



SERVICE MANUAL

Hollandia 300 Large

BEFORE BEGINNING THE SERVICE PROCEDURE

1. Determine which model of the Hollandia 300 Large is installed in the vehicle.
2. Diagnose the problem by using the “Trouble Shooting” tables in this manual to determine what service procedures are required.
3. Perform the Service Procedure per the instructions.
4. Some Procedures such as Removal of the sunroof must be carried out before beginning the required Service Procedure and Reinstallation of the sunroof after completion. If this is the case it is noted at the beginning and end of the of the required service procedure.
5. Most Service Procedures are valid for both Manual and Electric models. When a step is not valid for one of the models, it will be indicated by a symbol next to the number of that procedure.



Invalid for the manual version



Invalid for the electrical version

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1. Troubleshooting tables

REPAIR ADVICE FOR LEAKS BETWEEN GLASS PANEL AND SEAL		
<i>Failure</i>	<i>Possible cause</i>	<i>Solution</i>
Leakage (general)	Dirt on the seal.	Clean the seal.
	Remains of mastic/dirt underneath the glass panel	Clean bottom of glass panel.
	Glass panel opened while there was water on the roof	Remove water.
	Sunroof not completely closed.	Dry vehicle.
	Crank not stored in recess, causing glass panel to not be mechanically blocked in closed position (manual version only).	Remove water.
Leakage at one of the rear corners	Locker slide is broken. (If this is the case, it is possible to push the rear corners of the glass panel up and down, more than 1 cm (3/8 inch))	Replace locker slide; if it is not possible to open the glass panel, push the rear side of the glass panel up while opening the roof.
Leakage at the seam of the seal	Excessive difference in height at the joint.	Replace seal.

1. Troubleshooting tables

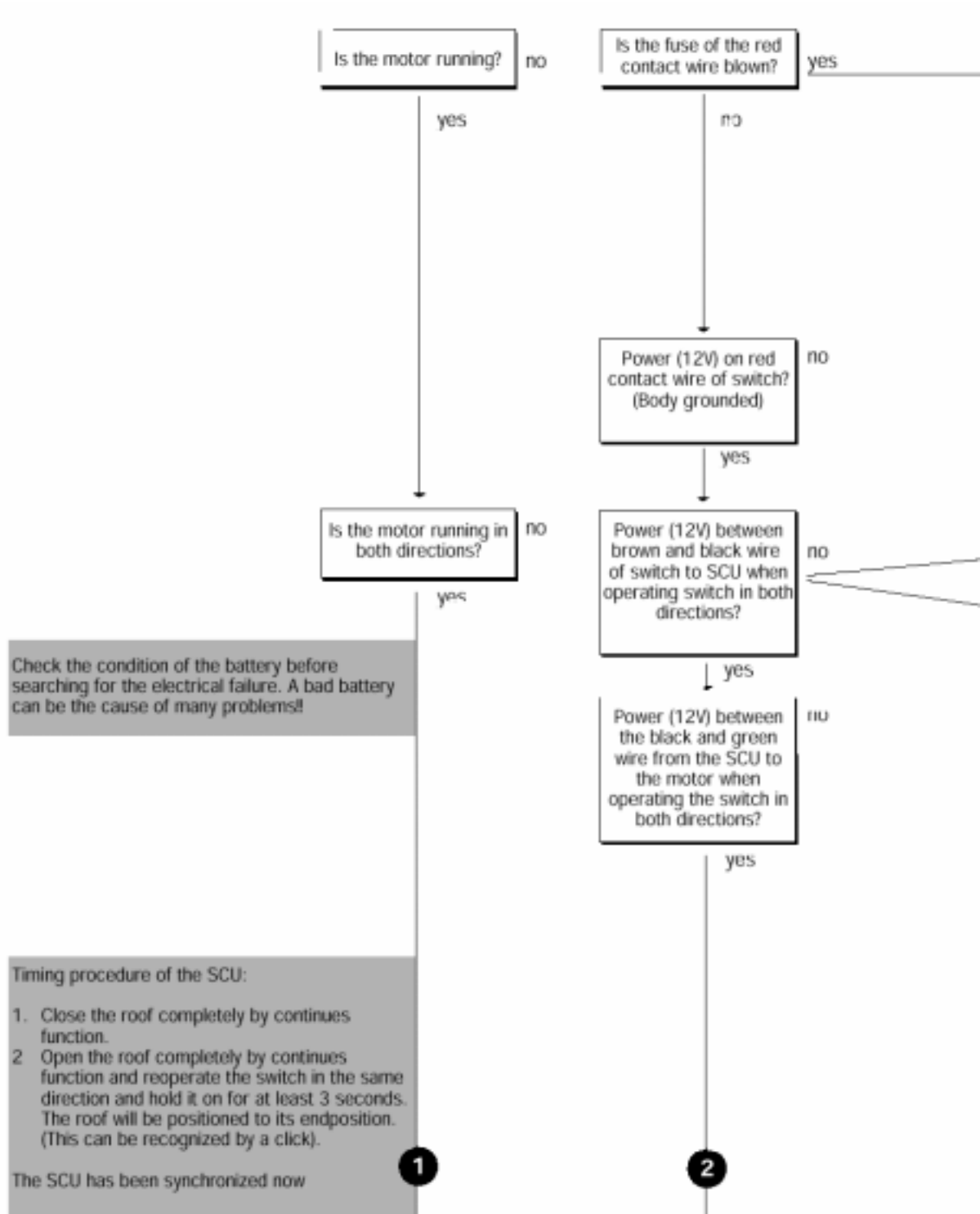
REPAIR ADVICE FOR MECHANICAL DEFECTS		
<i>Failure</i>	<i>Possible cause</i>	<i>Solution</i>
Rear side of glass panel cannot be closed or only partially opens.	Locker slide broken.	Replace locker slide; if it is not possible to open the glass panel, push at the rear side of the glass panel while opening the roof.
Glass panel can be opened into the tilt position but will not cycle to full open.	The front side of the glass panel is sticking to the seal.	Replace seal.
Glass panel is blocked when sliding.	Stop is incorrectly installed.	Install the stop correctly.
	Obstacle in mechanism.	Remove obstacle.
Glass panel is sliding unevenly when opening and closing.	Gear wheel is mounted the wrong way.	Install gear wheel housing according to the service manual
	Gear wheel housing is worn out.	Install cable repair set.
Glass panel not parallel with the frame in the closed position.	Incorrect adjustment of glass panel.	Adjust glass panel (using red bolts).

REPAIR ADVICE FOR SOLVING BACKGROUND NOISES		
<i>Failure</i>	<i>Possible cause</i>	<i>Solution</i>
Rattling noise near wind deflector.	Wind deflector is touching glass panel when glass panel is in closed or in tilt position.	Bend the wind deflector to flatten contour.
	Rod springs do not have sufficient tension.	Remove the wind deflector and bend the rod springs slightly upwards.
Cracking and/or creaking.	Roof opening cut, too small.	Enlarge the opening.
	Stretched headliner is causing flapping noise.	Re-stretch the headliner.
	Cracking noise when sliding the glass panel over the seal.	Apply talcum powder to the seal.
Glass panel is chattering in the half-opened position.	Stops are worn-out.	Install new stops.

1. Troubleshooting tables

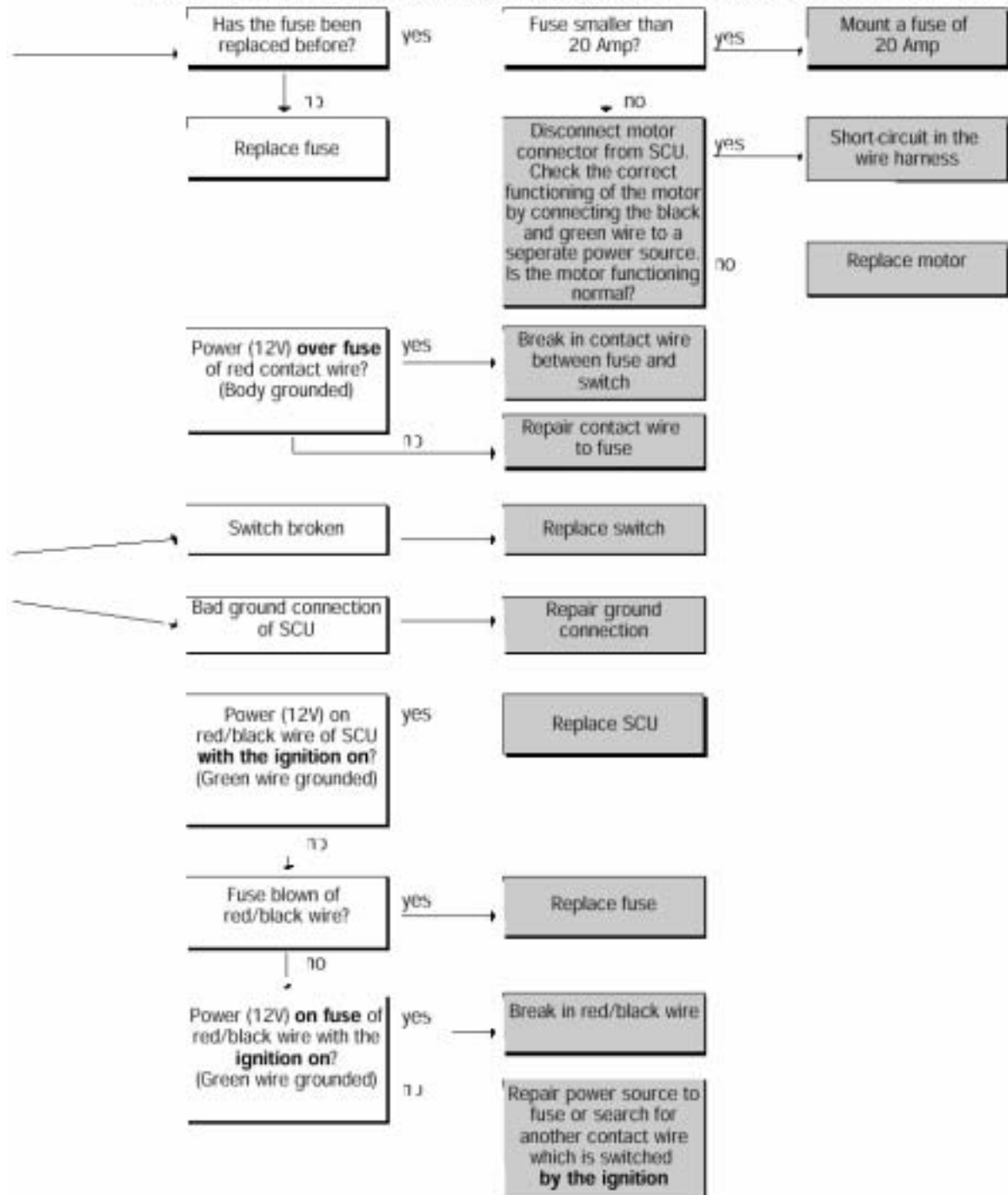
REPAIR ADVICE MECHANICAL TROUBLE WITH ELECTRIC MODEL		
<i>Failure</i>	<i>Possible cause</i>	<i>Solution</i>
Glass panel is sliding slowly.	Mechanism is dirty or needs lubrication.	Clean and lubricate the mechanism.
	Battery voltage too low.	Charge or replace the battery.
	Defective Motor.	Replace motor (if necessary).
Motor is running but the glass panel is not moving.	Drive shaft broken.	Replace motor.
	Drive shaft not far enough in gear wheel (the drive shaft will be protruding underneath the motor).	Remount the motor (open the roof half way) and push the drive shaft upwards at the bottom.
Motor is making a rattling noise when sliding the glass panel or in the end position.	Drive shaft not far enough in gear wheel (the drive shaft will be protruding) underneath the motor.	Remount the motor (open the roof halfway) and push the drive shaft upwards at the bottom.

1. Troubleshooting tables

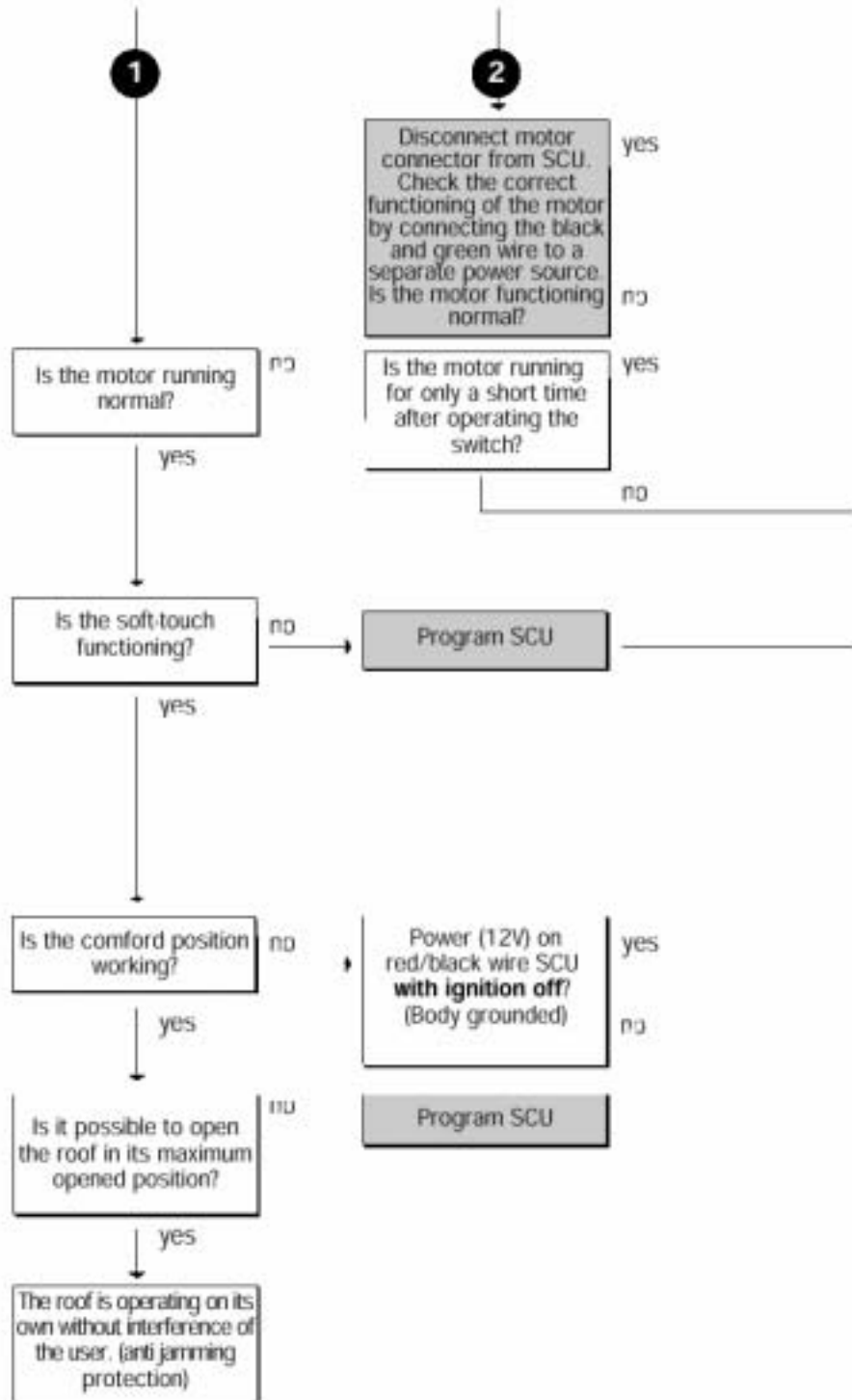


1. Troubleshooting tables

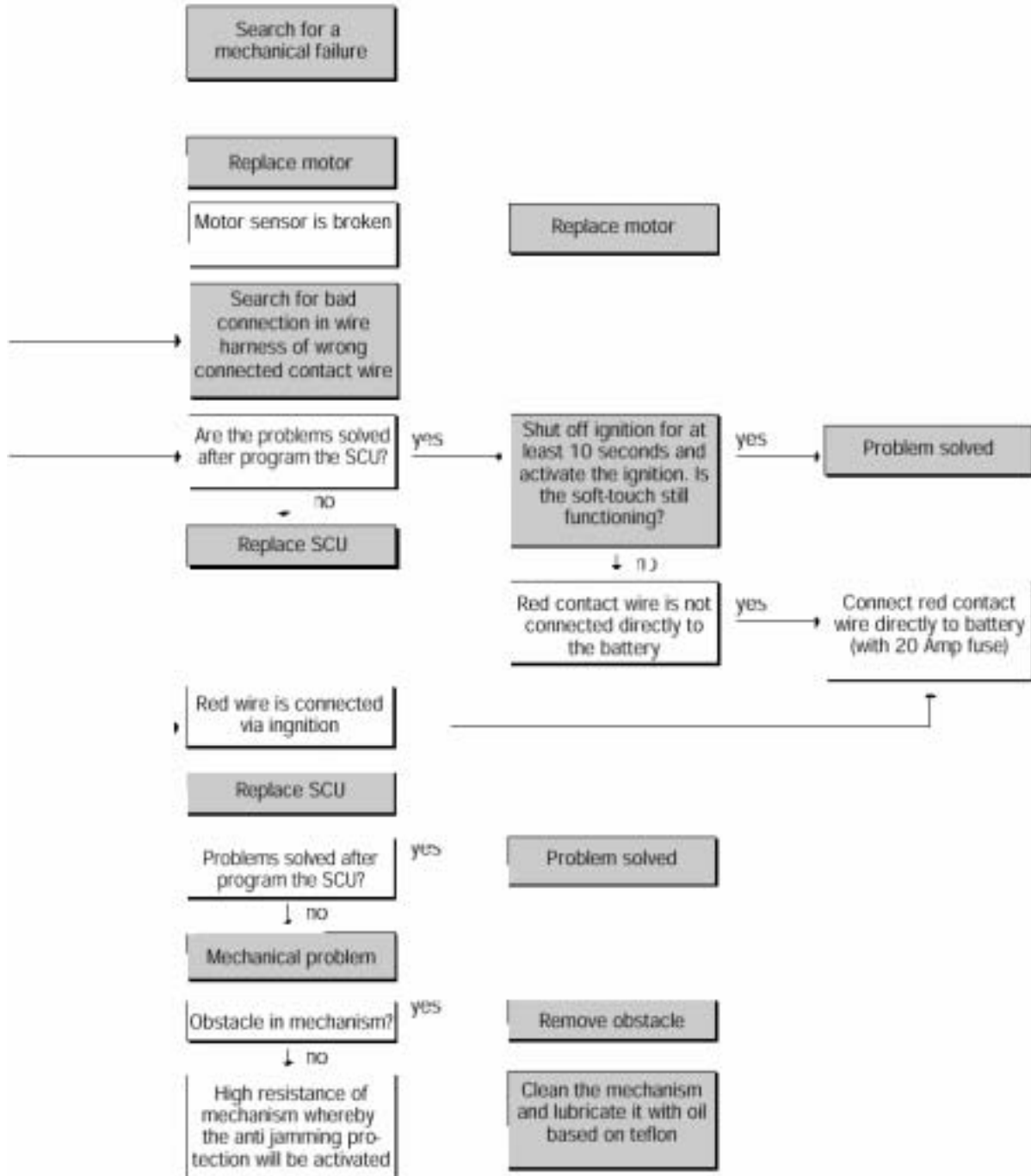
TROUBLESHOOTING TABLE FOR ELECTRICAL FAILURES FOR MODELS WITH SOFT-TOUCH



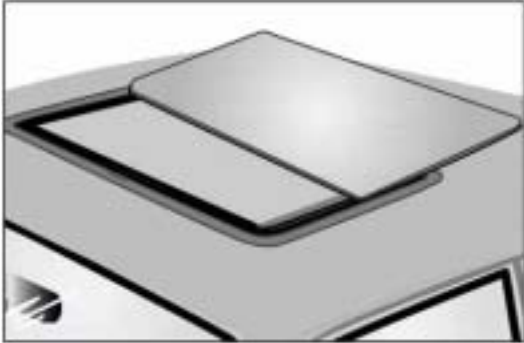
1. Troubleshooting tables



1. Troubleshooting tables



2. Removing the Hollandia 300 Large



01

Open the roof at about 1 cm (3/8 inch) before full open position.



02



Remove the crank and the locking plate.



03



Remove the trim shell.

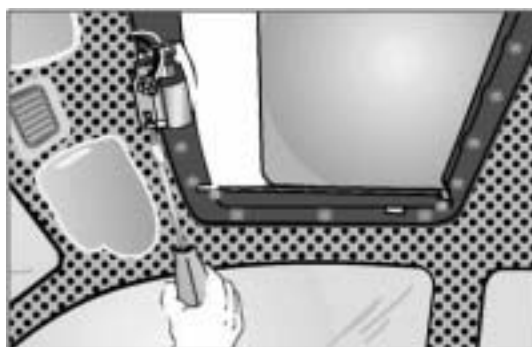


04



Hollandia 300 Large electric hard trim:

Remove the switch and the trim shell.

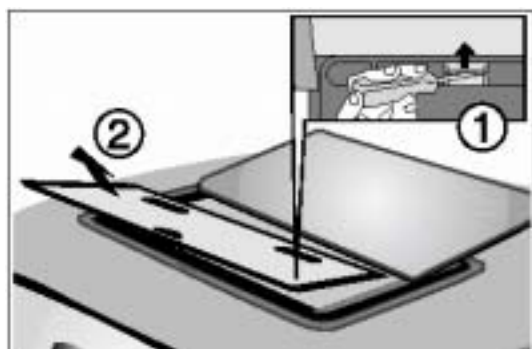


05



Hollandia 300 Large electric hard trim:

Dismount the motor by removing the two screws.



06



Hollandia 300 Large electric soft trim:

Remove the sunshade completely. To do so remove one guide by lifting the guide spring.

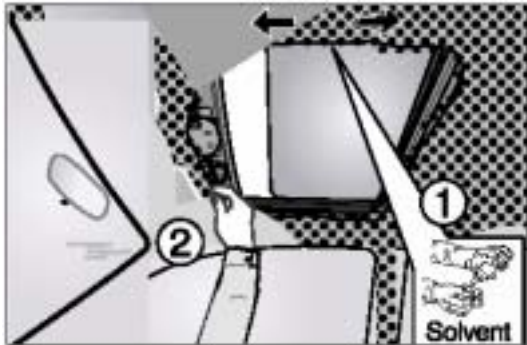


07



Hollandia 300 Large soft trim:

Remove the edge finisher.

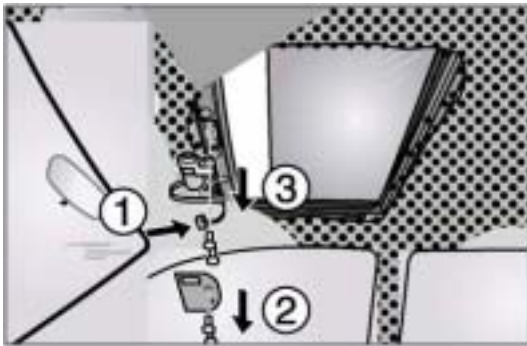


07



Hollandia 300 Large soft trim:

The soft headliner is glued all around the aperture. Apply solvent to dissolve the glue.

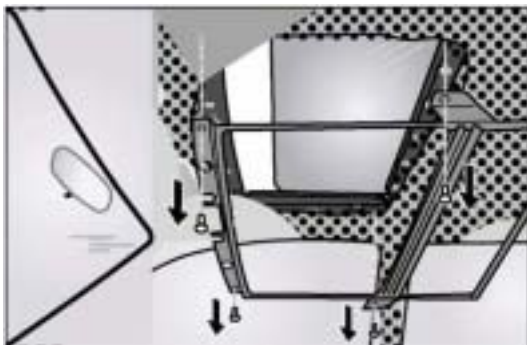


08



Hollandia 300 Large soft trim:

Disconnect the electrical connector from the motor. Remove the motor cover and the motor.



09



Hollandia 300 Large soft trim:

Remove the soft trim.



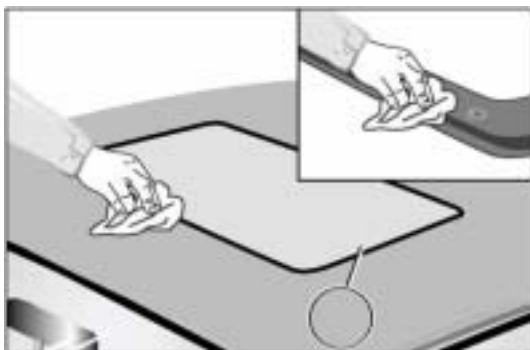
10

Remove the retainer ring.



11

Remove the sunroof.



12

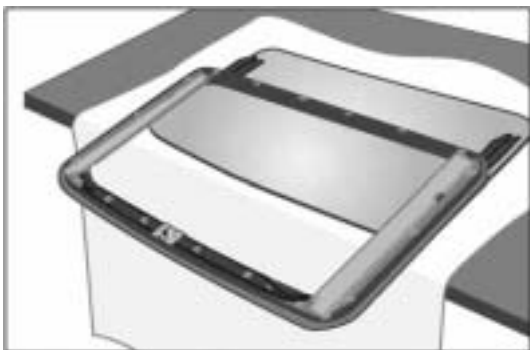
Remove the remains of sealing mastic from roof skin and frame.



13

Unhook the sliding blocks along the front of the wind deflector.

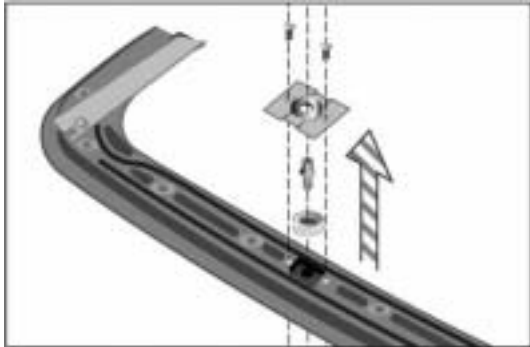
Pull the mounting blocks out of the guides.



14

Place sunroof on a work-bench with a non-scratching surface.

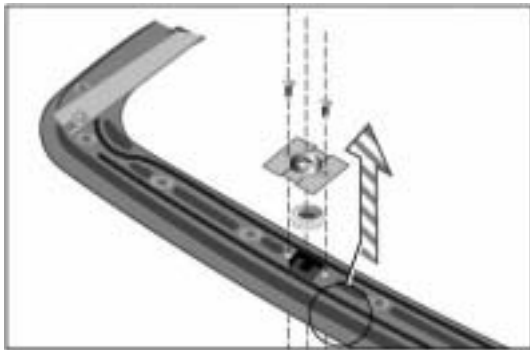
Place the sunroof on the work-bench with the front facing you.



15

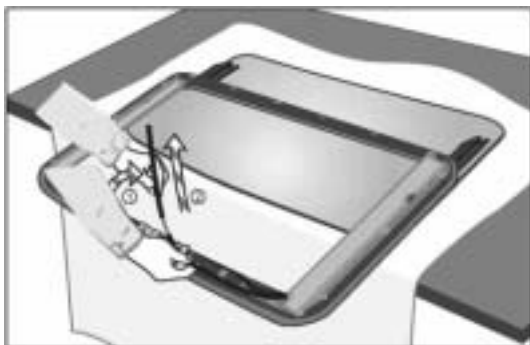


Remove the drive box, the drive shaft and the gear wheel.



16

Remove the drive box and the gear wheel.



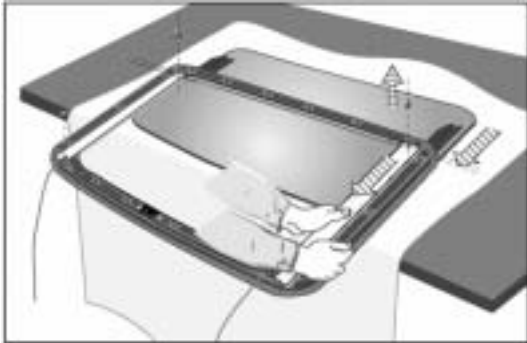
17

Take the drive cables out of the frame and remove the guide tubes.



18

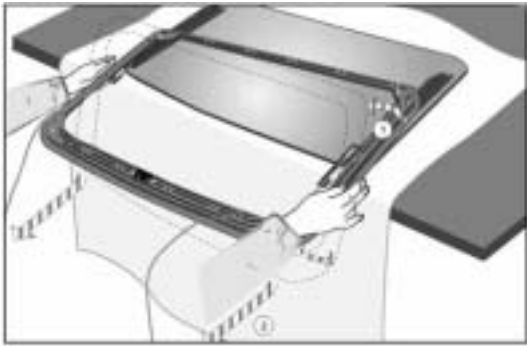
Mark the position of the guides in respect to the frame.



19

Remove the four red screws.

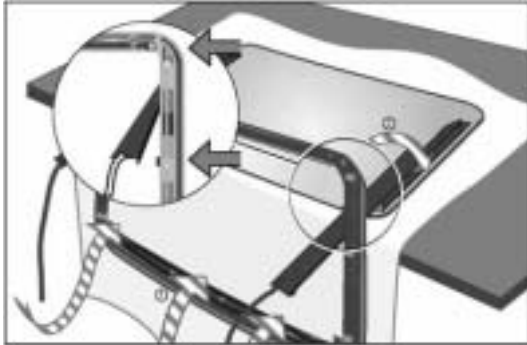
Slide the guides about 1 cm (3/8 inch) forward. The frame must be supported during this operation.



20

Rotate the frame with the front side down and remove the frame by sliding it forwards.

3. Reinstalling the Hollandia 300 Large.

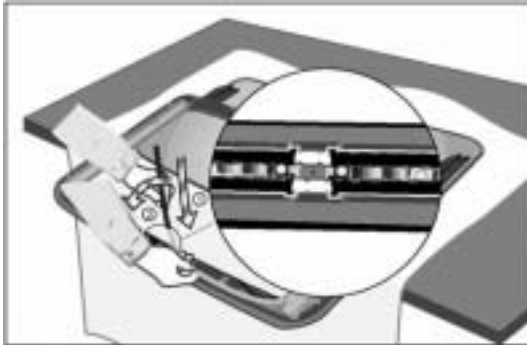


01

Slide the new frame over the guides

Note: Front side of frame down, bottom side towards you, guides between rear side and cams.

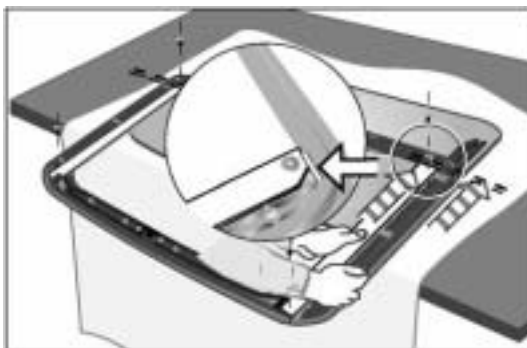
Position the frame cams left and right in the recess halfway between the guides and rotate the frame.



02

Slide the guide tubes over the drive cables and push the guide tubes into the groove.

The ends of the guide tubes must be positioned in the recess.



03

Slide the guides towards the position, marked during the dismounting.

Fasten the guides by using the 4 red screws. Always check the proper position of the drive cables.



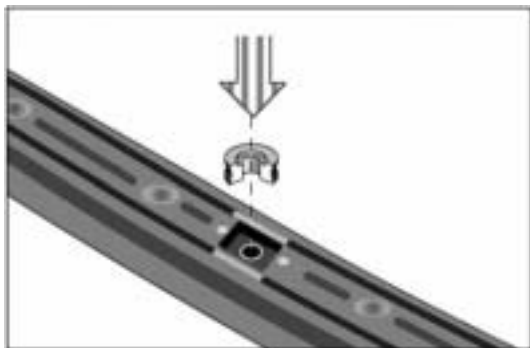
04

Replace the wind deflector.



05

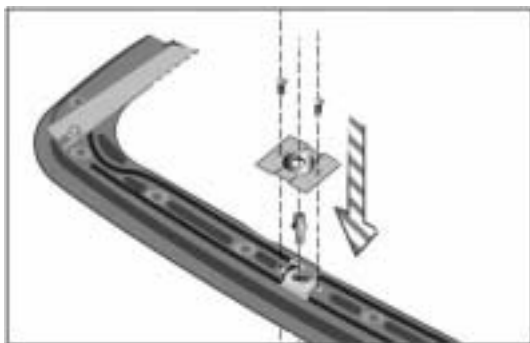
Place the frame, in respect to the glass panel, as far forward as possible.



06

Place the gear wheel above the top bearing.

Note: the chamfered must be directed upwards.



07

Place the drive shaft and mount the drive box.



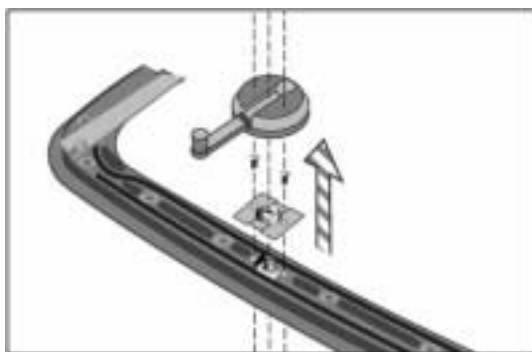


08



Place the crank on the drive shaft.

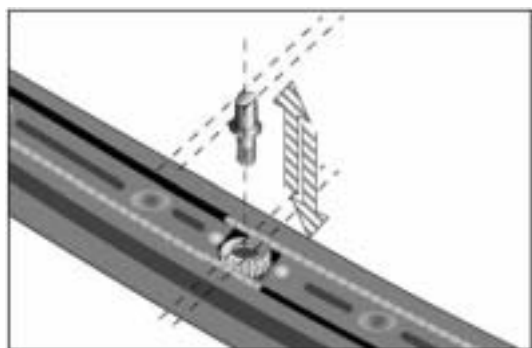
Close the roof.



09



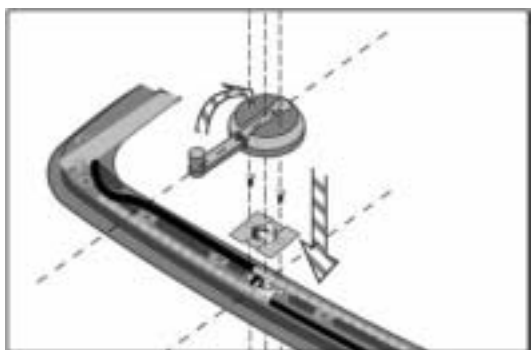
Remove the crank.



10



Position the drive shaft so that the sides of the drive shaft are parallel to the guides.



11



Remount the drive box and the crank.

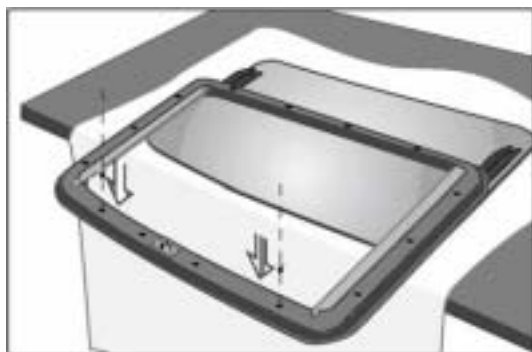
Check if the crank is in the correct closed position. Adjust if necessary.

Remove the crank.



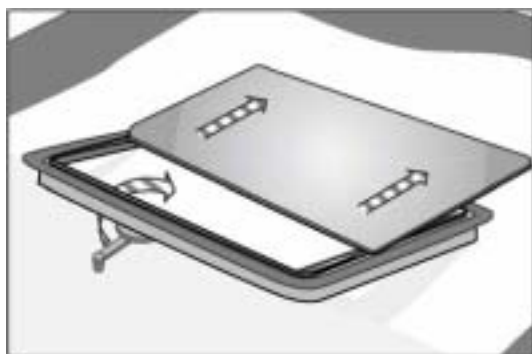
12

Mount the drive box.



13

Place the retainer ring and fasten along the front side with 2 screws.

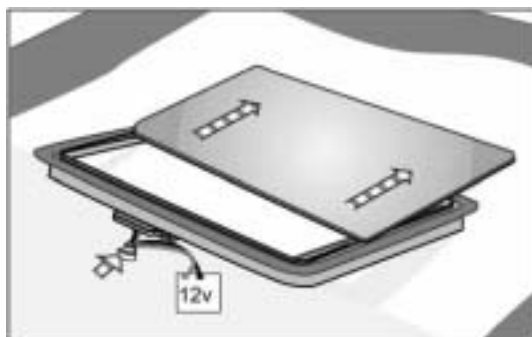


14

Mount the crank.

Check the correct functioning of the roof.

Open the roof up to 3/4 of the fully opened position. Remove the crank.



15

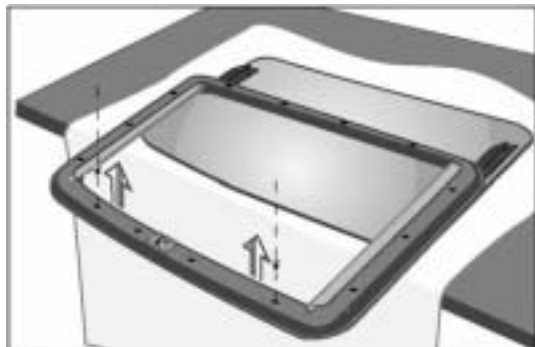
Mount the motor.

Connect the motor to the 12 V power source.

Check the correct functioning of the roof.

Open the roof up to 3/4 of the fully opened position. Remove the motor.





16

Remove the retainer ring.



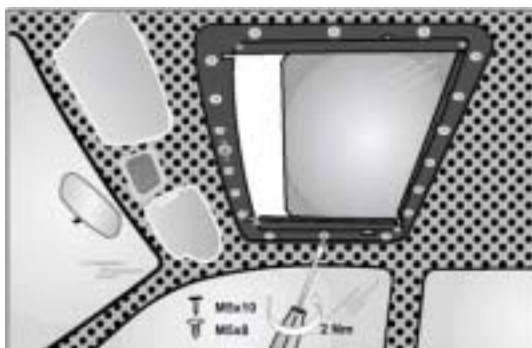
17

Apply a track of sealing mastic of \varnothing 3 mm (1/8 inch) to the frame.
Use only butyl sealant.



18

Place the roof.



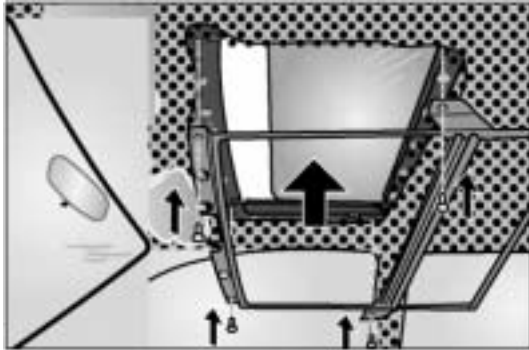
19

Mount the retainer ring.

M5 x 10 (black) along the sides
M5 x 8 (yellow) along the front and rear

Insert the screws finger tight. Tighten the screws, starting at the center of the roof.

When installing an electric sunroof, the motor retaining points should be left clear.

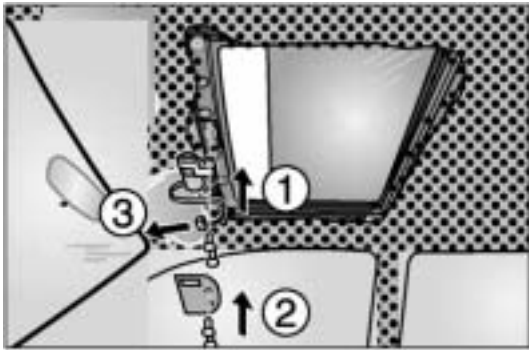


20



Hollandia 300 Large Soft trim:

Re-install the sub frame.

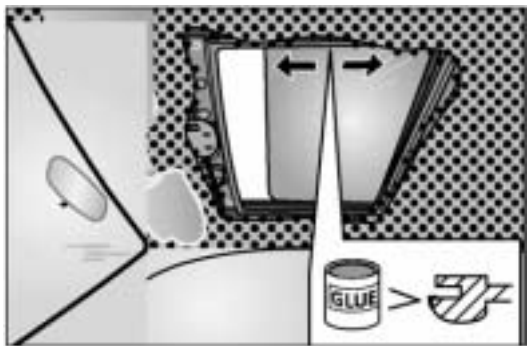


21



Hollandia 300 Large Soft trim:

Mount the motor and motor cover.
Connect motor connection to sunroof control unit.

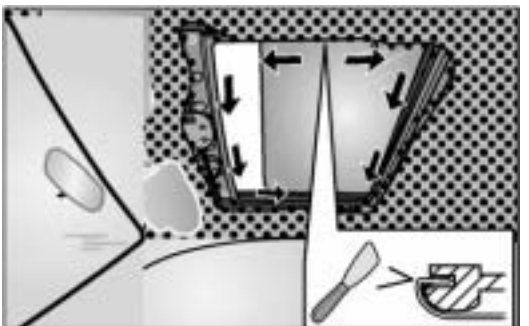


22



Hollandia 300 Large Soft trim:

Apply glue to the headliner and edge trim of the sub frame.



23



Hollandia 300 Large Soft trim:

Stretch the headliner. Use a spatula with rounded corners to push the headliner in the groove of the edge trim.

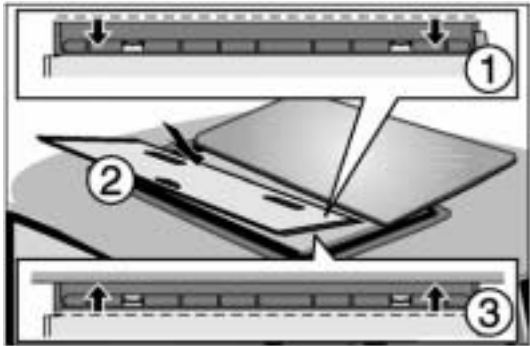


24



Hollandia 300 Large Soft trim:

Mount the edge finisher.

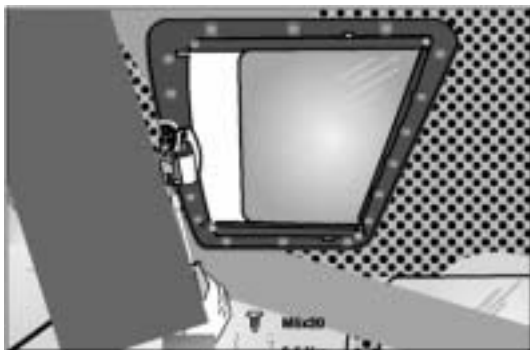


25



Hollandia 300 Large Soft trim:

Install the sunshade. Position the sunshade and lock the guides by pushing it into the guides of the sub frame.



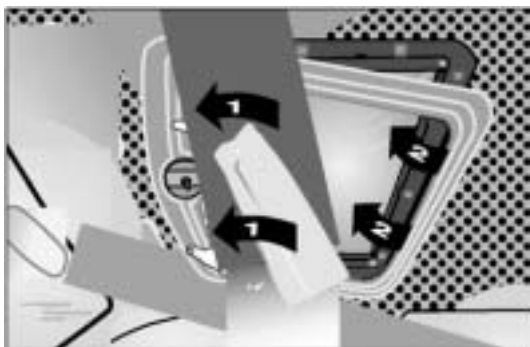
26



Hollandia 300 Large Soft trim:

Mount the motor

Connect the wire harness.



27



Hollandia 300 Large Hard trim:

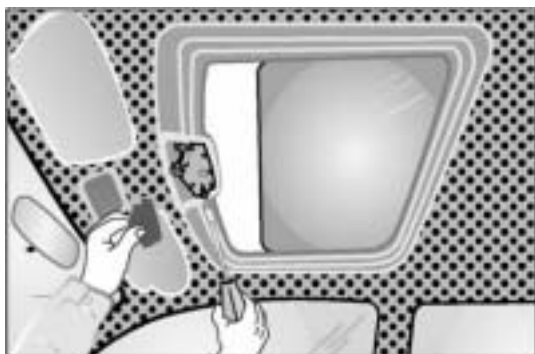
Mount the trim shell.



28



Place the locking plate.
Mount the crank.
Note: the felt ring must be in the recess.
Close the roof. The crank must fit in the recess.



29



Hollandia 300 Large Hard trim:

Mount the trim shell.



30

Hollandia 300 Large:

Remove excess sealer.

4. Replacing the seal

Note: When replacing the seal it is best to:

- open the roof completely when working along the front and the sides.
- move the roof into its maximum tilt position when working on the rear side.



01

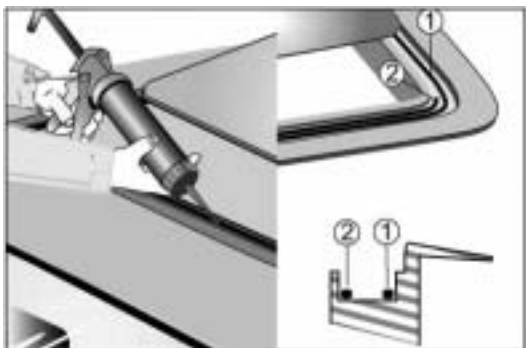
Open the roof entirely.

Carefully remove the old seal.



02

Remove the remains of sealant around the groove and clean it very well.

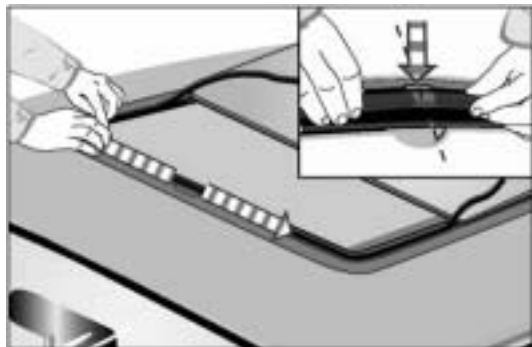


03

Adhesive sealant 1: all round, on the outside of the groove 2 mm (1/16 inch) thick.

Adhesive sealant 2: only along the front, on the inside of the groove 2 mm (1/16 inch) thick.

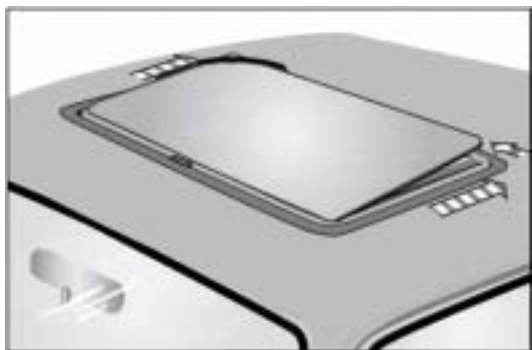
Preferably use acid-based silicone mastic.



04

Place the new seal in the frame without any pressure.

Seam **center front** under the glass holder.



05

Start from the front (center under the glass holder) and push the seal from the sides to the rear only 1 mm (1/32 inch) into the groove.

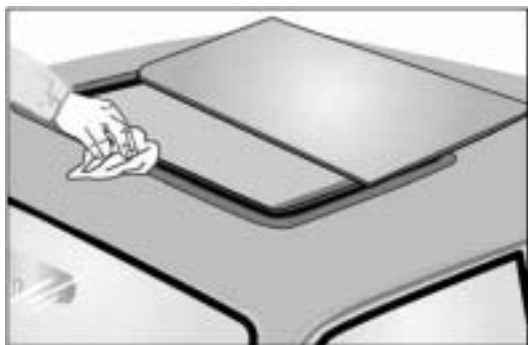
This is done to prevent tension in the seal.



06

Push the seal entirely in the groove.

Check if the seal is flush fitted in the frame.



07

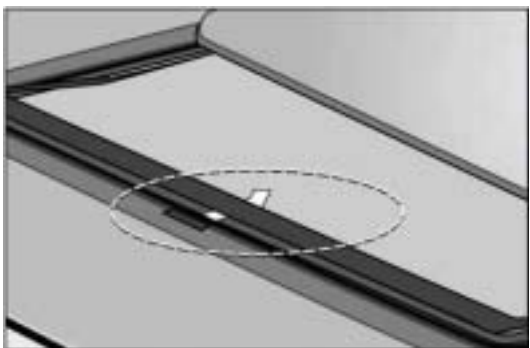
Remove excessive sealing mastic and clean the seal.



08

The roof has to be remained in the opened position.

The curing time for silicone mastic is at least 8 hours.

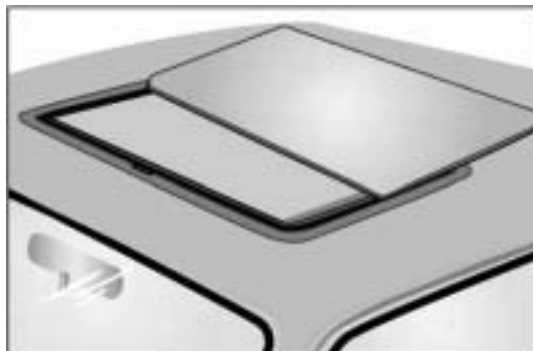


09

If the roof **has to be** closed directly, it is advisable to apply a piece of tape **center front over the seal** before closing the roof carefully.

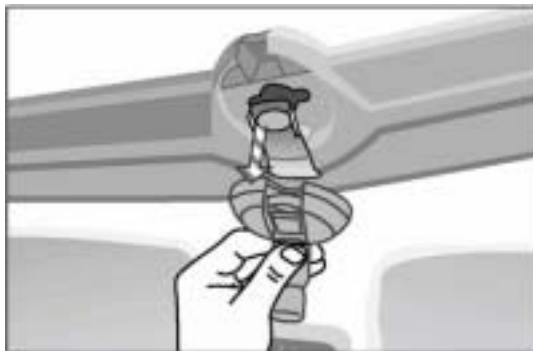
This is done to prevent the seal from pulling out of the groove.

5. Replacing glass holder



01

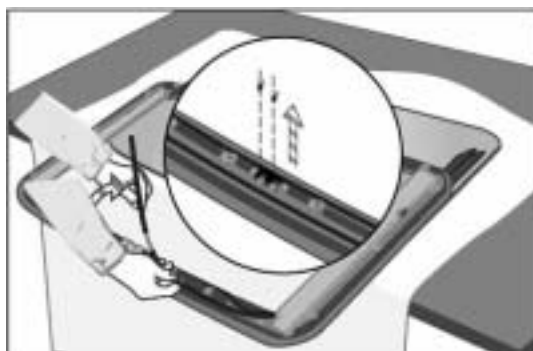
Open the roof halfway.



02

Dismount the roof as described in steps 2 to 12 of chapter 2 "Removing the Hollandia 300 Large".

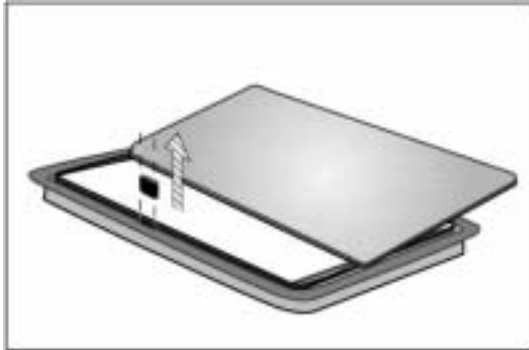
After this continue with the following instructions.



03

Lift the front drive cable with guide tubes out of the frame.

Remove the 2 Torx screws out of the glass holder.



04

Lift the front drive cable with guide tubes out of the frame.

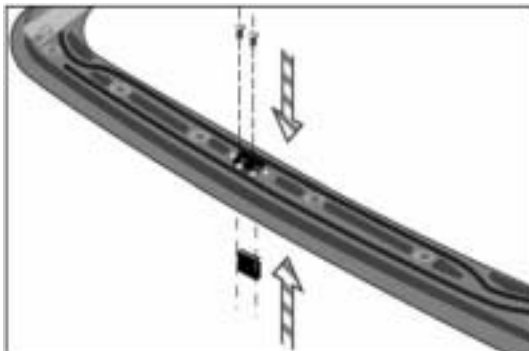
Remove the 2 Torx screws out of the glass holder.



05

Lift the front drive cable with guide tubes out of the frame.

Remove the 2 Torx screws out of the glass holder.



06

Lift the front drive cable with guide tubes out of the frame.

Remove the 2 Torx screws out of the glass holder.



07

Lift the front drive cable with guide tubes out of the frame.

Remove the 2 Torx screws out of the glass holder.



08

Check for remains of sealing mastic near the glass holder.

Remove if present.

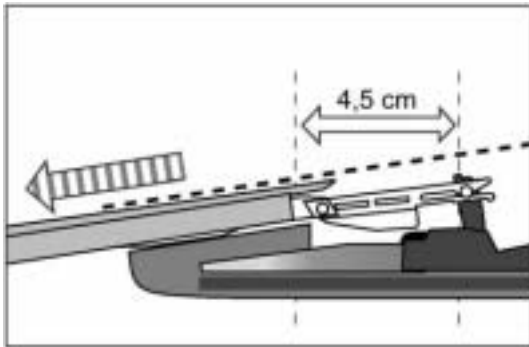
6. Replacing cables and gear wheel



01

Dismount the roof as described in step 1 to 16 of chapter 2 "Removing the Hollandia 300 Large".

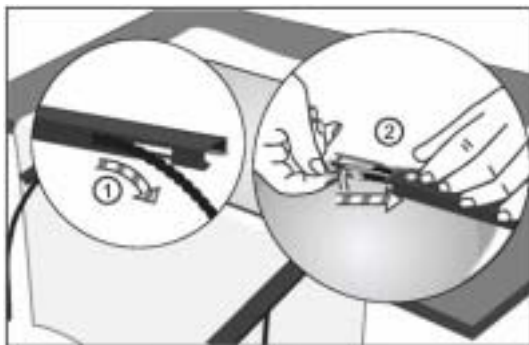
After this continue with the following instructions.



02

Slide the guide forward to the position where the driving slide extends 4.5 cm (2 inches) out of the guide.

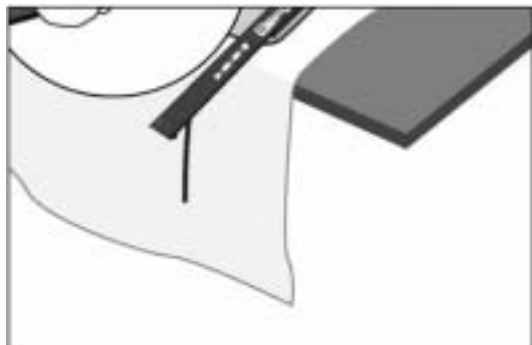
Note: do not bend the guides downward.



03

Remove the old drive cables.

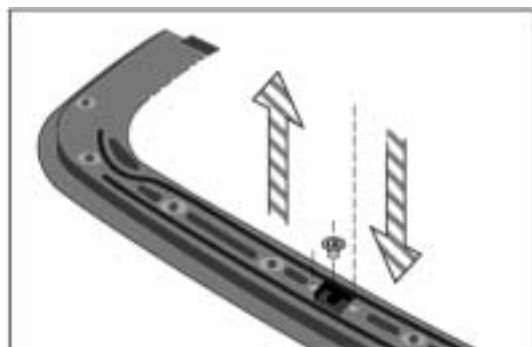
Insert the new drive cables into the guides and fix them to the driving slide.



04

Rotate the drive cable, in such a way that the points of the oval cable end fit into the guides.

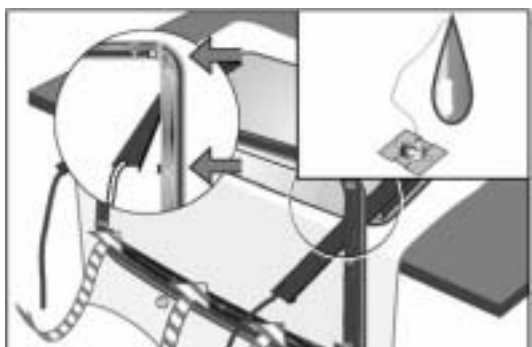
Slide the guides backwards over the driving slide, until the driving slide is 1 cm (3/8 inch) within the guide.



05

Remove the old top bearing from the frame.

Mount the new top bearing.



06

Mount the roof as described in step 1 through 24 of chapter 3 "Reinstalling the Hollandia 300 large"

Manual model: lubricate the bearing bushing on the new drive box with temperature-resistant grease (molybdenum grease).

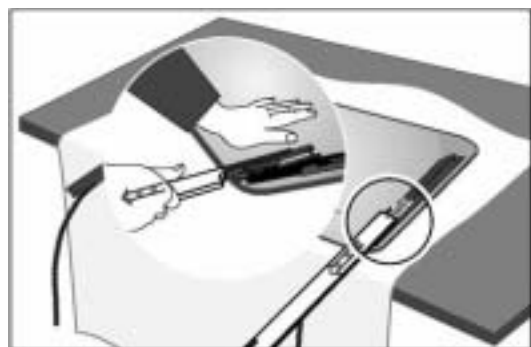
7. Replacing locker slide, mechanism and/or glass panel



01

Dismount the roof as described in step 1 through 16 of chapter 2 “Removing and dismounting Hollandia 300 large”.

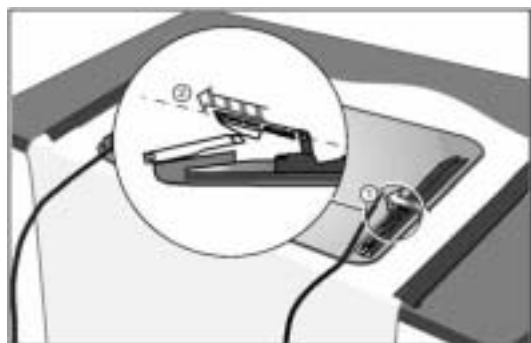
Hereafter continue with the following steps.



02

Remove the guides by sliding them forward.

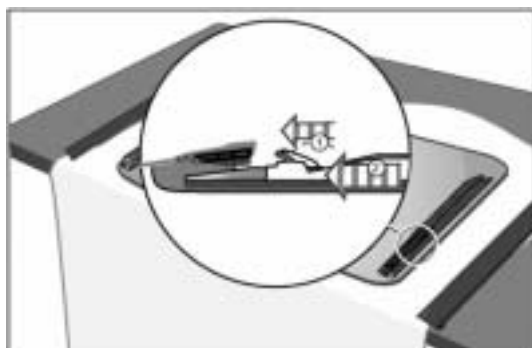
Note: do not bend the guides downward.



03

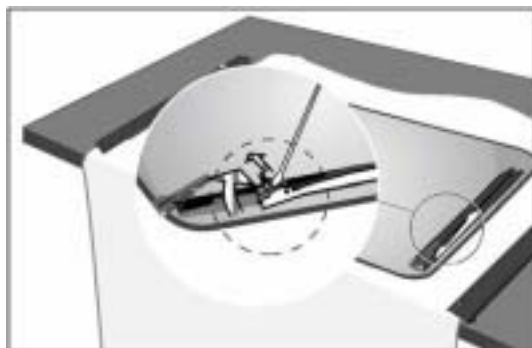
Remove the drive cables.

Remove the driving slides.



04

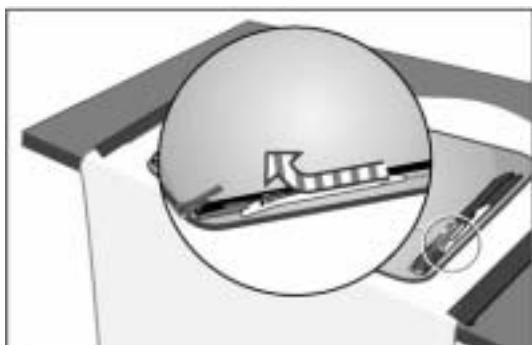
Rotate the lever forward and slide it together with the locker slide forward.



05

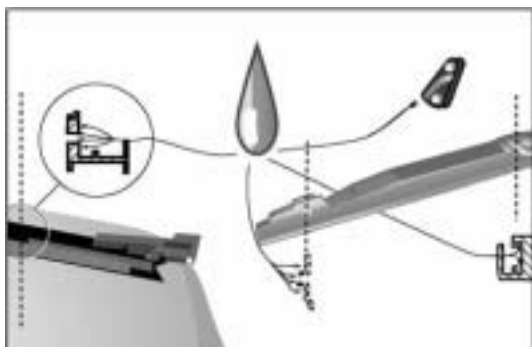
Force the lever carefully to the inside by inserting a screwdriver in between the mounting profile and the levers.

Remove the lever.



06

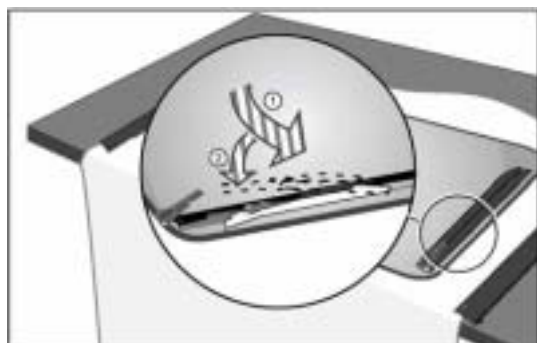
Push the front end of the locker slide to the outside and slide it forward.



07

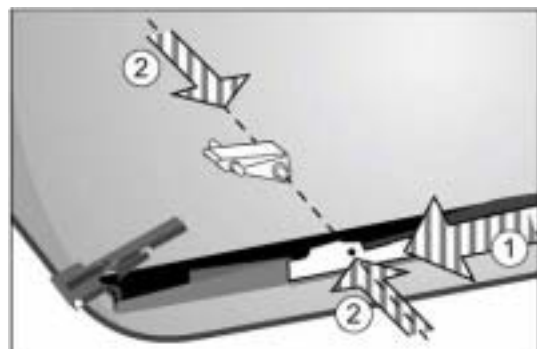
Apply lubricant to the following parts:

- the guide.
- the curve of the driving slide.
- the lever.
- the locker slide.
- the mounting profiles (bonded under glass panel).



08

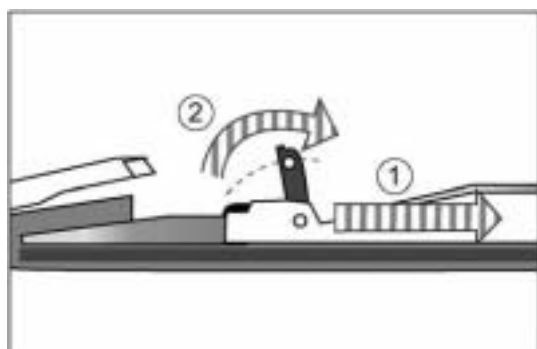
Place the locker slide, with the front to the outside, over the mounting profiles and slide it rearward.



09

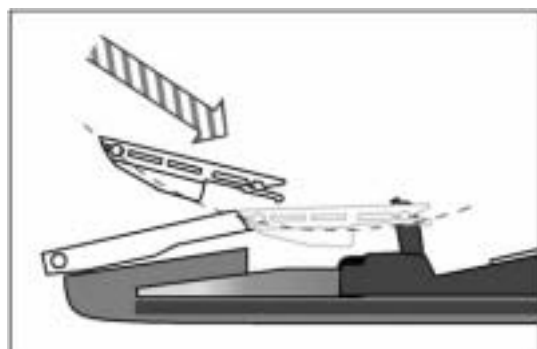
Slide the locker slide forward.

Push the pin of the lever carefully (through the mounting profiles) in the locker slide.



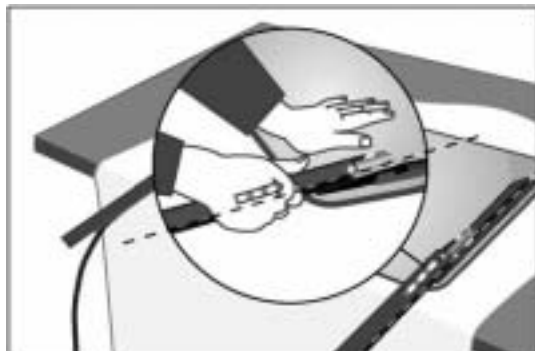
10

Slide the lever together with the locker slide rearward, and rotate the lever rearward.



11

Mount the driving slide to the lever and the front tumbler.

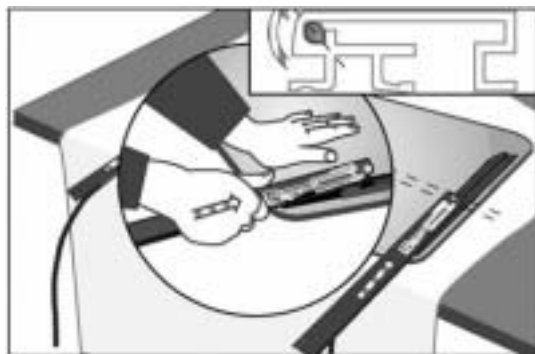


12

Position the front tumbler and the driving slide in-line with each other.

Slide the guide carefully over the front tumbler and driving slide until the driving slide extends 4.5 cm (2 inches) out of the guide.

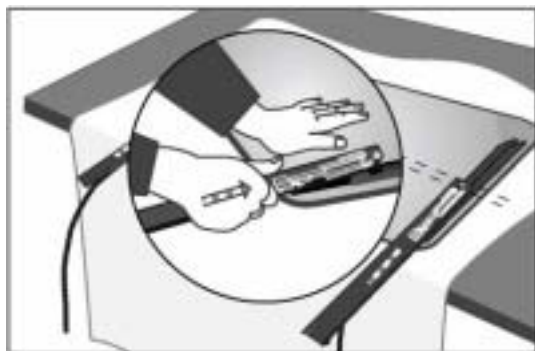
Note: To avoid damaging, do not force Guides.



13

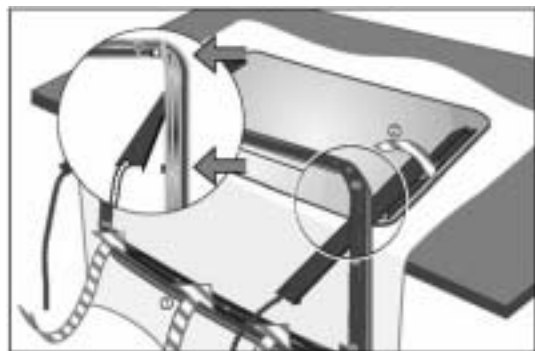
Mount the drive cable on the driving slide.

Rotate the drive cable, so that the points of the oval cable end fit into the guides.



14

Slide the guide rearwards until the end of the driving slide is 1 cm (3/8 inch) within the guide.



15

Mount the roof as described in step 1 through 24 of chapter 3 "Mounting and replacing Hollandia 300 Large".

8. Replacing upper frame

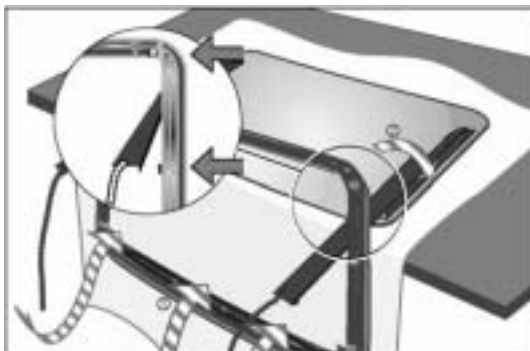


01

Dismount the roof as described in step 1 through 16 of chapter 2 "Removing the Hollandia 300 Large".

Hereafter continue with the following instructions.

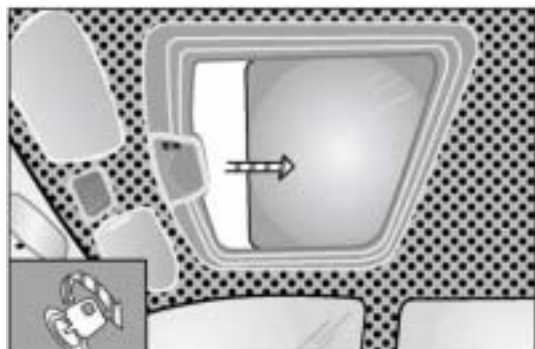
Exchange the upper frame.



02

Mount the roof as described in step 1 through 24 of chapter 3 "Reinstalling the Hollandia 300 Large".

9. Replacing motor and/or SCU



01

Open the roof halfway and switch off the ignition.

Switch off the auto close function by operating the switch.



02

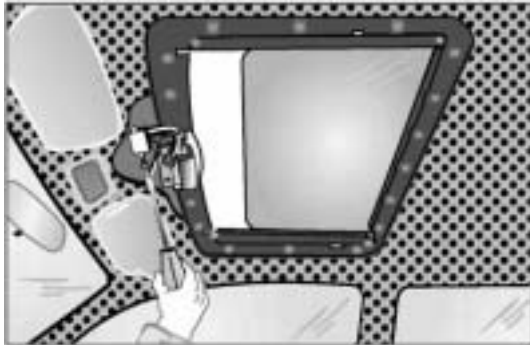
Remove the switch and the trim shell.



03

Disconnect the white connector block from the SCU.

Dismount the motor by loosening the 2 screws (and the cover).

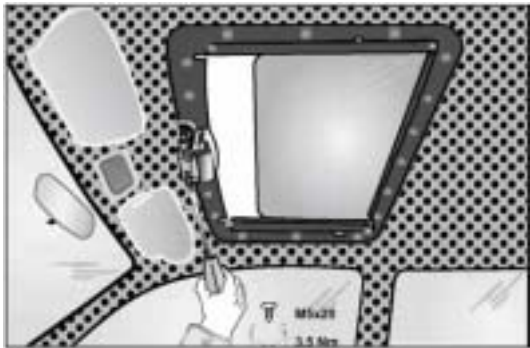


04

When replacing the SCU:

Disconnect the black and white connector of the SCU and remove the SCU.

Mount the new SCU and the connector.



05

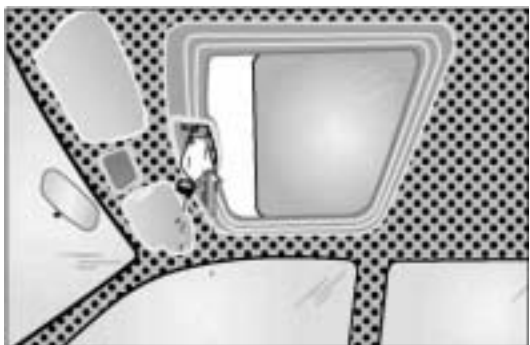
Mount the new motor.

Connect the wire harness.



06

Place the trim shell over the frame and fix the trim shell with 2 screws to the motor.



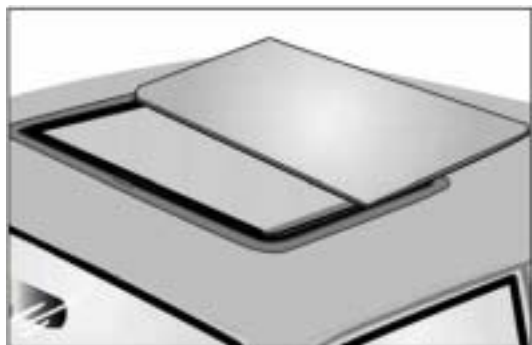
07

Mount the cover when applicable.

Push the connector block into the switch and mount the switch.

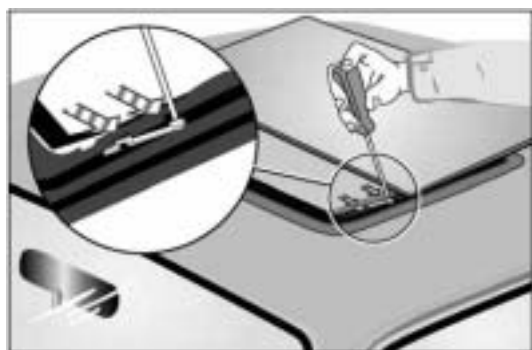
Turn on the ignition key and check the correct functioning of the roof.

10. Replacing stop



01

Open the roof to about 1 cm (3/8 inch) before the end position is reached.



02

Carefully pry the stop out of the guide and remove possible remains.



03

Insert the new stop in the guide.

Note: the stops must clearly make a 'click' when snapping into position, and may not reach over the guide.



04

Lubricate the stop with oil and check the correct functioning of the roof.

