

Directions for Using the MEMIC Form, “Step-by-Step Machine-Specific Lockout Description”

This form was developed to help employers document lockout procedures when required under the OSHA standard 1910.147(c)(4)(i).

Authorized employees must refer to the company lockout procedure to identify the type and magnitude of the energy that the machine or equipment uses. In addition, they must understand the hazards of the energy, and the methods to control the energy.

1910.147(c)(4)(i) Separate and specific lock out procedures shall be developed for equipment and used for the control of potentially hazardous energy when employees are engaged in the activities covered by this section.

Exception: The employer need not document the required procedure for a particular machine or equipment when all of the following elements exist: (1) The machine or equipment has no potential for stored or residual energy or for reaccumulation of stored energy after shutdown which could endanger employees; (2) the machine or equipment has a single energy source which can be readily identified and isolated; (3) the isolation and locking out of that energy source will completely deenergize and deactivate the machine or equipment; (4) the machine or equipment is isolated from that energy source and locked out during servicing or maintenance; (5) a single lockout device will achieve a locked-out condition; (6) the lockout device is under the exclusive control of the authorized employee performing the servicing or maintenance; (7) the servicing or maintenance does not create hazards for other employees; and (8) the employer, in utilizing this exception, has had no accidents involving the unexpected activation or reenergization of the machine or equipment during servicing or maintenance.

The MEMIC lockout form helps document the following OSHA requirements under 1910.147. It follows the sequence outlined in Appendix A of 1910.147.

1910.147(d) Application of control. The established procedures for the application of energy control (the lockout or tagout procedures) shall cover the following elements and actions and shall be done in the following sequence:

- 1910.147(d)(1) Preparation for shutdown.
- 1910.147(d)(2) Machine or equipment shutdown.
- 1910.147(d)(3) Machine or equipment isolation.
- 1910.147(d)(4) Lockout or tagout device application.
- 1910.147(d)(5) Stored energy.
- 1910.147(d)(6) Verification of isolation.

The form was generated using the material published under OSHA 1910.147 Appendix A, which serves as a non mandatory guideline to assist employers and employees in complying with the requirements of 1910.147, as well as providing other helpful information. Nothing in the appendix or the MEMIC form adds to or detracts from any of the requirements of the actual standard 1910.147.

The first and second pages of the MEMIC form can be used to document machine-specific lockout procedures for most machinery and equipment involving 10 or fewer energy isolating devices. The third page of the form is to be used only when special instructions or directions are necessary for deactivating or energizing energy isolating devices. Special information such as wait times, valve rotations, torque settings, temperature or pressure readings, etc. will be explained to coincide with the energy isolating device described in Section 3 of the MEMIC form.

Step-by-Step Machine-Specific Lockout Description

Machine or
Equipment
Description

- ❶ **Notify all affected employees** that servicing or maintenance is required on the machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

Name of Employee(s)	Area Normally Located	Method of Contact

- ❷ **Stop the equipment or system** through the following shut-down process. If equipment has already been stopped, then verify that it was done following the normal stopping procedure:

#	Name or Identification of items used to stop equipment (buttons, switches, levers, E-stops, keys, etc.)	Location of items used to stop machinery (rooms, panel, etc.)	Comment
1			
2			
3			
4			
5			
6			
7			
8			

- ❸ **Deactivate the Energy Isolating Device(s)** so that the machine or equipment will be isolated from the energy source(s). The following table identifies energy isolating devices that are associated with this equipment. The isolating devices need to be activated in the following order.

#	Energy Isolating Device (breaker, switch, valve, blocking, plug, etc.)	Identification (name or number)	Hazard Level (voltage, pressure, weight, temperature, chemical)	Location (MCC, area, room, top, front, behind, etc.)
A				
B				
C				
D				
E				
F				
G				
H				
I				
J				



4 Apply assigned lock(s) and tag(s) to lock out each energy isolating device.

All equipment with locking capabilities must utilize a lock identifying the authorized person locking out the machinery.

Note: Please refer to the third page of this lockout procedure for any detailed information regarding the activation of energy isolating devices or the releasing of residual energy.

5 Release stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

The following energy isolating devices coincide with the letters on table 3 and contain residual energy that needs to be dissipated or restrained:

Energy isolating devices taken from the table in Section 3 of this procedure

Energy Isolating Device from Section 3 Table	Identification (name or number)	Hazard Level (voltage, pressure, weight, temperature, chemical.)	Method to Dissipate or Restrain Energy
A			
B			
C			
D			
E			
F			
G			
H			
I			
J			

6 Ensure equipment is locked out. Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment either by operating the push button or other normal operating control(s) or by utilizing the testing equipment to make certain the equipment will not operate.

"Remember to return control(s) to the neutral or off position after verifying isolation."

Method of verification to ensure equipment is locked out:

7 The machine or equipment is now LOCKED OUT and work may begin.

RESTORING MACHINERY/EQUIPMENT TO SERVICE

- ① Check the machine/equipment and the immediate area to ensure that nonessential items have been removed, guards replaced, and the machine or equipment components are operationally intact.
- ② Check the work area and verify that all employees have been safely positioned or removed from the area and affected personnel have been notified.
- ③ Verify that the stop and isolating controls listed in Sections ② and ③ are in the appropriate position to control energy.
- ④ Remove all the lockout devices and reenergize the machine or equipment.
- ⑤ Verify proper operation of machinery and then release machinery or equipment back to operation.

SUPPORT MATERIAL FOR SECTION 3 TABLE

Machine or Equipment Description

Detailed information regarding the activation of energy isolating devices and/or the releasing of residual energy.

#	Energy Isolating Device from Section 3	Support information for deactivating the energy isolating devices (Support material will coincide with energy isolating devices described in Section 3.) (Support information will only be used for isolating devices which need special explanations for how to accomplish the deactivation. Special controls such as time, rotations, torque settings, temperatures, pressures, etc. will be explained.)
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		