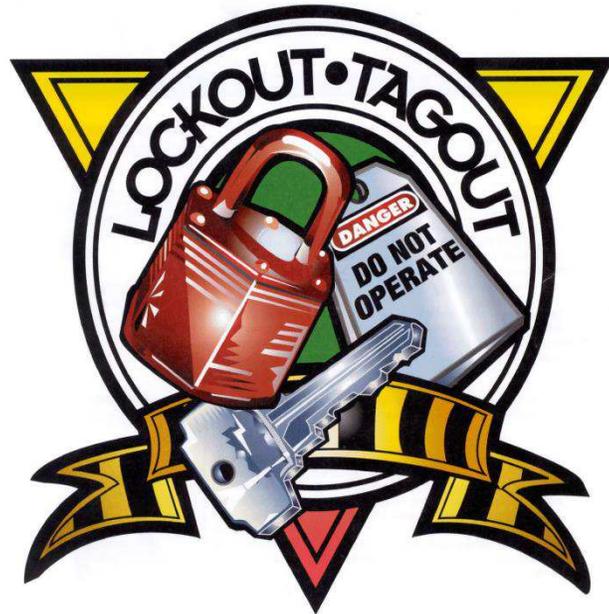


CMC LOCKOUT / TAGOUT PROGRAM



A SAFETY TRAINING GUIDE

3. Each shop must establish a lockout/tagout device log. This log will contain:
- a. Date & Time equipment was locked out/tagged out or just tagged out.
 - b. The name of the individual who performed the lockout/tagout.
 - c. Which piece of equipment was locked out/tagged out (Grinder).
 - d. Reason why it was locked out/tagged out. (Grinder has no shields)
 - e. Date & Time lockout/tagout was removed.



4. Supervisors will determine whether a tag is needed and, if so, that the appropriate tag is attached as required. They will coordinate the placement of tags, and the assignment of RAC, with wing safety.
- a. Wing safety need not be contacted when lockout/tagout is used during routine maintenance.

B. PROGRAM COMPLIANCE:

All personnel are required to comply with the restrictions and limitations imposed upon them during the use of the lockout/tagout program. Authorized members are required to perform lockout/tagout in accordance with this procedure. All members, upon observing that a machine or piece of equipment is locked out (due to it being inoperative, needing servicing or maintenance) shall not attempt to start, energize or use that machine or equipment.

C. SEQUENCE OF LOCKOUT/TAGOUT:

1. Procedures Involving More Than One Person. In the preceding steps, if more than one individual is required to lockout/tagout equipment, each shall place his or her own personal lockout/tagout device on the energy isolating device(s). When an energy-isolating device cannot accept multiple locks or tags, a multiple lockout/tagout device (hasp) may be used.
2. The member will locate and identify isolating devices to be certain which switch's, valve's, or other energy isolating devices apply to the equipment to be locked out/tagged out. More than one energy source (electrical, mechanical or others) may be involved. After identifying the equipment needing lockout/tagout, sign out the lockout/tagout devices from the lockout/tagout device log book.
3. The member will notify all other shop personnel, supervisor, and Wing Safety that a lockout/tagout system is going to be utilized and the reason therefore. The member shall know the type and magnitude of energy that machine or equipment utilizes and shall understand the hazards.
4. If the machine or equipment is operating, shut it down using normal stopping procedures (depress stop button, open toggle switch, close valve, etc.).
5. Operate the switch, valve or other energy-isolating device's so that the equipment is isolated from its energy source. Stored energy (such as that in springs, elevated machine member, rotating fly wheels, hydraulic systems, air, steam, or water pressure, etc.) must be dissipated or restrained by methods such as repositioning, blocking, bleeding down, etc.

6. Lock out the energy-isolating devices with assigned individual locks. When machine cannot be locked, assigned individual warning tags should be used. See note for special requirements for tagout only.

7. After ensuring personnel are not exposed or at risk, ensure that the energy source is disconnected, and then operate the control device to ensure that the equipment is completely reenergized/inoperable. If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists. **CAUTION:** Return operating controls to "neutral" or "off" position after verifying the isolation of the equipment.

8. THE MACHINE OR EQUIPMENT IS NOW LOCKED OR TAGGED OUT!

NOTE: In situations where using a lock is not possible, a tagout system can be used. The tag should be located where the lockout would have been placed. In addition, extra safety precautions must be taken such as, removing valve handles, blocking switches, etc. When using the tag out system the member should communicate to shop personnel and supervisor that a tagout system is being used and they understand the following:

a. Tags are essentially warning devices affixed to energy isolating devices and do not provide the physical restraint of a lock.

b. Tags, like locking devices, shall never be removed without approval of the authorized member who affixed it to the energy-isolating source.

c. Tags should be clearly legible, recognizable, and contain a legend such as the following:

-DO NOT START, DO NOT OPEN, DO NOT ENERGIZE, etc.

D. RESTORING MACHINE OR EQUIPMENT TO NORMAL OPERATING CONDITION:

1. After the equipment is fixed, serviced or maintenance completed and equipment is ready for normal operations, the authorized member shall check to ensure everyone is clear of the machine or equipment.
2. When all tools are removed, guards reinstalled and all employees are clear, the authorized member should remove the lockout/tagout devices. After checking to ensure all operating controls are in the "neutral" or "off" position power should be restored to the machine.
3. When it is verified all functions are operating properly, the authorized member shall return the lockout/tagout devices to the designated area and enter this information into the lockout/tagout device logbook. Notify wing safety, fire department, or BES if they were notified of the equipment being locked out/tagged out.

E. TRAINING:

1. Training shall be provided to ensure the purpose, function, knowledge and skills of the lockout/tagout programs and procedures are understood by supervisors, operators, and qualified equipment maintenance. Training shall include the following:
 - a. Each supervisor, operator, or any qualified equipment maintenance person shall receive initial job training on the type and magnitude of applicable energy sources, the methods and means necessary for energy isolation and control, and the use of the lockout/tagout procedures.
 - b. All other personnel whose duties are, or may be in an area where lockout/tagout procedures may be utilized, shall be briefed on the lockout/tagout program during the initial job safety briefing.
2. When lockout/tagout procedures are used, supervisors, operators, or any qualified equipment maintenance personnel shall receive initial job training on the use of locks and tags as follows:
 - a. Tags are essentially warning devices attached to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock.
 - b. When a lock or tag is attached to an energy-isolating device, only the person, supervisor or the designated representative, who initially installed the lock or tag can remove it, and it can never be bypassed, ignored, or otherwise defeated.
 - c. Tags may cause a false sense of security, and their use and limitations need to be understood as part of the overall energy control program.
 - d. Tags will be securely attached so that they cannot be inadvertently or accidentally detached during use.

3. Retraining shall be provided for supervisors, operators, and qualified equipment maintenance personnel at least annually or when a change in their job assignments, a change in machines or equipment, processes that present a new hazard, or when there is a change in the lockout/tagout procedures. Additional retraining shall also be conducted whenever a periodic inspection reveals that there are deviations from, or inadequacies in, the supervisor, operator, or qualified equipment maintenance personnel's knowledge or use of the lockout/tagout procedures.

4. All training shall be certified, documented, and kept up-to-date. The certification shall contain each individual's name and dates of training. This training shall be documented on an AF Form 55, "Employee Safety and Health Record."

F. INSPECTIONS:

1. Inspections of the lockout/tagout program shall be conducted at least annually by a qualified ground safety inspector, to ensure that the lockout/tagout program is in compliance with AFOSH STD 91-45.
2. Periodic self-inspection shall be conducted by the unit to ensure compliance with all program elements. The self-inspection shall include as a minimum:
 - a. Identification of the machines and equipment on which the lockout/tagout program is used.
 - b. A review of each person's responsibilities under the program.
 - c. All necessary training has been conducted and documented.
 - d. The self-inspection shall be documented to include the date of the inspection and the unit representative conducting the self-inspection.

G. DEFINITIONS:

1. **AUTHORIZED MEMBER:** Individual authorized to physically lockout/tagout machinery and equipment for the purpose of hazardous energy isolation.
2. **CAPABLE OF BEING LOCKED-OUT:** Any machinery or equipment capable of being locked out either if it is designed with a hasp or other attachment or can be secured by any means which does not require dismantling the device.
3. **ENERGIZED:** Any equipment/machine or process connected to an energy source or containing residual or stored energy.
4. **ENERGY SOURCE:** Any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal or other energy.
5. **ENERGY ISOLATING DEVICE:** A mechanical device that physically prevents the transmission or release of energy including but not limited to the following:
 - a. A manually operated electrical circuit breaker.
 - b. A disconnect switch.
 - c. Chocks.
 - d. A slip gate, blind, a line valve, a block, disconnected piping.
- 6 **LOCKOUT DEVICE:** A device that utilizes a lock and key to hold an energy isolating device in the safe position for the purpose of protecting personnel.
7. **TAGOUT DEVICE:** A mishap prevention tag that is capable of being securely attached and that, for the purpose of protecting personnel, forbids the operation of an energy isolating device and identifies the applier or authority who has control of the procedure.

H. TYPES OF TAGS:

The purpose of the following Hazard/Danger tags is to warn personnel of a hazardous condition or defective equipment.

1. AF Form 979, "Danger Tag" is a temporary means of identifying the same conditions as above to immediately alert employees a hazard exists (RAC 1, 2 or 3) and specific precautions that are required to protect personnel or property.
2. AF Form 980, "Caution Tag" shall be used to warn personnel against unsafe conditions, potential hazards (RAC 4 and 5), or to caution against unsafe practices.
3. AF Form 981, "Out of Order Tag" shall only be used for the specific purpose of indicating that a piece of equipment, machinery, utility or system is out of order and to attempt to use it might present a hazard.
4. AF Form 982, "Do Not Start" shall only be used to alert personnel to the hazards associated with the restarting of the equipment. This tag will be used for a very short time until the switch can be locked out.

NOTE: Consult AFOSH Standard 91-45 for complete lockout/tagout program information, implementation, and procedures