

Exhaust Emission Systems

1973-74 AMERICAN MOTORS & JEEP ELECTRIC ASSIST CHOKE

Used on models with 4-Bbl. carburetors.

DESCRIPTION

The Electric Assist Choke is designed to provide faster choke openings, more efficient choke operations to engine requirements, and reduce carbon monoxide (CO) during engine warm-up. It is used on all 4-Bbl. carburetors and consists of a thermostatic switch, choke bi-metal coil and AC terminal on alternator.

OPERATION

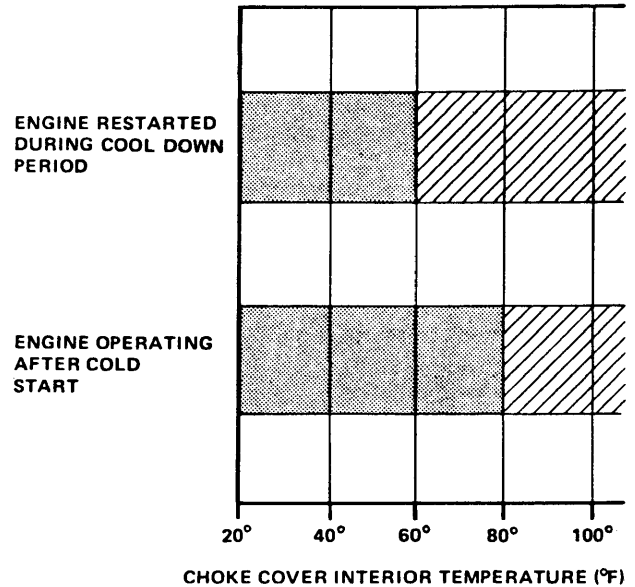
Power is supplied to choke by 7 volt AC terminal (on alternator) when ignition is "ON". At $95 \pm 15^\circ\text{F}$., underhood air temperature, thermostatic switch closes, allowing current to activate ceramic heating element. Choke cover and ground strap complete current circuit. Heat is absorbed by a metal plate in the choke cover, thereby heating the choke bi-metal coil. This heating method allows faster choke operation. Choke thermostatic switch remains closed even after engine shut-down, until underhood temperature is 65°F . or less. Therefore heating element will immediately begin warming up when engine is restarted if underhood temperature is above 65°F .

TESTING

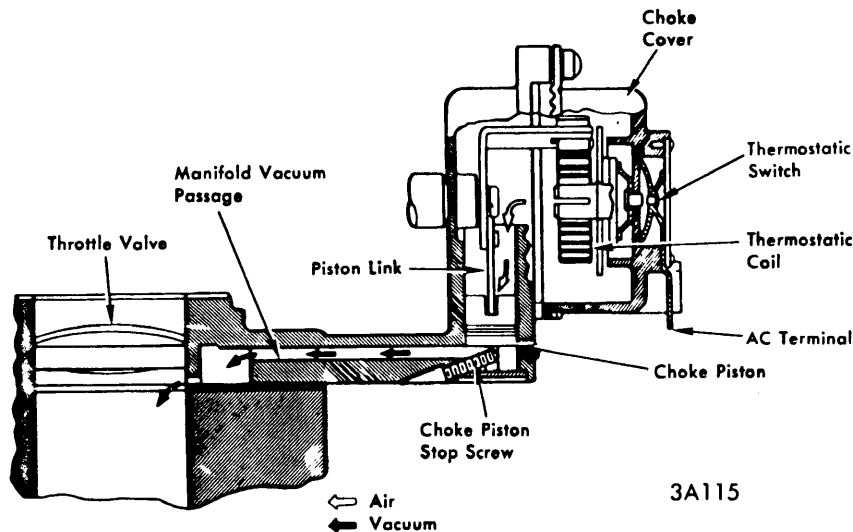
- 1) Disconnect choke wire from housing. Connect one lead of test lamp to spade terminal on choke housing. Connect other lead of test lamp to connector of choke wire.
- 2) Using a small thermometer, tape bulb end of thermometer to oval boss on back of bi-metal cap assembly. Start engine. Read thermometer and observe test lamp. Refer to "Thermostatic Switch Modulation Chart".

- 3) Read thermometer and observe test lamp. Lamp should be out when $60-80^\circ\text{F}$ is reached on the thermometer. The test lamp should light at temperatures above the $60-80^\circ\text{F}$ range. Once modulating temperature is reached (test lamp lit), the choke should be fully open within 1-1.5 minutes. **NOTE** - If test lamp did not light, check 7 volt source from alternator.

THERMOSTATIC SWITCH MODULATION CHART



- THERMOSTATIC SWITCH OPEN, NO CURRENT FLOWING TO HEATING ELEMENT
- THERMOSTATIC SWITCH CLOSED, CURRENT FLOWING TO HEATING ELEMENT



1973-74 AMC & JEEP ELECTRIC ASSIST CHOKE