

Troubleshooting

Flowchart — Outside Air Temperature Sensor

The outside air temperature sensor is a temperature dependent resistor (thermistor). The resistance of the thermistor decreases as the temperature outside the car increases. Use a digital multimeter (KS-AHM-32-003) to check it.

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

Disconnect the 2P connector from the outside air temperature sensor.

Measure resistance between the No. ① and No. ② wire terminals.

*Is the resistance within the range shown on the chart?

NO

Replace the outside air temperature sensor.

YES

Turn the ignition switch ON.

Measure voltage between the PNK wire terminal (+) and body ground (-).

Is there 4–6 V?

NO

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YES

Measure voltage between the PNK wire terminal (+) and the BLK wire terminal (-).

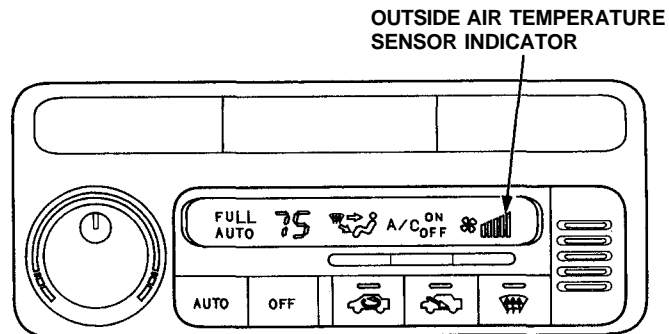
Is there 4–6 V?

NO

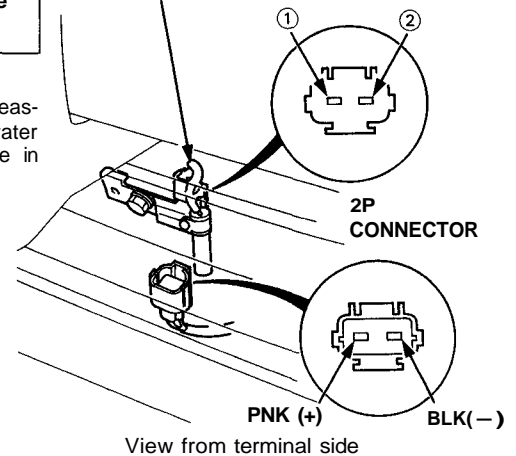
Repair open in the BLK wire between the evaporator temperature sensor and the climate control unit.

YES

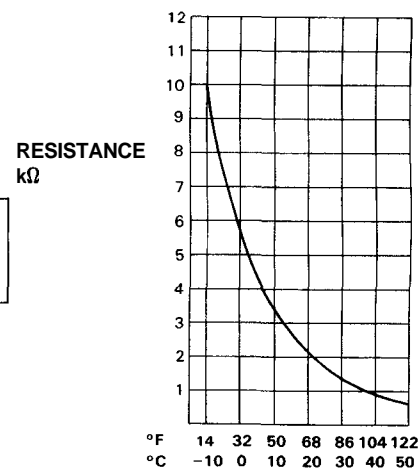
Substitute a known-good climate control unit and recheck. If symptom/indication goes away, replace the original climate control unit.



OUTSIDE AIR TEMPERATURE SENSOR



*: Dip the sensor in ice water and measure the resistance. Then pour hot water on the sensor and check for change in resistance.



CAUTION: The sensor uses a thermistor which can be damaged if high current is applied to it during testing. Therefore, use a circuit tester that puts out a measuring current of 1 mA or less. (At 20 kΩ range)



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Turn the ignition switch OFF.

Remove the climate control unit
(see page 22-6).

Disconnect the 30P connector from
the climate control unit.

Check the PNK wire for continuity
to body ground.

Is there continuity?

YES

Repair short in the PNK wire be-
tween the heater core temperature
sensor and the climate control unit.

NO

Using a jumper wire, connect the
PNK wire terminal in the outside air
temperture sensor connector (har-
ness half) to body ground.

Check for continuity in the PNK
wire between the climate control
unit connector and body ground.

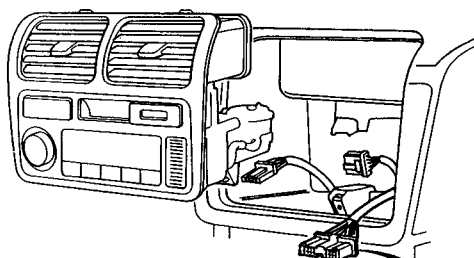
Is there continuity?

NO

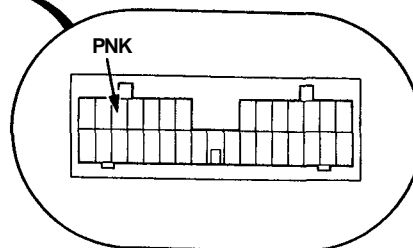
Repair open in the PNK wire be-
tween the heater core temperature
sensor and the climate control unit.

YES

Substitute a known-good climate
control unit and recheck. If
sympton/indication goes away,
replace the original climate control
unit.



30P CONNECTOR



View from wire side