



## **ABOUT THE SAFE OPERATION OF AERIAL WORK PLATFORMS**

LENGTH: 12 MINUTES

### **PROGRAM SYNOPSIS:**

Our workplace is full of hazards, hazards that can hurt us or kill us. Controlling these hazards and preventing injuries is the point of our safety and health program. One such hazard is the one presented by the unsafe operation of aerial work platforms, also known as elevated work platforms, including boom lifts and scissor lifts. Ensuring that these mobile and elevating work platforms are operated in a safe manner can prevent injuries and save lives. That is the point of our facility's policies regarding the safe operation of aerial work platforms and that is the point of this program. So, pay close attention as we get to the point about the safe operation of aerial work platforms.

Topics include operator training, pre-operational inspection, mounting and moving the lift, basic safe work practices and lowering and dismantling the platform.

### **PROGRAM OBJECTIVES:**

After watching the program, the participant will be able to explain the following:

- How to properly perform a pre-operational inspection;
- What to look for when inspecting the path of travel;
- How to safely mount and move the lift;
- What basic safe work practices to follow to avoid injuries and property damage;
- How to lower and dismantle the lift safely.

### **PROGRAM OUTLINE**

#### **OPERATOR TRAINING**

- Inclined surfaces or drop offs, obstacles to path of travel or elevation, overloaded platforms and unsafe acts or improper operation are all potential causes of injury and property damage related to aerial work platforms. Boom and scissor lifts have the potential to be very dangerous, so it is critical that operators make it a point to remain focused on their job and take all necessary precautions to avoid mishaps.
- Our organization has implemented an operator training and certification program that meets the requirements of all applicable regulatory agencies.
- Before operating any aerial work platform, you must be trained, qualified and authorized by our organization.
- Because there are many styles and types of these vehicles, you must be trained on the specific type of unit you will be operating.
- Your training will include recognition and control of common hazards, proper operation of all controls and information contained in the operator's manual and various safety placards displayed on the vehicles.

#### **PRE-OPERATIONAL INSPECTION**

- A major part of your training will include how to perform a comprehensive pre-operational inspection. You must make it a point to verify that the equipment is in safe operating condition before it is used for the first time each shift.
- Begin your inspection by locating the operator's and maintenance manuals. They must remain with the lift at all times so they can be easily accessed when more information about the vehicle is needed.
- Then, make a complete circle around the lift and look for loose or broken parts, structural damage, fluid leaks or any other signs of damage or unsafe conditions.
- Also, check the tires for excessive wear, cuts or embedded objects. If inflated, make sure they contain the recommended air pressure.
- Make sure all safety decals are in place and legible.
- If the vehicle uses oil, hydraulic fluid, liquid fuel or coolant, make sure they are all at the appropriate level.
- Inspect the unit's guardrails and gates. They should have no missing parts or cracked welds.
- If the lift has a swinging gate, make sure it can only swing inward and not outward.
- After the initial inspection of the lift is complete, the next step is to test the vehicle's operating and emergency controls.
- Test the functionality of the lower controls first. Check each movement of the platform to make sure all controls are working as they should.
- After verifying that the emergency stop on the lower level is functioning properly, turn the selector switch to the upper level controls so they can be tested.
- The upper level controls include the driving controls for the vehicle in addition to those used to maneuver the platform.
- Make sure the forward, reverse and steering controls are all working properly. Also, test the brakes.
- Then, check the lift and lower controls as well as the controls that manipulate the platform to make sure they are all working as intended.
- If the vehicle has a foot pedal that prevents inadvertent movement, check to ensure that all movement stops when the pedal is released.

- Conclude your inspection by testing the upper level emergency stop button.
- If you discover any damage or defects on the lift...or improper functioning of the controls...during your inspections, follow our organization's policy for removing the vehicle from service so it can be repaired. Never operate a defective or damaged lift.

### **TRAVEL PATH INSPECTION**

- After you have verified that your lift is safe to operate, make it a point to inspect the intended path of travel for obstructions or other hazards. Many incidents involving aerial work platforms occur while it is moving to its destination.
- Look for any debris or obstacles along your route. Remove anything that is in your path that may hinder your ability to maneuver the lift safely into position.
- Check for slopes, pot holes, drop offs or unstable soil. All of these can adversely affect the lift's stability and cause a tip-over.
- Also, check for overhead obstacles. Make sure you have sufficient clearance to safely pass under any overhead obstructions.

### **MOUNTING & MOVING THE LIFT**

- Now that you have determined that the vehicle and route are safe for travel, it's time to mount the lift and drive it to the work zone.
- After informing any co-workers in the area that you are preparing to move the vehicle, face it squarely and climb into the platform.
- Maintain three points of contact while climbing and be sure to duck your head if you must move under a guardrail. Then, close any access gates and secure any chains or guardrails.
- Next, attach your lanyard to an approved anchor point provided by the equipment's manufacturer. Do not connect the lanyard to gates, guardrails or other parts of the platform.
- Before moving the lift, make sure you understand which direction it will go by checking the position of the wheels.
- Be aware that most boom lifts have a decal that indicates which direction is forward and which direction is reverse. Make sure you are properly oriented and are confident of the travel direction before moving the lift.
- When traveling from one work area to another, keep the platform lowered fully and travel at a speed that will allow you to maneuver around obstructions and pedestrians.
- If the lift is equipped with a selector switch that limits its speed, make sure it is in slow mode when operating in tight spaces, near drop-offs or while elevated.
- While driving, face the direction of travel and check clearances in all directions frequently.
- If your view is obstructed, have a co-worker help guide you around obstacles and look out for other moving equipment.
- Don't make sharp turns or sudden stops, especially when traveling at higher speeds.
- Before driving up or down an incline, make sure its grade isn't too steep to travel on safely. A lift should always be fully lowered before traveling on an incline and only go straight up or down an incline, never sideways or diagonally.
- When you have arrived at your destination, ensure that the vehicle is level and stable before elevating the platform. Park the lift on a flat, firm surface.
- If the unit is equipped with outriggers or other stabilizing devices, deploy them and make sure the feet are on firm ground with the stabilizers adjusted to make certain the lift is stable.
- Ensure that the total combined weight of personnel, tools and equipment on the platform does not exceed the lift's capacity. An overloaded platform can become unstable when raised, resulting in a tip-over.
- Scan the area in all directions for obstructions and co-workers before raising, rotating or extending the lift's platform.

### **BASIC SAFE WORK PRACTICES**

- There are some basic safe work practices that must be followed when you have reached the working elevation to prevent injury and property damage.
- Before raising the platform look for overhead hazards and make sure that cords, ropes or similar items are not tangled on any solid object.
- Keep hands and arms inside the platform to prevent them from being crushed or pinched as the lift passes solid objects.
- Always maintain a lookout for overhead objects and approach them slowly to prevent striking your head as the lift reaches its working height.
- Keep both feet on the floor of the platform while working. Lower, raise or reposition the platform if you can't reach the work.
- Don't stand on the guardrails or use ladders to better access your work. Again, the point is to always work with your feet flat on the platform floor.
- Your lanyard should remain connected to the tie off point in the lift at all times. Do not connect your lanyard to anything outside of the platform.
- Tools and debris should be located in areas where you aren't standing or walking so you won't slip or trip.
- Make sure you don't exceed your lift's horizontal, or side-load, rating, which can easily cause a tip-over. This data can be found in the operator's manual and is often displayed on the unit itself.
- Never use the lift as a crane to hoist loads, tools or supplies. This dramatically increases the probability of a tip-over and isn't permitted under any circumstance.
- When your elevated work is complete, make it a point to lower your lift safely and then park and dismount it properly.

### **LOWERING & DISMOUNTING THE PLATFORM**

- Before lowering the platform, scan the surrounding area to make sure it is clear of equipment and personnel.
- As the lift descends, keep body parts inside the guardrails and make sure any cables or cords don't become entangled.
- Also, make certain that the platform or any of the lift's mechanisms don't get caught on any object while lowering.
- Once fully lowered, return the vehicle to the appropriate location for storage.
- Dismount the lift by facing it and maintaining three points of contact as you climb down to the ground or floor.

# TO THE POINT ABOUT THE SAFE OPERATION OF AERIAL WORK PLATFORMS

## Review Quiz

Name \_\_\_\_\_ Date \_\_\_\_\_

*Please provide answers to the following to show how well you understand the information presented during this program.*

1. You should begin your initial pre-operational inspection of a lift by \_\_\_\_\_.
  - a. Circling the lift to look for unsafe conditions
  - b. Checking the tires for excessive wear or cuts
  - c. Locating the owner's and maintenance manuals
  
2. If a lift has a swinging gate, it must only swing \_\_\_\_\_.
  - a. Inward
  - b. Outward
  
3. Only the lower level controls of a lift must be tested and verified before use.
  - a. True
  - b. False
  
4. The \_\_\_\_\_ level controls include the driving controls for a lift.
  - a. Upper
  - b. Lower
  
5. If you discover any defects or damage during the pre-operational inspection, you should follow your company's procedure for removing the vehicle from service so it can be properly repaired.
  - a. True
  - b. False
  
6. When inspecting the path of travel, you should look for \_\_\_\_\_.
  - a. Drop offs
  - b. Soft soil
  - c. Pot holes
  - d. Curbs
  - e. All of the above
  
7. Once you are safely inside the platform after mounting, you should attach your lanyard to one of the approved anchor points or the guardrail.
  - a. True
  - b. False
  
8. When driving the lift on an incline, you should keep the platform fully lowered.
  - a. True
  - b. False
  
9. What should you do if you are unable to reach your work while on the platform?
  - a. Stand on the guardrail
  - b. Use a stool or a ladder
  - c. Raise or reposition the platform

***ANSWERS TO THE REVIEW QUESTIONS***

1. c

2. a

3. b

4. a

5. a

6. e

7. b

8. a

9. c