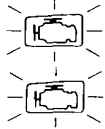
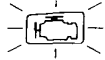


PGM-FI Control System

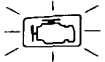
Troubleshooting Flowchart — MAP Sensor



Self-diagnosis LED indicates code 3: Most likely an electrical problem in the Manifold Absolute Pressure (MAP) Sensor system.



Self-diagnosis LED indicates code 5: Most likely a mechanical problem (broken hose) in the Manifold Absolute Pressure (MAP) Sensor System.



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

Turn the ignition switch OFF.

Remove CLOCK fuse in the under-hood relay 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

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.

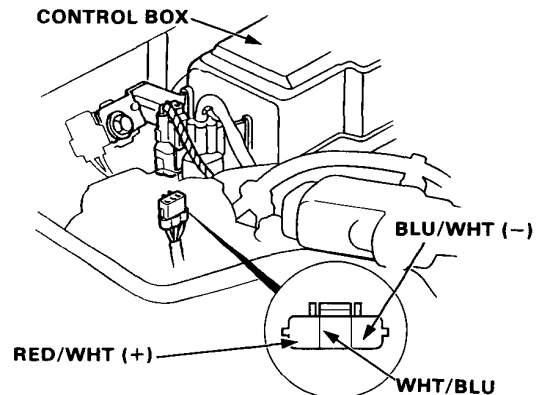
Turn the ignition switch OFF.

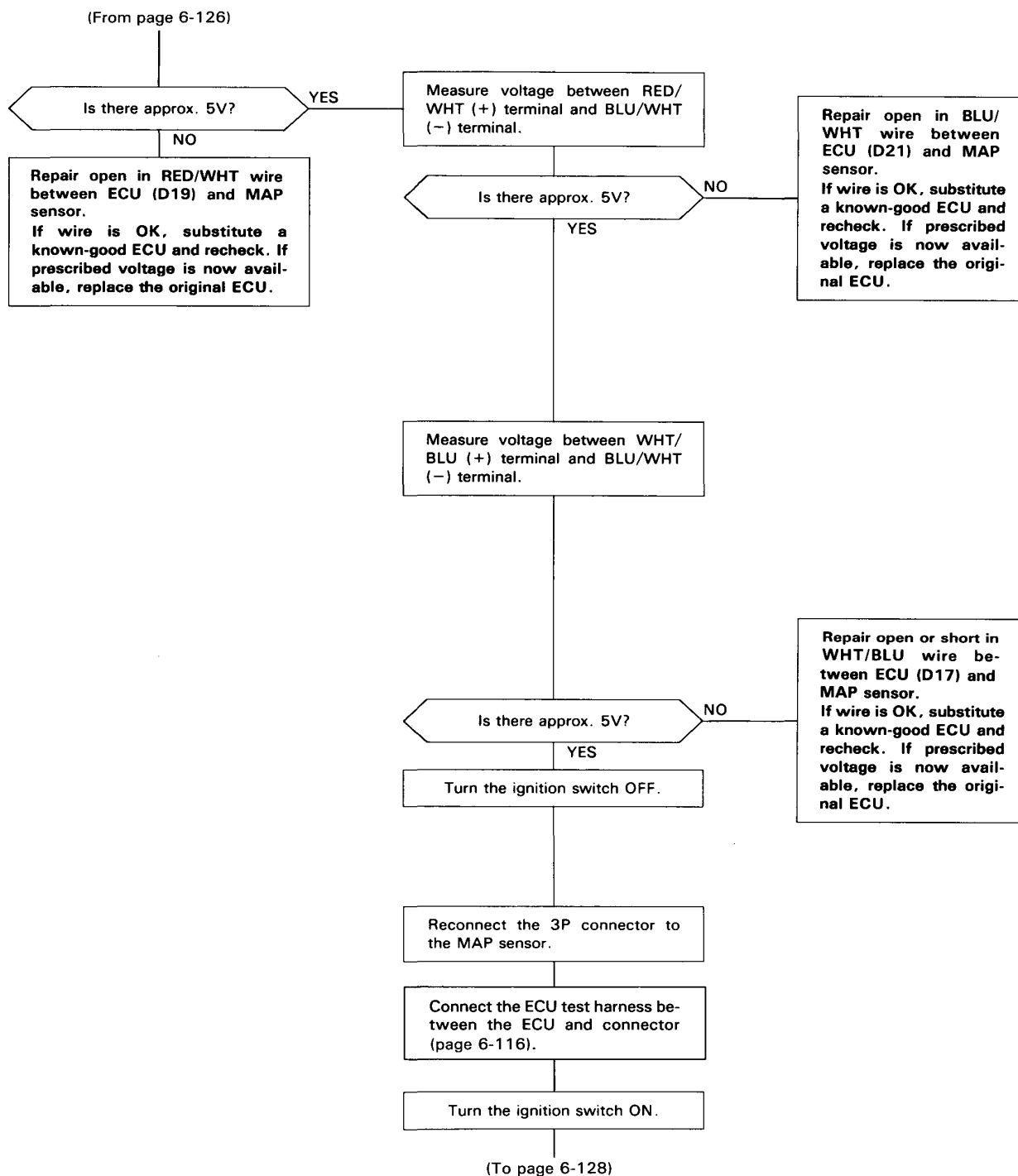
Disconnect the 3P connector from the MAP sensor.

Turn the ignition switch ON.

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

(To page 6-127)





(cont'd)

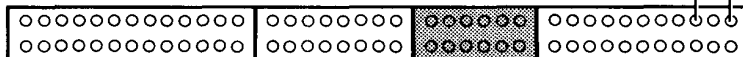
PGM-FI Control System

Troubleshooting Flowchart — MAP Sensor (cont'd)

(From page 6-127)

Measure voltage between D17 (+) terminal and D21 (-) terminal.

3 V ?
D17 (+) D21 (-)



Is there approx. 3 V ?

NO

Replace MAP sensor.

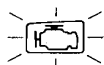
YES

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



PGM-FI Control System

Troubleshooting Flowchart — MAP Sensor



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

Turn the ignition switch OFF.

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

Start the engine.

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

YES

Stop the engine.

Disconnect #21 hose from the throttle body, connect vacuum pump to the hose and apply vacuum.

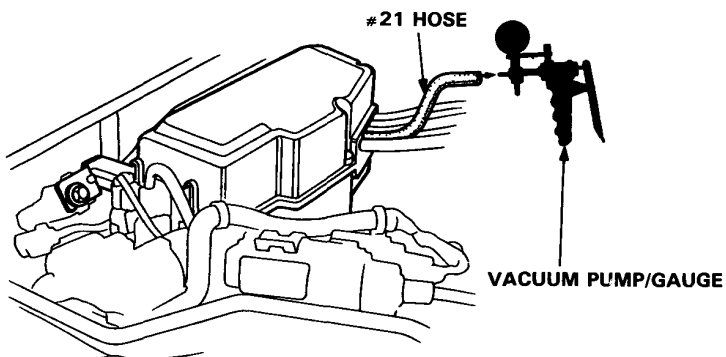
Does it hold vacuum?

YES

Connect a T-fitting from a vacuum gauge between the throttle body and MAP sensor.

(To page 6-131)

- 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.



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

Does it hold vacuum?

YES

Replace #21 hose.

Replace MAP sensor.



(From page 6-130)

Start the engine.

Is there manifold vacuum?

NO

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

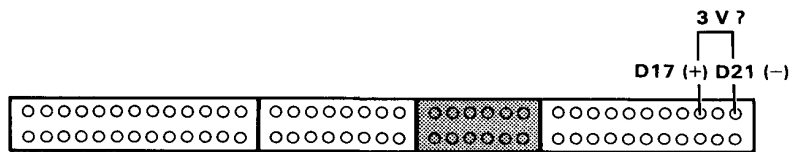
YES

Stop the engine.

Connect the ECU test harness between the ECU and connector (page 6-116).

Turn the ignition switch ON.

Measure voltage between D17 (+) terminal and D21 (-) 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.