

Mistral Engineering

Unit B, 51a Carysfort Road, London. N16 9AF
Telephone: 01-254 2627

FITTING INSTRUCTIONS

RITA IGNITION ON YAMAHA XS650

INTRODUCTION In view of the possibility of wet weather causing shorting, it is advisable to seal the cable entries of the three way plug and socket on the amplifier and wiring harness with R.T.V. compound. This is easier before fitting the amplifier to the machine.

AMPLIFIER MOUNTING (REVISED JAN. 1981) The amplifier has been moved under the seat to avoid problems of water ingress.

To provide space in the flat area behind the battery it is necessary to drill out the rivet and remove the "U" bracket holding the 2 plastic cable connectors. Also remove the main battery earth wire and replace with the longer one supplied.

It is now possible to arrange the cables to leave space for the amplifier. This is placed in position with the cable outlet facing forward over the battery. The lugs on the amplifier should be uppermost and the small black amplifier earth wire will be on the right. Bring this earth round to the back of the amplifier and connect it to the frame with the main battery earth.

DIODE MOUNTING Remove the petrol tank and remove the nut from the front bolt that holds the cylinder head steady to the frame. Mount the diode bracket on the R.H. Side of the head steady with the diodes pointing towards the L.H. side of the machine, they will then be in a protected position in the vee between the two frame tubes that run forward to the steering head. Discount the condensers and connect the diodes to the coil negative leads, as shown on the diagram.

LOCKING THE ADVANCE/RETARD SHAFT Remove the advance/retard cover on the cambox. Remove the M6 nut and washer, bobweights, springs and shims. Remove the slotted spacer ring, taking care not to lose the steel pin which locates it to the shaft.

Fit the locking plate supplied over the shaft and on to the larger posts of the advancer with the tongue of the plate facing outwards. Replace the slotted spacer ring, locating on both the pin in the shaft and tongue of the locking plate. Replace the M6 nut and washer and lock up.

PICKUP AND RELUCTOR MOUNTING Remove the contact breaker cover. Remove the complete contact breaker plate as one assembly. Remove the c/b cam. Fit the pickup plate assembly, locate the reluctor on the radial pin and fit and tighten the M6 nut. Check the 0.2-0.3mm air gap on both poles of the reluctor and adjust if necessary by pivoting the pickup.

Rotate the engine to bring the timing mark on the rotor in line with full advance mark on the casting. Rotate the pickup plate clockwise to trap the 5mm timing spacer between the pickup and reluctor poles, as shown on the diagram. Tighten the two screws.

WIRING AND TIMING Run the harness forward to the coil area and connect up as shown on the diagram. Clip or tape the wires in position avoiding sharp edges and rubbing points. Care taken at this stage avoids roadside problems later.

Note: The plastic covered "560" type connector is used to connect the white-yellow from the amplifier to the ignition feed wire to the coils, (red-white usually). Do not strip the insulation. Lay the wires in the connector, down the metal bridge with pliers and snap over the plastic catch.

Run the engine and check the full advance timing with a stroboscopic timing light. It is necessary to take a flash reading at near maximum r.p.m. to ensure that full advance is not exceeded at high r.p.m. switch off if adjustment is needed and rotate the pickup plate. (Clockwise to advance, anti-clockwise to retard).