
21.0 CHAINSAWS

21.1 STARTING THE SAW

1. Check your saw (maintenance and handling)
2. Personal Protective Equipment:
 - a. Hard Hat (with Eye and Face protection)
 - b. Hearing Protection
 - c. Vest
 - d. Close Fitting Clothing
 - e. Radio (or other means of communication)
 - f. First Aid Kit
 - g. Hand Protection
 - h. Leg Protection (Chainsaw Pants – Ensure the protection meets 3,600 ft/min.
 - i. Foot Protection (Steel Toed Boots with good grip)
 - j. Whistle
3. Secured on the Ground
 - a. Position saw on level ground
 - b. Clear anything in way of saw with bar pointing away
 - c. Place a foot on the footplate or rear handle and grip the front handle with one hand.
4. Secured Between Legs
 - a. Spread legs slightly with one leg ahead of the other
 - b. Grip front handle of the saw with one hand.
 - c. Grip the rear handle firmly between your knees (with guide bar pointed away and ahead of you.
 - d. Ensure you are well balanced and have solid footing.

21.2 LIMBING

1. Grip the chainsaw firmly with both hands. Ensure that you have secure footing and do not move your feet while cutting.
2. Limb as close to the tree as possible to avoid leaving branch stubs or sharp points.
3. Beware of limbs that may be supporting the tree, under tension or hidden, that could spring up unexpectedly when log is released.
4. Position yourself so that you are not in line with the chain. Wherever possible, keep the tree trunk between you and the saw while cutting.

BEAIRSTO LEHNERS KETCHUM
ENGINEERING LTD.

5. Move limbs out of your way to reduce kickback and tripping hazards.
6. When limbing on sloped terrain, work from the uphill side of the tree as much as possible. This will reduce the risk of being pinned by shifting or rolling trees.
7. Personal Protective Equipment:
 - a. Hard Hat (with Eye and Face Protection)
 - b. Hearing Protection
 - c. Vest
 - d. Close Fitting Clothing
 - e. Radio (or other means of communication)
 - f. First Aid Kit
 - g. Hand Protection
 - h. Leg protection (chainsaw pants, ensure the protection meets 3,600 ft/min.
 - i. Foot Protection (Steel Toed Boots with good grip)
 - j. Whistle

21.3 FELLING TREES

1. Site Assessment
 - a. The lean of the tree
 - b. Weather (Wind, Snow, etc.)
 - c. Dangerous Tree Assessment
 - d. Hazardous Trees surrounding fall area
 - e. 90 Meter space between workers.
2. Plan Escape Route
 - a. Clear path at least 3 meters away from base of the tree
 - b. Path should be 45 degrees to the line of fall
 - c. Consider all obstacles, terrain and ground conditions
 - d. Stand behind trees bigger than the one you are felling if available
3. Felling Cuts
 - a. Undercut made on the side of the tree facing direction of fall
 - b. Undercut consists of two cuts, which join to produce a notch with a depth of $\frac{1}{4}$ to $\frac{1}{3}$ of tree diameter. Height should be at least $\frac{1}{3}$ of its depth.
 - c. Back cut is made on the opposite side of the tree, 2.5 to 5 cm above the deepest part of undercut.

**BEIRSTO LEHNERS KETCHUM
ENGINEERING LTD.**

4. Personal Protective Equipment:

- a. Hard Hat (with eye & face protection)
- b. Hearing protection
- c. Vest
- d. Close fitting clothing
- e. Radio or other means of communication
- f. First Aid Kit
- g. Hand protection
- h. Leg Protection (chainsaw pants, ensure protection meets 3,600 ft/min.
- i. Foot Protection (Steel Toed Boots with good grip
- j. Whistle

21.4 BUCKING

1. Avoid working in a stretching or over-reaching position. This can affect your balance, slowing your reaction time and lead to back ache or even back injury.
2. Position your feet to avoid having cut pieces fall on them.
3. Ensure adequate spacing between yourself and other buckers or work activities.
4. Be aware of the tension and a compression stress that may be in a log resting on uneven terrain, or on other logs or trees. Where these stresses occur, wood on one side of the log is being pulled, or under tension, while the other side is being squeezed or under compression.
5. Similar precautions to limbing.
6. Personal Protective Equipment:
 - a. Hard Hart (with eye & face protection)
 - b. Hearing protection
 - c. Vest
 - d. Close Fitting Clothing
 - e. Radio or other means of communication
 - f. First Aid Kit
 - g. Hand Protection]
 - h. Leg Protection (Chainsaw pants, ensure the protection meets 3,600 ft./min.
 - i. Foot Protection (Steel Toed Boots with good grip)
 - j. Whistle

**BEIRSTO LEHNERS KETCHUM
ENGINEERING LTD.**