How to Do a Lockout Tagout Procedure for Oil and Gas Equipment

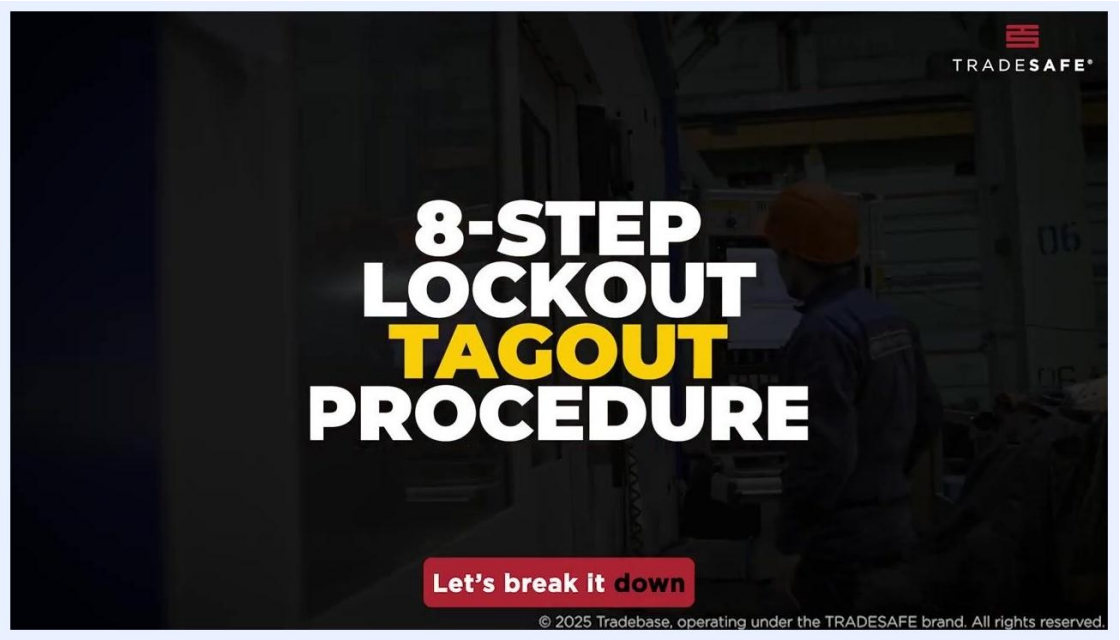
Before lockout tagout (LOTO) procedures existed, equipment often remained powered during repairs because there was no standardized or reliable way to secure it or communicate its operational status. Workers relied on verbal requests to operators, asking them not to start or energize equipment during maintenance, which left teams vulnerable to misunderstandings, accidental startups, and energy releases. This guide explains how to do a lockout tagout procedure using the eight-step structured process that replaced these informal, unsafe practices and now governs how hazardous energy is controlled during maintenance and repair work.

Three workers in safety gear discuss industrial machinery in a facility.

A worker in a high-visibility jacket and hard hat inspects industrial equipment while using a laptop.

Two workers in safety vests and hard hats discuss procedures in front of industrial machinery.

The eight-step lockout tagout procedure keeps everyone safe by systematically controlling energy sources through a clear, actionable sequence that can be applied consistently across a facility.



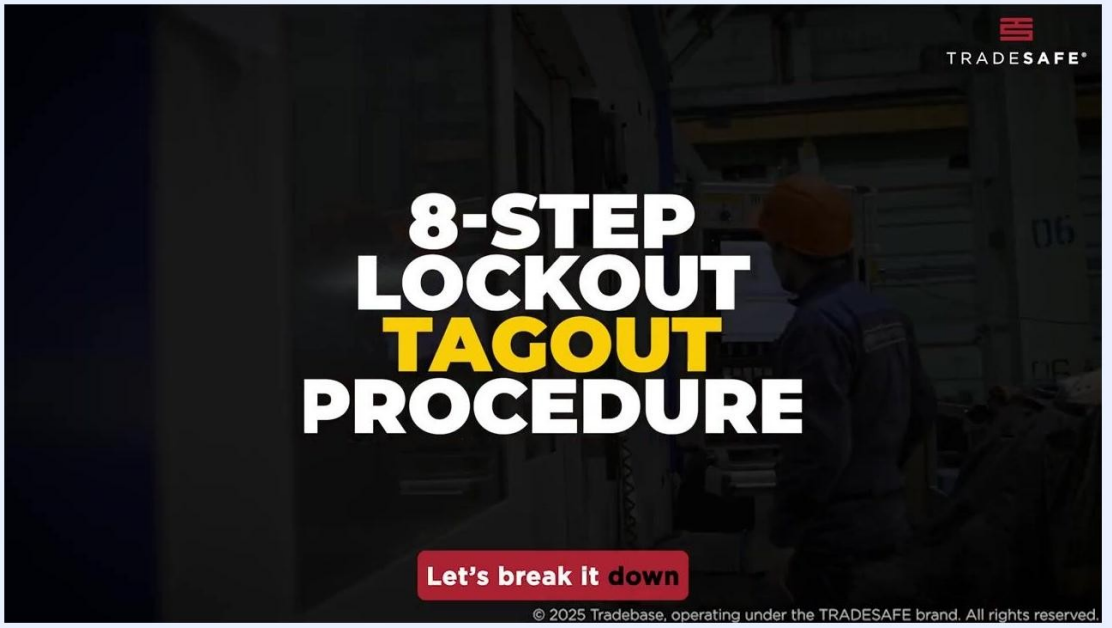
Text "8-STEP LOCKOUT TAGOUT PROCEDURE" is displayed with a worker in a hard hat visible in the background.

Scope

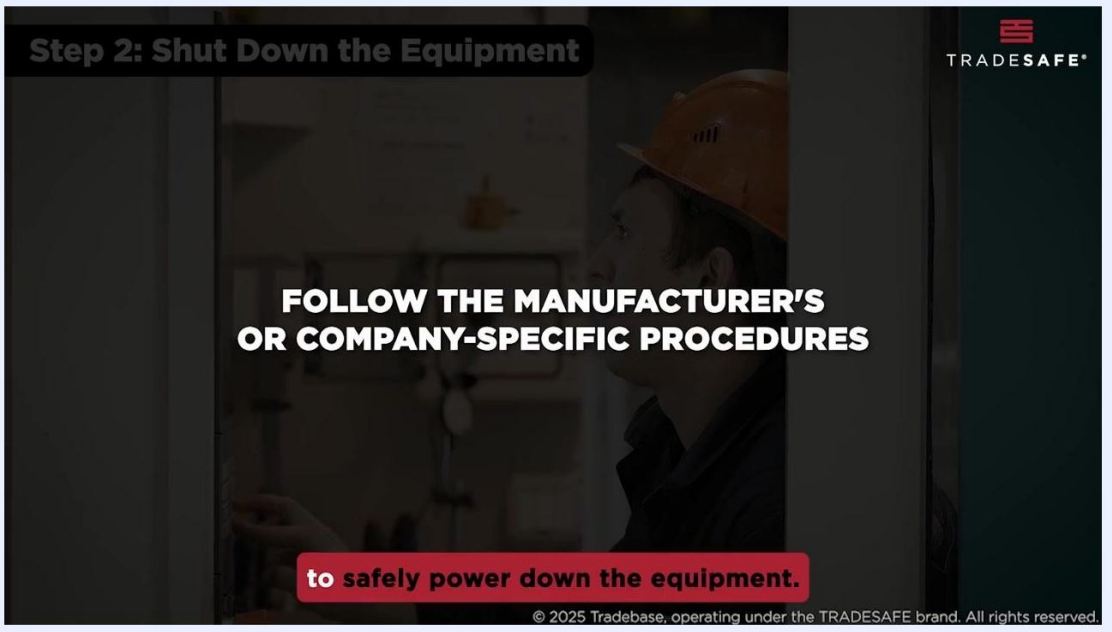
Before locking anything out, survey the equipment and its surrounding environment to determine every source of hazardous energy connected to it, using checklists or diagrams if they are available so no source is overlooked. This defines the boundaries of the job and the systems that will be affected once the lockout begins.

- Document each identified energy source for reference throughout the lockout process.
- Inform every employee who may be affected, including operators, maintenance staff, and supervisors, about which equipment will be locked out and why.

- Confirm that all affected personnel understand the plan before work proceeds.



A worker documents machinery energy sources during inspection.



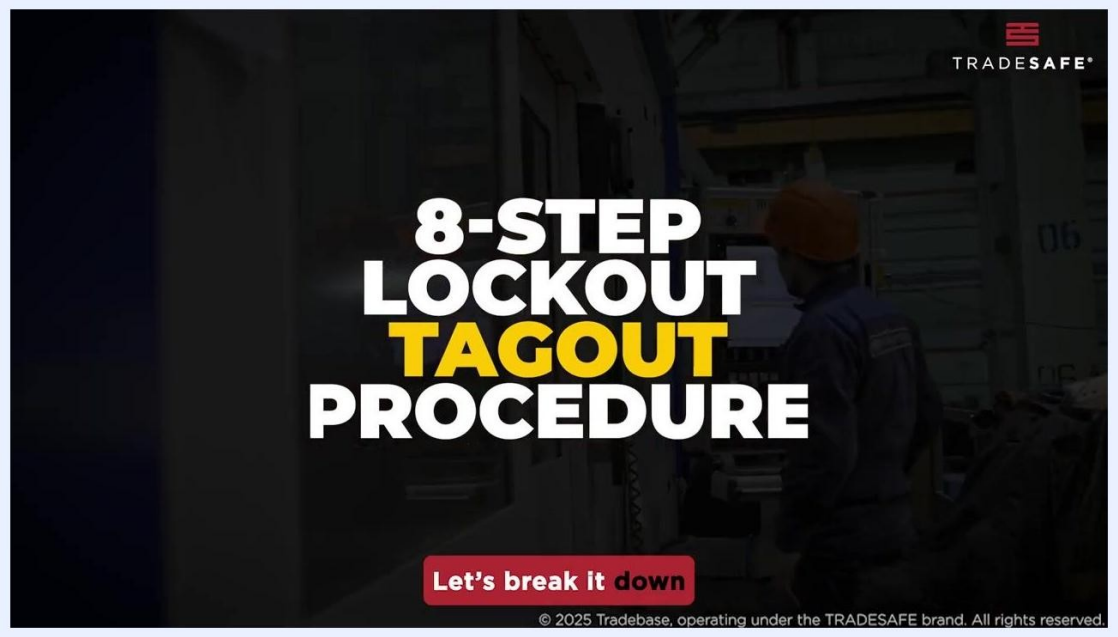
Two workers in lab coats and hairnets stand at an industrial control panel, one holding a clipboard and gesturing toward the equipment.

A complete scope statement should also name the specific facility and the equipment tag number involved in the job; this level of site-specific identification

is not part of the general procedure described here and should be added from your facility's own equipment records.

Energy sources

When you survey equipment, identify every type of energy that could pose a hazard. Include electrical power, hydraulic systems, and pressurized air, and inspect the machine carefully for hidden or secondary sources such as stored energy in springs or capacitors and backup power supplies.



A worker in a yellow hard hat inspects machinery while referencing a clipboard.

- Electrical power connected to the equipment.
- Hydraulic systems and pressurized fluid lines.
- Pneumatic systems and pressurized air.
- Stored energy such as springs, capacitors, or residual pressure in tanks, pipes, and cylinders.

- Mechanical energy from parts that could move unexpectedly.

A close-up of a hand turning a red valve on industrial piping.

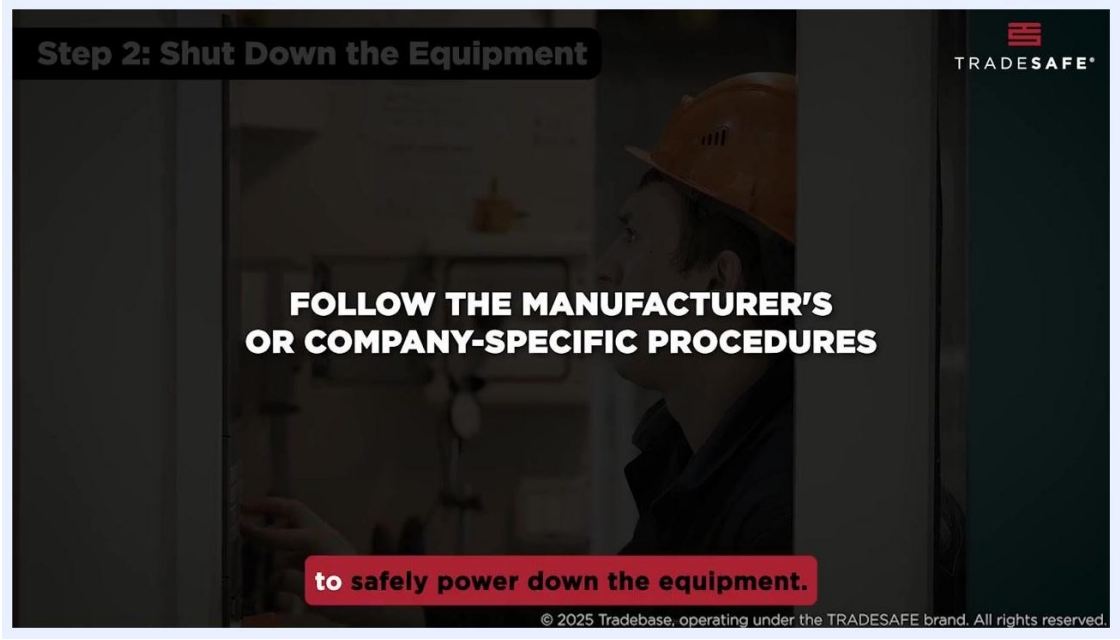
A gloved hand operates a valve near blue tanks to release residual pressure.

The source material does not separately address chemical, thermal, or gravity-related hazards; a complete energy source list for oil and gas equipment should also account for these where they apply on site.

Isolation points

Isolation points are the locations where energy is physically interrupted, such as circuit breakers, valves, and disconnect switches. Each point must be secured with a lockout device and a tag before work begins.

Isolation point	Method used	Device applied
Circuit breaker / electrical panel switch	Flip the breaker or open the disconnect switch	Red lockout device on the switch
Valve on piping or a pressurized system	Close or turn the valve to stop flow	Lockout hasp secured to the valve
Disconnect switch	Disconnect the power supply	Lock and standardized "DANGER" tag



A worker in a hard hat and gloves turns off a machine in an industrial setting.

A worker's hands attach a "DANGER" tag to a red lockout device on a pipe.

The procedure does not specify facility-specific tag numbers, blind or drain locations, or the named individual responsible for each isolation point; these details should be recorded on your site's own isolation point log before the lockout begins.

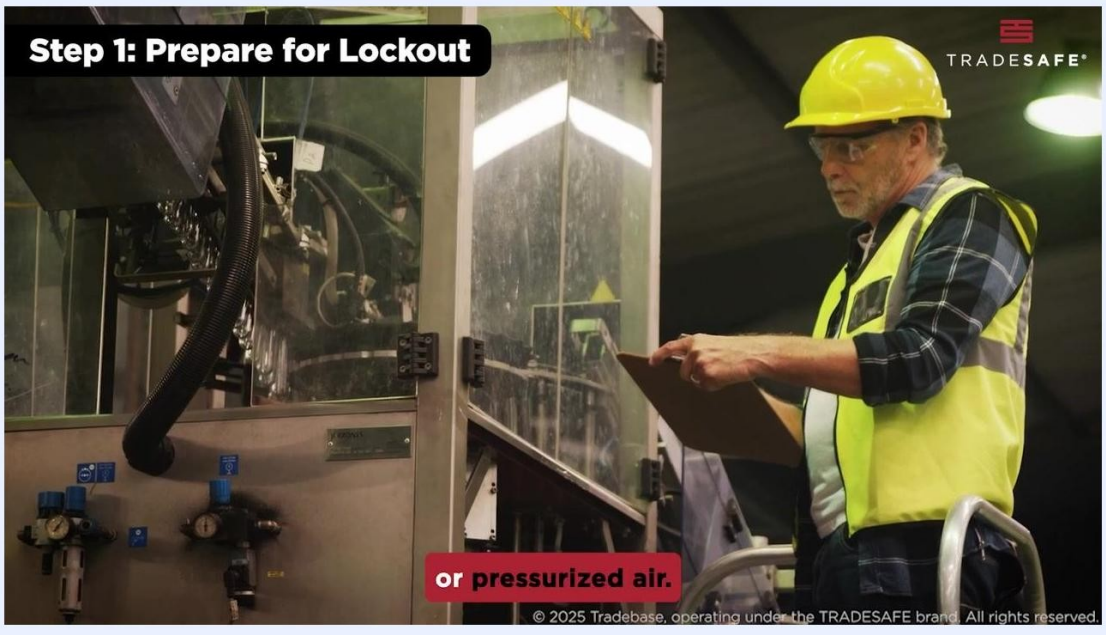
Lockout steps

Follow the manufacturer's or company-specific procedures to safely power down the equipment before isolating it.

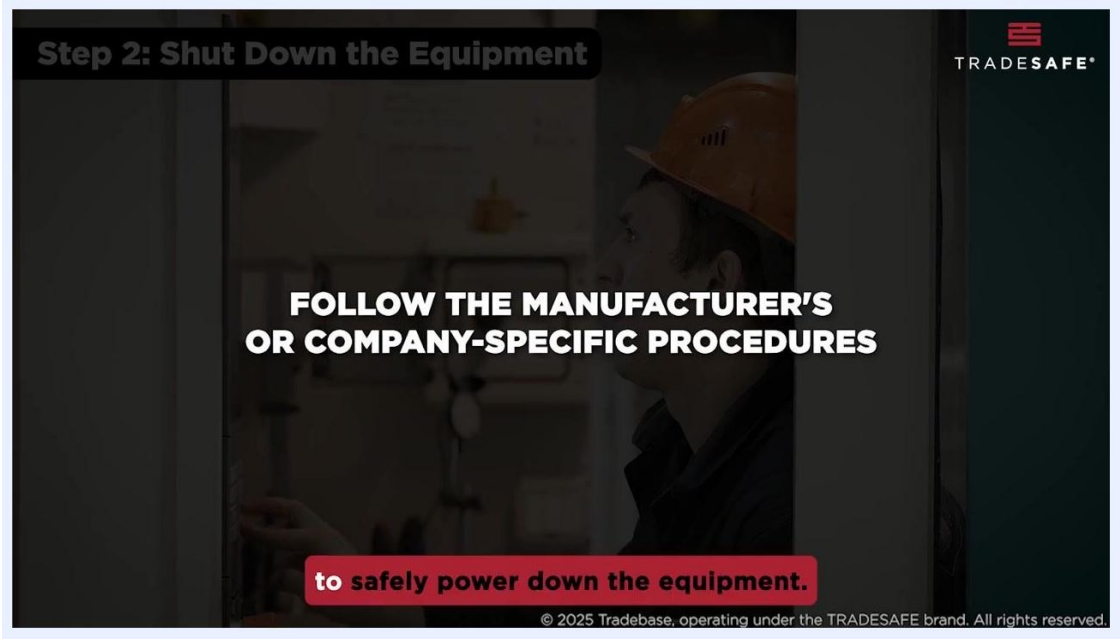
1. Identify the correct shutdown sequence for the specific machine and use the control panel to press the appropriate buttons or switches to turn it off. Do not improvise or skip steps in the shutdown process.
2. Ensure all moving parts have come to a complete stop, visually inspect the equipment, and listen for any sounds of operation before proceeding.
3. Identify all energy isolation points, such as circuit breakers, valves, and disconnect switches, and flip, close, or disconnect them as required to isolate every form of hazardous energy.
4. Place a lockout device, such as a lock or hasp, on each energy isolation point so it cannot be reconnected without a key or tool.
5. Attach a clearly labeled tag to each lockout device, filled out with the name of the person applying the lock and the reason for the lockout, using standardized tags that include a DANGER warning and space for remarks.
6. Use OSHA-standardized locks and tags so they are easily identifiable to everyone on site, and double-check that each isolation point is locked and tagged before proceeding.
7. Release any residual pressure from the system by opening valves or using bleed devices to safely vent trapped pressure from tanks, pipes, or cylinders, and bleed off hydraulic fluid as necessary.
8. Secure all moving parts using blocks, pins, or restraints so no part of the equipment can move unexpectedly.

9. Communicate the lockout status to all affected employees so everyone understands which equipment is locked out and why.

Two workers in a workshop, one operating a lathe while the other observes.

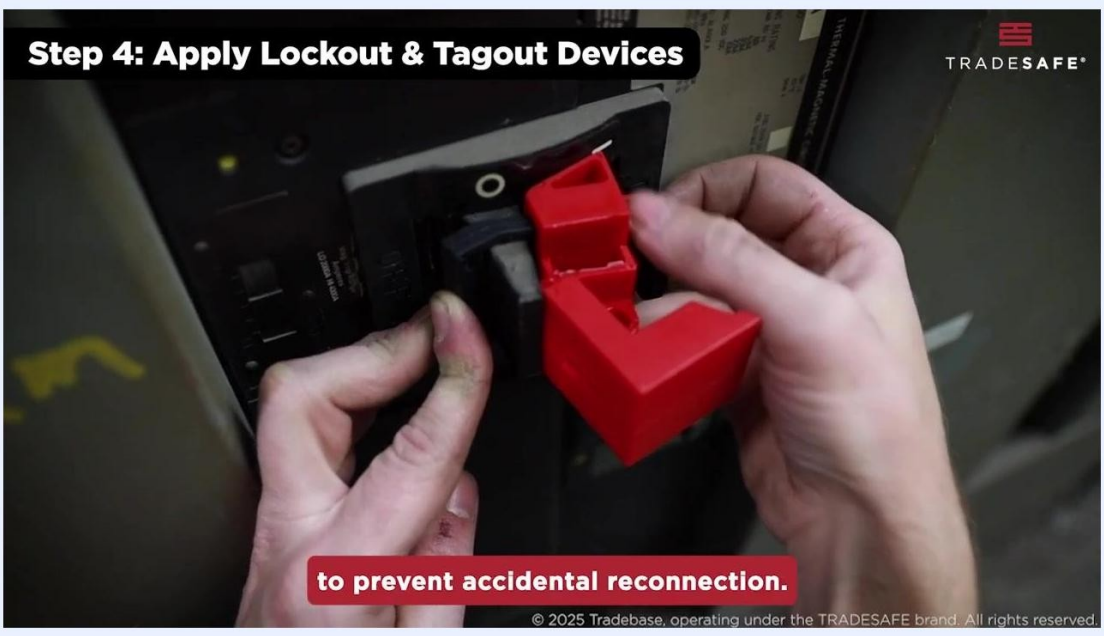


Two workers in lab coats and hairnets review documents at a control panel.



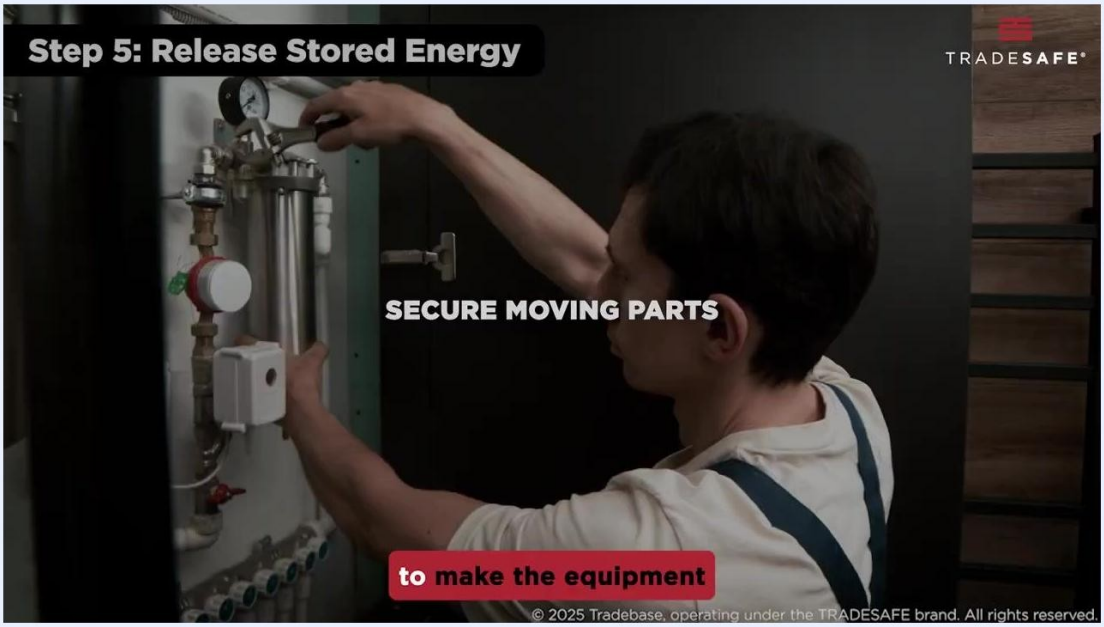
A worker opens an electrical panel and reaches to operate a switch.

A worker faces a control panel while following manufacturer shutdown instructions.



A hand holds a "DANGER" lockout tag, preparing to attach it to a red lockout device.

A worker's hands attach a striped "DANGER" lockout tag to a red lockout device on an electrical panel.



A hand operates a valve on a gas cylinder manifold with blue-handled valves and copper tubing.

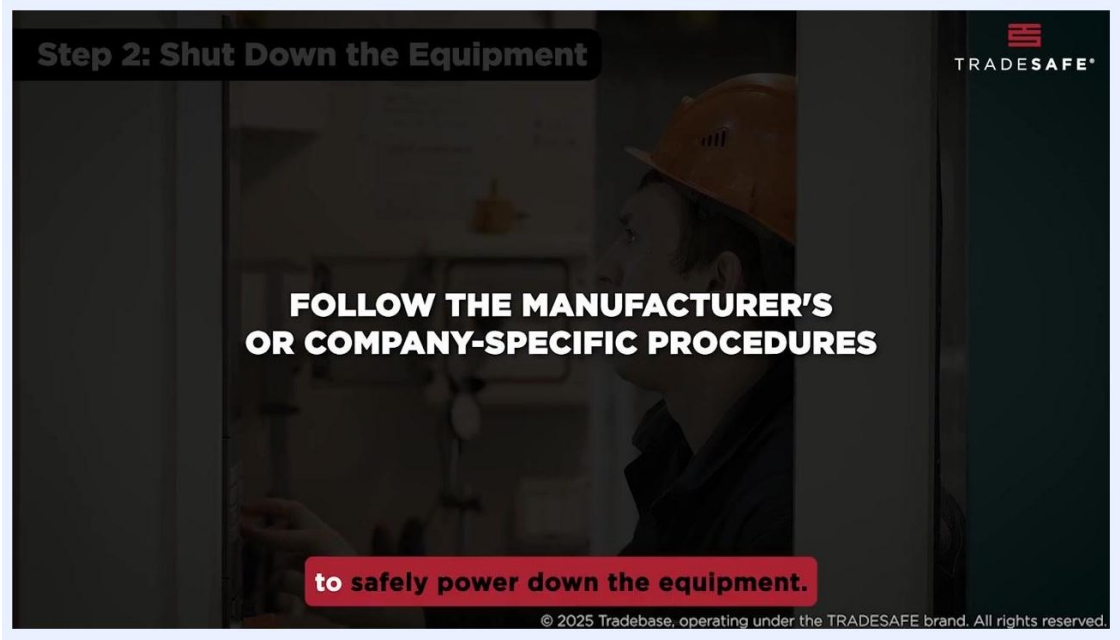
A worker secures a valve on a large industrial filter or pressure vessel.

Zero-energy verification

Once every isolation point is locked and tagged, test the controls to confirm the equipment is completely de-energized before maintenance begins.

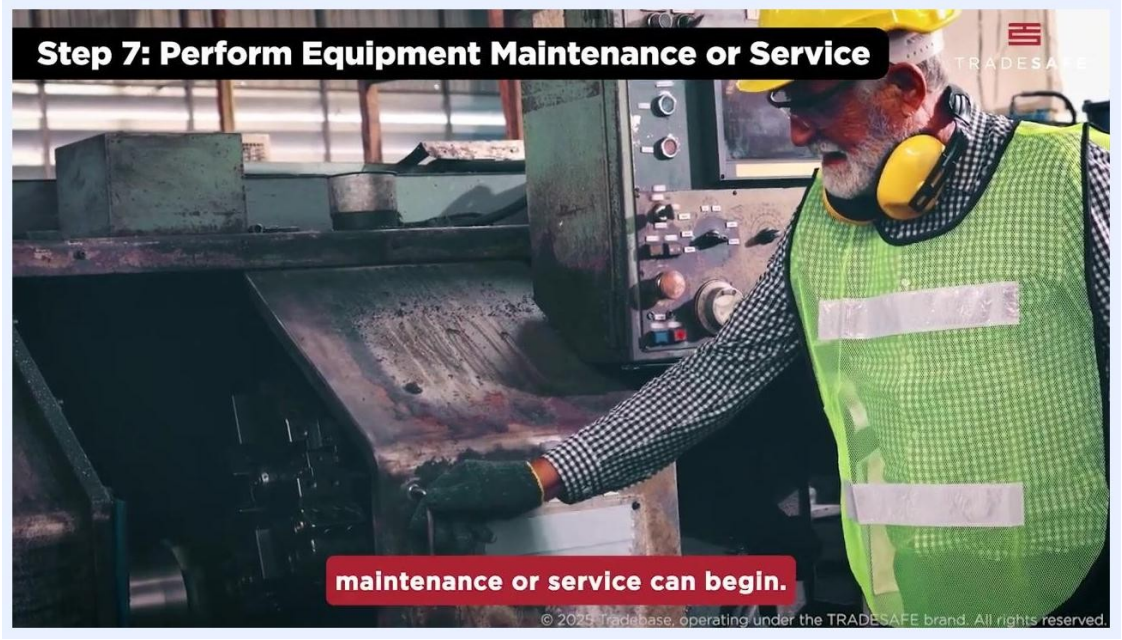
- Attempt to restart the machine using its normal controls and confirm it does not power on or operate.
- Double-check that all lockout/tagout devices remain in place and that all energy sources are isolated and released.
- Observe all indicator lights and gauges for any sign of residual energy, such as illuminated lights or pressure gauges reading above zero.

- Only proceed with maintenance once every indicator confirms the equipment is in a zero-energy state.



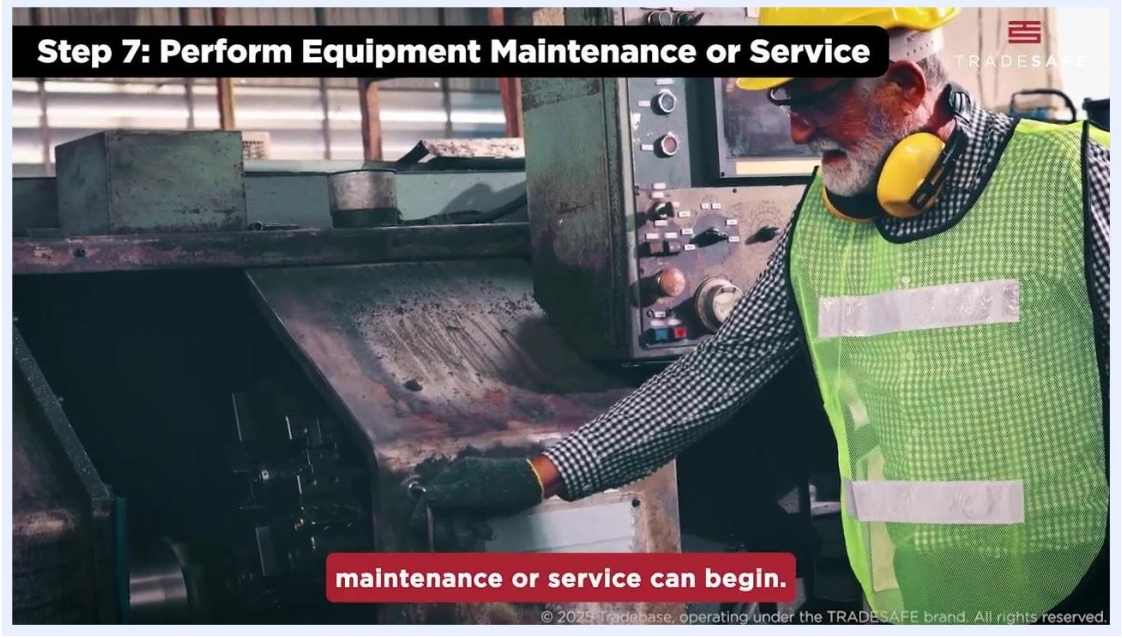
A worker in a mask and gloves operates a control panel with illuminated buttons and a digital display.

A worker at a control panel attempts to operate the machine to confirm it is de-energized.



A worker in safety glasses presses a button on a control panel as a final check.

The source procedure does not describe separate voltage testing with a meter or gas testing instruments; where those checks apply to your equipment, add them to this verification step along with a record of the results.



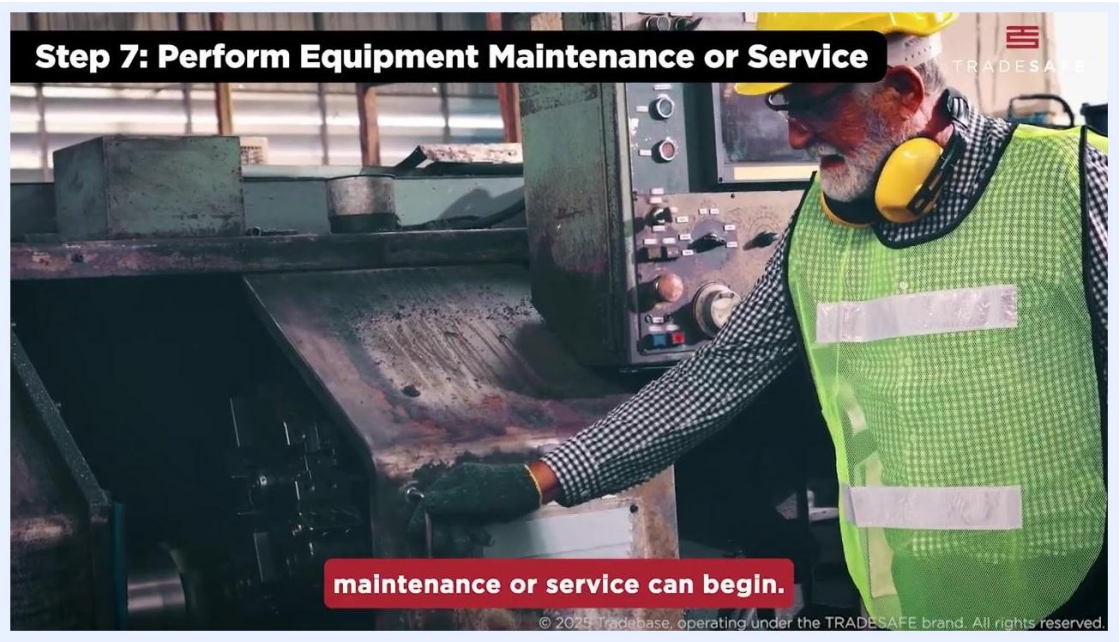
A close-up of a hand pressing a button on a control panel with labeled switches and indicator lights.

Shift handover

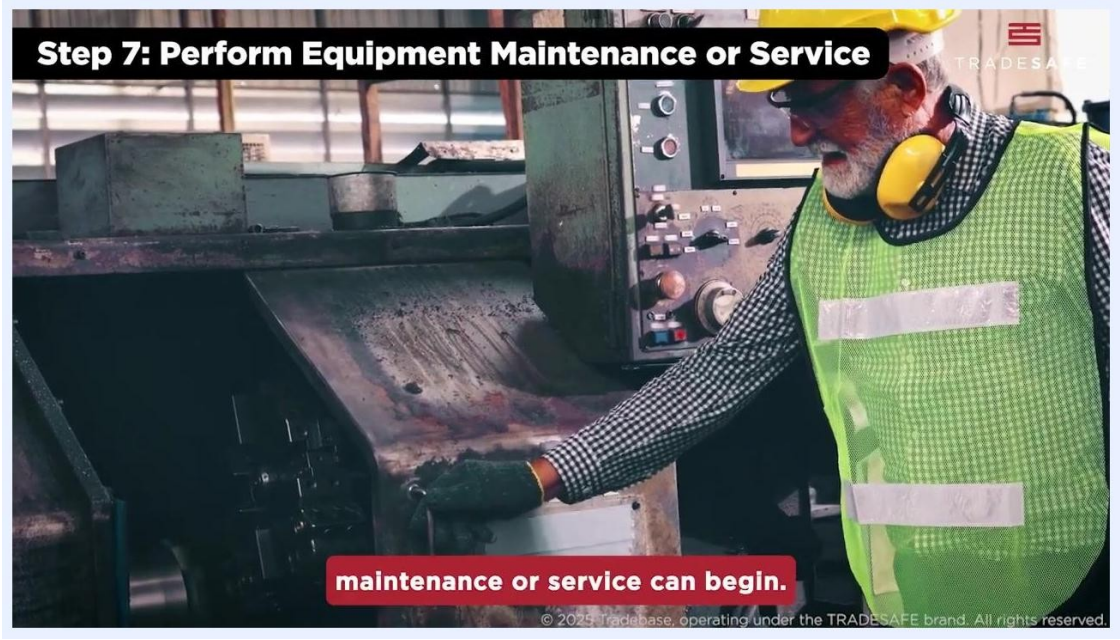
The source material does not describe a shift handover process. A complete procedure should state how personal locks are transferred between shifts, whether a group lock box is used, how permit continuity is maintained, and what checks a supervisor performs before work resumes.

Restoration

Maintenance or service work begins only after isolation has been verified, and it must follow the outlined procedures for the specific task, using all tools and materials correctly as specified in the work instructions. Do not remove any lockout/tagout devices while work is underway, and communicate any updates or changes in status with the team until all tasks are finished and the area is clear of tools and materials.



A worker in a yellow hard hat and hearing protection performs maintenance on a large industrial machine.



A worker in a face shield uses a power tool at a workstation, remaining aware of the lockout status.

A worker operates a lathe while completing maintenance tasks and communicating with the team.

Once maintenance is complete, restore the equipment to operational status by following these steps:

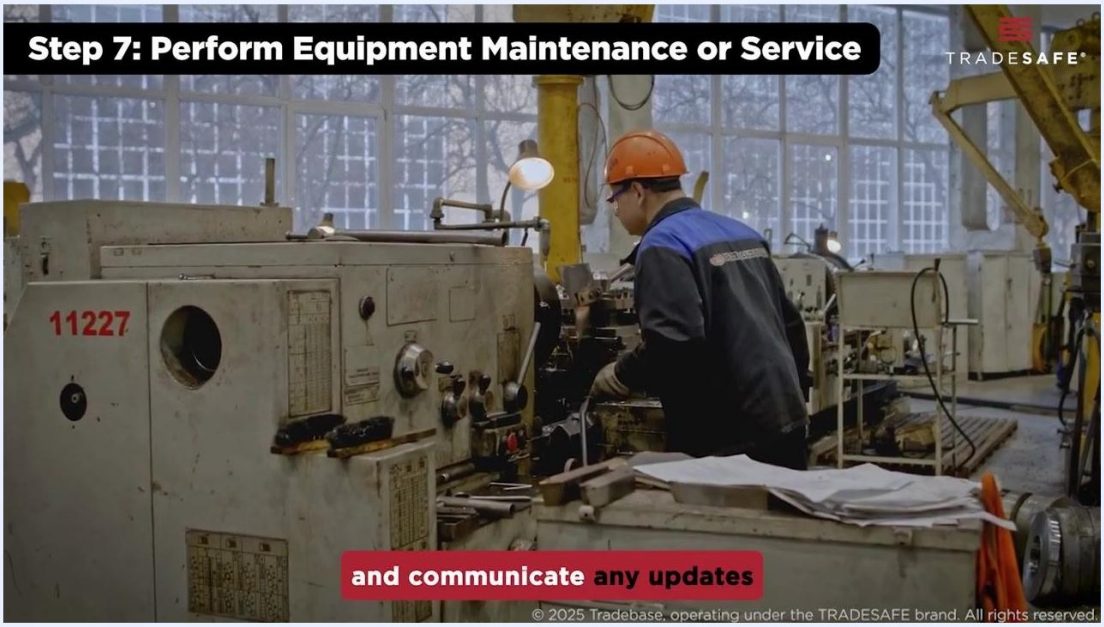
10. Confirm the identity of the employee removing each device: only the person who applied a lockout or tagout device is permitted to remove it.
11. Carefully detach the lockout hasp and DANGER DO NOT OPERATE tag from each isolation point.
12. Inspect the area to ensure all tools and personnel are clear before restoring power.
13. Reconnect all previously isolated energy sources, including electrical, hydraulic, and pneumatic systems, in the correct sequence.

14. Test the equipment to confirm it is functioning properly and safely before returning it to service.

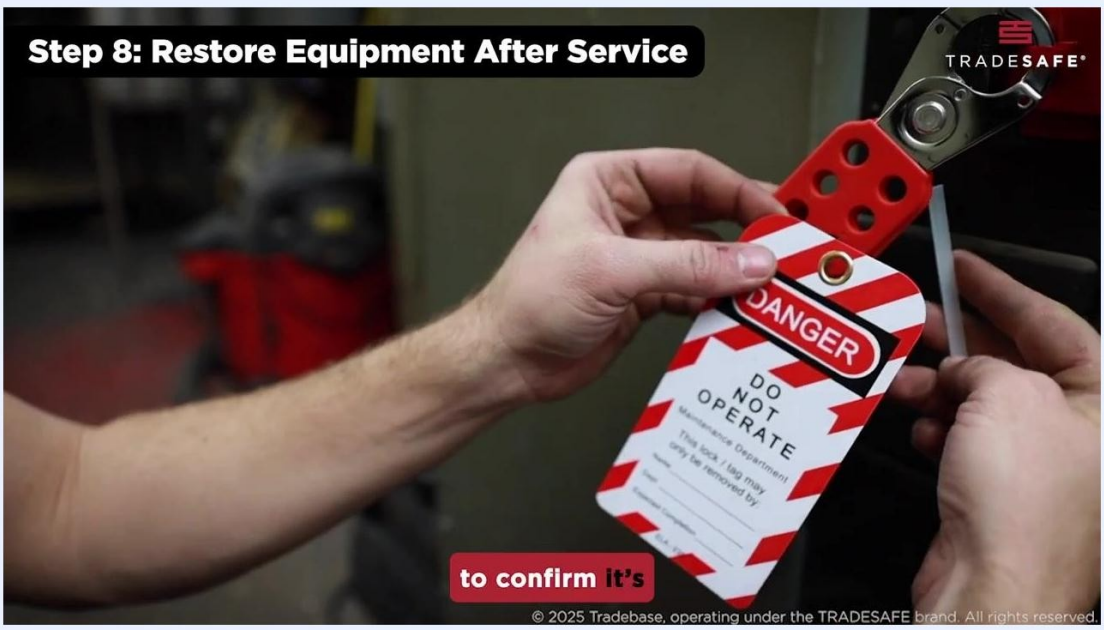
A worker closely inspects machinery components and wiring to understand the full system.

Hands apply a red lockout device to a black switch on an electrical panel.

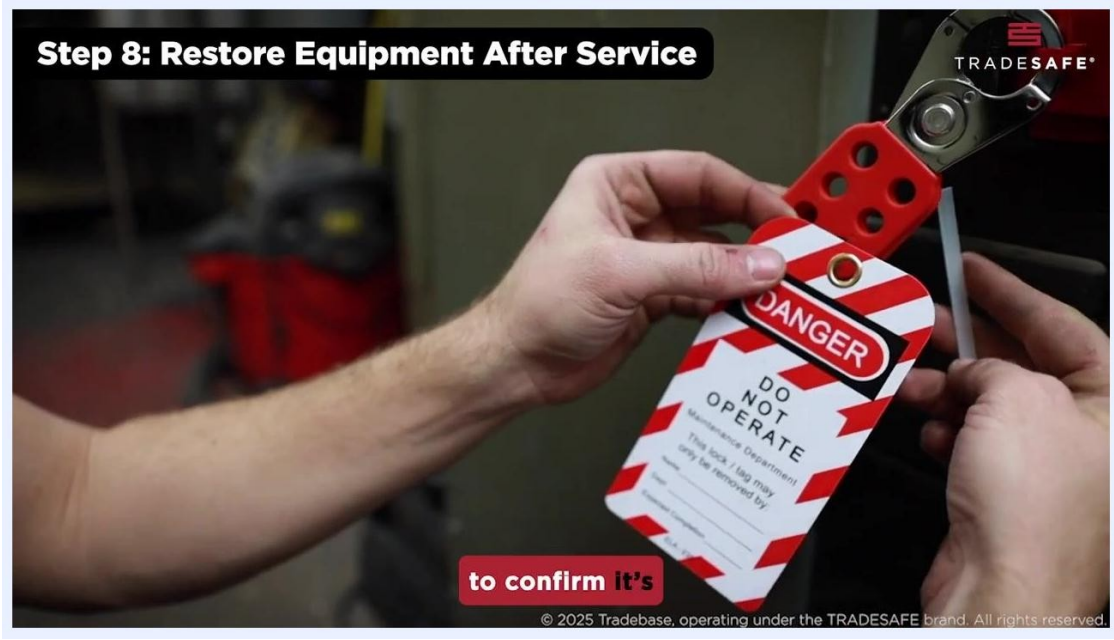
Refer to your lockout/tagout checklist to confirm no steps were missed and to double-check all isolation points and documentation before declaring the equipment safe for use.



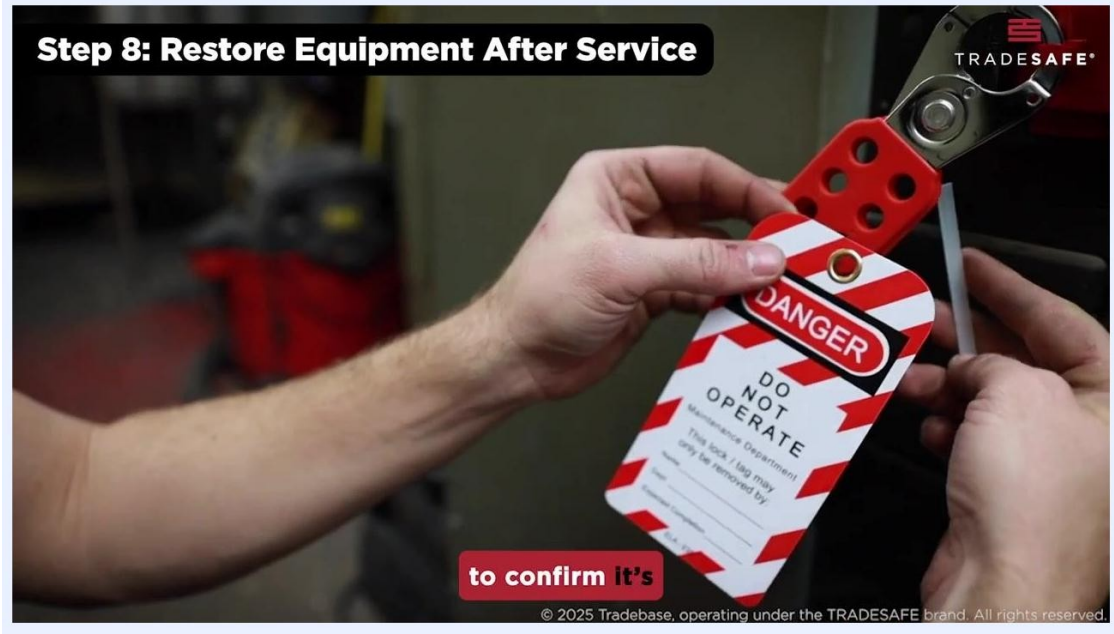
Hands remove a red lockout device from a circuit breaker panel to restore the equipment.



Hands hold a red lockout hasp and "DANGER DO NOT OPERATE" tag, confirming the identity of the employee before removal.



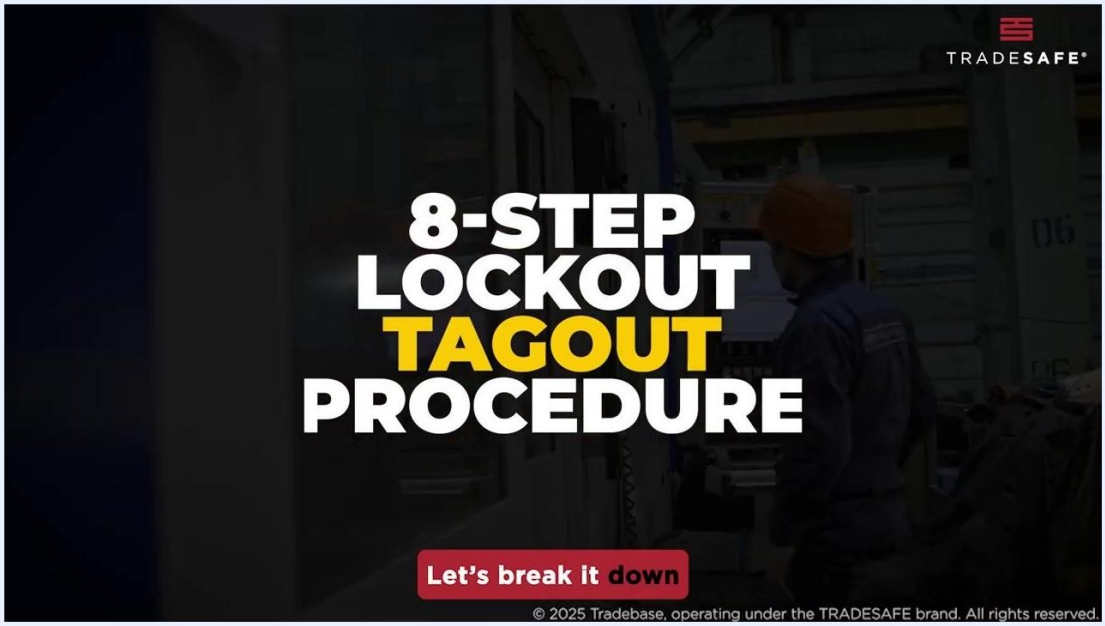
Hands remove a red lockout hasp and "DANGER DO NOT OPERATE" tag from equipment.



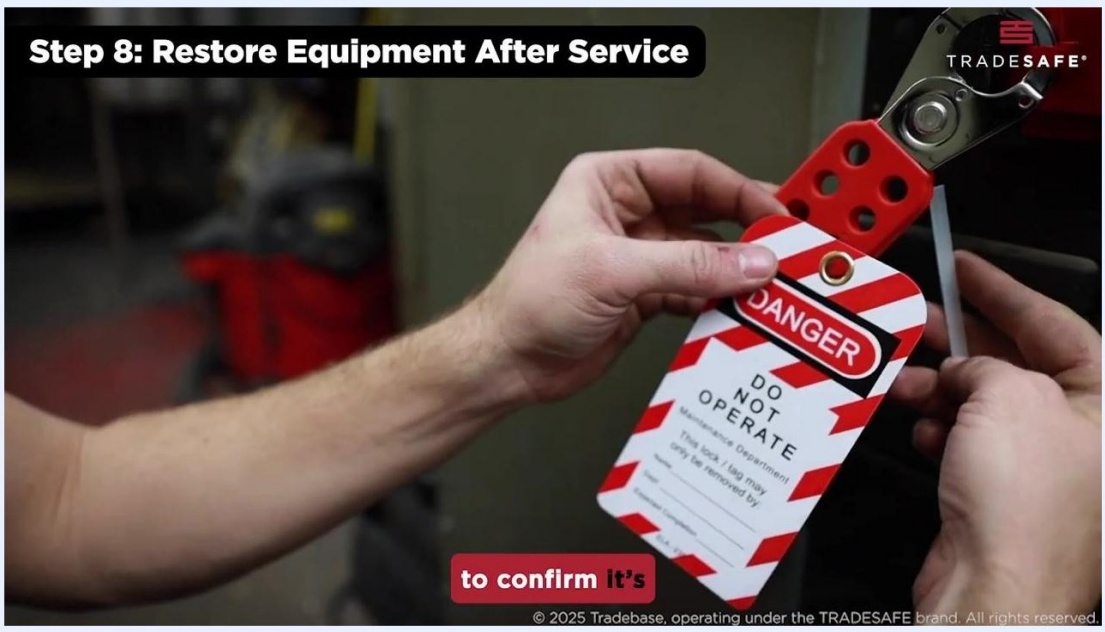
A hand holds a large red lockout device attached to a valve on a pipe in an industrial setting.

What's next

Lockout/tagout remains a reliable method for controlling hazardous energy and minimizing risk, and following established procedures consistently protects both workers and equipment. Share lockout/tagout safety tips with your team and continue to refer to your company's LOTO checklist and resources for complete compliance and continuous improvement.



Text "8-STEP" is displayed over a worker in a hard hat operating machinery.



Hands finish removing a lockout/tagout device from equipment before reconnecting energy sources.

A worker in a yellow hard hat and blue coveralls is in an industrial facility, with another worker in the background. The text "If you found this guide helpful," is at the bottom.

A factory floor with workers in blue uniforms. Large red subscribe, like, and bell icons are displayed in the center. The text "and subscribe for more" is at the bottom.

A "THANKS FOR WATCHING!" screen with placeholders for more videos, the Tradesafe logo, and website/social media information. The text "USA BASED, PREMIUM QUALITY, TRUSTED BY 1000'S DAILY. trdsf.com" is at the bottom.

A "THANKS FOR WATCHING!" screen with placeholders for more videos, the Tradesafe logo, and website/social media information. The text "USA BASED, PREMIUM QUALITY, TRUSTED BY 1000'S DAILY. trdsf.com" is at the bottom.