

LOCKOUT/TAGOUT STANDARD OPERATING PROCEDURES

The following procedure establishes the minimum requirements for lockout of energy sources that could cause injury to personnel. All employees will comply with these procedures. All equipment and/or circuits will be locked out to protect against accidental or inadvertent operation when such operation of the equipment and/or circuits could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy isolating device bearing a lock. Any employee found to be working, or causing others to work on, equipment and or/circuits that, in the opinion of management should have been locked out, will be subject to severe disciplinary actions up to and including termination.

Lockout Responsibility

The primary responsibility for the proper lockout of equipment and/or circuits on a project belongs to the project Supervisor and/or Foreman. However, this does not alleviate the field employees from ensuring that proper lockout procedures are followed at all times. The Supervisor and/or Foreman will ensure that each employee is properly instructed in the safety significance of lockout procedures.

Preparation for Lockout of Circuits and Equipment

Employees will be certain as to which switch, valve, or other energy isolating devices apply to the equipment and/or circuits being locked. More than one energy source (electrical, mechanical, or others) may be involved. Any questionable identification of sources will be cleared by the employees with their supervisor or project foreman. Before lockout commences, authorization from the customer and project Supervisor will be obtained.

Sequence of Lockout Procedures

Special Note: In the following steps, when more than one individual is involved with the project and required to lock out the equipment and/or circuits, each employee will place their own personal lock on the energy isolating devices. A lock for each involved is the preferred method for locking out energy sources. If this is not feasible, the designated individual of the work crew (the Supervisor or Foreman) with complete knowledge of who is on the crew is the individual responsible for carrying out all steps of the lockout procedure. That individual will inform the work crew when it is safe to work on the equipment and/or circuits. Additionally, the designated individual will not remove a crew lock until it has been verified that ALL individuals are clear.

1. Notify all affected employees and customer(s) that a lockout is required and the reason.
2. If the equipment is in operation, after obtaining approval, shut it down by the normal stopping procedures.

3. Operate the switch, valve, or other energy isolating devices so that all energy sources (electrical, mechanical, hydraulic, etc.) are disconnected or isolated from the equipment and/or circuits. Stored energy, such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc., must also be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
4. All affected employees are then required to lockout the energy devices with their individual lock.
5. After ensuring that no personnel are exposed and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. In the event that electrical circuits have been locked out, ensure that the circuits are de-energized by applying an appropriate voltage tester that itself has been tested on live circuits. Be sure to return all operating controls to the neutral position.
6. The equipment and/or circuits are now locked out.



Restoring Equipment and/or Circuits to Service

1. When the job is complete and the equipment or circuits are ready for testing or normal service, check the equipment and/or circuits to ensure that no one is exposed (no locks are left on the locking device from others).
2. When the equipment and/or circuits are clear, remove all locks. The energy isolating devices may be operated to restore energy to the equipment and/or circuits.