



**DALHOUSIE
UNIVERSITY**

**Department of
Facilities Management
Occupational Health and Safety**

Safe Job Procedure for Operating Scissor Lifts

Service / Shop

This safe job procedure applies all shops or trades that use scaffolding.

Effective Date: May 2014

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Known Hazards

- Falling objects
- No, or, improper supervision
- Employees falling
- Not using required safety parts and accessories.
- Scissor lift tipping over
- Exceeding load restrictions
- Contact with electrical wires.
- Unstable footings, rough surfaces
- Improperly installed / assembled
- Irresponsible behavior or actions
- Scaffold tilting over and collapsing.
- Falling from scaffolding
- Poor training in proper use of scissor lift.

Job Specific Training Requirements

- Proper training in the use of a scissor lift.
- Fall Protection
- Proper training in the use of all required PPE
- Proper training in the use of all required tools and equipments.

Applicable Regulations / Standards / Procedures

- Nova Scotia Fall Protection and Scaffolding Regulations (Under Review)
- Safe Job Procedures for tools and equipment that are to be used.

The following are regulations that are to be referenced when assembling or dismantling scaffolds and there is a risk of falling exists:

- CSA Standard Z259.1-1995 "Fall Arresting Safety Belts and Lanyards for the Construction and Mining Industries"
- Z259.3-M1978, "Lineman's Body Belt and Lineman's Safety Strap"
- CSA Standard Z259.10-M90, "Full Body Harness"
- CSA Standard Z259.11-M92, "Safety Belts and Lanyards"
- CSA Standard Z259.2-M1979, "Fall Arresting Devices, Personnel Lowering Devices and Life Lines"

Personal Protective Equipment Requirements

- Eye Protection
- Protective Footwear
- Hard Hats
- Work Gloves
- Full Body Harness and Life Lines
- Any other PPE required by the hazard assessment for the job to be performed.

Safe Job Procedure

Job steps are listed in the order in which they must be completed. Key activities follow each step. Key steps and the associated activities must be followed in the order presented to achieve maximum efficiency in safety, production, quality and overall loss prevention.

PRE-START CHECKS

- Only employees that have received training from a competent person may operate a scissor lift.
- Scissor lift operators should have their practical skills evaluated every three months.
- Check for obstacles around the work platform and in the path of travel such as holes, drop offs, debris, ditches and soft fill.
- Check for overhead clearances.
- Make sure the batteries are fully charged.
- Disconnect battery-charging system from external power source.
- Ensure that the scissor lift tilt sensors are fully functioning.
- Ensure that scissor lift is maintained in accordance with the manufacturer's requirements.
- Do you have all required personal protective equipment?

START AND OPERATION

- Mark or barricade all hazards in the work area.
- Lift operators must cordon off the area in which they will be working using either YELLOW caution tape or RED danger tape depending on the severity of potential hazards presented by the work being performed.
- As lift operator you must ensure that all persons who will be on the lift platform have been familiarized with the safe job procedures and safe work practices for this equipment.
- Complete the equipment checklist each day before beginning work.
- Inspect the condition of all safety devices.

- Follow all manufacturer safety rules at all times.
- Put on all required personal protective equipment.
- Once work has begun no one is allowed to enter an area marked with yellow tape without the lift operator's permission.
- No one is to enter an area marked with red danger tape unless all activity is halted and the lift operator has given their permission.
- If the scissor lift will be operated near an overhead hoist travel way, the overhead hoist must be locked out before any work begins.
- If you will be working near the orange duct-o-bars by the overhead hoist rail, the main switch for duct-o-bars must be locked out and checked for zero energy state by an electrician before beginning work.
- Pull out the emergency stop button on the control panel.
- Select "platform" with off/platform/base select key switch.
- Enter the platform.
- Pull out the emergency stop button on the platform control panel.
- Proceed with job using the required buttons, levers and controller located on the operator console.
- Always ensure that all wheels are properly positioned and balanced on a solid base.
- If the Scissor Lift is equipped with a high and low range for travel. It can be used in high range in open travel ways, but should be used in low range in tight areas.
- If painting is being done while on the Scissor Lift, cover up the platform, handrails and controls to minimize overspray or splashing on the Scissor Lift.
- Use outriggers if provided.

SHUTDOWN PROCEDURE

- Fully lower the platform.
- Push the emergency stop buttons.
 - On the operator console.
 - On the base control.
- Turn the base key switch to the off position.
- If you are finished with the scissor lift, clear all tools, debris, materials, etc. from the platform and plug the scissor lift in to recharge the battery.

- No safety belt or harness is required as long as long as:
 - The work being done is limited to inside the perimeter defined by the guard rail.
 - No worker leans out or extends themselves beyond the limit of the guard rail at any time.
 - No employee steps on the rails of the guardrail system, or, uses a ladder or similar device, to increase their height or reach and by doing so negates the protection provided by the guardrail.

Safety Note

The steering-arm spindles of any of the following scissor lifts owned or rented by Dalhousie must be inspected to ensure that there are no cracks in the spindle root radius:

- Marklift J25 EP
- Terex TS30; and,
- TSM30

To conduct the inspections, remove the steering arms from the machine and use the magnetic particle technique or other effective non-destructive testing method. The magnetic particle technique enables cracks to be distinguished from other markings on the spindle.

Steering arms with cracks in the spindle must be replaced with manufacturer approved parts when ever possible, or, if no replacement is available with a suitable part that has been designed by a professional engineer.