

# Waterleaks

## Diagnostic Information and Procedures

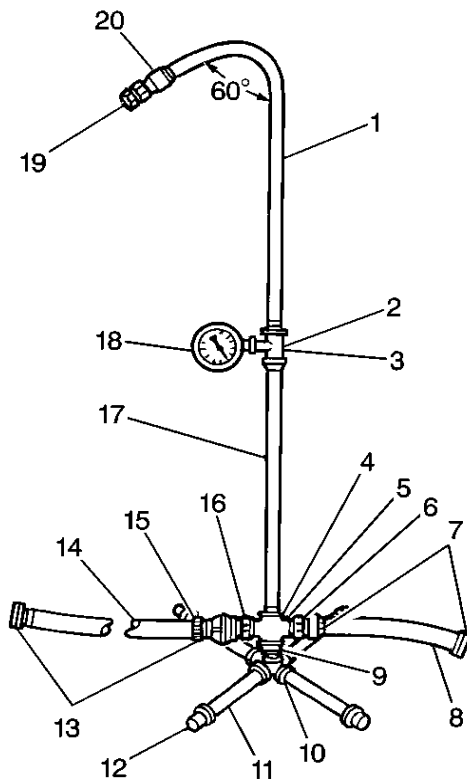
### Generalized Testing

#### Water Leak Tests

You can use various methods in order to inspect for water leaks after the window adhesive dries. Use the first test method for generalized testing. The first test method uses a large volume of water spread to a general area without exceeding the sealing limitations of the glass. Locate the entry point by using the water hose test or the air hose test.

#### Checking With Watertest Stands

##### *Watertest Stand Assembly:*

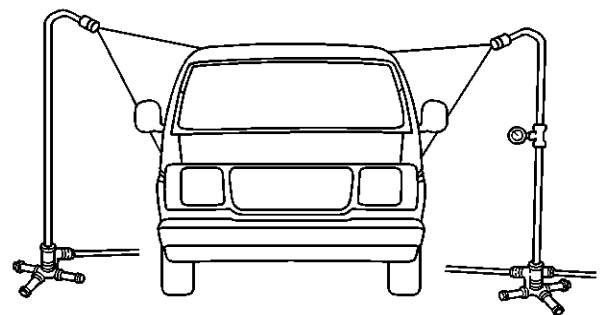


1. Pipe (0.5 x 36 in)
2. Reducing Tee, Right Stand Only (0.5 x 0.5 x 0.25 in)
3. Coupling, Left Stand Only, (0.5 in)
4. Tee, Left Stand Only (0.5 in)
5. Cross, Right Stand Only (0.5 in)
6. Pipe to Hose Nipple, Right Stand Only (0.5 in)
7. Female Hose Coupling (5/8 in)
8. Input Hose, Right Stand Only (2.0 ft) (5/8 in diameter)

9. Close Nipple (0.5 in)
10. Cross (0.5 in) with Weld-On Cap (0.5 in)
11. Nipple (0.5 x 12 in)
12. Cap (0.5 in)
13. Female Hose Coupling (5/8 in)
14. Cross Hose (12 ft) (5/8 in diameter)
15. Hose Quick Connect
16. Pipe to Hose Nipple (0.5 in)
17. Pipe (0.5 x 60 in)
18. Water Pressure Gage, Right Stand Only
19. Full Jet Spray Nozzle, No. 1/2GG-25
20. Coupling (0.5 in)

Perform the following steps when assembling the watertest stands:

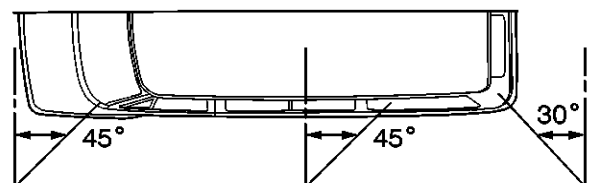
1. Position the stands. The water spray from the stands will overlap on the vehicle.
- 2.



Run the water at a volume of 14 liters (3.7 gallons) per minute and at a pressure of 155 kPa (22 psi) measured at the nozzle, for at least 4 minutes.

3. Have an assistant inside the cab during the test in order to inspect for the location of any leaks.

4.



In order to inspect the windshield, aim the water spray 30 degrees down and 45 degrees toward the rear. Aim at the corner of the windshield.

5. In order to check the side windows, aim the water spray 30 degrees down and 45 degrees toward the rear. Aim at the center of the rear quarter.
6. In order to inspect the back window, aim the water spray 30 degrees down and 30 degrees toward the front.

## Diagnostic Information and Procedures

### Dust Leaks

Dust may leak into the vehicle where water will not. This happens particularly in the lower portion of the interior.

Forward motion of the vehicle can create a slight vacuum which pulls air and dust into the vehicle.

In order to determine the location of dust leaks, perform the following steps:

1. Remove the mats from the floor.
2. Remove the mats from the kick panel.
3. Remove the insulation from the floor.
4. Remove the insulation from the kick panel.
5. Drive the vehicle on a dusty road.
6. Examine the interior.

Dust in the shape of a small cone or slit will usually be found at the point of leakage.

7. Mark the points of leakage.

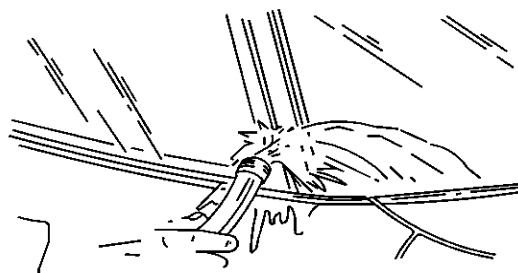
8. Shine bright lamps on the underside of the floor and the cowl.

Ensure that the interior is darkened when performing this step.

9. Have an assistant mark any points inside of the vehicle for any points where the light shines through.
  - Inspect the weld joints.
  - Inspect the body mounts.
10. Seal any leaks with an air-drying, body-sealing compound.

## Diagnostic Information and Procedures

### Water Hose Test

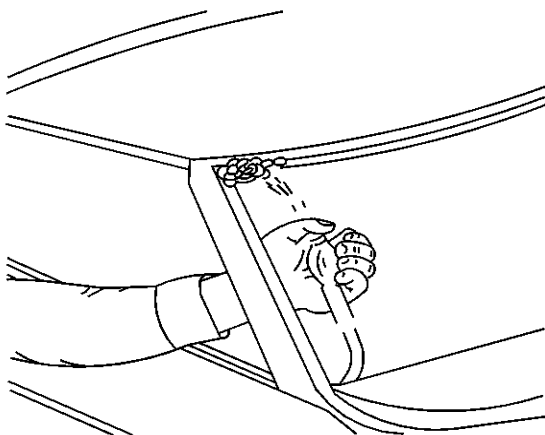


1. **Important:** Use a water hose without the nozzle attached.  
Have someone inside of the vehicle in order to locate the leak.
2. Begin testing at the base of the window or the windshield.
3. Slowly move the hose upward and across the top of the vehicle.

## Diagnostic Information and Procedures

### Air Hose Test

1.



**Notice:** 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.

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.

2. **Important:** The compressed air should not exceed 205 kPa (30 psi).

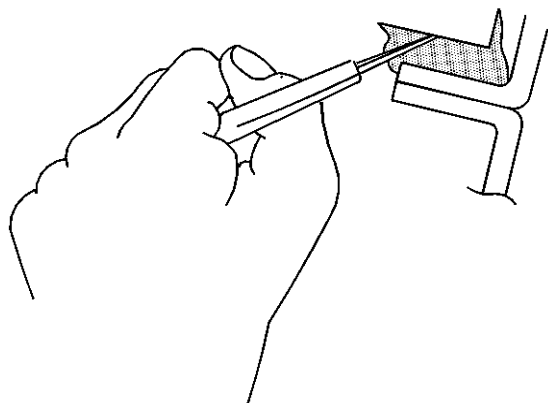
Have an assistant inside of the vehicle with an air hose.

3. Have the assistant aim the compressed air at the suspected areas.

Bubbles will form in the soap solution at the location of the leak.

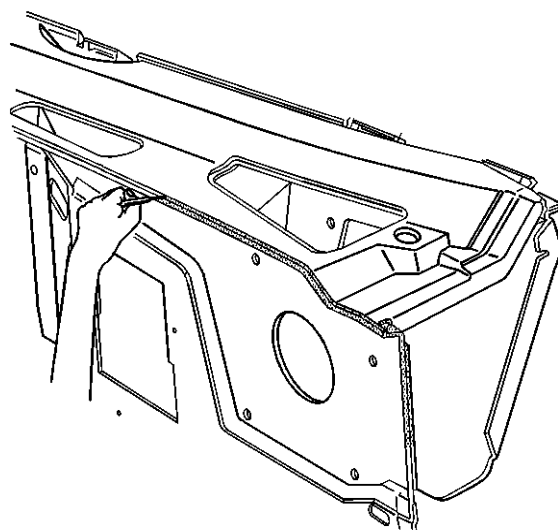
## Repair Instructions

### Body Waterleak Repair



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

▪



Cut out a portion of the adhesive caulking in the leak area from inside or outside of the vehicle.

- Clean and remove all loose particles of the old adhesive caulking from the area.
- Apply joint body and seam sealer where the old adhesive caulking was removed.
- Allow the adhesive caulking to dry for several hours.
- Test for leaks.
- Install the trim, if removed.

## Repair Instructions

### Stationary Window Waterleak Repair

1. Remove the trim moldings or the headliner in order to repair the leak, if needed.
2. Determine the source of water entry.
3. If water is leaking at the edge of the windshield, reseal the windshield using Urethane Adhesive Caulking Kit Jinbei GM P/N 12346392.
4. If water leaks into the vehicle at the sides of the stationary windows, reseal the window using Urethane Adhesive Caulking Kit Jinbei GM P/N 12346392.