# Lockout/Tagout Model Program

This document contains information that requires font color attributes to be turned on in screen reader settings. Font in red must be customized by the end user.

This is a fillable template that the employer must complete. Instructions in red font enclosed in brackets indicate where you must enter your worksite-specific information.

Employers with employees who perform cleaning, servicing, adjusting, repairing, and setting-up work on machinery or equipment are required to establish, implement, and maintain an effective written program to protect employees from hazardous energies. This is required by the California Code of Regulations, title 8, section 3314.

Cal/OSHA has developed this model program to assist employers with developing their own program with specific procedural steps. This model program is designed to be used with the Cal/OSHA guidancedocument *Controls for Hazardous Energies, Including Lockout/Tagout* and the *Lockout/Tagout Sample Forms: Evaluations, Procedures, and Permit*. Both documents can be found on the [Cal/OSHA Publications](https://www.dir.ca.gov/dosh/PubOrder.asp) webpage.

Employers are not required to use this model program or the accompanying forms, but if they do, the employer should carefully review all the elements required by section 3314 and customize the program to their specific operations, machinery, and equipment. The employer must also complete a separate set of specific procedural steps for each piece of machinery or equipment that is covered under the standard. Using these forms and model program does not guarantee that the employer’s program will comply with the standards. However, it will help save development time.

## How to use the forms and model program:

1. Evaluate your workplace and complete the Evaluation for General Hazardous Energy Control Procedures form.
2. Complete one Equipment-Specific Hazardous Energy Control Evaluation and Certification form for each piece of equipment.
3. Fill in the blanks of the Lockout/Tagout Model Program and customize it to your specific operations, prime movers, machinery, and equipment to create your own program.
4. Develop separate procedural steps and complete the Equipment-Specific Procedural Steps form for each piece of machinery or equipment.
5. Complete the Safety Permit for Hazardous Energy Control (Lockout/Tagout) Work Activities each time a worker performs such activities, if you choose to use permits as part of your program*.*



Cal/OSHA Publications Unit

October 2022

## Table of Contents

[Documents Included in This Publication 2](#_Toc117848416)

[GENERAL HAZARDOUS ENERGY CONTROL PROCEDURE (LOCKOUT/TAGOUT) 3](#_Toc117848417)

[Scope 3](#_Toc117848418)

[Statement of intended use for these procedures 3](#_Toc117848419)

[Purpose 3](#_Toc117848420)

[Authorization and training 3](#_Toc117848421)

[Preparation for lockout 3](#_Toc117848422)

[Hazardous energy control procedure for authorized employees or personnel and supervisors 4](#_Toc117848423)

[Procedure involving group lockout 5](#_Toc117848424)

[Means to enforce compliance 5](#_Toc117848425)

[Contractors 5](#_Toc117848426)

[Written machinery and equipment procedural steps 6](#_Toc117848427)

[Contact 6](#_Toc117848428)

[Equipment-Specific Procedural Steps 7](#_Toc117848429)

[Personnel 7](#_Toc117848430)

[Operator controls 7](#_Toc117848431)

[Energy Sources 8](#_Toc117848432)

[Energy control procedures 8](#_Toc117848433)

## Documents Included in This Publication

| **Title** | **Purpose** | **Related title 8 section(s)** |
| --- | --- | --- |
| General Hazardous Energy Control Procedure (Lockout/Tagout) | Procedure/model program(Employers must customize the model program to create site-specific procedures that include the required elements) | 3314(g) |
| Equipment-Specific Procedural Steps | Procedural steps for each machine or piece of equipment | 3314(g)(2)(A) |

The employer should review the California Code of Regulations, [title 8](https://www.dir.ca.gov/samples/search/query.htm), for complete requirements.

## GENERAL HAZARDOUS ENERGY CONTROL PROCEDURE (LOCKOUT/TAGOUT)FOR [Enter Company Name]

### Scope

This document requires supervisors and employees to follow basic lockout principles when cleaning, repairing, servicing, setting up, unjamming, and adjusting machinery and equipment at our facility.

### Statement of intended use for these procedures

[Enter the name of employer] will ensure that employees and outside service personnel who are engaged in the regulated work operations—cleaning, repairing, servicing, setting-up, unjamming, and adjusting of machinery and equipment—at our facility follow our hazardous energy control procedure and our machine/equipment-specific procedural steps.

### Purpose

This procedure establishes minimum requirements for controlling hazardous energy sources that could cause injury to personnel, including lockout, tagout, and blockout. All employees must comply with this procedure at all times.

### Authorization and training

The responsibility for seeing that this procedure is followed is binding upon all employees and supervisors. All employees and supervisors will be instructed on the significance of the safety and lockout procedures. New or transferred employees shall also be instructed. Each authorized employee shall be trained by [Enter names or job titles] on the hazards related to performing the covered work activities on equipment and machinery. Each affected employee shall be trained by [Enter names or job titles] in the purpose and use of the lockout procedure. All other employees whose work operations may be in the area where lockout and tagout activities are conducted shall be trained by [Enter names or job titles] to recognize accident prevention tags and in the prohibition of attempts to restart or reenergize machinery that are locked or tagged out.

Authorized employees at our facility who are trained to conduct cleaning, servicing, adjusting, unjamming, repairing, or setting-up operations include:

[Enter job title or name, followed by work activity they are authorized to perform.]

Affected employees who operate or use machinery or equipment on which hazardous energy control activities are conducted or who work in areas where those activities are being performed include:

[Enter job title or name, followed by relevant work activity.]

(Note: Affected employees, such as machine operators, may not unjam machinery or equipment unless they have been designated as authorized employees and received the required training.)

### Preparation for lockout

Employees authorized to perform lockout must know which switch, valve, or other energy isolating devices apply to the equipment being locked out. More than one energy source (electrical, mechanical, or others) may be involved. Employees must follow the separate procedural steps for controlling the hazardous energy or energies associated with the machinery or equipment on which they are working. Employees must clear any questionable identification of sources with their supervisors. Before starting lockout procedures, a job authorization or permit should be obtained.

Before starting lockout procedures, employees will obtain a permit from [If applicable, enter the job title of supervisor or safety office. If permits are not used, delete this sentence.].

### Hazardous energy control procedure (rules and techniques) for authorized employees or personnel and supervisors

Our rules for shutting down, isolating, blocking, and securing machines or equipment to control hazardous energy include:

1. Following the employer’s separate procedural steps for the safe lockout/tagout for the machinery and equipment when conducting lockout/tagout activities.
2. Notifying all affected employees that a lockout is required and the reason for this requirement. Instructing all other employees whose work operations may be in an area where energy control procedures may be utilized, about the prohibition related to attempts to restart or reenergize machines or equipment that are locked out or tagged out.
3. Shutting down according to the manufacturer’s normal shutdown procedures and the company’s separate procedural steps associated with the machinery or equipment, if the equipment is operating.
4. Operating the switch, valve, or other energy isolating devices so that the energy sources (such as electrical, mechanical, hydraulic, and others) are **disconnected or isolated** from the equipment. Stored energy, such as in capacitors; springs; elevated machine members; rotating flywheels; hydraulic systems; and air, gas, steam, or water pressure, must be dissipated or restrained by methods such as grounding, repositioning, blocking, or by bleeding down.
5. Locking and tagging out the machinery or equipment prior to conducting work activities – using individual locks with only one key under the control of the authorized employee conducting the work activity.
6. Confirming that all energy sources were controlled.
7. Testing the machine or equipment to determine and verify the effectiveness of devices used for lockout, tagout, and blockout.
	1. Ensuring that no personnel are exposed.
	2. Checking the effectiveness of the energy source(s) isolation by:
		1. Operating the push button or other normal operating controls to make certain the equipment will not operate.
		2. Returning operating controls to the disconnect or OFF position after the test.
8. Confirming all of the steps in the machine or equipment-specific procedures have been completed before cleaning, servicing, adjusting, unjamming, repairing, and setting-up operations.
9. Providing protection to each shift worker from hazards associated with the unexpected energization or start-up of the machine or equipment, or release of stored energy, when there are shift changes during a regulated work operation, by establishing methods for the safe transfer of lockout and tagout devices.
	1. [Enter the procedures for providing protection across shifts. Include procedures for safely transferring lockout and tagout devices from one shift to the next.]
10. Ensuring that all outside servicing personnel and contractors use the site-employer’s energy control procedure.

[Enter additional hazardous energy control rules if applicable.]

The sequence for restoring equipment to service includes:

1. Communicating to all affected and authorized employees that all work is complete.
2. Checking the equipment area to see that no one is exposed to the danger zone, when the job is complete and equipment is ready for testing or normal service.
3. Removing all locks and other energy isolating devices by the authorized employee or person, when the equipment is cleared.

[Insert additional site-specific restoring equipment to service procedures where applicable.]

### Procedure involving group lockout

If more than one individual is required to lock out equipment or machinery, the following steps shall be included:

1. Designating an authorized employee with primary responsibility for the protection of all individuals in the group.
2. Designating an authorized employee if more than one crew, craft, or department is working on the machinery or equipment who must coordinate affected workforces to ensure continuity of protection.

The authorized employee with primary responsibility shall ensure the following procedures are implemented:

1. Maintaining control over the group lockout device by using their own lockout device, such as an operations lock.
2. Informing the crew when it is safe to work on the equipment.
3. Assuring that each authorized employee in the group places his/her own personal lock on the group energy isolating device(s).
4. Verifying, once the work is complete, that all individuals are clear of the equipment or machinery prior to removing their lock and initiating procedures for restoring equipment to service.

[Insert additional site-specific group procedures where applicable.]

Rules for affected employees include:

1. All employees must not conduct lockout/tagout activities such as cleaning, servicing, adjusting, unjamming, repairing, and setting-up operations unless authorized and trained in the safe practices for energy control for those operations.
2. Do not assist authorized employees conducting the regulated work operations unless authorized and trained in the safe practices for energy control and the specific procedural steps for the machinery or equipment.
3. Do not attempt to operate any control, switch, or valve on machinery or equipment bearing a lock, tag, or other energy isolating device.

[Add additional rules here.]

### Means to enforce compliance

[Enter name of company] will ensure compliance with Cal/OSHA’s lockout requirement in accordance with our written Injury and Illness Prevention Program. All supervisors and employees shall comply with this procedure at all times. Failure to follow [Enter name of company]’s lockout procedures will result in disciplinary action.

### Contractors

When needed, we may provide qualified contractors to perform cleaning, repairing, servicing, setting up, unjamming, and adjusting of machinery at our facility. The contractors must follow our general procedure and our separate procedural steps related to the machinery being serviced. Management will provide the contractor with these written procedures and any other safety information available in a timely manner for the work to be completed safely.

### Written machinery and equipment procedural steps

[Enter company name] shall develop, implement, and update equipment-specific lockout procedures. These separate procedural steps will be evaluated and updated annually to ensure their continued effectiveness. If no changes are made, then it will be noted on the procedure and certified by management.

List of machinery and equipment that have separate procedural steps [Complete the following table]:

| Machine/Equipment | Manufacture/Make/Model/Serial No. | Location |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

### Contact

For questions and comments regarding hazardous energy controls, this procedure, the separate procedural steps, lockout/tagout training, annual evaluations, or abandoned locks or tags please contact:

Name/Title: [Enter name of contact person] Contact Number: [Enter phone number]

\*Note: Keep a blank copy of this template to use for multiple pieces of equipment. For each table, add more rows if needed. Delete this note when writing procedural steps.

[Enter name of company.]

## Equipment-Specific Procedural Steps

**Machine/equipment information:** [Enter machine name, manufacturer, make, model, serial no. for identification]

**Machine location**: [Enter machine location here]

**Types of hazardous energies associated with this machine:** [Enter energy types: kinetic: electrical, thermal, motion, steam, radiant; and, potential: gravitational, stored mechanical (i.e. springs), chemical, pneumatic, hydraulic, etc.]

**Safe access and personal protective equipment :** [Enter the method of safe access and any personal protective equipment required to safely conduct work activities]

Prior to conducting cleaning, servicing, adjusting, unjamming, repairing, or setting up operations on this machinery, the following steps must be taken to ensure the control of hazardous energies and moving parts of the machinery.

### Personnel: [Complete the following table]

| Energy control procedure participants | Job titles / Names | Work activities permitted |
| --- | --- | --- |
| Authorized employees |  |  |
| Affected employees |  |  |

Note: Affected employees (i.e., machine operators) must be trained as authorized employees when their duties include hazardous energy control work activities (i.e., setting up, cleaning, adjusting, unjamming, etc.)

### Operator controls: [Complete the following table]

| List type of controls | Location of controls | Photo/Diagram (if available) |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

### Energy Sources: [Complete the following table]

| Energy sources | Location of energy source | Energy control devices | Photos/diagram(before and after, if available) |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Energy sources: electrical, steam, hydraulic, pneumatic, natural gas, stored energy, gravitational, thermal, etc.

Energy control devices: locks, tags, blocks, blanks, etc.

### Energy control procedures

List the steps in order that are necessary to shut down and de-energize the equipment. Be specific.

#### Steps for shutting down each energy source: [Complete the following table]

| Energy source | Steps for shutting down the energy source | Photo/Diagram |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

NOTIFY ALL AFFECTED EMPLOYEES PRIOR TO PUTTING THIS PROCEDURE INTO APPLICATION.

#### Steps for dissipating or restraining stored energy: [Complete the following table]

| Stored Energy | Steps for dissipating or restraining the stored energy | Photo/Diagram |
| --- | --- | --- |
|  |  |  |
|  |  |  |

#### Steps for locking, tagging, blanking, blinding, or other method for controlling energy sources: [Complete the following table]

| Energy source | Steps for locking, tagging, blanking, blinding, sealing, etc. | Photo/Diagram |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### Steps for verifying the methods of energy isolation and control are effective: [Complete the following table]

| Steps for verifying procedure was effective | Photo/Diagram |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

#### Steps for starting machinery and equipment during lockout activities for evaluation and testing: [Complete the following table. Include clearing all personnel, tools, and materials, removing lockout devices, restoring the equipment to safe lockout conditions.]

| Steps for evaluation and testing equipment during lockout | Photo/Diagram |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

#### Steps for starting up machinery and equipment after the energy control work activity is completed: [Complete the following table]

| Steps for returning machinery and equipment to service for normal production operations | Photo/Diagram |
| --- | --- |
|  |  |
|  |  |
|  |  |

NOTIFY ALL AFFECTED EMPLOYEES PRIOR TO PUTTING THIS PROCEDURE INTO APPLICATION.

#### Alternative measures that provide effective protection for employees during lockout work activities (if applicable):

Alternate measures are only permitted under the following circumstances:

1. During cleaning, servicing, adjusting, and unjamming operations when the machinery or equipment must be capable of movement in order to perform a specific task, then the use of extension tools (e.g., extended swabs, brushes, scrapers) is required.
2. During minor tool changes and adjustments and other minor servicing activities, if they are routine, repetitive, and integral to the use of the equipment or machinery for production.
3. During work on cord and plug-connected electric equipment, if unplugging the equipment protects the worker from unexpected energization or start-up of the equipment (i.e., there is no stored or residual energy) and the cord stays under the exclusive control of the employee performing the work for the duration of the operation.
4. Repetitive process machines under specific conditions described in the California Code of Regulations, title 8, subsection 3314(f).

[Complete the following table if applicable]

| Work Activity | Steps for the alternative energy control method(Must provide equivalent protection to employees) | Photo/Diagrams |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

Questions regarding these procedural steps may be directed to:

Authorized Supervisor Title Contact Information