## 1970-71 JEEP FUEL EVAPORATIVE EMISSION CONTROL

### DESCRIPTION

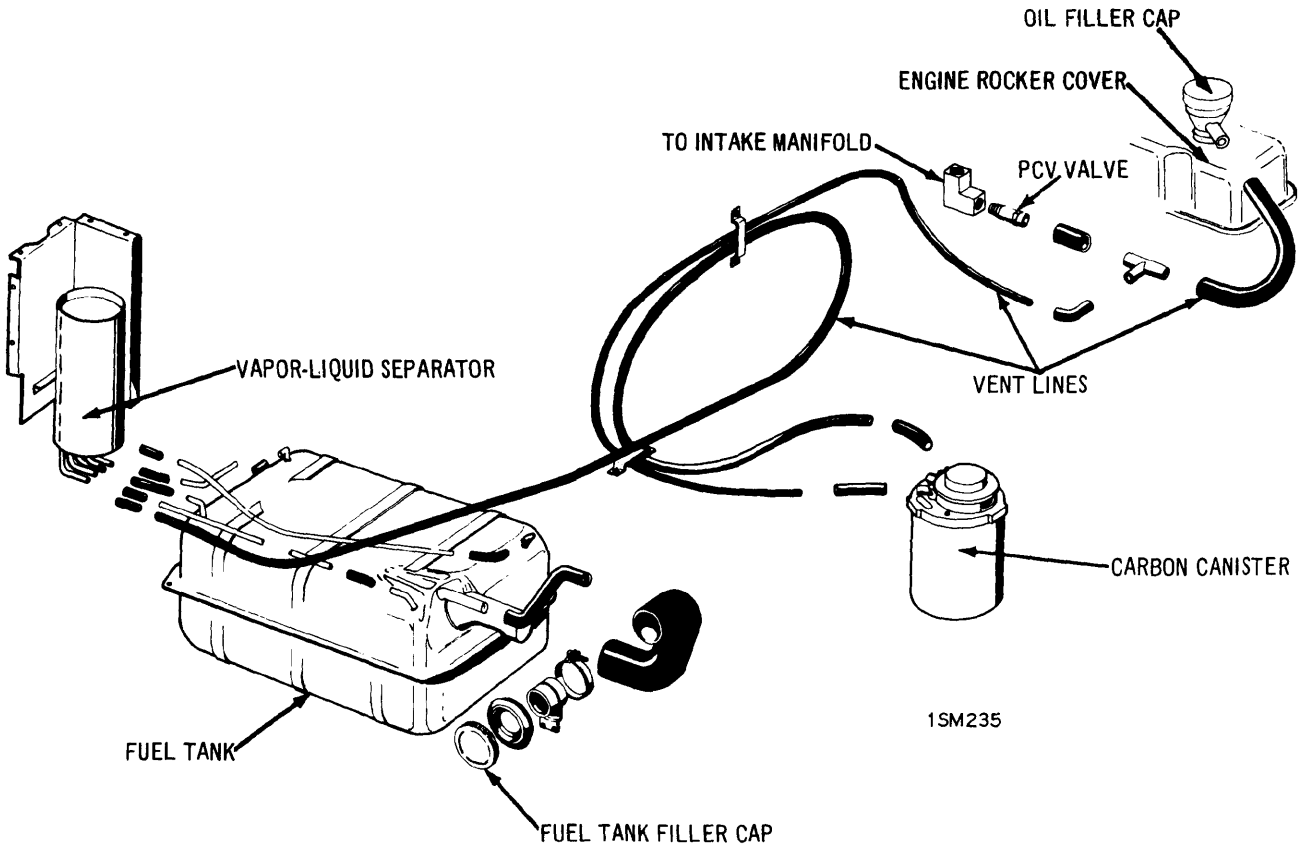
The fuel evaporation emission control system is designed to control fuel vapors emitted to the atmosphere and employs a closed system with a sealed fuel tank filler cap and a vent system by which fuel vapors are directed to the intake manifold where they enter the combustion system and are burned. Components of the system are; a redesigned fuel tank, a liquid-vapor separator, an activated carbon canister and a series of vent lines and hoses connecting components.

### OPERATION

**Fuel Tank & Filler Cap** – Fuel tank filler cap is sealed. Fuel tank is designed with four vent tubes (one at each corner of tank) to provide positive venting regardless of vehicle inclination. These four vent lines are connected to a vapor-liquid separator.

**Vapor-Liquid Separator** – Separator assembly is mounted above main fuel tank. Vent tubes (one from each corner of fuel tank) extend into separator and are of different heights to provide for positive venting. Separator is designed to prevent liquid fuel flowing through the vent line to the carbon canister by providing a chamber in which liquid fuel is separated from vapors and returned through one vent line which is short and provides a return line to the tank for liquid fuel and condensate within the separator.

**Carbon Canister** – Fuel tank vent line (from liquid-vapor separator) is connected to a canister filled with activated carbon. Canister is located in engine compartment. A second vent line (from canister) extends to a "Tee" connection in the crankcase ventilation hose leading to the PCV valve connection. When engine is stopped, fuel vapors are stored in the canister. When engine is running, fuel vapors are drawn into the combustion system (through crankcase ventilation system) and burned. This action cleans the canister and renews its absorption capacity.




JEEP FUEL EVAPORATION EMISSION CONTROL SYSTEM COMPONENTS