Page 14

Section N (Electrical Equipment)

The voltmeter reading should be steady and lie between the appropriate limits given, according to the temperature. An unsteady reading may be due to unclean contacts. If the reading occurs outside the appropriate limits, an adjustment must be made. In this event, continue as follows:—

- 5. Stop the engine and remove the control box cover.
- 6. Re-start the engine and run the generator at 3000 r.p.m.
- Using the correct tool, turn the voltage adjustment cam until the correct setting is obtained—turning the tool clockwise to raise the setting or anticlockwise to lower it.
- 8. Check the setting by stopping the engine and then again raising the generator speed to 3000 r.p.m.
- 9. Restore the original connections and refit the cover.

CURRENT REGULATOR

On-Load setting

The current regulator on-load setting is indicated in yellow crayon on the moulded cover. It is 22 amperes when used with the C40-1 generator, and 25 amperes with the C40-L generator.

Method of adjustment (See Fig. 12)

The generator must be made to develop its maximum output, whatever the state of charge of the battery might be at the time of setting. The voltage regulator must therefore be rendered inoperative, and this is the function of the bulldog clip used in keeping the voltage regulator contacts together.

- 1. Remove the control box cover.
- Using a bulldog clip, short out the voltage regulator contacts.
- Withdraw the cables from control box terminal blades "B".
- Using a suitable "jumper" lead, connect the cables previously removed to the load side of a first grade 0 to 40 moving coil ammeter.
- 5. Connect the other side of the ammeter to one of the control box terminal blades "B".

It is important to ensure that terminal "B" carries only this one connection. All other load connections (including the ignition coil feed) must be made to the battery side of the ammeter.

- 5. Start the engine and run the generator at 4500 r.p.m.
- 7. Observe the ammeter pointer.

The ammeter pointer should be steady and indicate a current of 22 amperes (C40-1 generator) or 25 amperes (C40-L generator). An unsteady reading may be due to dirty contacts. If the reading is too high or too low, adjust as follows:—

- Using the correct tool, turn the current adjustment cam until the correct setting is obtained—turning the tool clockwise to raise the setting or anticlockwise to lower it.
- 9. Switch off the engine, restore the original connections and refit the control box cover.



Fig. 12. Current-voltage control box and internal wiring diagram