1981 Fuel Evaporation Systems

PORSCHE

911SC
924
924 Turbo
928

DESCRIPTION

Porsche Fuel Evaporation Emission Control System is designed to prevent fuel vapors from being emitted into the atmosphere.

The system consists of a non-vented fuel tank filler cap, an expansion chamber, an activated charcoal canister, a purge valve, a vent valve, and a series of vent lines which interconnect the components between the fuel tank and air cleaner.

On air-cooled models, a pressure line, used to purge the system, is connected between the engine blower assembly and the charcoal canister.

OPERATION

Expanded fuel, caused by high ambient temperatures, is collected in the expansion tank. This fuel is returned to main tank by venting action as fuel is used from main tank.

Fuel vapors produced in fuel tank pass through a vent line to a carbon canister where they are stored in the activated charcoal in the canister. A second vent line connects carbon canister to air cleaner.

When engine is running, intake vacuum draws fresh air through carbon canister. This fresh air mixes with fuel vapors and is drawn into intake system where it enters the combustion system and is burned.

This action purges the activated charcoal and renews its storage capacity. On air-cooled models fresh air is blown through charcoal canister from blower housing to aid in purging action.

MAINTENANCE

Check entire system for leaks, damage, deterioration, etc. every 15,000 miles.

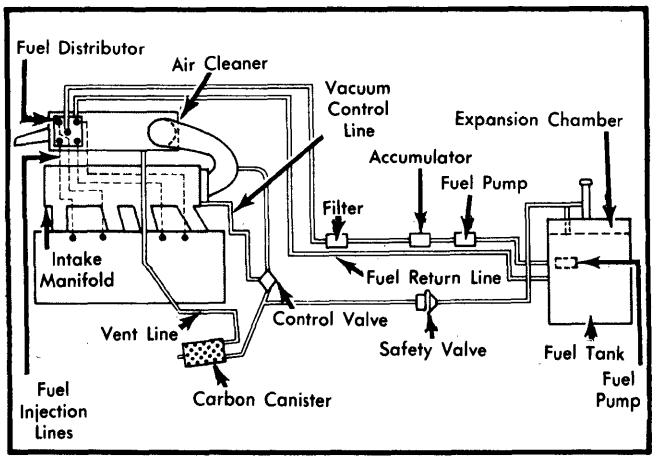

Fig. 1 Porsche 924 and 924 Turbo Fuel Evaporation System

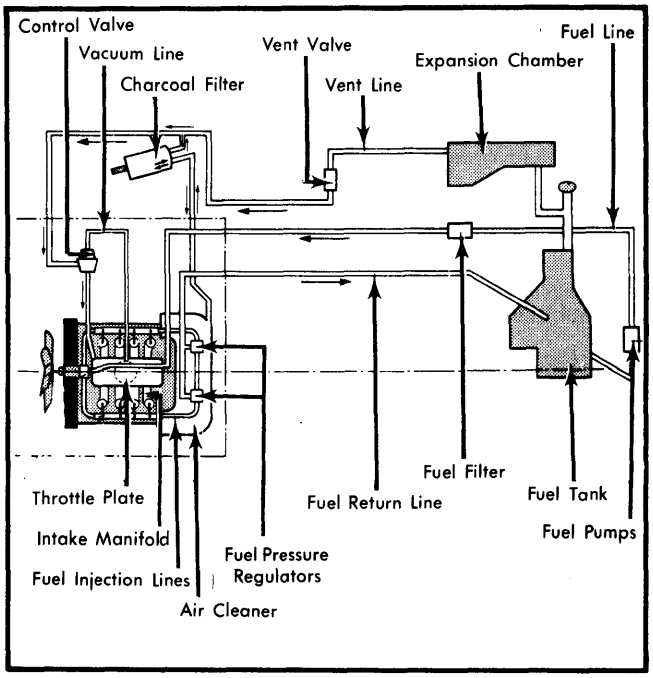

Fig. 2 Porsche 928 Fuel Evaporation System

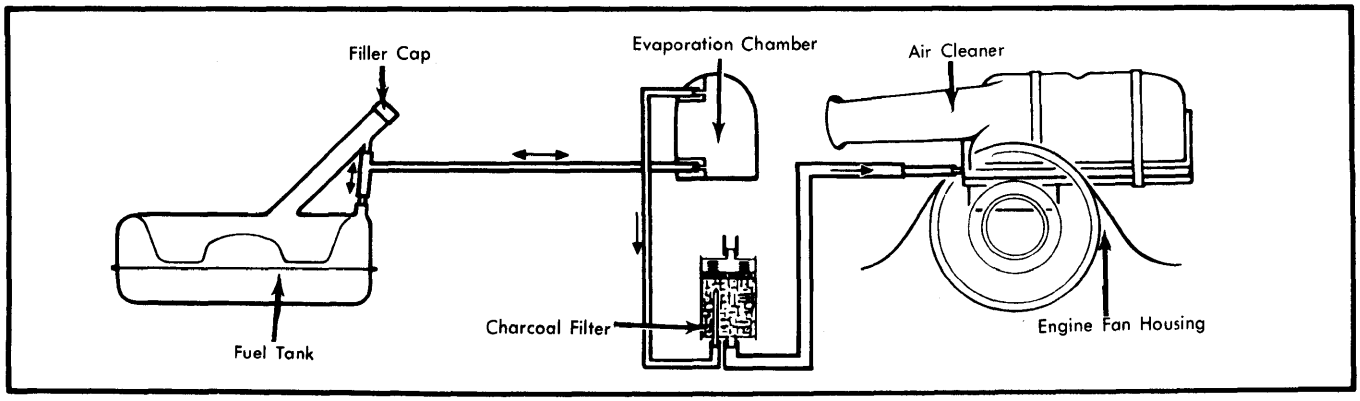

Fig. 3 Porsche 911 SC Fuel Evaporation System