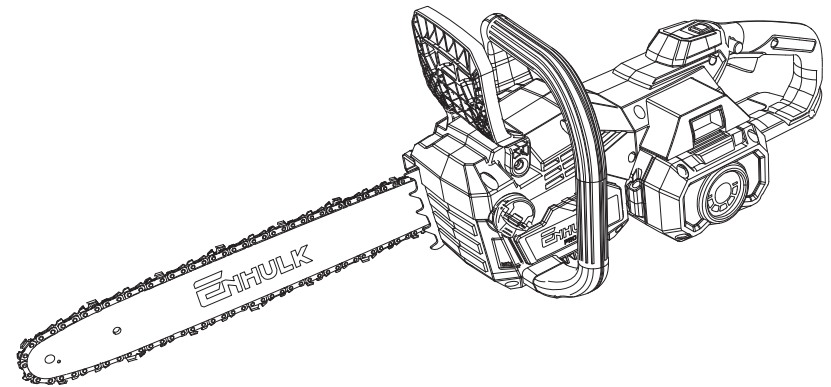


# ENHULK

58V Max PRO SERIES Brushless Chainsaw  
LCS1216  
LCS1418



**SYVIO TECHNOLOGY.CO.LIMITED**  
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videos



**Please Read Carefully Before Use  
Original Instruction Manual**

## General Power Tool Safety Warnings

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

### Work Area Safety

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

### Electrical Safety

- a) **Machine plugs must match the outlet. Never modify the plug in any way.** Do not use any adapter plugs with earthed (grounded) Machine. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **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.
- c) **Do not expose Machine to rain or wet conditions. Water entering a machine will increase the risk of electric shock.**
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the machine.** Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a machine outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a machine in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

### Personal Safety

- a) **Stay alert, watch what you are doing and use common sense when operating a machine.** Do not use a machine while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating Machine may result in serious personal injury.
- b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- c) **Prevent unintentional starting. Ensure the switch is**

**in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying Machine with your finger on the switch or energising Machine that have the switch on invites accidents.

- d) **Remove any adjusting key or wrench before turning the machine on.** A wrench or a key left attached to a rotating part of the machine may result in personal injury.
- e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the machine in unexpected situations.
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

### Machine Use And Care

- a) **Do not force the machine. Use the correct machine for your application.** The correct machine will do the job better and safer at the rate for which it was designed.
- b) **Do not use the machine if the switch does not turn it on and off.** Any machine that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the machine before making any adjustments, changing accessories, or storing Machine.** Such preventive safety measures reduce the risk of starting the machine accidentally.
- d) **Store idle Machine out of the reach of children and do not allow persons unfamiliar with the machine or these instructions to operate the machine.** Machine are dangerous in the hands of untrained users.
- e) **Maintain Machine and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the machine's operation.** If damaged, have the machine repaired before use. Many accidents are caused by poorly maintained Machine.
- f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **Use the machine, 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 machine for operations different from those intended could result in a

# Safety Instructions

hazardous situation.

- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

## Battery Tool Use And Care

- a) **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b) **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- c) When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- d) Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- e) Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- f) Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 130 °C may cause explosion.  
**NOTICE:** The temperature 130 °C can be replaced by the temperature 265 °F.
- g) Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

## Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the machine is maintained.
- b) **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

## Safety Instructions For Chainsaws

### General Chainsaw Safety Warnings

- a) **Keep all parts of the body away from the saw chain when the chainsaw is operating. Before you start the chainsaw, make sure the saw chain is not contacting anything.** A moment of inattention while

operating chainsaws may cause entanglement of your clothing or body with the saw chain.

- b) **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.
- c) Hold the chainsaw by insulated gripping surfaces only, because the saw chain may contact hidden wiring. Saw chains contacting a "live" wire may make exposed metal parts of the chain saw "live" and could give the operator an electric shock.
- d) Wear eye protection. Further protective equipment for hearing, head, hands, legs and feet is recommended. Adequate protective equipment will reduce personal injury from flying debris or accidental contact with the saw chain.
- e) Do not operate a chainsaw in a tree, on a ladder, from a rooftop, or any unstable support. Operation of a chainsaw in this manner could result in serious personal injury.
- f) Always keep proper footing and operate the chainsaw only when standing on fixed, secure and level surface. Slippery or unstable surfaces may cause a loss of balance or control of the chainsaw.
- g) When cutting a limb that is under tension, be alert for spring back. When the tension in the wood fibres is released, the spring loaded limb may strike the operator and/or throw the chainsaw out of control.
- h) 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.
- i) 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 saw chain.
- j) Follow instructions for lubricating, chain tensioning and changing the bar and chain. Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- k) Cut wood only. Do not use chainsaw for purposes not intended. For example: do not use chainsaw for cutting metal, plastic, masonry or non-wood building materials. Use of the chainsaw for operations different than intended could result in a hazardous situation.
- l) Do not attempt to fell a tree until you have an understanding of the risks and how to avoid them. Serious injury could occur to the operator or bystanders while felling a tree.
- m) Follow all instructions when clearing jammed material, storing or servicing the chainsaw. Make sure the switch is off and the battery pack is removed. Unexpected actuation of the chainsaw while clearing jammed material or servicing may result in serious personal injury.

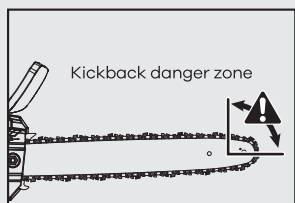
# Safety Instructions

## Causes And Operator Prevention Of Kickback

Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes in and pinches the saw chain in the cut. Tip contact in some cases may cause a sudden reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator.

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 chainsaw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below:

- a) **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 forces can be controlled by the operator, if proper precautions are taken. Do not let go of the chainsaw.
- b) **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.
- c) **Only use replacement guide bars and saw chains specified by the manufacturer.** Incorrect replacement guide bars and saw chains may cause chain breakage and/or kickback.
- d) **Follow the manufacturer's sharpening and maintenance instructions for the saw chain.** Decreasing the depth gauge height can lead to increased kickback.

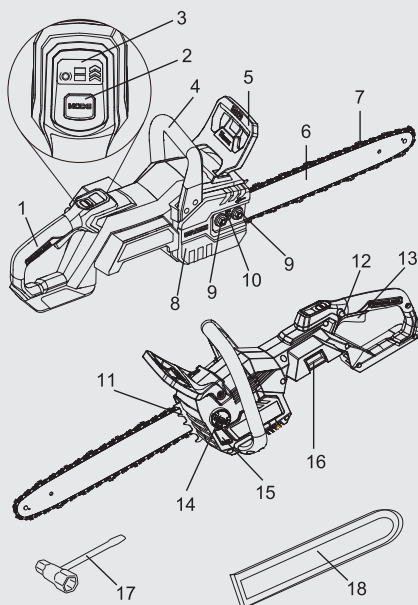


# Symbols

	Warning
	Read the operator's manual
	Do not expose to rain
	Always use eye/ear protection, Wear dust mask and safety helmet.
	Tip contact can cause the guide bar to move suddenly upward and backward, which can cause serious injury.
	Protect your hands with gloves when handling saw and saw chain. Heavy-duty, nonslip gloves improve your grip and protect your hands.
	Always use two hands when operating the chainsaw.
	Keep all bystanders at least 50 feet (15m) away.
	Li-Ion battery This product has been marked with a symbol relating to 'separate collection' for all battery packs and battery pack. It will then be recycled or dismantled in order to reduce the impact on the environment. Battery packs can be hazardous for the environment and for human health since they contain hazardous substances.
	Voltage
	Degrees Fahrenheit
	Degrees Celsius

# Product Descriptions And Specifications

Diagram of the power tool on the graphics page.



- |                         |                            |
|-------------------------|----------------------------|
| 1. Rear Handle          | 10.Chain Tensioning Screw  |
| 2. Speed Mode Switch    | 11. Bucking Spikes         |
| 3. LED Panel Display    | 12. Lock-out Button        |
| 4. Front Handle         | 13.Trigger                 |
| 5. Chain Kickback Brake | 14.Oil-Tank Cap            |
| 6. Guide Bar            | 15. Oil-Inspection Window  |
| 7. Saw Chain            | 16. Battery Release Button |
| 8. Side Cover           | 17. Wrench                 |
| 9. Side Cover Nuts      | 18. Chain Sheath           |

## Technical Data

### 58V Max PRO SERIES Brushless Chainsaw

Article number	LCS1216	LCS1418
Claimed Voltage	58V MAX	
Nominal Voltage	50.4V	
Guide Bar Length	16 in (400mm)	18 in (450mm)
No-load Speed	High Mode: 68.9ft./s (21m/s) Turbo Mode: 78.8ft./s (24m/s)	
Chain Type	91P056X-C	91P062X-C
Guide Bar Type	160SDEA041	180SDEA041
Chain Pitch	3/8 in (9.5mm)	
Chain Gauge	0.050 in (1.27mm)	
Chain Oil Tank Capacity	10 oz. (300ml)	
Operating Temperature	5°F-104°F (-15°C-40°C)	
Storage Temperature	-4°F-158°F (-20°C-70°C)	
Net Weight (without battery pack)	8.8 lbs (4kg)	9 lbs (4.1kg)
Accessories	LCS1216	LCS1418
Battery	LBA1025 (2.5Ah)	LBA1050 (5.0Ah)
Charger	LCH1025	
Chain Sheath	●	●
Wrench	●	●

- : Attachment included  
○ : Attachment not included

# Operating Instructions

## Operation

**⚠ WARNING** Always remove the battery pack from the product when you are assembling parts, making adjustments, cleaning, or when the product is not in use.

**⚠ WARNING** Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or

accessories not recommended can result in serious personal injury.

**⚠ WARNING** 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.

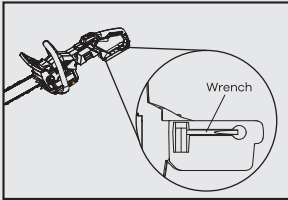
# Operating Instructions

## Assembling The Guide Bar And Saw Chain

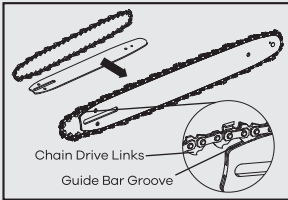
**⚠ WARNING** Do not install battery pack until you assemble all the parts.

**⚠ WARNING** Wear protective gloves if you touch the chain, bar or areas around the chain.

1. Loosen the side cover nuts with the wrench (It's embedded in the bottom of the chainsaw), and removed the side cover.

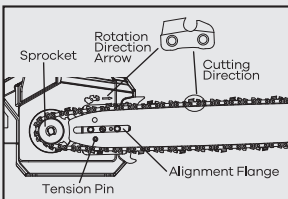


2. Lay the new saw chain in a loop on a flat surface and straighten any kinks.
3. Place the chain drive links into the guide bar groove.



4. Put the chain loop around the sprocket. Making sure that the tension pin is inserted in the lower hole in the tail of the guide bar.

**NOTICE:** Rotation directional arrows are engraved in the saw chain and the side cover. When looping the saw chain onto the sprocket, make sure that the direction of the arrows on the saw chain corresponds to the direction of the arrow on the side cover. If they face in opposite directions, turn over the saw chain and guide bar assembly.



5. Install the chain cover.
6. Tighten the saw chain. Refer to Adjust the chain tension.
7. Tighten the side cover nuts when the chain is correctly tensioned.

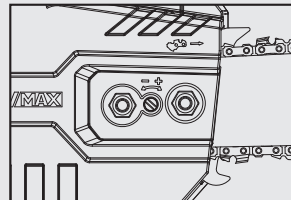
## Adjusting The Chain Tension

**⚠ WARNING** The saw chain must be properly tensioned before using. A slack chain may jump off and cause serious or even fatal injury.

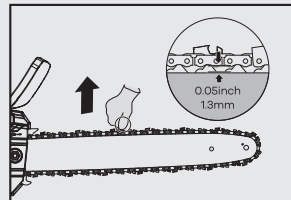
**NOTICE:** New chains tend to stretch. Check chain tension frequently and adjust tension as required.

**NOTICE:** The more you use a chain the longer it becomes. It is therefore important to adjust the chain regularly to take up the slack.

1. Stop the motor and remove the battery pack before adjusting the chain tension.
  2. Loosen the side cover nuts with the wrench.
- NOTICE:** It is not necessary to remove the side cover to adjust the chain tension.
3. Turn the chain tensioning screw clockwise to increase the chain tension.
  4. Turn the chain tensioning screw counterclockwise to decrease the chain tension.



5. During normal saw operation, the temperature of the chain will increase. The drive links of a correctly tensioned warm chain will hang approximately 0.050 in. (1.3 mm) out of the bar groove.



**NOTICE:** New chains tend to stretch. Check chain tension frequently and adjust tension as required.

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

6. Retighten the side cover nuts.

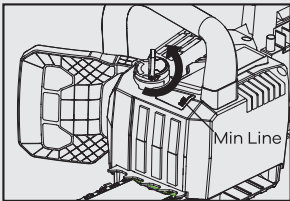
# Operating Instructions

## Filling Oil Tank With Chain Oil

**⚠ WARNING** Do not smoke or bring any fire or flame near the oil or the chain saw. Oil may spill and cause a fire.

**NOTICE:** The chain saw is not filled with oil at the time of purchase. It is essential to fill the tank with oil before use. Operating the chainsaw without chain oil or when the oil level is below the minimum line will result in damage to the chain saw. Chain life and cutting capacity depend on optimum lubrication. The chain is automatically lubricated with chain oil during operation.

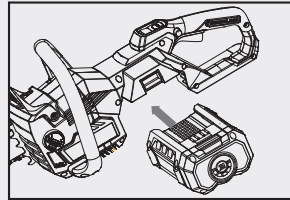
1. Stop the motor and remove the battery pack before adjusting the chain tension.
2. Clean the oil tank cap and the area around it to ensure that no dirt falls into the oil tank.
3. Put the chainsaw on its side on a firm, flat surface, so that the tank cap is facing upwards. Lift up the semicircular tab. Grasp the tab and rotate the oil tank cap counterclockwise to remove it.



4. Carefully pour the chain oil into the tank. Wipe off any excess oil.
  5. Retighten the cap. Make sure the oil tank cap is tightly secured in place.
- Never use oil or other lubricants not specifically designed for use on the bar and chain. This can lead to a clogged oil system, which may cause premature wear of the bar and chain.
  - Check the oil level frequently and fill when the oil level falls below the minimum line. Never operate the chain saw if the oil is not visible.
  - Do not use dirty, used or other contaminated oil. Damage may occur to the bar and chain.
  - It is normal for oil to seep from the saw when it is not in use. To prevent seepage, empty the oil tank after each use, and then run the saw for one minute. When storing the tool for a long period of time, be sure the chain is lightly lubricated. This will prevent rust on the chain.
  - To preserve natural resources, please recycle or dispose of oil properly. Consult your local waste authority for information regarding available recycling and disposal options.

## To Install/Remove Battery Pack

1. Charge before first use or after being unused for a long time.
2. To install the battery, align the ribs of the battery pack with the mounting slots in the blower and push the battery pack until it snaps into position.
3. To remove the battery, press the battery-release button, the battery pack will disengage from the latch and the ejection mechanism will assist with removal. Remove the battery pack from the chainsaw.



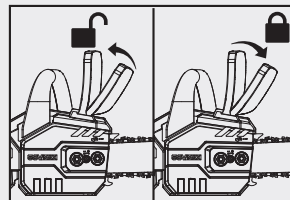
**⚠ WARNING** Always carefully when install or remove battery pack. Serious injury could result if the battery pack falls. NEVER remove the battery pack when in a high location.

## To Start/Stop The Chainsaw

**⚠ WARNING** Check the chain tension before each use. Make sure that the chain is properly mounted and correctly tensioned. If the tension requires adjustment, refer to the chapter "Adjusting the Chain Tension" of this manual for adjustment instructions.

**⚠ WARNING** Check the oil level before each use and fill the tank as needed.

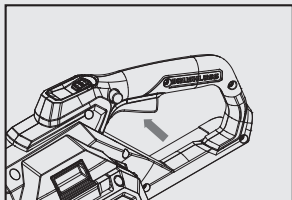
1. Install the battery pack.
2. Disengage the chain kickback brake by pulling the chain kickback brake handle towards the front handle.



**NOTICE:** Push the chain kickback brake handle towards the front of the saw. A properly functioning hand brake will stop the movement of the chain immediately. If the chain brake is not working properly, do not use the chain saw until it has been repaired by a qualified service technician.

# Operating Instructions

3. Grasp the front and rear handles firmly, using both hands. Make sure that you have a secure and balanced footing. Watch out for obstacles such as tree stumps, roots and ditches, which could cause you to trip or stumble.
4. Press and hold the lock-off button with the thumb of your right hand, then squeeze the trigger with the fingers of your right hand to start the saw.
5. Release the lock-off button and continue to squeeze the trigger for continued operation.








## Speed Adjustment Function

The Chainsaw has two speed settings, HIGH/TURBO mode. Press the speed mode switch to change cutting speed between the HIGH and TURBO mode.

The speed indicator will display the active speed status.

## The Indicator Display

The indicator will display the speed mode and machine status:

LED Indicators	LED Indicator Display	Machine Status
	Chain Kickback Brake LED Solid Red	Chain Kickback Brake is engaged
	High speed LED Solid Green	High speed Mode
	Turbo speed LED Solid Green	Turbo speed Mode
	High speed LED Solid Red	Low Battery Capacity
	Turbo speed LED Solid Red	Low Battery Capacity

## Preparation For Cutting

**⚠ WARNING** Refer to "Important Safety Instructions" section earlier in this manual for appropriate safety equipment. 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.

**⚠ WARNING** Never allow children to operate the chain saw.

## Work Area Precautions

- When felling a tree, keep everyone - helpers, bystanders, children, and animals - a safe distance from the cutting area. 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 feet (4.5 m) between workers.
- 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 a tree does make contact with any utility line, stay clear of the tree and the line and notify the utility company immediately.
- Do not fell trees near electrical wires or buildings.
- Cut only when visibility and light are adequate for you to see clearly.
- Cut only wood or materials made from wood. Do not cut sheet metal, plastics, masonry, or non-wood building materials.

## Proper Grip On Handles

- Always grasp the front handle with the left hand and the rear handle with the right hand.
- Wear non-slip gloves for maximum grip and protection.
- With the saw on a firm, flat surface, hold the saw firmly with both hands.
- The fingers should encircle the handle, with the thumb wrapped under the front handle.

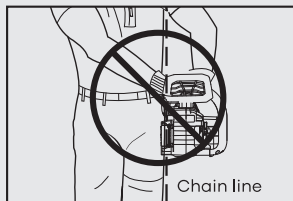
## Proper Cutting Stance

- 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.
- The left arm should be straight, with the elbow locked. This helps to withstand the forces generated by kickback.
- Your body should always be to the left of the chain line.



# Operating Instructions

**⚠ WARNING** Never use a left-handed (cross-handed) grip, or any stance which would place your body or arm across the chain line.



## Cutting

### Basic Cutting

**⚠ WARNING** Always be sure of your footing and hold the chainsaw firmly with both hands while the motor is running.

**⚠ WARNING** Never start the chainsaw when it is in contact with the wood. Always allow the chainsaw reach full speed before applying the saw to the wood.

1. Always cut with both feet on solid ground to prevent being pulled off balance.
2. Always grasp the front handle with the left hand and the rear handle with the right hand.
3. Your body should always be to the left of the chain line. your body or arm NEVER across the chain line.
4. Press the lock-off button and squeeze the trigger to start the chain saw. Let the chain reach the full speed before beginning the cut.
5. Begin cutting by lightly pressing the guide bar against the wood. Use only light pressure, letting the saw do the work.
6. Maintain a steady speed throughout the cut, releasing pressure just before the end of the cut.
7. Release the trigger as soon as the cut is completed, allowing the chain to stop.

**⚠ WARNING** When the saw chain is stopped due to pinching during cutting, release the trigger, make the saw chain and guide bar leave from the wood, then restart the chainsaw.

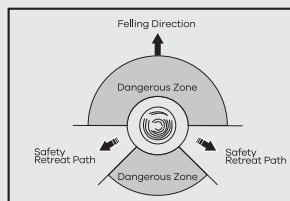
**⚠ WARNING** Do not pull the saw chain with your hand when it is bound by the sawdust. Serious injury could result if the chainsaw starts accidentally.

**NOTICE:** It is recommended that the first-time user as a minimum practice should start cutting logs on a saw-horse or cradle.

## Preparation For Tree Felling

**⚠ WARNING** Refer to "Work Area Precautions" section earlier in this manual before felling a tree.

- Operator should stand on the uphill side of the terrain, as the tree is likely to roll or slide downhill after it is felled.
- Before felling is started, consider the lean of the tree, the location of larger branches and the wind direction to judge which way the tree will fall.
- Before any cuts are started, pick your escape route (or routes, in case the intended route is blocked). Clear the immediate area around the tree and make sure that there are no obstructions in your planned paths of retreat. Clear a path of safe retreat approximately 135° from the planned line of fall. The retreat path should extend back and diagonally to the rear of the expected line of fall.

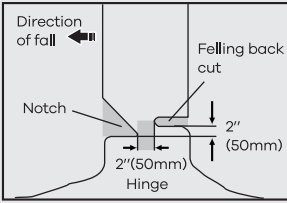


- Check the tree for damaged or dead branches that could fall and hit you during felling.
- Periodically glance at the top of the tree during the back cut to assure the tree is going to fall in the desired direction.
- If the tree starts to fall in the wrong direction, or if the saw gets caught or hung up during the fall, leave the saw and save yourself!
- Remove dirt, stones, loose bark, nails, staples, and wire from the tree where felling cuts are to be made.

## Felling A Tree

1. Make a lower level notching cut first. Make the notch 1/3 the diameter of the tree, perpendicular to the direction of fall. This will help to avoid pinching of either the saw chain or the guide bar when the second notch is being made.
2. Make the felling back cut at least 2 inches (50.8 mm) higher than the horizontal notching cut. Keep the felling back cut parallel to the horizontal notching cut. Make the felling back cut so that enough wood is left to act as a hinge. The hinge wood prevents the tree from twisting and falling in the wrong direction. **DO NOT** cut through the hinge.

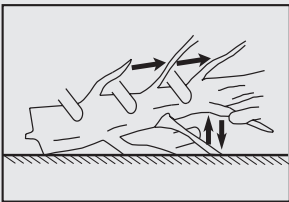
# Operating Instructions



3. As the felling cut gets close to the hinge, the tree should begin to fall. If there is any chance that the tree may not fall in the desired direction or it may rock back and causing the cutting bar and chain to become stuck in the cut, stop cutting before the felling back cut is complete and use wedges of wood, plastic or aluminum to open the cut and drop the tree along the desired line of fall.
4. When the tree begins to fall, remove the chainsaw from the cut, stop the motor, put the chainsaw down, move away from the escape path planned. Be alert for overhead limbs falling and watch your footing.

## Limbing A Tree

1. Keep the larger lower branches to hold the log off the ground.
2. Remove the small limbs in one cut.
3. Limb the branches with tension from the bottom to top.
4. Keep the larger lower branches as a support until the log is limbed.

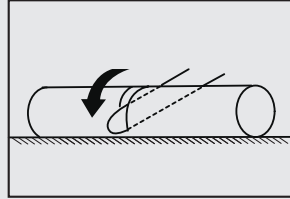


## Bucking A Log

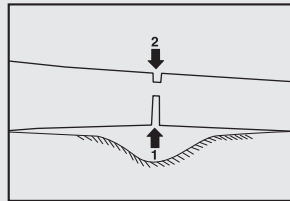
Bucking is cutting a log into lengths. It is important to make sure your footing is firm and your weight is evenly distributed on both feet. When possible, the log should be raised and supported by the use of limbs, logs, or chocks. Follow the simple directions for easy cutting.

**⚠ WARNING** Keep a clear-cutting area. Make sure that no objects can contact the guide bar nose and chain during cutting – this can cause kickback.

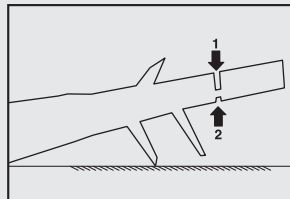
1. When the log is supported along its entire length, it should be cut from the top.



2. When the log is supported on only one end, cut 1/3 the diameter from the underside. Then make the finished cut by overbucking to meet the first cut.



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



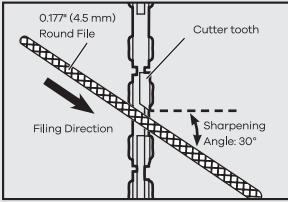
## Sharpen The Cutters

**NOTICE:** We recommend that a service center, which has an electric sharpener, perform important sharpening work.

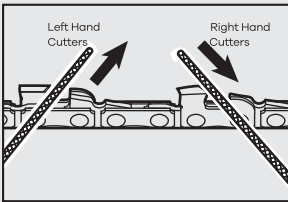
Make sure to file all cutters to the specified angles and to the same length, as fast cutting can be obtained only when all cutters are uniform.

1. Remove the battery pack. Wear gloves for protection.
2. Properly tension the chain prior to sharpening. Refer to the chapter "Adjusting The Chain Tension" earlier in this manual.
3. Keep the file level with the top plate of the tooth. Do not let the file dip or rock.
4. Use a 0.177" (4.5 mm) diameter round file and holder (not included). Do all of your filing at the middle position of the guide bar.
5. Keep a correct sharpening angle of 30° between the file and the saw chain.

# Operating Instructions



6. Using light but firm pressure, perform a stroke towards the front corner of the tooth. Lift the file away from the steel on each return stroke.
7. Perform a few firm strokes on every tooth. File all left-hand cutters in one direction. Then move to the other side and file the right-hand cutters in the opposite direction. Occasionally remove filings from the file with a wire brush.



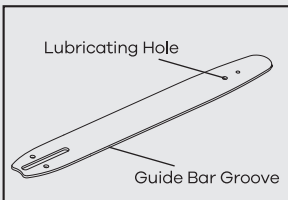
Replace the saw chain if:

1. The length of the cutting edges is less than 1/5 in. (5mm).
2. There is too much space between the drive links and the rivets.
3. The cut speed is slow.
4. Sharpening the chain many times but it does not increase the cutting speed. The chain is worn.

## Guide Bar Maintenance

When the guide bar shows signs of wear, disassemble it from the chain saw power head and reverse it for reassembly. This way the wear will be distributed to maximize the guide bar life.

1. Lubricate the bearings on the nose sprocket (if present) with the syringe (not included).
2. Clean the bar groove with the scraping hook (not included).
3. Clean the lubrication holes.
4. Remove burr from the edges and level the cutters with a flat file.



Replace the guide bar if:

1. the groove does not fit with the height of the drive links (which must never touch the bottom).
2. the inside of the guide bar is worn and makes the chain lean to one side.

# Troubleshooting

Problem	Possible causes	Solution
Motor does not run.	There is no electrical contact between the saw and battery.	Remove the battery, check contacts and reinstall the battery pack.
	Battery is low capacity.	Charge the battery pack.
	The battery pack or chain saw is too hot.	Allow the battery pack or chainsaw to cool.
	Chain Kickback brake is engaged.	Pull the chain kickback brake backward toward the front handle.
	Debris in bar groove.	Press the saw chain against the wood, move the chain saw back and forth to discharge the debris.
	Debris in side cover.	Remove battery pack, then remove side cover and clean out debris.
Chain saw stops running during operation.	The chain saw is overloaded.	Decrease the load.
	The battery pack or chain saw is too hot.	Allow the battery pack or chainsaw to cool.
	Saw chain is bound in the wood.	Release the trigger make the saw chain and guide bar leave from the wood, then restart the chain saw.
Motor runs, but chain does not rotate.	Chain does not engage drive sprocket.	Reinstall the chain, following the chapter "Assembling The Guide Bar And Saw Chain". Ensure that the drive links on the chain are fully seated on the sprocket.
Chain saw does not cut properly.	Insufficient chain tension.	Readjust the chain tension, following the chapter: "Adjusting The Chain Tension".
	Blunt chain.	Sharpen the chain cutters, following the chapter: "Sharpen The Cutters".
	Chain installed backwards.	Reinstall the saw chain, following the chapter "Assembling The Bar And Chain".
Chain becomes loose or drops off the guide bar during normal use.	The chain will become loose as the temperature of the chain increases during normal saw operation.	Tighten the chain tension, following the chapter "Adjusting The Chain Tension".
	Chain does not engage drive sprocket.	Reinstall the saw chain, following the chapter "Assembling The Bar And Chain".
	Check chain tension for over tightened condition.	Re-tension the saw chain, following the chapter: "Adjusting The Chain Tension".
Bar and chain running hot and smoking.	Chain oil tank is empty.	Fill the tank with chain oil.
	Debris in guide bar groove.	Clear the debris in the groove.

# Maintenance and transportation

## Maintenance

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

**⚠️ WARNING** Wear protective gloves if you touch the chain, bar or areas around the chain.

**⚠️ WARNING** When cleaning the chain saw, DO NOT immerse in water or other liquids.

**⚠️ WARNING** To avoid serious personal injury, remove the battery pack from the chain saw before inspecting, cleaning, or performing maintenance. A battery operated tool with the battery pack inserted is always on and can start accidentally.

**⚠️ 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.

## Cleaning And Maintenance

**⚠️ WARNING** All maintenance should be carried out by a qualified person, do not try to repair any defect. When servicing, use only identical replacement parts. Use of any other part could create a hazard or cause product damage.

## Cleaning

- After each use, clean debris from the chain and guide bar with a soft brush. Wipe the chainsaw surface with a clean cloth moistened with a mild soap solution.
- Remove the side cover, and then use a soft brush to remove debris from the guide bar, saw chain, sprocket, and side cover.
- Always clean out wood chips, saw dust, and dirt from the guide bar groove when replacing the saw chain.

## Storage

1. Remove the battery packs.
2. Clean the product and re-pack to original package.
3. Store the product and its accessories in a dark, dry, frost-free, well-ventilated place.
4. Always store the product in a place that is inaccessible to children. The ideal storage temperature is between 64°F-75°F(18 °C-24 °C).
5. We recommend using the original package for storage or covering the product with a suitable cloth or enclosure to protect it against dust.

## Transportation

1. Remove the battery packs.
2. Re-pack to original package.
3. Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.
4. Secure the product to prevent it from slipping or falling over.

# Guarantee

## Guarantee

Dear Customer,

This equipment is provided with a 4-year guarantee from the date of purchase. In case of defects, you have statutory rights against the seller of the product. These statutory rights are not restricted by our guarantee presented below. Terms of Guarantee the term of the guarantee begins on the date of purchase, please retain the original receipt and it's required as proof of purchase. If a material or manufacturing defect occurs within 4-year of the date of the purchasing, we will repair or replace the product for you free of charge. This guarantee requires the defective equipment and proof of purchase to be presented within the 4-year period with a brief written description of what constitutes the defect and when

it occurred. If the defect is covered by our guarantee, you will receive either the repaired product or a new product. No new guarantee period begins on repair or replacement of the product.

## Guarantee Period And Statutory

The guarantee period is not extended by the guarantee service. This also applies for replaced or repaired parts. Any damages and defects already present at the time of purchase must be reported immediately after unpacking.