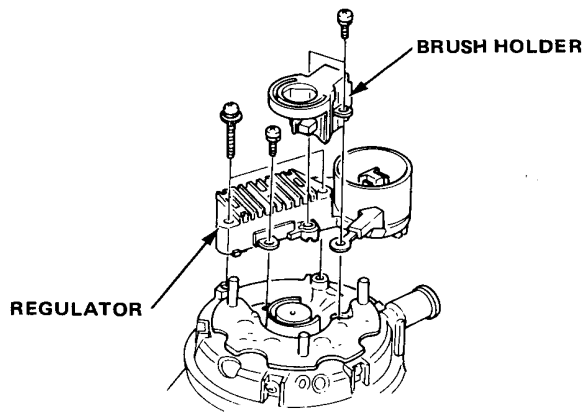


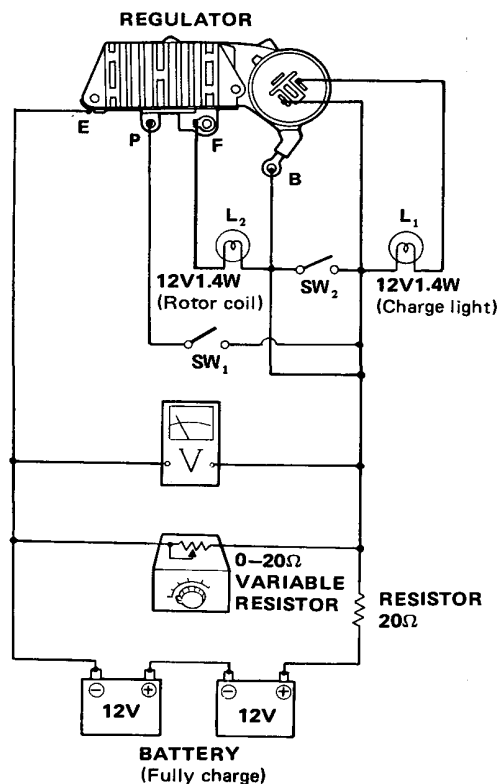
# Charging

## Voltage Regulator Test

1. Remove the rear end cover and the brush holder, then remove the regulator.



2. Hook up the regulator, batteries, voltmeter, lights, switches, and resistor as shown.



3. Turn the switches 1 and 2 OFF, and adjust the voltage to 12 V.

4. Turn the switch 1 ON, and switch 2 OFF.

5. Turn the switch 2 ON with the switch 1 ON.

6. With the switches 1 and 2 ON, gradually raise voltage to see that the lamp L<sub>2</sub> goes OFF at anywhere between 13.9 and 15.1 V.

The regulator is normal if it meets the following conditions in each test:

Test	Lamp L <sub>1</sub>	Lamp L <sub>2</sub>
4	ON	ON
5	OFF	ON
6	OFF	OFF

### NOTE:

- Do not disturb the above sequence as the regulator will not function properly if the correct sequence is not observed.
- Perform the above tests quickly.

7. Check the diode for continuity between the terminals B and F. There should be continuity only in one direction.

