

LawnMaster®

Operator's Manual / Manuel d'opération

EN p. 2

60V MAX* LITHIUM-ION CORDLESS CHAINSAW CLCSF6016A

FR p. 51

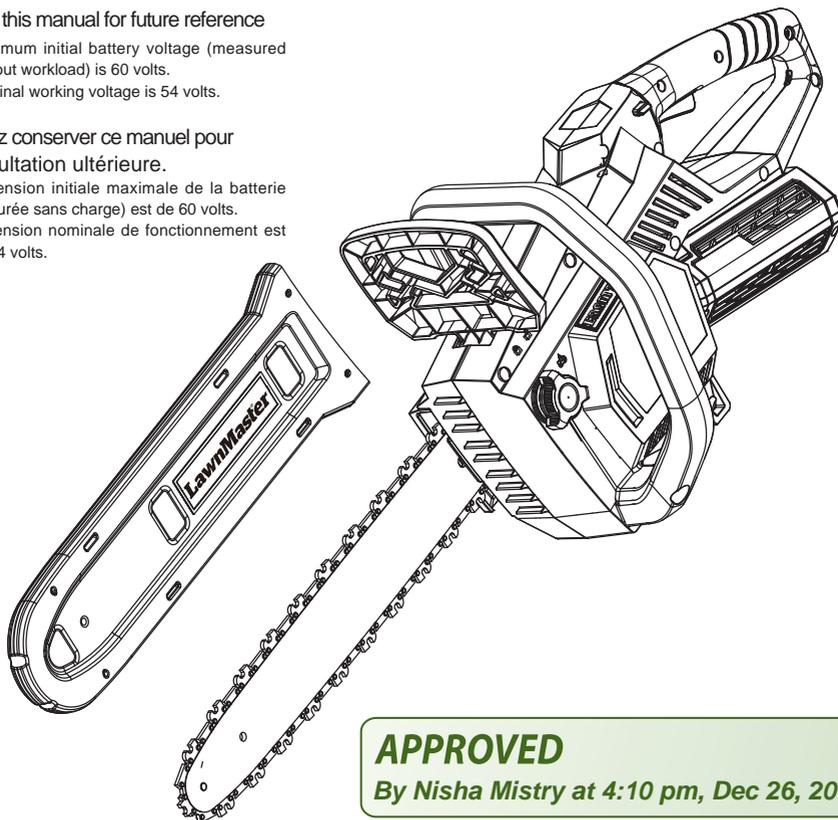
SCIE À CHAÎNE SANS FIL 60V MAX* LIHTIUM-ION CLCSF6016A

Save this manual for future reference

* Maximum initial battery voltage (measured without workload) is 60 volts.
Nominal working voltage is 54 volts.

Veillez conserver ce manuel pour consultation ultérieure.

* La tension initiale maximale de la batterie (mesurée sans charge) est de 60 volts.
La tension nominale de fonctionnement est de 54 volts.



APPROVED

By Nisha Mistry at 4:10 pm, Dec 26, 2018

Battery Model Number is 60LB2021-S / Modèle de batterie: 60LB2021-S
Charger Model Number is 60 LFC01-ETL / Modèle du chargeur: 60 LFC01-ETL



CAUTION: To reduce the risk of injury, the user must read and understand the Operator's Manual before using this product.



ATTENTION: Pour réduire les risques de blessure, l'utilisateur doit lire et comprendre ce manuel d'opération avant d'utiliser le produit.



TABLE OF CONTENTS

Table of Contents	2
Product Specifications	2
Important Safety Instructions	3-8
Symbols	9-10
Know Your Cordless Chainsaw	11-12
Assembly	13-15
Battery Pack and Charger	15-17
Operation	18-32
Maintenance	33-44
Environmentally Safe Battery Disposal	45
Troubleshooting	46
LawnMaster® 60V Warranty	47
Exploded View	48
Parts List	49
Notes	50

PRODUCT SPECIFICATIONS

Type	Cordless, battery-powered
Motor	60V Max* D.C.
Guide Bar Length	16"
Oil Tank Capacity	300 ml
Chain Speed	13 MPS
Max. Cutting Diameter	15"
Weight with Battery	11.0 lbs (5.44 kg)
Weight without Battery	9.7 lbs (4.41 kg)

BATTERY

Model Number	60LB2021-S
Type	60V Max* Lithium-Ion, 2.0Ah

CHARGER

Model Number	60 LFC01-ETL
Rated Input Voltage	120V~60Hz
Rated Output Voltage	60V Max* D.C.
Rated Output Current	2.0A
Charging Time from Zero to Full Charge	70 minutes

* Maximum initial battery workload voltage (measured without a workload) is 60 volts.
Nominal voltage is 54 volts.

IMPORTANT SAFETY INSTRUCTIONS

WARNING

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury:

Save all warnings and instructions for future reference.

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate chainsaws in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Chainsaws create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a chainsaw. Distractions can cause you to lose control.
- Chainsaw plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) chainsaws. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose chainsaws to rain or wet conditions. Water entering a chainsaw will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the chainsaw. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a chainsaw outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- Stay alert, watch what you are doing and use common sense when operating a chainsaw. Do not use a chainsaw while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating chainsaws may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to a power source and/or a battery pack, picking up or carrying the tool. Carrying chainsaws with your finger on the switch or energizing chainsaws that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the chainsaw on. A wrench or a key left attached to a rotating part of the chainsaw may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times. This enables better control of the chainsaw in unexpected situations.
- Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- 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.
- Do not force the chainsaw. Use the correct chainsaw for your application. The correct chainsaw will do the job better and safer at the rate for which it was designed.
- Do not use the chainsaw if the switch does not turn it on and off. Any chainsaw that cannot be controlled with the switch is dangerous and must be repaired.
- Disconnect the plug from the power source and/or the battery pack from the chainsaw before making

IMPORTANT SAFETY INSTRUCTIONS

any adjustments, changing accessories, or storing chainsaws. Such preventive safety measures reduce the risk of starting the chainsaw accidentally.

- Store idle chainsaws out of the reach of children and do not allow persons unfamiliar with the chainsaw or these instructions to operate the chainsaw. Chainsaws are dangerous in the hands of untrained users.
- Maintain chainsaws. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the chainsaw's operation. If damaged, have the chainsaw repaired before use. Many accidents are caused by poorly maintained chainsaws.
- Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- Use the chainsaw, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the chainsaw for operations different from those intended could result in a hazardous situation.
- Have your chainsaw serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the chainsaw is maintained.
- Keep all parts of the body away from the chain when the chainsaw is operating. Before you start the chainsaw, make sure the chain is not in contact with anything. A moment of inattention while operating chainsaws may cause entanglement of your clothing or body with the chain.
- Always hold the chainsaw with your right hand on the rear handle and your left hand on the front handle. Holding the chainsaw with a reversed hand configuration increases the risk of personal injury and should never be done.
- Hold the chainsaw by insulated gripping surfaces only. Holding the chainsaw by any other part other than the insulated gripping surface, may cause an electric shock in an instance where the chain comes into contact with hidden wiring.
- Wear safety glasses and hearing protection. Further protective equipment for head, hands, legs and feet is recommended. Adequate protective clothing will reduce personal injury by flying debris or accidental contact with the blade.
- Before operating the chainsaw, check that it is in proper working order and that its condition complies with the safety regulations. Check in particular that:
 - The run-down brake is working properly;
 - The bar and the sprocket cover are fitted correctly;
 - The chain has been sharpened and tensioned in accordance with the regulations;
- Do not operate a chainsaw in a tree. Operation of a chainsaw while up in a tree may result in personal injury.
- Always keep proper footing and operate the chainsaw only when standing on fixed, secure and level surface. Slippery or unstable surfaces such as ladders may cause a loss of balance or control of the chainsaw.
- When cutting a limb that is under tension be alert for spring back. When the tension in the wood fibers is released the spring loaded limb may strike the operator and/or throw the chainsaw out of control.
- Use extreme caution when cutting brush and saplings. The slender material may catch the chain and be whipped towards you or pull you off balance.
- Carry the chainsaw by the front handle with the chainsaw switched off and away from your body. When transporting or storing the chainsaw always fit the guide bar cover. Proper handling of the chainsaw will reduce the likelihood of accidental contact with the moving chain.
- Follow instructions for lubricating, chain tensioning and changing accessories. An improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- Keep handles dry, clean, and free from oil and grease. Greasy, oily handles are slippery causing loss of control.

IMPORTANT SAFETY INSTRUCTIONS

- Cut wood only. Do not use chainsaw for purposes not intended. For example: do not use the chainsaw for cutting plastic, masonry or non-wood building materials. Use of the chainsaw for operations different than intended could result in a hazardous situation.
- 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 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.

Either of these reactions may cause you to lose control of the saw which could result in serious personal injury. Do not rely exclusively upon the safety devices built into your saw. As a chainsaw user, you should take several steps to keep your cutting jobs free from accident or injury. Kickback is the result of tool 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 chainsaw 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 chainsaw.
 - Do not overreach and do not cut above shoulder height. This helps prevent unintended tip contact and enables better control of the chainsaw in unexpected situations.
 - Only use replacement bars and chains specified by the manufacturer. Incorrect replacement bars and chains may cause chain breakage and/or kickback.
 - Follow the manufacturer's sharpening and maintenance instructions for the chain. Decreasing the depth gauge height can lead to increased kickback.
 - Always grip the saw firmly with both hands. Hold the saw firmly with both hands when the motor is running. Place your right hand on the rear handle and your left hand on the front handle with your thumbs and fingers encircling the chainsaw handles. A firm grip together with a stiff left arm will help you maintain control of the saw if kickback occurs.
 - 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 that could be hit while you are operating the saw.
 - Always cut with the unit running at full speed. Fully squeeze the trigger switch and maintain a steady cutting speed.
 - Use replacement parts such as low-kickback chain and special guide bars that reduce the risks associated with rotational kickback.
- Never let anyone use your chainsaw who has not received adequate instructions in its proper use. This applies to rentals as well as privately owned saws.
- Stop the chainsaw before setting it down. Do not leave the unit running unattended.
- To avoid accidental starting, never carry the unit with your finger on the trigger switch.
- Maintain the unit with care. Keep the cutting edge sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories.
- Do not operate a chainsaw that is damaged, improperly adjusted, or not completely and securely assembled. The chain should stop turning when the trigger switch is released. If the chain turns after the trigger switch has been released, discontinue chainsaw use immediately. If within warranty period, return unit to retailer of purchase for possible product replacement.
- Do not adapt your power head to a bow guide or use it to power any attachments or devices not listed for the saw.
- Do not cut vines and/or small underbrush.

IMPORTANT SAFETY INSTRUCTIONS

- With a basic understanding of kickback, you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
- Push and Pull - This reaction force is always opposite to the direction the chain is moving where wood contact is made. Consequently, the operator must be ready to control the PULL of the log backward when cutting on the bottom edge of the bar (over-bucking), and to control the PUSH of the log forward when cutting on the top edge of the bar (under-bucking).

NOTE: The size of the work area depends on the job being performed as well as the size tree or work piece involved. For example, felling a tree requires a larger work area than making bucking cuts.

- Always use the right product for your application. Never use the chainsaw to cut plastic, masonry or non-wood building materials.
- Remove the battery pack from the chainsaw before cleaning, servicing, storing, transporting, removing material from the unit, changing accessories such as the bar and chain, or when not in use.

SAFETY DEVICES

LOW-KICKBACK SAW CHAIN

The rakers (depth gauges) ahead of each cutter can minimize the force of a kickback reaction by preventing the cutters from digging in too deeply at the kickback zone. Only use a replacement chain that is equivalent to original chain or has been certified as low-kickback chain per ANSI B175.1.

A low-kickback saw chain is one that has met the kickback performance requirements of ANSI B175.1 - 1991 (American National Standard for chainsaws - Gasoline – Powered chainsaws - Safety Requirements) when tested on the representative sample of chainsaws below 3.8. c.i.d. specified in ANSI B175.1 - 1991.

As chains are sharpened during their useful life, they lose some of the low-kickback qualities and extra caution should be used.

GUIDE BARS

Generally, guide bars with small radius tips have somewhat lower kickback potentials.

When making a replacement, be sure to order the LawnMaster® bar listed for the saw in this Operator's Manual.

BATTERY PACK

- The battery pack is only compatible with 60LFC01-ETL or 60LFC02-ETL chargers.
- Recharge only with the charger specified by the manufacturer and listed in this manual. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Do not charge the battery in a damp or wet location. Following this rule will reduce the risk of electric shock.
- Do not place battery powered tools or their batteries near fire or heat. This will reduce the risk of explosion and possibly injury.
- Do not open or mutilate the battery pack. Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- Do not dispose of battery packs in fire. They will explode or leak and cause injury. Liquid ejected from the battery may cause irritation or burns.
- Do not crush, drop or damage the battery pack. Do not use a battery pack or charger that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a

IMPORTANT SAFETY INSTRUCTIONS

dropped or damaged battery immediately.

- Batteries can explode in the presence of a source of ignition, such as a pilot light. To reduce the risk of serious personal injury, never use any cordless product in the presence of open flame. An exploded battery pack can propel debris and chemicals. If exposed, flush with water immediately.
- Under extreme usage or temperature conditions, battery pack leakage may occur. If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets into your eyes, flush them with clean water for at least 10 minutes, then seek immediate medical attention.
- When the battery pack is not in use, keep it away from other metal objects like: paper clips, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery pack terminals together may cause sparks, burns, or a fire.
- Do not expose a battery pack or blower to fire or excessive temperature. Exposure to fire or temperature above 265°F (130°C) may cause an explosion.
- Do not modify or attempt to repair the blower or the battery pack (as applicable) except as indicated in the instructions for use and care.
- Follow all charging instructions and do not charge the battery pack or blower 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.
- All tool services should be performed by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.

BATTERY CHARGER

- This charger is only compatible with 60LB2021-S, 60LB2521-S or 60LB5025-S lithium-ion batteries.
- To reduce the risk of injury, charge only the specified lithium-ion rechargeable batteries. This charger is only compatible with lithium-ion batteries. Other types of batteries may burst, causing personal injury or damage.
- Do not charge battery in a damp or wet location. Following this rule will reduce the risk of electric shock.
- Keep the cord and charger away from heat to prevent damage to housing or internal parts.
- Do not operate charger with a damaged cord or plug, which could cause shorting and electric shock. If damaged, immediately discontinue use. Replace the charger with an identical model as listed in this manual.
- Do not use a charger that has been dropped or received a sharp blow.
- Do not disassemble charger. Take it to a qualified service center to be checked or replaced. Incorrect reassembly may result in a risk of electric shock or fire.
- Do not abuse the charger cord. Never use the cord for carrying, pulling or unplugging.
- Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock. If the charger cord is damaged, replace the charger with an identical model as listed in this manual.
- A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Charge the battery at the normal charging temperature between 40°F (4°C) and 100°F (38°C).
- 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.

IMPORTANT SAFETY INSTRUCTIONS

FCC COMPLIANCE

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
 - This device may not cause harmful interference, and
 - This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

- This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that of the receiver.
 - Consult the dealer or an experienced radio/ TV technician for help.

CALIFORNIA PROPOSITION 65



WARNING

Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

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.

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	Watt	Power
hrs	Hours	Time
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
n_o	No Load Speed	Rational speed, at no load
	Alternating Current	Type of current
	Direct Current	Type or a characteristic of current
	Lithium-Ion Battery Recycling	Designates that this tool is in compliance with Lithium-Ion battery recycling program requirements
	Safety Alert	Indicates a potential personal injury hazard.
	Read The Operator's Manual	To reduce the risk of injury user must read and understand Operator's Manual before using this product.
	Gloves	Wear non-slip, heavy-duty protective gloves when handling this product.
	Safety Footwear	Wear non-slip safety footwear when using this product.
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	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.
	Rain Alert	Do not expose to rain or wet conditions.

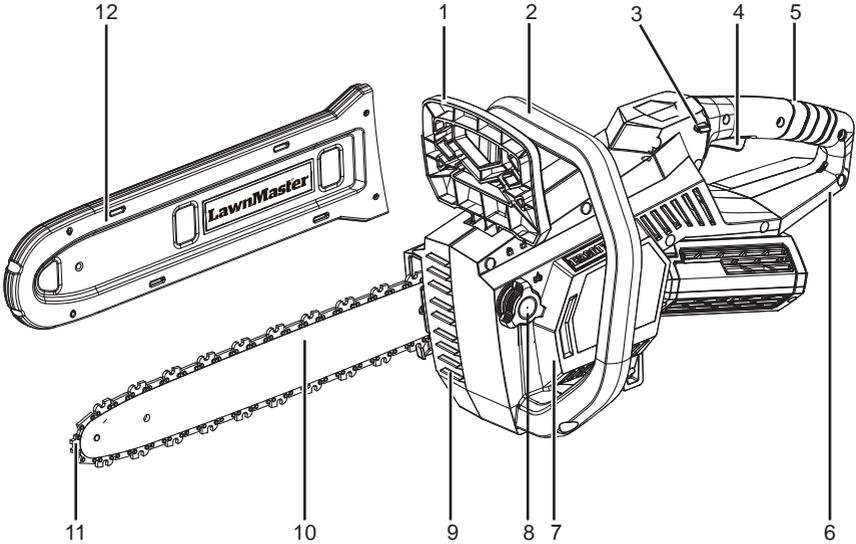
SYMBOLS

SYMBOL	NAME	DESIGNATION/EXPLANATION
	Eye Protection	Wear eye protection.
	Ear Protection	Wear ear protection.
	Bar Nose Contact	Avoid bar nose contact.
	Kickback	DANGER! Beware of kickback.
	One handed	Do not operate the saw using only one hand.
	Operate With Two Hands	Hold and operate the saw properly with both hands.
	Keep Away From Water	Do not dispose of battery packs in rivers or immerse in water.
	Keep Away From Fire	Do not dispose of battery packs in fire. They will explode or leak and cause injury.
	Heat Alert	Do not expose battery packs to heat in excess of 140°F.
	Recycle Symbol	This product uses lithium-ion batteries. Local, state, or federal laws may prohibit disposal of batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.

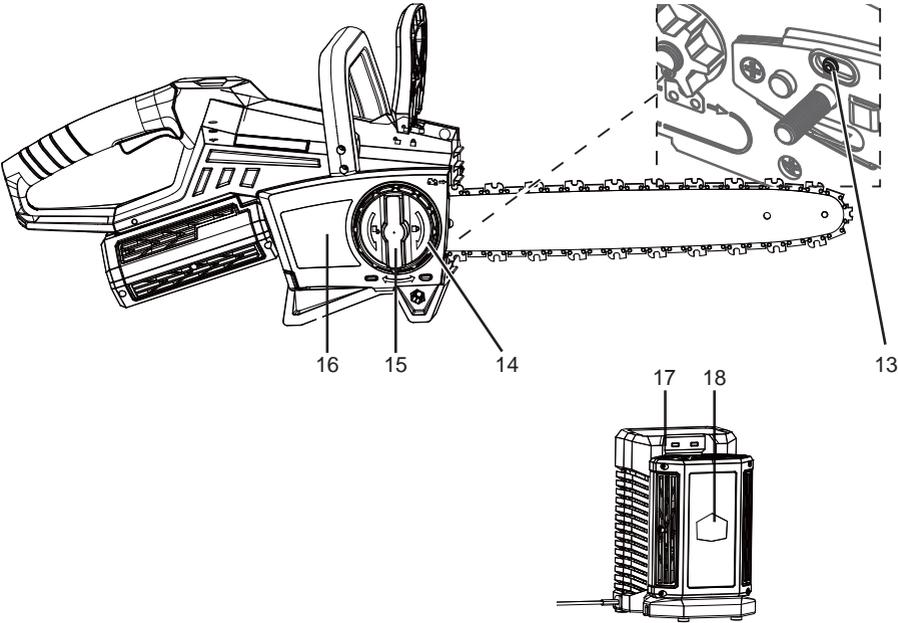
The following signal words and meanings are intended to explain the levels of risk associated with this product.

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.
	NOTICE	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

KNOW YOUR CORDLESS CHAINSAW



Disassemble the Cover



KNOW YOUR CORDLESS CHAINSAW

Components

1. Chain Brake
2. Front Handle
3. Safety Switch
4. Trigger Switch
5. Rear Handle
6. Handle Guard
7. Motor Housing Cover
8. Oil Reservoir Cap
9. Bucking Spikes
10. Guide Bar
11. Low-Kickback Saw Chain
12. Reusable Scabbard
13. Oil Port
14. Chain Tensioning Ring
15. Chain Cover Lock Knob
16. Chain Cover
17. Battery Charger
18. Battery Pack

KNOW YOUR CORDLESS CHAINSAW

The safe use of this product requires an understanding of the information on the product and in this Operator's Manual as well as a knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety instructions.

NOTE: BAR & CHAIN OIL NOT INCLUDED.

BAR & CHAIN OIL MUST BE ADDED PRIOR TO USE.

REUSABLE SCABBARD

The scabbard keeps the operator from coming in contact with the sharp chain when the tool is not in use. It also helps keep the chain from being nicked or damaged when the tool is in storage.

CHAIN TENSIONING RING

This feature allows user to adjust the tension of the chain.

QUICK-VIEW OIL INDICATOR

Semi-transparent oil reservoir that allows user to see when to add oil.

ASSEMBLY

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.



WARNING

Do not use this product if any parts on the Packing List are already assembled to your product when you unpack it. Parts on this list are not assembled to the product by the manufacturer and require customer installation. Use of a product that may have been improperly assembled could result in serious personal injury.

- 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, do not operate the product. Return it for replacement to the retailer from which it was purchased.

PACKING LIST

- (1) 60V Cordless chainsaw with Bar, Chain and Scabbard
- (1) 60V Max* 2.0 Ah Lithium-Ion Battery
- (1) 60V Max* Battery Charger
- (1) Operator's Manual

BATTERY

IMPORTANT! The battery pack is not charged when it is purchased. Before using the chainsaw read all safety precautions, and follow the instructions in the Battery Pack and Charger section. With regular use, it will need shorter charging time. If storing for a prolonged period of time, remove the battery. When ready to use again, charge the battery pack for at least 70 minutes.



WARNING

Always remove the battery pack from your tool when you are assembling parts, making adjustments, cleaning, carrying, transporting or when not in use. Removing battery pack will prevent accidental starting that could cause serious personal injury.

NOTE: To avoid serious personal injury, always remove the battery pack and keep hands clear of the safety switch when carrying or transporting the tool.

ASSEMBLY

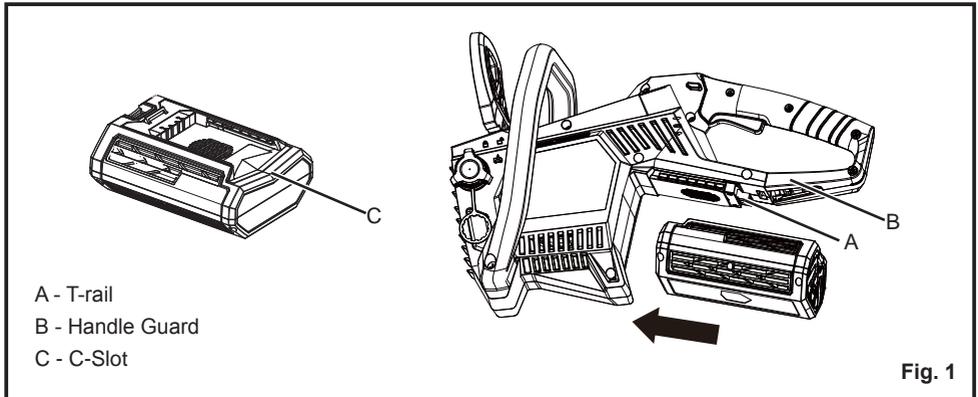
TO INSTALL THE BATTERY PACK (See Fig. 1)

- Grasp the chainsaw firmly by the rear handle (Fig. 1).
- Align the C-slot of the battery pack with the T-rail on the underside of the rear handle guard.
- Slide the C-slot onto the T-rail until the battery pack secures into place.
- Do not use force when inserting the battery pack. It should slide into position and "click".

NOTICE: Make sure that battery pack is securely in place before starting chainsaw operation.

TO REMOVE THE BATTERY PACK (See Fig. 1)

- Stop the chainsaw by fully releasing trigger (Fig. 1).
- Insert fingertip beneath edge of battery pack release button and press and hold button up.
- Slide battery pack off the T-rail.



WARNING

If any parts are damaged or missing do not operate this product until the parts are replaced. Use of this product with damaged or missing parts 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.

ASSEMBLY

WARNING

To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the product when assembling parts.

CHAIN AND GUIDE BAR ASSEMBLY

The chain and guide bar are pre-assembled at delivery. Inspect and re-assemble them before operation if necessary.

Use only the guide bar and chain listed in the Product Specifications section of this manual.

To remove and replace the bar and the chain, refer to “Replacing the Guide Bar and Chain” in the Maintenance Section of this manual.

NOTE: BAR & CHAIN OIL NOT INCLUDED.

BAR & CHAIN OIL MUST BE ADDED PRIOR TO USE.

BATTERY PACK AND CHARGER

BATTERY CHARGING

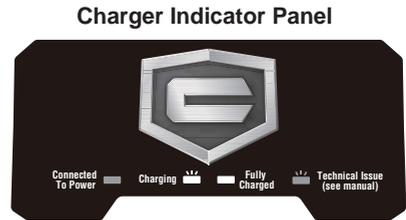
- Use only with 60V LawnMaster® battery chargers. The battery charger supplied is specifically designed for the lithium-ion battery used in this tool.
- Check the power voltage! Battery chargers operate on 120V.
- Charge the battery between 40°F (4°C) and 100°F (38°C). This ensures an optimum battery service life.
- Protect the battery from heat, from continuous exposure to sun and keep away from radiation or other heat sources. Do not leave the battery in the tool in direct sunlight over long periods.
- The battery is supplied uncharged. Fully charge the battery before using the tool for the first time. The lithium-ion battery can be charged at any time without reducing its service life. Interrupting the charging procedure does not affect the battery.

CHARGER LEDS

- If the battery is not inserted into the charger, a continuous red LED light indicates that the plug is plugged into an outlet socket and the battery charger is ready for operation.
 - Charging: a flashing green LED on the charger indicates that the battery is charging normally.
 - Charged: continuous green LED on the charger indicates that the battery is ready for use.
-

BATTERY PACK AND CHARGER

SYMBOL	INDICATOR LIGHTS	STATUS
	Red, continuous	Connected to power supply
	Green, blinking	Charging
	Green, continuous	Fully charged
	Red, blinking	Charging problem: See Technical Issue in CHARGER LEDS

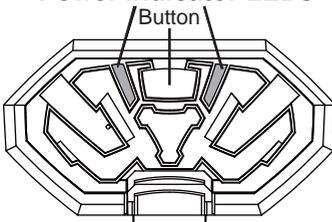


- Technical Issue: a flashing red LED light on the charger indicates that battery pack has a charging problem or might be defective.
 - One possible condition is the battery temperature is not within the charging temperature range of 40°F (4°C) and 100°F (38°C) or the charging current is too high. As soon as the permitted temperature and the charging current ranges are reached, the battery charger will automatically switch to charging.
 - If the temperature range and charging current are correct and flashing red LED light continues, then remove and reinstall the battery pack. If the LED status repeats a second time, try to charge another identical battery. If the battery charges normally, dispose of the defective battery pack (see Environmental Safe Battery Disposal section).
 - If the flashing red light continues after installing the second battery, the charger may be defective. Replace with a new one.
- After continuous or repeated charging cycles without interruption, the charger may warm up. This is normal and does not indicate a technical defect of the battery charger.

BATTERY LED PANEL

- The panel consists of 2 LEDs on the face of the battery. Press the panel button for the LEDs to show you the charge level of the battery.
- The battery charge level can be checked when the battery is attached or removed from the chainsaw.

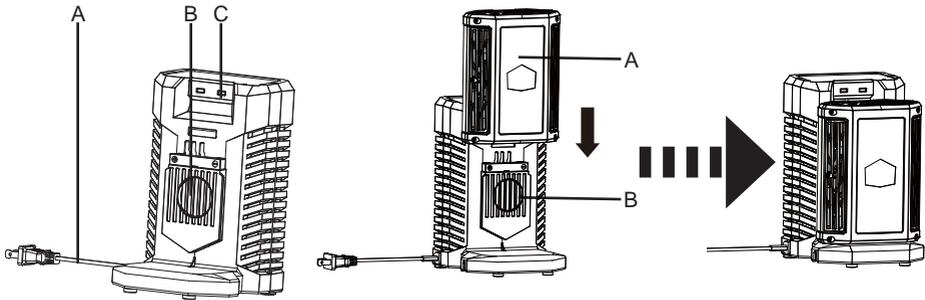
Power Indicator LEDs



COLOR	BATTERY CAPACITY
Green	50%~100%
Orange	25%~ 50%
Red	0-25% (Recharge required)

BATTERY PACK AND CHARGER

CHARGING THE BATTERY PACK (See Fig. 2)



A - Power Cord with Plug
B - Charger T-rail
C - Indicator Lights

A - Battery
B - Charger T-rail

Fig. 2

WARNING

If any part of the charger is missing or damaged, do not operate it! Replace the charger with a new one. Failure to heed this warning could result in possible serious injury.

Check the voltage! The voltage must comply with the information on the rating label.

-
- Align the C-slot of the battery pack with the T-rail on the charger. Slide the C-slot onto the T-rail until the battery pack secures into place (Fig. 2).
 - Connect the charger to the power supply.
 - Allow sufficient charging time (see Product Specifications), and then disconnect the charger from the power supply.
 - Press the release button on the battery pack and remove it from the charger.

NOTE: It is normal for the battery pack and the charger to become warm (but not hot) during charging process. If the battery does not charge properly, check to make sure the electrical outlet is operational. Always charge the battery before storage!

OPERATION

WARNING

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

WARNING

Always wear eye protection with side shields marked to comply with ANSI Z87.1, along with head protection. Failure to do so could result in objects being thrown into your eyes and other possible serious injuries.

WARNING

Do not use any attachments or accessories not recommended by the manufacturer or retailer of this product. The use of attachments or accessories not recommended can result in serious personal injury. Before each use, inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced.

APPLICATIONS

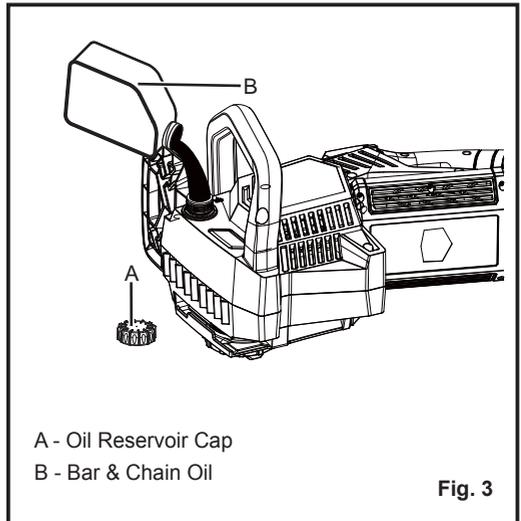
You may use this product for the purposes listed below:

- Limbing and pruning branches from trees.
- Felling small trees up to 15 inch diameter.
- Bucking a fallen tree into shorter lengths.

NOTE: For complete charging instructions, refer to the Battery Pack and Charger section for your battery pack and charger.

CHAIN OIL SYSTEM (See Fig. 3)

Check and fill the oil tank when the battery is recharged, or as needed (Fig. 3).



OPERATION



CAUTION

Remove the battery pack from the unit before checking and filling oil reservoir. Fill the oil tank with LawnMaster® bar and chain oil before starting the chainsaw. Failure to lubricate the chain will cause damage to the bar and chain.

NOTE: BAR & CHAIN OIL NOT INCLUDED.

BAR & CHAIN OIL MUST BE ADDED PRIOR TO USE.

Use standard LawnMaster® chainsaw bar and chain oil. It is designed for chains and chain oilers, and is formulated to perform over a wide temperature range with no dilution required.

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

- Remove oil reservoir cap.
- Carefully pour the bar and chain oil into the reservoir.
- Wipe off excess oil from around the reservoir.

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. 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.

STARTING AND STOPPING THE CHAINSAW



WARNING

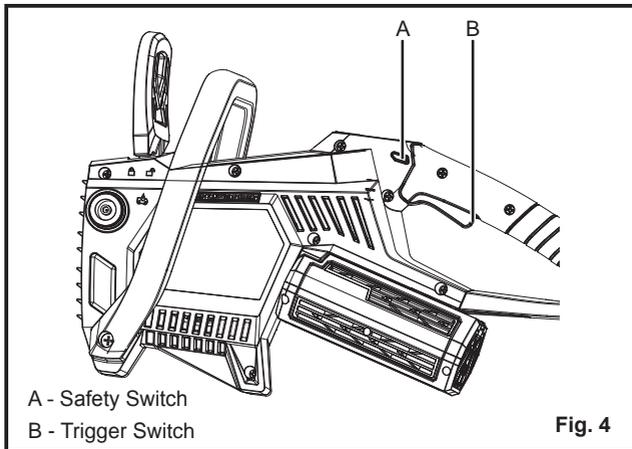
Keep the body to the left of the chain line. Never straddle the saw or chain, or lean over past the chain line.

NOTE: Carefully remove the scabbard from the bar before starting the chainsaw and place the scabbard over the bar when the chainsaw is not in use.

STARTING THE CHAINSAW (See Fig. 4)

- Make sure the chain tension is at desired setting. Refer to “Saw Chain Tensioning” in the Maintenance section of this manual.
- Make sure no objects or obstructions are in immediate vicinity which could come into contact with the bar and chain.
- Press and hold the safety switch. This makes the trigger switch operational (Fig. 4).
- Press and hold the trigger switch, release the safety switch, and continue to squeeze the trigger switch for continued operation.

OPERATION



STOPPING THE CHAINSAW

NOTE: It is normal for the chain to come to a stop once the trigger switch is released.

WARNING

NEVER touch the chain while it is moving. Even a slow moving chain can cause serious personal injury if touched.

- Release the trigger switch to stop the chainsaw.
- Upon release of the trigger switch, the safety switch will be automatically reset to the lock position.

NOTE: This cordless chainsaw is not designed for cutting trees larger than 15" in diameter. This cordless chainsaw is designed for limbing and pruning type cutting, as well as cutting trees up to 15" in diameter only.

PROPER GRIP ON HANDLES (See Figs. 5-6)

- See the Important Safety Instructions section for appropriate safety equipment.
 - Wear non-slip gloves for maximum grip and protection.
 - Hold the saw firmly with both hands. Always keep your left hand on the front handle and your right hand on the rear handle so that your body is to the left of the chain line (Fig. 5).
 - Maintain a proper grip on the saw whenever the motor is running. The fingers should encircle the handle, with the thumb wrapped under the handlebar. This grip is least likely to be broken by a kickback or other sudden reaction of the saw. Any grip in which the thumb and fingers are on the same side of the handle is dangerous, because a slight kick of the saw can cause loss of control.
-

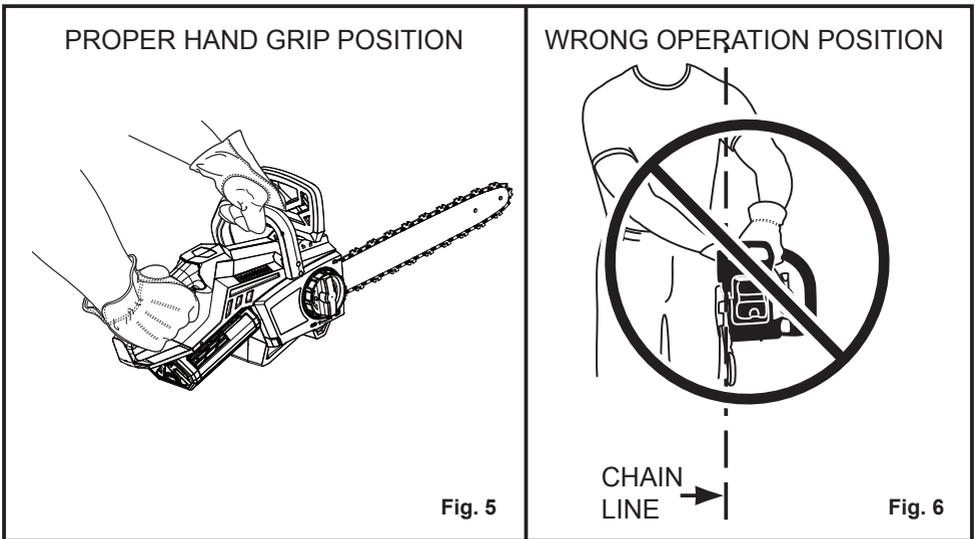
OPERATION

WARNING

Never use a left-handed (cross-handed) grip or any stance that would place your body or arm across the chain line.

WARNING

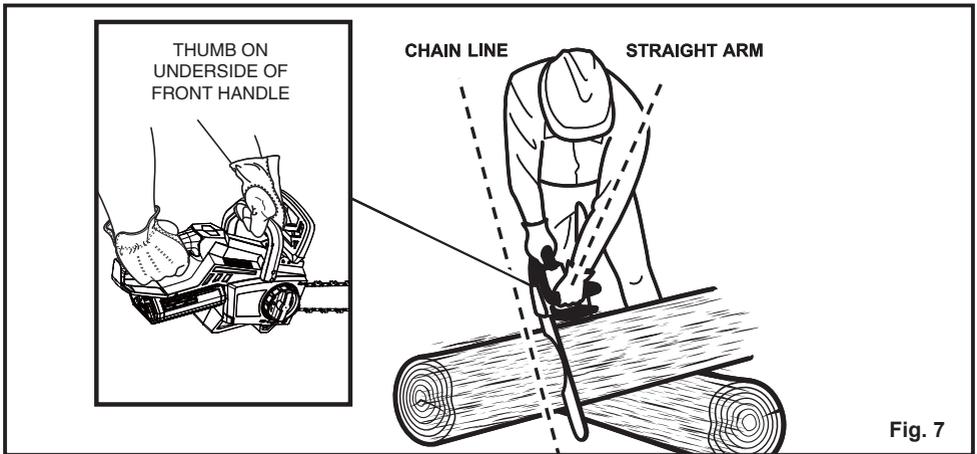
DO NOT operate the trigger switch with your left hand and hold the front handle with your right hand. Never allow any part of your body to be in the chain line while operating a saw (Fig. 6).



PROPER CUTTING STANCE (See Fig. 7)

- Balance your weight with both feet on solid ground (Fig. 7).
- Keep the left arm with the elbow locked in a “straight arm” position to withstand any kickback force.
- Keep your body to the left of the chain line.
- Keep your thumb on underside of the front handle.

OPERATION



BASIC OPERATING/CUTTING PROCEDURES

- Practice cutting a few small logs using the following technique to get the “feel” of using the saw before you begin a major sawing operation.
- Take the proper stance in front of the wood with the saw idling.
- Press the safety switch and squeeze the trigger switch, then release the safety switch and let the chain accelerate to full speed before entering the cut.
- Begin cutting with the saw against the log.
- Keep the unit running the entire time you are cutting, maintain a steady speed.
- Allow the chain to cut for you; exert downward pressure gently.
- Forcing the cut could result in damage to the bar, chain, or motor.
- Release the trigger switch as soon as the cut is completed, allowing the chain to stop. If you run the saw without a cutting load, unnecessary wear can occur to the chain, bar, and unit.
- Do not put pressure on the saw at the end of the cut.

WORK AREA PRECAUTIONS (See Fig. 8)

- Cut only wood or materials made from wood; no sheet metal, no plastics, no masonry, and no non-wooden building materials.
- Never allow children to operate the saw. Allow no person to use this chainsaw who has not read this Operator’s Manual or received adequate instructions for the safe and proper use of this chainsaw.
- Keep everyone - helpers, bystanders, children, and animals - a SAFE DISTANCE from the cutting area. During felling operations, the safe distance should be at least twice the height of the largest tree in the felling area. During bucking operations, keep a minimum distance of 15 ft. (4.6 m) between workers.
- Always cut with both feet on solid ground to prevent being pulled off balance.
- Do not cut above chest height, because a saw held higher is difficult to control against kickback forces.

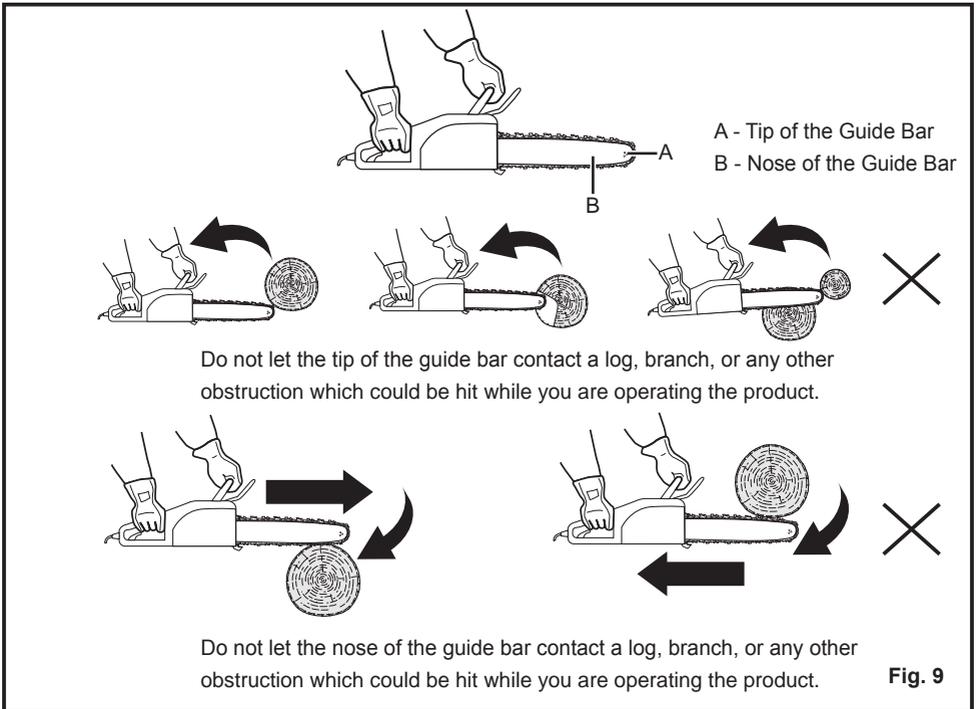
OPERATION

- Do not fell trees near electrical wires or buildings. Leave this operation for professionals.
- Cut only when visibility and light are adequate for you to see clearly.



HAZARDOUS CONDITIONS IN TREE FELLING (See Fig. 9)

When felling a tree, it is important that you heed the following instructions and warnings to prevent possible serious injury (Fig. 9):



OPERATION

TO AVOID KICKBACK

- Saw with the guide bar at a flat angle.
- Never work with a loose, widely stretched or the heavily worn out chain.
- Ensure the chain is sharpened correctly.
- Never saw with the tip of the guide bar.
- Always hold the product firmly with both hands.
- Always use a low-kickback chain.
- Ensure the correct chain tension.
- Only cut with the motor at high speeds.
- Do not let the nose of the guide bar contact a log, branch, or any other obstruction which could be hit while you are operating the product.
- Follow the chain sharpening and maintenance instructions in the Maintenance section of this manual.
- Only replace the guide bar and the chain with the identical parts as specified in the Parts List of this manual.

WARNING

Do not cut down trees having an extreme lean or large trees with rotten limbs, loose bark or hollow trunks. Have these trees pushed or dragged down with heavy equipment, then cut them up.

DANGER

Electrocution hazard. Do not cut trees or branches near power lines or electrical wires. Contact with power lines or live electrical wires will result in serious personal injury or death.

WARNING

Do not cut trees or branches near buildings, which may result in serious injuries or property damage.

WARNING

Check the tree for damaged or dead branches that could fall and hit you during felling.

OPERATION

! WARNING

Periodically glance at the top of the tree during the back cut to assure the tree is going to fall in the desired direction.

! WARNING

If the tree starts to fall in the wrong direction, or if the saw gets caught or hung up during the fall, leave the saw and save yourself!

! WARNING

Do not fell trees during periods of high wind or heavy precipitation. Wait until the hazardous weather has ended.

PROPER PROCEDURE FOR TREE FELLING (See Figs. 10a-10e)

When bucking and felling operations are being performed by two or more persons at the same time, the felling operation should be separated from the bucking operation by a distance of at least twice the height of the tree being felled. Trees should not be felled in a manner that would endanger any person, strike any utility line, or cause any property damage. If the tree does make contact with any utility line, the utility company should be notified immediately.

- The operator should keep on the uphill side of terrain as the tree is likely to roll or slide after it is felled.
- Plan and clear an escape path before starting to cut. The escape path should extend back and diagonally to the rear of the expected line of fall. Make sure there are no obstructions in your planned path of retreat. Clear a path of safe retreat from a point approximately 135° to the planned line of fall on each side of the tree (Fig. 10a).

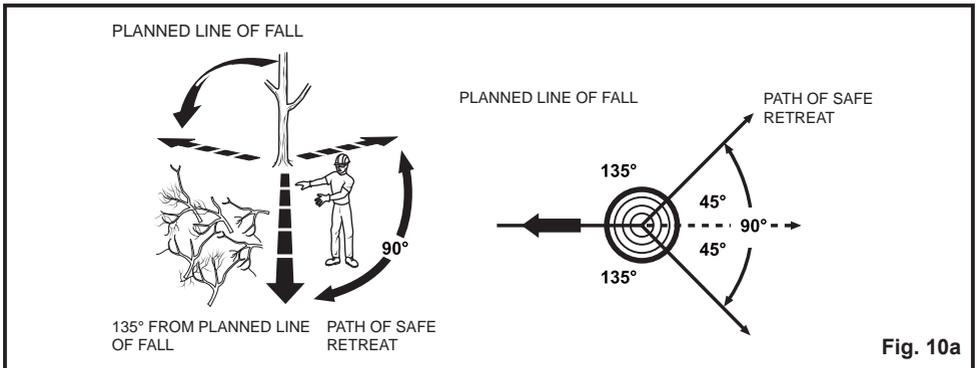
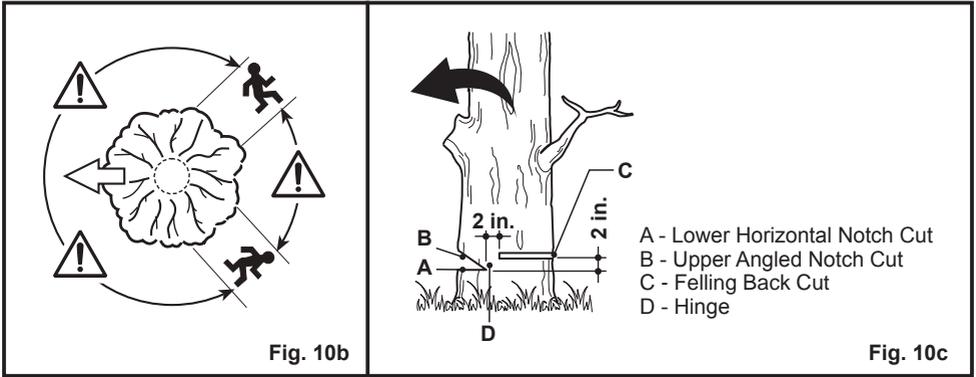


Fig. 10a

OPERATION

- Before felling is started, consider the natural lean of the tree, the location of larger branches and the wind direction to judge which way the tree will fall.



NOTCHING UNDERCUT

- Make the notch 1/3 the diameter of the tree, perpendicular to the direction of fall (Fig. 10c). Make the lower horizontal notching cut (A) first. This will help to avoid pinching either the saw chain or the guide bar when the upper angled second notching cut (B) is being made.

FELLING BACK CUT

- Make the felling back cut (C) at least 2 inches (50 mm) higher than the horizontal notching cut (Fig. 10c). Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so enough wood is left to act as a hinge (D). The hinge wood keeps the tree from twisting and falling in the wrong direction. Do not cut through the hinge.

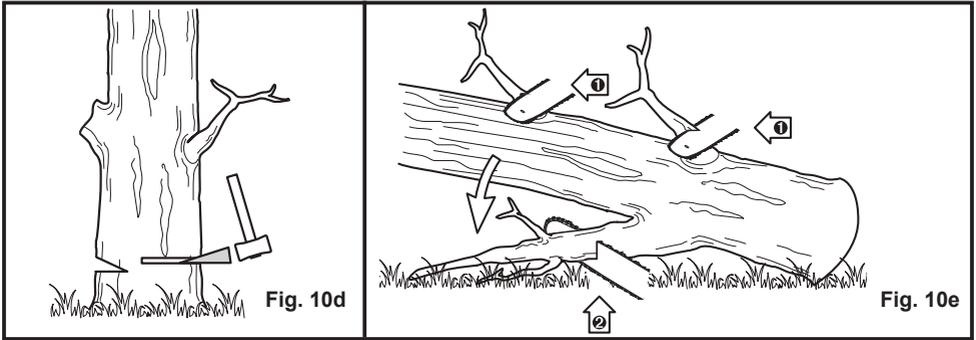
WARNING

Never cut through to the notch when making a back cut. The hinge controls the fall of the tree. This is the section of wood between the notch and back cut.

- As the felling back cut gets close to the hinge, the tree should begin to fall. If there is any chance that the tree may not fall in desired direction or that it may rock back and bind the saw chain, stop cutting and insert wedges in the cut (Fig. 10d) so as to open it wider and drop the tree in the desired line of fall.
- When the tree begins to fall, remove the chain bar from the cut, stop the chainsaw motor, put the chainsaw down, and move away from the tree along the planned retreat path. Be alert for overhead limbs falling and watch your footing.
- Limbing is removing the branches from a fallen tree. When limbing, leave larger lower limbs to support

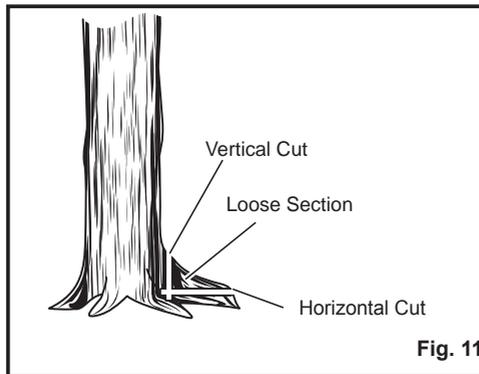
OPERATION

the log off the ground. Remove the small limbs in one cut (Fig. 10e). Branches under tension should be cut from the bottom up to avoid binding the chain bar.



REMOVING BUTTRESS ROOTS (See Fig. 11)

- A buttress root is a large root extending from the trunk of the tree above the ground. Saw through the buttress root with a vertical cut. Remove the resulting loose section from the work area. Follow the correct tree felling procedure as stated in “Proper Procedure for Tree Felling” after you have removed the large buttress roots (Fig. 11).



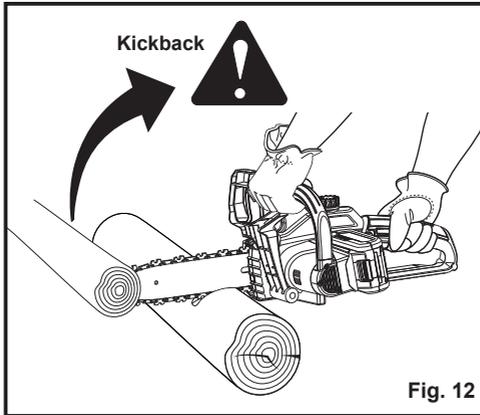
BUCKING (See Fig. 12)

Bucking is the term used for cutting a fallen tree to the desired log length (Fig. 12).

- Always make sure your footing is secure and your weight is distributed evenly on both feet.
- Cut only one log at a time.
- Support small logs on a saw horse or another log while bucking.
- Keep a clear cutting area. Make sure no objects can contact the guide bar nose and chain during cutting, because this can cause kickback.

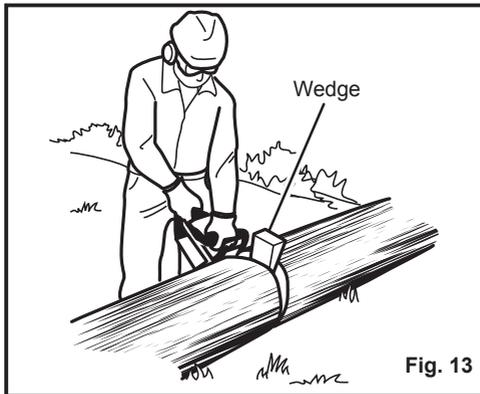
OPERATION

- When bucking on a slope, always stand on the uphill side of the log. To maintain complete control of the chainsaw when cutting through the log, release the cutting pressure near the end of the cut without relaxing your grip on the chainsaw handles. Do not let the chain contact the ground. After completing the cut, wait for the saw chain to stop before you move the chainsaw. Always stop the motor before moving from tree to tree.



BUCKING WITH A WEDGE (See Fig. 13)

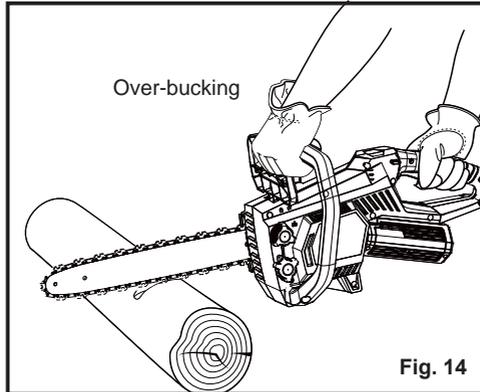
If the wood diameter is large enough for you to insert a bucking wedge without touching the chain, you should use the wedge to hold the cut open to prevent pinching (Fig. 13).



OPERATION

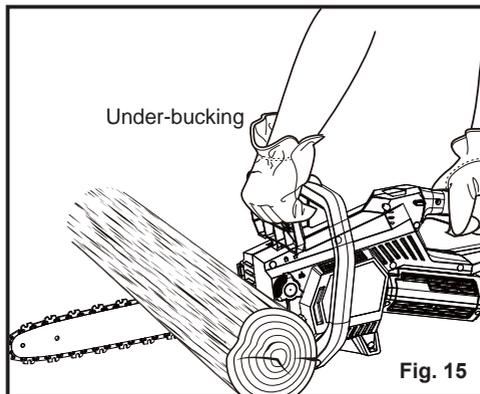
OVER-BUCKING (See Fig. 14)

- Begin on the top side of the log with the bottom of the saw against the log; exert light pressure downward. Note that the saw will tend to pull away from you (Fig. 14).



UNDER-BUCKING (See Fig. 15)

Begin on the underside of the log with the top of the saw against the log; exert light pressure upward. During under-bucking, the saw will tend to push back at you. Be prepared for this reaction, and hold the saw firmly to maintain control (Fig. 15).

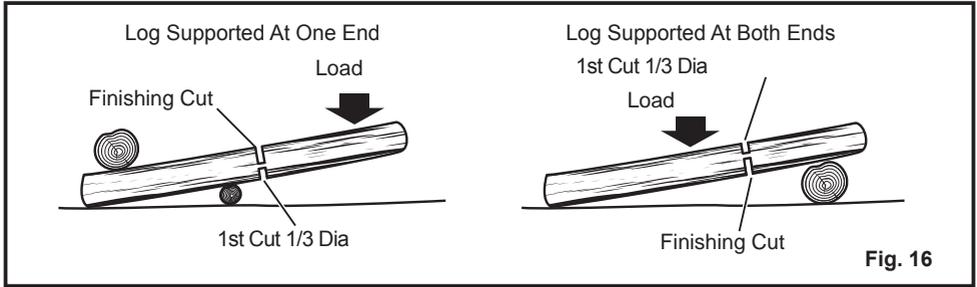


BUCKING LOGS UNDER STRESS (See Fig. 16)

Make the first bucking cut $\frac{1}{3}$ of the way through the log, and finish with a $\frac{2}{3}$ cut on the opposite side. As you cut the log, it will tend to bend. The saw can become pinched or hung in the log if you make the first cut deeper than $\frac{1}{3}$ of the diameter of the log (Fig. 16).

Give special attention to logs under stress to prevent the bar and chain from pinching.

OPERATION



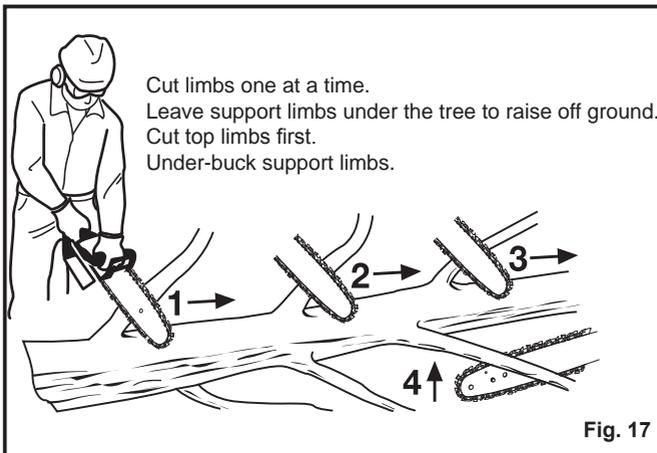
LIMBING (See Fig. 17)

Limbing is removing branches from a fallen tree.

- Work slowly, keeping both hands on the chainsaw with a firm grip. Always make sure your footing is secure and your weight is distributed evenly on both feet.
- Leave the larger support limbs under the tree to keep the tree off the ground while cutting.
- Limbs should be cut one at a time. Remove the cut limbs from the work area often to help keep the work area clean and safe.
- Support limbs are under tension. Under-buck (cut from bottom up) support limbs to avoid binding the saw blade.

! WARNING

While limbing, stand on the other side of the tree from the limb you are cutting to stay out of the way of the falling cut limb (Fig. 17).



OPERATION

PRUNING (See Fig. 18)

Pruning is trimming limbs from a live tree (Fig. 18).

- Work slowly, keeping both hands on the chainsaw with a firm grip. Always make sure your footing is secure and your weight is distributed evenly on both feet.
-

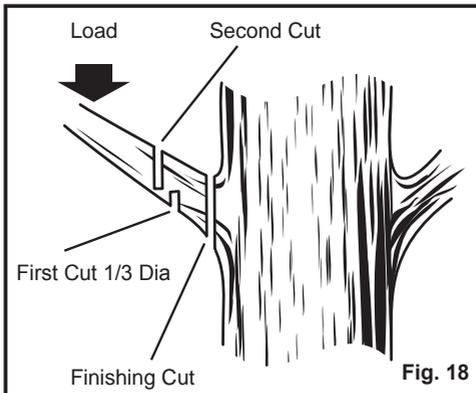
WARNING

Do not cut from a ladder. This is extremely dangerous. Leave this operation for professionals.

WARNING

Do not cut above chest height, because a saw held higher is difficult to control against kickback.

- When pruning trees, it is important not to make the finishing cut next to the main limb or trunk until you have cut off the limb further out to reduce the weight. This prevents stripping the bark from the main member.
- Under-buck the branch 1/3 through for your first cut.
- Your second cut should over-buck to drop the branch off.
- Now make a smooth and neat finishing cut against the main member so the bark will grow back to seal the wound.



OPERATION

CUTTING SPRING POLES (See Fig. 19)

A spring pole is any log, branch, rooted stump, or sapling that is bent under tension by other wood, so that it springs back if the wood holding it is cut or removed. On a fallen tree, a rooted stump has a high potential of springing back to the upright position during the bucking cut to separate the log from the stump. Watch out for spring poles - they are dangerous (Fig. 19).



! DANGER

Spring poles are dangerous, and could strike the operator, causing the operator to lose control of the chainsaw. This could result in severe or fatal injury to the operator.

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 eye protection with side shields marked to comply with ANSI Z87.1, along with hearing protection. Failure to do so could result in objects being thrown into your eyes resulting in possible serious injuries. If operation is dusty, also wear breathing protection.

WARNING

To avoid serious personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.

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 a clean cloth 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.

Remove the scabbard when performing any maintenance or cleaning. Always place scabbard over the bar when chainsaw is not in use.

BATTERY PACK

- Store the battery pack fully charged.
- Charge the battery pack whenever there is a noticeable reduction in the chainsaw performance. Do not allow the battery pack to become completely discharged.
- Once the battery pack is fully charged, remove the battery from the charger and disconnect the charger from the outlet.
- Do not store the battery pack on the tool or in the charger.
- Charge the battery at a temperature between 40°F (4°C) and 100°F (38°C). If the battery pack is hot, allow it to cool down before recharging.

MAINTENANCE

CHARGER

- Keep the charger clean and clear of debris. Do not allow foreign material into the recessed cavity or on the contacts. Wipe with a dry cloth. Do not use solvents, water, or place in wet conditions.
- Always unplug the charger when the battery pack is not installed on the charger.
- Keep the charger stored in normal room temperature. Do not store it in excessive heat. Do not use in direct sunlight.
- Disconnect the charger from the AC power outlet when not in use and once the battery has reached a full charge.

LUBRICATION

All of the motor bearings in this product are lubricated with a sufficient amount of high grade oil for the life of the unit under normal operating conditions. Therefore, no further lubrication is required.

CHAINSAW CARE

Switch the chainsaw off, remove the battery pack and let it cool down. Check, clean and store the chainsaw as described below. Keep the chainsaw clean. Remove the debris from it after each use and before storage. Regular and proper cleaning will help ensure the safe use and prolong the life of the chainsaw. Inspect the chainsaw before each use for worn and damaged parts. Do not operate the chainsaw if you find broken and worn parts.

GENERAL CLEANING

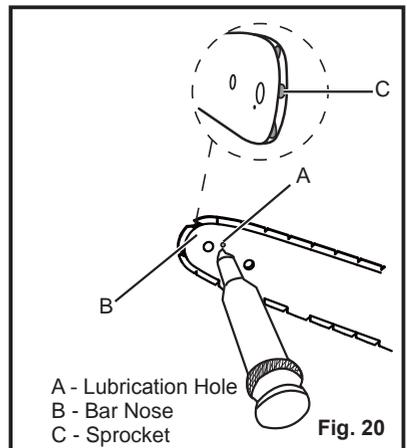
Clean the product with a slightly damp cloth and mild soap. Use a brush for areas that are hard to reach. In particular clean the air vents after every use with a cloth and brush.

Remove stubborn dirt with high pressure air (max. 3 Bar). Check for damaged or worn parts. Replace damaged or worn parts before further chainsaw use. Only use identical replacement parts as listed in the Parts List section in this manual.

BAR NOSE (See Fig. 20)

Clean the bar nose. Using a disposable lube gun, insert the applicator into the lubrication hole and inject grease until it appears at the outside edge of the bar nose sprocket (Fig. 20).

Rotate the saw chain by hand. Repeat the lubrication procedure until the entire bar nose sprocket has been greased.



MAINTENANCE

GUIDE BAR AND SAW CHAIN MAINTENANCE

Most guide bar problems can be prevented merely by keeping the chainsaw well maintained. Incorrect filing and non-standard cutter and depth gauge settings are the causes of most guide bar problems, primarily resulting in uneven bar wear. As the bar wears unevenly, the rails widen, which may cause the chain to clatter and make it difficult to complete straight cuts. If the guide bar is insufficiently lubricated and the chainsaw is operated with a chain which is too tight, the bar will wear rapidly. To help minimize bar wear, maintenance of the guide bar as well as the saw chain is recommended.

Check the oiling port (see Know Your Cordless Chainsaw) for clogging and clean if necessary to ensure the proper lubrication of the guide bar and saw chain during operation. Use a soft wire small enough to insert into the oil discharge hole.

REMOVING THE GUIDE BAR AND CHAIN (See Figs. 21-22)



WARNING

To avoid serious personal injury, read and understand all the safety instructions in this section.



WARNING

Before performing any maintenance, remove the battery pack from the tool. Failure to heed this warning could result in serious personal injury.



CAUTION

Always wear gloves when handling the bar and chain. These components are sharp and may contain burrs.



WARNING

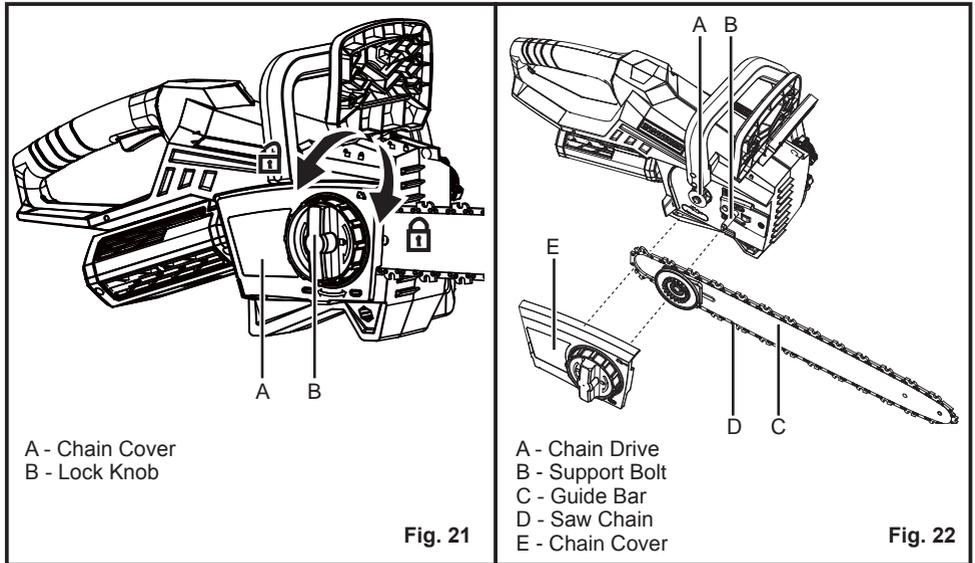
Never touch or adjust the chain while the motor is running. The saw chain is very sharp. Always wear protective gloves when performing maintenance involving the chain to avoid possible serious lacerations.

MAINTENANCE

WARNING

Always hold the chainsaw with your right hand on the rear handle and your left hand on the front handle. Holding the chainsaw with a reversed hand configuration increases the risk of personal injury and should never be done.

- Place the chainsaw on a suitable flat surface.
- Rotate the chain cover red lock knob counter clockwise to loosen and remove the chain cover (Fig. 21).
- Remove the bar and chain assembly from support bolt (Fig. 22).
- Wear protective gloves, and remove the used chain from guide bar.



MAINTENANCE

REPLACING THE GUIDE BAR AND CHAIN (See Figs. 23-26)

DANGER

Never start the motor before installing the guide bar, chain, chain cover, and chain cover lock knob. Without all these parts in place, the clutch can fly off or explode, exposing the user to possible serious injury.

WARNING

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

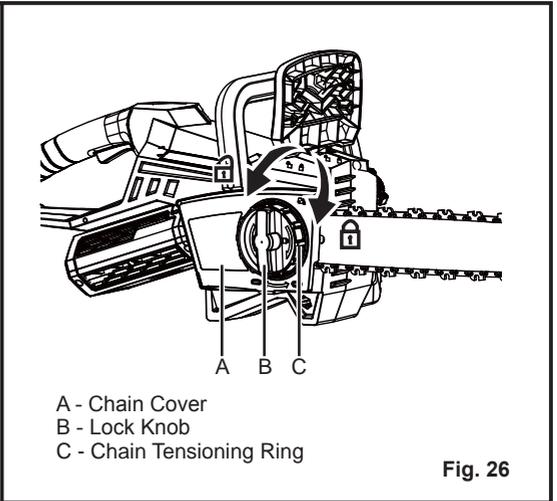
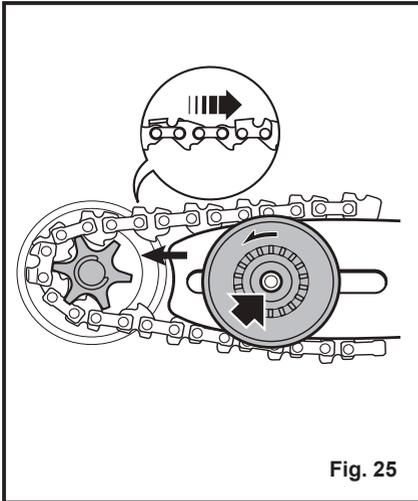
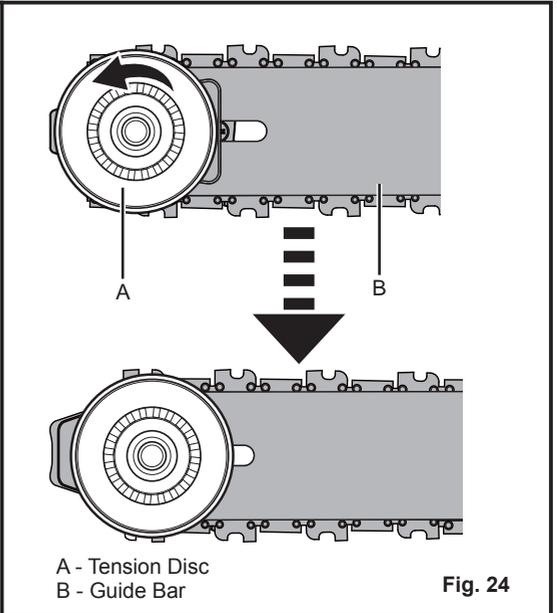
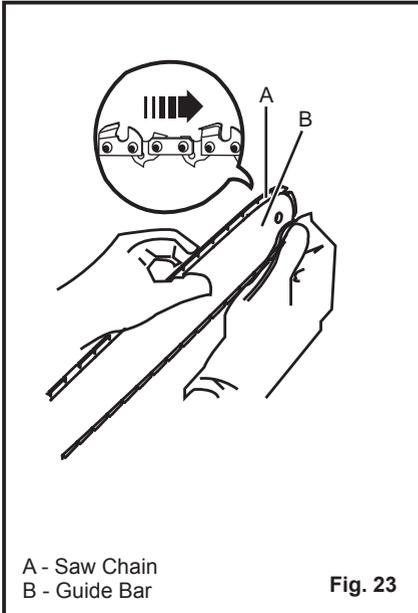
WARNING

Always use a saw chain designated as “low-kickback” or a saw chain which meets the low-kickback requirements!

A standard saw chain (a chain which does not have the kickback reducing guard links) should only be used by an experienced professional operator! Nevertheless, a low-kickback saw chain does not completely eliminate kickback! A low-kickback or “safety” chain should never be regarded as complete protection against injury! Therefore always use a low-kickback saw chain in conjunction with other kickback protection devices such as the chain brake!

- Use only a guide bar and saw chain as listed in the Product Specifications section of this manual.
- Lay the saw chain into the groove of the bar with the cutting edges of the chain pointing in the rotational direction shown on the bar (Fig. 23).
- Ensure that the guide bar tension disc is adjusted to the outermost position away from the bar; turn the disc counter clockwise if required (Fig. 24).
- Lay the saw chain around the drive sprocket, and lay the guide bar against the saw body so that the support bolt protrudes through the hole in the guide bar tension disc (Figs. 22 - 25).
- Replace the chain cover and slightly tighten the red lock knob by rotating it clockwise (Fig. 26). Do not tighten the lock knob completely; saw chain tensioning is required first.

MAINTENANCE



MAINTENANCE

Proceed to the **SAW CHAIN TENSIONING** section.

- After adjusting the chain tension, fully tighten the chain cover red lock knob.

SAW CHAIN TENSIONING (See *Figs. 27-28*)

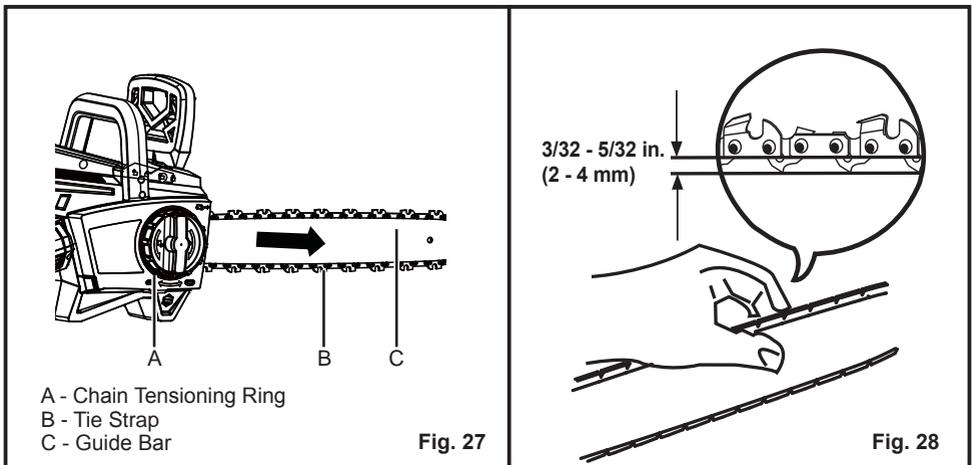
WARNING

Never touch or adjust the chain while the motor is running. The saw chain is very sharp. Always wear protective gloves when performing maintenance involving the chain.

- The chain is correctly tensioned when there is no sag on the underside of the guide bar, and when the chain is snug it can be turned by hand without binding. If the chain is too tight, it will not rotate.
- Upon initial operation, new chains can lengthen considerably. This is normal during the break-in period and the interval between future adjustments will soon increase.
 - a) To tension the chain, first set the chainsaw on a suitable flat surface.
 - b) Turn the chain tensioning ring clockwise until the chain tie straps are just touching the bottom edge of the guide bar (Fig. 27).

NOTE: The tension is correct when you can lift the chain so that the tie straps are approximately $3/32 - 5/32$ " (2 – 4 mm) above the bar edge (Fig. 28).

- After tensioning the chain, fully tighten the chain cover red lock knob.
- Always check the saw chain tension before use and regularly during use (approximately every five cuts). See the Tension Test section.



MAINTENANCE

TENSION TEST

- Set the chainsaw on a flat surface. Check the chain tension by using one hand to lift the chain above the edge of the bar. The tension is correct when the chain lifts so that the tie straps are approximately 3/32 - 5/32" (2 - 4 mm) above the bar edge (Fig. 28).
- Adjust the tension if the chain is too loose or tight. Rotate the chain tensioning ring clockwise to tighten and counter clockwise to loosen the chain tension.

NOTE: A cold chain is correctly tensioned when there is no slack on the underside of the guide bar, the chain is snug, and it can be turned by hand without binding. Re-tension a cold chain whenever the tie straps on the drive links hang below the bar bottom edge.

- After tensioning the chain, fully tighten the chain cover red lock knob.

NOTE: During normal saw operation, the temperature of the chain increases. The drive links tie straps of a correctly tensioned warm chain will hang approximately 1/16 in. (1.3 mm) below the bar bottom edge.

NOTE: New chains tend to stretch. Check the chain tension frequently and tension as required.



CAUTION

A chain tensioned while warm may be too tight upon cooling.
Check the tension when the chain is cold before next use.

CHECKING THE OIL LEVEL (See Figs. 29-31)

- Check the oil level through oil tank window (Quick View Oil Indicator) prior to switching on and regularly during operation. Refill oil when the oil level is lower than the "MIN" mark (Fig. 29).
- Do not overfill. Leave approximately 1/5" of space at the top of the tank to allow the oil to expand (Fig. 30).
- Wipe up spilled oil with a soft cloth and refit the tank cap.
- Make sure the guide bar and the chain are in place when you check the oil delivery.
- Switch on the product (see Starting the Chainsaw section); keep pressing the trigger switch and check if the chain oil is delivered as shown in the figure (Fig. 31).

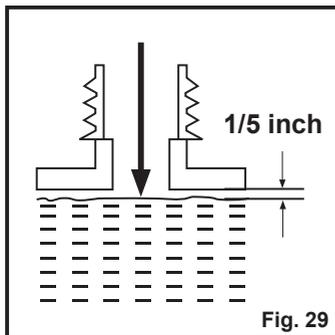
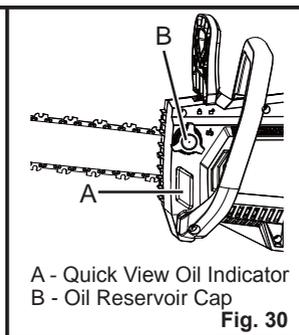


Fig. 29



A - Quick View Oil Indicator
B - Oil Reservoir Cap

Fig. 30

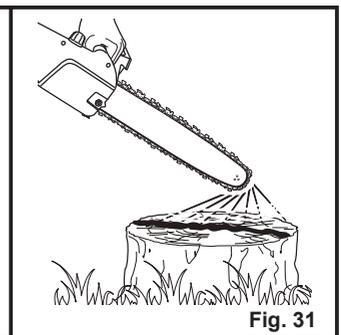
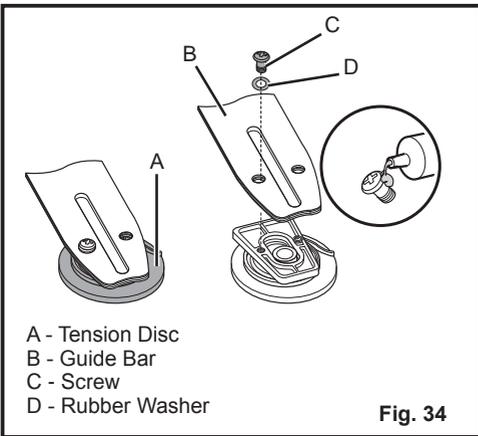
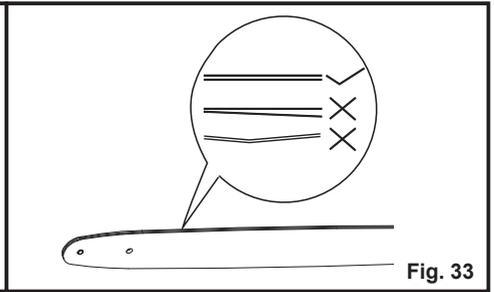
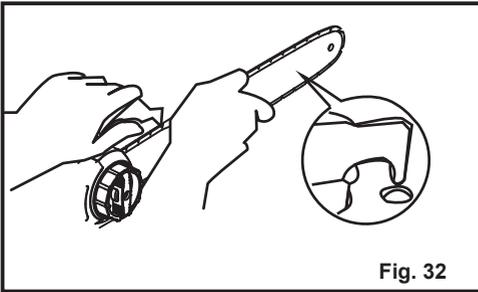


Fig. 31

MAINTENANCE

CHECK AND CLEAR THE GUIDE BAR (See Figs. 32-34)

- Check the drive sprocket. If it is worn or damaged due to strain, it must be replaced before further chainsaw use.
- Clear residue from the rails on the guide bar using a screwdriver, putty knife, wire brush or other similar tool. This will keep the oil passages open to provide proper lubrication to the bar and chain (Fig. 32).
- Check the guide bar 'rail' for wear: Hold a ruler (straight edge) against the side of the guide bar and 'cutter side plates'. If there is no gap between the ruler and guide bar, the guide bar 'rail' is normal. If there is a gap (ruler flush against the side of the guide bar) the guide bar 'rail' is worn and needs to be replaced with a new one of the same type (Fig. 33).
- Reverse the guide bar from time to time to allow for even wear, which will extend the life span of the bar. Loosen the screw and remove the tension disc from the guide bar. Ensure the rubber washer on the screw is free of wear. Turn the guide bar and fix the tension disc with the screw. Apply a drop of suitable glue to the screw to ensure its safe positioning when reassembled (Fig. 34).



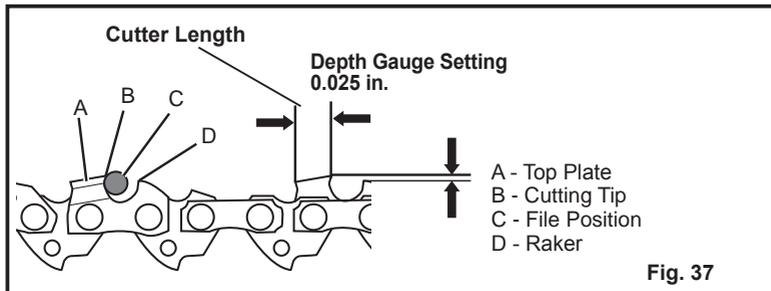
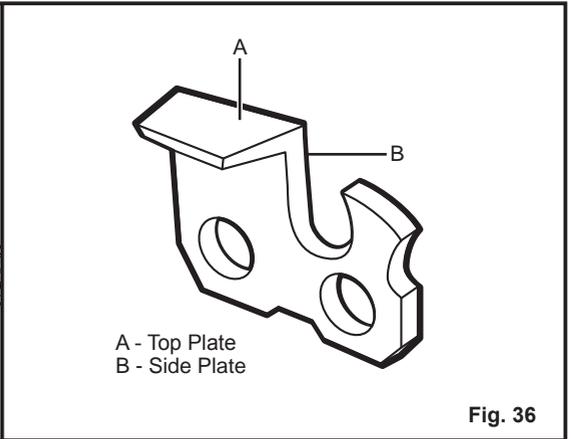
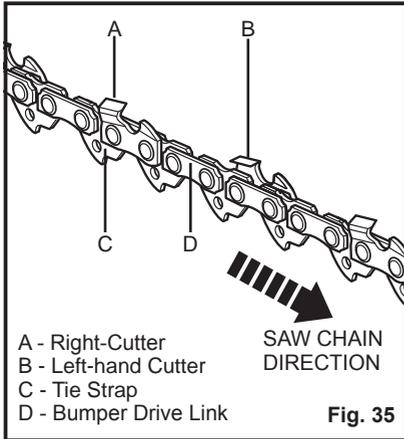
MAINTENANCE

CHAIN MAINTENANCE (See Figs. 35-37)

Know your saw chain.

Use only a low-kickback chain on this saw (Fig. 35). This fast-cutting chain provides kickback reduction when properly maintained. For a smooth and fast cut, maintain the chain properly. The chain requires sharpening when the wood chips are small and powdery, the chain must be forced through the wood during cutting, or the 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 severe kickback (Fig. 36).
- Depth gauge setting (Fig. 37).
- Edges worn too low increases the potential for kickback.
- Cutting edges not low enough decreases cutting ability.
- If the chain cutters hit hard objects such as nails and stones, or are abraded by mud or sand on the wood, take the saw to a qualified chainsaw service center to have the chain sharpened. Use only identical parts as listed in this manual.



MAINTENANCE

NOTE: Inspect the drive sprocket for wear or damage when replacing the chain. If signs of wear or damage are present in the areas indicated, take the saw to a qualified chainsaw service center to have the sprocket replaced. Use only identical parts as listed in this manual.

Check the chain for possible wear and damages. Replace it with a new one if required. Experienced users can sharpen a dull chain (see “Saw Chain Sharpening” below). Refit the chain and the guide bar as described in the Replacing the Guide Bar and Chain section.

NOTE: If you do not fully understand the correct procedure for sharpening the chain after reading the instructions that follow, have the chain sharpened by a qualified chainsaw service center or replaced with a recommended low-kickback chain.

SAW CHAIN SHARPENING (See Fig. 37)

Have your chain sharpened professionally at a qualified service center, or sharpen the chain yourself by using a proper sharpening kit. Also observe the sharpening instructions supplied with the sharpening kit. The height difference between the cutting tip and the raker is the depth gauge setting (Fig. 37).

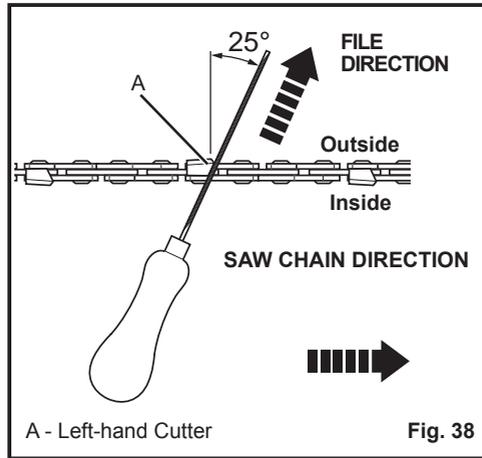
When sharpening the saw chain you have to consider the following points:

- File angle
- Cutting angle
- File position
- Diameter of round file
- File

TO SHARPEN THE CHAIN, PROCEED AS FOLLOWS (See Figs. 37-38):

- Use protective gloves.
- Ensure the chain is correctly tensioned on the guide bar. Use a round file, whose diameter is 1.1 times the cutting tooth depth. Make sure 20% of the file diameter is above the cutter's top plate. A file guide is available from most reputable tool merchants and is the easiest way to hold the file at the correct position. File at an angle perpendicular to the bar, and at an angle of 25° to the direction of travel (Fig. 38). 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 (Fig. 37). Check the depth gauge settings after every 5th sharpening. It is essential to keep the depth gauge settings at 0.025" (Fig. 37). Use a depth gauge measuring instrument to check the height of the depth gauge setting. Depth gauge measuring jigs are available from most tool merchants. If the saw is not functioning properly, take it to a qualified chainsaw service center to have saw inspected for possible repair. Use only identical parts as listed in this manual.

MAINTENANCE



STORAGE

Store the product and its accessories in a dry, frost-free place. Always store the product in a place that is inaccessible to children. The ideal storage temperature is between 50°F (10°C) and 80°F (26.7°C). We recommend using the original package for storage or covering the product with a suitable cloth or enclosure to protect it against dust.

TRANSPORTATION

Switch the product off and remove the battery pack before transporting it anywhere. Attach the blade cover to the saw blade. Attach other transportation guards, if applicable. Always carry the product by its gripping handles. Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles. Secure the product to prevent it from slipping or falling over.

ENVIRONMENTALLY SAFE BATTERY DISPOSAL



The following toxic and corrosive materials are in the batteries used in this battery pack:
Lithium-ion, a toxic material.

WARNING

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

WARNING

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

DO NOT ATTEMPT TO REPAIR IT!

To avoid injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment:

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

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The motor does not start when trigger switch is depressed.	Battery is not secure.	Remove and re-insert battery until you hear it "click" in place.
	Battery is not charged.	Charge battery pack per the instructions in this manual.
	Battery is defective	Replace with battery model listed in this manual.
	Battery temperature is too hot.	Wait for battery to cool down.
	The safety trigger is depressed.	Release the safety trigger.
The motor runs but the chain does not rotate.	The chain tension is too tight.	Refer to the Saw Chain Tensioning section in this manual to adjust chain tension.
	The guide bar and/or chain is damaged.	Replace with parts listed in this manual.
	The guide bar and/or chain are not assembled properly.	Refer to the Guide Bar and Saw Chain section of this manual.
The motor runs, the chain rotates but does not cut.	The chain is dull.	Sharpen the chain.
	The chain is on backwards.	Reverse the direction of the chain.
Bar and chain overheats or begins smoking.	Chain tension is too tight.	Adjust the chain tension.
	The chain-oil tank is empty and chain needs lubrication.	Refill tank with oil recommended in this manual.

LAWNMASTER® 60V WARRANTY



LawnMaster®

LawnMaster® 60V LIMITED WARRANTY

We take pride in producing a high quality, durable product. This LawnMaster® product carries a limited four (4) year warranty against defects in workmanship and materials from date of purchase under normal household use. This product carries a ninety (90) day warranty from date of purchase when used for commercial purposes. This warranty is void if this product is ever used for rental purposes. **Batteries and chargers carry a two-year warranty against defects in workmanship and materials from date of purchase.** Batteries must be charged in accordance with the operator's manual directions and regulations in order to be valid. Warranty does not apply to defects due to alterations, direct or indirect abuse, negligence, misuse, accidents, repairs and lack of maintenance. Please keep your receipt/packing list as proof of purchase. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state. For product service call Customer Service at (866) 384-8432.

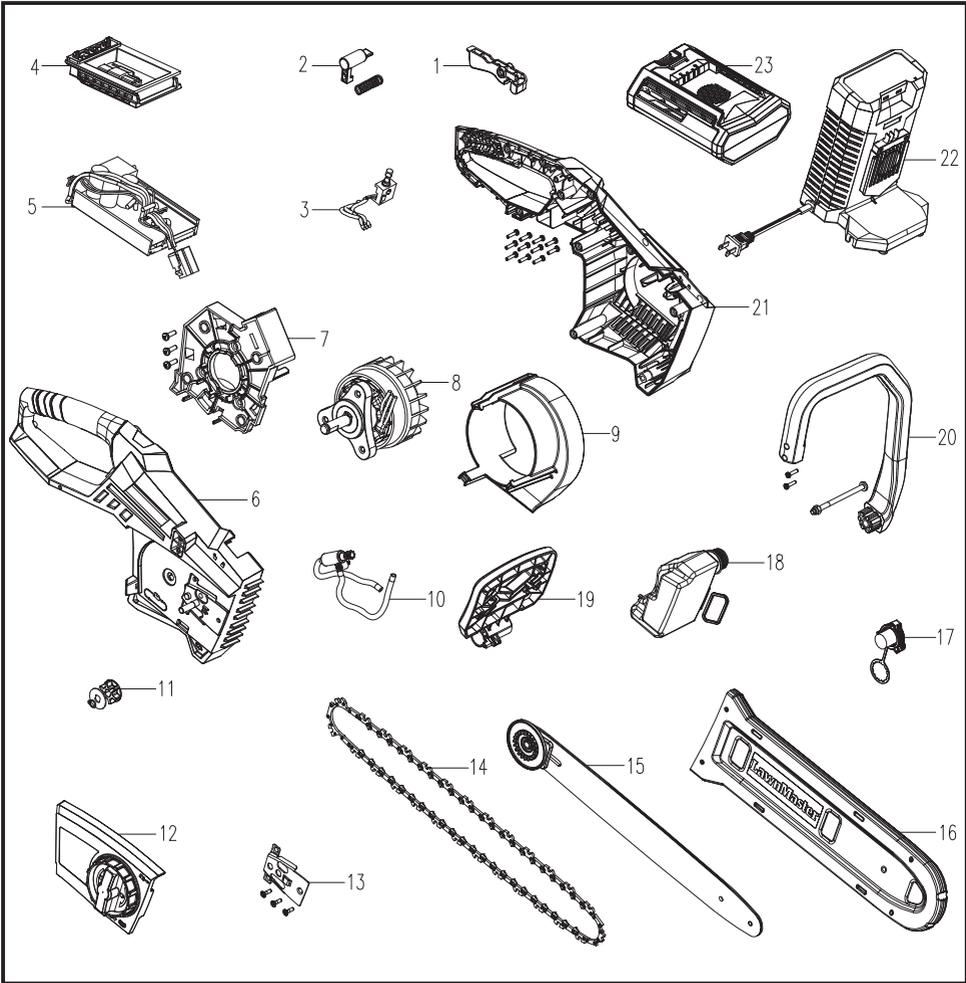
Items not covered by warranty :

1. Any part that has become inoperative due to alteration, misuse, commercial use, abuse, neglect, accident, or improper maintenance.
2. The unit, if it has not been operated and/or maintained in accordance with the owner's manual.
3. Normal wear, except as noted below.
4. Routine maintenance items such as lubricants, blade sharpening, etc.
5. Normal deterioration of the exterior finish due to use or exposure.
6. Parts that can wear out from normal use within the warranty period, such as the blades, collection bags, spools, spool covers, etc.

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 LawnMaster.

**THIS WARRANTY ONLY APPLIES TO ORIGINAL PURCHASER WITH PROOF OF PURCHASE.
THIS WARRANTY IS VOID WITHOUT PROOF OF PURCHASE.**

EXPLODED VIEW / PARTS LIST



EXPLODED VIEW / PARTS LIST

Key Number	Drawing Number	Description	Quantity
1	261021101	Trigger	1
2	261021102	Safety Switch	1
3	261018103	Speed Control Switch	1
4	261021110	Battery Engagement Plate	1
5	261018105	PCB Board	1
6	261021103	Right Motor Housing Assembly	1
7	261018107	Motor Basket	1
8	261018108	Motor Assembly	1
9	261018109	Wind Scooper	1
10	261018110	Oil Pump	1
11	261018111	Chain Wheel	1
12	261021104	Tool-Free Housing Assembly	1
13	261018113	Guide Plate Assembly	1
14	261018114	Chain	1
15	261021105	Guide Bar with Tensioning Sprocket	1
16	261021106	Scabbard	1
17	261021107	Oil Reservoir Cap	1
18	261018118	Oil Reservoir	1
19	261018119	Chain Guard Assembly	1
20	261018120	Assist Handle	1
21	261021108	Left Motor Housing Assembly	1
22	121058108	60V OPP Charger	1
23	121058111	60V 2.0Ah Battery	1

* Parts highlighted in gray are available for after sales purchase.

