Environmental Health and Safety
EAST TEXAS A&M

Safety Instructions

Scissor Lifts

General

Scissor lifts are work platforms used to safely move workers vertically. 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. 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.

An example of a scissor lift.

Scissor Lift Hazards

Scissor lifts come with their own unique hazards that the operator must keep in mind. Some of those are:

- Wind speeds: the max wind speed for scissor lift operation is 28 mph.
- Wind direction: if the scissor lift is facing broadside to the wind, it has a higher risk of tipping over.
- Slope: scissor lifts should only be used on level terrain where they will not be at an angle.
- Electrical lines: be aware of what is above and around the work platform. Take potential sway into account when determining how far away you need to be to avoid contact.
- Falling: ensure that all guardrails are properly installed and in good working condition.
- Collapse: Ensure that safety systems designed to stop collapsing are maintained, not bypassed, and never allow the weight on the work platform to exceed the manufacturer's load rating.
- If the scissor lift includes outriggers, ensure that they are properly deployed before using the scissor lift.

Training and Requirements

- Only full-time employees with a detailed position description including usage of equipment in their scope of work may operate a scissor lift, and employers should ensure workers are trained and certified. All scissor lift operators must be trained by a member of the Department of Emergency Management and Safety on the specific piece of equipment they will be using.
- Scissor lift operators will be reevaluated at least once every three years.
    - Minimum required training shall include:
        - 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.
        - Reporting any equipment defects or maintenance needs.
- Full body harnesses are the only acceptable harness and ***must be used*** at all times on all personnel lifting equipment, including scissor lifts (NO BELT HARNESSES ALLOWED).

Inspections

- Employers need to assess the worksite to identify all possible hazards and follow effective controls that address fall protection, stabilization and positioning.
- Pre-Use: Before use each day or at the beginning of each shift, the scissor lift shall be given a visual inspection and functional test by the operator. (See attached Pre-operation checklist)
- Annual: An annual inspection is required and must be conducted by an authorized person qualified as a mechanic on the type of aerial/scissor lift.

Recordkeeping Requirements

- Must maintain records of all aerial/lift training, 3-year reevaluations, pre-use inspections, annual equipment inspections, and repair records.

Reference

https://www.osha.gov/Publications/OSHA3842.pdf

Scissor Lift Pre-Operation Checklist

Instructions: Operator must check off each item as having been inspected and safe to use during daily inspection prior to operation. Complete the Work Site Evaluation for every new location.

Scissor Lift Model: _____ Serial Number: _____

Department: _____ Date: _____ Time: _____ AM/PM

PRE-OPERATION	PASS	FAIL	N/A
KEY OFF Procedures			
Check that the operator's manual, decals are in place and legible			
Check Hydraulic cylinders/Lifting mechanism/Fluid level			
Check welds, pins, missing nuts or bolts and other structural parts for cracks or defects			
Check outriggers, outrigger limiting switches, and locking pins			
Check platform entry mid-rail/gate, and platform housekeeping			
Check battery level to assure that the unit can operate the duration of the job			
Tires/Rollers/Monitor tire air pressure if pneumatic			
Make sure Personal protective equipment is in use (Harness)			
KEY ON Procedures			
Check all ground controls for proper operation, including emergency lowering means			
Check all basket controls, foot switch, horn for proper operation			
Steering and drive system			
Check limit switches, alarms, and flashing beacon if equipped			

SITE EVALUATION	YES	NO	N/A
Is the work surface structurally strong enough to handle the lift, and free of drop-offs?			
Are surface conditions where the lift is used free of obstructions and on level surface?			
Are there proper barricades to control pedestrian and vehicle traffic in work zone?			
Are there overhead obstructions or restricted places where the lift will be operated?			
Will the basket handle the loads to be carried without exceeding the rated capacity?			
Are there ramps and other sloped surfaces that could affect the vehicle's stability?			
Will the lift be used for electrical work or near high voltage lines?			
Are there 'Classified Hazardous' locations where the vehicle will be operated?			
Is there an enclosed environment(s) or other areas where insufficient ventilation or poor vehicle maintenance could cause a build-up of carbon monoxide or diesel exhaust buildup for combustion motors, or hydrogen gas buildup at electric vehicle recharging stations?			
Is wind or other weather a concern? Are there sustained winds or gusts stronger than the manufacturer's rated design allowance?			
List below other potentially hazardous site-conditions that could affect safe operation:			

_____ _____

Operator's Printed Name **Operator's Signature**