





### **WHAT TYPE OF AERIAL LIFT SHOULD YOU RENT?**

### **TABLE OF CONTENTS**

If you know where you're going, go ahead and click on a chapter.

Introduction	: Your Guide to Renting Aerial Lifts	1
Chapter 1:	Electric Scissor Lifts	Ę
Chapter 2:	Rough Terrain Scissor Lifts	7
Chapter 3:	Personnel Lifts	Ć
Chapter 4:	Electric Boom Lifts	10
Chapter 5:	Straight Telescopic Booms	12
Chapter 6:	Articulated Knuckle Booms	14
Chapter 7:	Towable Boom Lifts	16
Chapter 8:	Atrium Lifts	18
Chapter 9:	Benefits of Renting Versus Buying an Aerial Lift	20
Chapter 10:	Aerial Lift Safety Training and Inspection Guide	24
Conclusion:	Using Aerial Lifts to Complete Your Fleet	33

## **INTRODUCTION:**Your Guide to Renting Aerial Lifts

Aerial lifts are versatile pieces of equipment featuring extendable platforms that allow you to access higher work areas, such as ceilings, roofs, windows and HVAC equipment. Lift prices tend to vary greatly due to the wide variety of specialized features and options available. Deciding on the right lift for your job can be complicated, but MacAllister Rentals is here to help. Read on to learn about the various types of lifts available and advice on which type is best suited for your next job.

#### What Are Aerial Lifts?

Aerial lifts feature a platform supported by a "boom," or a tall, extendable arm used to lift the platform to a greater height. You may also know them as boom lifts, cherry pickers or bucket lifts. <u>Aerial lift rentals</u> are seen on many commercial construction and residential projects, and they come in many sizes and forms.

Some are designed for a specific use, such as <u>atrium lifts</u>. Others are meant solely for elevating a single person with a limited number of tools, and some are built for rough terrain and outside weather. In any case, aerial lifts are flexible pieces of equipment that are a necessity on many modern jobsites.



#### **Types of Aerial Lifts**

Some types of aerial lift rentals you can consider for your project include:

- 1. **Electric Scissor Lifts:** <u>Scissor lifts</u> move up and down, offering more capabilities than standard scaffolding. Their wide variety of platform and working heights give you more flexibility on the job.
- Rough Terrain Scissor Lifts: Similar to standard scissor lifts, rough terrain scissor lifts have been outfitted to withstand outside terrain and harsh environmental elements.
- 3. **Personnel Lifts:** A <u>personnel lift</u> is best suited for jobs that will be completed by one person. With working heights that range from 17 to 26 feet, these are ideal for a variety of indoor projects.
- 4. Electric Boom Lifts: Boom lifts are a type of aerial lift with a platform that can move beyond the base of the lift itself, horizontally and vertically. The boom has a considerable reach advantage and greater versatility than many other aerial lift options.
- Straight Telescopic Booms: <u>Straight telescopic boom lifts</u> are a great option for outdoor use. This lift lets you access hard-to-reach areas and elevated locations that aren't suitable for scaffolding.
- Articulated Knuckle Booms: Articulated boom lifts provide even greater
  versatility than straight telescopic booms. These lifts are typically used in
  crowded outdoor environments where there are hazards and obstacles to
  avoid.
- 7. **Towable Boom Lifts:** The ability to <u>tow a lift behind</u> your average work truck makes it easy to transport between jobsites and to secure it overnight.

8. **Atrium Lifts:** The <u>atrium lift</u> can fold into a compact size to squeeze through a doorway. The lift then opens to reach high locations with ease. An atrium lift is best suited for a job that requires precise vertical movement.

Some aerial lifts may require specific certifications or qualifications to operate. These requirements depend on your specific job and how the lift will be used.

The necessary <u>certification and training</u> courses may be available at your local college or technical school. Be sure to consider expected usage, any required operator certifications and the availability of specific lifts when making your final rental decision.



#### **Industries That Use Aerial Lifts**

Aerial lifts are not specific to one particular industry or job. For instance, manufacturing companies use aerial lifts to reach overhead components, as well as to reach behind large pieces of equipment. General contractors use lifts to reach high areas when making repairs, and construction companies identify aerial lifts as one of the most critical pieces of equipment in their fleet.

Emergency crews use aerial lifts to reach buildings, and HVAC contractors use them for indoor and outdoor applications. In essence, aerial lifts provide reliable access for a range of industries and purposes.

#### **Aerial Lifts Using Alternative Fuel Systems**

MacAllister Rentals offers aerial lifts that are diesel, gas, liquid propane and battery-powered. Depending on the size and strength of the aerial lift you are considering, some are offered with different power options.

Articulating and straight telescopic boom lifts with a platform height of less than 80 feet are generally available with dual fuel systems that use gas and propane. These lifts, including <a href="Skyjack's rough terrain scissor lifts">Skyjack's rough terrain scissor lifts</a>, are a great option for alternative fuel on the jobsite. The important thing to remember with lifts that are fueled by diesel or gas is that they emit carbon monoxide. These lifts will need to be used in well-ventilated indoor areas or outside.

Some lifts are available in <u>push-around models</u>. Push-around lifts are useful for indoor jobs that are clear of obstacles and debris. These devices are light enough to be pushed by hand, yet sturdy enough to support the weight of a worker and a limited set of tools. Such lifts are available with a variety of platform heights, working heights and ground dimensions. The most common models feature a working height of 30 or 40 feet, and a total stowed height of less than seven feet.

Push-around models usually aren't the best choice for outdoor jobsites. The exterior terrain makes the manual movement difficult and can present serious safety hazards. Their relatively light frame means they're easily damaged by high winds, flying debris and other obstacles.

### Understanding Your Options and Choosing the Right Aerial Lift Rental for Your Project

It's important to be aware of the different lift options available so you can pick the best lift for your upcoming project.

Our aerial lift guide will help you navigate the world of aerial lifts. You'll understand more about the different uses of each lift and how to rent lift equipment. You'll also learn about the many heavy-duty lift options that are on the market today.

Once you've found the lift you need, or if you want to review the features of each lift, <u>contact MacAllister Rentals.</u> We can help determine if that lift is best for your project needs.

### **CHAPTER 1:** Electric Scissor Lifts

Unlike boom lifts with working platforms that can reach beyond the base of the lift, scissor lifts only move up and down. Most <u>electric scissor lifts</u> use wheels to move into the proper position for the job. Once positioned, these lifts don't offer as much horizontal versatility. Features of Electric Scissor Lifts

Electric scissor lifts are battery-powered lifts designed to lift several people or large amounts of equipment, and they come with a variety of platform and working heights. The average heights tend to be between 10 feet and 60 feet, and workspace sizes are typically between two and 10 feet wide. Most electric scissor lifts weigh no more than a few thousand pounds, but the biggest and most powerful models weigh more than 10,000 pounds.

The average height of an electric scissor lift tends to be between **10** and **60 feet**.





#### What Are the Specialty Uses of Electric Scissor Lifts?

The standard electric scissor lift is commonly seen in small-scale applications and indoor construction sites. Small spaces and tight areas are perfect for the narrowly designed platform. The machine can be used for, but not limited to, maintenance, window washing and construction projects.

Electric scissor lifts are also often seen in warehouses, retail stores and production sites. Installation of hanging signs is also an ideal application for these lifts.

#### What to Consider When Renting Electric Scissor Lifts

If you are looking to rent an electric scissor lift, consider the requirements of your project. Because scissor lifts offer more vertical height than horizontal space, be sure to plan accordingly.

Electric scissor lifts are ideal for indoor use, such as in a warehouse. If you are specifically renting an electric scissor lift for an indoor project, consider non-marking tires to prevent damage to floors.

#### The Benefits of Electric Scissor Lifts

Compared to bucket lifts, electric scissor lifts offer more weight capacity. Electric scissor lifts also offer 90-degree steering, which factors in to their enhanced maneuverability.

Additionally, because the machines are battery-powered, no fumes are emitted — which is beneficial for indoor spaces.

# **CHAPTER 2:**Rough Terrain Scissor Lifts

Rough terrain scissor lifts are designed to <u>traverse rough outdoor terrain</u>, making them ideal for areas with uneven surfaces — especially locations such as construction sites. These lifts can also hold multiple people.

#### **Rough Terrain Scissor Lift Features**

Almost all rough terrain lifts come with outriggers, heavy-duty tires and additional safety mechanisms. Fall restraints and arrestors are common since extreme weather can appear suddenly and pose a serious risk to elevated workers.

Rough terrain machines can vertically reach between 26 and 50 feet, with some reaching up to 60 feet. Similar to electric scissor lifts, rough terrain lifts offer widths between two and 10 feet. The lifts can be diesel, gas, liquid propane or dual fuel machines.



DUE TO THE HEAVY-DUTY NATURE OF THIS MACHINE, MANY PREFER THIS SCISSOR LIFT RENTAL OVER OTHER OPTIONS.

#### **Specialty Uses of Rough Terrain Scissor Lifts**

Many people prefer rough terrain scissor lift rentals over other options because of

their heavy-duty capabilities and versatility. Although they can also be used indoors, rough terrain lifts are specifically designed for harsh terrain and weather, as well as for construction-oriented jobs.

Rough terrain scissor lifts can perform on slopes, so they have a 0-40% gradeability, depending on the model.

#### What Should You Consider Before Renting a Rough Terrain Scissor Lift?

Consider the terrain and environment of your project — if you are working on uneven ground and weather conditions vary, renting a rough terrain lift can benefit your productivity levels.

#### **Rough Terrain Scissor Lift Benefits**

Renting a rough terrain scissor lift means you'll have four-wheel drive, reinforced tires and positive traction control for your project. These machines allow for safe and stable work platforms in demanding outdoor environments.

Compared to indoor scissor lifts, outdoor terrain lifts provide more workspace for operators and have a higher weight capacity.

## **CHAPTER 3:** Personnel Lifts

The standard personnel lift is designed for one individual, a basic set of tools and limited materials. For this reason, it is often referred to as a "man lift."

Larger working platforms can accommodate two or three workers, but jobs requiring more people are typically better served with a different type of lift.

#### **Personnel Lift Features**

Average dimensions of a personnel lift are around 35 inches by 29.5 inches, but larger ones can range from two to three feet wide. Personnel lifts can reach heights between 15 and 50 feet and are battery-powered.



#### **Specialty Uses of Personnel Lifts**

Personnel lifts are often used in warehouses, indoor construction sites, compact spaces and for maintenance work and renovations. It is common to use man lifts for electrical work above floor levels.

#### What to Consider About Personnel Lifts

When looking to rent personnel lifts, it's important to consider the maximum working height. If you need to fit more than one worker in your personnel lift rental, you'll want to consider the size of the platform.

#### What Are the Benefits of Personnel Lifts?

The main benefit of renting a personnel lift is its maneuverability and ease of transport.

Personnel lifts can also be set up by a single person and are light-weight.

Electric boom lifts are made for confined and side-to-side work spaces. They are used for

aerial work platforms and jobs that require multiple attachments.

Because electric boom lifts are significantly smaller than other aerial lifts, they can hold only one worker at a time.

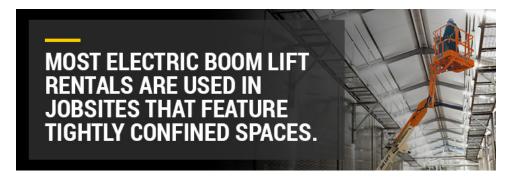
# CHAPTER 4: Electric Boom Lifts

#### What Are the Specific Features of Electric Boom Lifts?

Features of electric boom lifts include compact storage length, easy maneuverability and self-leveling platforms. Work platform widths can vary between three and 10 feet. Heights of electrical booms range from 30 to 100 feet, with average working heights between 30 and 40.

This type of aerial lift has a variety of boom types, such as mast and Z-type. Electric booms are battery-powered as well.

#### **Electric Boom Lifts: Specialty Uses**



Electric boom lifts are ideal for confined spaces, particularly where you need to move horizontally. They can be used for electrical work and other overhead construction tasks.

While electric boom lifts are often best-suited for small spaces, they can be extremely useful for commercial operations where you need to navigate narrow aisles or tight spaces.

Jobs within manufacturing facilities and construction sites or pedestrian spaces like malls and open areas could benefit from utilizing an electric boom.

#### What You Should Consider with Electric Boom Lifts

Consider renting an electric boom lift with special handling technology that allows you to maneuver the work platform 180 degrees. This feature helps you access areas in hard to reach locations.

You may also want to consider a telescoping boom to provide maximum reach for areas with limited access.

#### **Benefits of Electric Boom Lifts**

In general, electric lifts are a more sustainable option for those who want to reduce their carbon footprint. <u>Electric boom lifts</u> are common choices because of their compact size and the fact that they are powered by electricity rather than fossil fuel.

Electrically-powered lifts are especially useful for indoor operations because they don't emit toxic fumes. These lifts can be a great environmentally-friendly choice, but they often have a limited battery life. Larger projects will require multiple batteries for continuous operation.

Electric boom lifts typically have non-marking tires, making them perfect for indoor use. These lifts are also less dependent on hydraulic oils and are highly productive.

# **CHAPTER 5:**Straight Telescopic Booms

Straight telescopic booms, also known as "stick" booms, are the most common alternative to articulated booms and are best used on jobsites with no clutter. The ability to transport personnel and materials either vertically or horizontally is useful for many scenarios.

#### **Straight Telescopic Boom Features**

Telescopic booms <u>come in many different sizes</u>. An average straight telescopic boom features a platform height between 40 and 80 feet, but it's not uncommon to see specialized booms with heights of up to 200 feet.



AN AVERAGE STRAIGHT TELESCOPIC BOOM MIGHT FEATURE A MAXIMUM PLATFORM HEIGHT OF 40 FEET, BUT IT'S NOT UNCOMMON TO SEE BOOMS OF 100 OR EVEN 200 FEET. Platform widths typically have a standard size of eight feet or larger, which is one of the widest bases compared to other aerial lifts. The stowed height of most telescopic booms is under 10 feet, and telescopic booms use diesel or dual fuel. Specialty Uses of Straight Telescopic Booms

Straight telescopic boom lifts are specially designed to reach extremely high locations with minimal horizontal movement.

They are often found in industrial construction projects, along with bridge work, multi-story building construction, and industrial inspection applications.

#### **Considerations for Renting a Straight Telescopic Boom**

When renting a telescopic boom, consider the width of the base. Compared to other aerial lifts, straight telescopic boom bases are wider, so your job site must be able to accommodate accordingly.

Depending on your project's location, you may also want to contemplate the option of renting a rough terrain machine that has outriggers. Booms that are diesel powered and have more reach feature larger price tags for both renting and purchasing options.

#### **Benefits of Straight Telescopic Booms**

The main benefit of straight telescopic booms is their ability to provide maximum elevation up to 185 feet. Rough terrain types are also available, which usually have outriggers to stabilize the machine.

### **CHAPTER 6:** Articulated Knuckle Booms

Knuckle lifts feature a bendable joint that allows the boom to flex and reach around tall objects or obstacles. They are Z-style aerial lifts that have both vertical and horizontal flexibility — however, its horizontal reach is limited to 50-75% of the vertical reach.



#### **Features of Articulated Knuckle Booms**

Most knuckle lifts have a platform height of approximately 40 feet, but specialized knuckle lifts can reach heights of more than 100 feet. The width of each lift depends on the make and model. Some knuckle lifts have a rather compact width of four feet and a height of less than seven feet.

Others are wider than eight feet and are around 10 feet tall in storage. It takes a large warehouse or industrial-sized garage to store one of these lifts on a permanent basis. Articulated knuckle booms can be diesel, gas, liquid propane, dual fuel or electric.

#### What Are the Specialty Uses of Articulated Knuckle Boom Lifts?

Knuckle lifts have many uses beyond the construction site. Some fire departments have begun using these lifts instead of traditional extension ladders and buckets. Although these specialty lifts are often modified to meet the demands of a specific industry, these lifts usually function in the same way as the average boom lift.

<u>Articulated knuckle boom lifts</u> are frequently seen around outdoor jobsites and designated work areas. Common applications include work on utility lines and <u>tree trimming</u>

#### What to Consider When Renting an Articulated Knuckle Boom

Because articulated knuckle lifts are used for indoor and outdoor scenarios, consider different aspects for your specific needs. For example, if you are looking to rent an aerial lift for indoor use, consider one with an electrical power source and non-marking tires.

For outdoor use, consider a diesel-powered engine, and a towable or rough terrain articulated boom.

#### **Benefits of Articulated Knuckle Booms**

Some articulating booms have a second arm that allows for even more versatility. These are especially handy in crowded or hard-to-reach worksites. Articulated booms are beneficial because they provide maximum flexibility for highly-elevated jobs.

Most boom lifts are self-propelled units that can be used for indoor or outdoor jobs. If you

## **CHAPTER 7:**Towable Boom Lifts



BECAUSE TOWABLE
BOOM LIFTS CAN BE
TOWED, THEY'RE HIGHLY
USEFUL WHEN YOU'RE
FREQUENTLY SWITCHING
PROJECTS OR TRYING
TO COVER MULTIPLE
PROJECTS AT ONCE.

have access to a commercial work truck with the appropriate towing hitch, you can take advantage of towable boom lifts.

### What Are the Main Features of a Towable Boom Lift?

In situations where portability is important, renting a towable boom lift is perfect for the job. Towable boom lifts can reach heights between 10 and 60 feet and have platforms four to six feet wide.

These aerial lifts can be gas, diesel or electricpowered.

#### **Specialty Uses of Towable Boom Lifts**

Towable boom lifts are ideal for the following projects:

- · Tree trimming
- · Outdoor decorating
- · Outdoor projects
- Utility work on telephone, cable and powerlines
- · Replacement of ladders for fire stations
- Washing windows

What Should You Consider Before Renting a Towable Boom Lift?

Towable booms require necessary transportation equipment. If you are renting this type of aerial lift, consider proper and safe methods for transporting the lift to and from each jobsite.

#### **Benefits of Towable Boom Lifts**

Towable boom lifts can be towed from jobsite to jobsite — making them an acutely-portable option. This functionality makes them incredibly useful when you're frequently switching projects or trying to cover multiple projects at once. It also saves fuel by relying on another vehicle, that likely gets better gas mileage, for long-range transportation.

Towable boom lifts are a great option for those who will use them on a regular basis. Their small size means they can be stored in many garages, pole barns and warehouses when not in use.

<u>Atrium lifts</u> are useful in a variety of indoor and outdoor jobs. The design of the atrium lift base usually includes extendable legs to stabilize the lift. This limits their indoor usage to wide, open spaces such as warehouses, gymnasiums and other open projects. Atrium lifts

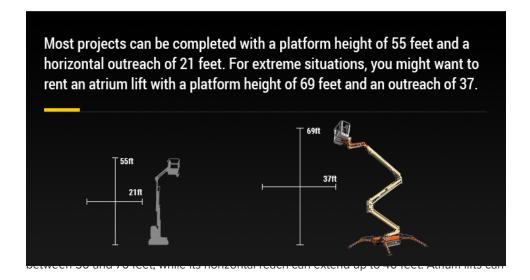
### **CHAPTER 8:** Atrium Lifts

are popular among the industrial or commercial sectors for this reason.

Most atrium lifts have a Z or S-type articulated knuckle boom.

#### **Features of Atrium Lifts**

Most projects can be completed with a platform height of 55 feet and a horizontal outreach of 21 feet. For extreme situations, you'll likely want to rent an atrium lift with a higher platform and outreach length.



be diesel, gas or electric.

#### **Atrium Lift: Specialty Uses**

Some organizations use atrium lifts to aid in wildlife inspection, control and removal. Instead of carrying step ladders and bulky extension ladders, many have introduced the modern atrium lift to their professions.

Although most atrium lifts are seen in the construction industry, they have a myriad of potential creative uses. Regardless of your exact needs, MacAllister Rentals is here to help you get more done.

#### What to Consider Before Renting an Atrium Lift

When considering an atrium lift rental, look at the final platform height and the horizontal outreach of the model. You may also want to consider if your job can accommodate outriggers to keep the atrium lift in place.

#### What Are the Benefits of Atrium Lifts?

One of the benefits of renting an atrium aerial lift is its ability to turn the bucket a full 360 degrees. The machines are ideal for maximum elevation in small areas and provide an extremely high reach.

It can be difficult to decide between buying and renting a lift. Most companies will come to a decision by looking at their expected usage over time. Businesses that will only use a lift once or twice a year may not benefit from purchasing and maintaining their own lift.

### **CHAPTER 9:**

### Benefits of Renting Versus Buying an Aerial Lift

However, those that rent the same equipment often might want to consider making a purchase.

#### **Renting vs. Buying Lifts: Pros and Cons**

If you are looking to use an aerial lift year-round, it may be sensible to purchase one instead of renting. But in the more likely case you will be using an aerial lift for only several days, weeks or months at a time, renting is the most cost-effective option. Compared to purchasing aerial lifts, renting can save you an average of 13%.

For example, purchasing a 19-foot Electric Scissor Lift costs between \$12,000 and \$14,000. In contrast, renting a 19-foot electric scissor lift will only cost:

Daily: \$100-\$150\*
Weekly: \$350-\$500\*
Monthly: \$900-\$1,200\*

(\*prices based on typical industry averages and not reflective of pricing at MacAllister Rentals)

While prices vary depending on the size of aerial lift you require, if you don't need your lift on a regular basis, the benefits of renting equipment outweigh purchasing outright.

We've already learned a lot about the types of lifts that are common in the rental and used markets today. Now that you have a better idea of what you're looking for, you can compare some of the pros and cons of renting vs. buying.

#### **Pros of Renting Aerial Lifts**

Pros of renting aerial lifts include:

· Renters typically are not accountable for expenses such as maintenance, but some might be factored in the final rental price. Either way, you won't have to worry as much about downtime because of an equipment breakdown or malfunction. You can often quickly exchange your unit for another lift rental and resume the job at hand.



for rough terrain.

- · Companies that depend on rental equipment can assign their operators to other areas during projects that don't require such hardware. This is also a great way to offer additional time to your most valuable and multitalented employees.
- Not all rental equipment is outfitted with next-generation technology, but these lifts are generally used more frequently and replaced sooner. This makes it possible to take advantage of more high-tech options at an affordable price.
- Renters who face tight budget constraints can still get access to the necessary equipment. Many companies would struggle without the assistance of a local rental agency providing them with the equipment they need at a reasonable price.

#### **Cons of Renting Aerial Lifts**

Some of the cons of renting aerial lifts are:

- Rental options may be limited due to local stock levels or regional demand. You
  might have no other choice but to find a substitute replacement.
- If a replacement isn't available, you may have to wait until your desired lift is available.

#### **Pros of Buying Aerial Lifts**

If you choose to buy your own lift:

 You will enjoy the freedom, flexibility and availability of using your equipment whenever you need.



#### **Cons of Buying Aerial Lifts**

Be sure to think about the cons of buying an aerial lift as well:

 The biggest downside to buying your own aerial lift is the maintenance fees and repair costs. Combine these fees with long-term storage costs and the original price tag of the lift, and you're looking at a serious investment. Rental companies like <u>MacAllister Rentals</u> also sell past rental lifts as used equipment. This is a great option if you would like to purchase, but cannot justify the price of a brand-new lift. For your convenience, we also keep the latest and most requested models in stock at all our facilities.

#### **Renting Aerials Lifts from MacAllister Rentals**

It is important to note the exact nature of your work and your expected usage, as it will immediately rule out many types of lifts. This makes it easier to find the <u>lift best suited for the job</u> at hand. The process of choosing a lift may seem complicated, but with the help of this guide, you can be confident in your choices.

Here are some general questions to consider when determining which aerial lift is right for your project:

- · Is your jobsite indoors or outdoors?
- · Will you be operating in a tight space or a large, open area?
- Will there be any rough terrain?
- · What size of machine will you require?
- How many workers will you need to accommodate at a time?
- What kind of platform heights and outreach distances are you looking at?
- Will you need outriggers for added stability?

Before you decide to buy or rent a lift, you'll want to consider the safety of both you and your workers. Using aerial lifts incorrectly results in many injuries and deaths every year. To minimize the risk of injury, you and your operators must be educated and trained on the common hazards of construction equipment, appropriate safety procedures, and how to

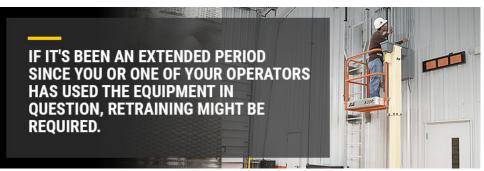
## **CHAPTER 10:**Aerial Lift Safety Training and Inspection Guide

respond in the event of an emergency.

Ensure all necessary safety information is covered in your equipment training courses, including:

- How to clean or deal with hazardous materials and situations. When an employee
  notices a safety concern, it makes the correction process more efficient if they
  immediately know what to do to remedy the situation. Faster action makes cleanup
  more efficient and keeps everyone safer.
- How to inspect jobsites and equipment for potential risks. Spotting safety hazards
  before beginning work can drastically reduce safety incidents and downtime. All
  employees should be trained on what safety concerns to look for before they arrive
  at the jobsite.
- How to avoid common dangers in the work area. It is vital to keep your employees safe by educating them about potential safety risks in their work environment.
- Proper loading and unloading of hardware. The size and complexity of aerial lifts
  can make even setting up the equipment dangerous for inexperienced workers. All
  jobsite employees should be trained on best practices of unloading lifts to begin
  work and loading them back for transportation.

If it's been an extended period since you or one of your operators has used the equipment in question or if there has been a recent injury or accident in the workplace, retraining might be required. You can never be too cautious in ensuring the safety of your employees. An investment in safety training is not only an investment in the well-being of your workers, but also an investment in your business productivity and job efficiency.



#### **Electric Scissor Lift Safety Inspection Checklist**

Be sure to follow a thorough process of inspecting your scissor lift before use:

- Assess the condition of the scissor lift at the beginning of each workday. Look for any visible damage, signs of wear or rust.
- Inspect the guardrail around the platform. Make sure the guardrail gate and safety
  chain are always in place during operation. Keep in mind that the guardrail and the
  extension arms of the scissor lift are dangerous pinch points. Take care to keep
  body parts, clothing and other items away from these areas.
- Ensure operator knowledge of controls and safety procedures before usage. Go over emergency response procedures beforehand. If necessary, offer safety training either through a company-sponsored training session or a local college.
- During use, make sure to watch for overhead hazards and obstacles. Look for power lines and trees when working outdoors, and check for pipes or other fixtures when inside.
- Maintain three points of contact when entering and exiting the platform. Three
  out of four limbs should always be in contact with the platform or the guardrail of the
  lift to remain stable.

 Make sure to inspect the jobsite itself. Look for any dangerous holes, obstacles or uneven ground. If any hazards are identified, make sure to avoid these areas when operating your scissor lift.

Before you wrap up your safety training and rent a scissor lift, double-check the condition of the scissor lift against OSHA's standards for general scaffolding. Most of the regulations for standard scaffolding also apply to scissor lifts, so this is an invaluable resource when ensuring the safety of your team.

#### **Rough Terrain Scissor Lift Safety Inspection Checklist**

Safety inspections for rough terrain scissor lifts are vital in keeping you and your employees safe. Because these aerial lifts are often used in harsher outdoor conditions, it's important to know what guidelines to follow:

- Always set brakes on lock. Especially with the use of rough terrain aerial lifts, always
  ensure the machine is safely locked into position. Because rough terrain scissor lifts
  are used on uneven, sloping environments, you do not want to risk the instance of it
  falling over or shifting downhill.
- Keep a safe distance from powerlines and wires. Rough terrain scissor lifts are
  typically used in outside environments. Therefore, keeping the machine away from
  hazardous wires will prevent electric shocks and power outages.
- Avoid dangerous weather. Although rough terrain aerial lifts are designed for outdoor weather conditions, severe weather still causes safety hazards. Do not operate equipment in storms or highly risky terrains.
- Never move the rough terrain scissor lift while in operation. No matter how small
  the distance, never operate a rough terrain scissor lift in an upright position. In many
  conditions, this action will cause the lift to tip over.

#### **Personnel Lift Safety Inspection Checklist**

Be sure to go over important inspection points before you use, buy or rent a personnel lift.

These tips can ensure the safety of your employees and the reliability of your equipment over time. Consider the following safety points before using your personnel lift:

- Personnel lifts should only be operated by trained and qualified workers. Failure
  to abide by this rule could result in a voided warranty or personal liability on your
  behalf.
- Never modify a personnel lift. This is especially true when you rent a personnel lift
  from a third party. An exception can be made for modifications and upgrades that
  are certified or produced by the lift's manufacturer, but only if you own the lift.



### WORKERS SHOULD NEVER RIDE ON THE PLATFORM OF THE LIFT WHILE IT IS IN MOTION.

remain clear until it has been moved.

- Utilize the lift's outriggers and wheel chocks to provide additional stability. This
  is especially helpful when working on an incline, as these tools can be used to level
  the lift.
- **Designate responsibilities in the lift.** If two workers are on an elevated platform at the same time, one should be designated to operate the controls. This prevents

confusion and maximizes efficiency and safety.

Many of these tips can apply to other lifts mentioned in this guide. Combine these tips to maximize safety and protection for yourself and your team.

#### **Electric Boom Safety Inspection Checklist**

Electric boom lifts are ideal for confined and side-to-side workspaces. Because these aerial lifts can hold different attachments, safety risks can increase. The following safety tips can help protect you, your employees and electric boom lift from hazardous situations:

- Prior to use, electric boom lifts should be given a warm-up period. Test the lift's
  hydraulic system and lift control before operating. You should report and fix any
  malfunctions or unsafe conditions.
- Never overload the lift's load capacity. Because electric boom lifts can only hold
  one person at a time, overloading it with people or tools can cause complications.
- Secure all equipment on the inside of the boom lift. Electric boom lifts are often
  used for tight spaces and electrical work, so securing all equipment is essential. If
  anything snags on surrounding areas, it can harm you and damage other objects.
- Give special attention to direction of travel, clearances above, below and on all sides of an electric boom lift. Confined spaces create the potential for more hazards and unsafe situations. Make sure the areas of operation are clear of clutter to allow for easy access of the boom lift.

#### Straight Telescopic Boom Safety Inspection Checklist

The straight telescopic boom rental is one of the safest lifts on the market to use and operate. The boom, rotating cab and wheels are the only moving parts, so there are fewer parts to be cautious of. All lifts should still be inspected before usage. Make sure to assess the following:

• Double-check the tires before renting a straight telescopic boom lift. Before each

use, ensure all tires are in good condition and inflated to match the specifications listed on the exterior tire wall. This ensures proper load balancing as well as fuel efficiency in gas-powered, self-propelled models.

- Verify the fluid levels of all systems within the engine and the lift components of the unit. Repair any leaks immediately and before use. Verify the condition of the vehicle's battery and any charging units.
- Limit your use of the telescopic boom lift to areas that are clear of tall or overhead hazards. The lift's inability to reach around such obstacles can be limiting and even dangerous in some environments.
- Inspect the telescoping boom of the lift for any dents, rust or damage. If present, correct these issues before regular usage.
- Never exceed the platform or bucket's maximum weight capacity. Make sure to factor in the weight of all workers, tools and materials for an accurate total.

WHEN COMPARED TO SOME OF THE OTHER LIFTS ON THE MARKET, THE STRAIGHT TELESCOPIC BOOM RENTAL IS AMONG THE SAFEST TO USE AND OPERATE.



For further safety education and instruction, you may want to consider signing up for <u>safety training at MacAllister Rentals</u> or enrolling in a class at a local university.

#### **Articulated Knuckle Boom Lift Safety Inspection Checklist**

The presence of additional moving parts, such as the knuckle itself, makes the inspection process more complex for a knuckle boom lift. These points should be covered before you rent a knuckle lift and before each use:

- Pay extra attention to your working environment, especially when outdoors.
   Winds over 25 MPH can tip or damage the lift. Additional caution is advised for the articulated knuckle boom, due to its extended reach and knuckle mechanism.
- Ensure safety features are intact. Make sure guardrails are properly installed and are free of any rust, dents or damage. Close any access gates before lifting the platform.
- Verify the position of any outriggers before operating the lift. When moving or repositioning, make sure the outriggers are in the stowed position. Outriggers should always be used when a worker is in the basket and extended to any height.
- Take the time to inspect the boom fully before each use, especially the knuckle itself. Any visible damage or rust should be repaired immediately and before use.
- Articulated knuckle lifts should only be used by a certified professional. The sheer size and scale of these lifts make them incredibly dangerous when operated by an inexperienced person.

#### **Towable Boom Lift Safety Inspection Checklist**

Safety inspections are not only required for the towable boom aerial lift, but also for the towing aspect of these machines. Refer to the following guidelines to ensure your safety:

- Make sure entrance gate and openings are closed. It's imperative that the gate and other openings are closed to secure the operator and tools.
- Use a body harness or a retaining belt. If you are not fastened to the towable boom lift, the potential of falling increases. Be sure you are safely attached to the aerial lift.
- Always place the lift on solid ground. If the towable boom lift is placed on uneven
  or sloping ground, the lift can easily tip if its weight is off-center.

Use appropriate towing equipment. If your towable boom lift is not correctly hitched
to a vehicle, it can become unattached. In this instance, the lift has potential to harm
other drivers and bystanders.

#### **Atrium Lift Safety Inspection Checklist**

If you want to buy or rent an atrium lift, it's important that you're up-to-date on the potential dangers, safety mechanisms and emergency response procedures. This information will keep your lift running over time and could even save a life. Take note of these important details:

- Safety guardrails should be fully intact around the work platform. These should
  be free of any rust and clear of any visible damage or erosion. Replace any worn or
  damaged sections immediately and before further use.
- Double-check the condition of the lift's components and track. Make sure to
  include any stabilizers or outriggers, as they are critical to maintaining the lift's
  balance during normal usage.
- Be aware of any overhead obstacles or potential hazards. Hidden dangers may
  not be visible from the ground level stay alert for possible issues as the lift moves
  upward.
- Look out for excess rust, dirt or grease on any articulated joints. If rust cannot be removed, it might be time for a replacement or repair.
- Verify the operability of control panels on the base and in the lift. Technical failures
  are typically a simple and affordable repair, but they can cause serious setbacks if
  left not identified before starting a job.
- Check the fluid levels of the lift's engine and hydraulic system. The hydraulic system is responsible for moving the boom, so it's essential that these hoses and tanks are free of any damage or erosion.

Implement your own additional rules and guidelines for using atrium lifts on your jobsites. You can never be too safe! At MacAllister Rentals, we offer <u>aerial lift safety resources</u>. You can also check with local college campuses in your area for information on classes or

training sessions they offer.

IMPLEMENT YOUR OWN ADDITIONAL RULES AND GUIDELINES FOR USING ATRIUM LIFTS ON YOUR JOBSITES.
YOU CAN NEVER BE TOO SAFE!



Now that you've read our guide, we hope you have a better understanding of the different types of lifts available. The information here is invaluable when navigating the world of aerial lifts, and we suggest referring to this guide or speaking with our team of

## **CONCLUSION:**Using Aerial Lifts to Complete Your Fleet

professionals to make effective business choices.

Depending on the size of your company and the jobs you usually perform, it might be beneficial to rent lifts based strictly on your day-to-day needs. Those who find that they're renting the same lifts frequently would likely benefit from investing in a lift of their own.

Renting a lift is a great choice when trying to fill one-time needs, such as small construction projects around a home or property. In this case, the expense of an outright purchase can't be justified, so a rental is the better option. You'll then want to rent your lift from a reputable company like MacAllister Rentals.

Whether you're renting or buying, MacAllister Rentals can take your business to the next level. We rent equipment for short and long-term use and offer flexible options for companies whose equipment needs change often. The versatility of our equipment, our wide selection and numerous locations across Indiana and Michigan make us an excellent partner.

Our customers come from many different backgrounds, trades and industries. Regardless of your personal scenario, contact us for more information.

**VIEW OUR AERIAL LIFT RENTALS** 

### **SOURCES**

http://www.macallisterrentals.com/rental/aerial-lift-rental/man-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/atrium-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/electric-scissor-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/electric-boom-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/rough-terrain-scissor-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/straight-telescopic-boom-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/articulating-boom-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/towable-boom-lift-rental/

http://www.nccco.org/docs/default-source/osha/-articulating-crane-certification-requirements-flow-chart.pdf?sfvrsn=0

http://www.macallisterrentals.com/about/contact/

http://www.purchasing.com/construction-equipment/aerial-lifts/purchasing-guide/

http://www.rentalmanagementmag.com/Art/tabid/232/ArticleId/27827

http://www.ipaf.org/fileadmin/user\_upload/documents/en/13\_Joanne\_Ulnick.pdf

http://www.macallisterrentals.com/rental/aerial-lift-rental/atrium-lift-rental/

https://www.osha.gov/Publications/aerial-lifts-factsheet.pdf

http://ehs.uky.edu/docs/pdf/ohs\_aerial\_lift\_safety\_program\_0001.pdf

http://www.macallisterrentals.com/rental/aerial-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/towable-boom-lift-rental/

http://www.pctonline.com/article/pct0912-lifts-use-wildlife-control/

http://www.macallisterrentals.com/rental/aerial-lift-rental/atrium-lift-rental/

http://www.macallisterrentals.com/

http://www.macallisterrentals.com/rental/aerial-lift-rental/electric-scissor-lift-rental/

https://www.osha.gov/Publications/OSHA3842.pdf

 $\underline{http://www.worksafecenter.com/safety-resources/PDF/tutorial/construction/General\%20Scissor\%20Lift\%20Safety.pdf.}$ 

http://www.macallisterrentals.com/rental/aerial-lift-rental/rough-terrain-scissor-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/man-lift-rental/

https://www.workforcesafety.com/sites/default/files/employers/Aerial%20Platforms%20and%20Personnel%20Lift%20Safety.pdf

www.macallisterrentals.com/rental/aerial-lift-rental/atrium-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/straight-telescopic-boom-rental/

https://protect.iu.edu/environmental-health/occupational-safety/equipment/aerial-lift.html

https://safetyresourcesblog.files.wordpress.com/2014/11/aerial-and-scissors-lift-training-program.pdf

http://ehs.uky.edu/docs/pdf/ohs\_aerial\_lift\_safety\_program\_0001.pdf

http://www.fireapparatusmagazine.com/articles/print/volume-17/issue-2/features/telescoping-articulating-boom-aeri-

als-prove-flexible-for-many-scenarios.html

http://www.macallisterrentals.com/rental/aerial-lift-rental/articulating-boom-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/articulating-boom-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/towable-boom-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/rough-terrain-scissor-lift-rental/

http://www.macallisterrentals.com/rental/aerial-lift-rental/electric-boom-lift-rental/

http://www.macallisterrentals.com/

http://www.macallisterrentals.com/rental/aerial-lift-rental/man-lift-rental/

http://www.macallisterrentals.com/aerial-lift-type-for-the-job/

http://www.macallisterrentals.com/files/Skyjack-7127.pdf

http://www.lni.wa.gov/Safety/Research/Files/HazardousChem/PreventCOPoisonFmForklifts.pdf

http://www.ecmag.com/section/your-business/leasing-vs-buying

http://www.macallisterrentals.com/

http://www.macallisterrentals.com/

http://www.macallisterrentals.com/about/locations/