VOLVO

All Models

DESCRIPTION & OPERATION

The Fuel Evaporation Control System is designed to prevent fuel vapor emissions from the fuel system being discharged into the atmosphere. Fuel system is completely sealed and vented only through a carbon canister.

Fuel Tank & Filler Cap – Tank is fitted with a pressure safety valve type cap which allows excessive tank pressure or vacuum to escape. Tank is vented by a vent line through roll over valve and to carbon canister.

Roll Over Valve – Valve is located in the vent line close to fuel tank. Valve is designed to prevent fuel spillage if vehicle rolls over. Valve is open until vehicle is at a 45° angle, or more, from horizontal.

Carbon Canister – Canister is filled with activated carbon and has a replaceable foam filter in the bottom. Vent line from roll over valve is connected to canister and fuel vapors from tank are adsorbed by carbon when engine is not running. Another vent line on canister connects to air intake of fuel injection inlet duct. When engine is running faster than idle, air drawn in through bottom of canister and fuel vapors are drawn into engine and burned. This purging action renews adsorbing capacity of the carbon canister.

MAINTENANCE

Foam plastic filter in bottom of carbon canister should be replaced every 60,000 miles.

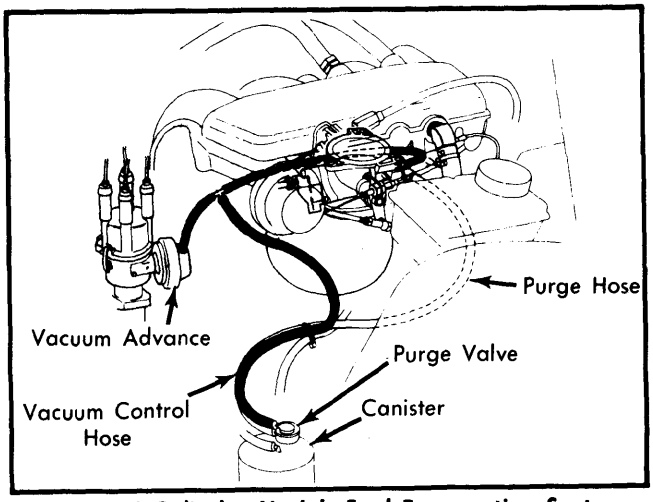

Fig. 1 4 Cylinder Models Fuel Evaporation System (From Carbon Canister to Engine)

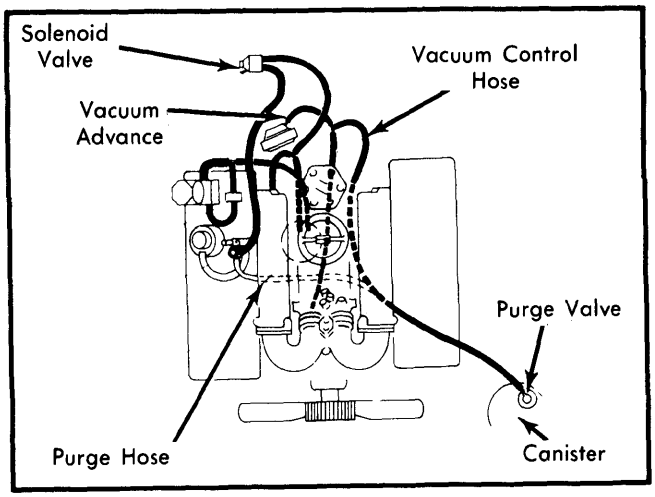

Fig. 2 6 Cylinder Models Fuel Evaporation System (From Carbon Canister to Engine)

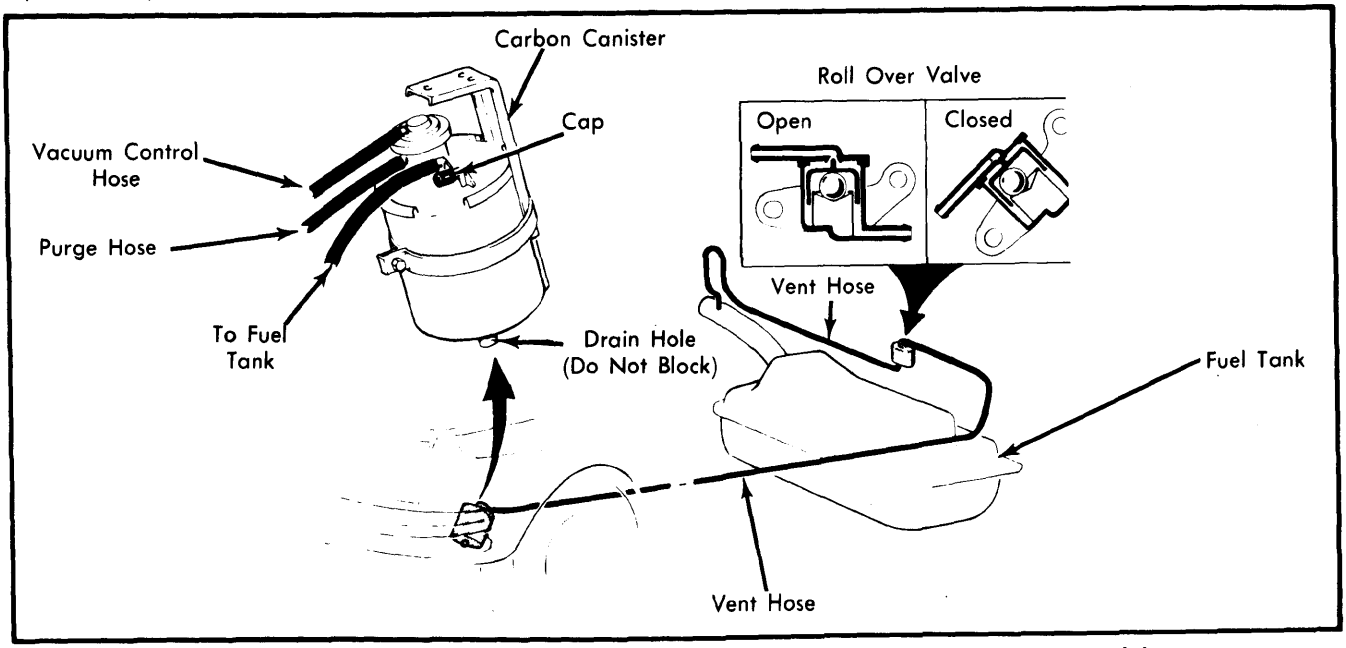

Fig. 3 Fuel Evaporation System From Carbon Canister to Fuel Tank on All Models