

Note: The voltmeter indicates an output of 14~15 V at 5,000 rpm at no load, the circuit is satisfactory.

- After completing the adjustment, reinstall the regulator cover and perform a recheck of the voltage.

Note: There will be a 0.5V rise in voltage when the low speed contacts changes to the high speed contacts in the regulator. (Fig. 8-13)

If the change in voltage is higher than 0.5V or if there is a drop in voltage, core gap should be adjusted by referring to next paragraph.

- Core gap adjustment

If the surface of the points are dirty or pitted, use a fine grade emery paper and clean up the points. Check the core gap with a thickness gauge to see if it is within the specified limits, 0.024~0.04 in. (0.6~1.0 mm). Core gap can be adjusted by loosening the adjusting screw. (Fig. 8-14)

- Point gap adjustment

If the surface of the points and if they are dirty or pitted, use a fine grade emery paper and clean up the points. Check the gap with a thickness gauge. Standard gap is 0.12~0.016 in. (0.3~0.4 mm). If necessary to adjust, loosen the point gap lock screw, then tighten the screw after adjustment. (Fig. 8-15)

d. Reassembly

Reassembly is performed in the reverse order of disassembly.

8-4 SILICON RECTIFIER

a. Description

As the rotor rotates three phase alternation currents are induced in the stator coil. However, the currents are rectified to D.C currents by the six silicon diodes which are in one unit and attached to the center of the frame. The silicon rectifier requires cooling and complete condition in negative terminal by which the rectifier is attached to the frame. Therefore it is necessary to take special care for attachment. (Fig. 8-16)

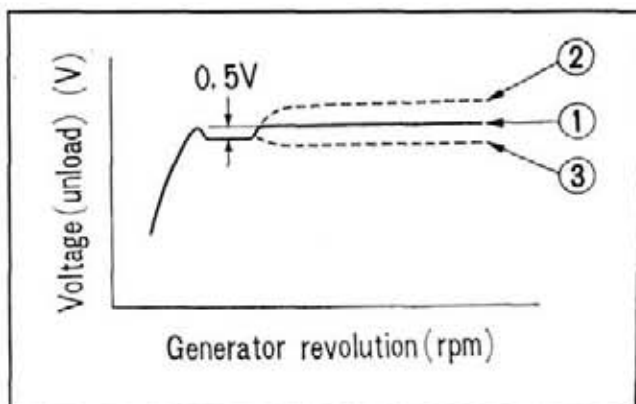


Fig. 8-13 ① Standard ② Wide core gap ③ Narrow core gap

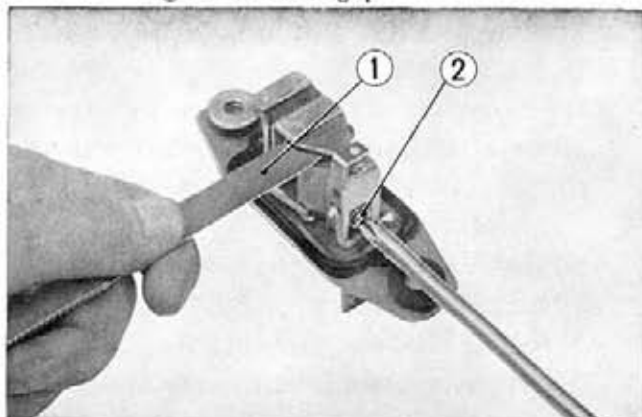


Fig. 8-14 ① Thickness gauge ② Core gap adjusting screw

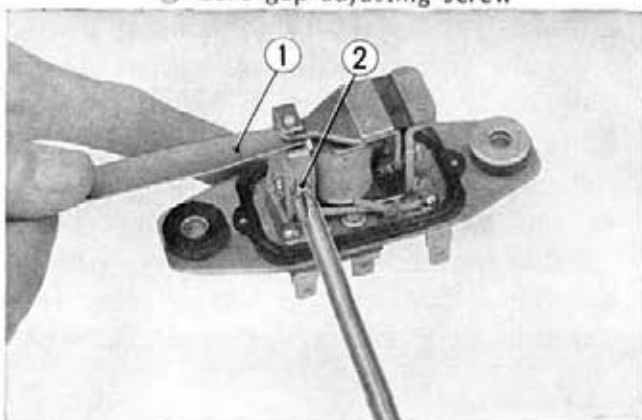


Fig. 8-15 ① Thickness gauge ② Point gap lock screw

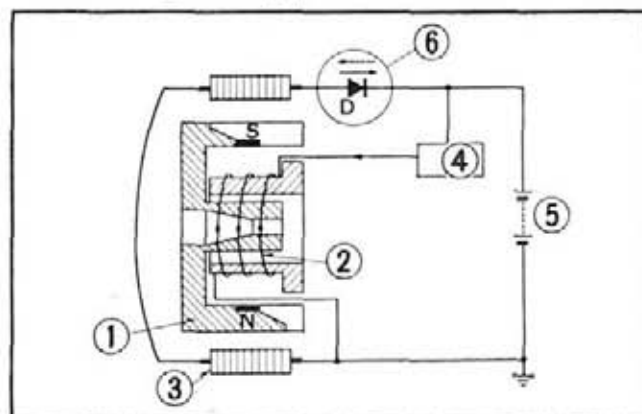


Fig. 8-16 ① Generator rotor ② Field coil ③ Stator coil ④ Regulator ⑤ Battery ⑥ Silicon rectifier