

# **MICRO-POWER ELECTRONIC IGNITION FOR NORTON COMMANDO / ATLAS.**

## **Comprising:-**

- a) Transistor box (rectangular red box with wires)
  - b) Stator plate (round printed circuit with two coils and wires)
  - c) Magnetic rotor (round plated steel unit with two magnets fitted)
  - d) Plastic straps (1x large 1x small)
  - e) 1.25" x 0.25" BSF bolt & 1.25" x 0.25" UNF bolt
  - f) Terminals: 4 male bullets
- YOU WILL ALSO REQUIRE A SPECIAL DIGITAL MINIATURE IGNITION COIL DUAL OUTPUT TYPE 00008.**

## **Fitting instructions**

- 1) Remove seat.
  - 2) Remove tank, disconnect fuel lines
  - 3) Remove contact breaker cover.
  - 4) Remove complete contact breaker assembly including the auto-advance unit.  
Disconnect the two wires coloured black-white and black-yellow.
  - 5) Set engine at 31 B.T.D.C. on the alternator mark (ensure correct mark is used - there are two marks on the alternator on 1972/3 models, use the mark indicating T.D.C. with the pistons in top position).
  - 6) Fit magnetic rotor unit using one of the bolts (supplied), with the magnets in line with the "NORTON" name on the timing case. See Fig.1.
  - 7) Fit stator plate (with the connecting wires at the bottom) using the standard studs.
  - 8) The magnet on one side of the rotor should now be in the centre of the top timing hole in the stator plate; this should also set it half way along its adjustment slots. If not, move the rotor until this is achieved without turning the engine from 31 deg. B.T.D.C. See Fig.2. (THE ATLAS ENGINE HAS THE POINTS HOUSING BEHIND THE CYLINDER HEAD, ITS SHAFT IS ROTATING IN THE REVERSE DIRECTION.SET TIMING ON THE CLOCKWISE TIMING HOLE.)
  - 9) Fit two male bullet connectors (supplied) to the two wires in the timing cover and plug them into the corresponding coloured female connectors on the stator plate wires. These connectors should be wedged in tight against the timing case or strapped to one of the stator coils as they can fracture with vibration. Check the two core cable from timing cover to the front frame tube has a minimum 50mm(2inch) of free play.
  - 10) The two wires in the timing cover can be traced up the frame tube to a pair of bullet type connectors. Remove these connectors.
  - 11) Remove and disconnect the ignition coils. Fit the new coil in the place of one. Refit H.T cables and plug caps.
  - 12) Remove the white-blue wire from the ballast resistor (no longer required) between the two ignition coil mountings. The colour of this ignition power feed wire may be different on some machines, if so check using a test lamp or meter to find the live wire when the ignition is switched on.
  - 13) Remove the red wire from its earthing point on the end of the condenser pack .
  - 14) Fit the transistor box to the frame tube with the plastic strap (supplied), with the long wires to the right-hand front side and the two short wires to the left. See Fig.3.
  - 15) Connect the short black-white and black-yellow wires from the transistor box to the two wires which feed down to the timing cover, using the male bullet connectors (supplied).
  - 16) Connect the red wire from the transistor box as follows: first connector to the + positive terminal on the ignition coil. The second piggyback connector on to the frame earth tag on the condenser pack (no longer required) and refit the red from the wiring loom.
  - 17) Connect the black wire from the transistor box to the - negative terminal of the ignition coil.
  - 18) Connect the white-blue wire (the one removed from the ballast resistor) to the white wire from the transistor box.
  - 19) All original wires that have been removed are now not in circuit and can be taped up and tucked out of the way.
  - 20) Check **all** connections are good and tight, if not remove and tighten with pliers.
  - 21) Refit tank, fuel lines and seat.
  - 22) Start engine and time with a stroboscope to 31 B.T.D.C.(28 DEG.with standard ignition) with the engine running up to 5000 r.p.m. This is done by moving the ignition stator plate. If the timing is not obtainable before the end of the adjustment, the magnetic rotor will have to be slackened off and moved a small amount until the correct timing can be obtained.
  - 23) Refit timing cover. With this system the total running current will be approximately 1 amp and static 50mA. If twin plug system is required two coils can be wired in series, each coil firing both cylinders.
- WITH THIS SYSTEM SUPPRESSED SPARK PLUG CAPS OF 5000 OHM MUST BE FITTED AS RADIO FREQUENCY ENERGY CAN CORRUPT THE MICROPROCESSOR AND PRODUCE VERY BAD RUNNING.**

**WARNING THIS SYSTEM PRODUCES VERY HIGH VOLTAGES ALWAYS SWITCH OFF BEFORE MAKING ANY ADJUSTMENTS.**

Figure 1

Norton

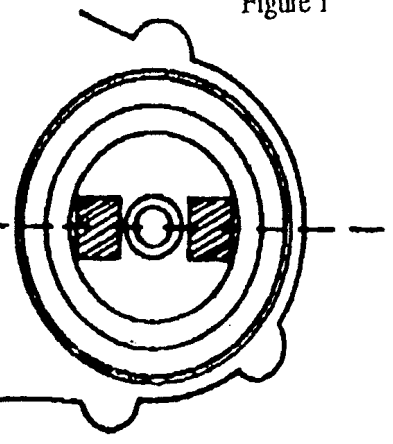


Figure 2

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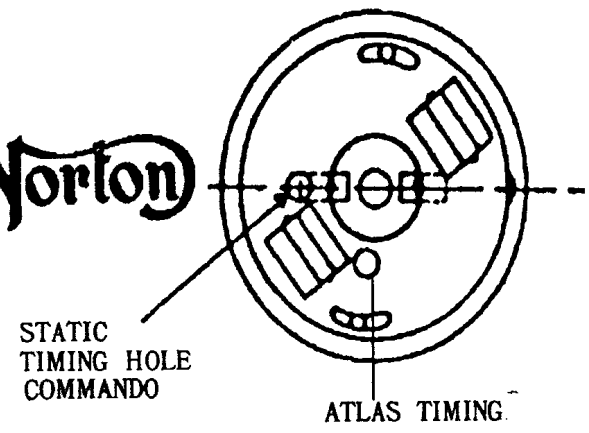
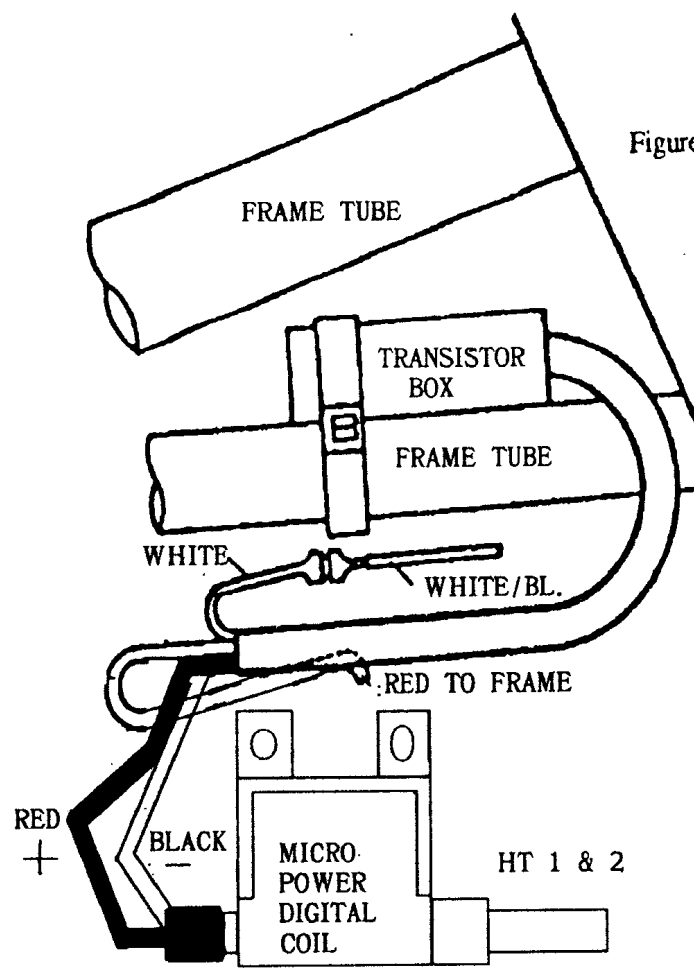


Figure 3



WHITE

WHITE/BLUE OR WHITE/YELLOW 12V

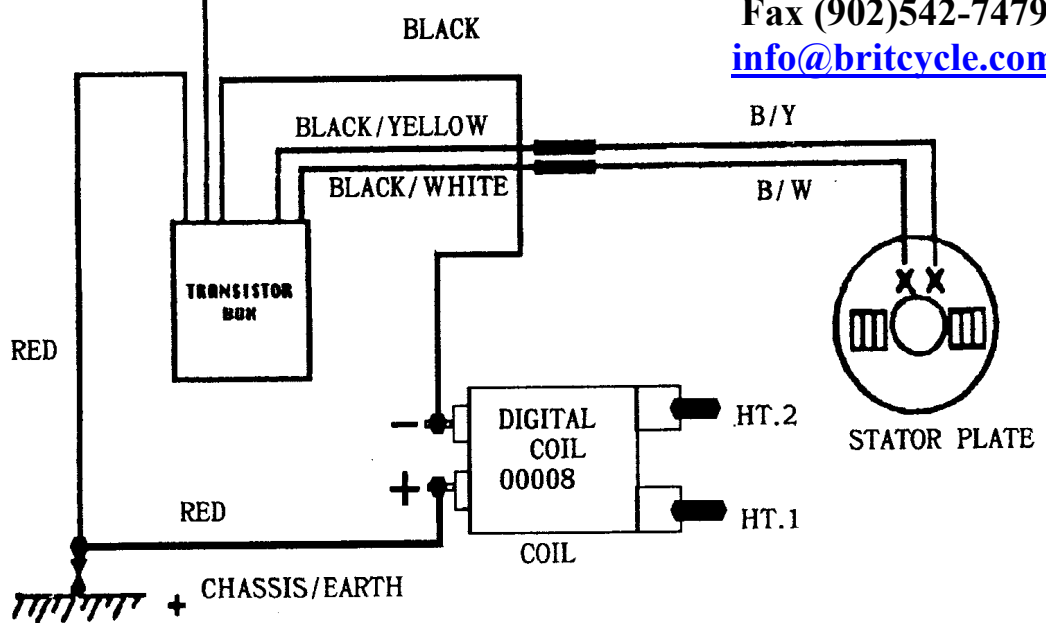
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