

Fuel Evaporation

1970-72 TRIUMPH

Spitfire MK IV (1970-72)
GT6 (1970-72)
TR6 (1970-72)
Stag (1971-72)

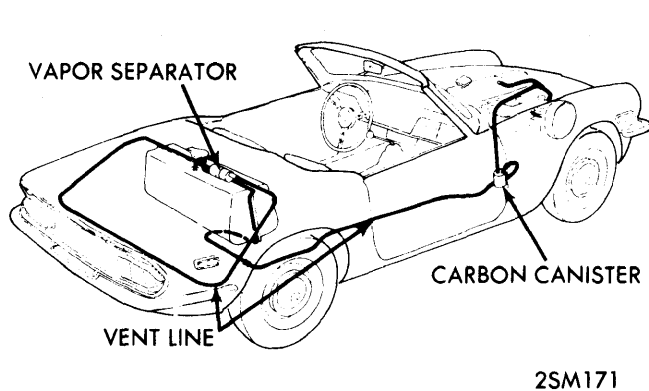
DESCRIPTION & OPERATION

The Evaporative Control System is designed to prevent fuel vapor emissions from the fuel system being discharged into the atmosphere. Fuel system is completely sealed and the fuel tank is vented only through the carbon canister which adsorbs fuel vapors as described below. See schematic illustrations for system used on each model.

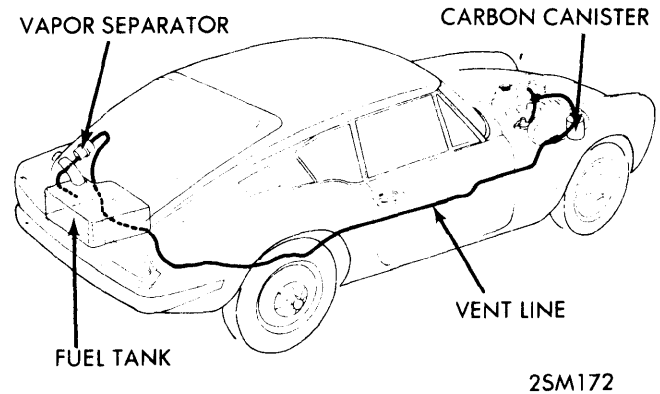
Fuel Tank & Filler Cap — Fuel tank filler cap is a non-vented type. Fuel tank incorporates an internal capacity limiting device which provides an air chamber within the tank to prevent tank being completely filled and to ensure space for fuel expansion.

Vapor Separator — Located in vent line between fuel tank and carbon canister. Vapor separator prevents liquid fuel from passing through the vent line and reaching the carbon canister.

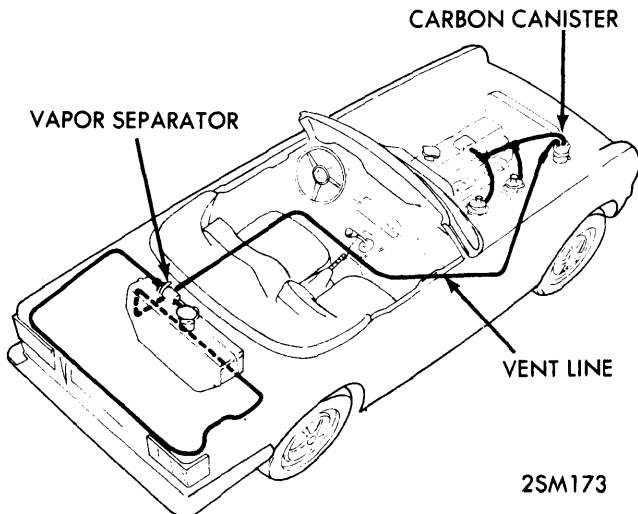
Carbon Canister — *NOTE* — Two canisters used on Stag models. Canister is mounted in engine compartment and consists of a container filled with activated carbon with a replaceable filter pad at the atmospheric air vent in the bottom of the canister. Vent line from fuel tank is connected to top of canister and fuel vapors from the tank are adsorbed by the activated carbon when the engine is not running. A second vent line from the top of the canister is connected to a constant vacuum area of the carburetors (line from crankcase ventilator to intake manifold) so that when the engine is running, fuel vapors will be drawn into the engine and burned. This purging action restores the adsorbing quality of the activated carbon.



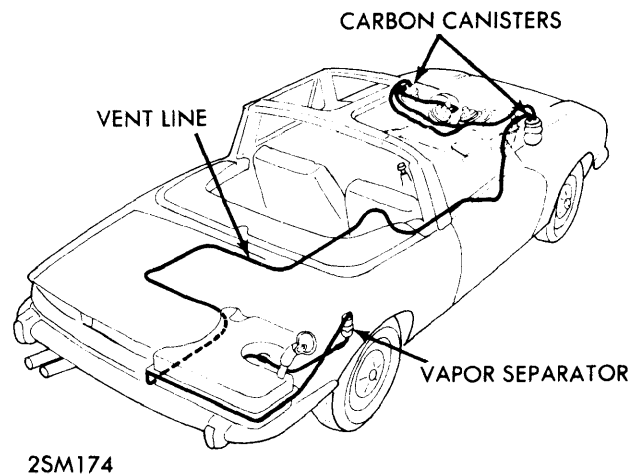
**EVAPORATIVE CONTROL SYSTEM
 TRIUMPH SPITFIRE MK IV**



**EVAPORATIVE CONTROL SYSTEM
 TRIUMPH GT6**



**EVAPORATIVE CONTROL SYSTEM
 TRIUMPH TR6**



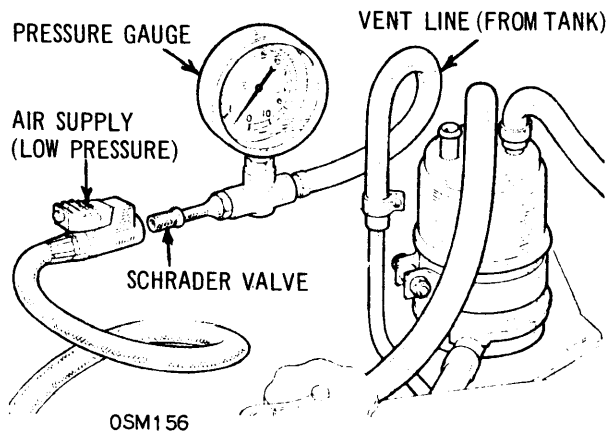
**EVAPORATIVE CONTROL SYSTEM
 TRIUMPH STAG**

1970-72 TRIUMPH (Cont.)

TESTING

If components (other than filter or canister) have been replaced, or if system is not operating correctly, it can be pressure tested as follows:

1) Make sure there is fuel in fuel tank (minimum of one gallon), run engine for at least one minute to prime system, then turn engine off.



EVAPORATIVE CONTROL SYSTEM
LEAK TEST SET-UP

2) Disconnect fuel tank vent line at canister connection. Connect a 0-10 lb. pressure gauge, Schrader valve, and low pressure air supply (use hand tire pump) to this line as indicated in illustration.

3) Use hand pump to pressurize system to one (1) psi. **CAUTION** — This pressure must not be exceeded at any time to avoid damage to fuel tank. Hold pressure at this figure and note gauge reading.

4) Pressure reading on gauge should be maintained for 10 seconds without falling more than 0.5 psi. If this reading is not maintained, check visually for leaks from fuel tank and connections, check filler cap for positive sealing.

5) If gauge reading satisfactory after 10 second interval, remove fuel tank filler cap. Pressure should fall to zero.

MAINTENANCE

Every 6,000 Miles or 6 Months — Check all fuel lines and connections for chafing, leaks or corrosion.

Every 12,000 Miles or 12 Months — Replace all carburetor filter elements. Replace fuel line filter. Replace carbon canister air filter element. Check condition of fuel tank filler cap gasket.

Every 48,000 Miles or 48 Months — Replace carbon canister.