

1974-79 EXHAUST EMISSION SYSTEMS

Volkswagen Fuel Evaporation

All Models

DESCRIPTION

The sealed fuel evaporation system prevents fuel vapors from escaping to the atmosphere. Vapors from the fuel tank are trapped in a charcoal canister. The system consists of a non-vented fuel tank filler cap, an expansion chamber built into fuel tank, an activated charcoal canister, and a series of vent lines which interconnect the components between the fuel tank and air cleaner. The charcoal canister is also connected to the fuel tank vent system.

On air cooled engines, a pressure line (used to purge the system), is connected between the engine blower assembly and the charcoal canister. Some models also use a separator to prevent the entry of liquid fuel into the system. On Dasher, only a fuel vapor restrictor is installed in vent line.

FUEL TANK VENTING

An expansion chamber in the fuel tank and vent lines are part of the fuel tank vent system. These components prevent fuel from escaping to the outside at extreme high outside temperatures and when the vehicle is driven or parked at an incline or any other non-level position.

OPERATION

Fuel vapors pass through the carbon canister and deposit hydrocarbons on the surface of the carbon. When the engine is running, fresh air entering the canister through an opening cleans the carbon and routes the hydrocarbons via the air cleaner back to the engine where they are burned during normal combustion.

On water cooled engines, any oversupply of fuel by the fuel pump is recirculated to the fuel tank via a fuel return line, to control fuel supply during engine idle. On air cooled engines, fresh air is blown through charcoal canister from blower housing to aid in purging action. This keeps emissions during idle at the required low level.

MAINTENANCE

Every 15,000 miles visually inspect the entire system and correct any deficiencies noted.

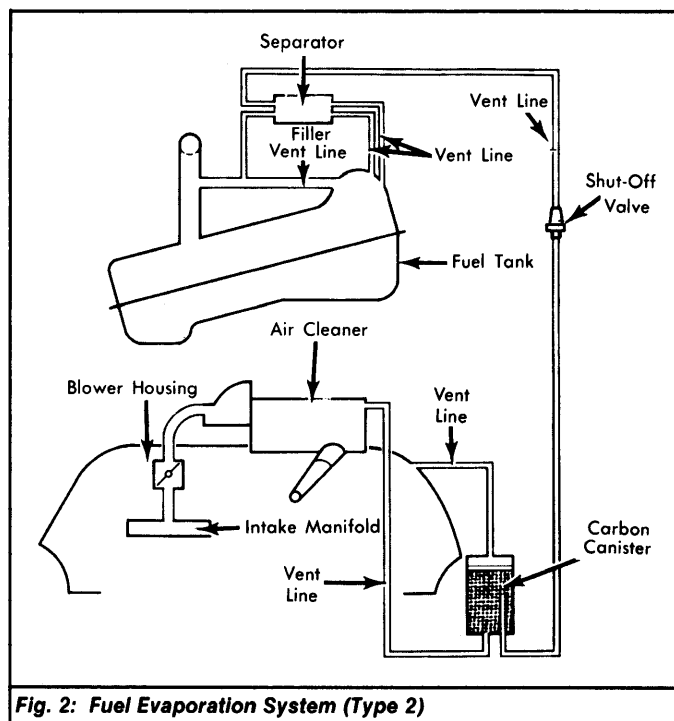
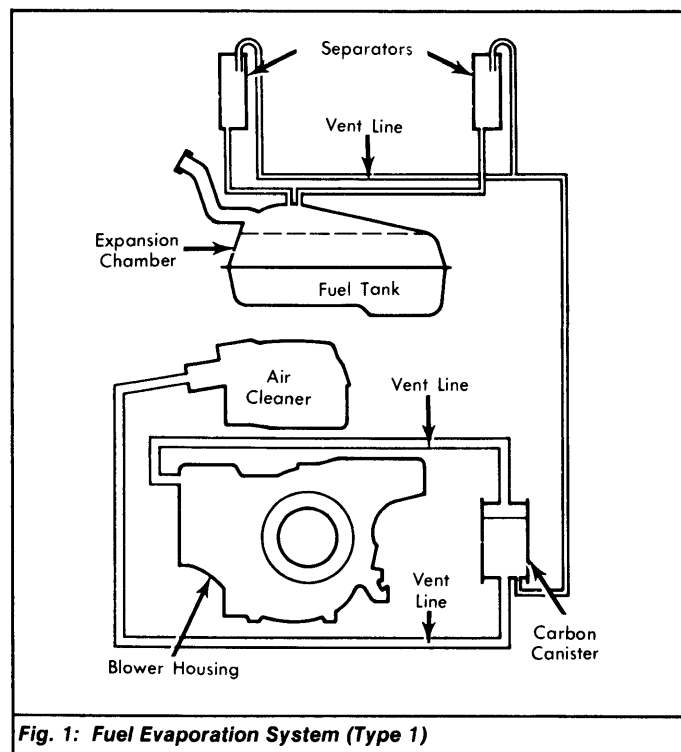


Fig. 2: Fuel Evaporation System (Type 2)

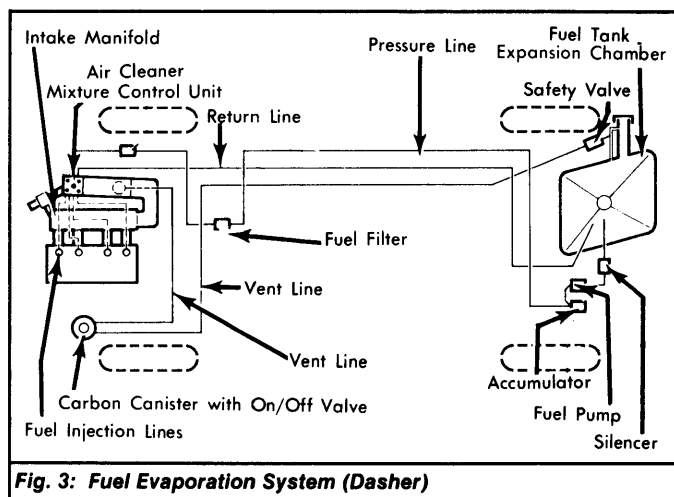


Fig. 3: Fuel Evaporation System (Dasher)

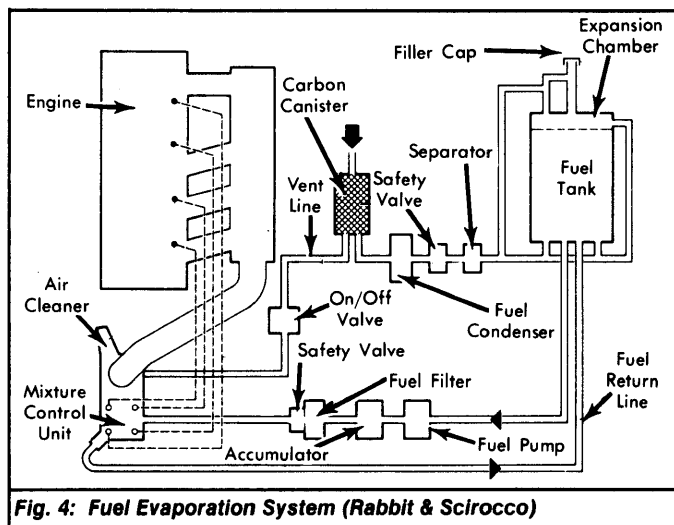


Fig. 4: Fuel Evaporation System (Rabbit & Scirocco)