

MODELS NC 65AB/NC 65AC

1. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY

As described above, the Models NC 65AB and NC 65AC basically consist of four sections: the Output Section, Valve Section, Nail Feed Section, and Magazine Section. As the Models NC 65AB and NC 65AC employ a new structure, virtually none of its parts are interchangeable with other models. The description below refer to important points in the disassembly and reassembly of the four sections. The circled numbers in the descriptions correspond to the item numbers in the Parts List and exploded assembly diagram.

In addition, the Model NC 65AC is essentially the same in structure with the Model NC 65AB except for the Magazine Section.

CAUTION: Prior to disassembly/reassembly or any other maintenance, ensure without fail that your finger is kept away from the trigger, that the air hose is disconnected from the nailer, and that all compressed air is discharged from the nailer.

1-1 Disassembly and Reassembly of the Output Section :

(1) Disassembly and Reassembly of the Piston (15), Cylinder (10), and related parts :

Tools Required :

- 4 mm Hexagon Bar Wrench
- (a) Disassembly : (Refer to Fig. 13)
- Loosen the four M5 x 30 Hex Socket Hd. Bolts (1), and remove the Top Cover (2). The Piston (15) and related component parts of the output section can then be taken out.

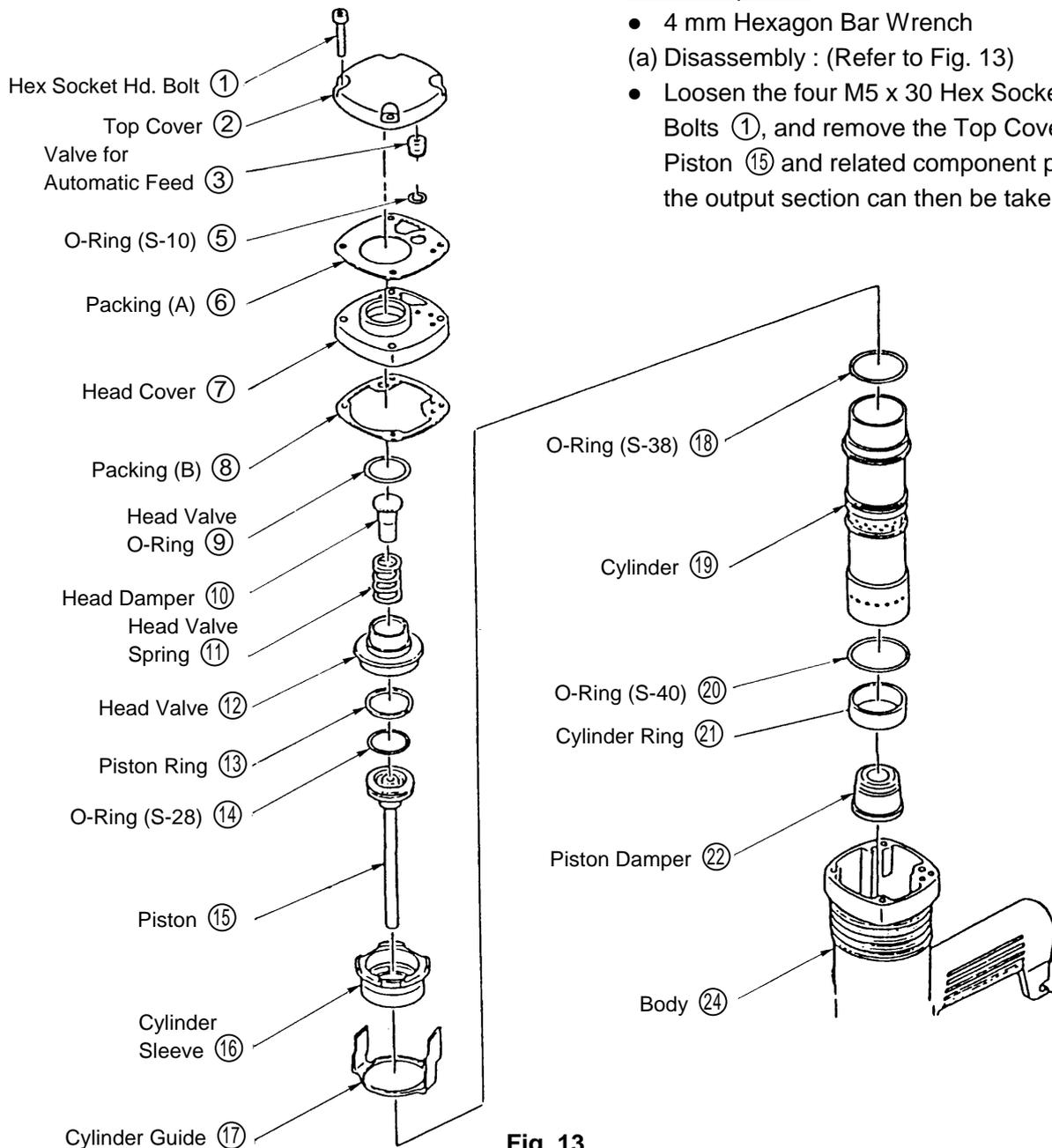


Fig. 13

(b) Reassembly:

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

- Be very careful to ensure that the Cylinder Guide (17) is assembled in the proper direction. (Refer to Fig. 13)
- Reassembly of the Head Valve (12) can be facilitated by first inserting it into the Head Cover (7). Prior to reassembly, coat grease (Hitachi Motor Grease, Code No. 930035, is recommended) on sliding portion (A) of the Head Cover (7) and lip portions (B) and (C) of the Head Valve (12). Also coat the same grease (approx. 0.5g [.018oz]) onto the groove portion of the Head Cover (7). (Refer to Fig. 14)
- Lightly coat oil (Shell Tonna T32 Oil) onto the inner surface of the Piston Ring (13) and Cylinder (19).
- Ensure that Packing (A) (6) and Packing (B) (8) are assembled so that their air vents are properly aligned with the air passage vents of the Head Cover (7) and Body (24).

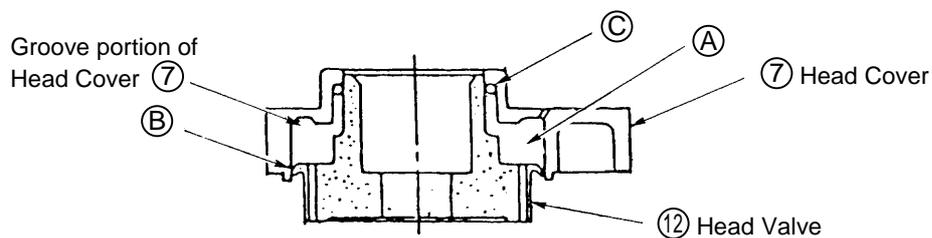


Fig. 14

1-2. Disassembly and Reassembly of the Valve Section:

(1) Disassembly and Reassembly of the Push Lever (31), Valve Bushing (A) (52), and related parts:

Tools Required:

- ϕ 3 mm (.118") Roll Pin Remover
- J-125 Valve Bush Spanner (Special Repair Tool, Code No. 970973)

(a) Disassembly : (Refer to Fig. 15)

- Loosen the M6 x 18 Knob Bolt (45), and remove the Magazine (67). Then, remove the Tail Cover (34) by following the procedures described in paragraph 1-3- (1).
- With the ϕ 3 mm Roll in Remover, extract the D3 x 22 Roll Pin (30) and take off the Trigger (29), Pushing Lever (31), Spring (B) (27) and Spring (28).
- Fit the J-125 Valve Bush Spanner into the groove of Valve Bushing (A) (52), and loosen it by turning it counterclockwise, being very careful not to deform the groove.
- After Valve Bushing (A) (52) has been removed, the Plunger (49) and related parts can be taken out.

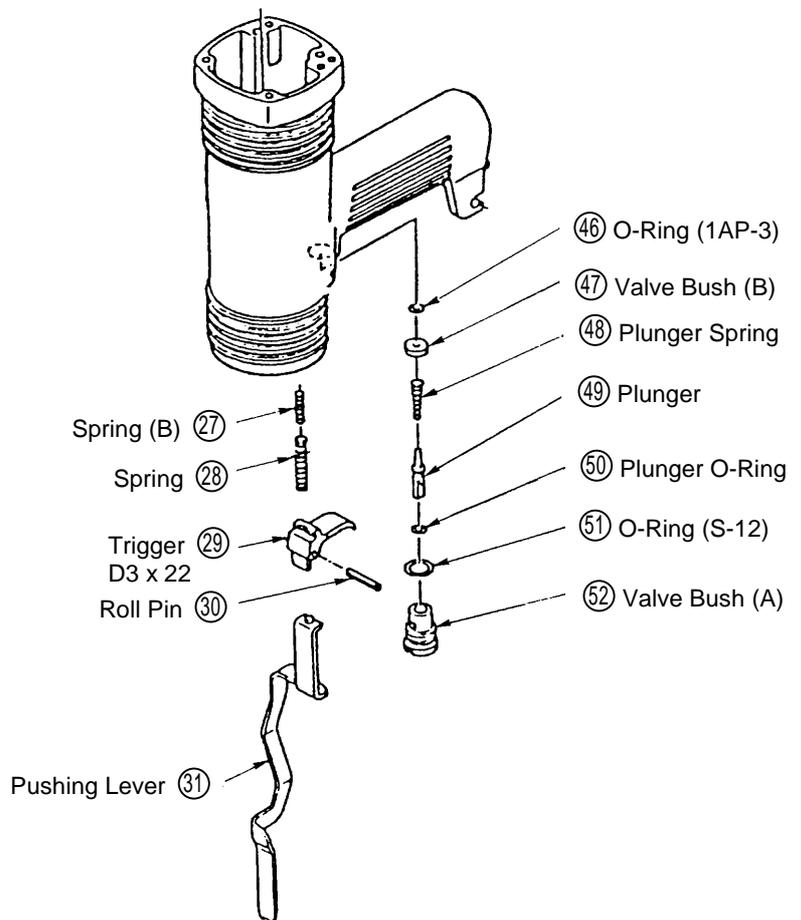


Fig. 15 Disassembly and Reassembly of the Push Lever, Valve Bushing (A) and related parts

(b) Reassembly:

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

- First, insert Spring (B) (27) inside the Spring (28). Next, confirm that the projection portion of the Pushing Lever (31) is properly installed into the Spring (28). (Refer to Fig. 16)
- When reassembling the Trigger (29), the D3 x 22 Roll Pin (30) can be easily inserted if the Pushing Lever (31) is pushed upward.
- It is very important to ensure without fail that there is no foreign matter in or on the Valve Section.

(2) Disassembly and Reassembly of Valve Bushing (C)

(42) and Related Parts :

Tools Required :

- ϕ 2.5 mm (.098") Roll Pin Remover

(a) Disassembly : (Refer to Fig. 17)

- Remove the Pushing Lever (31), Spring (B) (27) and Spring (28) by following the procedures described in Paragraph 1-2- (1).
- Fit the ϕ 2.5 mm (.098") Roll Pin Remover against the outer portion of the D2.5 x 12 Roll Pin (37), and tap it gently inward to extract the D2.5 x 12 Roll Pin from inside the Body (24).
- Next, by pulling either the Knob (43) or Plunger (B) (39) outward, Valve Bushing (C) (42) and related parts can be taken out.

(b) Reassembly:

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

- When reassembling the Knob (43), first assemble Plunger (B) (39) into Valve Bushing (C) (42). Then, push the Knob (43) onto Plunger (B) (39) before continuing the reassembly of the section.
- While reassembling Valve Bushing (C) (42) into the Body (24), very careful not to damage O-Ring (S-6) (41).
- It is very important to ensure without fail that there is no foreign matter in or on the Valve Section.

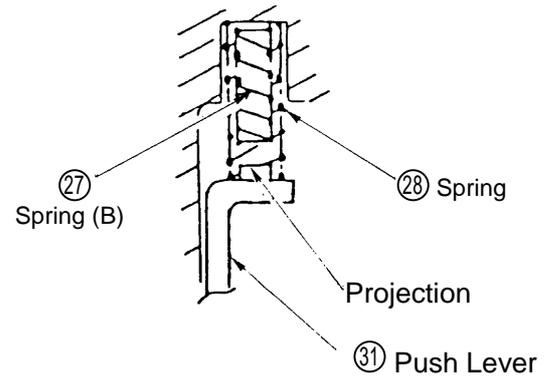


Fig. 16

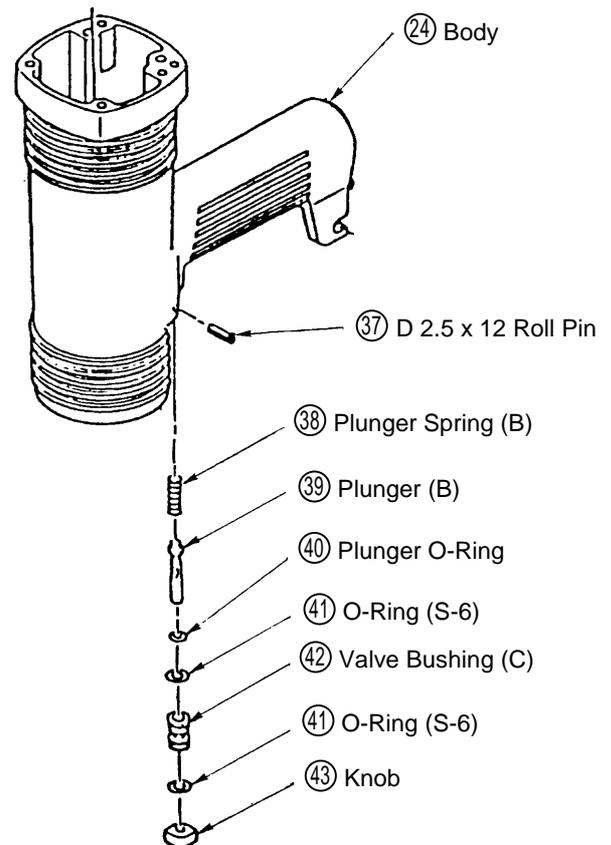


Fig. 17 Disassembly and Reassembly of Valve Bushing (C) and related parts

1-3. Disassembly and Reassembly of the Feeder Section:

(1) Disassembly and Reassembly of the Tail Cover (34) and Related Parts:

Tools Required:

- ϕ 3 mm (.118") Roll Pin Remover
- 6 mm Hexagon Bar Wrench

(a) Disassembly : (Refer to Fig. 18)

- With the ϕ 3 mm Roll Pin Remover, extract the D3 x 22 Roll Pin (30), and remove the Trigger (29).
- Loosen the two M8 x 25 Seal Lock Hex Socket Hd. Bolts (33), and take off the Tail Cover (34).

CAUTION: At this time, be very careful not to lose the O-Ring (P-4) (26).

(b) Reassembly:

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

- Ensure that Spring (B) (27) is inserted into the Spring (27). Then, confirm that the projection portion of the Pushing Lever (31) is properly installed into the Spring (28). (Refer to Fig. 16)
- When reassembling the Tail Cover (34), carefully confirm that the grooved portion of the Tail Cover is properly seated on the projecting portion of the Body (24) before tightening the two M8 x 25 Seal Lock Hex Socket Hd. Bolts (33) to their designated torque (410 ± 10 kg-cm [29.7 ± 7 ft-lb]). (Refer to Fig. 19)
- The two M8 x 25 Seal Lock Hex Socket Hd. Bolt (33) must be replaced with new ones once they are loosened.

(2) Disassembly and Reassembly of the Nail Guide Section:

Tools Required:

- 3 mm (.118") Hexagon Bar Wrench

(a) Disassembly : (Refer to Fig. 20)

- First, remove the Tail Cover (34) by following the procedures described in paragraph 1-3- (1). Then, extract the Pin (32) from the Tail Cover, and take off the Nail Guide (70).
- Remove the M4 x 8 Seal Lock Hex Socket Hd. Bolt (74), and take off the Nail Guide Cover (73) and the Nail Stopper Spring (72).

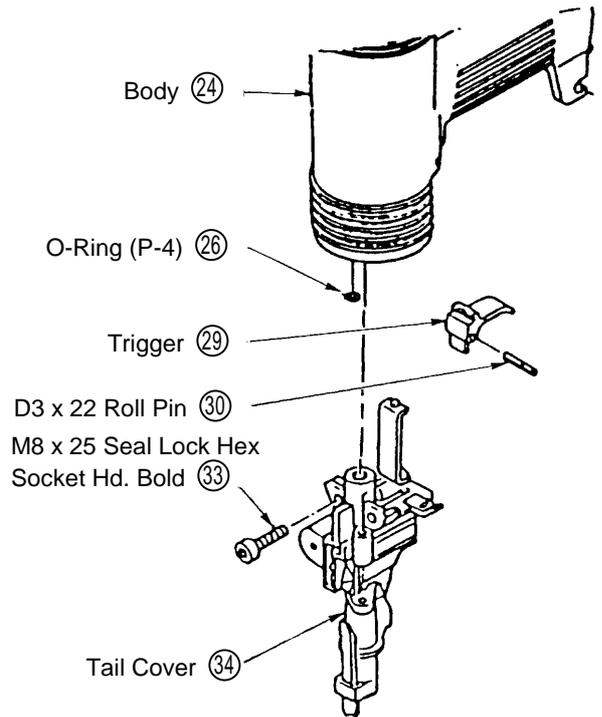


Fig. 18 Disassembly and Reassembly of the Tail Cover and Related Parts

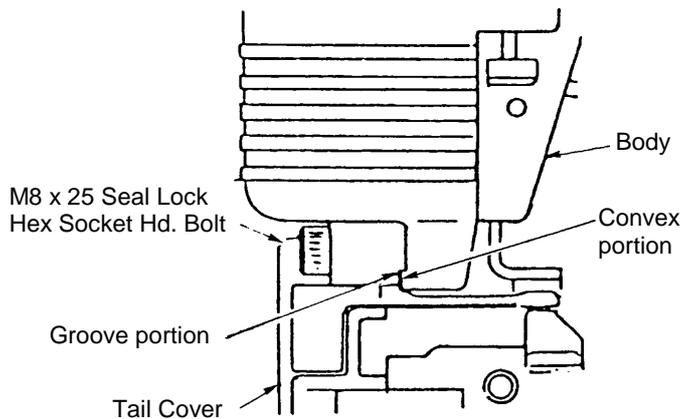


Fig. 19

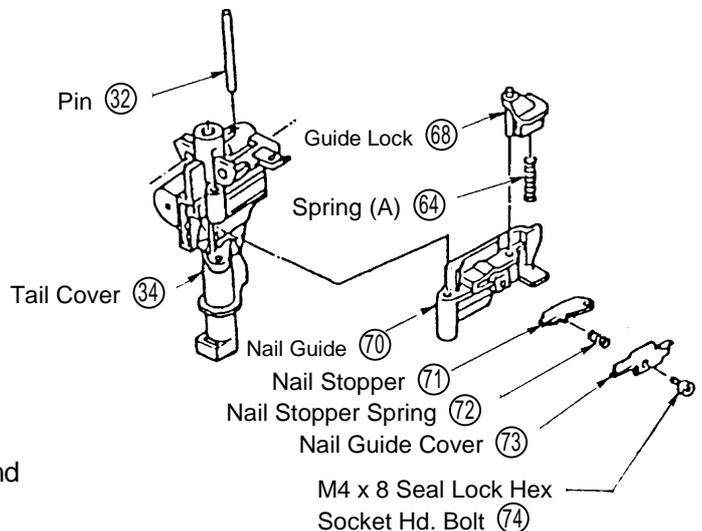


Fig. 20

- Next by extracting the Guide Lock (68) upward, the Nail Stopper (71) can be taken off.

(b) Reassembly :

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

- After reassembly, push the Nail Stopper (71) with a finger and confirm that it returns smoothly to its original position.

(3) Disassembly and Reassembly of the Feed Piston and Related Parts:

Tools Required :

- 4 mm Hexagon Bar Wrench

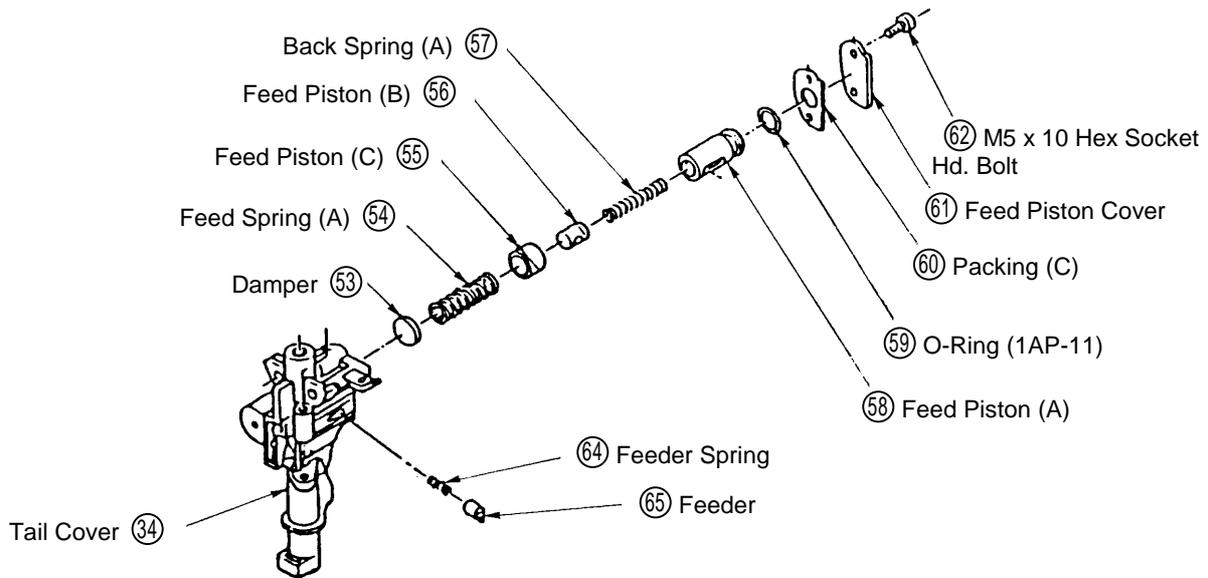


Fig. 21 Disassembly and Reassembly of Feed Piston and Related Parts

(a) Disassembly: (Refer to Fig. 21)

- Loosen the M6 x 8 Knob Bolt (45), and take off the Magazine (67).
- Loosen the two M5 x 10 Hex Socket Hd. Bolts (62), and take off the Feed Piston Cover (61).
- Next, after removing the Feeder (65) and the Feeder Spring (64) from the Tail Cover (34), Feed Piston (A) (58), Feed Spring (A) (54), and related parts can be removed.

(b) Reassembly:

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

- As illustrated in Fig. 22, push the O-Ring (1AP-11) (59) of Feed Piston (A) (58) to the left, and apply approximately 0.5 g (.018 oz) of grease into the groove.

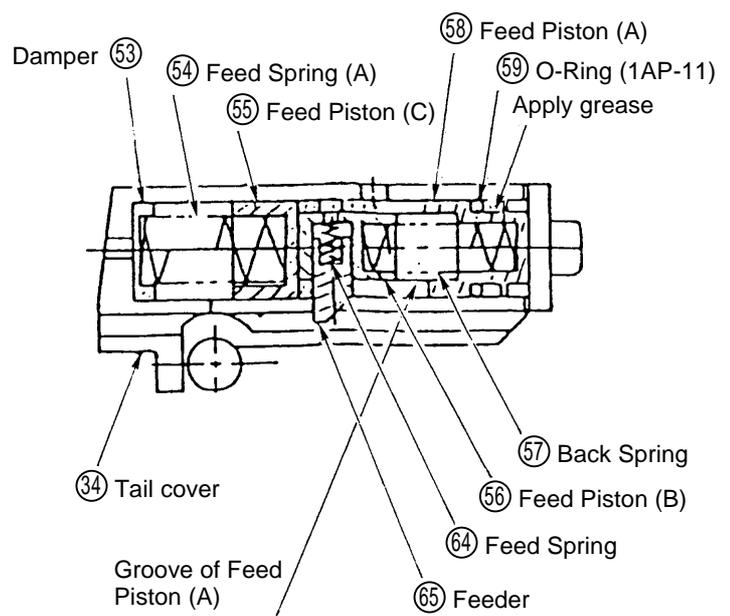


Fig. 22 Assembly Drawing for Feeder Piston and Related Parts (Cross Section)

- Be very careful to ensure that the Damper (53), Feed Piston (C) (55), Feed Piston (B) (56) and Feed Piston (A) (58) are assembled in the proper direction. (Refer to Fig. 21)
- To reassemble the Feeder (65) and the Feeder Spring (64) after pushing Feed Piston (A) (58), Feed Piston (B) (56) and their related parts into the feed piston chamber of the Tail Cover (34), carry out their assembly by pushing them into Hole (B) of Feed Piston (B) through Hole (A) of the Tail Cover (refer to Fig. 23). At this time, be very careful to ensure that the claw portion of the Feeder is mounted in the proper direction.
- On completion of assembly, push the Feeder (65) with a finger and confirm that it returns smoothly to its original position.

Press Feed Piston (C) down with a minus screwdriver or similar tool.

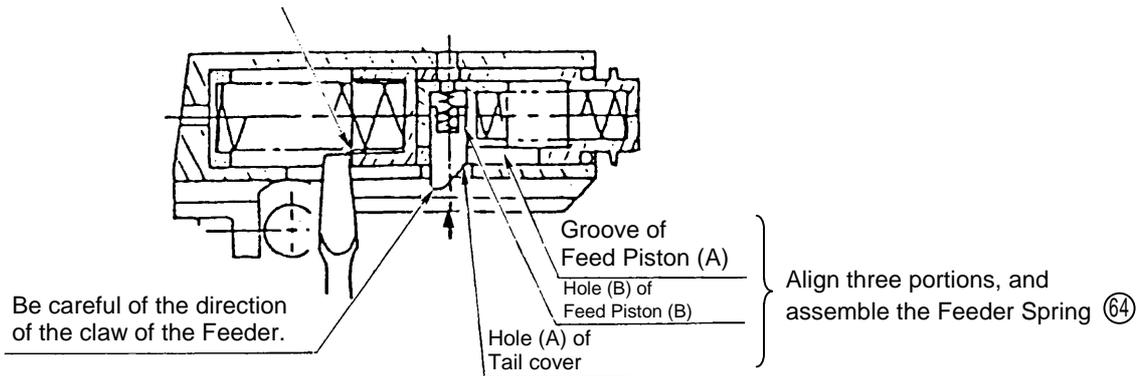


Fig. 23 Reassembly of Feeder and Related Parts

1-4 Disassembly and Reassembly of the Magazine: (Model NC 65AC Only)

Tool Required:

- Minus Screwdriver (Tip thickness: 1 - 0.5 mm [.036" - .020"] or similar steel plate)
- (1) Disassembly: (Refer to Fig. 24)
- Loosen the Knob Bolt (45), and extract the Magazine (68) backward. The Magazine (68) and related parts can then be disassembled from the Body (24).
 - Insert a minus screwdriver into a gap between the Magazine (68) and magazine Cover (71), and remove the Retaining Ring (69). The Magazine Cover (71) can be taken off by extracting the Hinge Pin (67).
- (2) Reassembly: (Refer to Fig. 24)
- Reassembly can be accomplished by following the disassembly procedures in reverse. However, special attention should be given to the following items.
- Assemble the Retaining Ring (69) onto the groove of the Hinge Pin (67), and check that the Retaining Ring is properly rested in the groove.

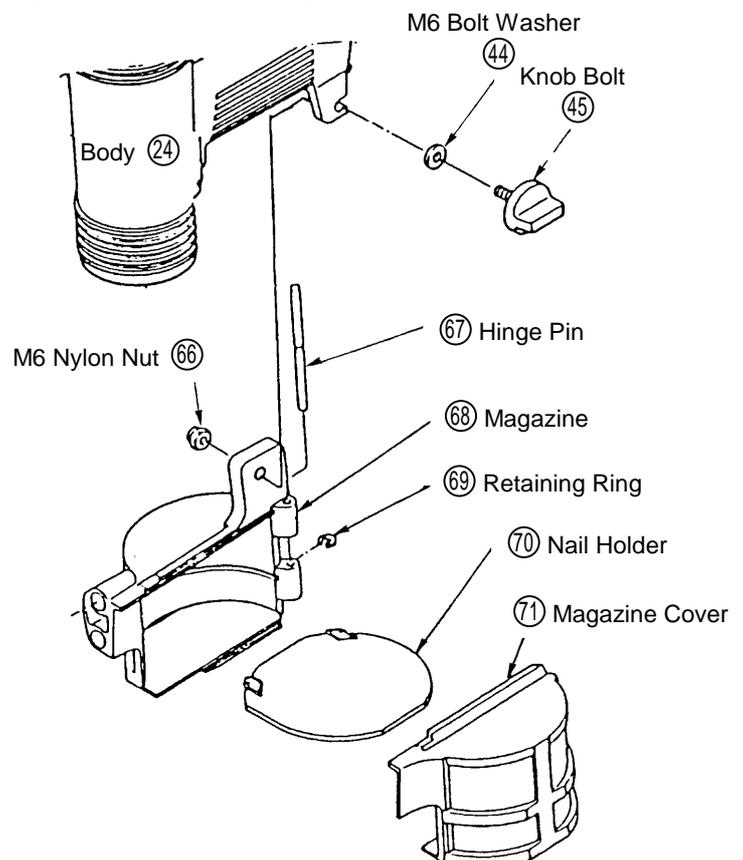


Fig. 24

1-5 General Precautions on Reassembly:

- Apply grease (Hitachi Motor Grease, Code No. 930035, is recommended) on the O-Ring and O-Ring sliding surfaces. When assembling the O-Rings, be particularly careful not to damage them, or permit dust or other foreign matter to enter the mechanism.
- If the Packing are damaged, replace them without fail and ensure that there is no leakage after repair.
- Be particularly careful not to permit dust or other foreign matter to enter the Valve Section.
- Coat a small amount of grease or Hitachi Nailer-Tacker Oil on the sliding portion of the Nail Feeding Section.
- Rated tightening torques for fastening bolt and screws are as follows:

Bolt/Nut type	Rated Tightening Torque
M8 x 25 Seal Lock Hex Socket Hd. Bolts (33)	410 ± 10 kg-cm (356 ± 9 in-lbs)
M5 x 10 Hex Socket Hd. Bolts (62)	85 ± 5 kg-cm (74 ± 4.3 in-lbs)
M5 x 30 Hex Socket Hd. Bolts (1)	65 ± 5 kg-cm (56 ± 4.3 in-lbs)
M4 x 8 Seal Lock Hex Socket Hd. Bolts (74)	45 ± 3 kg-cm (39 ± 2.6 in-lbs)

1-6 Inspection and Confirmation After Reassembly or Repair:

- Push the Nail Stopper (76) and Feeder (65) of the Tail Cover on the Nail Guide Section with a finger, and confirm that they return smoothly.
- There is no air leakage on each part.
- The Feed Piston should properly operate at an air pressure of 5 kg/cm² [70 psi] (Open the Nail Guide, and pull the Nail Feed Valve [Knob (43)].)
- Drive a nail with air pressure 5 kg/cm² (70 psi) , and reconfirm the tightening torque of each bolt.