## LUCAS WORKSHOP INSTRUCTIONS

# INTRODUCTION OF NEW GENERATORS

Modified versions of the standard range of generators have been introduced, and will shortly supersede the present range on new vehicles. The ventilated generators have been modified by the use of a larger fan and redesigned end brackets so that a larger volume of cooling air is drawn through the generator, thus permitting a slightly higher output to be taken from it without a corresponding rise in the working temperature. Modifications to the non-ventilated machines have been introduced in order to maintain standardisation of components.

The model numbers of the new generators are as follows:—

model	C39 PV-2	(superseding	model	C39 PV)
**	C39 P-2	( ,,	,,	C39 P)
••	C45 PV-5	( ,,	**	C45 PV-4)
,,	C45 P-5	( ,.	,,	C45 P)
**	C45 PVS-5	(	,,	C45 PVS)

As complete units all these generators are interchangeable with their earlier counterparts. There is, however, a slight change in the fixing dimensions: the distance between the armature axis and the **tapped** hole in the driving end bracket has been increased from  $2\frac{3}{4}$  inches to 3 inches on the 3.9 inch diameter generators, and from  $2\frac{18}{4}$  inches to  $3\frac{3}{4}$  inches on the 4.5 inch diameter machines.

## **SERVICING**

The test data and servicing instructions for these generators remain substantially the same as those given in SECTION A-2. When dismantling, note that the two through bolts are now inserted from the commutator end and screw into tapped holes in the driving end bracket. The through bolt locking nuts hitherto used on models C39PV and C39P have been dispensed with.

#### **Armature Replacements**

The armatures of C39PV-2 and C39P-2 generators are not interchangeable with those of models C39PV and C39P, owing to a change in the commutator design. In the other models — C45 PVS-5, C45 PV-5 and C45 P-5 — the armatures are the same as those used in the earlier counterparts of these generators.

### CONTROL BOXES

Two new control boxes (models RB106-2 and RB107) are under development for use with the new generators. Until these control boxes are introduced model RB106-1 (which is similar to the present RF96 control box but has a different value of series compensation to suit the new generators) will be used with the ventilated generators, and the existing RF97 with the non-ventilated generators.

NOTE: In no circumstances must the RB106-1 control box mentioned above be used with the earlier models of generator (C45 PV-4, C45 PVS or C39 PV), as there will be a risk of burning out the generator armature.

