

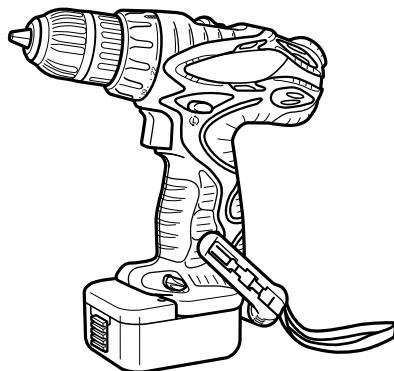
HIKOKI

Cordless Driver Drill

充電式起子電鑽機

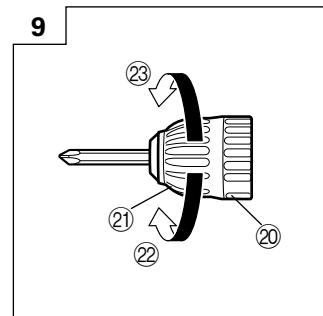
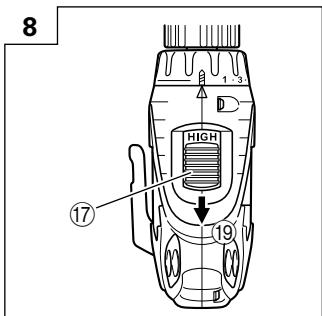
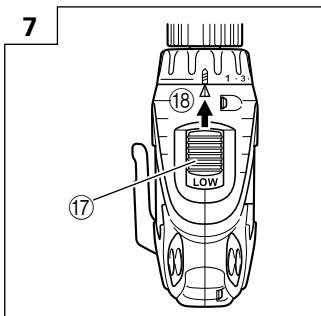
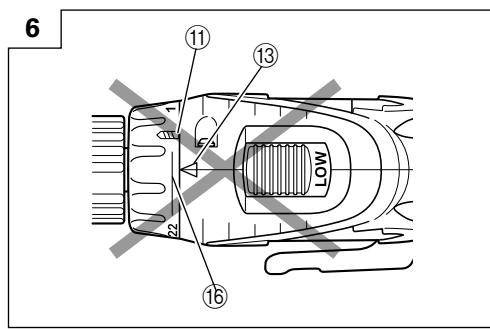
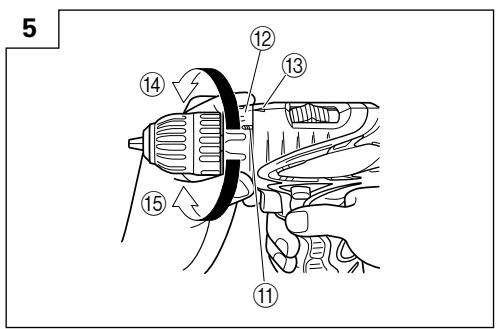
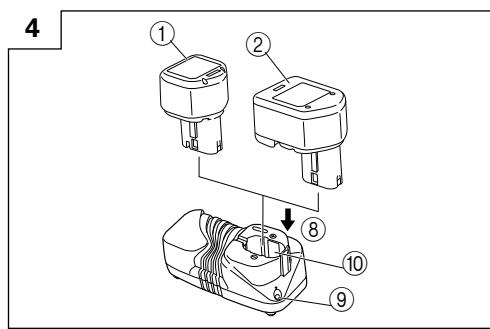
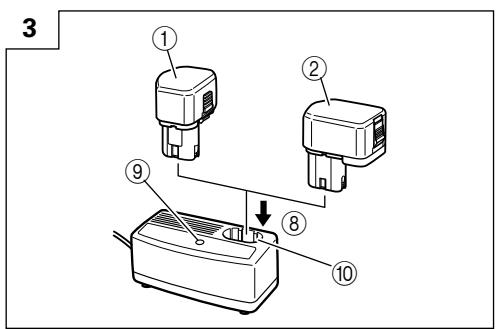
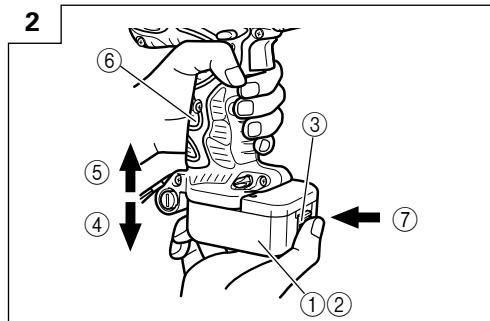
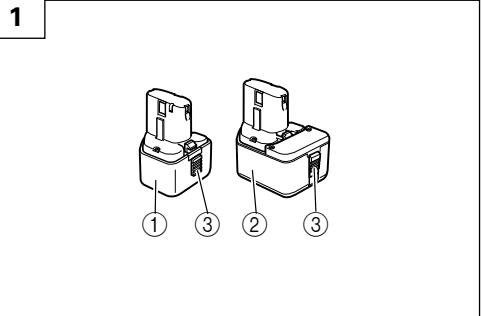
DS 9DVF3 • DS 12DVF3

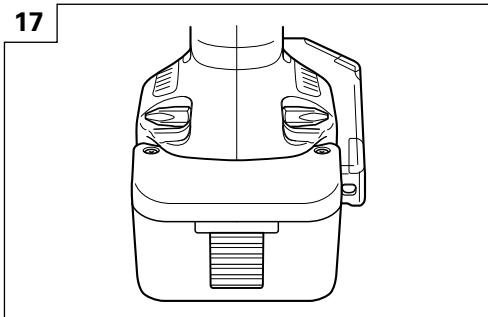
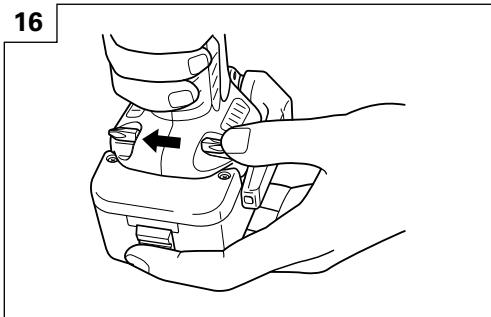
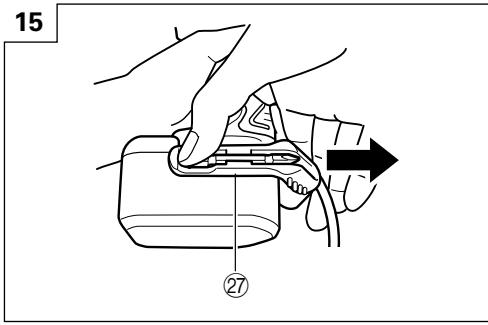
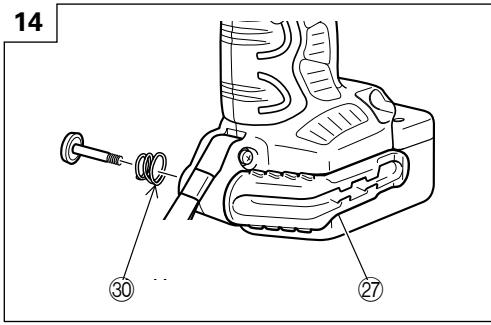
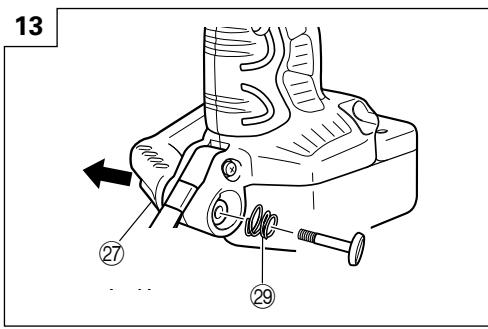
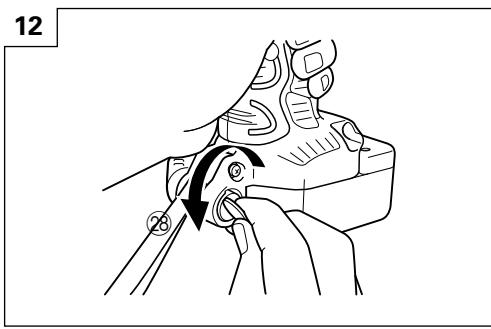
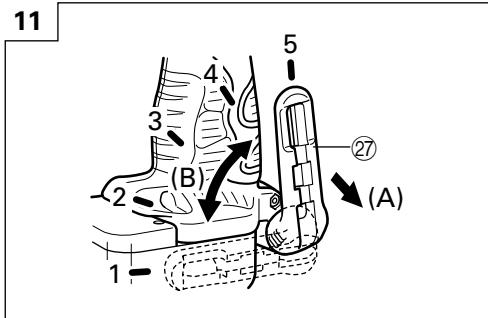
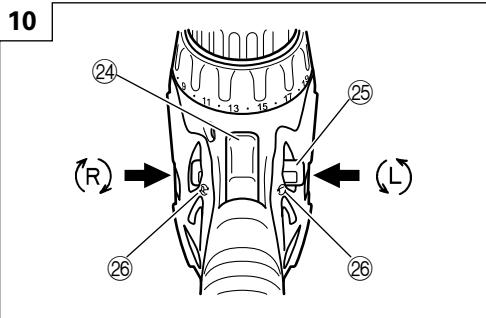
Handling Instructions
使用說明書



DS 12DVF3

Read through carefully and understand these instructions before use.
使用前務請詳加閱讀。





①	9.6V Rechargeable battery (For DS9DVF3)	9.6V 充電式電池 (适用于 DS9DVF3)
②	12V Rechargeable battery (For DS12DVF3)	12V 充電式電池 (适用于 DS12DVF3)
③	Latch	插銷
④	Pull out	拉出
⑤	Insert	插入
⑥	Handle	把手
⑦	Push	推
⑧	Insert	插入
⑨	Pilot lamp	指示燈
⑩	Hole for connecting the rechargeable battery	充電式電池連接孔
⑪	Drill mark	鑽機記號
⑫	Clutch dial	離合器轉盤
⑬	Triangle mark	三角形記號
⑭	Weak	弱
⑮	Strong	強
⑯	Line	線
⑰	Shift knob	變速手柄
⑱	Low speed	低速
⑲	High speed	高速
⑳	Ring	圓環
㉑	Sleeve	筒套
㉒	Tighten	緊
㉓	Loosen	鬆
㉔	Trigger switch	扳機開關
㉕	Selector button	選擇鈕
㉖	(R) and (L) marks	(R) 和 (L) 記號
㉗	Hook	掛鉤
㉘	Loosen	鬆開
㉙	Spring	彈簧
㉚	Larger diameter faces away	較大直徑向外

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. The appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance. 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 the children and infirm persons. 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 loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwears 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 receptacle.
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 HiKOKI 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 HiKOKI catalog.
20. If the supply cord of this charger is damaged, the charger must be returned to the HiKOKI authorized service center for the cord to be replaced. 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 is 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.
31. If the supply cord is damaged, it must be replaced by the manufacture or its service agent or a similarly qualified person in order to avoid a hazard.

PRECAUTIONS FOR CORDLESS DRIVER DRILL

1. Always charge the battery at a temperature of 10 – 40°C. A temperature of less than 10°C will result in over charging which is dangerous. 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. When one charging is completed, leave the charger for about 15 minutes before the next charging of battery.
Do not charge more than two batteries consecutively.
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 drilling in wall, floor or ceiling, check for buried electric power cord, etc.
8. 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.
9. Using an exhausted battery will damage the charger.
10. 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.
11. When mounting a bit into the keyless chuck, tighten the sleeve adequately. If the sleeve is not tight, the bit may slip or fall out, causing injury.

SPECIFICATIONS

POWER TOOL

Model	DS9DVF3	DS12DVF3
No-load speed (Low/High)	0 – 280 / 0 – 840 / min	0 – 350 / 0 – 1050 / min
Capacity	Drilling Wood (Thickness 18mm)	21 mm
	Metal (Thickness 1.6mm)	Steel: 10 mm, Aluminum: 12 mm
	Driving Machine screw	6 mm
	Wood screw	5.8 mm (diameter) x 45 mm (length) (Requires a pilot hole)
Rechargeable battery	EB912S: Ni-Cd 9.6 V (1.2 Ah 8 cells) EB914S: Ni-Cd 9.6 V (1.4 Ah 8 cells) EB9B: Ni-Cd 9.6 V (2.0 Ah 8 cells)	EB1212S: Ni-Cd 12 V (1.2 Ah 10 cells) EB1214S: Ni-Cd 12 V (1.4 Ah 10 cells) EB1220BL: Ni-Cd 12 V (2.0 Ah 10 cells)
Weight	1.4 kg	1.5 kg

CHARGER

Model	UC9SD/UC12SD	UC18YG
Charging voltage	9.6 / 12V	7.2 – 18V
Weight	1.2 / 1.4 kg	0.3 kg

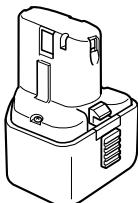
STANDARD ACCESSORIES

DS9DVF3	① Plus driver bit (No. 2 x 65L) 1 ② Charger (UC9SD or UC18YG) 1 ③ Plastic case 1
DS12DVF3	① Plus driver bit (No. 2 x 65L) 1 ② Charger (UC12SD or UC18YG) 1 ③ Plastic case 1

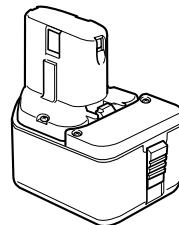
Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

1. Battery (EB912S, EB914S, EB9B)
(For DS9DVF3)



2. Battery (EB1212S, EB1214S, EB1220BL)
(For DS12DVF3)



Optional accessories are subject to change without notice.

APPLICATIONS

- Driving and removing of machine screws, wood screws, tapping screws, etc.
- Drilling of various metals.
- Drilling of various woods.

BATTERY REMOVAL/INSTALLATION

1. Battery removal

Hold the handle tightly and push the battery latch to remove the battery (see Figs. 1 and 2).

CAUTION

Never short-circuit the battery.

2. Battery installation

Insert the battery while observing its polarities (see Fig. 2).

CHARGING

(UC9SD/UC12SD)

Before using the driver drill, charge the battery as follows.

1. Insert the battery into the charger

Insert the battery firmly while observing its direction, until it contacts the bottom of the charger (See Fig. 3).

CAUTION

The UC9SD and UC12SD models are the exclusively designed charger. These cannot charge batteries except the specified batteries. It is possible to insert the batteries other than the specified into the charger and some of them may light up the pilot lamps. However, you are requested to exercise utmost caution not to charge batteries other than specified ones because these can not only be charged but also such actions can result in the malfunction of chargers.

2. Connect the charger power cord to the receptacle

Connecting the power cord will turn on the charger (the pilot lamp lights up).

CAUTION

If the pilot lamp does not light up, pull out the power cord from the receptacle and check the battery mounting condition.

About 60 minutes is required to fully charge the battery at a temperature of about 20°C. The pilot lamp goes off to indicate that the battery is fully charged.

The battery charging time becomes longer when a temperature is low or the voltage of the power source is too low.

When the pilot lamp does not go off even if more than 120 minutes have elapsed after starting of the charging, stop the charging and contact your HIKOKI AUTHORIZED SERVICE CENTER.

CAUTION

If the battery is heated due to direct sunlight, etc., just after operation, the charger pilot lamp may not light up. At that time, cool the battery first, then start charging.

3. Disconnect the charger power cord from the receptacle

4. Hold the charger firmly and pull out the battery

NOTE

After charging, pull out batteries from the charger first, and then keep the batteries properly.

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.

(UC18YG)

Before using the driver drill, charge the battery as follows.

1. Connect the charger power cord to the receptacle

Connecting the power cord will turn on the charger.

2. Insert the battery into the charger

Insert the battery firmly while observing its direction, until it contacts the bottom of the charger (the pilot lamp lights up) (See Fig. 4).

CAUTION

If the pilot lamp does not light up, pull out the power cord from the receptacle and check the battery mounting condition.

(1) Regarding the temperatures of the rechargeable battery

The temperatures for rechargeable batteries are as shown in Table 1.

Table 1 Recharging ranges of batteries

Rechargeable batteries	Temperatures at which the battery can be recharged
EB912S, EB914S, EB9B, EB1212S, EB1214S, EB1220BL	0°C – 45°C

(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)

Charger Battery	UC18YG
EB912S, EB914S, EB1212S, EB1214S	Approx. 30 min.
EB9B, EB1220BL	Approx. 50 min.

The pilot lamp goes off to indicate that the battery is fully charged.

The battery charging time becomes longer when a temperature is low or the voltage of the power source is too low.

When the pilot lamp does not go off even if more than 120 minutes have elapsed after starting of the charging, stop the charging and contact your HIKOKI AUTHORIZED SERVICE CENTER.

CAUTION

If the battery is heated due to direct sunlight, etc., just after operation, the charger pilot lamp may not light up. At that time, cool the battery first, then start charging.

3. Disconnect the charger's power cord from the receptacle

4. Hold the charger firmly and pull out the battery

NOTE

After charging, pull out batteries from the charger first, and then keep the batteries properly.

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.

PRIOR TO OPERATION

1. Setting up and checking the work environment

Check if the work environment is suitable by following the precautions.

HOW TO USE

1. Confirm the clutch dial position (See Fig. 5)

The tightening torque of this unit can be adjusted according to the clutch dial position, at which the clutch dial is set.

- (1) When using this unit as a screwdriver, line up the one of the numbers "1, 3, 5 ... 22" on the clutch dial, or the dots, with the triangle mark on the outer body.

- (2) When using this unit as a drill, align the clutch dial drill mark "▲" with the triangle mark on the outer body.

CAUTION

- The clutch dial cannot be set between the numerals "1, 3, 5 ... 22" or the dots.
- Do not use with the clutch dial numeral between "22" and the line at the middle of the drill mark. Doing so may cause damage (See Fig. 6).

2. Tightening torque adjustment

- (1) Tightening torque

Tightening torque should correspond in its intensity to the screw diameter. When too strong torque is used, the screw head may be broken or be injured. Be sure to adjust the clutch dial position according to the screw diameter.

- (2) Tightening torque indication

The tightening torque differs depending on the type of screw and the material being tightened.

The unit indicates the tightening torque with the numbers "1, 3, 5 ... 22" on the clutch dial, and a

dots. The tightening torque at position "1" is the weakest and the torque is strongest at the highest number (See Fig. 5).

(3) Adjusting the tightening torque

Rotate the clutch dial and line up the numbers "1, 3, 5 ... 22" on the clutch dial, or the dots, with the triangle mark on the outer body. Adjust the clutch dial in the weak or the strong torque direction according to the torque you need.

CAUTION

- The motor rotation may be locked to cease while the unit is used as drill. While operating the driver drill, take care not to lock the motor.
- Too long hammering may cause the screw broken due to excessive tightening.

3. Change rotation speed

Operate the shift knob to change the rotational speed. Move the shift knob in the direction of the arrow (See Figs. 7 and 8).

When the shift knob is set to "LOW", the drill rotates at a low speed. When set to "HIGH", the drill rotates at a high speed.

CAUTION

- When changing the rotational speed with the shift knob, confirm that the switch is off. Changing the speed while the motor is rotating will damage the gears.
- When setting the shift knob to "HIGH" (high speed) and the position of the clutch dial is "17" or "22", it may happen that the clutch does not engage and that the motor is locked. In such a case, please set the shift knob to "LOW" (low speed).
- If the motor is locked, immediately turn the power off. If the motor is locked for a while, the motor or battery may be burnt.

4. The scope and suggestions for uses

The usable scope for various types of work based on the mechanical structure of this unit is shown in **Table 3**.

Table 3

Work		Suggestions
Drilling	Wood	Use for drilling purpose.
	Steel	
	Aluminum	
Driving	Machine screw	Use the bit or socket matching the screw diameter.
	Wood screw	Use after drilling a pilot hole.

5. How to select tightening torque and rotational speed

Table 4

Use		Clutch Dial Position	Rotating speed selection (Position of the shift knob)	
			LOW (Low speed)	HIGH (High speed)
Driving	Machine screw	1 – 22	For 4 mm or smaller diameter screws.	For 6 mm or smaller diameter screws.
	Wood screw	1 – 	For 5.8 mm or smaller nominal diameter screws.	For 3.8 mm or smaller nominal diameter screws.
Drilling	Wood		For 25 mm or smaller diameters. (DS12DVF3)	For 12 mm or smaller diameters.
	Metal		For 21 mm or smaller diameters. (DS9DVF3)	
			For drilling with a metal working drill bit.	_____

CAUTION

- The selection examples shown in **Table 4** should be considered as general standard. As different types of tightening screws and different materials to be tightened are used in actual works proper adjustments are naturally necessary.
- When using the driver drill with a machine screw at HIGH (high speed), a screw may damage or a bit may loose due to the tightening torque is too strong. Use the driver drill at LOW (low speed) when using a machine screw.

6. Mounting and dismounting of the bit

- (1) After inserting a driver bit, etc. into the keyless drill chuck, firmly grasp the ring and tighten the sleeve by turning it toward the right (in the clockwise direction as viewed from the front) (See **Fig. 9**).
- If the sleeve becomes loose during operation, tighten it further. The tightening force becomes stronger when the sleeve is tightened additionally.

(2) Dismounting the bit

Firmly grasp the ring and loosen the sleeve by turning it toward the left (in the counter-clockwise direction as viewed from the front) (See **Fig. 9**).

CAUTION

- When it is no longer possible to loosen the sleeve, use a vise or similar instrument to secure the bit. Set the clutch mode between 1 and 11, and then turn the sleeve to the loose side (left side) while operating the clutch. It should be easy now to loosen the sleeve.

7. Confirm that the battery is mounted correctly

8. Check the rotational direction

The bit rotates clockwise (viewed from the rear side) by pushing the R-side of the selector button. The L-side of the selector button is pushed to turn the bit counterclockwise (See **Fig. 10**) (The (L) and (R) marks are provided on the body).

9. Switch operation

- When the trigger switch is depressed, the tool rotates. When the trigger is released, the tool stops.
- The rotational speed of the drill 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 trigger switch is pulled more.

NOTE

- A buzzing noise is produced when the motor is about to rotate; This is only a noise, not a machine failure.

10. Using the hook

CAUTION

- When using the hook, pay sufficient attention so that the main equipment does not fall. If the tool falls, there is a risk of accident.
- Do not attach the tip tool except phillips bit to the tool main unit when carrying the tool main unit with the hook suspended from a waist belt. Injury may result if you carry the equipment suspended from the waist belt with sharp tipped components such as drill bit attached.

The hook can be installed on the right or left side and the angle can be adjusted in 5 steps between 0° and 80°.

(1) Operating the hook

- (a) Pull out the hook toward you in the direction of arrow (A) and turn in the direction of arrow (B) (**Fig. 11**).
- (b) The angle can be adjusted in 5 steps (0°, 20°, 40°, 60°, 80°).

Adjust the angle of the hook to the desired position for use.

(2) Switching the hook position

CAUTION

Incomplete installation of the hook may result in bodily injury when used.

- (a) Securely hold the main unit and remove the screw using a slotted head screwdriver or a coin (**Fig. 12**).
- (b) Remove the hook and spring (**Fig. 13**).
- (c) Install the hook and spring on the other side and securely fasten with screw (**Fig. 14**).

NOTE

Pay attention to the spring orientation. Install the spring with larger diameter away from you (**Fig. 14**).

(3) Using the bit holder (Hook with bit holder)

- Installing the bit
Slide the bit from the side and then insert firmly until the groove on the bit locks in the protruded section of the hook.
- Removing the bit
Securely hold the main unit and pull out the bit by holding the tip with your thumb (**Fig. 15**).

CAUTION

- Only HiKOKI STANDARD ACCESSORIES phillips bit (No. 2 x 65L; Code No. 983006) may be used. Do not use other bits since they may come loose.

11. Using the bit holder

CAUTION

- Stow the bit in the specified location on the tool. If the tool is used with the bit stowed improperly, the bit may fall and cause bodily injury.
- Do not stow bits that are of a different length, gauge or dimension than the plus driver bit (65 mm long) included in the STANDARD ACCESSORIES. The bit may fall and cause bodily injury.

(1) Removing the bit

Securely hold the main unit and pull out the bit by holding the tip with your thumb (**Fig. 16**).

(2) Installing the Bit

Install the bit with steps opposite of when removing. Insert the bit so that the right and left sides are equal, as shown in **Fig. 17**.

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 driver drill is stained, wipe with a soft dry cloth or a cloth moistened with soapy water. Do not use chloric solvents, gasoline or paint thinner, for they melt plastics.

4. Storage

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

5. Service parts list

CAUTION

Repair, modification and inspection of HiKOKI Power Tools must be carried out by a HiKOKI Authorized Service Center.

This Parts List will be helpful if presented with the tool to the HiKOKI Authorized Service Center when requesting repair or other maintenance.

In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

MODIFICATIONS

HiKOKI Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

Accordingly, some parts may be changed without prior notice.

NOTE

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

作業上的一般注意事項

1. 工作場所應打掃乾淨，清理妥當。雜亂無章將導致事故。
2. 避免危險的環境，請勿讓電動工具與充電器淋到雨，不可在潮濕地方使用電動工具和充電器，工作地點要保持明亮。
請勿在易燃或爆炸性物質附近使用電動工具和充電器。
不可在存放易燃液體或氣體的地方使用電動工具和充電器。
3. 在無監督的情況下小孩或體弱者不適宜使用此電動工具。應監督小孩不要讓其玩耍電動工具。所有訪客均須保持安全距離。
4. 保存現未使用的工具和充電器。未使用電動工具和充電器時，須將它們存放在乾燥處、高處或能上鎖處，以防止小孩和體弱者取到。請將電動工具和充電器存放在溫度低於 40°C 地方。
5. 不得使勁用力推壓。電動工具需按設計條件才能有效而安全地工作。絕不可勉強。
6. 妥選使用工具。不可用小型工具或附件去幹重活。
7. 服裝要穿戴齊整。衣服或服飾不可鬆馳，以免捲入活動部件內。在室外工作時，最好戴橡膠手套，穿上鞋襪。
8. 使用電動工具時，大部分需要戴安全眼鏡。如果作業中灰塵多，還要戴上面具或防塵口罩。
9. 塞繩不可濫用。充電器切勿拿著塞繩搬動或從插座中拔出。不可讓塞繩受熱、沾油或碰到銳利的棱角。
10. 作業以安全第一為原則。工件要用夾具或臺鉗卡緊。這樣做，比用手按壓更為可靠，也能夠讓雙手專心操作。
11. 作業時腳步要站穩，身體姿勢要保持平衡。
12. 電動工具要小心保養。刀具要經常保持鋒利、清潔，以確保性能與安全。請按照潤滑和所更換的附件說明進行。
13. 充電器不用時或維修檢查時，務請將充電器的插頭從插座中拔出。
14. 拆下卡盤扳手和扳手。打開開關之前，總要先檢查扳手是否從工具上卸下。
15. 謹防不慎打開開關。搬運鑽機時，請勿將手指擋在開關上。
16. 請勿使用未經指定的充電器以免發生危險。
17. 只能使用HiKOKI指定的更換零件。
18. 不得使用電動工具去進行規定以外的其它作業。
19. 為了防止人體受傷，只能使用本說明書或HiKOKI產品目錄中所指定的附件。
20. 如果本充電器的電源線破損，請將充電器返回給HiKOKI授權的服務店更換電源線。只能請授權的服務店來維修本工具。對於因非授權者的修理或因錯誤使用了本工具而造成的工具損壞或人體傷害，本製造公司概不負責。

21. 為了保證設計的完整性，電動工具和充電器的蓋罩和螺釘類不可隨便拆除。
22. 務請在銘牌上規定的電壓下使用充電器。
23. 除非已取出電池，絕不可接觸轉動部分或附件。
24. 使用前務請充電。
25. 請勿使用未經指定的電池。請勿將未經指定的普通乾電池、充電式電池或汽車蓄電池連接於電動工具上。
26. 請勿使用含有昇壓器的變壓器。
27. 請勿用引擎發電機或直流電源裝置對電池進行充電。
28. 務請在室內進行充電。充電時，充電器和電池會稍微變熱，因此，不要在直射陽光處充電，而應在溫度低、通風好的陰涼處進行充電。
29. 在高處作業時，要注意下面的動靜，確認下面無人。
30. 進行授權服務時，請使用本說明書中的組裝分解圖。
31. 如果電源線破損，必須由廠家或其維修代理店或具有同等資格的技術人員更換，以避免發生危險。

充電式起子電鑽機使用上的注意事項

1. 勿請在 10~40°C 的溫度下進行充電。溫度低於 10°C 將會導致充電過度，極其危險。電池不能在高於 40°C 的溫度下充電。
最適合於充電的溫度是 20~25°C。
2. 一次充電完成後，請將充電器擱置 15 分鐘以上，然后再進行下一次充電。
請勿連續給兩節以上的電池充電。
3. 勿讓雜質進入充電池連結口內。
4. 切勿拆卸充電式電池與充電器。
5. 切勿使充電式電池短路。使電池短路將會造成很大的電流和過熱，從而燒壞電池。
6. 請勿將電池丟入火中。
電池受熱將會爆炸。
7. 在牆壁、地板或天花板上鑽孔時，請檢查有無埋入電線等。
8. 充電後電池壽命太短不夠使用時，請盡快將電池送往經銷店。不可將用過的電池亂丟。
9. 請勿使用耗竭了的電池，否則將會損壞充電器。
10. 請勿將異物插入充電器的通風口。
若將金屬異物或易燃物插入通風口的話，將會引起觸電事故或使充電器受損。
11. 將鑽頭裝進無開關卡盤時，請適當地旋緊筒套。如果不將筒套旋緊的話，鑽頭將會滑動或脫落，從而引起人體受傷事故。

規 格

電動工具

型式		DS9DVF3	DS12DVF3	
無負荷速度 (低/高)		0 - 280 / 0 - 840 轉／分	0 - 350 / 0 - 1050 轉／分	
能力	鑽孔	木材 (厚度 18 mm)	21 mm	
		金屬 (厚度 1.6 mm)	鋼: 10 mm 鋁: 12 mm	
	驅動	機械螺絲	6 mm	
		木螺絲	5.8 mm (直徑) x 45 mm (長度) (需要導向孔)	
充電式電池		EB912S: Ni-Cd 9.6 V (1.2 Ah, 8 節電池) EB914S: Ni-Cd 9.6 V (1.4 Ah, 8 節電池) EB9B: Ni-Cd 9.6 V (2.0 Ah, 8 節電池)	EB1212S: Ni-Cd 12 V (1.2 Ah, 10 節電池) EB1214S: Ni-Cd 12 V (1.4 Ah, 10 節電池) EB1220BL: Ni-Cd 12 V (2.0 Ah, 10 節電池)	
重量		1.4 kg	1.5 kg	

充電器

型式	UC9SD / UC12SD	UC18YG
充電電壓	9.6 / 12 V	7.2 - 18 V
重量	1.2 / 1.4 kg	0.3 kg

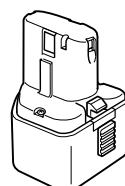
標準附件

DS9DVF3	① 十字槽頭螺絲刀頭 (No. 2 x 65L) 1
	② 充電器 (UC9SD 或 UC18YG) 1
	③ 塑料套 1
DS12DVF3	① 十字槽頭螺絲刀頭 (No. 2 x 65L) 1
	② 充電器 (UC12SD 或 UC18YG) 1
	③ 塑料套 1

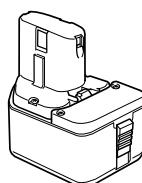
標準附件可能不預先通告而徑予更改。

選購附件 (分開銷售)

- 電池 (EB912S, EB914S, EB9B)
(用於DS9DVF3)



- 電池 (EB1212S, EB1214S, EB1220BL)
(用於DS12DVF3)



選購附件可能不預先通告而徑予更改。

用 途

- 機械螺絲、木螺絲、自攻螺絲等的旋入和取出。
- 對各種金屬的鑽孔。
- 對各種木材的鑽孔。

電池的拆卸/安裝法

1. 電池的拆卸法

請先緊抓住把手、然後再推壓電池插銷以拆下電池（見圖 1 和圖 2）。

注意

請勿使電池短路。

2. 電池的安裝法

請先確認了電池的正負極後，再將電池插進去（見圖 2）。

充 電

〈UC9SD/UC12SD〉

使用電動工具之前，按下述方法將電池進行充電。

1. 將電池插入充電器

按正確的電極方向插入電池直至其接觸到充電器底部（見圖 3）。

注意

UC9SD 和 UC12SD 型為專用充電器。此充電器無法給非指定的電池充電。雖能將非指定的電池插入充電器內且指示燈可能會點亮，但要提醒您特別注意，切勿給非指定的電池充電，因為這不僅無法給這種電池充電，而且還會導致充電器發生故障。

2. 將充電器的電源線插頭插入插座

接好電源線後便開始充電（此時指示燈亮起）。

注意

如果指示燈不亮，則請從插座上拔出電源線插頭並檢查電池的安裝情況。

在約 20°C 的溫度下約需 60 分鐘便可完全充電。指示燈熄滅表示電池已經充好。

如果溫度或電源電壓偏低，電池充電時間則會延長。

如果充電已超過 120 分鐘而指示燈仍不熄滅，則應停止充電並與您的 HIKOKI 授權維修中心聯繫。

注意

作業停止後，如電池（因晒太陽等原因）而變熱，充電指示燈會不亮。這時，應先讓電池冷卻，然後再充電。

3. 將充電器電源線從交流電插座中拔出

4. 抓住充電器，將電池拉出

註

充電後，首先從充電器中取出電池，然後將電池妥善存放。

關於使用新電池等情況下的放電。

由於新電池和未經長期使用電池的內部化學物質沒有活性，在前一兩次使用時放電量會較低。這只是暫時現象，通過 2 至 3 次充電後，將會恢復充電所需正常時間。

怎樣讓電池使用時間更長。

(1) 在電池電量完全耗盡之前給電池充電。

在感覺工具的動力變弱時，停止使用工具並為電池充電。

如果繼續使用工具消耗電流，可能會造成對電池的損壞，並且電池使用壽命也會縮短。

(2) 避免在高溫下充電。

充電電池在剛使用後會發熱。如果在電池剛使用後為電池充電，電池的內部化學物質的性能會下降，電池使用壽命會縮短。請先將電池放置一會，待其冷卻後再進行充電。

〈UC18YG〉

使用電動工具之前，按下述方法將電池進行充電。

1. 將充電器的電源線插頭插入插座

接好電源線後便開始充電。

2. 將電池插入充電器

按正確的電極方向插入電池直至其接觸到充電器底部（此時指示燈亮起）（見圖 4）。

注意

如果指示燈不亮，則請從插座上拔出電源線插頭並檢查電池的安裝情況。

(1) 關於充電電池的溫度。

充電電池的溫度如表1所示。

表1 電池充電範圍

充電電池	可以對電池進行充電的溫度
EB912S, EB914S, EB9B EB1212, EB1214S, EB1220BL	0°C – 45°C

(2) 關於充電時間

由充電器和電池共同決定，充電時間變化如表2所示。

表2 充電時間 (20°C下)

電池	充電器	UC18YG
EB912S, EB914S		約30分鐘。
EB1212S, EB1214S		
EB9B, EB1220BL		約50分鐘。

指示燈熄滅表示電池已經充好。

如果溫度或電源電壓偏低，電池充電時間則會延長。

如果充電已超過超過120分而指示燈仍不熄滅，則應停止充電並與您的HIKOKI授權維修中心聯繫。

注意

作業停止後，如電池（因晒太陽等原因）而變熱，充電指示燈會不亮。這時，應先讓電池冷卻，然後再充電。

3. 將充電器電線從插頭拔下

4. 抓穩充電器並取出電池

註

充電後，先將電池從充電器中取出，然後妥善存放。

關於使用新電池等情況下的放電。

由於新電池和未經長期使用的電池的內部化學物質沒有活性，在前一兩次使用時放電量會較低。這只是暫時現象，通過2至3次充電後，將會恢復充電所需正常時間。

怎樣讓電池使用時間更長。

(1) 在電池電量完全耗盡之前給電池充電。

在感覺工具的動力變弱時，停止使用工具並為電池充電。

如果繼續使用工具消耗電流，可能會造成對電池的損壞，電池使用壽命會縮短。

(2) 避免在高溫下充電。

充電電池在剛使用後會發熱。如果在電池剛使用後為電池充電，電池的內部化學物質的性能會下降，電池使用壽命會縮短。請先將電池放置一會，待電池冷卻後再進行充電。

作業之前

1. 裝配及工作環境的檢查

請仔細地檢查工作環境是否妥當。

使用方法

1. 確認離合器轉盤的位置（見圖5）

本工具的旋緊力可在帶有離合器轉盤的工具上根據離合器轉盤的位置進行調整。

- (1) 將本工具當作螺絲刀使用時，請設置於離合器轉盤的“1, 3, 5…22”中的一個數字處，或外框上帶有三角形記號的圓點處。
- (2) 將本工具當作鑽機使用時，將離合器轉盤的鑽機記號“”對準外框上的三角形記號。

注意

- 請勿將離合器轉盤設置於數字“1, 3, 5…22”之間或圓點之間。
- 使用時，請勿將離合器轉盤設置於數字“22”與鑽機記號之間的黑線處。否則，可能會損壞本工具（見圖6）。

2. 旋緊力的調整

(1) 旋緊力

旋緊力的強度必須與螺絲直徑相對應。若使用太強的旋緊力，螺絲頭可能會破損或受損。因此，必須根據螺絲直徑來調整離合器轉盤的位置。

(2) 旋緊力的顯示

旋緊力根據螺絲的類型及所旋緊的材料而異。本工具用離合器轉盤上的數字“1, 3, 5…22”和圓點來顯示旋緊力。“1”處的旋緊力最小，最大數字處的旋緊力最大（見圖5）。

(3) 調整旋緊力

旋轉離合器轉盤，將離合器轉盤上的數字“1, 3, 5…22”或圓點對準外框上的三角形記號。根據所需要的旋緊力按旋緊力大或小的方向調整離合器轉盤。

注意

- 本工具用作鑽機時，馬達可能會被鎖住。操作螺絲刀鑽機時，請注意不要鎖住馬達。
- 太長時間進行捶打的話，螺絲會因過度擰緊而受損。

3. 改變轉速

操作變速杆，改變轉速。朝箭頭方向移動變速手柄（見圖 7 和圖 8）。

變速手柄設定於“LOW”（低）時，鑽以低速旋轉；設定於“HIGH”（高）時，鑽以高速旋轉。

注意

- 用變速杆變速時，請先確認開關是否已關掉。在馬達旋轉時進行變速的話，會損壞齒輪。
- 將變速杆設於“HIGH”（高速）處，同時離合器轉盤位置位於“17”或“22”，可能會發生離合器不能操作及馬達被鎖住的情況。遇到這種情況時，請將變速杆設於“LOW”（低速）處。
- 若馬達鎖住，應立即關掉電源。若馬達被鎖住一會兒，馬達或電池會被燒毀。

4. 使用範圍與使用建議

根據本工具的機械結構，各類工作的使用範圍如表 3 所示。

表 3

工作		建議
鑽孔	木材	用於鎖孔。
	鋼	
	鋁	
驅動	機械螺絲	使用與螺絲直徑相匹配的鎖頭或孔座。
	木螺絲	用於鑽了預備孔後。

5. 如何選擇旋緊力與轉速

表 4

用途		帽蓋位置	轉速的選擇（變速桿位置）	
			LOW（低速）	HIGH（高速）
驅動	機械螺絲	1 - 22	用於直徑為 4mm 以下的螺絲。	用於直徑為 6mm 以下的螺絲。
	木螺絲	1 - 	用於標稱直徑為 5.8mm 以下的螺絲。	用於標稱直徑為 3.8mm 以下的螺絲。
鑽孔	木材		用於直徑為 25mm 以下的螺絲。（DS9DVF3） 用於直徑為 21mm 以下的螺絲。（DS12DVF3）	用於直徑為 12mm 以下的螺絲。
	金屬		用於鐵鑽機的鑽孔。	—

注意

- 表 4 所示的選擇例為一般標準。在實際工作中，使用與上述不同類型的旋緊螺絲和不同的被旋材料時，必須將其進行適當的調整。

- 螺絲刀鑽機設於“HIGH”（高速）處並使用機械螺絲時，因旋緊力太強，螺絲可能會損壞或鑽頭可能會鬆弛。在使用機械螺絲時，請將螺絲刀鑽機設於“LOW”（低速）處。

6. 鑽頭的裝卸

- (1) 裝螺絲刀鑽頭等插入無開關鑽機卡盤後，緊抓住圓環，並裝筒套向右旋緊（從正面看時，為順時針方向）（見圖 9）。
- 操作期間，如筒套變鬆了的話，請再次旋緊之。旋緊筒套時，旋緊力會越來越強。
- (2) 拆卸鑽頭
緊抓住圓環後，向左旋鬆筒套（從正面看時，為逆時針方向）（見圖 9）。

注意：

- 如不能旋鬆筒套時，請用老虎鉗等工具夾住鑽頭。請先將離合器模式設至 1 與 11 之間，然後邊操作離合器邊旋鬆筒套（向左）這樣便能較容易地旋鬆筒套。

7. 確認電池安裝正確無誤

8. 檢查轉向

按選擇鈕的 R 側，鑽頭按順時針方向旋轉（從後側觀看）；按選擇鈕的 L 側，鑽頭按逆時針方向旋轉（見圖 10）（機身上有 (L) 和 (R) 記號）。

9. 扳機開關的操作

- 按下扳機開關時，工具旋轉；鬆開扳機開關時，工具停止。
- 可調整扳機扳動量來控制鑽的轉速。扳動量小，速度低；扳動量大，速度高。

註

- 馬達將要轉動時會發出嗡嗡聲。這只是一種噪音，並非機器故障。

10. 使用掛鉤

注意

- 使用掛鉤時，千萬注意不要讓主要設備掉落。如果工具掉落，則有發生事故的危險。
- 在用腰帶上懸掛的掛鉤攜帶工具主體時，請不要在工具主體上裝配除菲利浦刀頭以外的尖頭工具。如果在腰帶上懸掛帶有尖頭部件（如鑽頭）的設備，可能會造成傷害。

掛鉤可以佩帶在右側或左側，可以在0° 到80° 之間的5個檔位調整角度。

(1) 掛鉤的操作

- (a) 對著自己按照箭頭(A)的方向拉出掛鉤，然後按照箭頭(B)的方向轉動（圖11）。

- (b) 可以在5個檔位調整角度(0°、20°、40°、60°、80°)。

將掛鉤的角度調整到想要使用的位置。

(2) 切換掛鉤位置

注意

裝配掛鉤不徹底可能會在使用時造成人身傷害。

- (a) 抓牢工具主體，用槽頭螺絲起子或硬幣將螺絲卸下（圖12）。

- (b) 取下掛鉤和彈簧（圖13）。

- (c) 在另一側裝上掛鉤和彈簧，並上緊螺絲（圖14）。

註

注意彈簧的方位。安裝彈簧時，將較大直徑的一面背對自己（圖14）。

(3) 使用鑽頭固定器（帶鑽頭固定器的卡夾）

○ 安裝鑽頭

從邊緣滑入鑽頭，用力插入直至鑽頭鎖上的凹槽與挂鉤的凸起部分吻合。

○ 取下刀頭

抓穩主體，用拇指握住末端將刀頭拉出（圖15）。

注意

只能使用HIKOKI標準附件十字形鑽頭(No. 2 × 65L；產品編號983006)。請勿使用其他鑽頭，否則可能變松。

11. 使用鑽頭固定器

注意

- 將鑽頭安裝在本工具的指定部位。如果未正確安裝鑽頭時使用本工具，鑽頭可能脫落並引起人體傷害。
- 安裝鑽頭的長度、規格、尺寸必須與標準附件中的十字槽頭螺絲刀頭（長65mm）相同。否則鑽頭可能脫落並引起人體傷害。

(1) 拆卸鑽頭

緊緊固定機身，用手指抓住鑽頭的頂端將其拉出（圖16）。

(2) 安裝鑽頭

安裝鑽頭的步驟與拆卸相反。插入鑽頭，使其位於正中，如圖17所示。

維護和檢查

1. 檢查工具

使用遲鈍的工具會降低效率並導致馬達故障，故若發現磨損，應即磨鋒或更換。

2. 檢查安裝螺釘

要經常檢查安裝螺釘是否緊固妥善。若發現螺釘鬆了，應立即重新扭緊，否則會導致嚴重的事故。

3. 清理外部

起子電鑽機沾污時，用乾軟布或沾肥皂水的布擦拭。切勿使用氯溶液、汽油或稀釋劑，以免塑膠部分溶化。

4. 收藏

起子電鑽機應收藏於溫度低於 40°C 而為小孩拿不到的地方。

5. 維修部件目錄

注意

HIKOKI電動工具的修理、維護和檢查必須由HIKOKI所認可的維修中心進行。

當尋求修理或其他維護時，將本部件目錄與工具一起提交給HIKOKI所認可的維修中心會對您有所幫助。

在操作和維護電動工具中，必須遵守各國的安全規則和標準規定。

改進

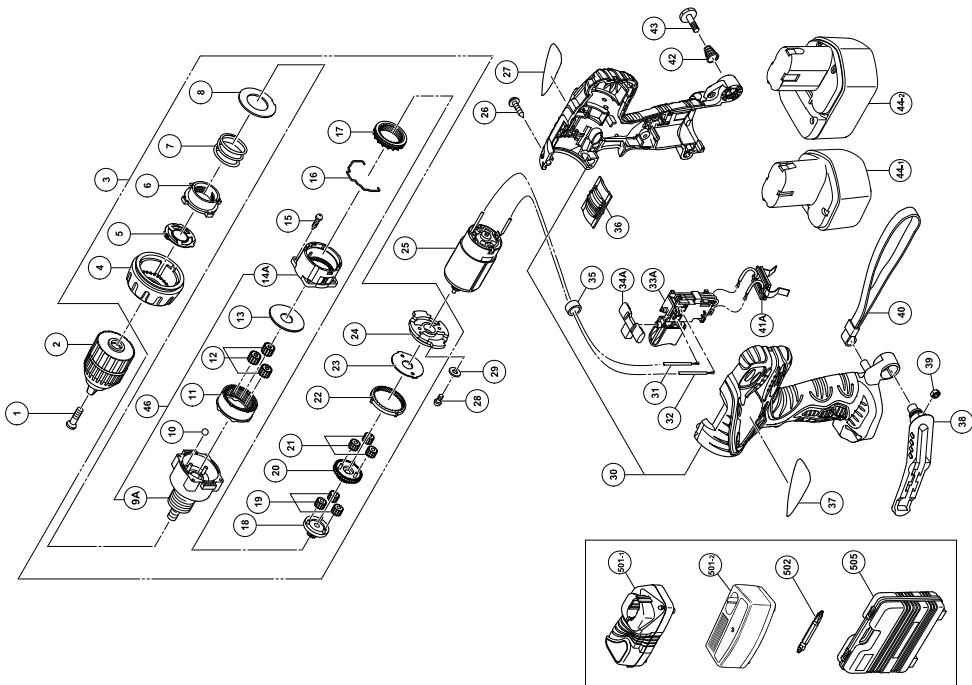
HIKOKI電動工具隨時都在進行改進以適應最新的技術進步。

因此，有些部件可能未預先通知而進行改進。

註

為求改進，本所冊所載規格可能不預先通告而徑予更改。

Item No.	Part Name	Item No.	Part Name
1	SPECIAL SCREW (LEFT HAND) M5 x 27	31	INTERNAL WIRE (B) 90L (BLACK)
2	DRILL CHUCK 10TLRD-N (W/O CHUCK WRENCH)	32	INTERNAL WIRE (B) 140L (RED)
3	GEAR BOX ASSY	33A	DC-SPEED CONTROL SWITCH
4	CLUTCH DIAL	34A	PUSHING BUTTON
5	CLICK SPRING	35	FERRITE CORE
6	NUT	36	SHIFT KNOB
7	SPRING	37	BRAND LABEL
8	WASHER (A)	38	HOOK ASSY
9	FRONT CASE	39	V-LOCK NUT M5
10	STEEL BALL D5	40	STRAP
11	RING GEAR	41A	BATTERY TERMINAL ASSY
12	PLANET GEAR (C) SET	42	HOOK SPRING
13	WASHER (A)	43	SPECIAL SCREW M6
14	REAR CASE	44-1	BATTERY: DSSDFV3
15	TAPPING SCREW D3 x 12	44-2	BATTERY: DS12DFV3
16	SHIFT ARM	501-1	CHARGER (UC18YG)
17	SLIDE RING GEAR	501-2	CHARGER (UC9SD / UC12SD)
18	PINION (C)	502	+ DRIVER BIT
19	PLANET GEAR (B) SET	503	CASE
20	PINION (B)		
21	PLANET GEAR (A) SET		
22	FIRST RING GEAR		
23	WASHER (B)		
24	MOTOR SPACER		
25	MOTOR		
26	TAPPING SCREW (W/FLANGE) D3 x 16		
27	NAME PLATE		
28	MACHINE SCREW M3 x 8		
29	SPRING WASHER M3		
30	HOUSING (A). (B) SET		



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