

1974-79 EXHAUST EMISSION SYSTEMS

Chrysler Corp. Fuel Evaporation

All Models

DESCRIPTION

The system consists of a separator tank, a two-way valve, a fuel check valve, a purge control valve, a charcoal canister, sealed filler cap, and tubes and hoses to connect the system. These components are employed to prevent the escape of fuel vapors into the atmosphere.

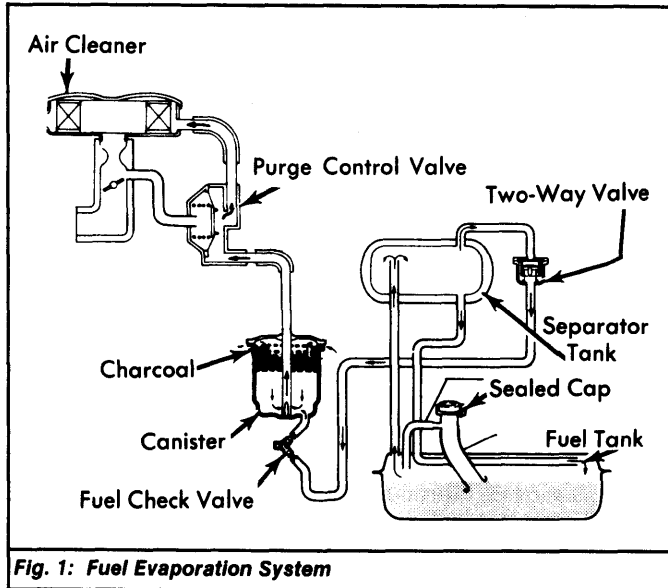


Fig. 1: Fuel Evaporation System

CANISTER

This charcoal filled canister traps vapors while engine is not running. During engine operation, fresh air is drawn through the canister to carry fuel vapors into engine air cleaner, then into engine where they are burned.

TWO-WAY VALVE

This valve consists of a pressure/vacuum valve. The pressure valve is designed to open when fuel tank internal pressure has increased over normal pressure. The vacuum valve prevents a vacuum from forming in fuel tank.

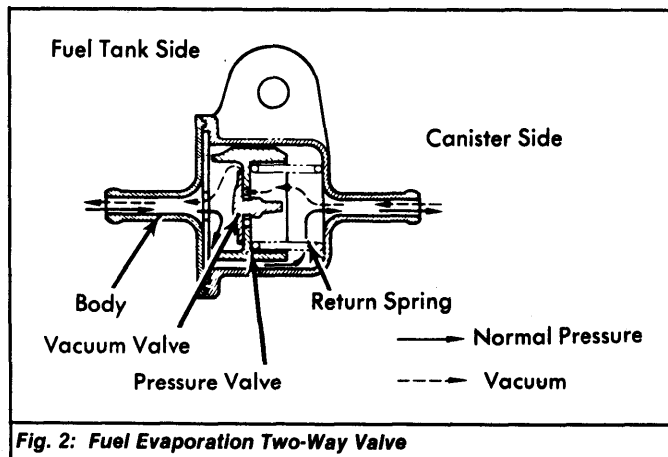


Fig. 2: Fuel Evaporation Two-Way Valve

SEPARATOR TANK

The separator tank is designed to reduce fuel overflow in fuel tank caused by temperature rise and also to prevent liquid fuel from entering vapor line during extreme cornering.

PURGE CONTROL VALVE

This valve reduces hydrocarbon (HC) emissions by closing at idle to prevent vaporized fuel from entering air cleaner. Carburetor vacuum opens valve as engine speed increases.

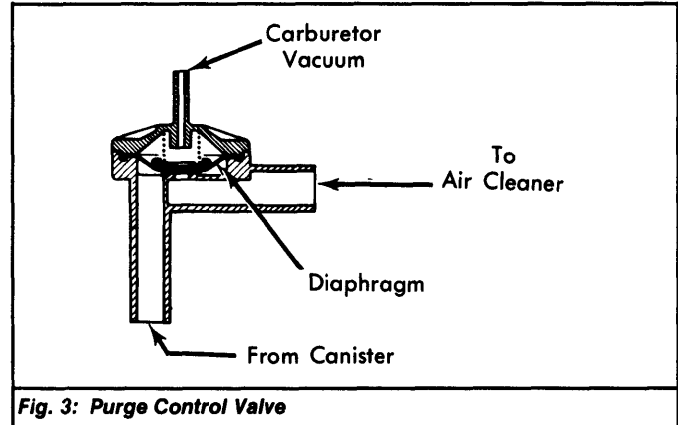


Fig. 3: Purge Control Valve

FUEL CHECK VALVE

If the vehicle should roll over, one of the two balls in valve will close off fuel passage and prevent fuel leaks.

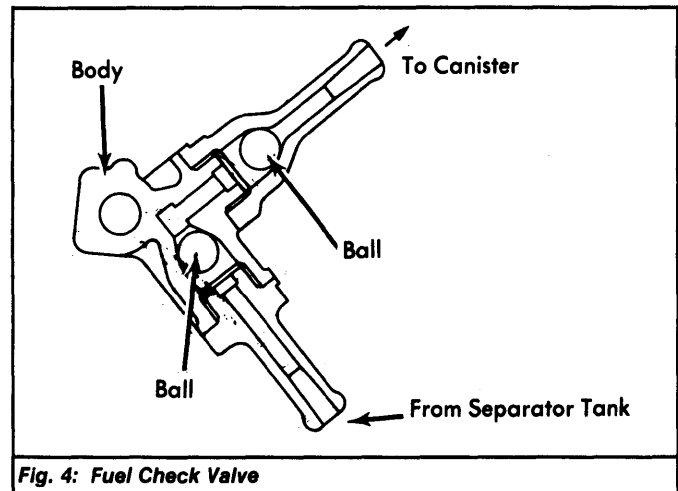


Fig. 4: Fuel Check Valve

TESTING

PURGE CONTROL VALVE

With engine stopped, remove purge hose from air cleaner and blow air into it. No air should pass through purge valve. Start engine and hold at 2000 RPM. Air should pass freely through purge valve. Replace valve if it does not respond as specified.

TWO-WAY VALVE

Remove valve and blow lightly through both inlet and outlet. If air passes in both directions, with light resistance, valve is good.

MAINTENANCE

Every 12 months or 15,000 miles, check fuel vapor vent line by blowing through line with compressed air. Also inspect and test valves and clean charcoal canister cover air suction port. Every 30,000 miles, replace all vapor lines in system and replace charcoal canister.