
Scissor Lift / Aerial Work Platform Pre-Operation Inspection

1.0 Objective & Intent

The objective of this SOP is to establish a mandatory pre-operation inspection procedure for all scissor lifts and aerial work platforms (AWPs) used at this facility. This procedure ensures that equipment is in safe working condition before use, reducing the risk of falls, tip-overs, mechanical failure, and electrocution. Compliance with WorkSafeBC Part 13 (Lifting Equipment) and Part 11 (Fall Protection) is required.

Failure to perform a documented pre-operation inspection is a violation of company safety policy and WorkSafeBC regulations. Any defects found during inspection must be reported immediately, and the equipment must be taken out of service until repaired.

2.0 Operational Scope

This procedure applies to all maintenance, production, and warehouse personnel who operate any scissor lift, boom lift, or aerial work platform (including electric, diesel, and rough-terrain models) within the facility or on job sites under company control. It covers all pre-shift and pre-use inspections required before the first use of the day or after any equipment changeover.

This SOP does not cover the operation of the lift itself, nor does it replace the manufacturer's operator manual. Operators must also be trained and certified on the specific model they are using.

3.0 Hazard Identification & Mandatory PPE

- Tip-Over Hazard: Unstable ground, overloading, or improper outrigger deployment can cause the platform to tip.
- Fall Hazard: Unauthorized access to elevated platform without proper guardrails or harness tie-off.
- Crush / Pinch Points: Scissor arms, pivot points, and platform edges during raising/lowering.
- Electrocution: Contact with overhead power lines if platform is not kept at safe distance.
- Entanglement: Loose clothing or hair caught in moving chains, cables, or hydraulic lines.
- CSA-Approved Steel Toed Boots (with slip-resistant sole)
- CSA-Approved Hard Hat (with chin strap if working at height)
- High-Visibility Safety Vest (Class 2 or 3 as per site requirements)
- Safety Glasses (with side shields) or Full Face Shield if near hydraulic fluids
- Full-Body Harness with Lanyard (if platform height exceeds 3m or as per manufacturer instructions)
- Cut-Resistant Gloves (for handling inspection tools or sharp edges)

4.0 Required Safety Equipment & Tools

- Manufacturer's Operator Manual (must be present in the weatherproof compartment on the machine)
- Pre-Operation Inspection Checklist (company-approved form or digital version on SafeDesk)
- Lockout/Tagout (LOTO) Kit with personal lock and hasp (for maintenance or repair scenarios)
- Flashlight or headlamp (for inspecting undercarriage and hydraulic lines in low light)

- Tire pressure gauge (for rough-terrain models with pneumatic tires)
- Spill kit (absorbent pads, gloves, disposal bags) for hydraulic fluid leaks
- Fire extinguisher (ABC-rated, minimum 5 lb, mounted on the platform or nearby)
- Barricade tape or cones (to isolate inspection area from pedestrian traffic)

5.0 Step-by-Step Safety Procedure

1. Verify operator training and certification: Confirm that the operator has valid, current training for the specific model of scissor lift or AWP being used. Untrained personnel are prohibited from performing the inspection or operating the equipment.
2. Park the machine on a level, stable surface away from overhead hazards (power lines, sprinklers, roof edges). Engage the parking brake and place wheel chocks on both sides of the wheels if on a slope.
3. Perform a visual walk-around inspection of the entire machine. Check for visible damage, cracks, bent components, missing guards, loose bolts, and signs of hydraulic fluid or fuel leaks. Pay special attention to scissor arms, pivot pins, welds, and the platform deck.
4. Inspect all safety decals and warning labels. Ensure that the load capacity chart, operating instructions, and emergency procedures decals are present, legible, and securely attached. Report any missing or damaged decals immediately.
5. Check the condition of all tires and wheels (if applicable). For solid tires, look for cuts, chunks missing, or excessive wear. For pneumatic tires, verify proper inflation pressure per manufacturer specifications using a calibrated gauge.
6. Inspect the guardrail system and entry gate. Ensure that guardrails are secure, free of deformation, and that the gate self-closes and latches properly. Check that the toe kick plate is present and not bent or missing.
7. Verify the operation of all controls and safety devices. Start the engine (or turn on battery power) and test the lift/lower function, drive controls, steering, horn, emergency stop button, and any platform tilt or overload indicators. Listen for unusual noises or vibrations.
8. Test the emergency descent system (manual or auxiliary power). Lower the platform using the emergency controls to ensure they function correctly. If the machine has an emergency stop, press it and confirm that all power functions stop immediately.
9. Inspect the fall protection anchorage point (if equipped). Verify that the designated tie-off point is structurally sound, free of corrosion, and marked with the proper load rating. Do not use the guardrail or platform railing as an anchorage point.
10. Complete and sign the pre-operation inspection checklist. Record the machine ID, date, time, operator name, and any defects found. If any defect is identified, tag the machine out of service with a LOTO tag and notify the supervisor immediately. Do not operate the machine until repairs are completed and re-inspected.

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.