

#01-08-58-002: Info - General Windnoise/Water Leak Diagnostic Guide - (Apr 17, 2001)

Subject: General Windnoise/Water Leak Diagnostic Guide

Models: 1998-2001 Chevrolet Camaro
1998-2000 Pontiac Firebird



This bulletin contains information on various windnoise/water leak conditions. Refer to the following table for a quick reference to the various conditions and the corresponding illustrations.

| Condition | Best Described in Figure |
|--------------------------|--|
| Front Floor Carpet Wet | 1, 2, 3, 5, 6, 7, 10, 12, 13, 14, 15 |
| Rear Floor Carpet Wet | 2, 3, 4, 8, 9, 11, 12, 13, 14, 15 |
| Water Dripping From Roof | 14, 15 |
| Rear Compartment Wet | 23, 24, 25, 26, 27, 28 |
| Windnoise, Front | 10, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22 |
| Windnoise, Rear | 9, 11, 12, 13, 14, 15, 16, 17, 18 |
| Glass Adjust | 29, 30 |
| Mirror Patch Adjust | 31 |

Condition

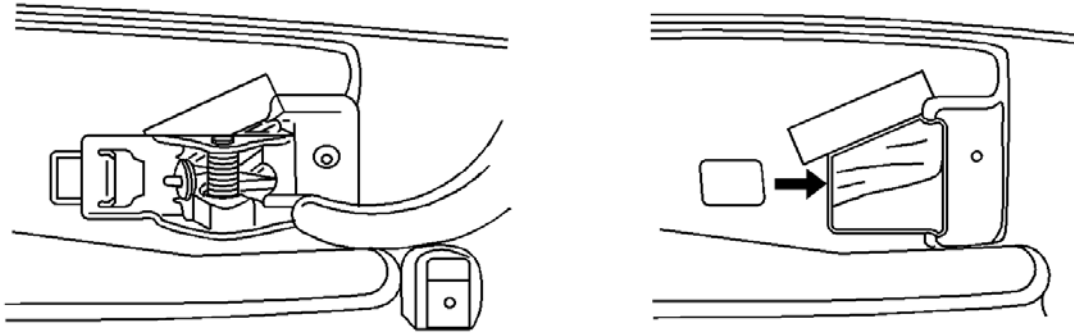
Water drips from the door lock knob or the front floor carpet is wet (convertible, hard top, T-top models).

Cause

The water deflector may not be seated properly behind the door handle.

Correction

Figure 1



Seat the water deflector behind the door handle so that the bottom of the water deflector is inboard of the door. Refer to Figure 1.

Condition

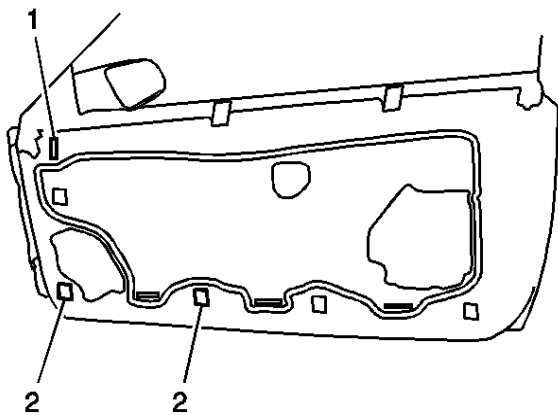
The front or rear floor is wet (convertible, hard top, T-top models).

Cause

The small water deflectors may be mispositioned or improperly installed.

Correction

Figure 2





- Make sure the rectangular slot is taped over with duct tape. Refer to item 1 in Figure 2.
- Ensure the water deflector seals fully to the door inner panel surface. It may be necessary to make two small 76 mm x 76 mm (3 in x 3 in) water deflectors. Refer to item 2 in Figure 2 and install these to the inside of the door inner panel at the locations indicated. Use a piece of plastic from the shipping protective material for either the door trim panel or the seat assemblies (or similar material)

Condition

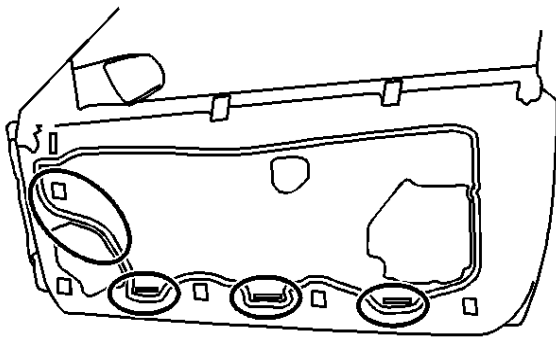
The front or rear floor is wet (convertible, hard top, T-top models).

Cause

The water deflector may not be seated properly to the door surface.

Correction

Figure 3



Seat the water deflector to the door surface at the primary locations. Refer to Figure 3. If the adhesive surface is dirty and the water deflector needs to be replaced, follow the service procedure listed below.

Service Procedure

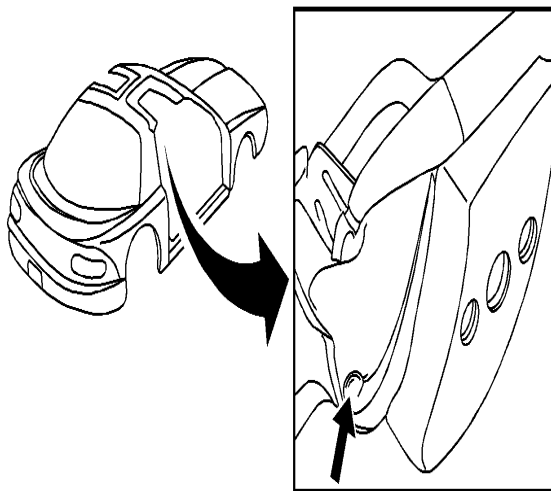
1. The adhesive surface must be clean, dry and free of dirt or contaminants. Clean the door surface (around the perimeter of the water deflector) with one of the cleaners listed below, or an equivalent.
 - 3M® General Purpose Adhesive Cleaner, P/N 08984
 - Dominion Sure Seal, Sure Solve Stock BSS
 - Kent Acrosol™
2. Install the water deflector to the inner panel.
3. Pull the harness connectors through their respective holes or slits.
4. Position the outer perimeter of the deflector to the door inner panel by working from the bottom center outboard. Make sure the butyl adhesive is below the drain holes.
5. Using a 50.8 mm (2 in) wallpaper roller, roll out the butyl adhesive. Start at the bottom center and work outboard, up the right and left sides. A 50.8 mm (2 in) roller can be purchased at a hardware or wallpaper store.

Condition

There is water in the rear floor foot well (T-top models).

Correction

Figure 4



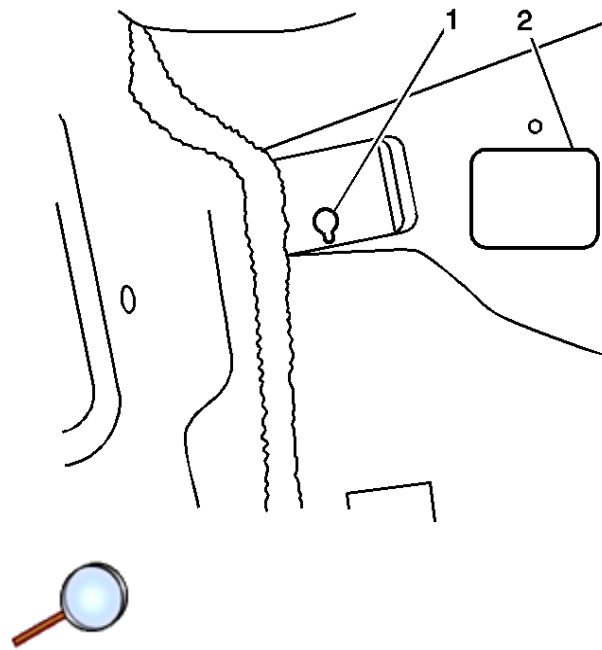
The upper "B" detail can allow water to stand and fill the lower weatherstrip. This can be too much water for the drain holes to accommodate. The upper "B" drain must be clear of debris. With the door open and using a squeeze bottle to fill the weatherstrip with water, the water should flow from the bottom drain holes. Refer to Figure 4. If too much water is entering the rear "B" detail, the T-top may not be sealing against the rear sealing strip. If the rear is sealed properly and there is still too much water entering the drain, enlarging the drain holes at the bottom of the weatherstrip will help. **DO NOT PUNCH A DRAIN HOLE IN THE SIDE OF THE WEATHERSTRIP AS THIS WILL PROVIDE A PATH FOR WINDNOISE.**

Condition

The driver's floor is wet (convertible, hard top, T-top models).

Cause

Figure 5



1. The hood release cable may not be sealed at the front of dash. Refer to item 1 in Figure 5.
2. The body harness grommet may not be sealed. Refer to item 2 in Figure 5.

Correction

Make sure both are SEATED properly. if necessary, seal with GM Weatherstrip Adhesive, P/N 12345097 (in Canada, use P/N 10953479).

Condition

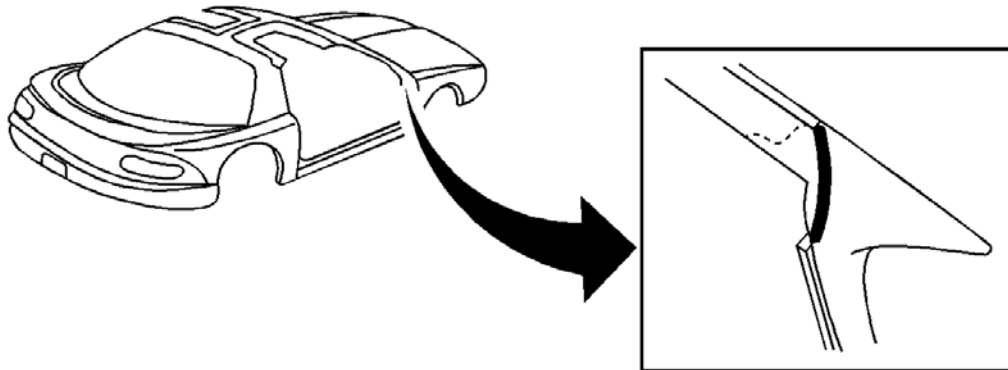
The molded weatherstrip detail at the base of the windshield may not be properly sealed causing the front floor to be wet (hard top, T-top models).

Cause

The material sealing the weatherstrip detail to the body surface between the pillar retainer and the mounting flange on the hinge pillar may be mispositioned or missing.

Correction

Figure 6



Apply a new seal using GM Silicone Sealant, P/N 12345739 (in Canada, use P/N 10953541), as shown in Figure 6 (almost a straight line from the outer edge of the pillar retainer to the inner hinge pillar flange should be used) and reinstall the weatherstrip to the flange retainer.

Condition

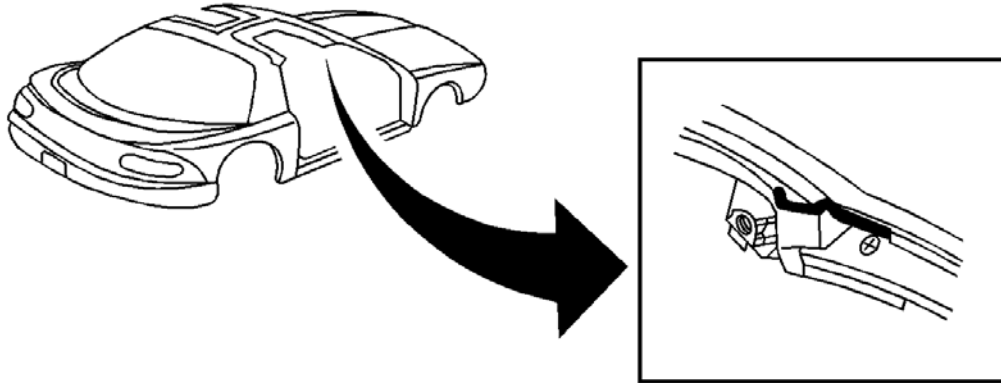
The front roof gutter molded weatherstrip detail to the roof sheet metal may not be sealed properly (T-top models). Water entering this area usually runs down the "A" pillar and ends up on the carpet below the instrument panel.

Cause

- The weatherstrip molded detail may not be sealed to the sheet metal gutter.
- Small holes or tears may exist in the molded detail at the attaching insert.

Correction

Figure 7



- Apply a new seal using GM Silicone Sealant, P/N 12345739 (in Canada, use P/N 10953541), to the end of the roof gutter, under the molded weatherstrip detail, as shown in Figure 7.
- Apply an even amount of GM P/N 12345097 (in Canada, use P/N 10953479) or 3M P/N 08011, or the equivalent, to the hole or tear for sealing.

Condition

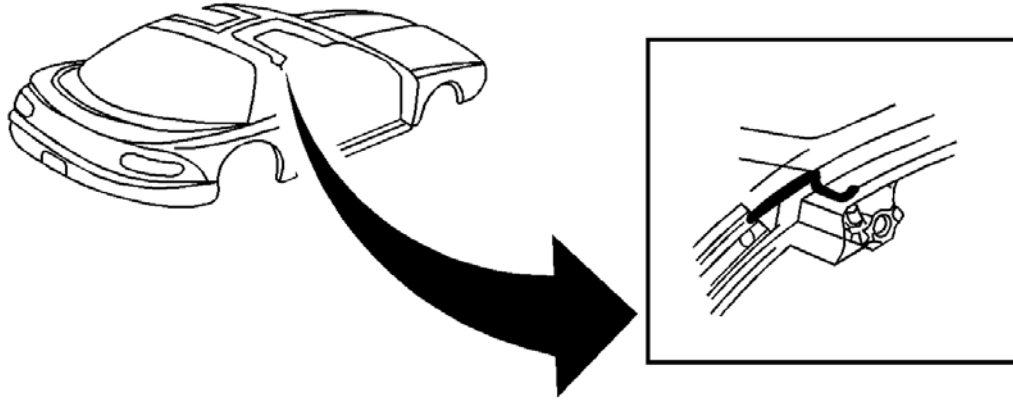
The rear roof gutter molded weatherstrip detail to the roof sheet metal may not be sealed properly causing water leaks (T-top models).

Cause

- The weatherstrip molded detail may not be sealed to the sheet metal gutter.
- Small holes or tears may exist in the molded detail at the attaching insert.

Correction

Figure 8



1. Apply GM Silicone Sealant, P/N 12345739 (in Canada, use P/N 10953541), to the end of the roof gutter, under the molded weatherstrip detail, as shown in Figure 8.
2. Apply an even amount of GM P/N 12345097 (in Canada, use P/N 10953479) or 3M P/N 08011, or the equivalent, to the hole or tear for sealing.

Condition

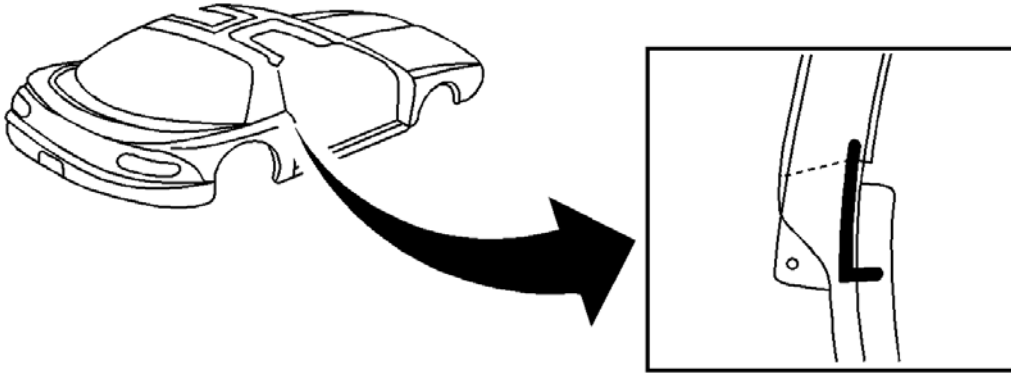
The molded weatherstrip detail at the base of the lock pillar may not be sealed properly causing windnoise and/or water leaks (hard top, T-top models).

Cause

The material sealing the weatherstrip detail to the body surface between the lock pillar retainer and the mounting flange on the quarter panel may be mispositioned or missing.

Correction

Figure 9



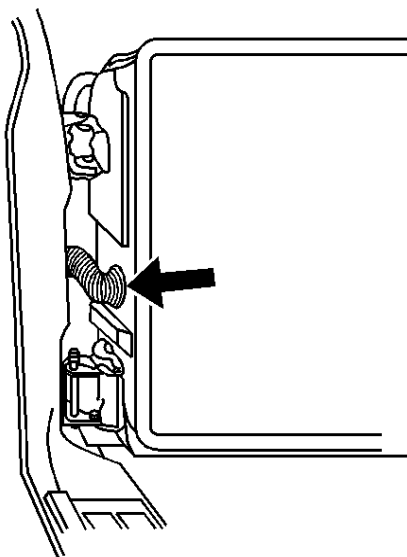
Apply a new seal using GM Silicone Sealant, P/N 12345739 (in Canada, use P/N 10953541), as shown in Figure 9 (apply in a straight line from the inner edge of the lock pillar retainer to the base of the mounting tab and then 90 degrees inboard to the lock pillar flange) and reinstall the weatherstrip to the flange and the retainer.

Condition

Water leaks through the front floor and/or windnoise through the door.

Cause

Figure 10



The door wiring harness rubber grommet may not be seated properly. Refer to Figure 10.

Correction

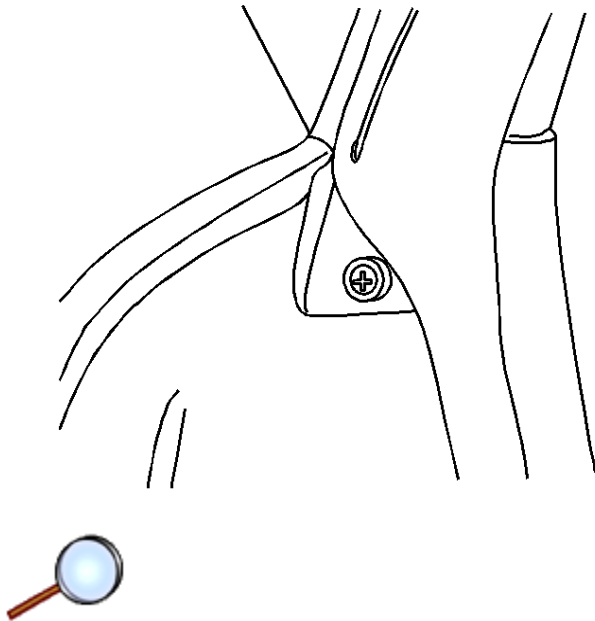
Make sure the grommet lip is seated properly to the door and the "A" pillar.

Condition

There is windnoise and/or water leaks in the rear of the vehicle (convertible, hard top, T-top).

Cause

Figure 11



The weatherstrip in the area indicated shows where the weatherstrip relaxes and loses contact with the door glass. This generates windnoise. Refer to Figure 11.

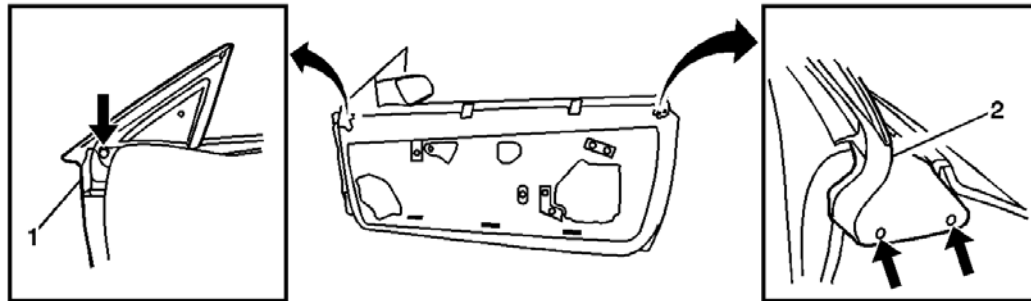
Correction

Loosen the "B" pillar weatherstrip retaining screw and tighten the screw while holding the weatherstrip.

Condition

There is windnoise and/or water leaks in the front or rear at the door belt line (convertible, hard top, T-top models).

Correction

Figure 12

- Insert the push-in retainers. Refer to Figure 12.
- Ensure that the muket has no folds. Refer to item 1 in Figure 12.
- Ensure that the muket is in contact with the side door glass when the door is closed. Refer to item 2 in Figure 12.

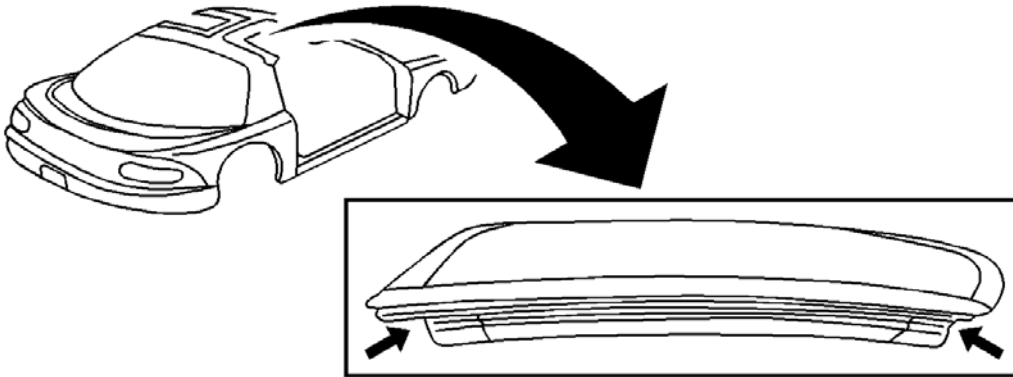
Condition

There is windnoise and/or water leaks at the T-top butt joints.

Cause

- The butt joint surfaces between the panel and the body details may have improper contact.
- The door glass may not be adjusted properly for height or "tip in" contact.

Correction**Figure 13**



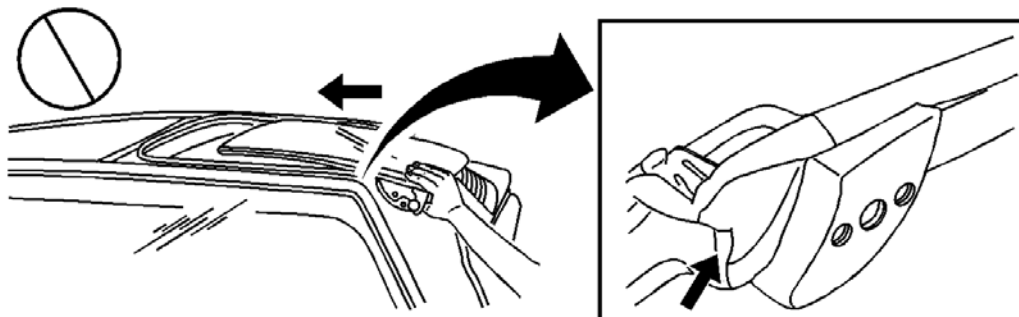
- The T-top rail weatherstrip is movable in the retainer and should be adjusted to only slight interference on the front and rear edges. The pressure of the closed glass will increase pressure on the joint once the glass is closed. Too much interference will cause the butt joint to pucker and provide a water path. Refer to Figure 13.
- Adjust the door glass to obtain sealing in the butt joints. Refer to General Information on Door Glass Adjustments later in this bulletin.

Condition

There is windnoise and/or water leaks from the front or rear "butt" joints (T-top models).

Cause

Figure 14



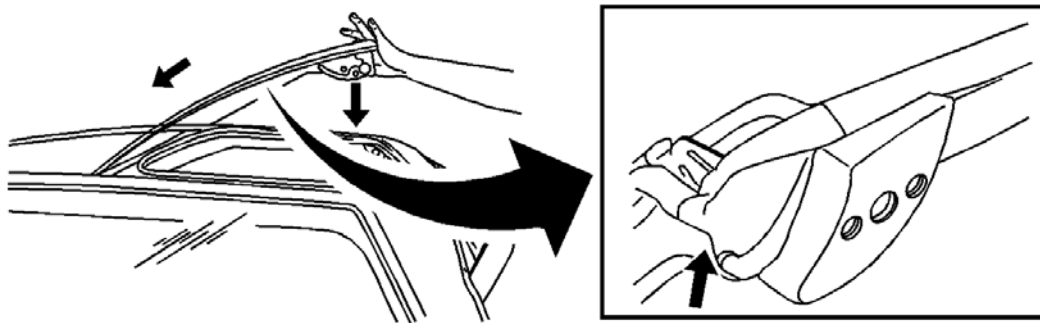
The T-top may have been installed improperly. Refer to Figure 14

T-Top Installation Procedure

When installing the T-top panels on the roof, keep the outboard edge of the panel raised about 8 cm (3 in) above the roof while placing the inboard edge of the panel under the center of the roof. After the inboard edge of the panel is in position under the center roof rail, lower the outboard edge of the panel into the weatherstrip on the body. Close the latch and lock the top. Refer to Figure 15.

Correction

Figure 15



Make sure the customer is informed on the proper installation. Do not attempt to install the panels by sliding them horizontally toward the center roof rail. Doing so may cause the weatherstrip outer lip to fold under the removable top weatherstrip and may result in leaks and possible damage to the weatherstrip. Refer to Figure 14.

Condition

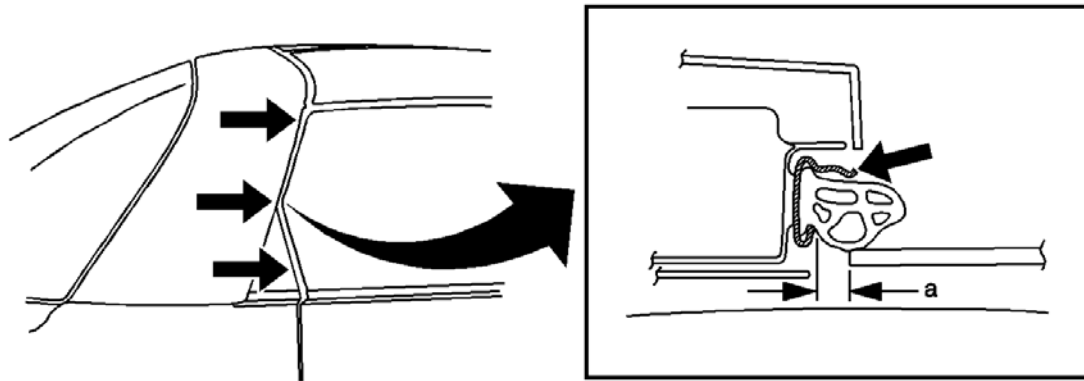
There is windnoise at the rear of the door glass (convertible, hard top, T-top models).

Cause

The door glass may not be adjusted forward/rearward for proper contact or you cannot obtain enough glass contact to the weatherstrip at the rear of the door glass.

Correction

Figure 16



- Adjust the door glass forward or rearward to obtain a standard dimension of no more than 12 mm (1/2 in) from the edge of the glass to the retainer surface. Refer to measurement A in Figure 16.
- If you cannot obtain enough contact at the rear of the door glass after glass adjustments, adjust the weatherstrip retainer outboard for more contact.

Condition

There is windnoise at the rear of the door glass (convertible, hard top, T-top models).

Cause

The weatherstrip may not be seated properly in the retainer.

Correction

Figure 17