

Emission Control System

Evaporative Emission (EVAP) Controls

Description

The evaporative emission controls are designed to minimize the amount of fuel vapor escaping to the atmosphere. The system consists of the following components:

A. Evaporative Emission (EVAP) Control Canister

An EVAP control canister is used for the temporary storage of fuel vapor until the fuel vapor can be purged from the EVAP control canister into the engine and burned.

B. Vapor Purge Control System

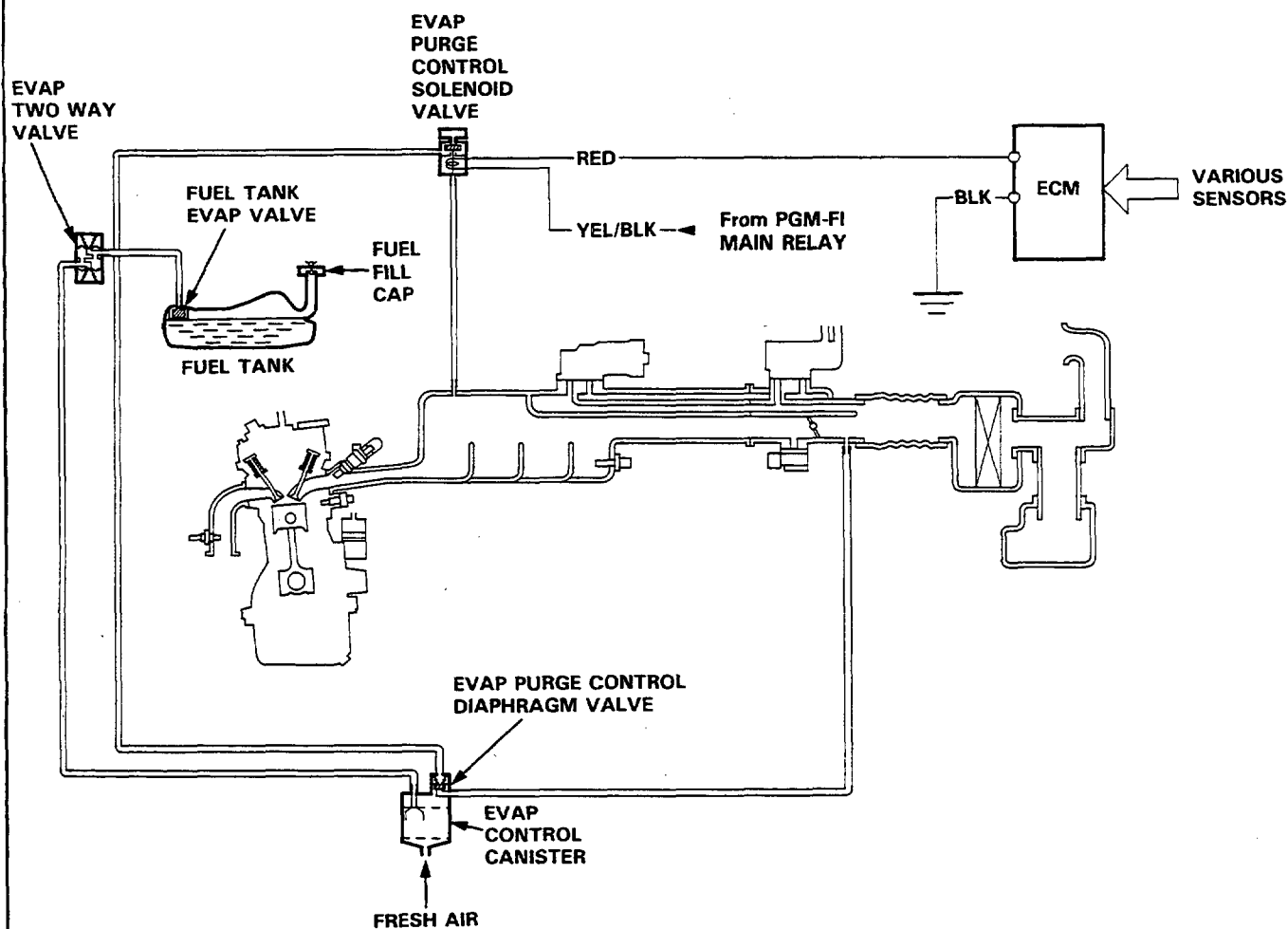
EVAP control canister purging is accomplished by drawing fresh air through the EVAP control canister and into a port on the throttle body. The purging vacuum is controlled by the EVAP purge control diaphragm valve and the EVAP purge control solenoid valve.

EVAP PURGE CONTROL SOLENOID VALVE OFF AFTER STARTING ENGINE
(EVAP PURGE CONTROL DIAPHRAGM VALVE OPEN)

ENGINE COOLANT TEMPERATURE ABOVE 75°C (167°F)

C. Fuel Tank Vapor Control System

When fuel vapor pressure in the fuel tank is higher than the set value of the EVAP two way valve, the valve opens and regulates the flow of fuel vapor to the EVAP control canister.

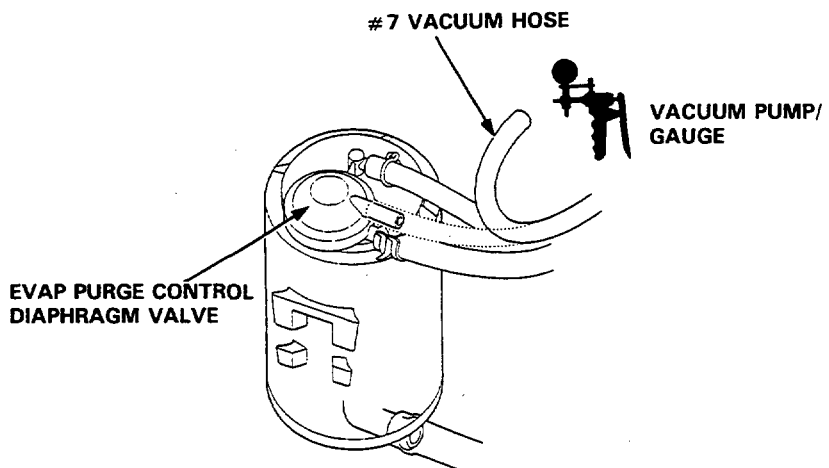




Inspection of Evaporative Emission Controls.

Disconnect #7 vacuum hose from the EVAP purge control diaphragm valve (on the EVAP Control canister) and connect a vacuum gauge to the hose.

Start the engine and allow it to idle.
NOTE: Engine coolant temperature must be below 75°C (167°F).



Is there vacuum?

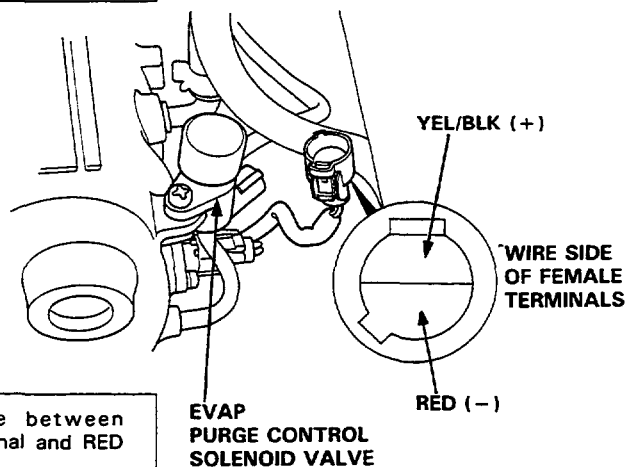
YES

Disconnect the 2P connector from the EVAP purge control solenoid valve.

NO

Start the engine. Hold the engine at 3,000 rpm (min^{-1}) with no load (A/T in **N** or **P** position, M/T in neutral) until the radiator fan comes on, then let it idle.

Check for vacuum at #7 vacuum hose after starting the engine.



Measure voltage between YEL/BLK (+) terminal and RED (-) terminal.

Is there battery voltage?

YES

Inspect vacuum hose routing. If OK, replace the EVAP purge control solenoid valve.

NO

Measure voltage between YEL/BLK (+) terminal and body ground.

Is there battery voltage?

NO

Repair open or short in YEL/BLK wire between PGM-FI main relay and the 2P connector.

YES

Inspect RED wire for an open to body ground between ECM (A20) and the 2P connector. If wire is OK, substitute a known-good ECM and recheck. If symptom goes away, replace the original ECM.

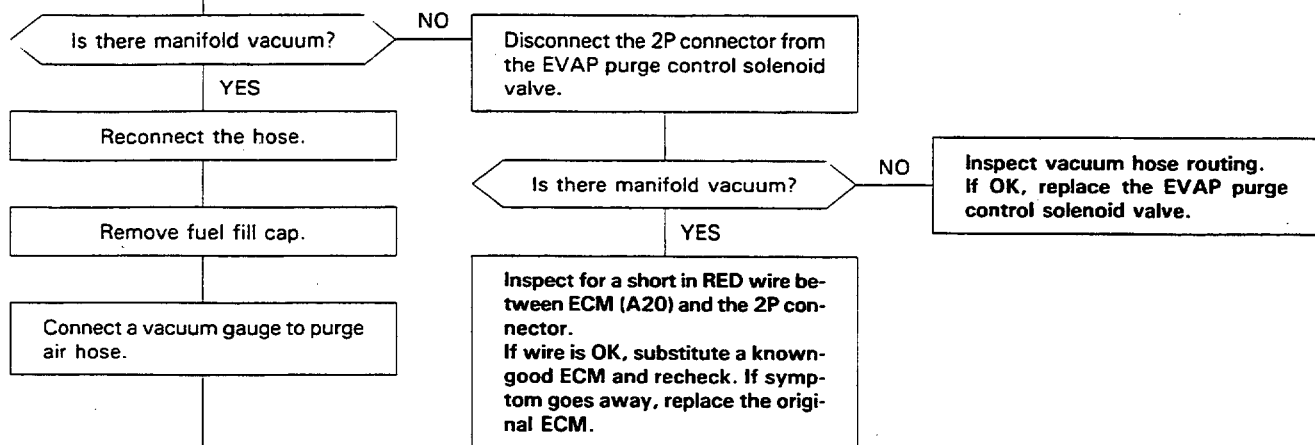
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Emission Control System

Evaporative Emission Controls (cont'd)

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VACUUM PRESSURE
GAUGE 0—4 in. Hg

