

CAMSHAFT POSITION (CMP) SENSOR INSPECTION[L3 Turbo]

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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

- Disconnect the negative battery cable.
- Remove the CMP sensor. (See CAMSHAFT POSITION (CMP) SENSOR REMOVAL/INSTALLATION[L3 Turbo].)
- 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

- Idle the engine.

Caution

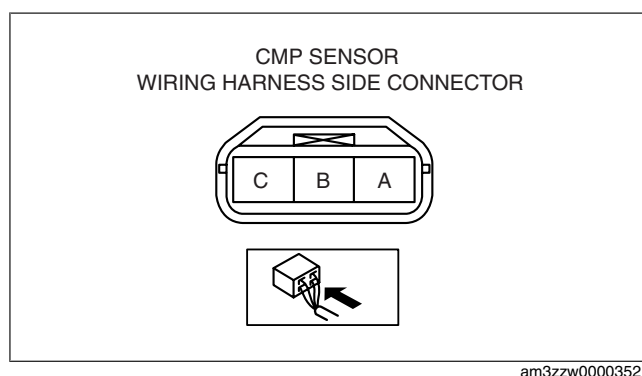
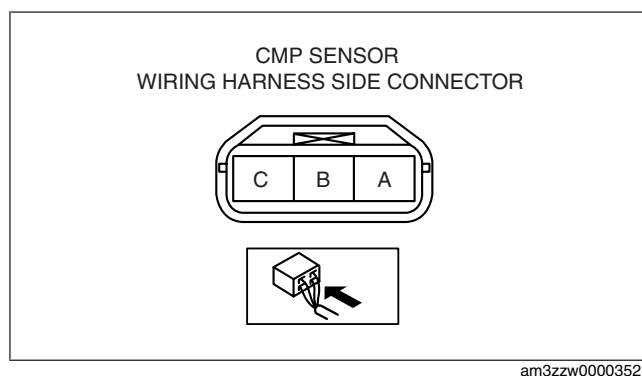
- Water penetrating the connector will cause sensor malfunction. To prevent this, be careful not to damage the wiring harnesses or the waterproof connector so as to cause water penetration.**
- Measure the output voltage using an oscilloscope.
 - If not within the specification, replace the CMP sensor.
 - 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".

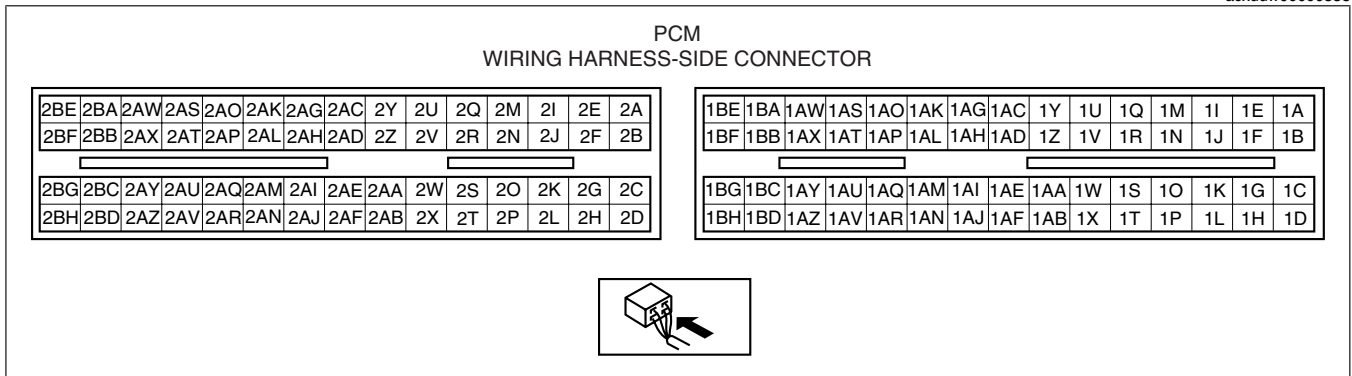
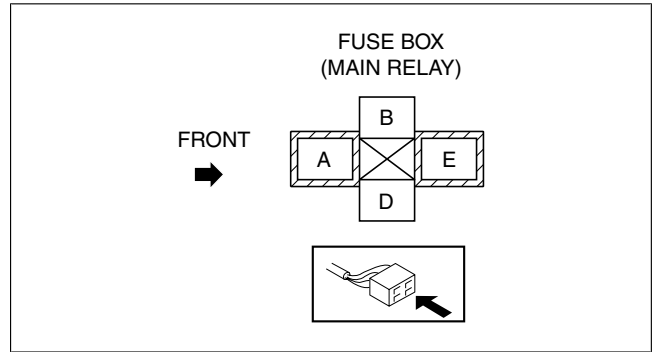
Voltage

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





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