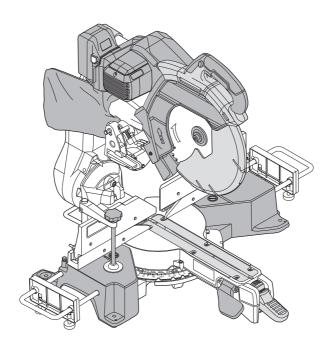
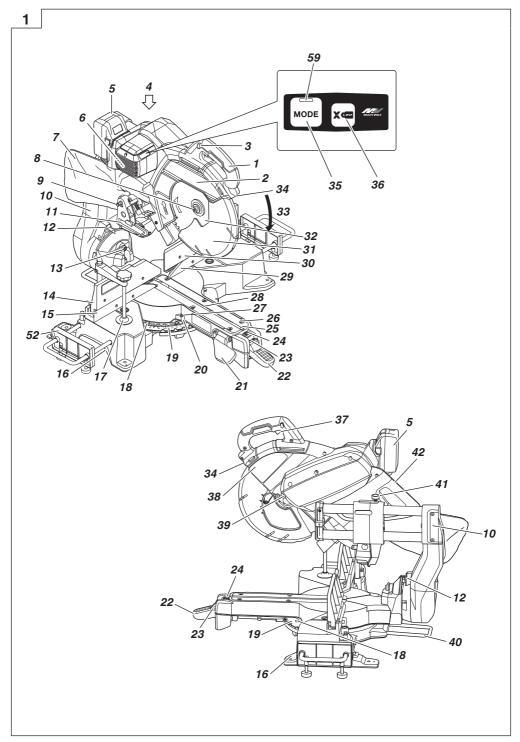


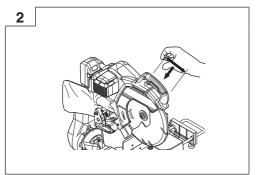
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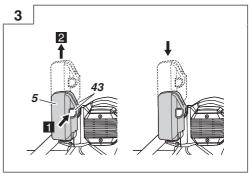


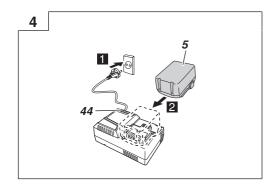


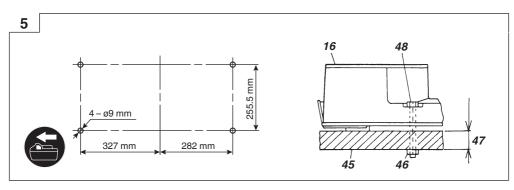
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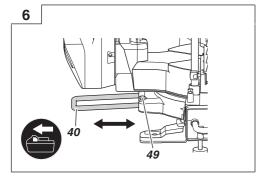


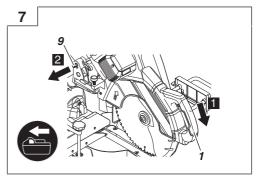


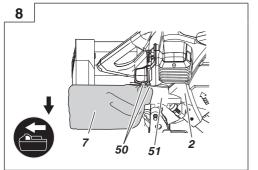


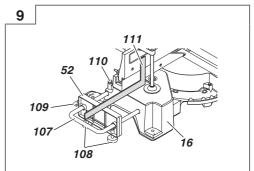


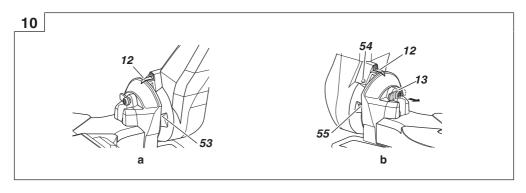


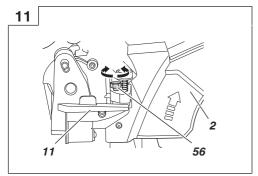


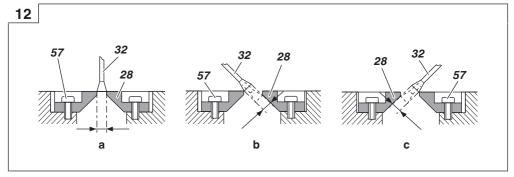


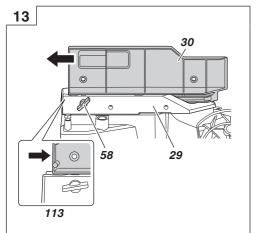


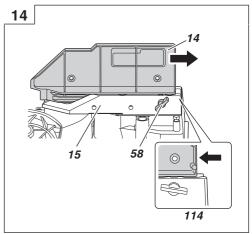


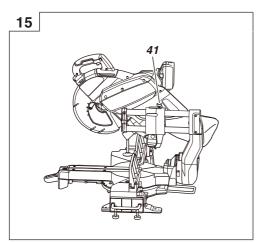


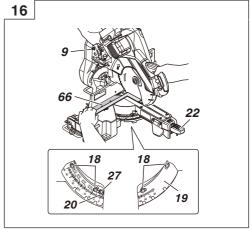


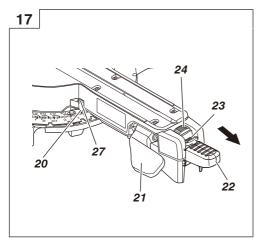


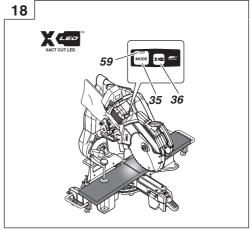


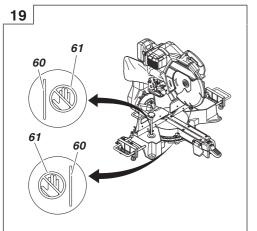


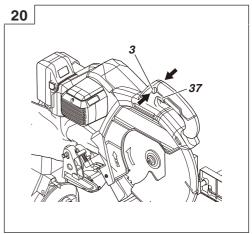


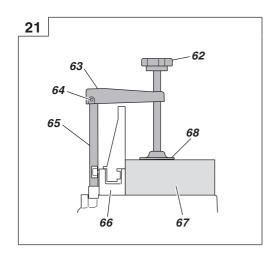


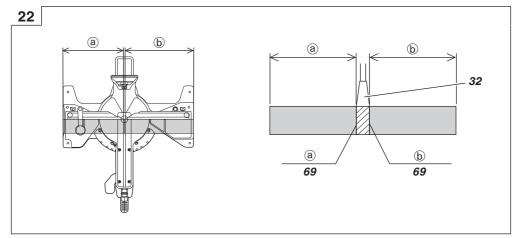


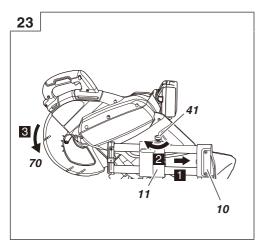


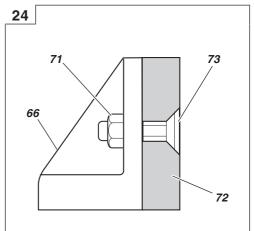


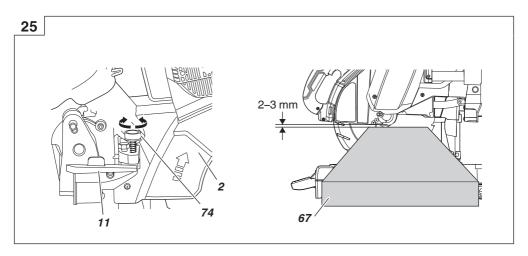


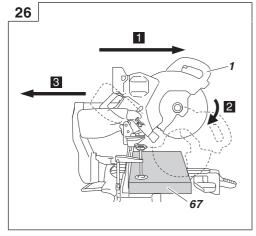


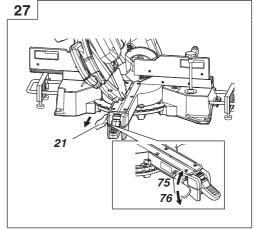


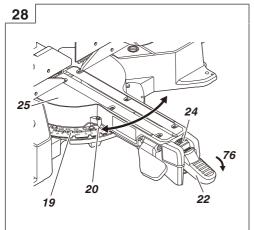


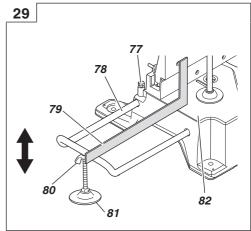


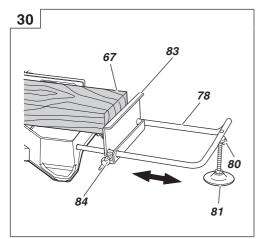


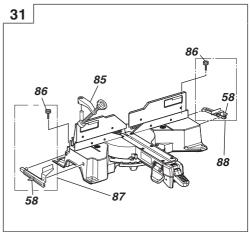


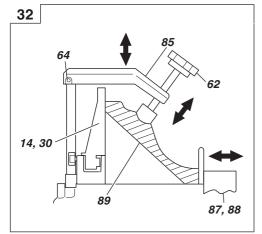


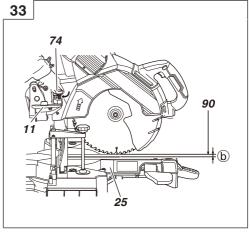


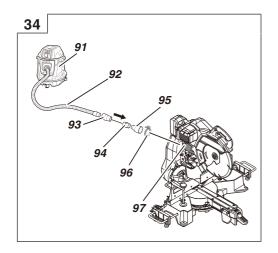


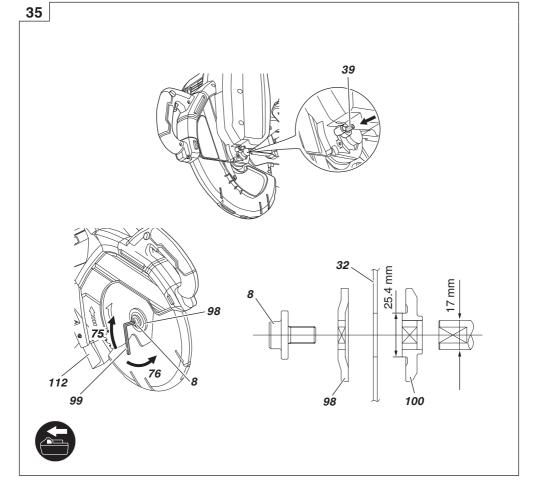


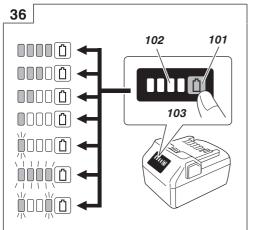


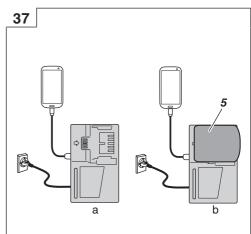


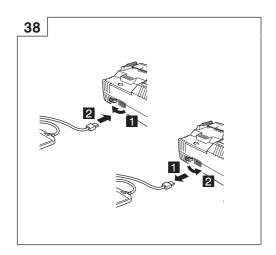


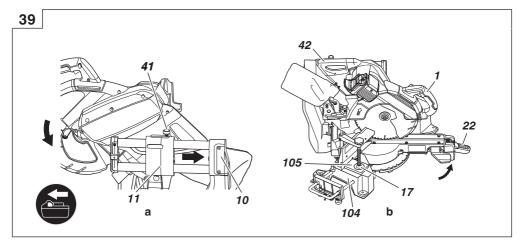


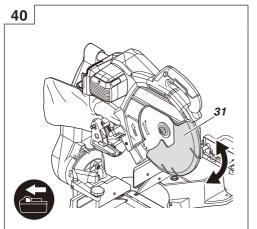


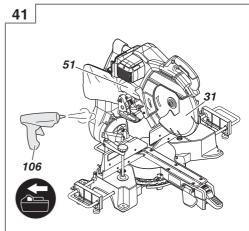












## GENERAL POWER TOOL SAFETY WARNINGS

#### 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 mainsoperated (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.
  - 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.
  - 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.

- 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-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.
- 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.
- b) 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
  - 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.
- 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.

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.

## SAFETY INSTRUCTIONS FOR MITER SAW

 Miter saws are intended to cut wood or wood-like products, they cannot be used with abrasive cutoff wheels for cutting ferrous material such as bars, rods, studs, etc.

Abrasive dust causes moving parts such as the lower guard to jam. Sparks from abrasive cutting will burn the lower quard, the kerf insert and other plastic parts.

 Use clamps to support the workpiece whenever possible. If supporting the workpiece by hand, you must always keep your hand at least 100 mm from either side of the saw blade. Do not use this saw to cut pieces that are too small to be securely clamped or held by hand.

If your hand is placed too close to the saw blade, there is an increased risk of injury from blade contact.

 The workpiece must be stationary and clamped or held against both the fence and the table. Do not feed the workpiece into the blade or cut "freehand" in any way.

Unrestrained or moving workpieces could be thrown at high speeds, causing injury.

4. Push the saw through the workpiece. Do not pull the saw through the workpiece. To make a cut, raise the saw head and pull it out over the workpiece without cutting, start the motor, press the saw head down and push the saw through the workpiece.

Cutting on the pull stroke is likely to cause the saw blade to climb on top of the workpiece and violently throw the blade assembly towards the operator.

- 5. Never cross your hand over the intended line of cutting either in front or behind the saw blade. Supporting the workpiece "cross handed" i.e. holding the workpiece to the right of the saw blade with your left hand or vice versa is very dangerous.
- Do not reach behind the fence with either hand closer than 100 mm from either side of the saw blade, to remove wood scraps, or for any other reason while the blade is spinning. The proximity of the spinning saw blade to your hand

may not be obvious and you may be seriously injured.

7. Inspect your workpiece before cutting. If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence. Always make certain that there is no gap between the

workpiece, fence and table along the line of the cut.

Bent or warped workpieces can twist or shift and may cause binding on tile spinning saw blade while cutting. There should be no nails or foreign objects in the workpiece.

- 8. Do not use the saw until the table is clear of all tools, wood scraps, etc., except for the workpiece. Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed.
- Cut only one workpiece at a time.
   Stacked multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.

 Ensure the miter saw is mounted or placed on a level, firm work surface before use.

A level and firm work surface reduces the risk of the miter saw becoming unstable.

11. Plan your work. Every time you change the bevel or miter angle setting, make sure the adjustable fence is set correctly to support the workpiece and will not interfere with the blade or the guarding system.

Without turning the tool "ON" and with no workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the fence.

 Provide adequate support such as table extensions, saw horses, etc. for a workpiece that is wider or longer than the table top.

Workpieces longer or wider than the miter saw table can tip if not securely supported. If the cut-off piece or workpiece tips, it can lift the lower guard or be thrown by the spinning blade.

13. Do not use another person as a substitute for a table extension or as additional support.

Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.

- 14. The cut-off piece must not be jammed or pressed by any means against the spinning saw blade. If confined, i.e. using length stops, the cut-off piece could get wedged against the blade and thrown violently.
- Always use a clamp or a fixture designed to properly support round material such as rods or tubing.

Rods have a tendency to roll while being cut, causing the blade to "bite" and pull the work with your hand into the blade.

Let the blade reach full speed before contacting the workpiece.

This will reduce the risk of the workpiece being thrown.

17. If the workpiece or blade becomes jammed, turn the miter saw off. Wait for all moving parts to stop and disconnect the plug from the power source and/or remove the battery pack. Then work to free the jammed material.

Continued sawing with a jammed workpiece could cause lass of control or damage to the miter saw.

18. After finishing the cut, release the switch, hold the saw head down and wait for the blade to stop before removing the cut-off piece. Reaching with your hand near the coasting blade is

Reaching with your hand near the coasting blade is dangerous.

 Hold the handle firmly when making an incomplete cut or when releasing the switch before the saw head is completely in the down position.

The braking action of the saw may cause the saw head to be suddenly pulled downward, causing a risk of injury.

## PRECAUTIONS ON USING SLIDE COMPOUND MITER SAW

- Keep the floor area around the machine level. Well maintained and free of loose materials e.g. chips and cut-offs.
- 2. Provide adequate general or localized lighting.
- Do not use power tools for applications other than those specified in the handling instructions.
- Repairing must be done only by authorized service facility. Manufacturer is not responsible for any damages and injuries due to the repair by the unauthorized persons as well as the mishandling of the tool.
- To ensure the designed operational integrity of power tools, do not remove installed covers or screws.
- Do not touch movable parts or accessories unless the power source has been disconnected.
- Use your tool at lower input than specified on the nameplate; otherwise, the finish may be spoiled and working efficiency reduced due to motor overload.
- Do not wipe plastic parts with solvent. Solvents such as gasoline, thinner, benzine, carbon tetrachloride, alcohol, may damage and crack plastic parts. Do not wipe them with such solvent. Clean plastic parts with a soft cloth lightly dampened with soapy water.
- 9. Use only original HiKOKI replacement parts.
- This tool should only be disassembled for replacement of carbon brushes.
- 11. Never cut ferrous metals or masonry.
- Adequate general or localized lighting is provided.
   Stock and finished workpieces are located close to the operators normal working position.

13. Wear suitable personal protective equipment when necessary, this could include:

Hearing protection to reduce the risk of induced hearing loss.

Eye protection to reduce the risk of injuring an eye. Respiratory protection to reduce the risk of inhalation of harmful dust.

Gloves for handling saw blades (saw blades shall be carried in a holder wherever practicable) and rough material.

- 14. The operator is adequately trained in the use, adjustment and operation of the machine.
- 15. Refrain from removing any cut-offs or other parts of the workpiece from the cutting area whilst the machine is running and the saw head is not in the rest position.
- 16. Never use the slide compound miter saw with its lower guard locked in the open position.
- 17. Ensure that the lower guard moves smoothly.
- Do not use the saw without guards in position, in good working order and properly maintained.
- Use correctly sharpened saw blades. Observe the maximum speed marked on the saw blade.
- 20. Do not use saw blades which are damaged or deformed
- Do not use saw blades manufactured from high speed steel.
- 22. Use only saw blades recommended by HiKOKI.
- 23. The saw blades should be 305 mm external diameter.
- 24. Select the correct saw blade for the material to be cut.
- 25. Never operate the slide compound miter saw with the saw blade turned upward or to the side.
- 26. Ensure that the workpiece is free of foreign matter such as nails.
- 27. Replace the table insert when worn.
- Do not use the saw to cut other than aluminium, wood or similar materials.
- 29. Do not use the saw to cut other materials than those recommended by the manufacturer.
- Blade replacement procedure, including the method for repositioning and a warning that this must be carried out correctly.
- 31. Connect the slide compound miter saw to a dust collecting device when sawing wood.
- 32. Take care when slotting.
- 33. When transporting or carrying the tool, do not grasp the holder. Grasp the handle instead of the holder.
- Start cutting only after motor revolution reaches maximum speed.
- Promptly cut OFF the switch when abnormality observed.
- Shut off power and wait for saw blade to stop before servicing or adjusting tool.
- During a miter or bevel cut the blade should not be lifted until it has stopped rotation completely.
- During slide cutting operation, the saw must be pushed and slided away from the operator.
- 39. Take all the possibility of residual risks in cutting operation into your consideration, such as the inadvertent access to moving parts on slide mechanical parts on machine and so on.
- 40. Ensure before each cut that the machine is stable.
- 41. Do not stand in a line with the saw blade In front of the machine. Always stand aside of the saw blade. This protects your body against possible kickback. Keep hands, fingers and arms away from the rotating saw hlade
  - Do not cross your arms when operating the tool arm.
- 42. If the saw blade should become jammed, switch the machine off and hold the workpiece until the saw blade comes to a complete stop. To prevent kickback, the workpiece may not be moved until after the machine

- has come to a complete stop.
- Correct the cause for the jamming of the saw blade before restarting the machine.
- 43. When the saw head is in the down position, never release the hand that is gripping the handle. Doing so could snap the saw head up, forcing the tool to fall and possibly cause injury.
- 44. Make sure to securely hold the tool during operation. Failure to do so can result in accidents or injuries. (Fig. 2)
- 45. Do not look directly into the light. Such actions could result in eye injury.
  - Wipe off any dirt or grime attached to the lens of the LED light with a soft cloth, being careful not to scratch the lens.
  - Scratches on the lens of the LED light can result in decreased brightness.
- 46. 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.
- 47. Do not use the charger continuously. When one charging is completed, leave the charger for about 15 minutes before the next charging of battery.
- 48. Do not allow foreign matter to enter the hole for connecting the rechargeable battery.
- 49. Never disassemble the rechargeable battery and charger.
- 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.
- 51. Do not dispose of the battery in fire. If the battery is burnt, it may explode.
- 52. 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.
- Do not insert objects 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 a damaged charger.
- 54. 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.
- 55. Make sure that the battery is installed firmly. If it is at all loose it could come off and cause an accident.
- 56. 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.
- 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.
- 58. 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.

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

Furthermore, please heed the following warning and caution

#### WARNING

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

- Make sure that swarf and dust do not collect on the battery.
- During work make sure that swarf and dust do not fall on the battery.
- Make sure that any swarf and dust falling on the power tool during work do not collect on the battery.
- Do not store an unused battery in a location exposed to swarf and dust.
- Before storing a battery, remove any swarf and dust that may adhere to it and do not store it together with metal parts (screws, nails, etc.).
- 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
- Do not use the battery for a purpose other than those specified.
- If the battery charging fails to complete even when a specified recharging time has elapsed, immediately stop further recharging.
- Do not put or subject the battery to high temperatures or high pressure such as into a microwave oven, dryer, or high pressure container.
- Keep away from fire immediately when leakage or foul odor are detected.
- Do not use in a location where strong static electricity generates.
- 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.
- 10. 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.
- Do not give a strong shock to the switch panel or break it. It may lead to a trouble.

#### CAUTION

- 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.
- 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.

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.

- O 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.

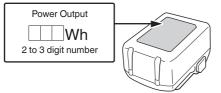
## REGARDING LITHIUM-ION BATTERY TRANSPORTATION

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.



# 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.
- O 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.
- O It may not be possible to charge some USB devices, depending on the type of device.

#### NAMES OF PARTS

The numbers in the list below correspond to Fig. 1-Fig. 41.

1	Handle		
2	Gear case		
3	Lock-off button		
4	Motor head		
5	Battery		
6	Motor		
7	Dust bag		
8	Left hex. 10 mm socket bolt		
9	Locking pin		
10	Holder (A)		
11	Hinge		
12	Indicator (For bevel scale)		
13	Set pin (A)		
14	Sub fence (B)		
15	Fence (B)		
16	Base		
17	Vise assembly		
18	6 mm machine screw		
19	Miter scale		
20	Indicator (For miter scale)		
21	Bevel lock handle		
22	Miter lock handle		
23	Detent lever		
24	Positive stop lever		
25	Turntable		
26	5 mm machine screw		
27	4 mm screw		
28	Table insert		
29	Fence (A)		
30	Sub fence (A)		
31	Lower guard		
32	Saw blade		
33	Rotation direction		
34	LED light		

35	Mode selector switch	
36	LED light switch	
37	Trigger switch	
38	Name plate	
39		
40	Spindle lock	
	Holder Clide coording track	
41	Slide securing knob	
42	Carriage handle	
43	Latch Change in disease a lease	
44	Charge indicator lamp	
45	Work bench	
46	8 mm nut	
47	25 mm thick work bench	
48	8 mm bolt	
49	6 mm bolt	
50	Support bar	
51	Dust port	
52	Sub table	
53	8 mm set screw (For left 45° bevel angle)	
54	8 mm set screw (For right angle)	
55	8 mm set screw (For right 45° bevel angle)	
56	8 mm depth adjustment bolt	
57	5 mm machine screw	
58	6 mm wing bolt	
59	Mode selector lamp	
60	Line	
61	Warning sign	
62	Knob	
63	Screw holder	
64	Hex. socket set screw	
65	Vise shaft	
66	Fence	
67	Workpiece	
68	Vise plate	
69	Marking (pre-marked)	
70	Press down	
71	6 mm nut	
72	Auxiliary board	

73	6 mm flat hd. screw		
74	6 mm depth adjustment bolt		
75	Loosen		
76	Tighten		
77	6 mm knob bolt (Optional accessory)		
78	Holder (Optional accessory)		
79	Steel square		
80	6 mm wing nut (Optional accessory)		
81	Height adjustment bolt 6 mm (Optional accessory)		
82	Base surface		
83	Stopper (Optional accessory)		
84	6 mm wing bolt (Optional accessory)		
85	Crown molding vise ass'y (Optional accessory)		
86	6 mm knob bolt		
87	Crown molding stopper (L) (Optional accessory)		
88	Crown molding stopper (R) (Optional accessory)		
89	Crown molding		
90	Bottom line of the groove		
91	Dust extractor		
92	Hose (id 38 mm)		
93	Adapter (Dust extractor's standard accessory)		
94	Joint (C) (Optional accessory)		
95	Dust collection adapter (Optional accessory)		
96	Hose band (Optional accessory)		
97	Duct		
98	Washer (B)		
99	8 mm hex. bar wrench		
100	Washer (A)		
101	Remaining battery indicator switch		
102	Remaining battery indicator lamp		
103	Display panel		
104	Base grip		
105	Piece of wood to secure the vise		
106	Air gun		
107	Holder		
108	Height adjustment bolt 8 mm		
109	6 mm wing bolt		
110	6 mm bolt		
111	Steel square		

112	Dust guide	
113	Mounting position of the sub fence (A)	
114	Mounting position of the sub fence (B)	

#### **SYMBOLS**

#### WARNING

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

	C3612DRA: Cordless Slide Compound Miter Saw	
(3)	To reduce the risk of injury, user must read instruction manual.	
===	Direct current	
V	Rated voltage	
n <sub>0</sub>	No-load speed	
I	Switching ON	
0	Switching OFF	
	Disconnect the battery	
	Always wear eye protection.	
	Always wear hearing protection.	
	Do not stare at operating lamp.	
$\triangle$	Warning	

#### Batterv

zano. y			
0000	Lights; The battery remaining power is over 75%.		
0000	Lights; The battery remaining power is 50%–75%.		
0000	Lights; The battery remaining power is 25%–50%.		
0000	Lights; The battery remaining power is less than 25%.		
<u></u> ₩000	Blinks; The battery remaining power is nearly empty. Recharge the battery soonest possible.		

	Output suspended due to high temperature. Remove the battery from the tool and allow it to fully cool down.
Ĭ,oo Ĭ,	Blinks; Output suspended due to failure or malfunction. The problem may be the battery so please contact your dealer.

### **STANDARD ACCESSORIES**

Blinks:

0	305 mm TCT Saw blade (mounted on tool)
0	Dust bag
0	8 mm hex. bar wrench
0	Vise Assembly 1
0	Holder 1
0	Sub Fence (mounted on tool)1
0	Washer (C) (Only For Australia) 1
0	Holders2
	Sub table assembly2
0	Battery (BSL36A18X) (2XCZ):2, (NN):0
0	Battery Charger (UC18YSL3) (2XCZ):1, (NN):0
0	Battery cover (Code No. 329897) (2XCZ):2, (NN):0

Standard accessories are subject to change without notice.

#### **APPLICATIONS**

Cutting various types of aluminium sash and wood.

### **SPECIFICATIONS**

#### 1. Power tool

Model		C3612DRA
Voltage		36 V
No-load speed		4000 /min (Auto Switch mode) / 3200 /min (High Torque mode)
Saw Blade Dimensions (oD × iD × Thickness)		305 mm × 25.4 mm × 2.1 mm
Miter Cutting Angle		Right 0°–57°, Left 0° – 45°
Bevel Cutting Angle		Right 0°–45°, Left 0°–45°
Compound Cutting	Bevel (Left) 0°-45°	Miter (Left) 0°–45°, (Right) 0°–45°
Angle	Bevel (Right) 0°-45°	Miter (Right) 0°-45°, (Left) 0°-45°
LED light		Yes
Battery available for this tool*1		Multi volt battery
Machine Dimensions (Width × Depth × Height)		655 mm × 873 mm × 724 mm
Net weight		26.2 kg

<sup>\*1</sup> Existing batteries (BSL3660/3620/3626, BSL18 and BSL14 series) cannot be used with this tool. Use a multi volt type battery.

Table 1: Max. sawing dimension

	Head Turntable		Max. sawing dimension	
	пеаи	Turniable	Max. height	Max. width
	0	0	105 mm	312 mm
Miter		Left 45° or Right 45°	105 mm	220 mm
		Right 57°	105 mm	170 mm
Bevel	Left 45°	0	68 mm	312 mm
Devel	Right 45°	0	43 mm	312 mm
	Left 45°	Left 45°	68 mm	220 mm
Compound		Right 45°	68 mm	220 mm
Compound	Right 45°	Left 45°	43 mm	220 mm
		Right 45°	43 mm	220 mm

#### NOTE

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

#### 2. Battery

Model	Voltage	Battery capacity
BSL36A18X	36 / 18 V *1	2.5 / 5.0 Ah *1

<sup>\*1</sup> The tool itself will automatically switch over.

#### **CHARGING**

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

#### <UC18YSL3>

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. (See **Table 2**)

2. Insert the battery into the charger.

Firmly insert the battery into the charger as shown in **Fig. 4** (on page 3).

3. Charging

When inserting a battery in the charger, charging will commence and 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 2**)

(1) Charge indicator lamp indication

The indications of the charge indicator lamp will be as shown in **Table 2**, according to the condition of the charger or the rechargeable battery.

Table 2: Indications of the charge indicator lamp

ON/OFF at 0.5 sec. intervals (RED)	Before charging *1
Lights for 0.5 sec. at intervals of 1 sec. (BLUE)	Charged at less than 50%

Lights for 1 sec. at intervals of 0.5 sec. (BLUE)	Charged at less than 80%
Lights continuously (BLUE)	Charged at more than 80%
Lights continuously (Continuous buzzer sound: about 6 sec.) (GREEN)	Charging complete
ON/OFF at 0.3 sec. intervals (RED)	Overheat standby *2
ON/OFF at 0.1 sec. intervals (Intermittent buzzer sound: about 2 sec.) (PURPLE)	Charging impossible

#### NOTE

- \*1 If the red lamp continues to blink even after the charger has been attached, check to confirm that the battery has been fully inserted.
- \*2 Battery overheated. Unable to charge. Although charging will start once the battery has cooled down even when left in situ, the best practice is to remove the battery and allow it to cool down in a shaded, well-ventilated location before charging.
- \*3 Malfunction in the battery or the charger
  - Fully insert the battery.
  - Check to confirm that no foreign matter is stuck to the battery mount or terminals. If there are no foreign objects, it is probable that the battery or charger is malfunctioning. Take it to your authorized Service Center.
- 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 5 minutes rest until the next charging.
- (2) Regarding the temperatures and charging time of the battery (See Table 3)

Table 3

Model		UC18YSL3	
Type of battery		Li-ion	
Charging voltage		14.4–18 V	
Temperatures at which the battery can be recharged		0°C-50°C	
Charging time for battery capacity, approx. (At 20°C)	1.5 Ah	15 min	
	2.0 Ah	20 min	
	2.5 Ah	25 min	
	3.0 Ah	20 min (BSL1430C, BSL1830C: 30 min)	
	4.0 Ah	26 min (BSL1840M: 40 min)	
	5.0 Ah	32 min	
	6.0 Ah	38 min	

Charging time for multi volt battery capacity, approx. (At 20°C)	1.5 Ah (× 2 unit)	20 min
	2.5 Ah (× 2 unit)	32 min
	4.0 Ah (× 2 unit)	52 min
Number of battery cells		4–10
Charging voltage for USB		5 V
Charging current for USB		2 A
Weight		0.6 kg

#### NOTE

- The recharging time may vary according to the ambient temperature and power source voltage.
- O If charging takes a long time
  - Charging will take longer at extremely low ambient temperatures. Charge the battery in a warm location (such as indoors).
  - Do not block the air vent. Otherwise the interior will overheat, reducing the charger's performance.
  - If the cooling fan is not operating, contact a HiKOKI Authorized Service Center for repairs.
- Disconnect the charger's power cord from the receptacle.
- 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.

#### **MOUNTING AND OPERATION**

Action	Figure	Page
Removing and inserting the battery	3	3
Charging	4	3
Remaining battery indicator	36	10
Charging a USB device from a electrical outlet	37-a	10

Action	Figure	Page
Charging a USB device and battery from a electrical outlet	37-b	10
How to recharge USB device	38	10
Selecting accessories	_	28, 29

#### PRIOR TO OPERATION

#### WARNING

Make all necessary adjustments before inserting the batteries.

#### Battery

Do not use a battery other than that specified. Doing so may result in damage or accidents.

- Remove all packing materials attached or connected to the tool before attempting to operate it.
- 3. Installation (Fig. 5)

Ensure that the machine is always fixed to bench. Attach the power tool to a level, horizontal work bench. Select 8 mm diameter bolts suitable in length for the thickness of the work bench.

Bolt length should be at least 40 mm plus the thickness of the work bench.

For example, use  $8 \text{ mm} \times 65 \text{ mm}$  bolts for a 25 mm thick work bench.

4. Base holder adjustment (Fig. 6)

Loosen the 6 mm bolt with the 10 mm box wrench. Adjust the base holder until its bottom surface contacts the bench or the floor surface.

After adjustment, firmly tighten the 6 mm bolt.

5. Releasing the locking pin (Fig. 7)

When the power tool is prepared for shipping, its main parts are secured by a locking pin.

Press the handle slightly down and pull out the locking pin to disengag the cutting head.

During transport, lock the locking pin into the gear case.

- Installing the dust bag, sub table assembly, stopper and vises (The stopper is an optional accessory.)
- (1) Installing the dust bag (Fig. 8)

Install the dust bag onto the dust port on the miter saw. Fit the connecting tube of dust bag and the dust port together.

To empty the dust bag, pull out the dust bag assembly from dust port. Open zipper on underside of bag and empty into waste container. Check frequently and empty the dust bag before it gets full.

When bevel angle cutting, adjust the support bar and Install the dust bag so that it hangs down vertically.

#### WARNING

Do not use this saw to cut and/or sand metals. The hot chips or sparks may ignite saw dust from the bag material.

#### CAUTION

- Empty the dust bag frequently to prevent the duct and the lower guard from becoming clogged.
   Sawdust will accumulate more quickly than normal during bevel cutting.
- O After cutting wood, before starting to cut aluminum window sash, discard the chips that are in the dust bag.
- (2) Installing the sub table (Fig. 9)

Using an item such as a steel square, match the upper surfaces of the base surface and sub table. Adjust the vertical level of the sub table by turning the 8 mm height adjustment bolt. After the adjustment, secure the holder with the 8 mm bolt on the rear of the base, and secure the 6 mm knob bolt of the sub table.

(Attach the vise assembly as shown in Fig. 1 and also stopper as shown in Fig. 21.)

 Check the lower guard for proper operation (Fig. 40)

#### WARNING

## NEVER OPERATE THE POWER TOOL if the lower guard does not function smoothly.

Lower guard is designed to protect the operator from coming into contact with the saw blade during operation of the tool

Always check that the lower guard moves smoothly and covers the saw blade properly.

#### 8. Oblique angle

#### WARNING

When changing the oblique angle, hold down the motor head. If the motor head moves to an oblique angle suddenly, it may result in injury or damage to the main body.

Before the power tool is shipped from the factory, it is adjusted for 0°, right angle, left 45° bevel cutting angle and right 45° bevel cutting angle with the 8 mm set

When changing the adjustment, change the height of the 8 mm set screws by turning them. (Fig. 10-a, Fig. 10-b)

When changing the bevel angle to the left  $45^\circ$ , loosen the 6 mm wing bolt shown in Fig. 14, then slide the sub fence (B) outward and incline the motor head to the left. To change the bevel angle to the right at  $45^\circ$ , move the sub fence (A) outward and loosen the bevel lock handle, then pull out the set pin (A) toward the front, and tilt the motor head to the right. (Fig. 10-b) When the motor head is straight upright, the set pin (A) is held tightly in place, so tilt the motor head slightly to the left when pulling out the set pin (A) before tilting the motor head to the right.

When adjusting the motor head to 0°, always return the set pin (A) to its initial position as shown in **Fig. 10-b**.

Checking the saw blade lower limit position
 Check that the saw blade can be lowered 9 mm to
 11 mm below the table insert.

11 mm below the table insert.
When you replace a saw blade with a new one, adjust the lower limit position so that the saw blade will not cut the turntable or complete cutting cannot be done.
To adjust the lower limit position of the saw blade, follow the procedure (1) indicated below. (Fig. 11) Furthermore, when changing the position of a 8 mm depth adjustment bolt that serves as a lower limit

position stopper of the saw blade.
(1) Turn the 8 mm depth adjustment bolt, change the height where the bolt head and the hinge contacts, and adjust the lower limit position of the saw blade.

#### NOTE

Confirm that the saw blade is adjusted so that it will not cut into the turntable.

#### PRIOR TO CUTTING

#### 1. Positioning the table insert (Fig. 12)

Table inserts are installed on the turntable. When shipping the tool from the factory, the table inserts are so fixed that the saw blade does not contact them. The burr of the bottom surface of the workpiece is remarkably reduced, if the table insert is fixed so that the gap between the side surface of the table insert and the saw blade will be minimum. Before using the tool, eliminate this gap in accordance with the following procedure.

#### (1) Right angle cutting

Loosen the three 5 mm machine screws, then secure the left side table insert and temporarily tighten the 5 mm machine screws of both ends. Then fix a workpiece (about 200 mm wide) with the vise assembly and cut it off. After aligning the cutting surface with the edge of the table insert, securely tighten the 5 mm machine screws of both ends. Remove the workpiece and securely tighten the 5 mm center machine screw. Adjust the right hand table insert in the same way.

(2) Left and right bevel angle cutting

Adjust the table insert in the manner same procedure for right angle cutting.

#### CAUTION

After adjusting the table insert for right angle cutting, the table insert will be cut to some extent if it is used for bevel angle cutting.

When bevel cutting operation is required, adjust the table insert for bevel angle cutting.

## 2. Confirmation for use of sub fence (A) (Fig. 13) WARNING

When right bevel angle cutting, loosen the 6 mm wing bolt, then slide the sub fence (A) outward and remove it. Failure to do so may result in the main body or saw

blade coming into contact with the sub fence (A) and causing injury.

This power tool is equipped with a sub fence (A). In the case of direct angle cutting and left bevel angle cutting, use the sub fence (A). Then, you can realize stable cutting of the material with a wide back face.

#### CAUTION

In the case of direct angle cutting and left bevel angle cutting, slide inward to the position where the sub fence (A) hits, and secure it with 6 mm wing bolt. (as shown in Fig. 13)

### 3. Confirmation for use of sub fence (B) (Fig. 14) WARNING

When left bevel angle cutting, loosen the 6 mm wing bolt, then slide the sub fence (B) outward. Failure to do so may result in the main body or saw blade coming into contact with the sub fence (B) and causing injury.

This power tool is equipped with a sub fence (B). In the case of direct angle cutting and right bevel angle cutting, use the sub fence (B). Then, you can realize stable cutting of the material with a wide back face.

#### CAUTION

In the case of direct angle cutting and right bevel angle cutting, slide inward to the position where the sub fence (B) hits, and secure it with 6 mm wing bolt. (as shown in Fig. 14)

#### 4. Slide carriage system (Fig. 15)

#### WARNING

To reduce the risk of injury, return slide carriage to the full rear position after each crosscut operation.

For chop cutting operations on small workpieces, slide the cutting head assembly completely toward the rear of the unit and tighten the slide securing knob. To cut wide boards up to 312 mm, the slide securing knob must be loosened to allow the cutting head slide freely.

#### 5. Miter scale adjustment

Down the head and insert the locking pin.
Unlock the miter lock handle and swing the turntable until the positive stop locks it at the 0° miter position.
Do not lock the miter lock handle. Place a square against the saw's fence and blade, as shown in Fig. 16. (Do not touch the tips of the blade teeth with the square. To do so will cause an inaccurate measurement.) If the saw blade is not exactly perpendicular to the fence, loosen the 6 mm machine screws (4 pcs.) that

hold the miter scale and move the miter lock handle and the scale left or right until the blade is perpendicular to the fence, as measured with the square.

Retighten the 6 mm machine screws (4 pcs.). (**Fig. 16**) Pay no attention to the reading of the indicator (for miter scale) at this time.

O Indicator (for miter scale) adjustment Unlock the miter lock handle to move the turntable to the 0° position. With the miter lock handle unlocked, allow the positive stop to snap into place as you rotate the turntable to 0°.

Observe the indicator (for miter scale) and miter scale as shown in Fig. 16. If the indicator (for miter scale) does not indicate exactly 0° loosen the 4 mm screw holding the indicator (for miter scale). In place reposition the indicator (for miter scale) and tighten the 4 mm screw.

#### 6. Miter angle adjustment

The slide compound miter saw scale can be easily read, showing miter angles from 0° to 45° to the left and right. The miter saw table has nine of the most common angle settlings with positive stops at 0°, 15°, 22.5°, 31.6°, and 45°. These positive stops position the blade at the desired angle quickly and accurately. Follow the process below for quickest and most accurate adjustments. (Fig. 17)

#### Adjusting miter angles:

- (1) Push up the miter lock handle to release the turntable.
- (2) Push down the positive stop lever until the detent lever catches on it to release the "positive stop".
- (3) Rotate the turntable and set the indicator to line up with the desired angle of the miter scale. At this time, when using the positive stop function, pull the detent lever in the direction of the arrow near the desired angle as shown in Fig. 17, release the detent lever, and move the turntable to secure it in place at the desired angle via the positive stop function. (0°, 15°, 22.5°, 31.6°, and 45°)
- (4) Push down the miter lock handle to secure the turntable in place.

#### Detent lever (Fig. 17)

The detent lever allows for the table to be micro adjusted, disengaging the positive detent stops feature. When a required miter angle is close to a positive detent stop, this detent lever prevents the wedge on the positive stop lever from slipping into that detent slot on the base.

## 7. LED lighting system (Fig. 18) [XACT CUT LED™] CAUTION

Do not stare at operating lamp. Staring into the light beam may result in serious injury or vision loss.

The LED lighting system [XACT CUT LED™] casts the shadow of the blade onto the workpiece. This results in greater accuracy of cuts and requires no adjustments. To use this feature, turn the LED light switch on. Bring the motor head down so the blade is approximately 6 mm from the workpiece. The shadow of the blade will be projected onto the workpiece, indicating where the blade teeth will make contact as the cut is made.

#### 8. About the mode select function

Each time the mode selector switch is pushed, the operation mode changes.

When the High Torque mode is selected, the mode selector lamp lights up.

The High Torque mode reduces maximum motor RPM enabling efficient work.

If the load increases while the motor is operating in the Auto Switch mode, it automatically changes to the High Torque mode.

Additionally, if the load decreases again, it automatically returns to the Auto Switch mode.

In the High Torque mode, it does not change to the Auto Switch mode even when the load decreases.

Mode	No-load speed	
Auto Switch	4000 /min	
High Torque	3200 /min	

#### NOTE

- O The mode will only change after a battery is installed and the switch is pulled once.
- The current mode will be maintained even if the switch is on/off, or the battery is removed/reinserted.

#### PRACTICAL APPLICATIONS

#### WARNING

- O To avoid personal injury, never remove or place a workpiece on the table while the tool is being operated.
- Never place your limbs inside of the line next to warning sign while the tool is being operated (see Fig. 19). This may cause hazardous conditions.

#### CAUTION

- O It is dangerous to remove or install the workpiece while the saw blade is turning.
- When sawing, clean off the shavings from the turntable.
- If the shavings accumulate too much, the saw blade from the cutting material will be exposed. Never subject your hand or anything else to go near the exposed blade.

#### 1. Switch operation

Pull the switch while pressing the switch lock to either side of the arrow to make the saw blade rotate. (Fig. 20)

After the switch is turned on, even if the switch lock is released, the saw blade continues to rotate as long as the switch is pulled.

When the switch is released, the brake is applied to the saw blade rotation and the saw blade stops.

#### 2. Turn on the LED light

Press the LED light switch to switch the LED light.

#### NOTE

To prevent the battery power consumption caused by forgetting to turn off the LED light, the light goes off automatically in about 1 hour.

 Using the Vise Assembly (Standard accessory) (Fig. 21)

#### WARNING

Always firmly clamp or vise to secure the workpiece to the fence; otherwise the workpiece might be thrust from the table and cause bodily harm.

#### CAUTION

Always confirm that the motor head does not contact the vise assembly when it is lowered for cutting. If there is any danger that it may do so, move the vise assembly to a position where it will not contact the saw blade.

- (1) The vise assembly can be mounted on the base.
- (2) Turn the upper knob and securely fix the workpiece in position (Fig. 21).

#### NOTE

When using the vise, make sure that the tool is free of any excessive contact when the unit is swung or slid.

#### 4. Cutting operation

(1) As shown in **Fig. 22** the width of the saw blade is the width of the cut. Therefore, slide the workpiece to the right (viewed from the operator's position) when length (b) is desired, or to the left when length (a) is desired. Turn the LED light, project the shadow of the blade onto the workpiece, align the left side or right side of shadow of the blade with the ink line on the workpiece.

- (2) After turning on the switch and checking that the saw blade is rotating at maximum speed, slowly push down the handle and bring the saw blade in the vicinity of the material to be cut.
- (3) Once the saw blade contacts the workpiece, push the handle down gradually to cut into the workpiece.
- (4) After cutting the workpiece to the desired depth, turn the power tool OFF and let the saw blade stop completely before raising the handle from the workpiece to return it to the full retract position.

#### WARNING

- Confirm that the trigger switch is turned OFF and the battery has been removed from the power tool whenever the tool is not in use.
- O Always turn the power off and let the saw blade stop completely before raising the handle from the workpiece. If the handle is raised while the saw blade is still rotating, the cut-off piece may become jammed against the saw blade causing fragments to scatter about dangerously.
- Every time one cutting of deep-cutting operation is finished, turn the switch off, and check that the saw blade has stopped. Then raise the handle, and return it to the full retract position.
- O Be absolutely sure to remove the cut material from the top of the turntable, and then proceed to the next step.
- Continued cutting operation can result in overload of the motor. Touch the motor and if it's hot, stop your cutting operation once and rest for 10 minutes or so, and then restart your cutting operation.

#### CAUTION

- O For maximum dimensions for cutting, refer to "SPECIFICATIONS" table.
- Increased pressure on the handle will not increase the cutting speed. On the contrary, too much pressure may result in overload of the motor and/or decreased cutting efficiency.

#### Cutting narrow workpieces (Press cutting) (Fig. 23)

Slide the hinge down to holder (A), then tighten the slide securing knob. Lower the handle to cut the workpiece. Using the power tool this way will permit cutting of workpieces of up to 107 mm square.

#### 6. Cutting large workpieces (Fig. 24)

There may be case when a complete cutting cannot be done depending on the height of workpiece. In this case, mount an auxiliary board with the 6 mm flat head screws and the 6 mm nuts using the 7 mm holes on the fence surface (two holes on each side). Refer to "SPECIFICATIONS" for the thickness of the auxiliary board.

#### NOTE

When cutting a workpiece exceeding 107 mm in height in right-angle cutting or 70 mm in left bevel angle cutting or 45 mm in right bevel angle cutting, adjust the lower limit position so that the base of the motor head will not come in contact with the workpiece.

To adjust the lower limit position of the saw blade, follow the procedure (1) shown in **Fig. 25**.

(1) Lower the motor head, and turn the 6 mm depth adjustment bolt and make adjustments so that there can be a clearance of 2 mm to 3 mm between the lower limit position of the motor head and the top of the workpiece at the saw blade's lower limit position where the head of the 6 mm depth adjustment bolt contacts the hinge.

#### 7. Cutting wide workpieces (Slide cutting) (Fig. 26)

(1) Workpieces up to 107 mm high and 312 mm wide: Loosen the slide securing knob, grip the handle and slide the saw blade forward. Then press down on the handle and slide the saw blade backward to cut the workpiece.

This facilitates cutting of workpieces of up to 107 mm in height and 312 mm in width.

(2) Workpieces up to 120 mm high and 260 mm wide: Workpieces of up to 120 mm in height and up to 260 mm in width can be cut in the same manner as described in paragraph 6-(1) above.

#### WARNING

- O For slide cutting, follow the procedures. Forward slide cutting (toward the operator) is very dangerous because the saw blade could kick upward from the workpiece. Therefore, always slide the handle away from the operator.
- Always return the carriage to the full rear position after each crosscut operation in order to reduce the risk of injury.
- Never put your hand on the miter lock handle during the cutting operation because the saw blade comes close to the miter lock handle when the motor head is lowered

#### CAUTION

- O When cutting a workpiece of 120 mm height, adjust the lower limit position of the motor head so that the gap between the lower edge of the motor head and the workpiece will be 2 to 3 mm at the lower limit position.
- O If the handle is pressed down with excessive or lateral force, the saw blade may vibrate during the cutting operation and cause unwanted cutting marks on the workpiece, thus reducing the quality of the cut. Accordingly, press the handle down gently and carefully.
- In slide cutting, gently push the handle back (rearwards) in a single, smooth operation. Stopping the handle movement during the cut will cause unwanted cutting marks on the workpiece.

#### 8. Bevel cutting procedures (Fig. 27)

#### WARNING

When changing the oblique angle, hold down the motor head. If the motor head moves to an oblique angle suddenly, it may result in injury or damage to the main body.

(1) Loosen the bevel lock handle and bevel the saw blade to the left or to the right.

To change the bevel angle to the right, loosen the bevel lock handle, then pull out the set pin (A) toward the front, and tilt the motor head to the right. When the motor head is straight upright, the set pin (A) is held tightly in place, so tilt the motor head slightly to the left when pulling out the set pin (A) before tilting the motor head to the right.

(2) Adjust the bevel angle to the desired setting while watching the bevel angle scale and indicator, then secure the bevel lock handle.

Always check that the bevel lock handle is secured and the motor head is clamped. If you attempt angle cutting without clamping the motor head, then the motor head might shift unexpectedly causing injuries.

#### WARNING

O When the workpiece is secured on the left or right side of the blade, the short cut-off portion will come to rest on the right or left side of the saw blade. Always turn the power off and let the saw blade stop completely before raising the handle from the workpiece.

- O If the handle is raised while the saw blade is still rotating, the cut-off piece may become jammed against the saw blade causing fragments to scatter about dangerously. When stopping the bevel cutting operation halfway, start cutting after pulling back the motor head to the initial position.
  - Starting from halfway, without pulling back, causes the lower guard to be caught in the cutting groove of the workpiece and to contact the saw blade.
- When right angle cutting, loosen the 6 mm wing bolt, then slide the sub fence (A) outward and remove it.
- When left angle cutting, loosen the 6 mm wing bolt, then slide the sub fence (B) outward.

#### CAUTION

When cutting a workpiece of 75 mm height in the left 45° bevel cutting position or a workpiece of 50 mm height in the right 45° bevel cutting position, adjust the lower limit position of the motor head so that the gap between the lower edge of the motor head and the workpiece will be 2 to 3 mm at the lower limit position (refer to "9. Checking the saw blade lower limit position" on page 21).

#### NOTE

The bevel lock handle adopts a clutch system. When contacting the bevel lock handle and the main body, pull the bevel lock handle in the direction of the arrow mark as illustrated in **Fig. 27**, and change the direction of the bevel lock handle.

#### 9. Miter cutting procedures (Fig. 28)

- (1) Unlock the miter table by lifting up on the miter lock handle.
- (2) While lightly pressing down on the positive stop lever until it engages the detent lever, grasp the miter lock handle and rotate the table left or right to the desired angle.
- (3) Once the desired miter angle is achieved, press down on the miter lock handle to secure the table into position.
- (4) If the desired miter angle is one of the nine positive stops noted below, please see the Miter detent lever section on Fig. 17.
- (5) Turn the LED light on and position the workpiece on the table for pre-alignment of your cut.

#### CAUTION

Always check that the miter lock handle is secured and the turntable is clamped.

If you attempt angle cutting without clamping the turntable, then the turntable might shift unexpectedly causing injuries.

#### NOTE

- Positive stops are provided at the right and left of the 0° center setting, at 15°, 22.5°, 31.6° and 45° settings.
   Check that the miter scale and the tip of the indicator are properly aligned.
- Operation of the saw with the miter scale and indicator out of alignment will result in poor cutting precision.

#### 10. Compound cutting procedures

Compound cutting can be performed by following the instructions in 8 and 9 above. For maximum dimensions for compound cutting, refer to "SPECIFICATIONS" table.

#### CAUTION

Always secure the workpiece with the right or left hand and cut it by sliding the round portion of the saw backwards with the right or left hand.

It is very dangerous to rotate the turntable to the right or left during compound cutting because the saw blade may come into contact with the hand that is securing the workpiece.

In case of compound cutting (angle + bevel) by left

bevel, slide the sub-fence (B) outward, and engage in the cutting operation.

In case of compound cutting (angle + bevel) by right bevel, remove the sub-fence (A), and engage in the cutting operation.

#### 11. Cutting long materials

When cutting long materials, use an auxiliary platform which is the same height as the holder (optional accessory) and base of the special auxiliary equipment. Capacity:

wooden material (W  $\times$  H  $\times$  L) 300 mm  $\times$  45 mm  $\times$  1300 mm, or 180 mm  $\times$  25 mm  $\times$  2000 mm

## **12.** Installing the holders ... (Optional accessory) The holders help keep longer workpieces stable and in

place during the cutting operation.

(1) As indicated in **Fig. 29**, use a steel square for aligning

the upper edge of the holders with the base surface. Loosen the 6 mm wing nut. Turn a height adjustment bolt 6 mm, and adjust the height of the holder.

(2) After adjustment, firmly tighten the 6 mm wing nut and fasten the holder with the 6 mm knob bolt (optional accessory). If the length of Height Adjustment Bolt 6 mm is insufficient, spread a thin plate beneath. Make sure the end of Height Adjustment Bolt 6 mm does not protrude from the holder.

#### CAUTION

When transporting or carrying the tool, do not grasp the holder. There is the danger of the holder slipping out of the base. Grasp the handle instead of the holder.

## 13. Stopper for precision cutting ... (Stopper and holder are optional accessory)

The stopper facilitates continuous precision cutting in lengths of 285 mm to 450 mm. To install the stopper, attach it to the holder with the 6 mm knob bolt as shown in Fig. 30.

### 14. Confirmation for use Crown molding vise, Crown molding Stopper (L) and (R) (Optional accessory)

- (1) Crown molding Stopper (L) and (R) (optional accessories) allow easier cuts of crown molding without tilting the saw blade. Install them in the base both-sides side to be shown in Fig. 31. After inserting tighten the 6 mm knob bolts to secure the Crown molding Stoppers.
- (2) The crown molding vise (B) (Optional accessory) can be mounted on either the left fence (Fence (B)) or the right fence (Fence (A)). It can unite with the slope of the crown molding and vice can be pressed down. Then turn the upper knob, as necessary, to securely attach the crown molding in position. To raise or lower the vise assembly, first loosen the hex. socket set screw.

After adjusting the height, firmly tighten the 6 mm wing bolt; then turn the upper knob, as necessary, to securely attach the crown molding in position (Fig. 32). Position crown molding with its WALL CONTACT EDGE against the guide fence and its CEILING CONTACT EDGE against the Crown molding Stoppers as shown in Fig. 32. Adjust the Crown molding Stoppers according to the size of the crown molding. Tighten the 6 mm wing bolt to secure the Crown molding Stoppers. Refer to the lower table for the miter angle. Use the sub fence (A) to secure the crown molding more firmly.

#### WARNING

Always firmly clamp or vise to secure the crown molding to the fence; otherwise the crown molding might be thrust from the table and cause bodily harm.

Do not bevel cutting. The main body or saw blade may contact the sub fence, resulting in an injury.

#### CAUTION

Always confirm that the motor head does not contact the crown molding vise ass'y when it is lowered for cutting.

If there is any danger that it may do so, loosen the hex. socket set screw and move the crown molding vise ass'y to a position where it will not contact the saw blade.

#### 15. Groove cutting procedures

Grooves in the workpiece can be cut by adjusting the 6 mm depth adjustment bolt (**Fig. 33**).

- Lower the motor head, and turn the 6 mm depth adjustment bolt by hand. (Where the head of the 6 mm depth adjustment bolt contacts the hinge.)
- (2) Adjust to the desired cutting depth by setting the distance between the saw blade and the surface of the base (Fig. 33).

#### NOTE

When cutting a single groove at either end of the workpiece, remove the unneeded portion with a chisel.

## 16. Connecting the dust extractor (Sold separately) (Fig. 34)

Do not inhale the harmful dusts generated in cutting operation.

The dust can endanger the health of yourself and bystanders.

Use of dust extractor can reduce dust related hazards. By connecting with dust extractor through adapter, joint and dust collection adapter, most of dust can be collected.

Connect the dust extractor with adapter.

(1) Connect in order of hose (id 38 mm x 3 m long) and adapter (Dust extractor's Standard accessory) joint (Optional accessory) and dust collection adapter (Optional accessory) with the duct of power tool. Connection is done by pressing in the direction of the arrow. (Fig. 34)

The dust collection adapter (Optional accessory) is fixed to the duct by a hose band. (Optional accessory)

## MOUNTING AND DISMOUNTING SAW BLADE

#### WARNING

To prevent an accident or personal injury, always turn off the trigger switch and remove the battery pack before removing or installing a saw blade.

#### 1. Mounting the saw blade (Fig. 35)

 Press in spindle lock and loosen 10 mm bolt with 8 mm hex. bar wrench (standard accessory).

Since the 10 mm bolt is left-hand threaded, loosen by turning it to the right.

#### NOTE

- If the spindle lock cannot be easily pressed in to lock the spindle, turn the 10 mm bolt with 8 mm hex. bar wrench (standard accessory) while applying pressure on the spindle lock.
- The saw blade spindle is locked when the spindle lock is pressed inward.
- (2) Remove the bolt and washer (B)
- (3) Lift the lower guard and mount the saw blade.

#### WARNING

When mounting the saw blade, confirm that the rotation indicator mark on the saw blade and the rotation direction of the gear case (**Fig. 1**) are properly matched.

- (4) Thoroughly clean washer (B) and the 10 mm bolt, and install them onto the saw blade spindle.
- (5) Press in the spindle lock and tighten the 10 mm bolt by turning it to the left by 8 mm hex. bar wrench (standard accessory).

#### WARNING

Tighten the 10 mm bolt so it does not come loose during operation. Confirm the 10 mm bolt has been properly tightened before the power tool is started.

#### CAUTION

- A dust guide is installed inside behind the hinge. When removing or installing the saw blade, do not make contact with the dust guide. Contact may break or chip saw blade tips. (Fig. 35)
- Confirm that the spindle lock has returned to the retract position after installing or removing the saw blade.

#### 2. Dismounting the saw blade

Dismount the saw blade by reversing the mounting procedures.

The saw blade can easily be removed after lifting the lower quard.

#### CAUTION

Never attempt to install saw blades except 305 mm in diameter.

#### LED LIGHT WARNING SIGNALS

This product features functions that are designed to protect the tool itself as well as the battery. If any of the safeguard functions are triggered during operation, the LED light will blink as described in **Table 4**.

When any of the safeguard functions are triggered, immediately remove your finger from the switch and follow the instructions described under corrective action.

#### Table 4

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

## TRANSPORTATION OF THE MAIN BODY

#### WARNING

To avoid an accident or personal injury, always confirm that the trigger switch is turned OFF and remove the battery before transportation of the main body.

The vice assembly could be dropped during transportation. Either remove the assembly or slip a piece of wood between the vice to firmly secure it. (Fig. 39-b)

Down the head and insert the locking pin (see page 20 "5. Releasing the locking pin"). Also screw in the slide securing knob so that the hinge is positioned to hit the holder (A) and secure the head. (Fig. 39-a)

Lift up the miter lock handle, turn the turntable as far right as it will go, and secure the turntable by press down the miter lock handle to the fixed position. This will make the main body even more compact. (Fig. 39-b)

When transporting the main body, carry it in your arms, holding the grip located on the base with both hands.

When transporting with two people, each person should use both their hands to hold the carry handle, handle and the base grip.

#### MAINTENANCE AND INSPECTION

#### WARNING

Be sure to turn off the switch and pull out the battery before doing any inspection or maintenance.

#### 1. Inspecting the saw blade

Always replace the saw blade immediately upon the first sign of deterioration or damage.

A damaged saw blade can cause personal injury and a worn saw blade can cause ineffective operation and possible overload to the motor.

#### CAUTION

Never use a dull saw blade. When a saw blade is dull, its resistance to the hand pressure applied by the tool handle tends to increase, making it unsafe to operate the power tool.

#### 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. Inspecting the lower guard for proper operation O Before each use of the tool, test the lower guard (Fig. 40) to assure that it is in good condition and that it moves smoothly.
- O Never use the tool unless the lower guard operates properly and it is in good mechanical condition.
- 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.

#### 6. Lubrication

Lubricate the following sliding surfaces once a month to keep the power tool in good operating condition for a long

Use of machine oil is recommended.

Oil supply points:

- Rotary portion of hinge
- Rotary portion of holder (A)
- Rotary portion of vise assembly

#### 7. Cleaning

Clean the machine, duct and lower guard by blowing with dry air from an air gun or other tool. (Fig. 41) Periodically remove chips and other waste material from the surface of the power tool with a damp, soapy cloth. To avoid a malfunction of the motor, protect it from contact with oil or water.

If the LED line becomes invisible due to chips and the like adhered onto the window of the LED's light-emitting section, wipe and clean the window with a dry cloth or a soft cloth moistened with soapy water, etc.

#### 8. Disposal of the exhausted battery WARNING

Do not dispose of the exhausted battery. The battery must explode if it is incinerated. The product that you have purchased contains a rechargeable battery. The battery is recyclable. At the end of it's useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

#### 9. Storage

- After operation of the tool has been completed, check that the following has been performed:
- (1) Trigger switch is in OFF position.
- (2) Pull out the battery, from the tool, Store the power tool and battery 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

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

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

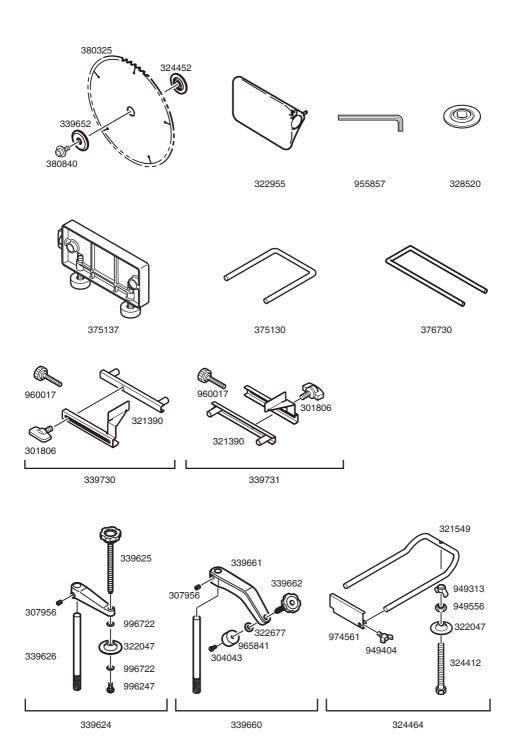
Due to HiKOKI's continuing program of research and development, the specifications herein are subject to change without prior notice.

#### **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.

Symptom	Possible cause	Remedy
Tool doesn't run	The battery is not fully installed.	Insert the battery into the tool until you hear a click.
Tool suddenly stopped	Tool was overburdened	Get rid of the problem causing the overburden.
	The battery is overheated.	Let the battery cool down.
	The motor was automatically stopped to prevent failure of the tool.	This is not a malfunction. The trigger switch was held down for 5 minutes or more. Switch on the power once more.
Cannot be tilted	The bevel lock handle has not been loosened.	Loosen the bevel lock handle and then tilt the tool. After adjusting the loosened component, make sure to tighten it once again.
Cannot be tilted to the right	Set pin (A) has not been pulled out.	Tilt to the right after pulling out set pin (A).
	The bevel lock handle has not been loosened.	Loosen the bevel lock handle and then tilt.
Sawblade is dull	The sawblade is worn down or missing teeth.	Exchange with a new product.
	Bolt is loose.	Tighten the bolt.
	The sawblade has been installed in reverse.	Install the sawblade in the correct direction.
Cannot cut with precision	The operation parts of the tool are not fully fixed.	Fully install the bevel lock handle and miter lock handle.
	Material cannot be fixed in the correct position.	Remove any foreign material from the fence or turntable.
		In some cases, proper position cannot be fixed due to a curve in the material. Try to fix a flat surface with the fence or turntable.
Switch can't be pulled	Switch lock is not pressed in enough.	Press in the switch lock all the way until it strikes the back
Battery cannot be installed.	Attempting to install a battery other than that specified for the tool.	Please install a multi volt type battery.





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