

nections for continuity, corrosion or shorts. If none of these conditions exists and the light is still on the dual ballast resistor is malfunctioning and must be replaced. **Note:** If lights come on in both positions, first check for reversed wires at ballast resistor terminals, (1/2 ohm connected to 5 ohm or 5 ohm connected to 1/2 ohm) before replacing ballast resistor.

### Circuit Breaker Switch

The circuit breaker will protect the tester against damage due to testing a shorted control unit and if the tester is left connected for a period of time in excess of what it takes to test the system. Wait 60 seconds before attempting to reset a popped circuit breaker. Also do not replace control unit unless green control unit light was off **BEFORE** circuit breaker popped.

### Component Tests Off the Vehicle

Connect battery clips of tester to a fully charged battery. The green ignition input voltage light will come on if the battery is supplying sufficient voltage for testing. If the light does not come on **DO NOT PROCEED WITH TEST** until battery is charged enough to turn on the light.

### Control Unit (Fig. 7)

The control unit should be tested as a component **OFF THE VEHICLE**. However, in the event it is tested as a component on the vehicle, **MAKE SURE THE CORRECT POLARITY IS FOLLOWED WHEN CONNECTING THE BATTERY LEADS OF TESTER TO BATTERY, BLACK TO NEGATIVE, RED TO POSITIVE. REVERSING THE POLARITY WILL DAMAGE THE TESTER AND CONTROL UNIT.**

Only the ignition input voltage and the control unit lights apply on this test. **Disregard any red lights that may light.**

Connect the wiring harness connector of tester to the control unit. Control unit does not need to be grounded for this test. The control unit green light must come on to indicate a good control unit. If light does not come on check all connector pins for corro-

sion and security. Check all plug holes to be sure they are clean. If light still does not come on the control unit is defective.

### Pick-Up Coil (Fig. 8)

The pick-up coil may be tested while assembled in distributor or as a separate unit. Disregard all other lights on the tester except the ignition input circuit light and the pick-up circuit light.

(1) Connect clips to battery and connect the pick-up lead to the proper tester lead. Red pick-up light will be "off" if pick-up is good. Check pick-up lead by flexing it to be sure that there are no intermittent faults in the lead. If pick-up light blinks during flexing the pick-up coil assembly is malfunctioning and must be replaced.

(2) If pick-up light comes "on" replace the pick-up coil assembly.

### ELECTRONIC IGNITION TEST (WITHOUT TESTER)

**NOTE: DO NOT SUBSTITUTE THIS TEST IF TESTERS ARE AVAILABLE.**

To properly test the Electronic Ignition System (Fig. 9), the testers C-4166 with adaptor, C-4166-1 or C-4166-A should be used. But in the event they are not available, the system, (Fig. 11) may be tested using a voltmeter with a 20,000 ohm/volt rating and an ohmmeter which uses a 1-1/2 volt battery for its operation. Both meters should be in calibration. When Ignition System problems are suspected, the following procedure should be followed:

- (1) Visually inspect all secondary cables at the coil, distributor and spark plugs for cracks and tightness.
- (2) To check wiring harness and connections.
  - (a) Check primary wire at the ignition coil and ballast resistor for tightness. If the above checks do not determine the problem, the following steps will determine if a **component** is faulty.
  - (b) Check and note battery voltage reading using voltmeter. Battery voltage should be at least 12 volts.
  - (c) Remove the multi-wiring connector from the

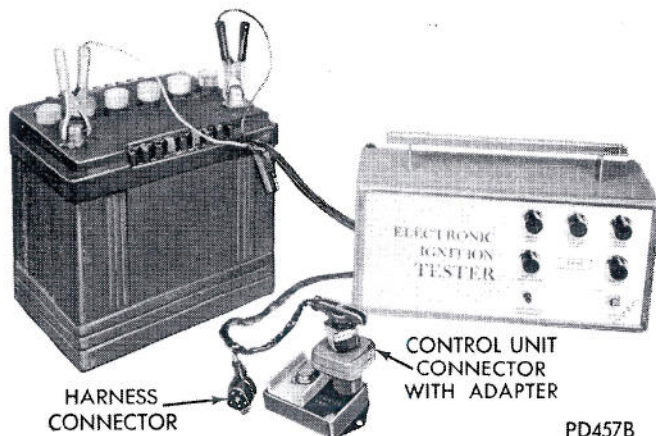


Fig. 7—Testing Control Unit Off Vehicle

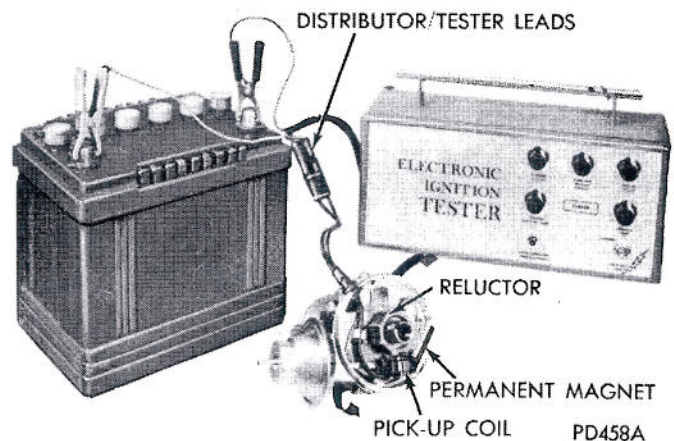


Fig. 8—Testing Pick Up Coil Off Vehicle