

Mistral Engineering

TRIUMPH ONLY
BROOKS ONLY

63a Turner Road, London, E17 3JG Tel: 01-521 1180

FITTING INSTRUCTIONS FOR RITA IGNITION ON TRIUMPH 650 & 750 TWINS WITH OIL-CARRYING SPINE FRAME (1971-1978)

Dismantling

ISSUE 2 Dec.198

Remove the seat, air filter covers and elements and the battery.
Remove the panels to the rear of the air filter by taking out the $\frac{1}{4}$ " bolts inside the filter casting. Then remove the 2 - 5/16th bolts holding the casting to the frame and replace them with the longer ones supplied. Take off all the wiring connectors from the coils and condensers. Remove the contact breaker plate assembly and the advance/retard unit.

Assembly

Mount the diode pair beneath the triangular plate behind the frame oil filler cap, if necessary drill a $\frac{1}{4}$ " hole in the plate. The aluminium mounting bracket does not have to be earthed or have a heat sink.

N.B. The diode pair looks similar to a replacement rectifier used on some machines but internally is entirely different and neither component should be interchanged. Fit the amplifier brackets on to the extension of the longer bolts through the air filter. Ensure that there is metal to metal contact between the bracket to which the amplifier case earth has been fitted, and the abutting face on the frame. These faces may be greased before assembly to prevent later corrosion. The amplifier will not work correctly unless earthed. Also ensure that there is 4 mm. minimum clearance from the frame, mudguard and chainguard to the amplifier. Pass the amplifier harness up to the diode pair avoiding sharp edges and rubbing points.

Fit the reluctor into the camshaft taper with the key peg engaged in the reluctor keyway and tighten the centre bolt. Fit the pick-up plate in the retarded position as shown on the diagram and nip up the two pillar bolts. At this stage the pick-up wires are run out through the back of the timing case, under the right-hand side of the engine and plugged into the appropriate amplifier wires. The battery can now be replaced, but do not connect until the wiring has been completed.

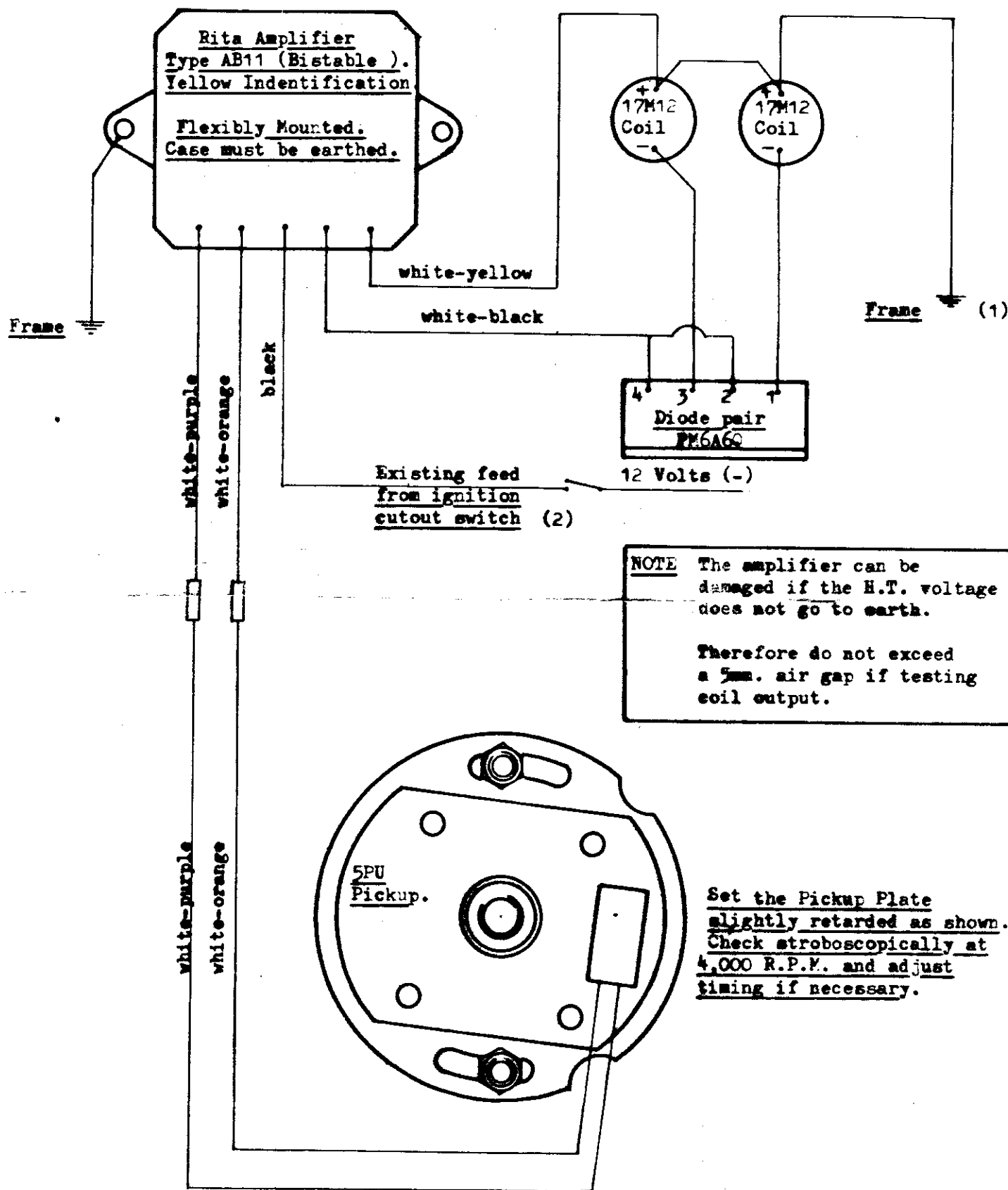
The air filters can now be re-assembled. Note that on models with a plastic extension tube fitted to the elements, this must be removed. Bend back the metal retaining lug and push the plastic extension out of the filter.

Wiring and Strobng

The wires from the RITA amplifier are prepared with end connections to plug in to the original wiring removed from the coils and condensers. Since the original connections are not all required for the RITA circuit, it is necessary to insulate the ends of the female lucars that are not required in order that they do not short to earth on the frame.

Therefore tape over the single female lucar on the white-yellow. Connect the amplifier wires as shown on the diagram, i.e. black to double white-yellow (or white-blue on some models). Tape round the joint of the plastic sleeves to avoid them pulling apart. Wire up the system as shown in diagram.

Run the engine and adjust the fully-advanced timing position using a stroboscope. A flash reading at 5,000 R.P.M. is necessary as there is a slight increase in advance up to this speed.



RITA System for Triumph Twin, using AB11 amplifier and 5PU Pickup.
Positive Earth shown. For Negative Earth, reverse functions 1 and 2.

February 1982