BRITISH LEYLAND

Jaguar XJ6
MGB
Rover 3500
Spitfire
TR7
TR8

DESCRIPTION

The Evaporative Loss Control System is a completely sealed system designed to prevent fuel vapors from entering the atmosphere. It consists of a sealed gas cap, modified fuel tank, expansion chamber, vapor separator, one or two charcoal canisters, and on some models, a relief valve or anti-run on valve.

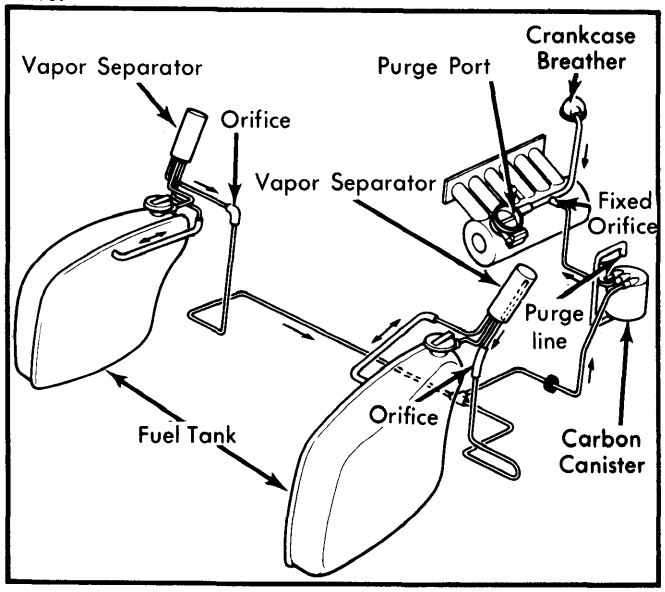

Fig. 1 Jaguar XJ6 Fuel Evaporation System

OPERATION

When the engine is stopped, vapors formed in the gas tank or carburetor fuel bowl pass through a vent line to the charcoal canister(s). These canisters are filled with activated charcoal to collect and hold fuel vapors. When the engine is running, intake manifold vacuum draws the fuel vapors from the canister into the engine, where they are burned.

The fuel tank modifications prevent overfilling, and the sealed cap keeps expanding fuel from escaping out the cap. An expansion tank is located in the fuel tank on some models and externally on others. It allows the gasoline to expand without overflowing. A vapor separator prevents liquid fuel from reaching the charcoal canister.

An anti-run on valve is used on carbureted vehicles to control canister purging and engine dieseling. When the ignition is turned "OFF", the valve closes and cuts off purge air to the canister. It also connects the float chamber to manifold vacuum, which prevents fuel from being drawn through the carburetor into the engine and causing run on. When oil pressure drops to zero, the valve will be deactivated.

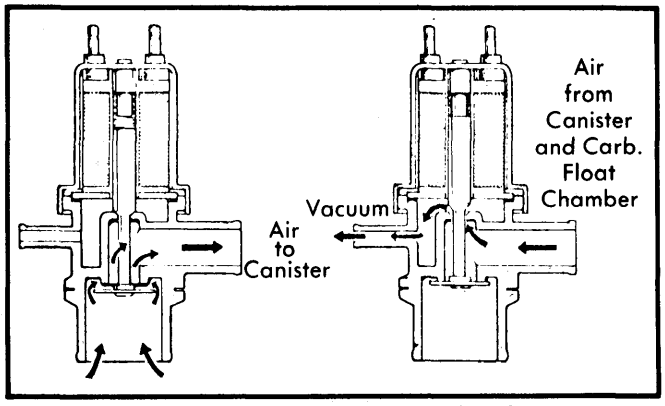

Fig. 3 Anti-Run On Control Valve (Carbureted Models)

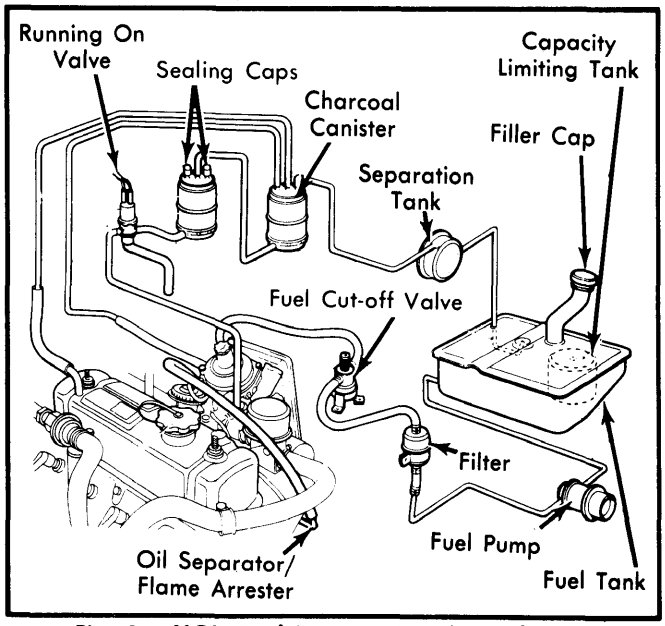

Fig. 2 MGB Fuel Evaporation Control System

TESTING

Fuel evaporation control systems normally need no checking other than hose condition and tight connections. On carbureted models, operation of the anti-run on solenoid can be

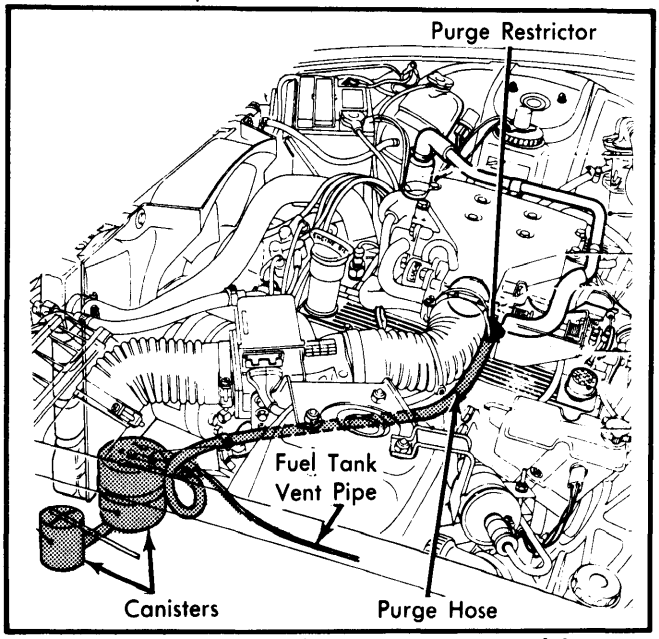

Fig. 4 Rover 3500 Fuel Evaporation Control System

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checked by applying 12 volts to the positive terminal of the solenoid while the engine is running. If the engine stops, valve is operating properly. If not, check valve, wiring, oil pressure switch and ignition switch.

NOTE – *If carburetor vent valve is not adjusted properly, air will bleed into float chamber and shut down engine even if valve is operating properly. For information on vent valve adjustment, see appropriate carburetor article in FUEL SYSTEMS Section.*

MAINTENANCE

Every 12,500 miles, check all lines and connections for chafing, leakage, or deterioration. Check fuel cap seal. At 50,000 miles, replace charcoal canisters.

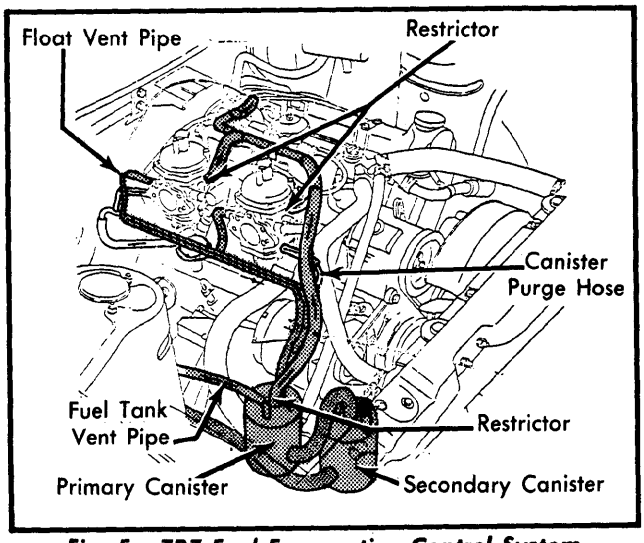

Fig. 5 TR7 Fuel Evaporation Control System