

LUCAS WORKSHOP INSTRUCTIONS

STARTING MOTORS

MODEL M35G

SUPPLEMENTARY INFORMATION TO SECTION B-2 ISSUE 2

Para. 4 (d) (i) Brushgear

During 1957, series-parallel connected aluminium field coils were introduced in model M35G starting motors, making necessary the following special procedure when fitting replacement brushes:

Cut off the original brush flexible $\frac{1}{8}$ in. (3 mm. approx.) from the aluminium.

Clean up and tin the original resistance-brazed joint.

Open out the loop of the replacement brush flexible.

Tin the loop, taking great care not to allow any solder to run towards the brush.

Place the original joint within the loop.

Squeeze up and solder.

NOTE: Providing the necessary equipment is available for refitting and tightening the pole shoes, the above operations will be found easier to carry out if the field coils are removed from the yoke.

Para. 3 Performance Data

The torque developed by a machine is not a constant figure but varies according to the source of current. For example, the performance obtained when the source is a pair of constant voltage bus bars will be higher than if the same machine were connected to a battery. Performance is also affected by the state of charge of a battery and by the condition of its plates.

The following **minimum** figures are given for model M35G 12-volt starting motors having field coils of copper or aluminium (series or series-parallel connected, respectively) when tested with a 7-plate 38-A.H. (10-hr. rate) fully charged battery in good condition at 60° F. (15.5° C.).

	With Armature Locked	With Armature Running at 1000 R.P.M.
Torque (lb.-ft.):	7.7	4.5
Current (amp.):	330—350	215—235
Voltage:	7.5—7.1	9.1—8.7

