



# MODEL H 55SA

## 1. NOTE ON DISASSEMBLY AND REASSEMBLY

The numbers mentioned in the description indicate the parts list number.

### 1-1. Disassembly

- Retainer

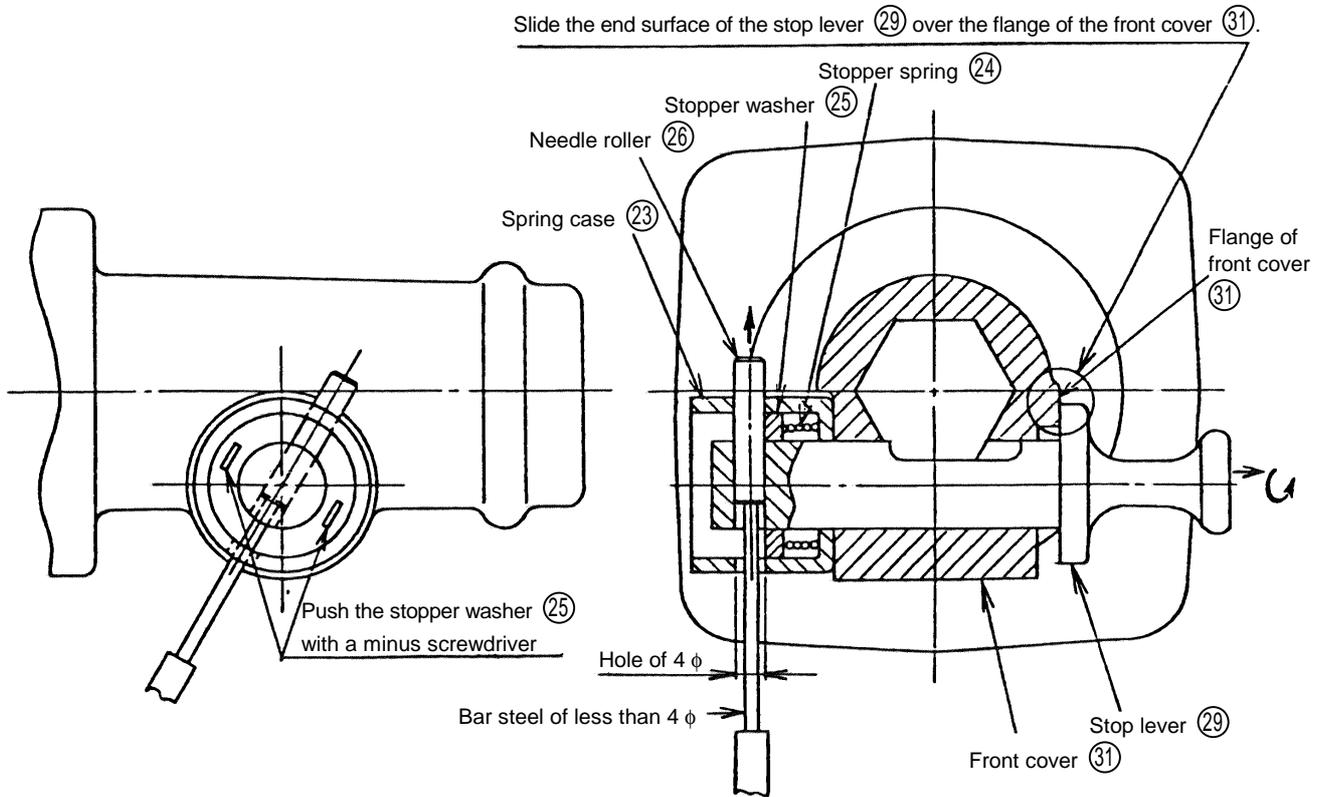


Fig. 7

The disassembly order is shown in the above drawing.

Pull the stop lever (29) in the direction of the arrow, rotate it a little and slide the end surface of the stop lever over the flange end surface of the front cover (31).

Rotate the spring case so that the hole of the spring case (23) is adjusted to the position of the needle roller (26) out and remove the needle roller. Then, the stop lever, stopper washer (25) and stopper spring can be taken off.

- O-rings of piston and striker

Remove four M8 hexagonal socket head bolts (8) of the cylinder case assembly (22). Then, the cylinder case assembly comes off from the crank case (80).

The piston (7) remains in the crank case, and you may remove the connecting rod (13) from the crank shaft (19). The striker (4) will come off if the cylinder case assembly is tapped with a plastic hammer. If the striker will not come off, push the removed piston with the connecting rod into the cylinder and pull it out suddenly. Then the striker will pop out together with the piston.

- Disassembling the first gear

Remove six M5 hexagonal socket head bolts (15) of the crank cover (16) and bearing cover (20). Support the upper end of the crank case (80). Push the end surface of the crank shaft (19) with a press to release it.

- Disassembling the handles

Remove four M5 hexagonal socket head bolts (15).

Then, the handles (A) (76) and (B) (70) come off from the main unit.

## 1-2. Assembly

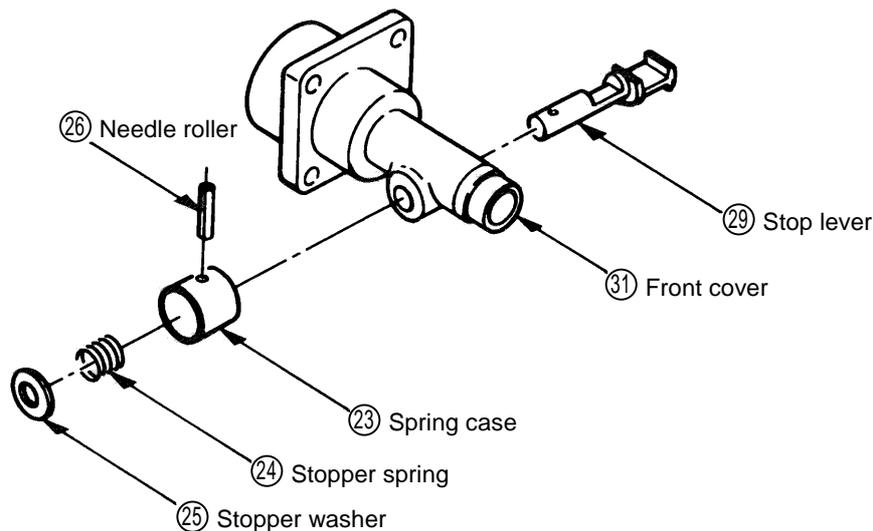
Do the disassembly procedure in the reverse order.

Pay attention to the following points.

- Lubricant application

Apply the special lubricant (electric impact drill lubricant) to the needle bearing (B) (14) of the connecting rod assembly (13), needle bearing (A) (84) supporting the crank shaft (19) O-rings (A) (5) attached to the piston (7) and striker (4), pinions of the first gear (82) and armature (92).

- Assembling the retainer



Apply Mollub alloy K#777-1 lubricant to the sliding part of the stop lever (29) before assembling.

As shown in Fig. 7, mount the stop lever end surface on the flange of the front cover (31) and push the stopper washer (25) with the minus screwdriver to contract the stopper spring (24). Adjust the holes of the stop lever and spring case (23), and insert the needle roller (26).

- Oil seal

Take care not to damage the O-ring (B) (17) of the crank cover (16), oil seal (89) of the gear cover (86), O-ring (10) of the crank case assembly, and O-rings (A) (5) of the piston (7) and striker (4).

### 1-3. Notes on using adhesives

- Apply Screw Locking Agent TB1401 to all M5 and M6 hexagonal socket head bolts ⑮, ④③, ④⑨, ⑧⑦ and the cylinder case assembly mounting M8 hexagonal socket head bolt ⑧ before tightening them.
- Apply CEMEDINE 1500 to the front cover mounting M8 hexagonal socket head bolt ③⑩ before tightening it.

**Note:** Loosened bolts may result in damage of the machine.

Always apply screw locking agent to the bolts. Before applying screw clean the oil and fat with gasoline, etc.

### 1-4. Tightening torque of screws and bolts

- (1) M4 tapping screw: 15 - 25 kg-cm (13.0 - 21.7 lbs-in)
- (2) M5 tapping screw:  $30 \pm 5$  kg-cm ( $26.0 \pm 4.3$  lbs-in)
- (3) M5 hexagonal socket head bolt:  $80_{-0}^{+20}$  kg-cm ( $69.4_{-0}^{+17.3}$  lbs-in)
- (4) M6 hexagonal socket head bolt:  $100_{-0}^{+20}$  kg-cm ( $86.7_{-0}^{+17.3}$  lbs-in)  
(Housing fixing bolts M6 x 45, M6 x 60:  $50_{-0}^{+20}$  kg-cm ( $43.4_{-0}^{+17.3}$  lbs-in)
- (5) M8 hexagonal socket head bolt:  $200_{-0}^{+20}$  kg-cm ( $173.4_{-0}^{+17.3}$  lbs-in)  
(Front cover fixing bolts M8 x 25:  $400 \pm 10$  kg-cm ( $346.9 \pm 8.7$  lbs-in)

### 1-5. Insulation test

After disassembly and repair, the insulation resistance should be measured and the dielectric strength (resistance voltage) should be tested.

Insulation resistance: Should be more than 7 M  $\Omega$

Dielectric strength: Should be normal after applying 4000 V for 1 minute.

### 1-6. No-load current

The no-load current should be as below, specified after 30 minutes no-load operation.

3 A or less at 220 V, 50/60 Hz