

1973-74 CHRYSLER CORP. EVAPORATION CONTROL SYSTEM

DESCRIPTION

System is designed to reduce fuel vapor emissions from entering atmosphere through use of a closed system in which fuel vapors from fuel tank and carburetor flow through a vent line to an activated charcoal canister. When engine is running, these vapors are drawn into combustion system through intake manifold. This action purges and renews adsorption quality of the charcoal.

OPERATION

When fuel tank is filled to base of filler tube, vapors can no longer escape, they become trapped above fuel. Vapor flow through vent line is blocked by limiting valve. Filler tube is blocked by fuel preventing more fuel from entering tank. Any time pressure in tank goes above operating pressure of limiting valve, about 1/2 psi, valve opens and vapors flow to charcoal canister.

NOTE — On 1973 station wagons and some other models, vapor separator tanks are not required due to fuel tank configuration.

Vapor Separator Tank — On some models, each corner of fuel tank is vented and each of the hoses from these vents is connected to vapor separator. Other models use a domed fuel tank with an internal separator. On each, a tube from separator carries vapor from tank through separator to canister.

Charcoal Canister — There are two types of canisters used; One has three hose connections and no purge valve. Purging is accomplished by an additional ported vacuum connection at carburetor. This type utilizes throttle valve of carburetor as a purge valve. This system improves hot idle quality by eliminating canister purging during idle. On 1973 limited production high performance engines, a four connection in-

tegral purge valve type canister is used. Hoses connected to canister ports at one end will be connected to the following ports or "Tee" connector at other end:

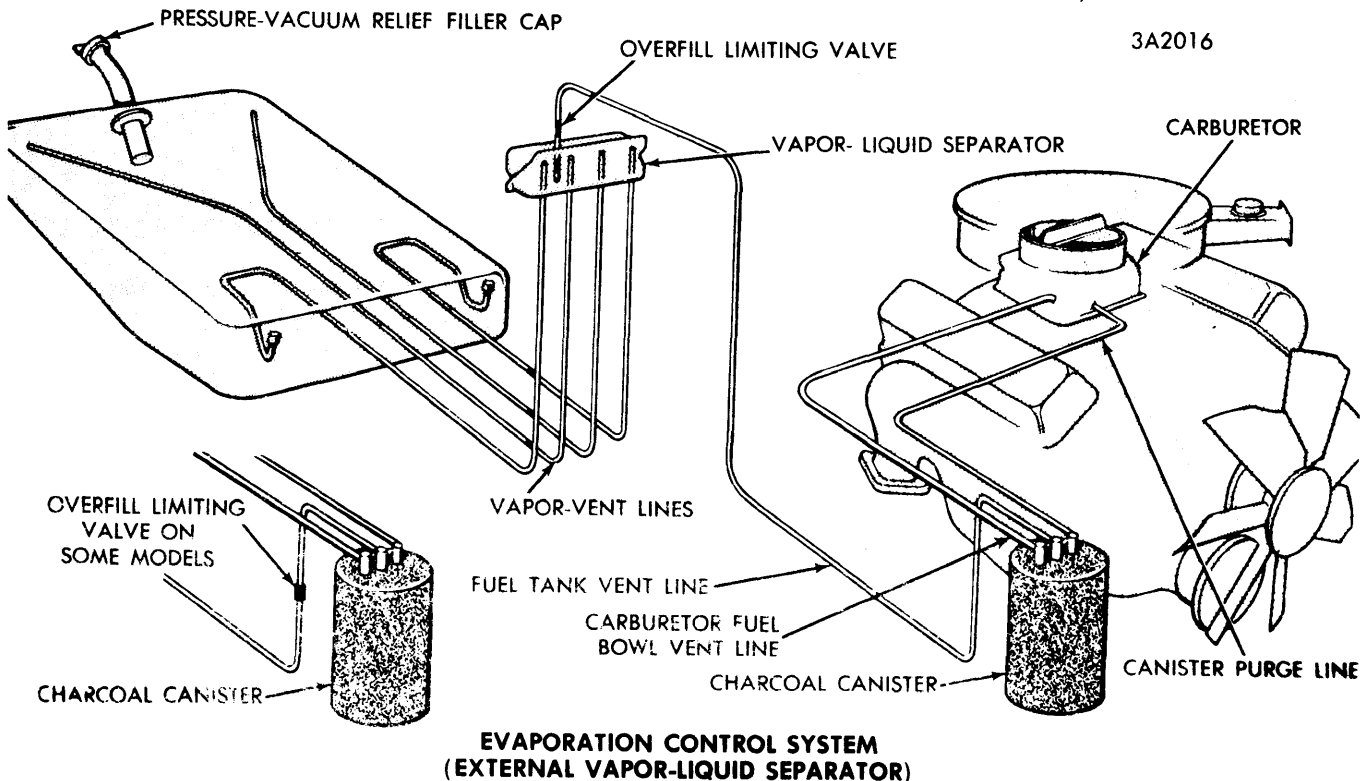
- 1) Canister port marked "Distributor Vacuum" is connected to "OSAC" valve at carburetor with a "Tee" connector.
- 2) "PCV" port is connected to PCV valve hose at carburetor with a "Tee" connector.
- 3) "Fuel Tank" port is connected directly to vapor separator.
- 4) "Carburetor Bowl" hose is connected directly to carburetor fuel bowl vent.

Overfill Limiting Valve — Valve is located in engine compartment in some models and may be replaced if necessary by cutting it out of vent line. **NOTE** — It is important that all overfill limiting valves be installed as vertical as possible. On systems where overfill limiting valve is attached to vapor separator, replacement of valve requires a new vapor separator.

Fuel Tank Filler Cap — Relief valves in cap are a safety feature and operate only to prevent excessive pressure or vacuum in tank caused by a malfunction in-system or damage to vent lines. To release pressure or vacuum from fuel tank, turn cap a partial turn. To remove cap from tank, turn an additional 90°. This cap works in the same way as a radiator cap.

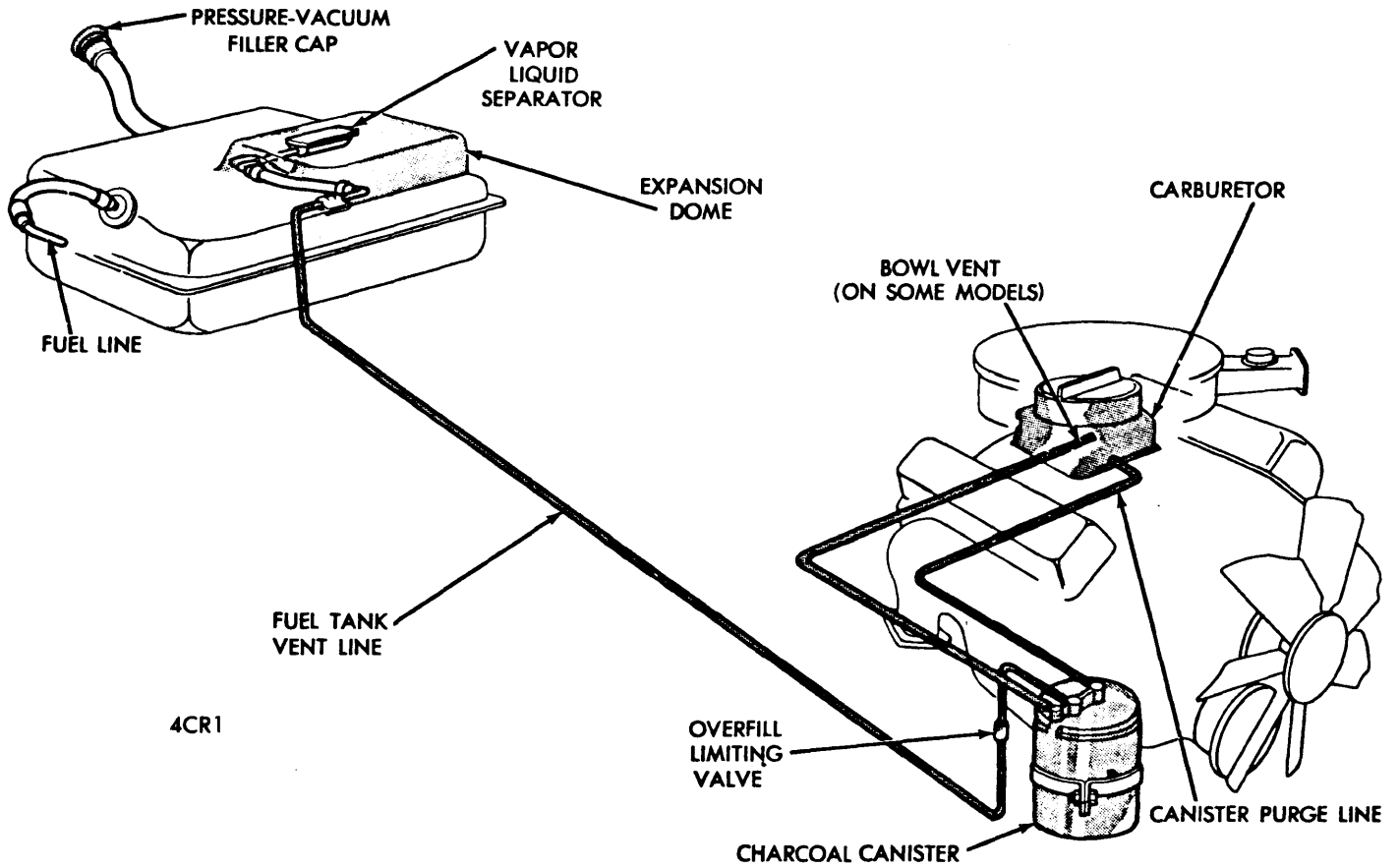
MAINTENANCE

The only service normally required for system is to replace filter located in bottom of charcoal canister each 12 months or 12,000 miles. Replace more often if vehicle is driven in dusty areas. **NOTE** — Hoses used in this system must be fuel resistant.



Fuel Evaporation

1973-74 CHRYSLER CORP. EVAPORATION CONTROL SYSTEM (Cont.)



**EVAPORATION CONTROL SYSTEM
(INTEGRAL VAPOR-LIQUID SEPARATOR)**