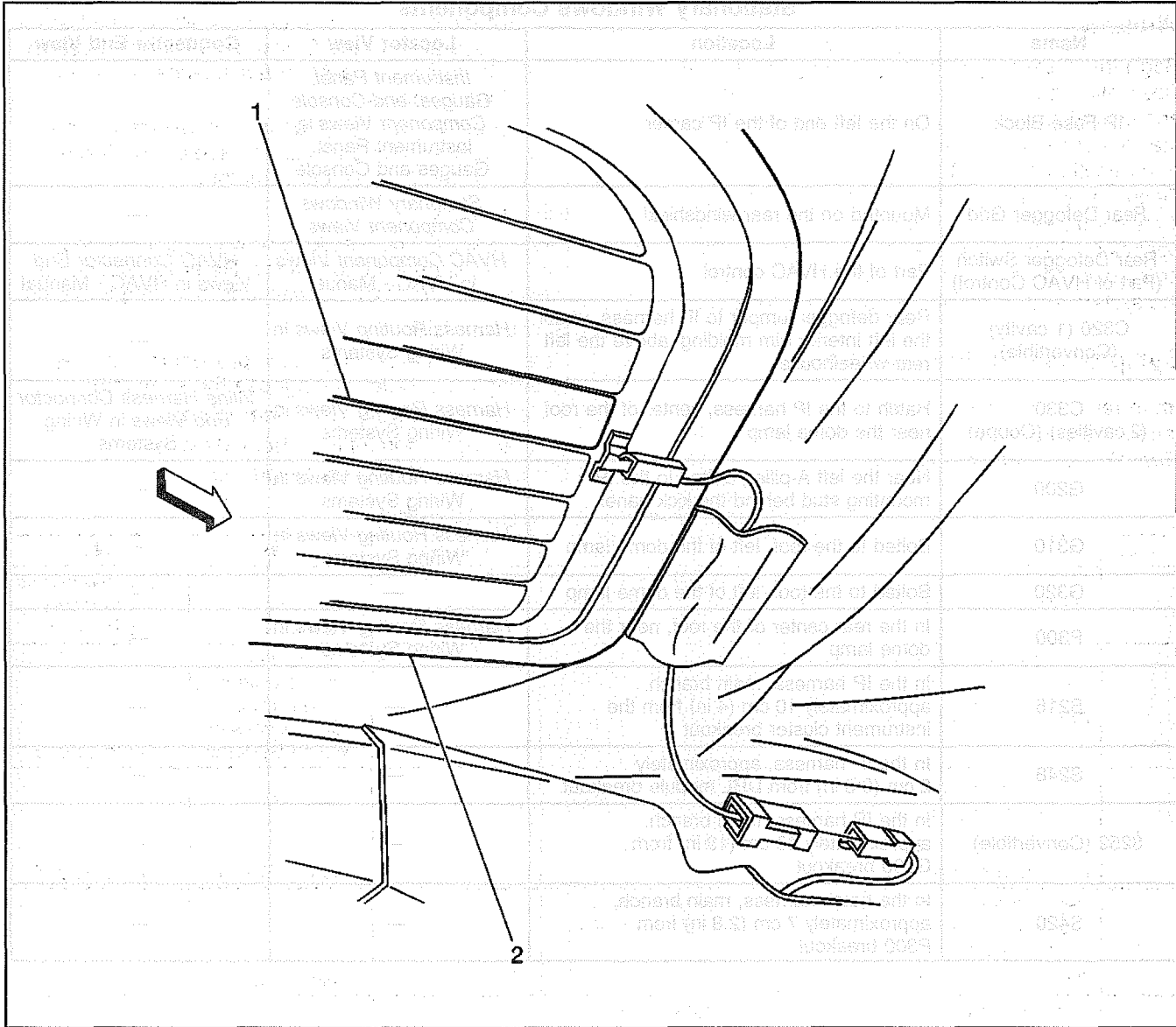


Stationary Windows Component Views

Component Location

Inside Rear Convertible Top



374419

Legend

(1) Rear Defogger Grid

(2) Folding Top Glass

## Diagnostic Information and Procedures

### A Diagnostic Starting Point - Stationary Windows

Begin the system diagnosis by reviewing the system Description and Operation. Reviewing the Description and Operation information will help you determine the correct symptom diagnostic procedure when a malfunction exists. Reviewing the Description and Operation information will also help you determine if the condition described by the customer is normal operation. Refer to *Symptoms - Stationary Windows* in order to identify the correct procedure for diagnosing the system and where the procedure is located.

### Symptoms - Stationary Windows

**Important:** Review the system operation in order to familiarize yourself with the system functions. Refer to *Rear Window Defogger Operation*.

### Visual/Physical Inspection

- Inspect for aftermarket devices which could affect the operation of the Stationary Windows System. Refer to *Checking Aftermarket Accessories in Wiring Systems*.
- Inspect the easily accessible or visible system components for obvious damage or conditions which could cause the symptom.

### Intermittent

Faulty electrical connections or wiring may be the cause of intermittent conditions. Refer to *Testing for Intermittent and Poor Connections in Wiring Systems*.

### Symptom List

Refer to a symptom diagnostic procedure from the following list in order to diagnose the symptom:

- Defogger Always On - Rear Window*
- Defogger Inoperative - Rear Window*
- Defogger Grid Lines Diagnosis*

### Defogger Always On - Rear Window

Step	Action	Value(s)	Yes	No
1	Did you review the system operation and perform the necessary inspections?	—	Go to <i>Step 2</i>	Go to <i>Symptoms - Stationary Windows</i>
2	1. Turn the ignition to the OFF position. 2. Turn the rear defogger off. Does the rear defogger turn off?	—	Go to <i>Testing for Intermittent and Poor Connections in Wiring Systems</i>	Go to <i>Step 3</i>
3	1. Turn the ignition switch to the OFF position. 2. Disconnect the HVAC control connector C4. 3. Turn the ignition switch to the RUN position. Is the rear defogger still on?	—	Go to <i>Step 4</i>	Go to <i>Step 5</i>
4	Repair the short to battery voltage in the supply voltage circuit of the rear defogger grid. Refer to <i>Wiring Repairs in Wiring Systems</i> . Did you complete the repair?	—	Go to <i>Step 6</i>	—
5	Replace the HVAC control. Refer to <i>Control Assembly Replacement in HVAC Systems - Manual</i> . Did you complete the replacement?	—	Go to <i>Step 6</i>	—
6	Operate the system in order to verify the repair. Did you correct the condition?	—	System OK	Go to <i>Step 3</i>

## Defogger Inoperative - Rear Window

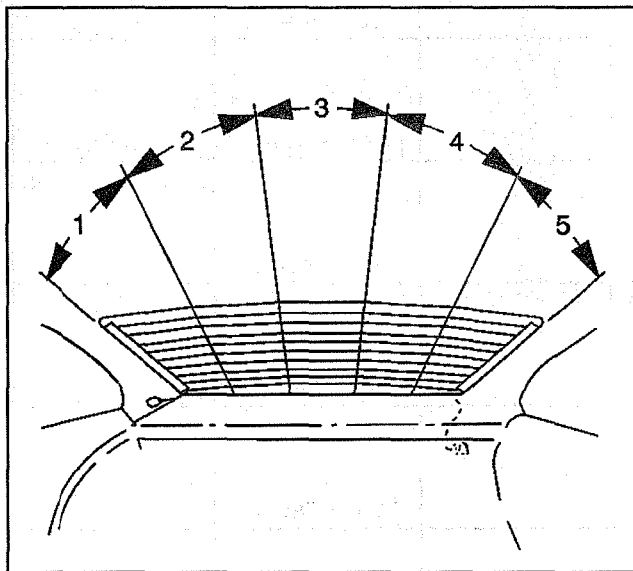
Step	Action	Value(s)	Yes	No
1	Did you review the system operation and perform the necessary inspections?	—	Go to Step 2	Go to Symptoms - Stationary Windows
2	1. Turn the ignition to the RUN position. 2. Turn the rear defogger switch on. 3. Observe the status of the defogger on indicator. Does the rear defogger turn on?	—	Go to Testing for Intermittent and Poor Connections in Wiring Systems	Go to Step 3
3	Are both the defogger indicator and the defogger grid inoperative?	—	Go to Step 4	Go to Step 5
4	1. Turn the ignition switch to the OFF position. 2. Connect a test lamp between the HVAC control connector C4 terminals A and D. Refer to <i>Circuit Testing</i> in Wiring Systems. Does the test lamp illuminate?	—	Go to Step 7	Go to Step 8
5	Is the defogger grid operative while the defogger indicator is inoperative?	—	Go to Step 18	Go to Step 6
6	1. Connect a test lamp between the HVAC control connector C4 terminal B and ground. Refer to <i>Circuit Testing</i> in Wiring Systems. 2. Press the rear defogger switch. Does the test lamp illuminate?	—	Go to Step 12	Go to Step 18
7	1. Connect a test lamp between the HVAC control connector C4 terminals C and D. Refer to <i>Circuit Testing</i> in Wiring Systems. 2. Turn the ignition switch to the RUN position. Does the test lamp illuminate?	—	Go to Step 17	Go to Step 11
8	Connect a test lamp between the HVAC control connector C4 terminal A and ground. Refer to <i>Circuit Testing</i> in Wiring Systems. Does the test lamp illuminate?	—	Go to Step 9	Go to Step 10
9	Repair a poor connection or an open in the ground circuit of the HVAC control. Refer to <i>Wiring Repairs</i> or <i>Connector Repairs</i> in Wiring Systems. Did you complete the repair?	—	Go to Step 19	—
10	Repair a poor connection or an open in the battery voltage circuit of the HVAC control. Refer to <i>Wiring Repairs</i> or <i>Connector Repairs</i> in Wiring Systems. Did you complete the repair?	—	Go to Step 19	—
11	Repair a poor connection or an open in the ignition 3 voltage circuit of the HVAC control. Refer to <i>Wiring Repairs</i> or <i>Connector Repairs</i> in Wiring Systems. Did you complete the repair?	—	Go to Step 19	—
12	Connect a test lamp between the supply voltage circuit of the rear defogger grid and the ground circuit of the rear defogger grid at the rear defogger grid connector. Refer to <i>Circuit Testing</i> in Wiring Systems. Does the test lamp illuminate?	—	Go to Step 13	Go to Step 14
13	Replace the rear defogger grid. Refer to <i>Rear Lift Window Replacement</i> . Did you complete the replacement?	—	Go to Step 19	—

Defogger Inoperative - Rear Window (cont'd)

Step	Action	Value(s)	Yes	No
14	Connect a test lamp between the supply voltage circuit of the rear defogger grid and ground. Refer to <i>Circuit Testing</i> in Wiring Systems. Does the test lamp illuminate?	—	Go to Step 16	Go to Step 15
15	Repair a poor connection or an open in the supply voltage circuit of the rear defogger grid. Refer to <i>Wiring Repairs</i> or <i>Connector Repairs</i> in Wiring Systems. Did you complete the repair?	—	Go to Step 19	—
16	Repair a poor connection or an open in the ground circuit of the rear defogger grid. Refer to <i>Wiring Repairs</i> or <i>Connector Repairs</i> in Wiring Systems. Did you complete the repair?	—	Go to Step 19	—
17	Inspect for and repair a short to ground or an open in the supply voltage circuit of the rear defogger grid. Refer to <i>Circuit Testing</i> and <i>Wiring Repairs</i> in Wiring Systems. Did you find and repair a short or an open?	—	Go to Step 19	Go to Step 18
18	Replace the HVAC control. Refer to <i>Control Assembly Replacement</i> in HVAC Systems - Manual. Did you complete the replacement?	—	Go to Step 19	—
19	Operate the system in order to verify the repair. Did you correct the condition?	—	System OK	Go to Step 3

Defogger Grid Lines Diagnosis

Test Procedure



71185

1. Start the engine.
2. Activate the rear window defogger system.
3. Ground one test lamp lead.

4. Contact the other test lamp lead to each of the grid lines at points 1 through 5 as shown in the figure.

Specification Normal Test Lamp Brilliance

- 4.1. No Bulb Brilliance (1)
- 4.2. 1/4 Bulb Brilliance (2)
- 4.3. 1/2 Bulb Brilliance (3)
- 4.4. 3/4 Bulb Brilliance (4)
- 4.5. Full Bulb Brilliance (5)

**Important:** The lamp brilliance will decrease proportionately to the increased resistance in the grid line as the probe is moved from the feed bus wire to the ground bus wire. Test all of the grid lines in at least two places in order to eliminate the possibility of bridging a break. The range of test lamp brilliance may vary from one window to another.

5. Compare the test lamp brilliance pattern with the normal test lamp brilliance in order to check for proper grid operation:
  - If the test lamp shows full brilliance at both ends of the grid lines, inspect for a loose ground wire contact to body ground.
  - If an abnormal lamp reading is apparent on a specific grid line, place the test lamp lead on that grid at the feed bus bar and move the lead toward the ground bus bar until the lamp goes out. This will indicate the location of the break.

# Defogger Schematics (HVAC Control, Rear Defogger Grid)

