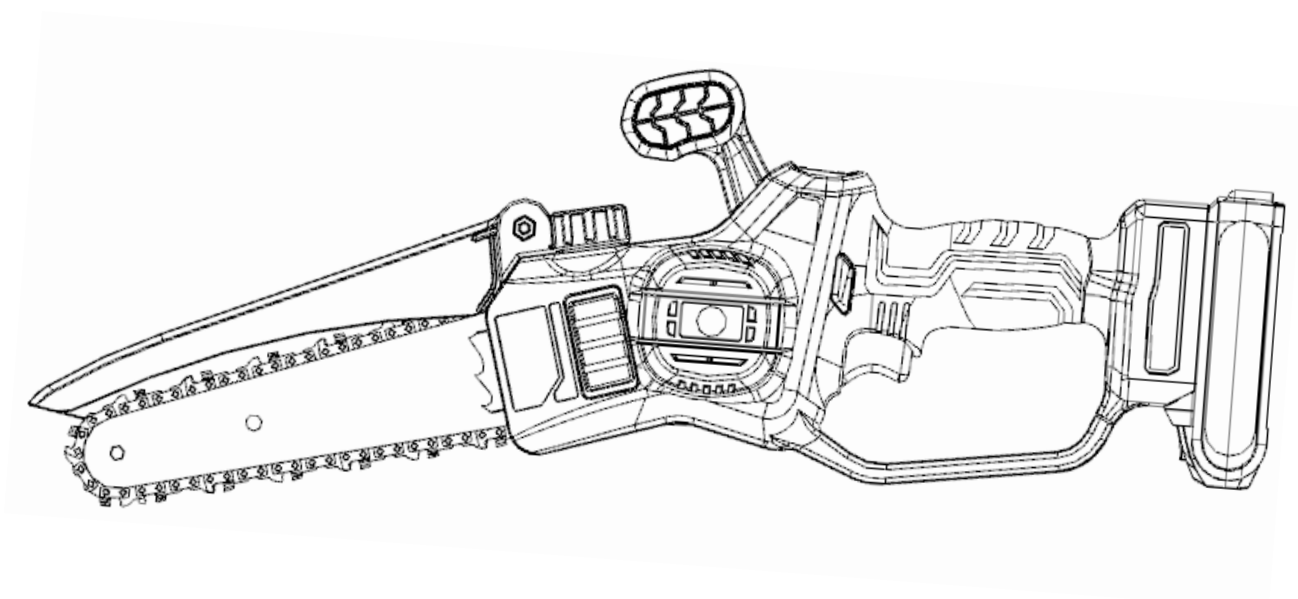


Instructions and user manual

MB600



ALNOVA[®]

Millasur, SL.

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15688 - Oroso - A Coruña 981 696465 www.millasur.com



ANOVA wishes to congratulate you for choosing one of our products and guarantees the assistance and cooperation that has always distinguished our brand over time.

This machine is designed to last for many years and to be of great use if used in accordance with the instructions contained in the user manual. We therefore recommend that you read this instruction manual carefully and follow all our recommendations.

For more information or doubts, you can contact us through our web supports such as www.anova.es.

INFORMATION ABOUT THIS MANUAL

Pay attention to the information provided in this manual and on the machine for your safety and that of others.

- This manual contains instructions for use and maintenance.
- Take this manual with you when you go to work with the machine.
- The contents are correct at the time of printing.
- The rights to make changes at any time are reserved without affecting our legal responsibilities.
- This manual is considered an integral part of the product and must remain with it in case of loan or resale.
- Ask your dealer for a new manual in case of loss or damage.

READ THIS MANUAL CAREFULLY BEFORE USING THE MACHINE

To ensure that your machine provides the best results, please read the usage and safety regulations carefully before using it.

OTHER WARNINGS:

Incorrect use could cause damage to the machine or other objects.

The adaptation of the machine to new technical requirements could cause differences between the content of this manual and the purchased product.

Read and follow all instructions in this manual. Failure to follow these instructions could result in serious personal injury.

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ALNOVA[®]

Symbols

Symbols for this product are shown below. Please understand its meaning before using the product.



Read the instruction manual



Keep it out of the rain



Please pull out the plug in time once the power cord is damaged or cut



Warning / Danger



Wear safety glasses



wear protective clothing



wear earmuffs



Wear non-slip boots



Chainsaw operating direction



oil can sign



No littering



Prevent the chainsaw from jumping



keep away from fire



Keep away from moisture.

General Safety Specification for Power Tools

Caveat

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

Note: Save all warnings and instructions for future reference.

Note 2: Power tools are understood as both tools that are connected directly to the current and those that work through battery.

1) Safety in the workplace

- a. Keep the site clean and organized as chaotic and dark conditions can cause accidents.
- b. Do not use any power tool in an explosive environment, such as an environment with flammable liquid, gas, or dust. Sparks generated by power tools can ignite dust or gas.
- c. Operate the power tool after excluding children and bystanders from the site. The operator may lose control of the tool.

2) electrical safety

- a. Avoid touching grounded surfaces such as pipes, heat sinks, and refrigerators, as grounding will increase the risk of electric shock.
- b. Do not expose any power tool to rain or moisture. Water ingress will increase the risk of electric shock.
- c. Don't abuse the cables. Never use cords to carry or pull power tools/battery chargers or unplug them.

Keep cables away from heat sources, sharp edges, or moving parts. Damaged or entangled cords increase the risk of electric shock.

- d. When using power tools or charging your batteries outdoors, use an external cord for outdoor use, which can reduce the risk of electric shock.
- e. If using power tools in a wet environment is unavoidable, Residual Current Devices (RCD) should be used, which can reduce the risk of electric shock.

3) Personal security

- a. Stay alert, pay attention to operation when operating power tools. Do not use power tools when you are tired or not in full power. Momentary negligence while operating a power tool can result in serious personal injury.
- b. Wear personal protective equipment and always wear safety goggles and devices. For example, wear a dust mask, non-slip safety boots, hard hats, hearing protection devices, etc., under appropriate conditions, to minimize personal injury.
- c. Avoid accidental starting and make sure the switch is in the OFF position when connecting the power supply/battery holder, or when lifting or moving the tool. Putting fingers into the switch that is on or inserting the plug while the switch is on can be dangerous.
- d. Remove all adjusting wrenches and wrenches before turning on power tool. Any wrench left in the rotating parts of the power tool can cause personal injury.
- e. Hold the tool firmly and always pay attention to your footing and body balance, so that the power tool can be well controlled in case of accidents.
- f. Dress appropriately. Do not wear loose clothing or accessories. Keep clothing, gloves, and hair away from moving parts. Loose clothing, accessories, or loose long hair can get into moving parts.
- g. If devices are provided to connect to chip removal and dust collection equipment, ensure that these devices are properly connected and used correctly. The use of such devices can reduce the risks caused by dust.

4) Use and precautions of power tools

- a. Do not abuse power tools. Select the appropriate ones according to the purpose. Properly designed power tools will make your work more effective and safer.
- b. If the switch cannot connect or disconnect the power supply to the tool, the power tool should not be used. Power tools that cannot be controlled with switches are dangerous and should be repaired.
- c. Before any adjustment, replacement of accessories, or storage of the power tool, the plug must be removed from the power source or the battery must be disconnected from the tool. This protective measure will reduce the risk of accidental starting of the tool.
- d. Store idle power tools out of the reach of children and do not allow anyone who is not familiar with power tools or who does not understand these instructions to use them. Power tools are dangerous when used by untrained people.

Safety warnings for rechargeable chainsaws

- 1) Keep all parts of the body away from the operating chainsaw. Before starting the chainsaw, make sure that the chain does not touch any object. Any minor distraction during an operation can result in clothing or body dragging on the chain.
- 2) Hold the chainsaw correctly for safety. Otherwise, the risk of personal injury could be greater.
- 3) Since the chain can come into contact with hidden wires, only the insulated handle can be grasped when operating the tool. If the chain touches any live/charged wires, the exposed metal part of the tool can also become charged and electrify the operator.
- 4) Wear safety glasses and hearing protection devices. It is also recommended to use protective devices to protect the head, hands, legs and feet. Full protective clothing will reduce personal injury from debris or accidental chain contact.
- 5) Do not operate the chainsaw in the tree. Personal injury can occur when operating the chainsaw in

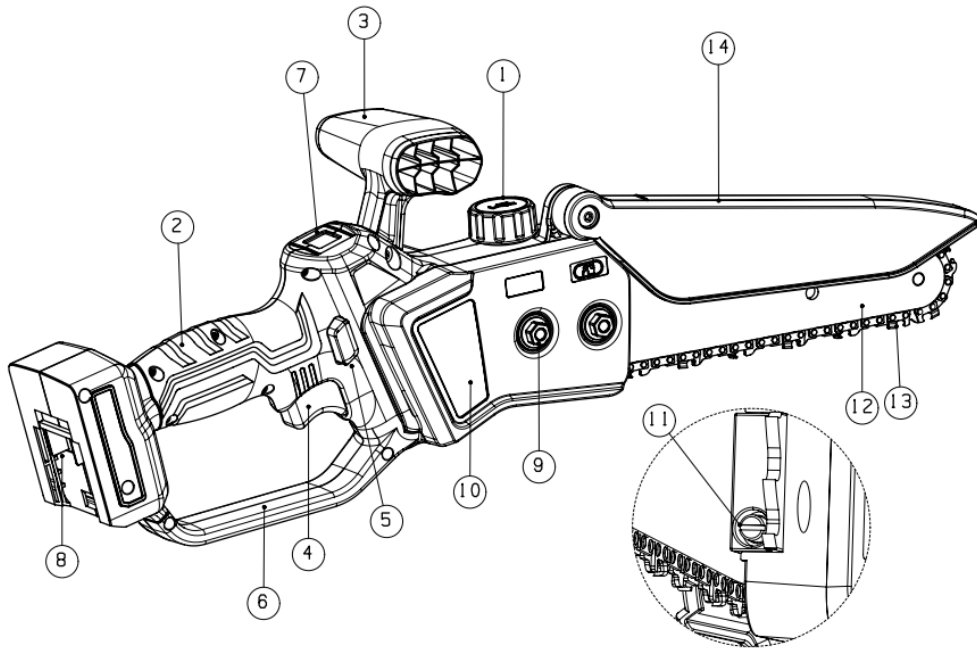
the tree.

- 6) Be sure to stand firmly on a firm, secure, level surface before using the chainsaw. Slippery or unstable surfaces, such as stairs, can cause loss of balance or loss of control of the chainsaw.
- 7) Stay alert when cutting a limb under tension to avoid any kickback. By releasing the tension in the wood grain, the spring force in the branch can impact the operator or cause the chainsaw to spin out of control.
- 8) Be careful as thin materials can bind the chain when cutting brush or saplings, and can strike the operator or throw the operator off balance.
- 9) Turn off the chainsaw before transporting it, hold the front handle firmly and keep it at a certain distance from your body. Be sure to attach the bar cover when transporting or storing the chainsaw. Proper chain saw operation reduces the possibility of accidental contact with the running chain.
- 10) Lubricate and tension chain or replace accessories according to instructions. Improper chain tension or lubrication can cause breakage or increase the chance of kickback.
- 11) Keep the handle dry, clean, free from oil and grease stains. The greasy handle is easy to slip, causing the tool to spin out of control.
- 12) For wood cutting only. Do not use the chainsaw for any purpose other than its intended purpose. For example, do not use the chainsaw to cut plastic, stone, or non-wood building materials. Using the chainsaw for operations other than its intended purpose causes serious hazards and injuries.

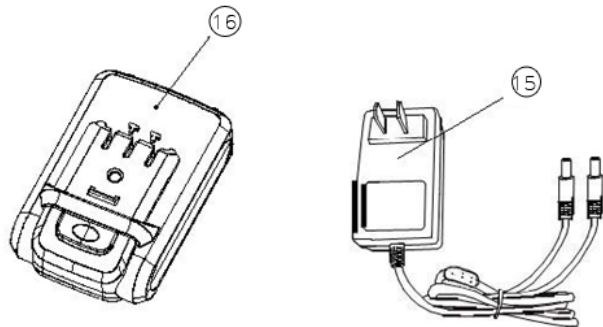
Causes of Tool Kickback and Preventive Measures

- 1) During a cut, if the guide bar touches an object or a wooden brace and pinches the chain, kickback or kickback may occur.
- 2) In some cases, when the sword head touches an object, it will generate a sudden reaction force and the sword may ricochet and hurtle towards the user.
- 3) Tightening the chain across the top of the bar can quickly pull the bar toward the operator. Either of these reactions can cause the chain saw to spin out of control and result in serious personal injury.
- 4) Do not rely solely on the safety equipment installed on the chainsaw.
- 5) As a chain saw user, you must take a variety of measures to prevent accidents or personal injury during operations.
- 6) Malfunction, incorrect operating steps, or improper operating conditions will cause kickback. Kickback can be avoided by taking the following precautions:
 - a. Hold the handle firmly with both thumbs and fingers. Adjust body and arm positions to avoid kickback. The operator can control the kickback force if precautions are followed. However, be careful at all times.
 - b. Do not overextend the tool or hold it above shoulder level. This will prevent the bar head from touching anything and will help the operator effectively control the tool in the event of an accident.
 - c. Use only replacement bars and chains specified by the manufacturer. Incorrect bars or chains can cause breakage and/or kickback.
 - d. Follow the manufacturer's grinding and maintenance instructions for the chain. Otherwise, it may cause frequent kickback.

Machine parts



1. Oil cap
2. Main/rear handle
3. Front handle
4. Trigger
5. Self-locking switch
6. Protective cover
7. Screen
8. Battery input interface
9. Lock nut
10. Sprocket cover plate
11. Tighten the knobs
12. Sword
13. String
14. Chain guard
15. Charger
16. Drums




Other security specifications

Scope of application: cutting or pruning branches and cutting small diameter trees, suitable for gardens and orchards.

► Precautions before operation

- 1) The use of battery packs and chargers that are not approved by the manufacturer may cause a fire or explosion, which can cause serious injury.
- 2) Using the chainsaw, battery pack, or charger beyond its design specifications can cause serious injury.

➤ Operator Requirements

Caveat  The user must not use or access the chainsaw, battery pack or charger before reading and understanding the manual. Otherwise, it may cause serious injury to the user or other people. Read and understand the instruction manual and keep it for future reference.

Make sure the user fully meets the following requirements:

- 1) When using the chainsaw or using the battery and charger, the user must be in good physical condition to be fit for such operations. Otherwise, the user must not use the tool without the supervision of guardians or managers.
- 2) The user must be an adult.
- 3) Before initial use, the user should have read the dealer's manual or professional operating instructions.
- 4) The user must use the product if he is in full power.

Note: Users using a chainsaw for the first time should first perform pre-cutting exercises on the sawhorse or stand.

➤ Clothing and protection requirements

Caveat

- 1) Dress appropriately. Do not wear loose clothing or accessories. Keep clothing, gloves, and hair away from all moving parts. Loose clothing, accessories, or long hair can get into moving parts.
- 2) When the chainsaw is running, debris or other sawdust may fly out, which can cause bodily injury.
 - a. Wear protective glasses.
 - b. Wear a face shield.
 - c. Wear long, not baggy clothing.
- 3) Falling objects from a great height can cause head injuries. Use appropriate PPE such as helmets.
- 4) Dust and sawdust will be generated during operation, causing poor air circulation or allergic reaction. Use PPE such as masks or glasses, among others.
- 5) Inappropriate clothing can be caught by branches or crotch, which influences the work of the chainsaw. Improper clothing of the user can cause serious injury.
 - a. Wear tight, cut-resistant clothing.
 - b. Take off accessories that can cause injury such as the wedge and jewelry.
- 6) The user, if he approaches the running chain when using the saw, can be seriously injured.
 - a. Wear pants with the appropriate degree of cut protection for this type of work, defined by the speed of the chainsaw.
- 7) The user may be injured while cutting wood. In particular, the user can touch the sharp edges of the chain with his hand when cleaning the machine or the chain.
 - a. Wear protective anti-cut gloves when working.
- 8) Improper shoes can cause slips or falls. The user may be injured if he touches the chain after falling.
 - a. Use protective boots for chainsaws, with a degree of protection defined according to the speed of the chainsaw.

Environment requirements

➤ Surrounding security requirements

- 1) Bystanders, children, and animals unaware of sawdust or other debris flying from the chainsaw may be at risk. And they can be seriously injured.
 - a. Keep bystanders, children, and animals away from the work area.
- 2) The chainsaw is not waterproof and may cause electric shock if used in the rain or in a wet environment, injuring the user and damaging the chainsaw.

- a. Do not use the chainsaw in the rain or in a wet environment.
- 3) The chainsaw motor can produce sparks that can cause a fire or explosion in the environment with combustible or explosive materials. This can cause very serious injury to the user and property damage.
 - a. Do not use it in an environment with combustible or explosive materials.

➤ **Machine safety requirements**

The chainsaw is safe if it meets the following conditions:

- 1) The chain is not damaged.
- 2) The chainsaw is clean and dry.
- 3) The handle is in good condition.
- 4) Trigger switch works properly.
- 5) The control program works normally and has not been modified.
- 6) The lubricating oil supply system is normal.
- 7) The depth of the tooth groove between the chain wheel and the chain should not exceed 0.5mm.
- 8) The assembly of the bar and the chain is carried out according to the instructions.
- 9) The bar and chain are well assembled.
- 10) The chain is properly tensioned.
- 11) The original accessories are used to match the chainsaw.
- 12) Accessories are properly mounted.

 **Caveat**

If the product does not meet safety requirements, parts cannot perform their function properly, or the safety mechanism does not work properly, very serious injuries may occur.

- 1) Use only a chainsaw in good condition. Clean and dry a dirty or wet chainsaw before using it.
- 2) Do not modify your chainsaw in any way or under any manufacturer's instructions.
- 3) If the control system does not work properly, stop using the chainsaw.
- 4) Only use original accessories.
- 5) Install the bar and chain according to the manual.
- 6) See manual for accessory installation.
- 7) Do not insert anything into the chainsaw.

➤ **Sword safety instructions:**

If the sword meets the following conditions, the sword is safe:

- 1) The functions of the sword are intact.
- 2) The sword is not deformed and not incomplete either.
- 3) The depth of the sword groove has no obvious change.
- 4) The bar guide is smooth without burrs.
- 5) There are no cracks in the groove of the sword.

 **Caveat**

If the bar is not in good condition, it will not fit the chain properly. The chain can jump off the bar, which can cause very serious injuries.

- 1) Use only a sword that is not damaged.
- 2) If the bar groove is less than the minimum depth, replace it.
- 3) Clean the bar after using the chainsaw.

➤ **Chain Safety Instructions:**

Use the chain only if it is safe, since it fulfills that:

- 1) The chain is not damaged.
- 2) The cutting edges of the chain teeth are sharp.
- 3) The depth of the notch of the teeth of the chain cutter heads complies with the description of the service mark.
- 4) The length of the cutting edges of the cutter heads meets the requirements of grinding.

Caveat

If parts and accessories do not meet safety standards, they cannot perform their functions properly, and the safety device will become invalid, resulting in very serious personal injury or death.

- 1) Do not use any damaged chain.
- 2) Teeth grinding of chain will be subject to the criteria of the manual.
- 3) Please contact the official dealer in time if you have any questions.

Precautions during operation

► Precautions for cutting

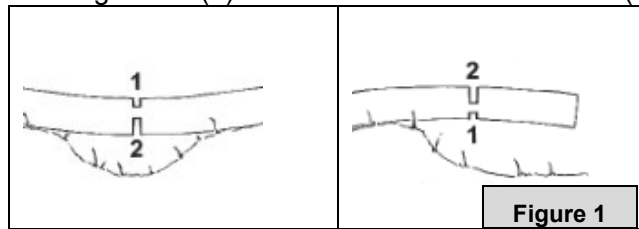
Caveat

- 1) In some specific cases, the operator may not concentrate on the job and may be seriously injured by tripping or falling.
 - a. Always work calmly and in a planned way.
 - b. Do not use the chainsaw in dark environments and with poor visibility.
 - c. Use your own chainsaw.
 - d. Do not use the chainsaw above shoulder height.
 - e. Watch out for obstacles.
 - f. When using the chainsaw, stand in a safe position and keep your balance. For operations at height, use a safe hoist or scaffold.
- 2) The user may be injured or seriously injured by the running chain.
 - a. Do not touch the moving chain.
- 3) Running chain will get hotter and elongate and may jump off the bar or break if not cooled down and re-tensioned effectively. This can cause serious injury and property damage.
 - a. Make sure the chain lubricating oil is working properly.
 - b. Check whether the chainsaw chain is properly tensioned during operation. If the chain is loose, please adjust it in time.
- 4) If the chainsaw shows any abnormality when starting to work, it may be in an unsafe state, which may cause serious personal injury or damage.
 - a. Stop working and contact the official distributor.
- 5) The chainsaw vibrates when it is running.
 - a. Use gloves.
 - b. Check that the chainsaw is in good condition and all its components are tight.
 - c. If it continues to vibrate, contact your nearest official dealer.
- 6) If the running chain touches any hard object, sparks will be generated which may cause a fire in a combustible environment. This will cause serious injury and material damage.
 - a. Do not use the chainsaw in any flammable, fuel or explosive environment.
- 7) The chainsaw will continue to run for a period of time after the trigger is released, which can cause serious injury.
 - a. Wait for the chainsaw chain to come to a complete stop.

Caveat

When the tree is under tension, the bar can be seized and the user will lose control of the chainsaw, causing serious injury. (Figure 1)

- 1) Cut a relief slot on the tight side (1) and then cut on the loose side (2).



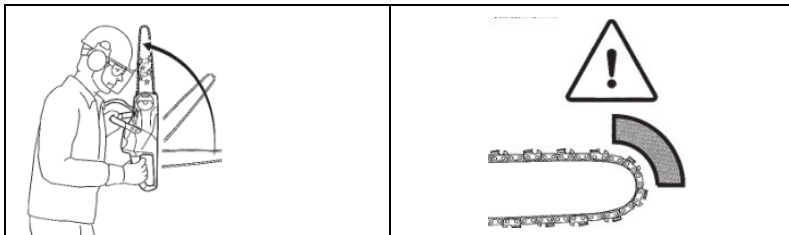
➤ **Precautions for trimming**

- 1) If branches are first trimmed from under a fallen tree, the trunk will lose support and may roll, causing serious injury or death.
 - a. Flip the trunk over and cut off the branches.
 - b. Don't stand on the round log to trim.

➤ **Cutting precautions**

- 1) Inexperienced people are prohibited from approaching the workplace as it is dangerous, otherwise serious or fatal personal injury and property damage may occur. For added safety, avoid cutting trees alone.
- 2) Branches or other objects from the fallen tree can fall on people and objects, causing serious personal injury or property damage.
 - a. Judge the falling direction of the tree so that it can fall smoothly.
 - b. Spectators, children and animals are not allowed to stay within the 2.5 long trees.
 - c. Observe the target tree canopy and adjacent trees to ensure there is no interference from any branches when the canopy falls.
- 3) When the tree falls, the trunk can break or ricochet back toward the operator, causing serious injury or death.
 - a. Plan the escape route.
 - b. Observe the direction of the tree's fall and choose an escape route along a planned route.
 - c. Avoid working on uneven or unstable areas.
- 4) Obstacles in the workplace or in the escape route can make it difficult to evacuate. The evacuee may be seriously or fatally injured once they fall during the evacuation.
 - a. Eliminate obstacles in the workplace and escape route.
- 5) If there are wedges or guy ropes in the trunk, the tree can spin out of control and fall rapidly, causing serious or fatal injury and property damage.
 - a. Do not use wedges.
 - b. Use the fixing rope in the latter case.
 - c. If the tree falls too quickly, stop felling and go through the escape route.
- 6) During cutting, if the tip of the bar touches an object or the wood grips and pinches the chain, kickback may occur. In some cases, when the bar touches an object, it will generate a sudden reaction force and the bar may ricochet and hurtle towards the operator, causing serious injury.
- 7) If the tree is uncontrollable in terms of its direction of fall or falls onto another tree, the operator cannot complete felling operations in a controlled manner.
 - a. Stop felling operations and fell the tree with a suitable vehicle and ropes.

➤ **Kickback warnings**

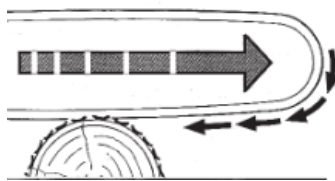


The chainsaw may kick back in the following cases:

- 1) The running chainsaw touches any hard object on the bar or brakes suddenly.
- 2) If the tip of the bar with the chainsaw running.

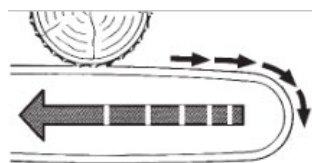
➤ **Voltage Warning Messages**

When the bar is used for a top-down cut, the direction of tension on the chainsaw is opposite that of the operator.



➤ **Thrust Warning Messages**

When the bar is used for a bottom-up cut, the thrust direction of the chainsaw is toward the operator.



If the operating chain saw touches any hard object and becomes attached, the electric chain saw will suddenly separate from the operator and control of the chain saw will be lost, causing serious injury or death.

- a. Hold the chainsaw handle firmly with both hands.
- b. Use the chainsaw as described in the manual.
- c. Cut when the bar is stable.
- d. Cut at maximum working speed.

Cleaning, maintenance and repair

- 1) During cleaning, maintenance and repair, the chainsaw may start suddenly if the battery pack is not disconnected from the tool. This can cause serious injury and property damage.
 - a. Cut off the power supply.
 - b. Remove the battery from the chainsaw.
 - c. Remove the bar and chain.
- 2) Corrosive cleaning agents, high-pressure cleaning equipment, or sharp cleaning tools can damage the chainsaw, guide bar, chain, battery, or charger. If the chainsaw, bar, chain, battery pack and charger are not cleaned properly, the parts involved do not work as they should, or the safety device does not work, serious injury can occur.
 - a. Clean the chainsaw, guide bar, chain, battery pack and charger according to the manual.
- 3) If the chainsaw, bar, chain, battery pack, and charger are not cleaned properly, the parts involved do not work as they should, or the safety device does not work, serious injury can occur.
 - a. Do not attempt to service the chainsaw, battery, or charger.
 - b. If the chainsaw, battery pack or charger needs maintenance, please contact the dealer in

- time.
- c. For the maintenance of the bar and the chain, follow the descriptions in the manual.
- 4) The user can be injured by sharp teeth when cleaning or maintaining the chainsaw:
 - a. Wear protective gloves.

Items to be inspected before operation

Check whether the following items are in a safe state and perform any necessary pre-operation tasks.

- 1) The pieces:
 - a. chainsaw main unit
 - b. Sword
 - c. String
 - d. Drums
 - e. Charger
- 2) check the battery
- 3) The battery must be fully charged.
- 4) clean the chainsaw
- 5) Install the bar and chain
- 6) tighten the chain
- 7) Top up chain oil
- 8) Check control system
- 9) Check the lubricating oil pumping system.
- 10) If you do not understand any of the above operations, do not use the chainsaw and contact your nearest official dealer before using the tool.

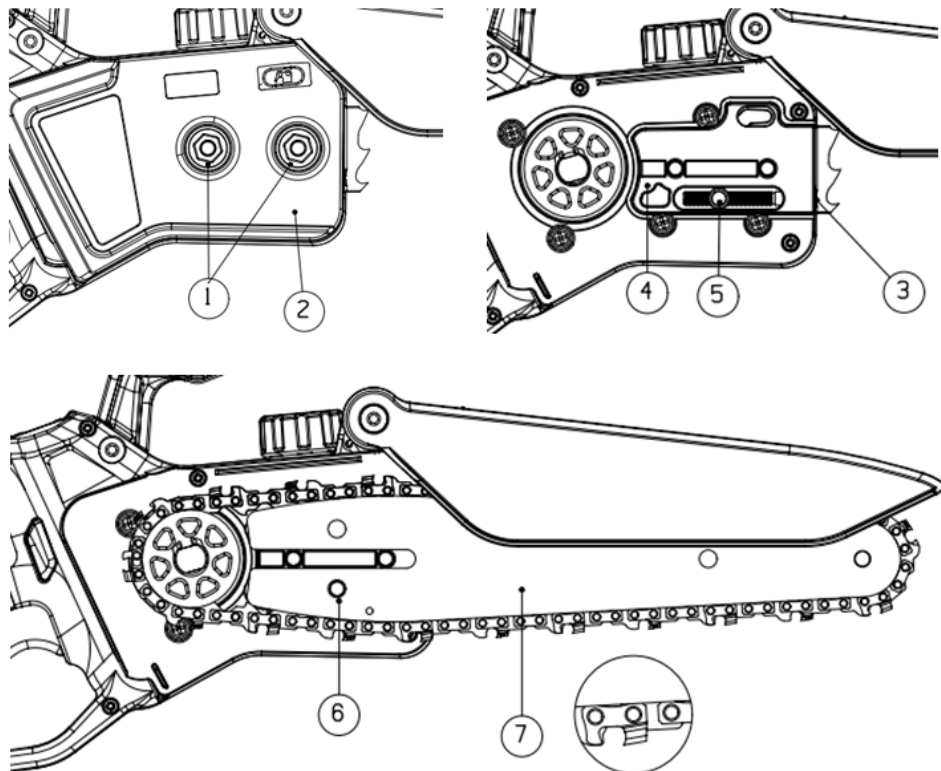
Chainsaw assembly

Cut off the power supply before the following operations

► Chain and bar installation

The parameters and specifications of the bar chain and sprocket are listed in the technical data table

- 1) Turn off the chainsaw and unplug the battery.
- 2) Use an Allen wrench to turn the nut "①" counterclockwise until the chain cover can be removed"②".
- 3) Remove the pinion cover"②"
- 4) Adjust the tension adjustment bolt "③", place the bar in the chainsaw body"④" and insert the fixing column of the sword "⑤" in the fixing hole "⑥" of the sword.
Note: The front and back of the sword can be used "⑦", and the marking can be on the front or back.
- 5) Place the chain in the bar groove and refer to the arrow mark on the cap for the direction of the chain cut.
- 6) Cover the pinion cover and tighten the nut.



► **Chain and bar removal**

- 1) Turn the nut "①" counterclockwise until the sprocket cover can be removed ②.
- 2) Remove the sprocket cover.
- 3) Adjust the tension adjustment bolt "③" to loosen the chain.
- 4) Remove chain and bar.

► **Chain tension**

When the chainsaw works, the chain can loosen on its own. If necessary, adjust chain tension according to operating specifications.

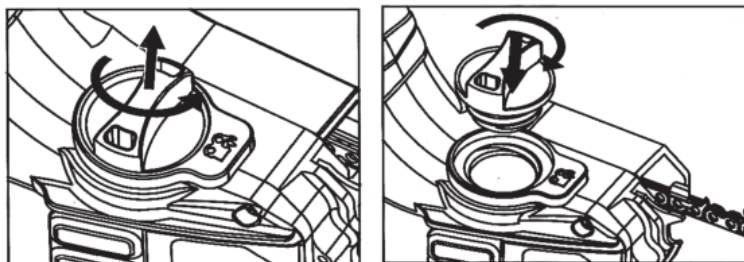
- 1) Turn off the chainsaw and cut off the power supply.
- 2) Turn the nut "①" counterclockwise to loosen it.
- 3) Adjust the tension adjustment bolt "③"
 - a. The chain drive teeth are near the bottom of the bar groove.
The chain can be easily pulled along the bar slot.
- 4) If you use a carving bar: adjust the chain tension and pull the chain by hand, you can see that half of the drive teeth are out of the bar groove.
- 5) If the chain cannot be moved by hand: Loosen the sprocket cover nut and knob and adjust the tension bolt until the chain can be easily pulled along the bar groove.
- 6) Tighten the pinion cover.

► **Chain oil feed**

Chain oil can lubricate and cool the chain:

- 1) Turn off the chainsaw and remove the battery.
- 2) Place the chainsaw on a horizontal place with the fuel cap facing up.
- 3) Clean the oil tank and its surroundings with a damp cloth.
- 4) Twist the oil can cap counterclockwise until you can remove it.
- 5) Remove the lid from the oil can.
- 6) Feed chain oil to proper level to prevent overflow.

- 7) Cover the lid of the oil can and tighten it.

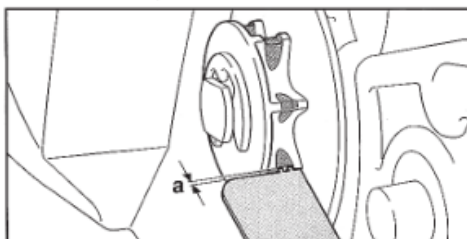


Check the chainsaw

 Turn off the chainsaw when you do the following.

► Chain Wheel Inspection

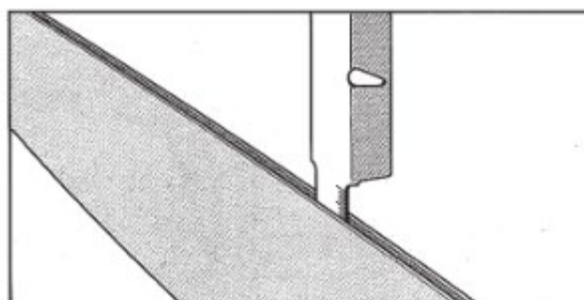
- 1) Turn off the chainsaw and cut off the power.
- 2) Remove the chain wheel protection cover.
- 3) Remove the bar and chain.
- 4) Measure the depth of the chainwheel groove with a depth gauge.



- 5) If the groove depth exceeds 0.5mm, do not use the chainsaw and contact the dealer to replace the chain wheel as soon as possible.

► Sword Inspection

- 1) Turn off the chainsaw and cut off the power supply.
- 2) Remove chain and bar.
- 3) Measure the depth of the guide bar groove and refer to our standard for depth.
- 4) Replace the new bar in time if the following conditions are met:
 - a. The sword is damaged.
 - b. The measured depth is less than the minimum depth allowed.
 - c. The chainsaw groove is deformed and damaged.
- 5) Please contact the dealer in time if you have any questions.



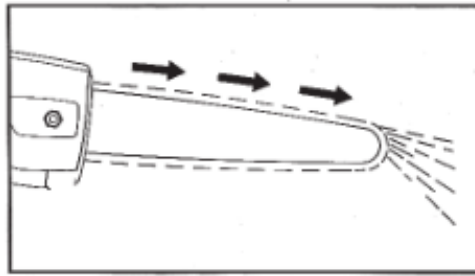
► Chain Oil Discharge Inspection

- 1) Place the chainsaw bar directly on the clean ground.

- 2) Turn on the chainsaw.
 - a. The chain oil is expelled and the oil can be clearly seen on the ground directly below the bar.
 - b. Which indicates a normal discharge of oil from the chainsaw.

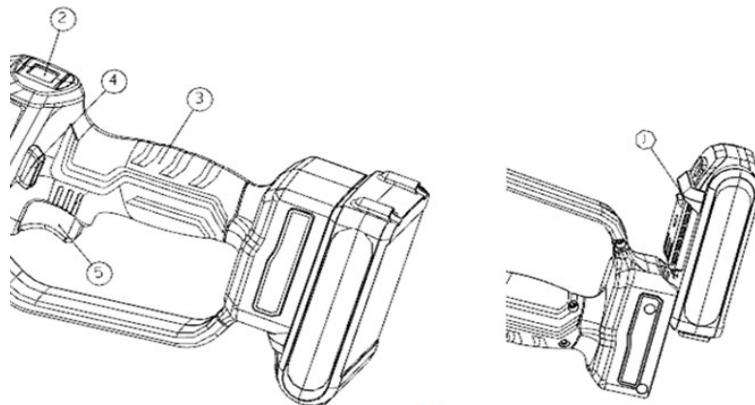
If no oil is visible:

- 3) Supply chain oil.
- 4) Recheck the chain oil.
- 5) Chainsaw without oil: Please do not use chainsaws without oil, and contact the dealer in time. Chain oil is essential.

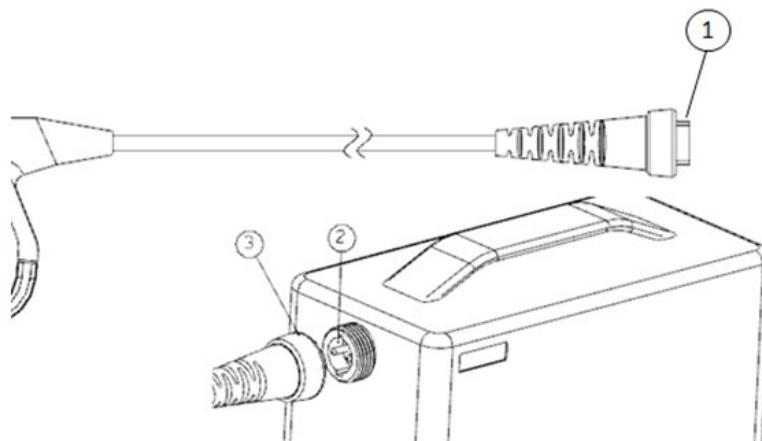


► Commissioning Inspection

- a. Make sure no children or other people are seen within 50 feet (15 meters) of the work site, and watch for animals around.
- b. Power on reference for the model with battery inserted: Align the battery pack "①" with the card slot of the machine and push it until the battery pack is locked and click.

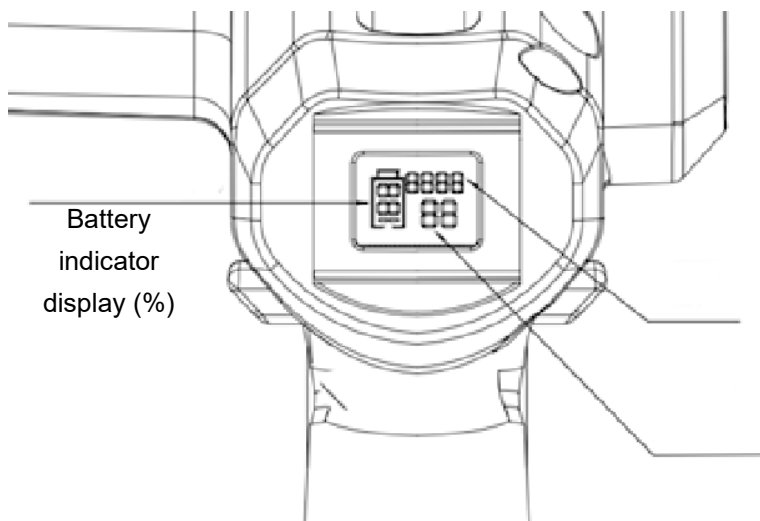


- c. Reference for powering on the backpack battery model: Align the power cord "①" with the slot and insert it into the battery pack "②", and tighten the knob "③".



- d. Start the machine, hold the handle (3), press the self-locking switch "④" with your thumb and pull the trigger "⑤". At this time, the screen "②" lights up and the screen content is displayed on the (Note: there is no step ② for non-display models) and the machine starts up normally. (Note: the

chain and bar must not be in contact with any object when starting the machine).



Display: hours / minutes
Pull the trigger and count the time

1. Normal presentation box for seconds
2. Show fault code after problem occurs

	Condition	Observation
battery indicator	Low battery	2HZ battery frame logo flashes (displays 0%)
	The discharge capacity is less than 25%.	Battery frame logo flashes at 1HZ (shows current power %)
	The discharge capacity is greater than 25%.	Steady bright (displays the current % of battery)
Fault code display		
E2	Over/Under voltage fault	Slow flashing 1HZ
E3	boot failure	Flash 2HZ
E3	overcurrent fault	Slow flashing 1HZ
E5	NTC open/short circuit fault	Slow flashing 1HZ
E6	MOS tube over temperature failure	Observation

Note: If the above fault is not clear, please contact your nearest official dealer for help.

➤ **Chainsaw operation with one hand**

⚠ **Caveat**

If the chainsaw bounces, it will bounce back towards the user. resulting in serious or fatal injury

- a. Be sure to cut at full speed when cutting.
- b. Do not cut with the tip of the blade.
- c. When starting to cut, keep the chainsaw at full speed and the bar vertical.
- d. Depending on the width of the sword, its tip will expose the cut trees.
- e. Add the weight of the chainsaw to the bar.

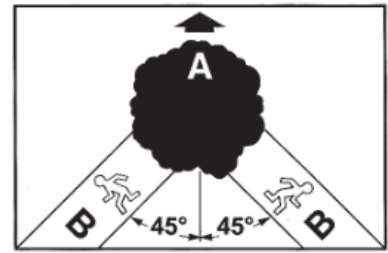
➤ **Prune tree branches**

- a. Place the chainsaw bar on the branches to be trimmed
- b. The chain runs at full speed.
- c. Cut the branches with the top of the spade.
- d. Cut guy limbs: First, cut a small opening on the loose side and cut continuously under the tight side.

➤ **felling**

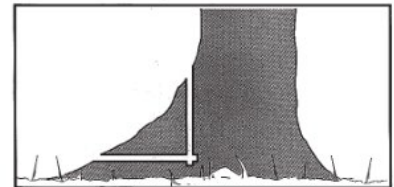
1. confirm the escape route

- The escape path (B) has an included angle of 45° in the reverse direction (A) of the direction of tree fall.
- Make sure path (B) is clear of obstacles.
- You can see the top of the tree.



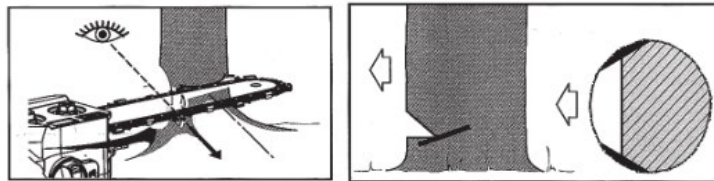
two. Treatment of roots of cut trees.

- Clear obstacles under trees and in work areas.
- Clean the superfluous parts of the roots.
- For large trees with thick stumps at the root: First cut vertically and then horizontally to clear superfluous root parts.



3. Cut the wedge in shape C

The wedge determines the direction of fall. Cut the wedge on the falling side of the tree and cut the wedge as close to the ground as possible. First, make a horizontal cut 1/5 to 1/3 deep of the diameter of the trunk. Do not cut the wedge too deep and then cut diagonally.



- Cut the full width of the involved part of the wedge.
- The dorsal cut is made absolutely horizontally at a height slightly above the base line of the handkerchief, leaving a width of approximately 1/10 of the diameter of the trunk between the dorsal cut and the planting line.
- The tree fibers of the uncut part of the trunk act as a hinge. Under no circumstances is it allowed to cut the entire trunk directly, otherwise the falling direction of the tree cannot be confirmed, and insert a wedge into the dorsal cut in time.
- Only plastic or aluminum wedges may be used to maintain the dorsal cut, and iron wedges are not permitted in the disconnected state.

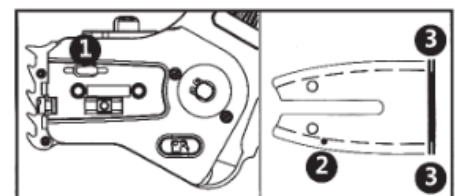
chainsaw cleaning

1) chainsaw cleaning

- Turn off the chainsaw and cut off the power.
- Clean the body of the chainsaw with a damp cloth.
- Remove the chain wheel protection cover.
- Clean the area around the periphery of the chain wheel and body with a damp cloth.
- Use a softer brush to clean the battery pack charger.
- Install the sprocket cover plate.

2) Clean the sword and chainsaw

- Turn off the chainsaw and cut off the power.
- Remove the bar and chain.
- Clean the oil outlet (1), oil inlet (2) and bar rear groove (3) with a soft brush.
- Clean the chain with a soft brush.



Maintenance

1) Chain Sprocket Maintenance

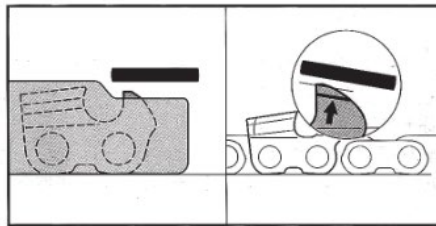
- a. Users cannot disassemble the chain wheel independently.
- b. If the chain wheel is damaged or defective; Do not use this equipment and contact the dealer to replace it in time.

2) Sword maintenance: If there are burrs on the edge of the sword groove, please polish it in time.

- a. If you have any questions, please contact your nearest official dealer.

3) chain grinding

- a. Use a special round file to sharpen the chain.
- 1) Make sure the file is only applied in the forward direction and does not touch the cutting tooth when pulled back. First, sharpen the shortest tooth, the length of which will be used as a reference dimension for other teeth in the chain:
 - a. The round file must be adjusted to the pitch of the chain.
 - b. The round file works on the teeth from the inside out.
 - c. File in one direction according to the angle of the cutting head.
 - d. Maintain the angle of the tooth.
 - e. Grind the small teeth of the cutter heads according to the depth of the bar groove.



- f. Please contact the dealer in time if you have any questions.

Technical data

	Model	MB600
1	cutting diameter	0~200mm
two	rated voltage	DC21V
3	rated power	600W
4	chain speed	0~18m/s
5	Chain specification	1/4'
6	Chain plate specification	4/6/8 Inch
7	Weight	≤2kg
Battery (lithium)		
1	Ability	4.0Ah
two	Voltage	21V
3	Working time	3-5h
4	battery weight	0.5kg
Charger		
1	rated voltage	100-240V AC,50-60Hz
two	Loading time	2-2.5h

Note: The right is reserved to change specifications without prior notice.

Specifications and battery packs may vary.

Warranty

For this tool the company provides the end user - regardless of the obligations of the retailer resulting from the purchase contract - with the following guarantees:

The warranty period is 24 months from the delivery of the device which must be approved by the original purchase document. For commercial use and rental use, the warranty period is reduced to 12 months. Excluded from this warranty are wear parts and defects caused by the use of inappropriate accessories, repair with parts that are not original manufacturer parts, use of force, shock and breakage, as well as mischievous overloading of the motor. Warranty replacement only includes defective parts, not complete devices. Warranty repair will be carried out exclusively by authorized dealers or company customer service. In the event of any intervention by unauthorized personnel, the guarantee will be void.

All postage or shipping costs, as well as any other subsequent costs, will be borne by the customer.

Environment



Never pour waste chain lube or 2-stroke fuel mixture into the drain or sewage system or the ground, but dispose of it in an appropriate, environmentally friendly manner, for example to a special collection point or landfill.

If your machine no longer works at some point in the future or you no longer need it, do not dispose of the device with your household waste, but dispose of it in an environmentally friendly manner. Completely empty the oil/lubricant and fuel tanks and dispose of the residues at a special collection point or landfill. Also dispose of the device at a corresponding collection / recycling point. In this way, the plastic and metal parts can be separated and recycled. Information on disposal of materials and devices is available from your local administration.

EC Declaration of Conformity

ALNOVA

DISTRIBUTION COMPANY

MILLASUR, SL
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15688 OROSO - A CORUÑA
SPAIN

EC DECLARATION OF CONFORMITY

In compliance with the different CE directives, it is hereby confirmed that, due to its design and construction, and according to the CE mark printed by the manufacturer on it, the machine identified in this document complies with the relevant and fundamental health and safety requirements. of the aforementioned EC directives. This declaration validates the product to display the CE symbol.

In the event that the machine is modified and this modification is not approved by the manufacturer and communicated to the distributor, this declaration will lose its value and validity.

Machine name: BATTERY CHAINSAW

Model: **MB600**

Recognized and approved standard to which it conforms:

Directive 2006/42/EC
directive2014/35/EU

According to standard:

EN 62841-1:2015/AC:2015
ISO 12100:2010,
EN 55014-1:2017/A11:2020
EN 55014-2:2015
EN 60335-1:2012+A14:2019
EN 62233:2008

Company seal

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