Air-Powered Dock Levelers

The Serco Air Bag Dock Leveler combines advanced air lifting technology with simple operation and a clean, efficient design to deliver maximum operational efficiency and low cost of ownership.
THE SERCO AIR BAG DOCK LEVELER:
Push-Button Convenience, Proven Performance.
Efficient Operation. All At An Affordable Price.

LOW-PRESSURE AIR BAG TECHNOLOGY FOR TOUGH, RELIABLE PERFORMANCE.
The Serco Air Bag Dock Leveler utilizes the same concepts and the same laws of physics that have made low-pressure air bags a tough, proven lifting technology for over 50 years.

NO SPRINGS. NO HOLD-DOWN. NO WORRIES.
The Air Bag Dock Leveler is activated by a simple push-button located on the interior loading dock wall. Push and hold and the two-stage, single speed fan inflates the air bag to raise the deck. Releasing the button allows the deck to descend to the trailer, reversing the air direction back through the self-cleaning fan motor.

HEAVY-DUTY SERCO STRENGTH. STANDARD ON ALL MODELS.
The leveler deck and lip are manufactured with a heavy-duty, high-tensile steel (depending on selected capacity), with a unique beam design that can withstand repeated impacts of fully-loaded forklifts. The torsionally-capable beam design provides the strength required for fully-loaded forklifts and enables the deck to conform to out-of-level trailers.

THE CLEAN FRAME®: EASY ACCESS BY DESIGN.
Serco’s unique CLEAN FRAME® design provides full structural integrity without conventional front frame members. The CLEAN FRAME® design allows wide-open access to the leveler pit for easy clean-up of spills, trash removal and routine maintenance.
The Serco Air Bag Dock Leveler:


Efficient operation. All at an affordable price.

Simple, easy push-button operation.
Push to raise the deck and release to lower, it couldn’t be easier than that.

5-Year Guarantee
Serco guarantees the Air Bag Dock Leveler will stand up to the toughest conditions. To prove it, we offer a 5-year unlimited parts & labor guarantee on the air bag, seals, fittings, gaskets, hoses and motor.

There’s no need for special electrical services.
Our 10-amp fan with two-stage, single-speed, self-cleaning, filtered UL-approved fan motor uses the same 110-volt power that operates your dock lights.

Low-Pressure Air Bag Technology
For tough, reliable performance.
The Serco Air Bag Dock Leveler utilizes the same concepts and the same laws of physics that have made low-pressure air bags a tough, proven lifting technology for over 50 years.

No Springs. No Hold-Down. No Worry.
The Air Bag Dock Leveler is activated by a simple push-button located on the interior loading dock wall. Push and hold and the two-stage, single-speed fan inflates the air bag to raise the deck. Releasing the button allows the deck to descend to the trailer, reversing the air direction back through the self-cleaning fan motor.

Heavy-Duty Serco Strength.
Standard on all Models.
The leveler deck and lip are manufactured with a heavy-duty, high-tensile steel (depending on selected capacity), with a unique beam design that can withstand repeated impacts of fully-loaded forklifts. The torsionally-capable beam design provides the strength required for fully-loaded forklifts and enables the deck to conform to out-of-level trailers.

The Clean Frame®
Easy Access by Design.
Serco’s unique CLEAN FRAME® design provides full structural integrity without conventional front frame members. The CLEAN FRAME® design allows wide-open access to the leveler pit for easy clean-up of spills, trash removal and routine maintenance.

1. Structural beams are fully welded to the front header assembly and are designed to conform to out-of-level trucks. Patented split-box beam model shown.
2. The rugged Hydra-Cam-Plus lip extension allows the lip to extend smoothly at the top of the cycle.
3. Full-range telescopic toe guards.
4. Structural Safety legs provide support at and below-dock loading.
5. Integral maintenance strut for deck support.
6. Optional Reflex™ Anti-Stump-Out System with patented sensor roller rides along a reinforced cam surface, providing fluid free-float motion while also providing a measure of free-fall protection in the event of premature trailer separation.
7. Polyvinylchloride-coated polyester fiber air bag lifting mechanism.
8. Exclusive SafeTFrame™ provides superior structural support and level interface with warehouse floor.
9. Pan can be removed for additional easy pit clean-out.
10. Integral lip support latch.

CLEAN FRAME® pit design for easy clean-up, maintenance and inspection.

Nite-Locks prevent unauthorized entry.
1  Full-range telescopic toe guards.
2  Integral maintenance strut for deck support.
3  Structural Safety legs provide support at and below-dock loading.
4  Optional Reflex™ Anti-Stump-Out System with patented sensor roller rides along a reinforced cam surface, providing fluid free-float motion while also providing a measure of free-fall protection in the event of premature trailer separation.
5  Exclusive SafeTFrame™ provides superior structural support and level interface with warehouse floor.
6  Pan can be removed for additional easy pit clean-out.
7  Polyvinylchloride-coated polyester fiber air bag lifting mechanism.
8  Integral lip support latch.
9  High volume, low-pressure air bag lifting mechanism.
10  CLEAN FRAME® pit design for easy clean-up, maintenance and inspection.
11  Nite-locks prevent unauthorized entry.
12  Optional 18” or 20” lip for longer lip purchase.
13  Lip extension automatically extends lip at full height.

Serco guarantees the Air Bag Dock Leveler will stand up to the toughest conditions. To prove it, we offer a 5-Year Unlimited Parts & Labor Guarantee on the air bag, seals, fittings, gaskets, hoses and motor.
FOR DECADES all dock levelers installed in a concrete pit have required an installer to place and weld steel shim under the rear frame in order to level the device and provide long-term support. This conventional process can lead to install errors as installers are often working under the dock leveler in a cramped environment and may not use the correct size shim and/or weld the shim properly. The result... the dock leveler can suffer structural fatigue which may lead to expensive repair or replacement.

SAFETFRAME ADVANTAGES:

- Greater structural strength & durability
- Eliminates installation issues common with conventional dock levelers
- Ensures level transition from warehouse floor to dock leveler
- Eliminates premature structural fatigue due to improperly shimmed/installed dock leveler

SERCO AB DOCK LEVELERS SAVE MONEY:

<table>
<thead>
<tr>
<th>MECHANICAL DOCK LEVELER COSTS</th>
<th>SERCO AIR BAG DOCK LEVELER COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimated 5-Year Maintenance Cost:</strong> $900.00</td>
<td><strong>Estimated 5-Year Maintenance Cost:</strong> $200.00</td>
</tr>
<tr>
<td>- Lubrication of over 20 points every 90 days. Adjust activation springs and lip extension as necessary.</td>
<td>- Light oil on four areas every 90 days. No adjustments necessary.</td>
</tr>
<tr>
<td>- Time Required: 45-60 minutes per unit every 90 days (Based on 3 hours per year @ $60/hr.)</td>
<td>- Time Required: 10 min. per unit every 90 days (Based on 40 minutes per year @ $60/hr.)</td>
</tr>
<tr>
<td><strong>Estimated 5 Year Replacement Parts Cost:</strong> $953.00</td>
<td><strong>Estimated 5 Year Replacement Parts Cost:</strong> $0.00</td>
</tr>
<tr>
<td>(includes 1.5 hours labor per service call (4 total) @ $60/hr.)</td>
<td>(includes 1.5 hours labor per service call (4 total) @ $60/hr.)</td>
</tr>
<tr>
<td><strong>Total 5-Year Cost of Ownership:</strong> $1,853.00</td>
<td><strong>Total 5-Year Cost of Ownership:</strong> $200.00</td>
</tr>
<tr>
<td>(Costs shown based on average historical product repair and service data by region)</td>
<td>(Costs shown based on average historical product repair and service data by region)</td>
</tr>
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**DURABILITY: IT'S IN THE BAG.**

**THE HEART OF THE SERCO AIR BAG DOCK LEVELER** — the air bag — is made of rugged, reinforced coated polyester fibers. The bags are resistant to many chemicals, gasoline, oil spills, cuts, scrapes and even punctures. To ensure operational efficiency even in the toughest conditions (like yours), we put Serco Air Bag lifting technology through extensive testing ...

![Image of Serco Air Bag Dock Levelers]

**PUNCTURE TEST**

Even with numerous puncture holes, the Serco Air Bag continued to operate. The holes did not “Star,” tear or rip and were easily repaired with an inexpensive vinyl patch, returning the leveler to full operating efficiency.

**CYCLE TESTING**

Since their introduction in 1994, air powered dock levelers have completed an estimated 47 million cycles with an impressive record of only 0.4% fan/motor claims and 0.1% air bag claims. That’s 5.9 million days of operation. In fact, the Serco Air Bag has been tested the equivalent of 20 years of service at a standard dock position (that’s over 200,000 cycles) and still worked without permanent damage that impeded the operation of the leveler. Compare air-powered levelers with mechanicals for operational efficiency and cost of ownership and you’ll see why they are fast becoming a more popular addition to docks around the world.

**5-YEAR GUARANTEE**

The result of these extensive tests is your assurance that the Serco Air Bag Dock Leveler will stand up to the toughest conditions. To prove it, we offer a **5-Year Unlimited Parts & Labor Guarantee on the air bag, seals, fittings, gaskets, hoses and motor.**

**ENVIRONMENTAL TEST**

To prove the Serco Air Bag’s durability, 100 units were installed in a variety of extreme environments for a full year. Extreme heat, extreme cold, caustic chemicals, high altitude and high traffic volume environments didn’t affect the air bag performance in any way.

**INTERLOCK SERCO PRODUCTS FOR THE ULTIMATE IN PERFORMANCE AND SAFETY.**

The Serco Air Bag Dock Leveler can be interlocked with other dock devices through the Serco Master Control Panel™ and programmed to act sequentially for maximum dock efficiency and safety.

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A continuing research program is in effect at Serco. We reserve the right to incorporate product improvement at any time without prior notice.
**Available Options**

- Factory Installed Brush Weatherseal
- Factory Installed Neoprene Weatherseal
- 18" Lip
- 20" Lip
- Lip Taper _________ (specify)
- Special Paint Color
- Interlock Capable Control Panel (Non-Metallic)
- 24" Pit Conversion
- Spray Foam Insulated Deck
- Structural Steel Safety Legs with Reflex™ Anti-Stump Out System (Shown)
- Box Option: For installation without pre-formed concrete pits, dock leveler supplied with integral pre-formed steel box for pour-in-place construction. Leveler shall be in an enclosed steel box structure complete with its own six-piece, welded structural curb angles and concrete anchors. The leveler is to be concreted in place as the floor is poured.
- Other __________________________________________________________

**Accessories**

- PitBull® SAFETY-LOC® Restraint____________________
- SLP Recessed Restraint
- Universal Truck-Chock™ Wheel Restraint
- SAFETY-CHOCK® Wheel Restraint
- ALS Light Communication System
- MLS Light Communication System
- Master Control Panel™
- Combination Control Panel

**Bumper Options**

- B410-14
- B610-14
- B610-14F
- VB420-11F
- VB420-11 Steel Faced
- Other ______________________________

**Certified For Construction**

By __________________________________________________________

Company _____________________________________________________

Address ______________________________________________________

Date __________________________________________________________

2. Construction, Platform Assembly: Platform constructed of high tensile steel safety tread deck plate supported by high tensile steel beams fully welded to front header. “L” beam construction for 35K split box beam construction for 40K-50K capacity units. Deck to be 1/4” thick on 30K-45K capacities and 3/8” thick on 50K capacity.

3. Lip Assembly: Lip to be 7/8” thick on 30K-45K capacity units, and ¾” thick on 50K capacity units. 7' wide lip tapers to 6'-6” at leading edge (6'-0” taper optional). Lip hinge to have full width structural front header and heavy wall tubing with a minimum of 3/8” wall thickness on 35K and ½” wall thickness on 40K-50K capacity units. Hinge tubes to have gussets on 35K, 45K & 50K capacity units. Lip hinge shaft to be a minimum of 1” solid steel on 35K and 1-1/4” on 40K-50K capacity units.

4. Lip Extension: Patented HYDRA CAM™ Plus lip assist mechanism automatically extends lip at top of raising cycle.

5. Rear Subframe & Hinge: Rear structural frame consists of a welded structure constructed from 4 structural angle vertical members connecting two horizontal members. The upper rear angle has longitudinal support gussets & additional deck supports to promote structural stiffness. The hinge system consists of four ¾” thick lugs allowing 4 inches of side to side deck twist without gap.

6. SafeFrame: Adjustable shim system consisting of four independently operated leveling feet capable of 1-1/2 inches of vertical adjustment each. System eliminates the need for installer to place and weld steel shim stock under the vertical uprights providing more consistent installation thus preventing a gap or (bump) between the rear transition angle and curb angle.

7. Power Unit: Power unit is an electric motor and blower.

8. Electrical: Motor is 120V single phase. Power unit is mounted to galvanized pan subassembly (elevated off pit floor).


11. CLEAN FRAME*: Unique design allows access for easy pit clean out and routine maintenance.

12. Lip Extension: Lip will extend automatically at top of raising cycle.

13. “Nite-Lock”: Permanent “Nite-Lock” to prevent unauthorized entry beneath locked overhead door is standard.

14. Structural Center Deck Support: Standard center beam support (5” structural channel) to reinforce leveler for 3-wheel lift truck traffic is on 40K-50K capacities.

15. Toe Guard Protection: Full operating range toe guard protection is provided on the sides of the leveler.

16. Safety Legs: Structural safety legs provide emergency support should a truck depart with a load on the leveler platform. Optional Reflex design incorporates cam mechanism to limit interference from truck float.

17. Integral Maintenance Strut & Lip Support Latch: A permanently mounted, hinged, lockout capable maintenance strut and lip support latch are provided to support the lip and leveler during routine maintenance and pit cleaning.


19. Out of Level Compensation: Leveler platform on all capacities is designed to compensate for canted truck beds up to 4”, while the rear of the deck remains flush with the pit.

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

21. Operation: Serco’s “AB” Air Bag Leveler shall be supplied completely assembled with platform; lip; power unit; including motor. To operate leveler, dock attendant presses “RAISE” button, platform raises and hinged lip automatically extends. When button is released, platform descends until lip is supported by the truck bed and floats with truck movement. To restore leveler, dock attendant presses “RAISE” button and lip retracts as platform raises. Standard below-dock level operation allows for below-dock endloading with push-button control and lanyard. Working range to be 12” above-dock and 12” below-dock for 6’ and 8’ long units, 12” above-dock and 12” below-dock for 10’ long units. The lip extends a minimum of 11” beyond the face of a 4” bumper.

22. Installation: Unit shipped completely assembled and ready for installation in pre-formed concrete pit. Pit depth is 20” for 6’ and 8’ long units, 24” for 10’ long units. Pit construction to be in accordance with certified Serco pit detail drawings. Contact Serco for current cost and nearest distributor.

23. 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 4-year parts & labor warranty on lifting system (air bag, motor, hoses, gaskets, fittings, & seals). Limited prorated 10-year structural warranty available upon engineering approval of written application.

24. Bumpers: Unit to include two model B410-14F (4” Thick x 14” W x 10” H) heavy-duty bumpers.