

FEIDER
MACHINES

Cordless Chain Saw
FTREN220V
INSTRUCTION MANUAL



IMPORTANT: Please read the instruction manual before using.

BUILDER SAS
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MADE IN PRC



SAFETY WARNINGS

General power tool safety warnings

 **WARNING** Read all safety warnings and all instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

Save all warnings and instructions for future reference. *The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.*

1) Work area safety

a) **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*

b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*

c) **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

2) Electrical safety

a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*

b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*

c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*

d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*

e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*

f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

NOTE the term "residual current device (RCD)" may be replaced by the term "ground fault circuit interrupter (GFCI)" or "earth leakage circuit breaker (ELCB)".

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 connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.*

d) **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*

e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*

f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewellery or long hair can be caught in moving parts.*

g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*

4) Power tool use and care

a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*

b) **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with*

the switch is dangerous and must be repaired.

- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *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

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

Cordless 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.*
- **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.*
- **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

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.

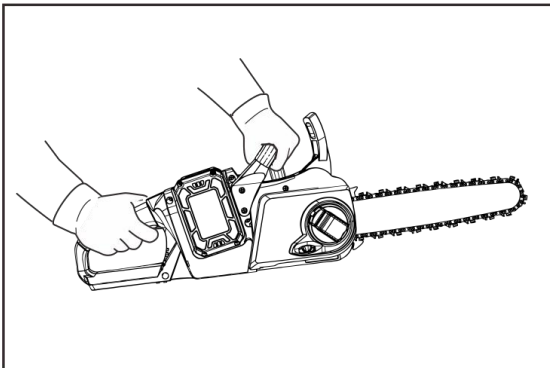
Tip contact in some cases may cause a sudden reverse reaction, kicking the guide bar up and back towards the operator.

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:

- **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.*
- **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.*



- **Before starting work, check that the chain saw is in proper working order and that its condition complies with the safety regulations. Check in particular that:**
 - The chain brake is working properly;
 - The run-down brake is working properly;
 - The bar and the sprocket cover are fitted correctly;
 - The chain has been sharpened and tensioned in accordance with the regulations.
- **Do not start the chain saw with the chain cover being installed on it.** Starting the chain saw with the chain cover being installed on it may cause the chain cover to be thrown out forward resulting in personal injury and damage to objects around the operator.
When the first-time use, the user should try as a minimum practice cutting logs on a saw-horse or cradle

SAVE THESE INSTRUCTIONS.

⚠ WARNING: DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

Important safety instructions for battery cartridge

1. Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
2. Do not disassemble battery cartridge.
3. If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
4. If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
5. Do not short the battery cartridge:
 - (1) Do not touch the terminals with any conductive material.
 - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
 - (3) Do not expose battery cartridge to water or rain.

A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
6. Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 °C (122 °F).
7. Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
8. Be careful not to drop or strike battery.
9. Do not use a damaged battery.
10. The contained lithium-ion batteries are subject to the Dangerous Goods Legislation requirements.

For commercial transports e.g. by third parties, forwarding agents, special requirement on packaging and labeling must be observed.

For preparation of the item being shipped, consulting an expert for hazardous material is required.

Please also observe possibly more detailed national regulations.

Tape or mask off open contacts and pack up the battery in such a manner that it cannot move around in the packaging.
11. Follow your local regulations relating to disposal of battery.
12. Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer or authorized service providers

INSTRUCTIONS FOR CHARGER

- **This charger can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.**
- **If the supply cord of the charger is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.**
- **Warning: Do not recharge non-rechargeable batteries.**

- The charger automatically charges the battery after it is plugged in. Do not exceed the capacity of the charger and the battery (see the technical specifications).

SAVE THESE INSTRUCTIONS

⚠ CAUTION: Only use genuine BUILDER batteries. Use of non-genuine BUILDER batteries, or batteries that have been altered, may result in the battery bursting causing fires, personal injury and damage. It will also void the BUILDER warranty for the BUILDER tool and charger.

Tips for maintaining maximum battery life

1. Charge the battery cartridge before completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
3. Charge the battery cartridge with room temperature at 10 °C - 40 °C (50 °F - 104 °F). Let a hot battery cartridge cool down before charging it.
4. Charge the battery cartridge if you do not use it for a long period (more than six months).

Symbols



Warning symbol.



Read instruction manual.



Wear hearing and ocular protection and a helmet.



Warning – Risk of kickback.



Hold the tool in both hands with the brake stopped. It is forbidden to hold with one hand.



Wear protective gloves.



Wear safety clothes.



Wear anti-skid safety shoes.



Do not use the tool under rain .



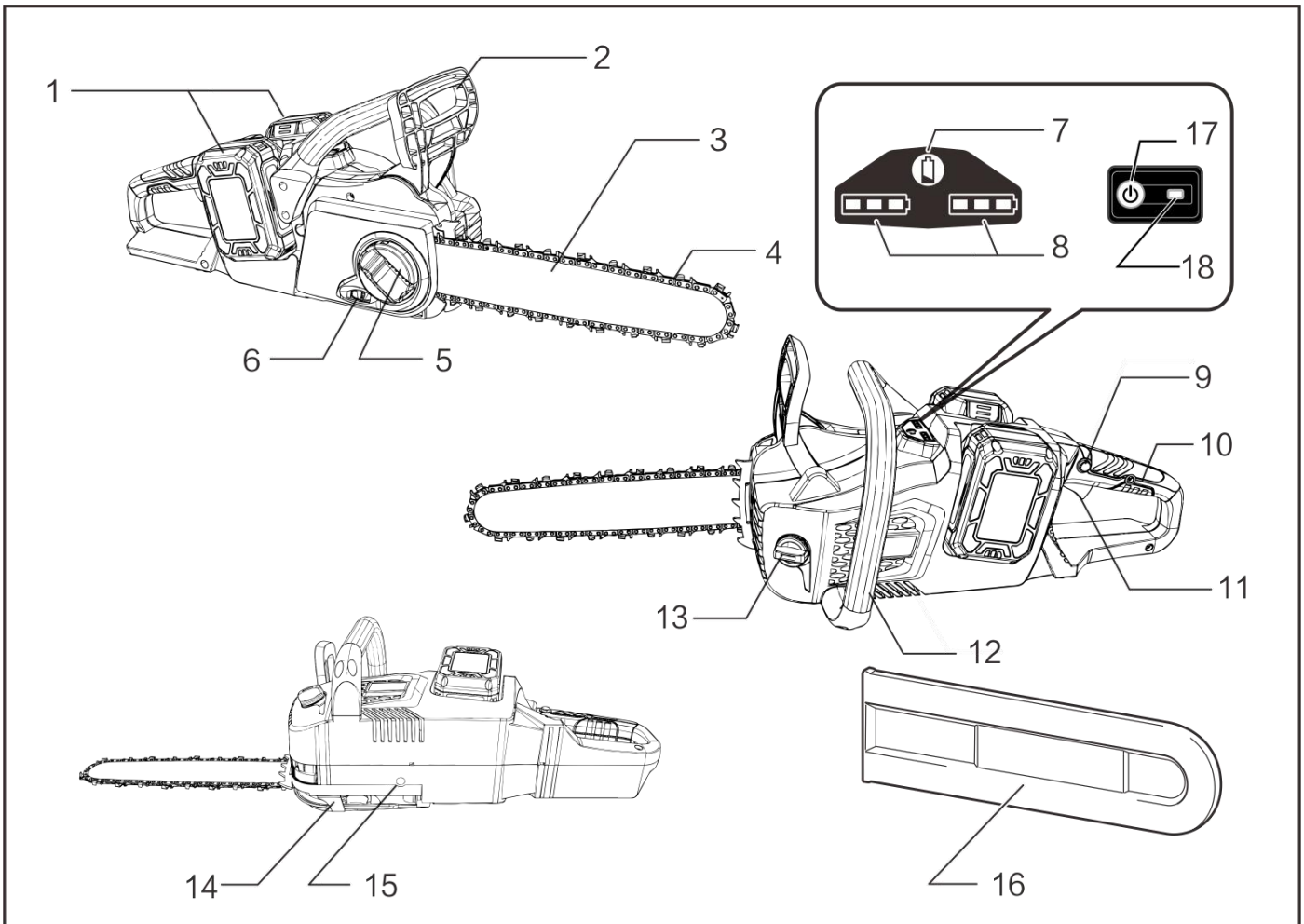
Guarantee sound power level.



Remove the battery before maintenance and repairs. Read the instructions.

YOUR TOOL

PARTS DESCRIPTION



1	Battery cartridge	2	Front hand guard	3	Guide bar
4	Saw chain	5	Lever	6	Adjusting dial
7	Check button	8	Capacity indicator	9	Lock-off lever
10	Rear handle	11	Switch trigger	12	Front handle
13	Oil tank cap	14	Chain catcher	15	Adjusting screw(for oil pump)
16	Guide bar cover	17	Main power switch	18	Main power lamp

SPECIFICATIONS

Model	FTREN220V
Overall length(without guide bar)	445mm
Rated voltage	40V d.c. (2x20V d.c.)
Net weight	3.2kg (without chain bar and saw chain, oil tank empty, without battery pack)
Standard guide bar length	356mm(14")
Recommended guide bar length	300-400mm(12"-16")
Applicable saw chain type	3/8LP-53
Applicable guide bar type	AP14-53-507P
Chain gauge	1.27mm
Chain Pitch	9.525mm(3/8")
Chain speed	15m/s
Oil tank volume	260ml
Sprocket	6 teeth
Charger /NOT included	Model: FFC20U Input:220-240Vac, 50/60Hz, 0,6A max Output: 20 Vd.c., 2A
Battery /NOT included	Battery Li-on model FBA20U4 , 4Ah, max 80Wh
Sound pressure level	92.5dB(A) K=3dB(A)
Sound power level	104.8dB(A) K=3dB(A)
Guaranteed sound power level	108dB(A)
Vibration	Front handle: 4.2 m/s ² K=1.5m/s ² Real handle: 4.61m/s ² K=1.5m/s ²

Information:

- The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another;
- The declared vibration total value may also be used in a preliminary assessment of exposure.

Warning:

- The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used;
- need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

Wear hearing protection

FUNCTIONAL DESCRIPTION

⚠ WARNING: Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

Charging (Charger and battery not included in this model)

- 1). Take the battery pack out of the equipment. Do this by pressing the side pushlock buttons.
- 2). Check that your mains voltage is the same as that marked on the rating plate of the battery charger. Insert the power plug of the charger into the socket outlet. The RED LED will then begin to light.
- 3). Insert the battery pack into the battery charger .then the red LED on charger will begin to Green flash light.
- 4). You will find a label with “Charger indicator” of the LED indicator on the charger.

The battery pack can become a little warm during the charging. This is normal.

If the battery pack fails to charge, check:

- Voltage at the power socket
- Whether there is good contact at the charging contacts.
- Whether the battery pack is warm or not, The battery protection system will not allow the battery to be charged if the battery temperature is over 40°C after use, allow the battery pack to cool to room temperature before commencing with the charging.

If the battery pack still fails to charge, send the charging unit and the battery pack to our customer service center. To ensure that the battery pack provides long service, you should take care to recharge it promptly. You must recharge the battery pack when you notice that the power of the cordless vacuum drops. Never allow the battery pack to become fully discharged. This will cause it to develop a defect.

Battery capacity indicator

Press the switch for the battery capacity indicator . The battery capacity indicator shows the charge status of the battery using 4 LEDs as following:

All 4 LEDs are lit:

The battery is fully charged.

3 LED(s) are lit:

The battery has approx 75% remaining charge.




2 LED(s) are lit:



The battery has approx 50% remaining charge.

1 LED is lit:

The battery will be empty soon, please recharge the battery.

Charger indicator

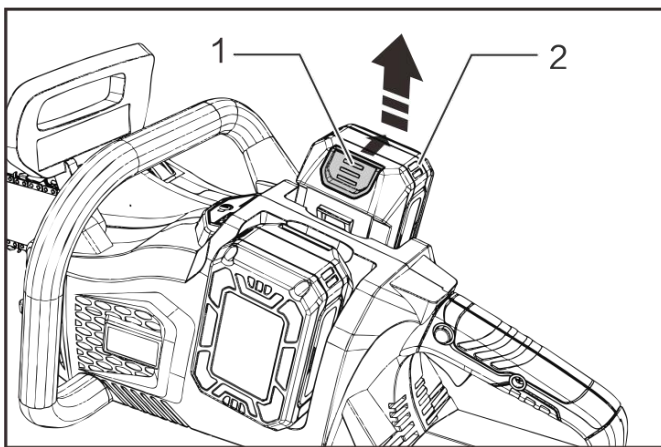
Indicator status	Explanations and actions
	Ready for use The charger is connected to the mains and is ready for use; there is no battery pack in the charger.
	Charging The charger is charging the battery pack in charge mode.
	Battery pack is full of charge. Charging is finished and battery pack in the charger.

	The temperature of battery is too high or too low, the charger is under protection status. The charging function can be recovered after the temperature is normal.
	Unrecoverable battery malfunction.

Installing or removing battery cartridge

⚠ CAUTION: Always switch off the tool before installing or removing of the battery cartridge.

⚠ CAUTION: Hold the tool and the battery cartridge firmly when installing or removing battery cartridge. Failure to hold the tool and the battery cartridge firmly may cause them to slip off your hands and result in damage to the tool and battery cartridge and a personal injury.



1.Button 2.Battery cartridge

To remove the battery cartridge, slide it from the tool while sliding the button on the front of the cartridge. To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.

⚠ CAUTION: Always install the battery cartridge fully until the red indicator cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

⚠ CAUTION: Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

NOTE: The tool does not work with only one battery cartridge.

NOTE: Pay attention to the position of your fingers when installing the battery. The button will be depressed unintentionally.

Tool / battery protection system





The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions.

Overload protection

When the tool is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops and the main power lamp will blink. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

Overheat protection

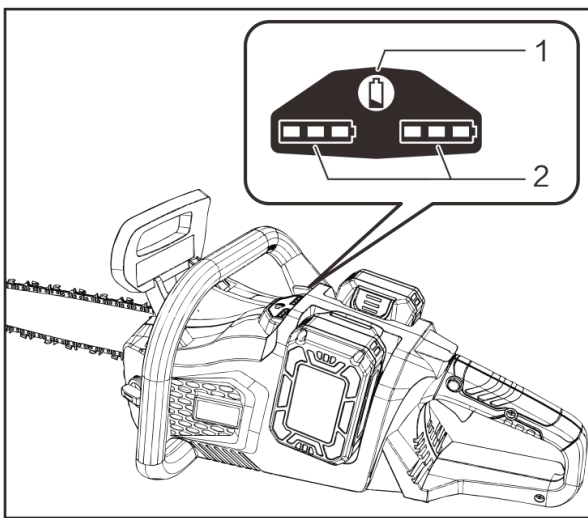
When the tool is overheated, the tool automatically stops and the capacity indicator lamp will blink as illustrated. In this situation, let the tool cool down before turning the tool on again.

Capacity indicator status			Status
 On	 Off	 Blinking	
			Overheated

Overdischarge protection








When the battery capacity becomes low, the tool stops automatically. If the product does not operate even when the switches are operated, remove the batteries from the tool and charge the batteries.

Indicating the remaining battery capacity

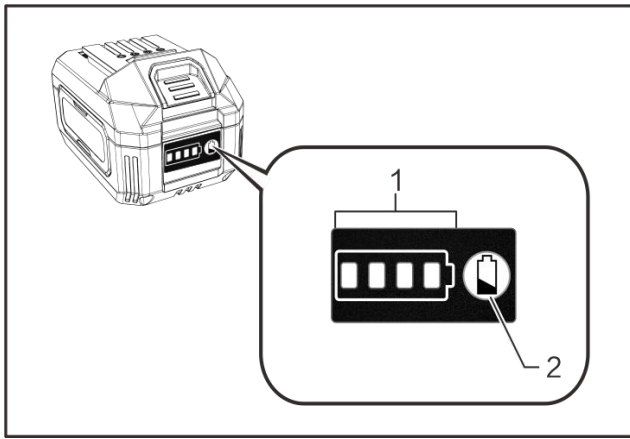


1.Button 2.Battery cartridge

The remaining battery capacity is shown while you are pressing the check button. The capacity indicators correspond to each battery.(The indicator on the left corresponds to the usage of the battery pack on the left)

Capacity indicator status			Reminding battery capacity
 On	 Off	 Blinking	
			50% to 100%
			20% to 50%
			0% to 20%
			Charge the battery

Only for battery cartridges with the indicator



1.Button 2.Battery cartridge

Press the check button on the battery cartridge to indicate the remaining battery capacity. The indicator lamps light up for few seconds.

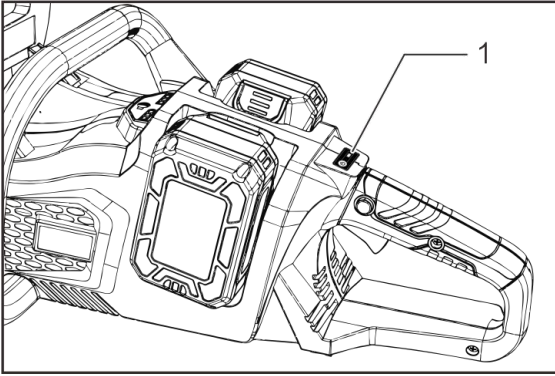
Indicator lamps			Reminding battery capacity
On	Off	Blinking	
	■ ■ ■ ■		75% to 100%
	■ ■ ■ □		50% to 75%
	■ ■ □ □		25% to 50%
	■ □ □ □		0% to 25%
▣	□ □ □ □		Charge the battery
■ ■ □ □	□ □ ■ ■	↑ ↓	The battery may have malfunctioned

NOTE: Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.

Main power switch

⚠ WARNING: Always turn off the main power switch when not in use.

To stand by the chain saw, press the main power switch until the main power lamp lights up. To turn off, press the main power switch again.



1.Main power switch

NOTE: The main power lamp blinks if the switch trigger is pulled under non-operating conditions. The lamp blinks if you turn on the main power switch while holding down the lock-off lever and the switch trigger;

- pull the switch trigger while the chain brake is applied;
- release the chain brake while holding down the lock-off lever and pulling the switch trigger.

NOTE: This chain saw employs the auto power-off function. To avoid unintentional start up, the main power switch will automatically shut down when the switch trigger is not pulled for a certain period after the main power switch is turned on.

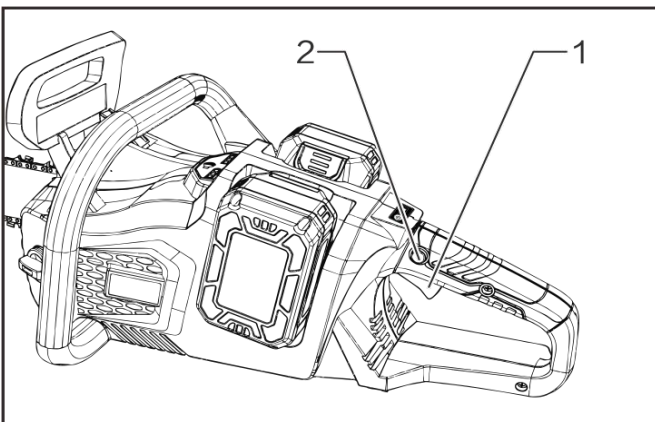
Switch action

⚠WARNING: For your safety, this tool is equipped with lock-off lever which prevents the tool from unintended starting. **NEVER** use the tool if it runs when you simply pull the switch trigger without pressing the lock-off lever. Return the tool to our authorized service center for proper repairs **BEFORE** further usage.

⚠CAUTION: Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

NOTICE: Do not pull the switch trigger hard without pressing the lock-off lever. This can cause switch breakage.

To prevent the switch trigger from being accidentally pulled, a lock-off lever is provided. To start the tool, depress the lock-off lever and pull the switch trigger. Release the switch trigger to stop.



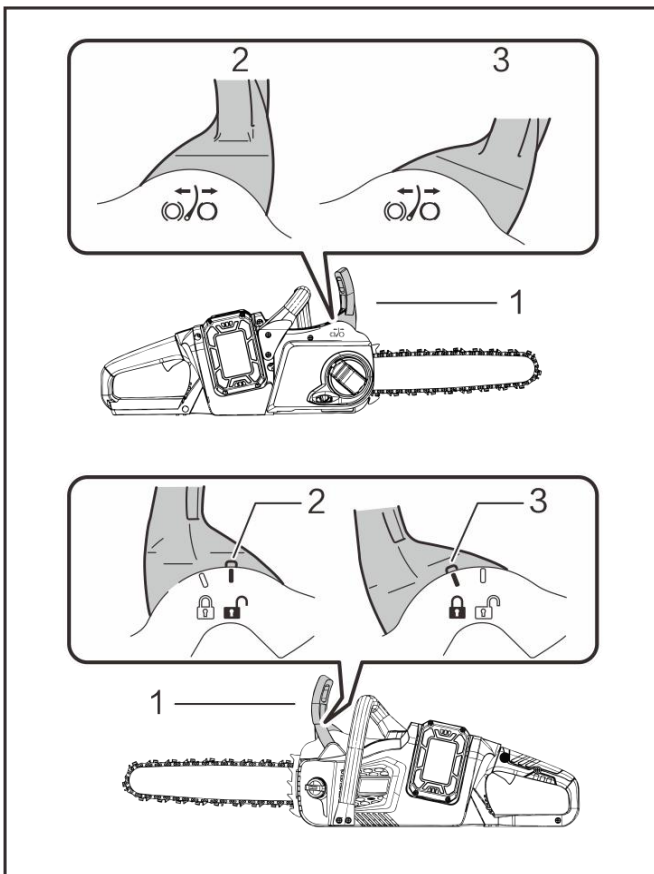
1.Switch trigger 2.Lock-off lever

Checking the chain brake

⚠ CAUTION: Hold the chain saw with both hands when switching it on. Hold the rear handle with your right hand, the front handle with your left. The bar and the chain must not be in contact with any object.

⚠ CAUTION: Should the saw chain not stop immediately when this test is performed, the saw may not be used under any circumstances. Consult our authorized service center.

1. Press the lock-off lever, then pull the switch trigger. The saw chain starts immediately.
2. Push the front hand guard forwards with the back of your hand. Make sure that the chain saw comes to an immediate standstill.



1. Front hand guard 2. Unlocked position
3. Locked position

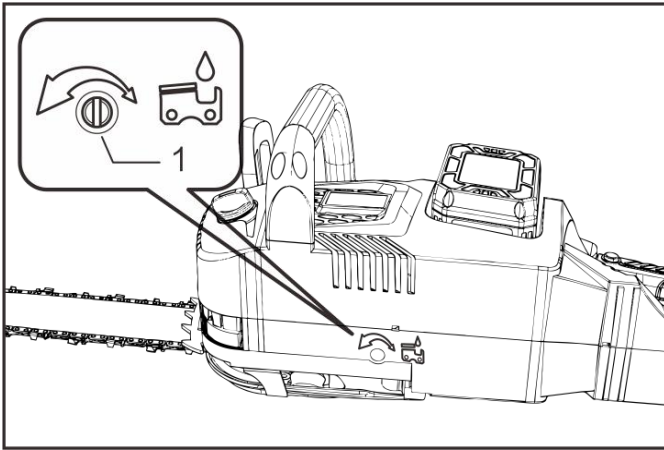
Checking the run-down brake

⚠ CAUTION: If the saw chain does not stop within one second in this test, stop using the chain saw and consult our authorized service center.

Run the chain saw then release the switch trigger completely. The saw chain must come to a standstill within one second.

Adjusting the chain lubrication

You can adjust the oil pump feed rate with the adjusting screw. The amount of oil can be adjusted using the universal wrench.



1.Adjusting screw

ASSEMBLY

⚠ CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

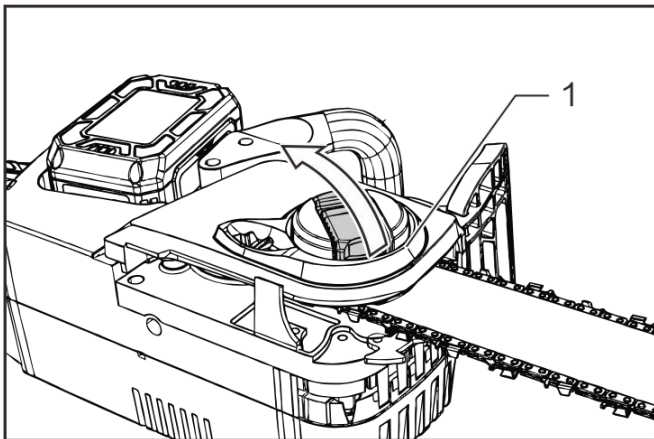
⚠ CAUTION: Do not touch the saw chain with bare hands. Always wear gloves when handling the saw chain.

Removing or installing saw chain

⚠ CAUTION: The saw chain and the guide bar are still hot just after the operation. Let them cool down enough before carrying out any work on the tool.

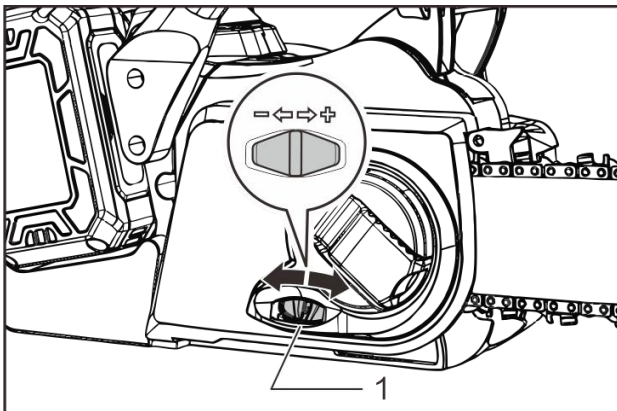
To remove the saw chain, perform the following steps:

1. Pull the lever up while pressing its edge.



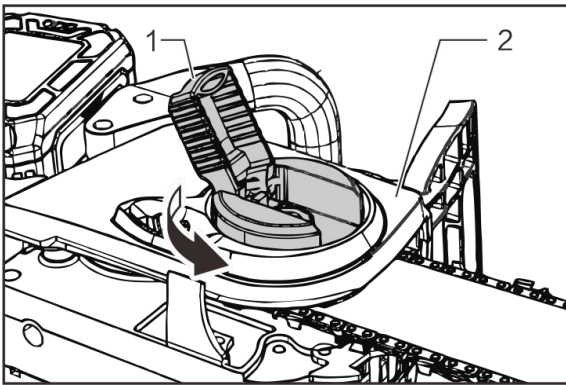
1.Lever

2. Turn the adjusting dial to "-" direction to release the saw chain tension.



1.Adjusting dial

3. Turn the lever counterclockwise until the sprocket cover comes off.

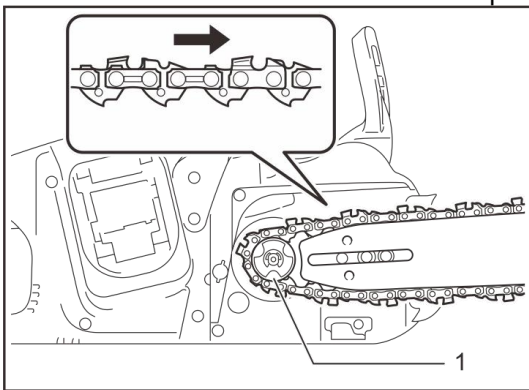


1.Lever 2.Sprocket cover

4. Remove the sprocket cover then remove the saw chain and guide bar from the chain saw body.

To installing the saw chain, perform the following steps:

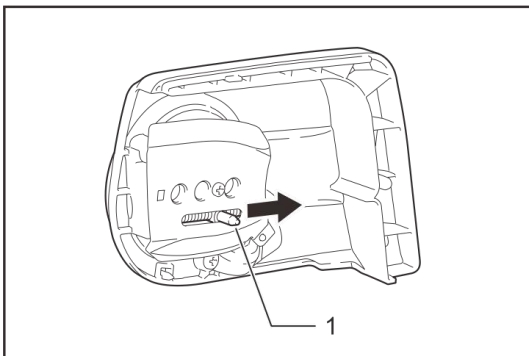
1. Make sure the direction of the chain. The arrow mark on the chain shows the direction of the chain.
2. Fit in one end of the saw chain on the top of the guide bar and the other end around the sprocket.



1.Sprocket

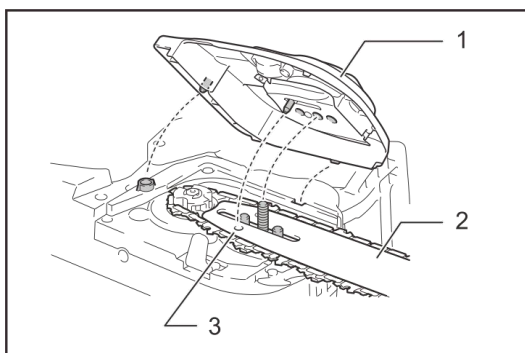
3. Rest the guide bar in place on the chain saw.

4. Turn the adjusting dial to "-" direction to slide the adjusting pin in the direction of arrow.



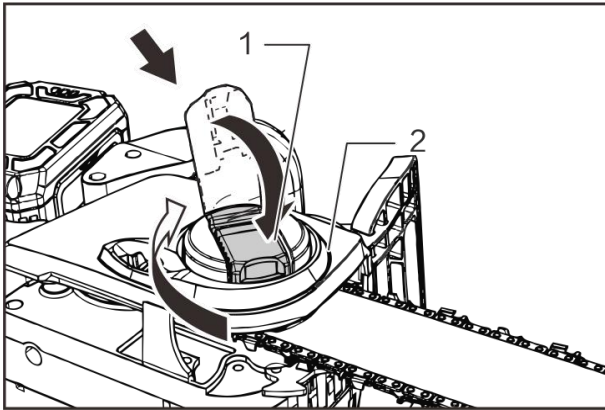
1.Adjusting pin

5. Place the sprocket cover on the chain saw so that the adjusting pin is positioned in a small hole on the guide bar.



1.Sprocket cover 2.Guide bar 3.Hole

6. Turn the lever clockwise fully and a quarter turn back to keep looseness for adjusting the chain tension.
7. Turn the adjusting dial to adjust the chain tension.
8. Turn the lever clockwise until the sprocket cover is secured then return it to the original position.



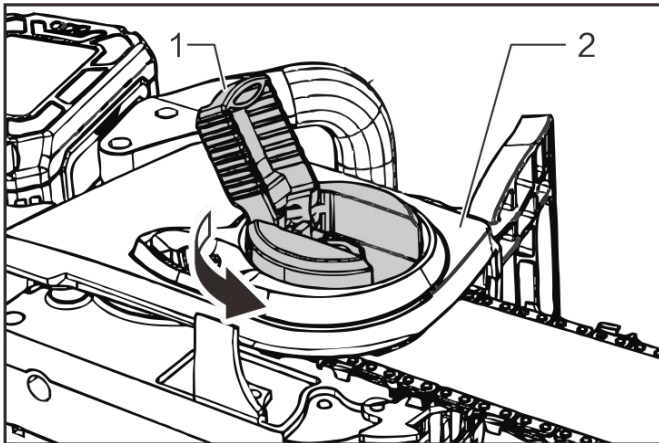
1.Lever 2.sprocket cover

Adjusting saw chain tension

- ⚠ CAUTION:** Carry out the procedure of installing or removing saw chain in a clean place free from sawdust and the like.
- ⚠ CAUTION:** Do not tighten the saw chain too much. Excessively high tension of saw chain may cause breakage of saw chain, wear of the guide bar and breakage of the adjusting dial.
- ⚠ CAUTION:** A chain which is too loose can jump off the bar and it may cause an injury accident.

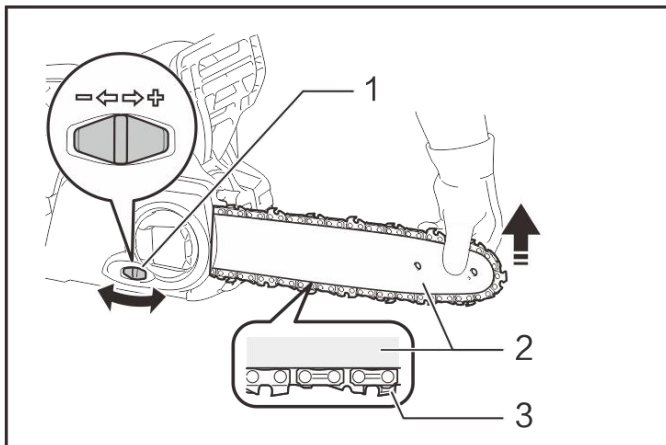
The saw chain may become loose after many hours of use. From time to time check the saw chain tension before use.

1. Press and fully open the lever until it clicks. Turn it counterclockwise a little to loosen sprocket cover lightly.



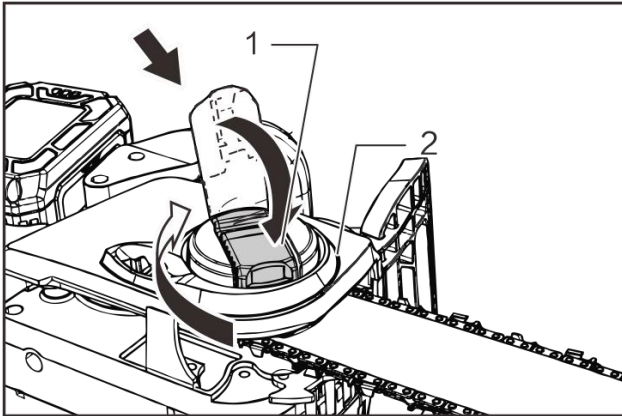
1.Lever 2.Sprocket cover

2. Lift up the guide bar tip slightly and adjust the chain tension. Turn the adjusting dial to the "-" direction to loosen, turn to the "+" direction to tighten. Tighten the saw chain until the lower side of the saw chain fits in the guide bar rail as illustrated.



1.Adjusting dial 2.Guide bar 3.Saw chain

3. Keep holding the guide bar lightly and tighten the sprocket cover. Make sure that the saw chain does not loose at the lower side.
4. Return the lever to the original position.



1.Lever 2.Sprocket cover

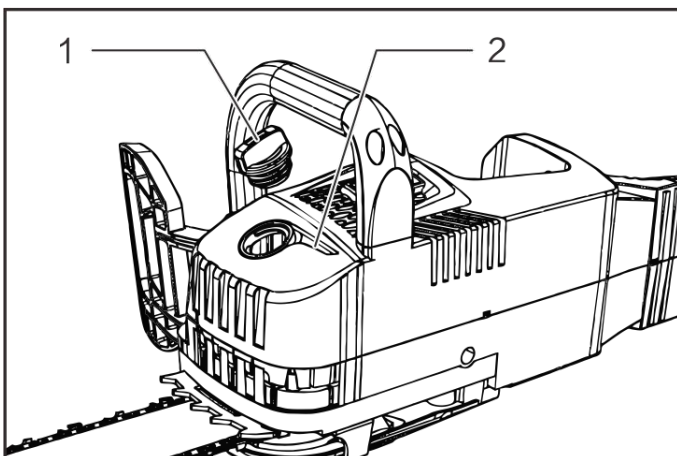
Make sure the saw chain fits snugly against the lower side of the bar.

OPERATION

Lubrication

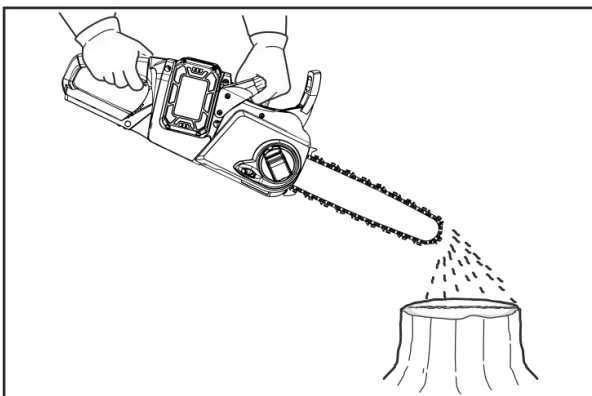
Saw chain is automatically lubricated when the tool is in operation. Check the amount of remaining oil in the oil tank periodically.

To refill the tank, lay the chain saw on its side and remove the oil tank cap. The proper amount of oil is 200 ml. After refilling the tank, make sure that the oil tank cap is tightened securely.



1.Oil tank cap 2.Oil tank(translucent)

After refilling, hold the chain saw away from the tree. Start it and wait until lubrication on saw chain is adequate.



NOTICE: When filling the chain oil for the first time, or refilling the tank after it has been completely emptied, add oil up to the bottom edge of the filler neck. The oil delivery may otherwise be impaired.

NOTICE: Use the saw chain oil exclusively for chain saws or equivalent oil available in the market.

NOTICE: Never use oil including dust and particles or volatile oil.

NOTICE: When pruning trees, use botanical oil. Mineral oil may harm trees.

NOTICE: Before the cutting operation, make sure that the provided oil tank cap is screwed in place.

WORKING WITH THE CHAIN SAW

CAUTION: The first time user should, as a minimum practice, do cutting logs on a saw-horse or cradle.

CAUTION: When sawing pre-cut timber, use a safe support (saw horse or cradle). Do not steady the workpiece with your foot, and do not allow anyone else to hold or steady it.

CAUTION: Secure round pieces against rotation.

CAUTION: Keep all parts of the body away from the saw chain when the motor is operating.

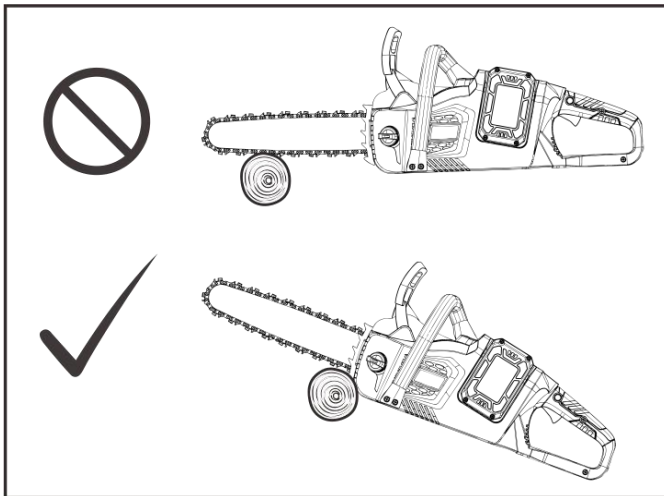
CAUTION: Hold the chain saw firmly with both hands when the motor is running.

CAUTION: Do not overreach. Keep proper footing and balance at all times.

NOTICE: Never toss or drop the tool.

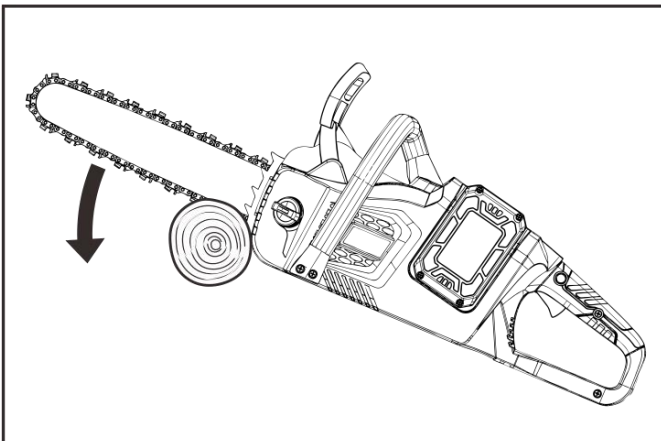
NOTICE: Do not cover the vents of the tool.

Bring the bottom edge of the chain saw body into contact with the branch to be cut before switching on. Otherwise it may cause the guide bar to wobble, resulting in injury to operator. Saw the wood to be cut by just moving it down by using the weight of the chain saw.



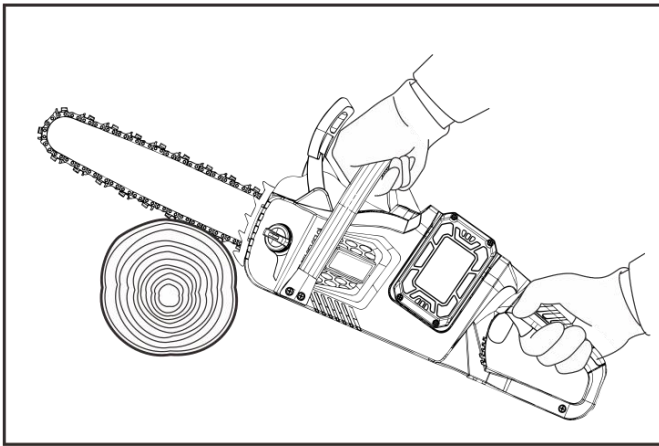
If you cannot cut the timber right through with a single stroke:

Apply light pressure to the handle and continue sawing and draw the chain saw back a little; then apply the spike bumper a little lower and finish the cut by raising the handle.



Bucking

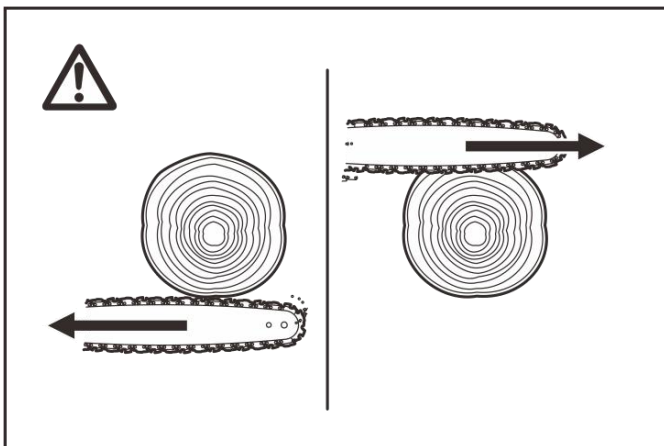
1. Rest the bottom edge of the chain saw body on the wood to be cut.



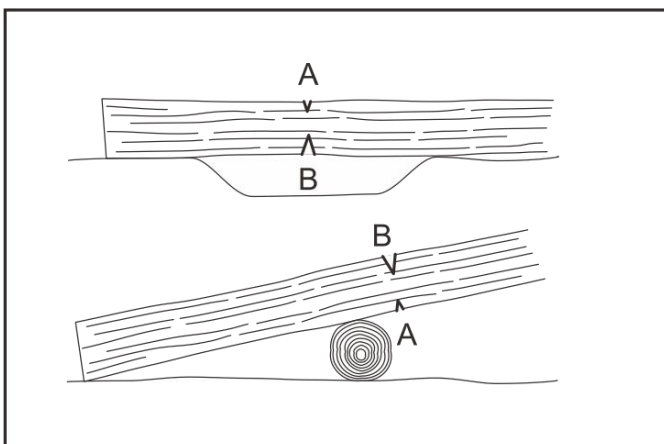
2. With the saw chain running, saw into the wood while using the rear handle to raise the saw and the front one to guide it. Use the spike bumper as a pivot.
3. Continue the cut by applying slight pressure to the front handle, easing the saw back slightly. Move the spike bumper further down the timber and raise the front handle again.

NOTICE: When making several cuts, switch the chain saw off between cuts.

CAUTION: If the upper edge of the bar is used for cutting, the chain saw may be deflected in your direction if the chain becomes trapped. Forth is reason, cut with the lower edge, so that the saw will be deflected away from your body.



When you cut a wood under tension, cut the pressured side (A) first. Then make the final cut from the tensioned side (B). This prevents the bar from becoming trapped.



Limbing

⚠ CAUTION: Limbing may only be performed by trained persons. A hazard is presented by the risk of kickback.

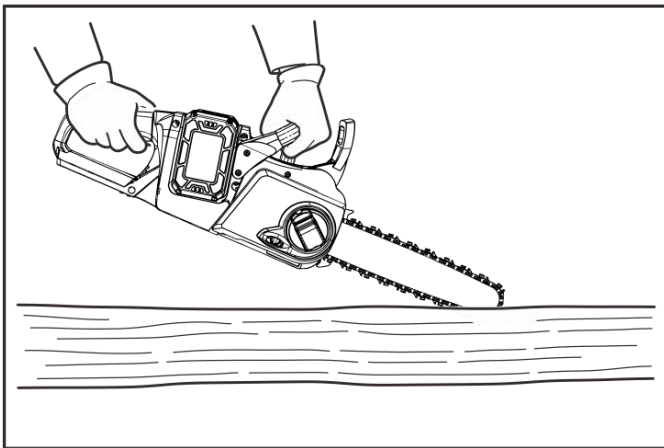
When limbing, support the chain saw on the trunk if possible. Do not cut with the tip of the bar, as this presents a risk of kickback.

Pay particular attention to branches under tension. Do not cut unsupported branches from below. Do not stand on the felled trunk when limbing.

Parallel-to-grain cuts

⚠ CAUTION: Parallel-to-grain cuts may only be carried out by persons with special training. The possibility of kickback presents a risk of injury.

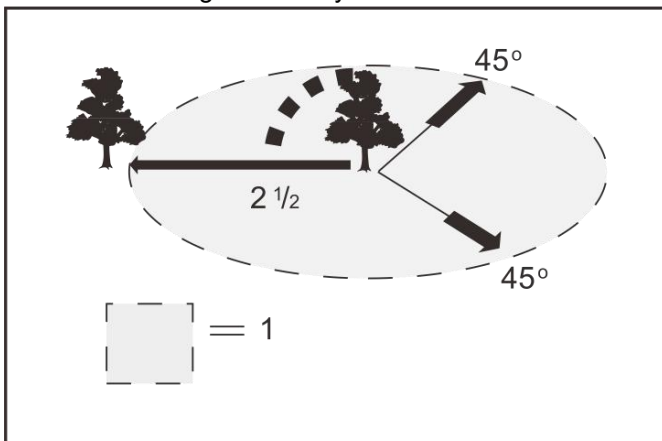
Perform parallel-to-grain cuts at as shallow an angle as possible. Take an extra caution when carrying out the cut as the spike bumper cannot be used.



Felling

⚠ CAUTION: Felling work may only be performed by trained persons. The work is hazardous.

Observe local regulations if you wish to fell a tree.



1. Felling area

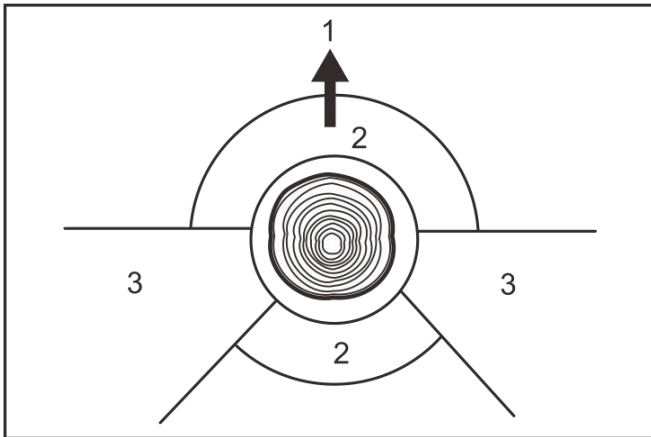
--Before starting felling work, ensure that:

- Only persons involved in the felling operation are in the vicinity;
- Any person involved has an unhindered path of retreat through a range of approximately 45° either side of the felling axis.
- The base of the trunk is free of foreign objects, roots and branches;
- No persons or objects are present over a distance of 2 1/2 tree lengths in the direction in which the tree will fall.

--Consider the following with respect to each tree:

- Direction of lean;

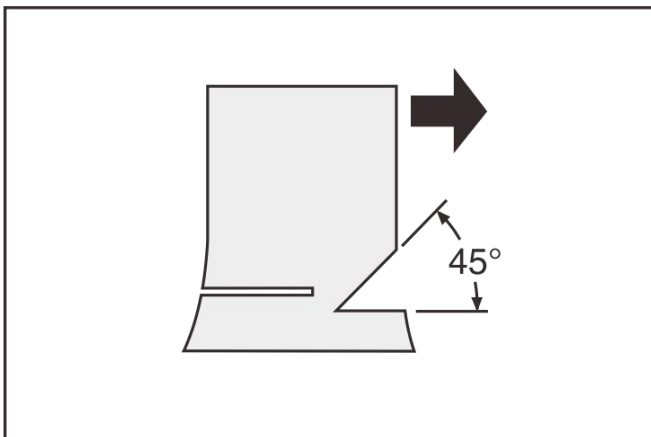
- Loose or dry branches;
 - Height of the tree;
 - Natural overhang;
 - Whether or not the tree is rotten.
- Consider the wind speed and direction. Do not carry out felling work if the wind is gusting strongly.
- Trimming of root swellings: Begin with the largest swellings. Make the vertical cut first, then the horizontal cut.
- Stand to the side of the falling tree. Keep an area clear to the rear of the falling tree up to an angle of 45° either side of the tree axis (refer to the “felling area” figure). Pay attention to falling branches.
- An escape path should be planned and cleared as necessary before cuts are started. The escape path should extend back and diagonally to the rear of the expected line of fall as illustrated in figure.



**1.Felling direction 2.Danger zone
3.Escape route**

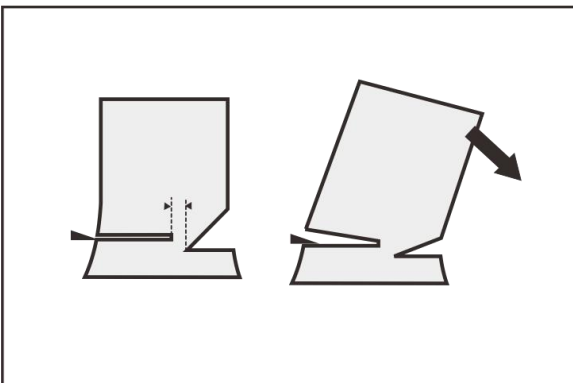
When felling trees, follow the procedures below:

1. Cut a scarf as close to the ground as possible. First make the horizontal cut to a depth of 1/5 -1/3 of the trunk diameter. Do not make the scarf too large. Then make the diagonal cut.



NOTE: The scarf determines the direction in which the tree will fall, and guides it. It is made on the side towards which the tree is to fall.

2. Make the back cut a little higher than the base cut of the scarf. The back cut must be exactly horizontal. Leave approximately 1/10 of the trunk diameter between the back cut and the scarf. The wood fibers in the uncut trunk portion act as a hinge. Insert wedges into the back cut in time.

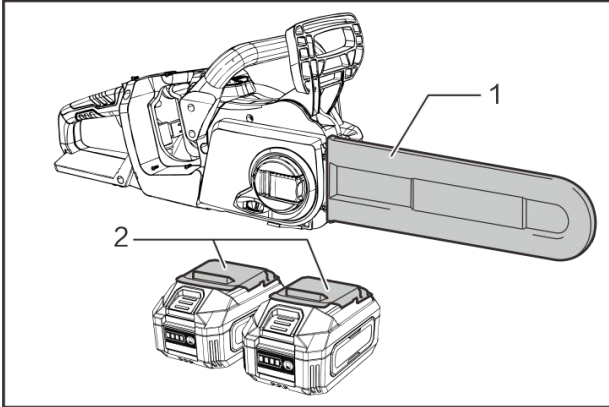


⚠ WARNING: Do not cut right through the fibers under any circumstances. The tree will otherwise fall unchecked.

NOTICE: Only plastic or aluminum wedges may be used to keep the back cut open. The use of iron wedges is prohibited.

Carrying tool

Before carrying the tool, always apply the chain brake and remove the battery cartridges from the tool. Then attach the guide bar cover. Also cover the battery cartridge with the battery cover.



1. Guide bar cover 2. Battery cover

MAINTENANCE

⚠ CAUTION: Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

⚠ CAUTION: Always wear gloves when performing any inspection or maintenance.

NOTICE: Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

Sharpening the saw chain

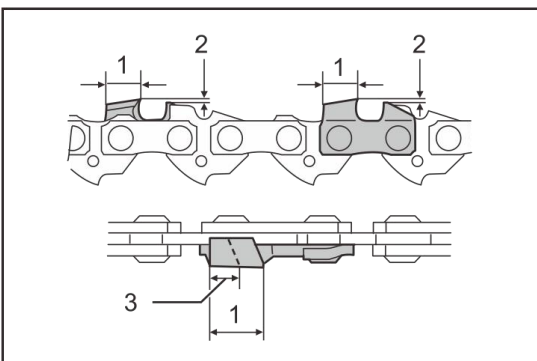
Sharpen the saw chain when:

- Mealy sawdust is produced when damp wood is cut;
- The chain penetrates the wood with difficulty, even when heavy pressure is applied;
- The cutting edge is obviously damaged;
- The saw pulls to the left or right in the wood. (caused by uneven sharpening of the saw chain or damage to one side only)

Sharpen the saw chain frequently but a little each time. Two or three strokes with a file are usually sufficient for routine resharpening. When the saw chain has been resharpened several times, have it sharpened in our authorized service center.

Sharpening criteria:

⚠ WARNING: An excessive distance between the cutting edge and depth gauge increases the risk of kickback.

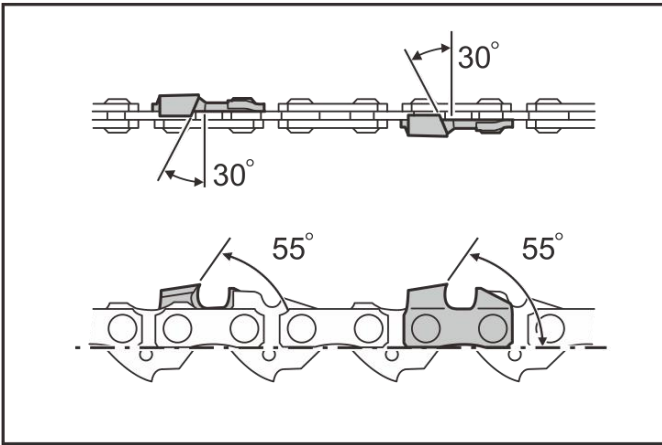


1. Cutter length 2. Distance between cutting edge and depth gauge 3. Minimum cutter length (3mm)

— All cutter lengths must be equal. Different cutter lengths prevent the saw chain from running smoothly and may

cause the saw chain to break.

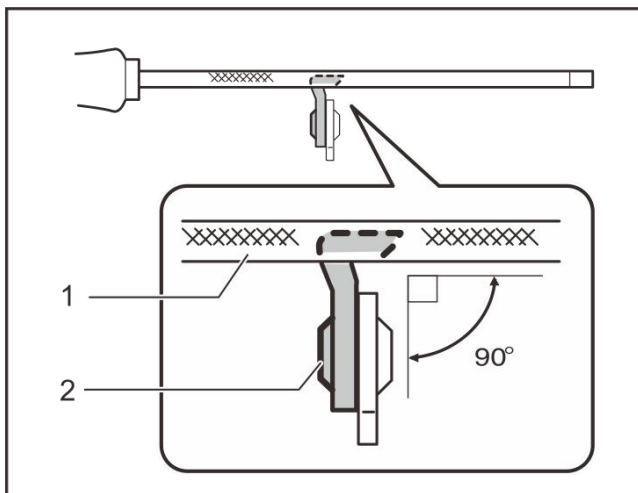
- Do not sharpen the chain when the cutter length has reached 3 mm or shorter. The chain must be replaced with new one.
- The chip thickness is determined by the distance between the depth gauge (round nose) and the cutting edge.
- The best cutting results are obtained with following distance between cutting edge and depth gauge.
- Chain blade 90PX : 0.65 mm (0.025")
- Chain blade 91PX : 0.65 mm (0.025")



- The sharpening angle of 30° must be the same on all cutters. Different cutter angles cause the chain to run roughly and unevenly, accelerate wear, and lead to chain breaks.
- Use a suitable round file so that the proper sharpening angle is kept against the teeth.
- Chain blade 90PX : 55°
- Chain blade 91PX : 55°

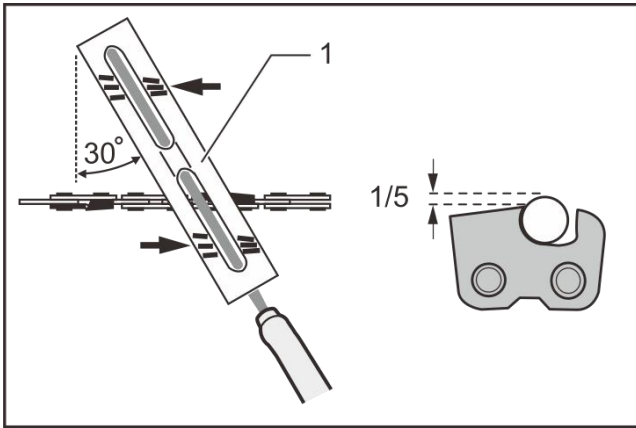
File and file guiding

- Use a special round file (optional accessory) for saw chains to sharpen the chain. Normal round files are not suitable.
- Diameter of the round file for each saw chain is as follows:
- Chain blade 90PX : 4.5 mm (3/16")
- Chain blade 91PX : 4.0 mm (5/32")
- The file should only engage the cutter on the forward stroke. Lift the file off the cutter on the return stroke.
- Sharpen the shortest cutter first. Then the length of this shortest cutter becomes the standard for all other cutters on the saw chain.
- Guide the file as shown in the figure.



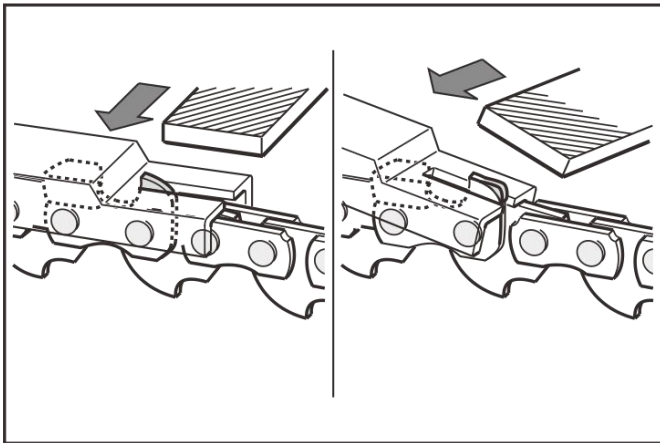
1.File 2.Saw chain

- The file can be guided more easily if a file holder (optional accessory) is employed. The file holder has markings for the correct sharpening angle of 30° (align the markings parallel to the saw chain) and limits the depth of penetration (to 4/5 of the file diameter).



1. File holder

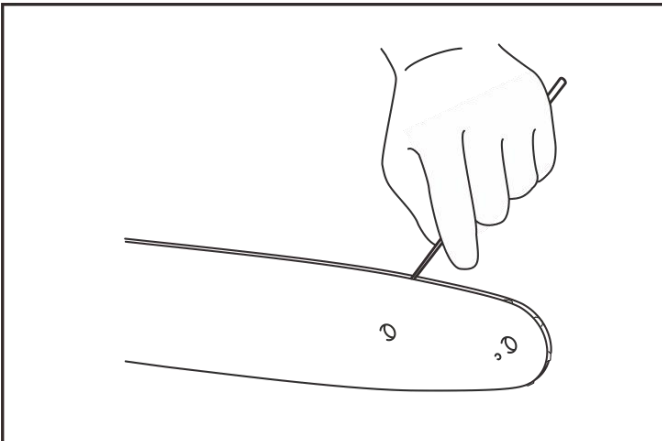
- After sharpening the chain, check the height of the depth gauge using the chain gauge tool (optional accessory).



- Remove any projecting material, however small, with a special flat file (optional accessory).
- Round off the front of the depth gauge again.

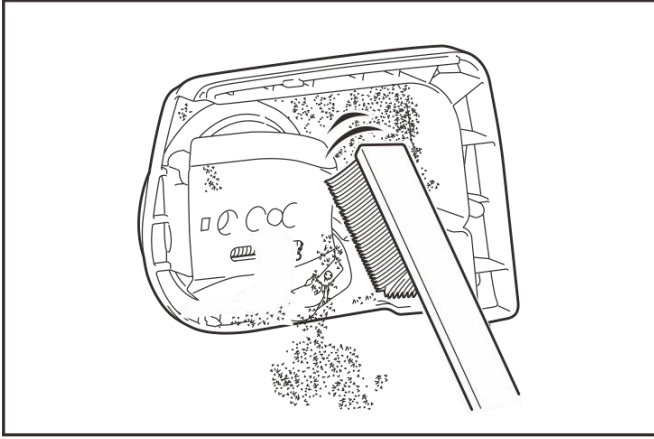
Cleaning the guide bar

Chips and sawdust will build up in the guide bar groove. They may clog the bar groove and impair the oil flow. Clean out the chips and sawdust every time when you sharpen or replace the saw chain.



Cleaning the sprocket cover

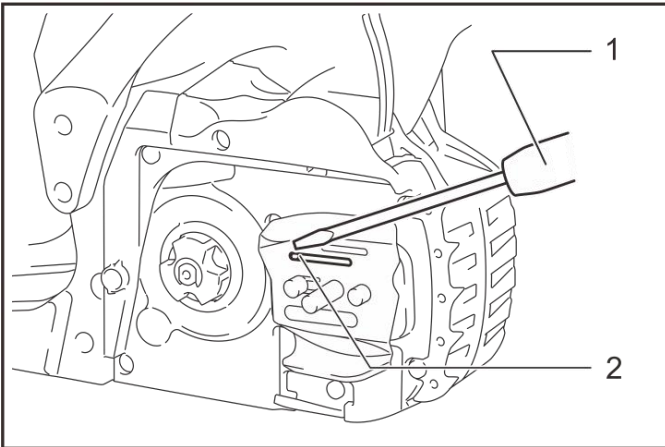
Chips and saw dust will accumulate inside of the sprocket cover. Remove the sprocket cover and saw chain from the tool then clean the chips and saw dust.



Cleaning the guide bar

Small dust or particles may be built up in the oil discharge hole during operation. These dust or particles may impair the oil to flow and cause an insufficient lubrication on the whole saw chain. When a poor chain oil delivery occurs at the top of guide bar, clean the oil discharge hole as follows.

1. Remove the sprocket cover and saw chain from the tool.
2. Remove the small dust or particles using a slotted screwdriver with a slender shaft or the like.



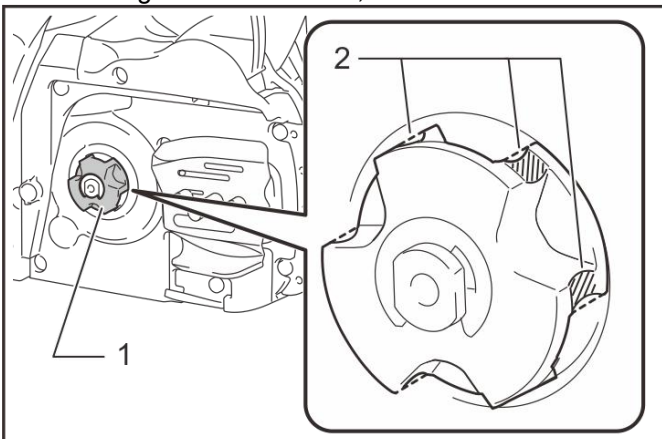
1. Slotted screwdriver 2. Oil discharge hole

3. Insert the battery cartridge into the tool. Pull the switch trigger to flow built-up dust or particles off the oil discharge hole by discharging chain oil.
4. Remove the battery cartridge from the tool. Reinstall the sprocket cover and saw chain on the tool.

Replacing the sprocket

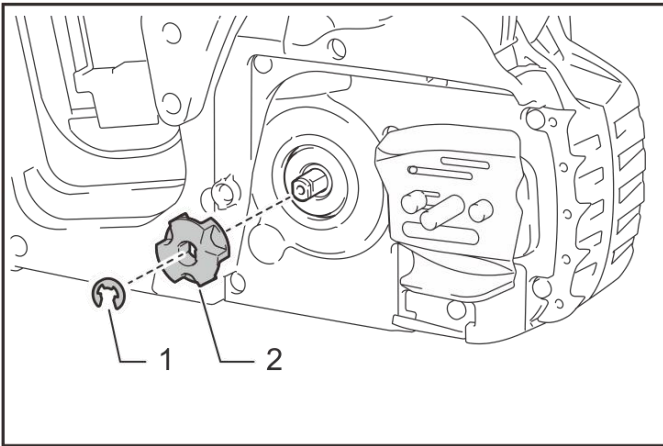
CAUTION: A worn sprocket will damage a new saw chain. Have the sprocket replaced in this case.

Before fitting a new saw chain, check the condition of the sprocket.



1. Sprocket 2. Areas to be worn out

Always fit a new locking ring when replacing the sprocket.



1.Locking ring 2.Sprocket

Maintenance

To ensure long life, prevent damage and ensure the full functioning of the safety features, the following maintenance must be performed regularly. Warranty claims can be recognized only if this work is performed regularly and properly. Failure to perform the prescribed maintenance work can lead to accidents! The user of the chain saw must not perform maintenance work which is not described in the instruction manual. All such work must be carried out by our authorized service center.

Check item / Operating time		Before operation	Everyday	Every week	Every 3 month	Annually	Before storage
Chain saw	Inspection.	✓	-	-	-	-	-
	Cleaning.	-	✓	-	-	-	-
	Check at authorized service center.	-	-	-	-	✓	✓
Saw chain	Inspection.	✓	-	-	-	-	-
	Sharpening if necessary.	-	-	-	-	-	✓
Guide bar	Inspection.	✓	✓	-	-	-	-
	Remove from the chain saw.	-	-	-	-	-	✓
Chain brake	Check the function.	✓	-	-	-	-	-
	Have it inspected regularly at authorized service center.	-	-	-	✓	-	-
Chain lubrication	Check the oil feed rate.	✓	-	-	-	-	-
Switch trigger	Inspection.	✓	-	-	-	-	-
Lock-off lever	Inspection.	✓	-	-	-	-	-
Oil tank cap	Check tightness.	✓	-	-	-	-	-
Chain catcher	Inspection.	-	-	✓	-	-	-
Screws and nuts	Inspection.	-	-	✓	-	-	-

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by BUILDER Authorized or Factory Service Centers, always using BUILDER replacement parts.

NOTICE: Make sure that the sprocket is installed as shown in the figure.

Storing the tool

1. Clean the tool before storing. Remove any chips and sawdust from the tool after removing the sprocket cover.
2. After cleaning the tool, run it under no load to lubricate the saw chain and guide bar.
3. Cover the guide bar with the guide bar cover.
4. Empty the oil tank.

TROUBLESHOOTING

Before asking for repairs, conduct your own inspection first. If you find a problem that is not explained in the manual, do not attempt to dismantle the tool. Instead, ask BUILDER Authorized Service Centers, always using Royal Garden replacement parts for repairs.

Malfunction status	Cause	Action
The chain saw does not start.	Two battery cartridges are not installed.	Install two charged battery cartridges.
	Battery problem (low voltage).	Recharge the battery cartridges. If recharging is not effective, replace the battery cartridge.
	Main power switch is off.	The chain saw is automatically turned off if it is un-operated for a certain period. Turn on the main power switch again.
The saw chain does not run.	Chain brake activated.	Release chain brake.
The motor stops running after a little use.	Battery's charge level is low.	Recharge the battery cartridges. If recharging is not effective, replace the battery cartridge.
No oil on the chain.	Oil tank is empty.	Fill the oil tank.
	Oil guide groove is dirty.	Clean the groove.
	Poor oil delivery.	Adjust the amount of oil delivery with the adjusting screw.
The chain saw does not reach maximum RPM.	Battery cartridge is installed improperly.	Install the battery cartridges as described in this manual.
	Battery power is dropping.	Recharge the battery cartridges. If recharging is not effective, replace the battery cartridge.
	The drive system does not work correctly.	Ask the authorized service center in your region for repair.
The main power lamp is blinking.	Switch trigger is pulled under an unoperable condition.	Pull the switch trigger after the main power switch is turned on and the chain brake is released.
Chain does not stop even the chain brake is activated: Stop the machine immediately!	The brake band is worn down.	Ask the authorized service center in your region for repair.
Abnormal vibration: Stop the machine immediately!	Loose guide bar or saw chain.	Adjust the guide bar and saw chain tension.
	Tool malfunction.	Ask the authorized service center in your region for repair.

DISPOSAL



Electrical products should not be discarded with household products. According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation into national law, electrical products used must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice on recycling.



This symbol means that the product contains batteries in accordance with European Directive 2013/56 / EU, which must not be disposed of with household waste. Learn more about your local waste management system for electrical and electronic equipment and how to dispose of batteries. Observe local regulations and do not dispose of this product and the batteries with household waste. Proper disposal of your old devices and batteries helps preserve the environment and health.

DECLARATION OF CONFORMITY

Declaration  of conformity

BUILDER SAS

ZI, 32 rue Aristide Bergès – 31270 Cugnaux - France

Tel: +33 (0)5.34.502.502 Fax: +33 (0)5.34.502.503

Declares that the machinery designated below:

**Cordless chainsaw
FTREN220V**

Serial number: 20210752055-20210752354

**Complies with the provisions of the Directive "machinery" 2006/42/EC and regulations
National transposing it;**

Also complies with the following European directives:

EMC Directive 2014/30/EU

RoHS Directive (EU)2015/863 amending 2011/65/EU

Noise emission Directive 2000/14/EC Annex V and Directive 2005/88/EC

Guarantee sound power level: 108 dB(A)

Measured sound power level: 104.8 dB(A) KwA=3,0dB(A)

Also complies with European standards, national standards and provisions following techniques:

EN60745-1:2009+A11:2010

EN60745-2-13: 2009+A1:2010

EN55014-1:2017

EN55014-2:2015

Notified body

Intertek Deutschland GmbH Stangenstraße 1, 70771 Leinfelden-Echterdingen

Code:NB0905

EC-type certification: 20SHW1369-01

Responsible of the Technical file: Mr Patriaca

Cugnaux, 23/06/2021

Philippe MARIE / PDG

WARRANTY



WARRANTY

The manufacturer guarantees the product against defects in material and workmanship for a period of 2 years from the date of the original purchase. The warranty only applies if the product is for household use. The warranty does not cover breakdowns due to normal wear and tear.

The manufacturer agrees to replace parts identified as defective by the designated distributor. The manufacturer does not accept responsibility for the replacement of the machine, in whole or in part, and/or ensuing damage.

The warranty does not cover breakdowns due to:

- insufficient maintenance.
- abnormal assembly, adjustment or operations of the product.
- parts subject to normal wear and tear.

The warranty does not extend to:

- shipping and packaging costs.
- using the tool for a purpose other than that for which it was designed.
- the use and maintenance of the machine done in a manner not described in the user manual.

Due to our policy of continuous product improvement, we reserve the right to alter or change specifications without notice. Consequently, the product may be different from the information contained therein, but a modification will be undertaken without notice if it is recognized as an improvement of the preceding characteristic.

READ THE MANUAL CAREFULLY BEFORE USING THE MACHINE.

When ordering spare parts, please indicate the part number or code, you can find this in the spare parts list in this manual. Keep the purchase receipt; without it, the warranty is invalid. To help you with your product, we invite you to contact us by phone or via our website:

- **+33 (0)9.70.75.30.30**
- **<https://services.swap-europe.com/contact>**

You must create a "ticket" via the web platform.

- Register or create your account.
- Indicate the reference of the tool.
- Choose the subject of your request.
- Describe your problem.
- Attach these files: invoice or sales receipt, photo of the identification plate (serial number), photo of the part you need (for example: pins on the transformer plug which are broken).



PRODUCT FAILURE

WHAT TO DO IF MY MACHINE BREAKS DOWN?

If you bought your product in a store:

- a) Empty the fuel tank if your product has one.
- b) Make sure that your machine is complete with all accessories supplied, and clean! If this is not the case, the repairer will refuse the machine.

Go to the store with the complete machine and with the receipt or invoice.

If you bought your product on a website:

- a) Empty the fuel tank if your product has one.
- b) Make sure that your machine is complete with all accessories supplied, and clean! If this is not the case, the repairer will refuse the machine.
- c) Create a SWAP-Europe service ticket on the site: <https://services.swap-europe.com> When making the request on SWAP-Europe, you must attach the invoice and the photo of the nameplate (serial number).
- d) Contact the repair station to make sure it is available before dropping of the machine.

Go to the repair station with the complete machine packed, accompanied by the purchase invoice and the station support sheet downloadable after the service request is completed on the SWAP-Europe site

For machines with engine failure from manufacturers BRIGGS & STRATTON, HONDA and RATO, please refer to the following instructions.

Repairs will be done by approved engine manufacturers of these manufacturers, see their site:

- <http://www.briggsandstratton.com/eu/fr>
- <http://www.honda-engines-eu.com/fr/service-network-page;jsessionid=5EE8456CF39CD572AA2AEEDFD290CDAE>
- <https://www.rato-europe.com/it/service-network>

Please keep your original packaging to allow for after-sales service returns or pack your machine with a similar cardboard box of the same dimensions.

For any question concerning our after-sales service you can make a request on our website <https://services.swap-europe.com>

Our hotline remains available at +33 (9) 70 75 30 30.



WARRANTY EXCLUSIONS

THE WARRANTY DOES NOT COVER:

- Start-up and setting up of the product.
- Damage resulting from normal wear and tear of the product.
- Damage resulting from improper use of the product.
- Damage resulting from assembly or start-up not in accordance with the user manual.
- Breakdowns related to carburetion beyond 90 days and fouling of carburetors.
- Periodic and standard maintenance events.
- Actions of modification and dismantling that directly void the warranty.
- Products whose original authentication marking (brand, serial number) has been degraded, altered or withdrawn.
- Replacement of consumables.
- The use of non-original parts.
- Breakage of parts following impacts or projections.
- Accessories breakdowns.
- Defects and their consequences linked to any external cause.
- Loss of components and loss due to insufficient screwing.
- Cutting components and any damage related to the loosening of parts.
- Overload or overheating.
- Poor power supply quality: faulty voltage, voltage error, etc.
- Damages resulting from the deprivation of enjoyment of the product during the time necessary for repairs and more generally the costs related to the immobilization of the product.
- The costs of a second opinion established by a third party following an estimate by a SWAP-Europe repair station
- The use of a product which would show a defect or a breakage which was not the subject of an immediate report and/or repair with the services of SWAP-Europe.
- Deterioration linked to transport and storage*.
- Launchers beyond 90 days.
- Oil, petrol, grease.
- Damages related to the use of non-compliant fuels or lubricants.

* In accordance with transport legislation, damage related to transport must be declared to carriers within 48 hours maximum after observation by registered letter with acknowledgement of receipt.

This document is a supplement to your notice, a non-exhaustive list.

Attention: all orders must be checked in the presence of the delivery person. In case of refusal by the delivery person, it you must simply refuse the delivery and notify your refusal.

Reminder: the reserves do not exclude the notification by registered letter with acknowledgement within 72 hours.

Information:

Thermal devices must be wintered each season (service available on the SWAP-Europe site). Batteries must be charged before being stored.