

## LUCAS WORKSHOP INSTRUCTIONS

### LUCAS IMPULSE STARTER FOR BOSCH FU4 MAGNETO

The Bosch FU4 magneto is fitted with an impulse starter of Bosch manufacture. Should this impulse starter fail in service, replacement parts not being available, it may be replaced by a Lucas impulse starter, although the two types are not completely interchangeable. The differences between the two impulse starters, as far as the process of conversion is concerned, lie in the lever stop plate and in the spindle nut, which has a smaller diameter thread on the Bosch than on the Lucas unit.

The components required for the conversion are:

- Impulse starter, service number 487416,
- Lever stop plate, service number 487415.

#### CONVERSION INSTRUCTIONS

- (i) Remove the original impulse starter and lever stop plate.
- (ii) Fit the lever stop plate, No. 487415, to the magneto body, using the two tapped holes in the body ring. Using the lever stop plate as a template, drill through the body ring with a No. 26 drill, tap 2 B.A. and insert two countersunk steel screws. Tighten all four securing screws and lock by caulking the screwheads.
- (iii) Remove the shaft nut from each impulse starter and fit that from the Bosch impulse starter to the Lucas unit. The shaft nut is held in position by a circlip, sprung into a recess on the front of the impulse starter body. See that the spring washer is in position before fitting the shaft nut.
- (iv) Fit the Lucas impulse starter to the magneto.

#### TESTING

The impulse starter must operate regularly at all speeds up to 120 r.p.m. and cut-out completely at speeds above 180 r.p.m. The retard due to the impulse starter should be  $30^{\circ} \pm 5^{\circ}$ , measured on the magneto shaft.

