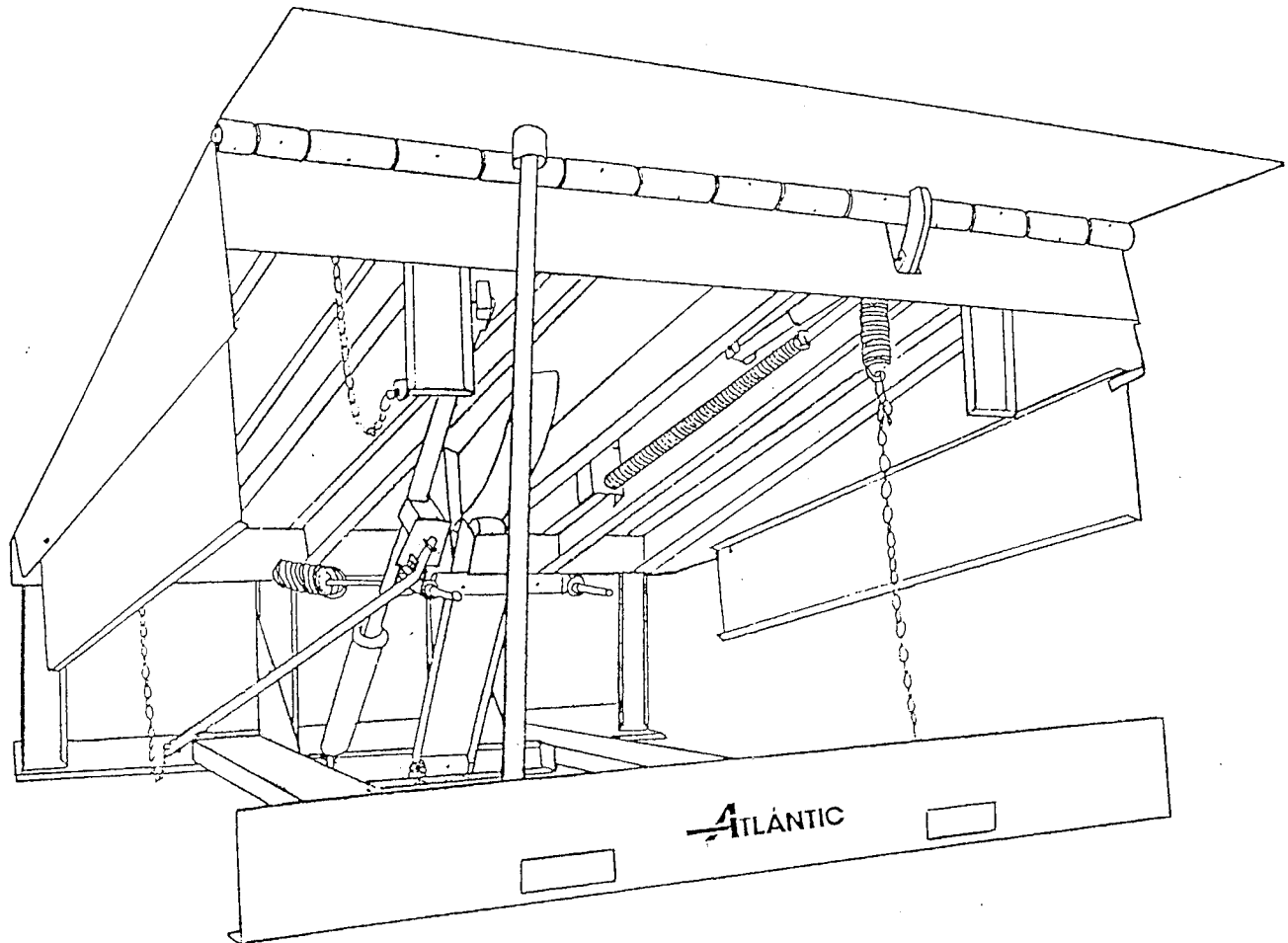


# OWNERS MANUAL



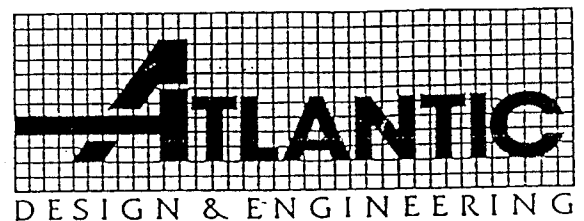
## HYDRA\*MECHANICAL DOCK LEVELER MGP - 86

Atlantic Mfg. Corp.

Box 202A

Athens, New York 12015

(518) 943-5522



*Congratulations on your selection of the Atlantic General Purpose Mechanical Dock Leveler. This product will provide satisfactory performance in most non-industrial environments where extra capacity levelers are not required. Design and performance considerations of this product will provide an efficient bridge between your loading dock and freight carrier with a limited amount of maintenance.*

*Quality of design and manufacture is a prime consideration at the Atlantic Mfg. Corp., however, even a skillfully constructed product can be installed or operated in a hazardous manner. Safety precautions are of great importance and must be observed in a by all those who install, service and use this equipment.*

*As with any mechanical equipment, Atlantic recommends you follow a simple preventive maintenance program to assure maximum performance and longest possible use. On-site maintenance personnel should follow the service instructions provided. If preferred, you can easily arrange for professional service thru your authorized Atlantic Representative. NOTE: The factory must be advised of any situation which might include warranty coverage prior to addressing such a situation.*

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# CAUTION!

BEFORE attempting to install, operate or service leveler, read the manual provided. Thoroughly understand the operation of all components. DO NOT ALLOW PERSONS UNFAMILIAR WITH THIS EQUIPMENT TO INSTALL, OPERATE OR SERVICE SAME. Be sure all persons are properly indoctrinated with information necessary to fully understand these products. Contact your authorized Atlantic representative or factory whenever problems arise or information provided is not fully understood.

**SAFETY FIRST:** Negligent work habits at the loading dock can result in personal injury and/or damage to equipment and freight. Always follow dock safety regulations. This should include the wearing of protective clothing, gloves, eyewear, foot gear and hard hat as conditions warrant.

**CAUTION:** DO NOT operate equipment while anyone is directly in front of the dock leveler.

**CAUTION:** BEFORE loading or unloading begins be certain truck wheels are chocked. Wheel chocks should be removed ONLY when clearance is provided by dock supervisor.

**CAUTION:** ALWAYS be sure dock leveler is stored at dock level after loading or unloading. Be sure operating instructions are followed.

**CAUTION:** Be sure leveler is securely braced BEFORE proceeding with any maintenance tasks.

**CAUTION:** NEVER stand on or near or touch any part of the dock leveler while a load is being placed on it. NEVER place hands, arms, feet or legs in a position where a moving load could cause injury. NEVER allow yourself or your clothing to be exposed to a situation that can cause personal harm.

**NOTICE:** Dock leveler should be inspected quarterly by qualified maintenance personnel to insure no worn or damaged part exists which could result in equipment breakdown or personal injury. Follow Preventive Maintenance instructions for essential service information.

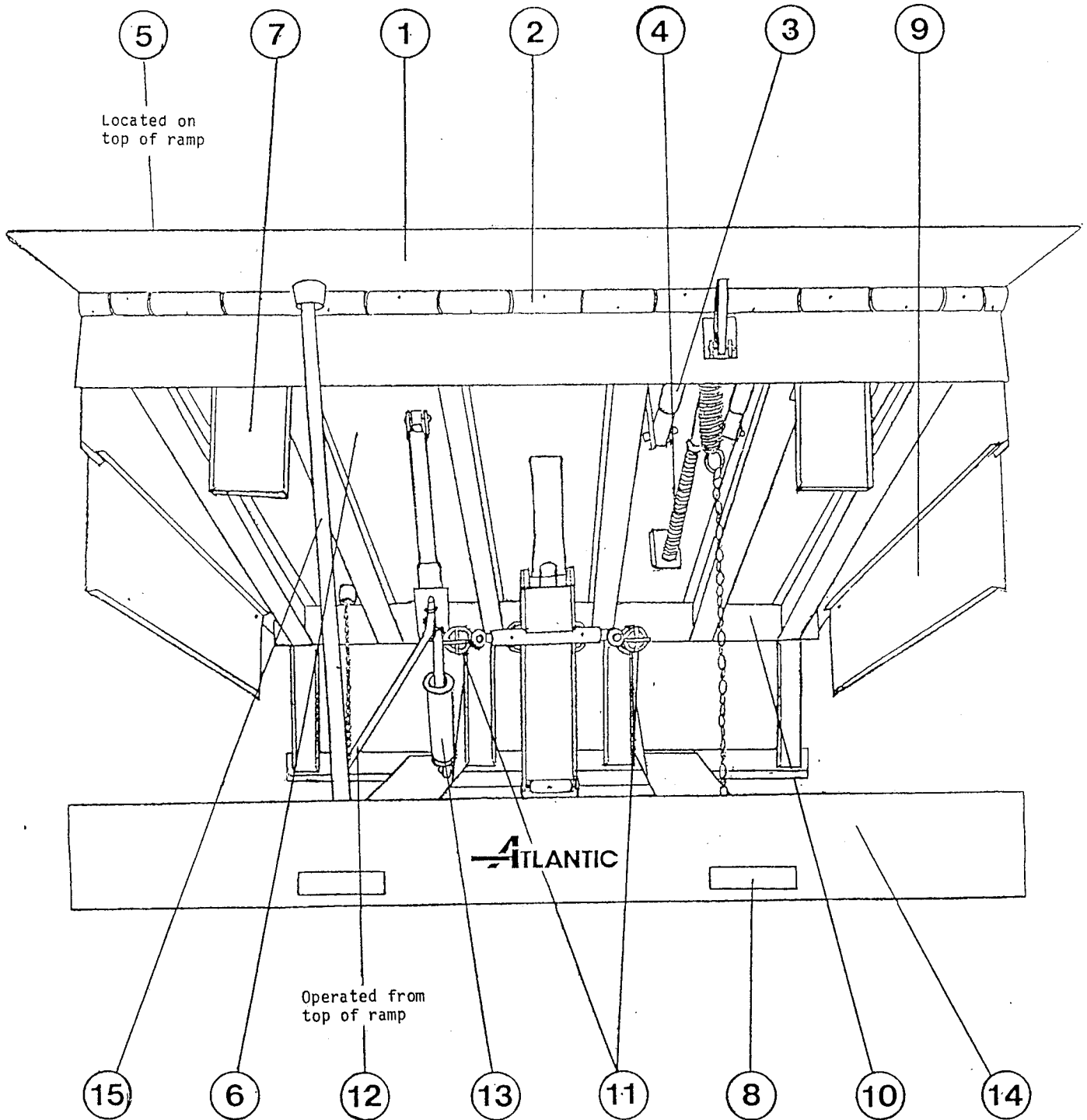
BEFORE attempting to correct any malfunction which is not understood, consult with the Atlantic Mfg. Corp.

**WARNING:** Abuse or negligent use of this product can result in personal injury and/or structural damage to the equipment.

The proper operation and use of this product is essential to assure safety at the loading dock. ATLANTIC MFG. CORP. shall not, in any event, be liable for any injuries or damages of any kind, nor loss of the use of any equipment, as a result of improper installation, misuse, abuse or improper operation of this product.

# Component Identification

1. HINGED LIP: Automatically extends after the ramp rises. Hydraulic control assures truck bed contact.
2. LIP HINGE: Seamless barrel-type hinges; connects lip to ramp section of leveler.
3. HYDRAULIC LIP CONTROL: Fully-sealed hydraulic support mechanism controls lip extension and retraction. Allows lip to remain yieldable in all positions.
4. LIP COUNTERBALANCE: Used to minimize weight of swinging lip. Lip is extended with the least amount of upward thrust.
5. BELOW DOCK RELEASE SYSTEM: Controlled by the release chain recessed at the front of the ramp; retracts cross traffic supports, allows ramp to lower to below dock positions.
6. RAMP: Welded, bridge-type construction with structural supports. Deck plate is high yield safety tread steel plate. Offers firm bridge between dock and truck.
7. DUAL SAFETY STOPS: Retractable structural steel units stop ramp from downward travel. Retracted by operator when below dock service is required.
8. FORK LIFT SLOTS: For in-transit, at-site and installation movement.
9. TOE GUARDS: Provide side protection.
10. REAR HINGE: Shelf-mounted solid steel shaft designed to provide full width support.
11. SPRING COUNTERBALANCE: Multiple spring system with individual point spring adjustment. Provides operating power for raising ramp.
12. HOLD DOWN RELEASE SYSTEM: Controlled by the release chain recessed at the rear of the ramp; disengages Hold Down mechanism, allows ramp to raise.
13. HOLD DOWN ASSEMBLY: Prevents the ramp from lifting until disengaged by the Hold Down Release System. Designed to allow ramp to follow upward, downward and canting movement of truck bed.
14. BASE FRAME: Structural steel weldment with gusseted rear uprights and hinge shelf. Offers firm support to ramp, lift mechanism and Hold Down.
15. SERVICE STRUT: Integral component to support leveler in elevated position when under ramp inspection or service is needed.



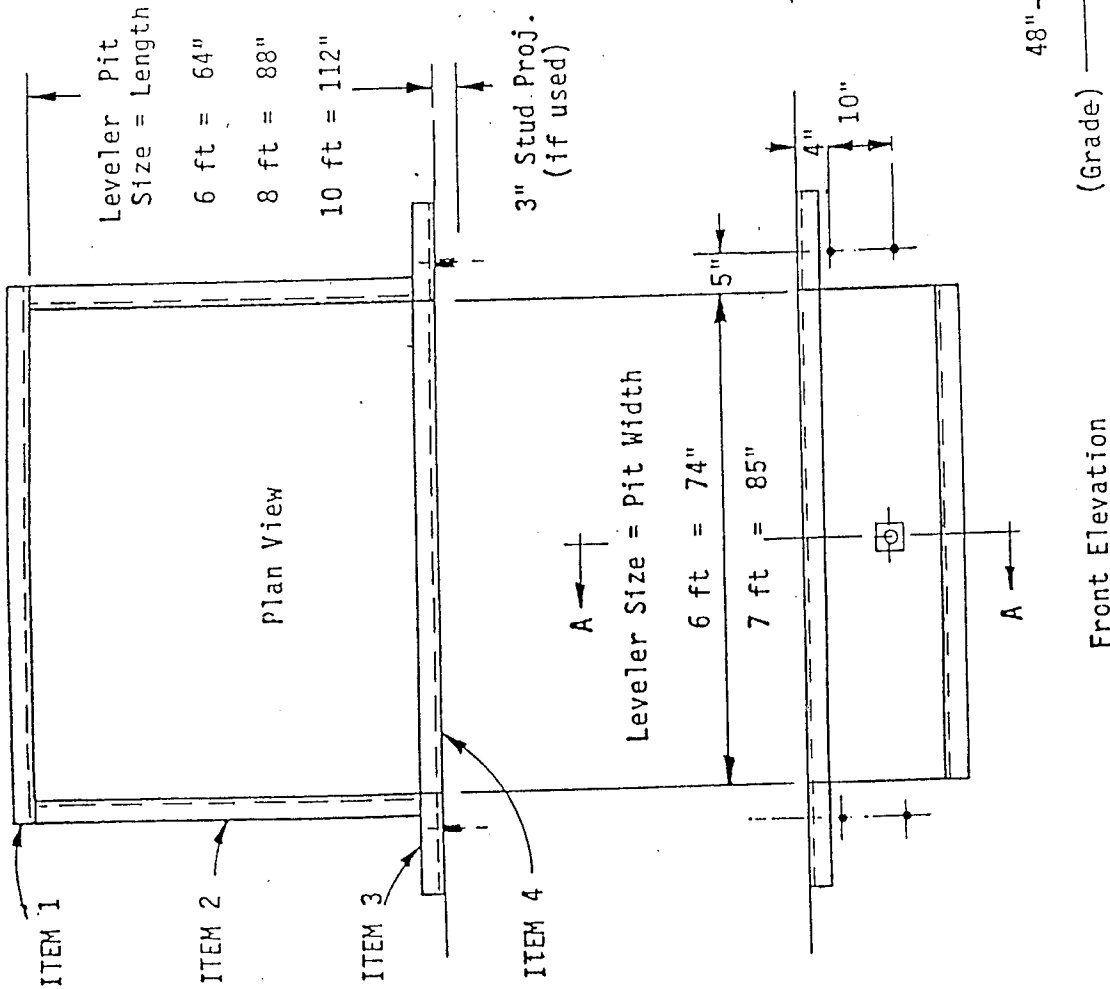
**BILL OF MATERIAL - CURB STEEL\***

**NOMINAL LEVELER SIZE**

ITEM	QTY	6X6	6X8	6X10	7X6	7X8	7X10
1	1	80	80	80	91	91	91
2	2	61	85	109	61	85	109
3	2	18	18	18	18	18	18
4	1	74	74	74	85	85	85

Dimensions common to all capacities

- \*Rec. Min. Angle Iron Size 1/4" X 3" X 3"
- ▲Rec. Min. Lgth. Connect to door jamb or pit to pit if possible



MFG. CORP.  
ALBANY  
NEW YORK

DRAWN BY	DATE	CHECKED BY	SCALE
REP II	1-3-86		None
TOLERANCES UNLESS SPECIFIED			
MACHINED PARTS	± .005	3 DECIMAL PLACES	± .005
FABRICATED PARTS	± .010	ANGLES	± .30'

**DOCK LEVELER**

**PIT DETAIL**

**625-12A**

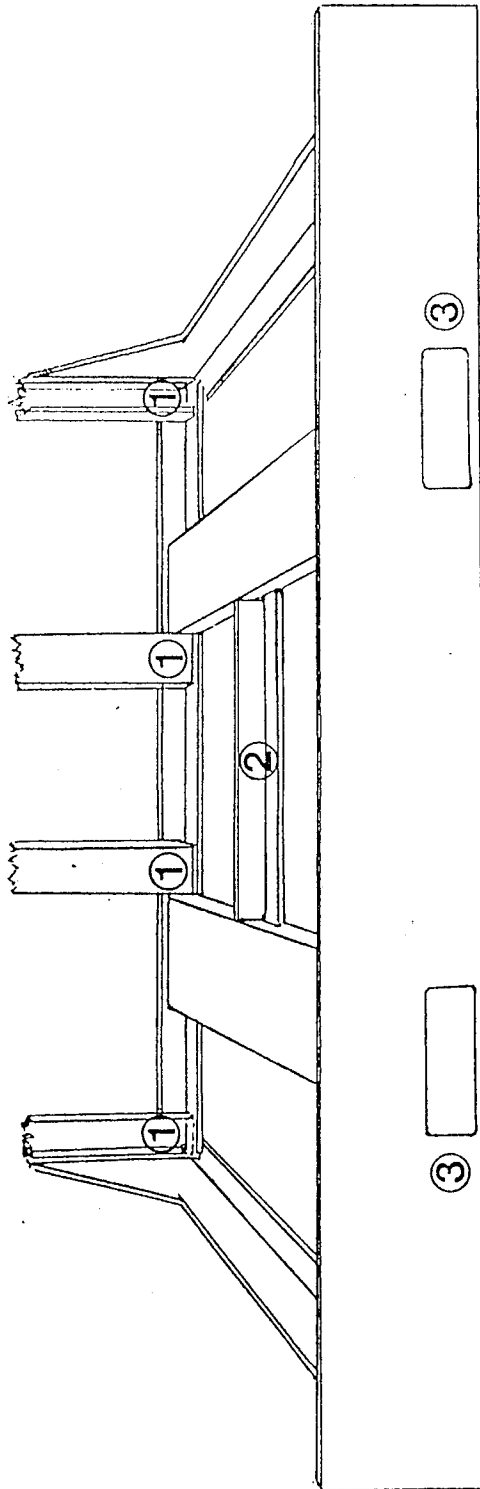
DRAWING NUMBER

Diagram below shows proper shim placement to provide correct weight transference to pit floor.

**NOTE:**

Shims to be steel, and welded in position to prohibit movement.

- SHIM PLACEMENT:**
- (1) Shim under each Vertical Support of Rear Frame.
  - (2) Shim under Center Pivot Location.
  - (3) Shim directly under Cross Traffic Supports.



**NOTE:** Standard frame shown. For Heavy Duty and General Purpose frame construction follow same Shim Instructions.

# ATLANTIC

MFG. CORP.  
ATHENS,  
NEW YORK

DRAWN BY REP II	DATE 1/6/86	CHECKED BY	SCALE None
TOLERANCES UNLESS SPECIFIED			
MACHINED PARTS FABRICATED PARTS	± 1/64" ± 1/32"	3 DECIMAL PLACES ANGLES	± 0.005 ± 30'

## DOCK LEVELER SHIM DIAGRAM

DRAWING  
NUMBER

625-13

# Installation Instructions

BEFORE attempting to install or operate leveler, read the manual provided and thoroughly understand operation of all components. DO NOT allow persons unfamiliar with this equipment to install or operate. Contact your authorized Atlantic representative or factory whenever problems arise or information provided is not fully understood.

BE SURE to follow the CAUTION reminders on Page 1 of this manual when installing your Atlantic Leveler.

1. Check Dock Leveler for possible transit damage.
2. Check pit for verification of all dimensions. Check corner to corner dimensions to see if pit is square. (Uneven dimensions indicates pit is out of square) Leveler should be adjusted in pit to best suit pit conditions.

NOTE: DO NOT work around leveler while it is suspended by lift equipment. Leveler should be resting firmly on pit floor and lift equipment should be removed.

3. Prepare dock leveler for installation by moving with fork truck (using slots built into the front base frame) into pit area.
4. Position leveler against rear pit wall. Adjust side to side location to provide equal clearance between sides of leveler and pit. (Proper dimensions allow 1" side clearance.) Rear frame should be tight to rear curb angle. (Rear frame extension angle may be trimmed to allow tight fit if pit is not square or properly sized.)
5. Operate leveler to raise ramp and extend lip. (See Operating Instructions) Position Service Strut to support leveler ramp and lip in "UP" position.



6. Place shims under frame: (Shims to be provided by Installer)
    - Shim beneath each vertical support of rear frame.
    - Shim under lift arm pivot location.
    - Shim directly under Safety Stops.Frame must be kept "level" with any unevenness of floor curb angle, divided equally across width of leveler frame. Center area should be flush. Corners may be slightly above or below curb line. Welding should bridge any difference of level at frame to curb joint. NOTE: Shims to be steel, and welded in position to prohibit movement.
    - Weld rear shims to dock leveler base frame.
    - Weld front shims to front curb angle and base frame.
    - Weld shims under lift arm to the frame.
    - Weld upper rear frame member to rear pit curb angle. 4"-12" pattern, min.
  7. Lubricate all moving parts of the leveler. Refer to Lubrication Chart.
  8. Store Service Strut and place leveler in cross traffic position. Close lip to vertical position. Complete several cycles of operation, per Operating Instructions. Review performance. Correct any noticeable deficiency in operation.
- NOTE: All Atlantic Dock Levelers are adjusted and pre-operated at the factory. No major problem should exist at installation, however, minor adjustments might be needed due to temperature variations or plant to out-door conditions and time delay from production to installation.
9. Attach bumpers to face of dock. Be sure bumper height will accommodate truck heights. Mount edge of bumper as close to pit edge as possible.

The Atlantic Hydra-Mechanical Dock Leveler is now ready for operation. The new owner should be advised of the proper operation and care of this unit. Those individuals working with this unit should also be instructed in its proper use, and in safe work habits at the loading dock.

# Operating Instructions

BEFORE attempting operation of the Atlantic Dock Leveler read the manual provided and thoroughly understand operation of all components. DO NOT allow persons unfamiliar with this equipment to operate same.

BE SURE to follow the CAUTION reminders on Page 1 when operating your Atlantic Leveler.

CAUTION: DO NOT actuate the leveler until the truck is in position. Truck should be squarely against dock bumpers and its wheels securely chocked.

CAUTION: Whenever driving down declined ramp move slowly. DO NOT operate lift equipment with inadequate braking systems on Dock Levelers; personal injury or equipment damage may result. NEVER attempt to place or remove load from truck with extended overhang behind rear axle without proper truck support.

CAUTION: NEVER use fork truck or other handling equipment to lower ramp or lip. This could cause personal injury and damage to leveler or freight carrier.

CAUTION: Equipment or personnel should NEVER be on ramp or lip when truck pulls away.

NOTE: Release chains require only moderate effort to operate properly. Excessive forceful pulling or jerking can prevent proper operation and/or damage to leveler mechanism.

## NORMAL OPERATION:

1. Pull and hold Hold Down Release Chain, recessed in ramp at rear of leveler, until upward movement of ramp has stopped and lip has extended. NOTE: Do not stand on ramp during lifting cycle.
2. When ramp has raised and lip is fully extended, walk directly up ramp to front hinge line ONLY. Operator weight will lower ramp and bring the lip to rest on truck bed.
3. When truck departs the lip will automatically retract. Ramp will remain at the same level on or above dock.
4. To return to Cross Traffic Position, if above dock level, walk on ramp. It will settle to the level, Cross Traffic Position.

## END LOADING ABOVE DOCK:

If freight occupies area at rear of truck which would be contacted by lip in normal operation, and truck floor is at or above dock level, freight can be removed with leveler in Cross Traffic position. No need to operate leveler.

## BELOW DOCK OPERATION:

REMINDER: BE SURE to follow CAUTION instructions on preceeding page.

1. Pull and hold the Hold Down Release Chain until upward movement of ramp has stopped and lip has extended.
2. When ramp has raised and lip is fully extended, walk directly to front of ramp; pull and hold the Below Dock Release Chain, recessed in ramp at front of leveler, to retract cross traffic legs.
3. Step to hinge line ONLY to lower ramp and lip to operating level.
4. When truck departs, pull the Hold Down Release Chain, momentarily, to allow ramp to rise to a position slightly above dock level. Walk on ramp and it will settle to level, cross traffic position.

## END LOADING BELOW DOCK:

REMINDER: BE SURE to follow CAUTION instructions on preceeding page.

If freight occupies area at rear of truck which would be contacted by lip in normal operation, and truck floor is below dock level, freight can be removed as follows.

1. Pull the Hold Down Release Chain, momentarily, to allow ramp to rise to a position slightly above dock level.
2. Pull the Below Dock Release Chain, to retract cross traffic supports; step to hinge line ONLY. Ramp will lower to its below dock position when dock attendant holds the Below Dock Release Chain and stands at front end of ramp.

## OPERATIONAL CHECK:

Because some time lapse between manufacture and daily use of your Atlantic Hydra-Mechanical Dock Leveler may have occured, a simple operational check is suggested.

1. Operate leveler several times thru normal cycles, per Operating Instructions.  
NOTE: Be sure lip is in vertical, stored position prior to each cycling of leveler.
2. If operation does not conform to specifications refer to 'Adjustment' section and take necessary corrective action.
3. When your dock leveler performs to factory specification, it is ready for your dock bridging needs.  
NOTE: Refer to 'Preventive Maintenance' section and follow recommended procedures to maintain maximum performance of your Atlantic Dock Leveler.

# Trouble - Shooting

The Atlantic Dock Leveler is adjusted and pre-operated at the factory. Operating problems can be caused by UNNECESSARY ADJUSTMENTS BY UNQUALIFIED PERSONNEL. If problems do arise, refer to the Trouble-Shooting Analysis Chart below; and contact your authorized Atlantic representative or factory when necessary. BEFORE servicing leveler BE SURE to read the manual provided and thoroughly understand operation of all components. ALWAYS follow the CAUTION reminders on Page 1.

**CAUTION:** BE SURE to review these instructions BEFORE Trouble-Shooting, performing maintenance tasks and/or making any adjustments on the equipment.

1. Block off leveler area to all forms of traffic or personnel.
2. Raise leveler and place service strut in position. BE CERTAIN leveler is securely braced before proceeding.
3. Prior to attempting any adjustments, COMPLETELY lubricate leveler per Lubrication Specifications.

TROUBLE-SHOOTING ANALYSIS CHART

Read and understand proper adjusting procedures (Page 12) BEFORE making any adjustments.		
SYMPTOMS	PROBABLE CAUSE	CORRECTIVE ACTION
Ramp does not rise.	<ol style="list-style-type: none"> <li>1. Obstruction on ramp.</li> <li>2. Insufficient spring tension.</li> <li>3. Hold down failing to disengage.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove. Ramp cannot lift more than its own weight.</li> <li>2. Lubricate all operating components and adjust springs.</li> <li>3. Identify problem and correct.</li> </ol>
Ramp rises slowly.	<ol style="list-style-type: none"> <li>1. Obstruction on ramp.</li> <li>2. Restriction to lift effort due to excessive pulling on Hold Down release chain.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove. Ramp cannot lift more than its own weight.</li> <li>2. Relax slightly on chain after Hold Down has been disengaged. Do not attempt to aid ramp lift by pulling heavily on chain, as that will restrict the motion not aid the motion.</li> </ol>

TROUBLE-SHOOTING ANALYSIS CHART (cont)

SYMPTOMS	PROBABLE CAUSE	CORRECTIVE ACTION
Ramp rises slowly. (cont)	3. Spring adjustment required to compensate for spring rate fatigue and vast temperature changes.	3. Lubricate all moving parts and adjust spring banks equally. Do not over adjust.
Ramp rises violently.	1. Main counterbalance assembly over adjusted.	1. Lubricate all moving parts & re-adjust main counterbalance assembly.
Ramp fails to stay in lowered position.	1. Hold Down malfunction.	1. Identify problem and correct; or replace Hold Down.
Excessive "walk down" weight required to lower ramp.	1. Main counterbalance assembly over adjusted.	1. Lubricate all moving parts and re-adjust main counterbalance assembly.
Lip fails to extend.	1. Check lip snubber assembly.	1. Correct deficiencies.
Lip does not fully extend.	1. Lip counterbalance out of adjustment.  2. Dry or damaged lip hinge.  3. Insuffieient main counterbalance spring tension.	1. Lubricate hinge and complete operating mechanism. Adjust lip counterbalance to maximum tension yet allowing complete lip retraction with ramp at dock level. Test after adjustment.  2. Lubricate or repair as required.  3. Lubricate all parts and adjust main springs.
Lip does not retract.	1. Dry or damaged lip hinge.  2. Lip counterbalance system over adjusted.  3. Damaged lip counterbalance component.	1. Lubricate or correct as required.  2. Lubricate and re-adjust.  3. Repair or replace as required.

# Adjustments

BEFORE attempting to adjust leveler components, read the manual provided and thoroughly understand operation of all components. BE SURE to follow the CAUTION reminders on Page 1.

CAUTION: Block off leveler area to all traffic and personnel and BE SURE leveler is securely braced BEFORE making any adjustments.

NOTE: Prior to attempting any adjustments, COMPLETELY lubricate leveler per lubrication specifications.

LIP RETRACTION TOO SLOW - TOO FAST: When properly adjusted maximum spring tension is provided to counterbalance lip, yet allow full return of lip to closed position after gradual fall - lip will settle to a point of near weightlessness. Adjustment is made with the adjusting nut located on the lip counterbalance rod.

- ADJUSTMENT: 1. If lip "fall" is too rapid, increase spring counterbalance tension by turning adjusting nut clockwise.  
NOTE: Excessive adjustment will not allow lip to completely lower to closed position. If this occurs, back off on lip adjustment slightly, to allow complete closing.
2. If lip "fall" is too slow, decrease spring counterbalance tension by turning adjusting nut counter-clockwise.

SERVICE NOTES: Hold spring while making adjustment to avoid turning of spring with nut movement.

To check lip operation, remove service strut and lower ramp to cross traffic position. Swing lip (manually) into fully extended position; allow to fall.

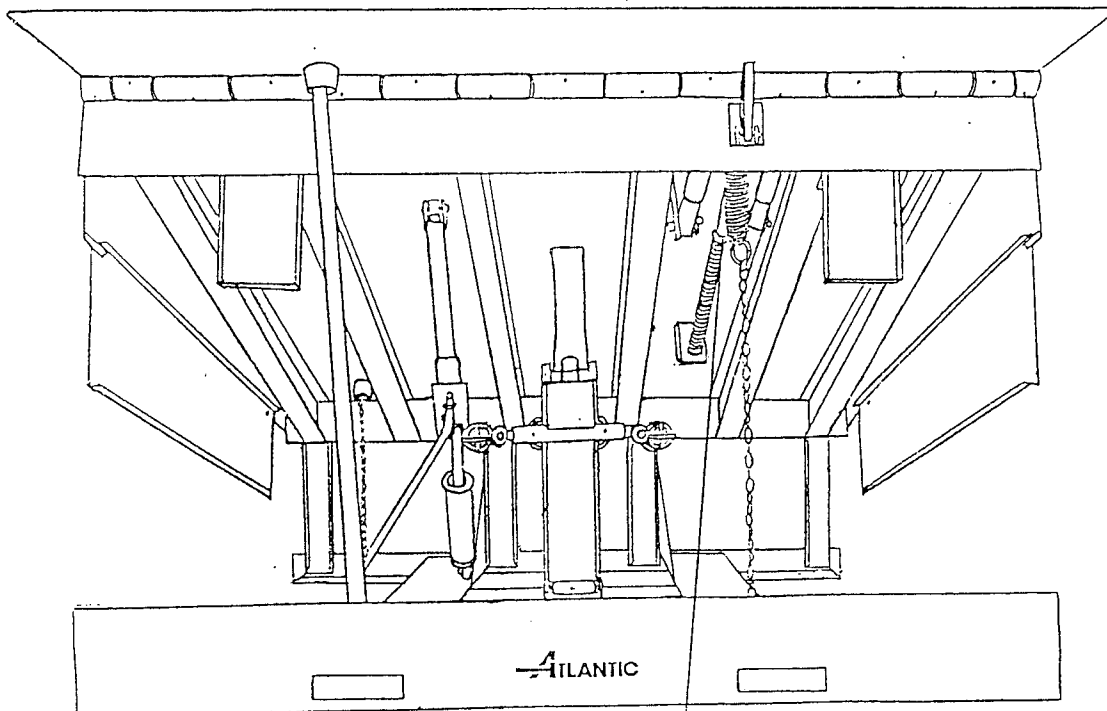


Figure "A" LIP COUNTERBALANCE ADJUSTING NUT

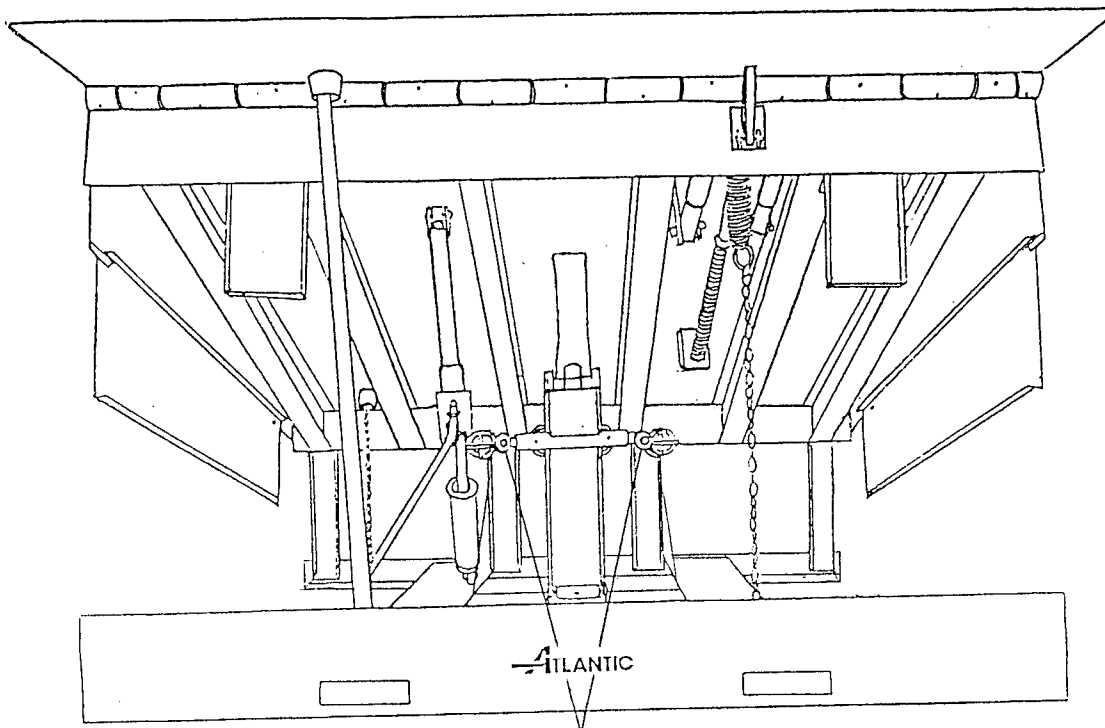


Figure "B" RAMP COUNTERBALANCE ADJUSTING NUTS

**RAMP RISES TOO SLOW - TOO FAST:** If properly adjusted ramp should lift, allowing lip to extend (but not slam) against front of ramp. The lightest adjustment should be sought to allow lip to gently swing into extended position - This will keep walk down effort to a minimum.

Adjustment is made with the two adjusting nuts, one located on each side of the lift arm.

- ADJUSTMENT:**
1. Increase main spring power by turning adjusting nuts clockwise to make ramp rise faster and harder.
  2. Decrease main spring power by turning adjusting nuts counterclockwise to reduce speed of ramp lift.

**SERVICE NOTES:** Adjustments should be equal on each spring bank to allow equal spring pull from each side of lift arm.

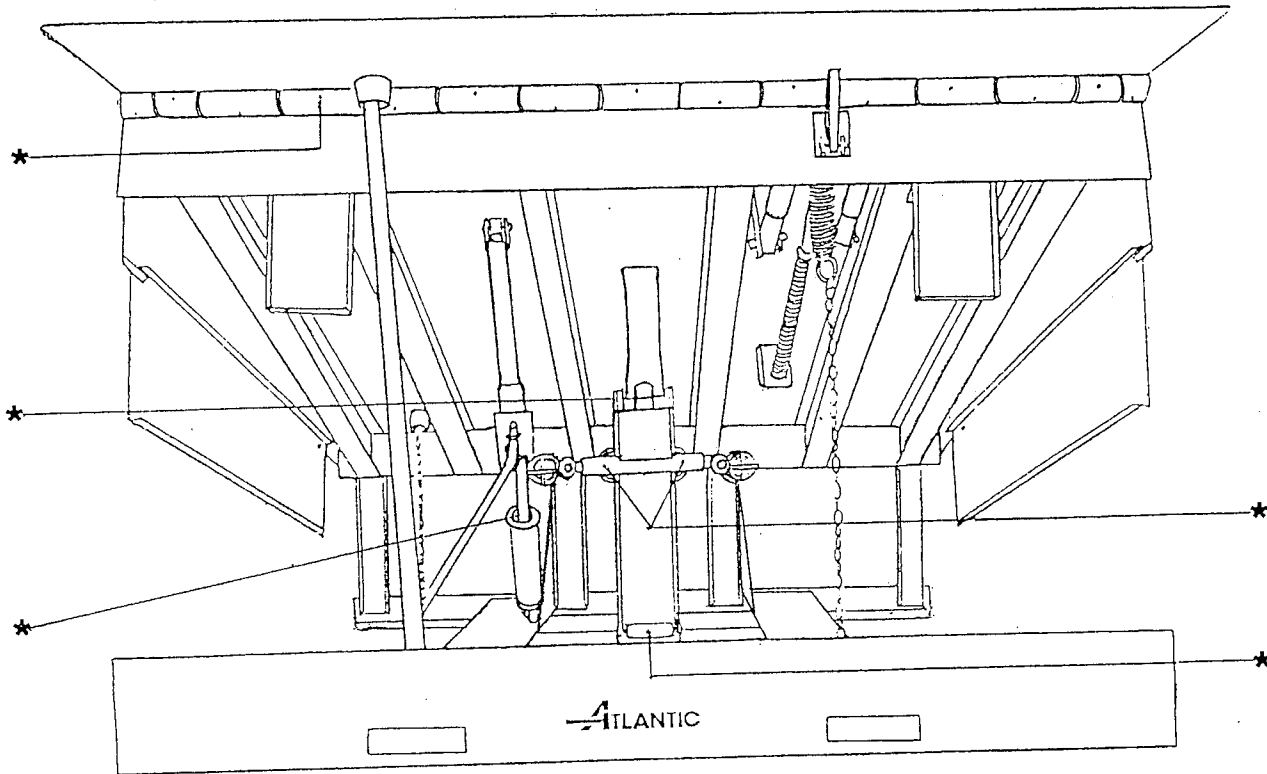
To check for proper power, remove service strut and place ramp and lip in stored position. Operate ramp according to instructions. Ramp should lift without violent action and lip should swing into extended position.

Check of operation should always originate from dock level with lip in closed position, otherwise a false indication of "normal operation" will be given and may result in improper function and possible component damage.

# Preventive Maintenance

Have your qualified maintenance personnel follow these simple instructions or arrange for professional care thru your authorized Atlantic representative to insure maximum performance from your dock leveler.

\*LUBRICATE DOCK LEVELER WITH GREASE AT POINTS INDICATED ON DIAGRAM BELOW.



BEFORE attempting to service leveler, read the manual provided and thoroughly understand operation of all components. BE SURE to follow the CAUTION reminders on Page 1.

**CAUTION:** Block off leveler area to all traffic and personnel and BE SURE leveler is securely braced BEFORE performing any maintenance tasks.

1. Inspect Dock Leveler quarterly.  
Check and make sure all welds and structural members are sound. If any damage is found, DO NOT use leveler until damage is repaired. Tag "out of service"
2. Lubricate Dock Leveler quarterly as indicated above. NOTE: After lubrication, leveler should be operated thru several cycles to work lubrication into and around moving components.
3. Good Housekeeping practices should always be followed.  
Keep areas under and around dock leveler clean and free of debris.
4. Keep hinge areas clean and free of debris that might restrict free movement of lip and/or ramp.  
Prior to operating leveler in winter months, make sure any moving parts are free of ice and snow.
5. General maintenance and lubrication should be performed more often as needed, in environments which are wet; extremely dusty; or with vast temperature changes.
6. Dock leveler may require adjusting with the change of seasons. Refer to 'Adjustment' section. Always lubricate BEFORE making adjustments.