



## 1. NOTES ON DISASSEMBLY AND REASSEMBLY

The circled numbers in the descriptions below correspond to the part numbers in the Parts List and exploded diagram.

At all times, exercise adequate care in handling to avoid damaging the grinding wheel.

### 1-1. Removing Armature Ass'y ⑳

- (1) Remove the Brush Cap ③④, and take out the Carbon Brush ③③.
- (2) Loosen the four M5 x 25 ⊕-Hd. Tapping Screws ⑦, and remove the Nose Bracket Ass'y ⑨. Separate Inner Cover (B) ⑱ from the Housing Ass'y ④⑥ with a screwdriver, and remove Inner Cover (B) ⑱ together with the Armature Ass'y ⑳.
- (3) As illustrated in Fig. 1, support Inner Cover (B) ⑱ with a tubular jig with an inner diameter large enough (63 mm) to accept the Armature Ass'y ⑳, and push down on the end of the Armature Ass'y shaft with a hand press to remove the Armature Ass'y ⑳.

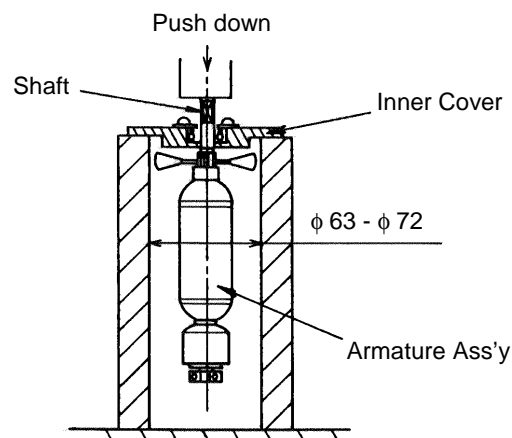


Fig. 1

### 1-2. Removing the Coupling ⑬

The Coupling ⑬ is sometimes difficult to remove from the Armature Ass'y ⑳ due to rusting. If it cannot be removed by pulling by hand, carry out the following procedure.

- (1) As illustrated in Fig. 2, raise the Coupling ⑬ slightly with a screwdriver or similar tool to partially remove it.
- (2) Push the Coupling on again by tapping it lightly with a wooden hammer.
- (3) Repeat steps (1) and (2) several times until the rust is freed and the Coupling can be fully removed.

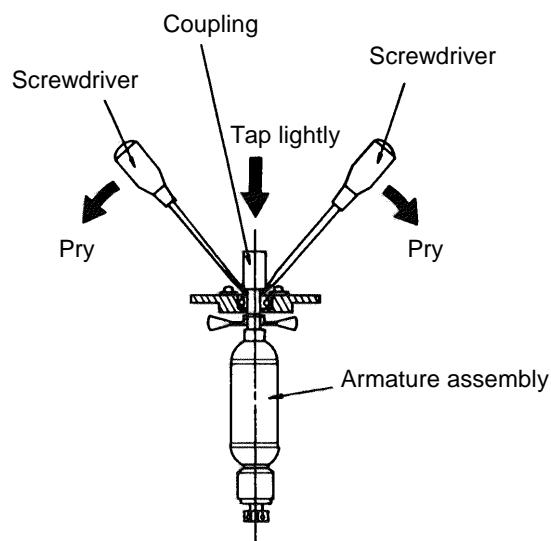


Fig. 2

### 1-3. Removing the Stator Ass'y (41)

- (1) After removing the Armature Ass'y (20), disconnect the Stator Ass'y (41) leadwire from the Slide Switch (37).

Then, remove the Brush Terminal Ass'y (42) from the Brush Holder (45).

- (2) After straightening the bent click of the Special Washer (27), loosen the M4 x 70 Hexagon Hd. Tapping Screw (26), and remove the Stator Ass'y (41).

### 1-4. Removing the Spindle (2)

Loosen the M4 x 4 Hexagon Socket-Hd. Set screw (19), and remove Bearing Lid (B) (1). The Spindle (2) can then be taken out.

### 1-5. Adhesive Agent

- (19) M4 hexagon socket head set screw TB1406 (Synthetic rubber base)

### 1-6. Locking Torques

- |   |                  |                                  |
|---|------------------|----------------------------------|
| • (28) M4 pan head screw                | $6^{+3}_0$ Kg-cm | $(5.2^{+2.6}_0 \text{ lbs.-in})$ |
| • (26) (36) (38) D4 tapping screw       | $20 \pm 5$ Kg-cm | $(17.4 \pm 4.3 \text{ lbs.-in})$ |
| • (7) D5 tapping screw                  | $30 \pm 5$ Kg-cm | $(26.0 \pm 4.3 \text{ lbs.-in})$ |
| • (19) M4 hexagon socket head set screw | $5^{+5}_0$ Kg-cm | $(4.3^{+4.3}_0 \text{ lbs.-in})$ |
| • (1) Bearing cover                     | $70 \pm 5$ Kg-cm | $(60.8 \pm 4.3 \text{ lbs.-in})$ |

### 1-7. Bending the Click of the Special Washer (27)

As illustrated in Fig. 3, be sure to bend the click of the Special Washer (27) toward the inside of the Stator Ass'y (41) after tightening the M4 x 70 Hexagon Hd. Tapping Screw (26)

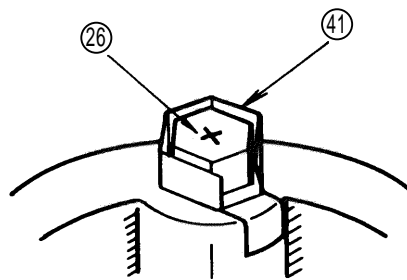


Fig. 3

## 1-8. Schematic Diagram

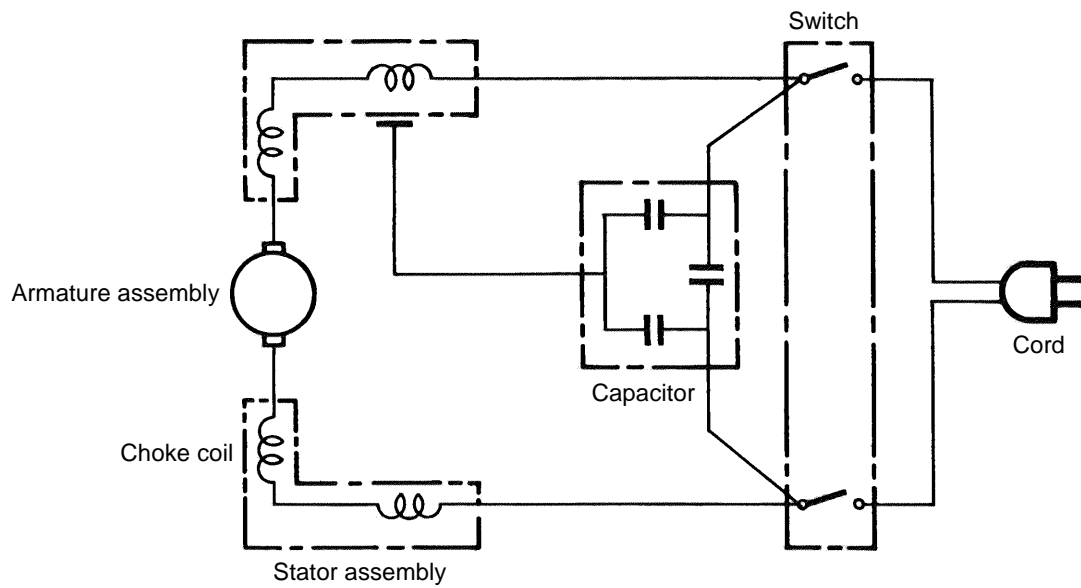


Fig. 4

## 1-9. Remaining Reassembly can be Accomplished by Following the Disassembly Procedures in Reverse.

## 1-10. On Completion of Repair, Measure the Insulation Resistance and Perform a Dielectric Strength Test.

- Insulation resistance: 7M  $\Omega$  or more when measured with an insulation resistance meter of 500 V DC.
- Dielectric strength test: 4000 V, 1 minute.