
Loading Dock Leveler Lip Extension And Restraint Maintenance

1.0 Objective & Scope

The objective of this procedure is to ensure that all loading dock leveler lip extensions and vehicle restraints are inspected, maintained, and repaired in a safe, consistent, and compliant manner. This SOP applies to all field technicians and logistics personnel responsible for dock equipment maintenance at customer sites across Canada.

The Lead Technician is responsible for executing this procedure, documenting all findings in SiteQueue, and obtaining customer sign-off upon completion. The Fleet Manager is responsible for ensuring all required tools and replacement parts are available before dispatch.

2.0 Required Equipment & Tools

- Mobile tablet with SiteQueue application installed and charged
- Personal protective equipment (PPE): hard hat, high-visibility vest, steel-toed boots, safety glasses, cut-resistant gloves
- Lockout/tagout kit with padlocks, hasps, and tags
- Hydraulic jack and jack stands (rated for dock leveler weight)
- Torque wrench (calibrated, range 0-250 ft-lbs)
- Socket set (metric and imperial, 3/8" and 1/2" drive)
- Flathead and Phillips screwdrivers
- Adjustable wrench (10" and 12")
- Pry bar (24")
- Wire brush and degreaser
- Lubricant spray (e.g., WD-40 or equivalent)
- Replacement lip extension pins, springs, and bolts (as per manufacturer specifications)
- Vehicle restraint replacement parts (hooks, sensors, cables)
- Digital camera or tablet camera for photo documentation
- Service log book and pen
- Customer sign-off form (digital in SiteQueue or paper backup)

3.0 Site Safety & Hazard Assessment

- Conduct a site-specific hazard assessment before beginning any work. Identify pinch points, overhead obstructions, and traffic flow around the dock area.
- Ensure the dock area is clear of personnel and equipment. Erect warning cones or barriers to prevent unauthorized access.
- Verify that the loading dock leveler is fully lowered and the vehicle restraint is disengaged before approaching the equipment.
- Perform lockout/tagout on the dock leveler and restraint system. Isolate all electrical and hydraulic power sources. Attach

a personal padlock and tag.

- Wear all required PPE at all times. Hard hats and high-vis vests are mandatory in active dock areas.
- Be aware of uneven surfaces, oil spills, and trip hazards. Clean up any spills immediately.
- Never work alone in a confined space or under a raised dock leveler without proper mechanical supports (jack stands).

4.0 Step-by-Step Execution Procedure

1. Arrive at the customer site and check in with the site supervisor or dock manager. Confirm the location of the equipment to be serviced and any site-specific safety rules.
2. Set up the work zone: place warning cones around the dock area, ensure adequate lighting, and confirm that no trucks are approaching or parked at the dock.
3. Perform lockout/tagout on the dock leveler and restraint system. Disconnect electrical power to the restraint control box and lock out the hydraulic power unit for the leveler. Test that the system is de-energized by attempting to activate the controls.
4. Visually inspect the dock leveler lip extension for cracks, deformation, or excessive wear. Check the lip hinge pins for play or corrosion. Document any defects with photos in SiteQueue.
5. Using a hydraulic jack and jack stands, safely raise the dock leveler to access the lip extension mechanism. Ensure the leveler is securely supported before working underneath.
6. Remove the lip extension pins and springs. Clean the hinge area with a wire brush and degreaser. Inspect the pin bores for elongation or damage. Replace any worn or damaged pins and springs with manufacturer-approved parts.
7. Reinstall the lip extension and secure it with new pins and springs. Torque all bolts to manufacturer specifications (typically 150-200 ft-lbs). Lubricate all moving parts with spray lubricant.
8. Lower the dock leveler and remove jack stands. Test the lip extension operation by cycling the leveler through a full range of motion. Ensure the lip extends and retracts smoothly without binding.
9. Inspect the vehicle restraint system: check the hook for wear, cracks, or deformation. Verify that the restraint engages and disengages properly with the ICC bar. Test the sensor alignment and indicator lights.
10. If the restraint requires adjustment, loosen the mounting bolts and reposition the unit according to the manufacturer's guidelines. Retighten bolts to the specified torque. Replace any worn cables or sensors.
11. Cycle the restraint system at least three times to confirm proper operation. Verify that the dock light or indicator system shows the correct status (red/green) for engaged/disengaged.
12. Remove lockout/tagout devices and restore power. Conduct a final operational test of both the leveler and restraint together. Ensure no unusual noises or movements occur.

5.0 Verification, Sign-off & Reporting

1. Complete a final walk-around inspection of the dock area. Confirm that all tools, parts, and debris are removed and the work zone is clean.
2. Document all maintenance activities in SiteQueue: include photos of the completed work, before/after comparisons, and any parts replaced.
3. Fill out the service log book with the date, technician name, equipment serial numbers, and a summary of work performed.
4. Present the completed work to the customer site supervisor. Walk them through the maintenance performed and answer any questions.

5. Obtain the customer's digital signature in SiteQueue to confirm acceptance of the work. If digital signature is unavailable, use a paper sign-off form and scan it into SiteQueue later.
6. Upload all completion photos and the signed form to the work order in SiteQueue. Close the ticket and notify the dispatch team.
7. If any safety issues or recurring problems were identified, escalate them to the Fleet Manager via SiteQueue's internal messaging system for follow-up.

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