

MODELS

DH 30PC

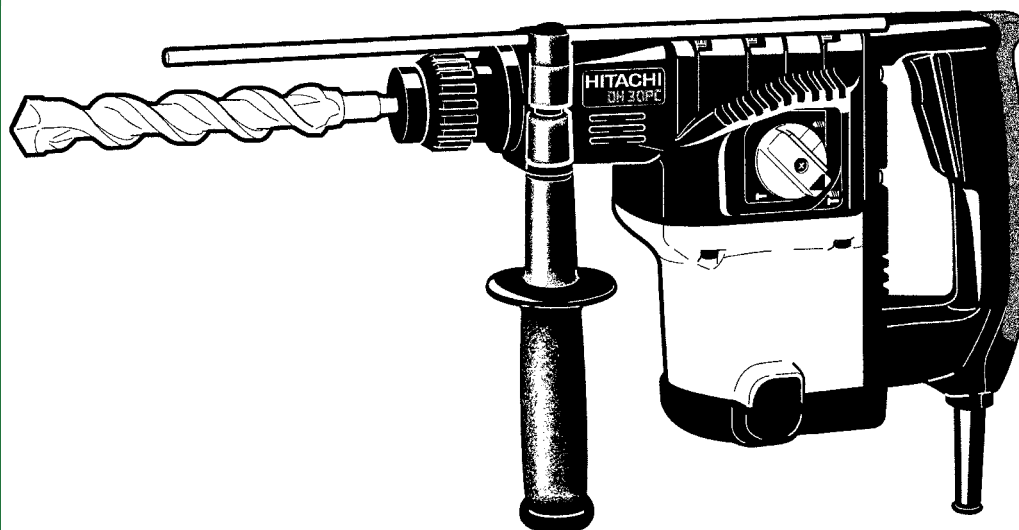
DH 30PB

HITACHI
POWER TOOLS

HAMMER DRILL
DH 30PC/DH 30PB

TECHNICAL DATA
AND
SERVICE MANUAL

D



LIST No. DH 30PC: E466
DH 30PB: E465

May 2002

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:

Symbols Utilized	Competitors	
	Company Name	Model Name
B	BOSCH	GBH4DFE
C	MAKITA	HR3000C



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1. PRODUCT NAME

Hitachi Hammer Drill, Model DH 30PC

Hitachi Hammer Drill, Model DH 30PB

2. MARKETING OBJECTIVE

The Model DH 30PC has been developed to provide 3 modes of operation, "Rotation and striking", "Rotation only" and "Striking only" with prolonged service life. This series includes the Model DH 30PB equipped with 2 modes of operation, "Rotation and striking" and "Rotation only", which is based on the Model DH 30PC.

3. APPLICATIONS

(1) Rotation and striking 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) Striking only function

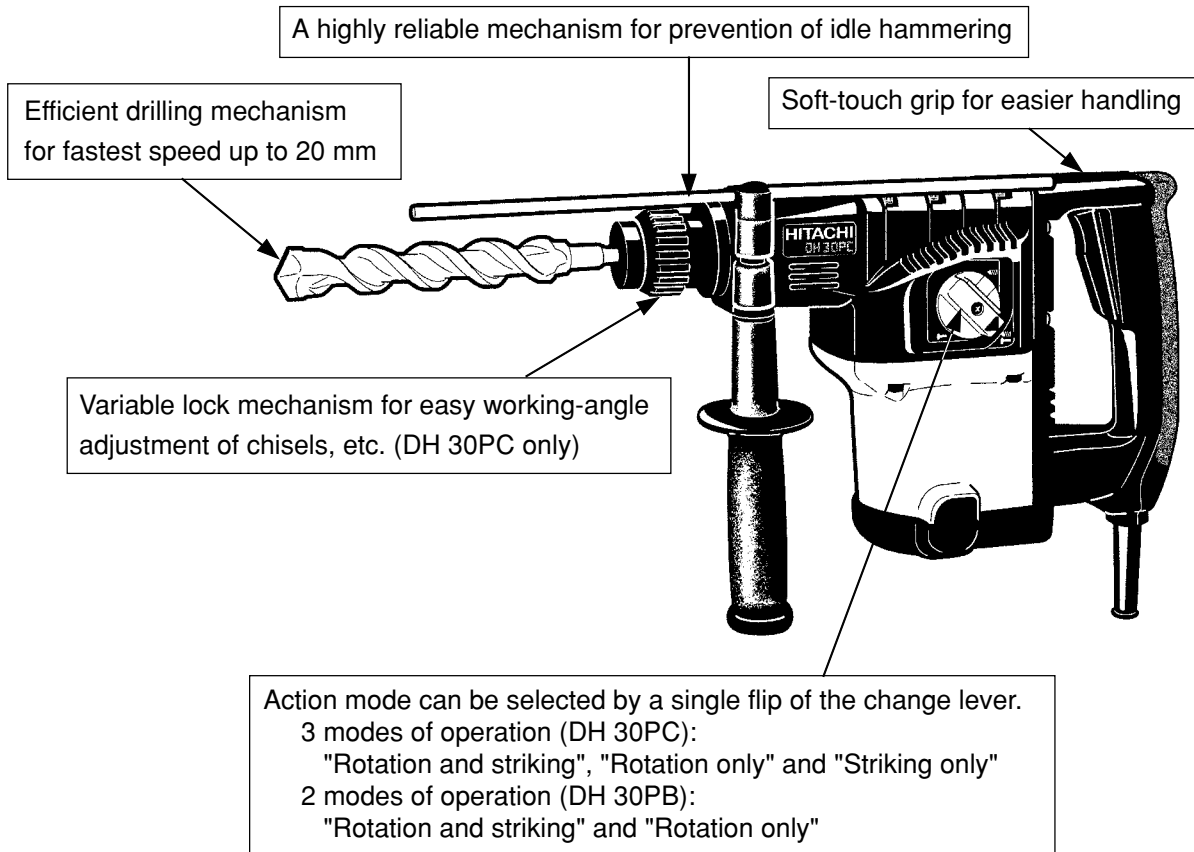
- Stripping mortar and tiles
- Demolishing and chiseling of concrete
- Grooving and cutting of bricks

[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

Maker・Model	Overall length	Weight
HITACHI DH 30PC/DH 30PB	390 mm (15-3/8")	4.8 kg (10.6 lbs.)/4.7 kg (10.3 lbs.)
B	395 mm (15-9/16")	3.9 kg (8.6 lbs.)
C	391 mm (15-3/8")	4.8 kg (10.6 lbs.)



4-1. Selling Point Descriptions

4-1-1. 3 modes of operation

The Model DH 30PC provides 3 functions, "Rotation and striking", "Rotation only" and "Striking only". Thus, the Model DH 30PC is applicable to light-duty chiseling and grooving in concrete.

4-1-2. Optimum drilling mechanism for fastest speed

The drilling speed is the fastest up to 20 mm (at concrete), as the Model DH 30PC/DH 30PB has great striking energy owing to the optimum design of the rotation speed, striking frequency and the weight of the striker.

4-1-3. A highly reliable mechanism for prevention of idle hammering

The Models DH 30PC and DH 30PB are equipped with a mechanism that slides the tool retainer to prevent idle hammering. When the drill bit is pressed against the concrete surface, the striker is shifted to the striking position to start striking. When the drill bit is moved off the concrete surface, the striker is shifted forward to open the air hole so that air pressure within the air chamber no longer changes even with reciprocating movement of the piston, bringing the hammering action to a stop. Thanks to the highly reliable mechanism for prevention of idle hammering, the operability and the durability are improved.

4-1-4. Variable locking mechanism

The Model DH 30PC 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 "Striking only" function mode.

4-1-5. 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

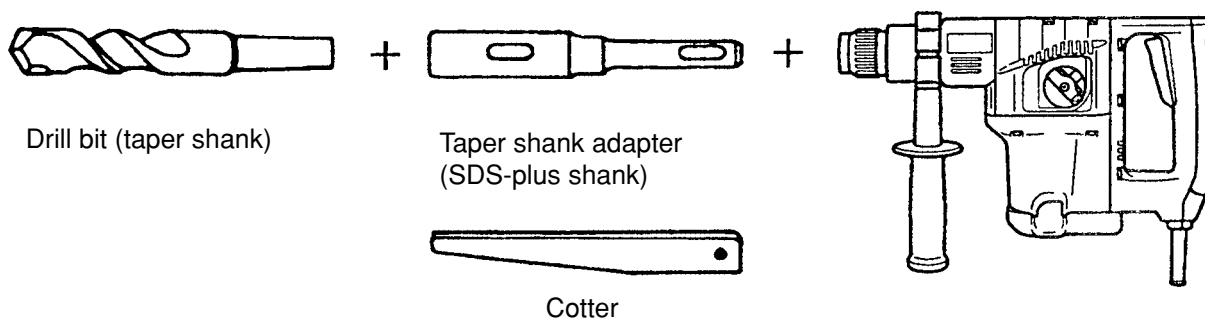
5-1. Specifications

Model		DH 30PC					DH 30PB		
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 – 670 /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		Housing: Glassfiber reinforced resin (green) Crank case cover Cylinder case cover Tail cover Grip Handle Glassfiber reinforced resin (black)							
Dimensions (Length x height x width)		390 mm x 226 mm x 102 mm (15-3/8" x 8-29/32" x 4")							
Weight	Net*	4.8 kg (10.6 lbs.)				4.7 kg (10.3 lbs.)			
	Gross	8.0 kg (17.6 lbs.)				7.9 kg (17.4 lbs.)			
Packaging		Corrugated cardboard box with case							
Standard accessories		(1) Case 1 (2) Side handle 1 (3) Stopper 1 (4) Dust cup 1 (5) Syringe 1							

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

5-2. Optional Accessories

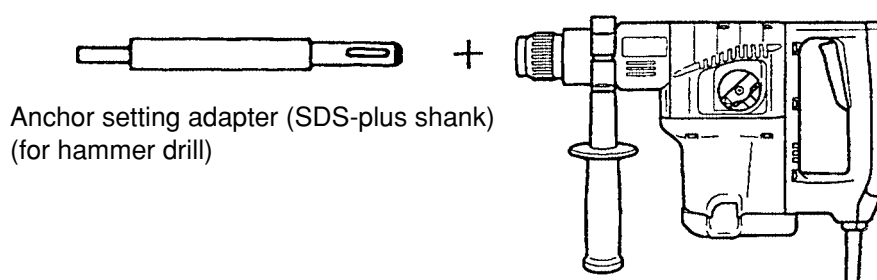
5-2-1. Drilling anchor holes (rotation + striking)



Drill bit (taper shank)		Taper shank adapter		Cotter
Outer diameter	Code No.	Type	Code No.	Code No.
11.0 mm (7/16")	944460	Morse taper (No. 1)	303617	944477
12.3 mm (31/64")	944461			
12.7 mm (1/2")	993038			
14.3 mm (9/16")	944462			
14.5 mm (37/64")	944500			
17.5 mm (11/16")	944463			
21.5 mm (27/32")	944464	Morse taper (No. 2)	303618	
The drill bit for A-taper or B-taper is not provided.		A-taper	303619	
		B-taper	303620	

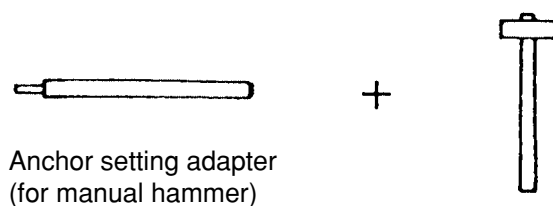
5-2-2. Anchor setting (striking only) (DH 30PC)

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



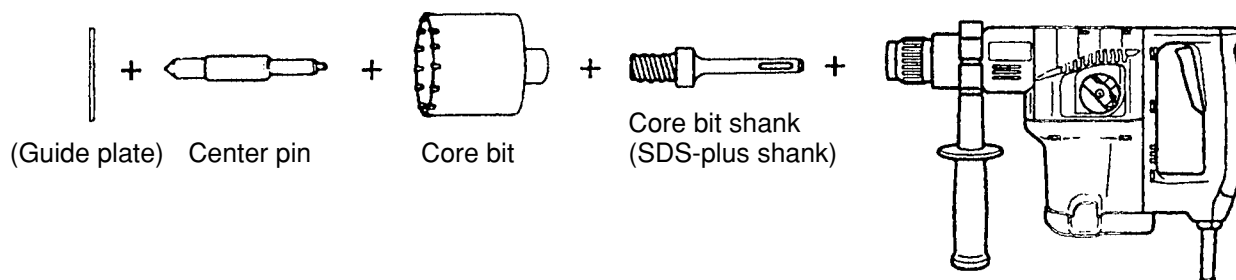
Anchor size	Overall length	Internal cone type (Code No.)	External cone type (Code No.)
W1/4"	260 mm (10-1/4")	302976	302979
W5/16"	260 mm (10-1/4")	302975	302978
W3/8"	160 mm (6-5/16")	303621	303622
	260 mm (10-1/4")	302974	302977

- Anchor setting bar for manual anchor setting



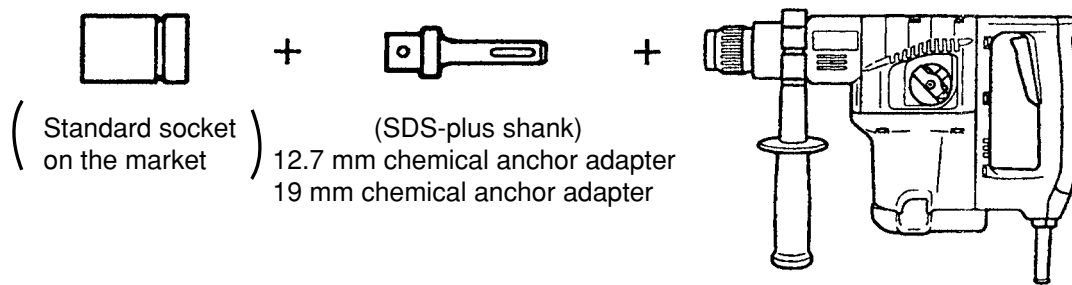
Anchor size	Internal cone type (Code No.)	External cone type (Code No.)
W1/4"	971794	971799
W5/16"	971795	971800
W3/8"	971796	971801
W1/2"	971797	971802
W5/8"	971798	971803

5-2-3. Large hole boring (rotation + striking)



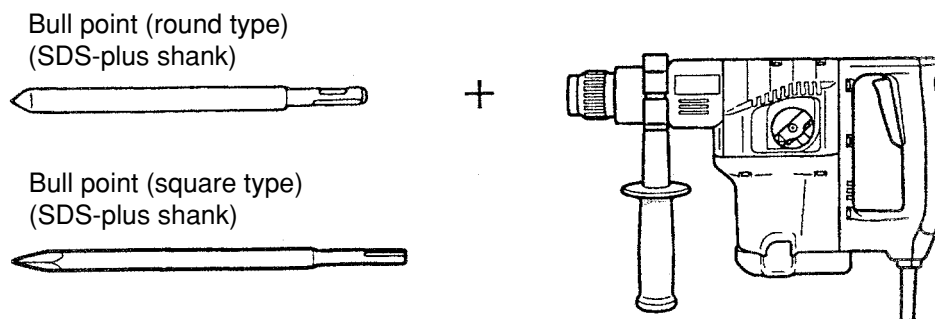
Outer diameter	Core bit (Code No.)	Guide plate (Code No.)	Center pin (Code No.)	Core bit shank (Code No.)	
				L = 105 mm	L = 300 mm
25 mm (1")	982672	318528	318527	303625	303626
29 mm (1-1/8")	982673	318529			
32 mm (1-1/4")	982674	982686	982684		
35 mm (1-3/8")	982675	982687			
38 mm (1-1/2")	982676	982688			
45 mm (1-3/4")	982677	982689	982685	—	303627
50 mm (2")	982678	982690			
65 mm (2-9/16")	982679	982691			
80 mm (3-5/32")	982680	982692			
90 mm (3-9/16")	982681	982693			

5-2-4. Bolt placing operation with chemical anchor (rotation + striking)



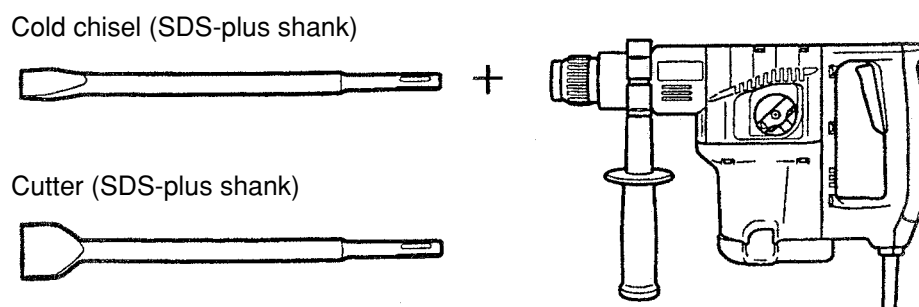
Size	Code No.
12.7 mm (1/2")	303044
19.0 mm (3/4")	303045

5-2-5. Demolition work (striking only) (DH 30PC)



Type	Overall length	Code No.
Round	250 mm (10")	303046
Square	250 mm (10")	326656

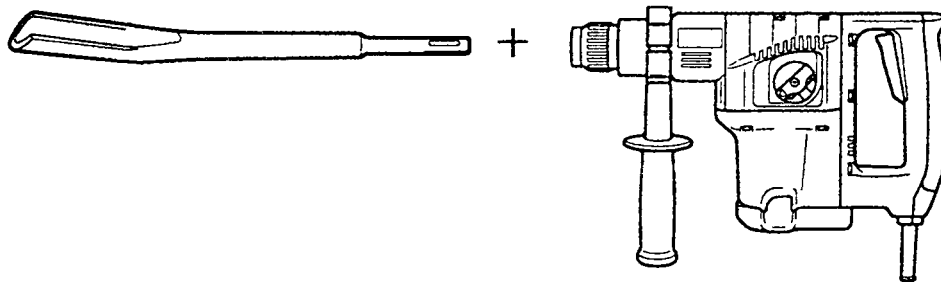
5-2-6. Groove digging and edging work (striking only) (DH 30PC)



Part	Width	Overall length	Code No.
Cold chisel	20 mm (3/4")	250 mm (10")	316657
Cutter	40 mm (1-9/16")	250 mm (10")	316658

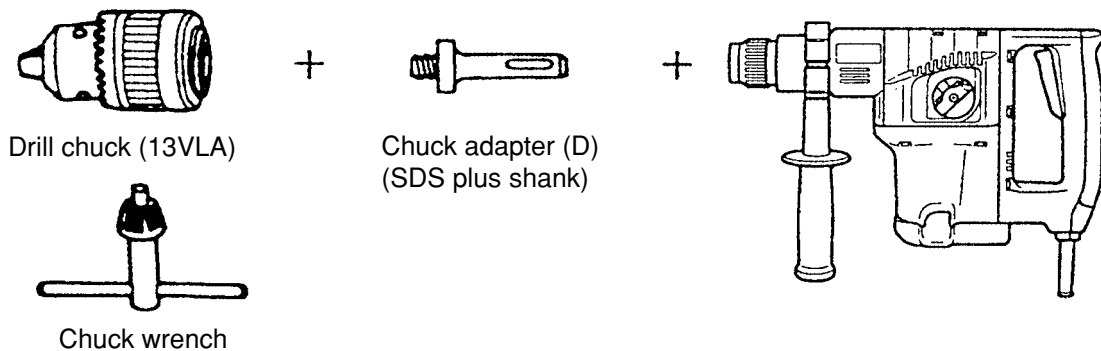
5-2-7. Grooving work (striking only) (DH 30PC)

Grooving chisel (SDS-plus shank)



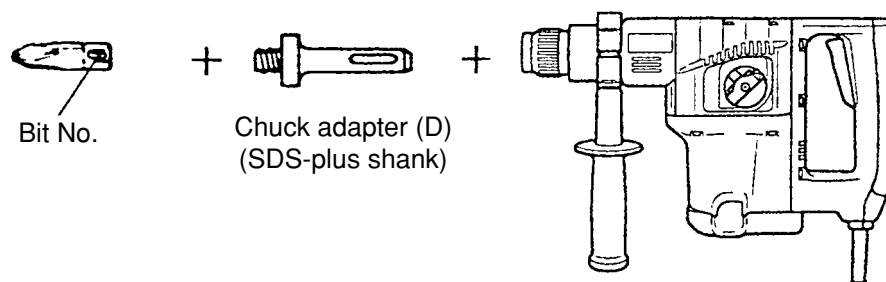
Part	Overall length	Code No.
Grooving chisel	250 mm (10")	316659

5-2-8. Drilling hole in steel and wood (rotation only)



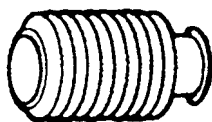
Part	Code No.
Chuck adapter (D) (SDS-plus)	303624
Drill chuck 13VLA (with chuck wrench 10G)	950272
Chuck wrench 10G	930515

5-2-9. Drilling screws (rotation only)



Bit No.	Screw size	Overall length	Code No.
No. 2	3 – 5 mm (1/8" – 13/64")	25 mm (1")	971511Z
No. 3	6 – 8 mm (15/64" – 5/16")	25 mm (1")	971512Z

5-2-10. Dust collector



Dust collector

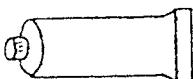
Code No. 986802

5-2-11. Grease for impact drill



500 g (1.1 lbs.) Can

Code No. 980927



70 g (2.5 oz) Tube

Code No. 308471



30 g (1 oz) Tube

Code No. 981840

(Note)

Code numbers listed above are subject to change. Please refer to periodic Technical News Bulletins.

6. COMPARISONS WITH SIMILAR PRODUCTS

6-1. Specification Comparisons

Maker			Hitachi		B	C
Model			DH 30PC	DH 30PB		
Capacity	Concrete	mm	30 (1-3/16")		30 (1-3/16")	30 (1-3/16")
	Steel	mm	13 (1/2")		13 (1/2")	13 (1/2")
	Wood	mm	32 (1-1/4")		32 (1-1/4")	32 (1-1/4")
	Core bit	mm	90 (3-17/32")		80 (3-5/32")	90 (3-17/32")
Power input		W	850		750	850
Rotation speed	No load	/min.	0 – 850		0 – 650	360 – 720
Full-load blow		/min.	0 – 3,700		0 – 3,900	1,650 – 3,300
Impact energy		J	5.3		3.5*	5.3*
Dimensions	Length	mm	390 (15-3/8")		395 (15-9/16")	391 (15-13/32")
	Height	mm	226 (8-29/32")		225 (8-27/32")	230 (9-1/16")
	Width	mm	102 (4")		89 (3-1/2")	100 (3-15/16")
Weight	Net	kg (lbs.)	4.8 (10.6)	4.7 (10.3)	3.9 (8.6)	4.8 (10.6)
Action mode	Rotation + striking	—	○	○	○	○
	Rotation only	—	○	○	○	○
	Striking only	—	○	—	○	○
Change lever		—	1		1	2
No-load sound pressure level		dB(A)	88		89	89
Typical weighted acceleration		m/s ²	9.5		11	9

Note 1) Mark "○" ... Equipped

2) Weight excludes cord and side handle.

*: These values are listed on the catalog.

6-2. Drilling Speed Comparisons

Drilling speed depends on the operating conditions. The test results shown in Fig. 1 are based on actual tests at the factory and should be used as a reference only. The drill bits, which used in the test, are the Hitachi genuine SDS-plus shank bits.

[Test conditions]

Pressing force: 98 N (10 kgf)

Test material: Concrete panel with a compression strength of 23.5 MPa (240 kgf/cm²)

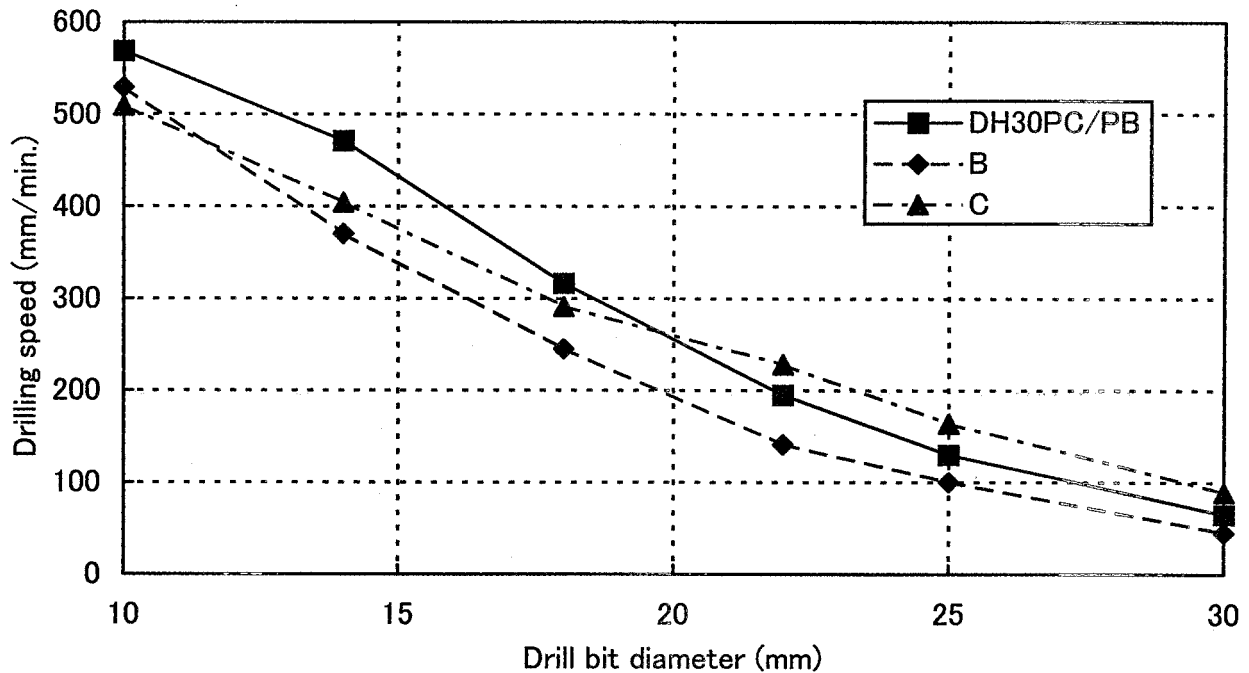


Fig. 1

6-3. Demolishing Performance Comparisons

The data shown in Fig. 2 are obtained in actual factory tests, and are for reference only. Demolished amount may vary in accordance with operating conditions, operator skill, etc.

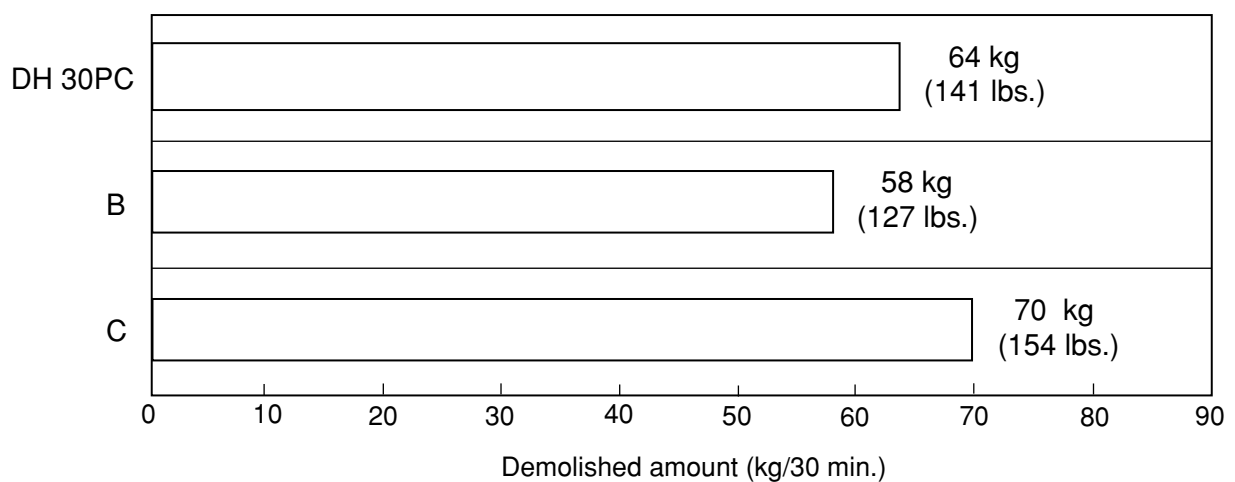


Fig. 2

7. PRECAUTIONS IN SALES PROMOTION

In the interest of promoting the safest and most efficient use of the Model DH 30PC/DH 30PB Hammer Drill 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 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 Hammer Drill 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 30PC/DH 30PB unit is provided with a nameplate which lists basic safety precautions in its use. Carefully ensure that the customer fully understands and follows these precautions before using the tool.

(1) For the U.S.A. and Canada

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

(2) For Australia, New Zealand, China and India

CAUTION
●Read thoroughly HANDLING INSTRUCTIONS before use.

7-3. Grease Replacement

The striking portion and the speed reduction portion of the Model DH 30PC/DH 30PB respectively use different types of grease. Grease replacement is required if the unit is disassembled for maintenance or o-rings become damaged or worn as described in 7-4. The striking portion uses special grease. If the striking portion (inside the cylinder case and crank case) is disassembled, thoroughly remove all of the old grease from each part.

On reassembly, insert 30 g (1.1 oz) of new grease into the crank case (connecting rod side) and insert 10 g (0.4 oz) into the cylinder case (outside the cylinder). Do not exceed the designated amount of grease. Excessive grease insertion may cause reduced striking performance.

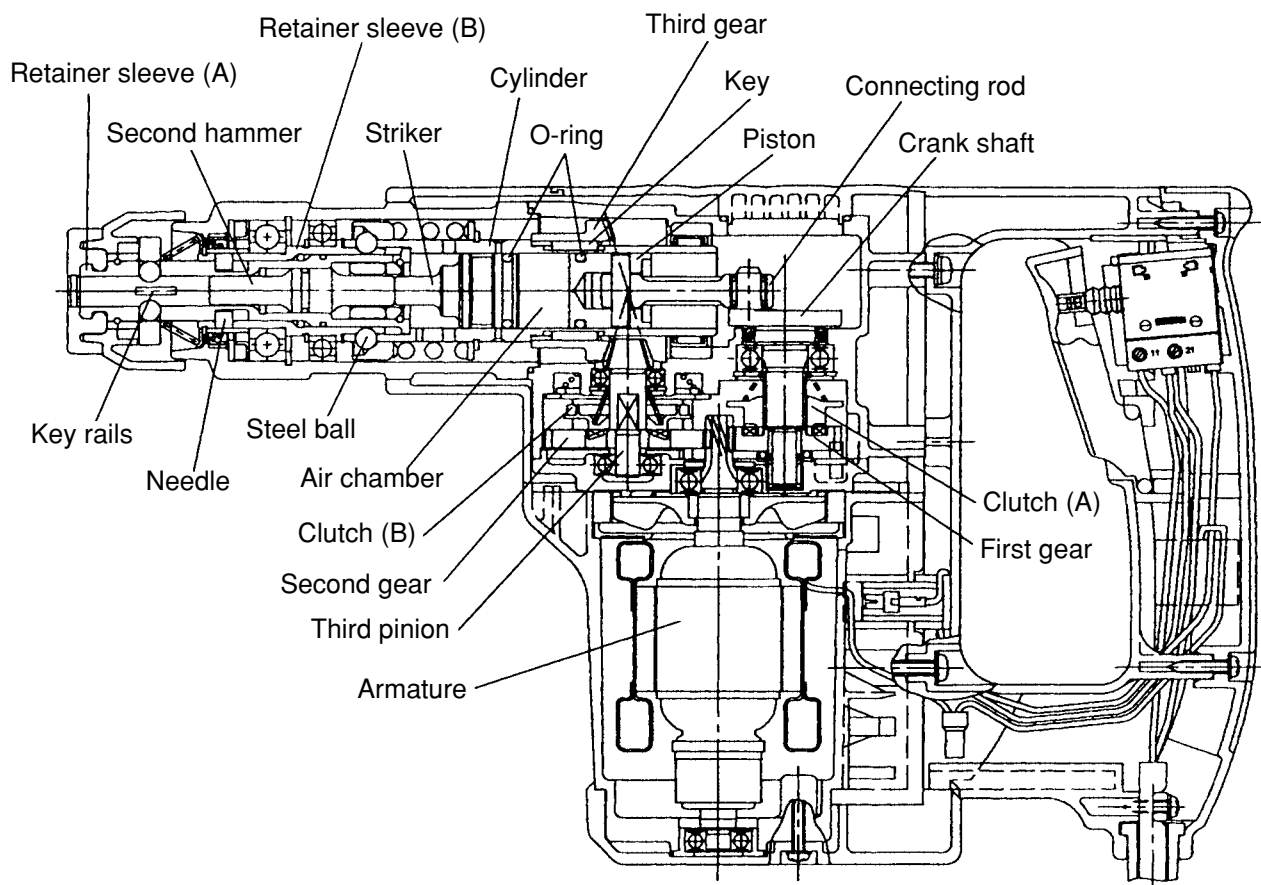
The speed reduction portion (inside the gear cover) uses Hitachi Motor Grease No. 29 (Code No. 930035). The proper supply volume is 30 g (1.1 oz). Never use the striking portion special grease in the speed reduction portion. Special grease would leak into the motor portion and cause subsequent trouble.

7-4. O-Ring Replacement

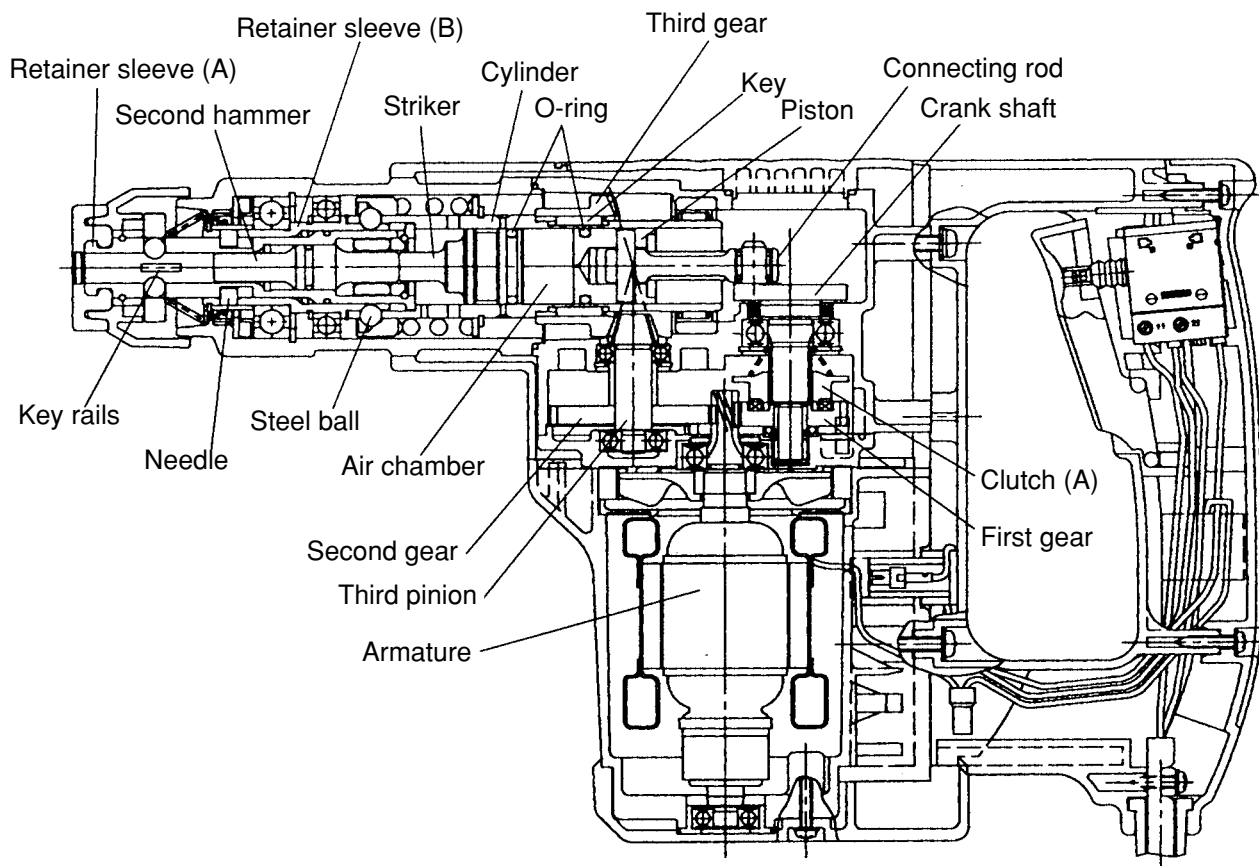
The O-rings (mounted on the striker and the piston) are extremely important to ensure adequate sealing of the air pressure. Although the o-rings are made of special rubber to give them a long service life, they do nonetheless become worn, and should be replaced with new ones periodically depending on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

8. REFERENCE INFORMATION

Structure:



(a) DH 30PC



(b) DH 30PB

Fig. 3

8-1. Rotational Transmission

The rotation of the armature is transmitted to the third pinion through the second gear and clutch (B) in the case of the Model DH 30PC. In the case of the Model DH 30PB, the rotation of the armature is transmitted to the third pinion through the second gear. Then the rotation is transmitted from the third pinion through the third gear and the key to turn the cylinder. The rotation of the cylinder is transmitted to retainer sleeve (B) through the steel ball of the slip clutch mechanism, and to retainer sleeve (A) through the needle of the idling-proof mechanism. The rotation of retainer sleeve (A), which is key-connected to the inserted drill bit by means of two key rails, is transmitted to the drill bit.

8-2. Striking Operation

The rotation of the armature is transmitted to the crank shaft through the first gear and clutch (A). Then the rotation is transmitted to 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 second hammer. 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 piston play an extremely important role in sealing the air within the air chamber.

8-3. Idling-proof Mechanism

When the drill bit is released from concrete surface, the second hammer and retainer sleeve (A) move to the position illustrated in Fig. 4, and the striker moves out of striking position. When this occurs, the air holes are opened and the pressure within the air chamber remains unchanged even though the piston continues to reciprocate, thereby preventing striking operation.

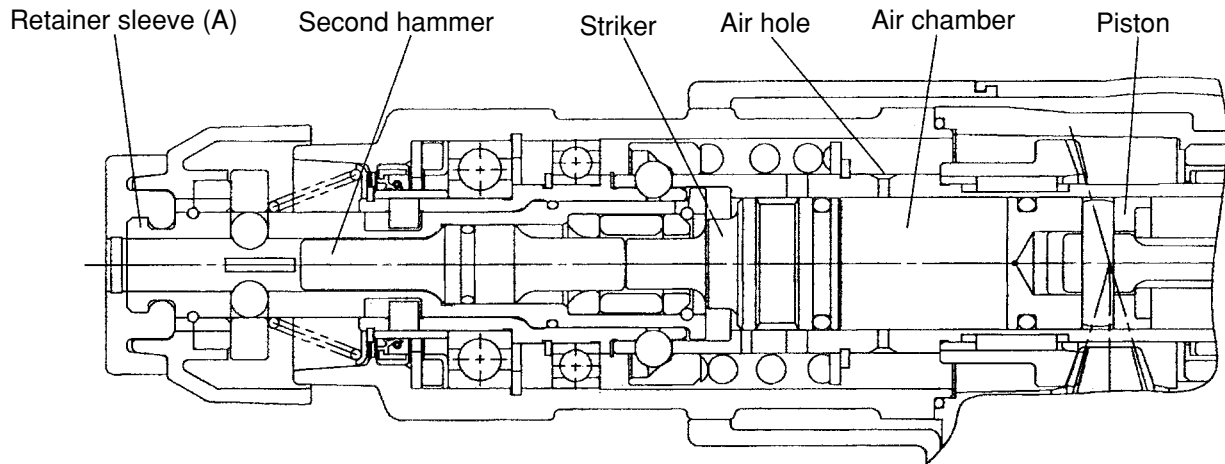


Fig. 4

8-4. Slip Mechanism

The slip mechanism structure is described below with reference to Fig. 5.

The rotation of the cylinder is transmitted to retainer sleeve (B) through six steel balls. Steel balls in holes provided on the cylinder are pressed on outer of retainer sleeve (B) by spring (A) through the pushing ring. When an excess torque is exerted on the drill bit, steel balls are slipped out retainer sleeve (B) against the load of spring (A) to allow idle of the cylinder. With this arrangement, the clutch slips when a violent torque is applied to the tool as with the drill bit contacting steel wire within the concrete, protecting the operator from jerking or being violently thrown around.

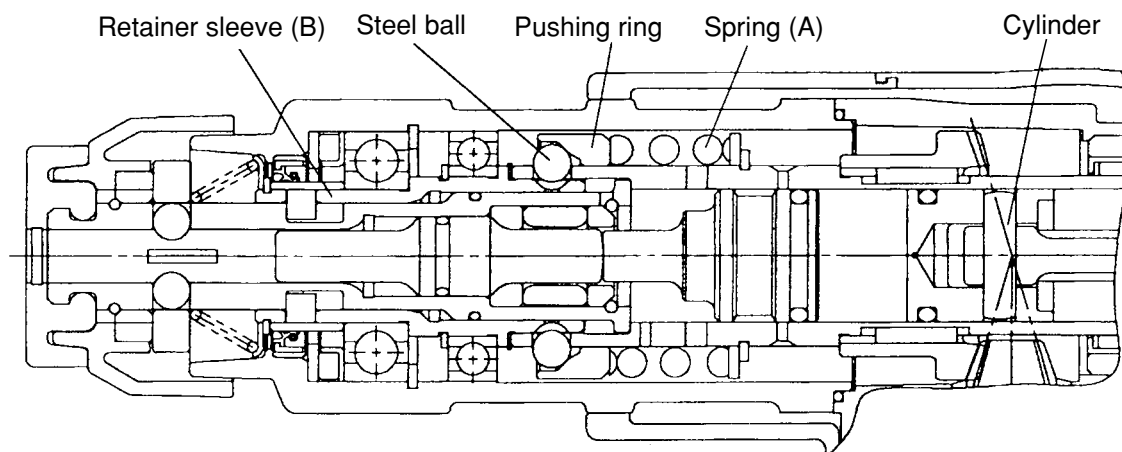


Fig. 5

8-5. Sealed and Dust-proof Construction

The crank case and cylinder case are sealed by four o-rings, and two oil seals which serve to prevent leakage of the grease, as well as to prevent dust and dirt from entering the mechanism.

The drill bit chuck portion is protected by a rubber front cap to keep out dust and chips.

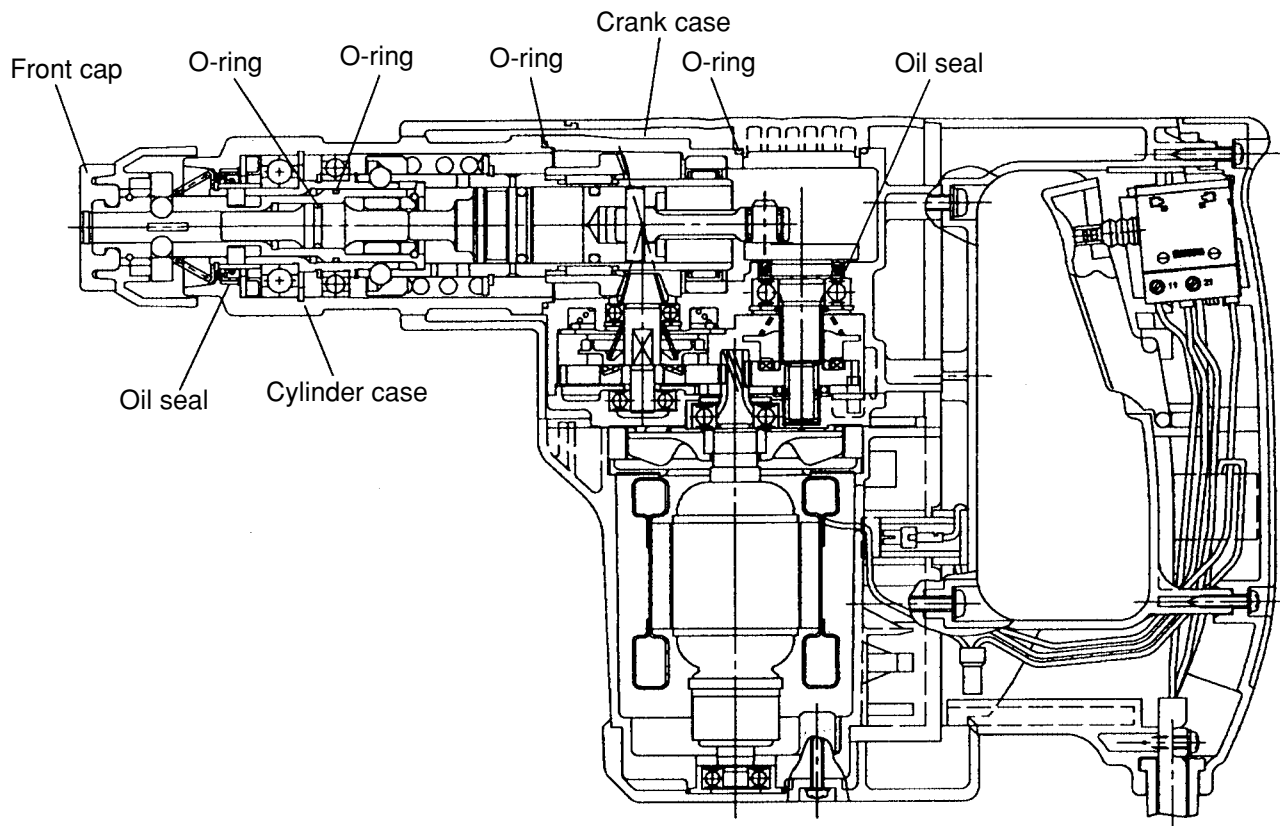


Fig. 6

8-6. Speed Control

The variable speed control switch permits free change of the rotation speed and striking force. When drilling in fragile materials, pull the switch trigger gently for low rotation speed and striking force to achieve optimum results.

8-7. Function Mode Mechanism

The change lever of the Model DH 30PC permits quick and easy changeover among the "Rotation and striking", "Rotation only" and "Striking only" functions. Also the change lever of the Model DH 30PB permits changeover among the "Rotation and striking" and "Rotation only" functions.

When operating the change lever, be sure to continue pressing the pushing button.

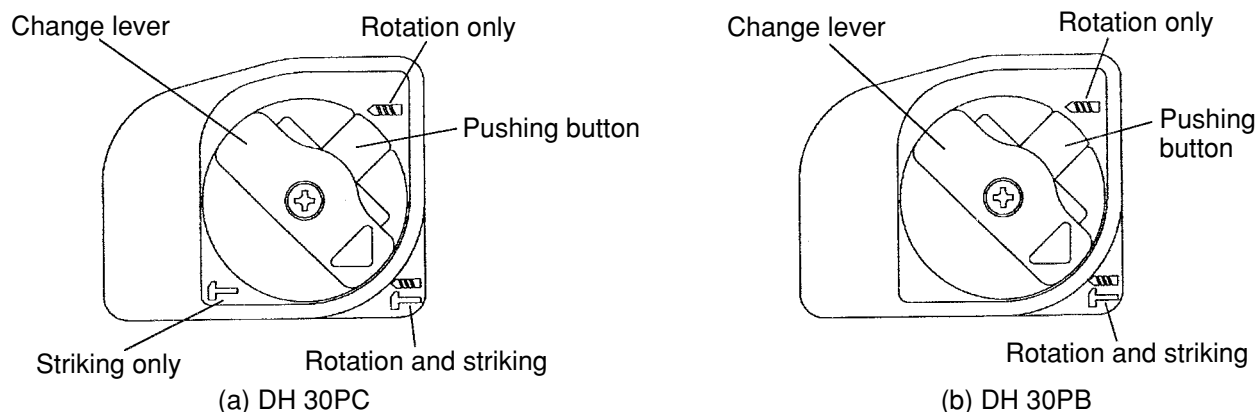
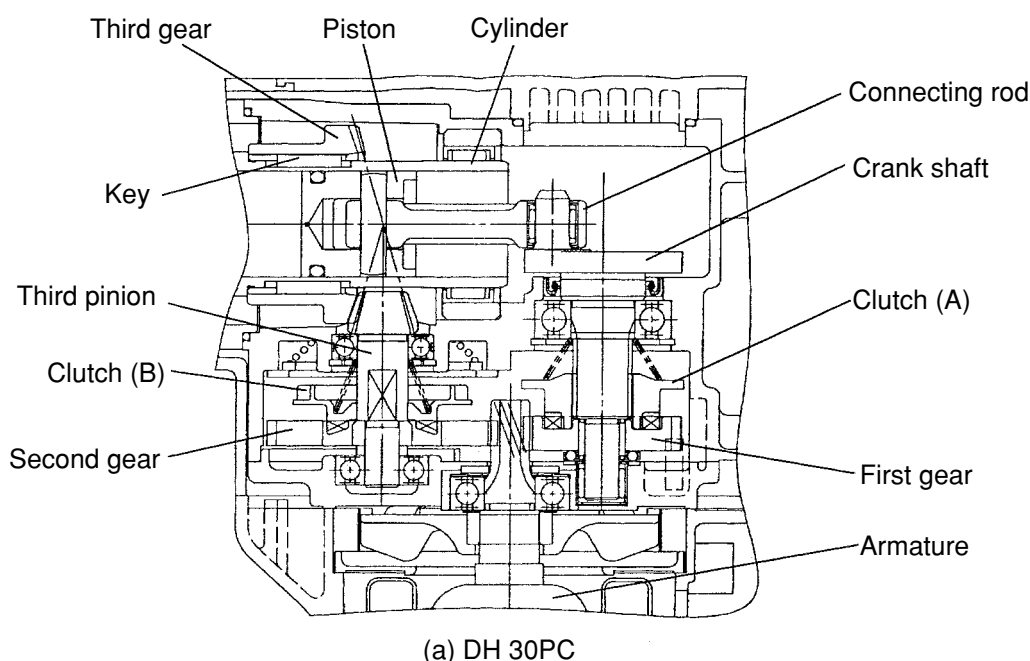


Fig. 7

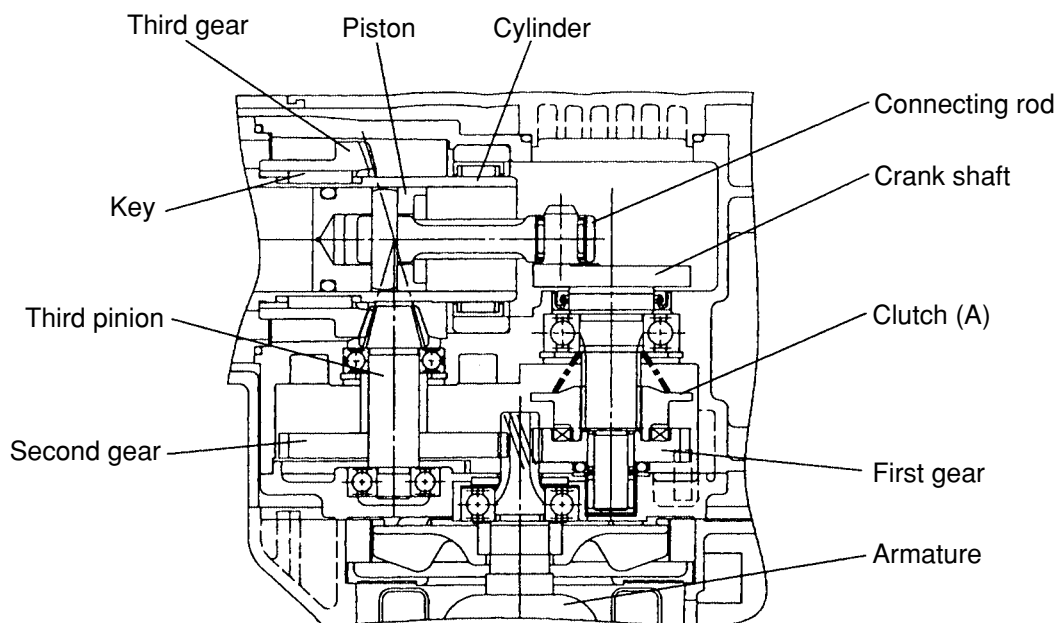
(1) Rotation and striking

Adjust the change lever to "Rotation and striking". On one hand, the rotation of first gear, which is transmitted from the armature, is transmitted to clutch (A) by matching with claws of the first gear and of clutch (A), and to the crank shaft via the spline of clutch (A) and of crank shaft. Then the rotation is transmitted to connecting rod, which in turn cause the piston to reciprocate inside the cylinder. On the other hand, in the case of the Model DH 30PC, the rotation of second gear, which is transmitted from the armature, is transmitted to clutch (B) by matching with claws of the second gear and of clutch (B), and to the third pinion via the oval of the second gear and of the third pinion. Then the rotation is transmitted from the third pinion through the third gear and the key to turn the cylinder.



(a) DH 30PC

In the case of the Model DH 30PB, the rotation of the armature is transmitted to the third pinion through the second gear in which the third pinion is press-fitted. Then the rotation is transmitted from the third pinion through the third gear and the key to turn the cylinder.



(b) DH 30PB

Fig. 8

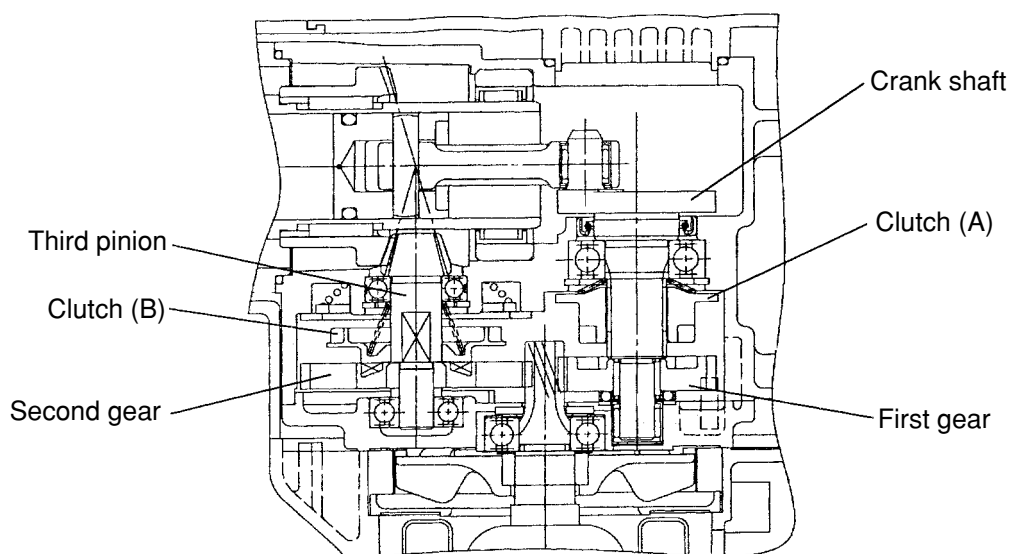
(2) Rotation only

Adjust the change lever to "Rotation only".

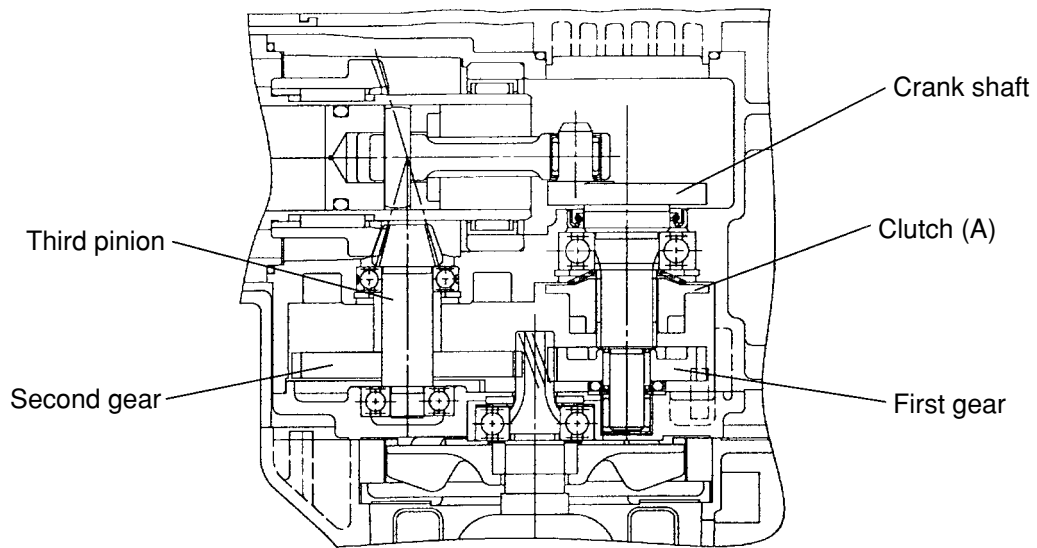
On one hand, clutch (A) is moved above by the pin of the change lever, and engagement between clutch (A) and the first gear is released. So the first gear idles on the crank shaft, and striking is stopped.

On the other hand, in the case of the Model DH 30PC, the second gear engages with clutch (B), and so the rotation is transmitted to third pinion for "Rotation only" function.

In the case of the Model DH 30PB, the rotation of the armature is always transmitted to the third pinion through the second gear in which the third pinion is press-fitted.



(a) DH 30PC



(b) DH 30PB

Fig. 9

(3) Striking only (DH 30PC only)

Adjust the change lever to "Striking only".

On one hand, clutch (B) is moved above via the shift plate by the pin of the change lever, and engagement between clutch (B) and the second gear is released. So the second gear idles on the third pinion, and the rotation of third pinion is stopped. Clutch (B) on the third pinion is engaged with the lock plate to lock the turn of tool. Thereby, the tool can be carried out in the arbitrary direction. On the other hand, the first gear engages with clutch (A), and so the rotation is transmitted to crank shaft for "Striking only" function.

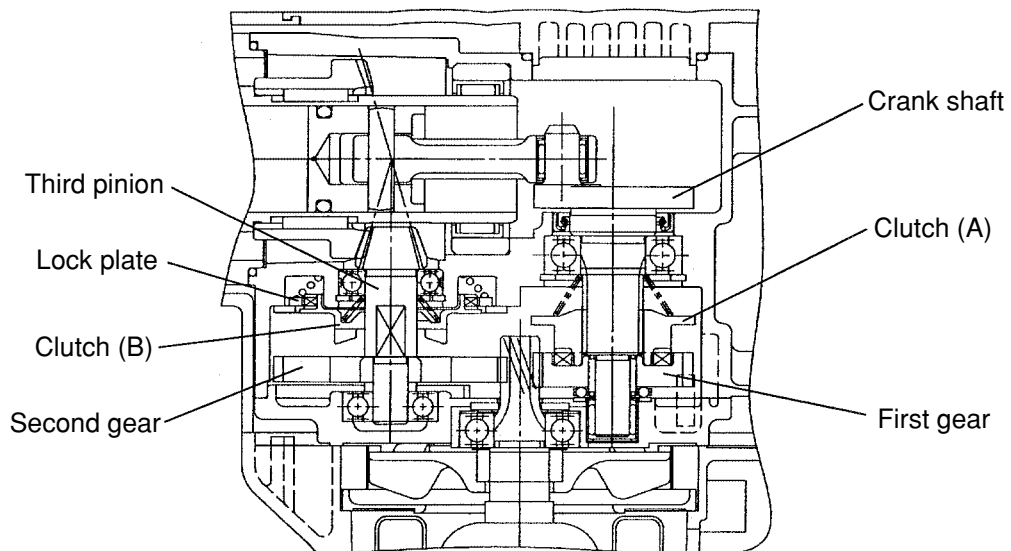


Fig. 10

8-8. Tool Retainer

The opening where the tool is inserted is covered with the front cap made of rubber to prevent dust from entering inside. When the tool is inserted, the steel ball fits in to the matching groove on the tool to lock it in place and prevent it from coming off. The key rails transmit rotating torque to the tool.

The grip is held forward by the holder spring. To mount the tool, pull the grip back to compress the holder spring. Then the steel ball moves outward. While turning the tool, push it until it makes contact and is fully inserted. Then release the grip so that it moves forward and fixes the tool. To remove the tool, simply pull the grip back fully and pull the tool out.

9. PRECAUTIONS AND SUGGESTIONS FOR DISASSEMBLY AND REASSEMBLY

The numbers in **[Bold]** below correspond to the item numbers in the Parts List and exploded assembly diagrams for DH 30PC, and the number in **<Bold>** below correspond to those in the Parts List and exploded assembly diagrams for DH 30PB.

9-1. Disassembly

(1) Piston and striker o-rings

Remove the Tapping Screw (W/Flange) D4 x 25 (Black) **[25] <25>** from the Change Lever **[26] <26>**. Remove the four Seal Lock Hex. Socket Hd. Bolts M4 x 10 **[46] <36>** from the Crank Case Cove **[48] <38>**, and pull the Crank Case Cover **[48] <38>**. Remove the Hex. Socket Hd. Bolt (W/Flange) M5 x 35 **[102] <92>** from the Housing Ass'y **[101] <91>**, and the Cylinder Case Cover **[10] <10>** to remove them.

Remove the four Hex. Socket Hd. Bolt (W/Flange) M5 x 25 **[13] <13>** from the Cylinder Case **[12] <12>**, and remove the Cylinder Case **[12] <12>** from the Crank Case Ass'y **[51] <41>**. Remove the Connecting Rod Ass'y **[85] <75>** from the Crank Shaft **[50] <40>**.

Pull out the Striker **[80] <70>** by tapping on the Cylinder Case **[12] <12>** with a plastic hammer. If it is difficult to pull out the Striker **[80] <70>**, push the removed Piston **[83] <73>** together with the Connecting Rod Ass'y **[85] <75>** into the Cylinder **[74] <64>** and quickly pull them out, and the Striker **[80] <70>** will jump out together with the Piston **[83] <73>**.

(2) Retainer disassembly

Pull the Grip **[2] <2>** back fully, and remove the Front Cap **[1] <1>**. This allows the Grip **[2] <2>**, Stopper Ring **[3] <3>**, Holder Sleeve **[4] <4>**, Ball Holder **[5] <5>**, Holder Spring **[6] <6>**, Spring Holder (B) **[7] <7>** and Steel Balls D7.0 (2 pcs.) **[65] <55>** to be separated from Retainer Sleeve (A) **[66] <56>**.

(3) Disassembly of the striking mechanism section

Remove the Third Gear [82] <72> and Feather keys 3 x 3 x 15 (2 pcs.) [75] <65> from the Cylinder [74] <64>. Remove the Retaining Ring [8] <8> from Retainer Sleeve (A) [66] <56>. Remove the cylinder ass'y press-fitted onto the Sleeve [9] <9> and the Ball Bearing 6005T2X3CN [19] <19> with a hand press. At this time, be very careful not to lose the three Needles [23] <23>. Remove the Retaining Ring for D34 Shaft [79] <69> from the Cylinder [74] <64>. At this time, be careful that shock is caused by elasticity of Spring (A) [77] <67> released, and the Retaining Ring for D34 Shaft [79] <69> jumps out. Then, remove Washer (C) [78] <68>, Spring (A) [77] <67>, Pushing Ring [76] <66> and the Steel Balls D7.0 (6 pcs.) [65] <55> can be removed from the Cylinder [74] <64>. Remove the Cylinder [74] <64> from Retainer Sleeve (B) [24] <24>, and Retainer Sleeve (A) [66] <56> can be removed from Retainer Sleeve (B) [24] <24>. At this time, be very careful not to lose Washer (A) [73] <63>.

Pressing the Damper Holder [71] <61> with a 14-mm dia. round bar, remove the Stopper Ring [72] <62> from the groove inside Retainer Sleeve (A) [66] <56> by striking the Stopper Ring [72] <62> through the hole provided on Retainer Sleeve (A) [66] <56>. This allows the Damper Holder [71] <61>, the Damper [70] <60>, the Hammer Holder [69] <59> and the Second Hammer [68] <58> to be separated from Retainer Sleeve (A) [66] <56>.

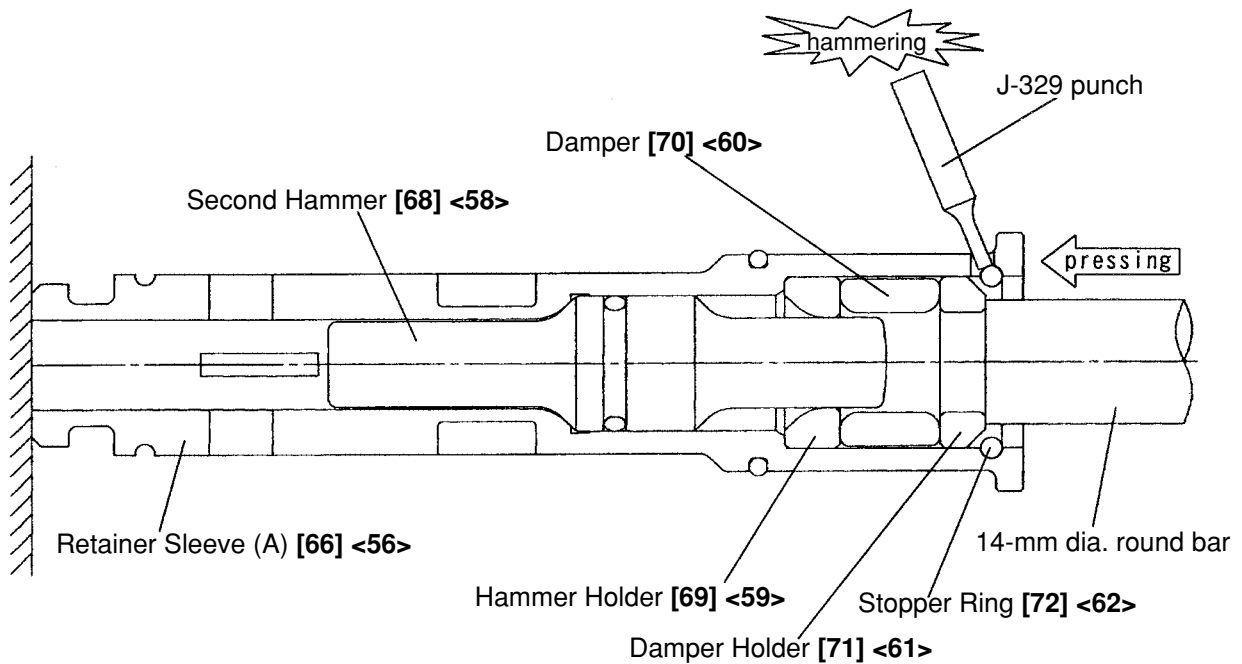


Fig. 11

(4) Disassembly of the crank shaft

Remove the Tapping Screw (W/Flange) D4 x 16 (Black) **[107] <97>** from the Tail Cover **[109] <99>**, and remove the Brush Cap **[103] <93>** and the Carbon Brush (Auto Stop Type) **[104] <94>** from the Housing Ass'y **[101] <91>**. Remove the Machine Screw (W/Washers) M5 x 16 (Black) **[112] <102>** and the Tapping Screw (W/Flange) D5 x 25 (Black) **[123] <113>** from the Handle **[113] <103>**.

Remove the Hex. Socket Hd. Bolt (W/Flange) M5 x 35 **[102] <92>** from the Housing Ass'y **[101] <91>**, and open the Gear Cover **[63] <53>** and the Crank Case Ass'y **[51] <41>**. At this time, be very careful not to lose Washer (A) **[60] <50>**, the Thrust Ball Bearing **[59] <49>**, the First Gear **[58] <48>** and the Needle Cage **[57] <47>**. Remove the Crank Shaft **[50] <40>** press-fitted onto the Ball Bearing 6002VVCMP2L **[53] <43>** with a hand press.

(5) Disassembly of the third pinion

[DH 30PC]

Remove Sleeve (B) **[42]** and the Second Gear **[41]** from the Third Pinion **[35]**, and remove the Shift Guide **[45]** from the Crank Case Ass'y **[51]**. This allows the Shift Plate **[40]**, Clutch (B) **[39]** and Clutch Spring (B) **[38]** to be separated from the Third Pinion **[35]**.

Remove the Retainer Ring for D24 Hole **[37]** from the Crank Case Ass'y **[51]**, remove the Third Pinion **[35]** from the Crank Case Ass'y **[51]** by tapping on the Crank Case Ass'y **[51]** with a plastic hammer.

[DH 30PB]

Remove the Third Pinion **<31>** from the Crank Case Ass'y **<41>** by tapping on the Crank Case Ass'y **<41>** with a plastic hammer.

Remove the Second Gear **<34>** press-fitted onto the Third Pinion **<31>** with a hand press.

9-2. Reassembly

Reassembly can be accomplished by following the disassembly procedures in reverse. However, special attention should be given to the following items. Do not reuse the disassembled retaining rings and stopper rings. Use the new retaining rings and stopper rings at reassembly.

(1) Reassembly of the third pinion

[DH 30PC]

Press the Ball Bearing 6901DDC3PS2-L (EC) [36] of the Third Pinion [35] into the Crank Case Ass'y [51].

Never press the Third Pinion [35]. Do not mistake Clutch Spring (B) [38] for Clutch Spring (A) [55]. Be careful not to mistake the turn of the Second gear [41]. Apply grease DUBREX No. 251 to the inner circumference of Clutch (B) [39] and of the Second Gear [41], the outer circumference of the Shift Guide [45], and the portion of Clutch (B) [39] engage with the Second Gear [41].

[DH 30PB]

Press the Second Gear <34> of the Third Pinion <31> into the Crank Case Ass'y <41>. Never press the Third Pinion <31>. Need not use the Retainer Ring D20 in case of DH 30PB.

(2) Reassembly of the crank shaft

Apply special grease (FG-6A) to the inner circumference of Oil Seal (B) [52] <42>. When the Crank Shaft [50] <40> is press-fitted in the Ball Bearing 6002VVCMP2L [53] <43>, hold the Ball Bearing 6002VVCMP2L [53] <43> directly. Do not hold the Crank Case Ass'y [51] <41>. Reassemble Clutch Spring (A) [55] <45> and Clutch (A) [56] <46>, and move the Shift Lever [29] <29> to the "Rotation only" position with the removed Change Lever [26] <26>. If the Shift Lever [29] <29> is stiff, apply Hitachi Motor grease No. 29 to O-ring (B) [30] <30> mounted on the Shift Lever [29] <29>.

Apply grease DUBREX No. 251 to the inner circumference of Clutch (A) [56] <46> and of the First Gear [58] <48>, the gear portion of the First Gear [58] <48> and the portion of Clutch (A) [56] <46> engage with the First Gear [58] <48>.

(3) Gear Cover Ass'y

Press-fit the Needle Bearing (HK0810) [61] <51> of the Gear Cover [63] <53> aligning it with the joint surface of the Crank Case Ass'y [51] <41>. Apply grease DUBREX No. 251 to the inner portion of the Needle Bearing (HK0810) [61] <51>. Be careful not to mistake the turn of the Packing Washer [91] <81>.

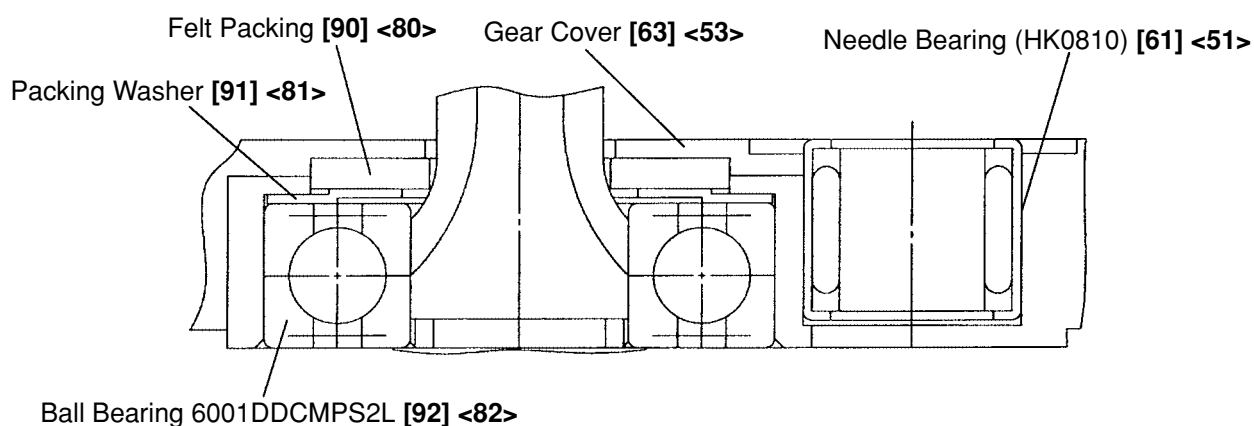


Fig. 12

(4) Reassembly of the striking mechanism section

Be careful not to mistake the direction of the Second Hammer [68] <58>. When reassembling the Stopper Ring [72] <62> and the Retaining Ring for D34 Shaft [79] <69>, ensure that they are fitted on parts.

Apply special grease (FG-6A) to O-ring (B) [67] <57> of the Second Hammer [68] <58>, the O-ring [64] <54> of Retainer Sleeve (A) [66] <56>, the inner D25 of the Cylinder [74] <64>, the inner portion of the Oil Seal [15] <15>, the inner portion of the Connecting Rod Ass'y [85] <75> and the O-rings [81] <71> of the Striker [80] <70> and of the Piston [83] <73>.

Apply grease DUBREX No. 251 to Washer (A) [73] <63>, the sliding portion of Retainer Sleeve (B) [24] <24> and the inner D29 of the Cylinder [74] <64>.

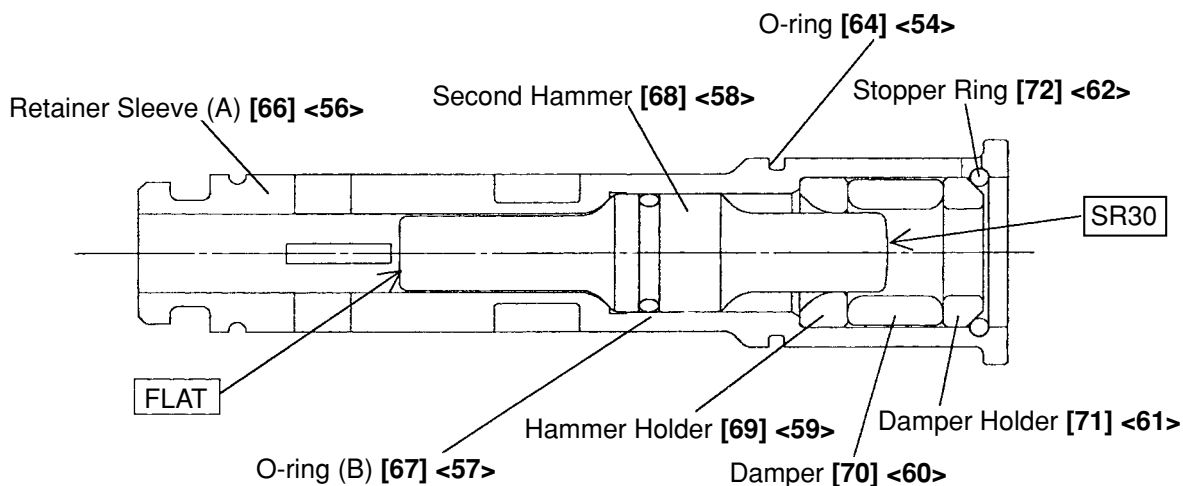


Fig. 13

(5) Lubrication

Insert 10 g of special grease into the Cylinder Case [12] <12> (outside the Cylinder [74] <64>), and 30 g into the Crank Case Ass'y [51] <41> (Connecting Rod Ass'y [85] <75> side). Insert 30 g of grease Hitachi Motor No. 29 into the Crank Case Ass'y [51] <41> (First Gear [58] <48> side).

9-3. Screw Locking Agent TB1401

Apply screw locking agent TB1401 to all hex. socket hd. M4 and M5.

Note: If bolts are loosened by vibration, it could cause damage to the body. Ensure without fail that screw locking agent is applied to threaded portions prior to assembly.

9-4. Tightening Torque

(1) Screw M4	$2.0 \pm 0.5 \text{ N}\cdot\text{m}$ ($20 \pm 5 \text{ kgf}\cdot\text{cm}$)
(2) Screw M5	$3.4 \pm 0.5 \text{ N}\cdot\text{m}$ ($35 \pm 5 \text{ kgf}\cdot\text{cm}$)
(3) Hex. socket hd. bolt M4	$4.4 \pm 0.5 \text{ N}\cdot\text{m}$ ($45 \pm 5 \text{ kgf}\cdot\text{cm}$)
(4) Hex. socket hd. bolt M5	$5.0 + 2.0/0 \text{ N}\cdot\text{m}$ ($50+20/0 \text{ kgf}\cdot\text{cm}$)
(5) Hex. socket hd. bolt M5 mounted housing (35L)	$3.4 + 1.5/0 \text{ N}\cdot\text{m}$ ($35+15/0 \text{ kgf}\cdot\text{cm}$)
(6) Tapping screw D4	$2.0 \pm 0.5 \text{ N}\cdot\text{m}$ ($20 \pm 5 \text{ kgf}\cdot\text{cm}$)
(7) Tapping screw D5	$2.9 \pm 0.5 \text{ N}\cdot\text{m}$ ($30 \pm 5 \text{ kgf}\cdot\text{cm}$)

9-5. 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. 14 and tighten the screw [tightening torque: 0.6 ± 0.2 N·m (6 ± 2 kg·cm)]. Insert each lead wire (black) coming from plug (B) 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. 14).

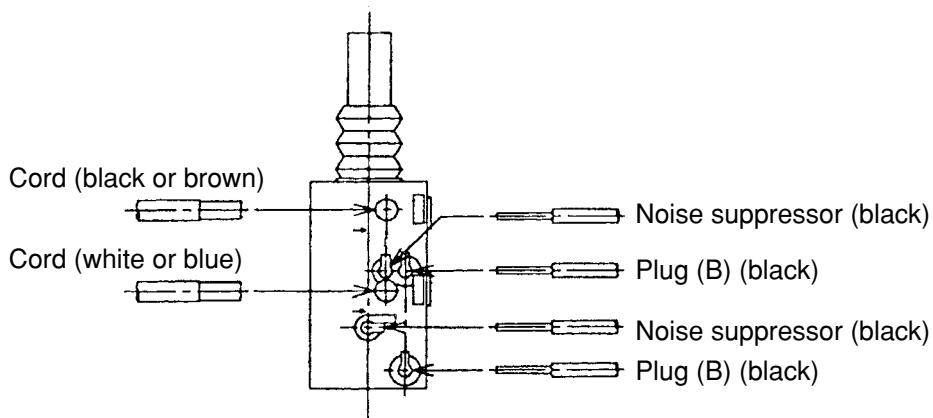


Fig. 14

9-6. Insulation Tests

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

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

Dielectric strength : AC 4,000 V/1 minute, with no abnormalities 220 V - 240 V (and 110 V for U.K. products)

AC 2,500 V/1 minute, with no abnormalities 110 V - 120 V (except U.K. products)

9-7. 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

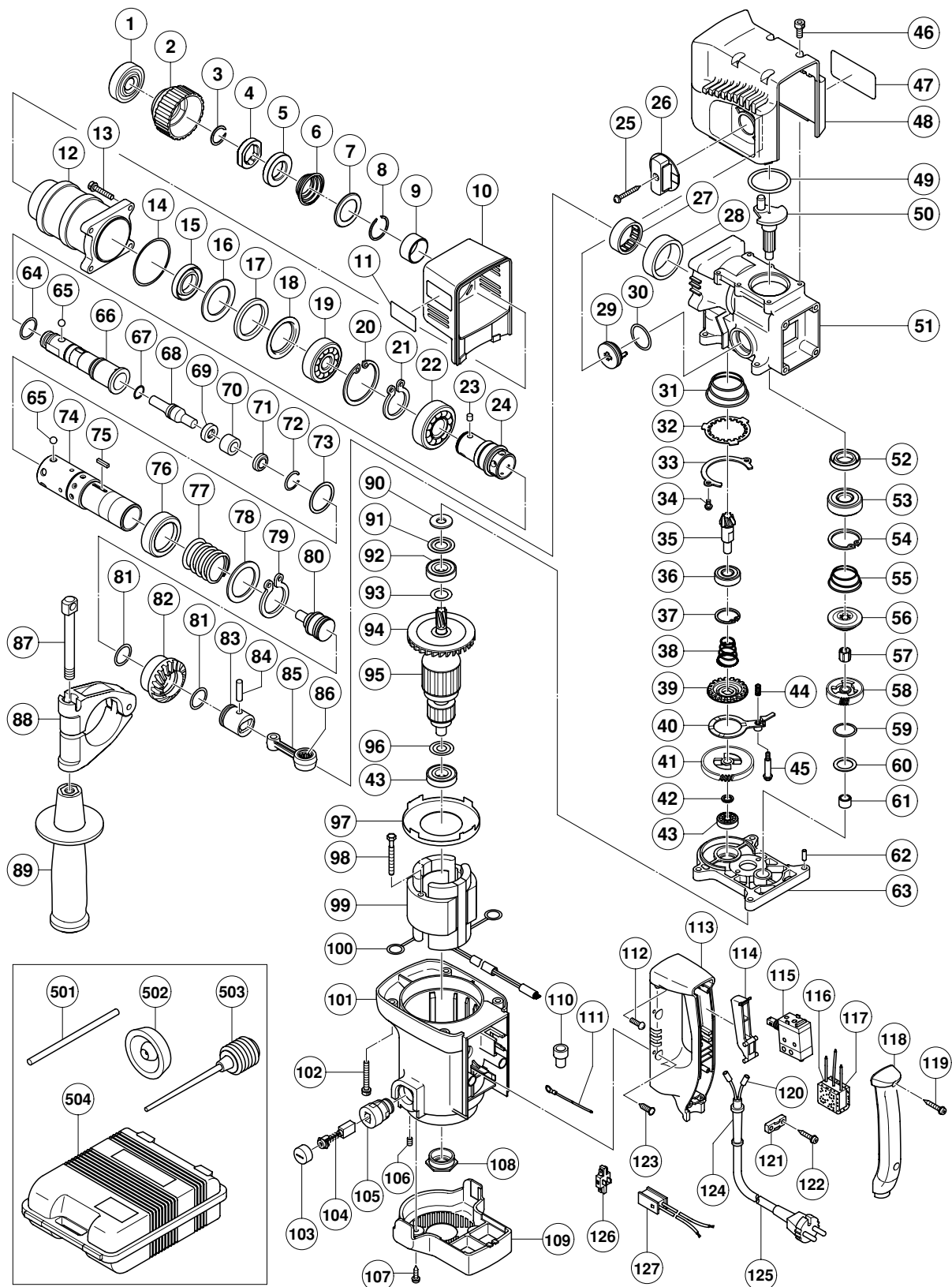
MODEL	Variable		10	20	30	40	50	60 min.
	Fixed							
<div>DH 30PB</div> <div>DH 30PC</div>	<div>General Assembly</div>	Work Flow						
		Handle Cover Switch Cord						Housing Ass'y Stator Ass'y
		Tail Cover Bearing Bushing (B)						Armature Ass'y Ball Bearing (6001DD) Ball Bearing (608VV) Washer (B)
		Crank Case Cover O-ring						
				Handle			Crank Shaft Ball Bearing (6002VV) Oil Seal (B) Clutch Spring (A) Clutch (A) First Gear	Crank Case Ass'y
		Front Cap Grip Ball Holder Holder Spring Spring Holder (B)	Cylinder Case O-ring (1AS-50) Oil Seal Damper Washer (B) Damper (B) Retainer Sleeve (A) Retainer Sleeve (B) Ball Bearing (6005) Ball Bearing (5906) O-ring O-ring (B) Second Hammer Hammer Holder Damper Damper Holder			Third Pinion Ball Bearing (6901DD) Second Gear Ball Bearing (608VV) Plate Spring Lock Plate Plate Holder Clutch Spring (B) Clutch (B) Shift Plate	DH 30PC	
					Striker O-ring x 2 Pison Piston Pin Connecting Rod		Cylinder Spring (A) Steel Ball Third Gear	

ELECTRIC TOOL PARTS LIST

■ ROTARY HAMMER Model DH 30PC

2002 · 5 · 30

(E1)



PARTS

DH 30PC

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
1	318-028	FRONT CAP	1		
2	320-352	GRIP	1		
3	306-340	STOPPER RING	1		
4	320-349	HOLDER SLEEVE	1		
5	320-353	BALL HOLDER	1		
6	320-351	HOLDER SPRING	1		
7	320-354	SPRING HOLDER (B)	1		
8	676-432	RETAINING RING	1		
9	320-350	SLEEVE	1		
10	320-355	CYLINDER CASE COVER	1		
11		HITACHI LABEL	1		
12	320-323	CYLINDER CASE	1		
13	992-253	HEX. SOCKET HD. BOLT (W/FLANGE) M5X25	4		
14	990-067	O-RING (1AS-50)	1		
15	320-324	OIL SEAL	1		
16	320-344	WASHER (B)	1		
17	320-325	DAMPER (B)	1		
18	320-326	DAMPER WASHER (B)	1		
19	600-5T2	BALL BEARING 6005T2X3CN	1		
20	948-227	RETAINING RING FOR D47 HOLE	1		
21	948-310	RETAINING RING FOR D30 SHAFT	1		
22	690-6T2	BALL BEARING 6906T2CN	1		
23	320-343	NEEDLE	3		
24	320-330	RETAINER SLEEVE (B)	1		
25	307-028	TAPPING SCREW (W/FLANGE) D4X25 (BLACK)	1		
26	320-360	CHANGE LEVER	1		
27	320-307	NEEDLE BEARING	1		
28	320-972	BEARING BUSHING	1		
29	320-358	SHIFT LEVER	1		
30	320-359	O-RING (B)	1		
31	320-308	PLATE SPRING	1		
32	320-309	LOCK PLATE	1		
33	320-310	PLATE HOLDER	1		
34	993-982	SEAL LOCK SCREW (W/SP. WASHER) M4X6	2		
35	320-311	THIRD PINION	1		
36	690-1DD	BALL BEARING 6901DDC3PS2-L (EC)	1		
37	983-748	RETAINING RING FOR D24 HOLE	1		
38	320-313	CLUTCH SPRING (B)	1		
39	320-314	CLUTCH (B)	1		
40	320-361	SHIFT PLATE	1		
41	320-315	SECOND GEAR	1		
42	320-316	SLEEVE (B)	1		
43	608-VVM	BALL BEARING 608VVC2PS2L	2		
44	320-363	SHIFT SPRING	1		
45	320-362	SHIFT GUIDE	1		
46	878-356	SEAL LOCK HEX. SOCKET HD. BOLT M4X10	4		
47		NAME PLATE	1		
48	320-356	CRANK CASE COVER	1		
49	314-030	O-RING	1		
50	320-318	CRANK SHAFT	1		
51	320-368	CRANK CASE ASS'Y	1	INCLUD.27,28	

PARTS

DH 30PC

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
52	981-851	OIL SEAL (B)	1		
53	600-2VV	BALL BEARING 6002VVCMP2L	1		
54	948-001	RETAINING RING FOR D32 HOLE	1		
55	320-320	CLUTCH SPRING (A)	1		
56	320-321	CLUTCH (A)	1		
57	320-932	NEEDLE CAGE	1		
58	320-322	FIRST GEAR	1		
59	320-317	THRUST BALL BEARING	1		
60	320-319	WASHER (A)	1		
61	670-714	NEEDLE BEARING (HK0810)	1		
62	949-756	PIN D4X12 (10 PCS.)	1		
63	320-365	GEAR COVER	1		
64	320-340	O-RING	1		
65	959-156	STEEL BALL D7.0 (10 PCS.)	8		
66	320-329	RETAINER SLEEVE (A)	1		
67	311-819	O-RING (B)	1		
68	320-331	SECOND HAMMER	1		
69	320-332	HAMMER HOLDER	1		
70	320-333	DAMPER	1		
71	320-334	DAMPER HOLDER	1		
72	320-335	STOPPER RING	1		
73	320-341	WASHER (A)	1		
74	320-328	CYLINDER	1		
75	982-696	FEATHER KEY 3X3X15	2		
76	320-336	PUSHING RING	1		
77	320-337	SPRING (A)	1		
78	320-338	WASHER (C)	1		
79	320-339	RETAINING RING FOR D34 SHAFT	1		
80	320-346	STRIKER	1		
81	320-347	O-RING	2		
82	320-345	THIRD GEAR	1		
83	320-348	PISTON	1		
84	319-581	PISTON PIN	1		
85	982-647	CONNECTING ROD ASS'Y	1	INCLUD.86	
86	956-406	NEEDLE BEARING (NTN 8Q-HK08 10D)	1		
87	313-080	HANDLE BOLT	1		
88	320-357	HANDLE HOLDER	1		
89	313-078	SIDE HANDLE	1		
90	320-366	FELT PACKING	1		
91	320-367	PACKING WASHER	1		
92	600-1DD	BALL BEARING 6001DDCMP2L	1		
93	971-736	WASHER (B)	1		
94	319-930	FAN	1		
*	95	360-561U	ARMATURE ASS'Y 110V-120V	1	INCLUD.43,92-94,96
*	95	360-561E	ARMATURE ASS'Y 220V-230V	1	INCLUD.94
*	95	360-561F	ARMATURE ASS'Y 240V	1	INCLUD.94
	96	982-631	WASHER (A)	1	
	97	980-931	FAN GUIDE	1	
	98	953-121	HEX. HD. TAPPING SCREW D5X50	2	
*	99	340-507H	STATOR ASS'Y 110V-120V	1	INCLUD.100
*	99	340-507J	STATOR ASS'Y 220V-230V	1	INCLUD.100

PARTS

DH 30PC

[illegible]

DH 30PC

[illegible]

OPTIONAL ACCESSORIES

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
601	944-460	TAPER SHANK DRILL BIT D11X100	1		
602	944-461	TAPER SHANK DRILL BIT D12.3X110	1		
603	993-038	TAPER SHANK DRILL BIT D12.7X110	1		
604	944-462	TAPER SHANK DRILL BIT D14.3X110	1		
605	944-500	TAPER SHANK DRILL BIT D14.5X110	1		
606	944-463	TAPER SHANK DRILL BIT D17.5X120	1		
607	944-464	TAPER SHANK DRILL BIT D21.5X140	1		
608	303-617	TAPER SHANK ADAPTER (SDS PLUS) NO.1	1		
609	303-618	TAPER SHANK ADAPTER (SDS PLUS) NO.2	1		
610	303-619	A-TAPER SHANK ADAPTER (SDS PLUS)	1		
611	303-620	B-TAPER SHANK ADAPTER (SDS PLUS)	1		
612	944-477	COTTER	1		
613	302-976	ANCHOR SETTING ADAPTER A (SDS+)W1/4X260L	1		
614	302-975	ANCHOR SETTING ADAPTER A (SDS+)W5/16X260L	1		
615	303-621	ANCHOR SETTING ADAPTER A (SDS+)W3/8X160L	1		
616	302-974	ANCHOR SETTING ADAPTER A (SDS+)W3/8X260L	1		
617	302-979	ANCHOR SETTING ADAPTER B (SDS+)W1/4X260L	1		
618	302-978	ANCHOR SETTING ADAPTER B (SDS+)W5/16X260L	1		
619	303-622	ANCHOR SETTING ADAPTER B (SDS+)W3/8X160L	1		
620	302-977	ANCHOR SETTING ADAPTER B (SDS+)W3/8X260L	1		
621	971-794	ANCHOR SETTING ADAPTER A W1/4" (MANUAL)	1		
622	971-795	ANCHOR SETTING ADAPTER A W5/16" (MANUAL)	1		
623	971-796	ANCHOR SETTING ADAPTER A W3/8" (MANUAL)	1		
624	971-797	ANCHOR SETTING ADAPTER A W1/2" (MANUAL)	1		
625	971-798	ANCHOR SETTING ADAPTER A W5/8" (MANUAL)	1		
626	971-799	ANCHOR SETTING ADAPTER B W1/4" (MANUAL)	1		
627	971-800	ANCHOR SETTING ADAPTER B W5/16" (MANUAL)	1		
628	971-801	ANCHOR SETTING ADAPTER B W3/8" (MANUAL)	1		
629	971-802	ANCHOR SETTING ADAPTER B W1/2" (MANUAL)	1		
630	971-803	ANCHOR SETTING ADAPTER B W5/8" (MANUAL)	1		
631	982-672	CORE BIT (A) 25MM	1		

OPTIONAL ACCESSORIES

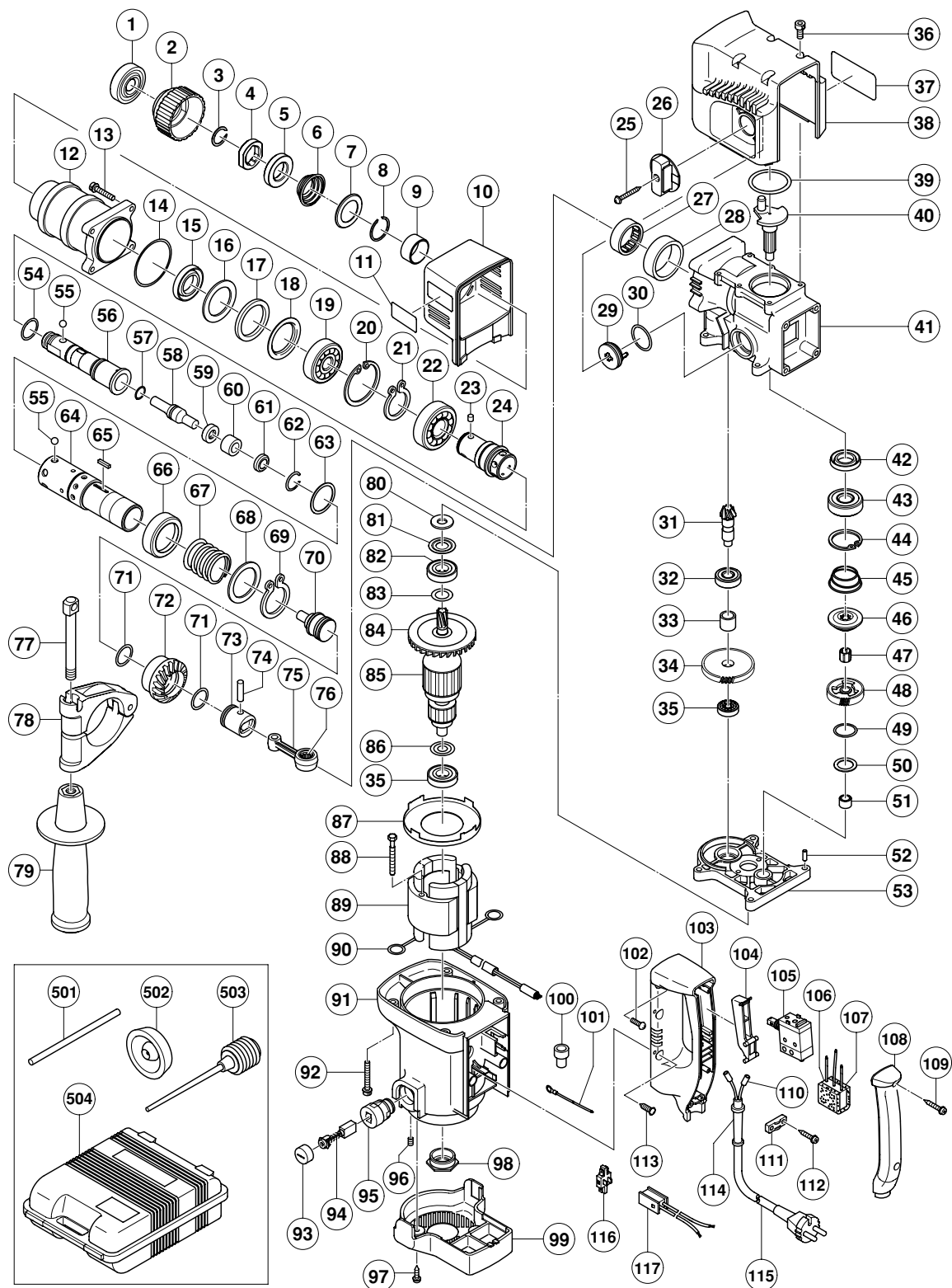
DH 30PC

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ELECTRIC TOOL PARTS LIST

■ ROTARY HAMMER Model DH 30PB

2002 · 5 · 30
(E1)



PARTS

DH 30PB

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
1	318-028	FRONT CAP	1		
2	320-352	GRIP	1		
3	306-340	STOPPER RING	1		
4	320-349	HOLDER SLEEVE	1		
5	320-353	BALL HOLDER	1		
6	320-351	HOLDER SPRING	1		
7	320-354	SPRING HOLDER (B)	1		
8	676-432	RETAINING RING	1		
9	320-350	SLEEVE	1		
10	320-355	CYLINDER CASE COVER	1		
11		HITACHI LABEL	1		
12	320-323	CYLINDER CASE	1		
13	992-253	HEX. SOCKET HD. BOLT (W/FLANGE) M5X25	4		
14	990-067	O-RING (1AS-50)	1		
15	320-324	OIL SEAL	1		
16	320-344	WASHER (B)	1		
17	320-325	DAMPER (B)	1		
18	320-326	DAMPER WASHER (B)	1		
19	600-5T2	BALL BEARING 6005T2X3CN	1		
20	948-227	RETAINING RING FOR D47 HOLE	1		
21	948-310	RETAINING RING FOR D30 SHAFT	1		
22	690-6T2	BALL BEARING 6906T2CN	1		
23	320-343	NEEDLE	3		
24	320-330	RETAINER SLEEVE (B)	1		
25	307-028	TAPPING SCREW (W/FLANGE) D4X25 (BLACK)	1		
26	320-360	CHANGE LEVER	1		
27	320-307	NEEDLE BEARING	1		
28	320-972	BEARING BUSHING	1		
29	320-305	SHIFT LEVER	1		
30	320-359	O-RING (B)	1		
31	320-301	THIRD PINION	1		
32	690-1DD	BALL BEARING 6901DDC3PS2-L (EC)	1		
33	320-303	SLEEVE (C)	1		
34	320-302	SECOND GEAR	1		
35	608-VVM	BALL BEARING 608VVC2PS2L	2		
36	878-356	SEAL LOCK HEX. SOCKET HD. BOLT M4X10	4		
37		NAME PLATE	1		
38	320-304	CRANK CASE COVER	1		
39	314-030	O-RING	1		
40	320-318	CRANK SHAFT	1		
41	320-368	CRANK CASE ASS'Y	1	INCLUD.27,28	
42	981-851	OIL SEAL (B)	1		
43	600-2VV	BALL BEARING 6002VVCMP2L	1		
44	948-001	RETAINING RING FOR D32 HOLE	1		
45	320-320	CLUTCH SPRING (A)	1		
46	320-321	CLUTCH (A)	1		
47	320-932	NEEDLE CAGE	1		
48	320-322	FIRST GEAR	1		
49	320-317	THRUST BALL BEARING	1		
50	320-319	WASHER (A)	1		
51	670-714	NEEDLE BEARING (HK0810)	1		

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PARTS

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ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
52	949-756	PIN D4X12 (10 PCS.)	1		
53	320-365	GEAR COVER	1		
54	320-340	O-RING	1		
55	959-156	STEEL BALL D7.0 (10 PCS.)	8		
56	320-329	RETAINER SLEEVE (A)	1		
57	311-819	O-RING (B)	1		
58	320-331	SECOND HAMMER	1		
59	320-332	HAMMER HOLDER	1		
60	320-333	DAMPER	1		
61	320-334	DAMPER HOLDER	1		
62	320-335	STOPPER RING	1		
63	320-341	WASHER (A)	1		
64	320-328	CYLINDER	1		
65	982-696	FEATHER KEY 3X3X15	2		
66	320-336	PUSHING RING	1		
67	320-337	SPRING (A)	1		
68	320-338	WASHER (C)	1		
69	320-339	RETAINING RING FOR D34 SHAFT	1		
70	320-346	STRIKER	1		
71	320-347	O-RING	2		
72	320-345	THIRD GEAR	1		
73	320-348	PISTON	1		
74	319-581	PISTON PIN	1		
75	982-647	CONNECTING ROD ASS'Y	1	INCLUD.76	
76	956-406	NEEDLE BEARING (NTN 8Q-HK08 10D)	1		
77	313-080	HANDLE BOLT	1		
78	320-357	HANDLE HOLDER	1		
79	313-078	SIDE HANDLE	1		
80	320-366	FELT PACKING	1		
81	320-367	PACKING WASHER	1		
82	600-1DD	BALL BEARING 6001DDCMPS2L	1		
83	971-736	WASHER (B)	1		
84	319-930	FAN	1		
* 85	360-561U	ARMATURE ASS'Y 110V-120V	1	INCLUD.35,82-84,86	
* 85	360-561E	ARMATURE ASS'Y 220V-230V	1	INCLUD.84	
* 85	360-561F	ARMATURE ASS'Y 240V	1	INCLUD.84	
86	982-631	WASHER (A)	1		
87	980-931	FAN GUIDE	1		
88	953-121	HEX. HD. TAPPING SCREW D5X50	2		
* 89	340-507H	STATOR ASS'Y 110V-120V	1	INCLUD.90	
* 89	340-507J	STATOR ASS'Y 220V-230V	1	INCLUD.90	
* 89	340-507K	STATOR ASS'Y 240V	1	INCLUD.90	
* 89	340-507G	STATOR ASS'Y 110V-120V	1	INCLUD.90 FOR USA,CAN	
90	930-703	BRUSH TERMINAL	2		
91	319-590	HOUSING ASS'Y	1	INCLUD.95,96	
92	319-589	HEX. SOCKET HD. BOLT (W/FLANGE) M5X35	4		
93	945-161	BRUSH CAP	2		
94	999-073	CARBON BRUSH (AUTO STOP TYPE) (1 PAIR)	2		
95	958-900	BRUSH HOLDER	2		
96	938-477	HEX. SOCKET SET SCREW M5X8	2		
97	307-811	TAPPING SCREW (W/FLANGE) D4X16 (BLACK)	2		

PARTS

DH 30PB

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DH 30PB

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OPTIONAL ACCESSORIES

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
601	944-460	TAPER SHANK DRILL BIT D11X100	1		
602	944-461	TAPER SHANK DRILL BIT D12.3X110	1		
603	993-038	TAPER SHANK DRILL BIT D12.7X110	1		
604	944-462	TAPER SHANK DRILL BIT D14.3X110	1		
605	944-500	TAPER SHANK DRILL BIT D14.5X110	1		
606	944-463	TAPER SHANK DRILL BIT D17.5X120	1		
607	944-464	TAPER SHANK DRILL BIT D21.5X140	1		
608	303-617	TAPER SHANK ADAPTER (SDS PLUS) NO.1	1		
609	303-618	TAPER SHANK ADAPTER (SDS PLUS) NO.2	1		
610	303-619	A-TAPER SHANK ADAPTER (SDS PLUS)	1		
611	303-620	B-TAPER SHANK ADAPTER (SDS PLUS)	1		
612	944-477	COTTER	1		
613	302-976	ANCHOR SETTING ADAPTER A (SDS+)W1/4X260L	1		
614	302-975	ANCHOR SETTING ADAPTER A (SDS+)W5/16X260L	1		
615	303-621	ANCHOR SETTING ADAPTER A (SDS+)W3/8X160L	1		
616	302-974	ANCHOR SETTING ADAPTER A (SDS+)W3/8X260L	1		
617	302-979	ANCHOR SETTING ADAPTER B (SDS+)W1/4X260L	1		
618	302-978	ANCHOR SETTING ADAPTER B (SDS+)W5/16X260L	1		
619	303-622	ANCHOR SETTING ADAPTER B (SDS+)W3/8X160L	1		
620	302-977	ANCHOR SETTING ADAPTER B (SDS+)W3/8X260L	1		
621	971-794	ANCHOR SETTING ADAPTER A W1/4" (MANUAL)	1		
622	971-795	ANCHOR SETTING ADAPTER A W5/16" (MANUAL)	1		
623	971-796	ANCHOR SETTING ADAPTER A W3/8" (MANUAL)	1		
624	971-797	ANCHOR SETTING ADAPTER A W1/2" (MANUAL)	1		
625	971-798	ANCHOR SETTING ADAPTER A W5/8" (MANUAL)	1		
626	971-799	ANCHOR SETTING ADAPTER B W1/4" (MANUAL)	1		
627	971-800	ANCHOR SETTING ADAPTER B W5/16" (MANUAL)	1		
628	971-801	ANCHOR SETTING ADAPTER B W3/8" (MANUAL)	1		
629	971-802	ANCHOR SETTING ADAPTER B W1/2" (MANUAL)	1		
630	971-803	ANCHOR SETTING ADAPTER B W5/8" (MANUAL)	1		
631	982-672	CORE BIT (A) 25MM	1		

OPTIONAL ACCESSORIES

DH 30PB

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