

These rules may be updated periodically and may be amended as necessary.

Lockout/Tagout

All employees need to be protected from accidental or unexpected activation of mechanical and/or electrical equipment. Therefore, any individual engaging in the maintenance, repairing, cleaning, servicing, or adjusting of any machinery or equipment will abide by the following procedures.

Lockout is a first mean of protection; warning tags only supplement the use of locks. Tags (such as “Do not start,” “Do not operate”) alone may be used only when the application of a lock is not practically feasible and with approval of the appropriate supervisor.

A. Definitions

1. *Lockout*: The practice of using keyed or combination security devices (“locks”) to prevent the unwanted activation of mechanical or electrical equipment.
2. *Tagout*: The practice of using tags in conjunction with locks to increase the visibility and awareness that equipment is not to be energized or activated until such devices are removed.
3. *Hazardous Motion*: Movement of equipment under mechanical stress or gravity that may abruptly release and cause injury. Hazardous motion may result even after power sources are disconnected. Examples are coiled springs, raised hydraulic equipment, and any sources of potential energy that may cause injury.
4. *Energy Control Procedures*: Proper use of lockout/tagout equipment to ensure safe work practices.

B. Responsibilities.

1. Department/division heads will:

- a. Ensure that all appropriate personnel are competent to follow lockout/tagout procedures.
- b. Provide training to employees affected by lockout/tagout procedures. Provide re-training when job, equipment, new hazard arises or if supervisor feels knowledge refresher is advisable for safety of employees.
- c. Inspect energy control procedures and practices at least annually to ensure that general and specific lockout/tagout procedures are being followed.



- 1) Inspections must be carried out by persons other than those employees directly utilizing energy control procedures.
 - 2) Inspections will include a review between the inspector and each authorized employee, concerning that employee's responsibilities under the energy control procedure being inspected.
 - 3) Certify that periodic inspections have been performed [Appendix I, Form 11].
- d. Maintain a list of equipment, machinery, and operations that require the use of lockout/tagout procedures. The file will include the location, description, power source, and primary hazards of equipment/machinery, a list of the primary operators/maintenance personnel, and a list of lockout/tagout equipment that is used and maintained on site.
 - e. Ensure that each supervisor adheres to procedures.

2. Supervisors will:

- a. Ensure that each employee or contractor engaging in work requiring lockout/tagout of energy sources understands and adheres to adopted procedures.
- b. Assure that employees have received training in energy control procedures prior to operating the machinery or equipment.
- c. Provide and maintain necessary equipment and resources, including accident prevention signs, tags, padlocks, seals, and/or other similarly effective means.

3. Employees will:

- a. Adhere to specific procedures as outlined in this document for all tasks that require the use of lockout/tagout procedures as defined.
- b. Maintain lockout/tagout supplies in maintenance vehicles.

C. Specific Procedures

1. Preparation for Lockout/Tagout.

- a. Make a survey to locate and identify all isolating devices to be certain which switch(es), valve(s), or other energy isolating devices apply to the equipment to be locked or tagged. More than one energy source (electrical, mechanical, stored energy, or others) may be involved.

2. Sequence of Lockout or Tagout System Procedure.

- a. Notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
- b) If the machine or equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
- c) Operate the switch, valve, or other energy isolating device(s) so that the equipment is isolated from its energy source(s). Stored energy (such as that in springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.
- d) Lockout/Tagout the energy isolating devices with assigned individual lock(s) or tag(s).
- e) After ensuring that no personnel are exposed, and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. **CAUTION:** Return operating control(s) to neutral or off position after the test.
- f) The equipment is now locked out and tagged out.

3. Restoring Equipment to Service.

- a) When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps will be taken.
- b) Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
- c) Check the work area to ensure that all employees have been safely positioned or removed from the area.
- d) Verify that the controls are in neutral.
- e) Remove the lockout devices and reenergize the machine or equipment. **NOTE:** The removal of some forms of blocking may require re-energization of the machine before safe removal.
- f) Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for used.