

2. Generator

The generator has a built-in regulator which provides diagnostic functions in addition to a voltage regulating function as follows:

1) Voltage regulation

The on-off operation of transistor Tr_1 connects and disconnects the field current circuit, providing a constant level of output voltage.

2) Diagnosis warning

When any of the following problems occur, the charge lamp illuminates.

a. No voltage generation

Brush wear exceeds specified wear limits, field coil circuit is broken, etc.

b. Excessive output

Output voltage is greater than 16 volts (approx.)

c. Terminal B disconnection

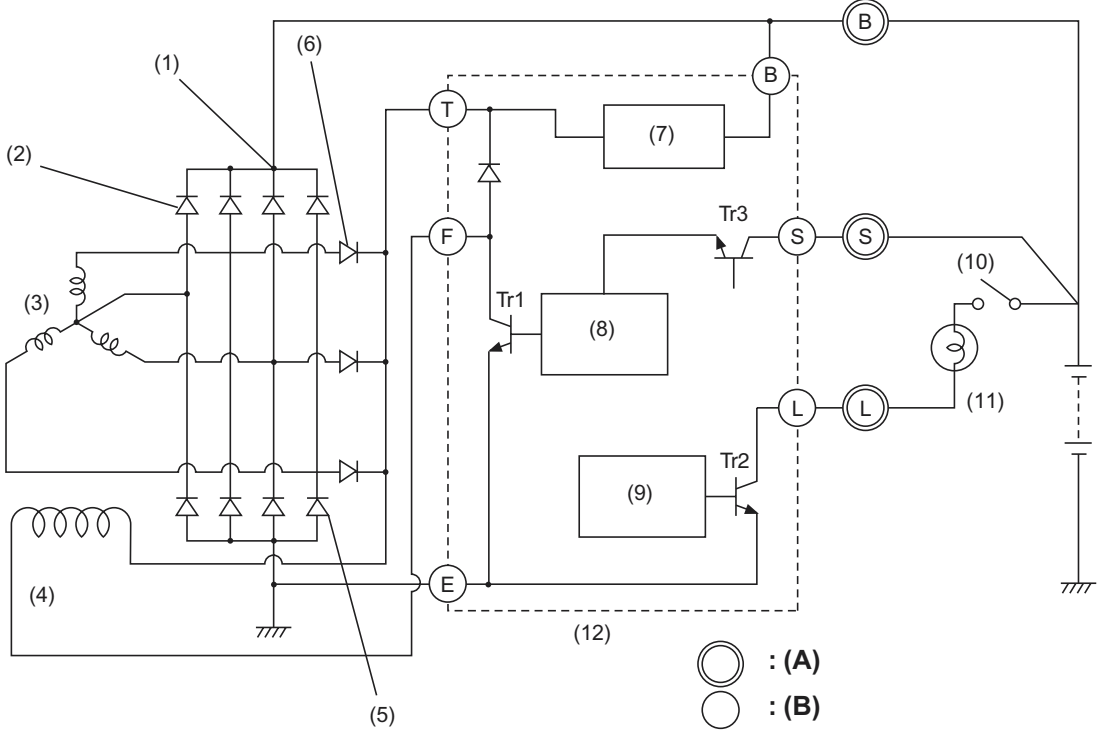
Harness is disconnected from alternator terminal B.

d. Terminal S disconnection

Harness is disconnected from alternator terminal S. In this case, voltage is slightly greater than specified regulated voltage; however, voltage regulation is still controlled and the battery is prevented from becoming overcharged.

GENERATOR

Starting/Charging



SC-00057

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| (1) Positive side diodes (3 pcs.) | (7) Energizing circuit | (A) Alternator terminal |
| (2) Additional diodes (2 pcs.) | (8) Constant voltage circuit | (B) Regulator terminal |
| (3) Stator coil | (9) Diagnostic and warning circuit | |
| (4) Field coil | (10) Ignition switch | |
| (5) Negative side diodes (3 pcs.) | (11) Charge light | |
| (6) Trio diodes (3 pcs.) | (12) IC regulator | |