

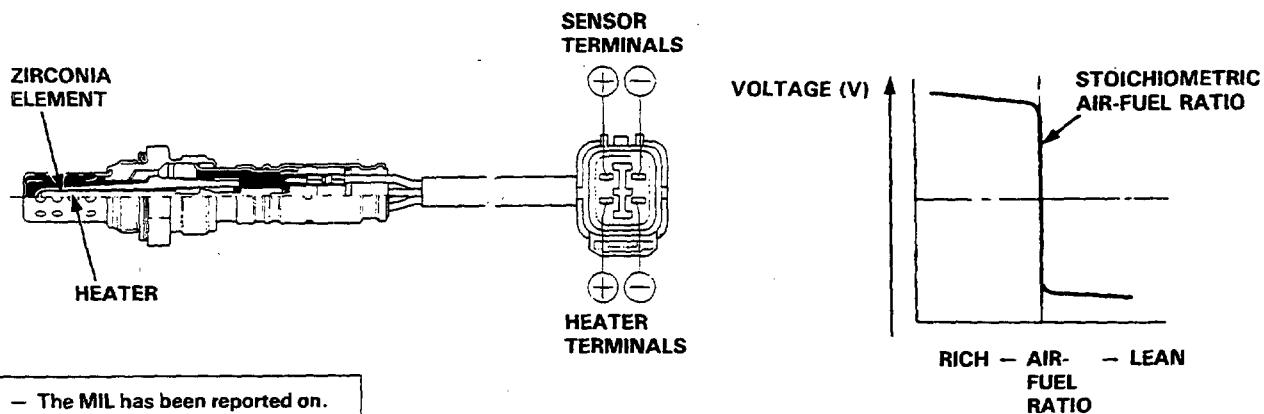
PGM-FI System

Heated Oxygen Sensor (HO2S) [D16Y2 engine]



The Malfunction Indicator Lamp (MIL) indicates Diagnostic Trouble Code (DTC) 1: A problem in the Heated Oxygen Sensor (HO2S) circuit.

The Heated Oxygen Sensor (HO2S) detects the oxygen content in the exhaust gas and signals the ECM. In operation, the ECM receives the signals from the sensor and varies the duration during which fuel is injected. To stabilize the sensor's output, the sensor has an internal heater. The HO2S is installed in exhaust manifold.



- The MIL has been reported on.
- With the SCS short connector connected (see page 11-14), code 1 is indicated.

Do the ECM Reset Procedure (see page 11-15).

Start the engine. Hold the engine at 3,000 rpm (min^{-1}) with no load (M/T in neutral) until the radiator fan comes on, then let it idle for at least one minute before road testing.

Connect the SCS short connector to the service check connector (see page 11-14).

Road test with the 4th gear. Starting at 1,600 rpm (min^{-1}), accelerate using wide open throttle for at least 5 seconds. Then decelerate for at least 5 seconds with the throttle completely closed.

Does the MIL blink and does it indicate code 1?

NO

Intermittent failure, system is OK at this time. Check for poor connections or loose wires between the HO2S and the ECM.

YES

Inspect fuel pressure (see page 11-80).

Is it normal?

NO

Go to Fuel Supply System (see page 11-74).

YES

(To page 11-31)



(From page 11-30)

Turn the ignition switch OFF.

Disconnect the HO2S connector and connect No. 3 (+) terminal to No. 4 (-) terminal with a battery.

Start the engine.

After two minutes, measure voltage between No. 1 (+) terminal and No. 2 (-) terminal.

Is the voltage above 0.6 V at wide open throttle to 4,500 rpm (min^{-1}) and below 0.4 V when the throttle is quickly released from 4,500 rpm (min^{-1})?

NO

Replace the HO2S.

YES

Turn the ignition switch OFF.

Connect the HO2S connector to engine wire harness.

Connect the test harness between the ECM and connectors (page 11-17).

Restart the engine. Hold the engine at 3,000 rpm (min^{-1}) with no load (M/T in neutral) until the radiator fan comes on, then let it idle.

Measure voltage between D14 (+) and A26 (-) terminal.

Is the voltage above 0.6 V at wide open throttle to 4,500 rpm (min^{-1}) and 0.4 V when the throttle is quickly released from 4,500 rpm (min^{-1})?

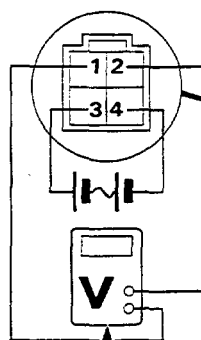
NO

Repair short or open in WHT/RED wire between ECM (D14) and HO2S.

YES

Substitute a known-good ECM and recheck. If symptom/indication goes away, replace the original ECM.

TERMINAL SIDE OF MALE TERMINALS



DIGITAL CIRCUIT TESTER
Commercially available or 07411-0020000

OXYGEN SENSOR
SOCKET WRENCH
07LAA-PT50101

HO2S
44 N·m (4.5 kgf-m, 33 lbf-ft)

