### **PRESENTER'S GUIDE**

# "SCISSOR LIFTS IN INDUSTRIAL AND CONSTRUCTION ENVIRONMENTS"

**Training for the Use of Scissor Lifts** 

**Quality Safety and Health Products, for Today... and Tomorrow.** 

# **OUTLINE OF MAJOR PROGRAM POINTS**

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The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- Accessing high places can be difficult in many work environments.
  - To reach these areas, many workers use scissor lifts.
- Nearly everyone has seen a scissor lift.
  - They're common on construction sites, both inside and out.
  - They are often found in warehouses and other large buildings as well.
- It's easy to identify a scissor lift. Just look for the crisscrossed "X"-shaped supports.
  - When the supports move closer together, the lift rises.
  - When the supports move apart, the platform lowers.

### • This program will:

- Introduce you to scissor lifts.
- Make you aware of the hazards associated with scissor lifts.
- Give you the information you need in order to stay safe, whether you're using a scissor lift or working near one.
- Depending on the task and the location of your work, there are several types of scissor lifts to choose from.
  - The most common types of lifts are electric, diesel, propane or gas-powered.
  - They have platforms that can elevate up to 60 feet or more.
- Some scissor lifts are intended for use indoors on finished floors, such as in warehouses.
  - Other lifts are meant to be used outdoors on rough terrain.

- In order to operate a scissor lift, you must be authorized and properly trained on the specific lift you'll be using. Much of the information you'll need will be covered in this program, including:
  - The hazards associated with scissor lifts.
  - Tips on controlling, minimizing and/or eliminating these hazards.
  - How to recognize and avoid unsafe conditions in the areas where you'll be using a lift.
  - How and when you should inspect a scissor lift.
  - How to operate and work near a lift safely.
- You'll be required to undergo "retraining" if:
  - You have an accident while operating a scissor lift.
  - Workplace conditions change and present a new hazard that could affect the operation of a lift.
  - You need to use a different type of scissor lift than the one you were trained on.
  - You're observed operating a lift in an unsafe manner.
- However, it's still important that you review the operator's manual for the specific lift you'll be using, to determine if there's anything "special" you'll need to do to operate the lift safely.
  - You'll also need to put in some time practicing to use the lift, to become familiar with it.
- Just because scissor lifts are common in many workplaces doesn't mean that they're easy to operate.
  - An average of eight fatalities related to scissor lifts occur each year.
  - And hundreds of scissor lift related injuries occur as well.
- In order to stay safe when working with or near a scissor lift, it's important that you understand the hazards associated with this type of equipment. The most common accidents involving scissor lifts are:
  - Tip-overs
  - Falling objects
  - Overhead hazards

- Tip-overs account for a full 40 percent of lift-related accidents.
- To prevent tip-overs, it's important that you never overload a lift.
  - Be sure to take into account not only your own weight, but the weight of any other workers and tools that will be on the lift with you.
- Proper placement of a lift can help to prevent tip-overs as well.
  - Make sure the ground is stable and as level as possible.
  - In some situations outriggers may be required.
  - Be sure to thoroughly inspect the area where the scissor lift will be working to determine if you'll need to use them.
- Falling objects can also be a hazard when working on a scissor lift.
  - Even when you're careful, tools or materials can still fall from the platform, endangering coworkers below.
  - You can protect people working near the lift by marking off the area with tape or safety cones, so that they're aware of the hazards.
- Your surroundings can also be hazardous when you are working on a scissor lift. Overhead hazards can be especially dangerous. When working inside, you should look for:
  - Low ceilings, beams and rafters.
  - HVAC ducts, piping and cable raceways.
  - Busy or cluttered work areas.
- When working outside, look for:
  - Holes, slopes, ditches, bumps or other uneven surfaces.
  - Overhead hazards, such as power lines, trees or light poles (stay a minimum of 10 feet from these hazards at all times).

- And be aware of the weather.
  - High winds, rain and other conditions can create havoc if you're on a lift.
  - It's a good idea to look at the forecast to see if any problems are on the horizon.
- Before you use a scissor lift, you should make sure it's in good condition and that there are no hazards in the area where you'll be working.
- There are two inspections that must be performed before you use a lift:
  - The "pre-start" inspection.
  - The "work site" inspection.
- You should inspect the lift at the start of every work shift.
  - This will ensure that nothing has happened to the equipment while you've been away and that the lift is still in good condition.
- You'll find a list of things to be inspected in the operator's manual of the lift you're using.
  - The operator's manual has been compiled by the equipment manufacturer and should be followed closely.
- There are a number of things that should be looked at on every scissor lift.
  - Check that fluids are at the appropriate levels.
  - Make sure wheels and tires are in good condition and properly inflated.
  - Check that the battery and charger are in good working order.
  - Verify that all of the controls work properly.
- Be sure to inspect all of the lift components, particularly the power system, guardrails and other safety devices.
  - Never use a lift that has defective components.
  - Any lift that fails the pre-start inspection must be removed from service until a qualified person has made repairs.

- It's also important to inspect the work site where the lift will be used.
  - Survey the work zone and eliminate any hazards.
  - If you're working inside look for overhead hazards, as well as material on the floor that could hinder moving the lift.
  - If you're outside, look for surface conditions that could cause problems, as well as power lines and other hazards up high that you'll need to avoid.
- Remember, OSHA classifies scissor lifts as "movable scaffolds".
  - So you may also want to refer to OSHA's scaffolding regulations when setting up or using a scissor lift.
- Once you've assured yourself that both the equipment and the worksite are safe, it's time to set up the scissor lift.
  - First, look through the operator's manual for any instructions on using the lift.
  - Then, make sure the lift is on stable ground.
  - If the lift has outriggers or other stabilizers, position them on a level, solid surface.
  - If you're outdoors, you may need to move some earth or lay down some "pads" to get a proper base.
- Be sure to set up work zone warnings, such as signs, tape or cones, to restrict access and let others know that you're working in the area.
- Inspect any protective equipment you'll be using, such as:
  - Hard hats.
  - Gloves.
  - Safety shoes.
  - Fall protection.
- Never use damaged PPE.
- When you have the scissor lift set up properly, you're ready to go to work.
  - Climb onto the platform and secure the gate or guardrails.

- If you're using fall protection, make sure it's attached to an appropriate point on the lift.
  - Never attach fall protection to an adjacent structure (this could result in serious injuries, even death).
- Make sure any loads, including tools, equipment and other workers, don't exceed the rated weight capacity of the lift.
  - You can determine how much weight a scissor lift can hold by checking the labels on the equipment or looking it up in the operator's manual.
- Keep both feet on the platform at all times.
  - Never lean, sit or climb on the guardrails.
- Make sure all equipment, tools and the other people on the lift with you are evenly spaced and properly balanced.
- Test the controls to make sure the lift operates smoothly and will maneuver properly.
  - Then slowly raise yourself to the desired height.
- Many scissor lifts have extendable platforms to help you get closer to your work.
  - These can slide out to help extend the lift's "reach".
- It's important that you never try to use ladders, planks, stools or other devices to extend your reach or to bridge gaps between the lift and the area where you need to work.
- Once your work on a lift is finished, there are still some things you need to do before returning the lift to its "home".
  - Before lowering the lift, make sure there are no tools, debris or people below.
- You may want to enlist the aid of a spotter to ensure that the area is clear.
  - If you do employ a spotter, 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's resting on its supports.
- If you were using any fall protection, be sure to remove it from its anchor point.
- Then exit the platform, keeping two hands and one foot or one hand and two feet in contact with the equipment at all times.
  - Never jump from the platform.
- If outriggers or stabilizers were deployed, stow them away properly.
- Lastly, remove any warning signs, tape and/or cones from the work area.
- Even if you aren't the one operating a scissor lift, you may be affected by having one in your work area.
  - On the ground, you can still be subject to tip- overs, falling objects and even electrocution.
  - So whenever possible, stay clear of the work area where a scissor lift is in operation.
- If you must go into the area, wear the appropriate personal protective equipment, including a hard hat, to protect yourself from any inadvertently dropped tools or material.
- Always be aware of a lift's "blind spots."
  - Remember, if you're directly below a lift, there's a good chance that the operator won't see you.
  - Always stay clear of lifts that are being raised or lowered.
- Scissor lifts can help you reach places that you might not be able to get to otherwise.
  - But they can be dangerous if you don't know how to use or work around them safely.

#### \* \* \* SUMMARY \* \* \*

- Make sure that you've been trained to use the scissor lifts in your workplace.
- Know the hazards associated with scissor lifts and how to avoid them.
- Inspect a scissor lift for damage or unsafe conditions before you use it.
- Never use a damaged scissor lift.
- Know how to properly set up and operate your lift, as well how to return it to its "home."
- When you're working on the ground, be aware of scissor lifts that are in the area.
- When you need to do work that's "up in the air," scissor lifts can take you there.
  - And with the proper training and safety precautions, you'll stay safe when working off the ground!