3 LI

Testing Generator and No-Load Voltage

Note:

Although the generator indicator lamp may go out with increased engine speed, it is not certain that the battery is being charged adequately. If the wiring is in good condition (see 2 LI) indications of improper charging may be: weak starting effort, dim headlights when starting, or frequent battery water loss caused by excessive charging rates. The cause may be found through simple preliminary tests without removing the generator or regulator cover.

Before making any tests check the condition and tension of the V-belt.

Test:

1. Switch on ignition. Generator indicator lamp on the instrument panel must light. Disconnect generator lead from terminal "61 D+" at regulator. Lamp should go out. If the lamp does not go out the generator lead is grounded and must be repaired. Reconnect generator lead to terminal "61 D+".

2. Disconnect battery lead from terminal "51 B+" at the regulator and insulate end with tape. Connect the positive lead of the voltmeter to terminal "61 D+" and the negative lead to ground on the regulator base plate (Fig. 8).

3. Start the engine and increase speed gradually to the nominal voltage rpm (see page L 85). The voltmeter should indicate 6 V. If no reading is obtained the generator is not charging and must be overhauled.

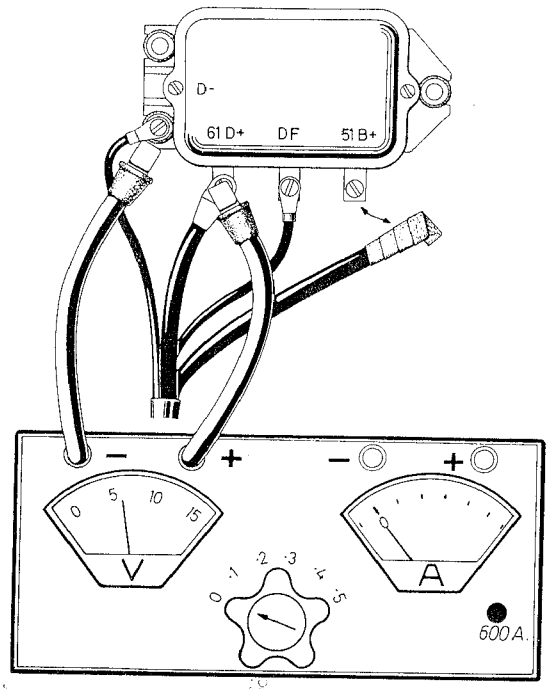

Fig. 8

If a replacement regulator is to be used for a quick check, it is important to check the field winding of the generator first to prevent damaging the regulator.

To test field windings (regulator fully connected) connect an ammeter to terminals "51 B+" and "DF" of the regulator. A reading considerably greater than 5 amp. indicates a short in the field windings or a short to ground.