

CHRYSLER CORP. ELECTRIC ASSIST CHOKE

DESCRIPTION

All passenger cars, except Omni and Horizon, are equipped with an electric assist choke, as described in this article, to help reduce emissions during engine warm-up. Two different electrical control units are used to regulate the choke heating element: a dual-stage control to assist engine warm-up in summer and winter operation, and a single-stage control which shortens choke on time during warmer weather only.

NOTE — Omni and Horizon use a "Full Electric Choke" system. See appropriate article in this section.

OPERATION

Electrical current is supplied from the oil pressure switch. A minimum of 4 psi oil pressure is required to close contacts in switch and provide electrical current to choke control switch.

Single Stage — The single-stage control is designed to shorten choke operation only above approximately 80°F. Below 55°F, electric heat is not available until engine approaches normal operating temperature. Normal engine heat will warm the control and energize the choke heater, but only after the choke has opened by engine heat.

Dual-Stage — This unit will shorten choke duration above approximately 80°F and it will stabilize choke operation in the winter (summer electric assist is hotter than winter heat level). Engine temperature controls a switch inside the dual-stage control. In winter weather (below 55°F), electric power is reduced by a resistor. In summer weather (above 80°F), the resistor is by-passed and full heat is supplied, thus shortening choke duration.

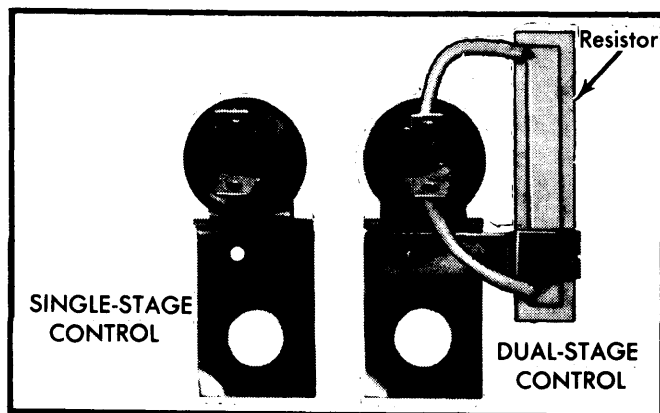


Fig. 1 Choke Control Unit Identification

TESTING

SINGLE & DUAL-STAGE

- 1) Check test light by connecting between battery terminals of car battery. Take careful note of bulb light intensity when testing dual-stage control.
- 2) Before starting engine, remove ignition harness electrical connector from control switch.

- 3) Connect test light to load (choke) terminal of control switch and to ground. Start engine and allow to reach normal operating temperature.

- 4) Apply 12 volts to ignition harness terminal of control switch. If test light does not light or does not have same intensity as in step 1), control switch is defective and should be replaced.

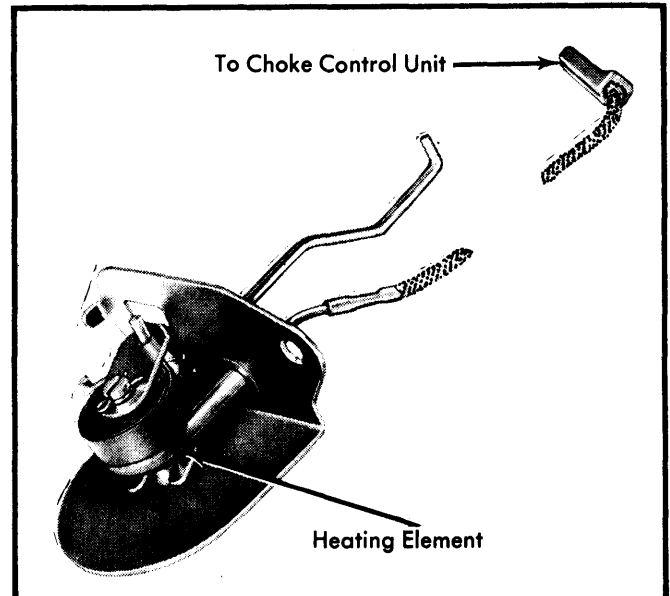


Fig. 2 Close-Up View of Choke Heating Element

CHOKE HEATING ELEMENT

- 1) Disconnect only the "B+" wire from the control switch (terminal is marked on switch). Connect an ohmmeter lead to choke housing or choke retainer screw.
- 2) Touch other meter lead to a bare portion of choke wire connector at switch (not the "B+" terminal).
- 3) Electrical resistance of 4-12 ohms indicates the heating element is electrically functional. Only meter readings indicating an open or short circuit are cause for installation of a new choke assembly.

SERVICING

- 1) The electric assist choke system does not change any carburetor or choke system procedure, and cannot be adjusted. The choke linkage must be inspected for free movement.
- 2) Choke rods must be checked for kinks. During carburetor installation, be careful not to bend choke linkage. A bent rod will not function properly.