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STARTER MOTOR

MODEL M 35G

GENERAL

The starter motor is a four-pole, four-brush machine having an extended shaft to carry the engine engagement gear or starter drive. This motor is controlled by a solenoid switch mounted above the battery and operated by the ignition key on the side of the instrument panel. In an emergency or for testing purposes, the solenoid can be operated by hand by pressing the rubber cap covering the plunger.

ROUTINE MAINTENANCE

Periodically remove the cover band from the starter motor and carry out the following procedure:---

 Check that the brushes move freely in their holders by holding back the brush springs and pulling gently on the flexible connectors. (See Fig. 14). If movement is sluggish, remove the brush from its holder



Fig. 14. Checking free movement of carbon brushes

and clean its sides with a fluffless petrol-moistened cloth. Replace the brush in its original position. Brushes which are worn to less than $\frac{5}{16}$ in. (8mm.) in length must be renewed.

 Check the tension of the brush springs using a spring scale. (See Fig. 15). The correct tension is 30 to 34 oz. New springs must be fitted if tension is low.





- 3. The commutator must be clean and have a polished appearance. If necessary, clean by pressing a fine dry cloth against it while the starter is turned by applying a spanner to the squared extension of the shaft. Access to the squared shaft is gained by removing the thimble-shaped metal cover. If the commutator is very dirty, moisten the cloth with petrol.
- Keep all electrical connections clean and tight. Any which may have become dirty must be cleaned and the contacting surfaces lightly smeared with petroleum jelly.