

the water trough area, then retest with water.

Are the drain hoses operating correctly?

Yes	INSPECT other areas of the vehicle that may cause water to enter the roof area such as the windshield or luggage rack, if equipped, and REPAIR as necessary. TEST the system for normal operation, if the condition still exists, GO to B7
No	LOWER the headliner and INSPECT the drain hoses for correct routing. REPAIR or INSTALL a new drain hose(s) as necessary.

B7 CHECK THE CONDITION OF THE ROOF OPENING PANEL FRAME

Check the roof opening panel frame for damage that may cause the roof opening panel seal to seat incorrectly.

Is the roof opening panel frame OK?

Yes	INSTALL a new roof opening panel glass. REFER to: Roof Opening Panel Glass .
No	REPAIR or REPLACE the roof opening panel frame as necessary. REFER to: Roof Opening Panel Frame .

DIAGNOSIS AND TESTING > ROOF OPENING PANEL > PINPOINT TESTS > PINPOINT TEST C : THE ROOF OPENING PANEL RATTLES

Normal Operation and Fault Conditions

When the roof opening panel glass is completely closed, it is flush with the roof panel. All components should be secured correctly. The roof opening panel system is made up of many components that require specific torque specifications and correct installation in order to avoid any NVH concerns. Over time, components may become loose or damaged, fasteners may become loose, sound insulating material may wear out and foreign material may collect in the roof opening panel frame. It is possible that one or more of these conditions may lead to a rattle concern in the roof opening panel system.

Possible Causes

- Incorrect roof opening panel glass alignment
- Roof opening panel lifter assemblies
- Roof opening panel tracks
- Roof opening panel drain channels and guides
- Roof opening panel shield (sunshade)
- Roof opening panel assembly

Visual Inspection and Diagnostic Pre-checks