

Waterleaks

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Diagnostic Information and Procedures

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1. GENERAL INFORMATION

2. WATERLEAKS

3. DIAGNOSTIC INFORMATION AND PROCEDURES

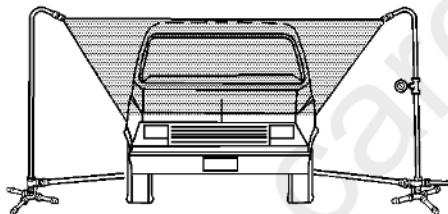
4.

Waterleak Test Preparation

- GM vehicles are designed to operate under normal environmental conditions.
- The design criteria for sealing materials and components takes into consideration the sealing forces required to withstand the natural elements. These specifications cannot take into consideration any artificial conditions, i.e., high pressure car washes.
- The water leak test procedure has been correlated to the natural elements and will determine the ability of a vehicle to perform under normal operating conditions.
- The first step in diagnosing a leak is determining the conditions under which a leak occurs. If the general leak area can be found, the exact entry point can be isolated using a water hose or an air hose. Some trim panels or components may need to be removed in order to repair the leak.
- If leaks are found around a door, door window, rear compartment lid or liftgate area this does not necessarily indicate a bad weatherstrip. An adjustment to these areas may resolve the condition.

Other List:figure-sio

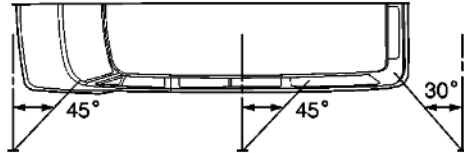
1. Assemble the water test stand as shown.



2.

[Click here for full size](#)

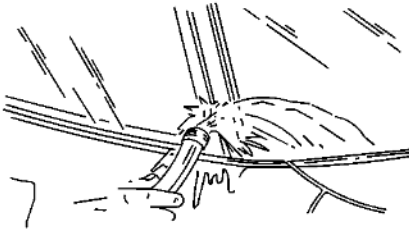
3. Position the stands as shown. The water spray from the stands should overlap the vehicle as shown.
4. Have an assistant inside of the vehicle during the test in order to locate any leaks.
5. The water pressure at the nozzle should maintain a 155 kPa (22 psi), for at least 4 minutes.



6. [Click here for full size](#)
7. In order to check the windshield, aim the water spray 30° down and 45° toward the rear.
8. Aim the water towards the corner of the windshield.
9. In order to check the side windows for leaks, position the water stand towards the center of the rear quarter, aiming the water spray 30° down and 45° toward the rear.
10. In order to check the back window, aim the water spray 30° down and 30° toward the front.

1. GENERAL INFORMATION
2. WATERLEAKS
3. DIAGNOSTIC INFORMATION AND PROCEDURES
- 4.

Water Hose Test

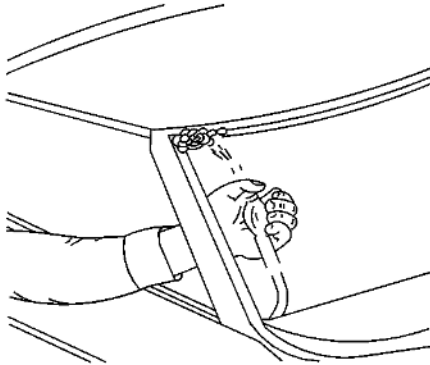


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1. Note:
Use a water hose without the nozzle attached.
2. Have an assistant inside of the vehicle in order to locate the leak.
3. Begin testing at the base of the window or the windshield.
4. Slowly move the hose upward and across the top of the vehicle.

1. GENERAL INFORMATION
2. WATERLEAKS
3. DIAGNOSTIC INFORMATION AND PROCEDURES
- 4.

Air Hose Test



1. [Click here for full size](#)
2. Caution:

The air hose test should only be used on fully cured urethane adhesive. Otherwise, damage to the urethane adhesive bead could result in additional leaks.
3. Using a liquid detergent, diluted with water in a spray bottle, spray the window at the edges. Begin at the bottom and gradually move up and across the top.
4. Note:

The compressed air should not exceed 205 kPa (30 psi).
5. Have an assistant inside of the vehicle with an air hose.
6. Have the assistant aim the compressed air at the suspected areas.
7. Bubbles will form in the soap solution at the location of the leak.

Repair Instructions

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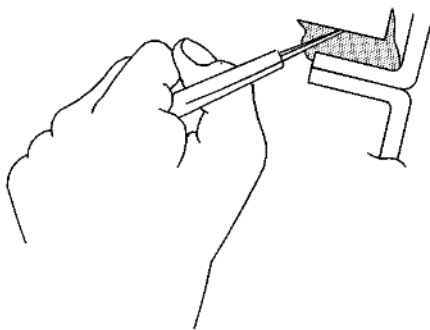
1. GENERAL INFORMATION

2. WATERLEAKS

3. REPAIR INSTRUCTIONS

4.

Body Waterleak Repair



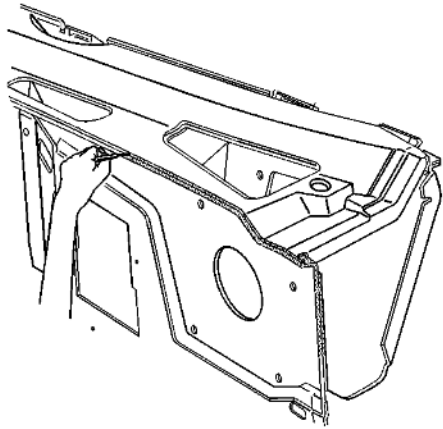
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Warning:

If the vehicle interior is exposed to moisture and becomes soaked up to the level of the sensing and diagnostic module (SDM), the SDM and SDM harness connector must be replaced. The SDM could be activated when powered, which could cause airbag deployment and result in personal injury.

Depending on the location of the waterleak, you may have to remove certain interior components in order to repair the leak.

1. If the floor carpet is wet, refer to [Floor Carpet Drying](#).



2. [Click here for full size](#)
3. Cut out a portion of the adhesive caulking in the leak area from inside or outside of the vehicle.
4. Clean and remove all loose particles of the adhesive old caulking from the area.
5. Apply joint body and seam sealer where the old adhesive caulking was removed.
6. Allow the adhesive caulking to dry for several hours.
7. Test for leaks.
8. Install the trim, if removed.

1. GENERAL INFORMATION

2. WATERLEAKS

3. REPAIR INSTRUCTIONS

4.

Stationary Window Waterleak Repair

Warning:

If any water enters the vehicle interior up to the level of the carpet or higher and soaks the carpet, the sensing and diagnostic module (SDM) and the SDM harness connector may need to be replaced. The SDM could be activated when powered, which could cause deployment of the air bag(s) and result in personal injury. Before attempting these procedures, the SIR system must be disabled. Refer to Disabling the SIR System.

With the ignition OFF, inspect the SDM mounting area, including the carpet. If any significant soaking or evidence of significant soaking is detected, you must perform the following tasks:

1. Remove all water.
2. Repair the water damage.
3. Replace the SDM harness connector.
4. Replace the SDM.

Failure to follow these tasks could result in possible air bag deployment, personal injury, or otherwise unneeded SIR system repairs.

1. If the floor carpet is wet refer to [Floor Carpet Drying](#).
2. Remove the trim moldings or the headliner in order to repair the leak, if needed.
3. Determine the source of water entry.
4. If water is leaking at the edge of the windshield, reseal the windshield using Urethane Adhesive Caulking Kit GM P/N 12346392 or the equivalent.
5. If water leaks into the vehicle at the sides of the stationary windows, reseal the window using Urethane Adhesive Caulking Kit GM P/N 12346392 or the equivalent.

BODY HARDWARE AND TRIM

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