# COOLANT TEMPERATURE METER/ECT SENSOR

### SYSTEM INSPECTION

# WHEN ENGINE IS HOT BUT NEEDLE DOES NOT MOVE

Before performing the system inspection, check the following:

- Battery condition
- Burned fuse
- Horn operation

Remove the side body cover (page 3-4).

Disconnect the ECT sensor 3P (Gray) connector.

Short the connector terminal of the wire harness side and ground with the jumper wire.

#### **CONNECTION: Green/Blue – Ground**

Do not leave the T terminal connected p with jumper wire T for a long time, as it Ir causes damage to the coolant temperature meter –

Turn the ignition switch ON, check the coolant temperature meter needle move to "H". The needle moves if the system circuit is normal.

In that case, check the ECT sensor (page 21-9).

If the needle does not move, check the following:

- Green/Blue wire between the ECT sensor and speedometer for open or short circuit
- Black/Brown wire between the fuse box and speedometer for open circuit
- Green/Black wire between the speedometer and ground for open circuit

If the wires are normal, replace the speedometer panel with a new one, and recheck.

After inspection, reset the self-diagnosis memory data from the ECM (page 6-15).

## ECT SENSOR INSPECTION

Remove the ECT sensor (page 6-52).

Suspend the ECT sensor in a pan of coolant on an electric heating element and measure the resistance between the ECT sensor terminal and body as the coolant heats up.

- Dip the ECT sensor in coolant up to its threads while keeping the distance at least 40 mm (1.57 in) from the bottom of the pan to the bottom of the sensor.
- Keep the temperature constant for 3 minutes before testing. A sudden change of temperature will result in incorrect reading. Do not let the thermometer or ECT sensor touch the pan.

Measure the resistance between the ECT sensor terminal and thread.

#### **CONNECTION: A – Ground**

Temperature	50 °C (122 °F)	80 °C (176 °F)
Resistance	<b>130 – 180</b> Ω	<b>47 – 57</b> Ω

If the resistance is out of above range by 10% at any temperature listed, replace the ECT sensor.





