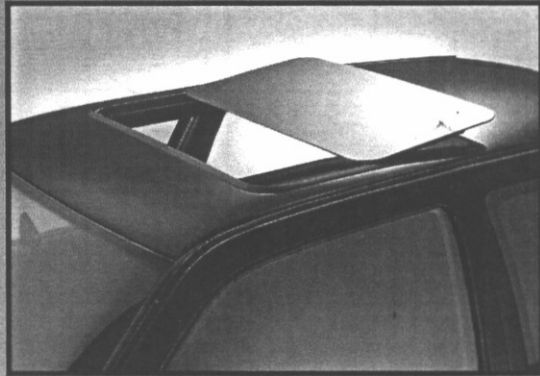


X-48 / SPORT SPOILER INSTALLATION MANUAL

Glass Tilting/
Sliding Roof

X-48 / Sport Spoiler

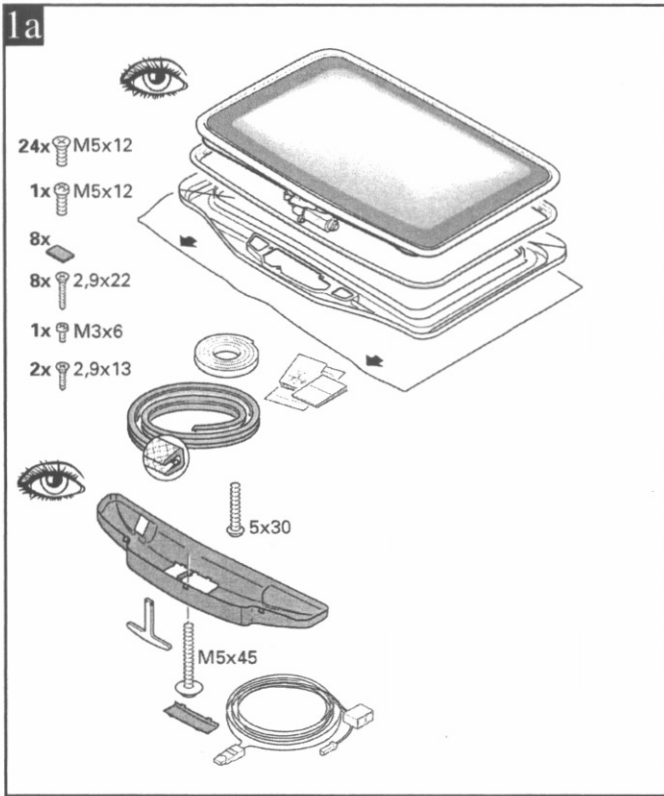


4/98

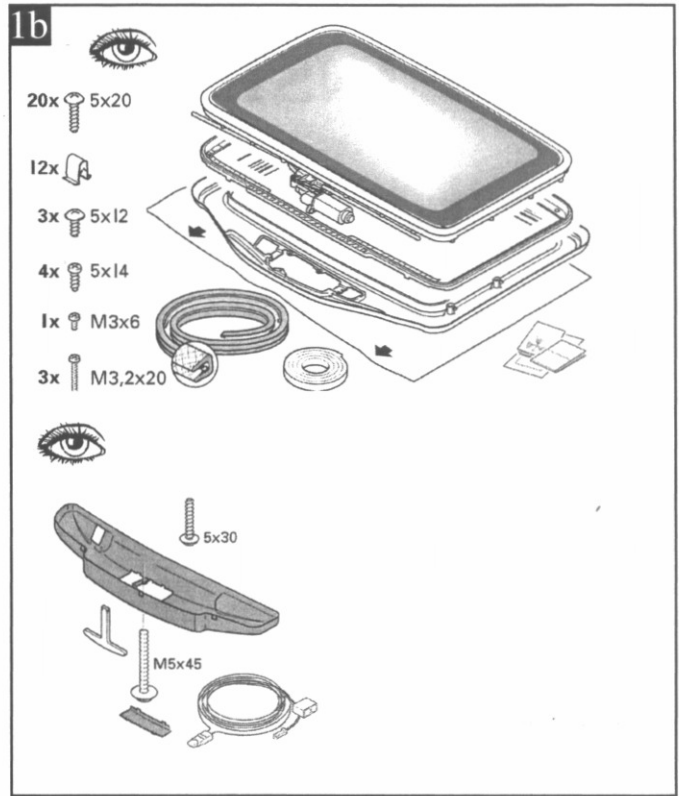
Open Air Freedom

Webasto
sunroofs

X-48 / Sport Spoiler: Installation Manual



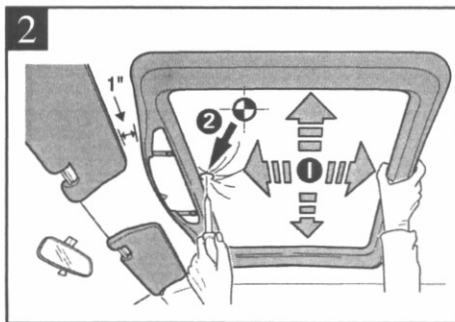
SPORT SPOILER



X-48

Inspect contents of package:

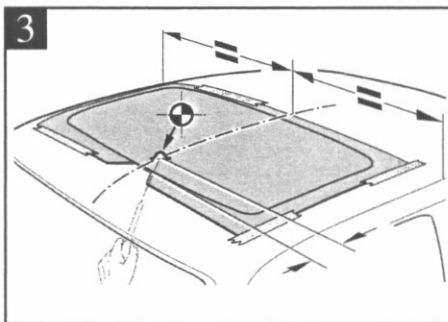
- Any parts damaged in shipping?
- Any parts missing?



If C-line is already established, proceed to next step. (Refer to Application List)

Position Garnish inside vehicle so that it clears the sun visors, assist straps, console, front/rear header, moldings, dome lights, etc.

Place an awl at the front inside edge of bezel. Push up through the headliner to create a dimple on the outside of the roof skin.



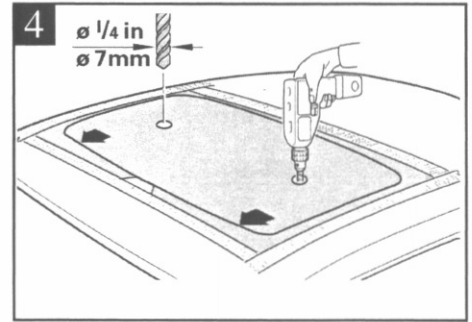
Measure forward from dimple 1 1/8" (29 mm) on Sport Spoiler and 1 3/8" (35 mm) on X-48 and mark a 2" line parallel to front edge of roof. This is your C-line. Record this dimension for future reference.

Position front cut edge of template on C-line. Center template side to side.

Secure template to roof skin with masking tape.

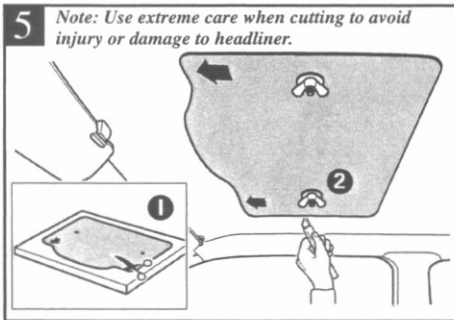
Note: Make sure curved edge marked front is facing the front windshield.

A professional template set is available for the Sport Spoiler and the X-48. Refer to the Service Parts List.



Drill 1/4" hole through template where marked and through headliner of vehicle.

X-48 / Sport Spoiler: Installation Manual



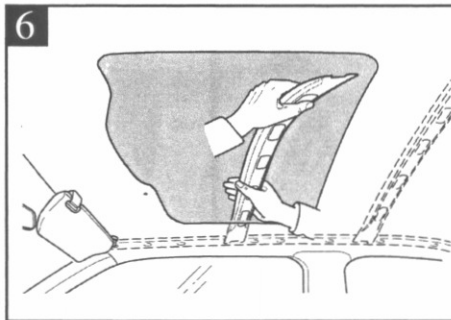
5 *Note: Use extreme care when cutting to avoid injury or damage to headliner.*

1) Cut out cardboard headliner cutting template from sunroof shipping container. Pre-drill holes in template (1/4").

2) Attach inside template to outside template using 1/4" nut and bolt (2). Make sure inside template is positioned properly. (Curved line of template is to the front)

Cut headliner along template line using a utility knife or similar cutting tool.

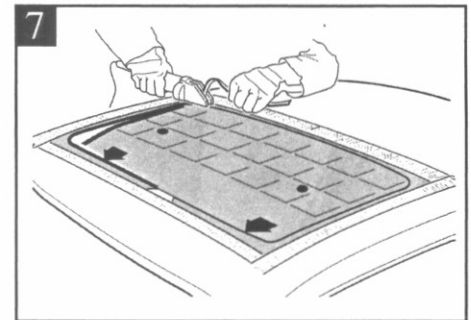
Note: A professional template set is available for the Sport Spoiler and the X-48. Refer to the Service Parts List.



6 Remove any roof bows that interfere with the installation of the sunroof unit.

Note: Make cut in center of roof bow first, then cut the outside ends to prevent distortion to outside of roofskin.

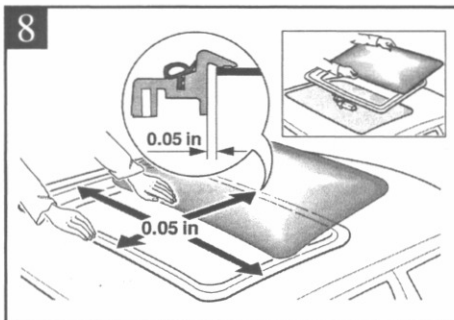
Important: Relocate bows if possible.



7 Cut out-roof panel along line on template.

Discard cutout.

Note: To minimize any sheet metal distortion, make a relief cut 1-2 inches along inside of template line before cutting to the line.

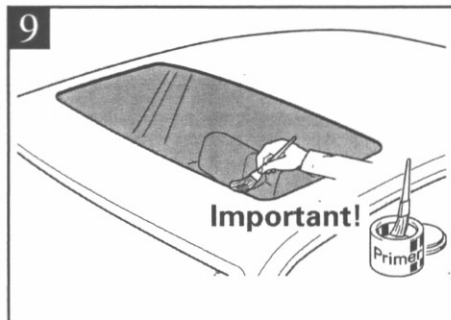


8 1) Position sunroof unit in roof hole.

Tip: Open the glass panel manually to make for easier handling.

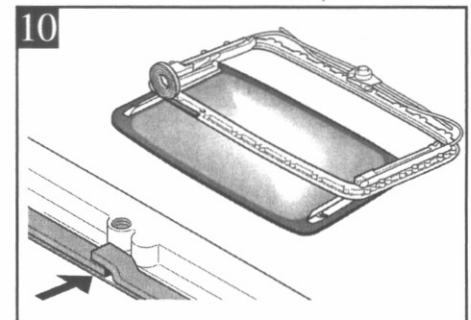
2) Check clearance of sunroof frame to roof hole.

Important: To prevent roof distortion, sunroof frame must have approx. 1/16" (1.5mm) clearance at all points.



9 Prime raw edge of roof hole with a corrosion resistant paint or primer.

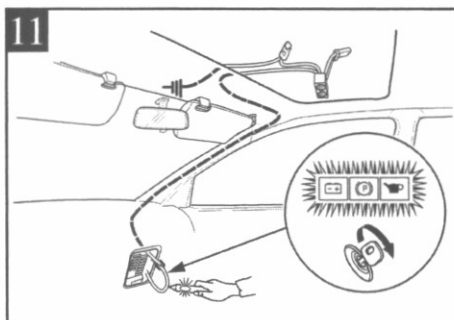
Important!



10 Apply sealing tape provided around perimeter of sunroof frame.

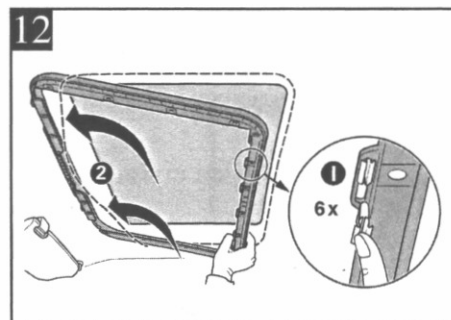
Start tape at a fastener location and overlap 1/4 inch.

Note: Use foam tape on lower frames without rubber profile.



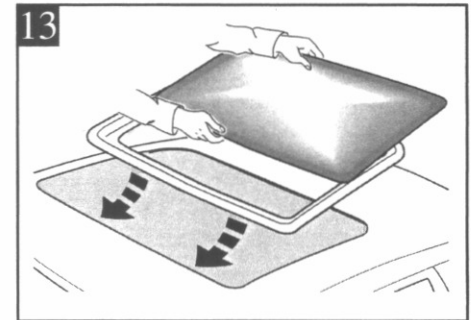
11 1) Connect the red wire ("hot") to a fuse (20 amp min.) that is only energized when the key is in the run or accessory position.

2) Connect the black wire (ground) to the vehicle's header rail to complete the circuit.



12 1) Install clips (6) into lower frame on the X-48 sunroof. Clips are not necessary for the Sport Spoiler sunroof.

2) Position lower frame into vehicle placing front edge of frame between headliner and roof skin.

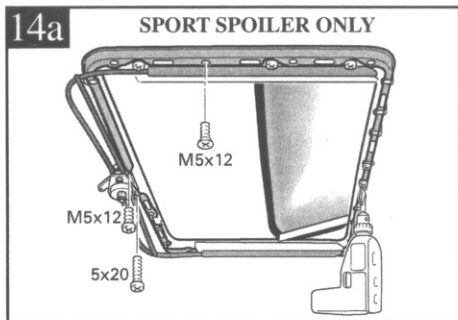


13 Position sunroof frame into roof hole.

Note: Ensure that all track screws on outer frame are fastened securely before attaching lower frame.

Important: If motor is removed to install sunroof, re-time unit before attaching motor (see Retiming Procedure in Service Manual).

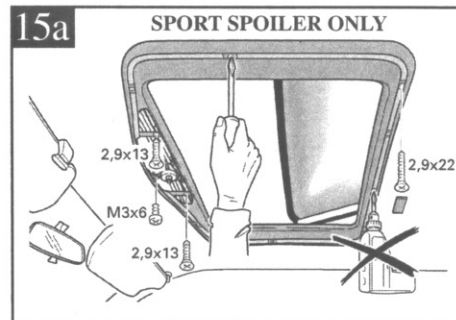
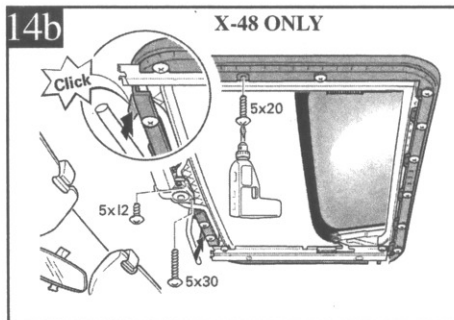
X-48 / Sport Spoiler: Installation Manual



Fasten lower frame to sunroof frame with the screws provided.

On X-48, attach plastic return tubes to lower frame.

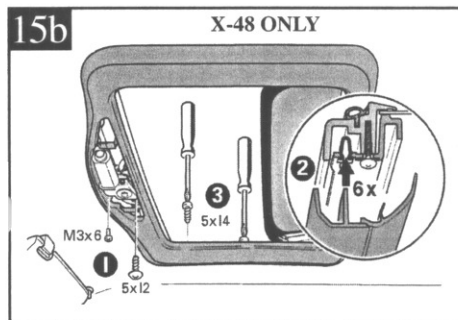
Note: Start in center and work outwards using a cordless drill with clutch setting to avoid over-torquing / stripping screws.



Attach Garnish to lower frame with screws provided (see illustration above). **To avoid stripping screws, do not use power driver.**

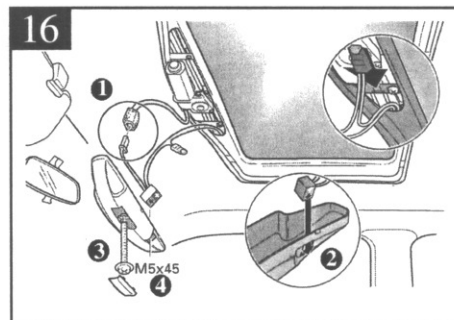
Use small cover plates to cover the 8 recessed areas on the garnish.

Note: Garnish may also be wrapped in headliner.

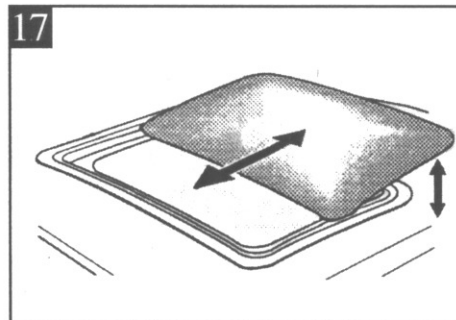


- 1) Install the (2) screws to retain the front of the Garnish.
- 2) Insert the tabs (6) at rear of Garnish into the clips (6) on the lower frame.
- 3) Install the remaining 5 x 14 screws (4) through the holes (4) in the mechanism track for the Garnish.

Note: Garnish may also be wrapped in headliner matching the vehicle interior prior to installing.



- 1) Connect sunroof switch to plug on motor.
- 2) Install sunroof switch into square hole on motor cover.
- 3) Fasten motor cover to frame using an M5 x 45 screw provided.
- 4) Attach emergency cover to motor cover.



Function sunroof to verify proper operation of system. (Ensure that there are no unusual sounds or movements)

Note: Refer to Service Manual if necessary.

IMPORTANT

Perform Water Test per procedure 0500-RP-0035A of X-48/X-48 "SS" Service Manual.

Perform road test to check for any buzz, squeaks, rattles, wind noise, etc.

Clean interior and glass panel.