

CAMSHAFT POSITION (CMP) SENSOR INSPECTION[L3 Turbo]

id0140b6801400

Note

- Before performing the following inspection, make sure to follow the procedure as indicated in the troubleshooting flowchart. (See HOW TO USE THIS MANUAL.)

Visual Inspection

1. Disconnect the negative battery cable.
2. Remove the CMP sensor. (See CAMSHAFT POSITION (CMP) SENSOR REMOVAL/INSTALLATION[L3 Turbo].)
3. Verify that there are no metal shavings on the sensor.
 - If the monitor item condition/specification (reference) is not within the specification even though there is no malfunction, carry out the "Circuit Open/Short Inspection".

Voltage Inspection

1. Idle the engine.

Caution

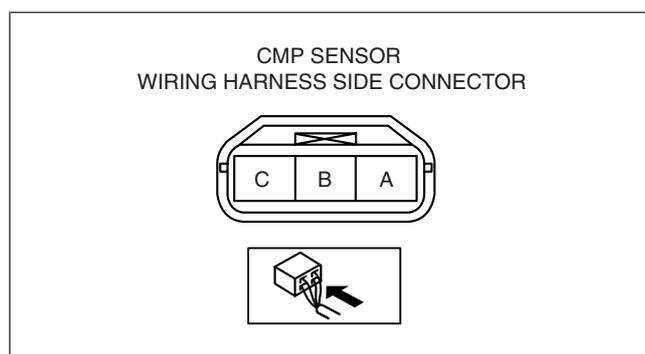
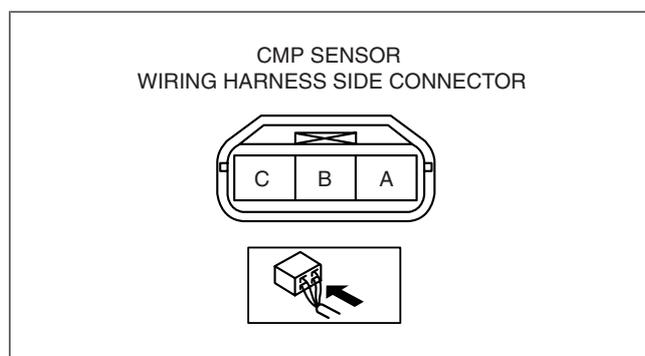
- **Water penetrating the connector will cause sensor malfunction. To prevent this, be careful not to damage the wiring harnesses or the waterproof connector so as to cause water penetration.**
2. Measure the output voltage using an oscilloscope.
 - If not within the specification, replace the CMP sensor.
 - If the monitor item condition/specification (reference) is not within the specification, even though the voltage is within the specification, carry out the "Circuit Open/Short Inspection".

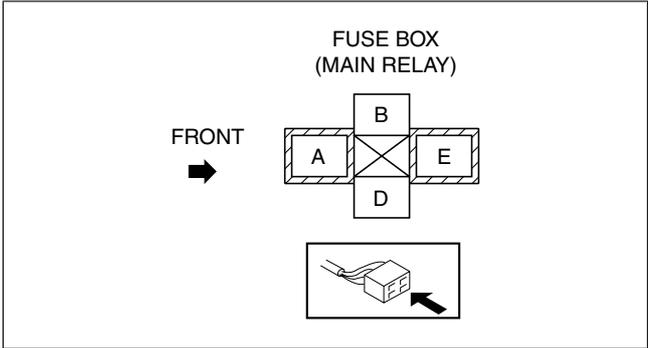
Voltage

Terminal	Voltage (V)	Condition
A	B+	Under any condition
B	Below 1.0	Under any condition
C	4.8 or more	High output*
	0.8 or less	Low output*

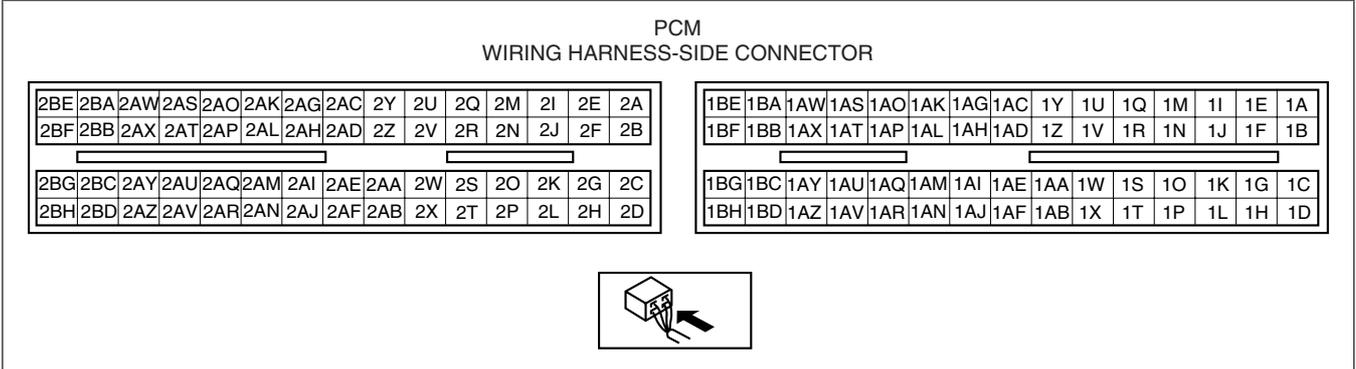
* : Output voltage varies with camshaft rotation.

Circuit Open/Short Inspection





acxuuw0000538



acxuuw0000089

1. Inspect the following wiring harnesses for an open or short circuit. (Continuity check)

Open circuit

- If there is no continuity, the circuit is open. Repair or replace the wiring harness.
 - CMP sensor terminal A and main relay terminal A
 - CMP sensor terminal B and PCM terminal 2P
 - CMP sensor terminal C and PCM terminal 2S

Short circuit

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