Commonwealth of Massachusetts

Department of Labor Standards

OSHA Consultation Program

[mass.gov/dols/consult](http://www.mass.gov/dols/consult)

**Lockout/Tagout**

(29CFR 1910.147)

Note: The following models provided as a guideline only. Employers must develop written programs that are specific to their companies’ needs. The Control of Hazardous Energy

In compliance with 29 CFR 1910.147, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Company located at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, has developed and implemented a *Lockout/Tagout Program*. The program establishes policies and procedures for affixing appropriate lockout devices and, in some instances, tagout devices, to energy isolating machines or equipment. Such policies and procedures have been developed and implemented to prevent unexpected energization, start-up, or release of stored energy.

The following person(s)/employee(s) have been instructed by \_\_\_\_\_\_\_\_\_\_\_\_\_ in the \_\_\_\_\_\_\_\_\_\_\_\_\_ Company’s *Lockout/Tagout Program* and are **authorized** to perform the *Lockout/Tagout Procedure*:

|  |  |  |
| --- | --- | --- |
| **Name** | **Job Title** | **Date of Instruction** |
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**Note:** Training records and the training plan are located in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ office.

The following list of **affected** persons/employees have been made aware of the *Lockout/Tagout Program* and are required to be notified when the procedure is to be implemented.

|  |  |  |
| --- | --- | --- |
| **Name** | **Job Title** | **Date of Instruction** |
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Note: Training records and the training plan may be located in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_or in the personnel office or file.

# TRAINING ATTENDANCE SHEET

On \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, the following employees were trained on the *Lockout/Tagout Program* for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Company. Please refer to *Appendix C* for key points of the training plan.

**AUTHORIZED EMPLOYEES’ SIGNATURES:**

**AFFECTED EMPLOYEES’ SIGNATURES:**

# GENERAL LOCKOUT TAGOUT POLICIES AND PROCEDURES

# Refer to *Appendix A* and *Appendix B* for Required Machine-Specific Procedure Forms

In the event that a machine or piece of equipment does not have a specific procedure, contact \_\_\_\_\_\_\_\_ at \_\_\_\_\_\_\_\_\_\_ immediately. Work cannot proceed until a machine specific procedure is in place.

The following policies and procedures are in accordance with 29 CFR 1910. 147. The reference source is contained in 29 CFR Parts 1900 to 1910 as of July 1, 1994.

**I.** The **authorized** employee or person shall prepare to implement the *Lockout/Tagout Procedure* by implementing the following steps:

a. **Notify** **all** **affected** employees that the *Lockout/Tagout Procedure* will be implemented because servicing or maintenance on a machine or equipment is required.

b. The **authorized** employee/person shall refer to the company’s equipment survey to identify the type and magnitude of the energy that the machine or equipment utilizes. The equipment or machine shall be shut down or tuned off by the normal stopping procedure such as depressing the stop button etc.

c. **Deactivate** the energy isolating device(s) so that the equipment is isolated from its energy source(s).

d. **Lock out** the energy isolating device(s) with assigned individual lock(s).

e. **Stored energy** such as that in springs, capacitators, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure etc. **must be dissipated or restrained** by methods such as repositioning, blocking, bleeding down, etc.

f. **After ensuring that no personnel are exposed,** **and as a** **check on having disconnected the energy sources, verify the isolation of the machine/equipment by operating the push button, start button or other normal operating controls or by testing to make certain the equipment will not operate.**

**CAUTION:** Return the operating control (s) to “neutral” or “off” position after the test.

 g. The equipment/machinery is now locked out.

**II.** **Restoration of Machines/Equipment to Normal Operations:**

 a. **Check** the machine/equipment and the immediate area to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.

 b. **Check** the work area to ensure that all employees have been safely repositioned or removed from the area.

c. **Verify** the controls are in neutral.

d. **Remove** the lockout devices and reenergize the machine or equipment.

**NOTE:** The removal of some forms of blocking may require reenergization of the machine before
 safe removal.

e. **Notify** affected employees that the servicing or maintenance is completed and the
 machine or equipment is ready to be used.

# GROUP LOCKOUT OR TAGOUT

When servicing or maintenance is performed by a crew, craft, department, or other group, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Company’s standard procedure shall be followed. The primary responsibility remains with **one authorized person/employee** **who coordinates** the actual implementation of the procedure.

In group lockout or tagout, **each authorized employee** shall affix a personal lockout or tagout device to the group lockout device, group lockbox or comparable mechanism when work is initiated.

The personal lockout or tagout device shall be removed when the work is completed **following the standard procedure**.

# SHIFT OR PERSONNEL CHANGES

Specific procedures shall be utilized during shift or personnel changes to ensure the continuity of lockout or tagout protection, including provision for the orderly transfer of lockout or tagout devices between off-going and oncoming employees.

**REMOVING LOCKOUT DEVICES BY OTHER THAN THE**

**PERSON WHO APPLIED THE DEVICE**

Locks will only be removed in cases where the authorized employee who applied it is not available. Locks will only be removed by \_\_\_\_\_\_\_\_\_\_\_\_\_. The employee who had his lock removed will be notified by \_\_\_\_\_\_\_\_\_\_\_\_\_\_ prior to returning to the worksite.

**ACCIDENTS CONCERNING LOCKOUT/TAGOUT**

\_\_\_\_\_\_\_\_\_\_will be responsible for fully investigating all lockout/tagout accidents and ensuring that lockout/tagout procedures provides for safe servicing of the machine.

# OUTSIDE CONTRACTOR POLICY

All outside contractors shall comply with the policies and procedures of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Company’s *Lockout/Tagout Program* with regard to policies and procedures for informing employees and others of their activities.

The following **authorized** persons/employees shall coordinate the outside contractor activities.

**Name:**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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This *Lockout/Tagout Program* was specifically developed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Company in compliance with *29 CFR 1910.147*. It shall be evaluated at least annually by \_\_\_\_\_\_\_\_\_\_\_ and documented. Refer to *Appendix D*.

# HAZARDOUS ENERGY CONTROL INVENTORY

Department: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor/Foreman: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**List equipment name, model, serial number, and location of equipment and energy source.**

**Name: Model: Serial Number: Site of Energy Source:**

**i.e.,** L&J Press Brake T-101 50050 West Wall

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# APPENDIX A

### HAZARDOUS ENERGY CONTROL PROCEDURE FORM FOR EACH MACHINE WITH MORE THAN ONE ENERGY SOURCE

**Step 1. Machine Identification**

Description/Name of Machine/Equipment: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Manufacturer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Model: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Serial Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Step 2. Operator Controls**

## List Type (s) of Operator Controls: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Step 3. Energy Sources**

Check and/or List Energy Sources:

Electrical \_\_\_\_\_\_\_\_\_\_ Steam \_\_\_\_\_\_\_\_\_\_ Mechanical \_\_\_\_\_\_\_\_ Pneumatic \_\_\_\_\_\_\_\_\_\_\_\_

Hydraulic \_\_\_\_\_\_\_\_\_ Other \_\_\_\_\_\_\_\_\_\_\_

Explanation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Note: For multiple pieces of the same machinery or equipment, with the same energy sources(s), shutdown and start up procedures, the information may be entered on one ID Form.

**Step 4. SHUTDOWN PROCEDURES**

In the appropriate order, list the steps to be taken to shut down and de-energize the equipment. For stored energy, be specific in regard to how the energy will be dissipated or restrained.

Procedure: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Step 5. TYPES OF LOCK:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Step 6. LOCATION OF ENERGY ISOLATING MEANS:**

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**Step 7**. **METHOD TO ENSURE EQUIPMENT HAS BEEN DE-ENERGIZED**

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**Step 8.** **SPECIAL PRECAUTIONS NOT NOTED ABOVE (i.e., Cool down periods,**

**chemical reactions, fire hazards.**

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**Step 9.** **START UP PROCEDURES**

In the appropriate order, list the steps necessary to re-activate or energize the equipment, ensuring that all personnel are removed from the area where testing or activation procedures are being performed.

Procedure: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Step 10. ENERGY SOURCES ACTIVATED:**

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**APPENDIX B**

**HAZARDOUS ENERGY CONTROL PROCEDURE FORM FOR SINGLE ENERGY SOURCE PLUG-IN EQUIPMENT**

**Step 1: Machine Identification**

Description/Name of Machine/Equipment:

Manufacturer:

Model: Serial Number:

Location:

**Step 2. Operator Controls**

List Type(s) of Operator Controls

**APPENDIX C**

**FOR LOCKOUT/TAGOUT TRAINING PROGRAM**

* Procedures developed, documented, and utilized for control of potentially hazardous energy.
* Employer has provided locks, tags, chains, edges, key blocks, adapter pins, self-locking fasteners, or other hardware for isolating, securing, or blocking machines or equipment.
* Lockout/Tagout devices singularly identified.
* Lockout/Tagout devices are used only for controlling energy.
* Lockout/Tagout devices are not used for other purposes.
* Durable lockout/tagout devices must be capable of withstanding the environment to which are exposed for the maximum period of time that exposure is expected.
* Standardized lockout/tagout devices must be standardized within each facility in at least color shape or size.
	+ For tagout devices, also standardized print and format
	+ Must be legible and understandable (bilingual?)
* Identifiable lockout/tagout devices must indicate the identity of the employee applying the devices.
* When major modifications are made to machinery, electrical systems or when new machinery is installed, the energy source must be designed to accept a lockout device.
* Inspection conducted at least annually.
	+ Performed by authorized employee other than those utilizing energy control procedure under inspection.
	+ Designed to correct any deviations or inadequacies observed.
	+ Include review of each authorized employee’s responsibilities under the procedures. If tagout is used, then include review of limitations of tags.
* Substantial: Tagout devices and means of attachment.
	+ Sufficient to prevent inadvertent or accidental removal.
	+ Attachment means must be non-reusable type; attached by hand; self-locking; non-releasable with minimum unlocking strength no less than 50 pounds; at least equivalent in design and characteristics to one-piece, all environment tolerant nylon cable tie, and if used with electrical, must be non-conductive
* Warnings
	+ Warn against hazardous conditions if machine or equipment will be or is energized.
	+ Legend such as “Do Not Start”, “Do Not Close”, “Do Not Energize”, “Do Not Operate”.
* Training: Limits of tags.
	+ Warning devices, not physical restraint.
	+ Do not remove without authorization; never bypass, ignore, or otherwise defeat tag.
	+ Must be legible and understandable.
	+ Tags and means of attachment must be made of materials that will withstand workplace environmental conditions.
	+ May evoke false security; understand meaning.
	+ Securely attached to energy isolating devices.
* Application
	+ Clearly indicate that the operation or movement of energy isolating devices from “safe” or “off” position is prohibited.
	+ Attach at the same point that lock would have been attached (if lockout capability exists).
	+ If cannot affix to energy isolating device, then affix as close as safety possible and in an obvious position.

**APPENDIX D**

**ANNUAL EVALUATION REPORT**

**Date of Evaluation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Evaluation made by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Comments or Updates on the *General Policy*:**

**The following specific procedures have been reviewed (list below):**

**The following specific procedures have been modified (list below):**

**The following specific procedures were added (list below):**

**A review of the company’s *Injury and Illness Log.* Yes\_\_\_\_\_ No \_\_\_\_\_**

**The following injuries resulted from lockout/tagout:**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 ***Signature and Title Date of Evaluation***