



Quick Guide to Chainsaws.

The essentials of a chainsaw.



About this Guide

This guide is meant to introduce you to the basics of a chainsaw. Its purpose is to outline the best practices to consider when purchasing, servicing and using a chainsaw.

Notice to reader:

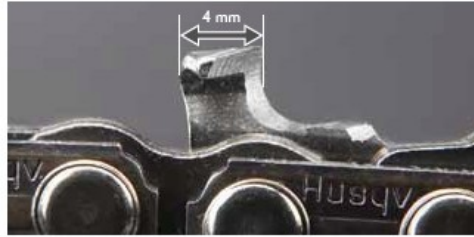
The information contained in this guide are for general purposes only. Our aim is to give you a good idea of the best ways to use and care for you chain saw. Working with chainsaws can be inherently dangerous. Please follow your saw's user manual for more specific safety and operation instructions.

This guide does not provide warranties and guarantees of any kind, expressed or implied. The reader assumes liability for any



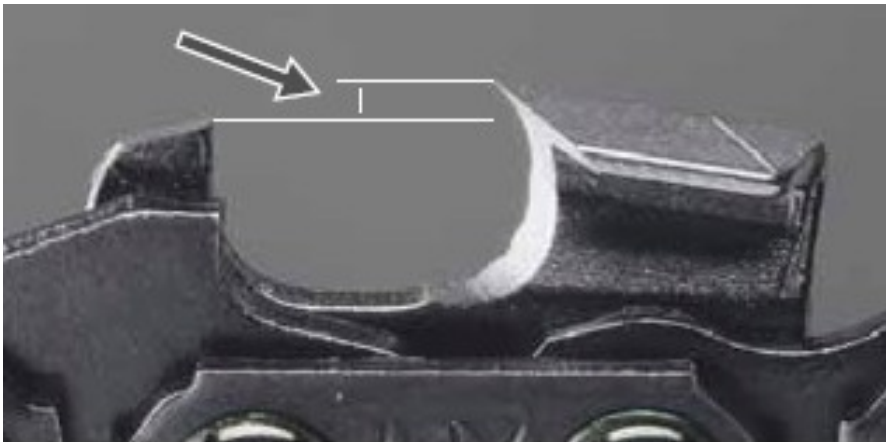
Replace the chain

It is time to replace the chain when the longest portion of the cutting tooth is less than 4mm or if you find cracks.



Depth gauge.

The height difference between the position of the depth gauge and tip of the tooth (depth gauge clearance) determines how much the cutting tooth will cut. It works much like a plane. When the plane is set up with minimal cutting blades, the plane takes a very little amount of wood. The same thing happens with the saw chain if the distance between the depth gauge clearance lip and the tip of the tooth is too small. It is also not good if the depth gauge clearance lip has been filed down too much. The cutting tooth will then cut too deeply into the wood. The cut is more aggressive with high vibrations as a result. The risk of kickback increases and the chainsaw is exposed to unnecessary stress.



Who uses Chain saws?

Casual Chain Saw Users

- Homeowners and Landowners
- Occasional firewood cutters
- Campers
- Hunters

Commercial Chain Saw Users

- Arborists
- Orchardists
- Construction workers
- Tree Suregons
- Farmers
- Landscapers
- Carvers

Professional Chain Saw Users

- Forest fighters
- Pulp loggers
- Big-timber loggers

How often should the chain be sharpened?

A saw chain sharpness is impaired after time even if you have been avoiding cutting objects that reduce its sharpness (rock, soil, etc.). The chain becomes blunt. If the chain has sawn through stone it is useless and must be sharpened immediately.

If you use the chainsaw for much of the day, it is appropriate to sharpen the chain with a file each time you refuel. It is easier to sharpen a little but often than waiting a long time to file. You also get better precision and work more efficiently.

Choosing the right bar & chain.

Always use the type of guide bar and chain recommended by the manufacturer. When replacing chain match it with correct specifications: chain pitch, gauge, and number of chain drive links.



Here you can see how it looks when a cutting tooth is blunt. It is high time to sharpen the cutting teeth. Notice the cutting tooth's "white" edge.



Backward leaning angle. The cutting tooth is filed too high up, making it cut poorly. Use the depth gauge and re-file the cutting teeth according to the recommendation.



The cutting tooth that has sawn through stone shows an irregular edge where the top layer of the cutting tooth is damaged. It is important that all the damage is filed away to ensure the best possible sharpness.



This is what a sharp cutting tooth looks like.



Maintenance of cutting equipment.

Wear work gloves when you inspect the chainsaw's cutting equipment.
Check cutting equipment regularly.



Chain tension.

Make sure the chain tension is correctly tensioned. A slack chain may jump off the guide bar, injure you and damage the chainsaw. An overly tight chain tension can cause premature wear of the guide bar. A properly tensioned chain should not hang under the guide bar. The chain tension is correct when the chain is in contact with the underside of the guide bar, and you still can pull it around easily by hand. See picture Above.

A sharp chain.

The chain must always be sharp to ensure cutting that is safe, effective and has good precision. An easy way to keep the chain sharp is to use a chainsaw filling kit which includes a round file, flat file, and filling gauge. There are other more complex sharpening tools. You can also have chains sharpened at local chainsaw dealer.

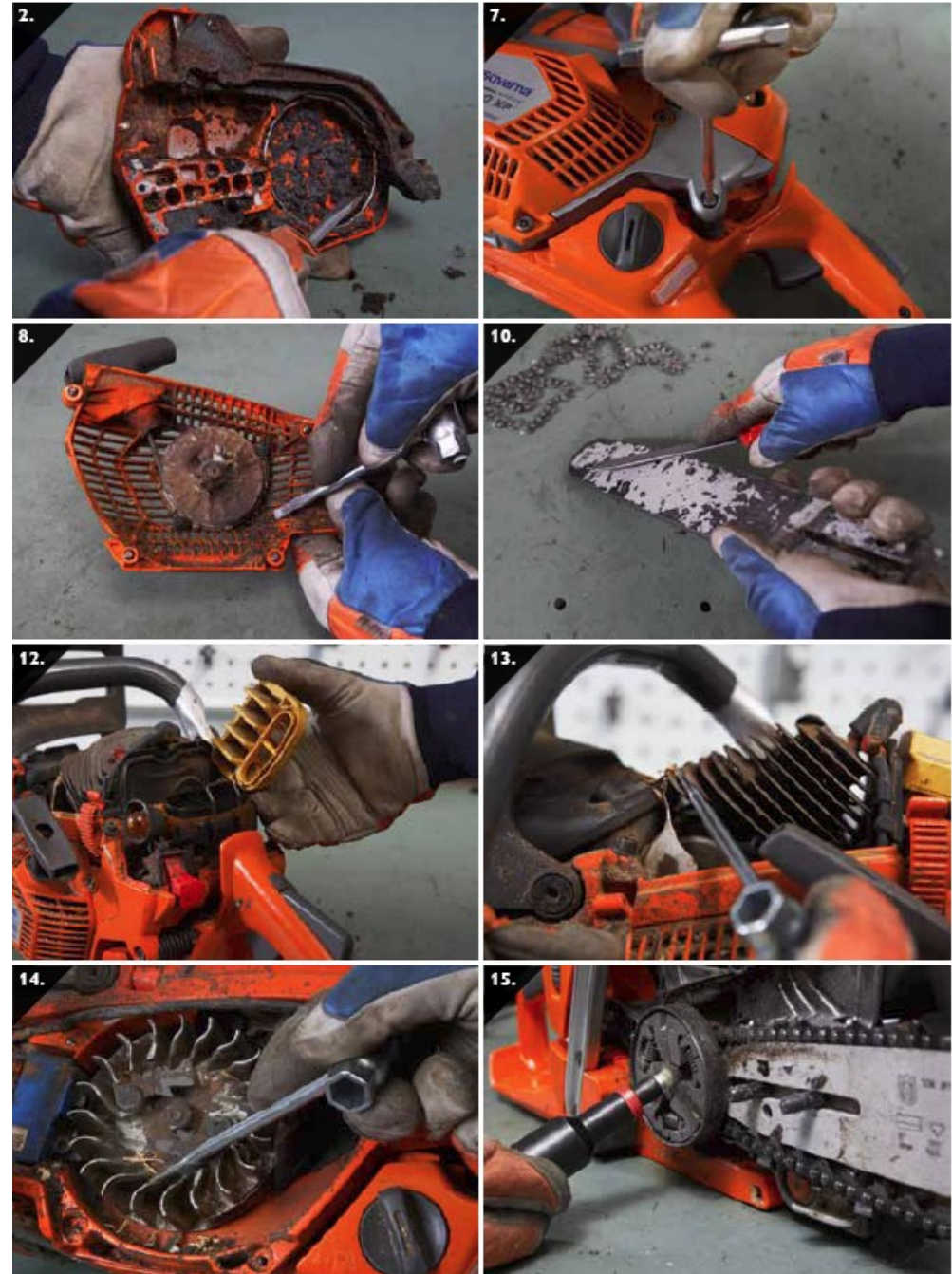


Safety First

Chainsaws are an efficient tool. However it can be dangerous if used incorrectly. To avoid injuries it is important to follow proper safety procedures based on the Operator's Manual of your chainsaw.

Even if you only occasionally use a chainsaw around the house, proper safety gear is essential to avoiding severe injuries. Protective equipment cannot prevent accidents but can help reduce the level of injury if one does occur.

Proper safety equipment (use diagram of person with all accessories)



Maintenance and Safety Inspections

Service your chainsaw regularly to maintain efficiency and safety. You can perform basic service yourself according to the service points below. For further assistance consult with local chainsaw expert.

1. **CHAIN BRAKE** Clean and Check brake function for safe operation.
2. **CLUTCH COVER** Clean the brake band for the chain brake. Replace the brake band if it is damaged or severely worn.
3. **THROTTLE** Check that the throttle lock works and is not damaged.
4. **CHAIN CATCHER** Make Sure it is intact and is not loose. Replace the chain catcher if it is damaged.
5. **STOP SWITCH** Check that stop switch is working properly.
6. **CRACKS** Make sure that no cracks appeared in the safety features and components of the chainsaw. Replace them if they could jeopardise your safety. If in doubt, consult local chainsaw expert.
7. **BOLTS AND NUTS** Check regularly that all nuts and bolts are tightened, especially on the muffler.
8. **STARTER** Clean the air intake, check the functionality and wear.
9. **CHAIN** Sharpen and check chain tension and condition.
10. **GUIDE BAR** Clean the holes for lubrication and chain groove. The guide bar should be turned at regular intervals to ensure more even wear. Also file off any burs using flat file.
11. **GUIDE BAR AND CHAIN LUBRICATION** Check oiler function. Start the saw. Hold the saw over the stump and rev up the engine. Chain lubrication is working if there is a line of oil on the stump.
12. **AIR FILTER** Clean the air filter in a lukewarm soap solution. Replace filter as needed.
13. **CYLINDER** Clean the fins regularly to preserve the engine's cooling function.
14. **FLYWHEEL** Clean the cooling fins for sustained fan/cooling effect.
15. **CLUTCH** Lubricate the clutch needle bearing.
16. **EXPERT SUPPORT** Read more about specific maintenance requirements in the Chainsaw user's manual. For further repairs and assistance consult your local chain saw dealer.



Buying a Chainsaw

Buying a chainsaw can be made an easy process when you break it down to smaller decisions: Gas vs. Electric, New vs. Used, primary application, etc.

There are many options in brands, styles and sizes of chainsaws. Keep in mind that all saws are designed for the purpose of cutting wood. But not all saws are created equal. Make sure that you take the time to choose the best option for your type of use. Most brands manufacture saws for different applications.

Online and Catalogue Retailers

Pros:

- » Low Prices
- » Product reviews by others
- » Convenience of buying from home
- » Wide selection of brands

Cons:

- × Lack of personal support
- × No product set-up
- × Shipping time & costs
- × No local seller support and service after the sale
- × Purchase based on specs only without seeing the product
- × Possibility of online fraud.

Buying used chainsaw (Classifieds, etc.)

Pros:

- » Cost efficient
- » No sales tax and shipping
- » Try saw before purchase

Cons:

- × Lack of personal support
- × Buying someone else's "problem"
- × No warranty
- × No support after the sale.
- × Missing safety features
- × Chance of buying stolen goods.
- × Incomplete User Manual



Local Chainsaw Dealers

Pros:

- » Extensive Product Knowledge
- » Service & Support
- » Selection of Parts
- » Saw Demonstration may be available.
- » Product set-up
- » Personal Instructions
- » Professional & Robust models available
- » Accessories & Safety gear available
- » Dealer only promotions

Cons:

- × Limited selection to certain brands
- × Premium prices
- × Shorter product return and exchange terms.

Large “Big Box” Retailers

Pros:

- » Wider selection of brands
- » Lower Prices and Sales Events
- » Convenience & availability
- » Relatively cleaner shopping environment
- » May have some accessories

Cons:

- × Lack of product knowledge
- × Limited to certain models and sizes
- × Lack of service
- × Limited availability of parts
- × No Product set-up

Questions to ask before buying a chainsaw.

- What is your level of experience using a chainsaw?
- What are you going to be using the chainsaw for? Full time, professional, or home use?
- What is the size of trees you would be felling mostly?
- Are you cutting hard or soft wood?
- How often will you be using the saw? Daily, once a month, or few times a year?
- How important is chainsaw weight and ergonomics for you?
- How important are service and maintenance features? Do you want easy access to spark plug, air filter, and easy chain tensioning?



Personal Protective Gear



Protective Head Gear

Head, eyes, hearing protection.



Protective Jacket

Upper body coverage



Protective Pants/ Chaps

Leg protection with chain stopping material.



Protective Boots

Steel toes forestry boots.



Protective Gloves



Performance & Maintenance



Approved Gas Can



Approved 2-Cycle Mix Oil



Bar & Chain Oil



Saw Carrying Case



Chain Sharpening Kit



