

1974-79 EXHAUST EMISSION SYSTEMS

Austin & MG Crankcase Ventilation

3-39

Austin: 1974-75 Marina
MG: All Models

DESCRIPTION

Closed positive crankcase ventilation system consists of a sealed oil filler cap, oil separator, flame trap, primary charcoal canister, and connecting hoses and lines. Purge line from fuel evaporation loss control system primary carbon canister is connected to crankcase ventilation hose.

OPERATION

Blow-by gases and fumes are drawn into a controlled depression chamber between the cylinder and throttle plates of the carburetor. Blow-by gases and fumes are mixed with purged air from primary charcoal canister and combine with fuel inlet mixture to be drawn into combustion chamber and burned.

The diaphragm valve assembly used in 1974 models varies the metering valve opening to the intake manifold according to vacuum and pressure acting upon it. When manifold vacuum decreases or when crankcase obtains a positive pressure, diaphragm opens valve and allows crankcase vapors to be drawn into the intake manifold. During periods of high manifold vacuum, diaphragm closes valve and restricts flow of crankcase vapors into intake manifold.

TESTING

1974 Models – With engine idling at normal operating temperature, remove oil filler cap. A noticeable rise in engine speed indicates control valve is functioning properly. No rise in engine speed indicates control valve needs servicing.

MAINTENANCE

- 1) Every 12,000 miles, check for loose, disconnected, or deteriorated hoses. Check restrictor in rocker cover purge line. Clean and replace as parts as necessary.
- 2) To clean diaphragm valve assembly on 1974 models, remove spring clip. Remove cover plate, diaphragm, metering valve, and spring. Clean metal parts in solvent.

- 3) Clean diaphragm with denatured alcohol. Examine parts for wear or damage. Reassemble valve making sure metering valve fits correctly in its guide and that diaphragm is fully seated. Reinstall valve and check for proper operation.

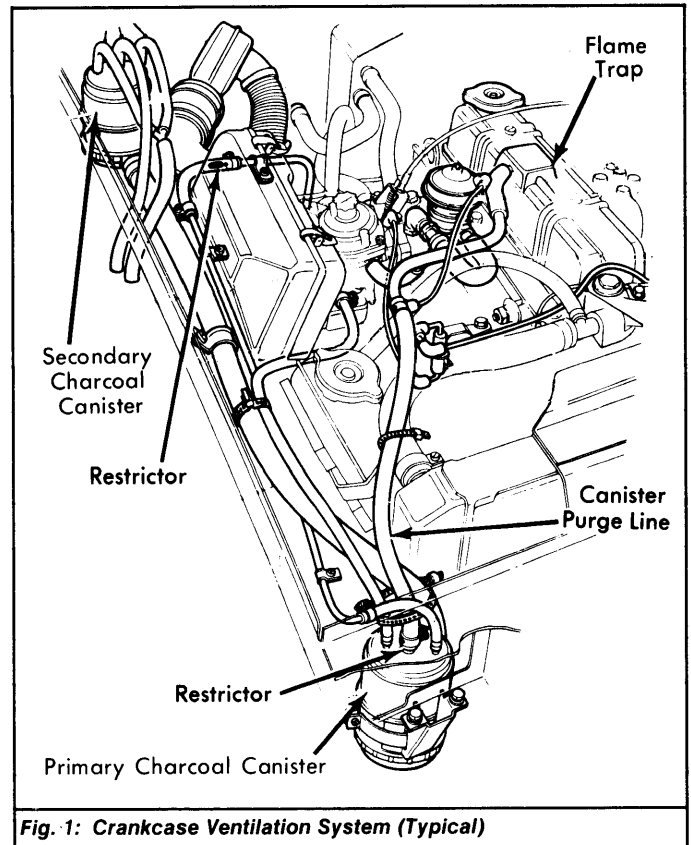


Fig. 1: Crankcase Ventilation System (Typical)