1981 Fuel Evaporation Systems

CHRYSLER CORP. IMPORTS

Arrow Pickup
Challenger
Champ
Colt
Ram-50 Pickup
Sapporo

DESCRIPTION

The fuel evaporation system is used to prevent the escape of evaporative gases into the atmosphere. The system consists of a special fuel tank, vacuum relief filler cap, vapor separator, 2-way valve, fuel check valve, charcoal canister(s), purge control valve, carburetor bowl vent valve, carbon element and tubes and hoses to connect the system.

OPERATION

When Engine is Running – The fuel vapors absorbed in the canister are drawn into the intake manifold through the purge control valve and an orifice. The fuel vapors absorbed in the carbon element are led into the carburetor and the carburetor bowl vapors flow into the carburetor through the bowl vent valve.

When Engine is Not Running – The fuel vapors generated inside the fuel tank and the carburetor float chamber flow into the charcoal canister and are stored there. The fuel vapors generated inside the carburetor and intake manifold are absorbed into the carbon element of the air cleaner.

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 with mouth. If air passes with light resistance in both directions, 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 (Federal models) or 50,000 miles (California models), replace all vapor lines in system and replace charcoal canister.

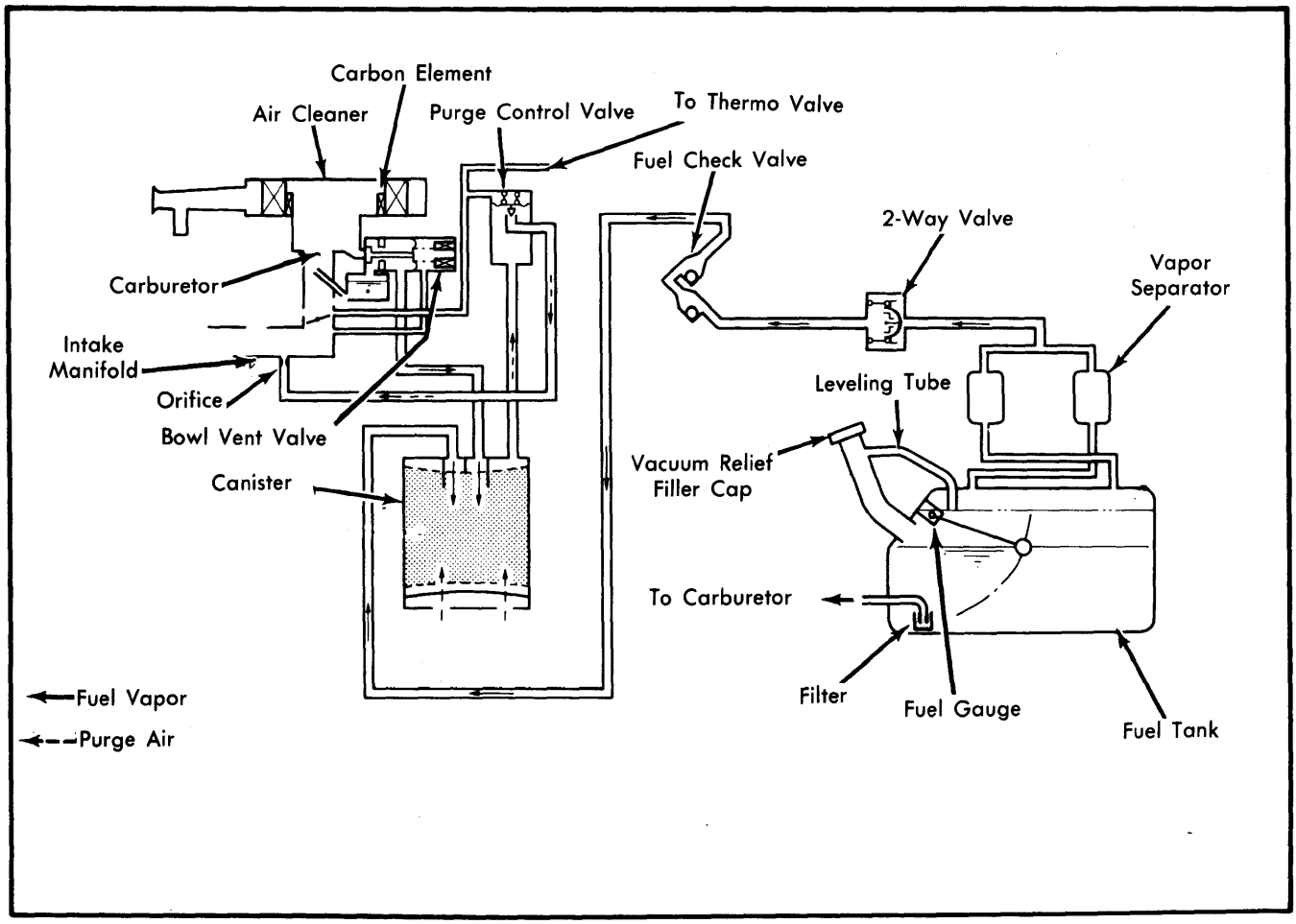

Fig. 1 Fuel Evaporation System (Arrow Pickup & Ram-50 Pickup)

CHRYSLER CORP. IMPORTS (Cont.)

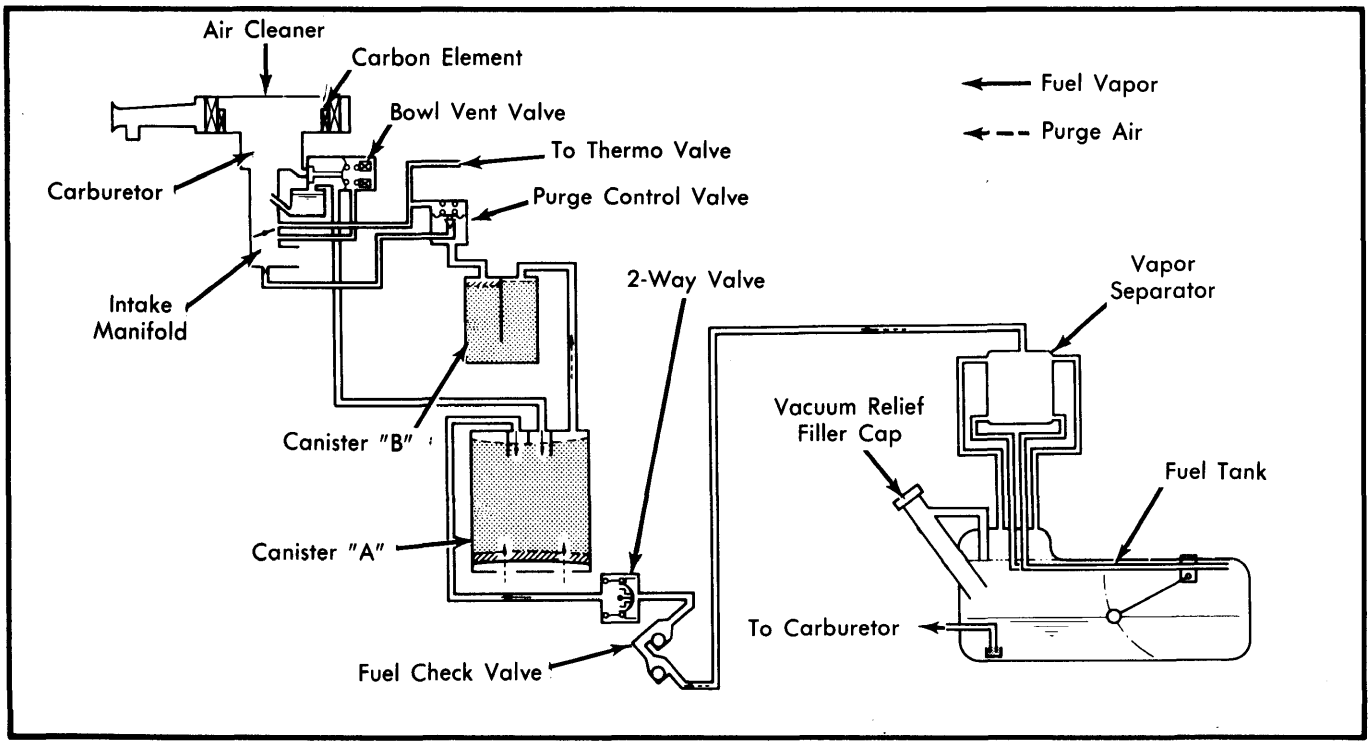

Fig. 2 Fuel Evaporation System (Challenger & Sapporo)

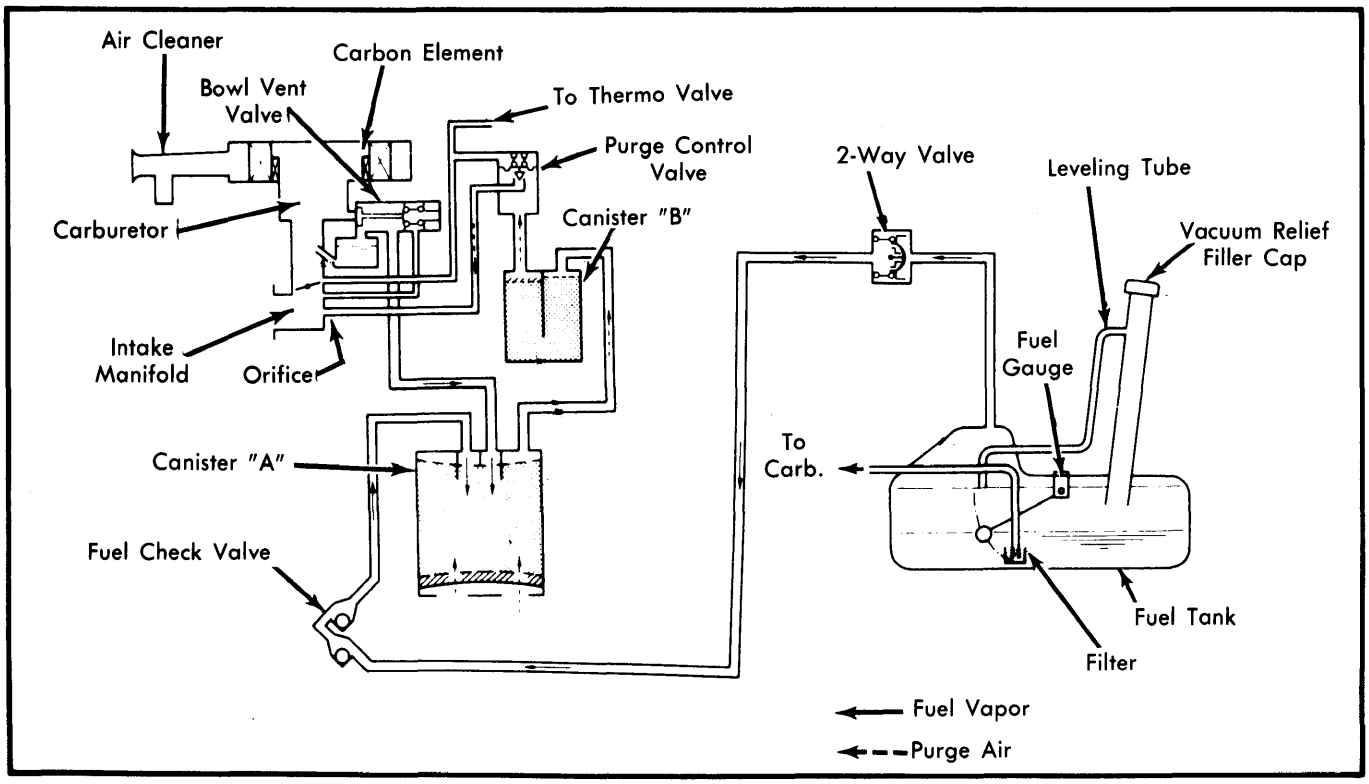

Fig. 3 Fuel Evaporation System (Champ & Colt)