

# SAFETY MATTERS



Safety Matters is intended to promote discussions of safety issues among underground construction professionals. You should always read and understand the operator's manual before operating any equipment. For additional information, please e-mail [safety@ditchwitch.com](mailto:safety@ditchwitch.com).

## TOPIC:

### Lockout/Tagout—FOR PERFORMING SERVICE AND/OR MAINTENANCE ON EQUIPMENT

#### POTENTIAL HAZARDS

- Caught in
- Drawn into
- Burn
- Struck by
- Laceration
- Fluid injection

#### PRECAUTIONS

- Know, understand and follow your employer's lockout/tagout procedures for any hazardous energy sources on machines.
- Ensure engine is off, unless operator's manual states otherwise and remove key from ignition and take with you while service and/or maintenance is being performed. Also, disconnect the battery, if necessary.
- The equipment should be physically blocked from moving. Place on level ground, chock the wheels or tracks and set the parking brake, if equipped.
- Tag equipment for service near the ignition or start control. Or, if the battery has been disconnected, tag the disconnect device.
- To avoid burns, let engine cool before performing any service and/or maintenance.
- Any raised components need to be locked out or lowered to the ground. Some units have safety devices such as cylinder locks for raised components and chocks for tires or tracks. If a safety device is not provided, use wood or metal for support. Do not use concrete blocks.
- While working under a hood, latch or lock the hood in place or verify that it is resting over center to keep it from falling on you. Some hoods or doors on equipment can be taken completely off.
- Know the equipment. Be aware if the equipment contains an accumulator or capacitor. Know how to release trapped pressure from hydraulic or pneumatic lines and how to de-energize capacitors.
- Use lockout devices when possible. Tagout devices may be used in place of a lockout device if it provides the same protection. The person that installed the device should be the only one to remove it.

- Wear the appropriate Personal Protective Equipment (PPE) while performing maintenance.

#### INFORMATION/FACTS

- OSHA regulations for control of hazardous energy (lockout/tagout) can be found at 29 CFR 1910.147 and 29 CFR 1910.333.
- According to OSHA, failure to control hazardous energy accounts for nearly 10 percent of serious accidents in many industries.
- Types of hazardous energy to lockout:
  - Electrical
  - Mechanical
  - Raised loads or raised equipment
- Lockout is a mechanical device that physically prevents the release of energy.
- Tagout is the placement of a tagout device on an energy isolating device to indicate that the energy isolating device and equipment being controlled may not be operated until the tagout is removed.
- There are safety signs on the equipment and throughout the operator's manual. Read each safety sign carefully, know the potential hazards and how to avoid them.

#### TALES FROM THE TRENCH

- A worker was performing maintenance on a piece of equipment, but did not have the hood latched. A strong wind gust blew the hood door down. The hood hit the worker in the head, causing a concussion.
- A mechanic was performing service on a machine that would only take a few minutes so he left the key in the ignition. His coworker did not realize he was performing service and turned on the machine. The mechanic got his finger partially amputated by a moving belt in the engine compartment.
- A landscaper was under an unsupported raised bucket trying to look at something he thought was wrong on a loader. The lift cylinder broke and dropped the bucket. The landscaper was hit in the head and suffered severe brain damage.

**DON'T LEARN SAFETY  
BY ACCIDENT**

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