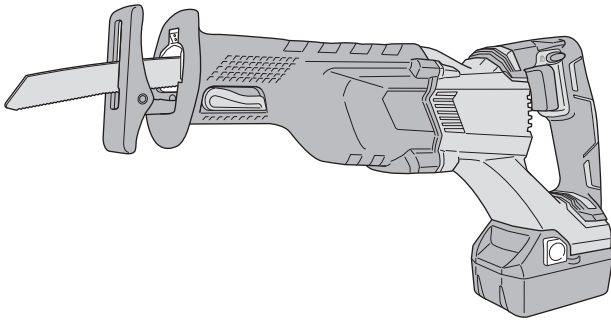


HIKOKI

CR 18DBL



Handling instructions

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 tool's operation.**

If damaged, have the power tool repaired before use.

- 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 RECIPROCATING SAW SAFETY WARNINGS

1. **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring.**

Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

ADDITIONAL SAFETY WARNINGS

1. Preparing and checking the work environment. Make sure that the work site meets all the conditions laid forth in the precautions.
2. Do not allow foreign matter to enter the hole for connecting the rechargeable battery.
3. Never disassemble the rechargeable battery and charger.
4. Never short-circuit the rechargeable battery. Shortcircuiting the battery will cause a great electric current and overheat. It results in burn or damage to the battery.
5. Do not dispose of the battery in fire. If the battery is burnt, it may explode.
6. 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.
7. 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.
8. When using this unit continuously, the unit may overheat, leading to damage in the motor and switch. Therefore, whenever the housing becomes hot, give the saw a break for a while.
9. If the machine is used continuously at low speed, an extra load is applied to the motor which can result in motor seizure. Always operate the power tool so that the blade is not caught by the material during operation. Always adjust the blade speed to enable smooth cutting.

10. Always hold the body handle and front cover of the power tool firmly. Otherwise the counterforce produced may result in inaccurate and even dangerous operation.
11. Mounting and dismantling the blade
 - Pull the back of the saw blade two or three times by hand and check that the blade is securely mounted. When pulling the blade, you will know it is properly mounted if it clicks and the lever moves slightly. (Fig. 7)
 - When pulling the saw blade, be absolutely sure to pull it from the back. Pulling other parts of the blade will result in an injury.
 - Never touch the saw blade immediately after use. The metal is hot and can easily burn your skin.
 - If the broken saw blade is hidden inside the small slit, hook the broken blade using a tip of another saw blade and take it out. (Fig. 8)
 - After use, blow away sawdust, earth, sand, moisture, etc., with air or brush them away with a brush, etc., to ensure that the blade mount can function smoothly.
 - Do not use any saw blade with a worn-out blade hole. Otherwise, the saw blade can come off, resulting in personal injury.
12. Make sure that the battery is installed firmly. If it is at all loose it could come off and cause an accident.
13. Do not fix and secure the switch lock. Besides, keep your finger off the switch trigger when the tool is being carried around. Otherwise, the main body switch can be inadvertently turned ON, resulting in unexpected accidents.
14. Be careful not to let sawdust, earth, moisture, etc., enter the inside of the machine through the plunger section during operation. If sawdust and the like accumulate in the plunger section, always clean it before use.
15. Do not remove the front cover which will cause in an injury.
 - Be sure to hold the body from the top of the front cover.
16. During use, press the base firmly against the workpiece.
17. Select a saw blade of the most appropriate length. Ideally, the length protruding from the base of the saw blade after subtracting the stroke quantity should be larger than the material.
 - If you cut a large pipe, large block of wood, etc., that exceeds the cutting capacity of a blade; there is a risk that the blade may contact with the inner wall of the pipe, wood, etc., resulting in damage. (Fig. 10)
18. Never apply any unreasonable force to the saw blade when cutting. Doing so can easily break the blade.
19. The motor can be locked sometimes, depending on the combination of the material to be cut and the blade. Whenever the motor gets locked, switch it off immediately.
20. Use clamps or another practical way to secure and support the workpiece to a stable platform. (Fig. 11)
 - Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
21. When cutting metallic materials, use an appropriate cutting fluid (spindle oil, soapy water, etc.) to prolong the blade's service life.
22. Delay the feed speed when cutting the material into small circular arcs. An unreasonably fast feed may break the blade.
23. Plunge cutting
 - Avoid plunge cutting for metallic materials. This can easily damage the blade.
 - Never pull the switch trigger while the tip of the saw blade tip is pressed against the material. If you do so, the blade can easily be damaged when it collides with the material.
 - Make absolutely sure that you cut slowly while holding the body firmly. If you apply any unreasonable force to the saw blade during the cutting operation, the blade can easily be damaged.

24. Keep the light ON during cutting operation only. If it is lit ON in other cases, the main body switch can be inadvertently turned ON, resulting in unexpected accidents.
25. 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.
26. Never touch moving parts.
Never place your hands, fingers or other body parts near the tool's moving parts.
27. Never operate without all guards in place.
Never operate this tool without all guards or safety features in place and in proper working order. If maintenance or servicing requires the removal of a guard or safety feature, be sure to replace the guard or safety feature before resuming operation of the tool.
28. NEVER leave tool running unattended. Turn power off. Don't leave tool until it comes to a complete stop.
29. The power tool is equipped with a temperature protection circuit to protect the motor. Continuous work may cause the temperature of the unit to rise, activating the temperature protection circuit and automatically stopping operation. If this happens, allow the power tool to cool before resuming use.
30. Do not give a strong shock to the switch panel or break it. It may lead to a trouble.
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.

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.

1. When the battery power remaining runs out, the motor stops.
In such a case, charge it up immediately.
2. 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.
3. 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.

1. 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.

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.

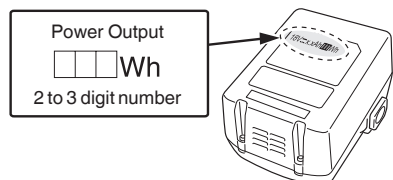
REGARDING LITHIUM-ION BATTERY TRANSPORTATION

When transporting a lithium-ion battery, please observe the following precautions.

WARNING

Notify the transporting company that a package contains a lithium-ion battery, inform the company of its power output and follow the instructions of the transportation company when arranging transport.

- Lithium-ion batteries that exceed a power output of 100Wh are considered to be in the freight classification of Dangerous Goods and will require special application procedures.
- For transportation abroad, you must comply with international law and the rules and regulations of the destination country.



USB DEVICE CONNECTION PRECAUTIONS (UC18YSL3)

When an unexpected problem occurs, the data in a USB device connected to this product may be corrupted or lost. Always make sure to back up any data contained in the USB device prior to use with this product.

Please be aware that our company accepts absolutely no responsibility for any data stored in a USB device that is corrupted or lost, nor for any damage that may occur to a connected device.

WARNING

- Prior to use, check the connecting USB cable for any defect or damage.
Using a defective or damaged USB cable can cause smoke emission or ignition.
- When the product is not being used, cover the USB port with the rubber cover.
Buildup of dust etc. in the USB port can cause smoke emission or ignition.

NOTE

- There may be an occasional pause during USB recharging.
- When a USB device is not being charged, remove the USB device from the charger.
Failure to do so may not only reduce the battery life of a USB device, but may also result in unexpected accidents.
- It may not be possible to charge some USB devices, depending on the type of device.






















NAMES OF PARTS (Fig. 1 – Fig. 17)

①	Handle
②	Trigger switch
③	Lock-off button
④	Housing
⑤	Front cover
⑥	Lever
⑦	Blade
⑧	Base
⑨	LED light
⑩	Base lever
⑪	Battery
⑫	Blade hole
⑬	Slit of plunger
⑭	Another blade
⑮	Stroke
⑯	Hook

SYMBOLS

WARNING

The following show symbols used for the machine. Be sure that you understand their meaning before use.

	CR18DBL: Cordless Reciprocating Saw
	To reduce the risk of injury, user must read instruction manual.
	Direct current
	Weight
	Switching ON
	Switching OFF
	Disconnect the battery
	Lock
	Unlock
	Remaining battery indicator switch
	The battery remaining power is nearly empty. Recharge the battery soonest possible
	The battery remaining power is a half.
	The battery remaining power is enough.
	Mode selector switch
	Mode indicator lamp
	Low mode
	Medium mode
	High mode
	Auto mode
	Warning
	Prohibited action

STANDARD ACCESSORIES

In addition to the main unit (1 unit), the package contains the accessories listed on page 13.

Standard accessories are subject to change without notice.

APPLICATIONS

- Cutting metal and stainless steel pipe.
- Cutting various lumber.
- Cutting mild steel, aluminum and copper plate.
- Cutting synthetic resins, such as phenol resin and vinyl chloride.

SPECIFICATIONS

Model		CR18DBL
Voltage		18 V
No-Load Speed		0 – 2500 min ⁻¹
Stroke		32 mm
Capacity	Mild Steel Pipe	O.D. 130 mm
	Vinyl Chloride Pipe	O.D. 130 mm
	Wood	120 mm
	Mild Steel Plate	19 mm
Weight		3.4 kg (BSL1850) 3.4 kg (BSL1860)

NOTE

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

CHARGING

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

1. Connect to the power source. (Fig. 3 on page 14)

When charging the battery from an AC power source

- Connect the charger's power cord to the receptacle.

<UC18YFSL>

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

<UC18YSL3>

When connecting the plug of the charger to a receptacle, the charge indicator lamp will blink in red (At 1-second intervals).

CAUTION

Do not use the electrical cord if damaged. Have it repaired immediately.

2. Insert the battery into the charger. (Fig. 3 on page 14)

Firmly insert the battery into the charger.

3. Charging

<UC18YFSL>

When inserting a battery in the charger, the pilot lamp will light up continuously in red.

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

- Pilot lamp indication

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

<UC18YSL3>






When inserting a battery in the charger, the charge indicator lamp will blink in blue.

When the battery becomes fully recharged, the charge indicator lamp will light up in green. (See **Table 1-b**)

- Charge indicator lamp indication

The indications of the charge indicator lamp will be as shown in **Table 1-b**, according to the condition of the charger or the rechargeable battery.

Table 1-a

		Indications of the pilot lamp		
The pilot lamp lights or blinks.	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	Flickers (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
	Overheat standby	Blinks (red)	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)

NOTE: When standby for cooling battery, UC18YFSL cools the overheated battery by cooling fan.

Table 1-b

Indications of the charge indicator lamp				
Charge indicator lamp (red / blue / green / purple)	Before charging	Blinks (red)	Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds)	Plugged into power source
	While charging	Blinks (blue)	Lights for 0.5 seconds. Does not light for 1 second. (off for 1 second)	Battery capacity at less than 50%
		Blinks (blue)	Lights for 1 second. Does not light for 0.5 seconds. (off for 0.5 seconds)	Battery capacity at less than 80%
		Lights (blue)	Lights continuously	Battery capacity at more than 80%
	Charging complete	Lights (green)	Lights continuously (Continuous buzzer sound: about 6 seconds)	
	Overheat standby	Blinks (red)	Lights for 0.3 seconds. Does not light for 0.3 seconds. (off for 0.3 seconds)	Battery overheated. Unable to charge. (Charging will commence when battery cools)
	Charging impossible	Flickers (purple)	Lights for 0.1 seconds. Does not light for 0.1 seconds. (Intermittent buzzer sound: about 2 seconds)	Malfunction in the battery or the charger

NOTE: When standby for cooling battery, UC18YSL3 cools the overheated battery by cooling fan.

- Regarding the temperatures and charging time of the battery. The temperatures and charging time will become as shown in **Table 2**

Table 2

Battery		Charger	UC18YFSL	UC18YSL3
		Charging voltage	V	14.4V - 18V
Weight	kg	0.5	0.6	
Temperatures at which the battery can be recharged			0°C - 50°C	-10°C - 50°C
Charging time for battery capacity, approx. (At 20°C)				
1.3Ah	Min.	20	15	
1.5Ah	Min.	22	15	
2.0Ah	Min.	30	20	
2.5Ah	Min.	35	25	
3.0Ah	Min.	45	20	
4.0Ah	Min.	60	26	
5.0Ah	Min.	75	32	
6.0Ah	Min.	90	38	
Number of battery cells			4 - 10	

NOTE

The recharging time may vary according to the ambient temperature and power source voltage.

CAUTION

When the battery charger has been continuously used, the battery charger will be heated, thus constituting the cause of the failures. Once the charging has been completed, give 15 minutes rest until the next charging.

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.

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 UC18YFSL charger lights for 1 second, does not light for 0.5 seconds (off for 0.5 seconds), or the charge indicator lamp of UC18YSL3 charger lights for 0.3 seconds, does not light for 0.3 seconds (off for 0.3 seconds). In such a case, first let the battery cool, then start charging.
- When the pilot lamp or charge indicator lamp flickers in red (at 0.2-seconds 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 micro computer takes about 3 seconds to confirm that the battery being charged with charger 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.

Operating speed

Mode	Status	Operating speed
Transmission Mode	Low	0 – 1600 min ⁻¹
	Medium	0 – 2300 min ⁻¹
	High	0 – 2500 min ⁻¹
Auto Mode	A	0 – 1600 min ⁻¹ 2500 min ⁻¹ (When the load becomes heavier)

CAUTION

Do not cut stainless steel in Auto Mode.

*2 Dismounting the blade

CAUTION

Never touch the saw blade immediately after use. The metal is hot and can easily burn your skin.

- (1) After pivoting the lever, point the blade downward. The blade should fall out on its own. If the blade fails to fall out, pull it out by hand.

WHEN THE BLADE IS BROKEN

Even when the saw blade is broken and remains inside the small slit of the blade holder, it should fall out when the lever is pivoted and the blade is pointed downward. If the blade fails to fall out on its own, take it out by using the procedures described below.

- (1) If a part of the broken saw blade is sticking out of the small slit of the blade holder, pull out the protruding part and take the blade out.
- (2) If the broken saw blade is hidden inside the small slit, hook the broken blade using a tip of another saw blade and take it out. (**Fig. 8**)

*3 How to use the Hook

The hook can be used to hang up the unit temporarily during operations (**Fig. 9**).

CAUTION

The hook should never be used to hang the unit on your person.

When using the hook, check to make sure that the main unit will not slip and fall, or become unstable by the wind, etc.

Never hang the unit from your belt or trousers as this could cause accidents.

MOUNTING AND OPERATION

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Charging a USB device and battery from a electrical outlet	14	17
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*1 Adjusting operating speed

CAUTION

Select mode while the trigger switch is released. Failure to do so could result in malfunction.

Once you install the battery and switch on the power, you can change modes with each press of the mode selector switch.

- Speed change mode allows the number of maximum strokes to be switched between 3 levels: low speed, medium speed and high speed.
With speed change mode, the set number of maximum strokes will be maintained even if there is a change in load.
- With auto mode, electricity consumption and noise can be suppressed by lowering the number of maximum strokes during no-load motor operation.
Auto mode automatically increases the number of revolutions when the load becomes heavier during operation. When the load becomes lighter, the number of revolutions is automatically reduced.

LED LIGHT WARNING SIGNALS (Fig. 17)

This product features functions that are designed to protect the tool itself as well as the battery. While the switch is pulled, if any of the safeguard functions are triggered during operation, the LED light will blink as described in **Table 3**. When any of the safeguard functions are triggered, immediately remove your finger from the switch and follow the instructions described under corrective action.

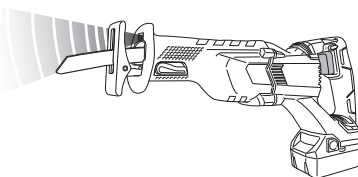




Fig. 17

Table 3

Safeguard Function	LED Light Display	Corrective Action
Overburden Protection	On 0.1 second/off 0.1 second 	Remove the cause of the overburdening.
Temperature Protection	On 0.5 second/off 0.5 second 	Allow the tool and battery to thoroughly cool.

SELECTION OF BLADES

To ensure maximum operating efficiency and results, it is very important to select the appropriate blade best suited to the type and thickness of the material to be cut.

The blade number is engraved in the vicinity of the mounting portion of each blade. Select appropriate blades by referring to **Table 4-5**.

Table 4: HCS blades

Blade No.	Uses	Thickness (mm)
No. 4	For cutting and roughing lumber	50 – 70
No. 5	For cutting and roughing lumber	Below 30
No. 95	For cutting stainless pipe less than 100 mm in diameter	Below 2.5
No. 96	For cutting stainless pipe less than 30 mm in diameter	Below 2.5

Table 5: BI-METAL blades

Blade No.	Uses	Thickness (mm)
No. 101 No. 103 No. 109 No. 141(S)	For cutting steel and stainless pipes less than 60 mm in outer diameter	2.5 – 6
No. 102 No. 104 No. 110 No. 142(S) No. 143(S)	For cutting steel and stainless pipes less than 100 mm in outer diameter	2.5 – 6
No. 107	For cutting steel and stainless pipes less than 60 mm in outer diameter	Below 3.5
No. 108	For cutting steel and stainless pipes less than 100 mm in outer diameter	Below 3.5
No. 121	For cutting and roughing lumber	100
No. 131	All purpose	100
No. 132	All purpose	100

Table 6: Selection of blades for other materials

Material to be cut	Material quality	Thickness (mm)	Blade No.
Iron plate	Mild steel plate	2.5 – 10	No. 101, 102, 103, 104, 109, 110, 131, 141(S), 142(S), 143(S)
		Below 3.5	No. 107, 108
Nonferrous metal	Aluminium, Copper and Brass	5 – 20	No. 101, 102, 103, 104, 109, 110, 131, 132, 141(S), 142(S), 143(S)
		Below 5	No. 107, 108
Synthetic resin	Phenol resin, Melamine resin, etc.	10 – 50	No. 101, 102, 103, 104, 131, 132, 141(S), 142(S), 143(S)
		5 – 30	No. 107, 108, 109, 110
	Vinyl chloride, Acrylic resin, etc.	10 – 60	No. 101, 102, 103, 104, 131, 132, 141(S), 142(S), 143(S)
		5 – 30	No. 107, 108, 109, 110

MAINTENANCE AND INSPECTION

CAUTION

Be sure to turned off the switch and remove the battery before maintenance and inspection.

1. Inspecting the blade

Continued use of a dull or damaged blade will result in reduced cutting efficiency and may cause overloading of the motor. Replace the blade with a new one as soon as excessive abrasion is noted.

2. Inspecting the mounting screws

Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.

3. Maintenance of the motor

The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

4. 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, for they melt plastics.

5. Storage

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

NOTE

Storing lithium-ion batteries.

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

Prolonged storage (3 months or more) 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.

CAUTION

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

Important notice on the batteries for the HiKOKI 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).

NOTE

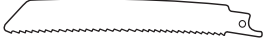




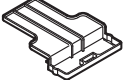
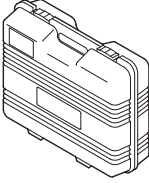
Due to HiKOKI's continuing program of research and development, the specifications herein are subject to change without prior notice.

TROUBLESHOOTING

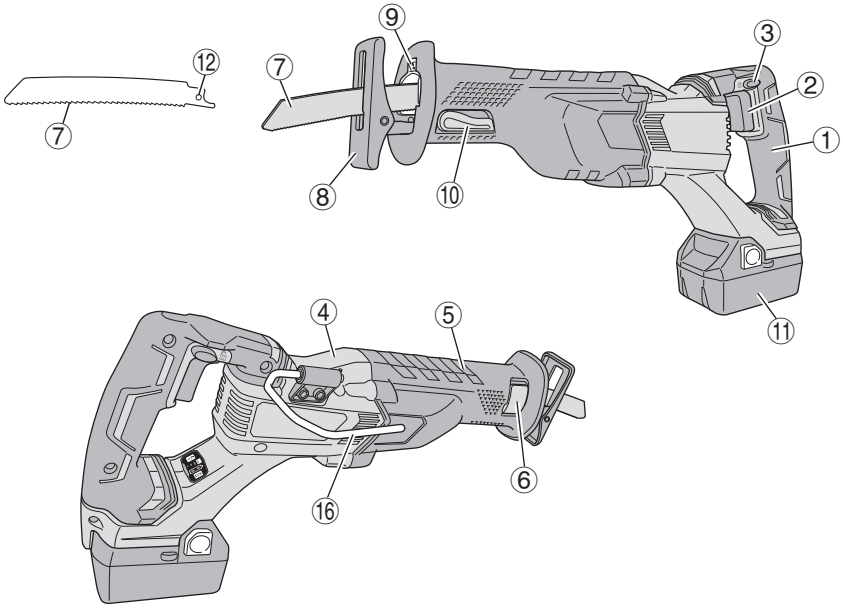
Use the inspections in the table below if the tool does not operate normally. If this does not remedy the problem, consult your dealer or the HIKOKI Authorized Service Center.

Symptom	Possible cause	Remedy
Tool doesn't run	No remaining battery power	Charge the battery.
Tool suddenly stopped	Tool was overburdened	Get rid of the problem causing the overburden. During operation, lighten the applied pressure.
	Battery or tool overheated	Allow the tool and battery to thoroughly cool.
	The trigger switch was held down for 5 minutes or more.	This is not a malfunction. The motor was automatically stopped to prevent failure of the tool.
Saw blade -can't be attached -fall off	The shape of the attachment portion doesn't match	Use the appropriate blade (See "Selecting accessories")
	The blade's attachment hole is worn	Replace with a new blade.
Switch can't be pulled	Lock-off button is pushed in	Release the Lock-off button.
An abnormal high-pitched noise occurs when the trigger switch is pulled.	The trigger switch is being pulled only slightly.	This is not a malfunction. It does not occur if the trigger switch is pulled more fully.
Blade wears out too quickly.	Number of strokes is too fast Mode is inappropriate	Switch the mode to a lower setting than the current one. (Switch to low speed mode when cutting stainless pipes) (See "Adjusting operating speed")
	Proper machine oil not used when cutting metallic materials	Use machine oil (turbine oil, etc.)
	Too much applied pressure during operation	During operation, lighten the applied pressure.
Unable to properly cut.	Blade is inappropriate for the quality and thickness of the material to be cut	Use the proper blade (See "Selecting accessories")
	Blade is too short for the length of the material to be cut	
	Mode is inappropriate for the quality and thickness of the material to be cut	Set the appropriate mode (See "Adjusting operating speed")
	Blade is worn, degraded or damaged	Replace with a new blade.
<UC18YFSL> The pilot lamp is rapidly flickers red, and battery charging doesn't begin.	The battery is not inserted all the way.	Insert the battery firmly.
	There is foreign matter in the battery terminal or where the battery is attached.	Remove the foreign matter.
<UC18YSL3> The charge indicator lamp is rapidly flickers purple, and battery charging doesn't begin.		
<UC18YFSL> The pilot lamp blinks red, and battery charging doesn't begin.	The battery is not inserted all the way.	Insert the battery firmly.
	The battery is overheated.	If left alone, the battery will automatically begin charging if its temperature decreases, but this may reduce battery life. It is recommended that the battery be cooled in a well-ventilated location away from direct sunlight before charging it.
<UC18YSL3> The charge indicator lamp blinks red, and battery charging doesn't begin.		
Battery usage time is short even though the battery is fully charged.	The battery's life is depleted.	Replace the battery with a new one.

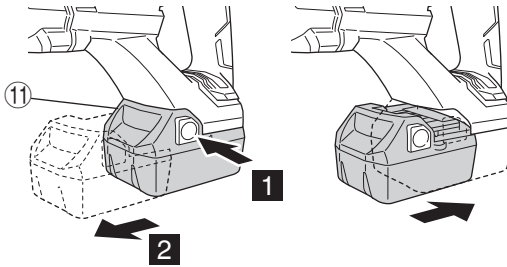
Symptom	Possible cause	Remedy
The battery takes a long time to charge.	The temperature of the battery, the charger, or the surrounding environment is extremely low.	Charge the battery indoors or in another warmer environment.
	The charger's vents are blocked, causing its internal components to overheat.	Avoid blocking the vents.
	The cooling fan is not running.	Contact a HiKOKI Authorized Service Center for repairs.
<UC18YSL3 only>		
Charging of a USB device pauses midway.	The charger was plugged into an electrical socket while the USB device was being charged using the battery as the power source.	This is not a malfunction. The charger pauses USB charging for about 5 seconds when it is differentiating between power sources.
	A battery was inserted into the charger while the USB device was being charged using a power socket as the power source.	
Charging of the USB device pauses midway when the battery and the USB device are being charged at the same time.	The battery has become fully charged.	This is not a malfunction. The charger pauses USB charging for about 5 seconds while it checks whether the battery has successfully completed charging.
Charging of the USB device doesn't start when the battery and the USB device are being charged at the same time.	The remaining battery capacity is extremely low.	This is not a malfunction. When the battery capacity reaches a certain level, USB charging automatically begins.

	CR18DBL	
		(NN)
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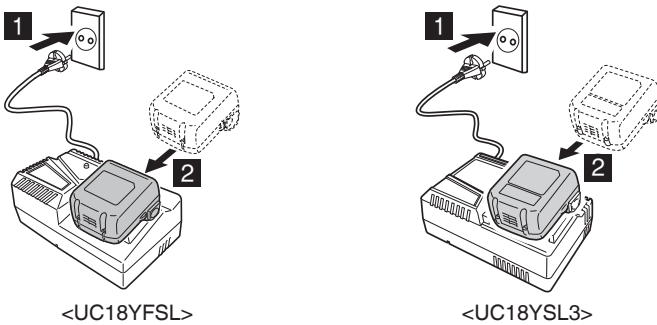
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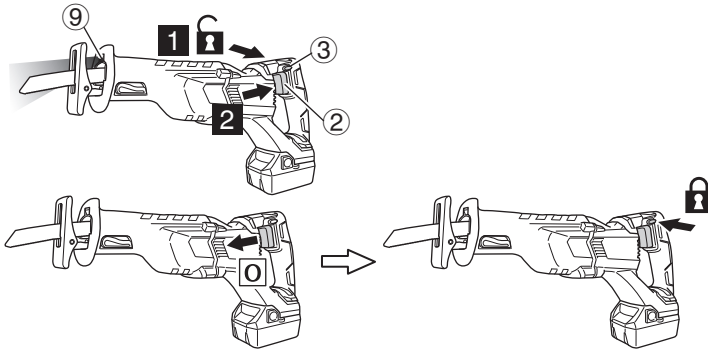


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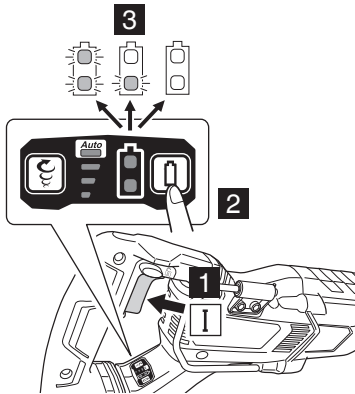


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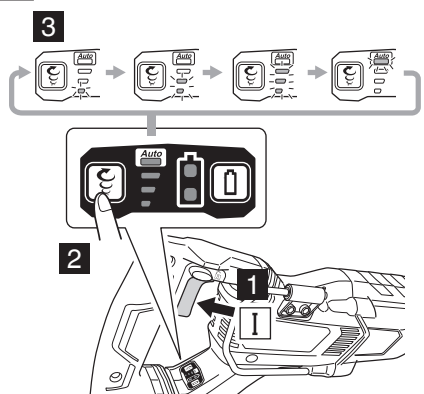
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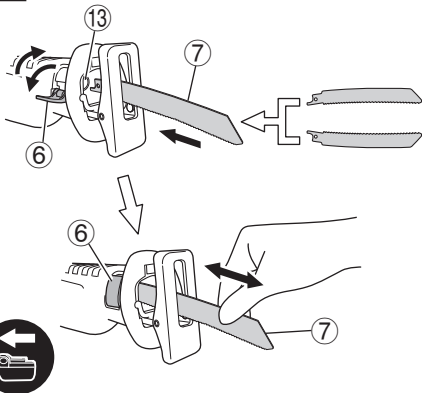
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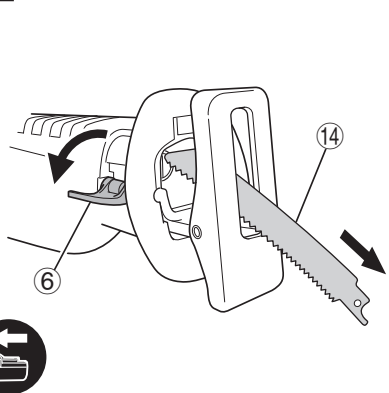
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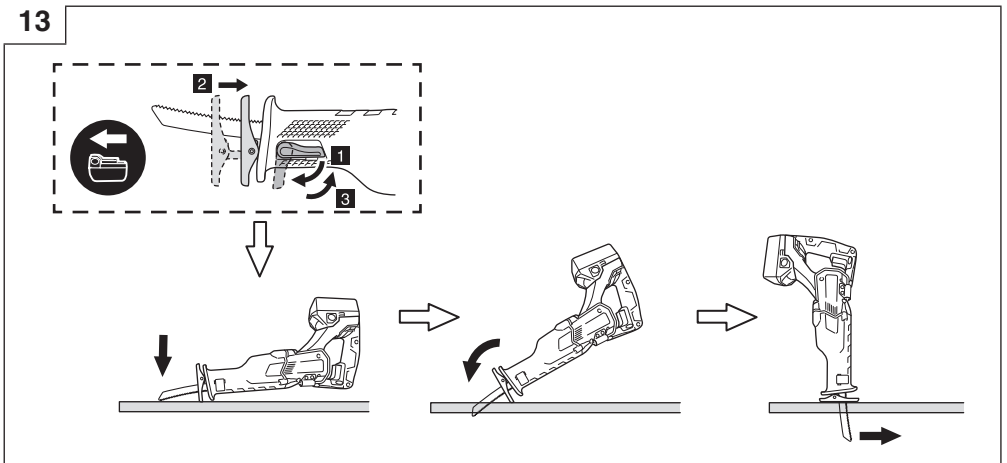
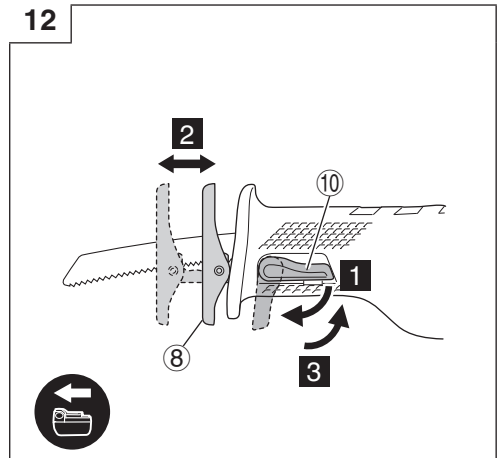
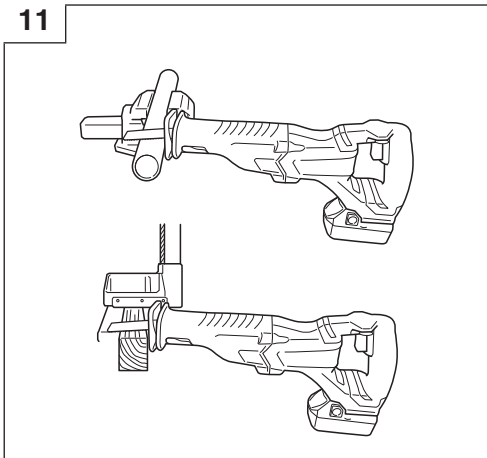
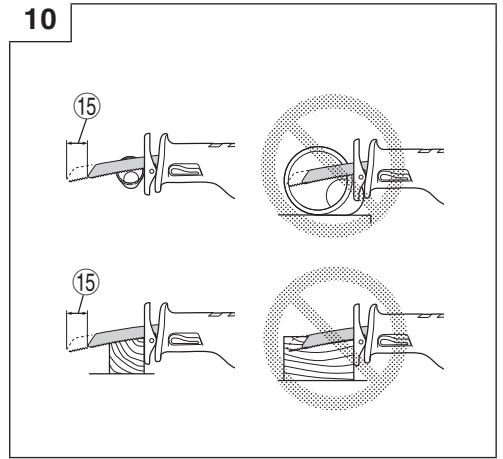
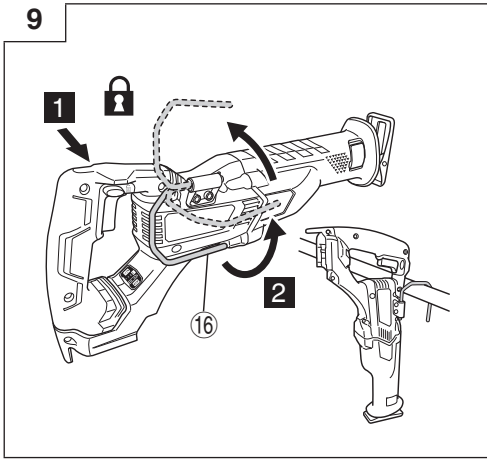


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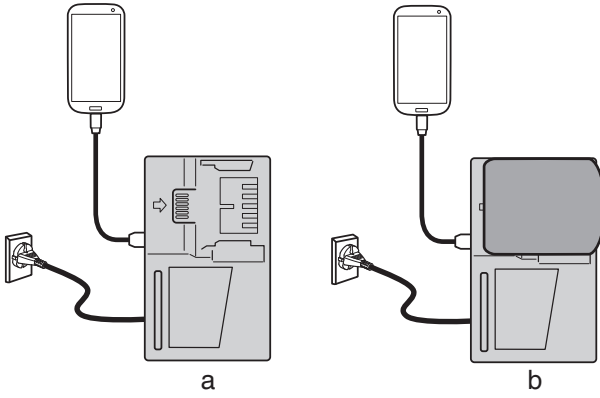


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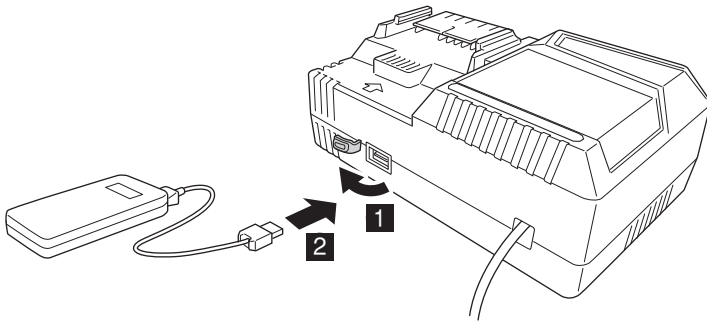




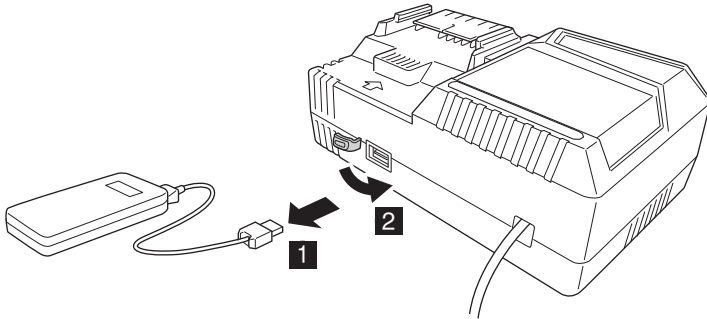
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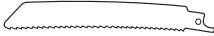


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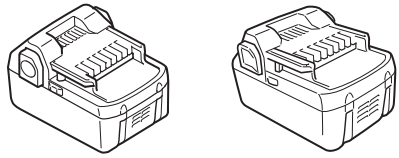


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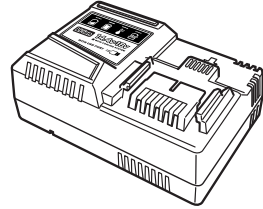




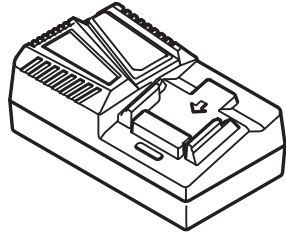
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No.107	318617
No.108	318618
No.109	324818
No.110	324819
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No.142(S)	370684
No.143(S)	370685



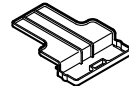
18V (Li-ion)



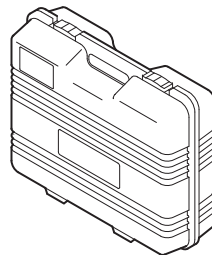
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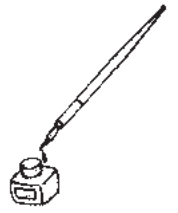
UC18YFSL (14.4V - 18V)



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