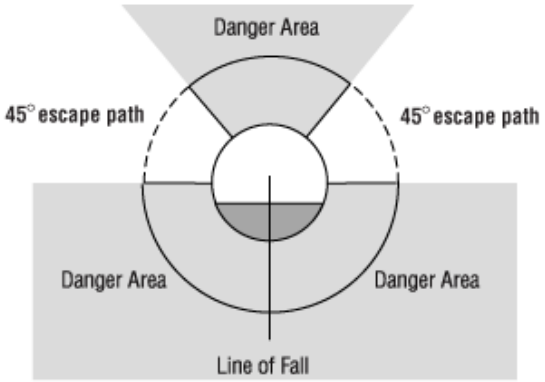
Chainsaws – Basic Saw Operations – Fact Sheet



WHAT ARE SOME SAFETY TIPS FOR FELLING (CUTTING DOWN A TREE)?

These tips apply specifically to felling trees that have a diameter less than the length of the chain saw blade, although some will generally apply to felling larger trees.

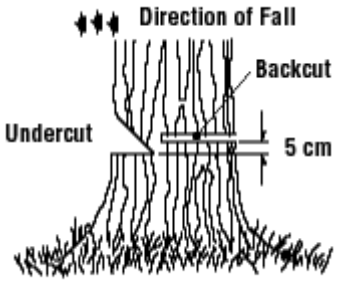
- Notify the proper authorities before felling near buildings, power lines, roads or railways.
- Study the tree for diameter and direction of lean before cutting.
- Choose the direction of fall according to the lean and shape of the tree (e.g., more heavily branched on one side) and wind direction. Other factors that can affect the direction of the fall include the health of the tree (any signs of decay?), contact or entanglement of branches with other trees, the slope of the land, and snow load.
- Check the condition of the tree to see if there are any branches that might fall on you while you are sawing.
- Make sure tree has a clear area to fall into.
- Check the fuel tank of the chain saw to make sure you have enough fuel to complete the job. Running out of fuel when making a cut can be hazardous.
- Clear work area of brush and debris before cutting down the tree and remove any lower limbs that may interfere with your work.
- Do not overreach or cut above shoulder level.
- Clear two escape paths on the side opposite from the intended direction of fall and at about a 45° angle opposite the line of fall.
- Ensure that people, equipment and tools are a safe distance from the tree and are not in the way of the falling tree or your escape routes.



- Warn persons in the area that a tree is falling (and make sure they heard the warning over the noise of the chain saw).
- Ensure that co-workers or by-standers are at least 2 tree lengths away from any and all trees that may be cut.
- If you are felling trees on sloping terrain, other workers should not be working downhill from you so that they are not exposed to sliding or rolling material.
- Move at least 7.5 m (25 feet) away when the tree starts to fall. Turn the chain saw off, and lay it in a safe place.
- Never take your eyes off a falling tree. Wait 30 seconds to allow debris to settle once the tree is on the ground.

How can I control the direction of the fall?

- If the tree has large buttress roots, remove pieces by first cutting vertically downward and then cutting horizontally. These cuts will make the tree trunk more “cylindrical” and make it easier to select the direction of fall.
- Prepare a felling notch (also called a directional or front notch) that is perpendicular to the direction of fall.
- First, cut downward at about a 45° angle so that the bottom of the cut is in about 1/5 to 1/4 of the tree trunk diameter.
- Next, make an undercut that meets the diagonal cut exactly and remove the piece. Ensure that the felling notch is facing the intended direction of fall.
- Make a backcut or felling cut on the opposite side of the tree that is about 2.5 to 5 cm (1 to 2 in.) above the horizontal undercut. Stop just short of the undercut, leaving about 1/10 of the diameter uncut to make a hinge that will help control direction of fall.
- Use ropes or wedges to guide fall in a direction other than natural lean. Wedges should be made of wood or plastic (not metal) to prevent kickback or damage to the chain in case of accidental contact.

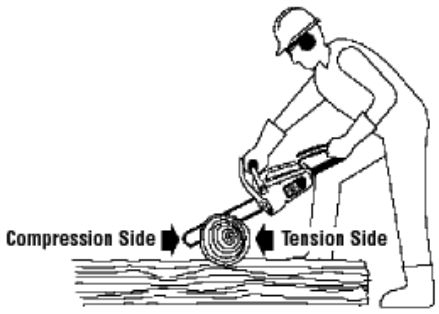


What are some tips for limbing (removing branches from felled trees)?

- Make sure that the tree is stable before limbing or debranching it.
- Do not cut limbs that are supporting the log – roll log first and ensure it is stable.
- Stand in a well-balanced position and where the ground is not slippery.
- Stand on the uphill side of the log if the ground is sloping.
- Do not stand on the log when limbing – you may slip off or the log may move or roll.
- Do not walk or move your feet when limbing on the same side of the tree where you are standing.
- For those lower branches, bend your knees, not your back.
- Do not let the tip of the guide bar (kickback zone) touch any branches or logs, or the ground below.
- Start limbing branches on the upper side of the tree so the lower ones can help balance it.
- Cut limbs on far side first, then near side.
- Be aware of branches or undergrowth that is under tension – watch out for branches springing back when cut.
- Do not reach over the guide bar to remove any loose branches.

What are some tips for bucking (cross cutting a log into shorter lengths)?

- Clear the work area.
- Plan the cut. Determine which way the piece will fall or roll after it is cut.
- Saw the log from the uphill side of a slope.
- If possible, prop up the end to be cut off using another log.
- Cut the compression side or zone first and the tension or “stretched” side last to prevent pinching of the blade.
- Keep feet away from the trunk while bucking.



What should I do when pruning (cutting limbs from a standing tree)?

- Keep both hands on the saw, both feet on the ground and maintain balance at all times.
- Work at shoulder height or below.
- Undercut limb first – then cut from the top (that is, cut in the compression zone first and then the tension area).

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