

# SOP: Lockout/Tagout (LOTO) Procedures for Equipment

This SOP provides detailed **lockout/tagout (LOTO) procedures for equipment** to ensure the safe isolation of machinery during maintenance and repair activities. It covers the identification of energy sources, application of locks and tags, verification of energy isolation, safe release of stored energy, and procedures for re-energizing equipment. The goal is to prevent accidental startup and protect workers from hazardous energy exposure, thereby minimizing the risk of injuries and equipment damage.

## 1. Purpose

To establish standardized steps for safely isolating energy sources and preventing unexpected energization or release of hazardous energy during maintenance, servicing, or repair of equipment.

## 2. Scope

This procedure applies to all employees, contractors, and personnel authorized to perform maintenance or service on equipment that could unexpectedly start up, energize, or release stored energy.

## 3. Responsibilities

- **Authorized Employees:** Responsible for implementing LOTO procedures and using LOTO devices.
- **Affected Employees:** Notified of LOTO activities and must not attempt to operate locked/tagged equipment.
- **Supervisors:** Ensure compliance with LOTO procedures and employee training.

## 4. Definitions

Term	Definition
Lockout	The placement of a lockout device on an energy isolating device to prevent the equipment from being energized.
Tagout	The placement of a tag on an energy isolating device to indicate it must not be operated until the tag is removed.
Energy Source	Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy.

## 5. Procedure

1. **Preparation for Shutdown**
  - Identify all energy sources related to the equipment.
  - Review equipment-specific LOTO procedures and diagrams.
  - Notify affected employees of the planned shutdown.
2. **Equipment Shutdown**
  - Shut down equipment using normal procedures.
  - Isolate it from all energy sources (e.g., disconnect power, close valves).
3. **Apply Lockout/Tagout Devices**
  - Attach locks and tags to each energy isolating device.
  - Ensure only authorized personnel apply locks/tags. Each individual working must apply their own lock.
4. **Release or Restrain Stored Energy**
  - Safely release, block, or restrain all stored or residual energy (e.g., bleed off pressure, discharge capacitors).
5. **Verification of Isolation**
  - Verify that isolation and de-energization of the equipment have been accomplished (try to operate controls, visually check meter readings, etc.).
6. **Perform Maintenance or Service**
  - Carry out maintenance, servicing, or repair work only after confirming zero energy state.
7. **Release from Lockout/Tagout**
  - a. Inspect work area to ensure all tools and parts are removed.

- b. Ensure all personnel are safely positioned or removed from the area.
- c. Remove all locks/tags (each worker removes their own lock).
- d. Restore energy sources and notify affected employees that equipment is ready for use.

## 6. Training and Communication

- All employees must receive LOTO training appropriate to their role (authorized/affected).
- Refresher training must be conducted annually or when new equipment/procedures are introduced.
- Records of training shall be maintained by the safety department.

## 7. Documentation

- Maintain completed LOTO checklists and logs for all maintenance activities.
- Report and investigate any deviations or incidents related to LOTO.

## 8. References

- [OSHA Standard 29 CFR 1910.147: Control of Hazardous Energy \(Lockout/Tagout\)](#)
- Company Safety Manual
- Equipment Manufacturer Guidelines

**Never bypass LOTO procedures. Failure to comply can result in serious injury or death.**