BRITISH LEYLAND – AUSTIN/MG DIVISION CLOSED

Austin America
Austin-Healey Sprite
Austin-Healey 3000
MGB
MGC
MG Midget
MG 1100 Sedan
Mini Cooper & Cooper S
Marina

DESCRIPTION & OPERATION

Early Model – Crankcase ventilation control system consists of; an oil filler cap incorporating a filtered restricted orifice, an oil separator located on engine crankcase, a diaphragm control valve located on intake manifold and a ventilation hose which connects oil separator and diaphragm control valve.

Late Model – Engine breather outlet is connected by hoses to a controlled vacuum chamber on each carburetor. Engine fumes and blow-by gases are drawn from crankcase, by carburetor vacuum, through an oil separator incorporated in engine outlet connection. From oil separator, fumes flow to intake manifold. Fresh air is supplied to engine through charcoal canister of fuel evaporation emission control system. A sealed oil filler cap is used with this system.

Oil Separator – Separator prevents liquid vapors and condensate from passing through to diaphragm valve assembly.

Diaphragm Valve Assembly – Diaphragm valve assembly varies the metering valve opening to the intake manifold according to vacuum or pressure acting upon it. When manifold vacuum decreases or when the crankcase obtains a positive pressure, diaphragm opens the valve allowing crankcase vapors to be drawn into the intake manifold. During periods of high manifold vacuum (low engine speeds or heavy loads), diaphragm closes valve and restricts flow of crankcase vapors into intake manifold.

SYSTEM TESTING

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

SERVICE PROCEDURES

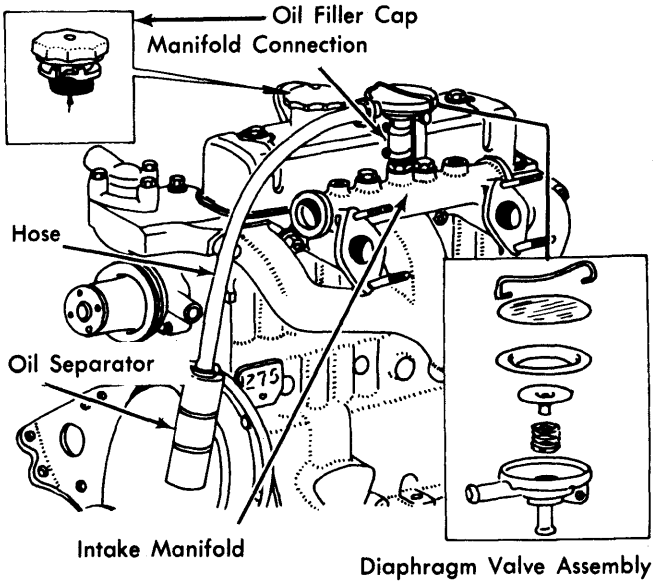
Oil Filler Cap – Replace every 12,000 miles or 12 months.

Diaphragm Valve Assembly – Clean valve as follows:

1) Remove spring clip and withdraw cover plate, diaphragm, metering valve and spring.

2) Clean all metal parts with a suitable solvent. *NOTE – Do not use an abrasive.* If deposits are difficult to remove, immerse in boiling water before applying solvent. Clean diaphragm with a detergent or methylated spirits (denatured alcohol).

3) Examine parts for wear or damage, replace as necessary. Reassemble valve making sure metering valve fits correctly in its guides and that diaphragm is correctly seated. Reinstall valve and check its operation.



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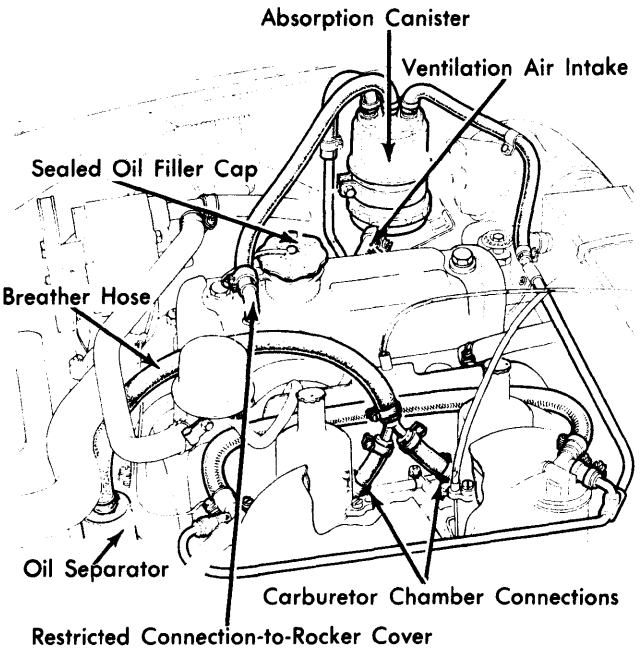
CRANKCASE VENTILATION (EARLY MODELS)



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CRANKCASE VENTILATION (LATE MODELS)