



# Lockout/Tagout



## What is Lockout/Tagout?

Lockout/Tagout (or LOTO) makes sure that equipment does not start up or move without warning during maintenance and service work.

- ▶ A lockout device is a key or combination lock that prevents equipment from turning on or moving unexpectedly.

A tagout device is a tag securely attached to the

equipment using, for example, a self-locking nylon cable. The tags say "Do not start" or "Do not operate." Tags should be used along with a lockout device unless the equipment cannot be locked out.

The person who puts the lock or tag on the equipment is the only one who can take it off.

## Why is LOTO important?

When LOTO procedures are **not followed**, workers that clean, service, repair, install, set up, erect, adjust, inspect, un-jam, test, or dismantle equipment are at risk for serious injuries or death from:

- Electrocution,
- Burns.
- Being crushed, or
- Amputation (e.g., loss of a finger).

For example, a 30-year-old elevator repairman was crushed and died while working in an elevator shaft because the power to the elevator had not been locked 0Ut.1

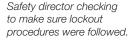
Following LOTO procedures prevents roughly 120 deaths and 50,000 injuries each year.2

## Learn more about how to work safely:

Scan this QR code to learn about OSHA's LOTO requirements:







Scan this QR code to access life-saving LOTO procedures:



## **Before Work Begins:**

## Your employer should...



- Show you how to shut down and restart the equipment.
- Provide training on how to use LOTO devices.



Recognize the hazard...

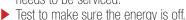
Energy comes in many forms, and almost all types can be found on a construction worksite. LOTO prevents the unexpected release of energy. Identify all of the energy sources for the equipment you are working on or around.

Energy Types:	Examples:
Chemical	Gasoline-powered heavy equipment, propane, wet and dry cell batteries
Electrical	Electrical circuits, temporary power
Gravitational	Objects supported by cranes and hoists
Hydraulic	Hoses on excavators, backhoes, rough terrain forklifts
Mechanical	Tools with blades and moving parts
Pneumatic	Compressed air-powered rammers, rock drills, jackhammers and nailers
Source: Oregon OSHA Gu Pubs/3326.pdf	iide to Controlling Hazardous Energy: https://osha.oregon.gov/OSHA-

Follow procedures...

### ALWAYS:

- ▶ Disconnect equipment from energy sources.
- Prevent equipment parts or materials from moving due to gravity.
- ► Lock out and/or tag out equipment that needs to be serviced.



▶ Tell other employees when you are about to shut down or restart a machine.

#### **NEVER:**

Perform maintenance or service on equipment or electrical circuits unless they have been locked out and/or tagged out.



#### Find out more about consturction hazards.

Worker testing a circuit to

To receive copies of this Hazard Alert and cards on other topics call

301-578-8500 or visit www.cpwr.com



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1) Mechanic crushed to death by elevator: http://mypost.com/2015/01/09/mechanic-crushed-to-death-by-elevator/
2) OSHA Fact Sheet: Lockout/Tagout: https://www.osha.gov/03ifboc/data\_Generaj\_Facts/factsheet-lockout-tagout.pdf
3) OSHA requires employers to imigement programs to protect workers. Hubugh the detailed OSHA LOTO Standard does not apply to construction, it includes important steps tha employers in construction should take, including having a written LOTO program: https://www.osha.gov/pis/oshaweb/owadsp.show\_document?p\_table=STANDAPDS8p\_id=9804