

**MODEL****D 6SH/D 6SB**

## **1. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY**

The [**Bold**] numbers encircled in the descriptions below correspond to the item numbers in the Parts List and exploded assembly diagram.

### **1-1. Disassembly**

#### **1-1-1. Disassembly of the Armature [9] and Stator [10]**

- (1) Remove the six D4 x 20 Tapping Screws W/Flanges [**15**], and remove the Housing (A) [**13**] from the Housing (B) [**13**].
- (2) Remove the Brush Holder [**22**] from the Housing (A) [**13**] and take out the Carbon Brushes [**23**].
- (3) Remove the Ball Bearing [**8**] from the Armature [**9**] by means of a bearing puller.
- (4) Remove the two D4 x 16 Tapping Screws W/Flanges [**27**], and remove the Cord Clip [**26**].
- (5) Take out the Switch (B) [**29**], Noise Suppressor [**31**] and Cord [**28**] as a unit from the Housing (A) [**13**].
- (6) Remove the Noise Suppressor [**31**] and Cord [**28**] from the Switch (B) [**29**].

#### **1-1-2. Removal of the Gear [5] and Spindle [3]**

- (1) Support the drill-chuck side of the gear surface and press the Spindle [**3**]. The Gear [**5**] can be removed.
- (2) Remove the Ball Bearing [**4**] from the Spindle [**3**] by means of a bearing puller.

### **1-2. Reassembly**

Perform reassembly in the reverse order of disassembly while observing the given precautions and taking care of the following points.

- (1) Pay attention to the direction of the Thrust Spring [**12**]. Mount it carefully in accordance with the exploded assembly diagram.
- (2) As mentioned in "5. SPECIFICATIONS", the difference between Models D 6SH and D 6SB is the number of teeth on the gear and the armature pinion. To differentiate the armature pinions, count the number of teeth. For differentiation of the gears, only the gear for Model D 6SB has a groove (dia. 16 mm) on one side. Be careful not to make a mistake when reassembling.

### 1-3. Lubrication

(1) The gear chamber of the Housing (A) **[13]** ..... Nippeco grease (SEP-3A) 3 g

Thoroughly apply Nippeco grease SEP-3A to the following points.

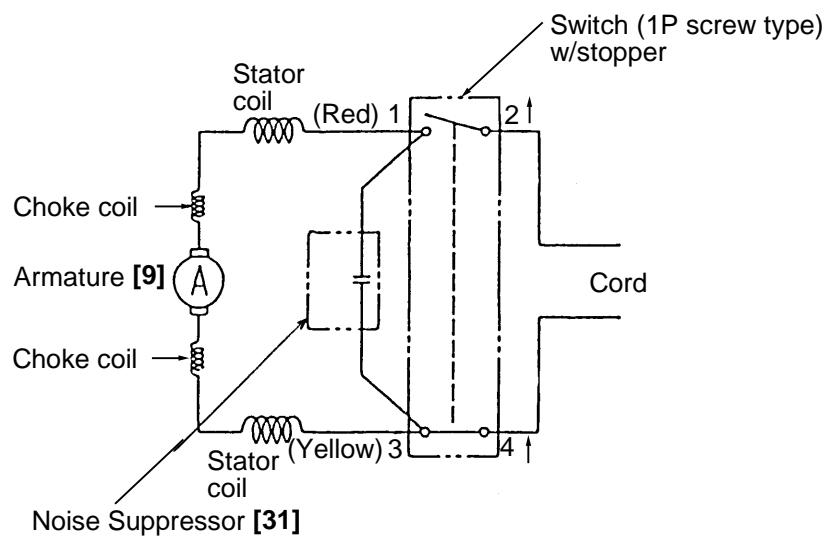
- (1) Teeth of the Gear **[5]**
- (2) Teeth of pinion of the Armature **[9]**
- (3) Both sides of the Thrust Spring **[12]**
- (4) Inside of the Metal **[6]**

### 1-4. Tightening Torque

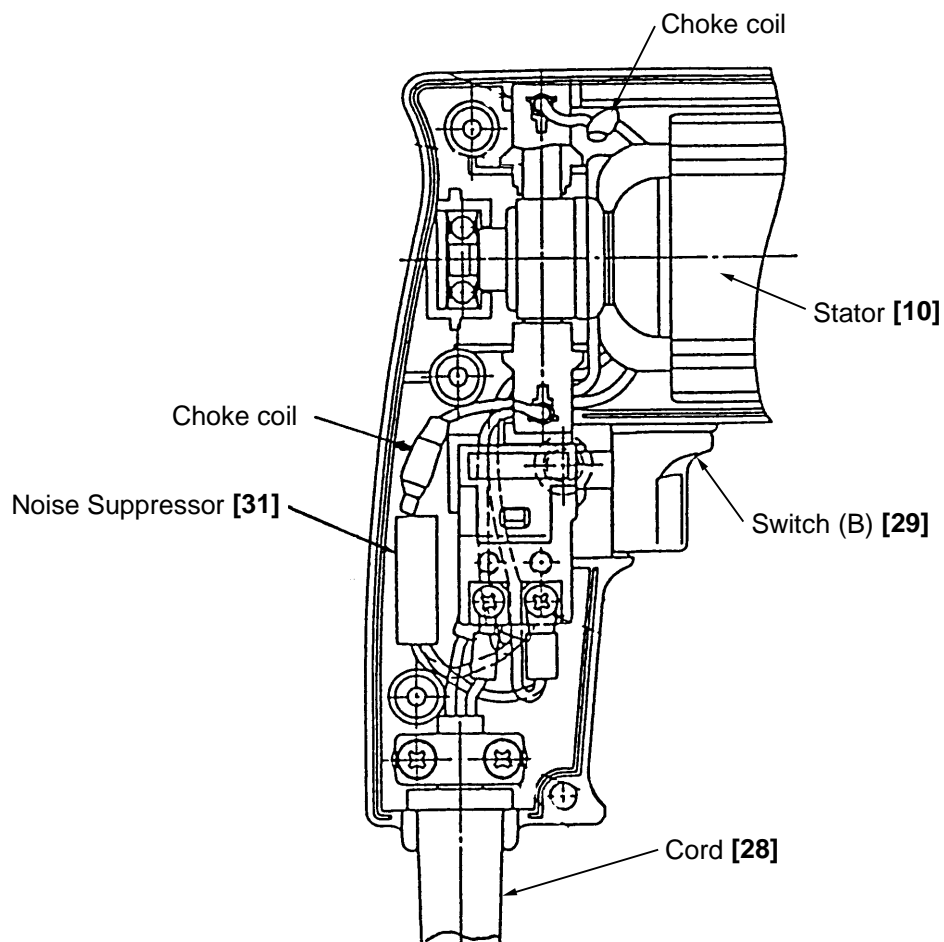
- (1) Tapping Screw (W/Flange) D4 x 20 **[15]**       $\left. \begin{array}{l} \text{ } \end{array} \right\} 2.0 \pm 0.5 \text{ Nm } (20 \pm 5 \text{ kgfcm})$
- (2) Tapping Screw (W/Flange) D4 x 16 **[27]**       $\left. \text{ } \right\}$
- (3) M3.5 Binding Screw of switch (B) **[29]** .....  $0.6 \pm 0.15 \text{ Nm } (6 \pm 5 \text{ kgfcm})$

## 1-5. Wiring Diagram and Lead Wire Arrangement

(1) For models with noise suppressor and choke coils

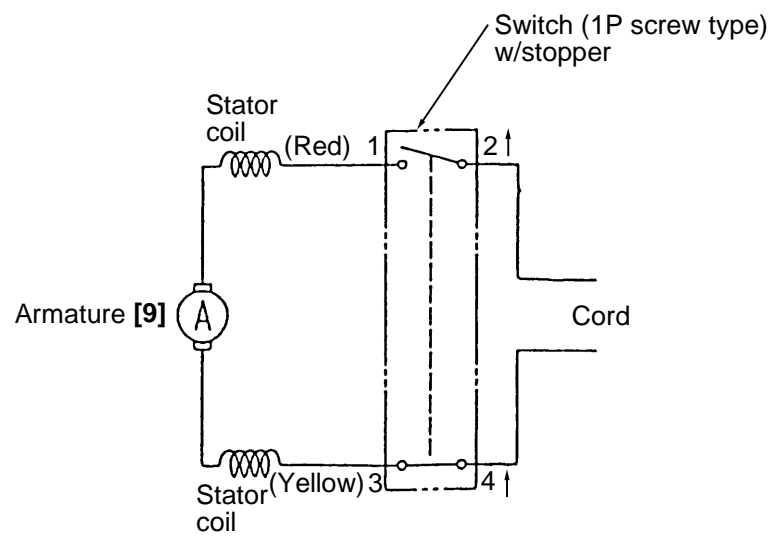


Wiring diagram

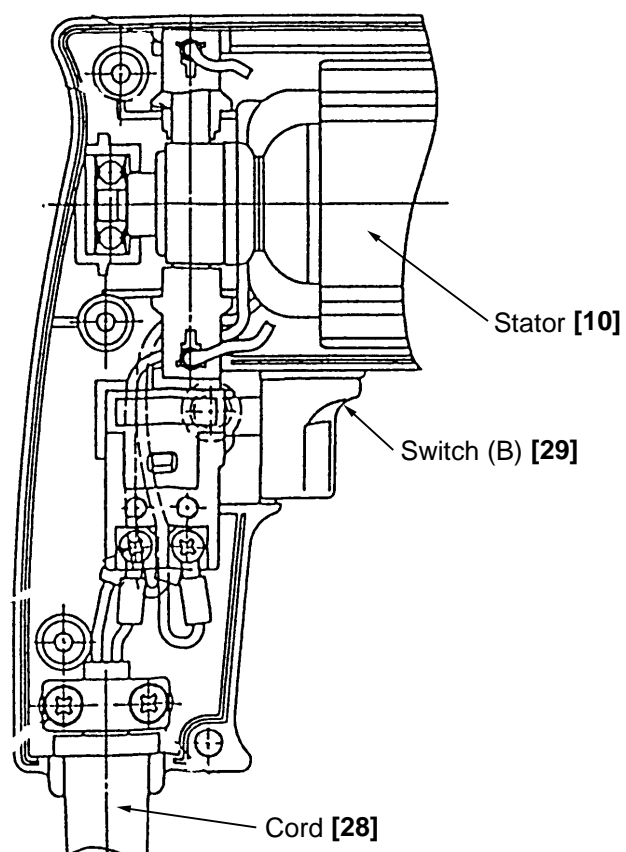


Lead wire arrangement

(2) For models without noise suppressor and choke coils



**Wiring diagram**



**Lead wire arrangement**

### 1-6. Insulation Tests

On completion of disassembly and repair, measure the insulation resistance and conduct the dielectric strength test.

Insulation resistance : 7 M $\Omega$  or more with DC 500 V Megohm Tester

Dielectric strength : AC 4000 V/1 minute, with no abnormalities.....220 V - 230 V

### 1-7. No-Load Current Values

After no-load operation for 30 minutes, the no-load current values should be as follows:

Voltage (V)	220	230
Current (A) max.	0.8	0.8

2. STANDARD REPAIR TIME (UNIT) SCHEDULES

Model	Variable		10	20	30	40	50	60min.
	Fixed							
D 6SH			Work Flow					
D 6SB				Cord Switch (B) Housing Drill Chuck Spindle Ball Bearing (6001VV) Gear Metal O-Ring (S-10)				
		General Assembly		Ball Bearing (626VV) x 2 Armature Stator Carbon Brush (2 pcs.)				