1970 FORD CAPRI

Ford Capri (1970 All Models)

DESCRIPTION & OPERATION

The Fuel Evaporative Emission Control System is designed to prevent fuel vapors from being emitted to the atmosphere by use of a closed fuel supply system in which all fuel vapors are conducted through a vent line to the engine compartment where they are stored in a carbon canister (engine not running) and burned in the engine (when engine is running). Fuel system has the following modified parts:

Fuel Tank & Vapor Separator – The filler neck consists of two concentric tubes to allow for venting and fuel level sensing during fuel filling. A non-vented filler cap completely seals the system once filling operation is complete. The vapor separator is welded to top of tank and allows liquid fuel to return to the fuel tank while preventing liquid fuel from entering vent line to three-way control valve. *NOTE – The vapor separator and vent pipes cannot be serviced separately from fuel tank.*

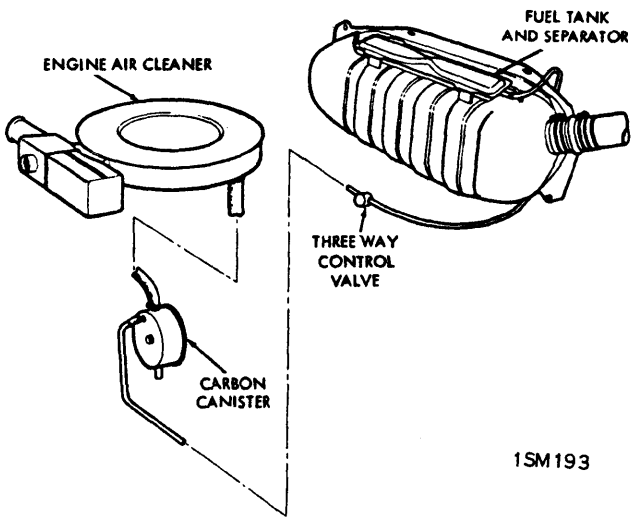
Three-Way Control Valve – This valve, located near rear wheel arch, is connected in vapor vent line between separator and carbon canister. Valve control venting of fuel system under all conditions as follows:

1) When filling fuel tank, valve closes vent line to maintain an expansion volume within tank (about 10% of total tank volume) and prevent overfilling (check valve opens at 0.3-0.65 psi and this pressure will not occur during filling operation).

2) Increase of pressure in tank due to thermal expansion will cause check valve to open (at 0.3-0.65 psi) and allow fuel vapor to flow to carbon canister. If a restriction prevents this vapor flow, pressure relief valve will open (at 0.7-1.5 psi) venting vapors to atmosphere.

3) As fuel is drawn from tank, or fuel volume decreases due to temperature decrease, vacuum valve will open (at vacuum of 0.25 psi) allowing air from atmosphere to flow into tank through a filter located in control valve body. As soon as pressure balance is restored, valve will close.

Carbon Canister – Canister mounted in engine compartment is filled with activated carbon which adsorbs fuel vapors when engine is not running (vapor line from control valve is connected to canister). Canister is connected to air cleaner by a hose so that, when engine is running, fuel vapors are drawn into air cleaner and burned in the engine. Canister also has an air intake on opposite side of case and outside air is drawn through activated carbon when engine is running. This action purges fuel vapors from canister and renews its storage capacity.



CAPRI EVAPORATIVE EMISSION CONTROL SYSTEM

MAINTENANCE

Replace three-way control valve every 12,000 miles. Canister must be replaced if damaged by crushing, oil contamination or water flooding.

PARTS REPLACEMENT

Component parts of system cannot be repaired and should be replaced if damaged or inoperative. Components can be removed as follows:

Three-Way Control Valve – Remove by disconnecting two lines and taking out two mounting screws, then remove valve assembly.

Carbon Canister – Disconnect large hose and vapor line hose at canister. Remove mounting bolt in center of canister and remove canister. When installing canister, tighten mounting bolt to 15-18 ft. lb.