

Aerial Lifts and Work Platforms -

Cedarville University
Policy Name: Safety Guidelines for Aerial Lifts and Work Platforms
Effective Date: replaces all previous policies, 3/2021

Purpose

Applicable OSHA Standards: 29 CFR 1910.67, 1926.453

To provide training and qualification guidelines for the safe operation of aerial lifts and powered manned platforms.

SCOPE

This applies to all employees on our campus that use aerial lifts or work platforms either owned or rented. Subcontractors working within our controlled worksites will supply their own lifts due to liability reasons. Any exceptions to this policy such as contractor work on behalf of the University that needs to be completed due to an emergency or urgent need situation (i.e., broken water pipe, ruptured sprinkler head, etc.) will be reviewed and approved ahead of time by the Campus Safety Director. In such cases, a trained representative from the University will ensure that the person using the lift has been provided proper instruction in its safe use as indicated in this policy and is wearing a full body harness and lanyard attached to anchor point on the lift.

QUALIFICATION REQUIREMENTS

All aerial lift operators are required to be fully qualified and competent in the operation of each piece of equipment they are required to operate. All New Hire operators are required to successfully complete the Aerial Lift Training Program or submit proof of previous training and or experience.

AERIAL LIFT TRAINING PROGRAM

The Aerial Lift Training Program is intended for all operators. This program is generic in nature and is supplemented with manufactures Operating and Safety Handbook. The training program consists of:

- OSHA Standards Overview;

- Overview of manufacturers operation manual.

Successful completion of this program requires:

- Satisfactory check out by a qualified person;
- Field evaluation.

OSHA STANDARDS OVERVIEW

Standards 29 CFR 1910.67 and 1926.453 of the Occupational Safety and Health Administration (OSHA) covers the operation of vehicle-mounted elevating and rotating work platforms and aerial lifts. In summary, these standards spell out specific requirements as to the construction, modification, and safe use of the equipment and training of operators. For more information concerning these standards ask the Campus Safety Director for assistance.

I. References

- Manufacturers Operation and Safety Handbook
- Manufacturers Operator Training material such as videos, DVD’s, when available

II. Aerial Lift Vocabulary and Parts

Aerial platform lifts are used as man lifts whenever work is being performed overhead, such as reaching building roofs, changing lights bulbs, etc. The aerial platform lift is one of the first tools to consider when performing the job.

As with most specialized equipment, aerial platform lifts have a vocabulary of their own. Before you start learning about platform lifts, you need to make sure that you know the different parts and terms. Some common terms are as follows; however, not all of the terms in this list apply to every type of lift:

Term	Meaning
Auxiliary Power	Control used to lower the basket in an emergency.
Basket	Enclosed area where operator controls the aerial platform lift and performs all necessary work from this area.
Basket Controls	Controls usually located in the front middle of the basket area.
Basket Rotate Left	Control used to only rotate the basket left.
Basket Rotate Right	Control used to only rotate the basket right.

Starter Switch	Control used to help start the gas engine when it is cold.
Deadman Switch	Foot switch that must be depressed before any of the controls on the aerial platform lift will operate.
Drive Forward	Control used to move the aerial platform forward.
Drive Reverse	Control used to move the aerial platform backwards.
Drive Speed	Control used to set the speed to which the aerial platform will travel.
Emergency lowering Valve	Valve used to lower the basket when the aerial platform lift has no power.
Emergency Stop	Control used to kill the aerial platform lift in an emergency situation.
Engine Speed	Control used to set the engine speed.
Extending Axles	Axles that extend used to stabilize the aerial platform lift.
Forward and Reverse Arrows	Arrows used to indicate travel direction.
Ground Controls	Controls used to operate the aerial lift from the ground in case of an emergency. Also known as auxiliary controls.
Level Warning Light	Light that indicates that the base is 5 degrees or more out of level- don't swing, raise or scope if out of level.
Lift Down	Control used to lower the boom down.
Lift Up	Control used to lift the boom up.
Maximum Weight Placard	Placard on the aerial platform lift used stating the amount of weight the lift can handle.
On/Off Ignition	Control used to turn the ignition on or off.
Outriggers	Stabilizing devices used to stabilize the aerial platform lift.
Start Button	Button used to start the aerial platform lift.

Steer Left	Control used to turn the aerial platform left when traveling.
Steer Right	Control used to turn the aerial platform right when traveling.
Swing Left	Control used to swing the boom to the left.
Swing Right	Control used to swing the boom to the right.
Telescope In	Control used to retract the boom.
Telescope Out	Control used to extend the boom.
Tilt Down	Control used to tilt the basket down.
Tilt Up	Control used to tilt the basket up.

Aerial Platform Lift Parts: (Reference manufacturers "Operating and Safety Handbook".)

III. Operating Procedures

A. (Reference manufacturers "Operating and Safety Handbook")

IV. General Safety Rules

A. Only authorized, trained employees shall operate an aerial lift.

B. Lower basket to grade level to gain access to the platform.

C. Aerial lifts operated near energized overhead lines shall be operated so that a minimum clearance of 10ft. is maintained.

D. Lift controls shall be tested prior to use to determine that such controls are in safe working condition.

E. Belting off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted.

F. Employees shall always stand firmly on the floor of the basket and shall not sit or climb on the edge of the basket or use planks, ladders, or other devices for a work position. Operators shall not use the lift to reach to a higher elevation for the purpose of climbing out of it.

G. A full body harness shall be worn, and a lanyard attached to the boom or basket when working from an aerial lift.

H. Boom and basket load limits specified by the manufacturer shall not be exceeded.

I. Outriggers, when used, shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline.

J. Aerial lifts shall not be moved when the lift is extended and a person is in the basket. It must first be lowered prior to moving it to another position or location.

K. The insulated portion of an aerial lift shall not be altered in any manner that might reduce its insulating value.

L. Do not travel with the boom elevated or extended. However, it may be necessary to extend the boom while moving a few feet to position it.

M. Aerial lifts may not be "field modified" for used in ways other than those intended by the manufacturer.

N. Do not exceed the machine placard maximum platform load.

O. Always look in the direction you are moving the unit, and be aware of everything above, below and around you. Never move the unit without a ground person.

P. Do not attach wires or cables to the platform. Many aerial lifts have a place to plug in an electrical cord.

Q. Other personnel should be restricted from passing or working underneath the raised platform.

R. A malfunctioning lift shall be shut down and removed from service until repaired.

S. Attachments

V. Procedures for requesting use.

All employees requesting use of an Aerial lift owned by the University Physical Plant Department must submit a work order request at least 72 hours in advance of the required use. No employee shall remove an Aerial lift from storage without approval from the Physical Plant Department.

Three (3) types of lifts commonly used at Cedarville University:

Reciprocating Boom Lift



Scissors Lift



One Man Bucket Lift

APPENDIX A

Cedarville University Platform or Scissor Lift Certification Form

Specific Lift Familiarization Training

This form documents the OSHA-Required Aerial Platform or Scissor Lift training that is performed by an approved, competent person. The Campus Safety Director or appropriate Physical Plant Manager/Supervisor must approve the trainer which is based on his/her experience with the particular lift or his/her safety training experience. The training may also consist of video training relative to the types of lifts used on our campus. Each operator must be trained on each aerial platform or scissor lift that he/she operates. The Specific Lift Familiarization Training shall consist of a review of the following items:

- a. All safety placards and warnings
- b. All switches, drive mechanisms, adjustments, and controls (both lower and upper controls)
- c. The functional operation of the lift.
- d. The use of outriggers or stabilizing equipment.
- e. All gauges, horns, and lights.
- f. Proper battery charging procedures.
- g. Inspections and inspection process.
- h. Use of safety restraint equipment

Aerial or Scissor Lift: Lift Manufacturer (Brand Name) Model Serial #

I certify that I have met with the trainee identified below and have reviewed the operations of the specific lift identified above and made myself available to answer any questions he/she may have had with regards to the operation of this lift.

Print Trainer's Name, Signature of Trainer, Date

I certify that I have met with the trainer identified above and that he/she has reviewed with me the operations of the specific aerial platform or scissor lift identified above. I was given an opportunity to ask questions which, if any, were answered to my satisfaction and that I now have the necessary understanding of operations of this lift. I have reviewed the operator's manual for this lift and have been given the opportunity to ask questions. ~~that I have had.~~

Print the Trainee's Name, Signature of Trainee, Date

Appendix B

Aerial Platform & Scissor Lift Pre-start Inspection Form

The pre-start inspection shall be performed prior to each day's or shift's use of the aerial platform lift by an authorized employee and trained operator of the lift. Documentation of the inspection shall be maintained by each department, with a copy of the most recent inspection document stored on the lift.

Check off the items that have been inspected or mark the N/A box if the item does not apply to the lift being inspected. Place any comments in the space provided below. If there are any of these items that are not satisfactory, place the lift out of service until the item is corrected.

Make of Lift _____ Model of Lift _____ Serial # _____

Inspectors Name _____ Date of Inspection _____

Item Inspected

OK

Not/OK

OK N/A

Operating controls
Emergency controls
Safety devices
Personal protective devices
Pneumatic systems (leaks)
Hydraulic system (leaks)
Fuel System (leaks)
Cables
Wiring harness
Loose/ missing parts (lock pins/bolts ...)
Tires and wheels
Placards and warnings
Operational manual available
Outriggers/Stabilizers
Guardrail system and locking gate
Anemometer present (if using outdoors)
Other items

Comments: _____

Inspectors Signature _____ Date _____

Appendix C

Aerial Platform & Scissor Lift Workplace Inspection Form

The workplace inspection shall be performed prior to using the aerial platform lift. One inspection may be performed for multiple tasks taking place in a single room or space per day.

Check off the items that have been inspected and abate any safety issues that were identified prior to using the lift.

Item observed

- Drop-offs or holes
- Slopes
- Bumps and floor obstructions
- Debris
- Overhead obstructions and high voltage conductors.
- Inadequate surface and support to withstand all load forces imposed by aerial lift platform.
- Wind and weather conditions if being used outdoors are safe. Wind speeds Below 29 mph and no lightening or severe weather forecasted.
- Presence of other unsafe conditions.

Inspectors Name _____ Date _____

Appendix D

Operating Manual Acknowledgement Form

By signing this document, I am certifying that I have been shown a copy of the operations Manual (the manual is kept on each piece of equipment) for the aerial platform lift shown below. Upon training and authorization by my department, I am expected to operate this lift in accordance with the safety rules and procedures outlined in the owner's manual. I know that if, at any time, I have any questions regarding the information found in the user's manual, I can contact the Campus Safety Director, my supervisor, or the manufacturer to obtain answers.

Aerial Lift Make _____ Aerial Lift Model _____

Name (print) _____

User/Operator's Signature _____ Date _____