Single Self Closing Safety Gate

Installation Instructions and Operators Manual

MODELS
- Powder Coat Safety Yellow (PCY)
- Hot Dip Galvanized (GAL)
- Stainless Steel Food Processing Model 316L (SS-SW)
- Stainless Steel 304 (SS)
- Aluminum (ALUM)

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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 DOORS 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.
LIMITED WARRANTY

PS DOORS warrants this product and components to be free from defects in material and workmanship for a period of one (1) year from date of shipment. If within the term of this warranty, any Ladder Safety Gate or component is found to be defective upon inspection by an authorized PS DOORS representative, PS DOORS will replace or repair, at PS DOORS’ discretion, any part found to be defective. Any field labor charges incurred are the sole responsibility of the customer.

To make a claim under this warranty, contact PS DOORS at the address shown below.

PS DOORS
Attention: Warranty
1150 S. 48th Street
Grand Forks, ND 58201
Toll Free: 877-446-1519
Phone: 701-746-4519
Fax: 701-746-8340
E-mail: 4psinfo@psdoors.com

Unauthorized modification of or to this product voids the PS DOORS Limited Warranty. Accordingly, you can expect any request for warranty repair to be charged to you, if the product requires service after unauthorized modification. 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.

PS DOORS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES.

All other warranty’s, express or implied including any warranty of merchantability, are expressly excluded. Some states do not allow the exclusion or limitation of consequential or incidental damages, so the above limitation or exclusion may not apply to you.

WARRANTY DOES NOT APPLY TO ANY DAMAGE OR DETERIORATION CAUSED BY MODIFICATION, ABUSE, APPLIED PAINT FAILURE OR FAILURE TO PROVIDE REASONABLE AND NECESSARY MAINTENANCE.

This warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state.

Safety Precautions: The following icons are used throughout this Manual.

- **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 moderated injury.
- **NOTICE**: Indicates manufacture’s statement of additional information.
- **IMPORTANT!**: Indicates a required action.
- **CRITICAL**: Indicates a vital component to product performance.

**NOTICE** ADDITIONAL INFORMATION

1. PS DOORS recommends that the owner implement a regular maintenance program to inspect the Ladder Safety Gate. This program may require the replacement of worn components, touch up painting and dimensional adjustments or warning label replacement as necessary.

2. PS DOORS AND/OR ITS RESPECTIVE SUPPLIERS MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S) OR SERVICE(S) OFFERED AT ANY TIME WITHOUT NOTICE.

I. GENERAL INFORMATION

This manual contains information regarding installation, operation, and maintenance of the Single Closing Gate (PCY, GAL, SS, SS-SW and ALUM). Operation in a manner other than intended could result in damage or less than acceptable performance, for which the manufacturer will not be held responsible.

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.

II. STORAGE PRIOR TO INSTALLATION OF PRODUCT

A. Store materials in a dry, ventilated location. If outdoor storage is required, block materials and tarp in a tent-like arrangement, elevated above the product with open sides to allow airflow.

III. INSTALLATION SITE PREPARATION

A. Clear work area of any debris.
B. Ensure you have necessary tools available.
C. See recommended tool list next to specific installation instruction.

IV. PRE-INSTALLATION SAFETY PRECAUTIONS

A. Ensure opening is clear of all obstructions through the entire proposed travel of the safety gate during operation.
B. Comply with all OSHA Safety Regulations and/or company safety policies when installing.
C. Install only on railing/surfaces capable of supporting all loading. Structural analysis of mounting surface is the responsibility of the owner.

V. OPERATION

A. When ascending a ladder/entering the elevated platform:
1. When the gate opening is reached, obtain a firm grip on the railing or ladder.
2. Step through gate.
3. DO NOT USE THE SINGLE CLOSING GATE AS A GRAB SURFACE WHILE ASCENDING THE LADDER
B. When descending a ladder/exiting the elevated platform:
1. Open the Single Closing Gate and obtain firm grip on railing.
2. DO NOT USE THE SINGLE CLOSING GATE AS A GRAB SURFACE WHILE DESCENDING THE LADDER.
3. Always maintain a firm grip on the railing or ladder.

VI. INSPECTION AND MAINTENANCE

A. Fasteners and Mechanical Connections:
1. All fasteners must be in place and adjusted to their original design standards. Replace any damaged components.
2. Check for broken springs periodically to ensure proper functionality. Replace as necessary.
B. Finishes: Touch up and repair finishes as necessary.
C. Label: Replace if missing or illegible.

**NOTICE** There are variations of the Single Closing Gate hinge plate. If you have a LSG that is between 15” and 36”, it will have 2 hinges attached to the hinge plate. If your gate is between 40” and 48”, it will have 3 hinges attached to the hinge plate. Although these gates are designed differently, all Single Closing Gates should follow the enclosed installation instructions and operators manual.

**WARNING** Ensure mounting surface is capable of supporting all loading (by others).

**NOTICE** Unauthorized modification of this product voids the CAI SAFETY Limited Product Warranty. Accordingly, you can expect any request for warranty repair to be charged to you, if it requires service after modification. Authorized modifications, received in writing from CAI SAFETY, as long as the modification is accomplished strictly in accordance with CAI SAFETY instructions, does not void warranty. To request product modifications contact CAI SAFETY.
INSTALLATION – STANDARD RAILING: For installation on a railing up to 2” O.D. round or 1.5” square.— See Illustration 1.

1. Loosely attach the Single Closing Gate railing/mounting bracket to vertical column of railing with provided U-bolts. Do not tighten, additional adjustment may be required.

2. Adjust top of safety gate to align with top of railing.

3. Align railing/mounting bracket to be perpendicular (90°) to Single Closing Gate and opening, tighten U-Bolts.

4. Adjust hoop/gate arm to proper opening width by selecting any combination of two of the three carriage bolt holes at connection point for hinge plate and hoop/gate arm. Ensure stop plate overlaps and contacts adjacent vertical column of railing system allowing for 1/4” maximum of clearance.

5. Operate gate through full swing range to check for proper alignment.

6. Tighten U-Bolts into final position. Install plastic protective thread caps (optional).

7. For Models LSG-30 - LSG-48, after ladder gate assembly is mounted as required and “U” bolts are tightened on each railing/mounting bracket, it is required to “pin” each railing bracket to the existing railing with self drilling screws provided and install stop block.

CRITICAL VERIFY INSTALLATION
1. Ensure all bolts/nuts are tight.
2. Operate gate to ensure free movement.
3. Ensure rigid installation and proper contact at stop plate.

Recommended Tools
- One (1), 1/2” Deep-well socket and ratchet
- One (1), Wrench Set
- One (1), Torque Wrench
- One (1), Measuring Tape

Illustration 1. INSTALLATION - STANDARD PIPE RAILING

Loosely attach gate with U-Bolts.

Align brackets and snug U-Bolts.

Loosen and adjust hoop/gate arm.

Align Gate Top and Railing Top.

Operate gate through full swing range.

Tighten U-Bolts and carriage bolts. Install plastic protective thread caps (optional). Field verify installation.

For Models LSG-30 thru LSG-48.

Pin hinge bracket to railing using provided self drillers.

Locate top of stop block 3/4” below stop plate. Utilize the provided self-drillers and fasten support block to railing column or stop surface.

— See Illustration 4, Page 6
INSTALLATION – ANGLE IRON RAILING: For direct mount installation on angle iron railing. — See Illustration 2.

1. Align the Single Closing Gate railing/mounting bracket flush to the inside of the angle iron.
2. Align the top of the Single Closing Gate to match top of railing.
3. Match drill two, 3/8" holes (one per hinge bracket). CAI SAFETY offers “no drill” adapter kits for large diameter pipe, angle iron and flat stock railings.
4. Mount Single Closing Gate with appropriate mounting fasteners, NOT provided.

**Recommended Hardware:** At a minimum use 5/16", grade 5 hex head bolts of appropriate length with washers and self-locking nuts.

5. Adjust hoop/gate arm to proper opening width by selecting any combination of two of the three carriage bolt holes at connection point for hinge plate and hoop/gate arm. Insure stop plate overlaps and contacts adjacent vertical column of railing system allowing for 1/4" maximum of clearance.

6. Operate gate through full swing range to check for proper alignment.
7. Tighten ALL mounting bolts and carriage bolts. Field verify installation.

**Illustration 2.** INSTALLATION - ANGLE IRON RAILING

**STEP 1** Align railing/mounting bracket flush to inside of angle iron.

**STEP 2** Align gate top and railing top.

**STEP 3** Match drill one hole per bracket in angle iron

**STEP 4** Mount with hardware (by others)

**STEP 5** Loosen and adjust hoop/gate arm.

**STEP 6** Operate gate through full swing range.

**STEP 7** Tighten ALL mounting bolts and carriage bolts. Field verify installation.

**NOTICE** CAI SAFETY offers “no drill” adapter kits for large diameter pipe, angle iron and flat stock railings.

**Recommended Tools**
- One (1), 1/2" Deep-well socket and ratchet
- One (1), Wrench Set
- One (1), Electric Drill
- One (1), 3/8" drill bit
- One (1), Measuring Tape

**CRITICAL** VERIFY INSTALLATION
1. Ensure all bolts/nuts are tight.
2. Operate gate to ensure free movement.
3. Ensure rigid installation and proper contact at stop plate.
INSTALLATION – FLAT STOCK RAILING OR WALL: For direct mount installation on a flat stock railing or wall.— See Illustration 3.

1. Align the Single Closing Gate railing/mounting bracket flush to flat surface/wall.
2. Adjust top of safety gate to match top of railing. If no railing, adjust top of hoop/gate arm to 42” above walking surface.
3. Match drill two 3/8” holes (one per hinge bracket). CAI SAFETY offers “no drill” adapter kits for large diameter pipe, angle iron and flat stock railings.
4. Mount with appropriate mounting fasteners, NOT PROVIDED.
   a. **Recommended Hardware for Flat Stock:** At a minimum use 5/16”, grade 5 hex head bolts of appropriate length with washers and self-locking nuts.
   b. **Recommended Hardware for mounting to a wall:** At a minimum use mechanical or chemical fastener, sized appropriately, for mounting material and loading requirements.
5. If no stop surface is available for the stop plate to rest against, install stop surface (NOT PROVIDED), using appropriate anchoring hardware and material, to align with the stop plate.
6. Adjust hoop/gate arm to proper opening width by selecting any combination of two of the three carriage bolt holes at connection point for hinge plate and hoop/gate arm. Insure stop plate overlaps and contacts adjacent vertical column of railing system or stop surface allowing for 1/4” maximum of clearance.
7. Operate gate through full swing range.
8. Tighten ALL mounting fasteners and carriage bolts. Field verify installation.

**Illustration 3. INSTALLATION - FLAT BAR OR WALL SURFACE**

**NOTICE** CAI SAFETY offers “no drill” adapter kits for large diameter pipe, angle iron and flat stock railings.

**Recommended Tools**
- One (1), 1/2” Deep-well socket and ratchet
- One (1), Wrench Set
- One (1), Electric Drill
- One (1), 3/8” drill bit
- One (1), Measuring Tape

**CRITICAL** VERIFY INSTALLATION
1. Ensure all bolts/nuts are tight.
2. Operate gate to ensure free movement.
3. Ensure rigid installation and proper contact at stop plate.
STOP BLOCK INSTALLATION:


Kit Contains
1. One (1), stop block, pre-drilled.
2. Five (5), hex head self drilling screws.

Installation Steps
1. Locate top of stop block ¼" below stop plate.
2. Utilize the provided self-drillers and fasten support block to railing column or stop surface. — See Illustration 4.
3. When Single Closing Gate is mounted in place, use provided self drillers and pin the mounting bracket to the railing.

Recommended Tools
- One (1), 3/8" Nut Driver
- One (1), Electric Drill
- One (1), Measuring Tape

CRITICAL  VERIFY INSTALLATION
1. Ensure all bolts/nuts are tight.
2. Operate gate to ensure free movement.
3. Ensure rigid installation and proper contact at stop plate.

Illustration 4.  INSTALLATION - STOP BLOCK and MOUNTING BRACKET PIN
Note 1: Single Closing Gate is shipped fully assembled. Diagram is for part identification only.
Note 2: This diagram is for PCY/GAL/SS Models. Hardware variants for SS-SW Model and ALU Model are shown below.

Finish Options

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<td>SS-SW</td>
<td>Stainless Steel/Seal Welded</td>
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<td>Powder Coat Safety Yellow</td>
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<tr>
<td>GAL</td>
<td>Hot Dipped Galvanized</td>
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<tr>
<td>ALUM</td>
<td>Aluminum</td>
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Mounting hardware for all Stainless Steel gates is typ. 316 alloy.

For Models LSG-30 through LSG-48

Hardware Variant for SS-SW Gates

Hardware Variant for ALUM Gates

Parts List

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* Quantity for 3-hinge plate variants.

** For replacement springs, order Torsion Spring Kit (part #511686). Kit includes (1) LSG Torsion Spring, (2) bushings and installation instructions.
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