

3. Starter magnetic switch

The starting motor, because of its characteristics, draws a large current (above 100A) that exceeds the capacity of the starter switch. This needs thick wires to reduce the resistance in the starter circuit and the contact surface of the switch controlling such a large current must also be increased in area. If a large current is suddenly cut off, spark will be given out and some amount of resistance may also be applied to the circuit due to the pressure of the contact surface of the switch. This is the reason why an electromagnetic switch is provided in the circuit and thus the stater circuit is remote-controlled with a small current.

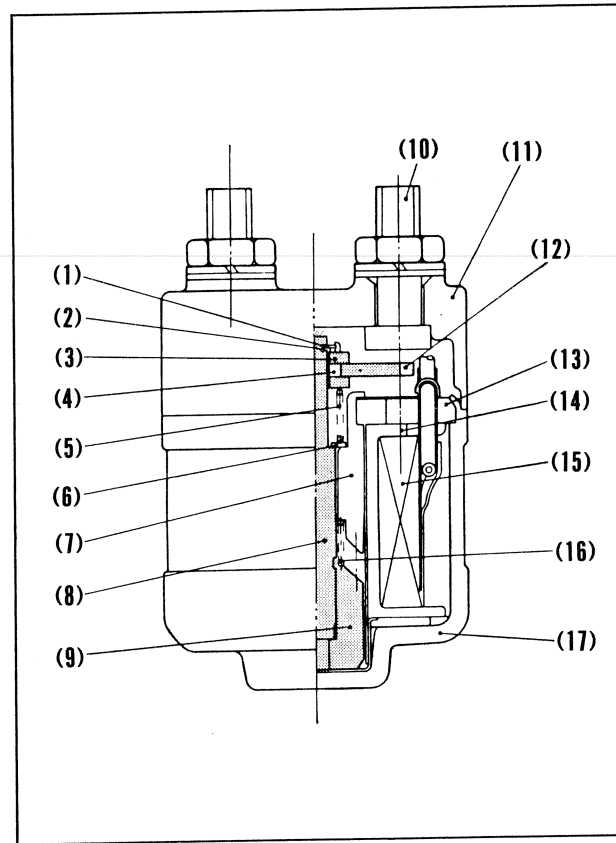


Fig. 6-24 (1) Stopper
 (2) Stopper holder
 (3) Washer
 (4) Roller A
 (5) Contact spring
 (6) Flat washer
 (7) Plunger holder
 (8) Plunger shaft
 (9) Plunger
 (10) Contact bolt
 (11) Case
 (12) Contact plate
 (13) Yoke
 (14) Coil bobbin
 (15) Coil
 (16) Return spring
 (17) Body

Inspection

1. Check the primary coil for continuity.
 If there is no continuity, the primary coil has an open circuit.
 If the coil clicks when 12 volts are applied across both terminals, it is in good condition.

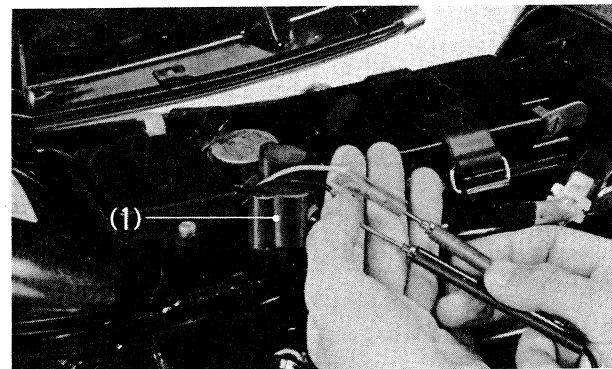


Fig. 6-25 (1) Starter magnetic switch

2. When the magnetic switch is used for a long time of period, the contact surfaces may be burnt to increase the resistance, preventing current from flowing.
 With 12 volts applied across the terminals of the primary coil, turn on the switch and check the terminals for continuity. If there is no continuity, the magnetic switch is defective.

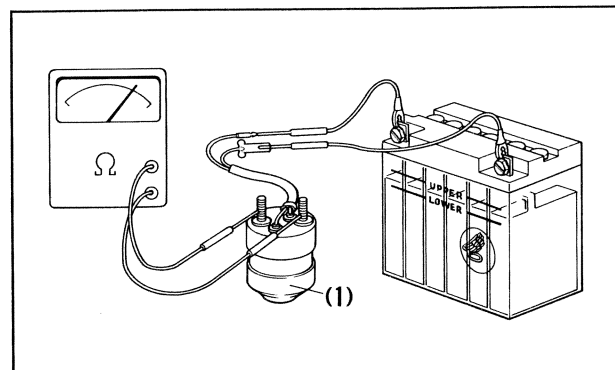


Fig. 6-26 (1) Starter magnetic switch