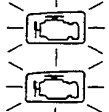
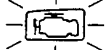


# PGM-FI Control System

## Troubleshooting Flow Chart — MAP Sensor [KX, KS, KZ]



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.
- PGM-FI warning light is 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.

Start the engine and allow to idle.

Is PGM-FI warning light on ?  
Does LED indicate CODE 3 ?

NO

Intermittent failure  
(test drive may be necessary).

YES

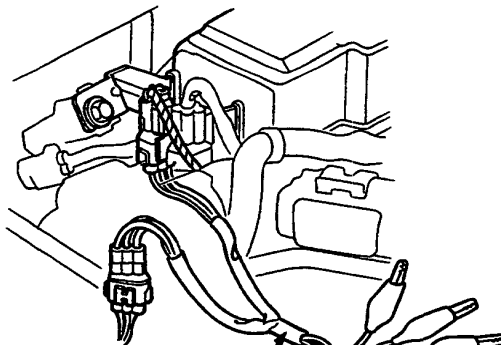
Turn the ignition switch OFF.

Connect the inspection adaptor between the MAP sensor and wire harness.

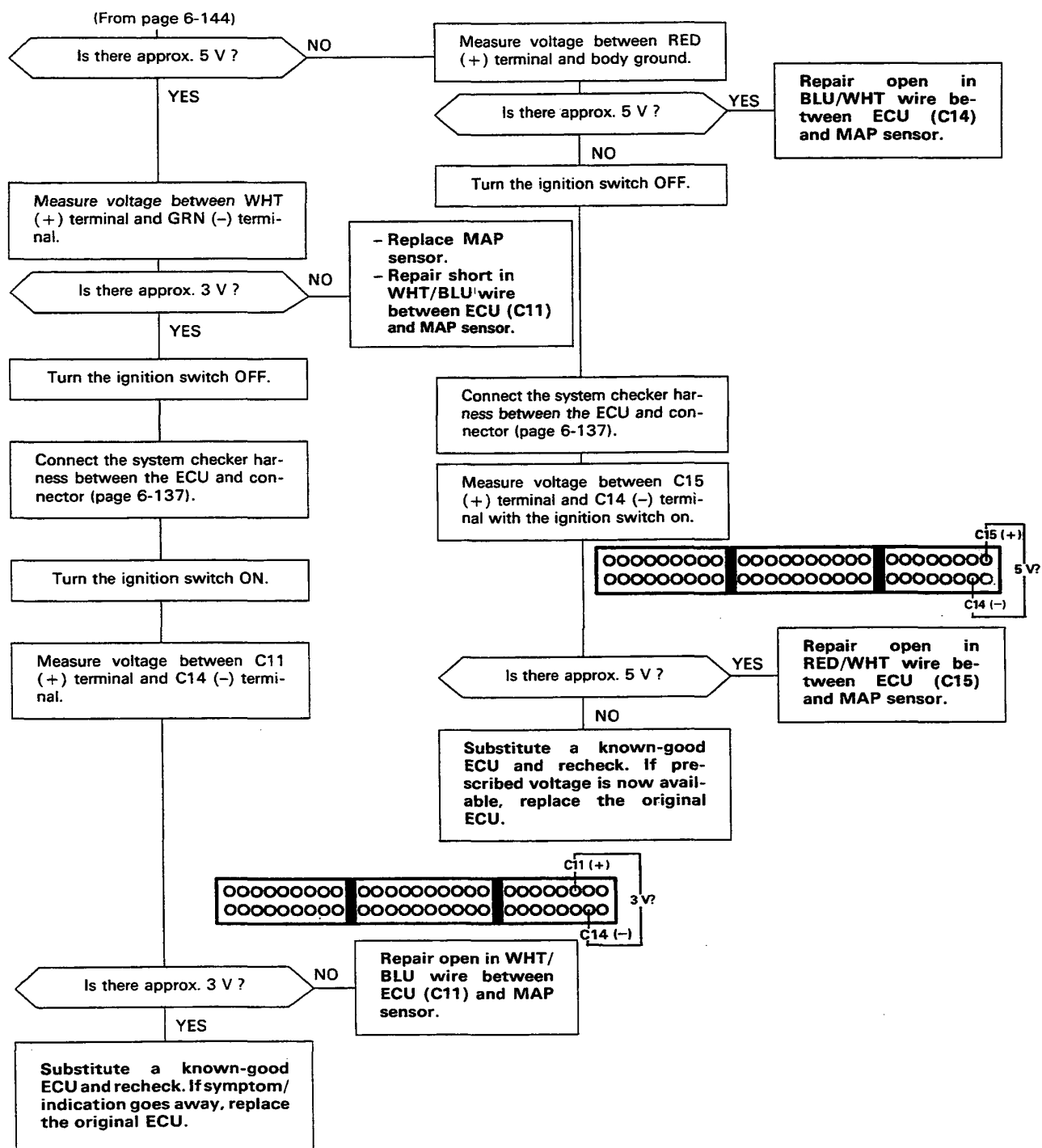
Turn the ignition switch ON.

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

(To page 6-145)



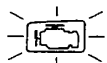
INSPECTION ADAPTOR  
07GMJ-ML80100



(cont'd)

# PGM-FI Control System

## Troubleshooting Flow Chart — MAP Sensor [KX, KS, KZ] (cont'd) —



- PGM-FI 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 engine and keep engine rpm at idle.

Is PGM-FI warning light on ?  
Does LED indicate CODE 5 ?

NO

Intermittent failure  
(test drive may be necessary).

YES

Stop engine.

Remove #21 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 #21 hose.
- Replace MAP sensor.

YES

Connect vacuum pump to #21 hose and apply vacuum.

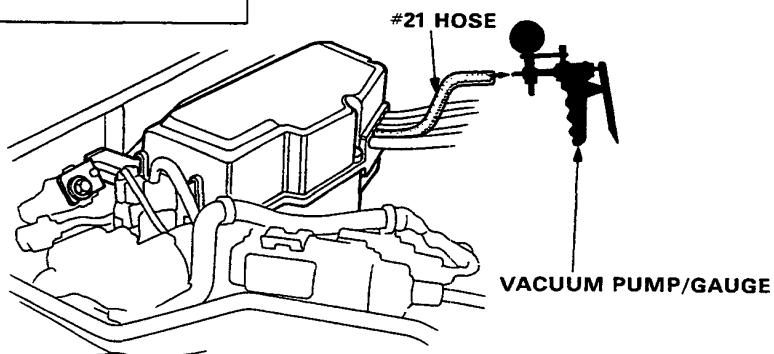
Does it hold vacuum ?

NO

Replace #21 hose.

YES

(To page 6-147)





(From page 6-146)

Stop engine.

Connect the inspection adaptor between the MAP sensor and wire harness.

Turn the ignition switch ON.

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

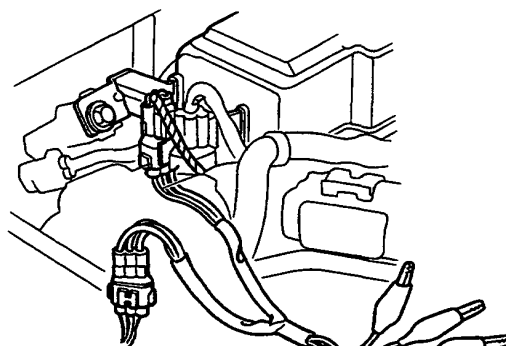
Is there approx. 3V ?

NO

Replace MAP sensor.

YES

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



INSPECTION ADAPTOR  
07GMJ-ML80100

# PGM-FI Control System

## Troubleshooting Flow Chart — MAP Sensor [Except KX, KS, KZ]



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.
- PGM-FI warning light is 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.

Start the engine and allow to idle.

Is PGM-FI warning light on ?  
Does LED indicate CODE 3 ?

NO

Intermittent failure (test drive may be necessary).

YES

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 BLU/WHT (-) terminal.

Is there approx. 5 V ?

NO

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

YES

(To page 6-149)

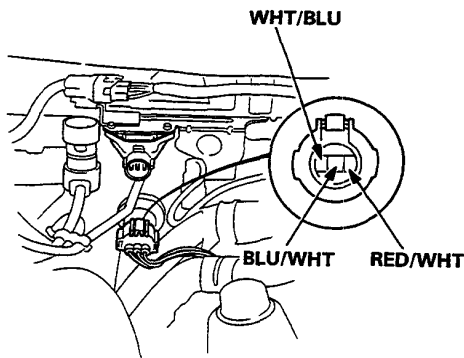
Is there approx. 5 V ?

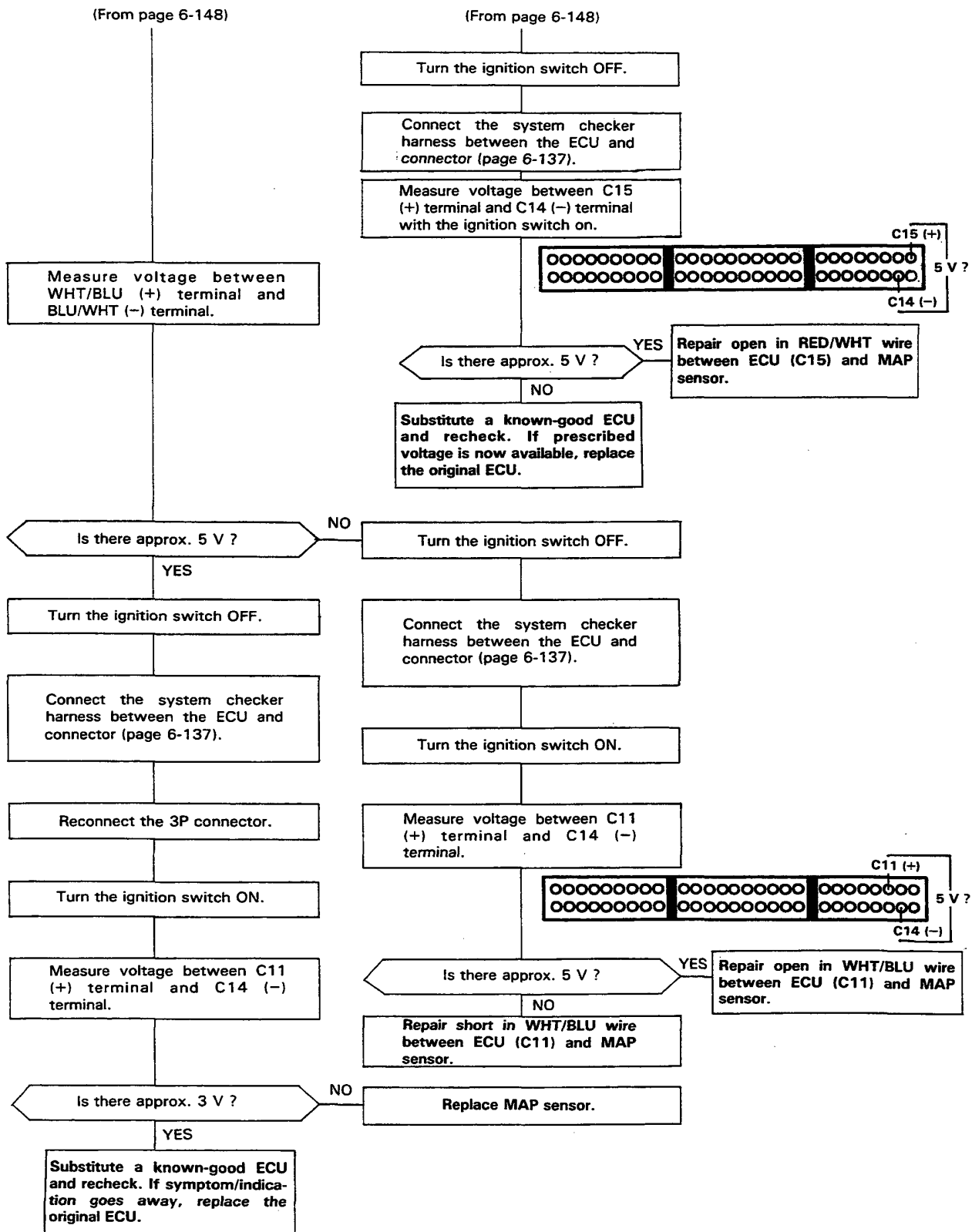
YES

Repair open in BLU/WHT wire between ECU (C14) and MAP sensor.

NO

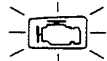
(To page 6-149)





# PGM-FI Control System

## Troubleshooting Flow Chart — MAP Sensor [Except KX, KS, KZ] (cont'd) —



- PGM-FI 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 engine and keep engine rpm at idle.

Is PGM-FI warning light on ?  
Does LED indicate CODE 5 ?

NO

Intermittent failure  
(test drive may be necessary).

YES

Stop engine.

Remove #21 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 #21 hose.
- Replace MAP sensor.

YES

Connect vacuum pump to #21 hose and apply vacuum.

Does it hold vacuum ?

NO

Replace #21 hose.

YES

(To page 6-151)

