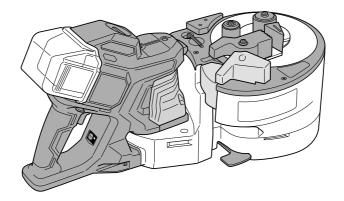
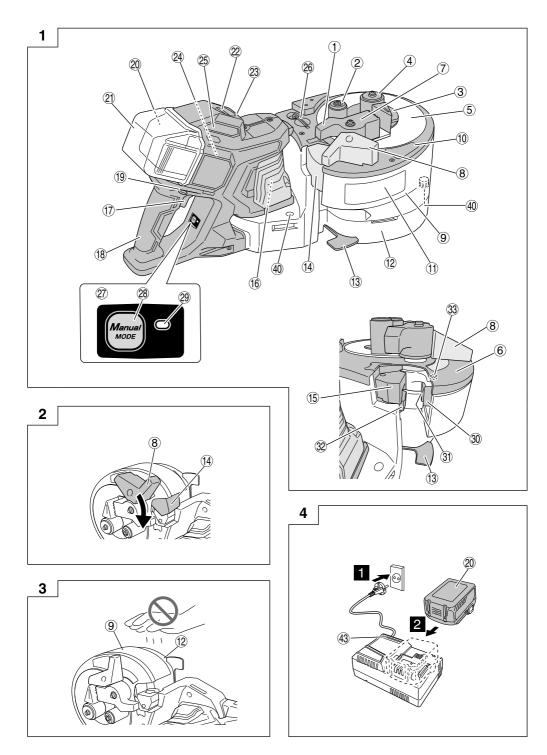


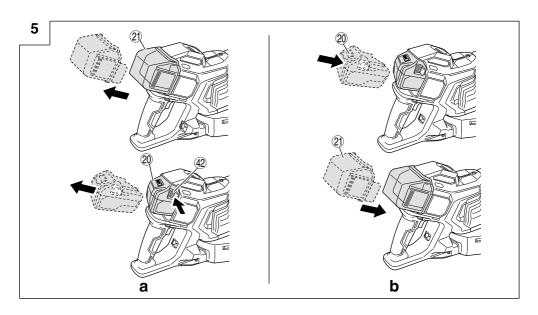
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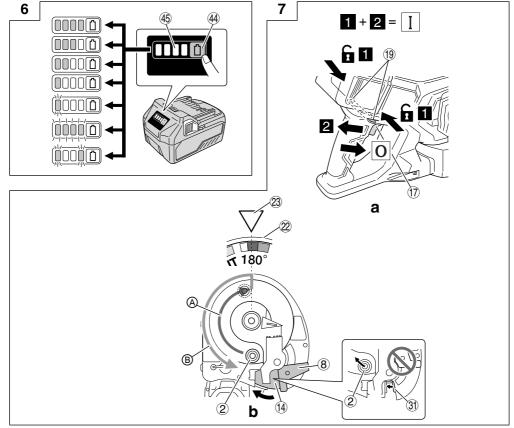


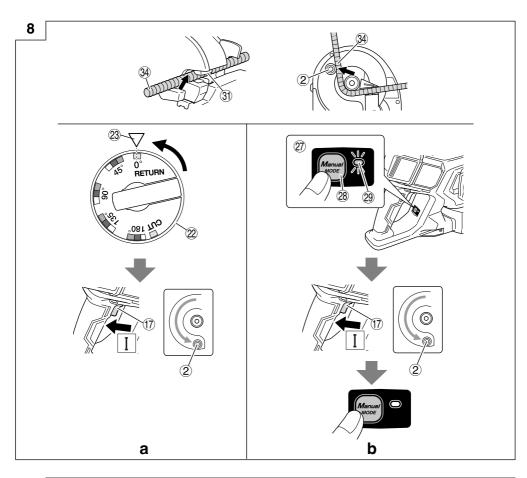


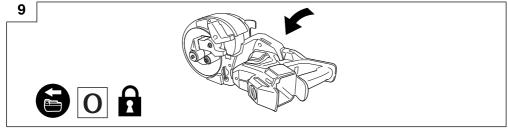
Handling instructions

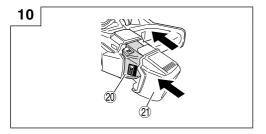


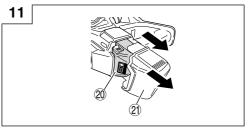


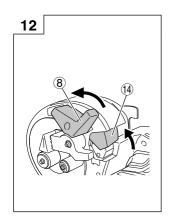


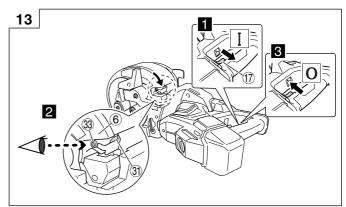


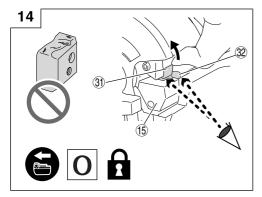


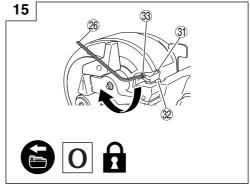


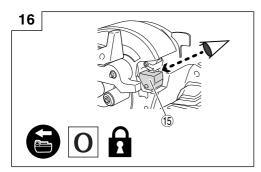


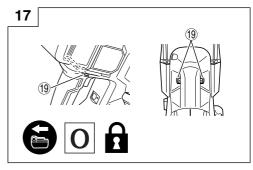


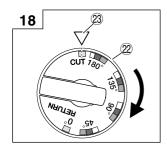


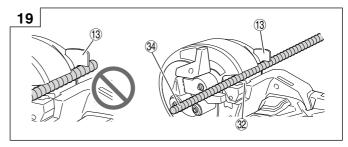


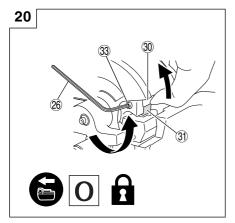


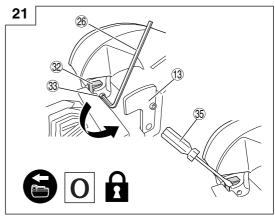


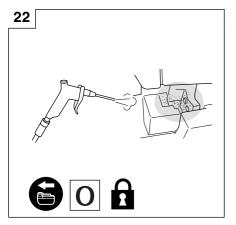


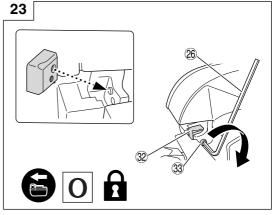


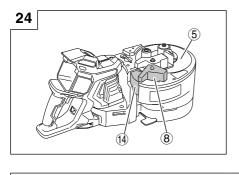


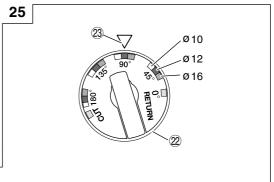




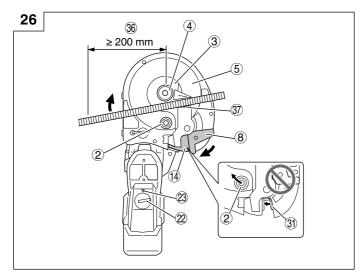


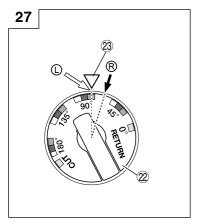


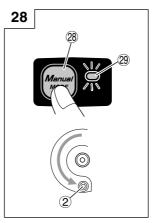




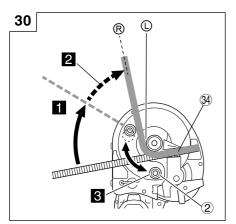
45°	90°	135°	180°
45°	90°	135°	180°

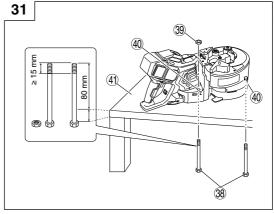


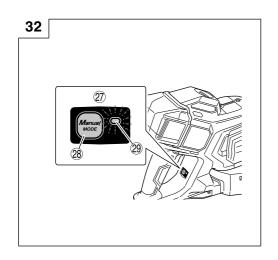


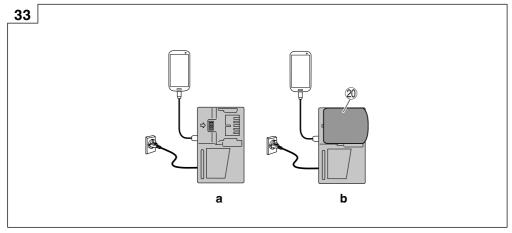


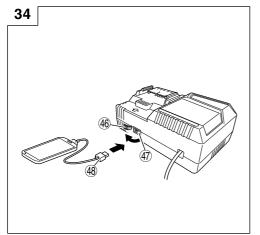


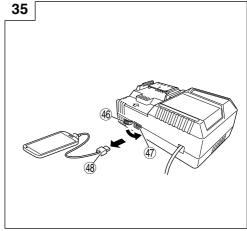












# GENERAL POWER TOOL SAFETY WARNINGS

# **⚠** 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.

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.

 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-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries. c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.

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

 d) Remove any adjusting key or wrench before turning the power tool on.

A wrench or a key left attached to a rotating part of the power tool may result in personal injury.

e) Do not overreach. Keep proper footing and balance at all times.

This enables better control of the power tool in unexpected situations.

f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair 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

 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

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.

 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.

#### Service

 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 PORTABLE REBAR CUTTER/BENDER SAFETY WARNINGS

 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.

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

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

During operation, maintenance or inspection, make sure you and anybody in the immediate vicinity are wearing protective goggles.

This will help prevent iron filings from getting in the eyes.

- If you use the machine continuously, the inner cover and gear cover can become hot. After such continuous use, do not touch the inner cover and gear cover. (Fig. 3)
- 5. Avoid any work exceeding the maximum capacities of the unit described in the specifications. Never cut and/or bend any hard materials such as PC(Precast concrete) steel, etc. Materials of this type are likely to scatter into pieces and cause injuries.
- 6. If the unit malfunctions during operation or you hear any abnormal noise, immediately turn off the switch and stop operation. Contact the store where you bought the unit or a HiKOKI Authorised Service Center, and ask for checkup and/or repair. Use of the unit without checkup and repair can result in injury.
- Make absolutely sure that the cutter cover is closed when you don't carry out the cutting work. If the cover is kept open, the cutter can jam on foreign objects and cause serious accidents. (Fig. 2)
- While turning switches, never put your hand close to the cutter, reaction stopper, or bending roller. Bringing your hand close to these components can result in serious injury.
- If you accidentally drop the unit or knock it against something, thoroughly examine the unit and ensure that there are no damages, cracks, or deformations on the cutter and unit.
- 10. Do not immerse unit in water as this may cause malfunction or electric shock.
- 11. If a warning label can no longer be read, peels off or becomes indistinct, exchange the label with a new one.

Contact a HiKOKI Authorized Service Center for new labels.

- 12. Install the cutter and accessories securely according to the handling instructions. If you fail to install them properly, they may come off and cause an injury.
- 13. Be sure to pull out the battery when the cutter is checked, cleaned, and replaced. Failure to do so can result in a serious injury.

# ADDITIONAL SAFETY WARNINGS

- Preparing and checking the work environment. Make sure that the work site meets all the conditions laid forth in the precautions.
- Do not allow foreign matter to enter the hole for connecting the rechargeable battery.
- Never disassemble the rechargeable battery and charger.
- Never short-circuit the rechargeable battery. Shortcircuiting the battery will cause a great electric current and overheat. It results in burn or damage to the battery.
- Do not dispose of the battery in fire. If the battery is burnt, it may explode.
- Bring the battery to the shop from which it was purchased as soon as the post-charging battery life becomes too short for practical use. Do not dispose of the exhausted battery.
- 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.
- 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.

- 9. Make sure that the battery is installed firmly. If it is at all loose it could come off and cause an accident.
- 10. Never touch moving parts.

Never place your hands, fingers or other body parts near the tool's moving parts.

11. Never operate without all guards in place.

Never operate this tool without all guards or safety features in place and in proper working order. If maintenance or servicing requires the removal of a guard or safety feature, be sure to replace the guard or safety feature before resuming operation of the tool.

- 12. NEVÉR leave tool running unattended. Turn power off. Don't leave tool until it comes to a complete stop.
- 13. 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.
- 14. Do not give a strong shock to the switch panel or break it. It may lead to a trouble.
- 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.
- 17. 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.4. Do not use the battery in reverse polarity.
- Do not connect directly to an electrical outlets or car cigarette lighter sockets.
- 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.
- 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

- 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

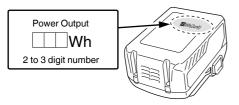
When transporting a lithium-ion battery, please observe the following precautions.

#### 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 100Wh are considered to be in the freight classification of Dangerous Goods and will require special application procedures.
- For transportation abroad, you must comply with international law and the rules and regulations of the destination country.

 If the BSL36B18 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**

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

# NAMES OF PARTS (Fig. 1 - Fig. 35)

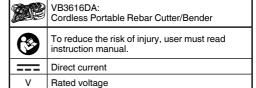
1	Reaction stopper A
2	Bending roller
3	Center plate
4	Center roller
(5)	Turn table
6	Cam cover
7	Guide
8	Lever
9	Inner cover
10	Warning label (Bending)
11)	Warning label (Cutting)
12	Gear cover
13	Reaction stopper B
(14)	Cover

15)	Grip rubber
16	Motor
17)	Switch trigger
18	Handle
19	Switch lock
20	Battery
21)	Battery cover
22	Setting dial
23	Alignment position
24)	Name plate
25	Warning label (Battery cover)
26	Hexagonal bar wrench (For M5 hexagon socket bolt)
27)	Switch panel
28	Manual mode switch
29	Mode indicator lamp
30	Cutter guard
31)	Upper cutter
32	Lower cutter
33	Hexagon socket bolt
34)	Rebar
35	Flat head screwdriver
36	Bending length
37)	Stopper
38	Bolt
39	Nut
40	Hole to fix unit
<b>41</b> )	Work bench
42	Latch
43	Charge indicator lamp
44)	Battery level indicator switch
45	Battery level indicator lamp
46	Rubber cover
47)	USB port
48	USB cable

# **SYMBOLS**

# WARNING

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



n <sub>0</sub>	No-load speed
kg	Weight
I	Switching ON
0	Switching OFF
8	Disconnect the battery
a	Lock
a	Unlock
Manual MODE	Manual Mode Switch
Manual C	Manual Mode OFF
Marchael Al	Manual Mode ON
Affancari secon	Lights Blinking: Warning Signals
$\triangle$	Warning
0	Prohibited action

# Battery

Dattory	
Ů	Remaining battery indicator switch
00000	Lights; The battery remaining power is over 75%
00000	Lights; The battery remaining power is 50% – 75%.
00000	Lights; The battery remaining power is 25% – 50%.
00000	Lights; The battery remaining power is less than 25%
<u> </u>	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.

# STANDARD ACCESSORIES

In addition to the main unit (1 unit), the package contains the accessories listed on page 22.

Standard accessories are subject to change without notice.

# **SELECTING ACCESSORIES**

The accessories of this machine are listed on page 23.

# **APPLICATIONS**

- O Cutting of rebar
- O Bending of rebar

# **SPECIFICATIONS**

## 1. Power tool

Model	VB36	VB3616DA		
Voltage	36	36 V		
No-Load Speed	0 – 16	0 – 16 /min		
Capacities	<ul><li>(1) Material:Rebar, equivalent grades: 2</li><li>(2) Diameter of material: 8 – 16 mm</li></ul>	(1) Material:Rebar, equivalent grades: 250N, 300E, 500L, 500N, 500E (2) Diameter of material: 8 – 16 mm		
Number of piece(s) that can be processed at one time	Cutting         Bending           ø10 mm 2 pieces         ø10 mm 3 pieces           ø12 mm 1 piece         ø12 mm 2 pieces           ø16 mm 1 piece         ø16 mm 1 piece			
Battery available for this tool*	Multi volt battery			
Weight	18.6 kg (BSL36A18) 19.2 kg (BSL36B18)			

<sup>\*</sup> 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	BSL36A18 BSL36B18				
Voltage	36 V / 18 V (Automatic Switching*)				
B	2.5 Ah / 5.0 Ah	4.0 Ah / 8.0 Ah			
Battery capacity	(Automatic Switching*)				
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.

# 3. Charger

Model	UC18YSL3
Charging voltage	14.4 V – 18 V
Weight	0.6 kg

# **CHARGING**

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

- 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. 4** (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	
	Before charging		Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds)	Plugged into power source
	BI (E		Lights for 0.5 seconds. Does not light for 1 second. (off for 1 second)	Battery capacity at less than 50%
Charge	While charging	Blinks (BLUE)	Lights for 1 second. Does not light for 0.5 seconds. (off for 0.5 seconds)	Battery capacity at less than 80%
indicator lamp		Lights (BLUE)	Lights continuously	Battery capacity at more than 80%
(RED / BLUE / GREEN / PURPLE)			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 Flickers impossible (PURPLE)		Flickers (PURPLE)	Lights for 0.1 seconds. Does not light for 0.1 seconds. (off for 0.1 seconds)  (Intermittent buzzer sound: about 2 seconds)	Malfunction in the battery or the charger

(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						
	Type of battery					Li-ion			
	Temperatures at will battery can be rech			0°C – 50°C					
	Charging voltage	V	14	1.4			18		
Rattony	ttery		BSL14xx series BSL18xx series		Multi volt series				
Dattery			(4 cells)	(8 cells	s)	(5 cells)	(10 cell	ls)	(10 cells)
	Charging time, approx. (At 20°C)	min.	BSL1415S:15 BSL1415:15 BSL1415X:15 BSL1420:20 BSL1425:25 BSL1430C:30	BSL1430 BSL1440 BSL1450 BSL1460	: 20 : 26 : 32 : 38	BSL1815S: 15 BSL1815 : 15 BSL1815X: 15 BSL1820 : 20 BSL1825 : 25 BSL1830C: 30	BSL1830 BSL1840 BSL1850 BSL1860	: 20 : 26 : 32 : 38	BSL36A18:32 BSL36B18:52
USB	Charging voltage	V	5						
USB	Charging current	Α	2						

#### 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.

 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

O 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.

- O 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.
- O 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

Before use, check the following. 1 to 4 should be checked before insert the battery.

### CAUTION

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 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.

- Preparation and confirmation of working environment.
   Check and confirm if the workplace is in proper conditions as mentioned in the [GENERAL POWER TOOLS SAFETY WARNINGS]; 1).
- 3. For safety sake, use the provided hexagonal bar wrench to make absolutely sure that the hexagon socket bolt is securely clamped. Use of the unit with the bolt in a loosely clamped condition can result in damage to the unit and cutter as well as accidents.
- 4. Confirm that the cutter is in sharp condition.

Make certain that the cutter is in a sharp condition. Continued use of a worn out and deformed cutter with dull edges results in damage to the unit and cutter as well as accidents.

# Removing and inserting the battery cover and battery (Fig. 5)

#### WARNING

Make sure the battery cover is attached when operating the tool.

Iron filings in the battery terminal area may result in malfunction.

6. Remaining battery indicator (Fig. 6)

# PICTGRAPH ILLUSTRATION AND EXPLANATION

Warning label (Cutting)



Avoid bringing your hand near to the reaction stoppers during operation; otherwise, you may get your finger caught in or may run the hazard of other injuries.

During cutting work, securely hook the rebar to the reaction stoppers. Furthermore, secure enough length of a rebar to be hooked to the reaction stoppers.

Never bring your hand close to the cutter during operation.

Continued use of a worn-out cutter can result in the damage and the broken pieces flying around. Replace it with a new cutter after approximately 8000 times of cutting as a rough guide.

If the grip rubber gets worn out, there is a fear that it cannot sufficiently hold the rebar and gets broken down with its parts flying around, etc.

If the grip rubber cannot hold the rebar much longer, replace it with a new grip rubber.

Set the rebar in the center or the recess of the cutter during cutting work. Any cutting work with the rebar set on corners or ends of the cutter can result in the pieces of broken rebar flying around or the damage to the cutter and the machine.

Warning label (Bending)



If you bend the rebar with a large angle while placing your hand onto it, there is a fear of getting your hand caught in by the fold-back reaction of the rebar.

Begin operation only after ensuring that there are no people within the turning range of the material to be bent.

Warning label (Battery cover)



Attach the battery cover when storing or operating the tool.

# **OPERATION**

#### CAUTION

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

When finished with a job, pull out the battery.

### 1. Switch operation

This product is equipped with a switch lock to prevent inadvertent switch operations. (Fig. 7-a)

Pressing the switch lock in one of the indicated directions and pulling the switch will activate the motor.

Once the switch is activated, it will remain on even after releasing the switch lock as long as you are pulling on the switch.

Releasing the switch within area (A) will apply a brake that will stop operation. (Fig. 7-b)

Releasing the switch within area ® will automatically return the upper cutter and bending roller to their original positions. (Fig. 7-b)

# WARNING

The cutter also simultaneously activates, so please close the cover. (Fig. 7-b)

# 2. Reverse-rotating the cutter and bending roller

Releasing the switch during operation could result in the cutter and bending roller coming to a standstill to sandwich the rebar and irremovably lock it in place.

In this situation, the motor should be reverse-rotated to return the cutter and bending roller back to their original positions.

Below are the two methods for returning the cutter and bending roller during operation.

- Set the setting dial on "RETURN" (Fig.8-a)
- (1) Align the setting dial on "RETURN".
- (2) Pulling the switch again will activate reverse-rotation

When the tool begins returning, it will return to its original position when the switch is released.

- Press the Manual Mode switch (Fig.8-b)
- (1) Press the Manual Mode switch.
- (2) Pulling the switch again will activate reverse-rotation mode.

The tool will return while the switch is pulled, and it will stop when it returns to its original position.

(3) Once returned to the original position, press the Manual Mode switch to return to "Normal Rotation Mode".

The tool will not operate if left in Reverse-rotation mode. so press the Manual Mode switch to cancel reverse rotation

# **HOW TO USE (CUTTING)**

### WARNING

- Note that the unit is not a hand held tool. Be absolutely sure to use the unit only after placing it on stable spots such as floor, ground, etc.
- Never bring your hand close to the cutter during operation.
- Never bring your hand close to the reaction stoppers A and B during operation.

# 1. Inspect the cutter and grip rubber

# WARNING

Confirm that the hexagon socket bolt attaching the cutter

If the tool is used with the bolt loose, it could damage the tool or the cutter and result in accident or injury.

The machine is so designed that the upper cutter and the grip rubber can support a rebar.

If the grip rubber gets worn out, there is a fear that it cannot sufficiently hold the rebar and gets broken down with its parts flying around, etc.

If the grip rubber cannot hold the rebar much longer, replace it with a new grip rubber. (For replacing the grip rubber and repairing, ask the store where you purchased it or the HiKOKI Authorized Service Center.)

- Position the tool as shown in Fig. 9.
- (2) Attach battery and battery cover. (Fig. 10)
- (3) Open the cover. (Fig. 12)
- (4) Lower the upper cutter.

Lightly pull the switch and slowly move the upper cutter. When the upper cutter comes outside the cam cover and the hexagon socket bolt is fully visible, release the switch to stop it in that position. (Fig. 13)

(5) Detach the battery cover and battery. (Fig. 11)

(6) Check for abnormalities such as wear, deformation or breaks in the cutter. (Fig. 14)

If the cutter needs to be exchanged, see "3. Cutter Replacement".

- (7) Using the included hexagonal bar wrench, make sure that the hexagon socket bolt is fully tightened. (Fig. 15) (8) Make sure the grip rubber isn't worn down (Fig. 16)
- (9) Make sure that the switch lock is in the lock position (Fig. 17)
- (10) Attach battery and battery cover (Fig. 10)

### 2. Cutting WARNING

- O Do not cut any materials other than the rebars. If you attempt to do so, the material can splinter into pieces
- The bending roller moves even during cutting operation. Never bring your hand close to the bending roller.
- The cutter blade can get worn out by repeated cutting of the rebar. Continued use of a worn-out cutter can result in the damage and the broken pieces flying around. Replace it with a new cutter after approximately 8000 times of cutting as a rough guide.

During cutting work, securely hook the rebar to the reaction stopper B. Furthermore, secure enough length of the rebar to be hooked to the reaction stopper B.

Set the rebar in the center or the

recess of the cutter during cutting work. Any cutting work with the rebar set on corners or ends of the cutter can result in the pieces of broken



rebar flying around or the damage to the cutter and the machine.

## CAUTION

O Do not simultaneously cut two rebars measuring D16 mm or D13 mm.

Doing so may damage the tool.

O A slip clutch is built in the machine to protect the mechanism.

If you process the material with the diameter or quality beyond the capacity, the slip clutch can sometimes function. In such a case, stop processing immediately and check the material.

When the slip clutch works, a big slip noise occurs, but it's not a malfunction.

After following the steps for "1. Inspect the cutter and grip rubber" (steps (1) through (10)), follow the instructions below.

- (1) Position the setting dial in the "CUT" position. (Fig. 18)
- (2) Set the rebar to be cut above the lower cutter Make sure that there is enough length for the rebar to fully hook reaction stopper B. (Fig. 19)
- (3) Press the switch lock in either direction to release the lock, and pull the switch to cut the rebar. (Fig. 7)

After cutting the rebar, hold down the switch until the motor completes its reverse-rotation and the upper cutter begins its return.

#### 3. Cutter Replacement

After following the steps for "1. Inspect the cutter and grip rubber" (steps (1) through (5)), follow the instructions below. Replace the upper and lower cutters as one set.

(1) Using the included hexagonal bar wrench, remove the hexagon socket bolt and then remove the upper and lower cutters.

Pushing the cutter guard upwards makes it easier to remove the upper cutter. (Fig. 20)

Prying with a flathead screwdriver will make it easier to remove the lower cutter. (Fig. 21)

(2) Clean away the iron filings attached around the cutter installation area (Fig. 22)

### WARNING

Wear protective goggles.

(3) Align the hole of the cutter with the position of the pin and attach the cutter.

Using the included hexagonal bar wrench, firmly tighten the hexagon socket bolt to secure the cutter.

Exchange the hexagon socket bolt with the new one included with the cutter. (Fig. 23)

(4) Attach the battery and battery cover (Fig. 10)

# **HOW TO USE (BENDING)**

# 1. Normal bending procedure WARNING

- Note that the unit is not a hand-held tool. Be absolutely sure to use the unit only after placing it on a stable spots such as floor, ground, etc.
- Never bring your hand close to the bending roller during operation.
- Never bend any materials other than the rebars. If you attempt to do so, the material can splinter into pieces and scatter.
- Bend less than every 3 pieces of rebar with a 10 mm diameter, less than every 2 pieces with a 12 mm diameter, and every 1 piece with a 16 mm diameter.
- Remember that the cutter moves even during the bending operation, thereby, close the cutter cover without fail. (Fig. 24)
- Begin operation only after making sure that there are no people within the turning range of the material to be bent.

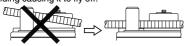


 Reserve an extra length of at least 200 mm on the bending length of the rebar to be bent. (Fig. 26)

If the extra length is not long enough, the rebar can come off during bending operation, or it can break into fragments and scatter dangerously.

 Place the rebar on the center plate and set it so that it is horizontal with the turntable surface.

If the side that is to be bent is set inclined upward, the rebar can come loose from the bending roller while bending causing it to fly off.



O When bending multiple rebars at one time, some may come off the bending roller and guide, etc., and therefore exercise caution and set them horizontally.

O If you bend the rebar with a large angle while placing your hand onto it, there is a fear of getting your hand caught in by the fold-back reaction of the rebar. Never place your hand onto the position where the rebar may fold back.



- (1) Remove battery cover and battery (Fig. 5-a)
- (2) Make sure the switch lock is in the lock position. (Fig. 17)
- (3) Position the tool so that the turn table is facing upwards (Fig. 24)
- (4) Make sure the cutter's cover is closed (Fig. 24)
- (5) Attach the battery and battery cover (Fig. 5-b)
- (6) Align the setting dial to the appropriate size color and angle of the rebar to be bent. (Fig. 25)
- [Adjusting for the sizes of rebars]

Although the bend angle is the same on the dial, the angle will slightly change depending on the rebar's thickness.

Adjust the angle in accordance with the size color on the setting dial.

Size of rebar	Colors of indicated marks
ø10 mm	White
ø12 mm	Green
ø16 mm	Silver

#### NOTE

Even at the same dial setting position, the bending angle can sometimes differ if the diameter or hardness of the rebar is different. Use the angle marks merely as a rough guideline.

- (7) Properly setup by placing the rebar against the guide's stopper (Fig. 26)
- (8) Press the switch lock to release the lock and pull the switch to bend the rebar. (**Fig. 7**)

Even after the rebar is bent, the motor will reverse-rotate and the roller will return to position while the switch is pulled.

When the roller begins returning to position, it will continue to do so even if the switch is released. (See "[OPERATION]; 1. Switch operation")

#### 2. Bending in Manual Mode

In addition to "bending according to dial setting", this tool uses a variable speed switch to allow the bending of rebars according to "visual estimation".

After steps (1) through (5) of "1. Normal bending procedure" have been completed, follow the instructions below.

- Set the setting dial to a larger angle 

   than the one desired 
   ® (Fig. 27)
- (2) Set the rebar and release the switch lock (See "[OPERATION]; 1. Switch operation") (Fig. 7)
- (3) Pull the switch and release at the desired angle ® (Fig. 30 1)

The roller will move as long as the switch is pulled. Little by little, pull the switch a few times to adjust until the desired angle is reached.

(4) Verify the bent angle

Press the Manual Mode switch to slightly reverse-rotate the bending roller. (Fig. 28)

If the desired bending angle ® is reached, go to step (5). If the angle requires more bending, press the Manual Mode switch to return to normal rotation and bend a little more.) (Fig. 29) (Fig. 30 2)

- (5) When the rebar is bent to the desired angle, keep pulling the switch in reverse-rotation mode, until the roller is returned to its original position. (Fig. 30 3)
- (6) When the bending roller stops after returning to its original position, press the Manual Mode switch once again to cancel reverse-rotation. (Fig. 29)
- 3. Using holes to fix unit in place.

When using this product, place it in a stable position on floor or ground.

At the center of the tool is a hole for securing the unit in place and a screw hole located on the notch part of the inner cover

Use these holes to secure the tool to a work bench or other location. (Bolt size: M10) (Fig. 31)

# **WARNING SIGNALS**

This product features functions that are designed to protect the tool itself as well as the battery. During work, from the time the switch is being pulled and three seconds after its release, each of the protective functions may be activated, resulting in the Mode indicator lamp to blink as shown in **Table 3** to notify the user. When any of the safeguard functions are triggered, immediately remove your finger from the switch and follow the instructions described under corrective action. (**Fig. 32**)

### 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.

# HOW TO RECHARGE USB DEVICE (UC18YSL3)

- (1) Select a charging method
- O Charging a USB device from a electrical outlet (Fig. 33-a)
- Charging a USB device and battery from a electrical outlet (Fig. 33-b)
- (2) How to recharge USB device (Fig. 34)
- (3) When charging of USB device is completed (Fig. 35)

# MAINTENANCE AND INSPECTION

#### CAUTION

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

# 1. Inspecting the cutter

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

## 2. Inspecting the mounting screws

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

#### 3. Maintenance of the motor

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

## 4. 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.

# 5. Cleaning on the outside

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

#### Storage

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

#### NOTE

Storing lithium-ion batteries.

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

Prolonged storage (3 months or more) of batteries with a low charge may result in performance deterioration, significantly reducing battery usage time or rendering the batteries incapable of holding a charge.

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

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

# CAUTION

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

# Important notice on the batteries for the HiKOKI cordless power tools

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

### NOTE

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

# **TROUBLESHOOTING**

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

# 1. Power tool

Symptom	Possible cause	Remedy	
Does not move	No battery remaining.	Charge the battery.	
	Battery is not properly installed.	Push battery in until a click is heard.	
	The tool remains in reverse-rotation mode	Press the Manual Mode switch to cancel reverse-rotation.	
Suddenly stopped	Overload protection circuit activated.	Remove cause of overload.	
	Heat protection circuit activated due to overheating of the battery or the tool itself.	Allow battery and tool to fully cool down.	
Switch cannot be pulled	Insufficient pressure on the switch lock.	Press switch lock in until it comes to the end.	
Hear a "beep" when pulling on the switch	Switch is pulled in a small amount.	Not a problem. Pull harder on the switch and the sound will stop.	
Cannot cut satisfactorily	Cutter is worn/degraded/damaged	Replace with a new cutter.	
	Working tool outside of its normal capacity (material, material diameter, processing quantity).	Review "SPECIFICATIONS" to cut properly.	
Have trouble holding rebar when cutting	Grip rubber is worn.	Replace with new grip rubber. Contact a HiKOKI Authorized Service Center.	
Cannot bend properly	Working tool outside of its normal capacity (material, material diameter, processing quantity).	Review "SPECIFICATIONS" to bend properly.	
Cannot install battery	Attempting to install battery other than type specified.	Use Multi Volt type battery.	

# 2. Charger

Symptom	Possible cause	Remedy	
The charge indicator lamp	The battery is not inserted all the way.	Insert the battery firmly.	
is rapidly flickers purple, and battery charging doesn't begin.	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.	
The USB power lamp has switched off and the	The battery's capacity has become low.	Replace the battery with one that has capacity remaining.	
USB device has stopped charging.		Plug the charger's power plug into an electric socket.	
USB power lamp does not switch off even though the USB device has finished charging.	The USB power lamp lights up green to indicate that USB charging is possible.	This is not a malfunction.	
It is unclear what the charging status of a USB device is, or whether its charging is complete.	The USB power lamp does not switch off even when charging is complete.	Examine the USB device that is charging to confirm its charging status.	
Charging of a USB device pauses midway.	The charger was plugged into an electrical socket while the USB device was being charged using the battery as the power source.	This is not a malfunction. The charger pauses USB charging for about 5 seconds when it is differentiating between power sources.	
	A battery was inserted into the charger while the USB device was being charged using a power socket as the power source.		
Charging of the USB device pauses midway when the battery and the USB device are being charged at the same time.	The battery has become fully charged.	This is not a malfunction. The charger pauses USB charging for about 5 seconds while it checks whether the battery has successfully completed charging.	
Charging of the USB device doesn't start when the battery and the USB device are being charged at the same time.	The remaining battery capacity is extremely low.	This is not a malfunction. When the battery capacity reaches a certain level, USB charging automatically begins.	

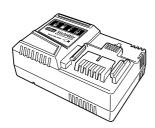
	VB36	VB3616DA	
	(2XC)	(NNK)	
	1	1	
5 mm	1	1	
BSL36A18	2	_	
	1	1	
UC18YSL3	1	_	
	2	_	
	1	1	



BSL36A18



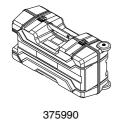
BSL36B18



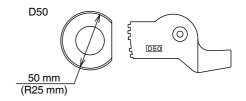
UC18YSL3 (14.4V - 18V)



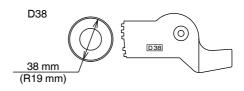
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ET36A

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