



SAFETY TIPS

Lockout/Tagout

The purpose of lockout/tagout (LO/TO) is to help prevent injury from the unexpected startup of equipment or release of stored energy that can occur during servicing and maintenance operations. Hazardous energy sources include, but are not limited to: electrical, mechanical, hydraulic, pneumatic, chemical, and thermal. Some examples of activities that could require lockout/tagout would be cleaning or unjamming machinery, which often requires a body part being at the point of operation. Additional information about these procedures can be found at [29 CFR 1910.147](#).

Written Program

A written program and training is required to ensure the employees are aware of the hazards involved if an unexpected startup of equipment occurs and the company's methods to prevent injuries. All employees involved in working on or around machinery shall be trained in lockout/tagout upon hire, whenever there is a change in equipment and/or machinery procedures or whenever there is evidence that this procedure is being violated. Employees need to be trained to ensure that they know, understand and follow the applicable provisions of the hazardous energy control procedures. The training must cover at least three areas: aspects of the employer's energy control program; elements of the energy control procedure relevant to the employee's duties or assignment; and the various requirements of the standards related to lockout/tagout.

Definitions

- **Authorized personnel:** This is an associate who performs servicing or maintenance on equipment and machinery. This associate implements lockout/tagout procedures to guarantee his or her own protection.
- **Energized:** Equipment and machinery is energized when they are connected to an energy source or contains residual or stored energy.
- **Energy source:** This is any source of electrical, mechanical, hydraulic, pneumatic, chemical, steam, thermal or other energy.
- **Lockout:** Placing a lock on an energy-isolating device according to an established procedure, that ensures that the fixture, equipment or machinery cannot be energized until the lock is removed by the person who placed it there.
- **Lockout device:** This is a device that utilizes a positive means such as a lock to hold an energy-isolating device in a safe position and prevent the energizing of fixtures, equipment or machinery.
- **Tagout:** This is the placement of a tagout device on an energy-isolating device, according to an established procedure, clearly marked by means of a tag that states who has the fixture, equipment or machinery shut down and that the equipment or machinery must not be operated until the tagout device is removed by the Authorized person who placed it there.
- **Tagout device:** This is any prominent warning device, such as a tag and a means of attachment that can be securely fastened to an energy-isolating device according to established procedure. The tag indicates that the equipment or machinery to which it is attached must not be operated until the tagout device is removed according to the energy control procedure. The attachment method must be substantial and not easily removed.

Basic rules of a lockout or tagout system:

- All energy sources to fixtures, equipment and/or machinery shall be locked out or tagged out to protect against accidental or inadvertent operation when such operation could cause injury to personnel.
- Do not attempt to operate any switch, valve or other energy isolation device when it is locked or tagged out.
- Have only Authorized personnel place and transfer lockout/tagout devices
- Never remove a lock or tag for another associate. Only the associate placing the lock or tag may remove it. If there is a need to remove another associate's lock or tag in an emergency, only a Supervisor or designated authority may do so after making every effort to contact the owner of the lock or tag.
- Note that isolating a piece of equipment from its source may not eliminate all potential hazards. Stored energy may be present within the equipment or machinery.

Procedures

Develop, implement and enforce an energy control program.

- Comply with the additional energy control provisions in OSHA standards when machines or equipment must be tested or repositioned, when outside contractors work at the site, in group lockout situations, and during shift or personnel changes.
 - Develop, document, implement and enforce written energy control procedures for each energy source requiring lock out/tag out [See [29 CFR 1910.147\(c\)\(4\)\(i\)](#) for an exception to the documentation requirements.]
 - Develop, implement and enforce an effective tagout program if machines or equipment are not capable of being locked out.
 - Ensure that lockout/tagout devices identify the individual users.
 - Ensure that new or overhauled equipment is capable of being locked out.
 - Establish a policy that permits only the employee who applied a lockout/tagout device to remove it. [See [29 CFR 1910.147\(e\)\(3\)](#) for exception.]
 - Inspect energy control procedures at least annually.
 - Provide effective training as mandated for all employees covered by the standard.
 - Use lockout devices for equipment that can be locked out. Tagout devices may be used in lieu of lockout devices only if the tagout program provides employee protection equivalent to that provided through a lockout program.
 - Use only lockout/tagout devices authorized for the particular equipment or machinery and ensure that they are durable, standardized and substantial.
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- After the service or repairs have been completed, the authorized personnel is the only person(s) that can remove or transfer the lock and tag and determine if it is safe to reenergize the equipment.
 - Have the Authorized personnel verify that the machine is de-energized and isolated
 - Identify secondary and stored energy sources
 - Look for all sources of energy (e.g. switches, junction boxes, etc.)
 - Secure the equipment and/or machine with a lock and/or tagout device by an Authorized Person
 - The lock must identify the person who applied it by labeling or placing a tag