

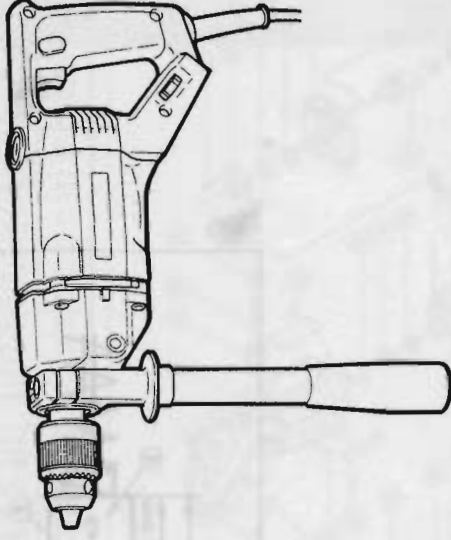
# HITACHI

Q024356

36015

**DIAMOND CORE DRILL  
DIAMANT-KERN BOHR MASCHINE  
PERCEUSE POUR TREPAN DIAMANT  
TRAPANO CON CORONA A PUNTE DIAMANTATE  
DIAMANT DOOS BOOR  
TALADRO PARA CORONA DIAMANTE**

**DC 120V**



Read through carefully and understand these instructions before use.  
Diese Anleitung vor Benutzung des Werkzeugs sorgfältig durchlesen und verstehen.  
Lire soigneusement et bien assimiler ces instructions avant usage.  
Prima dell'uso leggere attentamente e comprendere queste istruzioni.  
Deze gebruiksaanwijzing s.v.p. voor gebruik zorgvuldig doorlezen.  
Leer cuidadosamente y comprender estas instrucciones antes del uso.

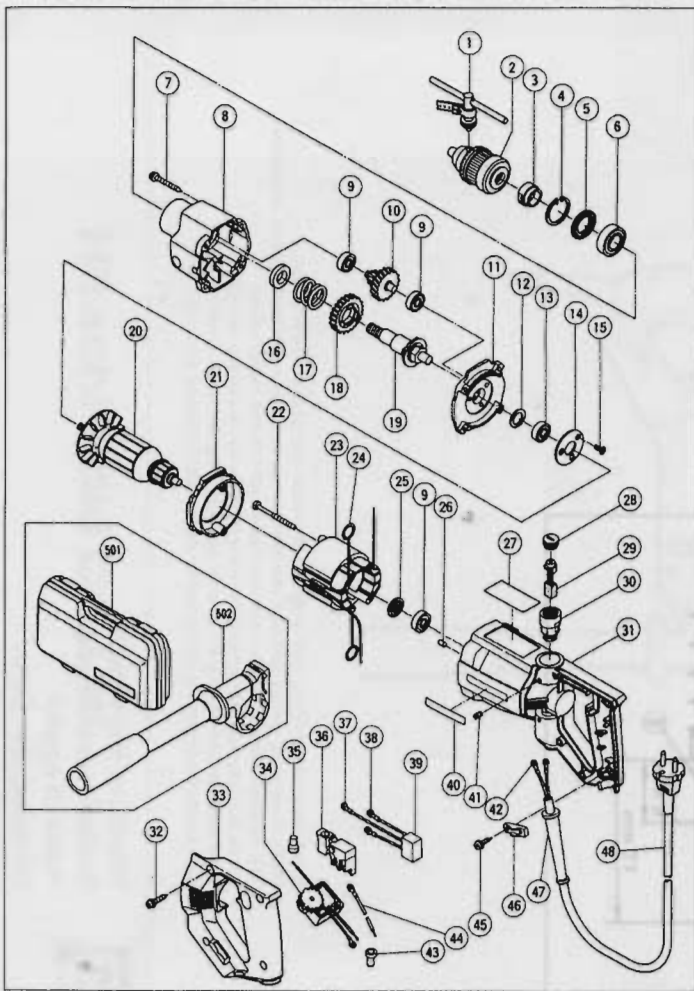


Handling instructions  
Bedienungsanleitung  
Mode d'emploi  
Istruzioni per l'uso  
Gebruiksaanwijzing  
Instrucciones de manejo

**Hitachi Koki Co.,Ltd.**

607  
Code No. C99060871 N  
Printed in Japan

The exploded assembly drawing should be used only for authorized service center.

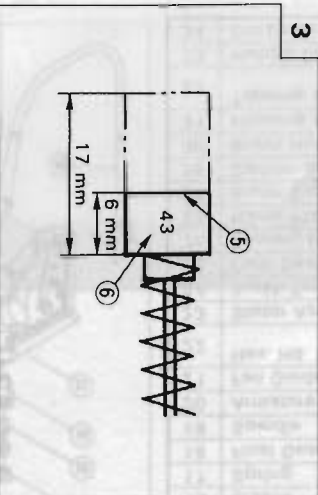
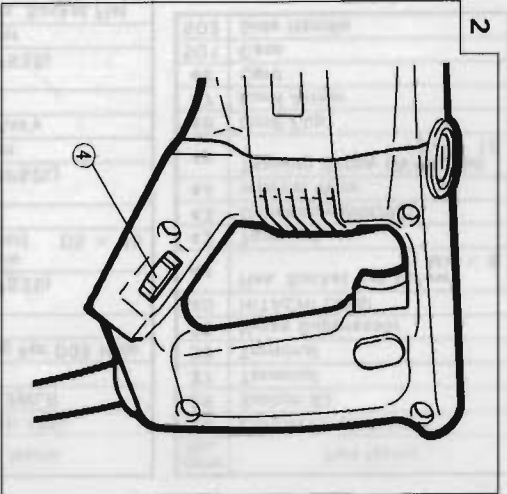
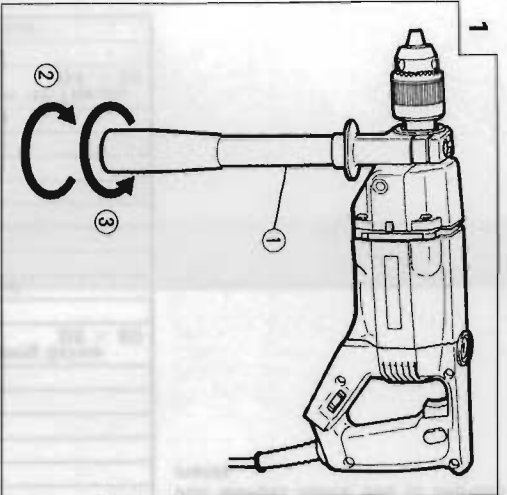


Item No.	Part Name
1	Chuck Wrench 10G
2	Drill Chuck 13WLR
3	Nut
4	Retaining Ring For D35 Hole
5	Dust Seal
6	Ball Bearing (6003VVCMP2S)
7	Tapping Screw (W/Sp. Washer) D5 × 35
8	Gear Cover
9	Ball Bearing (608VVMC2EPS2L)
10	Second Pinion
11	Inner Cover Ass'y
12	Washer
13	Ball Bearing (609VVMC2PS2S)
14	Bearing Holder
15	Seal Lock Hex. Socket Flat Hd. Bolt M5 × 16
16	Sleeve
17	Spring
18	Final Gear
19	Spindle
20	Armature
21	Fan Guide
22	Hex. Hd. Tapping Screw D5 × 60
23	Stator Ass'y
24	Brush Terminal
25	Dust Seal (A)
26	Bearing Lock
27	Name Plate
28	Brush Cap
29	Carbon Brush
30	Brush Holder
31	Housing Ass'y
32	Tapping Screw (W/Flange) D4 × 20
33	Handle Cover
34	Controller Circuit

Item No.	Part Name
35	Connector (50091)
36	Switch (C)
37	Terminal
38	Terminal
39	Noise Suppressor
40	HITACHI Label
41	Hex. Socket Set Screw M4 × 6
42	Terminal
43	Connector (50092)
44	Internal Wire
45	Tapping Screw (W/Flange) D4 × 16
46	Cord Clip
47	Cord Armor
48	Cord
501	Case
502	Side Handle

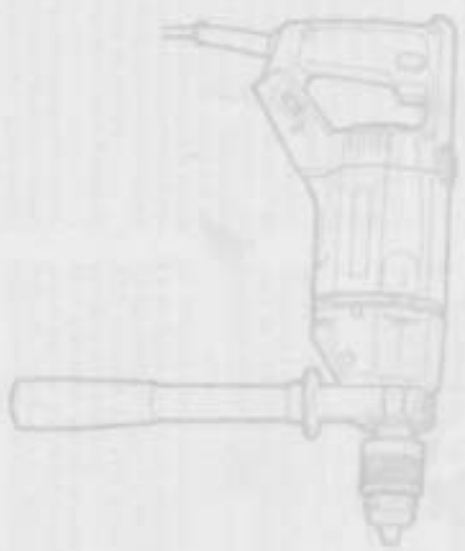
Parts are subject to possible modification without notice due to improvements.





English	Deutsch	Français
① Side handle	Seitengriff	Poignée latérale
② Removing (Loosen)	Befestigen (Festziehen)	Mise en place (Serrer)
③ Fixing (Tighten)	Abnehmen (Lösen)	Dépose (Desserrer)
④ Dial	Stala	Cadran
⑤ Wear limit	Verschleißgrenze	Limite d'usure
⑥ No. of carbon brush	Nr. der Kohlebürste	No. de balai en carbone

Italiano	Nederlands	Español
① Impugnatura laterale	Zijhendel	Mango lateral
② Fissaggio (stringere)	Vastzetten (Aandraaien)	Fijación (apretado)
③ Rimozione (allentare)	Verwideren (Losdraaien)	Extracción (Aflojado)
④ Selettore	Schijf	Dial
⑤ Limite d'usura	Slijtaaglimiet	Limite de desgasta
⑥ N. della spazzola di carbone	Nr. van koolborstel	No. de la escobilla de carbón



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**GENERAL OPERATIONAL PRECAUTIONS**

1. Keep work area clean. Cluttered areas and benches invite injuries.
2. Consider work area environment. Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit. Don't use tool in presence of flammable liquids or gases.
3. Power tools produce sparks during operation. They also spark when switching ON/OFF. Never use power tools in dangerous sites containing lacquer, paint, benzine, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive.
4. Guard against electric shock. Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
5. Keep children away. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
6. Store idle tools. When not in use, tools should be stored in dry and high or locked-up place-out of reach of children.
7. Don't force tool. It will do the job better and safer at the rate for which it was intended.
8. Use right tool. Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended -for example -don't use circular saw for cutting tree limbs or logs.
9. Dress properly. Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
10. Use eye protection. Also use face or dust mask if cutting operation is dusty.
11. Don't abuse cord. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
12. Secure work. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
13. Don't overreach. Keep proper footing and balance at all times.
14. Maintain tools with care. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service center. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
15. Disconnect tools. When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
16. Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
17. Avoid unintentional starting. Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
18. Outdoor use extension cords. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
19. Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
20. Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding or moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be

properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this handling instructions. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.

21. Use the power tools only for applications specified in the Handling Instructions.
22. To avoid personal injury, use only the accessories or attachment recommended in these handling instructions or in the HITACHI catalog.
23. Let only the authorized service center do the repairing.
24. The manufacturer will not be responsible for any damages or injuries caused by repair by unauthorized persons or by mishandling of the tool.
25. To ensure the designed operational integrity of power tools, do not remove installed covers or screws.
26. Do not touch movable parts or accessories unless the power source has been disconnected.
27. Use your tool at lower input than specified on the nameplate; otherwise, the finish may be spoiled and working efficiency reduced by motor overload.
28. Do not wipe plastic parts with solvent. Solvents such as gasoline, thinner, benzine, carbon tetrachloride, alcohol, ammonia and oil containing chloric annex may damage and crack plastic parts. Do not wipe them with such solvent. Wipe plastic parts with a soft cloth lightly dampened with soapy water.
29. Use only genuine HITACHI replacement parts.
30. Disassemble this tool only for replacement of carbon brushes.
31. Use the exploded assembly drawing on this handling instructions only for authorized servicing.

**PRECAUTIONS ON USING DIAMOND CORE DRILL**

1. Before drilling into a wall, floor or ceiling, thoroughly confirm that no items such as electric cables or conduits are buried inside.
2. Always hold the body handle and side handle of the power tool firmly. Otherwise the counterforce produced may result in inaccurate and even dangerous operation.



**SPECIFICATIONS**

Voltage (by areas) <sup>1)</sup>	(110V, 230V, 240V) ~	
Input	900W <sup>2)</sup>	
No-load speed	600 - 1400/min	
Capacity:	Brick, Block <sup>2)</sup>	152 mm
	Mild Steel	13 mm
	Wood	30 mm
Weight (without cord and side handle)	3.1 kg	

- <sup>1)</sup> Be sure to check the nameplate on product as it is subject to change by areas.  
<sup>2)</sup> When using dry type diamond core bit (Excluding hard brick)

**STANDARD ACCESSORIES**

- (1) Chuck wrench ..... 1  
 (2) Side handle ..... 1  
 (3) Case ..... 1  
 Standard accessories are subject to change without notice.

**OPTIONAL ACCESSORIES (sold separately)**

Bit Dia. (mm)	Length (mm)	Bit Dia. (mm)	Length (mm)
22	300	52	107
28		65	117
38	150	78	127
48		91	152

**(2) Adapter Packs and Extension Rods**

- Adapter Pack (Fig.4-2)  
 Adapter for Dia. 38 ~ 152 mm Core Bits (Fig. 4-3)  
 Pilot Spigot (Fig. 4-4)  
 Ejector Drift (Fig. 4-5)  
 Extension Rod (Length 250 mm) (Fig. 4-6)

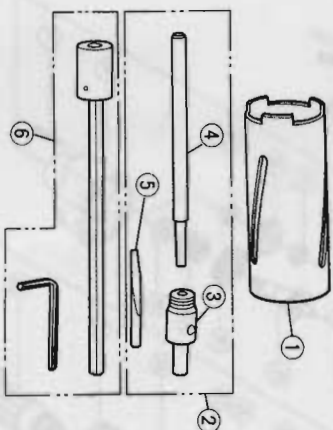


Fig. 4

**(3) Dust Extraction Range**

- Dust Sucker-Large (Fig.5-1)  
 ○ Dust Sucker-Small (Fig. 5-2)  
 ○ Dust Swivel (Fig. 5-3)  
 ○ Extension Rod for Dust Swivel (Length 230mm) (Fig. 5-4)

**CAUTION:**  
 When using the dust swivel, connect the vacuum cleaner hose before turning on the main unit switch.  
 Used to suck chips by connecting a vacuum cleaner.

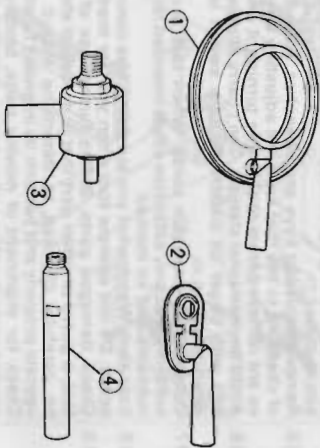


Fig. 5

Optional accessories are subject to change without notice.

**APPLICATIONS**

- Drilling various blocks and bricks products  
 ○ Boring holes in metals, wood and plastics.

**PRIOR TO OPERATION**

- Power source**  
 Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.
- Power switch**  
 Ensure that the power switch is in the OFF position. If the plug is connected to a power receptacle while the power switch is in the ON position, the power tool will start operating immediately, which could cause a serious accident.
- Extension cord**  
 When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.
- Mounting the side handle**  
 Mount the side handle in the main body, as shown in Fig. 1.  
 Rotate the handle in clockwise direction to tighten the side handle and rotate it in counterclockwise direction to loosen it.  
 When mounting the side handle, loosen the handle and mount the side handle to the gear cover. Then press it to the proper position in the side handle mounting section of the gear cover and tighten it. Before operation, securely tighten the side handle. (The side handle can be secured in any position over 360°.)
- Clamping**  
 Insert the diamond core bit or drill bit as far as it will go into the open chuck. Clamp tightly in normal manner by inserting the toothed end in the chuck wrench into the three key holes.

**PRACTICAL HANDLING PROCEDURES**

- Switch operation**  
 Switching-on: Push the trigger.  
 Switching-off: Release the trigger.  
**CAUTION**  
 Securely hold the handle of the main body and the side handle when switching on as there is danger that your hands may be turned by force of reaction.
- Adjusting the operating speed**  
 The machine is equipped with an electric control circuit which enables non-step speed control. To adjust the speed, turn the dial shown in Fig. 2. When the dial is set to "1", the diamond core drill operates at minimum speed (600/min.). When the dial is set to "5", the diamond core drill operates at maximum speed (1400/min.). Adjust the speed according to the material to be drilled and working efficiency.  
**CAUTION**  
 ○ When continuously operating the diamond core drill at low speed for a long time, the motor may be overloaded and burn as a result.  
 ○ When using a diamond core bit, use the low speed operation only for positioning.

**3. Diamond Core drilling**

- Place the diamond core bit in the drilling location.
  - When drilling, always hold the tool squarely against the material.
  - Do not force the core bit, but allow the core bit to do the work. This will prolong the life of the core bit and reduce breakage.
  - Ensure that masonry dust/swarf produced during drilling is regularly removed. Allowing dust/swarf to accumulate will result in overheating and excessive clutch/torque limiter wear and loss of segments from the core bit.
  - When entering or leaving a hole, ensure that the core bit is rotating.
  - If the core bit starts to vibrate and when the core bit begins to break through the material, reduce pressure immediately.
  - After use, store the core bit carefully in its box and remember that it is a diamond core bit.
- «Drilling method by using Pilot Spigot»  
 For easy positioning, carry out the following steps when using a diamond core bit.
- Make a pilot hole at the center position of the material to be drilled with a 1.3 mm stone drill bit.
  - Attach a pilot spigot to a diamond core bit.
  - Align the pilot spigot to the pilot hole and begin the drilling operation to make a guide groove.
  - When making the guide groove, temporarily stop the drilling operation and remove the pilot spigot.
  - Align the diamond core bit with the guide groove and start the drilling operation again.

**CAUTION**  
 ○ When drilling with a diamond core bit, there will be a high force of reaction load to your hands. Make sure to hold the handle of the main body and the side handle.

**[Safety-Release Clutch]**

This tool is equipped with a positive type Safety-Release Clutch. The clutch will slip when a certain torque level is required, causing the motor to disengage from the output shaft. When this happens, the chuck will stop turning.

**CAUTION**

- Immediately pull away the main body when the Safety-Release Clutch starts its operation.
- Do not continue to operate the tool for more than two seconds while the clutch is slipping.
- Do not let the Safety-Release Clutch activate too frequently.

**4. Drilling with a conventional drill bit**

- Drilling in wood**  
 Use a woodworking drill bit. However, use an metalworking drill bit when drilling a hole which is less than 6.5 mm in diameter. The usable drill bit diameter is maximum 30 mm.
- Drilling in mild steel or plastics**  
 Use a conventional metalworking drill bit. The usable drill bit diameter is minimum 1.2 mm and maximum 13 mm.

**CAUTIONS**

- Pressure:  
 Drilling will NOT be accelerated by placing heavy pressure on the drill. Such action will only result in a damaged drill bit, decreased drilling efficiency, and/or shortened service life of the drill.

- Using a large diameter drill bit:  
The larger the drill bit diameter, the larger the reactive force on your arm. Be careful not to lose control of the drill because of this reactive force. To maintain firm control, establish a good foothold, hold the drill tightly with both hands, and ensure that the drill is vertical to the material being drilled.
- When drilling completely through the material:  
When the drill bit bores completely through the material, careless handling often results in broken drill bit or damage to the drill body itself due to the sudden movement of the drill.  
Always be alert and ready to release pushing force when drilling through the material.

## MAINTENANCE AND INSPECTION

1. **Inspecting the diamond core bit**  
Continued use of a dull or damaged diamond core bit results in reduced drilling efficiency and may cause overloading of the motor. Replace the diamond core bit with a new one as soon as excessive abrasion is noted.
2. **Inspecting the mounting screws**  
Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.
3. **Maintenance of the motor**  
The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.
4. **Inspecting the carbon brushes (Fig. 3)**  
The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush could result in motor trouble, replace the carbon brush with a new one which has the same carbon brush No. shown in Fig. 3 when it becomes worn to or near the "wear limit". In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.
5. **Replacing a carbon brush**  
Disassemble the brush cap with a minus-head screw-driver. The carbon brush can be easily removed.

### NOTE

Due to HITACHI's continuing program of research and development, the specifications herein are subject to change without prior notice.

### IMPORTANT

Correct connection of the plug  
The wires of the main lead are coloured in accordance with the following code:

Blue: — Neutral  
Brown: — Live

As the colours of the wires in the main lead of this tool may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:  
The wire coloured blue must be connected to the terminal marked with the letter N or coloured black.  
The wire coloured brown must be connected to the terminal marked with the letter L or coloured red.  
Neither core must be connected to the earth terminal.

### NOTE

This requirement is provided according to BRITISH STANDARD 2769: 1984.  
Therefore, the letter code and colour code may not be applicable to other markets except The United Kingdom.

The noise emitted by this power tool is measured in accordance with IEC 59 (CO) 11, IEC 704, DIN 45 635 Part 21, NFS 31-031 (84/537/EEC for concrete breakers).

The sound pressure level at the workplace can exceed 85 dB (A); in this case noise protection for the operator is required.