



Feel the drive

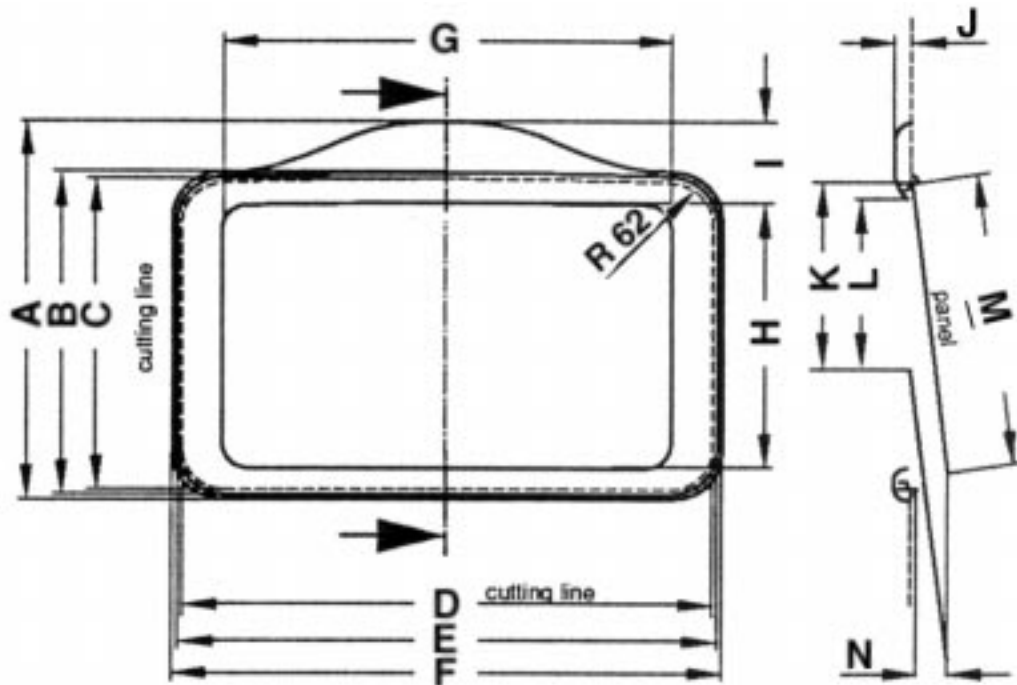
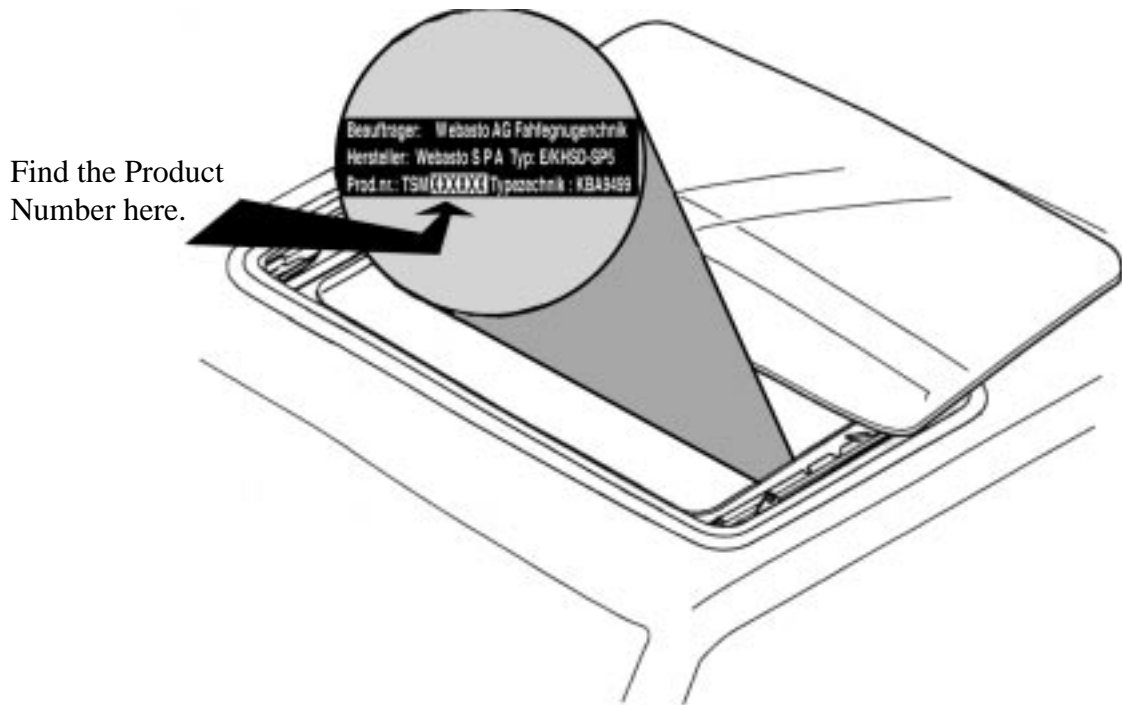
SOLAIRE 3200

SERVICE MANUAL

SOLAIRE 3200: Table of Contents

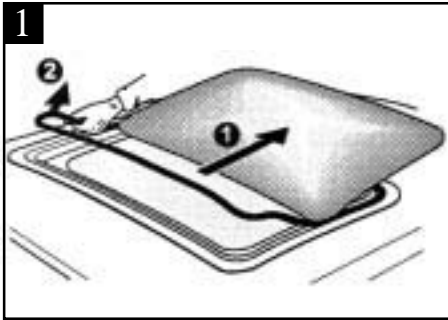
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SOLAIRE 3200: Identification and Dimensions

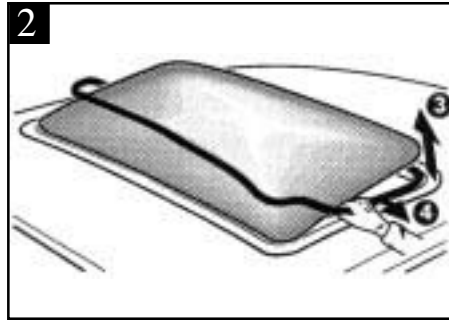


Dimension	Inches	Millimeters	Dimension	Inches	Millimeters
A	20.47	520	H	13.35	339
B	16.22	412	I	7.68	130
C	15.51	394	J	1.38	35
D	30.08	764	K	7.68	130
E	30.78	782	L	6.50	165
F	32.68	830	M	29.44 X 14.88	748 X 378
G	24.09	612	N	1.69	43

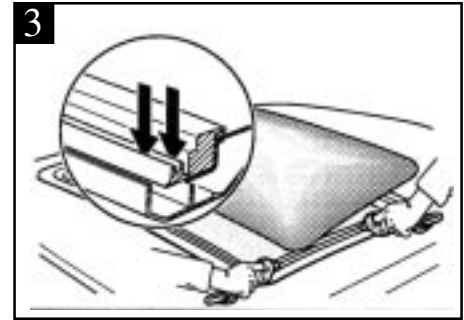
SOLAIRE 3200: Replacement of Frame Seal



Check the service parts package for the Sport Spoiler seal (PN 7595-ME-5002 A) and the proper instruction sheet.
Read the instructions carefully before starting the repair.
1) Open the sunroof fully.
2) Remove the seal from the front of the mainframe by pulling up.

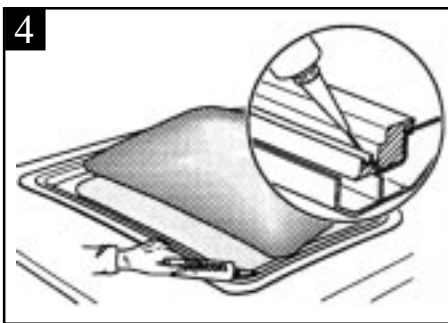


3) Position the sunroof in vent.
4) Finish removing the seal from the rear of the mainframe.

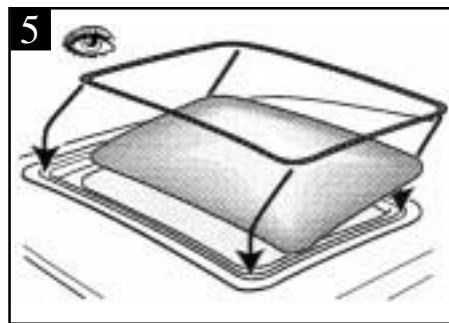


Completely clean the channel in the mainframe of silicone adhesive and any other debris. A nylon glazing stick or a soft wire brush would be helpful in removing the silicone.

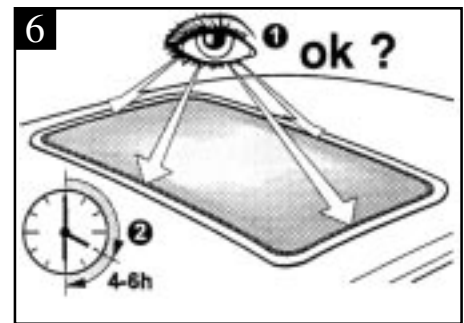
Note: The sunroof glass may have to be removed in order to clean the entire frame easily.



Add black, non-corrosive silicone adhesive under the entire outside edge of the seal.

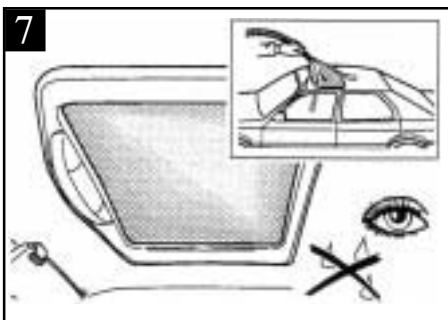


Insert the new Sport Spoiler seal (PN 7595-ME-5002 A) by pressing the seal into the mainframe channel.



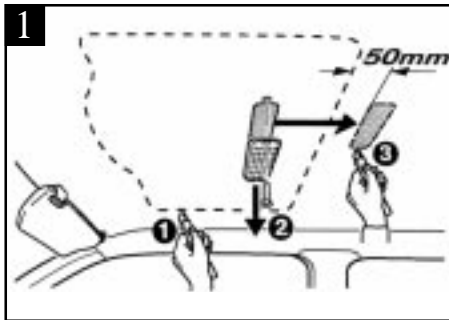
Fully close the sunroof and wait 4-6 hours for the silicone to dry.

Visually check the glass and seal in the full open and closed positions.

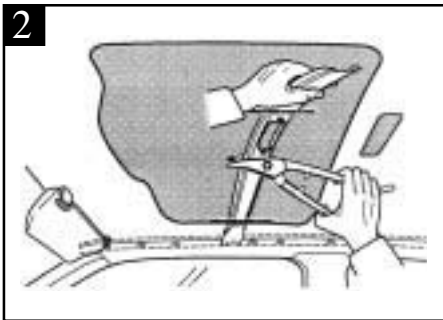


Open and close the sunroof. Test all functions.

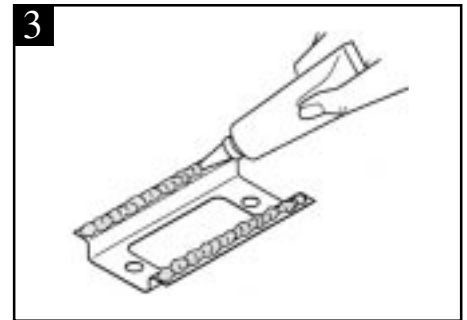
SOLAIRE 3200: Replacement of the Interior Light



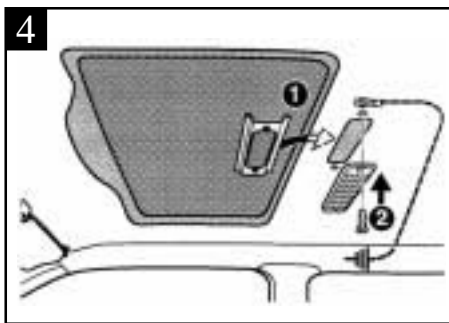
- 1) Layout the hole for the sunroof by using the Template set.
- 2) Remove the interior light assembly, if needed, to lay out the hole.
- 3) Measure 2 inches (50 mm) to the rear of the hole and trace the cut-out for the interior light. Now, cut the hole.



- Cut away the headliner material which you traced with the template.
- Now, remove the roof bow.
- Cut a length of the roof bow where the interior light fits. This is now your interior light bracket.

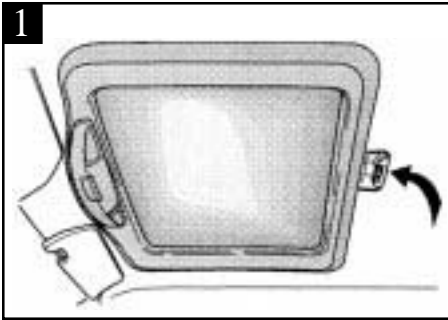


- Apply silicon to the rear of the interior light bracket as shown.

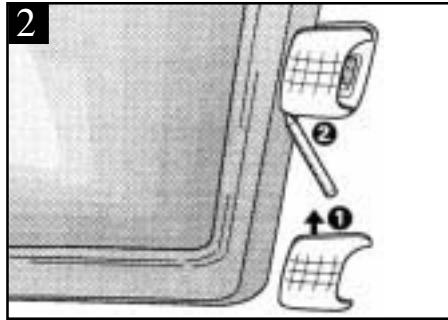


- 1) Glue the interior light bracket to the roof skin behind the hole you cut into the headliner.
 - 2) Run a ground wire to the header if needed.
- Now, snap the interior light through the headliner and into place.

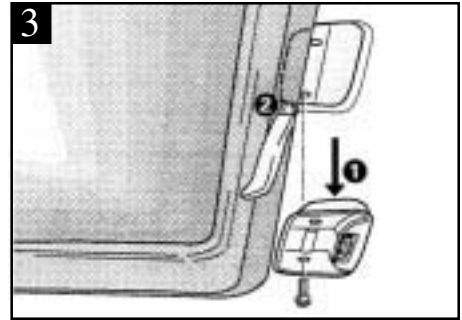
SOLAIRE 3200: Cut Out Rubber Lip Around the Interior Light



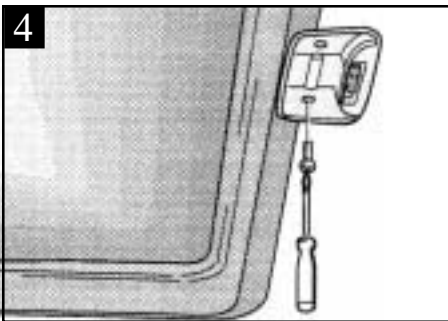
Note that the rubber lip hangs over the light.



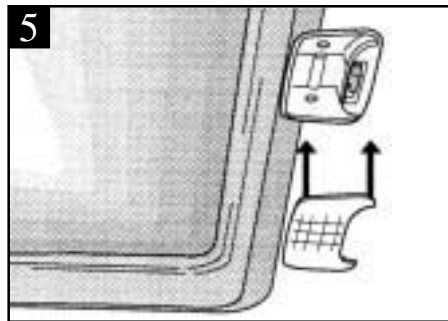
1) Now, take the lens and place it into the light fixture, take care to keep the lens over the rubber lip.
2) Trace the outline of the lens onto the rubber lip of the headliner.



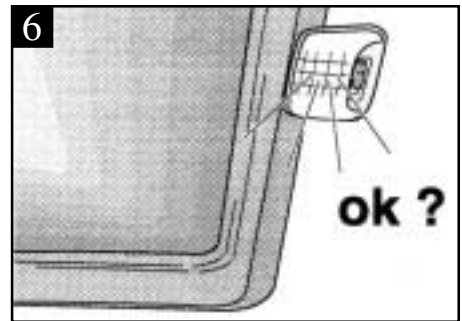
1) Now, remove the light fixture from the headliner of the car.
2) Cut the outline traced on the rubber lip.



Now, replace the light fixture back into the vehicle headliner.



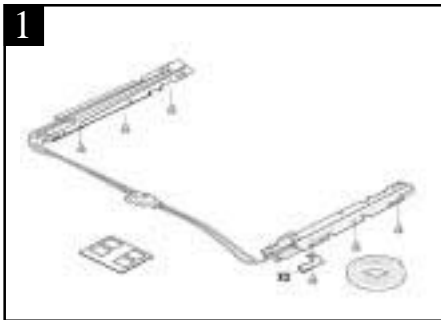
Snap the lens into place.



Check to make sure the light turns on and off as intended.

The installation is now complete.

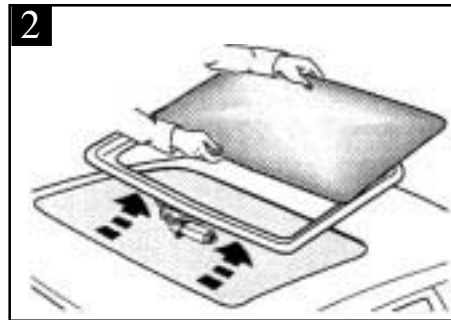
SOLAIRE 3200: Replacement of the Mechanism Assembly



Check the service parts package for the guidance mechanism, mechanism mounting screws, and (1) roll of sealing tape.

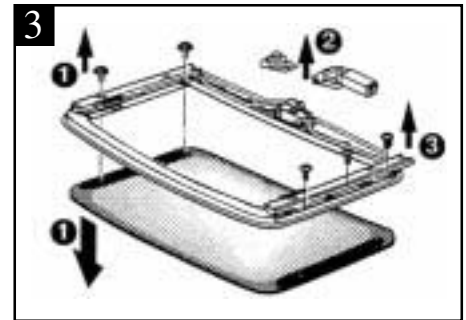
Read the instructions carefully before starting the repair.

Note: It is recommended that this repair be done on a work bench and not in the vehicle.



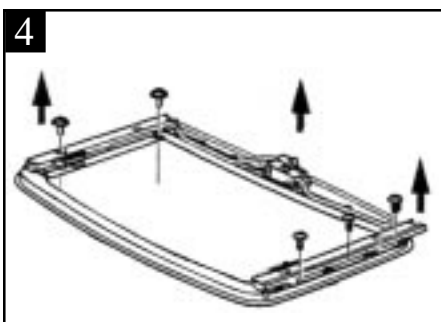
Remove the sunroof from the vehicle. (Reverse the procedure of the Installation Manual)

Clean the hole in the roof to remove any sealing tape or other debris.

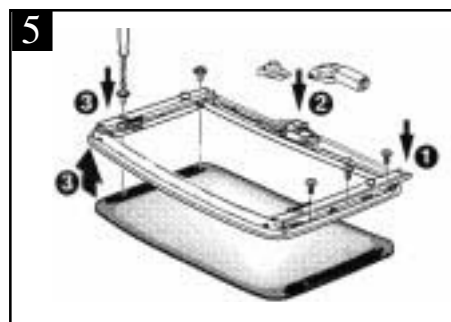


Close the sunroof manually using the emergency key or bench power supply. (*Note: This repair can be performed with the sunroof opened or closed.*) Place the sunroof on a workbench glass down.

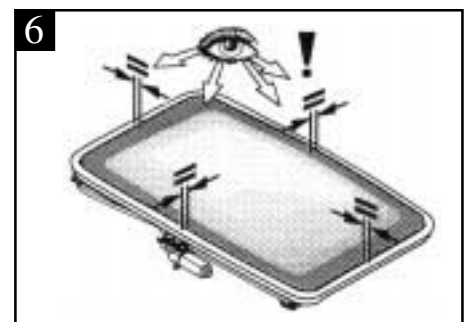
- 1) Remove the (4) glass mounting screws.
- 2) Remove (2) remaining motor screws and motor.
- 3) Remove (5) mechanism mounting screws each side



Remove guidance mechanism.

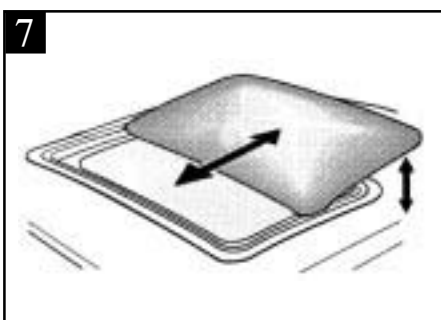


- 1) Replace new guidance mechanism. (retime mechnism--see page 12)
- 2) Replace motor.
- 3) Replace glass panel.



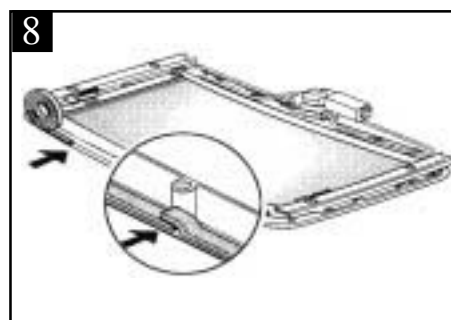
Place the sunroof on a workbench glass up. From above the sunroof, visually check to see if the glass is spaced equally in the opening from front-to-rear and side-to-side.

If the spacing is not equal, loosen the (4) glass mounting screws and adjust the glass panel, then re-tighten the (4) screws.



Manually test the function of the sunroof.

Note: Never test the function of the sunroof glass-side down. This may cause damage.



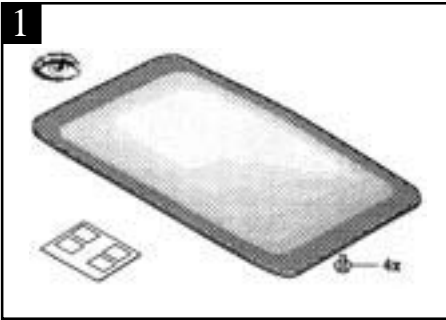
Replace the foam sealing tape. Clean off any debris left on frame.

Hint - make sure that the sealing tape overlaps at a screw hole. This will produce the best sealing results.

Install sunroof into vehicle.

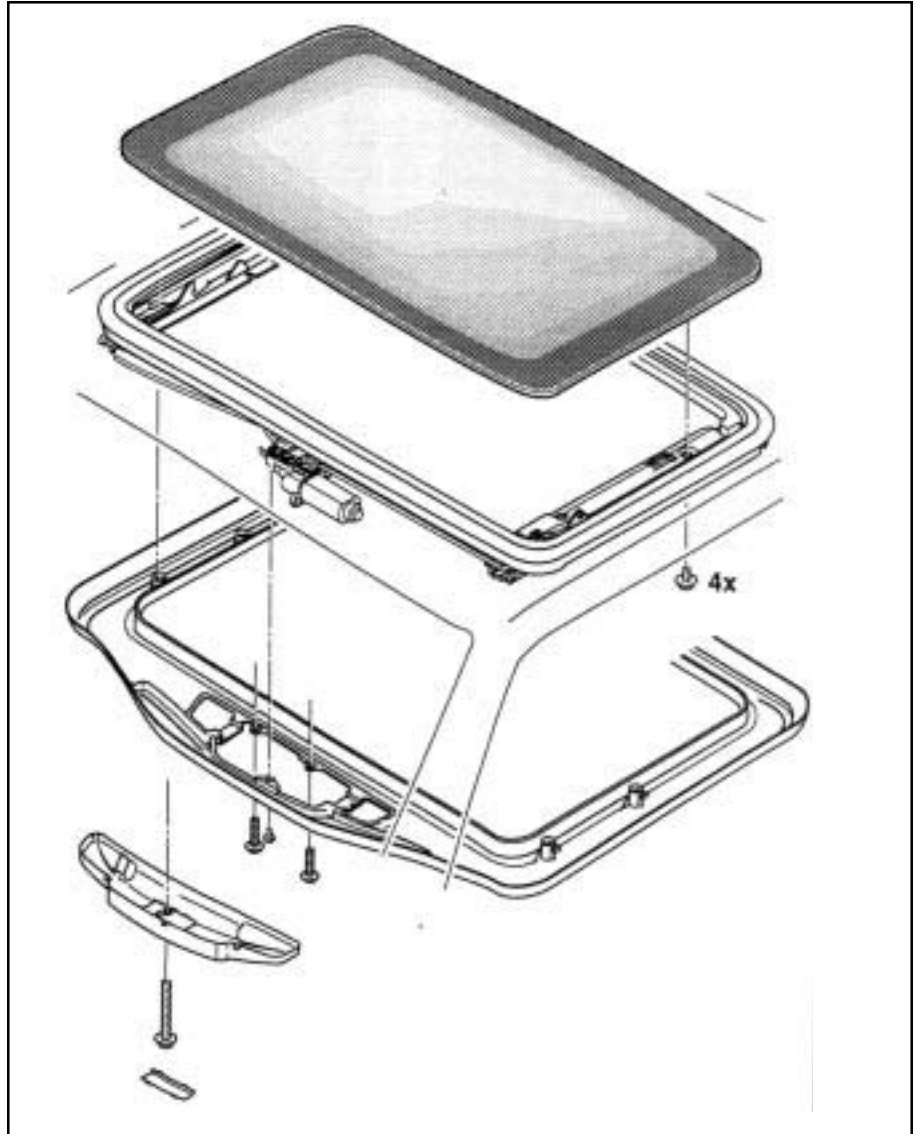
See installation instructions if necessary
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SOLAIRE 3200: Replacement of the Glass Panel

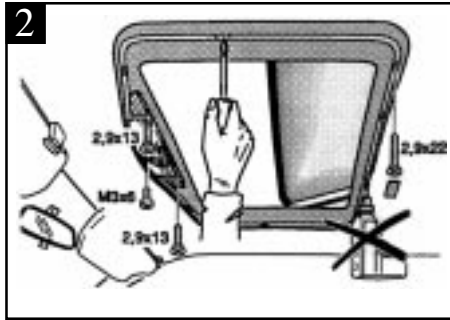


Check that the service glass panel includes the (4) glass mounting screws, and the proper instruction sheet.

Read the instructions carefully before starting the repair.



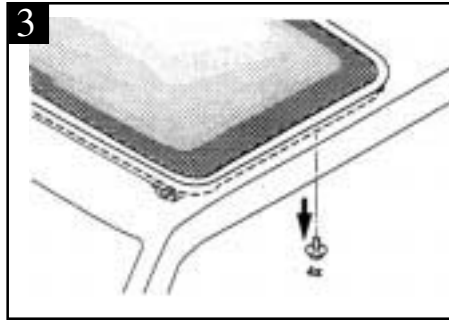
SOLAIRE 3200: Replacement of the Glass Panel



Open the sunroof fully.

Remove the garnish screws.

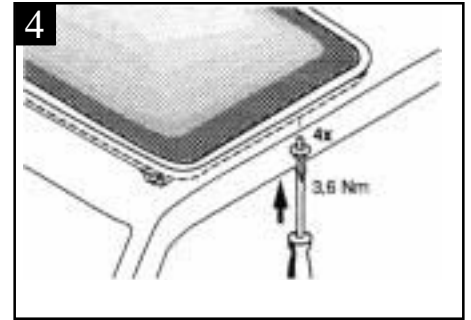
Remember, there are (1) M3x6, (2) 2.9 x 13, (8) 2.9 x 22 and (8) screw covers.



Remove the (4) glass mounting screws.

Remove the (2) rear glass mounting screws by closing the sunroof and putting the screw driver through the access holes in the mechanism (as shown).

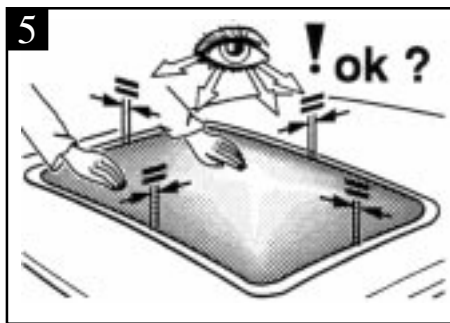
Remove the (2) front glass mounting screws. Remove the glass from the sunroof.



Be careful not to operate the sunroof without the glass panel fully secured.

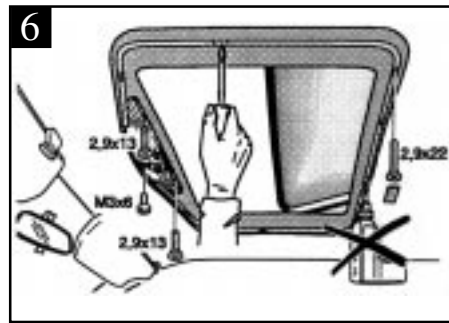
Now, place the new glass panel into position on the vehicle.

Replace all (4) glass mounting screws.



From outside the vehicle, visually check to see if the glass is spaced equally in the opening from front-to-rear and side-to-side.

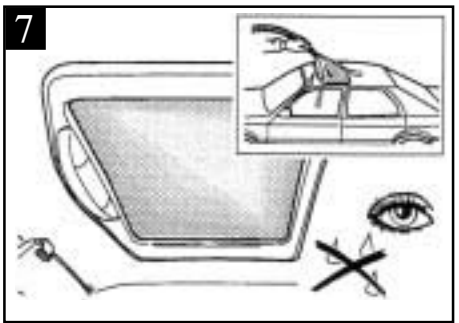
If the spacing is not equal, loosen the (4) glass mounting screws and adjust the glass panel, then re-tighten the (4) screws.



Now, place the garnish in position and fasten with the appropriate screws.

Remember, there are (1) M3x6, (2) 2.9 x 13, (8) 2.9 x 22 and (8) screw covers holding the garnish up to the sunroof.

Next, replace the motor cover and drive the last remaining motor screw through the hole in the motor cover. Now, click the emergency cover into place.

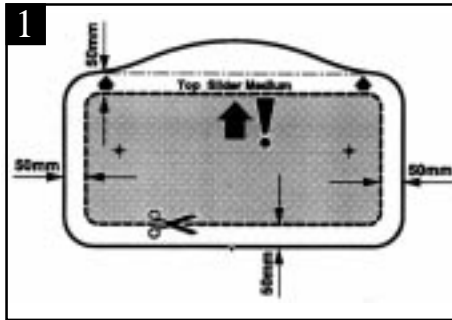


Open and close the sunroof. Test all functions.

Water test the sunroof

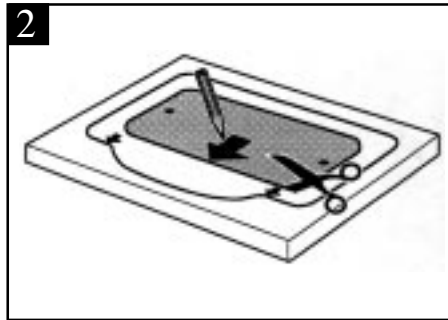
SOLAIRE 3200: Installation with Soft Headliner

Note: This procedure is to be used for sunroof installation into a vehicle with a soft fabric headliner (i.e. no fiberglass backing).

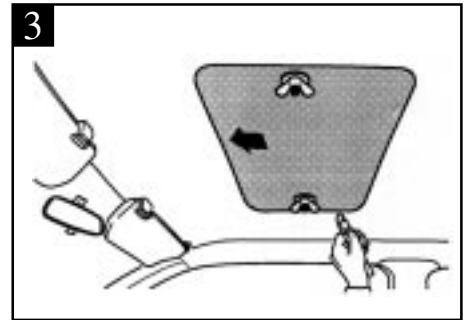


Remove the packaging insert shown above.

Measure 2 inches (50 mm) in from the outer edge of interior template, to form a rectangle.



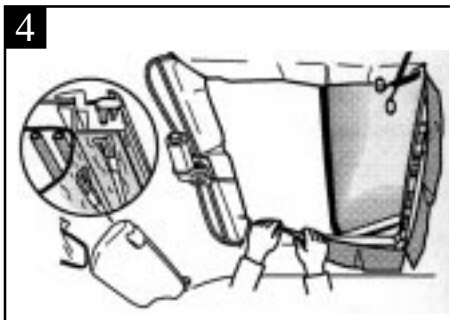
Cut out and remove the interior rectangle. This is the interior template needed for installing the sunroof with a soft vehicle headliner.



Not shown: Properly place outer template on roof skin for installation. Also, drill holes through the roof and template as indicated. If you have any questions, please refer to frames 3, 4, and 5 of the installation instructions.

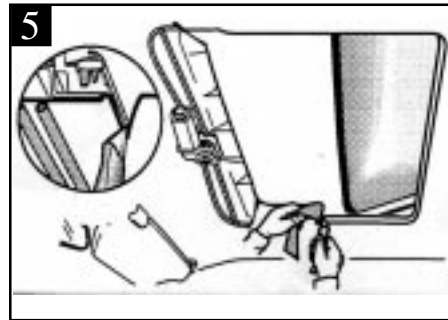
Place screws thru holes in roof and interior template. Use wing nuts to hold interior template in place.

Cut fabric around outside of template.

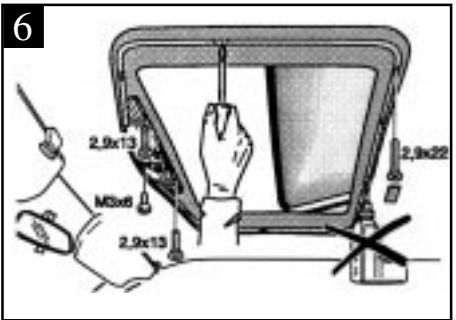


Install sunroof (see installation instructions).

Place glue as shown on the clamping frame and fabric.



Wrap and cut headliner to fit as needed.



Now, place the garnish in position and fasten with the appropriate screws.

Remember, there are (1) M3x6, (2) 2.9 x 13, (8) 2.9 x 22 and (8) screw covers holding the garnish up to the sunroof.

Next, replace the motor cover and drive the last remaining motor screw through the hole in the motor cover. Now, click the emergency cover into place.

Note: This is for exposed garnish ring installation with a soft headliner.

SOLAIRE 3200: Re-Timing Procedure

The following procedure should be used for re-timing the drive mechanism on the SOLAIRE 3200 sunroofs.

- 1) Operating the sunroof normally, open the glass at least two inches from the front of the sunroof. If the sunroof will not open at least this far call Webasto for technical support.
- 2) Remove the motor.
- 3) Place your hands on the front edge of the glass and gently push both sides to the full open position. Take care to move both sides of the glass at the same time. Verify that the leading edge of the glass panel is parallel with the rear edge of the sunroof mainframe. At this point the mechanism is said to be ***Re-Timed***.
- 4) Check screws on the drive tube retainer plates (*gold* colored metal located behind where the motor mounts). If loose, check or re-insert the ends of the cable drive and return tubes into place. Apply a product such as blue Loc-tite to keep the screws from working loose again.

Additional for the SOLAIRE 3200: Check the left and right drive tube clamps. The clamps should hold the end of the drive tube securely in position. If not, remove the clamp, bend straight or replace the part and re-install the clamp over the ends of the drive tubes.

Caution: Overtightening of the screws may strip the threads.

- 5) Replace the motor and motor cover.
- 6) Test the function of the sunroof through several cycles.

SOLAIRE 3200: Water Test Procedure

Make sure the sunroof is fully closed.

- 1) Use a garden hose with nozzle and flood the sunroof for 10-15 minutes.
Take care to flood all areas of the glass, seal, and mainframe or trim ring (depending on model) to insure water has been in contact with all interfaces between mating parts.
- 2) Check the inside of the vehicle for leaks.
Take special care to look where the glass panel meets the seal in spoiler models and in the drain trough of the Starlite models. Note: Some water may seep through a Starlite and the drain trough may be slightly damp. Remember, you are looking for a large leak since the Starlite has drain tubes to remove a small amount of water if some seeps through.
- 3) Now, take the vehicle for a test drive.
Make sure to test all normal driving conditions including right and left turns, bumps, driving in reverse, and sudden stops. Most of this test driving can be done in the parking lot, but it is also recommended to drive the car at highway speeds. The reason for the test driving is to insure that the seal and sealant used during the repair can withstand the windy conditions and flexing of a vehicle in motion. Again check the inside of the vehicle for leaks.
- 4) If no leaks have been found your repair is complete. If leaks have been found please refer to the Trouble Shooting List Fault code (for the model you are repairing) entitled Water Ingress for probable causes and remedies. Now, follow the instructions listed there.

SOLAIRE 3200: Trouble Shooting Guide

Fault code	Probable Causes	Remedy
<p>1) Water Leakage</p> <ul style="list-style-type: none"> • Between glass panel and rubber seal • Between frame and roof skin 	<ul style="list-style-type: none"> • Rubber seal dirty • Rubber seal torn or damaged • Sunroof didn't close completely • Guidance mechanism is faulty • Foam seal not well fitted • Clamping frame screws not properly fastened properly 	<ul style="list-style-type: none"> • Clean the rubber seal (instructions) • Replace the rubber seal • See Fault Code 2) Sunroof Inoperable • Check the guidance mechanism, clean the guide rails and, if necessary, replace the guidance mechanism assembly. • Refit the sunroof and replace the foam seal correctly • a) Check if the foam seal is placed correctly and not damaged b) Tighten the screws of the lower frame properly c) If necessary refit the sunroof and replace the foam seal
<p>2) Sunroof inoperable</p>	<ul style="list-style-type: none"> • Fuse blown • Inconsistent electrical function • Motor faulty • Relay faulty • Switch faulty • Guidance mechanism dirty • Guidance mechanism faulty 	<ul style="list-style-type: none"> • Replace the fuse • Verify all connections • Replace the motor • Replace the relay. • Replace the switch with the wiring harness • Clean the guidance mechanism.(See operating and maintenance instructions) • Replace the guidance mechanism
<p>3) Rattling and/or Creaking Noise</p> <ul style="list-style-type: none"> • In open position • In closed position • Only by operating • All times • Only with optional sunshade 	<ul style="list-style-type: none"> • Guidance mechanism faulty • Looking hooks dry • Rubber seal dry • Slide shoes faulty • Guidance mechanism faulty • Roof panel stiffener not fastened or insulated • Car headliner cutout improper (lies on the roof frame) • Car headliner not properly fastened • Guidance mechanism faulty • Foam buffer between sunshade and glass panel missing • Sunshade deformed 	<ul style="list-style-type: none"> • Replace the guidance mechanism. • Lubricate the looking hooks • Clean the rubber seal and lubricate with silicone spray • Replace the guidance mechanism • Replace the guidance mechanism • Remove the garnish cover and fasten or insulate the remaining roof panel stiffeners • Remove the garnish cover and correct the headliner cut out • Check if the noises come from the headliner. If yes, fasten the headliner to the roof panel stiffeners • Replace the guidance mechanism • Add foam pad to the sunshade to stop rattling. • Replace the sunshade.

SOLAIRE 3200: Trouble Shooting Guide

Fault code	Probable Causes	Remedy
4) Glass Panel Misalignment	<ul style="list-style-type: none"> • Panel or guidance mechanism isn't properly adjusted • Motor not properly fastened • Motor faulty • Guidance mechanism faulty 	<ul style="list-style-type: none"> • Retime the sunroof • Center glass panel by loosening 4 mounting screws, centering and retightening. • Fasten the motor properly • Replace the motor • Replace the guidance mechanism
5) Excessive Wind Noise	<ul style="list-style-type: none"> • Rubber seal dirty • Rubber seal damaged • Glass panel improperly adhered • Mechanism dirty • Guidance mechanism faulty • Motor faulty • Not enough pressure between glass panel and rubber seal • Curvature between sunroof and roof aperture too different 	<ul style="list-style-type: none"> • Clean the rubber seal and lubricate with silicone spray • Replace the rubber seal. • Replace the glass panel. • Clean the mechanism. • Replace the guidance mechanism. • Check the electrical connections. Check the electric components (switch, relay etc.) Replace the motor. • Lower the mechanism • Roof not recommended by Webasto.
6) Roof panel distortion	<ul style="list-style-type: none"> • Lower frame fixing screws not well tightened • Foam seal not well fitted 	<ul style="list-style-type: none"> • Tighten the screws • Replace the foam seal
7) Sluggish operation	<ul style="list-style-type: none"> • Guidance Mechanism too dry • Guidance Mechanism faulty • Damaged guidance mechanism • Improper electrical connections (ground / power) 	<ul style="list-style-type: none"> • Lubricate the mechanism • Replace the guidance mechanism • Replace the guidance mechanism • Verify all electrical connections
8) Misc <ul style="list-style-type: none"> • Inner lamp removed and did not work • Headliner miscut 	<ul style="list-style-type: none"> • Fuse blown • Lamp blown • Necessary additional ground wiring not installed • Improper electrical connections (ground / power) • Car headliner with special shape 	<ul style="list-style-type: none"> • Replace the fuse • Replace the lamp • Check, if an additional ground wire is necessary. Install an additional ground wire if necessary. • Verify all electrical connections. • Garnish soft profile cut off