

ISUZU & LUV

Isuzu I-Mark, P'UP, LUV Pickup

DESCRIPTION

System is designed to route fuel vapors from fuel tank into carbon canister where they are mixed with ambient air and drawn into intake manifold.

System consists of a roll-over and float valve, check and relief valve, relief valve, charcoal canister, vent switching valve and tubes connecting the components. I-Mark models also use a vapor separator tank located near fuel tank.

OPERATION

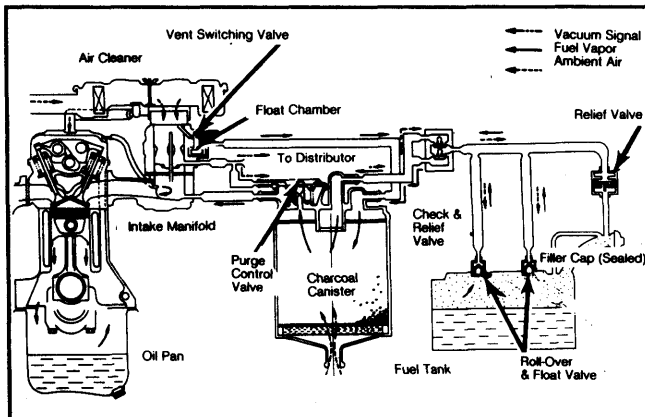
WITH ENGINE RUNNING

When vacuum develops in fuel tank or crankcase and the difference between relief side and fuel tank or crankcase is .2-6 in. Hg, the relief valve opens and allows air from air filter to enter fuel tank or crankcase. This air replaces fuel vapors and brings fuel tank or crankcase back to balanced atmospheric pressure.

WITH ENGINE NOT RUNNING

The fuel vapor taken up into the roll-over and float valve is routed into check and relief valve. When vacuum becomes 1.0-1.4 in. Hg, the check valve opens and allows vapor into canister. While check valve is open, valve at air cleaner side remains closed to prevent flow of vapor into air cleaner.

Fig. 1: LUV Evaporative Emission Control System



TESTING

ROLL-OVER & FLOAT VALVE

Check valve for fuel leaks, distortion, clogging or any damage. Replace valve if required.

CHECK & RELIEF VALVE

- 1) Remove check valve and inspect for leakage by blowing air into ports in check valve as follows:
- 2) When air is applied to fuel tank side of check valve, it can pass into canister, but should not leak into air cleaner.
- 3) When air is applied from check side, the valve is normal if passage of air is restricted.

Fig. 2: Isuzu & LUV Check & Relief Valve

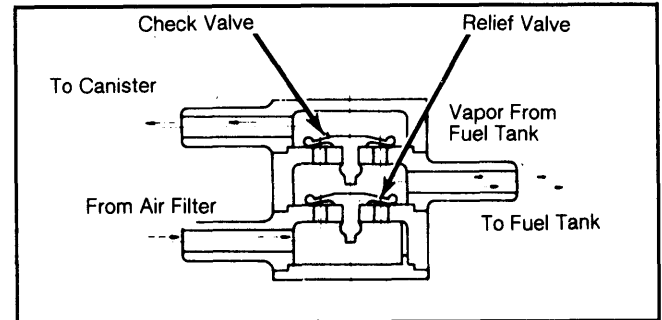
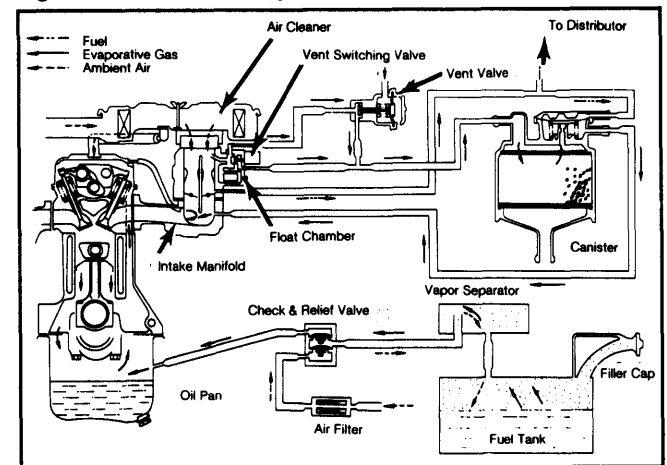


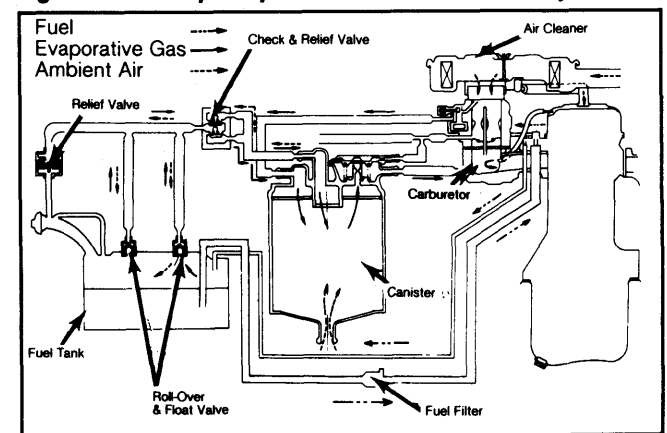
Fig. 3: Isuzu I-Mark Evaporative Emission Control System



CANISTER & PURGE VALVE

- 1) Remove canister from vehicle. Apply 7.5 psi air pressure to port marked "V.C." No air should leak from diaphragm.
- 2) Apply and maintain 15 in. Hg vacuum to port marked "Purge". Gradually apply vacuum to "V.C." port. Purge valve should open when 7.1-8.7 in. Hg is applied to port "V.C." Replace valve if it does not operate properly.

Fig. 4: Isuzu P'up Evaporative Emission Control System



MAINTENANCE

The system and all components should be inspected for condition and function every 15,000 miles.