




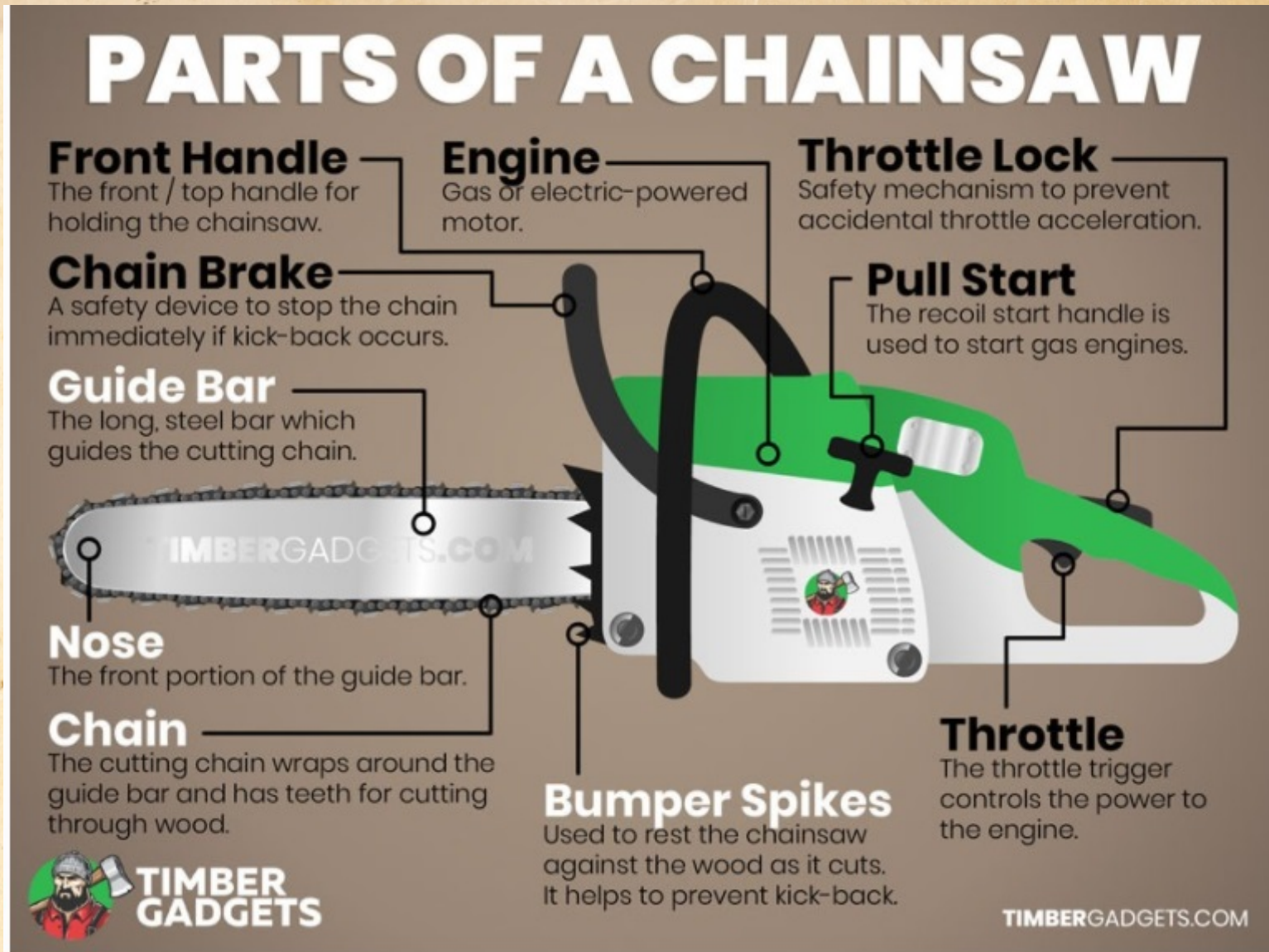
Unusual Communications Volunteer
Tool: The ChainSaw

If you don't have one, you may not make it out of
your DRIVEWAY!

Gordon L. Gibby MD KX4Z



Parts



Electric Chainsaw



<https://www.poulanpro.com/us/products/chainsaws/pl914/967695001/>

SAFETY

- “Kickback” if you use the TIP to cut.
- **Review safety movies**, always be aware of where the chain is going to PULL. Kickbacks can take your forehead off...
- Wear gloves. **DONT PUSH YOURSELF.** Stay in **CONTROL.**
- Never cut while elevated on a ladder
- Never climb something (fence) with a running chainsaw.
- **READ** the instructions, **USE** the brake.

PLAN YOUR CUT

- If the wood is laying flat on the ground you can saw vertically thru without getting the blade “pinched”
- If the wood is ELEVATED.....you have to arrange the geometry so the cut will OPEN rather than PINCH as you cut....you may need a helper to position. Getting the bar pinched is a good way to get into an unsafe condition.
- I always cut with the BOTTOM of the bar and NOT at the tip!!

Basic Operation (Gas)

- Fresh Gas, Bar Oil in the reservoir
- SET ON GROUND
- Push BRAKE forward to lock the chain.
- Set the throttle control into one of the CHOKE positions (you may have to experiment depending on outside temperature)
- Foot where your hand would go, holding saw on ground.
PULL!! (Rest, repeat)
- When it starts, blip throttle to take it out of FAST, then release the brake, all with your foot STILL HOLDING IT DOWN.

Running

- Because we often have GENERATORS, an electric chainsaw can make a LOT OF SENSE for our volunteers. 3KW generator can start the Poulon.
- GAS 2cycle chainsaws can be DIFFICULT to start!
- BAR OIL: get a good sized container.
- 50:1 2-cycle gas – mix properly or buy the canned (expensive) stuff.
- ALWAYS CHECK THE BAR OIL RESERVOIR

Tightening the Chain

- Never let the chain get really loose. It should be pretty tight on the “bar” but not binding.
- On MOST chainsaws you’ll need to do two steps to tighten (after wiping away all the gunk)
 - Loosen the big nuts to keep the cover tight over the bar so it has the possibility of moving
 - Find the SCREW that you’ll generally turn CLOCKWISE to slide the bar further out to tighten the chain as it wears and stretches.
 - CHANGING THE BLADE is pretty obvious once you get that cover off....Blades aren’t very expensive, and having a spare sharp blade is a good idea.
 - BARS are measured by the length out in the open IN FRONT OF THE COVER. Round up to the nearest whole inch. Example, 14”, 16” 18” 20” Chains must be the right number of “links” for the BAR of course!! Imprint on the bar will tell you the size and number of links and other useful info....may be tough to read.

Electric Chainsaw Saves Day

- The weak link of a gas chainsaw is the CARBURETOR, which is a marvelous little invention with a built-in fuel pump (made of fiber flap valves over passageways), idle jets, main jet, choke, possibly a needle valve and float too!!!
- Electric is a LOT easier for the casual user even though less powerful. A sharp chain on a 14" electric can get thru big wood that is blocking your car...just don't go sawing WITH THE TIP if the wood is too big.

How a chain saws.

- Cutters alternate Right and Left – they slice CHIPS out of the wood.
- When they are making DUST instead slicing chips – badly need sharpening!
- Depth gauge just 0.025” lower sets the size of the chip that gets cut off
- Chain runs in an oiled groove of the BAR





Sharpening a Chain Saw

- SAFETY.
- Hand kits economically available; this is a 15 minute job at worst.
- Pick correct size ROUND file out of the kit, 3 or more strokes to shapen top and size of leading edge.
- Stay with the Angle! It may be marked on the blade. (Look for an angled imprint showing you the proper angle.



<https://www.bobvila.com/articles/sharpening-a-chainsaw/>

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- If the blade gets really worn down, it won't be high enough compared to the "depth guide" and you'll have to put a few strokes with a FLAT FILE on the depth guides.
 - They make a tool to help you gauge the height difference, but just laying a straight edge on the blades and seeing if the guides are a wee bit LOWER is adequate.
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Replacement Carburetor

- With your model number, should be easy to find an inexpensive replacement gas carburetor (\$25) with EVERYTHING
- Rebuild kit has the flexible diaphragms \$7 and you can rebuild the original carb while you have the new one in front of you to compare.
- Usually solves the cranking problem. Far less expensive and quicker than trip to the small engine shop.
- Take a digital photo of how the 2 linkages connected and you should be able to change the carburetor in 10-15 minutes.



The End





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