

# Mistral Engineering

UNIT 12 TAYLORS  
GRAVEL LANE  
CHIGWELL  
ESSEX  
IG7 6DQ  
Tel: 020 8501 2161  
Fax: 020 8501 2270

## FITTING INSTRUCTIONS NORTON COMMANDO WITH EXISTING 6 VOLT COILS

### A. AMPLIFIER MOUNTING

1. Remove seat and petrol tank.
2. Remove wiring from condensers, coils and ballast resistor.  
(Please note that ballast and condensers are no longer required).
3. Remove coil bracket.
4. Drill two holes 6.5mm. ( $\frac{1}{4}$  in.) dia. at 50mm. (2 in.) centres lengthways on centre line of coil mounting bracket.
5. Fit amplifier bracket to coil bracket.
6. Remove coils in order to replace the bracket in position.
7. Fix and tighten up in position.

### B. WIRING INSTRUCTIONS FOR AMPLIFIER, COILS AND LEAD TO PICK-UP

1. Locate ignition feed, which was connected to old ballast, (colour of wire - white/blue, or later model, white/yellow) and connect this wire to black wire from amplifier.
2. Connect the white-yellow from amplifier to positive (+) terminal on one of the coils.
3. Also connect the two red wires which are in a double lucar in the existing loom to the same terminal on coil positive.  
If these wires are not available in the loom connect link wire provided from coil positive terminal to earth on machine.
4. Connect the negative (-) of that coil (with link wire supplied) to the positive of second coil.
5. Connect negative of second coil to the white/black wire from amplifier.
6. Connect white/orange wire from amplifier to the black/yellow wire of contact breaker.
7. Connect the white/purple wire from amplifier to the black/white wire.

### C. PICK-UP AND RELUCTOR MOUNTING

1. Remove plugs and rest on cylinder head connected to H.T. leads.
2. Remove contact breaker plate and auto advance units.
3. Fit pick-up plate in middle of adjustment slots with the terminal post in the most convenient position to connect contact breaker wires.
4. Fit reluctor to camshaft taper (finger tight only) and turn engine to bring pole of pick-up and reluctor in line. Set 0.2-0.3mm. (0.008"-0.012") air gap. It is only necessary to slacken the outer screw and it will pivot for adjustment.
5. Turn the engine to 28° B.T.D.C. and turn the reluctor to just trap the timing spacer (see 5mm. dimension on diagram). Tighten centre bolt and turn engine to re-check the 0.2-0.3mm. air gap in both positions of the reluctor.
6. Connect the black-white contact breaker wire to yellow (or white) of pick-up and the black-yellow to the black wire of the pick-up. The terminal post is designed to insulate each pair of eyelets from each other and from the backplate.
7. Switch on and kick the engine over. If plugs are sparking, re-assemble tank etc. strobe engine at 2,000 r.p.m. and set to 20° at this speed. Also take a flash reading at high r.p.m. to see that the timing is 28° at 6-6,500. The picture may fluctuate at this speed due to cam chain slackness and torsional oscillation of the camshaft. This check is only practicable with a second person to assist.

- D. **NOTE** that for high lift cams such as the 4S, it may be necessary to have the amplifier modified to cure an over advanced timing fault above 5,500 r.p.m.

**Fax:** 020 8501 2270

