

MODEL

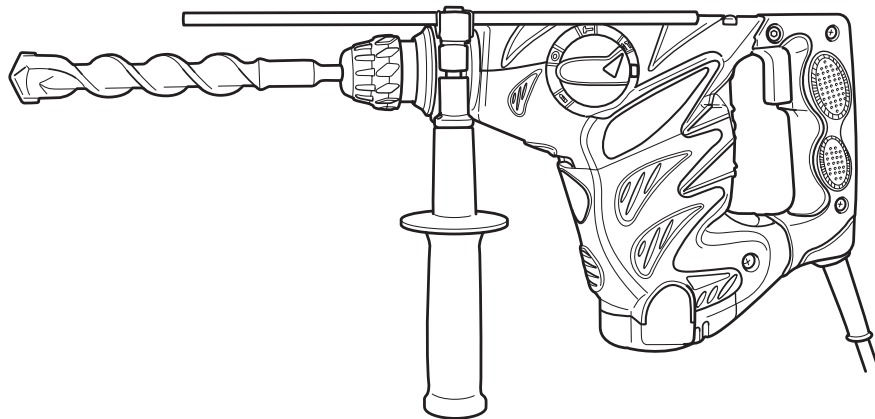
**DH 30PC2**

# Hitachi Power Tools

**ROTARY HAMMER  
DH 30PC2**

**TECHNICAL DATA  
AND  
SERVICE MANUAL**

**D**



LIST No. E494

Aug. 2006

REMARK:

Throughout this TECHNICAL DATA AND SERVICE MANUAL, a symbol(s) is(are) used in the place of company name(s) and model name(s) of our competitor(s). The symbol(s) utilized here is(are) as follows:

| Symbol Utilized | Competitor   |            |
|-----------------|--------------|------------|
|                 | Company Name | Model Name |
| C               | BOSCH        | GBH4DFE    |
| B               | MAKITA       | HR3000C    |
|                 |              |            |

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## 1. PRODUCT NAME

Hitachi Rotary Hammer, Model DH 30PC2

## 2. MARKETING OBJECTIVE

The new Model DH 30PC2 features the concrete drilling capacity with the maximum drill bit diameter 30 mm and the use of SDS-plus shank tools. It can provide 3 modes of operation, "Rotation and hammering," "Rotation only" and "Hammering only." The "Hammering only" operation is convenient for chipping and grooving works.

The main features of the Model DH 30PC2 are as follows:

- (1) Highest drilling speed and chipping performance in the class
- (2) Highly reliable mechanism for prevention of idle hammering
- (3) Shortest body in the class (entire length 355 mm)
- (4) Comfortable and soft-touch double-layer molded handle
- (5) New design

## 3. APPLICATIONS

### (1) Rotation and hammering function

- Drilling anchor holes
- Drilling holes in concrete, tile, brick and similar materials
- Large hole boring with core bit

### (2) Rotation only function

- Drilling holes in steel and wood (with chuck adapter)
- Tightening machine screws and wood screws (with chuck adapter)

### (3) Hammering only function

- Stripping mortar and tiles
- Demolishing and chiseling of concrete
- Grooving and cutting of bricks

[Typical applications]

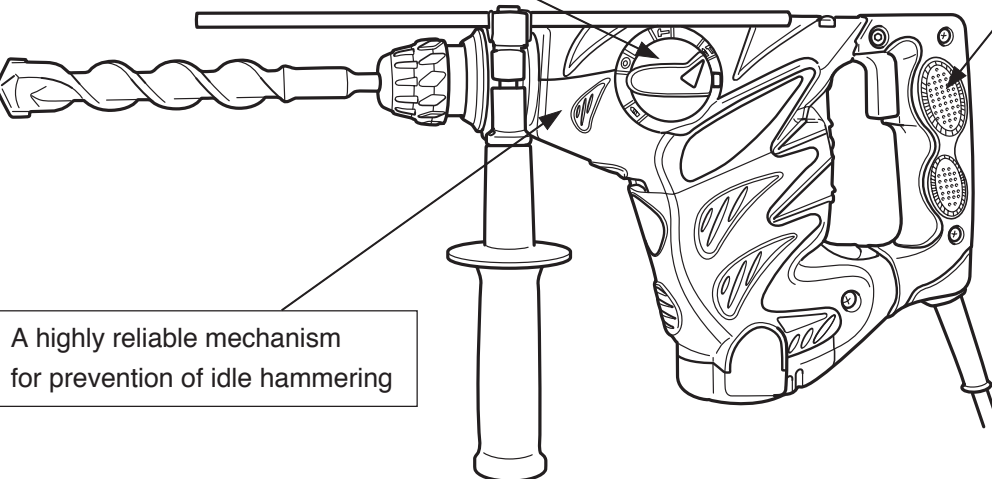
- Air conditioning ..... Installation of air conditioners, water coolers and air ducts
- Piping and plumbing ..... Installation of gas, water and sanitary facilities
- Electrical fixtures ..... Installation of electrical and lighting fixtures
- Interior decoration ..... Installation of seats, display stands and partitions
- Other building, construction and repair work

## 4. SELLING POINTS

- Highest drilling speed in the class
- Highest chipping performance in the class
- Shortest body in the class (entire length 355 mm)

Hitachi's original and convenient 3-mode changeover mechanism

Comfortable and soft-touch double-layer molded handle



A highly reliable mechanism for prevention of idle hammering

New design

### 4-1. Selling Point Descriptions

#### 4-1-1. Highest drilling speed and chipping performance in the class

The drilling speed of the Model DH 30PC2 is 1.3 times higher than C and equivalent to or higher than B thanks to the efficient transmission of the hammering energy.

#### 4-1-2. A highly reliable mechanism for prevention of idle hammering results in prolonged service life and comfortable operation

Conventional mechanism for prevention of idle hammering is to open and close the air holes according to the movement of the striker. The Model DH 30PC2 has air holes located at the position unaffected by the rebound of the striker at no load. The air holes are opened and closed by the movement of slide sleeve (A) provided around the cylinder that interlocks with the tool and the second hammer to prevent idle hammering. This mechanism securely prevents idle hammering even if the striker rebounds heavily when drilling holes using a large-diameter drill bit. Thanks to the highly reliable mechanism for prevention of idle hammering, the service life of the Model DH 30PC2 is prolonged and hammering works requiring much attention not to break the surroundings can be efficiently performed with the Model DH 30PC2.

#### 4-1-3. Hitachi's original and convenient 3-mode changeover mechanism

The Model DH 30PC2 is equipped with Hitachi's original and new 3-mode changeover mechanism including the mechanism for prevention of idle hammering. Thanks to this mechanism, operation is selectable from 3 modes, "Rotation and hammering," "Rotation only" and "Hammering only." The Model DH 30PC2 can be widely used for not only light-duty chipping works by means of a bull point but also cornering and grooving works by means of a cold chisel and a cutter.

#### **4-1-4. Shortest body in the class (entire length 355 mm)**

The Model DH 30PC2 is equipped with Hitachi's original and new 3-mode changeover mechanism including the mechanism for prevention of idle hammering. This mechanism made the entire length as short as possible to 355 mm. The Model DH 30PC2 has the shortest body in its class.

| Maker/Model      | Entire length |
|------------------|---------------|
| HITACHI DH 30PC2 | 355 mm        |
| HITACHI DH 30PC  | 390 mm        |
| B                | 391 mm        |
| C                | 395 mm        |

#### **4-1-5. Variable locking mechanism**

The Model DH 30PC2 is equipped with a variable locking mechanism that allows the angle of a tool such as a cold chisel or a cutter to be rotated conveniently to 36 individual positions in relation to the work in the "Hammering only" function mode.

#### **4-1-6. Soft-touch grip for easier handling**

The double-layer molded handle consists of a plastic resin base covered with a soft plastic layer to ensure a soft touch and firm, non-slip grip of the handle.

## 5. SPECIFICATIONS

### 5-1. Specifications

|   |           |   |     |     |     |     |     |
|---|-----------|---|-----|-----|-----|-----|-----|
| Model                                   |           | DH 30PC2  |     |     |     |     |     |
| Capacity                                | Concrete  | 4 – 30 mm (5/32" – 1-3/16")   |     |     |     |     |     |
|   | Steel     | 13 mm (1/2")  |     |     |     |     |     |
|   | Wood      | 32 mm (1-1/4")  |     |     |     |     |     |
|   | Core bit  | 90 mm (3-17/32")  |     |     |     |     |     |
| Power source                            |           | AC single phase 50 Hz or 60 Hz  |     |     |     |     |     |
| Voltage, current and power input        |           | Voltage (V)   | 110 | 120 | 220 | 230 | 240 |
|   |           | Current (A)   | 8.1 | 7.4 | 4.1 | 3.9 | 3.7 |
|   |           | Input (W)   | 850 |     |     |     |     |
| Rotation speed                          | No-load   | 0 – 850 /min.   |     |     |     |     |     |
|   | Full-load | 0 – 700 /min.   |     |     |     |     |     |
| Full-load blow rate                     |           | 0 – 3,700/min.  |     |     |     |     |     |
| Type of motor                           |           | AC single-phase commutator motor  |     |     |     |     |     |
| Type of switch                          |           | Variable switch   |     |     |     |     |     |
| Type of handle                          |           | D-type handle and side handle   |     |     |     |     |     |
| Enclosure: Material                     |           | Materials: Aluminum alloy die casting (Crank case, cylinder case and gear cover)<br>Polycarbonate resin (Housing)<br>Nylon resin (Hood, crank case cover, tail cover, handle)<br>Paint: Green gray, black |     |     |     |     |     |
| Dimensions<br>(Length x height x width) |           | 355 mm x 227 mm x 102 mm<br>(14" x 8-15/16" x 4")   |     |     |     |     |     |
| Weight                                  | Net*      | 4.3 kg (9.5 lbs.)   |     |     |     |     |     |
|   | Gross     | 7.3 kg (16.1 lbs.)  |     |     |     |     |     |
| Packaging                               |           | Plastic case  |     |     |     |     |     |
| Standard accessories                    |           | (1) Plastic case ..... 1<br>(2) Side handle ..... 1<br>(3) Stopper ..... 1<br>(4) Dust cup ..... 1<br>(5) Syringe ..... 1   |     |     |     |     |     |

\*: Net weight does not include cord and side handle.

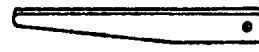
## 5-2. Optional Accessories

### A. Drilling anchor holes (rotation + hammering)

- Drill bit (taper shank)



+



(1) Drill bit (taper shank)

(2) Taper shank adapter  
(SDS-plus shank)

(3) Cotter

| (1) Drill bit (Taper shank) |          | (2) Taper shank adapter |          | (3) Cotter |
|-----------------------------|----------|-------------------------|----------|------------|
| Outer dia. (mm)             | Code No. | Type                    | Code No. | Code No.   |
| 11 (7/16")                  | 944460   | Morse taper<br>No. 1    | 303617   | 944477     |
| 12.3 (1/2")                 | 944461   |                         |          |            |
| 12.7 (1/2")                 | 993038   |                         |          |            |
| 14.3 (9/16")                | 944462   |                         |          |            |
| 14.5 (9/16")                | 944500   |                         |          |            |
| 17.5 (11/16")               | 944463   |                         |          |            |
| 21.5 (7/8")                 | 944464   | Morse taper No. 2       | 303618   |            |

| Part name | Code No. | Taper shank adapters (A-taper or B-taper) is provided as an optional accessory, but drill bit is not provided. |
|-----------|----------|--|
| A-taper   | 303619   |  |
| B-taper   | 303620   |  |

### B. Anchor setting (hammering only)

- Anchor setting bar to permit anchor setting operation with the rotary hammer

Anchor setting bar



Anchor setting adapter (SDS-plus shank)

| Part name                       | Overall length | Code No. | Part name                       | Overall length | Code No. |
|---------------------------------|----------------|----------|---------------------------------|----------------|----------|
| W-1/4 Anchor setting adapter-A  | 260            | 302976   | W-1/4 Anchor setting adapter-B  | 260            | 302979   |
| W-5/16 Anchor setting adapter-A | 260            | 302975   | W-5/16 Anchor setting adapter-B | 260            | 302978   |
| W-3/8 Anchor setting adapter-A  | 160            | 303621   | W-3/8 Anchor setting adapter-B  | 160            | 303622   |
| W-3/8 Anchor setting adapter-A  | 260            | 302974   | W-3/8 Anchor setting adapter-B  | 260            | 302977   |
| Internal cone type              |                |          | External cone type              |                |          |

- Anchor setting bar for manual anchor setting



+

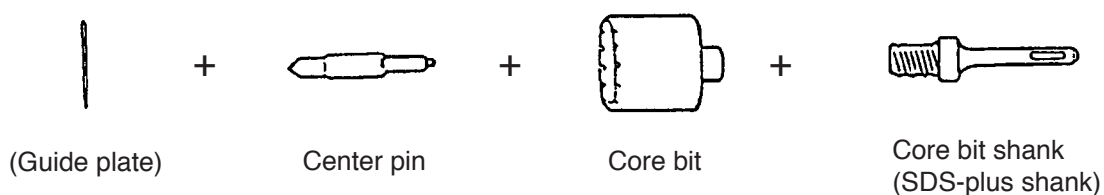


Anchor setting adapter

| Part name                       | Code No. | Part name                       | Code No. |
|---------------------------------|----------|---------------------------------|----------|
| W-1/4 Anchor setting adapter-A  | 971794   | W-1/4 Anchor setting adapter-B  | 971799   |
| W-5/16 Anchor setting adapter-A | 971795   | W-5/16 Anchor setting adapter-B | 971800   |
| W-3/8 Anchor setting adapter-A  | 971796   | W-3/8 Anchor setting adapter-B  | 971801   |
| W-1/2 Anchor setting adapter-A  | 971797   | W-1/2 Anchor setting adapter-B  | 971802   |
| W-5/8 Anchor setting adapter-A  | 971798   | W-5/8 Anchor setting adapter-B  | 971803   |
| Internal cone type              |          | External cone type              |          |

### C. Large hole boring (rotation + hammering)

- Center pin, core bit, core bit shank and guide plate



(1) Center pin (Do not use bit with outer diameter of 25 mm (1") and 29 mm (1-1/8"))

|                |  |                 |
|----------------|--|-----------------|
| Center pin (A) | Core bit (outer diameter) 32, 35, 38 mm (1-1/4", 1-3/8", 1-1/2")                         | Code No. 982684 |
| Center pin (B) | Core bit (outer diameter) 45, 50, 65, 80, 90 mm (1-3/4", 2", 2-9/16", 3-5/32", 3-17/32") | Code No. 982685 |

(2) Guide plate

| Core bit (outer diameter ) (mm) | Code No. | Core bit (outer diameter ) (mm) | Code No. |
|---------------------------------|----------|---------------------------------|----------|
| 32 (1-1/4")                     | 982686   | 50 (2")                         | 982690   |
| 35 (1-3/8")                     | 982687   | 65 (2-9/16")                    | 982691   |
| 38 (1-1/2")                     | 982688   | 80 (3-5/32")                    | 982692   |
| 45 (1-3/4")                     | 982689   | 90 (3-17/32")                   | 982693   |

(3) Core bit with guide plate (The guide plate is not supplied with 25 mm (1") and 29 mm (1-1/8") outer diameter core bits.)

| Outer diameter (mm) | Code No. | Outer diameter (mm) | Code No. |
|---------------------|----------|---------------------|----------|
| 25 (1")             | 982672   | 45 (1-3/4")         | 982677   |
| 29 (1-1/8")         | 982673   | 50 (2")             | 982678   |
| 32 (1-1/4")         | 982674   | 65 (2-9/16")        | 982679   |
| 35 (1-3/8")         | 982675   | 80 (3-5/32")        | 982680   |
| 38 (1-1/2")         | 982676   | 90 (3-17/32")       | 982681   |

(4) Core bit shank (SDS-plus shank)

|                    |  |                                |                 |
|--------------------|--|--------------------------------|-----------------|
| Core bit shank (A) | Core bit (outer diameter) 25 – 38 mm (1" – 1-1/2")       | Overall length 105 mm (4-1/8") | Code No. 303625 |
|                    |  | Overall length 300 mm (12")    | Code No. 303626 |
| Core bit shank (B) | Core bit (outer diameter) 45 – 90 mm (1-3/4" – 3-17/32") | Overall length 300 mm (12")    | Code No. 303627 |

### D. Bolt placing operation with chemical anchor (rotation + hammering)



(Standard socket available on the market)

12.7 mm (1/2") Chemical anchor adapter (SDS-plus shank)  
19 mm (3/4") Chemical anchor adapter (SDS-plus shank)

| Part name                              | Code No. |
|--|----------|
| 12.7 mm (1/2") Chemical anchor adapter | 303044   |
| 19 mm (3/4") Chemical anchor adapter   | 303045   |

#### E. Crushing operations (hammering only)



Bull point (round type)  
(SDS-plus shank)

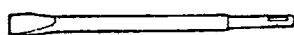
Code No. 303046



Square bull point  
(SDS-plus shank)

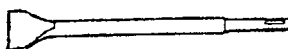
Code No. 316656

#### F. Groove digging and edging (hammering only)



Cold chisel  
(SDS-plus shank)

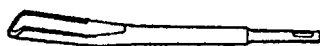
Code No. 316657



Cutter  
(SDS-plus shank)

Code No. 316658

#### G. Grooving (hammering only)



Grooving chisel  
(SDS-plus shank)

Code No. 316659

#### H. Drilling hole and driving screw (rotation only)

- Drill chuck, chuck adapter (G), special screw and chuck wrench



Special screw

+



13 mm (1/2") Drill chuck  
(13VLRB-D)

+



Chuck adapter (G)  
(SDS-plus shank)



Chuck wrench

(NOTE)

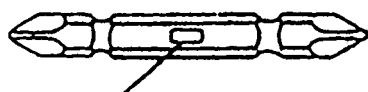
If the tool is to be used for loosening screws, open the three jaws of the drill chuck and securely fix the drill chuck to chuck adapter (G) with the special screw (a left-hand threaded M6 screw) when mounting the drill chuck onto chuck adapter (G).

|    | Part name   | Code No. |
|----|---|----------|
| a. | Chuck adapter (G) for SDS-plus shank system           | 303623   |
| b. | 13 mm (1/2") Drill chuck 13VLRB-D (with chuck wrench) | 321814   |
| c. | Special screw (M6 left-hand threaded)                 | 995344   |

(1) Cross-recessed head (Phillips) bit

[Overall length: 70 mm]

(For use with cross-recessed head (Phillips) screw)



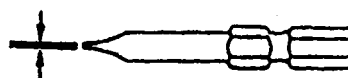
Stamped bit No.

| Bit No. | Code No. | Applicable screw dia. (mm) |
|---------|----------|----------------------------|
| No. 2   | 955654   | 4 – 5                      |
| No. 3   | 955655   | 6 – 8                      |

(2) Slotted-head (minus) bit

[Overall length: 50 mm]

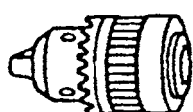
(For use with slotted-head (minus) screw)



Tip thickness

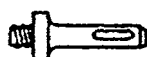
| Bit tip thickness | Code No. | Applicable screw dia. (mm) |
|-------------------|----------|----------------------------|
| 0.8               | 955658   | 4                          |
| 1                 | 955673   | 5 – 6                      |

I. Drilling hole (rotation only) ... For drilling holes in steel and wood



Drill chuck (13VLD-D)

+



Chuck adapter (D)  
(SDS-plus shank)



Chuck wrench

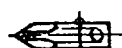
(NOTE)

The 13VLD-D drill chuck and chuck adapter (D) cannot be used for reverse rotation. If reverse rotation is to be used for loosening screws, use the plus bit (Bit No. 2) described below by attaching it directly to chuck adapter (D).

| Part name  | Code No. |
|--|----------|
| Chuck adapter (D) (for SDS-plus shank type)          | 303624   |
| 13 mm (1/2") Drill chuck 13VLD-D (with chuck wrench) | 321813   |

J. Drilling screws (rotation only)

- Plus driver bit [overall length: 25 mm] (for cross-recessed head screws)



Bit No.

+

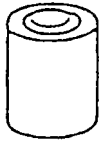


Chuck adapter (D)  
(SDS-plus shank)

| Bit No. | Screw size | Code No. |
|---------|------------|----------|
| No. 2   | 3 – 5 mm   | 971511Z  |
| No. 3   | 6 – 8 mm   | 971512Z  |

K. Grease for electric impact drill

- Containing 500 g (17.64 oz.): Code No. 980927



- Containing 30 g (1.06 oz.): Code No. 981840

70 g (2.5 oz.): Code No. 308471



L. Dust cup

Dust cup



Code No. 971787

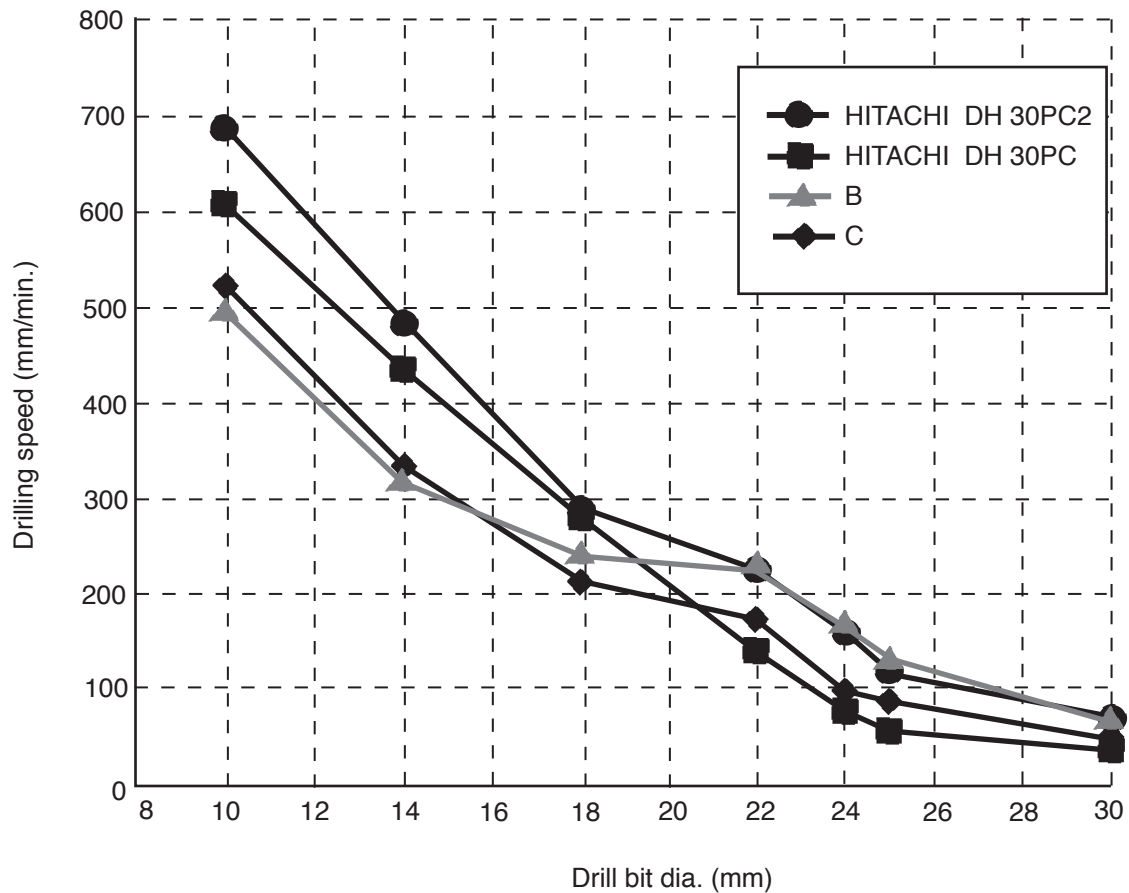
## 6. COMPARISONS WITH SIMILAR PRODUCTS

### 6-1. Specification Comparison

| Maker                                    |          |                   | HITACHI           | HITACHI            | B                  | C                 |
|--|----------|-------------------|-------------------|--------------------|--------------------|-------------------|
| Model                                    |          |                   | DH 30PC2          | DH 30PC            |                    |                   |
| Capacity                                 | Concrete | mm                | 30 (1-3/16")      | 30 (1-3/16")       | 30 (1-3/16")       | 30 (1-3/16")      |
|  | Steel    | mm                | 13 (1/2")         | 13 (1/2")          | 13 (1/2")          | 13 (1/2")         |
|  | Wood     | mm                | 32 (1-1/4")       | 32 (1-1/4")        | 32 (1-1/4")        | 32 (1-1/4")       |
|  | Core bit | mm                | 90 (3-17/32")     | 90 (3-17/32")      | 90 (3-17/32")      | 80 (3-5/32")      |
| Power input                              |          | W                 | 850               | 850                | 850                | 750               |
| No-load rotation speed                   |          | min <sup>-1</sup> | 0 – 850           | 0 – 850            | 360 – 720          | 0 – 650           |
| Full-load impact rate                    |          | min <sup>-1</sup> | 0 – 3,700         | 0 – 3,700          | 1,650 – 3,300      | 0 – 3,900         |
| Weight<br>(Without cord and side handle) |          | kg                | 4.3<br>(9.5 lbs.) | 4.8<br>(10.6 lbs.) | 4.8<br>(10.6 lbs.) | 3.9<br>(8.6 lbs.) |
| Dimension                                | Length   | mm                | 355 (14")         | 390 (15-3/8")      | 391 (15-13/32")    | 395 (15-9/16")    |
|  | Height   | mm                | 227 (8-15/16")    | 226 (8-29/32")     | 230 (9-1/16")      | 225 (8-27/32")    |
|  | Width    | mm                | 102 (4")          | 102 (4")           | 100 (3-15/16")     | 89 (3-1/2")       |
| Full-load vibration level                |          | dB (VL)           | 16                | 15                 | 19                 | 14                |
| Full-load noise level                    |          | dB (A)            | 84                | 85                 | 83                 | 87                |

## 6-2. Drilling Speed Comparison

Drilling speed varies considerably depending on the work conditions. Use the factory test results shown in Fig. 1 for comparison purpose only.



**Fig. 1**

[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>)

## 6-3. Chiseling Performance Comparison

The chiseling performance varies considerably depending on the work conditions. Use the factory test results shown in Fig. 2 for comparison purposes only.

| Voltage supply | Maker   | Model    | Chiseling amount (kg/30 min.) |    |    |    |    |    |    |    |
|----------------|---------|----------|-------------------------------|----|----|----|----|----|----|----|
|                |         |          | 0                             | 10 | 20 | 30 | 40 | 50 | 60 | 70 |
| 230 V          | HITACHI | DH 30PC2 | 57                            |    |    |    |    |    |    |    |
|                | HITACHI | DH 30PC  | 36                            |    |    |    |    |    |    |    |
|                | B       |          | 56                            |    |    |    |    |    |    |    |
|                | C       |          | 32                            |    |    |    |    |    |    |    |

**Fig. 2**

## 7. PRECAUTIONS IN SALES PROMOTION

In the interest of promoting the safest and most efficient use of the Model DH 30PC2 Rotary Hammer by all of our customers, it is very important that at the time of sale the salesperson carefully ensures that the buyer seriously recognizes the importance of the contents of the Handling Instructions, and fully understands the meaning of the precautions listed on the Caution Plate attached to each tool.

### 7-1. 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 the use of any electric power tool cannot be completely eliminated. Accordingly, general precautions and suggestions for the use of electric power tools, and specific precautions and suggestions for the use of the Rotary Hammer are listed in the Handling Instructions to enhance the safe, efficient use of the tool by the customer. Salespersons must be thoroughly familiar with the contents of the Handling Instructions to be able to offer appropriate guidance to the customer during sales promotion.

### 7-2. Caution Plate

The Model DH 30PC2 unit is provided with a Caution Plate (illustrated below) which lists basic safety precautions in use. Carefully ensure that the customer fully understands and follows these precautions before using tool.

For Australia and New Zealand

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

For the U.S.A. and Canada

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

For Taiwan

**注意**  
●使用前請詳讀使用說明書

## 8. REFERENCE INFORMATION

### 8-1. Grease Replacement

The striking portion and the speed reduction portion of the Model DH 30PC2 respectively use different types of grease. It is not necessary to replenish the grease unless the tool is disassembled for repair or there is grease leakage due to a damaged seal. The striking portion uses special grease. To change the grease in the striking portion (inside the crank case and cylinder case), carefully wipe the old grease off the parts, and re-lube with 30 g (1 oz) into the crank case (connecting rod side) and 10 g (0.3 oz) into the cylinder case. Take care not to overfill the grease as an excessive amount of grease can cause hammer failure.

The speed reduction portion (inside the gear cover) uses Hitachi Motor Grease No. 29. The proper supply volume is 30 g (1 oz). Never use the striking portion special grease in the speed reduction portion. Special grease would leak into the motor portion and cause subsequent trouble.

### 8-2. O-ring Replacement

The O-rings (mounted on the striker and piston) are extremely important to ensure adequate sealing of the air pressure. Although the O-rings are made of special rubber to give them a long service life, they do nonetheless become worn, and should be replaced by new ones periodically depending on frequency of use of the tool. With average use, it is recommended that the O-rings be replaced at least every six months to ensure maximum effectiveness.

### 8-3. Structure of the Model DH 30PC2 Rotary Hammer

#### ○ Torque transmission

Armature revolution is transmitted to the second gear to rotate the bevel gear via the slip mechanism between the second gear and bevel pinion axes. Rotation of the bevel gear is then transmitted to the cylinder keyed thereto through the clutch. Cylinder rotation is conveyed to the retainer sleeve coupled together by means of four needle pins and, then to the drill bit inserted into the retainer sleeve by way of two key rails and two steel balls which couple them together.

#### ○ Striking operation

The rotation of the armature is transferred to the crank shaft and connecting rod, which in turn cause the piston to reciprocate inside the cylinder. As the piston reciprocates, the changing air pressure inside the air chamber between the piston and the striker causes the striker to continuously strike against the end of the second hammer. At the same time, the air-cushion effect within the air chamber absorbs the impact of the striker. Should the air escape from the air chamber, the air-cushion effect would cease, and the impact energy would not be absorbed. Accordingly, the O-rings mounted on the striker and the piston play an extremely important role in sealing the air within the air chamber.

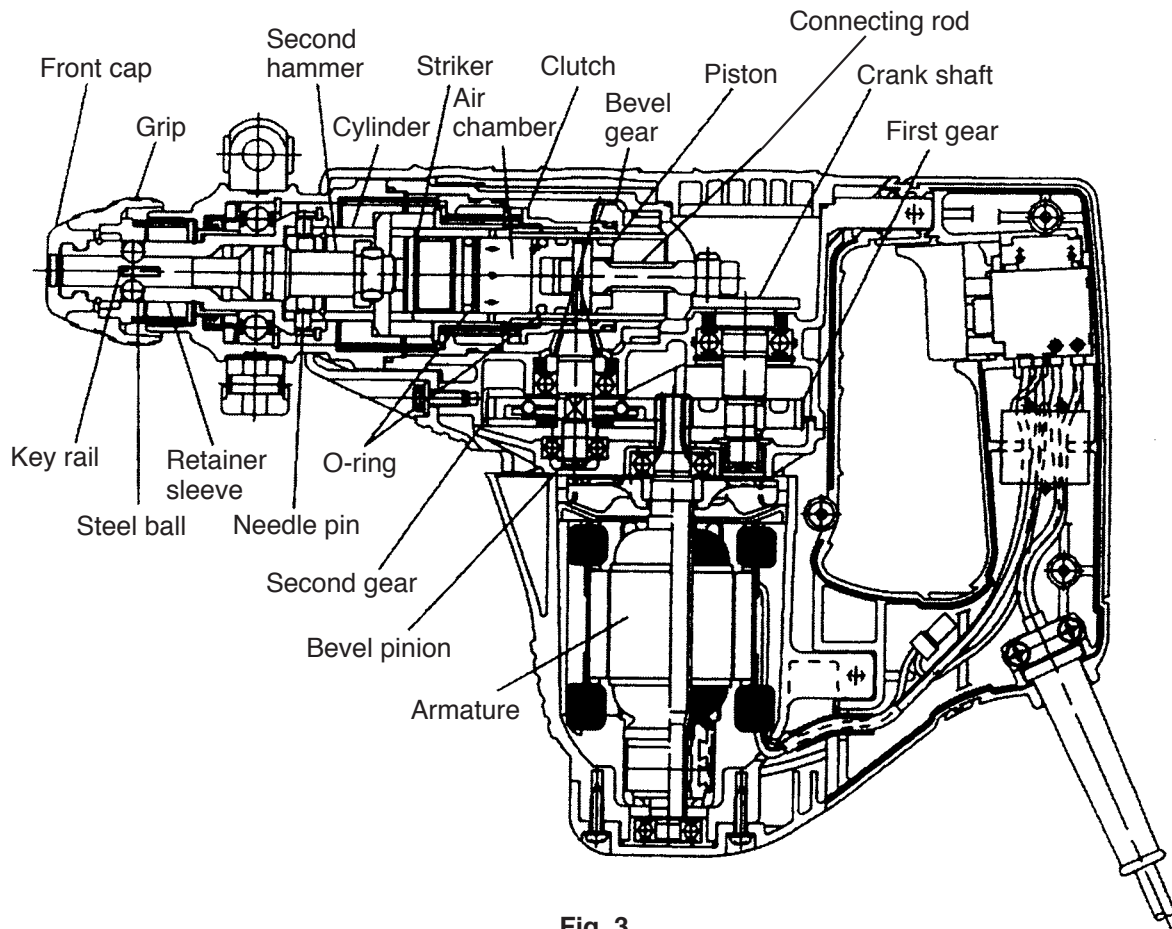


Fig. 3

○ Mechanism to prevent idle hammering

When the working tool is released from the workpiece, slide sleeve (A) and the second hammer are forcibly moved to the position illustrated in Fig. 4 by clutch spring, and the striker moves out of striking position. When this occurs, the air holes located at the position unaffected by the rebound of the striker at no load are opened and the pressure within the air chamber remains unchanged even though the piston continues to reciprocate, thereby preventing striking operation.

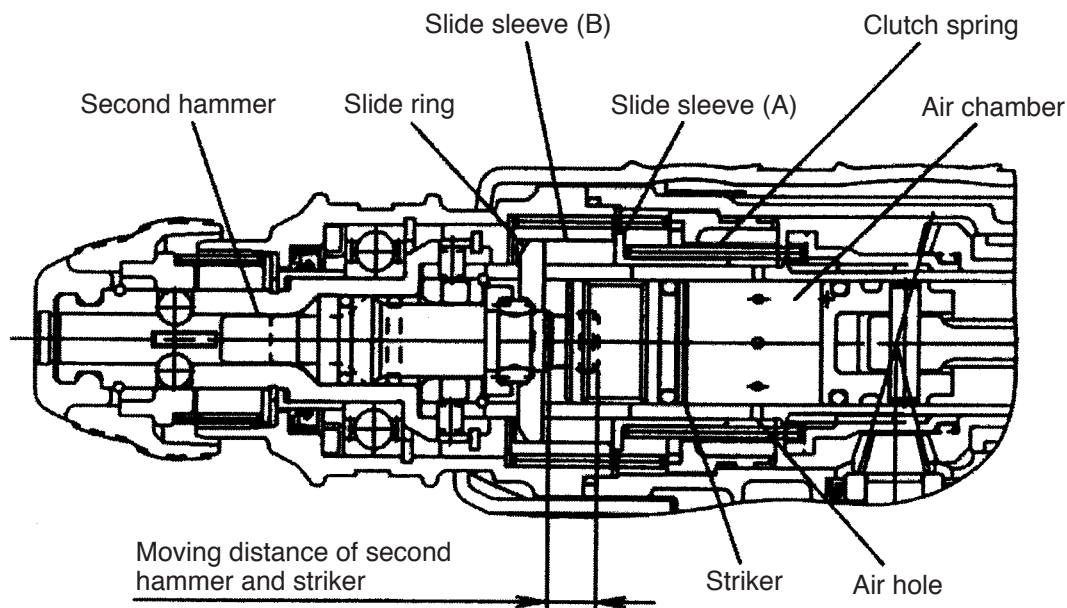


Fig. 4

#### ○ Slip clutch mechanism

A clutch plate holding a steel ball is inserted between the second gear and the spring as a slip mechanism in the Model DH 30PC2. If an excessively large torque is applied to the tool shaft, the second gear idles and does not transmit rotation.

The slip torque is adjusted by the slip plate and the belleville (coned disk) spring pressure. With the arrangement, the clutch slips when an excessive torque is applied to the working tool as when the drill bit contacts steel bar/wire in the concrete, protecting the operator from unexpected motion of the side handle.

#### ○ Sealing and dust-proof structure

The cylinder case and crank case section is tightly sealed with O-rings and oil seals as shown in Fig. 5. This prevents leakage of grease from the cases, while also protecting them against dust from outside. The drill bit chuck portion is protected by a rubber front cap to keep out dust and chips which could cause improper fitting of the drill bit and/or other faulty operation of the chuck portion. The speed control switch is also a fully dust-proofed type to prevent dust and chips from entering the handle section and causing possible operational trouble or a break down of the insulation.

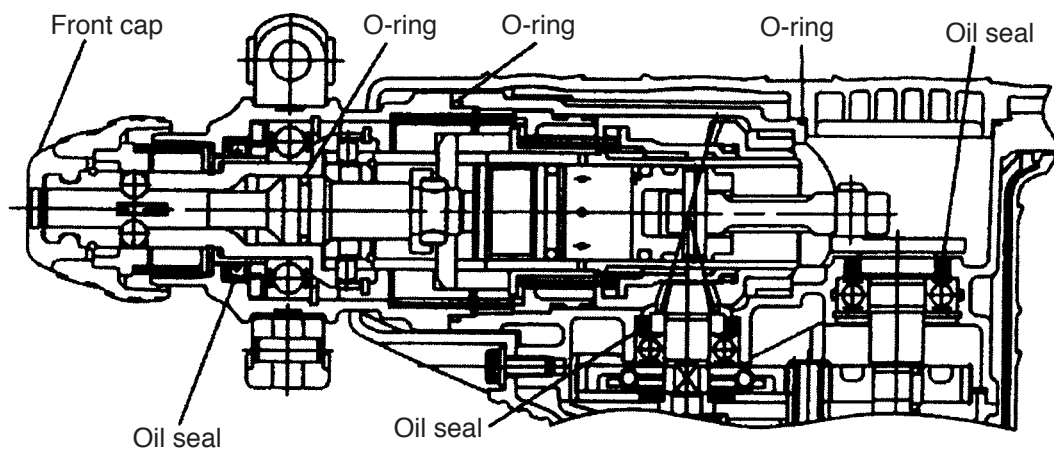


Fig. 5

#### ○ Speed control

The Model DH 30PC2 is equipped with a variable speed control switch which permits free change of the rotation speed and hammering force. When drilling in fragile materials, pull the switch trigger gently for low rotation speed (hammering force) to achieve optimum results.

#### ○ Handle and side handle

The handle section is of a two-layer structure. The base is made of glassfiber-reinforced plastic and the outside layer is soft resin. They are molded in one piece.

The side handle also has a two-layer structure. The base is made of glassfiber-reinforced plastic base with a steel nut and the outside layer is soft resin. They are molded in one piece. The newly designed handle and side handle structure ensures more comfortable grip for improved operability.

#### 8-4. "Three-Mode" Changeover Mechanism

The change lever of the Model DH 30PC2 permits quick and easy changeover among the "Rotation and hammering", "Rotation only" and "Hammering only" functions. Each function mode is explained below. When operating the change lever, be sure to continue pressing the pushing button.

##### ○ Rotation and hammering (Fig. 6)

Adjust the change lever to "Rotation and hammering" (**T** mark). Claws of the bevel gear engage with matching claws of the clutch and rotation is transmitted to the cylinder coupled to the clutch. Thus the tool is turned. When the tool is pressed against a workpiece, slide sleeve (A) blocks the air hole of the cylinder to make an air chamber between the piston and the striker. The striker is then moved according to the pressure fluctuation in the air chamber and transmits the hammering force to the second hammer and the tool.

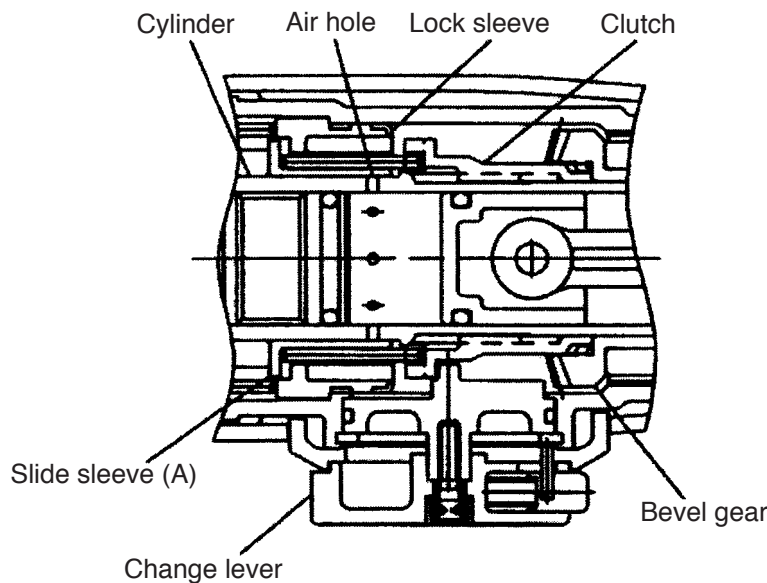


Fig. 6

##### ○ Hammering only (Fig. 7)

Adjust the change lever to "Hammering only" (**T** mark). Engagement between the bevel gear and the clutch is released and no rotation is transmitted. The spline inside the lock sleeve engages with the spline outside the clutch to lock the turning motion of both the cylinder and the tool. When the tool is pressed against a workpiece, slide sleeve (A) blocks the air hole of the cylinder to make an air chamber between the piston and the striker. The striker is then moved according to the pressure fluctuation in the air chamber and transmits the hammering force to the second hammer and the tool.

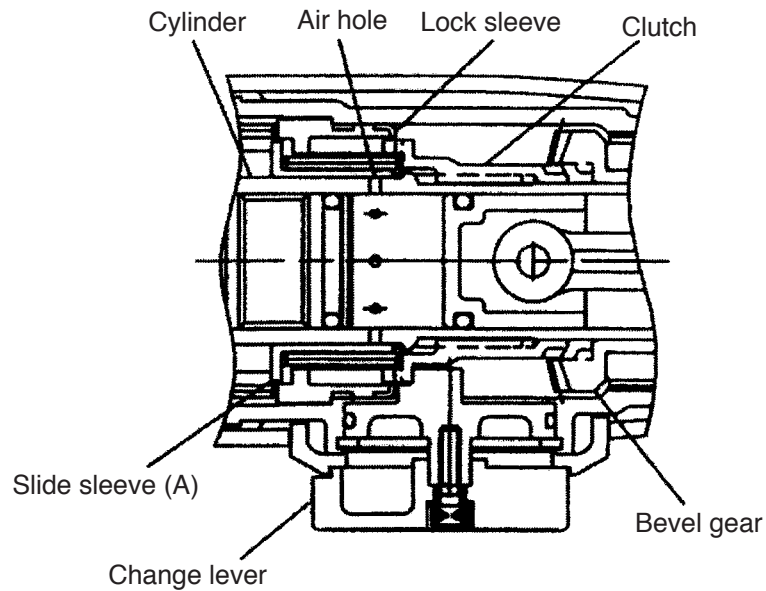


Fig. 7

○ Rotation only (Fig. 8)

Adjust the change lever to "Rotation only" (▨ mark). Claws of the bevel gear engage with matching claws of the clutch and rotation is transmitted to the cylinder coupled to the clutch. Thus the tool is turned.

When the lock sleeve is moved toward the tip, the amount of backward movement of slide sleeve (A) is limited to the position where it contacts the lock sleeve to keep the air hole of the cylinder opened. Thus there is no pressure fluctuation in the air chamber and no hammering force is transmitted.

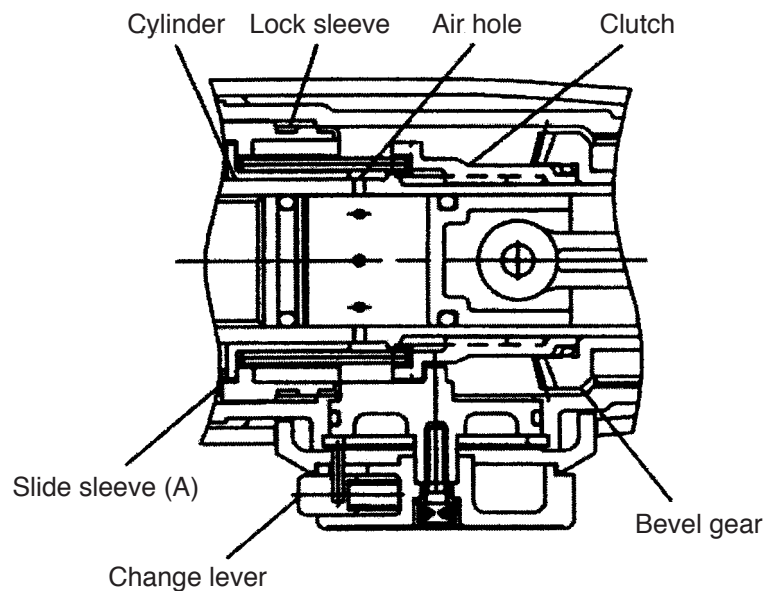


Fig. 8

○ Neutral (Fig. 9)

The Model DH 30PC2 has a neutral mode used for positioning a tool such as a cold chisel. Adjust the change lever to "Neutral" (⊙ mark). Engagement between the bevel gear and the clutch is released and no rotation is transmitted. Then turn the grip of the tool retainer to adjust the tool to the desired position.

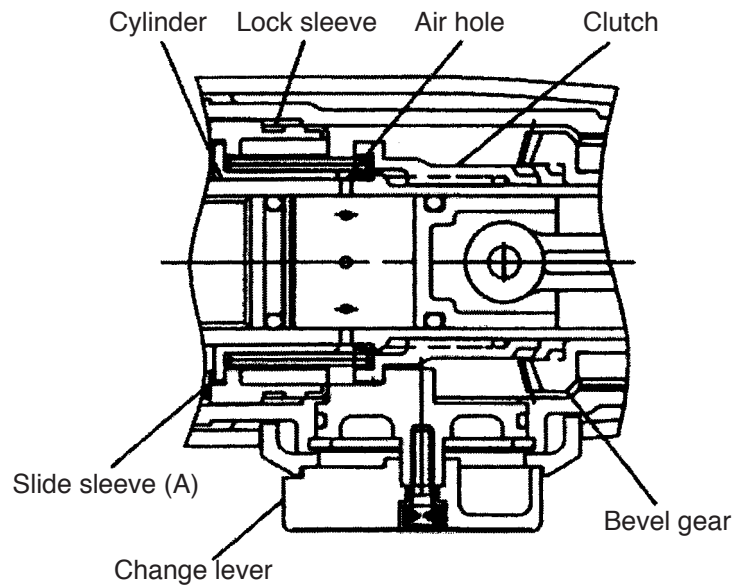


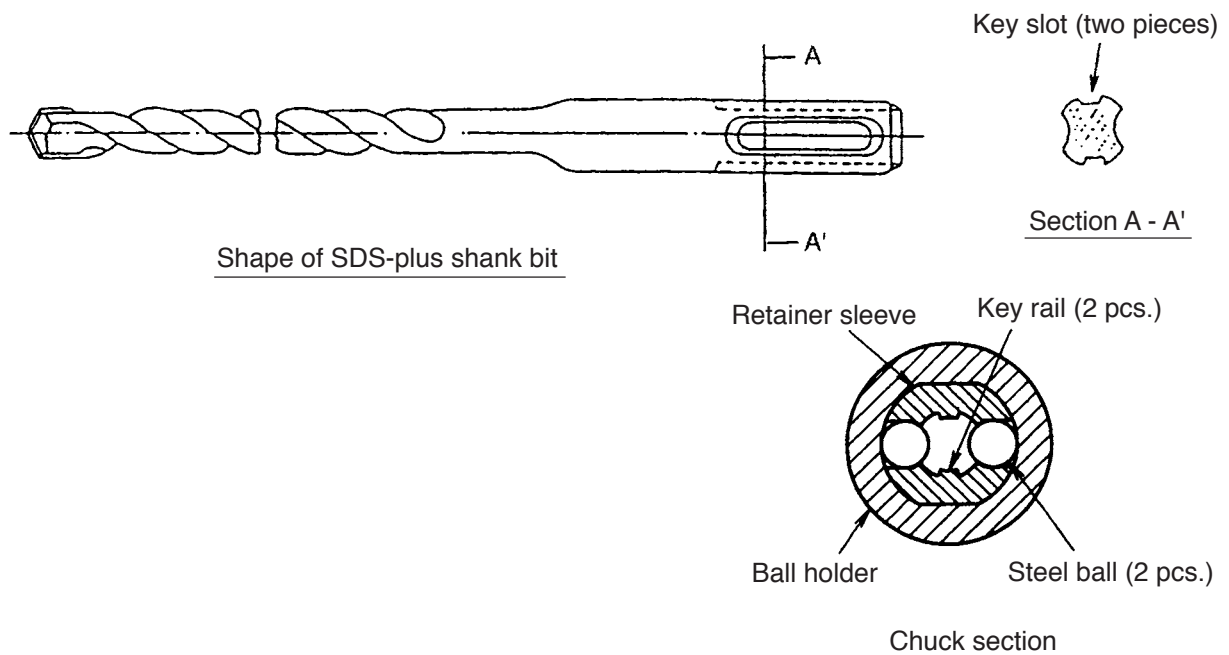
Fig. 9

**8-5. Caution when Using "Rotation Only"(No Hammering) Function**

The chuck adapter and the drill chuck (optional accessories) are required for drilling into wood or metal materials. The change lever of the Model DH 30PC2 permits changeover among "Rotation only," "Rotation and hammering" and "Hammering only" functions. Be sure to adjust the change lever to "Rotation only" for drilling into wood or metal materials by means of the chuck adapter and the drill chuck (optional accessories). If the change lever is adjusted to "Rotation and hammering" or "Hammering only" for such operation, the drill chuck will be damaged by hammering. Please caution the customers about the above.

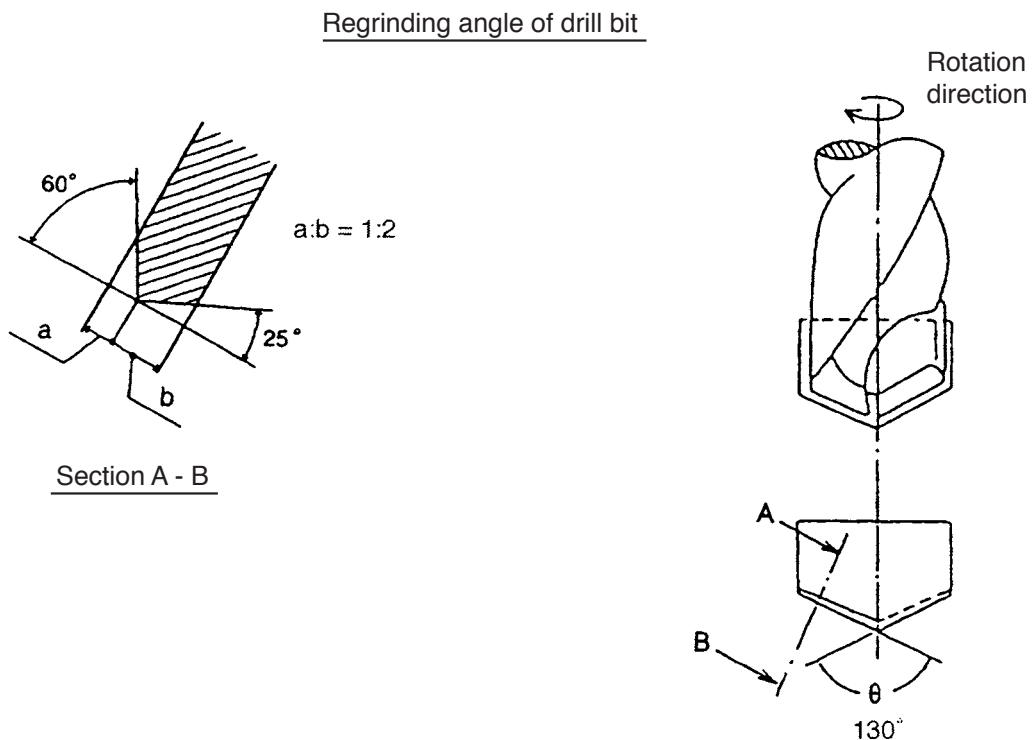
## 8-6. Drill Bits

The chuck section is designed exclusively for the popular and widely available SDS-plus shank bits as shown in Fig. 10. Rotating torque is transmitted to the drill bit by two key rails provided in the tool holding section. A steel ball is used to prevent the bit from coming off.



**Fig. 10**

The service life of a drill bit with a diameter of 8 mm is approximately 300 holes when drilling into concrete to a depth of 30 mm. If reground before the end of its service life, the drill bit will continue to provide efficient drilling. Figure 11 shows the regrinding angle.



**Fig. 11**

### 8-7. Tool Retainer

The tool retainer is structured as shown in Fig. 12. The tip of the tool retainer is covered with the front cap (made of rubber) to prevent dust and chips from getting inside. The steel ball falls into the round groove of the bit to prevent the tool from coming off and the two key rails transmit the rotation torque.

To mount the bit, push the bit in the tool retainer as far as it will go. Pushing lightly, turn the bit until it is caught. At this position, slide the grip backward to the full. Release the grip. The grip is then returned to the original position and the bit is fixed. Pull the bit to check whether it is securely fixed or not. To remove the bit, slide the grip backward to the full and remove the bit.

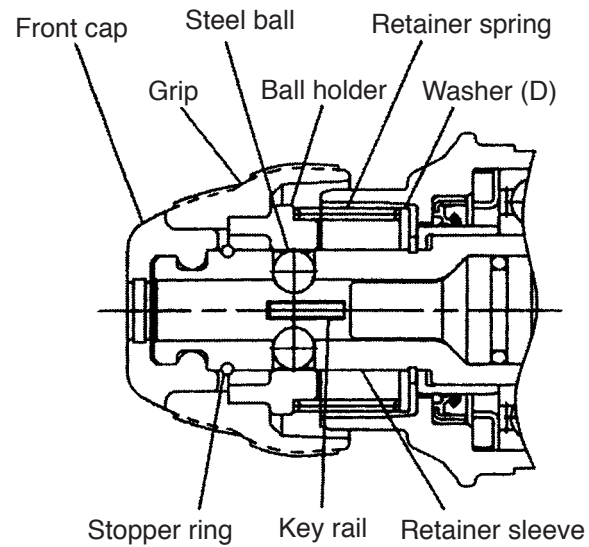


Fig. 12

## 9. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY

The numbers in **[Bold]** correspond to the item numbers in the Parts List and exploded assembly diagrams.

### 9-1. Disassembly

#### (1) Disassembly of the retainer

As shown in Fig. 13, pull the Grip **[2]** fully in the arrow direction and remove the Front Cap **[1]**. (Pull the Front Cap **[1]** strongly because it is made of rubber and fitted to the grip securely.) Then, the Grip **[2]** can also be removed. Remove the Stopper Ring **[3]** with a retaining ring puller. The Ball Holder **[4]**, two Steel Balls D7.0 **[17]**, Retainer Spring **[5]** and Washer (D) **[6]** can be removed from the Retainer Sleeve **[18]**. (Fig. 14)

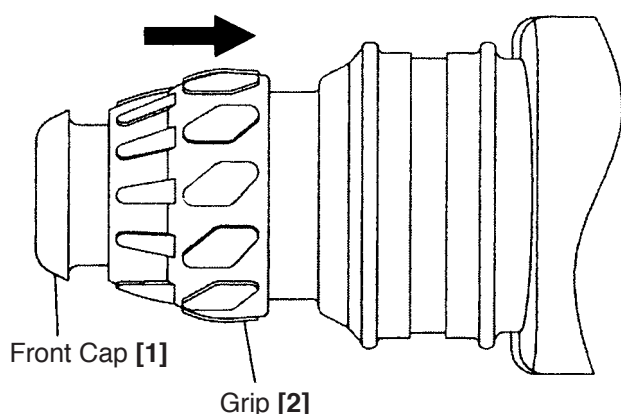


Fig. 13

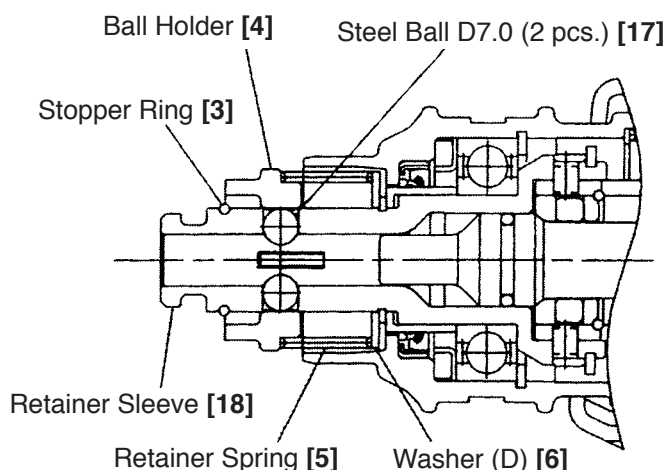


Fig. 14

#### (2) Removal of the Cylinder Case **[9]** and Cylinder **[36]**

Remove the Seal Lock Hex. Socket Hd. Bolt M4 x 12 **[56]** of the Crank Case Cover **[90]** and the Hex. Socket Hd. Bolt (W/Flange) M5 x 12 **[50]** of the Hood **[51]**. Remove the Crank Case Cover **[90]** and the Hood **[51]** from the Crank Case **[94]**. Remove the Seal Lock Hex. Socket Hd. Bolt M4 x 12 **[56]** securing the Change Lever **[57]** and remove the Change Lever **[57]** and the Lever Holder **[59]**. Remove the Retaining Ring for D40 Hole **[60]** with a retaining ring puller and remove the Lever Shaft **[61]**.

Remove the Seal Lock Hex. Socket Hd. Bolt M6 x 22 **[8]** from the Cylinder Case **[9]** and separate the Cylinder Case **[9]** from the Crank Case **[94]**. Remove the Clutch **[40]**, Clutch Spring **[35]**, Lock Sleeve **[39]** and Lock Spring **[38]** from between the Cylinder Case **[9]** and the Crank Case **[94]**. (Fig. 15)

Remove the Retaining Ring **[7]** with a retaining ring puller. In this condition, stand the Cylinder Case **[9]** and pull out the Retainer Sleeve **[18]** from the Cylinder Case **[9]** with a hand press. Then the Sleeve **[16]** can be removed from the Retainer Sleeve **[18]**. The Retainer Sleeve **[18]**, Cylinder **[36]**, Second Hammer **[23]**, Slide Ring **[30]**, Slide Sleeve (A) **[34]** and Slide Sleeve (B) **[33]** can also be separated from the Cylinder Case **[9]** as a unit. (Fig. 16)

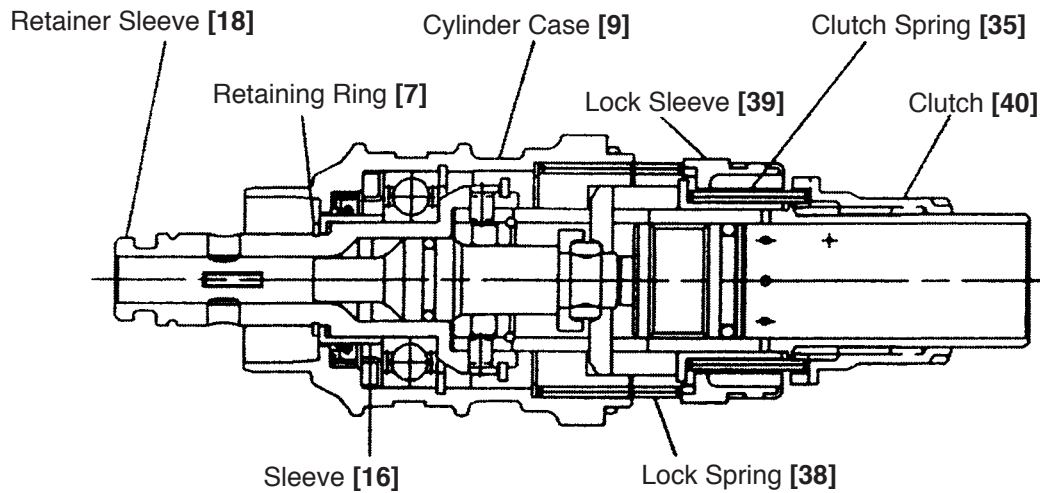


Fig. 15

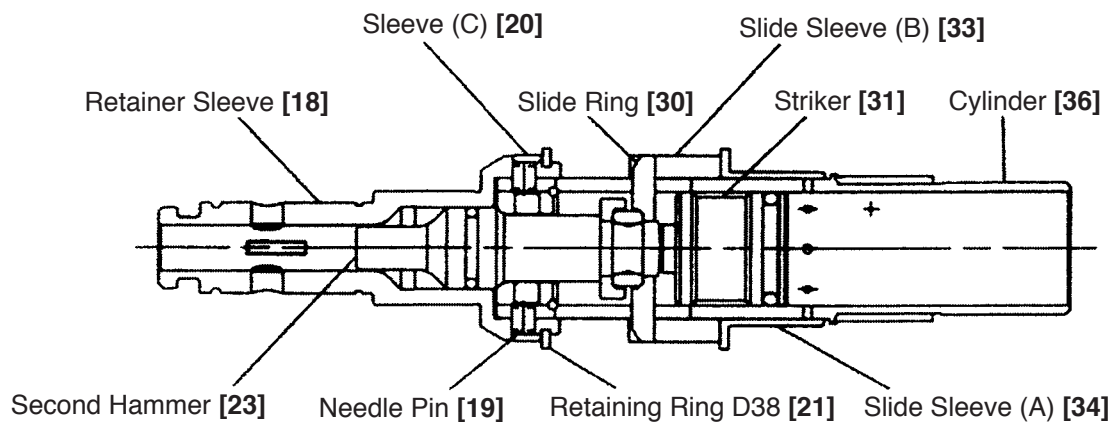


Fig. 16

### (3) Removal of components in the Cylinder [36]

Remove the Retaining Ring D38 [21] with a retaining ring puller and remove Sleeve (C) [20]. Remove the four Needle Pins [19] to separate the Retainer Sleeve [18] from the Cylinder [36]. Remove the Striker [31], Second Hammer [23], Damper Holder (B) [28] and Damper (C) [29] from the inside of the Cylinder [36]. As shown in Fig. 17, move Slide Sleeve (A) [34] and Slide Sleeve (B) [33] until they contact the outside flange of the Cylinder [36]. In this condition, slightly tilt the Slide Ring [30] to the axial direction of the Cylinder [36]. Turn the Slide Ring [30] on its protrusion by 90° to remove it from the slotted hole of the Cylinder [36].

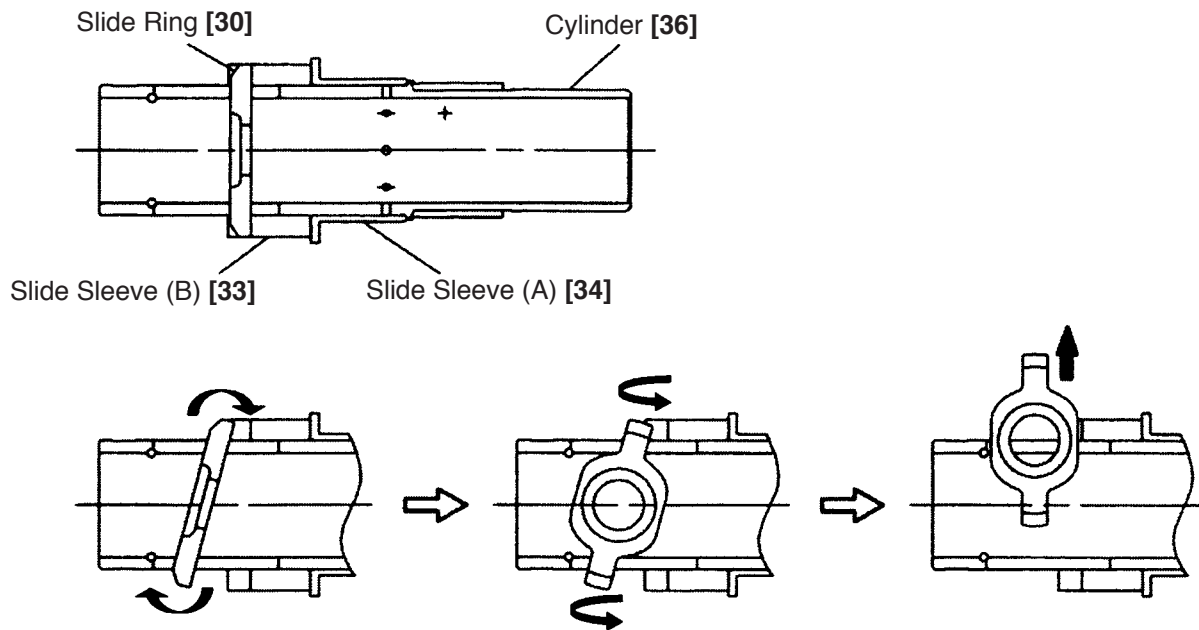


Fig. 17

#### (4) Removal of the Piston [44]

The Piston [44] is remained in the Crank Case [94]. Move the Crank Shaft [92] to the bottom dead center then the piston ass'y can be removed from the Crank Shaft [92]. (Figs. 18 and 19)

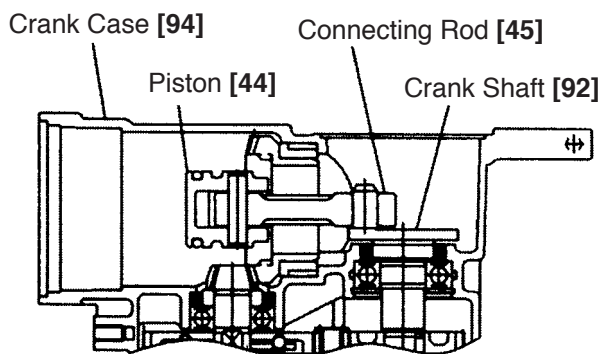


Fig. 18

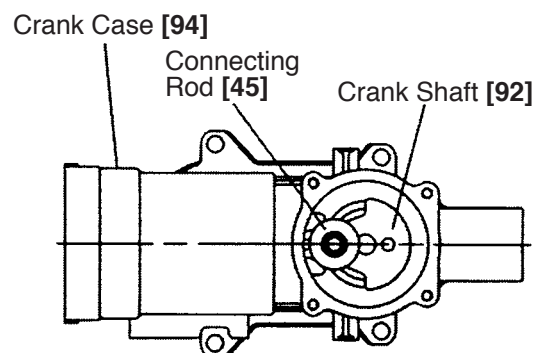


Fig. 19

#### (5) Removal of the First Gear [98] and the Crank Shaft [92]

Remove the Hex. Socket Hd. Bolt (W/Flange) M5 x 16 [102] and the Tapping Screw (W/Flange) D5 x 20 (Black) [103] from Handle (A). (B) Set [101] and separate Handle (A). (B) Set [101] from the Crank Case [94] and the Housing Ass'y [106]. Remove the Seal Lock Hex. Socket Hd. Bolt M6 x 45 [54] from the Crank Case [94] and separate the Crank Case [94] from the Housing Ass'y [106]. Place the Crank Case [94] on a support facing the Connecting Rod [45] downward and press the end face of the Crank Shaft [92] with a hand press to remove the Crank Shaft [92] and the First Gear [98]. (Fig. 20)

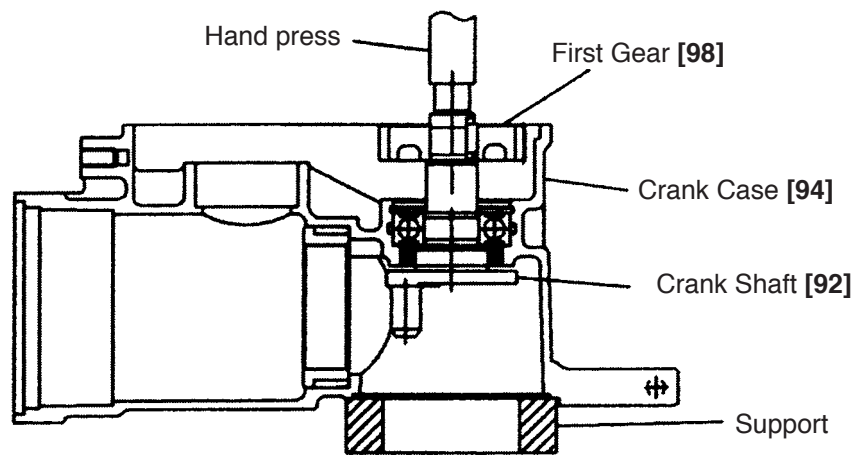


Fig. 20

## 9-2. Reassembly

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

### (1) Mouting the First Gear [98] and the Crank Shaft [92]

Press-fit Oil Seal (B) [75] in the Crank Case [94] then the O-ring (S-32) [96] is fitted in the groove inside the Crank Case [94]. Press-fit the Ball Bearing 6002DDCMPS2L [95] in the Crank Case [94] then the Retaining Ring for D32 Hole [97] is fitted in the groove inside the Crank Case [94]. Press-fit the Crank Shaft [92] in the Ball Bearing 6002DDCMPS2L [95]. Put the Feather Key 3 x 3 x 8 [93] into the groove of the Crank Shaft [92] and press-fit the First Gear [98] with a suitable tool while holding the flat portion of the Crank Shaft [92] with a steel bar. Before press-fitting, make sure that the Feather Key 3 x 3 x 8 [93] fits in the key groove of the First Gear [93]. (Fig. 21)

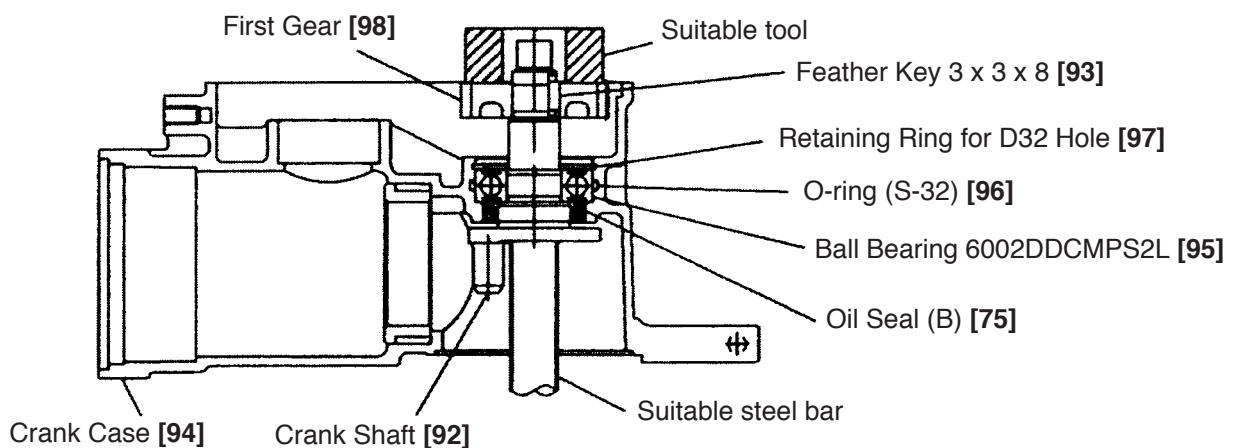


Fig. 21

### (2) Mouting the Piston [44]

Mount the O-ring (I.D 19.2) [32] to the Piston [44]. Insert the Piston Pin [43] into the Piston [44] and the Connecting Rod [45]. Move the Crank Shaft [92] to the bottom dead center then insert the piston ass'y into the Crank Case [94] from the Cylinder Case [9] side. (Figs. 22 and 23)

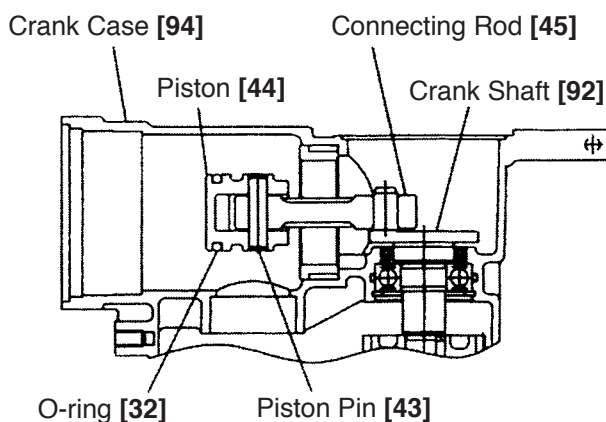


Fig. 22

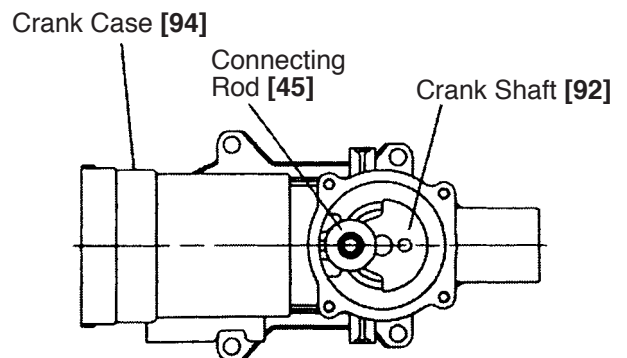


Fig. 23

(3) Mounting components in the Cylinder [36]

Fit Slide Sleeve (A) [34] and Slide Sleeve (B) [33] on the outer circumferrence of the Cylinder [36] and move Slide Sleeve (A) [34] and Slide Sleeve (B) [33] until they contact the outside flange of the Cylinder [36]. At this time, align the slotted hole of the Cylinder [36] with the groove of Slide Sleeve (B) [33]. (Fig. 24)

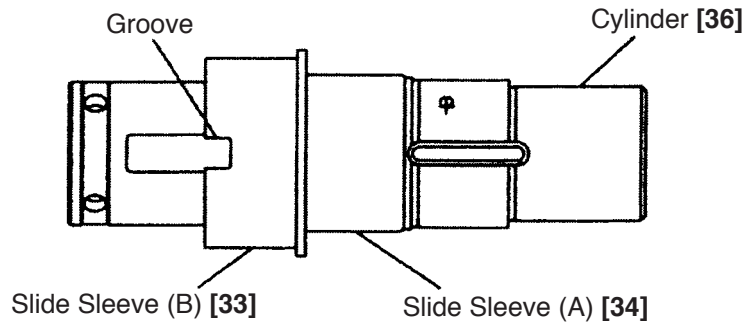


Fig. 24

Put the Slide Ring [30] in the Cylinder [36] through the slotted hole. Tilt the Slide Ring [30] slightly to the axial direction of the Cylinder [36] and turn the Slide Ring [30] on its protrusion by 90°. (Fig. 25) Be careful not to deviate the protrusion of the Slide Ring [30] from the groove of Slide Sleeve (B) [33] during mounting.

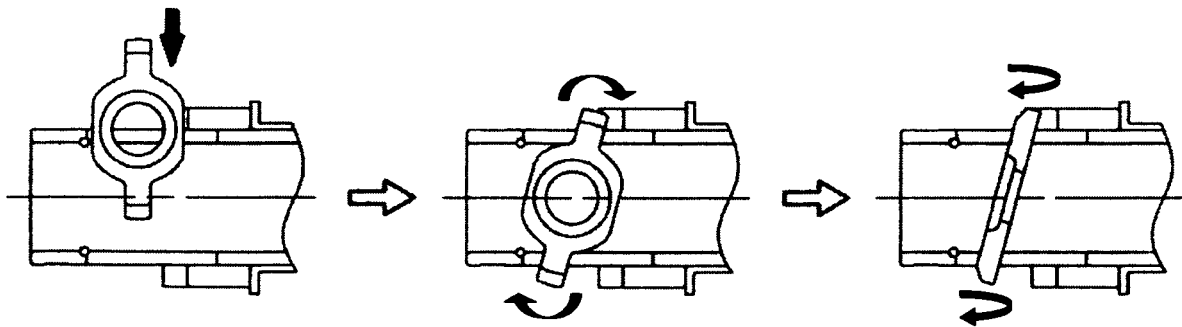


Fig. 25

Mount the Second Hammer [23], Damper Washer [24], Damper [25], Damper Holder [26], Damper Holder (B) [28] and Damper (C) [29] to the inside of the Cylinder [36]. Mount the Damper Washer [24] so that the R surface of the inside diameter is aligned with the R surface of the Second Hammer [23]. Mount the Damper Holder [26] so that its flat surface without difference is faced to the Damper [25]. Fit the Retaining Ring D38 [21] and Sleeve (C) [20] on the outer circumference of the Cylinder [36] then insert the Cylinder [36] into the Retainer Sleeve [18]. (Fig. 26)

Connect the Cylinder [36] and the Retainer Sleeve [18] with the four Needle Pins [19]. Fit Sleeve (C) [20] on the outer circumference of the Retainer Sleeve [18] and fix it with the Retaining Ring D38 [21].

To connect the Cylinder Case [9] with the Crank Case [94] easily, move the Crank Shaft [92] and move the Piston [44] to the top dead center, then insert the Piston [44] in the Cylinder [36]. (Fig. 27)

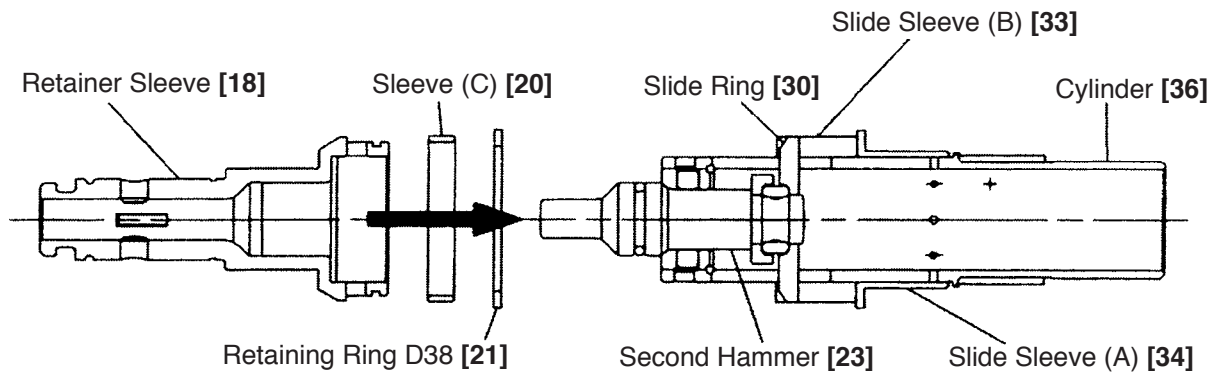


Fig. 26

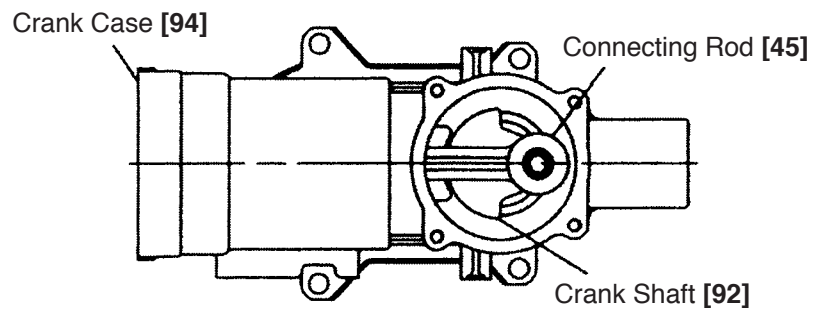


Fig. 27

#### (4) Mounting the Fan Guide [70]

Mount the Fan Guide [70] to the Housing Ass'y [106] being careful of the concave portion of the Fan Guide [70]. (Fig. 28)

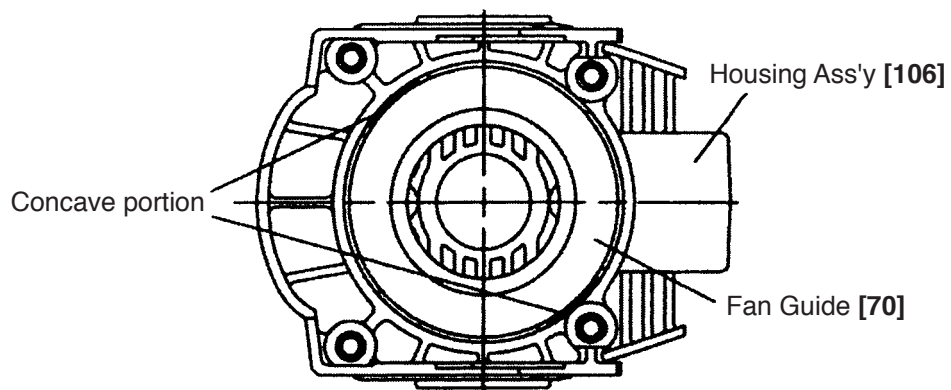


Fig. 28

#### (5) Lubrication

Apply Hitachi Motor Grease No. 29 to the following places:

Apply 30 g (1 oz) to the gears in the Gear Cover [100] and the Crank Case [94], and coat grease on the Needle Bearing (M661) [99] (motor ass'y), Steel Ball D7.0 [17], pinion of armature ass'y.

Apply special grease (grease for electric impact drill) to the following places:

Apply 30 g (1 oz) to the Connecting Rod [45] in the crank case.

Apply 10 g (0.3 oz) to the inside of the Cylinder Case [9].

Coat grease on the inside diameter of the Connecting Rod [45] of the piston ass'y, O-ring (C) of the Second Hammer [23], O-ring (I.D 19.2) [32], sliding portion of the Second Hammer [23], Damper [25], Damper (C) [29], O-ring [62], inside and outside diameters of the Bevel Gear [41], inside diameter of the Clutch [40], inside diameter of Slide Sleeve (A) [34], inside diameter of Slide Sleeve (B) [33], inside lip portion of Oil Seal (B) [75] and inside lip portion of the Oil Seal [11].

#### (6) Oil seal and others

- Be careful not to scratch the following parts:
- Oil Seal [11] and O-ring [10] of the Cylinder Case [9]
- Oil Seal (B) [75] and O-ring (S-32) [96] of the Crank Case [94]
- O-ring (C) of the Second Hammer [23]
- O-ring (I.D 19.2) [32] of the Piston [44] and the Striker [31]
- O-ring [62] of the Lever Shaft [61]
- O-ring (S-48) [91] of the Crank Case Cover [90]

### 9-3. Screw Locking Agent TB1401

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

**Note: Be sure to apply screw locking agent ThreeBond TB1401 to the threads during reassembly, as the bolts loosened with vibration may cause damage to the tool body.**

## 9-4. Tightening Torque

|  |   |
|--|---|
| Cylinder case mounting bolt .....                    | $9.8^{+1.96}_0$ N·m ( $100^{+20}_0$ kgf·cm) |
| (Seal Lock Hex. Socket Hd. Bolt M6 x 22 [8])         |   |
| Crank case mounting bolt .....                       | $9.8^{+1.96}_0$ N·m ( $100^{+20}_0$ kgf·cm) |
| (Seal Lock Hex. Socket Hd. Bolt M6 x 45 [54])        |   |
| Crank case cover mounting bolt .....                 | $4.41 \pm 0.49$ N·m ( $45 \pm 5$ kgf·cm)    |
| (Seal Lock Hex. Socket Hd. Bolt M4 x 12 [56])        |   |
| Lever shaft mouning bolt .....                       | $1.47 \pm 0.49$ N·m ( $15 \pm 5$ kgf·cm)    |
| (Seal Lock Hex. Socket Hd. Bolt M4 x 12 [56])        |   |
| Handle mouning bolt .....                            | $3.92 \pm 0.49$ N·m ( $40 \pm 5$ kgf·cm)    |
| (Hex. Socket Hd. Bolt (W/Flange) M5 x 16 [102])      |   |
| Hex. Hd. Tapping Screw D5 x 50 [71] .....            | $2.94 \pm 0.49$ N·m ( $30 \pm 5$ kgf·cm)    |
| Tapping Screw (W/Flange) D5 x 20 (Black) [103] ..... | $2.94 \pm 0.49$ N·m ( $30 \pm 5$ kgf·cm)    |
| Tapping Screw (W/Flange) D4 [104] [113] [120] .....  | $1.96 \pm 0.49$ N·m ( $20 \pm 5$ kgf·cm)    |

## 9-5. Wiring Diagrams

(1) Product with noise suppressor

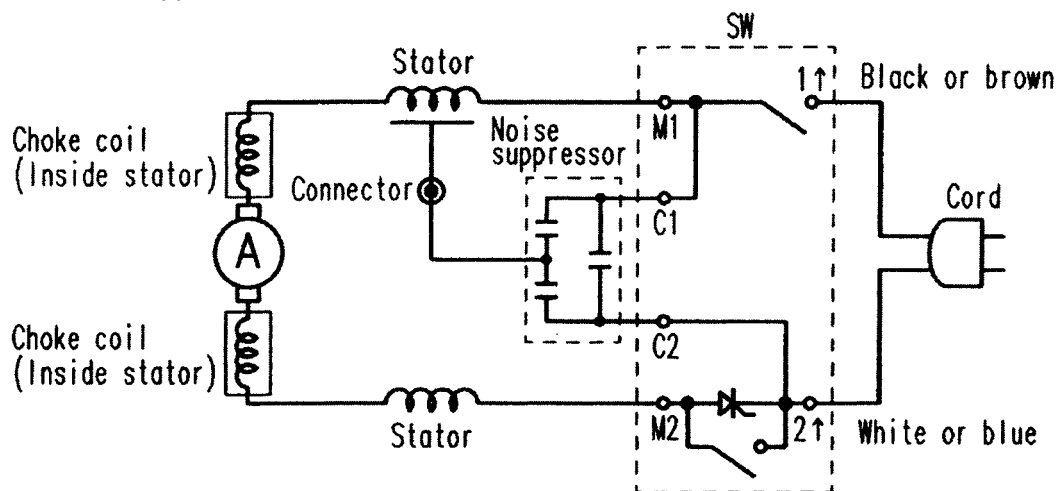


Fig. 29

(2) Product without noise suppressor

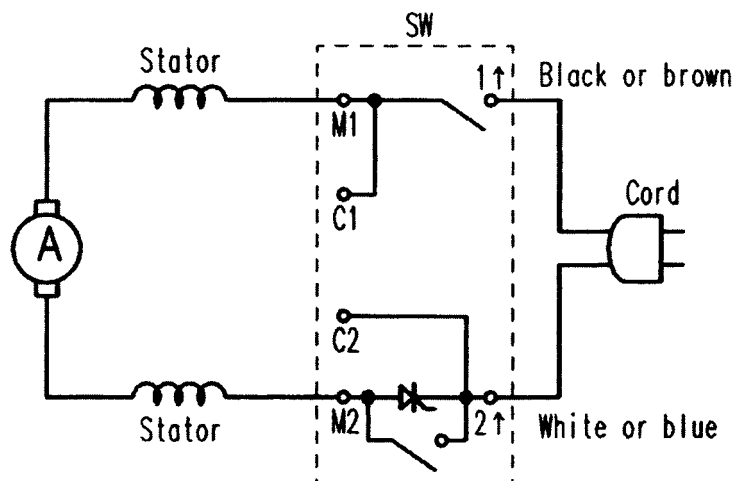


Fig. 30

## 9-6. Wiring of Variable Speed Control Switch

Insert each cord into the terminal 1 ↑ and terminal 2 ↑ of the speed control switch as shown in Fig. 31 and tighten the screw [tightening torque:  $0.6 \pm 0.2$  N·m ( $6 \pm 2$  kg·cm,  $5.2 \pm 1.7$  in·lbs.)]. Insert each lead wire (black) coming from the stator ass'y into the terminals M1 and M2. Insert each lead wire (black) coming from the noise suppressor into the terminals C1 and C2. After insertion, pull each lead wire slightly to check the lead wires do not come off. To disconnect the lead wires, insert a small flatblade screwdriver into the slots near the terminals and pull out the lead wires.

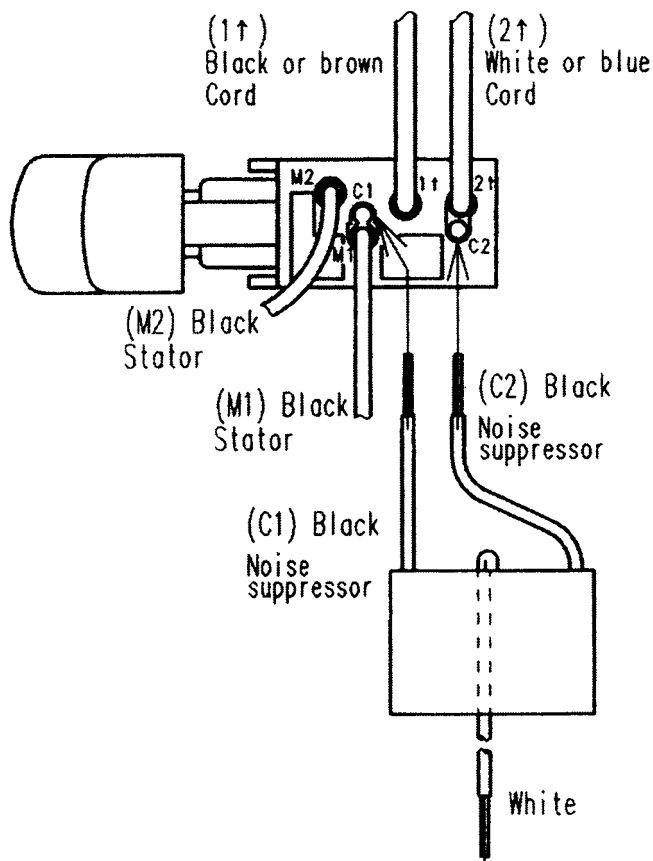


Fig. 31

## 9-7. Insulation Tests

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

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

Dielectric strength : AC 4,000 V/1 minute, with no abnormalities ... 230 V (and 110 V for U.K. products)

AC 2,500 V/1 minute, with no abnormalities ... 110 V (except U.K. products)

## 9-8. No-load Current Values

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

| Voltage (V)      | 110 | 120 | 220 | 230 | 240 |
|------------------|-----|-----|-----|-----|-----|
| Current (A) Max. | 4.2 | 4.2 | 2.5 | 2.5 | 2.4 |

## 10. STANDARD REPAIR TIME (UNIT) SCHEDULES

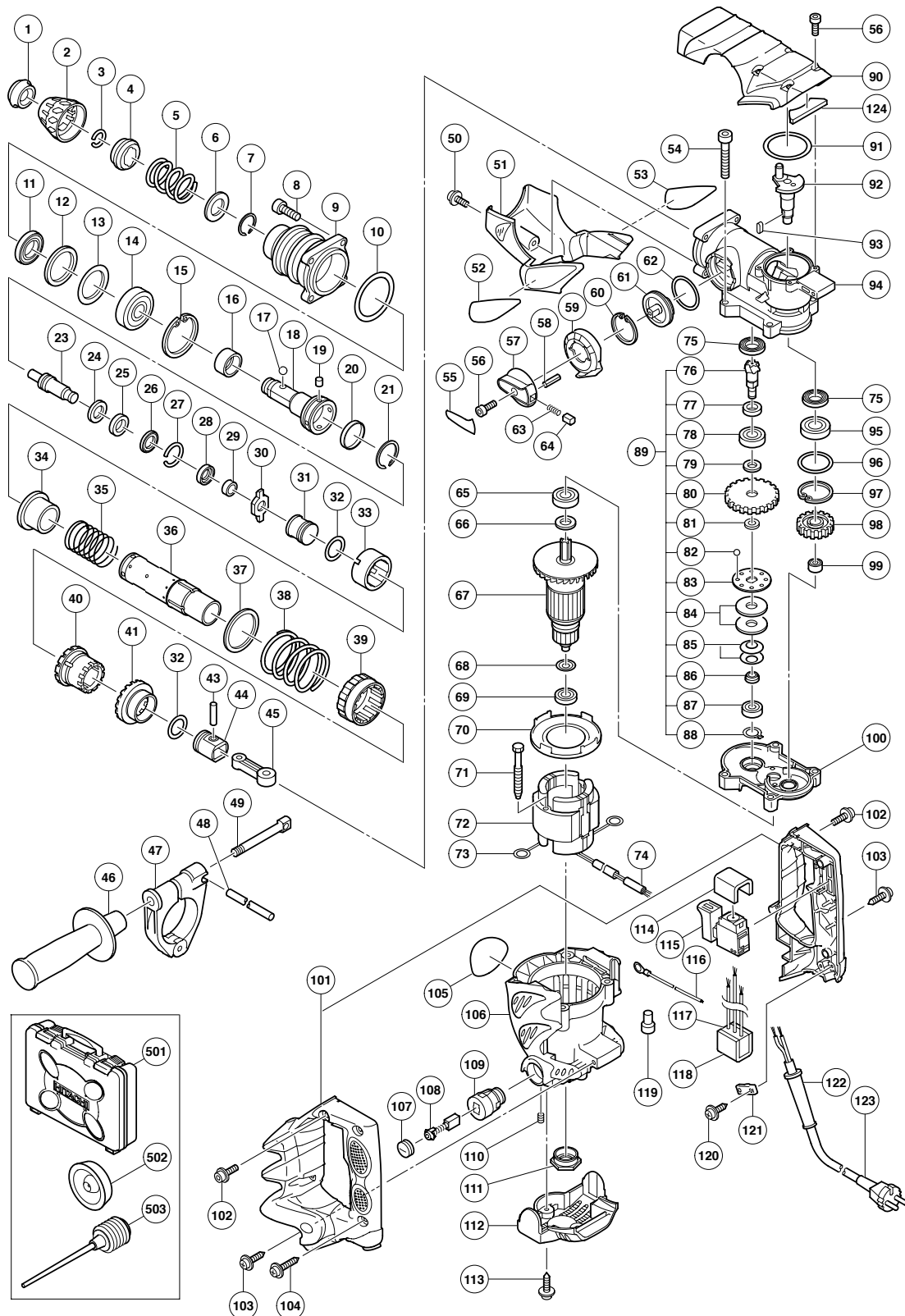
| MODEL    | Variable         |  | 10  | 20  | 30   | 40   | 50 | 60 min. |
|----------|------------------|--|---|---|--|--|----|---------|
|          | Fixed            |  |   |   |  |  |    |         |
| DH 30PC2 | General Assembly | Work Flow  |   |   |  |  |    |         |
|          |                  |  |   |   |  |  |    |         |
|          |                  |  | Switch<br>Cord<br>Cord Armor  |   |  | Housing Ass'y<br>Stator Ass'y                                  |    |         |
|          |                  |  |   |   | Gear Cover<br>Needle Bearing   |  |    |         |
|          |                  | Tail Cover   |   |   | Armature Ass'y<br>Ball Bearing (6001DD)<br>Ball Bearing (608VV)                                  |  |    |         |
|          |                  | Crank Case<br>Cover<br>O-ring (S-48)   |   |   |  |  |    |         |
|          |                  |  | Handle (A). (B)<br>Set  |   | Crank Shaft<br>Oil Seal (B)<br>O-ring (S-32)<br>Ball Bearing (6002DD)<br>First Gear              | Crank Case   |    |         |
|          |                  | Front Cap<br>Grip<br>Ball Holder<br>Retainer Spring  | Cylinder Case<br>O-ring (S-55)<br>Oil Seal<br>Damper (B)<br>Damper<br>Washer (B)  |   | Slip Clutch<br>Ass'y   |  |    |         |
|          |                  | Piston O-ring<br>Lever Shaft<br>Lever Holder<br>Change Lever<br>Lever Spring<br>Pushing Button | Ball Bearing (6005DD)<br>Sleeve<br>Steel Ball D7.0<br>Retainer Sleeve<br>O-ring (C)<br>Second Hammer<br>Damper Washer<br>Damper<br>Damper Holder<br>Hammer Holder (B)<br>Damper (C)<br>Slide Ring |   | Bevel Pinion<br>Collar<br>Ball Bearing (6001DD)<br>Washer<br>Second Gear<br>Ball Bearing (608ZZ) |  |    |         |
|          |                  |  |   | Striker<br>O-ring x 2<br>Piston<br>Connecting Rod | Slide Sleeve (B)<br>Slide Sleeve (A)<br>Clutch Spring  | Cylinder<br>Lock Spring<br>Lock Sleeve<br>Clutch<br>Bevel Gear |    |         |

## ELECTRIC TOOL PARTS LIST

### ■ ROTARY HAMMER Model DH 30PC2

2006 · 8 · 3

(E1)



## PARTS

DH 30PC2

| ITEM NO. | CODE NO. | DESCRIPTION                           | NO. USED | REMARKS |  |
|----------|----------|---------------------------------------|----------|---------|--|
| 1        | 323-078  | FRONT CAP                             | 1        |         |  |
| 2        | 323-077  | GRIP                                  | 1        |         |  |
| 3        | 306-340  | STOPPER RING                          | 1        |         |  |
| 4        | 323-076  | BALL HOLDER                           | 1        |         |  |
| 5        | 323-075  | RETAINER SPRING                       | 1        |         |  |
| 6        | 325-668  | WASHER (D)                            | 1        |         |  |
| 7        | 306-993  | RETAINING RING                        | 1        |         |  |
| 8        | 321-313  | SEAL LOCK HEX. SOCKET HD. BOLT M6X22  | 4        |         |  |
| 9        | 325-651  | CYLINDER CASE                         | 1        |         |  |
| 10       | 980-744  | O-RING (S-55)                         | 1        |         |  |
| 11       | 320-324  | OIL SEAL                              | 1        |         |  |
| 12       | 320-325  | DAMPER (B)                            | 1        |         |  |
| 13       | 320-326  | DAMPER WASHER (B)                     | 1        |         |  |
| 14       | 326-304  | BALL BEARING 6005DDCMPS2L             | 1        |         |  |
| 15       | 948-227  | RETAINING RING FOR D47 HOLE           | 1        |         |  |
| 16       | 325-667  | SLEEVE                                | 1        |         |  |
| 17       | 959-156  | STEEL BALL D7.0 (10 PCS.)             | 2        |         |  |
| 18       | 325-652  | RETAINER SLEEVE                       | 1        |         |  |
| 19       | 325-658  | NEEDLE PIN                            | 4        |         |  |
| 20       | 326-301  | SLEEVE (C)                            | 1        |         |  |
| 21       | 313-420  | RETAINING RING D38                    | 1        |         |  |
| 23       | 325-653  | SECOND HAMMER                         | 1        |         |  |
| 24       | 323-059  | DAMPER WASHER                         | 1        |         |  |
| 25       | 323-060  | DAMPER                                | 1        |         |  |
| 26       | 323-061  | DAMPER HOLDER                         | 1        |         |  |
| 27       | 323-062  | STOPPER RING                          | 1        |         |  |
| 28       | 326-302  | DAMPER HOLDER (B)                     | 1        |         |  |
| 29       | 326-303  | DAMPER (C)                            | 1        |         |  |
| 30       | 326-300  | SLIDE RING                            | 1        |         |  |
| 31       | 325-660  | STRIKER                               | 1        |         |  |
| 32       | 319-577  | O-RING (I.D 19.2)                     | 2        |         |  |
| 33       | 325-656  | SLIDE SLEEVE (B)                      | 1        |         |  |
| 34       | 325-655  | SLIDE SLEEVE (A)                      | 1        |         |  |
| 35       | 325-664  | CLUTCH SPRING                         | 1        |         |  |
| 36       | 325-654  | CYLINDER                              | 1        |         |  |
| 37       | 325-661  | WASHER (C)                            | 1        |         |  |
| 38       | 325-662  | LOCK SPRING                           | 1        |         |  |
| 39       | 325-663  | LOCK SLEEVE                           | 1        |         |  |
| 40       | 325-665  | CLUTCH                                | 1        |         |  |
| 41       | 325-666  | BEVEL GEAR                            | 1        |         |  |
| 43       | 319-581  | PISTON PIN                            | 1        |         |  |
| 44       | 319-580  | PISTON                                | 1        |         |  |
| 45       | 319-585  | CONNECTING ROD                        | 1        |         |  |
| 46       | 313-078  | SIDE HANDLE                           | 1        |         |  |
| 47       | 325-672  | HANDLE HOLDER                         | 1        |         |  |
| 48       | 320-973  | STOPPER ROD                           | 1        |         |  |
| 49       | 313-080  | HANDLE BOLT                           | 1        |         |  |
| 50       | 998-471  | HEX. SOCKET HD. BOLT (W/FLANGE) M5X12 | 1        |         |  |
| 51       | 325-677  | HOOD                                  | 1        |         |  |
| 52       |          | HITACHI LABEL                         | 1        |         |  |
| 53       |          | HITACHI LABEL                         | 1        |         |  |

# PARTS

DH 30PC2

| ITEM NO. | CODE NO. | DESCRIPTION                          | NO. USED | REMARKS                                |  |
|----------|----------|--------------------------------------|----------|--|--|
| 54       | 986-940  | SEAL LOCK HEX. SOCKET HD. BOLT M6X45 | 4        |  |  |
| 55       | 321-867  | LEVER LABEL                          | 1        |  |  |
| 56       | 983-162  | SEAL LOCK HEX. SOCKET HD. BOLT M4X12 | 5        |  |  |
| 57       | 321-309  | CHANGE LEVER                         | 1        |  |  |
| 58       | 321-312  | PIN D2X10                            | 1        |  |  |
| 59       | 325-671  | LEVER HOLDER                         | 1        |  |  |
| 60       | 948-391  | RETAINING RING FOR D40 HOLE          | 1        |  |  |
| 61       | 325-670  | LEVER SHAFT                          | 1        |  |  |
| 62       | 980-948  | O-RING                               | 1        |  |  |
| 63       | 321-310  | LEVER SPRING                         | 1        |  |  |
| 64       | 321-311  | PUSHING BUTTON                       | 1        |  |  |
| 65       | 600-1DD  | BALL BEARING 6001DDCMPS2L            | 1        |  |  |
| 66       | 971-736  | WASHER (B)                           | 1        |  |  |
| * 67     | 360-768C | ARMATURE 110V                        | 1        |  |  |
| * 67     | 360-768U | ARMATURE ASS'Y 120V                  | 1        | INCLUD. 65, 66, 68, 69                 |  |
| * 67     | 360-768E | ARMATURE 220V-230V                   | 1        |  |  |
| * 67     | 360-768F | ARMATURE 240V                        | 1        |  |  |
| 68       | 982-631  | WASHER (A)                           | 1        |  |  |
| 69       | 608-VVM  | BALL BEARING 608VVC2PS2L             | 1        |  |  |
| 70       | 323-083  | FAN GUIDE                            | 1        |  |  |
| 71       | 953-121  | HEX. HD. TAPPING SCREW D5X50         | 2        |  |  |
| * 72     | 340-672C | STATOR ASS'Y 110V                    | 1        | INCLUD. 73                             |  |
| * 72     | 340-672K | STATOR ASS'Y 110V                    | 1        | INCLUD. 73 FOR VEN                     |  |
| * 72     | 340-672G | STATOR ASS'Y 120V                    | 1        | INCLUD. 73                             |  |
| * 72     | 340-672E | STATOR ASS'Y 220V-230V               | 1        | INCLUD. 73                             |  |
| * 72     | 340-672H | STATOR ASS'Y 220V-230V               | 1        | INCLUD. 73 FOR INA, SYR, SIN, HKG, IND |  |
| * 72     | 340-672J | STATOR ASS'Y 240V                    | 1        | INCLUD. 73                             |  |
| * 72     | 340-672F | STATOR ASS'Y 240V                    | 1        | INCLUD. 73 FOR AUS                     |  |
| 73       | 930-703  | BRUSH TERMINAL                       | 2        |  |  |
| 74       | 321-322  | VINYL TUBE                           | 1        |  |  |
| 75       | 981-851  | OIL SEAL (B)                         | 2        |  |  |
| 76       | 325-647  | BEVEL PINION                         | 1        |  |  |
| 77       | 325-648  | COLLAR                               | 1        |  |  |
| 78       | 600-1DD  | BALL BEARING 6001DDCMPS2L            | 1        |  |  |
| 79       | 992-503  | WASHER                               | 1        |  |  |
| 80       | 325-649  | SECOND GEAR                          | 1        |  |  |
| 81       | 971-087  | STOPPER WASHER                       | 1        |  |  |
| 82       | 959-155  | STEEL BALL D3.97 (10 PCS.)           | 8        |  |  |
| 83       | 992-916  | CLUTCH PLATE                         | 1        |  |  |
| 84       | 992-926  | SPRING PLATE                         | 2        |  |  |
| 85       | 980-877  | BELLEVILLE SPRING                    | 2        |  |  |
| 86       | 325-650  | BUSHING                              | 1        |  |  |
| 87       | 608-VVM  | BALL BEARING 608VVC2PS2L             | 1        |  |  |
| 88       | 940-079  | RETAINING RING FOR D8 SHAFT          | 1        |  |  |
| 89       | 325-646  | SLIP CLUTCH ASS'Y                    | 1        | INCLUD. 76-88                          |  |
| 90       | 325-669  | CRANK CASE COVER                     | 1        |  |  |
| 91       | 980-715  | O-RING (S-48)                        | 1        |  |  |
| 92       | 325-644  | CRANK SHAFT                          | 1        |  |  |
| 93       | 944-109  | FEATHER KEY 3X3X8                    | 1        |  |  |
| 94       | 325-643  | CRANK CASE                           | 1        |  |  |
| 95       | 600-2DD  | BALL BEARING 6002DDCMPS2L            | 1        |  |  |

# PARTS

DH 30PC2

| ITEM NO. | CODE NO. | DESCRIPTION                            | NO. USED | REMARKS  |  |
|----------|----------|--|----------|--|--|
| 96       | 872-767  | O-RING (S-32)                          | 1        |  |  |
| 97       | 948-001  | RETAINING RING FOR D32 HOLE            | 1        |  |  |
| 98       | 325-645  | FIRST GEAR                             | 1        |  |  |
| 99       | 939-299  | NEEDLE BEARING (M661)                  | 1        |  |  |
| 100      | 325-674  | GEAR COVER                             | 1        |  |  |
| 101      | 325-680  | HANDLE (A).(B) SET                     | 1        |  |  |
| 102      | 994-192  | HEX. SOCKET HD. BOLT (W/FLANGE) M5X16  | 2        |  |  |
| 103      | 302-089  | TAPPING SCREW (W/FLANGE) D5X20 (BLACK) | 2        |  |  |
| 104      | 307-028  | TAPPING SCREW (W/FLANGE) D4X25 (BLACK) | 3        |  |  |
| 105      |          | NAME PLATE                             | 1        |  |  |
| 106      | 325-673  | HOUSING ASS'Y                          | 1        | INCLUD. 109, 110   |  |
| 107      | 945-161  | BRUSH CAP                              | 2        |  |  |
| 108      | 999-073  | CARBON BRUSH (AUTO STOP TYPE) (1 PAIR) | 2        |  |  |
| 109      | 958-900  | BRUSH HOLDER                           | 2        |  |  |
| 110      | 938-477  | HEX. SOCKET SET SCREW M5X8             | 2        |  |  |
| 111      | 310-111  | BEARING BUSHING (B)                    | 1        |  |  |
| 112      | 323-085  | TAIL COVER                             | 1        |  |  |
| 113      | 307-811  | TAPPING SCREW (W/FLANGE) D4X16 (BLACK) | 2        |  |  |
| 114      | 317-492  | SUPPORT (B)                            | 1        |  |  |
| 115      | 325-675  | SWITCH (2P PILLAR TYPE)                | 1        |  |  |
| * 116    | 994-190  | INTERNAL WIRE                          | 1        | FOR NZL, AUS, GBR, SAF, EUROPE, FIN, NOR, SWE, DEN, AUT, SUI, CHN, TPE |  |
| * 117    | 994-273  | NOISE SUPPRESSOR                       | 1        | FOR NZL, AUS, GBR, SAF, EUROPE, FIN, NOR, SWE, DEN, AUT, SUI, CHN, TPE |  |
| * 118    | 317-492  | SUPPORT (B)                            | 1        | FOR NOISE SUPPRESSOR   |  |
| * 119    | 959-140  | CONNECTOR 50091 (10 PCS.)              | 1        | FOR NOISE SUPPRESSOR   |  |
| 120      | 984-750  | TAPPING SCREW (W/FLANGE) D4X16         | 2        |  |  |
| 121      | 960-266  | CORD CLIP                              | 1        |  |  |
| * 122    | 953-327  | CORD ARMOR D8.8                        | 1        |  |  |
| * 122    | 938-051  | CORD ARMOR D10.1                       | 1        |  |  |
| * 123    | 500-390Z | CORD                                   | 1        | (CORD ARMOR D8.8)  |  |
| * 123    | 500-249Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR USA, CAN   |  |
| * 123    | 500-439Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR NZL, AUS   |  |
| * 123    | 500-424Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR SIN, KUW   |  |
| * 123    | 500-235Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR INA, IND   |  |
| * 123    | 500-447Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR SYR  |  |
| * 123    | 500-239Z | CORD                                   | 1        | (CORD ARMOR D10.1) FOR VEN   |  |
| * 123    | 500-391Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR SUI  |  |
| * 123    | 500-454Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR GBR (110V)                                       |  |
| * 123    | 500-446Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR GBR (230V)                                       |  |
| * 123    | 500-457Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR CHN  |  |
| * 123    | 500-440Z | CORD                                   | 1        | (CORD ARMOR D8.8) FOR HKG  |  |
| * 123    | 500-477Z | CORD                                   | 1        | (CORD ARMOR D10.1) FOR TPE   |  |
| 124      | 326-651  | FELT PACKING                           | 1        |  |  |
|          |          |  |          |  |  |
|          |          |  |          |  |  |
|          |          |  |          |  |  |
|          |          |  |          |  |  |
|          |          |  |          |  |  |
|          |          |  |          |  |  |

## STANDARD ACCESSORIES

DH 30PC2

| ITEM NO. | CODE NO. | DESCRIPTION            | NO. USED | REMARKS |  |
|----------|----------|------------------------|----------|---------|--|
| 501      | 325-679  | CASE                   | 1        |         |  |
| 502      | 971-787  | DUST CUP               | 1        |         |  |
| 503      | 318-085  | SYRINGE (BELLOWS TYPE) | 1        |         |  |
|          |          |                        |          |         |  |
|          |          |                        |          |         |  |

## OPTIONAL ACCESSORIES

| ITEM NO. | CODE NO. | DESCRIPTION                                | NO. USED | REMARKS          |  |
|----------|----------|--|----------|------------------|--|
| 601      | 303-046  | BULL POINT (SDS+) 250MM (ROUND SHANK TYPE) | 1        |                  |  |
| 602      | 303-044  | CHEMICAL ANCHOR ADAPTER (SDS+) 12.7MMX90L  | 1        |                  |  |
| 603      | 303-045  | CHEMICAL ANCHOR ADAPTER (SDS+) 19.0MMX100L | 1        |                  |  |
| 604      | 303-334  | CHUCK HANDLE                               | 1        |                  |  |
| 605      | 302-976  | ANCHOR SETTING ADAPTER A (SDS+) W1/4X260L  | 1        |                  |  |
| 606      | 930-515  | CHUCK WRENCH 10G                           | 1        |                  |  |
| 607      | 302-975  | ANCHOR SETTING ADAPTER A (SDS+) W5/16X260L | 1        |                  |  |
| 608      | 303-621  | ANCHOR SETTING ADAPTER A (SDS+) W3/8X160L  | 1        |                  |  |
| 609      | 302-974  | ANCHOR SETTING ADAPTER A (SDS+) W3/8X260L  | 1        |                  |  |
| 610      | 302-979  | ANCHOR SETTING ADAPTER B (SDS+) W1/4X260L  | 1        |                  |  |
| 611      | 302-978  | ANCHOR SETTING ADAPTER B (SDS+) W5/16X260L | 1        |                  |  |
| 612      | 303-622  | ANCHOR SETTING ADAPTER B (SDS+) W3/8X160L  | 1        |                  |  |
| 613      | 302-977  | ANCHOR SETTING ADAPTER B (SDS+) W3/8X260L  | 1        |                  |  |
| 614      | 303-617  | TAPER SHANK ADAPTER (SDS PLUS) NO. 1       | 1        |                  |  |
| 615      | 303-618  | TAPER SHANK ADAPTER (SDS PLUS) NO. 2       | 1        |                  |  |
| 616      | 303-619  | A-TAPER SHANK ADAPTER (SDS PLUS)           | 1        |                  |  |
| 617      | 303-620  | B-TAPER SHANK ADAPTER (SDS PLUS)           | 1        |                  |  |
| 618      | 981-122  | SPECIAL SCREW M6X22                        | 1        |                  |  |
| 619      | 303-627  | CORE BIT SHANK (SDS PLUS) 45-90MM 300L     | 1        |                  |  |
| 620      | 303-625  | CORE BIT SHANK (SDS PLUS) 25-38MM 105L     | 1        |                  |  |
| 621      | 303-626  | CORE BIT SHANK (SDS PLUS) 25-38MM 300L     | 1        |                  |  |
| 622      | 303-624  | CHUCK ADAPTER (D) (SDS PLUS)               | 1        |                  |  |
| 623      | 321-825  | DRILL CHUCK AND ADAPTER SET                | 1        | INCLUD. 624, 625 |  |
| 624      | 303-623  | CHUCK ADAPTER (G) (SDS PLUS)               | 1        |                  |  |
| 625      | 321-814  | DRILL CHUCK 13VLRB-D                       | 1        | INCLUD. 626      |  |
| 626      | 995-344  | FLAT HD. SCREW (A) (LEFT HAND) M6X25       | 1        |                  |  |
| 627      | 321-813  | DRILL CHUCK 13VLD-D                        | 1        |                  |  |
| 628      | 980-927  | GREASE FOR HAMMER. HAMMER DRILL (500G)     | 1        |                  |  |
| 629      | 981-840  | GREASE (A) FOR HAMMER. HAMMER DRILL (30G)  | 1        |                  |  |
| 630      | 308-471  | GREASE FOR HAMMER. HAMMER DRILL (70G)      | 1        |                  |  |
| 631      | 971-511Z | + DRIVER BIT (A) NO. 2 25L                 | 1        |                  |  |
| 632      | 971-512Z | + DRIVER BIT (A) NO. 3 25L                 | 1        |                  |  |
| 633      | 944-477  | COTTER                                     | 1        |                  |  |
| 634      | 982-684  | CENTER PIN (A) 109L FOR CORE BIT D32-38    | 1        |                  |  |
| 635      | 982-685  | CENTER PIN (B) 104L FOR CORE BIT D45-90    | 1        |                  |  |
| 636      | 315-921  | ADAPTER (A) FOR HAMMER DRILL               | 1        |                  |  |
| 637      | 982-672  | CORE BIT (A) 25MM                          | 1        |                  |  |
| 638      | 982-673  | CORE BIT (A) 29MM                          | 1        |                  |  |
| 639      | 982-674  | CORE BIT (A) 32MM                          | 1        | INCLUD. 640      |  |
| 640      | 982-686  | GUIDE PLATE (FOR CORE BIT 32MM)            | 1        |                  |  |
| 641      | 982-675  | CORE BIT (A) 35MM                          | 1        | INCLUD. 642      |  |

## OPTIONAL ACCESSORIES

DH 30PC2

| ITEM NO. | CODE NO. | DESCRIPTION                              | NO. USED | REMARKS     |  |
|----------|----------|--|----------|-------------|--|
| 642      | 982-687  | GUIDE PLATE (FOR CORE BIT 35MM)          | 1        |             |  |
| 643      | 982-676  | CORE BIT (A) 38MM                        | 1        | INCLUD. 644 |  |
| 644      | 982-688  | GUIDE PLATE (FOR CORE BIT 38MM)          | 1        |             |  |
| 645      | 982-677  | CORE BIT (B) 45MM                        | 1        | INCLUD. 646 |  |
| 646      | 982-689  | GUIDE PLATE (FOR CORE BIT 45MM)          | 1        |             |  |
| 647      | 982-678  | CORE BIT (B) 50MM                        | 1        | INCLUD. 648 |  |
| 648      | 982-690  | GUIDE PLATE (FOR CORE BIT 50MM)          | 1        |             |  |
| 649      | 982-679  | CORE BIT (B) 65MM                        | 1        | INCLUD. 650 |  |
| 650      | 982-691  | GUIDE PLATE (FOR CORE BIT 65MM)          | 1        |             |  |
| 651      | 982-680  | CORE BIT (B) 80MM                        | 1        | INCLUD. 652 |  |
| 652      | 982-692  | GUIDE PLATE (FOR CORE BIT 80MM)          | 1        |             |  |
| 653      | 982-681  | CORE BIT (B) 90MM                        | 1        | INCLUD. 654 |  |
| 654      | 982-693  | GUIDE PLATE (FOR CORE BIT 90MM)          | 1        |             |  |
| 655      | 971-794  | ANCHOR SETTING ADAPTER A W1/4" (MANUAL)  | 1        |             |  |
| 656      | 971-795  | ANCHOR SETTING ADAPTER A W5/16" (MANUAL) | 1        |             |  |
| 657      | 971-796  | ANCHOR SETTING ADAPTER A W3/8" (MANUAL)  | 1        |             |  |
| 658      | 971-797  | ANCHOR SETTING ADAPTER A W1/2" (MANUAL)  | 1        |             |  |
| 659      | 971-798  | ANCHOR SETTING ADAPTER A W5/8" (MANUAL)  | 1        |             |  |
| 660      | 971-799  | ANCHOR SETTING ADAPTER B W1/4" (MANUAL)  | 1        |             |  |
| 661      | 971-800  | ANCHOR SETTING ADAPTER B W5/16" (MANUAL) | 1        |             |  |
| 662      | 971-801  | ANCHOR SETTING ADAPTER B W3/8" (MANUAL)  | 1        |             |  |
| 663      | 971-802  | ANCHOR SETTING ADAPTER B W1/2" (MANUAL)  | 1        |             |  |
| 664      | 971-803  | ANCHOR SETTING ADAPTER B W5/8" (MANUAL)  | 1        |             |  |
| 665      | 944-460  | TAPER SHANK DRILL BIT D11X100            | 1        |             |  |
| 666      | 944-461  | TAPER SHANK DRILL BIT D12.3X110          | 1        |             |  |
| 667      | 993-038  | TAPER SHANK DRILL BIT D12.7X110          | 1        |             |  |
| 668      | 944-462  | TAPER SHANK DRILL BIT D14.3X110          | 1        |             |  |
| 669      | 944-500  | TAPER SHANK DRILL BIT D14.5X110          | 1        |             |  |
| 670      | 944-463  | TAPER SHANK DRILL BIT D17.5X120          | 1        |             |  |
| 671      | 944-464  | TAPER SHANK DRILL BIT D21.5X140          | 1        |             |  |
| 672      | 320-859  | SYRINGE (BLOW-OUT BULB TYPE)             | 1        |             |  |
| 673      | 303-571  | DRILL BIT (SDS PLUS) D4.0X110            | 1        |             |  |
| 674      | 303-575  | DRILL BIT (SDS PLUS) D5.0X110            | 1        |             |  |
| 675      | 303-578  | DRILL BIT (SDS PLUS) D5.0X160            | 1        |             |  |
| 676      | 303-576  | DRILL BIT (SDS PLUS) D5.5X110            | 1        |             |  |
| 677      | 303-581  | DRILL BIT (SDS PLUS) D6.5X160            | 1        |             |  |
| 678      | 303-582  | DRILL BIT (SDS PLUS) D7.0X160            | 1        |             |  |
| 679      | 303-584  | DRILL BIT (SDS PLUS) D8.0X160            | 1        |             |  |
| 680      | 303-585  | DRILL BIT (SDS PLUS) D8.5X160            | 1        |             |  |
| 681      | 303-586  | DRILL BIT (SDS PLUS) D9.0X160            | 1        |             |  |
| 682      | 303-591  | DRILL BIT (SDS PLUS) D12.0X166           | 1        |             |  |
| 683      | 303-606  | DRILL BIT (SDS PLUS) D12.0X260           | 1        |             |  |
| 684      | 303-593  | DRILL BIT (SDS PLUS) D12.7X166           | 1        |             |  |
| 685      | 303-595  | DRILL BIT (SDS PLUS) D14.0X166           | 1        |             |  |
| 686      | 303-598  | DRILL BIT (SDS PLUS) D15.0X166           | 1        |             |  |
| 687      | 303-599  | DRILL BIT (SDS PLUS) D16.0X166           | 1        |             |  |
| 688      | 303-611  | DRILL BIT (SDS PLUS) D16.0X260           | 1        |             |  |
| 689      | 303-601  | DRILL BIT (SDS PLUS) D17.0X166           | 1        |             |  |
| 690      | 303-613  | DRILL BIT (SDS PLUS) D19.0X260           | 1        |             |  |
| 691      | 303-614  | DRILL BIT (SDS PLUS) D20.0X250           | 1        |             |  |
| 692      | 303-615  | DRILL BIT (SDS PLUS) D22.0X250           | 1        |             |  |

## OPTIONAL ACCESSORIES

**DH 30PC2**

[illegible]



