

# Hitachi Power Tools

TECHNICAL DATA AND SERVICE MANUAL

LIST No.  
DH 38MS: H402  
May 2009

PRODUCT NAME .....

## Hitachi Rotary Hammer

Model **DH 38MS**

MARKETING OBJECTIVE .....

The new Model DH 38MS is capable of drilling holes of up to 38 mm in diameter into concrete and is compatible with SDS max shank tools.

APPLICATIONS .....

- Drilling holes in concrete and drilling anchor holes.
- Demolishing and chiseling concrete. Edging, gravel road digging, compacting and tamping, grooving, cutting, stripping and roughing, etc.

SELLING POINTS .....

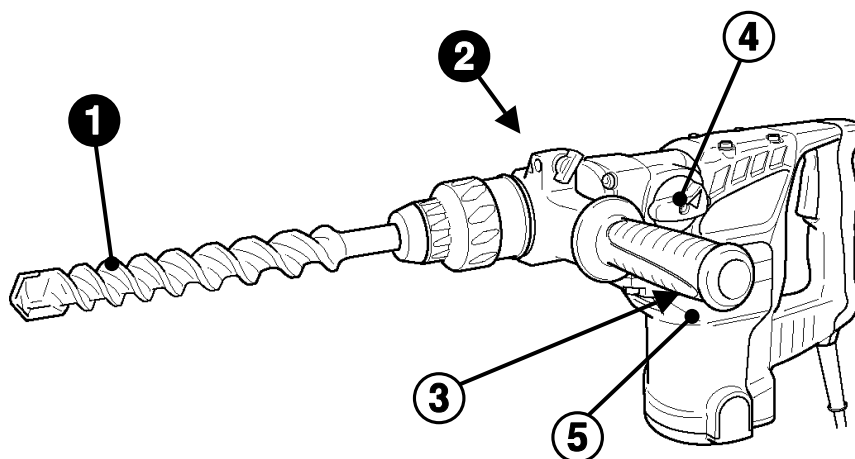
SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.

<New features>

- 1 Fastest drilling speed and best chiseling performance in its class
- 2 Functional and robust design

<Same features as the conventional models>

- 3 Easy-to-operate with a double-molded side handle
- 4 Variable lock mechanism for easy working-angle adjustment of chisels, etc.
- 5 Needle-pin type of slip clutch



**HITACHI**

 **Hitachi Koki Co., Ltd.**  
International Sales Division

**REMARKS:**

For more information about HANDLING INSTRUCTIONS, visit our website at:

[http://www.hitachi-koki.com/manual\\_view\\_export/](http://www.hitachi-koki.com/manual_view_export/)

This TECHNICAL DATA AND SERVICE MANUAL utilizes a symbol to denote the company name and model name of our competitor. The symbol utilized herein is as follows:

Symbol utilized	Competitors	
	Company name	Model name
B	BOSCH	GBH5-38D

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Assembly Diagram for DH 38MS	

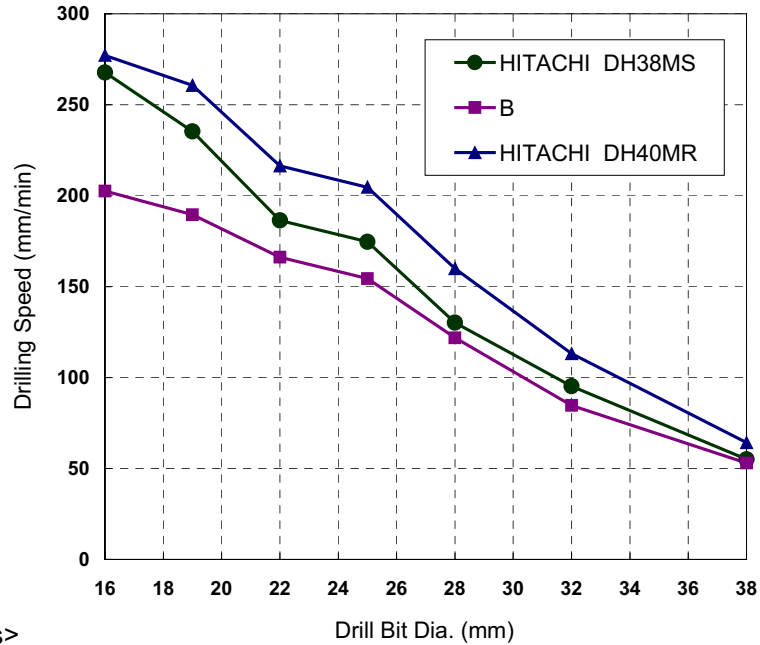
# SELLING POINTS

## 1 Fastest drilling speed and best chiseling performance in its class\*

We conducted digital engineering to determine the optimal impact specifications. As a result, the Models DH 38MS offers the fastest drilling speed and best chiseling performance in its class.

\*Based on our own research

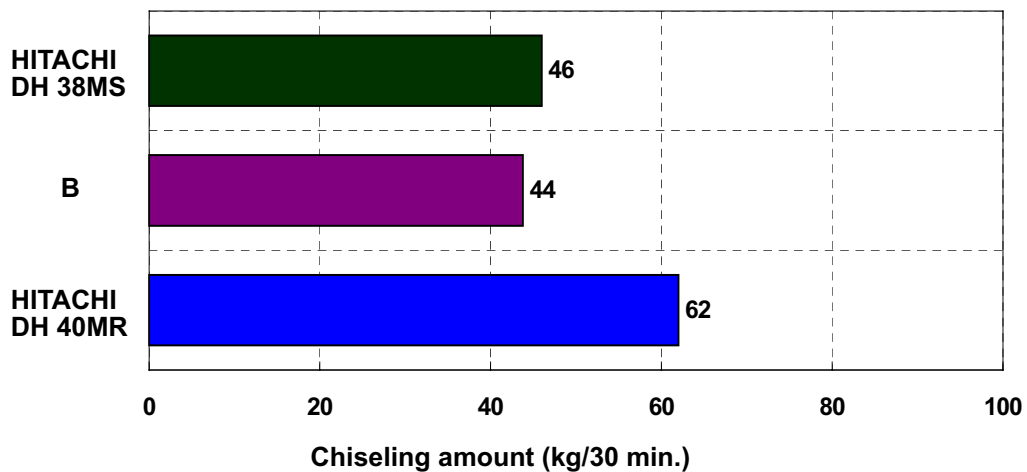
### ● Comparison of drilling speed



### <Test conditions>

Direction: Downward drilling  
 Pushing force: 98 N (10 kgf)  
 Test material: Concrete panel with a compression strength of 2,352 N/cm<sup>2</sup> (240 kgf/cm<sup>2</sup>)

### ● Comparison of chiseling performance



Chiseling performance varies considerably depending on the work conditions.  
 Use the factory test results for comparison purposes only.

Refer to the Technical Data and Service Manual of the current Model DH 40MR for the following.

## DH 40MR / List No. E467

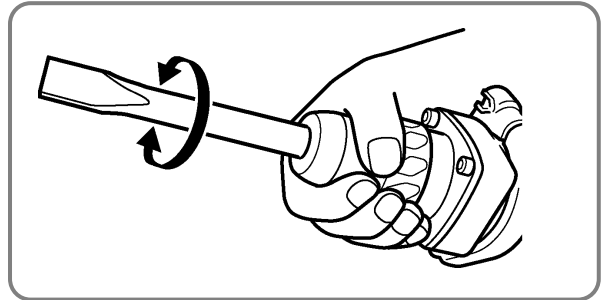
### ③ Easy-to-operate and double-molded side handle

The base material of the side handle is plastic resin. The plastic resin base is integrally molded with soft resin to realize a double-layer structure. As a result, the grip of the soft side handle affords easier operation.

### ④ Change lever for switching between “Rotation + Hammering,” “Neutral” and “Hammering only”

The Models DH 38MS provides three functions; the “rotation + hammering” function (for drilling), “neutral” function (for positioning the tool tip) and “hammering only” function (for chiseling and chipping).

These function modes can be easily switched by using the change lever. The tool angle can be easily changed in 12 steps by turning the grip with the change lever positioned at “Neutral.”



### ⑤ Needle-pin type of slip clutch

The Model DH 38MS is equipped with a needle-pin type of slip clutch for higher slip torque accuracy and enhanced safety (same as the Model DH 40MR).

# SPECIFICATIONS

## 1. Specifications

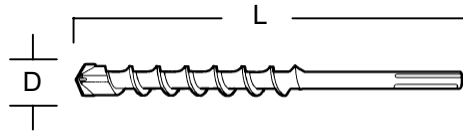
Model	-	DH 38MS				
Capacity	mm	Drill bit (max. dia.): 38 (1-31/64")				
		Core bit (max. dia.): 105 (4-9/64")				
Voltage	V	110	120	220	230	240
Current	A	9.1	8.4	4.6	4.4	4.2
Power input	W	950				
Enclosure	-	Materials : Aluminum alloy die casting (Cylinder case, crank case, gear cover) Nylon resin (Handle, handle cover, tail cover, crank cover) Polycarbonate resin (Housing) Paint : Green, black, silver metallic green				
Switch	-	Trigger switch				
Type of handles	-	D-shaped handle and side handle				
No load rotation rate	min <sup>-1</sup>	620				
Full load impact rate	min <sup>-1</sup>	2,800				
Packaging	-	Plastic case				
Weight	Product*	kg (lbs.)	6.4 (14.1)			
	Packed		9.5 (20.9)			
Standard accessories	-	· Plastic case ----- 1 · Side handle ----- 1				

\*: Excluding cord and side handle

## 2. Optional Accessories

(1) Drilling work for through-hole drilling (rotation + impact)

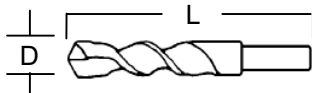
Drill bit (SDS max shank)



D mm	L mm	Code No.	D mm	L mm	Code No.
16 (5/8")	340 (13-3/8")	313448	16 (5/8")	540 (21-1/4")	313456
19 (3/4")	340 (13-3/8")	313449	19 (3/4")	540 (21-1/4")	313457
22 (7/8")	320 (12-5/8")	313450	22 (7/8")	520 (20-15/32")	313458
25 (1")	320 (12-5/8")	313451	25 (1")	520 (20-15/32")	313459
28 (1-1/8")	370 (14-9/16")	313452	28 (1-1/8")	570 (22-7/16")	313460
32 (1-1/4")	370 (14-9/16")	313453	32 (1-1/4")	570 (22-7/16")	313461
38 (1-1/2")	370 (14-9/16")	313454	38 (1-1/2")	570 (22-7/16")	313462

(2) Drilling work for anchor holes (rotation + hammering)

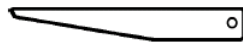
Drill bit (taper shank)



(1) Drill bit (taper shank)



(2) Taper shank adapter  
(SDS max shank)



(3) Cotter

(1) Drill bit (taper shank)			(2) Taper shank adapter		(3) Cotter
D mm	L mm	Code No.	Taper dimension	Code No.	Code No.
11.0 (7/16")	100 (4")	944460	Morse taper No. 1	313464	944477
12.3 (15/32")	110 (4-5/16")	944461			
14.3 (9/16")	110 (4-5/16")	944462			
14.5 (9/16")	110 (4-5/16")	944500			
17.5 (11/16")	120 (4-3/4")	944463			

SDS-plus shank bit adapter



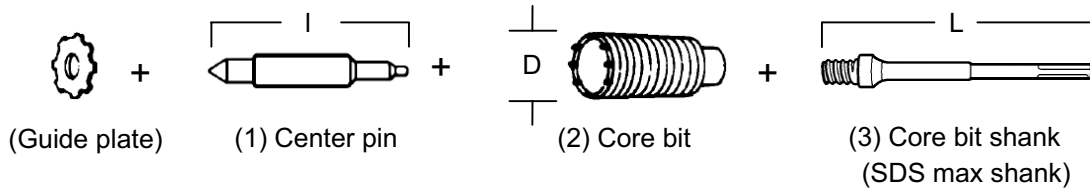
Drill bit (SDS-plus shank)



SDS-plus shank  
bit adapter  
(SDS max shank)

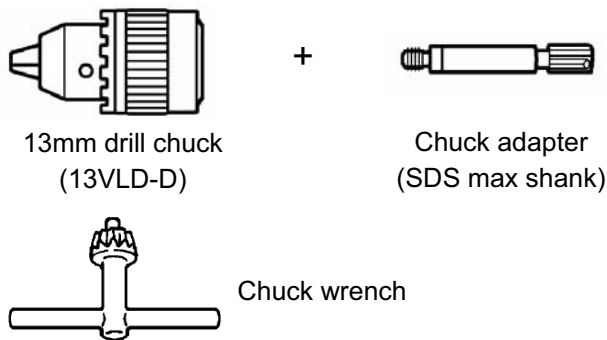
Code No.
313465

(3) Boring work for large-diameter holes (rotation + hammering)



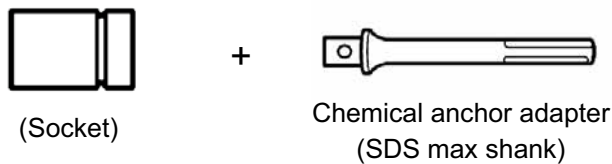
(2) Core bit			(1) Center pin		(3) Core bit shank (SDS max)	
D mm	Code No.	Guide plate	l mm	Code No.	L mm	Code No.
25 (1")	955994	-	147 (5-25/32")	956009	300 (11-13/16")	313466
29 (1-1/8")	955995	-				
32 (1-1/4")	955996	○				
35 (1-3/8")	955998	○				
38 (1-1/2")	956000	○	133 (5-1/4")	955165	300 (11-13/16")	313467
45 (1-3/4")	955154	○				
54 (2-1/8")	955155	○				
64 (2-1/2")	956002	○				
79 (3-1/8")	955157	○				
94 (3-11/16")	956004	○				
105 (4-1/8")	955159	○				

(4) Hole drilling



13-mm drill chuck (13VLD-D) with chuck wrench	Chuck adapter
Code No.	Code No.
321813	313468

(5) Chemical anchor holes drilling work (rotation + hammering)

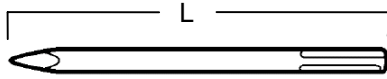


Socket square size mm	Code No.
12.7 (1/2")	313469
19.0 (3/4")	313470



(6) Demolishing work (hammering)

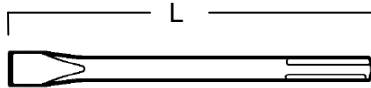
Bull point (SDS max shank)



L mm	Code No.
280 (11")	313471
450 (15-3/4")	313472

(7) Groove digging and edging (hammering)

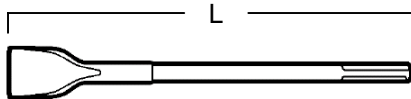
Cold chisel (SDS max shank)



L mm	Code No.
280 (11")	313473
450 (15-3/4")	313474

(8) Cutting and stripping (cutting asphalt etc.) (hammering)

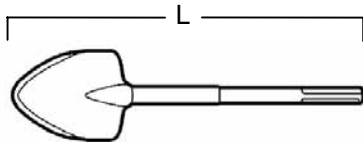
Cutter (SDS max shank)



L mm	Width mm	Code No.
400 (15-3/4")	50 (2")	313475

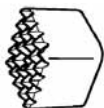
(9) Scooping work (hammering)

Scoop (SDS max shank)



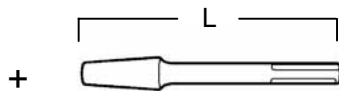
L mm	Code No.
400 (15-3/4")	313476

(10) Surface roughing work (hammering)



Bushing tool

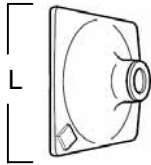
Code No.
313477



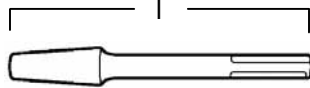
Shank (SDS max shank)

L mm	Code No.
220 (8-21/32")	313479

(11) Tamping work (hammering)



+



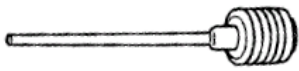
Rammer

L mm	Code No.
150 (5-29/32")	313478

Shank (SDS max shank)

l mm	Code No.
220 (8-21/32")	313479

(12) Syringe (for chip removal)



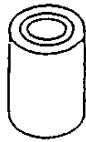
Bellows



Blow-out bulb

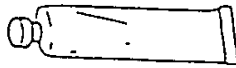
Syringe	Code No.
Bellows	318085
Blow-out bulb	320859

(13) Grease



500 g (1.1 lbs.) can

Code No.
980927



30 g (1 oz) tube

Code No.
981840

**NOTE:**

The code numbers listed above are subject to change without notice.  
Please refer to periodic Technical News Bulletins for updates

## COMPARISON WITH SIMILAR PRODUCTS

### 1. Comparison of Specifications

(Superior specifications: )

Maker			HITACHI		B
Model name			DH 38MS	DH 40MR	
Capacity	Drill bit dia.	mm	38 (1-1/2")	40 (1-9/16")	38 (1-1/2")
	Core bit dia.	mm	105 (4-1/8")	105 (4-1/8")	90 (3-17/32")
Power input		W	950	950	1,050
Full-load rotation rate		min <sup>-1</sup>	510	240 - 480	340
Full-load impact rate		min <sup>-1</sup>	2,800	1,320 – 2,650	3,000
Full-load vibration level (Tri-axial, measured)		m/s <sup>2</sup>	16.1	18.8	16.1
No-load noise level (measured)		dB	85.0	81.2	85.7
Full-load noise level (measured)		dB	92.7	92.3	93.3
Tool size	Length	mm	433 (17-1/64")	435 (17-1/8")	430 (16-15/16")
	Height		247 (9-3/4")	255 (10-3/64")	253 (9-31/32")
	Width		103 (4-1/32")	104 (4-7/64")	102 (4-1/16")
Weight*		kg (lbs.)	6.4 (14.1)	6.5 (14.3)	5.8 (12.8)

\*: Weight does not include the cord and side handle

# PRECAUTIONS ON SALES PROMOTION

## 1. Safety Instructions

In the interest of promoting the safest and most efficient use of the Model DH 38MS Rotary Hammer by all of our customers, it is very important that when conducting a sale that the salesperson carefully ensure that the buyer seriously recognizes the importance of Handling Instructions, and fully understands the precautions listed on the Caution Plate and Nameplate attached to each tool.

### A. Handling instructions

Although every effort is made in each step of design, manufacture, and inspection to provide protection against safety hazards, the dangers inherent in using any electric tool cannot be completely eliminated. Accordingly, the Handling Instructions list general precautions and suggestions on the use of electric power tools, and specific precautions and suggestions on the use of rotary hammers to enhance the safe, efficient use of the tool by the customer. Salespersons must be thoroughly familiar with the contents of the Handling Instructions in order to offer appropriate guidance to customers during sales promotion activities.

### B. Caution plate

Each Model DH 38MS unit is provided with a Caution Plate (shown below) that lists basic safety precautions on its use. Carefully ensure that customers fully understand and follow these precautions before using the tool.

[For Australia and New Zealand]

**CAUTION**  
● Read thoroughly **HANDLING INSTRUCTIONS**  
before use.

[For the USA and Canada]

**-WARNING-** ● To reduce the  
risk of injury, user must read  
instruction manual.  
**AVERTISSEMENT** ● Afin de réduire le risque  
de blessures, l'utilisateur doit  
lire le mode d'emploi.

[For China]

**注意：使用前请仔细阅读使用说明书**

## C. Grease replacement procedures

The hammering section and gear change section use different types of grease. There is no need to replenish the grease unless disassembling the tool for repair or in case grease is leaking due to a damaged seal.

Special grease is used for the hammering section. After disassembling the hammering section (inside the cylinder case and crankcase), carefully wipe the old grease off the parts and fill the cylinder case and crankcase (on the connecting rod side) with 50 g of grease. Be careful not to overfill the grease as an excessive amount of grease can cause hammering failure.

The gear change section (inside the gear cover) uses Hitachi Motor Grease No. 29. The proper amount of grease is 30 g. Never use this special grease for the hammering section in the gear change section. Otherwise, the special grease will leak into the motor section and subsequently cause trouble. Periodically change the grease in the slip clutch. Fully fill the slip clutch with Hitachi Motor Grease No. 29.

## REFERENCE MATERIALS

Refer to the Technical Data and Service Manual for the model indicated below.

1. Torque transmission
2. Striking operation
3. Mechanism to prevent idle hammering
4. Slip clutch mechanism
5. Tool holder
6. Sealing and dust-proof structure
7. Switching between "Rotation + Hammering", "Neutral" and "Hammering only"

**DH 40MR / List No. E467**

## REPAIR GUIDE

Be sure to disconnect the power cord plug from the wall outlet before conducting repair. Otherwise, the motor may suddenly run, posing a very dangerous situation.

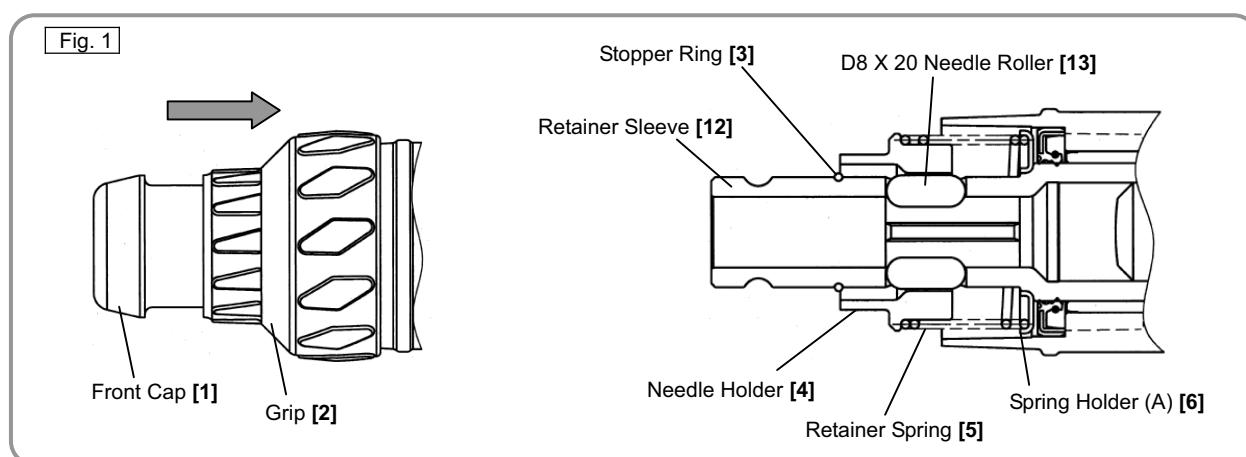
### 1. Precautions on Disassembly and Reassembly

The **[Bold]** numbers in the descriptions below correspond to item numbers in the Parts List and exploded view assembly diagram for the Model DH 38MS.

## Disassembly

### 1. Disassembly of the tool retainer

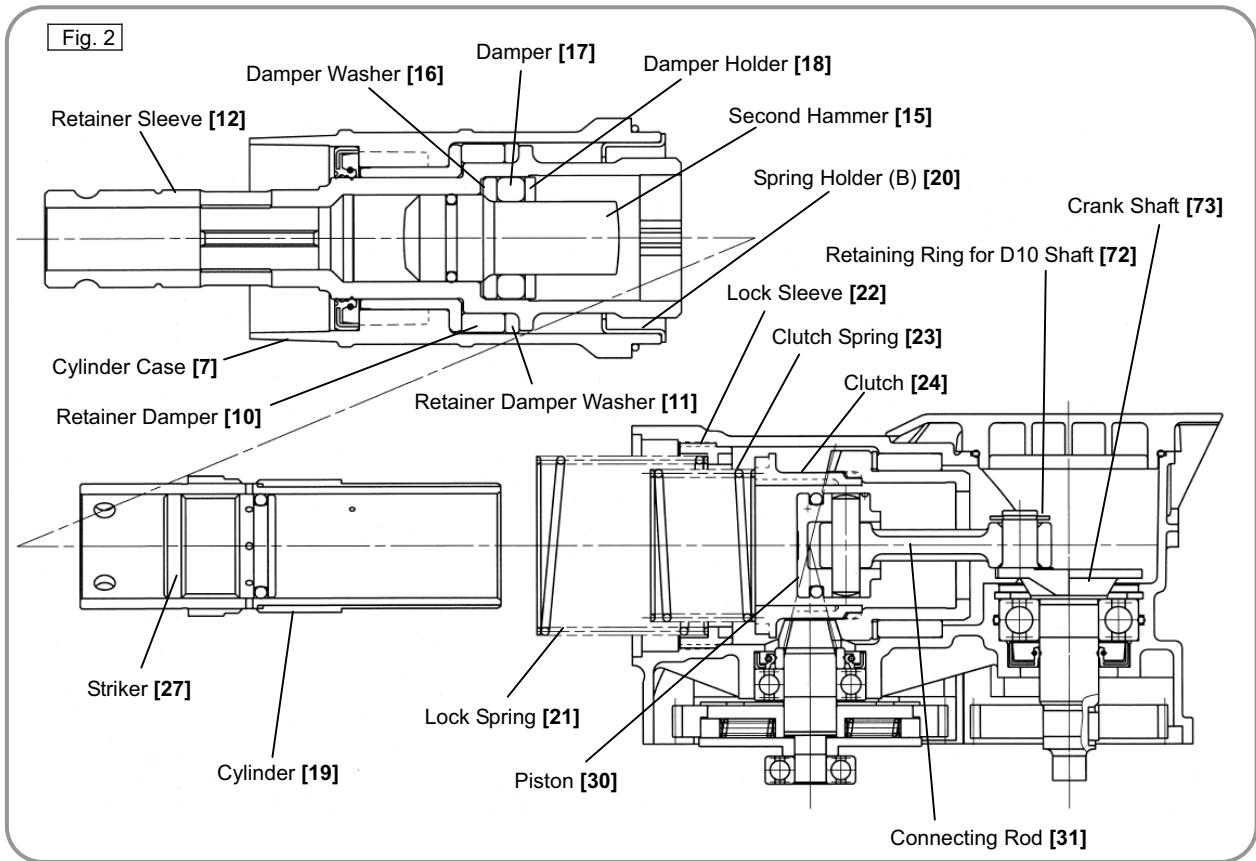
While pulling the Grip **[2]** in the arrow direction, remove the Front Cap **[1]**, which is fitted securely. (Forcibly pull the Front Cap **[1]** to remove it.) Then the Grip **[2]** can be removed from the Retainer Sleeve **[12]**. Remove the Stopper Ring **[3]** by using a retainer ring puller. Then the Needle Holder **[4]**, two Needle Rollers D8 x 20 **[13]**, Retainer Spring **[5]** and Spring Holder (A) **[6]** can be removed from the Retainer Sleeve **[12]** (Fig. 1).



### 2. Disassembly of the hammering mechanism

#### (a) Second Hammer **[15]** and Striker **[27]**

Remove the Seal Lock Hex. Socket Hd. Bolt M5 x 16 **[67]** from the Crank Cover **[68]**. Remove the Crank Cover **[68]** from the Crank Case **[70]**. Remove the Seal Lock Hex. Socket Hd. Bolt M6 x 20 **[64]** and Seal Lock Hex. Socket Hd. Bolt M6 x 45 **[65]**. Remove the Gear Cover **[80]** from the Crank Case **[70]**. Remove the Slip Clutch Ass'y **[49]** from the Crank Case **[70]** beforehand because the Bevel Gear **[25]** cannot be removed with the Slip Clutch Ass'y **[49]** remaining in the Crank Case **[70]**. Remove the Seal Lock Hex. Socket Hd. Bolt M4 x 12 **[32]** and the Change Lever **[33]**. Remove the Retaining Ring for D20 Hole **[35]** securing the Lever Shaft **[36]** with a retaining ring puller. Remove the Lever Shaft **[36]** from the Crank Case **[70]** beforehand because the Bevel Gear **[25]** cannot be removed with the Lever Shaft **[36]** remaining in the Crank Case **[70]**. Remove the Seal Lock Hex. Socket Hd. Bolt (W/Flange) M6 x 25 **[8]**. Then the Cylinder Case **[7]**, Spring Holder (B) **[20]**, Retainer Sleeve **[12]** and other parts can be removed from the main body. Remove the Second Hammer **[15]** from the Retainer Sleeve **[12]** together with the Damper Holder **[18]**, Damper **[17]** and Damper Washer **[16]**. Pull out the Cylinder **[19]** from the main body together with the Lock Spring **[21]**, Lock Sleeve **[22]**, Clutch Spring **[23]** and Clutch **[24]**. Remove the Striker **[27]** by tapping the end surface of the Cylinder **[19]** with a plastic hammer (Fig. 2).

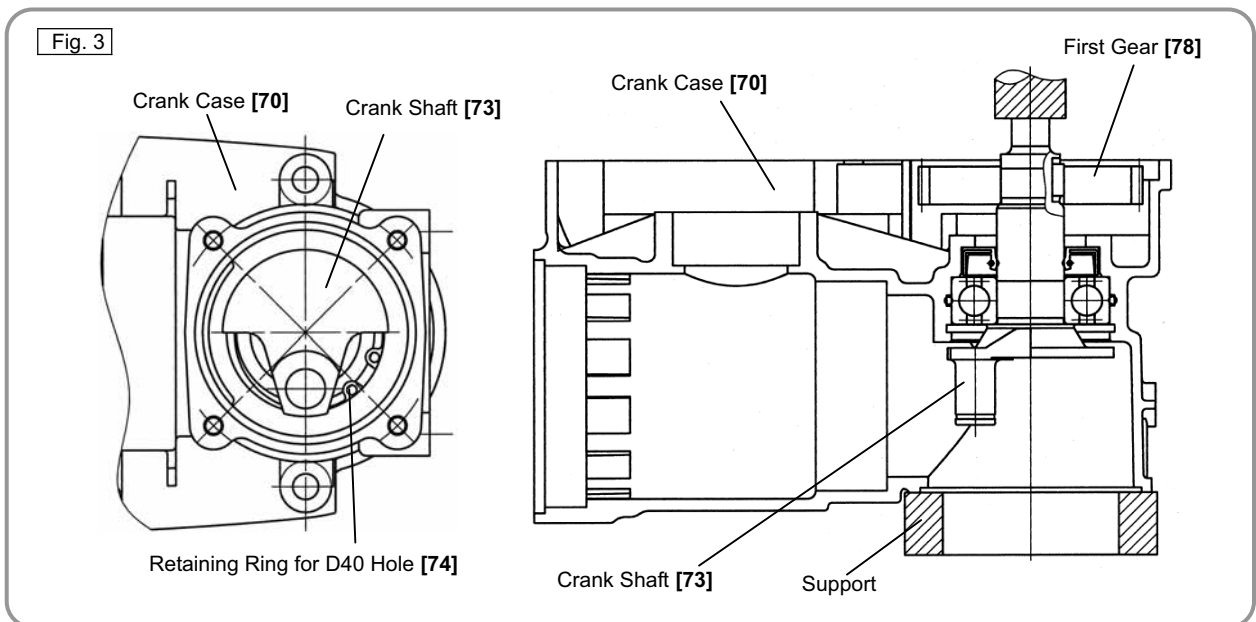


**(b) Piston [30]**

To remove the Piston [30], use a retaining ring puller to remove the Retaining Ring for the D10 Shaft [72], and then remove the Connecting Rod [31] from the Crank Shaft [73].

**(c) First Gear [78] and Crank Shaft [73]**

Remove the Seal Lock Hex. Socket Hd. Bolt M6 x 45 [65], Seal Lock Hex. Socket Hd. Bolt M6 x 20 [64], Hex. Socket Hd. Bolt (W/Flange) M5 x 16 [67] and Tapping Screw (W/Flange) D5 x 30 (black) [95]. Remove the Crank Case [70] from the Housing Ass'y [48] and Handle [97]. Remove grease from the Piston [30] side and First Gear [78] side of the Crank Case [70]. Use a retaining ring puller to remove the Retaining Ring for D40 Shaft [74] fixing the Ball Bearing 6203DDC MPS2L [75]. At this time, turn the Crank Shaft [73] to expose the hole of the Retaining Ring for the D40 Shaft [74] prior to removal. Use a hand press to press the end face of the Crank Shaft [73], and then remove the First Gear [78] and Crank Shaft [73] from the Crank Case [70] (Fig. 3).



(d) Slip Clutch

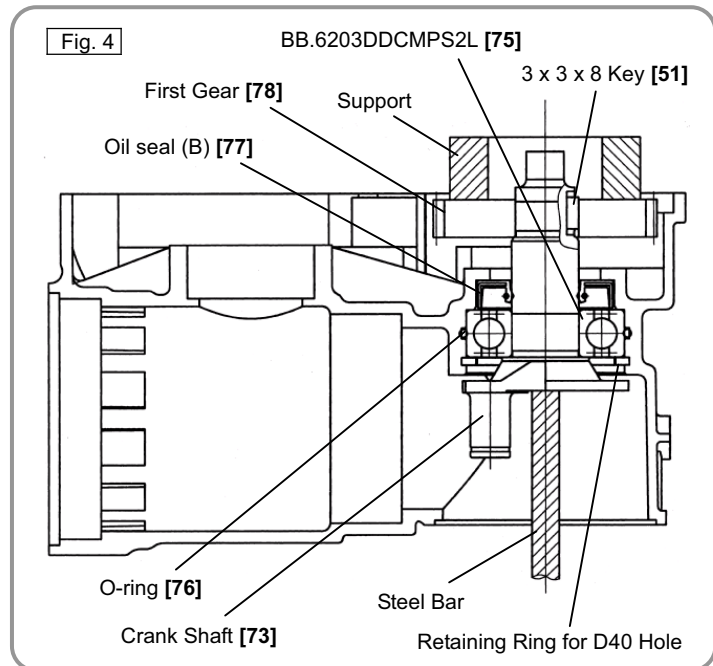
Refer to the Technical Data and Service Manual for the Model DH 40MR (List No. E467) because the slip clutch mechanism is the same as that of the Model DH 40MR.

## Reassembly

Perform reassembly by reversing the order of the disassembly procedure. However, special attention should be given to the following items.

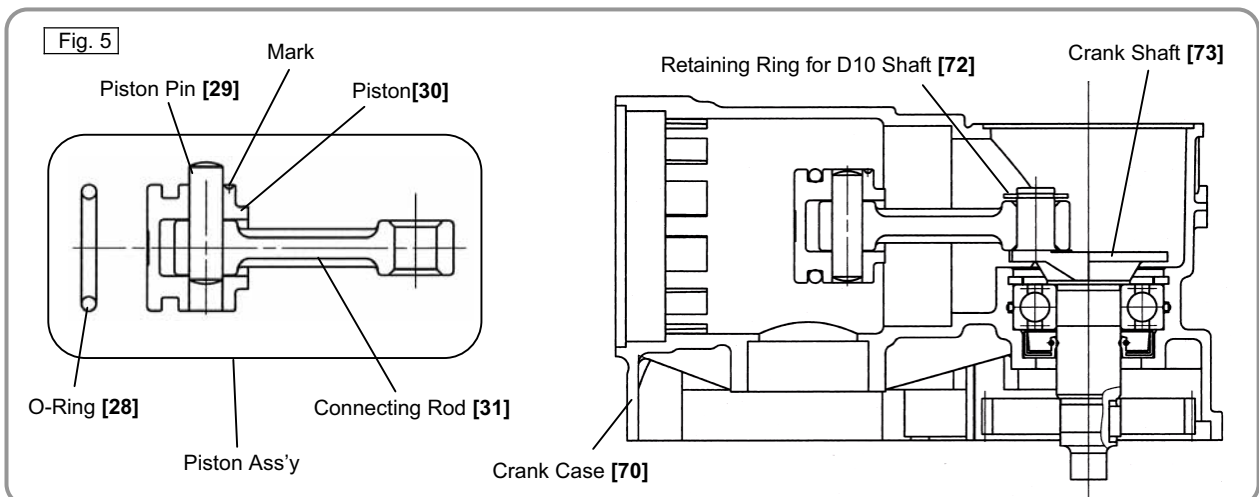
### 1. Reassembly of the hammering mechanism

(a) First Gear [78] and Crank Shaft [73]  
Press-fit Oil Seal (B) [77] into the Crank Case [70] and mount the O-ring [76]. Then press-fit the Ball Bearing 6203DDCMPS2L [75]. Use a retaining ring puller to mount the Retaining Ring for the D40 Shaft [74]. Press-fit the Crank Shaft [73] into Ball Bearing 6203DDCMPS2L [75]. Put the Feather Key 3 x 3 x 8 [51] into the groove of the Crank Shaft [73] and then press-fit the First Gear [78] with a suitable jig, while holding the flat portion of the Crank Shaft [73] with a steel bar. Before press-fitting, make sure that the Feather Key 3 x 3 x 8 [51] fits into the key groove of the First Gear [78] (Fig. 4).



(b) Piston [30]

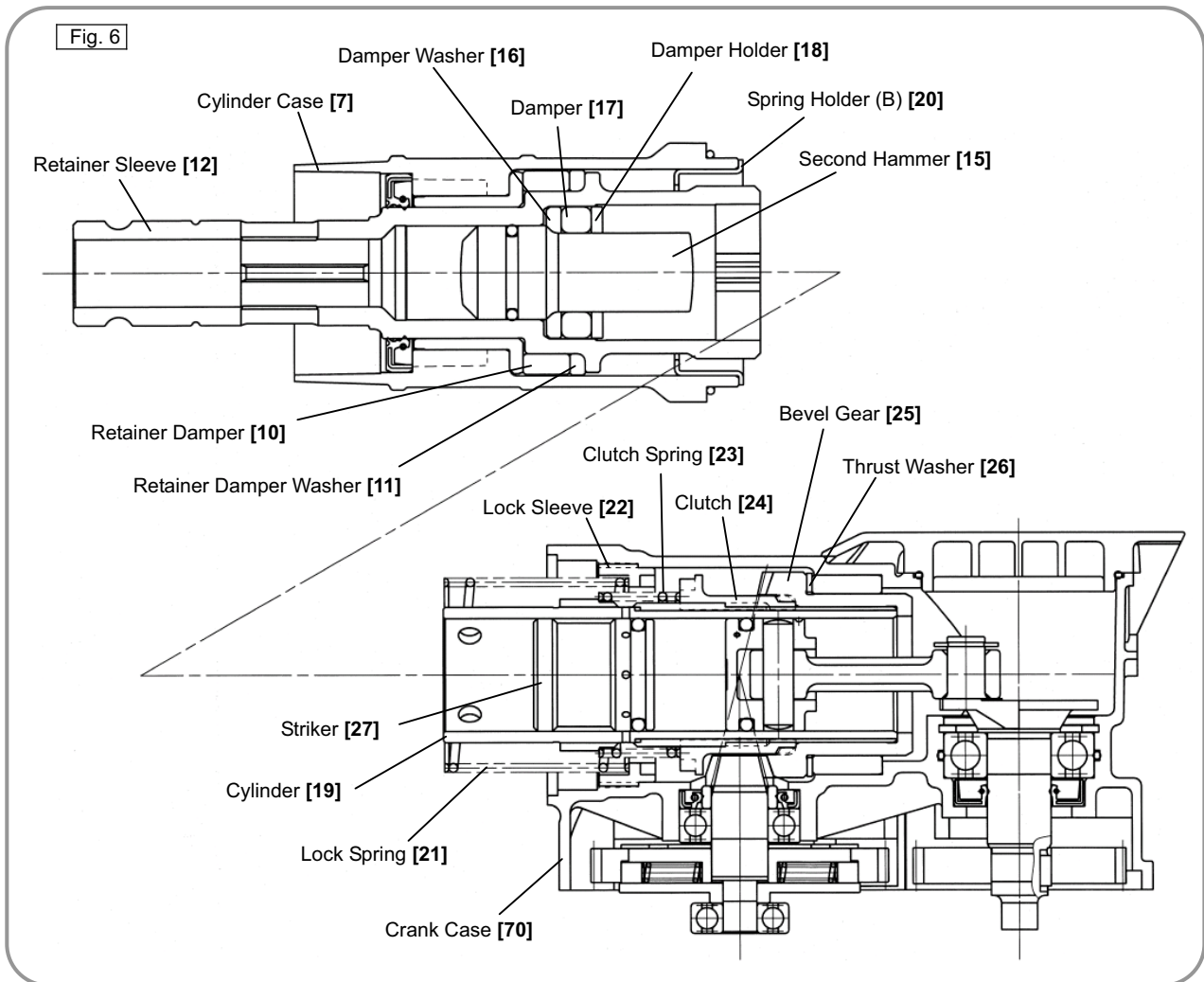
Insert the Connecting Rod [31] into the Piston [30] and then insert the Piston Pin [29] into the 8-mm dia. hole (on the marked side) of the Piston [30]. (Be careful not to protrude the Piston Pin [29] from the outer diameter of the Piston [30].) Mount the O-ring [28] to the Piston [30] to complete the piston ass'y. Move the crank pin of the Crank Shaft [73] to the bottom dead center, and then mount the piston ass'y to the Crank Shaft [73] from the Cylinder Case [7] side of the Crank Case [70]. Use a retaining ring puller to mount the Retaining Ring for the D10 Shaft [72] (Fig. 5).





(c) Cylinder [19] and Retainer Sleeve [12]

Mount the Retainer Damper Washer [11] and Retainer Damper [10] to the Retainer Sleeve [12] in this order by aligning the rounded portion of the Retainer Damper Washer [11] with the rounded portion of the Retainer Sleeve [12]. Mount the Second Hammer [15] (with O-ring (C) [14] mounted), Damper Washer [16], Damper [17] and Damper Holder [18] in this order by aligning the rounded portion of the Damper Washer [16] with the rounded portion of the Second Hammer [15]. Insert the assembly of the Retainer Sleeve [12] into the Cylinder Case [7], and then insert Spring Holder (B) [20] into the Cylinder Case [7]. Insert the Striker [27] (with the O-ring [28] mounted) into the Cylinder [19]. Mount the Clutch Spring [23], Clutch [24], Bevel Gear [25] and Thrust Washer [26] to the Cylinder [19], and then insert this Cylinder [19] ass'y into the Crank Case [70]. Insert the Lock Sleeve [22] into the Crank Case [70] by aligning the spline groove at the inner circumference of the Crank Case [70] with the spline of the Lock Sleeve [22]. Put the Lock Spring [21] on the Lock Sleeve [22]. Finally put the Cylinder Case [7] (with the Retainer Sleeve [12] mounted) and the Crank Case [70] (with the Cylinder [19] mounted) together by meshing the claw of the Retainer Sleeve [12] with the groove of the Cylinder [19] (Fig. 6).



(d) Slip Clutch

Refer to the Technical Data and Service Manual for the Model DH 40MR (List No. E467) because the slip clutch mechanism is the same as that of the Model DH 40MR.

## 2. Application of lubricant

- Filling special grease (for the hammer and hammer drill)  
In the Cylinder Case [7]: 15 g  
Connecting Rod [31] side in the Crank Case [70]: 50 g
- Application of special grease (for the hammer and hammer drill)  
Apply special grease to the inner circumferences of the Cylinder [19] and Connecting Rod [31], the sliding portion of the Second Hammer [15], the O-ring (C) [14] wound around the Second Hammer [15], the sliding portion of the Striker [27], the O-ring [28] wound around the Striker [27] and Piston [30], the lip portions at the inner circumference of Oil Seal (A) [53] and Oil Seal (B) [77], the inner and outer circumferences of the Bevel Gear [25], the inner circumference of metal in the Cylinder Case [7], and the lip portions at the inner circumference of oil seals in the Cylinder Case [7], Damper [17] and Retainer Damper [10].
- Filling Hitachi Motor Grease No. 29  
First Gear [78] side and Gear Cover [80] side in the Crank Case [70]: 30 g in total
- Application of Hitachi Motor Grease No. 29  
Pinion portions of the Needle Bearing M661 [79], Armature Ass'y [43] and Needle Roller D8 x 20 [13]

## 3. Tightening torque

Apply screw locking agent TB1401 to all hex. socket head bolts M4, M5 and M6.

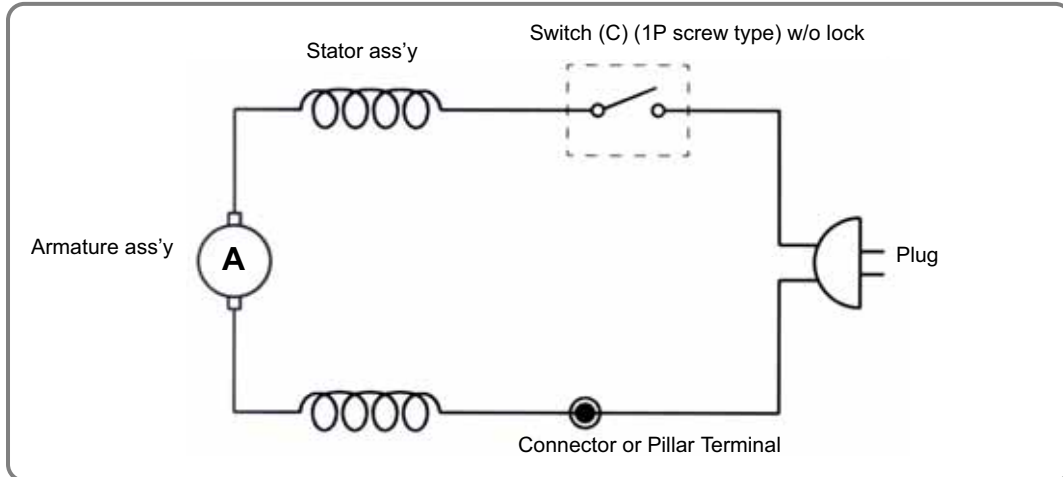
### NOTE:

**Be sure to apply screw locking agent (Three Bond TB1401) to the threads during reassembly. Otherwise, any bolts loosened due to vibration may damage the tool body.**

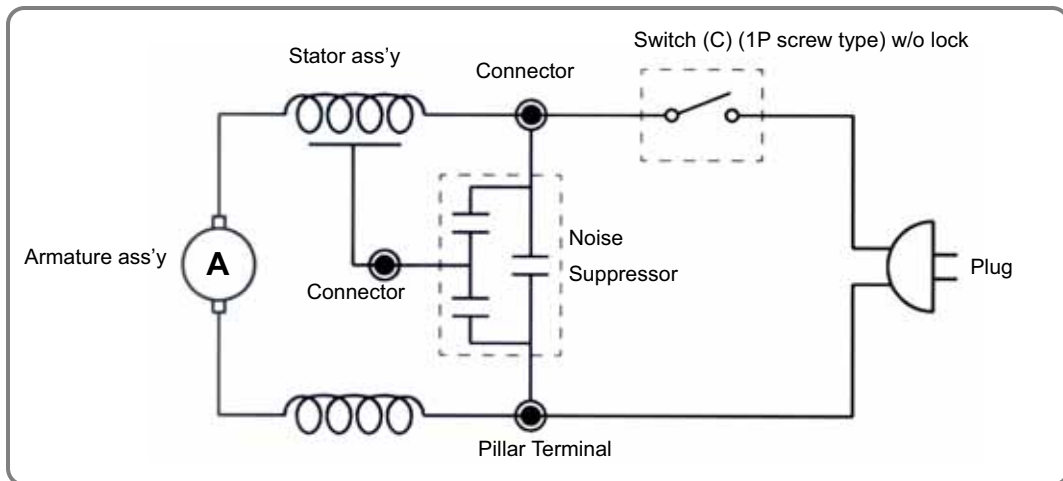
M6	• Seal Lock Hex. Socket Hd. Bolt M6 x 45 [65] (For mounting the housing) -----	9.8 ± 0.98 N•m (100 ± 10 kgf•cm)
	• Seal Lock Hex. Socket Hd. Bolt M6 x 20 [64] (For mounting the gear cover) -----	9.8 $\begin{matrix} + 1.96 \\ 0 \end{matrix}$ N•m (100 $\begin{matrix} + 20 \\ 0 \end{matrix}$ kgf•cm)
	• Hex. Socket Hd. Bolt (W/Flange) M6 x 25 [8] (For mounting the cylinder case) -----	9.8 $\begin{matrix} + 1.96 \\ 0 \end{matrix}$ N•m (100 $\begin{matrix} + 20 \\ 0 \end{matrix}$ kgf•cm)
M5	• Hex. Socket Hd. Bolt (W/Flange) M5 x 16 [67] (For mounting the crank cover) -----	7.84 $\begin{matrix} + 1.96 \\ 0 \end{matrix}$ N•m (80 $\begin{matrix} + 20 \\ 0 \end{matrix}$ kgf•cm)
	• Hex. Socket Hd. Bolt (W/Flange) M5 x 16 [67] (For mounting the handle) -----	5.88 $\begin{matrix} + 1.96 \\ 0 \end{matrix}$ N•m (60 $\begin{matrix} + 20 \\ 0 \end{matrix}$ kgf•cm)
M4	• Seal Lock Hex. Socket Hd. Bolt M4 x 12 [32] (For mounting the change lever) -----	4.41 ± 0.49 N•m (45 ± 5 kgf•cm)
	• Tapping Screw (W/Flange) D5 -----	2.94 ± 0.49 N•m (30 ± 5 kgf•cm)
	• Tapping Screw (W/Flange) D4 -----	1.96 ± 0.49 N•m (20 ± 5 kgf•cm)

## 4. Internal wiring

(1) Wiring diagram for products without a noise suppressor



(2) Wiring diagram for products with a noise suppressor



## 5. Insulation tests

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

Insulation resistance: 7M  $\Omega$  or more using a 500 VDC megohm tester

Dielectric strength: 4,000 VAC/minute, with no abnormalities (220 to 240 V)  
(110 V for U.K. products)

2,500 VAC/minute, with no abnormalities (110 to 127 V)  
(Except for U.K. products)

## 6. No-load current value

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

Voltage (V)	110	120	220	230	240
Current (A) max.	6.4	5.9	3.2	3.1	2.9

# STANDARD REPAIR TIME (UNIT) SCHEDULES

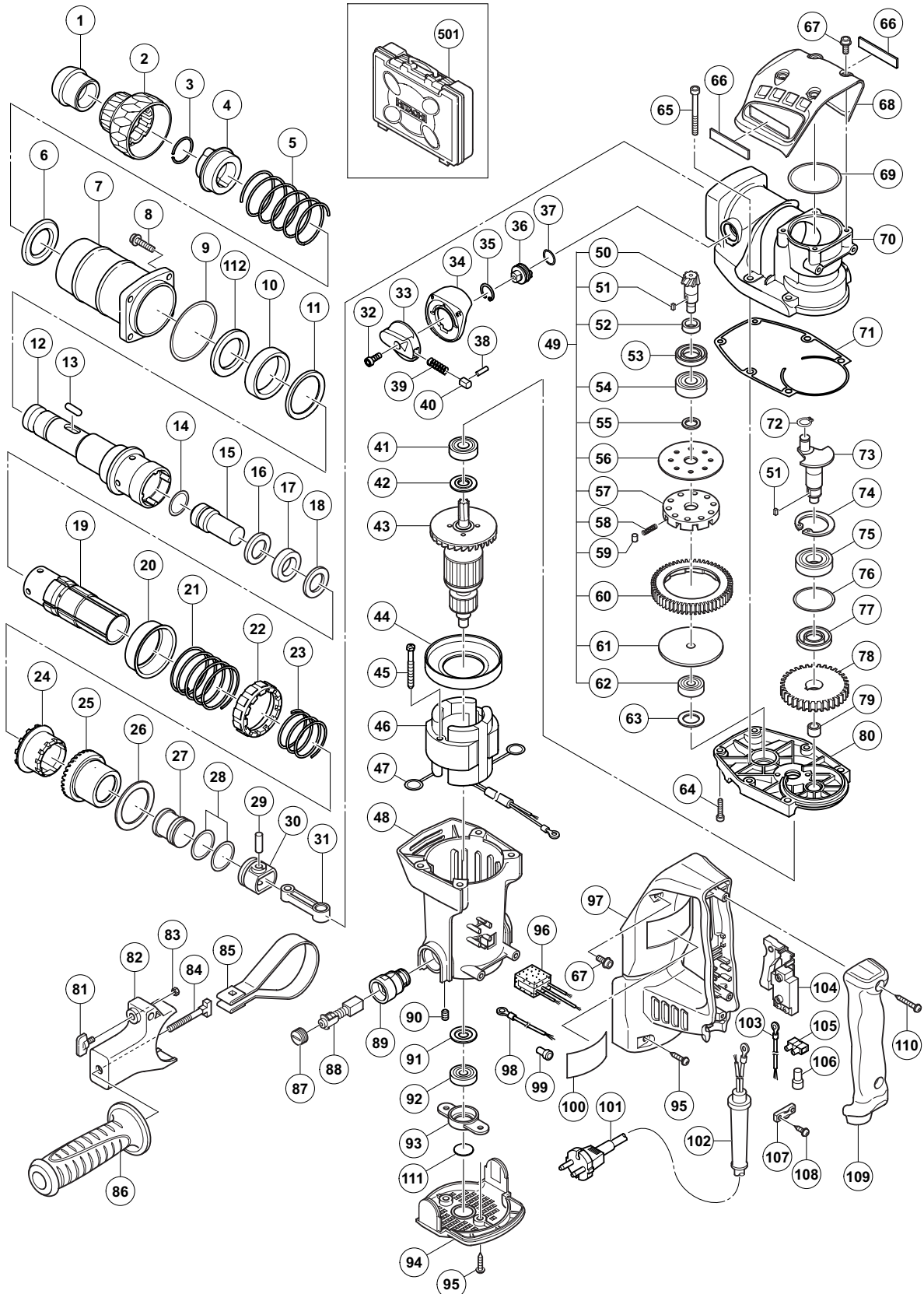
MODEL	Variable		10	20	30	40	50	60
	Fixed							
DH 38MS		Work Flow						
		Handle Cover Switch (C) Cord Cord Armor						Housing Ass'y Stator Ass'y
		Tail Cover					Gear Cover Needle Bearing	
		Crank Cover					Armature Ass'y Ball Bearing (6201 DDCMPS2L) Dust Washer (B) Ball Bearing (608 VVC2PS2L)	
	General assembly				Handle		Crank Shaft Ball Bearing (6203 DDCMPS2L) Oil Seal (B) First Gear	Crank Case
		Change Lever Lever Holder Lever Shaft					Slip Clutch Ass'y Bevel Pinion Oil Seal (A) Ball Bearing (6002 DDCMPS2L) Washer (A) Gear Holder Second Gear Ball Bearing (629 VVC2PS2L)	
		Front Cap Grip Needle Holder	Cylinder Case Retainer Damper Retainer Sleeve Second Hammer Damper					
					Cylinder Lock Sleeve Clutch Striker O-Ring		Bevel Gear Piston Connecting Rod	

## ELECTRIC TOOL PARTS LIST

### ■ ROTARY HAMMER Model DH 38MS

2009·5·26

(E1)



**PARTS**

DH 38MS

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS
1	331-542	FRONT CAP	1	
2	331-541	GRIP	1	
3	331-540	STOPPER RING	1	
4	331-539	NEEDLE HOLDER	1	
5	331-538	RETAINER SPRING	1	
6	331-537	SPRING HOLDER (A)	1	
7	331-530	CYLINDER CASE	1	
8	991-712	HEX. SOCKET HD. BOLT (W/FLANGE) M6 X 25	4	
9	956-996	O-RING (1AS-60)	1	
10	331-531	RETAINER DAMPER	1	
11	331-532	RETAINER DAMPER WASHER	1	
12	331-524	RETAINER SLEEVE	1	
13	331-536	NEEDLE ROLLER D8 X 20	2	
14	313-396	O-RING (C)	1	
15	331-525	SECOND HAMMER	1	
16	331-224	DAMPER WASHER	1	
17	321-835	DAMPER	1	
18	331-225	DAMPER HOLDER	1	
19	331-526	CYLINDER	1	
20	331-533	SPRING HOLDER (B)	1	
21	331-534	LOCK SPRING	1	
22	331-535	LOCK SLEEVE	1	
23	331-527	CLUTCH SPRING	1	
24	331-528	CLUTCH	1	
25	331-529	BEVEL GEAR	1	
26	331-234	THRUST WASHER	1	
27	331-235	STRIKER	1	
28	986-104	O-RING	2	
29	331-221	PISTON PIN	1	
30	326-369	PISTON	1	
31	321-285	CONNECTING ROD	1	
32	983-162	SEAL LOCK HEX. SOCKET HD. BOLT M4 X 12	1	
33	331-545	CHANGE LEVER	1	
34	331-544	LEVER HOLDER	1	
35	311-229	RETAINING RING FOR D20 HOLE	1	
36	331-543	LEVER SHAFT	1	
37	873-095	O-RING (P-16)	1	
38	331-548	PIN D2 X 10	1	
39	331-546	LEVER SPRING	1	
40	321-311	PUSHING BUTTON	1	
41	620-1DD	BALL BEARING 6201DDCMPS2L	1	
42	325-003	DUST WASHER (B)	1	
* 43	360-875C	ARMATURE 110V	1	
* 43	360-875U	ARMATURE ASS'Y 120V	1	INCLUD. 41, 42, 91, 92
* 43	360-875E	ARMATURE 220V-230V	1	
* 43	360-875F	ARMATURE 240V	1	
44	331-252	FAN GUIDE	1	
45	953-174	HEX. HD. TAPPING SCREW D5 X 55	2	
* 46	340-753C	STATOR ASS'Y 110V	1	INCLUD. 47
* 46	340-753G	STATOR ASS'Y 110V	1	INCLUD. 47 FOR VEN

**PARTS**

DH 38MS

ITEM NO.	CODE NO.	DESCRIPTION	NO USED	REMARKS
* 46	340-753D	STATOR ASS'Y 120V	1	INCLUD. 47
* 46	340-753E	STATOR ASS'Y 220V-230V	1	INCLUD. 47
* 46	340-753H	STATOR ASS'Y 220V-230V	1	INCLUD. 47 FOR THA, INA, SIN, IND
* 46	340-753J	STATOR ASS'Y 240V	1	INCLUD. 47
* 46	340-753F	STATOR ASS'Y 240V	1	INCLUD. 47 FOR AUS
47	930-703	BRUSH TERMINAL	2	
48	331-251	HOUSING ASS'Y	1	INCLUD. 89, 90
49	331-210	SLIP CLUTCH ASS'Y	1	INCLUD. 50-52, 54-62
50	331-211	BEVEL PINION	1	
51	944-109	FEATHER KEY 3 X 3 X 8	2	
52	331-212	COLLAR	1	
53	313-050	OIL SEAL (A)	1	
54	600-2DD	BALL BEARING 6002DDCMPS2L	1	
55	331-213	WASHER	1	
56	331-214	WASHER (A)	1	
57	321-281	GEAR HOLDER	1	
58	331-218	SPRING (C)	10	
59	331-217	NEEDLE	10	
60	331-215	SECOND GEAR	1	
61	331-219	SPACER	1	
62	629-VVM	BALL BEARING 629VVC2PS2L	1	
63	331-220	BEARING WASHER (C)	1	
64	992-803	SEAL LOCK HEX. SOCKET HD. BOLT M6 X 20	2	
65	986-940	SEAL LOCK HEX. SOCKET HD. BOLT M6 X 45	4	
66		HITACHI LABEL	2	
67	994-192	HEX. SOCKET HD. BOLT (W/FLANGE) M5 X 16	6	
68	331-245	CRANK COVER	1	
69	878-713	CYLINDER O-RING (B)	1	
70	331-523	CRANK CASE	1	
71	331-549	SEAL PACKING	1	
72	939-540	RETAINING RING FOR D10 SHAFT (10 PCS.)	1	
73	331-208	CRANK SHAFT	1	
74	948-391	RETAINING RING FOR D40 HOLE	1	
75	620-3DD	BALL BEARING 6203DDCMPS2L	1	
76	996-363	O-RING (S-40)	1	
77	321-274	OIL SEAL (B)	1	
78	331-209	FIRST GEAR	1	
79	939-299	NEEDLE BEARING (M661)	1	
80	331-253	GEAR COVER	1	
81	307-947	WING BOLT M6 X 12	1	
82	331-248	MOUNT	1	
83	949-556	NUT M6 (10 PCS.)	1	
84	331-247	HANDLE BOLT	1	
85	331-246	BAND	1	
86	330-209	SIDE HANDLE	1	
87	945-161	BRUSH CAP	2	
88	999-043	CARBON BRUSH (1 PAIR)	2	
89	958-900	BRUSH HOLDER	2	
90	938-477	HEX. SOCKET SET SCREW M5 X 8	2	
91	982-631	WASHER (A)	1	

**PARTS**

DH 38MS

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS
92	608-VVM	BALL BEARING 608VVC2PS2L	1	
93	331-254	BEARING HOLDER	1	
94	331-202	TAIL COVER	1	
95	302-089	TAPPING SCREW (W/FLANGE) D5 X 20 (BLACK)	4	
* 96	331-203	NOISE SUPPRESSOR	1	EXCEPT FOR VEN, THA, INA, SIN, KUW, USA, CAN, MEX, IND
97	331-204	HANDLE	1	
* 98	330-216	INTERNAL WIRE 270L	1	EXCEPT FOR VEN, THA, INA, SIN, KUW, USA, CAN, MEX, IND
* 99	959-141	CONNECTOR 50092 (10 PCS.)	1	EXCEPT FOR USA, CAN, MEX
100		NAME PLATE	1	
* 101	500-390Z	CORD	1	(CORD ARMOR D8.2)
* 101	500-239Z	CORD	1	(CORD ARMOR D10.7) FOR VEN, THA
* 101	500-424Z	CORD	1	(CORD ARMOR D8.2) FOR SIN, KUW
* 101	500-235Z	CORD	1	(CORD ARMOR D8.2) FOR INA, IND
* 101	500-439Z	CORD	1	(CORD ARMOR D8.2) FOR, NZL, AUS
* 101	500-434Z	CORD	1	(CORD ARMOR D8.2) FOR USA, CAN, MEX
* 101	500-446Z	CORD	1	(CORD ARMOR D8.2) FOR GBR (230V)
* 101	500-454Z	CORD	1	(CORD ARMOR D8.2) FOR GBR (110V)
* 101	500-391Z	CORD	1	(CORD ARMOR D8.2) FOR SUI
* 101	500-457Z	CORD	1	(CORD ARMOR D10.7) FOR CHN
* 101	500-477Z	CORD	1	(CORD ARMOR D10.7) FOR TPE
* 101	500-475Z	CORD	1	(CORD ARMOR D8.2) FOR KOR
* 102	958-049	CORD ARMOR D8.2	1	
* 102	940-778	CORD ARMOR D10.7	1	
* 103	981-974	INTERNAL WIRE	1	EXCEPT FOR VEN, THA, INA, SIN, KUW, USA, CAN, MEX, IND
104	313-093	SWITCH (C) (2P SCREW TYPE W/O LOCK)	1	
* 105	938-307	PILLAR TERMINAL	1	EXCEPT FOR VEN, THA, INA, SIN, KUW, IND
* 106	959-141	CONNECTOR 50092 (10 PCS.)	1	EXCEPT FOR USA, CAN, MEX
107	960-266	CORD CLIP	1	
108	984-750	TAPPING SCREW (W/FLANGE) D4 X 16	2	
109	331-205	HANDLE COVER	1	
110	307-028	TAPPING SCREW (W/FLANGE) D4 X 25 (BLACK)	2	
111	331-547	DUST SEAL	1	
112	331-550	WASHER (FW)	1	

**STANDARD ACCESSORIES**

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS
501	331-206	CASE	1	