

AERIAL LIFTS PART II: **WORKING WITH A LIFT** **AND ON THE GROUND AROUND ONE**

COURSE OUTLINE

- **Before you use an aerial lift you want to verify that it's in good working order.**
 - You also need to make sure that there aren't any problems with the area where you'll be setting up.
- **You will need to conduct two different inspections...**
 - An equipment inspection.
 - A worksite inspection.
- **You should inspect your lift prior to the start of every work shift.**
 - This will ensure that nothing's happened to it while you've been away, and that it's all in good working condition.
- **You'll find a list of things to look for in your lift's operator's manual.**
 - It's been compiled by the equipment manufacturer and should be followed rigorously.
- **There are a number of things that should be looked at on every lift. Always check that...**
 - Fluids are at their proper levels.
 - Wheels and tires are not damaged and are properly inflated.
 - The battery and charger are functioning as they should.
- **Confirm that the controls operate correctly, and that the horn, gauges, lights and alarms all work properly.**
 - Test the steering and brakes as well.
- **Be sure to include all of the lift's "components" in your inspection, especially the:**
 - Power system.
 - Guardrails,
 - Other safety devices.
- **Never use a lift if it looks like any of its components are defective.**
 - Remove it from service until a qualified person has made repairs.

- **It's also important to inspect the area where you'll be using an aerial lift. You'll need to...**
 - Survey the work zone.
 - Take note of any hazards that exist.
 - Take action to reduce or eliminate them before operating the lift.
- **If you're working outside, you should look for:**
 - Drop-offs, holes or other potentially unstable surfaces.
 - Slopes, ditches or bumps.
 - Overhead power lines.
- **You also need to be aware of any high wind, rain and other potentially hazardous weather conditions that are on the horizon.**
- **If you're working inside, you should look for:**
 - Low beams, rafters or ceilings.
 - Overhead hazards such as HVAC ducts, pipes, electrical conduit or cable raceways.
 - Driving obstructions, such as other equipment or storage racks.
 - Materials or debris on the floor.
- **Performing these inspections on your lift and your work area are essential, and will help you to avoid dangerous situations.**
- **Once you have ensured that your aerial lift will operate correctly and the area where you'll be working is safe, it's time to set up your lift.**
- **First, position the lift where you want it.**
 - If it has outriggers, or other stabilizers are available, position them on a level, solid surface.
 - If you're outdoors, you may need to lay down "pads" or move some earth to get a proper base.
- **Make sure the platform's guardrails are secure, and that the access gates are latched shut.**
- **Look through the operator's manual for instructions and "tips" on using the lift.**

- **Review the signs and notices that are posted on the lift itself, including:**
 - Warnings.
 - Cautions and restrictions.
 - The rated workload and maximum platform height.
- **Calculate the total weight that the lift will be carrying.**
 - Make sure that it doesn't exceed the lift's rated capacity.
 - Be sure to take into account your own weight, plus the weight of any tools, equipment or other people that you will have with you.
- **When you are finished preparing the lift itself, you should set up work zone warnings, such as cones, tape or signs... to let others know that you're working in the area and restrict access.**
 - If workers must be on the ground while you are using the lift, make sure that they are wearing hard hats.
- **Finally, inspect your personal fall protection equipment.**
 - If you find any damage, take it out of service and replace it.
 - When putting it on, make sure the harness fits snugly.
 - If you have any questions about what fall protection you should wear or how to rig it, ask your supervisor.
- **Once you've determined that your lift is stable and everything is set up correctly, you're ready to go to work.**
- **Climb into the platform or bucket, then close and lock any gates or doors.**
- **Next attach your fall protection equipment to the manufacturer's approved anchor point on the lift.**
 - Do not attach it to an adjacent structure.
 - This could result in you being pulled off the platform if the lift moves.
- **Remember to stand securely, with both feet flat on the platform's floor.**
 - Don't lean on the guardrail or gate, and never sit or climb on the rails.
- **Test the controls to make sure the lift operates smoothly and will maneuver correctly.**
- **Some aerial lifts have safety features built in, such as a "dead man's switch" that halts the machine if the operator is injured or incapacitated.**
 - Make sure that these are functioning as well.

- **Slowly raise yourself to the desired height and location.**
 - Never try to use ladders, planks, stools or other devices on the lift to extend your reach, or to bridge gaps between the lift and the area where you want to work.
- **Be sure not to exceed the manufacturer's limits for the vertical and horizontal extension of the lift.**
 - This information can be found in the operator's manual or on warning stickers affixed to the lift.
- **Never override hydraulic, mechanical, electrical or pneumatic safety devices.**
 - These are there to help ensure that the machines are operated safely.
 - Watch out for overhead hazards as you elevate.
- **If you're outside, "high voltage" power lines can be extremely dangerous.**
 - They have their own set of "avoidance" rules based on the amount of electricity that they are carrying.
 - If it is possible, the lines should be de-energized.
 - If that's not possible, it's mandatory that you keep a safe distance away from them.
- **OSHA says that if you're not a "qualified electrical worker" you and any conductive objects that you're holding should be at least 10 feet away from a line carrying 50,000 volts.**
 - You must stay even further away from higher voltage lines.
- **Sometimes you may find that you need to reposition a lift to get better access to the location that you're trying to reach.**
 - But you should never move a lift while its platform is raised unless the equipment is specifically designed to do this safely.
- **If a lift cannot position its platform where you need it, consider using another type of lift or even a ladder or scaffold, to reach your destination.**
- **Unless there is an emergency situation, lower-level controls should not be operated while a lift is raised, unless the worker on the platform specifically grants permission at that time.**
- **Avoid reckless driving or "horseplay" when you're moving a lift.**
 - Even though they are large, lifts can be easily damaged and expensive to repair.

- **Obey the posted speed limit at all times.**
 - If there is no posted limit, maintain a slow, steady speed.
 - Always give pedestrians the right of way.
- **There may also be times when you need to get off of a lift to get your work done.**
- **If you have to transfer from a lift to an adjacent structure, the platform must be resting on the structure, or positioned within one foot of it.**
- **Your fall protection system should be equipped with two lanyards.**
 - One of them should be secured to the platform.
 - The second lanyard should be attached to an appropriate anchorage on the structure.
 - Once you have secured the second lanyard, you can then detach the platform lanyard and transfer yourself onto the structure.
 - You get back onto the platform by reversing the process.
- **Once the work you're performing on the platform is complete, there are a number of procedures you need to follow to lower a lift safely.**
- **First, make sure the area below is "clear" of tools, materials and people, so the platform won't hit anything on the way down.**
 - You may want to enlist the aid of a "spotter" to help.
 - If you choose to use a spotter, be sure to work out the verbal instructions or hand signals that you'll be using to communicate ahead of time.
- **Bring the lift down slowly and carefully, until it is fully lowered.**
- **Secure the platform or bucket to the supports, to prevent it from moving during transport.**
- **If you have used them, return and stow any outriggers or other stabilizers that are on the lift.**
- **Remove any warning signs, caution tape or safety cones from the work area.**
 - Stow reusable items in their proper location.
- **Once everything is secure, you can return the lift to its designated storage area.**
 - Remember to proceed slowly and follow "safe driving" rules as you go.
 - Look out for other traffic that may be in the area, and sound the horn at all corners and intersections.

- **Even if you don't operate an aerial lift, having one working nearby can expose you to a number of hazards, such as:**
 - Falling objects.
 - Equipment "tipovers".
 - Electrocution.
- **So be aware of aerial lift equipment when it is working in your area.**
 - Watch for safety cones or warning tape that lift operators have set up to mark off hazard areas.
 - Stay a safe distance away from the lift whenever possible.
- **It's especially important to stay clear of lifts when their platforms are being raised or lowered.**
- **You also need to use caution when lifts are entering or exiting your work area.**
 - A lift that is on the move will normally give pedestrians the "right of way", but you can't assume that the operator can see you.
 - The higher up they are, the more difficult it is.
 - Stay out of the driver's "blind spots" and make sure that they know where you are.
- **If you have to go into an area around a lift, always wear appropriate personal protective equipment, including a hard hat and safety shoes with steel toes.**

*** * * SUMMARY * * ***

- **Aerial lifts can help you reach places that you would never be able to get to without them.**
 - But they can be dangerous if you don't know how to use or work around them properly.
- **You should inspect any aerial lift that you will be working on before you use it.**
- **When preparing an aerial lift for use, make sure it is on firm, level ground and it can take the weight of the people and equipment that will be on it.**
- **When you're operating an aerial lift, make sure all of the safety features are set up correctly and you are aware of the types of hazards you could encounter.**
- **When you're finished using an aerial lift, you need to stow the equipment and materials you've been working with, as well as the lift itself, properly.**
- **If you're working on the ground around an aerial lift, wear the appropriate PPE and make sure you know where the lift is at all times.**
- **When your work requires you to go 'above and beyond', aerial lifts can make your job a lot easier. And by knowing how to properly set up and operate the lifts that you use, you can go home safe at the end of every day.**