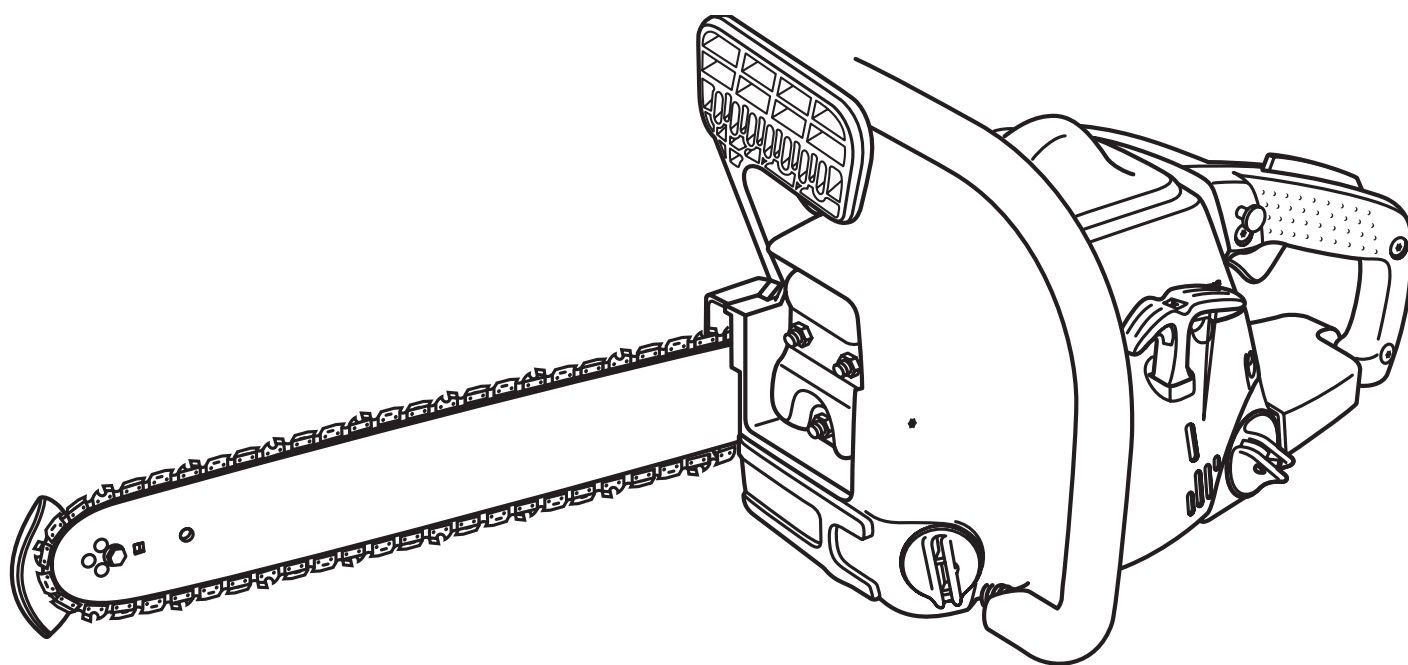


Homelite®

OPERATOR'S MANUAL

16 in. (406 mm) 33cc Chain Saw

UT10530, UT10530A, UT10947D, UT10947E



Your new chain saw has been engineered and manufactured to Homelite's high standard for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance.



WARNING: To reduce the risk of injury, the user must read and understand the operator's manual before using this product.

Thank you for buying a Homelite chain saw.

SAVE THIS MANUAL FOR FUTURE REFERENCE

TABLE OF CONTENTS

■ Introduction	2
■ General Safety Rules	3-4
■ Specific Safety Rules	4-5
■ Symbols	6-7
■ Specifications	7
■ Features	8
■ Operation	9-21
■ Maintenance	22-32
■ Bar and Chain Combinations	33
■ Troubleshooting	33-34
■ Warranty	35
■ Parts Ordering/Service	36

INTRODUCTION

IMPORTANT

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. When servicing use only identical Homelite replacement parts.

For safe operation, read and understand all instructions before using the chain saw. Follow all safety instructions. Failure to follow all safety instructions listed below, may result in serious personal injury.

WARNING:

Carefully read through this entire operator's manual before using your new saw. Pay close attention to the Safety Rules and all Safety Alert Symbols including Danger, Warning, and Caution. These safety rules are for your safety and to prevent possible serious injury. If you use your saw properly and only for what it is intended, you will enjoy years of safe, reliable service.



Look for this symbol to point out important safety precautions. It means attention!!! Your safety is involved.

WARNING:



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

GENERAL SAFETY RULES

WARNING:

The warnings, labels, and instructions found in this section of the operator's manual are for your safety. Failure to follow all instructions may result in serious personal injury.

Safe operation of this tool requires that you read and understand this operator's manual and all labels affixed to the tool. Safety is a combination of using common sense, staying alert, and knowing how your saw works.

READ ALL INSTRUCTIONS

- **KNOW YOUR TOOL.** Read the operator's manual carefully. Learn the saw's applications and limitations as well as the specific potential hazards related to this tool.
- **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 lightning-fast reverse reaction kicking the guide bar up and back toward the operator. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back toward 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 chain saw user, you should take several steps to keep your cutting jobs free from accident or injury.
 1. With a basic understanding of kickback, you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
 2. Keep a good firm grip on the saw with both hands when the engine is running. Place your right hand on the rear handle and your left hand on the front handle with your thumbs and fingers encircling the chain saw handles. A firm grip together with a stiff left arm will help you maintain control of the saw if kickback occurs.
 3. Make sure that the area in which you are cutting is free from obstructions. **DO NOT** let the nose of the guide bar contact a log, branch, fence, or any other obstruction that could be hit while you are operating the saw.
 4. Cut at high engine speeds. Always cut with the engine running at full speed. Fully squeeze the throttle trigger and maintain a steady cutting speed.
 5. Do not overreach or cut above chest height.
 6. Follow the manufacturer's sharpening and maintenance instructions for the saw chain.
 7. Only use replacement bars and chains specified by the manufacturer or the equivalent.
- **DO NOT OPERATE A CHAIN SAW WITH ONE HAND.** Serious injury to the operator, helpers, bystanders, or any combination of these persons may result from one-handed operation. A chain saw is intended for two-handed use.
- **DO NOT OPERATE A CHAIN SAW WHEN YOU ARE FATIGUED.** Never operate a chain saw when you are tired or under the influence of medication, drugs, or alcohol.
- **USE SAFETY FOOTWEAR.** Wear snug-fitting clothing, protective gloves, and eye, hearing, and head protection devices.
- **DO NOT STAND ON ANY UNSTABLE SURFACE** while using your chain saw, that includes ladders, scaffolds, trees, etc.
- **USE CAUTION WHEN HANDLING FUEL.** Move the chain saw at least 30 feet (9 m) from the fueling point before starting the engine.
- **DO NOT ALLOW OTHER PERSONS** to be near the chain saw when starting or cutting with the chain saw. Keep bystanders and animals out of the work area.
- **DO NOT START CUTTING** until you have a clear work area, secure footing, and a planned retreat path from the falling tree.
- **KEEP ALL PARTS OF YOUR BODY** away from the saw chain when the engine is running.
- **ALWAYS CARRY THE CHAIN SAW WITH THE ENGINE STOPPED AND THE BRAKE ENGAGED,** the guide bar and saw chain to the rear, and the muffler away from your body. When transporting the chain saw, use the appropriate guide bar scabbard.
- **DO NOT OPERATE A CHAIN SAW THAT IS DAMAGED,** improperly adjusted, or not completely and securely assembled. Be sure that the saw chain stops moving when the throttle control trigger is released.
- **SHUT OFF THE ENGINE** before setting the chain saw down. **DO NOT** leave the engine running unattended. As an additional safety precaution, apply the chain brake prior to setting down the saw.
- **USE EXTREME CAUTION** when cutting small-size brush and saplings because slender material may catch the saw chain and be whipped toward you or pull you off balance.
- **WHEN CUTTING A LIMB** that is under tension, be alert for springback so that you will not be struck when the tension in the wood fibers is released.
- **KEEP THE HANDLES** dry, clean, and free of oil or fuel mixture.
- **OPERATE THE CHAIN SAW ONLY** in well-ventilated areas.
- **DO NOT OPERATE A CHAIN SAW IN A TREE** unless you have been specifically trained to do so.

GENERAL SAFETY RULES

- **ALL CHAIN SAW SERVICE**, other than the items listed in the instruction manual and all maintenance, should be performed by competent chain saw service personnel. (For example, if improper tools are used to remove the flywheel or if an improper tool is used to hold the flywheel in order to remove the clutch, structural damage to the flywheel could occur and subsequently could cause the flywheel to burst.)
- **KEEP SAFE-T-TIP ANTI-KICKBACK NOSE GUARD** properly mounted on the guide bar to prevent rotational kickback.
- **FOLLOW THE SHARPENING** and maintenance instructions for the saw chain.
- **USE ONLY THE REPLACEMENT GUIDE BARS** and low kickback chains specified for your saw.
- **DO NOT** adapt your powerhead to a bow guide or use it to power any attachments or devices not listed for your saw.
- **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use to instruct other users. If you loan someone this tool, loan them these instructions also.

SPECIFIC SAFETY RULES

WARNING:

The warnings, labels, and instructions found in this section of the operator's manual are for your safety. Failure to follow all instructions may result in serious personal injury.

GENERAL PRECAUTIONS

- **DO NOT CUT VINES** and/or small underbrush (less than 3 in./76 mm in diameter).
- **MUFFLER SURFACES ARE VERY HOT** during and after operation of the chain saw; keep all body parts away from the muffler. Serious burns may occur if contact is made with the muffler.
- Always hold the chain saw with both hands when the engine is running. Use a firm grip with thumbs and fingers encircling the chain saw handles.
- Never let anyone use your chain saw who has not received adequate instructions in its proper use. This applies to rentals as well as privately owned saws.
- Before you start the engine, make sure the saw chain is not contacting any object.
- Operate the chain saw only in well ventilated areas.

SAFETY APPAREL

- Wear snug fitting clothing. Always wear heavy, long pants, boots, and gloves. Do not wear jewelry, short pants, sandals, or go barefoot. Do not wear loose fitting clothing, which could be drawn into the engine or catch the chain or underbrush. Wear overalls, jeans, or chaps made of cut resistant material or ones that contain cut resistant inserts. Secure hair so that it is above shoulder level.
- Wear non-slip safety footwear and heavy-duty gloves to improve your grip and to protect your hands.

- Wear eye protection which is marked to comply with ANSI Z87.1, as well as, hearing and head protection when operating this equipment.

REFUELING (DO NOT SMOKE!)

- To reduce the risk of fire and burn injury, handle fuel with care. It is highly flammable.
- Mix and store fuel in a container approved for gasoline.
- Mix fuel outdoors where there are no sparks or flames.
- Select bare ground, stop the engine, and allow it to cool before refueling.
- Loosen the fuel cap slowly to release pressure and to keep fuel from escaping around the cap.
- Tighten the fuel cap securely after refueling.
- Wipe spilled fuel from the unit. Move 30 feet (9 m) away from refueling site before starting engine.
- Never attempt to burn off spilled fuel under any circumstances.

BASIC PRECAUTIONS IN THE CUTTING/WORK AREA

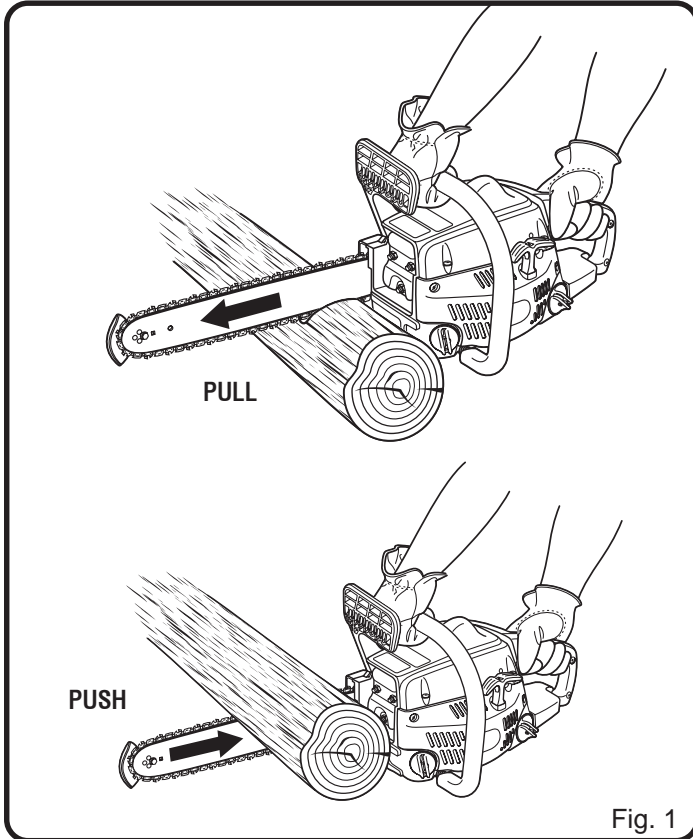
- Do not operate a chain saw in a tree.
- Do not cut from a ladder, this is extremely dangerous.
- Keep bystanders and animals out of the work area. Do not allow other persons to be nearby during starting or cutting with the chain saw.

Note: The size of the work area depends on the job being performed as well as the size tree or workpiece involved. For example, felling a tree requires a larger work area than making other cuts (i.e., bucking cuts, etc.).

SPECIFIC SAFETY RULES

PUSH AND PULL

The reaction force is always opposite to the direction the chain is moving. Thus, the operator must be ready to control the PULL when cutting on the bottom edge of the bar and the PUSH when cutting along the top edge.



Note: Your chain saw has been fully factory tested. It is normal to find some slight oil residue on the saw.

MAINTENANCE PRECAUTIONS

Never operate a chain saw that is damaged, improperly adjusted, or is not completely and securely assembled. Be sure that the saw chain stops moving when the throttle control trigger is released. If the saw chain moves at idle speed, the carburetor may need adjusting. Refer to "Operation" later in this manual. If the saw chain still moves at idle speed after adjustment has been made, contact a Homelite Service Center for adjustment and discontinue use until the repair is made.

⚠ WARNING:

All chain saw service, other than items in the operator's manual maintenance instructions, should be performed by competent chain saw service personnel. If improper tools are used to remove the flywheel or clutch, or if an improper tool is used to hold the flywheel in order to remove the clutch, structural damage to the flywheel could occur which could subsequently cause the flywheel to burst and serious injury could result.













KICKBACK

Kickback is a dangerous reaction that can lead to serious injury. Do not rely only on the safety devices provided with your saw. As a chain saw user, you must take special safety precautions to help keep your cutting jobs free from accident or injury.

Note: See the "Operation" section later in this manual for added information on kickback and how to avoid serious personal injury.

SYMBOLS

Important: Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	EXPLANATION
	Safety Alert Symbol	Indicates danger, warning or caution. It means attention!!! Your safety is involved.
	Read Your Operator's Manual	Your manual contains special messages to bring attention to potential safety concerns, machine damage as well as helpful operating and servicing information. Please read all the information carefully to avoid injury and machine damage.
	Eye, Hearing, and Head Protection	Wear eye, hearing, and head protection when operating this equipment.
	SAFE-T-TIP Nose Guard	The SAFE-T-TIP nose guard on the guide bar helps prevent kickback.
	No Smoking	No smoking, sparks, or open flame.
	Prohibited Symbol	Diagonal line across a symbol means this is prohibited or should be avoided.
	Operate with Two Hands	Hold and operate the saw properly with both hands.
	One Handed	Do not operate the saw using only one hand.
	Carbon Monoxide	Engines produce carbon monoxide which is an odorless, deadly poison. Do not operate in an enclosed area.
	Kickback	Danger – beware of kickback.
	Bar Nose Contact	Avoid bar nose contact.
	Gloves	Wear non-slip gloves.

SYMBOLS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

Symbol	Meaning
	DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
NOTE:	Advises you of information or instructions vital to the operation or maintenance of the equipment.

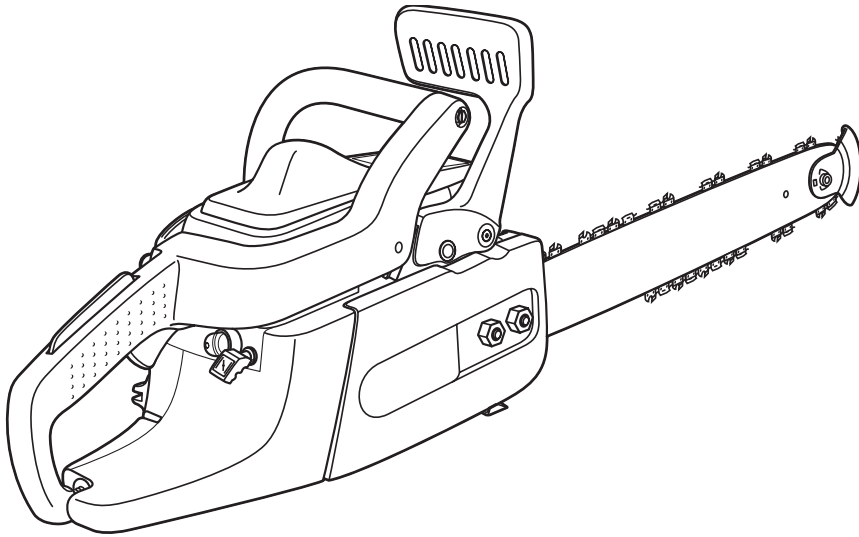
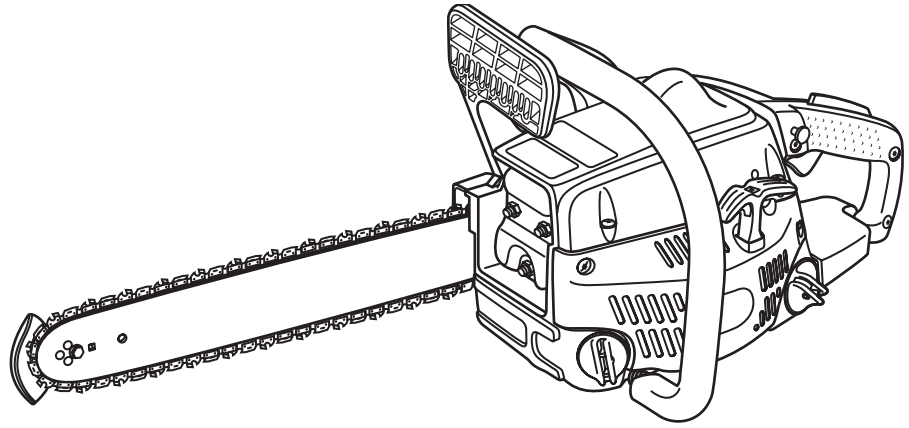


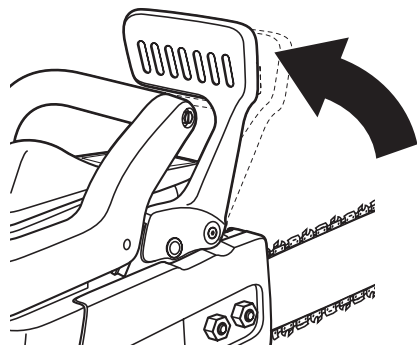
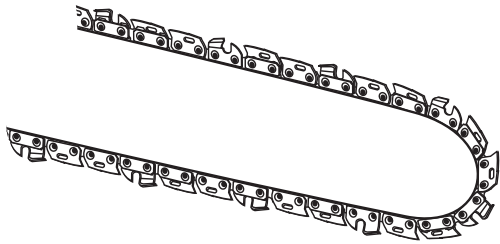
SAVE THESE INSTRUCTIONS

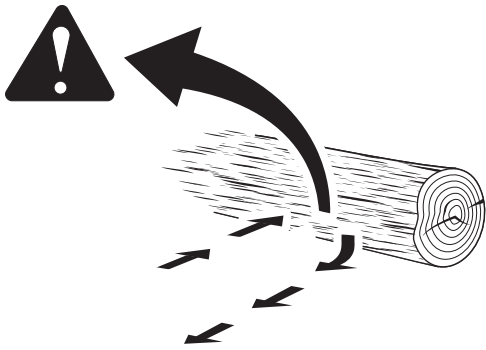
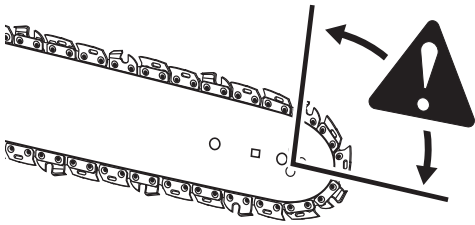
SPECIFICATIONS

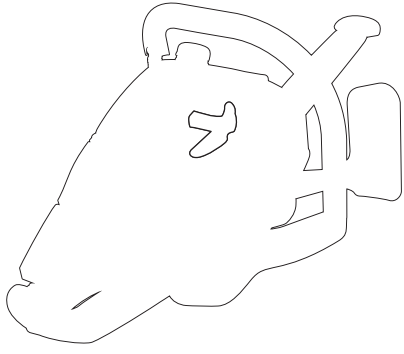
Weight - No bar, chain, fuel or oil 9.7 lbs. (4.4 kg)
 Fuel tank volume 19.4 oz. (575 ml)
 Chain oil tank volume 11.8 oz. (350 ml)
 Bar lengths 16 in. (406 mm)
 Chain pitch375 in (9.5 mm)
 Chain gauge050 in. (1.25 mm)
 Chain type Semi-Chisel, LoPro, Skip Tooth

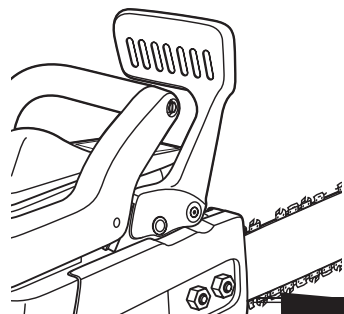
Drive sprocket 6-tooth
 Engine displacement 2.0 in.³ (33 ml)
 Maximum engine power (ISO 7293) 1.78HP (1.33 kW)
 Idle engine speed 2,600 - 3,400 RPM
 Fuel tank capacity 19.4 oz. (575 ml)
 Oil tank capacity 11.8 oz. (350 ml)











OPERATION

7. While squeezing both the trigger release and throttle trigger, push in the throttle lock button. Release the throttle trigger. This latches the trigger for starting.
8. When the temperature is above 50° F, pull the STARTER GRIP until the engine attempts to start, but no more than 3 times. When the temperature is below 50° F, pull the STARTER GRIP until the engine attempts to start, but no more than 5 times.
9. Push CHOKE lever to half choke position.
10. Pull STARTER GRIP until engine runs.
Note: Allow the saw to run in this position 15-30 seconds depending upon the temperature.
11. Push CHOKE lever all the way IN.
12. SQUEEZE and release the throttle trigger to return the engine to idle.


CAUTION:

Failure to release partial throttle when chain brake lever is in the brake position will result in serious damage to the unit. Never squeeze and hold the throttle trigger while the chain brake is in the brake position.

Now you are ready to pick up the saw. Use the proper grip for both handles, refer to "Operation" for additional information.

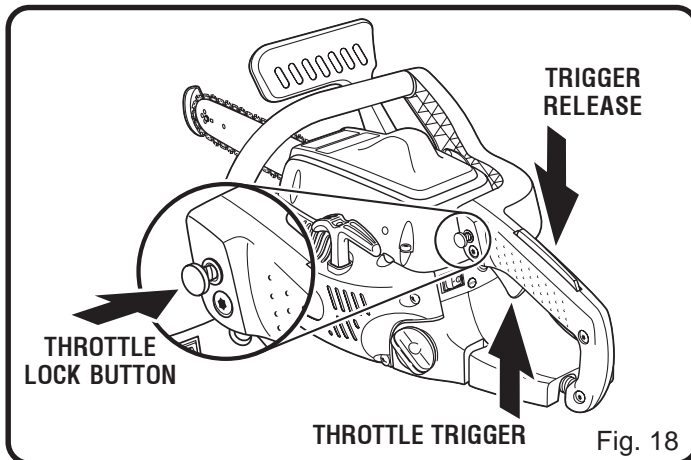
STOPPING THE ENGINE

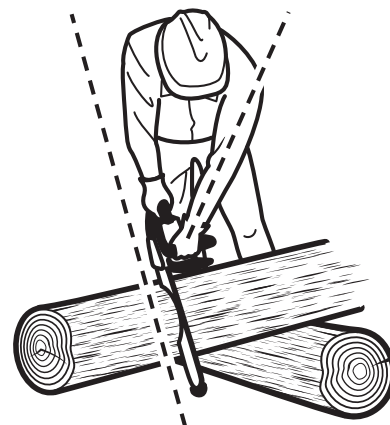
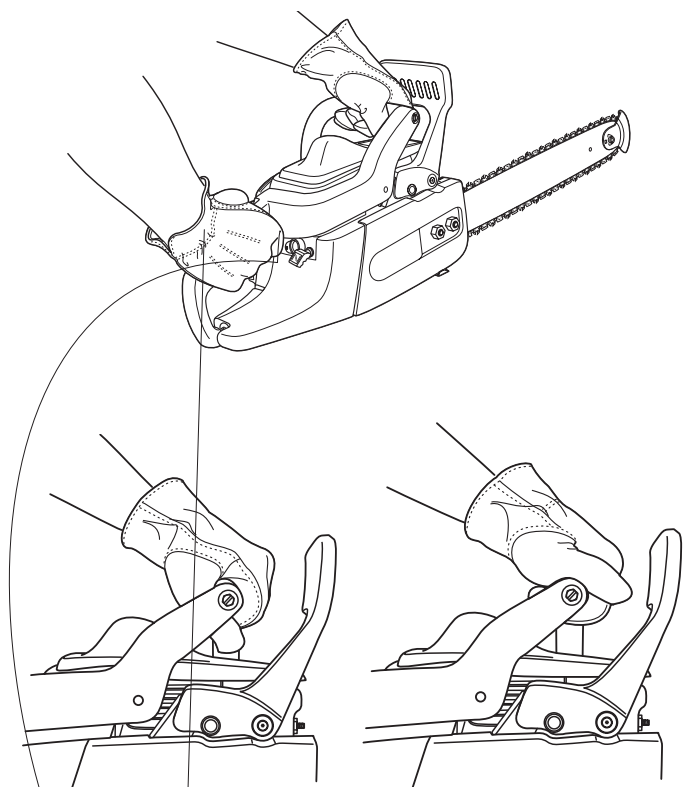
Release the throttle trigger and let the engine return to idle. To stop the engine, move the ignition switch to the "STOP" position. Do not put the chain saw on the ground when the chain is still moving. For additional safety, set the chain brake when the saw is not in use.

In the event that the ignition switch will not stop the saw, pull the choke lever out to the fully extended position (Full Choke / ) and engage chain brake to stop the engine.

If the ignition switch will not stop the saw when set to the stop "STOP" position, have the ignition switch repaired before using the chain saw again to prevent unsafe conditions or serious injury.

Important: When you are finished using the saw, relieve tank pressures by loosening the CHAIN OIL and FUEL MIX caps. Then retighten the caps. Allow the engine to cool before storing.





OPERATION

BASIC OPERATING/CUTTING PROCEDURES

Practice cutting a few small logs using the following technique to get the “feel” of using your saw before you begin a major sawing operation.

1. Take the proper stance in front of the wood with the saw idling.
2. Accelerate the engine to full throttle just before entering the cut by squeezing the throttle trigger.
3. Begin cutting with the saw against the log.
4. Keep the engine at full throttle the entire time you are cutting.
5. Allow the chain to cut for you; exert only light downward pressure. Forcing the cut could result in damage to the bar, chain, or engine.
6. Release the throttle trigger as soon as the cut is completed allowing the engine to idle. Running the saw at full throttle without a cutting load can result in unnecessary wear to the chain, bar, and engine.
7. Do not put pressure on the saw at the end of the cut.

WORK AREA PRECAUTIONS

See Figure 23.

- Cut only wood or materials made from wood; no sheet metal, no plastics, no masonry, no non-wood building materials.
- Never allow children to operate your saw. Allow no person to use this chain saw who has not read this operator's manual or received adequate instructions for the safe and proper use of this chain saw.
- Keep everyone – helpers, bystanders, children, and animals, a **SAFE DISTANCE** from the cutting area. During felling operations, the safe distance should be a least twice the height of the largest trees in the felling area. During bucking operations, keep a minimum distance of 15 feet (4.5m) between workers.



Fig. 23

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

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

ADJUSTING THE CARBURETOR

See Figures 24 and 25.

Before adjusting the carburetor, clean the air filter and the starter cover vents. Allow the engine to warm up prior to carburetor adjustment. Refer to “Maintenance” later in this manual.

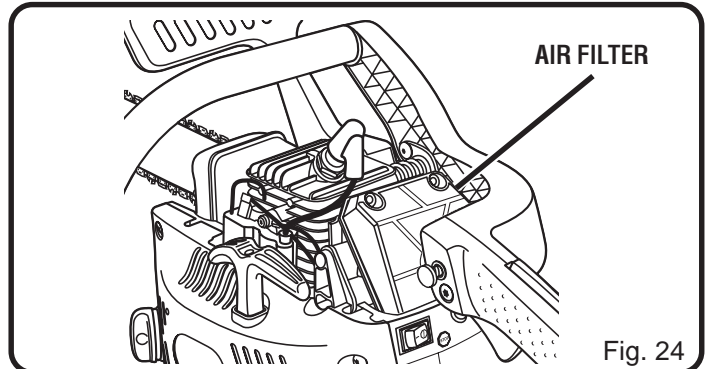


Fig. 24

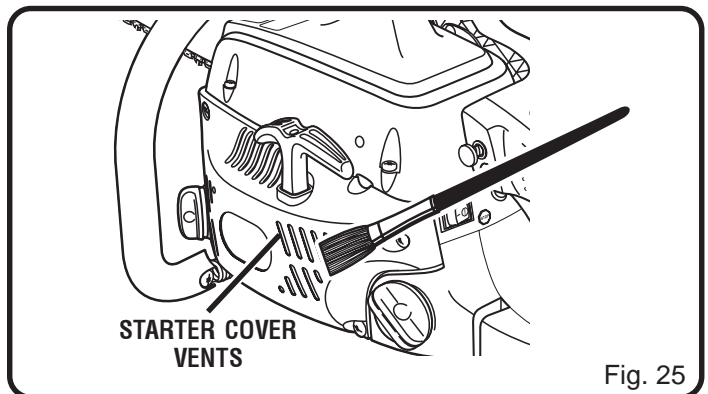


Fig. 25

The carburetor is factory set and should not require adjusting. The carburetor will permit only limited adjustment of the “L” (Low Jet) and “H” (High Jet) needles. Any adjustment should be done by a Homelite Service Center. Under no circumstances should the “L” (Low Jet) and “H” (High Jet) needles be forced outside the range of adjustment.

⚠ CAUTION:

Serious damage can occur to the engine if improper adjustments are made to the “L” and “H” needles. Do not force the “L” and “H” needles outside the adjustment range!

OPERATION

ADJUSTING IDLE SPEED

See Figure 26.

- If the engine starts, runs, and accelerates but will not idle, turn the idle speed screw “T” clockwise to increase idle speed.
- If the chain turns at idle, turn the idle speed screw “T” counterclockwise to reduce the idle RPM and stop the chain movement. If the saw chain still moves at idle speed, contact a Homelite Service Center for adjustment and discontinue use until the repair is made.

⚠ WARNING:

THE SAW CHAIN SHOULD NEVER TURN AT IDLE. Turn the idle speed screw “T” counterclockwise to reduce the idle RPM and stop the chain, or contact a Homelite Service Center for adjustment and discontinue use until the repair is made.

Serious personal injury may result from the saw chain turning at idle.

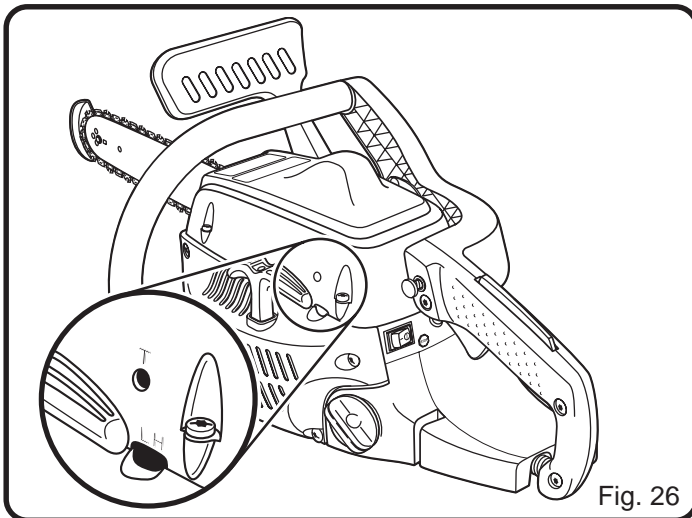


Fig. 26

⚠ WARNING:

Weather conditions and altitude may affect carburetion.

Do not allow bystanders close to the chain saw while adjusting the carburetor.

FELLING TREES

HAZARDOUS CONDITIONS

⚠ WARNING:

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

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

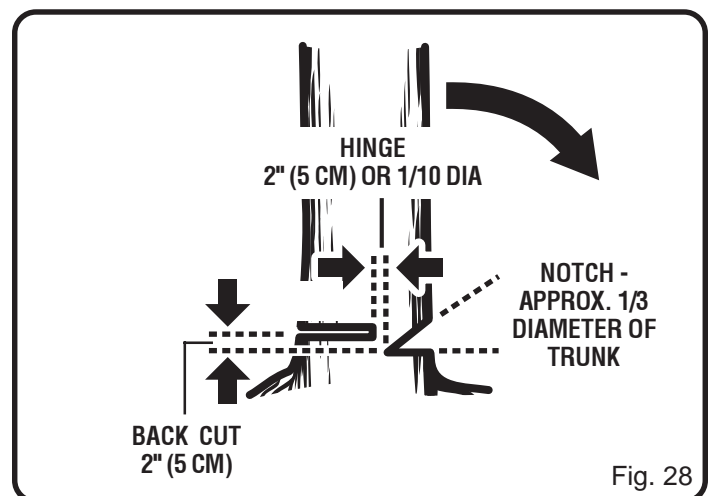
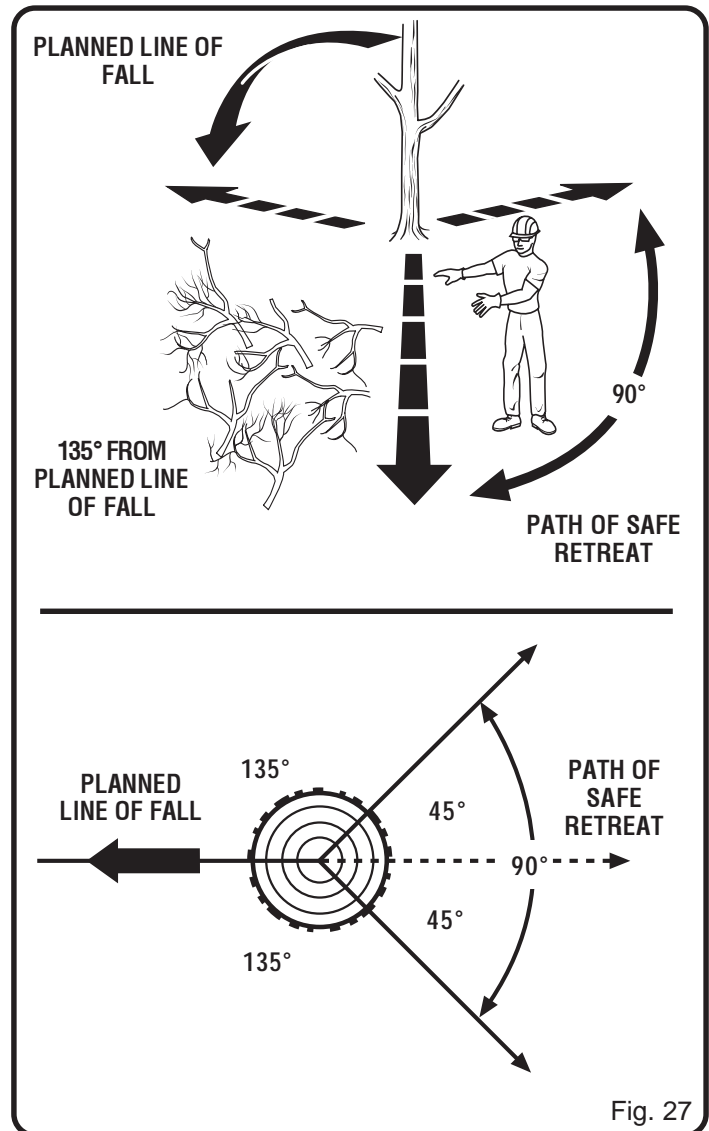
- Do not cut down trees having an extreme lean or large trees with rotten limbs, loose bark, or hollow trunks. Have these trees pushed or dragged down with heavy equipment, then cut them up.
- Do not cut trees near electrical wires or buildings.
- Check the tree for damaged or dead branches that could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

OPERATION

PROPER PROCEDURE FOR TREE FELLING

See Figures 27 through 30.

1. Pick your escape route (or routes in case the intended route is blocked). Clear the immediate area around the tree and make sure there are no obstructions in your planned path of retreat. Clear the path of safe retreat approximately 135° from the planned line of fall.
2. Consider the force and direction of the wind, the lean and balance of the tree, and the location of large limbs. These things influence the direction in which the tree will fall. Do not try to fell a tree along a line different from its natural line of fall.
3. Cut a notch about $1/3$ the diameter of the trunk in the side of the tree. Make the notch cuts so they intersect at a right angle to the line of fall. This notch should be cleaned out to leave a straight line. To keep the weight of the wood off the saw, always make the lower cut of the notch before the upper cut.
4. Make the backcut level and horizontal, and at a minimum of 2 inches (5 cm) above the horizontal cut of the notch.



OPERATION

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

On large diameter trees, stop the back cut before it is deep enough for the tree to either fall or settle back on the stump. Then insert soft wooden or plastic wedges into the cut so they do not touch the chain. Drive wedges in, little by little, to help jack the tree over.

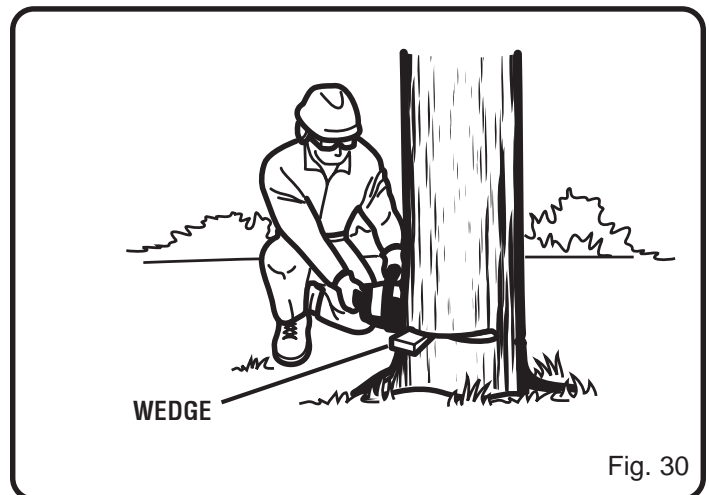
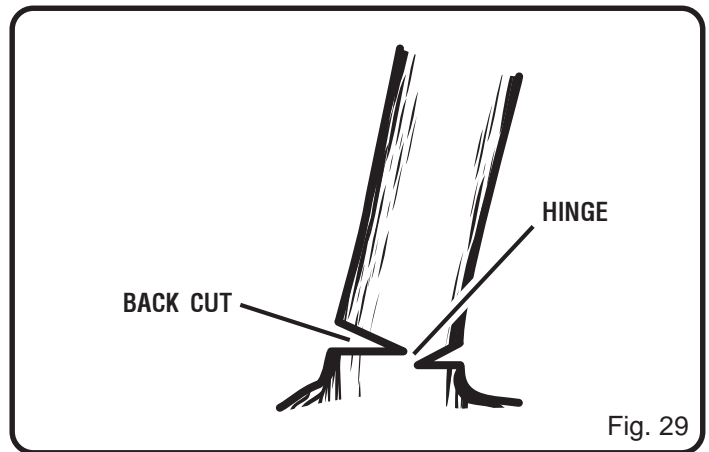
When bucking or felling with a wedge, it may be necessary to remove the SAFE-T-TIP anti-kickback device to allow the bar to be drawn through the cut.

After you complete the cut, reinstall the tip immediately.

5. As tree starts to fall, stop the chain saw and put it down immediately. Retreat along the cleared path, but watch the action in case something falls your way.

⚠ WARNING:

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



OPERATION

REMOVING BUTTRESS ROOTS

See Figure 31.

A buttress root is a large root extending from the trunk of the tree above the ground. Remove large buttress roots prior to felling. Make the horizontal cut into the buttress first, followed by the vertical cut. Remove the resulting loose section from the work area. Follow the correct tree felling procedure after you have removed the large buttress roots. Refer to "Operation – Proper Procedure for Tree Felling" earlier in this manual.

BUCKING

See Figure 32.

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

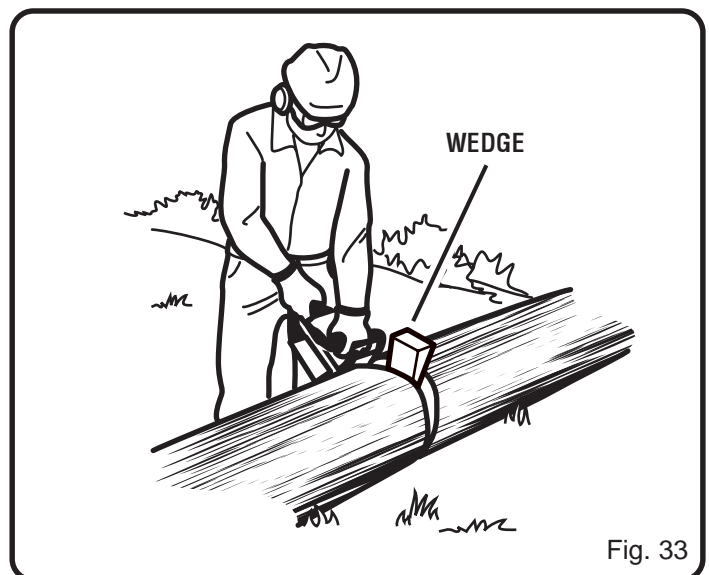
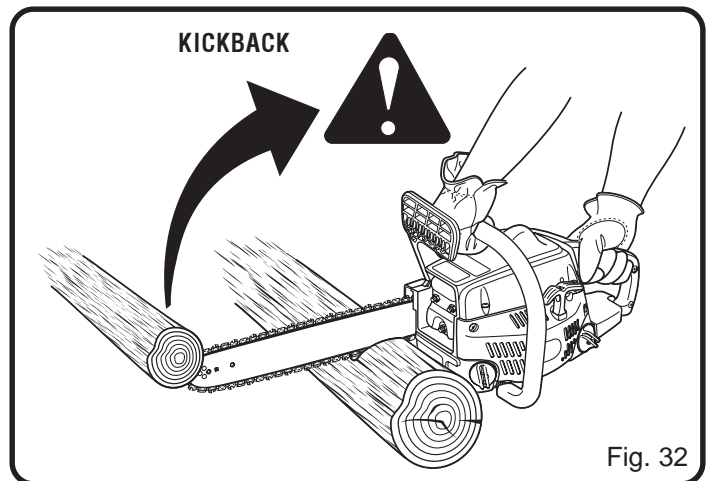
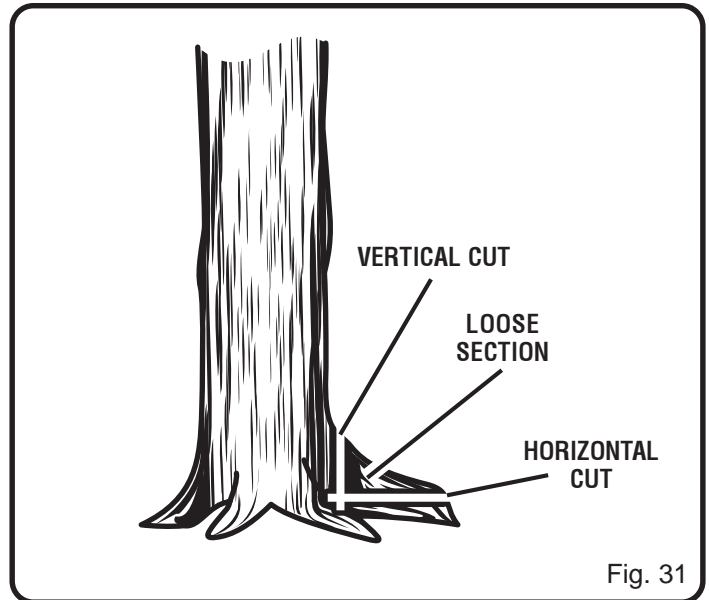
- Cut only one log at a time.
- Support small logs on a saw horse or another log while bucking.
- Keep a clear cutting area. Make sure that no objects can contact the guide bar nose and chain during cutting, this can cause kickback. To avoid the danger, keep the SAFE-T-TIP anti-kickback device attached while cutting. Refer to "Specific Safety Rules - Kickback" earlier in this manual.
- During bucking operations, stand on the uphill side so that the cut-off section of the log cannot roll over you.
- Sometimes it is impossible to avoid pinching (with just standard cutting techniques) or difficult to predict which way a log will settle when cut.

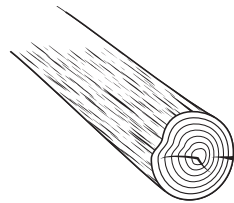
BUCKING WITH A WEDGE

See Figure 33.

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

Note: When bucking or felling with a wedge, you may need to remove the SAFE-T-TIP anti-kickback device to allow the bar to be drawn through the cut. After you complete, reinstall the tip.





OPERATION

LIMBING AND PRUNING

See Figure 36.

- Work slowly, keeping both hands on the saw with a firm grip. Maintain secure footing and balance.
- Keep the tree between you and the chain while limbing.
- Do not cut from a ladder, this is extremely dangerous. Leave this operation for professionals.
- Do not cut above chest height as a saw held higher is difficult to control against kickback.

⚠ WARNING:

Never climb into a tree to limb or prune. Do not stand on ladders, platforms, a log, or in any position which can cause you to lose your balance or control of the saw.

- When pruning trees it is important not to make the flush cut next to the main limb or trunk until you have cut off the limb further out to reduce the weight. This prevents stripping the bark from the main member.
 1. Underbuck the branch 1/3 through for your first cut.
 2. Overbuck the branch to drop it.
 3. Finish by cutting smoothly and neatly against the main member so the bark will grow back to seal the wound.

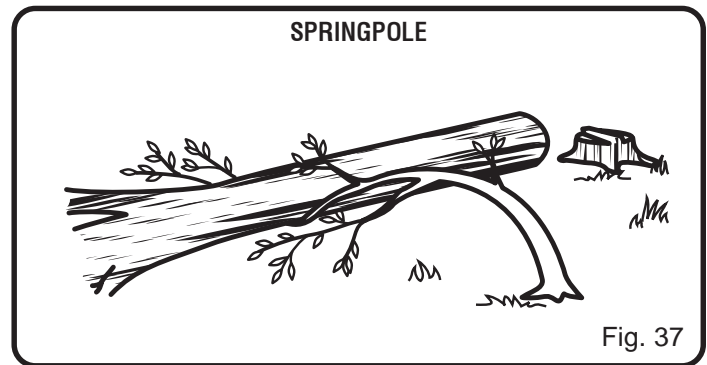
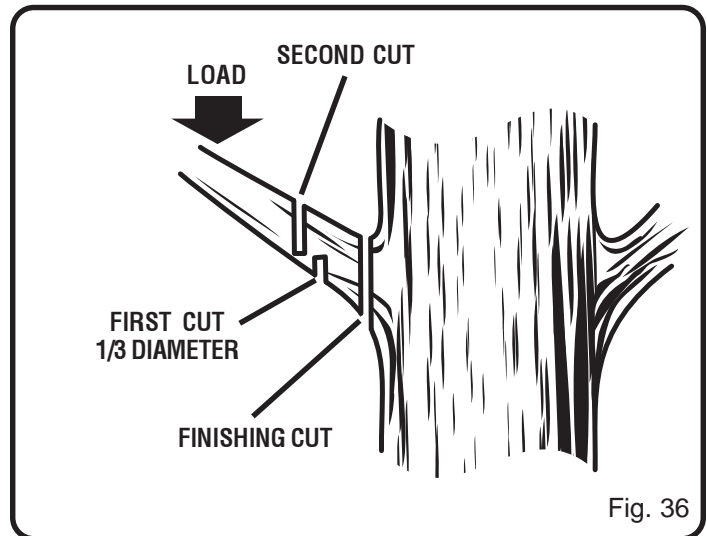
⚠ WARNING:

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

CUTTING SPRINGPOLES

See Figure 37.

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



⚠ WARNING:

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

MAINTENANCE

ASSEMBLING THE BAR AND CHAIN


See Figures 38 through 48.

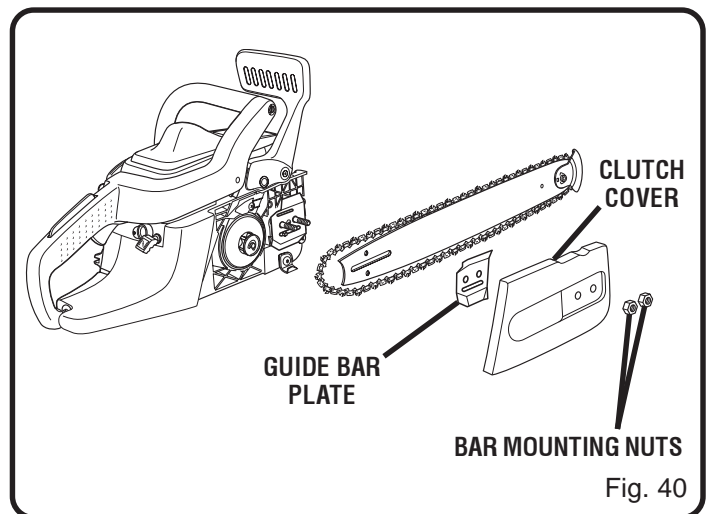
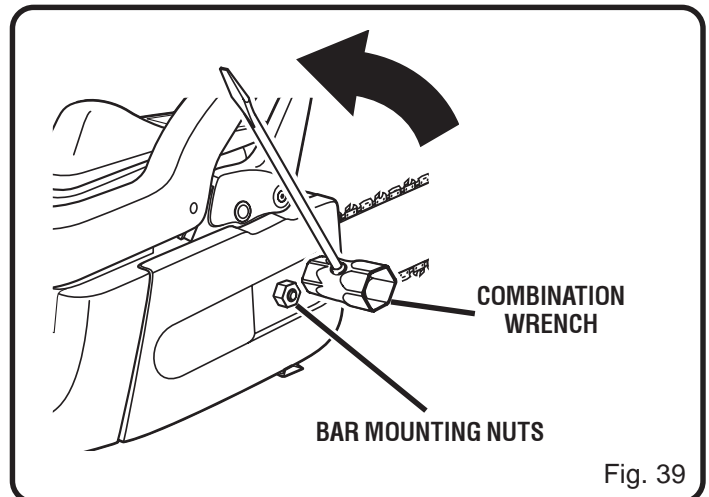
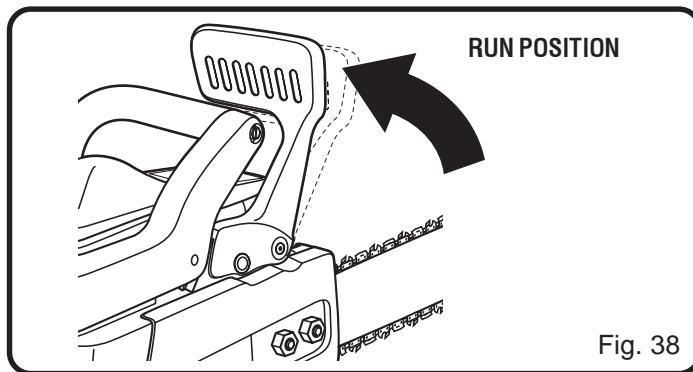
⚠ DANGER:

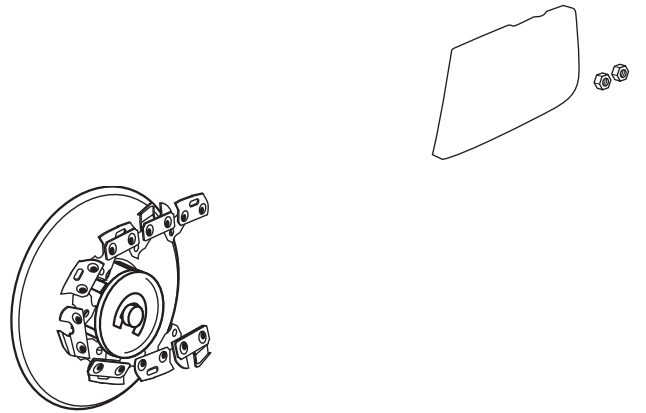
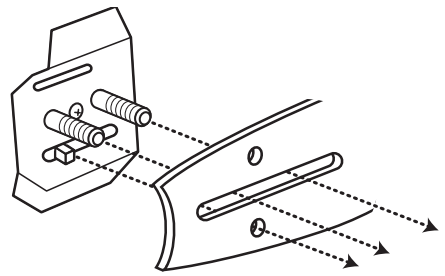
Never start the engine before installing the guide bar, chain, drivecase cover, and clutch drum. Without all these parts in place, the clutch can fly off or explode exposing the user to possible serious injury.

⚠ WARNING:

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

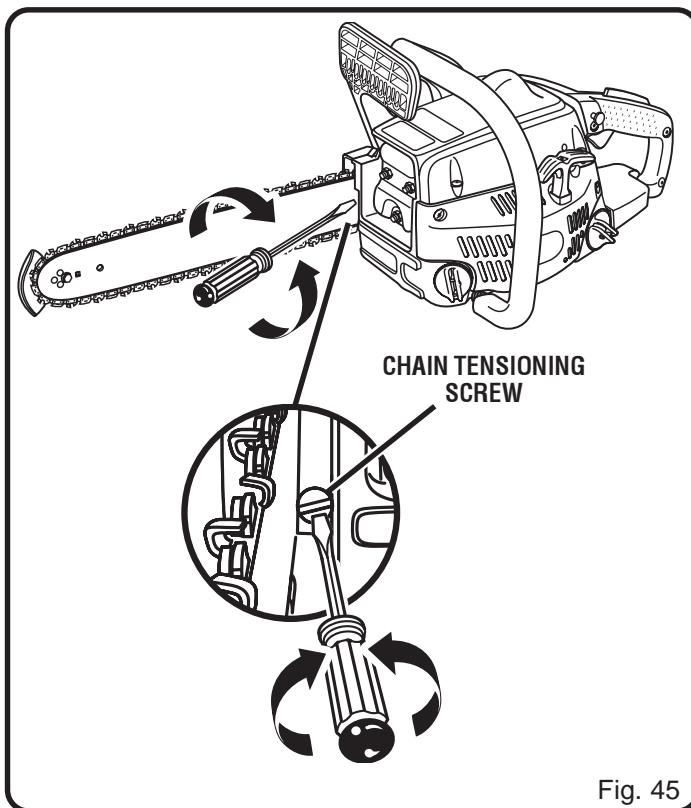
1. Always place the switch in the stop “” position before you work on the saw.
2. Make sure the chain brake is not set by pulling the chain brake lever/hand guard towards the front handle to the RUN position.
3. Wear gloves when handling the chain and bar. These components are sharp and may contain burrs.
4. Remove the bar mounting nuts using a combination wrench or 5/8 in. wrench.
5. Remove the clutch cover, and the outer guide bar plate.





MAINTENANCE

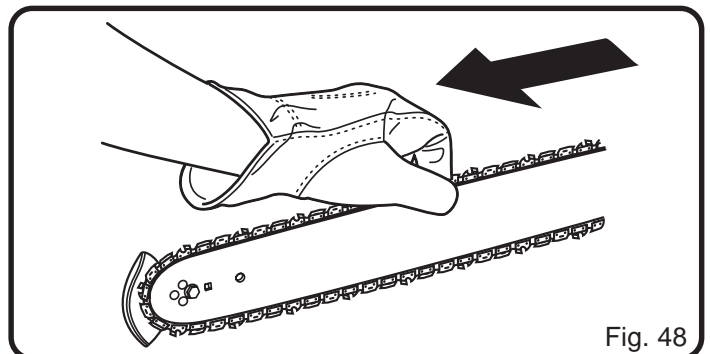
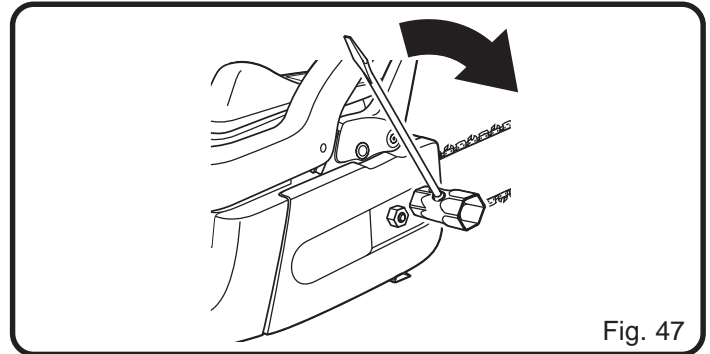
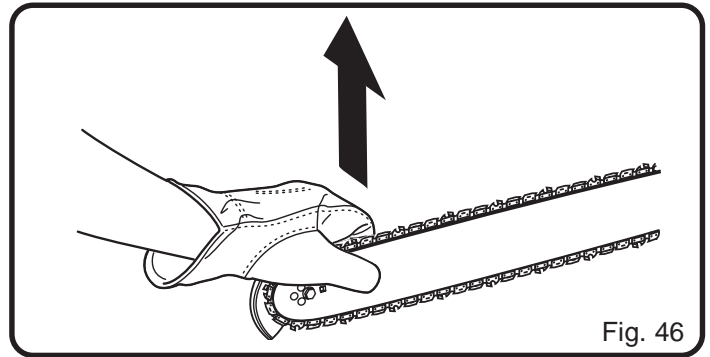
11. Replace the outer guide bar plate ensuring that the bar pin groove is at the bottom with the upper and lower edges angled away from the guide bar.
12. Replace the clutch cover and bar mounting nuts.
13. Tighten the bar mounting nuts finger tight only. The bar must be free to move for tension adjustment.
14. Remove all slack from the chain by turning the chain tensioning screw clockwise until the chain seats snugly against the bar with the drive links in the bar groove.
15. Lift the tip of the guide bar up to check for sag.
16. Release the tip of the guide bar and turn the chain tensioning screw 1/2 turn clockwise. Repeat this process until sag does not exist.



17. Hold the tip of the guide bar up and tighten the bar mounting nuts securely.

The chain is correctly tensioned when there is no sag on the underside of the guide bar, the chain is snug, but it can be turned by hand without binding. Ensure that the chain brake is not set.

Note: If chain is too tight, it will not rotate. Loosen the bar nuts slightly and turn the tension adjuster 1/4 turn counter-clockwise. Lift the tip of the guide bar up and retighten the bar nuts securely. Ensure that the chain will rotate without binding.



MAINTENANCE

ADJUSTING THE CHAIN TENSION

See Figures 49 through 51.

⚠ WARNING:

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

1. Stop the engine before setting the chain tension.
2. Make sure the bar mounting nuts are loosened to finger tight, turn the chain tensioner clockwise to tension the chain.

Note: A cold chain is correctly tensioned when there is no slack on the underside of the guide bar, the chain is snug and it can be turned by hand without binding.

3. Retension the chain whenever the flats on the drive links hang out of the bar groove.

Note: During normal saw operation, the temperature of the chain increases. The drive links of a correctly tensioned warm chain will hang approximately .050 in. (1.25 mm) out of the bar groove. To help determine the correct warm chain tension, use the tip of the combination wrench can be used as a guide.

Note: New chain tends to stretch, check the chain tension frequently and tension as required.

⚠ CAUTION:

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

FLATS ON DRIVE LINKS

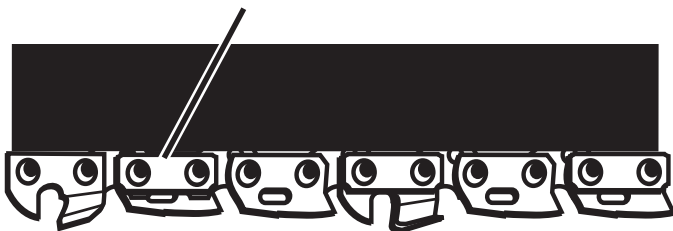


Fig. 49

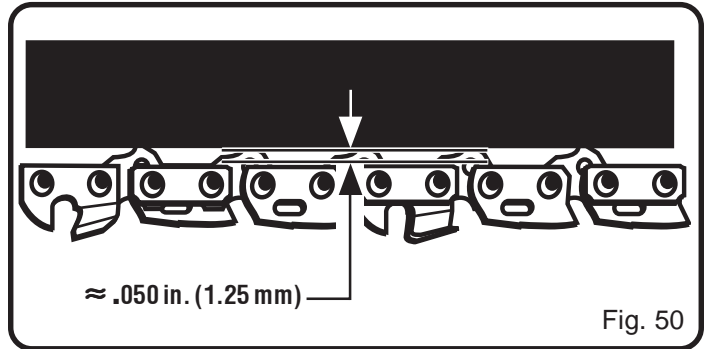


Fig. 50

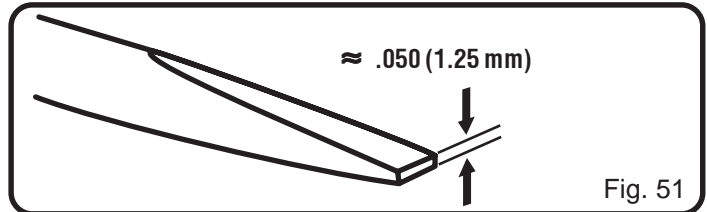


Fig. 51

CHAIN MAINTENANCE

See Figures 52 and 53.

⚠ CAUTION:

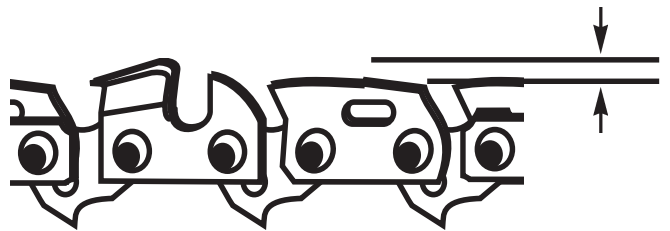
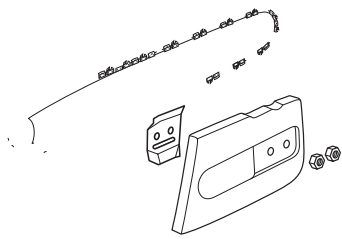
Check that the switch is in the STOP "STOP" position before you work on the saw.

Use only a low-kickback chain on this saw. This fast-cutting chain provides kickback reduction when properly maintained.

For smooth and fast cutting, maintain the chain properly.

The chain requires sharpening when the wood chips are small and powdery, the chain must be forced through the wood during cutting, or the chain cuts to one side. During maintenance of the chain, consider the following:

- Improper filing angle of the side plate can increase the risk of severe kickback.





MAINTENANCE

TOP PLATE FILING ANGLE

See Figure 60.

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

SIDE PLATE ANGLE

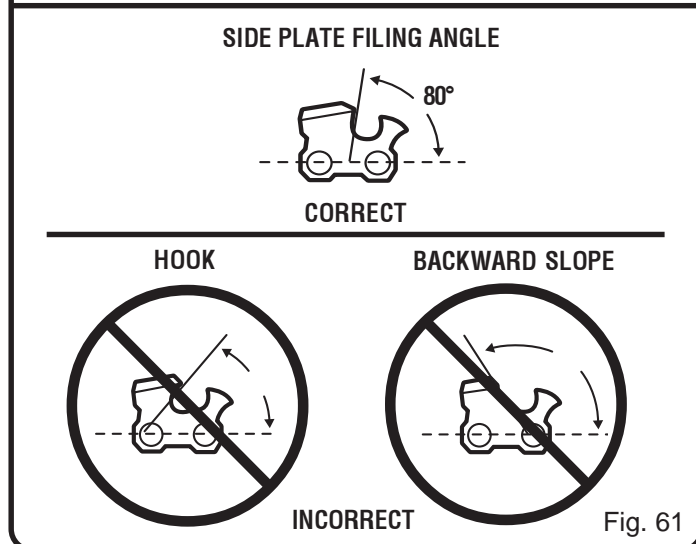
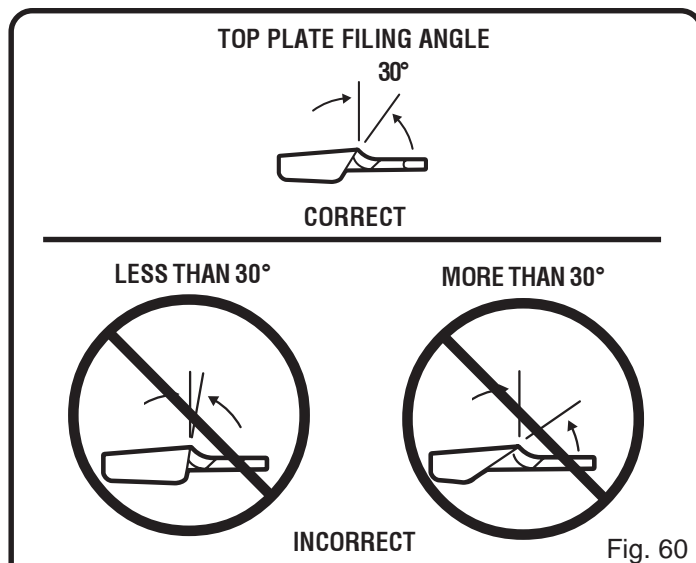
See Figure 61.

- **CORRECT 80°** – Produced automatically if you use the correct diameter file in the file holder.
- **HOO** – “Grabs” and dulls quickly, increases the potential of KICKBACK.

Results from using a file with a diameter too small or a file held too low.

- **BACKWARD SLOPE** – Needs too much feed pressure, causes excessive wear to the bar and chain.

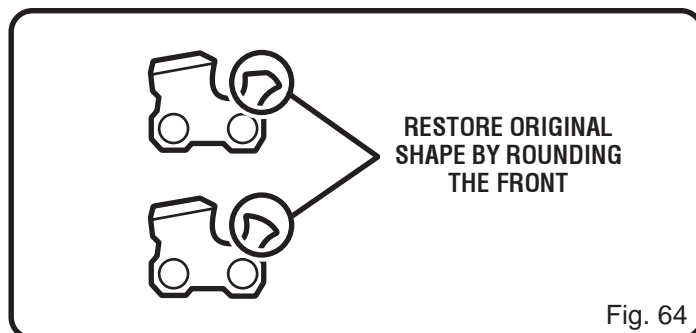
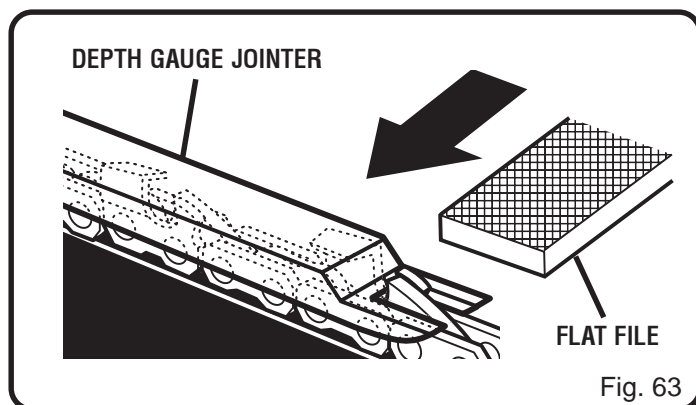
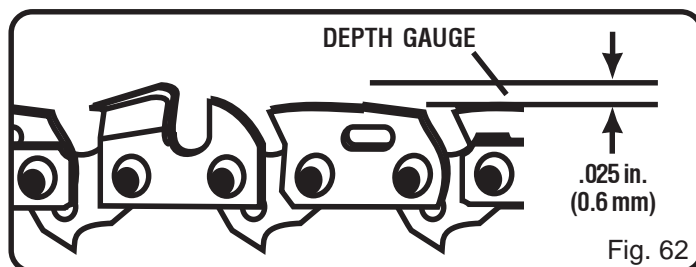
Results from using a file with a diameter too large or file held too high.



MAINTAINING DEPTH GAUGE CLEARANCE

See Figure 62, 63 and 64.

- Maintain the depth gauge at a clearance of .025 in. (0.6 mm). Use a depth gauge tool for checking the depth gauge clearances.
- Every time the chain is filed, check the depth gauge clearance.
- Use a flat file and a depth gauge jointer to lower all gauges uniformly. Use a .025 in. (0.6mm) depth gauge jointer. After lowering each depth gauge, restore original shape by rounding the front. Be careful not to damage adjoining drive links with the edge of the file.
- Depth gauges must be adjusted with the flat file in the same direction the adjoining cutter was filed with the round file. Use care not to contact cutter face with flat file when adjusting depth gauges.



MAINTENANCE

MAINTAINING THE GUIDE BAR

See Figure 65.

⚠ CAUTION:

Make sure the chain has stopped before you do any work on the saw.

Every week of use, reverse the guide bar on the saw to distribute the wear for maximum bar life. The bar should be cleaned every day of use and checked for wear and damage.

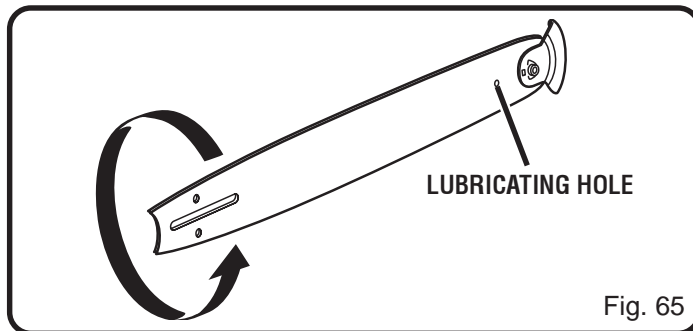
Feathering or burring of the bar rails is a normal process of bar wear. Such faults should be smoothed with a file as soon as they occur.

A bar with any of the following faults should be replaced:

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

In addition, lubricate guide bars (with a sprocket at their tip) weekly. Using a grease syringe, lubricate weekly in the lubricating hole.

Turn the guide bar and check that the lubrication holes and chain groove are free from impurities.



MAINTAINING THE SAFE-T-TIP NOSE GUARD

See Figures 66 and 67.

⚠ CAUTION:

Make sure the chain has stopped before you do any work on the saw.

⚠ WARNING:

Although the guide bar comes with a SAFE-T-TIP anti-kickback device already installed, you need to check the tightness of the mounting screw before each use.

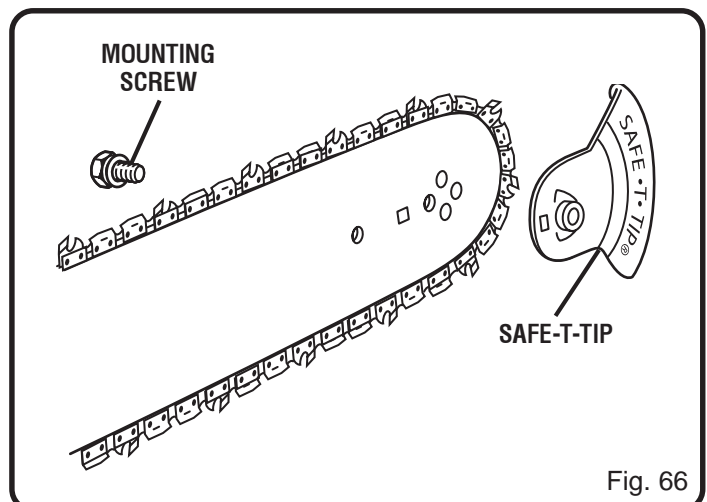
Tighten the mounting screw of the nose guard as instructed below. These are specially hardened screws. If you cannot install the screw tightly, replace both the screw and the SAFE-T-TIP before further operation.

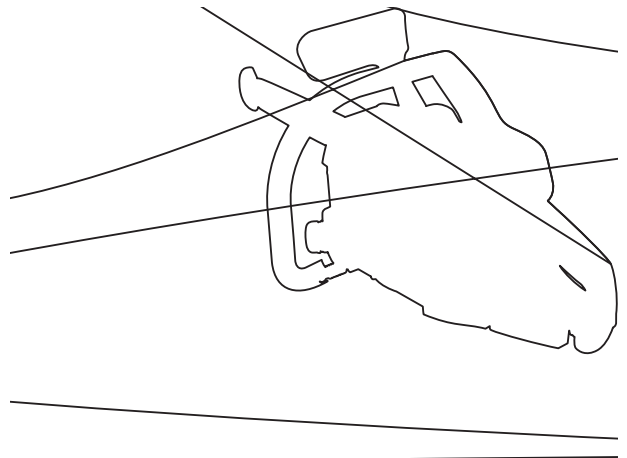
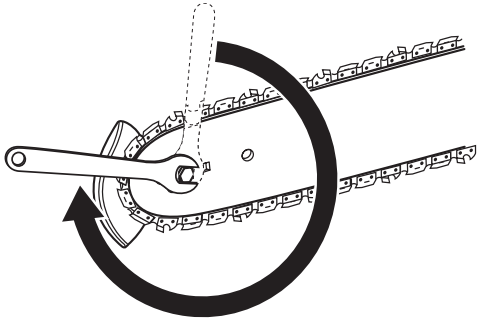
Note: Do not replace the screw with an ordinary screw; manufacturer's replacement parts should be used when replacing parts.

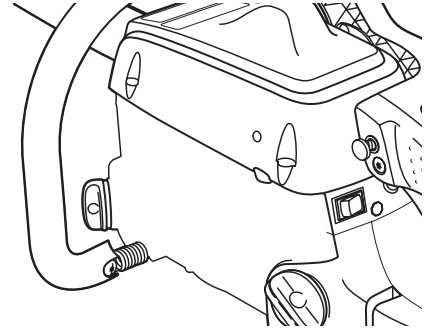
In addition to preventing chain contact with solid objects at the nose of the bar, the SAFE-T-TIP also helps keep the chain away from abrasive surfaces, such as the ground. Keep it on the right hand side of the bar where it will be between the chain and the ground during flush with ground cutting.

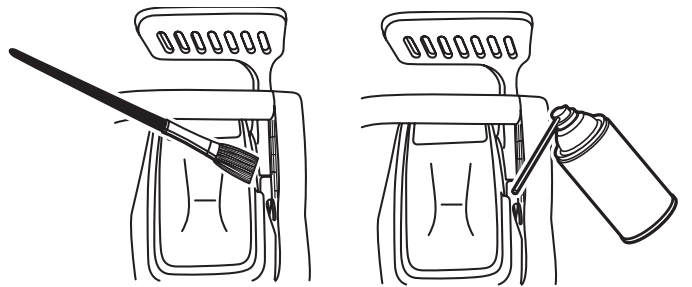
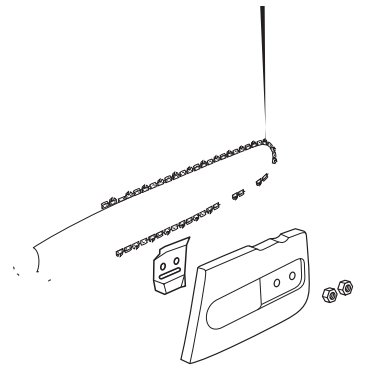
The mounting screw requires a 5/16 in. wrench (or adjustable wrench) to achieve the recommended tightness of 35 to 45 in.lb. (4-5 Nm). A tightness within this range can be achieved by using the following method.

1. Tighten the screw with your finger.
2. Tighten the screw an additional 3/4 of a turn using a wrench.









BAR AND CHAIN COMBINATIONS

Length of Bar	Guide Bar Part Number	Chain Part Number
14 in.	PS06331	984296005
16 in.	PS06338	PS06285

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
<p>Engine will not start. (Make sure Ignition Switch is in start position "I".)</p>	<ol style="list-style-type: none"> 1. No spark. 2. Flooded engine. 	<ol style="list-style-type: none"> 1. Check spark. Remove air filter cover. Remove spark plug from cylinder. Reattach the spark plug wire and lay spark plug on top of cylinder with the metal part of plug touching the cylinder. Pull the starter rope and watch for spark at spark plug tip. If there is no spark, repeat test with a new spark plug. 2. With the Ignition Switch off, remove spark plug. Move choke lever to run position (pushed in completely) and pull starter cord 15 to 20 times. This will clear excess fuel from engine. Clean and reinstall spark plug. Set Ignition Switch to run (I) position. Push and fully release primer bulb 7 times. Pull starter three times with choke lever at run. If engine does not start, move choke lever to choke and repeat normal starting procedure. If engine still fails to start, repeat procedure with a new spark plug.
<p>Engine starts but will not accelerate properly.</p>	<p>Carburetor requires "L" (Low jet) adjustment.</p>	<p>Contact a Homelite Service Center for carburetor adjustment.</p>
<p>Engine starts but will not run properly at high speed.</p>	<p>Carburetor requires "H" (High jet) adjustment.</p>	<p>Contact a Homelite Service Center for carburetor adjustment.</p>
<p>Engine does not reach full speed and/or emits excessive smoke.</p>	<ol style="list-style-type: none"> 1. Oil / Fuel mixture is incorrect. 2. Air filter is dirty. 3. Spark arrester screen is dirty. 4. Carburetor requires "H" (High jet) adjustment. 	<ol style="list-style-type: none"> 1. Use fresh fuel and the correct 2-cycle oil mix ratio. 2. Clean air filter. Refer to "Maintenance – Cleaning the Air Filter" earlier in this manual. 3. Clean spark arrester screen. Refer to "Maintenance – Cleaning the Spark Arresting Muffler" earlier in this manual. 4. Contact a Homelite Service Center for carburetor adjustment.

Note: The carburetor adjustment needle(s) are equipped with plastic cap(s) that prevent counterclockwise rotation from the original factory adjustment. If your product exhibits specific performance problem(s) where the Troubleshooting Section recommends a counterclockwise needle adjustment and you have made no adjustments since the original purchase, take the product to a factory authorized service center for repair. In most cases, the needed adjustment is a simple task for the factory trained service representative.

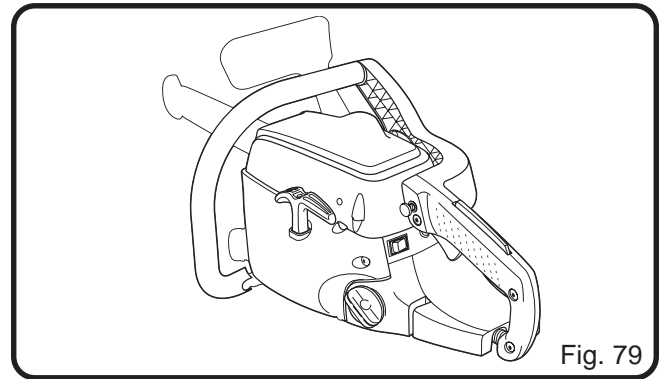


Fig. 79

WARRANTY

LIMITED WARRANTY STATEMENT

Homelite Consumer Products, Inc. warrants to the original retail purchaser that this **HOMELITE** product is free from defect in material and workmanship and agrees to repair or replace, at Homelite Consumer Products, Inc.'s discretion, any defective product free of charge within these time periods from the date of purchase.

- One year for the following units: Yard Broom, Trimlite, and Bandit;
- Two years for all other Homelite products, if the product is used for personal, family or household use;
- 90 days, if any of the above products are used for any other purpose, such as commercial or rental.

This warranty extends to the original retail purchaser only and commences on the date of the original retail purchase.

Any part of the **HOMELITE** product manufactured or supplied by **HOMELITE** and found in the reasonable judgment of **HOMELITE** to be defective in material or workmanship will be repaired or replaced by an authorized **HOMELITE** service dealer without charge for parts and labor.

The **HOMELITE** product including any defective part must be returned to an authorized service dealer within the warranty period. The expense of delivering the **HOMELITE** product to the dealer for warranty work and the expense of returning it back to the owner after repair or replacement will be paid by the owner.

HOMELITE'S responsibility in respect to claims is limited to making the required repairs or replacements and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any **HOMELITE** product. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an authorized **HOMELITE** service dealer.

This warranty is limited to ninety (90) days from the date of original retail purchase for any **HOMELITE** product that is used for rental or commercial purposes, or any other income-producing purpose.

This warranty does not cover any **HOMELITE** product that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the **HOMELITE** operator's manual. This warranty does not apply to any damage to the **HOMELITE** product that is the result of improper maintenance or to any **HOMELITE** product that has been altered or modified. The warranty does not extend to repairs made necessary by normal wear or by the use of parts or accessories which are either **INCOMPATIBLE WITH THE HOMELITE** product or adversely affect its operation, performance or durability.

In addition, this warranty does not cover:

- A. Tune-ups – Spark Plugs, Carburetor, Carburetor Adjustments, Ignition, Filters
- B. Wear items – Bump Knobs/Spool Retainers, Outer Spools, Cutting Lines, Inner Reels, Starter Pulley, Starter Ropes, Drive Belts

HOMELITE reserves the right to change or improve the design of any **HOMELITE** product without assuming any obligation to modify any product previously manufactured.

ALL IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE STATED WARRANTY PERIOD. ACCORDINGLY, ANY SUCH IMPLIED WARRANTIES INCLUDING MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE,

CALIFORNIA EMISSION CONTROL LIMITED WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS HOMELITE CONSUMER PRODUCTS, INC.

The U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Homelite Consumer Products, Inc. are pleased to explain the Emission Control System Warranty on your utility/lawn/garden equipment engine. The California, new 1995 and later utility/lawn/garden equipment engines must be designed, built and equipped to meet the state's stringent anti-smog standards. In other states, new 1997 and later model year utility/lawn/garden equipment engines must be designed, built and equipped, at the time of sale, to meet the U.S. EPA regulations for small non-road engines. The equipment engine must be free from defects in material and workmanship which cause it to fail to conform with U.S. EPA standards for the first two years of engine use from the date of sale to the ultimate purchaser. Homelite Consumer Products, Inc., must warranty the emission control system on your utility/lawn/garden equipment engine for the period of time listed above provided there has been no abuse, neglect, or improper maintenance of your utility/lawn/garden equipment engine.

Your emission control system may include parts such as the carburetor or fuel injection system, the ignition system, the catalytic converter. Also included may be hoses, belts, and connectors and other emission-related assemblies.

Where a warrantable condition exists, Homelite Consumer Products, Inc., will repair your utility/lawn/garden equipment engine at no cost to you, including diagnosis (if the diagnostic work is performed at an authorized dealer), parts, and labor.

Homelite®

OPERATOR'S MANUAL

16 in. (406 mm) 33cc Chain Saw

UT10530, UT10530A, UT10947D, UT10947E

 **WARNING:**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.
CALIFORNIA PROPOSITION 65

For product information, technical help, dealer locations or parts ordering information visit our website at: www.homelite.com.

HOMELITE CONSUMER PRODUCTS, INC.

1428 Pearman Dairy Road, Anderson, SC 29625

Post Office Box 1207, Anderson, SC 29622

Phone 1-800-chainsaw (1-800-242-4672)

www.homelite.com