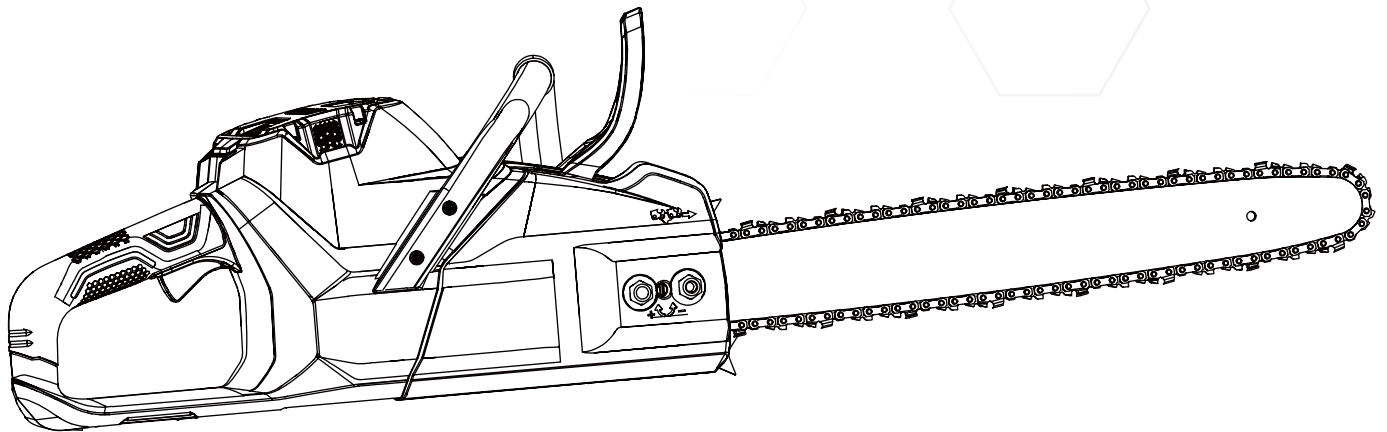


KOBALT™



ITEM #1359953

80V LITHIUM-ION BRUSHLESS 18-IN CHAIN SAW

MODEL #KCS 4080-06

Español p. 33

ATTACH YOUR RECEIPT HERE

Serial Number _____ Purchase Date _____



Questions, problems, missing parts? Before returning to your retailer, call our customer service department at **1-888-3KOBALT** (1-888-356-2258) 8 a.m. - 8 p.m., EST, Monday - Friday.

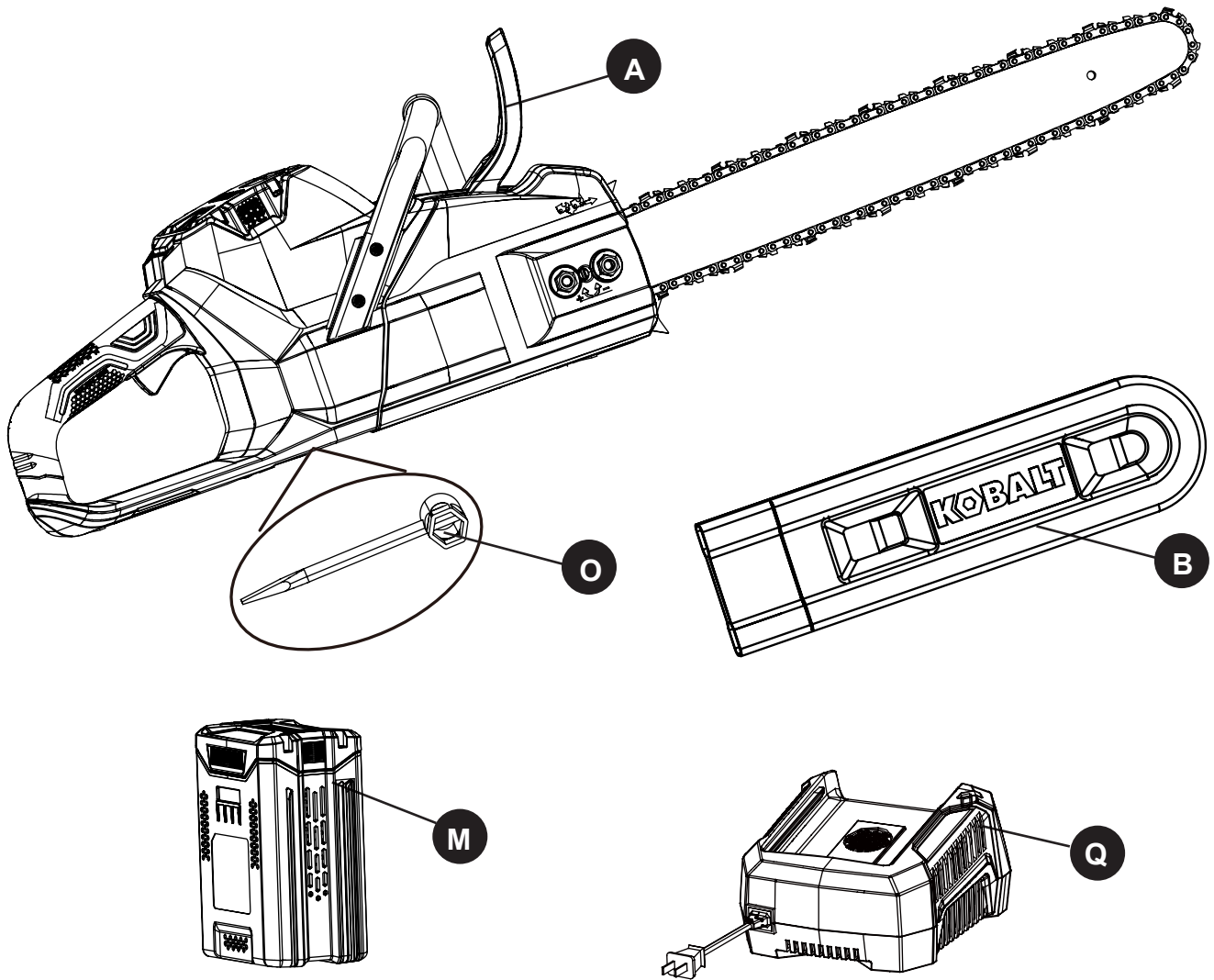
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PRODUCT SPECIFICATIONS

SPECIFICATIONS	
Bar length	18 in. (458 mm)
Chain pitch	3/8 in. (9.5 mm)
Chain gauge	0.050 in. (1.27 mm)
Chain type	91P062X
Guide bar type	180SDEA041
Chain oil tank capacity	6.8 oz (200 ml)
Unit weight (without battery)	10.6 lbs.(4.8 kg)











PACKAGE CONTENTS



PART	DESCRIPTION	QUANTITY
A	Chain saw	1
B	Scabbard	1
M	Battery	1
Q	Charger	1
O	Wrench	1




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.


SYMBOLS	DESIGNATION	EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
min	Minutes	Time
---	Alternating Current	Type of current
no	No Load Speed	Rational speed, at no load
/min	Per Minute	Revolutions, strokes, surface speed, orbits etc., per minute
	Safety Alert	Precautions that involve your safety.
	Wet Conditions Alert	Do not expose to rain or use in damp locations
	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 Hearing Protection	Wear eye protection that is marked to comply with ANSI Z87.1 as well as hearing protection when operating this product.
	Gloves	Wear non-slip, heavy-duty protective gloves when handling the chain saw and the blade.
	Safety Footwear	Wear non-slip safety footwear when using this equipment.
	Kickback	Tip contact can cause the guide bar to move suddenly upward and backward, which can cause serious injury.
	Operate With Two Hands	Hold and operate the saw properly with both hands.
	One Handed	Do not operate the saw using only one hand.
	Bar Nose Contact	Avoid bar nose contact.

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.

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 1-888-356-2258 for assistance.
-  The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before operating a power tool, always wear safety goggles, safety glasses with side shields, or a full face shield when needed. We recommend a Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields. Always use eye protection that is marked to comply with ANSI Z87.1.

SAVE THESE INSTRUCTIONS



SAFETY INFORMATION



IMPORTANT

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. The term “power tool” in all of the warnings listed below refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1. WORK AREA SAFETY

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

2. ELECTRICAL SAFETY

- 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 power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device protected supply. Use of an RCD reduces the risk of electric shock.
- Use only Kobalt 80-volt batteries. (KB 280-06, KB 2580-06, KB 380-06, KB 480-06).

3. PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A lapse of attention while operating power tools 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 appropriately will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack and when picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.



SAFETY INFORMATION

- **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- **Do not over-reach. Keep proper footing and balance at all times.** *This enables better control of the power tool 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.*

4. POWER TOOL USE AND CARE

- **Do not force the power tool. Use the power tool for the application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- **Disconnect the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- **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 power tool, 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 power tool for operations different from those intended could result in a hazardous situation.*

5. BATTERY TOOL USE AND CARE

- **Ensure the switch is in the off position before inserting battery pack.** *Inserting the battery pack into power tools that have the switch on invites accidents.*
- **Recharge only with the charger specified by the manufacturer.** *A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.*
- **Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*
- **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.** *Shorting the battery terminals together may cause burns or a fire.*
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact**



SAFETY INFORMATION

accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. *Liquid ejected from the battery may cause irritation or burns.*

6. SERVICE

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

7. CHAIN SAW SAFETY WARNINGS

- **Keep all parts of the body away from the saw chain when the chain saw is operating. Before you start the chain saw, make sure the saw chain is not in contact with anything.** *A moment of inattention while operating chain saws may cause entanglement of your clothing or body with the saw chain.*
- **Hold the power tool by insulated gripping surfaces only, because the saw chain may contact hidden wiring or its own cord.** *Saw chains contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.*
- **Always hold the chain saw with your right hand at the rear handle and your left hand at the front handle.** *Holding the chain saw with a reversed hand configuration increases the risk of personal injury and should never be done.*
- **Wear safety glasses and hearing protection. Further protective equipment for head, hands, legs and feet is recommended.** *Adequate protective clothing will reduce personal injury from flying debris or accidental contact with the saw chain.*
- **Do not operate a chain saw in a tree.** *Operation of a chain saw while up in a tree may result in personal injury.*
- **Always keep proper footing and operate the chain saw only when standing on fixed, secure and level surface.** *Slippery or unstable surfaces such as ladders may cause loss of balance or control of the chain saw.*
- **When cutting a limb that is under tension, be alert of spring back.** *When the tension in the wood fibres is released, the spring loaded limb may strike the operator and/or throw the chain saw out of control.*
- **Use extreme caution when cutting brush and saplings.** *The slender material may catch the saw chain and be whipped toward you or pull you off balance.*
- **Carry the chain saw by the front handle with the chain saw switched off and away from your body. When transporting or storing the chain saw, always fit the guide bar cover.** *Proper handling of the chain saw will reduce the likelihood of accidental contact with the moving saw chain.*



SAFETY INFORMATION

- **Follow instructions for lubricating, chain tensioning and changing accessories.** *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.*
- **Cut wood only. Do not use chain saw for purposes not intended. For example: do not use chain saw for cutting plastic, masonry or non-wood building materials.** *Use of the chain saw for operations other than intended could result in a hazardous situation.*



WARNING Proposition 65

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk of exposure to these chemicals varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as dust masks that are specifically designed to filter out microscopic particles.



SAFETY INFORMATION

Kickback

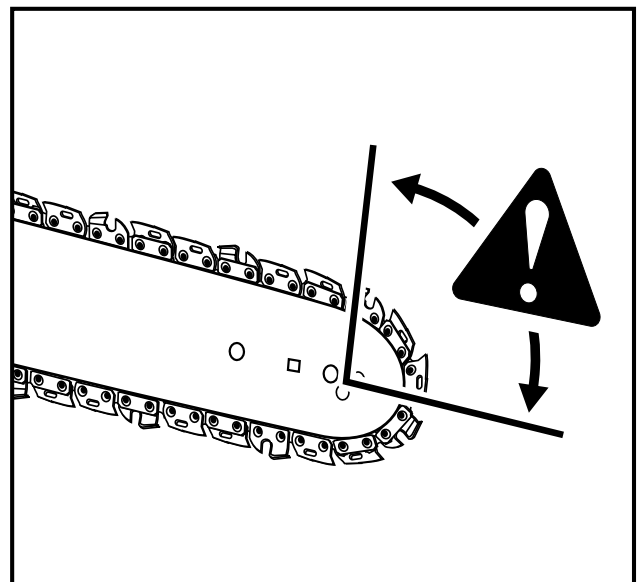
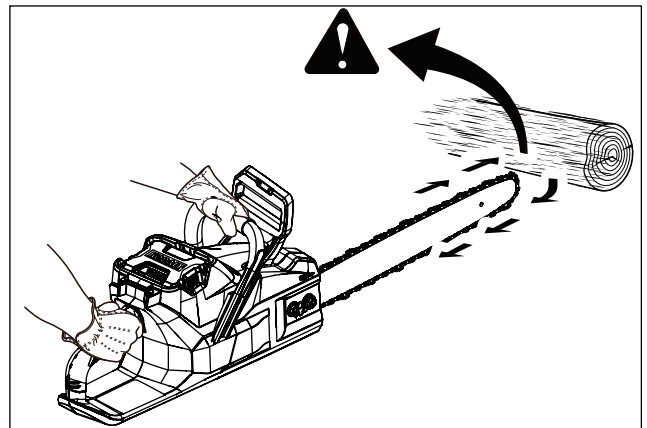


WARNING

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 saw 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 saw chain is pinched along the top of the guide bar, the guide bar can be driven rapidly back toward the operator. Either of these reactions can cause loss of saw control which can result in serious injury. Do not rely exclusively upon the safety devices built into the saw. As a chain saw user, you should take several steps to keep your cutting jobs free from accident or injury.

The following precautions should be followed to minimize kickback:

- **Maintain a firm grip, with thumbs and fingers encircling the chain saw handles, with both hands on the saw and position your body and arm to allow you to resist kickback forces.** Kickback can be controlled by the operator, if proper precautions are taken. Do not let go of the chain saw.
- **Do not overreach and do not cut above shoulder height.** This helps prevent unintended tip contact and enables better control of the chain saw in unexpected situations.
- **Only use replacement bars and chains specified by the manufacturer.** Incorrect replacement bars and chains may cause chain breakage and/or kickback.
- **Follow the manufacturer's sharpening and maintenance instructions for the saw chain.** Decreasing the depth gauge height can lead to increased kickback.



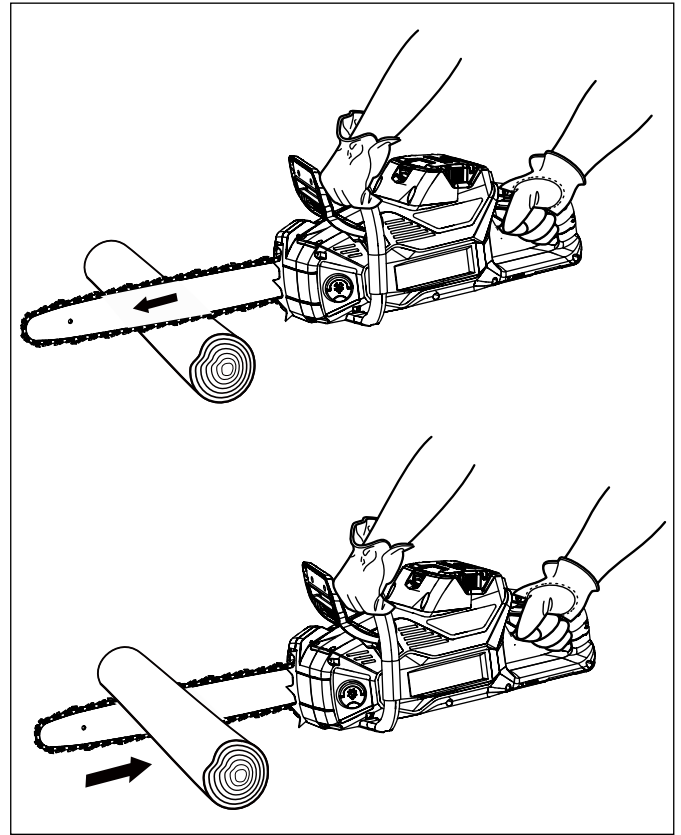


SAFETY INFORMATION

- Push and Pull - This reaction force is always opposite to the direction the chain is moving where wood contact is made. Thus, the operator must be ready to control the PULL when cutting on the bottom edge of the bar, and PUSH when cutting along the top edge.

Understanding your chain saw safety devices Low kickback saw chain

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 replacement chain that is equivalent to original chain or has been certified as low kickback chain per ANSI B175.1. Low kickback/skip tooth saw chain is a chain that has met the kickback performance requirements of ANSI B175.1 - 1991. (American National Standard for Power Tools - Gasoline- Powered Chain Saws-Safety Requirements) when tested on the representative sample of chain saws below 3.8 c.i.d. specified in ANSI B175.1-1991. As saw chains are sharpened during their useful life, they lose some of the low kickback qualities and extra caution should be used.





PREPARATION

Before beginning to operate this product, make sure all parts are present. Compare parts with package contents list. If any part is missing or damaged, do not attempt to operate the product.

Unpacking

This product has been shipped completely assembled.

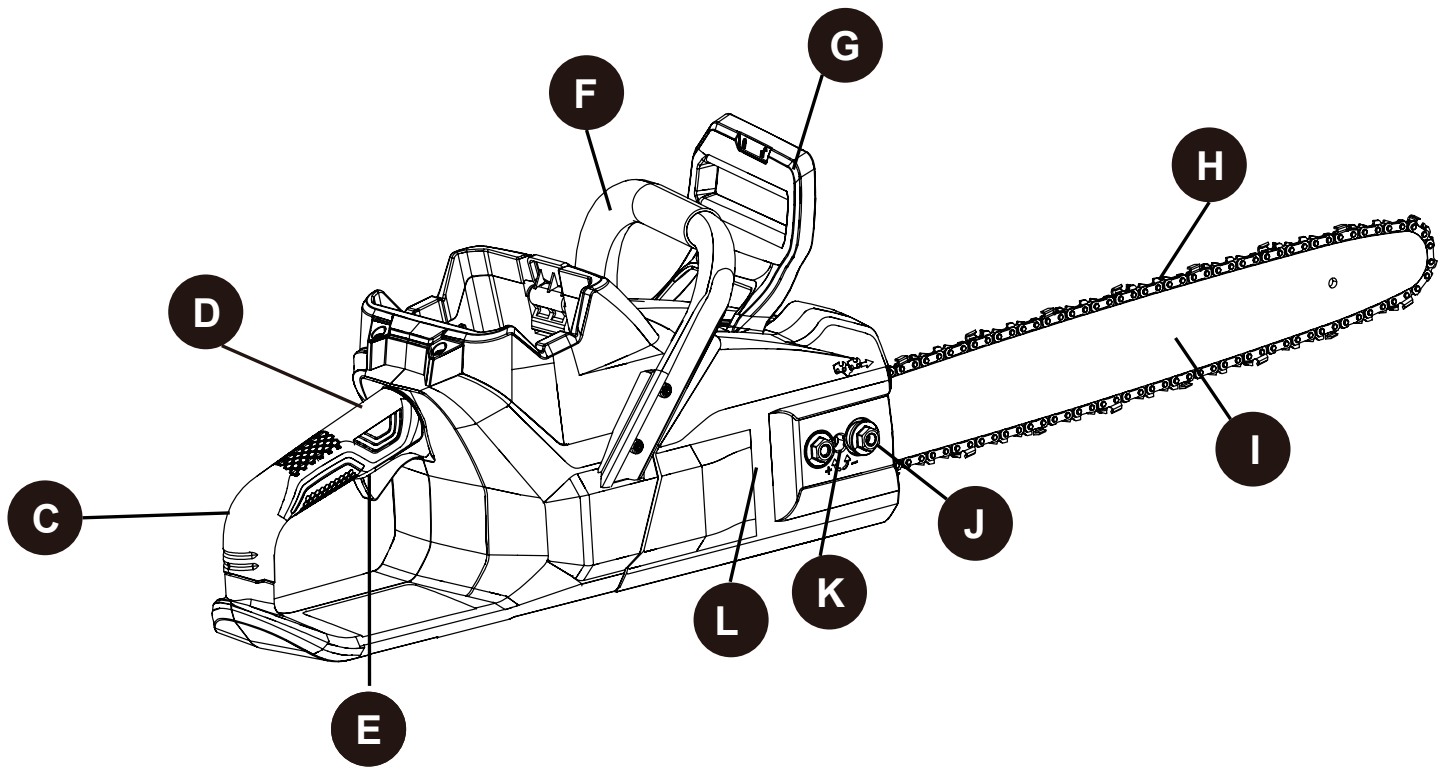
- Carefully remove the product and any accessories from the box. Make sure that all items listed in the package contents section are included.
- Inspect the product carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the product.
- If any parts are damaged or missing, please call 1-888-356-2258 for assistance.



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.
- 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.

KNOW YOUR CHAIN SAW



PART	DESCRIPTION	QUANTITY
C	Rear handle	1
D	Safety lock	1
E	Trigger	1
F	Front handle	1
G	Guard/Chain brake	1
H	Low kickback chain	1
I	Guide bar	1
J	Chain cover lock nuts	2
K	Adjustment screw	1
L	Chain cover	1

OPERATING INSTRUCTIONS

WARNING

- If any parts are damaged or missing do not operate this product until the parts are replaced. Using a product with damaged or missing parts could result in serious personal injury.
- 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.
- 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.
- 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.
- 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.

Adding bar and chain lubricant

Use a bar and chain lubricant (not included) with this product. It is designed for chains and chain oilers, and is formulated to perform over a wide temperature range with no dilution required.

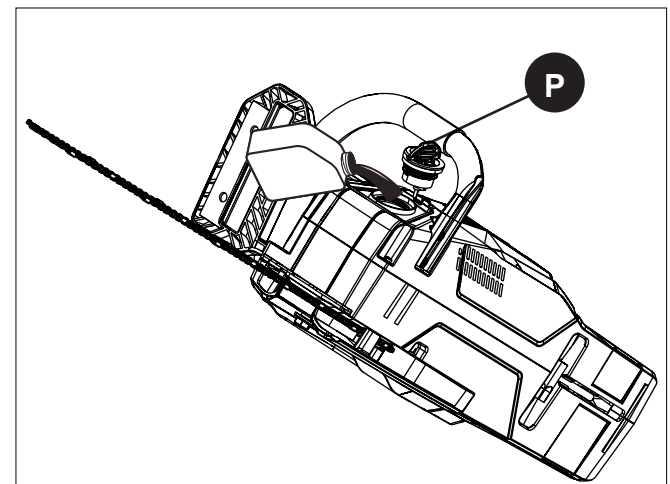
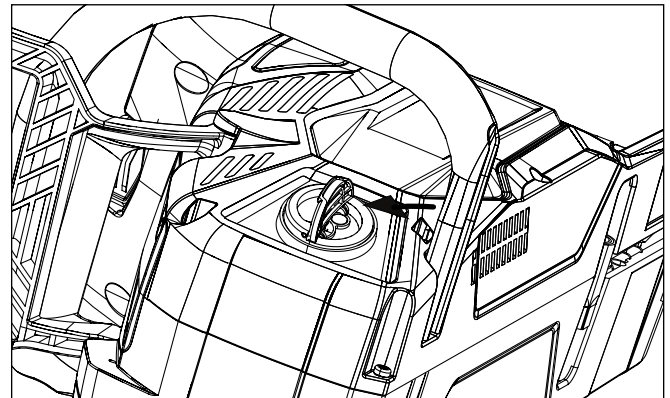
Note: Chain saw comes from the factory with no bar and chain oil added.

The level should also be checked after every 20 minutes of use and refilled as needed.

- Open the removable cover and then rotate the cover counterclockwise to remove it.
- Remove oil cap (P).
- Carefully pour the bar and chain oil into the tank.
- Wipe off excess oil and replace cap.
- Check and fill the oil tank when quick view oil indicator is below the MIN. line.
- Repeat as needed.

Note:

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



WARNING

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 INSTRUCTIONS

Battery

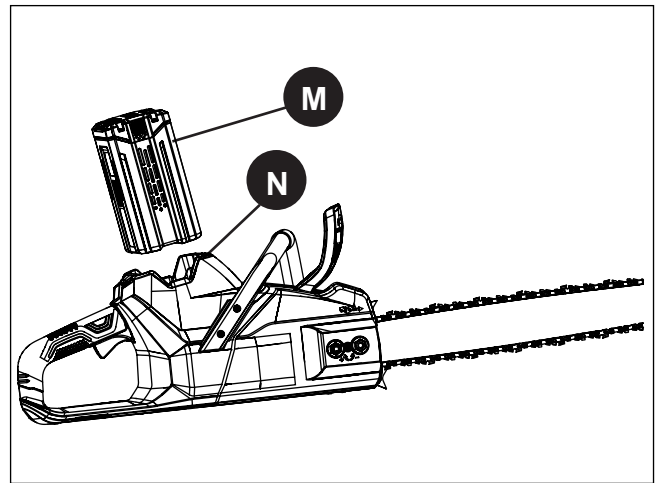
The battery will only be half charged when it is purchased. Before using the chain saw for the first time, place the battery in the battery charger and charge it fully. Be sure to read all safety precautions and follow the instructions in the battery and charger manuals. When storing the chain saw for a prolonged period of time, remove the battery. When the chain saw is going to be used again, charge the battery for at least a full charging period. The battery has no memory effect.

To install the battery:

- Align the battery (M) with the battery opening.
- Insert the battery into the battery opening until the battery release button (N) locks into place.
- Push down on the battery until it locks into place. You should hear a “click” once it is installed.

To remove the battery:

- Press the battery release button (N) on the chain saw. This will cause the battery to raise out of the tool slightly.
- Grasp the chain saw firmly and pull the battery out of the battery opening.



WARNING

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

- Replace the battery or the charger immediately if the battery case or charger cord is damaged.
- Verify that the battery is removed before inspecting, adjusting, or performing maintenance on any part of the chain saw.
- Read, understand, and follow the instructions contained in the charger manual.

IMPORTANT

This Lithium-ion battery is equipped with an internal protection, 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:

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

OPERATING INSTRUCTIONS

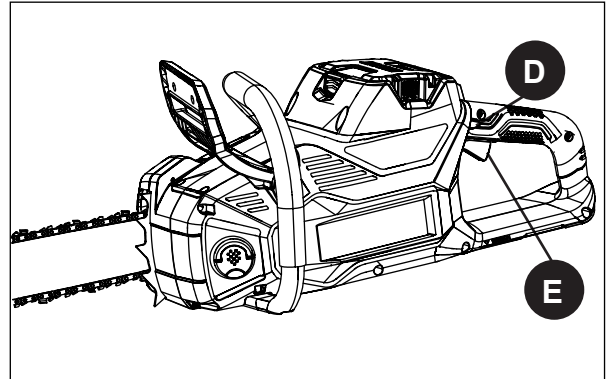
Starting and stopping the chain saw

WARNING

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

A. To start the chain saw:

- Make sure chain tension is at desired setting. Refer to adjusting the chain tension in the Care and Maintenance section of this manual.
- Make sure the chain cover lock nuts (J) are tight to the chain cover.
- Make sure no objects or obstructions are in the immediate vicinity which could come in contact with the bar and chain.
- Insert the battery into the chain saw.
- Press in the safety lock (D). This makes the trigger (E) operational.
- Press and hold the trigger (E) and keep it pressed for continued operation.



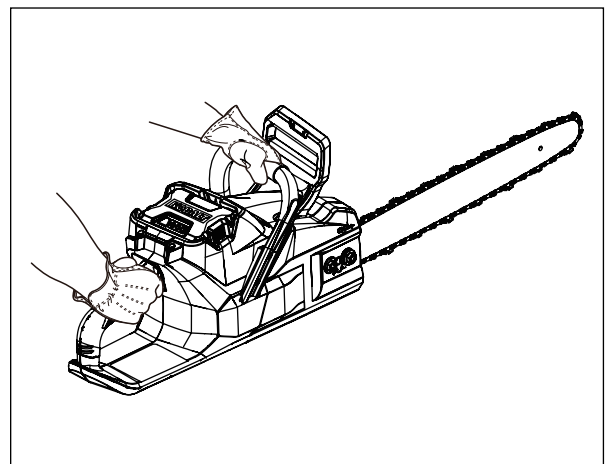
B. To stop the chain saw:

- Release the trigger (E).
- Upon release of the trigger, the switch lock will be automatically reset to the lock position.

Preparing for cutting

See General Safety Rules 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.
- 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.



OPERATING INSTRUCTIONS

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

Proper cutting stance

- Balance your weight with both feet on solid ground.
- Keep left arm with 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 front handle.

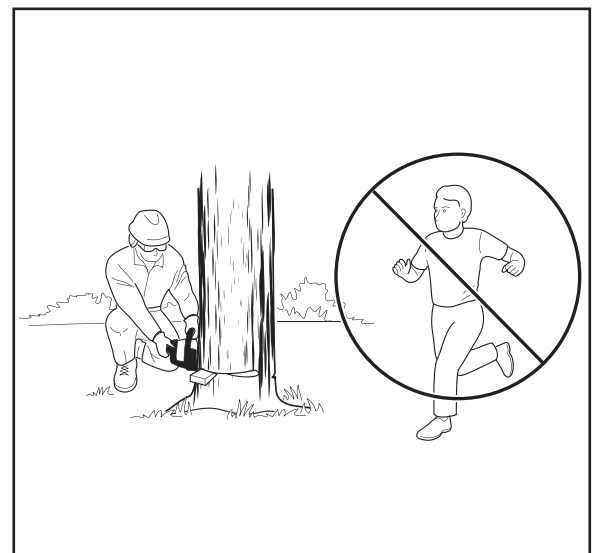
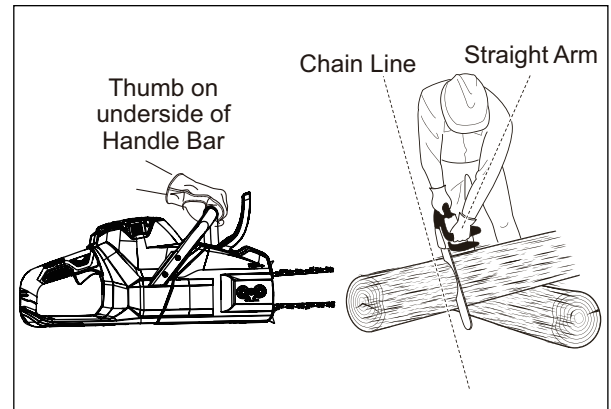
Basic operating/cutting procedures

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.
- Press the safety lock and squeeze the trigger, then release the safety lock 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.
- The chain will cut for you; exert only light downward pressure. Forcing the cut could result in damage to the bar, chain, or motor.
- Release the trigger 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

- Cut only wood or materials made from wood; no sheet metal, no plastics, no masonry, no nonwood building materials.
- Never allow children to operate the saw. Allow no person to use this chain saw who has not read this operator’s manual or received adequate instructions for the safe and proper use of this chain saw.
- 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 trees in the felling area. During bucking operations, keep a minimum distance of 15 ft. (4.6 m) between workers.



OPERATING INSTRUCTIONS

- Always cut with both feet on solid ground to prevent being pulled off balance.
- Do not cut above chest height as a saw held higher is difficult to control against kickback forces.
- 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.

Felling trees

Hazardous conditions



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

When felling a tree, it is important that you heed the following warnings to prevent possible serious injury.

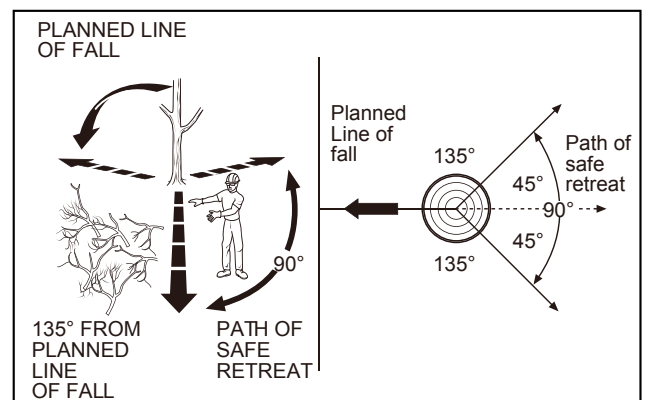
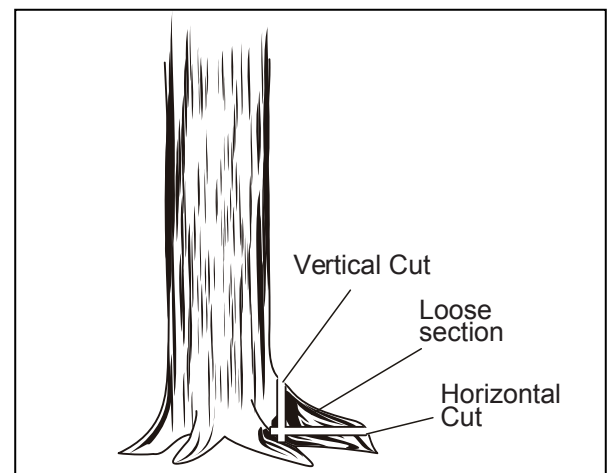
- Do not cut down trees having an extreme lean or large trees with rotten limbs, loose bark, or hollow trunks. Have these trees pushed or dragged down with heavy equipment, then cut them up.
- Do not cut trees near electrical wires or buildings.
- Check the tree for damaged or dead branches that could fall and hit you during felling.
- Periodically glance at the top of the tree during the backcut to assure the tree is going to fall in the desired direction.
- 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.

Removing buttress roots

A buttress root is a large root extending from the trunk of the tree above the ground. Remove large buttress roots prior to felling. Make the horizontal cut into the buttress first, followed by the 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.

Proper procedure for tree felling

- Felling a tree — 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.

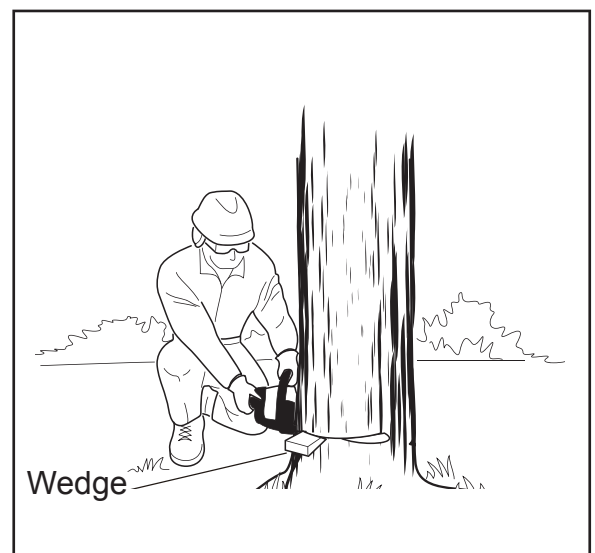
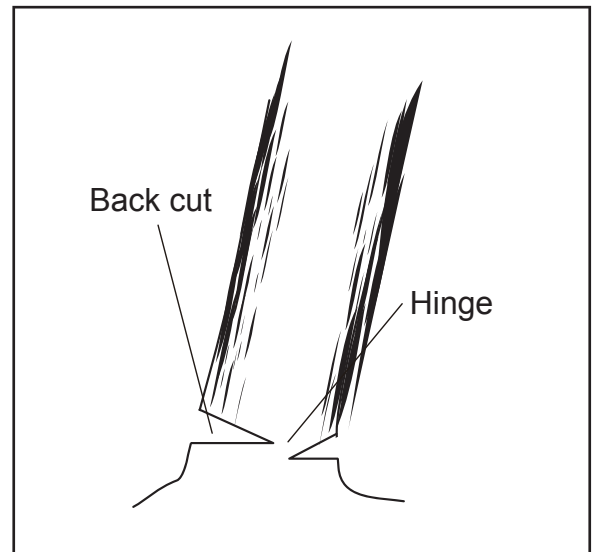
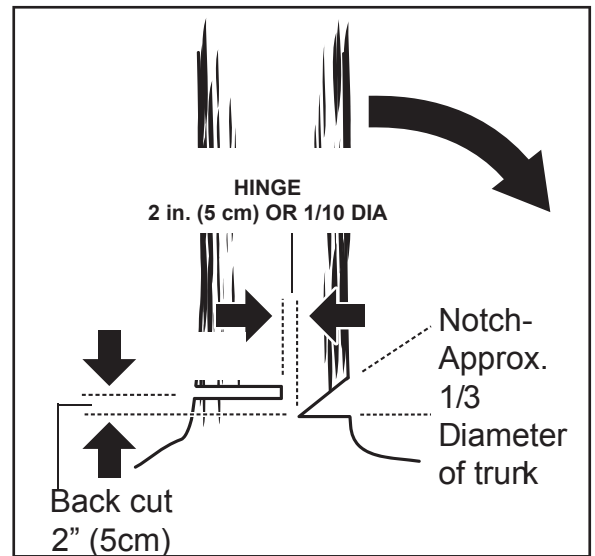


OPERATING INSTRUCTIONS

- Operator should keep on the uphill side of terrain as the tree is likely to roll or slide after it is felled.
- Pick your escape route (or routes in case the intended route is blocked). Clear the immediate area around the tree and make sure there are no obstructions in your planned path of retreat. Clear the path of safe retreat approximately 135° from the planned line of fall.
- Consider the force and direction of the wind, the lean and balance of the tree, and the location of large limbs. These things influence the direction in which the tree will fall. Do not try to fell a tree along a line different from its natural line of fall.
- Remove dirt, stones, loose bark, nails, staples, and wire from the tree where felling cuts are to be made.
- Notched Undercut. Cut a notch about 1/3 the diameter of the trunk on the side of the tree. Make the notch cuts so they intersect at a right angle to the line of fall. This notch should be cleaned out to leave a straight line. To keep the weight of the wood off the saw, always make the lower cut of the notch before the upper cut.
- Felling Backcut. As the felling cut gets close to the hinge, the tree should begin to fall. If there is any chance the tree may not fall in the desired direction or it may rock back and bind the saw chain, stop cutting before the felling cut is complete and use wedges of wood, plastic or aluminum to open the cut and drop the tree along its desired line of fall. Make the backcut level and horizontal, and at a minimum of 2 in. (5 cm) above the horizontal cut of the notch.

Note: Never cut through to the notch. Always leave a band of wood between the notch and back cut (approximately 2 in. (5 cm) or 1/10 the diameter of the tree). This is called “hinge” or “hingewood.” It controls the fall of the tree and prevents slipping or twisting or shoot back of the tree off the stump.

- On large diameter trees, stop the back cut before it is deep enough for the tree to either fall or settle back on the stump. Then insert soft wooden or plastic wedges into the cut so they do not touch the chain. The wedges can be driven in, little by little, to help jack the tree over.
- As tree starts to fall, stop the chain saw and put it down immediately. Retreat along the cleared path, but watch the action in case something falls your way.

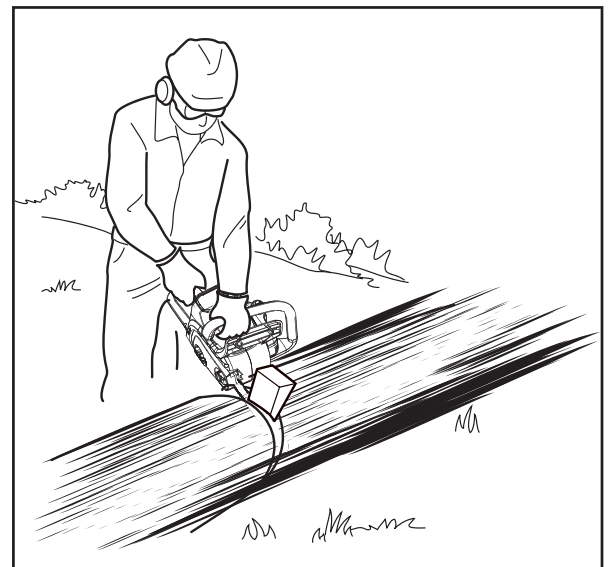
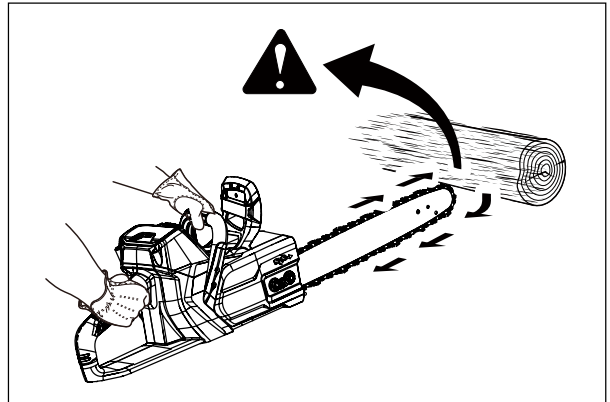


OPERATING INSTRUCTIONS

Bucking

Bucking is the term used for cutting a fallen tree to the desired log length.

- 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 that no objects can contact the guide bar nose and chain during cutting as this can cause kickback. Refer to Kickback earlier in this manual.
- When bucking on a slope, always stand on the uphill side of the log. To maintain complete control of the chain saw when cutting through the log, release the cutting pressure near the end of the cut without relaxing your grip on the chain saw handles. Do not let the chain contact the ground. After completing the cut, wait for the saw chain to stop before you move the chain saw. Always stop the motor before moving from tree to tree.

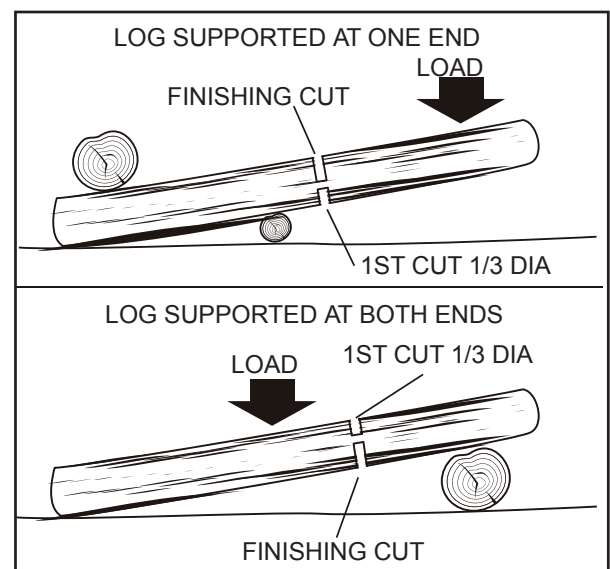


Bucking with a wedge

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

Bucking logs under stress

When the log is supported on one end, cut 1/3 the diameter from the underside. Then make the finished cut by overbucking to meet the first cut. When the log is supported on both ends, cut 1/3 of the diameter from the top overback. Then make the finished cut by underbucking the lower 2/3 to meet the first cut.



OPERATING INSTRUCTIONS

Overbucking

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.

Underbucking

Begin on the under side 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.

Limbing

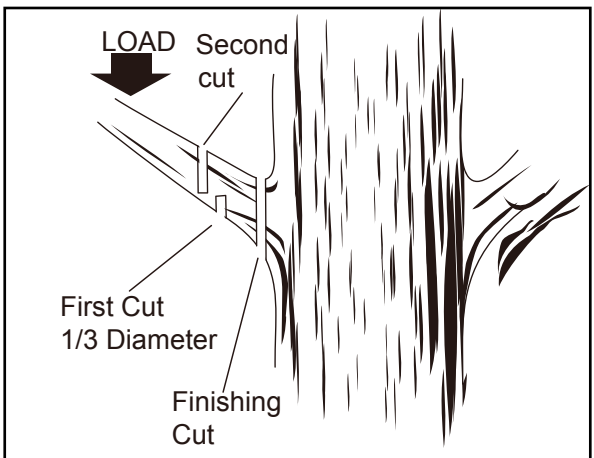
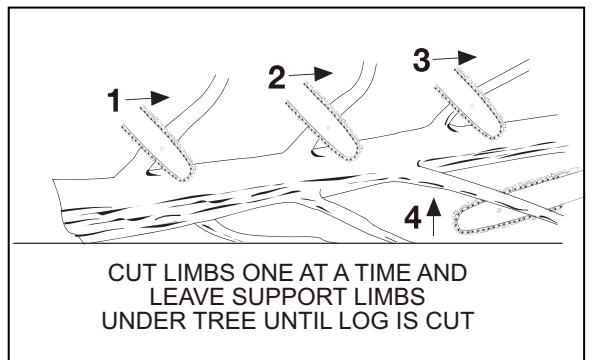
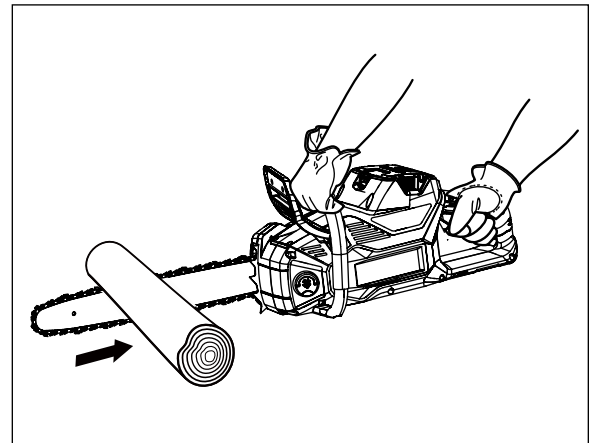
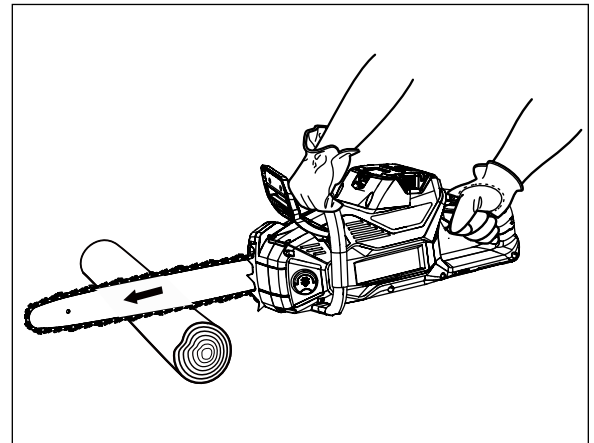
Limbing is removing branches from a fallen tree.

- Work slowly, keeping both hands on the chain saw 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.
- Branches under tension should be cut from the bottom up to avoid binding the chain saw.
- Keep the tree between you and the chain saw while limbing. Cut from the side of the tree opposite the branch you are cutting.

Pruning

Pruning is trimming limbs from a live tree.

- Work slowly, keeping both hands on the chain saw with a firm grip. Always make sure your footing is secure and your weight is distributed evenly on both feet.
- Do not cut from a ladder. This is extremely dangerous. Leave this operation for professionals.
- Do not cut above chest height as 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.
- Underbuck the branch 1/3 through for your first cut.
- Your second cut should overbuck to drop the branch off.
- Now make your finishing cut smoothly and neatly against the main member so the bark will grow back to seal the wound.

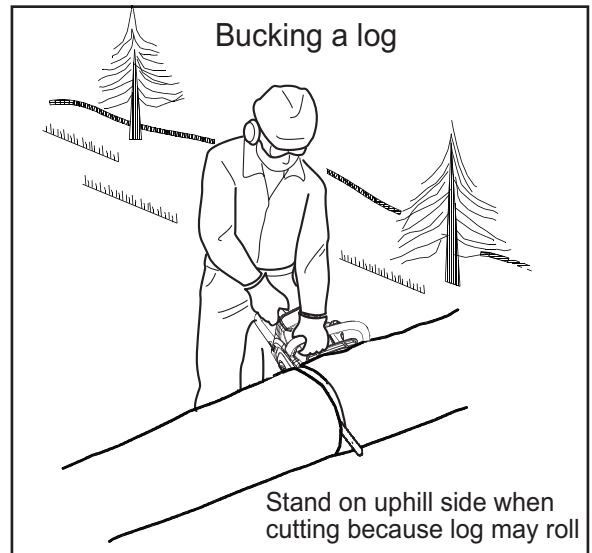


OPERATING INSTRUCTIONS

WARNING

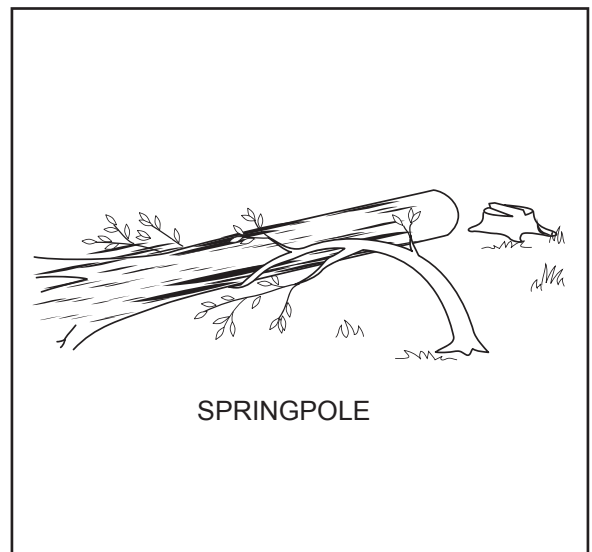
If the limbs to be pruned are above chest height, hire a professional to perform the pruning.

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



Cutting springpoles

A springpole is any log, branch, rooted stump, or sapling which is bent under tension by other wood so that it springs back if the wood holding it is cut or removed. 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 springpoles — they are dangerous.



WARNING

Springpoles are dangerous and could strike the operator, causing the operator to lose control of the chain saw. This could result in severe or fatal injury to the operator.

CARE AND MAINTENANCE

WARNING

- When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.
- Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If the operation is dusty, also wear a dust mask.

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, lubricant, grease, etc..

- 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.

Lubrication

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

Replacing the guide bar and chain

WARNING

Never start the motor before installing the guide bar, chain, bar cover, and bar nuts. Without all these parts in place, the unit may overheat, exposing the user to possible serious injury.

WARNING

- To avoid serious personal injury, read and understand all the safety instructions in this section.
- Before performing any maintenance, make sure the battery is removed. 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 to the chain to avoid possible serious lacerations.

Note: When replacing the guide bar and chain, always use the specified bar and chain listed in the bar and chain combinations section later in this manual.

CARE AND MAINTENANCE

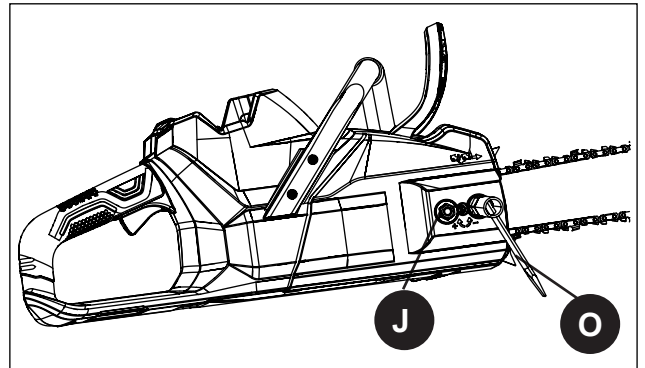
Chain & Bar Assembly

During use, the chain will stretch and become dull. Debris and saw dust can also collect underneath the bar cover. Use the following steps to maintain your chain saw and chain.

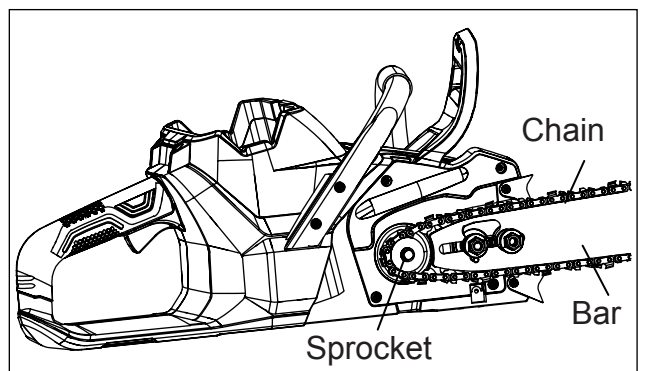
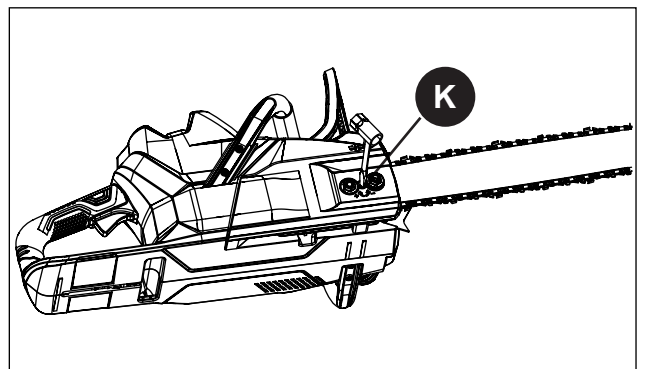
WARNING

Before performing any maintenance, make sure the battery is removed from the chain saw. Failure to heed this warning could result in serious personal injury.

1. Remove the battery from the chain saw.
2. Remove the supplied wrench (O) from the bottom of the handle.
3. Remove the two chain cover lock nuts (J) from the chain cover by rotating them counterclockwise with the wrench (O).

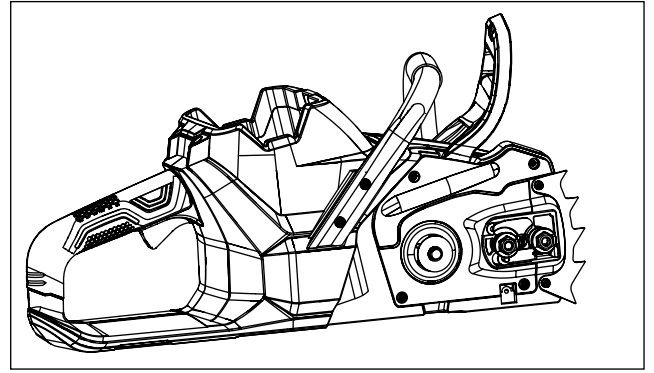


4. Remove the chain cover from the mounting surface.
5. The bar and chain can now be removed by lifting it away from the main body of the saw and releasing the chain from the sprocket.



CARE AND MAINTENANCE

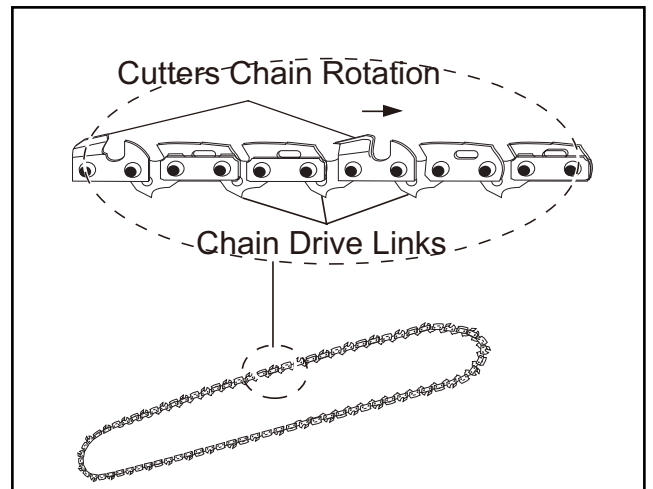
6. Remove the old chain from the bar.



7. Lay out the new saw chain in a loop and straighten any kinks. The cutters should face in the direction of chain rotation. If they face backwards, turn the loop over.

8. Place the chain drive links into the bar groove.

Note: Make certain of direction of the chain.

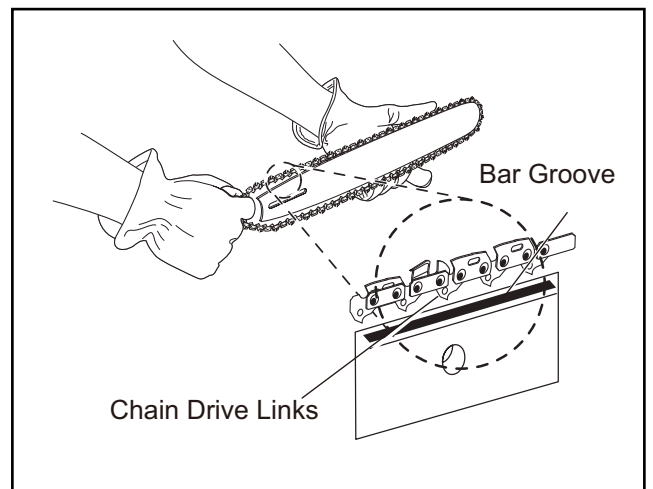


9. Position the chain so there is a loop at the back of the bar.

10. Hold the chain in position on the bar and place the loop around the sprocket.

11. Fit the bar flush against the mounting surface so that the bar studs are in the long slot of the bar. Ensure that the chain is over the sprocket.

Note: When placing the bar on the bar studs, ensure that the adjusting pin is in the chain tension pin hole.



12. Replace the chain cover.

13. Remove all slack from the chain by turning the chain adjustment screw (K) clockwise until the chain seats snugly against the bar with the drive links in the bar groove.

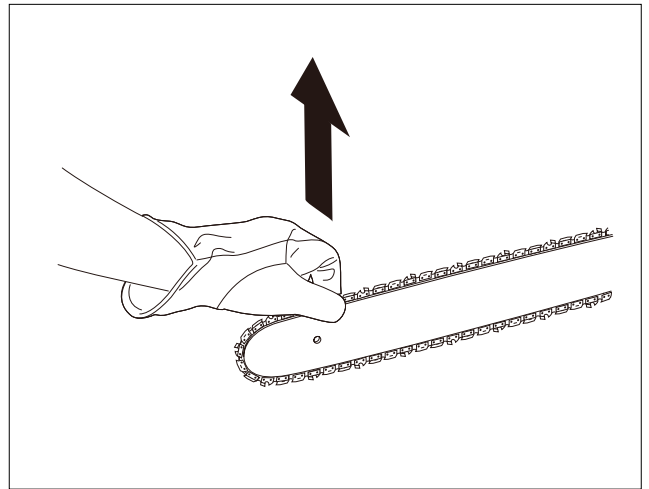
14. Lift the tip of the guide bar up to check for sag.

15. Release the tip of the guide bar and turn the chain adjustment screw 1/2 turn clockwise. Repeat this process until sag does not exist.

CARE AND MAINTENANCE

16. Hold the tip of the guide bar up and tighten the chain cover lock nuts (J) by turning them with the wrench (O). The chain is correctly tensioned when there is no sag on the underside of the guide bar, the chain is snug, but it can be turned by hand without binding.

Note: If the chain is too tight, it will not rotate. Loosen the chain cover lock nuts (J) slightly and turn the chain adjustment screw 1/4 turn counterclockwise. Lift the tip of the guide bar up and retighten the chain cover lock nuts (J). Ensure that the chain will rotate without binding.

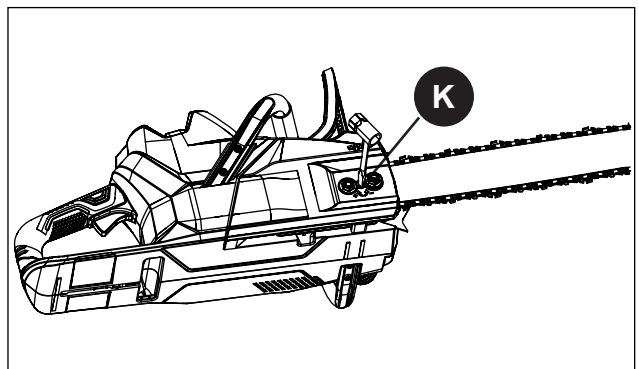
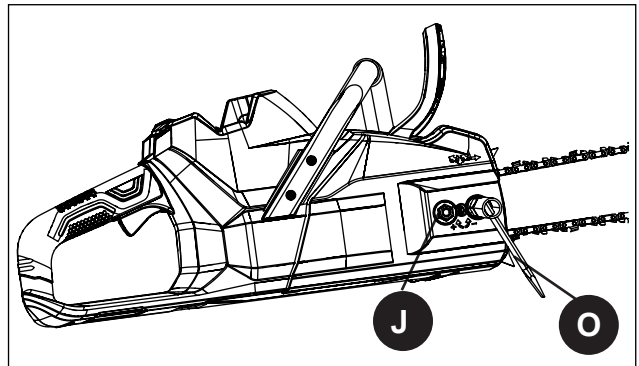


Adjusting the chain tension

WARNING

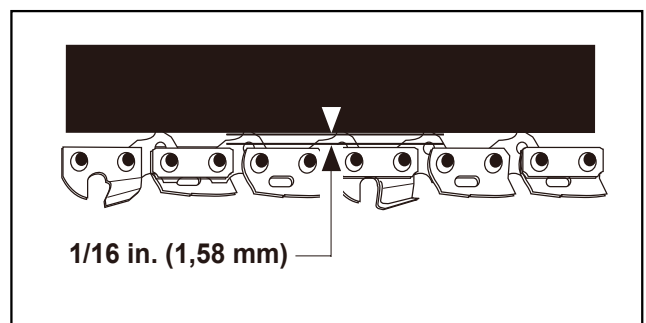
Never touch or adjust the chain while the motor is running. The chain saw is very sharp. Always wear protective gloves when performing maintenance on chain.

- Loosen the chain cover lock nuts (J) with the supplied wrench (O). The chain cover lock nuts (J) do not have to be completely removed in order to adjust the chain tension.
- Rotate the chain adjustment screw (K) clockwise to increase the chain tension and rotate counterclockwise to decrease the chain tension.
- Once the chain is at the desired tension, tighten the chain cover lock nuts (J).



Note: During normal saw operation, the temperature of the chain increases. The drive links of a correctly tensioned warm chain will hang approximately 1/16 in. (1,58 mm) out of the bar groove.

Note: New chains tend to stretch; check the chain tension frequently and tension as required.

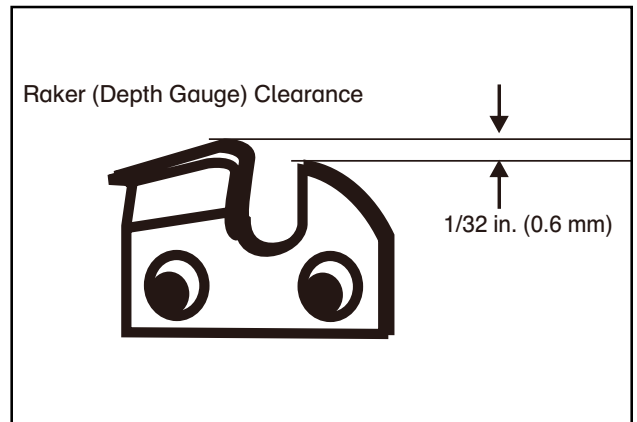


CARE AND MAINTENANCE

Chain maintenance

Use only a low-kickback chain on this saw. This fast-cutting chain provides kickback reduction when properly maintained. For smooth and fast cutting, 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
- Raker (depth gauge) clearance.
- Too low increases the potential for kickback.
- Not low enough decreases cutting ability.
- If the cutter teeth hit hard objects such as nails or stones, or are abraded by mud or sand on the wood, have an authorized service center sharpen the chain.

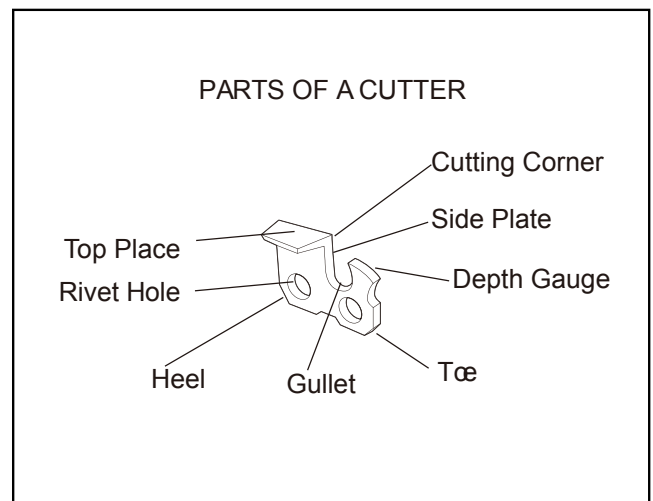


Note:

- Inspect the sprocket for wear or damage when replacing the chain. If signs of wear or damage are present in the areas indicated, have the sprocket replaced by an authorized service center.
- If you do not fully understand the correct procedure for sharpening the chain after reading the instructions that follow, have the saw chain sharpened by an authorized service center or replace with a recommended low-kickback chain.

Sharpening the cutters

- 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.
- Tension the chain prior to sharpening.
- Use a 5/32 in. (4 mm) diameter round file and holder. Do all of your filing at the midpoint of the bar.
- Keep the file level with a 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 the file away from the steel on each return stroke.

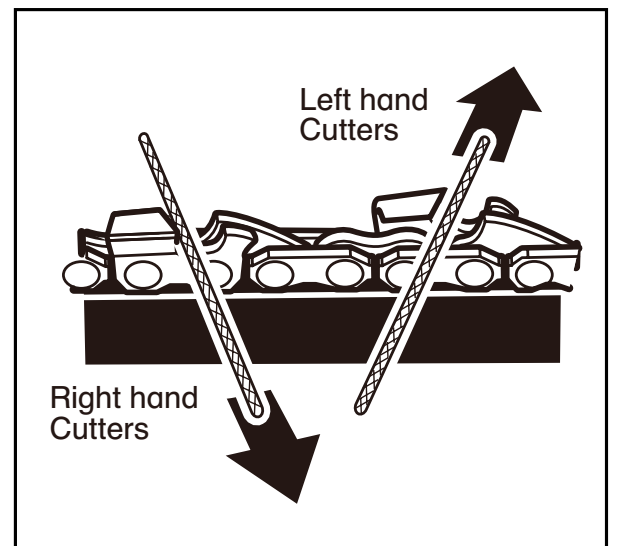
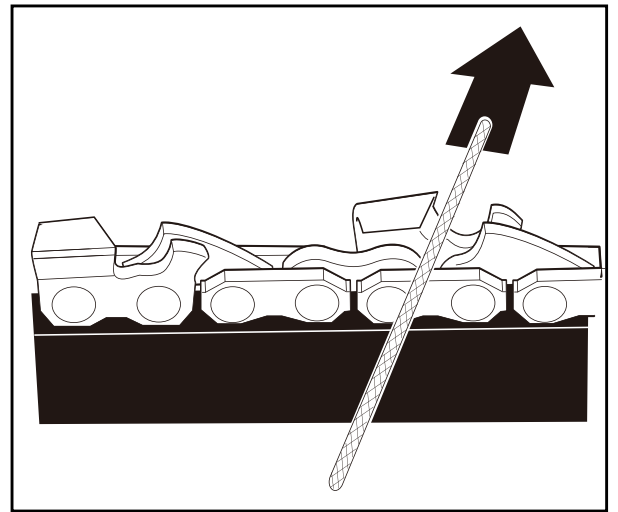
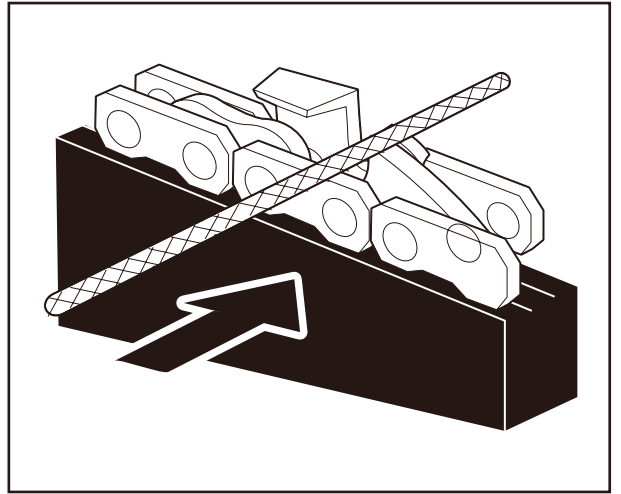


CARE AND MAINTENANCE

- 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.
- Remove filings from the file with a wire brush.

WARNING

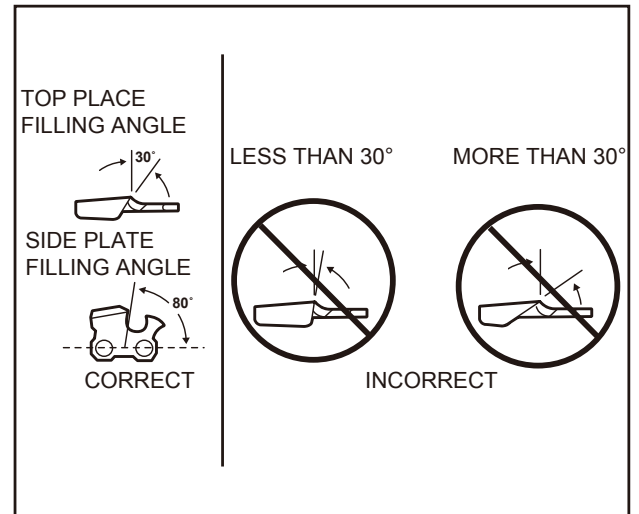
- Improper chain sharpening increases the potential of kickback.
- Failure to replace or repair a damaged chain can cause serious injury.



CARE AND MAINTENANCE

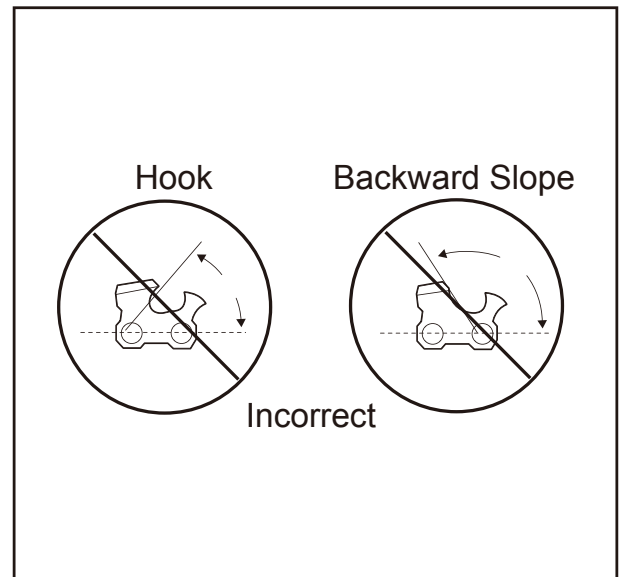
Top plate filing angle

- CORRECT 30° – file holders are marked with guide marks to align file properly to produce correct top plate angle.
- LESS THAN 30° – for cross cutting.
- MORE THAN 30° – feathered edge dulls quickly.



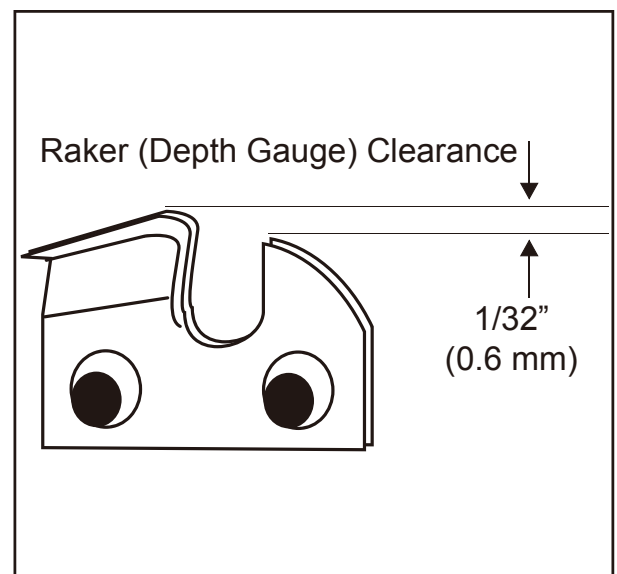
Side plate angle

- Correct 80° – Produced automatically if you use the correct diameter file in the file holder.
- Hook – “Grabs” and dulls quickly; increases the potential of kickback. Results from using a file with a diameter too small or a file held too low.
- Backward Slope – Needs too much feed pressure; causes excessive wear to the bar and chain. Results from using a file with a diameter too large or file held too high.



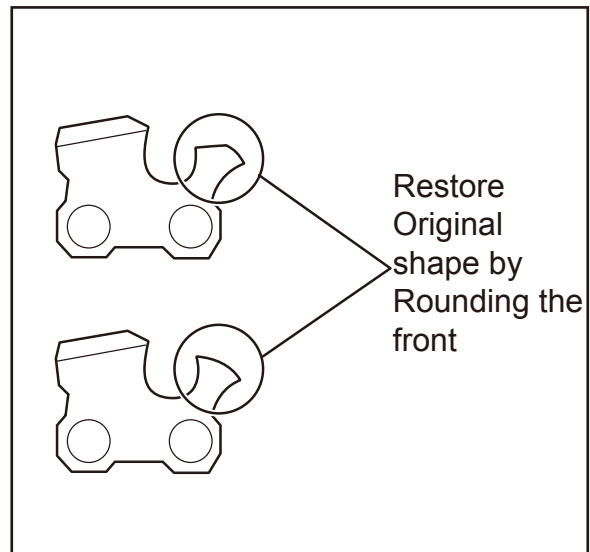
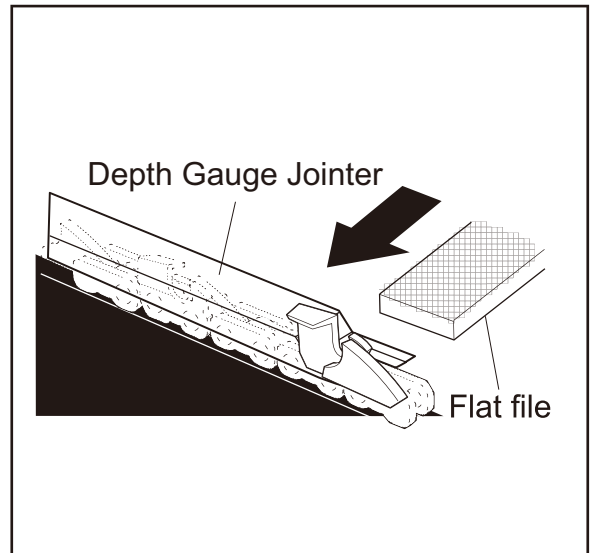
Side plate angle

- Maintain the depth gauge at a clearance of 1/32 in. (0.6 mm). Use a depth gauge tool for checking the depth gauge clearances.
- Every time the chain is filed, check the depth gauge clearance.



CARE AND MAINTENANCE

- Use a flat file and a depth gauge jointer to lower all gauges uniformly. Use a 1/32 in. (0.6 mm) depth gauge jointer. After lowering each depth gauge, restore original shape by rounding the front. Be careful not to damage adjoining drive links with the edge of the file.
- Depth gauges must be adjusted with the flat file in the same direction the adjoining cutter was filed with the round file.
- Use care not to contact cutter face with flat file when adjusting depth gauges.

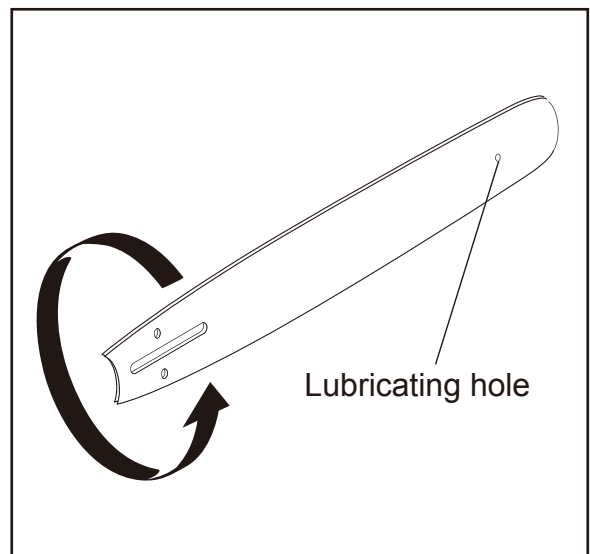


Maintaining the guide bar

Every week of use, reverse the guide bar on the saw to distribute the wear for maximum bar life. The bar should be cleaned every day of use and checked for wear and damage. Feathering or burring of the bar rails is a normal process of bar wear. Such faults should be smoothed with a file as soon as they occur. A bar with any of the following faults should be replaced:

- Wear inside the bar rails that permits the chain to lay over sideways
- Bent guide bar
- Cracked or broken rails
- Spread rails

Lubricate guide bars weekly with a sprocket at their tip. Using a grease syringe, lubricate weekly in the lubricating hole. Turn the guide bar and check that the lubrication holes and chain groove are free from impurities.



TROUBLESHOOTING

For replacement parts, call our customer service department at 1-888-3KOBALT (1-888-356-2258), 8 a.m. - 8 p.m., EST, Monday - Friday.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Bar and chain running hot and smoking.	<ol style="list-style-type: none">1. Check chain tension for overtightened condition.2. Chain oil tank empty.	<ol style="list-style-type: none">1. Tension chain. Refer to Chain Tension earlier in this manual.2. Check oil tank.
Motor runs, but chain is not rotating.	<ol style="list-style-type: none">1. Chain tension too tight.2. Check guide bar and chain assembly.3. Check guide bar and chain for damage.	<ol style="list-style-type: none">1. Re-tension chain. Refer to Chain Tension earlier in this manual.2. Refer to Replacing the Bar and Chain earlier in this manual.3. Inspect guide bar and chain for damage.
Motor runs, chain rotates but does not cut.	<ol style="list-style-type: none">1. Dull chain.2. Chain on backwards.	<ol style="list-style-type: none">1. Sharpen or replace the chain.2. Reverse direction of chain.

WARRANTY

5-YEAR LIMITED WARRANTY

This 80 V Lithium-Ion Brushless 18 in. Chain saw is warranted to the original purchaser from the original purchase date for five (5) years subject to the warranty coverage described herein.

This 80 V Lithium-Ion Brushless 18 in. Chain saw is warranted for the original user to be free from defects in material and workmanship.

If you believe that the Kobalt 80 V Lithium-Ion Brushless 18 in. Chain saw is defective at any time during the specified warranty period, simply call our Warranty service (1-888-356-2258) along with proof of purchase.

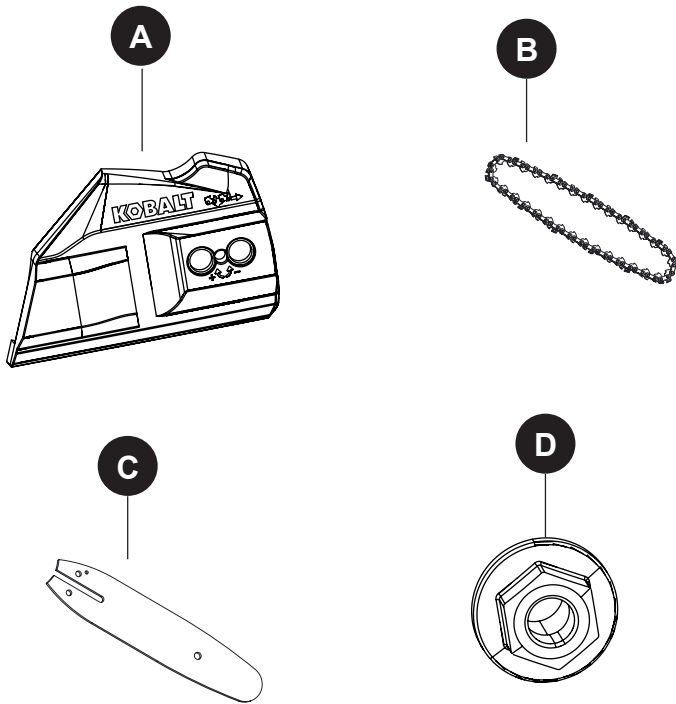
This warranty is void if: defects in materials or workmanship or damages result from repairs or alterations which have been made or attempted by others or the unauthorized use of nonconforming parts; the damage is due to normal wear, damage is due to abuse (including overloading of the tool beyond capacity), improper maintenance, neglect or accident; or the damage is due to the use of the tool after partial failure or use with improper accessories or unauthorized repair or alteration.

This warranty excludes bar and chain.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

REPLACEMENT PARTS LIST

For replacement parts, call our customer service department at 1-888-3KOBALT (1-888-356-2258), 8 a.m. - 8 p.m., EST, Monday - Friday.



PART	DESCRIPTION	PART #
A	Chain cover assembly	341102042
B	Chain	322041075
C	Bar	C3200303-00
D	Chain cover lock nut	332012029

Printed in China