

## DISTRIBUTOR

### MODEL 25D4

#### GENERAL

Mounted on the distributor driving shaft, immediately beneath the contact breaker, is a centrifugally operated timing control mechanism. It comprises a pair of spring-loaded governor weights, linked by lever action to the contact breaker cam. At low engine speeds, the spring force maintains the cam in a position in which the spark is slightly retarded. Under the centrifugal force imparted by higher engine speeds, the governor weights swing out against the spring pressure to advance the contact breaker cam, and thereby the spark, to suit engine conditions at the greater speed.

Vacuum-operated timing control is also provided, designed to give additional advance under part-throttle conditions. The inlet manifold of the engine is in direct communication with one side of a spring-loaded diaphragm. This diaphragm is linked to the contact breaker plate and rotates the contact breaker heel about the cam, thus advancing the spark for part-throttle operating conditions. There is also a micrometer adjustment for making fine alterations in timing to allow for changes in running conditions, e.g., state of carbonisation change of fuel, etc.

The H.T. brush in the distributor cover is of composite construction, the centre portion being made of resistive compound and the ends of softer carbon. The resistive portion gives a measure of radio interference suppression. Under no circumstances must a short non-resistive brush be used as a replacement for the longer resistive brush.

#### Special "Cold Starting" ignition for North America

The ignition coil is a 7-volt unit, and during normal running the excess voltage is dropped across a ballast resistor in series with the coil primary windings. For starting, an additional contact on the solenoid starter switch shorts out the ballast resistor, thus ensuring that the terminal voltage, and hence the performance, of the coil at this time remains practically unaffected by the drop in battery voltage. As soon as the engine starts, and the solenoid switch is opened, the ballast resistor is automatically reconnected into the primary circuit.

#### ROUTINE MAINTENANCE

(See Figs. 20 and 21)

In general, lubrication, cleaning and contact breaker adjustment constitute normal maintenance procedure.

#### Lubrication

Take great care to prevent oil or grease getting on or near the contacts. Add a few drops of clean thin engine

oil (SAE.30) through the aperture at the edge of the contact breaker base to lubricate the centrifugal timing control. Lightly smear the cam with lubricant as specified. Lift off the rotor arm and apply to the spindle a few drops of clean thin machine oil to lubricate the cam bearing. It is not necessary to remove the exposed screw since it affords a clearance to permit the passage of oil. Refit the rotor arm, locating carefully its moulded projection in the keyway in the spindle and pushing it on as far as it will go.

*Moving point pivot—separate contacts*  
Lubricate with one drop of engine oil.

#### *Quikafit moving point pivot*

Remove 2BA nut holding movable contact spring to the nylon terminal post. Lift movable point off its pivot post. Lightly smear pivot with Shell Retinax A grease. Clean points. Refit moving point, tightening the 2BA nut on the nylon terminal post finger tight, AND THEN A FURTHER HALF TURN ONLY. Tightening beyond this amount will strip the nylon thread.

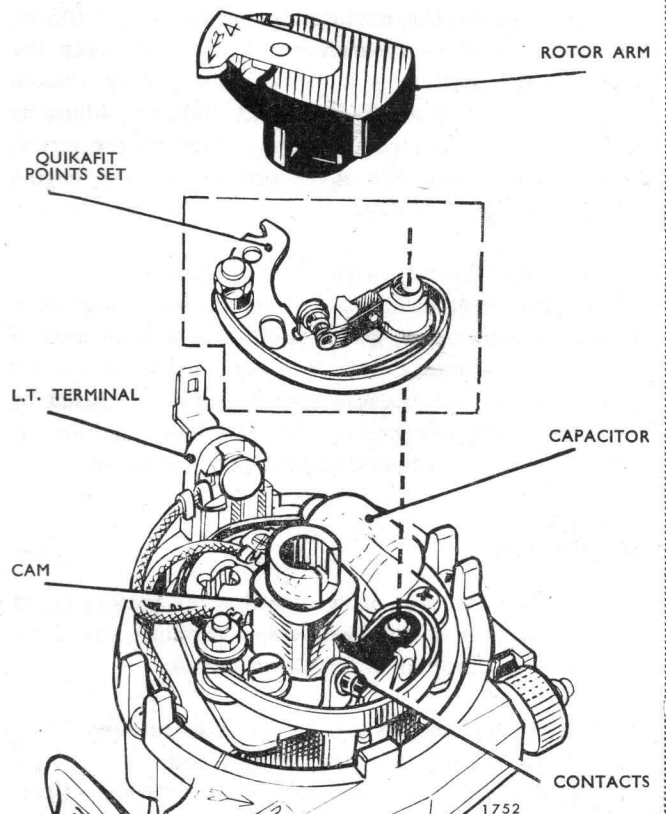


Fig. 20. Distributor assembly with cover removed, showing separate contact set, and alternative Quikafit contact set.