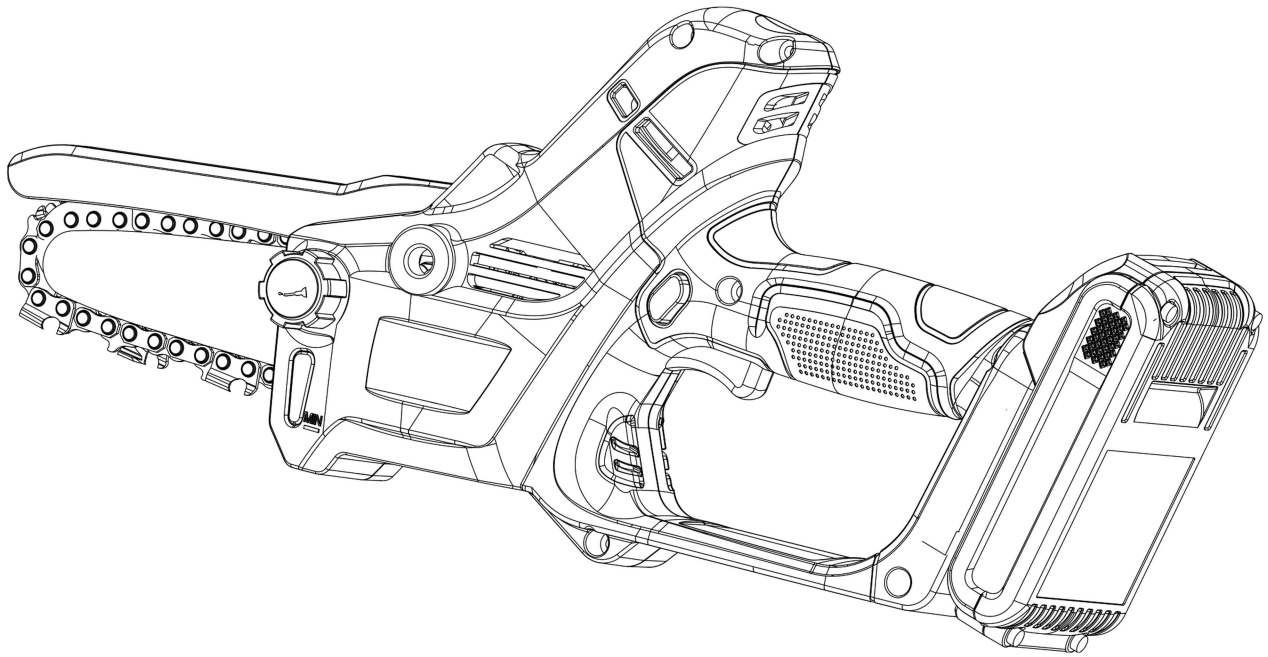
PRORUN®

20V/// Lithium-Ion

Operator's Manual

MINI CHAINSAW

MODEL: PMCS120



Everything PRORUN

Before charging, read the instructions.

⚠ **IMPORTANT - READ CAREFULLY BEFORE USE**

⚠ **IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS**



WARNING: To reduce the risk of injury, the user must read and understand the Operator's Manual before using this product. Save these instructions for future reference.

Please let us know what you think.
To leave a review and see our full line of products, visit:

proruntech.com ★★★★★

1-844-905-0882, info@proruntech.com

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1. GENERAL MACHINE SAFETY WARNINGS

⚠ **WARNING! Read all safety warnings, instructions, illustrations, and specifications provided with this machine.** Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injuries.

Save all warnings and instructions for future reference.

The term “machine” in all of the warnings listed below refers to your battery operated (cordless) machine.

● Work area safety

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

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

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

● Electrical safety

a) 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.

b) Do not expose machines to rain or wet conditions. Water entering a machine will increase the risk of electric shock.

c) Do not abuse the battery charger power cord. Never use the cord for Carrying. Keep power cord away from heat, oil, sharp edges, or moving parts. Damaged or entangled cords increase the risk of electric shock.

● Personal safety

a) Stay alert, watch what you are doing, and use common sense when operating a machine. Do not use a machine while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating machines 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 battery pack and/or to power source, picking up or carrying the machine. Carrying machines with your finger on the switch or energizing machines that have the switch on invites accidents.

d) Remove any adjusting key or wrench before turning the machine on. A wrench or a key left attached to a moving part of

machine may result in personal injury.
e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the machine in unexpected situations.
f) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, 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 these devices can reduce dust-related hazards.
h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

● Machine use and care

a) Do not force the machine. Use the correct machine for your application. The correct machine will do the job better and safer at the rate for which it was designed.
b) Do not use the machine if the switch does not turn it on and off. Any machine that cannot be controlled with the switch is dangerous and must be repaired.
c) Remove the battery pack from the machine before making any adjustments, changing accessories, or storing machines. Such preventive safety measures reduce the risk of starting the power tool accidentally.
d) Store idle machines out of the reach of children and do not allow persons unfamiliar with the machine or these instructions to operate the machine. Machines are dangerous in the hands of untrained users.
e) Maintain machines and accessories. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the machine's operation. If damaged, have the machine repaired before use. Many accidents are caused by poorly maintained machines.
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 machine, 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 machine for operations different from those intended could result in a hazardous situation.
h) Keep handles and grasping surfaces dry, clean, and free

from oil and grease. Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

● 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 machines 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, which can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.

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

e) Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion, or risk of injury.

f) Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 212°F(100 °C) may cause explosion.

g) Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

● Service

a) Contact PRORUN Customer Service with questions or issues with this machine. This will ensure that the safety of the power tool is maintained.

b) Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer or authorized service providers.

2. SAFETY INSTRUCTIONS FOR MINI CHAINSAW

● General chainsaw safety warnings:

a) Keep all parts of the body away from the saw chain when the chainsaw is operating. Before you start the chainsaw, make sure the saw chain is not contacting anything. A moment

of inattention while operating chainsaws may cause entanglement of your clothing or body with the saw chain.
b) Hold the machine with one hand wrapped tightly around the handle.
c) Hold the chainsaw 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 chainsaw "live'" and could give the operator an electric shock.
d) Wear eye protection. Further protective equipment for hearing, head, hands, legs, and feet is recommended. Adequate protective equipment will reduce personal injury from flying debris or accidental contact with the saw chain.
e) Do not operate a chainsaw in a tree, on a ladder, from a rooftop, or any unstable support. Operation of a chainsaw in this manner could result in serious personal injury.
f) Always keep proper footing and operate the chainsaw only when standing on fixed, secure, and level surface. Slippery or unstable surfaces may cause a loss of balance or control of the chainsaw.
g) When cutting a limb that is under tension, be alert for spring back. When the tension in the wood fibers is released, the spring-loaded limb may strike the operator and/or throw the chainsaw out of control.
h) 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.
i) Carry the chainsaw by the handle with the chainsaw switched off and away from your body. When transporting or storing the chainsaw, always fit the guide bar cover. Proper handling of the chainsaw will reduce the likelihood of accidental contact with the moving saw chain.
j) Follow instructions for lubricating, chain tensioning and changing the bar and chain. Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
k) Cut wood only. Do not use chainsaw for purposes not intended. For example: do not use chainsaw for cutting metal, plastic, masonry, or non-wood building materials. Use of the chainsaw for operations different than intended could result in a hazardous situation.
l) Do not attempt to fell a tree until you have an understanding of the risks and how to avoid them. Serious injury could occur to the operator or bystanders while felling a tree.
m) Follow all instructions when clearing jammed material,

storing, or servicing the chainsaw. Make sure the switch is off and the battery pack is removed. Unexpected actuation of the chainsaw while clearing jammed material or servicing may result in serious personal injury.

● 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 chainsaw user, you should take several steps to keep your cutting jobs free from accident or injury.

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

a) Maintain a firm grip, with thumbs and fingers encircling the chainsaw handle 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 chainsaw.

b) Do not overreach and do not cut above shoulder height. This helps prevent unintended tip contact and enables better control of the chainsaw in unexpected situations.

c) Only use replacement guide bars and saw chains specified by the manufacturer. Incorrect replacement guide bars and saw chains may cause chain breakage and/or kickback.

d) Follow the manufacturer's sharpening and maintenance instructions for the saw chain. Decreasing the depth gauge height can lead to increased kickback.

3. TRANSPORTATION AND STORAGE

a) When transporting or storing the chainsaw always fit the guide bar cover. Proper handling of the chainsaw will decrease the risk of personal injury from the blades.

b) Unintentional starting may result in personal injury or property damage. Remove the battery before inspecting the chainsaw or carrying out any cleaning, maintenance, or repair work, before storing, and any other time the chainsaw is not in use.

c) Improper storage can result in unauthorized use, damage to the machine, battery and charger and an increased risk of fire, electric shock, and other personal injury or property damage.
– Before storing, always unplug the charger from the wall outlet and remove the battery.
– Store the machine, battery, and charger indoors in a dry, secure place out of the reach of children and other unauthorized users.

4. BATTERY AND BATTERY CHARGER

This section describes the battery and battery charger safety for your battery product.
Only use original batteries for products and only charge them in an original battery charger.

● Battery charger

The battery chargers are only used for fast charging of PRORUN® 60V replacement batteries.
– This manual contains important safety and operating instructions for battery charger.
– Before using battery charger read all instructions and cautionary markings on battery charger and product using battery.
⚠ CAUTION! Charge only Li-ion batteries recommended by the manufacturer.
– Other types of batteries may burst causing personal injury and damage.
– If the shape of the plug does not fit the power outlet, use an attachment plug adapter of the proper configuration for the power outlet.
⚠ WARNING! Minimize the risk of electric shock or short circuit as follows:
– Never insert any object into the charger's cooling slots. Do not try to dismantle the battery charger.
– Never connect the charger terminals to metal objects as this can short circuit the battery charger.
– Use approved and intact wall sockets.
⚠ WARNING! This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants consult their physician and the medical implant manufacturer before operating this machine. Do not use product when a thunderstorm is approaching.
– Unplug the charger from the wall outlet before inspecting or cleaning the charger.

– Regularly check that the battery charger connection wire is intact and that there are no cracks in it. Replace the charger if the power supply cord becomes worn or damaged. The power supply cord cannot be repaired or replaced.
– Never carry the battery charger using the power cord and never pull out the plug by pulling the power cord.
– Keep all powers cords and extension cords away from water, oil, and sharp edges. Make sure the power cord is not pinched in doors, fences, or the like. Otherwise, it can cause the object to become live.
– Never clean the battery or the battery charger with water.
– Never allow the children to use the battery charger.
When charging, the charger must be placed in a well-ventilated area and under a roof to keep out moisture.
⚠ **WARNING! Do not charge non-rechargeable batteries in the battery charger or use them in the machine.**
⚠ **WARNING! Do not use the battery charger close to corrosive or flammable materials. Do not cover the battery charger. Pull out the plug to the battery charger in the event of smoke or fir. Risk of fire**.
– Use the battery charger only when the surrounding temperature is between 41 °F (5 °C) and 113 °F (45 °C). Use the charger in an environment which is well ventilated, dry, and free from dust.
Do not use:
– A faulty or damaged battery charger
– The battery in the battery charger outdoors.
Do not charge or never use a faulty, damaged, or deformed battery.
– The battery in the rain or in wet conditions.
– The battery in direct sunlight.
– The battery in the battery charger outdoors.

● Battery

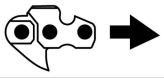
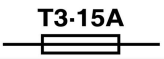
– Do not dismantle, open or shred secondary batteries.
– Keep batteries out of the reach of children.
– Do not expose batteries to heat or fire. Avoid storage in direct sunlight.
– Do not short-circuit a battery. Do not store batteries haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.
– Do not remove a battery from its original packaging until required for use.
– Do not subject batteries to mechanical shock.
– In the event of a cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical

advice.
– Do not use any charger other than that specifically provided for use with the equipment.
– Do not use any battery which is not designed for use with the equipment.
– Always purchase the battery recommended by the device manufacturer for the equipment.
– Keep batteries clean and dry.
– Wipe the battery terminals with a clean dry cloth if they become dirty.
– Secondary batteries need to be charged before each use. Always use the correct charger and refer to the manufacturer's instructions or equipment manual for proper charging instructions.
– Do not leave a battery on prolonged charge when not in use.
– After extended periods of storage, it may be necessary to charge and discharge the batteries several times to obtain maximum performance.
– Retain the original product literature for future reference.
– Use the battery only in the application for which it was intended. When possible, remove the battery from the equipment when not in use.
– Dispose of properly.

5. SYMBOLS

This page depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate it.

	Safety Alert	Because a chainsaw is a high-speed cutting tool, special safety precautions must be observed to reduce the risk of personal injury.
	Read the User's Manual	It is important that you read, fully understand and observe the following safety precautions and warnings. Read the instruction manual and the safety precautions periodically.
	Do not expose to rain	Protect the tool, battery and charger from rain, water, liquids and damp conditions. Keep the tool, battery and charger dry.
	Wear eye, ear and head protection	To reduce the risk of injury to you, always wear safety goggles or safety glasses, sound barriers and safety hard hat when operating this product.
	Wear protective gloves	Always wear heavy duty nonslip gloves when handling the machine.

	Wear safety footwear	Wear sturdy boots with nonslip soles. Never wear sandals, flip-flops or go barefoot.
	Remove the battery	Disconnect or remove the battery before cleaning or maintenance.
	Chain direction marking	Shows the direction of the saw chain installation.
	Chain oil marking	The port to replenish the chain oil.
	Never expose to fire	Risk of fire, explosion and/or burns, including chemical burns. Never incinerate or place the battery on or near fires, stoves or other high-temperature locations.
	Never heat the battery	Do not disassemble, crush, heat above 212°F (100°C). Never expose the battery to high pressures.
	Never immerse in water	To reduce the risk of personal injury or property damage from a short circuit, fire or explosion. Never immerse the battery in water or other liquids.
	Recycling	Take the chainsaw, charger, accessories, and packaging to an approved disposal site for environmentally friendly recycling.
	Waste	Symbols on the product or its packaging indicate that this product cannot be handled as domestic waste. This product must be deposited at an appropriate recycling facility.
	Indoor use only	Use and store charger only indoors in dry rooms.
	Class II tool	Battery charger belongs to Class II tools. It is intended for charging Li-ion batteries and having an output at safe extra-low voltage.
	Guaranteed sound power lever	Guaranteed sound power level for this equipment.
	Fuse	T3.15A time-lag miniature fuse-link
~	Alternating Current	Type of current
Li-Ion	Lithium-ion battery	Type of battery
⎓	Direct Current	Type of current

This below units may be used in mannual:

V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency(cycles per second)
W	Watts	Power
min	Minutes	Time

mm	Millimeter	Length or size
in.	Inch	Length or size
Kg	Kilogram	Weight
Lbs.	Pound	Weight
RPM	Revolutions per minute	Rotational speed

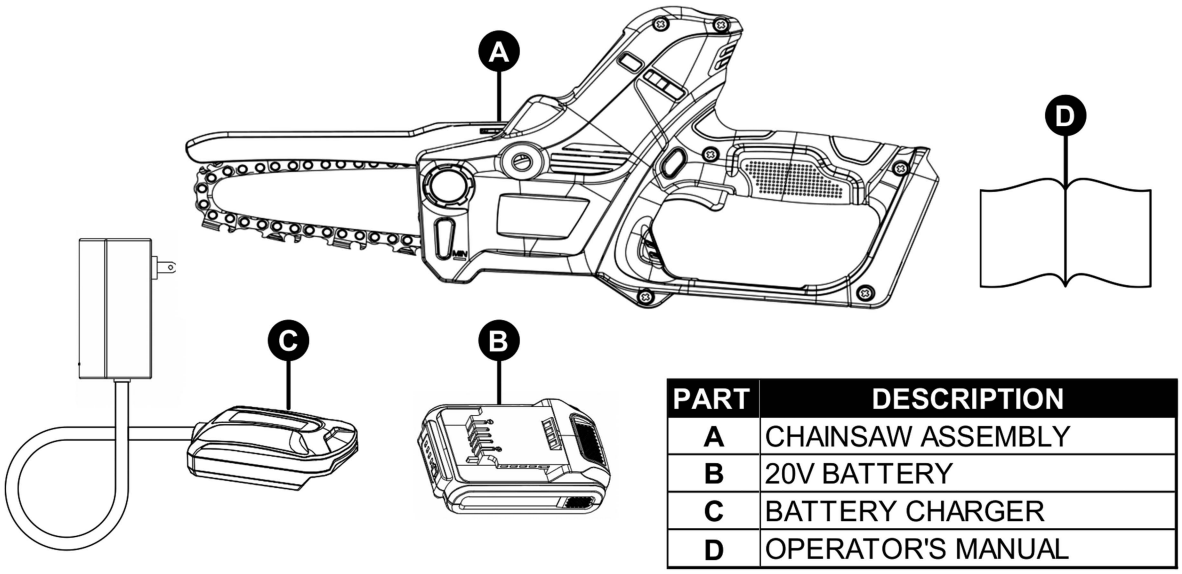
DANGER! People with electronic devices, such as pacemakers, should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

6. SPECIFICATION

Machine model	PMCS120
Voltage	DC 20V
Motor type	Permanent Magnet DC
Maximum speed of saw chain	7.5 m/s (16.78 MPH)
Cutting length	5 in (120mm) / 7 in (195mm)
Weight (without saw chain, guide bar, guide bar cover, oil and battery)	2.65 Lbs. (1.2 Kg)
Chain pitch	1/4 in. (6.35mm)
Chain guage	0.043 in. (1.09mm)
Drive sprocket	6T×1/4 in (6.36mm)
Volume of chain oil tank	1 oz. ($30cm^3$)
Recommended guide bar and saw chain combinations	1. TSB05-43M+25-43BZ32 2. TSB07-43M+25-43BZ44
Sound pressure level L_{pA} according to IEC 62841-4-1	78.4dB(A)
Sound power level L_{WA} according to IEC 62841-4-1	89.4 dB(A)
The noise uncertainties values	K = 3 dB(A)
Declared sound power level L_{WAd} according to directive 2000/14/EC	92 dB(A)
Vibration according to IEC 62841-4-1*	1.16 m/s^2
The vibration uncertainties value	K=1.5 m/s^2
Battery charger	PC120
Charger Input	AC 100-240 V, 50/60 Hz, 170 W
Charger Output	21VDC, 1.5 A
Battery	PB12020 or PB12040
Rated parameter	DC 20 V, 2.0 Ah

*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. 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.

7. KNOW YOUR MINI CHAINSAW



PART	DESCRIPTION
A	CHAINSAW ASSEMBLY
B	20V BATTERY
C	BATTERY CHARGER
D	OPERATOR'S MANUAL

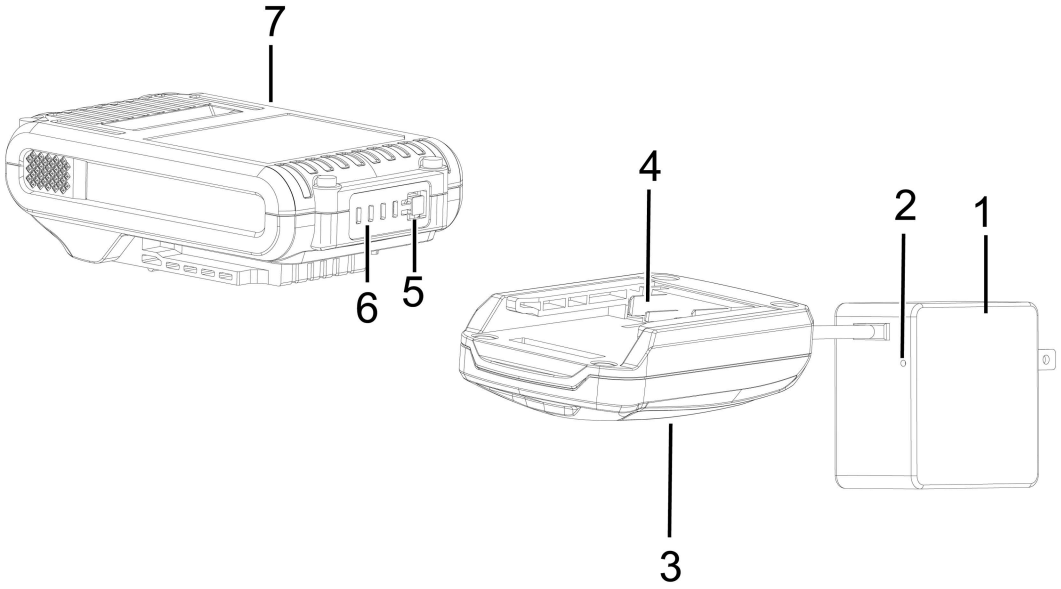
1. Rear hand guard
Extension on the lower part of the rear handle for protecting the hand from the saw chain if it breaks or derails.
2. Drive sprocket cover
Covers the drive sprocket.
3. Locking nuts
Locks or releases the drive sprocket cover.
4. Chain catcher
Protect the operator from injury if saw chain breakage occur.
5. Guide bar
Attachment that supports and guides the saw chain.
6. Saw chain
Attachment, serving as a cutting tool, consisting of drive links and cutters.
7. Protective cover
Chain protection cover to prevent hand injury during chain operation.
8. Chain tension screw
Tightens or releases the saw chain.
9. Chain oil tank cap
Closes the chain oil tank.
10. Power switch
Switches on or off the motor.
11. Lock-off device
Device which prevents the unintentional activation of the power switch unless releasesd by the end user.
12. Rear handle
Support handle and grasping surface (shadow area) located towards the rear of the machine.
13. Battery
Supplies electrical power to the motor.
14. Chain Scabbard
Protects the operator from injuries and the chain blades from damaged during transportation and storage.

IMPORTANT! The safe use of this product requires an understanding of the information located on the product and in this operator's manual, as well as a knowledge of the projects you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

8. BATTERY AND CHARGER OPERATION

This section describes the battery and battery charger safety for your battery product.

Only use PRORUN® original batteries for PRORUN products and only charge them in an original battery charger from PRORUN. The batteries are software encrypted.



1. Electric plug
2. Charging indication LED
3. Battery charger
4. Electrical terminal
5. Electric energy button
6. Electric energy LED light
7. Battery

NOTE! The specifications of the plugs can be different by country, the picture is only for reference. If the shape of the plug does not fit the power outlet, use an attachment plug adapter of the proper configuration for the power outlet.

⚠ **WARNING! Risk of electric shock and short circuiting.** Use approved and intact wall sockets. Make sure that the power cord is not damaged. Replace power cord if it appears to be damaged in any way.

● Connect the battery charger

Connect the battery charger (3) to the voltage and frequency specified on the rating plate.

– Put the electric plug (1) in an earthed or grounded socket-outlet.

– The charging indication LED (2) will shine green indicating that the charger is working correctly.

– After 5 second, the light will turn off if no battery in the charger.

● Connect the battery to the battery charger

The battery(7) must be charged before using it the first time. The battery is only 30% charged when delivered.

NOTE! Monitor the charging process while charging a battery. It is recommended to remove the battery from the battery charger when the battery is full charged, or the charger is disconnected from the power supply.

– Align the raised ribs of the battery pack with the mounting slots in the charger; slide the battery battery into the charger and engage the battery with the charger's electrical terminals.

– The charger will communicate with the battery pack to evaluate the condition of the battery pack.

– While the battery pack is charging, the charger's indication LED will shine as follows to indicate the charging process and levels:



The charger's indication LED light shines consistently red when the battery is charging.



The charger's indication LED light shines consistently green when the battery is fully charged.



The battery will not be charged if the battery temperature is deviation. In that case the charger's indication LED light shines consistently green until the battery cool down or heat to normal temperature.



The battery will never be charged if the battery is damaged. In that case the charger's indication LED light shines consistently green

– The four LEDs on the battery pack indicate the current charged power level. Press the battery's electric energy button to check the power level of the battery.

– When the battery is full charged, the battery charger will stop charging (switch to stand by).

– It is recommended to remove the battery from the battery charger when the battery is fully charged, or the charger is disconnected from the power supply.

– Pull out the plug. Never use the power supply cable to disconnect the charger from the wall socket.

● Maintenance

– Make sure the battery and battery charger are clean and that the terminals on the battery and the battery charger are always clean and dry before the battery is placed in the battery charger.

– Keep the battery guide tracks clean. Clean plastic parts with a clean and dry cloth.

● Transport and storage

– Store the equipment in a lockable area so that it is out of reach of children and unauthorized persons.

– Store the battery and the battery charger in a dry, moisture-free and frost-free space.

– Store the battery where the temperature is between 14 °F (-10 °C) and 113 °F (45 °C) and never in direct sunlight.

– Store the battery charger only in an enclosed and dry space.

– Be sure to store the battery separate from the battery charger.

● Fault codes

LED display	Possible faults	Possible action
Charger LED shines consistently green but battery electric energy LED light indicates no increase in charge.	The battery is ok, but temperature deviation.	Charge the battery in surroundings where temperatures are between 32°F (0 °C) and 104°F (40 °C). Wait for the battery cool down.
Charger LED shines consistently green but battery electric energy LED light indicates no increase in charge.	Battery is damaged. Charger is damaged.	Contact PRORUN Customer Service.

9. ASSEMBLY INSTRUCTIONS

● Unpacking

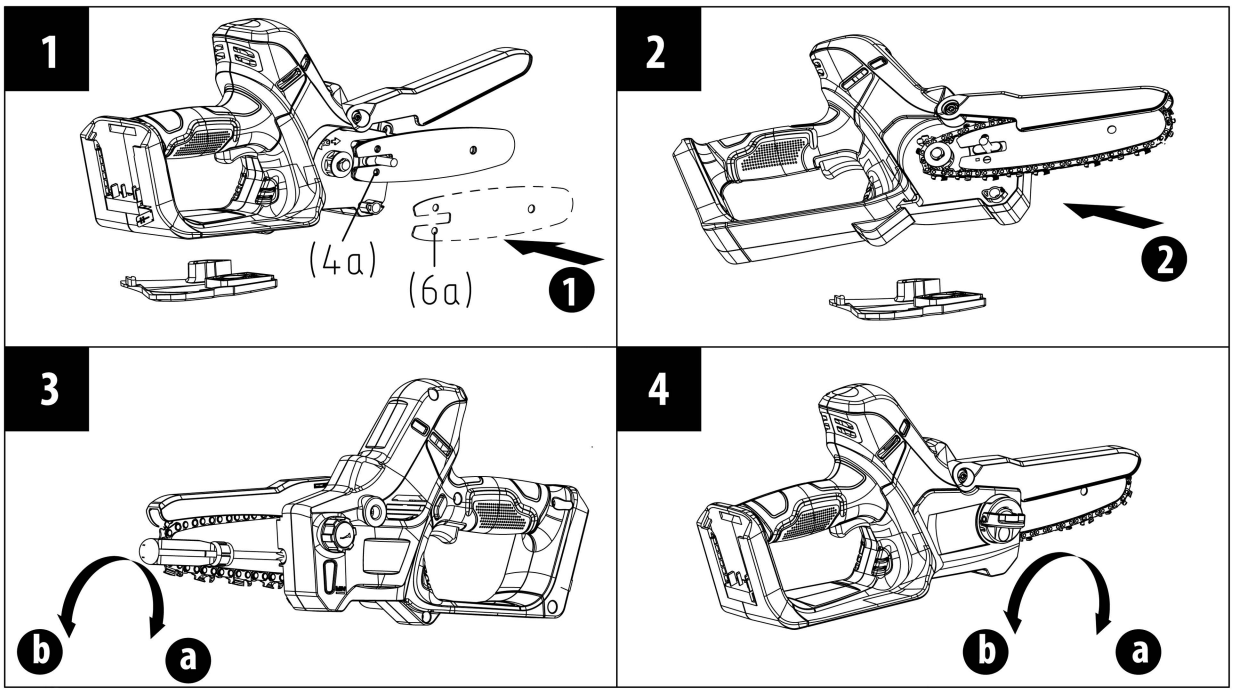
This machine requires assembly of the guide bar and saw chain.
- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the product carefully to make sure that no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.

● Packing list

1. Mini Chainsaw
2. Guide bar
3. Saw chain
4. Battery Charger
5. Battery
6. File
7. Operator's manual

● Install the guide bar and saw chain

1. Remove the drive sprocket cover, turn the chain tension screw counter-clockwise (a to b) to the end, align the hole (6a) of the guide bar and the tension pin (4a), and mount the guide bar onto the chainsaw (1). (See Fig. 1)
2. Gear the chain to the sprocket while fitting the saw chain around the guide bar (2). Install the drive sprocket cover and rotate the locking handle clockwise just enough to hold the cover in position. (See Fig. 2)
3. While holding up the tip of the bar, adjust saw chain tension by turning the chain tension screw clockwise (b to a) until the tie straps just touch the bottom side of the bar rail. (See Fig. 3)
4. Secure the guide bar securely by holding the bar tip up and rotating the lock-nuts clockwise (b to a) with a wrench or multi-tool. Next check the chain for smooth rotation and proper tension while moving it by hand. If necessary, readjust the saw chain tension with the drive sprocket cover loose. (See Fig. 4)
5. Tighten the chain by turning the chain tension knob clockwise (b to a). Loosen the chain by turning the chain tension knob counter-clockwise (a to b).



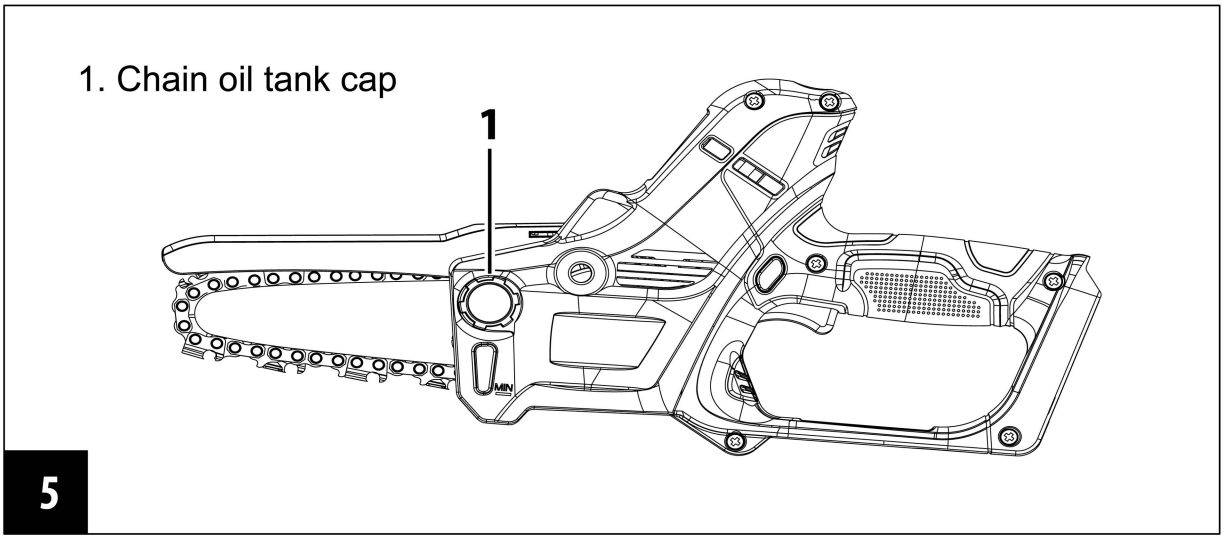
10. OPERATION

● Replenish the chain oil (See Fig. 5)

Check oil level before starting work, while sawing, and each time the battery is changed.

- The service life of the chain and guide bar depends on the quality of the lubricant. It is therefore essential to use only a specially chain lubricant.
- Do not operate the chainsaw without lubrication. Replenish chain lubricant before the container is empty.

⚠ **Do not use waste oil.** Renewed contact with waste oil can cause skin cancer. Moreover, waste oil is environmentally harmful.



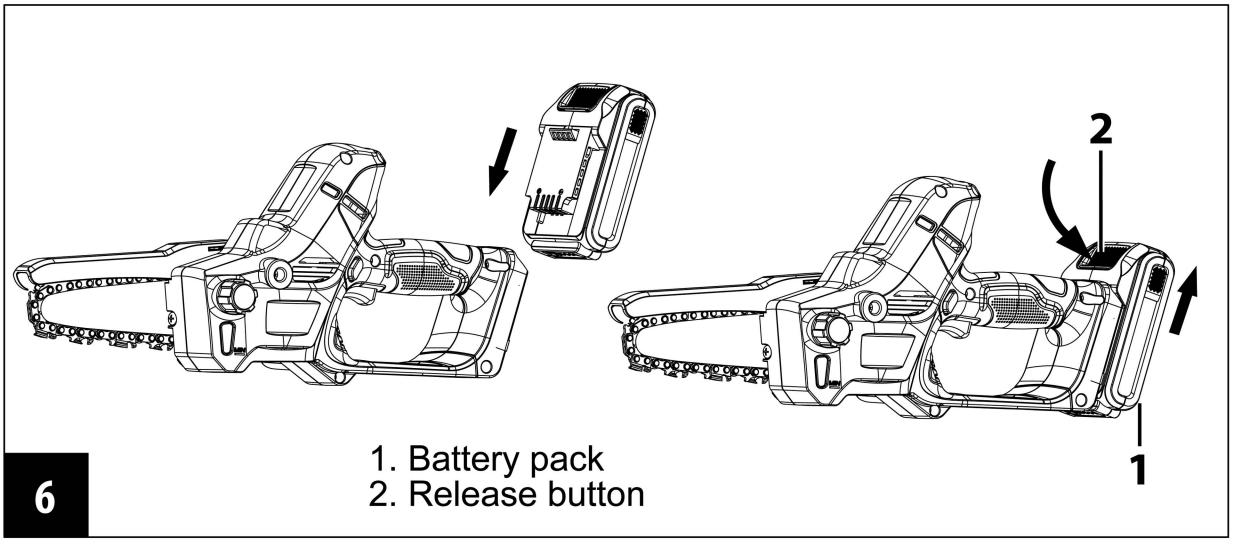
5

● Install the battery pack (See Fig. 6)

Align the raised ribs of the battery pack with the mounting slots in the chainsaw battery port; slide the battery pack down into the machine until you hear an audible click.

● Remove the battery pack (See Fig. 6)

Depress the release button (2) to release battery pack (1) and pull out the battery simultaneously.

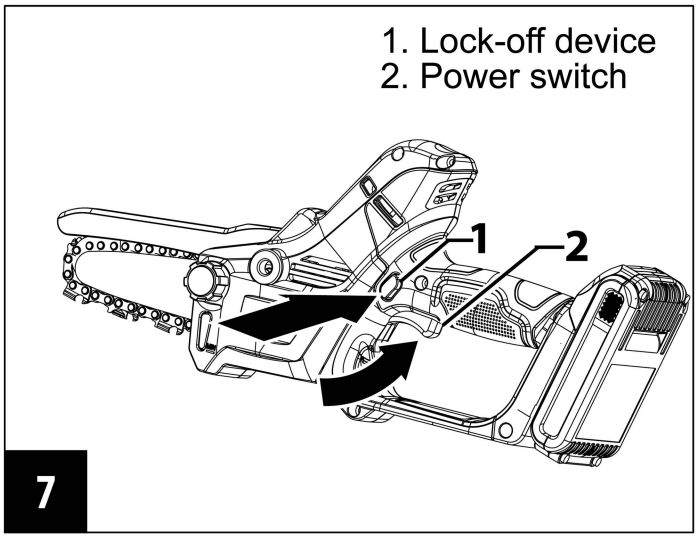


6

● Switching on the machine (See Fig. 7)

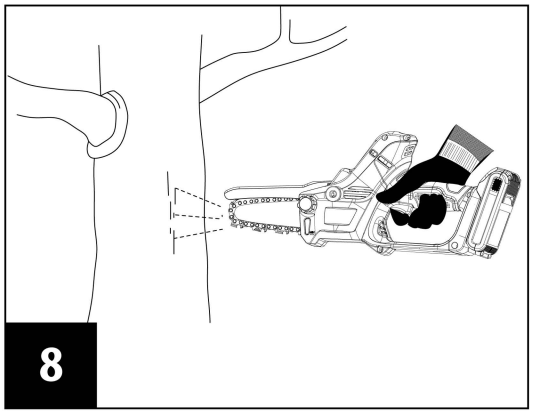
- Hold the machine with hand – wrap hand tightly around the handle.
- Make certain that the saw chain has not yet been positioned for cutting and is not touching any other objects.

- Press lock-off device (1) with thumb, depress power switch (2) with index finger at the same time.
- It shall not be necessary to sustain the actuation of the lock-off device after the power switch is activated.
- The power switch shall return to the original locked state when the power switch is released.
- Press lock-off device to release the power switch before switch on the machine.



● Checking the oil delivery (See Fig. 8)

IMPORTANT! Never use the machine without lubrication!
- Always check chain lubrication and the oil level in the tank before starting work.
- Switch on the machine, keep it running at low speed and check if the chain oil is delivered as shown in the figure (Fig.8).



● Checking the machine

Before starting work please:
– Daily inspection before use and after dropping or other impacts to identify significant damage or defects.
– Check that all the screws on the machine and the bar are tightly fastened.
– Check that the chain is sharp and there are no signs of any damage.
– Check that handgrips and protection devices are clean and dry, correctly mounted and well fastened to the machine.
– Check that the chain brake is working efficiently.
– Check the chain tension.

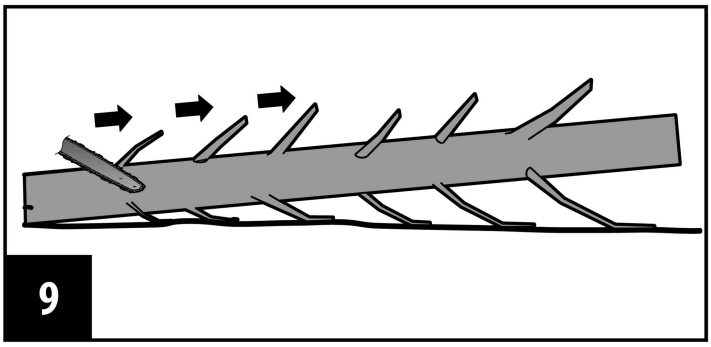
● Before starting work

Always follow all the safety regulations which can restrict the use of the machine.
– The chainsaw must only be used for cutting wood. It is forbidden to cut other types of material.
– Vibrations and kickback vary with different materials and the requirements of the safety regulations would not be respected.
– Do not use the chainsaw as a lever for lifting, moving or splitting objects.
– Comply with local regulations and provisions for the disposal of waste materials after sawing.
– Before felling or delimbing for the first time, practice cutting logs on a saw-horse or cradle. Become familiar with the machine and the most suitable sawing techniques.

● Instructions concerning the proper techniques for basic felling, limbing, and cross-cutting

Liming a tree

Limbing is removing the branches from a fallen tree. When limbing leave larger lower limbs to support the log off the ground, remove the small limbs in one cut as illustrated in Figure 9. Branches under tension should be cut from the bottom up to avoid binding the pruning saw.

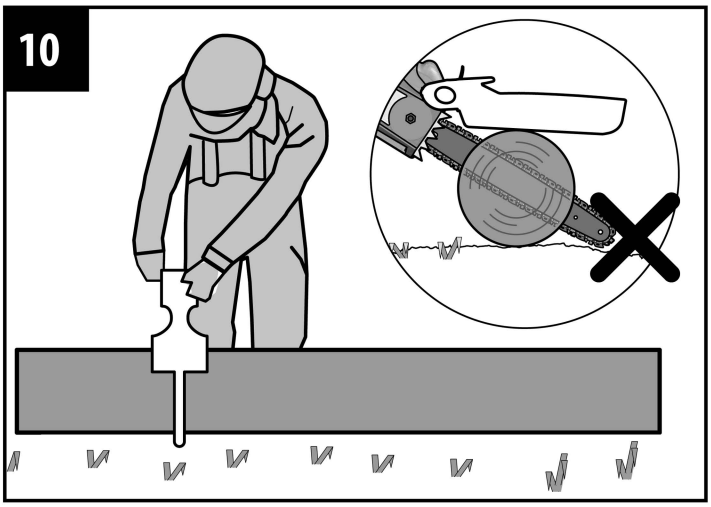


9

Bucking a log

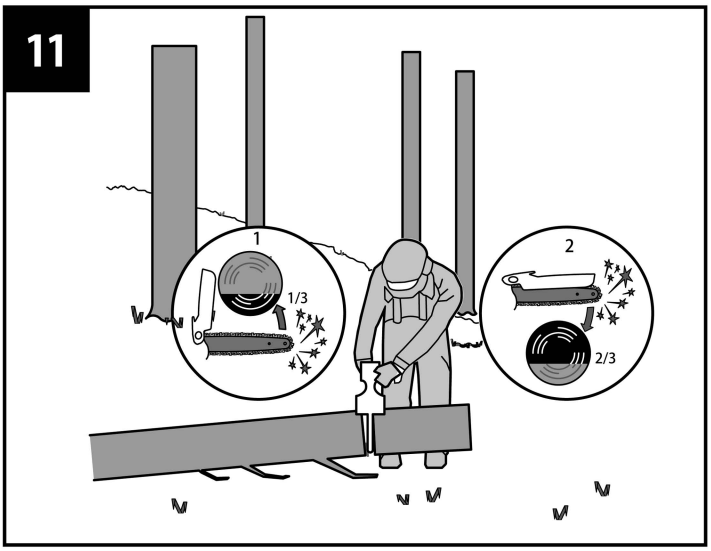
Bucking is cutting a log into lengths. It is important to make sure your footing is firm and your weight is evenly distributed on both feet. When possible, the log should be raised and supported by the use of limbs, logs or chocks. Follow these simple directions for easy cutting.

- When the log is supported along its entire length as illustrated in Figure 10, it is cut from the top (overbuck), avoid contacting ground as this will greatly reduce the chain sharpness.



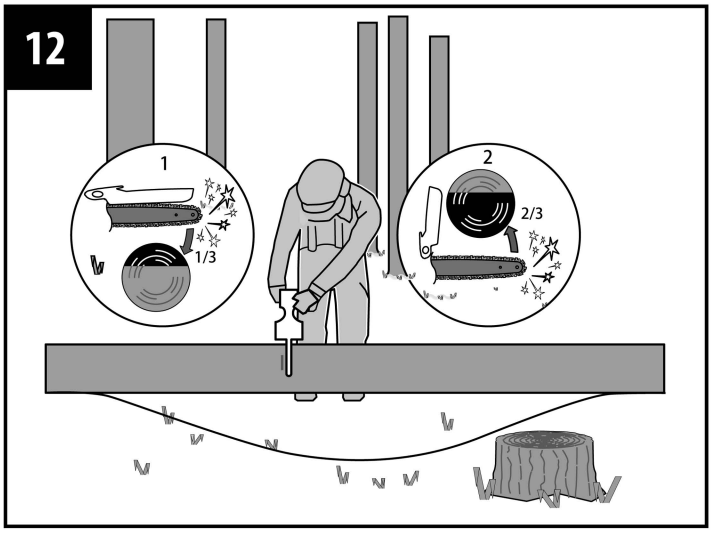
10

- When the log is supported on one end, as illustrated in Figure 11, cut 1/3 the diameter from the underside (underbuck) (1). Then make the finished cut by overbucking (2) to meet the first cut.

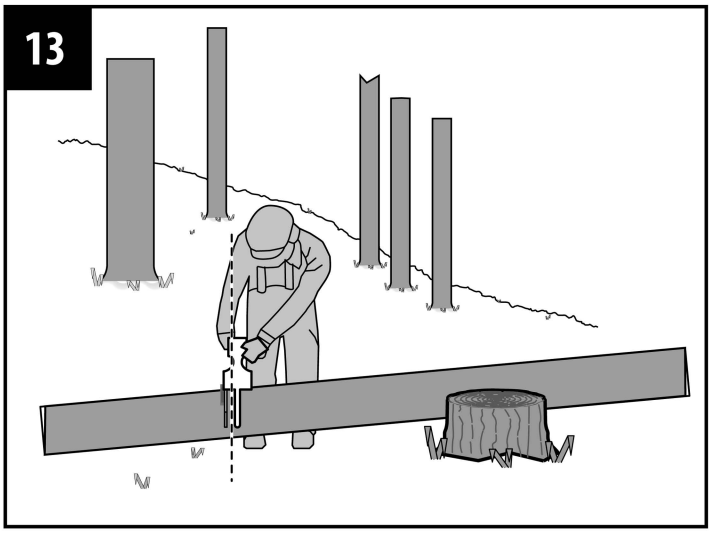


11

- When the log is supported on both ends, as illustrated in Figure 12, cut 1/3 the diameter from the top (overbuck) (1). Then make the finished cut by underbucking (2) the lower 2/3 to meet the first cut.



- When bucking on a slope always stand on the uphill side of the log, as illustrated in Figure 5. When “cutting through”, to maintain complete control release the cutting pressure near the end of the cut without relaxing your grip on the mini chainsaw. Don’t let the chain contact the ground. After completing the cut, wait for the saw chain to stop before you move the mini chainsaw. Always stop the motor before moving from tree to tree.



End of operations

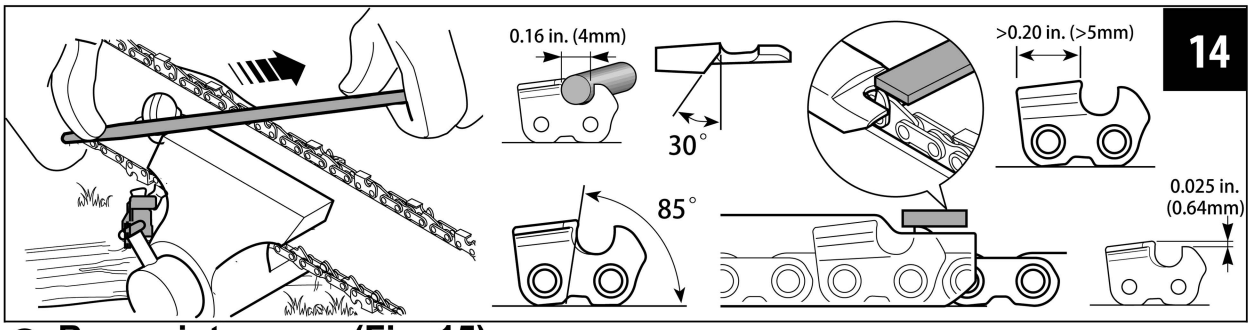
Switch off the motor. Remove any traces of saw dust or oil deposits from the saw chain.

11. MAINTENANCE AND REPAIR

– Correct maintenance is essential to maintain the original efficiency and safety of the machine over time.
– Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
– Never use the machine with worn or damaged parts. Damaged parts are must be replaced and never repaired.
– Only use original spare parts. Parts that are not of the same quality can seriously damage the equipment and compromise safety.
– If your machine has a malfunction or is damaged or requires servicing: Contact PRORUN Customer Service.

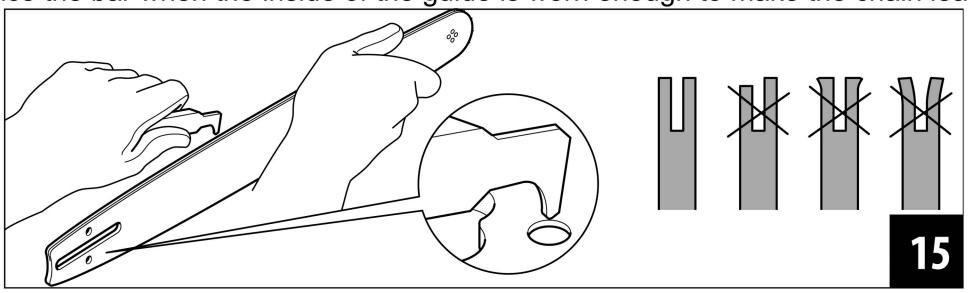
● Sharpening the saw chain

It is very important for smooth and safe operation to always keep the cutters sharp.
The saw chain needs to be sharpened when:
– Sawdust becomes powder-like.
– You need extra force to saw in.
– The cut way does not go straight.
– Vibration increases.
The specifications of the chain and the bar authorized for this machine are shown in the SPECIFICATIONS chart within this manual. Do not use other types of chains or bars for safety reasons.
The below Figure 14 gives the sharpening data for saw chain, but this does not mean you can use different chains then the authorized one.



● Bar maintenance (Fig. 15)

To avoid asymmetrical wear on the bar, make sure it is turned over periodically.
To keep the bar in perfect working order, proceed as follows:
– Grease the bearings on the nose sprocket (if present) with the syringe. Clean the bar groove with the scraper.
– Clean the lubrication holes.
– Remove burrs from the edges and level off the guides with a flat file.
– Replace the bar whenever the groove is not as deep as the height of the drive links (which must never touch the bottom).
– Replace the bar when the inside of the guide is worn enough to make the chain lean to one side.



● Servicing and repairing the battery.

The battery requires no servicing and cannot be repaired.

– If the battery has a malfunction or is damaged: Replace the battery.

● Servicing and repairing the charger

The charger requires no servicing and cannot be repaired.
– If the charger has a malfunction or is damaged: Replace the charger.
– If the connecting cable has a malfunction or is damaged: DO NOT use the charger and contact PRORUN Customer Service.

⚠ **WARNING! If the battery pack cracks or breaks, with or without leaks, do not recharge it and do not use.** Dispose of it and replace with a new battery pack.

● Inspections of the chainsaw, battery, and charger

To reduce the risk of personal injury from unintended activation, remove the battery before conducting an inspection, or performing any maintenance on the chainsaw:
– Sharpen the saw chain per instructions in this user's manual.
– Use only recommended guide bar and saw chain as specified in this user's manual.
– Contact PRORUN Customer Service with questions or issues with this machine.

DO NOT ATTEMPT TO REPAIR THE BATTERY!

To avoid injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:
– Cover the battery's terminals with heavy-duty adhesive tape.
– DO NOT attempt to remove or destroy any of the battery pack components.
– DO NOT attempt to open the battery pack.
– If a leak develops, the released electrolytes are corrosive and toxic. DO NOT get the solution in the eyes or on skin, and do not swallow it.
– DO NOT place these batteries in your regular household trash.
– DO NOT incinerate.
– DO NOT place them where they will become part of any waste landfill or municipal solid waste stream.
– Take them to a certified recycling or disposal center.

● Limitation

The manufacturer disclaims any responsibility if the device has not been used for its intended purpose or if the user has not followed the safety instructions for use.
– Read the instructions carefully before each use of the machine.
– Keep your receipt, this is necessary for a guarantee.

12. TRANSPORTING, CLEANING, AND STORING

● Transporting the mini chainsaw

When transporting the chainsaw:
– Switch off the chainsaw and remove the battery pack.
– When transporting the chainsaw by hand, point the guild bar and protective cover downward aligned with the direction of travel.
– When transporting the chainsaw in a vehicle, always secure and position the machine to prevent turnover, leakage, impact, and damage.

● Transporting the battery

Switch off the machine and remove the battery. Make sure the battery is in a safe condition.
Observe the following points when packing the battery:
– The packaging must be non-conductive.
– Make sure the battery cannot shift inside the packaging.
– Secure the packaging so that it cannot move.

● Cleaning the mini chainsaw

To reduce the risk of personal injury from unintended activation, remove the battery before conducting cleaning on the chainsaw:

– Clean the chainsaw's plastic components with a slightly dampened cloth. Do not use detergents or solvents.
– Do not use a pressure washer to clean the housing or spray them with water or other liquids.
– Keep the battery housing and guides free from foreign matter and clean as necessary with a soft brush or soft, dry cloth.
– Always unplug the charger before cleaning.
– Keep the charger housing and electrical contacts free from foreign matter.

● Cleaning the battery

- Clean the battery with a damp cloth.

● Cleaning the charger

- Disconnect the plug from the wall outlet.
- Clean the charger with a damp cloth.
- Clean the charger’s electrical contacts with a soft brush.

● Storing the mini chainsaw

When storing the chainsaw:
– Switch off the chainsaw and remove the battery pack.
– Clean the chainsaw.
– Always fit the guide bar cover or remove the saw chain and guide bar.
– Store the chainsaw indoors in a dry and secure location, out of the reach of children.
– Protect the chainsaw against dampness and corrosive agents such as garden chemicals and de-icing salts.
– Keep the machine clean and dry.

● Storing the battery

We recommend that you store the battery with a charge between 40% and 60%.
Observe the following points when storing the battery:
– Battery is out of the reach of children.
– Battery is clean and dry.
– Battery is in an enclosed space.
– Battery is stored separately, away from the machine and charger.
– Battery is in non-conductive packaging.
– Battery is in a temperature range between 41 °F (5 °C) and 113 °F (45 °C).
– Remove foreign matter from the battery compartment and clean the battery compartment with a damp cloth.
– Clean electrical contacts in the battery compartment with a soft brush.

● Storing the charger

– Disconnect the charger from the wall outlet. Remove the battery from the charger.
– Store the charger indoors in a dry and secure location.

13. TROUBLESHOOTING

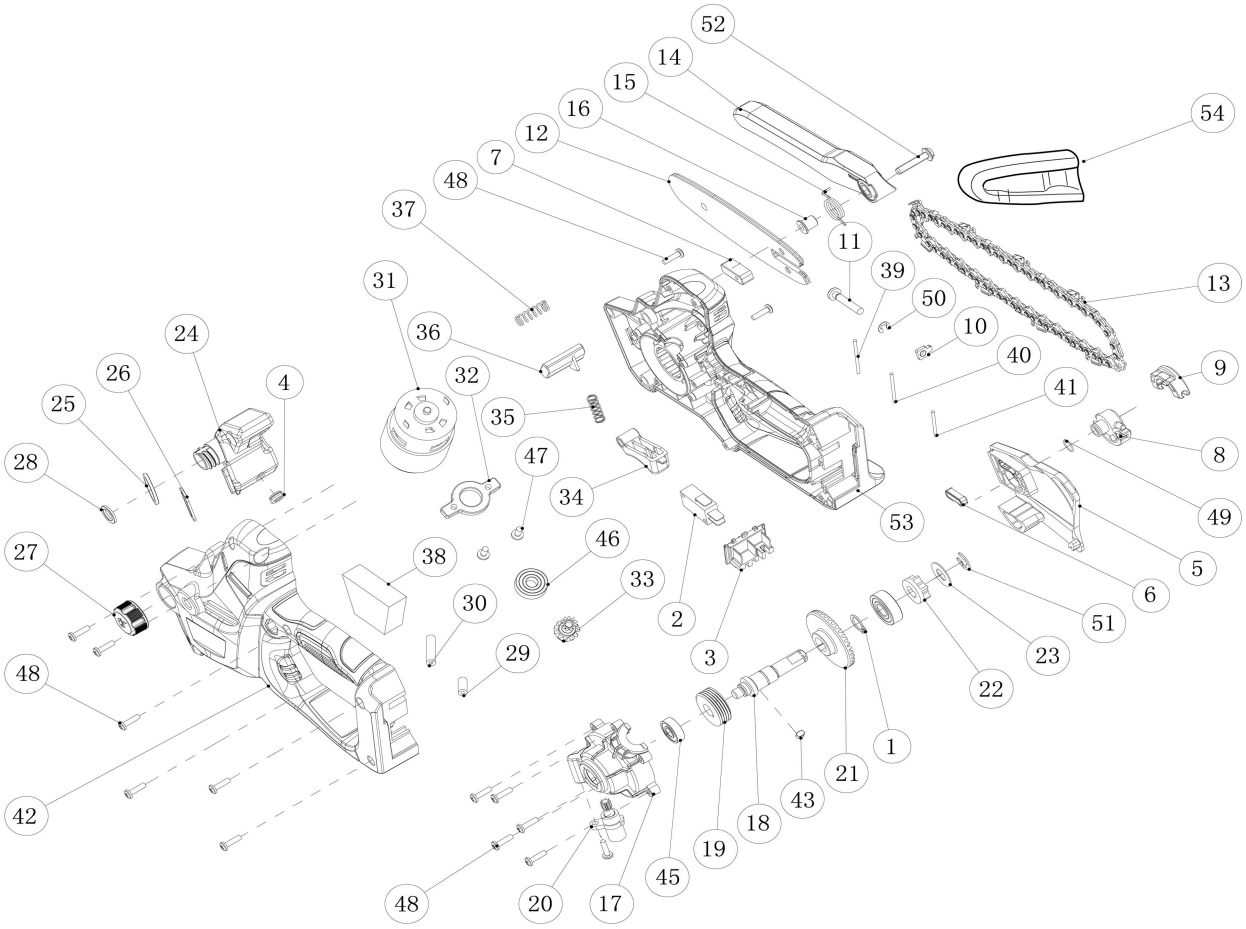
Problem	Possible cause	Solution
Motor fails to start when power switches are depressed.	Battery is not secure.	To secure the battery pack, make sure the latches on the top of the battery pack snap into place.
	Battery is not charged.	Charge the battery pack according to the instructions included with your model.

Problem	Possible cause	Solution
Motor runs but saw chain do not move.	Debris or other materials may be jamming the sprocket. Sprocket worn or damage.	Remove battery, clear debris blockage from sprocket. Contact PRORUN Customer Service.
Chainsaw shuts down during operation.	Battery pack too hot. Electrical malfunction.	Allow the battery to cool down gradually at ambient temperatures. Contact PRORUN Customer Service.
Machine runtime is too short.	Battery not fully charged. Useful life of battery has been reached or exceeded.	Fully charge the battery. Contact PRORUN Customer Service for replacement.

14. Disposal

All toxic materials must be disposed of in a specified manner to prevent contamination of the environment. Before disposing of damaged or worn out Lithium-Ion battery packs, contact your local waste disposal agency, or the local Environmental Protection Agency for information and specific instructions. Take the batteries to a local recycling and/or disposal center, certified for lithium-ion disposal.

15. Exploded view



15. Exploded view

NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
1	External circlips	1	28	Seal ring	1
2	Microswitch	1	29	Oil inlet pipe	1
3	Terminal block	1	30	Oil outlet pipe	1
4	Grease seal	1	31	Electric machinery	1
5	Side cover	1	32	Fixed plate	1
6	Gasket	1	33	Small cone tooth	1
7	Gasket	1	34	Power switch	1
8	Lock fastening button	1	35	Spring	1
9	Lock the movable button	1	36	Lock-off device	1
10	Tensioning block	1	37	Spring	1
11	Screw	1	38	Sponge	1
12	Guide bar	1	39	Wireway 320mm	1
13	Saw chain	1	40	Wireway 165mm	1
14	Protective cover	1	41	Wireway 80mm	1
15	Torsion spring	1	42	Left casing	1
16	Axle sleeve	1	43	Key	1
17	Gearbox cover	1	44	Bearing 6000-2Z	1
18	Output shaft	1	45	Bearing 607RS	1
19	Worm	1	46	Bearing 608-2RS	1
20	Oil pump	1	47	Screw	2
21	Large conical tooth	1	48	Screw	14
22	Chain wheel	1	49	Retaining ring	1
23	Pad	1	50	Snap ring	1
24	Oil tank	1	51	Snap ring	1
25	Washer	1	52	Screw	1
26	Gasket	1	53	Right casing	1
27	Oil tank cover	1	54	Chain scabbard	1

16. EC Declaration

1) Herewith we, Zhejiang Zhongjian Technology Co., Ltd.
No.155 Mingyuan North AVE, Economic Development Zone, Yongkang, Zhejiang, 321300, P.R. China
declare that the following appliance complies with the appropriate basic safety and health requirements of the EC Directives based on its design and type, as brought into circulation by us.

This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user.

2) Designation/ function: For tree service, e.g. pruning or dismantling.

3) Type: PMCS120

4) Serial number: MM/YY-XXXXX

5) Applicable EC Directives: Machinery Directive 2006/42/EC

6) Used harmonized Standards: EN 62841-1:2015, EN 62841-4-1:2020

7) Additional used EC Directives: EMC Directive 2014/30/EU on electromagnetic compatibility
Noise Directive 2000/14/EC as amended by Directive 2005/88/EC on the noise emission in the environment by equipment for use outdoors
2011/65/EU as amended Directive (EU) 2015/863 Restriction of the use of certain hazardous substances in electrical and electronic equipment

8) Used other technical standards/ specifications: EN 55014-1:2017+A11:2020, EN 55014-2:2015

9) Responsible for documentation:

10) EC type approval: XXXXXXXXX-01 Intertek Deutschland GmbH (NB 905) Stangenstraße 1, 70771 Leinfelded-Echterdingen

Measured sound power level	89.4 dB(A)
Guaranteed sound power level	92 dB(A)

Conformity assessment method to Annex V/ Directive 2000/14/EC and 2005/88/EC

11) Date /Place/Name/ Authorized Signature:
2022-02-12/ Yongkang/ Yang Haiyue

12) Title of Signatory:
Chief Engineer

PRORUN regularly improves our products, and you may find slight differences between your machine and descriptions contained within this operator's manual. Modifications can be made to the machine without notice and without the obligation to update the manual, providing that the essential safety and functional characteristics remain unaltered. Contact PRORUN Customer Service with any questions and for current specifications.

PRORUN / TOPSUN USA
200 Overhill Drive, Suite A
Mooresville, NC 28117
Proruntech.com
info@proruntech.com
Phone: 1-844-905-0882



Zhejiang Zhongjian Technology Co., Ltd
Web: www.topsunpower.cc
E-mail: sales@topsunpower.cc
ADD: No.155 Mingyuan North AVE, Economic Development Zone,
Yongkang, Zhejiang, 321300, P.R.China
Made In China