Wood Chippers and Shredders

Objective: Operate wood chippers and shredders safely.

How to Use This Module

Sharp knives and powerful engines make wood chippers and shredders a dangerous tool.
For this module:

- Read the information on hazards and safety tips below.
- Ask your supervisor to demonstrate how to use a wood chipper or shredder safely.
- Practice safety techniques while your supervisor observes.
- Review the important points.
- Take the True/False quiz to check your learning.

Background

The knives on wood chippers and shredders are sharp enough to slice through fresh wood. The engines are powerful enough to grind thick branches and limbs. Those same knives and engines would make short work of a worker's finger, a hand, or an arm. Workers can be pulled into the knives or struck by the chipper disc hood. Workers should never operate this equipment without training.

Hazards of Wood Chippers and Shredders

- Workers feeding materials into self-feeding chippers or shredders can get caught in chipper knives. A worker's limb can be shredded. For more details on avoiding this type of accident, see the Tailgate Safety Training module Caught-In or Caught-Between Objects.
- An unlatched, improperly secured, or damaged hood can be thrown from the chipper or shredder. Fixtures can easily be thrown if they come into contact with the rotating knives.

Safety Tips for Selecting the Work Area

- Position the chipper or shredder so that workers do not have to stand on slopes when feeding material into the machine.
- Keep the area around the chipper or shredder free of tripping hazards.
- Put up warning signs to keep the public a safe distance from the work area.
- Ensure that the dislodging chute is positioned to prevent chips from being blown in any direction.
Safety Precautions for Knives

- Wear a hard hat, sturdy slip-resistant footwear, eye protection, hearing protection, gloves without cuffs, and pants without cuffs.
- Keep shirt sleeves buttoned and shirts tucked into pants.
- Read the operator’s manual and complete training on proper use and safety precautions before using a chipper or shredder.
- Do not work alone when using a chipper or shredder.
- Test all safety and emergency shut-off devices before operating the chipper or shredder.
- Make sure the material to be chipped is free from stones, metal, and other foreign objects.

Safety Precautions for Disc and Drum Hoods

- If the machine is out of order, tag it with a DO NOT USE tag. If possible, lock it out.
- Make sure that the hood covering the knives is completely closed.
- Run the machine at the lowest possible speed and listen for noises that might indicate broken parts.
- If you hear unusual noises, shut down the machine right away. Have it repaired by a qualified technician.
- Allow all internal machine parts to come to a complete stop before opening the hood covering the disc or drum.
- Wear gloves when handling the knives.
- Knives must be changed if damaged.
- When sharpened knives are fitted, maintain the clearance between the knives and the anvil.

Review These Important Points

- Keep the area around the chipper or shredder free of tripping hazards.
- Make sure that the hood covering the knives is completely closed.
- Knives must be changed if damaged.

About These Modules

The author team for the training modules in the landscape and horticultural tailgate training series includes Dee Jepsen, Program Director, Agricultural Safety and Health, Ohio State University Extension; Michael Wonacott, Research Specialist, Vocational Education; Peter Ling, Greenhouse Specialist; and Thomas Bean, Agricultural Safety Specialist. Modules were developed with funding from the Occupational Safety and Health Administration, U.S. Department of Labor, Grant Number 46E3-HT09.

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Answer Key: 1 = F, 2 = T, 3 = F, 4 = T, 5 = F.
Wood Chippers and Shredders

True or False?

1. Work alone when using wood chippers or shredders. T F

2. Do not chip material that has stones, metal, and other foreign objects in it. T F

3. Run the machine at the highest possible speed and listen for noises that might indicate broken parts. T F

4. If a chipper or shredder sounds unusual, turn it off and call for a technician. T F

5. Do not wear gloves when handling the knives. T F