

# What is Lockout Tagout?

## Employee Awareness

Lockout/Tagout (LOTO) is an OSHA required safety control for all machines (both electrical and mechanical). LOTO consists of engineered control steps that include written procedures, and the use of a system of locks, blocks, and/or tags that prevent the release of unexpected hazardous energy.

**Lockout** is the physical process that stops, blocks, or isolates the potentially hazardous energy of equipment at its source. A typical scenario is that a power switch, circuit breaker, or valve is turned off, and a locking device is attached to prevent the power from being turned back on.

**Tagout** is a written warning on a tag that indicates a LOTO situation exists. The tag displays the name of the service person and the duration of time that the machine will be LOTO. Occasionally, if a lock cannot be placed on a machine, a tag may be used in its place. This is permitted in certain circumstances only. Locks and tags must have the same format. They must be easy to read and durable enough to withstand the work environment.

### Who can perform LOTO procedures?

Only employees who have completed Lockout Tagout training and have received permission from their supervisor can conduct LOTO procedures. Trained workers must be provided with locks and tags that clearly indicate who has locked out and tagged out the machine or equipment.

### Which types of machines require a LOTO program?

All machines that are powered by any form of potentially hazardous energy or have stored potential energy, including kinetic energy must undergo LOTO. Potential energy is often stored, and can be released by electricity, pressurized liquid, pressurized gas, or springs. All equipment and machines are subject to LOTO, as needed to ensure worker safety.

### When are LOTO procedures required?

Any machine that is being serviced, maintained or is under repairs must be LOTO. This includes lubricating, cleaning, un-jamming, removing guards, or when the body can become exposed to moving parts. The only person allowed to undo a LOTO procedure is the person that implemented it.

### What steps must be taken when implementing Lock out/Tag out?

- Notify all coworkers before beginning LOTO and verify that they are a safe distance from the machine. Identify any potential hazards and the energy source used in the machine.
- Refer to the equipment specific LOTO procedure. Isolate or shut down all energy sources of the machine. Sometimes there may be more than one power source.
- Connect the pre-designated lock and tag to the energy control(s). Each user should have their own lock, tag, and key. Place the locks and/or tags so that they are clearly visible to others.
- Test the machine to ensure that no energy is flowing. Turn “on” the local switch control(s) to make sure that zero energy is reached. Be sure to turn them “off” before moving to the next step.
- When service or maintenance is complete, remove all tools and keep the energy switches in the “off” position.
- Remove the lock and/or tag. The individual who placed the lock or tag is the only person authorized to remove it.
- Make sure coworkers are a safe distance from the machine. Turn on the energy and test the machine for proper operation. Notify other workers that the machine is operational again.

**Employees must follow all LOTO procedures and must not take short cuts.**

# Lock-Out/Tag-Out Checklist

1. Identify all sources of electrical energy for the equipment or circuits in question.
2. Disable backup energy sources such as generators and batteries.
3. Identify all shut-offs for each energy source.
4. Notify all personnel that equipment and circuitry must be shut off, locked out, and tagged out. (Simply turning a switch off is NOT enough.)
5. Shut off energy sources and lock switchgear in the OFF position. Each worker should apply his or her individual lock. Do not give your key to anyone.
6. Test equipment and circuitry to make sure they are de-energized. This must be done by a qualified person.\*
7. Deplete stored energy by bleeding, blocking, grounding, etc.
8. Apply a tag to alert other workers that an energy source or piece of equipment has been locked out.
9. Make sure everyone is safe and accounted for before equipment and circuits are unlocked and turned back on. Note that only a qualified person may determine when it is safe to reenergize circuits.

**\*OSHA defines a “qualified person” as someone who has received mandated training on the hazards and on the operation of equipment involved in a job or task.**

## Employee Responsibilities:

- Notify your supervisor immediately if you notice damaged or malfunctioning equipment.
- Don't leave malfunctioning equipment so that someone else may be injured; if your Supervisor is not available, mark the equipment clearly with a safety tag or clearly written notice stating the hazard or problem. Write the date and your name on the tag or note.
- Never use equipment that is tagged as needing repair and never remove safety tags. Only the person applying the tag and/or lock may remove them.
- Read and follow manufacturer safety instructions and labels for all equipment you use. Request additional training if you are unsure about safe equipment use.
- Ask questions! If you are not sure about any safety program or safety requirement- ask your Supervisor or contact EHS at 898-5126.
- ALWAYS.....SAFETY FIRST!