



# SafetyAlert

We're Serious About Safety

## Aerial Lift Safety

Many different contractors and employees use aerial lifts to perform a variety of tasks. Some of the most common users are; construction workers, electrical/utility contractors, painters, landscaping-tree companies, warehousing employees, building maintenance staff, bridge inspectors and sign erectors. When used properly, these vehicles can be a valuable labor and time saver. If misused, the results can be catastrophic.

The Center of Disease Control and Prevention (CDC) reported that during a recent three-year period, 1,380 workers were injured as a result of operating an aerial lift or scissor lift. 360 of these injuries were a result of slips, trips, and falls from one level to another. Additionally, 87 workers died as a result of operating an aerial lift or scissor lift. 48 of these deaths were a result of slips, trips, and falls from one level to another.

An average of 26 construction workers die each year from using aerial lifts. This is 2 to 3% of all construction deaths. The major causes are falls, electrocutions, and collapses or tipovers.



## Aerial Lift Standards for Employers to Follow

**ANSI A92.2 – 2001 American National Standard Vehicle-Mounted Elevating and Rotating Aerial Devices.** Elevating and Vehicle Lift Devices Package establishes the requirements for designing, manufacturing, performance, training and use of vehicle mounted elevating / rotating devices, propelled elevating aerial platforms, boom-supported elevating work platforms and self-propelled elevating work platforms.

**OSHA CFR's - 1926.453 - Aerial lifts & 1910.67 - Vehicle-mounted elevating and rotating work platforms.**

For the purpose of this Safety Alert we will be talking about the two distinct varieties of boom lifts:

- Telescopic boom lifts (also called stick booms or straight booms) have long, extendable arms that can reach up to 120' at almost any angle. They are often used in construction, where their long reach lets workers get access to upper stories of buildings. For the highest and longest reach, these are your best choice.
- Articulating-boom lifts have arms that bend. Sometimes called knuckle booms, they can reach over and around obstacles to position the bucket exactly where it needs to be.

## Hazards Associated with Aerial Lifts

The following hazards, among others, can lead to personal injury or death:

- Fall from elevated level
- Objects falling from lifts
- Tip-overs
- Ejections from the lift platform
- Structural failures (collapses)
- Electric shock (electrocutions)
- Entanglement hazards
- Contact with objects
- Contact with ceilings and other overhead objects



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## Operating Training

Frequently operators lack the training to know they are creating safety hazards. An aerial lift is a potentially dangerous piece of equipment if the operators don't understand safe operating procedures. Operators should be trained on each piece of equipment by a qualified person who has extensive knowledge regarding the lift. The qualified person should train all users on:

- How to operate the lift correctly (including maximum load capacity)
- Procedures for dealing with hazards
- How to conduct a pre-shift inspection
- How to conduct a work-site inspection

There are many hazards that come with working with aerial lifts. Operators need to understand how to reduce hazards to prevent tip overs or collapses of the lifts. Aerial lifts should never be operated in wind that exceeds manufactures recommendations. Portable wind meters (Anemometer) can be purchased and used in the field to measure job site wind conditions. Follow manufacturer's guidelines for operating in windy conditions. Additionally, employees should adhere to the following precautions to avoid aerial lift tip-overs:

- Do not push or pull objects with the bucket of the lift.
- Do not use ladders, buckets or other items to stand on inside the bucket.
- Do not move the truck or lift with the bucket in the up position.
- Make sure truck is parked on even ground.
- If possible make sure outriggers are in the proper position.
- Watch for drop-offs, holes, bumps, curbs and debris.



## Fall Protection

- Ensure that access gates or openings are closed.
- Stand firmly on the floor of the bucket or lift platform.
- Do not climb on or lean over guardrails or handrails.
- Do not use planks, ladders, or other devices as a working position.
- Use a full body harness with retractable life line or lanyard attached to the approved anchorage point in the bucket.
- Do not tie-off to adjacent structures or poles while in the bucket.

*Beacon Mutual also offers Safety Alerts on Scissor Lift and Bucket Lift Safety. Visit [beaconmutual.com/safety](http://beaconmutual.com/safety) for access to the Safety Alerts.*

## What You Should Know If You Rent

Many contractors rent aerial lifts for specific jobs. Renting aerial lifts pose different risks than owning the units. In many situations, you may not know which model you will be using, and may be unfamiliar with operator controls and other key features that differ with each model. The dealer or company renting the equipment should:

- Properly inspect and service the lift before rental.
- Provide operator and maintenance manuals.
- Make sure the operator controls are easy to reach and properly marked.
- Be willing to provide basic machine operation training to employees.



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