

BOYER BRANSDEN ELECTRONICS LTD

Frindsbury House, Cox Lane, Detling, MAIDSTONE, Kent ME14 3HE ENGLAND
Telephone: 01622 730939 Fax: 01622 730930

Boyer Bransden Ignitions

Electrifying Performance

WWW.BOYERBRANSDEN.COM

KIT 00286

MICRO-POWER IGNITION SYSTEM FOR B.M.W.PRE-79 MOTORCYCLES WITH 12 VOLT ELECTRICS THIS SYSTEM MUST BE USED WITH THE SPECIAL DIGITAL IGNITION COIL(S) TYPE COIL00008 ONE FOR SINGLE PLUG, TWO FOR TWIN PLUG FIRING, CONNECTED IN SERIES, EACH COIL FIRING BOTH CYLINDERS.

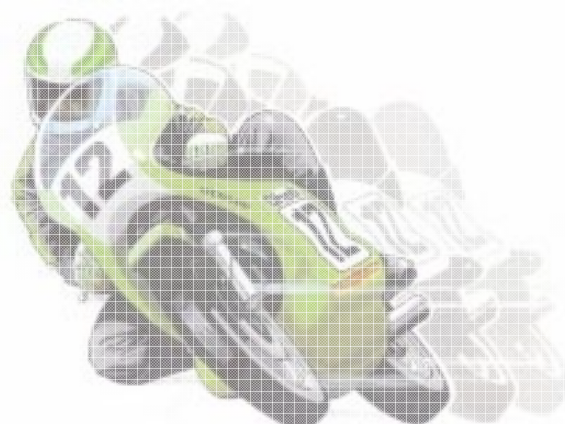
Comprising:-

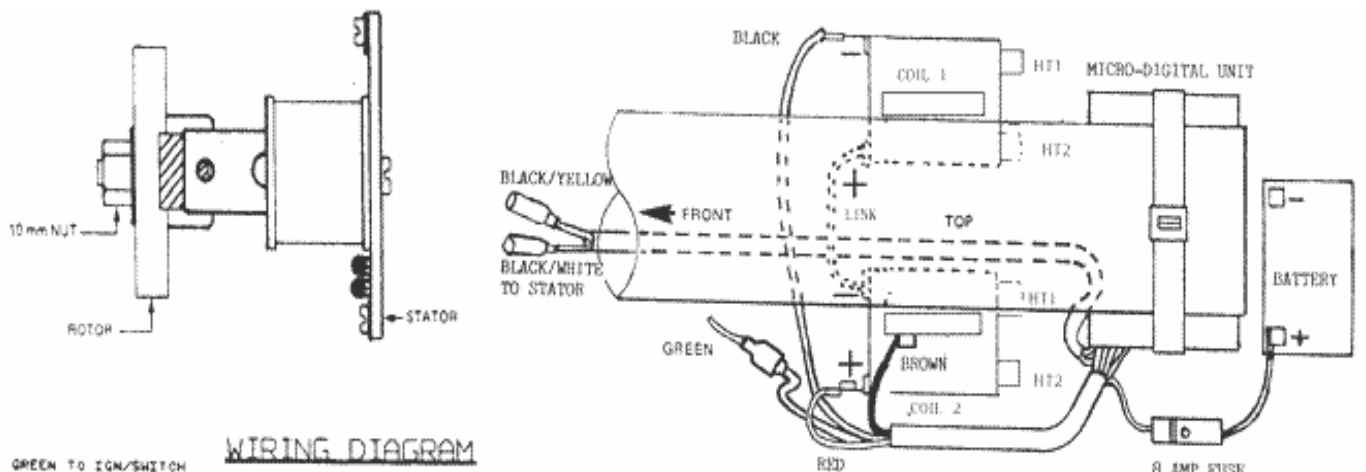
- a) Micro-Power Electronic Box (red box with wires)
- b) Stator Plate (round printed circuit with two coils and two connecting wires)
- c) Magnetic Rotor (round plated steel unit with two magnets fitted)
- d) Two 5mm flat washers and two lock washers
- e) Plastic straps
- f) Piggyback spade connector

Fitting instructions:

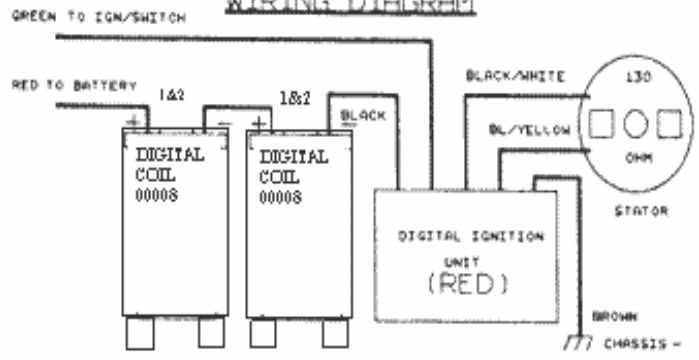
(Tools required are the standard tool kit plus a strobe timing lamp for final timing. Suppressed spark plug caps must be used with this ignition).

- 1) Open seat and remove tool tray.
- 2) Undo the two wingnuts holding the rear of the petrol tank.
- 3) Turn off both petrol taps and undo the pipes from the bottom of each using the 24mm end of the large "C" spanner, or slide the pipes off.
- 4) Remove petrol tank by sliding back and lifting.
- 5) Remove the positive battery terminal. (FAILING TO DO THIS COULD DAMAGE THE ALTERNATOR CONTROL UNIT, WHEN REMOVING THE ENGINE FRONT COVER)
- 6) Remove engine front cover by undoing the three caphead screws. (YOU MAY HAVE TO REMOVE THE HORN)
- 7) Remove contact breaker and auto-advance unit by undoing the two holding screws and single 10mm fitting nut on the end of the shaft.
- 8) Disconnect the points wire from the condenser unit and pull out of the long rubber grommet.
- 9) Feed the wire on the ignition stator plate through the long rubber grommet (from the large end, female connector first).
- 10) Fit the stator plate into the contact breaker housing with the two screws and four washers, wires to the bottom. Set halfway along adjustment slots.
- 11) Refit rubber grommet into mounting bracket and crankcase.
- 12) Slide the rotor unit onto the end of the "D" shaped contact breaker shaft with the magnets facing the stator plate (take care not damage the "D" hole as it is a tight fit.) Testing its fit with it facing the wrong way is a good idea. If too tight, remove the plating on the inside of the hole with a file.
- 13) Turn rotor anticlockwise as far as possible and secure with the 10mm fitting nut and washer (DO NOT OVERTIGHTEN). See Fig.1
- 14) Remove the large black wire from the right hand ignition coil (this is no longer used) and the green wire from the left hand ignition coil. Remove the ignition coils and fit the new coil in place of one. For twin plug, two coils must be fitted with a link wire, as per diagram below. The wiring loom earth can be replaced on one of the mounting screws. Refit the HT cables. These must have 5000 ohm suppressed plug caps fitted.
- 15) Fit the electronic box behind the ignition coil with the wires on the left hand side, using the long plastic straps around the top frame tube to secure it. See Fig.2
- 16) Connect the green wire from the electronic box to the green wire from the wiring loom.
- 17) Connect the black wire from the electronic box to the -neg ignition coil connection.
- 18) Route the sleeved black/white-black/yellow wires over the rubber air intake. Remove the rubber grommet at the top of the front engine case and run through the grommet slot, replace the grommet and connect to the stator plate wires. (COLOURS MUST MATCH OR ENGINE WILL NOT RUN)
- 19) Connect the brown wire from the ignition box to the main wiring loom earth on the ignition coil mounting.
- 20) Connect the red wire to the +pos. terminal of the ignition coil.
- 21) Connect the red fuse wire to the positive battery terminal, along with the original wire.
- 22) Check all connections are good and tight and wires fitted neatly (USE SMALL TIE STRAPS).
- 23) Refit petrol tank and pipes.
- 24) Remove rubber timing hole bung in left hand engine side casting.
- 25) Start engine and run for three to five minutes for it to warm up.
- 26) Connect the strobe lamp and time through the timing hole to the Full Advance Mark (F) dot with the engine running at 4000 RPM. With twin plug, set timing 5 to 6 degrees retarded for best results. This final position is obtained by moving the stator plate on its slotted holes; this should be done with the engine stationary, the screws being tightened after each adjustment. The timing mark can be seen as the electronic advance is operating, when the engine is speeded up. Anticlockwise movement will advance the ignition.
- 27) Remove the battery earth wire from the rear engine case, and refit the front engine cover and horn.





WIRING DIAGRAM



TWO COIL SETUP FOR TWIN PLUG HEADS. FOR SINGLE PLUG STANDARD SYSTEM WIRE BLACK AND RED TO THE ONE COIL.

NOTE:--

WE HAVE FOUND THAT SOME PRE-79 BMW MODELS, WHEN FITTED WITH THIS IGNITION, FAIL TO STOP RUNNING WHEN THE KILL SWITCH IS OPERATED.

THIS IS DUE TO THE VERY SMALL CURRENT REQUIRED TO KEEP THE ELECTRONICS RUNNING.

TO OVERCOME THIS PROBLEM YOU CAN OPERATE THE BRAKE LIGHT OR REWIRE THE SYSTEM TO TAKE ALL ITS POWER FROM THE STANDARD IGNITION WIRING.

TO DO THIS THE RED WIRE AND FUSE ARE TOTALLY DISCONNECTED AND REMOVED. THE GREEN WIRES ARE BOTH JOINED ONTO THE + PLUS OF THE LEFT HAND COIL. THE MALE TERMINAL ON THE IGNITION BOX WILL REQUIRE CHANGING TO FEMALE.

