

## Section N (Electrical Equipment)

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If short-circuiting the sparking plugs is not possible, due to their being fitted with shrouded cable connectors, remove each plug connector in turn. Again, removal of the connection to the defective cylinder will cause no noticeable change in the running note, but there will be a definite increase in roughness when the other plugs are disconnected. Having thus located the defective cylinder, stop the engine and remove the cable from the sparking plug terminal.

Restart the engine and hold the cable end about  $\frac{3}{16}$  in. (5 mm.) from the cylinder head. If sparking is strong and regular, the fault lies with the sparking plug, and it should be removed, cleaned and adjusted, or a replacement fitted.

If, however, there is no spark, or only weak irregular sparking, examine the cable from the plug to the distributor cover. Renew the cable if the insulation is cracked or perished.

Clean and examine the distributor moulded cover for free movement of the carbon brush. (See Fig. 22). If a replacement brush is necessary, it is important that the correct type is used. If tracking has occurred, indicated by a thin black line between two or more electrodes or between one of the electrodes and the body, a replacement distributor cover must be fitted.

#### Testing in position to locate cause of ignition failure

Spring back the clips and remove the moulded cover. Lift off the rotor. Without disturbing the wiring, connect a 0-20 voltmeter between the "CB" terminal of the coil and a good earthing point. The engine will normally have stopped with the contacts closed—if so, separate the contacts with a piece of clean card. Switch on the ignition when a reading of battery voltage should be shown on the voltmeter. If no reading is given proceed as in (i) below. Remove the card from between the contacts when the voltmeter reading should drop to zero. If the battery voltage reading persists, or the reading drops, but not to zero volts, proceed as in (ii), following.

#### Low Tension Circuit Fault Location

(i) *No reading in voltmeter test with contacts separated*  
Transfer the voltmeter lead from the "CB" to "SW" terminal of the coil. If a reading is now shown disconnect the cable from the coil "CB" terminal and re-connect the voltmeter lead from "SW" to "CB". No reading will indicate a faulty coil while a reading of battery voltage means that the contact breaker insulation or the capacitor is faulty.

(ii) *Voltmeter reading with contacts closed*

If a reading of battery voltage is obtained, transfer the voltmeter lead from the coil "CB" terminal to the

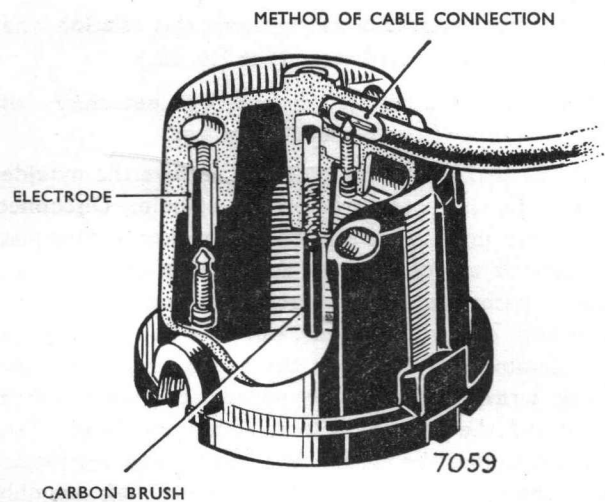


Fig. 22. Distributor cover and H.T. leads.

distributor L.T. terminal. If this results in the reading dropping to zero then the coil-to-distributor cable is faulty, while a continued reading of battery voltage means that the contacts are not "making". If, however, the voltmeter still shows a low reading when so connected this indicates high resistance between the contact breaker mating surfaces. Clean or renew the contacts.

#### High Tension Circuit—Fault Location

Remove the high tension lead from the centre terminal of the distributor cap. Ensure that the contact breaker points are closed and switch on the ignition. Flick open the contact points while the high tension lead end is held  $\frac{3}{16}$  in. (5 mm.) from the cylinder block. A strong H.T. spark should be seen each time the points open. If no spark occurs a fault exists in either the H.T. lead or the coil. Check these by substituting a new H.T. lead or coil. If spark is given and ignition failure persists, test rotor arm by substitution.

Check H.T. leads for cracking and perishing. Renew if required.

If misfiring occurs after all known causes have been eliminated, a new set of H.T. leads should be fitted, ensuring that the terminal ends of each H.T. lead are fitted correctly.

The cable leads from the distributor to the sparking plugs must be connected in the correct firing order.

#### Dismantling

When dismantling, carefully note the positions in which the various components are fitted, in order to ensure their correct replacement on reassembly. The tongue of the driving dog is offset; note the relation between it