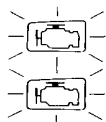
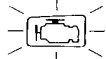


# PGM-FI Control System

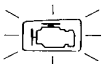
## Troubleshooting Flowchart — MAP Sensor



Self-diagnosis LED indicator blinks three times: Most likely an electrical problem in the Manifold Absolute Pressure (MAP) Sensor system.



Self-diagnosis LED indicator blinks five times: Most likely a mechanical problem (broken hose) in the Manifold Absolute Pressure (MAP) Sensor system.



- Engine is warm and running.
- Check Engine warning light is on.
- LED indicates CODE 3.

Turn the ignition switch OFF.

Remove HAZARD fuse in the main fuse box for 10 seconds to reset ECU.

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

Is Check Engine warning light on and does LED indicate CODE 3?

NO

YES

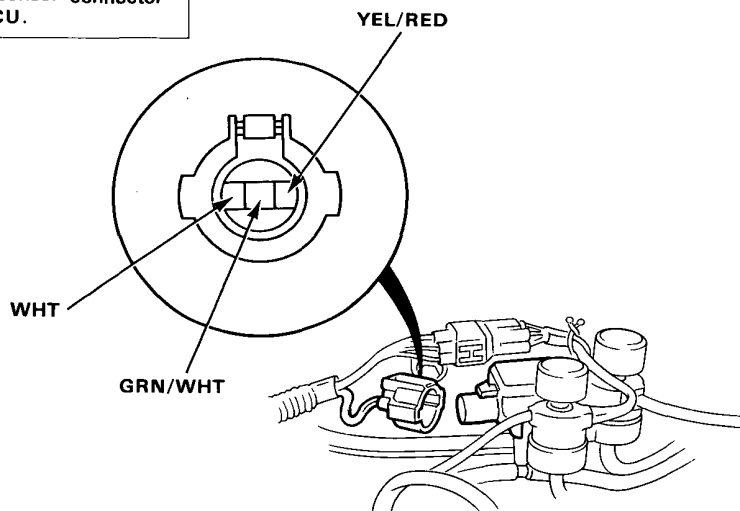
Turn the ignition switch OFF.

Disconnect the 3P connector from the MAP sensor.

Turn the ignition switch ON.

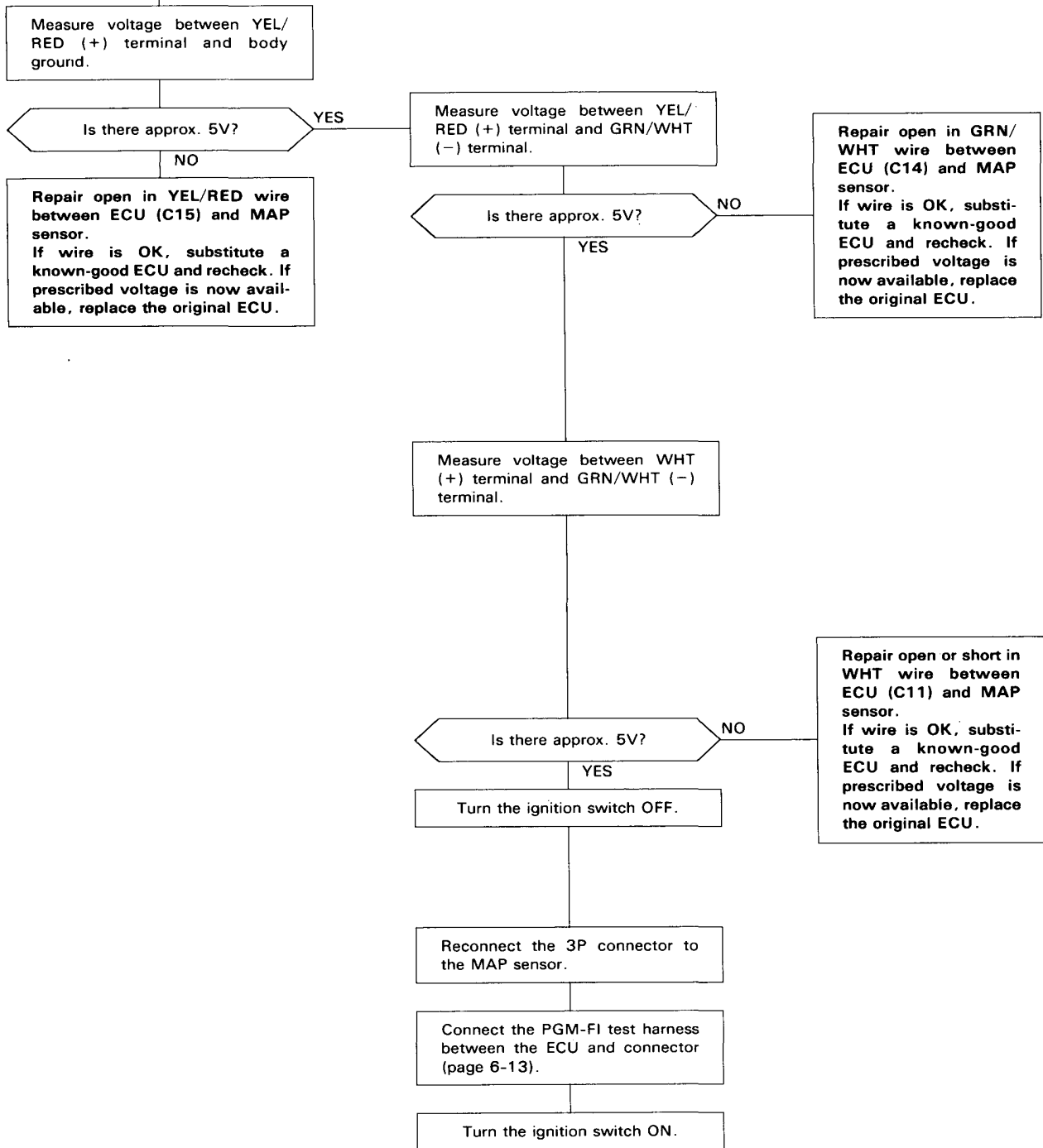
(To page 6-23)

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





(From page 6-22)



(To page 6-24)

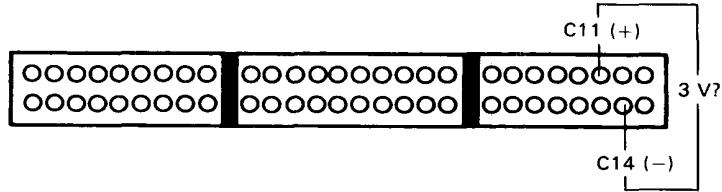
(cont'd)

# PGM-FI Control System

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

(From page 6-23)

Measure voltage between C11 (+) terminal and C14 (-) terminal.



Is there approx. 3 V ?

NO

Replace MAP sensor.

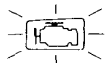
YES

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



# PGM-FI Control System

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



- Check Engine warning light has been reported on.
- LED indicates CODE 5.

Turn the ignition switch OFF.

Remove HAZARD fuse in the main fuse box for 10 seconds to reset ECU.

Start the engine.

Is Check Engine warning light on and does LED indicate CODE 5?

NO

- Intermittent failure, system is OK at this time (test drive may be necessary).
- Check vacuum hoses pipes and connections.
- Make sure all connectors are secure.

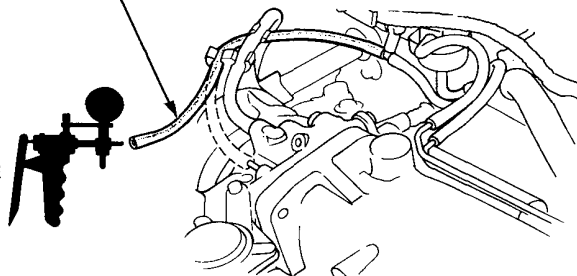
YES

Stop engine.

Connect vacuum pump to #21 hose and apply vacuum.

#21 VACUUM HOSE

VACUUM PUMP/GAUGE



Does it hold vacuum?

NO

Connect a vacuum pump to the MAP sensor and apply vacuum.

YES

Does it hold vacuum?

NO

Replace MAP sensor.

YES

Replace #21 hose.

Disconnect # 21 hose from the throttle body and connect a T-fitting from a vacuum gauge between the throttle body and MAP sensor.

(To page 6-27)



(From page 6-26)

Start engine.

Is there manifold vacuum?

NO

-Remove restriction from throttle body.  
-Replace throttle body.

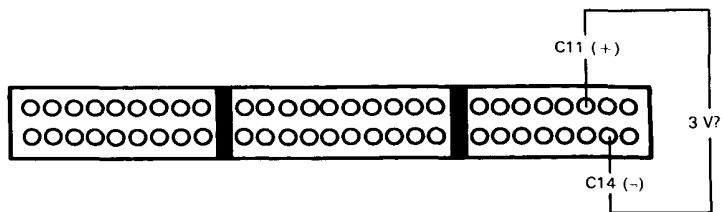
YES

Stop engine.

Connect the PGM-FI test harness between the ECU and connector (page 6-13).

Turn the ignition switch ON.

Measure voltage between C11 (+) terminal and C14 (-) terminal.



Is there approx. 3 V?

NO

Replace the MAP sensor.

YES

Start the engine and allow it to idle.

Is there approx. 1 V?

NO

Replace MAP sensor.

YES

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