

# LEVEL-LIFT

## LOADWARRIOR® SERIES

### LIFT PRODUCTS SPECIFICATIONS

DOCK LIFT & DOCK LEVELER COMBINATION



### Design Highlights

- 50,000 lbs. Capacity Leveler (per ANSI MH14.1-1987)
- 12,000 lbs. Capacity Lift (8 ft. long units)
- 20,000 lbs. Capacity Lift (10 & 12 ft. long units)
- 18" Lip Standard
- LED Light Communication Package
- Remote 7.5 HP Independent Lift Motor & Hydraulic System
- PLC Operation
- 1 HP Independent Leveler Motor & Hydraulic System
- Full Feature NEMA 12 Control Panel with Mushroom Style Stop Button
- Remote NEMA 4X Pendant Push Button Hand Control
- Interior Warning Light & Audible Alarm Indicate Dock Lift Is Not In Stored Position
- Safety Velocity Fuse on Leveler and Lift
- Guard Rail Package
- Rear Hinge Blocks
- Protective Roller Curtain on Front
- Side and Rear Weatherseal
- Grease Fittings

### Project Information

Job Name \_\_\_\_\_  
Address \_\_\_\_\_  
General Contractor \_\_\_\_\_  
Distributor \_\_\_\_\_  
Model \_\_\_\_\_ Quantity \_\_\_\_\_ Voltage/Phase \_\_\_\_\_

### Certified For Construction

By \_\_\_\_\_  
Company \_\_\_\_\_  
Address \_\_\_\_\_  
Date \_\_\_\_\_

### Available Options

- 20" Lip
- Safety Barrier Lip
- Biometric Switch Thumb Reader
- Internal Lift Powerpack with Flood Switch
- NEMA 4 Control Panel
- Other \_\_\_\_\_

### Accessories

- Manual Safety Gate
- Powered Safety Gate
- Master Control Panel
- Combination Control Panel
- Wheel Restraint \_\_\_\_\_  
(Surface or In-Ground Mounted)
- Other \_\_\_\_\_



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### LIFT PRODUCTS SPECIFICATIONS

DOCK LIFT & DOCK LEVELER COMBINATION

**1. General:** SERCO's Level-Lift fully hydraulic dock leveler and lift system can service virtually any size truck and provide ground level access from dock height at a single dock position. The lip extends nominally 13" beyond the face of 4" bumpers. Operating range is from ground level to 59" above ground regardless of dock height.

**2. Construction, Platform Assembly:** The platform is constructed of 3/8" high tensile steel safety tread plate. The lip is a 3/4" thick high tensile steel safety tread plate. The hinge spools are 2-3/8" O.D. by 1/2" wall. The 4 scissor legs are laser cut from high tensile steel plate.

**3. Hydraulic Power:** Lift power pack is an electric hydraulic pump and valve assembly (can be remote mounted).

**4. Electrical:** A 1 h.p. motor powers the leveler and a 7.5 h.p. motor powers the lift. Standard motor voltages available are 208/230/460/600V three phase. Electrical system has built in motor overload protection as standard. (See recommended wire size reference guide for installation).

**5. Hydraulic:** The leveler uses a conventional 1 h.p. dock leveler hydraulic system totally separate from the lift hydraulic system. The leveler has a platform cylinder and a lip cylinder. The lift uses a 7.5 h.p. hydraulic system. The lift has two lift cylinders, two mode-change cylinders, and two lock pin cylinders. The leveler cylinder and both lift cylinders have "velocity fuses" safety valves to prevent collapse in the event of hydraulic component failures.

**6. Safety Equipment:** Velocity fuses limit leveler platform free-fall and prevent scissor lift collapse. Inside and outside LED light communication package, full range toe guards, leveler maintenance support and scissor safety stops are standard. An interior warning strobe light indicates when the lift is not at dock level and an audible alarm sounds when the lift is left below dock level after 10 minutes.

**7. Control Panel:** NEMA 12, automatic motor starter, thermal overload, control circuit breakers with reset capability. U.L. approved. All leveler and lift functions are controlled by a solid state programmable controller (PLC). The PLC has advanced "real time" diagnostic capability. Separate control buttons shall be furnished for lip extend, raise, and stop button as standard. A remote NEMA 4X hand control is furnished with the control panel for lift operation.

**8. Product Finish:** Primed, followed by an enamel grey paint finish.

**9. System Stop Button:** Stops the Level-Lift instantly when depressed at any time to help prevent an accident. The dock attendant does not have to continuously hold the "STOP" button to maintain the Level Lift in a "STOP" position.

**10. Leveler Quick Cycle Lip Extend:** Properly sized cylinders and "LIP EXTEND" button insure quickest leveler cycle time by not having to fully raise the leveler before extending the lip onto the truck bed.

**11. Leveler Below Dock Control (End Loading):** Push button control feature extends leveler lip beyond lip supports to handle below dock end loads.

**12. Out of Level Compensation:** Leveler platform is designed to compensate for canted truck beds up to 4".

**13. Float Compensation:** Allows for vertical carrier deflection when lip is in contact with truck bed.

**14. Operation:** SERCO's Level-Lift shall be supplied completely assembled with platform, lip, electrical power pack assembly, including motor, pump and valve assembly. "Level Lift" unit to have complete hydraulic control of all functions. Leveler and lift to be operated by independent hydraulic cylinders controlled by a remote push button station. To operate in leveler mode, the dock attendant presses the leveler mode push button and presses the "RAISE" button. The leveler raises and the lip extends hydraulically. When button is released, leveler descends under gravity to truck bed and floats with truck movement. Lip can be retracted with truck in position by pressing the raise button and restoring lip. The "LIP EXTEND" button will extend the lip at any point in the leveler cycle. Pushing the "STOP" button allows the attendant to stop the leveler immediately when necessary. Pulling out the button allows the leveler to operate again. Standard below dock level control allows for below dock end loading with all control as a push button function. To operate in lift mode, the dock attendant presses the Lift Mode Push Button. He then pushes the lift "RAISE" or "LOWER" control button to position the platform to the desired working height. The "LIP EXTEND" button allows the lip to be extended and placed on a truck when in lift mode. The lift can operate from ground level to 59" above ground regardless of dock height.

**15. Installation:** Unit ships completely assembled, and ready for installation in pre-formed concrete pit. Pit construction to be in accordance with certified SERCO pit detail drawings. Unit includes Plug and Play electrical connections to panel for raising unit during installation. Control panel is furnished for remote mounting and electrically interconnected by others. Contact SERCO for current cost and nearest distributor.

**16. Limited Warranty:** Limited parts & labor warranty on all components under normal use for a 1-year "Base Warranty Period" beginning on the completion of installation or the sixtieth (60th) day after shipment, whichever is earlier. Additional limited 4-year parts only warranty on hydraulic power unit and cylinders. Limited prorated 10-year structural warranty available upon engineering approval of written application.

**17. Bumpers:** Unit to include two model VB420-11 (4" X 20" X 11") laminated bumpers.

#### NOMINAL DIMENSIONS

MODEL	WIDTH	LENGTH
LL6x8	6'	8'
LL6.5x8	6'6"	8'
LL7x8	7'	8'
LL6x10	6'	10'
LL6.5x10	6'6"	10'
LL7x10	7'	10'
LL6x12	6'	12'
LL6.5x12	6'6"	12'
LL7x12	7'	12'

