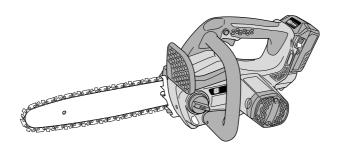
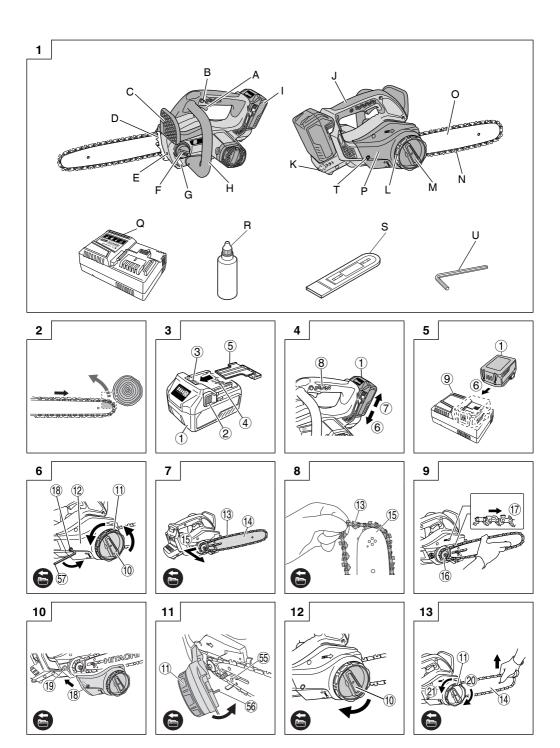
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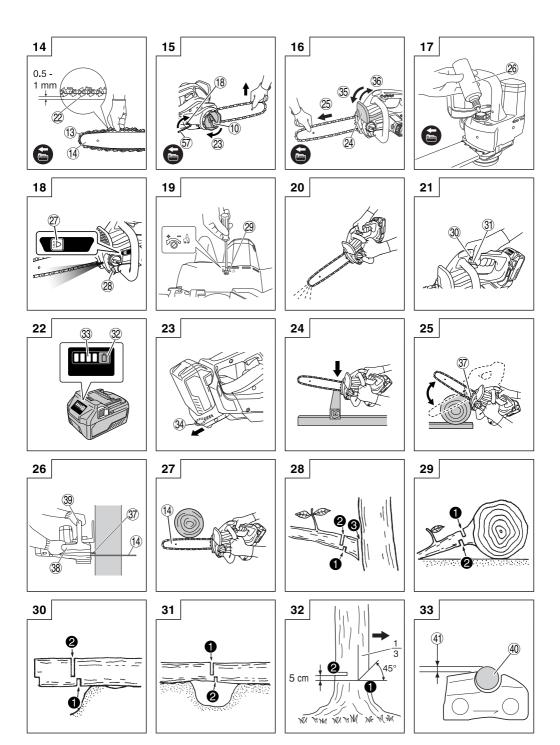
CS 3630DA

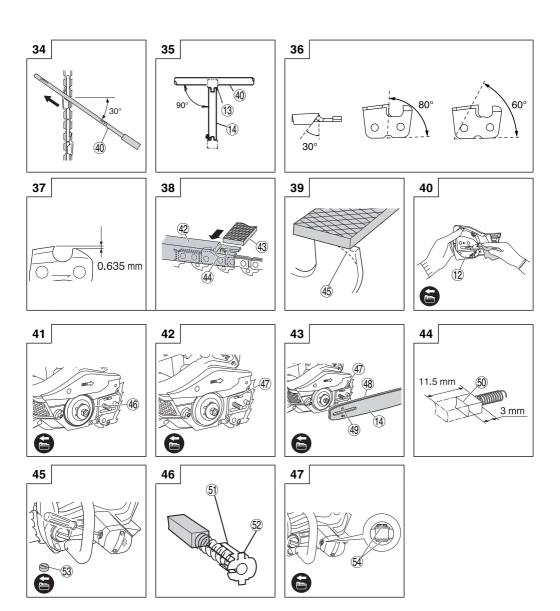


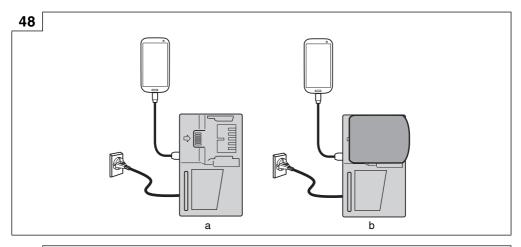


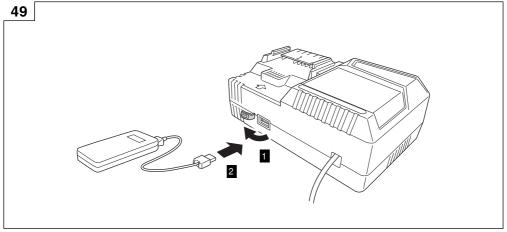
Handling instructions

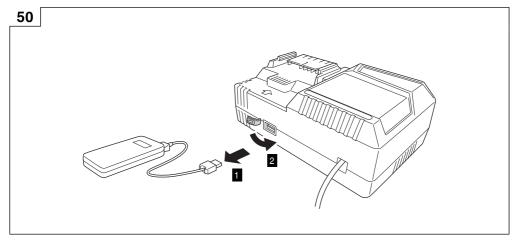








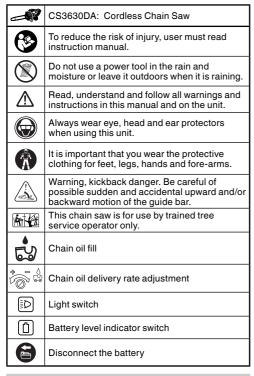




SYMBOLS

WARNING

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



WHAT IS WHAT? (Fig. 1)

- A: Switch: Device activated by the finger.
- B: Lock-off button: Button that prevents the accidental operation of the trigger.
- C: Chain brake: Device for stopping or locking the saw chain.
- D: Spiked bumper: Device for acting as a pivot when in contact with a tree or log.
- E: LED light: Light that illuminate the cutting edge.
- F: Oil tank cap: Cap for closing the oil tank.
- G: Oil sight glass: Window to check chain oil amount.
- H: Front handle: Support handle located at or towards the front of the main body.
- I: Battery: Power source to drive the unit.
- J: Rear handle (Top handle): Support handle located on the top of the main body.
- K: Hook: Tool for hanging the unit with rope etc.
- L: Tension dial: Device for adjusting tension of saw chain.
- M: Knob: Knob for securing tension dial and side cover.
- N: Saw chain: Chain, serving as a cutting tool.
- O: Guide bar: The part that supports and guides the saw
- P: Side cover: Protective cover to the guide bar, saw chain, clutch and sprocket when the chain saw is in
- Q: Charger: For charging the battery.
- R: Oil feeder: Container for oil.

- S: Chain case: Case for covering the guide bar and saw chain when the unit is not being used.
- T: Bolt: Bolt for fixing the side cover in place.
- U: Hexagonal bar wrench: Tool for loosening and tightening the bolt.

⚠ WARNING

This chain saw (CS3630DA) is designed especially for tree care and surgery. Only persons trained in tree care and surgery may use this saw. Observe all literature, procedures and recommendations from the relevant professional organization. Failure to do so constitutes a high accident risk. We recommend always using a rising platform for sawing in trees. Rappelling techniques are extremely dangerous and require special training. The operator must be trained in and familiar with the use of safety equipment and working and climbing techniques. Always use the restraining equipment for both the operator and the saw.

GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING

Read all safety warnings and all instructions.

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

Save all warnings and instructions for future reference.

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

- 1) Work area safety
 - a) Keep work area clean and well lit.

Cluttered or dark areas invite accidents.

- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust
- or fumes.
 c) Keep children and bystanders away while operating a power tool.

Distractions can cause you to lose control.

- 2) Electrical safety
 - a) Power tool plugs must match the outlet.

Never modify the plug in any way.

Do not use any adapter plugs with earthed (grounded) power tools.

Unmodified plugs and matching outlets will reduce risk of electric shock.

 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 dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

c) Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the tool.

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

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

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

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

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

f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.

Loose clothes, jewellery or long hair can be caught in moving parts.

g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.

Use of dust collection can reduce dust-related hazards.

4) Power tool use and care

a) Do not force the power tool. Use the correct power tool for your application.

The correct power tool will do the job better and safer at the rate for which it was designed.

 b) Do not use the power tool if the switch does not turn it on and off.

Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.

Such preventive safety measures reduce the risk of starting the power tool accidentally.

d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.

Power tools are dangerous in the hands of untrained users

e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools' operation.

if damaged, have the power tool repaired

Many accidents are caused by poorly maintained power tools.

f) Keep cutting tools sharp and clean.

Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.

Use of the power tool for operations different from those intended could result in a hazardous situation.

5) Battery tool use and care

 a) Recharge only with the charger specified by the manufacturer.

A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.

b) Use power tools only with specifically designated battery packs.

Use of any other battery packs may create a risk of injury and fire.

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

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

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

Liquid ejected from the battery may cause irritation or burns.

6) Service

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

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

PRECAUTION

Keep children and infirm persons away.

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

CHAIN SAW SAFETY WARNINGS

- Keep all parts of the body away from the saw chain when the chain saw is operating. Before you start the chain saw, make sure the saw chain is not contacting anything. A moment of inattention while operating chain saws may cause entanglement of your clothing or body with the saw chain.
- Always hold the chain saw with your right hand on the rear handle and your left hand on the front handle. Holding the chain saw with a reversed hand configuration increases the risk of personal injury and should never be done.
- Hold the power tool by insulated gripping surfaces only, because the saw chain may contact hidden wiring. Saw chains contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- 4. Wear safety glasses and hearing protection. Further protective equipment for head, hands, legs and feet is recommended. Adequate protective clothing will reduce personal injury by flying debris or accidental contact with the saw chain.

- Do not operate a chain saw in a tree. Operation of a chain saw while up in a tree may result in personal injury.
- Always keep proper footing and operate the chain saw only when standing on fixed, secure and level surface. Slippery or unstable surfaces such as ladders may cause a loss of balance or control of the chain saw.
- When cutting a limb that is under tension be alert for spring back. When the tension in the wood fibres is released the spring loaded limb may strike the operator and/or throw the chain saw out of control.
- Use extreme caution when cutting brush and saplings.
 The slender material may catch the saw chain and be whipped toward you or pull you off balance.
- Carry the chain saw by the front handle with the chain saw switched off and away from your body. When transporting or storing the chain saw always fit the guide bar cover. Proper handling of the chain saw will reduce the likelihood of accidental contact with the moving saw chain.
- Follow instructions for lubricating, chain tensioning and changing accessories. Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- Keep handles dry, clean, and free from oil and grease.
 Greasy, oily handles are slippery causing loss of control.
- 12. Cut wood only. Do not use chain saw for purposes not intended. For example: do not use chain saw for cutting plastic, masonry or non-wood building materials. Use of the chain saw for operations different than intended could result in a hazardous situation.
- Causes and operator prevention of kickback: (Fig. 2)
 Kickback may occur when the nose or tip of the guide
 bar touches an object, or when the wood closes in and
 pinches the saw chain in the cut.

Tip contact in some cases may cause a sudden reverse reaction, kicking the guide bar up and back towards the operator.

Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator.

Either of these reactions may cause you to lose control of the saw which could result in serious personal injury. Do not rely exclusively upon the safety devices built into your saw. As a chain saw user, you should take several steps to keep your cutting jobs free from accident or injury.

Kickback is the result of tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

- O Maintain a firm grip, with thumbs and fingers encircling the chain saw handles, with both hands on the saw and position your body and arm to allow you to resist kickback forces. Kickback forces can be controlled by the operator, if proper precautions are taken. Do not let go of the chain saw.
- Do not overreach and do not cut above shoulder height. This helps prevent unintended tip contact and enables better control of the chain saw in unexpected situations.
- O Only use replacement bars and chains specified by the manufacturer. Incorrect replacement bars and chains may cause chain breakage and/or kickback.
- Follow the manufacturer's sharpening and maintenance instructions for the saw chain. Decreasing the depth gauge height can lead to increased kickback.

ADDITIONAL SAFETY WARNINGS

- Work without pressure. In addition, always keep your body warm.
- Before commencing work, reflect fully on the work procedures involved and work to avoid accidents, otherwise injury may occur.

- Do not use in the event of bad weather, such as strong wind, rain, snow, fog, or in areas prone to rockfall or avalanches. In bad weather, judgment may be impaired and the vibration may result in disaster.
- When visibility is poor, such as during bad weather or night, do not use the unit. In addition, do not use it in rain or in a location exposed to rain.
 - Unstable foothold or loss of balance may result in an accident.
- Check the guide bar and saw chain before starting the unit.
- O If the guide bar or saw chain is cracked, or the product is scratched or bent, do not use the unit.
- Check if the guide bar and saw chain are securely installed. If the guide bar or saw chain is broken or dislodged, this may result in an accident.
- Before starting work, check to ensure the switch does not engage unless the lock-off button is pressed.
 If the unit does not working properly, immediately stop using and request repair from your Hitachi Authorized Service Center.
- Install the saw chain properly, in accordance with the instruction manual.
 - If installed incorrectly, the saw chain will come off the guide bar and injury may occur.
- Never remove any of the safety devices equipped on the chain saw (brake lever, lock-off button, chain catcher etc.).
 - In addition, do not alter or immobilize them. Injury may occur.
- In the following cases, switch the unit off and ensure the saw chain is no longer moving:
- O When not in use or being repaired.
- O When shifting to a new work location.
- When inspecting, adjusting or replacing the saw chain, quide bar, chain case and any other part.
- When refilling the chain oil.
- When removing dust etc. from the body.
- When removing obstacles, trash or sawdust generated from work from the work area.
- When you take off the unit, or when you get away from the unit.
- O Otherwise, if you sense danger or anticipate risk.
- If the saw chain is still moving, an accident may occur.

 O Work should generally be performed individually
- 10. Work should generally be performed individually. When multiple individuals are involved, ensure sufficient spacing between them. In particular, when felling standing trees or working on
 - In particular, when felling standing trees or working on a slope, if you anticipate trees falling, rolling or sliding, ensure there is no danger to other workers.
- 11. Remain more than 15 m away from other people. In addition, when working with multiple persons, remain 15 m or more apart.
- There is a risk of impact with scatters and other accidents.
- O Prepare a whistle alert etc. and determine appropriate contact method for other workers beforehand.
- 12. Before felling standing trees, ensure the following:
- O Determine a safe evacuation location prior to felling.
- O Remove obstacles (e.g., branches, shrubs) in advance.
- O Based on a comprehensive evaluation of the state of the tree to be felled (e.g., trunk bend, tension of branches) and the surrounding situation (e.g., state of adjacent trees, presence of obstacles, terrain, wind), decide on the direction in which the standing tree will fall and then plan the felling procedure.
- Careless felling may result in injury.
- 13. When felling standing trees, ensure the following:O During work, be very careful of the direction in which
- When working on a slope, ensuring the tree will not roll, always work from the uphill side of the terrain.

trees fall.

- When the tree starts falling, switch the unit off, alert the surroundings, and immediately retreat to a safe location.
- O During work, if the saw chain or guide bar become entangled in the tree, switch off and use a wedge.
- 14. During use, if the unit performance deteriorates, or you notice any abnormal sound or vibration, immediately switch off and discontinue use, and return to your Hitachi Authorized Service Center for inspection or repair.

If you continue using, injury may occur.

- 15. If the unit is accidentally dropped or exposed to impact, inspect carefully for damage or cracks and ensure there is no deformation.
 - If the unit is damaged, cracked or deformed, injury may occur.
- 16. When transporting the unit by car, secure the unit to prevent it moving. There is a risk of accident.
- Do not switch the unit on while the chain case is attached.

Injury may occur.

- 18. Ensure there are no nails and other foreign objects in the material.
 - If the saw chain impact on the nail etc., injury may occur.
- 19. To avoid the guide bar becoming entangled with the material when chopping on a verge or when subject to the weight of material while cutting, install a supporting platform close to the cutting position.
- If the guide bar becomes entangled, injury may occur.

 20. If the unit is to be transported or stored after use, either remove the saw chain, or attach the chain cover.

 If the cover shows the context with your body.

If the saw chain comes into contact with your body, injury may occur.

- 21. Adequately care for the unit.
- To ensure work can be performed safely and efficiently, care for the saw chain to ensure it provides optimal cutting performance.
- When replacing the saw chain or guide bar, maintaining the body, filling oil etc., follow the instruction manual.
- 22. Ask the shop to repair the unit.
- O Do not modify this product, since it already complies with the applicable safety standards.
- Always refer to your Hitachi Authorized Service Center for all repairs.
 - Attempting to repair the unit yourself may result in an accident or injury.
- 23. When not using the unit, ensure it is properly stored. Drain off the chain oil, and keep in a dry place out of reach of children or a locked location.
- 24. If the warning label is no longer visible, peels off or is otherwise unclear, apply a new warning label.
 - For the warning label, refer to your Hitachi Authorized Service Center.
- When working, if local rules or regulations apply, comply with the same.
- 26. 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.
- 27. Keep the tool's terminals (battery mount) free of swarf and dust.O Prior to use, make sure that swarf and dust have not
- collected in the area of the terminals.

 O During use, try to avoid swarf or dust on the tool from
- falling on the battery.

 O 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.

PRECAUTIONS FOR BATTERY AND CHARGER

- Always charge the battery at an ambient temperature of -10-40°C. A temperature of less than -10°C will result in over charging which is dangerous. The battery cannot be charged at a temperature greater than 40°C. The most suitable temperature for charging is that of 20-25°C.
- 2. Do not use the charger continuously.
 - When one charging is completed, leave the charger for about 15 minutes before the next charging of battery.
- Do not allow foreign matter to enter the hole for connecting the rechargeable battery.
- Never disassemble the rechargeable battery or charger.
- Never short-circuit the rechargeable battery. Short-circuiting the battery will cause a great electric current and overheat. It results in burn or damage to the battery.
- Do not dispose of the battery in fire. If the battery is burnt, it may explode.
- 7. Using an exhausted battery will damage the charger.
- 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 flammable into the charger air ventilation slots will result in an electrical shock hazard or damage to the charger.

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.
- 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.
- O 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.

 2. If liquid leaks onto your skin or clothes, wash well with
- 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 an electrically conductive foreign object enters the terminals of the lithium ion battery, a short-circuit may occur resulting in the risk of fire. Please observe the following matters when storing the battery.

- Do not place electrically conductive cuttings, nails, steel wire, copper wire or other wire in the storage case.
- Either install the battery in the power tool or store by securely pressing into the battery cover until the ventilation holes are concealed to prevent short-circuits (See Fig. 3).

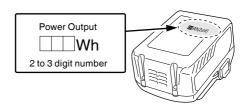
REGARDING LITHIUM-ION BATTERY TRANSPORTATION

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

WARNING

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

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



USB DEVICE CONNECTION PRECAUTIONS (UC18YSL3)

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

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

WARNING

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

NOTE

emission or ignition.

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

DESCRIPTION OF NUMBERED ITEMS (Fig. 3-Fig. 47)

1	Battery	16	Sprocket	31)	Switch	46	Brake band chamber
2	Latch	17)	Blade direction	32	Battery level indicator switch	47)	Chain oil spout
3	Ventilation holes	18	Bolt	33	Battery level indicator lamp	48	Groove
4	Terminals	19	Bolt hole	34)	Hook	49	Oil hole
(5)	Battery cover	20	Increase the tension	35	Actuation	50	Wear limit
6	Insert	21)	Decrease the tension	36	Release	(51)	Nail of carbon brush
7	Pull out	22	Drive link	37)	Spike	(52)	Protrusion of carbon brush
8	Rear handle (Top handle)	23	Fasten	38	Rear handle (Top handle)	53	Brush cap
9	Charge indicator lamp	24)	Chain brake	39	Front handle	(54)	Contact portion of brush tube
10	Knob	25)	Pull	40	Round file	55	Chain tensioner hole
11)	Tension dial	26	Chain oil	41)	1/5 of diameter of file	56	Chain tensioner boss
12	Side cover	27)	Light switch	42	Depth gage jointer	57)	Hexagonal bar wrench
13	Saw chain	28	Oil sight glass	43	Flat file		
14)	Guide bar	29	Oil pump adjuster	44)	Protruding depth gage head		
(15)	Guide bar tip	30	Lock-off button	45	Round off		

SPECIFICATIONS

POWER TOOL

I OWEN TOOL	
Model	CS3630DA
Voltage	36 V
Saw chain	Type: 91PX-45XJ Pitch: 9.5 mm (3/8") / Gage: 1.3 mm (0.05")
Guide bar	Type: P012-50CR Size: 300 mm (Max. cutting legth)
Sprocket	Number of teeth: 6 / 9.5 mm (3/8")
No-load chain speed	8.3 m/s (500 m/min)
Chain oil tank capacity	80 ml
LED light	White LED
Battery available for this tool*	BSL36A18
Weight	4.3 kg (With BSL36A18 attached)

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

BATTERY

Model	BSL36A18			
Voltage	36 V / 18 V (Automatic Switching*)			
Battery capacity	2.5 Ah / 5.0 Ah (Automatic Switching*)			
Available cordless products**	Multi volt series, 18V product			
Available charger	Sliding charger for lithium ion batteries			

The tool itself will automatically switch over.

CHARGER

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

STANDARD ACCESSORIES

In addition to the main unit (1 unit), the package contains the accessories listed on page 20.

Standard accessories are subject to change without notice.

^{**} Please see our general catalogue for details.

OPTIONAL ACCESSORIES (sold separately) (Page 21)

Optional accessories are subject to change without notice.

APPLICATIONS

- O Cutting of timber/logs
- O Pruning, felling of garden trees

BATTERY REMOVAL/INSTALLATION

1. Battery removal

Hold the housing tightly and push the battery latches to remove the battery (see **Fig. 4**).

CAUTION

Never short-circuit the battery.

2. Battery installation

Insert the battery while observing its polarities (see Fig. 4).

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
 - 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. 5** (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 Blinks (RED)		Lights for 0.5 seconds. Does not light for 0.5 seconds. (off for 0.5 seconds)	Plugged into power source		
	While charging	Blinks (BLUE)	Lights for 0.5 seconds. Does not light for 1 second. (off for 1 second)	Battery capacity at less than 50%		
Charge		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 /		Lights (GREEN)	Lights continuously			
GREEN / PURPLE)			(Continuous buzzer sound: about 6 seconds)			
	Overheat standby	Blinks (RED)	Lights for 0.3 seconds. Does not light for 0.3 seconds. (off for 0.3 seconds)	Battery overheated. Unable to charge. (Charging will commence when battery cools)		
	Charging impossible	Flickers (PURPLE)	Lights for 0.1 seconds. Does not light for 0.1 seconds. (off for 0.1 seconds)	Malfunction in the battery or the charger		

(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 which the battery can be recharged		-10°C – 50°C						
	Charging voltage	V	14.4 18						
Battery	Charging time, approx. (At 20°C) min.		BSL14xx series		BSL18xx series		Multi volt series		
1			(4 cells)	(8 cells	s)	(5 cells)	(10 cell	s)	(10 cells)
			BSL1415S: 15 BSL1415: 15 BSL1415X: 15 BSL1420: 20 BSL1425: 25 BSL1430C: 30	BSL1430 BSL1440 BSL1450 BSL1460	:20 :26 :32 :38	BSL1820 : 20	BSL1840 BSL1850	:20 :26 :32 :38	BSL36A18:32
USB	Charging voltage	٧	5						
USB	Charging current	Α	2						

NOTE

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

- 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.

INSTALLING (REPLACING) SAW CHAIN

WARNING

- O To prevent accidents, always switch the unit off, and remove the storage battery.
- O Don't use the saw chain or the guide bar other than those specified in "SPECIFICATIONS".

CAUTION

Wear gloves and be careful to avoid injury with the saw chain.

NOTE

- When removing the saw chain, remove sawdust from the oil spout, oil hole, and guide bar groove.
 If sawdust accumulates, this may cause the unit to fail.
- Use the correct type of saw chain in accordance with the specifications.
- If you install the wrong type of guide bar, the saw chain may come off and injury may occur.
- 1. Removing the side cover (Fig. 6)
- 1) Rotate the knob once to loosen it.
- Rotate the tension dial half a turn to loosen it.
- 3 Using the supplied hexagonal bar wrench, loosen the bolt until there is no resistance.
- (4) Turn the knob and remove the side cover.
- Removing the saw chain and guide bar (Fig. 7)
 Remove the saw chain and guide bar in the direction indicated by the arrow.

3. Engaging the new saw chain in the sprocket (Fig. 8, 9)

Engage the saw chain at the guide bar tip with attention to the direction of the saw chain, and then properly engage the saw chain with the sprocket.

4. Installing the side cover

(1) Align the bolt with the bolt hole (Fig. 10)

- 2 Adjust the tension dial of the side cover so that the chain tensioner boss is inserted into the guide bar chain tensioner hole, and attach the side cover. (Fig. 11)
- 3 Rotate the knob once to temporarily fix it. (Fig. 12)

5. Adjusting the saw chain tension (Fig. 13)

- O While lifting the guide bar tip, turn the tension dial to adjust the saw chain tension.
- Turn the tension dial to the right to increase the saw chain tension, and to the left to decrease it.

6. Checking the saw chain tension (Fig. 14)

Adjust the saw chain tension so that the gap between the saw chain drive link and the guide bar is 0.5 to 1 mm when you lift the saw chain slightly near the center of the guide bar.

7. Securing the knob (Fig. 15)

- (1) When adjustment is complete, lift up the guide bar, and fully tighten the knob.
- Make sure the bolt is firmly tightened.

WARNING

After adjusting the saw chain tension, ensure the knob is fully tightened.

If it is loose, injury may occur.

INSPECTION AND PREPARATION PRIOR TO USE

Prior to use, make the following inspection and preparation. WARNING

- O To prevent accidents, always perform steps 1 to 4 ensuring the storage battery is removed from the body.
- Do not secure the lock-off button while it is pressed. If the switch is accidentally engaged, the unit may unexpectedly start and injury may occur.
- 1. Ensuring the switch is off
- O If you insert the storage battery without knowing whether the switch is engaged, the unit may unexpectedly start, which may result in an accident.
- O When the switch is engaged while pressing the lockoff button, the unit switches on, and when the switch is released, the unit switches off.
- 2. Checking the saw chain tension
- O If the saw chain tension is incorrect, there is a risk of damage to the saw chain or guide bar and malfunction. Referring to steps 5 to 7 "Installing (replacing) saw chain," ensure an appropriate tension is set.
- O While the saw chain is still new, it is particularly stretchy, so periodically check the tension and adjust as required.
- Also check the knob is securely tightened.

3. Checking operation of chain brake (Fig. 16) WARNING

- O Although the chain brake is an emergency stop device. this is not completely reliable. Operate carefully to avoid the risk of kickback.
- O The chain brake is intended for use in emergencies and when starting up. Do not use it indiscriminately.
- O To avoid impaired movement of the chain brake due to buildup of sawdust etc., clean regularly.
- O The chain brake is an important component to ensure safe use.

If you have any concern regarding the brake operation. request repair from your Hitachi Authorized Service Center.

The chain brake is an emergency stop device that stops the saw chain when the unit is subject to kickback etc., to reduce risk.

(Refer to "Causes and operator prevention of kickback.") When activating the chain brake by pushing the brake lever forward, the saw chain stops moving.

If you pull the brake lever toward you, the brake is released. When confirming the operation of the chain brake, always switch the unit off, remove the battery, activate the brake lever and pull the saw chain by hand.

If the saw chain does not move, this means the chain brake is activated.

NOTE

Always wear thick gloves for this task.

Since the saw chain blade is very sharp, pulling it hard risks injuring your fingers.

Checking the chain oil

- This unit is delivered without chain oil inside. Ensure the oil tank is filled with the chain oil provided before use. (Fig. 17)
- Periodically check the oil sight glass during work and replenish oil as required.
- When you press the light switch on the switch panel, an LED light turns on and the internal light improves visibility. (Fig. 18) (Check this in step 6.)
- If the chain oil supplied runs out, use Hitachi chain oil sold separately or equivalent chain oil on the market.
- O The chain oil lubricates automatically.

The discharge rate for auto lubrication is factory preset to the maximum.

To reduce the discharge rate, turn the oil pump adjuster on the rear of the body clockwise. (Fig. 19)

NOTE

O The oil tank capacity is about 80 ml.

Even if overfilled, excess oil will escape from the overflow spout.

We recommend that you stock up with chain oil.

If you continue working without chain oil, the saw chain may burn through, or the motor may fail.

- Be careful to avoid dust or other foreign matter from entering the oil tank.
 - If dust and other foreign matter enter the oil tank, the unit may fail.
- Chain oil left in the tank may leak due to the structure of this unit. Although this does not indicate a malfunction, it may soil the storage location, so be careful.
 - When storing, empty the oil from the oil tank, and place an item under the main body which can absorb any

5. Installing the storage battery (Fig. 4)

As shown in Fig. 4, push firmly until it clicks into place. CAUTION

Securely attach the storage battery.

If the storage battery is not securely attached, it may come off and injury may occur.

6. Checking if the LED light works (Fig. 18)

- O When you press the light switch, the LED light turns on and when released, the light goes out.
- O The LED light illuminates the cutting edge section.
- O It lights up the inside of the oil sight glass to facilitate checks of the remaining oil level.

NOTE

If the light is dirty, carefully wipe with a soft cloth etc., to avoid damaging it.

If the light is damaged, this will reduce the brightness.

7. Checking brake is engaged

- When the switch is engaged while pressing the lockoff button, the unit switches on, and when the switch is released, the unit switches off.
- In addition, 1 to 3 seconds after releasing the switch, the unit applies a brake to stop the rotation of the saw chain.
 - Before using, check to ensure brake is engaged.

CAUTION

Be careful of the repulsive force when the brake is engaged.

If you drop the unit, injury may occur.

8. Checking chain oil discharge (Figs. 19, 20)

 When switching the unit on, chain oil automatically lubricates the saw chain and guide bar.

 If oil does not seem to emerge 2 to 3 minutes after the unit starts, check if any sawdust has accumulated around the oil spout.

(Refer to "Cleaning the chain oil spout.")

(Refer to "Checking the chain oil.")

Switch operation

When the switch is engaged while pressing the lock-off button, the saw chain rotates. (Fig. 21)

Unless the lock-off button is pressed, the switch cannot be engaged.

After the switch is engaged, the saw chain continues rotating as long as it is pressed down. In addition, the LED light remains lit up.

When the switch is released, a brake is applied to stop the saw chain rotation.

WARNING

Do not secure the lock-off button while it is pressed. If the switch is accidentally engaged, the unit may unexpectedly start and injury may occur.

Using the hook

Pull out the hook from the unit, to which a rope etc. can be tied to suspend the unit. (Fig. 23)

WARNING

When using the hook, ensure the unit is securely suspended to avoid the risk of falling.

If the unit falls, an accident may occur.

REMAINING BATTERY INDICATOR

You can check the battery's remaining capacity by pressing the remaining battery indicator switch to light the indicator lamp. (Fig. 22, Table 3)

The indicator will shut off approximately 3 seconds after the remaining battery indicator switch is pressed.

It is best to use the remaining battery indicator as a guide since there are slight differences such as ambient temperature and the condition of the battery.

Also, the remaining battery indicator may vary from those equipped to a tool or charger.

Table 3

State of lamp	Battery Remaining Power
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>(†1000</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.
<u> </u>	Blinks; Output suspended due to failure or malfunction. The problem may be the battery so please contact your dealer.

As the remaining battery indicator shows somewhat differently depending on ambient temperature and battery characteristics, read it as a reference.

NOTE

- O Do not give a strong shock to the switch panel or break it. It may lead to a trouble.
- To save the battery power consumption, the remaining battery indicator lamp lights while pressing the remaining battery indicator switch.

CUTTING PROCEDURES

WARNING

- O Prior to operation, ensure that chain brake works.
- O During use, grip the handle securely with both hands.
- O When cutting timber from the bottom, ensure the saw chain does not impact with the timber.

If the unit is pushed back, injury may occur.

 During work breaks or after work, always switch the unit off, and remove the storage battery from the main body.

Always monitor the workplace and surrounding area, ensure there are no objects which could cause injuries, accidents or failure, and if any are present, remove them in advance.

In particular, when establishing a foothold for working, ensure there is no instability or any object which could be tripped over.

When felling standing trees, always pay careful attention to the direction in which the tree will fall or roll, and determine a safe evacuation area and escape route for yourself in advance.

1 Ensuring the unit is switched off

If the storage battery is inserted while the switch is unknowingly engaged, the unit may unexpectedly start, which may result in an accident.

② Installing the storage battery (Fig. 4)

As shown in Fig. 4, push firmly until it clicks into place.

3 Engaging the switch

Ensuring the saw chain is not in contact with the timber, engage the switch, and start cutting when the saw chain speed has increased.

CAUTION

- When switching the unit on, ensure the saw chain does not contact with material or anything else.
- During use, be careful to ensure the saw chain does not contact with other material or object. In particular, when you have finished cutting, be careful to ensure it does not touch the ground.

NOTE

Refill the oil tank early to prevent the unit running out of oil.

1. General cutting procedures

- Switch ON the power while keeping the saw slightly away from the wood to be cut. Start sawing only after the unit has reached full speed.
- (2) When sawing a slender piece of wood, press the base section of the guide bar against the wood and saw downward as shown in Fig. 24.
- (3) When sawing a thick piece of wood, press the spike on the front section of the unit against the wood and cut it with a lever action while using the spike as a fulcrum as shown in Fig. 25.
- (4) When cutting wood horizontally, turn the unit body to the right so that the guide bar is below and hold the upper side of the front handle with your left hand. Hold the guide bar horizontally and place the spike that is on the front of the unit body on the lumbar. Using the spike as a fulcrum, cut into the wood by turning the rear handle to the right. (Fig. 26)

- (5) When cutting into wood from the bottom, touch the upper part of the guide bar to the wood lightly. (Fig. 27)
- (6) As well as carefully studying the handling instructions, ensure practical instruction in the operation of the chain saw prior to use, or at least practice working with the chain saw by cutting lengths of round timber on a sawing trestle.
- (7) When cutting logs or timbers which are not supported, support them properly by immobilizing them during cutting using a sawing trestle or other proper method.

CAUTION

- When cutting wood from the bottom, there is a danger that the unit body may be pushed back toward the user if the chain strongly impacts with the wood.
- Do not cut all the way thorough the wood by starting from the bottom since there is the danger of the guide bar flying up out of control when the cut is finished.
- Always prevent the operating chain saw from touching the ground or wire fences.

2. Branch cutting

(1) Cutting branches from a standing tree:

A thick branch should initially be cut off at a point away from the trunk of the tree.

First cut in about one third of the way from below, and then cut off the branch from above. Finally, cut off the remaining portion of the branch even with the trunk of the tree. (Fig. 28)

CAUTION

- O Always be careful to avoid falling branches.
- O Always be alert for chain saw recoil.
- (2) Cutting branches from fallen trees:

First cut off branches that do not touch the ground, then cut off those which touch the ground. When cutting thick branches that touch the ground, first cut in about half of the way from above, then cut the branch off from below. (Fig. 29)

CAUTION

- When cutting off branches which touch the ground, be careful that the guide bar does not become bound by pressure.
- O During the final cutting stage, beware of the log suddenly rolling.
- 3. Log cutting

When cutting a log positioned as shown in Fig. 30, first cut in about one third of the way from below, then cut down all the way from above. When cutting a log that straddles a hollow as shown in Fig. 31, first cut in about two thirds of the way from above, then cut upward from below.

CAUTION

- O Ensure the guide bar does not become bound in the log by pressure.
- When working on inclined ground, be sure to stand on the uphill side of the log. If you stand on the downhill side, the cut-off log may roll toward you.

4. Felling trees

(1) Undercut (1) as shown in Fig. 32):

Make undercut facing the direction in which you want the tree to fall.

The depth of the undercut should be 1/3 of the tree's diameter. Never fell trees without proper undercut.

(2) Back cut (2 as shown in Fig. 32):

Make a backcut about 5 cm above and parallel to the horizontal undercut.

If the chain becomes entangled during cutting, stop the saw and use wedges to free it. Do not cut thorough the tree.

CAUTION

- O Trees should not be felled in a manner that would endanger any person, strike any utility line or cause any property damage.
- O Be sure to stand on the uphill side of the terrain as the tree is likely to roll or slide downhill after it is felled.

Precaution for cutting work

For large-scale operation or non-stop work

To protect the motor and electronics contained in this unit, if it is exposed to high temperature, this is signaled by a flashing LED light.

If you cut or push forcibly with a high load or non-stop, the motor and electronics will heat up and the LED light will flash.

NOTE

- O If the LED light flashes, stop using and please allow the unit to cool sufficiently. If you continue to use it, the unit may sustain damage.
- O In addition, if you work non-stop, when replacing the battery, please allow the unit to cool down for at least 15 minutes.
- In addition, when work is interrupted, if the LED light flashes when you turn the switch back on, this means the unit has not cooled sufficiently, so please allow longer downtime before switching back on.

Gripping/pushing force of chain saw

Always grip the chain saw securely.

In addition, do not force the chain saw more than necessary. When cutting, additional force exerted on the chain saw will not accelerate the cutting speed. This will strain the motor, impair the performance, and damage or cause malfunction of the motor or guide bar. Use the unit in the range where the saw chain is at a reasonable speed.

In particular, when the saw chain stops (becomes jammed) due to the excessive force, it may cause an injury or failure of the unit.

Chain catcher

- The chain catcher is located on the power head just below the chain to further prevent the possibility of a broken chain striking the chain saw user.
- O When the saw chain is cut, replace it with a new one referring to "Installing (replacing) saw chain".

SHARPENING OF THE CHAIN BLADE

WARNING

To prevent accidents, always turn off the switch and remove the storage battery from the main body. In addition, when using saw chains, always wear thick

gloves.

NOTE

Sharpen the saw chain and adjust the depth gage at the central position on the guide bar, with the saw chain attached to the main body.

When the sharpness of saw chains deteriorates, the motor and each part of the body are burdened and the efficiency declines.

For optimal performance of the unit, frequent maintenance is necessary to keep the saw chain sharp.

1. Blade sharpening

The round file should be held against the chain blade so that one-fifth of its diameter extends above the top of the blade, as shown in Fig. 33. Sharpen the blades by keeping the round file at a 30° angle in relation to the guide bar, as shown in Fig. 34, ensuring that the round file is held straight, as shown in Fig. 35. Ensure that all saw blades are filed at the same angle, or the cutting efficiency of the tool will be impaired. Appropriate angles for sharpening the blades correctly are shown in Fig. 36. (Round file is sold separately.)

2. Adjustment of depth gage WARNING

 Do not sand the top part of the bumper tie strap and guard drive link, nor cause the shape of said parts to deform. Adjustment of depth gages must be in line with the predetermined dimensions and shapes, otherwise the risk of kickback may increase, causing an injury.

Bumper tie strap Guard drive link

Depth gages shall be all lined up in the same manner because they are used to adjust depth at the position where the cutter inlays into the wood.

When sharpening the saw chain, be sure to check the depth gage every two or three times.

Place a depth gage jointer on the saw chain, leave the gage visible at the groove, and use a flat file to bevel the portion out of the depth gage jointer. (Fig. 38) (Depth gage jointer and flat file are sold separately.)

After filing away the depth gage, round off the front side of the depth gage as it was. (Fig. 39)

After sharpening the saw chain, place it into chain oil to wash off the filings.

If filings are not cleaned off, the saw chain and guide bar will quickly wear while in use.

ABOUT USB DEVICE

- O Charging a USB device from an electrical outlet. (Fig. 48-a)
- Charging a USB device and battery from an electrical outlet. (Fig. 48-b)
- O How to recharge USB device. (Fig. 49)
- O When charging of USB device is completed. (Fig. 50)

MAINTENANCE AND INSPECTION

After operation, perform inspection and maintenance of each part when storing the unit.

WARNING

During maintenance and inspection, always switch off the unit and remove the storage battery from the main body. In addition, disconnect the power plug of the charger from the outlet.

1. Inspection of saw chains

- O Occasionally inspect the saw chain. In the event of any abnormality, replace it with a new one referring to "Installing (replacing) saw chain".
- Inspect the chain tension and check If it is correctly tightened.
- O Stop using the unit when the saw chain becomes blunt and sharpen it referring to "Sharpening of the chain blade".
- After use, carefully lubricate the saw chain and guide bars with oil for rust-proofing.

CAUTION

Wear gloves to avoid injury while using a saw chain.

Cleaning the side cover and brake band chamber (Figs. 40, 41)

Clean and remove any sawdust left inside the parts.

NOTE

When cleaning the side cover, brake band chamber, chain oil spout, and side bar, see the procedure "Installing (replacing) saw chain" and remove the saw

3. Cleaning the chain oil spout (Fig. 42)

Before cleaning the chain oil spout, remove the side cover and guide bar.

4. Cleaning the guide bar (Figs. 9, 43)

When sawdust and similar become clogged in the groove of the guide bar or oil spout, the oil may not flow, which may result in the unit failing.

Remove the guide bar and clean any sawdust clogged in the groove after use and when replacing the saw chain. (Refer to "Installing (replacing) saw chain.")

5. Inspecting the carbon brushes (Fig. 44)

The motor employs carbon brushes which are consumable parts. Since and excessively worn carbon brush can result in motor trouble, replace the carbon brush with new ones when it becomes worn to or near the "wear limit". In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

NOTE

When replacing the carbon brush with a new one, be sure to use the Hitachi Carbon Brush Code No. 999068.

6. Replacing carbon brushes

Take out the carbon brush by first removing the brush cap and then hooking the protrusion of the carbon brush with a slotted head screw driver, etc., as shown in Fig. 45.

When installing the carbon brush, choose the direction so that the nail of the carbon brush (see Fig. 46) agrees with the contact portion of brush tube. Then push it in with a finger as illustrated in Fig. 47. Lastly, install the brush cap.

CAUTION

- O Be absolutely sure to insert the nail of the carbon brush into the contact portion of brush tube. (You can insert whichever one of the two nails provided.)
- Caution must be exercised since any error in this operation can result in the deformed nail of the carbon brush and may cause motor trouble at an early stage.

7. 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.

8. 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.

9. 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.

10. Cleaning of the outside

When the chain saw 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.

11. Storage

When storing the unit, perform cleaning and maintenance of each part and mount the chain case to the guide bar.

Store the chain saw in a place where 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.

SELECTING ACCESSORIES

The accessories of this machine are listed on page 21.

Important notice on the batteries for the Hitachi cordless power tools

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

NOTE

Due to HITACHI'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 Hitachi Authorized Service Center.

1. Power tool

Symptom	Possible cause	Remedy		
The motor sounds but the saw chain	The chain brake may be activated.	Release by pulling the brake lever toward you.		
O does not move O does not move freely	The saw chain tension is excessive.	Check the saw chain tension, and if it is too tight, loosen the tension.		
	Saw chain comes out of the sprocket.	Remove the side case, and check the saw chain is properly engaged on the sprocket.		
	Inside the side case → sawdust is jammed → foreign matter is trapped	Remove the side case and clean the chain cover.		
	In the guide bar groove → sawdust is jammed → oil does not flow	Clean the guide bar groove and the oil hole. Make sure there is oil in the oil tank, and replenish as required.		
Poor sharpness	The saw chain → is worn out or the blade is broken → is rusted	Sharpen the saw chain. If the wear or breakage is very severe, replace with a new saw chain.		
	The direction of the saw chain is reversed,	Re-attach ensuring the correct direction.		
	Saw chain tension is loose.	Check the saw chain tension and tighten if it is loose.		
Chain oil O is slow-flowing	Lack of chain oil in the tank.	Replenish with chain oil.		
O does not come out (seizes up)	Chain oil spout is clogged.	Clean the chain oil spout.		
Battery cannot be installed.	Attempting to install a battery other than that specified for the tool.	Please install a multi volt type battery.		

2. Charger

Z. Charger				
Symptom	Possible cause	Remedy		
The charge indicator lamp	The battery is not inserted all the way.	Insert the battery firmly.		
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	The battery is not inserted all the way.	Insert the battery firmly.		
blinks red, and battery charging doesn't begin.	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 Hitachi 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.		

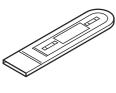
CS3630DA	1	1	1	1	2	1
CS3630DA (NN)	-	-	-	1	2	1



BSL36A18



UC18YSL3 (14.4V- 18V)



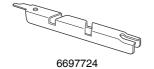
















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