



Lockout/Tagout



Lockout/tagout/blockout (LOTO) is a method of preventing equipment from being set in motion and endangering workers. Failure to properly isolate and de-energize energy sources can be fatal. Compliance with the University's LOTO policy is mandatory for your protection and the protection of others.

The application of lockout/tagout/blockout is often limited to electrical energy. It is critical for your safety to remember that power sources include mechanical, hydraulic, pneumatic, chemical, thermal, and other energy sources. Other energy is often stored energy, such as in electrical batteries, capacitors, and springs. Even gravity presents a form of energy.

General Guidelines

1. Consult with the EH&S Department and refer to the Campus-specific LOTO Program, procedures, and training requirements.
2. Apply LOTO procedures whenever adjusting, servicing, or maintaining any power tool or machine. Examples include whenever the blades or attachments on power tools or machinery must be changed, whenever a guard or safety device must be removed or by-passed, whenever you will place any part of your body where it might be caught in moving machinery, or whenever the unexpected movement of the machinery or tool could cause injury.
3. Identify all sources of energy supplying the tool or machine prior to starting the procedures.
4. Ensure you have the appropriate lockout/blockout devices, locks, and tags.
5. Never assume when the power switch is in the "off" position there will be no movement. Dissipate all residual energy prior to beginning the service or repair work. Ask your instructor or supervisor if you do not know how to do this procedure.
6. Ask your supervisor or instructor if you are unsure of how to proceed.

Applying Energy Controls

1. Notify others in the area that you are shutting down and locking out the tool or equipment.
2. Shut down the tool or machine using its on/off switch and normal shut-down procedures.
3. Bleed, drain, and clear all steam, air, gas, and hydraulic lines to ensure there is no residual energy.
4. Release and block any mechanism under load or pressure.
5. Apply the lockout devices and/or blockout devices, as well as the locks and tags. Unplug tools and equipment equipped with a power cord; apply a clamp-shell cover to the plug. Remember some machinery and power tools have more than one source of energy; ensure all energy sources are de-energized and

lockout.

6. Fill out the tags: name of person performing the lockout, reason, and date.
7. Test the on/off switch to verify there is no movement or energy release.
8. Keep the keys to the lockout devices on your person at all times.

Removing Energy Controls

1. Only the personnel who applied the LOTO may remove the LOTO. See your supervisor for exceptions.
2. Remove all tools, parts, and scrap.
3. Ensure the system is fully assembled, and all guards and safety devices have been restored.
4. Notify personnel in the area that you are re-energizing the tool or machine.
5. Remove the locks, tags, and lockout/blockout devices following manufacturer's checklist to re-energize.
6. Make another visual check to ensure everyone is clear prior to starting the tool or machine.
7. Never remove a lock until you are absolutely sure that it is completely safe to do so.

Talk to your supervisor if you have any questions about this information.