

# PGM-FI Control System

## Troubleshooting Flowchart — Oxygen Sensor



Self-diagnosis Check Engine warning light indicates code 1: A problem in the Heated Oxygen (O<sub>2</sub>) Sensor circuit.



—Check Engine warning light has been reported on, with service check connector jumped (page 6-84) CODE 1 is indicated.

Turn the ignition switch OFF.

Remove BACK UP fuse in the under-hood relay box for 10 seconds to reset ECU.

Inspect fuel pressure (page 6-104).

Is it normal ?

NO

Go to page 6-103 Fuel Supply System.

YES

Warm up engine to normal operating temperature (cooling fan comes on).

Run engine for 10 seconds.

Road test with the Transmission in 2nd gear, accelerate using wide open throttle for at least 5 seconds. Then decelerate for at least 5 seconds with the throttle completely closed.

Is Check Engine warning light on and does it indicate CODE 1 ?

NO

Intermittent failure, system is OK at this time. Check for poor connections or loose wires.

YES

(To page 6-87)



(From page 6-86)

Turn the ignition switch OFF.

Disconnect the O<sub>2</sub> sensor connector and connect A (–) terminal to B (+) terminal with a battery.

After two minutes, measure voltage between C (–) terminal and D (+) terminal.

Start the engine.

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

NO

Replace O<sub>2</sub> sensor.

YES

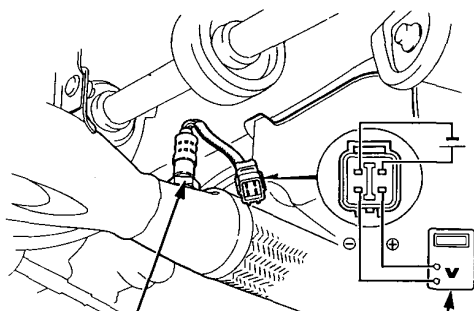
Stop engine.

Connect the O<sub>2</sub> sensor connector to engine wire harness.

Connect the ECU test harness between the ECU and connector

(To page 6-88)

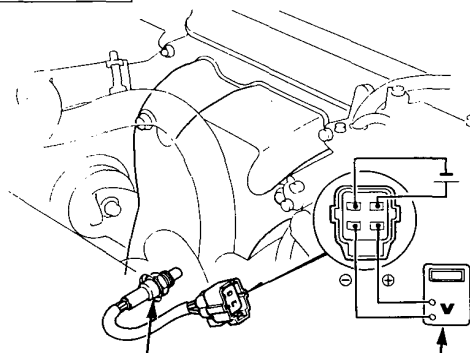
2.2 t :



O<sub>2</sub> SENSOR  
45 N·m (4.5 kg-m, 33 lb-ft)

DIGITAL MULTIMETER  
07411-0020000

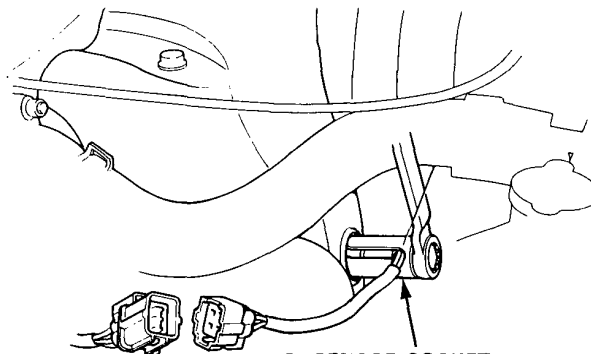
2.0 t :



O<sub>2</sub> SENSOR

DIGITAL MULTIMETER

2.0 t :



O<sub>2</sub> SENSOR SOCKET  
WRENCH  
07LAA-PT50100  
45 N·m (4.5 kg-m, 33 lb-ft)

(cont'd)

# PGM-FI Control System

## Troubleshooting Flowchart — Oxygen Sensor (cont'd)

(From page 6-87)

Restart and warm up engine to normal operating temperature (cooling fan comes on).

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

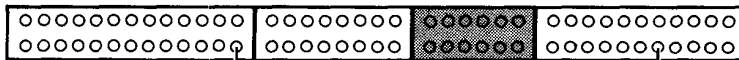
Is the voltage above 0.6 V at wide open throttle to 4,500  $\text{min}^{-1}(\text{rpm})$  and 0.4 V when the throttle is quickly released from 4,500  $\text{min}^{-1}(\text{rpm})$  ?

NO

Repair short or open in WHT wire between ECU (D14) and O<sub>2</sub> sensor.

YES

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



Above 0.6 V at wide open throttle to 4,500  $\text{min}^{-1}(\text{rpm})$ .  
Below 0.4 V when the throttle is quickly released from 4,500  $\text{min}^{-1}(\text{rpm})$ .