

# SafeMezz360

## Installation Instructions/Operation and Maintenance Manual



### Models

SMZMM060

SMZMM100

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## PS DOORS Contact Information

<b>Mail</b>	<b>Local Phone</b>	<b>Email</b>	<b>Hours of Operation</b>
PS DOORS	701.746.4519	4psinfo@psdoors.com	8 A.M. to 5 P.M. CT
Attn: PS Safety Access			Monday – Friday
1150 South 48th Street	<b>Toll Free Phone</b>	<b>Website</b>	
Grand Forks, ND 58201	877.446.1519	pssafetyaccess.com	

**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.

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

## Product Information

### I. General Information

- A. This manual contains information regarding installation, operation, and maintenance of the PS DOORS SafeMezz360 (all models).
- B. The SafeMezz360 is designed to meet OSHA Railing Standard 1910.23
- C. The SafeMezz360 is designed to meet ANSI Standards including the MH28.3-2009 Section 6.4.3 requirement and A1264.1-2007
- D. PS DOORS recommends that the owner implement a regular maintenance program to inspect the SafeMezz360 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. 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

**NOTICE** Before starting site preparation and installation of the SafeMezz360, read the entire Operation and Maintenance Manual and review all installation instructions thoroughly.

- A. Clear work area of any debris.
- B. Ensure you have the necessary tools available;  
Recommended Tools:
  - 1. One (1) stepladder
  - 2. One (1) impact Drill with 3/8" nut driver
  - 3. One (1) 1/2" socket
  - 4. One (1) 7/16" socket

### 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. (2-3 people recommended)

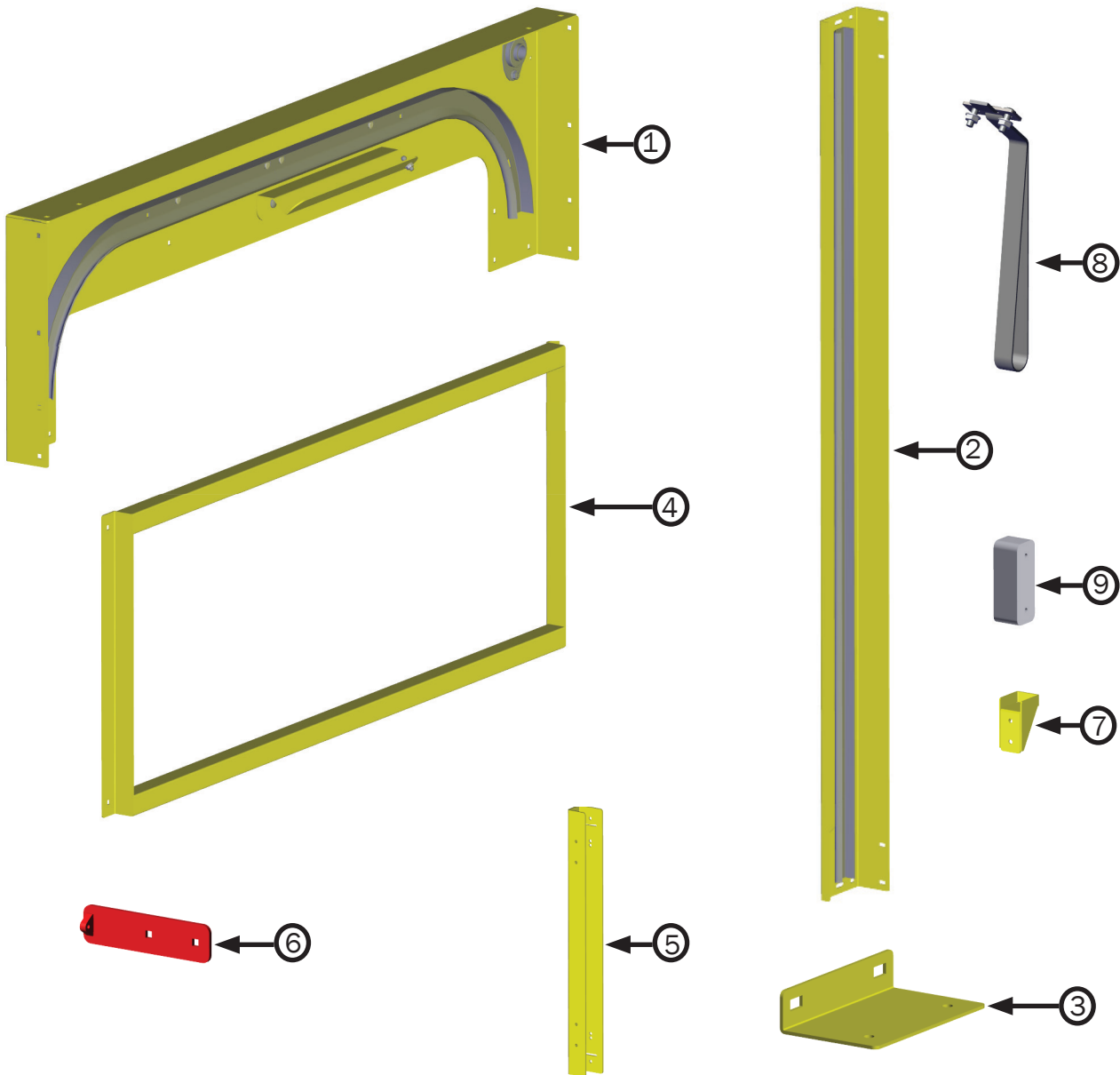
**▲ DANGER** User and installer discretion required to prevent exposure of personnel to an unprotected edge of an

## Parts List

### V. Parts List

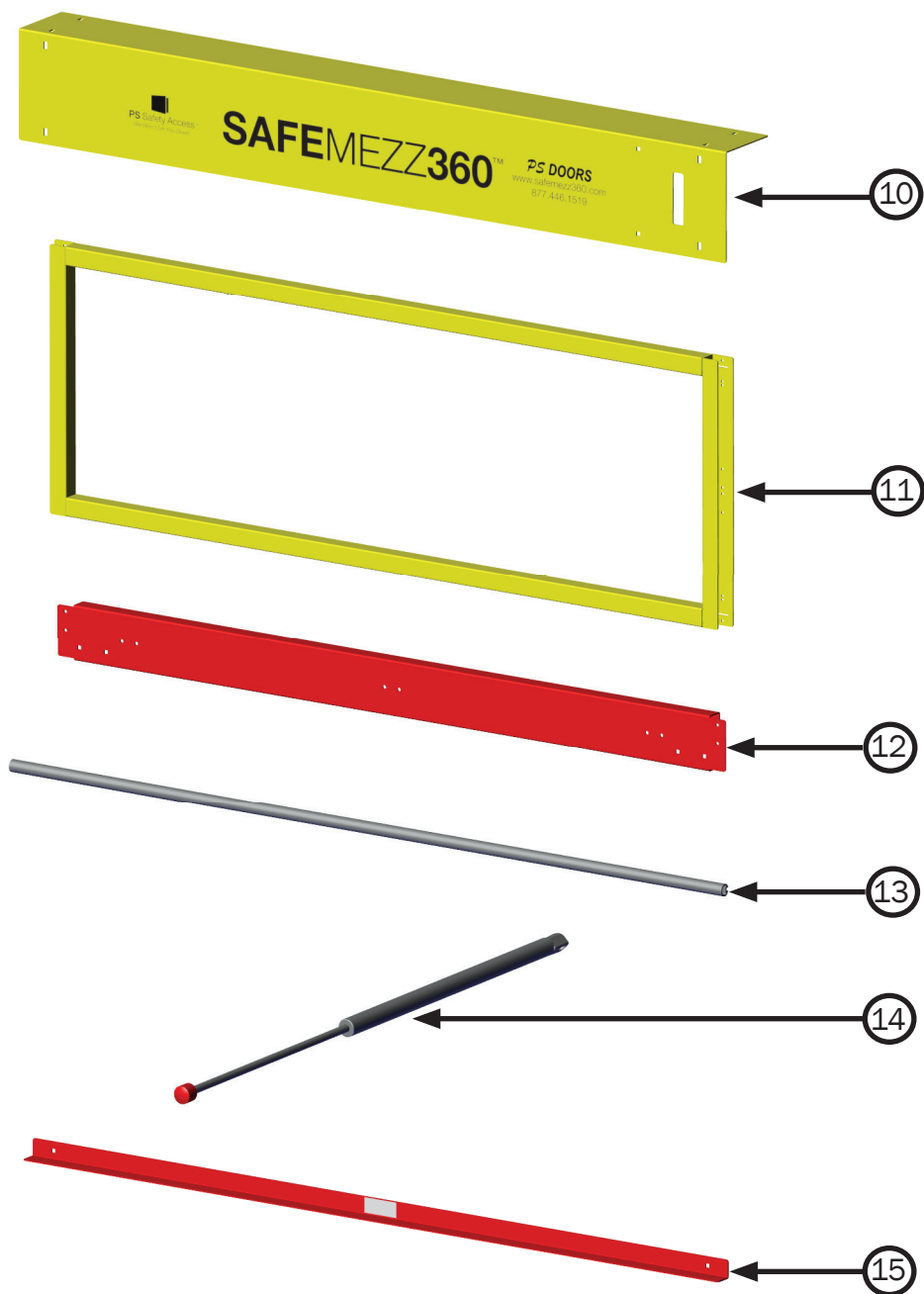
- A. Inventory shipment to ensure all parts are present for assembly/installation. Refer to part list on pages 3-5.
  - 1. Box A
  - 2. Box B or Box C
  - 3. Hardware Box (included in Box A)

## Box A Parts List



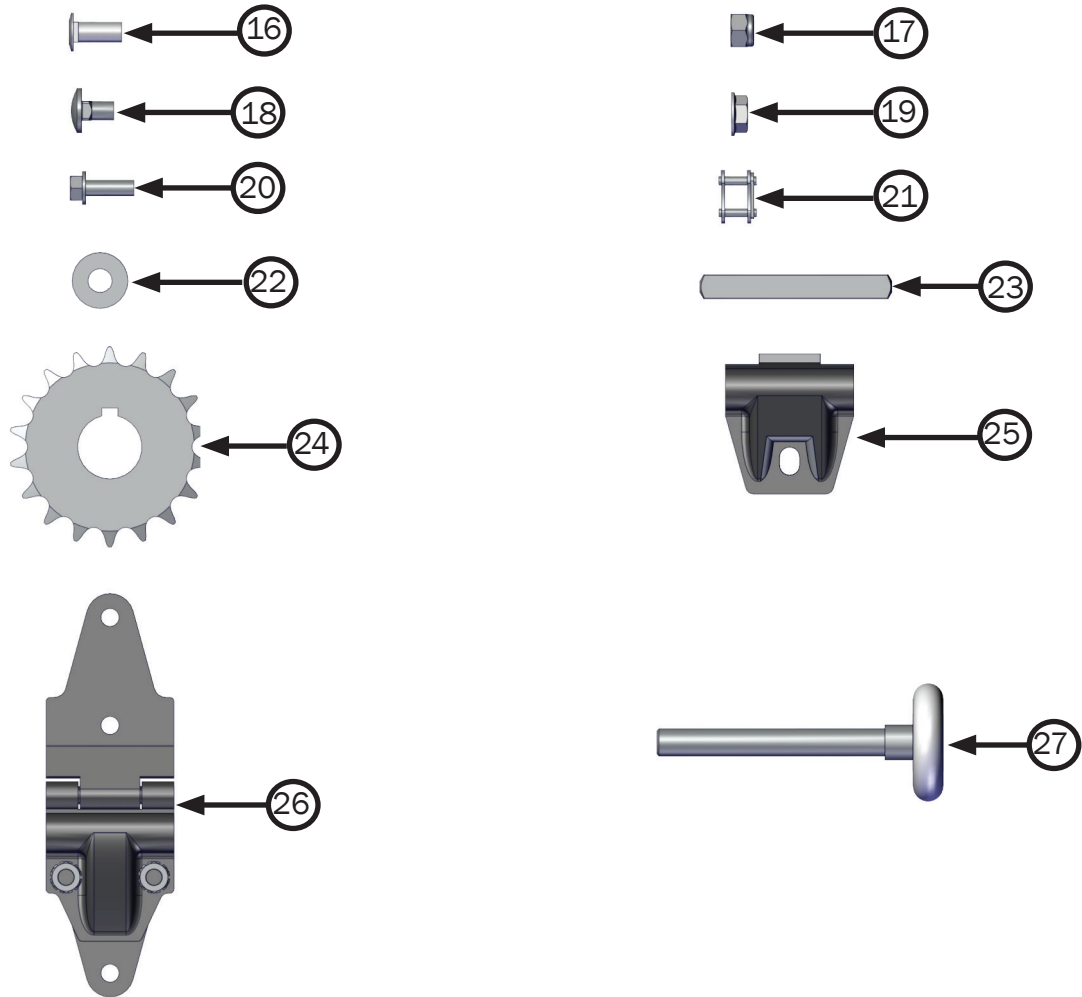
ITEM NUMBER	DESCRIPTION	QUANTITY
1	Side Header	2
2	Column	4
3	Anchor Bracket	4
4	Side Rail	2
5	Toeboard Arm	4
6	Chain Mount Bracket	4
7	Dampener Strike	2
8	Pull Strap	1
9	Chain Retainer	4

## Box B or Box C Parts List



ITEM NUMBER	DESCRIPTION	QUANTITY
10	Front Header	2
11	Gate	2
12	Toeboard	2
13	Jack Shaft	2
14	Dampener	2
15	Temporary Brace	2

## Hardware Parts List (Included in box A)



ITEM NUMBER	DESCRIPTION	QUANTITY
16	5/16" Track Bolt	4
17	5/16" Nylon Lock Nut	4
18	5/16" Carriage Bolt	68
19	5/16" Flange Nut	68
20	1/4" Thread Cutting Screw	44
21	#41 Chain Connect Link	4
22	5/16" Washer	4
23	Shaft Key	4
24	Sprocket	4
25	Roller Clamp	8
26	Hinge w/Roller Clamp	4
27	2" Nylon Roller	12
28	Chain*	2

\* Chain is not shown.

## Installing SafeMezz360

### VI. Installing a SafeMezz360

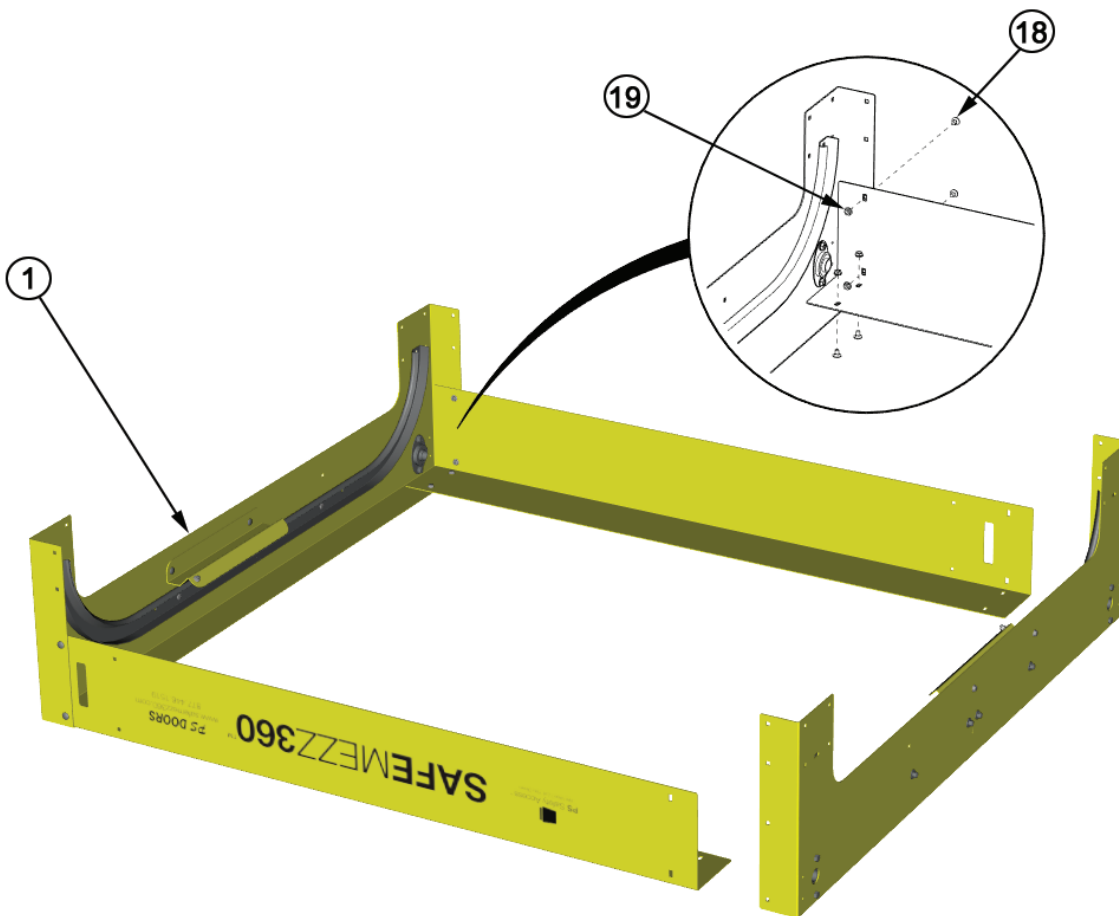
**A.** The fully assembled SafeMezz360 is modular and freestanding so that it can be assembled safely away from the mezzanine edge and moved into position prior to fastening it in its final position.

**NOTICE** Refer to parts list on page 3-5 for part item numbers.

**NOTICE** Use blocking to raise parts off floor to aid in assembly and protect finish paint.

**Step 1.** Start with (2) side header assemblies lying upside down. Place (2) front headers inside side header assemblies (SafeMezz360 logo will appear upside down and should face out) and fasten each corner using (4) carriage bolts and (4) flange nuts.

#### Step 1 Illustration.

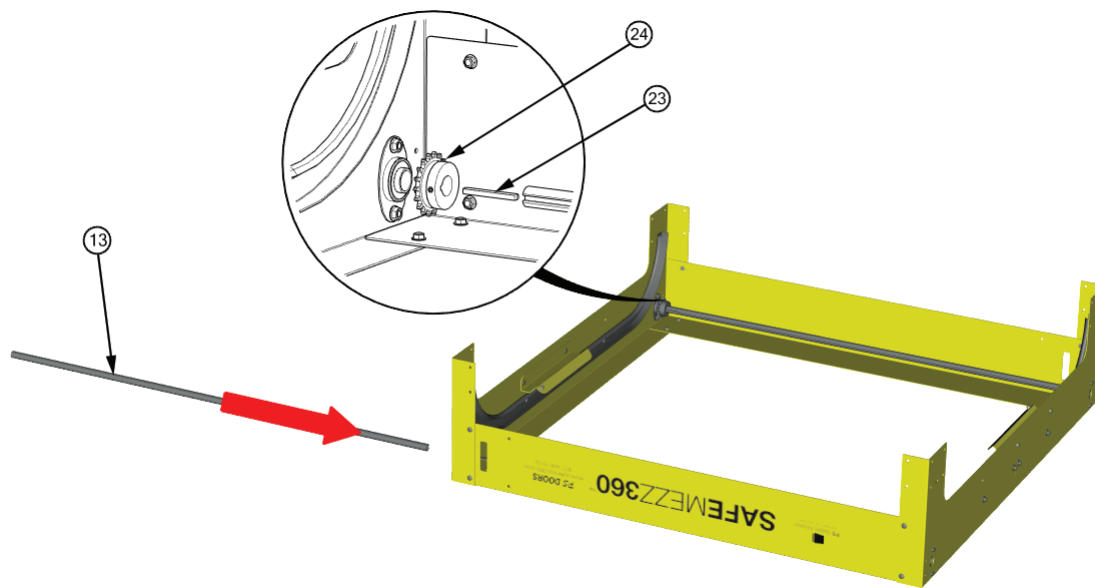


## Installing SafeMezz360

**NOTICE** If you are installing the Electric Operator, see the installation instructions that came with the Electric Operator. Additional steps are required at this point.

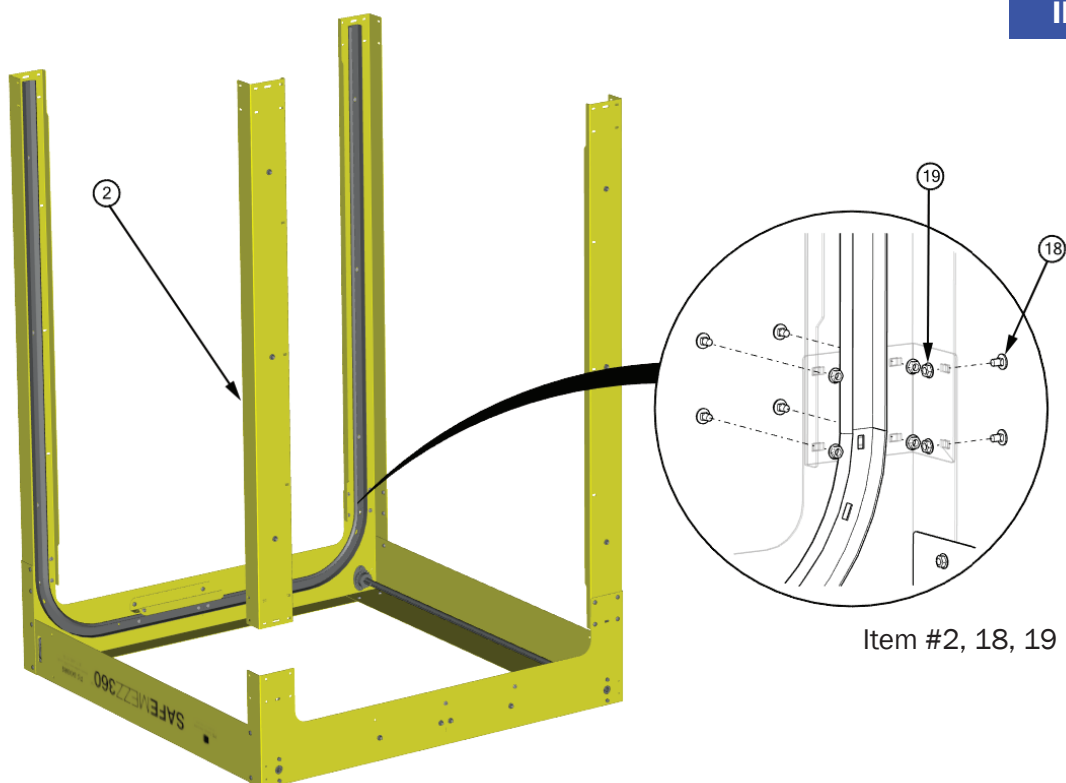
**Step 2.** Slide the jackshaft in the end of the side header. Place the sprockets tight to each side flange bearing to prevent lateral movement of shaft with orientation as shown in the illustration below. Use a shaft key to align the sprocket to shaft and tighten both set screws firmly. Repeat step at each corner.

### Step 2 Illustration



**Step 3.** Attach the (4) columns to each corner using (6) carriage bolts and (6) flange nuts. Each column should slide **between** the side header and the radiused top track.

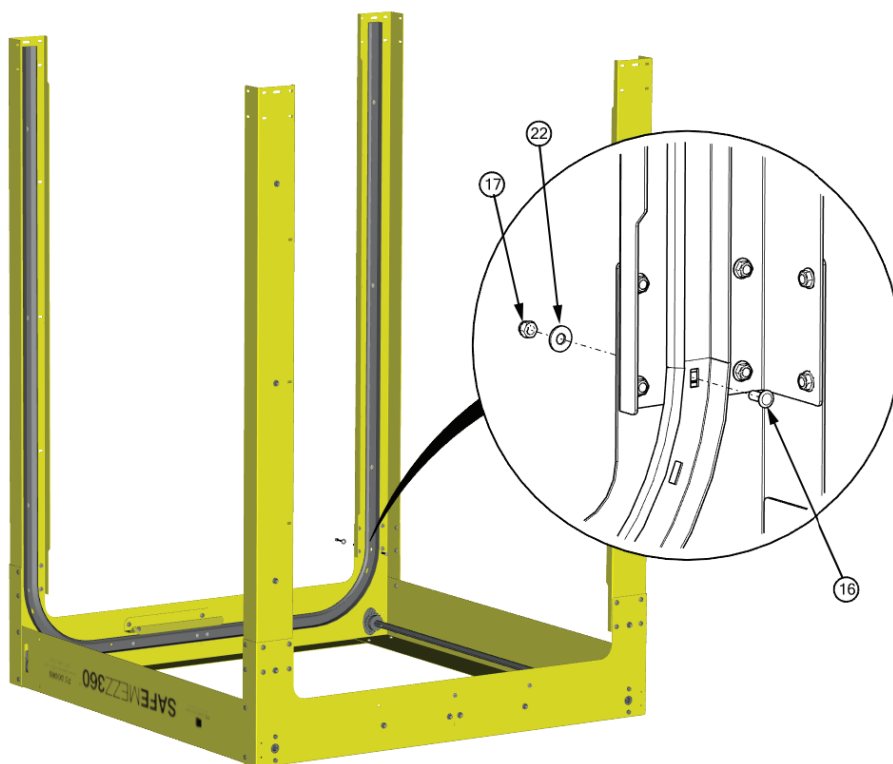
### Step 3 Illustration.



## Installing Safemezz360

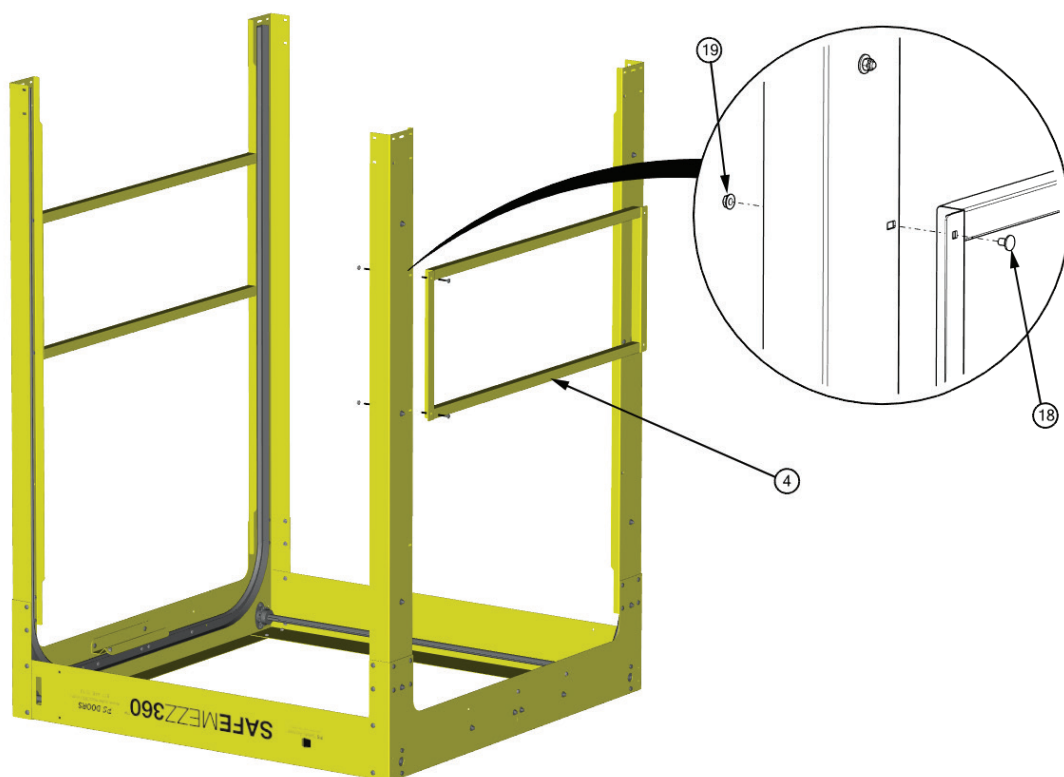
**Step 4.** Attach ends of the radiused tracks using track bolts, washers, and nylock nuts. Initial adjustments should be made to the vertical straight track, so all conjoining track sections align tight and flush to allow smooth operation of gate rollers. Only if additional adjustment is needed should the radius track sections be moved. Minor forming of the track with adjustable wrench or pliers may be required to allow smooth gate roller travel. Repeat at each corner.

### Step 4 Illustration.



**Step 5.** Attach the side rail to the column using (4) carriage bolts and (4) flange nuts. Repeat step for other side.

### Step 5 Illustration.

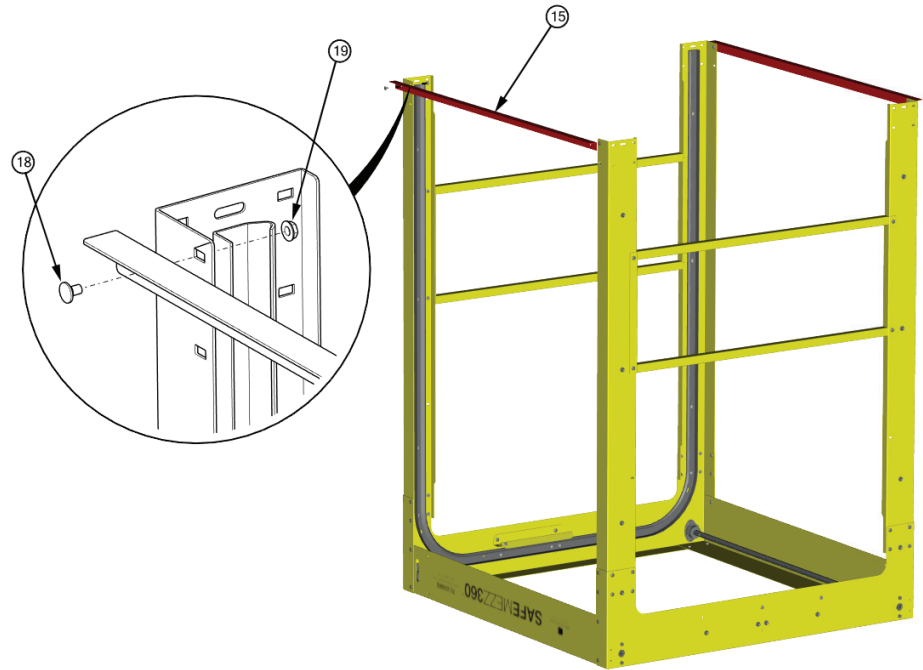




## Installing SafeMezz360

**Step 6.** Attach temporary brace using (2) carriage bolts and (2) flange nuts. Repeat for other side.

### Step 6 Illustration.



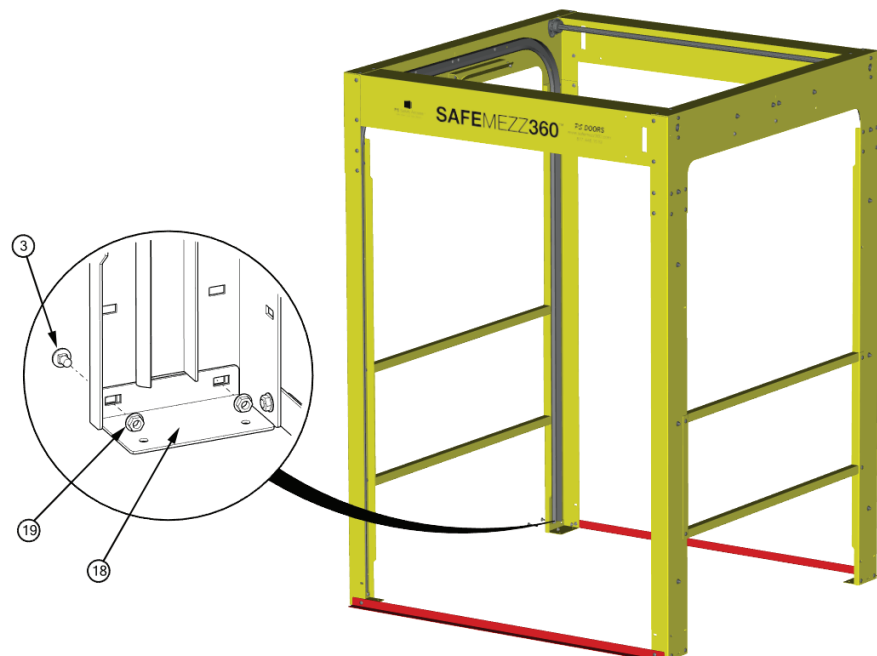
**NOTICE** The assembly weighs approximately 340 lbs. (SMZMM060) or 390 lbs. (SMZMM100) and requires a minimum of two people to move. Take precautions to protect finish paint and ensure safe and controlled movement of the assembly.

**Step 7.** Once side rails and temporary braces are installed, the SafeMezz360 can be tipped into the upright position.

**Step 8.** Attach an anchor bracket to each leg using (2) carriage bolts and (2) flange nuts.

**NOTICE** The anchor brackets can be installed to the inside or outside of each column assembly depending on installation conditions. If installing anchor brackets to the outside of the column assemblies and using the **optional side toeboards**, see the installation instructions that come with the side toeboard kit for proper location of anchor brackets.

### Step 8 Illustration.

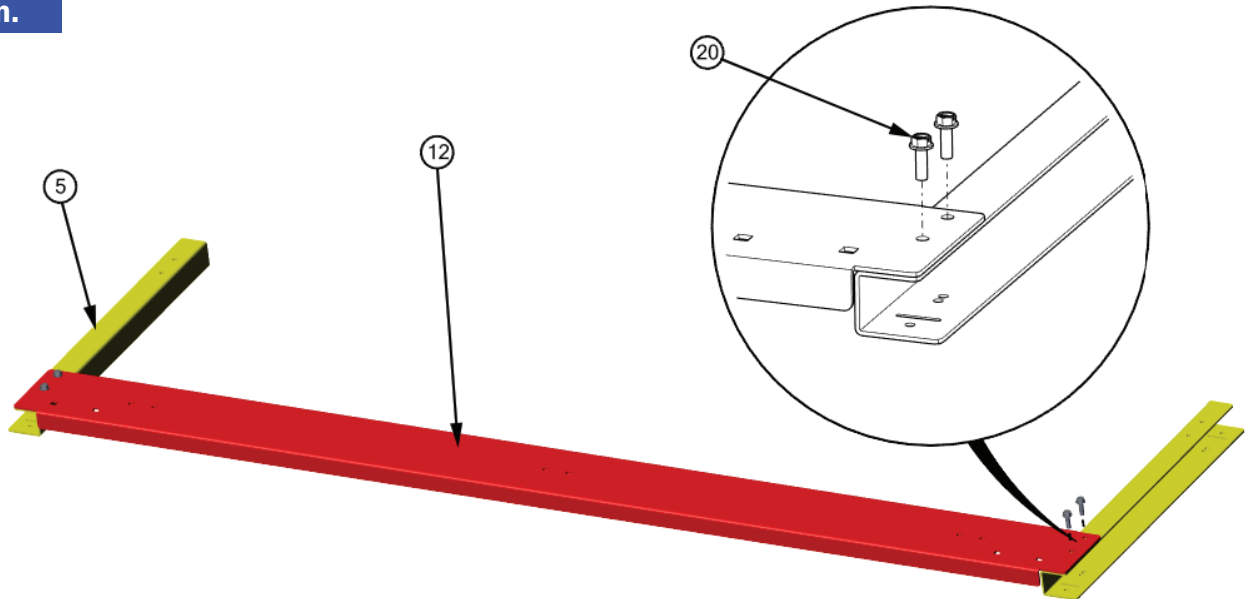


## Installing SafeMezz360

### Assemble the gates and install in main assembly

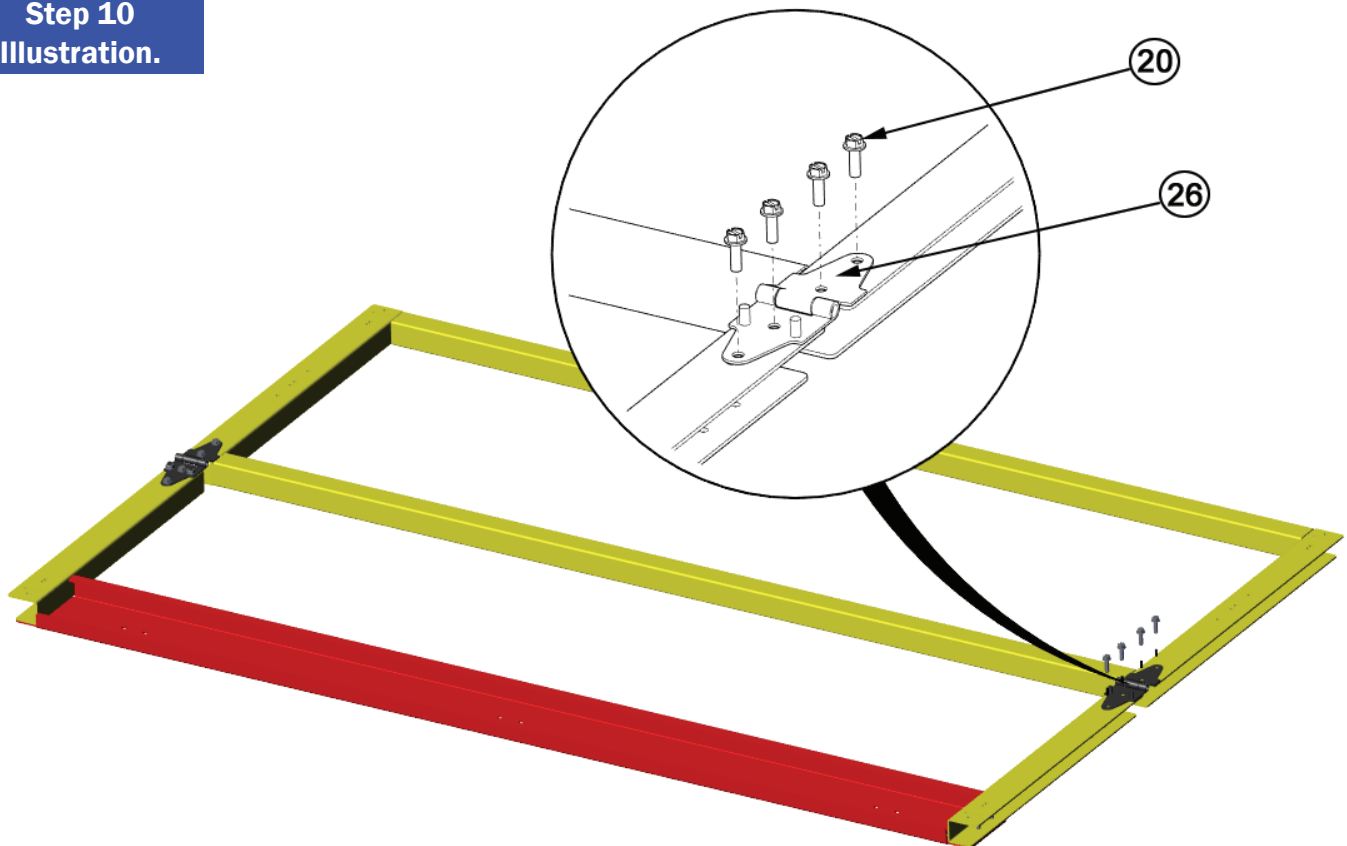
**Step 9.** Attach toeboard to two toeboard arms using (4) thread cutting screws. Flip the toeboard and toeboard linkage arms over for hinge installation in step 10.

#### Step 9 Illustration.



**Step 10.** Connect the toeboard linkage arms to the gate using (2) hinges and (8) thread cutting screws. Orient the hinge with the threaded studs on the bottom (closer to the Toeboard). Repeat step for opposite side.

#### Step 10 Illustration.



## Installing Safemezz360

### Installing the gates into main assembly

**Step 11.** Stand the gate up in its appropriate opening and attach (2) 2" nylon rollers with (2) roller clamps and (2) 1/4" thread cutting screws.

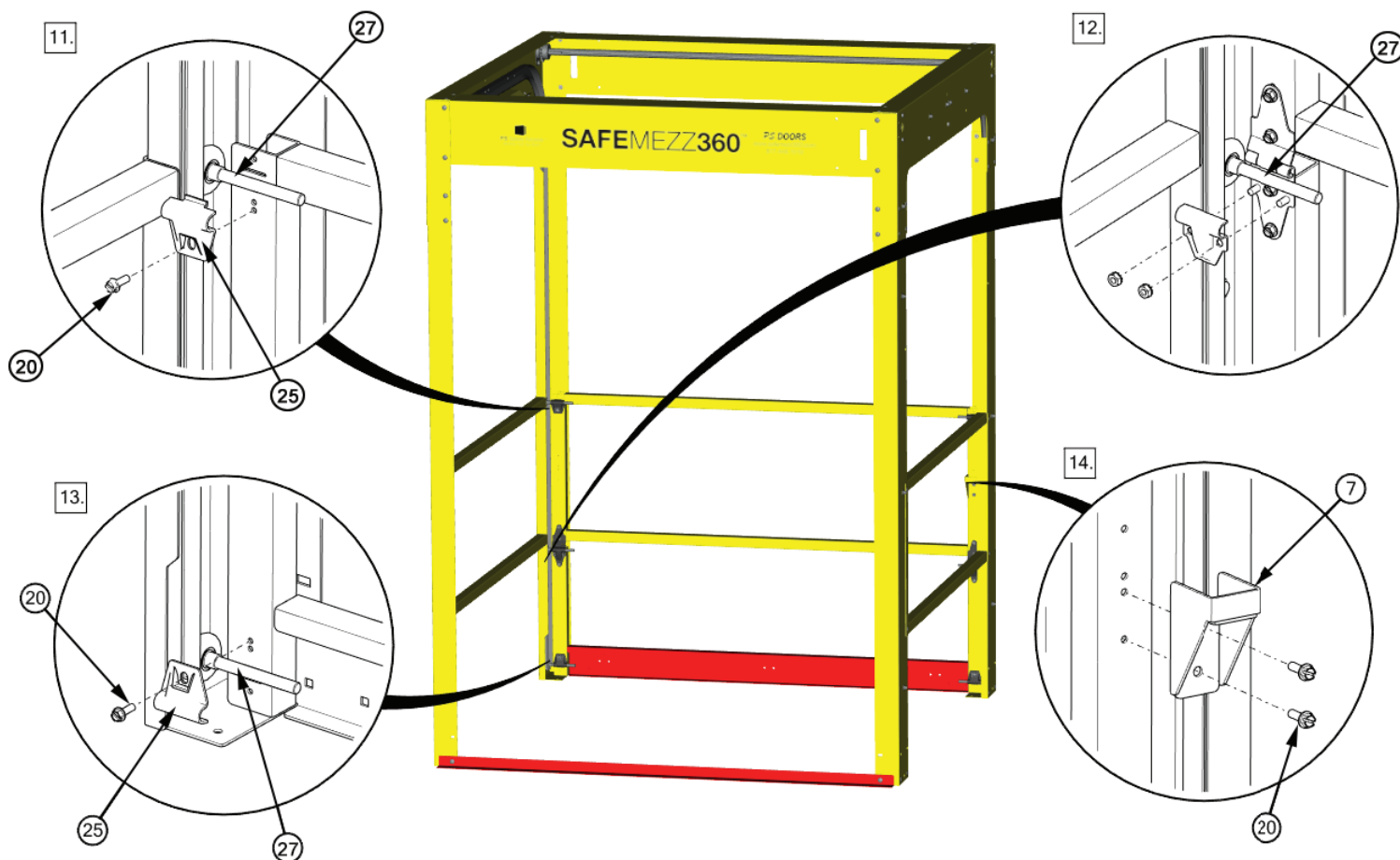
**Step 12.** Attach (2) 2" nylon rollers using (2) roller clamps and (4) keps nuts.

**Step 13.** Attach (2) 2" nylon rollers with (2) roller clamps and (2) 1/4" thread cutting screws.

**Step 14.** Attach (1) dampener strike to the right side of gate only, **as shown below**, using (2) 1/4" thread cutting screws.

**Step 15.** Repeat steps 9-14 for the opposing gate.

### Steps 11-15 Illustration.



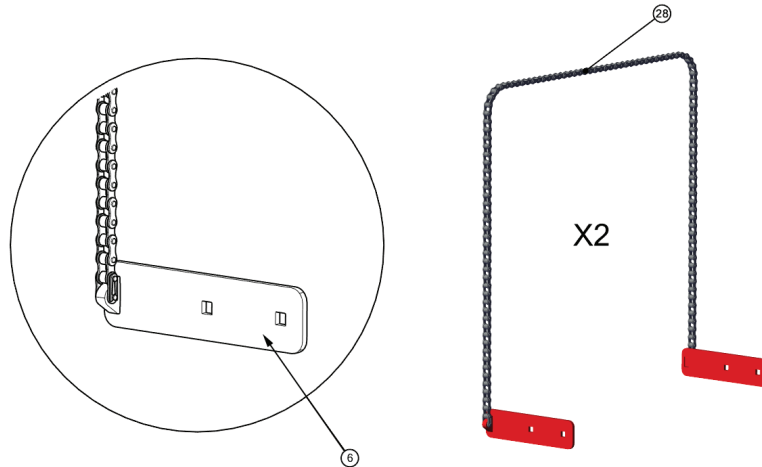
## Installing SafeMezz360

### Installing drive chain and level gates

**NOTICE** The drive chain is pre-sized to the correct length.

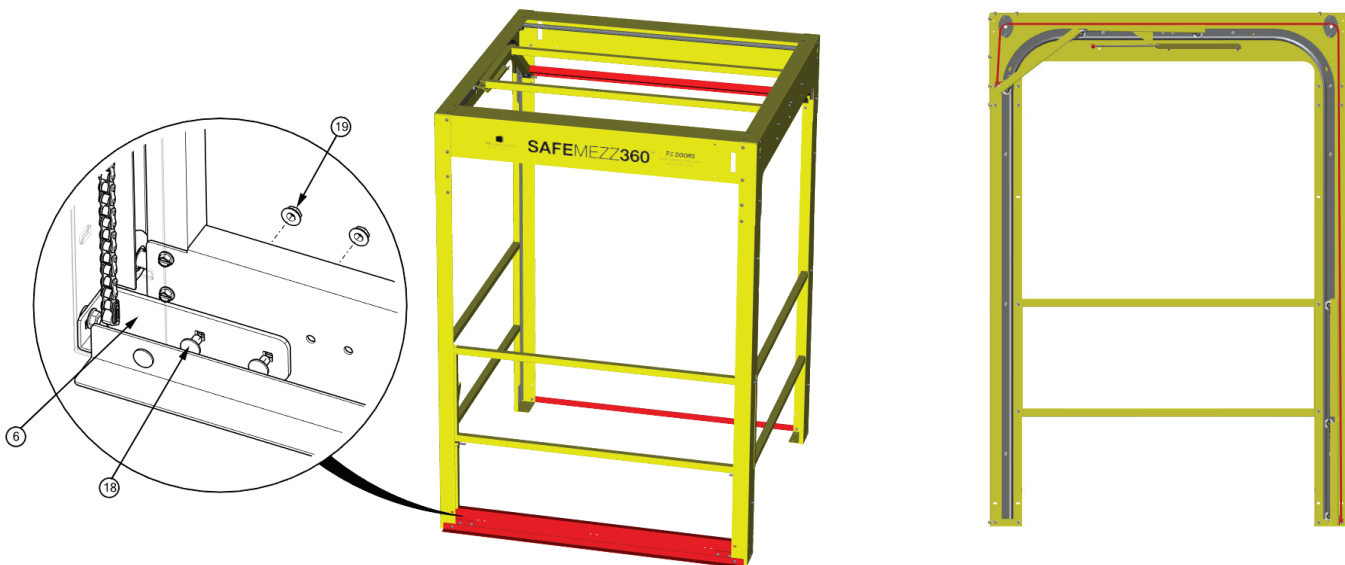
**Step 16.** Attach chain mount brackets on each end using connect links as shown below.

#### Step 16 Illustration.



**Step 17.** Install (2) chain mount brackets (one from each chain) to a single gate toeboard using (2) carriage bolts and (2) flange nuts each. Raise the gate and clamp or tether so that the toeboard is 81 inches or greater above floor level. Secure gate safely and redundantly so not to create an overhead falling hazard. Route each chain up and over both Jackshafts (not over sprockets at this time) and install remaining chain mount brackets to opposing gate toeboard.

#### Step 17 Illustration.



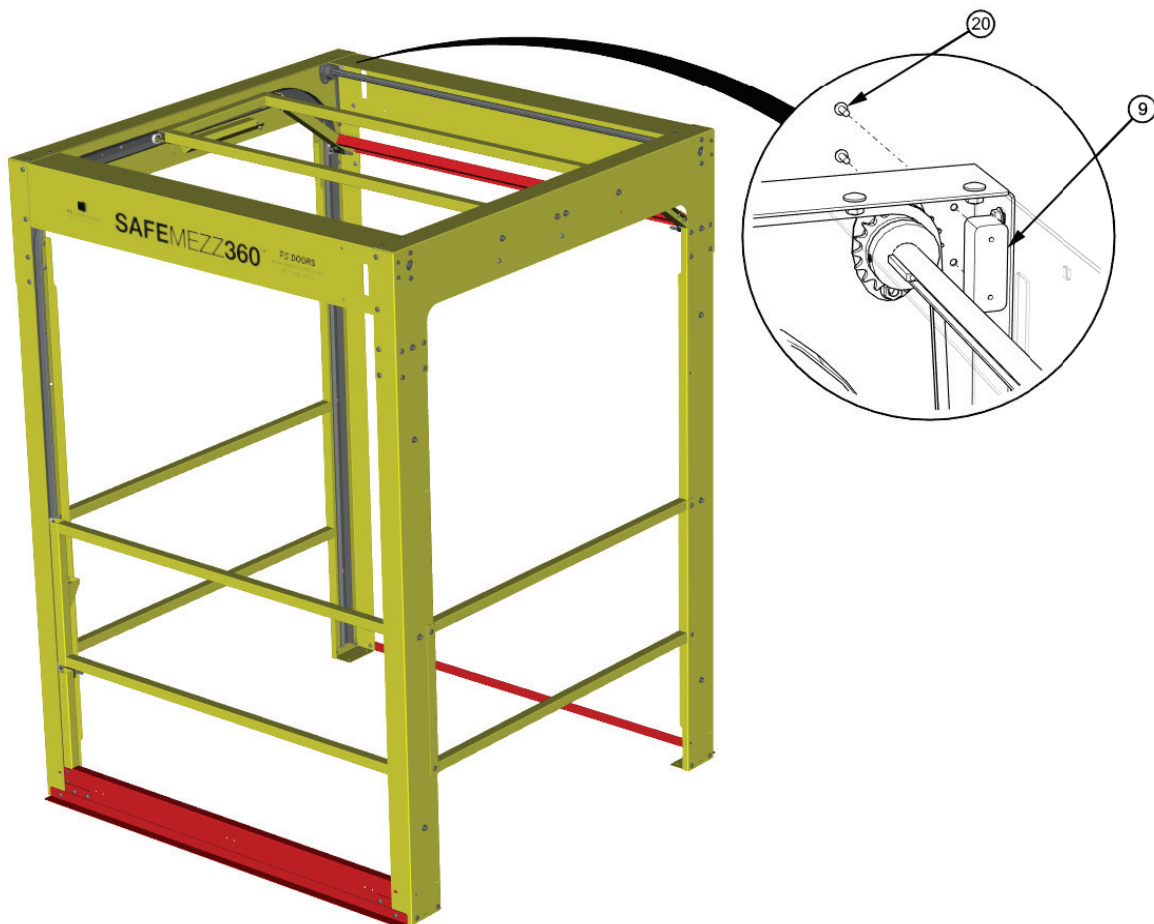
## Installing SafeMezz360

**Step 18.** Place the chains onto the sprockets while ensuring that the gates remain level and lower the secured gate to remove slack from chain. Inspect both gates to ensure both are level. If the gates are not hanging level, create slack in chain by hoisting and securing one of the gates. Remove chain from one sprocket and adjust it one tooth at a time in the appropriate direction until both gates hang and operate level.

**WARNING** Only operate gates with slow and controlled movements until the SLAM-PROOF DAMPENING SYSTEM is installed (see step 20). Do not operate gates when working on or near the chain and sprockets to avoid pinching or collision with moving gates.

**Step 19.** Attach (4) chain retainers at each sprocket location using (2) 1/4" thread cutting screws each.

### Step 19 Illustration.



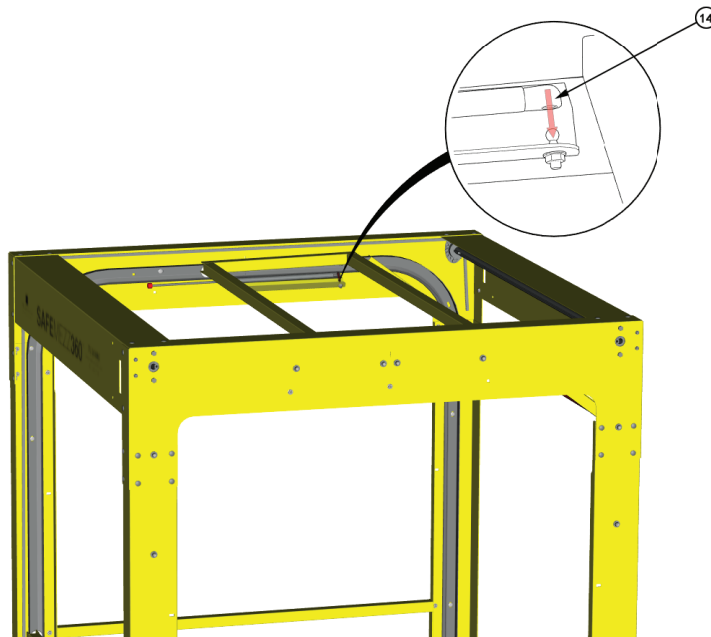
## Installing Safemezz360

### Install slam-proof gate dampening system

**NOTICE** Use precaution to protect the dampener piston rod from ANY scratches or abrasion to ensure long working life.

**Step 20.** Attach dampener by pushing the ball socket onto the ball stud in the dampener bracket causing the spring clip to snap-in-place. Repeat for other side.

#### Step 20 Illustration.



### Anchor SafeMezz360 to platform

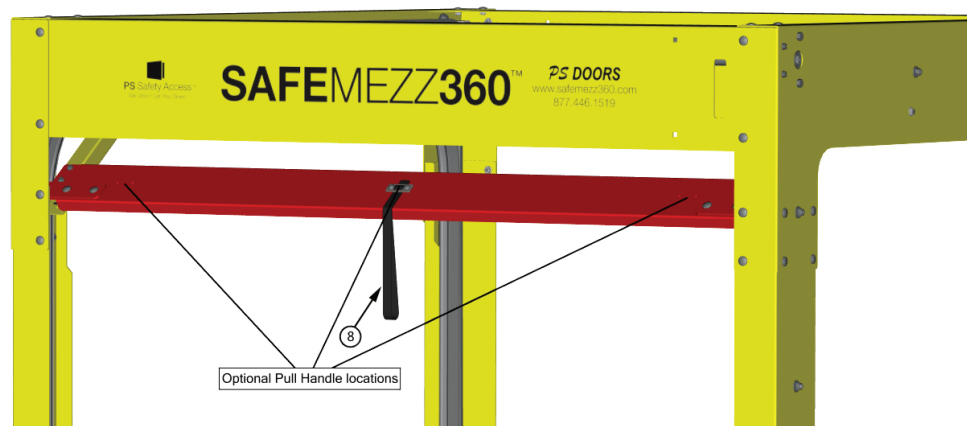
**WARNING** Ensure the method of fastening is sufficient to support all external loading and meets applicable codes.

**Step 21.** Safely move the SafeMezz360 into its final location and anchor (anchors not included) to the floor ensuring the SafeMezz360 remains square and level.

**Step 22.** Remove installation braces that were attached in step 6.

**Step 23.** (OPTIONAL) Attach pull strap to the Toeboard of the mezzanine side gate.

#### Step 23 Illustration



### **VII. Inspection and Maintenance**

#### **A. Fasteners and mechanical connections**

1. All fasteners must be in place and adjusted to their original design standard.
2. Replace any damaged fasteners.

#### **B. Dampeners**

1. Check dampener alignment to ensure red bumper only makes contact with the dampener strike. Adjust the track for clearance as necessary.
2. Dampener is maintenance free. Replace dampener if assisting force has diminished.

#### **C. Sprockets**

1. Ensure keys are in place and set screws are tight.

#### **D. Track**

1. Inspect track for damage and misalignment. Verify smooth gate operation.
2. Re-align or replace track as needed.

#### **E. Chain**

1. Ensure the connecting links are connected appropriately.
2. Replace damaged connecting links.
3. Grease chain as required.

#### **F. Rollers, Roller Clamps and Hinges**

1. Inspect items for damage.
2. Replace damaged items.

#### **G. Headers, Columns, and Gates**

1. Inspect items for damage or misalignment. Adjust, repair or replace as needed, to meet original design tolerances.
2. Check all mounting connections, making sure they meet original design standards (refer to instructions).

#### **H. Labels**

1. Replace if missing or illegible.

#### **H. Finishes**

1. Touch-up and repair as necessary.



## Operation of SafeMezz360

### VII. Operation

**NOTICE** 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.



To open the SafeMezz360, lift up on the gate or utilize automated push button.



To close the SafeMezz360, pull down on the gate or utilize automated push button



**⚠ DANGER** Never operate SafeMezz360 within the pallet drop area when the edge is exposed. Incorrect operation shown.

## PS DOORS Limited Warranty

### III. 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 ship date. If within the terms of this warranty, any SafeMezz360 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:

PS DOORS, Attention: Warranty  
1150 South 48th Street Grand Forks, ND 58201  
877.446.1519 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. Contact PS DOORS to request product modifications.

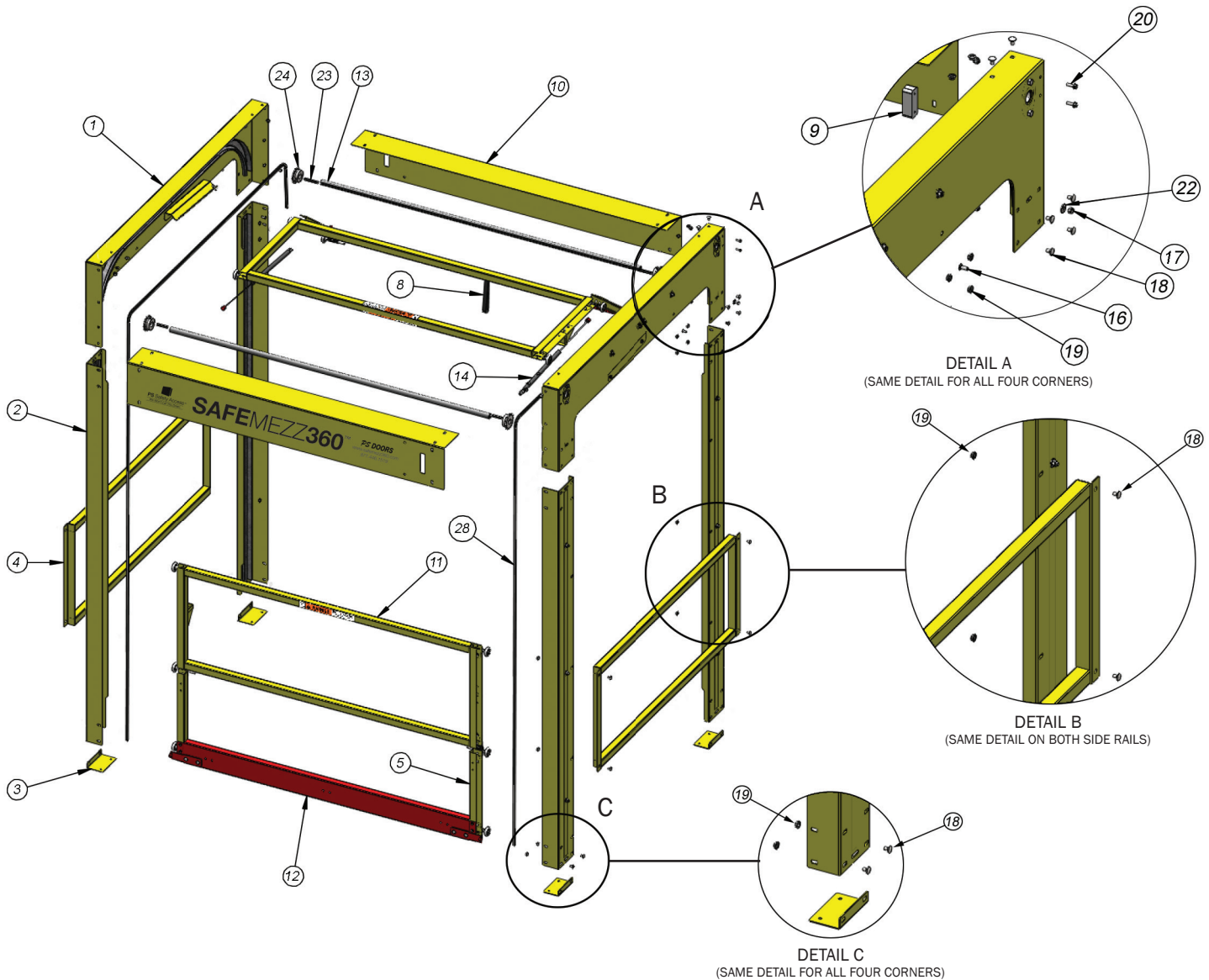
PS DOORS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES. WARRANTY DOES NOT APPLY TO ANY DAMAGE OR DETERIORATION CAUSED BY MODIFICATION, ABUSE, APPLIED PAINT FAILURE OR FAILURE TO PROVIDE REASONABLE AND NECESSARY MAINTENANCE.

All other warranties expressed 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 exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary, from state to state.



# Replacement Parts List

## VII. Replacement Parts List

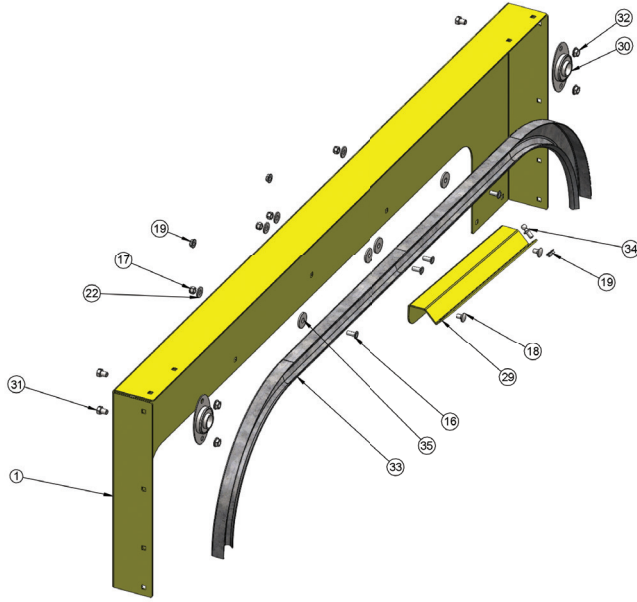


ITEM NUMBER	DESCRIPTION	SMZMM060	SMZMM100
1	SMZ; SIDE HEADER ASM	512992	512992
2	SMZ; COLUMN ASM	513004	513004
3	SMZ;ANCHOR BRACKET PCY	513022	513022
4	SMZ;SIDE RAIL PCY	513008	513008
5	SMZ;TOEBOARD LINKAGE ARM PCY	513018	513018
8	SMZ;PULL STRAP ASM	513029	513029
9	SMZ;CHAIN RETAINER	513003	513003
10	SMZ;FRONT HEADER PCY	512996	512998
11	SMZ;GATE PCY	513010	513012
12	SMZ;TOEBOARD PCR	513014	513016
13	SMZ;JACK SHAFT	512999	513000

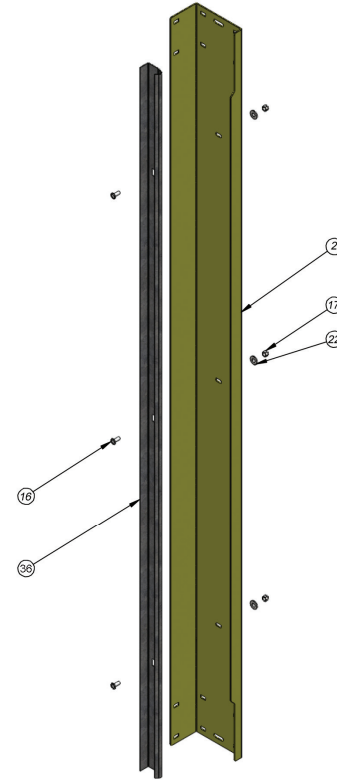
ITEM NUMBER	DESCRIPTION	SMZMM060	SMZMM100
14	SMZ;DAMPENER ASM	513062	513063
16	BOLT;TRACK 5/16"18X1	500458	500458
17	NUT;NYLOCK 5/16"18	501126	501126
18	BOLT;CARRIAGES5/16"X1/2	512985	512985
19	NUT;FLANGE 5/16"18	501087	501087
20	SCREW;HEXCUT 1/4"20X3/4	501488	501488
21	CHAIN CONNECT LINK #41*	512989	512989
22	WASHER;FLAT 5/16	501949	501949
23	KEY;SHAFT 1/4X3/8X3 STEEL	513217	513217
24	SPROCKET;41BS18X1"	512987	512987
28	SMZ;CHAIN #41 CUT TO LENGTH	513049	513049

\*Not shown on chart

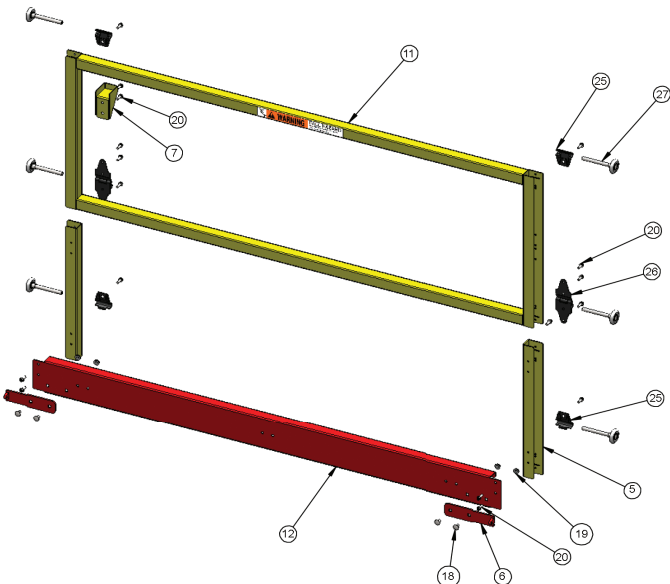
## REPLACEMENT PARTS LIST



ITEM NUMBER	DESCRIPTION	SMZMM060	SMZMM100
1	SMZ; SIDE HEADER PCY	512994	512994
16	BOLT;TRACK5/16"18X1	500458	500458
17	NUT;NYLOCK 5/16"18	501126	501126
18	BOLT;CARRIAGE5/1618X1/2	512985	512985
19	NUT;FLANGE 5/16"18	501087	501087
22	WASHER;FLAT 5/16"	501949	501949
29	SMZ;DAMPENER MOUNT PCY	513002	513002
30	BEARING;FLANGE 2-BOLT 1" SHAFT	513040	513040
31	BOLT;HEX3/8"16X1/2	500399	500399
32	NUT;FLANGE 3/8"16	501085	501085
33	SMZ;TOP TRACK, TRKH	513033	513033
34	STUD;10MM BALL X 5/16"-18	513035	513035
35	WASHER;FLAT 5/16X1-1/4	512986	512986



ITEM NUMBER	DESCRIPTION	SMZMM060	SMZMM100
2	SMZ; COLUMN PCY	513006	513006
16	BOLT;TRACK5/16"18X1	500458	500458
17	NUT;NYLOCK 5/16"18	501126	501126
22	WASHER;FLAT 5/16"	501949	501949
36	SMZ;VERTICAL TRACK TRL V	513034	513034



ITEM NUMBER	DESCRIPTION	SMZMM060	SMZMM100
5	SMZ; TOEBOARD LINKAGE ARM PCY	513018	513018
6	SMZ;CHAIN MOUNT BRACKET PCR	513028	513028
7	SMZ;DAMPENER STRIKE PCY	513031	513031
11	SMZ;GATE PCY	513010	513012
12	SMZ;TOEBOARD PCY	513014	513016
18	BOLT;CARRIAGE 5/16"18X1/2	512985	512985
19	NUT;FLANGE 5/16"18	501087	501087
20	SCREW;HEXCUT 1/4"20X3/4	501488	501488
25	CLAMP;ROLLER HOOK, BLACK	513041	513041
26	HINGE;END W/ROLLER CLAMP BLACK	513042	513042
27	ROLLER;2"NYLON, 11-BALL	513044	513044