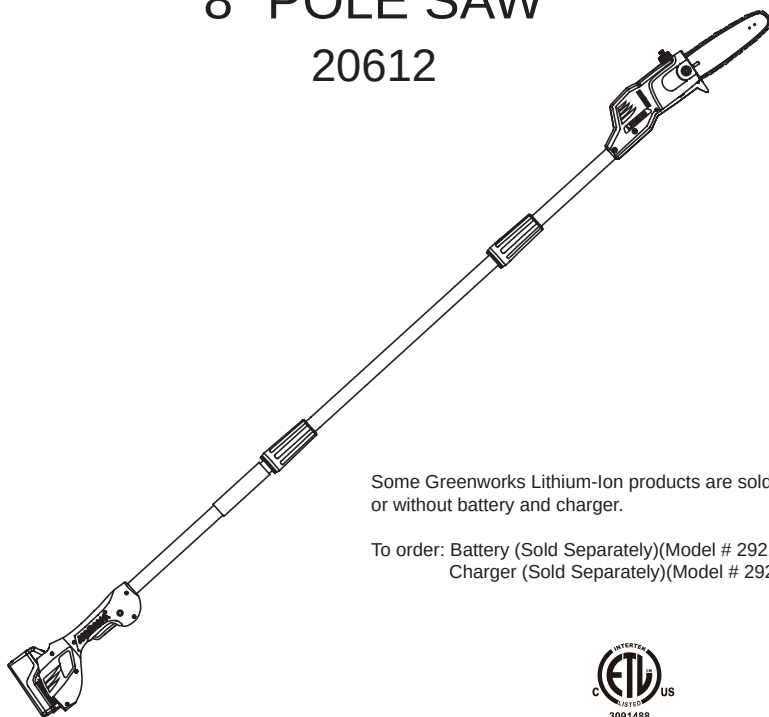



greenworks™

20V LITHIUM-ION CORDLESS 8" POLE SAW 20612



Some Greenworks Lithium-Ion products are sold with or without battery and charger.

To order: Battery (Sold Separately)(Model # 29212)
Charger (Sold Separately)(Model # 29222)



Owner's Manual

TOLL-FREE HELPLINE: 1-888-90WORKS (888.909.6757)

 Read all safety rules and instructions carefully before operating this tool.

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PRODUCT SPECIFICATIONS

20 V LITHIUM-ION 8" POLE SAW

Type..... Cordless, battery-powered

Motor 20 V

Bar length 8" (20.3 cm)

Charge time 4-1/2 hours

Chain pitch 3/8" (9.5 mm)

Chain type 8" chain 91PJ033X (Oregon)

Guide bar type..... 8" bar 080SDEA318 (Oregon)

Weight 7.96 lbs (3.6 kg)



SAFETY INFORMATION

IMPORTANT SAFETY INSTRUCTIONS

IMPORTANT

READ AND UNDERSTAND ALL INSTRUCTIONS. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

- For safe operation, read and understand all instructions before using this product. Be familiar with all controls and proper use of the machine. Follow all safety instructions. Failure to follow all safety instructions listed below, can result in serious personal injury.
- Do not allow children or untrained individuals to use this unit.
- Thoroughly inspect the area where the equipment is to be used and remove all foreign objects.
- Wear safety glasses or goggles that are marked as complying with ANSI Z87.1 standard as well as head protection when operating this product.
- Dress properly. Wear heavy long pants, boots, and gloves. Do not wear loose fitting clothing, short pants, or go barefoot. Do not wear jewelry of any kind.
- Secure long hair above shoulder level to prevent entanglement in moving parts.
- Keep all bystanders, children, and pets at least 50' (15 m) away.
- Stay Alert — Watch what you are doing; use common sense. Do not operate this unit when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- Do not operate in poor lighting.
- Keep firm footing and balance. Do not overreach. Overreaching can result in loss of balance or exposure to hot surfaces.
- Keep all parts of your body away from any moving part.
- Inspect the unit before each use for loose fasteners, etc. Replace any damaged parts before use.
- When not in use, product should be stored indoors in a dry, locked up place—out of the reach of children.
- Use only original manufacturer's replacement parts. Failure to do so may cause poor performance, possible injury, and will void your warranty.
- Do not, under any circumstance, use any attachment or accessory on this product which was not provided with the product or identified as appropriate for use with this product in the operator's manual.
- Avoid dangerous environments. Do not use the product in damp or wet locations. Do not use in rain.
- Use the right appliance. Do not use the product for any job except that for which it is intended.
- Do not use on steps, a ladder, or unstable support. Stable footing on a solid surface enables better control of the product in unexpected situations.
- Do not force the product. It will do the job better and with less likelihood of a risk of injury at the rate for which it was designed.

DANGER! - Keep hands away from cutting area. Keep both hands on handles when power is on.

SAFETY INFORMATION

CAUTION! - Blade coasts after being turned off.

SPECIFIC SAFETY RULES

- Kickback is a dangerous reaction that can lead to serious injury. Kickback may occur when the moving chain contacts an object at the upper portion of the tip of the guide bar or when the wood closes in and pinches the chain in the cut. Contact at the upper portion of the tip of the guide bar can cause the chain to dig into the object and stop the chain for an instant. The result is a lightning-fast, reverse reaction which kicks the guide bar up and back toward the operator. If the chain is pinched along the top of the guide bar, the guide bar can be driven rapidly back toward the operator, which can cause loss of control and may result in serious injury. Do not rely exclusively upon the safety devices built into the product. With a basic understanding of kickback, you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
- Use pole saw for cutting wood only. Do not use for cutting non-wood items.
- Make sure that the area in which you are cutting is free from obstructions. Do not let the nose of the guide bar contact a log, branch, fence, or any other obstruction while you are operating the unit. Have a planned retreat path.
- Do not grasp the exposed cutting blades or cutting edges when picking up or holding the product.
- Cut only when visibility and light are adequate for you to see clearly.
- To protect yourself from electrocution, do not operate within 50' (15 m) of overhead electrical lines.
- Before starting the motor, make sure the chain is not contacting any object. To protect yourself from falling branches, do not stand directly under the branch or limb being cut. This unit should not be held at an angle over 60° from ground level.
- Turn off the motor and make sure the cutting attachment has stopped before setting the unit down.
- Follow the sharpening and maintenance instructions for the saw chain.
- Use only the replacement guide bars and low kickback chains specified for the unit.
- Do not operate the saw with one hand! Serious injury to the operator, helpers, bystanders, or any combination of these persons may result from one hand operation. This saw is intended for two-handed use.
- Use extreme caution when cutting small sized brush and saplings because slender material may catch the saw chain and be whipped toward you or pull you off balance.
- When cutting a limb that is under tension, be alert for spring back so that you will not be struck when tension in wood fibers are released.
- To avoid accidental starting, never carry plugged in product with finger on switch. Be sure switch is off when plugging in.
- Maintain product 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 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.

SAFETY INFORMATION

- Check for damaged parts. Before further use of the product, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service centre unless indicated elsewhere in this manual.
- Remove the battery from pole saw when not in use, before servicing, and when changing accessories.
- Service on the product must be performed by qualified repair personnel only. Service or maintenance performed by unqualified personnel could result in injury to the user or damage to the product.
- Save these instructions. Refer to them frequently and use them to instruct others who may use this product. If you loan someone this product, loan them these instructions also to prevent misuse of the product and possible injury.

SAVE THESE INSTRUCTIONS

SYMBOLS

Some of the following symbols may be used on this product. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the product better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
hrs	Hours	Time
n_0	No Load Speed	Rational speed, at no load
	Class II Construction	Double-insulated construction
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Lithium-Ion Battery Recycling	Designates that this tool is in compliance with Lithium-Ion battery recycling program requirements
	Safety Alert Symbol	Precautions that involve your safety.
	Read the Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye and Head Protection	Wear eye and head protection when operating this equipment.
	Gloves	Wear non-slip, heavy-duty protective gloves when handling the pole saw and the blade.
	Safety Footwear	Wear non-slip safety footwear when using this equipment.
	Kickback	DANGER! Beware of kickback.
	Risk of Electrocution	DANGER! Risk of electrocution!
	Electric Shock	Failure to use in dry conditions and to observe safe practices can result in electric shock.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	Keep Bystanders Away	Keep all bystanders at least 50' (15 m) away.

SYMBOLS

The following signal words and meanings are intended to explain the levels of risk associated with this product.

SYMBOL	SIGNAL	MEANING
	DANGER	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.
	CAUTION	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

SERVICE

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the product to your nearest **AUTHORIZED SERVICE CENTER** for repair. When servicing, use only identical replacement parts.

WARNING

To avoid serious personal injury, do not attempt to use this product until you have read this Owner's Manual thoroughly and understand it completely. If you do not understand the warnings and instructions in this Owner's Manual, do not use this product. Call the Toll-free Helpline (1-888-909-6757) for assistance.

WARNING

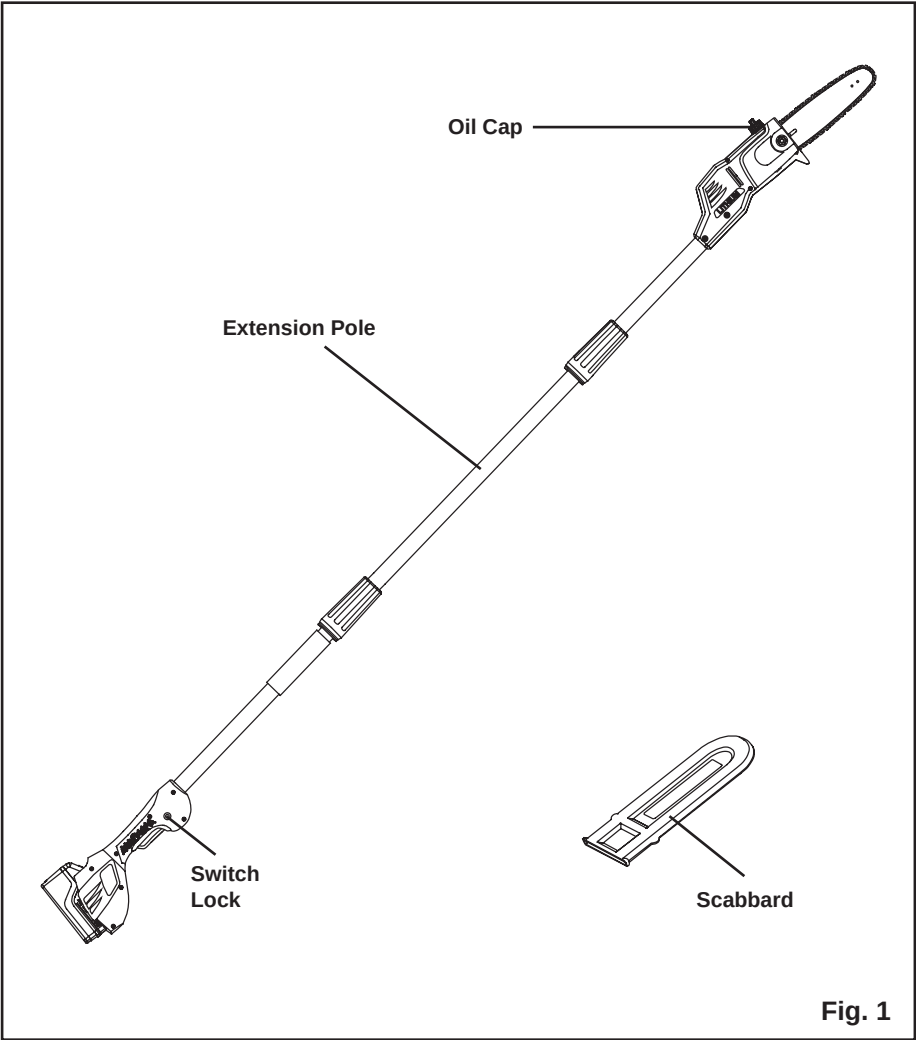


The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and, when needed, a full face shield. We recommend Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.

SAVE THESE INSTRUCTIONS

KNOW YOUR POLE SAW

Read this operator's manual and safety rules before operating your pole saw. Compare the illustration in Figure 1 to your lawn mower in order to familiarize yourself with the location of various controls and adjustments. Save this manual for future reference.



ASSEMBLY INSTRUCTIONS

UNPACKING

This product has been shipped completely assembled.

- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.
- If any parts are damaged or missing, please call 1-888-909-6757 for assistance.

PACKING LIST

- Pole saw
- Scabbard
- Owner's Manual

WARNING

If any parts are damaged or missing, do not operate this product until the parts are replaced. Failure to heed this warning could result in serious personal injury.

WARNING

Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

WARNING

Do not fit on the battery until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

ASSEMBLY INSTRUCTIONS

⚠ WARNING

Do not allow familiarity with this product to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

⚠ WARNING

Always wear safety goggles or safety glasses with side shields when operating power tools. Failure to do so could result in objects being thrown into your eyes, resulting in possible serious injury.

⚠ WARNING

Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or accessories not recommended can result in serious personal injury.

CONNECTING THE POLES (See Figure 2)

Before using the pole saw, assembly is required. When removed from the box, there are the three poles as shown above.

- Remove packaging material from cord and discard.
- Insert the intermediate pole into the handle pole and slide together. The tubes are egg-shaped and will only install one way.
- Lower the collar on the intermediate pole to the threaded base on the handle pole and rotate clockwise to secure.
- Repeat this process to attach the intermediate pole to the powerhead pole.

⚠ WARNING

Failure to lock powerhead pole as directed above could result in serious injury or death.

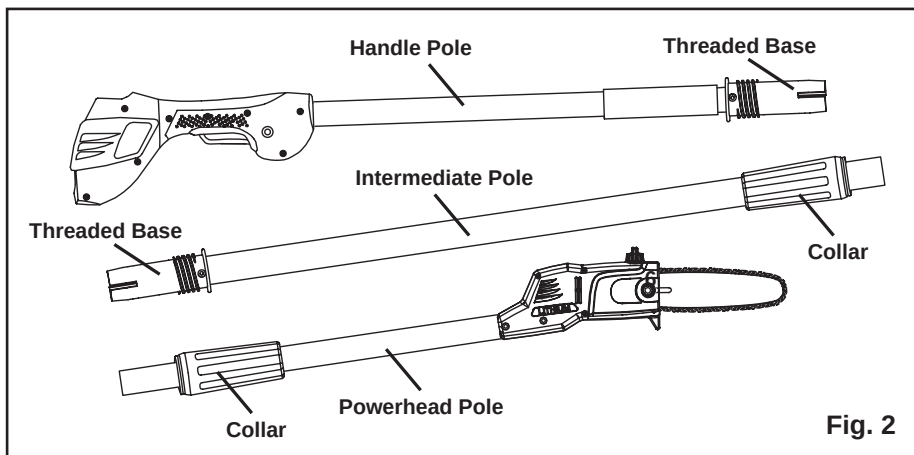


Fig. 2

OPERATING YOUR POLE SAW

WARNING

Do not allow familiarity with this product to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.

WARNING

Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or accessories not recommended can result in serious personal injury.

WARNING

Always wear safety goggles or safety glasses with side shields when operating power tools. Failure to do so could result in objects being thrown into your eyes, resulting in possible serious injury.

APPLICATIONS

You may use this product for the purposes listed below:

- Limbing
- Pruning

OPERATING YOUR POLE SAW

ADDING BAR AND CHAIN LUBRICANT (See Figure 3)

Use GREENWORKS Bar and Chain Lubricant. It is designed for chains and chain oilers, and is formulated to perform over a wide temperature range with no dilution required.

NOTE: Pole saw comes from the factory with no bar and chain oil added. Level should also be checked after every 20 minutes of use and refilled as needed.

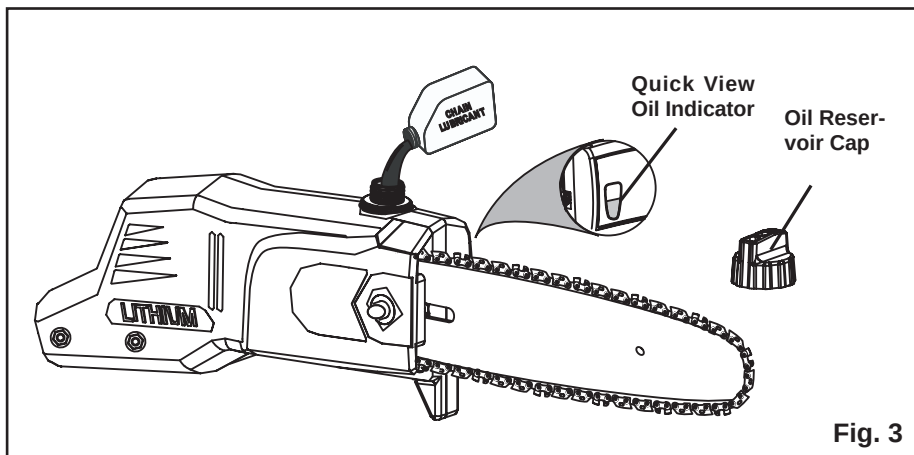
- Remove oil cap.
- Carefully pour the bar and chain oil into the tank.
- Wipe off excess oil.
- Check and fill the oil tank when there is no oil in the oil tank.
- Repeat as needed.

NOTE: Do not use dirty, used or otherwise contaminated oils. Damage may occur to the bar or chain.

NOTE: It is normal for oil to seep from the saw when not in use. To prevent seepage, empty the oil tank after each use then run for one minute. When storing the unit for a long period of time (three months or longer) be sure the chain is lightly lubricated; this will prevent rust on the chain and bar sprocket.

A I M P O R T A N T

To preserve natural resources, please recycle or dispose of oil properly. Consult your local waste authority for information regarding available recycling and/disposal options.



OPERATING YOUR POLE SAW

BATTERY PACK *(See Figure 4)*

IMPORTANT

The battery pack is not charged when it is purchased. Before using the pole saw for the first time, place the battery pack in the battery charger and charge it fully. Be sure to read all safety precautions, and follow the instructions in the section entitled Charging Procedure. With regular use, the battery will require shorter charging times. When storing the pole saw for a prolonged period of time, remove the battery. When the pole saw is going to be used again, charge the battery pack for at least a full charging period. This product has no memory effect.

REMOVING THE BATTERY PACK

- Press the latch button (1) on the battery pack down and hold.
 - Grasp the pole saw (2) firmly, and pull the battery pack out of the handle.
-

Note: The battery pack fits into the handle snugly in order to prevent accidental dislodging. It may require a strong pull to remove it.

OPERATING YOUR POLE SAW

INSTALLING THE BATTERY PACK

- Align the tongue (3) of the battery pack with the cavity.
- Grasp the pole saw (2) firmly.
- Push the battery pack into the handle until the latch locks into place.
- Do not use force when inserting the battery pack. It should slide into position and “click”.

⚠ WARNING

Follow these instructions in order to avoid injury and to reduce the risk of electric shock or fire:

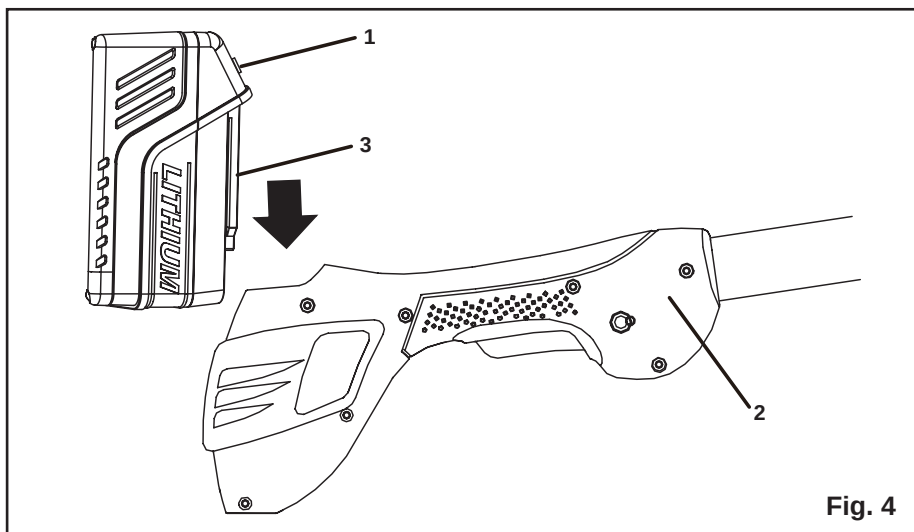
- Replace the battery pack or the charger immediately if the battery case or charger cord is damaged.
 - Verify that the switch is in the OFF position before inserting or removing the battery pack.
 - Verify that the battery pack is removed and the switch is in the OFF position before inspecting, adjusting, or performing maintenance on any part of the pole saw.
 - Read, understand, and follow the instructions contained in the section entitled Charging Procedure.
-

⚠ IMPORTANT

This Lithium-ion battery pack is equipped with an internal circuit breaker which will automatically shut off the power to the tool and then reset itself once cooled.

Follow these steps if an overload occurs while under heavy use:

1. Release the power switch and restart tool by depressing switch.
 2. The battery may need to be removed for approximately 1 minute, allowed to cool and then reinstalled for use.
-



OPERATING YOUR POLE SAW

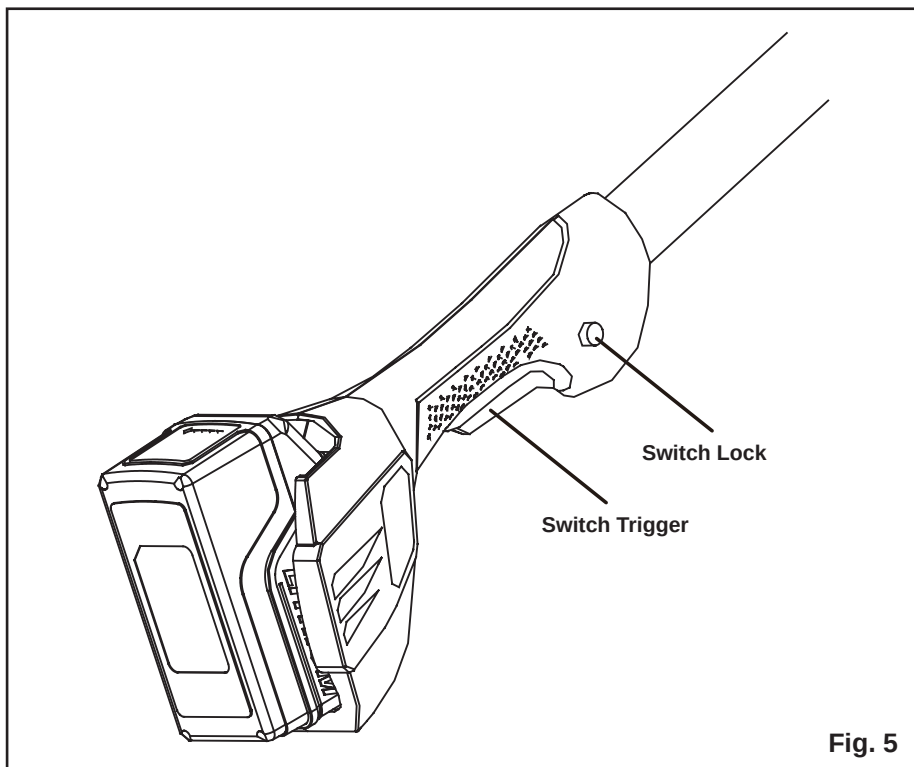
STARTING AND STOPPING *(See Figure 5)*

TO START THE MOTOR:

- Fit the battery pack into the pole saw.
- Press and hold the switch lock. This makes the switch trigger operational.
- Press and hold the switch trigger, release the switch lock and continue to squeeze the switch trigger for continued operation.

TO STOP THE MOTOR:

- Release the switch trigger.



OPERATING YOUR POLE SAW

ADJUSTING TELESCOPING POLE (See Figure 6)

- Remove the battery pack from the pole saw.
- Rotate the collar counterclockwise to loosen.
- Push poles towards each other to shorten the pole or pull away from each other to lengthen the pole.

NOTE: Extend the pole only to the length required to reach the limb being cut. Do not extend the handle above waist height.

- When the desired length is achieved, rotate the collar clockwise to secure.

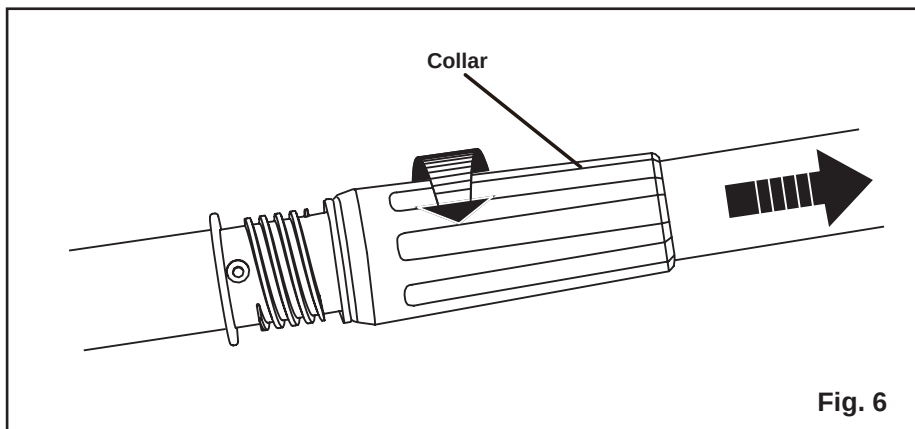
NOTE: Adjust hand placement on the shaft of the pole saw to keep proper balance. Do not attempt to use the pole saw at a length which does not allow you to achieve proper footing and balance at all times.

ASSEMBLING THE POLES (See Figure 6)

- Remove the battery pack from the pole saw.
- Insert handle pole into intermediate pole or powerhead pole firmly.
- Turn the collar clockwise to lock the poles together.

NOTE: Assemble poles only to the length required to reach the limb being cut. Do not extend the handle above waist height.

NOTE: Adjust hand placement on the shaft of the pole saw to keep proper balance. Do not attempt to use the pole saw at a length which does not allow you to achieve proper footing and balance at all times.



OPERATING YOUR POLE SAW

PREPARATION FOR CUTTING (See Figure 7-8)

- Wear non-slip gloves for maximum grip and protection.
- Maintain a proper grip on the unit whenever the motor is running. Use your right hand to firmly grip the rear handle while your left hand has a firm grip on the pole shaft.
- Hold unit firmly with both hands. Always keep your left hand on the pole shaft and your right hand on the rear handle, so your body is to the left of the chain line. Never use a left-handed (cross-handed) grip, or any stance that places your body or arm across the chain line.
- Never stand directly under the limb you are cutting.
- Be certain the collars are fully tightened before operating equipment; check them periodically for tightness during use to avoid serious injury.

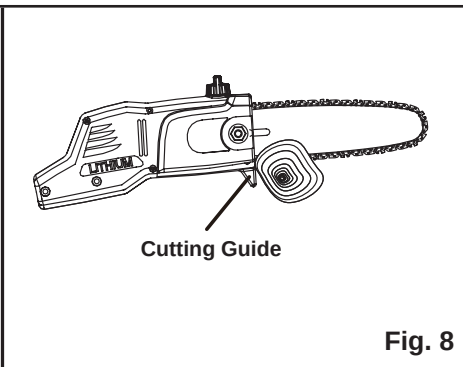
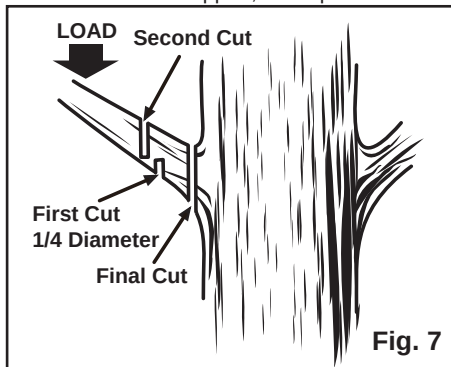
BASIC CUTTING PROCEDURE

Follow the steps below to prevent damage to tree or shrub bark. Do not use a back-and-forth sawing motion.

- Make a shallow first cut (1/4 of limb diameter) on the underside of the limb close to the main limb or trunk.
- Make a second cut from the top side of the limb outboard from the first cut. Continue the cut through the limb until the limb separates from the tree. Be prepared to balance the weight of the tool when the limb falls.
- Make a final cut close to trunk.

NOTE: For second and final cuts (from top of limb or branch), hold front cutting guide against the limb being cut. This will help steady the limb and make it easier to cut. Allow chain to cut for you; exert only light downward pressure. If you force the cut, damage to the bar, chain, or motor can result.

- Release the trigger as soon as the cut is completed. Failure to follow proper cutting procedures will result in the bar and chain binding and becoming pinched or trapped in the limb. If this should happen:
- Stop the motor and remove the battery from the pole saw.
- If the limb can be reached from the ground, lift the limb while holding the saw. This should release the “pinch” and free the saw.
- If the saw is still trapped, call a professional for assistance.



OPERATING YOUR POLE SAW

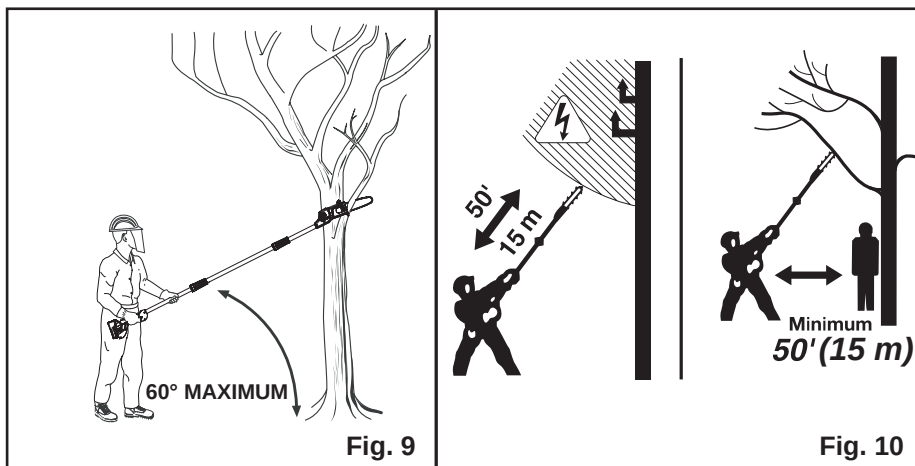
LIMBING AND PRUNING (See Figure 9-10)

This unit is designed for trimming small branches and limbs up to 6" (15.2 cm) in diameter. For best results, observe the following precautions.

- Plan the cut carefully. Be aware of the direction in which the branch will fall.
- Branches may fall in unexpected directions. Do not stand directly under the branch being cut.
- The most typical cutting application is to position the unit at an angle of 60° or less, depending on the specific situation, as shown. As the angle of the pole saw shaft to ground increases, the difficulty of making the first cut (from the underside of limb) increases.
- Remove long branches in several stages.
- Cut lower branches first to allow the top branches more room to fall.
- Work slowly, keeping both hands on the saw with a firm grip. Maintain secure footing and balance.
- Keep the tree between you and the chain while limbing. Cut from side of tree opposite branch you are cutting.
- Do not cut from a ladder; this is extremely dangerous. Leave this operation for professionals.
- Do not make the flush cut next to the main limb or trunk until you have cut off the limb further out to reduce the weight.

Following proper cutting procedures will prevent stripping the bark from the main member.

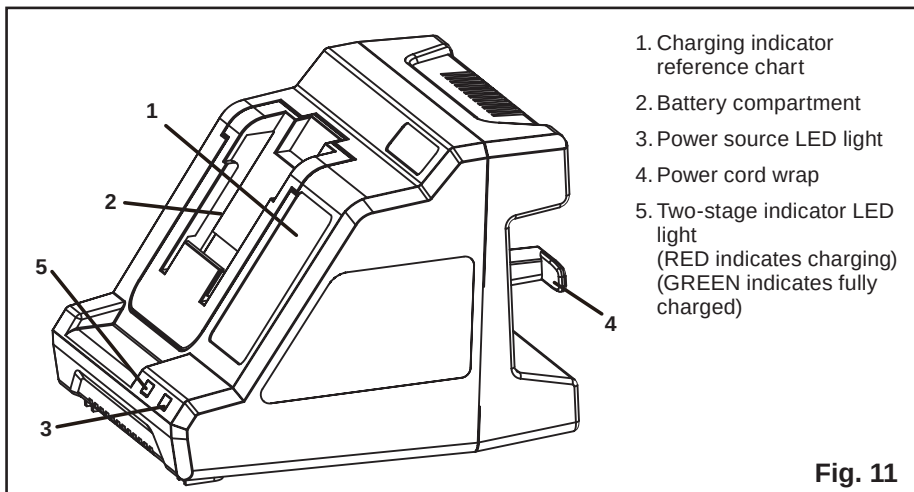
- Do not use the pole saw for felling or bucking.
- To prevent electrocution, do not operate within 50' (15 m) of overhead electrical lines.
- Keep bystanders at least 50' (15 m) away.



BATTERY & CHARGER

BECOME FAMILIAR WITH THE CHARGER (See Figure 11)

Before attempting to use this charger, become familiar with all of its operating features and safety requirements.



CHARGER SPECIFICATIONS:

Charger Input: 120 V 60 Hz AC only

Charger output max.: 21 V

Charger Weight 1.54 lb (0.7 kg)

Optimum Charging Temperature: 32° to 104°F (0° to 40°C)

BATTERY & CHARGER

BATTERY CHARGING PROCEDURE (See Figure 12)

⚠ WARNING

If any part of the charger is missing or damaged, do not operate it until the part is repaired or replaced. Failure to heed this warning could result in possible serious injury.

NOTE: The battery is not shipped fully charged. It is recommended to fully charge before first use to ensure that maximum run time can be achieved. This lithium-ion battery will not develop a memory and may be charged at any time. A fully discharged battery pack will require approximately 4.5 hours to fully charge.

- Plug the charger into an AC wall outlet/receptacle.
- The RED LED power indicator (1) will illuminate.
- Insert the battery into the charger. Verify that the battery is fully inserted into the charger.
- The RED LED indicator (3) will illuminate indicating that the battery is in CHARGE MODE.
- Once the battery has reached a full charge level, the LED indicator (3) will switch from RED to GREEN.
- The battery may be removed or stored in the charger once it is fully charged; however, it is recommended to disconnect the plug from the wall outlet/receptacle.

NOTE: Lithium-ion batteries while in use will continue to provide full power without power fade unlike typical batteries; when the battery is fully discharged the battery circuitry will immediately cut power to the tool and require immediate charging.

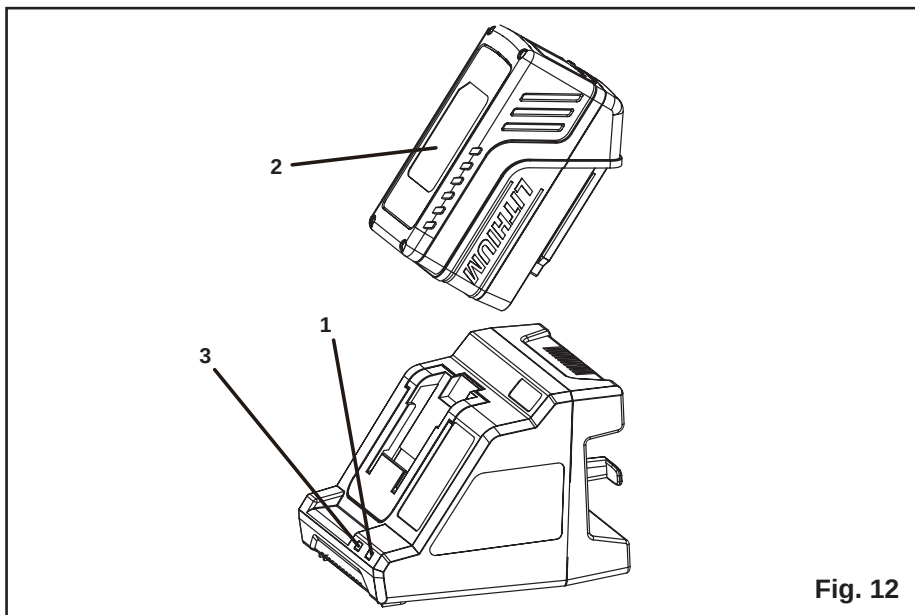
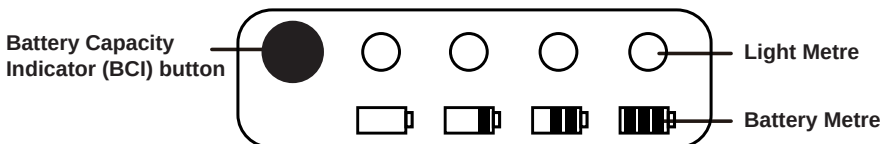


Fig. 12

BATTERY & CHARGER

BATTERY INSTRUCTIONS

Press the Battery Capacity Indicator (BCI) button. The lights will illuminate according to the battery's current power level. See chart below:



Lights	Capacity
4 Green Lights	The battery is at full capacity
3 Green Lights	The battery is at 70% capacity
2 Green Lights	The battery is at 45% capacity
1 Green Light	The battery is at 10% capacity and requires charging soon
Lights go out	The battery is under 10% capacity and requires charging immediately

SAFETY NOTES AND PRECAUTIONS

- Do not disassemble the battery.
- Keep away from children.
- Do not expose the battery to water or salt water. You should place the battery in a cool and dry environment.
- Do not place the battery in high-temperature locations, such as fire, heater, etc.
- Do not reverse the positive terminal and the negative terminal of the battery.
- Do not connect the positive terminal and the negative terminal of the battery to each other with any metal objects.
- Do not knock or strike the battery, nor step on it.
- Do not solder directly onto the battery and pierce the battery with nails or other edge tools.
- In the event that the battery leaks and the fluid gets into your eyes, do not rub the eyes. Rinse well with water. Immediately discontinue use of the battery if it emits an unusual smell, feels hot, changes color, changes shape, or appears abnormal in any other way.

WARNING

To reduce risk of injury to persons:

- Do not recharge batteries in a confined or unvented area; and
- Do not smoke, strike a match, or cause a spark in the vicinity of the battery during charging.
- Do not charge battery in rain, or in wet location.

BATTERY & CHARGER

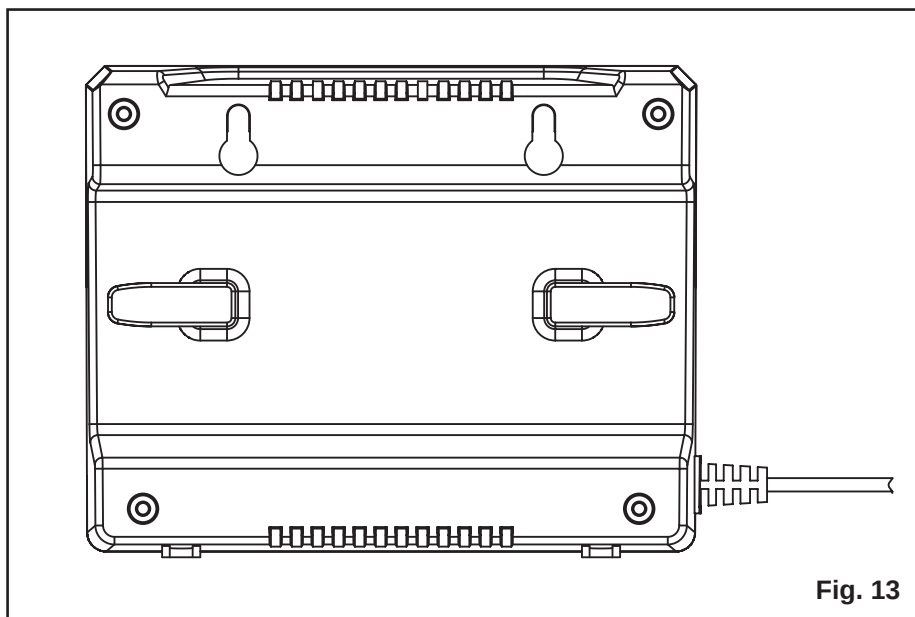
MOUNTING THE CHARGER *(See Figure 13)*

WALL-MOUNTABLE

The charger features a key-hole hanging feature for convenient storage. Screws should be installed so that the centre distance is 3 5/32" (8 cm). Use proper wall fasteners to accommodate the combined weight of the charger and the battery pack (approximately 3 1/2 lb [1.6 kg]).

CORD WRAP

The charger is equipped with a cord wrap that is located at the rear of the unit. Use this feature to minimize workspace clutter and hazards.



MAINTENANCE

WARNING

When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.

WARNING

Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If operation is dusty, also wear a dust mask.

WARNING

Before inspecting, cleaning or servicing the unit, stop the motor, wait for all moving parts to stop, and remove the battery. Failure to follow these instructions can result in serious personal injury or property damage.

GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

WARNING

Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken, or destroy plastic, which may result in serious personal injury.

All pole saw service, other than the items listed in the instruction manual maintenance instructions, should be performed by competent pole saw service personnel. (For example, if improper tool is used to hold the flywheel in order to remove the clutch, structural damage to the flywheel could occur and subsequently could cause the flywheel to burst).

MAINTENANCE

CHAIN TENSION (See Figure 14-19)

⚠ WARNING

To avoid possible serious injury, never touch or adjust the chain while the motor is running. The saw chain is very sharp; always wear protective gloves when performing maintenance to the chain.

- Stop the motor and disconnect from power supply before setting the chain tension. Make sure the guide bar nut is loose enough to finger tighten, turn the chain tensioning screw (see figure 18) clockwise to tension the chain. Refer to Replacing the Bar and chain for additional information.

NOTE: A cold chain is correctly tensioned when there is no slack on the underside of the guide bar, the chain is snug, but it can be turned by hand without binding.

- Chain must be retensioned whenever the flats on the drive links hang out of the bar groove as shown in Fig. 14.
- During normal operation, the temperature of the chain will increase. The drive links of a correctly tensioned warm chain will hang approximately 1/16" (1.3 mm) out of the bar groove, as shown in Fig. 15.

NOTE: New chain tends to stretch; check chain tension frequently and tension as required.

⚠ CAUTION

Chain tensioned while warm, may be too tight upon cooling. Check the "cold tension" before next use.

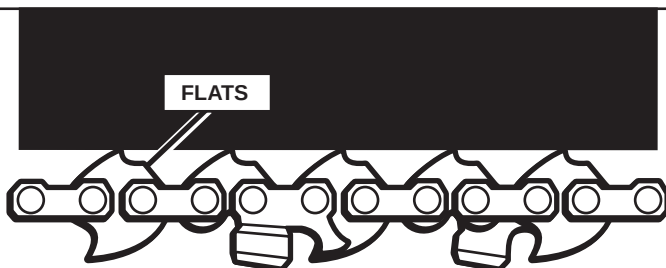


Fig. 14

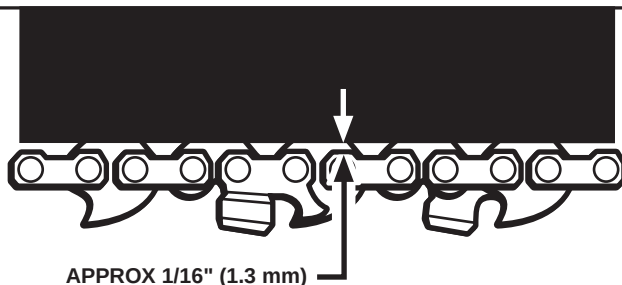


Fig. 15

MAINTENANCE

REPLACING THE BAR AND CHAIN (See Figure 16-19)

⚠ WARNING

To avoid possible serious injury, stop the motor and remove the battery from the pole saw before replacing the bar, chain, or performing any maintenance operation.

- Remove the lock bolt and drivecase cover.
- The bar contains a bar stud slot that fits over the bar stud. The bar also contains a chain tensioning pin hole which fits over the chain tensioning pin.
- Place the bar onto the bar stud so that the chain tensioning pin fits into the chain tensioning pin hole.
- Fit the chain over the sprocket and into the bar groove. The cutters on the top of the bar should face toward the bar tip, in the direction of the chain rotation.
- Replace the drivecase cover and install the lock bolt. Tighten the bar nut finger tight only. The bar must be free to move for tension adjustment.
- Remove all slack from chain by turning the chain tensioning screw clockwise, assuring that the chain seats into the bar groove during tensioning.
- Lift the tip of the bar up to check for sag. Release the tip of the bar, and turn the chain tensioning screw 1/2 turn clockwise.
- Repeat this process until sag does not exist.
- Hold the tip of the bar up and tighten the lock bolt securely.
- Chain is correctly tensioned when there is no slack on the underside of the bar, the chain is snug, but it can be turned by hand without binding.

NOTE: If chain is too tight, it will not rotate. Loosen the bar nut slightly and turn adjusting screw 1/4 turn counterclockwise. Lift the tip of the bar up and retighten lock bolt.

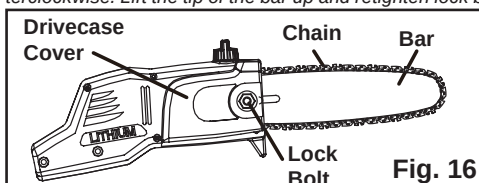


Fig. 16

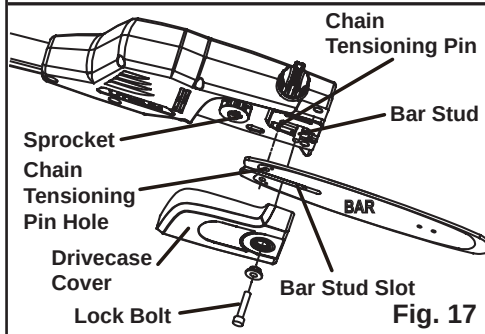
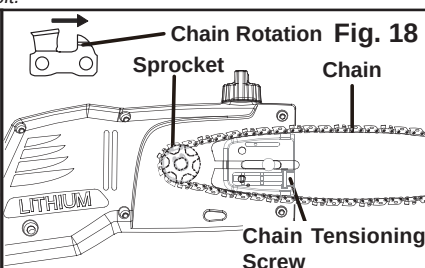


Fig. 17



Chain Rotation Fig. 18

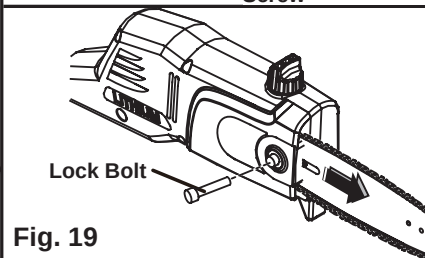


Fig. 19

MAINTENANCE

CHAIN OILER (See Figure 20)

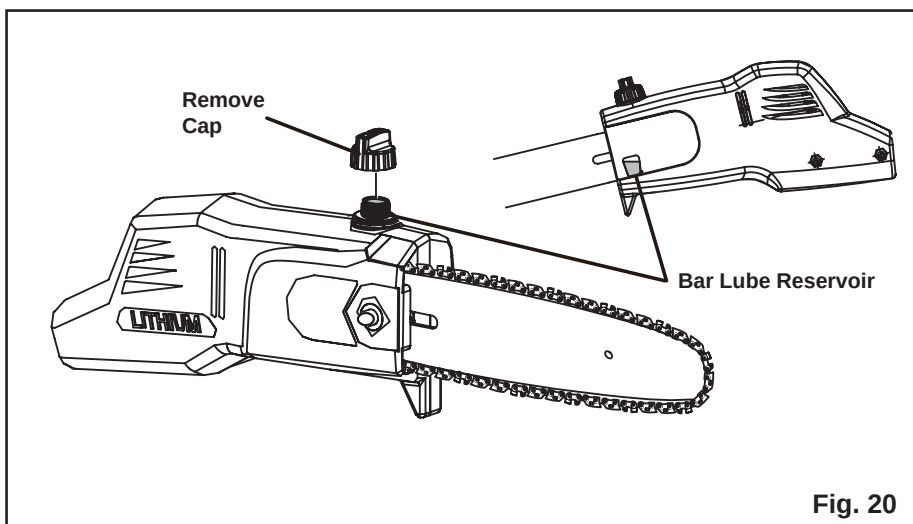
⚠ WARNING

To avoid possible serious injury, stop the motor and remove the battery from the pole saw before replacing the bar, chain, or performing any maintenance operation.

- Use Premium Bar and Chain Lubricant. It is designed for chains and chain oilers and is formulated to perform over a wide temperature range with no dilution required.
 - Remove the cap and carefully pour approximately 2 oz (57 g) of bar and chain lubricant into the bar lube reservoir.
 - Replace the cap and tighten securely.
 - Check and refill the bar lube reservoir every time the pole saw is used.
-

NOTE: Do not use dirty, used, or otherwise contaminated lubricants. Damage may occur to the oil pump, bar, or chain.

NOTE: There is foam inserted inside the oil reservoir to filter dirt and debris from the oil pump. Do not remove the foam.



MAINTENANCE

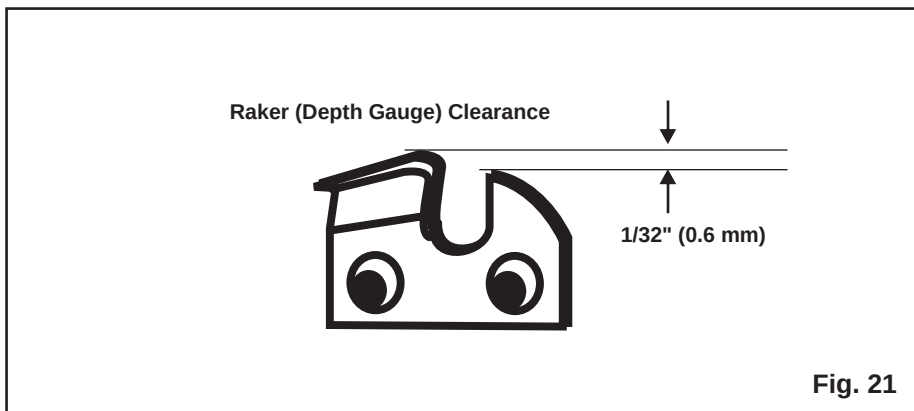
CHAIN MAINTENANCE *(See Figure 21)*

For smooth and fast cutting, the chain needs to be maintained properly. The following conditions indicate that the chain requires sharpening:

- Wood chips are small and powdery
- Chain must be forced through the wood during cutting
- Chain cuts to one side

During maintenance of the chain, consider the following:

- Improper filing angle of the side plate can increase the risk of a severe kickback.
- Depth gauge (or raker clearance) setting determines the height the cutter enters the wood and the size of the wood chip that is removed. Too much clearance increases the potential for kickback. Too little clearance decreases the size of the wood chip thus decreasing the chain's cutting ability.
- If cutter teeth have hit hard objects such as nails and stones, or have been abraded by mud or sand on the wood, have service dealer sharpen chain.



MAINTENANCE

HOW TO SHARPEN THE CUTTERS (See Figure 22-25)

Be careful to file all cutters to the specified angles and to the same length, as fast cutting can be obtained only when all cutters are uniform.

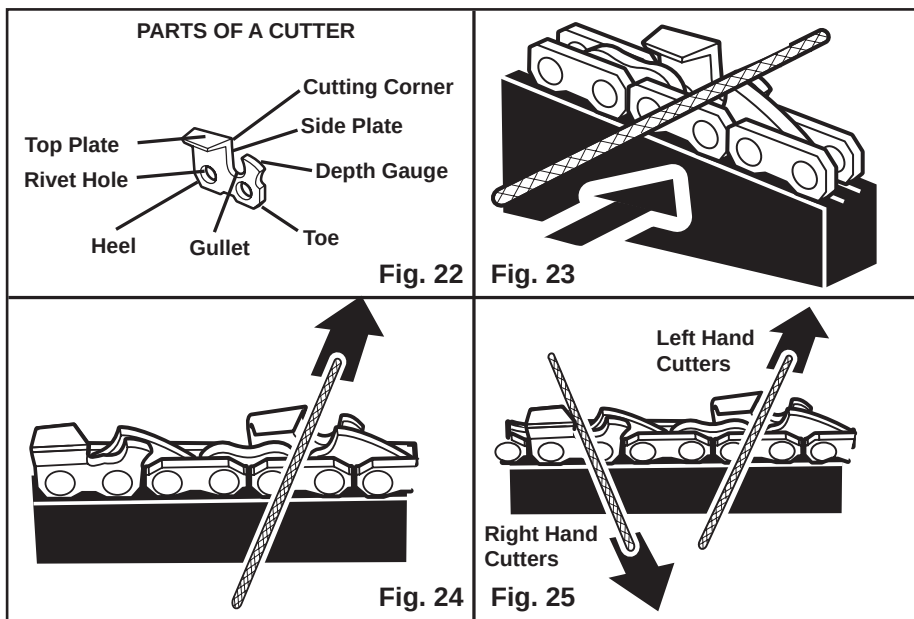
- Tighten the chain tension enough that the chain does not wobble. Do all of your filing at the midpoint of the bar. Wear gloves for protection.
- Use a round file and holder.
- Keep the file level with the top plate of the tooth. Do not let the file dip or rock.
- Using light but firm pressure, stroke towards the front corner of the tooth. Lift file away from the steel on each return stroke.
- Put a few firm strokes on every tooth. File all left hand cutters in one direction. Then move to the other side and file the right hand cutters in the opposite direction. Occasionally remove filings from the file with a wire brush.

CAUTION

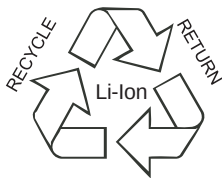
Dull or improperly sharpened chain can cause excessive motor speed during cutting which may result in severe motor damage.

WARNING

Improper chain sharpening increases the potential of kickback. Failure to replace or repair damaged chain can cause serious injury.



ENVIRONMENTALLY SAFE BATTERY DISPOSAL



The batteries used in this pole saw's battery pack contain the following toxic and corrosive material: LITHIUM-ION.

⚠ WARNING

Toxic materials must be disposed of in a specified manner in order to prevent contamination of the environment. Before disposing of damaged or worn out Lithium-Ion battery packs, contact your local waste disposal agency or the local Environmental Protection Agency for information and specific instructions. Take the batteries to a local recycling and/or disposal centre that is certified for disposal. If the battery pack cracks or breaks, whether it leaks or not, do not recharge it and do not use it. Dispose of it and replace it with a new battery pack. **DO NOT ATTEMPT TO REPAIR IT!**

Follow these instructions in order to avoid injury and the risk of fire, explosion, or electric shock, and to avoid damage to the environment:

- Cover the battery's terminals with heavy-duty adhesive tape.
- Do not attempt to remove or destroy any of the components of the battery pack.
- Do not attempt to open the battery pack.
- If a leak develops, the electrolytes that are released are corrosive and toxic. Do not get the solution in the eyes or on the skin, and do not swallow it.
- Do not place batteries in regular household trash.
- **DO NOT** incinerate batteries.
- **DO NOT** place batteries where they will become part of any waste landfill or municipal solid waste stream.
- Dispose of batteries at a certified recycling or disposal centre.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Bar and chain running hot and smoking.	Check chain tension for overtightened condition.	Tension chain. Refer to Chain Tension earlier in this manual.
	Bar lube reservoir empty.	Check bar lube reservoir.
Motor runs, but chain is not rotating.	Chain tension too tight.	Retention chain. Refer to Chain Tension earlier in this manual.
	Check guide bar and chain assembly.	Refer to Replacing the Bar and Chain earlier in this manual.
	Check guide bar and chain for damage.	Inspect guide bar and chain for damage.

LIMITED FOUR-YEAR WARRANTY



GREENWORKS™ hereby warrants this product, to the original purchaser with **proof of purchase**, for a period of four (4) years against defects in materials, parts or workmanship. GREENWORKS™, at its own discretion will repair or replace any and all parts found to be defective, through normal use, free of charge to the customer. This warranty is valid only for units which have been used for personal use that have not been hired or rented for industrial/commercial use, and that have been maintained in accordance with the instructions in the owners' manual supplied with the product from new.

Battery carries a one (1) year warranty against defects in workmanship and materials. Batteries must be charged in accordance with the operator's manuals directions and regulations in order to be valid.

ITEMS NOT COVERED BY WARRANTY:

1. Any part that has become inoperative due to misuse, commercial use, abuse, neglect, accident, improper maintenance, or alteration; or
2. The unit, if it has not been operated and/or maintained in accordance with the owner's manual; or
3. Normal wear, except as noted below;
4. Routine maintenance items such as lubricants, blade sharpening;
5. Normal deterioration of the exterior finish due to use or exposure.

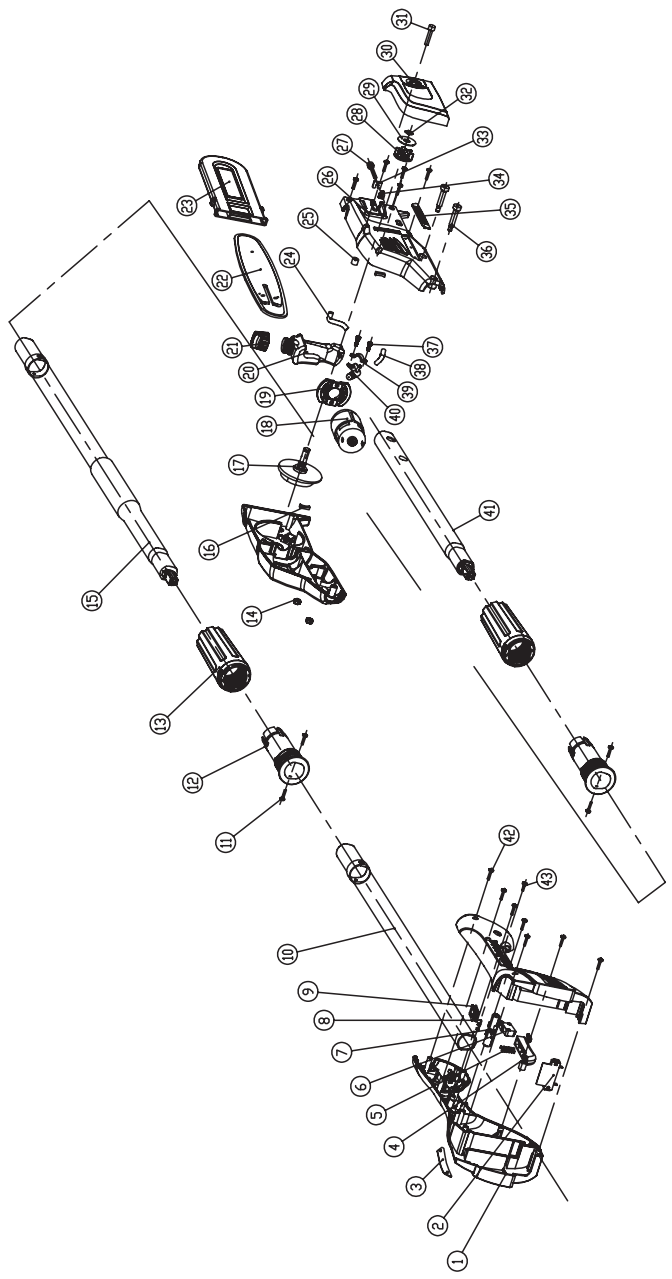
GREENWORKS HELPLINE (1 888 90WORKS):

Warranty service is available by calling our toll-free helpline, 9 a.m. to 5 p.m. EST. Monday – Friday at **1 888 909 6757 (1 888 90WORKS)**.

TRANSPORTATION CHARGES:

Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. It is the purchaser's responsibility to pay transportation charges for any part submitted for replacement under this warranty unless such return is requested in writing by GREENWORKS.

EXPLODED VIEW



PARTS LIST

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	31302320-2	Handle assy.	1
2	34106177	Connector	1
3	34113320	Handle name	1
4	34105320-2	Switch trigger	1
5	33402161	Spring	1
6	36301320	Micro switch	1
7	34104320-2	Self-lock handle	1
8	33214320	Spring	1
9	34204320	Rubber ring	1
10	31309320-1	Handle pole assy.	1
11	3220840-1	Bolt M4x8	4
12	34108320-2	Locking connector	2
13	34109320-2	Locking cap	2
14	32907152	Nut M6	2
15	31303320-1	Middle pole assy.	1
16	34201320	Rubber ball bearing	2
17	31304320	Big gear	1
18	36101320	Motor assy.	1
19	33203155	Motor bracket	1
20	31306320	Oil tank	1
21	31307320-2	Oil tank cap assy.	1
22	31308320-3	8" Bar assy.	1
23	34112320-2	Scabbard	1
24	34207152	Outlet oil tube	1
25	33204320	Copper insert	1
26	31301320-2	Housing assy.	1
27	33201320	Tension screw	1
28	33902102	Chain wheel	1
29	33302102	Chain wheel washer	1
30	31310320-1	Side cover assy.	1
31	32904320	Locked screw	1
32	3290875	Retaining ring	1
33	33210320	Clip	1
34	33202320	Tension block	1
35	34114320	Housing nameplate	1
36	32909320	Screw M6x30	2
37	32201152	Screw ST3x8-F	2
38	34203152	Inlet oil tube	1
39	34109152-1	Oil pump board	1
40	34906152	Oil pump assy.	1
41	31311320-1	Upper pole assy.	1
42	3220505	Screw ST4x16-F	13
43	3220319	Screw ST4x12-F	1

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TOLL-FREE HELPLINE: 1-888-90WORKS (888.909.6757)

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