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Fitting Instructions for Yamaha XS650 Micro Power Ignition

1. Remove the covers from the C.B. unit & advancer unit on the cylinder head. Dismantle and remove the contact breaker, cam & all of the advancer mechanism including the shaft through the centre of the camshaft.
2. Screw the magnetic rotor onto the 8mm stud using loctite until the thread in the rotor is fully used. Allow 10 minutes to dry.
3. Pass the 8mm stud & rotor through the camshaft from the left side. Fit the 8mm stepped spacer, washer & lock washer onto the right side. Fit the 8mm nut & hand tighten. See Fig 1. Place a 13mm socket over the nut & sharply tap the end, this will drive the right hand bearing bush home into the camshaft before fully tightening the rotor stud.
4. Feed the two 6mmx30mm cap screws & washers through the holes in the stator plate from the coil side. Place the two aluminium spacers over the screws & offer the unit up to the left hand contact breaker housing & hand tighten. See Fig 1.
5. Remove the spark plugs & alternator cover to reveal the timing marks. Using a 17mm socket spanner on the alternator bolt turn the engine anticlockwise until the first or front of the three timing marks lines up with the timing mark on the alternator rotor. Please note this is the full advance mark. It is not marked with any adjacent letter. Continuing anticlockwise the next mark is F which is the low speed (full retard) mark & lastly T (top dead centre).
6. With the engine set in the full advance position set the stator plate half way along the slotted holes & tighten. Loosen the 8mm nut on the rotor stud & move the rotor round until one of the magnets is under the anticlockwise (right-hand) timing hole, offset as in Fig 1. Fully tighten the nut.
7. Remove the petrol tank. Disconnect & remove the ignition coils. Cut supplied HT lead in half. Strip back one end of each lead & solder or crimp brass coil connectors. Fit rubber boot (lubricate with WD40). Fit HT leads to the new coil & use two small tie straps per boot to secure. Mount the new coil in place using one of the original holes & drilling a second hole to use both mountings. Route HT leads to the spark plug positions. Adjust length of HT leads as required & then screw plug caps to the HT lead ends. Some customers may find it necessary to reposition the horn during this installation.
8. The ignition unit can be tie strapped to the top of the coil mounting frame tube with the wires on the left. Wire as per the diagram on the reverse of this page. Cut wires and fit terminals, make good connections & tape up wires.
9. Refit plugs & fuel tank. Connect strobe lamp & start engine. Warm up & strobe time on the front or full advance mark by revving up the engine & watching the timing move up to the mark. Adjust by moving the stator plate, if necessary move the magnetic rotor a little and retighten.
10. Remove strobe & refit all covers. The timing is now set and requires no maintenance. Small adjustment can be made to the carburetion to set idle speed.

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.

CIRCUIT DIAGRAM

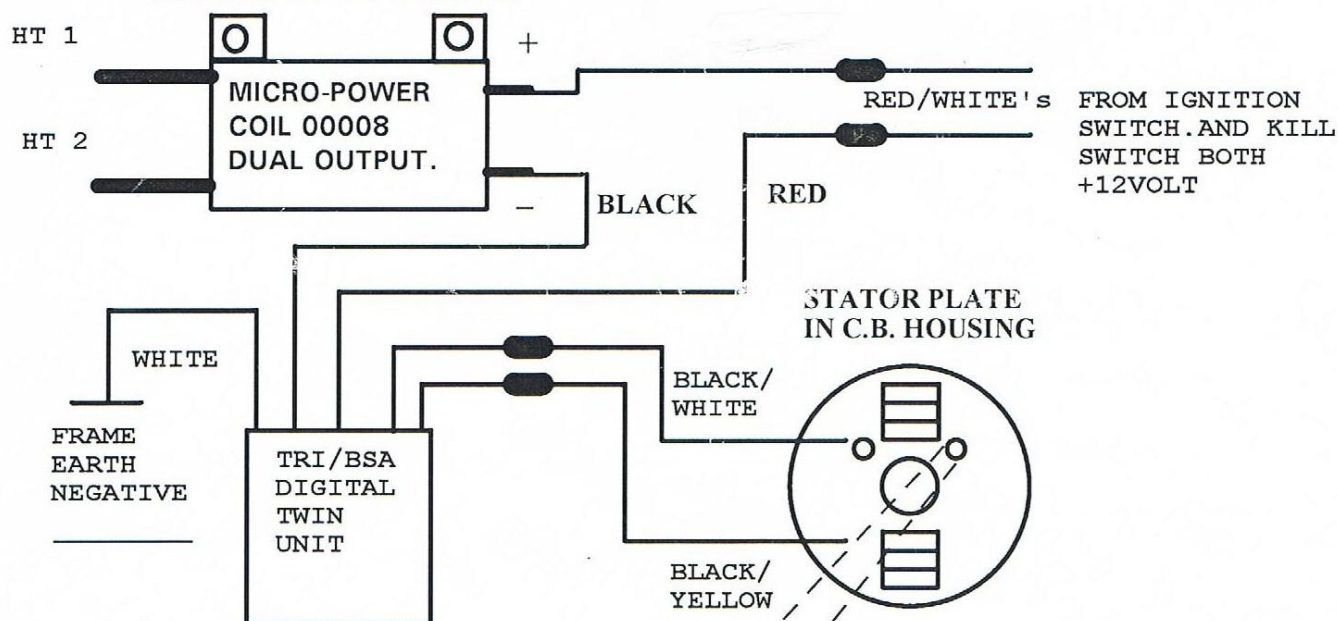
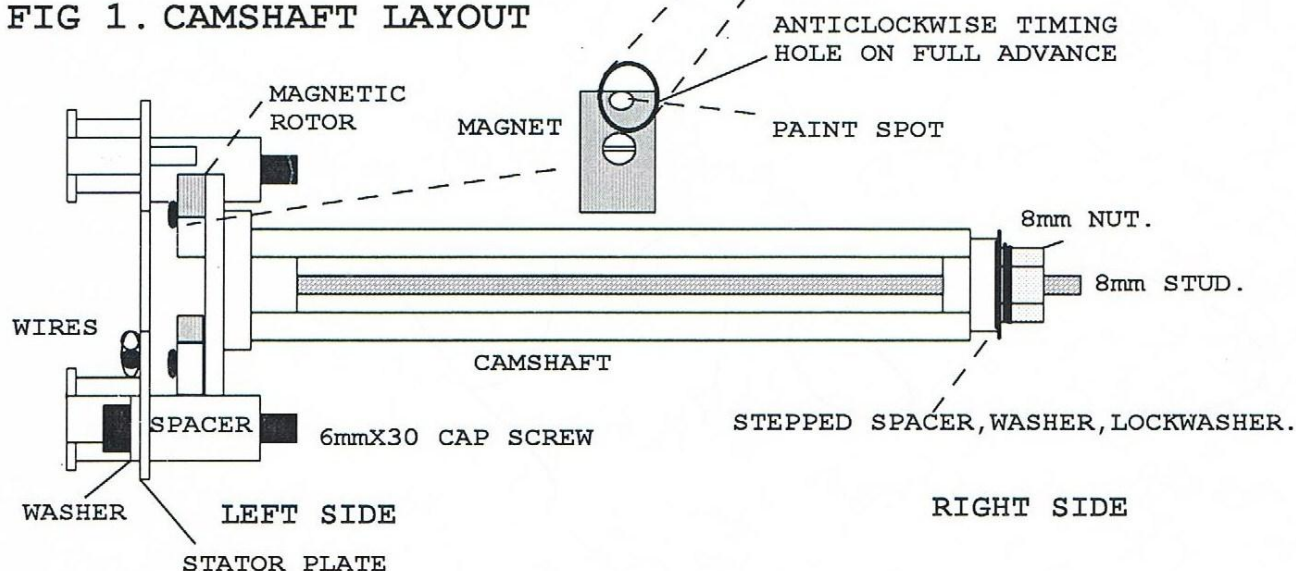


FIG 1. CAMSHAFT LAYOUT



PARTS LIST:-

- 1) TRI/BSA MICRO-POWER IGNITION BOX
 - 2) XS650 STATOR PLATE
 - 3) XS650 MAGNETIC ROTOR
 - 4) 8mm X 240mm LONG STUD
 - 5) TWO 6mm x 30mm SOCKET CAP SCREWS
 - 6) TWO 6mm FLAT WASHERS
 - 7) TWO 11mm x 14mm ALUMINIUM SPACERS
 - 8) ONE STEPPED 8 mm SPACER, WASHER, AND LOCKWASHER.
 - 9) ONE 8mm NUT
 - 10) TWO TIE STRAPS AND TWO BULLET, ONE RING, TWO FEMALE SPADE TERMINALS.
- YOU WILL ALSO REQUIRE A STROBE LAMP, LOCTITE, BLACK PVC TAPE, TERMINAL CRIMPING PLIERS AND TOOLS.