



CHAIN SAW ATTACHMENT

8" | 7 AMP | FOR SUN JOE LAWN + GARDEN MULTI-TOOL SYSTEM GTS4000E

Model GTS4000E-8CS-CGY

Form No. SJ-GTS4000E-8CS-CGY-880E-M

A Division of Snow Joe®, LLC

OPERATOR'S MANUAL

IMPORTANT!

Safety Instructions

All Operators Must Read These Instructions Before Use

Always follow these safety guidelines. Failure to do so may result in serious bodily injury or death.

⚠ DANGER! This indicates a hazardous situation, which, if not followed, will result in serious injury or death.

⚠ WARNING! This indicates a hazardous situation, which, if not avoided, could result in serious injury or death.

⚠ CAUTION! This indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury.

General Safety

⚠ WARNING! When using electric yard tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

- 1. Keep guards in place** – Protective guards should be checked periodically to ensure they are properly fitted and in correct working order.
- 2. Remove adjusting keys and wrenches** – Check that adjusting wrenches are removed from the saw before turning it on.
- 3. Keep work area clean and well-lit** – Clear work area of branches and limbs after each cutting session. Cluttered areas invite accidents.
- 4. Do not use in dangerous environments** – Do not use power tools in damp or wet locations.
- 5. Do not use the pole chain saw in the rain.**
- 6. Keep bystanders and children away** – All bystanders, including children and pets, should be kept a safe distance away from the work area.
- 7. Do not force the tool** – It will do the job effectively and safely if it is used at the rate for which it was designed.
- 8. Use the right tool** – Do not force the tool or any attachment on the tool to do a job for which they were not designed.
- 9. Wear proper apparel** – Do not wear loose articles of clothing or jewelry since such items may get caught in moving parts. Use of heavy-duty rubber gloves,

substantial non-skid footwear, and close-fitting clothing is recommended when working outdoors with power tools.

- 10. Wear protective hair coverings to contain long hair.**
- 11. Always wear safety glasses and ear defenders to provide eye and ear protection** – Everyday eyeglasses only have impact resistant lenses and do not provide the same protection as safety glasses.
- 12. Wear face or dust masks** – If the cutting operation is dusty, the use of a face or dust mask specially designed to filter out microscopic particles is recommended.
- 13. Do not overreach** – Keep proper footing and balance at all times.
- 14. Maintain tools with care** – Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 15. Disconnect tool** – Disconnect the pole chain saw from the power supply when not in use, before servicing, when transporting, or when changing the chain or other accessories.
- 16. Reduce the risk of unintentional starting** – Make sure the switch is in the OFF position before plugging the tool into a power source.
- 17. Use recommended accessories** – Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
- 18. Check for damaged parts** – Before each use, repair, or replace any guard or part that is damaged. In addition, check for alignment of moving parts, binding of moving parts, breakage of parts, and any other conditions that may affect the tool's operation.
- 19. Never leave tool unattended while it is running** – Turn the power OFF by removing the power cord directly from its socket. Do not leave the saw until the cutting bar comes to a complete stop.
- 20. Avoid unintentional starting** – Do not carry the pole chain saw with your finger on the switch.
- 21. Do not grasp the exposed cutting blade or cutting edges when picking up or holding the saw** – Be sure to encase the cutting bar in its protective sheath when not in use.
- 22. Stay alert** – Watch what you are doing. Use common sense. Do not operate the pole chain saw when you are tired.
- 23. Store idle tool indoors** – When not in use, appliances should be stored indoors in a dry and high or locked-up place out of the reach of children.

Electrical Safety

1. Ground fault circuit interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used for the pole chain saw. Receptacles are available having built-in GFCI protection and may be used for this measure of safety.
2. To prevent electric shock, use only with an extension cord suitable for outdoor use, such as SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJOW-A, SJTW-A, or SJTOW-A.

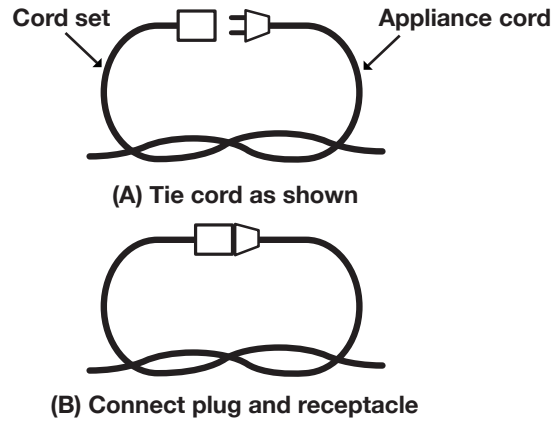
Before use, check that the extension cord is in good condition. When using an extension cord, make sure to use one heavy enough to carry the current your product will draw. For lengths less than 50 ft (15 m), a No. 16 AWG (or greater) extension cord should be used. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

3. To reduce the risk of electric shock, this appliance has a polarized plug (i.e. one blade is wider than the other). Use this appliance only with a polarized UL-, CSA-, or ETL-rated extension cord for outdoor, all-weather use. The appliance plug will fit into a polarized extension cord only one way.

If the appliance plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. The extension cord plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not modify the appliance plug, extension cord receptacle, or extension cord plug in any way.

4. To prevent the appliance cord from disconnecting from the extension cord during operation, make a knot with the two cords as shown in Table 1.

Table 1. Method of Securing Extension Cord



5. Do not abuse the cord. Never pull the pole chain saw by the cord or yank the cord to disconnect it from the receptacle. Keep the cord away from heat, oil, and sharp edges.

Specific Safety Rules for Pole Chain Saws

⚠️ WARNING! SHOCK HAZARD! – To protect yourself from electrocution, do not operate the pole chain saw within 50 ft (15 m) of overhead wires. Failure to follow this instruction could result in severe personal injury.

Operating Tips for Pole Chain Saws

- 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 different than intended could result in a hazardous situation.
- Note the extension cord's location relative to the tool. While operating the pole chain saw, be careful not to trip over the cord.
- Keep the cord away from the chain and the operator at all times.
- Keep children, animals, and bystanders a safe distance away from the pole chain saw and extension cord.
- Only the pole chain saw operator should be in the work area.
- Do not use the pole chain saw to cut down trees.
- Always use two hands when operating the pole chain saw. Grip the pole chain saw securely with one hand on the trigger and the other hand on the pole.
- Before starting the pole chain saw, make sure that the saw chain is not in contact with any object.

⚠️
WARNING!
⚠️

Electric shock may cause SEVERE INJURY or DEATH. Heed these warnings:

- Do not allow any part of the pole chain saw to make contact with water while it is in operation. If the appliance becomes wet while turned off, wipe dry before starting.
- Use only a UL-, CSA-, or ETL-rated extension cord for outdoor, all-weather use.
- Do not use an extension cord over 100 ft (30 m).
- Do not touch the appliance or its plug with wet hands or while standing in water. Wearing rubber boots offers some protection.

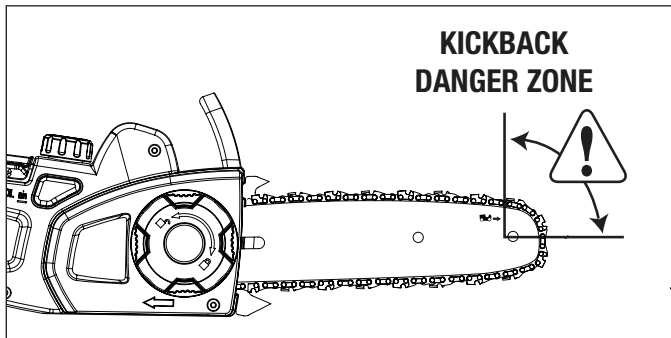
EXTENSION CORD CHART

Cord Length:	Up to 50 ft (15 m)	+50 ft - 100 ft (+15 m - 30 m)
Min. Wire Gauge (A.W.G.):	16	14

- Do not allow the pole chain saw to make contact with grounded objects such as pipes, fences, and metal posts.
- Do not force the pole chain saw while cutting. Apply light pressure. It will perform more effectively and safely if it is used at the rate for which it was designed.
- Remove plug from the mains immediately if the cable is damaged or cut.
- Do not operate a chain saw in a tree. Operation of a chain saw while up in a tree may result in personal injury.
- 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.
- Use extreme caution when cutting a limb that is under tension. When wood tension is released, the limb could spring back and strike the operator, causing severe injury or death.
- Do not carry a plugged-in unit. Carry the pole chain saw from one place to another with the unit unplugged. During transport, hold the pole at its balance point (close to the saw end), with the guide bar and chain facing to the rear.
- Do not cut small brush and saplings with the pole chain saw. Small branches may catch in the chain and be whipped towards the operator, which could pull the operator off balance.

- Always use two hands when operating the pole chain saw, one hand gripping the trigger and the other hand gripping the pole. Use a firm grip. Thumbs and fingers must wrap around the trigger and the pole.
- Keep all guards in place on the pole chain saw. Make sure they are in proper working order.
- Do not overreach or extend arms above shoulder height.
- Keep solid footing and balance at all times.
- Never try cutting through two branches at the same time. Only cut one at a time.
- Do not bury the guide bar nose or try to cut by boring the guide bar nose into the wood.
- Watch for shifting of wood or other forces that may pinch the chain.
- Use extreme caution when re-entering a previous cut.
- Use the low-kickback chain and guide bar supplied with this pole chain saw. Only use genuine Snow Joe® + Sun Joe® replacement parts designed specifically for use with this pole chain saw.
- Never use a dull or loose chain. Keep the chain sharp and properly tensioned.

Kickback



⚠ WARNING! 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.

AVOID CONTACTING THE GUIDE BAR TIP WITH ANY OBJECT. In some cases, when the tip makes contact with an object, it may cause a fast reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may also push the guide bar rapidly back towards the operator. Either of these reactions may cause you to lose control of the pole chain saw, which could result in serious personal injury.








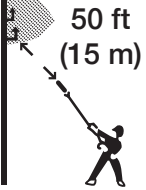








- Kickback safety devices on this pole chain saw include a skip chain and a low kickback guide bar. These will reduce, but not entirely prevent, kickbacks. Follow the necessary precautions indicated in this operator's manual to avoid kickbacks.

Pole Chain Saw Trimming Precautions

- Never stand directly under the limb you are trimming. Always position yourself outside the path of falling debris.
- Never stand on a ladder or other type of unstable support while using the pole chain saw.
- Keep all handles and grip surfaces clean, dry, and free from oil and grease.
- Always use both hands to operate the pole chain saw. Keep a firm, steady pressure on the pole chain saw while cutting, but do not try to cut limbs larger in diameter than the length of the guide bar.
- Keep other people and pets away from the cutting end of the pole chain saw and at a safe distance away from the work area.
- Do not use the pole chain saw near cable, electric power, or telephone lines. Maintain a minimum clearance of 50 ft (15 m) from all power lines.

Safety Symbols

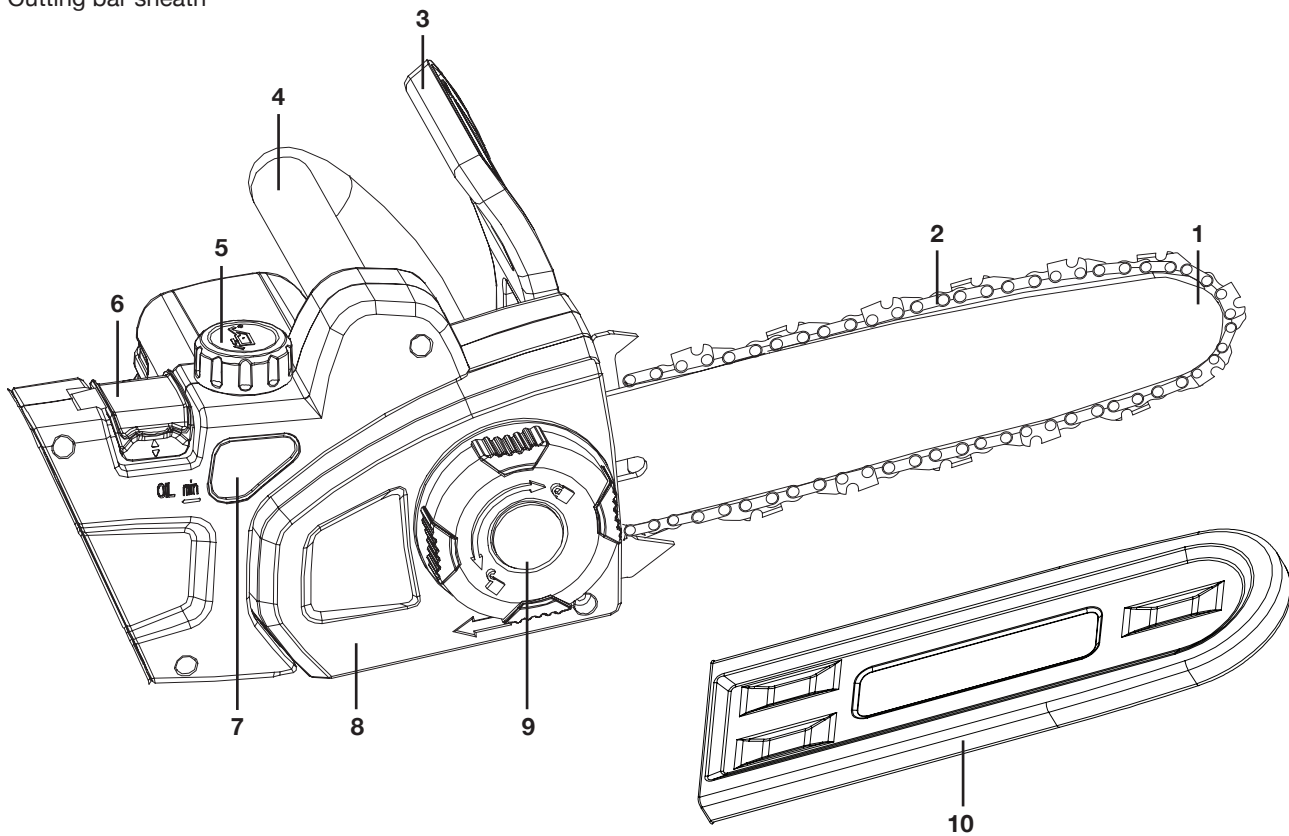
The following table depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate.

Symbols	Descriptions	Symbols	Descriptions
	READ THE OPERATOR'S MANUAL(S) – Read, understand, and follow all instructions in the user manual(s) before attempting to assemble and operate.		Keep bystanders and children a safe distance away.
	SAFETY ALERT – Indicates a precaution, a warning or a danger.		WARNING! Do not expose the unit to rain or wet conditions.
	Wear personal protective equipment, including close-fitting clothing.		WEAR EYE AND HEARING PROTECTION – For protection against injury, wear ear defenders and safety goggles.
	CAUTION! Avoid contacting the guide bar tip with any object. Tip contact may cause the guide bar to move suddenly upward and backwards, which may cause serious injury to the user.		WARNING! SHOCK HAZARD – Keep at least 50 ft (15 m) away from power lines. Do not overreach. Keep proper footing and balance at all times.
 	DANGER! ROTATING BLADES – Keep hands and feet away from openings while the saw is running.	 	Wear protective gloves and non-slip footwear when using the machine and handling debris.
	SWITCH OFF! Remove plug from outlet before cleaning or conducting maintenance checks.		SWITCH OFF! Remove plug from outlet immediately if the cord is damaged or cut.
	The rotating part will continuously run for several seconds after you turn off the machine.		Double Insulation.

Know Your Chain Saw Attachment

Read the owner's manual and safety instructions carefully before operating the pole/chain saw. Compare the illustration below to the power tool in order to become familiar with the location of the various controls and adjustments. Save this manual for future reference.

1. 8 in. guide bar
2. 8 in. chain
3. Safety chain brake lever
4. Front handle
5. Oil tank cap
6. Quick-release button
7. Oil level indicator window
8. Sprocket/chain end cover
9. Chain tension adjustment knob
10. Cutting bar sheath



Technical Data

Rated Voltage	120 V ~ 60 Hz	Cutting Thickness	Max: 7.5 in. (19 cm) Recommended: 6.5 in. (16.5 cm)
Power	7 A	Oil Tank Capacity	2.5 fl oz (75 ml)
No Load Speed	6000 rpm	Chain Speed	39.4 ft/s (12 m/s)
Bar/Chain Length	8 in. (20.3 cm)	Weight	5.7 lbs (2.6 kg)

Unpacking

Carton Contents

- Chain saw attachment
- 8 in. (20.3 cm) chain (pre-mounted on bar)
- 8 in. (20.3 cm) guide bar (pre-mounted)
- Cutting bar sheath
- Manual with registration card

1. Carefully remove the product and any accessories from the box and check to see that all of the above items are supplied.
2. Inspect the product carefully to make sure no breakage or damage occurred during shipping. If you find damaged or missing parts, DO NOT return the unit to the store. Please call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

NOTE: Do not discard the shipping carton and packaging material until you are ready to use the electric pole/chain saw. The packaging is made of recyclable materials. Properly dispose of these materials in accordance with local regulations or save the packaging for long-term product storage.

IMPORTANT! The equipment and packaging material are not toys. Do not let children play with plastic bags, foils, or small parts. These items can be swallowed and pose a suffocation risk!

Assembly

⚠WARNING! Always wear heavy-duty gloves when handling the bar and chain. Mount the bar and chain very carefully to ensure the safety and efficiency of the machine. If in doubt, contact an authorized Snow Joe® + Sun Joe® dealer or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

⚠DANGER! Never start the motor before installing the guide bar, chain, and chain cover. Without all these parts in place, the clutch/sprocket can fly off or explode, exposing the user to potentially serious injuries.

⚠WARNING! To avoid serious personal injury, read and understand all safety instructions provided.

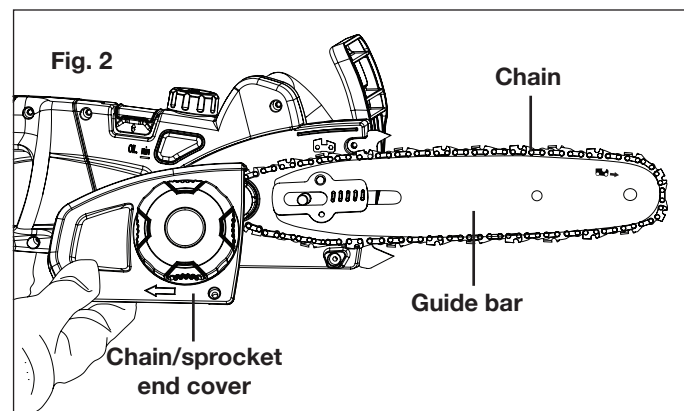
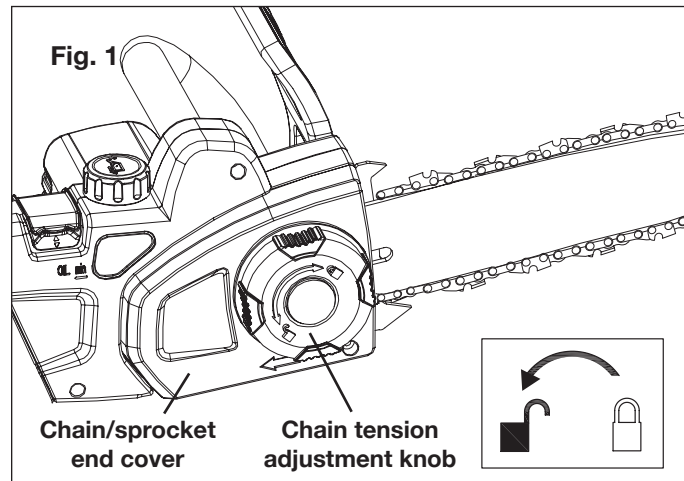
⚠WARNING! Before performing any maintenance, make sure the tool is unplugged from the power supply. Failure to heed this warning could result in serious personal injury.

⚠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 to the chain to avoid possible serious lacerations.

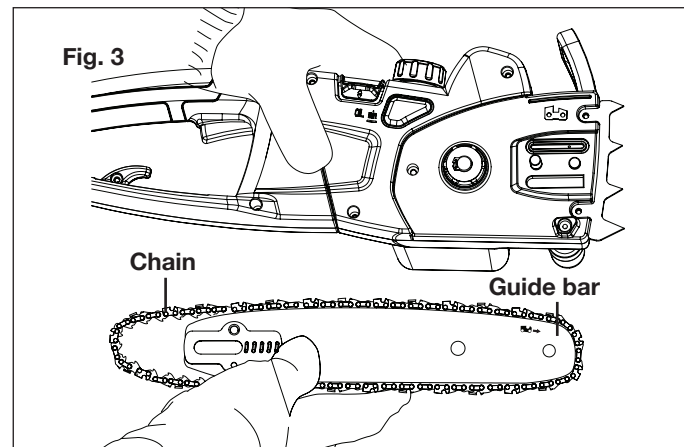
Installing/Replacing the Guide Bar and Chain


NOTE: When replacing the guide bar and chain, use only identical replacement parts. Make sure the chain saw is disconnected from the power supply before proceeding with installation.

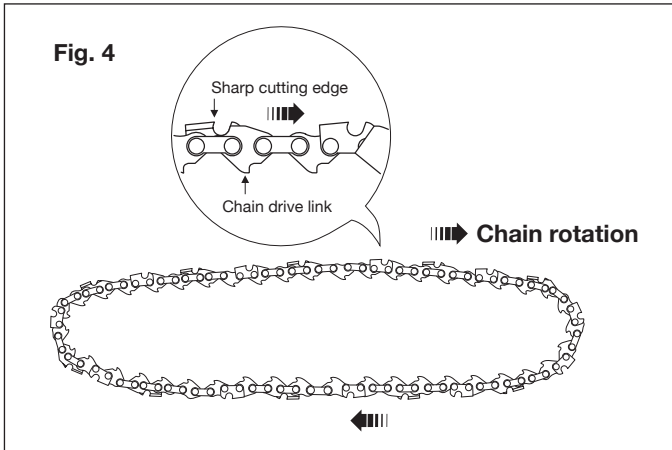
1. Loosen the chain tension adjustment knob by turning it counter-clockwise and remove the chain/sprocket end cover to expose the sprocket and access the area where the guide bar needs to be fitted (Figs. 1 & 2).




2. Remove the guide bar and chain from the mounting surface (Fig. 3).

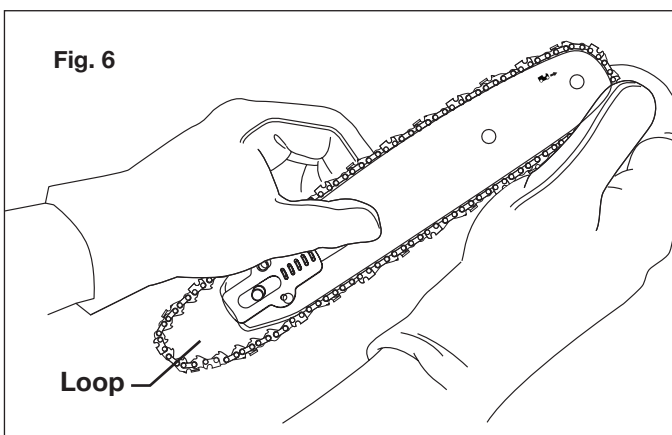
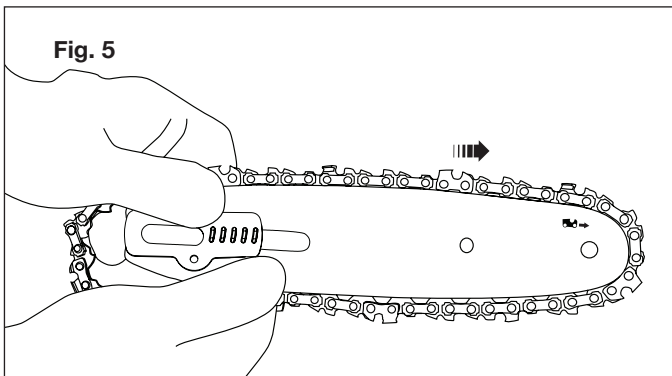


3. Remove the old chain from the bar.
4. Lay out the new saw chain in a loop and straighten any kinks. **THE SHARP SIDE OF THE TEETH MUST FACE AWAY FROM YOU IN THE DIRECTION OF THE CHAIN ROTATION INDICATED ON THE GUIDE BAR** . If the teeth face backwards, turn the loop over (Fig. 4).

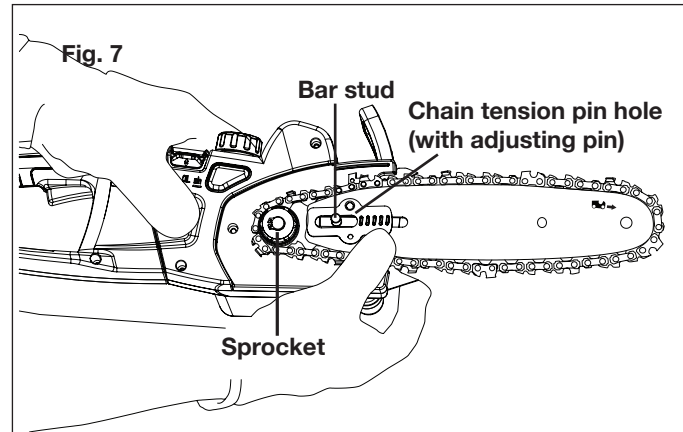


5. Starting at the tip, mount the chain drive links into the bar groove, leaving a loop at the back of the bar. The chain will loosely fit until it is placed on the sprocket (Figs. 5 & 6).

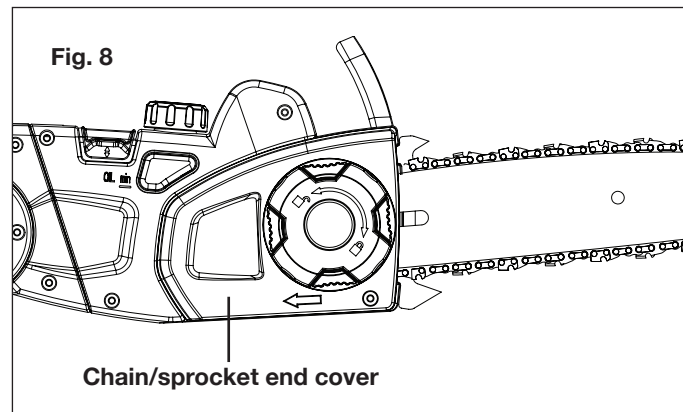
NOTE: Make certain of the direction of the chain . If the chain is mounted backwards, the saw will vibrate abnormally and will not cut.



6. Hold the chain in position on the bar and place the loop around the sprocket. Fit the bar flush against the mounting surface so that the bar stud is in the long slot of the bar and the adjusting pin is in the chain tension pin hole (Fig. 7).

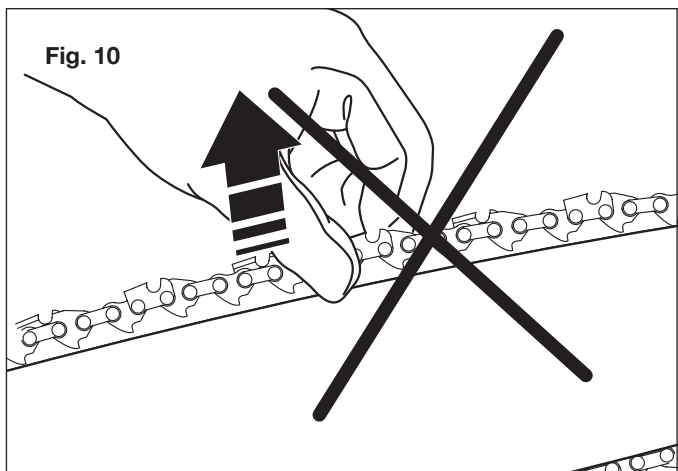
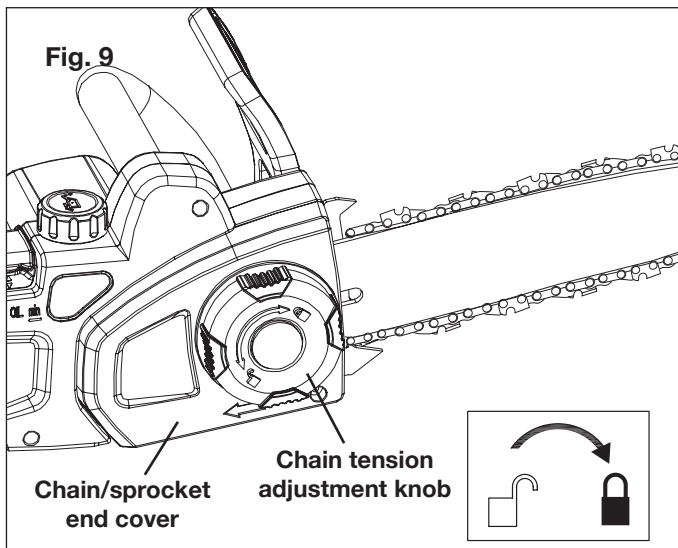


7. Replace the chain/sprocket end cover. Tighten the chain tension knob by hand; leave the bar loose enough to move slightly for tension adjustment (Fig. 8).



8. Remove all slack from the chain by turning the chain tension adjustment knob clockwise until the chain seats snugly against the bar with the drive links flush inside the bar groove (Figs. 9 & 10).

NOTE: The chain is correctly tensioned when there is no sag on the underside of the guide bar; the chain is snug, but can be rotated by hand without binding. For more information on chain tensioning, see the maintenance section beginning on pg. 15.



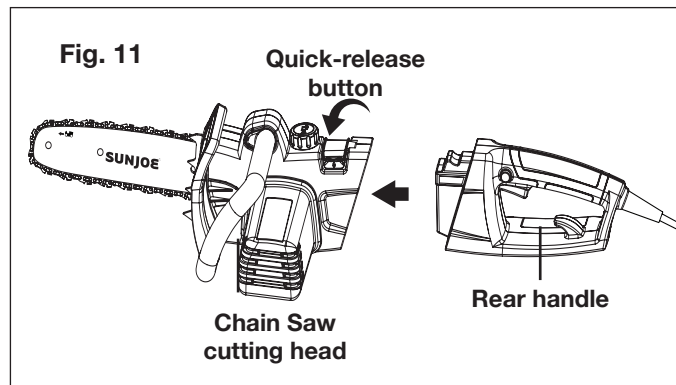
NOTE: If the chain is too tight, it will not rotate. Loosen the chain tension adjustment knob 1/4 turn counterclockwise. Lift the tip of the guide bar up and retighten the chain tension adjustment knob. Ensure that the chain can be rotated by hand without binding.

NOTE: A new chain tends to stretch; check the chain tension frequently, and adjust tension as required.

NOTE: GTS4000E lawn + garden multi-tool system sold separately at snowjoe.com

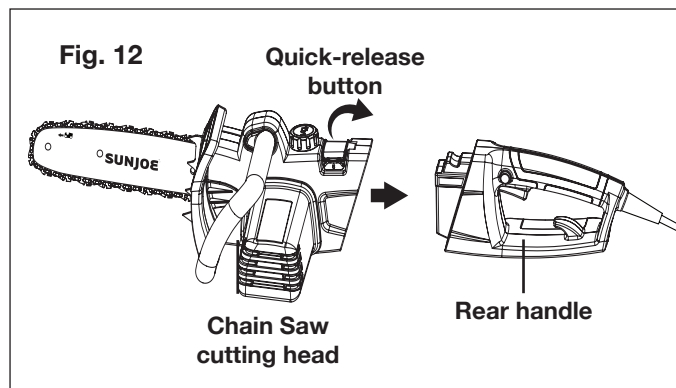
Fitting the Chain Saw

1. Insert the rear handle directly into the chain saw cutting head. When fully inserted, press down on the quick-release button. Make sure the button snaps in firmly and securely, locking the parts together (Fig. 11).

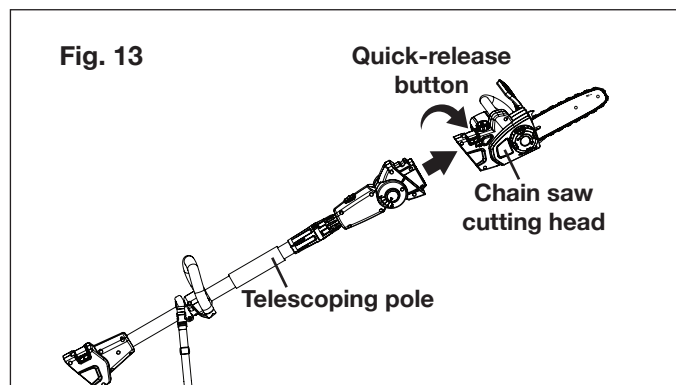


Converting from Chain Saw to Pole Chain Saw

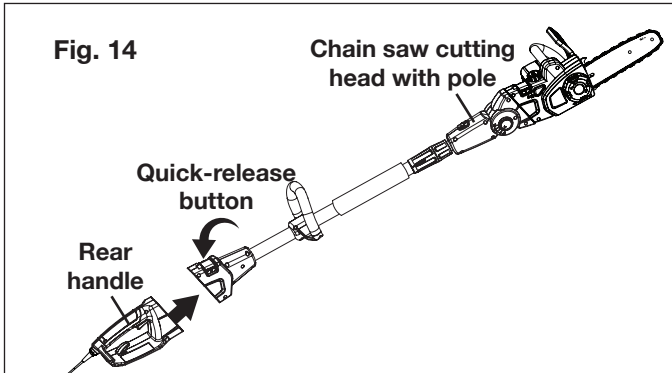
1. Lift the quick-release button. Pull to remove the rear handle from the chain saw cutting head (Fig. 12).



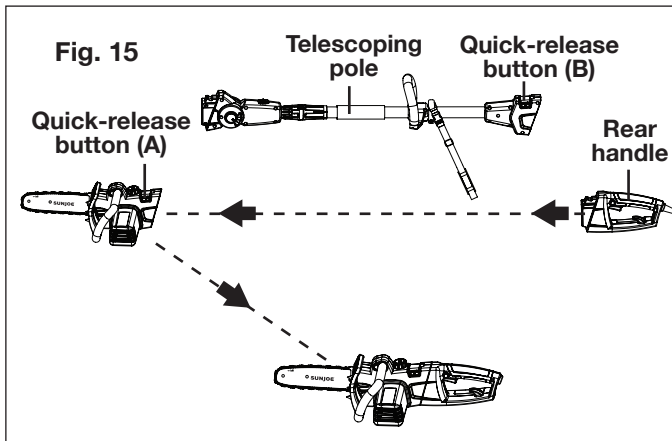
2. Insert the telescoping pole into the chain saw cutting head. Press the quick-release button into a locked position (Fig. 13).



3. Insert the rear handle into the end of the telescoping pole (Fig. 14).
4. Press down on the quick-release button. Ensure the release button snaps firmly into position to lock the handle securely (Fig. 14).



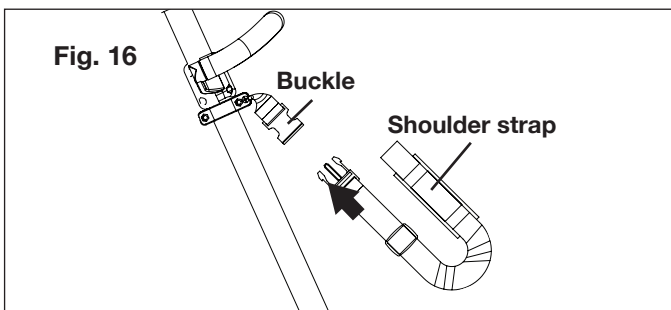
5. To convert back to the chain saw, disconnect rear handle and cutting head from ends of telescoping pole by lifting the quick-release buttons A and B and pulling straight out. Then re-insert the rear handle directly into the chain saw cutting head (Fig. 15).



Attaching the Shoulder Strap

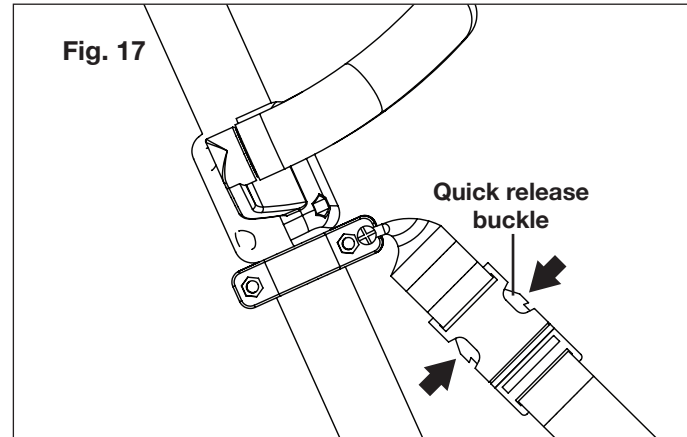
⚠️WARNING! Always attach the shoulder strap from the unit before starting motor. Use the shoulder strap to help support the pole chain saw while in use; do not carry the pole chain saw with only your hands.

1. Wear the shoulder strap over the left shoulder so that the hook stays at your right hand side.
2. Fasten the shoulder strap to the buckle on the pole (Fig. 16).



3. Adjust the length of the strap to attain a comfortable working position.

⚠️WARNING! The buckle is provided with a means of quick release which can be accomplished by simply squeezing the sides of the buckle (Fig. 17).



Preparing To Work

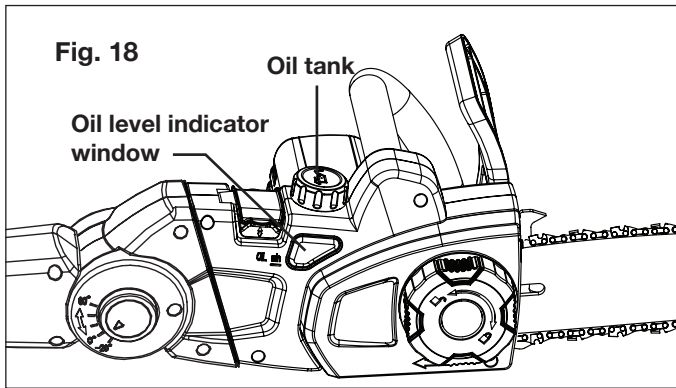
Checking the Machine

⚠️WARNING! Before performing any checks, adjustments, repairs, or maintenance on the machine, make sure the unit is not connected to the power supply.

Before starting work, please:

- Check that all the screws on the machine and the guide bar are tightly fastened;
- Check that the chain is correctly tensioned, properly sharpened, and there are no signs of any damage;
- Check that hand grips and protection devices are clean and dry, correctly mounted, and securely fastened to the machine;
- Check that the trigger switch and the safety button move freely without forcing and return automatically and rapidly back to their neutral positions;
- Check that the trigger switch remains locked until the safety button is pressed;
- Make sure the cooling air vents are not clogged with sawdust or debris;
- Check that the chain's oil level is not below the "MIN" level mark; if necessary, top up the oil to 0.4 in. (1 cm) from the rim of the filler (Fig. 18).

⚠️WARNING! You must fill the chain oil tank with bar and chain oil before using your chain saw.



Check the Chain Lubrication

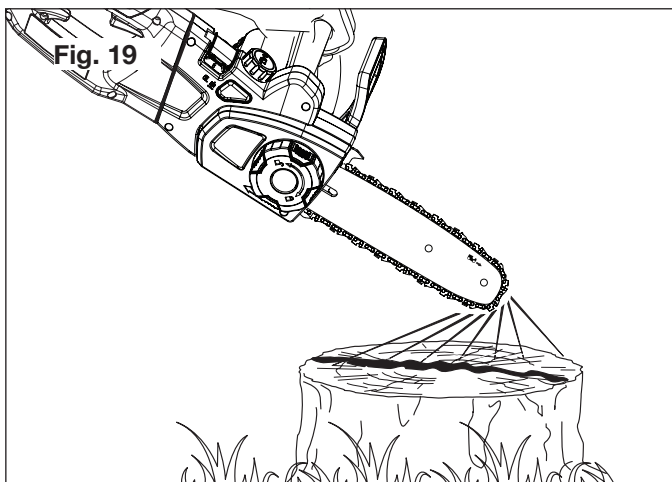
⚠ CAUTION! Failure to lubricate the chain will cause damage to the chain and bar. Use a good quality bar and chain oil designed specifically for use with chain saws. Bar and chain oil can be purchased at your local hardware store or online at snowjoe.com.

NOTE: It is normal for oil to seep from the saw when not in use. To prevent seepage, empty the oil tank after each use. When storing the unit for a long period of time (3 months or longer), be sure the chain is lightly lubricated. This will prevent rust on the chain and the bar sprocket.

⚠ WARNING! Do not use the chain saw with any type of accessory or attachment. Such usage might be hazardous.

Never saw when a sufficient chain lubrication is not guaranteed. Otherwise the life of the sawing device will be reduced. Before starting work, check the oil level in the tank and the oil feeding. Check the fed oil quantity by following the instructions below:

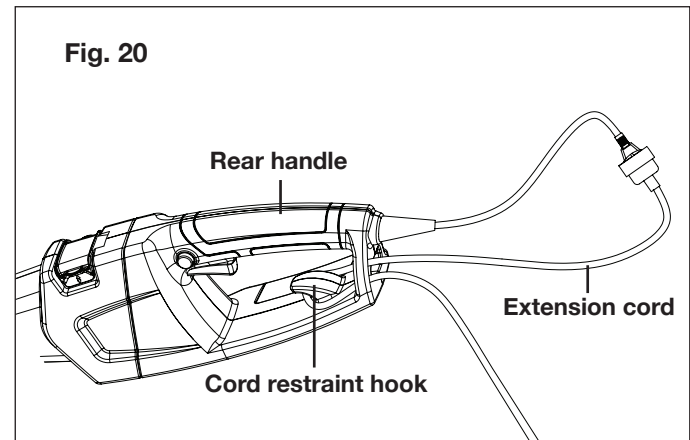
1. Start the electric chain saw
2. Hold the running chain saw approx. 6 in. (15 cm) above a trunk or the ground (use an appropriate surface) (Fig.19).
3. If the lubrication is sufficient, you will see a light oil trace because oil will be centrifuged from the chain saw (Fig.19).



Operation

Connecting to Power Supply

1. Make a loop in the extension cord and push it up through the hole in the rear handle and around the cord restraint hook, then connect the extension cord to the appliance cord (Fig. 20).



Starting the Pole/Chain Saw

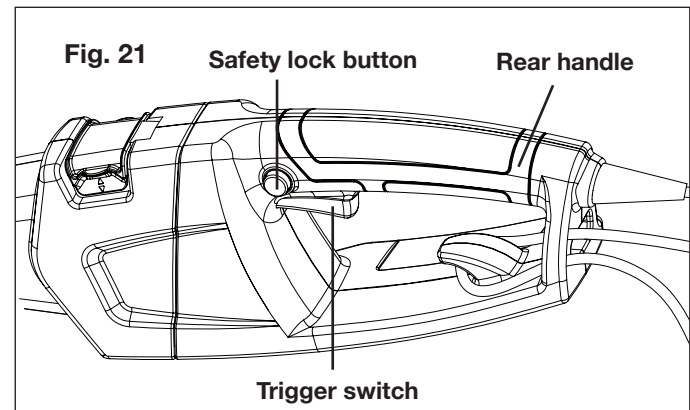
Before operating the pole/chain saw, stand in the operating position and are holding tool with both hands so that the cutting blades are always away from your body.

⚠ WARNING! Before you start the tool, make sure the pole/chain saw is not contacting any object.

⚠ WARNING! You are wearing all of the necessary personal protective equipment, including protective gloves, non-slip footwear, safety goggles, ear defenders, and close-fitting clothing.

To start the pole/chain saw:

1. Hold the pole/chain saw firmly with both hands.
2. To turn the pole/chain saw ON, press and hold the safety lock button with your thumb, then squeeze the ON/OFF trigger switch with your fingers. Once the machine powers on, you can release the safety button and proceed with operation (Fig. 21).



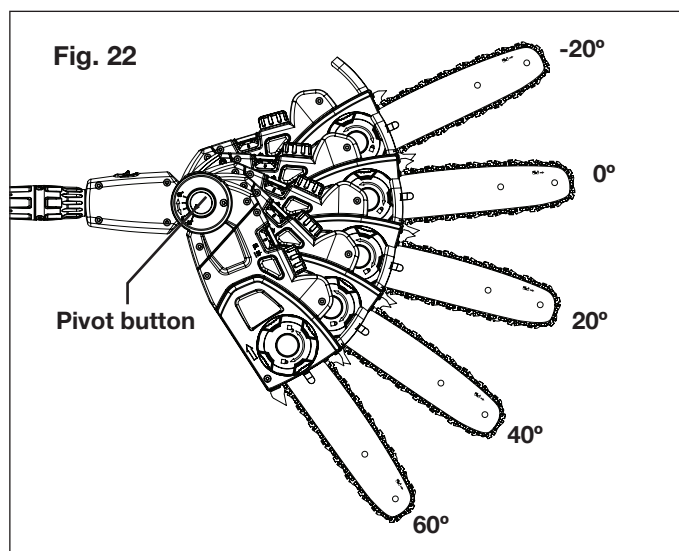
3. To turn the tool OFF, release the trigger switch (Fig. 21).

NOTE: Do not press the trigger switch until you are ready to make a cut.

Adjusting Pole Chain Saw Pivoting Head

The pole chain saw cutting head can be rotated into 5 different cutting angles.

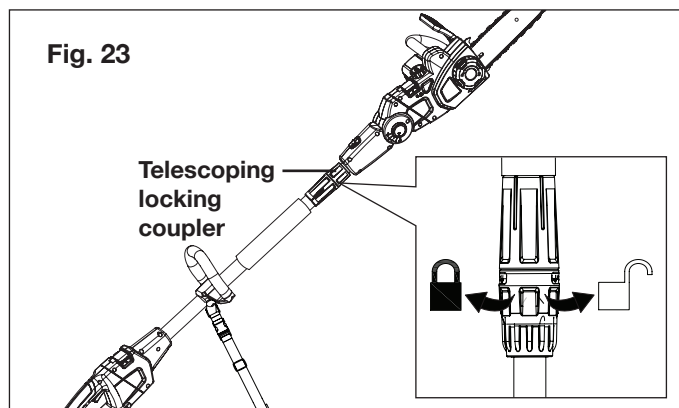
1. Always disconnect the pole chain saw from the power supply.
2. Place the pole chain saw on a sturdy flat surface.
3. Press the pivot button and adjust the chain saw cutting head to the desired angle (Fig. 22).



Extending the Telescoping Pole

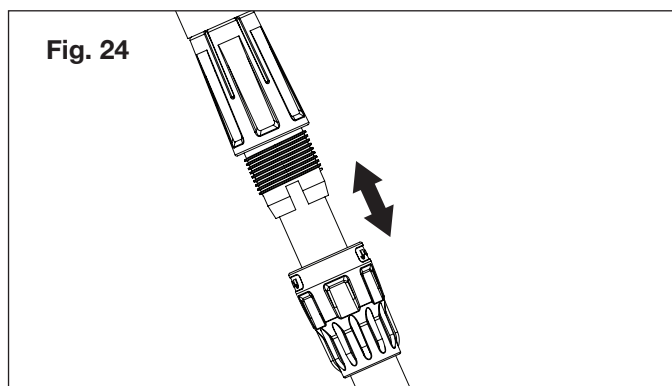
The telescoping pole can be extended or shortened for ease of use.

1. Disconnect the pole chain saw from the power supply.
2. Unlock the telescoping pole by turning the telescoping locking coupler clockwise (Fig. 23).



3. Extend the telescoping pole to a comfortable height (Fig. 24)

NOTE: Push poles toward each other to shorten the pole or pull them away from each other to lengthen the pole. Only extend the pole to the minimum length required to reach the limb to be cut.

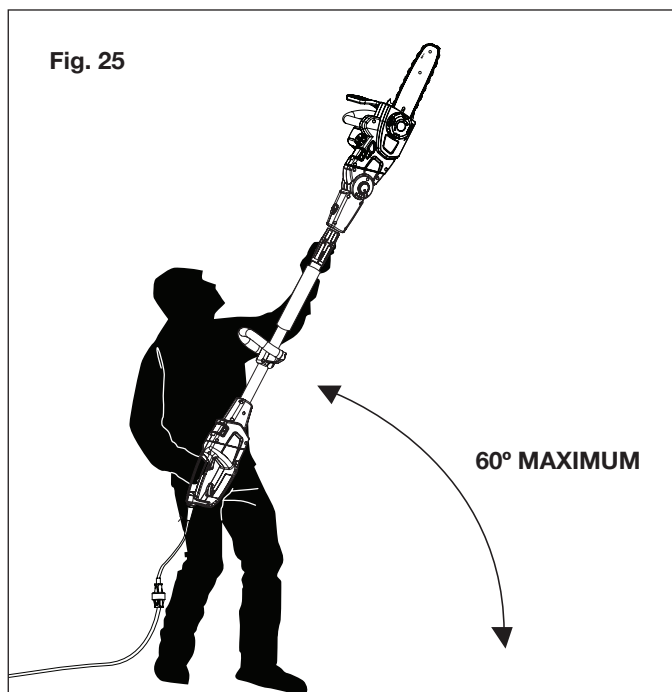


4. Lock the pole in position by turning the locking coupler counter-clockwise, and ensure that the pole is secure.

Cutting Tips for Pole Chain Saw

Proper Cutting Stance

- Balance your weight with both feet on solid ground.
- Your body should always be to the left of the chain line.
- The most typical cutting application is to position the unit at an angle of 60° or less depending on the specific situation (Fig. 25). As the angle of the pole chain saw shaft to the ground increases, the difficulty of making the first cut (from the underside of limb) increases.



Basic Cutting Procedures

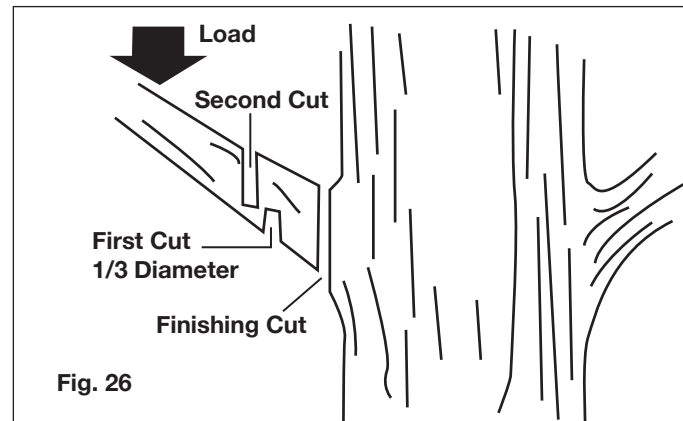
⚠️ WARNING! Do not cut limbs or trees that are larger than the maximum cutting thickness.

- Practice cutting a few small logs using the following techniques to get the feel of using the saw before you begin a major sawing operation.
- Take the proper stance in front of the wood with the saw turned off (Fig. 25).
- Squeeze the trigger and let the chain accelerate to full speed before entering the cut.
- Hold the saw with both hands firmly. 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.
- Keep the saw running the entire time you are cutting, maintaining a steady speed.
- Allow the chain to cut for you; exert only light downward pressure. If you force the cut, damage to the bar, chain, or unit can result.
- **PUSH and PULL** – This reaction force is always opposite to the direction the chain is moving when it is in contact with the wood. 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.
- Do not put the pressure on the saw at the end of the cut.
- Always cut with both feet on solid ground to prevent falling.
- Do not cut above chest height since it is difficult to control kickback forces with a saw held high.

Pruning

Pruning is the process of trimming limbs from a live tree.

- Remove long branches in several stages.
- Cut lower branches first to allow the top branches more room to fall.
- 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 farthest lying limb. This will reduce the weight and prevent stripping the bark from the main member.
- Under cut the branch 1/3 through for your first cut. Your second cut should over cut to drop the branch off (Fig. 26). Be prepared to balance the weight of the pole chain saw when the limb falls.



- Now make your finishing cut from the topside of the branch smoothly and neatly against the main member so the bark will grow back to seal the wound.
- Release the trigger ON/OFF switch as soon as the cut is completed. Failure to follow proper cutting procedures will result in the bar and chain binding and becoming pinched or trapped in the limb.

Limbing

Limbing is the process of removing branches from a fallen tree.

- You should cut limbs one at a time. Remove the cut limbs from the work area often to help keep the work area clean and safe.
- Cut branches under tension from the bottom up to avoid binding the pole chain saw.
- Keep the tree between you and the pole chain saw while limbing. Cut from the side of the tree opposite the branch you are cutting.

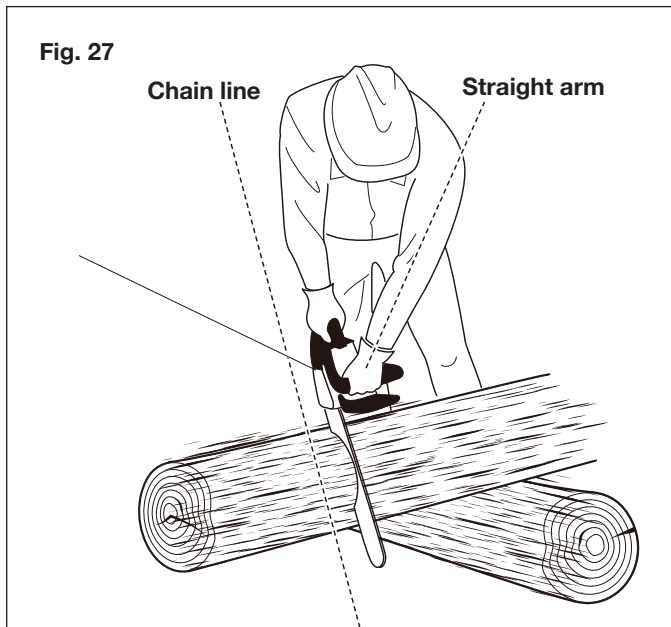
If the Saw Becomes Pinched or Trapped

1. Wait for the blade to stop, wait five minutes for the saw to cool, unplug the power cord, and wear gloves to protect your hands from the chain teeth.
2. If you can reach the limb from the ground, lift the limb while holding the saw. This should release the "pinch" and free the saw.
3. If the saw is still trapped, call a professional for assistance.

Cutting Tips for Chain Saw

Proper Cutting Stance

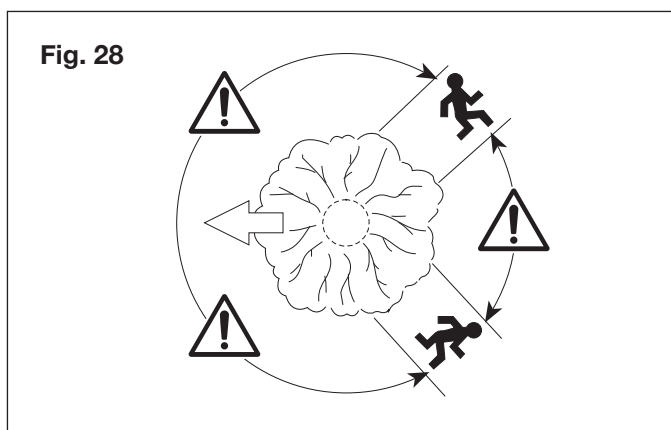
- Weight should be balanced with both feet on solid ground.
- Keep your left arm and elbow locked in a "straight arm" position to withstand any kickback force (Fig. 27).



- Your body should always be to the left of the chain line.

Felling a Tree

- When bucking and felling are performed by two or more people 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 company should be notified immediately.
- The chain saw operator should keep on the uphill side of the terrain as the tree is likely to roll or slide downhill after it is felled.
- An escape path should be planned and cleared as necessary before cuts are started. The escape path should extend back and diagonally to the rear of the expected line of fall as illustrated (Fig. 28).

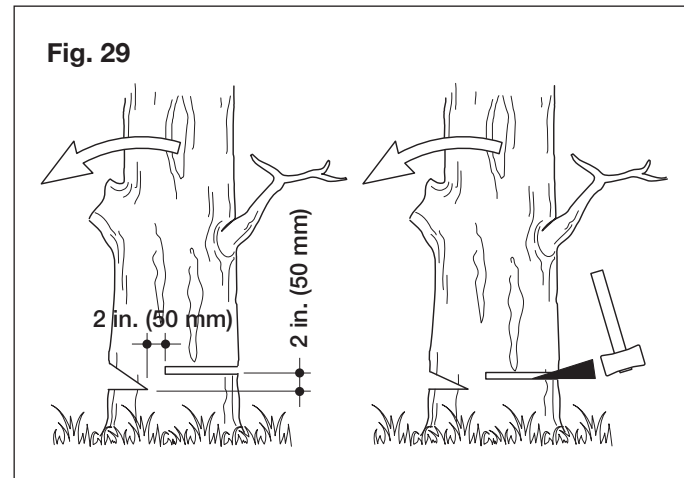


- Before felling is started, consider the natural lean of the tree, the location of larger branches and the wind direction to help you judge which way the tree will fall.

- Remove dirt, stones, loose bark, nails, staples and wire from the tree.

Notching Undercut

Make the notch 1/3 the diameter of the tree, perpendicular to the direction of falls as illustrated (Fig. 29).



Make the lower horizontal notching cut first.

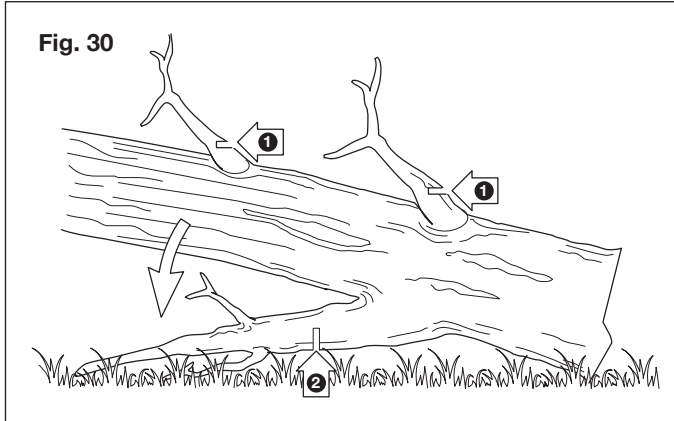
This will help to avoid pinching either the saw chain or the guide bar when the second notch is made.

Felling Back Cut

- Make the felling back cut at least 2 in. (50 mm) higher than the horizontal notching cut as illustrated (Fig. 29). Keep the felling back cut parallel to the horizontal notching cut. Strategically position the felling back cut so that enough wood is left to act as a hinge. The hinge wood keeps the tree from twisting and falling in the wrong direction. Do not cut through the hinge.
- As the felling 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 bind the saw chain, stop cutting before the felling back cut is complete and use wedges of wood, plastic or aluminium to open the cut and drop the tree along the desired line of fall.
- When the tree begins to fall, remove the chain saw from the cut, stop the motor, put the chain saw down, then use the retreat path planned. Be alert for overhead limbs falling and watch your footing.

Limbing

Limbing is the process in which branches are removed from a fallen tree. When limbing, leave larger lower limbs to support the log off the ground. Remove the small limbs in one cut as illustrated (Fig. 30). Branches under tension should be cut from the bottom up to avoid binding the chain saw.



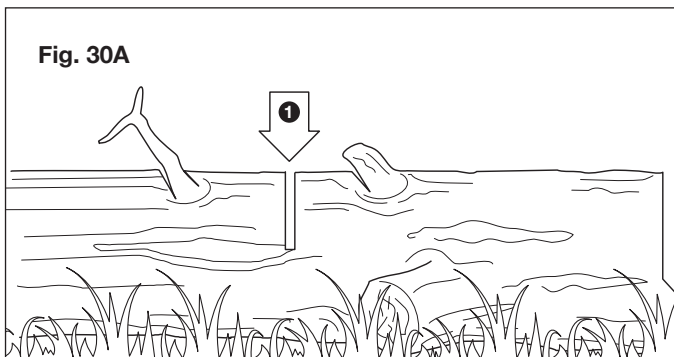
⚠️ WARNING! Pay special attention to where the branches are lying on the ground and recognize the following risks: 1). the branches may be under tension; 2). the direction in which the branch will fall may differ from that anticipated; 3). the tree may be unstable after the branch has been cut.

Bucking a Log

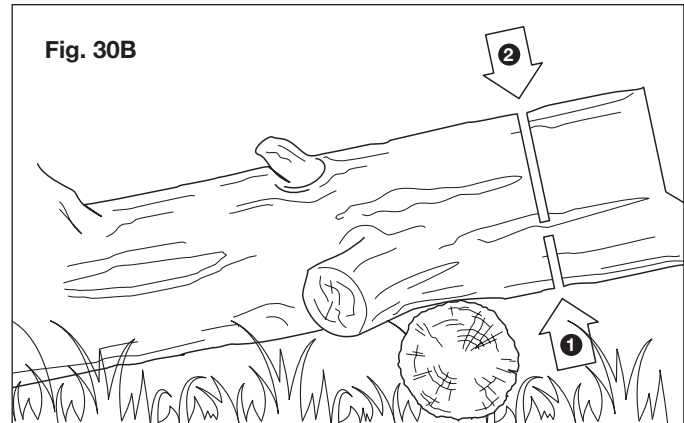
⚠️ WARNING! Do not buck logs that are larger than the maximum cutting thickness.

Bucking is the process in which a log is cut 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 these simple directions for easy cutting:

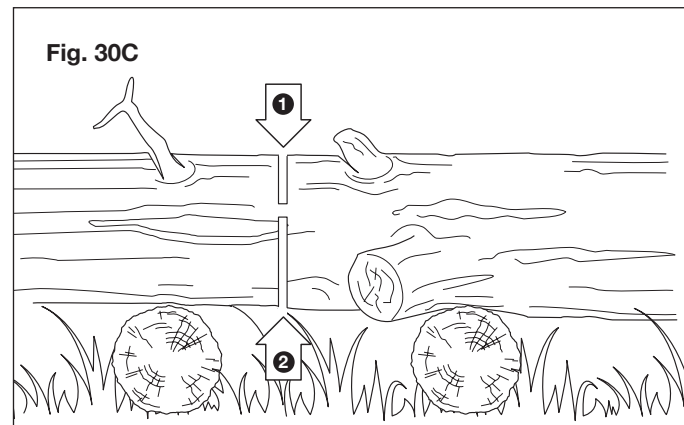
- When the log is supported along its entire length as illustrated (Fig. 30A), cut from the top (overbuck).



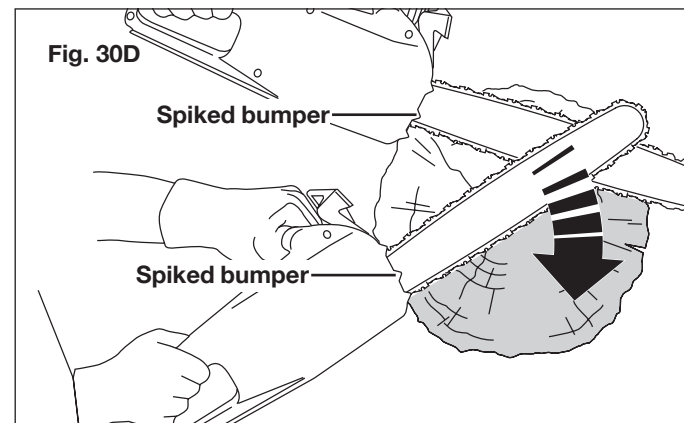
- When the log is supported on one end (Fig. 30B), cut 1/3 the diameter from the underside (underbuck). Then make the finishing cut by overbucking to meet the first cut.



- When the log is supported on both ends (Fig. 30C), cut 1/3 the diameter from the top (overbuck). Then make the finishing cut by underbucking the lower 2/3 to meet the first cut.



- It is easier to saw a log using the spiked bumper (Fig. 30D).
 - Dig the spiked bumper into the log and use it as a pivot. Cut with an arched motion to make the bar penetrate the wood.
 - Repeat several times if necessary, changing the point where you plant the spiked bumper.



- When bucking on a slope, always stand on the uphill side of the log. When cutting through the log, maintain control by releasing 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.

Maintenance

Please contact an authorized Snow Joe® + Sun Joe® dealer or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563) for all maintenance operations not foreseen in this manual. Any operation performed in an unauthorized service center or by unqualified personnel will completely invalidate the warranty.

⚠️ WARNING! For your safety and that of others:

- Correct maintenance is essential to maintain the original efficiency and safety of the machine over time.
- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Never use the machine with worn or damaged parts. Damaged parts are to be replaced and never repaired.
- Only use original Snow Joe® + Sun Joe® replacement parts. Parts that are not of the same quality can seriously damage the equipment, compromise safety, and invalidate the warranty.

⚠️ WARNING! Always unplug the power cord before performing any adjustments, maintenance, or repairs to your 2-in-1 pole + chain saw.

- Use protective gloves when handling the bar and chain.
- Keep the bar encased in its sheath, except when working directly on the bar or the chain.
- Never dispose of oils or other polluting materials in unauthorized places.

Motor Cooling

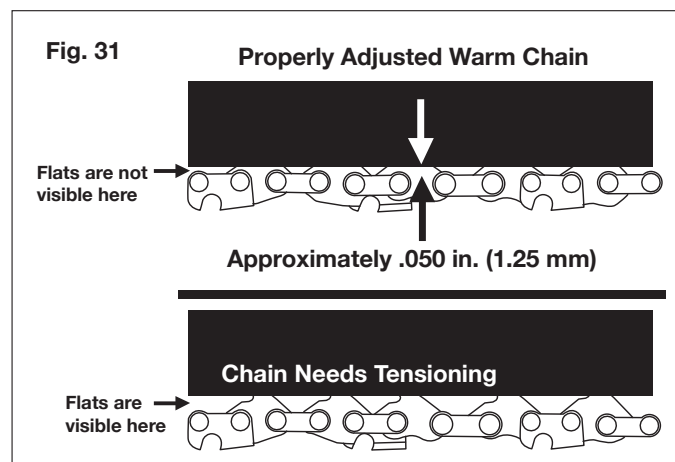
To avoid overheating and damage to the motor, always keep the cooling air vents clean and free of sawdust and debris.

Chain Tension

Check the chain tension before using the saw when the chain is cold. The correct tension of a cold chain is when there is no slack on the underside of the guide bar; the chain is snug, but you can rotate it by hand without binding.

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. (1.25 mm) out of the bar groove (Fig. 31). Be aware that a chain tensioned while warm, may be too tight upon cooling. Check the “cold tension” before

next use. The chain must be re-tensioned whenever the flats on the drive links hang out of the bar groove (Fig. 31).



NOTE: A new chain tends to stretch. Check the chain tension frequently and re-tension as needed.

Nuts and Screws

Periodically check that all the nuts and screws are tightened securely. Check that the telescoping locking coupler that controls the telescoping pole is intact and in proper working order.

Chain Sharpening

⚠️ WARNING! To ensure that the saw works safely and efficiently, it is essential that the cutting components are well-sharpened. **It is highly recommended to replace the chain once it loses its ability to cut cleanly and safely.** It is possible, however, to sharpen the existing chain if the sharpening is carefully performed. Any work on the chain and bar requires specific experience and special tools. For safety purposes, we recommend you contact an authorized Snow Joe® + Sun Joe® dealer or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

Sharpening is necessary when:

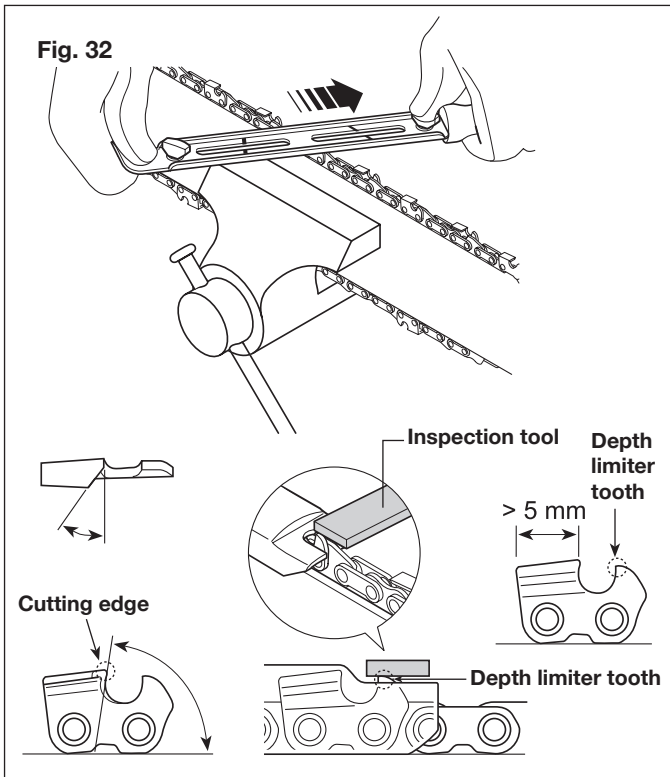
- The sawdust looks like dust;
- Cutting becomes more difficult;
- The cut is not straight;
- Vibrations increase.

An authorized service center will sharpen the chain using the right tools to ensure minimum removal of material and even sharpness on all the cutting edges.

If you sharpen the chain yourself, use special round-section files with the right diameter depending on the type of chain (see “Chain Maintenance Table” pg. 16). You need a certain amount of skill and experience to avoid damaging the cutting edges.

Sharpen the chain as follows (Fig. 32):

- Secure the bar firmly, with the chain mounted in a suitable vise.
- Tighten the chain if it is loose.
- Mount the file in the guide and then insert it in the tooth at a constant angle from the cutting edge.
- Sharpen in a forward motion a few times and repeat this on all the cutting edges facing the same way (right or left).
- To move the chain forward, use a screwdriver.
- Turn the bar over in the vise and repeat on all the other cutting edges.
- Check that the depth limiter tooth does not stick out farther than the inspection tool and file any projecting parts with a flat file, rounding off the edges (Fig. 32).
- After sharpening, remove all traces of filing and dust and lubricate the chain in an oil bath. Replace the chain whenever:
 - The length of the cutting edges decreases to 5 mm or less;
 - There is too much play between the links and the rivets.



Guide Bar Maintenance

When the guide bar shows signs of wear, turn it over on the saw to distribute the wear for maximum bar life. Feathering or burring of the bar rails is a normal process of bar wear. You should smooth such faults with a file as soon as they occur.

Replace a bar with any of the following faults:

- wear inside the bar rails permitting the chain to lay over sideways
- bent guide bar
- cracked or broken rails
- spread rails

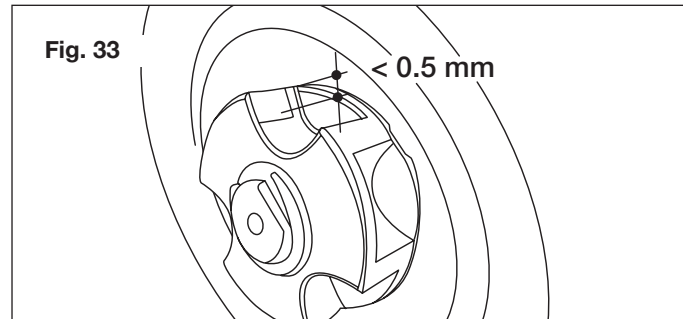
Turn the saw over, check the underside of the guide bar, and make sure that the lubrication holes and chain groove are free from impurities.

You can purchase replacement parts for your Sun Joe® GTS4000E-8CS-CGY chain saw attachment by ordering online at snowjoe.com or, to order by phone, contact Snow Joe® + Sun Joe® customer service at 1-866-SNOWJOE (1-866-766-9563).

Chain Sprocket

Regularly check the condition of the sprocket and replace it when wear exceeds 0.5 mm (Fig. 33).

Do not mount a new chain with a worn sprocket or vice-versa.



Chain Maintenance Table

Drive Link	Chain Pitch		Chain Gauge		File Diameter	
	inches	mm	inches	mm	inches	mm
56	3/8	9.5	0.050	1.3	5/32	4

Troubleshooting

Troubleshooting Tips

Most difficulties are easy to fix. Consult the troubleshooting table for common problems and their solutions. If you continue to experience problems or need repairs beyond these minor adjustments, please call 1-866-SNOWJOE (1-866-766-9563) for assistance.

⚠️WARNING! Always unplug the power cord before performing any adjustments, maintenance, or repairs to your 2-in-1 pole + chain saw.

Troubleshooting Table

Problems	Corrective Action
The saw motor fails to start	<ul style="list-style-type: none"> • Check that you installed the extension cord properly into the saw power cord receptacle and that you plugged the extension cord into a live 120 V outlet. • Make sure that you fully depress and hold the safety lock button before squeezing the ON/OFF trigger switch.
The saw runs, but the chain speed is low	<ul style="list-style-type: none"> • The chain is too tight; re-tension.
Bar and chain running hot and smoking	<ul style="list-style-type: none"> • The chain tension is too tight; re-tension. • The chain oil tank is empty; refill. • The lubrication holes are plugged; clean them out.
The saw motor runs, but the chain is not turning	<ul style="list-style-type: none"> • The chain tension is too tight; re-tension. • The guide bar or chain is damaged; inspect and replace the damaged part.

Daily Checklist, Cleaning and Storage

Daily Checklist

To help maintain your electric 2-in-1 pole + chain saw for optimum performance, we recommend you complete this checklist prior to each work session.

⚠️WARNING! Do not plug in the power cord until you have completed all of the daily checks.

- Inspect for any visible damage to the chain, guide bar, or motor housing.
- Inspect the oil port and guide bar rails and clean them to remove any debris.
- Check the chain tension.
- Check the chain teeth for sharpness.
- Check the bar and chain oil level; fill with only new chain oil specifically formulated for chain saws.

NOTE: If you notice anything unusual, such as a vibration or or an odd sound, shut the saw OFF immediately. Remove the power cord and check the saw for any damage.

If you cannot find the cause of the problem or are uncertain what to do, then have the saw inspected by an authorized Snow Joe® + Sun Joe® dealer or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563) before using it.

⚠️CAUTION!

- Remove the power cord and wait at least five minutes for the saw to cool before servicing or storing your unit.
- If you drop the saw, carefully inspect it for damage. If the guide bar is bent, the housing is cracked, the handle is broken, or if you see any other condition that may affect the saw's operation, **DO NOT USE** the tool. Instead, have it serviced at an authorized Snow Joe® + Sun Joe® dealer or call the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).

Cleaning

Use only mild soap and a damp cloth to clean the 2-in-1 pole + chain saw. Never let any liquid get inside the motor housing and **NEVER** immerse any part of the saw housing in liquid.

Storage

- Ensure that the guide bar cover is in place when storing.
- Do not store the 2-in-1 pole + chain saw near chemicals, such as fertilizers or other harsh solvents. Do not expose the plastic parts of the unit to brake fluids, gasoline, petroleum-based products, penetrating oils, or the like. These products are often highly corrosive and may cause permanent damage, weaken, or destroy the plastic parts of your unit.
- When not in use, your machine should be stored indoors in a dry and high or locked-up place, out of the reach of children.

Support

If your Sun Joe® GTS4000E-8CS-CGY chain saw attachment requires service or maintenance, please call 1-866-SNOWJOE (1-866-766-9563) for assistance.


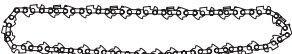
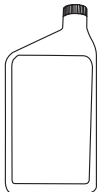
Model and Serial Numbers

When contacting the company, reordering parts, or arranging service from an authorized dealer, you will need to provide the model and serial numbers, which can be found on the decal located on the housing of the unit. Copy these numbers into the space provided below.

Record the following numbers from the housing or handle of your new product:	
Model #:	
G T S 4 0 0 0 E - 8 C S - C G Y	
Serial #:	

Optional Accessories

⚠️WARNING! ALWAYS use only authorized Snow Joe® + Sun Joe® replacement parts and accessories. NEVER use replacement parts or accessories that are not intended for use with this saw. Contact Snow Joe® + Sun Joe® if you are unsure whether it is safe to use a particular replacement part or accessory with your saw. The use of any other attachment or accessory can be dangerous and could cause injury or mechanical damage.

Accessories	Item	Model
	Oregon 8-inch replacement bar	GTS-8EBAR
	Oregon 8-inch replacement chain	SWJ-8CHAIN
	Bar and chain oil	SWJ-OIL sold at snowjoe.com or you can purchase equivalent bar and chain oil sold at your local hardware store

NOTE: Accessories are subject to change without any obligation on the part of Snow Joe® + Sun Joe® to provide notice of such changes. Accessories can be ordered online at snowjoe.com or via phone by contacting the Snow Joe® + Sun Joe® customer service center at 1-866-SNOWJOE (1-866-766-9563).



SNOW JOE® + SUN JOE® CUSTOMER PROMISE

ABOVE ALL ELSE, Snow Joe® + Sun Joe® are dedicated to you, our customer. We strive to make your experience as pleasant as possible. Unfortunately, there are times when a product does not work or breaks under normal operating conditions. We think it's important that you know what you can expect from us. That's why we created the Snow Joe® + Sun Joe® promise.

OUR PROMISE: Snow Joe® + Sun Joe® warrant new products for two years from the date of purchase. If your product does not work, or there's an issue with a specific part, we will fix this by either sending you a free replacement part or by sending you a new or comparable product at no charge. How cool is that! Before you know it, you'll be back in action cutting, sawing, mowing, washing and...?

PRODUCT REGISTRATION:

Snow Joe®, LLC ("Snow Joe® + Sun Joe®") strongly encourages you to register your purchase. You can register online at snowjoe.com/ProductRegistration, or by printing and mailing in a registration card available online from our website, or calling our Customer Service Department at **1-866-SNOWJOE (1-866-766-9563)**, or by e-mailing us at help@snowjoe.com. Failure to register your product purchase will not diminish your warranty rights. However, registering your purchase will allow Snow Joe® + Sun Joe® to better serve you with any of your customer service needs.

WHO CAN SEEK WARRANTY COVERAGE?

This Warranty is extended by Snow Joe® + Sun Joe® to the owner of this Machine (a "Machine" consists of a product powered by a motor) for residential and personal household use only. This Warranty does not apply to products used for commercial, rental or re-sale purposes. Should ownership of this machine change during the 2-year period, please update the Machine's owner information at snowjoe.com/ProductRegistration.

WHAT IS COVERED?

Snow Joe® + Sun Joe® warrants to the owner that if this Machine fails within 2 years from the date of purchase due to a defect in material or workmanship or as a result of normal wear and tear from ordinary household use, Snow Joe® + Sun Joe® will send a replacement part or product, as needed, free of charge and with free shipping to the original purchaser.

If, in Snow Joe® + Sun Joe®'s sole discretion, the failed Machine cannot be repaired with a part, Snow Joe® + Sun Joe® will elect to either (A) send a new Machine at no charge and with free shipping or (B) refund the full purchase price to the owner.

WHAT IS NOT COVERED?

This Warranty does not apply to the Machines that have been used commercially or in non-household applications. This Warranty does not cover cosmetic changes that do not affect performance. This Warranty is only valid if the Machine is used and maintained in accordance with the instructions, warnings and safeguards contained in the owner's manual. Snow Joe® + Sun Joe® will not be responsible for the cost of any unauthorized warranty repairs. This warranty does not cover any cost or expense incurred by the purchaser in providing substitute equipment or service during reasonable periods of malfunction or non-use of this product while waiting for a replacement part or unit under this warranty.

Wearing parts like belts, augers, chains and tines are not covered under this warranty, and can be purchased at snowjoe.com or by calling **1-866-SNOWJOE (1-866-766-9563)**. Batteries are covered in full for 90-days from the date of purchase.

Repair, replacement or refund of the purchase price are the exclusive remedies of purchaser and the sole liability of Snow Joe® + Sun Joe® under this warranty. No employee or representative of Snow Joe® + Sun Joe® is authorized to make any additional warranty or any modification to this warranty which may be binding upon Snow Joe® + Sun Joe®. Accordingly, purchaser should not rely upon any additional statements made by any employee or representative of Snow Joe® + Sun Joe®. In no event, whether based on contract, indemnity, warranty, tort (including negligence), strict liability or otherwise, shall Snow Joe® + Sun Joe® be liable for any special, indirect, incidental, or consequential damages, including, without limitation, loss of profit or revenue.

Some states do not allow limits on warranties. In such states, the above limitations may not apply to you.

Outside the USA, other warranties may apply.



snowjoe.com

⚠WARNING! Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known [to the State of California] 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 from these exposures 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 those dust masks that are specifically designed to filter out microscopic particles. For more information go to www.P65Warnings.ca.gov.