



Training Solutions, Delivered!

OPERATING AN AERIAL BOOM SUPPORTED PLATFORM SAFELY

**Leader's Guide, Fact Sheet
& Quiz**

Item Number: 4203
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This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

4203 OPERATING AN AERIAL BOOM SUPPORTED PLATFORM SAFELY FACT SHEET

LENGTH: 14 MINUTES

PROGRAM SYNOPSIS:

Aerial boom supported platforms are important tools in helping us access areas that were nearly impossible to reach in the past. Like any other piece of heavy equipment, unsafe use of any aerial work platform can result in serious injury and possibly death. This program reviews the basic procedures for operating these machines safely to protect company property, your coworkers and yourself from serious harm or death. Topics include pre-operational inspection, entering the platform properly, determining if the controls are safe to operate, safe driving procedures, maneuvering platforms safely and working on platforms safely.

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

- What controls and functions to check during a pre-operational inspection;
- How to prepare for travel once you have mounted the platform;
- How to travel in the lift safely;
- What precautions to take when working from the platform

PROGRAM OUTLINE

BACKGROUND

- Aerial work platforms are used to help us perform many tasks in maintenance and construction projects. When used properly, this equipment provides quick and easy access to work areas that were once impossible to reach.
- It does not matter what type of aerial platform you use, the law requires that you be trained in the functions of the controls and the safe operation of the equipment.
- While each type of lift has several safety precautions, basic safe operating procedures should be followed before, during and after the operation of any aerial work platform.

LIFT OPERATOR REQUIREMENTS

- Before operating any type of lift, you must be well trained and authorized to use that unit. Your training should cover the model you'll be operating and the safe operating procedures associated with it.
- Be sure you understand and follow all warning and caution decals on your machine.
- Never use this or any type of equipment under the influence of alcohol or drugs. If you are on prescription medication, notify your supervisor immediately.
- If you have a history of dizziness or seizures, or are uncomfortable working above ground, you should not operate aerial lifts.
- All aerial platforms have one thing in common: they must be operated safely to prevent accidents, property damage, injuries and death.
- As an operator of a boom supported elevating work platform, it's your responsibility to know and understand all the rules with operating this equipment safely to protect your wellbeing and your coworkers. To do this, you must understand the equipment and its basic characteristics.
- Before you can even start your inspection to use the platform, you must make sure the operator manual for the model and type of lift is on the equipment.
- The aerial boom supported work platform is one of the few pieces of equipment that the law requires that the operator manual be on it. Many other types of equipment suggest that the operator manual be on it; the aerial platform is one of the few that requires it.

PRE-OPERATIONAL INSPECTION

- The aerial platform must be inspected before use each day or at the beginning of each shift.
- Begin your inspection with a walk around the platform. Look for structural damage, loose parts, leaks and other unsafe conditions.
- The operating controls on the ground unit are to assist the operator in case of an emergency. All boom functions can be performed from the ground unit; you just cannot move the unit with the ground controls.
- If you are lowering the platform of a boom lift from the lower controls, make sure you are clear of the platform path and other moveable parts.
- With the side covers removed, check the hydraulic and fuel systems for leaks, cables and wiring harness, fan belts and any other components your company may require.
- Know the location of the emergency controls and verify that they are functional.

- On the outside of the unit, check the tires and wheel lugs, emergency controls, safety devices, personal protective devices, loose or missing parts, placards, warnings, control markings and the operation manual.
- If the equipment has outriggers, stabilizers, extendable axels or other structures, they must be inspected also.
- Read the owner's manual and make sure that you are checking everything that is required by the manufacturer.
- The lift must have a tilt alarm that activates when it's out of level. Many manufacturers are requiring you to check the tilt alarm prior to using the equipment.
- Check your owner's manual for the location of the tilt sensor on your unit. On the majority of boom supported aerial platforms, the tilt sensor can be tested by shaking the cone found in the engine compartment.
- When the cone is moved outside the allowable range for the equipment, the tilt alarm will sound.

PERSONAL PROTECTIVE EQUIPMENT

- Before entering the platform, you need fall protection and you may need other equipment required by your company.
- This equipment may include hard hats, safety shoes and work vests. Some environments may require hearing protection or respirators.
- Make sure you are wearing the correct fall protection harness. The harness needs to have a chest strap and straps that fit around your legs. There must be a ring to attach the tether to the ring in the center of your back.
- The straps need to be tight. Loose fall protection can cause serious injury.

ENTERING THE PLATFORM

- Once you have all the required safety gear and fall protection on correctly, you may enter the platform. When entering the platform, face the machine and always maintain three points of contact.
- Make sure the gate closes freely and without any obstruction. Make sure the guardrail system and all other protective devices are in place and secure.
- Never use any control levers as hand holds when climbing on or off.
- Be sure to stay clear of any foot controls when mounting.
- Immediately upon entering the platform, connect the tether to an approved tether point. Each platform has a pound rating and will only allow as many people as it has approved tether points for.

DETERMINING IF THE CONTROLS ARE SAFE TO OPERATE

- On the platform floor is a dead man's switch. The unit will not start if you are depressing it and the control panel will not work unless you are pressing it.
- A special note: if you were to hold your foot there too long without moving any of the controls, the panel will lock out and you'll have to move your foot off of it and replace it to make the panel come back to life.
- Make sure you can read all the controls on the control panel.
- On the ground unit are arrows or markings that indicate forward. On the control panel are matching markings. These are to help you as you move the boom from side to side.
- You will always know which way the ground unit will move if you move the control lever in the forward direction.
- Although aerial platforms perform the basic functions, the controls may be set up differently on the control panel by the manufacturer. Take the time to know how the one you are using works.

OPERATING THE CONTROLS

- After you have determined the controls are safe to operate, make sure you operate them smoothly. Avoid sudden stops, starts and changes in direction.
- Be sure the steering works properly and that you can control the travel and elevating functions.
- If any of the controls do not work properly or there is any other malfunction, tag out the machine and report problems to the proper authority or to your supervisor. Do not operate the unit until all malfunctions have been corrected.

PREPARATIONS FOR TRAVEL

- Inform others in the area that you are preparing to start the machine.
- When starting the vehicle, follow the procedures in the operator's manual. It will include instructions for starting in cold weather.
- Do not start the machine in confined areas where flammable gases may be present. After starting, recheck all gauges and lights.
- Pay attention to wind and weather conditions. At 40 feet in the air, a five mile an hour wind can feel like a hurricane.
- In lightning storms, bring the unit to the ground and dismount the unit.
- Every aerial platform has a speed limit switch connected to the boom height. On some units, the first speed reduction begins when the boom is lifted off the cradle.
- You'll always want to make sure you have a clear path of your route of travel. Using the jib boom, raise the platform up so the path is visible and the boom stays in the cradle; this will provide the fastest travel speed available while allowing for the best view of the travel path.

SAFE DRIVING PROCEDURES

- It's also important to drive the lift safely. Whenever possible, drive the unit in the stowed position to maintain maximum stability.
- Avoid sharp turns and sudden stops, especially when traveling at high speeds.
- If the speed is too fast for the terrain you are operating on, switch to turtle speed on the control panel.
- Be sure personnel remain clear of the machine during raising and lowering.
- Once you have a view of your path, check it for drop-offs, holes, obstructions and debris. Make sure that where you are traveling will support the weight of the unit.
- As you raise the platform higher into the air, you need to be aware of any overhead obstructions, including power lines. All power lines must be avoided in accordance with the MSAD chart.
- MSAD stands for minimum safe approach distance. The minimum safe approach distance will vary depending on the voltage.

MANEUVERING PLATFORMS SAFELY

- Boom lifts can have articulating or telescopic booms used to maneuver the platform in place.
- Many of these units provide articulating jibs for additional versatility. Some units have a jib boom, main boom and a riser to reach maximum height and angle.
- When operating around other equipment, take the necessary precautions to prevent a collision. The use of warnings such as flags, lights and barricades shall be used.
- Look in all directions before moving the platform.
- Keep coworkers on the ground clear of an operating lift and do not position any part of the unit over personnel below. Never allow anyone to stand on, near or pass under a raised platform.
- If you discover any problems while operating the lift or encounter any potentially hazardous locations, report them to your supervisor immediately. Make sure any problems are rectified before proceeding with your work.

AVOIDING HAZARDS WHILE TRAVELING

- When encountering a ramp or a slope, make sure the grade does not exceed your vehicle's rating for traveling on these types of surfaces.
- If you must drive while elevated, make sure your view is clear and maintain a safe distance from overhead obstacles and other hazards.
- Maintain a travel speed that will allow you to safely avoid congestion, coworkers and other hazards.
- Use extreme caution when traveling in confined areas. Keep your attention in the direction of travel and be sure to check clearances beside, above and below you. Have a coworker serve as a lookout if your view is obstructed.
- In all driving situations, remember that stunt driving and horseplay is prohibited.
- If for any reason you must stop the vehicle and leave it unattended, lower the platform and shut off the engine. Follow your company's procedures for preventing unauthorized use of the platform.

WORKING FROM THE PLATFORM SAFELY

- Always check clearances above, below and on all sides before raising, lowering or rotating the platform.
- When the platform has reached the working position, make sure to secure items that could shift and strike the operating controls or fall from the platform.
- If the platform or elevating assembly of a boom lift gets caught or snagged by another object, all personnel on the platform must be removed before attempts are made to free the platform.
- Do not tie the platform to another object and never attach wire, rope or cable to the platform. If they were to get tangled or caught on an obstacle, the vehicle could tip over.
- Remember, an aerial platform is not to be used as a crane.
- Keep the platform floor clear of debris that could cause a person to slip or trip. Make sure rope, electrical cords and other equipment will not affect your footing.
- Never use ladders, planks or other devices to gain additional reach or height.
- Never lean over, sit or climb on the platform railings. Keep both feet on the platform floor at all times.

LOWERING, PARKING & DISMOUNTING THE PLATFORM

- When lowering the platform, make sure that the surrounding area is free of personnel and other equipment.
- Park the lift in an area designated by your company. Make sure to park the unit on level ground.
- After you've parked the vehicle, place the platform in a stowed position.
- When you've come to a complete stop, place the controls in neutral, shut the engine off and dismount carefully using three points of contact while facing the machine. Never jump off the machine or dismount while it's moving.

OPERATING AN AERIAL BOOM SUPPORTED PLATFORM SAFELY

ANSWERS TO THE REVIEW QUIZ

1. a

2. c

3. b

4. a

5. b

6. a

7. b

OPERATING AN AERIAL BOOM SUPPORTED PLATFORM SAFELY
REVIEW QUIZ

Name _____ Date _____

The following questions are provided to determine how well you understand the information presented in this program.

1. If you have a history of dizziness or seizures, you should not operate aerial lifts.
 - a. True
 - b. False

2. What must you do before you start your pre-operational inspection of a lift?
 - a. Test the ground controls
 - b. Test the platform controls
 - c. Make sure the operator manual is on the lift

3. You can move an aerial lift from both the ground controls and the platform controls.
 - a. True
 - b. False

4. You should never use the control levers on the platform as hand holds when climbing on or off.
 - a. True
 - b. False

5. You will always know which way the ground unit will move if you move the control lever in the _____ direction.
 - a. Backward
 - b. Forward

6. You should never allow anyone to pass under a raised platform.
 - a. True
 - b. False

7. An aerial platform should only be used as a crane when the combined weight of the load to be lifted and the occupants of the platform fall below the platform's weight limit.
 - a. True
 - b. False