



# MODELS W 6V2/W 6VA2

## 1. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY:

The circled numbers in the descriptions below correspond to the item numbers in the Parts Lists and exploded assembly diagrams, and are common to both models.

### 1-1. Disassembly:

#### A. Disassembly of the Parts Within the Handle:

- (1) Remove the Handle Cover:

Loosen the D4 x 20 Tapping screws (23), and remove the Handle Cover (24).

- (2) Remove the Carbon Brush:

With a small minus-head screwdriver, lift up on the Brush Holder (26), and pull it out slightly. Next, pull out the terminal portion which connects the Carbon Brush (25) and the lead wire from the Switch (28). When pulling the terminal, it is best to push the Carbon Brush fully into the Brush Holder.

- (3) Remove the Cord:

Loosen the D4 x 16 Tapping Screws (34) which retain the Cord Clip (35) and remove the Cord (38) together with the Cord Armor (37).

#### B. Remove the Armature and Stator:

- (1) Remove the Armature:

Remove the D4 x 35 Tapping Screws (3) from the Gear Cover Ass'y (4), and remove the Inner Cover (15) from the Housing (21). The Armature (16) can then be taken out.

- (2) Remove the Stator:

First, remove the Fan Guide (17) from the inside of the Housing.

Then, loosen the D4 x 50 Tapping Screws (18), and lightly tap the end surface of the Housing with a wooden hammer to loosen and remove the Stator (19).

#### C. Remove the Socket, Clutch Disk and Gear

Being very careful not to lose Spring (9), disassemble the Gear Cover Ass'y (4) and the Inner Cover (15). Socket (7), Clutch Disk (8) and Gear (11) can then be removed.

## 1-2. Reassembly:

Reassembly can be accomplished by following the disassembly procedures in reverse. However, special attention should be given to the following items.

### (1) Lubrication:

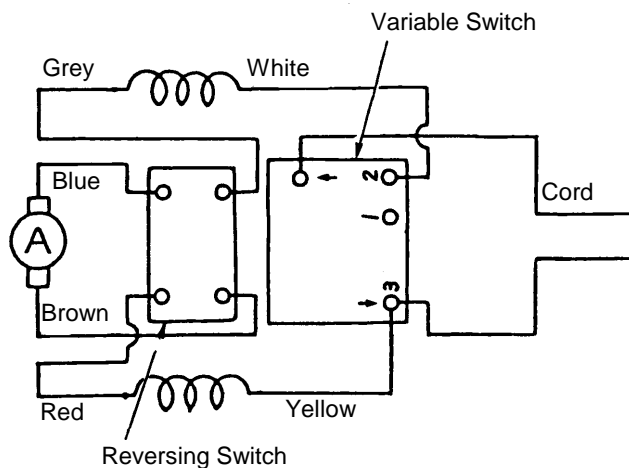
Apply NIPPECO SEP-3A to the pinion gear portion of the Armature (16), outer surfaces of the Gear Shaft (10), the teathed and ratchet portions of the Gear (11), the inner and outer surfaces and ratchet portion of Socket (7) and Clutch Disk (8).

### (2) Tightening Torques:

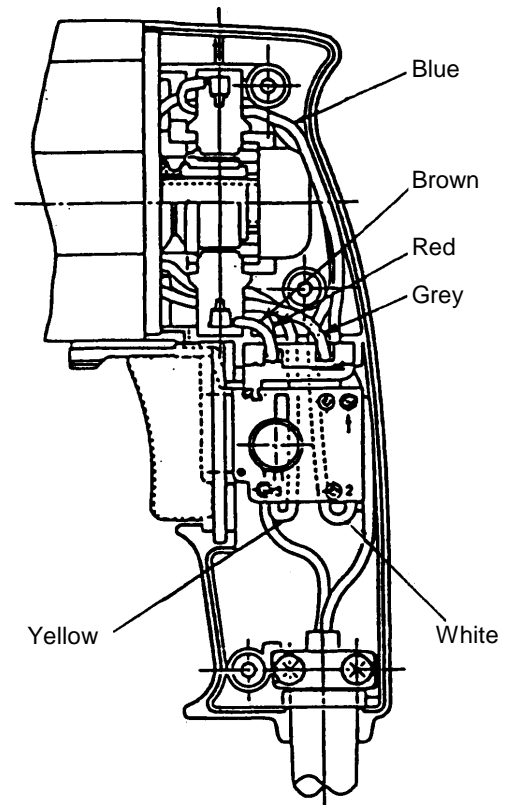
- Handle Cover Retaining Screws ..... 15 - 25 kg-cm (13.0 - 21.7 lbs.-in)
- Gear Cover Retaining Screws ..... 15 - 25 kg-cm (13.0 - 21.7 lbs.-in)
- Stator Retaining Screws ..... 15 - 25 kg-cm (13.0 - 21.7 lbs.-in)
- Speed Control Switch Retaining Screws ..... 3 - 9 kg-cm (2.6 - 7.8 lbs.-in)

## 1-3. Wiring Diagrams and leadwire Arrangements

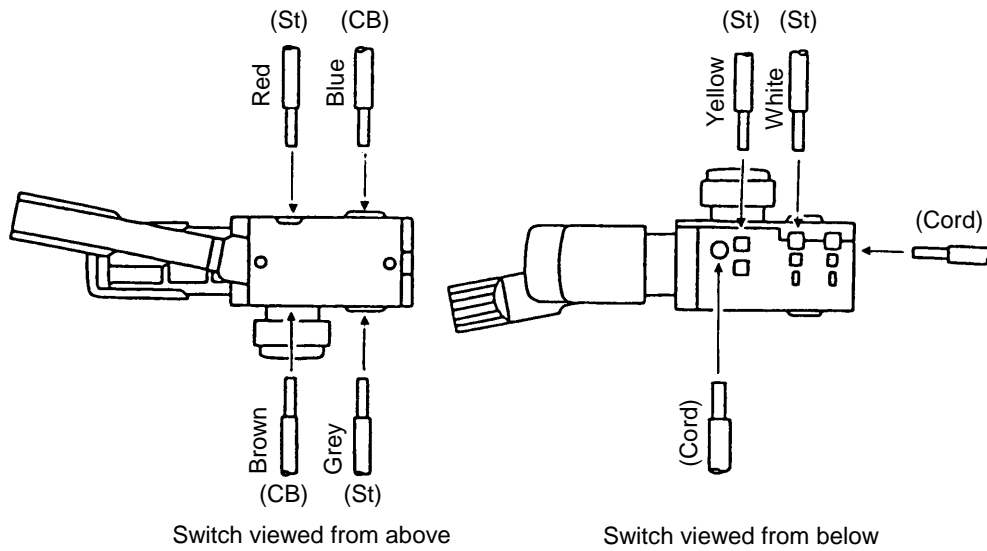
### (1) Without Noise Suppressor



**Fig. 15 Wiring Diagram**

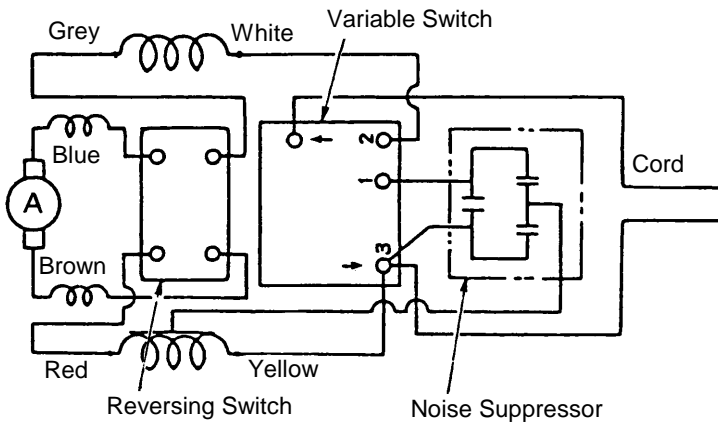


**Fig. 16 Lead Wire Arrangement**

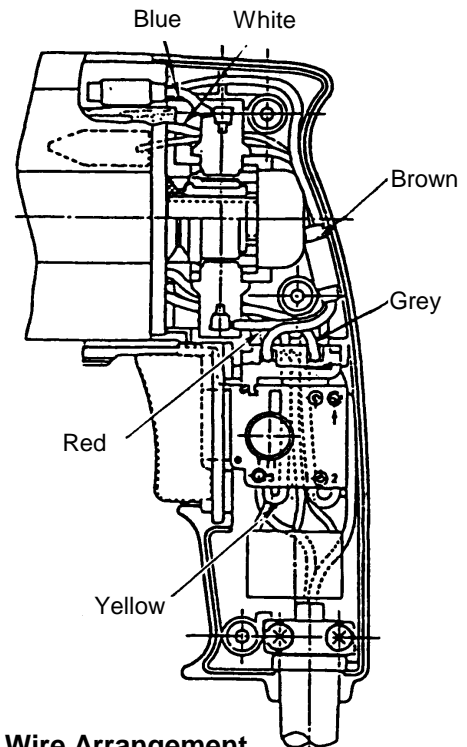


**Fig. 17 Switch Wiring Arrangement**

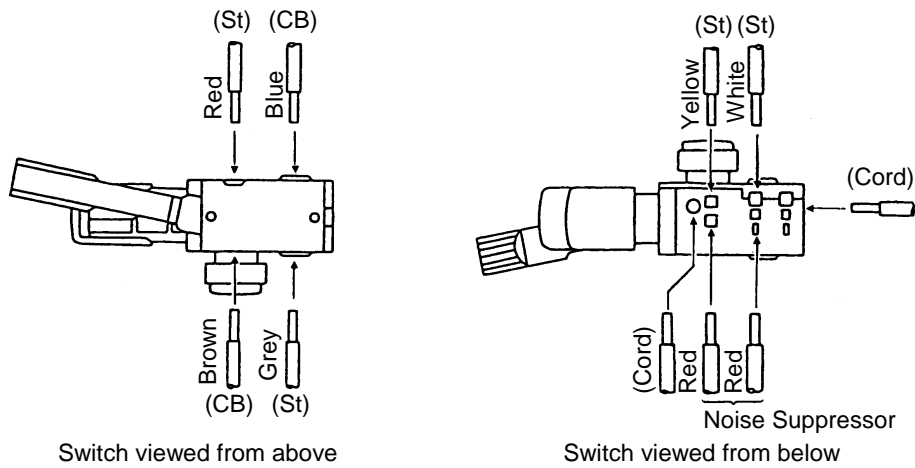
(2) With Noise Suppressor



**Fig. 18 Wiring Diagram**



**Fig. 19 Lead Wire Arrangement**



**Fig. 20 Switch Wiring Arrangement Diagram of Lead Wires**

#### 1-4. Insulation Tests:

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

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

Dielectric Strength: AC 4000 V/1 minute, with no abnormalities ..... 220 V - 240 V  
(and 110 V for U.K. products)  
AC 2500 V/1 minute, with no abnormalities ..... 110 V - 127 V  
(except U.K. products)

##### CAUTION

- Ensure without fail that the insulation resistance measurement and dielectric strength test are conducted between the plugblade and some portion of the external metal frame, such as the gear cover.

Never carry out these tests between the two blades of the plug.

This could cause burning out of the control element in the switch.

#### 1-5. No-load Current Value:

After no-load operation for 30 minutes, the no-load current value should be as specified below at a frequency of 50/60 Hz.

100V	2.5A or less
110V - 127V	1.8A - 2.3A
220V - 230V	1.0A - 1.2A
240V	1.1A or less