
Scissor Lift Annual Certification – Safe Operation & Inspection Protocol

1.0 Objective & Intent

This SOP defines the mandatory annual certification procedure for all scissor lifts used within the cabinet and millwork manufacturing facility. The primary objective is to verify the structural integrity, mechanical function, and safety systems of each scissor lift to prevent catastrophic failure, tip-over, or fall-from-height incidents. Compliance with WorkSafeBC Part 13 (Mobile Equipment) and Part 11 (Fall Protection) is mandatory.

Uncertified or improperly maintained scissor lifts pose serious risks including platform collapse, uncontrolled descent, and crushing injuries. This procedure ensures that every unit meets manufacturer specifications and regulatory standards before being placed back into service.

2.0 Operational Scope

This procedure applies to all scissor lifts (electric, diesel, and rough-terrain models) owned or leased by the company and used in the cabinet and millwork production facility, warehouse, and on-site installation locations. It covers all maintenance personnel, certified inspectors, and operators involved in the annual certification process.

Excluded from this SOP are boom lifts, personnel lifts, and forklifts, which have separate certification procedures. This SOP does not replace daily pre-use inspections; it is an additional annual requirement.

3.0 Hazard Identification & Mandatory PPE

- Crush/Pinch Points: Scissor arms, pivot points, and platform edges during raising/lowering.
- Fall from Height: Unstable platform, missing guardrails, or improper use of fall arrest.
- Tip-Over: Uneven ground, overloading, or wind loads.
- Electrical Shock: Contact with overhead power lines or damaged wiring.
- Hydraulic Fluid Injection: Leaks in high-pressure hoses or fittings.
- CSA-Approved Hard Hat (Class E or G) – required when working under or near the raised platform.
- CSA-Approved Steel Toed Boots (Grade 1) – required at all times.
- Safety Glasses (Z87.1) – required during inspection and testing.
- High-Visibility Vest – required in active traffic areas.
- Full-Body Harness with Lanyard (if platform guardrails are removed or compromised during inspection).

4.0 Required Safety Equipment & Tools

- Lockout/Tagout (LOTO) Kit with personal lock, hasp, and danger tag.
- Manufacturer's service manual and annual inspection checklist.
- Calibrated load test weights (or certified load cell) equal to 125% of rated platform capacity.
- Torque wrench (calibrated within last 12 months).
- Multimeter (CAT III rated) for electrical system checks.
- Hydraulic pressure gauge (0-5000 psi range).
- Feeler gauges and straightedge for platform deck flatness check.

- Spill containment pads and absorbent material for hydraulic fluid.
- First aid kit (Type 2 minimum).
- Fire extinguisher (ABC rated, 5 lb minimum).

5.0 Step-by-Step Safety Procedure

1. Notify all affected personnel (operators, supervisors, maintenance) that the scissor lift is out of service for annual certification. Post a visible out-of-service tag on the control panel and remove the key from the ignition.
2. Perform a complete lockout/tagout on the scissor lift. Isolate the battery disconnect switch (or engine ignition for diesel units) and apply a personal lock and danger tag. Verify zero energy state by attempting to raise the platform using the controls.
3. Conduct a thorough visual inspection of the scissor lift structure. Check for cracks, deformation, corrosion, or weld failures on the platform, scissor arms, base frame, and guardrails. Use a straightedge to verify platform deck flatness within manufacturer tolerance.
4. Inspect all hydraulic components: hoses, fittings, cylinders, and the reservoir. Look for leaks, abrasions, or bulges. Check hydraulic fluid level and condition. Replace any damaged hoses or fittings before proceeding.
5. Inspect the electrical system (battery, wiring, connectors, and control panel). Use a multimeter to verify battery voltage and check for loose or corroded connections. Test all emergency stop buttons and limit switches for proper function.
6. Remove the lockout/tagout and perform a no-load functional test. Raise and lower the platform through its full range of motion at least three times. Listen for unusual noises, check for smooth operation, and verify that the platform stops immediately when the control is released.
7. Perform a load test using calibrated weights equal to 125% of the rated platform capacity. Place the weights evenly on the platform. Raise the platform to maximum height and hold for five minutes. Monitor for hydraulic leaks, structural deflection, and drift. Lower slowly and remove weights.
8. Test all safety devices: tilt alarm, overload sensor, descent alarm, and emergency lowering system. Verify that the tilt alarm activates when the platform is tilted beyond manufacturer specification. Test the emergency lowering valve to ensure manual descent is possible.
9. Complete the annual inspection checklist and certification decal. Record all findings, including serial number, date, inspector name, and any repairs performed. Affix a new certification decal to the platform control panel with the next due date.
10. Remove all test equipment, clean up any spills, and return the scissor lift to service. Notify the supervisor that the unit is certified and ready for use. File the completed inspection report in the equipment maintenance log for a minimum of three years.

Regulatory Disclaimer: This document is a generic safety template provided for educational and informational purposes only. It does not constitute professional engineering, legal, or regulatory compliance advice. The end-user assumes all liability for validating all safety protocols against specific machinery manufacturer manuals and local occupational health and safety regulations (e.g., WorkSafeBC, CSA standards) before deployment.