

# Fuel Evaporation

## CHEVROLET LUV

Chevrolet Luv Pickup (1972-73)

### DESCRIPTION

System is designed to route the fuel vapor from fuel tank into engine crankcase, where it is mixed with blow-by gases and drawn into intake manifold. System consists of vapor separator tank, check and relief valve and tubes connecting components.

### OPERATION

**When Engine is Running** — When vacuum is developed in the fuel tank or engine crankcase and the difference between relief side and fuel tank or crankcase is 2.06" Hg., the relief valve opens and allows air from air cleaner into the fuel tank or engine crankcase. This air replaces vapors and brings fuel tank or crankcase back to balanced atmospheric pressure.

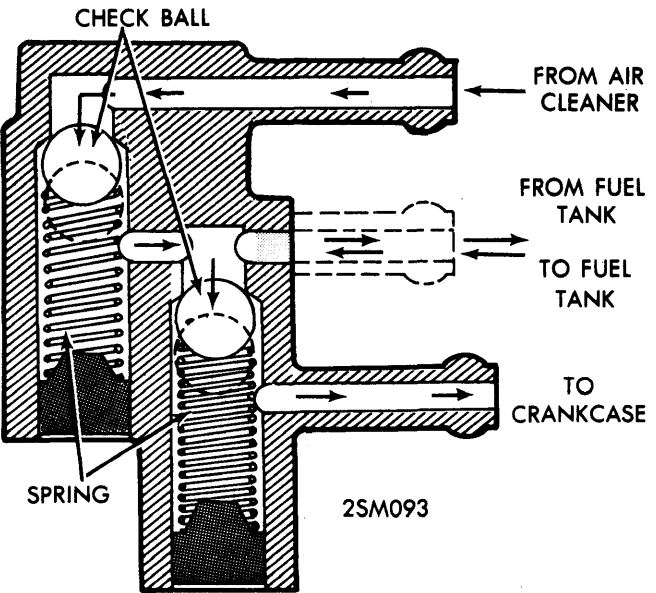
**When Engine is Stopped** — The fuel vapor taken up into the vapor separator is routed into the check and relief valve. When the vacuum becomes 1-1.4" Hg., the check valve opens and allows vapor into the crankcase. While check valve is open, the valve at the air cleaner side remains closed to prevent flow of vapor into the air cleaner.

### SERVICE PROCEDURES

The system and all components should be inspected for condition and proper functioning every 12,000 miles.

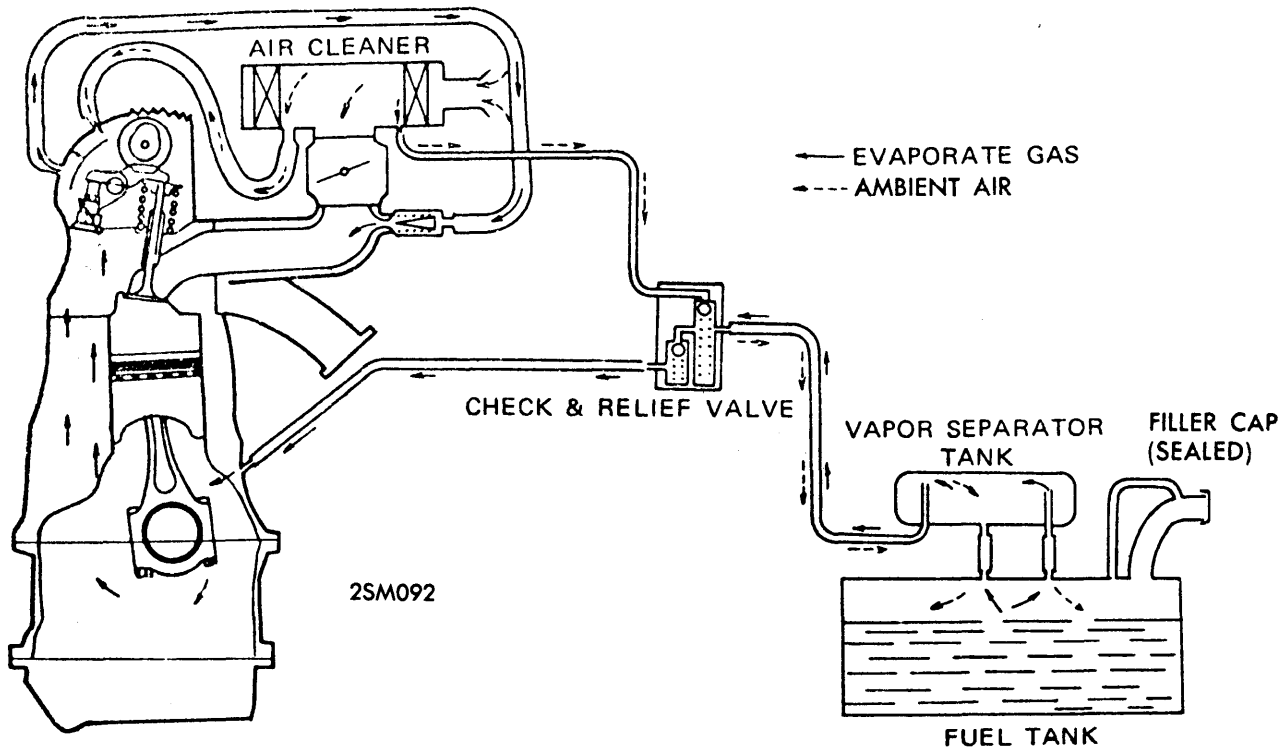
**Vapor Separator Tank** — Check tank for fuel leaks, distortion or any damage. Replace tank if necessary.

**Check & Relief Valve** — Remove check valve and inspect for leakage by blowing air into the ports in the check valve. Valve should perform as follows:



CHECK AND RELIEF VALVE

- 1) When air is applied from the fuel tank side, the check valve is normal if air passes into the crankcase side, but it should not leak into the relief side (air cleaner side).
- 2) When air is applied from check side, the valve is normal if passage of air is restricted.
- 3) When air is applied from the relief side (air cleaner side), the valve is normal if air passes into the fuel tank side but it should not leak into the check (crankcase) side.



### LUV EVAPORATIVE EMISSION CONTROL SYSTEM