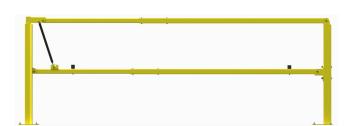
# EDGESAFE Loading Dock Safety Gate



## **Installation Instructions/Operation and Maintenance Manual**

## **Patent Pending**



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LDSG-120-PCY (8'-10' Openings) LDSG-144-PCY (10'-12' Openings)

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## **Contact Information**

Mail

PS Safety Access 1150 South 48th Street Grand Forks, ND 58201 **Local Phone** 

701.746.4519

Toll Free Phone

877.446.1519

Website

pssafetyaccess.com

Email

4psinfo@psdoors.com

**Hours of Operation** 

8 A.M. to 5 P.M. CT Monday – Friday

**IMPORTANT!** Read entire Instruction and Operations Manual to become familiar with the product.

**NOTICE** This product is a fall protection product. The effectiveness of the product is directly related to the proper installation and operation of this product. Failure to properly maintain this product **will** affect performance.

#### **Publication Notice**

This manual has been compiled and published covering the latest product descriptions and specifications.

The contents of this manual and the specifications of this product are subject to change without notice.

PS Safety Access reserves the right to make changes without notice in the specifications and materials contained herein and shall not be responsible for any damages (including consequential) caused by reliance on the materials presented, including but not limited to typographical and other errors relating to the publication.

PS Safety Access and/or its respective suppliers may make improvements and/or changes in the product(s)/ service(s) offered and/or the program(s) at any time without notice.

Retain this manual for future reference.

If you would like to download a copy of this manual, please go to psdoors.com or pssafetyaccess.com



## **LDSG Product Information**

#### **I. General Information**

- A. This manual contains information regarding installation, operation, and maintenance of the PS DOORS Loading Dock Safety Gate.
- B. The Loading Dock Safety Gate is designed to meet OSHA Railing Standard 1910.29(b).
- C. PS DOORS recommends that the owner implement a regular maintenance program to inspect the Loading Dock Safety Gate as necessary.

**NOTICE** This product is manufactured to specific guidelines. Unauthorized alteration in any way will result in voiding factory warranty, and may cause product to fail with potential serious consequences. Accordingly, if the product requires service after unauthorized modification, you can expect any request for warranty repair to be charged to you. Authorized modifications, received in writing from PS DOORS, as long as the modification is accomplished strictly in accordance with PS DOORS' instructions, does not void warranty. To request product modifications contact PS DOORS.

#### **II. Storage Prior To Installation of Product**

A. Store materials in a dry, ventilated location.

#### **III. Installation Site Preparation**

**NOTICE** Before starting site preparation and installation of the Loading Dock Safety Gate, read the entire Operation and Maintenance Manual and review all installation instructions thoroughly.

**IMPORTANT! Anchorage:** The concrete floor anchors provided have been engineered to structurally withstand OSHA loading requirements when installed into a minimum four inch thick concrete floor and at least three inches from the edge of the concrete slab. If existing mounting structure differs, the installer is responsible for ensuring the product is structurally mounted to resist all required field loads.

- A. Clear work area of any debris.
- B. Ensure you have the necessary tools available;

#### Recommended Tools:

- 1. Two (2)  $\frac{9}{16}$  socket and ratchet
- 2. Two (2)  $\frac{7}{16}$  socket and ratchet
- 3. One (1) Heavy duty flat blade screwdriver
- 4. One (1) Rubber mallet
- 5. One (1) Tape measure
- 6. One (1)  $\frac{3}{16}$  Allen Wrench

#### **IV. Installation Safety Precautions**

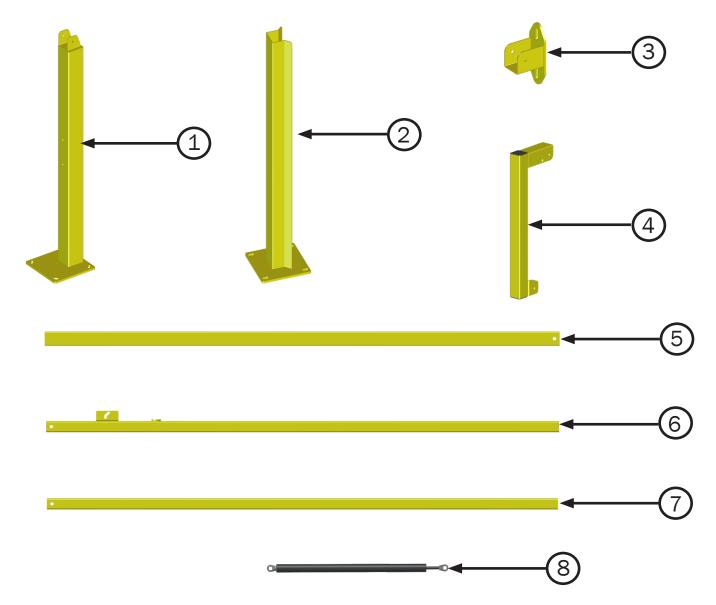
- A. Comply with all OSHA and ANSI Safety Regulations and/or company safety policies when installing.
- B. Personnel: Determine the appropriate number of personnel required to perform installation and have them readily available at the project site. (1-2 people recommended)

▲ DANGER User and installer discretion required to prevent exposure of personnel to an unprotected edge of an elevated platform.

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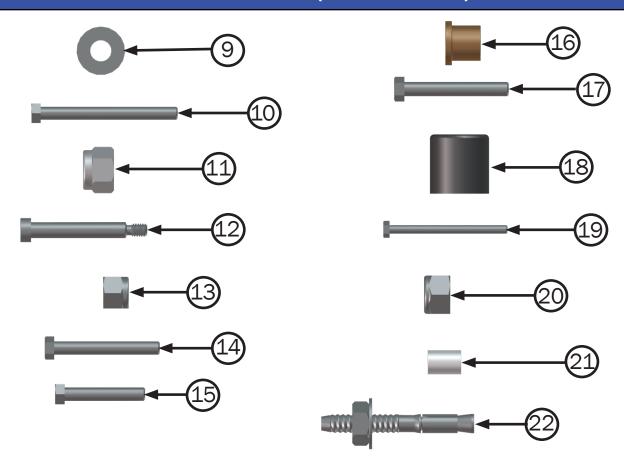
#### **V. Parts List**

- A. Inventory shipment to ensure all parts are present for assembly/installation. Refer to part list on pages 3-4.
  - 1. Loading Dock Safety Gate Box
  - 2. Hardware Box (included in box)



ITEM NUMBER DESCRIPTION		QUANTITY
1	Gate Post	1
2	Gate Catch	1
3	Adjustable Clevis	1
4	Gate End	1
5	2" Lift Arm	2
6	1 ¾" Lower Lift Arm	1
7	1 ¾" Upper Lift Arm	1
8	Dampener	2

# **Hardware Parts List (Included in box)**



ITEM NUMBER	DESCRIPTION	QUANTITY
9	<sup>3</sup> / <sub>8</sub> " Flat Washer	4
10	<sup>3</sup> / <sub>8</sub> " x 4" Hex Bolt	2
11	<sup>3</sup> /8" Nylock Nut	10
12	3/8" x 2 1/4" Shoulder Bolt	2
13	<sup>5</sup> / <sub>16</sub> " Heavy Nylock Nut	2
14	<sup>3</sup> / <sub>8</sub> " x 3" Hex Bolt	2
15	<sup>3</sup> / <sub>8</sub> " x 2 <sup>1</sup> / <sub>4</sub> " Hex Bolt	4
16	Flange Bearing	8
17	<sup>3</sup> / <sub>8</sub> " x 2 <sup>3</sup> / <sub>4</sub> " Hex Bolt	2
18	Round Bumper	2
19	<sup>1</sup> / <sub>4</sub> " x 3 <sup>1</sup> / <sub>2</sub> " Hex Bolt	2
20	<sup>1</sup> / <sub>4</sub> " Nylock Nut	2
21	Nylon Spacer	1
22	Concrete Floor Anchor	8

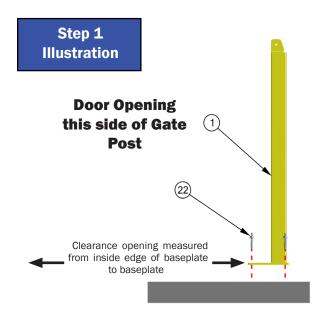
#### VI. Installing a Loading Dock Safety Gate

**NOTICE** Refer to parts list on page 3-4 for part item numbers and descriptions.

**NOTICE** Base plates are slotted to allow adjustment for alignment.

**Step 1.** Mark out holes for the Gate Post and anchor with concrete floor anchors.

Measure and mark the center of wall opening and use the Gate Size Reference Table to assist in centering the gate on the wall opening. See reference drawing on the last page of this manual.



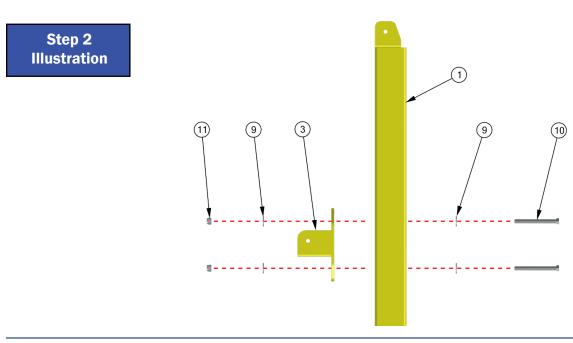
 LDSG SIZE REFERENCE TABLE

 NOMINAL OPENING
 CLEAR OPENING
 CLEARANCE HEIGHT

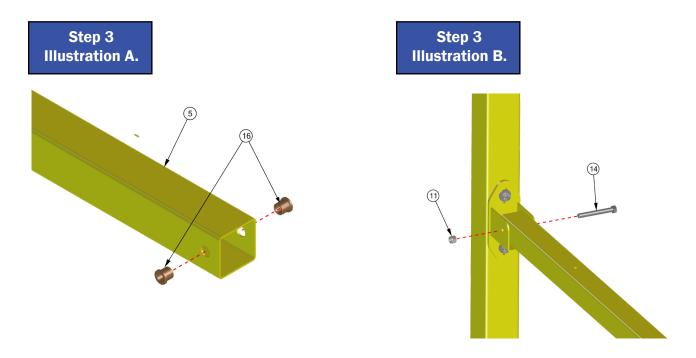
 LDSG-120-PCY
 96" - 120"
 108",120", OR 132"
 154 \(^1\supersquip^4\) - 178 \(^1\supersquip^4\)

 LDSG-144-PCY
 120" - 144"
 132", 144", OR 156"
 178. \(^1\supersquip^4\) - 202 \(^1\supersquip^4\)

**Step 2.** Attach Adjustable Clevis with (2)  $\frac{3}{8}$  x 4" hex bolts, (2)  $\frac{3}{8}$  nylock nuts and (4)  $\frac{3}{8}$  flat washers. Tighten bolts, bracket height will be adjusted later.

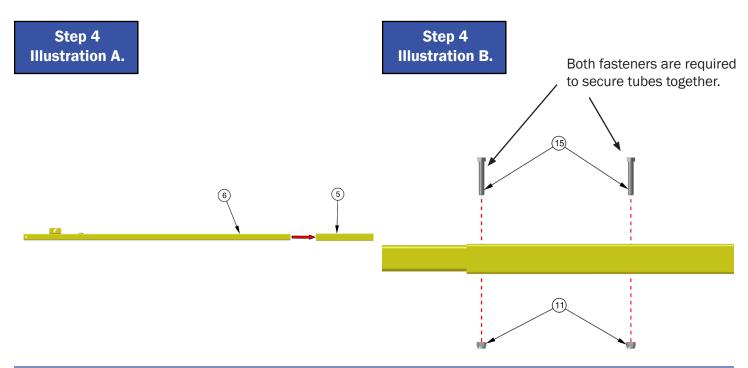


**Step 3.** Use mallet to gently hammer flange bearings into both sides of 2" Lift Arm. Slide 2" Lift Arm into Adjustable Clevis. Insert  $\frac{3}{8}$ " x 3" hex bolt and tighten  $\frac{3}{8}$ " nylock nut.

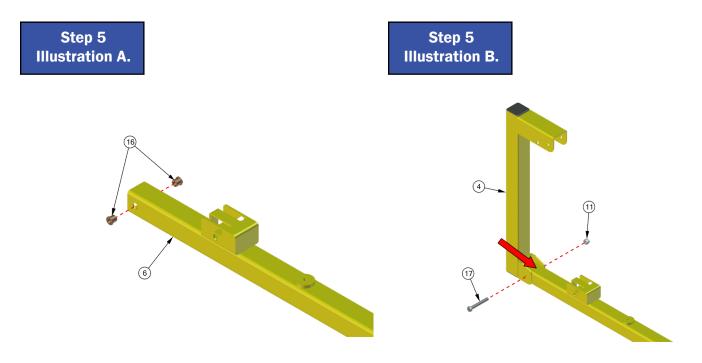


**NOTICE** The 1  $^{3}/_{4}$ " Lift Arms have a series pre-drilled holes to allow for adjustable gate width. See Size Reference Table (pg. 5) to determine available width adjustment. Do not slide beyond desired length to protect the paint finish.

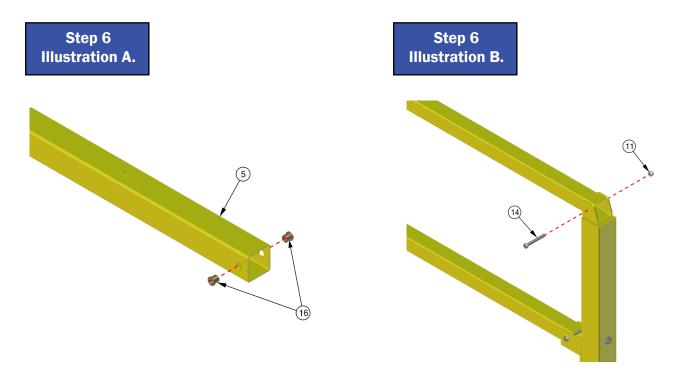
**Step 4.** Slide in 1  $^{3}/_{4}$ " Lower Lift Arm into 2" Lift Arm to the desired gate width. Insert  $^{3}/_{8}$ " x 2  $^{1}/_{4}$ " hex bolt align pre-drilled holes and tighten  $^{3}/_{8}$ " nylock nuts.



**Step 5.** Use mallet to gently hammer flange bearings into both sides of 1  $^3/_4$ " Lower Lift Arm. Slide the Gate End over the 1  $^3/_4$ " Lower Lift Arm. Insert  $^3/_8$ " x 2  $^3/_4$ " hex bolt and tighten  $^3/_8$ " nylock nut.

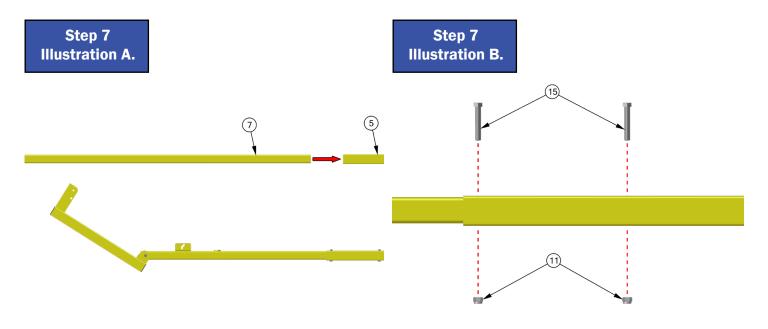


**Step 6.** Use rubber mallet to gently hammer flange bearing into both sides of 2" Lift Arm. Insert 2" Lift Arm into clevis on Gate Post, then insert  $\frac{3}{8}$ " x 3" hex bolt and tighten  $\frac{3}{8}$ " nylock nut.

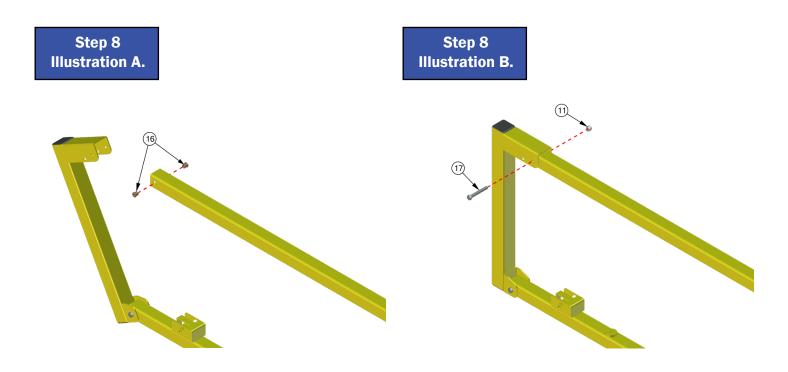


**Step 7.** Slide in 1  $\frac{3}{4}$ " Upper Lift Arm into 2" Lift Arm, then insert  $\frac{3}{8}$ " x 2  $\frac{1}{4}$ " hex bolts and  $\frac{3}{8}$ " nylock nuts at pre-drilled holes.

**NOTICE** Do not slide beyond desired length to protect the finish.

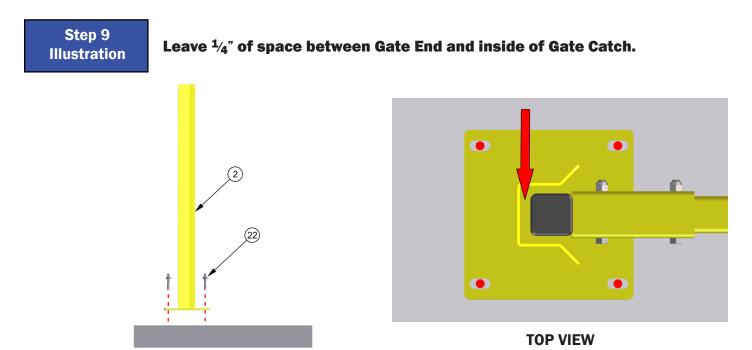


**Step 8.** Use rubber mallet to gently hammer flange bearings into both sides of 1  $^3/_4$ " Upper Lift Arm. Then slide the Gate End over the 1  $^3/_4$ " Upper Lift Arm. Insert  $^3/_8$ " x 2  $^3/_4$ " hex bolt and tighten  $^3/_8$ " nylock nut.



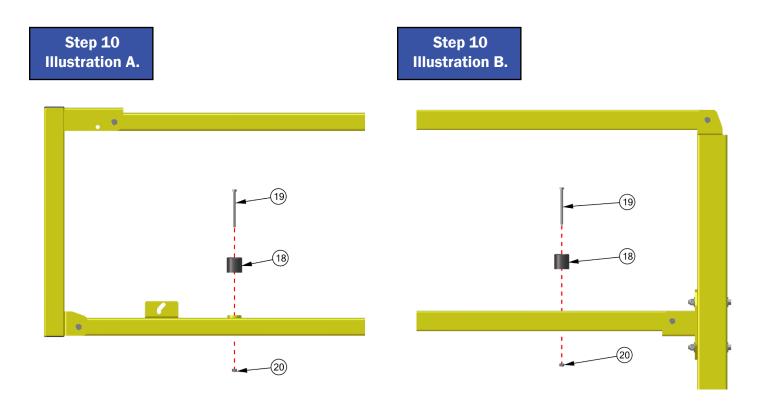
**NOTICE** Base plates are slotted to allow adjustment for alignment.

**Step 9.** Mark out holes for the Gate Catch and anchor with concrete floor anchors.



**Step 10.** Add bumpers to Lower Lift Arms at both locations and snug with bolts and nuts.

**NOTICE** Do not over-tighten - bumper should be snug but not compressed.

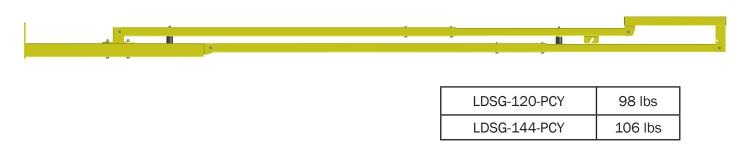


**Step 11.** Rotate gate to the open position (gate arms vertical). Remove Gate Post from anchors to free up the assembly and lay on the ground in the extended position for improved access during dampener installation.

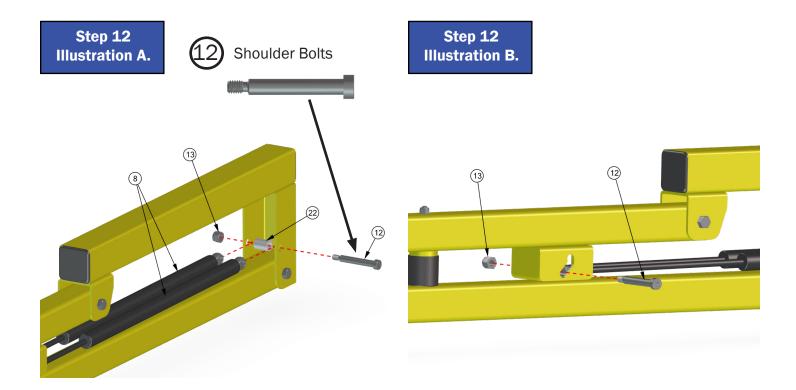
**NOTICE** To protect the finish, lay on cardboard.

Step 11 Illustration

▲ WARNING The Loading Dock Safety Gates are heavy, verify weights and use appropriate lifting procedures and equipment.

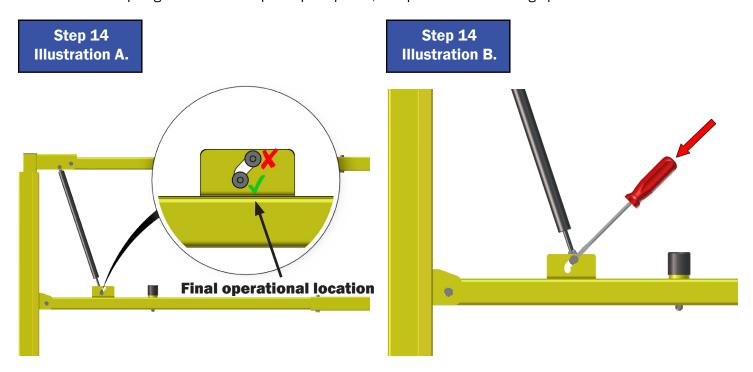


**Step 12.** Install dampeners first into the Gate End (Illustration A), then into the slotted dampener bracket (Illustration B) with shoulder bolts.

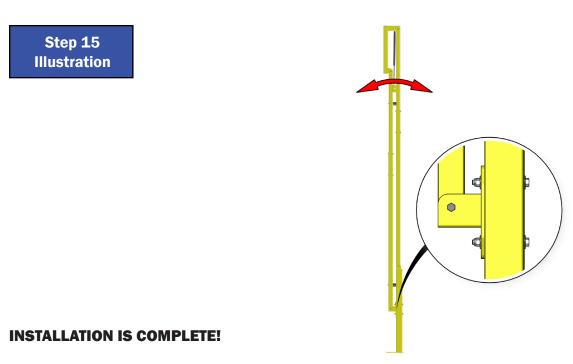


- **Step 13.** Fully extend assembly upward, anchor Gate Post back onto the floor surface, and tip gate down into Gate Catch. As the gate approaches fully closed, you should hear a loud noise of the dampeners self-setting.
- **Step 14.** Visually verify that the dampeners self-set into the appropriate location. If they did not, carefully tap them into place with a screwdriver. (Illustration B)

**A DANGER** Keep fingers clear of dampener pivot points, dampeners are under high pressure.



**Step 15.** To ensure the gate opens to precisely 90°, the Adjustable Clevis needs to be set. Loosen Adjustable Clevis bolts, tip gate vertically to 90° and re-tighten Adjustable Clevis bolts.



## **Disassembling Gate Instructions**

#### **VII. Disassembling Gate Instructions**

**NOTICE** Only complete depressurization process if disassembling Gate.

▲ DANGER System under high pressure. Refer to depressurization instructions in manual before doing any work on the gate.

Step 1. Rotate gate to the open position (gate arms vertical) before proceeding with Step 2.

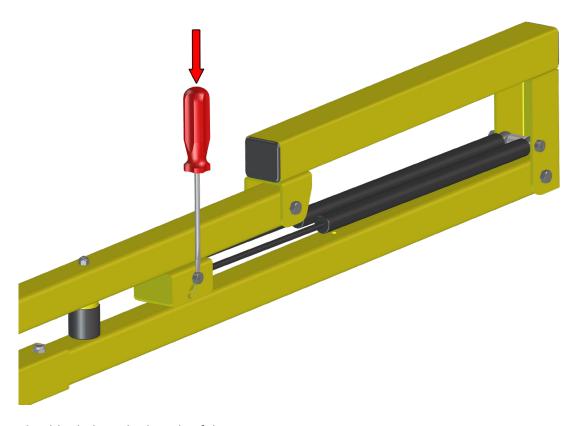
**CAUTION** High internal gate forces! Before removing Gate Post baseplate fasteners, the gate must be in the open position (gate arms vertical) so the dampeners are in a non-compressed state.

**Step 2.** Remove Gate Post from anchors to free up the assembly and lay on the ground to enable access to the dampeners.

**Step 3.** Use a screwdriver to gently tap alternating sides of the dampener mounting shoulder bolt into the long portion of the slot to relieve dampener pressure from shoulder bolts.

▲ DANGER Keep fingers clear of dampener ends and installation slot.

**NOTICE** To protect the finish, lay on cardboard.

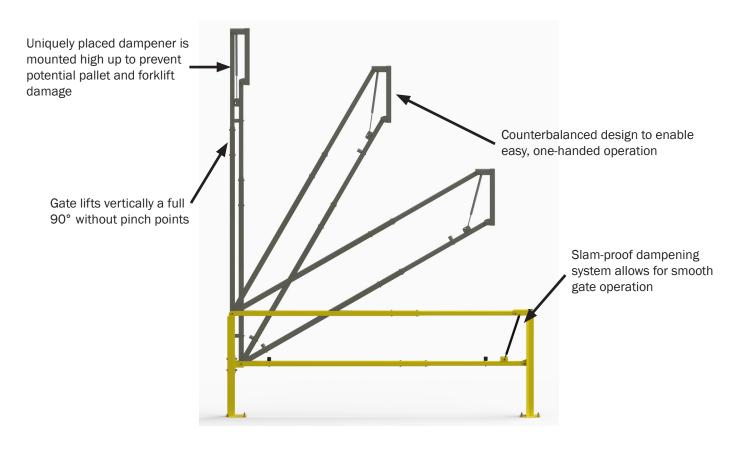


**Step 4**. Remove shoulder bolts at both ends of dampeners.

RETURN TO INSTALLATION STEPS 12-14 TO INSTALL NEW DAMPENERS, AS SHOWN IN THIS 0&M.

# **Operation**

#### **VIII. Operation**



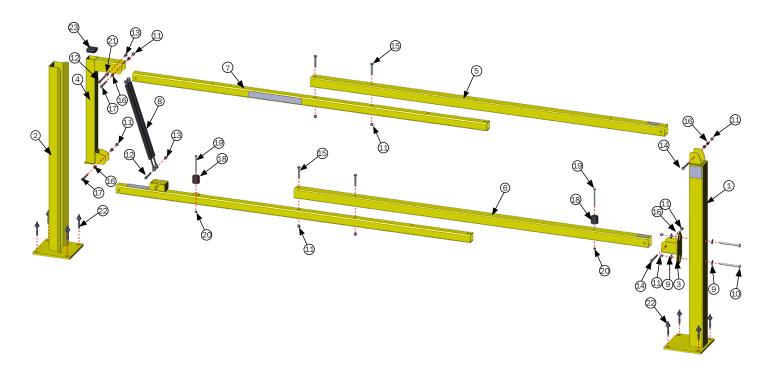


#### ADJUSTABLE TO FIT:

8', 9', OR 10' OPENINGS (LDSG-120-PCY) 10', 11', OR 12' OPENINGS (LDSG-144-PCY)

# **Replacement Parts List**

## IX. Replacement Parts List



ITEM NUMBER	DESCRIPTION	LDSG-120-PCY LDSG-144-PCY
1	LDSG;GATE POST PCY	513414
2	LDSG; GATE CATCH PCY	513424
3	LDSG; ADJ CLEVIS PCY	513420
4	LDSG; GATE END PCY	513437
6	LDSG; 1.75" LIFT ARM WLD PCY	513432
7	LDSG; 1.75" LIFT ARM PCY	513430
9	WASHER; FLAT 3/8" 16 ZN	501947
10	BOLT; HEX 3/8" 16X4 GR5ZN	502589
11	NUT; NYLOCK 3/8" 16 ZN	501120
12	BOLT;SHOULDER3/8"X2-1/4"	513779
13	NUT;NYLOCK 5/16"18 HEAVY ZN	513780
14	BOLT; HEX 3/8" 16X 3GR5ZN	500411
15	BOLT; HEX 3/8" 16X2 1/4 GR5ZN	500405
16	BEARING;FLANGE .3765IDX.50300D	513764
17	BOLT; HEX 3/8" 16X2 3/4 GR5ZN	500406
18	BUMPER; ROUND 1-1/2" DIAX 1-1/2	513133
19	BOLT; HEX 1/4" 20X3 1/2 GR5ZN	502651
20	NUT; NYLOCK 1/4" 20 ZN	501113
21	SPACER;NYLON .425X.625X.875 513444	
22	ANCHOR;PWRSTUD+SD1-3/8"x3"CS 513454	
23	PLUG; SQ TUBE 2" OD	513134

ITEM NUMBER	DESCRIPTION	LDSG-120-PCY
5	LDSG;2" LIFT ARM10' PCY	513428
8	LDSG;DAMPENER 10 W/ CLEVIS ENDS	513462

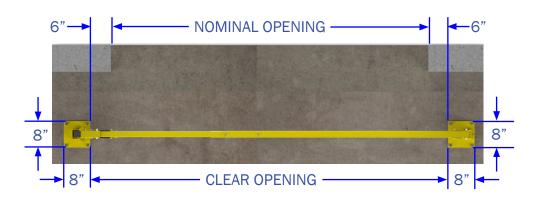
ITEM NUMBER	DESCRIPTION	LDSG-144-PCY
5	LDSG;2" LIFT ARM12' PCY	513726
8	LDSG;DAMPENER 12 W/ CLEVIS ENDS	513718

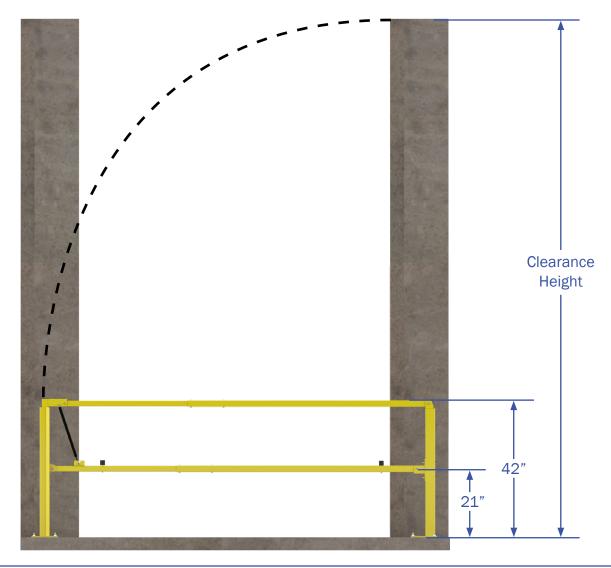
# **LDSG Size Reference Drawing**

## X. LDSG Size Reference Drawing

#### LDSG SIZE REFERENCE TABLE

	NOMINAL OPENING	CLEAR OPENING	CLEARANCE HEIGHT
LDSG-120-PCY	96" - 120"	108",120", OR 132"	154 <sup>1</sup> / <sub>4</sub> " - 178 <sup>1</sup> / <sub>4</sub> "
LDSG-144-PCY	120" - 144"	132", 144", OR 156"	178. <sup>1</sup> / <sub>4</sub> " - 202 <sup>1</sup> / <sub>4</sub> "





## **Inspection and Maintenance**

#### **XI. Inspection and Maintenance**

- A. Fasteners and mechanical connections
  - 1. All fasteners must be in place and adjusted to their original design standard.
  - 2. If gate closes too quickly, fasteners at four corners of the gate can be tightened to reduce closing speed
  - 3. If gate closes too slowly, fasteners at four corners of the gate can be loosened to increase closing speed
  - 4. Replace any damaged fasteners.
- B. Dampeners
  - 1. Dampener is maintenance free. Replace dampener if assisting force has diminished.
- C. Bumpers
  - 1. Inspect items for damage or wear. Replace as needed.
- D. Gate
  - 1. Check gate for proper alignment with catch. Adjust as necessary to achieve proper alignment.
- E. Labels
  - 1. Replace if missing or illegible.
- E. Finishes
  - 1. Touch-up and repair as necessary.

CORRECTED BY (Print & Sign) **CRITICAL** Periodic Inspection and Maintenance Required. Inspect at minimum annually. Door Identifier / Number: CORRECTIVE ACTION Location: **INSPECTION ITEMS** NOTED **Inspection and Maintenance Log INSPECTED BY** (Print & Sign) Date Purchased: Model Number: Serial Number: DATE INSPECTED Product:

CORRECTED BY (Print & Sign) **CRITICAL** Periodic Inspection and Maintenance Required. Inspect at minimum annually. Door Identifier / Number: CORRECTIVE ACTION Location: **INSPECTION ITEMS** NOTED **Inspection and Maintenance Log INSPECTED BY** (Print & Sign) Date Purchased: Model Number: Serial Number: DATE INSPECTED Product:

## PS DOORS - LIMITED WARRANTY

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Limited Warranty: Subject to the terms of this Limited Warranty, Production Specialties Corporation, doing business as PS DOORS ("PS DOORS") warrants to the original user or consumer (the "Owner") of a PS DOORS product (the "Product") that, for a period of one (1) year from date of shipment, the Product will be free from defects in material and workmanship under normal use and service, and provided the Product is installed, operated and maintained in accordance with instructions supplied by PS DOORS. The terms and limitations of this Limited Warranty apply to all repaired or replacement Products for a term equal to the balance of the warranty remaining on the Product that was repaired or replaced as of the date of such repair or replacement.

PS Flood Barriers™ Product Warranty Registration: For PS DOORS Flood Barrier™ Products, this Limited Warranty will only be valid if the Owner completes the Warranty Registration Form provided within thirty (30) days of Product installation. To request a copy of the Warranty Registration Form, contact PS DOORS, 1150 S. 48th Street, Grand Forks, ND 58201, phone 877-446-1519, email: 4psinfo@psdoors.com. Additional Warranty Registration Forms can be downloaded at www.psfloodbarriers.com/download-center/

Warranty Exclusions: Notwithstanding anything to the contrary, this Limited Warranty does not cover any of the following:

- 1. Normal wear and tear (including, but not limited to, normal wear and tear to gaskets and weather seals); damage or accidents resulting from freight damage, from failure to follow precautionary safety measures, or applied paint failure; abuse, misuse or unauthorized modification of the Product; misapplication; improper installation; or any defects, damage or other harm that is not the result of the acts or omissions of PS DOORS.
- 2. Cost of field labor or other charges incurred by Owner in removing and/or re-affixing the Product or any part or component thereof.
- 3. Transportation costs.

Unauthorized modification of or to the Product voids this Limited Warranty. Authorized modifications, received in writing from PS DOORS, as long as the modification is accomplished in strict accordance with PS DOORS' instructions, does not void warranty. To request product modifications contact PS DOORS, 1150 S. 48th Street, Grand Forks, ND 58201, phone 877-446-1519, email: 4psinfo@psdoors.com.

Claim Procedure: To make a claim under this Limited Warranty, the claim must be received by PS DOORS before the expiration of the above stated Limited Warranty period together with proof of purchase. Contact PS DOORS at the address shown below.

PS DOORS Toll Free: 877-446-1519
Attention: Warranty Phone: 701-746-4519
1150 S. 48th Street Fax: 701-746-8340

Grand Forks, ND 58201 E-mail: 4psinfo@psdoors.com

An authorized PS DOORS representative must be given a reasonable opportunity to inspect and investigate the alleged Product defect prior to any work being done that affects the Product or its installation. PS DOORS reserves the right to charge reasonable amounts for travel and labor associated with investigation of claims. PS DOORS may also require photographs of the alleged Product defect or return of the Product or part to a designated PS DOORS location, freight prepaid. A return goods authorization must be received prior to the return of the Product or part. Please contact PS DOORS to determine the designated location for return and to obtain the return material authorization.

**Exclusive Remedy:** In the event of a warranty claim that PS DOORS determines to be covered by this Limited Warranty, PS DOORS will replace or repair, at PS DOORS' discretion, the Product or any part of the Product found to be defective.

Disclaimers: The above warranty and remedy is the sole express warranty and remedy given by PS DOORS on its Product. No warranties or representations at any time made by any representative from PS DOORS shall vary or expand the provisions hereof. TO THE EXTENT PERMITTED BY LAW, ALL EXPRESS AND IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT) OTHER THAN THE EXPRESS LIMITED WARRANTY SET FORTH ABOVE ARE EXPRESSLY DISCLAIMED. UPON THE EXPIRATION OF THE ABOVE STATED LIMITED WARRANTY PERIOD, ANY AND ALL APPLICABLE IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT, ARE DISCLAIMED. SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO OWNER.

LIABILITY LIMITATION: In no event will PS DOORS' liability to Owner or any other person or entity exceed the price paid to PS DOORS for the defective Product. IN NO EVENT SHALL PS DOORS BE LIABLE TO OWNER OR ANY OTHER PERSON OR ENTITY FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT OR SPECIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF WARRANTY (INCLUDING ANY IMPLIED WARRANTIES) OR ANY OTHER CONTRACT, STRICT LIABILITY, NEGLIGENCE OR OTHER TORT, OR OTHERWISE, INCLUDING ARISING FROM INSPECTION OR REMEDY DELAYS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION AND EXCLUSION MAY NOT APPLY TO OWNER.

THIS WARRANTY GIVES OWNER SPECIFIC LEGAL RIGHTS AND OWNER MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

Rev. 042018









877.446.1519

4psinfo@psdoors.com | psdoors.com 1150 South 48th Street | Grand Forks, ND 58201