FORD MOTOR CO. ELECTRIC ASSIST CHOKE

DESCRIPTION

Some light truck models use an electrically heated choke thermostatic spring housing as an aid to fast choke release. The heater operates from a stator terminal on the alternator, but only when the engine is actually running. The choke system consists of a choke cap, thermostatic spring, a bi-metal temperature sensing disc, and a ceramic positive temperature coefficient (PTC) ceramic heater.

OPERATION

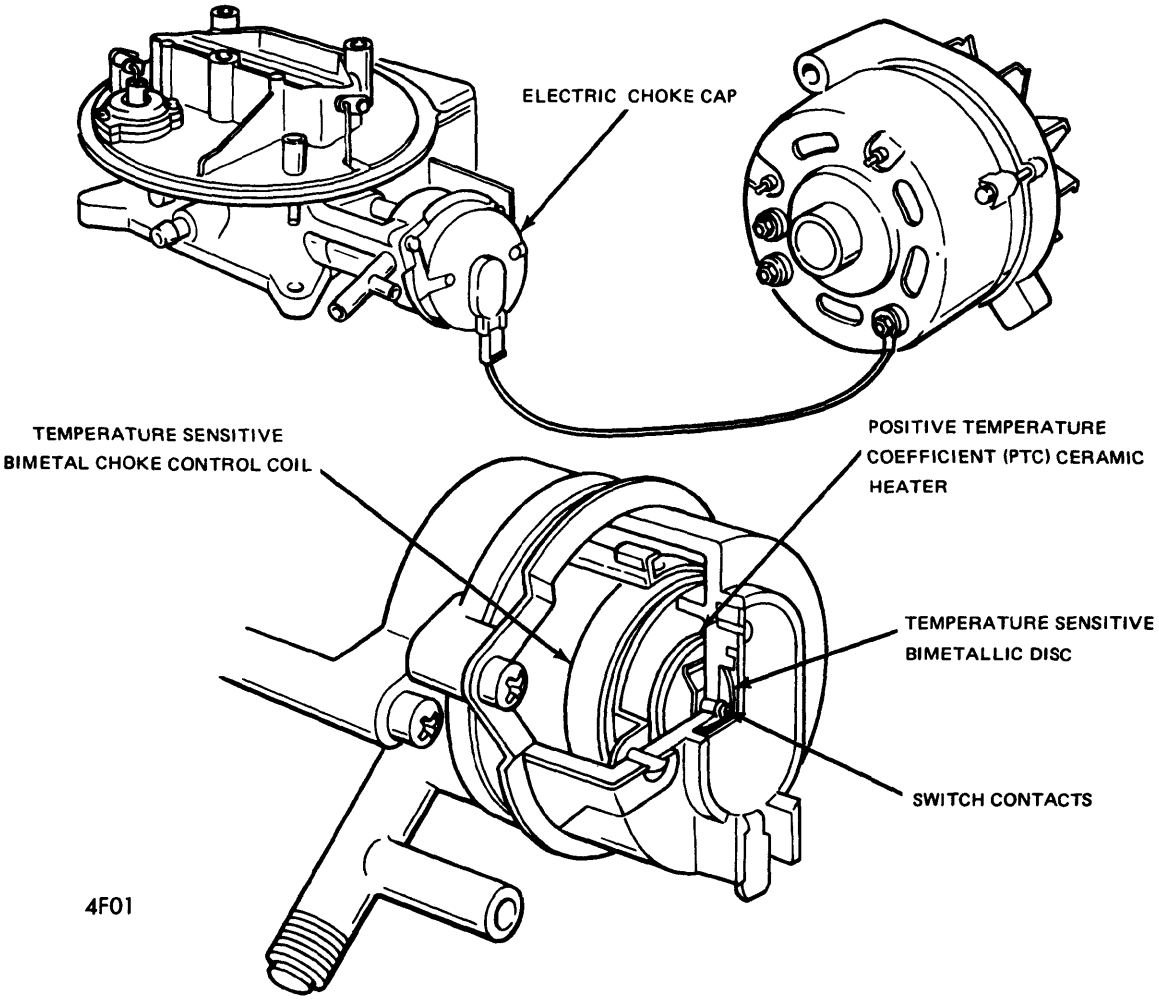
Current is constantly supplied to the temperature sensing switch. The system is grounded through a ground strap connected to the carburetor body. At temperatures below about 60°F the switch is open and no current is supplied to the ceramic heater located within the thermostatic spring, thus normal choking action occurs. But, at temperatures above 60°F, the temperature sensing switch closes and current is then supplied to the ceramic heater. As the heater warms, it causes the thermostatic spring to pull the choke plate open within 1 to 1.5 minutes.

TESTING

1) Remove air cleaner, check choke plate and choke linkage for free operation. Remove hot air supply tube at choke housing, and install a suitable choke tester (LRE-34618). Perform hot and cold choke function per instructions contained in tester kit.

2) With the engine running, disconnect the stator lead at connector and connect a 0-3 amp. ammeter between the choke lead connector and stator lead. Start the engine and observe ammeter for current draw. Cool choke cap until temperature is less than 55°F, using the choke tester. If a current flow is noted on ammeter, the cap is defective.

3) Now operate the engine for about 5 minutes. A current reading of .3 to 1 amp. should be noted. The choke cap is out of spec if the above conditions are not met. Be sure the alternator is operating properly before replacing the choke cap.



ELECTRIC ASSISTED CHOKE ASSEMBLY