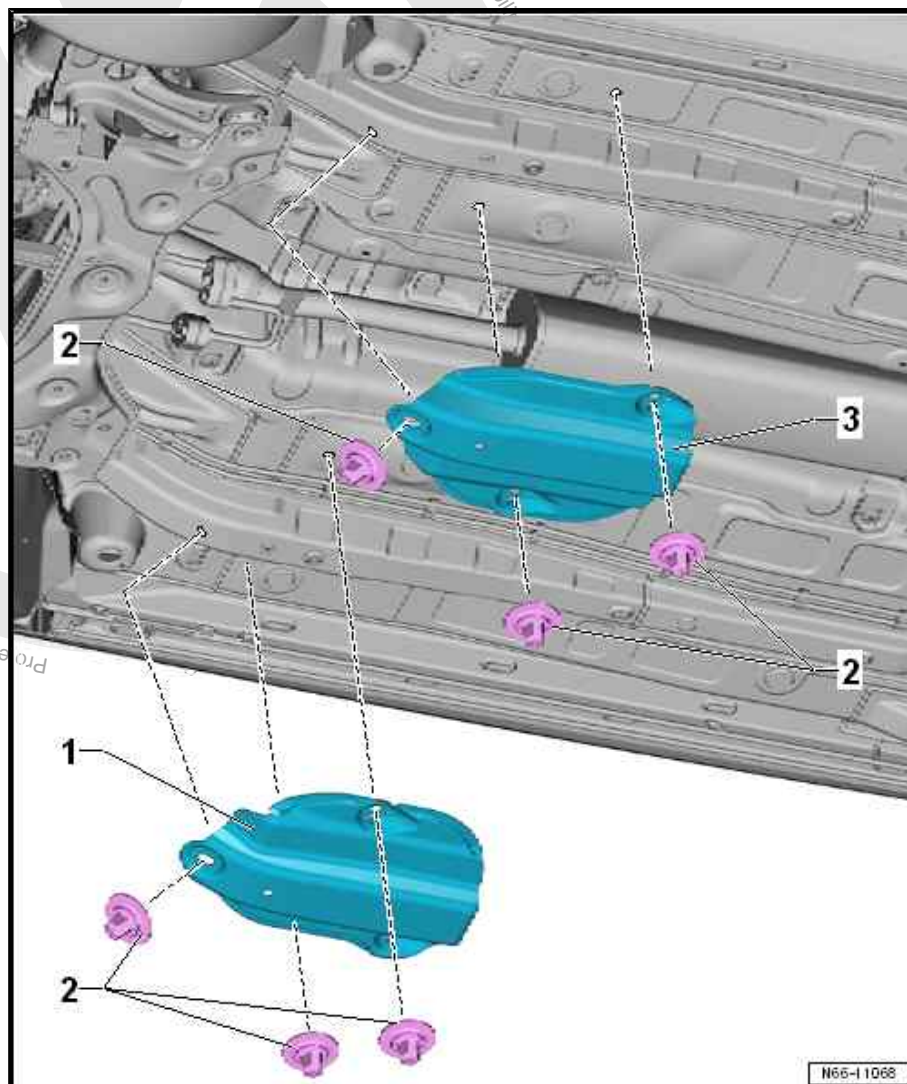
1 - Right underbody cladding

2 - Left underbody cladding

3 - Hexagon nut

Qty. 3 on each side

2 Nm





4.2.3 Assembly overview - underbody cover, e-up!

1 - Front underbody cover

Removing:

- Remove bolts -6 and 7-

2 - Expansion nut

- Qty. 2

3 - Rear underbody cover

Removing:

- Remove front underbody cladding.
- Unscrew bolts -4- and hexagon nuts -5-.

4 - Bolt

- Qty. 4
- 2 Nm

5 - Hexagon nut

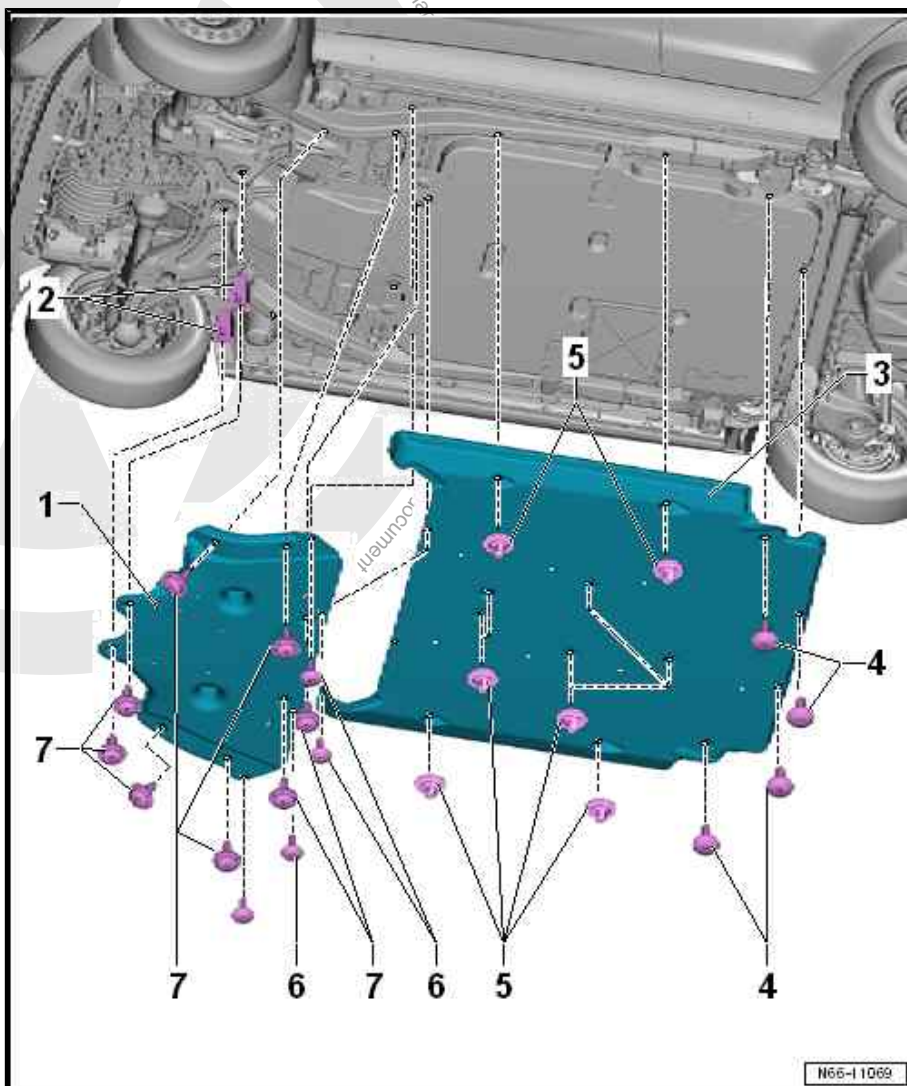
- Qty. 9
- 2 Nm

6 - Bolt

- Qty. 4
- 2 Nm

7 - Bolt

- Microencapsulated, renew each time when loosened
- Qty. 8
- 6 Nm



4.3 Assembly overview - bracing on underbody

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1331-

V.A.G 1331



W00-0427

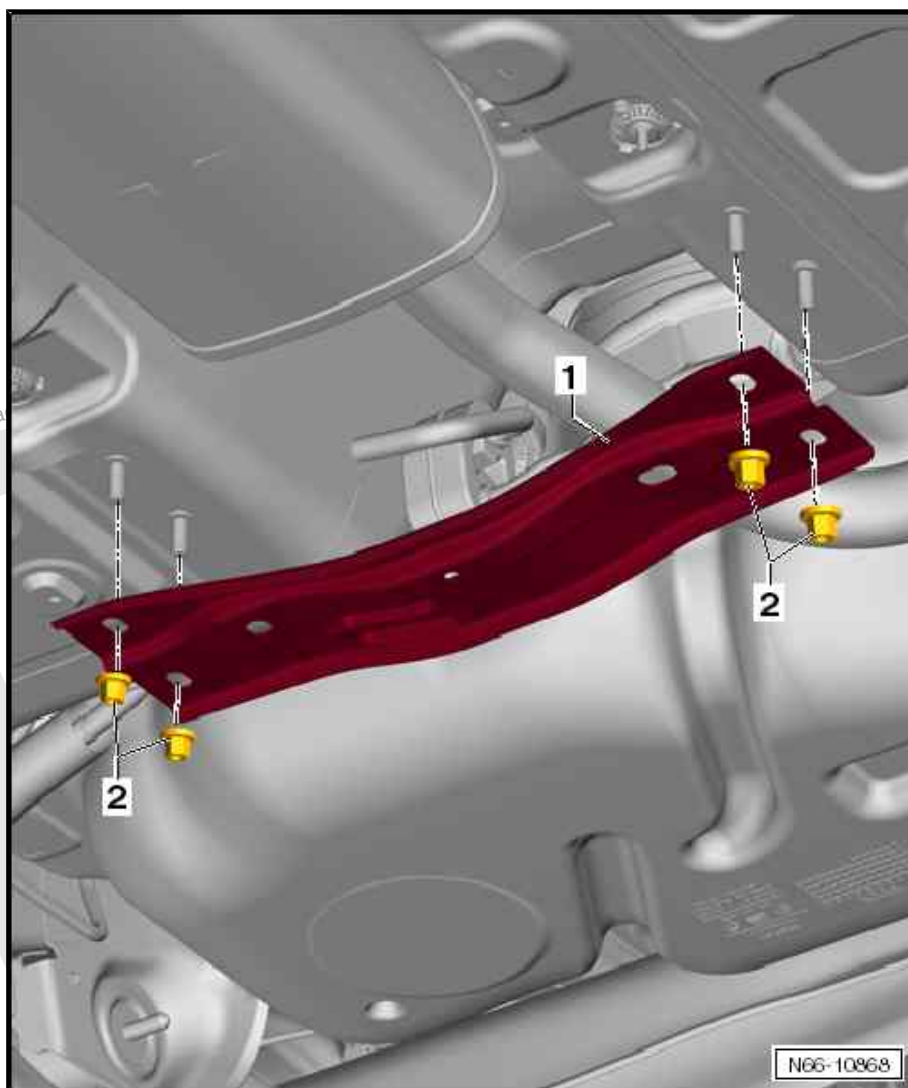


1 - Tunnel cross-piece

- ❑ Removing:
 - Unscrew bolts -2-.

2 - Hexagon nut

- ❑ Qty. 4
- ❑ Specified torque: 20 Nm



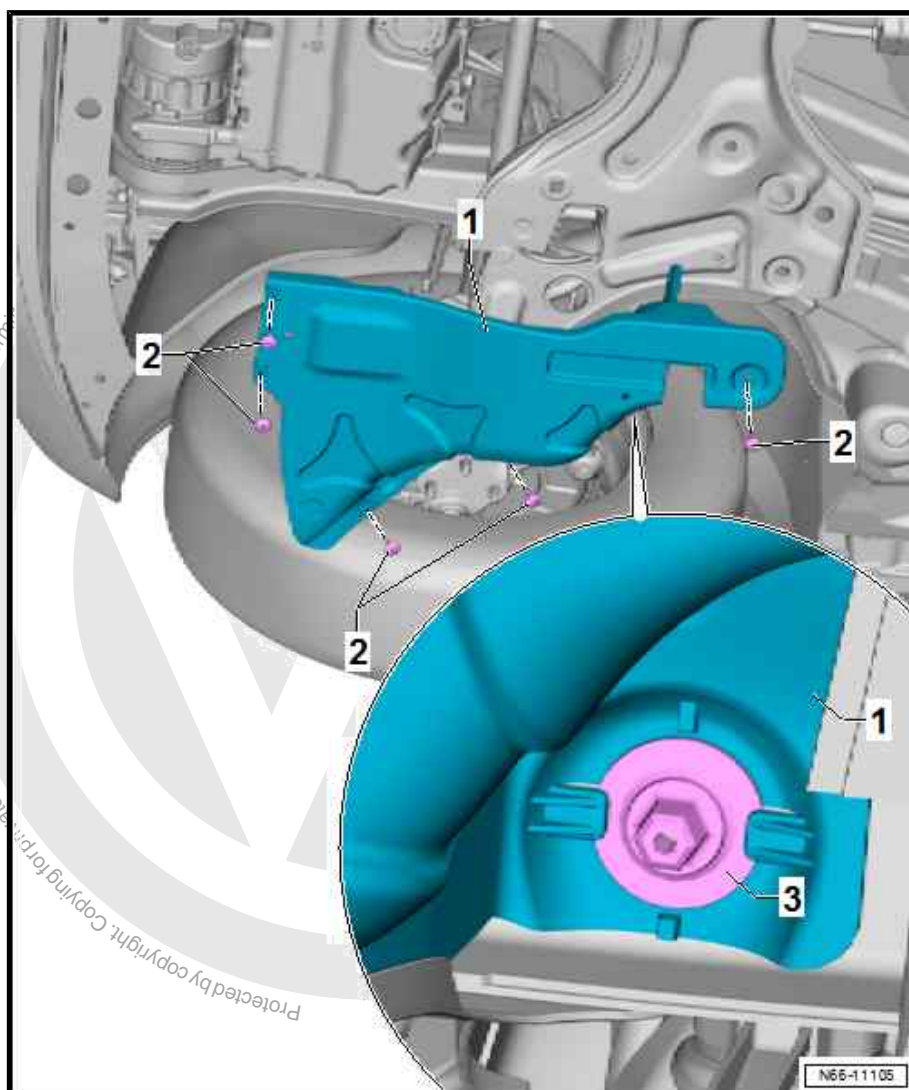


4.4 Removing and installing underbody cladding

⇒ ["4.4 Removing and installing underbody cladding", page 333](#)

⇒ ["4.4.2 Removing and installing front underbody cladding \(retrofitted\)", page 334](#)

4.4.1 Removing and installing front underbody cladding



Removing

- Unscrew bolts -2-.
- Undo and remove hexagon nut -3-. Hexagon nut remains attached to underbody cladding.

Installing

- Bring underbody cladding -1- into installation position.
- Tighten bolts -2-.
- Tighten hexagon nut -3-.

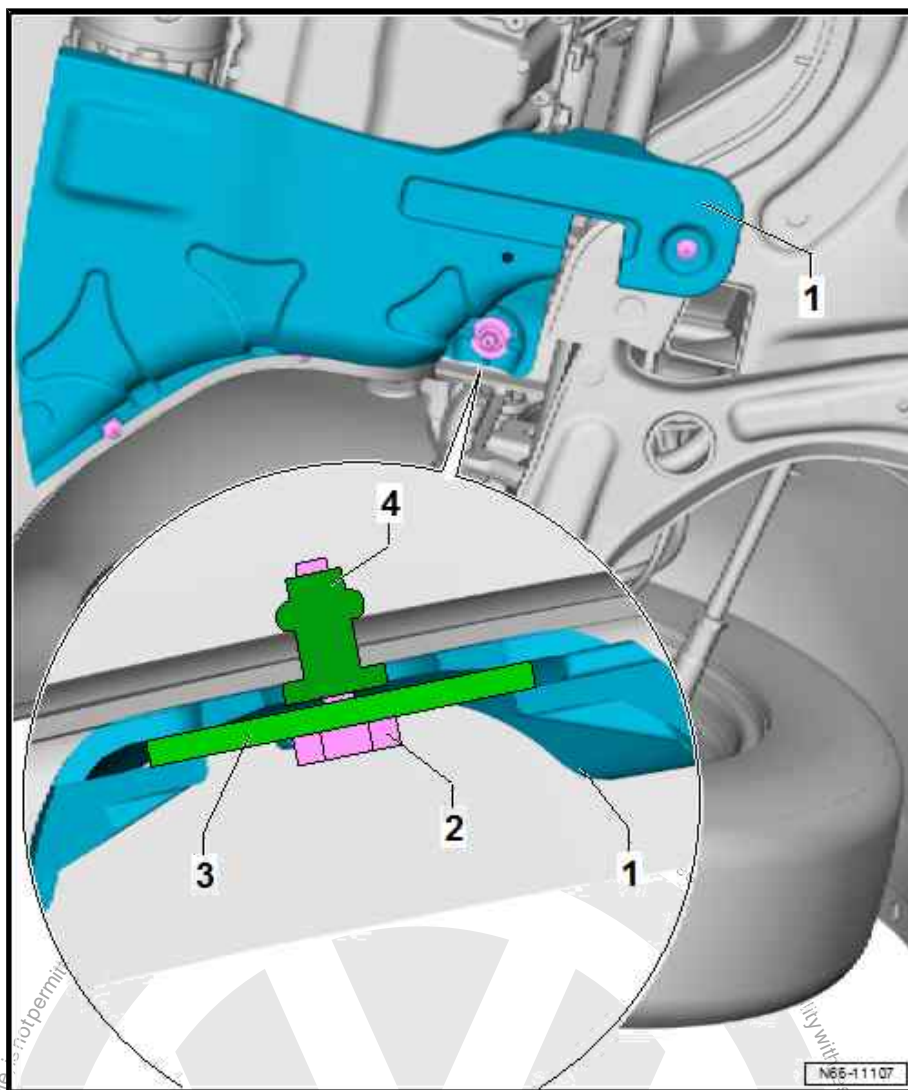
Specified torques

- ◆ Bolts ⇒ [Item 5 \(page 328\)](#)



- ◆ Hexagon nut ➔ [Item 2 \(page 328\)](#)

4.4.2 Removing and installing front underbody cladding (retrofitted)



Removing

- Unscrew bolts -2-.
- Unscrew bolt -2-. Washer -3- remains attached to underbody cladding.

Installing

- Rivet nut -4- is fitted.
- Attach washer -2- to underbody cladding.
- Bring underbody cladding -1- into installation position.
- Tighten bolts -2-.
- Tighten hexagon nut -3-.

Specified torques

- ◆ Bolts ➔ [Item 5 \(page 328\)](#)
- ◆ Hexagon nut ➔ [Item 2 \(page 328\)](#)



5 Roof moulding and roof railing

⇒ ["5.1 Assembly overview - roof railing", page 335](#)

⇒ ["5.2 Removing and installing roof railing", page 336](#)

5.1 Assembly overview - roof railing

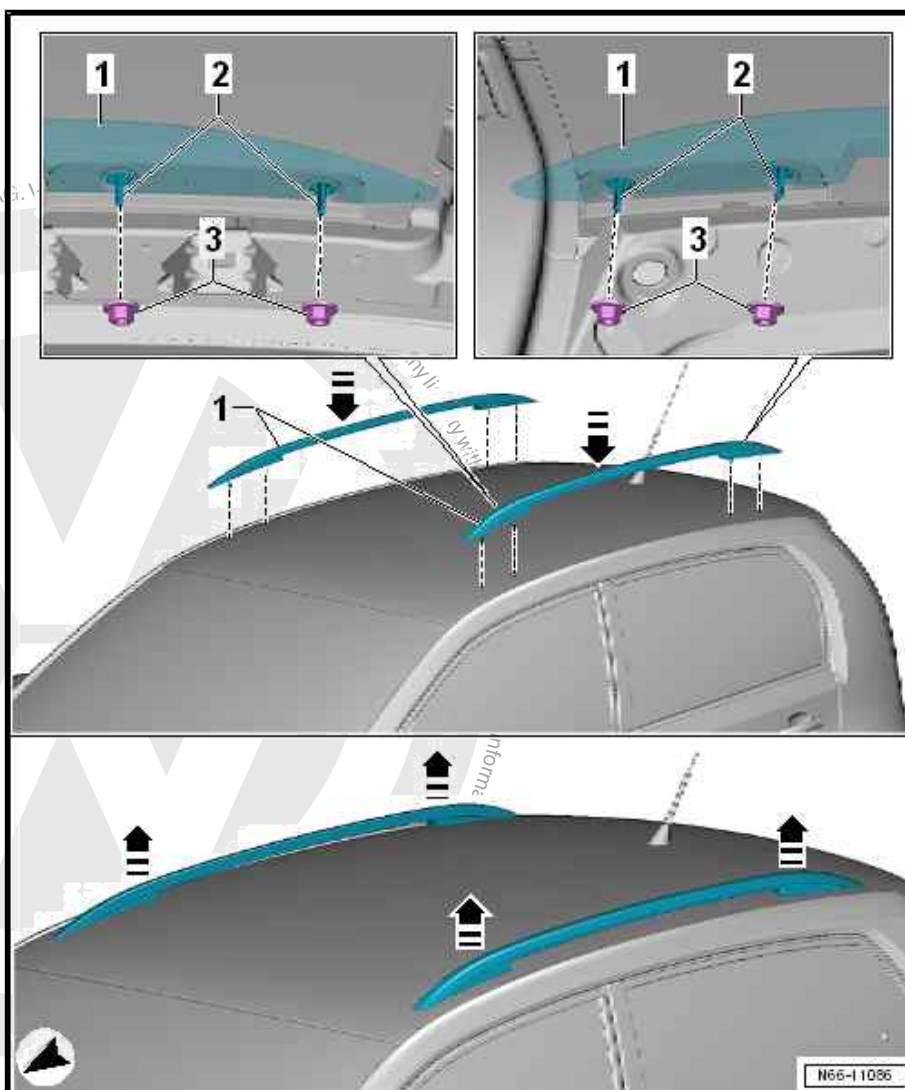
1 - Roof railing

2 - Threaded pin

- ☐ With seals
- ☐ Part of roof railing

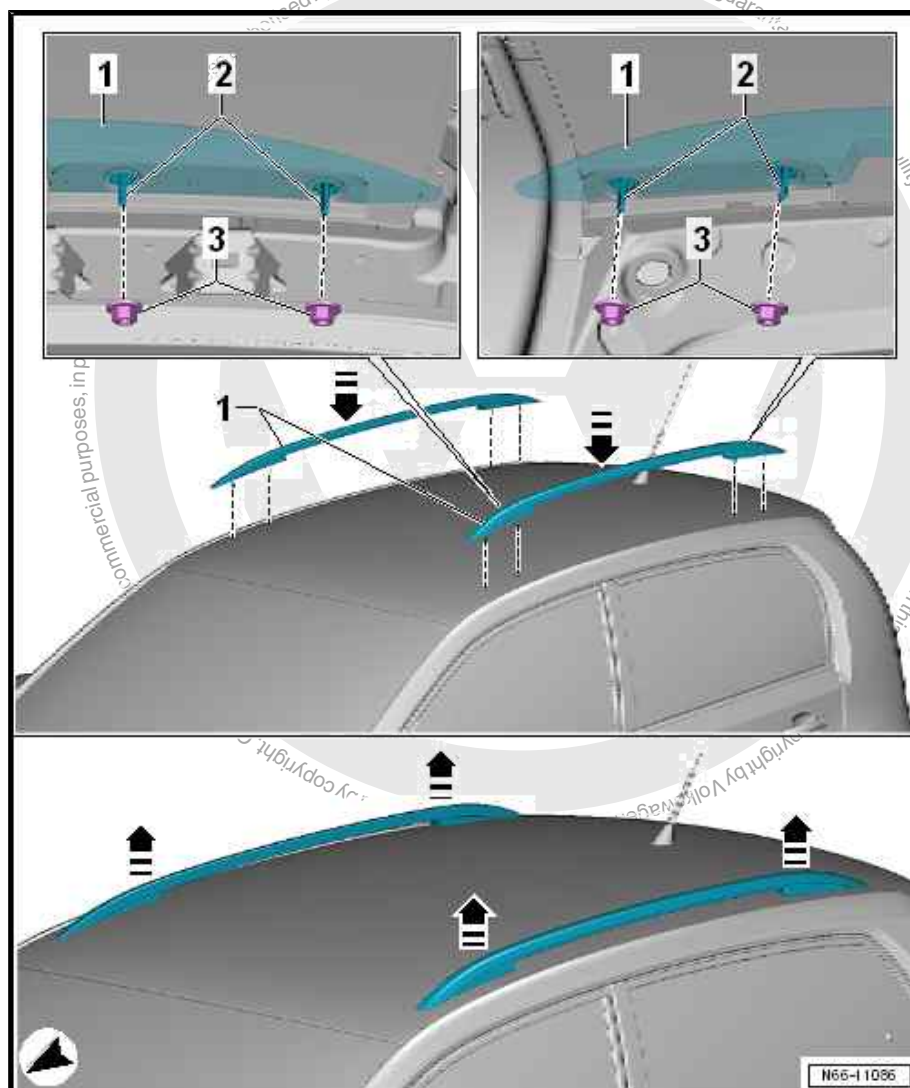
3 - Hexagon nut

- ☐ Qty. 4 on each side
- ☐ Specified torque: 9 Nm





5.2 Removing and installing roof railing



Removing



Note

The moulded headliner is removed only if the roof railings on both sides must be removed.

- Detach moulded headliner on the appropriate side ⇒ General body repairs, interior; Rep. gr. 70 ; Roof trim .
- Unscrew hexagon nuts -3- at front and rear.
- Remove roof railing -1- straight upwards.

Installing

- Check seal on threaded pins -2- for damage and ensure proper seating.
- Position roof railing -1- straight from above.
- Tighten hexagon nuts -3- at front and rear.



Specified torques

- ◆ Nuts ⇒ [Item 3 \(page 335\)](#)





6 Exterior mirror

⇒ [“6.1 Assembly overview - exterior mirror”, page 338](#)

⇒ [“6.2 Removing and installing mirror glass”, page 342](#)

⇒ [“6.3 Removing and installing mirror cover”, page 344](#)

⇒ [“6.4.1 Removing and installing mirror trim, ► MY 2016”, page 350](#)

⇒ [“6.5 Removing and installing mirror adjustment unit”, page 352](#)

⇒ [“6.6 Removing and installing exterior mirror”, page 357](#)

6.1 Assembly overview - exterior mirror

⇒ [“6.1.1 Assembly overview - exterior mirror, electrically adjustable ► MY 2016”, page 338](#)

⇒ [“6.1.2 Assembly overview - exterior mirror, electrically adjustable, MY 2017 ►”, page 340](#)

⇒ [“6.1.3 Assembly overview - exterior mirror, manually adjustable, ► MJ 2016”, page 341](#)

⇒ [“6.1.4 Assembly overview - exterior mirror, manually adjustable, MY 2017 ►”, page 342](#)

6.1.1 Assembly overview - exterior mirror, electrically adjustable ► MY 2016



Note

The illustrations show the left-hand side. The right side is similar.



1 - Mirror mounting

- ☐ Removing and installing
⇒ [page 357](#)

2 - Mirror housing

- ☐ Material: ABS
- ☐ Chromed mirror housing for vehicles from Volkswagen R GmbH
- ☐ Removing and installing
⇒ [page 344](#)

3 - Electrical cable and connector

- ☐ Optional, for interior monitoring LED

4 - Dampers

5 - Bolt

- ☐ Qty. 2
- ☐ Specified torque: 12 Nm

6 - Adjuster unit

- ☐ Removing and installing
⇒ [page 352](#)

7 - Mirror glass

- ☐ Removing and installing
⇒ [page 342](#)

8 - Trim

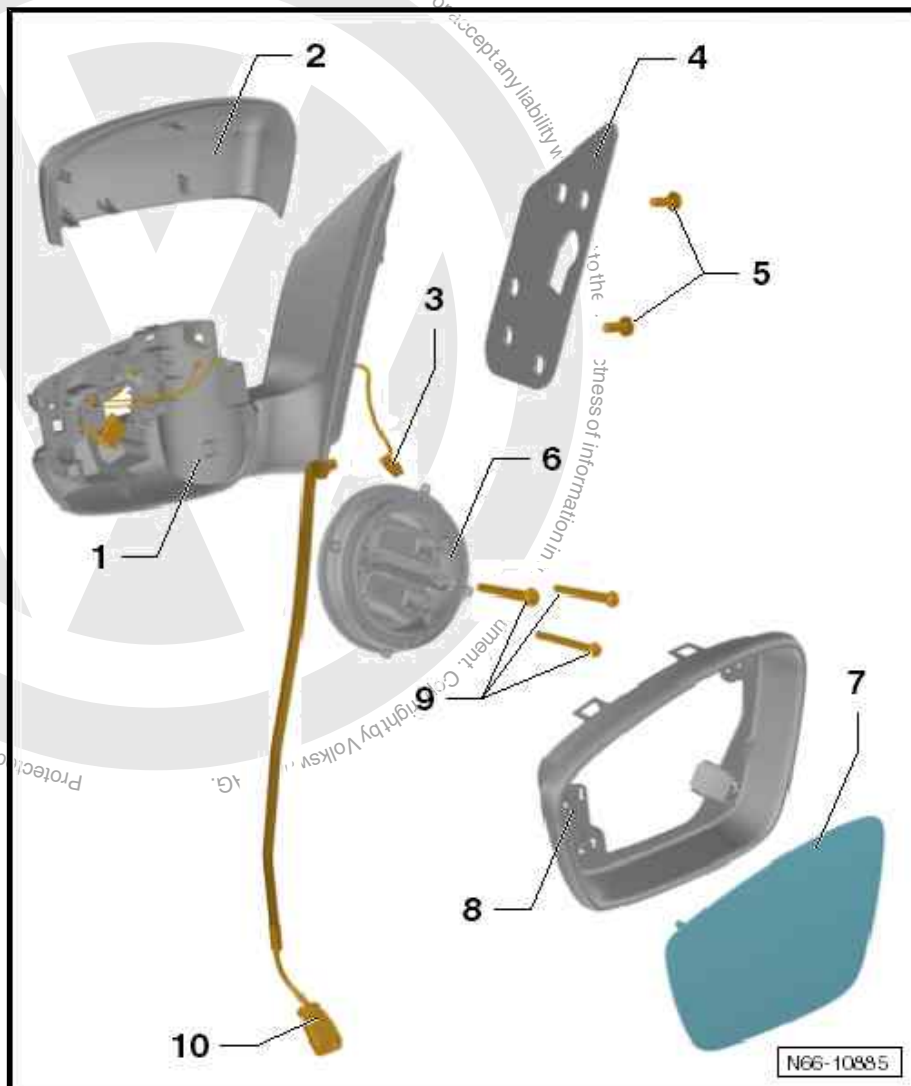
- ☐ Removing and installing
⇒ [page 350](#)

9 - Bolt

- ☐ Qty. 3
- ☐ Specified torque: 2 Nm

10 - Electrical cable and connector

- ☐ Optional, for interior monitoring LED





6.1.2 Assembly overview - exterior mirror, electrically adjustable, MY 2017 ➤



Note

The illustrations show the left-hand side. The right side is similar.

1 - Mirror mounting

- ❑ Removing and installing
⇒ [page 357](#)

2 - Top mirror cover

- ❑ Material: ABS
- ❑ Chromed mirror housing for vehicles from Volkswagen R GmbH
- ❑ Removing and installing
⇒ [page 346](#)

3 - Dampers

4 - Bolt

- ❑ Qty. 2
- ❑ Specified torque: 12 Nm

5 - Electrical cable and connector

- ❑ Optional, for interior monitoring LED

6 - Mirror trim

- ❑ Removing and installing

7 - Bolt

- ❑ Qty. 3
- ❑ Specified torque: 2 Nm

8 - Adjuster unit

- ❑ Removing and installing
⇒ [page 355](#)

9 - Bolt

- ❑ Qty. 1
- ❑ Specified torque: 2 Nm

10 - Mirror glass

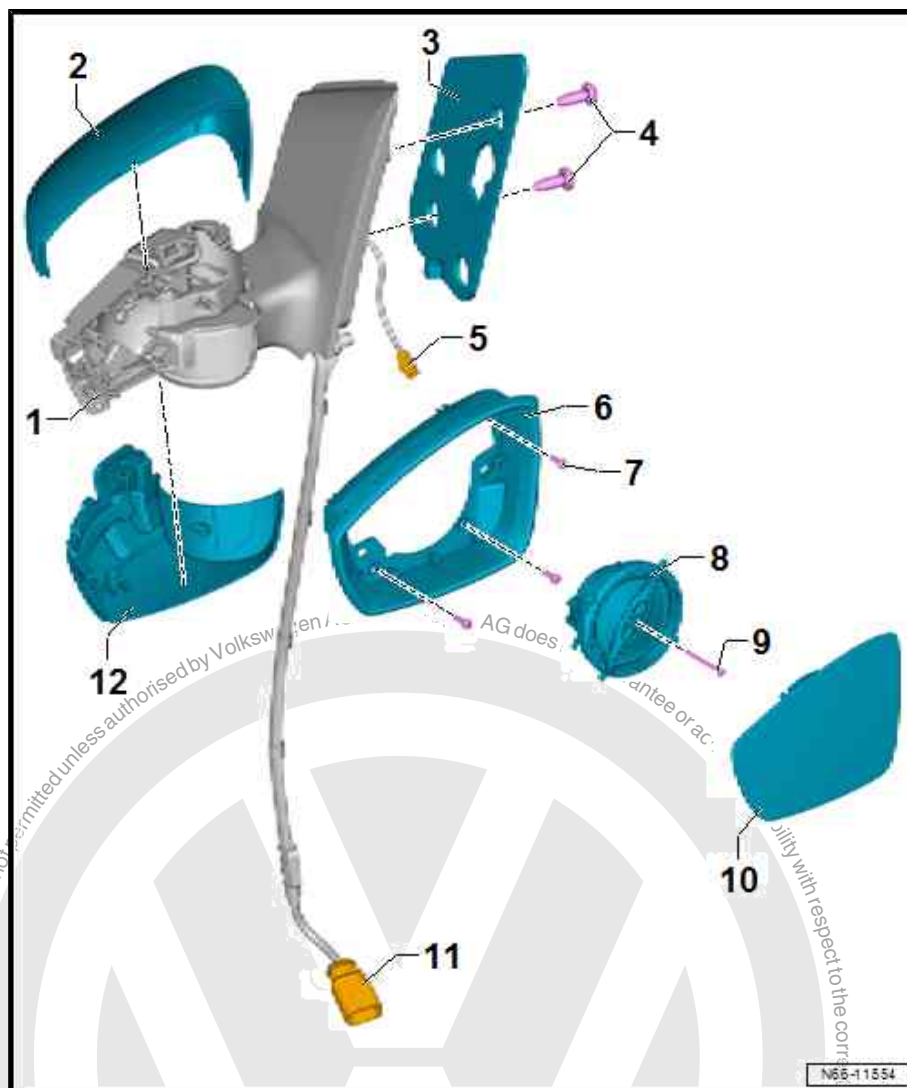
- ❑ Removing and installing ⇒ [page 342](#)

11 - Electrical cable and connector

- ❑ Optional, for interior monitoring LED

12 - Bottom mirror cover

- ❑ With side turn signal repeater.
- ❑ Removing and installing ⇒ [page 349](#)





6.1.3 Assembly overview - exterior mirror, manually adjustable, ➤ MJ 2016



Note

The illustrations show the left-hand side. The right side is similar.

1 - Mirror mounting

- ☐ Removing and installing
⇒ [page 360](#)

2 - Mirror cover

- ☐ Material: ABS
- ☐ Removing and installing
⇒ [page 344](#)

3 - Electrical cable and connector

- ☐ Optional, for interior monitoring LED

4 - Dampers

5 - Bolt

- ☐ Qty. 2
- ☐ Specified torque: 12 Nm

6 - Hexagon nut

- ☐ Specified torque: 2 Nm

7 - Operating handle

8 - Trim

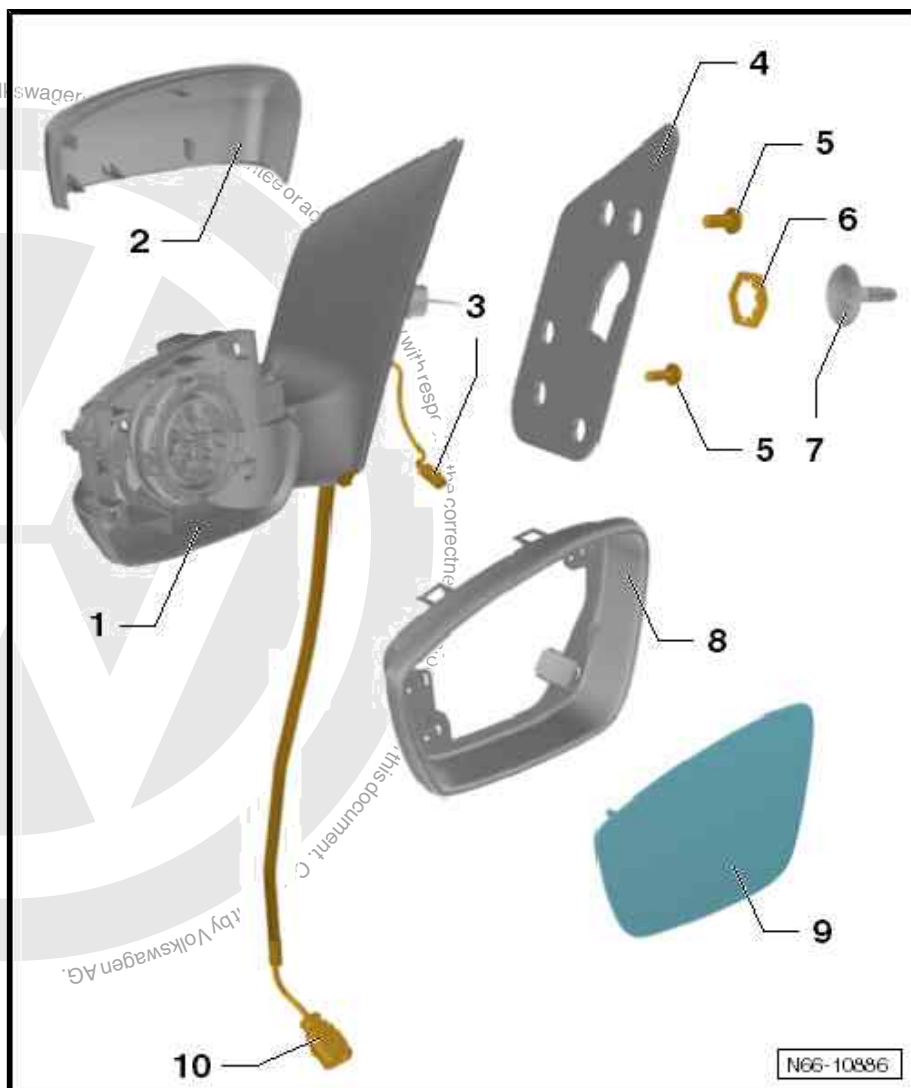
- ☐ Removing and installing
⇒ [page 350](#)

9 - Mirror glass

- ☐ Removing and installing
⇒ [page 342](#)

10 - Electrical cable and connector

- ☐ Optional, for interior monitoring LED





6.1.4 Assembly overview - exterior mirror, manually adjustable, MY 2017 ►



Note

The illustrations show the left-hand side. The right side is similar.

1 - Mirror mounting

- ☐ Removing and installing
⇒ [page 360](#)

2 - Top mirror cover

- ☐ Material: ABS
- ☐ Removing and installing
⇒ [page 346](#)

3 - Dampers

4 - Bolt

- ☐ Qty. 2
- ☐ Specified torque: 12 Nm

5 - Electrical cable and connector

- ☐ Optional, for interior monitoring LED

6 - Hexagon nut

- ☐ Specified torque: 2 Nm

7 - Operating handle

8 - Mirror trim

- ☐ Removing and installing
⇒ [page 352](#)

9 - Bolt

- ☐ Qty. 3
- ☐ Specified torque: 2 Nm

10 - Adjuster unit

- ☐ Forms one component with mirror mounting

11 - Bolt

- ☐ Qty. 3
- ☐ Specified torque: 2 Nm

12 - Mirror glass

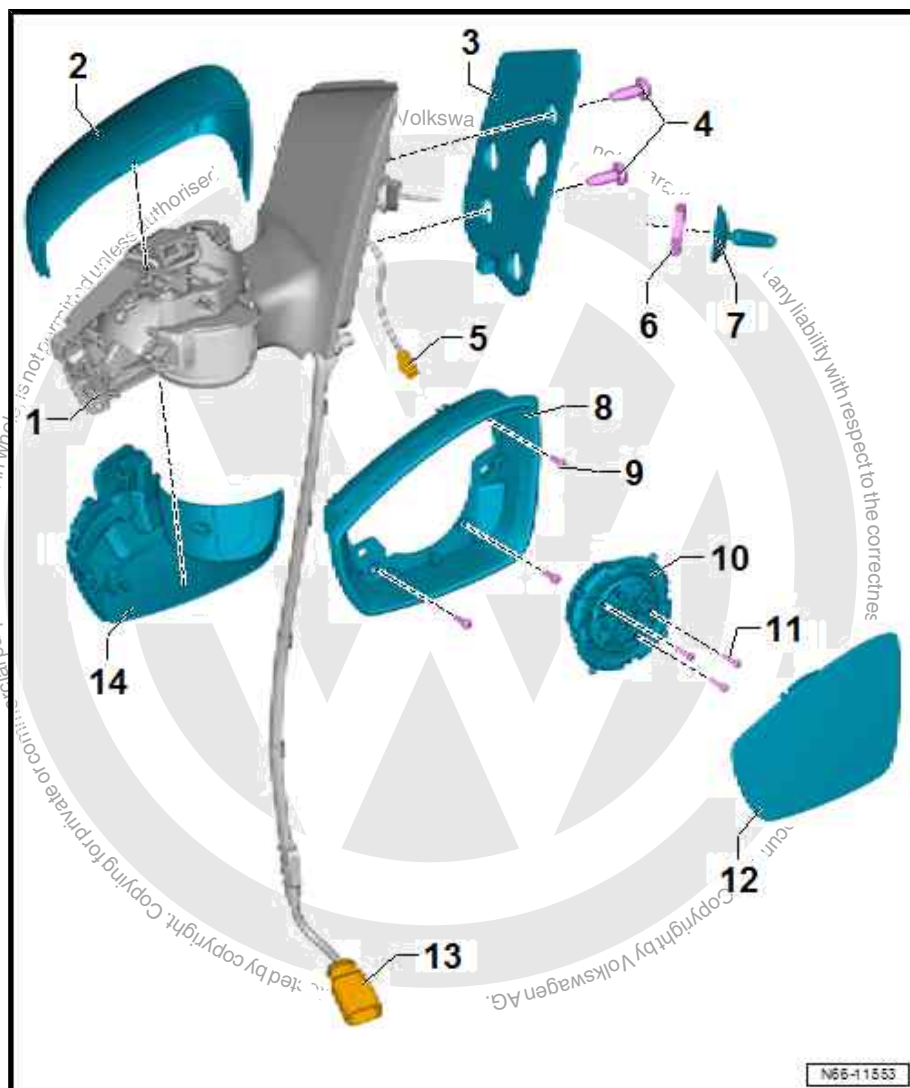
- ☐ Removing and installing ⇒ [page 342](#)

13 - Electrical cable and connector

- ☐ Optional, for interior monitoring LED

14 - Bottom mirror cover

- ☐ With side turn signal repeater.
- ☐ Removing and installing ⇒ [page 349](#)

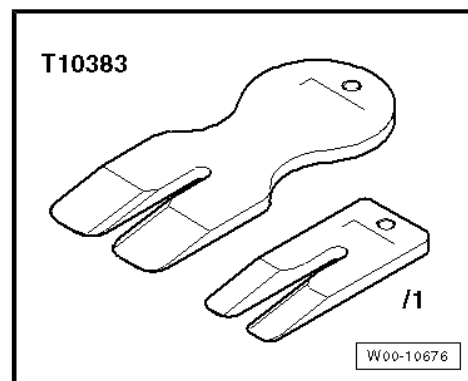


6.2 Removing and installing mirror glass

Special tools and workshop equipment required



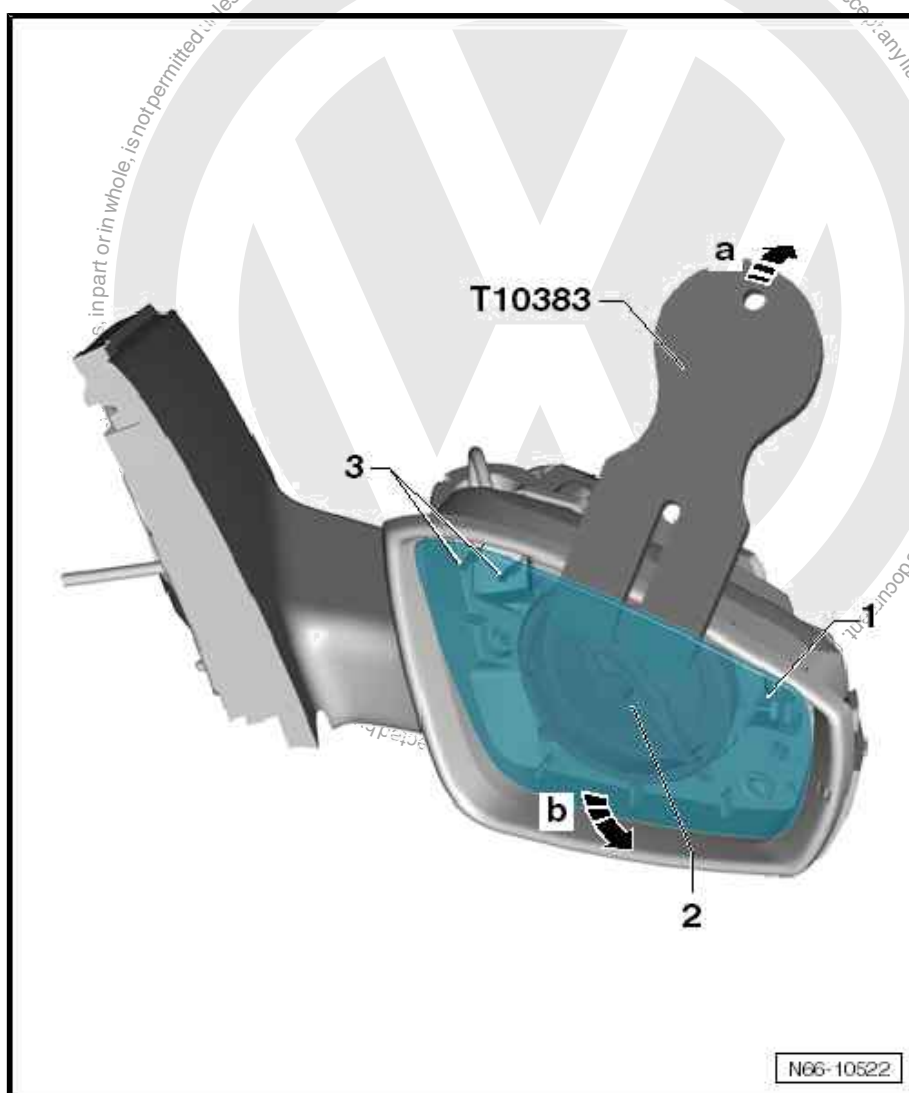
◆ Wedges - T10383-



Note

Removal and installation are described only for the right mirror glass. The left side is similar.

Removing





WARNING

When doing this repair work, always wear safety goggles and leather gloves!

- Protect edge of housing -2- against paint damage with e.g. fabric-reinforced adhesive tape.
- Press bottom of mirror glass -1- into mirror housing.
- Press mirror glass -1- off adjuster unit -2- -arrow a- using wedge T10383- .
- Swivel mirror glass -1- to side -arrow b- and detach existing connector contacts -3- for electric mirror heating on back of mirror glass -1-.

Installing

- Press connector contacts onto mirror glass.
- Push mirror glass centrally onto adjustment unit in housing.

Mirror glass engages audibly.

- Perform functional check

6.3 Removing and installing mirror cover

⇒ [“6.3.1 Removing and installing mirror cover, ► MY 2016”, page 344](#)

⇒ [“6.3.2 Removing and installing top mirror cover, MY 2017 ►”, page 346](#)

⇒ [“6.3.3 Removing and installing bottom mirror cover, MY 2017 ►”, page 349](#)

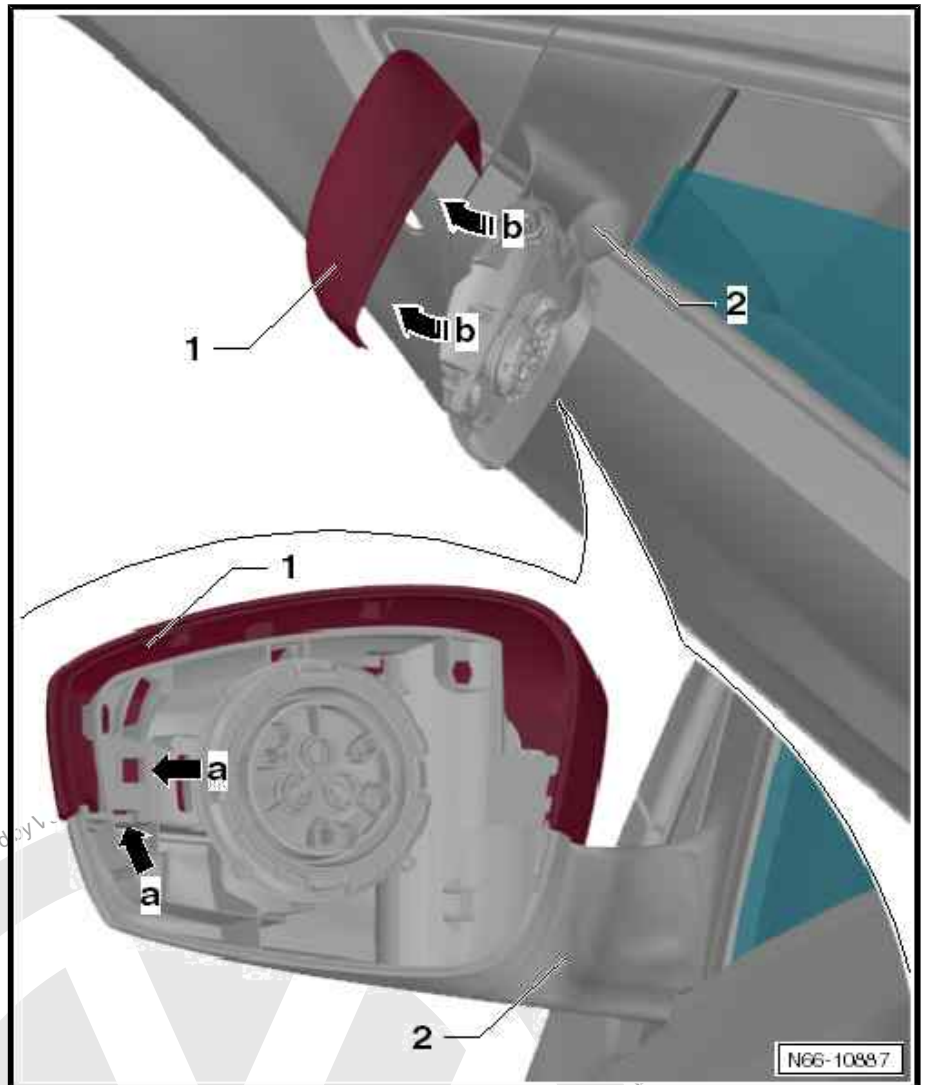
6.3.1 Removing and installing mirror cover, ► MY 2016



Note

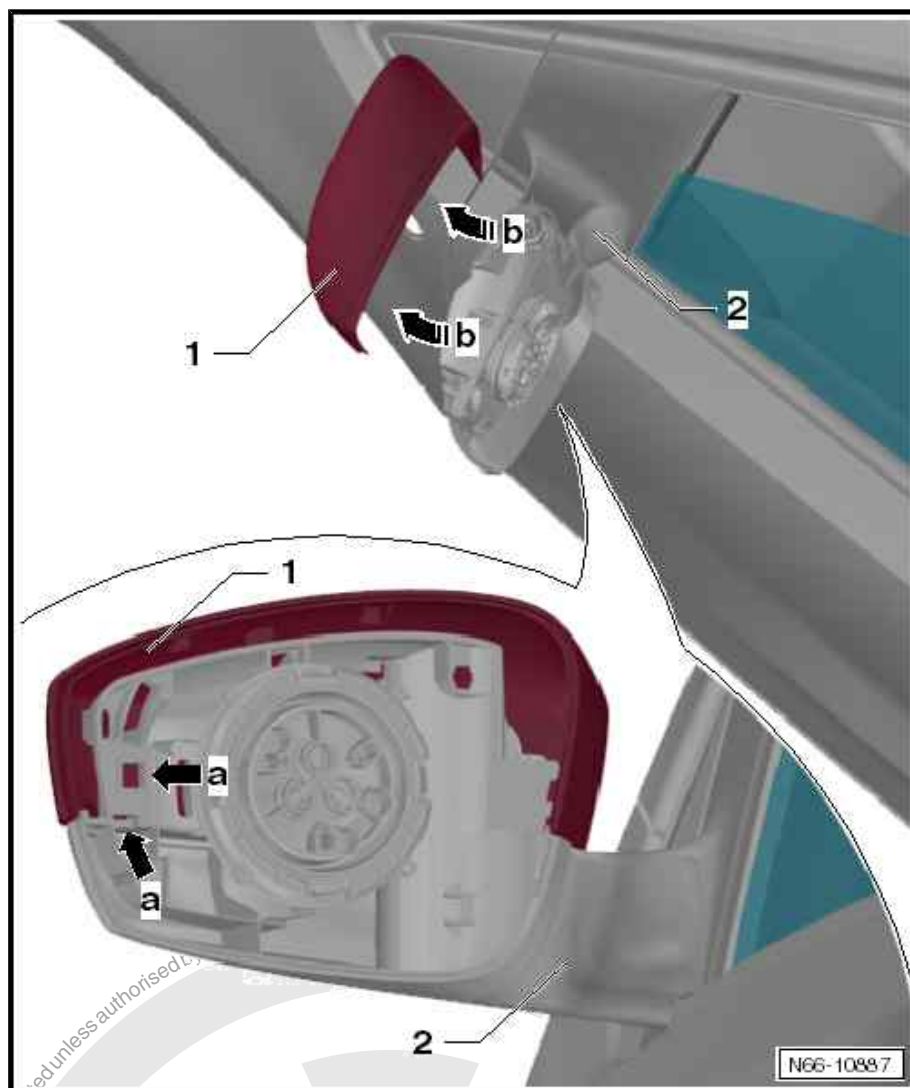
- ◆ *Removal and installation are described only for the left mirror cover. The right side is similar.*
- ◆ *Generally, the mirror cover cannot be removed without being damaged.*

Removing



- Remove mirror glass ➤ [page 342](#) .
- Remove trim ➤ [page 350](#) .
- Release locking hooks -arrows a-
- Then, pull mirror cover -1- forwards in -direction of arrow b- off mirror mounting -2-.
- Doing so will release the remaining locking hooks.

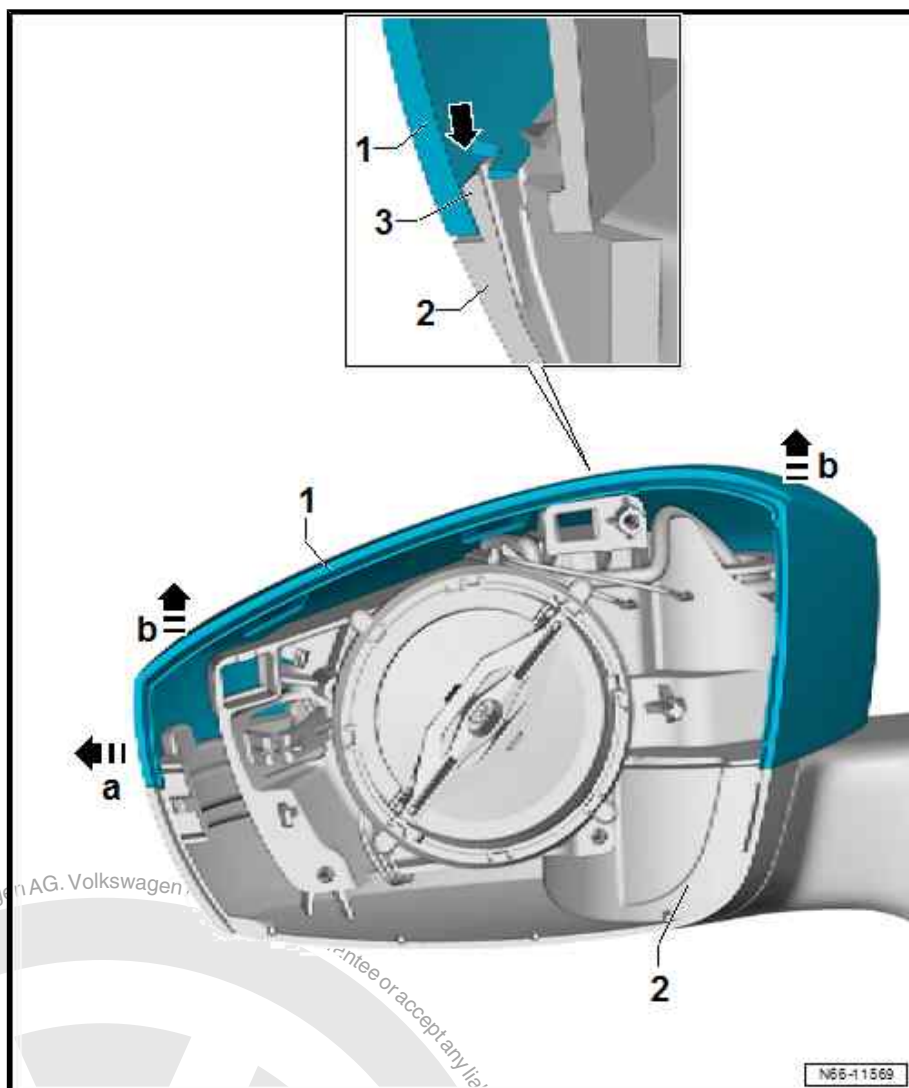
Installing



- Position mirror cover -1- and press on until locking hooks engage audibly.
- Finally check function.
- Installing trim ➔ [page 350](#) .
- Install mirror glass ➔ [page 342](#) .

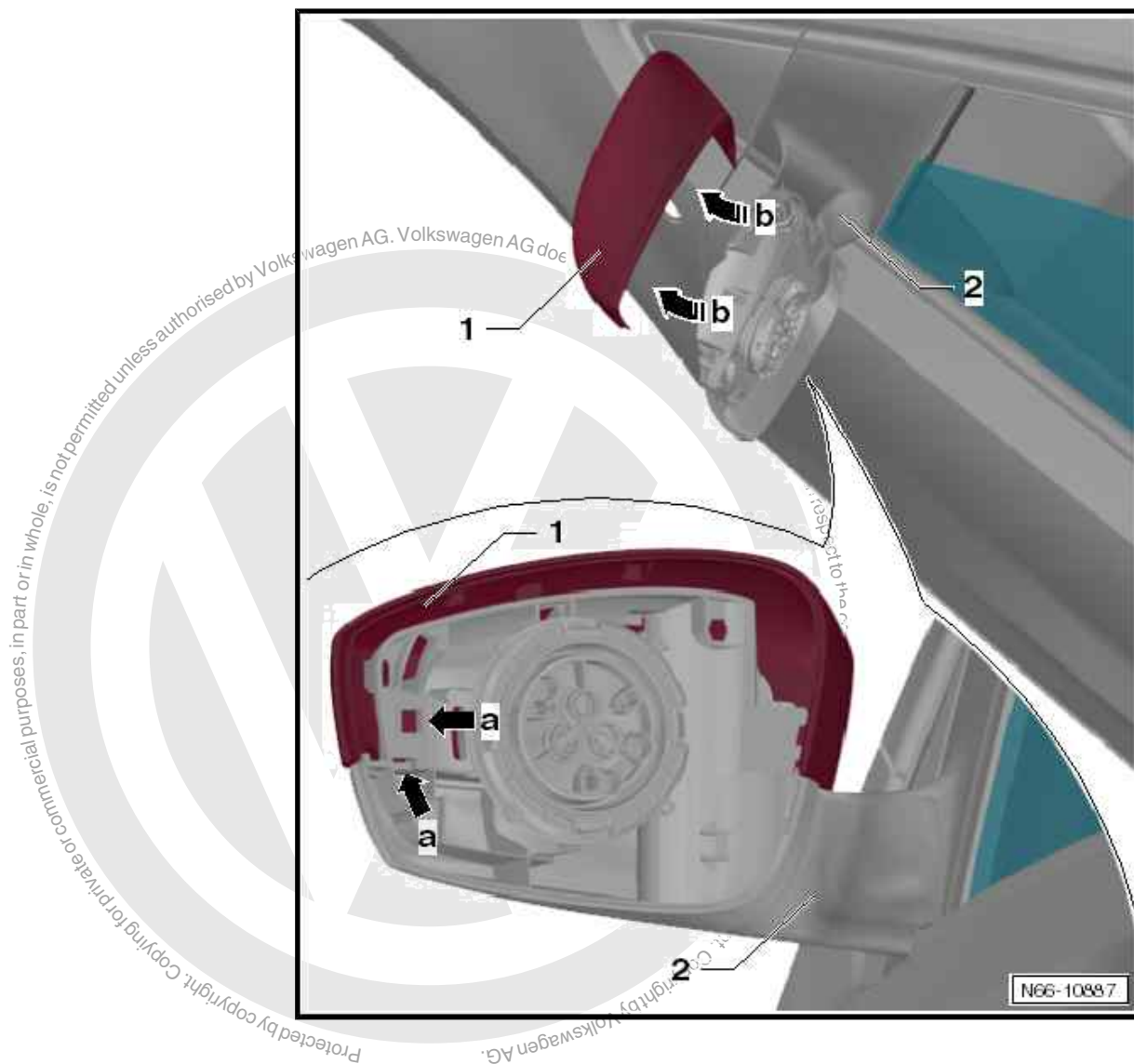
6.3.2 Removing and installing top mirror cover, MY 2017 ➤

Removing



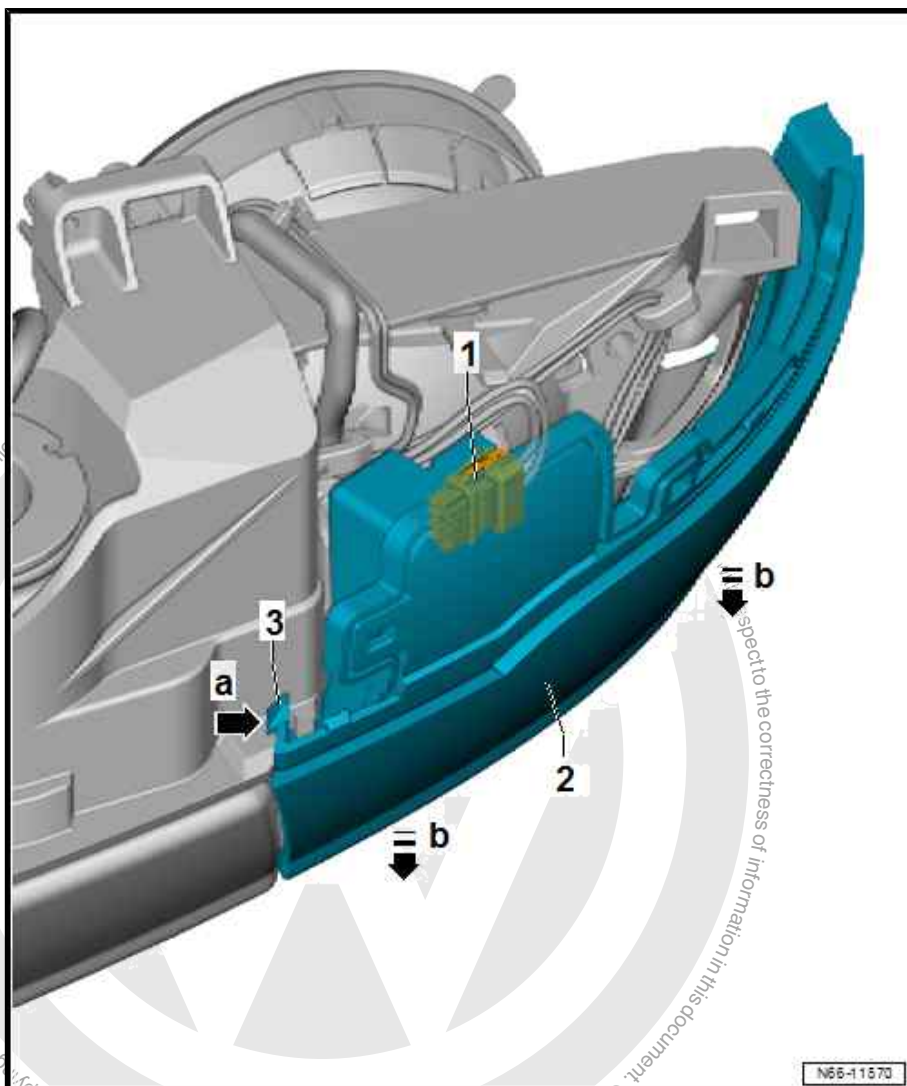
- Remove mirror glass ➤ [page 342](#) .
- Remove trim ➤ [page 352](#) .
- Slightly pull off top mirror cover from bottom mirror cover -arrow a-.
- Then, pull off mirror cover -1- upwards from mirror mounting -2- -arrows b-.
- Doing so will release the remaining locking hooks.

Installing



- Position mirror cover -1- and press on until locking hooks engage audibly.
- Finally check function.
- Installing trim ➔ [page 352](#) .
- Install mirror glass ➔ [page 342](#) .

6.3.3 Removing and installing bottom mirror cover, MY 2017 ➤



Removing

- Release locking device -3- -arrow a-.
- Pull bottom mirror cover downwards with turn signal repeater -2- -arrows b-.
- Disconnect connector of turn signal repeater -1-.

Installing

- Position mirror cover -1- and press on until locking hooks engage audibly.
- Finally check function.



6.4 Removing and installing mirror trim

⇒ ["6.4.1 Removing and installing mirror trim, ► MY 2016", page 350](#)

⇒ ["6.4.2 Removing and installing mirror trim, MY 2017 ►", page 352](#)

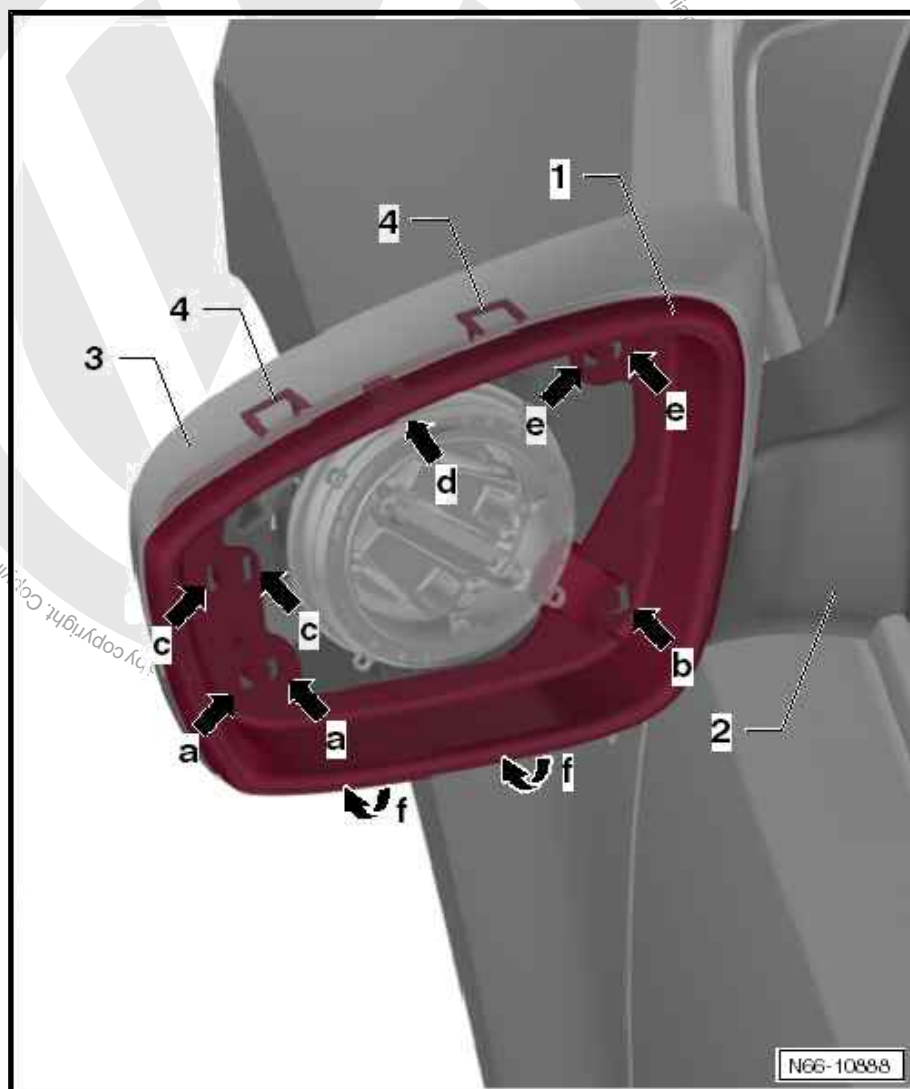
6.4.1 Removing and installing mirror trim, ► MY 2016



Note

- ◆ The removal and installation sequence is only for the left trim plate. The right side is similar.
- ◆ Generally, the trim cannot be removed without being damaged.

Removing

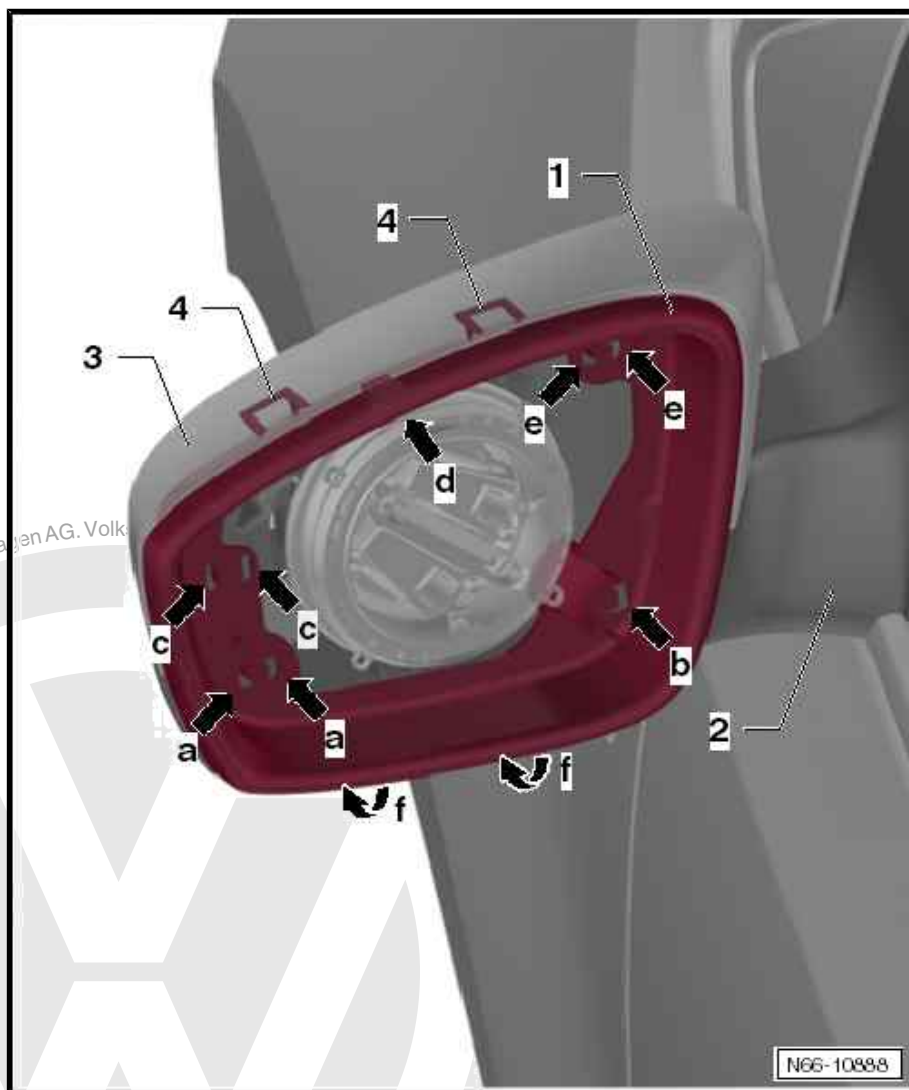


- Remove mirror glass ⇒ [page 342](#) .
- Release locking hooks -arrows a- and -arrows b-.



- Slightly tilt trim upwards -arrows f- so that locking hooks remain released.
- Release locking hooks -arrows c, d- and -arrows e-.
- Tilt trim -1- further upwards -arrows f-.
- The trim is then released from catches -4-.

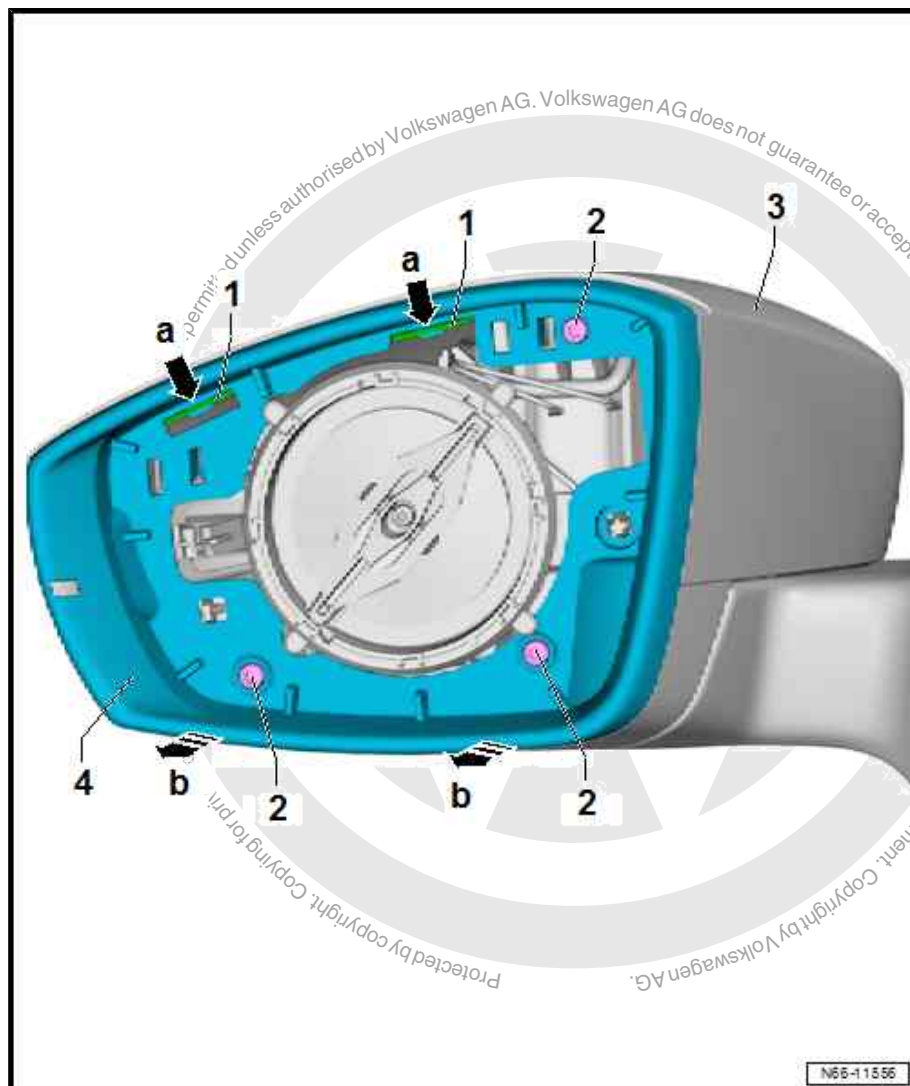
Installing



- Press trim -1- into all catches until they engage audibly.
- Finally check function.
- Install mirror glass ➤ [page 342](#) .



6.4.2 Removing and installing mirror trim, MY 2017 ➤



Removing

- Remove mirror glass ➔ [page 342](#) .
- Unscrew bolts -2-.
- Release retaining hooks -1- -arrows a-.
- Pull off mirror trim -4- from mirror covers -3-.

Installing

- Press trim -4- into the catches -1- until they engage audibly.
- Tighten bolts -2-.
- Install mirror glass ➔ [page 342](#) .

Specified torques

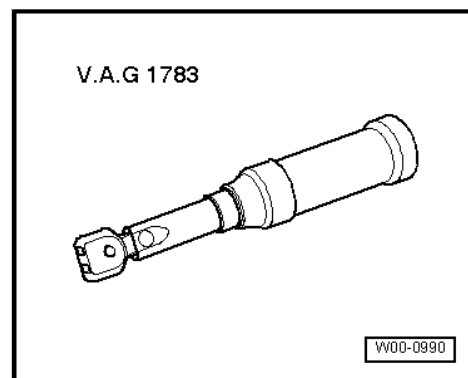
- ♦ Bolts ➔ [page 340](#)

6.5 Removing and installing mirror adjustment unit

Special tools and workshop equipment required



- ◆ Torque wrench - V.A.G 1783-



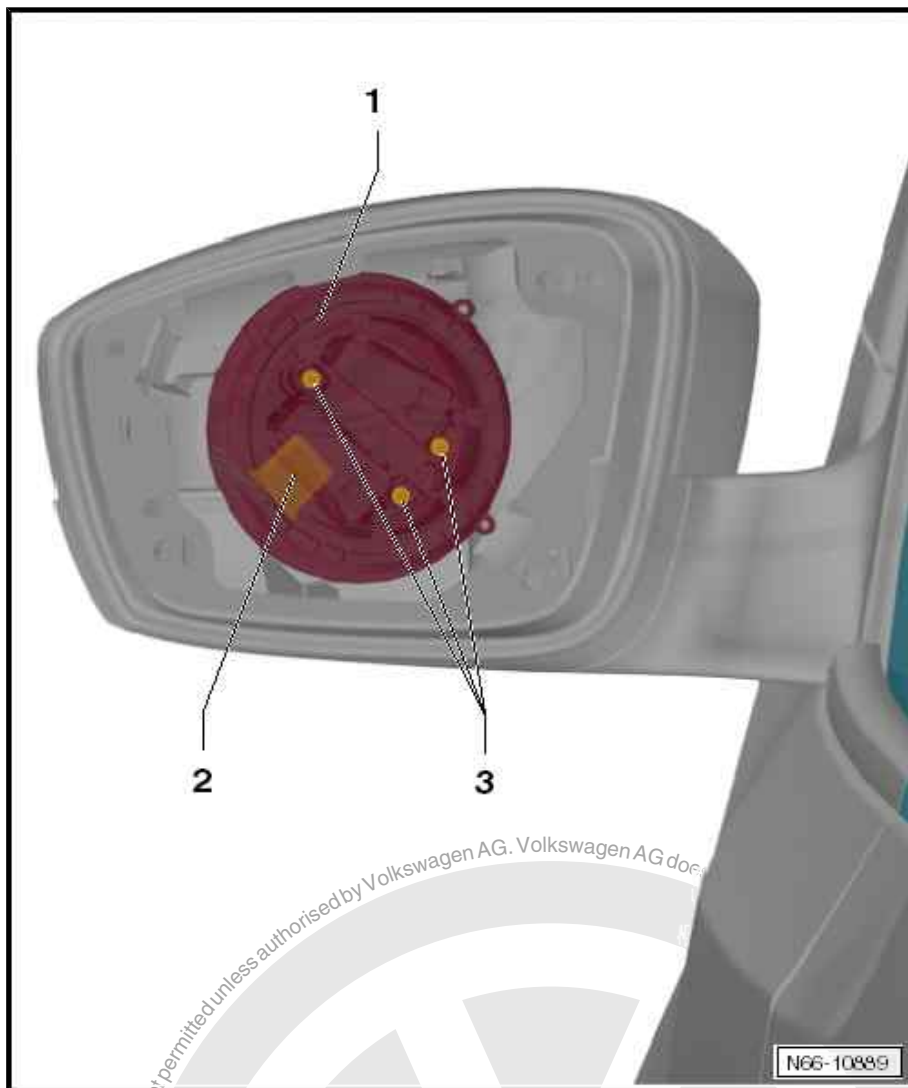
Note

The removal and installation sequence is only for the left adjustment unit with motor. The right side is similar.

6.5.1 Removing and installing mirror adjustment unit, ► MY 2016

Removing

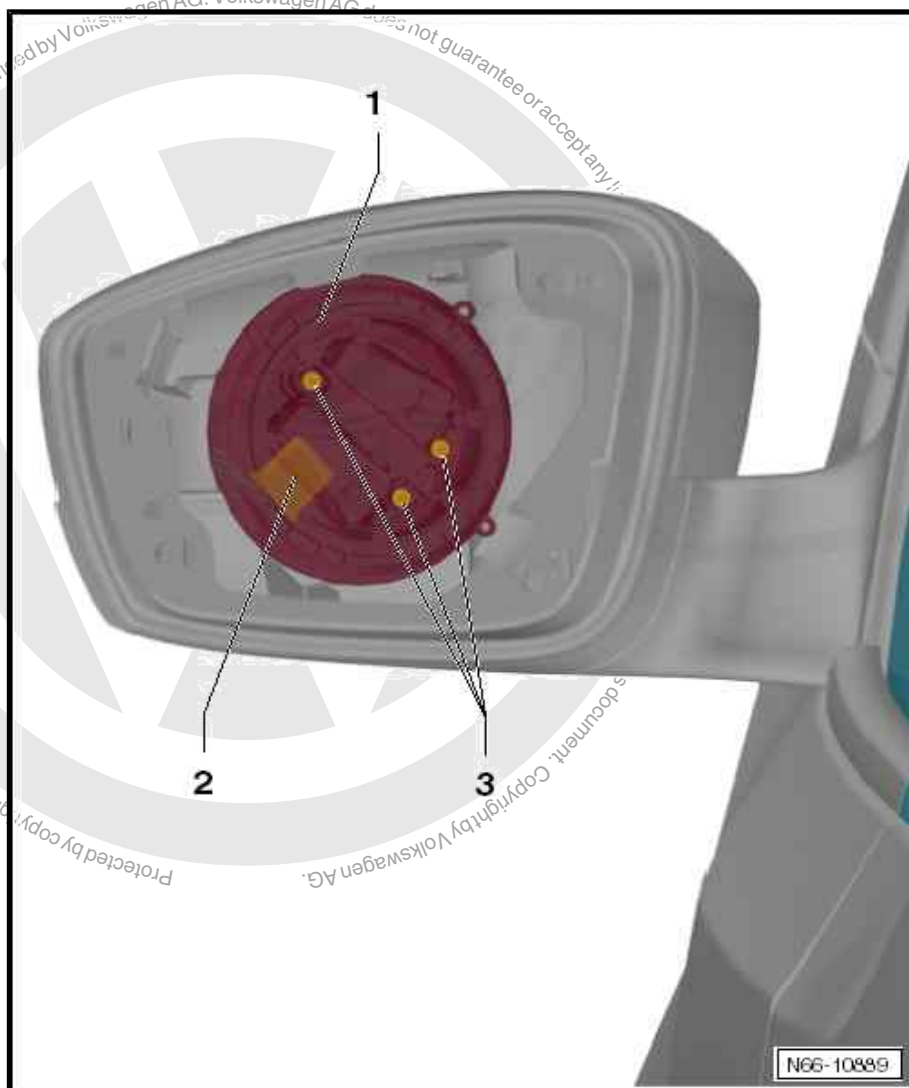




Perform the following steps:

- Remove mirror glass ➔ [page 342](#) .
- Unscrew bolts -3- (qty. 3) and remove adjustment unit -1- from mirror mounting.
- Swivel adjustment unit together with motor -1- to the side and pull off connector -2-.

Installing



Perform the following steps:

- Attach connector -2- to adjusting unit -1-.
- Place adjustment unit -1- on mirror mounting and fix in place by tightening bolts -3- (qty. 3).
- Install mirror glass ⇒ [page 342](#) .
- Perform functional check

Specified torques

- ◆ Bolts ⇒ [page 338](#)

6.5.2 Removing and installing mirror adjustment unit, MY 2017 ►

Special tools and workshop equipment required

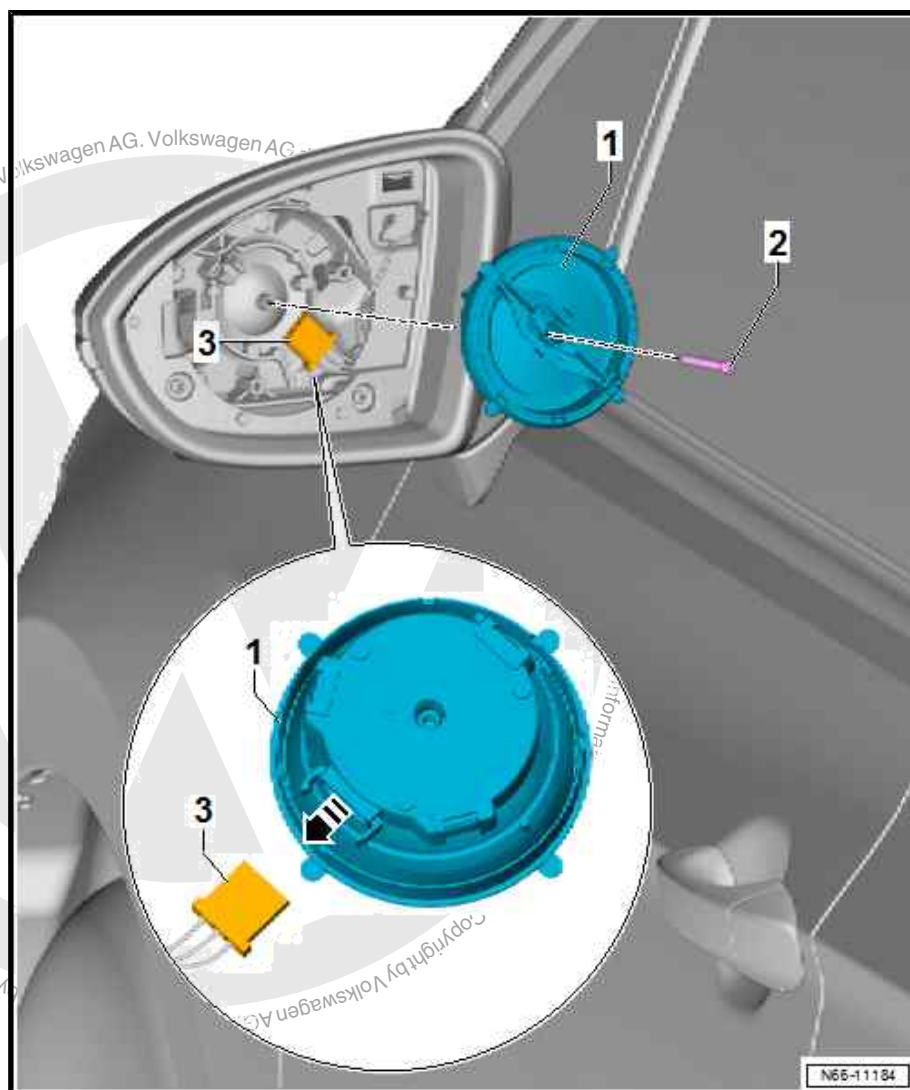


◆ Torque wrench - V.A.G 1783-



Note

The removal and installation sequence is only for the left adjustment unit with motor. The right side is similar.



Removing

- Remove mirror glass ⇒ [page 342](#) .



- Unscrew bolt -2- (qty. 1), and remove adjustment unit -1- from mirror mounting.
- Swivel adjustment unit together with motor -1- to the side and pull off connector -3-.

Installing

- Attach connector -3- to adjusting unit -1-.
- Fit adjustment unit -1- to mirror mounting, and secure it by tightening bolt -2- (qty. 1).
- Install mirror glass
⇒ [“6.2 Removing and installing mirror glass”, page 342](#) .

Specified torques

- ◆ Bolts ⇒ [page 340](#)

6.6 Removing and installing exterior mirror

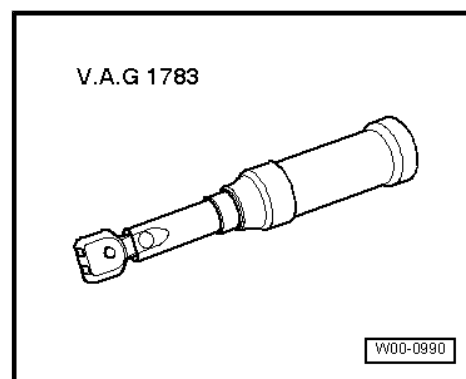
⇒ [“6.6.1 Removing and installing exterior mirror, electrically adjustable”, page 357](#)

⇒ [“6.6.2 Removing and installing exterior mirror, manually adjustable”, page 360](#)

6.6.1 Removing and installing exterior mirror, electrically adjustable

Special tools and workshop equipment required

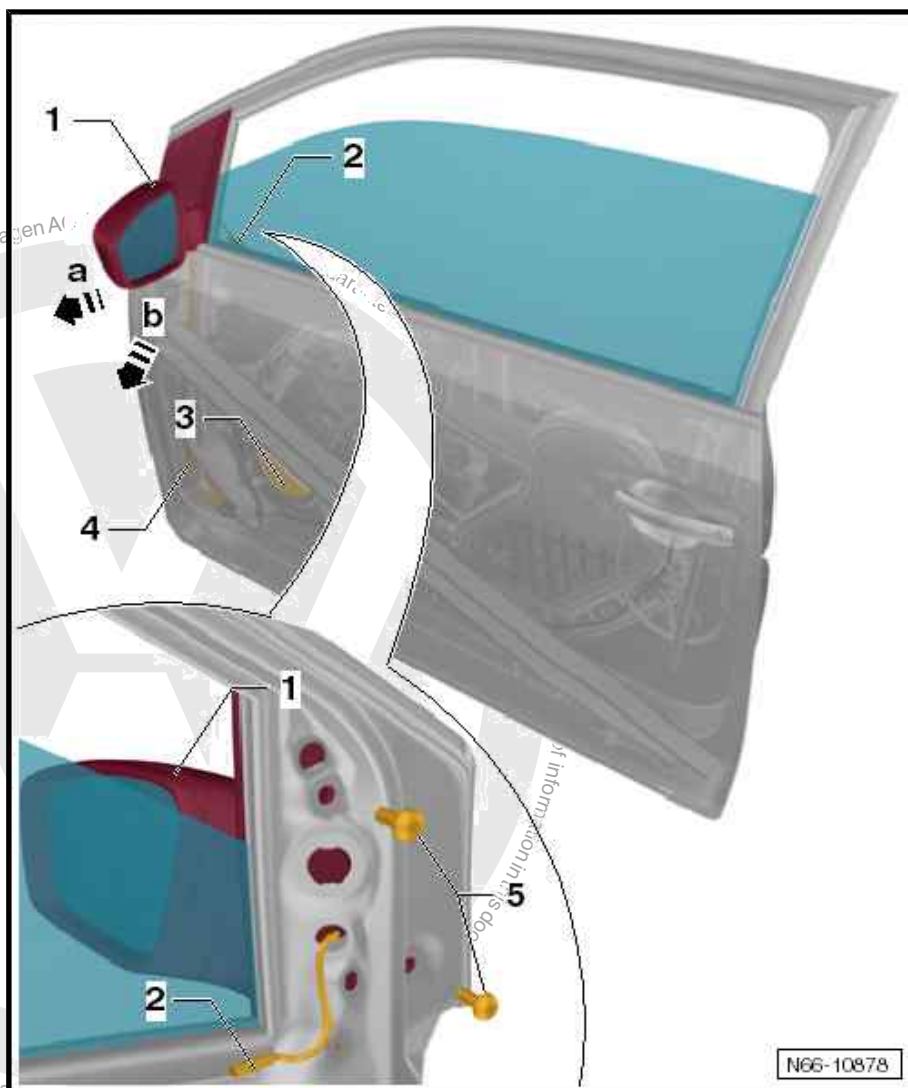
- ◆ Torque wrench - V.A.G 1783-



Note

- ◆ *The removal and installation sequence is for the left exterior mirror only. The right side is similar.*
- ◆ *The cables and connectors in a new exterior mirror are always ready for the highest equipment level.*
- ◆ *Any superfluous connectors are secured to prevent noise.*

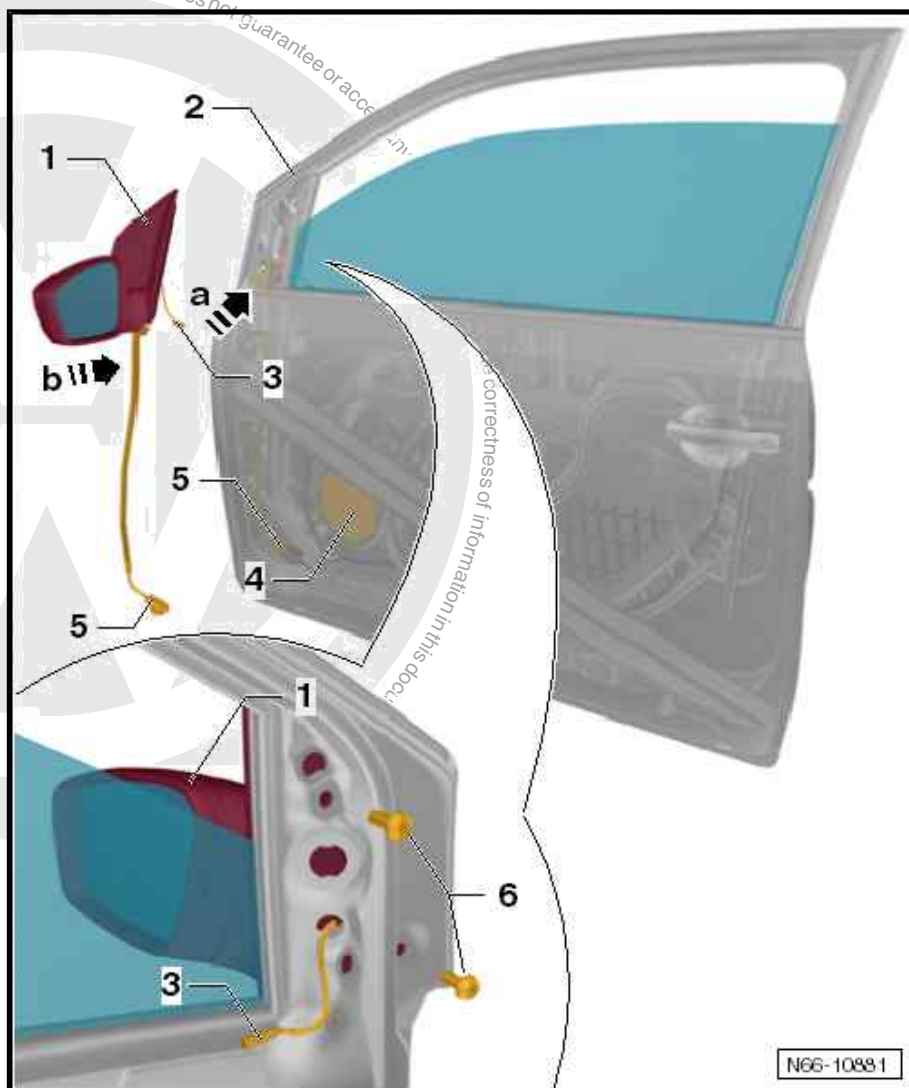
Removing



Perform the following steps:

- If window crank is fitted, remove it ➤ [page 270](#) .
- Remove front door trim ➤ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Remove cover or front loudspeaker -3- ➤ Communication; Rep. gr. 91 ; Sound system; Fitting location overview - sound system .
- Disconnect connectors -2 and 4- for exterior mirror -1-.
- Unscrew bolts -5- from exterior mirror -1-.
- Swivel lower part of exterior mirror -1- away from the door a little -arrow a- and pull it downwards out of window channel -arrow b-.
- Thread electric cable through hole in door and remove exterior mirror -1-.

Installing



Perform the following steps:

- Check that the foam part -3- is correctly installed in the door.
- Thread wires -3 and 5- for exterior mirror -1- through opening in door.
- Push exterior mirror -1- into window channel -2- from below -arrow a- and press the lower part onto the door -arrow b-.
- Screw in and tighten bolts -6- for exterior mirror -1-.
- Connect connectors -3 and 5- for exterior mirror -1-.
- Install cover or front loudspeaker -3- ⇒ Communication; Rep. gr. 91 ; Sound system; Fitting location overview - sound system .
- Install front door trim panel ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trim panels; Removing and installing front door trim panel .

Specified torques

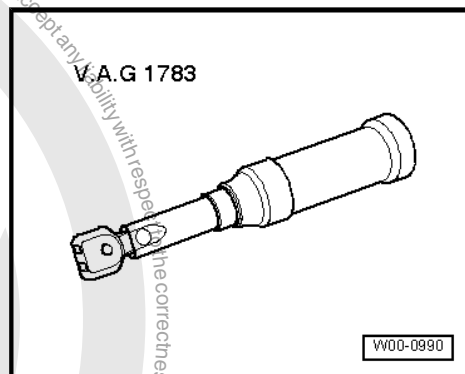
- ◆ Bolts ⇒ [page 338](#)



6.6.2 Removing and installing exterior mirror, manually adjustable

Special tools and workshop equipment required

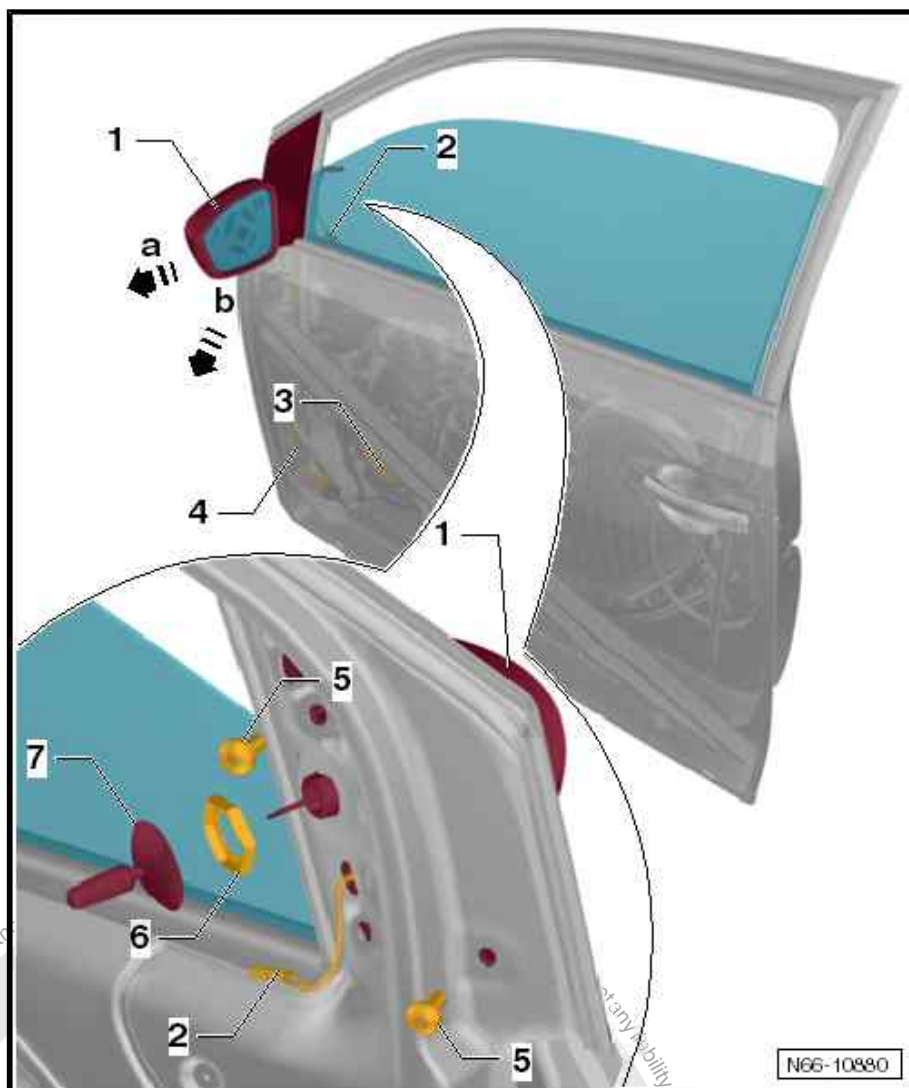
- ◆ Torque wrench - V.A.G 1783-



Note

The removal and installation sequence is for the left exterior mirror only. The right side is similar.

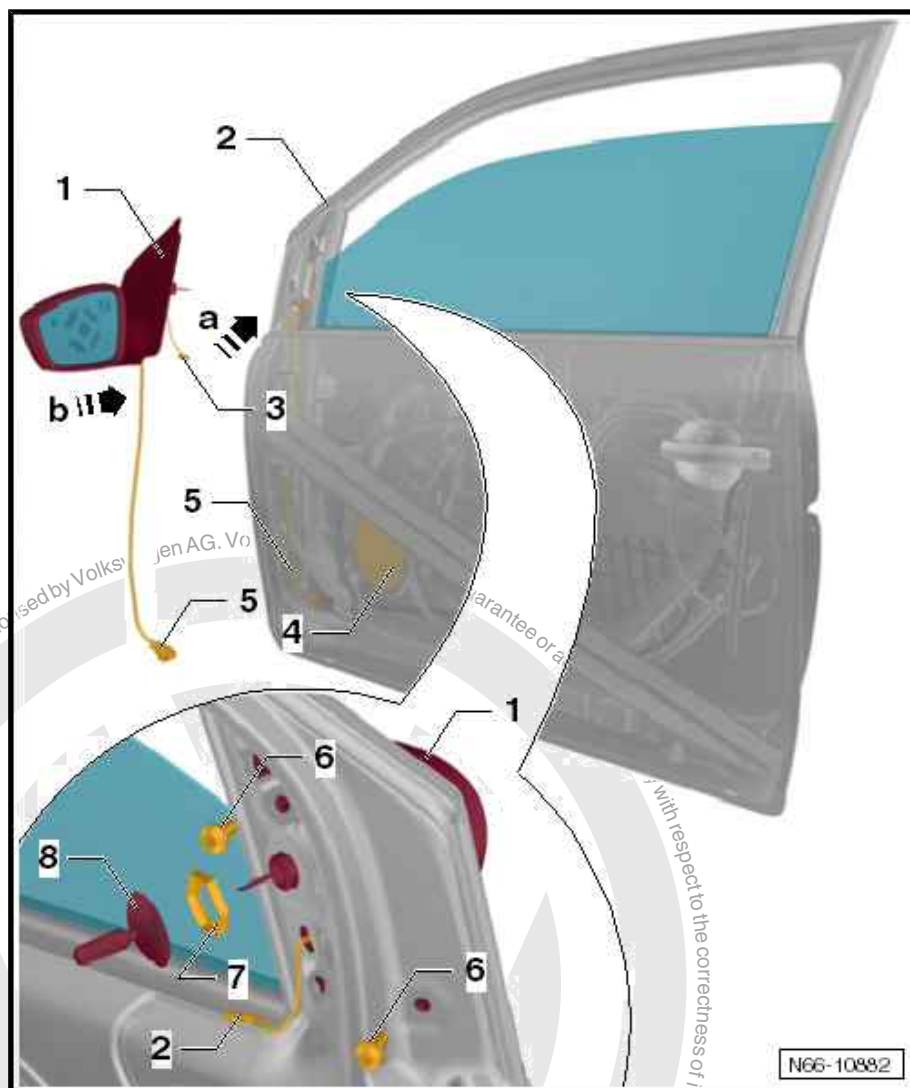
Removing



Perform the following steps:

- If window crank is fitted, remove it ➔ [page 270](#) .
- Remove front door trim ➔ General body repairs, interior; Rep. gr. 70 ; Front door trims; Removing and installing front door trim .
- Remove cover or front loudspeaker ➔ Communication; Rep. gr. 91 ; Sound system; Fitting location overview - sound system .
- Detach connector -3- for exterior mirror -1-.
- Pull off operating handle -7-.
- Unscrew hexagon nut -6-.
- Unscrew bolts -5- from exterior mirror -1-.
- Swivel lower part of exterior mirror -1- away from the door a little -arrow a- and pull it downwards out of window channel -arrow b-.
- If electrical wires -2 and 4- are present, thread them through opening in door.

Installing



Perform the following steps:

- Check proper seating of foam element in door.
- Thread wires -3 and 5- for exterior mirror -1- through opening in door.
- Push exterior mirror -1- into window channel -2- from below -arrow a- and press the lower part onto the door -arrow b-.
- Screw in and tighten bolts -5- for exterior mirror -1-.
- Screw on and tighten hexagon nut -7- for exterior mirror -1-.
- If fitted, connect connectors -2 and 4- for exterior mirror -1-.
- Fit operating handle -8-.
- Install front door trim panel ⇒ General body repairs, interior; Rep. gr. 70 ; Front door trim panels; Removing and installing front door trim panel .
- Install cover or front loudspeaker -4- ⇒ Communication; Rep. gr. 91 ; Sound system; Fitting location overview - sound system .

Specified torques

- ◆ Bolts ⇒ [page 338](#)



7 Wheel housing liner

⇒ [“7.1 Assembly overview - front wheel housing liner”,
page 363](#)

⇒ [“7.2 Assembly overview - rear wheel housing liner”,
page 364](#)

⇒ [“7.3 Removing and installing front wheel housing liner”,
page 364](#)

⇒ [“7.4 Removing and installing rear wheel housing liner”,
page 367](#)

7.1 Assembly overview - front wheel housing liner



Note

- ♦ Minor differences may be encountered in respect of front wheel housing liner, depending on vehicle model.
- ♦ The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.

1 - Front wheel housing liner

- ☐ Material RP/EPDM
- ☐ Removing and installing
⇒ [page 364](#)

2 - Bolt

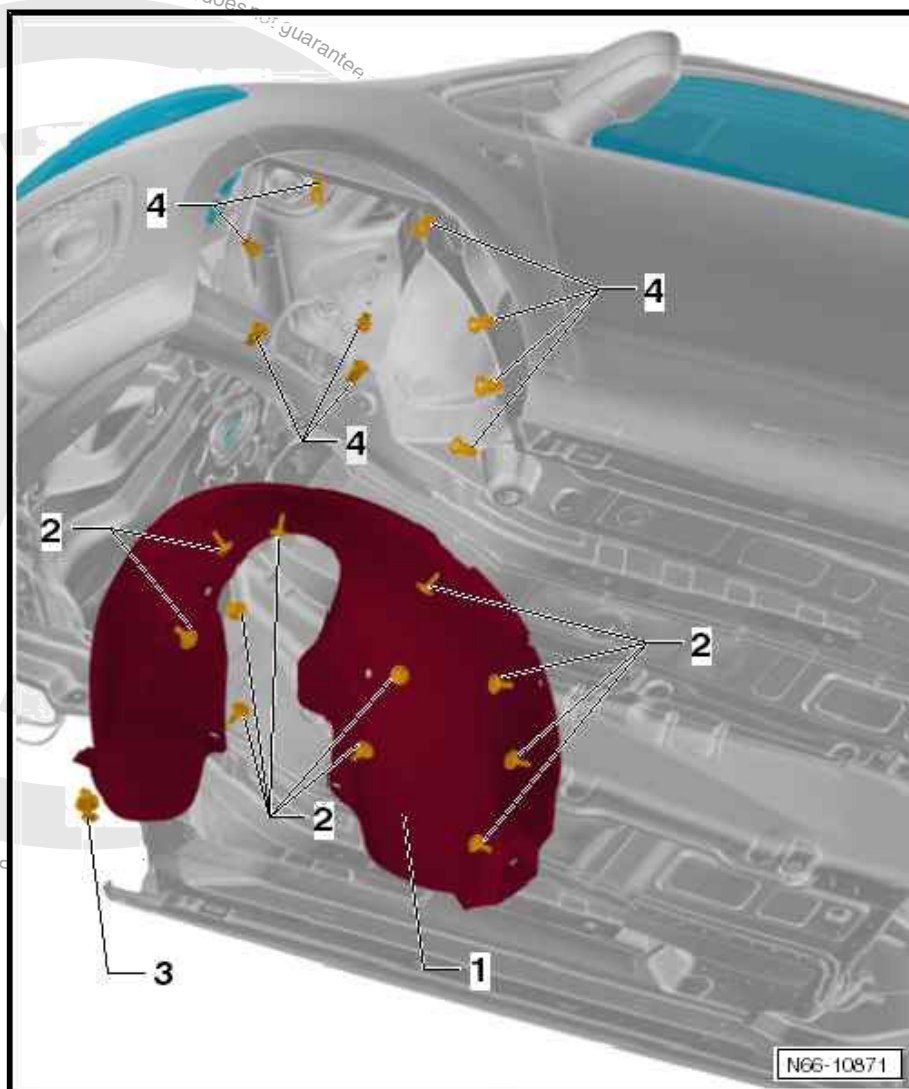
- ☐ Qty. 11 on each side
- ☐ Specified torque: 2 Nm

3 - Spreader clip

- ☐ Qty. 1 on each side

4 - Expanding nuts

- ☐ Qty. 9 on each side





7.2 Assembly overview - rear wheel housing liner

1 - Rear wheel housing liner

- ☐ Fitted only on some models.
- ☐ Material PP/EPDM
- ☐ Removing and installing
⇒ [page 367](#)

2 - Bolt

- ☐ Qty. 9 on each side
- ☐ Specified torque: 2 Nm

3 - Side member cover

4 - Expanding nuts

- ☐ Qty. 4 on each side

5 - Expanding nuts

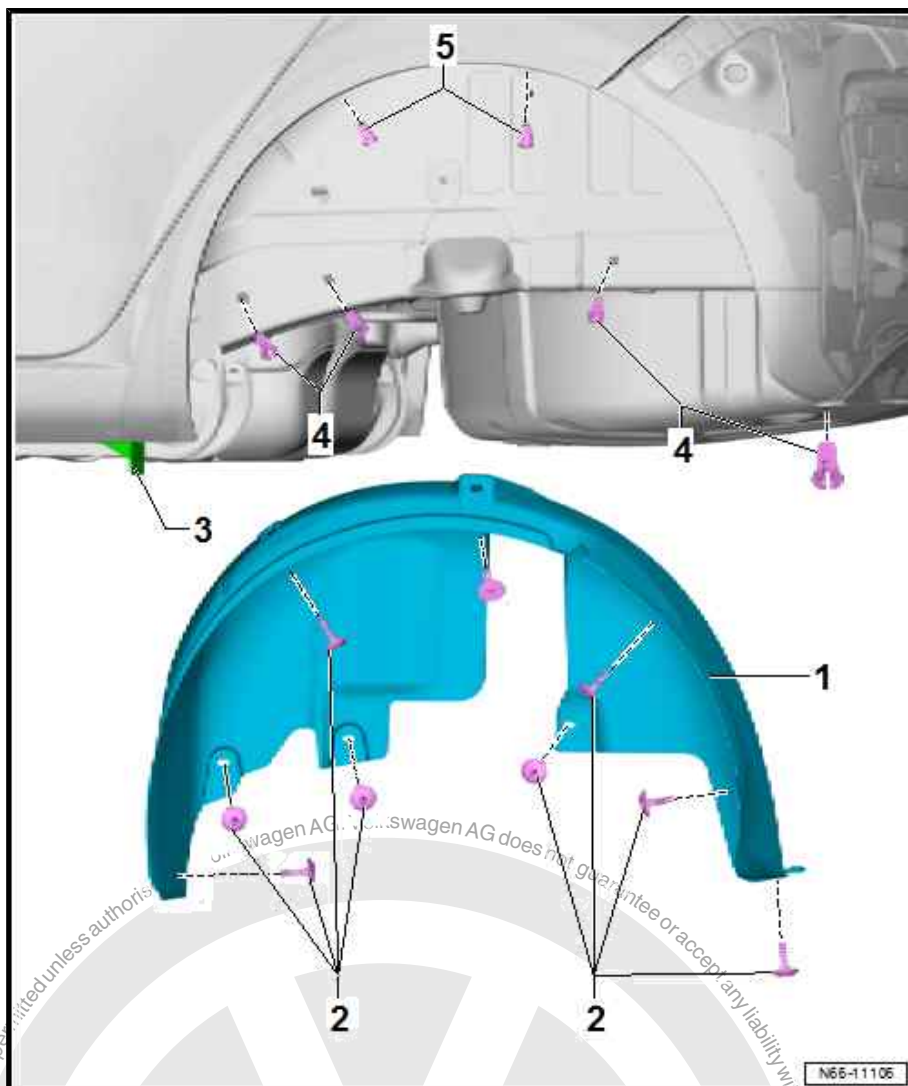
- ☐ Gas-tight.
- ☐ Qty. 2 on each side



DANGER!

Check gas-tight spreader nuts for damage and renew if necessary.

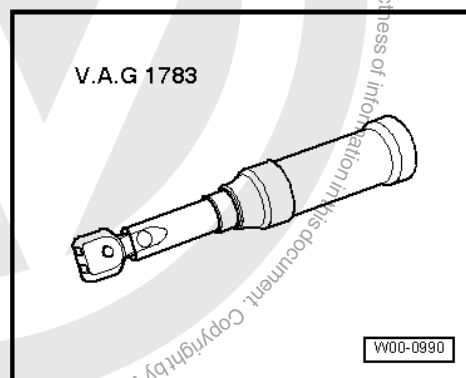
The spreader nuts seal the interior against exhaust gases. They have to be renewed without fail in the event of damage.



7.3 Removing and installing front wheel housing liner

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1783-

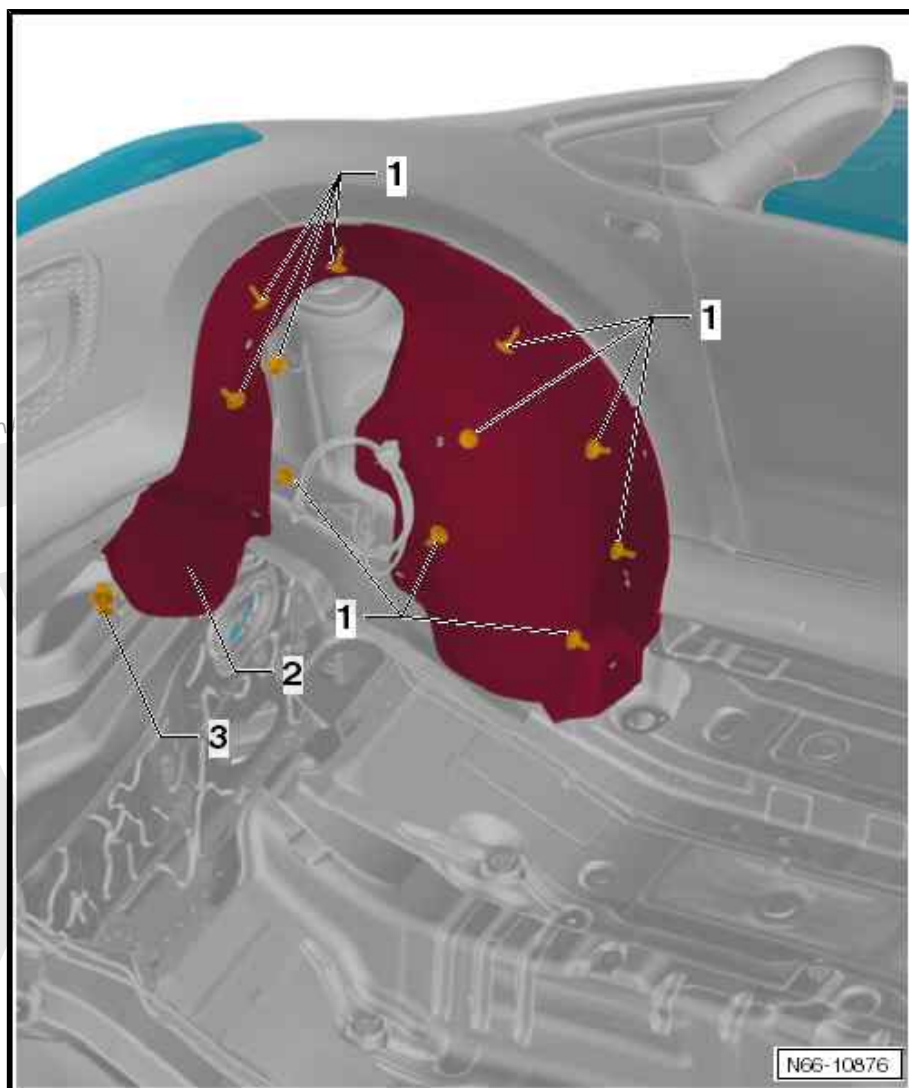




Note

- ◆ Removal and installation is described for the front left wheel housing liner only. The procedure for the right-hand side is basically the same.
- ◆ The removal and installation procedures may have to be modified slightly depending on model variants.

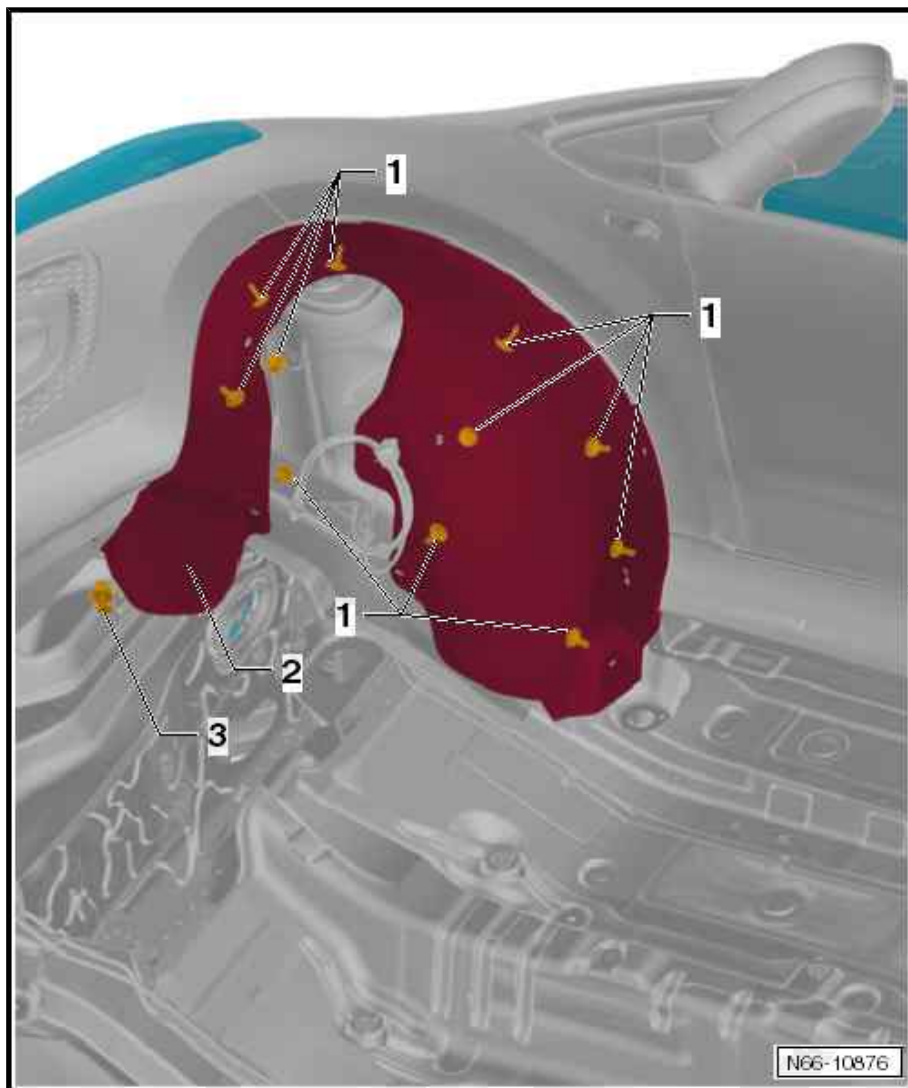
Removing



Perform the following steps:

- Remove wheel ➤ Running gear, axles, steering; Rep. gr. 44;
Wheels, tyres; Specified torque for wheel bolts .
- Pull out spreader rivet 3.
- Unscrew bolts -1-.
- Pull wheel housing liner -2- out of wing.

Installing



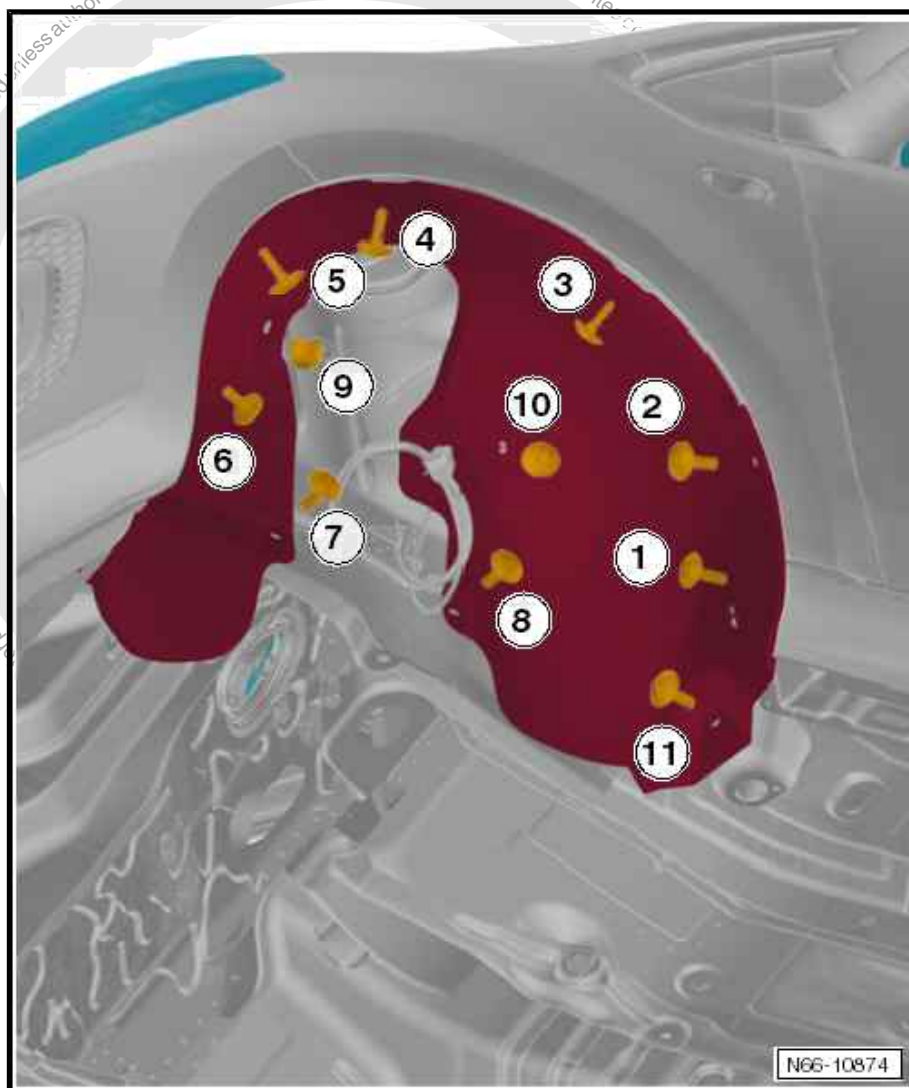
Perform the following steps:



Note

Check expanding nuts for damage and renew if necessary.

- Insert front wheel housing liner -1- into wing.
- Align front wheel housing liner -1- with front bumper cover.
- Insert spreader rivet -3-.
- Start all bolts and tighten them in sequence described below
⇒ [page 367](#) .



Bolting sequence

- Tighten wheel housing liner bolts -1- through -11- in sequence given to specified torque of 2 Nm.
- Mount wheel ⇒ Running gear, axles, steering; Rep. gr. 44 ; Wheels, tyres; Specified torque for wheel bolts .

7.4 Removing and installing rear wheel housing liner

⇒ [“7.4.1 Removing and installing rear wheel housing liner”, page 367](#)

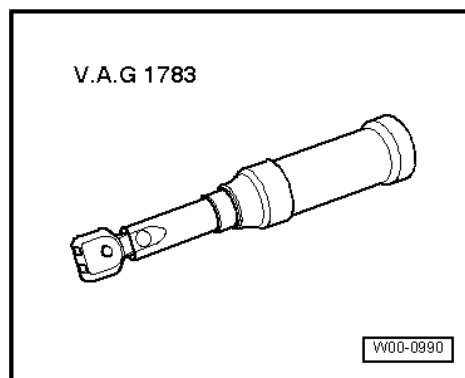
⇒ [“7.4.2 Removing and installing side member cover”, page 369](#)

7.4.1 Removing and installing rear wheel housing liner

Special tools and workshop equipment required

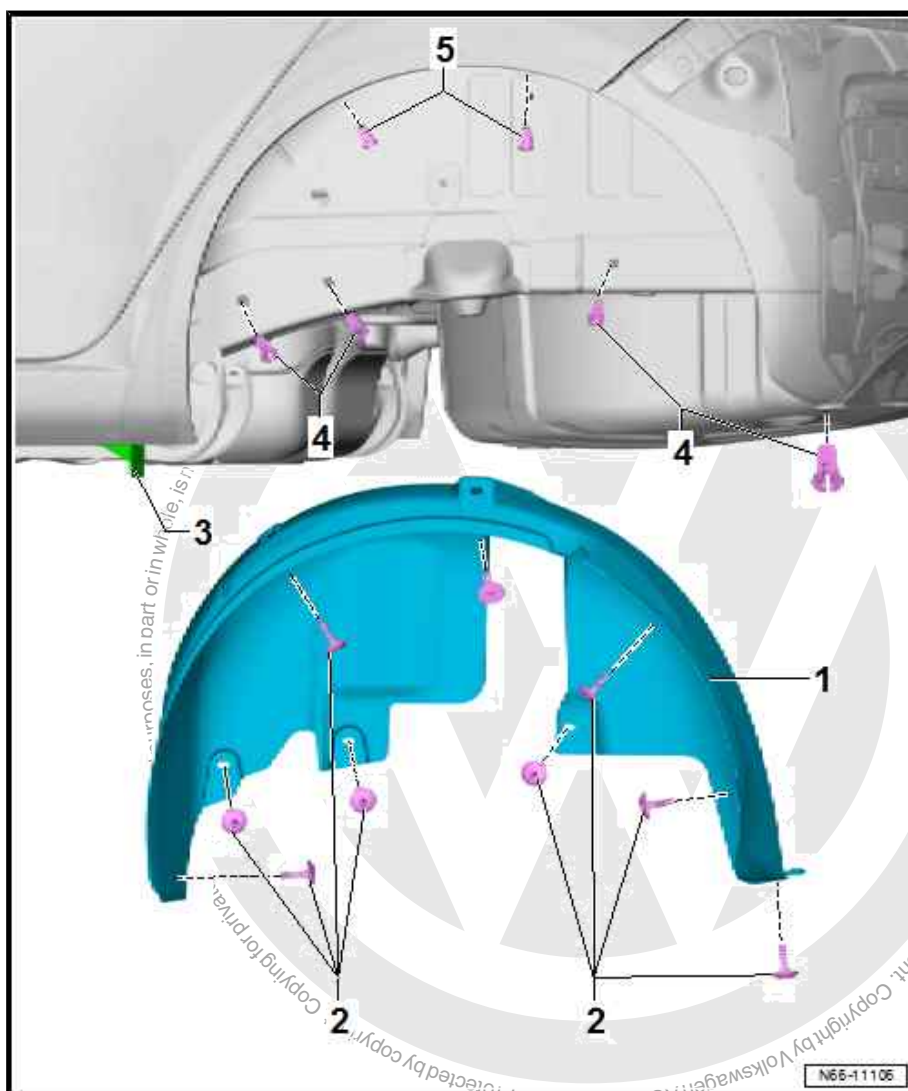


- ◆ Torque wrench - V.A.G 1783-



Note

- ◆ Removal and installation are described for the rear left wheel housing liner only. The procedure for the right-hand side is basically the same.
- ◆ The removal and installation procedures may have to be modified slightly depending on model variants.





Removing

- Remove wheel ⇒ Running gear, axles, steering; Rep. gr. 44 ;
Wheels, tyres; Specified torque for wheel bolts .
- Unscrew bolts -2-.
- Pull rear wheel housing liner -1- out of wheel housing.

Removing and installing sill panel cover ⇒ [page 369](#)

Installing



DANGER!

Check gas-tight spreader nuts -5- for damage and renew if necessary.

The spreader nuts seal the interior against exhaust gases and have to be renewed without fail in the event of damage.

- Insert rear wheel housing liner -1- in wheel housing without kinking the liner.
- Mount wheel ⇒ Running gear, axles, steering; Rep. gr. 44 ;
Wheels, tyres; Specified torque for wheel bolts .

Specified torques

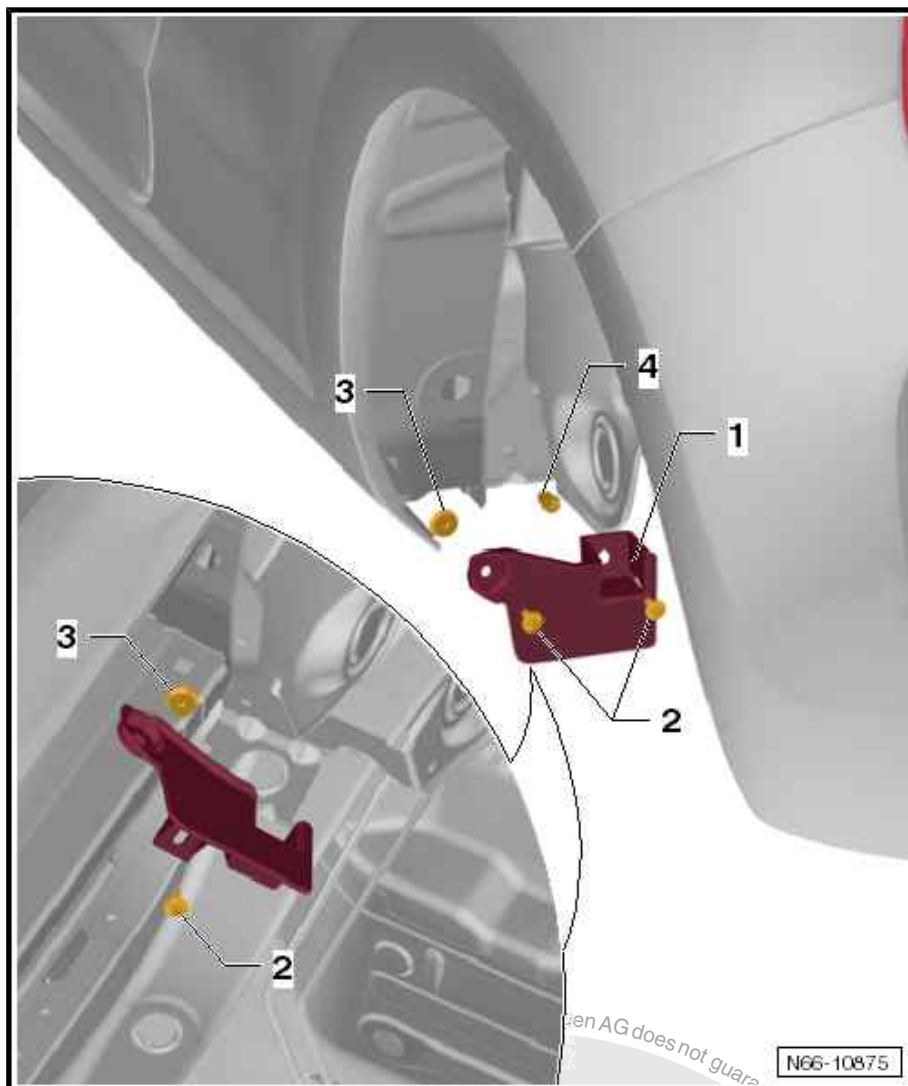
- ◆ Bolts
⇒ ["7.2 Assembly overview - rear wheel housing liner",
page 364](#) .

7.4.2 Removing and installing side member cover



Note

The illustrations show the left-hand side. The procedure for the right-hand side is basically the same.



Perform the following steps:

Removing

- Unscrew bolts -2-.
- Remove side member cover -1- downwards.

Installing



DANGER!

Check the two gas-tight spreader nuts -3- for damage and renew if necessary.

The spreader nuts seal the interior against exhaust gases. They have to be renewed without fail in the event of damage.



Note

Check spreader nut -4- for damage and renew if necessary.

- Position side member cover.



- Tighten bolts -2- to specified torque 2 Nm.





8 Lettering and emblems

⇒ ["8.1 Dimensions - lettering and emblems on rear", page 372](#)

⇒ ["8.2 Renewing lettering and badges on sides", page 375](#)

⇒ ["8.3 Removing and installing lettering and emblems for radiator grille", page 379](#)

8.1 Dimensions - lettering and emblems on rear

⇒ ["8.1.1 Dimensions - lettering and emblems on rear", page 372](#)

⇒ ["8.1.2 Dimensions - lettering and badges on rear, GTI", page 373](#)

8.1.1 Dimensions - lettering and emblems on rear



Note

- ◆ *The vertical and horizontal dimensions of lettering for the different engines are identical.*
- ◆ *When fitting the lettering, observe the assembly instructions as follows.*

Fitting instructions

- ◆ Heat lettering or emblem with hot air blower - V.A.G 1416- before removing.
- ◆ If the lettering or badge is removed and reinstalled, only use adhesive remover - D 002 000 10- to remove the adhesive remains.
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The lettering or emblem must be bonded in place immediately after cleaning.
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.
- ◆ Lettering or emblem cannot be removed without being damaged.



1 - Lettering

- ☐ Model designation
- ☐ Observe installation instructions

2 - Lettering

- ☐ Engine designation

3 - Horizontal dimension

- ☐ 20 mm, from outer edge of rear lid to lettering.

4 - Rear lid

5 - Tail light

6 - Height dimension

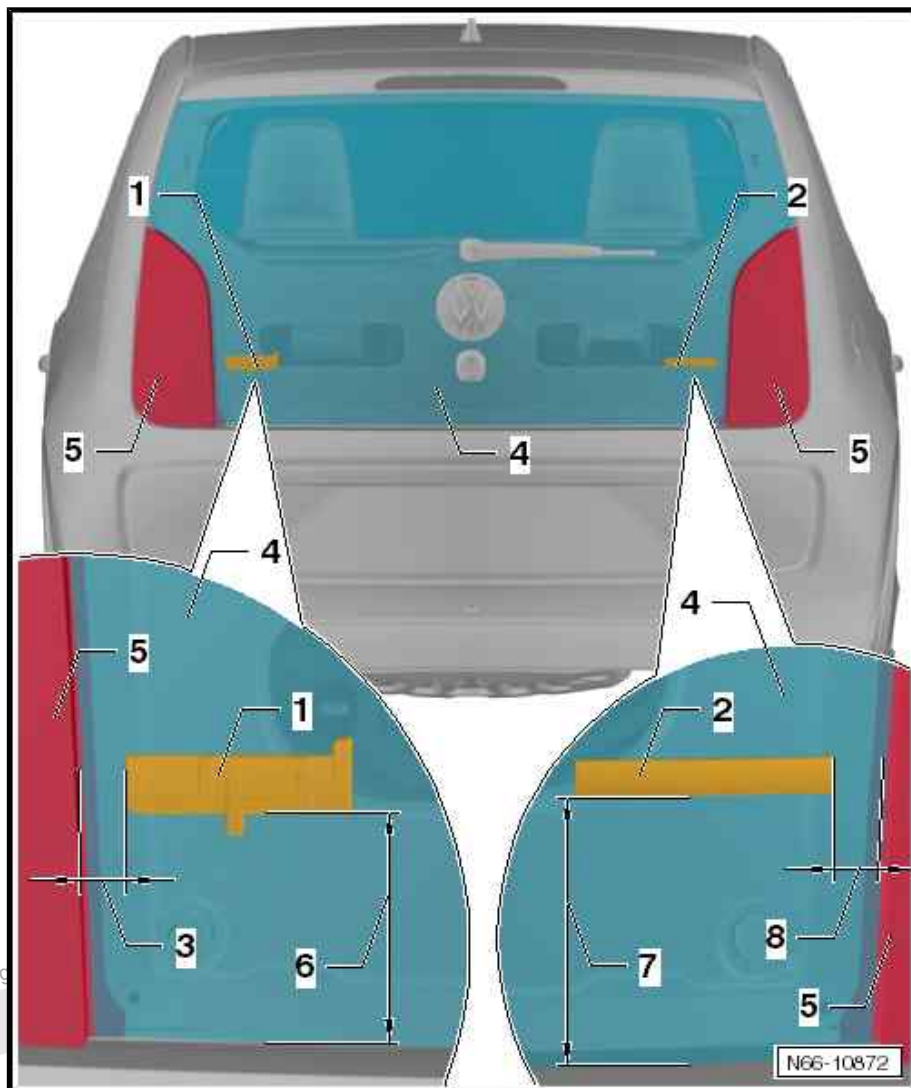
- ☐ 102 mm, from bottom edge of rear lid to lettering.

7 - Height dimension

- ☐ 108 mm, from bottom edge of rear lid to lettering.

8 - Horizontal dimension

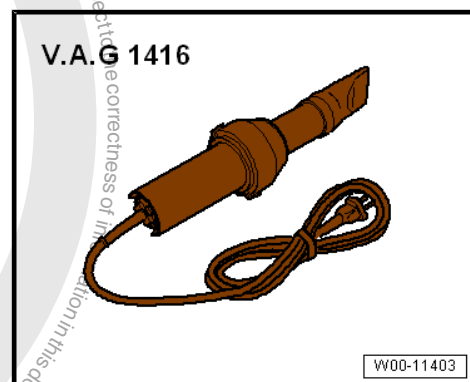
- ☐ 20 mm, from outer edge of rear lid to lettering.



8.1.2 Dimensions - lettering and badges on rear, GTI

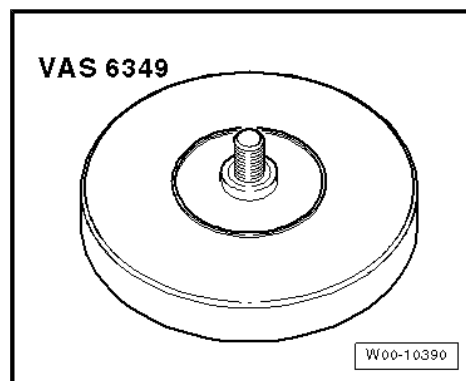
Special tools and workshop equipment required

- ◆ Hot-air blower - V.A.G 1416-





◆ Adhesive strip remover - VAS 6349-



Fitting instructions

Lettering or emblem cannot be removed without being damaged.

- Heat lettering or emblem with hot air blower - V.A.G 1416- before removing.
- If the lettering or badge is removed and reinstalled, use only adhesive remover to remove the adhesive residue.
- Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- Ensure that the adhesive surfaces are free of dust and grease.
- The lettering or emblem must be bonded in place immediately after cleaning.
- Remove backing only immediately before installation.

Working temperature is approx. 21 °C.



1 - Lettering

- ☐ Model designation
- ☐ Observe installation instructions

2 - Horizontal dimension

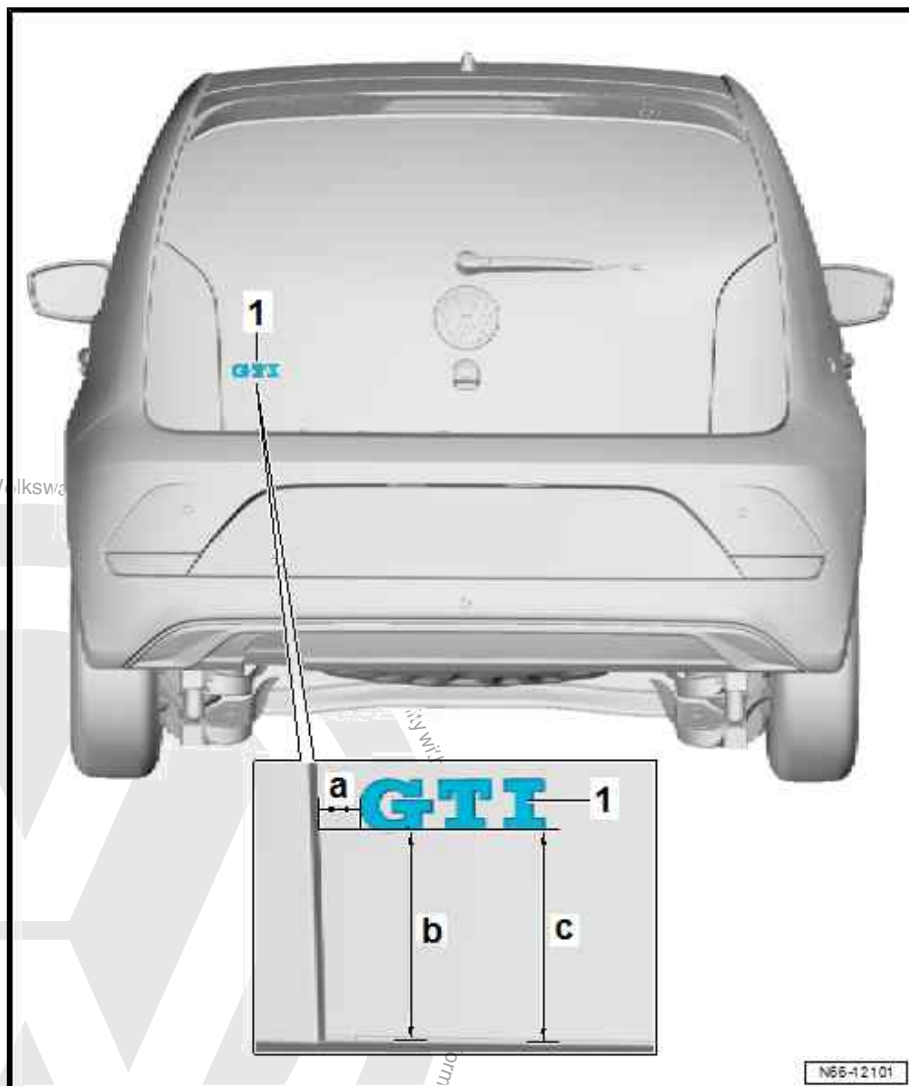
- ☐ Dimension -a=20 mm-:
from outer edge of rear
lid to lettering

3 - Height dimension

- ☐ Dimension -b=103 mm-:
from lower edge of rear
lid to lettering

4 - Height dimension

- ☐ Dimension -c=105 mm-:
from lower edge of rear
lid to lettering



8.2 Renewing lettering and badges on sides

⇒ ["8.2.1 Fitting instructions", page 375](#)

⇒ ["8.2.2 Renewing lettering and badges on sides, black", page 376](#)

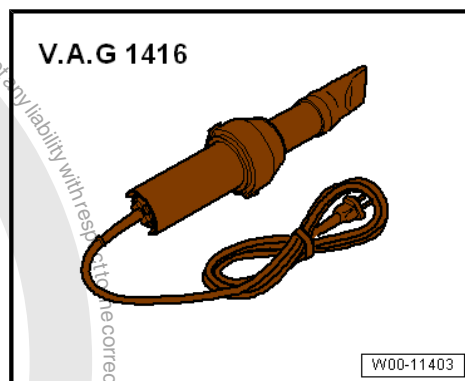
⇒ ["8.2.3 Renewing lettering and badges on sides, GTI", page 378](#)

8.2.1 Fitting instructions

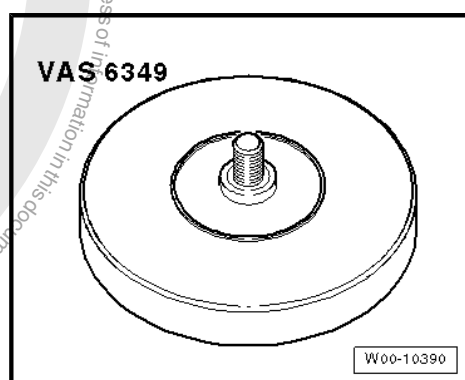
Special tools and workshop equipment required



◆ Hot-air blower - V.A.G 1416-



◆ Adhesive strip remover - VAS 6349-



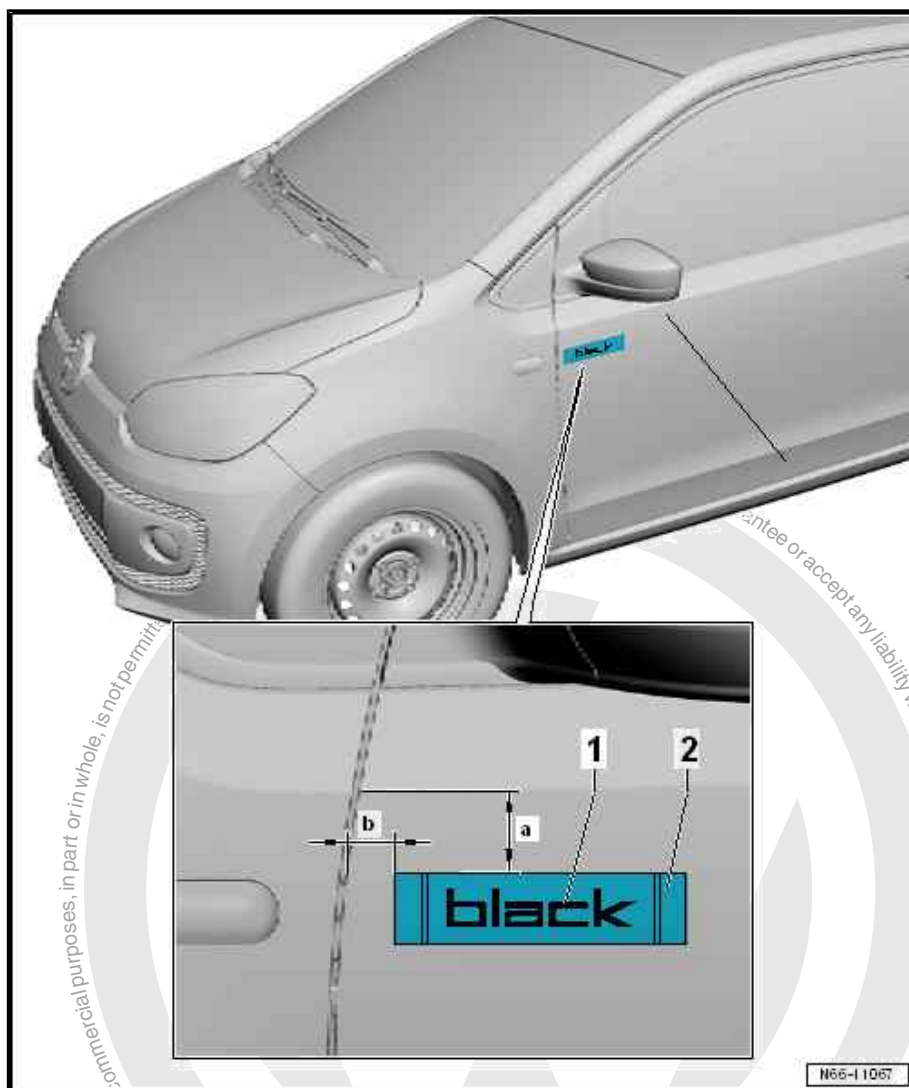
- The bonded film with lettering cannot be removed without damage.
- Before removing the film with lettering, heat it with a hot air blower - V.A.G 1416- .
- If the film with lettering is removed and reinstalled, only use adhesive remover - D 002 000 10- to remove the adhesive remains.
- Ensure that the adhesive surfaces are free of dust and grease.
- The film with lettering must be bonded in place immediately after cleaning.
- Remove protective film immediately before bonding.
- Working temperature is approx. 21 °C.

8.2.2 Renewing lettering and badges on sides, black



Note

- ◆ The film with lettering "black", shown in the illustration, is just an example.
- ◆ Depending on model version, film with the lettering »Black« or »White« is bonded to the front door or side panel.



Removing

- Warm film with lettering -1- using hot air blower - V.A.G 1416- before removing.
- Carefully pull film with lettering -1- off side panel.

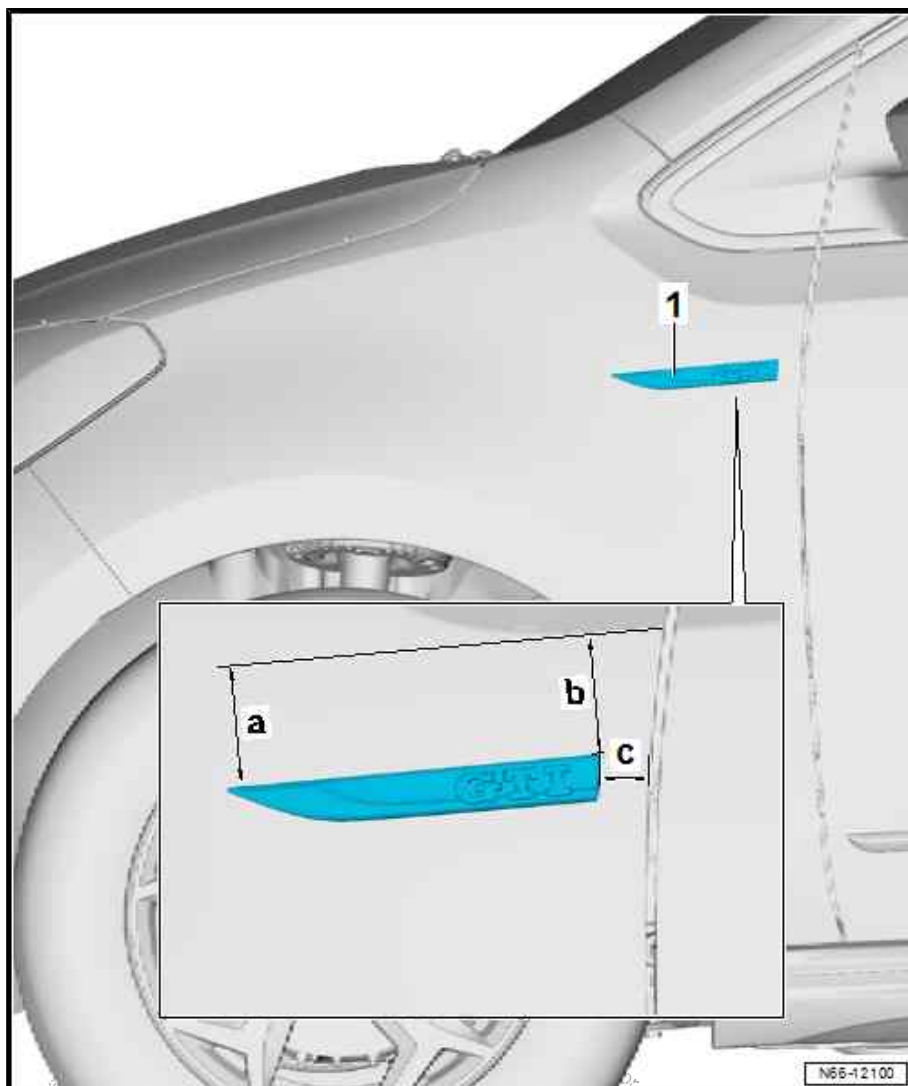
Installing

Follow installation instructions ➔ [page 375](#) .

- Remove protective film before fitting.
- Position lettering with assembly film -2- on lay-on edges.
- ◆ Height dimension -a-, from edge in door to outer edge of assembly film -2-: 40 mm.
- ◆ Lateral dimension -a-, from door edge to outer edge of assembly film -2-: 30 mm.
- Press on film with lettering -1-.
- After bonding, remove assembly film -2-.



8.2.3 Renewing lettering and badges on sides, GTI



Removing

- Carefully heat lettering -1- using hot air blower - V.A.G 1416- .
- Pull off lettering -1-.

Installing

Install in reverse order of removal, observing the following:

Follow installation instructions ➔ [page 375](#) .

- Remove protective film before fitting.
- Align lettering -1- in position.
- ◆ Dimension -a = 49.5 mm-
- ◆ Dimension -b = 51 mm-
- ◆ Dimension -c = 20 mm-
- Press on lettering -1-.



8.3 Removing and installing lettering and emblems for radiator grille

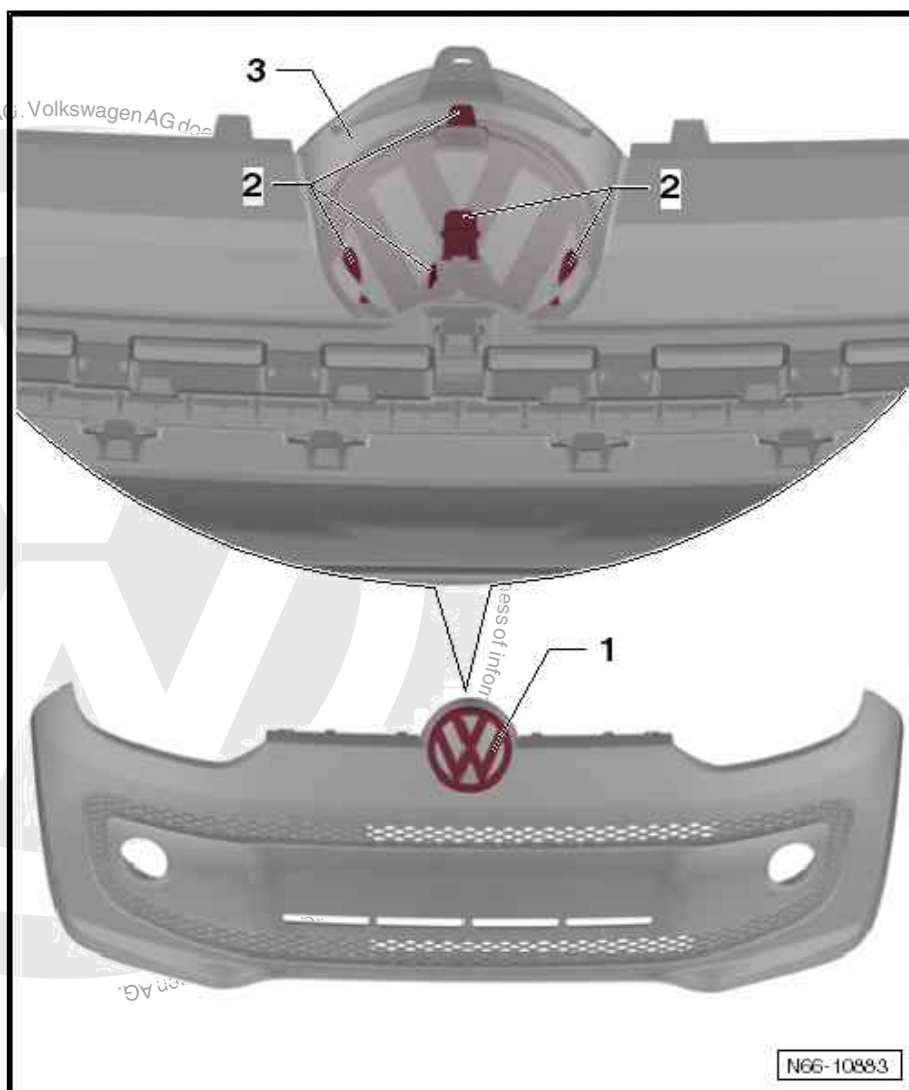
⇒ [“8.3.1 Removing and installing emblem ▶05.2016”, page 379](#)

⇒ [“8.3.2 Removing and installing emblem, 06.2016 ▶”, page 380](#)

⇒ [“8.3.3 Removing and installing model designation, GTI”, page 382](#)

8.3.1 Removing and installing emblem ▶05.2016

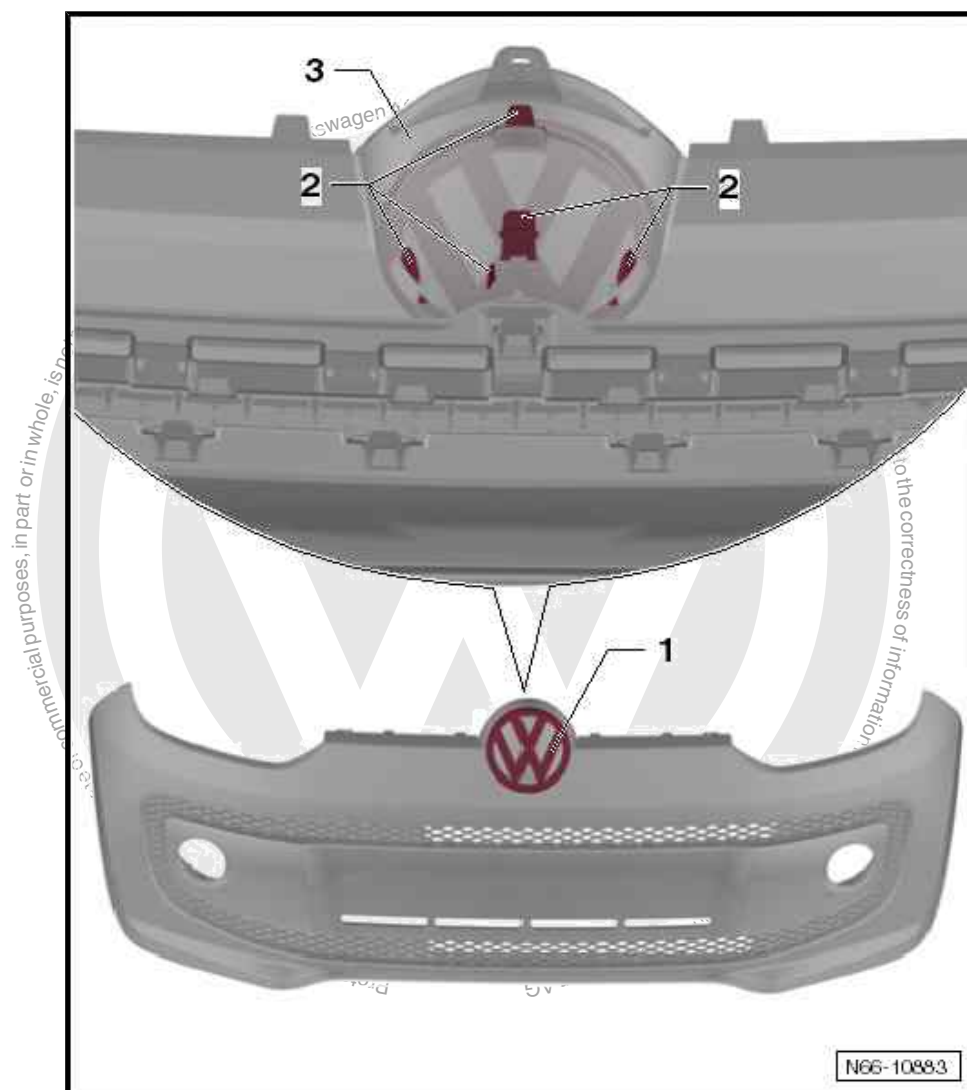
Removing



Perform the following steps:

- Remove bumper cover ⇒ [page 214](#) .
- Release all locking hooks -2- of emblem -1-.
- Remove emblem -1- from bumper cover -3-.

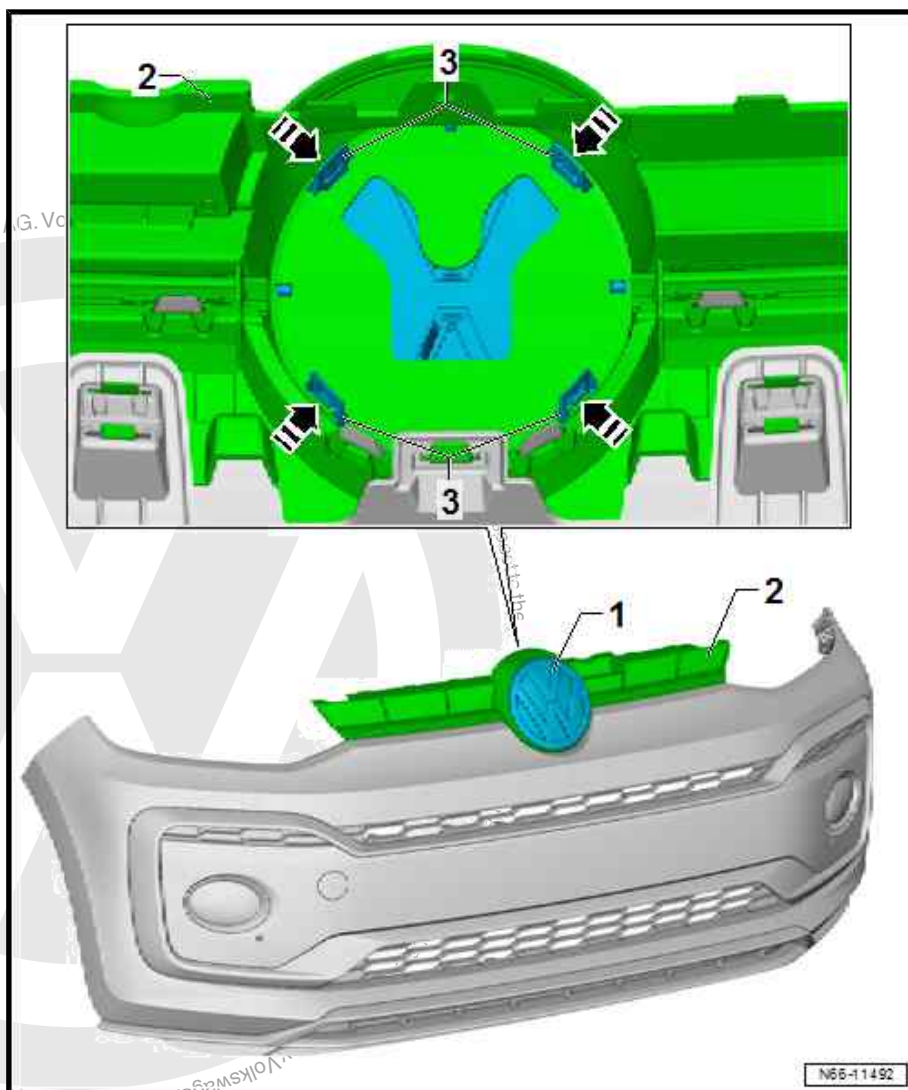
Installing



- Press emblem -1- onto bumper cover -3- until all locking hooks -2- engage audibly.

8.3.2 Removing and installing emblem, 06.2016 ►

Removing



- Push emblem -1- into radiator grille -2- until all retaining hooks -3- audibly engage -arrows-.

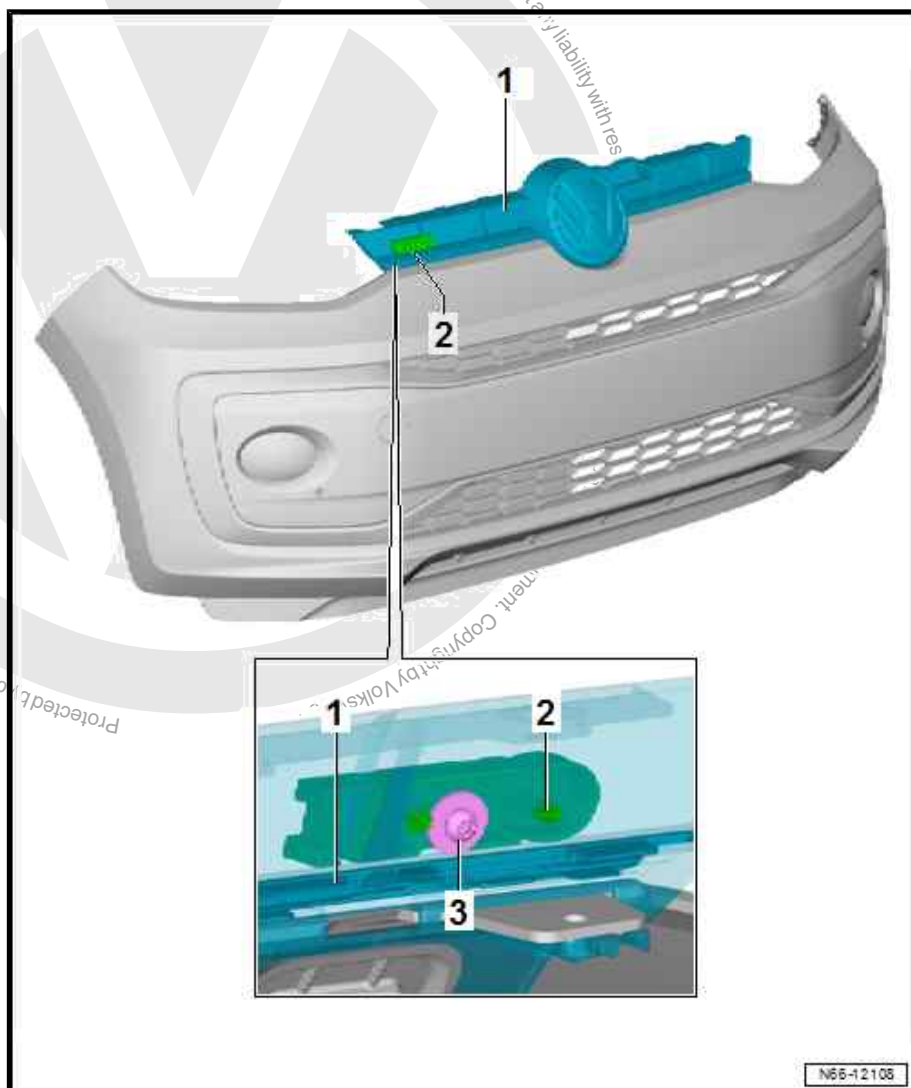
8.3.3 Removing and installing model designation, GTI

Special tools and workshop equipment required

- ◆ Torque wrench - V.A.G 1783-



Removing



- Remove bumper cover ➤ [page 214](#) .
- Unscrew bolt -3-.
- Detach emblem with model designation -2- from radiator grille -1-.

Installing

Install in reverse order of removal, observing the following:

Specified torques

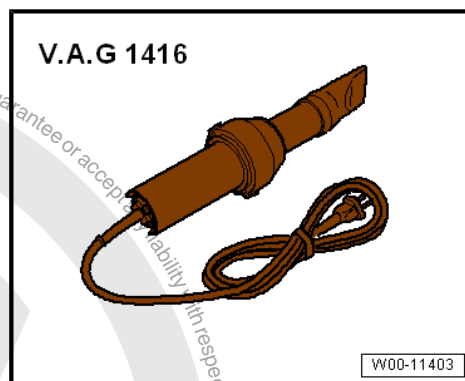
Component	Specified torque
Model designation	2 Nm

8.4 Renewing lettering and badges at rear

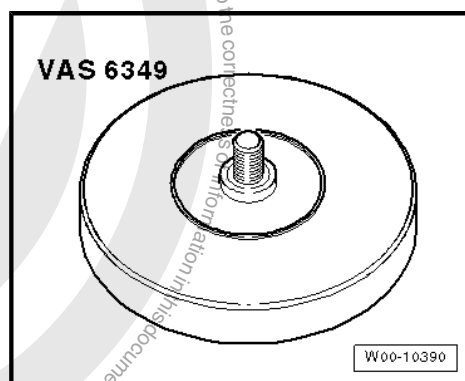
Special tools and workshop equipment required



◆ Hot-air blower - V.A.G 1416-



◆ Adhesive strip remover - VAS 6349-



Removing

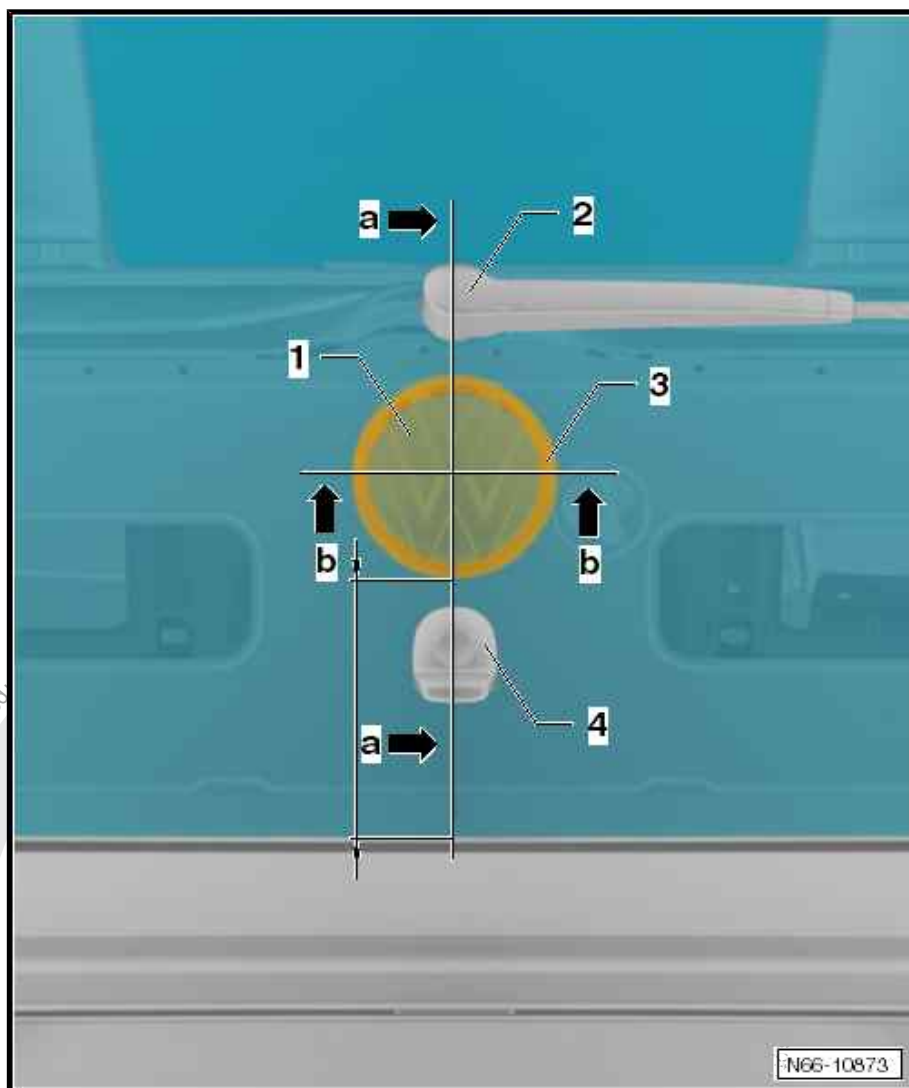


Note

- ◆ The removal and installation procedures may have to be modified slightly depending on model variants.
- ◆ When fitting the emblem, observe the fitting notes below.

Fitting instructions

- ◆ Heat lettering or emblem with hot air blower - V.A.G 1416- before removing.
- ◆ If the lettering or badge is removed and reinstalled, only use adhesive remover - D 002 000 10- to remove the adhesive remains.
- ◆ Remove existing adhesive residue of adhesive tape using adhesive strip remover - VAS 6349- .
- ◆ Ensure that the adhesive surfaces are free of dust and grease.
- ◆ The lettering or emblem must be bonded in place immediately after cleaning.
- ◆ Remove backing only immediately before installation.
- ◆ Working temperature is approx. 21 °C.
- ◆ Lettering or emblem cannot be removed without being damaged.



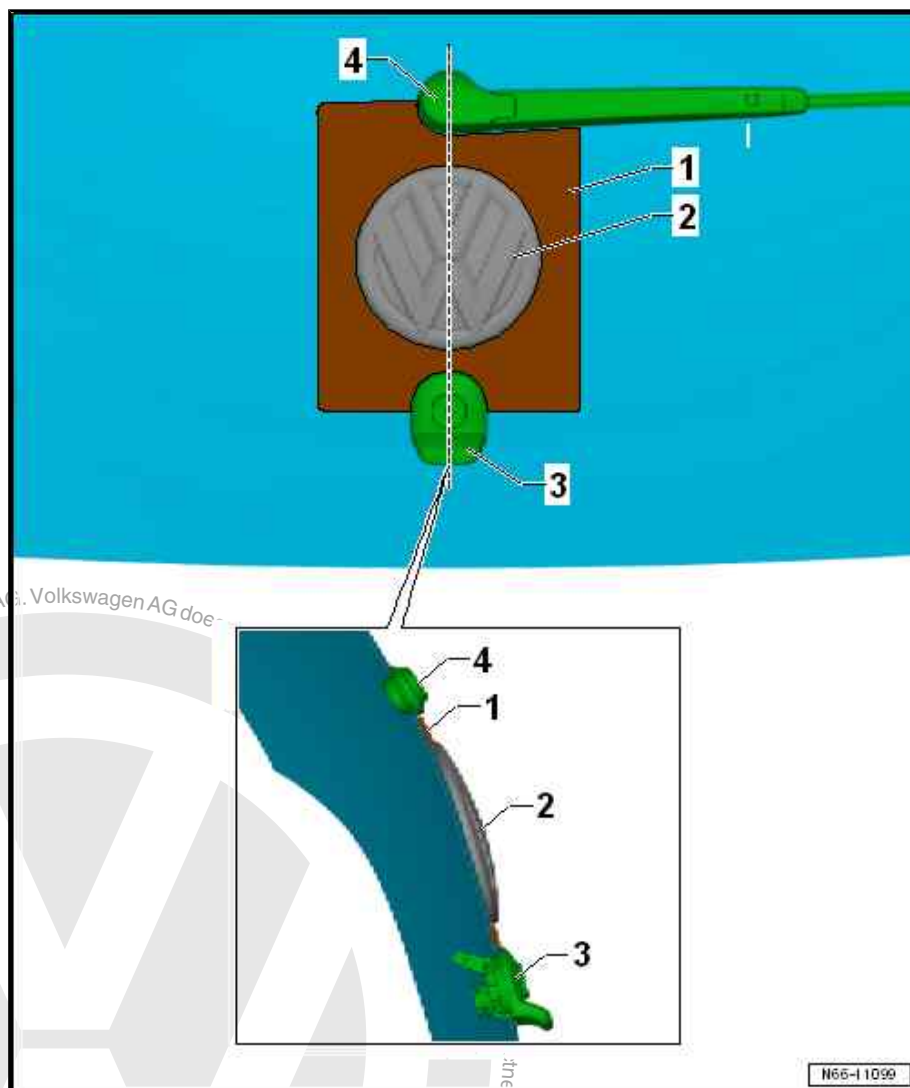
- Before removing badge -1-, heat it with hot air blower - V.A.G 1416- .
- Lift VW emblem off rear lid

Installing



Note

The template can be ordered together with the emblem from the Electronic Parts Catalogue "ETKA".



- Place template -1- between rear window wiper -4- and button -3-.
- Clean bonding surface -2- and allow to flash-off for 10 minutes.
 - Apply primer to bonding surface -2- and allow to flash-off for 10 minutes.
 - Pull protective film off emblem.
 - Press on emblem -1- firmly.



9 Protective films/decorative films

⇒ ["9.1 Renewing protective films/decorative films", page 387](#)

9.1 Renewing protective films/decorative films

⇒ ["9.1.1 Renewing lateral decorative films", page 387](#)

⇒ ["9.1.2 Renewing lateral decorative films, GTI", page 389](#)

⇒ ["9.1.3 Renewing sill protector film, GTI", page 391](#)

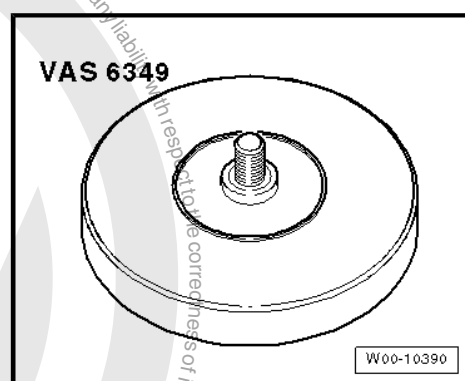
9.1.1 Renewing lateral decorative films

Special tools and workshop equipment required

◆ Hot-air blower - V.A.G 1416-



◆ Adhesive strip remover - VAS 6349-



Fitting instructions

Bonded decorative film cannot be removed without it being damaged.

- Heat up decorative film with hot air blower - V.A.G 1416- , and pull it off.

If the decorative film is installed for the first time on a new vehicle or on newly painted surfaces, follow the procedure in ⇒ Repair manual "Paint"; ⇒ Paintwork repairs; ⇒ Paint finish; ⇒ Mouldings and film .

If decorative film is removed and reattached, only use adhesive remover to remove adhesive residue.

Remove any glue residue from adhesive tape using adhesive strip remover - VAS 6349- .

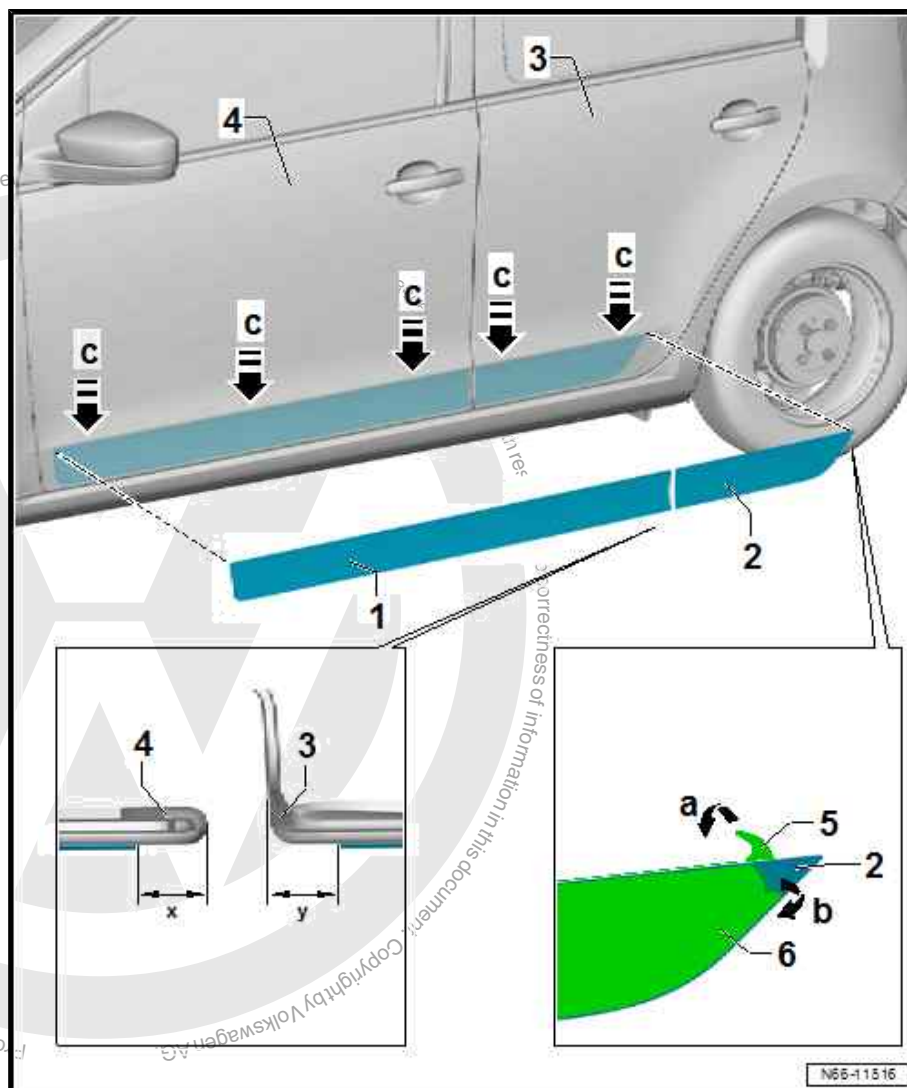
Ensure that the adhesive surfaces are free of dust and grease.

Apply decorative films immediately after cleaning.



Only remove backing film immediately before installation.

Working temperature is approx. 21 °C.



Observe installation instructions.

- Pull off protective film from adhesive surface -5- -arrow a-
- Observe gap width -x- of 2 mm at front of door -4-.
- Observe gap width -y- at rear of door -3- of 2 mm or at side panel -3- of 3 mm.
- Apply decorative film -1 or 2- with edge of decorative film -6- at door edge -arrows c-.
- Slightly smooth film by hand.
- Check installation position. Reposition if necessary and use a squeegee to attach film.



Note

The film attached with a squeegee cannot be removed without damage.

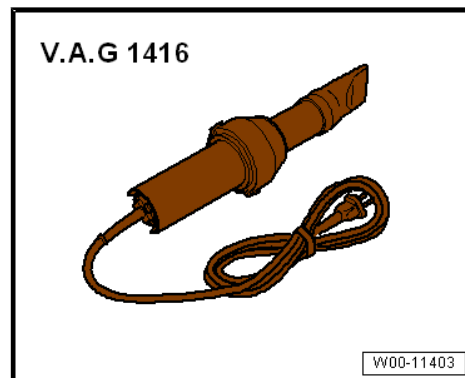


- Pull off protective film -6- from decorative film in a sharp angle
–2- -arrow b-.

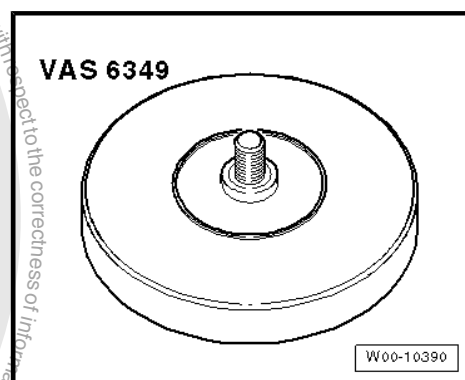
9.1.2 Renewing lateral decorative films, GTI

Special tools and workshop equipment required

- ◆ Hot-air blower - V.A.G 1416-



- ◆ Adhesive strip remover - VAS 6349-



Fitting instructions

Bonded decorative film cannot be removed without it being damaged.

If the decorative film is installed for the first time on a new vehicle or on newly painted surfaces, follow the procedure in ➔ Repair manual "Paint"; ➔ Paintwork repairs; ➔ Paint finish; ➔ Mouldings and film .

If decorative film is removed and reattached, only use adhesive remover to remove adhesive residue.

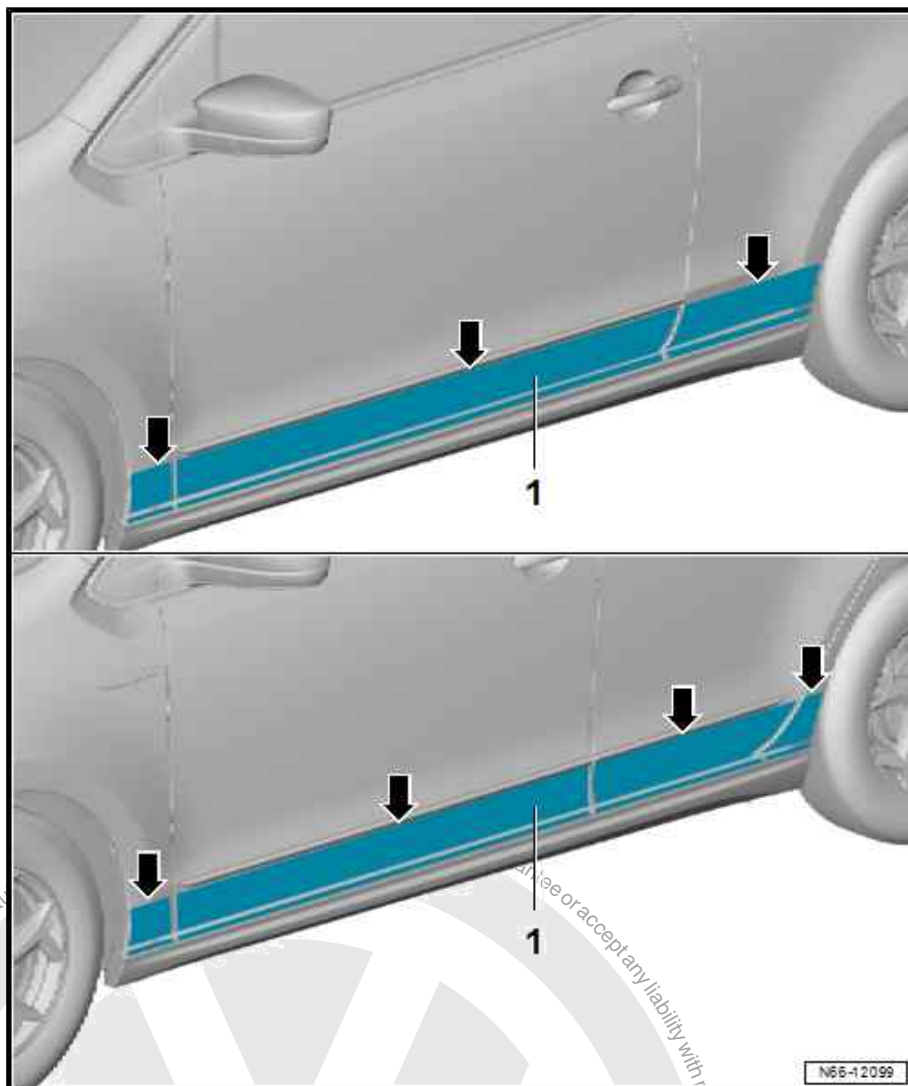
Remove any glue residue from adhesive tape using adhesive strip remover - VAS 6349- .

Ensure that the adhesive surfaces are free of dust and grease.

Apply decorative films immediately after cleaning.

Only remove backing film immediately before installation.

Working temperature is approx. 21 °C.



Removing



Note

The following procedure applies for decorative films on 2-door models and 4-door-models.

- Heat up decorative film -1- using hot air blower - V.A.G 1416- , and pull it off.

Installing

Install in reverse order of removal, observing the following:

- Pull off protective film of bonded surface.
- Align decorative film -1- parallel to contact edge of door -arrows-.
- Slightly smooth film by hand.



Note

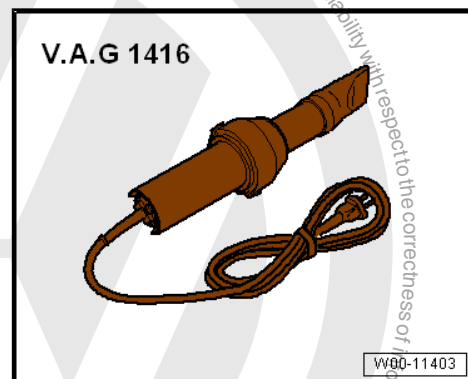
After bonding, the film cannot be removed without damage.



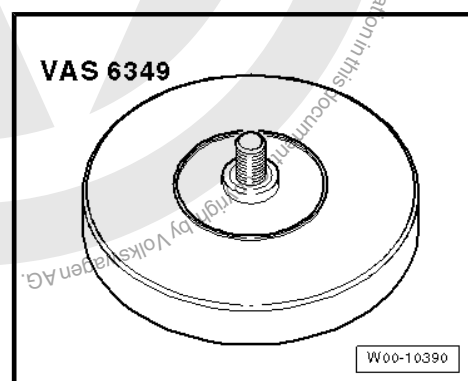
9.1.3 Renewing sill protector film, GTI

Special tools and workshop equipment required

- ◆ Hot-air blower - V.A.G 1416-



- ◆ Adhesive strip remover - VAS 6349-



Fitting instructions

Bonded sill protector film cannot be removed without damage.

If the sill protector film is installed for the first time on a new vehicle or on newly painted surfaces, follow the procedure in ⇒ Paintwork manual; ⇒ Paintwork repairs; ⇒ Paint finish; ⇒ Decorative trims and film .

If sill protector film is removed and reinstalled, only use adhesive remover to remove the adhesive remains.

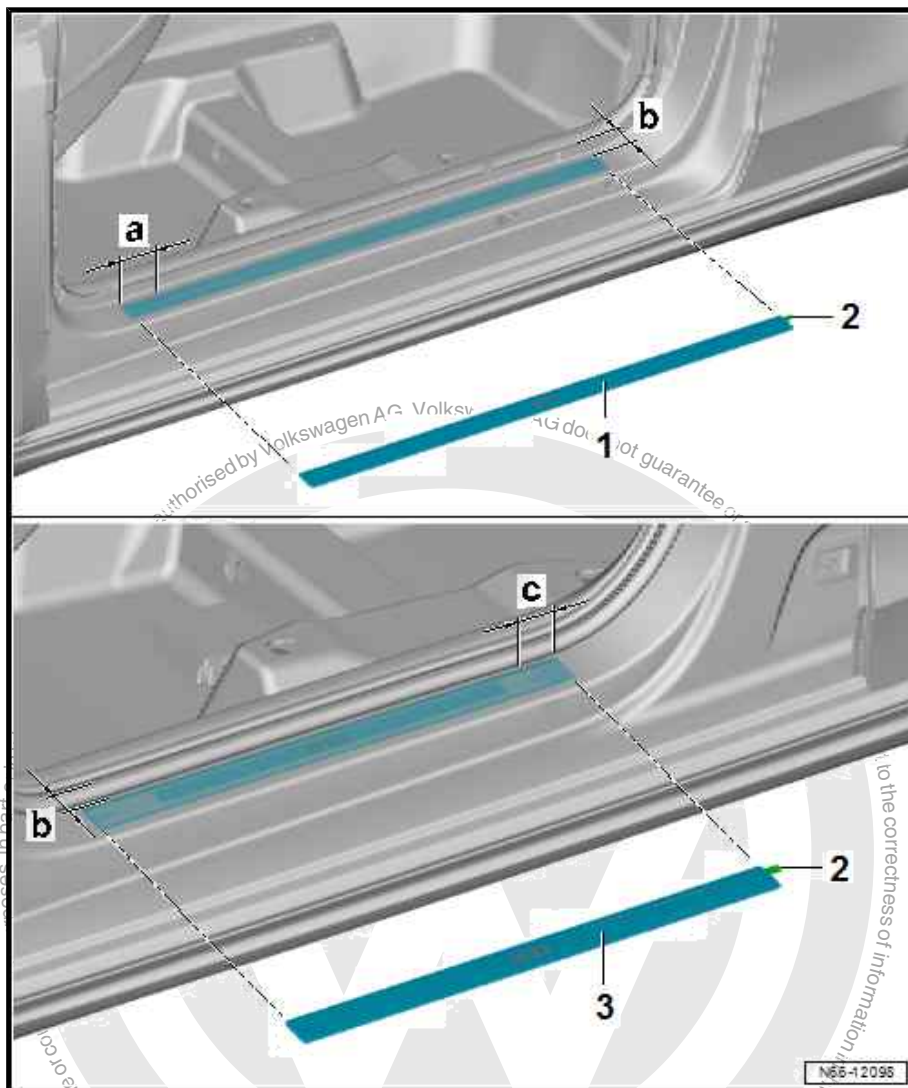
Remove any glue residue from adhesive tape using adhesive strip remover - VAS 6349- .

Ensure that the adhesive surfaces are free of dust and grease.

Affix sill protector film immediately after cleaning.

Do not pull off sill protector film until immediately before installation.

Working temperature is approx. 21 °C.



Removing

- Detach door seal ➔ [page 112](#) .
- Heat up sill protector film -1-/-3- using hot air blower - V.A.G 1416- , and pull it off.

Installation for 2-door and 4-door models

Install in reverse order of removal, observing the following:

- Pull protective liner -2- off adhesive tape of new sill protector film -1-.
- Bond sill protector film -1- onto sill, maintaining -dimension a = 172.5 mm-.
- Bond sill protector film -3- onto sill, maintaining -dimension a = 38.5 mm-.

Distance between sill protector film -1- and body flange:
-dimension b = 19 mm-



10 Special add-on parts

⇒ ["10.1 Assembly overview – special add-on parts", page 393](#)

10.1 Assembly overview – special add-on parts

⇒ ["10.1.1 Assembly overview - special add-on parts, e-up!", page 393](#)

⇒ ["10.1.2 Assembly overview - special add-on parts, Cross up!", page 394](#)

⇒ ["10.1.3 Assembly overview - special add-on parts, GTI!", page 395](#)

10.1.1 Assembly overview - special add-on parts, e-up!

1 - Side member extension

- ☐ Removing and installing
⇒ [page 300](#)

2 - Side lettering

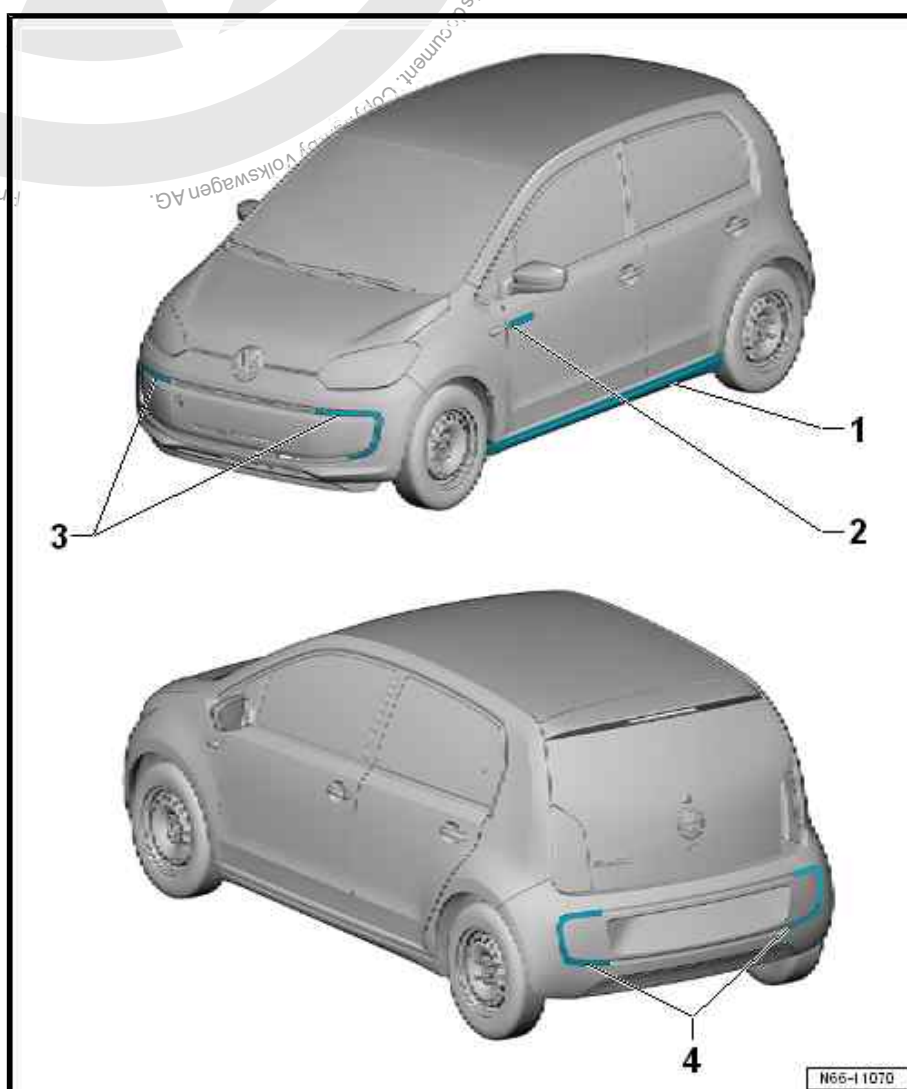
- ☐ Removing and installing
⇒ [page 375](#)

3 - Daytime running lights

- ☐ Removing and installing
⇒ Electrical system;
Rep. gr. 94 ; Lights,
switches - exterior; Re-
moving and installing
daytime running lights

4 - Reflector

- ☐ Engaged in bumper
cover
- ☐ Can be released from
locking hooks only after
bumper cover has been
removed
- ☐ Removing and installing
rear bumper cover
⇒ [page 224](#)





10.1.2 Assembly overview - special add-on parts, Cross up!

1 - Number plate carrier

- ☐ Removing and installing
⇒ [page 212](#)

2 - Front bumper cover

- ☐ Removing and installing
⇒ [page 214](#)

3 - Spoiler

- ☐ Removing and installing
⇒ [page 212](#)

4 - Radiator grille

- ☐ Removing and installing
⇒ [page 289](#)

5 - Wheel arch trim on front bumper

- ☐ Removing and installing
⇒ [page 212](#)

6 - Front wheel arch trim

- ☐ Removing and installing
⇒ [page 315](#)

7 - Roof railing

- ☐ Removing and installing
⇒ [page 336](#)

8 - Wheel arch trim, rear door

- ☐ Removing and installing
⇒ [page 317](#)

9 - Rear wheel arch trim

- ☐ Removing and installing
⇒ [page 317](#)

10 - Front and rear door trim strip

- ☐ Removing and installing
⇒ [page 326](#)

11 - Side member extension

- ☐ Removing and installing ⇒ [page 307](#)

12 - Rear bumper trim

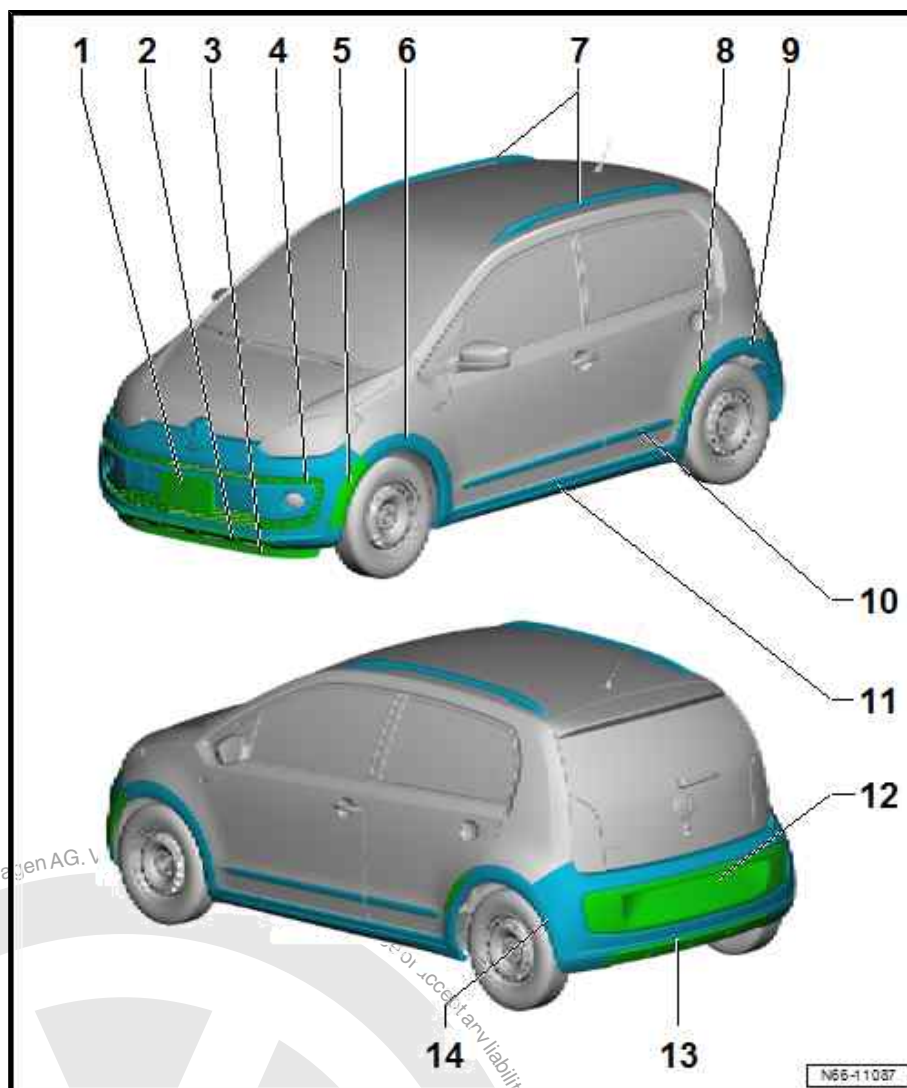
- ☐ Removing and installing ⇒ [page 221](#)

13 - Rear bumper cover

- ☐ Removing and installing ⇒ [page 224](#)

14 - Wheel arch trim on rear bumper

- ☐ Removing and installing ⇒ [page 221](#)





10.1.3 Assembly overview - special add-on parts, GTI

1 - Badge

- ☐ Radiator grille
- ☐ Removing and installing
⇒ [page 379](#)

2 - Decorative film

- ☐ On side
- ☐ Removing and installing
⇒ [page 387](#)

3 - Lettering

- ☐ Renewing ⇒ [page 375](#)

4 - Roof spoiler

- ☐ Removing and installing
⇒ [page 292](#)

5 - Lettering

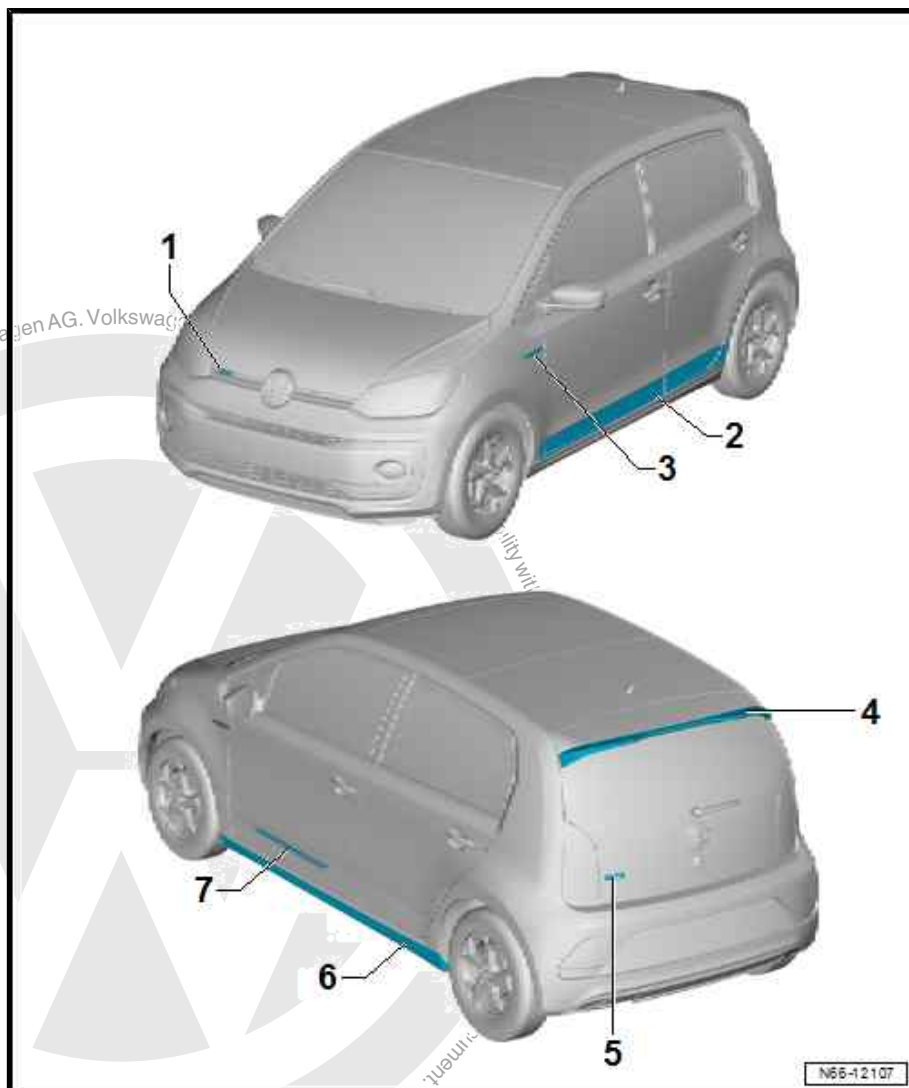
- ☐ Rear lid
- ☐ Renewing ⇒ [page 372](#)

6 - Side member trim

- ☐ Removing and installing
⇒ [page 300](#)

7 - Sill protector film

- ☐ Removing and installing
⇒ [page 387](#)





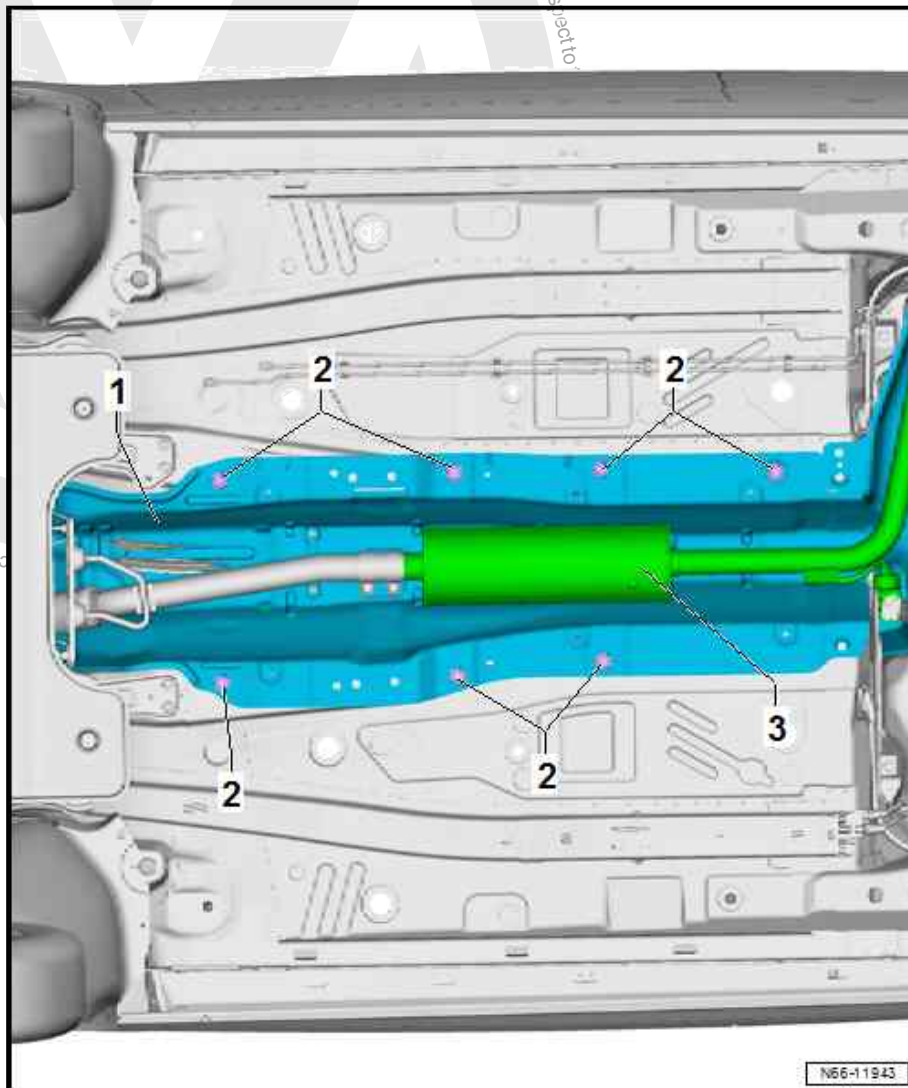
11 Heat shields

11.1 Removing and installing underbody heat shield



Note

Slight discrepancies may need to be allowed for depending on the type of engine.



Removing

- Remove rear exhaust system -3- ➔ Rep. gr. 26 ; Exhaust system/silencers; Assembly overview - silencers .
- Detach lock washers -2- (qty. 7) and remove heat shield -1- backwards.

Installing

Installation is carried out in reverse order.