



Tailgate Safety Training for Landscaping and Horticultural Services

Agricultural Safety Program, 590 Woody Hayes Drive, Columbus, OH 43210

Lockout and Tagout

Objective: Lockout and tagout equipment properly.

How to Use This Module

Lockout and tagout are important to prevent injuries from powered machinery. For this module:

- Read the information below carefully:
 - ◆ What lockout and tagout are.
 - ◆ The purpose of lockout and tagout.
- Ask your supervisor to demonstrate locking out and tagging out on a piece of equipment.
- Discuss how lockout and tagout apply to jobs you do.
- Review the important points.
- Take the True/False quiz to check your learning.

Background

To **lockout** means to place a lock on a device. The lock prevents electrical power from going to a piece of equipment and keeps the equipment from operating. Also, the lock may prevent energy from being released; for example, a hydraulic system is locked out in a specific position to prevent it from moving. The goal is to prevent unexpected starting or energizing of equipment during service or repair. A switch or lever is locked in the OFF or LOCKED position to prevent movement of equipment while maintenance is done.

To **tagout** means to place a warning tag on a switch or other shut-off device to warn others not to start the piece of equipment. Tagout should only be used with lockout, unless locking out the equipment is impossible.

Equipment should be locked out while being repaired. In addition to lockout, any stored energy in the equipment should be blocked from release. For example, hydraulic equipment in a raised position could be lowered by accident during the repair. Either lower the equipment first or support the equipment in the raised position. Electrical energy may be stored in a battery or capacitor. Amputations, fractures, or even death could occur while cleaning or repairing equipment. For example, locking out the power to grinding equipment, sharpening machines, soil mixing or filling equipment, growth chambers, limb or brush shredders, stump grinders, and other equipment is critical to avoid serious injury.

Lockout and Tagout Procedures

- Notify all affected employees that a lockout/tagout procedure is ready to begin.
- Turn off power to the equipment at the control panel.
- Turn off or pull the main disconnect. Be sure all stored energy is released or restrained.
- Check all locks and tags for defects.
- Attach your safety lock or tag on the energy-isolating device.
- Try to restart the equipment at the control panel to ensure that it is secured.
- Check the machine for possible residual pressures, particularly for hydraulic systems and reciprocating and conveying equipment.
- Complete the repair or servicing work.
- Replace all guards on the machinery.
- Remove the safety lock and adapter.
- Restart the equipment to ensure proper and safe operation.
- Let others know that the equipment is back in service.

Common Mistakes in Lockouts

- Leaving keys in the locks.
- Locking the control circuit and not the main disconnect or switch.
- Not testing the controls to make sure they are definitely inoperative.

Review These Important Points

- Equipment should be locked out while being repaired.
- Lockout means to place a lock on a device that prevents energy release.
- Tagout means to place a tag on a switch or other shut off device that warns not to start that piece of equipment.
- Make sure to remove keys from the locks.
- Lock the main switch.
- Test the controls to make sure they are definitely inoperative.
- Replace all guards on the machinery after servicing.
- Restart the equipment to ensure safe and proper operation.

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 = T, 2 = T, 3 = F, 4 = T, 5 = T.

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Name _____

True or False?

- | | | |
|---|---|---|
| 1. To lockout means to place a lock on a device that will prevent the equipment from starting or moving. | T | F |
| 2. To tagout means to place a tag on a switch or other shut-off device warning others not to start that piece of equipment. | T | F |
| 3. Equipment doesn't need to be locked out while being repaired. | T | F |
| 4. Never leave the key in the lock when locking out. | T | F |
| 5. Always test the controls in a lockout to make sure they are definitely inoperable. | T | F |