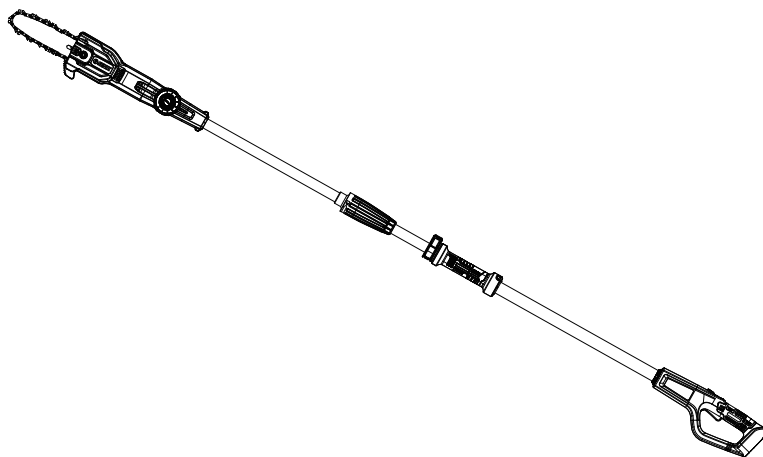




CORDLESS POLE SAW



CAUTION: Before using this tool, please read this manual completely, and follow all operating safety measures.

- SAFETY
- ASSEMBLY
- OPERATION
- MAINTENANCE

TABLE OF CONTENTS

SAFETY & INTERNATIONAL SYMBOLS.....	2
SAFETY INSTRUCTIONS.....	3
KNOW YOUR UNIT	7
SPECIFICATIONS.....	8
ASSEMBLY.....	8
OPERATION.....	10
MAINTENANCE.....	14
TROUBLESHOOTING.....	17

SAFETY & INTERNATIONAL SYMBOLS

The following table 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.



Caution / Warning.



WARNING - To reduce the risk of injury, user must read instruction manual.



Wear tight-fitting protective clothes.



Always wear eye protection, ear protection and head protection.



Wear respiratory protection.



Do not expose the product to rain or wet conditions.



Wear protective, slip-resistant footwear.



Wear protective gloves.



Keep bystanders a safe distance away from the work area.



Keep sufficient distance from electrical power lines.



DANGER - Keep hands away from blade.



DANGER! Risk of electrocution!



Tip contact can cause the guide bar to move suddenly upward and backward, which can cause serious injury.



Indoor use only. Only use battery charger indoors.



The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.

SAFETY INSTRUCTIONS



WARNING!

When using electric gardening appliances, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.

READ ALL INSTRUCTIONS

GENERAL POWER TOOL SAFETY WARNINGS



WARNING!

When using cordless yard tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following:

1. Keep guards in place – Protective guards should be checked periodically to ensure they are properly fitted and in correct working order.
2. Keep work area clean and well-lit – Clear work area of branches and limbs after each cutting session. Cluttered areas invite accidents.
3. Do not use in dangerous environments – Do not use power tools in damp or wet locations.
4. Do not use the pole chain saw in the rain.
5. Keep bystanders and children away – All bystanders, including children and pets, should be kept a safe distance away from the work area.
6. Do not force the tool – It will do the job effectively and safely if it is used at the rate for which it was designed.
7. Use the right tool – Do not force the tool or any attachment on the tool to do a job for which they were not designed.
8. Wear proper apparel – Do not wear loose articles of clothing or jewelry since such items may get caught in moving parts. Use of heavy-duty rubber gloves, substantial non-skid footwear and close-fitting clothing is recommended when working outdoors with power tools.
9. Wear protective hair coverings to contain long hair.
10. Always wear safety glasses and ear defenders to provide eye and ear protection – Everyday eyeglasses only have

impact resistant lenses and do not provide the same protection as safety glasses.

11. Wear face or dust masks – If the cutting operation is dusty, the use of a face or dust mask specially designed to filter out microscopic particles is recommended.
12. Use recommended accessories – Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
13. Check for damaged parts – Before each use, repair or replace any guard or part that is damaged. In addition, check for alignment of moving parts, binding of moving parts, breakage of parts and any other conditions that may affect the tool's operation.
14. Never leave tool unattended while it is running – Turn the power OFF by removing the battery from the unit. Do not leave the saw until the cutting bar comes to a complete stop.
15. Do not grasp the exposed cutting blade or cutting edges when picking up or holding the saw – Be sure to encase the cutting bar in its protective sheath when not in use.
16. Disconnect tool – Turn off the power switch and remove the battery when it is not in use, before servicing, when transporting or when changing the chain or other accessories.
17. Stay alert – Watch what you are doing. Use common sense. Do not operate the pole chain saw when you are tired.
18. Store idle tool indoors – When not in use, tools should be stored indoors in a dry and high or locked-up place out of the reach of children.
19. Maintain Appliance With Care – Keep cutting edge sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories. Inspect appliance cord periodically, and if damaged, have it repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.

WARNINGS FOR ALL BATTERY-OPERATED TOOLS

1. Prevent unintentional starting. Ensure the power switch is in the off-position before connecting to battery pack, picking up or

carrying the tool. Carrying the tool with your finger on the power switch or energizing the tool that has the power switch on invites accidents.

2. Make sure the power switch is off and the battery pack is removed before clearing jammed material, making adjustments, changing accessories, storing or servicing the tool. Unexpected actuation of the tool while clearing jammed material or servicing may result in serious personal injury.
3. 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.
4. Use tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
5. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
6. 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. (This advice is considered correct for conventional NiMH, NiCd, lead acid and lithium-ion cell types. If this advice is incorrect for a cell design that differs from these, then the correct advice may be substituted.)
7. 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.
8. Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 100°C may cause explosion. The temperature of 100°C can be replaced by the temperature of 212°F.
9. Follow all charging instructions and do not charge the battery pack or tool outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
10. Have servicing performed by a qualified

repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.

11. Do not modify or attempt to repair the tool or the battery pack (as applicable) except as indicated in the instructions for use and care.



WARNING!

Use only SENIX X2 batteries (B20X2/B25X2/B40X2/B50X2/B60X2/B80X2) and chargers (CHX2/CHQX2/CHQX2-M-EU/CHDX2-M-EU).

POLE SAW SAFETY WARNING



WARNING!

Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

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

1. Keep all parts of the body away from the saw chain. Do not remove cut material or hold material to be cut when blades are moving. Make sure the switch is off when clearing jammed material. Saw chain continues to move after the switch is turned off. A moment of inattention while operating the extended-reach pruner may result in serious personal injury.
2. Carry the extended-reach pruner by the handle with the saw chain stopped. When transporting or storing the extended-reach pruner, always fit the saw chain device cover. Proper handling of the extended-reach pruner will reduce possible personal injury from the saw chain.
3. Hold the extended-reach pruner by insulated gripping surfaces only, because the saw chain may contact hidden wiring. A saw chain contacting a "live" wire may make exposed metal parts of the extended-reach pruner "live" and could give the operator an electric shock.
4. Do not use the extended-reach pruner in bad weather conditions, especially when there is a risk of lightning. This decreases the risk of being struck by lightning.

5. To reduce the risk of electrocution, never use near any electrical power lines. Contact with or use near power lines may cause serious injury or electric shock resulting in death.
 6. Always use two hands when operating the extended-reach pruner. Hold the extended-reach pruner with both hands to avoid loss of control.
 7. Always use head protection when operating the extended-reach pruner overhead. Falling debris can result in serious personal injury.
 8. Familiarize yourself with the operation of the pole chain saw and learn to use it properly.
 9. Never permit others (especially children) who have not read the manual to use the machine.
 10. Never remove the labels or security elements.
 11. Check the oil level before each use of the pole chain saw. Never use the pole chain saw without oil in the tank or when the amount of oil is low.
 12. Make sure that the handles are clean and dry. When the pole chain saw is running, always firmly grip the front handle with your left hand and the rear handle with your right hand.
 13. Do not operate the pole chain saw in an environment with flammable materials such as liquids, gases or dust. The sparks generated by the operation of the machine can cause an explosion.
 14. Never stand directly under the limb you are trimming. Always position yourself outside the path of falling debris.
 15. Always start sawing with the moving chain running.
 16. Do not saw with the tip of the saw guide bar.
 17. To protect yourself from electrocution, do not operate the pole chain saw within 50 ft (15 m) of overhead wires. Failure to follow this instruction could result in severe personal injury.
 18. The use of power equipment can be regulated. Remember to comply with legal regulations which may differ from one location to another.
- with an object, it may cause a fast reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may also push the guide bar rapidly back towards the operator. Either of these reactions may cause you to lose control of the cordless pole chain saw, which could result in serious personal injury.
- Kickback safety devices on this cordless pole chain saw include a skip chain and a low kickback guide bar. These will reduce, but not entirely prevent, kickbacks. Follow the necessary precautions indicated in this operator's manual to avoid kickbacks.
 - Always use two hands when operating the pole chain saw, one hand gripping the trigger and the other hand gripping the pole. Use a firm grip. Thumbs and fingers must wrap around the trigger and the pole.
 - Keep all guards in place on the pole chain saw. Make sure they are in proper working order.
 - Do not overreach or extend arms above shoulder height.
 - Keep solid footing and balance at all times.
 - Never try cutting through two branches at the same time. Only cut one at a time.
 - Do not bury the guide bar nose or try to cut by boring the guide bar nose into the wood.
 - Watch for shifting of wood or other forces that may pinch the chain.
 - Use extreme caution when re-entering a previous cut.
 - Use the low-kickback chain and guide bar supplied with this pole chain saw. Only use genuine replacement parts designed specifically for use with this pole chain saw.
 - Never use a dull or loose chain. Keep the chain sharp with proper tension.

EMERGENCY

Familiarise yourself with the use of this product by means of this instruction manual. Memorise the safety directions and follow them to the letter. This will help to prevent risks and hazards.

1. Always be alert when using this product, so that you can recognise and handle risks early. Fast intervention can prevent serious injury and damage to property.
2. Switch off and disconnect from the power supply if there are malfunctions. Have the product checked by a qualified professional and repaired, if necessary, before you operate it again.

KICKBACK

AVOID CONTACTING THE GUIDE BAR TIP WITH ANY OBJECT.

In some cases, when the tip makes contact

RESIDUAL RISKS

Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the structure and design of this product:

1. Health defects resulting from vibration emission if the product is being used over long periods of time or not adequately managed and properly maintained.
2. Injuries and damage to property due to broken attachments or the sudden impact of hidden objects during use.
3. Danger of injury and property damage caused by flying objects.
4. Prolonged use of this product expose the operator to vibrations and may produce 'whitefinger' disease. In order to reduce the risk, please wear gloves and keep your hands warm. If any of the 'whitefinger' symptoms appear, seek medical advice immediately. 'Whitefinger' symptoms include: numbness, loss of feeling, tingling, pricking, pain, loss of strength, changes in skin colour or condition. These symptoms normally appear in the fingers, hands or wrists. The risk increases at low temperatures.



WARNING!

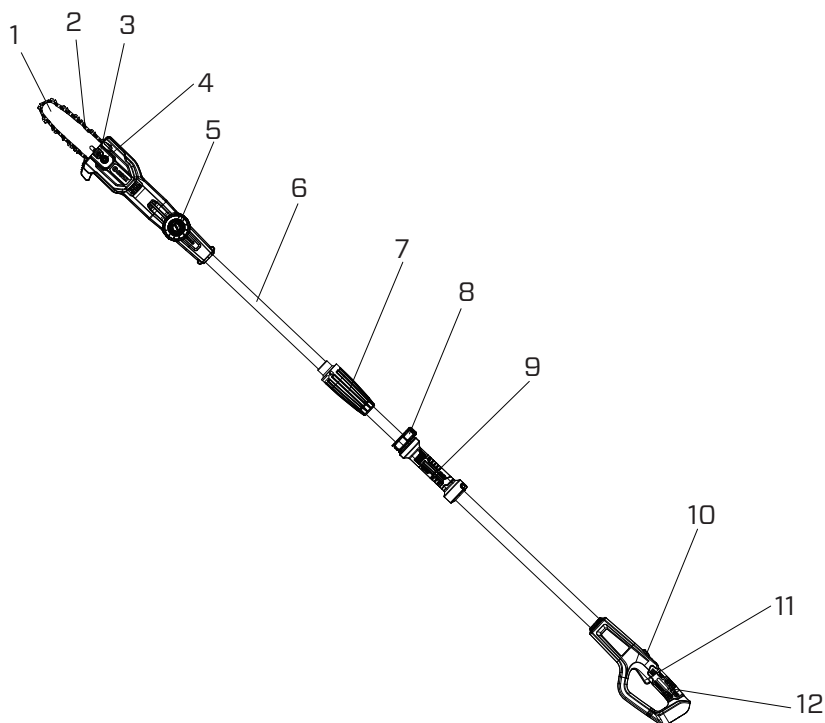
This product produces an electromagnetic field during operation! This field may under some circumstances interfere with active or passive medical implants! To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their doctor and the medical implant manufacturer before operating this product!

SAVE THESE INSTRUCTIONS

INTENDED USE

This tool is a cutting implement mounted on a pole to enable the operator to cut the branches of standing trees. It is not intended for use as a regular chainsaw.

KNOW YOUR UNIT



APPLICATIONS

Model: CSPX2-M-EU

As a pole saw:

Cutting small limbs.

General tree pruning.

1	Guide bar
2	Saw chain
3	Tensioning Gear
4	Sprocket Cover Nut
5	Angle Adjustment Button
6	Pole

7	Connecting Sleeve
8	Telescoping Lock Clip
9	Front Handle
10	Safety Switch
11	Switch Trigger
12	Rear Handle

SPECIFICATIONS

Model	CSPX2-M-EU
Input Voltage	18 V \equiv (20 V \equiv Max*)
Motor Type	Brushed
No-Load Speed	2800 rpm
Chain Speed	5.2 m/s
Chain & Bar Length	20 cm / 25 cm
Angle Adjusting	5 setting, -60°/-30°/0°/30°/60
Collapsing Length	1.85 m- 2.3 m
Oil Tank	60 ml
Weight (Tool Only)	3.0 kg

*20V Max battery, maximum initial battery voltage (measured without a workload) is 20V. The nominal voltage is 18V.

ASSEMBLY

1. Unpack all parts and lay them on a flat, stable surface:
2. Remove all packing materials and shipping devices, if applicable.
3. The scope of delivery varies depending on the country and purchased variant.
Model CSPX2-M-EU
 - Pole saw x1
 - Saw chain x1
 - Guide bar x1
 - Guide bar cover x1
 - Instruction manual x1
4. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.
5. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.



WARNING!



Wear protective gloves for this assembly work and always lay the product on a flat and stable surface while assembling. Follow the assembly instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product! Do not insert the battery pack before the power tool is completely assembled or adjusted!

CONNECTING THE FRONT AND THE REAR POLE

1. Align arrows on the rear pole component and the front pole, then Insert for connecting.

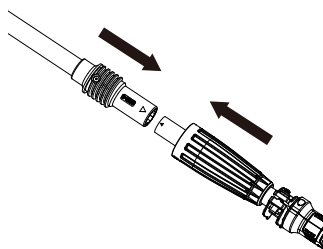


Fig. 1

2. Rotate the connecting sleeve clockwise to reinforce the connection.

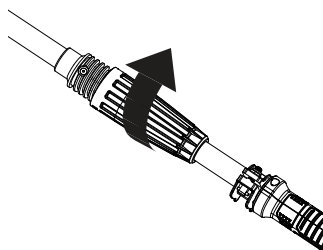


Fig. 2

3. Check looseness between two parts.

INSTALLING THE SAW CHAIN AND GUIDE BAR

WARNING!

Switch off and remove the battery pack before installing the saw chain and guide bar.

1. Loosen the sprocket cover nut and detach the chain sprocket cover.
2. Wind the saw chain to the outside edge of the guide bar. Make sure the chain teeth are stuck into the slots.



NOTE:

Make sure the chain's direction of rotation is correct. The blades on each cutting link on the upper side of the cutting bar must be facing towards the tip of the pole saw.

3. Attach the guide bar and the saw chain to the product. Loop the saw chain around the sprocket and locate the chain bar by the fixing bolt on the saw. If the guide bar and saw chain can not be mount over the drive sprocket, slightly adjust the tensioning gear.
4. Pull the chain around the guide bar with your gloved hand or using auxiliary tools to make sure it can run smoothly.
5. Replace the sprocket cover and preliminarily screw the sprocket cover nut to prevent the guide bar and saw chain from dropping. Do not totally tighten it.
6. Turn the saw chain tensioning gear clockwise till the saw chain can be lifted by 2-3 mm from the center of the guide bar.
7. Fully tighten the sprocket cover nut to secure the sprocket cover.

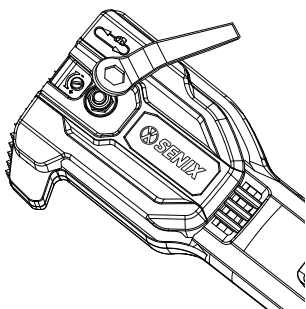


Fig. 3

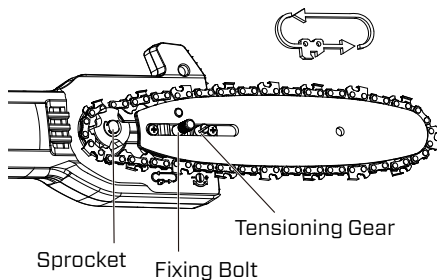


Fig. 4

INSTALLING THE HARNESS

The harness with quick release function can be hooked on the front handle.

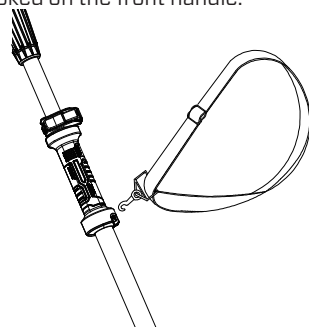


Fig. 5

BAR AND CHAIN OIL FILLING



WARNING!

Never operate the pole saw without bar and chain oil. The use of the pole saw without enough bar and chain oil will damage the unit.

This pole saw is shipped without bar and chain oil in the tank. Fill the oil tank for the initial use and check the oil level before every start.

1. Place the pole saw on a level surface. Clean the area around the oil tank cap and then open it.
2. Fill the oil tank with bar and chain oil carefully. Make sure that no dirt gets into the oil tank so that the oil nozzle does not clog.
3. Close the oil tank cap and wipe off residual oil around the opening.

INSTALLING/REMOVING BATTERY PACK

To install:

Align the battery ribs with the mounting slots and press the battery pack down until you hear a “click”.

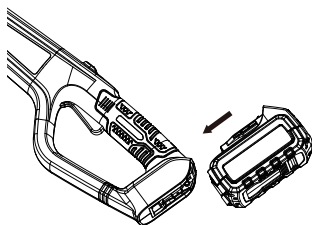


Fig. 6

To remove:

Depress the battery-release button and pull the battery pack out.

OPERATION



WARNING!

To avoid serious personal injury, do not operate the pole saw without the guide bar, saw chain and sprocket cover properly assembled. Do not attempt to operate the pole saw if any part is damaged or missing.



WARNING!

Always wear protective equipments.
Make sure the pole saw is in a complete stop when perform any adjustments.

ADJUSTING THE SAW HEAD

The angle of the saw's head can be adjusted from -60° to 60° by pressing the angle adjustment button. Five stages (-60°, -30°, 0°, 30°, 60°) in total can be achieved.

If you would like to change the angle of the saw's head, switch off the product and remove the battery pack at first in case of injury. Make sure it is firmly engaged once adjusted. Never start the pole saw whose head is disengaged.

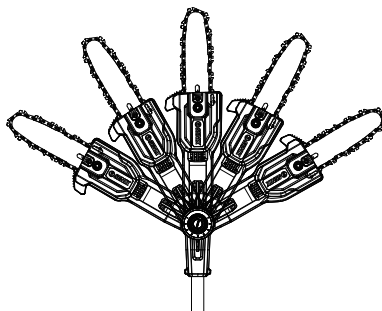


Fig. 7

ADJUSTING POLE LENGTH

1. Unlock the telescoping lock clip so that the pole can freely extend outwards and inwards.

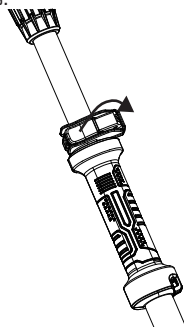


Fig. 8

2. Extend the pole to the desired length and lock the telescoping lock clip to hold it in place.

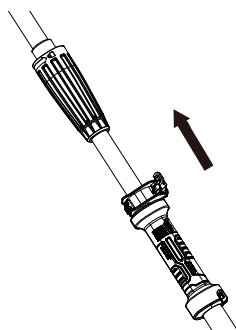


Fig. 9

3. In order to prevent accident or injury, check the tightness by holding and stretching the both ends of the telescoping part.
4. If the locked telescoping lock clip can not

firmly hold the pole. The lock nut for the telescoping release lever is supposed to be tightened by a wrench.

ADJUSTING THE TENSION OF SAW CHAIN

WARNING!

After using, the chain tension may loose. Adjust the chain tension before next work.

If adjustments are needed, slightly loosen the sprocket cover nut. It's not necessary to remove the sprocket cover. Adjust the saw chain tensioning gear by a wrench. Do not over-tension the chain: this will lead to excessive wear and reduce the life of both the bar and chain. Secure the sprocket cover nut after adjustment.



NOTE:

The saw chain is correctly tensioned if it can be raised approximately 2-3 mm from the center of the guide bar.

ADJUSTING THE HARNESS

Adjust the harness to a suitable length. Always use the harness to carry the product weight on your shoulder (on the same side of tool or cross your body). Ensure that the quick release is on your chest (NOT on your back). Open the quick release clamp under emergencies to take off the harness quickly.

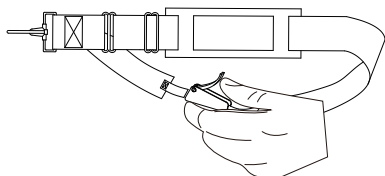


Fig. 10

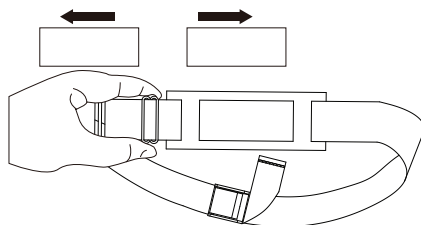


Fig. 11

SWITCHING ON/OFF

WARNING!

Before beginning work, you should check:

- The wearing of protective equipments.
- The damage of the saw housing, the saw chain and the guide bar.
- The level of the oil tank.
- The tension of the chain and the condition of the blades.

Hold the product as in working condition. To start the product, keep pressing the safety switch, Then squeeze the switch trigger.

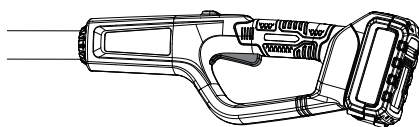
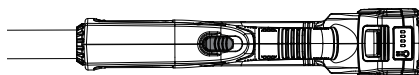


Fig. 12

To switch the product off, just release the switch trigger.

OVERHEAT PROTECTION

When the tool/battery is overheated, the tool stops automatically. In this situation, let the power tool/battery cool before turning the tool on again.

OVERDISCHARGE PROTECTION

When the battery capacity is not enough, the tool stops automatically. In this case, remove

the battery from the tool and charge the battery.

HOLDING THE UNIT

- Stand in the operating position and stand up straight. Do not bend over.
- Keep feet apart and firmly planted.
- Hold the shaft grip with the right hand. Keep the right arm slightly bent.
- Hold the handle with the left hand. Keep the left arm straight.
- Hold the unit at waist level.
- Position the cutting head a few inches above the ground.
- Do not over-reach; Keep all parts of your body away from the rotating cutting attachment and hot surfaces.

HANDLING POLE SAW

- Hold the pole saw with both hands.
- Wear the harness to carry the weight for maintain a better control of the product.
- Fully grip both handles at all times during operation. Never operate pole saw using only one hand.
- Hold the pole saw at a max. angle of 60° from the horizontal level.

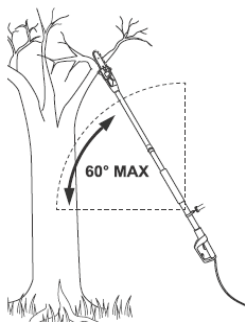


Fig. 13

- Do not stand directly under the limb you are sawing. Objects may fall different than expected. Position yourself well out of the path of falling limbs.
- Keep bystanders away from cutting end of garden power tool and a safe distance from the work area. Maintain a minimum distance of thirty feet to bystanders.
- Do not stand on a ladder or other support while using pole saw. Maintain a firm footing and balance during operation.

- Make sure the power cord is located to the rear, away from the chain and wood, and kept free of branches during cutting.
- Hold the pole saw to the side of your body.
- Do not operate the pole saw with arms fully extended or attempt to saw areas that are difficult to reach.
- Keep a firm, steady pressure on the pole saw while working. Do not try to force the pole saw through the wood, let the chain do the work. Use the gripping teeth to apply minimal leverage pressure.
- Use caution when reaching end of cut. The pole saw's weight may change unexpectedly as it cuts free from the wood. Always remove the pole saw from a wood cut while it is running.

AVOIDING KICKBACK DURING USE

Kickback occurs when the chain (at the tip of the guide bar) comes in contact with a log or wood, or when the saw chain becomes jammed, often when sawing sideward, slanted or during lengthwise cuts.

To avoid kickback:

- Saw with guide bar at a flat angle
- Do not work with a loose, overstretched or worn out chain
- Ensure chain is sharpened correctly
- Do not work with the tip of the guide bar
- Hold the pole saw firmly with both hands
- Use a low kickback chain
- Ensure correct chain tension

CUTTING THIN BRANCHES

- Thin branches can be cut off with a single cut.
- To prevent the branch from splintering and buckling, cut the branch off in several pieces. When cutting larger branches, the following four cuts are necessary:
- First cut into the branch from below, outside of the location where you intend to cut off the branch.
- The cut should go one third to halfway through the branch (1).
- Cut into the branch from the top, making sure it's outside from where the branch is to be sawed (2).
- To keep stump and branch from splintering, do a stub undercut below branch (3).

- Cut off the stump with one clean cut from top to bottom.
- If desired, seal the cut with a suitable compound (4).
- When finished cutting, turn off the pole saw and disconnect its power supply after use.
- Clean, then store the appliance indoors out of children's reach.

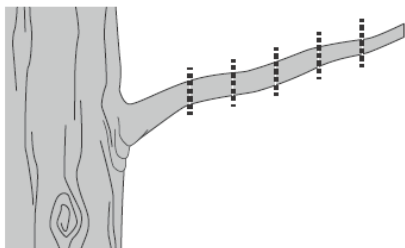


Fig. 14

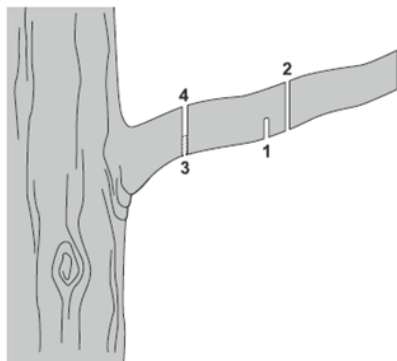


Fig. 15

SAFE WORK

WARNING!

Do not operate near electrical power lines. The unit has not been designed to provide protection from electric shock in the event of contact with overhead electric lines. Consult local regulations for safe distances from overhead electric power lines and ensure that the operating position is safe and secure before operating the tool.

- Before beginning work and after dropping or other impacts, inspect the pole saw in order to identify any significant damage to the housing, the saw chain and the guide bar. Never use an obviously damaged

machine.

- Before beginning work and regularly during work check oil level, lubrication system and chain tension.
- Wear hearing protection and protective goggles and a safety helmet with integrated hearing protection and a face guard. This provides protection against falling branches and recoiling branches.
- In order to ensure safe work, a maximum working angle of 60° is prescribed.
- Never stand below the branch to be sawed.
- Exercise caution when sawing branches under tension or splintering wood.
- Potential risk of injury from falling branches and flying wood projectiles!
- If the machine is in operation, keep persons and animals away from the danger area.
- The machine is not protected against electric shock when coming into contact with high-voltage lines.
- Maintain a minimum clearance of 30 feet (10 m) from current carrying lines. Life-threatening danger from electric shock!
- When working on an incline, always stand above or to the side of the branch to be sawed.
- Hold the machine as close as possible to your body. By doing so, you maximize your balance. Make absolutely sure to wear the appropriate, close fitting protective clothing, such as chainsaw-protective pants, gloves and safety shoes.
- Never overwork yourself. Take a regular rest during working.

SAWING TECHNIQUES

WARNING!

The risk of the operation may occur, such as the sharp tree branches may cut the user's skin, the blade of the unit may hurt the user's body. Always wear eye, hearing, hand, foot and body protection to reduce the risk of injury when operating this unit.

- Make sure the chain is running at full speed before touching the branch to be cut.
- When removing branches, hold the pole saw at an angle ranging from 0 to 60° in order to avoid being struck by a falling branch. The saw should never be operated directly above head.
- Saw off the lower branches on the tree first. By doing so, it is easier for the cut branches

- to fall to the ground.
- At the end of the cut, the weight of the saw suddenly increases for the user, because the saw is no longer supported on the branch. There is the risk of losing control of the saw.
- Only pull the saw out of the cut with the saw chain running. By doing so, you can prevent it from getting jammed.
- Do not saw with the tip of the guide bar.
- IMPORTANT! Use the shoulder strap!**
Always use the shoulder strap when working with the equipment. Switch off the equipment before you take off the shoulder strap (risk of injury). And hold the pole saw firmly with both hands.
- If any foreign object is hit or if vibrations occur, stop the machine immediately. Disconnect the battery. Check that the machine is not damaged. Repair any damage.
- For sawing off smaller branches, place the stop face of the saw on the branch. This prevents unwanted movements of the saw at the beginning of the cut. While applying light pressure, guide the saw through the branch from top to bottom.
- For sawing off larger branches, first make a relief cut. Saw through 1/3 of the branch diameter from the bottom to top using the top side of the guide bar. Then saw from top to bottom for the other 2/3 using the bottom side of the guide bar.
- Saw off longer branches in sections in order to maintain control over the location of impact.

MAINTENANCE

WARNING!

Always remove the battery pack and let the product completely cool down before performing cleaning and maintenance work! Always wear protective equipments such as gloves and eye protections to reduce the risk of injury when operating this unit. Only perform cleaning and maintenance work according to these instructions! All further works must be performed by a qualified specialist!
When servicing use only identical replacement parts. Use of any other accessory or attachment may increase the risk of injury.

REPLACING THE SAW CHAIN AND GUIDE BAR

WARNING!

When handling saw chains, always wear protective gloves.

Replace chain when cutters are too worn to sharpen or when chain breaks. Only use replacement chain noted in this manual. DO NOT use any other bar/chain combination. Always include new drive sprocket when replacing chain. This will maintain proper driving of chain.

- Place the pole saw body on a firm and level surface.
- Loosen the sprocket cover nut to remove the chain sprocket cover.
- Wearing protective gloves, take off the broken saw chain or the guide bar.
- Wind the new saw chain around the new guide bar, making sure that the teeth are aimed in the direction of rotation. The chain should be properly seated into the slot running along the entire outside edge of the guide bar.
- Loop the saw chain around the sprocket and locate the guide bar by matching its hole with the fixing bolt on the saw.
- Put the sprocket cover on the original place.
- Screw the sprocket cover nut, but not tight.
- Adjust the chain tension according to the chapter "ADJUSTING THE TENSION OF SAW CHAIN".
- Fully tighten the sprocket cover nut to secure the sprocket cover.
- Check for the smooth movement of the saw chain.

SHARPENING THE SAW CHAIN

WARNING!

Do not sharpen the saw chain by yourself, unless you are experienced in doing so. It is recommended to have the chain saw sharpened by an authorized service.

Keep chain sharp. Your saw will cut more efficient and more safely. A dull chain will

cause undue sprocket, guide bar, chain, and motor wear. Do not force chain into wood to prevent the saw chain from becoming dull.

To sharpen the chain:

1. Using protective gloves, ensure the chain is correctly tensioned on the guide bar.
2. Use a round file with a diameter 1.1 times the cutting tooth depth. Make sure 20% of the file diameter is above the cutter's top plate.
3. File at an angle perpendicular to the bar, and at an angle of 25° to the direction of travel.
4. File each tooth from the inside towards outside only. File one side of the chain first then turn the saw around and repeat the process.
 - Sharpen each tooth equally by using the same number of strokes.
 - Keep all cutter lengths equal. Each time the cutting tip is sharpened the cutting length is reduced. When the cutter length is reduced to 0.16 inch (4 mm), the chain is worn out and should be replaced.
 - The depth gauge setting is also reduced with each sharpening. Every 5 sharpenings use a depth gauge measuring tool to check the height between the cutting tip and the ridge. When necessary, use a flat file to file down the ridge to achieve the 0.25 inch (6 mm) depth gauge setting. Depth gauge measuring tools are available from most pole saws retailers.
 - If the saw is not functioning properly, take it to a qualified pole saw service center to have the saw inspected. Use only identical parts as listed in this manual.

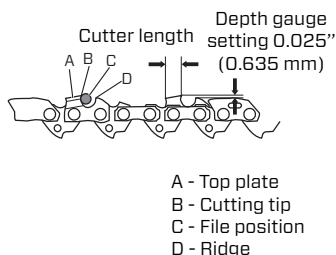


Fig. 16

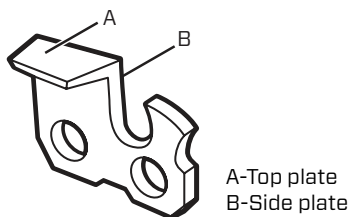


Fig. 17

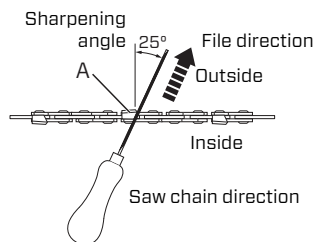


Fig. 18

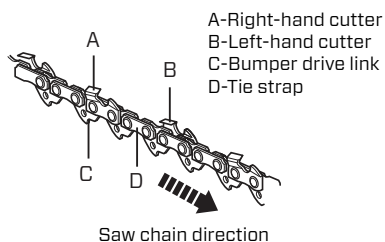


Fig. 19

CLEANING

- Remove wood chips and other debris from the housing. Clean dirty with a soft, dry cloth. Dirt or oil can cause a poor electrical connection, resulting in loss of power.
- After use, clean debris from the saw chain and guide bar. Wipe with a cloth moistened with mild soap solution. Never use harsh cleaners or solvents.
- Always clean out wood chips, saw dust and dirt from the bar groove when replacing saw chain.
- Ensure the area under the side cover is free of wood chips and other debris.

STORAGE

- Clean chainsaw thoroughly as described above.
- Install the guide bar cover and place an absorbent pad under the bar.
- Store in a dry place.
- Keep out of reach of children or pets.
- We recommend using the original package for storage or covering the product with a suitable cloth or enclosure to protect it against dust.

TRANSPORT

- Install the guide bar cover.
- If desired, drain the bar and chain oil to reduce seepage.
- Carry saw by its handle with bar and chain facing behind the operator.
- Ensure the tool is secure and cannot fall or move into contact with people or property.



NOTE:

The guide bar cover prevents the operator from coming in contact with the sharp chain blades when the machine is not in use. It also helps keep the chain blades from being nicked or damaged when the machine is transported or stored.

DISPOSAL

Waste product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.



Electrical products should not be discarded with household products. Used electrical products must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice.

TROUBLESHOOTING

Suspected malfunctions are often due to causes that the users can fix themselves. Therefore, check the product using this section. In most cases the problem can be solved quickly.

Problem	Possible Cause	Solution
Product does not start	Battery pack not properly attached	Attach properly
	Battery pack capacity too low	Remove and charge battery pack
	Battery pack damaged	Inspection by a specialist electrician
	Safety switch is not turned on	Refer to section "SWITCHING ON/OFF"
Product does not cut properly	Insufficient chain tension	Refer to section "ADJUSTING THE TENSION OF SAW CHAIN"
	Dull / worn chain	Sharpen or replace the chain.
	Chain installed backwards	Refer to the section "INSTALLING THE SAW CHAIN AND GUIDE BAR"
Product suddenly stops	Battery pack capacity too low	Remove and recharge battery pack
	The machine is overloaded	Release the trigger and restart the machine