



Door SHIELD™

Owner's/User's Manual



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PRECAUTIONS

Recognize Precautionary Information

Safety-Alert Symbol



The Safety-Alert Symbol is a graphic representation intended to convey a safety message without the use of words. When you see this symbol, be alert to the possibility of death or serious injury. Follow the instructions in the safety message panel.

DANGER

The use of the word DANGER signifies the presence of an extreme hazard or unsafe practice which will most likely result in death or severe injury.

WARNING

The use of the word WARNING signifies the presence of a serious hazard or unsafe practice which could result in death or serious injury.

CAUTION

The use of the word CAUTION signifies possible hazard or unsafe practice which could result in minor or moderate injury.

NOTICE

The use of the word NOTICE indicates information considered important, but not hazard-related, to prevent machine or property damage.

SAFETY INSTRUCTIONS

Indicates a type of safety sign, or separate panel on a safety sign, where safety-related instructions or procedures are described.

General Operational Precautions



Read and understand the Owner's/User's Manual and become thoroughly familiar with the equipment and its controls before operating the equipment.

Never operate equipment while a safety device or guard is removed or disconnected.

Never remove DANGER, WARNING, or CAUTION signs, Placards or Decals on the equipment unless replacing them.

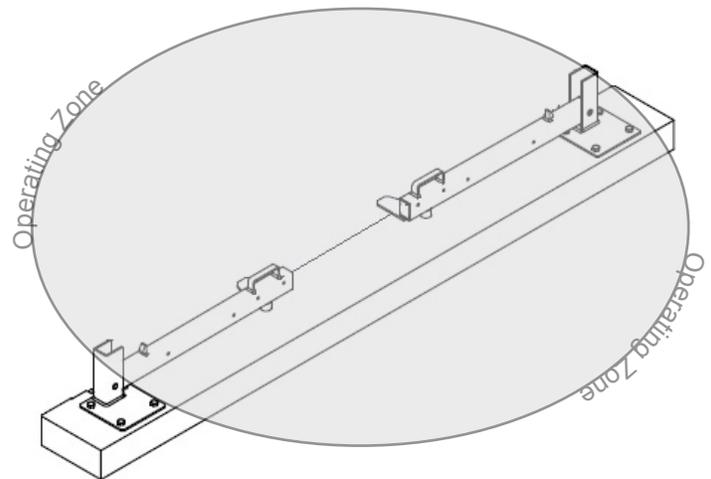


Figure 1

Do not start the equipment until all unauthorized personnel in the area have been warned and have moved outside the operating zone (see Figure 1).

Remove any tools or foreign objects from the operating zone before starting.

Keep the operating zone free of obstacles that could cause a person to trip or fall.



WARNING: This product can expose you to chemicals including lead, which are known to the State of California to cause cancer or birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

PRECAUTIONS

Operational Precautions



Learn the safe way to operate this equipment. Read and understand the manufacturer's instructions. If you have any questions, ask your supervisor.

DANGER



Stay clear of dock leveling device when transport vehicle is entering or leaving area.



Do not move or use the dock leveling device if anyone is under or in front of it.



Keep hands and feet clear of pinch points. Avoid putting any part of your body near moving parts.

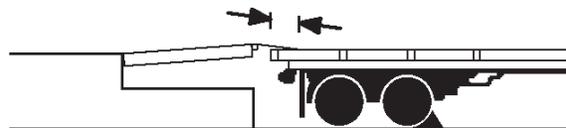
WARNING



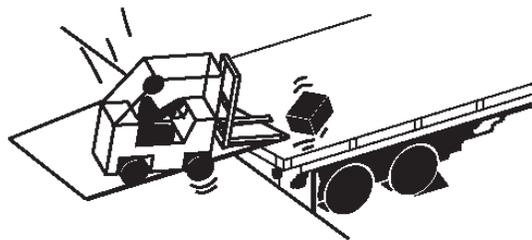
Chock/restrain all transport vehicles. Never remove the wheel chocks or release the restraining device until loading or unloading is finished, and transport driver has been given permission to drive away.



Do not use a broken or damaged dock leveling device or restraining device. Make sure proper service and maintenance procedures have been performed before using.



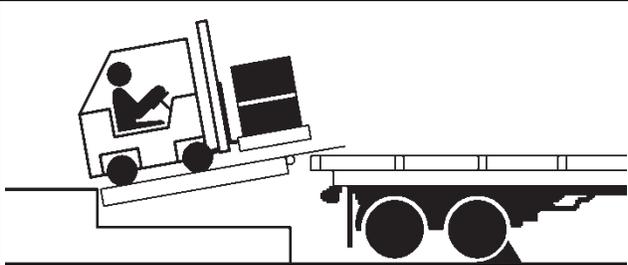
Make sure lip overlaps onto transport vehicle bed at least 4 in. (102 mm).



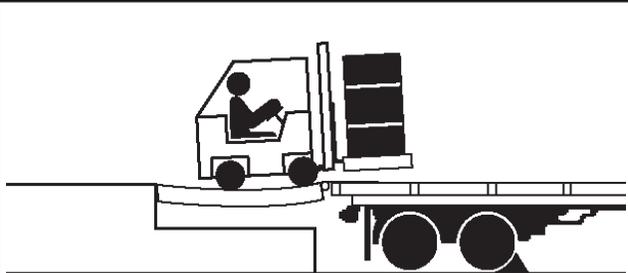
Keep a safe distance from both side edges.

Operational Precautions

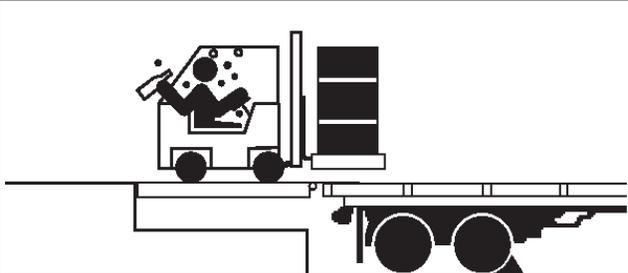
! WARNING



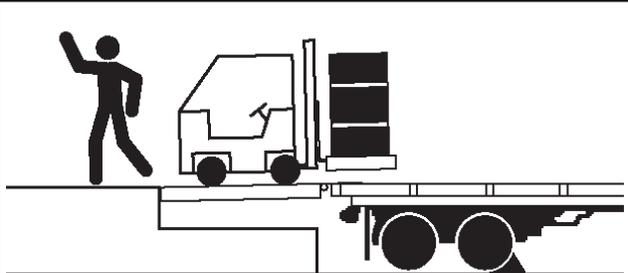
Do not use dock leveling device if transport vehicle is too high or too low.



Do not overload the dock leveling device.



Do not operate any equipment while under the influence of alcohol or drugs.



Do not leave equipment or material unattended on dock leveling device.

OWNER'S/USER'S RESPONSIBILITIES

- 1) The manufacturer shall provide to the initial purchaser and make the following information readily available to the owners/users and their agents, all necessary information regarding Safety Information, Operation, Installation and Safety Precautions, Recommended Initial and Periodic Inspections Procedures, Planned Maintenance Schedule, Product Specifications, Troubleshooting Guide, Parts Break Down, Warranty Information, and Manufacturers Contact Information, as well as tables to identify the grade(slope) for all variations of length or configuration of the dock leveling device and information identifying the maximum uncontrolled drop encountered when sudden removal of support while in the working range of the equipment.
- 2) When selecting loading dock safety equipment, it is important to consider not only present requirements but also future plans and any possible adverse conditions, environmental factors or usage. The owners/users shall provide application information to the manufacturer to receive recommendations on appropriate equipment specifications and capacity.
- 3) The owner/user must see all nameplates, placards, decals, instructions and posted warnings are in place and legible and shall not be obscured from the view of the operator or maintenance personnel for whom such warnings are intended for. Contact manufacturer for any replacements.
- 4) Dock leveling devices may become hazardous if the manufacturer's instructions regarding modifications or adjustments are not followed. Modifications or alterations of dock leveling devices shall only be made with prior written approval from the original manufacturer. These changes shall be in conformance with all applicable provisions of the MH30.1 standard and shall also satisfy all safety recommendations of the original equipment manufacturer of the particular application.
- 5) Modifications or alterations of restraining devices shall be made only with prior written approval from the original manufacturer. These changes shall be in conformance with all applicable provisions of the MH30.3 standard and shall also satisfy all safety recommendations of the original equipment manufacturer of the particular application.
- 6) The owner/user should recognize the inherent dangers of the interface between the loading dock and the transport vehicle. The owner/ user should, therefore, train and instruct all operators in the safe operation and use of the loading dock equipment in accordance with manufacturer's recommendations and industry standards. Effective operator training should also focus on the owner's/user's company policies, operating conditions and the manufacturer's specific instructions provided with the dock leveling device. Maintaining, updating and retraining all operators on safe working habits and operation of the equipment, regardless of previous experience, should be done on a regular basis and should include an understanding and familiarity with all functions of the equipment. Owners/users shall actively maintain, update and retrain all operators on safe working habits and operations of the equipment.
- 7) An operator training program should consist of, but not necessarily be limited to, the following:
 - a) Select the operator carefully. Consider the physical qualifications, job attitude and aptitude.
 - b) Assure that the operator reads and fully understands the complete manufacturer's owners/ users 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 the dock leveling device and components design as related to safety, e.g., mechanical limitation, stability, functionality, etc.
 - e) Introduce the equipment. Show the control locations and demonstrate its functions. Explain how they work when used properly and maintained as well as problems when they are used improperly.
 - f) Assure that the operator understands the capacity rating, nameplate data, placards and all precautionary information appearing on the dock leveling device.
 - g) Supervise operator practice of equipment.
 - 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.

OWNER'S/USER'S RESPONSIBILITIES

- 8) Loading dock safety equipment should never be used outside of its vertical working range, or outside the manufacturer's rated capacity. It shall also be compatible with the loading equipment and other conditions related to dock activity. Please consult the manufacturer if you have any questions as to the use, vertical working range or capacity of the equipment. Only properly trained and authorized personnel should operate the equipment.
- 9) It is recommended that the transport vehicle is positioned as close as practical to the dock leveling device and in contact with both bumpers. When an industrial vehicle is driven on or off a transport vehicle during loading and unloading operations, the transport vehicle parking brakes shall be applied and wheel chocks or a restraining device that provides equal or better protection of wheel chocks shall be engaged. Also, whenever possible, air-ride suspension systems should have the air exhausted prior to performing said loading and unloading operations.
- 10) When goods are transferred between the loading dock and a trailer resting on its support legs/ landing gear instead of a tractor fifth wheel or converter dolly, it is recommended that an adequate stabilizing device or devices shall be utilized at the front of the trailer.
- 11) In order to be entitled to the benefits of the standard product warranty, the dock safety equipment must have been properly installed, maintained and operated in accordance with all manufacturer's recommendations and/ or specified design parameters and not otherwise have been subject to abuse, misuse, misapplication, acts of nature, overloading, unauthorized repair or modification, application in a corrosive environment or lack of maintenance. Periodic lubrication, adjustment and inspection in accordance with all manufacturers' recommendations are the sole responsibility of the owner/user.
- 12) Manufacturer's recommended maintenance and inspection of all dock leveling and vehicle restraining devices shall be performed in conformance with the following practices: A planned maintenance schedule program must be followed, only trained and authorized personnel shall be permitted to maintain, repair, adjust and inspect dock leveling devices, and only the use of original equipment manufacturer parts, manuals, maintenance instructions, labels, decals and placards or their equivalent. Written documentation of maintenance, replacement parts or damage should be kept. In the event of damage, notification to the manufacturer is required.
- 13) Loading dock 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 a manufacturer's authorized representative, and repaired or replaced as needed or recommended by the manufacturer before being placed back in service.
- 14) Restraining devices that are structurally damaged shall be removed from service, inspected by a manufacturer's authorized representative, and repaired or replaced as needed or recommended by the manufacturer before being placed back in service.

INTRODUCTION

General Information



Figure 2

This manual provides current information on the Allied Solutions Door SHIELD™. Due to ongoing product improvement, some parts may have changed, along with operation and troubleshooting methods. This manual describes these changes where applicable.

The Door SHIELD is designed to protect the bottom panel of the overhead door from the daily dings and collisions caused by pallets and rolling carts. The Door SHIELD lowers in front of the door protecting the bottom panel by engaging with the floor or dock leveler preventing items from being pushed into the door.

The Door SHIELD utilizes an under door lip which prevents the door from being closed before the Door SHIELD is in position. The Door SHIELD is available in both standard height and also with an optional extended cart shield. The Door SHIELD can be used with either mechanical or powered doors and can be interlocked electronically to the overhead door or dock leveler with the optional interconnect limit switch.

Door SHIELDS are available in the following sizes:

Width:

- 36 inch (25 lbs each piece)
- 48 inch (30 lbs each piece)

Call Systems, LLC to discuss available options to meet your specific needs.

Technical Service at 800-643-5424 or techservices@loadingdocksystems.com

Component Identification

Inspect package and all components. Report any missing or damaged items immediately and note on the shipping Bill Of Lading (BOL).

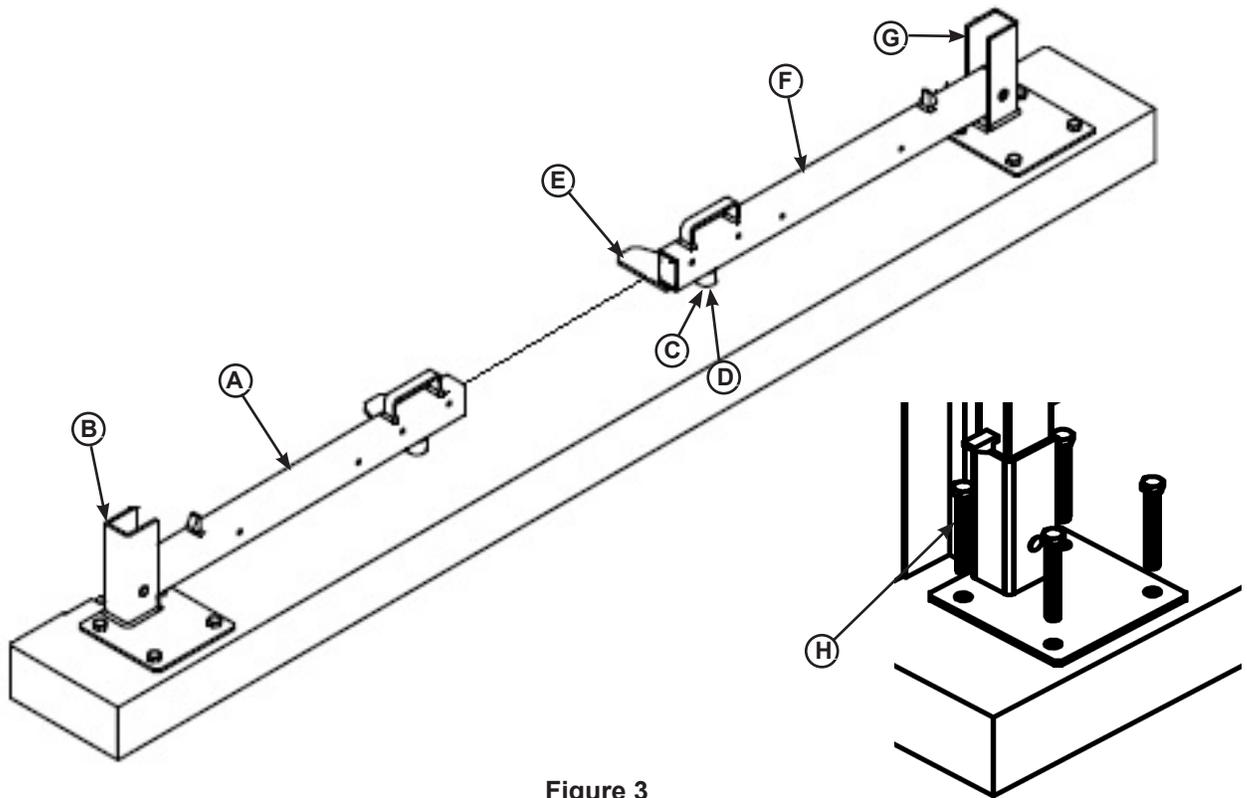


Figure 3

A — Upper Arm, Left
B — Base, Left
C — Rubber Donut (optional)

D — Stabilizing Pin
E — Integrated Lock
F — Upper Arm, Right

G — Base, Right
H — Anchors (8)

INSTALLATION

Installation Precautions

WARNING

Post safety warnings and barricade the work area to prevent unauthorized use of nearby equipment until installation has been completed.

CAUTION

Only trained installation professionals with the proper equipment should install this product.

CAUTION

In applications where adhesive anchors will be used, holes must be properly prepped and cleaned before applying adhesive into holes. Refer to adhesive instructions for further detail.

Installation Instructions

1. Visually inspect the concrete and verify it is acceptable for mounting the Door SHIELD.
 2. Remove all debris from the floor and sweep the floor clean.
 3. With the Door SHIELD in the vertical position, place then on each side of the overhead door in front of the door track so the locking mechanism is at least 1/2" from the inside of the track. See Figure 4.
 4. Space the unit approximately 1.00 inch in front of the track. Visually inspect each unit is in proper orientation and straight in line with the opposite side.
 5. Mark each of the four (4) holes on the mounting plate; repeat on opposite site.
 6. Remove the unit and use a hammer drill or equivalent to drill 5/8" dia. holes to a minimum of 4-1/2" deep
 7. Clean out the holes and place the unit back into position.
 8. Install four (4) minimum 5/8" x 4-1/4" long anchor bolts or equivalent. Torque to manufacturer's specs. See Figure 5.
 9. Repeat step 3-8 on the opposite side.
 10. Lower each of the arms fully down. Check to see if there is interference with any anchors, if so, the anchor top can be ground down for clearance.
 11. Lower each arm and trace around the stabilizing pins.
- Note:** If Door SHIELD is being used over a loading dock leveler, consult the dock leveler Owner's/User's Manual for any hazards that may be under the unit.
12. Drill a 1" dia hole 1-1/2" deep for each stabilizing pin. Ensure the hole is deep enough to allow the arm to be level with the floor, and clean out to receive the stabilizing pin.
- Note:** If drilling into the dock leveler, use appropriate type drill bit and remove all sharp edges. Touch up paint as needed.
13. Operate each side of the Door SHIELD through full operational movement to ensure the unit is functioning correctly.

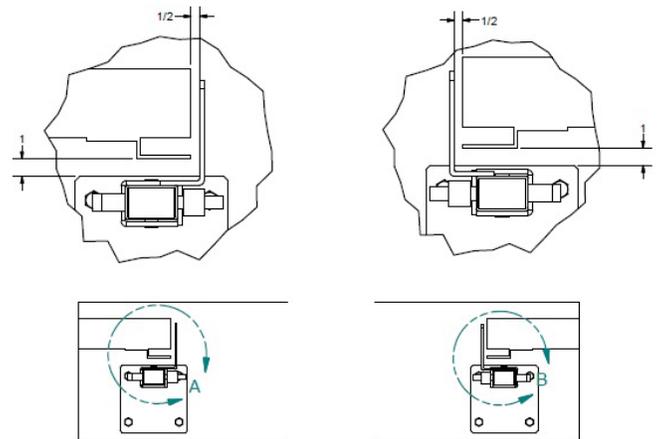


Figure 4

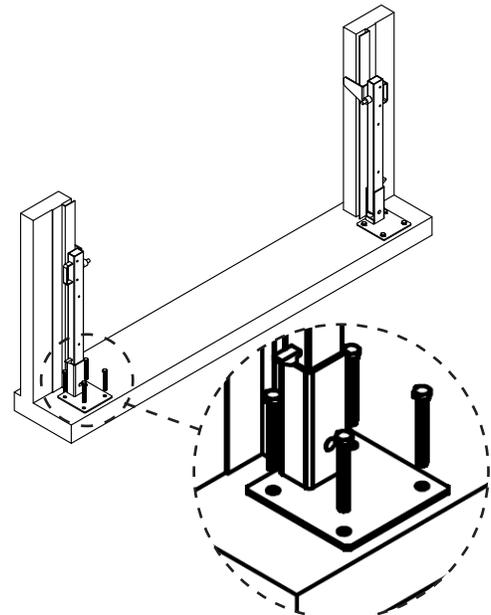


Figure 5

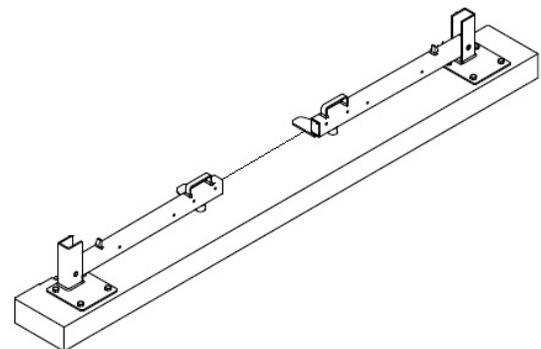
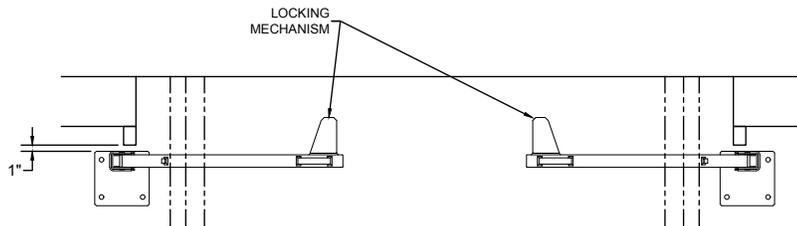


Figure 6

INSTALLATION

Installation Survey (36" model, 6'-8' doors)



PLAN VIEW

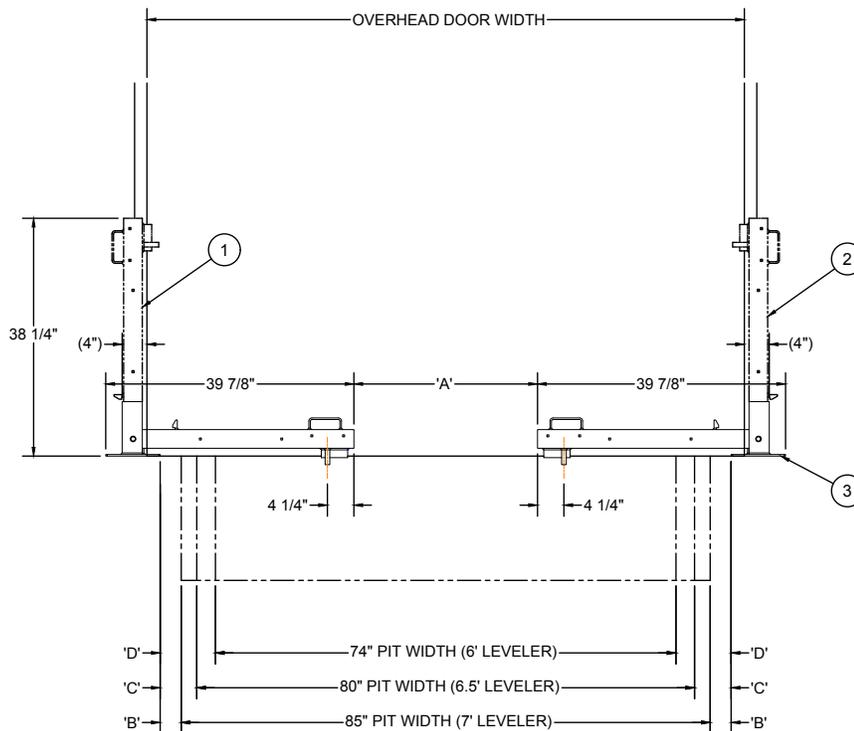


Figure 7

VARIABLES	OVERHEAD DOOR WIDTH				
	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
"A" - GAP BETWEEN ARMS	5.5"	11.5"	17.5"	23.5"	29.5"
"B" - 7' W PIT CLEARANCE	N/A	N/A	N/A	N/A	3.375"
"C" - 6.5' W PIT CLEARANCE	N/A	N/A	N/A	2.875"	5.875"
"D" - 6' PIT CLEARANCE	N/A	N/A	2.875"	5.875"	8.875"

NOTE: IF VALUE FOR VARIABLE 'B', 'C', OR 'D' IS **N/A** THE DOOR SHIELD WILL OVERLAP OR BE TOO CLOSE TO LEVELER PIT AND CANNOT BE USED WITH THAT SPECIFIC COMBINATION OF OVERHEAD DOOR AND LEVELER WIDTH

NOTES:

1. POSITION DOOR SHIELD SO MOUNTING PLATE IS 1" BEHIND DOOR TRACK AND 1/2" GAP EXISTS BETWEEN LOCKING MECHANISM PLATE AND DOOR TRACK WHEN SHIELD ARM IS IN VERTICAL POSITION. ONCE POSITIONED OUTSIDE EDGE OF FORMED BASE CHANNEL WILL BE 4" OUTSIDE THE INSIDE EDGE OF DOOR TRACK. SEE OWNER'S/USER'S MANUAL FOR FULL INSTALLATION INSTRUCTIONS
2. USE THE TABLE BELOW TO DETERMINE THE GAP BETWEEN LEFT AND RIGHT ARMS (VARIABLE 'A'), AND CLEARANCE BETWEEN SHIELD MOUNTING PLATE AND LEVELER PIT (VARIABLE 'B', 'C', OR 'D') BASED ON OVERHEAD DOOR WIDTH.
3. DOOR SHIELD SHOWN WITH NO AVAILABLE OPTIONS AND A 8'-0" DOOR OPENING

Installation Survey (48" model, 8'-10' doors)

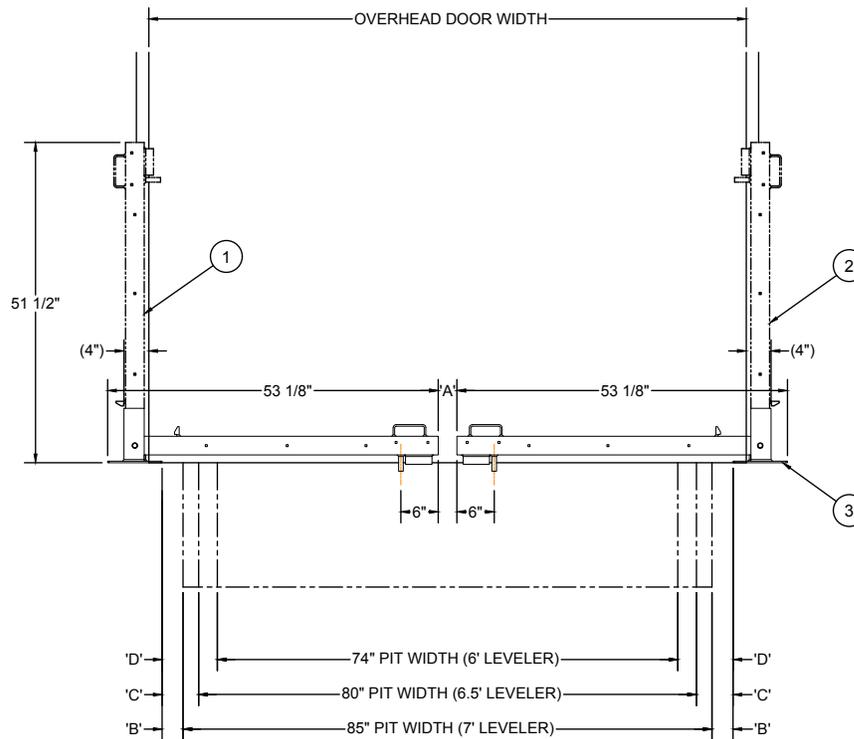
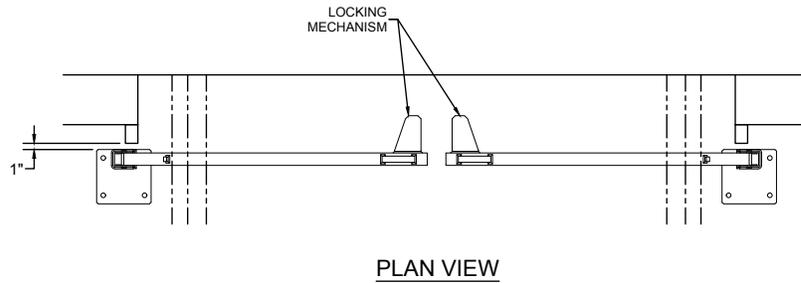


Figure 8

VARIABLES	OVERHEAD DOOR WIDTH				
	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"
"A" - GAP BETWEEN ARMS	3"	9"	15"	21"	27"
"B" - 7" W PIT CLEARANCE	3.375"	6.375"	9.375"	12.375"	15.375"
"C" - 6.5" W PIT CLEARANCE	5.875"	8.875"	11.875"	14.875"	17.875"
"D" - 6" PIT PIT CLERANCE	8.875"	11.875"	14.875"	17.875"	20.875"

NOTES:

1. POSITION DOOR SHIELD SO MOUNTING PLATE IS 1" BEHIND DOOR TRACK AND 1/2" GAP EXISTS BETWEEN LOCKING MECHANISM PLATE AND DOOR TRACK WHEN SHIELD ARM IS IN VERTICAL POSITION. ONCE POSITIONED OUTSIDE EDGE OF FORMED BASE CHANNEL WILL BE 4" OUTSIDE THE INSIDE EDGE OF DOOR TRACK. SEE OWNER'S/USER'S MANUAL FOR FULL INSTALLATION INSTRUCTIONS
2. USE THE TABLE BELOW TO DETERMINE THE GAP BETWEEN LEFT AND RIGHT ARMS (VARIABLE 'A'), AND CLEARANCE BETWEEN SHIELD MOUNTING PLATE AND LEVELER PIT (VARIABLE 'B', 'C', OR 'D') BASED ON OVERHEAD DOOR WIDTH.
3. DOOR SHIELD SHOWN WITH NO AVAILABLE OPTIONS AND A 8'-0" DOOR OPENING

OPERATION

Operational Precautions

DANGER

Stay clear of dock leveler and vehicle restraint when transport vehicle is entering or leaving dock area.

DO NOT move or use the dock leveler or restraint if anyone is under or in front of the dock leveler.

Keep hands and feet clear of pinch points. Avoid putting any part of your body near moving parts.

Operating Instructions

1. Check to make sure the transport vehicle is positioned squarely against dock bumpers.
2. Instruct driver to remain at the dock until the loading or unloading process has been completed.
3. Chock the transport vehicle wheels or use a vehicle restraint if available.
4. Verify the transport vehicle is secured.
5. Fully raise the overhead door.
6. Check the area around the Door SHIELDS to be free and clear of debris.
7. Lift the Door SHIELD by the handle to the vertical position and engage on the lock. See Figure 9.
8. Lift the other Door SHIELD to the vertical position and engage on the lock.
9. If doorway is equipped with a loading dock leveler, activate unit to access the transport vehicle.
10. Proceed with loading or unloading the transport vehicle
11. Once loading/unloading is complete, return dock leveler, if equipped, to the stored position, then lift up and lower the Door SHIELD to the horizontal position. DO NOT let the Door SHIELD drop down or free fall.
12. Lower the other Door SHIELD down to the horizontal position. See Figure 10.
13. Fully close the overhead door.
14. Indicate to driver that the transport vehicle may leave the dock.

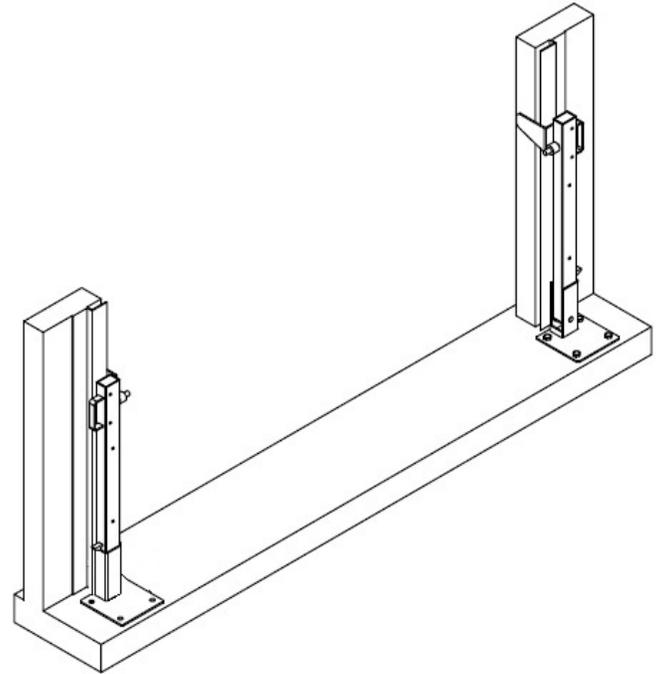


Figure 9

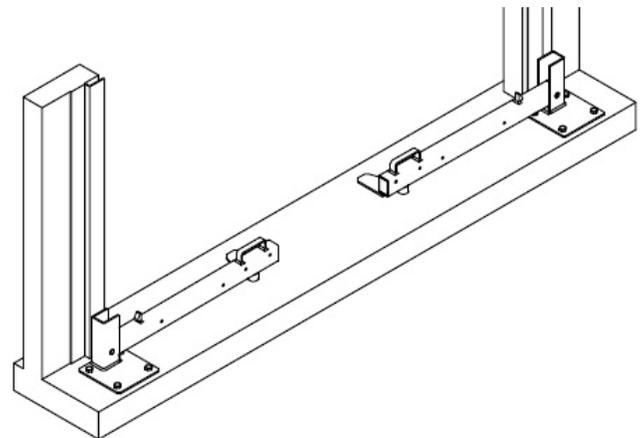


Figure 10

MAINTENANCE

Maintenance Precautions

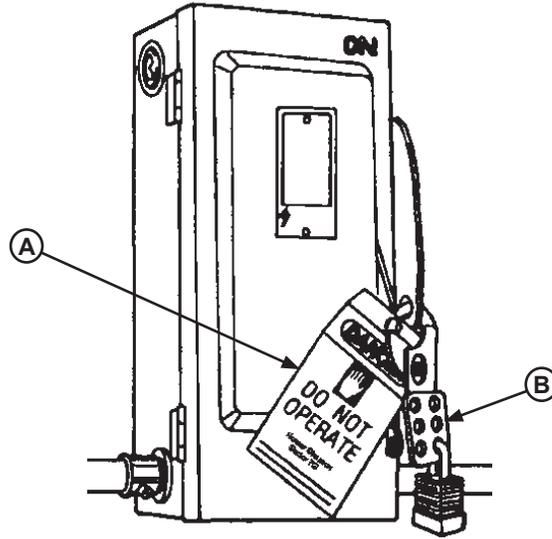


Figure 11

A— Tag Out Device

B—Lock Out Device

! WARNING

Always post safety warnings and barricade the work area at dock level and ground level to prevent unauthorized use of the equipment before maintenance is complete.

When working with electrical or electronic controls, make sure that the power source has been tagged (A) and locked out (B) according to OSHA regulations* and approved local electrical codes (see Figure 11).

Only the person servicing the equipment should have the capability to remove the lockout devices. The tag out devices* must inform that repairs are in process and clearly state who is responsible for the lockout condition.

! DANGER

Lockout/Tagout power before servicing. Comply with OSHA 1910.147

1751-0857 Rev A

! DANGER

Arc Flash and Shock Hazard
PPE [Personal Protection Equipment] Required
 De-energize equipment before working on or inside. Do not open cover without appropriate PPE. Refer to NFPA 70E for PPE requirements. This panel may contain more than one power source.

Hazardous Voltage Will Result in Death or Serious Injury

1751-0738 Rev A

* Refer to OSHA regulations 1910.146. Confined Space and 1910.147. Lockout/Tagout

Periodic Maintenance

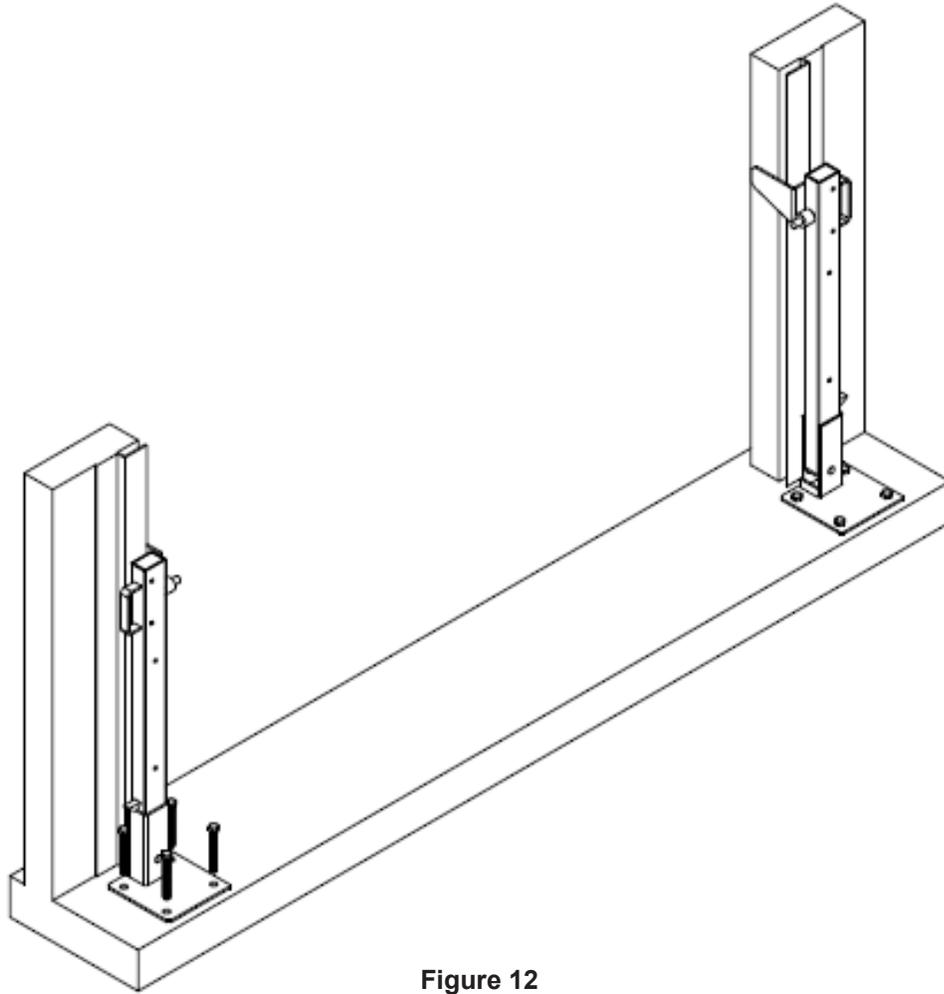


Figure 12

Weekly Maintenance

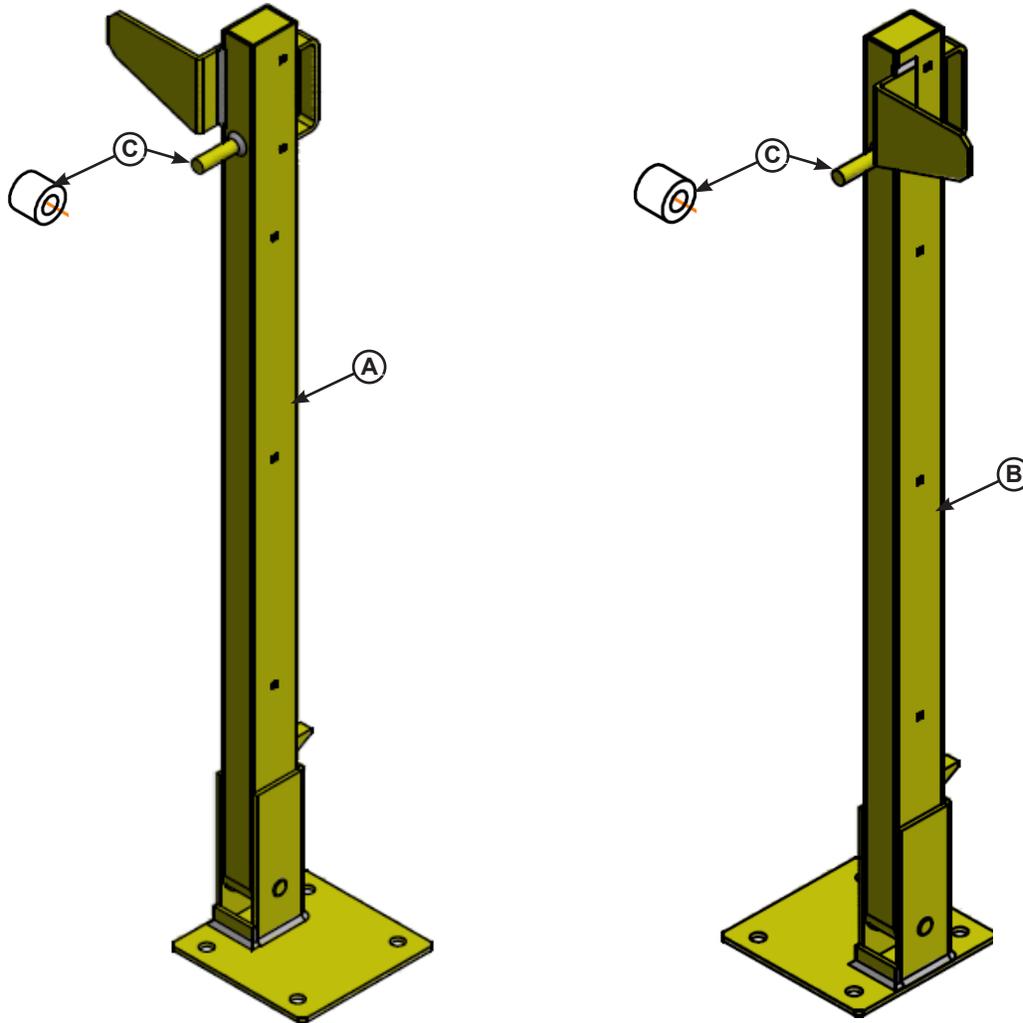
- Clean out and remove dirt and/or debris from on and around the Door SHIELD.
- Inspect arms, base and pivot for damage or excessive wear. Repair or replace as needed.
- Inspect welds, handles and locks.
- Check that the mounting hardware is not loose or missing.
- If equipped, check that limit switch wire connections are intact and not loose.

Weekly Maintenance

- Lubricate both pivot pins with lightweight machine oil.
- Check torque on anchor bolts. Re-tighten to manufacturer's specification if needed.

PARTS

Door SHIELD



Door SHIELD			
Item	Quantity	Part Number	Description
A	1	9444-0002	Arm, Right Side Assembly 36 inch
	1	9444-0007	Arm, Right Side Assembly 48 inch
B	1	9444-0001	Arm, Left Side Assembly 36 inch
	1	9444-0006	Arm, Left Side Assembly 48 inch
C	2	9441-0018	Stop, Rubber (OPTIONAL)
D	8	2101-0316	Anchor,Sleeve 5/8"x 4-1/4"(Not Shown)

Customer Information

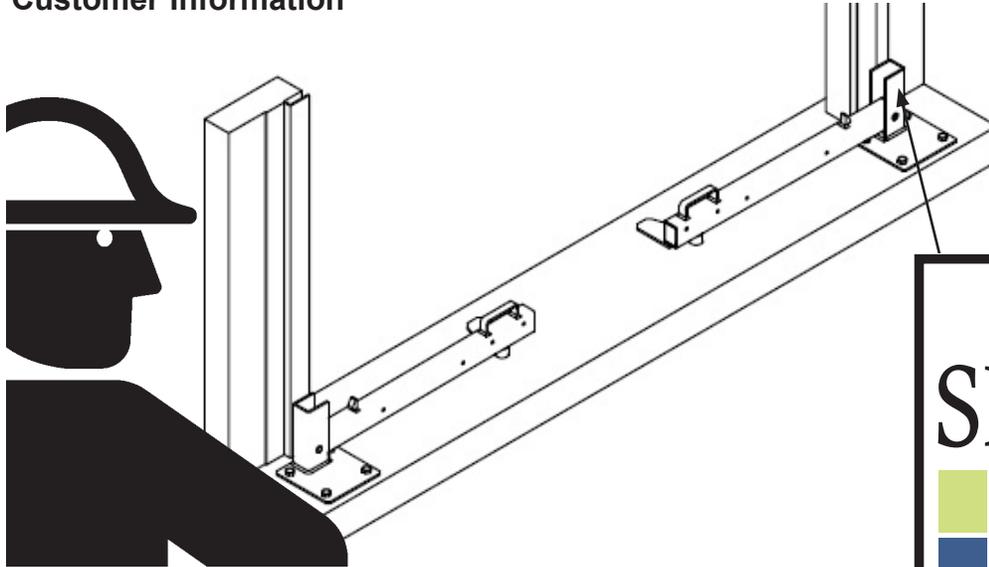


Figure 12

NOTE: Refer to Figure 12 for left/right orientation of Door SHIELD and Figure 13 for example of decal.

The date code decal is located on the right side Door SHIELD.

When you receive your new equipment, write down the Date Code number and install date in the form provided. This will help ensure safe keeping of the information.

Also, write down Systems, LLC's job number, the company that installed the equipment, and the original owner's name. This will all help to identify the equipment if more information is required.

For service, call or contact:

Systems, LLC
 P.O. Box 309
 Germantown, WI 53022

Phone: (800) 643-5424
 Fax: (262) 255-5917

www.loadingdocksystems.com

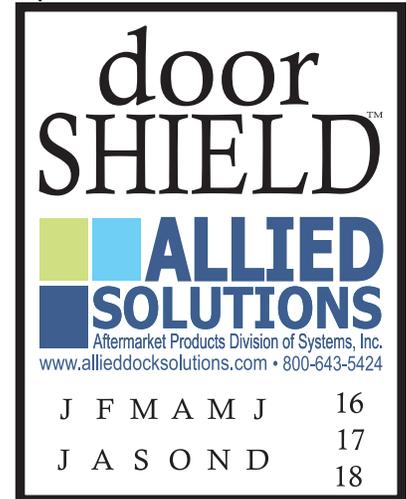


Figure 13

<u>Door SHIELD Information</u>	
Model	_____
Date Code	_____
Systems, Inc., Job No.	_____
<u>Original Owner Information</u>	
Name	_____
Address	_____ _____
<u>Installer Information</u>	
Name	_____
Address	_____ _____
Date of Installation	_____

STANDARD PRODUCT WARRANTY

SYSTEMS, LLC warrants that its products will be free from defects in design, materials and workmanship for a period of one (1) year from the date of shipment. All claims for breach of this warranty must be made within 30 days after the defect is or can with reasonable care, be detected. In no event shall any claim be made more than 30 days after this warranty has expired. In order to be entitled to the benefits of this warranty, the product must have been properly installed, maintained and operated in accordance with all manufacturer's recommendations and/or specified design parameters and not otherwise have been subject to abuse, misuse, misapplication, acts of nature, overloading, unauthorized repair or modification, application in a corrosive environment or lack of maintenance. Periodic lubrication, adjustment and inspection in accordance with all manufacturers' recommendations are the sole responsibility of the Owner/User.

In the event of a defect, as determined by SYSTEMS LLC, covered by this warranty, SYSTEMS LLC shall remedy such defect by repairing or replacing any defective equipment or parts, bearing the cost for the parts, labor and transportation. This shall be exclusive remedy for all claims whether based on contract, negligence or strict liability.

WARRANTY LIMITATIONS

THE ABOVE WARRANTIES ARE IN LIEU OF ANY OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SYSTEMS LLC AND ITS SUBSIDIARIES SHALL NOT IN ANY EVENT BE LIABLE TO ANYONE, INCLUDING THIRD PARTIES, FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND INCLUDING BUT NOT LIMITED TO, BREACH OF WARRANTY, LOSS OF USE, LOSS OF PROFIT, INTERRUPTION OF BUSINESS OR LOSS OF GOODWILL.