Village of Lake George DPW
Lock Out Tag Out Procedures

LOCKOUT-TAGOUT PROCEDURE
OSHA 29 CFR 1910.147

Lockout Tagout Procedure	
Purpose:	To protect authorized employees against unexpected or unplanned activation of equipment or energy while servicing equipment.
Scope:	Utilize this procedure for all scheduled PM shutdowns, any maintenance task that requires you to place your body in harm's way of the equipment, or if you have to leave the area while the equipment is in service.
Enforcement:	Failure to properly follow lockout-tagout procedure may result in corrective action

SHUTDOWN, LOCK, TAG & TEST SEQUENCE		
#	STEP	DESCRIPTION
1	Notify Employees	Notify all affected employees that servicing or maintenance is required, and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance
2	Review Lockout Procedure	The authorized employee shall refer to the company procedure to identify the type and magnitude of the type of energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.
3	Preform Machine Stop	If the machine or equipment is operating, shut it down by the normal stopping procedure (depress the stop button, open switch, close valve etc.). Reference machine operating procedure for normal shutdown.
4	Isolate Energy	Follow graphical lockout-tagout procedure from top to bottom to de-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s). NOTE It may be necessary to dissipate the non-lockable energy sources before isolating the lockable energy sources. (i.e. lower the machine to lowest position before locking out.)
5	Lockout Energy	Lockout & tagout as required the energy isolating device(s) with assigned individual lock(s) and tag(s).
6	Dissipate Energy	Stored or residual energy (such as that in capacitators, springs, elevated machine members, rotating flywheels, hydraulic systems, as well as air, gas, steam or water pressure, etc.) must be dissipated or restrained by methods such as grounding repositioning, blocking, bleeding down etc.
7	Attempt Restart	Ensure that the equipment is disconnected from the energy sources by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating controls or by testing to make certain the equipment will not operate. Caution: Return operating controls to neutral or "off" position after verifying the isolation of the equipment.

RESTORE TO SERVICE SEQUENCE		
#	STEP	DESCRIPTION
1	Check Machine	Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
2	Check Area	Check the work are to ensure that all employees have been safely positioned or removed from the area.
3	Verify Machine	Verify that the controls are in neutral.
4	Remove Lockout	Remove the locks, tags, and lockout devices and re-energize the machine or equipment. In reverse order, follow all of the steps from the visual lockout-tagout procedure found on the previous page. Note: The removal of some forms of blocking may require re-energization of the machine before safe removal.
5	Notify Employees	Notify affected employees that the servicing or maintenance is completed and the machine or equipment is ready for use.

Village of Lake George Department of Public Works
LOCKOUT/TAGOUT PROGRAM
OSHA 1910.147

PURPOSE

This procedure establishes the minimum requirements for the lockout and use of energy isolating devices whenever maintenance or servicing is done on machines or equipment. Lockout tagout (LOTO) will be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources, and locked out before employees perform any servicing or maintenance where the unexpected energization or start-up of the machine or equipment or the release of stored energy could cause injury.

This procedure does not apply to work on cord and plug connected electrical equipment; to hot-tap operations involving transmission and distribution systems for substances such as gas, steam, water, and petroleum products when they are performed on pressurized pipelines provided it has been demonstrated that continuity of service is essential, shutdown of the system is impractical and documented procedures are followed. This procedure does not apply to normal servicing and/or maintenance operations provided that an employee is not required to remove or bypass a guard or safety feature and an employee is not required to place any part of their body in an area on a machine or piece of equipment proximate to the point of operation or in a danger zone of the machine operating cycle.

COMPLIANCE WITH THIS PROGRAM

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with the procedures outlined in this document. All employees, upon observing a machine or piece of equipment that is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment.

Employees who do not comply with the requirements of this program shall be subject to formal counseling up to and including termination.

LOGBOOK

Any time an employee performs lockout tagout on any piece of equipment the logbook will be filled out by those employees performing the work. Employees will be required to record the following information into the logbook:

- the piece of equipment being serviced or maintenance,
- the location of that equipment,
- the date of which lockout began,
- the authorized employees applying their locks, tags, and energy isolating devices,
- as well as the expected date of the equipment being returned to service.

Once the service is complete, the employee will return to the logbook and complete the entry.

AUTHORIZED EMPLOYEES

- All Trained Employees

AFFECTED EMPLOYEES

- Other operations and maintenance staff

It is the policy of the DPW to inform all affected employees of any lockout/tagout procedures performed while the affected employees are on site. The Foreman shall make available to all affected parties a copy of the lockout tagout procedures and shall discuss the impact of any maintenance performed on the affected parties' duties.

LOCK OUT TAGOUT STATION LOCATIONS

Lockout tagout stations are located in all process areas for employee use.

LOCKOUT/TAGOUT DEVICES

Lockout/tagout devices shall be singularly identified; shall be the only devices used for controlling energy; and shall not be used for other purposes. Lockout and tagout devices shall be capable of withstanding the environment to which they are exposed. Devices shall be standardized; locks are coded by color and tag language is to be consistent. Each lockout and tagout device will indicate the identity of the employee applying the device(s).

UNAUTHORIZED LOCK REMOVAL

When an authorized employee who applied the lockout or tagout device is not available to remove it, the device may be removed only under the direction of the Foreman. The Foreman shall:

- Verify that the authorized employee who applied the device is not at the facility.
- Make all reasonable efforts to contact the authorized employee to inform them that their lockout or tagout device has been removed.
- Ensure that the authorized employee has this knowledge before they resume work at the facility.
- The Foreman shall document each of these items and maintain the document for one year. (Appendix 1)

MULTIPLE LOCKOUT/CONTRACTOR LOCKOUT

When maintenance is being performed on machinery or equipment that requires several employees to work on or in the proximity of the affected operation, each authorized employee shall place their lock on a multiple lock adapter. When a contractor's employees work with the facility's authorized workers, both the contractor's and the facility's authorized employees will place their personal locks on the multiple lock adapter. When multiple locks are used, the Foreman will designate an employee to be the first to attach their lock and the last removed. This designee will only remove their lock after verifying that it is safe for all authorized and affected employees for the machinery or equipment to be re-energized.

ENERGY CONTROL PROGRAM

Procedures for energy control have been established for each affected piece of equipment in the workplace. These procedures include provisions for:

- Preparation for shutdown.
- Machine and equipment shutdown.

- Machine or equipment isolation.
- Lockout/tagout device application.
- Stored energy.
- Verification of isolation.
- Release from lockout/tagout.

The DPW need not document a procedure for a particular machine or piece of equipment when all the following conditions exist:

1. The machine or equipment has no potential for stored or residual energy or re-accumulation of stored energy after shutdown that could endanger employees.
2. The machine or equipment has a single energy source that can be readily identified and isolated.
3. The isolation and locking out of the energy source will completely de-energize and deactivate the machine.
4. The machine or equipment is isolated from that energy source and locked out during servicing or maintenance.
5. A single lockout device will achieve a lockout condition.
6. The lockout device is under the exclusive control of the authorized employee performing the servicing and maintenance.
7. The servicing and maintenance don't create hazards for other employees.
8. The Water Filtration Plant has had no accidents involving unexpected re-energization of the machine during servicing and maintenance.

The DPW has identified the following pieces of equipment as meeting these requirements:

The DPW has identified certain pieces of equipment on which service and maintenance operations are to be performed only by qualified outside contractors as identified by the Operator:

- Overhead Garage Doors
- Generators
- Transfer switches

PERIODIC INSPECTIONS

The DPW will conduct a periodic inspection of the energy control procedure annually to ensure that the procedure and the requirements of the standard are being followed. The periodic inspection shall be performed by an authorized employee other than the one(s) utilizing the energy control procedure being inspected. The periodic inspection is conducted to correct any deviations or inadequacies identified during the inspection. Where lockout is used for energy control, the periodic inspection shall include a review, between the inspector and authorized employee, of the employee's responsibilities under the energy control procedure inspected. The DPW will maintain the completed inspection forms which will include the name of the machine or equipment being reviewed for energy control, the date of the inspection, the employees included in the inspection, and the person performing the inspection. See Appendix 2 for the Lockout/Tagout Periodic Inspection Form.

Unauthorized Lock Removal Form

Describe the reason for removal of Lockout/Tagout Device

_____

_____

_____

Name of Lockout/Tagout Device Owner

_____

Site Location and Equipment Type

_____

Methods used to verify the employee was not on site and was informed of the lock removal before returning to work (e.g., spoke to employee on phone)

_____

_____

_____

_____

Date and Time of Lockout/Tagout Device Removal

_____

Print Name of Designated Authorized Person who removed Lockout/Tagout device

_____

Signature of person who removed Lockout/Tagout device

_____

Lockout Tagout Logbook

Village of Lake George

Department of Public Works

Location:

All authorized employees performing lockout tagout during the servicing and maintenance of equipment must fill out this logbook.

Date	Equipment being serviced	Authorized Employee(s)	Expected Date of Return to Service	Task Complete Date

Lockout / Tagout Periodic Inspection Certificate

Company or Department Name:	
Internal Procedure Number (if applicable):	**Last Updated:**
Machinery/Equipment Name or Type:	

Persons Trained as "Authorized" for this Procedure:

Name	*Job Title*

Elements of Inspection:

1. **Preparation for Shutdown** – Knowledge of the type and magnitude of the hazardous energy
2. **Machine or Equipment Shutdown** – Performed established procedure
3. **Machine or Equipment Isolation** – All energy sources located and isolated
4. **Hazardous Energy Control Device Application** – Affixed to the energy isolated device by authorized individuals
5. **Stored Energy** – All potentially hazardous stored or residual energy shall be relieved, disconnected, restrained, and otherwise rendered safe.
6. **Verification of Isolation** – Authorized employee will verify the isolation and de-energize of the machine or equipment has been accomplished.

Certification: A check of the utilization of this procedure was performed on the following "Authorized" individuals (enter name and/or job title):

Name	*Job Title*

Authorization:
This field check was performed by the following person authorized to use this procedure and not the person being checked

Name	*Date:*

Deficiencies noted during field-check (if any):

Certification Statement:
The inspected individuals demonstrated adequate knowledge of locking/tagging this piece of equipment. Any deficiencies noted above have been corrected and proper techniques have been verified.

Signature of field-check Inspector:	**Signature of Authorized LOTO Employee:**

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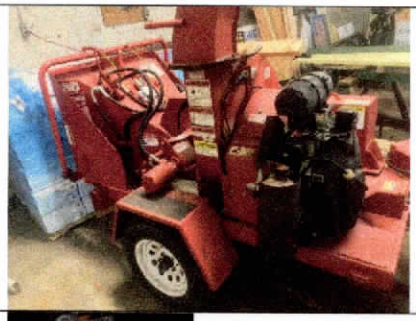
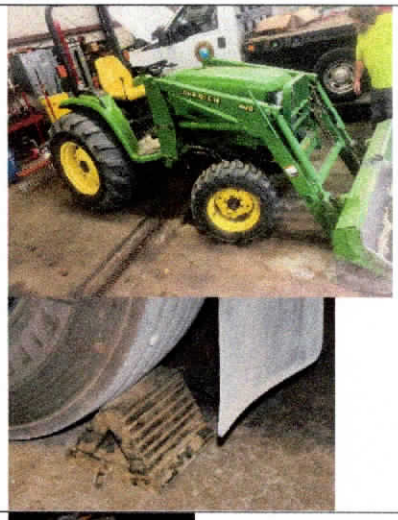
Created: 6/6/2023 Revised:	Location: Lake George DPW	Procedure Number: 001
	Description: Morbark Woodchipper	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Potential/kinetic energy (blade, rotating parts) and chemical (fuel) Thermal	Turn unit off and wait for components to come to a complete stop.		Visual Wait for parts to cool.
2.	Disconnect the battery.		Attempt to restart
3.	Place key in lockbox.		
4.	Tagout equipment		Manual

Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 002
	Description: John Deere Tractor	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Electrical energy, potential energy, Hydraulic	Park equipment on a flat surface, set parking brake and lower bucket and any rear attachment. If loader needs to be raised for maintenance block in place. Block the wheels.		Manual
2. Electrical	Turn off the engine. Disconnect the battery. Activate the hydraulics to relieve pressure in the lines.		Attempt to restart the engine. Wait for components to cool.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 003
	Description: Bobcat Skidsteer	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Electrical energy, potential energy, Hydraulic	Park equipment on a flat surface, set parking brake and lower bucket. If loader needs to be raised for maintenance block in place. Block the wheels.		Manual
2. Electrical	Turn off the engine. Disconnect the battery.		Attempt to restart the engine. Wait for components to cool.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 004
	Description: Bobcat L 28 Articulated Mini Loader	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Electrical energy, potential energy, Hydraulic	Park equipment on a flat surface, set parking brake and lower bucket. If loader needs to be raised for maintenance block in place. Block the wheels.	 	Manual
2. Electrical	Turn off the engine. Disconnect the battery.		Attempt to restart the engine. Wait for components to cool.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual

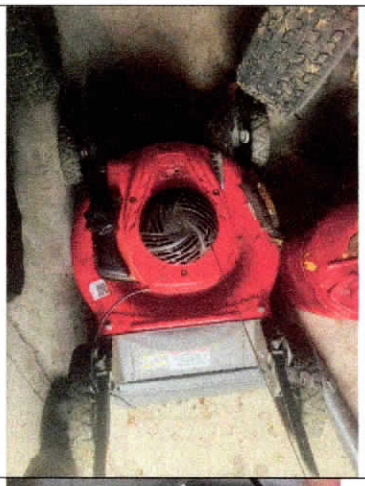
Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 005
	Description: Cub Cadet Mower	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Electrical energy, Potential energy	Park mower on a flat surface and turn off the engine. Block the wheels.		Manual Wait for components to cool
2. Electrical	Disconnect the battery.		Attempt to restart the engine. Check for residual energy with an AC sensor or Voltage meter by a qualified person.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual

Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 006
	Description: Push Mowers	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Potential energy	Park mower on a flat surface and turn off the engine.		Manual Wait for components to come to a complete stop and cool.
2.	Disconnect the spark plug wire from the spark plug.		Attempt to restart the engine. Drain fuel if necessary for maintenance.
3.	Place tag on the controls of the equipment.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 007
	Description: Stihl String Trimmers	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Potential/kinetic energy Chemical fuel, Hot components	Stop engine by moving the ignition switch to the stop of 0 position. Let all movement stop.		Manual Wait for hot components to cool.
2.	Disconnect the spark plug wire and remove the spark plug.		Attempt to restart the trimmer. Drain fuel if necessary for maintenance.
3.	Place tag on the machine to indicate it is out of service.		Manual

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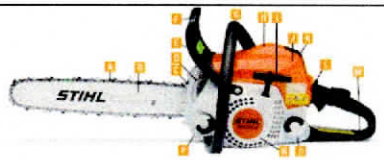
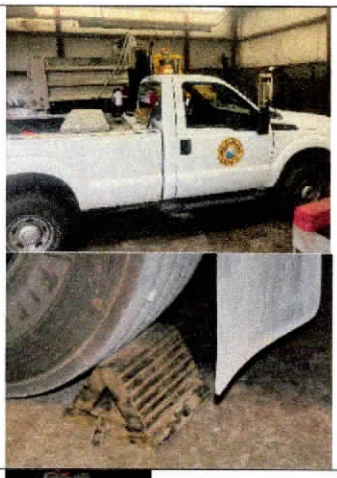
Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 008
	Description: Stihl Chainsaws	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Chemical energy, heat, mechanical	Stop engine by moving the ignition switch to the stop or 0 position.		Let all movement stop and engage the chain brake.
2.	Disconnect the spark plug wire and remove the spark plug.		Attempt to restart the saw. Drain fuel if necessary for maintenance.
3.	Place tag on the machine indicating it's out of service.		Wait for hot components to cool.

Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 009
	Description: Pickup Trucks	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Electrical energy, Potential energy	Park on a flat surface, set parking brake and turn off the key. Block the wheels.		Visual, wait for components to cool
2. Electrical	Disconnect the battery or battery switch if equipped.		Attempt to restart the truck by turning the key back on.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 010
	Description: F-550 Dump Body	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Electrical energy, Potential energy	Park on a flat surface, set parking brake and turn off the key. Block the wheels.	 	Visual, wait for components to cool
2. Mechanical and potential energy	If dump needs to be raised for maintenance block dump in place.		Manual
3. Electrical	Disconnect the battery or battery switch if equipped.		Attempt to restart the truck by turning the key back on.
4.	Place key in lock box.		Manual
5.	Place steering wheel cover over steering wheel.		Manual

Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 011
	Description: Single Axle Dump Truck	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Electrical energy, Potential energy	Park on a flat surface, set parking brake and turn off the key. Block the wheels.		Visual, wait for components to cool
2. Mechanical and potential energy	If dump needs to be raised for maintenance block dump in place.		Manual
3. Electrical	Disconnect the battery or battery switch if equipped.		Attempt to restart the truck by turning the key back on.
4.	Place key in lock box.		Manual
5.	Place steering wheel cover over steering wheel.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 012
	Description: Tandem Axle Dump Truck	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Electrical energy, Potential energy	Park on a flat surface, set parking brake and turn off the key. Block the wheels.		Visual, wait for components to cool
2. Mechanical and potential energy	If dump needs to be raised for maintenance block dump in place.		Manual
3. Electrical	Disconnect the battery or battery switch if equipped.		Attempt to restart the truck by turning the key back on.
4.	Place key in lock box.		Manual
5.	Place steering wheel cover over steering wheel.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 013
	Description: Bobcat Mini Excavator	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Electrical energy, potential energy, Hydraulic	Park equipment on a flat surface, lower front blade, and the arm.		Manual
2. Electrical	Turn off the engine. Disconnect the battery.		Attempt to restart the engine. Wait for components to cool.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover or tag over vehicle controls.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 014
	Description: Street sweeper	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Electrical energy, Potential energy	Park on a flat surface, set parking brake and turn off the key. Block the wheels.	 	Visual, wait for components to cool
2. Electrical	Disconnect the battery or battery switch if equipped.		Attempt to restart the sweeper by turning the key back on.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 015
	Description: Drum roller	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Electrical energy, Potential energy	Park on a flat surface, set parking brake and turn off the key. Block the rollers in place.		Visual, wait for components to cool
2. Electrical	Disconnect the battery or battery switch if equipped.		Attempt to restart the roller by turning the key back on.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual

Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 016
	Description: Cub Cadet Zero Turn Mower	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Electrical energy, Potential energy	Park mower on a flat surface and turn off the engine. Block the wheels.		Manual Wait for components to cool
2. Electrical	Disconnect the battery.		Attempt to restart the engine. Check for residual energy with an AC sensor or Voltage meter by a qualified person.
3.	Place key in lock box.		Manual
4.	Place steering wheel or tag over vehicles controls.		Manual

Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 017
	Description: EZ Go Golf Carts	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Electrical energy, Potential energy	Park golf cart on a flat surface and turn off the engine. Block the wheels.		Manual Wait for components to cool
2. Electrical	Disconnect the battery.		Attempt to restart the engine. Check for residual energy with an AC sensor or Voltage meter by a qualified person.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual

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Created: 6/28/2023 Revised:	Location: Lake George DPW	Procedure Number: 018
	Description: John Deere Tractor	

Lockout Steps

Step/Hazard	Action	Image	Verification
1. Thermal, Chemical (fuel) Electrical energy, potential energy, Hydraulic	Park equipment on a flat surface, set parking brake and lower bucket and rear arm. If loader or excavator arm needs to be raised for maintenance block in place. Block the wheels.	 	Manual
2. Electrical	Turn off the engine. Disconnect the battery. Lock any hydraulic locks that are equipped.		Attempt to restart the engine. Wait for components to cool.
3.	Place key in lock box.		Manual
4.	Place steering wheel cover over steering wheel.		Manual