

FK.110

Lumenition

OPTRONIC[®] IGNITION

INFRA-RED SOLID STATE BREAKERLESS IGNITION SYSTEM

A BRITISH INVENTION

Lumenition

Division of **Autocar** Equipment Ltd

77-85 NEWINGTON CAUSEWAY

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

® Registered Trade Mark.

USE WITH PMA.50

INSTRUCTION 1

See Illustration 1

LUCAS ELECTRONIC DISTRIBUTORS 4 & 6 CYLINDER — D.E. Types only.

Disconnect: *Negative Battery Terminal*

Remove: Distributor cap (9)
Distributor from engine first making sure engine is at top dead centre and rotor (1) is in line with No. 1 spark plug lead.
Rotor (1)
Circlip Washer and 'O' Ring (18)
Use small screwdriver to remove 'O' ring.
White timing rotor (31)
from distributor shaft.
Magnetic pick-up assembly (32)
with two screws and separate the vacuum advance housing from distributor body (3 screws-40) and lower vacuum lever to release from distributor base pin.
Cut off the wires from the magnetic pick-up assembly (32) and the three feed wires to the distributor as close as possible to the encapsulant in the vacuum advance housing.

INSTALLATION OF OPTICAL SWITCH (4)

- Fit adaptor plate (6) to distributor using countersunk screws (26) supplied into original pick-up fixing holes.
- Fit optical switch (4) to adaptor plate (6) using screws and washers (11) supplied.
- Slide long grommet (3A) over optical switch wires followed by short grommet (3B).
- With long grommet (3A) 38 mm from optical switch sleeving fit into existing slot in distributor body. This is important to allow wires to move during vacuum advance.
- Locate short grommet (3B) into slot of vacuum advance housing. Ensure optical switch wires are routed away from vacuum advance lever (14a).
- Refit vacuum advance housing (14) to distributor body checking advance lever (14a) is located over pin on distributor plate, ensuring that screws 40 pass through distributor cap clips (29).
- Fit optical switch wires into connector (13) until pins 'click' into position. Ensure wire colours correspond with power module connector:

- Red
- Black
- Blue

- To remove terminals use small probe to close tags and withdraw wires. **DO NOT CUT WIRES.**
- Fit 'P' clip (21) over optical switch wires and secure to distributor base plate fixing screw.
 - Select correct chopper (2) — four blades for four cylinders or six blades for six cylinders — and slide over distributor shaft locating wide lug in wide slot at base of distributor shaft.
 - Replace 'O' ring, washer and circlip (18).
 - Check all wires are clear from revolving chopper blades.
 - Fit rotor (1) to distributor.
 - Refit distributor to engine with rotor in line with No. 1 spark plug lead.
 - Set distributor with leading edge of chopper (2) blade just between lensed units.
 - Replace distributor cover (9), reconnect battery negative terminal and check ignition timing to conform to manufacturer's specification when complete system fitted.

INSTRUCTION 2

See Illustration 2

LUCAS ELECTRONIC DISTRIBUTORS 8 CYLINDER. C. & A. CLOCK. — D.E. Types only.

Disconnect: *Negative Battery Terminal*

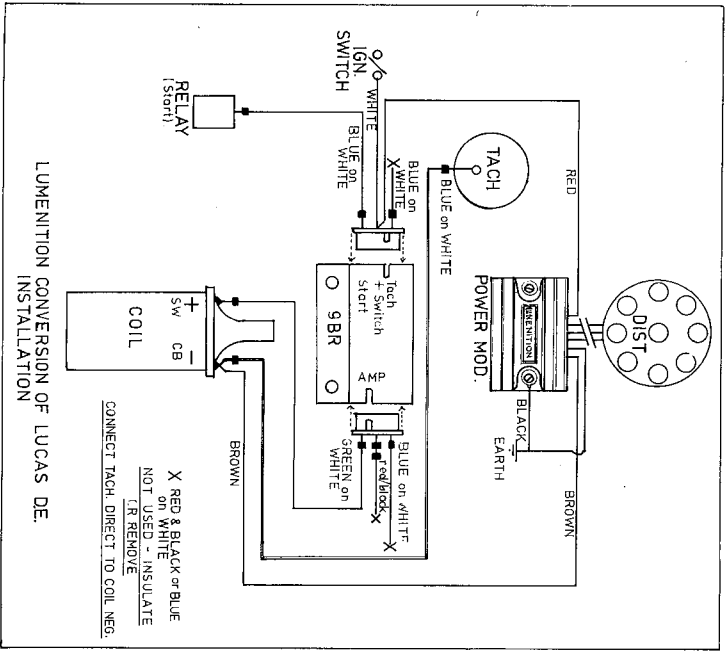
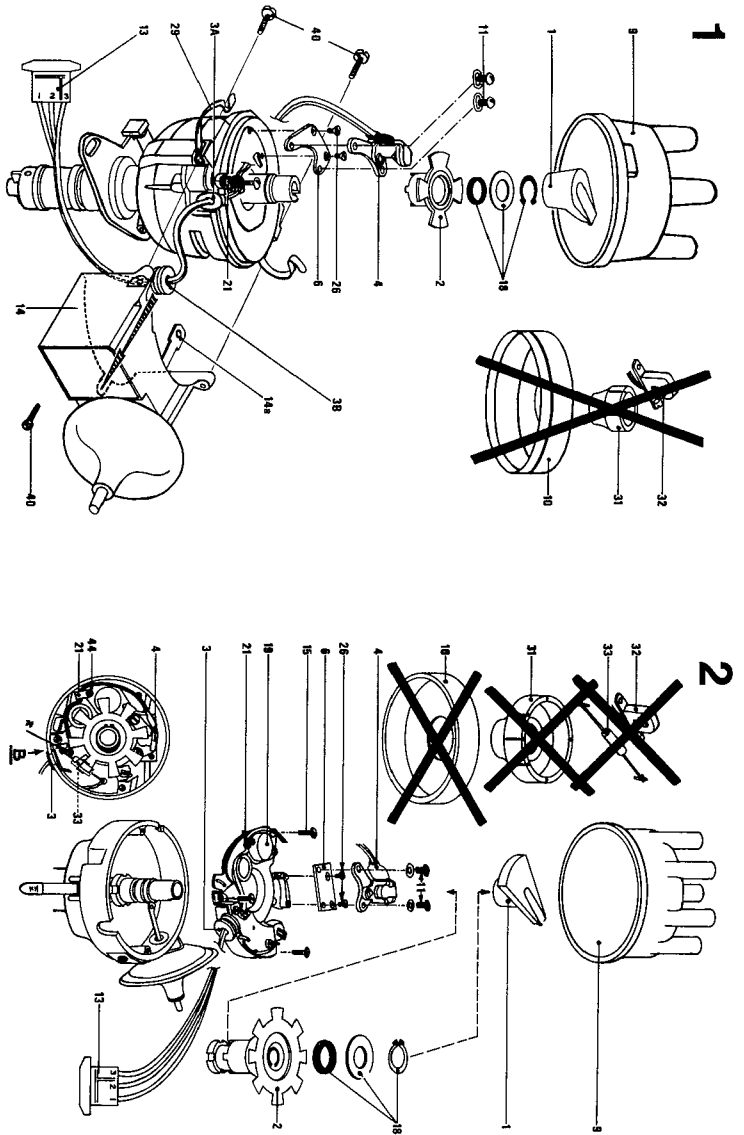
Remove: Distributor Cap (9)
Distributor from engine, first making sure engine is at top dead centre and rotor (1) is in line with No. 1 spark plug lead.
Rotor (1)
Dust Cover (if fitted). (10)
Circlip, washer and 'O' ring (18)
White timing rotor (31)
from distributor shaft.
Base plate (19)
complete with wires and grommet (3 screws).
Magnetic pick-up assembly (32)
with two screws and cut wires as close to base plate as possible.
Cut all remaining wires connected to base plate. Tape back cut wires to harness and replace harness as originally fitted to coil and ballast connections.
Remove green resistor (33)
complete with holder.

INSTALLATION OF OPTICAL SWITCH (4)

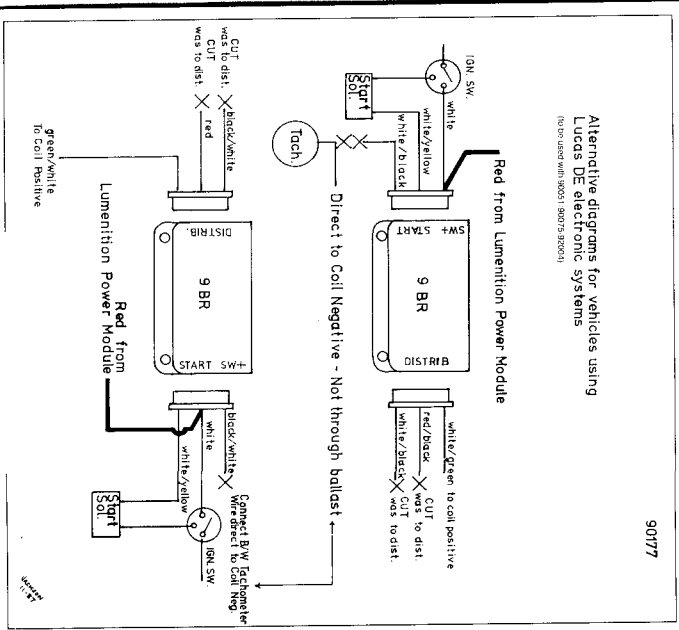
- Fit adaptor plate (6) to base plate (19) using countersunk screws (26) supplied.
- Fit optical switch (4) to adaptor plate (6) using screws and washers (11) supplied.
- Route optical switch wires round base plate — see illustration B and fit 'P' clip (21) over wires securing under nut (44) as shown.
NOTE: At position * wires are fed between base and encapsulant.
NOTE: Have sufficient length of wire between 'P' clip (21) and optical switch (4) to permit vacuum advance movement. Move optical switch from side to side to check.
- Slide grommet (3) over optical switch wires and position close to base (19).
- Reassemble complete base plate into distributor body sliding grommet (3) into position. Ensure that pivot pin is located in vacuum control arm.
- Slide chopper (2) over distributor shaft and locate with wide lug in wide slot at base of distributor shaft.
- Replace 'O' ring, washer and circlip (18).
- Check all wires are clear of rotating chopper.
- Fit optical switch wires into connector (13) until pins 'click' into position. Ensure wire colours correspond with power module connector:

- Red
- Black
- Blue

- To remove terminals use small probe to close tags and withdraw wires. **DO NOT CUT WIRES.**
- Fit rotor (1) to distributor.
 - Refit distributor to engine with rotor in line with No. 1 spark plug lead.
 - Refit distributor cover (9).
 - Reconnect battery negative terminal and check ignition timing to conform to vehicle manufacturer's specification when complete system is fitted.



FK.110
 8 cylinder Lucas
 Electronic Distributor 35DE8
 Clockwise rotation



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