

Fig. 21. Distributor contacts

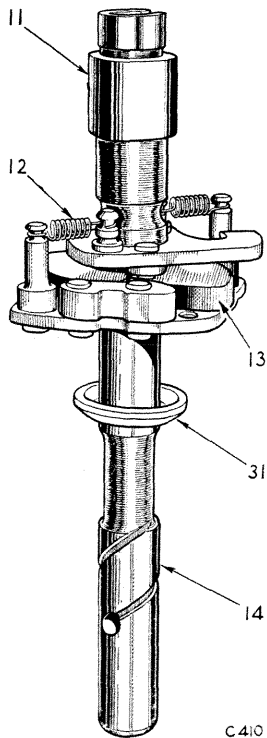


Fig. 22. Assembly of centrifugal weights and springs to the action plate

IGNITION DISTRIBUTOR

The distributor is mounted on a pedestal at the L.H. side of the engine and driven by the camshaft, via a helical gear, which also drives the oil pump and tachometer. The degree of ignition advancement is controlled mechanically, according to engine speed, by two centrifugal weights mounted between a driving and driven plate within the body. Additional vacuum control, according to the effect of load on manifold depression, is provided by a diaphragm acting directly on the contact breaker plate.

Contact Breaker Adjustment (Fig. 21)

Take off the distributor cap, remove the rotor arm and turn the engine until the contact breaker heel is on the highest point of the cam.

Slacken the screw (28), insert the blade of a screwdriver into the slots (31), and twist the screwdriver to adjust the gap between the contact breaker points, which should be 0.014"—0.016" (0.356—0.406 mm.) measured with a feeler gauge.

Tighten the locking screw (28), re-check the gap and, if satisfactory, refit the rotor arm and cap.

Contact Breaker Renewal

Slight pitting or discolouration of the points may be rectified by use of a fine carborundum stone. Do not use emery cloth unless the points are removed first and thoroughly cleaned before re-assembly. Renew burned or deeply pitted contacts as follows:—

1. Remove the nut (3), insulating sleeve (2) and lift the black and green cables from the terminal pillar.
2. Lift the spring contact (1) from the pivot post and remove the fibre washers (29) and (30).
3. Take out the lock screw (28) and lift off the fixed contact (27).

To Refit

Reverse the above instructions and adjust the gap between the contact breaker points.

Distributor Capacitor

A short circuit, resulting from the breakdown of the dielectric between the electrodes of the capacitor, which is parallel connected across the contact breaker points, will prevent the interruption of the low tension circuit and cause ignition failure.

An open circuit in the capacitor is more difficult to diagnose without the aid of special equipment, but may be suspect when the points are excessively burnt and difficult starting is experienced.

Renew the capacitor, or in case of doubt, substitute the existing one as follows:—

1. Remove the distributor cap and rotor arm, unscrew the nut (3) from the spring contact terminal post, and lift off the capacitor lead.
2. Take out the capacitor retainer screw and remove the capacitor.
3. Secure the new capacitor in place, reconnect the lead to the terminal post and refit the nut (3). Refit the rotor arm and distributor cap.

Overhauling the Distributor

To Remove

Disconnect the low tension cable from the side of the distributor, disconnect the high tension cable from the coil and release the high tension cables from the spark plugs.

Uncouple the vacuum pipe from the distributor, unscrew two nuts at the base of the distributor and lift it from the engine.

To Dismantle

Remove the distributor cover and rotor arm. Disconnect the vacuum control (26) from the contact plate (7), take out two screws (8) and remove the contact breaker assembly.

Release the circlip (19) and remove the adjusting nut (18) and spring (17), taking care not to lose the ratchet spring (16). Withdraw the vacuum control unit (25) from the distributor body.

Release both springs (12) from the base of the cam (11) and the action plate (14). Take out the screw (10) and lift the cam (11) from the shaft (14).

At this stage, check the shaft (14) for end float which should not exceed $\frac{3}{32}$ " (0.8 mm.). Drive out the pin (21), take off the collar (22) and the washer (23), and withdraw the shaft (14) from the distributor body.

Substituting a new shaft, or a test bar of 0.490" (12.45 mm.) diameter check the bearing sleeve (24) for wear, and renew the sleeve if required.

To reduce excessive end float, renew the nylon spacer beneath the action plate (14), and the washer (23) between the driving dog and distributor body.

To Reassemble

Refit the nylon spacer under the action plate (14), reassemble the weights (13), spring (12) and cam (11) to the action plate (14) and secure the cam with the screw (10). Lubricate the shaft and insert the assembly into the distributor body.

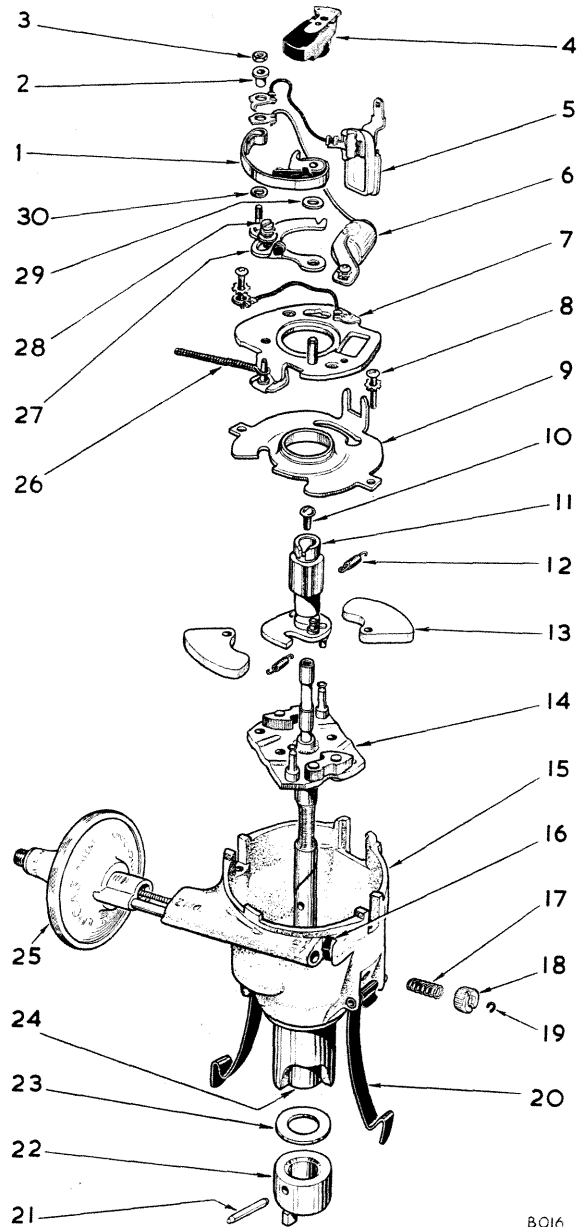
Refit the washer (23) and, placing the offset driving collar (22) as shown on Fig. 23, secure the collar by inserting and swelling the ends of the pin (21).

Assemble the contact plate (7) to the fixed base plate (9) by springing the spring clip over the base plate slot edge, inserting the peg of the contact plate into a slot in the base plate and moving it slightly clockwise. Secure the assembly to the distributor body, using two screws (8).

Insert the vacuum unit (25) into the distributor body and assemble the ratchet spring (16), the coiled spring (17), adjusting nut (18) and the circlip (19). Hook the vacuum connecting spring (26) on to the pin attached to a cranked lug on the contact plate.

Assemble the capacitor and the contact breaker to the contact plate (7) and adjust the contact breaker points as described previously.

Refit the complete distributor to the engine, re-connect the vacuum pipe, the high and low tension cables, and adjust the ignition timing as instructed on page 1-131.



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|------------------------------------|-----------------------------|
| 1 Spring contact | 16 Ratchet spring |
| 2 Insulating sleeve | 17 Coiled spring |
| 3 Nut | 18 Adjusting nut |
| 4 Rotor arm | 19 Circlip |
| 5 L.T. terminal | 20 Cap retainer |
| 6 Capacitor | 21 Pin |
| 7 Contact plate | 22 Driving dog |
| 8 Screw | 23 Washer |
| 9 Base plate | 24 Bearing sleeve |
| 10 Screw | 25 Vacuum unit |
| 11 Cam | 26 Vacuum connecting spring |
| 12 Centrifugal spring | 27 Fixed contact |
| 13 Centrifugal weights | 28 Screw |
| 14 Action plate and shaft assembly | 29 Insulating washer |
| 15 Distributor body | 30 Insulating washer |

Fig. 23. Dismantled ignition distributor