

Project WorkSAFE

Vermont DOL
Consultation

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Project WorkSAFE
Consultation

- Employer Obligations
- On-Site Consultation
- Who Typically participates?

On-Site Consultation



On-site Consultation






OSHA's On-Site Consultation Program offers free and confidential advice, information, and technical assistance to employers, employees, and unions to help them understand and meet their safety and health obligations under the OSHA Act. The program is available to all employers and employees in the United States, and is a key component of OSHA's outreach and training efforts. For more information, visit www.osha-slc.com.



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Project WorkSAFE
Consultation
(Texas Version)

Helping You
Create Safe
Workplaces




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VOSHA vs. Consultation

- What is **VOSHA** and what are their fees?
- What is **Project WorkSAFE?**
- What Services does it include:
 - Full service
 - Limited Service
 - Safety
 - Health
- How much does it cost?
 - Vermont Department of Labor does not charge for services
 - Funded through a grant from Federal OSHA
 - In short, it's **FREE!**

Sev./Prob.	Penalty	Severe Violat.	Fine/Day
High/Greater	\$13,494	High Gravity	\$134,532

NOTICE!
PENALTY ADJUSTMENTS FOR THE CALENDAR YEAR 2021 WILL GO INTO EFFECT ON FEBRUARY 1, 2021




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Lockout / Tagout (LOTO) Objectives:

Objectives:

- Identify what LOTO is
- Identify types of Hazardous Energy
- Identify hazards associated with uncontrolled hazardous energy
- Principal application of LOTO



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Lockout / Tagout (LOTO)

29 CFR 1910.147

What is LOTO?

- Practices and procedures:
 - used to **safeguard workers** from hazardous releases.
 - used to **disable hazardous energy** releases.
- OSHA requires:
 - Written (formal) **program** consisting of:
 - Energy control **procedures** (General & Specific);
 - Employee training (Roles & Responsibilities)
 - AUTHORIZED**
 - AFFECTED**
 - OTHERS**
 - Periodic (Annual Inspections)

WHO NEEDS TRAINING?







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When is LOTO required?

- When someone will be servicing or repairing machinery or equipment

And

- The unexpected machinery start-up or release of stored energy could cause injury

Examples:





- Installing,
- Constructing,
- Adjusting,
- Modifying,
- Unjamming
- Cleaning,
- Lubrication,
- Inspecting,
- Setup- prep for normal function



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Authorized Employee

- Employee who performs equipment, service, maintenance or implements these procedures.
- Are you AUTHORIZED to hang locks?







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Affected Employee

An employee:

- Whose job requires him/her to operate or use a machine or equipment on which servicing, or maintenance is being performed under lockout or tagout, or
- Whose Job requires him/her to work in an area in which such servicing or maintenance is being performed.



COFFEE HERE!







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Authorized, Affected & **OTHER**

Others are those who need to know:

- What LOTO looks like
- Not to touch something that is locked out or tagged out

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Exception to LOTO


MINOR SERVICING EXCEPTION – Limited exception!

- Work is minor in nature
- Routine & repetitive
- Performed during normal production operations
- Integral to the use of the equipment for production
- Work is performed using alternative methods which provide effective protection







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Why LOTO?



Victim crashed between loader's lift arm and cab
-Victim had 25 years experience
-2009 fatal investigation

SONYA WHITNEY
3RD GENERATION DAIRY FARMER
HORIZON ORGANIC PARTNER




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GRAPHIC CONTENT!
This could be you or someone you know

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Forms of Hazardous Energy?

- ▶ Electrical (live/stored)
- ▶ Hydraulic
- ▶ Pneumatic
- ▶ Chemical
- ▶ Thermal
- ▶ Mechanical/
rotating equipment
- ▶ GRAVITY!!!

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Hazardous Energy Source Examples

- ▶ Live electrical lines
- ▶ Electrical capacitors
- ▶ Lasers
- ▶ Engines & their moving parts
- ▶ Hydraulic lifts
- ▶ Pneumatic (air pressure lines)
- ▶ Pressurized water lines
- ▶ Springs
- ▶ Etc.

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Specific LOTO Procedures



- ❖ Tags equipment out of service
- ❖ Key removal (Locks out)
The employee performing the work maintains exclusive control of the vehicle's one and only key.
- ❑ Locked out & Tagged out?

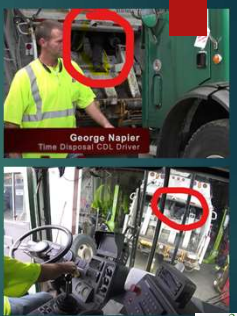

This employer has a documented procedure for LOTO to clean the truck's press. He uses this video to train his employees.



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Single key- how many trucks/equipment are all keyed the same...

- The following basic requirements must be applied:
 - **Written procedures** documenting and utilized to control potentially hazardous energy
 - Machine **specific** procedures [specific to the hazard(s)]
 - **Equipment:** Locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners or other hardware provided by the employer for isolating, securing, or blocking of machines/equipment from energy sources.
 - The employer must conduct **periodic inspections** of the energy control procedures at least **annually** to ensure the requirements of the standard are followed.
 - Employer shall provide **training** to ensure understanding, knowledge, skills, required for safe application, usage and removal are acquired by employees.


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SPECIFIC PROCEDURES



- General procedures alone are unacceptable
- You must know the sources of energy
- You must know how much pressure or how high the voltage might be
- Check the owner's manuals – some cover it all with the "Danger", "Warnings", "Cautions", etc.

ENERGY SOURCE	CONTROL METHOD	CONTROL POINT	CONTROL METHOD	CONTROL POINT
Electrical	Lockout/Tagout	Disconnect switch	Lockout/Tagout	Disconnect switch
Hydraulic	Lockout/Tagout	Pressure relief valve	Lockout/Tagout	Pressure relief valve
Pneumatic	Lockout/Tagout	Air supply line	Lockout/Tagout	Air supply line
Mechanical	Lockout/Tagout	Drive shaft	Lockout/Tagout	Drive shaft
Thermal	Lockout/Tagout	Hot surfaces	Lockout/Tagout	Hot surfaces
Chemical	Lockout/Tagout	Toxic substances	Lockout/Tagout	Toxic substances
Biological	Lockout/Tagout	Pathogens	Lockout/Tagout	Pathogens
Radiation	Lockout/Tagout	Ionizing radiation	Lockout/Tagout	Ionizing radiation
Other	Lockout/Tagout	Other energy sources	Lockout/Tagout	Other energy sources



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Skid Steer Owner's Manual

Proper entry and exit

⚠ DANGER
Crushing hazard!
Do not enter or exit the operator's compartment while the loader arms are raised or unsupported. Rest the loader arms on the ground or verify that loader arms is being supported by the loader arm strut or loader arm lock pin before entering or exiting the operator's compartment.

⚠ DANGER
Crushing hazard!
Do not enter or exit the operator's compartment while the loader arms are raised or unsupported. Rest the loader arms on the ground or verify that loader arm is being supported by the loader arm strut or loader arm lock pin before entering or exiting the operator's compartment.
Failure to comply will result in death or serious injury.

Specific precautions to this

⚠ DANGER
Crushing hazard!
Do not enter or exit the operator's compartment while the loader arms are raised or unsupported. Rest the loader arms on the ground or verify that loader arm lock pin before entering or exiting the operator's compartment.
Failure to comply will result in death or serious injury.

Unleak and lower the loader arm for machine operation




⚠ DANGER
Crushing hazard!
The loader arm is unsupported during support strut removal. Do not enter or exit the operator's compartment with an unsupported loader arm. Two persons are required during storage. One person should remove and store the support strut while the operator remains in the operator's compartment.
Failure to comply will result in death or serious injury.


Loader arm lock and cab tilt procedure - radial lift machines

⚠ DANGER
Crushing hazard!
Do not enter or exit the operator's compartment while the loader arms are raised or unsupported. Rest the loader arms on the ground or verify that loader arm is being supported by the loader arm strut or loader arm lock pin before entering or exiting the operator's compartment.
Failure to comply will result in death or serious injury.

Loader arm lock and cab tilt procedure - vertical lift machines

⚠ DANGER
Crushing hazard!
The loader arm is unsupported during support strut removal. Do not enter or exit the operator's compartment with an unsupported loader arm. Two persons are required during storage. One person should remove and store the support strut while the operator remains in the operator's compartment.
Failure to comply will result in death or serious injury.



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Job HAZARD Analysis

- Foundation of sound energy control procedures
- OSHA does not approve or certify hazard or risk analysis
- OSHA may apply recognized analysis such as those in the owner's manual
- Knowledgeable staff expertise may be required for more complex equipment.

JOB

H Identify Job Task

A Break Job Steps


Z Identify Potential Hazards

A Assess Risk

R Determine Control Measure

D Communicate & Implement

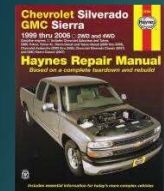
ANALYSIS



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Chevrolet Silverado GMC Sierra
1999 thru 2008 - 2009 and 2010

Haynes Repair Manual
Based on a complete teardown and rebuild




FORD PICK-UPS
2007-14 HELPERS MANUAL


CHILTON

Learn it all, understand it, fix it the right way.


Don't do this.



Do this.



HOW TO LIFT YOUR CAR





Chilton / Haynes Repair Manuals


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Vehicle Hazardous Energy Control


- Year after year vehicle servicing and maintenance activities have caused serious injury & death
- Trucks with dump bodies shall be equipped with positive means of support, permanently attached, and capable of being locked in position to prevent accidental lowering of the body while maintenance or inspection work is being done. 1926.601 (b)(10)



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A wooden block makeshift body prop



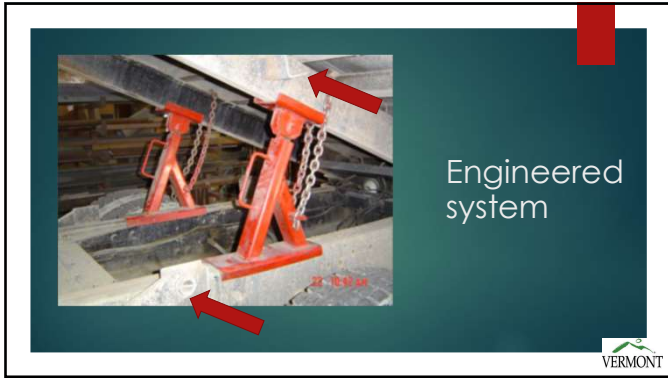
23



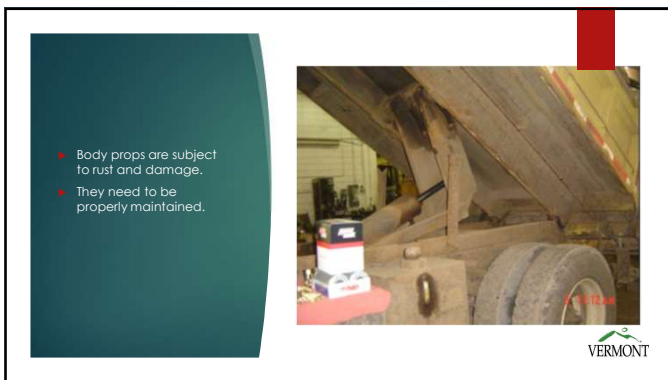
Steel I-beam sits across truck frame



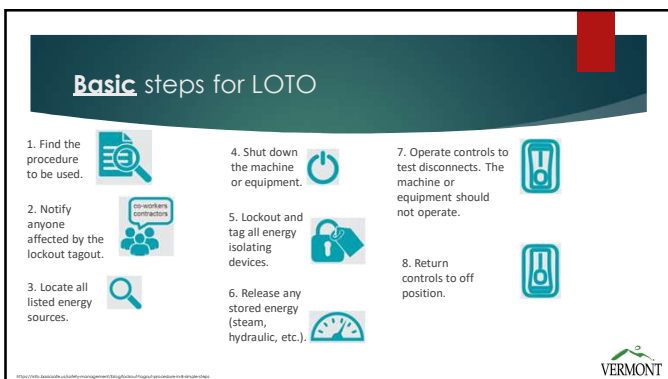
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Lockout/Tagout

Lockout/Tagout

- ▶ The placement of a **lockout device** on an energy isolating device to ensure the equipment cannot be operated until it's removed.
- ▶ Includes a Tag that states
 - ▶ **Danger Do Not Operate** or similar
 - ▶ Space for an employee name
 - ▶ Date and why it's being tagged out of service
 - ▶ Reinforced eyelet
- ▶ Employee must have exclusive control of the key.










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Tagout or Tags Plus


- ▶ Tagout Alone
- ▶ **Tags alone are only Warning devices.**
- ▶ Is only allowed when the energy isolating device is not capable of accepting a lockout device.
- ▶ The tag must provide **equivalent protection as using a lock** – hard to prove
- ▶ Must have a documented procedure
- ▶ As of Jan 2, 1990 must be able to accept a lockout device.

Labeled as energy isolating device

Specific Procedure

- ▶ How is a Tag alone equivalent to a lock here?
- ▶ If being repaired, modified, renovated, must be able to accept a lockout device.
- ▶ Tags Plus will require an extra step to verify the equipment is de-energized – that's the plus.



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Exclusive Control

- ▶ **Exclusive Control:** Employee has the **authority** to and is **continuously** in a position to prevent individuals from re-energizing equipment.
- ▶ This enables the employee to prevent the equipment from becoming energized **during servicing or maintenance.**







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OSHA Lockout/Tagout E-tool

- The E-tool can answer a lot of questions
- LOTO is probably 1/2 the work that OSHA looks for
- One of VOSHAs's Emphasis Programs

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The VERMONT Approach – Someone is waiting for you to come home safe and sound.

Who knows... It could be Batman or your chickens

THANK YOU FOR LISTENING

DO YOU HAVE ANY QUESTIONS

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credits

- ▶ <https://vectorforfree.com/product/coffee-delivery-vector/>
- ▶ <https://www.lincolnelectric.com/en-gb/support/welding-how-to/pages/welder-maintenance.aspx>
- ▶ <https://www.jkellersafety.com/news-articles/lockout-tagout-in-the-real-world>
- ▶ <https://elcosh.org/document/4002/6001396/safety-alert-use-skid-steer-loader-lift-arm-supports-during-maintenance-that-requires-lift-arms-to-be-raised.html>
- ▶ <https://www.youtube.com/watch?v=X2XdPjnpNE>
- ▶ <https://www.ford-trucks.com/forums/1041928-jacking-up-a-lifted-truck-2.html>
- ▶ <https://panduitblog.com/2019/10/02/safetytechnology/does-your-lockout-tagout-program-need-to-evolve/>
- ▶ <https://www.youtube.com/watch?v=eyvFslg5o>

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