

April 18, 2018

SWP-13 CHAIN SAW OPERATION

PURPOSE/APPLICATION

Chain saws are a versatile tool which can be used for many jobs. They are very useful for such jobs as clearing land, trimming trees, cutting fence posts, and cutting firewood. However, in the hands of a careless or non-competent operator, they can be hazardous.

PPE

 Canadian Plains Energy Services (CPE) minimum requirements

Gloves

- Eaco protection

Face protection • Limb protection

Hearing protection

TRAINING

Chain saw operation training

Note: if chain saws are to be used for falling trees, then additional training is required

HAZARDS & CONCERNS

Cuts/abrasions/amputation

Noise

Flying debris

Vibration

Splinters

Struck by object

PRECAUTIONS

Before Starting the Saw

- Study the operator's manual so that you are thoroughly familiar with all aspects of safe operational procedures.
- Check controls, chain tension, and all bolts and handles to ensure they are functioning properly and adjusted according to the manufacturer's instructions.
- Fuel the saw at least 10 feet from sources of ignition.
- Start the saw at least 10 feet from fueling area, with chain brake engaged, and with the chainsaw on the ground or otherwise firmly supported.

Chain Saw Operator

- Ensure all required PPE is in place and in good shape.
- During all Chainsaw and logging operations the operator will wear a high visibility vest.
- Three-point contact is the preferred method for starting a chainsaw as the saw is most secure. <u>Drop-starting is not recommended</u>
- Always use two hands to operate the saw.
- Keep hands on the handles and maintain secure footing while operating the chainsaw.
- Clear the area of obstacles. Do not cut directly overhead.
- Do not use the tip of the bar to do any cutting.
- Always work from the base of the saw.
- Cut with engine at full throttle.



SWP-13 CHAIN SAW OPERATION

April 18, 2018

- When walking with the chain saw always point the bar behind you and ensure the chain brake is engaged. Chainsaws are designed to be carried in the right hand.
- Never make adjustments to chain or guide bar while motor is running.

Bucking of Fallen Trees

- When bucking, identify and control hazards. (obstacles, congestion, nails)
- Always ensure your buddy or partner working with you is a safe distance away. When working in high traffic areas, your buddy or partner should restrict people from entering danger zone (i.e. directly behind or ahead of saw chain travel direction - flying chain parts or metal fragments)
- Check area for hang-ups and/or snags under tension. Stems under tension are referred to as "loaded" stems. Uncontrolled release of tension from a saw cut creates a very serious hazard to the operator.
- Check area for overhead hazards when clearing hang-ups and/or snags.
- Before commencing, clear work area for 5 ft of all debris and have an escape route established. Make sure you know which direction you need to go in case a quick exit is required.

Kickback - Avoiding kickback should be a primary concern of all chain saw operators. To avoid kickback, take these precautions:

- Keep a firm two-hand grip on the saw with your thumb securely wrapped under the front handle.
- Avoid standing directly in line with the cut.
- Do not cut above shoulder height.
- Be alert for obstructions such as limbs and twigs which could catch in the chain.
- Use safe operating techniques at all times.

Fueling the Saw

- Utilize an environmental pad when refueling to soak up any spills.
- Refueling will be conducted with engine shut off. Allow engine to cool down and have a fire extinguisher handy.
- Never smoke while refueling and never refuel around any open flames or sparks.
- Replace caps that have been damaged and ensure that vents are working.
- Refuel in well-ventilated area.
- Always follow manufacturer's specs when mixing the fuel and oil.

Transport and Storage

- Be sure the saw can not tip over and spill gasoline.
- Transport saw in truck box or on deck.
- Protect yourself and the chain with a chain guard or by placing the saw in a carrying case.
- For storage, drain the fuel tank in a safe area. Run the engine at idle until it stops to remove the remaining gas from the engine. Remove the chain and store it in a container of oil.

April 18, 2018

CHAIN SAW OPERATION

REFERENCES / ADDITIONAL INFORMATION

None

REGULATIONS

Alberta OHS Code - Part 23 Tools, Equipment and Machinery

Chainsaws 376

- 1. An employer must ensure that a chain saw
 - a. is operated, adjusted and maintained in accordance with the manufacturer's specifications, and
 - b. is designed or equipped with a mechanism that minimizes the risk of injury from kickback when the saw is in use.
- 2. A worker must not adjust the chain of a chain saw while the saw's motor is idling.

Saskatchewan OHS Regulation

Chain saws 146

- 1. An employer, contractor or supplier shall ensure that a chain saw is:
 - a. equipped with an effective chain brake or a chain and bar that is designed to minimize the possibility of a kickback; and
 - b. designed and constructed so that the chain stops when the engine is at idle.
- 2. Where a chain saw is to be used by a worker operating from an elevated cage or basket, the width of which is less than twice the length of the chain saw, an employer or contractor shall ensure that a secondary platform is installed outside the cage or basket and is used to store the chain saw and to start the chain saw engine.
- 3. An employer or contractor shall ensure that a worker who operates a chain saw:
 - a. stops the chain while the worker is walking with the saw;
 - b. does not operate the saw at a height that is higher than the worker's shoulder level;
 - c. holds the saw firmly in both hands while operating the saw; and
 - d. maintains the chain saw, cutting chain and safeguards in safe operating condition.
- **4.** A worker who operates a chain saw:
 - a. shall stop the chain while the worker is walking with the saw;
 - b. shall not operate the saw at a height that is higher than the worker's shoulder level;
 - c. shall hold the saw firmly in both hands while operating the saw;
 - d. shall maintain the chain saw, cutting chain and safeguards in safe operating condition; and
 - e. shall maintain the chain saw so that the chain stops when the engine is at idle.



April 18, 2018

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Chain Saws

12.72 Standards

- 1. A chain saw must meet the requirements of CSA Standard Z62.1-95, Chain Saws.
- **2.** A chain saw must have a chain brake that activates automatically upon kickback regardless of the position of the power head or operator's hands.
- **3.** A chain saw manufactured before January 1, 1999, with a guide bar exceeding 66 cm (26 in), measured from the top of the cutters at the bar tip to the point of the "dogs" or "bumper spikes", is exempt from the requirement for a chain brake.

12.73 Stopping chain movement

A chain saw chain must be stopped before the saw operator moves from cut to cut, unless the next cut is in the immediate area and the saw operator can safely move to the next cutting position.

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