
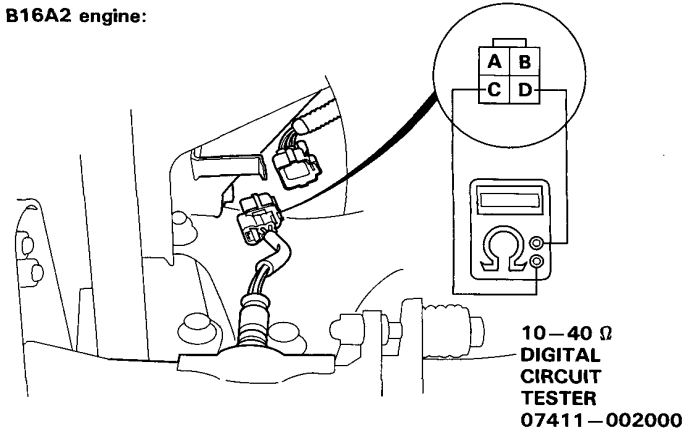



PGM-FI Control System

Troubleshooting Flowchart — Oxygen Sensor Heater [D16Z6, D16Z7, B16A2 engine]

 **41** Self-diagnosis Check Engine light indicates code 41: A problem in the Oxygen (O₂) Sensor Heater circuit.

B16A2 engine:



 **41**

- Engine is running.
- Check Engine light has been reported on. With service check connector jumped (page 11-208), CODE 41 is indicated.

Do the ECU Reset Procedure (page 11-209).

Start the engine.

Is Check Engine light on and does it indicate CODE 41?

NO

Intermittent failure, system is OK at this time (test drive may be necessary). Check for poor connections or loose wires at O₂ sensor and ECU.

YES

Stop the engine

Disconnect the 4P connector from the O₂ sensor.

Measure resistance between terminals C and D on the O₂ sensor.

Is there 10–40 Ω

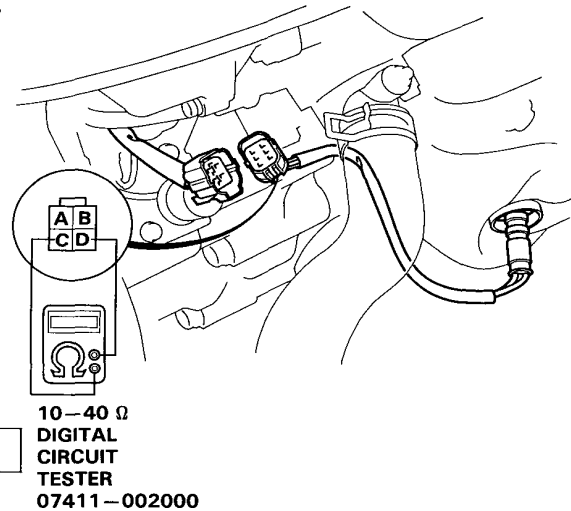
NO

Replace O₂ sensor.

YES

(To page 11-233)

D16Z6, D16Z7 engine:





(From page 11-232)

Check for continuity to body ground on terminals C and D of the O₂ sensor.

Does continuity exist?

YES

Replace O₂ sensor.

NO

Check for continuity between terminal D and terminals A and B individually.

Does continuity exist?

YES

Replace O₂ sensor.

NO

Turn the ignition switch ON.

At O₂ sensor harness, measure voltage between YEL/BLK (+) terminal and ORN/BLK (-) terminal.

Is there battery voltage?

YES

Disconnect the "A" connector from the ECU.

NO

Measure voltage between YEL/BLK (+) terminal and body ground.

At O₂ sensor harness, measure voltage between YEL/BLK (+) terminal and ORN/BLK (-) terminal.

Is there battery voltage?

YES

Repair short in ORN/BLK wire between ECU (A6) and O₂ sensor.

NO

Is there battery voltage?

NO

Repair open in YEL/BLK wire between O₂ sensor and main relay.

YES

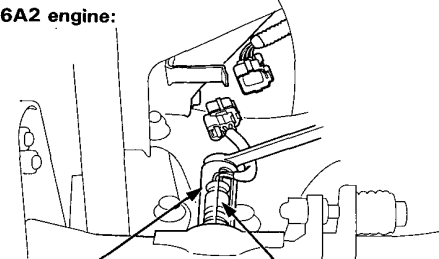
Turn the ignition switch OFF.

Reconnect the O₂ sensor connector.

(To page 11-234)

(To page 11-234)

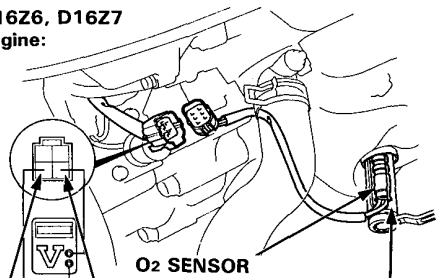
B16A2 engine:



O₂ SENSOR SOCKET WRENCH 07LAA-PT50101

O₂ SENSOR 45 N·m (4.5 kg-m, 33 lb-ft)

D16Z6, D16Z7 engine:



ORN/BLK YEL/BLK (+)

O₂ SENSOR 45 N·m (4.5 kg-m, 33 lb-ft)

O₂ SENSOR SOCKET WRENCH 07LAA-PT50101

(cont'd)

PGM-FI Control System

Troubleshooting Flowchart

Oxygen Sensor Heater

[D16Z6, D16Z7, B16A2 engine] (cont'd)

(From page 11-233)

(From page 11-233)

Connect the test harness "A" connector to the main wire harness only, not the ECU (page 11-212).

Connect an ammeter between terminals A6 (+) and A26 (-).

* Monitor over a 5 minutes period.

Replace O₂ sensor.

YES

Is the current less than 0.1 A? *

NO

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

Reconnect the 4P connector to O₂ sensor.

Connect the test harness "A" connector to the main wire harness only, not the ECU (page 11-212).

Turn the ignition switch ON.

Measure voltage between A6 (+) terminal and A23 (-) terminal.

Is there battery voltage?

NO

Repair open ORN / BLK wire between ECU (A6) and O₂ sensor.

YES

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

