1981 Crankcase Ventilation

RENAULT

Le Car
18i

DESCRIPTION

A crankcase ventilation system is used to recycle crankcase vapors back into the intake system for reburning. The system consists of an oil separator (which separates the oil from the vapors) and necessary connecting hoses. Metered orifices are also used in the hoses to control the amount of crankcase vapors being recycled into the intake system.

OPERATION

LE CAR

The oil-carrying fumes from the rocker cover are drawn into the oil separator. The oil is divided from the vapors and returned to the crankcase. From the oil separator, the vapors are drawn into the intake system for reburning. The .059" (1.5 mm) restricted orifice is located between the rocker arm cover and the intake manifold. It controls the amount of crankcase vapor reaching the intake manifold at any one time.

When engine speeds and loads are low, vacuum draws crankcase vapors through the hose to the intake manifold. At higher loads, both hoses are used, and at full throttle, all ventilation is provided through the hose to the air cleaner. The evaporative emissions canister is also purged through the same hoses used for the crankcase ventilation system.

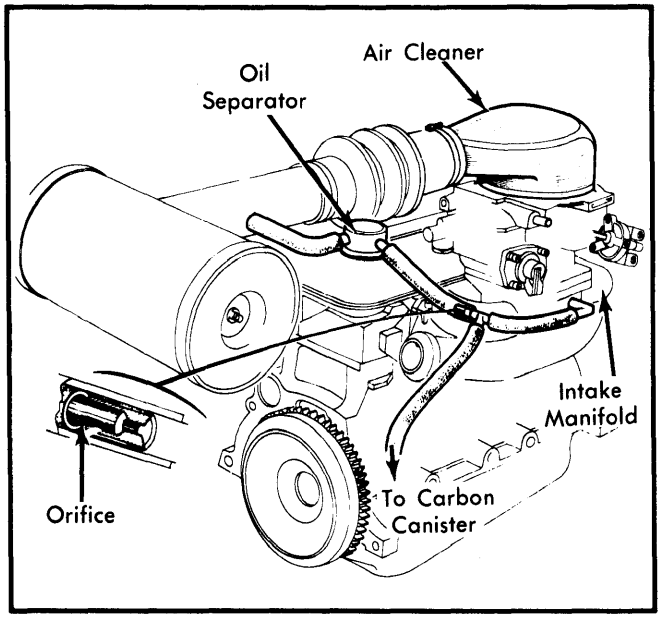

Fig. 1 Renault Le Car Crankcase Ventilation

18i

Oil fumes from the crankcase are routed to an oil separator, then drawn through one of 2 circuits into the engine. The upper circuit leads to a throttle body port just downstream from the airflow sensor, and the hose contains a .197" (5 mm) orifice. The lower circuit leads to the intake manifold and is connected to the fuel evaporation system. A .067" (1.7 mm) orifice is used near the oil separator, and a .079" (2 mm) orifice is provided in the hose to the carbon canister.

MAINTENANCE

Approximately every 12,000 miles, the crankcase ventilation system hoses and oil separator should be inspected and cleaned.

NOTE – *When hoses are replaced, orifices must be inserted into new hoses.*

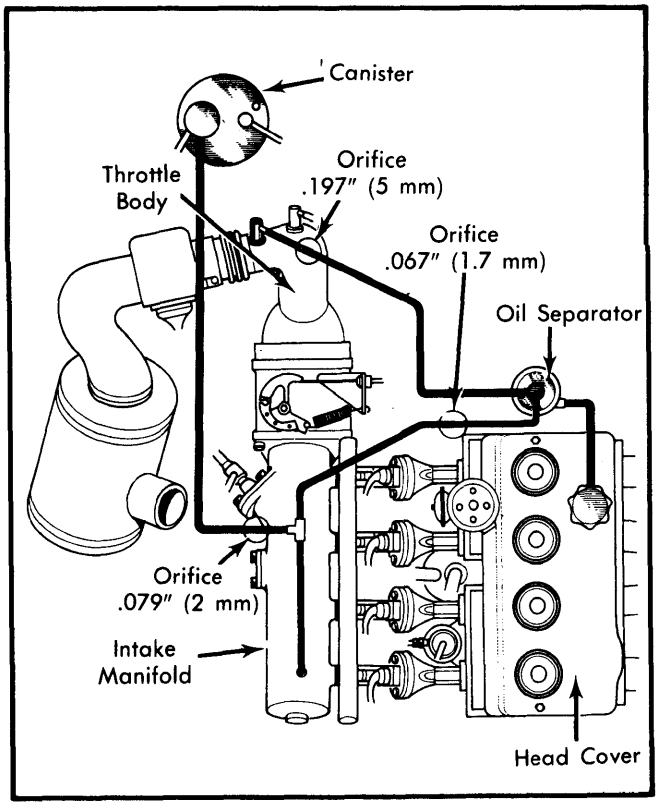

Fig. 2 Renault 18i Crankcase Ventilation