

Chapter B

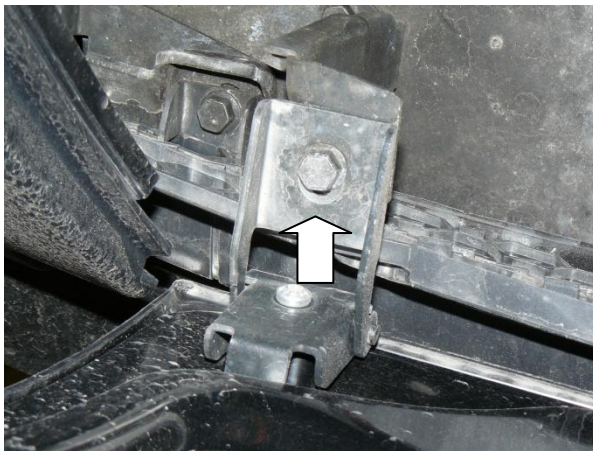
Body and frame

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B.1 General

A number of the body parts have clips around the holes where the screws are fastened. Ensure that the clips are faultless and in correct position before installation.



B.2 Hood

B.2.1 Disassembling

Unscrew the fasteners.

B.2.2 Assembling

Assemble in reverse order. Adjust the hood correctly.

Tightening torque = 20 Nm



B.3 Windscreen replacement

- Tilt the cover on the wiper arm.
- Unscrew the wiper arms.



Arrows indicating where the plugs are located

- Loosen the cover in the lower part of the windscreen. The cover is in two parts "hinged" in the middle and fastened with five plastic plugs (picture).
- Also loosen A-trim and front part of the roof trim to avoid any damages during windscreen replacement.



On cars with heated windscreen the wires must be disconnected. The picture is taken from the motor compartment showing the wires in lower part of the windscreen. You will also find wires at top of the windscreen.

NOTE that the wires fragile so be careful when disconnecting and connecting.



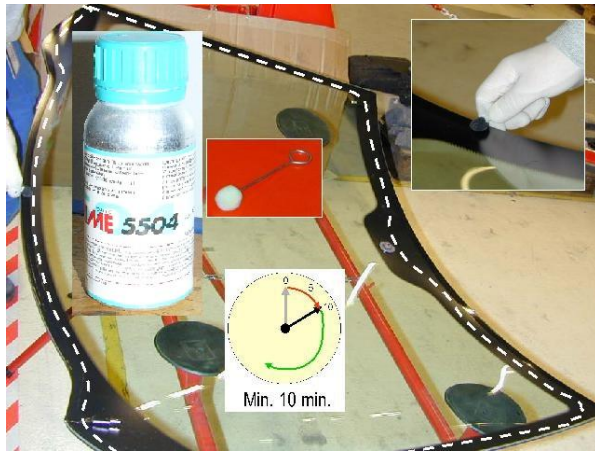
The picture shows the contacts in the upper part of the heated windscreen. To get access to the contacts the roof trim must be pulled down in front.



Start preparation of the windscreen replacement by doing the following:

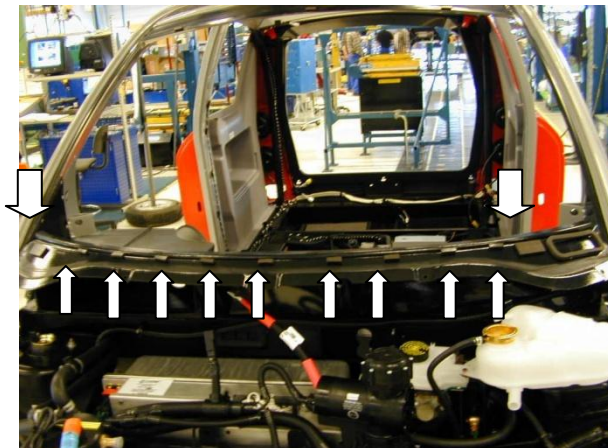
- Clean the area which are about to be glued with BetaClean 3300. Use paper that is not nappy. Apply and remove in ONE direction. Let it dry.

IMPORTANT: Use gloves, glasses and breathing protection.



- Use "elephant" Q-tips for applying BetaPrime 5504 around the border of the windscreen in a 20 mm wide application. Ensure the primer is only applied to the black silken area.
- Let it dry for at least 10 minutes.
- Gluing must be done within 8 hours.

IMPORTANT: Use gloves, glasses and breathing protection.



- Cut the windscreen loose with a suitable tool.
- Cut glue left on the frame down to 2 mm thickness.
- Check that the distance pieces are fine; nine pcs. 7,5 mm thick 25x8 mm (arrow upwards) and two 7,5 mm thick 25x50 mm (arrow downwards) as shown in the picture. Replace if necessary.

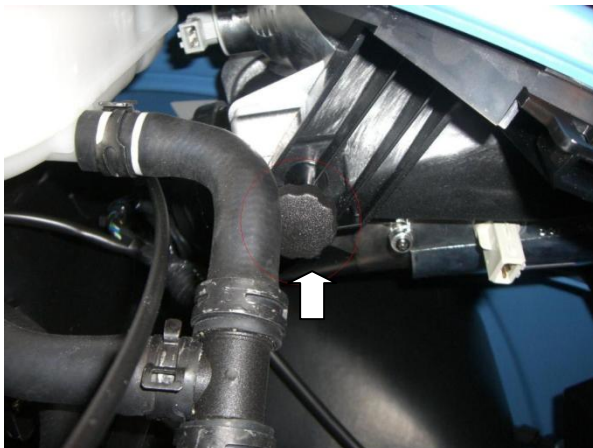


- Apply Beta Seal 2700 or 2710 5 mm from the edge of the windscreen. The application must be 6 mm high and 10 mm wide.
- The windscreen must be installed within 5 minutes after the glue is applied.

IMPORTANT: Use gloves, glasses and breathing protection.



- Fasten the windscreen to the roof with tape as shown in the picture. Leave the tape on for 1,5 hours.



B.4 Front fender

B.4.1 Disassembling

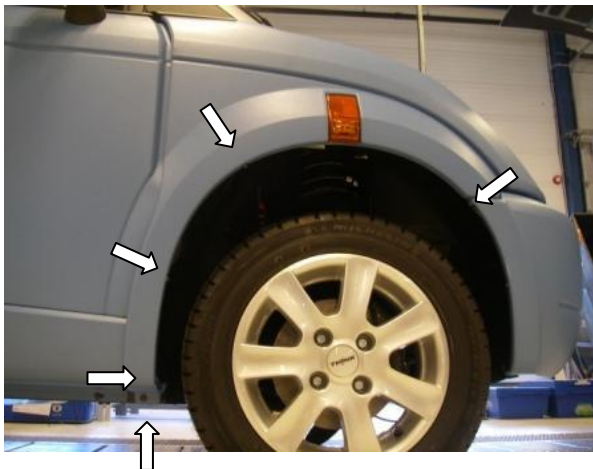
- Disconnect the headlamp wire.
- Unscrew the headlamp fastener (picture).
- Pull the headlamp out from the fender.



- Unscrew the two screws fastening the front fender to the bracket.



- Disconnect the indicator lamp cable.



- Unscrew the three – 3 – screws fastening the wheelhouse liner to the front fender.
- Unscrew the screw fastening the fender to the bumper.
- Unscrew the bottom screw fastening the fender to the lower frame.



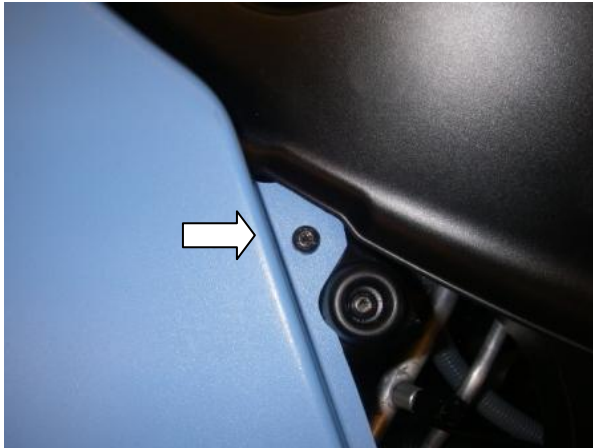
- Open the door and remove the screw between the door hinges.



- Tilt the upper part of the quarter panel out and pull it out so the lower clips are loosened.



- Remove the fastener behind the quarter panel.



- Remove the fastener in the motor compartment.

B.4.2 Assembling

Assemble in reverse order.
Tightening torque = 1,9 Nm

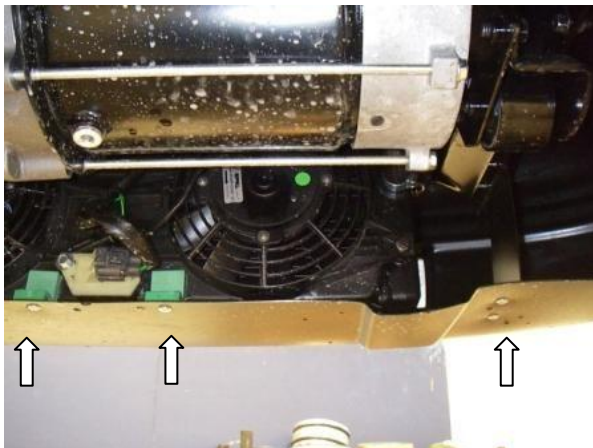
NOTE: You may need to press from the inside of the fender when fastening the quarter panel.



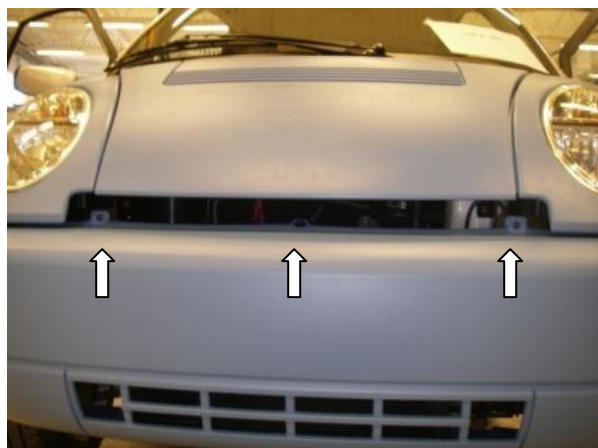
B.5 Front bumper

B.5.1 Disassembling

- Remove the fasteners on both sides where the bumper is fastened to the wheelhouse liner (three – 3 – fasteners each side).
- You must also remove the fastener in the picture holding the bumper, fender and wheelhouse liner together.



- Loosen the bumper from the lower brackets. The fastener at the left is not shown in the picture, but is exactly the same as the fastener to the right.



- Remove the three bolts on the top of the bumper. The outer two are also fastening the grille.
- First remove the grille, then the bumper.
- Remove front bumper foam.

B.5.2 Assembling

Assemble in reverse order.
Tightening torque = 1,9 Nm



B.6 Rear bumper

B.6.1 Disassembling

- Remove the fasteners along the right and left edges of the bumper. It is four – 4 – fasteners on each side holding the rear wheelhouse liner.



- Pull out the license plate lamp and twist the bulbs and the bases out so they are left attached to the car when the bumper is removed.



- Remove the four fasteners at the top of the bumper.
- Remove the bumper foam (next picture).



B.6.2 Assembling

- Assemble in reverse order.
- Assemble the bumper foam. This is fastened with one fastener on each side as showed in the picture.
- Install the fasteners on the top of the bumper. They could be close fit.



B.7 Outer sills

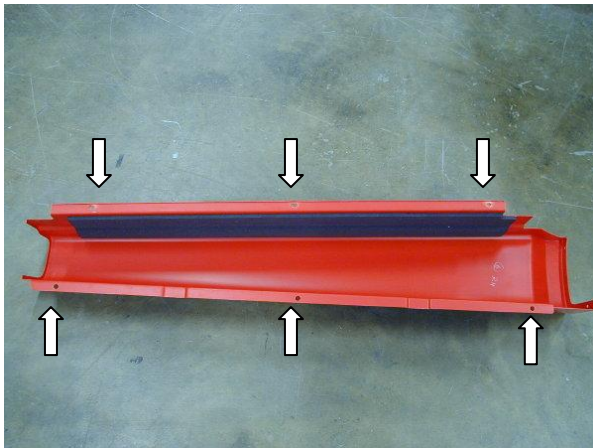
B.7.1 Disassembling

- Remove the door seal.

The panels are fastened on top (3 pcs.) and in the bottom (3 pcs.).



- Remove the three fasteners fastening the panel to the rear wheelhouse liner.



- Remove the three fasteners at bottom of the sill.
- Remove the three fasteners at top of the sill.

B.7.2 Assembling

Assemble in reverse order.

Tightening torque = 1,9 Nm



B.8 Rear spoiler and tailgate

B.8.1 Disassembling

- Remove the high mounted brake light by unscrewing the unit.
- Disconnect the brake light cable.



- Disconnect the connectors the tailgate heater.
- Remove the nut and the washer holding the spoiler.
- Lower the tailgate and remove the spoiler.



- Support the tailgate.
- Remove the gas struts by removing the clips fastening the strut to the ball joint. Use a small screwdriver. The gas strut can then be pulled of the ball joint.

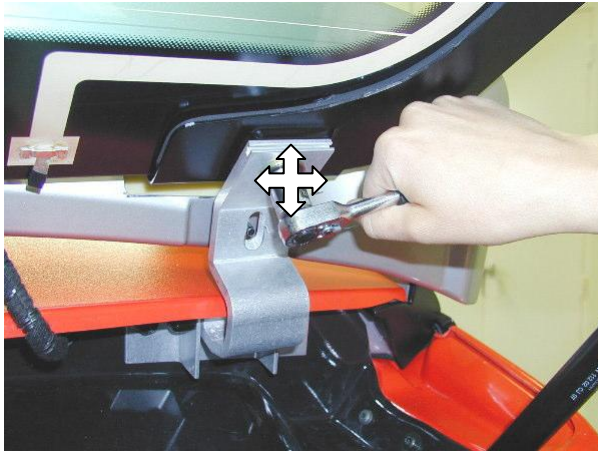
NOTE: The gas struts should be disconnected in both ends and put away so they are not squeezed between the body and the tailgate.

Struts containing gas should be treated carefully.



- Support the tailgate.
- Remove the nut and the washer.
- Carefully remove the tailgate.

NOTE: Be careful when handling the tailgate.



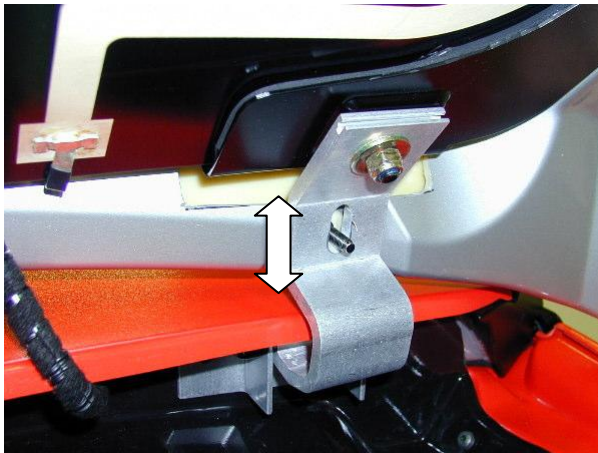
B.8.2 Assembling the tailgate

Assemble the tailgate in reverse order.

NOTE: Ensure the tailgate hit the latch correctly. The tailgate position can be adjusted in the directions as shown in the picture.

NOTE: Do NOT tighten the nuts too much – this can damage the tailgate.

Tightening torque = 25 Nm



B.8.3 Assembling the spoiler

- Assemble the spoiler in reverse order.

NOTE: Do NOT tighten the nuts too much - this can damage the spoiler!

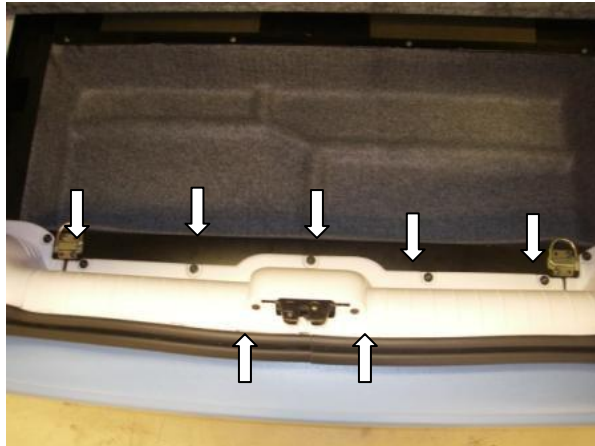
Tightening torque = 3,2 Nm.

NOTE: Ensure the electrical cable for brake lights is correctly routed between the tailgate and the spoiler.

The spoiler position can be adjusted as shown in the picture.



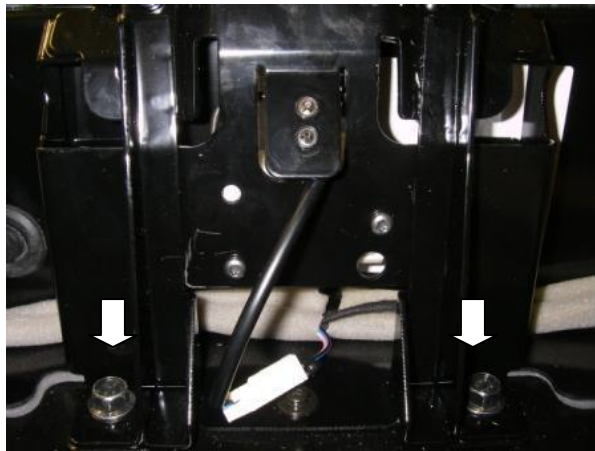
NOTE: Ensure the spoiler is not in contact with the roof when closed. Correct distance between the spoiler and the roof is 7 mm.



B.9 Liftgate latch

B.9.1 Disassembling - complete

- Open the tailgate and remove the cover fastened with two fasteners to the latch itself and five fasteners to the floor.



- Remove the two fasteners holding the bracket to the frame.
- Disconnect contacts (2 pcs.).

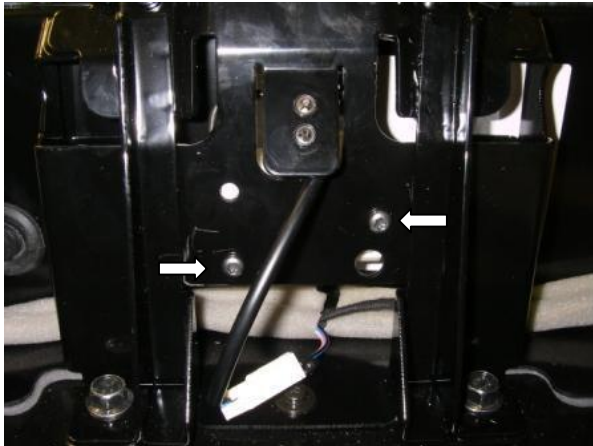


- Remove the rear bumper. See separate section.
- Remove the two bolts.
- Remove the complete bracket with the latch.

B.9.2 Assembling

Assemble in reverse order.

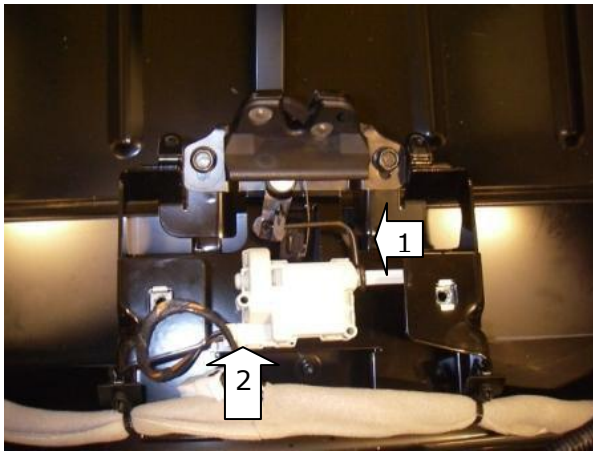
Tightening torques:
Bolts in the picture = 7 Nm
Bolts to the frame = 20 Nm



B.9.3 Replacing the latch actuator

The liftgate latch actuator can be replaced without removing the bracket it is fastened to.

- Remove the latch cover as described in the previous section.
- Remove the two fasteners holding the latch actuator.

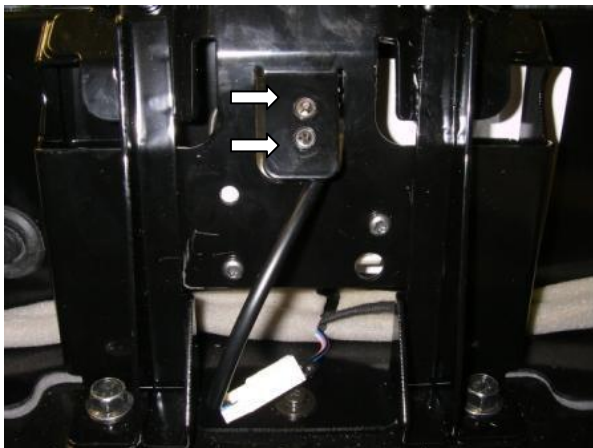


- Move the actuator to be able to disconnect it from the linkage (1).
- Move the actuator downwards and out.
- Disconnect the contact (2).

B.9.4 Assembling

Assemble in reverse order.

Tightening torque = 1,5 Nm



B.9.5 Replacing the sensor/switch

The sensor/switch can be replaced without disassembling the bracket it is attached to.

- Remove the latch cover as shown in section B.9.1.
- Remove the two crosshead screws holding the sensor/switch.
- Disconnect the contact.



B.9.6 Assembling

Assemble in reverse order.

NOTE that the switch must be located between the last and last but one of the spring's windings; as shown in the picture.



B.10 Quarterglass

B.10.1 Disassembling

- Cover up the rear bodyside as shown.
- Pull out the quarterlight finisher.

The finisher is glued and also fastened with 3 +2 fasteners.

NOTE: The finisher can not be reused. Only use a new finisher when assembling the new quarterglass.

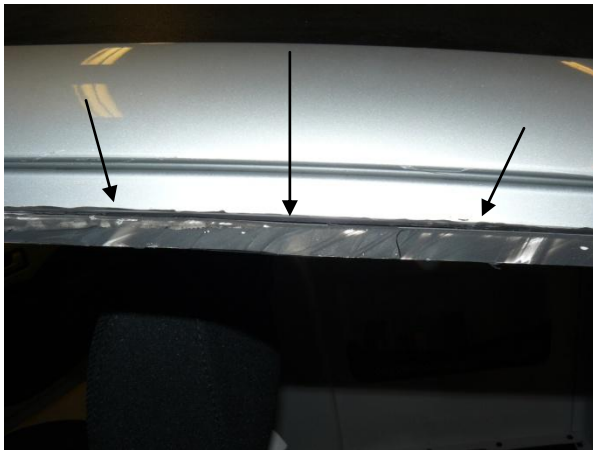


The quarterglass is glued to the aluminium frame and the plastic surrounding.

- Use a knife for removing glass to cut the glass loose.
- Cut the glue line down to about 2 mm.



- Ensure that two 7,5 mm thick 25x8 mm foam spacers are mounted at the B-pillar as shown in the picture.

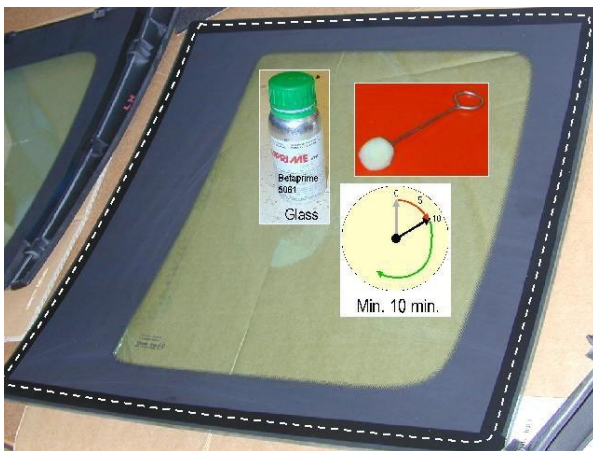


B.10.2 Assembling

- Test-install the quarterglass.
- Ensure the glass fits. Assemble the glass and finisher without gluing. Mark the corners with tape.

NOTE: Verify that the door can be closed without touching the glass.

- **IMPORTANT:** The finisher must be adjusted/attached to the glass before the glass is glued.
- **IMPORTANT:** Ensure the primer and glue line cover the opening between the upper frame and the support of the upper part of the glass. This is to avoid water leakage. See picture.



- Clean the area on the new glass that is to be glued with BetaClean 3300. Use paper that is not nappy. Apply and remove in ONE direction. Let it dry.
- Use "elefant" Q-tips to apply BetaPrime 5504 around the glass in a 20 mm wide glue line. Ensure the primer is only applied to the black silk area.
- Let dry for at least 10 minutes.
- Glue must be applied within 8 hours.

IMPORTANT: Use gloves, glasses and breathing protection.



Re-assembling of a used quarterglass.

- Ensure the glue line is clean and dry.
- Apply BetaPrime 5504 on all contacting surfaces (old glue line).
- Wait for 10 minutes
- Glue the glass (look futher down).

IMPORTANT: Use gloves, glasses and breathing protection.



- Apply BetaSeal 2700 in a glue line 5 mm from the edge of the glass. The glue line should be 6 mm high and 10 mm wide.
- Install the glass immediately after the glue is applied.

Let dry for 3 hours.

IMPORTANT: Use gloves, glasses and breathing protection.



Use tape to keep the quarterglass in place.

Products:

- New quarterglass is to be primed with Betaprime 5061.
- New rear bodyside/upper frame is to be primed with Betaprime 5404.
- Gluing on glue line: Glue line is to be primed with Betaprime 5504 both on car and glass.

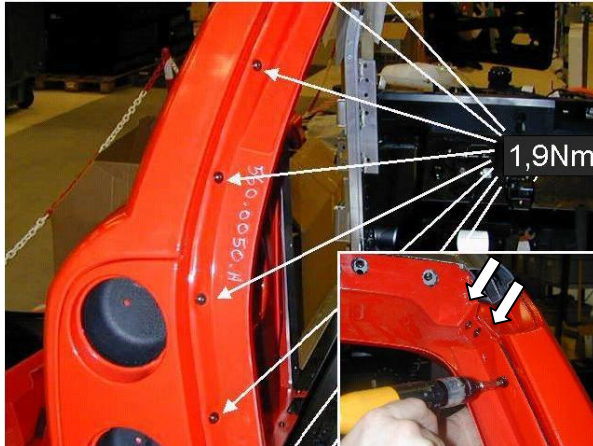


B.11 Rear bodyside

Must be removed complete – in one part.

B.11.1 Disassembling

- Remove the rear bumper; see section B.6.
- Cut out the quarterglass; see section B.10.
- Open the tailgate and remove the tailgate seal.
- Remove the tailgate latch cover; see section B.9.1.



- Remove the screws fastening the rear bodyside to the tailgate opening.
- Remove any clips.
- Remove trim from C- and B-pillars.



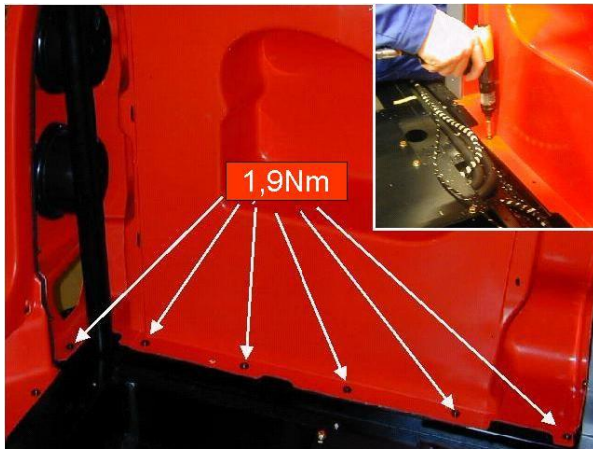
- Disconnect both tail lamps.

The lamps can now be removed from the rear bodyside with harness.



The rear bodyside is fastened with one fastener to the upper frame.

- Pull off the headlining.
- Remove the fastener.



- Lift the rear carpet in the boot to access the fasteners fastening the rear bodyside to the frame.
- Remove the fasteners.



- Remove the last three fasteners fastening the rear bodyside to the B-pillar and also the last fastener at the floor.

Between the rear bodyside and the B-pillar there is a seal.

At the top of the rear bodyside there is a seal of the same type as on the B-pillar.

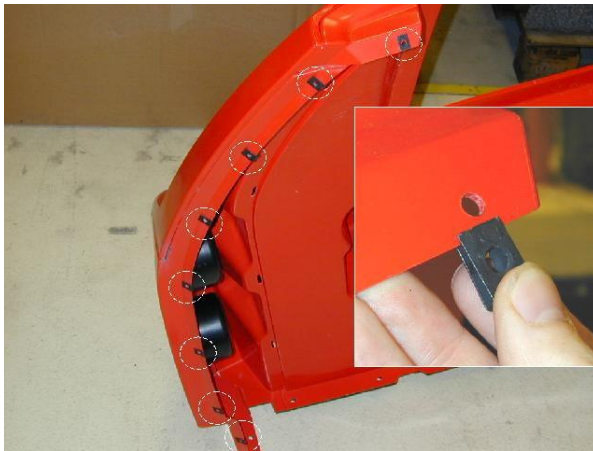
- Loosen the seal and slowly pull it off.



B.11.2 Assembling

- Assemble in reverse order.

Tightening torques = 1,9 Nm.



- Installation of clips: Ensure the clips are perfect are are located correctly.



B.12 Door panel trim

B.12.1 Disassembling

The door panel trim is fastened with two clips at the bottom, three at the top, one each side of the speaker grille and two screws inside the door handle.



- Remove the cover inside the door handle.

- Remove the two screws inside the door handle.



- Remove the three screws shown in the picture. The last two are not fastened in the frame behind.

- Pull of the panel. The panel is fastened with seven clips.



Remove the speaker:

- Remove the four screws.
- Disconnect the speaker.



- Remove the water shedder. This can not be reused because it is glued and probably will brake when disassembled.

B.12.2 Assembling

- Assemble in reverse order.

Check that all clips are present and undamaged..



B.13 Door window

B.13.1 Disassembling

- Remove door panel trim, speaker and water shedder; see section B.12.
- Lower the window to get access to the two bolts in the bracket and remove them.
- Remove the window from the bracket and lower the bracket slightly making it possible to remove the window at the rear.



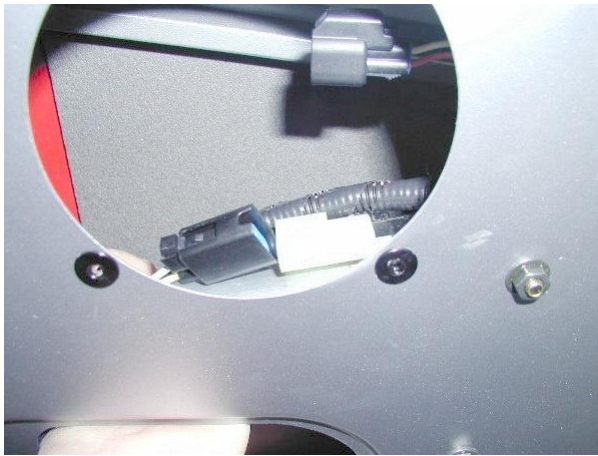
- Lower the front of the window and raise the rear to loosen it from the guidance. The window can now be removed with the rear first.

NOTE: Be careful to avoid damages to seals etc.

B.13.2 Assembling

- Assemble in reverse order.
- Ensure the window bracket fit the guidance correctly.
- Raise the window completely and check it is operating correctly and freely in the guidance.

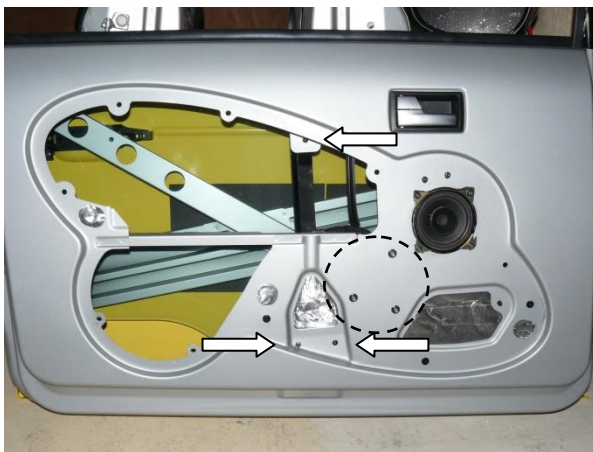
Tightening torques = 7 Nm



B.14 Power door window

B.14.1 Disassembling

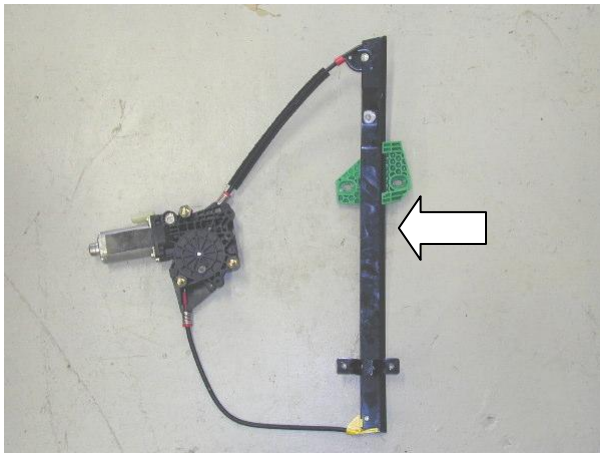
- Remove door panel trim, speaker and water shedder; see section B.12.
- Remove the window.
- Disconnect the contact shown in the picture.



- Remove the three nuts holding the lift motor.
- Drill out the three rivets fastening the mechanism to the door.



- Lift the mechanism out.



Complete power window mechanism.

NOTE: When new window mechanism is installed it must be greased.



B.14.2 Assembling

- Attach the mechanism in correct position.
- Insert rivets (3 pcs.).
- Assemble the rest of the parts in reverse order.



B.15 Door lock – complete

B.15.1 Disassembling

- Remove the rubber plug and remove the fastener for the door lock cover.

NOTE: The screw must not be removed. Only unscrewed enough making it possible to remove the door lock cover.



- Pull out the lock cylinder cover.



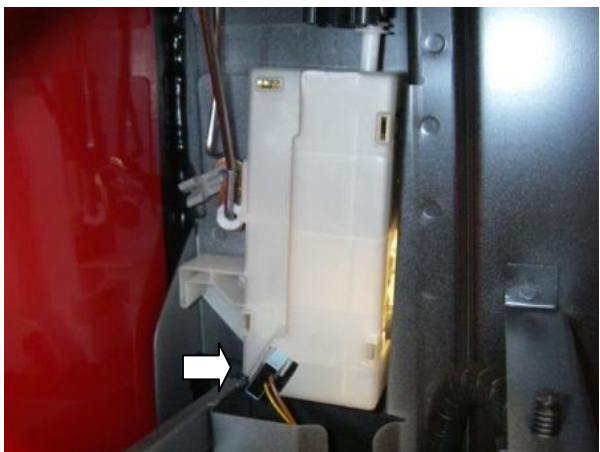
- Pull the door handle backwards and tilt it outwards.



- Remove the fasteners for the inside mechanism.



- Remove door panel trim, speaker and water shedder; see section B.12.
- Remove the fastener holding the mechanism to the outer panel.
- Pull the mechanism forward and remove it from the outer panel.



- Disconnect the door ajar switch.
- On cars with central locking the central locking must also be disconnected.



- Remove the three fasteners for the door lock mechanism.

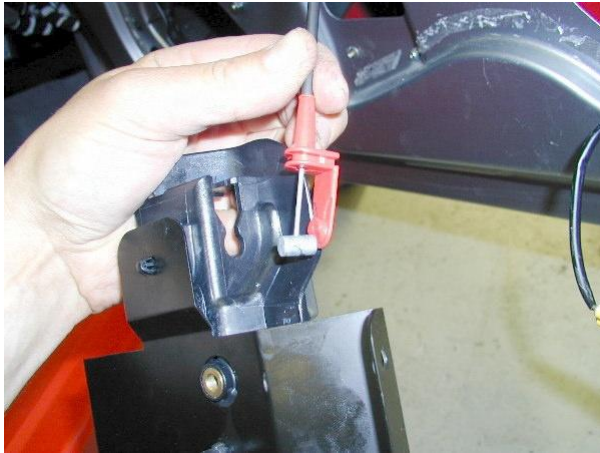


- Pull out the cover hiding the fastener.
- Remove the fastener.

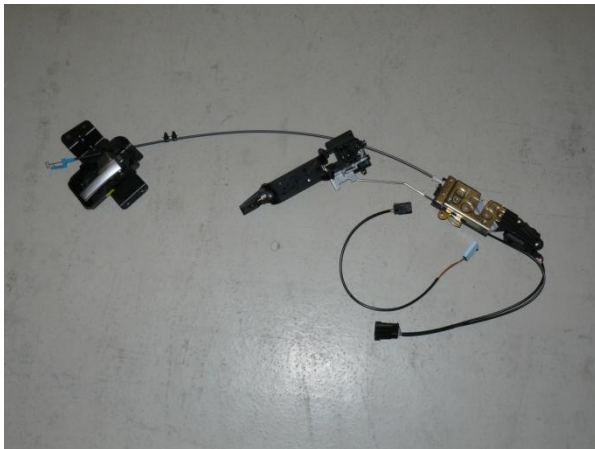


- Remove the frame around the door handle.
The rest of the mechanism is located on a bracket fastened with two screws below the door handle and two screws inside the door, at the top of the door. Details below.
- Remove the four fasteners holding the bracket.





- Disconnect the wire to the door lock.



- Remove the complete door lock.



B.15.2 Assembling

- Assemble in reverse order.
- Enter the door handle at the front.

NOTE: Press the locking pin on the mechanism and push the door handle in correct position.



- Press the locking pin on the mechanism to enter the door handle.



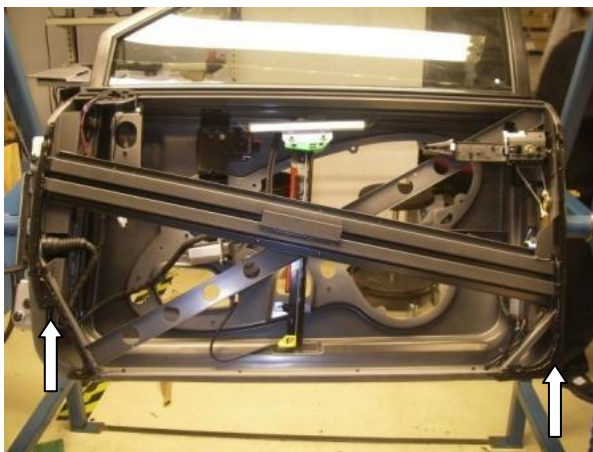
B.16 Outside mirrors

B.16.1 Disassembling

- Twist the mirror back. An opening will be visible making it possible to tilt off the mirror cover.
- Disconnect the contact.
- Remove the two screws fastening the mirror to the door.

B.16.2 Assembling

Assemble in reverse order.



B.17 Outer door panel

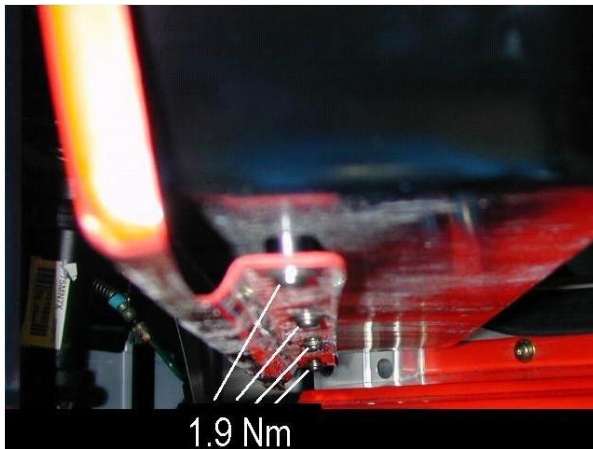
B.17.1 Disassembling

The outer door panel is hanged on the upper edge, glued along two sides as shown in picture and fastened with four screws at the lower edge.

- Remove the outside mirrors. See section B.16.



- Remove the finishers at both sides of the seal above the door panel.



- Remove the door panel trim. See section B.12.
- Remove the door handle and the part of the door lock it is fastened to. See section B.15.
- Remove the four fasteners at the lower part of the door panel.



- Raise the lower part of the door panel outwards and cut the glue along the sides.
- Just before the new panel is glued on, the glue line must be cut down to 2 mm height.
- Pull the panel out.



B.17.2 Door panel outer assembling

- Clean the area to be glued with BetaClean 3350. Use nappy free paper. Apply and remove in ONE direction. Let dry.
- Apply BetaPrime 5504 as shown in picture; where the panel is glued.
- Let dry for at least 10 minutes.
- Glue must be applied within 8 hours.



- Apply new glue line on door frame.
- Assemble within 5 minutes.

TIP:

If you are not able to glue the new panel on the fresh cut glue line on the frame, this can be reactivated in the following way:

- Apply Betawipe 4001
- Wait for 10 minutes
- Glue the new panel.

IMPORTANT: Use gloves, glasses and breathing protection.



- Press the upper side of the panel into the slot. Enter in front and then push backwards.
- Squeeze the panel against the door frame and fasten it along the sides to keep it in place.
- Fasten the screws at the lower edge of the panel.

Drying time: 1,5 hours.

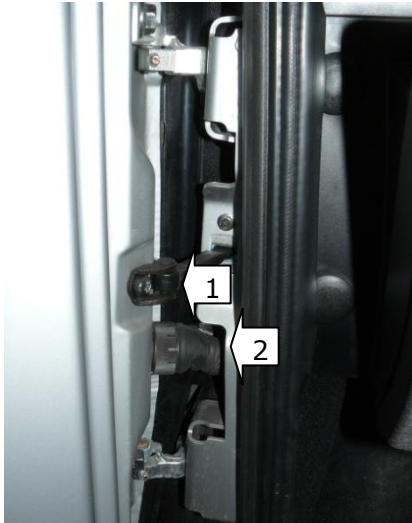
- Assemble the rest of the components in reverse order.

B.18 Door

B.18.1 Disassembling - complete

Open the door and

- Unscrew the door stop (1) in the middle.
- Disconnect the door harness from the car harness (2).



- Remove the locking bolts (3) on upper and lower door hinges.
- Lift the door off.

B.18.2 Assembling

Assemble in reverse order.

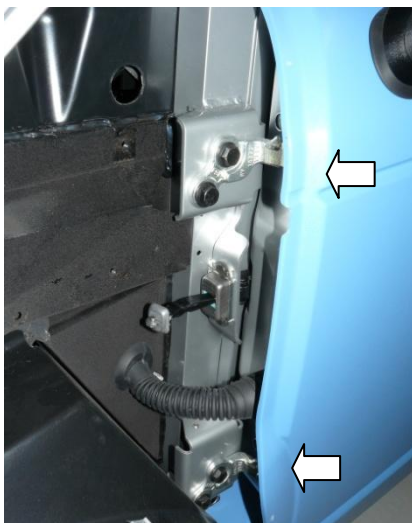


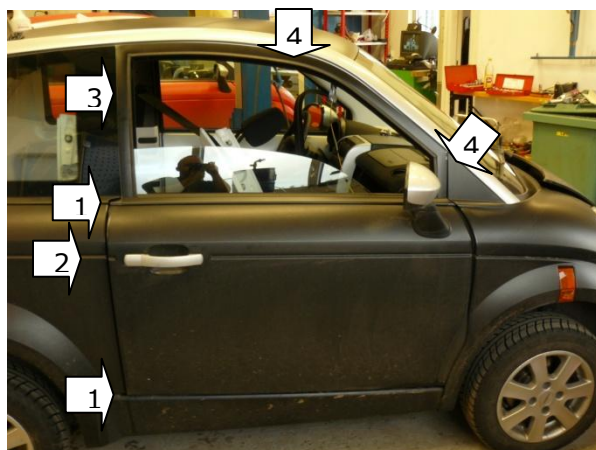
B.18.3 Door adjustment

An assembled door must probably be adjusted. Door adjustment is work for two people.

To adjust the door as high as possible do the following:

- Remove the front fender to access the adjustment bolts.
- Loosen the upper and lower bolts.
- Open the door in about 40 degrees angle.
- Lift the door as high as possible at the back and press it forward.
- Fasten the upper bolts.





- Lift the door as high as possible and backwards.
- Fasten the lower bolts.

Check the following:

- That upper and lower part of the door flushes the rear bodyside (1).
- That the door cut out matches the rear bodyside cut out (2).
- That it is a constant opening between the door frame and the quarterglass (3).
- That it is a constant opening between door frame and upper frame (4).



Also verify if the latch meets the striker correctly at the back edge of the door.

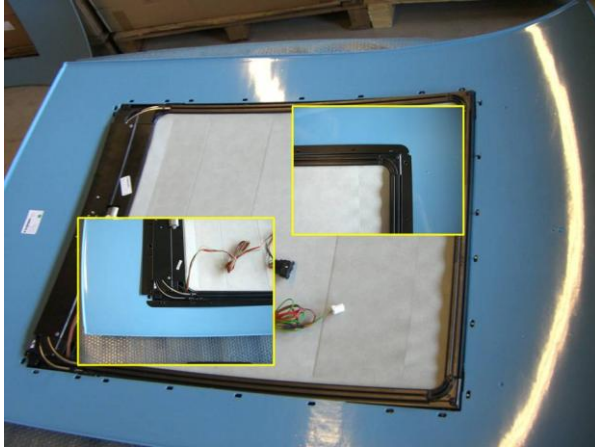
This can be adjusted by loosening the two fasteners and move the striker to correct position. The striker can be adjusted in two directions as shown in the picture.

B.19 Sunroof

B.19.1 *Disassembling complete sunroof*

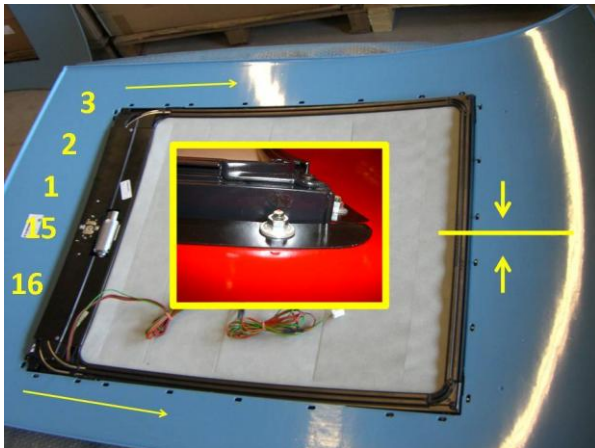
Remove the headlining (see separate chapter).

Harness for the sunroof is fastened to the right A-pillar and ends down by the relay box. Loosen the harness.



The sunroof is fastened to the roof panel with 30 pcs. M5 nuts.

Remove the nuts and remove the sunroof.



B.19.2 Assembling

Assemble the sunroof the following way:
Start at the back in the middle and tighten forward to the middle nut in front. Follow the same procedure on the other side.

Tightening torques = 4,1 Nm