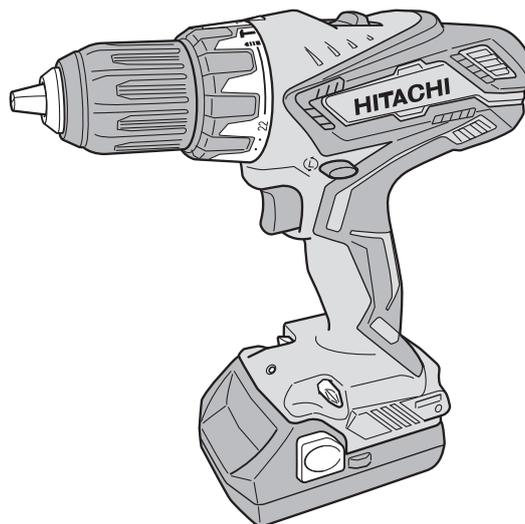


HITACHI

Cordless Combi Drill

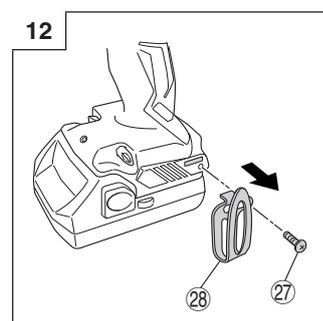
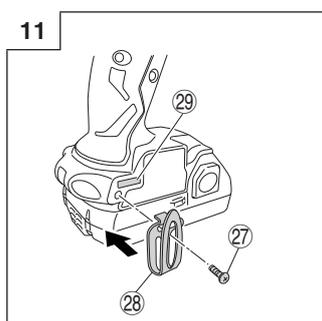
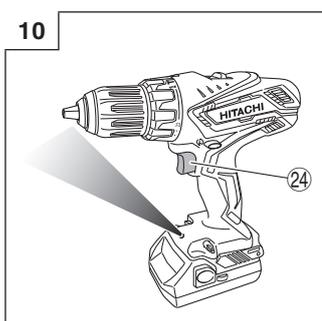
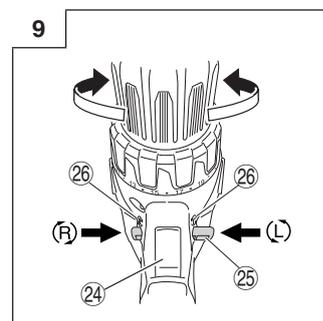
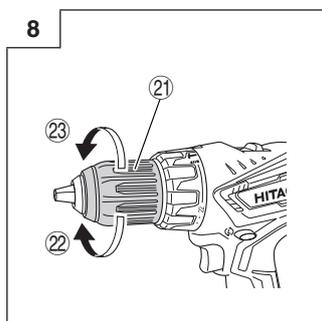
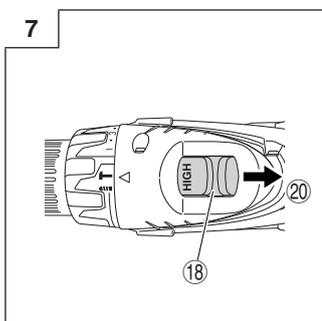
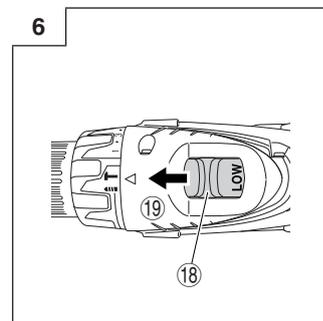
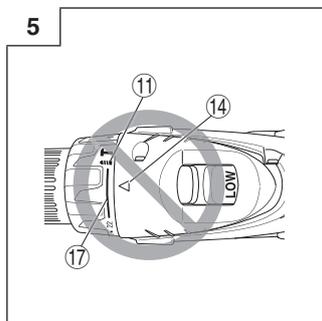
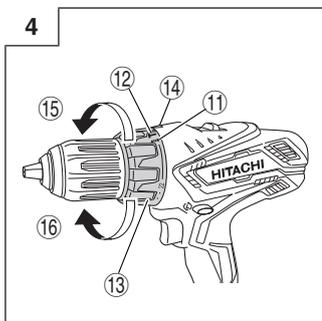
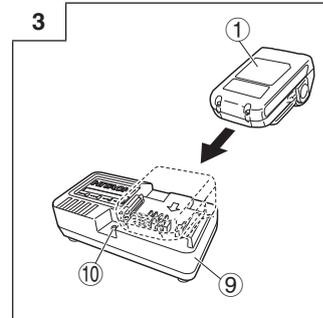
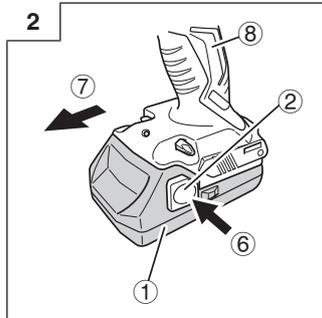
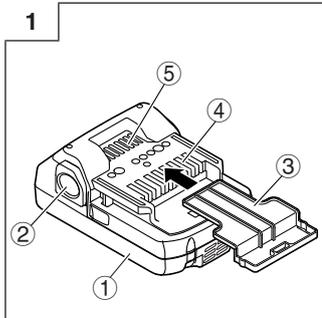
DV 18DGL



Read through carefully and understand these instructions before use.

Handling instructions

Hitachi Koki



	English
①	Rechargeable battery
②	Latch
③	Battery cover
④	Terminal
⑤	Ventilator
⑥	Push
⑦	Pull out
⑧	Handle
⑨	Charger
⑩	Pilot lamp
⑪	Drill mark
⑫	Hammer mark
⑬	Clutch dial
⑭	Triangle mark
⑮	Weak
⑯	Strong
⑰	Line
⑱	Shift knob
⑲	Low speed
⑳	High speed
㉑	Sleeve
㉒	Tighten
㉓	Loosen
㉔	Trigger switch
㉕	Selector button
㉖	(R) and (L) marks
㉗	Screw
㉘	Hook
㉙	Groove

	<p>Symbols</p> <p>⚠ WARNING The following show symbols used for the machine. Be sure that you understand their meaning before use.</p>
	<p>Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.</p>
	<p>Only for EU countries Do not dispose of electric tools together with household waste material! In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.</p>

GENERAL POWER TOOL SAFETY WARNINGS

WARNING

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.**
Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**
Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.**
Distractions can cause you to lose control.

2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.**
Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**
There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.**
Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.**
Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.**
Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.**
Use of an RCD reduces the risk of electric shock.

3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.**
A moment of inattention while operating power tools may result in serious personal injury.
- b) **Use personal protective equipment. Always wear eye protection.**
Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.**

Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.

- d) **Remove any adjusting key or wrench before turning the power tool on.**
A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
 - e) **Do not overreach. Keep proper footing and balance at all times.**
This enables better control of the power tool in unexpected situations.
 - f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.**
Loose clothes, jewellery or long hair can be caught in moving parts.
 - g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.**
Use of dust collection can reduce dust related hazards.
- #### 4) Power tool use and care
- a) **Do not force the power tool. Use the correct power tool for your application.**
The correct power tool will do the job better and safer at the rate for which it was designed.
 - b) **Do not use the power tool if the switch does not turn it on and off.**
Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
 - c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.**
Such preventive safety measures reduce the risk of starting the power tool accidentally.
 - d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**
Power tools are dangerous in the hands of untrained users.
 - e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools' operation. If damaged, have the power tool repaired before use.**
Many accidents are caused by poorly maintained power tools.
 - f) **Keep cutting tools sharp and clean.**
Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
 - g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**
Use of the power tool for operations different from those intended could result in a hazardous situation.
- #### 5) Battery tool use and care
- a) **Recharge only with the charger specified by the manufacturer.**
A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
 - b) **Use power tools only with specifically designated battery packs.**
Use of any other battery packs may create a risk of injury and fire.

- c) **When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.**

Shorting the battery terminals together may cause burns or a fire.

- d) **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.**

Liquid ejected from the battery may cause irritation or burns.

6) **Service**

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.**

This will ensure that the safety of the power tool is maintained.

PRECAUTION

Keep children and infirm persons away.

When not in use, tools should be stored out of reach of children and infirm persons.

CORDLESS COMBI DRILL SAFETY WARNINGS

- Wear ear protectors when impact drilling.**
Exposure to noise can cause hearing loss.
- Use auxiliary handle(s), if supplied with the tool.**
Loss of control can cause personal injury.
- Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory or fastener may contact hidden wiring.**
Cutting accessory or fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- Always charge the battery at a temperature of 0°C – 40°C. A temperature of less than 0°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°C – 25°C.
- 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.
- Do not allow foreign matter to enter the hole for connecting the rechargeable battery.
- Never disassemble the rechargeable battery and charger.
- 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.
- Do not dispose of the battery in fire.
If the battery is burnt, it may explode.
- 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.
- Using an exhausted battery will damage the charger.
- 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.

13. 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.

14. This product contains a strong permanent magnet in the motor.

Observe the following precautions regarding adhering of chips to the tool and the effect of the permanent magnet on electronic devices.

CAUTION

- **Do not place the tool on a workbench or work area where metal chips are present.**

The chips may adhere to the tool, resulting in injury or malfunction.

- **If chips have adhered to the tool, do not touch it. Remove the chips with a brush.**

Failure to do so may result in injury.



- **If you use a pacemaker or other electronic medical device, do not operate or approach the tool.**
Operation of the electronic device may be affected.

- **Do not use the tool in the vicinity of precision devices such as cell phones, magnetic cards or electronic memory media.**

Doing so may lead to misoperation, malfunction or loss of data.

CAUTION ON LITHIUM-ION BATTERY

To extend the lifetime, the lithium-ion battery equips with the protection function to stop the output.

In the cases of 1 to 3 described below, when using this product, even if you are pulling the switch, the motor may stop. This is not the trouble but the result of protection function.

- When the battery power remaining runs out, the motor stops.
In such case, charge it up immediately.
- If the tool is overloaded, the motor may stop. In this case, release the switch of tool and eliminate causes of overloading. After that, you can use it again.
- If the battery is overheated under overload work, the battery power may stop.
In this case, stop using the battery and let the battery cool. After that, you can use it again.

Furthermore, please heed the following warning and caution.

WARNING

In order to prevent any battery leakage, heat generation, smoke emission, explosion and ignition beforehand, please be sure to heed the following precautions.

- Make sure that swarf and dust do not collect on the battery.
- During work make sure that swarf and dust do not fall on the battery.
- Make sure that any swarf and dust falling on the power tool during work do not collect on the battery.
- Do not store an unused battery in a location exposed to swarf and dust.
- Before storing a battery, remove any swarf and dust that may adhere to it and do not store it together with metal parts (screws, nails, etc.).

2. Do not pierce battery with a sharp object such as a nail, strike with a hammer, step on, throw or subject the battery to severe physical shock.
3. Do not use an apparently damaged or deformed battery.
4. Do not use the battery in reverse polarity.
5. Do not connect directly to an electrical outlets or car cigarette lighter sockets.
6. Do not use the battery for a purpose other than those specified.
7. If the battery charging fails to complete even when a specified recharging time has elapsed, immediately stop further recharging.
8. Do not put or subject the battery to high temperatures or high pressure such as into a microwave oven, dryer, or high pressure container.
9. Keep away from fire immediately when leakage or foul odor are detected.
10. Do not use in a location where strong static electricity generates.
11. If there is battery leakage, foul odor, heat generated, discolored or deformed, or in any way appears abnormal during use, recharging or storage, immediately remove it from the equipment or battery charger, and stop use.

CAUTION

1. If liquid leaking from the battery gets into your eyes, do not rub your eyes and wash them well with fresh clean water such as tap water and contact a doctor immediately. If left untreated, the liquid may cause eye-problems.
2. If liquid leaks onto your skin or clothes, wash well with clean water such as tap water immediately. There is a possibility that this can cause skin irritation.
3. If you find rust, foul odor, overheating, discolor, deformation, and/or other irregularities when using the battery for the first time, do not use and return it to your supplier or vendor.

WARNING

If a conductive foreign matter enters in the terminal of lithium ion battery, the battery may be shorted, causing fire. When storing the lithium ion battery, obey surely the rules of following contents.

- Do not place conductive debris, nail and wires such as iron wire and copper wire in the storage case.
- To prevent shorting from occurring, load the battery in the tool or insert securely the battery cover for storing until the ventilator is not seen (Fig. 1).

SPECIFICATIONS

POWER TOOL

Model		DV18DGL	
No-load speed (Low/High)		0 – 350 / 0 – 1400 /min ⁻¹	
No-load impact rate (Low/High)		0 – 4900 / 0 – 19600 /min ⁻¹	
Capacity	Drilling	Brick (Depth 30 mm)	13 mm
		Wood (Thickness 18 mm)	38 mm
		Metal (Thickness 1.6 mm)	Steel: 13 mm Aluminum: 13 mm
	Driving	Machine screw	6 mm
		Wood screw	8 mm (diameter) × 75 mm (length) (Requires a pilot hole)
Rechargeable battery		BSL1815: Li-ion 18 V (1.5 Ah 5 celler) BSL1825: Li-ion 18 V (2.5 Ah 5 celler)	
Weight*		1.7 kg (With BSL1815 attached)	

* Weight: According to EPTA-Procedure 01/2003

CHARGER

Model	UC18YKSL
Charging voltage	14.4 V – 18 V
Weight	0.35 kg

STANDARD ACCESSORIES

DV18DGL (2LEGK)	① Plus driver bit (No. 2).....	1
	② Charger (UC18YKSL).....	1
	③ Battery (BSL1815).....	2
	④ Plastic case	1
	⑤ Battery cover	1
DV18DGL (2LFGK)	① Plus driver bit (No. 2).....	1
	② Charger (UC18YKSL).....	1
	③ Battery (BSL1825).....	2
	④ Plastic case	1
	⑤ Battery cover	1

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

- Battery
BSL1815, BSL1825
- Hook

Optional accessories are subject to change without notice.

APPLICATIONS

- Drilling of brick and concrete block, etc.
- 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 (2 pcs.) 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

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

1. Connect the charger's power cord to the receptacle.
When connecting the plug of the charger to a receptacle, the pilot lamp will blink in red (At 1-second intervals).

2. Insert the battery into the charger.
Firmly insert the battery into the charger as shown in Fig. 3.

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		
Pilot lamp (red)	Before charging	Blinks	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds) 	/
	While charging	Lights	Lights continuously 	
	Charging complete	Blinks	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds) 	
	Overheat standby	Blinks	Lights for 1 second. Does not light for 0.5 seconds. (off for 0.5 seconds) 	Battery overheated. Unable to charge. (Charging will commence when battery cools)
	Charging impossible	Flickers	Lights for 0.1 second. Does not light for 0.1 seconds. (off for 0.1 seconds) 	Malfunction in the battery or the charger

- (2) Regarding the temperature of the rechargeable battery.
The temperatures for rechargeable batteries are as shown in **Table 2**, and batteries that have become hot should be cooled for a while before being recharged.

Table 2 Recharging ranges of batteries

Rechargeable batteries	Temperatures at which the battery can be recharged
BSL1815, BSL1825	0°C – 50°C

- (3) Regarding recharging time
Depending on the combination of the charger and batteries, the charging time will become as shown in **Table 3**.

Table 3 Charging time (At 20°C)

Battery	Charger	UC18YKSL
BSL1815		Approx. 40 min.
BSL1825		Approx. 75 min.

NOTE

The charging time may vary according to 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**

NOTE

Be sure to pull out the battery from the charger after use, and then keep it.

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.

CAUTION

- If the battery is charged while it is heated because it has been left for a long time in a location subject to direct sunlight or because the battery has just been used, the pilot lamp of the charger lights for 1 second, does not light for 0.5 seconds (off for 0.5 seconds). In such a case, first let the battery cool, then start charging.

- When the pilot lamp flickers (at 0.2-second intervals), check for and take out any foreign objects in the charger's battery connector. If there are no foreign objects, it is probable that the battery or charger is malfunctioning. Take it to your authorized Service Center.
- Since the built-in microcomputer takes about 3 seconds to confirm that the battery being charged with UC18YKSL is taken out, wait for a minimum of 3 seconds before reinserting it to continue charging. If the battery is reinserted within 3 seconds, the battery may not be properly charged.

PRIOR TO OPERATION

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. 4)

The three modes of screwdriver, drill and impact drill can be switched by the position of the clutch dial in this unit.

- (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.
- (3) When using this unit as an impact drill, align the clutch dial hammer 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. 5).

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. 4).
- (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 combi drill, take care not to lock the motor.
- Too long hammering may cause the screw broken due to excessive tightening.

3. Rotation to Impact changeover (See Fig. 4)

The "Rotation (Rotation only)" and "Impact (Impact + Rotation)" can be switched by aligning the drill mark "▲" or the hammer mark "■" with the triangle mark on the outer body.

- To make holes in the metal, wood or plastic, switch to "Rotation (Rotation only)".
- To make holes in bricks or concrete blocks, switch to "Impact (Impact + Rotation)".

CAUTION

- If an operation which is normally performed at the "Rotation" setting is performed at "Impact" setting, the effect of making holes does not only increase but it may also damage the bit or other parts.
- If it is hard to turn the clutch dial to hammer mark "T" position, turn the chuck slightly in either direction and then turn the clutch dial to hammer mark "T" position again.

4. Change rotation speed

Operate the shift knob to change the rotational speed. Move the shift knob in the direction of the arrow (See Figs. 6 and 7).

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 between "15" and "22", it may happen that the clutch does not engaged 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.

- To extend the lifetime, the lithium-ion battery equips with the protection function to stop the output. Therefore, if the tool is overloaded, the motor may stop. However, this is not the trouble but the result of protection function. In this case, release the switch of tool and eliminate the causes of overloading.

5. 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 4.

Table 4

Work		Clutch dial position	Suggestions
Drilling	Brick	T	Use for drilling purpose.
	Wood	H	
	Steel		
	Aluminum		
Driving	Machine screw	1 - 22	Use the bit or socket matching the screw diameter.
	Wood screw	1 - H	Use after drilling a pilot hole.

6. How to select tightening torque and rotational speed

Table 5

Use		Clutch Dial Position	Rotating speed selection (Position of the shift knob)	
			LOW (Low speed)	HIGH (High speed)
Driving	Machine screw	1 - 22	For 6 mm or smaller diameter screws.	For 6 mm or smaller diameter screws.
	Wood screw	1 - H	For 8 mm or smaller nominal diameter screws.	For 4.8 mm or smaller nominal diameter screws.
Drilling	Brick	T	For 13 mm or smaller diameters.	For 10 mm or smaller diameters.
	Wood	H	For 38 mm or smaller diameters.	For 22 mm or smaller diameters.
	Metal	H	_____	For drilling with a metal working drill bit.

CAUTION

- The selection examples shown in Table 5 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 combi 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 combi drill at LOW (low speed) when using a machine screw.

NOTE

The use of the battery in a cold condition (below 0 degree Centigrade) can sometimes result in the weakened tightening torque and reduced amount of work. This, however, is a temporary phenomenon, and returns to normal when the battery warms up.

7. Mounting and dismantling of the bit

- (1) After inserting a driver bit, etc. into the keyless drill chuck, firmly tighten the sleeve by turning it toward the right (in the clockwise direction as viewed from the front) (See Fig. 8).

- 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
Loosen the sleeve by turning it toward the left (in the counter-clockwise direction as viewed from the front) (See Fig. 8).

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.

8. Confirm that the battery is mounted correctly

9. 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. 9) (The (L) and (R) marks are provided on the body).

CAUTION

Always use this unit with clockwise rotation, when using it as an impact drill.

10. 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.

11. For drilling into brick

Excessive pressing force never increases drilling speed. It will not only damage the drill tip or reduce working efficiency, but could also shorten the service life of drill bit. Operate the combi drill within 10-15 kg pressing force while drilling into brick.

12. Using the light

Pull the trigger switch to light up the light. The light keeps on lighting while the trigger switch is being pulled. The light goes out after releasing the trigger switch. (Fig. 10) (The light automatically goes out 10 seconds after releasing the trigger switch.)

CAUTION

Do not expose directly your eye to the light by looking into the light.

If your eye is continuously exposed to the light, your eye will be hurt.

13. Using the hook (sold separately)

The hook is used to hang up the power tool to your waist belt while working.

CAUTION

- When using the hook, hang up the power tool firmly not to drop accidentally.
- If the power tool is dropped, it may lead to an accident.
- When carrying the power tool with hooked to your waist belt, do not fit any bit to the tip of power tool. If the sharp bit such as drill is fitted to the power tool when carrying it with hooked to your waist belt, you will be injured.
- Install securely the hook. Unless the hook is securely installed, it may cause an injury while using.
- (1) Placing the hook and tightening the screws.
Install securely the hook in the groove of power tool and tighten the screws to fix the hook firmly. (Fig. 11)
- (2) Removing the hook.
Remove the screws fixing the hook with Philips screw driver. (Fig. 12)

CAUTION

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

MAINTENANCE AND INSPECTION

1. Inspecting the tool

Since use of as 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. 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. Cleaning on the outside

When the combi 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.

5. Storage

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

NOTE

Make sure that the battery is fully charged when stored for a long period (3 months or more). The battery with smaller capacity may not be able to be charged when used, if stored for a long period.

NOTE

Storing Lithium-ion Batteries

Make sure the lithium-ion batteries have been fully charged before storing them.

Prolonged storage of batteries with a low charge may result in performance deterioration, significantly reducing battery usage time or rendering the batteries incapable of holding a charge.

However, significantly reduced battery usage time may be recovered by repeatedly charging and using the batteries two to five times.

If the battery usage time is extremely short despite repeated charging and use, consider the batteries dead and purchase new batteries.

6. Service parts list

CAUTION

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

This Parts List will be helpful if presented with the tool to the Hitachi 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

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

Accordingly, some parts may be changed without prior notice.

Important notice on the batteries for the Hitachi cordless power tools

Please always use one of our designated genuine batteries. We cannot guarantee the safety and performance of our cordless power tool when used with batteries other than these designated by us, or when the battery is disassembled and modified (such as disassembly and replacement of cells or other internal parts).

GUARANTEE

We guarantee Hitachi Power Tools in accordance with statutory/country specific regulation. This guarantee does not cover defects or damage due to misuse, abuse, or normal wear and tear. In case of complaint, please send the Power Tool, undismantled, with the GUARANTEE CERTIFICATE found at the end of this Handling instruction, to a Hitachi Authorized Service Center.

NOTE

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

Information concerning airborne noise and vibration

The measured values were determined according to EN60745 and declared in accordance with ISO 4871.

Measured A-weighted sound power level: 96 dB (A)
Measured A-weighted sound pressure level: 85 dB (A)
Uncertainty KpA: 3 dB (A).

Wear hearing protection.

Vibration total values (triax vector sum) determined according to EN60745.

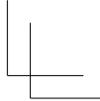
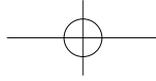
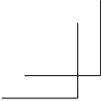
Impact drilling into concrete:
Vibration emission value **a_{h, ID}** = 11.1 m/s²
Uncertainty K = 1.5 m/s²

The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another.

It may also be used in a preliminary assessment of exposure.

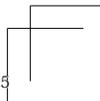
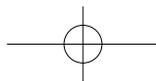
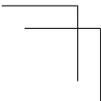
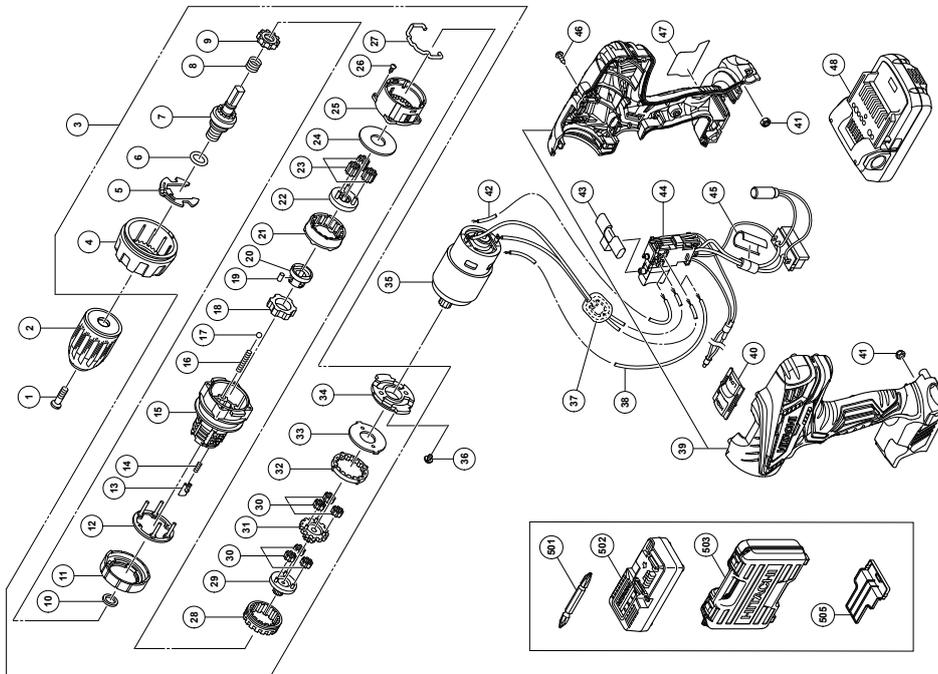
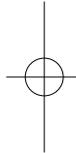
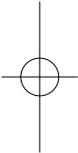
WARNING

- The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used.
- Identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).



Item No.	Part Name	QTY
31	PINION (B)	1
32	FIRST RING GEAR	1
33	WASHER (B)	1
34	MOTOR SPACER	1
35	MOTOR DC 18V	1
36	MACHINE SCREW (W/ SPWASHER) M4X6	2
37	INTERNAL WIRE FERRITE SET	1
38	INTERNAL WIRE (BLACK) 130L	1
39	HOUSING (A), (B) SET	1
40	SHIFT KNOB	1
41	LOCK NUT M4	2
42	INTERNAL WIRE (RED) 140L	1
43	PUSHING BUTTON	1
44	SWITCH TERMINAL SET	1
45	SUPPORT(D)	1
46	TAPPING SCREW (W/FLANGE) D3X16	9
47	NAME PLATE	1
48	BATTERY (BSL1815 / BSL1825) (INCLUD.504)	2
501	+ DRIVER BIT NO.2 65L	1
502	CHARGER (MODEL UC18YKSL)	1
503	CASE	1
505	BATTERY COVER	1

Item No.	Part Name	QTY
1	SPECIAL SCREW (LEFT HAND) M6X23	1
2	DRILL CHUCK 13VLRV-N (W/O CHUCK WRENCH)	1
3	GEAR BOX ASS'Y (INCLUD.4-34)	1
4	CLUTCH DIAL	1
5	CLICK SPRING	1
6	O-RING	1
7	SPINDLE	1
8	SPRING (C)	1
9	RATCHET (B)	1
10	WASHER (A)	1
11	NUT	1
12	WASHER	1
13	SLIP BLOCK	2
14	STOPPER SPRING	2
15	FRONT CASE	1
16	SPRING (A)	4
17	STEEL BALL D5	4
18	LOCK RING	1
19	NEEDLE ROLLER SET	1
20	SLEEVE	1
21	RING GEAR	1
22	CARRIER	1
23	PLANET GEAR (C) SET	1
24	WASHER (A)	1
25	REAR CASE	1
26	SCREW SET D3X12	1
27	SHIFT ARM	1
28	SLIDE RING GEAR	1
29	PINION (C)	1
30	PLANET GEAR (A) SET	1



<p>English</p> <p><u>GUARANTEE CERTIFICATE</u></p> <p>① Model No. ② Serial No. ③ Date of Purchase ④ Customer Name and Address ⑤ Dealer Name and Address (Please stamp dealer name and address)</p>	<p>Nederlands</p> <p><u>GARANTIEBEWIJS</u></p> <p>① Modelnummer ② Serienummer ③ Datum van aankoop ④ Naam en adres van de gebruiker ⑤ Naam en adres van de handelaar (Stempel a.u.b. naam en adres vande de handelaar)</p>
<p>Deutsch</p> <p><u>GARANTIESCHEIN</u></p> <p>① Modell-Nr. ② Serien-Nr. ③ Kaufdatum ④ Name und Anschrift des Kunden ⑤ Name und Anschrift des Händlers (Bitte mit Namen und Anschrift des Handlers abstempeln)</p>	<p>Español</p> <p><u>CERTIFICADO DE GARANTÍA</u></p> <p>① Número de modelo ② Número de serie ③ Fecha de adquisición ④ Nombre y dirección del cliente ⑤ Nombre y dirección del distribuidor (Se ruega poner el sello del distribuidor con su nombre y dirección)</p>
<p>Français</p> <p><u>CERTIFICAT DE GARANTIE</u></p> <p>① No. de modèle ② No de série ③ Date d'achat ④ Nom et adresse du client ⑤ Nom et adresse du revendeur (Cachet portant le nom et l'adresse du revendeur)</p>	<p>Português</p> <p><u>CERTIFICADO DE GARANTIA</u></p> <p>① Número do modelo ② Número do série ③ Data de compra ④ Nome e morada do cliente ⑤ Nome e morada do distribuidor (Por favor, carimbe o nome e morada do distribuidor)</p>
<p>Italiano</p> <p><u>CERTIFICATO DI GARANZIA</u></p> <p>① Modello ② N° di serie ③ Data di acquisto ④ Nome e indirizzo dell'acquirente ⑤ Nome e indirizzo del rivenditore (Si prega di apporre il timbro con questi dati)</p>	

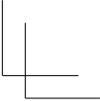
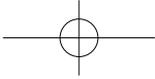
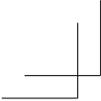


HITACHI

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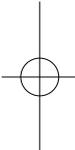
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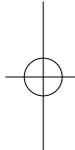
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Object of declaration: Hitachi Cordless Combi Drill DV18DGL

EC DECLARATION OF CONFORMITY

We declare under our sole responsibility that this product is in conformity with standards or standardization documents EN60745-1, EN60745-2-1, EN60745-2-2, EN60335-1, EN60335-2-29, EN55014-1, EN55014-2 and EN61000 in accordance with Directives 2004/108/EC, 2006/95/EC and 2006/42/EC. This product also conforms to RoHS Directive 2011/65/EU.

The European Standards Manager at Hitachi Koki Europe Ltd. is authorized to compile the technical file.

This declaration is applicable to the product affixed CE marking.

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28. 2. 2014



John de Loughry

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28. 2. 2014

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