Lockout Tagout – Landscaping Meeting Kit

WHAT’S AT STAKE

In landscaping, workers frequently operate, maintain, and repair various machinery and equipment, including mowers, trimmers, chainsaws, and irrigation systems. These machines can unexpectedly start up or release stored energy while being serviced or maintained. The Lockout/Tagout (LOTO) process is a critical safety procedure designed to prevent accidental energization of equipment.

WHAT’S THE DANGER

Understanding these risks and adhering to LOTO protocols is crucial for ensuring safety in landscaping operations.

Specific Risks

1. Unexpected Equipment Start-Up

- Mechanical Hazards: Machines that unexpectedly start up while being serviced can cause severe injuries, such as amputations, crushing, or entanglement.
- Electrical Hazards: Electrical equipment can energize without warning, leading to shocks, burns, or electrocution if proper LOTO procedures are not followed.

2. Stored Energy Release

- **Hydraulic and Pneumatic Systems:** Machines that use hydraulic or pneumatic systems may retain stored energy even after being powered off.
- **Gravity and Tension Hazards:** Equipment parts that are held in place by tension or gravity, such as mowers or suspended tools, can fall or shift unexpectedly.

3. Failure to Communicate

- **Miscommunication:** If workers are not properly informed that equipment has been locked out, they may attempt to start the machine, unaware that maintenance is in progress.
- **Improper Tagging:** Inadequate or unclear tagging of locked-out equipment can result in confusion and potential hazards, as workers may not understand the reason for the lockout or who is responsible for it.

HOW TO PROTECT YOURSELF

Lockout/Tagout procedures control hazardous energy and prevent accidental start-up during maintenance.

Lockout/Tagout Procedures

1. Preparation

- **Identify Energy Sources:** Before beginning any maintenance or repair work, identify all energy sources associated with the equipment.
- **Notify Affected Employees:** Inform all employees working in the area that the equipment will be locked out for maintenance or repair.

2. Shut Down the Equipment

- **Power Off:** Turn off the machine or equipment using the standard operating procedures.
- **Isolate Energy Sources:** Disconnect or isolate the equipment from its energy sources. For electrical equipment, this may involve unplugging the machine or turning off the circuit breaker. For hydraulic or pneumatic systems, it may involve closing valves and releasing stored pressure.

3. Apply Lockout Devices

- **Locking Devices:** Attach a lockout device to each energy-isolating device to prevent accidental re-energization.
- **Tagging:** Attach a tag to the lockout device with the

worker’s name, date, and reason for lockout.

4. Release Stored Energy

- **Depressurize Systems:** Release any stored energy in hydraulic or pneumatic systems by bleeding off pressure or using other safe methods.
- **Lower Suspended Parts:** Lower any parts of the equipment that could fall due to gravity.

5. Verify Isolation

- **Test the Equipment:** Before starting maintenance or repair work, verify that the equipment has been effectively isolated from all energy sources.
- **Double-Check:** Make sure all energy sources are completely isolated.

During Maintenance or Repair

1. Stay Vigilant

- **Ongoing Communication:** Maintain clear communication with all team members throughout the maintenance or repair process.
- **Periodic Checks:** Periodically check that no one has tampered with the lockout devices.

2. Removing Lockout/Tagout

- **Ensure Safety:** Before removing any lockout devices, ensure that all tools and materials have been removed from the equipment, and that the area is clear of workers.
- **Notify Affected Employees:** Inform all workers that the lockout devices will be removed and that the equipment will be re-energized.
- **Remove Locks and Tags:** Each worker who applied a lock and tag should personally remove them after confirming that the job is complete, and it is safe to do so.
- **Re-Energize the Equipment:** Once all locks and tags have been removed, re-energize the equipment.

Training and Awareness

1. Regular Training and Refresher Courses

- **LOTO Training:** Provide training to identify energy sources, apply locks and tags, verify isolation, and conduct refresher courses.

2. Foster a Safety Culture

- **Promote Compliance:** Encourage workers to always follow LOTO procedures without shortcuts.

FINAL WORD

By following LOTO procedures, you can prevent the accidental release of hazardous energy and protect yourself and your coworkers from serious injuries.