NADA MANAGEMENT SERIES

A DEALER GUIDE TO

Lockout/Tagout (LOTO): Controlling Hazardous Energy





The National Automobile Dealers Association has prepared this management guide to assist its dealer members in compliance with federal regulatory requirements. The presentation of this information is not intended to encourage concerted action among competitors or any other action on the part of dealers that would in any manner fix or stabilize the price or any element of the price of any good or service.
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Driven Lockout/Tagout (LOTO): Controlling Hazardous Energy

TABLE OF CONTENTS

INTRODUCTION	2
ENERGY CONTROL PLAN	2
HARDWARE	2
EMPLOYEE TRAINING	3
INSPECTIONS	3
FURTHER INFORMATION	3
APPENDICES	4
A. Sample Dealership LOTO Procedures	4
B. Dealership Survey for Application of LOTO Devices	7
C. Lockout/Tagout Training Form	2

A DEALER GUIDE TO

Lockout/Tagout (LOTO): **Controlling Hazardous Energy**

INTRODUCTION

OSHA requires equipment or machinery being repaired or maintained to be locked or tagged out to help prevent injuries or deaths. Covered activities include constructing, installing, setting up, adjusting, inspecting, modifying, maintaining and/or servicing machines or equipment (including cleaning, lubricating, or unjamming), and making adjustments or tool changes, if employees may be exposed to an unexpected start-up, energizing, or release of stored hazardous energy. LOTO involves disabling the equipment or machinery and securing it against operation by means of a special safety lock-out or accident prevention tag.

The OSHA standard for The Control of Hazardous Energy (Lockout/Tagout), specifies the methods for controlling various energy sources—chemical, electrical, hydraulic, mechanical, pneumatic, thermal, and others—during service and/or maintenance activities. A further section of the standard addresses protection of employees working on electrical circuits.

It is the employer's responsibility to institute, implement, and maintain an energy control program. A dealership LOTO program must include:

- Energy control plan
- Employee training
- Periodic inspections

ENERGY CONTROL PLAN

An effective energy control plan for motor vehicle dealerships consists of two main components:

1. Facility Survey. Survey the dealership to identify energy-isolating devices and equipment or machinery powered by chemical, electrical, hydraulic, mechanical, pneumatic, or thermal energy. Energy-isolating devices include manually-operated electrical circuit breakers, control switches, power panels, valves, and compressed air. Dealership equipment subject to LOTO includes grinders, lifts, lathes, tire inflators, compressors, furnaces, air conditioners—and motor vehicles themselves. Inappropriate operation of the latter by dealership employees has caused injury and death.

The written survey should list the device, machinery, or equipment and the LOTO hardware to be used. Add new equipment to the survey as soon as the equipment is added to the facility. Also, ensure that new or overhauled equipment is capable of being locked out (i.e., allows for a way to affix a lock to the energy-isolating device or contains a built-in locking mechanism).

2. Energy Control Procedures. Dealership energy control procedures document why and how to perform lockout and tagout on the devices, equipment, and machinery identified in the facility survey. These procedures specify how to shut down and isolate equipment, affix and remove LOTO devices, and test locked-out equipment to ensure against operation. Employees may verify that they have read and understood the procedures by signing and dating a copy of them.

Appendix A contains sample Dealership LOTO Procedures. A sample Dealership Survey form is given in Appendix B.

HARDWARE

Obtain an adequate supply of LOTO hardware, standardized by size, color, and/or shape and, in the case of tags, by format and font as well. LOTO hardware should be easily recognized, durable, substantial, utilized only for LOTO purposes, and it should identify the employee applying the device(s). Such hardware includes padlocks, chains, valve handle lockouts, circuit breaker hasps, electric plug lockouts, and tags. Locks must be strong enough to prevent removal except by extreme force, such as with the use of bolt cutters. Tags must be able to resist at least 50 pounds of force without releasing, and should be designed so they will not inadvertently or accidentally detach during use. Both lockout and tagout devices must be able to withstand the workplace environment, including corrosive and damp locations or exposure to adverse weather conditions. Select hardware based on what machinery/equipment may be serviced or repaired. Store hardware on a simple mounted board in a central location.

Tags are warnings affixed to energy-isolating devices. They must be legible and understandable to all employees. They typically read, "DO NOT START," "DO NOT OPEN," "DO NOT CLOSE," or "DO NOT OPERATE." Tags must not be removed without authorization. They should not be bypassed, ignored, or otherwise defeated. Since tags do not provide the physical restraint that locks do, they should be used only on machines or equipment not capable of being locked out.

EMPLOYEE TRAINING

All dealership employees are considered "affected employees" and should be trained to understand the LOTO plan and the importance of not attempting to use equipment or machinery under maintenance or repair. Emphasize the limitations of tagout procedures. Consider giving copies of this guide to all employees with follow-up meetings in each department. Keep training records including dates and employee names. A sample Lockout/Tagout Training Form is given in Appendix C.

"Authorized employees" are those selected to implement LOTO procedures. They should review this bulletin and receive training on the recognition of applicable hazardous energy sources, the various types of energy in the workplace and the magnitude of each type, and the methods and means necessary for energy isolation and control. Retrain authorized employees when new machinery or equipment is added to the dealership or when job assignments change. Outside contractors should follow proper LOTO procedures as well.

INSPECTIONS

Designate an employee (e.g., your service or fixed operations manager) to serve as an inspector to review each authorized employee's LOTO responsibilities to ensure that the procedures are understood and implemented correctly and to remedy any deviations or inadequacies. Inspections should occur at least annually and an inspection log should list covered machinery and equipment, inspection dates, the employees included in the inspection, and the inspector's name.

FURTHER INFORMATION

Please direct questions concerning this guide to NADA Legal and Regulatory Affairs at 703.821.7040 or regs@nada.org. For further information, see https:// www.osha.gov/SLTC/controlhazardousenergy/.

Appendices

Appendix A

Sample Dealership LOTO Procedures

General Instructions

Fill in necessary information and add any dealership-specific LOTO procedures. Lockout or tagout devices are available from safety supply catalogs or distributors. When tagout devices are used, employees should be trained to recognize that, unlike lockout devices, there are no physical barriers to prevent sudden equipment start-up. Also, inspections of tagout devices and of tagged-out machinery/equipment must be more rigorous.

The following LOTO procedures are for	(Name of Dealership)
THE IOHOWING LOTO procedures are for	(Name of Dealership)

Purpose

These procedures establish general requirements for the lockout of energy-isolating devices when maintenance or servicing is done on machinery or equipment. Machinery or equipment must be stopped, isolated from potentially hazardous energy sources, and locked- or tagged-out before employees perform service or maintenance, or if an unexpected start-up, release or energizing of stored energy could cause injury.

Compliance with this Program

"Authorized employees" are those who actually perform LOTO procedures. "Affected employees" should not attempt to start, energize or use locked- or tagged-out machinery or equipment. Employees who violate these LOTO procedures are subject to sanction.

General Procedures

- I. Authorized employees should:
 - A. Identify the type and magnitude of energy used, understand the hazards of the energy, and know the methods to control the energy.
 - B. Shut down operating machinery/equipment by normal stopping procedures (depress stop button, open switch, close valve, etc.).
 - C. Use isolating devices (switches, valves, etc.) to isolate machinery or equipment from energy sources. Dissipate or restrain stored or residual energy (i.e., in springs, capacitors, elevated members, rotating flywheels, hydraulic systems, air, gas, steam or water pressure, etc.) by grounding, repositioning, blocking, bleeding down, etc.
 - **D.** Lockout or tagout energy-isolating devices with individual locks or tags.
 - **E.** Confirm that machinery or equipment is isolated from energy sources:
 - 1. Check that no personnel are exposed.
 - 2. Verify isolation by operating the push button or other normal operating controls or by testing for nonoperative condition. Operating controls should be returned to their neutral or "off" position after verifying that the machinery or equipment is isolated (locked out).

II. Affected employees should be notified when machinery or equipment requires service or maintenance and when machinery or equipment is shut down and locked- or tagged-out.

Guidelines by Energy Type

The following methods and devices can be used to lockout and tagout specific energy sources:

Chemical. Recognize all hazards. Insert a blank or blind in the line. Use valve lockouts, chains, padlocks, or lockouts at the isolating source. Examples are fluids and gases, such as an oil line.

Electrical. Unplug machinery or equipment and use electrical plug lockouts or disconnect switches with padlocks, lockouts, or tags. Ensure that all power sources are locked and tagged out. Bleed any stored electrical energy to obtain a zero state. Test to ensure all circuits are dead. Grinders are examples of electrical energy.

Hydraulic. Release pressure to reach zero energy state. Use lockout valves, chains, padlocks, or lockouts to lockout the energy source. A vehicle lift uses hydraulic energy.

Mechanical. Release or block stored mechanical energy. Be aware of gravity, springs, tension, and other sources of energy that may not be obvious. Padlocks, lockouts, and tags should also be used to lockout and tagout mechanical energy. A garage door is an example of mechanical energy.

Pneumatic. Release pressure to reach a zero energy state. Use chains, energy isolation air valves, shut-off valves, padlocks, or lockouts to lockout the energy source. A tire inflator uses pneumatic energy.

Thermal. Recognize all hazards of the high or low temperatures produced by mechanical work, radiation, chemical reaction, or electrical resistance. Shut down the main switch, disconnect plugs, and close steam or fluid line valves. Ensure that all power sources are locked and tagged out. A heater is an example of thermal energy.

Restoring Equipment to Service

When the machinery or equipment is ready to return to normal operating condition after servicing or maintenance, the following steps should be taken:

- Check machinery or equipment and the immediate area to see that nonessential items have been removed; that components are operationally intact; and that employees are safely positioned or removed from the area.
- **2.** Verify that the controls are "off" or in "neutral."
- **3.** Remove lockout devices and re-energize the machine or equipment. The removal of some forms of blocking may require re-energizing before lockout device removal.
- **4.** Notify affected employees that the servicing or maintenance is complete and that the machine or equipment is ready for use.

Key Handling Guidelines for Motor Vehicles

The following key control guidelines are designed for vehicles in for repair or service. These guidelines may be tailored to suit individual dealership operation needs.

- 1. Service Advisor takes possession of and tags ignition keys during the write-up.
- 2. For vehicles that should not be started or operated (no brakes, etc.), keys are stapled to the written repair

- orders with notes written on or attached to them. Vehicles are tagged to show clearly that they should not be started or operated. Designated technicians arrange to move these vehicles into their stalls.
- 3. For vehicles that may be safely started and operated, ignition keys are handled normally. Vehicles are brought to stalls by technicians or porters.
- **4.** Technicians should disconnect vehicle batteries, when practicable, following manufacturer instructions. When a battery disconnect is not practicable, unexpected start-ups should be prevented by removing the keys from the ignition and placing them in the sole control of the technician performing the maintenance or service. Technicians should keep ignition keys in a safe place under their control (on a board behind

5.	their bench, in vehicle ashtrays, on sun visors, under floor mats, etc.)—but not in their pockets. After maintenance or service is complete, the vehicle should be parked and the ignition key and repair order returned to the service writer.				
I have read and understand these LOTO procedures.					
En	nployee name (please print)				
Fn	polovee Signature Date				

Appendix B

Dealership Survey for Application of LOTO Devices

Dealership Department Instructions: Evaluate all machines, devices, and sources of energy to complete survey.				
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14.				
15.				

Appendix C

Lockout/Tagout Training Form

Dealership Department			
The following authorized employees have machine or piece of equipment listed in the	been trained to perform step-by-step LOTO procedures on each he Dealership Survey:		
Name (please print)			
Signature	Date		
Manager			
1			
2			
3			
4			
5			
The following affected employees have rece			
1			
2			
3			
4			
5			
6			

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