



## ENERGY CONTROL LO/TO

**E**nergy runs machines and moves their parts. That energy can be electrical, mechanical, hydraulic, or pneumatic. Sometimes the energy is stored, as in springs, steam, or as pressurized air or liquids. Any type of energy, however, can be a serious safety hazard, especially if it comes on or is released unexpectedly while you are servicing or maintaining equipment.

**T**hat's why the Occupational Safety and Health Administration (OSHA), has developed lockout/tagout procedures to prevent the sudden release of energy. These procedures will help make sure that you or anyone working on equipment isn't electrocuted, hit, cut, crushed, or otherwise hurt during machinery service or repair.

**I**t's important that you follow the procedures and remember if you have any questions about this material or safety precautions, ask your supervisor.

You turn off a machine to do maintenance or repair. Before doing anything else, you need to "lockout" danger by making sure that the energy is fully drained and that the machine cannot be accidentally turned on or restarted. If a machine starts up or part move unexpectedly, you or others could be seriously hurt or maybe even killed.

***Proper lockout prevents accidents and saves lives.***

**A**fter all the energy has been shut off and drained, lockout is the safest method of keeping you from getting hurt. The law requires you to lockout machine power whenever possible.

**W**hat does lockout mean?

***Lockout means putting a lock on the part of the machine that controls the energy: for example, a circuit breaker, switch, block, valve, etc.***

**W**hat does lockout do?

*It locks the energy control device in an "off" position. This prevents the machine from starting up or releasing energy accidentally.*

**W**hat kinds of locks are used?

**A** lockout lock can have a key or a combination. But it cannot be a lock that is used for any other purpose than lockout.

**A** lockout lock also has to be:

- Durable enough for the heat, cold, humidity, or corrosiveness in the area where it's used - for as long as it's needed.
- Standardized by color, shape or size throughout the facility.
- Strong enough so it can't be removed without heavy force or tools like bolt cutters.
- Identified by the name of the employee who installs and removes it.

*Tagout means using special tags that warn people of the danger of starting up the machine. A tag has printed warning about what could happen if the equipment starts up. And it will catch your attention with warning like "DO NOT START" or "DO NOT OPEN" or "DO NOT OPERATE".*

**Please remember: tags alone don't prevent equipment from starting up. *They are only warnings.***

- They have to be durable, strong, standardized, and show the identity of the authorized employee doing the work.
- Easy to read and understand even if used in areas that are dirty, corrosive, or damp.
- Tough enough so they can't be removed accidentally.

**T**he law even tells how to attach a tag. Use something like a nylon cable tie that:

- Can't be reused.
- Can be attached by hand.
- Is self-locking.
- Can't be released with less than 50 pounds of strength. Attach and remove tags following the same steps, in the same order, as locks. But remember: **Tags don't lock out energy. They only provide a warning about the dangers!**

**F**OR MORE INFORMATION, CONTACT THE OSH OFFICE AT DSN **626-5105**  
OR COMMERCIAL **081-568-5105**