

FK.116

Lumenition

OPTRONIC[®]IGNITION

INFRA-RED SOLID STATE BREAKERLESS IGNITION SYSTEM

A BRITISH INVENTION

Lumenition

Division of **Autocar** Electrical Equipment Co Ltd

49-51 TIVERTON STREET
LONDON SE1 6NZ. ENGLAND

Patent Nos. 1219833, 1252324, 1252559, 1279385, 1330453,
1410782, 1417857, 1420814, 1437770.

® Registered Trade Mark.

LUCAS DISTRIBUTORS
not electronic

Disconnect: Battery Negative Terminal.

Remove: Distributor Cap (9)
Rotor (1)
Contact Breaker (5)
and Cam Lubricating Pad if fitted.
Condenser complete with wires (8)
Earth Wire and retain it. (25)

Check: Mechanical and vacuum advance operation

Follow instructions A or B as appropriate.

INSTRUCTION A—Models 23D to 25D

See Illustration A.

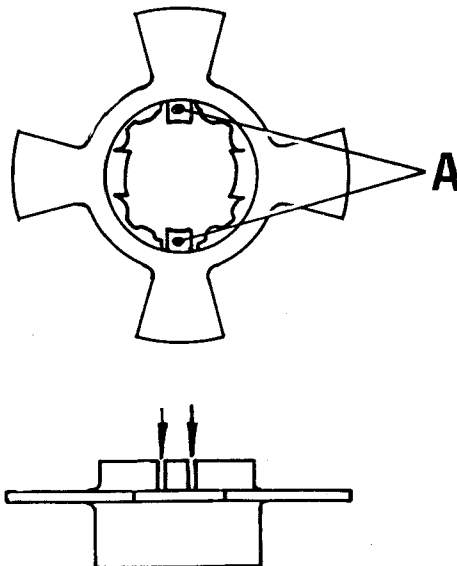
- 1 Fit optical switch (4) to original contact breaker mounting hole and pivot pin using screw and washers (11) provided.
NOTE: 23D distributor (without vacuum unit). Raise optical switch using 2 flat washers (12) as illustrated.
Early models, it is necessary to shorten brass pivot pin to maximum height of 5 mm to prevent chopper fouling.
- 2 Fit chopper (2) over cam.
- 3 Place split plastic grommet (3) over optical switch wires 73mm from sleeve on optical switch and insert grommet into slot in the distributor body.
CHECK: Freedom of vacuum advance movement.
- 4 To prevent optical switch wires being damaged by rotating chopper fit cable tie (22).
- 5 For fitment of connector (13) refer to fitting instruction supplied with power module/optical switch package.
- 6 Refit rotor (1) and distributor cap (9).
- 7 Check ignition timing to manufacturer's specification when complete system is fitted.

INSTRUCTION B—Models 43, 45, 48, 54D & 59D

See Illustration B.

- 1 Fit optical switch (4) to original contact breaker mounting hole and pivot pin using screw and washers (11) provided.
NOTE: 54D MODELS: Some distributors have a tall pin that prevents optical switch being fitted; as this is no longer used, break off the pin with pliers. These models do not have a contact breaker pivot pin so use the self threading screw and washer (20) supplied to mount optical switch (4).
- 2 Pass wires through exit hole in distributor body. Do not damage wire insulation.
- 3 To prevent optical switch wires being damaged by rotating chopper fit cable tie (22).
CHECK: Freedom of vacuum advance movement.
- 4 Fit chopper (2) over cam. There are two cam heights on models 48D and 54D distributors. If the chopper blades do not pass through optical switch remove chopper and cut down each side of the two small lugs A. Bend back the small lugs A and break off.
This will allow chopper to seat further down distributor cam.
(See Illustration C.)
- 5 Slide the grommet (3) over optical switch wires and locate it into distributor body ensuring:
 - (a) There is sufficient wire length between grommet and optical switch to allow distributor plate to move during vacuum advance/retard.
 - (b) The wires are clear of the revolving chopper blades.
- 6 For fitment of connector (13) refer to fitting instruction supplied with power module/optical switch package.
- 7 Refit rotor (1) and distributor cap (9).
- 8 Check ignition timing to manufacturer's specification when complete system is fitted.

ILLUSTRATION C



See over for illustration A and B

ILLUSTRATION A

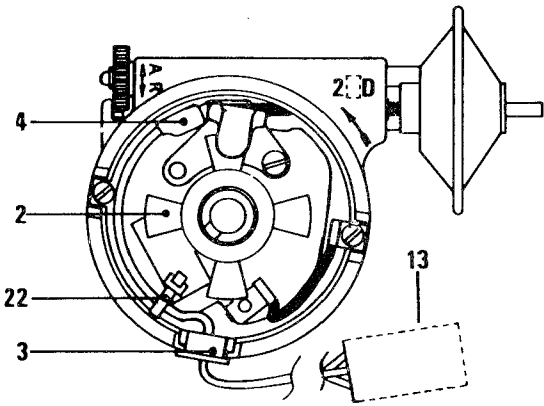
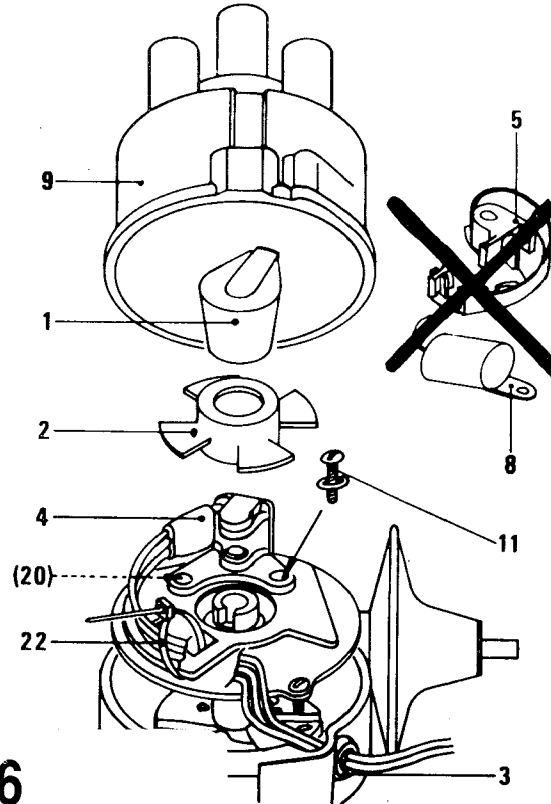
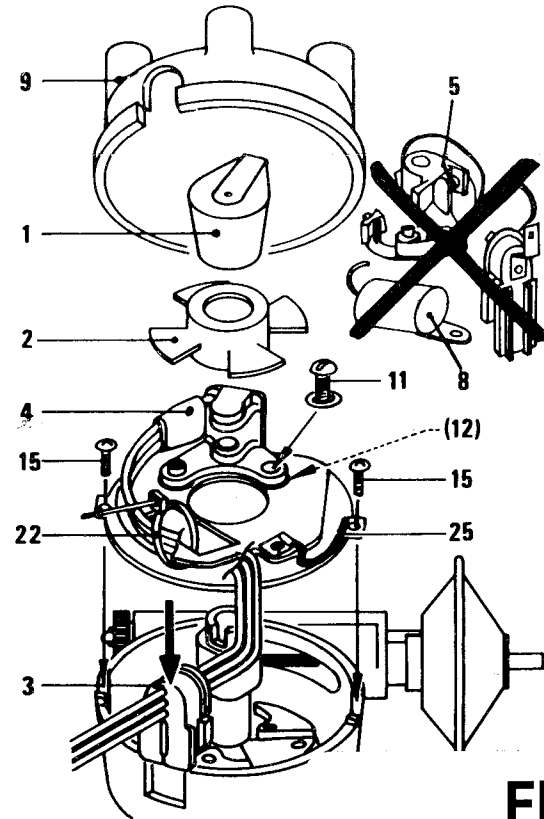
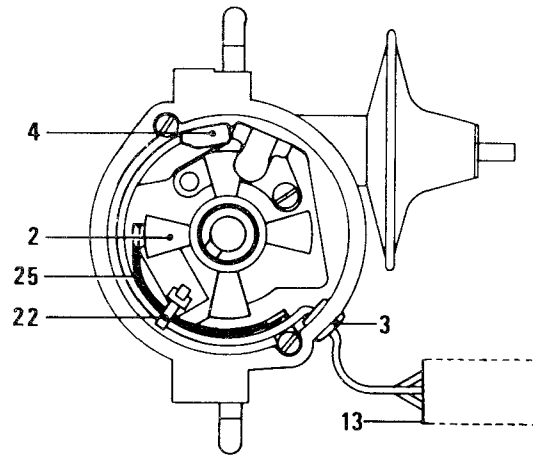


ILLUSTRATION B



FK.116

Lucas 22, 23 & 25D 4 & 6 Cylinder
Distributors. Anti-Clockwise Rotor Rotation