Safe Operation of Portable Circular Power Saws

Objective: Use portable circular power saws safely.

How to Use This Module

Portable circular power saws are powerful but dangerous tools. For this module:

- Read the information below on saws and safe work practices.
- Ask your supervisor to demonstrate safe practices.
- Ask your supervisor to observe as you practice safe practices.
- Review the important points.
- Take the True/False quiz to check your learning.

Background

Portable circular power saws can be used in various landscaping and horticulture tasks:

- Constructing raised garden beds.
- Constructing cold frames.
- Performing greenhouse maintenance or repairs.

Keep the Work Area Safe

- Keep extension cords out of water.
- Keep the work area free of clutter and debris.
- Use proper lighting.
- Have adequate ventilation.

What Makes a Saw Safe?

- Sharp blades.
- A three-conductor plug, unless it is double insulated.
- Properly functioning rubber-coated extension cords without cuts, tears, or breaks in the outer coating.
- Properly functioning guards that enclose the portion of the blade above and below the material being cut.
Portable power saw guards should be able to move freely and should almost totally enclose the blade except when a cut is being made. Then the guard should rotate to allow the blade to be exposed while making the cut. However, the portion of the blade extending below the material being cut will not be covered by a guard. The depth of the cut should be adjusted to limit the amount of blade extending through the material being cut to 1/2 inch or less.

Follow Safe Work Practices

- Wear eye protection.
- Use appropriate protection when cutting wood treated with chemicals like arsenic — protective gloves, eye protection, or disposable dust mask.
- Replace dull or burned saw blades.
- Lift the saw from the cut after the blade stops.
- Carry the saw by the handle and use the handle to raise or lower the saw.
- Use the correct blade for the material being cut.
- Disconnect power before cleaning the saw, changing blades, or making adjustments.
- Use power hand saws appropriately.
- Place materials on a firm surface for cutting (not on hands, arms, across the knees or feet).
- Cut the materials beyond the end of a support so that the waste falls clear.
- Adjust the blade depth to limit the amount of blade exposed below the material being cut to 1/2 inch or less.

Review These Important Points

- Keep work areas clean and free of clutter.
- Always wear goggles or other eye protection.
- Use the correct blade for the material being cut.
- Carry the saw by the handle and keep fingers off the trigger switch.
- Make sure power saws are grounded with a three-prong conductor plug.
- Replace all damaged parts and cords.
- Make sure guards are in place and functioning.

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 = T, 4 = F, 5 = T.
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Name____________________________________

True or False?

1. Eye protection is not necessary when using a power saw. T F
2. If an extension cord is damaged, it should be replaced immediately. T F
3. Carry the saw by the handle and not with a finger on the switch trigger. T F
4. One blade can be used for all saw cuts. T F
5. Never use an arm or leg as a sawhorse. T F