



MODEL CJ 65V2

1. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY:

The circled numbers in the descriptions below correspond to the item numbers in the Parts Lists for the Models CJ65V2.

1-1. Disassembly:

- (1) Disassembly of Handle (A) ①, and Handle (B) ⑦:

Remove the D4 x 20 Tapping Screw ⑨, and disassemble Tail Cover ⑳. Then loosen the D4 x 25 Tapping Screw ⑧, the two D4 x 20 Tapping Tapping Screws ⑨ and the two D4 x 16 Tapping Screws ⑩. The Handle (A) ① and Handle (B) ⑦ can be removed.

- (2) Removal of the Upper Cover ③① :

Remove the two M4 x 16 Machine Screws ③⑩ and two D4 x 65 Tapping Screws ②⑨. Then move the Upper Cover ③① in the forward direction to remove it together with the Plunger ⑤⑥ and related parts.

- (3) Disassembly of the Plunger ⑤⑥ from the Upper Cover ③① :

Remove the two M4 x 10 Seal Lock Flat Hd. Screws ⑤⑦ which fix the Connector ③⑧, and take out the Connector. Then pull the Plunger ⑤⑥ toward the Base ⑥⑩ to remove it from the Upper Cover ③①. (See Fig. 11)

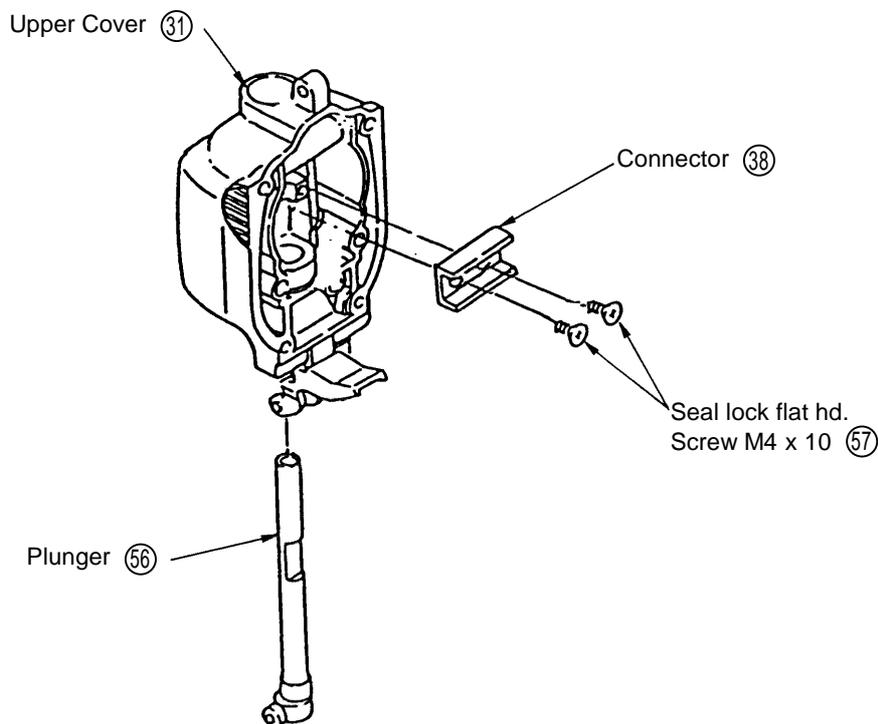


Fig. 11

- (4) Disassembly of the Plunger Holder Ass'y (34) from the Upper Cover (31):
Extract the D6 x 47 Pin (35) from the Upper Cover (31). Then, while lifting the Plunger Holder Ass'y (34), pull it toward the Gear Cover (50) to remove it from the Upper Cover (31). (See Fig. 12)

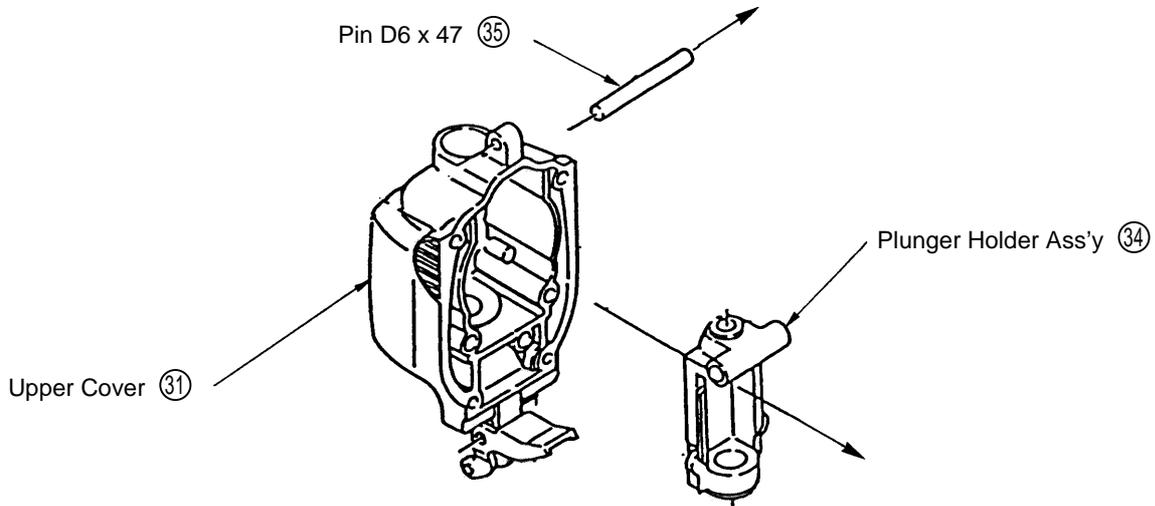


Fig. 12

- (5) Disassembly of the Guide Roller (54) from the Upper Cover (31):
Extract the D5 x 19.8 Needle (53) which is press-fitted into the Upper Cover (31), and remove the Guide Roller (54).
- (6) Disassembly of the Weight Holder (41) from the Gear Cover (50):
First, remove the Retaining Ring for D8 Shaft (58) from the end of the Spindle (48). Then, being very careful not to lose the Orbital Pin (61), pull out the Weight Holder (41) together with the Gear (46), Balance Weights (44), and related parts from the Gear Cover (50).
- (7) Disassembly of the Weight Holder (41) and the Gear (46):
Remove the M5 x 12 Hex. Socket Hd. Bolt (60) from the Weight Holder (41). Washer (A) (42), the three Balance Weights (44), the Orbital Cam (45), and Washer (A) (42) can then be removed in that order. (See Fig. 13)

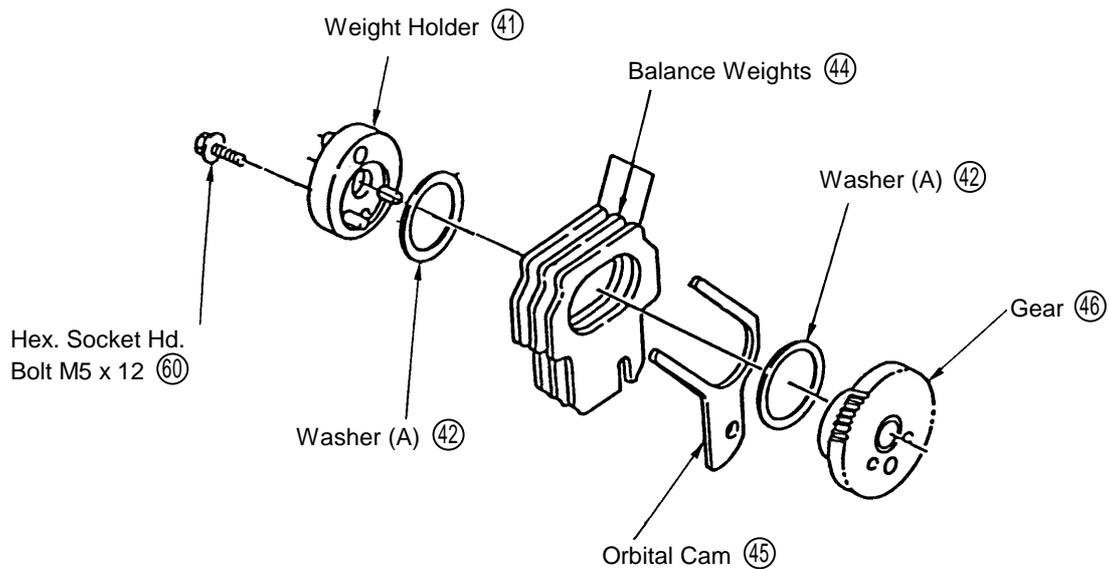


Fig. 13

- (8) Disassembly of the Gear Cover (50) and the Housing (24):
 Prior to disassembly, remove the Carbon Brushes (27) as described in the Instruction Manual. Remove the two D4 x 30 Tapping Screws (49) from inside the Gear Cover (50). Then move the Gear Cover (50) toward the front to remove it together with Armature (18).
- (9) Disassembly of the Change Knob (65) from the Gear Cover (50):
 Being very careful not to lose Spring (C) (66) and the D3.97 Steel Ball (67) inside the Change Knob (65), remove the E-Type Retaining Ring for D5 Shaft (64) from the end of the Change Knob (65), and remove the Change Knob from the Gear Cover (50).
- (10) Removal of the Carbon brushes (27) from the Housing (24):
 For removal of the Carbon Brushes (27), please refer to the Instruction Manual.
- (11) Removal of Wiring Block (C) (26) :
 Removal the two D4 x 16 Tapping Screws (14). Wiring Block (C) (26) can then be removed by pulling it toward the rear while holding the Housing (24).

1-2. Reassembly :

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

- (1) Installation of Carbon Brushes (2):
 For installation of Carbon Brushes (2), please refer to the Instruction Manual.

- (2) Assemble Spring (C) ⑥⑥ and the D3.97 Steel Ball ⑥⑦ in the Change Knob ⑥⑤ as shown in Fig. 14.

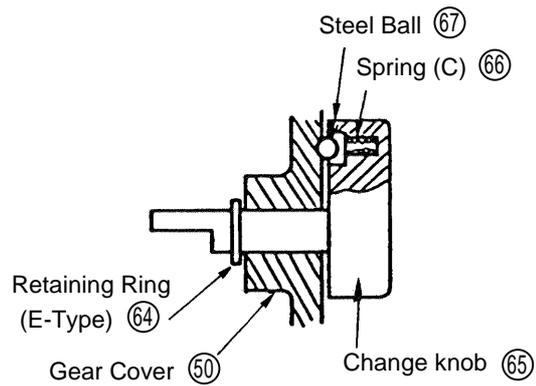


Fig. 14

- (3) Carefully ensure that the two Washers (A) ④②, the Orbital Cam ④⑤, and the three Balance Weights ④④ are assembled as shown in Fig. 15.

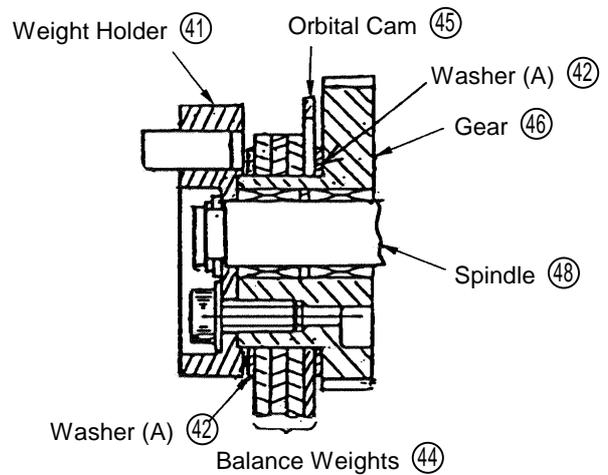


Fig. 15

- (4) During reassembly, be very careful not to forget to install the Felt ⑥② at the lower portion of the Orbital Cam ④⑤, as shown in Fig. 16.

- (5) Grease:
 Insert 20g of Nippeco SEP-3A Grease inside the Gear Cover. Also liberally apply grease to the Following portions:
- the teeth of the Gear ④⑥
 - the slide contact portions of the Balance Weights ④④
 - inside of the Needle Roller ④①
 - inside of the Connector ③⑧
 - the slide contact portions of the Plunger ⑤⑥
 - the Plunger Holder Ass'y ③④ surfaces in sliding contact with the Connector ③⑧

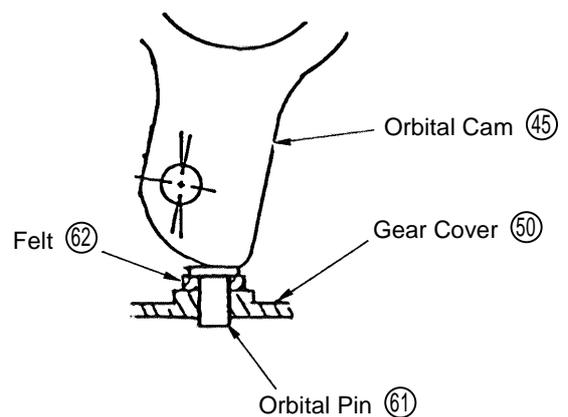


Fig. 16

- (6) When installing the Plunger Holder Ass'y (34) in the Upper Cover (31), ensure that the O-Ring (55) is properly mounted at the lower portion of the Plunger Holder Ass'y (34), as shown in Fig. 17. Also, ensure that the two Springs (32) are properly mounted between the Plunger Holder Ass'y (34) and the Upper Cover (31).

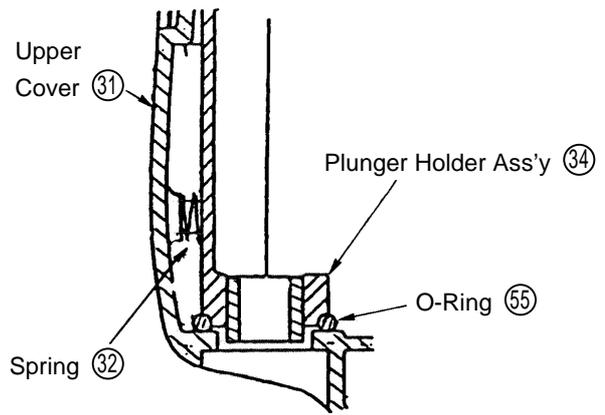


Fig. 17

- (7) After confirming that the Packing (43), Shooter (63), and Rubber Cushion (36) are properly installed, fit the Upper Cover (31) to the Gear Cover (50) so that the Connecting Piece (39) properly enters the Connector (38).

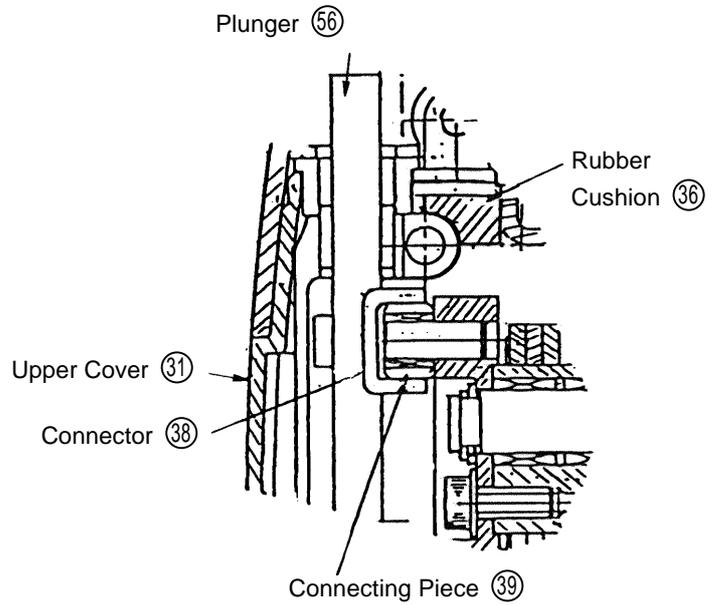


Fig. 18

- (8) Install Handle (A) (1) and Handle (B) (7) so that their pawls (two on Handle (A) , one on Handle (B)) are properly inserted into the grooves provided on the Gear Cover (50). (See Fig. 19)

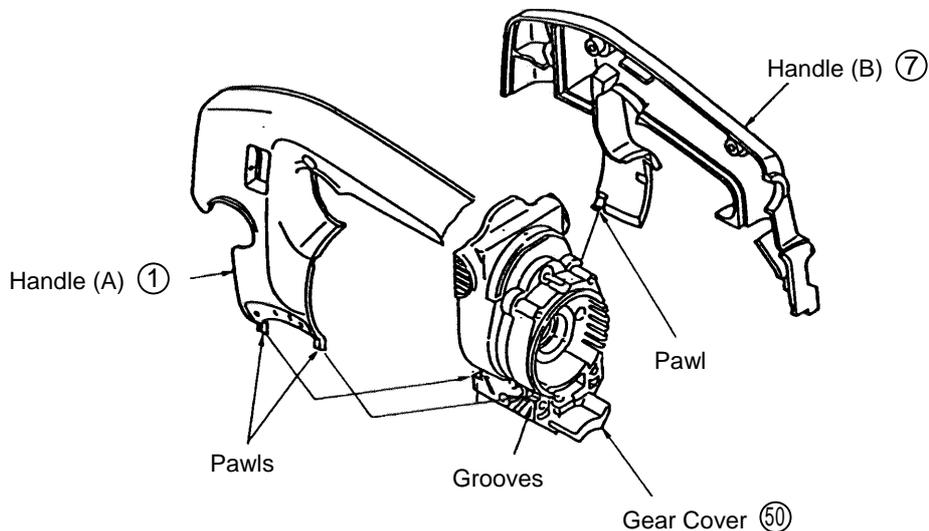


Fig. 19

(9) Screw Tightning Torques

- D4 Tapping Screw 15 - 25 kg-cm (13 - 22 in-lbs)
- M4 x 16 Machine Screw (30) 20 - 30 kg-cm (17.5 - 26 in-lbs)
- M4 x 10 Seal Lock Flat Hd. Screw (57) 20 - 30 kg-cm (17.5 - 26 in-lbs)
- M4 x 6 Hex Socket Hd. Bolt (51) 30 - 45 kg-cm (26 - 39 in-lbs)
- M4 x 20 Hex Socket Hd. Bolt (74) 30 - 45 kg-cm (26 - 39 in-lbs)
- M5 x 8 Nylock Flat Hd. Screw (72) 20 - 30 kg-cm (17.5 - 26 in-lbs)
- M5 x 12 Hex Socket Hd. Bolt (60) 40 - 60 kg-cm (35 - 52 in-lbs)

1-3. Wiring Diagrams:

For models without a Noise Suppressor, wiring is in accordance with Fig. 20. For models with a Noise Suppressor, wiring is in accordance Fig. 21.

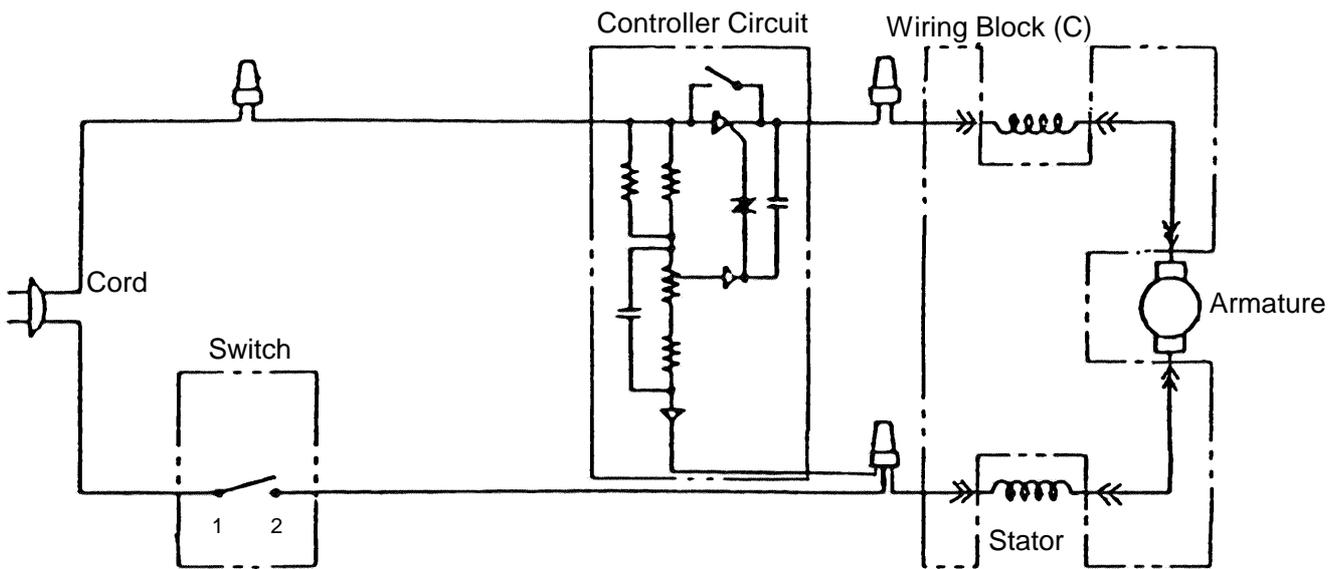


Fig. 20 CJ 65V2 without Noise Suppressor

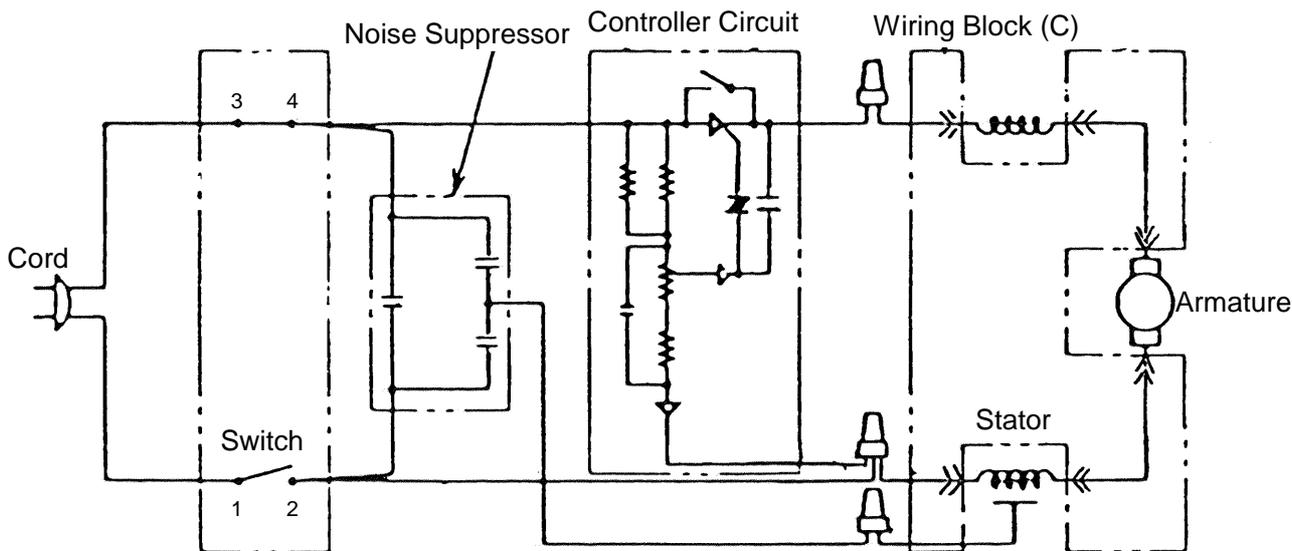


Fig. 21 C J65V2 with Noise Suppressor

1-4. Insulation Tests:

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

Insulation Resistance: 7M Ω 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.

| | | | | | | | |
|------------------|-------|-------|-------|-------|-------|-------|-------|
| Voltage | 110 V | 115 V | 120 V | 127 V | 220 V | 230 V | 240 V |
| Current (A) Max. | 2.7 A | 2.6 A | 2.5 A | 2.4 A | 1.4 A | 1.3 A | 1.2 A |