



# Service Bulletin

Bulletin No.: 18-NA-199

Date: January, 2019

## TECHNICAL

**Subject: Sunroof Inoperative After Cycling, and/or Sunroof Window Function Slow**

| Brand:    | Model:  | Model Year: |      | VIN: |    | Engine: | Transmission: |
|-----------|---------|-------------|------|------|----|---------|---------------|
|           |         | from        | to   | from | to |         |               |
| Chevrolet | Equinox | 2018        | 2019 |      |    | All     | All           |
| GMC       | Terrain | 2018        | 2019 |      |    |         |               |
| Holden    | Equinox | 2018        | 2019 |      |    |         |               |

|                                   |   |
|-----------------------------------|---|
| <b>Involved Region or Country</b> | North America, N.A. Export Regions, Australia   |
| <b>Additional Options (RPOs)</b>  | Equipped with ROOF-SUN, GLASS, SLIDING, ELEC, TRANSPARENT GLASS FIXED (C3U)   |
| <b>Condition</b>                  | Customer may comment that their sunroof is inoperative after cycling, and/or the sunroof the window opens/closes much slower in comparison to a like vehicle.   |
| <b>Cause</b>                      | <p>The cause of the condition may be that the sunroof is going into thermal protection mode due to one, or both, of the following:</p> <ul style="list-style-type: none"> <li>• The sunroof supplier may have manufactured a span of sunroof motors are lacking the proper amount of grease.</li> <li>• The sunroof housing may be slightly skewed in relationship to the roof opening, causing a bind condition</li> </ul> |
| <b>Correction</b>                 | Inspect both sunroof motors for the supplier's Julian build date breakpoint and replace if necessary. If issue is not resolved, remove the sunroof housing locator pins, following the Service Procedure below.   |

### Service Procedure



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1. Lower the headliner enough to inspect BOTH the sunroof window and sunshade motors, and also access the sunroof housing bolts. Refer to *Headlining Trim Panel Replacement*, in SI.



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2. Inspect the supplier's part label on BOTH sunroof motors for the Julian build date, shown circled in green in the graphic above.

**Important:** The Julian date is formatted Year/Month/Day, so the example above would have been manufactured December 9, 2017. Therefore any motor before 180201 (February 1, 2018) is suspect.

3. Any motor manufactured prior to February 1, 2018 is in the suspect range, and will need replacement. Refer to *Sunroof Window Motor Replacement* and/or *Sunroof Sunshade Motor Replacement*, in SI.
  - **For vehicles with the new motors installed,** cycle the sunroof 2 complete cycles. If condition is no longer present, no further repairs are necessary and the headliner can be reinstalled. Refer to *Headlining Trim Panel Replacement*, in SI.

**Note:** If condition is still present on vehicles WITH new motors installed, continue ahead to step #4 before reinstalling the headliner.

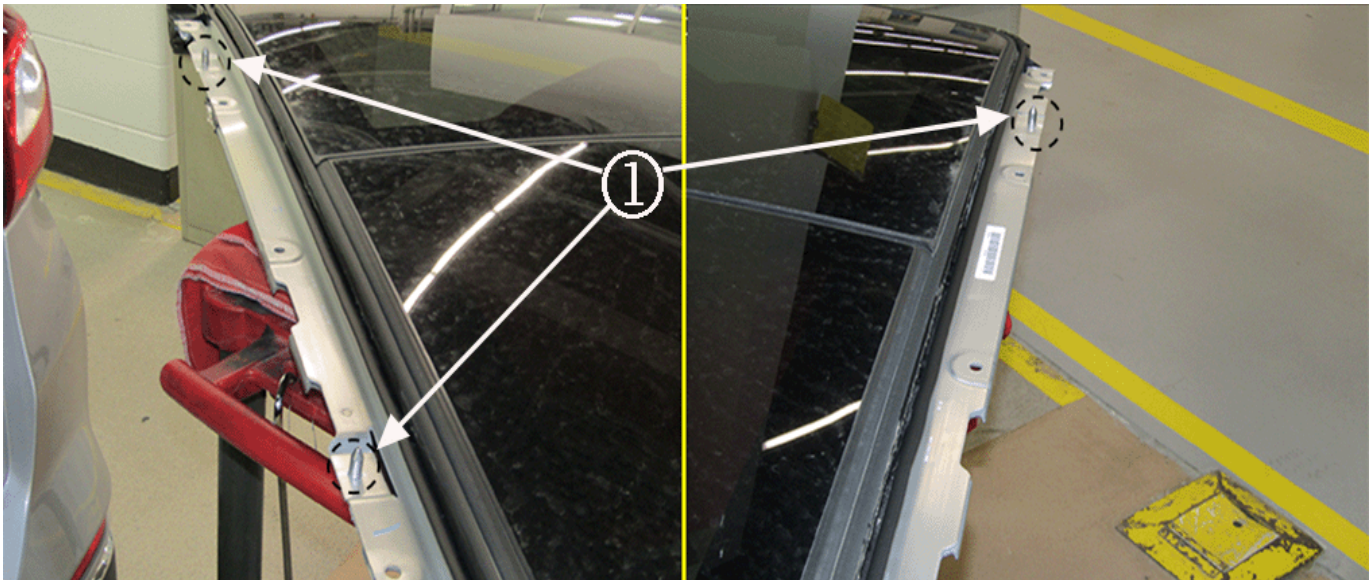
- **For vehicles NOT in the suspect motor range,** continue on to step #4 and complete the sunroof housing pin removal.
4. Remove the attachment bolts from the 4 corners of the sunroof housing.



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**Note:** The longer bolts only need to be threaded into roof ring enough so they can bear the weight of the sunroof housing when it's lowered onto them.

5. Partially install M6 x 1 thread x 75 mm (or slightly longer) bolts at the 4 corner locations of the housing.
6. Remove the remaining sunroof housing bolts and lower the housing onto the corner screws.

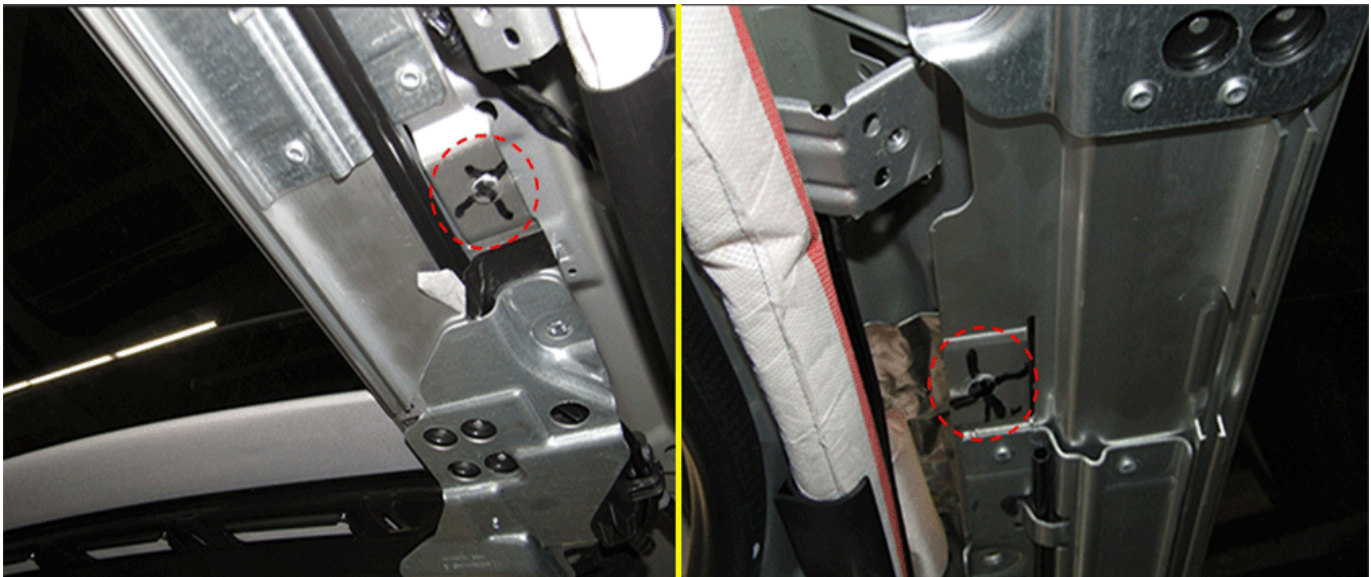


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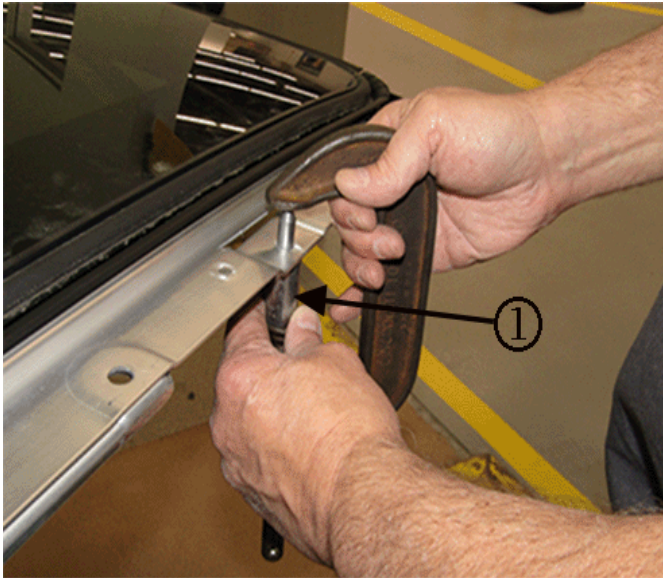
**Note:** The graphic above, and one following, shows the sunroof housing removed for clarification purposes only. It is not necessary to remove the housing from the vehicle.

7. Locate the 3 sunroof housing locator pins (1); 2 on the left side and 1 on the right.

**Note:** The graphic below shows an underside view of the locator pins, in vehicle.



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8. Using a C-clamp, or suitable tool, with a 5/8 in socket (1) centered on the underside of the pin, remove the 3 pins by driving them out of the housing.

**Important:** There must not be any sharp edges left at the pin locations when removal is completed.

9. To eliminate the risk of a sharp edge contacting any trim or airbag component, de-burr the 3 holes where the locators were removed.
10. Reposition the sunroof module to the roof and partially install by reinstalling and hand tightening the second set of fasteners removed. Then replace the longer fasteners at the 4 corners with the original bolts and hand tighten.
11. Allow the sunroof housing to center itself, and find a home position, by cycling the sunroof 2 complete cycles.
12. Fully tighten the sunroof housing bolts.

### Tighten

Tighten the bolts to 9 Nm (80 lb in).

13. Before reinstalling the headliner, verify proper operation of the sunroof by cycling 2 more times.
- If the sunroof is functioning properly, move to step #14 and reinstall the headliner.
  - If the sunroof is inoperative, or still exhibits a slow function condition, **replace the sunroof housing**. Refer to *Sunroof Housing Replacement*, in SI.
14. Reinstall the headliner. Refer to *Headlining Trim Panel Replacement*, in SI.

### Parts Information

If necessary to replace, use the vehicle identification number (VIN), SI, and the GM Electronic Parts Catalog to determine the proper sunroof housing to order.

| Causal Part | Description                        | Part Number | Qty             |
|-------------|------------------------------------|-------------|-----------------|
| x           | MOTOR ASM-SUN RF S/S (W/ CONT MDL) | 84287215    | 1, if necessary |
| x           | MOTOR ASM-SUN RF WDO (W/ CONT MDL) | 84287214    | 1, if necessary |

### Warranty Information

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 |
|-----------------|--|------------|
| 6080288*        | Remove/Reinstall Headliner, Inspect Sunroof Window and Sunshade Motors | 1.9 hr     |
| Add             | Replace Sunroof Motors Only  | 0.3 hr     |
| Add             | Remove Sunroof Housing Locator Pins Only                               | 0.7 hr     |
| Add             | Replace Motors AND Remove Locator Pins                                 | 0.9 hr     |
| Add             | Replace Sunroof Housing  | 1.9 hr     |

\*This is a unique Labor Operation for Bulletin use only.

|                 |   |
|-----------------|---|
| <b>Version</b>  | 2   |
| <b>Modified</b> | Released June 25, 2018<br>Revised January 14, 2019 – Added Model year 2019, Updated Service Procedure for possible sunroof housing replacement, Updated Warranty Information. |

