

The Genuine. The Original.



***Installation Instructions  
and User Manual for  
Edge of Dock Levelers  
Model E66R/E72R***

**READ COMPLETE INSTRUCTIONS BEFORE INSTALLING DOCK LEVELERS**

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# Terminology and Definitions

## Important Safety Instructions

DEFINITION OF KEY WORDS USED IN THIS MANUAL:



INDICATES A HAZARDOUS SITUATION THAT, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY.



INDICATES A HAZARDOUS SITUATION THAT, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.



INDICATES A HAZARDOUS SITUATION THAT, IF NOT AVOIDED, COULD RESULT IN MINOR OR MODERATE INJURY.



INDICATES INFORMATION CONSIDERED IMPORTANT, THAT IT IS NOT RELATED TO INJURY, BUT MAY RESULT IN PROPERTY DAMAGE.

**IMPORTANT:** Required key step for proper dock operation.

**NOTE:** Information only.

# Precautions

## Operational Precautions

Read and understand these instructions to ensure safe installation and operation of the equipment.

### DANGER

DO NOT STAND BETWEEN TRANSPORT VEHICLE AND DOCK LEVELING DEVICE WHEN TRANSPORT VEHICLE IS ENTERING OR LEAVING THE AREA. GETTING PINNED BETWEEN THE TRANSPORT VEHICLE AND THE LEVELER WILL CAUSE DEATH OR SERIOUS INJURY.

### DANGER

NEVER USE OR ACTUATE A DOCK LEVELING DEVICE IF ANYONE IS UNDER OR IN FRONT OF IT. THE DOCK LEVELER SWINGS WITH CONSIDERABLE FORCE AND WILL CAUSE DEATH OR SERIOUS INJURY.

### DANGER

KEEP HANDS AND FEET CLEAR OF HINGES AND OTHER PINCH POINTS. PLACING HANDS OR FEET INSIDE OF OR NEAR HINGES AND OTHER MECHANISMS WILL RESULT IN DEATH OR SERIOUS INJURY.

### DANGER

NEVER DRIVE A LOADING VEHICLE, SUCH AS A FORKLIFT, ONTO A STOWED EDGE OF DOCK LEVELER. THE EDGE OF DOCK LEVELER IS NOT DESIGNED TO BEAR THE LOAD OF A LOADING VEHICLE UNTIL THE LIP IS SUPPORTED BY THE TRANSPORT VEHICLE. DRIVING ONTO A STOWED LEVELER WILL CAUSE THE LEVELER TO COLLAPSE, RESULTING IN DEATH OR SERIOUS INJURY.

### WARNING

CHOCK/RESTRAIN ALL TRANSPORT VEHICLES. NEVER REMOVE THE WHEEL CHOCKS OR RELEASE THE RESTRAINING DEVICE UNTIL LOADING OR UNLOADING IS FINISHED, AND THE TRANSPORT VEHICLE DRIVER HAS BEEN ALERTED. DEATH OR SERIOUS INJURY MAY OCCUR IF THE TRANSPORT VEHICLE INADVERTENTLY SLIPS AWAY FROM THE DOCK DURING LOADING/UNLOADING.

### WARNING

DO NOT USE A BROKEN OR DAMAGED DOCK LEVELING DEVICE OR RESTRAINING DEVICE. ENSURE ATTACHMENT WELDS ARE NOT CRACKED AND PROPER SERVICE AND MAINTENANCE PROCEDURES HAVE BEEN PERFORMED BEFORE USING. A DAMAGED OR DETACHED EDGE OF DOCK LEVELER MAY COLLAPSE, CAUSING DEATH OR SERIOUS INJURY.

### WARNING

ENSURE THE LIP HORIZONTALLY OVERLAPS THE TRANSPORT VEHICLE BY AT LEAST 4 INCHES (102 MM) BEFORE DRIVING ONTO THE DOCK LEVELING DEVICE. USING A LEVELER WITHOUT SUFFICIENT OVERLAP MAY RESULT IN THE LIP SLIPPING OFF OF THE TRANSPORT VEHICLE AND COLLAPSING UP TO 5.2 INCHES, WHICH MAY CAUSE DEATH OR SERIOUS INJURY.

### WARNING

MAINTAIN A SAFE DISTANCE FROM BOTH SIDE EDGES WHEN DRIVING ONTO A DOCK LEVELING DEVICE. FALLING OFF THE DOCK LEVELING DEVICE MAY RESULT IN DEATH OR SERIOUS INJURY.

### WARNING

NEVER ATTEMPT TO USE A DOCK LEVELING DEVICE ABOVE OR BELOW THE ALLOWABLE VERTICAL WORKING RANGE. USING BEYOND THE MANUFACTURER SPECIFIED RANGE MAY CAUSE DANGEROUS LIP RISE, OR THE COLLAPSE OF THE DOCK LEVELING DEVICE, WHICH MAY RESULT IN DEATH OR SERIOUS INJURY.

### WARNING

OVERLOADING A DOCK LEVELING DEVICE BEYOND ITS MANUFACTURER RATED CAPACITY MAY RESULT IN DEATH OR SERIOUS INJURY.

### WARNING

OPERATING MATERIAL HANDLING OR DOCK EQUIPMENT WHILE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL MAY RESULT IN DEATH OR SERIOUS INJURY.

### CAUTION

NEVER LEAVE UNATTENDED EQUIPMENT, VEHICLES, OR MATERIALS ON DOCK LEVELING DEVICE.

# Operating Instructions

## To Deploy The Leveler:

1. Prior to deploying the dock leveler, ensure lip clears the transport vehicle. If lip will not clear the transport vehicle, reposition transport vehicle and consult **Table 3** in the troubleshooting section.
2. Communicate to the transport vehicle driver to remain at the dock until the loading/unloading has been completed and he or she has been cleared to depart the dock.
3. Use a vehicle restraint to prevent the transport vehicle from departing or slipping during loading/unloading.
  - a) If a vehicle restraint is not available, chock the transport vehicle wheels.
4. If necessary, remove any end loads with the leveler in the stowed position. NEVER DRIVE ONTO A STOWED EDGE OF DOCK!

## DANGER

**NEVER DRIVE A LOADING VEHICLE ONTO A STOWED EDGE OF DOCK. THE EDGE OF DOCK LEVELER LIP MUST BE SUPPORTED BY THE TRANSPORT VEHICLE BEFORE A LOADING VEHICLE CAN BE SUPPORTED. DRIVING ONTO A STOWED EDGE OF DOCK LEVELER MAY CAUSE IT TO COLLAPSE AND WILL RESULT IN DEATH OR SERIOUS INJURY.**

5. Deploy the dock leveler onto the transport vehicle:
  - a) If the operating handle is captured in the lifting socket, lift it fully until the stopper bolt contacts the bottom of the lifting socket.  
If the operating handle is not captured in the lifting socket, insert it into the lifting socket until the stopper bolt contacts the top of the socket.
  - b) Pull handle towards interior of building. The deck should rotate until vertical. The lip lifter will engage at this time.
  - c) Push the handle forward. The lip should project forward onto the transport vehicle bed.

## WARNING

**IF LIP DOES NOT FULLY EXTEND, THE DOCK LEVELER MAY NEED TO BE SERVICED. DO NOT USE THE DOCK LEVELER UNTIL IT HAS BEEN PROPERLY REPAIRED. FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY.**

6. Lower handle to its stored captured position or return to its storage location inside the building.

## To Stow The Leveler:

1. Stow the leveler:
  - a) If the operating handle is captured, lift it fully until the stopper bolt contacts the bottom of the lifting socket.  
If the operating handle is not captured, insert it into the lifting socket until the stopper bolt contacts the top of the socket.
  - b) Pull handle towards interior of building. The deck should rotate until it disengages from the loading vehicle and the lip drops.
  - c) Push the handle forward. The leveler should move into the stowed position

## WARNING

**IF DECK AND LIP DO NOT MOVE INTO THE STOWED POSITION, THE DOCK LEVELER MAY NEED TO BE SERVICED. DO NOT USE THE DOCK LEVELER UNTIL IT HAS BEEN PROPERLY REPAIRED. FAILURE TO COMPLY COULD RESULT IN DEATH OR SERIOUS INJURY.**

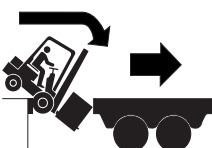
2. Lower handle to its stored captured position or return to its storage location inside the building.
3. Release the vehicle restraint.
  - a) If wheel chocks were used, remove the chocks from the transport vehicle wheels.
4. Communicate to the driver that the transport vehicle is clear to depart the dock.

## NOTICE

IF THE TRANSPORT VEHICLE PULLS AWAY WHILE THE LIP IS DEPLOYED, THE EDGE OF DOCK LEVELER WILL AUTOMATICALLY RETURN TO THE STOWED POSITION. HOWEVER, MANUALLY STOWING THE LEVELER WILL HELP PROLONG THE LIFE OF THE COUNTERBALANCE LINKAGES.

# Safety Decals

## 1. Danger And Safety Instructions Label (Quantity: 2)

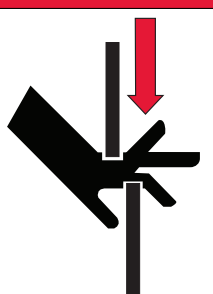
<b>⚠ DANGER</b>	<b>SAFETY INSTRUCTIONS</b>	
	<p><b>UNSUPPORTED DOCK LEVELER RAMPS CAN LOWER UNEXPECTEDLY.</b></p> <p><b>BEFORE ALLOWING VEHICLE TO LEAVE THE DOCK ALWAYS:</b></p> <ul style="list-style-type: none"> <li>• ENSURE NO EQUIPMENT, MATERIAL OR PEOPLE ARE ON DOCK LEVELER.</li> <li>• RETURN DOCK LEVELER TO IT'S STORED POSITION AT DOCK LEVEL.</li> </ul>	<p><b>OPERATION</b></p> <ol style="list-style-type: none"> <li>1. READ AND FOLLOW ALL INSTRUCTIONS AND WARNINGS IN OWNER'S / USER MANUAL.</li> <li>2. USE OF DOCK LEVELER RESTRICTED TO TRAINED OPERATORS.</li> <li>3. ALWAYS CHOCK TRAILER WHEELS OR ENGAGE TRUCK RESTRAINT BEFORE OPERATING DOCK LEVELER OR BEGINNING TO LOAD OR UNLOAD.</li> <li>4. NEVER USE HANDS OR EQUIPMENT TO MOVE RAMP OR LIP.</li> <li>5. BEFORE ACTIVATING DOCK LEVELER:             <ul style="list-style-type: none"> <li>• ENSURE TRAILER IS BACKED UP AGAINST BUMPERS.</li> <li>• REMOVE ANY END LOAD, IF REQUIRED.</li> <li>• CHECK TRAILER ALIGNMENT TO AVOID LIP INTERFERENCE. IF LIP DOES NOT LOWER TO TRAILER BED, REPOSITION VEHICLE.</li> </ul> </li> <li>6. ENSURE TRUCK BED SUPPORTS EXTENDED LIP OR LEVELER FRAME SUPPORTS THE RAMP BEFORE DRIVING ON RAMP.</li> </ol> <p><b>MAINTENANCE / SERVICE</b></p> <ol style="list-style-type: none"> <li>1. READ AND FOLLOW ALL INSTRUCTIONS, WARNINGS AND MAINTENANCE SCHEDULES IN THE OWNER'S / USER'S MANUAL.</li> <li>2. MAINTENANCE / SERVICE OF DOCK LEVELER RESTRICTED TO TRAINED PERSONNEL.</li> <li>3. PLACE BARRIERS ON THE DRIVEWAY AND DOCK FLOOR TO INDICATE WORK IS BEING PERFORMED.</li> <li>4. DO NOT ENTER PIT UNLESS DOCK LEVELER IS SECURELY SUPPORTED BY MAINTENANCE STRUT.</li> <li>5. IF ELECTRICALLY POWERED TURN OFF AND USE OSHA LOCKOUT / TAGOUT PROCEDURES.</li> </ol> <p><b>7. STAY CLEAR OF HINGES AND FRONT AND SIDES OF MOVING DOCK LEVELER.</b></p> <p><b>8. NEVER USE DAMAGED OR MALFUNCTIONING DOCK LEVELER. REPORT PROBLEMS IMMEDIATELY TO SUPERVISOR.</b></p>
<p><b>FAILURE TO FOLLOW POSTED INSTRUCTIONS WILL RESULT IN DEATH OR SERIOUS INJURY.</b></p> <p>851056-0001 REV- 06/15/2023 © 2023 Overhead Door Corporation Call dealer for replacement placards, warning labels, or owner's / user's manuals.</p>		

## 2. Danger, Use Maintenance Strut Label



<b>⚠ DANGER</b>

<p><b>RAMP SWINGS TOWARDS YOU. STAND CLEAR. USE MAINTENANCE STRUT WHILE SERVICING. FAILURE TO DO SO, WILL RESULT IN DEATH OR SERIOUS INJURY.</b></p> <p>REFER TO OWNER'S / USER'S MANUAL FOR PROPER PROCEDURE</p> <p>© 2023 Overhead Door Corporation 851055-0001 REV- 06/15/2023</p>


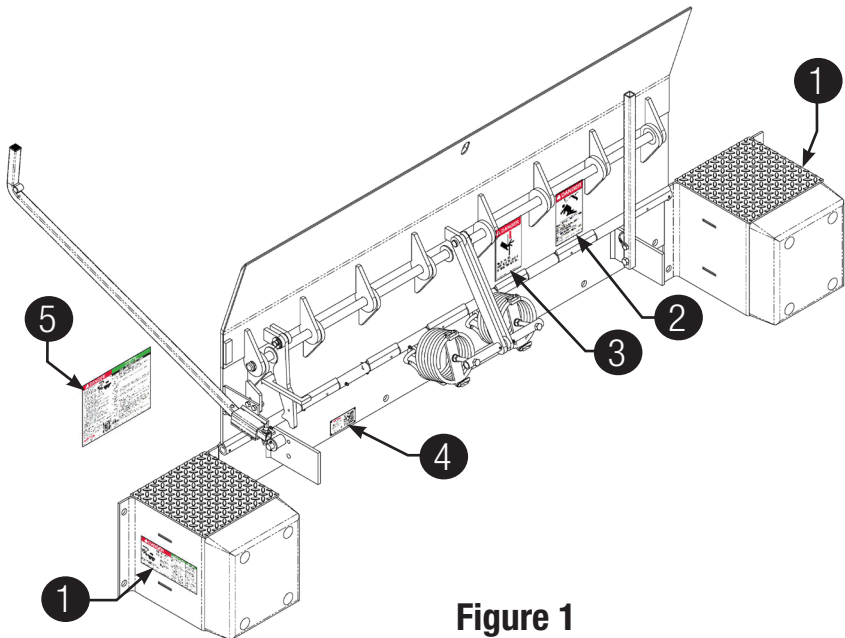
## 3. Pinch Point/Hand Crush Label

<b>⚠ DANGER</b>

<p><b>PINCH POINT. KEEP HANDS CLEAR DURING OPERATION.</b></p> <p>© 2023 Overhead Door Corporation 851059-0001 REV- 07/17/2023</p>

## 4. Serial Tag

	
<p>OVERHEAD DOOR CORPORATION PENNSYLVANIA DIVISION 23 INDUSTRIAL PARK RD. LEWISTOWN, PA., 17044</p> <p>MODELS: _____ SERIAL: _____ CAPACITY: _____ LBS.</p> <p>© 2023 Overhead Door Corporation 851053-0001 REV- 08/01/2023</p>	

## 5. Operating Instructions And Warning Placard

<b>⚠ DANGER</b>	<b>OPERATING INSTRUCTIONS</b>
<ul style="list-style-type: none"> <li>• Read and follow all instructions, warnings and maintenance schedules in the manual.</li> <li>• Operation and servicing of dock leveler is restricted to authorized personnel.</li> <li>• Always chock trailer wheels or engage trailer restraint before operating dock leveler or beginning to load or unload.</li> <li>• Never use hands or equipment to move ramp or lip.</li> <li>• Before activating dock leveler:             <ul style="list-style-type: none"> <li>• Ensure trailer is backed up against bumpers.</li> <li>• Remove any end load, if required.</li> <li>• Check trailer alignment to avoid lip interference. If lip does not lower to trailer bed, reposition vehicle.</li> </ul> </li> <li>• Ensure truck bed supports extended lip or leveler frame supports the ramp before driving on ramp.</li> <li>• Stay clear of hinges and front and sides of moving dock leveler.</li> <li>• Never use damaged or malfunctioning dock leveler. Report problems immediately to supervisor.</li> <li>• Before allowing vehicle to leave the dock always:             <ul style="list-style-type: none"> <li>• Ensure no equipment, material or people are on dock leveler.</li> <li>• Return dock leveler to its stored position at dock level.</li> </ul> </li> <li>• DO NOT ATTEMPT TO SERVICE unless dock leveler is securely supported by maintenance strut.</li> <li>• Do not drive onto ramp without the leveler lip supported by the vehicle bed.</li> </ul> <p><b>FAILURE TO FOLLOW THESE INSTRUCTIONS WILL RESULT IN DEATH OR SERIOUS INJURY.</b></p> <p>If you need assistance, scan the QR Code or contact your local Overhead Door Ribbon Distributor. To find your local Overhead Door Ribbon Distributor, go to the Find a Ribbon Distributor section online at <a href="http://www.OverheadDoor.com">www.OverheadDoor.com</a>.</p> <div style="text-align: center;">   <small>INDUSTRY LEADING COMMERCIAL &amp; INDUSTRIAL SOLUTIONS</small> </div> <p>© 2023 Overhead Door Corporation</p>	<p style="text-align: center;"><b>EDGE-OF-DOCK LEVELERS</b></p> <p><b>OPERATING INSTRUCTIONS EXTENDING THE LEVELER LIP INTO VEHICLE</b></p> <ol style="list-style-type: none"> <li>1. Reach and grasp the lifting handle stored in the retainer on the right side of the ramp and lift it to its fully extended length. See Figure 1</li> <li>2. Pull the lifting handle back until the leveler is fully lifted. See Figure 2</li> <li>3. Push lifting handle forward to lower the leveler. As the leveler is lowered onto the transport vehicle the lip will extend automatically and rest on vehicle bed. See Figure 3</li> <li>4. Lower and store the lifting handle back in its retainer, and proceed with loading / unloading. See Figure 4</li> </ol> <p><b>STORING THE LEVELER</b></p> <ol style="list-style-type: none"> <li>1. Reach and grasp the lifting handle stored in the retainer and lift it to its fully extended length. See Figure 1</li> <li>2. Pull the lifting handle back until the Lip clears the transport vehicle bed and let the lip drop. See Figure 5</li> <li>3. Lower and store the lifting handle back in its retainer. See Figure 6</li> </ol> <p><b>WARNING: IF TRANSPORT VEHICLE DEPARTS WITH LIP STILL RESTING ON VEHICLE BED BEFORE LEVELER IS STORED, LIP WILL DROP SUDDENLY. LIP MUST BE STORED BEFORE VEHICLE LEAVES, AND ENSURE NO PEOPLE, LOADS, OR EQUIPMENT ARE ON THE LEVELER.</b></p> <p><b>ENDLOADING BELOW THE DOCK</b></p> <ul style="list-style-type: none"> <li>• To remove the endloads return the leveler to stored position.</li> <li>• Do not drive onto ramp without the leveler lip supported by the vehicle bed.</li> </ul>
	
<p><b>Figure 1</b></p>	



# Owner/User Responsibilities

The following Owner/User Responsibilities are derived from Section 7 of ANSI MH30.1 with the authorization of MHI:

## General

Like other industrial devices, misuse and improper maintenance of dock leveling devices can result in injury or death.

## Application Constraints

Use of a dock leveling device shall take application constraints into consideration; including, but not limited to:

- a) Site Considerations:
  - 1. Driveway grades.
  - 2. Pit and bumper projections.
  - 3. Loading dock height.
- b) Transport Vehicle Considerations.
  - 1. Tractor operations.
  - 2. Shunt truck or yard jockey operations.
- c) Material Handling Equipment Considerations:
  - 1. The heaviest material handling equipment and load.
  - 2. The distribution of weight between the material handling equipment's front and rear axles.
  - 3. Gross vehicle weight (GVW) being driven across the dock leveler.
  - 4. The number of cycles driven across the dock leveler.
  - 5. The speed of material handling equipment moving across the dock leveler.
  - 6. The use of three-wheel vs. four-wheel fork trucks.
  - 7. Attachments on the front end of the material handling equipment.
  - 8. The direction of material handling equipment travel.
- d) Dock Leveler Considerations:
  - 1. The life expectancy of the dock leveler.
  - 2. The loading slope above or below dock leveler.
  - 3. The lip length.

Manufacturers shall provide dock leveling device load capacity guidance based on the requirements set forth in ANSI MH30.1, application constraints, and other applicable factors.

In selecting dock leveling devices, it is important to consider present requirements, future plans and adverse environmental conditions. The owner/user shall provide application information to the manufacturer to receive recommendations on appropriate equipment specifications and capacity.

The ANSI MH30.1 load testing and subsequent verification process does not reflect or provide any guarantees regarding a dock leveling device's load carrying capability. Refer to Annex B of ANSI MH30.1 for a further discussion about the dock leveling device's load carrying capacity.

# Owner/User Responsibilities Continued...

## Installation

### Placards And Warnings

The owner/user shall ensure that the following are in place, legible, and available to operators:

- Nameplates
- Instruction Placards
- Safety Signs Or Labels
- Operating And Maintenance Manuals

The owner/user shall obtain replacement nameplates, instruction placards, safety signs or labels, and manuals from the manufacturer, if needed. Placards, markings, and labels should not be obscured from the view of operating or maintenance personnel for whom such information are intended.

### Dock-Face Mounted Leveling Devices

The dock face shall have angle or channel embedded into the concrete as recommended by the dock leveling device manufacturer. Alternatively, the dock leveling device may be installed using an appropriately anchored transition plate as recommended by the dock leveling device manufacturer.

### Modifications To Dock Leveling Devices

Dock leveling devices can become hazardous if the manufacturer's instructions regarding modifications or adjustments are not followed.

Modifications or alterations of dock leveling devices shall be made only with written permission of the original manufacturer. These changes shall be in conformance with all applicable provisions of the latest ANSI MH30.1 standard and shall also satisfy all safety recommendations of the original equipment manufacturer for the particular application. Modifications or additions that affect capacity and appropriate dock leveling device operation shall not be performed without manufacturer's prior written approval.

### Information For Use

The owner/user shall verify that the material listed in this manual have been received, and that the information contained herein is made available for the instruction and training of personnel entrusted with the installation, operation or maintenance of the dock leveling device.

### Loading Dock Operating Personnel Training

The owner/user should recognize the inherent danger of the interface between dock and transport vehicle. The owner should, therefore, train and instruct loading dock operating personnel in the proper use of dock leveling devices in accordance with information provided by the manufacturer.

An effective loading dock operating personnel training program should focus on the user company's policies, operating conditions, and the manufacturer's specific instructions that were provided with the dock leveling device. The complete training program should be presented to all new operators and not condensed or eliminated for those claiming previous experience.

The loading dock operating personnel training program should consist of, but not necessarily be limited to, the following:

- a) Select the operator carefully. Consider physical qualifications, job attitude and aptitude.
- b) Assure that the operator reads and fully understand the complete manufacturer's instruction manual.
- c) Emphasize the impact of proper operation upon the operator, other personnel, material being handled, and equipment. Cite all rules and why they are formulated.
- d) Describe the basic fundamentals of dock leveling device and component design as related to safety, e.g., mechanical limitations, stability, etc.



# Owner/User Responsibilities Continued...

## Loading Dock Operating Personnel Training Continued...

- e) Introduce the equipment. Show control locations and demonstrate functions. Explain how they work when used properly and problems when they are used improperly.
- f) Assure that the operator understands the capacity rating and other nameplate data, including the operator instructions and all precautionary information appearing on the dock leveling device.
- g) Supervise operator practice of equipment operation.
- h) Develop and administer written and practical performance tests. Evaluate progress during and at completion of the course.
- i) Administer periodic refresher courses. These may be condensed versions of the primary course and include on-the-job operator evaluation.

## Operations

This clause contains broad operation standards applicable to dock leveling devices. Only operators trained to strictly adhere to the operating instructions stated in this clause shall be permitted to operate dock leveling devices. Unusual operating conditions may require additional precautions and special instructions.

The dock leveling device shall not be used outside its vertical working range or outside the manufacturer's labeled rated capacity. It shall also be compatible with the loading equipment and other conditions relating to dock activities.

The owner/user should recognize the inherent danger of the interface between the dock and the transport vehicle. The owner/user shall ensure that operators fully understand that proper operation is the operator's responsibility. The owner/user shall also ensure that operators are fully knowledgeable of, and observe, the operation rules and practices in this clause.

Proper operation of dock leveling devices is the responsibility of the operator. The operator shall have an ability to assess the working conditions and environment around the loading dock and an aptitude for identifying possible issues related to the process and use of the equipment.

Only authorized personnel shall be permitted to operate a dock leveling device. Operators shall be qualified as to visual, auditory, physical, and mental ability to operate the device safely in accordance with the manufacturer's instructions.

The operator shall know, understand, and follow the manufacturer's operating instructions and all precautionary labeling on the dock leveling device. The operator shall develop working habits and the awareness of hazardous conditions that help to protect the operator, other personnel, the dock leveling device and other material associated with the task. The operator shall also know, understand, and follow the operation and function of all controls before undertaking operation of the dock leveling device.

## Transport Vehicle Requirements

### Transport Vehicle Position

A dock leveling device shall be designed and installed so that when a transport vehicle is positioned as close as practicable to the loading dock, there shall be an overlap of at least 4 in. (102 mm) between the front edge of the lip of the dock leveler and the edge of the floor or sill of the transport vehicle.

The loading dock area shall be designed so that the transport vehicle can be parked in a position relatively perpendicular to the dock face, centered with, and as close as practical to, the dock leveling device.

### Use Of Positive Restraints

When goods are transferred between the loading dock and the transport vehicle, the brakes on the transport vehicle shall be applied and wheel chocks or positive restraints that provide the equivalent protection of wheel chocks shall be engaged. Also, whenever possible, air-ride suspension systems should have the air exhausted prior to performing loading or unloading operations.

Refer to the latest ANSI MH30.3, Vehicle Restraining Devices: Performance and Testing for additional information on restraining the vehicle.

# Owner/User Responsibilities Continued...

## Inspection

Dock leveling devices may become hazardous if the manufacturer's instructions regarding maintenance, repairs, or adjustments are not followed.

All dock levelers shall be regularly inspected and maintained in conformance with good practice and the manufacturer instructions. Dock leveling devices shall be kept in a clean condition to minimize fire hazards and facilitate detection of loose, worn, damaged or defective parts.

At the beginning of each shift and before operation of the dock leveling device, the operator shall inspect the condition of the dock leveling device, giving special attention to the following:

- a) Free of debris or obstruction
- b) Precautionary labeling intact and legible
- c) Guards or safety devices present and functional
- d) Controls fully operational
- e) Free of structural defect or damage
- f) All other items specified by the manufacturer

Actuators (including springs, hydraulic cylinders, pneumatic cylinders, and air bags), valves, hoses, fittings, safety devices and other components shall be checked to ensure that nothing has developed to the extent that it would create a hazard or interfere with safe operation. Special care should be taken on the inspection of pressure-containing systems, including hoses.

Control mechanisms, fastening and warning devices, dock leveling device overload devices, guards and safety devices, deck, lip, and frame members shall be carefully and regularly inspected and maintained in accordance with the manufacturer's recommendations.

All electrical components including motors, switches, limit switches, indicator lights, protective devices, conductors, and connections shall be regularly inspected and maintained in conformance with good practices and the manufacturer's instructions. Special attention shall be paid to the condition of electrical insulation.

Manufacturer's recommended periodic maintenance and inspection procedures in effect at date of shipment shall be followed, and written records of the performance of these procedures should be maintained.

## Maintenance

Maintenance and inspection of all dock leveling devices shall be performed in conformance with the following practices. In addition, maintenance and inspection shall be performed in accordance with the manufacturer's recommendations.

- a) A scheduled planned maintenance program shall be followed.
- b) Only trained and authorized personnel shall be permitted to maintain, repair, adjust, and inspect dock leveling devices.
- c) Use only original equipment manufacturer parts, manuals, maintenance instructions and labels; or their equivalent.

## Damage

Dock leveling devices that are structurally damaged or have experienced a sudden loss of support while under load, such as might occur when a transport vehicle is pulled out from under the dock leveling device, shall be removed from service, inspected by the manufacturer's authorized representative, and repaired as recommended by the manufacturer before being placed back in service.

# Owner/User Responsibilities Continued...

## Repair

If the dock leveling device is found to require repair or cannot be used in its intended operating condition, the matter shall be reported immediately to the owner/user's designated authority. The dock leveler shall be taken out of service until it has been restored to an acceptable operating condition.

The operator shall not make repairs or adjustments unless specifically authorized and qualified to do so.

Before starting repair or inspection of a dock leveler device:

- a) secure and restrict access in and around the dock position (dock and driveway)
- b) read, understand, and follow all maintenance instructions provided by the dock leveling device manufacturer
- c) follow all dock leveling device maintenance safety instructions
- d) remove the load from the platform
- e) disconnect power and follow established lockout/tag-out policies as required

Avoid fire hazards and have fire protection equipment present in the work area. Do not use an open flame to check the level or to check for leakage of any fluid. Do not use open pans of fuel or flammable cleaning fluids for cleaning parts.

Properly ventilate work area and keep it clean and dry.

Care shall be taken to ensure that all replacement parts meet or exceed original equipment manufacturer's specifications.

## Confined Space

If a confined space entry associated with operations or maintenance of a dock leveling device is required, the confined space procedures shall comply with ANSI/ASSP Z117.1.

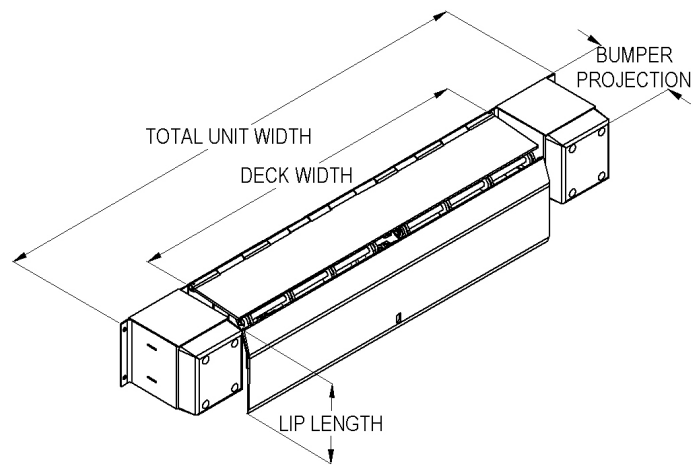
# Product Information

## General Information

This manual provides current information on the edge of dock leveler, see **Figure 3**. Edge of dock levelers mount directly to the dock wall face and provide a recommended maximum working range of +/-3” and an effective range of +/-5” above or below dock.

Edge of dock levelers are available in the sizes and weight capacities listed in **Table 1**. The ANSI MH30.1 load testing and subsequent verification process does not reflect or provide any guarantees regarding a dock leveling device’s load carrying capability. Refer to Annex B of ANSI MH30.1 for a further discussion about the dock leveling device’s load carrying capacity. In selecting dock leveling devices, it is important to consider present requirements, future plans and adverse environmental conditions. The owner/user shall provide application information to the manufacturer to receive recommendations on appropriate equipment specifications and capacity.

**NOTE:** Leveler grade chart available upon request from the manufacturer.

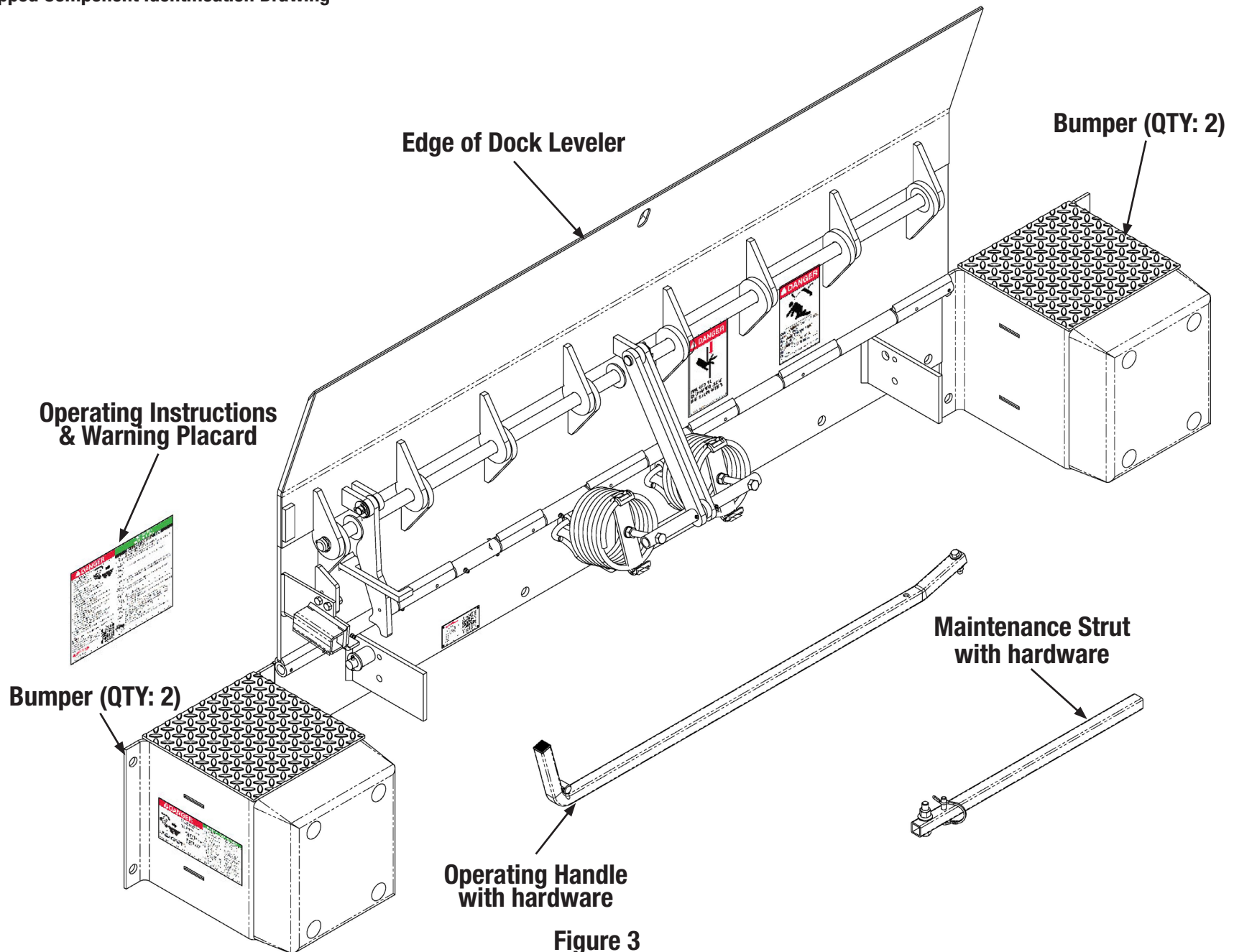


**Figure 2**

TABLE 1 - DIMENSIONS AND CAPACITIES						
MODEL #	CAPACITY (CIR)	DECK WIDTH	LIP LENGTH	TOTAL UNIT WIDTH (MIN)	CROWN STYLE	BUMPER BOX PROJECTION
E66R	20,000 POUNDS 30,000 POUNDS	66"	15"	98"	REGULAR	16"
					MID	
					HIGH	
			17"		REGULAR	17"
					MID	
					HIGH	
E72R	20,000 POUNDS 30,000 POUNDS	72"	15"	104"	REGULAR	16"
					MID	
					HIGH	
			17"		REGULAR	17"
					MID	
					HIGH	

# Product Information Continued...

## As-Shipped Component Identification Drawing



**Figure 3**

# Product Information Continued...

## Pre-Installation Considerations

Various installation solutions are available to optimize the effectiveness of a dock leveler. Several factors must be considered to properly specify the correct set of options and customizations for a dock leveler. These factors include, but are not limited to, variables such as:

- The height from the pavement to the dock.
- The grade and angle of the drive to the dock.
- The width of the opening.
- The typical height of the transport vehicle bed encountered at this dock.
- The type of transport vehicles encountered (refrigerated trailer, etc.).
- The maximum weight of the material handling equipment and load that will traverse from the dock to the transport vehicle.
- The frequency of use of the dock.
- Environmental factors (corrosive environments, etc.).
- The type and size of material handling equipment used (forklifts, pallet jacks, etc.).
- New construction versus retrofit.
- The rating and condition of the concrete.
- General dock construction and the presence (or absence) of steel reinforcement members.

**TABLE 2 - DOCK CONSTRUCTION AND CORRESPONDING INSTALLATION METHODS**

DOCK EDGE CONSTRUCTION	CONDITION OF CONCRETE SUBSTRATE	DOCK HEIGHT RELATIVE TO TRANSPORT VEHICLE	MOUNT TYPE	LEVELER IS WELDED / ANCHORED	REQUIRED ADDITIONAL STEEL MEMBERS
Securely anchored steel embed channel (8" tall minimum)	-	Adequate (within +3/-3")	Flush Mount	Welded	Optional flat kinked / beveled approach plate
Securely anchored steel embed channel (8" tall minimum)	-	Dock too low OR transport vehicle too high	Ramp Mount	Welded	Ramped kinked / beveled approach plate
Securely anchored curb angle	Uncracked	Adequate (within +3 / -3")	Flush Mount	Hybrid Welded & Anchored	Optional flat kinked / beveled approach plate
No steel members present OR securely anchored curb angle	Uncracked	Dock too low OR transport vehicle too high	Ramp Mount	Hybrid Welded & Anchored	Ramped kinked / beveled approach plate
No steel members present	Uncracked	Adequate (within +3 / -3")	Flush Mount	Hybrid Welded & Anchored	Flat kinked / beveled approach plate
No steel members present	Cracked	Adequate (within +3 / -3")	Formed Angle	Welded	Formed steel on horizontal and vertical faces of dock edge
No steel members present	Cracked	Dock too low OR transport vehicle too high	Ramp Mount with Formed Angle	Welded	Formed steel on horizontal and vertical faces of dock edge and ramped kinked / beveled approach plate



**ENSURE EDGE OF DOCK IS WELDED ON THE TOP EDGE AS SHOWN IN THE INSTRUCTIONS BELOW, OR THIS WILL RESULT IN SERIOUS INJURY OR DEATH.**

A completed site survey will assist your Overhead Door dock specialist or qualified technician with specifying the correct dock leveler solution for your application.

**Table 2** shows some of the most common dock construction scenarios and the corresponding methods for edge of dock leveler installations.

Be sure to follow the installation instructions from the manufacturers of additional steel members, such as approach plates and ramps.

Whatever the specific application is, be sure to verify with an architect or engineer of record that the dock edge construction is suitably rated for the edge of dock leveler.



# Installation Instructions

## Installation Precautions

### DANGER

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING INSTALLATION. IF YOU ARE IN QUESTION ABOUT ANY OF THE PROCEDURES, DO NOT PERFORM THE WORK. INSTALLATION OR REPAIRS SHOULD ONLY BE PERFORMED BY A TRAINED DOCK LEVELER SYSTEMS TECHNICIAN. FAILURE TO FOLLOW SAFETY INSTRUCTIONS WILL RESULT IN DEATH OR SERIOUS INJURY.

### DANGER

DURING INSTALLATION KEEP HANDS AND FEET CLEAR OF HINGES AND OTHER PINCH POINTS WHEN LIFTING, MANIPULATING, AND MOVING THE DOCK LEVELING SYSTEM. FAILURE TO COMPLY WILL RESULT IN SERIOUS INJURY OR DEATH.

### WARNING

INSTALLING THIS LEVELER PROPERLY REQUIRES THE USE OF SPECIAL TOOLS AND TECHNIQUES. ALWAYS USE THE CORRECT TOOLS OR TECHNIQUES WHEN PERFORMING INSTALLATION. FAILURE TO USE PROPER TOOLS OR TECHNIQUES OR ADHERE TO SAFETY MESSAGES, COULD RESULT IN DEATH OR SERIOUS INJURY.

### WARNING

APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) SHOULD ALWAYS BE USED. THIS INCLUDES BUT IS NOT LIMITED TO A HARD HAT WHEN WORKING BELOW LEVELER DECK, APPROPRIATE EYE PROTECTION, GLOVES, AND HARD-CAPPED SLIP-RESISTANT FOOTWEAR WHEN WORKING ON OR NEAR THE DOCK AREA. APPROPRIATE PPE MAY PROTECT YOU FROM DEATH OR SERIOUS INJURY.

### NOTICE

INSTALLATION OF THIS DOCK LEVELING DEVICE REQUIRES A MINIMUM OF TWO PEOPLE.

#### Required Tools And Materials List

- Lifting equipment
- Tape measure
- Welder with welding electrode or filler metal (minimum 70,000 PSI tensile strength)
- Wire brush (for cleaning weld slag and concrete splatter)
- Grinder (for removing powder coat before welding)
- Hammer drill with drill bit suitable for concrete. (Be sure to follow anchor manufacturer recommendation for hole diameter)
- Vacuum or compressed air (for concrete anchor hole cleanout)
- Hammer or mallet (for driving concrete anchors)
- Drill driver with socket adapters (for installing anchors)
- Grease gun with grease fitting adapter and calcium sulfonate complex grease
- Touch up paint (available as part number 606699.0064)
- Minimum 5/8" x 4-3/4" embedment concrete anchors

# Installation Instructions Continued...

The below instructions cover most typical installation constructions.

## 1. Prepare Mounting Surface:

- a) Remove all obstructions from dock edge. The faceplate must sit flush against the substrate (the vertical surface of the dock face) – ensure the surface is clear of foreign debris and concrete or weld splatter.
- b) If using an embedded steel channel or formed angle, it must span at least the minimum width of the leveler, as noted in **Table 1**.
- c) Clean/sweep dock edge from debris and flammable materials which may interfere with the welding procedure.

## 2. Mark Center:

- a) With a tape measure, locate and mark the center of the mounting surface.
- b) Mark the wall where the right and left edges of the faceplate will align. This may be accomplished by measuring half the faceplate width to the right and left of the centerline marked in step 2a.

**NOTE:** Be sure to mark on the vertical and top surfaces of the dock edge so that the marks are visible after moving the leveler into position.

## 3. Prepare Welding Surface:

- a) To mitigate weld contamination, expose bare metal on all surfaces that will be welded in steps 5, 7 and 9. See **Figure 9**.



**INADEQUATE LIFTING EQUIPMENT OR PRACTICES CAN CAUSE A LIFTED LOAD TO FALL UNEXPECTEDLY. MAKE SURE LIFTING CHAIN, FORKLIFT, OR OTHER LIFTING DEVICES ARE IN GOOD CONDITION AND HAVE A RATED CAPACITY OF AT LEAST 1000 LBS. AT THE LOAD CENTER AND FOR THE LIFTING ANGLE BEING USED. NEVER ALLOW ANYONE TO STAND ON OR NEAR DOCK LEVELER WHEN IT IS BEING LIFTED. DO NOT STAND OR PLACE ANY BODY PARTS BETWEEN OR NEAR THE DOCK LEVELER AND THE DOCK EDGE WHILE IT IS BEING MANEUVERED INTO POSITION. FAILURE TO FOLLOW THIS WARNING CAN ALLOW THE DOCK LEVELER TO FALL, TIP, CRUSH, OR SWING INTO PEOPLE, RESULTING IN DEATH OR SERIOUS INJURY.**

## 4. Lift The Dock Leveler Into Position:

- a) Secure a lifting harness properly rated for at least 1000 lbs. to the lifting hole in the center of the outermost edge of the leveler lip, and raise the dock leveler into position in front of the dock face.  
**Alternative Install:** Lift the edge of dock leveler using lifting forks from below the deck and lip. With the lifting equipment, simultaneously press and raise the leveler into position towards the dock edge. See **Figure 4**.
- b) Position the top edges of the faceplate 1/4" below the top surface of the dock edge. **Figure 5** shows this measurement when an embed channel is used. If using an approach ramp, formed angle, or other dock edge construction, measure from the top surface of the dock edge (the surface upon which the loading equipment wheels will traverse).

**NOTE:** If the dock edge is equipped with a horizontal transition plate and no vertical steel face, lowering the faceplate 1/4" below the top surface of the dock edge may leave insufficient overlap for welding the faceplate to the narrow edge of the transition plate. In this situation, lower the faceplate less than the full 1/4" to leave sufficient overlap for the welds.

- c) Ensure left and right sides of the leveler faceplate align with the previously marked locations on the dock edge.

# Installation Instructions Continued...

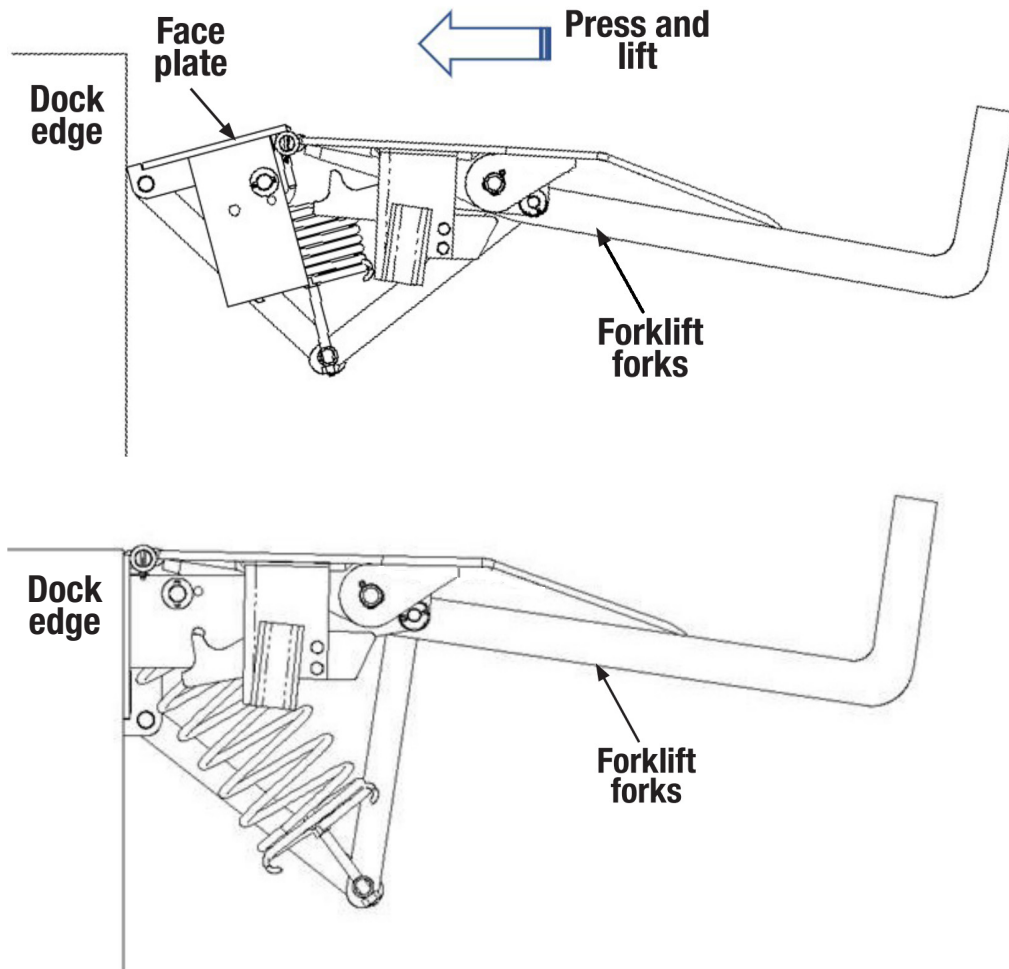


Figure 4

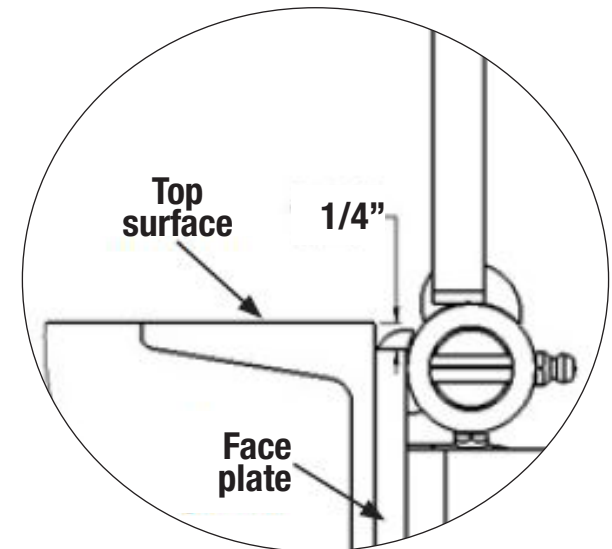
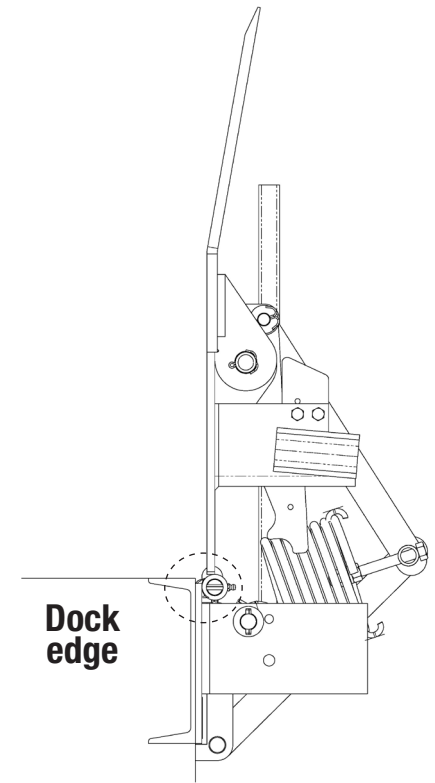


Figure 5

# Installation Instructions Continued...

## 5. Tack Weld Dock Leveler In Position:

- Ensure the edges of the faceplate are consistently below the top surface of the dock edge on both sides of the leveler (per step 4b).
- Apply a 2-inch-long 1/4" flare bevel weld to join the faceplate near the hinge tube (that is welded to the faceplate) to the face of the dock edge at the right-hand end of the leveler.
- Check the left-hand end of the faceplate to ensure that it is flush against the substrate and that the top of the faceplate is still consistently below the top surface of the dock edge (per step 4b).
- Apply a 2-inch-long 1/4" flare bevel weld to join the faceplate near the hinge tube (that is welded to the faceplate) to the face of the dock edge at the left-hand end of the leveler.
- Install maintenance strut using supplied hardware. See **Figure 6** and **Figure 10**.
- Capture the operating handle in the lifting socket using hardware supplied. See **Figure 7**.

**Alternative Install:** Non-captured Operating Handle - Mount the hardware in the hole above the bend. Handle can be stored away when not in use. See **Figure 8**.

### **! DANGER**

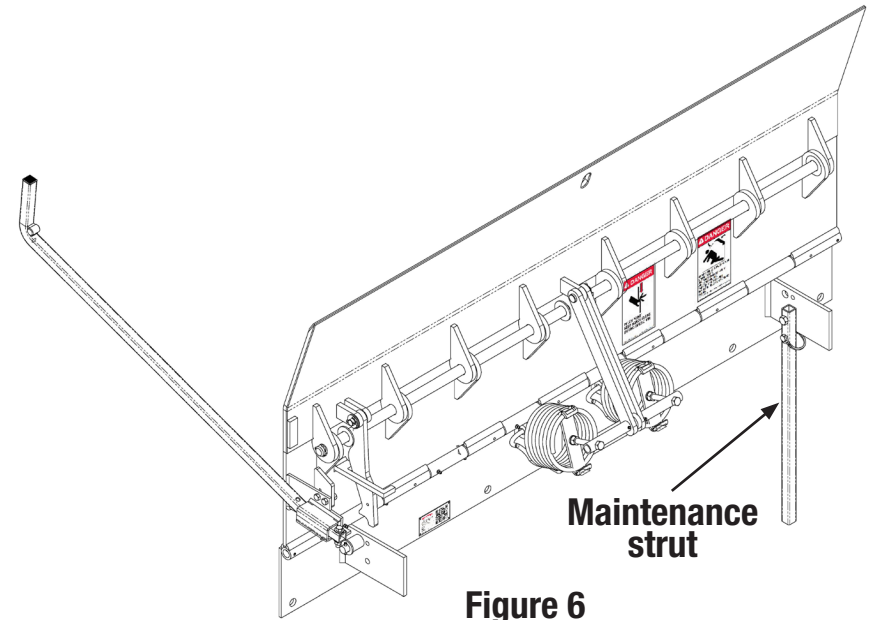
**DO NOT STAND BELOW LEVELER WHEN LOWERING FROM MAINTENANCE POSITION TO STOWED POSITION. KEEP ALL BODY PARTS CLEAR OF PINCH POINTS AND THE PATH OF MOTION OF THE LEVELER AS IT IS BEING LOWERED. LEVELER MAY LOWER UNEXPECTEDLY AND FORCEFULLY, CAUSING DEATH OR SERIOUS INJURY.**

- Using lifting equipment, carefully lower the lip and deck into the stowed position, being sure to keep body and limbs clear of the leveler pinch points and range of motion as it is lowering. NEVER PLACE HANDS IN THE LIP HINGE.

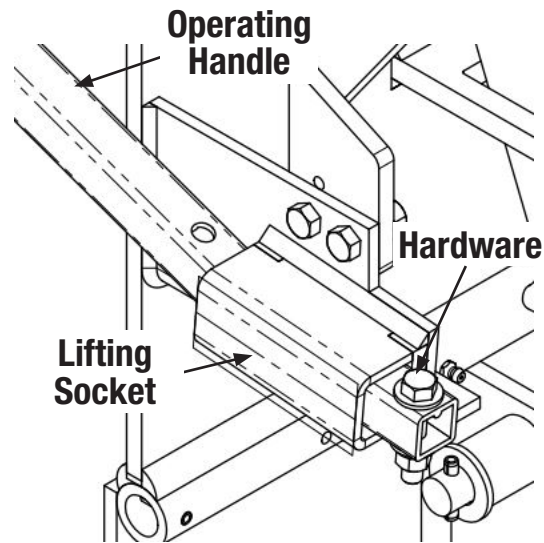
### **! WARNING**

**DO NOT RELEASE THE LIFTING HARNESS FROM THE EDGE OF DOCK LEVELER LIP UNTIL THE TACK WELDS ARE SECURELY IN PLACE. THIS COULD CAUSE AN UNEXPECTED DROP RESULTING IN DEATH OR SERIOUS INJURY.**

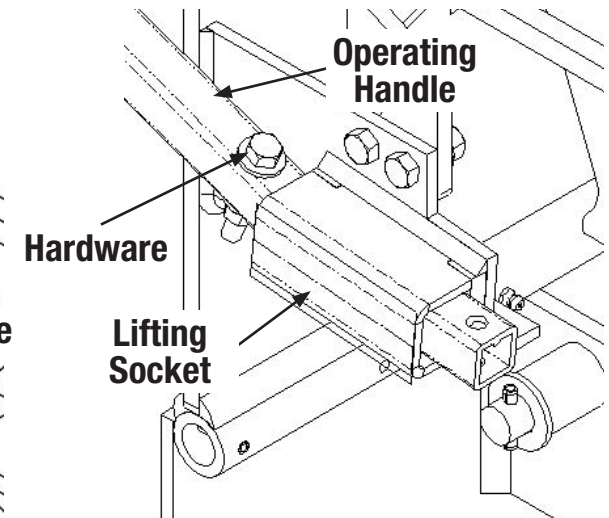
- Once leveler is stowed, release the dock lip from the lifting harness.



**Figure 6**



**Figure 7**



**Figure 8**

# Installation Instructions Continued...

## 6. Function Check:

- a) Cycle the dock leveler to check for obstruction or binding. If this occurs, remove the tack welds, adjust leveler, and go back to step 5.

## 7. Tack Weld Bumper Boxes In Position:

- a) Place bumper box flange flush to a vertical edge of the faceplate. The top plate of the bumper box should be flush with the top surface of the dock edge.

**IMPORTANT:** THE BUMPER BOXES SHOULD BE ORIENTED WITH THE DANGER AND SAFETY INSTRUCTIONS LABEL FACING AWAY FROM THE EDGE OF DOCK LEVELER.

- b) Apply a 1-inch-long butt weld to join the bumper box top plate to the top surface of the dock edge.
- c) Repeat steps 7a and 7b for the other bumper box.

## 8. Verify The Positioning Of The Faceplate And The Bumper Boxes:

- a) Ensure both bumper boxes are flat against the substrate and flush at the top surface of the dock edge.
- b) Ensure the leveler is flat against the substrate and consistently below the top surface of the dock (per step 4b), as shown in **Figure 5**.

## 9. Complete Welding And Anchoring. See Figure 9:

- a) Apply continuous weld across top plate of each bumper box to the top surface of the dock edge.
- b) Apply a 1/4" x 3" fillet weld between the dock edge and the faceplate, along the top outermost edges on both sides of the faceplate.
- c) Apply 1/4" flare bevel weld between the dock edge and the hinge tubes, along the top of each hinge tube that is welded to the faceplate. Skip welding is permitted to mitigate warping.



**SECURELY SUPPORT RAMP AND LIP WHEN IN VERTICAL POSITION WHILE WORKING BELOW THE LEVELER PLATFORM. FAILURE TO USE PROPER BRACING WILL RESULT IN DEATH OR SERIOUS INJURY DUE TO RAMP DROPPING. A SECONDARY MEANS OF SUPPORTING THE RAMP AND LIP SHOULD BE USED.**

- d) Plug weld all leveler mounting holes on the faceplate that overlap with steel substrate. Alternatively, install 5/8" x 4-3/4" embedment concrete anchors with washers (not included) being careful to follow the anchor manufacturer's installation instructions.
- e) On the bumper boxes, apply a 1/4" continuous fillet weld along all edges that overlap with steel substrate
- f) Plug weld all holes in bumper boxes. Alternatively, install 5/8" x 4-3/4" embedment concrete anchors with washers (not included) being careful to follow the anchor manufacturer's specifications.

## 10. Cleanup, Lubrication, And Balancing:

- a) Remove all welding slag, allow welded areas to cool and repaint welded areas with touch up paint (sold separately).
- b) Lubricate joints as needed. See page 22.
- c) Tune springs for smooth and balanced operation. See page 23.

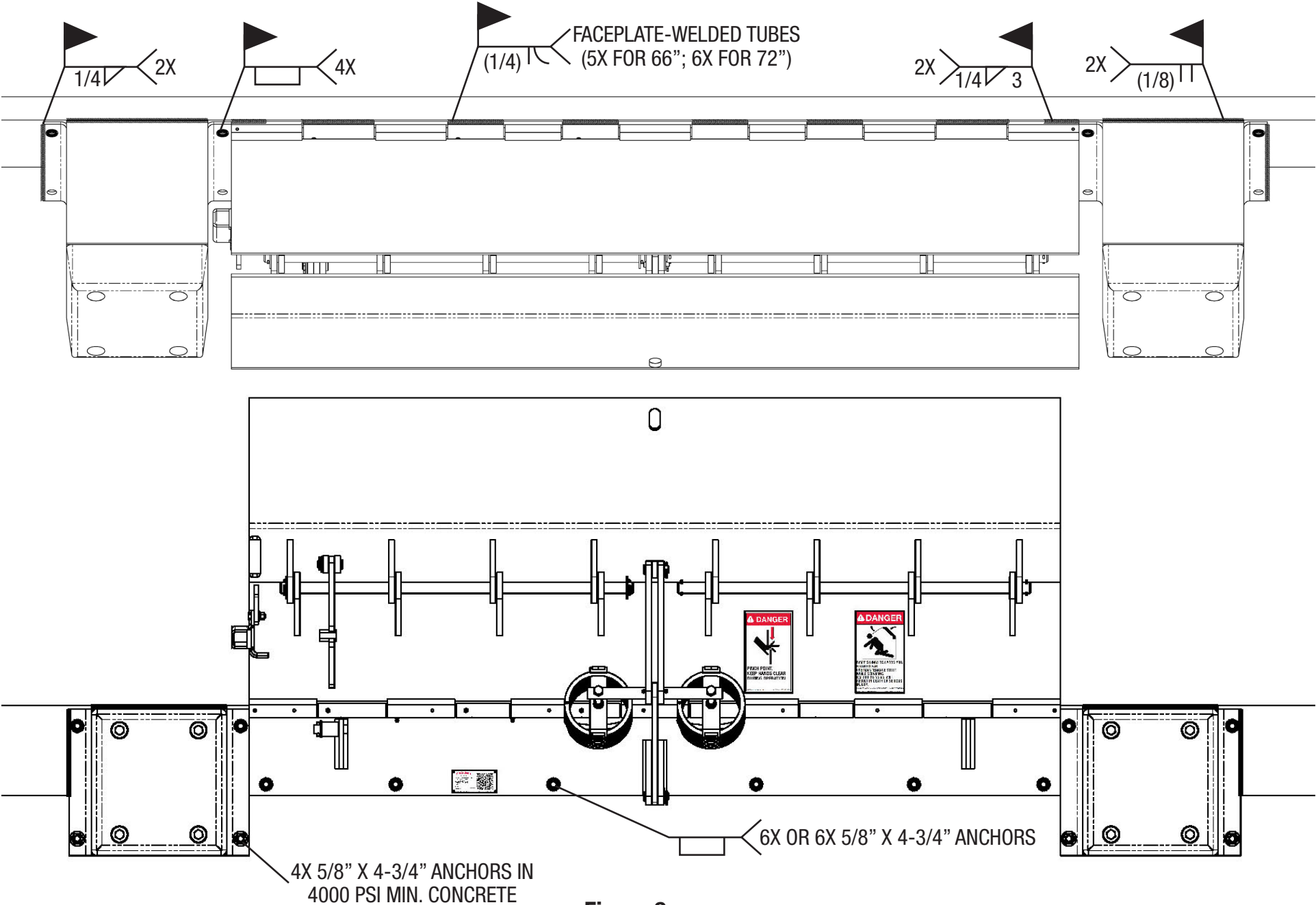


WARRANTY MAY BE VOIDED IF SPRING ADJUSTMENT PROCEDURE IS NOT FOLLOWED AFTER INSTALL.

## Placard Installation Instructions

Place the placard in a conspicuous location, unobstructed from the user's view, on a wall surface at eye level, within 3 feet of leveler.

# Installation Instructions Continued...



**Figure 9**



# Periodic Maintenance

## **⚠ DANGER**

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING MAINTENANCE. IF YOU ARE IN QUESTION ABOUT ANY OF THE PROCEDURES, DO NOT PERFORM THE WORK. REPAIRS SHOULD ONLY BE PERFORMED BY A TRAINED DOCK LEVELER SYSTEMS TECHNICIAN. FAILURE TO FOLLOW SAFETY INSTRUCTIONS WILL RESULT IN DEATH OR SERIOUS INJURY.

## **⚠ DANGER**

SECURELY SUPPORT RAMP AND LIP WITH MAINTENANCE STRUT WHEN RAMP IS IN VERTICAL SERVICE POSITION. FAILURE TO USE PROPER BRACING WILL RESULT IN DEATH OR SERIOUS INJURY DUE TO RAMP DROPPING DURING MAINTENANCE. A SECONDARY MEANS OF SUPPORTING THE RAMP AND LIP SHOULD BE USED.

## **⚠ WARNING**

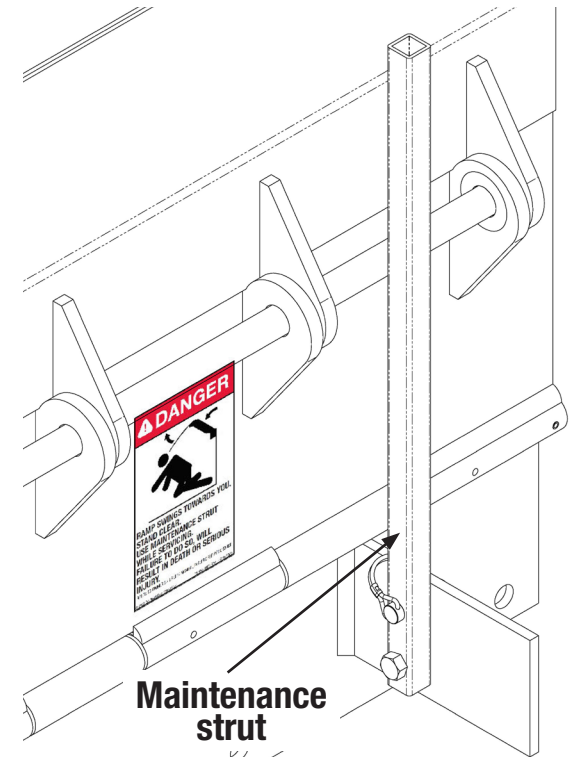
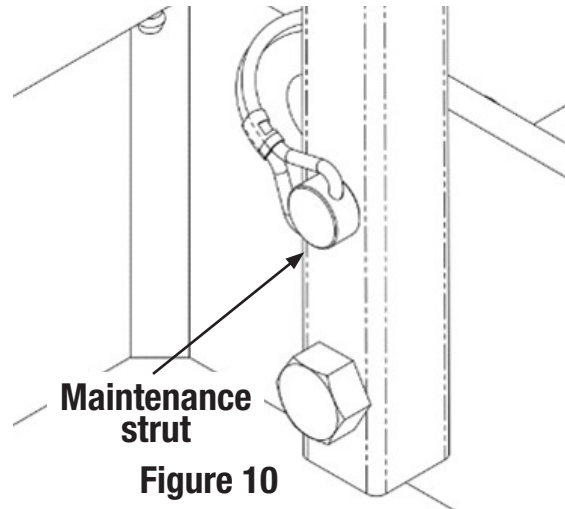
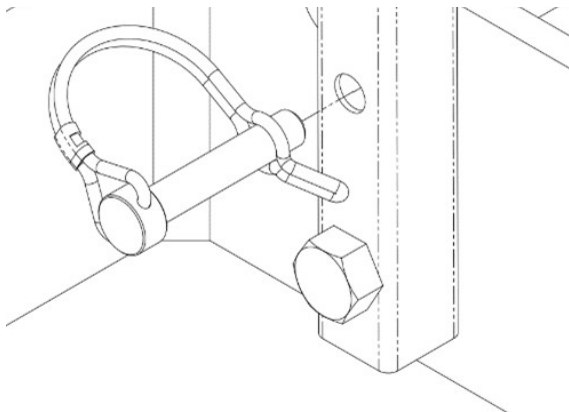
APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) SHOULD ALWAYS BE USED. THIS INCLUDES BUT IS NOT LIMITED TO: A HARD HAT WHEN WORKING BELOW LEVELER DECK, EYE PROTECTION, GLOVES, AND HARD-CAPPED SLIP-RESISTANT FOOTWEAR WHEN WORKING ON OR NEAR THE DOCK AREA. FAILURE TO USE APPROPRIATE PPE COULD RESULT IN SEVERE OR FATAL INJURY.

Before starting repair or inspection of a dock leveler device:

- Secure and restrict access in and around the dock position (dock and driveway) with physical barriers and visible signage.
- Read, understand, and follow all maintenance instructions and precautions provided.
- Remove all loads from the platform; and
- Disconnect power and follow established lockout/tag-out policies as required.

Maintenance and inspection of all dock leveling devices shall be performed in conformance with the following practices.

- A scheduled, planned maintenance program shall be followed and logged.
- Only trained and authorized personnel shall be permitted to maintain, repair, adjust, and inspect dock leveling devices.
- Use only original equipment manufacturer parts, manuals, maintenance instructions and labels.



# Periodic Maintenance Continued...

## Daily Maintenance

At the beginning of each shift and before operation of the dock leveling device, the operator shall inspect the condition of the dock leveling device, giving special attention to the following:

1. Ensure hinges and surfaces are free of debris, ice, dirt, or obstruction.
2. Verify all precautionary labeling and operation placards are intact, visible, and legible.
3. If leveler has guards or safety devices, ensure they are present and functional.
4. Perform a function check to ensure controls are fully operational.
5. Inspect that unit is free of visible structural defect or damage.

## Weekly Maintenance

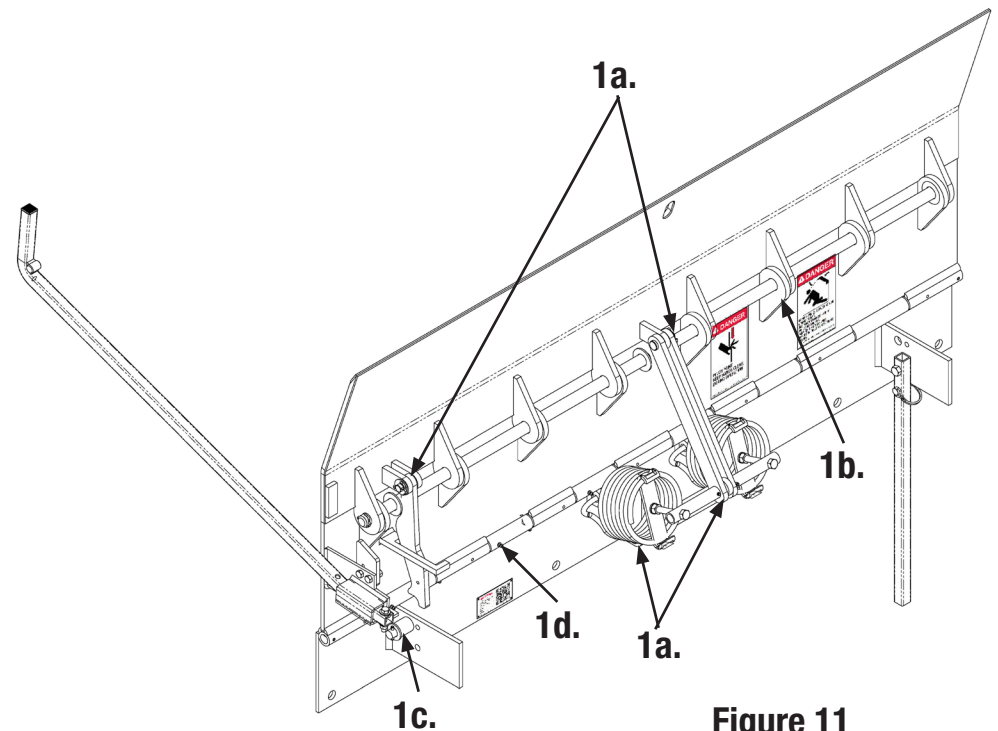
1. Cycle the dock leveler through at least one complete operating cycle to maintain lubrication.
  - a) Feel for imbalance. If leveler feels heavy or binds, call authorized, trained personnel to adjust the springs.
2. Check bumpers for wear. If the leveler begins to interfere with the transport vehicle during deployment or stowing, it is time to replace the bumpers.
3. Clean dock leveler with warm soapy water.

**NOTE:** Sodium hydroxide cleaning solution may be used if it is diluted to <5% and completely rinsed clean within 3 minutes. Ensure lubrication is not washed off.

## Quarterly Maintenance

1. Lubricate the following areas with calcium sulfonate complex grease. See **Figure 11**:

- a) All linkage joints
  - b) Lug hinge contact surfaces.
  - c) Surface between lip lifter support roller and pin.
  - d) All grease fittings on deck-to-faceplate hinge.
2. Inspect welds and structure for cracks, separation, or other damage. Replace or repair joints as needed.
    - a) Inspect welds between the leveler and the dock edge.
    - b) Inspect structural welds below leveler platform.
    - c) Inspect welds of bumpers to dock structure.
    - d) Inspect hinge pins for wear.
  3. Perform Weekly Maintenance
    - a) Tune the spring for easy, smooth operation.
  4. Check wall anchors/anchor nuts for tightness.



**Figure 11**

# Spring Adjustments Instructions

## **⚠ DANGER**

SECURELY SUPPORT RAMP AND LIP WITH MAINTENANCE STRUT WHEN RAMP IS IN VERTICAL SERVICE POSITION. FAILURE TO USE PROPER BRACING WILL RESULT IN DEATH OR SERIOUS INJURY DUE TO RAMP DROPPING DURING MAINTENANCE. A SECONDARY MEANS OF SUPPORTING THE RAMP AND LIP SHOULD BE USED.

## **⚠ WARNING**

NEVER ADJUST THE COUNTERBALANCE SPRING TENSION WHEN THE EDGE OF DOCK LEVELER IS IN THE STOWED POSITION. DOING SO COULD RESULT IN DEATH OR SERIOUS INJURY. ADJUST COUNTERBALANCE SPRINGS ONLY WITH THE LEVELER IN THE VERTICAL MAINTENANCE POSITION WITH THE MAINTENANCE STRUT IN PLACE.

The edge of dock leveler is balanced when:

- The deck fully rests on the gussets when the leveler is stowed with no spring back.
- The lip hinge stows fully under its own weight when the deck and lip are disengaged from the transport vehicle.
- The edge of dock can be deployed and stowed with minimal effort.

Make all spring adjustments and replacements to the edge of dock leveler with the deck and lip fully vertical and the maintenance strut in the maintenance position. See **Figure 12**.

### **To Increase Counterbalance Force**

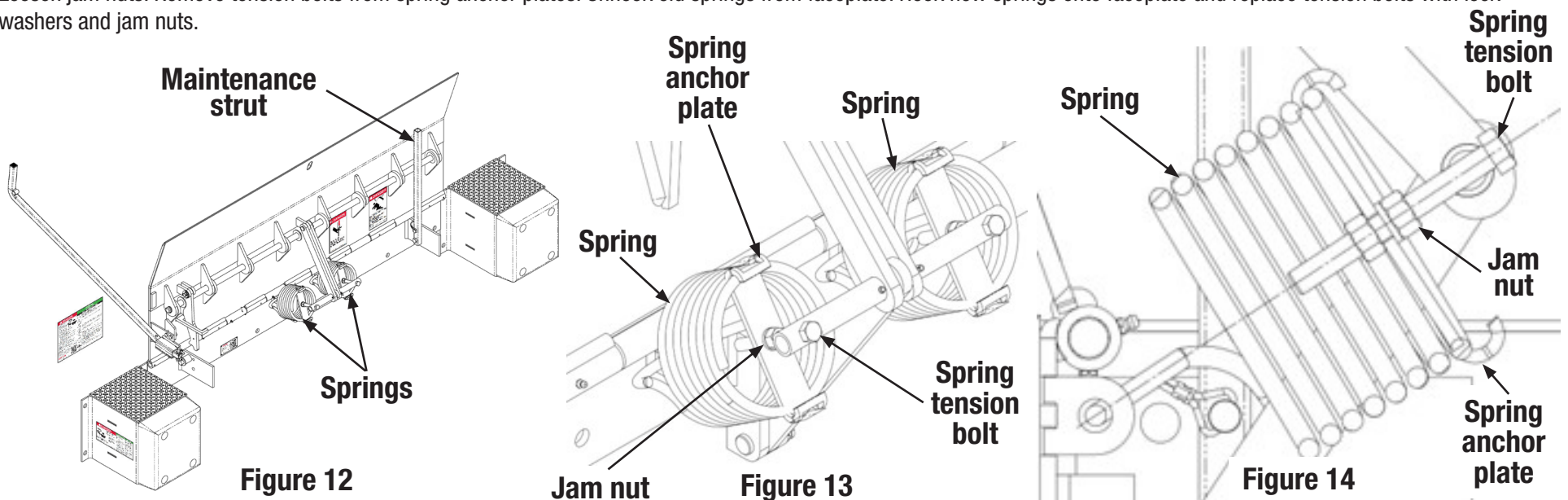
Loosen jam nut. Rotate the tension bolt clockwise, expanding the spring. Load both springs evenly. Tighten jam nut. See **Figure 13** and **Figure 14**.

### **To Decrease The Counterbalance Force**

Loosen jam nut. Rotate the tension bolt counterclockwise, contracting the spring. Load both springs evenly. Tighten jam nut. See **Figure 13** and **Figure 14**.

### **To Replace Springs**

Loosen jam nuts. Remove tension bolts from spring anchor plates. Unhook old springs from faceplate. Hook new springs onto faceplate and replace tension bolts with lock washers and jam nuts.



# Troubleshooting

## DANGER

FAILURE TO FOLLOW SAFETY INSTRUCTIONS WILL RESULT IN DEATH OR SERIOUS INJURY.

## DANGER

SECURELY SUPPORT RAMP AND LIP WITH MAINTENANCE STRUT WHEN RAMP IS IN VERTICAL SERVICE POSITION. FAILURE TO USE PROPER BRACING WILL RESULT IN DEATH OR SERIOUS INJURY DUE TO RAMP DROPPING DURING MAINTENANCE. A SECONDARY MEANS OF SUPPORTING THE RAMP AND LIP SHOULD BE USED.

## WARNING

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING REPAIR. IF YOU ARE IN QUESTION ABOUT ANY OF THE PROCEDURES, DO NOT PERFORM THE WORK. INSTEAD, HAVE A TRAINED LEVELER SYSTEMS TECHNICIAN DO THE INSTALLATION OR REPAIRS. REPAIRING A DOCK LEVELER WITHOUT PROPER TRAINING COULD RESULT IN DEATH OR SERIOUS INJURY.

## WARNING

APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) SHOULD ALWAYS BE USED. THIS INCLUDES BUT IS NOT LIMITED TO A HARD HAT WHEN WORKING BELOW LEVELER DECK, APPROPRIATE EYE PROTECTION, GLOVES, AND HARD-CAPPED SLIP-RESISTANT FOOTWEAR WHEN WORKING ON OR NEAR THE DOCK AREA. APPROPRIATE PPE MAY PROTECT YOU FROM DEATH OR SERIOUS INJURY.

If requiring additional support, contact your local Overhead Door Distributor.

# Troubleshooting Continued...

**TABLE 3 - TROUBLESHOOTING: SYMPTOMS, CAUSES AND SOLUTIONS**

<b>SYMPTOM</b>	<b>POSSIBLE CAUSE</b>	<b>SOLUTION</b>
Leveler does not deploy smoothly, or is very difficult to operate	Debris in the hinge	Clean out debris
	Insufficient lubrication in hinges and pivots	Lubricate leveler per Periodic Maintenance
	Counterbalance spring tension needs to be adjusted	Adjust springs per Spring Adjustment section
	Weight on deck surface	Remove weight
	Spring(s) is/are broken	Replace damaged spring(s)
	Damaged or missing parts	Repair or replace as needed
Lip lifter does not deploy lip, or does not allow lip to fall after vehicle departure	Worn or damaged lip lifter	Replace worn or damaged parts
	Debris in lip lifter	Clear out debris
	Lip lifter or link pivots needs lubrication	Lubricate leveler per Periodic Maintenance
Lip does not clear transport vehicle	Operating handle is interfering with lip	Ensure operating handle is fully withdrawn from its socket
	Lip lifter is damaged or misaligned	Replace or repair lip lifter
	Bumpers are worn more than 1"	Replace worn bumpers
	Drive grade is incompatible with bumper projection	Replace with compatible bumper projection
Painted areas flaking/wearing	Dirty surface prior to field paint	Clean surface and reapply touchup paint
	Too thin of a touchup paint coat applied	
	Harsh chemicals used	
Chipped or cracked powder coating	Bent or broken equipment	Inspect and replace as needed
Pallet jack or loading vehicle scrapes against leveler platform	Pallet jack is too low	Raise pallet jack to max height
	Transport vehicle is too high, or dock is too low	Ramped approach plate installation needed
Cracked deck or broken welds	Driving too fast over deck	Document with installer and repair/replace per manufacturer instruction.
	Load exceeded manufacturer factored load limit	
Lip stuck in extended position	Lip deployed without transport vehicle present	Raise lip edge to release lip lifter and allow lip to stow.

# Breakdown of Parts

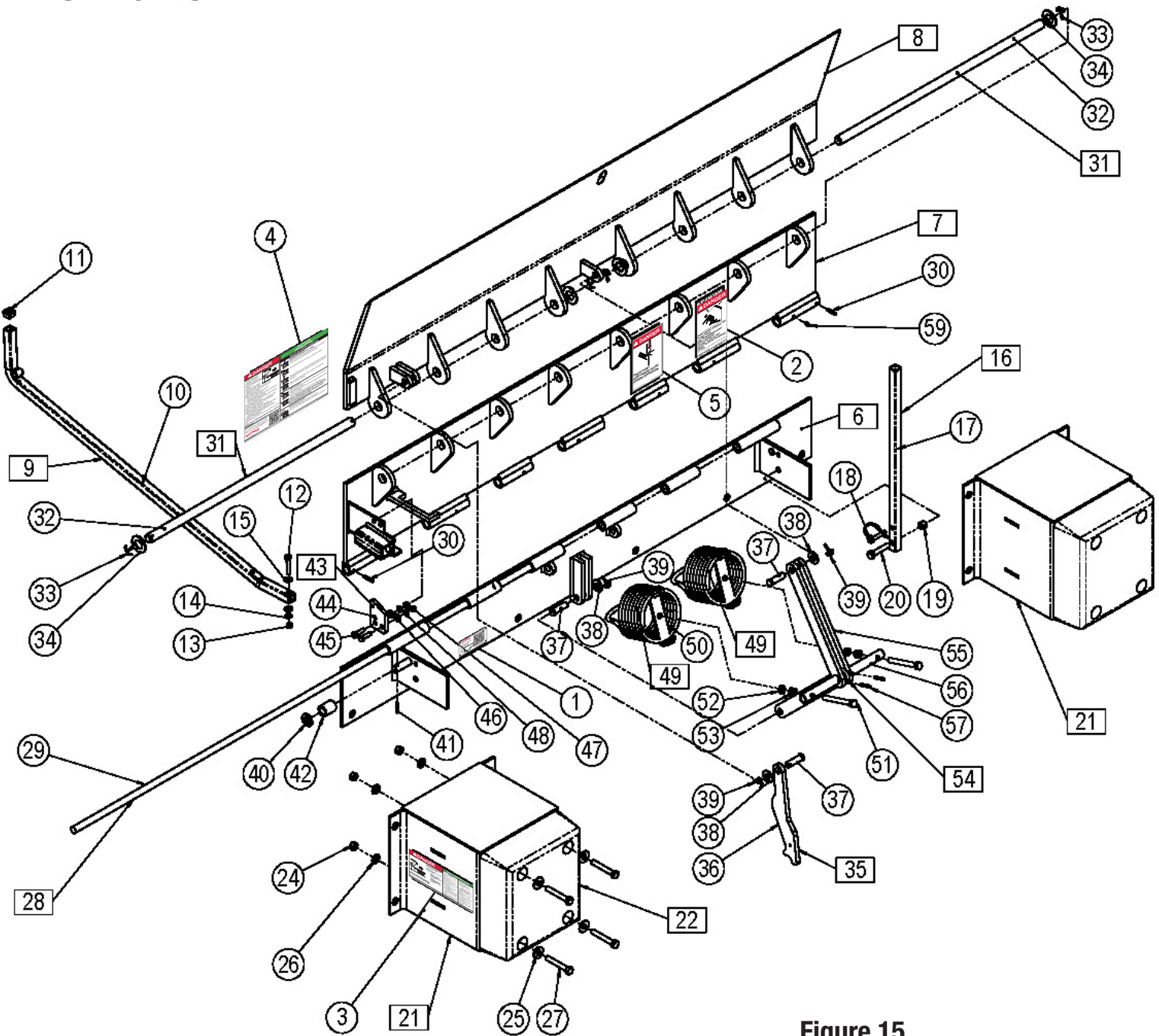


Figure 15



# Breakdown of Parts Continued...

ITEM	PART DESCRIPTION	CAPACITY ( CIR ) - PART NUMBER		QUANTITY
		20,000 POUNDS	30,000 POUNDS	
1	SERIAL # & MODEL TAG	851053.0001	851053.0001	1
2	DANGER, USE MAINTAINANCE STRUT LABEL	851055.0001	851055.0001	1
3	DANGER AND SAFETY INSTRUCTIONS LABEL	851056.0001	851056.0001	1
4	OPERATING INSTRUCTIONS AND DANGER PLACARD	851057.0001	851057.0001	1
5	DANGER, PINCH POINT LABEL	851059.0001	851059.0001	1
6	FACE ASSY, 66"	851002.0066	851002.0066	1
	FACE ASSY, 72"	851002.0072	851002.0072	
7	DECK ASSY, 66"	851003.0166	851003.0266	1
	DECK ASSY, 72"	851003.0172	851003.0272	
8	LIP ASSY, 15" LIP, 66", C1, MID CROWN	851004.156611	851004.156621	1
	LIP ASSY, 17" LIP, 66", C1, MID CROWN	851004.176611	851004.176621	
	LIP ASSY, 15" LIP, 66", C2, HIGH CROWN	851004.156612	851004.156622	
	LIP ASSY, 17" LIP, 66", C2, HIGH CROWN	851004.176612	851004.176622	
	LIP ASSY, 15" LIP, 66", C3, REGULAR CROWN	851004.156613	851004.156623	
	LIP ASSY, 17" LIP, 66", C3, REGULAR CROWN	851004.176613	851004.176623	
	LIP ASSY, 15" LIP, 72", C1, MID CROWN	851004.157211	851004.157221	
	LIP ASSY, 17" LIP, 72", C1, MID CROWN	851004.177211	851004.177221	
	LIP ASSY, 15" LIP, 72", C2, HIGH CROWN	851004.157212	851004.157222	
	LIP ASSY, 17" LIP, 72", C2, HIGH CROWN	851004.177212	851004.177222	
	LIP ASSY, 15" LIP, 72", C3, REGULAR CROWN	851004.157213	851004.157223	
	LIP ASSY, 17" LIP, 72", C3, REGULAR CROWN	851004.177213	851004.177223	

# Breakdown of Parts Continued...

ITEM	PART DESCRIPTION	CAPACITY ( CIR ) - PART NUMBER		QUANTITY
		20,000 POUNDS	30,000 POUNDS	
<b>9</b>	<b>OPERATING HANDLE W/ HARDWARE KIT</b>	851007.0001	851007.0001	
10	LIFTING HANDLE, TUBE			1
11	PLUG, PE			1
12	HEX BOLT, PLATED			1
13	HEX NUT, PLD			1
14	LOCK WASHER, PLATED			1
15	FLAT WASHER, PLATED			2
<b>16</b>	<b>MAINTENANCE BRACE W/ HARDWARE KIT</b>	851008.0001	851008.0001	
17	POLE, SAFETY BRACE			1
18	WIRE-LOCK CLEVIS PIN			1
19	HEX LOCK NUT, PLATED			1
20	HEX BOLT, PLATED			1
<b>21</b>	<b>COMPLETE BUMPER ASSEMBLY - 16" PROJECTION</b>	851005.0001	851005.0001	1
	<b>COMPLETE BUMPER ASSEMBLY - 17" PROJECTION</b>	851005.0002	851005.0002	1
<b>22</b>	<b>MOLDED RUBBER BUMPER W/ HARDWARE KIT</b>	851071.0001	851071.0001	
23	MOLDED RUBBER BUMPER			1
24	HEX NUT, PLATED			4
25	FLAT WASHER, LARGE, PLATED			4
26	FLAT WASHER, PLATED			4
27	HEX BOLT, PLATED			4
<b>28</b>	<b>REPLACEMENT DECK HINGE SHAFT W/ HARDWARE KIT, 66" WIDE</b>	851071.0002	851071.0002	
<b>29</b>	<b>DECK HINGE SHAFT, 66"</b>			1
<b>30</b>	<b>ROLL PIN, SPRING</b>			2

# Breakdown of Parts Continued...

ITEM	PART DESCRIPTION	CAPACITY ( CIR ) - PART NUMBER		QUANTITY
		20,000 POUNDS	30,000 POUNDS	
<b>28</b>	<b>REPLACEMENT DECK HINGE SHAFT W/ HARDWARE KIT, 72" WIDE</b>			
29	DECK HINGE SHAFT, 72"	851071.0003	851071.0003	1
30	ROLL PIN, SPRING			2
<b>31</b>	<b>REPLACEMENT LIP HINGE SHAFTS W/ HARDWARE KIT - 66" WIDE</b>			
32	SHAFT, LIP HINGE, 66"	851071.0004	851071.0004	2
33	PIN, COTTER, PLATED			4
34	FLAT WASHER, PLATED			4
<b>31</b>	<b>REPLACEMENT LIP HINGE SHAFTS W/ HARDWARE KIT - 72" WIDE</b>			
32	SHAFT, LIP HINGE, 72"	851071.0005	851071.0005	2
33	PIN, COTTER, PLATED			4
34	FLAT WASHER, PLATED			4
<b>35</b>	<b>REPLACEMENT LIP LIFTER 1 W/ HARDWARE KIT - FOR 15" MID &amp; HIGH CROWN LIP</b>			
36	LIP LIFTER 1	851071.0008	851071.0008	1
37	CLEVIS PIN, PLATED			1
38	FLAT WASHER, PLATED			1
39	PIN, COTTER, PLATED			1
40	FLAT WASHER, PLATED			1
41	ROLL PIN, SPRING			1
42	SUPPORT, LIP LIFTER			1

# Breakdown of Parts Continued...

ITEM	PART DESCRIPTION	CAPACITY ( CIR ) - PART NUMBER		QUANTITY
		20,000 POUNDS	30,000 POUNDS	
<b>35</b>	<b>REPLACEMENT LIP LIFTER 2 W/ HARDWARE KIT - FOR 17" MID &amp; HIGH CROWN LIP</b>	851071.0009	851071.0009	
36	LIP LIFTER 2			1
37	CLEVIS PIN, PLATED			1
38	FLAT WASHER, PLATED			1
39	PIN, COTTER, PLATED			1
40	FLAT WASHER, PLATED			1
41	ROLL PIN, SPRING			1
42	SUPPORT, LIP LIFTER			1
<b>35</b>	<b>REPLACEMENT LIP LIFTER 3 W/ HARDWARE KIT - FOR 15" &amp; 17" REGULAR CROWN LIP</b>	851071.0014	851071.0014	
36	LIP LIFTER 3			1
37	CLEVIS PIN, PLATED			1
38	FLAT WASHER, PLATED			1
39	PIN, COTTER, PLATED			1
40	FLAT WASHER, PLATED			1
41	ROLL PIN, SPRING			1
42	SUPPORT, LIP LIFTER			1
<b>43</b>	<b>LIP SUPPORT 1 W/ HARDWARE KIT - FOR MID CROWN</b>	851071.0010	851071.0010	
44	LIP SUPPORT 1, EOD			1
45	HEX BOLT, PLATED			1
46	FLAT WASHER, PLATED			1
47	HEX NUT, PLATED			1
48	LOCK WASHER, PLATED			1

# Breakdown of Parts Continued...

ITEM	PART DESCRIPTION	CAPACITY ( CIR ) - PART NUMBER		QUANTITY
		20,000 POUNDS	30,000 POUNDS	
<b>43</b>	<b>LIP SUPPORT 2 W/ HARDWARE KIT - FOR HIGH CROWN</b>	851071.0011	851071.0011	
44	LIP SUPPORT 2, EOD			1
45	HEX BOLT, PLATED			2
46	FLAT WASHER, PLATED			2
47	HEX NUT, PLATED			2
48	LOCK WASHER, PLATED			2
<b>43</b>	<b>LIP SUPPORT 3 W/ HARDWARE KIT - FOR REGULAR CROWN</b>	851071.0015	851071.0015	
44	LIP SUPPORT 3, EOD			1
45	HEX BOLT, PLATED			2
46	FLAT WASHER, PLATED			2
47	HEX NUT, PLATED			2
48	LOCK WASHER, PLATED			2
<b>49</b>	<b>SPRING W/ HARDWARE KIT</b>	851071.0012	851071.0012	
50	SPRING ASSY			1
51	HEX BOLT, PLATED			1
52	LOCK WASHER, PLATED			1
53	HEX NUT, PLATED			1

# Breakdown of Parts Continued...

ITEM	PART DESCRIPTION	CAPACITY ( CIR ) - PART NUMBER		QUANTITY
		20,000 POUNDS	30,000 POUNDS	
<b>54</b>	<b>LINKAGE BAR W/ HARDWARE KIT</b>			
55	LINKAGE BAR			3
56	SPRING HOLDER			1
57	ROLL PIN, SPRING	851071.0013	851071.0013	2
37	CLEVIS PIN, PLATED			2
38	FLAT WASHER, PLATED			2
39	COTTER PIN, PLATED			2
<b>58</b>	<b>GREASE FITTING</b>	851029.0001	851029.0001	13
59	TOUCH UP PAINT, DOCK GRAY ( NOT SHOWN )	606699.0064	606699.0064	1



# Limited Warranty

**The Genuine. The Original.**



## Edge of Dock Model E66R & E72R Limited Warranty

Overhead Door Corporation ("Seller") warrants to the original purchaser of Edge of Dock E66R & E72R ("Product"), subject to all of the terms and conditions hereof, that the Product and all components thereof will be free from defects in materials and workmanship under normal use for the following period, measured from the earlier of, the date of installation by original purchaser, or 60 days after shipping by Seller, provided that the owner maintains and operates the Product in accordance with the owner's manual.

- For the Product, Seller's warranty covers the repair or replacement of the Product or its components for a period of 12 months.

*Seller's obligation under this warranty is specifically limited to repairing or replacing, at its option, any part which is determined by Seller to be defective during the applicable warranty period. Repair or replacement labor for any defective Product part or component is included for a period of one (1) year from the date of installation. After that, any labor charges are excluded and will be the responsibility of the purchaser.*

*This warranty is made to the original purchaser of the Product only, and it is not transferable or assignable. This warranty does not apply to any unauthorized alteration or repair of the Product, or to any Product or component which has been damaged or deteriorated due to improper installation, improper operation, operation beyond capacity, misuse, neglect, accident, failure to provide necessary maintenance, normal wear and tear, or acts of God or any other cause beyond the reasonable control of Seller.*

*THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL SELLER BE RESPONSIBLE FOR, OR LIABLE TO ANYONE FOR, SPECIAL, INDIRECT, COLLATERAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES, even if Seller has been advised of the possibility of such damages. Such excluded damages include, but are not limited to, loss of goodwill, loss of profits, loss of use, cost of any substitute product, interruption of business, other similar indirect financial loss or arising out of or related to the use, installation or maintenance of the Product (including premature product wear, product failure, property damage or bodily injury resulting from use of unauthorized replacement parts or modification of the Product). Seller's sole obligation with regard to a Product that is claimed to be deficient in material or workmanship shall be as set forth in this Limited Warranty.*

*Claims under this warranty must be made promptly after discovery, within the applicable warranty period, and in writing to the Seller or to the authorized distributor or installer whose name and address appear below. The purchaser must allow Seller a reasonable opportunity to inspect any Product claimed to be defective prior to removal or any alteration of its condition. Proof of the purchase and/or installation date, and identification as the original purchaser, may be required.*

MODEL \_\_\_\_\_  
ORIGINAL PURCHASER \_\_\_\_\_  
INSTALLATION ADDRESS \_\_\_\_\_  
DISTRIBUTOR \_\_\_\_\_  
DISTRIBUTOR ADDRESS \_\_\_\_\_  
FACTORY ORDER #: \_\_\_\_\_  
DATE OF INSTALLATION: \_\_\_\_\_  
SIGNATURE OF DISTRIBUTOR: \_\_\_\_\_

07/2023