1974-79 EXHAUST EMISSION SYSTEMS
Jensen-Healey Thermal Ignition Control Valve

1974 Interceptor

DESCRIPTION

The Thermal Ignition Control (TIC) valve is used to reduce the possibility of engine overheating under extremely high temperature operating conditions.

OPERATION

When engine coolant temperature at idle reaches 225°F (107°C), valve opens and applies manifold vacuum directly to vacuum advance unit of distributor, by-passing Orifice Spark Advance System (OSAC) valve. This increases engine idle RPM and provides additional engine cooling. When engine has cooled to normal operating temperature, OSAC valve is restored to normal operation.

TESTING

1) Make sure vacuum hose routing and coolant level are correct. Connect tachometer to engine. Start and run engine until normal operating temperature is reached. Adjust idle to 600 RPM (for test only).
2) Disconnect and plug hose from bottom port (manifold inlet) of TIC valve. Check engine idle RPM. If RPM does not change, valve is operating properly. If idle speed drops 100 RPM or more, valve must be replaced.
3) Reinstall vacuum hose to bottom port of TIC valve. With engine at idle, cover radiator to increase engine coolant temperature to approximately 225°F (107°C). DO NOT allow engine to overheat.
4) If engine RPM does not increase 100 RPM by the time engine temperature reaches 225°F (107°C), TIC valve is defective and must be replaced. Uncover radiator and idle engine until it reaches normal operating temperature. Readjust idle RPM to specifications.

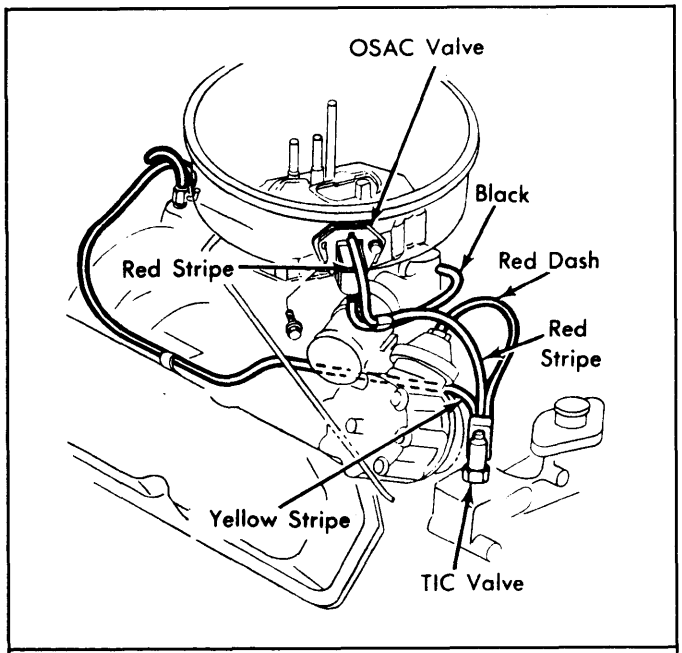

Fig. 1: Thermal Ignition Control Valve Hose Routing