

CAMSHAFT POSITION (CMP) SENSOR INSPECTION [ZJ, Z6]

B3E014018200W02

Note

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

Visual inspection

1. Remove the CMP sensor. (See [CAMSHAFT POSITION \(CMP\) SENSOR REMOVAL/INSTALLATION \[ZJ, Z6\]](#).)
2. Verify that there are no metal shavings on the sensor.
3. Install the CMP sensor. (See [CAMSHAFT POSITION \(CMP\) SENSOR REMOVAL/INSTALLATION \[ZJ, Z6\]](#).)

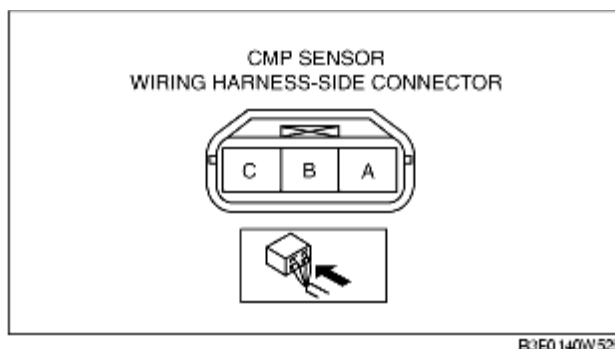
Voltage inspection

1. Idle the engine.

Caution

- Water penetrating the connector will cause sensor malfunction. To prevent this, be careful not to damage the wiring harnesses or the waterproof connector so as to cause water penetration.

2. Measure the output voltage using a oscilloscope.



- If not within the specification, replace the CMP sensor. (See [CAMSHAFT POSITION \(CMP\) SENSOR REMOVAL/INSTALLATION \[ZJ, Z6\]](#).)

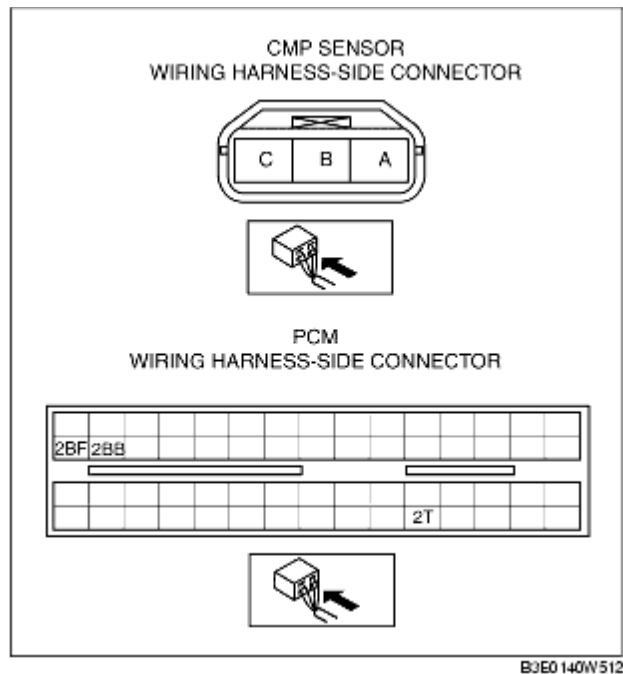
CMP sensor voltage

| Terminal | Voltage (V) | Condition |
|----------|-------------|---------------------|
| A | B+ | Under any condition |
| B | 4.8 or more | High output* |
| | 0.8 or less | Low output* |
| C | 0 | Under any condition |

* : Output voltage varies with camshaft rotation.

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, there is an open circuit. Repair or replace the wiring harness.
 - CMP sensor terminal A and PCM terminal 2T
 - CMP sensor terminal B and PCM terminal 2BB
 - CMP sensor terminal C and PCM terminal 2BF

Short circuit

- If there is continuity, there is a short circuit. Repair or replace the wiring harness.
 - CMP sensor terminal A and body GND
 - CMP sensor terminal B and power supply
 - CMP sensor terminal B and body GND
 - CMP sensor terminal C and power supply