



## MODEL H 41SC

### 1. REPAIR GUIDE

#### 1-1. Precautions and Suggestions for Disassembly and Reassembly of the Main Body

The numbers in the descriptions below correspond to the item numbers in the parts list and exploded assembly diagrams.

##### 1-1-1. Disassembly

- Piston and Striker O-Rings

Remove the four Nylock Bolts (W/Flange) M6x25 [9] from the Cylinder Case Ass'y [7], and disassemble the Cylinder Case Ass'y [7] from the Crank Case [28]. As the Piston [15] remains in the Crank Case side, only the Connecting Rod [17] need be removed from the Crank Shaft [21]. The Striker [12] can be removed by tapping the Cylinder Case Ass'y lightly with a plastic hammer. If it does not come out easily, push the reassembled Connecting Rod and Piston back into the Cylinder [10], and pull them apart again quickly. The Striker should come out at the same time.

- First Gear disassembly

Remove the grease from the First Gear [32] side of the Crank Case [28]. Then, use a bearing puller (Special Repair Tool J-30, Code No. 970804), to remove the First Gear. (See Fig. 1)

Be particularly careful during disassembly. The Ball Bearing [25] of the Crank Shaft [21] is secured by a C-Type Retaining Ring [23]. If removal is attempted by applying pressure on the end surface of the Crank Shaft [21] with a hand press, as is commonly done with conventional hammers, the C-Type Retaining Ring will be damaged.

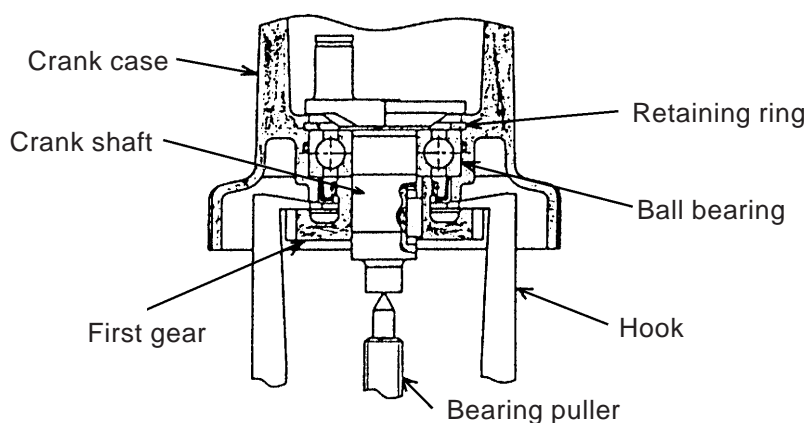
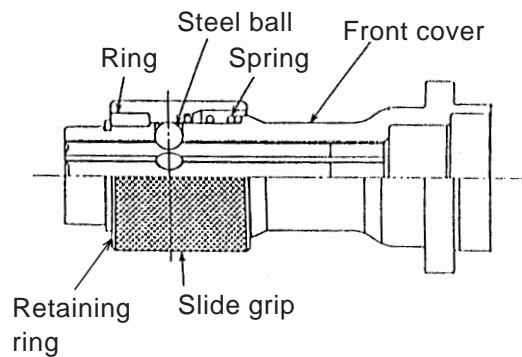


Fig. 1

- Retainer disassembly (See Fig. 2)

Remove the Front Cover Set [2] from the Cylinder Case Ass'y [7] and remove the Retaining Ring using the snap ring remover. Then the ring, slide grip, spring and six steel balls can be removed from the Front Cover Set [2].



**Fig. 2**

### 1-1-2. Reassembly

Reassembly can be accomplished by following the disassembly procedures in reverse.

However, special attention should be given to the following items.

- Lubrication

Apply special grease (grease for electric impact drills) to the inner portion of the Connecting Rod [17], the O-Rings [13] of the Striker [12] and Piston [15], the O-Ring (A) [8] of the Cylinder Case Ass'y [7], and the Oil Seal [26]. Seal 37 (13 oz) g of special grease inside the Crank Case [28] (Connecting Rod [17] side).

Apply Hitachi Motor Grease (SEP-3A) to the Needle Bearing (M661) [34] and the pinion portion of the armature. Insert 20 g (0.7 oz) of Hitachi Motor Grease (SEP-3A) onto the First Gear [32] side in the Crank Case [28].

- Oil Seal

Be very careful not to damage the Crank Cover O-Ring [20], the Piston and Striker O-Rings [13], Crank Case Oil Seal [26], the Cylinder Case Ass'y O-Ring [11], and O-Ring (A) [8].

### 1-1-3. Screw Locking Agent TB1401

CAUTION : Do not re-use the M6 and M7 nylock bolts once they are loosened.

They must be replaced by new ones, and it could cause serious damage to the hammer should the M6 and M7 nylock bolts be used repeatedly.

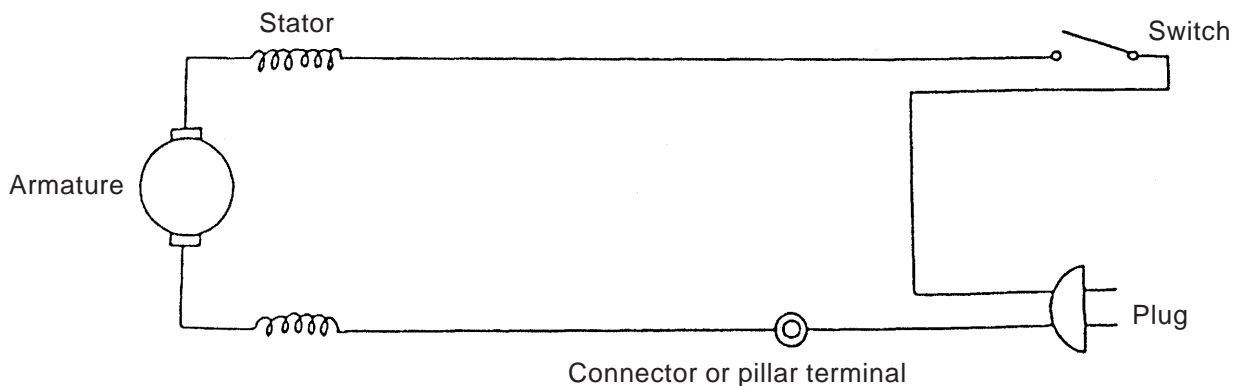
For other M4 and M5 hexagon socket hd. bolts, apply screw locking agent TB1401 prior to reassembly.

### 1-1-4. Tightening Torque

(1) Hex. socket hd.bolts M4	$4.4^{+0.49}_{-0} \text{ N}\cdot\text{m}$ ( $45^{+5}_{-5} \text{ kgf}\cdot\text{cm}$ )	( $39.1^{+4.3}_{-4.3} \text{ in-lbs}$ )
(2) Hex. socket hd.bolts M5	$4.9^{+1.96}_{-0} \text{ N}\cdot\text{m}$ ( $50^{+20}_{-0} \text{ kgf}\cdot\text{cm}$ )	( $43.4^{+17.4}_{-0} \text{ in-lbs}$ )
(3) Tapping screws D4	$1.96^{+0.49}_{-0} \text{ N}\cdot\text{m}$ ( $20^{+5}_{-5} \text{ kgf}\cdot\text{cm}$ )	( $17.4^{+4.3}_{-4.3} \text{ in-lbs}$ )
(4) Tapping screws D5	$2.94^{+0.49}_{-0} \text{ N}\cdot\text{m}$ ( $30^{+5}_{-5} \text{ kgf}\cdot\text{cm}$ )	( $26.1^{+4.3}_{-4.3} \text{ in-lbs}$ )
(5) Hex. socket hd. bolts (w/flange) M5	$5.88^{+0.98}_{-0.49} \text{ N}\cdot\text{m}$ ( $60^{+10}_{-5} \text{ kgf}\cdot\text{cm}$ )	( $52.1^{+8.7}_{-4.3} \text{ in-lbs}$ )
(6) Attached nylock bolts of front cover (Hex. socket hd. bolts M7 x 25)	$19.6^{+0.98}_{-0} \text{ N}\cdot\text{m}$ ( $200^{+10}_{-0} \text{ kgf}\cdot\text{cm}$ )	( $173.6^{+8.7}_{-0} \text{ in-lbs}$ )
(7) Attached nylock bolts of cylinder case (Hex. socket hd. bolts M6 x 25)	$9.8^{+1.96}_{-0} \text{ N}\cdot\text{m}$ ( $100^{+20}_{-0} \text{ kgf}\cdot\text{cm}$ )	( $86.8^{+17.4}_{-0} \text{ in-lbs}$ )

### 1-1-5. Wiring Diagrams

- For products without noise suppressor



- For products with noise suppressor

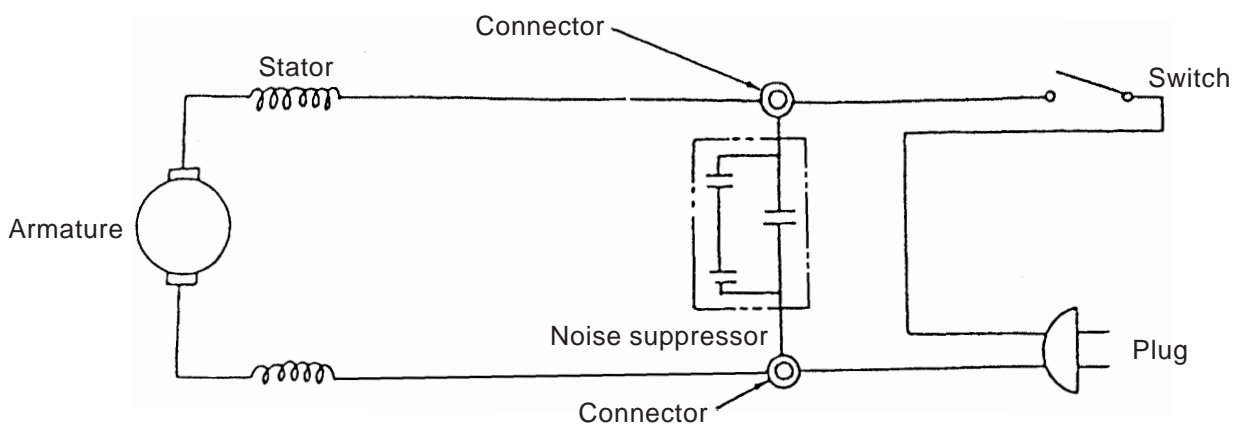


Fig. 3

#### 1-1-6. Insulation Tests

On completion of disassembly and repair, measure the insulation resistance and dielectric strength.

Insulation resistance : 7 M $\Omega$  or more with DC 500 V 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)

#### 1-1-7. No-Load Current Value

After no-load operation for 30 minutes, the no-load current value should be as follows:

Voltage (V)	110	220	230	240
Current (A) (Max.)	4.5	2.3	2.2	2.1

## 2. STANDARD REPAIR TIME (UNIT) SCHEDULES

MODEL	Variable Fixed	10	20	30	40	50	60 min.
H 41SC		Work Flow					
			Switch (A) Cord				Housing Ass'y Stator Ass'y
						Gear Cover Ass'y Needle Bearing	
	General Assembly			Handle (A) Handle (B) Transatory Unit		Armature Ass'y BB (608VV) BB (6201VV) Washer (A) Washer (B)	Crank Case
	Fixed Costs Switch (A) Front Cover Ass'y Cord Others	0 minute 10 minute 20 minute	Front Cover Ass'y Second Hammer Damperx2 Damper Washer O-Ringx2 Washer	Connecting Rod Piston O-Ringx2 Striker Piston Pin		Crank Shaft First Gear BB (6203DD) Oil Seal O-Ring (S-40) Feather Key (4x4x10) Cylinder Case Ass'y	