LOCKOUT/TAGOUT

IDENTIFY

Lockout/tagout ensures that hazardous energy sources are under the control of the workers needing protection.

Lockout often involves workers using a padlock to keep a switch in the "off" position, or to isolate the energy of moving parts.

Tagout is how you tell others that the device is locked out, who locked it out, and why.

Serious and fatal incidents have occurred when people assumed that electricity or machinery was turned off, but it wasn't. Electric shock, sudden movement of sharp machine parts, release of pressure, falling counterweights — these are just some hazards that can result when energy is unexpectedly released.

COMMUNICATE AND CONTROL

To lockout a piece of equipment is to isolate its energy source, which physically locks the system in a safe mode. In most cases, these devices will have loops or tabs which can be locked to a stationary item in a safe position (de-energized position).

Identify all energy sources

Forms of energy include electrical, mechanical, potential (stored energy, such as in suspended loads), hydraulic, pneumatic, thermal, and chemical.

To identify energy sources, trace wiring, lines, and piping within and connected to the piece of equipment. Equipment specifications, drawings, and operating manuals can also guide you to effectively shutting off a particular source of power.

De-energization

De-energization is a process that is used to disconnect and isolate a system from a source of energy in order to prevent the release of that energy. By de-energizing the system, you are eliminating the chance that the system could inadvertently, accidentally, or unintentionally cause harm to a person through movement, or the release of heat, light, or sound.

There are four basic actions in any lockout:

1. Identify all energy sources connected with the work.

2. De-energize, disable, redirect, or stop all energy from doing what it normally does.

3. Apply restraint devices (e.g., lock, scissors, chain, or block) to keep the system from starting up while you work on it.

4. Confirm that you've reached a zero-energy state.

A lock is your personal lock that can only be opened with your key. Once you apply the lock or other restraint device, you have to tag it. The tag must indicate the following:

- Who you are.
- Who you work for.
- Why the machine or system is locked out.
- The date when the lock was applied.

Once each energy source has been locked out and tagged, you must test the equipment to verify a zero-energy state.
Many plants or industrial establishments will have specific procedures for lockout/tagout.

The Workplace Safety and Health Regulation outlines the requirement for lockout in Part 16.14 to 16.18. As well, employers should develop, implement, and train workers on the safe work procedure for lockout.

FACTS AND TIPS

Roles and responsibilities

All workers play a role in creating and maintaining a safe workplace. If you are working with a piece of equipment that is damaged, broken or needs maintenance, remove it from your work area, report the problem to your supervisor and write any supported documentation.

FACTS AND TIPS

Lockout/tagout procedures

The written lockout/tagout procedures will identify what needs to be done, when it needs to be done, what tools are available to do it, who is supposed to do it, and who needs to be notified.

The document should specify the following:

- The actual specific machine, equipment, or process shutdown and isolation process.
- How and where the lockout/tagout devices are installed.
- How stored energy is controlled and subsequently deenergized.
- How the isolation can be verified.
- Work instructions will identify how the lockout/tagout process is to be carried out in a step-by-step manner including how stored energy is controlled and de-energized, how isolation can be verified, and how and where lockout devices are installed. Work instructions are specific to the machine, equipment, or process, and include pictures or images of what is being described. An organization will have one lockout/tagout program document, and as many sets of work instructions as required, depending on the number of systems that require lockout/tagout.

THE QUIZ

1. Lockout is one way to control hazardous energy:
   TRUE_____ FALSE_____

2. Tagout is only required when other workers are present:
   TRUE_____ FALSE_____

3. Who should have access to the locked-out device/equipment?
   a) Only the worker that attached the lock
   b) Everyone on the crew
   c) The site supervisor
   d) Whoever asks

4. Who is responsible to develop a safe work procedure?
   a) The supervisor
   b) The safety committee
   c) The employer
   d) The government

5. What information should be included on a tag?
   a) _____
   b) _____
   c) _____
   d) _____

6. Stored energy should be verified to ensure it was released prior to commencing work:
   TRUE_____ FALSE_____

ANSWERS:

1. TRUE; **2.** FALSE; **3.** a; **4.** c; **5.** Who you are, who you work for, why the equipment is locked out, the date the lock was applied; **6.** TRUE