

# PGM-CARB Control System

## Troubleshooting Flowchart — Oxygen Sensor



Self-diagnosis LED indicate code 1: A problem in the Oxygen (O<sub>2</sub>) Sensor circuit.

LED indicates CODE 1.

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

Turn the ignition switch OFF.

Remove EFI, ECU fuse in the under-hood relay box for 10 seconds to reset control unit.

Start engine and allow to idle for 1 minute.

Raise engine speed to 3,000 min<sup>-1</sup> (rpm).

Remove #2 and #7 hose quickly from the vacuum hose manifold and plug the vacuum hose manifold.

Hold engine speed steady at 3,000 min<sup>-1</sup> (rpm) for 20 seconds.

Does LED indicate CODE 1?

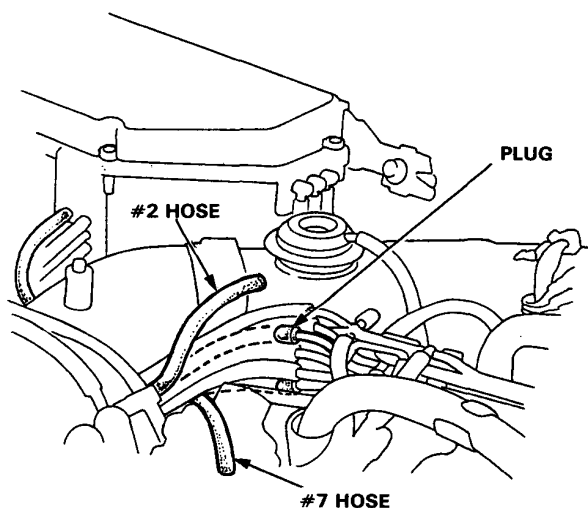
NO

Intermittent failure, check and seat connectors at O<sub>2</sub> sensor, at the battery and at the control unit.

YES

Turn the ignition switch OFF.

(To page 6-21)

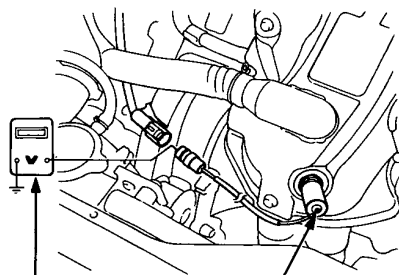




(From page 6-20)

Disconnect the wire harness from the O<sub>2</sub> sensor and connect a voltmeter between the O<sub>2</sub> sensor connector and engine ground.

Start the engine and measure the voltage between O<sub>2</sub> sensor connector and engine ground.



DIGITAL CIRCUIT TESTER  
07411-0020000

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

Is voltage above 0.6 at wide open throttle and below 0.4 when the throttle is quickly released?

NO

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

YES

Turn the ignition switch OFF.

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

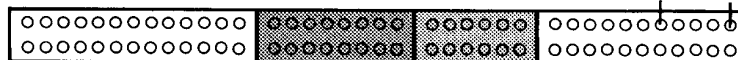
Connect the ECU test harness between the control unit and connector (page 6-16).

Start the engine.

Measure voltage between D13 (+) terminal and D21 (-) terminal.

0.4-0.6 V ?

D13 (+) D21 (-)



Is voltage above 0.6 V at wide open throttle and below 0.4 V when the throttle is quickly released ?

NO

Repair open or short in WHT wire between the control unit (D13) and O<sub>2</sub> sensor.

YES

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