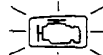


Exhaust Gas Recirculation System [KX, KS, KZ]



Troubleshooting Flow Chart — EGR System



Self diagnosis indicator blinks twelve times. Most likely a problem in the Exhaust Gas Recirculation (EGR) system.



—PGM-FI Warning light has been reported on.
—LED indicates CODE 12.

Verify that all connectors between the EGR valve lift sensor and the PGM-FI ECU are securely connected.

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

Disconnect 16 hose from EGR valve.

Connect a vacuum pump to EGR valve and apply vacuum.

VACUUM PUMP/GAUGE

#16 HOSE

EGR VALVE

Does EGR valve hold vacuum?
Did engine stall?

NO

Replace EGR valve.

YES

Disconnect #24 hose from the vacuum hose manifold and connect a vacuum gauge to the hose.

Restart engine and check for vacuum.

Is there vacuum?

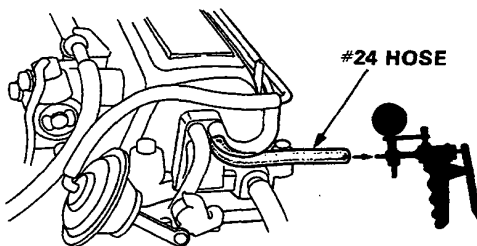
NO

Repair blockage at port or pinch in the #24 hose.

YES

Reconnect #24 hose.

(To page 6-210)



#24 HOSE

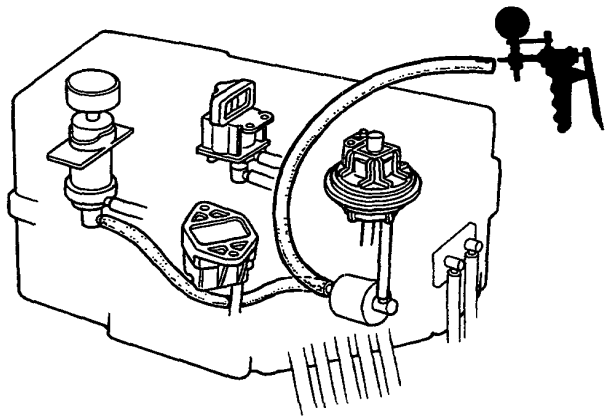
(cont'd)

Exhaust Gas Recirculation System [KX, KS, KZ]

Troubleshooting Flow Chart — EGR System (cont'd)

(From page 6-209)

Open the control box lid, disconnect the vacuum hose between the air chamber and EGR control solenoid valve from the air chamber, and connect vacuum gauge to the air chamber and check for vacuum.



Is there approx. 200 mm Hg (8 in. Hg)

NO

Replace CVC valve.

YES

Reconnect the vacuum hose between the air chamber and EGR control solenoid valve.

Connect vacuum gauge to the #16 vacuum hose and check for vacuum.

Is there approx. 200 mm Hg (8 in. Hg)

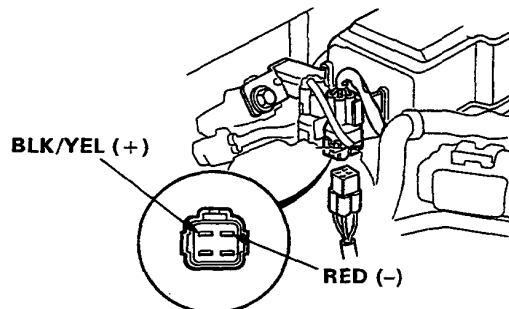
YES

Inspect short in RED wire between ECU (A10) and EGR control solenoid valve. If wire is OK, replace the solenoid valve.

NO

Disconnect the 4P connector on the control box.

Connect the battery positive terminal to the BLK/YEL terminal and the negative terminal to the RED terminal.



Is there vacuum approx. 200 mm Hg (8 in. Hg)

NO

Replace EGR control solenoid valve.

YES

(To page 6-211)



(From page 6-210)

Measure voltage between BLK/YEL (+) terminal on the R. engine compartment wire harness and body ground.

Is there battery voltage ?

NO

Repair open in BLK/YEL wire between the solenoid valve and No. 12 fuse.

YES

Turn the ignition switch OFF.

Connect the inspection adaptor between the EGR valve lift sensor and engine wire harness.

Turn the ignition switch ON.

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

Is there approx. 5V ?

NO

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

YES

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

Is there approx. 1V ?

NO

-Replace EGR valve.
-Repair short in YEL wire between ECU (C8) and EGR valve lift sensor.

YES

Turn the ignition switch OFF.

Connect the system checker harness between the ECU and connector (page 6-137).

(To page 6-212)

Is there approx. 5V ?

YES

Repair open in GRN/WHT wire between ECU (C12) and the sensor.

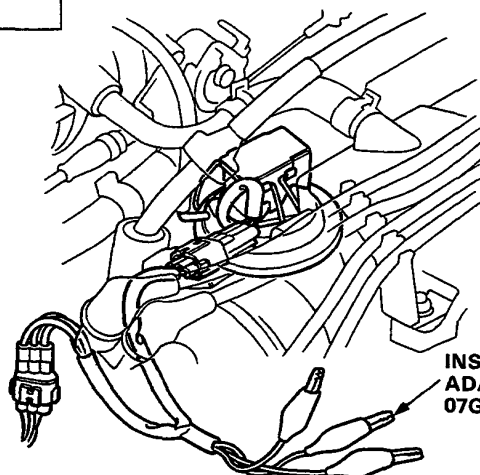
NO

Turn the ignition switch OFF.

Connect the system checker harness between the ECU and connector (page 6-137).

Turn the ignition switch ON.

(To page 6-212)



INSPECTION
ADAPTOR
07GMJ-ML80100

(cont'd)

Exhaust Gas Recirculation System [KX, KS, KZ]

Troubleshooting Flow Chart — EGR System (cont'd)

