LUV

Pickup

DESCRIPTION

System is designed to route fuel vapors from the fuel tank into the carbon canister, where they are mixed with ambient air and drawn into the intake manifold. The system consists of a roll-over fuel trap, check and relief valve, charcoal canister, vent switching valve and tubes connecting the various components.

OPERATION

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

When Engine is Not Running – The fuel vapor taken up into the roll-over fuel trap is routed into the check and relief valve. When vacuum becomes 1.0-1.4 in. Hg, the check valve opens and allows vapor into the canister. While the check valve is open, the valve at the air cleaner side remains closed to prevent the flow of vapor into the air cleaner.

TESTING

Roll-Over Fuel Trap – Check trap for fuel leaks, distortion, orifice clogging, or any damage. Replace trap if necessary.

Check and Relief Valve – 1) Remove check valve and inspect for leakage by blowing air into ports in the check valve. Valve should perform as follows:

2) When air is applied to the fuel tank side of the check valve, it can pass into the canister, but it should not leak into the air cleaner.

3) When air is applied from check side, the valve is normal if passage of air is restricted.

Canister and Purge Valve – 1) Remove canister from vehicle and check by applying 7.5 psi air pressure to port marked "V.C.". No air should leak from the diaphragm.

2) Apply and maintain 15 in. Hg vacuum to port marked "Purge". Gradually apply vacuum to port "V.C."; purge valve should open when 7.1-8.7 in. Hg is applied to "V.C.". Replace if valve does not operate correctly.

MAINTENANCE

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

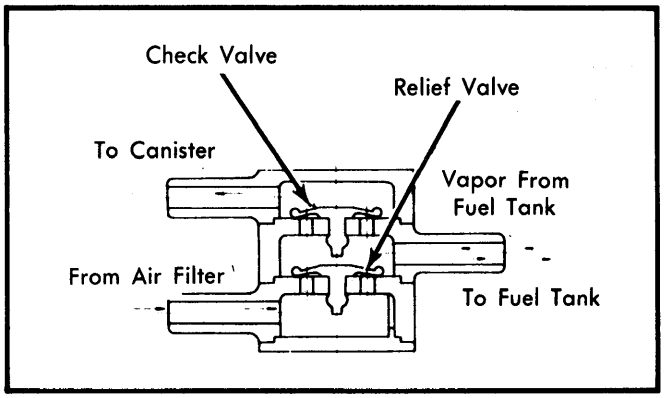

Fig. 2 LUV Check and Relief Valve

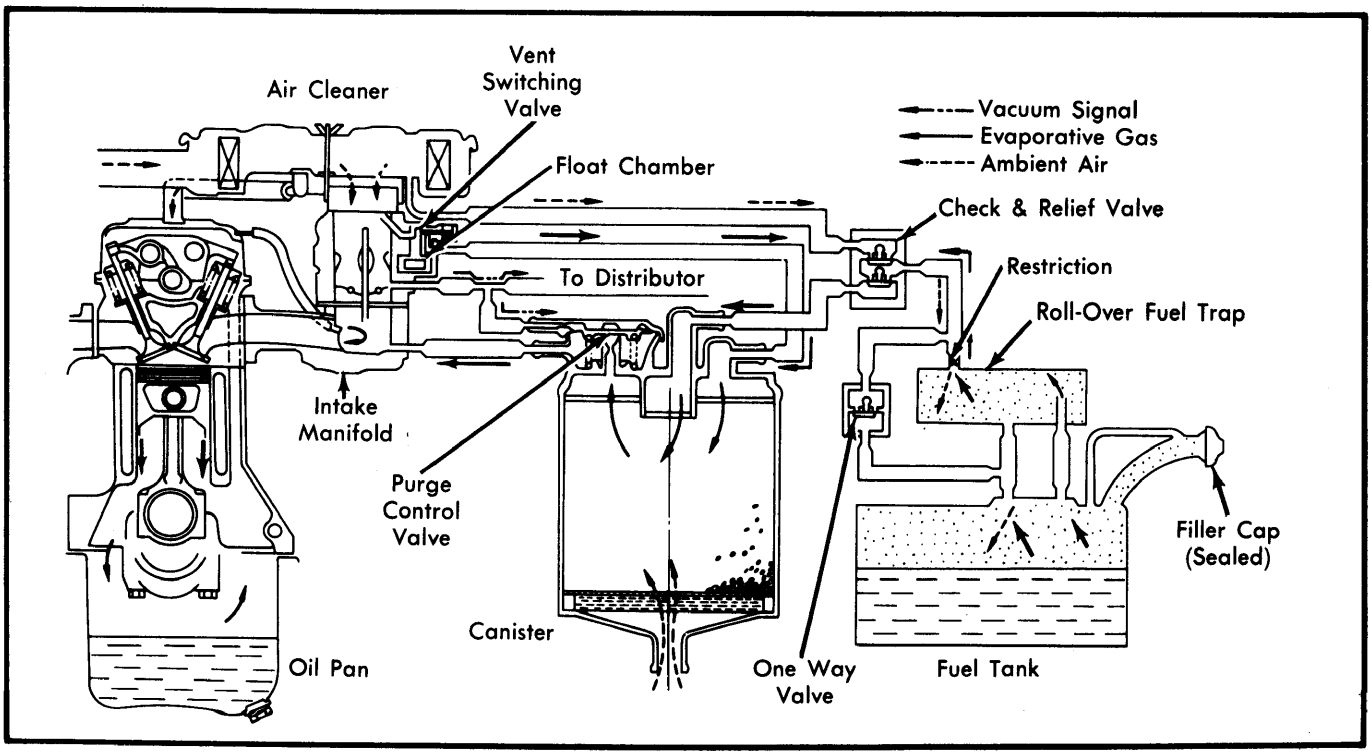

Fig. 1 LUV Evaporative Emission Control System