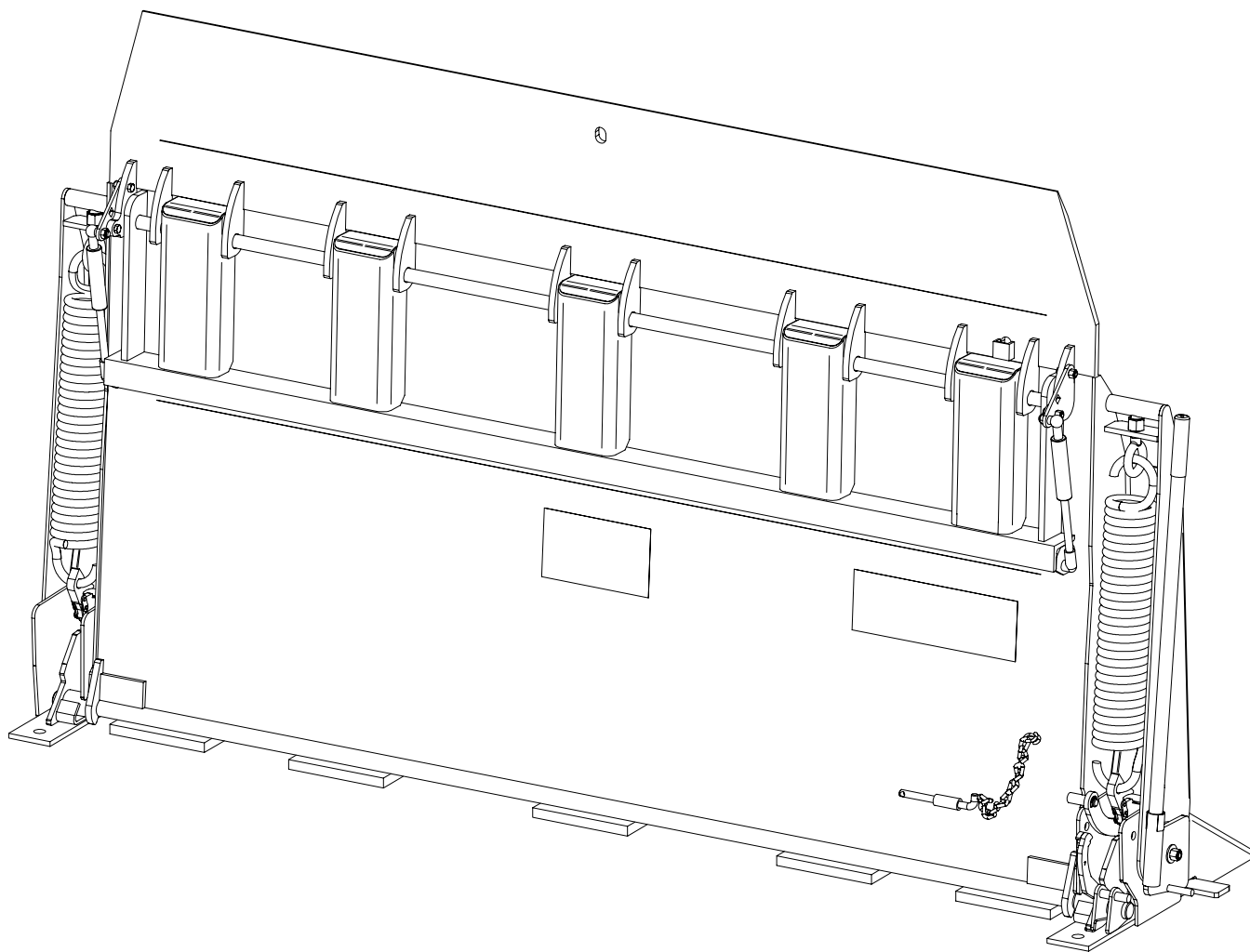




# Modular Dock Bridge

## 15,000 lbs Gross Vehicle Weight



This manual applies to the LHG  
Dock Bridges manufactured  
beginning May 2011 with the serial  
number 61007869 and higher

### **⚠ WARNING**

*Do not install, operate or service this product unless you have read and understand the Safety Practices, Warnings, and Installation and Operating Instructions contained in this manual. Failure to do so could result in death or serious injury.*

# User's Manual

## Installation, Operations, Maintenance and Parts

Part No. 6006333H

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## INTRODUCTION

Welcome, and thank you for buying your LoadHog® dock bridge from 4Front Engineered Solutions, Inc.

This manual contains information that you need to operate and maintain the dock bridge safely. It also contains a complete parts list and information about reordering replacement parts. Please **read it before** you use your new dock bridge.

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## SAFETY SIGNAL WORDS

You may find safety signal words such as DANGER, WARNING, or CAUTION throughout this User's Manual. Their use is explained below:



***This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible death or injury.***

### **▲ DANGER**

***Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.***

### **▲ WARNING**

***Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.***

### **▲ CAUTION**

***Indicates a potentially hazardous situation which, if not avoided may result in minor or moderate injury.***

### **NOTICE**

***Notice is used to address practices not related to personal injury.***

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# SAFETY PRACTICES

## **⚠ WARNING**

***Read these safety practices before installing, operating, or servicing the dock bridges. Failure to follow the safety practices could result in death or serious injury.***

If you do not understand the instructions, ask your supervisor to explain them to you or call local 4Front Engineered Solutions distributor.

### **OPERATION:**

Use of dock bridge restricted to trained operators.

Do not use this unit to service trailers outside of its intended working range which is 6" above dock and 4" below dock.

Do not operate the dock bridge when anyone is in front of it.

Follow procedures on placard(s) posted near dock bridge.

Stay clear of the dock bridge when it is moving.

**KEEP HANDS CLEAR OF HINGES AT ALL TIMES.** Do not use hands to position dock bridge or lip, or to store dock bridge. Use lifting handle furnished with dock bridge only to position deck and lip.

Do not use the dock bridge if it appears damaged or does not operate properly. Inform your supervisor immediately.

Do not stand in the driveway or on the bumper shelf between the dock bridge and the backing truck.

Chock truck wheels or lock truck into place with truck restraining device and set brakes before loading or unloading.

Visually check that the lip is supported by the truck bed or the dock bridge is fully lowered with the lip folded before driving on the dock bridge.

Stay clear of the dock bridge unless the lip is supported by the truck bed or the dock bridge is fully lowered. Unsupported dock bridge can lower unexpectedly.

Store the dock bridge vertically with the storage latch engaged and the lip extended vertically after use.

Ensure lip avoids contact with trailer sides and cargo. If lip does not lower to trailer bed, reposition trailer.

Move all equipment, material or people off the dock bridge and store the dock bridge before allowing the truck to pull out.

Do not use a fork truck or other material handling equipment to lower the dock bridge.

Before chocking wheels, or engaging the vehicle restraint, dump all air from the air ride suspensions and set the parking brake.

Do not step on the bumper shelf until the trailer is securely against the dock bumpers and chocked or secured with a trailer restraint.

### **INSTALLATION, MAINTENANCE AND SERVICE:**

Place barricades on the dock floor around the dock bridge and in the driveway in front of the dock while installing, maintaining or repairing the dock.

Do not operate the dock bridge when anyone is standing in front of the dock or the dock bridge.

Before doing any maintenance, repair, or adjustment on the dock bridge, store it in a vertical position with lip vertical, and the lock-out pin engaged through the left base assembly.

Before you disable the spring counter balance system, insert the lock-out pin through the left base assembly and secure the lock-out pin with a padlock.

Never adjust or attempt to remove the springs when the dock bridge is lowered. Never loosen or attempt to remove the nuts on the anchor bolts when the dock bridge is lowered. The dock bridge must be stored in a vertical position with the lock-out pin engaged through the left base assembly.

Never lift the dock bridge by any other means than the operating handle. If it does not lift, use a suitable lifting device to raise and insert lock-out pin before troubleshooting.

Failure to follow these instructions could result in death or serious injury to operators and/or bystanders.

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# OWNER'S RESPONSIBILITIES

The owner's responsibilities include the following:

The owner should recognize the inherent danger of the interface between dock and transport vehicle. The owner should, therefore, train and instruct operators in the safe use of dock bridges.

When a transport vehicle is positioned as closely as practical to a dock bridge, there shall be at least 4" of overlap between the front edge of the lip and the edge of the floor or sill of the transport vehicle.

Nameplates, cautions, instructions and posted warnings shall not be obscured from the view of operating or maintenance personnel for whom such warnings are intended. Manufacturer's recommended periodic maintenance and inspection procedures should be kept.

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

The owner shall see that all nameplates, caution and instruction markings or labels are in place and legible and that the appropriate operating and maintenance manuals are provided to users.

Modifications or alterations of the dock bridge shall be made only with written permission of the original manufacturer.

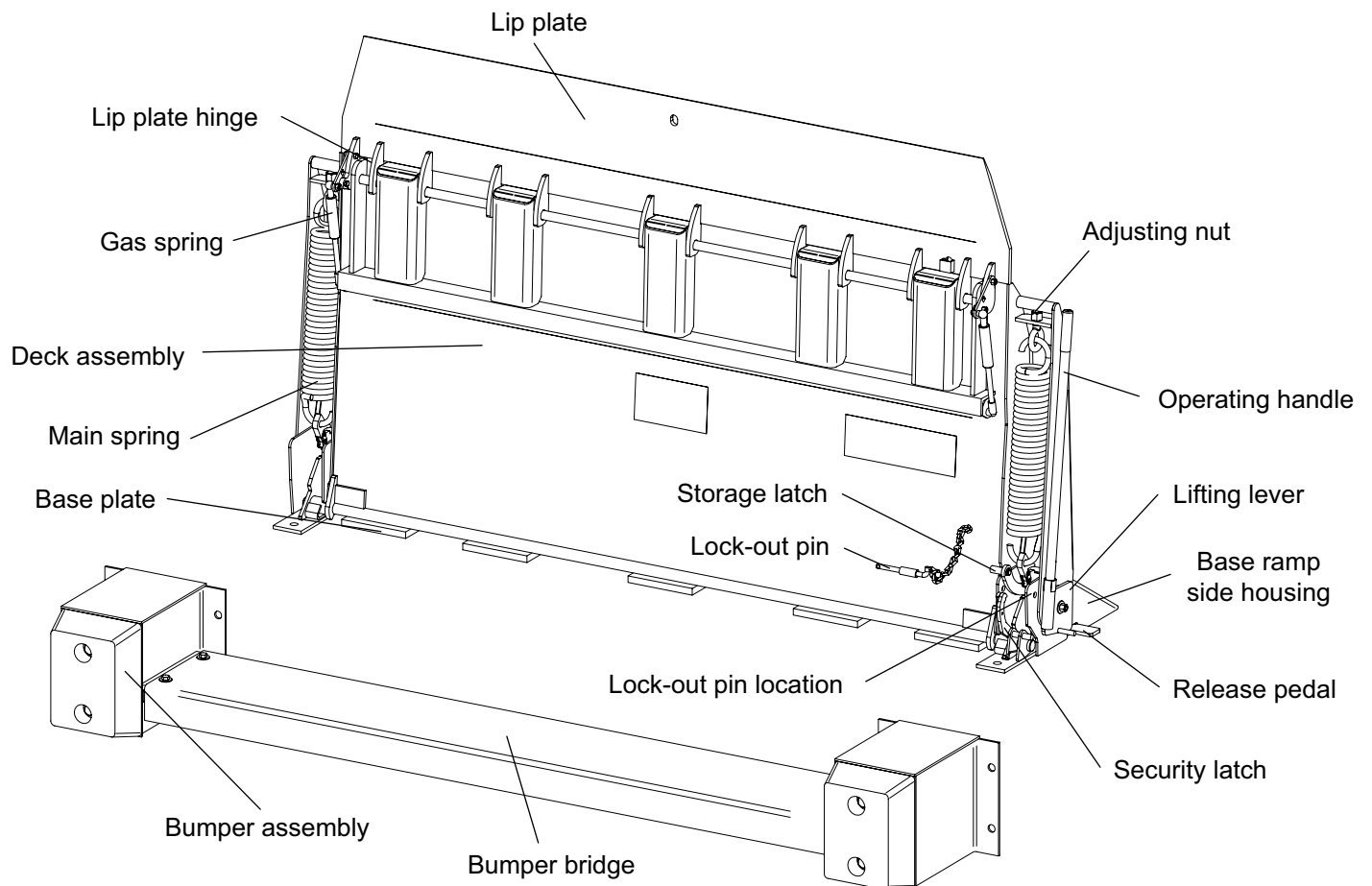
When industrial trucks are driven on and off transport vehicles during the loading and unloading operation, the brakes on the transport vehicle shall be applied and wheel chocks or positive restraints that provide the equivalent of wheel chocks engaged.

The dock bridge should never be used outside its vertical working range or outside the manufacturer's labeled rated capacity. It must also be compatible with the loading equipment and other conditions relating to the dock.

# COMPONENTS

The main components of the dock bridge are shown below. See the Parts List for specific part numbers.

Fig. 1



# INSTALLATION

## ⚠ WARNING

*Before installing the dock bridge, read and follow the Safety Practices on page 3. Failure to follow the safety practices could result in death or serious injury.*

## DOCK CHECK

1. Determine the desired location of the dock bridge. Door opening width recommendation is 8' for 6' wide model, 9' for 6'-6" wide model and 10' for 7' wide model.

## DOCK BRIDGE CHECK

1. Visually check that the dock bridge is not damaged.

## NOTE:

Dock bridges may ship in pairs, examine both dock bridges carefully.

## INSTALLATION

## NOTE:

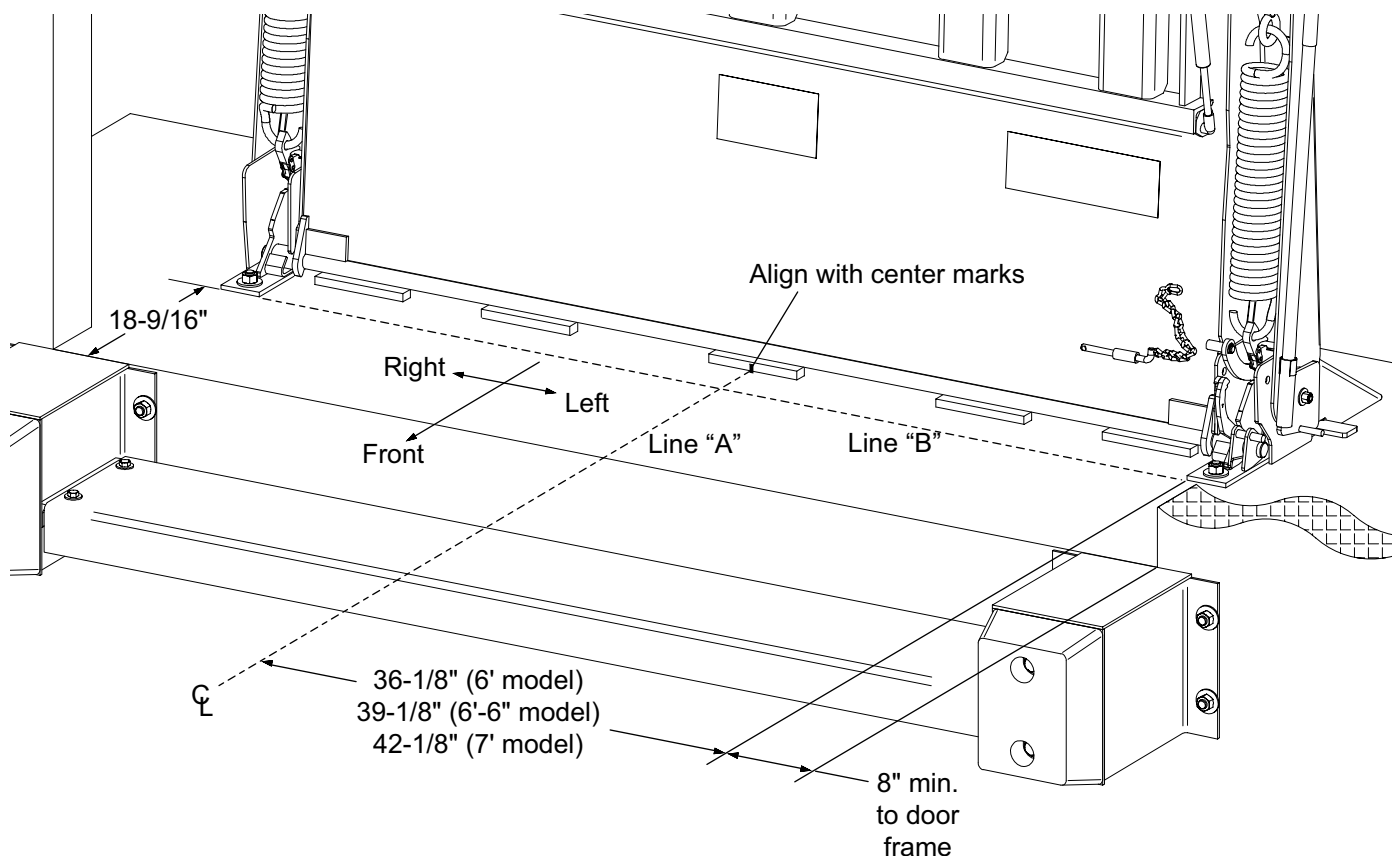
Front, left and right directions are determined when standing on the dock and looking out of the doorway. (Same orientation as a truck backed into the dock.)

1. Mark centerline "A" on the dock floor perpendicular to the dock face at the center of the desired dock position. Mark a line "B" perpendicular to the centerline 18-9/16" from the dock face. See Fig. 2.

## NOTE:

The handle side spring cover should have at least 4" from the door frame to the outside edge of the spring cover for proper handle clearance from the door frame or nearest obstruction. See Fig. 2.

Fig. 2



## INSTALLATION, continued

2. Check that the floor is flat in the base mounting area (24" x 86") for width of the dock bridge. Remove any bumps in the concrete. If the floor is higher in the center it may interfere with proper operation. Continue with the installation of the dock bridge but refer to step 11 when inspecting for proper operation.

### ▲ CAUTION

***Wear proper eye and hand protection when cutting steel banding.***

3. Carefully cut the steel banding and remove the bumpers, bumper shelf, operating handle and hardware tube from the dock bridge. See Fig. 3.
4. Use a 15/16" socket wrench to remove the 5/8" nuts (4 each side) from the bolts securing the dock bridge to the wood shipping skids, and the two bolts from the lip plate brace. Discard fasteners. See Fig. 3.

### ▲ WARNING

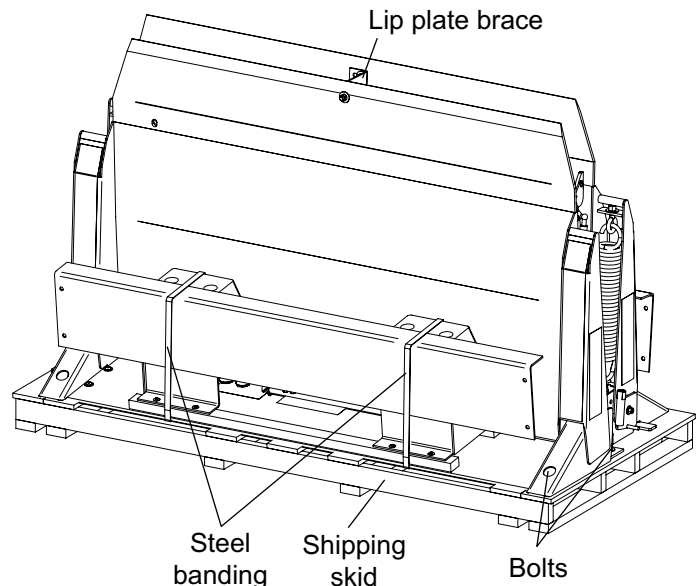
***Inadequate lifting equipment or practices can cause a lifted load to fall unexpectedly. Make sure lifting chain or other lifting devices are in good condition and have a rated capacity of at least 3500 lbs. for the lifting angle used. Never allow anyone to stand on or near dock bridge when it is being lifted or placed onto the dock floor. Stand clear of the dock bridge when it is being placed onto the dock floor. Failure to follow this warning can allow the dock bridge to fall, tip, or swing into people, resulting in death or serious injury.***

### NOTE:

Handle one dock assembly at a time.

5. Install a load centering eye bolt through the lip plate of the dock bridge. The dock bridge should not be lifted in any other manner.
6. Place the dock bridge in the desired position at the dock with the center of the deck aligned with the center of the opening and the front edge of the base plates 18-9/16" back from curb angle See Fig. 2.

Fig. 3



## INSTALLATION, continued

### ⚠ DANGER

**Do not remove the lock-out pin from the base assembly until the dock bridge has been secured to the dock floor. Failure to follow this warning can allow the dock bridge to fall, resulting in death or serious injury.**

- Using a 3/4" bit and the holes in the base plates as a guide, drill four holes at least 5-1/2" deep into the dock floor. Blow out or vacuum drilling dust from hole. Secure the dock bridge to the floor with the four 3/4" × 5-1/2" anchors and hardware provided. Torque the nuts to 110 ft-lb. See Fig. 4.

### ⚠ WARNING

**Improper installation of anchoring devices or installation into aged or unsound concrete could result in death or serious injury.**

- Install a steel cap to plug the hole in each side frame. See Fig. 5.
- Remove the lock-out pin from the left base assembly and store it in the socket on the deck.
- Inspect the dock face for installation of the bumpers. Ensure that the dock face is clear 56" each side of the dock centerline and 14" below the dock floor.

### ⚠ DANGER

**Do not stand in front of the dock bridge when removing the lock-out pin. Failure to follow the safety practices could result in death or serious injury.**

- Place the operating handle in the socket on the left side of the dock bridge. Step on the latch release pedal and gently push the dock bridge forward. It should lower to the fully lowered position.
- Cycle the dock bridge going through the operational steps described on pages 11 through 16. Refer to the troubleshooting guide on pages 22 and 23 if any operational problems are encountered.

Fig. 4

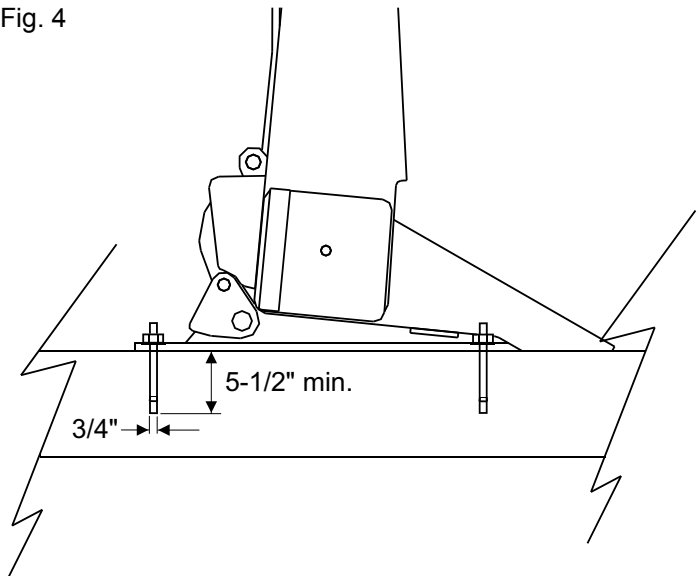
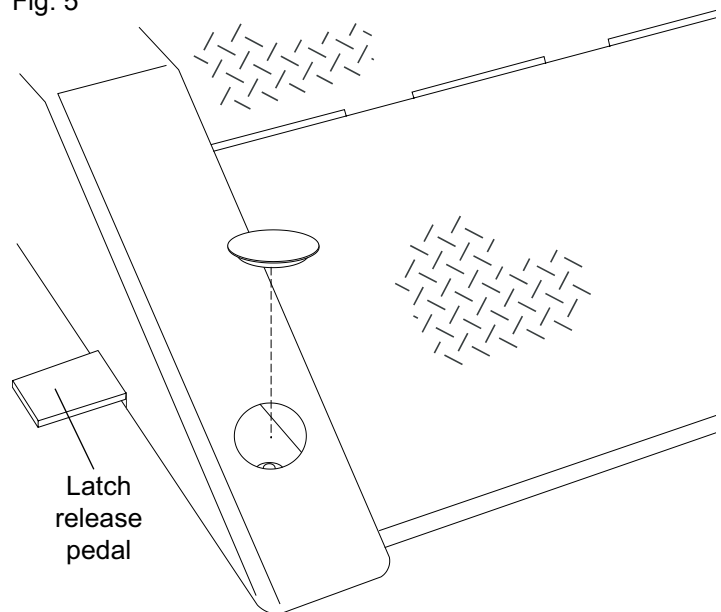


Fig. 5



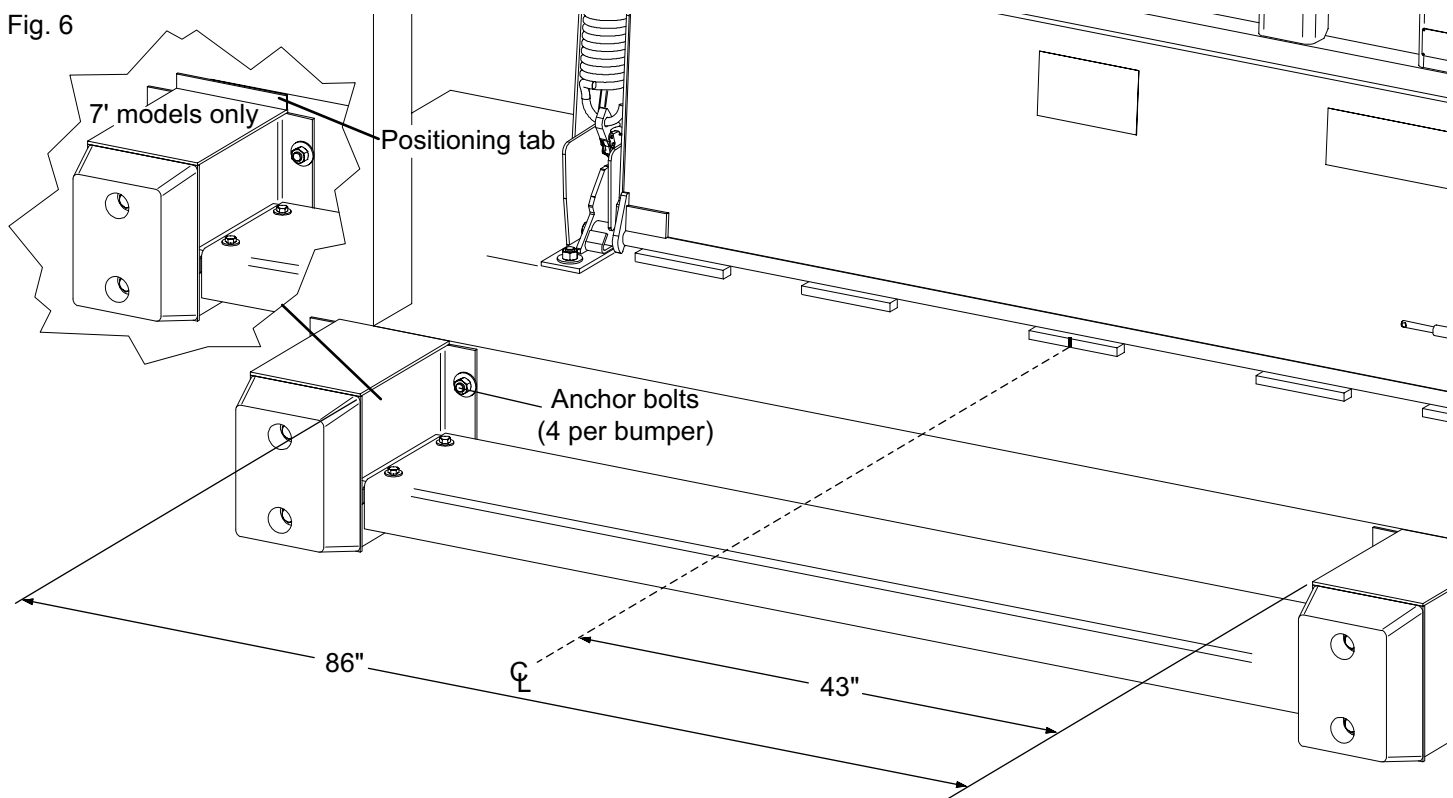


### **▲ DANGER**

***Extended springs contain stored energy. Never attempt to adjust or remove the springs when the dock bridge is lowered. Never loosen or attempt to remove the nuts on the anchor bolts when the dock bridge is lowered. The dock bridge must be stored in a vertical position with the lock-out pin engaged through the left base assembly.***

14. Mark a line on the dock floor at each side of the dock bridge. Raise the dock bridge to the stored vertical position and engage the lock-out pin.
15. Measure from the centerline "A" to each of the lines marked in step 14. Mark a new centerline if the dimensions are not equal. Mark two vertical lines "E" on the dock floor 43" each side of the centerline.
16. Locate bumpers as shown in Fig. 6. 6' and 6'-6" models will position the top plate flush with the dock floor. See Fig. 6. 7' models will position the top of the positioning tab flush with the dock floor. See Fig. 6. A positioning tab is provided on the 7' assembly. Note that there are right and left bumpers and the brackets on the side must be toward the center of the dock. See Fig. 6. Secure each bumper to the dock face with four  $\frac{3}{4}$ "  $\times$  5-1/2" anchor bolts provided. Torque to 110 ft-lb.

Fig. 6



## INSTALLATION, continued

17. Using the four 1/2" bolts and hardware supplied, attach the shelf to the bumpers with the lip edge out. See Fig. 7.
18. Permanently mount the dock bridge warning and operating placard on the wall nearest to the dock bridge. See Fig. 8.
19. Perform the quarterly maintenance steps on page 17 in this manual.

Fig. 7

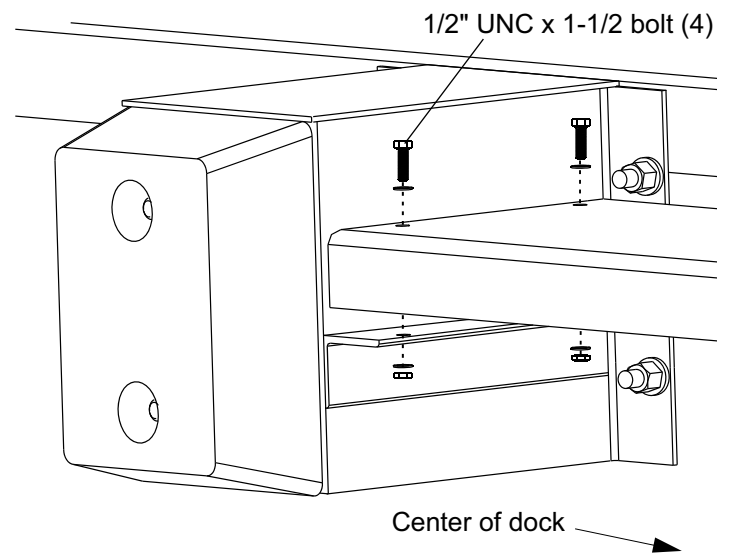
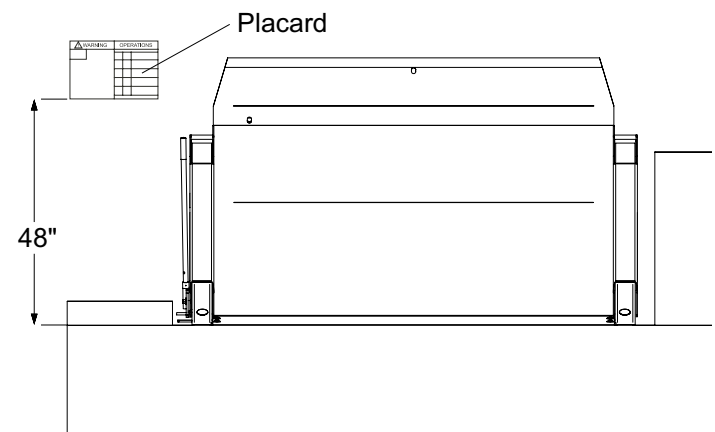


Fig. 8



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# OPERATIONS

## **⚠ WARNING**

***Before operating the dock bridge, read and follow the Safety Practices on page 3. Use of dock bridge restricted to trained operators. Follow procedures on placard posted near dock bridge.***

***DO NOT USE DOCK BRIDGE IF IT LOOKS BROKEN, OR DOES NOT SEEM TO WORK RIGHT. Inform your supervisor immediately.***

***Before chocking wheels or engaging vehicle restraint, dump air from air ride suspensions and set parking brake.***

***Always be certain that the truck is properly restrained, before loading or unloading. VISUALLY INSPECT vehicle restraint to make sure truck does not pull away unexpectedly. Failure to do so could result in death or serious injury.***

***Ensure lip avoids trailer sides and cargo when deck is lowered. If the lip does not lower to the trailer bed, reposition trailer.***

***Visually check that the lip is supported by the truck bed or the dock bridge is fully lowered to the dock floor with the lip folded before driving or walking on the dock bridge.***

***Always return the dock bridge to its latched vertical stored position with the lip extended vertically before allowing the truck to leave the dock.***

***Never lift the dock bridge by any other means than the operating handle. If it does not lift, use a suitable lifting device to raise and insert lock-out pin before troubleshooting.***

***Failure to follow these instructions could result in death or serious injury to operators and/or bystanders.***

---

## **NOTE:**

If the truck unexpectedly pulls away leaving the dock bridge unsupported, the dock bridge will fall to full below dock level.

## **INTRODUCTION**

The LoadHog® dock bridge is designed to span and compensate for space and height differences between a loading dock and freight carrier to allow safe, efficient freight transfers.

The dock bridge is spring counter balanced to allow easy manual lowering and raising.

The dock bridge is stored vertically with the lip extended. A mechanical latch holds the dock bridge in the stored position.

Stepping on the foot pedal releases the latch and allows the dock bridge to be pushed forward so it will lower to the working position.

The dock bridge is downwardly biased in the working position.

A security latch prevents the dock bridge from inadvertently raising above the working range.

After loading, raising the operating handle releases the security latch and raises the dock bridge.

For end loads the lip can be manually lowered by moving the operating handle to the socket in the lip plate.

## OPERATIONS, continued

Use these instructions for normal operations.

### ⚠ WARNING

*Always secure the truck with a vehicle restraint or wheel chocks before operating the dock bridge. Do not operate dock bridge with anyone standing on or in front of it.*

*Do not lift the dock bridge lip by hand.*

*Always keep hands and feet clear of all moving parts.*

*Always return the dock bridge to its latched vertical stored position with the lip extended vertically before allowing the truck to leave the dock.*

### LOWERING THE DOCK BRIDGE

1. Before operating the dock bridge, **secure the truck** with a vehicle restraint or wheel chocks.
2. To lower the dock bridge, **step on the latch release pedal and gently push the dock bridge forward**. See Fig. 9.
3. The dock bridge should lower gently to the working position with the lip supported by the freight carrier. If it does not lower all the way, **walk on the deck to lower it**. See Fig. 10.

### ⚠ DANGER

*Before doing any maintenance, repair, or adjustment on the dock bridge, store it in a vertical position with lip vertical, and the lock-out pin engaged through the left base assembly.*

Fig. 9

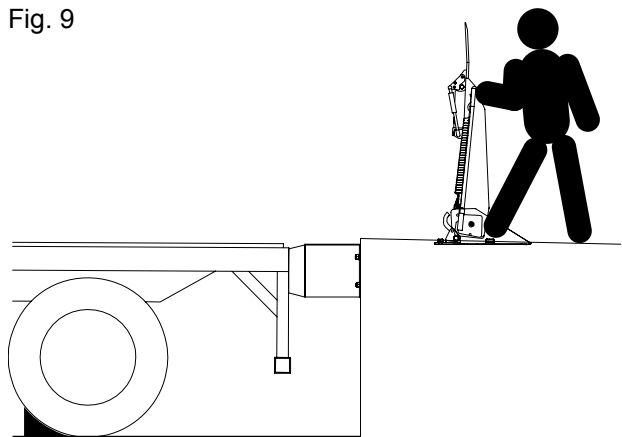
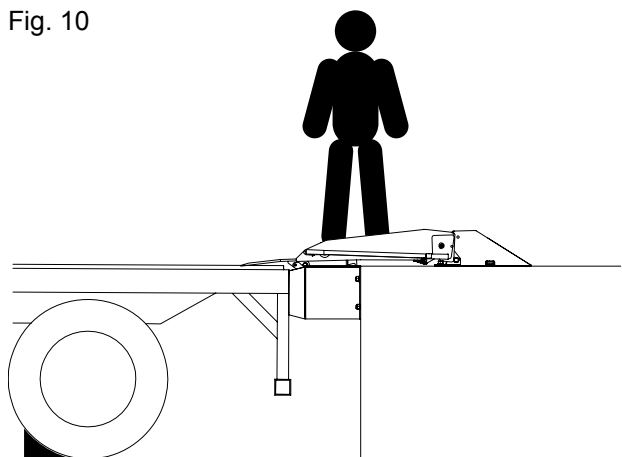


Fig. 10



### STORING THE DOCK BRIDGE

1. To return the dock bridge to the stored vertical position, **raise the operating handle by gently stepping on the bar protruding from the side of the operating handle housing.** See Fig. 11.
2. **Pull firmly on the operating handle to raise the dock bridge** to the stored position. The dock bridge will raise and the storage latch will automatically engage. See Fig. 12.

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#### NOTE:

Operating handle contains ratchet feature. While lifting deck, push forward on the operating handle to obtain additional lifting advantage and then pull firmly.

3. **Push the operating handle forward** and it will lock in the vertical stored position. See Fig. 13.

Fig. 11

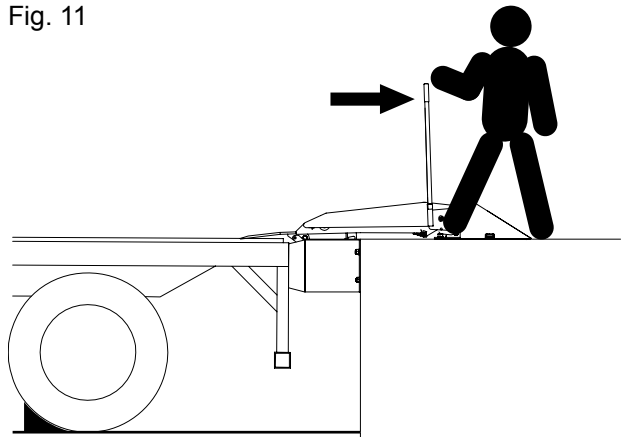


Fig. 12

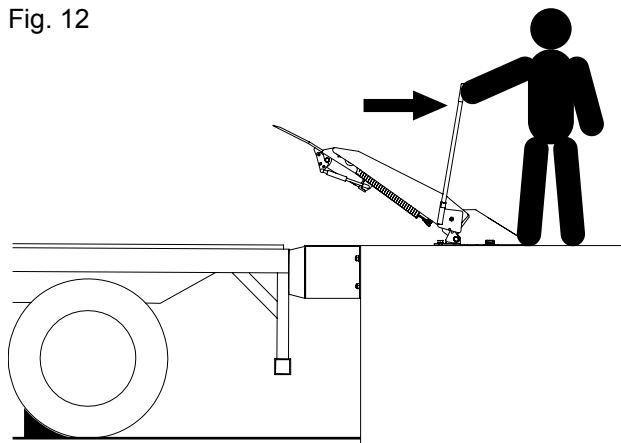
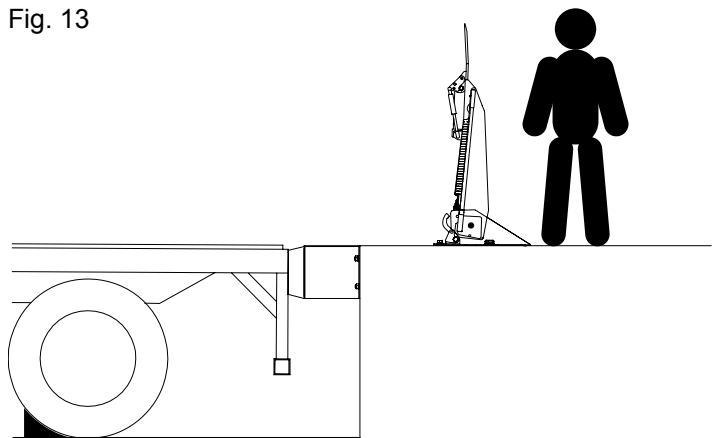


Fig. 13



## OPERATIONS, continued

Use these instructions when end loading a truck.

### END LOADING

1. **Pull the operating handle straight up** to remove it from the lifting lever. Then insert the operating handle into the socket at the left side of the lip. See Fig. 14.
2. **Lift the operating handle up** until the lip moves forward and the lip latch disengages. The lip will fall slowly to the retracted position. See Fig. 15.
3. Remove the operating handle from the lip and replace it in the lifting lever. Then **step on the latch release pedal and gently push the dock bridge forward**. It should fall gently to the working position. See Fig. 16.
4. If the dock bridge does not fall all the way, walk on the deck to lower it. See Fig. 17.

Fig. 14

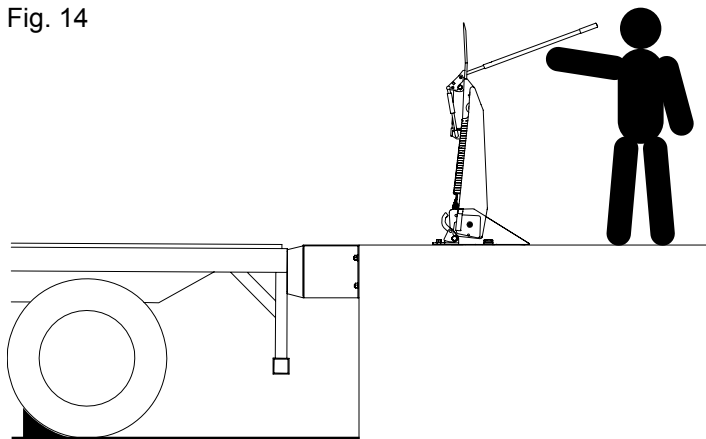


Fig. 15

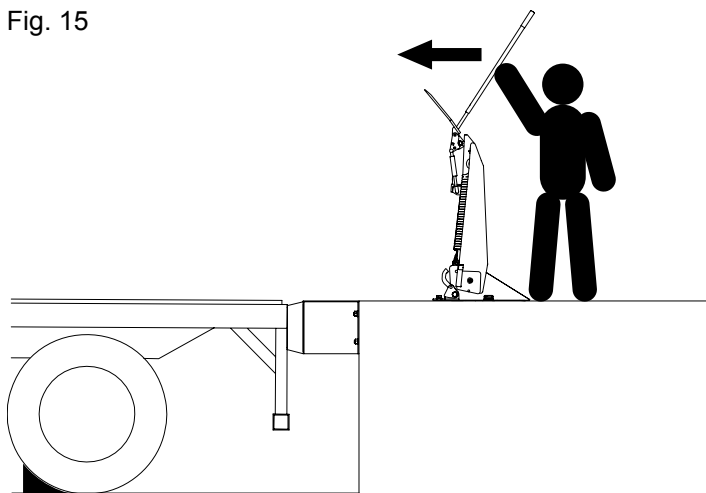
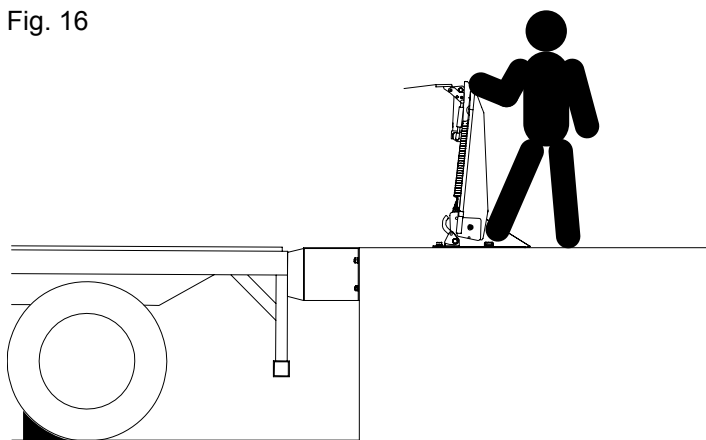


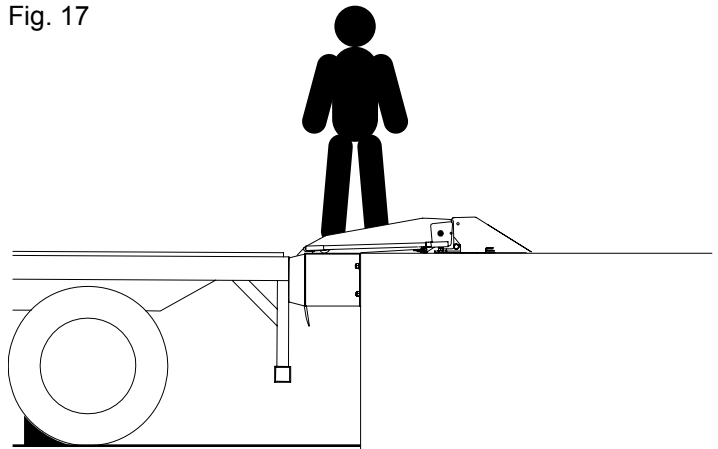
Fig. 16



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## OPERATIONS, continued

Fig. 17



### END LOADING, STORING THE DOCK BRIDGE

1. To return the dock bridge to the stored vertical position, **raise the operating handle by gently stepping on the bar protruding from the side of the lifting handle housing.** See Fig. 18.
2. **Pull firmly on the operating handle** to raise the dock bridge to the stored position. The dock bridge will raise and the storage latch will automatically engage. See Fig. 19.

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#### NOTE:

Operating handle contains ratchet feature. While lifting deck, push forward on the operating handle to obtain additional lifting advantage and then pull firmly.

Fig. 18

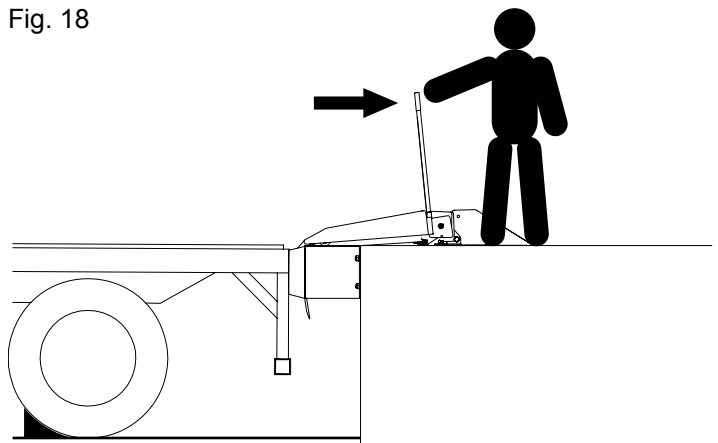
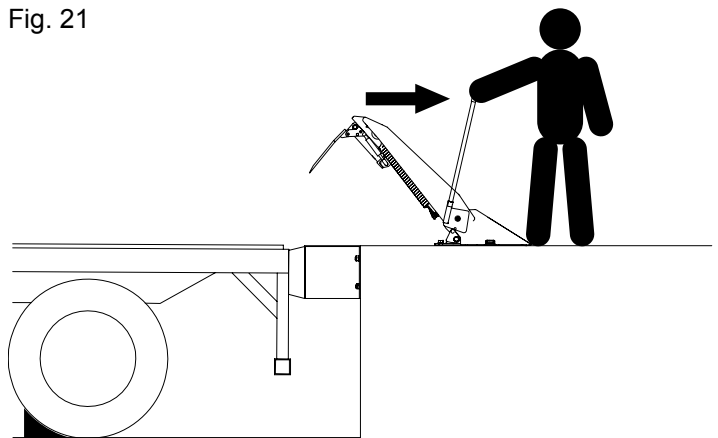


Fig. 21



## OPERATIONS, continued

### STORING THE LIP

1. **Pull the operating handle** straight up to remove it from the lifting lever and insert it into the socket at the left side of the lip. See Fig. 20.
2. **Pull the operating handle back** until the lip rotates 60° allowing the gas springs to lift the lip to its final vertical position. See Fig. 21.
3. Remove the operating handle from the lip. Replace the handle in the lifting lever. See Fig. 22.

Fig. 20

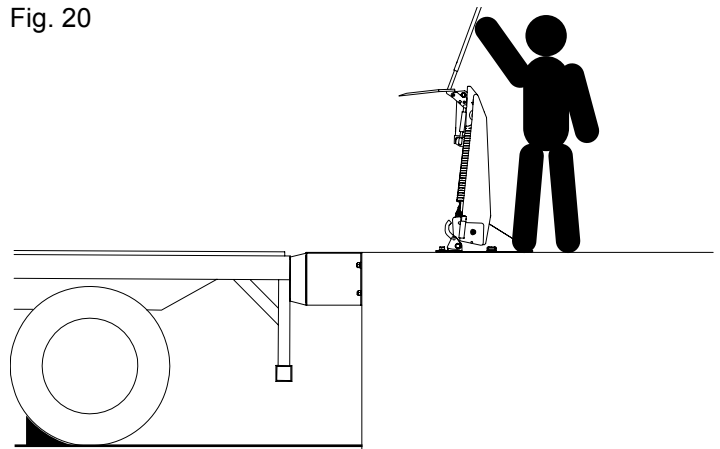


Fig. 21

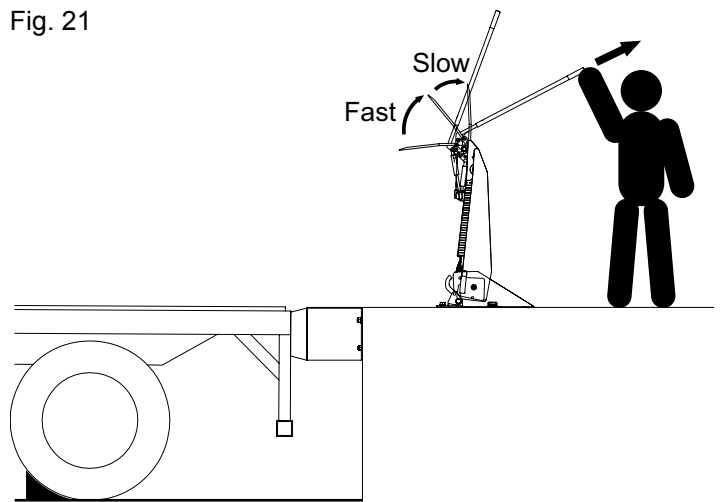
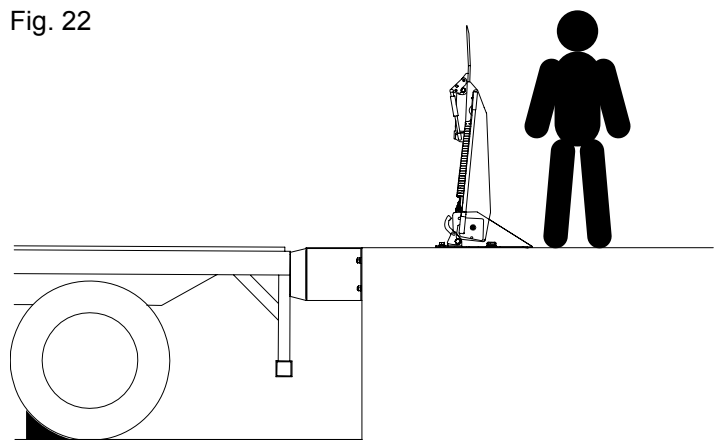


Fig. 22





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# PREVENTIVE MAINTENANCE

## **▲ WARNING**

*Before servicing the dock bridge, read and follow the Safety Practices on page 3 and the operations sections of this manual. Failure to follow the safety practices could result in death or serious injury.*

## **▲ DANGER**

*Before doing any maintenance, repair, or adjustment on the dock bridge, store it in a vertical position with lip vertical, and the lock-out pin engaged through the left base assembly.*

*Extended springs contain stored energy. Never attempt to adjust or remove the springs when the dock bridge is lowered. Never loosen or attempt to remove the nuts on the anchor bolts when the dock bridge is lowered. The dock bridge must be stored in a vertical position with the lock-out pin engaged through the left base assembly.*

## **WEEKLY**

- Clean debris from area around the dock bridge.

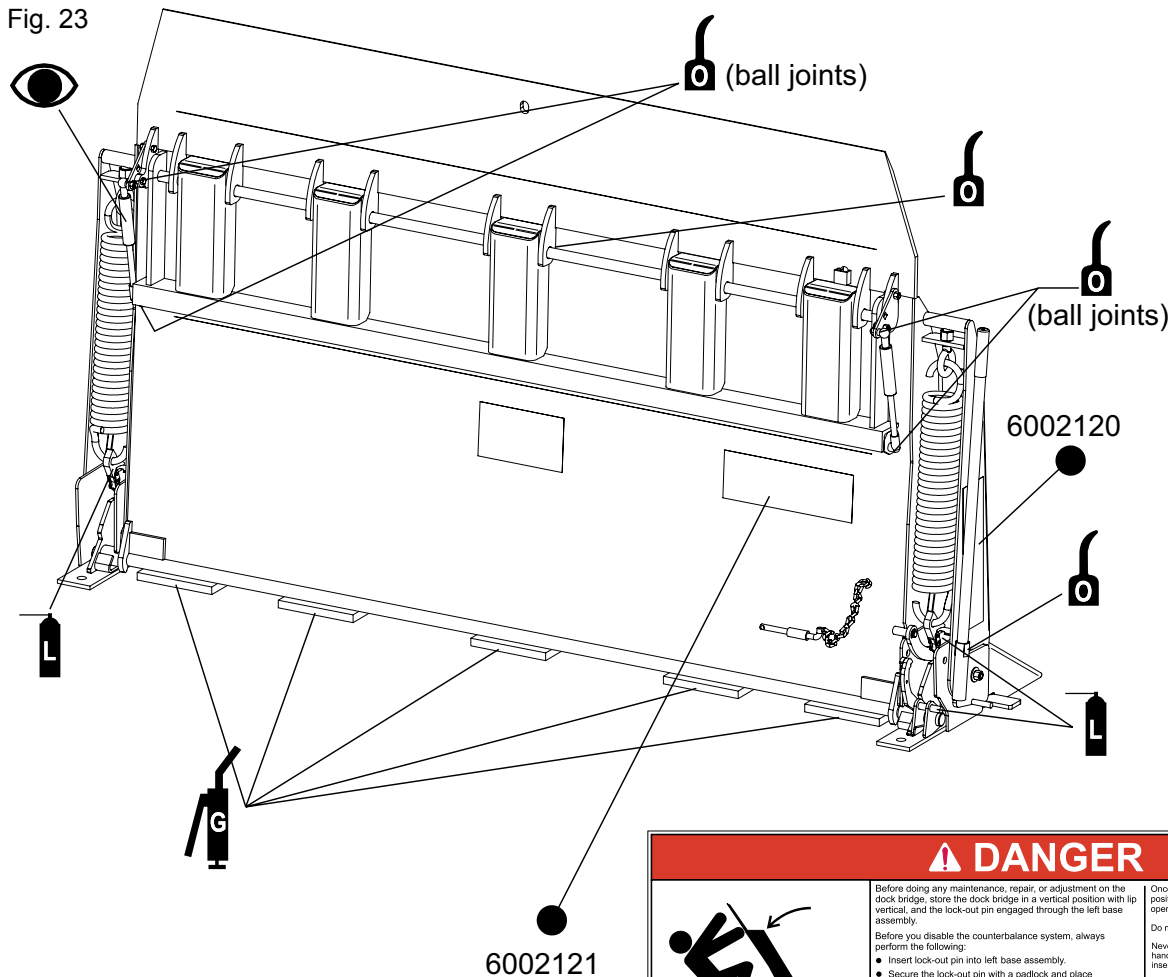
## **QUARTERLY**

- Inspect all warning labels and placards. See page 18. Replace as necessary.
- Ensure that nothing is in the way of the dock bridge if it lowers. With the dock bridge in the vertical stored position, gently push the dock bridge forward. The dock bridge should not fall forward. If it does then the storage latch is not engaging. Inspect the latch to ensure that it rotates freely, and remove any debris from the latch area. If latch is damaged it must be replaced.
- Inspect and lubricate all points as shown in Fig. 23 on page 18.
- Lubricate the lip hinge lugs with light oil or chain lube spray. Do not over lubricate. Use the operating handle to extend and retract the lip several times. See page 14. Wipe off excess lubricant.
- Lubricate the ball joints on the gas springs with light oil. Do not over lubricate. Wipe any excess oil from gas springs.
- Ensure that nothing is in the way of the dock bridge as it lowers. Step on the latch release pedal and gently push the dock bridge forward. It should lower toward the working position and almost stop as it approaches the working position. It is acceptable if the dock bridge stops above the working position as a slightly harder push will ensure that the dock bridge will fully lower. However when the dock bridge is in the working range (6" above and 4" below dock floor), it must always lower all the way to the dock floor. If the dock bridge falls heavily to the working position, increase the spring tension. If the dock bridge does not always lower when in the working range decrease the spring tension. See Adjustments on page 19. After adjusting the spring, repeat the test.
- With the dock bridge lowered and the lip extended, lift up on the end of the lip. The dock bridge should feel heavy and move downward when the lip is released between 0" and 20" above dock. If the dock bridge raises at any position, the security latch is not properly engaged. See Adjustments on page 21 for corrective action.
- Inspect dock bumpers. Four inches (4") of bumper protection is required. Worn, torn, loose or missing bumpers must be replaced.

# PLANNED MAINTENANCE, continued

Every 90 days (quarterly) inspect all safety labels and tags to ensure they are on the dock bridge and are easily legible. If any are missing or require replacement, please contact your distributor.

Fig. 23



Legend	
Symbol	Description
	<b>Lubricant - Oil</b> Light oil - SAE 30
	<b>Lubricant - Grease</b> Lithium grease NLGI #2
	<b>Lubricant - Chain</b> Chain lubricant LPS 2 or equivalent
	<b>Visually Inspect</b> (Oil leaks)

**⚠ DANGER**

Before doing any maintenance, repair, or adjustment on the dock bridge, store the dock bridge in a vertical position with lip vertical, and the lock-out pin engaged through the left base assembly.

Before you disable the counterbalance system, always perform the following:

- Insert lock-out pin into left base assembly.
- Secure the lock-out pin with a padlock and place barricades in front of the dock bridge and in the driveway.

Do not remove the lock-out pin from the left base assembly until you are sure that the spring counterbalance system and the storage latch are in proper working condition.

Do not stand in front of the dock bridge while removing the lock-out pin. Reach from the side of the dock bridge.

Do not force the lock-out pin out of the dock bridge base assembly. If the pin does not slide freely, support the dock bridge securely using other means and determine the cause of interference.

Once the lock-out pin is removed, lower dock bridge to horizontal position, then raise to latched storage position to test for proper operation before removing barricades.

Do not unbolt unit from floor with the ramp in the lowered position.

Never lift the dock bridge by any other means than the operating handle. If it does not lift, use a suitable lifting device to raise and insert lock-out pin before troubleshooting.

Refer to User's Manual for proper maintenance and adjustment procedures.

Call 4Front Engineered Solutions, Inc. if you have any questions about the operation of this dock bridge.  
972-446-0707 or  
800-525-2010

Failure to follow these instructions could result in death or serious injury.

**⚠ DANGER**

Use restricted to trained operators. Read and follow the User's Manual and posted warning and operation placard before operating or maintaining the dock bridge.

**DO NOT WALK IN FRONT OF DOCK BRIDGE** until you:

- Restore the dock bridge to its safe stored vertical position with the lip extended vertically.
- Ensure that the dock bridge is secured by the storage latch

**BEFORE** checking wheels or engaging vehicle restraint, dump air from air ride suspensions and set parking brakes.

**BEFORE** lowering the dock bridge ensure the lip avoids contact with the trailer sides and cargo. If lip does not lower to trailer bed, reposition trailer.

Do not stand in the driveway between the dock bridge and the backing truck.

Do not stand on the bumper shelf unless the trailer is securely against the dock bumpers and checked or secured with a trailer restraint.

Stay clear of the dock bridge unless lip is supported by trailer bed or dock bridge is supported in a horizontal position by the dock, with lip folded. Unsupported dock bridge can lower unexpectedly.

Never lift the dock bridge by any other means than the operating handle. If it does not lift, use a suitable lifting device to raise and insert lock-out pin before troubleshooting.

Before allowing vehicles to leave the dock, always:

- Ensure that no equipment, material or people are on the dock bridge.
- Restore dock bridge to its safe stored vertical position with lip extended vertically and storage latch engaged.

Failure to follow these instructions could result in death or serious injury.

6002120D

6002199

**⚠ DANGER**

OPERATING INSTRUCTIONS


Warning and operation placard  
(mounted on wall near dock bridge)

# ADJUSTMENTS

Use these instructions to adjust the dock bridge.

## ⚠ DANGER

*Before doing any maintenance, repair, or adjustment on the dock bridge, store it in a vertical position with lip vertical, and the lock-out pin engaged through the left base assembly.*

*Extended springs contain stored energy. Never attempt to adjust or remove the springs when the dock bridge is lowered. Never loosen or attempt to remove the nuts on the anchor bolts when the dock bridge is lowered. The dock bridge must be stored in a vertical position with the lock-out pin engaged through the left base assembly.*

*Before you disable the spring counter balance system, insert the lock-out pin through the left base assembly and secure the lock-out pin with a padlock.*

The dock bridge is counter balanced by two springs, one on each side. Spring tension is adjusted by turning the nut on the eyebolt at the top of each spring as shown in Fig. 24.

Ensure that nothing is in the way of the dock bridge as it lowers. Step on the latch release pedal and gently push the dock bridge forward. It should lower toward the working position and almost stop as it approaches the working position. It is acceptable if the dock bridge stops above the working position as a slightly harder push will ensure that the dock bridge will fully lower. However when the dock bridge is in the working range (6" above and 4" below dock floor), it must always lower all the way to the dock floor. If the dock bridge falls heavily to the working position, increase the spring tension. If the dock bridge does not always lower when in the working range decrease the spring tension. After adjusting the spring, repeat the test to ensure proper operation.

To adjust the spring tension, turn the adjusting nut on both springs one half turn. Both springs should be adjusted equally.

## ⚠ WARNING

*Before servicing the dock bridge, read and follow the Safety Practices on page 3 and the operations sections of this manual. Failure to follow the safety practices could result in death or serious injury.*

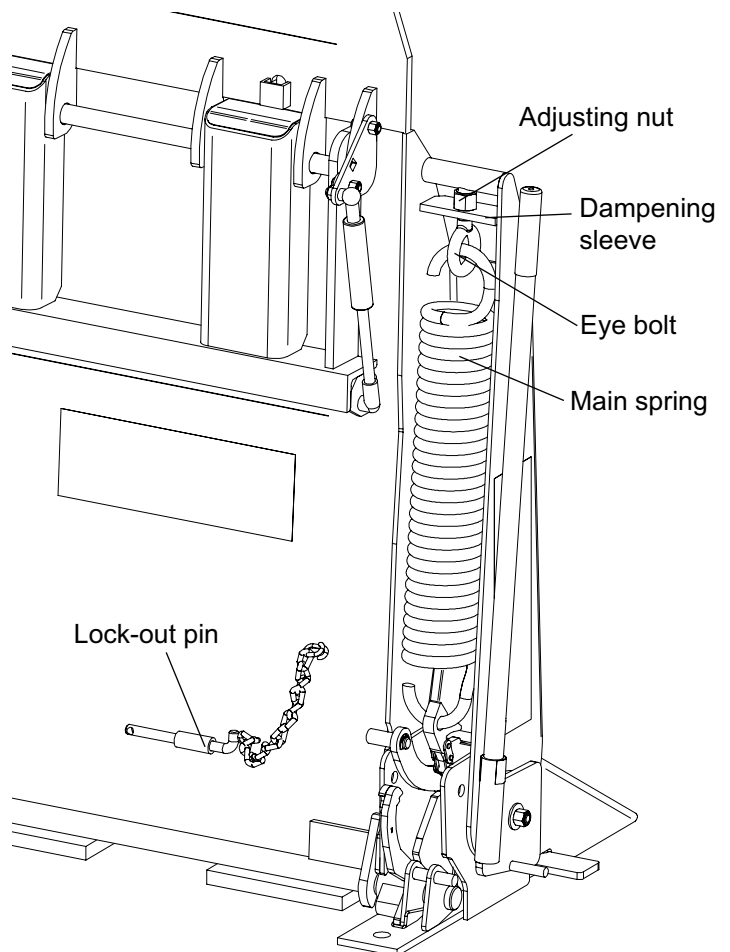
*Before servicing the dock bridge, always position traffic cones or a barricade behind the dock bridge to warn fork truck operators and pedestrians away from the dock bridge.*

*Always position traffic cones or a barricade in front of the dock bridge to warn against truck traffic.*

*Always notify a foreman or supervisor that you are working on the equipment.*

## ADJUST MAIN SPRINGS

Fig. 24



## ADJUSTMENTS, continued

### LIP ASSIST — GAS SPRING

The LoadHog is fitted with two gas springs that support the lip during operation. The lip must remain firmly extended when lowered into the truck. Inspect the gas spring for oil leakage or loss of pressure. Under normal operation the gas spring assist the lip extension and will lift the lip from 60° to vertical position. The lift should be a slow rate under control.

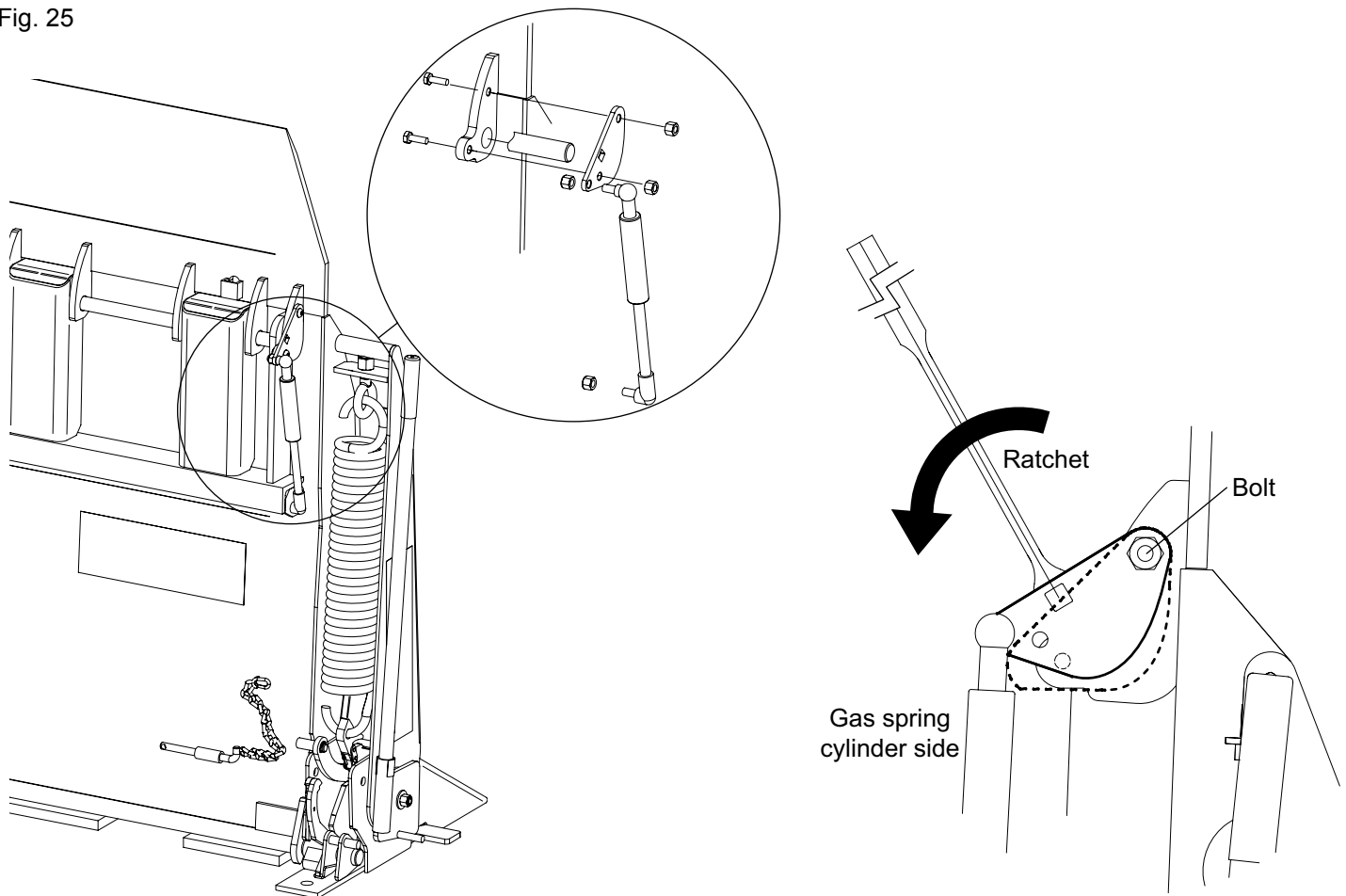
### INSTALLATION

Proper installation requires the gas spring to be installed with a pre load. Install the gas spring (cylinder side) to the lower mounting hole of the gas spring mounting bracket and tighten. The upper mounting bracket must be installed with the upper bolt first then with the use of a 1/2" sq. drive ratchet or breaker bar, rotate the bracket downward compressing the gas spring. Insert the lower bracket bolt and tighten.

### NOTE:

See proper disposal procedures on page 21.

Fig. 25



## ADJUSTMENTS, continued

### INSPECT SECURITY LATCH

The security latch is mounted on the left end of the dock bridge pivot shaft. The security latch is spring biased to rotate in a clockwise direction and should pivot freely. Move the security latch forward by hand and ensure that it rotates backward against the stop on the base plate. If the security latch does not rotate backward, inspect to see if the spring is missing and replace the spring if required. If the security latch does not rotate freely, lubricate the shaft. See Fig. 26.

The security latch engages the top of the spring link when the dock bridge is in the working range. If the dock bridge becomes upward biased when in the working range, lower the dock bridge and inspect to see if the security latch engages the top of the spring link. If the security latch does not engage properly, replace it.

### HANDLING AND DISPOSAL OF GAS SPRINGS

- Gas springs are under pressure. They must be drained of oil prior to disposal.
- Gas springs are filled with oil. Waste disposal only through raw materials trade or special refuse points.
- Do not dispose of gas springs in household refuse. Oil must not get into soil or water.

#### NOTE:

For waste removal of gas spring the following work must be performed in compliance with the accidental prevention and environment protection regulations.

#### ⚠CAUTION

***Wear proper eye protection.***

1. Clamp gas spring in a vice.
2. Drill open units at the specified point with an approximately 1/8" drill bit to allow the gas to escape. Shield the drilling point to prevent splashes of oil and debris. The hole must be drilled to a depth of about 3/8". Make a hole about 3/4" away from bottom of pressure tube as show in Fig. 27.
3. The gas spring oil is hydraulic oil and can be disposed of with motor oil/transmission lubricant according to the local waste disposal regulations.
4. Drain the oil from the gas spring by pumping the piston rod in and out several times.

Fig. 26

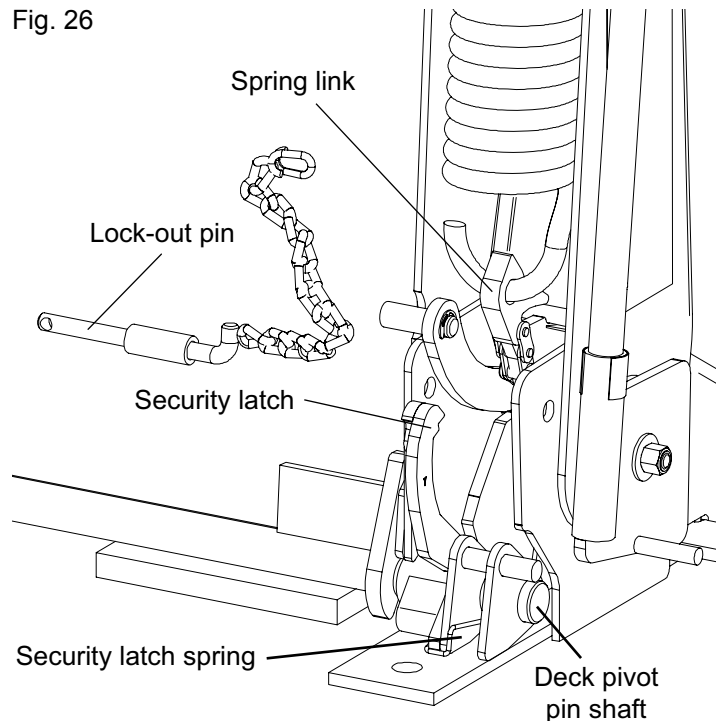
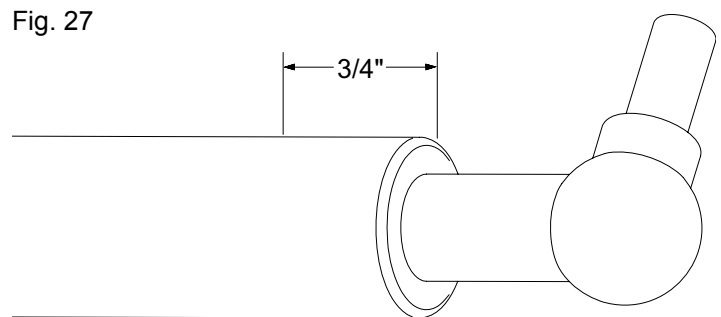


Fig. 27



5. Collect the oil and dispose of as specified by the relevant waste disposal regulations.
6. Dispose of the cylinder as metal waste.

# TROUBLESHOOTING GUIDE

Use the Troubleshooting Guide if ever the dock bridge fails to perform properly.

## ⚠ DANGER

*Before doing any maintenance, repair, or adjustment on the dock bridge, store the leveler in a vertical position with lip vertical, and the lock-out pin engaged through the left base assembly.*

## ⚠ WARNING

*Before servicing the dock bridge, read and follow the Safety Practices on page 3 and the Operating Instruction section in this manual.*

*Never lift the dock bridge by any other means than the operating handle. If it does not lift, use a suitable lifting device to raise and insert lock-out pin before troubleshooting.*

Problem	Possible Cause	Solution
1) Lip retracts before the dock bridge is fully lowered.	a) Gas spring bracket loose.  b) Gas spring failure(s).	a) Inspect the upper gas spring mounts for loose or missing fasteners. Replace as required.  b) Replace gas spring(s).
2) Lip does not stay extended when the dock bridge is in down position.	a) Lip gas spring(s) is worn or damaged.	a) Replace gas spring(s).
3) Lip raises too slowly or stops part way.	a) Lip hinge requires lubrication.  b) Lip gas spring(s) is damaged or binding.	a) Lubricate lip hinge.  b) Replace gas spring.
4) Dock bridge falls too fast.	a) Main springs require more tension.	a) Adjust main spring tension. See page 19.
5) Dock bridge raises from truck bed.	a) Main springs have too much tension.  b) Security latch is not engaging.	a) Adjust main spring tension. See page 19.  b) Inspect hold down for free movement and ensure security latch spring is present. Lubricate shaft and replace security latch and spring if required.
6) Dock bridge cannot be raised from the truck bed.	a) Security latch does not disengage.  b) Main springs require more tension or a spring or chain is broken.	a) Operating handle does not engage security latch. Inspect handle assembly and security latch assembly. Replace any damaged parts.  b) Adjust main springs or replace broken spring or chain. See page 19.

## TROUBLESHOOTING GUIDE, continued

### ▲ DANGER

*Before doing any maintenance, repair, or adjustment on the dock bridge, store the leveler in a vertical position with lip vertical, and the lock-out pin engaged through the left base assembly.*

### ▲ WARNING

*Before servicing the dock bridge, read and follow the Safety Practices on page 3 and the Operating Instruction section in this manual.*

*Never lift the dock bridge by any other means than the operating handle. If it does not lift, use a suitable lifting device to raise and insert lock-out pin before troubleshooting.*

Problem	Possible Cause	Solution
7) Dock bridge does not fully raise.	a) Debris caught between coils of the main spring.	a) Partially lower the dock bridge and remove debris from spring coils.
8) Dock bridge does not fully lower.	a) Debris on dock floor in front of dock bridge.	a) Raise the dock bridge to the latched vertical stored position and remove debris.
9) Dock bridge bounces/raises off truck bed during loading and unloading.	a) Lip not being held tight to deck.  b) Main springs require less tension.	a) Inspect the lip and gas spring(s). If the gas spring is damaged or lacking pressure the lip will not remain extended. Replace the gas spring. See page 20.  b) Adjust (loosen) eyebolt(s) 1/2~1 turn. Test performance. Repeat.
10) Foot pedal release too hard to depress when lowering deck.	a) Deck weight is resting on latch arm.	a) Pull back on deck while stepping on release pedal. Then push forward.



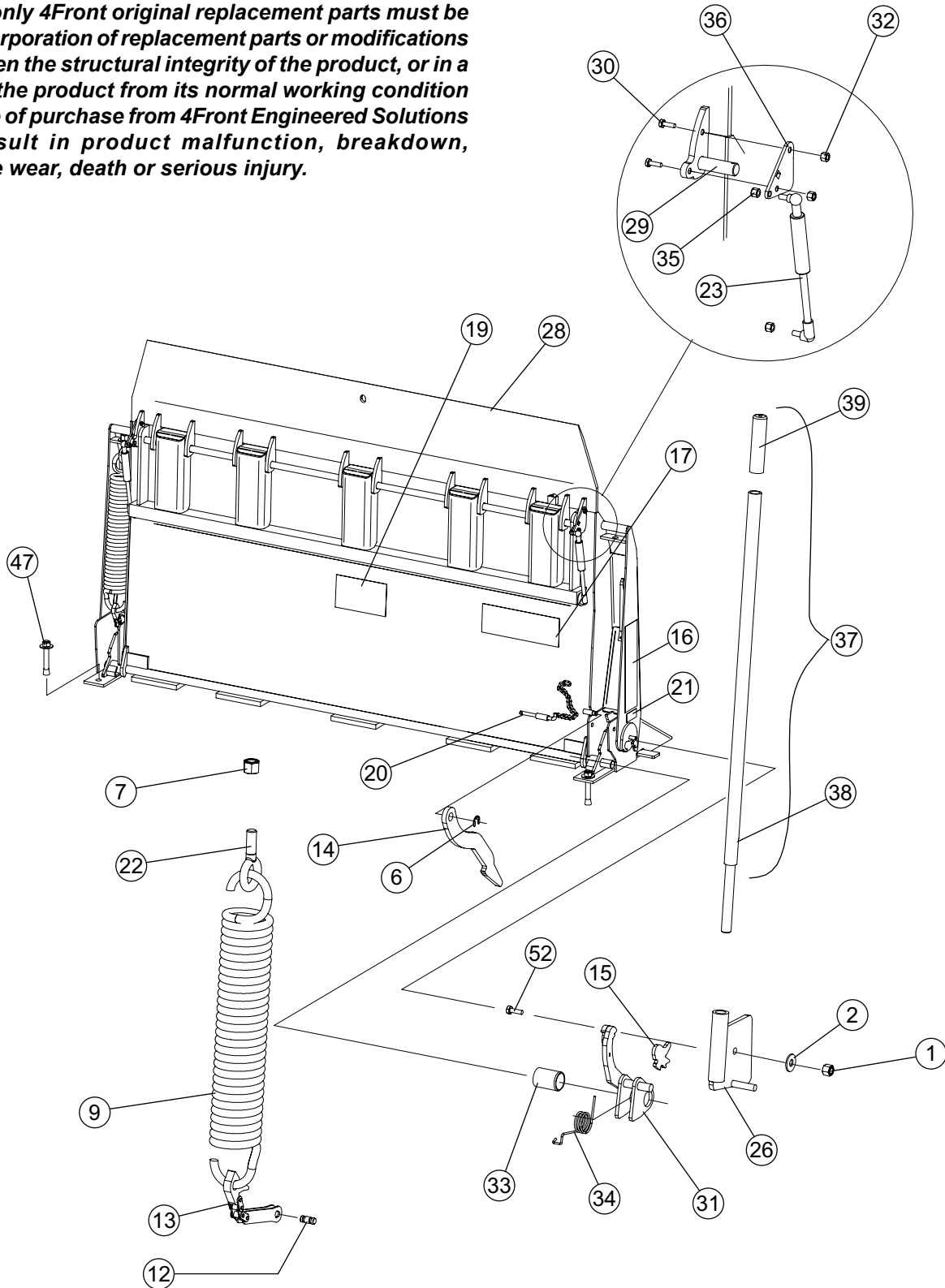
# DOCK BRIDGE PARTS LIST

Use this Parts List to determine the correct replacement part(s) for your dock bridge.

## ⚠ WARNING

*To ensure proper function, durability and safety of the product, only 4Front original replacement parts must be used. Incorporation of replacement parts or modifications that weaken the structural integrity of the product, or in a way alter the product from its normal working condition at the time of purchase from 4Front Engineered Solutions could result in product malfunction, breakdown, premature wear, death or serious injury.*

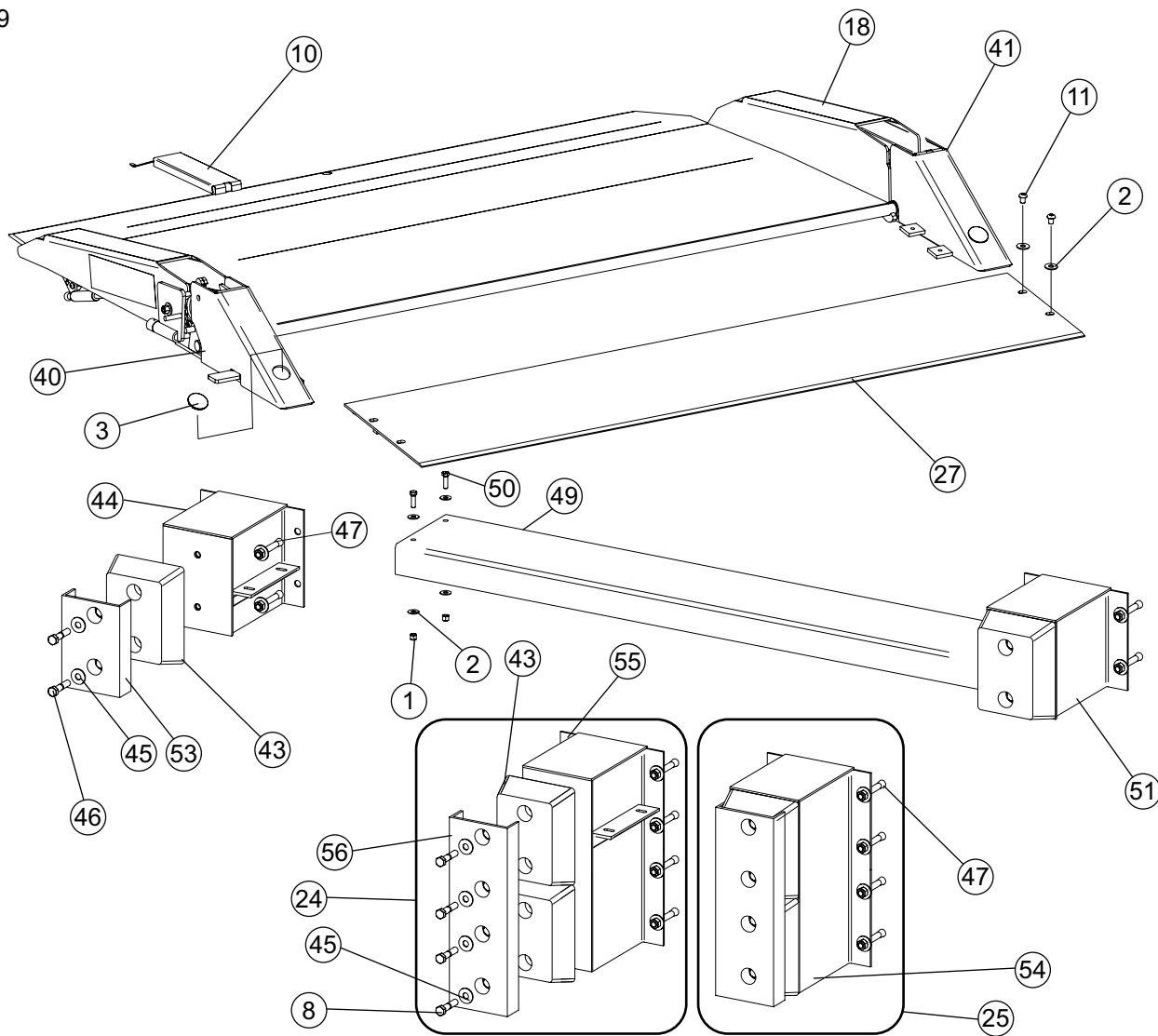
Fig. 28





# DOCK BRIDGE PARTS LIST, continued

Fig. 29



Item	Qty	Part Description	Part Number		
			LH6	LH6-6	LH7
1	5	Nylock nut - 1/2-13 UNC	214505	214505	214505
2	13	Washer 1/2 - 0.562ID x 1.375 OD	234121	234121	234121
3	2	Hole plug, 2"	6002112	6002112	6002112
4	1	Deck assembly	6006104	6006111	6006117
5	1	Operation placard (not shown)	6002199	6002199	6002199
6	1	Truarc extr. Klipring, 5/8" thin	049060	049060	049060
7	2	Nylock nut - 3/4-10 UNC	214558	214558	214558
8	8	Socket head cap screw 3/4"-10UNC x 3 1/2"	212328	212328	212328
9	2	Extension spring-L800-CP	333054	333054	333054
10	2	Cam cover paint assy	6002024	6002024	6002024
11	4	Hex socket button cap screw 1/2 - 13 x 7/8	6002078	6002078	6002078
12	2	Pin, cam link	6002099	6002099	6002099
13	2	Spring-cam link assy	6002170	6002170	6002100
14	1	Plate, latch bar	6002106	6002106	6002106
15	1	Plate, handle ratchet	6002107	6002107	6002107

## DOCK BRIDGE PARTS LIST, continued

Item	Qty	Part Description	Part Number		
			LH6	LH6-6	LH7
16	2	Label, warning, vertical	6002120	6002120	6002120
17	1	Label, warning, horizontal	6002121	6002121	6002121
18	2	Label, logo and warning stripe	6002123	6002123	6002123
19	1	Label, logo, back	6002124	6002124	6002124
20	1	Safety pin assy	6002155	6002155	6002155
21	1	Serial tag	6009761	6009761	6009761
22	2	Eye bolt, 3/4-10, UNC	6002419	6002419	6002419
23	2	Gas spring	6006107	6006107	6006107
24	1	Bumper assy, RH, 26"	6008984	6008984	6008992
25	1	Bumper assy, LH, 26"	6008983	6008983	6008991
26	1	Handle base weldment	6010937	6010937	6010937
27	1	Pre-ramp assembly	6006103	6006110	6006116
28	1	Lip assy	6006105	6006112	6006118
	1	Cut down lip assy	6006525	6006526	—
29	1	Lip rod	6006913	6006914	6006915
30	4	Bolt, hex 3/8-16 UNC x 1 1/4 LG	000357	000357	000357
31	1	Security latch weldment	6006108	6006108	6006128
32	4	Nylock nut - 3/8-16 UNC	214538	214538	214538
33	2	Bearing, deck pivot	6006138	6006138	6006138
34	1	Spring, security latch LH-E3	6006161	6006161	6006161
35	4	Nylock nut - M10X1.5 (metric)	6006234	6006234	6006234
36	2	Lip lug gas spring mount top	6006916	6006916	6006916
37†	1	Assembly, lift handle	6010932	6010932	6010932
38	1	Handle assembly	6010934	6010934	6010934
39	1	Handle, grip, yellow	6007550	6007550	6007550
40	1	Base assembly, LH	6006102	6006102	6006115
41	1	Base assembly, RH	6006101	6006101	6006114
42*	1	Bumper assembly, RH, 13"	6008602	6008602	6008606
43	2	DB13 moulded bumper - for 13" bumpers	391811	391811	391811
	4	DB13 moulded bumper - for 26" bumpers	391811	391811	391811
44	1	Frame paint assy, bumper, RH, 13" bumper	6008604	6008604	6008608
45	4	Washer 3/4 - 0.812ID x 2 OD - for 13" bumpers	234141	234141	234141
	8	Washer 3/4 - 0.812ID x 2 OD - for 26" bumpers	234141	234141	234141
46	2	Bolt, hex 3/4-10 UNC - 3 1/2" LG - GR	212328	212328	212328
47	12	Anchor bolt, 3/4 x 5 1/2 - for 13" bumpers	6001187	6001187	6001187
	20	Anchor bolt, 3/4 x 5 1/2 - for 26" bumpers	6001187	6001187	6001187
48**	1	Bumper assembly, LH, 13"	6008601	6008601	6008605
49	1	Plate, bridge, bumper	6002111	6002111	6002111
50	4	Bolt, hex 1/2-13 UNC - 1.25 - GR5	212204	212204	212204
51	1	Frame paint assy, bumper, LH, 13" bumper	6008603	6008603	6008607
52	1	1/2-13x1.5 HB	6006479	6006479	6006479
53	2	Steel face assy, bumper, 13" (optional)	6006774	6006774	6006774
54	1	Frame paint assy, bumper, LH, 26" bumper	6008985	6008985	6008993
55	1	Frame paint assy, bumper, RH, 26" bumper	6008986	6008986	6008994
56	2	Steel face assy, bumper, 26"	6002188	6002188	6002188

\*Includes items 43, 44, 45 and 46.

\*\*Includes items 43, 45, 46 and 51.

†Includes items 38 and 39.

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## LIMITED WARRANTY INFORMATION

4Front Engineered Solutions, Inc. warrants that this DOCK BRIDGE will be free from flaws in material and workmanship under normal use for a period of one (1) year from the earlier of 1) 60 days after the date of initial shipment by 4Front Engineered Solutions, Inc., or 2) the date of installation of the DOCK BRIDGE by the original purchaser, provided that the owner maintains and operates the DOCK BRIDGE in accordance with this User's Manual.

**Main Spring Warranty** — All main springs are warranted to cover the cost of replacement parts and freight only for an extended period of four (4) years after the initial 1 yr. warranty period.

**Parts warranty** — All spare or replacement parts are warranted to cover the cost of replacement parts and freight only for ninety (90) days from the date of shipment.

In the event that this DOCK BRIDGE proves deficient in material or workmanship within the applicable limited warranty period, 4Front Engineered Solutions, Inc. will, at its option:

1. Replace the DOCK BRIDGE, or the deficient portion of either, without charge to the owner; or
2. Alter or repair the DOCK BRIDGE, on site or elsewhere, without charge to the owner.

The limited warranty stated in the preceding paragraph IS EXCLUSIVE AND IT IS IN LIEU OF ANY OTHER GUARANTEES AND WARRANTIES, EXPRESS OR IMPLIED. The limited warranty does not cover any failure caused by improper installation, abuse, negligence, or failure to maintain and adjust the DOCK BRIDGE properly. Parts requiring replacement due to damage resulting from vehicle impact, abuse, or improper operation are not covered by this warranty. 4Front Engineered Solutions, Inc. disclaims any responsibility or liability for any loss or damage (including, without limitation, direct, indirect or consequential damages, or lost profits or production time) that results from the use of unauthorized replacement parts or modification of the DOCK BRIDGE. 4Front Engineered Solutions, Inc. sole obligation with regard to a DOCK BRIDGE that proves to be deficient in material or workmanship shall be as set forth in its standard warranty above (i.e., 4Front Engineered Solutions, Inc. will, at its option, repair or replace the DOCK BRIDGE or portion thereof, without charge to the purchaser).

This limited warranty does not cover any failure caused by improper installation, abuse, negligence, or failure to properly maintain and adjust the DOCK BRIDGE. This limited warranty will be void or of no effect if the original purchaser does not notify 4Front Engineered Solutions, Inc.'s warranty department within ninety (90) days after the product deficiency is discovered. Parts requiring replacement due to damage resulting from vehicle impact, abuse, or improper operation are not covered by this warranty. 4Front Engineered Solutions, Inc. disclaims any responsibility or liability for any loss or damage that results from the use of unauthorized replacement parts or modification of the DOCK BRIDGE.

**THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, AND THERE IS NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.**

**4Front Engineered Solutions, Inc. warranties extend only to the DOCK BRIDGE itself.**

**4Front Engineered Solutions, Inc. DISCLAIMS all warranties, express or implied, responsibility or liability for loss or damage of any kind associated with the installation or maintenance of the DOCK BRIDGE, including any liability for premature product wear, product failure, property damage or bodily injury arising from improper installation or maintenance of the DOCK BRIDGE.**

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Please direct questions about your dock bridge to your local distributor, or to 4Front Engineered Solutions, Inc.

Your local distributor is:

Corporate Head Office:

1612 Hutton Dr. Suite 140  
Carrollton, TX. 75006  
Tel. (972) 466-0707  
Fax (972) 323-2661



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