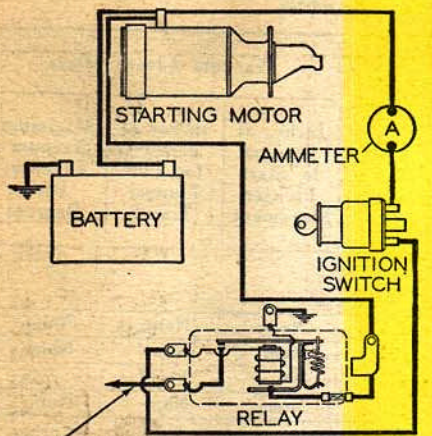


IGNITION SYSTEMS



TO LOAD WHICH MAY CONSIST OF HORNS, FOG LIGHTS, RADIO, HEATER, OR ANY ADDED ELECTRICAL ACCESSORY

INSTALLED AS ACCESSORY LOAD RELAY TO RELIEVE LOAD ON IGNITION SWITCH

Fig. 25 Showing relay connected in ignition circuit to prevent overloading of ignition switch when accessories are connected through the switch

vances it. The calibration of this unit is accomplished by changing the spring tension. On Auto-Lite units, a combination of flat washers of various thicknesses is used between the end of the spring and the brass retainer fitting which is screwed into the outer end of the vacuum diaphragm housing. On Delco-Remy units, any alteration necessary is accomplished by changing the spring to one having a greater or lesser tension depending upon the result desired.

IGNITION WIRING—The current carrying capacity of all ignition wiring should not be less than that specified by the car manufacturers. All terminals should be securely soldered to the wires and all joints and connections should be clean and tightened with lock washers.

The connecting leads in the distributor should be installed so that the terminals are screwed down tight and in such a manner that they will not interfere with the cap or rotor.

When testing the leads for open circuits, a slight tension should be placed on them, or they should be moved back and forth to find broken wires inside the insulation, which may make contact temporarily during the test.

All leads inside the distributor should be bent away from contact with the housing or other moving parts so that the insulation will not chafe, and cause failure due to rubbing or vibration.

The high tension wiring is subjected to high voltage and, therefore, insulation is important. Leakage may exist without being visible, causing poor engine performance. See the *Tune Up* chapter for inspecting and testing data. Special attention should be given to any part of the cables surrounded by metal manifolds or brackets, as any weakness of the insulation inside the metal would cause current leakage and cross-firing, resulting in poor engine performance,

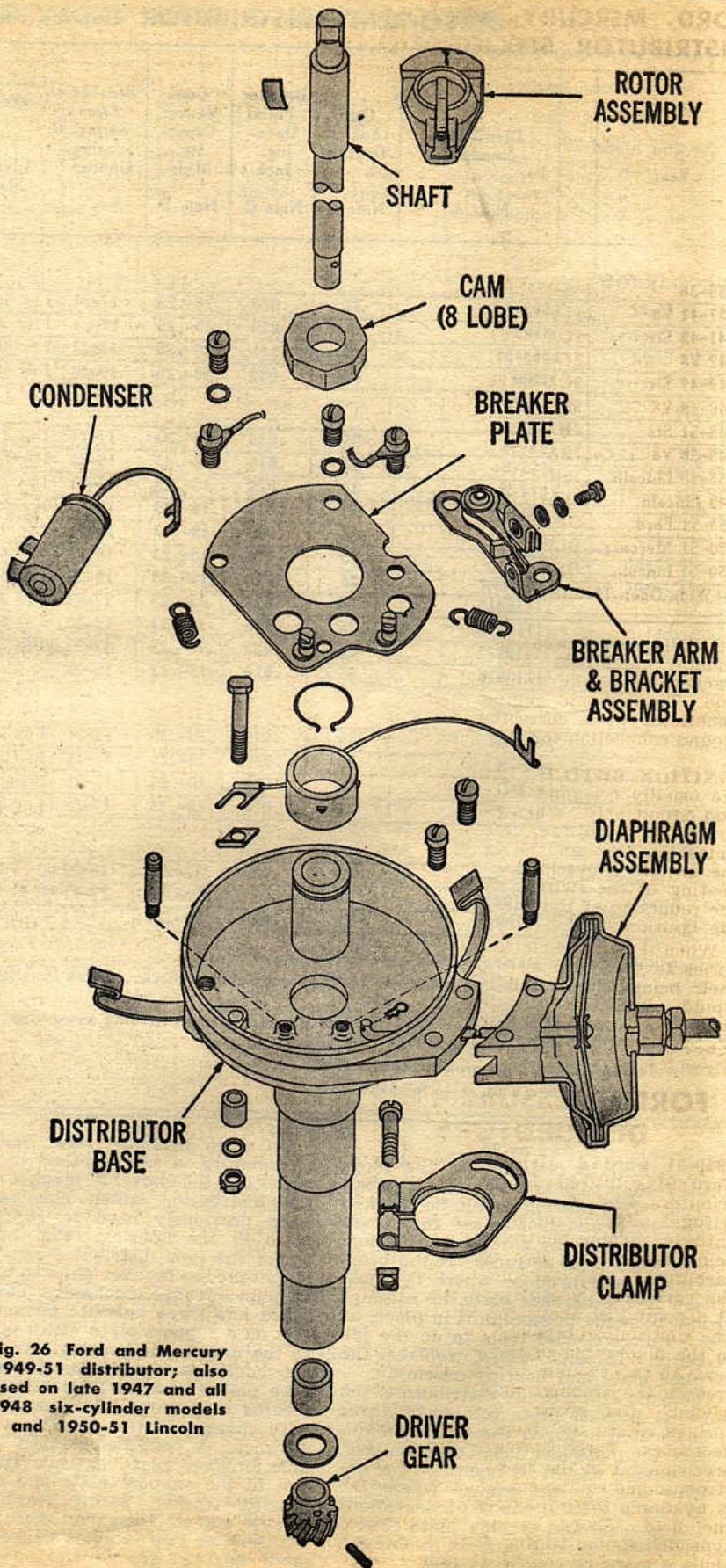


Fig. 26 Ford and Mercury 1949-51 distributor; also used on late 1947 and all 1948 six-cylinder models and 1950-51 Lincoln