FORD MOTOR CO. ELECTRIC ASSIST CHOKE

DESCRIPTION

All Light Duty emissions models use an electrically heated choke thermostat spring housing as an aid to fast choke release. The heater operates from a terminal on the alternator, but only when the engine is actually running. The choke system consists of a choke cap, thermostatic spring, a bimetal temperature sensing disc and a 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 54°F, the switch is open and no current is supplied to the ceramic heater located within the thermostatic spring, allowing normal choking action to occur. At temperatures from 54-74°F, depending on engine requirements, switch will remain open or will close to supply current to the ceramic heater. The switch will always be closed at temperatures above 74°F. As the heater warms, it causes the thermostatic spring to pull the choke plate open with in 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 (LRE34618 or equivalent). Perform hot and cold choke function per instructions contained in tester kit.

2) With engine running, disconnect the stator lead at connector and connect a 0-3 amp. ammeter or test lamp between the choke lead connector and stator lead. If light does not glow, replace choke cap assembly.

3) Operate engine for about 5 minutes. A current reading of .3 to 1 amp. should be noted. If reading not correct, check alternator for proper operation and if good, replace choke cap.

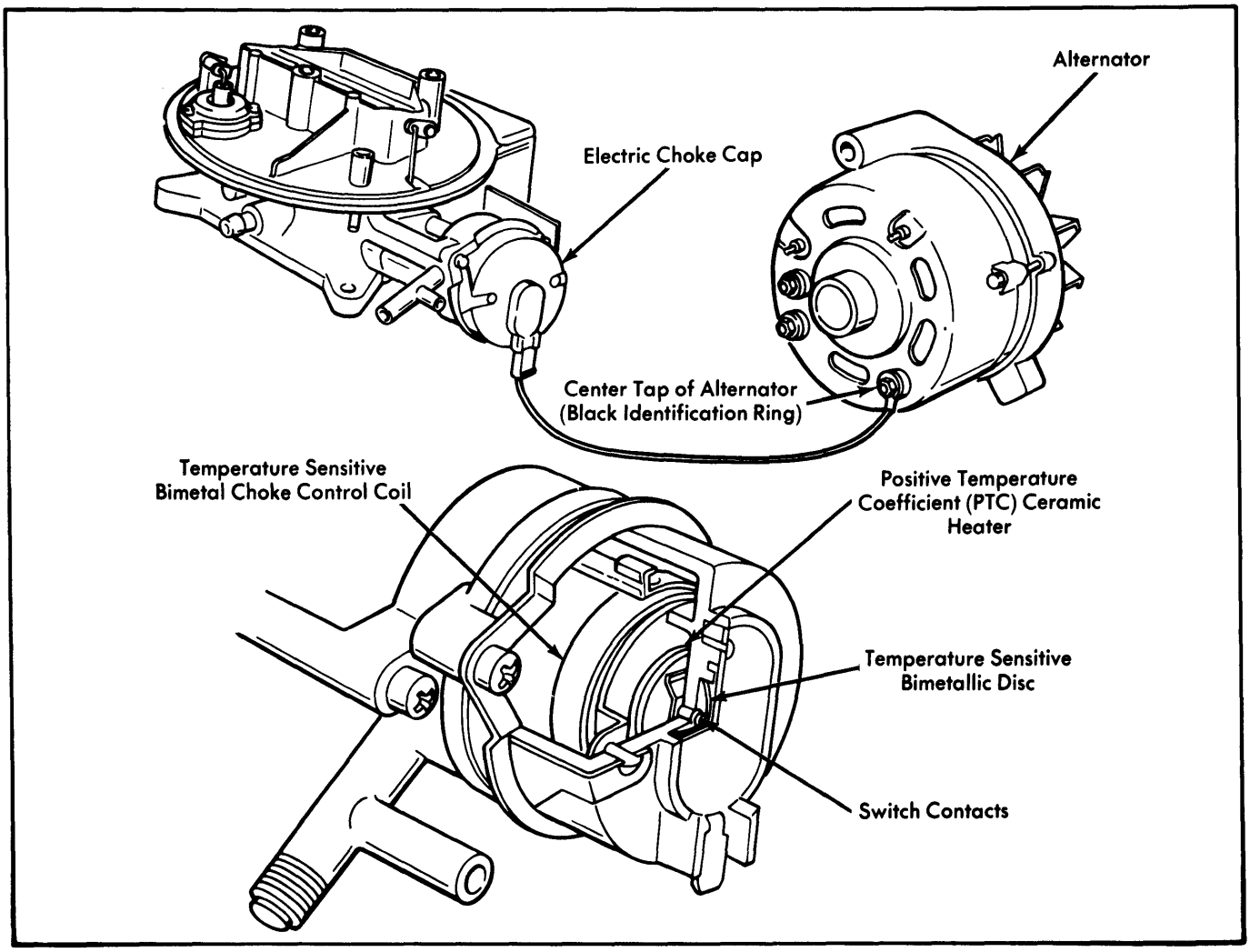

Fig. 1 Ford Motor Co. Electric Assist Choke Assembly