

Troubleshooting

In-car Temperature Sensor

Self-diagnosis indicator light A comes on: A problem in the in-car temperature sensor circuit.

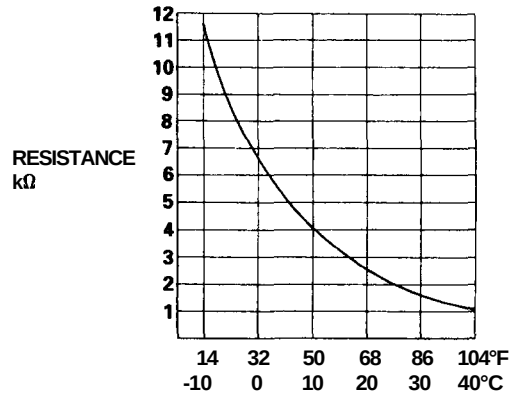
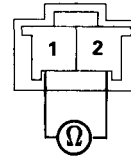
The in-car temperature sensor is a temperature dependent resistor (thermistor). The resistance of the thermistor decreases as the temperature inside the vehicle increases.

Self-diagnosis circuit check indicates a problem in the in-car temperature sensor circuit.

Check the in-car temperature sensor:

1. Remove the in-car temperature sensor (see page 22-60), and disconnect the 2P connector.
2. Measure the resistance between the No. 1 and No. 2 terminals of the in-car temperature sensor.

IN-CAR TEMPERATURE SENSOR



CAUTION: The sensor uses a thermistor which can be damaged if high current is applied during testing. Therefore, use a circuit tester with an output of 1 mA or less at the 20 kΩ range.

* Check for change in resistance by heating or cooling the sensor with a hair drier, etc.

* Is the resistance within the specifications shown on the graph.

NO

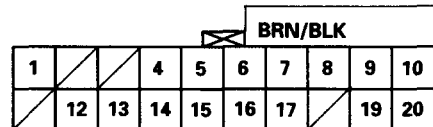
Replace the in-car temperature sensor.

YES

Check for a short in the wire:

1. Remove the climate control unit (see page 22-55), and disconnect the 8P and 20P connectors.
2. Check for continuity between the No. 6 terminal of the 20P connector and body ground.

CLIMATE CONTROL UNIT 20P CONNECTOR



Wire side of female terminals

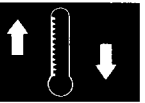
Is there continuity?

YES

Repair short in the wire between the climate control unit and the in-car temperature sensor.

NO

To page 22-17



From page 22-16

Check for an open in the wire:

Check for continuity between the No. 6 terminal of the climate control unit 20P connector and the No. 2 terminal of the in-car temperature sensor 2P connector.

Is there continuity?

NO

Repair open in the wire between the climate control unit and the in-car temperature sensor.

YES

Check for an open in the wire:

Check for continuity between the No. 2 terminal of the climate control unit 8P connector and the No. 1 terminal of the in-car temperature sensor 2P connector.

Is there continuity?

NO

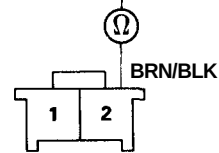
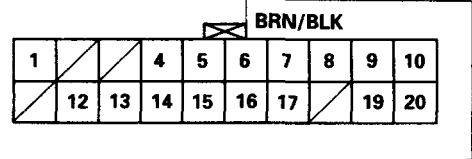
Repair open in the wire between the climate control unit and the in-car temperature sensor.

YES

Check for loose wires or poor connections at the climate control unit 8P and 20P connectors and at the in-car temperature sensor 2P connector. If the connections are good, substitute a known-good climate control unit, and recheck. If the symptom/indication goes away, replace the original climate control unit.

CLIMATE CONTROL UNIT 20P CONNECTOR

Wire side of female terminals



IN-CAR TEMPERATURE SENSOR 2P CONNECTOR

Wire side of female terminals

CLIMATE CONTROL UNIT 8P CONNECTOR

Wire side of female terminals

