

## **Aerial Lifts**

This safety talk is designed for discussion leaders to use in preparing safety meetings. Set a specific time and date for your safety meeting. Publicize your meeting so everyone involved will be sure to attend.

Review this safety talk before the meeting and become familiar with its content. Make notes about the points made in this talk that pertain to your workplace. You should be able to present the material in your own words and lead the discussion without reading it. Collect whatever materials and props you will need ahead of time. Try to use equipment in your workplace to demonstrate your points.

### **BEGINNING THE MEETING**

Give the safety talk in your own words. Use the printed talk merely as a guide. The purpose of a safety meeting is to initiate discussion of safety problems and provide solutions to those problems. Encourage employees to discuss hazards or potential hazards they encounter on the job. Ask them to suggest ways to improve safety in their area.

Don't let the meeting turn into a gripe session about unrelated topics. As discussion leader, it's your job to make sure the topic is safety. Discussing other topics wastes time and can ruin the effectiveness of your safety meeting. At the end of the meeting, ask employees to sign a sheet on the back of this talk as a record that they attended the safety meeting. Keep this talk on file for your records.

### **GENERAL DISCUSSION**

#### *Did You Know?*

About 26 construction workers die each year from using aerial lifts. More than half of the deaths involve boom-supported lifts, such as bucket trucks and cherry pickers; most of the other deaths involve scissor lifts. Electrocutions, falls, and tipovers cause most of the deaths. Other causes include being caught between the lift bucket or guardrail and object (such as steel beams or joists) and being struck by falling objects. (A worker can also be catapulted out of a bucket, if the boom or bucket is struck by something.) Most of the workers killed are electrical workers, laborers, painters, ironworkers, or carpenters.

#### *You Should Know*

Many construction contractors rent aerial lifts instead of buying them. So you may not know which model you will be using, even though operator controls and other key features differ on each model. Also, you may not know the maintenance history of the lift.

The dealer or company renting out the lift should:

- Be sure the lift is properly inspected and serviced before rental.
- Provide operator and maintenance manuals and maintenance history.
- Make sure the operator controls are easy to reach and properly marked.

Your employer should:

- Be sure an aerial lift is not modified without written permission of the manufacturer.
- Be sure an aerial lift is used only under conditions approved by the manufacturer.
- Be sure proper personal fall-protection is provided and used.

#### *What Types of Platforms Do the OSHA Regulations Cover?*

Aerial lifts include the following types of vehicle-mounted aerial devices used to elevate personnel to work at above ground elevations:

- Extensible boom platforms
- Articulating boom platforms
- Vertical towers
- Aerial ladders, and
- A combination of any of the above

#### *Before Operating an Aerial Lift*

Check operating and emergency controls, safety devices (such as, outriggers and guardrails), personal fall protection gear, wheels and tires, and other items specified by the manufacturer. Look for possible leaks (air, hydraulic fluid, and fuel-system) and loose or missing parts.

Check where the lift will be used. Look for a level surface that won't shift. Check the slope of the ground or floor; do not work on steep slopes that exceed slope limits listed by the manufacturer. Look for hazards, such as, holes, drop-offs, bumps, and debris, and overhead power lines and other obstructions.

Set outriggers, brakes, and wheel chocks – even if you're working on a level slope.

Your employer should:

- Provide required manuals to operators and maintenance mechanics.
- Be sure operators and mechanics are trained by a qualified person experienced with the model of aerial lift.

### *Using an Aerial Lift*

- Always close lift platform chains or doors.
- Stand on the floor of the bucket or lift platform. Do not climb on or lean over guardrails .
- Do not exceed manufacturer's load-capacity limits (including the weight of such things as bucket liners and tools).
- If working near traffic, set up work-zone warnings, such as cones and signs.

To prevent electrocutions:

- Non-electrical workers must stay at least 10 feet away from overhead power lines.
- Electrical workers must de-energize/insulate power lines or use proper personal protective equipment and tools.
- Insulated buckets protect from electrocution due to electric current passing through you and the boom to ground. An insulated bucket does not protect if there's another path to ground – for instance, if you touch another wire.

To prevent falls:

To help keep workers inside guardrails or in buckets, OSHA requires either a full-body harness or a positioning device on bucket trucks or boom-supported lifts. OSHA accepts a positioning device (belt) with a short lanyard, if there is an anchorage inside the bucket.

OSHA says a *qualified person*...by extensive knowledge, training, and experience can...solve...problems related to the subject matter.... A *competent person* is...capable of identifying existing and predictable hazards...and has authorization to take prompt measures to eliminate them.

Aerial equipment may be powered or manually operated and are deemed aerial lifts whether or not they are capable of rotating about a substantially vertical axis.

When working on Aerial equipment the following rules will be required:

- Ladder trucks and tower trucks shall be locked in lowered and stowed position prior to highway travel.
- Lift controls shall be tested each day prior to use to determine that such controls are in safe working condition.
- Only authorized persons shall operate an aerial lift.
- Belting off to an adjacent pole, structure, or equipment while working from an aerial lift shall not be permitted.
- Employees shall always stand firmly on the floor of the basket, and shall not sit or climb on the edge of the basket or use planks, ladders or other devices for a work position.
- A body belt shall be worn and a lanyard attached to the boom or basket when working from an aerial lift.
- Boom and basket load limits specified by the manufacturer shall not be exceeded.
- The brakes shall be set and when outriggers are used, they shall be positioned on pads or a solid surface. Wheel chocks shall be installed before using an aerial lift on an incline, provided they can be safely installed.
- An aerial lift truck shall not be moved when the boom is elevated in a working position with men in the basket, except for equipment which is specifically designed for this type of operation.
- Articulating boom and extensible boom platforms, primarily designed as personnel carriers, shall have both platform (upper) and lower controls. Upper controls shall be in or beside the platform within easy reach of the operator. Lower controls shall provide for overriding the upper controls. Controls shall be plainly marked as to their function. Lower level controls shall not be operated unless permission has been obtained from the employee in the lift, except in case of emergency.
- Climbers shall not be worn while performing work from an aerial lift
- The insulated portion of an aerial lift shall not be altered in any manner that might reduce its insulating value.
- Before moving an aerial lift for travel, the boom(s) shall be inspected to see that it is properly cradled and outriggers are in stowed position.

## **GENERAL SAFETY REVIEW**

This is a time to review all safety concerns, not just today's topic. Keep your notes on this page before, during and after the safety meeting.

Are you aware of any safety hazards from any other crews? Point out any hazards other crews are creating that this crew should know about. Tell the crew what you intend to do about those hazards.

Do we have any other safety business? Discuss any past issues or problems. Report any progress of investigations and action taken.

Have there been any accidents, near misses or complaints ? Discuss any accidents, near misses, and complaints that have happened since the last safety meeting. Also recognize the safety contributions made by members of the crew.

Please remember, we want to hear from you about any health and safety issues that come up. If we don't know about problems, we can't take action to fix them.

## **ENDING THE MEETING**

Circulate Sign-Off Form.

Assign one or more crew member(s) to help with next safety meeting.

Refer action items for follow-up.

Do you have any Safety Recommendations?

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Do you have any Job Specific Topics you would like us to discuss?

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Comments:

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