

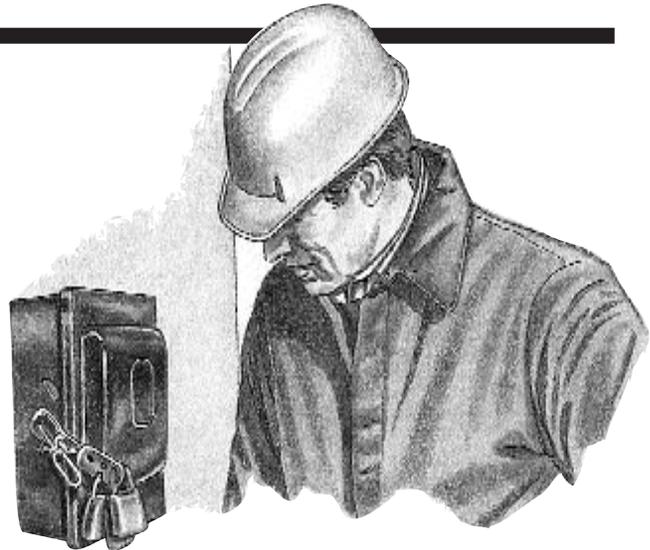
Lockout/Tagout Is Serious Business

Machinery or equipment that starts up unexpectedly or releases stored energy while someone is performing maintenance or repairs can cause serious injury. Lockout/tagout procedures prevent these types of accidents from happening. Although only authorized employees are permitted to perform lockout procedures and to remove locks and tags, all employees need to understand lockout and tagout procedures.

What Is Lockout?

Lockout means putting a lock on a machine or piece of equipment to make sure it stays off. Electrical, mechanical, chemical, thermal, hydraulic, pneumatic, raised-weight, pressurized and coiled-spring systems must be neutralized for safety during maintenance and repairs.

A lockout device is a lock, block or chain that keeps a switch, valve or lever in the “off” position. Lockout locks must meet special requirements and must be identified by the name of the worker who installs and removes them. Only use locks provided by your employer for lockout purposes. Never use these locks for toolboxes, storage sheds or other uses.



What Is Tagout?

When equipment can't be locked out, it must be tagged out with a special tag that warns workers to not start up the equipment. A tag is not a physical restraint. Tags must clearly state: “Do not operate or remove this tag.” Tags must be placed on each handle, push button, lever or circuit breaker used to energize the equipment.

Tags must meet special requirements and show the identity of the authorized employee. Both locks and tags must be strong enough to prevent unauthorized removal and to withstand various environmental conditions.

LOCKOUT STEPS

1. Identify all parts of any systems that need to be shut down. Find the switches, valves or other devices that need to be locked out.
2. Tell employees that the equipment will be locked out and why.
3. Locate all power sources, including stored energy in springs or hydraulic systems.
4. Neutralize all power at its source. Disconnect electricity; block moveable parts; release or block spring energy.
5. Drain or bleed hydraulic and pneumatic lines.
6. Lower suspended parts to rest positions.
7. Lock out all power sources. Use a lock designed for this purpose. Each worker should have a personal lock.
8. Test operating controls. Turn on all controls to make sure the power doesn't go on.
9. Turn controls back to “off.”
10. Perform necessary repairs or maintenance.

Restarting Equipment

After the maintenance or repair work is completed, only the same authorized employee who installed the lock may remove and restart the equipment. Before restarting the equipment:

- make sure all other workers are a safe distance away.
- remove tools from the equipment.
- reinstall machine guards.
- notify workers that the energy is restored and the machine is working.

How Much Do You Know About Lockout/Tagout?

Electrical shock, burns, amputations and death are some of the horrible consequences of not locking and tagging out equipment before servicing or repairing it. Lockout/tagout procedures are a proven way to reduce accidents from unexpected start-up. Although only authorized employees are permitted to perform lockout/tagout, to be safe, you should know and understand the procedures. Take this quiz to find out how much you know about lockout/tagout.

1. Lockout is accomplished by:

- a. locking the gates at your job site.
- b. shutting down equipment for service or maintenance work.
- c. installing a lockout device at the power source so equipment can't be operated.
- d. tagging equipment to indicate it shouldn't be used.
- e. none of the above.

2. Attaching a warning tag to a power source or piece of machinery telling others not to operate it is called:

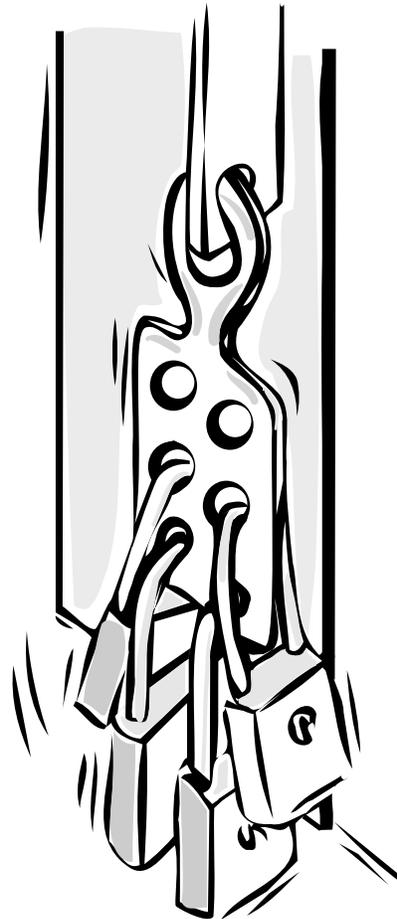
- a. lockout.
- b. tagout.
- c. shutout.
- d. none of the above.

3. OSHA rules require your employer to:

- a. maintain a written copy of the lockout/tagout procedures.
- b. make the procedures available to you.
- c. instruct you in lockout/tagout procedures.
- d. all of the above.

4. Lockout/tagout procedures are in place to prevent:

- a. the accidental start-up of equipment.
- b. workers from taking shortcuts while servicing equipment.
- c. the release of stored, residual or potential energy.
- d. all of the above.



5. Anytime electrical equipment is deactivated for repair:

- a. it must be locked or tagged at the point where it can be turned on.
- b. anyone can turn it back on.
- c. it must stay off for 24 hours.
- d. none of the above

6. Locks provided by your company for lockout purposes:

- a. must be strong enough to prevent unauthorized removal.
- b. can be used to lock your tool box.
- c. can be taken home when not in use.
- d. none of the above.

7. General requirements for your lockout/tagout procedure include:

- a. Circuits and equipment must be disconnected from all electrical energy sources.
- b. Control devices can't be the only means of de-energizing equipment.
- c. Interlocks for electrical equipment may not be used as a substitute for proper procedures.
- d. all of the above.
- e. none of the above.

8. Tags must have a statement on them that:

- a. refers you to the authorized person.
- b. says what time the tag should be removed.
- c. prohibits unauthorized operation of a switch and removal of the tag.
- d. tells you where the tagout procedures are located.

Answers: 1. c; 2. b; 3. d; 4. d; 5. a; 6. a; 7. d; 8. c.