

20V BRUSHLESS 8" COMPACT CHAINSAW

Owner's Manual



WARNING: Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

SYMBOLS

<u>^</u>	Warning / Attention!			
	Please read the instructions carefully before starting the machine.			
	Take the replaceable battery from the appliance before any extension, cleaning and servicing works.			
	Warning against dangerous kickback			
	Keep distance from others. Keep others out of danger zone.			
	Always use chain saw two-handed.			
	Do NOT use one-handed.			
	Keep dry at all times. Never expose tool to rain.			
(M)	Keep the machine out of reach of children.			
	Fire, sparks, naked flames and smoking are forbidden.			
600	Chain lubrication			
56.→	Chain running direction			
	Wear a protective helmet			
	Wear safety goggles. Wear ear protectors.			
	Wear protective gloves			
	Wear safety cut through resistant shoes with safety sole and steel toe			
***	Wear protective clothing with cut through resistant ply !			
	Any damaged or disposed devices must be delivered to appropriate collection centers.			

GENERAL POWER TOOL SAFETY INSTRUCTIONS

WARNING: Read all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Retain this manual for future reference.

1. Work area safety

- a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2. Electrical safety

- a. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded surfaces power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded.
- c. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

3. Personal safety

- a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use power tools while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b. Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, nonskid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- d. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

4. Personal protection

- a. Risk of eye injury. Wear safety glasses or similar eye protection. Use a face or dust mask whenever the operations may produce dust or flying particles.
- b. Wear ear protection whenever the sound level seems uncomfortable.
- c. Do not overreach
- d. Keep proper footing and balance at all times.

5. Use the appropriate tool

a. The intended use is described in this instruction manual. Do not force small tools or attachments to do the job of a heavy-duty tool.

GENERAL POWER TOOL SAFETY INSTRUCTIONS

b. The tool will do the job better and safer at the rate for which it was intended. The use of any accessory or attachment or performance of any operation with this tool other than those recommended in this instruction manual may present a risk of personal injury. Do not force the tool.

6. Maintain tools with care

- a. Keep cutting tools sharp and clean for better and safer performance.
- b. Follow the instructions for maintenance and changing accessories.
- c. Keep handles and switches dry, clean, and free from oil and grease.

7. Check for damaged parts

- a. Before using the tool, carefully check it for damage to ensure that it will operate properly and perform its intended function.
- b. Check for misalignment and seizure of moving parts, breakage of parts and any other conditions that may effect its operation.
- c. Have any defective parts repaired or replaced by an authorized repair agent. Do not use the tool if any part is defective.
- d. Never attempt any repairs yourself.

8. Battery tool use and care

- a. Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b. Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- c. When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- d. Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

9. Remove the battery

- a. Reduce the risk of injury to persons. Remove the battery pack when the tool is not in use, before changing any parts of the tool, accessories or attachments, and before cleaning or servicing.
- b. Avoid unintentional starting
- c. Do not carry the tool with a finger on the on/off switch.

10. Battery

- a. Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- b. Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 130 °C may cause explosion.
- c. 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.
- 11. Never carry the charger by its cord or pull it to disconnect from the socket. Keep the cord away from heat, oil, and sharp edges.

12. Service

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

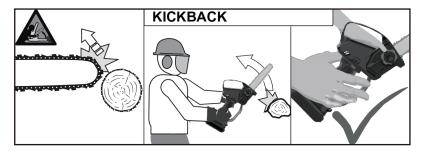
GENERAL COMPACT CHAIN SAW SAFETY WARNINGS

Keep all parts of the body away from the saw chain when the chain saw is operating. Before you start the chain saw, make sure the saw chain is not contacting anything. A moment of inattention while operating mini chain saw may cause entanglement of your clothing or body with the saw chain.

Always hold the mini chain saw with your right hand on the rear handle and your left hand on the front handle. (Secondary handgrip) Holding the mini chain saw with a reversed hand configuration increases the risk of personal injury and should never be done.

- a) Hold the mini chain saw 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 mini chain saw "live" and could give the operator an electric shock.
- b) 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.
- c) Do not operate a mini chain saw in a tree, on a ladder, from a rooftop, or any unstable support peration of a mini chain saw in this manner could result in serious personal injury.
- d) Always keep proper footing and operate the mini chain saw only when standing on fixed, secure and level surface. Slippery or unstable surfaces may cause a loss of balance or control of the mini chain saw.
- e) When cutting a limb that is under tension, be alert for spring back. When the tension in the wood fibre is released the spring loaded limb may strike the operator and /or throw the mini chain saw out of control.
- f) **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.
- g) Carry the mini chain saw by the front handle with the mini chain saw switched off and away from your body. When transporting or storing the mini chain saw, always fit the guide bar cover. Proper handling of the mini chain saw will reduce the likelihood of accidental contact with the moving saw chain.
- h) **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.
- i) **Keep handles dry, clean, and free from oil and grease.** Greasy, oily handles are slippery causing loss of control.
- j) **Cut wood only. Do not use mini chain saw for purposes not intended.** For example: do not use mini chain saw for cutting metal, plastic, masonry or non-wood building materials. Use of the mini chain saw for operations different than intended could result in a hazardous situation.
- k) Follow all instructions when clearing jammed material, storing or servicing the mini chain saw. Make sure the switch is off and the battery pack is removed. Unexpected actuation of the chain saw while clearing jammed material or servicing may result in serious personal injury.

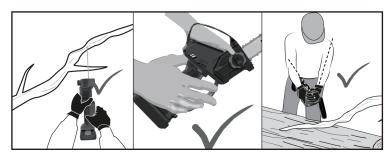
Causes and operator prevention of kickback:



- 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.

GENERAL COMPACT CHAIN SAW SAFETY WARNINGS

- 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 mini chain saw user, you should take several steps to keep your cutting jobs free from accident or injury.
- Kickback is the result of mini chain saw misuse and/ or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:
- Maintain a firm grip, with thumbs and fingers encircling the mini chain saw handles, with both hands on the saw and position your body and arm to allow you to resist kickback forces. Kickback forces can be controlled by the operator, if proper precautions are taken. Do not let go of the mini chain saw.
- Do not overreach and do not cut above shoulder height. This helps prevent unintended tip contact and enables better control of the chain saw in unexpected situations.
- Only use replacement bars and chains specified by the manufacturer. Incorrect replacement guide bars and chains may cause chain breakage and/or kickback.
- Follow the manufacturer's sharpening and maintenance instructions for the saw chain. Decreasing the depth gauge height can lead to increased kickback.



ADDITIONAL SAFETY AND WORKING INSTRUCTIONS

Ensure all guards, handles, and spiked bumper are properly fitted and are in good condition.

Persons using the mini chain saw should be in good health.

The operator should be alert, have a good vision, mobility, balance, and manual dexterity. If there is any doubt, do not operate the mini chain saw.

Wear a mask or respirator, if required.

Do not cut vines and/or small undergrowth.

Always hold the mini chain saw with both hands during operation. Use a firm grip with thumbs and fingers encircling the mini chain saw handles. Right hand must be on the rear handle and left hand on the front handle. (Auxiliary handle)

Before starting the mini chain saw, make sure the saw chain is not contacting any object.

Do not modify the mini chain saw in any way or use it to power any attachments or devices not recommended by the manufacturer for your mini chain saw.

There should be a first-aid kit containing large wound dressings and a means to summon attention (e.g., whistle) close to the operator. A larger more comprehensive kit should be reasonably nearby.

An incorrectly tensioned chain can jump off the guide bar and could result in serious injury or fatality. The length of the chain depends on the temperature. Check the tension frequently.

ADDITIONAL SAFETY AND WORKING INSTRUCTIONS

You should get used to your new mini chain saw by making simple cuts on securely supported wood. Do this whenever you have not operated the saw for some time.

To reduce the risk of injury associated with contacting moving parts, always stop the motor, apply the chain brake, remove the battery pack and make sure all moving parts have come to a stop before: blockage, leaving the machine unattended, conducting maintenance or working on the machine installing or removing attachments.

The size of the work area depends on the job being performed as well as the size of the tree or work piece involved. The operator needs to be aware and in control of everything happening in the work area.

Do not cut with your body in line with the guide bar and chain. If you experience kickback, this will help prevent the chain coming into contact with your head or body.

Do not use a back-and-forward sawing motion, let the chain do the work. Keep the chain sharp and do not try to push the chain through the cut.

Do not put pressure on the saw at the end of the cut. Be ready to take on the weight of the saw as it cuts free from the wood. Failure to do so could result in possible serious personal injury.

Do not stop the saw in the middle of a cutting operation.

Keep the saw running until it is already removed from the cut. Do not fix the on/off switch in the "on" position when using the saw hand-held.

Remove the battery pack before starting any work on the appliance.

WARNING! To reduce the risk of fire, personal injury, and product damage due to a short circuit, never immerse your device, battery pack or charger in fluid or allow a fluid to flow inside them. Corrosive or conductive fluids, such as seawater, certain industrial chemicals, and bleach or bleach containing products, etc., can cause a short circuit.

Never break open battery packs and chargers. Store only in dry rooms. Keep dry at all times.

Push and pull

The reaction force is always opposite to the direction the chain is moving. Thus, the operator must be ready to control the tendency for the machine to pull away (forward motion) when cutting on the bottom edge of the bar and the push backwards (towards the operator) when cutting along the top edge.

Saw jammed in the cut

Stop the mini chain saw and secure the saw by removing the battery. Do not try to force the chain and bar out of the cut as this is likely to break the chain, which may swing back and strike the operator. This situation normally occurs because the wood is incorrectly supported which forces the cut to close under compression, thereby pinching the blade. If adjusting the support does not release the bar and chain, use wooden wedges or a lever to open the cut and release the saw. Never try to start the mini chain saw when the guide bar is already in a cut or kerf.

Skating / Bouncing

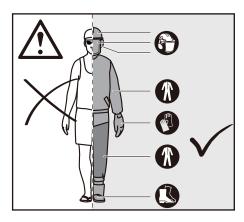
When the mini chain saw fails to dig in during a cut, the guide bar can begin hopping or dangerously skidding along the surface of the log or branch, possibly resulting in the loss of control of the mini chain saw. To prevent or reduce skating or bouncing, always use the saw with both hands make sure the saw chain establishes a groove for cutting. Never cut small, flexible branches or brushes with both hands, make sure. Their size and flexibility can easily cause the saw to bounce towards you or bind up with enough force to cause a kickback. The best tool for that kind of work is a hand saw, pruning shears, an axe or other hand tools.

ADDITIONAL SAFETY AND WORKING INSTRUCTIONS

Personal protective equipment

Wear a helmet at all times when operating the machine. A helmet, equipped with mesh visor, can help reduce the risk of injury to the face and the head if kickback occurs. Wear ear protectors. Exposure to noise can cause hearing loss.

Good quality personal protective equipment, as used by professionals, will help reduce the risk of injury to the operator. The following items should be used when operating the machine:



Guide Bar

Generally, guide bars with small radius tips have somewhat lower potential for kick-back. You should use a guide bar and matching chain which is just long enough for the job. Longer bars increase the risk of loss of control during sawing. Regularly check the chain tension. When cutting smaller branches (less than the full length of the guide bar) the chain is more likely to be thrown off if the tension is not correct.

Working Instructions

Understanding the forces within the wood

When you understand the directional pressures and stresses inside the wood you can reduce the "pinches" or at least expect them during your cutting. Tension in the wood means the fibers are being pulled apart and if you cut in this area, the "kerf" or cut will tend to open as the saw goes through. If a log is being supported on a saw horse and the end is hanging unsupported over the end, tension is created on the upper surface due to the weight of the overhanging log stretching the fibers. Likewise, the underside of the log will be in compression and the fibers are being pushed together. If a cut is made in this area, the kerf will have the tendency to close up during the cut. This would pinch the blade.

Limbing 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. Branches under tension should be cut from the bottom up to avoid binding the chain saw.

Cutting spring poles

A spring pole is any log, branch, rooted stump, or sapling which is bent under tension by other wood so that it springs back if the wood holding it is cut or removed. Warning! Spring poles are dangerous and could strike the operator, causing the operator to lose control of the chain saw. This could result in severe or fatal injury to the operator. This should be done by trained users.

Residual Risk

Even when the product is used as prescribed, it is still impossible to completely eliminate certain residual risk factors. The following hazards may arise in use and the operator should pay special attention to avoid the following:

Injury caused by vibration. Always Always use the right tool for the job. Use designated handles. Restrict working time and exposure.

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ADDITIONAL SAFETY AND WORKING INSTRUCTIONS

- Damage to hearing due to exposure to noise. Wear hearing protection and limit exposure.
- Injury caused by contact with exposed saw teeth of the chain
- Injury caused by thrown-out pieces of the workpiece (wood chips, splinters)
- Injury caused by dust and particles
- Injury to the skin caused by contact with lubricants
- Parts ejected from the saw chain (cutting/injection hazards)
- Unforeseen, abrupt movement, or kickback of the guide bar (cutting hazards)

Risk Reduction

It has been reported that vibrations from handheld tools may contribute to a condition called Raynaud's Syndrome in certain individuals. Symptoms may include tingling, numbness, and blanching of the fingers, usually apparent upon exposure to cold. Hereditary factors, exposure to cold and dampness, diet, smoking and work practices are all thought to contribute to the development of these symptoms. There are measures that can be taken by the operator to possibly reduce the effects of vibration:

- Keep your body warm in cold weather. When operating the unit wear gloves to keep the hands and wrists warm.
- After each period of operation, exercise to increase blood circulation.
- Take frequent work breaks. Limit the amount of exposure per day.
- Protective gloves available from professional chain saw retailers are designed specifically for chain saw use which give protection, good grip and also reduce the effect of handle vibration.

If you experience any of the symptoms of this condition, immediately discontinue use and see your doctor.

Warning! Injuries may be caused, or aggravated, by prolonged use of a tool. When using any tool for prolonged periods, ensure you take regular breaks.

Specified Conditions of Use

The mini chain saw is to be used as a branch saw. The cordless mini chain saw is only intended for use outdoors. For safety reasons, the mini chain saw must be adequately controlled by using two-handed operation at all times. The mini chain saw is designed for cutting branches, trunks, logs, and beams of a diameter determined by the cutting length of the guide bar. It is only designed to cut wood. It is only to be used by adults who have received adequate training on the hazards and preventative measures/ actions to be taken while using the mini chain saw.

Do not use the mini chain saw for any purpose not listed in the specified conditions of use. It is not to be used for professional tree services. The mini chain saw is not to be used by children or by persons not wearing adequate personal protective equipment and clothing.

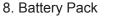
Warning! When using the mini chain saw, the safety rules must be followed. For your own safety and that of bystanders, you must read and fully understand these instructions before operating the mini chain saw. You should attend a professionally organized safety course in the use, preventative actions, first-aid, and maintenance of mini chain saws. Please keep these instructions safe for later use.

Warning! mini chain saws are potentially dangerous tools. Accidents involving the use of mini chain saws often result in loss of limbs or death. It is not just the mini chain saw that is the hazard. Falling branches, toppling trees, and rolling logs can all kill. Diseased or rotting timber poses additional hazards. You should assess your capability of completing the task safely. If there is any doubt, leave it to a professional tree surgeon.

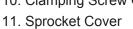
Do not use this product in any other way. Only use this saw as stated in this manual.

FUNCTION

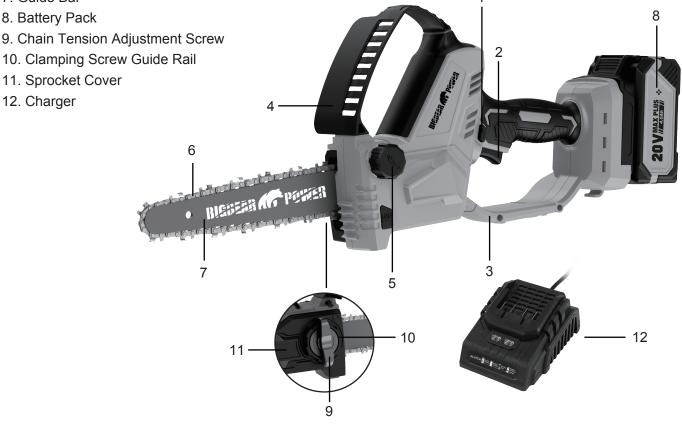
- 1. Lock-Off Switch
- 2. ON/OFF Switch Trigger
- 3. Hand Guard
- 4. Protective Cover
- 5. Oil Tank Cap
- 6. Chain
- 7. Guide Bar



9. Chain Tension Adjustment Screw



12. Charger



SPECIFICATION

Rated Voltage: 20V Max Motor Type: Brushless motor No load speed: 4600/min

Chain speed: 7m/s Bar Length: 8"

Chain Tension: Tool Free

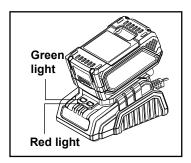
Auto Lubricate: Yes

Include: 1pc compact 8" chainsaw, 1pc 8" chainsaw bar, 1pc 4.0Ah 20V battery, 1pc 2A charger, 2pc 8"

Chains, 1pc Chain File, 1pc Safety Glasses, 1pc Work Gloves. 1pc Safety Ear Plugs

CHARGING BATTERIES

- 1. Place the Battery Pack on a dry fireproof surface in a room where the temperature is from 50° F to104° F. Note: If recharging a newly spent Battery Pack, allow it to cool completely before charging.
- 2. Examine the Battery Pack. It must be an undamaged 20V lithium-ion type Battery Pack. Do not charge a cracked, open, or leaking Battery Pack, or charge a non-recommended type of Battery Pack.
- 3. The Battery Pack's terminals are designed to fit this Charger specifically. If the Battery Pack does not fit the Charger properly, do not try to insert it. Do not force a Battery Pack into the Charger.
- 4. Make sure the power supply is normal household voltage, 120 volts, AC only, 60 Hz.
- 5. Connect the charger to a power supply.
- 6. Slide the Battery Pack onto the Charger
- 7. The battery pack may become slightly warm to the touch while charging. This is normal and does not indicate a problem.
- 8. After charging is complete, the green LED will remain on while the charger is in Energy Save mode.
- 9. Charger will periodically wake from Energy Save mode to ensure the battery pack remains in a fully charged state.
- 10. To remove the battery pack from the charger, depress the latches on the top of the battery pack and separate battery from charger.



CHARGING A HOT BATTERY PACK

When using a tool continuously, the battery pack may become hot. A hot battery pack may be placed directly onto the charger port but charging will not begin until the battery temperature cools to within acceptable temperature range. When a hot battery pack is placed on the charger, the red LED will begin flashing. When the battery pack cools, the charger will automatically begin charging.

The LED lights on charger show different status as below.

LED FUNCTIONS							
RED LED	GREEN LED	STATUS ACTION					
Off	On	Power	Ready to charge battery pack.				
Off	Flashing	Charging	Battery is being charged.				
Off	On	Fully charged	Disconnect charger from power supply and				
			remove battery pack from charger.				
Flashing	Off	Hot battery	The charger will recover to charge when the				
			temperature drops to 104° F (40°C).				
On	Off	Battery defective	Battery pack or charger is defective				

Caution

Fully charge battery before first use.

Avoid short periods of charging. Only charge battery pack when it completely runs out.

In order to extend the battery life, fully charge it after each use and ensure that it is charged every three months. Avoid storing batteries in cold places as low temperatures may cause them to fail.

NOTE: Before using the tool, read the instruction book carefully.

WARNING: Do not let your acquaintance with the tool allow you to get injured.

Adjusting the chain tension (Fig.1-3)

Remove the battery pack before you do any work on the chain saw.

Loosen the clamping screw guide rail/sprocket cover with one turn counterclockwise.

To increase the chain tension, turn the chain tension adjustment screw clockwise using the combination spanner. Check the chain tension regularly. To reduce the chain tension, turn the chain tensioning screw counterclockwise and check the chain tension frequently.

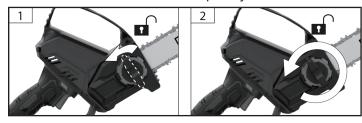
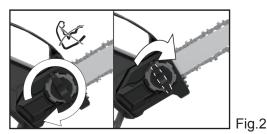


Fig.1

Then, tighten the clamping screw guide rail/sprocket cover clockwise. The chain tension is correctly adjusted when the distance between the teeth of the chain and the bar is approx. 2-3 mm. Pull the chain downwards (away from the bar) in the middle on the lower side of the bar, and then measure the gap between the bar and the chain.



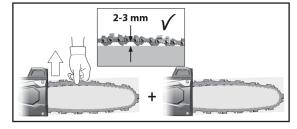


Fig.3

Note: Do not over-tension the chain - excess tension will cause excessive wear and will reduce the life of the chain and could damage the bar. New chains could stretch and loosen during initial use. Remove battery pack and check chain tension frequently during the first two hours of use. The temperature of the chain increases during normal operation causing the chain to stretch. Check the chain tension frequently and adjust as required. A chain tensioned while warm may be too tight upon cooling. Make sure that the chain tension is correctly adjusted as specified in these instructions.

Adding the chain lubricating oil (Fig.4)

Warning! Never work without chain lubricant. If the saw chain is running without lubricant, the guide bar and the saw chain can be damaged. Oil after approx. five sawing operations.



Fig.4

To attach the battery pack (Fig.5)

Before starting the mini chain saw, you should install the battery pack in the mini chain saw.

WARNING! To avoid the possibility of accidental starting, always take care not to activate the trigger switch when you are attaching the battery pack or performing other adjustments to the tool.

Align the raised rib on the battery pack with the grooves on the bottom of the tool. and then attach the battery pack to the chain saw.

NOTICE: When attaching the battery pack to the tool, make sure that the raised platform on the pack aligns with the grooves on the bottom of the tool and that the latches snap properly into place. Improper assembly of the battery pack can cause damage to internal components.



Fig.5

Operate (Fig.6-7)

WARNING! Make sure the saw chain is not yet applied to the cut and that no other objects are touched. Risk of injury!

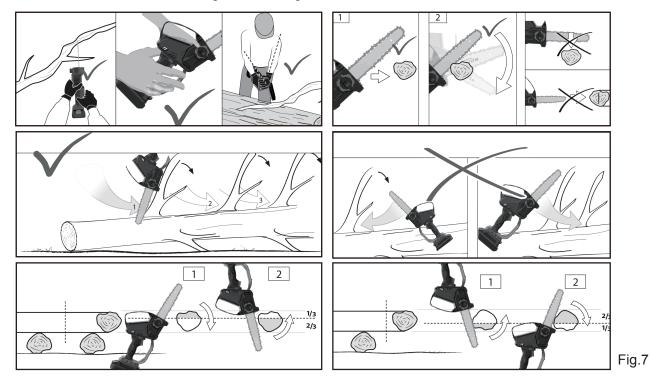
Press the lock switch and then press the on/off switch trigger to start the machine(Fig.6).



Fig.6

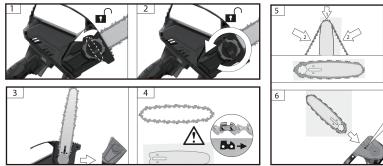
Caution: In an emergency, stop the machine by releasing the on/off switch trigger.

Always hold the chain saw with your right hand on the rear handle and your left hand on the front handle. Grip both handles with the thumbs and fingers encircling the handles.



Replacing the guide bar and saw chain (Fig.8) Wear protective gloves.

- 1) Remove the battery.
- 2) Remove the sprocket cover.
- 3) Remove the old chain with the guide bar
- 4) Put the new chain in the correct direction onto the bar and make sure that the drive links are aligned in the bar groove.
- 5) Attach the bar to the chain saw and loop the chain around the drive sprocket.
- 6) Put on the sprocket cover and screw the guide rail/ sprocket cover clamping screw back on (hand-tight).
- 7) Tighten the guide rail/chain disc cover clamping screw only hand-tight. The guide bar must be able to move freely for adjusting the chain tension.
- 8) Adjust the chain tension using the combination spanner. See section Adjusting chain tension.
- 9) Then tighten the clamping screw guide rail/ sprocket cover clockwise again.



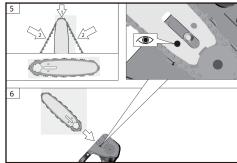


Fig.8

Warning! A dull or improperly sharpened chain can cause excessive motor speed during cutting which may result in severe motor damage.

Warning! Improper chain sharpening increases the potential of kickback.

Warning! Failure to replace or repair a damaged chain can cause serious injury.

Warning! The saw chain is sharp. Always wear protective gloves when performing maintenance to the chain.

MAINTENANCE

Maintenance

Remove the battery pack before starting any adjustment, cleaning and maintenance work on the device.

Carry out a visual inspection before switching the appliance on.

The appliance must not be used if damaged or safety equipment is defective. Replace any worn-out and damaged parts.

If the device is defective, the repair has to be made exclusively by the customer service. Use only original accessories and original spare parts. Components for which there are no instructions for exchanging should be replaced by the manufacturer only.

Only a regularly maintained and treated appliance can serve as a satisfactory aid. Insufficient maintenance and care can lead to unforeseen accidents and injuries.

Warning! Servicing requires extreme care and knowledge and should be performed only be a qualified service technician. For service, we suggest you bring the machine to your nearest service station for repair. When servicing, use only identical replacement parts.

Warning! Remove the battery before adjustment, maintenance or cleaning. Failure to do so could result in serious personal injury. You may only make adjustments or repairs described in this manual.

Consequences of improper maintenance may cause the chain brake and other safety features to not function correctly, thus increasing the potential for serious injury.

Follow instructions for lubricating and chain tension checking and adjustment.

Check all nuts, bolts, and screws at frequent intervals for security to ensure the machine is in safe working condition.

Transportation and Storage(Fig.9)

Always lightly oil the chain when storing to prevent rust. Always empty the oil tank when storing to prevent leakage. Stop the machine, remove the battery, and allow it to cool before storing or transporting.

Clean all foreign materials from the machine. Store the machine in a cool, dry, and well-ventilated place that is inaccessible to children. Keep away from corrosive agents, such as garden chemicals and deicing salts. Do not store outdoors. Fit the guide bar cover before storing the machine or during transportation.

For transportation in vehicles, secure the machine against movement or falling to prevent injury to persons or damage to the machine.

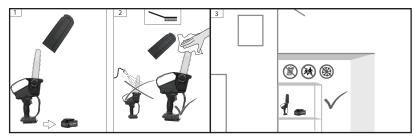
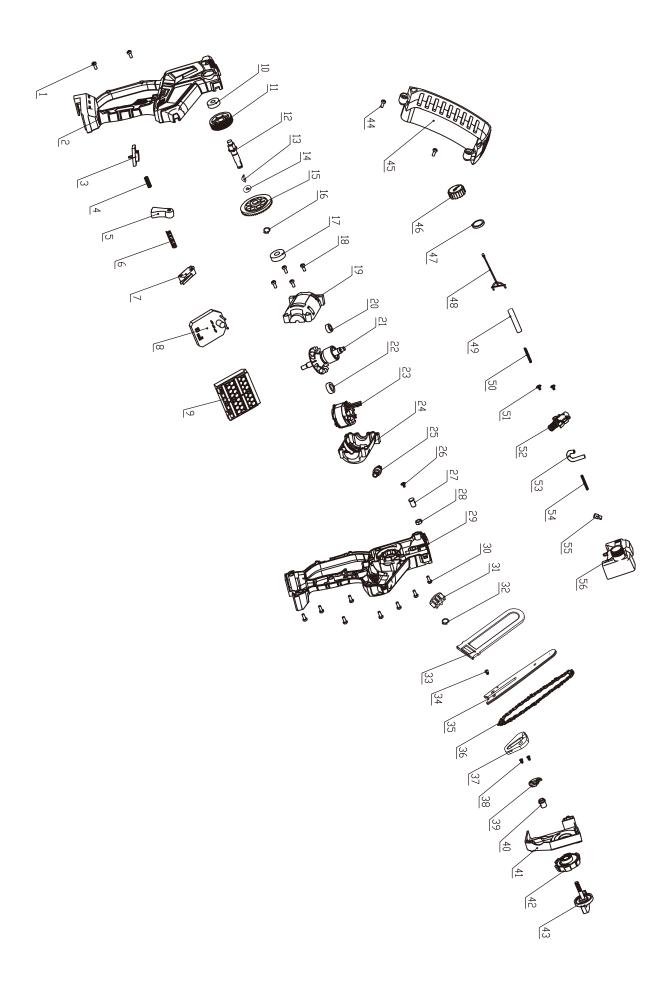


Fig.9

PARTS LIST

No	Description	Qty	No	Description	Qty
1	Self-Tapping Screw		29	Right Housing	1
2	Left Housing		30	Self-Tapping Screw	8
3	Anti-Self-Locking Button		31	Sprocket	1
4	1 Spring		32	Shaft Ring	1
5	Trigger Switch		33	Guide Plate Cover	1
6	Spring		34	Guide Plate Screws	1
7	Micro Switch		35	Guide Bar	1
8	Controller		36	Chain	1
9	Pin Socket		37	Push Block	1
10	6800 Bearing	1	38	Self-Tapping Screw	2
11	Worm		39	Cam	1
12	Output Shaft		40	Adjust The Lining	1
13	Half Circle Key		41	Small End Cap	1
14	Washer		42	Adjusting Knob	1
15	Gear	1	43	Tightening Knob	1
16	Shaft Retaining Ring	1	44	Self-Tapping Screw	2
17	6000 Bearing		45	Protective Plate	1
18	Self-Tapping Screw		46	Can Top	1
19	Motor Bracket		47	Fuel Tank Cap Sealing Ring	1
20	Deep Groove Ball Bearing	1	48	Anti Loss Hook	1
21	Rotor	1	49	Oil Outlet Pipe	1
22	Deep Groove Ball Bearing	1	50	Spring	1
23	Stator		51	Self-Tapping Screw	2
24	Motor Lower Bracket		52	Oil Pump Assembly	1
25	Gear		53	Oil Outlet Pipe	1
26	Flange Self-Tapping Screws		54	Spring	1
27	Pin		55	Valve	1
28	Nut M6	1	56	Oil Tank	1







GX COMMERCIAL LLC 4301 S VALLEY VIEW BLVD. STE 10 AND 11 LAS VEGAS, NV 89103

EXTENDED 5-YR GAS POWERED LIMITED WARRANTY.

Engines: Rato engines are 1 year warranty, a 4-year OEM commercial extended warranty is included at no extra cost. GX Commercial LLC will provide parts or replace Rato engines at our choice for **5 years from purchase date** at no cost to the original owner. The warranty is not transferable.

All other engines including Briggs and Stratton, Kohler, Ducar, Vanguard are covered under their original OEM warranty.

Chassis: GX Commercial LLC will provide parts and labor within the first 30 days at no cost to the original purchaser of gas equipment. After 30 days Gx commercial LLC will provide to the original purchaser for 5 years replacement parts only for defective chassis components.

Not Covered under this warranty for Gas powered equipment:

Tires, Cutting Blades, Cutting Teeth, Cutting chains, Anvils, Belts, Hardware, 12V Batteries, damage, misuse, accessories, shipping damage including minor scratch and dent.

EXTENDED 2-YR ELECTRIC POWERED LIMITED WARRANTY.

Electric Equipment: Tools come with a 1-year warranty, plus a 1-year GX Commercial LLC extended warranty at no extra cost. GX Commercial LLC will provide parts or replace tools of our choice for **2 years from purchase date** at no cost to the original owner. The warranty is not transferable.

Not Covered under this warranty for Electric powered equipment and tools:

Labor, Tires, Cutting Blades, Cutting Teeth, Cutting chains, Bars, Anvils, Belts, Hardware, Batteries, chargers, accessories, damage, misuse, shipping damage including minor scratch and dent.

SUPPORT INFORMATION

PHONE: 725-274-6171 ext #1

EMAIL: CustomerService@BigBearPower.com

GX Commercial LLC Corporate Offices 4301 S Valley View Blvd STE 10-11 Las Vegas, NV 89103

Hours: 8-4 PST





GX COMMERCIAL LLC 4301 S VALLEY VIEW BLVD. STE 10 AND 11 LAS VEGAS, NV 89103