BRITISH LEYLAND CARBURETED MODELS
HEATED AIR INTAKE SYSTEM

MGB
Spitfire
TR7
TR8

DESCRIPTION & OPERATION

The Heated Air Intake system is designed to maintain the air temperature entering the carburetor at a constant temperature. This is done by blending heated (manifold) and ambient (outside) air.

A temperature-sensitive bi-metal valve (temperature sensor) controls a flap valve which regulates the amount of air entering from the hot and cold air inlets, thereby maintaining the correct air temperature under all operating conditions.

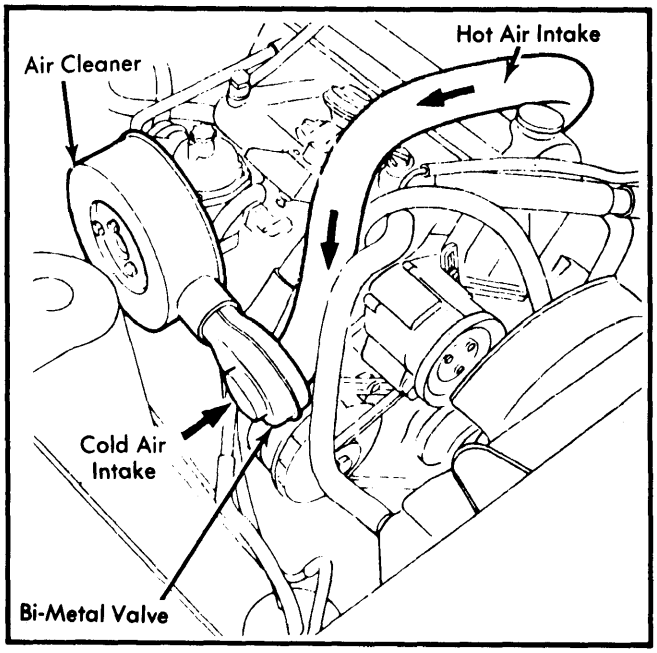

Fig. 1 Heated Air Intake System (Spitfire Shown, MGB and TR8 Similar)

TESTING

All Except TR7 – 1) Ensure that air cleaner and engine are cold. Check position of flap valve in air cleaner snorkel. The valve should be against the cold air intake (hot air position).

2) Start engine and run it until normal operating temperature is reached. Check operation of flap valve. It should move towards the hot air hose (cold air position).

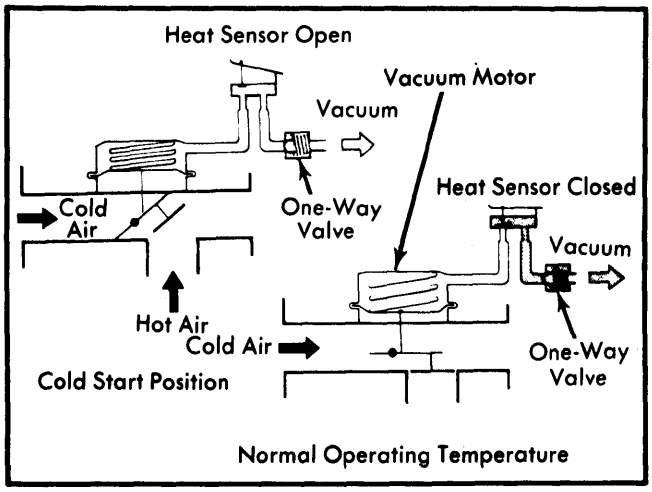

Fig. 2 Heated Air Intake System (Triumph TR7)

TR7 – 1) Disconnect vacuum line and apply a minimum of 9 in Hg. Flap should move to fully closed (hot) position. Remove vacuum, flap should return to fully open (cold) position.

2) Disconnect sensor vacuum supply line and apply a minimum of 9 in. Hg vacuum to sensor. Flap valve should move to closed position and hold until vacuum is released.

3) Apply 9 in. Hg vacuum to one-way check valve. Flap valve should close and hold closed for 20 seconds after vacuum is released.

BRITISH LEYLAND CARBURETED MODELS
CATALYTIC CONVERTER

MGB
Spitfire
TR7
TR8

DESCRIPTION & OPERATION

The catalytic converter is used to help control the emission of unburned hydrocarbons (HC) and carbon monoxides (CO). A chemical reaction which converts HC and CO to less harmful carbon dioxide and water vapor takes place when air is injected into the hot exhaust gas. This is a continuation of the "burning" process.

Hot exhaust gases pass through the converter which speeds up this conversion process. This process generates more heat which in itself assists in the conversion. The hotter the exhaust gases, the more easily emissions are converted into carbon dioxide and water vapors.

The catalytic converter consists of a ceramic block coated with Platinum-based material which remains unchanged during the conversion process.

Over extended mileage, the pores on the surface of the ceramic block become coated and the effectiveness of the catalytic converter is reduced. Therefore, the unit is to be replaced at various intervals.

SERVICING

The catalytic converter should be replaced every 50,000 miles.