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. (¼ 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
   backplane.
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.
RITA Amplifier
Type AB 11.
Part No. 48022.
Flexibly Mounted.
Case must be Earthed

white-black

white-purple
white-orange

black
Existing feed from ignition cutout switch.

12 Volts(-)

black-white
black-yellow(ex.c/breaker)

Note: The Amplifier can be damaged if the H.T. voltage does not go to earth. Therefore do not exceed a 5mm. air gap when testing the coil H.T. output.

0.2 - 0.3mm (.008" - .012")
Radial Clearance. Set with feeler gauges. Check in both positions and average the variation.

5mm. approximate firing position at full advance. Set with spacer supplied. Check statically at 6-500 R.P.M.

RITA System for NORTON COMMANDO

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