

1982 Exhaust Emission Systems

COURIER THERMOSTATIC AIR CLEANER

DESCRIPTION

The thermostatic air cleaner is used on all Courier models to control temperature of incoming air to the carburetor. Such control allows better air/fuel mixture settings for closer control of exhaust emissions.

A thermo sensor is located in the air cleaner snorkel and positions an air control valve to allow either heated air from exhaust shroud or cooler air from outside to enter.

OPERATION

When ambient temperature is below approximately 35°F (2°C), thermo sensor will position air control valve in up (heat on) position. This allows only heated air, which is gathered from around the exhaust manifold, to enter the carburetor. This aids in cold driveability.

As ambient temperature increases, air control valve moves downward, to allow some cooler outside air in. This modulating operation keeps air temperature in air cleaner practically constant. Once ambient temperature is above 90-105°F (30-40°C), air control valve will be fully down. Only cool, outside air will be allowed into the carburetor.

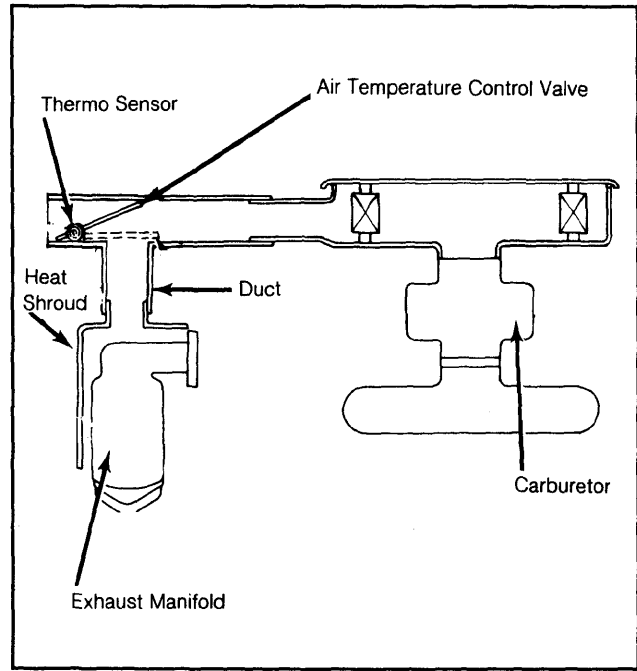
TESTING

AUTOMATIC AIR TEMPERATURE CONTROL VALVE

1) Inspect air control valve shaft and linkage for sticking or wear. Close hood, start engine and allow engine to reach normal operating temperature.

2) Open hood and check position of control valve in snorkel. Valve should be fully open to allow outside air to enter air cleaner.

Fig. 1: Courier Thermostatic Air Cleaner Assembly



Control valve should be in fully open position with engine at normal operating temperature.