

 <b>DALHOUSIE UNIVERSITY</b> <i>Inspiring Minds</i>  <b>Safe Work Instructions for Operating Scissor Lifts</b>	<b>Policy Sponsor:</b>  Assistant Vice President Facilities Management	<b>Approval Date:</b>  May 2015
	<b>Responsible Unit:</b>  Trade Services	<b>Revisions:</b>  January 2018

<b>Service / Shop</b>  This safe job procedure applies all shops or trades that use scaffolding.	
<b>Known Hazards</b> <ul style="list-style-type: none"> <li>• Falling objects</li> <li>• No, or, improper supervision</li> <li>• Employees falling</li> <li>• Not using required safety parts and accessories.</li> <li>• Scissor lift tipping over</li> <li>• Exceeding load restrictions</li> <li>• Contact with electrical wires.</li> <li>• Unstable footings, rough surfaces</li> <li>• Improperly installed / assembled</li> <li>• Irresponsible behavior or actions</li> <li>• Scaffold tilting over and collapsing.</li> <li>• Falling from scaffolding</li> <li>• Poor training in proper use of scissor lift.</li> </ul>	<b>Job Specific Training Requirements</b> <ul style="list-style-type: none"> <li>• Proper training in the use of a scissor lift.</li> <li>• Fall Protection</li> <li>• Proper training in the use of all required PPE</li> <li>• Proper training in the use of all required tools and equipments.</li> </ul>
<b>Applicable Regulations / Standards / Procedures</b> <ul style="list-style-type: none"> <li>• Nova Scotia Fall Protection and Scaffolding Regulations (Under Review)</li> <li>• Safe Job Procedures for tools and equipment that are to be used.</li> </ul> <p>The following are regulations that are to be referenced when assembling or dismantling scaffolds and there is a risk of falling exists:</p> <ul style="list-style-type: none"> <li>• CSA Standard Z259.1-1995 "Fall Arresting Safety Belts and Lanyards for the Construction and Mining Industries"</li> <li>• Z259.3-M1978, "Lineman's Body Belt and Lineman's Safety Strap"</li> <li>• CSA Standard Z259.10-M90, "Full Body Harness"</li> <li>• CSA Standard Z259.11-M92, "Safety Belts and Lanyards"</li> <li>• CSA Standard Z259.2-M1979, "Fall Arresting Devices, Personnel Lowering Devices and Life Lines"</li> </ul>	

## 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 AND ACTIVITIES

- Only employees that have received appropriate training from a competent person may operate a scissor lift.
- Operators should review the operator's user manual on a regular basis or prior to use if a long period of time has elapsed since they last operated the equipment.
- Perform a pre-use check of the equipment using the Facilities Management Scissor Lift Inspection Checklist.
- Scissor lift operators should have their practical skills evaluated every three months.
- Before using the scissor lift do a visual assessment of the work area looking for, but not limited to, the following hazards; holes, drop offs, unstable surfaces, slopes, debris, ditches, bumps, soft soil, floor level and overhead obstructions / clearances, power lines, wind and weather conditions and any other potentially unsafe conditions.
- Do not operate the lift on or near any of the above type of hazardous conditions.
- Depending on the nature of the workplace and the type of work being performed, it may be necessary to include additional to the above list of hazards.
- Clear all debris, snow, ice, etc. off work platform before using the scissor lift.
- Make sure the batteries are fully charged.
- Ensure that the scissor lift tilt sensors are fully functioning.
- Do Not use the lift if the tilt sensors are not functioning properly.
- Ensure that scissor lift is maintained in accordance with the manufacturer's requirements.
- Ensure all required personal protective equipment is available?
- 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.

- Do Not use this equipment if the platform, controls, electrical connections or any other parts are not working properly.

## **START AND OPERATION**

- As lift operator you must ensure that all persons who will be on the lift platform have been familiarized with the safe work instructions and safe work practices for this equipment.
- Follow all manufacturer safety rules at all times.
- Ensure anyone on the work platform is wearing the required personal protective equipment before starting to work.
- Do Not use the lift for anything other than its intended purpose.
- Once work begins ensure that no one is allowed to enter an area marked with yellow tape with out the lift operator's permission.
- Ensure that no one enters an area marked with red danger tape unless all activity is halted and the lift operator has given their permission.
- Before working near an overhead hoist travel way, the overhead hoist must be locked out and if you will be working near the Orange "duct-o-bars" for the overhead crane the energy source for the crane must be de-energized and locked out. A qualified electrician must confirm the crane is in a zero energy state.
- Disconnect battery-charging system from the power source.
- Follow the manufacturer's recommended start-up, operation and shut-down instructions for the type of scissor lift being used.
- Ensure the brakes are set before raising the lift.
- Ensure that the guardrails are installed and are in place and that the load being placed on the lift is within the rated capacity of the lift.
- Do Not stand on guardrails or use a ladder to try and extend your reach.
- Do not carry objects larger than the platform.
- Never exceed the load capacity of the platform.
- Always ensure that all wheels are properly positioned and balanced on a solid base.
- Do Not raise the platform when on a slope, drive onto a slope when the platform is raised or raise the platform on uneven or soft surfaces.
- If so equipped only use high range for travel on level, clear surfaces and low range for travel 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.

#### **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.