



# MODEL DH 38YE

## 1. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY:

The circled figures in the descriptions below correspond to the item numbers in the Parts List.

### 1-1. Disassembly:

#### 1-1-1. Piston and Striker O-Rings:

By removing the M6 x 25 Hex Socket Hd. Bolts (62), the Cylinder Case (63) may be removed from the Crank Case (47). As the Piston (58) remains in the Crank Case side, removal of the Connecting Rod (60) from the Crank Shaft (41) will be sufficient. The Striker (55) can be removed by tapping the Cylinder Case lightly with a plastic hammer.

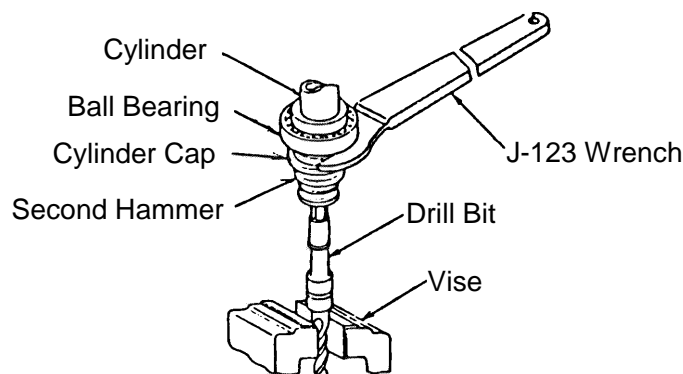
If the Striker cannot be easily removed, reinsert the Piston, together with the Connecting Rod, into the Cylinder, and pull it out again in a quick motion; the Striker should come out simultaneously.

#### 1-1-2. Disassembly of Cylinder:

Remove the Cylinder Case (63) from the Crank Case (47): take the Front Cover (7) off of the Cylinder Case (63); and you can then remove the Third Gear (66), Clutch (57), Spring A (18), Cylinder Ring (16), Damper Ring (11), Damper (12), and Second Hammer (10).

Next, as illustrated below, fit a drill bit into the tool holder, and secure it with a vise.

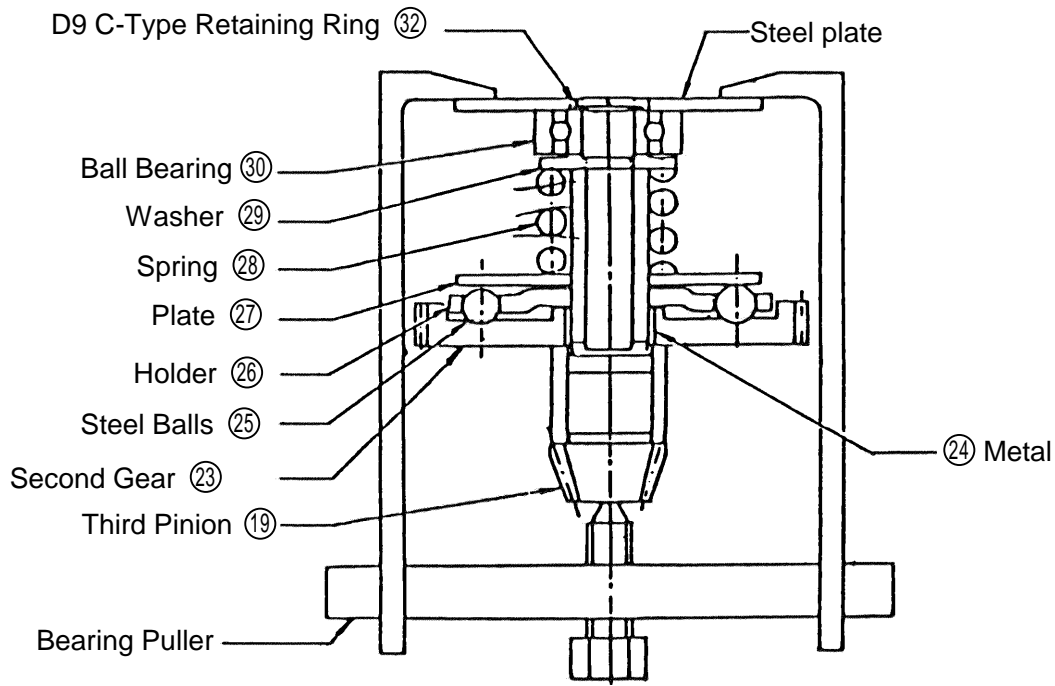
Then mount the Second Hammer (10) and Cylinder (54) onto the drill bit. Finally, fit a Wrench (J-123) [Code No. 970885] on the flat surfaces of the Cylinder Cap (13), and rotate it counterclockwise to loosen and remove the Cylinder Cap.



After the Cylinder Cap has been removed, press off the Ball Bearing (15) with a hand press. The Cylinder can then be completely removed.

#### 1-1-3. Disassembly of the Slip Clutch Mechanism:

First, place an appropriate steel plate on the Ball Bearing (30). Then, as illustrated below mount a bearing puller (special repair tool J-30 Bearing Puller Ass'y [Code No. 970804] recommended) on the steel plate and Third Pinion (19), apply pressure from the Second Gear (23) side to compress the Spring (28), and remove the C-Type Retaining Ring (32). After removing the Ball Bearing (30), the remaining parts can be disassembled.



## 1-2. Reassembly:

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

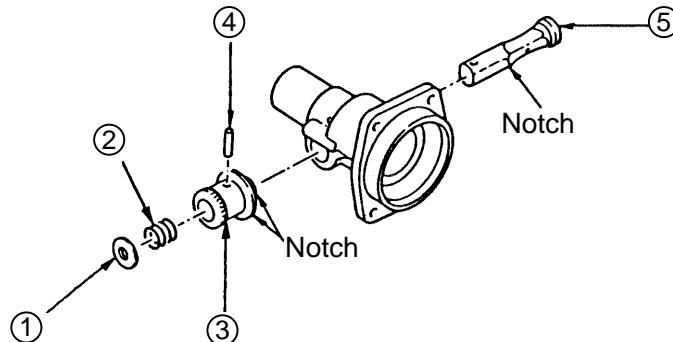
### 1-2-1. Lubrication:

Special Grease must be applied to the Needle Bearing of Connecting Rod Ass'y (60) the O-Rings attached to the Striker (55) and Piston (58), the 6007 Ball Bearing (15), and the O-Ring (C) (9). 50g (0.11 lbs) of Special Grease must be inserted in the Crank Case (47) (Connecting Rod side), and 20g (0.044 lbs) of Special Grease must be inserted in the Cylinder Case.

Ensure that Grease (N. P. C. SEP-3A) (Code No. 930035) is applied to the Needle Bearing (52), the piston portion of the Armature Ass'y (82), and Oil Seal (A) (46). Insert 40g (0.088 lbs) of Grease into the Gear Cover (53).

### 1-2-2. Reassembly of the Tool Retainer:

Ensure that the notched portions (A) of the Stop Lever (5) and the Knob (3) are properly aligned and assembled, as shown in the illustration. If not correctly aligned and assembled, the bull point cannot be properly inserted into the Tool Holder.



### 1-2-3. Oil Seals:

Take particular care not to damage the Crank Cover O-Ring (39), the Piston and Striker O-Ring (56), the Crank Case Oil Seal A (46) and B (22), the Cylinder Case Assembly O-Ring (8), and the Second Hammer O-Ring (9).

### 1-2-4. Reassembly of the Slip Clutch Portion:

Reassembly can be accomplished by following the disassembly procedures in reverse. After pressure fitting the Ball Bearing (30) onto the Third Pinion (19), apply pressure on the Ball Bearing from the Second Gear (23) side with a bearing puller and mount the C-Type Retaining Ring (31).

## 1-3. Adhesives and Screw Locking Agents

1-3-1. Apply Screw Locking Agent TB1401 to all M4, M5 and M6 Hexagon Socket Hd. Bolts (36), (44), (35), (62), and (94) before tightening them.

NOTE: If the bolts become loosened due to vibration, the tool body may be damaged. Be sure to apply the specified adhesive to the threads before tightening the bolts. Also, before applying the adhesive, carefully clean the male and female threads with gasoline or thinner.

1-3-2. The M7 x 25 Bolts (Seal Lock Bolts) (6) which fasten the Front Cover (7) are specially designed and processed (coated with blue colored adhesive) . If they are removed, ensure without fail that they are replaced with Hitachi genuine 'Seal Lock Bolts'.

### 1-4. Tightening Torque:

D4 tapping screw (89) (109) (113)	$20 \pm 5$ kgf-cm ( $17.4 \pm 4.3$ lb-in)
D5 tapping screw (83) (105)	$30 \pm 5$ kgf-cm ( $26.0 \pm 4.3$ lb-in)
D6 tapping screw (111)	$40 \pm 5$ kgf-cm ( $34.7 \pm 4.3$ lb-in)
M4 hexagon socket head bolt (36)	$50 \pm 5$ kgf-cm ( $43.4 \pm 4.3$ lb-in)
M5 hexagon socket head bolt (44)	$80^{+20}_0$ kgf-cm ( $69.4^{+17.4}_0$ lb-in)
M6 hexagon socket head bolt (35) (62) (112)	$100^{+20}_0$ kgf-cm ( $86.8^{+17.4}_0$ lb-in)
Housing fastening M6 x 50 bolt (94)	$50^{+20}_0$ kgf-cm ( $43.4^{+17.4}_0$ lb-in)
Front cover fastening M7 x 25 bolt (6)	$200^{+10}_0$ kgf-cm ( $174^{+9}_0$ lb-in)

### 1-5. Insulation Tests:

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

Insulation Resistance ..... 7MΩ or more with DC 500 V Megohm Tester

Dielectric Strength ..... 2,500 V/1 min., with no abnormalities.

### 1-6. No-Load Amperage:

After 30 minutes no-load running, no-load amperage measured in laboratory is as follows: 115 V 50/60 Hz ..... up to 5A.