



**Technical Service
BULLETIN**

August 21, 2006

Title:

**MOON ROOF
STUCK/IMPROPER OPERATION**

Models:

'03 – '07 4Runner

REVISÉD
BO016-06
BODY

TSB REVISION NOTICE:

- August 25, 2006: The Warranty Information table has been updated to include warranty.

Previous versions of this TSB should be discarded.

Introduction Some customers may experience a moon roof that exhibits improper operation, such as:

- The moon roof does not close from its fully open position (an improper jam protection operation occurs).
- The moon roof is stuck due to a difference of alignment between the right and left parts of the moon roof.
- Sliding parts are stuck due to hardened grease.

Perform the following repair procedure to correct these conditions.

Applicable Vehicles

- 2003 – 2007 model year 4Runner vehicles.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
BD5037	Clean/Lubricate Wind Deflector Links & Align Moon Roof Cable	0.9	63203-35040 63203-35041 63203-35050 63203-35060	9A	83

Applicable Warranty*:

This repair is covered under the Toyota Comprehensive Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.

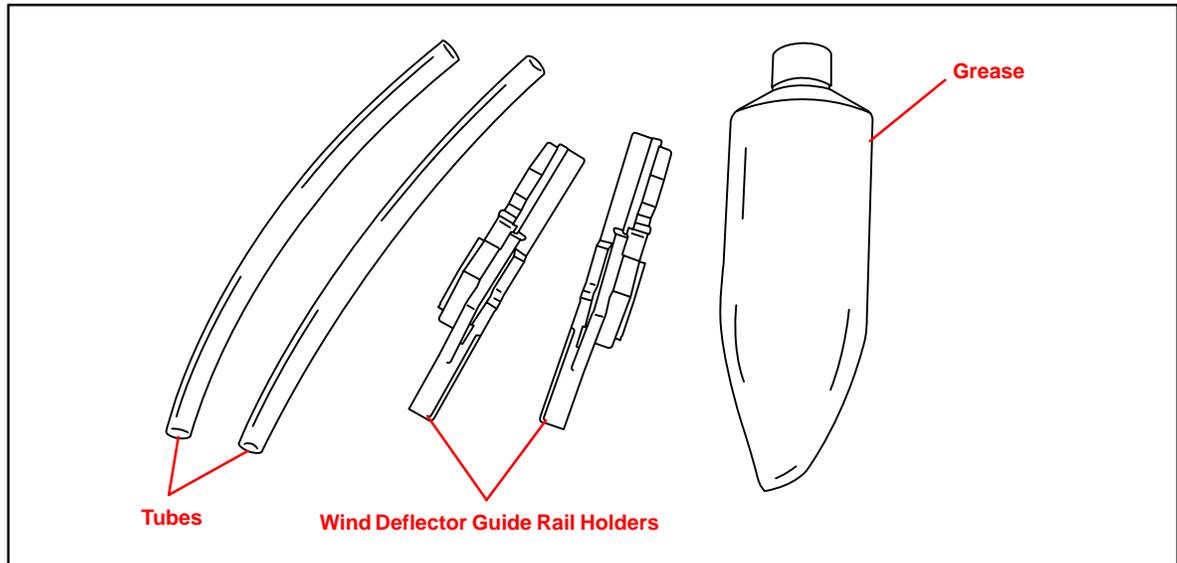
* Warranty application is limited to correction of a problem based upon a customer's specific complaint.



Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
63207-35040	Same	Base Sub-assembly, Roof Window Balancer (Repair Kit)	1

Kit Contents



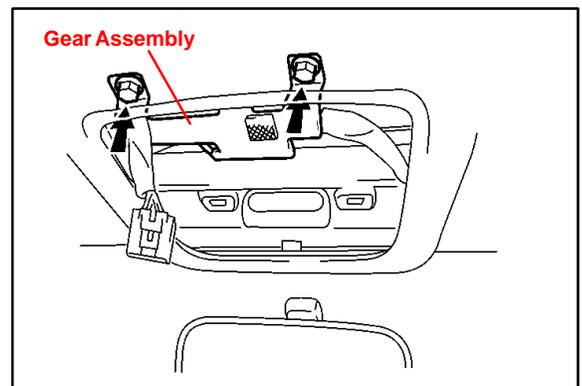
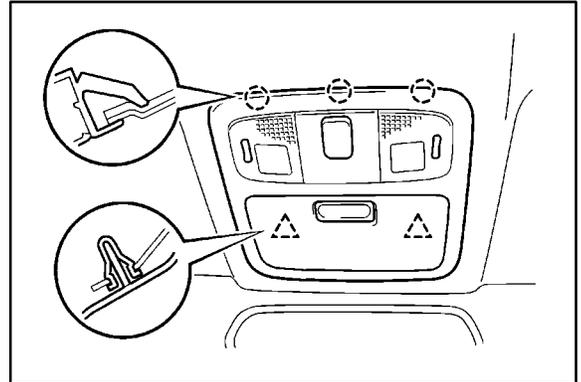
NOTE:
The plastic tubes are NOT required for this TSB.

Repair Procedure

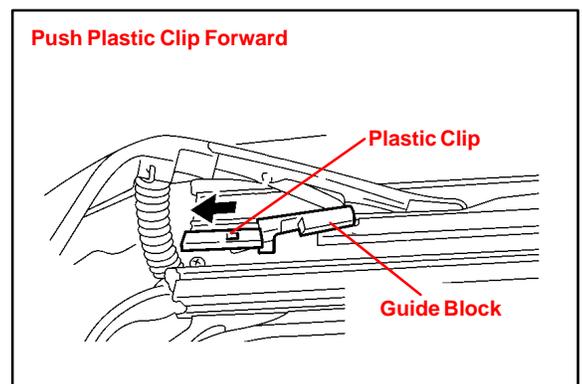
NOTE:

Perform the same procedure for both the RH and LH sides.

1. Remove the gear assembly.
 - A. Open the moon roof approximately 75% and then remove the ignition key.
 - B. Release the two (2) metal clips (behind the sunglass holder) by gently pulling down the front of the map light assembly.
 - C. Disconnect the connector and remove the map light assembly.
 - D. Remove the two (2) bolts, disconnect the motor connector, and then remove the gear assembly.



2. Remove the roof wind deflector.
 - A. Using a flathead screwdriver, hold down the guide block release lever and push the plastic clip forward.
 - B. Slide the guide block backwards and out. Repeat for the other side and remove the wind deflector.

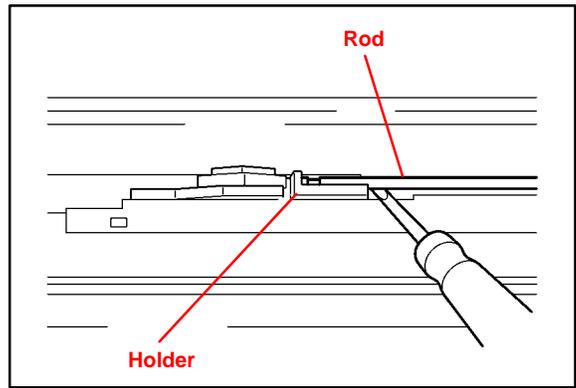


NOTE:

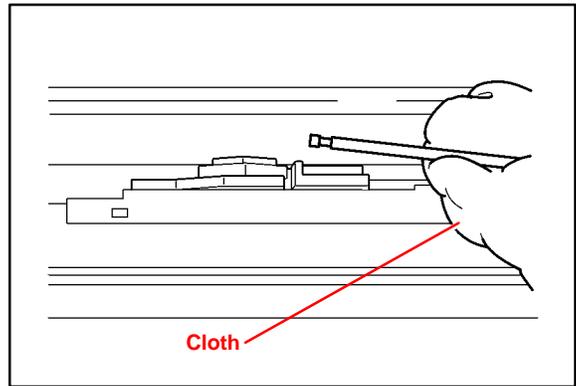
To prevent breakage of the guide block release lever when the outside temperature is below 40°F (4°C), use a heat gun to raise the temperature of the guide block and surrounding aluminum housing to at least 65°F (18°C). Be careful NOT to damage components or paint with the heat gun.

Repair Procedure
(Continued)

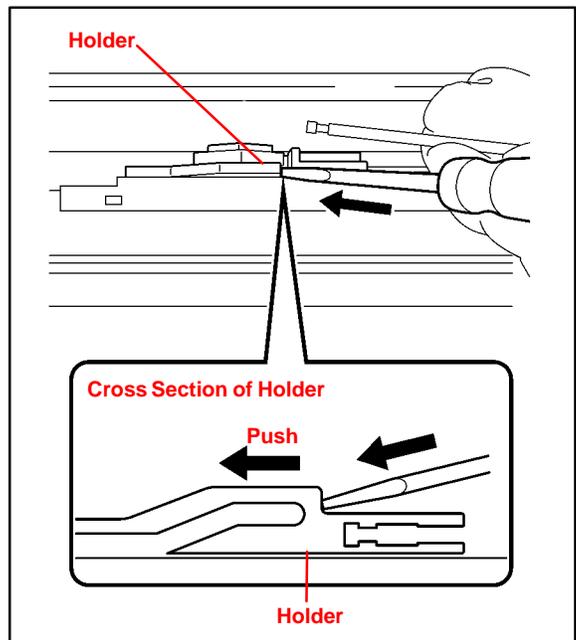
3. Disconnect the wind deflector rod.
 - A. Place a screwdriver against the rail, in the notch area as shown in the illustration, and pry the rod to disconnect it.



- B. Secure the rod with a piece of cloth. Place the cloth between the rod and track to keep it out of the way.



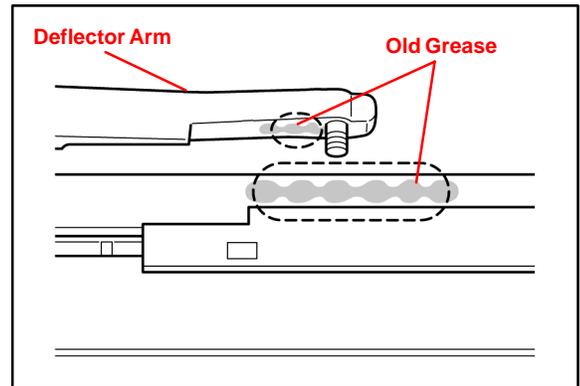
4. Remove the moon roof wind deflector guide rail holder.
 - A. Place a flathead screwdriver against the stepped portion of the holder and lightly tap the screwdriver, using a hammer, to release the holder.
 - B. Move the holder toward the front of the vehicle by pushing it with the screwdriver and remove it from the rail.



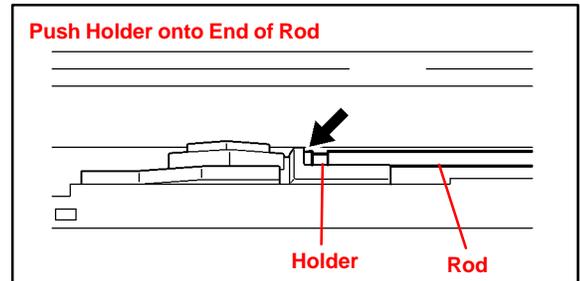
Repair Procedure
(Continued)

5. Replace the grease.
 - A. Using a piece of cloth or scraper, remove the old grease that is adhering to the holder-sliding surface on the rail and the deflector arm.

NOTE:
Remove the grease on both the RH and LH sides.

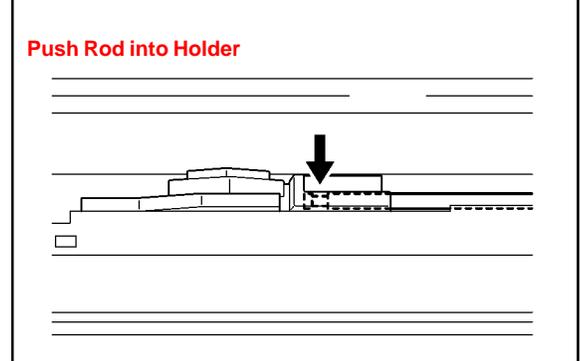


- B. Install the NEW holder (P/N 63257–35040/50, included in repair kit P/N 63207–35040) to the rail by performing the removal procedure in reverse order.

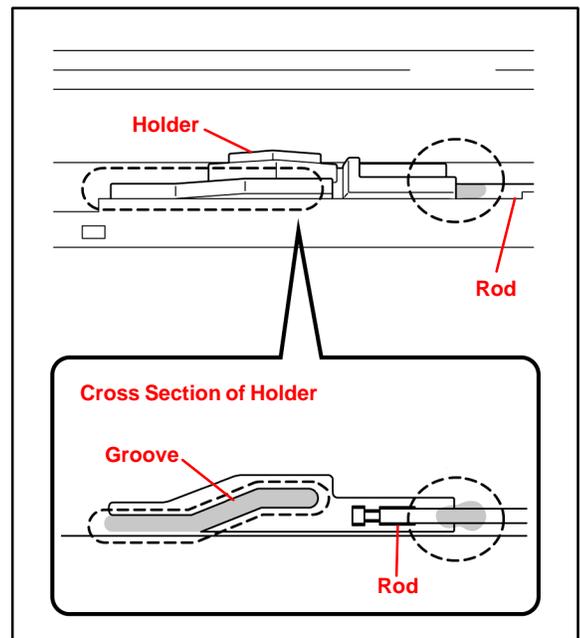


- C. Push the rod into the holder.

NOTE:
Make sure the wind deflector rod is installed in the guide block's forwardmost position.



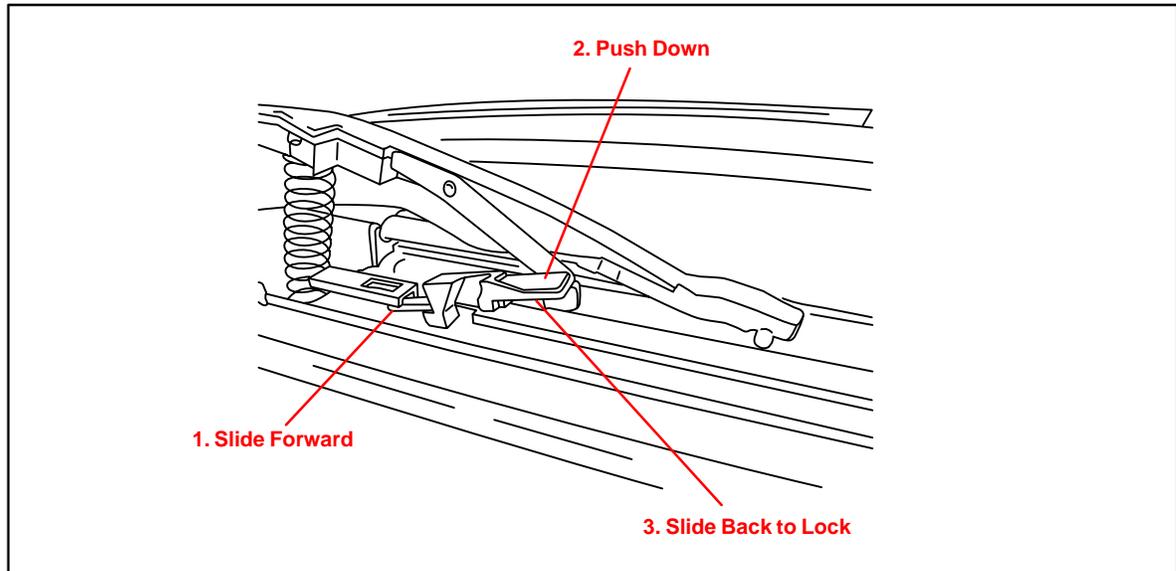
- D. Apply grease (P/N 09170–35010, included in the repair kit) to the contact surface between the holder and the rail and the groove (deflector arm installation portion).



Repair Procedure
(Continued)

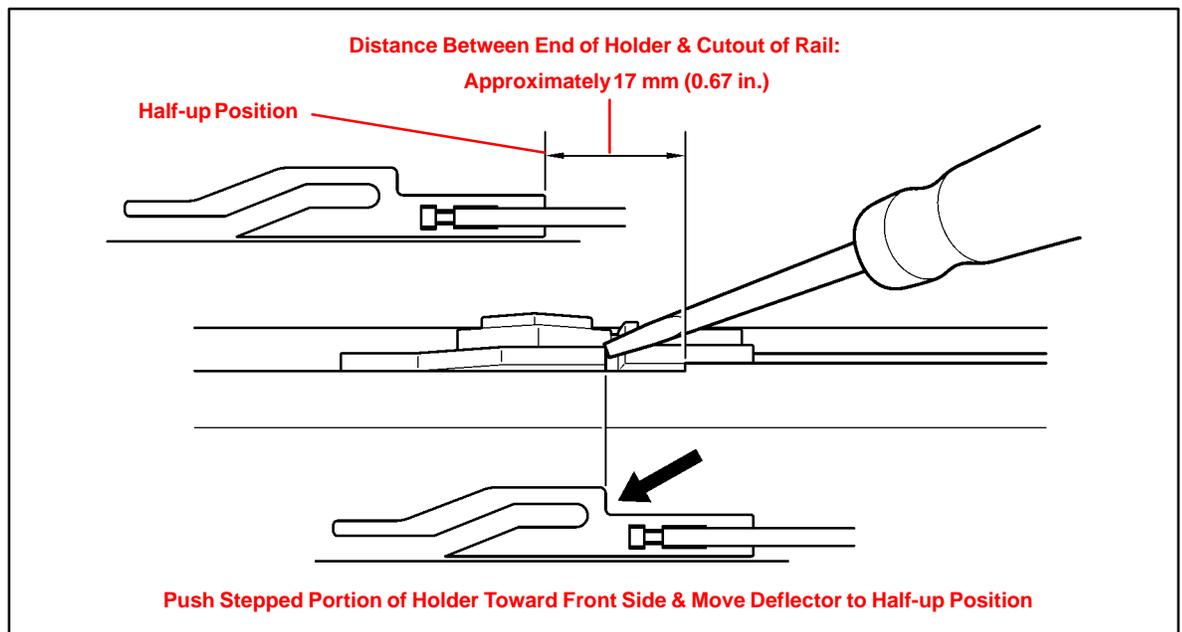
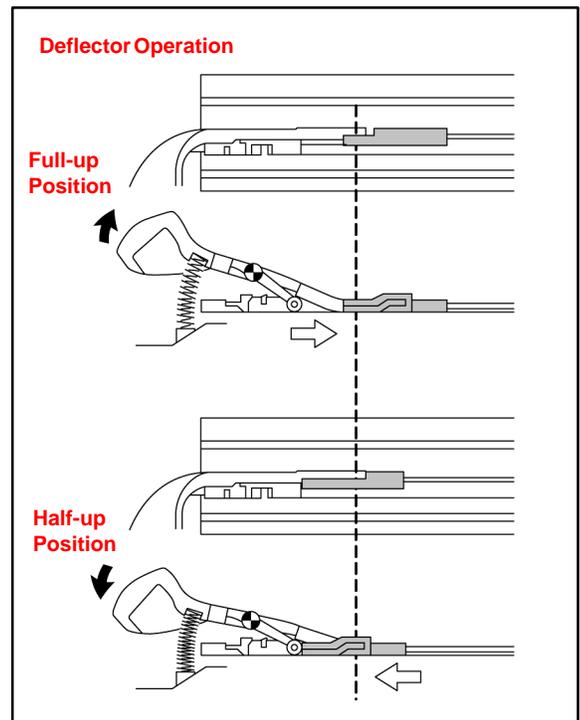
6. Install the roof wind deflector by performing the removal procedure in the reverse order.

NOTE:
Install the front tab first, then slide back, and snap into position.



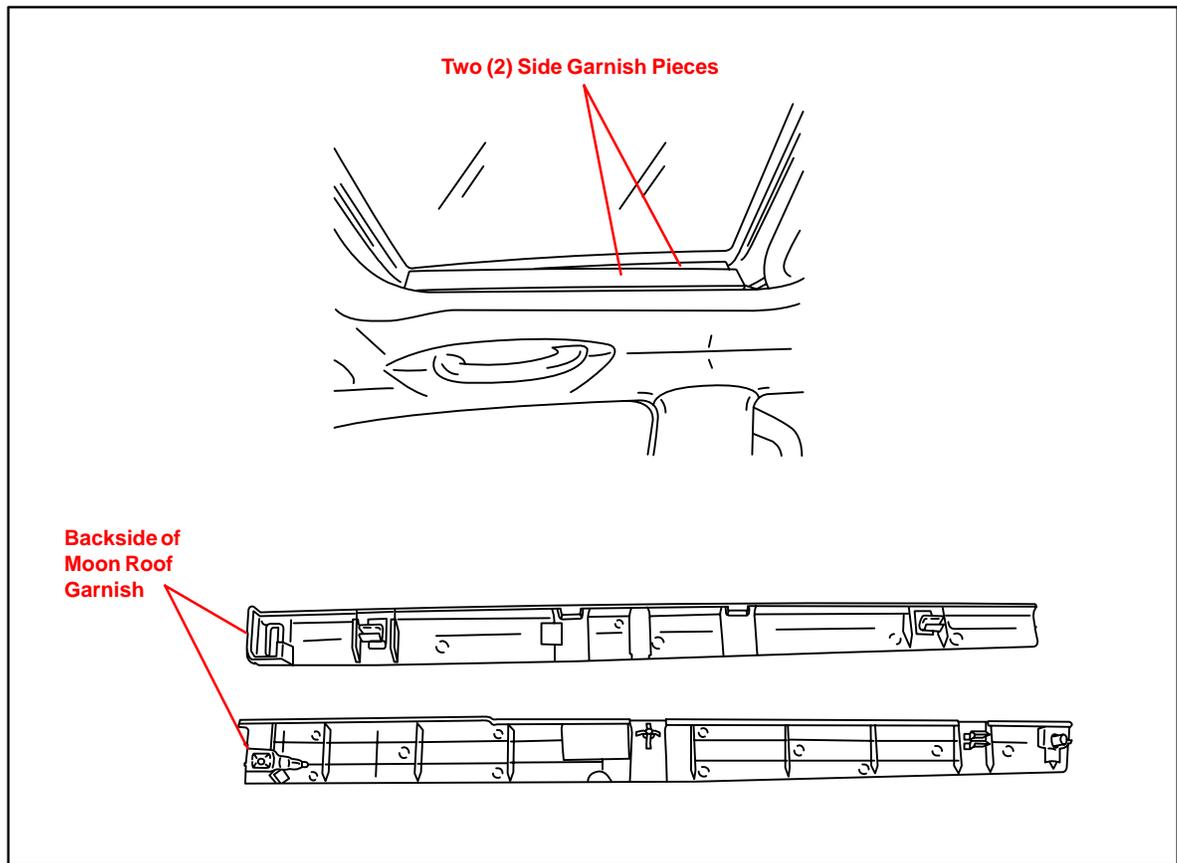
Repair Procedure
(Continued)

- 7. Align the drive cable holders.
 - A. Place a flathead screwdriver against the stepped portion of the holder and push the holder toward the front of the vehicle to move the deflector to the half-up position. Align the RH and LH holder positions.



**Repair
Procedure**
(Continued)

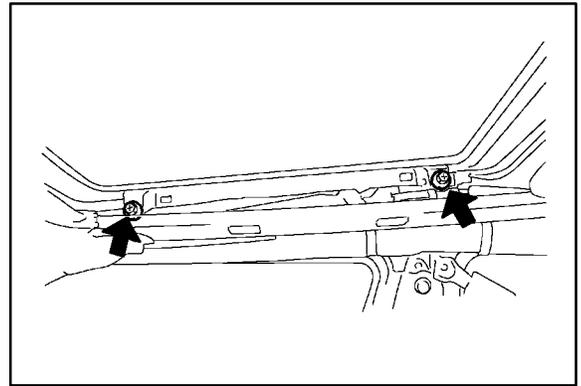
- B. Install the gear assembly and connect the map light assembly. Operate the moon roof switch to move the slide panel to its fully closed position.
- C. Remove the two (2) moon roof side garnish pieces by releasing the locking clips (pull gently).



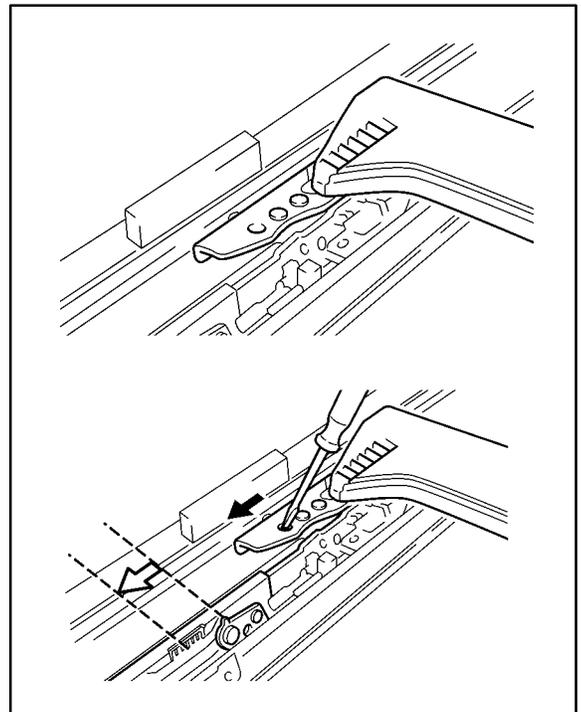
Repair Procedure
(Continued)

- D. Remove the moon roof panel and gear assembly. Set the moon roof system to the fully closed position.

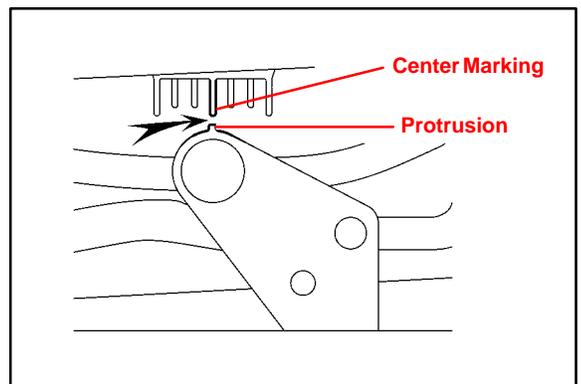
NOTE:
Be careful when removing the Torx screws for the moon roof panel to prevent damage to the screws.



- a. Using a flathead screwdriver, push the bracket of the cable assembly forward.



- b. Align the protrusion of the link to the center marking of the bracket.

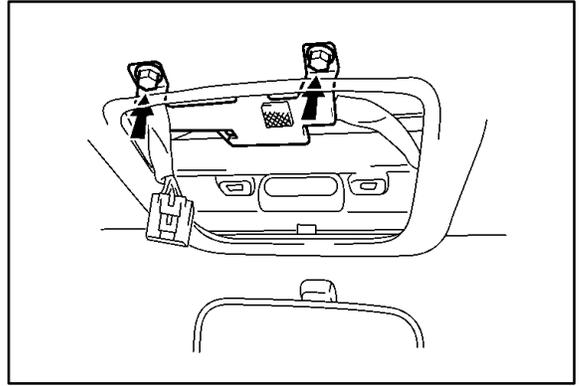


**Repair
Procedure**
(Continued)

8. Install the moon roof drive gear assembly, the moon roof panel, and the side garnish.

**Moon Roof Glass Assembly
Mounting Screw Torque:
4.0 N•m (41 kgf•cm, 35 in.•lbf)**

**Moon Roof Drive Gear Assembly
Mounting Bolt Torque:
5.4 N•m (55 kgf•cm, 48 in.•lbf)**



9. Initialize the moon roof.
- A. Press the moon roof switch on the “TILT-UP” side and hold the button (the button may have to be held for up to 10 seconds).
 - The moon roof will lock in the fully tilted up position.
 - Then, the moon roof will move down a few millimeters.
 - B. Release the switch — initialization is complete.
 - C. Cycle the moon roof through all the operating modes (including auto-open and auto-close modes) to make sure the moon roof functions properly.
10. Install the connected map lamp assembly.