

PGM-FI System

Engine Control Module (ECM)

The Malfunction Indicator Lamp (MIL) never comes on (even for two seconds) after ignition is turned on.

Turn the ignition switch ON.

Is the low oil pressure light on?

YES

Try to start the engine.

Does the engine start?

YES

Turn the ignition switch OFF.

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

Connect A13 terminal to body ground.

Turn the ignition switch ON.

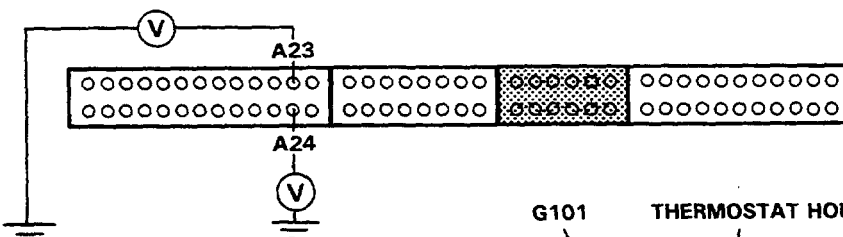
Is the MIL on?

YES

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

NOTE: If this symptom is intermittent, check for a loose fuse No. 15 BACK UP LIGHTS (10A) in the under-dash fuse/relay box, a poor connection at ECM terminal A13, or an intermittent open in the GRN/ORN wire between the ECM (A13) and the gauge assembly.

- Replace No. 15 BACK-UP LIGHTS (10 A) fuse in the under-dash fuse/relay box.
- Repair open or short in YEL wire between No. 15 BACK-UP LIGHTS (10 A) fuse and gauge assembly.



NO

Turn the ignition switch OFF.

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

Turn the ignition switch ON.

Measure voltage between body ground and the following terminals individually: A23, A24.

Is there less than 1.0 V?

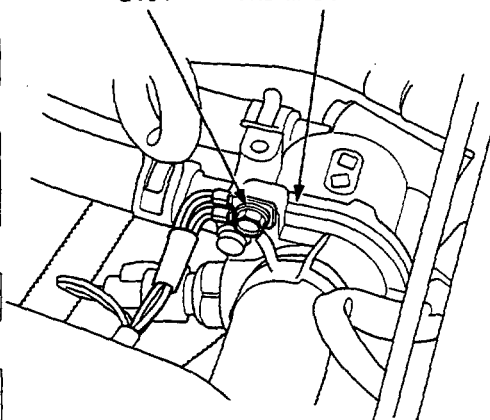
YES

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

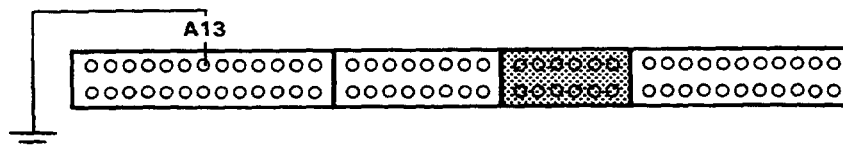
- Replace the MIL bulb.
- Repair open in GRN/ORN wire between ECM (A13) and gauge assembly.

NO

G101 THERMOSTAT HOUSING



Repair open in BLK wire(s) between ECM and G101 (located at thermostat housing) that had more than 1.0 V.





The Malfunction Indicator Lamp (MIL) stays on or comes on after two seconds.

Press the inertia switch button.

Does the MIL remain on?

NO

Intermittent failure, system is OK at this time.

YES

Disconnect the 2P connector from the inertia switch.

Connect BLK/YEL terminal to BLK/RED terminal.

Does the MIL remain on?

NO

Replace the inertia switch.

YES

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

Turn the ignition switch ON.

Does the MIL indicate any Diagnostic Trouble Code (DTC)?

YES

Go to self-diagnostic procedures (see page 11-16).

NO

Remove the SCS short connector from the service check connector.

Try to start the engine.

Did the engine start?

YES

Turn the ignition switch OFF.

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

Turn the ignition switch ON.

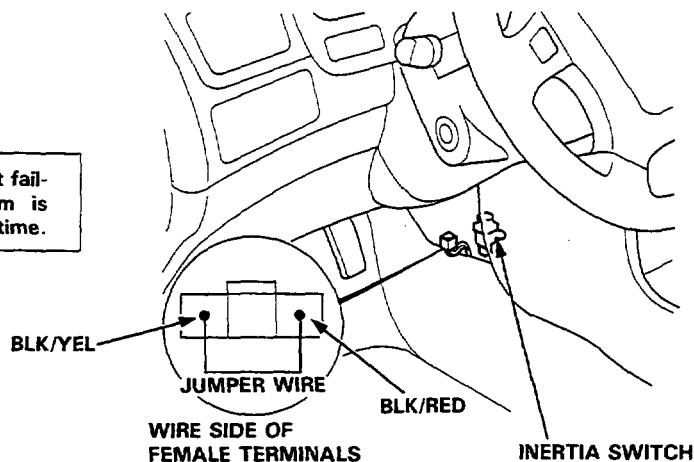
NO



(To page 11-24)



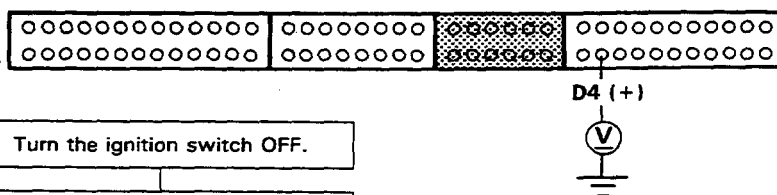
(To page 11-24)



LHD type is shown, RHD type is symmetrical.

NOTE:

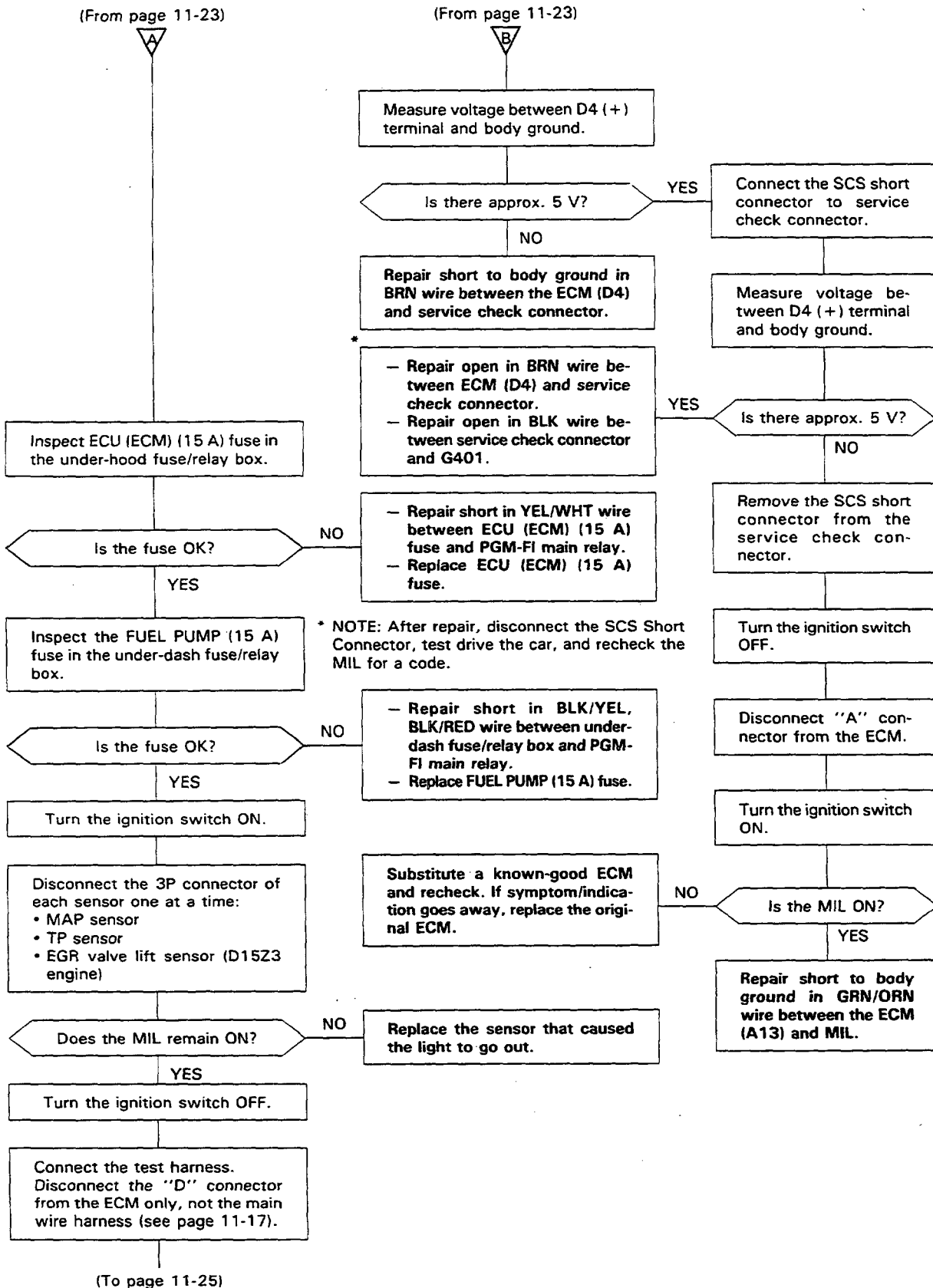
- When there is no code stored, the MIL will stay on if the service check connector is shorted.
- If this symptom is intermittent, check for:
 - A loose ECU (ECM) fuse (15 A) in the under-hood fuse/relay box
 - A loose FUEL PUMP fuse (15 A) in the under-dash fuse/relay box
 - An intermittent short in the BRN wire between the ECM (D4) and the service check connector
 - An intermittent open in the BLK wire between the service check connector and G401
 - An intermittent short in the GRN/ORN wire between the ECM (A13) and the gauge assembly.
 - An intermittent short in the YEL/WHT wire between the ECM (D19) and the MAP sensor
 - An intermittent short in the YEL/BLU wire between the ECM (D20) and the TP sensor or EGR valve lift sensor (D15Z3 engine)



(cont'd)

PGM-FI System

Engine Control Module (ECM) (cont'd)





(From page 11-24)

Check for continuity between body ground and D19, D20 terminals.

Is there continuity?

YES

NO

Reconnect all the sensor connectors.
Reconnect the "D" connector to the ECM.

Turn the ignition switch ON.

Measure voltage between A26 (-) and the following: B1 (+) and A25 (+).

Is there battery voltage?

NO

YES

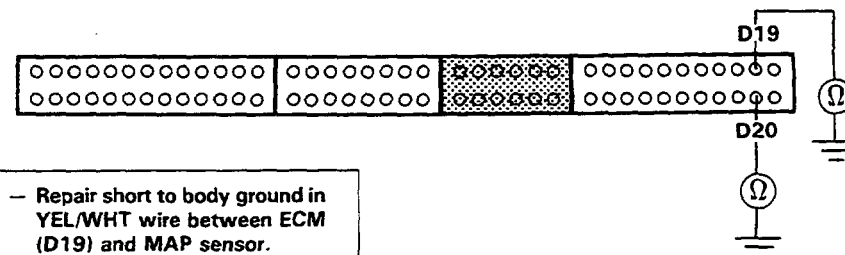
Measure voltage between body ground and the following terminals individually: A23, A24, A26, B2.

Is there less than 1.0 V?

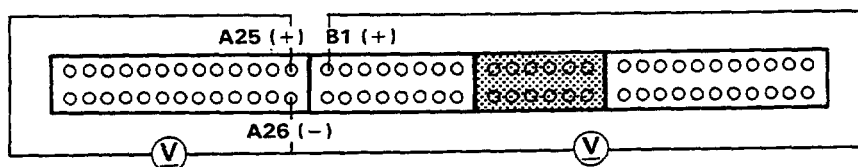
NO

YES

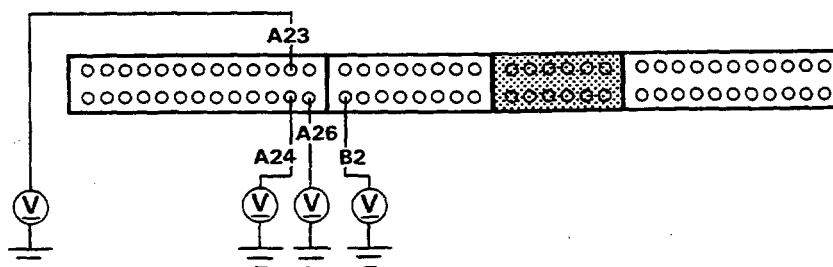
Substitute a known-good ECM and recheck. If symptom/indication goes away, replace the original ECM.



- Repair short to body ground in YEL/WHT wire between ECM (D19) and MAP sensor.
- Repair short to body ground in YEL/BLU wire between ECM (D20) and TP sensor or EGR valve lift sensor.



- Repair open in YEL/BLK wire between ECM (A25, B1) and PGM-FI main relay.
- Check PGM-FI main relay and wiring connectors at PGM-FI main relay (see page 11-89).



- Repair open in BLK wire between ECM (A23, A24) and G101 (located at thermostat housing).
- Repair open in BRN/BLK wire between ECM (A26, B2) and G101.