

## CAMSHAFT POSITION (CMP) SENSOR INSPECTION [SKYACTIV-D 2.2]

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### Visual Inspection

#### Caution

- When replacing the CMP sensor, make sure there is no foreign matter on it such as metal shavings. If it is installed with foreign matter, the sensor output signal will malfunction resulting from fluctuation in magnetic flux and cause a deterioration in engine control.

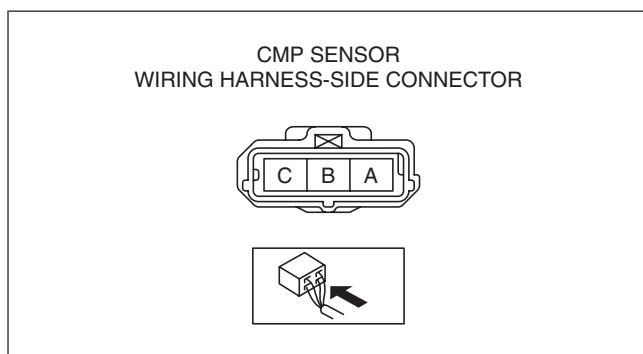
- Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
- Remove the engine cover. (See ENGINE COVER REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- Disconnect the CMP sensor connector.
- Remove the CMP sensor. (See CAMSHAFT POSITION (CMP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- Verify that there are no metal shavings on the CMP sensor.
  - If there is a malfunction, remove any metal shavings that are adhering.

### Voltage Inspection

#### Caution

- When replacing the CMP sensor, make sure there is no foreign matter on it such as metal shavings. If it is installed with foreign matter, the sensor output signal will malfunction resulting from fluctuation in magnetic flux and cause a deterioration in engine control.
- If the wiring harnesses or waterproof connectors are damaged, water penetrating the connector will cause a sensor malfunction. To prevent this, be careful not to damage wiring harnesses or waterproof connectors.

- Idle the engine.
- Measure the CMP sensor output voltage using the oscilloscope.
  - If not as specified, replace the CMP sensor. (See CAMSHAFT POSITION (CMP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)



Terminal	Voltage (V)	Condition
B	Below 1.0	Under any condition
C	B+	Under any condition

Terminal	Voltage (V)	Condition
A	Above 4.0	High output*
	Below 1.0	Low output*

\* : Output voltage varies with camshaft rotation.