

Please carefully read and save these instructions before attempting to assemble, maintain, install, or operate this product. Observe all safety information to protect yourself and others. Failure to observe the instructions may result in property damage and/or personal injury. Please keep instructions for future reference.

Important Operating Instructions



18 INCH GAS CHAINSAW

Model: 6595

CALIFORNIA PROPOSITION 65

WARNING: You can create dust when you cut, sand, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear.

WARNING: This product or its power cord may contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

Important!

When using equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating manual with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, give them these operating instructions as well. We accept no liability for damage or accidents which

arise due to non-observance of these instructions and the safety information herein.

CAUTION:
FOR YOUR OWN SAFETY
READ INSTRUCTION MANUAL
COMPLETELY AND
CAREFULLY BEFORE
OPERATING. Failure to follow all instructions as listed below may result in electrical shock, fire, and/or serious personal injury.

SPECIFICATIONS

Engine Displacement: 45cc

Bar Length: 18 in.

Idling Speed: 3000 RPMs

Max. Speed with Cutting

Equipment: 10,000 RPMs

Anti-Vibration Function

Chain Brake

Auto Chain Lubrication

SAFETY INSTRUCTIONS

- 1) Only allow users who have read and understand this manual operate this chainsaw.
- 2) Wear protective gear, such as steel-toed footwear, snugly fitting clothing, heavy duty gloves, eye protection (goggles or face screen), hard hat and ear protection (ear plugs or mufflers). Do not wear jewelry and pull long hair back.
- 3) Keep all body parts clear of the chain while the engine is running.
- 4) Do not allow other people or animals near the saw when it is running, starting, or being operated.
- 5) You must be mentally alert and in good physical condition when operating a chainsaw because the work is strenuous.
- 6) Carefully plan your sawing project before starting. Do

For warranty purchases, please keep your dated proof of purchase. File or attach to the manual for safekeeping.

not begin until you are sure the work area is clean, you have secure footing and if you are felling trees, that you have a planned and clear retreat path.

KICKBACK

WARNING: Kickback is the backward, upward or sudden movement of the guide bar that occurs when the guide bar contacts an object or when the wood closes in and pinches the saw in the cut. The saw contacting a foreign object in the wood can also result in a loss of control.

Rotational kickback occurs when the moving chain contacts an object with the upper tip of the guide bar. This can cause the chain to dig into the object, which then stops the chain for a moment. The result is a reverse reaction, which kicks the guide bar up and back towards the operator.

Pinch kickback occurs when the wood closes in on the moving chain along the top of the guide bar. The sudden stop of the chain results in the saw to move in the opposite direction of the rotation and the saw is driven straight back towards the operator.

Pull in occurs when the moving chain comes in

contact with a foreign object in the wood along the bottom of the guide bar. This sudden stop pulls the saw forward and away from the operator and could possibly cause the operator to lose control of the saw.

Avoiding Kickback

Be aware of situations or objects that can cause the material to pinch the top of or stop the chain.

Do not cut more than one log at a time.

Do not twist the saw when the bar is withdrawn from an undercut.

Always begin cutting with the engine at full speed and with the saw housing resting against the wood.

Use wedges made of plastic or wood to hold the cut open. Never use metal.

Stay alert. Realize kickback can occur and keep the cutting area free from foreign objects.

Keep your chain properly tensioned and sharp, along with properly maintaining the chainsaw. Failure to do so can increase the chance of kickback occurring.

Begin and continue the cut with the engine running at full speed. Use caution while

re-entering a previous cut. Do not attempt a plunge cut (starting a cut with the tip of the blade).

Maintaining Control of the Chainsaw

Stand to the left of the saw. Keep your elbow locked and a firm grip on the saw.

Keep the thumb on the underside of the handlebar. Never reverse hand positions (left hand on handlebar and right hand on the rear handle).

Stand slightly to the left side of the saw to keep your body from being in a straight line with the saw. Stand with your weight evenly balanced between both feet.

Do not overreach because you could be thrown off balance and lose control of the saw. Do not cut above shoulder height because it is difficult to maintain proper control of the saw at that height.

Chain Brake

The chain brake is designed to stop the chain from rotating in the event of a kickback.

WARNING: DO NOT RELY UPON THE CHAIN BRAKE (OR OTHER SAFETY FEATURES) TO PROTECT YOU IN THE EVENT OF A KICKBACK. Use your chainsaw properly and under the correct circumstances to avoid kickback.

ASSEMBLY

Wear protective gloves during assembly due to the handling of sharp objects.

Attaching the Bumper Spike

The bumper spike may be used as a pivot when making a cut.

1) Loosen and remove the bar knob completely by loosening the two nuts.

2) Remove the clutch cover.

3) Attach the bumper spike with the two screws with the spikes pointing downward.

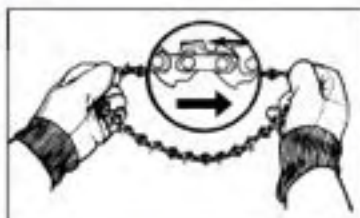
Attaching the Bar and Chain

1) Make sure the saw bottom is resting on a flat surface. Be sure the chain brake is pulled back. Loosen and remove the bar knob completely by removing the two nuts.

2) Remove the clutch cover.

3) Slide the guide bar on the bar bolts until the guide bar rests against the clutch drum sprocket.

4) Hold the chain with the drive links as shown. The drive links should be facing inward with the cutters facing to the right, or direction of rotation.



5) Fit the drive links in the clutch drum sprocket.

6) Place the chain drive links into the bar groove.

7) Pull the guide bar forward to make sure all of the drive links are in the bar groove.

8) Reinstall the clutch cover. Make sure the adjusting pin is aligned with the hole in the guide bar.

CAUTION: Make sure the adjustment pin aligns with the hole. Failure to align the pin and install the cover properly may result in damage, possibly permanent, to your saw.

ADJUSTING CHAIN TENSION

Before adjusting, make sure the bar knobs are loosened 1 ½ - 2 turns. Adjusting the chain tension with the knobs tight can cause damage.

Checking the Chain Tension

Check the chain tension by using a screwdriver to move the chain along the bar. If it does not rotate, it is too tight. If it sags below the bar, it is too loose.

Adjusting the Chain Tension

The chain stretches slightly during each use, especially the first few times the saw is used. Always check the chain tension each time the saw is used and refueled.

1) Make sure the bar knobs are loosened 1-1/2 – 2 turns.

2) Using a screwdriver, adjust the tension of the chain. The adjusting pin is located right below the two bar knobs.



3) Turn the screw to the right to increase the tension and turn it to the left to release tension.

4) Using a screwdriver, move the chain around on the guide bar to make sure all of the links are in the bar groove. If the chain does not rotate, it is too tight and the adjuster needs to be loosened.

5) Tighten the bar knob securely after the tension is adjusted.

FUELING AND LUBRICATION

Use regular grade unleaded gasoline mixed with 25:1 2-cycle engine oil. Do not use a fuel mixture that has been stored for more than 90 days.

The bar and chain require constant lubrication in order to function properly.

Lubrication is provided by the oiler system. Lack of oil will cause damage to the bar and chain. Smoke coming from the chain and discoloration on the bar are signs the oil is low.

Fueling Safety Instructions

- 1) Do not smoke while fueling or operating the saw.
- 2) Do not allow sparks or flame in the area where the fuel is poured or mixed. Always allow the engine to cool before refueling.
- 3) When refueling, turn the engine off and let it fuel in a non-combustible area. Slowly remove the fuel cap and refuel the saw.
- 4) Mix and pour the fuel in a well-ventilated outdoor area. Store the fuel in a cool, dry place. Wipe up fuel spills before attempting to start the saw.
- 5) Start the engine at least 10 feet from the fueling site
- 6) Store the saw and fuel in an area where sparks or open flame will not reach it.

OPERATING INSTRUCTIONS

Warning: The chain must not move when the engine is running at an idle speed. If the chain moves, the carburetor must be adjusted. Avoid contact with the muffler because a hot muffler can cause serious burns or injury.

Operation Safety Instructions

- 1) Do not operate a chainsaw with one hand.
- 2) Only operate the chainsaw in a well-ventilated, outdoor area.
- 3) Make sure that the chainsaw will not come into contact with any object while starting the engine. Do not start the saw when the guide bar is in the middle of a cut.
- 4) Do not apply pressure to the saw at the end of a cut. It can cause you to lose control of the saw when the cut is complete.
- 5) Make sure the engine is stopped before setting down the saw.
- 6) Make sure your chainsaw is in good condition before operating. Do not operate a saw that is damaged, improperly adjusted, or not completely and securely assembled.
- 7) Do not carry the saw with the engine running. Carry the saw with the engine stopped and the muffler pointing away from you, with the guide bar and chain facing behind you. The chain should be covered with a bar cover to ensure the blade will not cause harm.
- 8) Do not run while operating the chainsaw.

Starting A Cold Engine

Hold the saw firmly against the ground and make sure the chain is free to move without contacting any object.

- 1) Move the ON/OFF switch to the ON position.
- 2) Pull the choke lever out to its full extent.
- 3) Pull the starter rope quickly with your right hand a maximum of 5 times. If the engine sounds as though it is trying to start before the 5th pull, do not pull any more and immediately go to the next step.
- 4) Push the choke lever full in.
- 5) Pull the starter rope quickly with your right hand until the engine starts.
- 6) Allow the engine to run for approximately 30 seconds before squeezing and releasing the throttle trigger, which will allow the engine to return to idle speed.

Starting a Warm Engine

- 1) Place the ON/OFF switch into the ON position.
- 2) Push the choke lever full in.
- 3) Pull on the starter rope quickly with your right hand until the engine starts.
- 4) After the engine starts, squeeze and release the throttle trigger, this will allow the engine to return to idle speed.

Flooded Engine

If your engine does not start after 10 pulls, it may be flooded. It can be cleared of the excess fuel by following the warm engine starting process. Make sure the ON/OFF switch is in the ON position. The amount of flooding in the engine will determine how many pulls are necessary for it to start.

Checking the Chain Brake

The chain brake should be checked several times during use. The engine needs to be running while this is done and it is the only time the saw should be set on the ground with the engine running.

- 1) Place the saw on the ground.
- 2) Grasp the rear handle with your right hand and the front with your left.
- 3) Apply the full throttle with your right hand.
- 4) Activate the chain brake by turning your left wrist against the hand guard without letting go of the front handle.

The chain should stop immediately. If the chain brake fails to activate, take the saw to an authorized dealer to have the chain brake replaced or repaired.

CUTTING METHOD INSTRUCTIONS

Safety Instructions

Check the chain tension before using the saw for the first time and after 1 minute of operation. Do not cut any material other than wood. Do not cut metal, plastic, masonry, non-wood building materials, etc.

If the chain strikes a foreign object, stop the saw and inspect the chain for damage. If damage is present, repair or replace the necessary parts.

Keep the saw clear of dirt or sand because even a small amount could dull the blade and possibly cause kickback.

Before starting a major project, practice cutting a few logs.

Important Operation Reminders

Allow the engine to reach full speed before cutting.

Begin cutting with the saw frame resting against the log.

Keep the engine at full speed the entire time you are cutting.

Allow the chain to do the work for you. Do not apply excess pressure. Forcing the cut may cause damage to the engine, bar and/or chain.

When the cut is complete, release the trigger and allow the engine to return to idle.

Running the saw at full throttle without cutting can cause wear to the chainsaw.

Do not put pressure on the saw at the end of a cut in order to maintain control of the saw.

Stop the engine before setting down the saw.

Tree Felling

WARNING: Do not cut near buildings or electrical wires if the direction of the fall is uncertain. Check for broken or dead branches, which could fall while cutting. Do not cut at night or during bad weather. If the tree falls onto a utility line, notify the utility company immediately.

Plan your sawing operation in advance. Clear the work area in order to have a secure footing. Evaluate the natural conditions that could affect the direction of the fall such as wind, lean of the tree, weight and branches on one side, surrounding trees, decay and rot.

Make sure the tree has enough room to fall. Keep a distance of at least 2 ½ tree lengths from the nearest person or object because engine noises or the tree falling can drown out warning calls.

Remove all foreign objects from the tree where the cuts are going to be made. Plan a

clear retreat path that is diagonally back from the line of the fall.

Felling Large Trees (6 in. or larger in diameter)

A notch is cut into the side of the tree in the desired falling direction. After a felling cut is made, the tree will tend to fall into the notch.

Note: If the tree has large buttress roots, remove them before making the notch into the tree. If you use a chainsaw to remove the roots, keep the chain from contacting the ground to prevent the chain from dulling.

1) Make the notch by cutting the top of the notch first. Cut through 1/3 of the diameter of the tree. Complete the notch by cutting the bottom of the notch. Remove the notch of wood from the tree once the notch is cut.

2) After removing the wood, make the felling cut on the opposite side of the notch. Make a cut about two inches higher than the center of the notch. This will leave a hinge between the felling cut and the notch. The hinge will help prevent the tree from falling in the wrong direction. It also helps hold the tree on the stump and control the fall.

Before the felling cut is complete, use wedges, if necessary, to open the cut and control the direction of

the fall. Use wood or plastic wedges to avoid kickback and chain damage. Never use steel or iron wedges.

Be alert to signs that the tree is about to fall, such as cracking sounds, widening of the felling cut, or movement in the branches.

As the tree begins to fall, stop and put down the saw and quickly get away on your planned retreat path.

Do not cut down a partially fallen tree. Be cautious when working around partially fallen trees because they may be poorly supported. If a tree does not fall completely, put the saw aside and pull down the tree with a cable winch, block and tackle or a tractor.

Cutting A Fallen Tree (Bucking)

WARNING: DO NOT stand on the log that is being cut. If the log rolls, it can cause loss of footing and control. Do not stand downhill of the log being cut.

Only cut one log at a time.

Cut shattered wood carefully. Sharp pieces of wood could possibly be thrown back towards the operator.

Never allow another person to hold a small log for cutting, or use your leg or foot to hold it. Use a sawhorse to cut small logs.

Do not cut in an area where logs, roots and limbs are tangled. Drag the logs into a clear area before cutting.

Types of Cutting for Bucking

WARNING: If a saw becomes pinched in a log, do not try to force it out. It is possible to lose control of the saw which can result in injury and/or damage to yourself or the saw. Stop the saw and drive a plastic or wood wedge into the cut until the saw can be removed. Restart the saw and re-enter the cut. Using a metal wedge can cause kickback and chain damage. Do not attempt to restart your saw when it is pinched in a log.

Overcutting is when the bottom of the saw is against the top of the log. Use a light, downward pressure when overcutting.

Undercutting is when the log is cut from the underside with the top of the saw against the log. Use a light upward pressure. Hold the saw firmly and maintain control of the saw because it will tend to push backwards.

DO NOT turn the saw upside down to undercut. Control of the saw cannot be maintained in this position.

Always make your first cut on the compression side of the log (where the pressure of the

log's weight is concentrated).

Bucking Without A Support

Using an overcut, cut through 1/3 the diameter of the log.

Roll the log over and finish with a second overcut.

Watch out for logs with a compression side to prevent the saw from being pinched.

Bucking Using A Log or Support Stand

Make your first cut on the compression side of the log and extend it 1/3 into the diameter of the log.

Finish with a second cut.

Limbing and Pruning

WARNING: Be on alert for kickback. Keep the moving chain away from any other branches or objects when limbing or pruning. Never climb into a tree to limb or prune. Do not stand on ladders, platforms, other logs or in a position with unsteady footing.

Important Safety Reminders

Work slowly with both hands gripping the saw. Maintain balance and a secure footing.

Use caution when cutting smaller limbs. Small limbs may catch in the chain and be flung towards you or throw you off balance.

Watch out for branches that are under pressure or bent. When the wood is cut, the

tension may cause the wood to be flung.

Keep your work area clear. Clear away branches from the work area in order to avoid tripping over them.

Limbing

Limbing should only be done when a tree is already cut down.

Leave any large limbs under the tree for support as you work.

Start at the base of the tree and work towards the top. Small limbs can be removed in one cut.

Keep the tree between you and the chain. Cut opposite from the branch being cut.

Remove any larger, supportive branches with the technique described in Bucking Without A Support.

Always use an overcut to cut small and free hanging limbs. Do not use an undercut because it may cause limbs to fall and pinch the saw.

Pruning

WARNING: Do not prune limbs that are above shoulder height. If the branches are higher than your shoulder, have a professional perform the job.

Make your first cut 1/3 of the way through the limb.

Make the second cut all the way through the limb. The cut a third overcut through the branch, leaving a 1 – 2 inch collar from the trunk of the tree.

MAINTENANCE

Maintenance Schedule

Check before each use:

Fuel mixture level

Bar lubrication

Chain tension

Chain sharpness

For damaged parts

For loose caps, fasteners and parts

Inspect and Clean

Bar: Before each use

Saw: After each use

Air filter: Every 5 hours of use

Chain brake: Every 5 hours of use

Spark arresting screen and muffler: Every 25 hours of use

Replace spark plug: Yearly

Replace fuel filter: Yearly

Maintenance Safety Instructions

- 1) Be sure to have your chainsaw regularly serviced by a qualified dealer.
- 2) Never modify the chainsaw in any way.
- 3) Keep the handles clean and dry, and free from oil or fuel.

4) Make sure the fuel and oil caps, fasteners and screws are tightened and secure after performing maintenance.

5) Always wear protective gloves when performing maintenance.

6) Do not perform maintenance while the engine is hot.

Air Filter Cleaning

DO NOT clean the air filter in gasoline or other flammable solutions. Doing so can create a fire hazard or harmful emissions.

DO NOT operate the saw without an air filter. Dust and dirt will be drawn directly into the engine and damage it. Keep the air filter clean.

1) Remove the top cover by unscrewing the fastening screw.

2) Lift out the air filter.

3) Clean the air filter in warm, soapy water and rinse in clean water.

4) Allow the filter to air dry completely.

5) Insert the air filter back into the chainsaw. Replace the cover on the chainsaw. Make sure the cover is fitted securely and properly before tightening the screw.

Fuel Filter Cleaning

NEVER use the saw without a

fuel filter. After 100 hours of use, the filter should be cleaned or replaced, if damaged.

Make sure the fuel tank is empty before changing the filter.

1) Remove the fuel tank cap.

2) Bend a piece of soft wire.

3) Reach into the tank opening and hook the fuel line. Carefully pull the line towards the opening until you can reach it with your fingers. DO NOT pull the hose completely out of the tank.

4) Lift the filter out of the tank.

5) Pull off the filter. If it is damaged, discard and replace with a new one.

6) Insert a new filter. Place the filter into the opening and push it into the tank. Make sure it is situated in the lower corner of the tank. If need be, use a long screwdriver to move the filter into the correct position. Be careful not to damage the filter.

7) Fill the tank with new fuel mixture.

Spark Plug

The spark plug must be cleaned or replaced after every 20 hours of service.

1) Make sure the ON/OFF switch is turned off.

2) Remove the top cover by

unscrewing the fastener.

3) Remove the air filter.

4) Disconnect the ignition cable from the spark plug by pulling and twisting simultaneously.

5) Remove the spark plug by using a spark plug wrench.

6) Clean the spark plug with a copper wire brush. The electrode gap should be 0.6mm.

7) Reconnect the ignition cable.

8) Replace the air filter.

9) Replace the top cover, make sure the cover is securely fitted, and then screw down the fastener.

Carburetor

The carburetor has already been properly adjusted at the factory. If it requires additional adjustment, take the saw to an authorized service dealer.

Chain Bar Maintenance

The chain bar needs to be regularly lubricated and maintained in order for it to work.

Tools for lubrication

A lube gun is recommended, but not required, for applying grease to the guide bar sprocket tip. The gun is equipped with a needle nose tip, which allows the grease to be efficiently applied.

Lubricating the sprocket tip

The sprocket tip on your new saw has been pre-lubricated in the factory. It needs to be lubricated properly otherwise it will perform poorly, and possibly seize. Lubrication is recommended once a week or after 10 hours of use. Clean the bar tip before lubrication.

The chain does not have to be removed to lubricate the bar tip. Lubrication is possible while working, however the engine must be turned off.

Warning: Wear work gloves when handling the chain and bar.

- 1) Make sure the engine is off, with the ON/OFF switch in the Off position.
- 2) Clean the guide bar tip.
- 3) Using the lubrication gun, insert the nose into the lubrication hole and fill it with grease until it appears at the edges of the tip.
- 4) Rotate the saw by hand. Add additional lubrication until the entire tip has been greased.

Many guide bar problems can be avoided by properly maintaining the bar and chain saw. Insufficient lubrication or using a saw with a chain that is too tight

will cause the bar to wear rapidly.

Maintaining the chain bar

The bar should be reversed after 8 hours of work to keep uniform wear. Check the bar frequently for wear, and if need be, remove burs and square up the rails by using the flat file.

- 1) Be sure the ON/OFF switch is Off.
- 2) Loosen the bar knob and remove the cover.
- 3) Remove the chain and bar from the saw.
- 4) Clean the oil holes and bar groove.
- 5) If the bar is burred, remove the burs with a flat file.
- 6) If the rail top is uneven, use a flat file to make the sides and edges square again.

Replace the guide bar when the groove is worn, the bar is bent or cracked, or when excessive heating or burring occurs. If the bar needs replacing, only use the guide bar specified in the parts list or on the chain saw.

Oil passages

The oil passages should be cleaned to allow proper lubrication of the bar and chain.

The condition of the passages can be checked. If they are clear, the chain will automatically send off a spray

of oil within seconds of starting the saw because it is equipped with an automatic oiler system.

Automatic chain lubrication

The chain is equipped with an automatic oil system with a toothed wheel drive. It will automatically supply the bar and chain with the right amount of oil. When the engine is accelerated, the oil will flow through the bar more quickly.

The lubrication system has been set at the factory. The screw for adjusting the lubrication is located on the underside of the chainsaw. By turning the screw counterclockwise, it will increase the lubrication and turning it clockwise will decrease the lubrication.

To check the lubrication, hold the chain saw over a piece of paper and run it at full speed for a few seconds. The amount of oil on the paper will determine if the lubrication needs to be increased or not.

Chain Maintenance

Sharpening

Chain sharpening requires special tools to ensure that the cutters are sharpened to the proper angle and depth. We recommend you

allow a professional chain sharpener to sharpen your chain.

Breaking in a new chain

A new chain and bar will need adjusting after as few as 5 cuts. This is normal during the break-in period and the interval between future adjustments will begin to lengthen.

Chain lubrication

Make sure the oil tank is filled with the appropriate oil to lubricate the chain.

Running the saw with low or no oil will cause damage to the chain and the saw, causing overheating and excessive wear.

STORAGE

If a chainsaw is going to be in storage for longer than 30 days, follow these instructions.

Storing a chainsaw

- 1) Remove the fuel tank slowly in order to release any pressure in the tank. Carefully drain the fuel from the tank.
- 2) To remove all of the fuel from the carburetor, start the engine and let it run until the saw stops.
- 3) Allow the engine to cool completely.
- 4) Remove the spark plug.

- 5) Pour 1 teaspoon of 2-cycle oil into the combustion chamber. Slowly pull the starter rope a few times in order to coat the internal parts. Replace spark plug.

Note: Store the unit away from water, sources of flame and sparks and in a cool, dry location.

Preparation to use saw again

- 1) Remove the spark plug.
- 2) Pull the starter rope briefly to clear excess oil from the combustion chamber.
- 3) Clean the spark plug and check the electrode gap.
- 4) Replace the spark plug.
- 5) Fill the fuel tank with the proper fuel mixture.
- 6) Check oil levels.

Troubleshooting Guide

Problem	Possible Cause	Solution
Unit won't start or starts but will not run	Incorrect starting procedure	Follow startup instructions
	Incorrect carburetor mixture adjustment setting	Have carburetor adjusted by an authorized service center
	Issue with spark plug	Clean, adjust gap or replace plug
	Fuel filter plugged	Replace fuel filter
Unit starts but engine has low power	Incorrect lever position on choke	Move to RUN position
	Dirty air filter	Remove, clean and reinstall filter
	Incorrect carburetor mixture adjustment setting	Have carburetor adjusted by an authorized service center
Engine hesitates	Incorrect carburetor mixture adjustment setting	Have carburetor adjusted by an authorized service center
No power under load	Incorrectly gapped spark plug	Clean, adjust gap or replace plug
Runs erratically	Incorrect carburetor mixture adjustment setting	Have carburetor adjusted by an authorized service center
Smokes excessively	Incorrect fuel mixture	Use properly mixed fuel
Poor performance when operated	Blunt chain	Sharpen or replace chain
	Loose chain	Adjust tension on the chain
Engine dies	Empty gasoline tank	Fill the tank with more fuel
	Fuel filter in the wrong position in tank	Completely fill the gasoline tank or reposition the fuel filter in the gasoline tank
Insufficient chain lubrication (cutter and chain become hot)	Empty oil tank for the chain	Fill the oil tank with more oil
	Oil lubrication openings moved	Clean the oil lubrication hole in the cutter bar
		Clean the groove in the cutter bar

Limited Manufacturer Warranty

North American Tool (NAT) Industries makes every effort to ensure that this product meets high quality and durability standards. NAT warrants to the original retail consumer a 1-year limited warranty from the date the product was purchased at retail and each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations, or a lack of maintenance. NAT shall in no event be liable for death, injuries to persons or property, or for incidental, special or consequential damages arising from the use of our products. To receive service under warranty, the original manufacturer part must be returned for examination by an authorized service center. Shipping and handling charges may apply. If a defect is found, NAT will either repair or replace the product at its discretion.

DO NOT RETURN TO STORE

For Customer Service:

Email: feedback@natitools.com or Call 1-800-348-5004