# #10-08-67-001C: Headliner Wet, Water Leak from Front or Rear Sunroof Glass or Rear Compartment Carpet Wet - (May 22, 2015)

Subject: Headliner Wet, Water Leak from Front or Rear Sunroof Glass or Rear Compartment Carpet

Wet

Models: 2008-2016 Buick Enclave

2009-2016 Chevrolet Traverse

2007-2016 GMC Acadia

2007-2010 Saturn OUTLOOK



latest version of Corporate Bulletin Number 08-08-57-003. For more information see the

latest version of Corporate Bulletin Number 08-08-57-003.



## Condition #1

Some customers may comment on a waterleak in the headliner area above the 2nd or 3rd row seats. Water may be dripping from the overhead A/C outlets or the dome lamp.

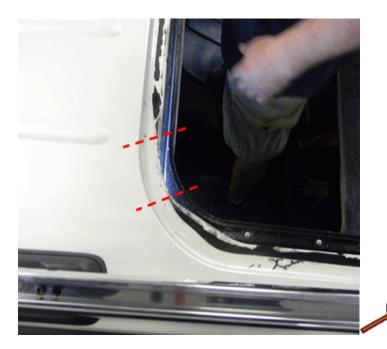
## Cause #1

The cause of this condition may be from the urethane of the sunroof rear stationary window not sealing the glass to the body. This may allow water to leak between the urethane and roof flange, then onto the headliner.

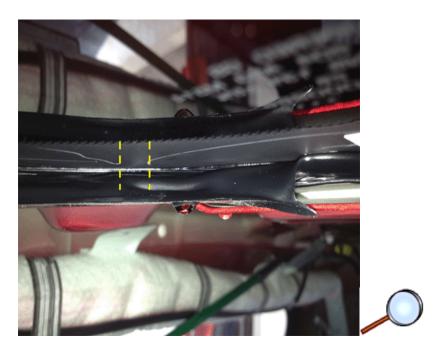
# Correction #1

**Note:** The shower method of diagnosing/confirming the leak location may be ineffective because the close-out surround seal on the rear stationary glass may prevent sufficient water from leaking past the seal and urethane bead.

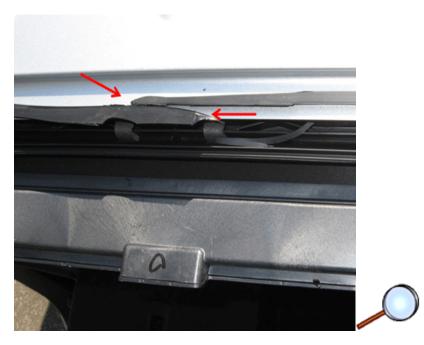
To properly verify that the leak is from the sunroof rear stationary glass, use a soapy solution and compressed air. The more common areas where leaks may be found is at the center rear edge of the glass, or in the front or rear corners of the glass. Several examples are shown in the graphics below.







The graphic below shows an example of a leak caused by the urethane not being properly aligned.



If a leak is confirmed, remove and reseal the glass. Refer to Roof Stationary Window Replacement in SI.

# **Warranty Information #1**

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
6040030	Roof Stationary Window Replacement	Use Published Labor Operation Time

## **Condition #2**

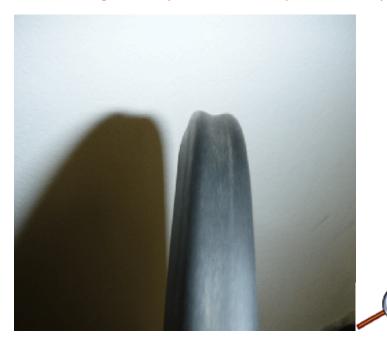
Some customers may comment on a waterleak from the front sunroof glass.

## Cause #2

The sunroof glass panel weather-strip/seal may have failed to retain its designed shape, resulting in a water leak that overwhelms the sunroof module water trough or allows sufficient dirt and debris into the drain location to plug up the drains.

## **Correction #2**

**Note:** The sunroof glass seal is not designed to be completely water tight. Minor drips witnessed dropping into the water management system can be expected. Heavy streams of water passing by the weather-strip should not be evident.



Technicians are to inspect the glass panel weather-strip/seal appearance at the corners and around the glass panel. If the seal looks depressed or concave in the middle, as shown above, replace the seal. Refer to Sunroof Window Weatherstrip Replacement in SI.

# **Warranty Information #2**

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
6041280	Sunroof Window Weatherstrip Replacement	Use Published Labor Operation Time

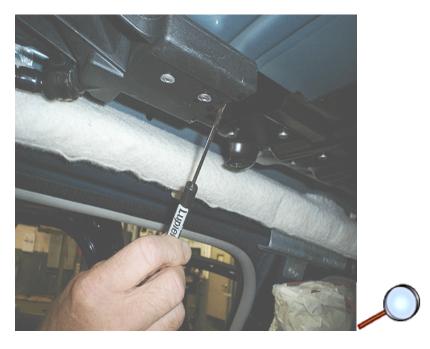
## **Condition #3**

**Important:** For vehicles equipped with sunroof (RPO C3U), prior to any repairs, verify vehicle eligibility and completion of Campaign #08207A.

Some customers may comment on water dripping/leaking from the overhead front and/or rear headliner areas, including the dome lamp. In addition, the front floor foot-well area of the carpet may be wet.

**Important:** All vehicles built prior to April 1, 2008 have drain holes in the roof sheet metal around the rear stationary glass. These holes are pierced through the roof structure and allow water to flow in to the vehicle. To confirm that water is entering through these holes, remove the sunroof frame and pour water around the rear fixed glass on the outside of the vehicle.

TECHNICIANS MUST SEAL THESE HOLES TO STOP WATER FROM ENTERING THE VEHICLE. ONCE THESE LOCATIONS ARE SEALED, NO WATER CAN ENTER THE VEHICLE IN THESE AREAS.



**Important:** Water dripping from the middle drain hose connection area, shown above, is due to the stationary glass holes leaking water, NOT the sunroof frame. Water flowing through these roof structure drain holes may miss the water management gutter, dripping onto the topside of sunroof frame and running to the underside of the frame where the black plastic drain spout attaches to the aluminum.

## Cause #3

The primary cause of the leaks in this area could be a result of the rear stationary glass to body weather-strip, front glass weather-strip, or rear roof drains allowing too much water for the sunroof drain system to manage. When exceeding this threshold, the water overflows onto the headliner and into the vehicle.

If water overflows on the headliner, it can travel to the front of the vehicle and down the inside of the A-pillar. Therefore, water may be present in the front floor foot-well area, on either the driver or passenger side.

**Note:** If water is present in the foot-well area, inspect the park brake switch and the IP fuse box for water damage. Replace if necessary.

## Correction #3

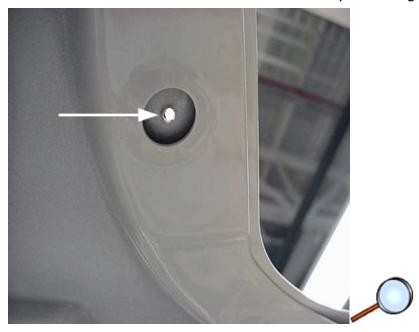
Whether two or four holes are present, plug the stationary glass drain holes in the roof sheet metal using the following steps:

1. Lower the headliner following the procedure in SI.



Important: The sunroof fixed rear panel glass has been removed for illustration purposes.

2. Loosen the front sunroof module bolts half way. Remove the sunroof drains. Remove the remaining sunroof module bolts and lower the rear of the sunroof module assembly following procedures in SI.



**Note:** The photo above, taken after the sunroof module was removed, is the view from inside the vehicle looking up at the drain holes around the rear fixed glass.

3. Whether two or four holes are present, seal the holes in the roof sheet metal from inside the vehicle. Refer to the illustration above.

**Important:** When plugging the holes, make sure to use a windshield urethane sealant and NOT a silicone sealant. See the Parts Information section of this bulletin for the proper sealant.

**Important:** Ensure the urethane fills directly into the center of the hole (noted by the white area the illustration above) and pushes upward to completely seal the hole.

- 4. Clean the four holes in the roof sheet metal and fill with a small amount of windshield urethane sealant.
- 5. Reinstall the sunroof module.
- 6. After the repair, run a second water test for leaks.

#### **Parts Information #3**

**Important:** Both the windshield urethane's can be used for multiple repairs.

Part Number	Description	Material Allowance
08609 Or P10545	3M <sup>™</sup> Windo-Weld <sup>™</sup> Super Fast Urethane Or Kent <sup>™</sup> Speed Set <sup>™</sup> Windshield Sealant	\$20.00 per tube (\$30 CAD)

## **Warranty Information #3**

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
6080118*	Lower Sunroof Module Assembly and Seal Four Drain Holes Under Roof Stationary Glass	2.8 hrs

<sup>\*</sup>This is a unique Labor Operation for Bulletin use only. It will not be published in the Labor Time Guide.

Note: These cross hatch restrictors were removed on vehicles built after May 1, 2008.

Some customers may comment on water leaks in the rear compartment area, or the rear compartment carpet being wet.

# Cause #4

The cause of this condition may be that the end of one of the front drains may be plugged with grease from the sunroof, or debris may be caught in the cross hatch at the end of the drain tubes.

## **Correction #4**

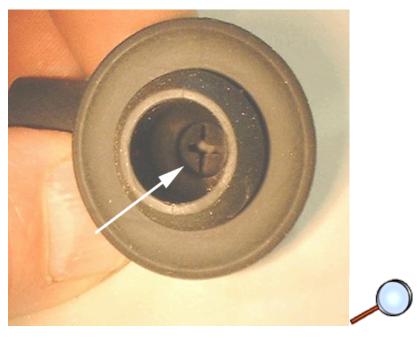
Verify that any water is flowing freely and exiting the vehicle. If the sunroof water trough assembly does not overflow onto the headliner, do not perform the following repair.

Inspect for plugged front sunroof drains by completing the following steps:

- 1. Pour water into the sunroof trough assembly to verify that the front drains are not plugged.
- 2. Remove the "A" pillar trim and defroster outlet grille to gain access to the end of the drain tubes.



3. Remove the rubber grommet at the end of the drain tube. Refer to the illustration above.



**Important:** To ensure good water flow, remove as much of the grommet material as possible.

- 4. Using a knife, carefully remove the cross hatch inside the grommet and reinstall. Another solution is to utilize a 3/8 in spot weld drill bit to remove the cross hatch. Refer to the illustration above.
- 5. After the repair, run a second water test for leaks.

# **Warranty Information #4**

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
6080128*	Removal of Cross Hatch Inside Drain Tube	0.6 hr

<sup>\*</sup>This is a unique Labor Operation for Bulletin use only. It will not be published in the Labor Time Guide.

# **Condition #5**

Some customers may comment on a waterleak at the rear headliner or water dripping from the rear dome lamp area.

# Cause #5

The cause of this condition may be a sunroof drain hose being improperly routed.

# **Correction #5**

Inspect the drain hose routing between the "B" and "C" pillar for proper routing.

**Note:** Rear drain hoses were removed on later models following elimination of drain holes at the rear fixed glass location.

# Figure 1 — Incorrect Routing



Figure 2 — Correct Routing



- Make sure that the hose is routed in back of the air bag bracket. Figure 1 shows the incorrect routing and Figure 2 shows the correct routing.
- Also make sure that there are no bends pointing upward in the drain tubes.

# **Warranty Information #5**

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
6040922	Sunroof Drain Inspection and Cleaning	Use Published Labor Operation Time

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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