

## INTRODUCTION

Aerial lifts are used by many different sectors of the entertainment industry, such as film, television, concerts, and theatrical productions. These pieces of equipment are often used to help with jobs that require people to reach certain heights. And while these pieces of equipment are commonly used within the industry, improper operation could expose you or others to harm. In this lesson, we will cover the different types of aerial lifts that may be used for your production, what aerial lifts are used in the entertainment industry, the hazards associated with aerial lifts, the personal protective equipment commonly used with these pieces of equipment, and the safe work practices that can be used to help minimize your chances of an accident occurring while working from an aerial lift.



## TYPES OF AERIAL LIFTS USED IN THE ENTERTAINMENT INDUSTRY

There are many different types of aerial lifts that may be used throughout the production time. These include:

- Boom lifts
  - Telescopic boom lifts
  - Articulating boom lifts
- Vertical personnel lifts
  - Single man lifts
  - Push around lifts
- Spider lifts
- Cherry pickers
  - Truck-mount cherry pickers
  - Self-propelled cherry pickers
- Vertical mast lifts
- Specialty lifts
  - Lifts that have been custom-designed

*Please note that while scissor lifts are also commonly used, Federal OSHA classifies them as scaffolds, and many state-OSHA plans categorize them as elevating work platforms.*

## WHAT AERIAL LIFTS ARE USED FOR IN THE ENTERTAINMENT INDUSTRY

The different types of aerial lifts are used for many different types of work in the entertainment industry, such as the following:

### Film Sets

When used on film sets, aerial lifts may be used for one or more of the following work tasks:

- Camera placement
- Lighting and sound rigging
- Set construction
- Special effects



# ENTERTAINMENT: AERIAL LIFT SAFETY

## Concert Venues

While at concert venues, aerial lifts may be used for one or more of the following:

- Stage construction
- Lighting design
- Speaker installation
- Banners and decorations

## Theatrical Productions

In theatre, aerial may be used for:

- Scenery adjustment
- Costume and prop access
- Technical support

## Outdoor Events and Festivals

For outdoor events, aerial lifts are commonly used for the following:

- Site preparation
- Emergency support

## Television Broadcasts

In television, aerial lifts are commonly used for:

- Studio maintenance
- Live broadcast support

## HAZARDS

When you or others are working from or around aerial lifts, there is the potential for exposure to one or more of the following hazards:

- Falls from heights that may occur from either overarching, from not wearing the appropriate fall protection while at height, or being ejected from the platform or basket
- Falling objects from tools or equipment not being properly secured to either your person or the lift
- Tipping of the lift due to it being placed on uneven terrain, from exceeding the manufacturer-specified weight limit, or when operating the lift in strong winds or other inclement weather
- Electric shock or electrocution from the lift making contact with overhead powerlines or from electrical equipment not being properly grounded
- Striking ceilings or other overhead objects
- Entanglement and crushing when operators become entangled or crushed between the lift and nearby objects or structures or when there is miscommunication between operators and ground crews
- Mechanical failures that are associated with poor maintenance practices

## PERSONAL PROTECTIVE EQUIPMENT

To help minimize the chances of physical injury occurring while working from or around an aerial lift, you should wear the appropriate personal protective equipment (PPE). PPE may include:

- Hard hat
- Safety glasses or goggles





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- Gloves
- Fall harness
- Non-slip and/or steel-toed shoes or boots

You should inspect all provided PPE for wear or damage before you put it on. Report worn or damaged items to your supervisor. Do NOT wear damaged PPE.

## SAFE WORK PRACTICES

### Before Using an Aerial Lift

Before using an aerial lift, you should do the following:

- Make sure that all applicable permits have been obtained in accordance with your state's regulations.
- Conduct a walkaround of the area where the aerial lift will be used to identify any hazardous conditions that may exist.
  - Hazards to watch out for include debris, obstructions, overhead powerlines, uneven or loose ground, low beams, high winds, inclement weather, etc.
  - Document and report hazardous conditions to your supervisor.
  - Aerial lifts should NOT be operated when there are high winds.
- Read the manufacturer-provided owner's or operator's manual for the model of lift you will be using.
- Inspect the aerial lift for missing, modified, or damaged parts.
  - Report aerial lifts with missing, modified, or damaged parts to your supervisor.
  - Aerial lifts that do not pass inspection should be tagged in accordance with your company's policies and procedures.
  - Do NOT use an aerial lift that has missing, modified, or damaged parts.
- Make sure that fluid levels are at manufacturer-recommended or specified levels.
  - Refill fluids as needed in accordance with the manufacturer's instructions.
- Assure that all gauges, lights, and moving parts are operating as intended by the manufacturer.
  - Report aerial lifts where gauges, lights, and moving parts are not working to your supervisor.
  - Do NOT use an aerial lift where gauges, lights, and/or moving parts are not functioning properly.
- Where applicable, make sure that outriggers have been deployed and secured in accordance with the manufacturer's instructions.
  - Where needed, make sure that outrigger pads are used to help with the stabilization of the aerial lift.
  - Where aerial lifts are used sloped surfaces, the wheels should be chocked when it is safe to do so.
- Assure that the brakes have been properly engaged.
- Where applicable, make sure that the area around the aerial lift has been coned, barricaded, or otherwise secured for employees who may have to work in the same area around the aerial lift.
  - If employees need to work near the aerial lift, they should wear the appropriate personal protective equipment while in the area.
- Make sure that ground personnel and crew members that will be in the aerial lift know how communication will be working for the production.
- Assure that you are familiar with the emergency procedures for your aerial lift.

### When Using an Aerial Lift

When using an aerial lift, you should do the following:

- Only allow trained and authorized personnel to use the aerial lift.
- Do NOT use an aerial lift while under the influence of drugs or alcohol.





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- If you are on prescription medication that could affect your ability to use the aerial lift safely, please speak with your supervisor.
- Make sure that your fall harness has been properly secured to the manufacturer's provided anchor points.
  - Do not climb on or lean over guardrails.
  - Do NOT anchor to adjacent structures or poles while in the bucket or on the platform.
- Make sure that access gates or openings have been closed and properly secured in accordance with the manufacturer's instructions.
- Assure that all tools, cameras, and anything else you will be using on the aerial lift have been properly secured to either yourself or the lift platform or basket.
  - Where applicable, make sure that cables have been neatly organized and secured to help avoid entanglement or tripping of the aerial lift operator.
  - Do NOT exceed the manufacturer-specified weight limit.
  - Make sure that you calculate your weight with that of all tools, cameras, and anything else that will be going up with you.
- Be aware of overhead clearance and overhead objects.
  - Aerial lifts should be kept a minimum of 10 feet from energized powerlines.
  - If you have questions about how far the aerial lift should be from different voltage powerlines, please speak with your supervisor.
- Operate the aerial lift in accordance with the manufacturer's instructions.
- Do NOT exceed the aerial lift's vertical or horizontal reach limits.
- Do NOT overreach when working from an aerial lift.
- Do NOT rest the aerial lift on fixed objects.

Where aerial lifts need to be moved, they should be moved only when the basket or platform is lowered unless the manufacturer's instructions allow it to be moved with the basket or platform raised. If you have questions about the position of the basket or platform during moves, please refer to the manufacturer's manual or speak with your supervisor.

Coworkers who are working in the vicinity of the aerial lift should not walk under the lift while the basket or platform is in the raised position. Additionally, they should NOT touch the controls at the base of the lift, unless they have received permission from the lift operator.

## CONCLUSION

To conclude, aerial lifts of all shapes and sizes are used throughout the entertainment industry. They are sometimes used for camera shots, setting up decorations, setting up sound systems, and so on. However, improper operation of these pieces of equipment could expose both operators and others around them to harm. To help minimize the chances of an accident occurring, aerial lifts should be operated in accordance with the manufacturer's instructions, and the proper fall protection harness should be used. If you have questions about aerial lift use for your production, please speak with your supervisor.

