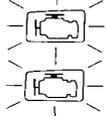


PGM-FI Control System

Troubleshooting Flow Chart — MAP Sensor



- Self-diagnosis Red LED indicator blinks three times: Most likely an electrical problem in the Manifold Absolute Pressure (MAP) Sensor system.
- Self-diagnosis Red 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.
 -Red LED indicates CODE 3.

Turn the ignition switch OFF.

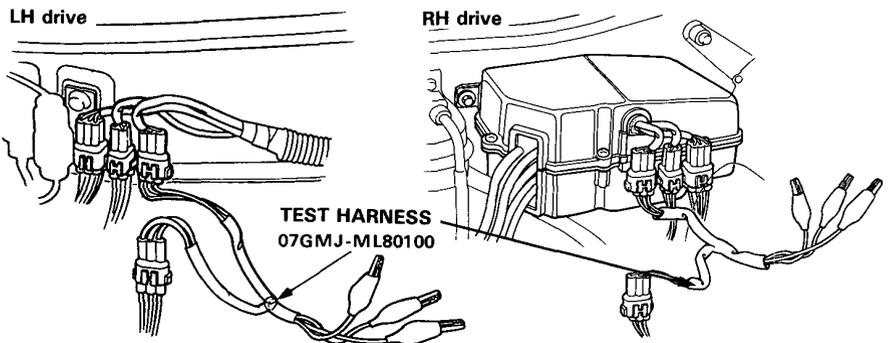
Remove ALTERNATOR SENSE fuse in the under-hood relay box for 10 seconds to reset ECU.

Start the engine and allow to idle.

Is Check engine warning light on? **NO** Intermittent failure (test drive may be necessary.)

YES
 Turn the ignition switch OFF.

Connect the test harness between the MAP sensor and wire harness.



Turn the ignition switch ON.

Measure voltage between RED (+) terminal and GRN (-) terminal.

Is there approx. 5 V? **NO**

YES
 Measure voltage between WHT (+) terminal and GRN (-) terminal.

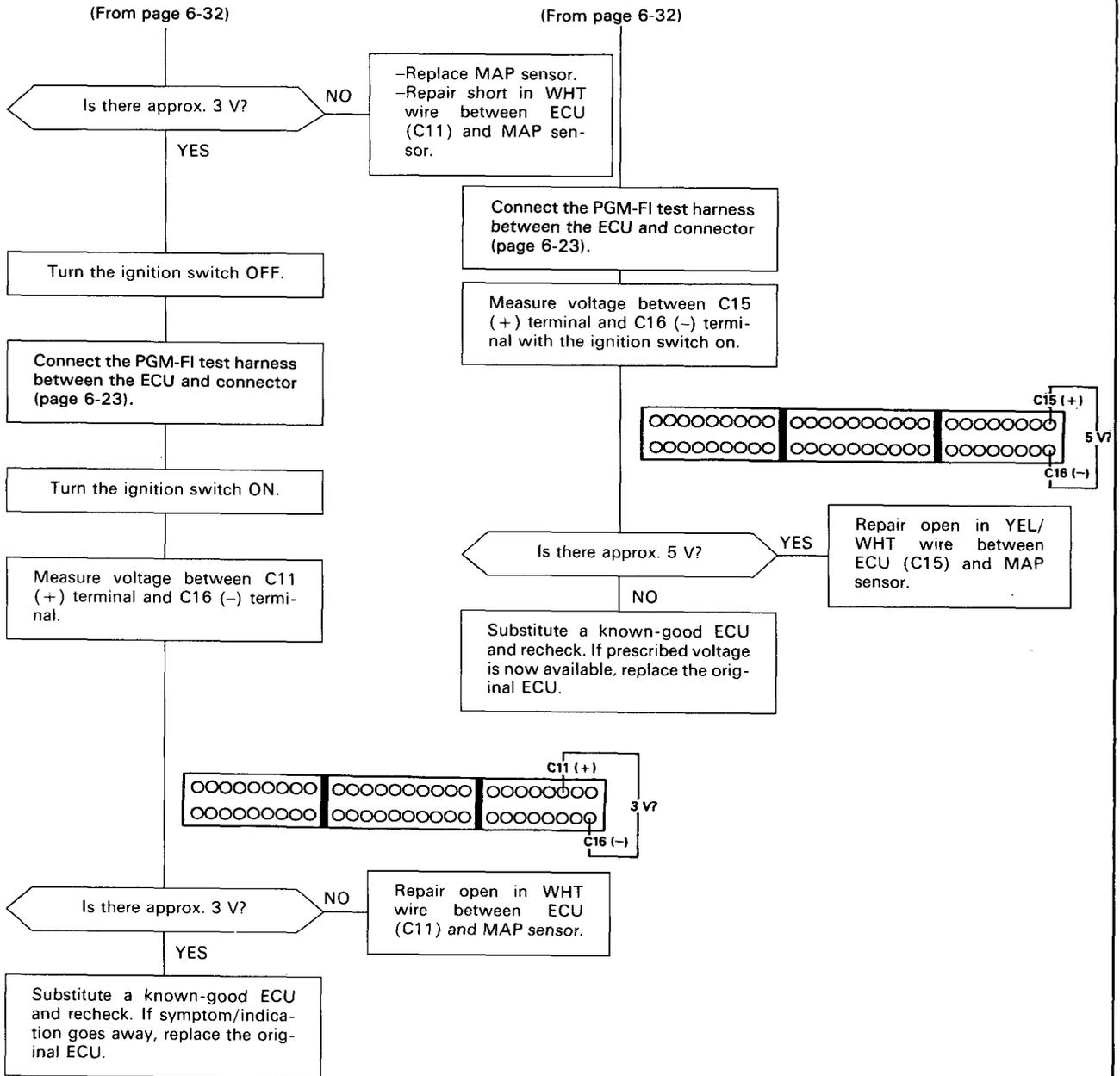
(To page 6-33)

Measure voltage between RED (+) terminal and body ground.

Is there approx. 5 V? **YES** Repair open in GRN/WHT wire between ECU (C16) and MAP sensor.

NO
 Turn the ignition switch OFF.

(To page 6-33)



(cont'd)

PGM-FI Control System

Troubleshooting Flow Chart — MAP Sensor (cont'd)



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

Turn the ignition switch OFF.

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

Start engine and keep engine rpm at idle.

Is Check engine warning light on?
Does Red LED indicate CODE 5?

NO

Intermittent failure
(test drive may be necessary.)

YES

Stop engine.

Remove #4 hose from the vacuum hose manifold and connect a T. fitting from a vacuum gauge between the throttle body and the MAP sensor.

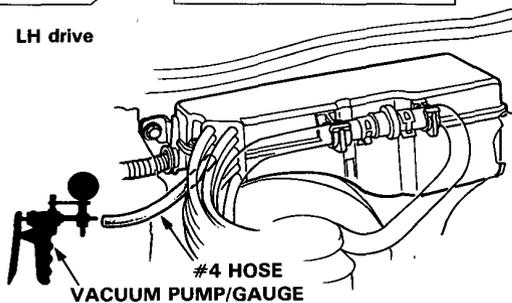
Start engine.

Is there vacuum?

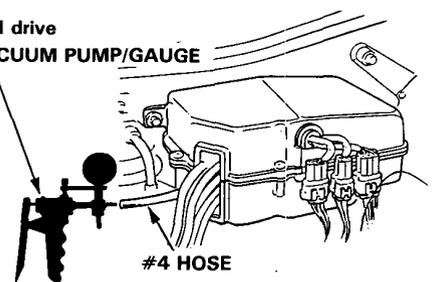
NO

Repair as necessary.

YES LH drive



RH drive
VACUUM PUMP/GAUGE



Connect vacuum pump to #4 hose and apply vacuum.

Does it hold vacuum?

NO

Replace #4 hose.

YES

(To page 6-35)



(From page 6-34)

Stop engine.

Connect the test harness between the MAP sensor and wire harness.

Turn the ignition switch ON.

Measure voltage between WHT (+) terminal and GRN (-) terminal.

Is there approx. 3V?

NO

Replace MAP sensor.

YES

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

