

Troubleshooting

Sunlight Sensor

Self-diagnosis indicator light C comes on: Indicates a problem in the sunlight sensor circuit. Use a digital multimeter (KS – AHM – 32 – 003) to check it.

The sunlight sensor is a light sensitive, variable resistance diode. The resistance of the diode increases as the intensity of the light increases.

Problem in the sunlight sensor circuit.

Disconnect the 2-P connector from the sunlight sensor.

Measure the voltage between the 2 terminals in the sunlight sensor, when held under a brightlight or sunlight.

Is there approx. 2.0 ± 1 V?

NO

Replace sunlight sensor.

YES

Turn the ignition switch ON.

Measure voltage between the ORN wire (+) terminal in the connector and body ground.

Is there approx. 5 V?

NO

Repair open circuit or short circuit to body ground in ORN wire between climate control unit and sunlight sensor. If wire is OK, substitute a known good climate control unit and retest.

YES

Measure voltage between GRN/RED wire (–) terminal and ORN wire (+) terminal.

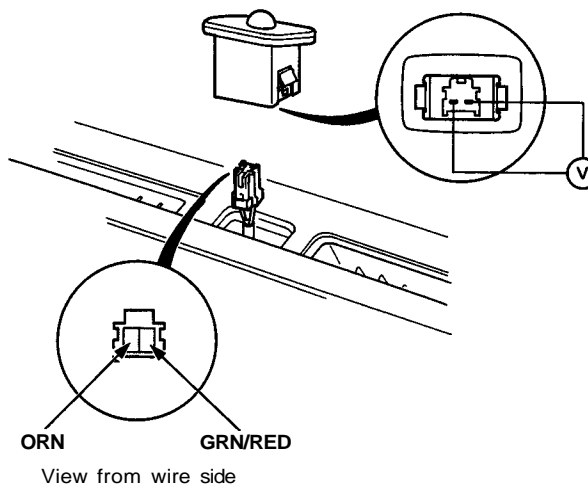
Is there approx. 5 V?

NO

Repair open in GRN/RED or ORN wire between climate control unit and sunlight sensor.

YES

Remove the climate control unit (page 22-6). Substitute a known-good climate control unit and recheck. If symptom/indication goes away, replace the original climate control unit.



NOTE: Under normal room lighting, the sunlight sensor voltage should be 1.4 ± 0.2 V.

