

Title: Wood Chipper Operating Procedure & Guidelines
Department: Grounds Shop
Effective Date: March 28, 2019

PURPOSE

The intent of this process is to provide a safety procedure for operating the wood chipper/shredder machine. The following procedures and equipment must be used at all times when operating the wood chipper/shredder machine to ensure safety requirements described below.

RESPONSIBILITY

It is the responsibility of the Grounds Manager and designated machine operator(s) to ensure that all safety and security requirements are met, and that all operating and clean-up procedures are followed and logged accordingly.

PROCEDURES

DO NOT use this machine unless you have been instructed in its safe use and operation and have been given permission.

Required Personal Protective Equipment (PPE)

1. Hard hat
2. Ear plugs
3. Protective clothing
4. Safety glasses/face shield
5. Snug-fitting, non-gauntlet type gloves
6. Work boots

Required Training:

1. Mandatory operation of wood chipper video shown below in references section

Pre-operational Safety Checks

- ✓ Locate and ensure you are familiar with all machine operations and controls.
- ✓ Check for loose/missing nuts, bolts and screws. Tighten and/or replace as needed.
- ✓ Ensure all guards are fitted, secure and functional. Do not operate if guards are missing or faulty.
- ✓ Ensure the chipper chute, feed intake, and cutting chamber are empty and free of all debris.

Operational Safety Checks

- ✓ Know how to stop the machine and disengage it quickly.

- ✓ Keep bystanders well clear from the machine while it is operating.
- ✓ If you need to push material through the shredder hopper, use a small diameter stick. Do not use your hands or feet.
- ✓ If the impeller strikes a foreign object or if the machine starts making an unusual noise or vibration, immediately shut the engine off. Inspect for damage and make repairs as necessary.

Operating the Machine Job Safety Analysis

The following tasks and controls must be followed to avoid any of the hazards listed below:

TASK	HAZARDS	CONTROLS
1. Secure chipper to towing vehicle.	1a. Pinching fingers, hands, legs, and feet	1a1. Avoid pinch points when connecting chipper hitch, safety chain, and brake lights to towing vehicle.
2. Prepare work area.	2a. Traffic hazards, injuries to bystanders and co-workers.	2a1. Set out warning signs or traffic cones. 2a2. Leave room on curbside of chipper for workers to maneuver. 2a3. Clear feeder table of all objects, position discharge chute to direct chips in desired direction.
3. Operate chipper.	3a. Flying debris entering eyes or injuring head 3b. Cutting injuries to hands, body parts 3c. Hearing loss	3a1. Wear safety glasses or face shield and <u>hard hat</u> , do not feed foreign material such as stones, nails, or sweepings into chipper. 3b1. Do not wear loose-fitting clothing or gauntlet-type gloves. 3b2. Do not place hands, arms, feet, legs, or any body parts past the front plane of the feeder table when the chipper is in operation. 3b3. Feed chipper from the <u>curb side</u> of the center line and immediately pivot away from the feeder table when material is being pulled into the chipper. Use large limbs to push small pieces through blades. If chute <u>becomes clogged</u> or chipper requires maintenance, fueling, or lubrication, turn off engine and remove key before performing these operations. Do not operate chipper when panels or <u>chute are</u> removed. 3c1. Wear ear plugs or ear muffs

Ending Operations, Cleaning Up & Service

- ✓ Remove any foreign material from in and around the motor, blades and guards.
- ✓ Before cleaning, repairing, or inspecting, stop the engine and make sure the impeller and all moving parts have stopped. Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.
- ✓ Keep the work area and implement storage area in a safe, clean and tidy condition.
- ✓ Equipment should undergo regular service every 240 hours.
- ✓ Cutting blades should be changed out 3 times a year, depending on service hours and visual inspection

Potential Hazards and Injuries to Avoid

- ❖ Rotating cutting blades.
- ❖ Noise.
- ❖ Hair/clothing getting caught in moving machine parts.
- ❖ Eye injuries.
- ❖ Kickback.
- ❖ Flying debris.

Below is a list of DON'Ts when operating this machine:

- Do not use faulty equipment. Report suspect machinery immediately.
- Never operate without the shredder hopper, chipper chute, or discharge chute properly attached to the machine.
- Do not operate on an un-paved, gravel or uneven surface.
- Never run an engine indoors or in a poorly ventilated area.
- Do not attempt to shred or chip material larger than specified on the machine or in the manual.
- Do not put your hands and feet near rotating parts or in the feeding chambers and discharge opening.
- Do not allow processed material to build up in the discharge area.
- Never remove fuel cap or add fuel while the engine is hot or running. Allow engine to cool for at least 15 minutes before refueling.
- Never attempt to unclog the feed intake or discharge opening or inspect and repair the machine while the engine is running.

This Safe Work Procedure does not necessarily cover all possible hazards associated with this equipment and requires operators to use good judgement. It is designed as a guide to be used to compliment training and as a reminder to operators prior to equipment use.


REFERENCES

Video for training purposes:

Vermeer Brush Chipper Operation and Safety Video (without lower feed stop bar)

www.youtube.com/watch?v=Z_3_XYF3taU&list=PL6906AE08CB4860E7&index=3&t=0s

APPROVED


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Date