GENERATOR

MODEL C40—1

GENERAL

The generator is a shunt-wound, two-pole, two-brush machine, arranged to work in conjunction with a Lucas regulator unit. A fan, integral with the driving pulley, draws cooling air through the generator, inlet and outlet holes being provided in the end brackets of the unit.

The armature is supported at the drive end in a ball race bearing and at the commutator end in a porous bronze bush.

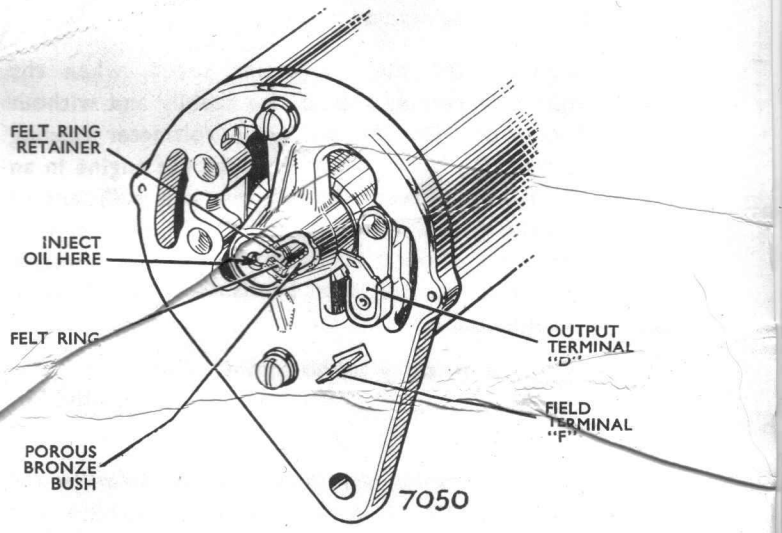

Fig. 2. *Generator lubrication and terminal connections*

ROUTINE MAINTENANCE

Lubrication

Every 5,000 miles or every six months, whichever occurs first, inject a few drops of Shell X-100, 30 engine oil into the hole marked "OIL" at the end of the commutator bearing housing (See Fig. 2). A felt ring located in the housing will absorb the oil and act as a reservoir.

Inspection of brushgear

Every 24,000 miles, the generator should be removed from the engine and the brushgear be inspected in the manner described in later paragraphs under Servicing.

Belt adjustment

Inspect the driving belt occasionally and, if necessary, adjust the tension by following the procedure described in Section "B". The machine must be properly aligned following an adjustment, otherwise undue strain will be thrown on the generator bearings.

PERFORMANCE DATA

The figures covering the design and performance of the generator are given in General Data, to which reference should be made when carrying out any test.

TESTING

Testing in position to determine condition of generator

In the event of charging trouble, adopt the following procedure to locate the cause.

1. Inspect the driving belt and adjust if necessary (See Section B).

2. Check the Lucar connections on the commutator-end bracket. The larger connector carries the main generator output, the smaller connector the field current (See Fig. 2).

3. Switch off all lights and accessories, pull off the connectors from the terminals of the generator and connect the two terminal blades with a short length of wire.

4. Start the engine and set to run at normal idling speed.