

MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR INSPECTION [SKYACTIV-D 2.2]

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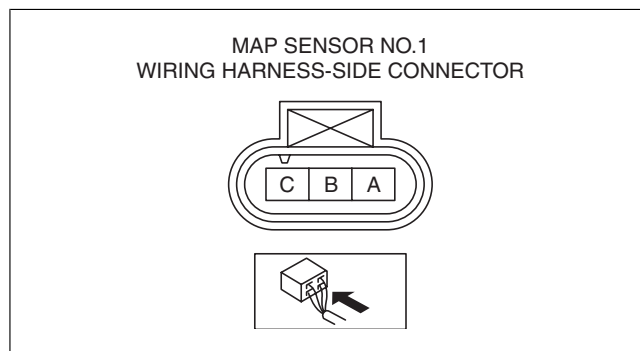
MAP Sensor No.1

Visual inspection

1. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
2. Remove the following parts:
 - (1) Cowl panel (See COWL PANEL REMOVAL/INSTALLATION.)
 - (2) Air cleaner (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
 - (3) Battery and battery tray (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
 - (4) Air pipe and air hose (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
3. Disconnect the MAP sensor No.1 connector. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
4. Remove the bolts from the bracket. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
5. Remove the bracket. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
6. Remove the MAP sensor No.1. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
7. Visually inspect the MAP sensor No.1 for the following malfunction:
 - Damage, cracks, soiling
 - If there is any malfunction, repair or replace the MAP sensor No.1. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
8. Visually inspect the vacuum hose for the following malfunction:
 - Air hose for improper routing, kinks or leakage
 - If there is any malfunction, repair or replace the malfunctioning part according to the inspection results.

Voltage inspection

1. Switch the ignition ON (engine off).
2. Measure the voltage at the MAP sensor No.1 terminal C.
 - If the voltage is within the specification, go to the next step.
 - If the voltage is not within the specification, replace the MAP sensor No.1. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

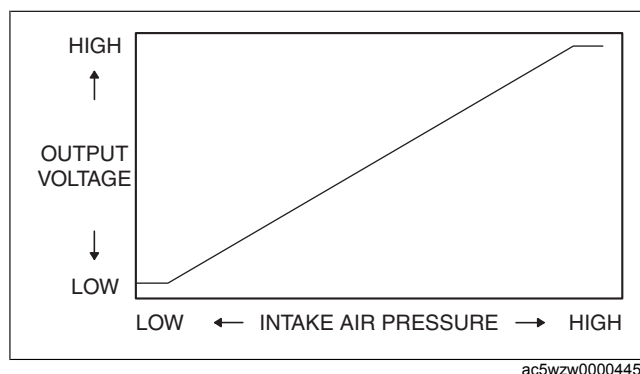


Specification

Approx. 1.2 V

3. Connect the M-MDS to the DLC-2.
4. Access the PID/DATA monitor item TCA_CINP using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].)
5. Start the engine.
6. Measure the voltage at the MAP sensor No.1 terminal C when the TCA_CINP PID increases.
 - If the voltage does not increase, replace the MAP sensor No.1. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

Specification (Reference)



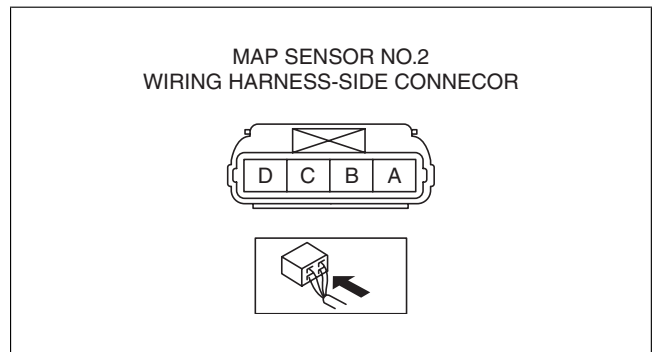
MAP Sensor No.2

Voltage inspection

1. Switch the ignition ON (engine off).
2. Measure the voltage at the MAP sensor No.2 terminal D.
 - If the voltage is within the specification, go to the next step.
 - If the voltage is not within the specification, replace the MAP sensor No.2. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

Specification

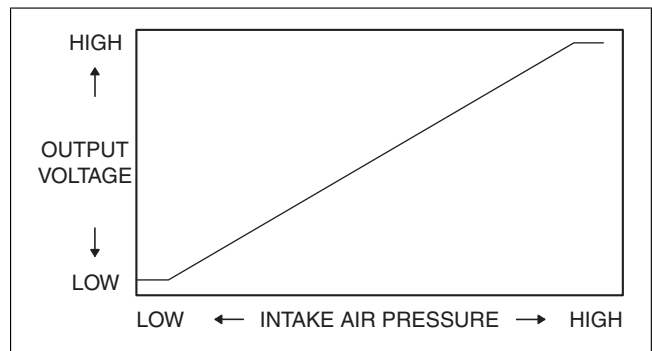
Approx. 1.6 V



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3. Connect the M-MDS to the DLC-2.
4. Access the PID/DATA monitor item MAP using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].)
5. Start the engine.
6. Measure the voltage at the MAP sensor No.2 terminal D when the MAP PID increases.
 - If the voltage does not increase, replace the MAP sensor No.2. (See MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

Specification (Reference)



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