


# Low Boy 2-n-1 Mausoleum Lift

## Owner's Manual: Safety, Operation, and Maintenance

NOTE: Owner responsibilities per ANSI A92.3 are stated in the Responsibilities section of this manual. As part of these responsibilities, **owners and managers are required to:**

- Provide safety training for all users of this equipment.
- Inspect and maintain the lift in safe working condition.
- Maintain records on lift inspections and corrective action.
- Maintain records on all operators who have had safety training.
- Keep a copy of this manual on the machine.

 <b>WARNING</b>
SERIOUS INJURY OR DEATH CAN TAKE PLACE WHEN OPERATORS DO NOT USE THE <i>STOP</i> PROCEDURE, ARE POORLY TRAINED, AND/OR ARE OPERATING UNSAFE EQUIPMENT

Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Date Built \_\_\_\_\_

Custom Equipment, Inc.  
2647 Hwy 175  
Richfield, WI 53076

Phone: (262) 644-1300 Fax: (262) 644-1320

## How to Train and Qualify an Operator

### *Initial Operator Training sessions*

1.) Allow the operator time to read the following sections of the Safety, Operation, and Maintenance manual.

Pages 1 - 17

Pages 33-34

Pages 45-49

(The trainer may explain this material to operators who have limited reading skills)

2.) After reading those sections of the manual that apply to the operator, view the video "Basic Safe Operation" of 2-n-1 Mausoleum Lifts.

3.) Check that the trainee has learned the information by using the training checklist included in this manual.

### *Annual Requalification Training Session*

1.) Allow the operator to review the manual pages above if they feel they need to.

2.) View the video "Basic Safe Operation" of 2-n-1 Mausoleum Lifts

3.) Check that the trainee has learned the information by using the training checklist below.

### *How to assure your training session has been effective*

The purpose of the Operator Training checklist:

1.) Allow the operator to demonstrate learning by:

a. Orally answer the questions given by the trainer

b. Use the checklist as a Quiz using an open book approach

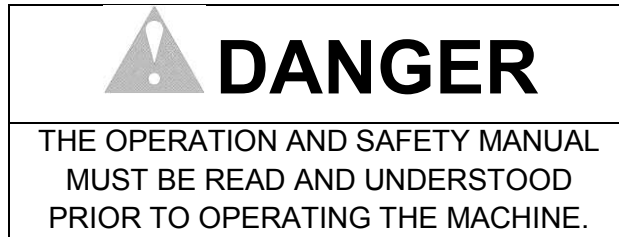
c. Use the lift to show the trainer the answers

2.) Allow the trainer to use a fixed learning reference for all operators

3.) Allow the trainer to add questions specific to their site.

## Foreword

The purpose of this Operations and Safety Manual is to provide users with the instructions and operating procedures essential to properly and safely operate the Custom Equipment Mausoleum Lift for its intended purpose, to position personnel and their necessary tools and materials. **Do not operate this equipment without proper safety training.**



BECAUSE THE MANUFACTURER HAS NO DIRECT CONTROL OVER MACHINE APPLICATION AND OPERATION, PROPER SAFETY PRACTICES ARE THE RESPONSIBILITY OF THE USER AND ALL OPERATING PERSONNEL.



If there is a question on application and/or operation, contact:

Custom Equipment, Inc.  
2645 Hwy 175  
Richfield, WI 53076  
USA  
Phone: 262-644-1300  
Fax: 262-644-1320

*SUPO-004 Revisions*

*Rev 01: 3/26/09: New Document-Includes Safety Training Manual*

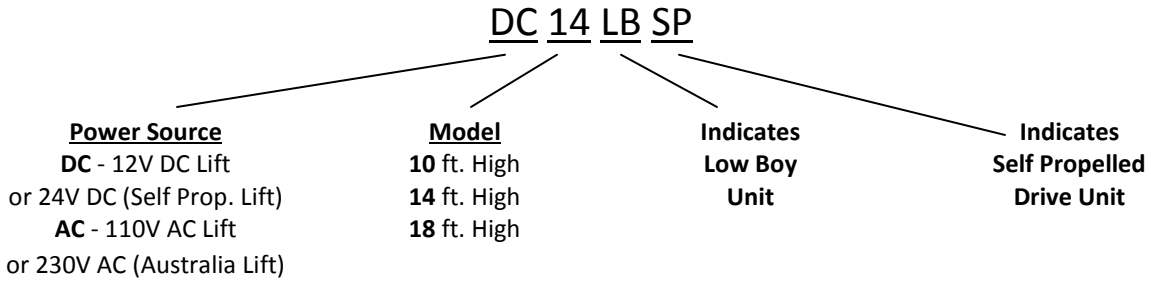
*Rev 02:6/21/13: Revision-to match training materials*

# Table of Contents

How to Train and Qualify an Operator .....	2
Foreword.....	3
Product Description .....	5
General Information .....	5
Specifications .....	5
Safety .....	6
Safety Symbols.....	6
Safety Features .....	6
General Rules and Precautions .....	7
STOP Procedure .....	9
Working from Aerial Platforms .....	10
Operation .....	12
STOP Procedure & Pre-start Inspection.....	12
Controls.....	12
Shut Down Procedure .....	13
Accessories.....	14
Maintenance .....	18
Maintenance Lock Use .....	19
Battery Service (DC Lifts Only) .....	20
Hydraulic Cylinder Service .....	21
Troubleshooting.....	21
Replacement Parts .....	23
Safety Decal Locations .....	23
Hydraulic Schematic & Electrical Wiring Diagrams.....	27
Prestart Lift Inspection Checklist .....	33
Annual Lift Inspection Checklist.....	34
Accident Prevention Responsibilities.....	35
Operator Training Checklist .....	50
Warranty .....	51

## Product Description

See cover sheet or front of lift for model number.



## General Information

The mausoleum lift is a hydraulically operated, electrically actuated scissors lift. The DC models use a self contained, battery operated lift mechanism. The AC models require an external power source.

## Specifications

All dimensions are taken from a standard lift w/ 10" foam filled tires. Some dimensions may change w/ different options. Load capacities will not change.

	<b>10 ft. Model</b>	<b>14 ft. Model</b>	<b>18 ft. Model</b>
<b>Dimensions</b>			
Machine Length	85 1/2"		
Machine Width w/o accessories	34 1/2"		
Machine Height - Stowed	65.5"	67 3/4"	73"
Machine Height - Extended	160.5"	210 3/4"	261"
Platform Height - Stowed	24.5"	24 3/4"	28"
Platform Height - Extended	120" (10 ft.)	168" (14 ft.)	218" (18 ft.)
Platform Width - Overall	31"		
Work Center Area	70"L x 28"W		
Wheel Base (center to center)	67" L x 28"W (rear)		
Track Base (center to center)	Front - 7" / Rear - 28"		
Work Center Railing Height	43"		
<b>Ground Clearance</b>			
Behind front wheel	4 3/4"		
Center of lift	7 1/2"		
Under rear outriggers	5"		
<b>Power Sources</b>			
Pump Electrical Power Source	12V DC Pump 24V DC Pump (on Self Propelled Lifts) 110V AC Pump - Optional		
Hydraulic Pressure (Maximum)	2000 psi		
Hydraulic Oil	1) Flomite #150 2) Dexron II		
Power Source for Optional Self Propelled Drive	24V DC		
<b>Environmental Limitations</b>			
Wind	Not Rated for wind load; do not use in windy conditions		
Rated Slope	0° (Use on level surface)		
<b>Load Capacity</b>	1000#		

# Safety

## Safety Symbols

Warnings and instructions that have a direct impact on safety are identified with the following signals:



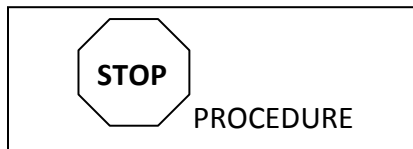
"DANGER" indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.



"WARNING" indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



"CAUTION" indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury or damage to equipment.




"STOP" Procedure indicates that the action is safety related and part of the STOP procedure used in safety training.

## Safety Features

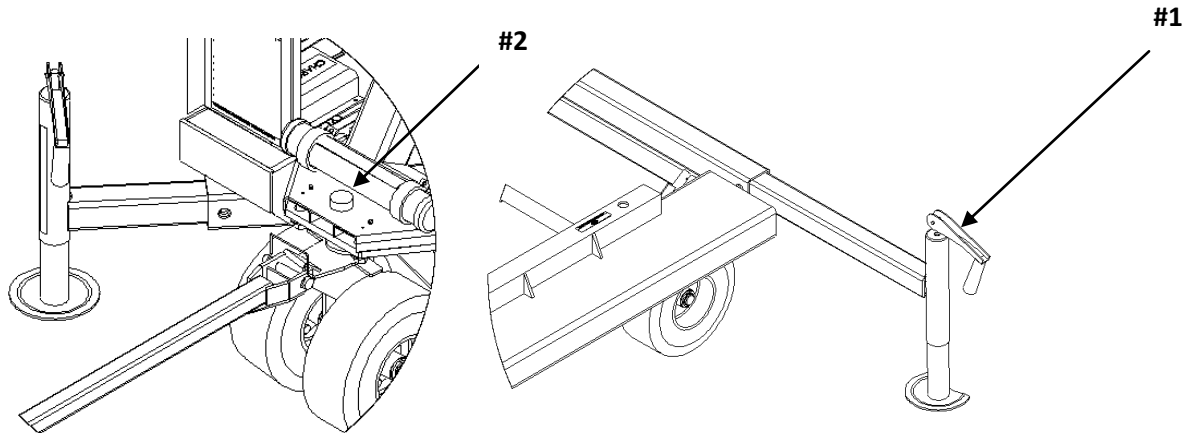
1. **Dual Controls.** If you press the UP switch at either location, the platform will come down or stay down if the switch at the other control station is held in the DOWN position.
2. **Free Descent Protection.** A velocity fuse is installed in the hydraulic circuit to prevent the platform from descending in case of a ruptured hydraulic hose. The platform will be hydraulically locked whenever this velocity fuse activates.
3. **Maintenance Lock.** These pins must be placed into position whenever the machine is being serviced in the raised or partially raised position. Serious injury and/or death could result if maintenance lock is not used properly. See the Maintenance section of this manual for proper usage.
4. **Emergency Manual Override.** This machine is equipped with a manual override valve. When opened, the platform will descend.
5. **Puncture-proof Wheels.**
6. **42" Guardrails, with 4" kick plates.**
7. **Non-slip Deck.**
8. **Ground Fault Protection.** A ground fault is installed in the optional 110V AC platform outlet.
9. **Emergency Stop.** This lift is equipped with two emergency stop switches, one at the platform control and one at the base control, that when activated, will render the unit inoperable until reset. To reset, pull the button out.
10. **Key Switch Security.**

11. **Decals.** Dangerous, Caution, and General Safety decals are displayed at various locations on this unit. These decals are to conform to ANSI-SIA A92.3-2006 standards as interpreted by Custom Equipment, Inc.

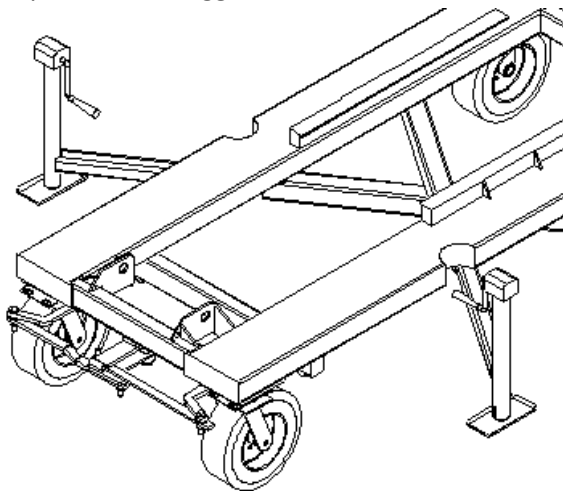
12. **Outriggers for Stability.** Fully extend the outriggers and deploy before lifting. Crank (#1) the jacks down until the foot reaches the ground, supporting the weight of the machine. Make sure the machine is level (#2).



**PROCEDURE:** Fully extend and deploy outriggers before elevating.



**Note:** Low Boy Lifts require four outriggers. 2-n-1 Mausoleum Lift styles (manufactured before 2000) require two outriggers, as shown below.



## General Rules and Precautions

Custom Equipment, Inc. designed the mausoleum lift to be safe and reliable. It is intended for elevating personnel, along with their necessary tools and materials to overhead work locations.

An operator of any type of work platform is subject to certain hazards that cannot be protected by mechanical means. It is therefore essential that operators be competent, careful, physically and mentally fit and thoroughly trained in safe operation of this machine.

**Although Custom Equipment, Inc. conforms to the specified ANSI & OSHA requirements, it is the responsibility of the owner to instruct operators with the safety requirements made not only by Custom Equipment, Inc., but by the various safety boards in your area, as well as additional requirements set forth by ANSI & OSHA. If you come across a situation that you think might be unsafe, stop the platform and request further information from qualified sources before proceeding.**



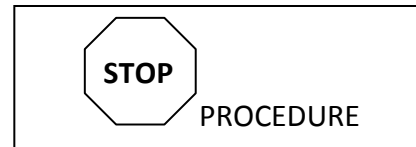
*Only qualified operators may operate this unit.*

- **Only operators trained by a qualified person can operate this unit.**
- All operators must read and understand the Operation and Safety Manual. They must understand all decals and warning labels on unit.
- ANSI A92.6 and other applicable standards identify requirements of all parties who may be involved with self-propelling elevating work platforms. Owner/user/operator must be familiar with Sections 6, 7, 8, 9, and 10, which contain responsibilities of the owner, users, operators, lessors, and lessees including safety, training, inspection, maintenance and operation. A copy of the ANSI Standard is considered part of this machine.
- Do not work on platform if your physical condition is such that you feel dizzy or unsteady in any way.
- Do not neglect/misuse machine. Report any misuse of equipment to proper personnel.
- Prevent unauthorized use; when unit is not in use, remove key.
- It is recommended all personnel on unit wear protective headgear (hard hats).



## STOP Procedure

The acronym STOP can be used to remember actions that are needed before each use.



Secure Stabilizers

Test Controls

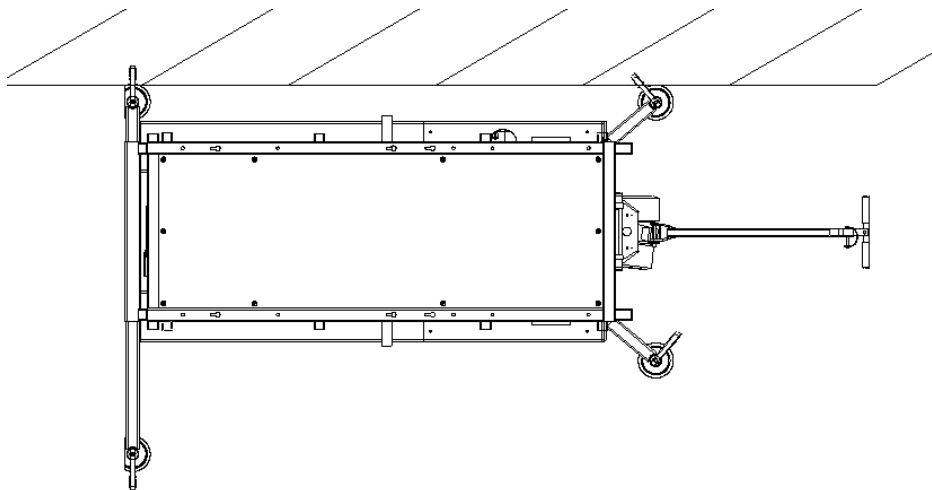
Observe Obstacles

Pin and lock all attachments

### *Secure Stabilizers.*

- Pull out as far as possible--before elevating, ensure that all outriggers are fully extended.
- Stabilizers must be firmly against ground, preventing lift movement—ensure that all outriggers are cranked down so the level indicator bubble is in the center of the ring.
- Outriggers are required for stability and brakes.

If this unit is in use next to a wall and it is not possible to fully extend the rear outrigger, no steps may be used on the side facing the wall. Outriggers must be extended as far as possible and deployed.



### *Test Controls. (Prestart Inspection)*

- Before operation, ensure that the machine is properly serviced. Lift must be taken out of service if any control is not functioning correctly until repaired.
- Inspect for damage and check all controls before each use as described in the Prestart Inspection checklist in this manual.

### *Observe obstacles. (Job Site Inspection)*



# DANGER

THE OPERATOR MUST BE AWARE OF THE ENVIRONMENT. DO NOT RAISE THE PLATFORM IF THE MACHINE IS NOT ON A FIRM, LEVEL SURFACE.

- Unit must be on hard level surface before elevating. Do not operate on incline or uneven surface.
- DO NOT USE IN WINDY CONDITIONS!
- Do not use outdoors in electrical storms.
- Watch out for others. Keep others clear of operating platform. Never allow others to pass under a raised platform or position the platform over someone.
- Do not operate near overhead electrical lines. This machine and its platform are not insulated against electrical shock.

Voltage Range	Minimum Safe Approach Distance	
	Feet	Meters
0 to 300 Volts	Avoid Contact	
Over 300 V to 50 KV	10	3.05
Over 50 KV to 200 KV	15	4.60
Over 200 KV to 350 KV	20	6.10
Over 350 KV to 500 KV	25	7.62
Over 500 KV to 750 KV	35	10.67
Over 750 KV to 1000 KV	45	13.62



# DANGER

DO NOT OPERATE MACHINE NEAR POWER LINES. THE PLATFORM AND ENCLOSURES ARE NOT INSULATED.

- Inspect for the following hazards:
  - Overhead hazards i.e.: light fixtures, vase holders, headers and low ceilings.
  - Poorly lit areas
  - Drop-offs, holes, bumps
  - Slippery surfaces and spills
  - Inadequate floor support
  - Overhead bridge cranes
  - Explosive conditions
  - Inadequate ventilation

*Pin and lock all attachments.*

- All lock pins must be chained to attachments.
- Repair or replace chains and lock pins immediately.
- Operator must ensure all locking pins or snap buttons are secured that steps and attachments are in place.
- Operator must ensure that all railings are securely in place when using side steps or maintenance platform.

## Working from Aerial Platforms

*Operators must work safely.*

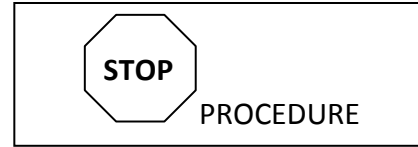
- Do not enter or exit platform while machine is in motion.
- Never mount or dismount a raised platform.
- Never belt or tie off to an adjacent structure.
- Distribute load evenly over platform floor area.
- Secure tools and materials.
- Do not use ladders or scaffolding on the platform to obtain greater height.
- Personnel must maintain a firm footing on the platform floor and work only within the platform area.
- Do not smoke while charging the battery.

*Use machine only for purposes for which it was intended.*

- Lift should never be used as a crane.
- Never use unit as electrical grounds for arc welding.
- Do not override any hydraulic, mechanical, or electrical safety devices.
- The owner of this machine shall comply with all inspections required by Section 6 of the ANSI / SIA A92.3-2006 standard. Check this owners-operators manual for details.
- Only use replacement parts manufactured by Custom Equipment, Inc. Consult this manual for correct part numbers.
- Operator shall use the maintenance lock when performing all types of maintenance procedures.
- Do not exceed the maximum lifting capacity.
- Manually-Propelled Models: DANGER: NEVER ATTEMPT TO MOVE THE MACHINE IN THE RAISED POSITION!
- Self-Propelled Drive Models: DANGER: NEVER ATTEMPT TO DRIVE THE MACHINE IN THE RAISED POSITION!

## Operation

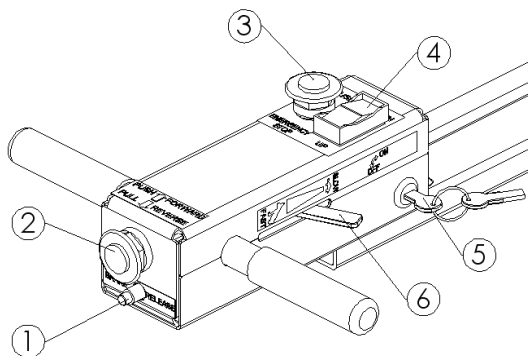
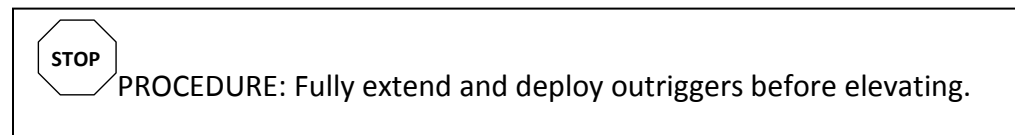
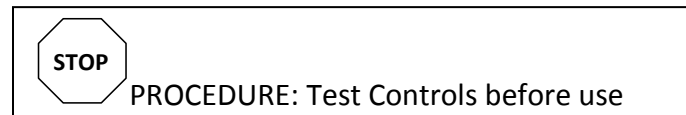
### STOP Procedure & Pre-start Inspection



The STOP procedure, as described in the Safety section of this manual, should take place before each use. Before use each day or at the beginning of each shift, the machine shall be given a visual inspection and functional test. Repairs (if any) must be made prior to operating the machine, as it is critical to ensure safe operation of the machine.

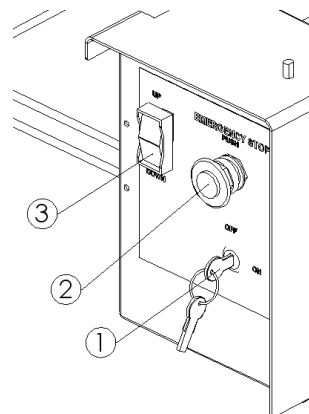
## Controls

### Chassis Controls



#### **Self-Propelled Models: Tiller Controls**

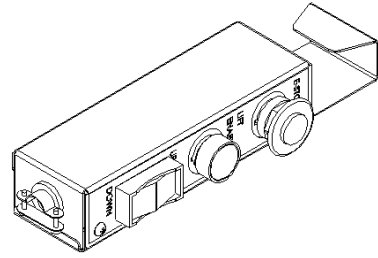
1. Brake Release: Must be pushed to push machine. **DO NOT TOW SELF PROPELLED UNITS!**
2. Forward reverse: Pull knob out to drive in the reverse direction.
3. Emergency Stop: when activated, will render the unit inoperable until reset. To rest, pull the button out.
4. Up/ Down Rocker Switch
5. Key Switch: Rotate key to turn on machine. Remove to prevent unauthorized use.
6. Throttle: Controls drive speed.



#### **Manually-Propelled Models: Base Controls**

1. Key switch: Turn key to turn on machine. Remove to prevent unauthorized use.
2. Emergency Stop: when activated, will render the unit inoperable until reset. To rest, pull the button out.
3. Up/Down Rocker Switch

## Remote Control



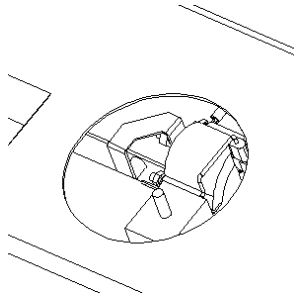
PROCEDURE: Test controls before operation



PROCEDURE: Fully extend and deploy outriggers before elevating.

The remote control for operating elevate/lower functions from the platform has three switches: emergency stop, enabler push button, and up/down switch.

## Emergency Down



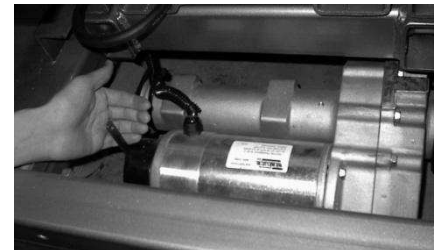
## WARNING

IF PLATFORM SHOULD FAIL TO LOWER, DO NOT ATTEMPT TO CLIMB DOWN THE BEAM ASSEMBLY. SERIOUS INJURY MAY RESULT. HAVE AN EXPERIENCED OPERATOR USE THE EMERGENCY LOWERING PROCEDURE TO SAFELY LOWER THE PLATFORM.

To use emergency down, push and turn knob located on down valve. Knob will pop up. To reset, push and turn the opposite direction.

## Manual Parking Brake Release (Self-Propelled Models)

Release brake for winching or pushing. This release is located to the left of the drive motor, opposite of the steering end of the lift. Pushing arm forward disengages brake so that lift can be moved manually. Please note: A disengaged brake will disable the drive. Elevating platform 12 or more inches will also disable the drive system. Do not push at speeds more than 2 mph.



## CAUTION

DO NOT TOW UNIT. THIS WILL DAMAGE DRIVE MOTOR.

## Shut Down Procedure

- Completely lower platform.
- Turn off and remove key. Note: Batteries will discharge if this procedure is not followed.
- Plug in battery charger; check indicator light. **Check battery water level monthly.** More details on battery charging are in the Maintenance section of this manual.

## Accessories

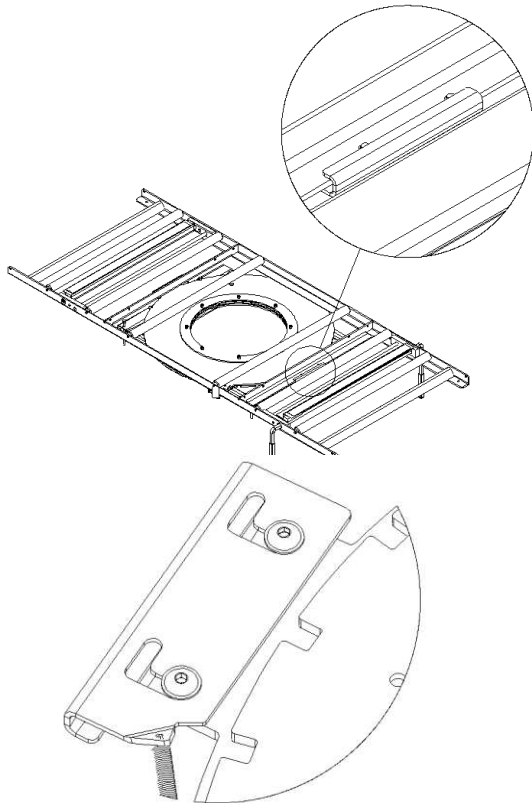


### *Casket lock*

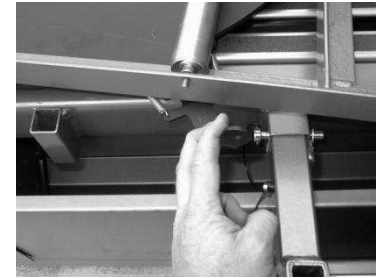
There are 2 casket locks with 2 removable handles. Lock is on when casket remains elevated above rollers. Use one lock when doing an entombment and two locks when transporting a casket.

### *Rotator*

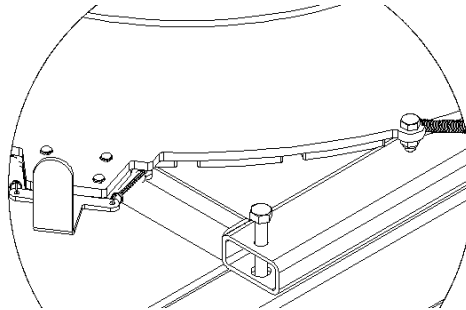
This option permits the roller platform to rotate and to receive a casket at an angle to the lift. The lock mechanism must be pulled at an angle in line with the center of the rotator to rotate.



The roller platform is attached to the rotator with the latches shown. To unlatch the rotator from the platform, slide the latches out as shown (view from underneath).



The regular rotator is attached to the platform in one of several positions with carriage bolts.



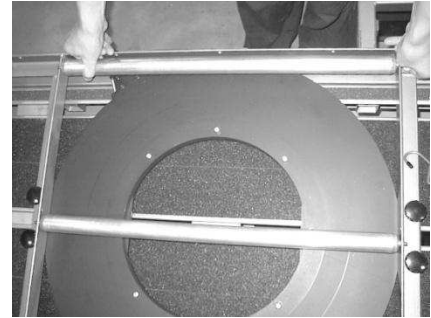
### *Sliding Platform*

This stainless steel deck is set up to allow the rotator to move along the length of the deck. A physical stop at the end of the platform (over steering) can be removed to allow the rotator to slide off completely.

### *Rotator Platform Extension*



This attachment converts a 6 high into a 7 high lift. It is also used to do entombments with low ceiling conditions. To install, remove roller platform and place extension over each tab of the rotator. Replace the roller platform and the 4 thumbscrews.



### *Couch Roller Position*

Rollers in the center of the lift can be placed either parallel or perpendicular to the chassis. When placed the same as the other rollers, they are in position to do entombments off the narrow end of the lift. When 2 rollers in the center are placed parallel with the chassis, they are in proper position for a couch entombment.

### *Tow Bar/Tiller*

Manually propelled lifts have a removable tow bar with removable handgrips. The pin used to hold in handgrips (when removed) can be used to pin tow bar to tractor or truck (5 mph max.).



### *Canvas cover*

This cover is a fitted cover that fits over the lift mechanism. Narrow end of the cover fits over steering end of the lift. Place step rails on top of cover.



### *Work Center Rails*

The 2 in 1 casket lift becomes a maintenance lift by removing rotator and roller platforms. Railings are placed on each side of the lift with the step rails placed on each end. Pin in step rails.



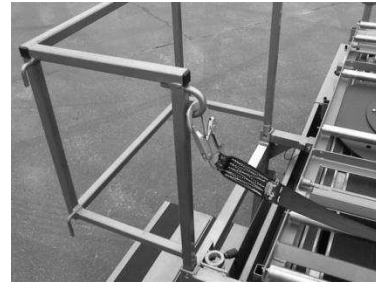
PROCEDURE: Pin & Lock Rails in Place



PROCEDURE: Fully extend and deploy outriggers before elevating. See STOP procedure section of manual for information on operation next to a wall.

### *D-Rings*

D-Rings are on the railings for use with a harness. Operators should always use as many railings as possible when using a lanyard attachment. Be careful; a lanyard is not a guaranty to avoid injury.



### *3-position/6-Position, Padded Crypt-Front Holder*

This attachment consists of carpeted channels and 2 vertical socket attachments – each with 2 lock pins, most commonly used at the narrow end of lift by the remote control. Pin-in each of the vertical socket attachments into one of the 3 horizontal positions. The padded-channel attachment may now be placed down through the vertical socket attachment. The 6-position padded holder has 3 vertical positions. The 2 highest positions must be pinned in. Remove padded channels for entombment procedure. Use the holders as physical stops when transporting caskets on the lift.



PROCEDURE: Verify all attachments are secured.

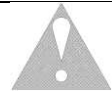
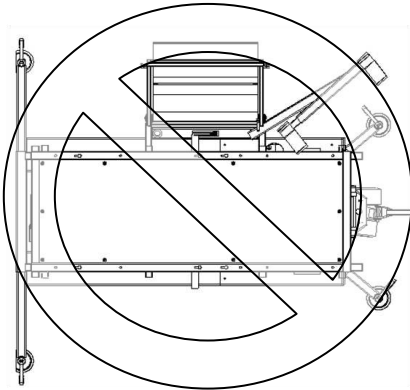
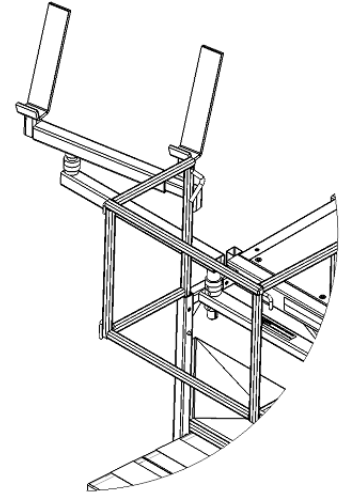
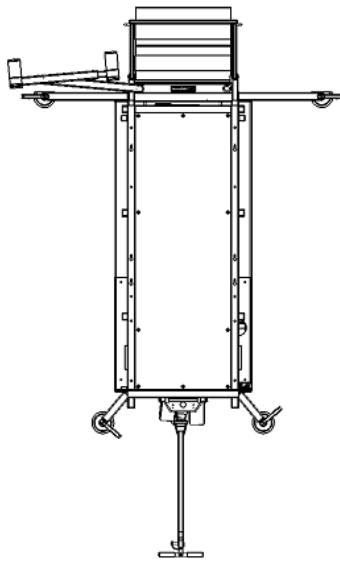
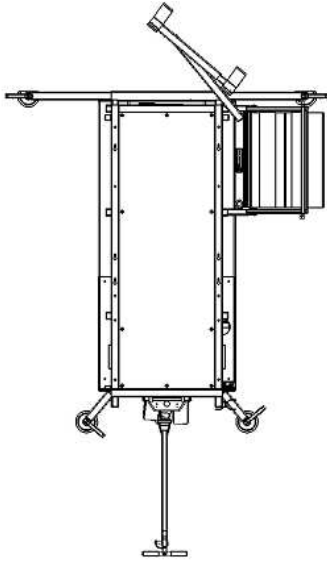


## Swing-Away Attachment



PROCEDURE: Fully extend and deploy outriggers before elevating.

The swing-away attachment is useful in removing crypt fronts. This attachment should only be used with the step on the **back end or on the side in the position toward the back.**



# DANGER

DO NOT USE SWING-AWAY ATTACHMENT WITH A STEP IN THE CENTER POSITION ON THE LONG SIDE OF UNIT.

## Maintenance



# WARNING

FAILURE TO COMPLY WITH THE LISTED SAFETY PRECAUTIONS MAY RESULT IN MACHINE DAMAGE, PERSONNEL INJURY OR DEATH.

- Never work under an elevated platform until maintenance locks have been engaged.
- Remove all rings, watches, and jewelry when performing any maintenance.
- Do not wear long hair unrestrained or loose fitting clothing and neckties which may become caught on or entangled in equipment.
- Observe and obey all warnings and cautions on machine and in manual.
- Keep oil, grease, water, etc. wiped from standing surfaces and handholds.
- Before making any adjustments, lubricating or performing any other maintenance, shut off all power controls.
- Battery should always be disconnected during replacement of electrical components.
- Keep all support equipment and attachments stowed in their proper place.
- Use only approved nonflammable cleaning solvents.



## WARNING:

**Do not service extended or partially extended unit without engaging the maintenance lock. Maintenance on this unit is relatively simple with a minimum amount of servicing required. However, with any scissors type lifting device, a hazard to personnel exists when maintenance is performed by working through the lifting beams with the unit raised. A maintenance lock is built into the unit to mechanically lock the mechanism into the raised position.**

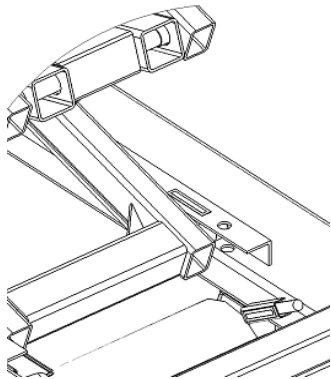
## Maintenance Lock Use

**WARNING:** Before any attempt is made to service this unit, when extended or partially extended, it is absolutely necessary to engage the maintenance lock.

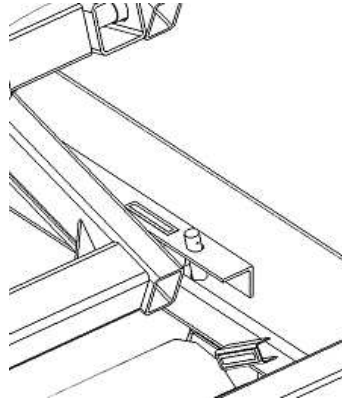
To engage the maintenance lock:

- 1) Remove any load from the platform.
- 2) Raise the platform as high as necessary to engage the maintenance lock.
- 3) Place each of the two pins into position.
- 4) Lower the platform until scissors rests on maintenance lock pin.

Do not service extended or partially extended units until the above procedure is followed. Maintenance lock must be engaged.



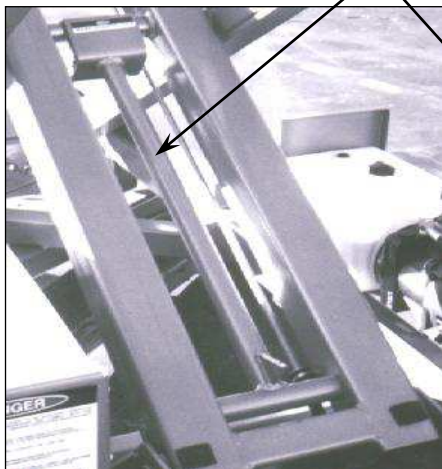
Maintenance lock



Maintenance lock engaged

**Note:** Units manufactured in 2006 and before have a maintenance lock style shown below.

### Maintenance Lock



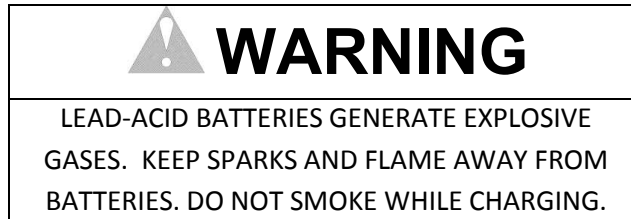
Maintenance lock  
location



Maintenance lock  
properly engaged

## Battery Service (DC Lifts Only)

This unit is equipped with a deep cycle 12-volt battery (2 batteries on self propelled units). The care and maintenance of your battery has much to do with how well this unit functions. Battery wiring and water level should be checked monthly. Do not overfill. The battery fluid will expand as it becomes warm from charging. When the cells are too full, fluid will seep out when charging.



**WARNING:** Never smoke or use other combustibles near battery while servicing battery or other components. Provide plenty of ventilation. Presence of hydrogen fumes could lead to explosion!



The solution is at its proper strength when the battery is manufactured. Use distilled water and keep fluid up to proper level. When required, water should be added to battery after charging, unless water level is below the plates.

**Note:** The surrounding temperature greatly affects the power reserve within a battery.

**Example:** A battery that is 100% charged at 80 degrees Fahrenheit drops to 65% at 32 degrees Fahrenheit. At 0 degrees, this battery will drop to 40%.

### **Battery care: To be done monthly**

- 1) Remove battery box/cabinet cover.
- 2) Remove battery caps and check fluid level.
- 3) Fill each cell (if needed) to split ring with distilled water. DO NOT OVERFILL.
- 4) Reinstall caps.
- 5) Wash all dirt, debris, acid, etc., off battery whenever corrosion is detected. Use a solution of 5-tsp. baking soda per quart of warm water.
- 6) Coat terminals with a commercially available coating.

### **Battery Charging: w/ manual charger (standard equipment)**

- 1) Plug charger into a 110V AC source.
- 2) Set timer on charger. Charge until meter on charger indicates "fully charged."

### **Battery Charging: w/ automatic charger (optional)**

- 1) Plug charger into a 110V AC source.
- 2) Check that red power light on charger goes on. A green light will indicate when battery is fully charged.

## Hydraulic Cylinder Service

**Hydraulic Cylinder:** Removal and replacement

**WARNING:** This procedure requires the platform to be raised to gain access to the unit through the open lifting beams. Serious injury or death could result if the maintenance lock is not properly engaged before performing this procedure. Never work through the beams or place yourself under the raised platform during maintenance without the maintenance lock properly engaged.

- 1) Raise platform and engage maintenance lock.
- 2) Lower platform until lower beams make contact with the maintenance lock.
- 3) Remove the negative (-) battery cable from the battery.
- 4) Disconnect high-pressure hose from cylinder.
- 5) Support hydraulic cylinder; remove snap rings from hydraulic cylinder pins. Remove cylinder pins from both the upper and lower mounting points; remove the cylinder from the lift.
- 6) Install new or repaired hydraulic cylinder in the reverse order.
- 7) Raise platform and disengage the maintenance lock. Lower the lift.
- 8) Fully raise and lower the lift two (2) times to bleed the air from the system.
- 9) With lift fully lowered, check hydraulic fluid level and fill if needed

## Troubleshooting

<b><u>Problem</u></b>	<b><u>Possible Cause</u></b>	<b><u>Solution</u></b>
Pump will not operate.	Key switch in <b>OFF</b> position.	Turn key switch to <b>ON</b> position.
	Emergency stop activated.	Pull out emergency stop button.
	Battery not sufficiently charged.	Fully charge battery.
	Electrical circuitry defective.	Repair or replace wiring as needed.
	Defective pump motor.	Remove pump assembly and obtain replacement pump from factory.
Pump operates; lift will not ascend	Hydraulic fluid level low.	With platform lowered, fill pump reservoir to 1" below top of reservoir.
	Dump valve on pump stuck open.	Flush valve by simultaneously pressing the up switch at base and the down switch on platform control for 30 sec.
	Emergency down valve open.	Close emergency down valve.
Ascent speed slow or erratic.	Battery not sufficiently charged.	Fully charge battery.
	Emergency down valve open.	Close emergency down valve.
	Loose electrical connection.	Inspect & ensure all connections

<b><u>Problem</u></b>	<b><u>Possible Cause</u></b>	<b><u>Solution</u></b>
		are secure.
	Momentary short in wiring.	Repair or replace wiring as needed.
	Foreign matter lodged in dump valve.	Flush valve by simultaneously pressing the up switch at base and the down switch on platform control for 30 sec. If problem continues, replace dump valve.
	Bent structural member(s).	Make arrangements <sup>w</sup> / factory to have member(s) replaced.
	Restriction in hydraulic hose.	Replace defective hydraulic hose.
	Gears in pump worn or defective.	Remove pump assembly and obtain replacement pump from factory.
Descent speed slow.	Obstruction in hydraulic hose.	Replace defective hydraulic hose.
	Obstruction in dump valve.	Flush valve by simultaneously pressing the up switch at base and the down switch on platform control for 30 sec. If problem continues, replace dump valve.
Unit will not descend.	Key switch on <b>OFF</b> position.	Turn key to <b>ON</b> position.
	Emergency stop activated.	Pull out emergency stop button.
	Battery not sufficiently charged.	Fully charge battery.
	Loose electrical connection.	Inspect & ensure all connections are secure.
	Faulty dump valve coil.	Replace dump valve coil.
	Actuated velocity fuse.	Check for hydraulic leak and repair as needed. Reset velocity fuse by elevating platform <sup>w</sup> / hydraulic pump. Check that the unit has proper hydraulic fluid. Replace if needed.
Unit creeps down.	Emergency down valve open.	Close emergency down valve.
	Foreign matter lodged in dump valve.	Flush valve by simultaneously pressing the up switch at base and the down switch on platform control for 30 sec.
	Defective down valve.	Replace down valve.
	Damaged seal in hydraulic cylinder.	Replace hydraulic seals in cylinder <sup>w</sup> /seal kit available from factory. <b>Note:</b> If walls inside cylinder are scratched or pitted, cylinder must be replaced.

## Replacement Parts

All parts should be ordered from:

**Custom Equipment, Inc.**  
**2647 Hwy 175**  
**Richfield, WI 53076**  
**Phone (262) 644-1300**

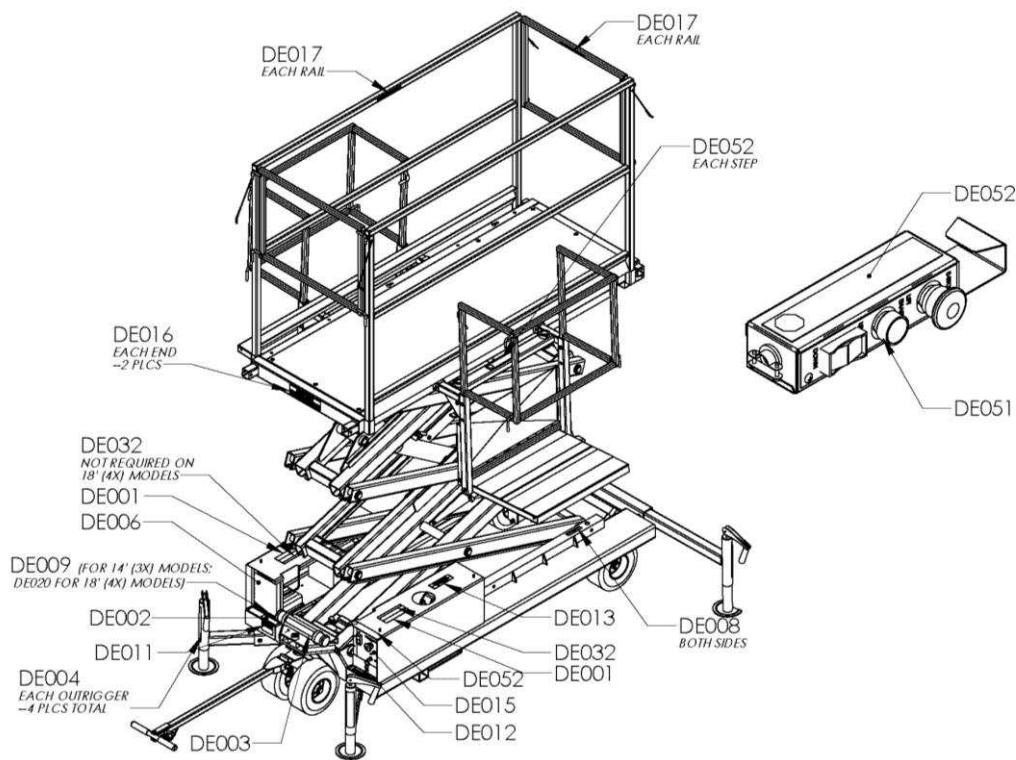
Always refer to our part number(s) as listed in this manual and give a complete description of the part(s) desired. Also, please provide the model number and the serial number of the unit when ordering. These can normally be found on the front of the unit on or near the main set of controls.

All parts will be shipped F.O.B. from Richfield, WI.

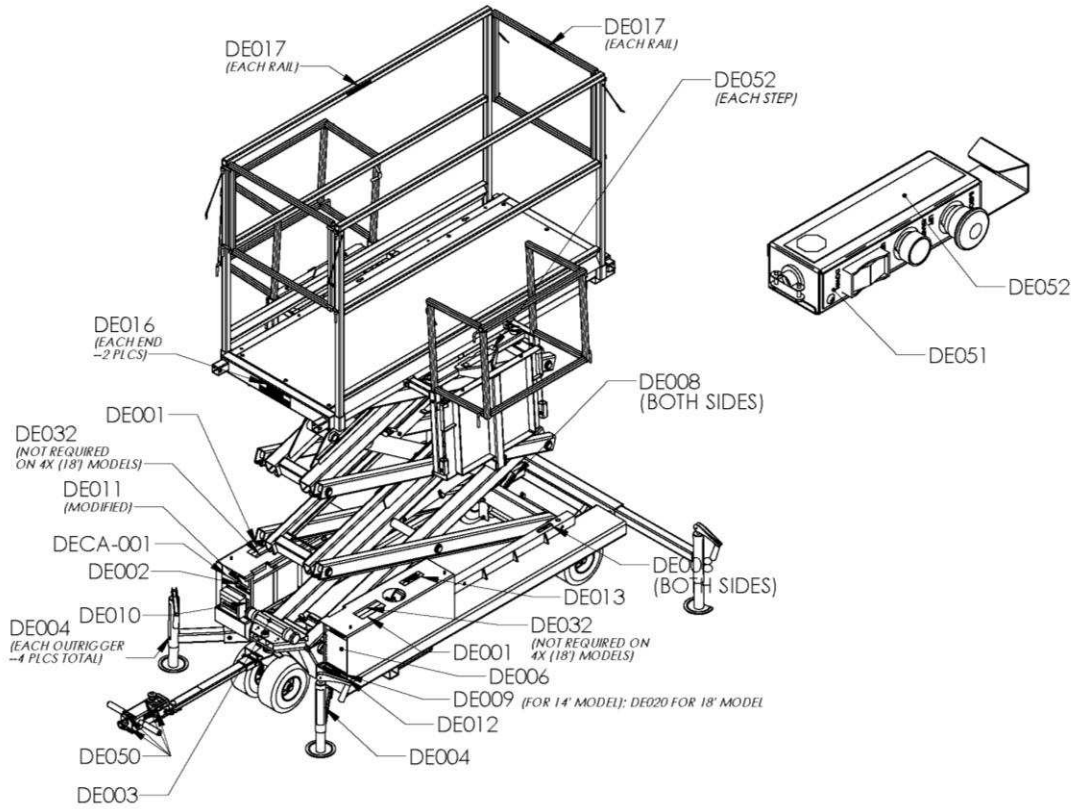
## Safety Decal Locations

Decals and locations vary with model number.

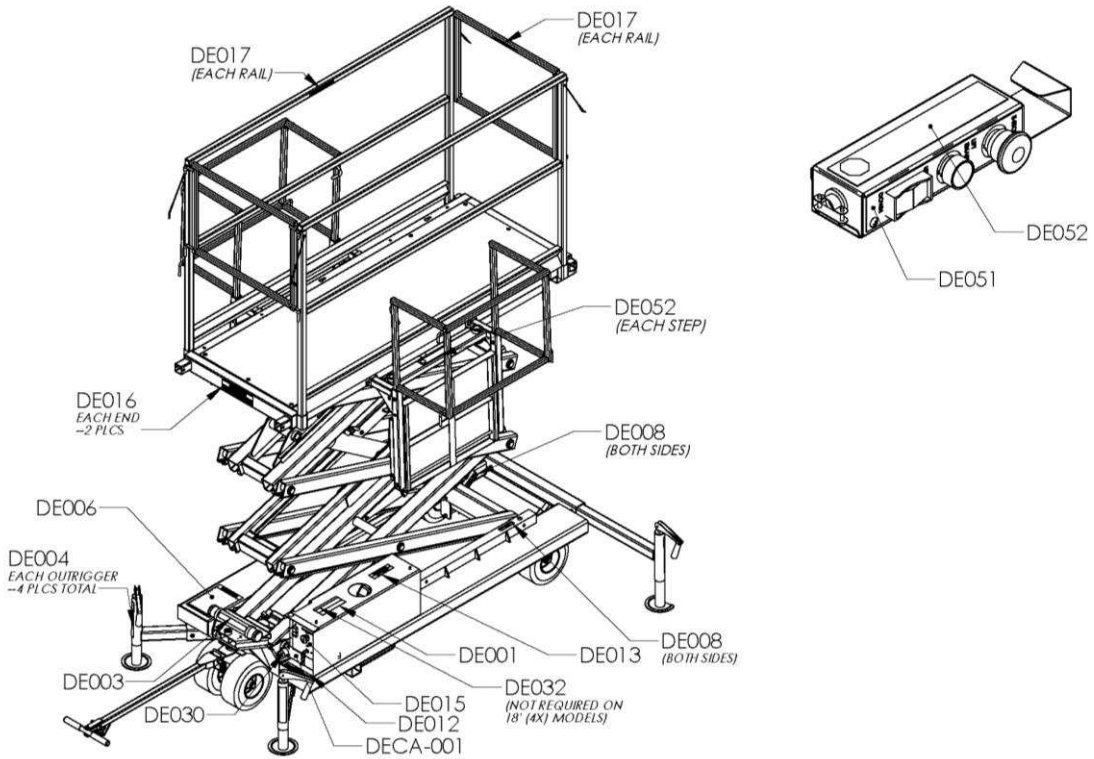
Part #	Description
DECA-001	Serial Number Plate
DE001	Warning No Step
DE002	Important-Keep Charge
DE003	Operators Manual
DE004	Extend Outriggers
DE006	Danger Do Not Operate
DE008	Danger Maintenance Lock
DE009	Max PF 14 ft.
DE010	Charger
DE011	Caution-Battery (Modified for 24V units)
DE012	Caution-Do Not Use in Windy
DE013	Caution-Emergency Down
DE015	Large Up/Down/E-Stop
DE016	Caution-Do Not Exceed
DE017	When Operator is On (Small)
DE020	Max PF 18 ft.
DE030	PF Outlet 110V AC
DE032	Caution Pinch Point
DE050	Control Decal Set
DE051	Remote Decal
DE052	STOP Reminder Decal



*DCLB Decal Locations*



**DCLB-SP DECAL LOCATIONS**



**ACLB DECAL LOCATIONS**



**Base Component Parts**

CV-0003 Pump Cabinet  
 CV-0001 Cover for Pump Cabinet  
 CV-0004 Battery Cabinet  
 CV-1061 Covered Storage Cabinet (optional on AC Models; not available on DC Models)  
 CV-0002 Cover for Battery Cabinet CV-0004 or optional Storage Cabinet CV-1061  
 CV-1110 Side Storage Boxes (optional for AC and DC Lifts) (No part number) Plastic Turn Knobs for Covers  
 CV-1056 AC Contact Mounting Plate  
 CV-1057 AC Contact Cover w/ screws  
 CB-1122 Outrigger – Pump Side Front  
 CB-1123 Outrigger – Battery/Storage Side Front  
 CB-1108 Outrigger – Pump Side Rear  
 CB-1109 Outrigger – Battery/Storage Side Rear  
 HARD-086 Bubble Level

**Hydraulic System Parts**

HYDR-043 12V DC Hydraulic Pump  
 HYDR-050 24V DC Hydraulic Pump  
 HYDR-044 110V AC Hydraulic Pump  
 HYDR-031 Hydraulic Hose  
 HYDR-041 Hydraulic Cylinder  
 HYDR-040 Seal Replacement Kit for Hydraulic Cylinder  
 (No part number) Down Valve/ Emergency Down Valve Insert – (specify pump type)

**Electrical System - Switches**

ELEC-070A Up/Down Toggle Switch  
 ELEC-133B Up/Down Rocker Switch – Self Propelled Lifts  
 ELEC-071-KIT Emergency Stop Push Button  
 ELEC-129 Direction Control Push Button – Self Propelled Lifts  
 ELEC-072 Direction Control Contact (use w/ ELEC-129) – Self Propelled Lifts  
 ELEC-073B Key Switch w/ Keys (replacement keys available upon request)  
 ELEC-132A Brake Release Switch – Self Propelled Lifts  
 ELEC-128 Throttle Control Box – Self Propelled Lifts  
 ELEC-123 Self Propelled Lift Height Limit Switch

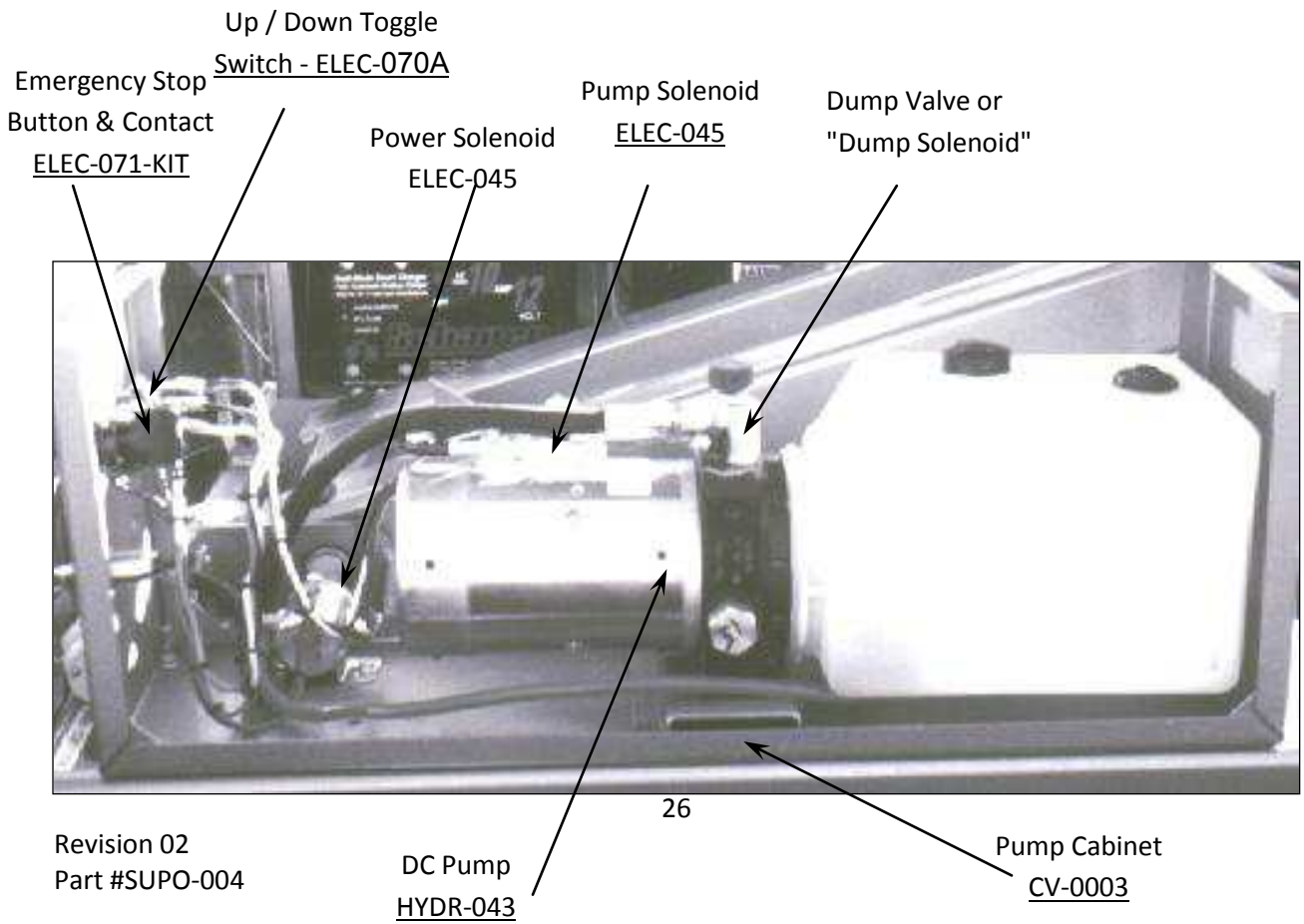
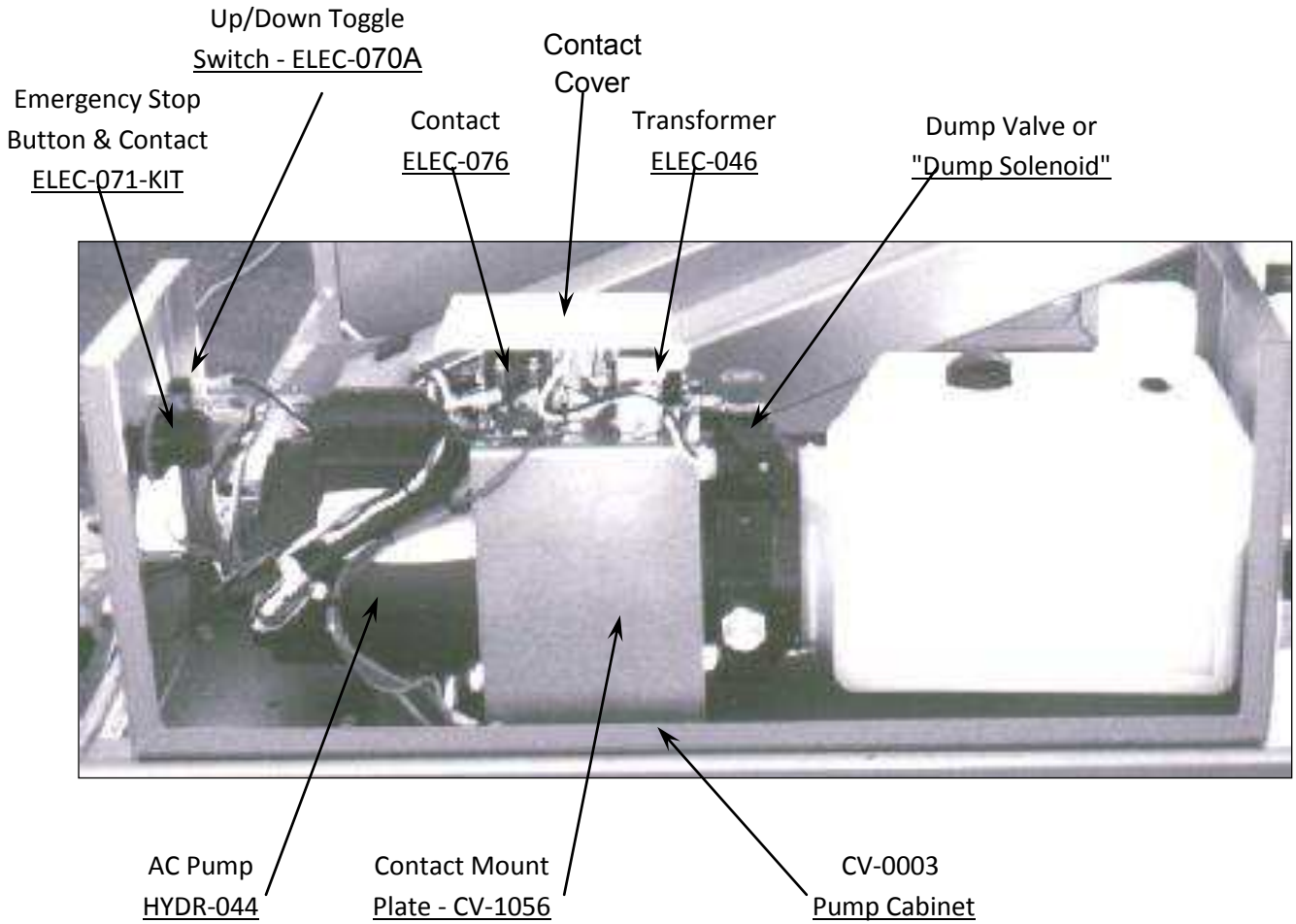
**Electrical System - Components**

ELEC-045 12V DC Solenoid  
 ELEC-044 24V DC Solenoid – Self Propelled Units  
 ELEC-076 110V AC Contact w/ 24V Coil (110V AC Models)  
 ELEC-046 110V AC to 24V AC Transformer (110V AC Models)  
 ELEC-047 12V Deep Cycle Battery  
 ELEC-048 12V Automatic Charger  
 ELEC-049 24V Automatic Charger – Self Propelled Units  
 ELEC-078 72" Cable - (1) Positive Battery end & (1) Eyelet end  
 ELEC-079 15" Cable - (1) Negative Battery end & (1) Eyelet end  
 ELEC-121 10" Cable - (1) Negative Battery end & (1) Eyelet end  
 ELEC-080 8" Cable - (2) Eyelet ends  
 ELEC-127 Control Board for Self Propelled Lifts  
 (No part number) 12V DC Pump Down Valve Coil (Dump Solenoid)  
 (No part number) 24V DC Pump Down Valve Coil (Dump Solenoid) – Self Propelled Units  
 (No part number) 110V AC Pump Down Valve Coil (Dump Solenoid)  
 ELEC-082 110V AC Plug

**Steering, Wheels, & Drive Parts**

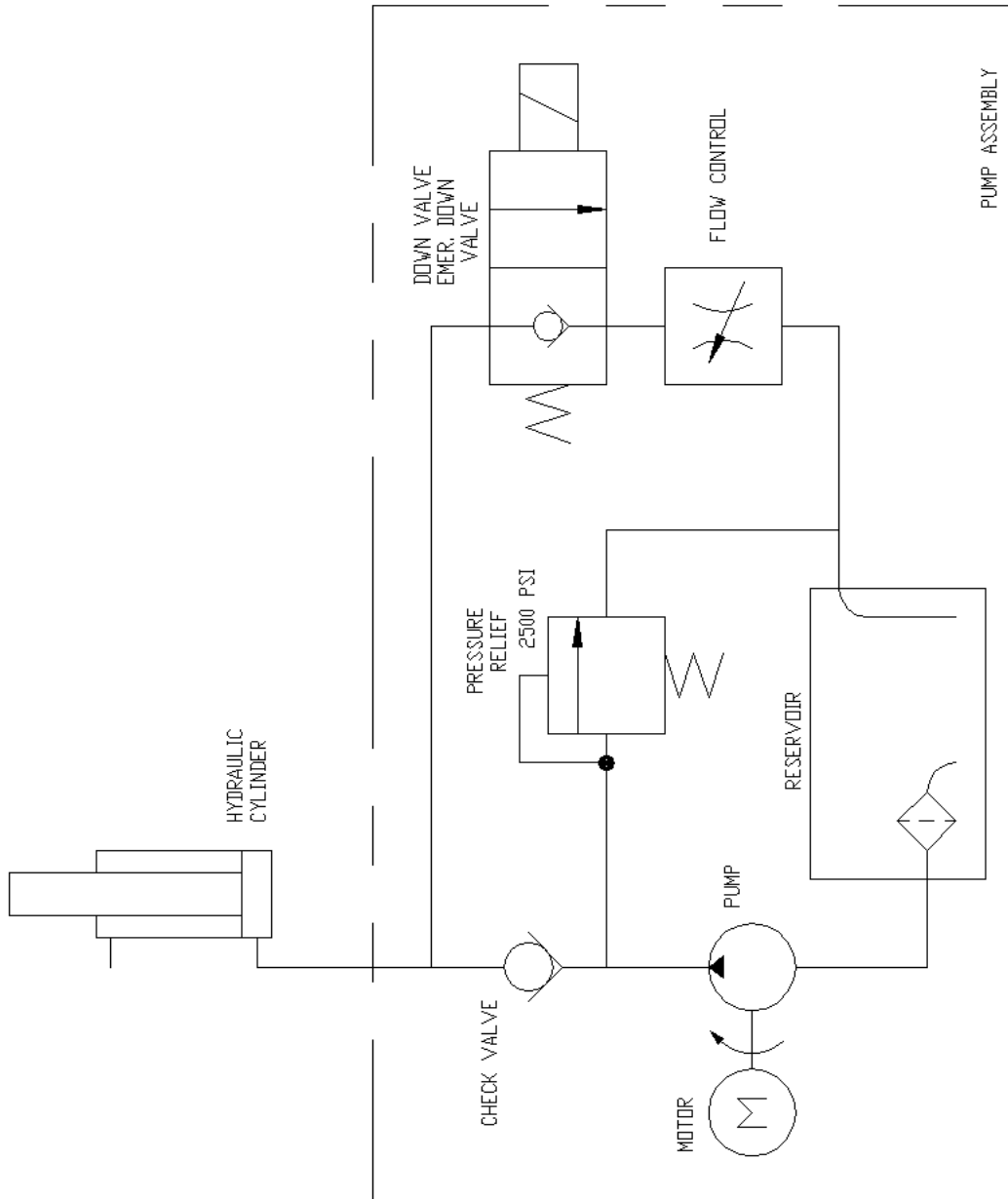
ST-0003 Tow Bar  
 ST-0004 Tee Handle  
 ST-1105 Self Propelled Tow Bar  
 ST-1091 Cover for Self Propelled Tow Bar  
 WHEE-113 Front Caster  
 LPA-071 Rear Axle Bracket  
 LPW-033 Rear Axle Shaft  
 ELEC-126 Self Propelled Drive Axle  
 ELEC-126-2 Brake for Self Propelled Drive Axle  
 (No part number) Motor for Self Propelled Drive Axle  
 (No part number) 10" Grey Non-marking Foam Filled Rubber Wheels  
 {When ordering, please specify front or rear wheel, and if unit has self propelled drive axle.}  
 HARD-063 Rubber Grips  
 HARD-069 1/2" Hitch Pin for Tow Bar  
 HARD-087 3/8" Lock Pin

**All Nuts, bolts, etc. replaced must be equivalent to ANSI Grade 5 or higher.**

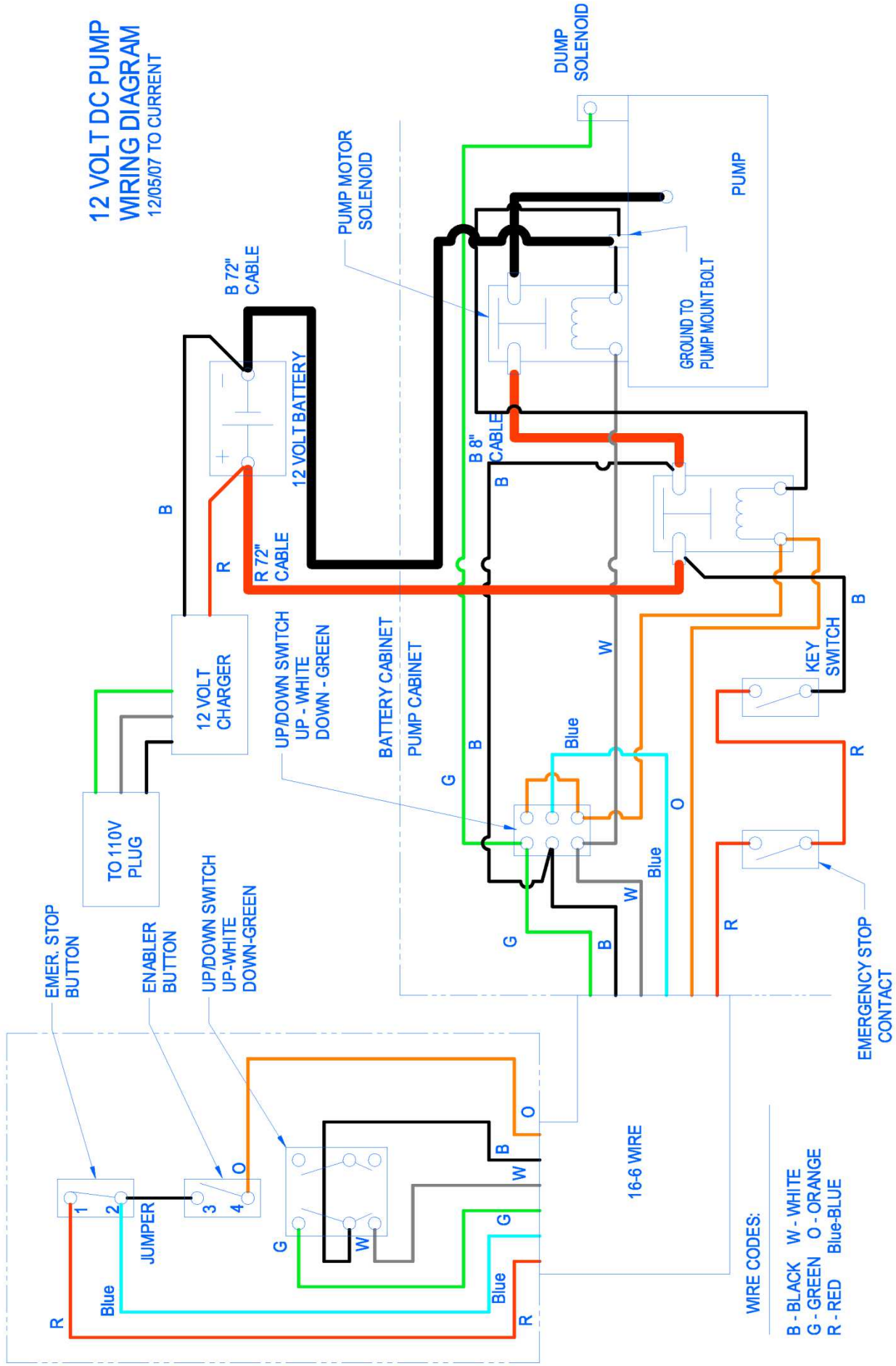


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# Hydraulic Schematic & Electrical Wiring Diagrams



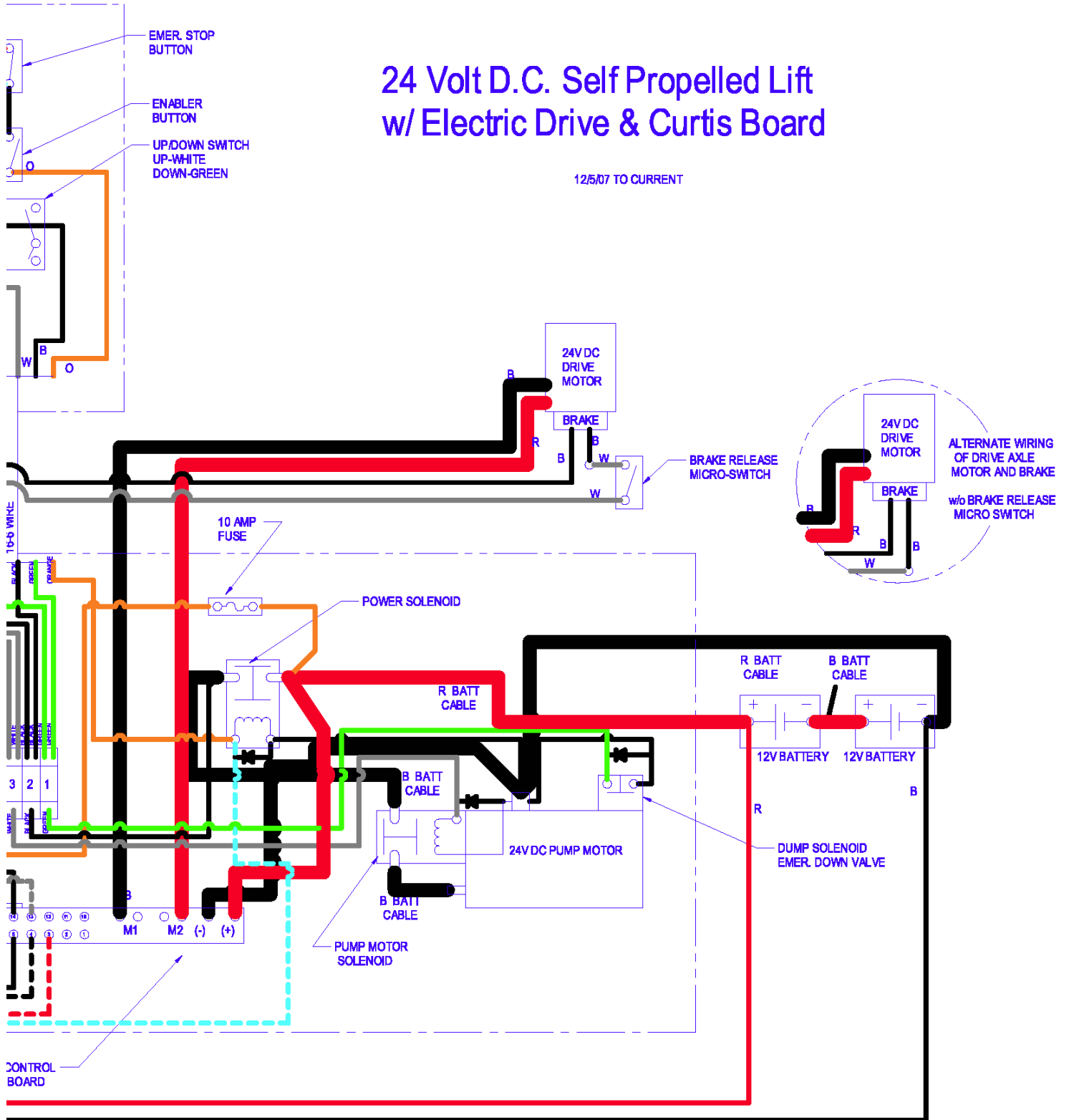
**12 VOLT DC PUMP  
WIRING DIAGRAM**  
12/05/07 TO CURRENT





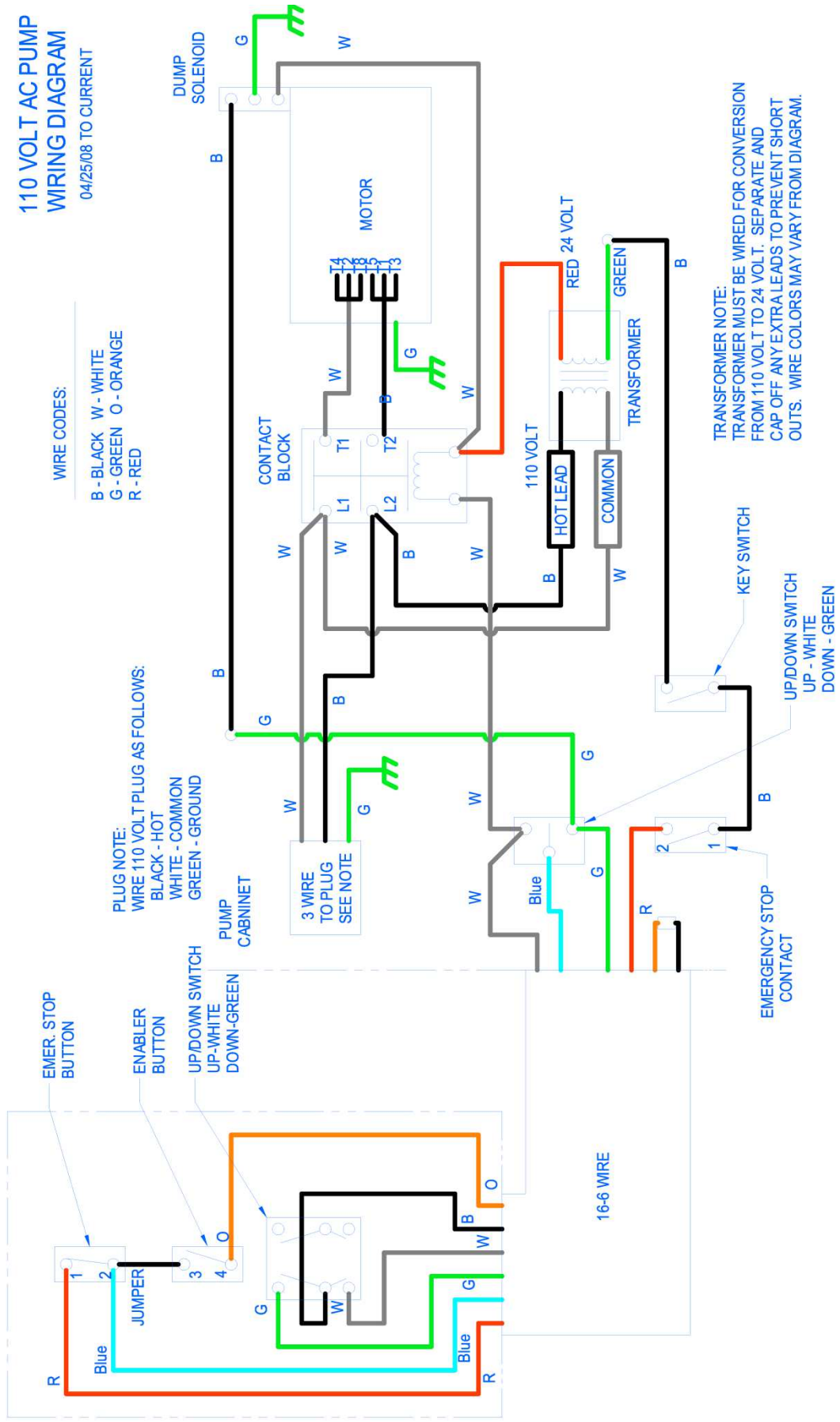
# 24 Volt D.C. Self Propelled Lift w/ Electric Drive & Curtis Board

12/5/07 TO CURRENT



# 110 VOLT AC PUMP WIRING DIAGRAM

04/25/08 TO CURRENT





## Prestart Lift Inspection Checklist



# WARNING

THIS CHECKLIST MUST BE USED AT THE BEGINNING OF EACH SHIFT OR AFTER EVERY SIX TO EIGHT HOURS OF USE. FAILURE TO DO SO COULD AFFECT THE SAFETY OF THE OPERATOR.

MODEL NUMBER \_\_\_\_\_ SERIAL NUMBER \_\_\_\_\_

1. Keep inspection records up-to-date.
2. Record and report all discrepancies to your supervisor.
3. A dirty machine cannot be properly inspected.

Y-Yes/Acceptable N-No/Unacceptable R-Repaired

Description	Y	N	R
<b>For the following checks, outriggers must be fully extended and deployed:</b>			
Visually inspect all machine components for missing parts and obvious damage including torn or loose hoses, hydraulic fluid leaks, torn, frayed, or disconnected wires, and bent structural members. Replace components as necessary.			
Check the hydraulic fluid level with the platform fully lowered.			
Check the tires for damage. Check wheel axle bolts for tightness.			
Check the hoses and the cables for worn areas or chafing. Replace if necessary.			
Check that all snap rings are secure in grooves on pivot pins.			
Check that warning and instructional labels are legible and secure.			
Check that manual is on unit.			
Check the platform control. Emergency Stop (must stop all function) Enable (must be pressed for function) Up/Down Control (must spring back to center off position)			
Check the base controls for proper operation. Key Switch (lift operates only from ON position) Emergency Stop (must stop all function) Up/Down Control (must spring back to center off position) (For Self-Propelled Models): Drive forward, reverse, brakes engaged when not driving.			

DATE \_\_\_\_\_ INSPECTED BY \_\_\_\_\_

## Annual Lift Inspection Checklist



# CAUTION

FAILURE TO PERFORM INSPECTIONS AND PREVENTIVE MAINTENANCE AT RECOMMENDED INTERVALS MAY RESULT IN THE UNIT BEING OPERATED WITH A DEFECT THAT MAY RESULT IN INJURY OR DEATH OF THE OPERATOR.

An annual inspection of the 2-n-1 Low Boy Mausoleum Lift shall be performed by a qualified person, no later than 13 months from the date of prior inspection. The inspection shall include, but not be limited to the following:

\_\_\_\_\_ Pull out and engage outriggers. Be sure that the outrigger stops are working properly. If not, adjust button stops so that the outriggers lock into the appropriate position.

### For the following:

**Outriggers must be fully extended and deployed.**

**The lift must be raised and have the maintenance lock engaged.**

\_\_\_\_\_ Inspect scissors sections. Check for bent members and cracked welds.

Check all pivot bars for wear.

\_\_\_\_\_ Check that all snap rings are locked into place and are not missing.

\_\_\_\_\_ Fully extend lift. Check cylinder, pump, and hose for hydraulic leaks.

### Disengage the maintenance lock and completely lower the lift.

\_\_\_\_\_ Use outrigger jacks to lift wheels off the ground. Check all wheels and bearings.

Check caster bearings. Grease all zerks.

\_\_\_\_\_ Check hydraulic fluid level. It should be 1" from top of tank. Fill as needed.

\_\_\_\_\_ Clean battery terminals and check water level in battery.

\_\_\_\_\_ Check all wires for damage or wear.

\_\_\_\_\_ Check that all snap clips and lanyards / or snap buttons are on all attachments.

(Step rails, work center rails, steps, stone holders, etc.)

\_\_\_\_\_ Check the step hinges. Step should be level or slightly elevated.

Replace non-skid tape if needed.

\_\_\_\_\_ Check that all switches are operating correctly.

\_\_\_\_\_ Check that all decals are in place and are legible.

**Make any necessary repairs and replace any worn parts.**

# Accident Prevention Responsibilities

## (from ANSI A92.3 Manual of Responsibilities)

### 5. Responsibilities of Dealers

5.1 Basic Principles. Sound principles of safety, training, inspection, maintenance, applications, and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the training of operators, in maintenance, application, and operation of the aerial platform with due consideration of the knowledge that the unit will be carrying personnel.

5.2.1 Manuals. Dealers shall keep and maintain a copy of the operating, maintenance, parts, and service manuals. The operating manual shall be provided upon each rental lease or sale delivery and shall be stored in the weather-resistant storage location on the aerial platform. Manual(s) are considered an integral part of the aerial platform and are vital to communicate necessary safety information to users and operators. IN addition, repair and parts manuals should be provided with each sale delivery.

5.2.2 Manual of Responsibilities. The current Manual of Responsibilities for Dealers, Owners, Operators, Lessors, Lessees, and Brokers of manually propelled elevating work platforms shall be provided and stored in the weather-resistant storage compartment.

5.3 Predelivery Preparation. Aerial platforms shall be inspected, serviced, and adjusted to manufacturer requirements prior to each delivery by sale, lease, or rental.

5.4 Maintenance, Inspection and Repair.

5.4.1 Maintenance. When a dealer accomplishes preventative maintenance on the aerial platform, it shall be in accordance with the manufacturer's recommendations and on the environment and severity of use.

5.4.2 Inspection. When the dealer accomplishes frequent and annual inspections, they shall be in accordance with the manufacturer's manuals and instructions.

5.4.3 Repairs. Repairs shall be accomplished to correct malfunctions and problems shall be in accordance with the manufacturer's manuals and instructions.

5.5 Safety Precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable:

- (1) All controls in the "off" position and all operating features secured from inadvertent motion by brakes, blocks, or other means.
- (2) Power plant stopped and starting means rendered inoperative.
- (3) Platform lowered to the full down position, if possible, or otherwise secured the maintenance lock to prevent dropping.
- (4) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.
- (5) Safety props or latches installed where applicable as described by the manufacturer.
- (6) Precautions specified by the manufacturer.

5.6 Replacement Parts. When parts of components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

5.7 Training. The dealer shall offer appropriate training to facilitate owners, users and operators to comply with requirements set forth in this standard regarding the inspection, maintenance, use, application and operation of the aerial platform.

5.8 Familiarization upon Delivery. Upon delivery by sale, lease, rental or any form of use, the dealer shall have the responsibility with the person designated by the receiving entity for accepting the aerial platform to:

- (1) Identify the weather-resistant compartment for manual(s) storage
- (2) Confirm that the manual(s), as specified by the manufacturer, are on the aerial platform.

- (3) Review control functions.
- (4) Review safety devices specific to the model aerial platform being delivered.
- (5) Review loading and unloading procedures and the use of tilt-back feature(s) when applicable.

5.9 Dealer as user. Whenever a dealer directs personnel to operate an aerial platform (loading, unloading, inspecting, sales demonstrations, or any form of use), the dealer shall assume the responsibilities as specified in section 7 of this standard. All personnel authorized to operate the aerial platform shall have been:

- (1) Trained.
- (2) Familiarized with the aerial platform to be operated.
- (3) Made aware of the responsibilities of the operators as outlined in section 8 of this standard.

5.10 Assistance to Owners and Users. If a dealer is unable to answer an owner's or user's question relating to rated capacity, intended use, maintenance, repair, inspection, or operation of the aerial platform, the dealer shall obtain the proper information from the manufacturer and provide that information to the owner or user.

5.11 Record Retention and Dissemination.

5.11.1 Record Retention. The dealer shall retain the following records for at least 4 years:

- (1) Name and address of the purchaser of each aerial platform by serial number and the date of delivery.
- (2) Records of the pre-delivery preparation performed prior to each delivery.
- (3) Name of the person(s) trained.
- (4) Name of the person(s) providing the training.
- (5) Name of the person(s) receiving familiarization with the aerial platform upon each delivery unless the individual has been provided with familiarization on the same model, or having characteristics consistent with the one being delivered, within the prior 90 days.
- (6) Name of the person(s) providing the familiarization with the aerial platform upon each delivery.
- (7) Records of frequent and annual machine inspections accomplished.
- (8) Records of repairs accomplished to correct malfunctions and problems.

5.11.2 Proof of Training. The dealer should provide trainees who successfully complete training a means to evidence that they are trained if such proof is requested by the trainee. The document evidencing training shall include the following information:

- (1) Name of trainee
- (2) Name of entity providing training or retraining
- (3) Name of trainer(s)
- (4) Clear identification that training covered Manually Propelled Elevating Work Platforms.
- (5) Date of the training.

5.11.3 Record Dissemination. Upon request, the dealer should provide the following information:

- (1) To the owner of the aerial platform, a copy of frequent or annual inspections performed.
- (2) To the owner of the aerial platform, a copy of repairs accomplished.
- (3) To a user, proof of training for an operator, including name of the trainer and the date of training.
- (4) To a user, the name of the person(s) receiving familiarization upon delivery of the aerial platform.

5.12 Modifications. Modification, alteration or remanufacture of the aerial platforms shall be made only with prior written permission of the manufacturer.

5.13 Manufacturer's Safety Bulletins. The dealer shall comply with safety-related bulletins as received from the manufacturer.

5.14 Responsibilities upon Sale. When the aerial platform is sold, the dealer:

- (1) Shall, upon delivery, ensure the operating and maintenance manuals are conveyed to the owner.
- (2) Shall, upon delivery, provide a copy of the current manual of responsibilities.
- (3) Should, within 60 days of sale, provide repair and parts manuals.

(4) Shall, within 60 days of sale, notify the manufacturer or its successor (if existing) of the sale, providing the full name and address of the purchaser.

(5) Should, if the aerial platform is used, accomplish an annual machine inspection prior to delivery and provide a copy to the purchaser within 60 days of sale.

(5) Shall, upon delivery, familiarize the person designated by the receiving entity with the aerial platform being acquired.

## **6. Responsibilities of Owners**

6.1 Basic Principles. Sound principles of safety, training, inspection, maintenance, application and operation consistent with all data available regarding the parameters of intended use and expected environment shall be applied in the performance of the responsibilities of owners with due consideration of knowledge that the unit will be carrying personnel.

6.2 Responsibilities upon Purchase. Upon purchase of the aerial platform, the buyer:

(1) Shall ensure the operating and maintenance manuals have been received.

(2) Should acquire repair and parts manuals within sixty (60) days of acquisition

(3) Shall within (60) days of acquisition of the aerial platform provide the manufacturer with the full name and address of the buyer along with the model and serial number of the aerial platform acquired.

(4) Shall, if the aerial platform is used, ensure that frequent and annual inspections are current.

(5) Shall become familiar with and conform to the responsibilities of owners set forth in the current Manual of Responsibilities for Manually Propelled Elevating Aerial Platforms.

6.3 Manuals.

6.3.1 Machine Manuals. Owners shall keep a copy of the operating and maintenance manual with each rental, lease, or sales delivery by ensuring they are properly stored in the weather-resistant compartment that is a part of the aerial platform. The manual is considered an integral part of the aerial platform and is vital to communicate necessary safety information to users and operators.

6.3.2 Manual of Responsibilities. The current Manual of Responsibilities for Dealers, Owners, Users, Operators, Lessors, Lessees, and Brokers of manually propelled elevating work platforms shall be provided and stored in the weather-resistant storage compartment.

6.4 Maintenance, Inspection and Repair.

6.4.1 Maintenance. The owner of an aerial platform shall arrange that the maintenance specified in this standard is properly performed on a timely basis. The owner shall establish a preventative maintenance program in accordance with the manufacturer's recommendations and based on the environment and severity of use of the aerial platform.

6.4.2 Inspection. The owner of an aerial platform shall arrange for frequent and annual inspections to be performed in accordance with the manufacturer. All malfunctions and problems identified shall be corrected before the aerial platform is returned to service.

6.4.3 Repairs. When the aerial platform is damaged or in need of repair, all malfunctions and problems identified shall be corrected before the platform is returned to service.

6.5 Pre-delivery Preparation. Aerial platforms shall be inspected, serviced, and adjusted in accordance with the manufacturer's requirements prior to each delivery by sale, lease, or rental.

6.6 Frequent Inspection. The owner of an aerial platform shall ensure that a frequent inspection is performed in accordance with the manufacturer's instructions, on an aerial platform:

(1) That was purchased used. This inspection shall be accomplished unless it is determined that the frequent and annual inspections are current.

(2) That has been in service for 3 months or 150 hours, whichever comes first.

(3) That has been out of service for a period of longer than 3 months.

The inspection shall be made by a person qualified as a mechanic on the specific type of aerial platform or one having similar design characteristic. The inspection shall be in accordance with items specified by the manufacturer for frequent inspection and shall include, but not be limited to, the following:

(1) All functions and their controls for speed(s) smoothness and limits of motion.

(2) Emergency lowering means.

(3) All chain and cable mechanisms for adjustment and worn or damaged parts.

(4) All emergency and safety devices.

(5) Lubrication of all moving parts, inspection of filter element(s), hydraulic oil, engine oil, and coolant, as specified by the manufacturer.

(6) Visual inspection of structural components and other critical components, such as fasteners, pins, shafts, and locking devices.

(7) Placards, warnings and control markings.

(8) Items specified by the manufacturer.

(9) Correction of all malfunctions and problems identified and further inspection, if necessary.

6.7 Annual Inspection. The owner of an aerial platform shall ensure that an annual inspection is performed on the aerial platform no later than 13 months from the date of prior annual inspection. The inspection shall be made by a person qualified as a mechanic on the specific type of aerial platform or one having similar design characteristics. The inspection shall be in accordance with items specified by the manufacturer for an annual inspection. The owner shall not place the aerial platform into service until all malfunctions and problems have been corrected.

6.8 Maintenance Safety Precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable.

(1) All controls in the "off" position and all operating features secured from inadvertent motion by brakes, blocks, or other means.

(2) Power plant stopped and starting means rendered inoperative.

(3) Platform lowered to full down position, if possible, or otherwise secured by the maintenance lock to prevent dropping.

(4) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.

(5) Safety props or latches installed where applicable as described by the manufacturer.

(6) Precautions specified by the manufacturer.

6.9 Replacement Parts. When parts or components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

6.10 Maintenance Training. The owner shall train their maintenance personnel in inspection and maintenance of the aerial platform in accordance with 6.2 through 6.11 of this standard, and with the manufacturer's recommendations.

6.11 Training.

6.11.1 Operator Training. Whenever an owner directs or authorizes an employee to operate an aerial platform (loading, unloading, inspecting or any form of use) the owner shall assume the responsibilities of the user as specified in section 7 of this standard and ensure that the individual has been:

(1) Trained.

(2) Familiarized with the aerial platform to be operated.

(3) Made aware of the responsibilities of operators as outlined in Section 8 of this standard.

6.11.2 Assistance to Users. Upon request of the user, when an owner sells, leases, rents or provides an aerial platform for any form of beneficial use, the owner at that time shall offer to do training or advise the user where training may be reasonably secured.

6.12 Familiarization upon Delivery. Upon delivery by sale, lease, rental or any form of use, the dealer shall have the responsibility with the person designated by the receiving entity for accepting the aerial platform to:

- (1) Identify the weather-resistant compartment for manual(s) storage
- (2) Confirm that the manual(s), as specified by the manufacturer, are on the aerial platform.
- (3) Review control functions.
- (4) Review safety devices specific to the model aerial platform being delivered.
- (5) Review loading and unloading procedures and the use of tilt-back feature(s) when applicable.

6.13 Operation. When an owner operates an aerial platform, the owner shall have the responsibilities of users as specified in Section 7 of this standard, and the operating personnel shall have the responsibilities of operators as specified in Section 8 of this standard.

6.14 Assistance to Owners and Users. If an owner is unable to answer an owner's or user's question relating to rated capacity, intended use, maintenance, repair, inspection, or operation of the aerial platform, the dealer shall obtain the proper information from the manufacturer and provide that information to the owner or user.

6.15 Record Retention and Dissemination.

6.15.1 Records Retention. The owner shall retain the following records for at least four (4) years:

- (1) Name and address of the purchaser of each aerial platform by serial number and date of delivery.
- (2) Written records of the frequent and annual inspections performed. The record shall include deficiencies found, corrective action accomplished and identification of the person(s) performing the inspection and repairs.
- (3) Written records of repairs accomplished on the aerial platform. The records shall include corrective action accomplished and identification of the person(s) performing the repairs
- (4) Pre-delivery preparation performed prior to each delivery.
- (5) Name of the person(s) trained.
- (6) Name of the person(s) providing training.
- (7) Name of the person(s) receiving familiarization with the aerial platform upon each delivery unless the individual has been provided with familiarization on the same model, or one having characteristics consistent with the one being delivered, within the prior 90 days.
- (8) Name of the person(s) providing familiarization.

6.15.2 Proof of Training. Owners providing training should provide successful trainees a means to evidence their training if such proof is requested by the trainee. The document evidencing training shall include the following information:

- (1) Name of trainee
- (2) Name of entity providing training or retraining
- (3) Name of trainer(s)
- (4) Clear identification that training covered Manually Propelled Elevating Work Platforms.
- (5) Date of the training.

6.15.3 Record Dissemination. Upon request, an owner accomplishing training and/or familiarization should provide the following:

- (1) To a user, proof of training for an operator, including name of the trainer and the date of training.
- (2) To a user, the name of the person(s) receiving familiarization upon delivery of the aerial platform.

6.16 Modifications. The owner shall not modify or concur in modifications or alteration to the aerial platform without the modifications being approved and certified in writing by the manufacturer.

6.17 Manufacturer's Safety Bulletins. The owner shall comply with safety-related bulletins as received from the manufacturer or dealer.

6.18 Responsibilities upon Sale. Upon sale of the aerial platform, the seller:

(1) Shall, upon delivery, ensure the operating and maintenance manuals are conveyed to the owner.

(2) Shall, upon delivery, provide a copy of the current Manual of Responsibilities for Manually Propelled Elevating Aerial Platforms to the new owner.

(3) Should provide repair and parts manuals to the new owner.

(4) Shall, upon the request of the new owner, offer training or advice where training may reasonably be obtained.

## **7. Responsibilities of Users.**

7.1 Basic Principles. The information in this standard must be supplemented by good job management, safety control, and the application of sound principles of safety, training, inspection, maintenance, application, and operation consistent with all data available regarding the parameters of intended use and expected environment. Since the user has direct control over the application and operation of aerial platforms, conformance with good safety practices in this area is the responsibility of the user and the operating personnel, including the operator. Decisions on the use and operation of the aerial platform must always be made with due consideration for the fact that the machine will be carrying personnel whose safety is dependent on those decisions.

7.2 Manuals.

7.2.1 Machine Manuals. Users shall keep and maintain copy(ies) of the operating and maintenance manual(s) in the weather-resistant storage compartment provided by the manufacturer. The manual(s) is considered an integral part of the aerial platform and are vital to communication of necessary safety information to users and operators.

7.2.2 Manual of Responsibilities. The current Manual of Responsibilities for Dealers, Owners, Users, Operators, Lessors, Lessees, and Brokers of manually propelled elevating work platforms shall be provided and stored in the weather-resistant storage compartment.

7.3 Inspection and Maintenance. Users shall inspect and maintain the aerial platform as required to ensure proper operation. The frequency of inspection and maintenance shall be determined by the manufacturer's recommendation and be compatible with operating conditions and the severity of the operating environment. Aerial platforms that are not in proper operating condition shall be immediately removed from service until repaired. Repairs shall be made by a qualified person and the repairs shall be in conformance with the manufacturer's recommendations.

7.3.1 Frequent Inspection. Users of an aerial platform shall ensure that frequent inspections are conducted as outlined in 6.6 of this standard.

7.3.2 Annual Inspection. Users of an aerial platform shall ensure that frequent inspections are conducted as outlined in 6.7 of this standard.

7.3.3 Prestart Inspection. Before use each day or at the beginning of each shift, the aerial platform shall be given a visual inspection and functional test including but not limited to the following:

(1) Operating and emergency controls.

(2) Safety devices.

(3) Air, hydraulic and fuel system leaks

(4) Cables and wiring harness.

(5) Loose or missing parts.

(6) Tires and wheels.



- (7) Placards, warnings, and control markings.
- (8) Outriggers, Stabilizers, and other structures
- (9) Guardrail systems
- (10) Items specified by the manufacturer.

7.3.4 Maintenance Safety Precautions. Before adjustments and repairs are started on an aerial platform, the following precautions shall be taken as applicable:

- (1) All controls in the "off" position and all operating features secured from inadvertent motion by brakes, blocks, or other means.
- (2) Power plant stopped and starting means rendered inoperative.
- (3) Platform lowered to the full down position, if possible, or otherwise secured by maintenance lock to prevent dropping.
- (4) Hydraulic oil pressure relieved from all hydraulic circuits before loosening or removing hydraulic components.
- (5) Safety props or latches installed where applicable as described by the manufacturer.
- (6) Precautions specified by the manufacturer.

7.4 Replacement Parts. When parts or components are replaced, they shall be identical or equivalent to original aerial platform parts or components.

7.5 Maintenance Training. The user shall train the maintenance personal in inspection and maintenance of the aerial platform in accordance with 7.3, 7.4, and 7.6 of this standard and with the manufacturer's recommendations.

7.6 Operator Training and Retraining. Whenever a user directs or authorizes an individual to operate an aerial platform, the user shall ensure that the individual has been:

- (1) Trained before being assigned to operate the aerial platform.
- (2) Familiarized with the aerial platform to be operated.
- (3) Made aware of the responsibilities of operators as outlined in Section 8 of this standard.
- (4) Retrained, if necessary, based on the user's observation and evaluation of the operator.

7.6.1 Trainee Records. A record of the trainee's aerial platform instruction shall be maintained by the user for at least four (4) years.

7.7 Familiarization before use. The user shall permit only properly trained personnel to operate an aerial platform. The user shall ensure that before use the operator is familiar with the model of the aerial platform to be operated, and specifically:

- (1) Knows where the weather-resistant compartment for manual storage is located.
- (2) Knows the operating and maintenance manuals supplied by the manufacturer are stored in the weather-resistant compartment and is familiar with the operating and safety manuals.
- (3) Understands all control functions, placards and warnings.
- (4) Is aware of and understands all safety devices specific to the model aerial platform being used.
- (5) Understands loading and unloading procedures and the use of tilt-back feature(s) when applicable.

7.8 Work Place Inspection. Before the aerial platform is used and during use, the user shall check the area in which the aerial platform is to be used for possible hazards such as, but not limited to:

- (1) Drop-offs or holes.
- (2) Slopes.
- (3) Bumps and floor obstructions.
- (4) Debris.
- (5) Overhead obstructions and high voltage conductors.
- (6) Hazardous locations. (Reference ANSI/NFPA 505-1996)

(7) Inadequate surface and support to withstand all load forces imposed by the aerial platform in all operating configurations.

(8) Wind and weather conditions.

(9) Presence of unauthorized persons.

(10) Other possible unsafe conditions

7.9 Determination of Hazardous Locations. It shall be the responsibility of the user to determine the hazard classification of the intended location of operation. Aerial platforms operated in hazardous location shall be approved in accordance with, and of the type required, by ANSI/NFPA 505-1996.

7.10 Operator Warnings and Instruction. The user shall direct personnel operating the aerial platform to be in compliance with the provisions set forth in this standard. The user shall monitor their performance and supervise their work to ensure the use, application and operation of the aerial platform is in conformance with the provisions set forth in section 8 of this standard, warn personnel of potential hazards, provide means to protect against identified hazards, and explain the potential; consequences of not following proper operating guidelines. Instructions and guidelines regarding proper operation shall include, but not necessarily be limited to the following issues and subjects:

(1) Fall Protection. The guardrail system of the aerial platform provides fall protection. If occupant(s) of the platform are required to wear personal fall protection equipment, occupants shall comply with instructions provided by the aerial platform manufacturer regarding anchorage(s).

(2) Slope. The aerial platform shall not be operated in any manner on slopes exceeding those for which the aerial platform is rated by the manufacturer.

(3) Deployment of stability enhancing means. Outriggers, Stabilizers, extendible axles, axle locks, or other stability enhancing means shall be deployed and locked into place as required by the manufacturer.

(4) Guardrail system. Guardrails shall be installed and positioned, and access gates or openings shall be closed per the manufacturer's instructions.

(5) Distribution of load. The load and its distribution on the platform extension(s) shall be in accordance with the manufacturer's rated capacity for that specific configuration.

(6) Maintaining overhead clearance. The operator shall be instructed to ensure that adequate clearance is maintained from overhead obstructions and energized electrical conductors and parts.

(7) Electrocutation hazard. All applicable safety related work practices intended to prevent electric shock covered by the Code of Federal Regulations (CFR) 1910.333 shall be defined and explained to the operator by a qualified person. In particular, such person shall direct the operator, commensurate with the operator's qualifications to maintain the appropriate minimum approach distance (MAD) from energized power lines and parts covered by CFR 1910.33 (c).

(8) Personal protective equipment. The user shall direct the operator to ensure all personnel on the platform wear personal protective equipment as required.

(9) Personnel footing. The user shall direct the operator to ensure all personnel on the platform while working thereon. Climbing by occupants on the midrail or top rail of the aerial platform is prohibited. The use of planks, ladders, or any other devices on the platform for achieving additional height or reach is prohibited.

(10) Precaution for moving equipment. When moving equipment or vehicles are present, special precautions shall be taken to comply with local ordinances or safety standards established for the workplace. Warnings such as, but not limited to, flags, roped off areas, flashing lights, and barricades shall be used as appropriate.

(11) Reporting problems or malfunctions. The user shall direct the operator to immediately report to a supervisor any problem(s) or malfunction(s) that become evident during operation. The user shall ensure all problems and malfunctions that affect the safeties of operations are prior to continued use.

(12) Reporting potentially hazardous locations. The user shall direct the operator to immediately report to a supervisor any potentially hazardous location(s) that become evident during operation.

(13) Hazardous location operation. Operation of aerial platforms not approved and marked for operation in a hazardous location shall be permitted.

(14) Entanglement. Care shall be taken to prevent rope, electric cords, hoses, etc., from becoming entangled in the aerial platform.

(15) Capacity Limitation. Rated capacity shall not be exceeded when loads are transferred to the platform at any level.

(16) Work Area. The user shall direct the operator to ensure that the area surrounding the aerial platform is clear of personnel and equipment before lowering the platform.

(17) Fueling. The engine (if applicable) shall be shut down while fuel tanks are being filled. Fueling shall be done in a well-ventilated area free of flames, sparks, or other hazards that may cause fire or explosion.

(18) Battery charging. Batteries shall only be charged in well-ventilated area free of flames, sparks, or other hazards that may cause fire or explosion.

(19) Improper platform stabilization. The aerial platform shall not be positioned against another object to steady the platform or improve stability.

(20) Misuse as a crane. The aerial platform shall not be used as a crane.

(21) Unusual operating support conditions. The aerial platform shall not be operated from a position on trucks, trailers, railway cars, floating vessels, scaffolds, or similar equipment unless the application is approved in writing by the manufacturer or a qualified person.

(22) Propelling. The user shall ensure that the operator follows the transport instructions of the manufacturer and limit speed according to conditions, including the condition of the support surface, congestion, visibility, slope, location of personnel, and other factors leading to hazards which may cause collision(s) or result in the potential injury (ies) to personnel.

(23) Securing the aerial platform. The user shall direct the operator to implement means provided to protect against use by an unauthorized person(s).

(24) Altering safety devices. Interlocks or other safety devices shall not be altered or disabled.

(25) Snagged platform. If the platform or elevating assembly becomes caught, snagged, or otherwise prevented from normal motion by adjacent structures or other obstacles such that control reversal does not free the platform, all personnel shall be removed from the platform before attempts are made to free the platform using lower controls.

(26) Exiting or entering an elevated aerial platform. If permitted by the manufacturer, personnel shall exit or enter a raised aerial platform by following the guidelines and instructions provided by the manufacturer.

(27) Modifications. Modifications or alterations of an aerial platform or the fabrication and attaching of frameworks, or the mounting of attachments for holding tools or materials onto the platform or the guardrail system shall only be accomplished with prior permission of the manufacturer.

(28) Assistance to the operator. If an operator encounters any suspected malfunction of the aerial platform, or any hazard or potentially unsafe condition relating to capacity, intended use or safe operation of the aerial platform, the operator shall cease operation of the aerial platform and request further information from the user.

(29) Problems or Malfunctions. Any problem(s) or malfunction(s) that affect the safety of operations shall be repaired prior to the use of the aerial platform.

(30) Carrying materials (larger than the platform). The user shall ensure that only properly secured tools and materials which are evenly distributed and can be safely handled by a person(s) working from the platform, are moved.

(31) Rated horizontal force. The user shall direct the operator not to exceed the manufacturer's rated horizontal force.

(32) Bridge cranes. When an aerial platform is to operate within the area of travel of a bridge crane or similar equipment, steps shall be taken to prevent a collision with the aerial platform.

(33) Adequate support requirements. The user shall ensure the support surface is adequate for the aerial platform and the load carried.

(34) Leveling the aerial platform. Outriggers and leveling devices supplied by the manufacturer shall be utilized to level the aerial platform when provided.

(35) Protection against unauthorized use. The user shall direct the operator not to use, rent, lease, or provide the aerial platform for any form of beneficial use unless so authorized.

(36) Loading and tilt-back feature(s). The user shall direct the operator to follow the instructions of the manufacturer regarding loading, unloading and the use of tilt-back feature(s) when applicable.

7.11 User as operator. If a user is also the operator of a aerial platform, the user shall have the responsibilities of operators specified in Section 8 of this standard as well as responsibilities of users as specified in Section 7 of this standard.

7.12 Assistance to Operator. If a user is unable to answer any operator's questions relating to rated capacity, intended use, maintenance, condition, or safety of operation of the aerial platform, the user shall obtain the proper information from the dealer, owner, or manufacturer and provide the information to the operator before use of the aerial platform in the application of concern.

7.13 Shutdown of Aerial Platform. The user shall authorize and direct the operating personnel to cease operation of the aerial platform in case of any suspected malfunctions of the aerial platform, or any hazard or potentially unsafe condition that may be encountered, and to request further information as to safe operation from the owner, dealer, or manufacturer before operation of the aerial platform.

7.14 Record Retention and Dissemination.

7.14.1 Record Retention. The user shall retain the following records for at least 4 years:

(1) Names of the operator(s) trained and retrained.

(2) Names of the operator(s) provided familiarization.

(3) The owner (or the entity designated by the owner) is responsible to ensure frequent and annual inspections are conducted and written records are maintained. The records shall include the date of inspection, any deficiencies found, the corrective action recommended and identification of the person(s) performing the inspection.

(4) When employees of the user accomplished repairs on the aerial platform, the user shall include the date of repair, a description of the work accomplished, and the identification of the person(s) performing the repair.

7.14.2 Record Dissemination.

(1) When the user directs personnel to accomplish frequent or annual inspections, not later than 60 days after the inspections, the appropriate records shall be provided to the owner of the aerial platform.

(2) When the user directs personnel to accomplish repairs on the aerial platform, not later than 60 days after the repairs are accomplished, the appropriate records shall be provided to the owner.

7.14.3 Proof of training. Users providing training should provide successful trainees a means to evidence their training if such proof is requested by the trainee. The document evidencing training shall include the following information:

(1) Name of trainee

(2) Name of entity providing training or retraining

(3) Name of trainer(s)

(4) Clear identification that training covered Manually Propelled Elevating Work Platforms.

(5) Date of the training.

7.15 Modifications. Modification, alteration or remanufacture of the aerial platform shall be made only with prior written permission of the manufacturer.

7.16 Manufacturer's Safety Bulletins. The user shall comply with safety-related bulletins as received from the manufacturer, dealer, or owner.

## **8. Responsibilities of Operators.**

8.1 Basic Principles. The information in this standard shall be supplemented by good judgment, safety control, and caution in evaluating each situation. Since the operator is in direct control of the aerial platform, conformance with good safety practices in this area is the responsibility of the operator. The operator shall make decisions on the use and operation of the aerial platform with due consideration for the fact that his or her own safety as well as the safety of others on the platform is dependent on those decisions.

### **8.2 Manuals.**

8.2.1 Machine Manuals. The operator shall ensure operating and maintenance manual(s) are stored in the weather-resistant storage compartment on the aerial platform. The manual(s) is considered an integral part of the aerial platform and are vital to communication of necessary safety information to operator. The operator shall be familiar with the manuals and reference them as required.

8.2.2 Manual of Responsibilities. The operator shall be familiar with the requirements for operators as set forth in Section 8 of the Manual of Responsibilities for Dealers, Owners, Users, Operators, Lessors, Lessees, and Brokers of manually propelled elevating work platforms. The current Manual of Responsibilities shall be stored in the weather-resistant storage compartment when not in use.

8.3 Prestart Inspection. Before use each day or at the beginning of each shift, the aerial platform shall be given a visual inspection and functional test including but not limited to the following:

- (1) Operating and emergency controls.
- (2) Safety devices.
- (3) Air, hydraulic and fuel system leaks
- (4) Cables and wiring harness.
- (5) Loose or missing parts.
- (6) Tires and wheels.
- (7) Placards, warnings, and control markings.
- (8) Outriggers, Stabilizers, and other structures
- (9) Guardrail systems
- (10) Items specified by the manufacturer.

8.4 Problems or Malfunctions. Any problems or malfunctions that affect the safety of operations shall be repaired prior to use of the aerial platform.

### **8.5 Training, Retraining, and Familiarization.**

8.5.1 General Training. Only personnel, who have received general instructions regarding the inspection, application and operation of aerial platforms, including recognition and avoidance of hazards associated with their operation, shall operate an aerial platform. Such items covered shall include, but not necessarily limited to the following issues and requirements:

- (1) The purpose and use of manuals.
- (2) The manual(s) is considered an integral part of the aerial platform and must be stored properly in the weather-resistant compartment when not in use.

- (3) A pre-start inspection.
- (4) Responsibilities associated with problems or malfunctions affecting the operation of the aerial platform.
- (5) Factors affecting stability.
- (6) The purpose of placards and decals.
- (7) Workplace inspection.
- (8) Safety rules and regulations.
- (9) Authorization to operate.
- (10) Operator warnings and instructions.
- (11) Actual operation of the aerial platform. Under the direction of a qualified person, the trainee shall operate the aerial platform for a sufficient period of time to demonstrate proficiency in actual operation of the aerial platform.

8.5.2 Retraining. The operator shall be retrained, when so directed by the user, based on the user's observation and evaluation of the operator.

8.5.3 Familiarization. When the operator is directed to operate an aerial platform he/she is not familiar with, the operator shall receive instructions regarding the following:

- (1) The location of the weather-resistant compartment (for manual storage).
- (2) The purpose and function of all controls.
- (3) Safety devices and operating characteristic specific to the aerial platform.
- (4) Loading, unloading, and the use of tilt-back feature(s) when applicable.

8.6 Before Operation. Before operation, the operator shall:

- (1) Read and understand the manufacturer's operating instruction(s) and user's safety rules, or have them explained.
- (2) Understand all labels, warnings, and instructions displayed on the aerial platform or have them explained.
- (3) Ensure all occupants of the aerial platform wear appropriate personal protective equipment for conditions, including the environment in which the aerial platform will be operated.

8.7 Workplace Inspection. Before the aerial platform is used and during use, the operator shall check the area in which the aerial platform is to be used for possible hazards such as, but not limited to:

- (1) Drop-offs or holes.
- (2) Slopes
- (3) Bumps and floor obstructions.
- (4) Debris.
- (5) Overhead obstructions and electrical hazards.
- (6) Hazardous locations (reference NFPA 505-1996).
- (7) Inadequate surface and support to withstand all load forces imposed by the aerial platform in all operating configurations.
- (8) Wind and weather.
- (9) Presence of unauthorized persons.
- (10) Other possible unsafe conditions.

8.8 Prior to Each Elevation. Before each elevation of the platform, the operator shall ensure:

- (1) Outriggers, stabilizers, extendable axles, or other stability enhancing means are used as required by the manufacturer.
- (2) Guardrails are installed and access gates or openings are closed per manufacturer's instructions.

(3) The load and its distribution on the platform and any platform extensions are in accordance with the manufacturer's rated capacity for that specific configuration.

(4) All personnel on the aerial platform have appropriate personal protective equipment for the work and environment envisioned.

8.9 Understanding of Hazardous Locations. It shall be the responsibility of the operator to determine the hazard classification of the intended location of operation according to ANSI/NFPA 505-1996.

8.10 Operator Warnings and Instruction. The operator shall ensure the operation of the aerial platform is in compliance with the following:

(1) Fall Protection. The guardrail system of the aerial platform provides fall protection. If occupant(s) of the platform are required to wear personal fall protection equipment, occupants shall comply with instructions provided by the aerial platform manufacturer regarding anchorage(s).

(2) Slope. The aerial platform shall not be operated in any manner on slopes exceeding those for which the aerial platform is rated by the manufacturer.

(3) Deployment of stability enhancing means. Outriggers, Stabilizers, extendible axles, axle locks, or other stability enhancing means shall be deployed and locked into place as required by the manufacturer.

(4) Guardrail system. Guardrails shall be installed and positioned, and access gates or openings shall be closed per the manufacturer's instructions.

(5) Distribution of load. The load and its distribution on the platform extension(s) shall be in accordance with the manufacturer's rated capacity for that specific configuration.

(6) Maintaining overhead clearance. The operator shall be instructed to ensure that adequate clearance is maintained from overhead obstructions and energized electrical conductors and parts.

(7) Electrocutation hazard. All applicable safety related work practices intended to prevent electric shock covered by the Code of Federal Regulations (CFR) 1910.333 shall be defined and explained to the operator by a qualified person. In particular, such person shall direct the operator, commensurate with the operator's qualifications to maintain the appropriate minimum approach distance (MAD) from energized power lines and parts covered by CFR 1910.33 (c).

(8) Personal protective equipment. The user shall direct the operator to ensure all personnel on the platform wear personal protective equipment as required.

(9) Personnel footing. The user shall direct the operator to ensure all personnel on the platform while working thereon. Climbing by occupants on the midrail or top rail of the aerial platform is prohibited. The use of planks, ladders, or any other devices on the platform for achieving additional height or reach is prohibited.

(10) Precaution for moving equipment. When moving equipment or vehicles are present, special precautions shall be taken to comply with local ordinances or safety standards established for the workplace. Warnings such as, but not limited to, flags, roped off areas, flashing lights, and barricades shall be used as appropriate.

(11) Reporting problems or malfunctions. The user shall direct the operator to immediately report to a supervisor any problem(s) or malfunction(s) that become evident during operation. The user shall ensure all problems and malfunctions that affect the safeties of operations are prior to continued use.

(12) Reporting potentially hazardous locations. The user shall direct the operator to immediately report to a supervisor any potentially hazardous location(s) that become evident during operation.

(13) Hazardous location operation. Operation of aerial platforms not approved and marked for operation in a hazardous location shall be permitted.

(14) Entanglement. Care shall be taken to prevent rope, electric cords, hoses, etc., from becoming entangled in the aerial platform.

(15) Capacity Limitation. Rated capacity shall not be exceeded when loads are transferred to the platform at any level.

(16) Work Area. The user shall direct the operator to ensure that the area surrounding the aerial platform is clear of personnel and equipment before lowering the platform.

(17) Fueling. The engine (if applicable) shall be shut down while fuel tanks are being filled. Fueling shall be done in a well-ventilated area free of flames, sparks, or other hazards that may cause fire or explosion.

(18) Battery charging. Batteries shall only be charged in well-ventilated area free of flames, sparks, or other hazards that may cause fire or explosion.

(19) Improper platform stabilization. The aerial platform shall not be positioned against another object to steady the platform or improve stability.

(20) Misuse as a crane. The aerial platform shall not be used as a crane.

(21) Unusual operating support conditions. The aerial platform shall not be operated from a position on trucks, trailers, railway cars, floating vessels, scaffolds, or similar equipment unless the application is approved in writing by the manufacturer or a qualified person.

(22) Propelling. The user shall ensure that the operator follows the transport instructions of the manufacturer and limit speed according to conditions, including the condition of the support surface, congestion, visibility, slope, location of personnel, and other factors leading to hazards which may cause collision(s) or result in the potential injury (ies) to personnel.

(23) Securing the aerial platform. The user shall direct the operator to implement means provided to protect against use by an unauthorized person(s).

(24) Altering safety devices. Interlocks or other safety devices shall not be altered or disabled.

(25) Snagged platform. If the platform or elevating assembly becomes caught, snagged, or otherwise prevented from normal motion by adjacent structures or other obstacles such that control reversal does not free the platform, all personnel shall be removed from the platform before attempts are made to free the platform using lower controls.

(26) Exiting or entering an elevated aerial platform. If permitted by the manufacturer, personnel shall exit or enter a raised aerial platform by following the guidelines and instructions provided by the manufacturer.

(27) Modifications. Modifications or alterations of an aerial platform or the fabrication and attaching of frameworks, or the mounting of attachments for holding tools or materials onto the platform or the guardrail system shall only be accomplished with prior permission of the manufacturer.

(28) Assistance to the operator. If an operator encounters any suspected malfunction of the aerial platform, or any hazard or potentially unsafe condition relating to capacity, intended use or safe operation of the aerial platform, the operator shall cease operation of the aerial platform and request further information from the user.

(29) Problems or Malfunctions. Any problem(s) or malfunction(s) that affect the safety of operations shall be repaired prior to the use of the aerial platform.

(30) Carrying materials (larger than the platform). The user shall ensure that only properly secured tools and materials which are evenly distributed and can be safely handled by a person(s) working from the platform, are moved.

(31) Rated horizontal force. The user shall direct the operator not to exceed the manufacturer's rated horizontal force.

(32) Bridge cranes. When an aerial platform is to operate within the area of travel of a bridge crane or similar equipment, steps shall be taken to prevent a collision with the aerial platform.

(33) Adequate support requirements. The user shall ensure the support surface is adequate for the aerial platform and the load carried.



(34) Leveling the aerial platform. Outriggers and leveling devices supplied by the manufacturer shall be utilized to level the aerial platform when provided.

(35) Protection against unauthorized use. The user shall direct the operator not to use, rent, lease, or provide the aerial platform for any form of beneficial use unless so authorized.

(36) Loading and tilt-back feature(s). The user shall direct the operator to follow the instructions of the manufacturer regarding loading, unloading and the use of tilt-back feature(s) when applicable.

8.11 Record of Training. When provided or when obtained upon the operator's request, proof of training provided by the training entity should be retained by the operator. Records shall contain the following:

- (1) Name of trainee
- (2) Name of entity providing training or retraining
- (3) Name of trainer(s)
- (4) Clear identification that training covered Manually Propelled Elevating Work Platforms.
- (5) Date of the training.

## **9. Responsibilities of Lessors.**

9.1 Basic Principles. Sound principles of safety, training, inspection, maintenance, application, and operation consistent with all data available regarding the parameters of intended use, and expected environment, shall be applied in the performance of responsibilities of lessors with due consideration of the knowledge that the unit shall be carrying personnel.

9.2 Lessor as a Dealer. When a lessor uses the aerial platform as a dealer, the lessor shall have the responsibilities of dealers as specified in Section 5 of this standard.

9.3 Lessor as an Owner. When a lessor uses the aerial platform as an owner, the lessor shall have the responsibilities of owners as specified in Section 6 of this standard.

9.4 Lessor as a User. When a lessor uses the aerial platform as a user, the lessor shall have the responsibilities of users as specified in Section 7 of this standard.

9.5 Lessor as an Operator. When a lessor uses the aerial platform as an operator, the lessor shall have the responsibilities of operators as specified in Section 8 of this standard.

## **10. Responsibilities of Lessees.**

10.1 Basic Principles. Sound principles of safety, training, inspection, maintenance, application, and operation consistent with all data available regarding the parameters of intended use, and the expected environment, shall be applied in the performance of responsibilities of lessees with due consideration of the knowledge that the aerial platform carries personnel.

10.2 Lessee as a Dealer. When a lessee uses the aerial platform as a dealer, the lessee shall have the responsibilities of dealers as specified in Section 5 of this standard.

10.3 Lessee as an Owner. When a lessee uses the aerial platform as an owner, the lessee shall have the responsibilities of owners as specified in Section 6 of this standard.

10.4 Lessee as a User. When a lessee uses the aerial platform as a user, the lessee shall have the responsibilities of users as specified in Section 7 of this standard.

10.5 Lessee as an Operator. When a lessee uses the aerial platform as an operator, the lessee shall have the responsibilities of operators as specified in Section 8 of this standard.

Trainee Name:

Date:

Trainer Name:

## Operator Training Checklist

### Question

### For Answer

- 1.) What are the four steps in the STOP program? *(See Manual pp. 9-10)*
  
- 2.) If you find that the controls are not functioning properly what are you as the operator required to do? *(See Manual p. 48, Sec 8.10.28)*
  
- 3.) Where are the danger decals? *(See Manual p. 23)*
- 4.) Point out each decal and the purpose they serve. *(Use Machine as visual aid)*
- 5.) Point out all spring lock buttons on steps, rails and outriggers and explain their function. *(Use Machine as visual aid)*
- 6.) Demonstrate proper operation of controls *(Use Machine as visual aid)*
- 7.) What is the first thing you do before elevating the scissors? *(See Manual p. 9)*
  
- 8.) When observing obstacles at the Job Site where should you look? *(video)*
  
- 9.) When should you perform the pre-start inspection? *(See Manual p. 45, Sec 8.3)*
  
- 10.) Do you need to put the outriggers out and down before the pre-start inspection? *(See Manual p.33)*
  
- 11.) Who is responsible for training the operator? *(See Manual p. 38, Sec 6.11.1)*
  
- 12.) Explain Section 8.10 of the Operators Responsibilities *(See Manual pp. 47-48)*

Additional Questions (Specific to the Owners site)

## Warranty

### LIMITED WARRANTY – Warranty Statement

Custom Equipment, Inc. (the “Company”) warrants that all new units of equipment manufactured and sold by it conform to the Company’s latest published specifications. Also, that all purchased components and sub-assembled parts and assemblies shall be free from defect in material and/or workmanship for a period of 12 months from the date a new unit is placed into service, with the exception of batteries which are covered by the battery manufacturer for a period of ninety (90) days (pro-rated for one (1) year) on batteries. Further, that all structural components manufactured, purchased, and installed by Custom Equipment, Inc. shall be free of any defect in material and/or workmanship for a period of 60 months from the date a new unit is placed into service.

If the equipment owner/end-user experiences a failure or deficiency within the specified warranty period they must promptly notify an authorized Dealer service repair facility.

During the Warranty period, Custom Equipment, Inc. reserves the right to replace, repair, exchange, or to provide a new, used, or rebuilt component, assembly, sub-assembly, or weldment at their discretion, dependent upon circumstance, situation, and/or availability. For battery warranty, call the number listed on the battery for further instructions.

This Warranty Policy does NOT cover damage caused by; shipment, misuse of unit (includes operation beyond Factory established limits, loads, and/or specifications), failure to properly service and maintain the unit in accordance with the Company’s manuals or Factory Service Bulletins. Custom Equipment, Inc. DOES NOT accept any responsibility for alterations or modifications to the unit, or, damages caused by any natural disasters (such as fire, flood, wind and lightning).

THE PREVIOUS WARRANTY STATEMENT IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

If field repair or parts replacement is necessary on any warranted components, Custom Equipment, Inc. will reimburse Authorized Dealers for direct labor costs incurred according to the Company’s current authorized Field Service Rate (FSR) and/or any established ‘Flat Rate Guides’. Custom Equipment does not pay labor on any consumable items such as batteries, brakes, or tire wear. In no event shall the Company be liable for any indirect, incidental, consequential, or special damage (including without limitation to loss of profits, loss of revenue, cost of capital, cost of substitute equipment, downtime, examination fees, claims of third parties, and injury to person or property) based upon any claim of breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory. This limited warranty statement recognizes the risks and limitations of product failure between Custom Equipment, Inc. and the Buyer.

This written warranty is also understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written and all other communications between the parties relating to the subject matter of this warranty. No employee, agent or distributor of the Company, or any other person is authorized to state or imply any additional warranties on behalf of the Company, nor to assume for the Company any other liability in connection with any of its products, unless made in writing, dated, and signed by an officer of the Company.