

# ENGINE COOLANT TEMPERATURE (ECT) SENSOR INSPECTION [ZJ, Z6]

B3E014018840W05

## Note

- Before performing the following inspection, make sure to follow the procedure as indicated in the troubleshooting flowchart. (See [Troubleshooting Procedure](#).)

## Continuity Inspection

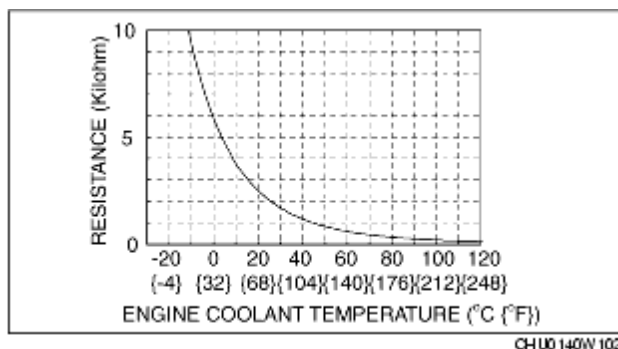
1. Disconnect the ECT sensor connector.
2. Remove the ECT sensor. (See [ENGINE COOLANT TEMPERATURE \(ECT\) SENSOR REMOVAL/INSTALLATION \[ZJ, Z6\]](#).)
3. Place the ECT sensor in the water and while increasing water temperature, measure the resistance between terminals A and B.

- If not within the specification, replace the ECT sensor. (See [ENGINE COOLANT TEMPERATURE \(ECT\) SENSOR REMOVAL/INSTALLATION \[ZJ, Z6\]](#).)
- If the monitor item condition/specification (reference) is not within the specification, even though there is no malfunction, perform the "Circuit Open/Short Inspection".

### ECT sensor resistance

Water temperature (°C {°F})	Resistance (kilohm)
20 {68}	2.212.69
80 {176}	0.2870.349

### ECT sensor characteristics graph (reference)



## Circuit Open/Short Inspection

1. Remove the PCM connector cover.
2. Disconnect the PCM connector. (See [INTAKE-AIR SYSTEM REMOVAL/INSTALLATION \[ZJ, Z6\]](#).)
3. Inspect the following wiring harness for open or short circuit (continuity check).

**Open circuit**

- If there is no continuity, the circuit is open. Repair or replace the wiring harness.
- ECT sensor terminal A and PCM terminal 2J
- ECT sensor terminal B and PCM terminal 2AX

**Short circuit**

- If there is continuity, the circuit is shorted. Repair or replace the wiring harness.
- ECT sensor terminal A and power supply
- ECT sensor terminal A and body GND
- ECT sensor terminal B and power supply