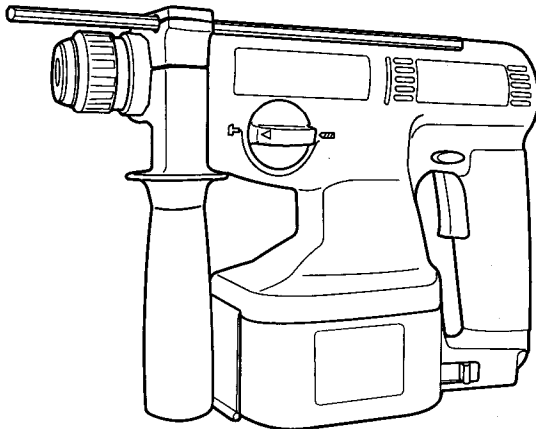


HITACHI

CORDLESS HAMMER DRILL AKKU-BOHRHAMMER MARTEAU PERFORATEUR À BATTERIE MARTELLO PERFORATORE A BATTERIA SNOERLOZE BOORHAMER TALADRO DE PERCUSIÓN SIN CABLE

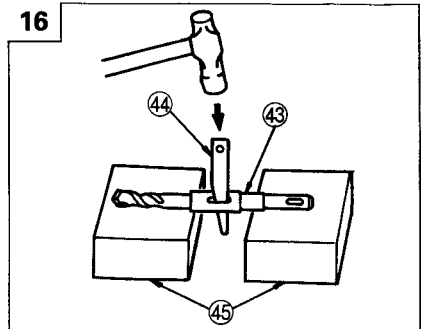
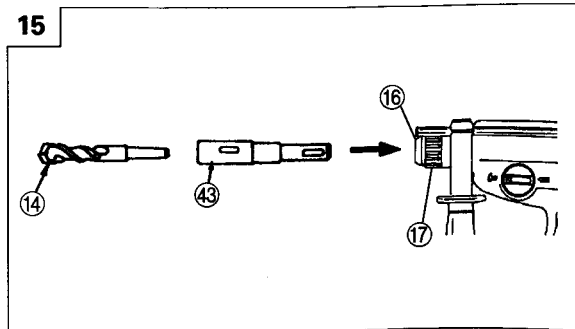
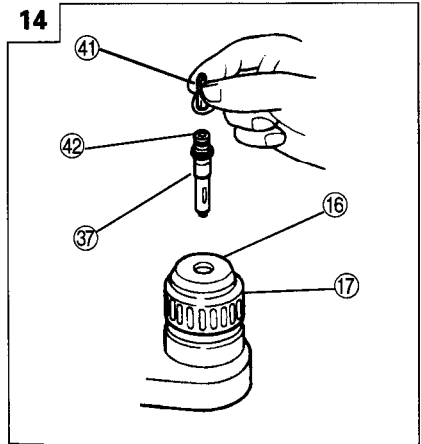
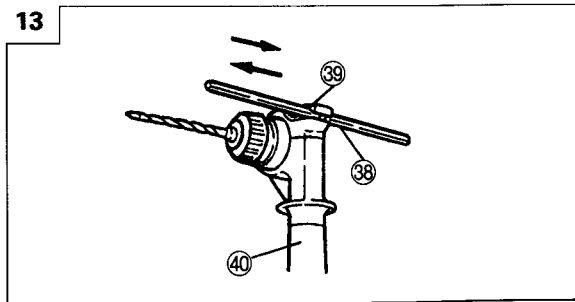
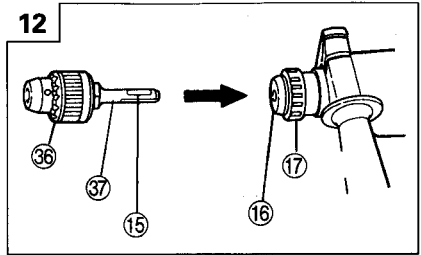
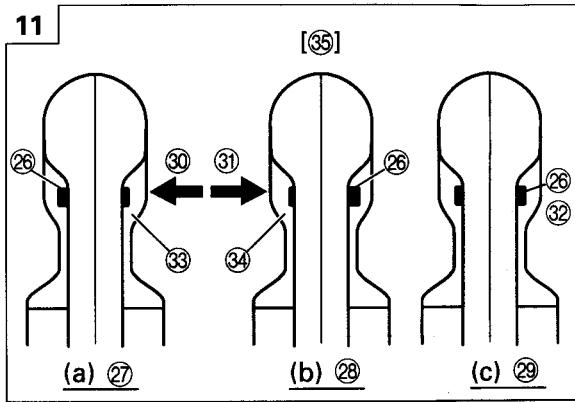
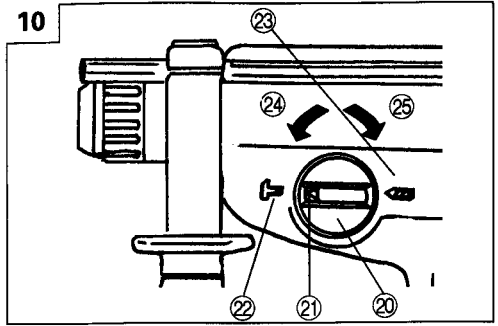
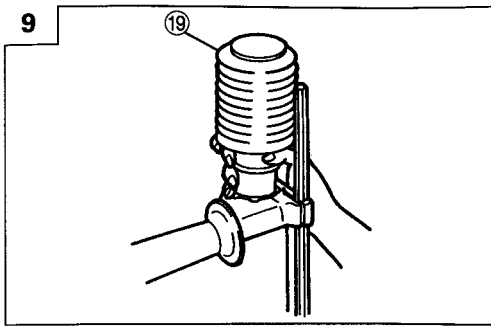
Variable speed

DH 20DV



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



	English	Deutsch	Français
①	Rechargeable battery	Batterie	Batterie rechargeable
②	Battery cover	Batterieabdeckung	Couvercle de batterie
③	Name plate of battery	Typenschild der Batterie	Plaque nominale de la batterie
④	Slide lever	Gleithebel	Levier coulissant
⑤	Plate ass'y	Blechmontage	Ensemble de plaque
⑥	Pull	Ziehen	Tirer
⑦	Open	Öffnen	Ouvrir
⑧	Body	Gehäuse	Corps
⑨	Pull out	Herausziehen	Tirer vers l'extérieur
⑩	Insert	Einsätzen	Insérer
⑪	Close	Schließen	Fermer
⑫	Pilot lamp	Kontrolllampe	Lampe témoin
⑬	Hole for connecting the rechargeable battery	Anschlußloch für Batterie	Orifice de raccordement de la batterie rechargeable
⑭	Drill bit	Bohrer	Foret de perçage
⑮	Part of SDS-plus shank	Teil des SDS-plus Schaftes	Élément de la tige SDS plus
⑯	Front cap	Verdere Abdeckung	Capuchon avant
⑰	Grip	Spannbacke	Attache coulissante
⑱	Dust cup	Staubschale	Godet a poussière
⑲	Dust collector (B)	Staubfang (B)	Collecteur à poussière (B)
⑳	Change lever	Wechselknopf	Bouton de changement
㉑	"▶" mark	"▶" zeichen	Repère "▶"
㉒	"T" mark	"T" zeichen	Repère "T"
㉓	"⚡" mark	"⚡" zeichen	Repère "⚡"
㉔	"Rotation + Striking" mode	Betriebsart "Schlagbohren"	Position "Rotation + Percussion"
㉕	"Rotation only" mode	Betriebsart "Bohren"	Position "Rotation seulement"
㉖	Push botton	Druckknopf	Poussoir
㉗	Forward rotation	Vorwärtsdrehung	Rotation avant
㉘	Reverse rotation	Rückwärtsdrehung	Rotation inverse
㉙	Does not rotate	Keine Drehung	Aucune rotation
㉚	Push the (R) side	Die (R) Seite drücken	Pousser sur le côté (R)
㉛	Push the (L) side	Die (L) Seite drücken	Pousser sur le côté (L)
㉜	Center position	Mittenposition	Position médiane
㉝	(R) indication	(R) Anzeige	Indication (R)
㉞	(L) indication	(L) Anzeige	Indication (L)
㉟	Diagram seen from the handle side	Die Zeichnung ist von der Handgriffseite aus gesehen.	Schéma, côté poignée
㊱	Drill chuck	Bohrfutter	Mandrin porte-feret
㊲	Chuck adaptor	Bohrutteradapter	Raccord de mandrin
㊳	Depth gauge	Tiefenmesser	Jauge de profondeur
㊴	Mounting hole	Befestigungsöffnung	Orifice de montage
㊵	Side handle	Handgriff	Poignée laterale
㊶	Bit	Bohrerspitzen	Mèche
㊷	Socket	Fassung	Prise
㊸	Taper shank adapter	Kegelschaftadapter	Raccord de queue conique
㊹	Cotter	Dorn	Clavette
㊺	Rest	Auflage	Support

	Italiano	Nederlands	Español
①	Batteria ricaricabile	Oplaadbare batterij	Batería recargable
②	Batteria di scorta	Accu-afdekking	Cubierta de la batería
③	Etichetta della batteria	Naamplaatje van de batterij	Placa de características de la batería
④	Leva scorrevole	Schuifhendel	Palanca deslizable
⑤	Gruppo piastra	Plaatmontage	Conjunto de la placa
⑥	Tirare	Trekken	Tire
⑦	Aprire	Open	Abrir
⑧	Corpo	Behuizing	Cuerpo
⑨	Estrarre	Uittrekken	Sacar
⑩	Inserire	Insteken	Insertar
⑪	Chiudere	Sluiten	Cerrar
⑫	Spia	Kontrolelampje	Lámpara piloto
⑬	Foro di collegamento della batteria ricaricabile	Aansluiting voor oplaadbare batterij	Agujero para conectar la batería recargable
⑭	Punta del trapano	Boorstuk	Broca
⑮	Parte dell'asta SDS plus	Onderdeel van SDS Plus schacht	Parte del SDS más vástago
⑯	Protezione davanti	Voorkap	Cubierta frontal
⑰	Presa davanti	Greep	Sujetador
⑱	Contentitore a polvere	Stofvangkap	Copa de polvo
⑲	Camera a polvere (B)	Stofverzamelaar (B)	Colector de polvo (B)
⑳	Rotella di cambio	Omstelknop	Perilla de cambio
㉑	Contrassegno "►"	"►"-markering	Marca "►"
㉒	Contrassetgno "T"	"T"-markering	Marca "T"
㉓	Contrassegno "☛"	"☛"-markering	Marca "☛"
㉔	Modo "rotazione e battimento"	"Draaien en kloppen" stand	Modo de "Rotación + Impacto"
㉕	Mode "solo rotazione"	"Alleen draaien" stand	Mode de "Rotación solamente"
㉖	Tasto da premere	Druktoets	Pulsador
㉗	Rotazione in avanti	Voorwaartse draairichting	Rotación hacia la derecha
㉘	Rotazione indietro	Terugwaartse draairichting	Rotación hacia la izquierda
㉙	Non ruota	Draait niet	No gira
㉚	Spingere il lato (R)	Druk aan de (R) kant	Presione el lado (R)
㉛	Spingere il lato (L)	Druk aan de (L) kant	Presione el lado (L)
㉜	Posizione centrale	Middenpositie	Posición central
㉝	Indicazione (R)	(R) aanduiding	Indicación (R)
㉞	Indicazione (L)	(L) aanduiding	Indicación (L)
㉟	Diagramma visto dal lato della maniglia	Schema, gezien vanaf de handgreep-kant	Diagrama visto desde el lado del asa
㊱	Mandrino	Boorkop	Portabrocas
㊲	Adattatore per mandrino	Boorkopadapter	Adaptador del portabrocas
㊳	Calibro profondità	Diepte-maatlat	Calibre de profundidad
㊴	Foro d'inserimento della bacchetta di arresto	Montagegat	Agujero de montaje
㊵	Laterale	Zijgreep	Mango lateral
㊶	Punta	Boorstuk	Broca
㊷	Presa	Aansluituis	Cubo
㊸	Adattatore per gambo conico	Vernauwde schachtadapter	Adaptador de la espiga ahusada
㊹	Coppiglia	Cotter	Chaveta
㊺	Appoggio	Steun	Apoyo

GENERAL OPERATIONAL PRECAUTIONS

1. Keep work area clean. Cluttered areas and benches invite accidents.
2. Avoid dangerous environment. Don't expose power tools and charger to rain. Don't use power tools and charger in damp or wet locations. And keep work area well lit. Never use power tools and charger near flammable or explosive materials. Do not use tool and charger in presence of flammable liquids or gases.
3. Keep children away. All visitors should be kept safe distance from work area.
4. Store idle tools and charger. When not in use, tools and charger should be stored in dry, high or locked-up place-out of reach of children. Store tools and charger in a place where the temperature is less than 40°C.
5. Don't force tool. It will do the job better and safer at the rate for which it was designed.
6. Use right tool. Don't force small tool or attachment to do the job of a heavy duty tool.
7. Wear proper apparel. Do not wear clothing or jewelry. They can be caught in moving parts. Rubber gloves and footwear are recommended when working outdoor.
8. Use eye protection with most tools. Also use face or dust mask if cutting operation is dusty.
9. Don't abuse cord. Never carry charger by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
10. 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.
11. Don't overreach. Keep proper footing and balance at all times.
12. Maintain tools with care. Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
13. When the charger is not in use, or when being maintained and inspected, disconnect its power cord from the AC outlet.
14. Remove chuck wrenches and wrenches. Form habit of checking to see that wrenches are removed from tool before turning it on.
15. Avoid accidental starting. Don't carry tool with finger on switch.
16. To avoid danger, always use only the specified charger.
17. Use only genuine HITACHI replacement parts.
18. Do not use power tools for applications other than those specified in the Handling Instructions.
19. To avoid personal injury, use only the accessories or attachment recommended in these handling instructions or in the HITACHI catalog.
20. Let only the authorized service center do the repairing. The Manufacturer will not be responsible for any damages or injuries caused by repair by the unauthorized persons or by mishandling of the tool.
21. To ensure the designed operational integrity of power tools and charger, do not remove installed covers or screws.
22. Always use the charger at the voltage specified on the nameplate.
23. Do not touch movable parts or accessories unless the battery has been removed.
24. Always charge the battery before use.
25. Never use a battery other than that specified. Do not connect a usual dry cell, a rechargeable battery

other than that specified or a car battery to the power tool.

26. Do not use any transformer that has a booster.
27. Do not charge the battery from an engine electric generator or DC power supply.
28. Always charge indoors. Because the charger and battery heat slightly during charging, charge the battery in a place not exposed to direct sunlight; where the humidity is low and the ventilation good.
29. When working in a high place, pay attention to the activities below to make sure there are no people below.
30. Use the exploded assembly drawing on this handling instructions only for authorized servicing.

PRECAUTIONS FOR CORDLESS HAMMER DRILL

1. These chargers utilize a special charging control system due to the fact that the high charging speed. Therefore, always charge the battery at a temperature of 0-40°C for UC 24YF. A lower temperature than these specified ranges will result in overcharging which will shorten the battery life. The battery cannot be charged at a temperature higher than 40°C. The most suitable temperature for charging is that of 20-25°C.
2. Do not use the charger continuously. When one charging is completed, leave the charger for about 15 minutes before the next charging of battery.
3. Do not allow foreign matter to enter the hole for connecting the rechargeable battery.
4. Never disassemble the rechargeable battery and charger.
5. Never short-circuit the rechargeable battery. Short-circuiting the battery will cause a great electric current and overheat. It results in burn or damage to the battery.
6. Do not dispose of the battery in fire. If the battery is burnt, it may explode.
7. When using this unit continuously, the unit may overheat, leading to damage in the motor and switch. Please leave it without using it for approximately 15 minutes.
8. Do not insert object into the air ventilation slots of the charger. Inserting metal objects or inflammables into the charger air ventilation slots will result in electrical shock hazard or damaged charger.
9. Using an exhausted battery will damage the charger.
10. When drilling in wall, floor or ceiling, check for buried electric power cord, etc.
11. Bring the battery to the shop from which it was purchased as soon as the post-charging battery life becomes too short for practical use. Do not dispose of the exhausted battery.
12. Wear earplugs to protect your ears during operation.
13. Do not touch the bit during or immediately after operation. The bit becomes very hot during operation and could cause serious burns.
14. 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

POWER TOOL

Model			DH20DV
No-load speed			0 – 1150/min.
No-load impact rate			0 – 4400/min.
Capacity	Drilling	Concrete	20 mm
		Steel	13 mm
		Wood	27 mm
	Driving	Wood screw	6.2 mm (diameter) × 40 mm (length)
Rechargeable battery			Ni-Cd battery, 24V
Weight			3.7 kg

CHARGER

Model		UC24YF
Charging time (at 20°C)	EB24B	Approx. 60 min.
Charging voltage		7.2 – 24V
Weight		1.0 kg

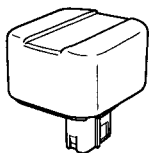
STANDARD ACCESSORIES

<p>DH20DV (BFK)</p>		<p>① Battery cover 1</p> <p>② Side handle 1</p> <p>③ Depth gauge 1</p> <p>④ Charger (UC 24YF) 1</p> <p>⑤ Plastic case 1</p>
<p>DH20DV (2BFK)</p>		<p>① Battery cover 1</p> <p>② Side handle 1</p> <p>③ Depth gauge 1</p> <p>④ Charger (UC24YF) 1</p> <p>⑤ Plastic case 1</p> <p>⑥ Extra battery 1</p>

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

1. Battery (Model EB24B)



It may be convenient to prepare some extra batteries.

2. Drilling anchor holes (rotation + striking)

- Drill bit (taper shank) and taper shank adapter



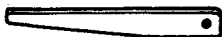
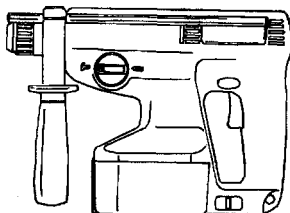
Drill bit (taper shank)

+



Taper shank adapter
(SDS Plus shank)

+



Cotter

Outer diameter
11.0 mm
12.3 mm
14.3 mm
14.5 mm
17.5 mm

Taper mode	Applicable drill bit	
Morse taper (No. 1)	Drill bit (taper shank)	11.0 ~ 17.5 mm
A-taper	Taper shank adapter formed A-taper or B-taper is provided as an optional accessory, but drill bit for it is not provided.	
B-taper		

- 13 mm Hammer Drill chuck and Chuck wrench



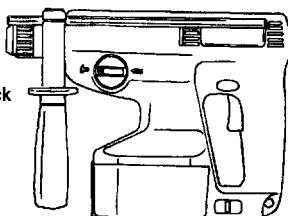
(Impact Drill Application)
Straight Shank Bit

+



13 mm Hammer Drill Chuck
(SDS Plus shank)

+

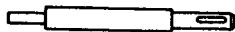


Chuck wrench

3. Anchor setting

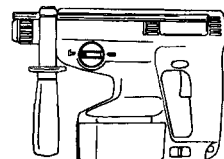
- Anchor setting adapter (for electric hammer drill)

Anchor size
W1/4"
W5/16"
W3/8"



Anchor setting adapter
(for electric hammer drill)
(SDS Plus shank)

+



- Anchor setting adapter (for manual hammer)

Anchor size
W1/4"
W5/16"
W3/8"
W1/2"
W5/8"



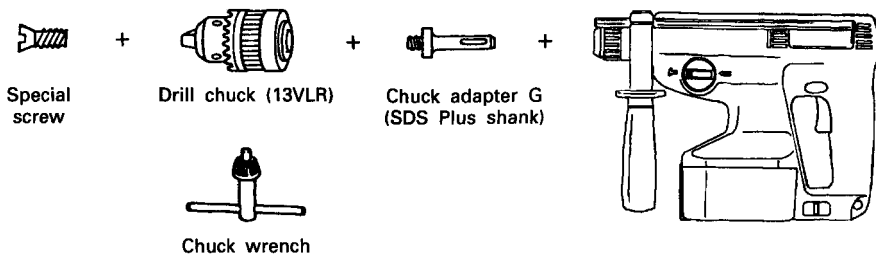
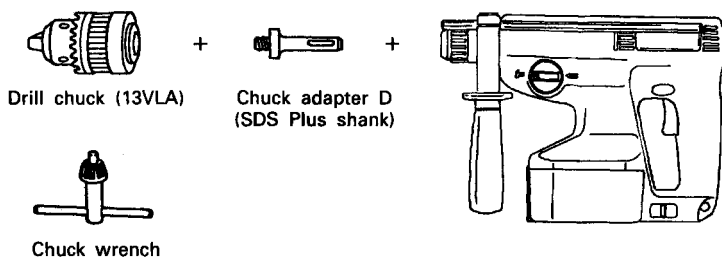
Anchor setting adapter
(for manual hammer)

+

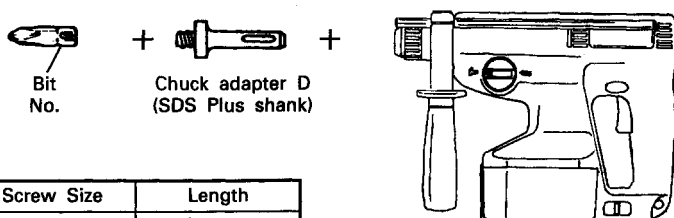


4. Drilling holes and driving screws (rotation only)

- Drill chuck, chuck adapter and chuck wrench

**5. Drilling holes (rotation only)**

- 13 mm drill chuck ass'y (include chuck wrench ass'y) and chuck (for drilling in steel or wood).

6. Driving Screws (rotation only)

Bit No.	Screw Size	Length
No.2	3-5 mm	25 mm

7. Dust cup, Dust collector (B)**APPLICATIONS****Rotation and striking mode**

- Drilling anchor holes
- Drilling holes in concrete
- Drilling holes in tile

Rotation only mode

- Drilling in steel or wood (with optional accessories)
- Tightening wood screws. (with optional accessories)

BATTERY REMOVAL/INSTALLATION

1. Turn the body upside down and hold it firmly. Then, open the plate assembly while pulling the slide lever. (Fig. 2) To remove the battery, pull it out while holding the body tightly. (Fig. 3)
2. Pay attention to the inserting direction of the battery, insert the battery, and close the plate assembly. When the plate assembly and the slide lever engage each other perfectly, there will be the sound of a click. (Fig. 4)

CHARGING

Before using the power tool, charge the battery as follows.

1. **Connect the charger's power cord to the receptacle.**
When the power cord is connected, the charger's pilot lamp will blink in red. (At 1-second intervals.)

2. Insert the battery into the charger.

Firmly insert the battery into the charger till it contacts the bottom of the charger after checking the polarities as shown in Fig. 5.

CAUTION:

- If the battery is inserted in the reverse direction, not only recharging will become impossible, but it may also cause problems in the charger such as a deformed recharging terminal.

3. Charging






When inserting a battery in the charger, charging will commence and the pilot lamp will light continuously in red.

When the battery becomes fully recharged, the pilot lamp will blink in red. (At 1-second intervals.) (See Table 1)

(1) Pilot lamp indication

The indications of the pilot lamp will be as shown in Table 1, according to the condition of the charger or the rechargeable battery.

Table 1

		Indications of the pilot lamp		
Before charging	Blinks (RED)	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds)		/
While charging	Lights (RED)	Lights continuously		
Charging complete	Blinks (RED)	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds)		
Charging impossible	Flikers (RED)	Lights for 0.1 seconds. Does not light for 0.1 seconds. (off for 0.1 seconds)		Malfunction in the battery or the charger
Charging impossible	Lights (GREEN)	Lights continuously		The battery temperature is high, making recharging impossible.

(2) Regarding recharging time

Depending on the combination of the charger and batteries, the charging time will become as shown in Table 2.

Table 2 Charging time (At 20°C)

Battery \ Charger	UC24YF
EB24B	Approx. 60 min.

NOTE: The charging time may vary according to ambient temperature and power source voltage.

4. **Disconnect the charger's power cord from the receptacle.**
5. **Hold the charger firmly and pull out the battery.**

Regarding electric discharge in case of new batteries, etc.

As the internal chemical substance of new batteries and batteries that have not been used for an extended period

is not activated, the electric discharge might be low when using them the first and second time. This is a temporary phenomenon, and normal time required for recharging will be restored by recharging the batteries 2-3 times.

How to make the batteries perform longer.

- (1) Recharge the batteries before they become completely exhausted.
When you feel that the power of the tool becomes weaker, stop using the tool and recharge its battery. If you continue to use the tool and exhaust the electric current, the battery may be damaged and its life will become shorter.
- (2) Avoid recharging at high temperatures.
A rechargeable battery will be hot immediately after use. If such a battery is recharged immediately after use, its internal chemical substance will deteriorate, and the battery life will be shortened. Leave the battery and recharge it after it has cooled for a while.

CAUTIONS

- If the battery has been heated (due to sunlight, etc.) right after operation, the charger's pilot lamp may not light in red. In such a case, first let the battery cool, then start charging.
- When the pilot lamp flickers in red (at 0.2-second intervals), check for and take out any foreign objects in the charger's battery installation hole. If there are no foreign objects, it is probable that the battery or charger is malfunctioning. Take it to your authorized Service Center.
- Do not use UC24YF to charge the battery at a temperature lower than 0°C. Rapid charging at low temperature will shorten the battery life. Due to this, it may take a maximum of 60 minutes to charge EB24B.

PRIOR TO OPERATION**1. Mounting the drill bit (Fig. 6)**

- (1) To attach a drill bit (SDS-plus shank), fully pull the grip in the direction of the arrow as shown in Fig. 6 and insert the drill bit as far as it will go while rotating.
- (2) By releasing the grip, the drill bit will be secured.
- (3) To remove the drill bit, fully pull the grip in the direction of the arrow and pull out the drill bit.

2. Confirm that the battery is mounted correctly.**3. Installation of dust cup or dust collector (B) (Optional accessories) (Fig. 8, Fig. 9)**

When using a hammer drill for upward drilling operations attach a dust cup or a dust collector (B) to collect dust or particles for easy operation.

- Installing the dust cup
Use the dust cup by attaching to the drill bit as shown in Fig. 8.
When using a bit which has big diameter, enlarge the center hole of the dust cup with this hammer drill.
- Installing dust collector (B)
When using dust collector (B), insert dust collector (B) from the tip of the bit by aligning it to the groove on the grip. (Fig. 9)

CAUTION:

- The dust cup and dust collector (B) are for exclusive use of concrete drilling work. Do not use them for wood or metal drilling work.
- Insert dust collector (B) completely into the chuck part of the main unit.
- When turning the hammer drill on while dust collector (B) is detached from a concrete surface, dust collector (B) will rotate together with the drill bit. Make sure to turn on the switch after pressing dust cup on the concrete surface. (When using dust collector (B) attached to a drill bit that has more than 190 mm of overall length, dust collector (B) cannot touch the concrete surface and will rotate. Therefore, please use dust collector (B) by attaching to drill bits which have 166 mm, 160 mm, and 110 mm overall length.
- Dump particles after every two or three holes when drilling.
- Please replace the drill bit after removing dust collector (B).

4. Selecting the driver bit

Screw heads or bits will be damaged unless a bit appropriate for the screw diameter is employed to drive in the screws.

5. Confirm the direction of bit rotation (Fig. 11)

The bit rotates clockwise (viewed from the rear side) by pushing the R-side of the push button. (Fig. 11-a)

The L-side of the push button is pushed to turn the bit counterclockwise. (Fig. 11-b)

The motor does not rotate if the push button is set to the center position. (Fig. 11-c)

6. Continuous drilling

The number of holes that can be drilled in concrete after one recharge is shown in Table 3.

Table 3

Bit dia. (mm)	Depth (mm)	Possible continuous drilling number (holes)
6.5	30	75
8.5	30	64
12.5	35	42
14.5	45	29
18	40	26

These data are for the referential values. The number of holes that can be drilled varies according to the sharpness of the used bit or the conditions of the concrete being drilled.

CAUTION

When using this unit continuously, the unit may overheat, leading to damage in the motor and switch.

Please leave it without using it for approximately 15 minutes.

HOW TO USE**1. Switch operation**

The rotational speed of the drill bit can be controlled by varying the amount that the trigger switch is pulled. Speed is low when the trigger switch is pulled slightly and increases as the switch is pulled more.

2. Rotation + Striking

Align the "▶" mark with the "T" mark by rotating the change lever to set the "Rotation + Striking" mode. (Fig. 10)

- (1) Mount the drill bit.
- (2) Pull the trigger switch after applying the drill bit tip to the drilling position. (Fig. 7)
- (3) Pushing the hammer drill forcibly is not necessary at all. Pushing slightly so that drill dust comes out gradually is just sufficient.

CAUTION

When the drill bit touches construction iron bar, the bit will stop immediately and the hammer drill will react to revolve. Therefore please grip the side handle and handle tightly as shown in Fig. 7.

3. Rotation only

Align the "▶" mark with the "◀" mark by rotating the change lever to set the "Rotation only" mode. (Fig. 10)

To drill a wood or metal material using the optional drill chuck and chuck adapter, proceed as follows.

Installing drill chuck and chuck adapter: (Fig. 12)

- (1) Attach the drill chuck to the chuck adaptor.
- (2) The part of the SDS-plus shank is the same as the drill bit. Therefore, refer to the item of "Mounting the drill bit" for attaching it.

CAUTIONS

- Application of force more than necessary will not only expedite work at all, but will deteriorate the tip edge of the drill bit and reduce the service life of the hammer drill in addition.
- Drill bit may snap off while withdrawing the hammer drill from the drilled hole. For withdrawing, it is important to use a pushing motion.
- Do not attempt to use the hammer drill in the rotation and striking mode with the drill chuck and chuck adapter attached. This would seriously shorten the service life of every component of the machine.

4. When driving wood screws (Fig. 14)

- (1) Selecting a suitable driver bit
Employ plus-head screws, if possible, since the driver bit easily slips off the heads of slotted-head screws.
- (2) Tightening wood screws
 - Prior to tightening wood screws, make pilot holes suitable for them in the wooden board. Apply the bit to the screw head grooves and gently drive the screws in the holes.

CAUTION

Exercise care in preparing a pilot hole suitable for the wood screw taking the hardness of the wood into consideration. Should the hole be excessively small or shallow, requiring much power to drive the screw into it, the thread of the wood screw may sometimes be damaged.

5. Using depth gauge (Fig. 13)

- (1) Loosen the knob on the side handle, and insert the stopper into the mounting hole on the side handle.
- (2) Adjust the depth gauge position according to the depth of the hole and tighten the knob bolt securely.

6. How to use the drill bit (taper shank) and the taper shank adapter

- (1) Mount the taper shank adapter to the hammer drill. (Fig. 15)
- (2) Mount the drill bit (taper shank) to the taper shank adapter. (Fig. 15)
- (3) Turn the switch ON, and drill a hole to prescribed depth.
- (4) To remove the drill bit (taper shank), insert the cotter into the slot of the taper shank adapter and strike the head of the cotter with a hammer supporting on the rest. (Fig. 16)

LUBRICATION

Low viscosity grease is applied to this hammer drill so that it can be used for a long period without replacing the grease. Please contact the nearest service center for grease replacement when any grease is leaking from loosened screw.

Further use of the hammer drill despite the grease shortage causes damage to reduce the service life.

CAUTION

A specific grease (FG-6A) is used with this machine, therefore, the normal performance of the machine may be badly affected by use of different grease. Please be sure to let one of our service centers to undertake replacement of the grease.

MAINTENANCE AND INSPECTION

1. Inspecting the tool

Since use of a dull tool will degrade efficiency and cause possible motor malfunction, sharpen or replace the tool as soon as 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. Cleaning on the outside

When the power tool is stained, wipe with a soft dry cloth or a cloth moistened with soapy water. Do not use chloric solvents, gasoline or paint thinner, as they melt plastics.

4. Storage

Store the power tool in a place in which the temperature is less than 40°C and out of reach of children.

NOTE

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

IMPORTANT

Correct connections of the plug

The wires of the mains lead are coloured in accordance with the following code:

Blue:	-Neutral
Brown:	-Live

As the colours of the wires in the mains 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 markers except United Kingdom.

Information concerning airborne noise and vibration

The measured values were determined according to EN50144.

The typical A-weighted sound pressure level: 92 dB (A)

The typical A-weighted sound power level: 105 dB (A)

Wear ear protection.

The typical weighted root mean square acceleration value: 8.0m/s²