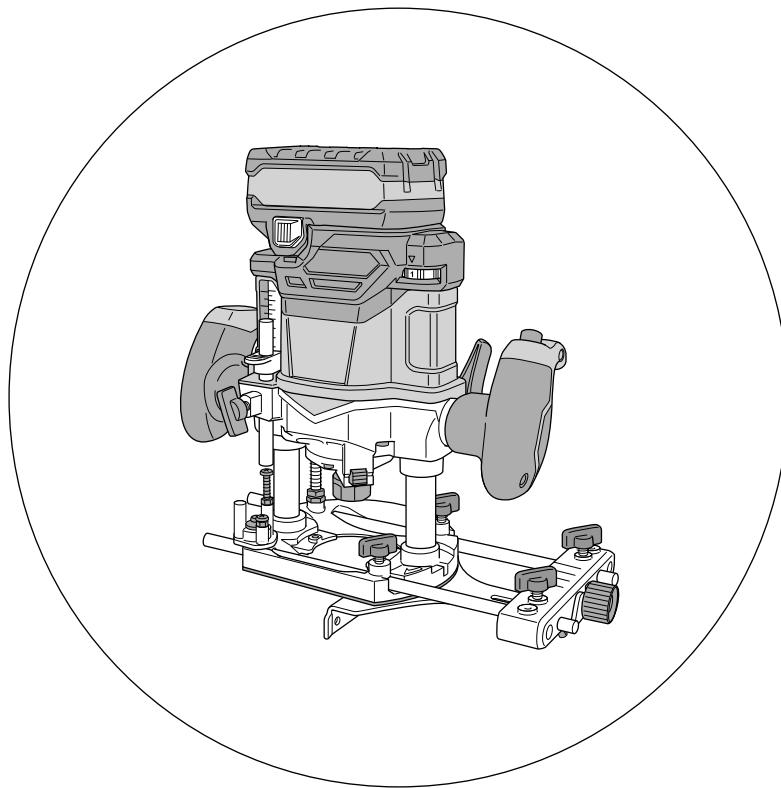
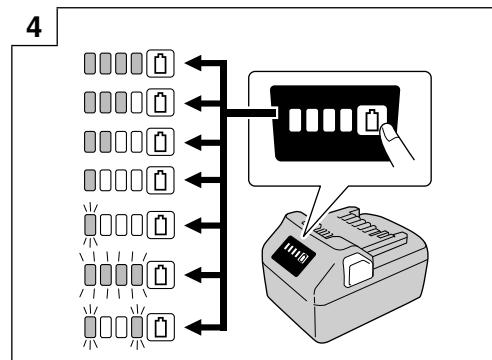
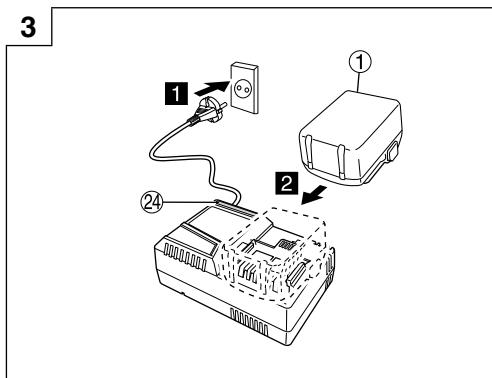
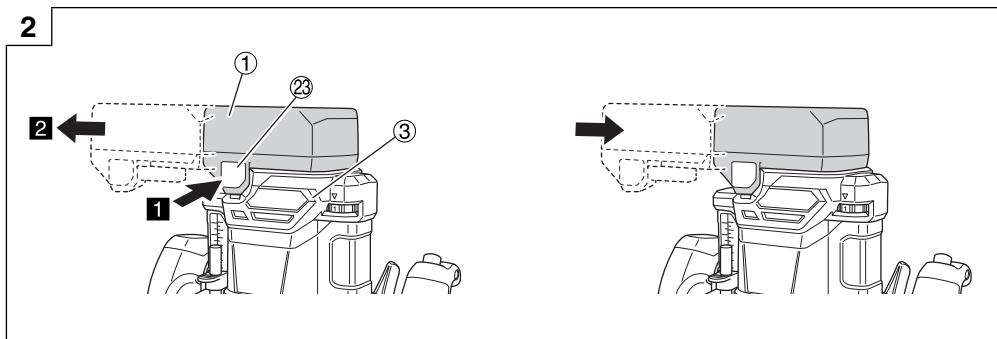
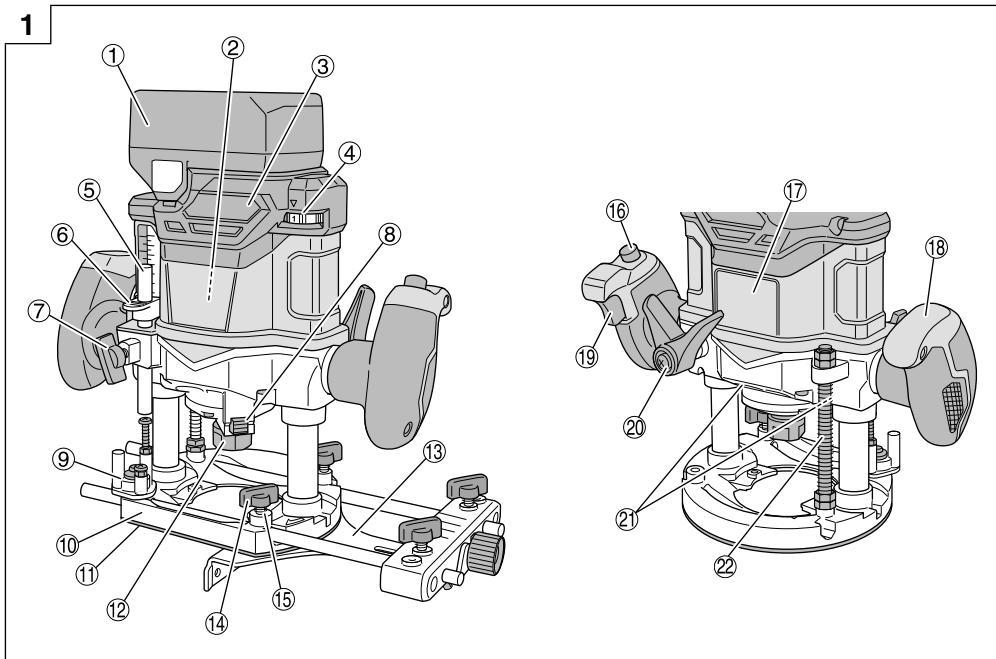


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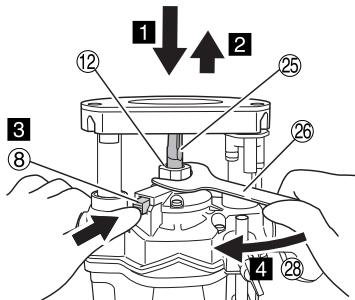


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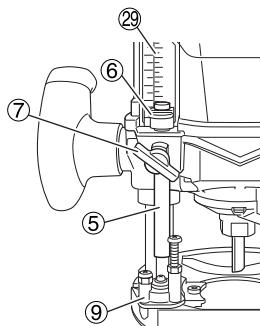
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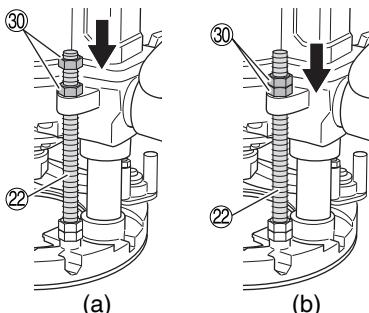
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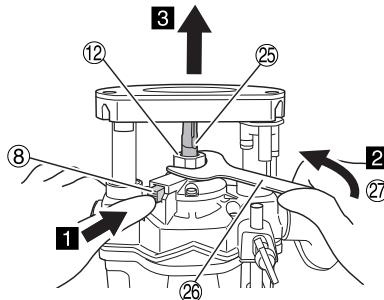
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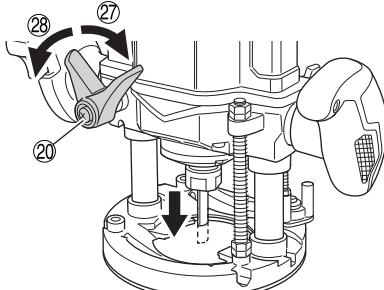
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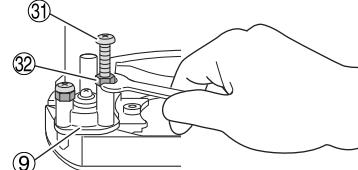
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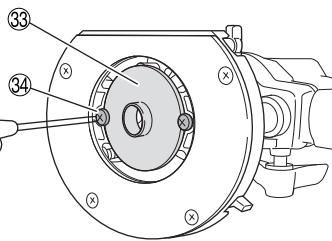
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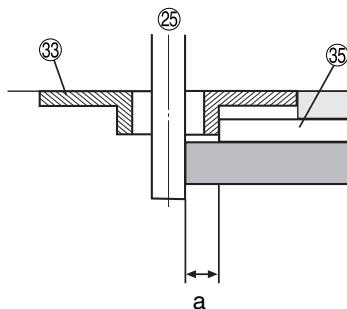
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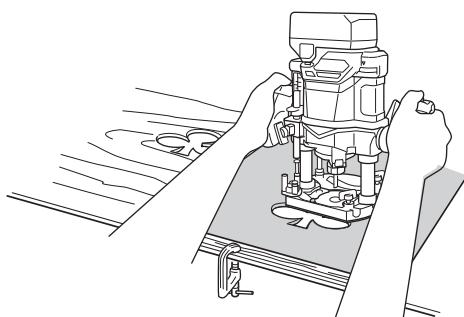
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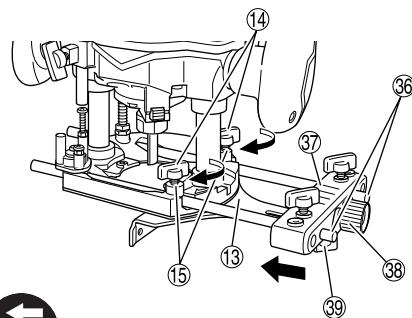
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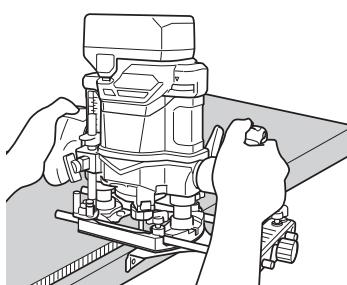
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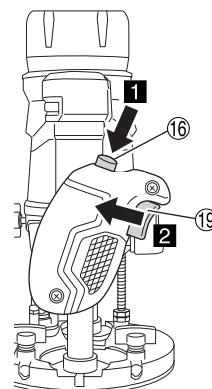
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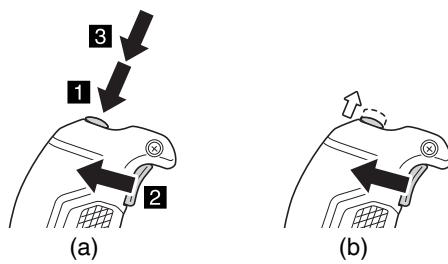
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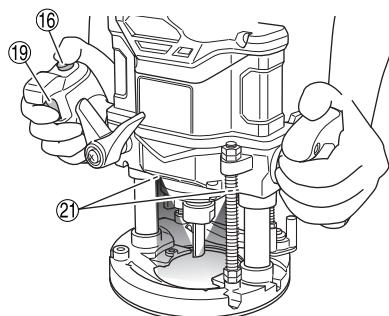
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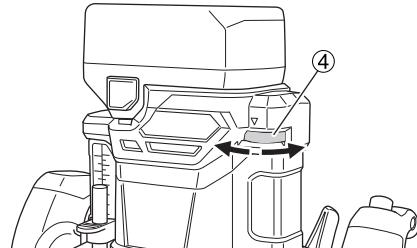
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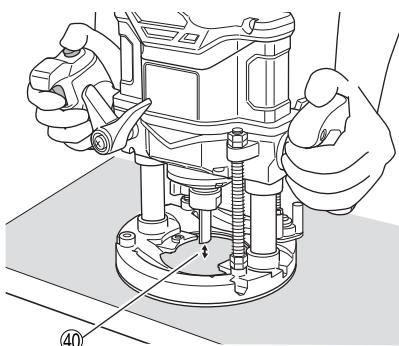


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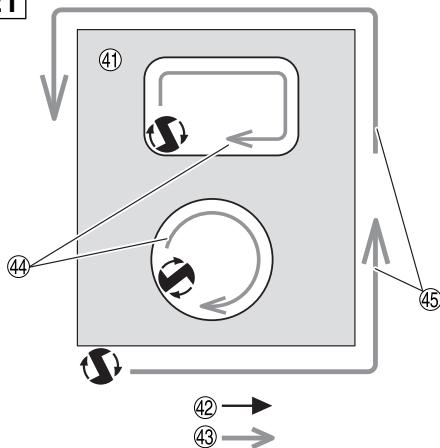


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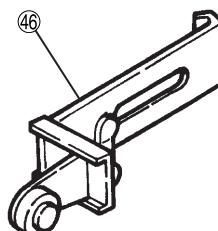
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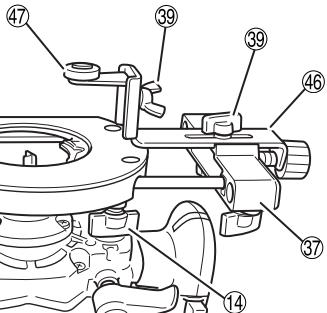
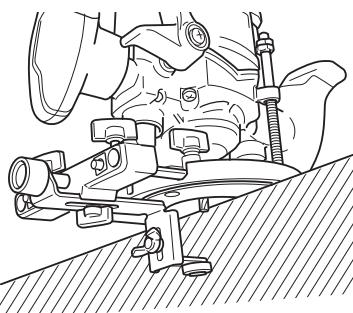
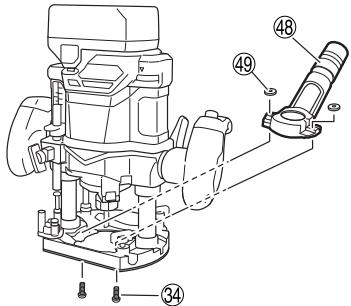
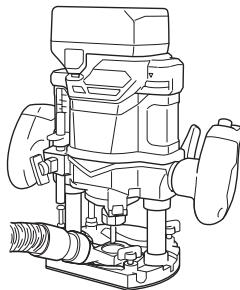


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23**24****25****26**

GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING

Read all safety warnings, instructions, illustrations and specifications provided with this power tool.

Failure to follow all instructions listed below 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 a dust mask, non-slip 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 and clothing 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.

- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.**
A careless action can cause severe injury within a fraction of a second.

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 remove the battery pack, if detachable, 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 and accessories. 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.**
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.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.**
Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

English

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.

e) Do not use a battery pack or tool that is damaged or modified.

Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.

f) Do not expose a battery pack or tool to fire or excessive temperature.

Exposure to fire or temperature above 130°C may cause explosion.

g) Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.

Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

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.

b) Never service damaged battery packs.

Service of battery packs should only be performed by the manufacturer or authorized service providers.

PRECAUTION

Keep children and infirm persons away.

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

CORDLESS ROUTER SAFETY WARNINGS

1. Hold the 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.

2. Use clamps or another practical way to secure and support the workpiece to a stable platform.

Holding the work by your hand or against the body leaves it unstable and may lead to loss of control.

3. Single-hand operation is unstable and dangerous. Ensure that both handles are gripped firmly during operation.

4. The bit is very hot immediately after operation. Avoid bare hand contact with the bit for any reason.

5. Use bits of the correct shank diameter suitable for the speed of the tool.

ADDITIONAL SAFETY WARNINGS

1. 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.
2. Do not use the charger continuously. When one charging is completed, leave the charger for about 15 minutes before the next charging of battery.
3. Do not allow foreign matter to enter the hole for connecting the rechargeable battery.
4. Never disassemble the rechargeable battery and charger.
5. Never short-circuit the rechargeable battery. Shortcircuiting 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. 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.
8. Do not insert object into the air ventilation slots of the charger. Inserting metal objects or inflammables into the charger air ventilation slots will result in electrical shock hazard or damaged charger.
9. 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 tool a break for a while.
10. 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.
11. Preparing and checking the work environment. Make sure that the work site meets all the conditions laid forth in the precautions.
12. Make sure that the battery is installed firmly. If it is at all loose it could come off and cause an accident.
13. Handle the bits very carefully.
14. Check the bit carefully for cracks or damage before operation. Replace cracked or damaged bit immediately.
15. Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.
16. Hold the tool firmly with both hands.
17. Make sure the bit is not contacting the workpiece before the switch is turned on.
18. Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate improperly installed bit.
19. Be careful of the bit rotating direction and the feed direction.
20. Always switch off and wait for the bit to come to a complete stop before removing the tool from workpiece.
21. After changing the bits or making any adjustments, make sure the collet chuck and any other adjustment devices are securely tightened. Loose adjustment device can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.
22. 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.
23. Never touch moving parts. Never place your hands, fingers or other body parts near the tool's moving parts.
24. NEVER leave tool running unattended. Turn power off. Don't leave tool until it comes to a complete stop.

25. 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.
26. Do not give a strong shock to the switch panel or break it. It may lead to a trouble.
27. Do not use the product if the tool or the battery terminals (battery mount) are deformed. Installing the battery could cause a short circuit that could result in smoke emission or ignition.
28. Keep the tool's terminals (battery mount) free of swarf and dust.
- Prior to use, make sure that swarf and dust have not collected in the area of the terminals.
- During use, try to avoid swarf or dust on the tool from falling on the battery.
- When suspending operation or after use, do not leave the tool in an area where it may be exposed to falling swarf or dust. Doing so could cause a short circuit that could result in smoke emission or ignition.
29. Always use the tool and battery at temperatures between -5°C and 40°C.

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.
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.
12. Do not immerse the battery or allow any fluids to flow inside. Conductive liquid ingress, such as water, can cause damage resulting in fire or explosion. Store your battery in a cool, dry place, away from combustible and flammable items. Corrosive gas atmospheres must be avoided.

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.

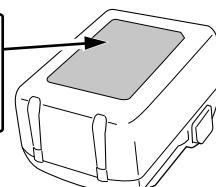
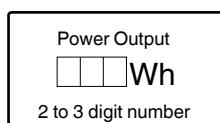
REGARDING LITHIUM-ION BATTERY TRANSPORTATION

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 100 Wh 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.
- If the BSL36B18X is installed in the power tool, the power output will exceed 100 Wh and the unit will be classified as Dangerous Goods for freight classification.



English

NAMES OF PARTS (Fig. 1–Fig. 26)

①	Battery	⑯	23 mm Wrench
②	Motor	⑯	Loosen
③	Head cover	⑯	Tighten
④	Dial	⑯	Scale
⑤	Stopper pole	⑯	Nuts
⑥	Depth indicator	⑯	Cut depth setting screw
⑦	Wing bolt	⑯	Nut
⑧	Lock pin	⑯	Template guide
⑨	Stopper block	⑯	Screw
⑩	Base	⑯	Template
⑪	Sub base	⑯	Guide bar
⑫	Collet chuck	⑯	Bar holder
⑬	Straight guide	⑯	Feed screw
⑭	Wing bolt (A)	⑯	Wing bolt (B)
⑮	Lock spring	⑯	Separate
⑯	ON/OFF Lock button	⑯	Work piece
⑰	Name plate	⑯	Rotation of bit
⑱	Handle	⑯	Router feed
⑲	Switch trigger	⑯	Inner peripheral cutting (Clockwise)
⑳	Lock lever	⑯	Outer peripheral cutting (Counterclockwise)
㉑	LED light	⑯	Trimmer guide
㉒	Threaded column	⑯	Roller
㉓	Latch	⑯	Dust collector
㉔	Charge indicator lamp	⑯	Knob nut
㉕	Bit		

	Always wear hearing protection.
—	Direct current
V	Rated voltage
n_0	No-load speed
	Disconnect the battery
	Switching ON
	Switching OFF
	Switch locks to the "ON" position
	Warning
	Prohibited action

Battery

	Lights ; The battery remaining power is over 75%
	Lights ; The battery remaining power is 50%–75%.
	Lights ; The battery remaining power is 25%–50%.
	Lights ; The battery remaining power is less than 25%
	Blinks ; The battery remaining power is nearly empty. Recharge the battery soonest possible.
	Blinks ; Output suspended due to high temperature. Remove the battery from the tool and allow it to fully cool down.
	Blinks ; Output suspended due to failure or malfunction. The problem may be the battery so please contact your dealer.

SYMBOLS

WARNING

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

	M3612DA: Cordless Router
	To reduce the risk of injury, user must read instruction manual.
	Always wear eye protection.

STANDARD ACCESSORIES

In addition to the main unit (1 unit), the package contains the accessories listed on page 26.

Standard accessories are subject to change without notice.

APPLICATIONS

- Woodworking jobs centered on grooving and chamfering.

SPECIFICATIONS

1. Power tool

Model	M3612DA
Voltage	36 V
No-Load Speed	11000–25000 /min
Collet Chuck Capacity	12 mm, 8 mm, 6 mm or 1/2", 1/4"
Main Body Stroke	50 mm
Battery available for this tool*	Multi volt battery
Weight	3.8 kg (BSL36A18X) 4.1 kg (BSL36B18X)

* Existing batteries (BSL3660/3620/3626, BSL18xx series, etc.) cannot be used with this tool.

NOTE

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

2. Battery

Model	BSL36A18X	BSL36B18X
Voltage	36 V / 18 V (Automatic Switching*)	
Battery capacity	2.5 Ah / 5.0 Ah (Automatic Switching*)	4.0 Ah / 8.0 Ah
Available cordless products**	Multi volt series, 18 V product	
Available charger	Sliding charger for lithium ion batteries	

* The tool itself will automatically switch over.

** Please see our general catalogue for details.

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 charge indicator 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 (on page 2).

3. **Charging**

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)

(1) Charge indicator lamp indication

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

Table 1

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. (off for 0.1 seconds) █ █ █ █ █ █ █ █ █ █ █	Malfunction in the battery or the charger

English

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

Table 2

Charger		UC18YSL3				
Battery	Type of battery	Li-ion				
	Temperatures at which the battery can be recharged	0°C–50°C				
	Charging voltage V	14.4		18		
		BSL14xx series		BSL18xx series		Multi volt series
		(4 cells)		(5 cells)		(10 cells)
	Charging time, approx. (At 20°C) min	BSL1415S : 15	BSL1430 : 20	BSL1815S : 15	BSL1830 : 20	BSL36A18 : 32
		BSL1415 : 15	BSL1440 : 26	BSL1815X : 15	BSL1840 : 26	BSL36A18X : 32
		BSL1415X : 15	BSL1450 : 32	BSL1820 : 20	BSL1850 : 32	BSL36B18 : 52
		BSL1420 : 20	BSL1460 : 38	BSL1825 : 25	BSL1860 : 38	BSL36B18X : 52
		BSL1425 : 25	BSL1460 : 38	BSL1830C : 30	BSL1850C : 32	
		BSL1430C : 30				

NOTE

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

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

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 charge indicator lamp of the 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 charge indicator 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 micro computer takes about 3 seconds to confirm that the battery being charged with UC18YSL3 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

WARNING

Pull out battery before carrying out any adjustment, servicing or maintenance.

When finished with a job, pull out the battery.

1. Power switch

Ensure that the switch is in the OFF position. If the battery is installed to power tool while the switch is in the ON position, the power tool will start operating immediately, which could cause a serious accident.

2. Removing and inserting the battery (Fig. 2)

3. Remaining battery indicator (Fig. 4)

INSTALLING AND REMOVING BITS

WARNING

Be sure to switch power OFF and pull out the battery to avoid serious trouble.

1. Installing bits

- (1) Loosen the lock lever, raise the tool to the maximum stroke position and return the lock lever to the tightening position.
- (2) Clean and insert shank of bit into the collet chuck until shank bottoms, then back it out approximately 2 mm.
- (3) With the bit inserted and pressing the lock pin holding the shaft, use the 23 mm wrench to firmly tighten the collet chuck in a clockwise direction (viewed from under the router). (Fig. 5)

CAUTION

- Ensure that the collet chuck is firmly tightened after inserting a bit. Failure to do so will result in damage to the collet chuck.
- Ensure that the lock pin is not inserted into the shaft after tightening the collet chuck. Failure to do so will result in damage to the collet chuck, lock pin and shaft.

- (4) When using the 8 mm or 1/4" diameter shank bit, replace the equipped collet chuck with the one for 8 mm or 1/4" diameter shank bit which is provided as the standard accessory.
- (5) Be sure to use a chuck sleeve when using a 6 mm bit with a collet chuck capacity of 12 mm. First insert the chuck sleeve deeply in the collet chuck, then insert the bit in the chuck sleeve. Tighten the collet chuck firmly as in step (1) and (2).

2. Removing bits

- (1) Loosen the lock lever, raise the tool to the maximum stroke position and return the lock lever to the tightening position.
- (2) Pressing the lock pin, loosen the collet chuck with the included 23 mm wrench to pull out the bit. (Fig. 6)

CAUTION

Ensure that the lock pin is not inserted into the shaft after tightening the collet chuck. Failure to do so will result in damage to the collet chuck, lock pin and shaft.

HOW TO USE THE ROUTER

1. Adjusting depth of cut (Fig. 7)

(1) Use stopper pole to adjust depth of cut.

- ① Place the tool on a flat wood surface.
- ② Turn the stopper block so that section to which the cutting depth setting screw on a stopper block is not attached comes to the bottom of the stopper pole. Loosen pole lock knob allowing the stopper pole to contact with stopper block.
- ③ Loosen the lock lever and press the tool body until the bit just touches the flat surface. Tighten the lock lever at this point. (Fig. 8)
- ④ Tighten pole lock knob. Align the depth indicator with the "0" graduation of scale.
- ⑤ Loosen pole lock knob, and raise until indicator aligns with the graduation representing the desired cutting depth. Tighten pole lock knob.
- ⑥ Loosen the lock lever and press the tool body down until the stopper block to obtain the desired cutting depth.
- (2) As shown in Fig. 9 (a), loosening the two nuts on the threaded column and moving them down will allow you to move down to the end position of the bit when the lock lever is loosened. This is helpful when moving the router to align the bit with the cutting position.

As shown in Fig. 9 (b), tighten the upper and lower nuts to secure the cutting depth.

- (3) When you are not using the scale to set the cutting depth, push up the stopper pole so that it is not in the way.

2. Stopper block (Fig. 10)

The 2 cut-depth setting screws attached to the stopper block can be adjusted to simultaneously set 3 different cutting depth. Use a wrench to tighten the nuts so that the cut-depth setting screws do not come loose at this time.

3. Guiding the router

WARNING

Be sure to switch power OFF and pull out the battery to avoid serious trouble.

(1) Template Guide (Standard Accessory)

Use the template guide when employing a template for producing a large quantity of identically shaped products.

As shown in Fig. 11, secure the template guide to the base of the router with two accessory screws. At this time, ensure that the projection side of the template guide is facing the bottom surface of the base of the router.

A template is a profiling mold made of plywood or thin lumber.

When making a template, pay particular attention to the matters described below and illustrated in Fig. 12.

When using the router along the interior plane of the template, the dimensions of the finished product will be less than the dimensions of the template by a amount equal to dimension "A", the difference between the radius of the template guide and the radius of the bit. The reverse is true when using the router along the exterior of the template.

Secure the template to the workpiece. Feed the router in the manner that the template guide moves along the template as shown in Fig. 13.

(2) Straight guide (Standard accessory) (Fig. 14)

Use straight guide for chamfering and groove cutting along the materials side.

- ① Insert the guide bar into the hole in the bar holder, then lightly tighten the 2 wing bolts (A) on top of the bar holder.
- ② Insert the guide bar into the hole in the base, then firmly tighten the wing bolt (A).
- ③ Make minute adjustments of the dimensions between the bit and the guide surface with the feed screw, then firmly tighten the 2 wing bolts (A) on top of the bar holder and the wing bolt (B) that secures the straight guide.
- ④ As shown in Fig. 15, securely attach the bottom of the base to processed surface of the materials. Feed the router while keeping the guide plane on the surface of the materials.

4. Switch operation

This product is equipped with an ON/OFF Lock button to prevent any inadvertent switch trigger operation. To activate the tool, press down on the ON/OFF Lock button and draw the switch trigger. (Fig. 16)

When the switch trigger is fully drawn, a further press of the ON/OFF Lock button will lock the switch trigger in place, allowing the release of the switch trigger for continued operation. (Fig. 17 (a))

The switch trigger will not be locked if the ON/OFF Lock button is released before the switch trigger is fully drawn, making it possible to operate the tool with a press of the switch trigger.

To unlock the switch trigger, draw the switch trigger once again to release the ON/OFF Lock button and discontinue operation. (Fig. 17 (b))

Prior to using the tool, make sure that the ON/OFF Lock button and the switch trigger are operating properly.

5. How to use the LED light (Fig. 18)

The LED light will light the area at the tip of the tool when the switch is "ON".

The LED light will automatically power off 10 seconds after the switch is released.

6. Adjusting the rotation speed

The M3612DA has an electronic control system that allows rpm changes.

As shown in Fig. 19, dial position "1" is for minimum speed, and position "6" for maximum speed.

7. Cutting

CAUTION

- Wear eye protection when operating this tool.
- Keep your hands, face and other body parts away from the bits and any other rotating parts, while operating the tool.

NOTE

- Do not press the lock pin while the motor is rotating. Also, do not switch the tool on while pressing the lock pin. Doing so may damage the lock pin and/or shaft as well as result in injury.
- Please limit the cutting depth of a single cut to under 20 mm.
- When cutting a deep groove, repeat the cut 2 or 3 times. Deep cutting operations can make the tool difficult to control and may overload the motor, resulting in malfunction.

English

- Moving the tool forward fast may cause a poor quality of cut, or damage to the bit or motor. Moving the tool forward too slowly may burn and mar the cut. The proper feed rate will depend on the bit size, the kind of workpiece and depth of cut. Before beginning the cut on the actual workpiece, it is advisable to make a sample cut on a piece of scrap lumber. This will show exactly how the cut will look as well as enable you to check dimensions.
- Abnormalities and overloads will trigger the overload protector, and stop operation. Remove the load immediately, and turn the power off, then on. The rotation speed should return to normal.

- As shown in **Fig. 20**, remove the bit from the work pieces and press the switch lever up to the ON position. Do not start cutting operation until the bit has reached full rotating speed.
- The bit rotates clockwise (arrow direction indicated on the base). To obtain maximum cutting effectiveness, feed the router in conformance with the feed directions shown in **Fig. 21**.

8 Trimmer Guide (Optional accessory) (Fig. 22)

Use the trimmer guide for trimming or chamfering. Attach the trimmer guide to the bar holder as shown in **Fig. 23**. After aligning the roller to the appropriate position, tighten the two wing bolts (A) and the other two wing bolts (B). Use as shown in **Fig. 24**.

9. Dust Collector Set (Standard accessory)

Connect the dust collector set cleaner to collect dust.

- Mounting the dust collector.
Use a screwdriver to attach the two screws to the base. (**Fig. 25**)
Align the holes on the dust collector with the two screws and attach the dust collector.
Tighten the two knob nuts.
Connect the cleaner to the dust collector. (**Fig. 26**)
- Dismounting the dust collector.
Use a screwdriver to loosen the two screws.

LED LIGHT WARNING SIGNALS (Fig. 27)

This product features functions that are designed to protect the tool itself as well as the battery. When any of the safeguard functions are triggered, any of the LED light will blink as described in **Table 3**. In this case, follow the instructions described under corrective action.

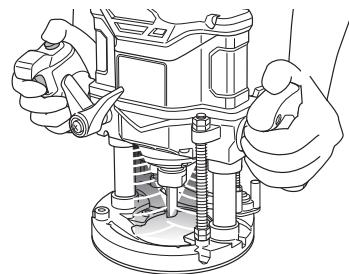


Fig. 27

Table 3

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

MAINTENANCE AND INSPECTION

WARNING

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

1. Inspecting the bit

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

2. Oiling

To ensure smooth vertical movement of the router, occasionally apply a few drops of machine oil to the sliding portions of the columns and end bracket.

3. 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.

4. 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.

5. Inspection of terminals (tool and battery)

Check to make sure that swarf and dust have not collected on the terminals.
On occasion check prior, during and after operation.

CAUTION

Remove any swarf or dust which may have collected on the terminals.

Failure to do so may result in malfunction.

6. 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 chlорic solvents, gasoline or paint thinner, for they melt plastics.

7. 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.

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 those designated by us, or when the battery is disassembled and modified (such as disassembly and replacement of cells or other internal parts).

CAUTION

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

SELECTING ACCESSORIES

The accessories of this machine are listed on page 27.

For details regarding each bit type, please contact the HiKOKI Authorized Service Center.

NOTE

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

TROUBLESHOOTING

WARNING

- To avoid injury from an accidental start, turn the switch OFF and remove the plug from the power source or remove the battery from the main body before making any adjustments.
- All electrical or mechanical repairs should be done only by qualified service technicians. Contact HiKOKI Authorized Service Center.

1. Power tool

Problem	Possible Cause	Remedy
Tool doesn't run	No remaining battery power	Charge the battery.
	Battery isn't fully installed.	Push the battery in until you hear a click.
Tool suddenly stopped	Tool was overburdened	Get rid of the problem causing the overburden.
	Battery or tool overheated	During operation, lighten the applied pressure.
Doesn't cut well	The bit is worn or missing teeth.	Replace with a new bit.
	The collet chuck is loose.	Firmly tighten the collet chuck.
Switch can't be pulled	ON/OFF Lock button is pushed in	Release the ON/OFF Lock button.
Battery cannot be installed	Attempting to install a battery other than that specified for the tool.	Please install a multi volt type battery.

2. Charger

Symptom	Possible cause	Remedy
The charge indicator lamp rapidly flickers purple, 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.
The charge indicator 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.
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.
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.

一般安全規則

△ 警告

閱讀所有安全警告說明

未遵守警告與說明可能導致電擊、火災或其他嚴重傷害。

請妥善保存本使用說明書，以供未來參考之用。

「電動工具」一詞在警告中，係指電源操作（有線）之電動工具或電池操作（無線）之電動工具。

1) 工作場所安全

- a) 保持工作場所清潔及明亮。
雜亂或昏暗的區域容易發生意外。
- b) 勿在易產生爆炸之環境中操作，譬如有易燃液體、瓦斯或粉塵存在之處。
電動工具產生火花會引燃粉塵或煙氣。
- c) 當操作電動工具時，確保兒童及過往人員遠離。
分神會讓您失去控制。

2) 電氣安全

- a) 電動工具插頭必須與插座配合，絕不可以任何方法修改插頭，且不得使用任何轉接插頭於有接地之電動工具。
不修改插頭及所結合之插座，可減少電擊。
- b) 避免身體接觸到地面，諸如管子、散熱器、爐灶及冰箱。
如果您的身體接地或觸地，會增加電擊的危險。
- c) 勿讓電動工具淋雨或曝露在潮濕的環境下。
電動工具進水會增加電繫的危險。
- d) 勿濫用電源線。請勿使用電源線去纏繞、拖拉電動工具或拔插頭，保持電源線遠離熱氣、油氣、尖角或可動零件。
損壞或纏繞的電源線會增加電繫之危險。
- e) 電動工具在室外操作時，請務必要使用適合室外用的延長線。
使用合適之室外用延長線會減少電擊的危險。
- f) 若無法避免在潮濕地區操作電動工具，請使用以漏電斷路器 (RCD) 來保護電源。
使用 RCD，可降低觸電危險。

3) 人員安全

- a) 保持機警，注意您正在做什麼，並運用正確常識操作電動工具。
當你感到疲勞或受藥品、酒精或醫療影響時，請勿操作電動工具。
操作中瞬間的不注意，可能造成人員嚴重的傷害。

- b) 使用個人防護裝備，經常配戴安全眼鏡。
配戴防塵口罩、防滑安全鞋、硬帽等防護裝備，或在適當情況下使用聽覺防護，可減少人員傷害。
- c) 防止意外發生。在連接電源或電池組、拿起或攜帶工具前，請確認開關是在「off」（關閉）的位置。
以手指放在開關握持電動工具，或在電動工具的開關於“on”的狀況下插上插頭，都會導致意外發生。
- d) 在電動工具啟動前，先卸下任何調整用鑰匙或扳手。
扳手或鑰匙遺留在電動工具的轉動部位時，可能導致人員傷害。
- e) 身體勿過度伸張，任何時間要保持站穩及平衡。
以便在不預期的狀態下，能對電動工具有較好的控制。
- f) 衣著要合宜，別穿太鬆的衣服或戴首飾。
保持你的頭髮、衣服及手套遠離轉動部位。
寬鬆的衣服、首飾及長髮會被捲入轉動部位。
- g) 如果裝置要用於粉塵抽取及集塵設施，要確保其連接及正當使用。
使用集塵裝置可減少與灰塵相關的危險。
- h) 請勿因頻繁使用本工具，熟悉操作而忽略本工具的安全原則。
粗心的行動有可能瞬間即造成嚴重傷害。

- 4) 電動工具之使用及注意事項
- a) 勿強力使用電動工具，使用正確之電動工具為您所需。
正確使用電動工具，會依其設計條件，使工作做得更好更安全。
- b) 如果開關不能轉至開或關的位置，勿使用電動工具。
任何電動工具不能被開關所控制是危險的，必須要修理。
- c) 進行任何調整、更換配件或收存電動工具時，必須將插頭與電源分開，且需將電池組從電動工具中取出。
此種預防安全措施，可減少意外開啟電動工具之危險。
- d) 收存停用之電動工具，需遠離兒童，且不容許不熟悉電動工具或未瞭解操作電動工具說明的人操作電動工具。
在未受過訓練的人手裡，電動工具極為危險。
- e) 保養電動工具，檢查是否可動零件有錯誤的結合或卡住、零件破裂及可能影響電動工具操作的任何其他情形。
電動工具如果損壞，在使用前要修好。
許多意外皆肇因於不良的保養。

f) 保持切割工具銳利清潔。

適當的保養切割工具，保持銳利之切割鋒口，可減少卡住並容易控制。

g) 按照說明書使用電動工具、配件及刀具時，必須考量工作條件及所執行之工作。

若未依照這些使用說明操作電動工具時，可能造成相關之危害情況。

h) 保持把手和握持面乾燥、清潔，且未沾到油脂和潤滑油。

滑溜的把手和握持面在操作時會有安全上的問題，且可能造成本工具意外失去控制。

5) 電池式電動工具的使用及注意事項

a) 需再充電時，僅能使用製造商指定的充電器。

因充電器僅適合同一型式的電池組，若使用任何其它電池組時，將導致起火的危險。

b) 使用電動工具時，僅能使用按照其特性設計的電池組。

因使用其它任何電池組時，將導致人員傷害及起火的危險。

c) 當電池組不再使用時，需保存好並遠離其它的金屬物件，例如：迴紋針、錢幣、鑰匙、圖釘、螺釘，或類似能造成端子與端子間連接的其它較小金屬物件。

因電池組端子間短路時，將導致燃燒或起火的危險。

d) 在誤用情況下，電解液可能自電池中噴出；請避免接觸。當發生意外接觸時，請用清水沖洗。若電解液觸及眼睛時，請儘速尋求醫療協助。因自電池中噴出的電解液，將導致灼傷或刺激皮膚。

e) 請勿使用損壞或改造的電池組或電動工具。

損壞或改造的電池可能會發生不可預知的行為，進而導致火災、爆炸或受傷的風險。

f) 請勿使電池組或電動工具接觸到火源或處於溫度過高的地方。

接觸火源或溫度超過 130°C 可能會引起爆炸。

g) 請遵循所有充電指示，並且不要在說明書指定的溫度範圍之外為電池組或電動工具充電。

充電不當或溫度超出指定範圍可能會損壞電池並增加火災的風險。

6) 維修

a) 讓您的電動工具由合格修理人員僅使用相同的維修零件更換。

如此可確保電動工具的安全得以維持。

b) 切勿對損壞的電池組進行維修。

電池組的維修只能由製造商或授權服務維修店進行。

注意事項

不可讓孩童和體弱人士靠近工作場所。

應將不使用的電動工具存放在孩童和體弱人士伸手不及的地方。

充電式木工雕刻機安全警告

1. 進行切割配件可能接觸到暗線的操作時，請握著電動工具的絕緣手柄表面。

接觸到“通電”電線的切割配件可能使電動工具的金屬零件“通電”，而造成操作人員觸電。

2. 使用夾具或其他可實施的方式將工件固定並支撐在穩定的平台上。

用手握住工件或用身體抵住工件會使其不穩定，並可能導致失去控制。

3. 單手作業不穩定且非常危險。請務必在作業期間緊握雙柄。

4. 作業開始後鑽頭會立即發燙。任何情況下都切勿用手觸摸鑽頭。

5. 使用適合工具速度的正確長柄直徑的鑽頭。

附加安全警告

1. 當電池充電時溫度必須為 0°C - 40°C。溫度低於 0°C 會導致過度充電，這是很危險的。不能在溫度高於 40°C 時給電池充電。

最合適的充電溫度是 20°C - 25°C。

2. 請勿連續使用充電器。

完成一次充電後，將充電器放置約 15 分鐘後才能再次給電池充電。

3. 勿讓雜質進入充電池連接口內。

4. 切勿拆卸充電電池與充電器。

5. 切勿使充電電池短路。

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。電池受熱會爆炸。

7. 充電後電池壽命若太短不夠使用，請儘快將電池送往經銷店。不可將用過的電池丟棄。

8. 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，將引起觸電事故或使充電器受損。

9. 連續使用本機時，機組可能出現過熱而導致馬達和開關損壞。因此，每當機殼變熱時，讓工具休息一會兒。

10. 如果以低速連續使用機器，會對馬達施加額外負載，從而導致馬達卡住。在操作電動工具的過程中，應使鋸片全程不被材料卡住。全程調整鋸片速度以實現滑順的切割。

11. 準備並檢查作業環境。確保作業現場滿足安全注意事項中所述的所有條件。

12. 確保電池安裝牢固。如果有鬆動，可能會脫落而造成事故。

13. 小心處理鑽頭。

14. 在操作之前，請仔細檢查鑽頭是否有破裂或損壞。立即更換破裂或損壞的鑽頭。

15. 避免切割釘子。在操作之前，檢查並移除工作材料上的所有釘子。

16. 用雙手牢牢握住工具。
17. 在打開開關之前，確保鑽頭未與工作材料接觸。
18. 在實際的工作材料上使用本工具之前，請先讓工具運行一段時間。注意是否有振動或搖晃，這可能表示鑽頭安裝不正確。
19. 注意鑽頭旋轉方向和進給方向。
20. 從工作材料移除工具之前，請總是關閉電源並等待鑽頭完全停止。
21. 更換鑽頭或進行任何調整後，確保筒夾夾盤和其他任何調整裝置都已牢牢旋緊。
鬆動的調整裝置可能會意外移位並導致失控，且鬆動的旋轉組件將被猛烈拋出。
22. 不要直視光而使眼睛直接暴露於光下。使眼睛持續暴露於光下會致其受傷。
23. 切勿觸摸移動部位。
切勿將手、手指或身體其他部位靠近工具的移動部位。
24. 切勿在無人照看的情況下讓工具運行 關閉電源。在工具完全停止之前請勿離開。
25. 本電動工具配備有溫度保護電路以保護馬達。連續作業可能會造成工具的溫度上升，啟動溫度保護電路並自動停止操作。如果發生這種情況，請在恢復使用前讓電動工具冷卻。
26. 請勿對開關面板施加強烈的衝擊或將其折斷。這可能會引發問題。
27. 如果工具或電池端子（電池座）變形，請勿使用本產品。
安裝電池可能會造成短路，從而導致冒煙或起火。
28. 保持工具的端子（電池座）沒有削屑和灰塵。
 - 使用前請確認端子區域沒有堆積削屑和灰塵。
 - 使用過程中盡量避免工具上的削屑或灰塵掉落在電池上。
 - 暫停操作或使用後，請勿將工具留在可能暴露於有掉落削屑或灰塵的區域。
否則可能會造成短路，從而導致冒煙或起火。
29. 勿必在 -5°C 至 40°C 的溫度下使用本工具和電池。

鋰離子電池使用注意事項

為延長使用壽命，鋰離子電池備配停止輸出的保護功能。

若是在使用本產品時發生下列 1 至 3 的情況，即使按下開關，馬達也可能停止。這並非故障，而是啟動保護功能的結果。

1. 在殘留的電池電力即將耗盡時，馬達會停止。
在這種情況下，請立即予以充電。
2. 若工具超過負荷，馬達亦可能停止。在這種情況下，請鬆開工具的開關，試著消除超過負荷的原因。之後您就可以再度使用。
3. 若電池在過載工作情況下過熱，電池電力可能會中止。
在這種情況下，請停止使用電池，讓電池冷卻。之後您就可以再度使用。

此外，請留心下列的警告及注意事項。

警告

為事先防止電池發生滲漏、發熱、冒煙、爆炸及起火等事故，請確保留意下列事項。

1. 確保電池上沒有堆積削屑及灰塵。
 - 在工作時確定削屑及灰塵沒有掉落在電池上。
 - 確定所有工作時掉落在電動工具上的削屑和灰塵沒有堆積在電池上。
 - 請勿將未使用的電池存放在曝露於削屑和灰塵的位置。
 - 在存放電池之前，請清除任何可能附著在上面的削屑和灰塵，並請切勿將它與金屬零件（螺絲、釘子等）存放在一起。
2. 請勿以釘子等利器刺穿電池、以鐵錘敲打、踩踏、丟擲電池，或將其劇烈撞擊。
3. 切勿使用明顯損壞或變形的電池。
4. 使用電池時請勿顛倒電極。
5. 請勿直接連接電源插座或汽車點煙器孔座。
6. 請依規定方式使用電池，切勿移作他用。
7. 如果已過了再充電時間，電池仍無法完成充電，請立即停止繼續充電。
8. 請勿將電池放置於高溫或高壓處，例如微波爐、烘乾機或高壓容器內。
9. 發現有滲漏或異味時，請立即將電池遠離火源處。
10. 請勿在會產生強烈靜電的地方使用。
11. 如電池出現滲漏、異味、發熱、褪色或變形，或在使用、充電或存放時出現任何異常，請立即將它從裝備或電池充電器拆下，並停止使用。
12. 請勿將電池浸入任何液體，或讓任何液體流入電池內。若水等具有導性的液體滲入，可能會造成損壞，進而導致火災或爆炸。將電池存放在陰涼、乾燥的地方，遠離可燃及易燃物品。必須避免腐蝕性氣體環境。

注意

1. 若電池滲漏出的液體進入您的眼睛，請勿搓揉眼睛，並以自來水等乾淨清水充分沖洗，立刻送醫。若不加以處理，液體可能會導致眼睛不適。
2. 若液體滲漏至您的皮膚或衣物，請立即以自來水等清水沖洗。
上述情況可能會使皮膚受到刺激。
3. 若初次使用電池時發現生銹、異味、過熱、褪色、變形及／或其他異常情況時，請勿使用並將該電池退還給供應商或廠商。

警告

若具有導電性的異物進入鋰離子電池的端子，可能會造成短路，進而引發火災。請在存放電池時遵循以下事項。

- 請勿將導電物品，如鐵釘、鐵絲等金屬絲，銅線和電線放入儲存箱內。
- 為了防止發生短路，將電池裝入工具內或確實壓下電池蓋儲存電池，直至遮住通風孔為止。

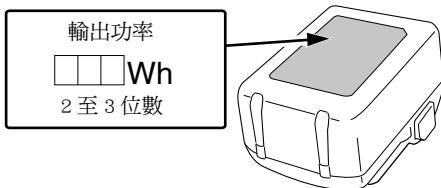
關於鋰離子電池的運輸

運輸鋰離子電池時，請遵守以下注意事項。

警告

安排運輸時，請通知運輸公司包裹中含有鋰離子電池，告知該電池之輸出功率，並按照運輸公司的指示。

- 輸出功率超過 100 Wh 的鋰離子電池被視為貨物分類中的危險物品，將需要特殊的申請程序。
- 對於國外的運輸，必須遵守國際法規則和目的國法規。
- 如果 BSL3618X 安裝在電動工具中，則功率輸出將超過 100 Wh，本機將被歸類為貨運分類的危險貨物。



零件名稱 (圖 1 - 圖 26)

①	電池	②	LED燈
②	馬達	②	螺紋柱
③	頭套	②	卡榫
④	撥盤	②	充電指示燈
⑤	止動杆	②	鑽頭
⑥	深度指針	②	23 mm扳手
⑦	碟形螺栓	②	旋鬆
⑧	鎖銷	②	旋緊
⑨	止動塊	②	刻度片
⑩	底座	②	螺帽
⑪	副底座	②	切割深度設定螺絲
⑫	筒夾夾盤	②	螺帽
⑬	直導架	②	模板導架
⑭	碟形螺栓 (A)	②	螺絲
⑮	鎖簧	②	模板
⑯	ON/OFF鎖定鉗	②	導杆
⑰	銘牌	②	杆架
⑱	握把	②	進給螺絲
⑲	開關扳機	②	碟形螺栓 (B)
⑳	鎖定桿	②	隔片

④1	工作材料	④6	修整器導架
④2	鑽頭的旋轉	④7	滾軸
④3	刨槽機進給	④8	集塵器
④4	內圍切割 (順時針)	④9	旋鈕螺帽
④5	外圍切割 (逆時針)		

符號

警告

以下為使用於本機器的符號。請確保您在使用前明白其意義。

	M3612DA: 木工雕刻機
	使用前請詳讀使用說明書。
	始終佩戴眼部保護裝置。
	始終佩戴聽力保護裝置。
	直流電流
	額定電壓
	無負荷速度
	取出電池
	開關ON
	開關OFF
	將鎖切換至「開」位置
	警告
	禁止操作

電池

	亮起： 電池剩餘電量超過 75%。
	亮起： 電池剩餘電量為 50% - 75%。
	亮起： 電池剩餘電量為 25% - 50%。
	亮起： 電池剩餘電量少於 25%。

	閃爍： 電池剩餘電量幾近零。請盡快進行充電。
	閃爍： 由於高溫導致輸出被暫停。從工具中取出電池，並使其完全冷卻。
	閃爍： 由於故障或機能失常導致輸出被暫停。問題可能是電池，請聯繫您的經銷商。

標準附件

除了主機身(1台)以外，包裝盒內包含第26頁所列之附件。

標準附件可能不預先通告而徑予更改。

用途

○ 以開槽和削角為主的木工作業。

規格

1. 電動工具

機型	M3612DA
電壓	36 V
無負荷速度	11000~25000 / 分
筒夾夾盤容積	12 mm、8 mm、6 mm 或 1/2"、1/4"
主機身衝程	50 mm
可用於本工具的電池 *	多伏特電池
重量	3.8 kg (BSL36A18X) 4.1 kg (BSL36B18X)

* 本工具不能使用現有的電池 (BSL3660/3620/3626、BSL18xx系列)。

註：

為求改進，本手冊所載規格可能不預先通告而徑予更改。

2. 電池

機型	BSL36A18X	BSL36B18X
電壓	36 V / 18 V (自動切換*)	
電池容量	2.5 Ah / 5.0 Ah	4.0 Ah / 8.0 Ah (自動切換*)
可用的充電式產品 **	多伏特系列，18 V 產品	
可用的充電器	鋰離子電池用滑動式充電器	

* 工具本身將自動切換。

** 詳情請參閱本公司的綜合目錄。

充電

使用電動工具之前，按下述方法將電池進行充電。

1. 將充電器的電源線纜連接到插座。
插頭接上插座時，充電信號燈會閃爍紅燈 (閃爍間隔時間為1秒)。
2. 將電池裝入充電器
將電池牢固地裝入充電器，如圖3所示 (第2頁)。
3. 充電中
當電池插入充電器時，充電信號燈會閃爍藍燈。
當電池已完全充電時，充電信號燈會亮起綠燈。
(見表1)

(1) 充電信號燈指示
依據充電器或充電池的狀態，充電信號燈會有不同的指示，如表1所示。

表 1

(2) 關於充電池的溫度和充電時間

溫度和充電時間如表 2 中所示。

表 2

充電器		UC18YSL3					
電池	電池類型		Li-ion				
	電池可充電的溫度		0°C ~ 50°C				
	充電電壓 V	14.4		18			
		BSL14xx 系列		BSL18xx 系列		多伏特系列	
	充電時間， 約 (於 20°C)	(4 個電池芯)		(8 個電池芯)		(10 個電池芯)	
		分鐘	BSL1415S : 15	BSL1430 : 20	BSL1815 : 15	BSL1830 : 20	
			BSL1415 : 15	BSL1440 : 26	BSL1815X : 15	BSL36A18 : 32	
			BSL1415X : 15	BSL1450 : 32	BSL1820 : 20	BSL36A18X : 32	
			BSL1420 : 20	BSL1460 : 38	BSL1825 : 25	BSL1850 : 32	
			BSL1425 : 25		BSL1830C : 30	BSL36B18 : 52	
			BSL1430C : 30		BSL1850C : 32	BSL36B18X : 52	

註

根據環境溫度和電源電壓，充電時間可能會有所不同。

4. 將充電器的電源線從插座拔下。

5. 拿穩充電器並取出電池。

註：

充電結束後，務必從充電器取出電池，然後妥善存放。

使用新電池或其他電池，產生電量較弱的問題時。

由於新電池及長時間未使用之電池的內部化學物質未活化，因此初次及第二次使用時的電量會較弱。此為暫時現象；在充電 2 至 3 次後，電量就會恢復正常。

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。

由於新電池及長時間未使用之電池的內部化學物質未活化，因此初次及第二次使用時的電量會較弱。此為暫時現象；在充電 2 至 3 次後，電量就會恢復正常。

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兒，待電池冷卻後再進行充電。

注意

- 電池因長時間放置在直射陽光處遭到日曬或剛使用後會發熱，若在此時進行充電，充電器的信號燈會亮起 0.3 秒，非亮起 0.3 秒（熄滅 0.3 秒）。此時您必須先待電池冷卻，再進行充電。
- 充電信號燈快速閃爍時（間隔時間為 0.2 秒），請檢查充電器的電池連接處是否有異物並加以清除。若沒有異物，則表示電池或充電器可能發生故障，請將其送往當地授權服務中心。
- 由於 UC18YSL3 內置微電腦需要約 3 秒的時間確認進行充電的電池已被取出，請等待至少 3 秒後再將電池重新插入繼續充電。如果電池在 3 秒之內重新插入，電池可能無法正常充電。

操作前

警告

在進行任何調整、保養或維修之前，須先取出電池。

完成作業時，應取出電池。

1 電源開關

確保開關處於 OFF 位置。如果在電源開關處於 ON 位置時安裝電池，電動工具將立即開始運作，可能會導致嚴重的事故。

2 取出和安裝電池（圖 2）

3 電池剩餘量指示器（圖 4）

鑽頭的安裝和拆卸

警告

務必關閉電源並取出電池，以避免發生嚴重的故障。

1. 安裝鑽頭

- 旋鬆固定杆，將本工具升高到最大衝程位置，然後將固定杆返回到旋緊位置。
- 清潔鑽頭長柄，然後將其插入夾盤直至長柄到達底端，再將其往外拉出 2 mm 左右。
- 在鑽頭插入並按下鎖銷固定軸的狀態下，使用 23 mm 扳手以順時針方向（從木工雕刻機下方看）牢固地旋緊筒夾夾盤。（圖 5）

注意

- 務必在插入鑽頭後牢固地旋緊夾盤。否則會損壞夾盤。
- 旋緊筒夾夾盤後，確保鎖銷未插入軸中。否則會損壞筒夾夾盤、鎖銷和軸。
- 當使用 8 mm 或 1/4" 直徑的長柄鑽頭時，請用作為標準附件提供的 8 mm 或 1/4" 直徑的長柄鑽頭更換配備的筒夾夾盤。
- 當使用 6 mm 的鑽頭和 12mm 的筒夾夾盤容積時，務必使用夾盤套筒。首先將夾盤套筒深深地插入筒夾夾盤，然後將鑽頭插入夾盤套筒。按照步驟（1）和（2）牢固地旋緊筒夾夾盤。

2. 移除鑽頭

- 旋鬆固定杆，將本工具升高到最大衝程位置，然後將固定杆返回到旋緊位置。
- 按下鎖銷，用隨附的 23 mm 扳手旋鬆筒夾夾盤以拉出鑽頭（圖 6）。

注意

旋緊筒夾夾盤後，確保鎖銷未插入軸中。否則會損壞筒夾夾盤、鎖銷和軸。

如何使用刨槽機

1. 調整切割深度。（圖 7）

- 使用止動杆調整切割深度。
- 將工具放到水準的木頭平面上。
- 旋轉止動塊，直至止動塊上未安裝有切割深度設定螺絲的部分觸及止動杆的底端。旋鬆杆鎖定旋鈕，使止動杆與止動塊接觸。
- 旋鬆固定杆，然後壓入機身直至鑽頭觸及平面。在該點旋緊固定杆。（圖 8）
- 旋緊杆鎖定旋鈕。將深度指針與刻度片的「0」刻度對齊。
- 旋鬆杆鎖定旋鈕，並升高直至指針與表示所需切削深度的刻度對齊。旋緊杆鎖定旋鈕。
- 旋鬆固定杆，將機身壓至止動塊，以達到所需切割深度。
- 如圖 9(a) 所示，當鎖定杆鬆開時，請旋鬆螺紋柱上的 2 枚螺帽，並向下移動，將可使螺帽移動至鑽頭底部位置。此程序在移動刨槽機以便使鑽頭對準切割位置時很有幫助。如圖 9(b) 所示鎖緊上方與下方螺帽，以固定切割深度。
- 若您未使用刻度片來設定切割深度，可將止動杆向上推，使其不致妨礙作業。

2. 止動塊（圖 10）

安裝在止動塊上的 2 個切割深度設定螺絲可以調節為同時設定 3 個不同的切割深度。使用扳手旋緊螺母，直至切割深度設定螺絲不會變鬆。

3. 刨槽機導架

警告

務必關閉電源並取出電池，以避免發生嚴重的故障。

（1）模板導架（標準附件）

需要加工出大量完全相同形狀的產品而採用模板時，請使用模板導架。

如圖 11 所示，使用 2 枚附件螺絲將模板導架固定在底座上。此時，須確認模板導架的凸出側朝向刨槽機的底座表面。

模板是膠合板或薄木板製成的壓型模具。

加工模板時，請特別注意下述事項及圖 12 中所示事項。

當用刨槽機加工模板的內面時，加工後的產品尺寸應小於模板，差值相當於尺寸 “A”，即模板導架和鑽頭的半徑之差。

當用刨槽機加工模板的外面時，與上述相反。

將模板固定在工作材料上。如圖 13 所示，利用使模板導架沿著模板移動的方式進給刨槽機。

(2) 直導架 (標準附件) (圖 14)

使用直導架沿材料側進行倒角和凹槽切割。

- ① 將導杆插入杆架的孔中，然後輕輕旋緊杆架頂部的 2 個蝶形螺栓 (A)。
- ② 將導杆插入底座的孔中，然後牢固地旋緊蝶形螺栓 (A)。
- ③ 用進給螺絲在鑽頭和導面之間進行尺寸的微調，然後牢牢旋緊杆架頂部的 2 個蝶形螺栓 (A) 和固定直導架的蝶形螺栓 (B)。
- ④ 如圖 15 所示，將底座的底部緊緊地壓住待加工的材料表面。保持導面壓住材料表面，送進刨槽機。

4. 開關操作

本產品配備有 ON/OFF 鎖定鉗以防止任何意外的開關扳機操作。若要啟動本工具，請按下 ON/OFF 鎖定鉗並拉動開關扳機。(圖 16)

當開關扳機完全拉開後，再按壓 ON/OFF 鎖定鉗會將開關扳機鎖定到位，讓開關扳機釋放以繼續操作。(圖 17 (a))

如果在開關扳機被完全拉開之前釋放 ON/OFF 鎖定鉗，則開關扳機將不會被鎖定，可以透過按下開關扳機來操作本工具。

若要解鎖開關扳機，請再次拉動開關扳機以釋放 ON/OFF 鎖定鉗並中止操作。(圖 17 (b))

使用本工具之前，確保 ON/OFF 鎖定鉗和開關扳機運作正常。

5. 如何使用 LED 燈 (圖 18)

當開關為「ON」時，LED 燈將照亮本工具尖端的區域。

釋放開關 10 秒後，LED 燈將自動關閉電源。

6. 調整轉速

M3612DA 具有允許轉速變化的電子控制系統。如 圖 19 所示，撥盤位置「1」表示最小速度，而位置「6」表示最大速度。

7. 切割

注意

- 操作本工具時請戴上防護鏡。
- 操作本工具時，保持手、臉和其他身體部位遠離鑽頭和其他轉動部件。

註

- 馬達正在旋轉時，請勿按下鎖銷。此外，請勿在按下鎖銷的同時打開本工具的開關。否則可能會損壞鎖銷和／或軸，並導致受傷。
- 請限制單次切割的切割深度在 20mm 以下。
- 切割深凹槽時，請重複切割 2 或 3 次。深切割操作會使本工具難以控制，並且可能會使馬達過載，從而導致故障。
- 快速向前移動本工具可能會導致切割品質不佳，或者損壞鑽頭或馬達。過慢向前移動本工具可能會燙傷並破壞切割。

正確的進給速度將取決於鑽頭尺寸、工作材料類型和切割深度。在實際的工作材料上開始切割之前，建議先在一塊廢木料上切割一個樣本。這將精確顯示切割的外觀以及使您能夠檢查尺寸。

- 異常和過載將觸發過載保護器，並停止運作。立即移除負載，並關閉電源，然後再打開電源。轉速應恢復至正常。

- (1) 如 圖 20 所示，從工作材料上取下鑽頭，然後將開關幹往上推至 ON 位置。

在鑽頭達到全速前，請勿開始切削作業。

- (2) 鑽頭沿順時針方向轉動 (底座上標示的箭頭方向)。為了達到最大切割效率，如 圖 21 所示的進給方向將材料送入刨槽機。

8. 修剪器導架 (選購附件) (圖 22)

使用修整器導架進行修整或倒角。如 圖 23 所示，將修整器導架安裝到杆架上。

將滾軸對準適當的位置後，旋緊兩個蝶形螺栓 (A) 和另外兩個蝶形螺栓 (B)。如 圖 24 所示使用。

9. 碎屑收集套件 (標準附件)

連接碎屑收集套件清潔器以收集碎屑。

- (1) 安裝碎屑收集器。

使用螺絲起子將兩個螺絲裝到底座。(圖 25)

將碎屑收集器上的孔對準這兩個螺絲，然後安裝碎屑收集器。

旋緊兩個旋鈕螺帽。

將清潔器連接到碎屑收集器。(圖 26)

- (2) 拆卸碎屑收集器。

使用螺絲起子旋鬆兩個螺絲。

LED 燈警示信號 (見圖 27)

該產品配備有保護工具本身及電池的功能。當觸發任意安全保護功能時，任意 LED 指示燈將按表 3 所述閃爍。

在這種情況下，請按照糾正措施中的說明進行操作。

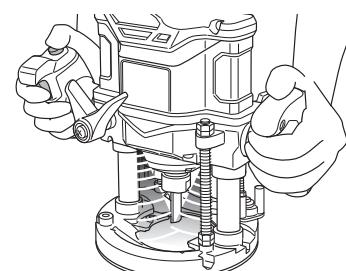


圖 27

表 3

保護功能	LED燈顯示	校正動作
過載保護	亮起0.1秒/熄滅0.1秒 	移除過載的原因。
溫度保護	亮起0.5秒/熄滅0.5秒 	使工具和電池徹底冷卻。

維護和檢查

警告

進行維修和檢查之前，務必要關閉開關，並取出電池。

1. **檢查鑽頭**
持續使用變鈍或損壞的鑽頭將導致切割效率降低並且可能造成馬達過載。一旦發現過度磨損，請立即將鑽頭換新。
2. **潤滑**
為了保證刨槽機的垂直移動順滑，請定期向機身和尾架的滑動部分添加機油。
3. **檢查安裝螺釘**
要經常檢查安裝螺釘是否堅固妥善。若發現螺釘鬆了，應立即重新扭緊，否則會導致嚴重的事故。
4. **電動機的維護**
電動機繞線是電動工具的心臟部。應仔細檢查有無損傷，是否被油液或水沾濕。
5. **端子的檢查（工具和電池）**
檢查以確保端子上沒有堆積削屑和灰塵。有時於操作前、操作期間和操作後檢查。

注意

去除任何可能已堆積在端子上的削屑或灰塵。
否則可能會導致故障。

6. **清理外部**
電動工具髒污時，請使用乾淨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。
7. **收藏**
電動工具應收藏於溫度低於 40°C 而為小孩拿不到的地方。

註.

存放鋰離子電池

存放鋰離子電池前，確保其已完全充電。

電池在低電力的狀態下長期存放（3個月以上），可能會導致性能劣化，電池的使用時間顯著降低或無法再進行充電。

然而，反覆將電池充電和暫停充電二至五次，可能會改善電池使用時間的顯著降低情況。

選擇配件

本機器的配件列在第 27 頁。

有關每種鑽頭類型的詳情，請聯繫 HiKOKI 授權服務中心。

HiKOKI 充電式工具電池重要注意事項

請務必使用本公司所指定的原廠電池。若未使用本公司所指定的電池，或使用經拆解及改裝的電池（例如，拆解後更換電池芯或其他內部零件），則本公司無法保證充電式工具的性能及操作安全。

三

為求改進，本手冊所載規格可能不預先通告而徑予更改。

疑難排解

警告

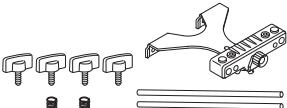
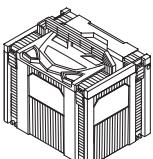
- 為避免因意外啟動而導致受傷，在進行任何調整之前，請關閉開關，並從電源上拔下插頭或從主機身取出電池。
- 所有電氣或機械維修只能由合格的維修技術人員進行。請聯繫 HiKOKI 授權服務中心。

1. 電動工具

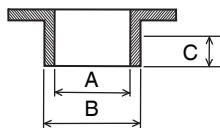
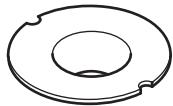
情況	可能原因	解決方法
工具無法運轉	無剩餘電池電量	為電池充電。
	電池未安裝牢固。	推動電池直至聽到咔噠一聲。
工具突然停止	工具負擔過重	除去造成工具負擔過重的問題。
	電池或工具過熱	在操作過程中，減輕施加的壓力。
鋸切效果不佳	鑽頭磨損或鋸齒缺失。	更換新的鑽頭。
	筒夾夾盤鬆動。	牢固地旋緊筒夾夾盤。
開關無法拉動	ON/OFF鎖定鉗被推入	釋放ON/OFF鎖定鉗。
電池無法安裝	試圖安裝非該工具所指定的電池。	請安裝多伏特型電池。

2. 充電器

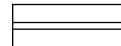
情況	可能原因	解決方法
充電指示燈迅速閃爍紫色，且電池不開始充電。	電池未完全插入。	牢固地插入電池。
	電池端子內或電池安裝處有異物。	移除異物。
充電指示燈閃爍紅色，且電池不開始充電。	電池未完全插入。	牢固地插入電池。
	電池過熱。	若放著不管，當電池溫度降低後就會自動開始充電，但這可能會縮短電池的壽命。建議在充電前將電池放在遠離陽光直射且通風良好的位置進行冷卻。
即使電池已充滿電，電池的使用時間仍然很短。	電池壽命已耗盡。	更換新的電池。
電池的充電時間很長。	電池、充電器或周圍環境的溫度非常低。	在室內或其他較溫暖的環境進行電池的充電。
	充電器的通風口被堵塞，造成其內部組件過熱。	避免堵塞通風口。
	冷卻風扇未運轉。	聯繫 HiKOKI 授權服務中心以進行修理。

	M3612DA			
	(2XCPZ)	(XCPZ)	(NNP)	(NN)
	1 / - *	1 / - *	1 / - *	1
	1 / - *	1 / - *	1 / - *	-
	1	1	1	1
	1	1	1	1
	1	1	1	1
	1	1	1	1
 BSL36A18 X	2	1	-	-
 UC18YSL3	1	1	-	-
	2	1	-	-
	1	1	1	-

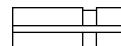
* The included collet chuck will differ according to region.



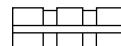
A	B	C	
7.5 mm	9.5 mm		303347
8.0 mm	10.0 mm		303348
9.0 mm	11.1 mm		303349
10.1 mm	12.0 mm		303350
10.7 mm	12.7 mm		303351
12.0 mm	14.0 mm		303352
14.0 mm	16.0 mm		303353
16.5 mm	18.0 mm		956790
18.5 mm	20.0 mm		956932
22.5 mm	24.0 mm		303354
25.5 mm	27.0 mm		956933
28.5 mm	30.0 mm		956934
38.5 mm	40.0 mm		303355
		4.5 mm	



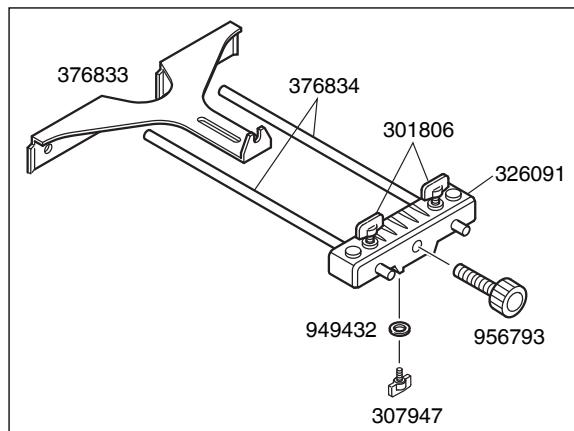
12 x 6: 956798
1/2" x 10: 956931Z



12 x 3/8": 956930Z



1/2" x 3/8": 956928Z

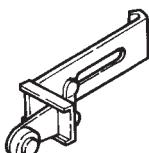


12 mm: 377013
1/2": 377014
8 mm: 376837
1/4": 376838

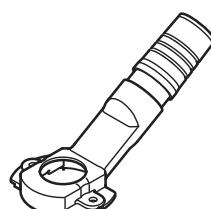


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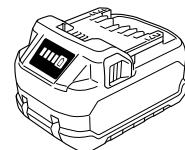
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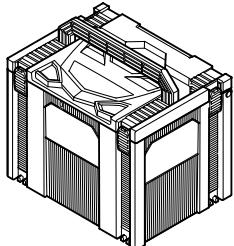
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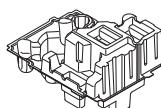
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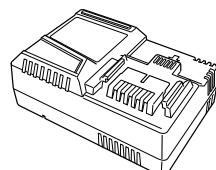
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