

MICRO-POWER TWINPLUG RACING
IGNITION FOR ENFIELD 350/500cc INDIA BULLET**COMPRISING:-**

- A) IGNITION UNIT (BLUE 'MICRO-POWER' UNIT WITH WIRES) BOX00261R
- B) STATOR PLATE (CIRCUIT BOARD WITH TWO COILS) STA00152
- C) MAGNETIC ROTOR (ROUND PLATED STEEL UNIT WITH TWO MAGNETS) ROT00118.
- D) ROTOR FIXING BOLT 6mmX25mm, CAPSCREW.
- E) MICROPOWER IGNITION COILS (COIL0007),M5 BOLTS/NUTS/WASHERS, HT LEAD 1m, COIL/H.T. CRIMP TERMINAL.
- F) SUPRESSED SPARK PLUG CAP, RUBBER COIL INSULATING BOOT, TIE STRAPS.

YOU WILL ALSO REQUIRE THE STANDARD TOOL KIT PLUS A 5mm ALLEN KEY, SMALL SOCKET SPANNER SET, HAMMER, PLIERS.

- 1) OPEN BATTERY BOX AND DISCONNECT NEGATIVE BATTERY TERMINAL.
- 2) REMOVE SEAT TO GAIN ACCESS TO THE IGNITION COIL.
- 3) REMOVE THE TERMINAL NUT FROM THE POSITIVE (+) COIL TERMINAL AND DISCONNECT THE (USUALLY) WHITE SUPPLY LEAD.
- 4) REMOVE THE TERMINAL NUT FROM THE NEGATIVE (-) COIL TERMINAL AND DISCONNECT THE BLACK WIRE. THERE SHOULD NOW ONLY BE THE H.T. LEAD CONNECTED TO THE COIL. REMOVE THE IGNITION COIL AND H.T. LEAD.
- 5) FIT THE NEW DIGITAL COILS IN THE POSITION OF THE ORIGINAL COIL (OR OTHER CONVENIENT PLACE), HANGING DOWN FROM THEIR M5 MOUNTINGS.
- 6) SLIDE THE RUBBER BOOTS OVER ONE END OF THE H.T. LEADS AND FIT THE SPECIAL 4mm CRIMP CONECTORS. SCREW THE SUPRESSED PLUG CAPS ONTO THE OTHER END. FIT THE NEW H.T. LEADS ONTO THE COIL BY PUSHING ON THE 4MM CRIMP CONNECTOR TO THE PIN OF THE COIL AND SLIDE THE RUBBER BOOTS OVER THE H.T. SHROUDS. SECURE THE H.T. LEADS AND RUBBER BOOTS USING SMALL TIE STRAPS.
- 7) CLEAN THE BACK OF THE NEAR SIDE TOOL BOX WITH PETROL OR SOLVENT TO REMOVE DIRT AND GREASE.
- 8) WARM THE DOUBLE SIDED TAPE ON THE IGNITION BOX, REMOVE PAPER COVERS AND FIX TO TOOL BOX IN A POSITION FOR THE WIRES TO REACH THE COIL AND THE C.B. HOUSING.
- 9) CONNECT THE RED WIRE PIGGYBACK TERMINAL FROM THE IGNITION UNIT TO THE POSITIVE (+) TERMINAL ON THE IGNITION COIL. CUT OFF THE RING TERMINAL FROM THE ORIGINAL (USUALLY WHITE) SUPPLY LEAD PREVIOUSLY DISCONNECTED IN STEP 3). FIT THE SUPPLIED FEMALE SPADE CONNECTOR TO THIS WIRE AND CONNECT IT TO THE POSITIVE (+) TERMINAL OF THE COIL TOGETHER WITH THE IGNITION UNIT'S PIGGYBACK TERMINAL.
- 10) CONNECT THE BLACK WIRE OF THE IGNITION UNIT TO NEGATIVE (-) TERMINAL OF THE IGNITION COIL.
- 11) REMOVE THE IGNITION POINTS COVER ON THE NEAR SIDE OF THE MACHINE AND DISCONNECT THE BLACK WIRE.
- 12) REMOVE THE TWO PILLAR SCREWS HOLDING THE CONTACT BREAKER PLATE AND PULL OUT.
- 13) REMOVE THE NUT HOLDING ADVANCE/RETARD UNIT, TAP ROUND THE UNIT AND PULL OFF. (IF IT DOES NOT COME OFF GO TO '14' AND REMOVE THE STUD FIRST).
- 14) REMOVE THE STUD,THIS CAN BE DONE WITH GRIPS ON THE UNTHREADED PART OR TWO 6mm NUTS DONE UP TOGETHER TO FORM A BOLT HEAD, THE SPANNER BEING PLACED ON THE INNER AND TURNED TO REMOVE.
- 15) REMOVE SPARK PLUG AND ROTATE THE ENGINE UNTIL TOP DEAD CENTRE IS FOUND. THIS CAN BE DONE WITH THE PRIMARY DRIVE CHAIN COVER REMOVED FOR GREATER ACCURACY, AND MARKS PUT ON THE ALTERNATOR, OR TURNING THE BACK WHEEL WITH 4th GEAR SELECTED WITH A GAUGE THROUGH THE PLUG HOLE IS THE BEST WAY. WITH CARE IT CAN BE DONE WITH A SMALL SCREWDRIVER TOUCHING THE PISTON TOP FEELING FOR MAXIMUM HEIGHT.
- 16) FIT THE MAGNETIC ROTOR IN PLACE OF THE ADVANCE/RETARD UNIT USING THE M6 CAPSCREW,LEAVE THE SCREW LOOSE.
- 17) FIT THE STATOR PLATE IN PLACE OF THE CONTACT BREAKER PLATE USING THE PILLAR SCREWS, SET THE PLATE FULLY ANTI-CLOCKWISE (FIG 1.)
- 18) LINE UP THE CENTRE OF THE ROTOR MAGNETS WITH THE CENTRE LINE OF THE TWO STATOR COILS ,(FIG 1.) AND TAP THE ROTOR BACK INTO ITS TAPER, TIGHTEN THE 6mm CAPSCREW, RECHECK T.D.C.AND ROTOR ALIGNMENT, AND REPEAT IF WRONG.
- 19) RESET STATOR TO 1/2 WAY ALONG ITS ADJUSTMENT SLOTS (TURN CLOCKWISE) AND TIGHTEN THE PILLAR SCREWS. (FIG 2.)
- 20) CONNECT BLACK/YELLOW AND BLACK/WHITE WIRES FROM THE TRANSISTOR BOX TO THE STATOR. THE CONNECTIONS CAN BE MADE INSIDE THE CAP. THE SLEEVE BEING TRAPPED BY THE CUTOUT IN THE COVER (RECHECK YELLOW TO YELLOW, WHITE TO WHITE) IF THIS IS WRONG THE ENGINE WILL RUN WITH NO POWER AND A LOT OF NOISE, WITH RETARDED IGNITION TIMING.
- 21) CONNECT WHITE WIRE FROM IGNITION UNIT TO THE NEGATIVE TERMINAL OF THE BATTERY ALONG WITH THE STANDARD EARTHING WIRE, (ON SOME MACHINES THIS COULD BE A RED WIRE, IF SO, CHECK ON THE TOP OF THE BATTERY FOR - 'NEG' POLARITY.)
- 22) REFIT SPARKPLUG, SEAT, BATTERY COVER, SELECT NEUTRAL. THE SYSTEM IS NOW READY TO RUN.
- 23) START THE ENGINE AND WARM UP.
- 24) SLOW RUNNING AND MIXTURE SCREWS CAN NOW BE FINE TUNED ON THE CARBURETTOR.
- 25) THE TIMING IS NOW SET AND WILL NOT MOVE BUT A SMALL AMOUNT OF ADJUSTMENT CAN BE TRIED ON THE SLOTTED ADJUSTMENT HOLES.
- 26) ANY ADJUSTMENT MADE IS MAGNIFIED BY TWO ON THE CRANKSHAFT, SO MARK AN ENGINE CASE TO STATOR SCRIBE LINE TO HELP MAKE JUST A SMALL CHANGE AT ANY ONE TIME.

PLEASE TURN OVER

WRONG BATTERY CONNECTIONS CAN DAMAGE THE ELECTRONIC IGNITION AND THE CHARGING REGULATOR, SO DOUBLE CHECK ALL CONNECTIONS WHEN REPLACING OR CHARGING THE BATTERY.

PROTRACTED ATTEMPTS AT KICK-STARTING OR VERY LOW IDLE RPMS (<1000 rpm) CAN CAUSE EXCESSIVE HEATING OF THE MICRO-POWER IGNITION COIL AND UNIT OVER TIME. PLEASE ALLOW GOOD VENTILLATION TO THESE PARTS AND REGULARLY ALLOW TO COOL IF THE BIKE IS NOT MOVING.

