



TOOLBOX TALK – LOCKOUT/TAGOUT (LOTO)

Topic

Lockout/Tagout (LOTO) – Control of Hazardous Energy

Objective

To ensure employees understand the importance of Lockout/Tagout (LOTO) procedures for preventing injuries caused by the unexpected startup of machinery or the release of hazardous energy during maintenance, servicing, inspection, or repair work.

What is LOTO?

Lockout/Tagout (LOTO) is a safety procedure used to isolate hazardous energy sources before maintenance, servicing, inspection, or repair work begins.

A **lock** physically prevents equipment from being energized, while a **tag** warns others that the equipment must not be operated until work is complete.

Why is LOTO Important?

Failure to follow LOTO procedures can lead to serious accidents such as:

- Electrocution
- Crushing injuries
- Amputations
- Burns
- Unexpected machine startup
- Release of stored pressure or hazardous energy
- Fatal accidents

Proper LOTO protects employees working on or around machinery.

Types of Hazardous Energy

Before starting any maintenance work, identify every possible energy source.

- Electrical Energy
- Mechanical Energy
- Hydraulic Energy
- Pneumatic Energy
- Thermal Energy
- Chemical Energy
- Gravity (Stored Energy)
- Steam Pressure
- Gas Pressure

The 7 Steps of LOTO



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1. Prepare

Identify all hazardous energy sources and understand the equipment shutdown procedure.

2. Notify

Inform all affected employees that the equipment will be shut down for maintenance.

3. Shut Down

Turn off the equipment using the normal operating controls.

4. Isolate

Disconnect all energy sources using valves, disconnect switches, circuit breakers, or isolators.

5. Lock and Tag

Apply personal locks and danger tags to every energy isolation point.

6. Release Stored Energy

Safely release or secure all stored energy by bleeding pressure, discharging capacitors, blocking moving parts, lowering suspended loads, or releasing spring tension.

7. Verify Isolation

Attempt to start the equipment using the normal controls to confirm that no hazardous energy remains.

Only after successful verification should maintenance begin.

LOTO Do's

- Use only authorized locks and tags.
- Apply your own personal lock.
- Verify zero energy before starting work.
- Follow the approved LOTO procedure every time.
- Remove your own lock after completing the work.
- Inspect locks and tags before use.

LOTO Don'ts

- Never remove another person's lock.
- Never bypass or ignore a lock.
- Never assume equipment is isolated.
- Never rely only on the ON/OFF button.
- Never restart equipment until everyone is clear.



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- Never begin work without testing for zero energy.

Required PPE

Use appropriate PPE according to the task.

- Safety Helmet
- Safety Shoes
- Electrical Insulated Gloves
- Safety Goggles
- Face Shield
- Arc Flash PPE (where applicable)
- Hearing Protection
- Flame Resistant Clothing

Before Starting Maintenance

Confirm the following:

- All energy sources have been identified.
- Equipment has been isolated.
- Locks and tags have been applied.
- Stored energy has been released.
- Zero energy has been verified.
- All affected employees have been informed.
- Required PPE is being used.

If any answer is **No**, do not begin the work.

Key Safety Message

STOP → ISOLATE → LOCK → TAG → VERIFY → WORK

Always follow the complete Lockout/Tagout procedure before performing maintenance.

Toolbox Talk Takeaway

Your Lock, Your Life.

Never remove another person's lock, always verify zero energy, and never start maintenance until all hazardous energy has been isolated.