**MICRO-POWER 12 VOLT IGNITION SYSTEM FOR MODIFYING LUCAS 18D2 'DISTRIBUTOR' type TWIN CYLINDER MOTOR CYCLES (KIT00262)**

**TWIN SYSTEM WILL ONLY WORK WITH THE SPECIAL DUAL OUTPUT DIGITAL IGNITION COIL TYPE 00008.**

---

a) Transistor BOX00210 (Blue plastic box with 5 wires)  
b) Stator Plate DT1a (printed circuit board with coil)  
c) Magnetic Rotor ROT00114 (Steel disc with magnets)  
d) 3 X 4BA X 1/4” SL screws & shake proof washers  
e) Plastic strap, Coil positive earthing wire, red 1ft.  
f) Terminals: 4 female spades, 1 piggyback spade, 2 male bullet & 1 ring.  
g) Dual output digital ignition coil, COIL00008  
h) bolts/nuts/washers, h.t.clips, boots & tie-straps

**Electrical Installation**

1) Adjust the distributor
2) Modify the distributor cover cap to allow fitting over the coil of the stator plate (fig6)
3) For safety, remove one battery connection (or fuse).
4) Slide the magnetic rotor onto the shaft in the distributor housing, locate onto the two drive pins and secure using supplied 4BA x 1/4” screw and shake proof washer at the top of the shaft. (fig 4)
5) Fit the DT1a stator into the modified distributor housing, fit two 4BA x 1/4 screws and shake proof washers to retain it. Check for clearance between the rotor and the stator underside, no contact should occur between the two parts when an end load is applied due to shaft end play.
6) Modify the distributor cover cap to allow fitting over the coil of the stator plate (fig6)
7) Refit the distributor
8) Set the distributor to Top Dead Centre on compression.
9) Adjust the rotor in the distributor housing until one of the magnets lines up centrally through the TDC timing hole in the stator plate.
10) Refit the distributor, keeping the engine in its TDC position.
11) Adjust the distributor angle to set the rotor magnet alignment before tightening the distributor clamp screw.

---

**General Data**

1) This unit can run positive or negative earth as long as the ignition coil is fed from the positive supply.
2) The working voltage is 10 to 16 volts.
3) The working current is controlled by the microprocessor, when static the current is approx. 50mA, when running 1.0 amp with a 6.0 amp. pulse on switch on.
4) The resistance of the coil on the stator plate should be 66 ohms, and the magnetic rotor should have the south poles of its magnets orientated outwards.
5) This coil can be adapted to work on many types of engine, fitted to the camshaft, it fires every 180° of camshaft rotation, (360° of crankshaft rotation).
6) This unit will drive two coils up to 15,000 sparks/minute.
7) Typical working advance range is 12° at 2,500 R.P.M. camshaft.
8) The unit and the peak primary voltage is regulated at 250 Volts.
9) This unit must always be operated with the frame or chassis acting as an electrical return, whether positive or negative earth.
10) This unit will operate from an alternator, rectifier, zener diode and capacitor battery-less system, but kick-starting may be more difficult. (IF THE ZENER DISCONNECTS WHEN THE ENGINE IS RUNNING THE IGNITION WILL BE DAMAGED). For this reason we recommend our POWER BOX UNIT. This is voltage controlled and cannot damage the system.

---

**Wiring**

1) Wiring should be trimmed to the correct length, spare wire should never be coiled up as this can affect the correct running of the ignition system. If possible the wires from the stator plate should be run separately from the main wiring loom.
2) The ignition system has two spark plugs, fitted simultaneously, thus if the engine only runs on one cylinder the fault can only lie with the mechanics of that cylinder, spark plug, lead or ignition coil, not the transistor box or stator plate. To run with a twin plug system two coils can be run in series, with each firing both cylinders. (NOT ONE COIL TO EACH CYLINDER).
3) WARNING: Protracted kick starting or idling can cause excessive heating of the Micro Power ignition coil and unit, please provide adequate ventilation to these parts during installation.

---

**WARNING:** THIS UNIT PRODUCES VERY HIGH VOLTAGES ALWAYS TURN OFF BEFORE WORKING ON THE SYSTEM.
To set static timing, align one of the rotor magnets centrally behind timing hole with the engines pistons mechanically positioned at Top Dead Centre.
LUCAS 18D2 DISTRIBUTOR MODIFICATIONS

Fig 1  Marking pole pin aperture
Fig 2  Marking coil tab aperture
Fig 3 Finished distributor apertures
Fig 4  Magnetic rotor fitted
Fig 5 Stator plate fitted
Fig 6  Clearance hole for coil in cover