

CHRYSLER CORP. FULL ELECTRIC CHOKE SYSTEM

DESCRIPTION

All Omni & Horizon engines require electric power to heat the automatic choke system. An electric heater and switch are sealed within the choke housing. Electric current is supplied to this unit from the oil pressure switch. Above 4 psi oil pressure, the oil sending unit contacts close and power is available to the choke control switch.

At winter temperatures, the choke switch is open to reduce heater output until choke area temperature is relatively warm. It then closes to provide full electric assist to open the choke. In summer temperatures, switch provides maximum choke heater output for a shortened choke on time.

TESTING

The heater element can be tested with the ignition "On", or a direct "B+" terminal connection. The choke should reach the open position within five minutes when the vehicle is parked in the service garage.

SERVICING

CAUTION — DO NOT immerse choke assembly in any cleaning fluids, as damage to the electric heating element and switch could result.

NOTE — For 1980, all Horizon and Omni models are equipped with chokes that are non-adjustable due to choke cover retaining ring being riveted to the choke housing.

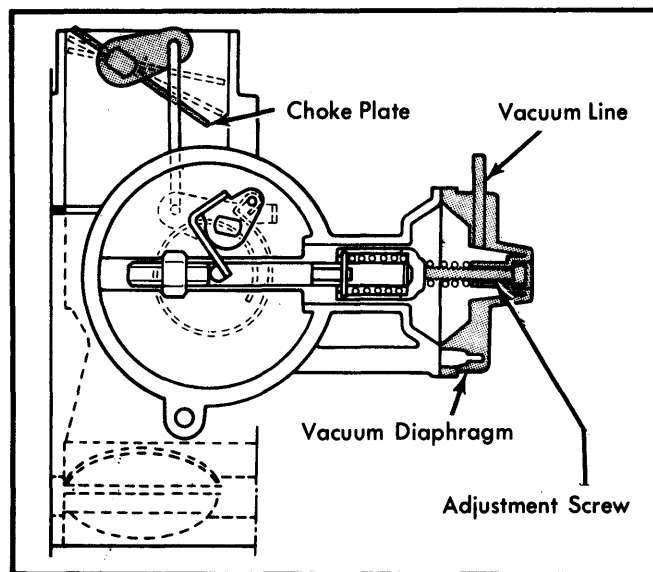


Fig. 1 Schematic of Full Electric Choke System (Omni & Horizon)

CHRYSLER CORP. THERMAL IGNITION CONTROL (TIC) VALVE

DESCRIPTION

The Thermal Ignition Control (TIC) switch is located at the right front of intake manifold next to thermostat housing. It is used on some 360" 4-Bbl. V8 engines equipped with Police package. Its purpose is to reduce the possibility of engine overheating during high temperature operation.

OPERATION

The TIC switch senses engine coolant temperature and signals the computer to increase spark advance timing at idle. When coolant temperature goes above 235°F. When engine has cooled and coolant temperature drops below 235°F, switch opens returning spark advance timing to original position.

TESTING

- 1) Start engine and warm to normal operating temperature. Remove TIC wiring connector at switch. Using ohmmeter, connect one lead to switch terminal and other lead to ground.
- 2) Switch should be open and have no continuity below 235°F. Cover radiator to increase engine coolant temperature. Avoid overheating engine.
- 3) Idle engine until coolant temperature is approximately 235°F. Read ohmmeter again, switch should be closed and have continuity. If switch fails either test, replace switch.

NOTE — For vacuum hose routings of the TIC valve, refer to "Chrysler Corp. Vacuum Diagrams" in this section.