

## Chapter 24 Scissor Lift Safety

Scissor lifts are work platforms used to safely move workers vertically and to different locations at a job site. Scissor lifts are different from aerial lifts because the lifting mechanism moves the work platform straight up and down using crossed beams functioning in a scissor-like fashion, and are engineered to operate without the use of outriggers. Although scissor lifts present hazards similar to scaffolding when extended and stationary, using scissor lifts safely depends on considering equipment capabilities, limitations and safe practices.

### Safe Operation

The supervisory employee needs to assess the worksite to identify all possible hazards in order to select the appropriate equipment for the task. The following needs to be considered and effective controls put in place when using a scissor lift:

- fall protection
- stabilization
- positioning

Only trained workers are allowed to use scissor lifts. Safe scissor lift use includes properly maintaining the equipment, following the manufacturer's instructions, providing workers training and needed personal protective equipment (PPE), and implementing safe work practices.

### Fall Protection

Scissor lifts must have guardrails installed to prevent workers from falling. Prior to each use it is important to check to see that a guardrail system is in place. Only stand on the work platform; **never stand on the guardrails**. Keep work within easy reach to avoid leaning away from the scissor lift.

### Stabilization

An examination of the work site should be performed to assure that the terrain is suitable for safe use of a scissor lift, and ensure that scissor lift is stable and will not tip over or collapse. Some safe work practices to ensure safe, stable conditions for scissor lift use include:

- Follow the manufacturer's instructions for safe movement
- Never move the lift in an elevated position.
- Isolate the scissor lift or implement traffic control measures to ensure that other equipment cannot contact the scissor lift.
- Select work locations with firm, level surfaces away from hazards that can cause instability (e.g., dropoffs, holes, slopes, bumps, ground obstructions, or debris).
- Use the scissor lift outside only when weather conditions are good. Scissor lifts rated for outdoor use are generally limited to wind speeds below 28 miles per hour.

The collapse of scissor lifts can be prevented by:

- Ensuring that safety systems designed to stop collapsing are maintained and not bypassed.
- Never allow the weight on the work platform to exceed the manufacturer's load rating.

- Never allow equipment other than the scissor mechanism to be used to raise the work platform (e.g., using a forklift to lift the work platform).
- Keep the lift from being struck by other moving equipment on the worksite.

### **Positioning**

Positioning the scissor lift to avoid crushing or electrocution hazards is important for safe use. Crushing hazards are present in workplaces using scissor lifts and may expose workers nearby, even those not working on the scissor lift. Scissor lifts present crushing hazards similar to vehicles and other mobile equipment at worksites.

When operating a scissor lift be watchful when:

- A moving scissor lift is near a fixed object.
- A moving vehicle and the scissor lift are operating closely.
- The scissor lift passes under a fixed object, such as a door frame or a support beam.

Positioning the scissor lift to avoid electrocution, arc flash, and thermal burns is important for safely using scissor lifts near energized power lines. Since electricity can arc or jump from the power line to the scissor lift or worker, electrocution can occur even if neither the scissor lift nor the worker touches the power line. The following work practices help to ensure that scissor lifts are safely positioned:

- Implement traffic control measures around the scissor lift to prevent other workers or vehicles from getting too close.
- Use ground guides when operating or moving the scissor lift around the workplace.
- Select work locations that do not approach electrical power sources (e.g., power lines, transformers) by at least 10 feet and that do not pose other overhead hazards (e.g., other utilities, branches, overhangs, etc.).
- If the job task requires work near an electrical source, ensure that the worker is qualified and has received the required electrical training.

### **Maintaining Scissor Lifts**

Scissor lifts must be regularly maintained to ensure that they are safe to use (e.g., prevent the lifting mechanism from collapsing). Follow the manufacturer's maintenance and inspection instructions to:

- Test and inspect controls and components before each use.
- Ensure that guardrail systems are in good working condition.
- Verify that brakes once set will hold the scissor lift in position.
- Inspection must be completed prior to each use.

***Scissor lifts are engineered to the manufacture's specifications for utility and especially safety. Sign Designs and its employees will never modify a scissor lift, or use a scissor lift for other than it's intended purpose.***

### **Training Workers**

Employers must provide workers training on hazards, including how to work safely with or near scissor lifts. Training includes:

- Manufacturer's instructions for operating the scissor lift vertically and while in transit.
- How to handle materials on the scissor lift, including weight limits.
- Other worksite hazards workers may encounter when working on a scissor lift (e.g., contact with electrical wires).
- Reporting any equipment defects or maintenance needs.