

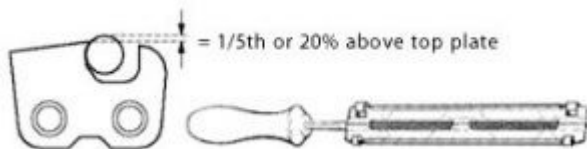
How do I sharpen my chain?

Always inspect your chain prior to sharpening. Check for the following:

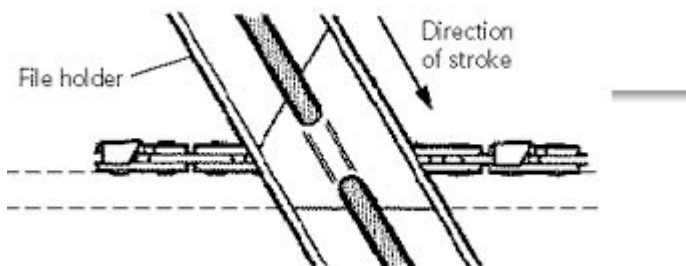
- Bent or burred drive links
- Broken cutters or tie-straps
- Loose rivets or broken rivet heads

If broken parts are detected, take it to a servicing dealer for replacement of parts or replace the entire chain. The following steps will help you correctly sharpen (with a round file) an Carlton saw chain:

1. Be sure to have the correct size file and file guide.
2. When hand filing it's important that 1/5, or 20 percent, of the file's diameter is always held above the cutter's top plate. Using the correct file guide is the easiest way to hold the file in this position.



3. Keep the correct top-plate filing angle line on your file guide parallel with the chain. Many cutters have a guide mark stamped near the rear edge of the top plate that can also be used as a guide for filing angle.



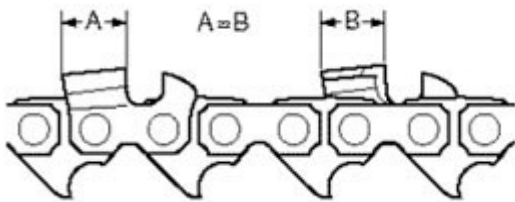
4. Sharpen cutters on one side of the chain first. File from the inside of each cutter to the outside. Then turn your saw around and repeat the process for cutters on the other side of the chain.



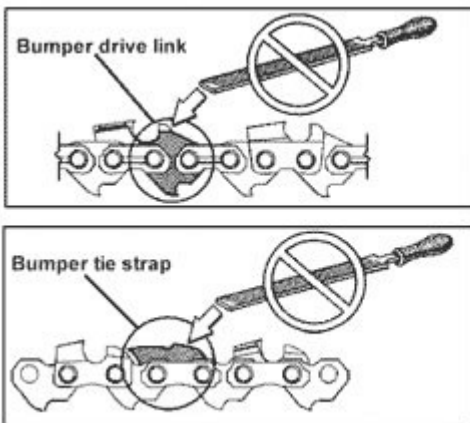
5. If damage is present on the chrome surface of top plates or side plates, file back until such damage is removed.



6. Keep all cutters equal. Start with the cutter with the most damage and hand file all cutters back equally.



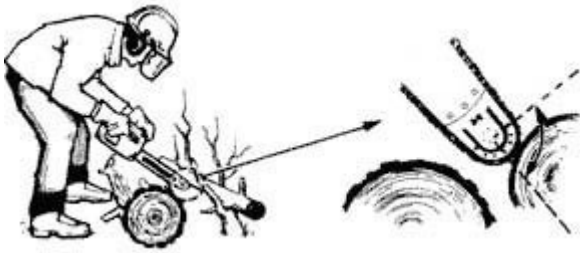
Note: Do not file or alter the tops of kickback-reducing bumper tie straps or bumper-drive links.



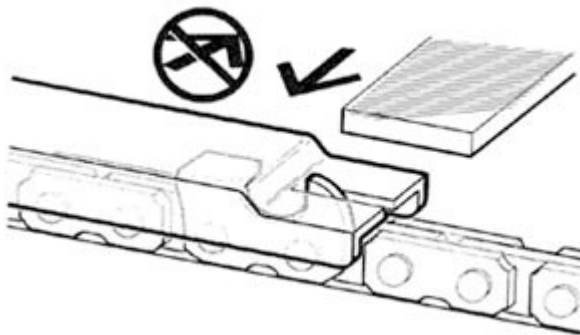
How do I set my depth gauges?

Prior to setting your depth gauges it's important to have the correct depth gauge tool. Most Carlton chains have a number stamped on each cutter located on the depth gauge indicating the correct depth gauge setting. If unsure of your Carlton chains depth gauge setting, ask your Carlton saw chain dealer. The following steps will help you correctly set your depth gauges:

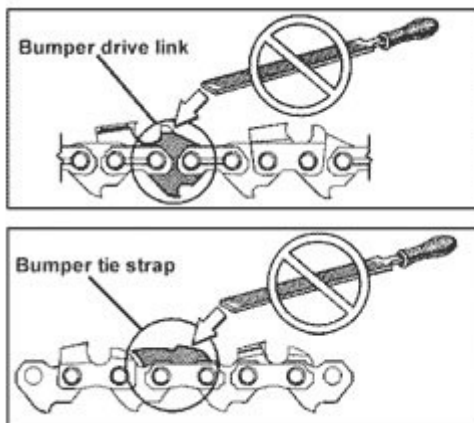
1. Use a depth-gauge tool with the correct built-in setting for your chain and check your depth gauges after every third or fourth sharpening.



2. Place the tool on top of your chain so one depth gauge protrudes through the slot in the tool. If the depth gauge extends above the slot, file the depth gauge down level with the top of the tool using a flat file. Never file the depth gauge down enough to exceed the depth gauge setting specified.



Note: Do not attempt to file or alter tops of kickback-reducing bumper tie straps or bumper drive links.



What is your warranty policy?

If your new Carlton product should fail because of defects in materials or workmanship, package it carefully and send it prepaid to Blount, Inc. with your name, address, phone number, and a brief explanation of the defect. We will replace it, free of charge. However, Carlton products are not warranted against user abuse, improper maintenance or improper repair. We will evaluate each warranty on an item-by-item basis.

How often and what type of lubrication should I use in my saw?

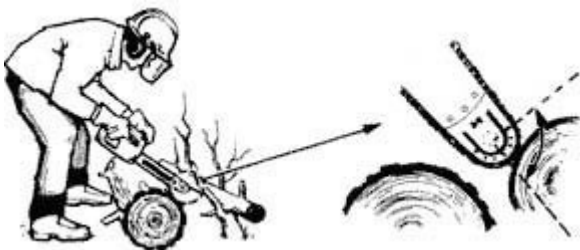
Keep your saw's chain-oiling system filled with clean bar-and-chain oil. Never put used oil or old motor oil in your saw or on your chain. Be sure your chain, bar, and sprocket are

always receiving oil from the saw during operation. Fill your oil reservoir each time you fill your gas tank.



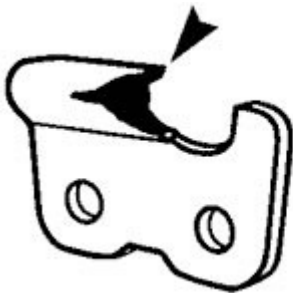
What is kickback?

Kickback is the violent backward and/or upward motion of the chain saw guide bar occurring when the chain near the nose or tip (see picture) of the guide bar contacts any object, such as another log or branch, or when the wood closes in and pinches the cutting chain in the cut.



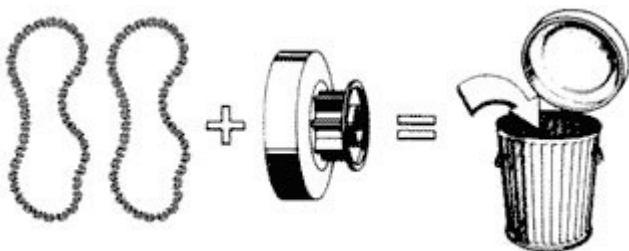
How do I know when my chain is dull, and when should I sharpen it?

Keep in mind that a sharp chain will cut large-size chips. A chain that is dull or has abrasive damage will create sawdust. It's time to sharpen when you're having to push on the saw or the saw is no longer self-feeding.



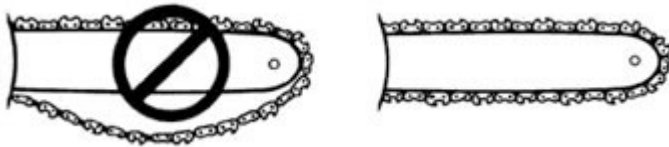
How long should the drive sprocket on my saw last?

It's important not to run a new chain on a badly worn drive sprocket. Replace drive sprocket systems after every two chains, or sooner.



How tight should I tension my chain?

For a sprocket nose bar, turn your saw's tension-adjustment screw until the bottoms of the lowest tie straps and cutters come up and contact the bottom of the bar rails, then turn your tension-adjustment screw an additional 1/4 turn. Also, on sprocket nose bars, the snap test should be performed. Grasp the chain along the bottom of the bar, pull down, and let go. The chain should snap back to its original position, solidly contacting the bottom of the bar rail.



For a solid-nose bar, turn your saw's tension-adjustment screw until the bottoms of the lowest tie straps and cutters come up and contact the bottom of the bar rails. Chain tension on a solid-nose bar should be adjusted looser than on sprocket nose bars. Regardless of your bar type, your chain should move freely around the bar.

NEVER TENSION CUTTING CHAIN WHILE IT'S HOT!

How do I measure the length of my chain?

The length of your chain is determined by counting the number of drive links.



What is chain pitch?

Chain pitch is the distance between any three consecutive rivets divided by two. Pitch defines the size of the chain. Carlton chain is made in several pitches – 1/4" is the smallest, 3/8" is the most popular. Other parts of the cutting elements are pitch-related. The drive sprocket must be the same pitch as the chain, and so must the nose sprocket in sprocket-nose bars.

