

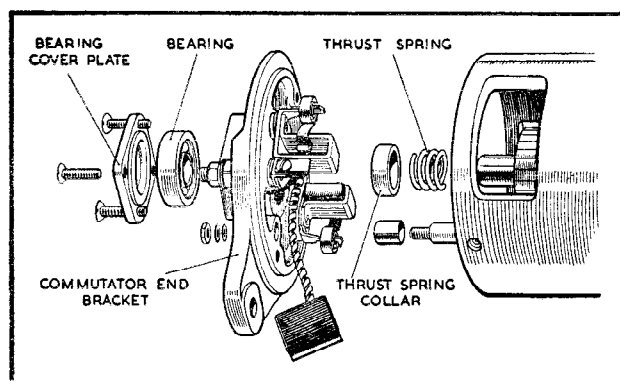
# LUCAS WORKSHOP INSTRUCTIONS

## GENERATORS MODELS C45PVS AND C45PVS-5

### MODIFIED COMMUTATOR END BRACKET AND BEARING

The current versions of the above generators have been modified to give a longer service life to the commutator end bearing. The modification affects the commutator end bracket, the bearing and the thrust spring: the bearing is secured to the armature shaft by a thrust screw, and the thrust spring, now loading the outer bearing journal, is fitted in the blind bearing housing in the commutator end bracket. On earlier machines the spring was fitted between the shoulder formed by the commutator assembly and a collar which bore on the inner bearing journal.

The differences between the two methods of construction will be made clear from Figures 1 and 2.

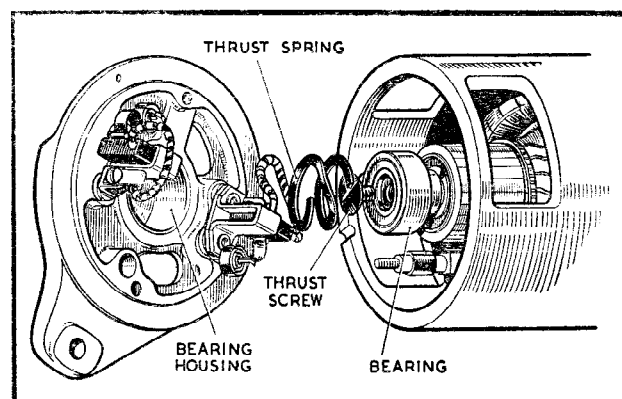


Detail of commutator end bearing assembly.

Fig. 1.

Before modification

As a result of this modification the instructions given for commutator end bearing replacement on Page 6 of SECTION A-2 do not apply to current machines. Further, the commutator end bracket and bearing of current generators are **not** interchangeable with those of earlier model C45PVS and C45PVS-5 machines.



Detail of commutator end bearing assembly.

Fig. 2.

Current machines

### DISMANTLING AND REPLACING BEARING

- (i) The generator is dismantled as described on Page 4 of SECTION A-2. When the commutator end bracket is forced off the yoke, however, the bearing will remain secured to the armature shaft by the thrust screw, and the thrust spring will come away with the bracket. (The spring locates loosely in the bearing housing in the end bracket).
- (ii) To remove the bearing, slacken and withdraw the thrust screw and pull the bearing off the shaft with an extractor.
- (iii) See that the new bearing is clean and packed with high-melting-point grease. Force it home against the shoulder on the armature shaft and insert and tighten the thrust screw.
- (iv) On reassembly, fit the armature and driving end bracket to the yoke. Place the thrust spring in the housing in the commutator end bracket, place the bracket in position and tap it home to force the bearing into the housing.

