

Stanley Access Technologies  
**Quick-Reference Guide**



**Dura-Glide™ 2000AG All-Glass Sliding Door**

**Installation Instructions**

**Quick-Reference Guide**

**203729**

**Rev. C, 3/3/09**

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**Quick-Reference Guide**

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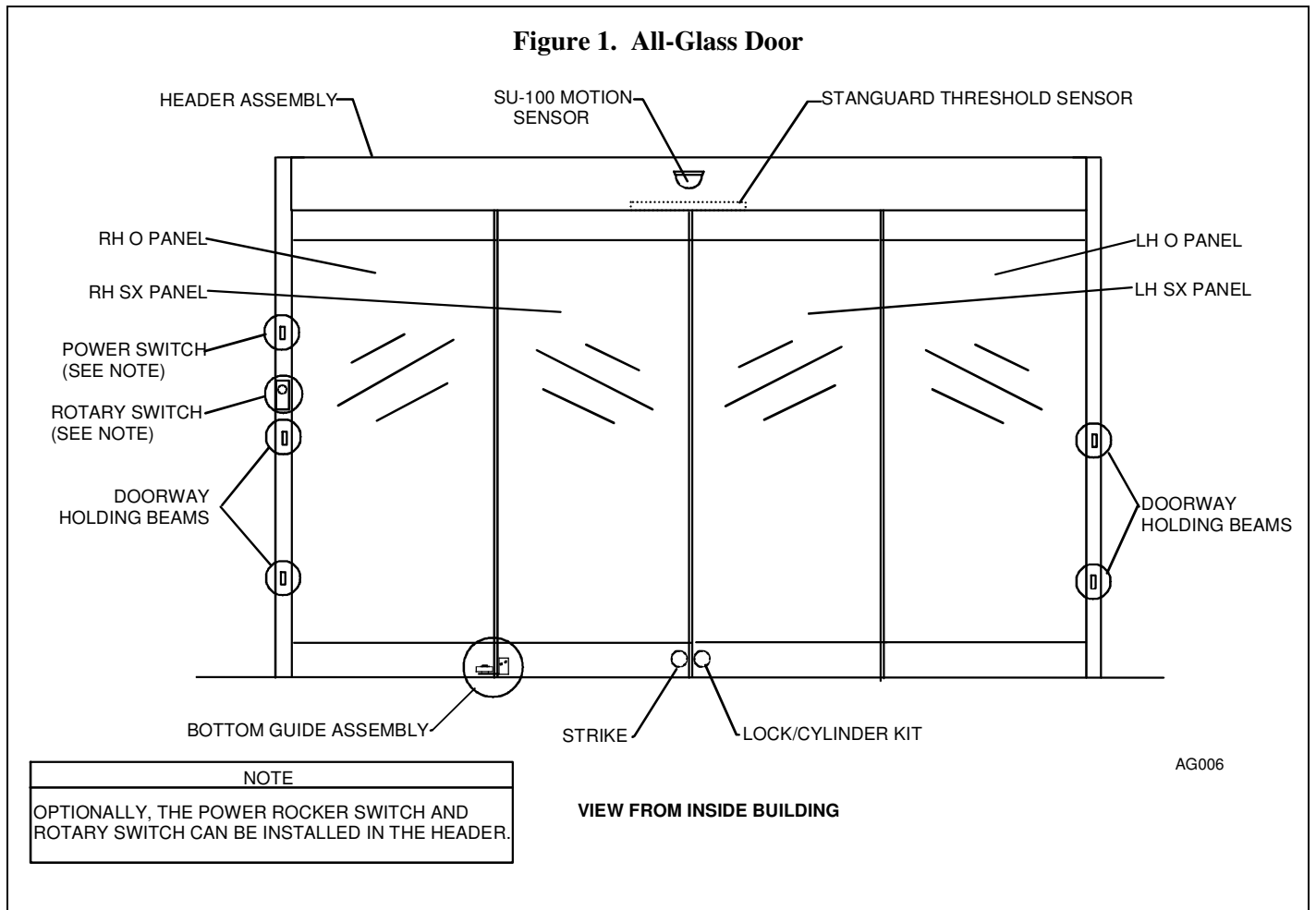
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## 1. PURPOSE

### 1.1 Discussion

This manual provides installation instructions for the Stanley Dura-Glide 2000AG Series sliding door system. The AG Series features all-glass SX- and O-panels. The package includes a breakout feature and the items shown in Figure 1.



### 1.2 Applicability

This manual is applicable to the Stanley Dura-Glide 2000AG Series sliding door system. This manual does not cover retrofit of an existing door system.

## 2. PREREQUISITES

- 2.1 Electrical power to the door has been deenergized before performing installation or maintenance.
- 2.2 Protective barrier (caution/warning tape) has been set up to prevent unauthorized access to work area.
- 2.3 The area has been cleared of all obstructions.
- 2.4 Attachment 1 has been reviewed for the following:
  - Definitions of the terms used in this procedure
  - A listing of the documents, special tools and equipment, materials, and consumables used in this procedure.
- 2.5 Attachment 3 replacement parts list has been reviewed.

### 3. INSTALLATION INSTRUCTIONS

#### **NOTE**

These instructions are intended to supplement the other installation instructions supplied with this package.

#### 3.1 **Installing the Header and Jambs**

- 3.1.1 Refer to Stanley Access Technologies document No. 203590, "Dura-Glide™ 2000 Installation Manual," and **INSTALL** the header and jambs.

#### 3.2 **Installing the Top and Bottom Rails onto the Glass Panel**

#### **WARNING**

To prevent injury, two people are required to lift and handle the glass panels.

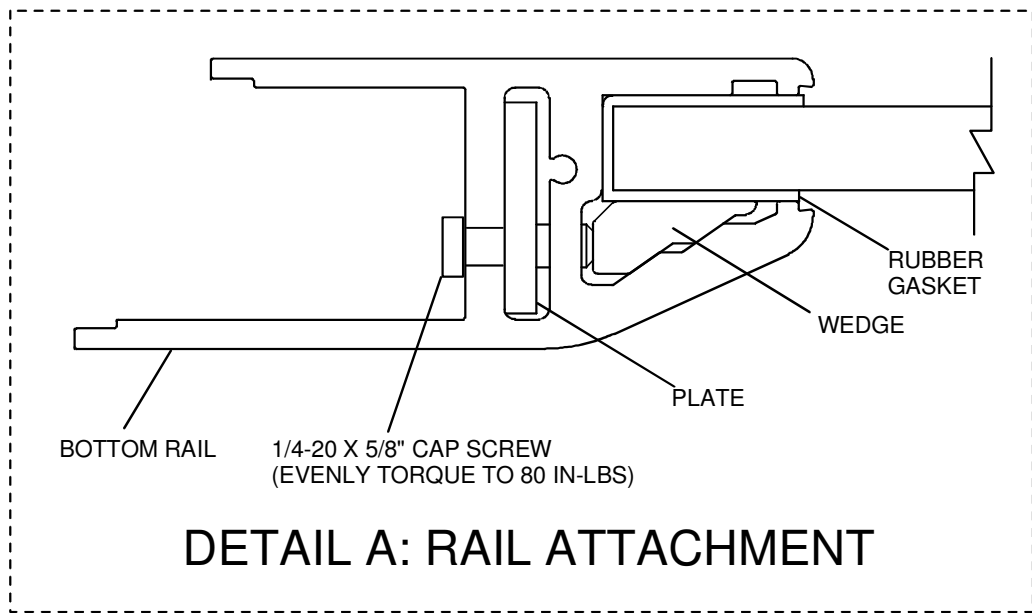
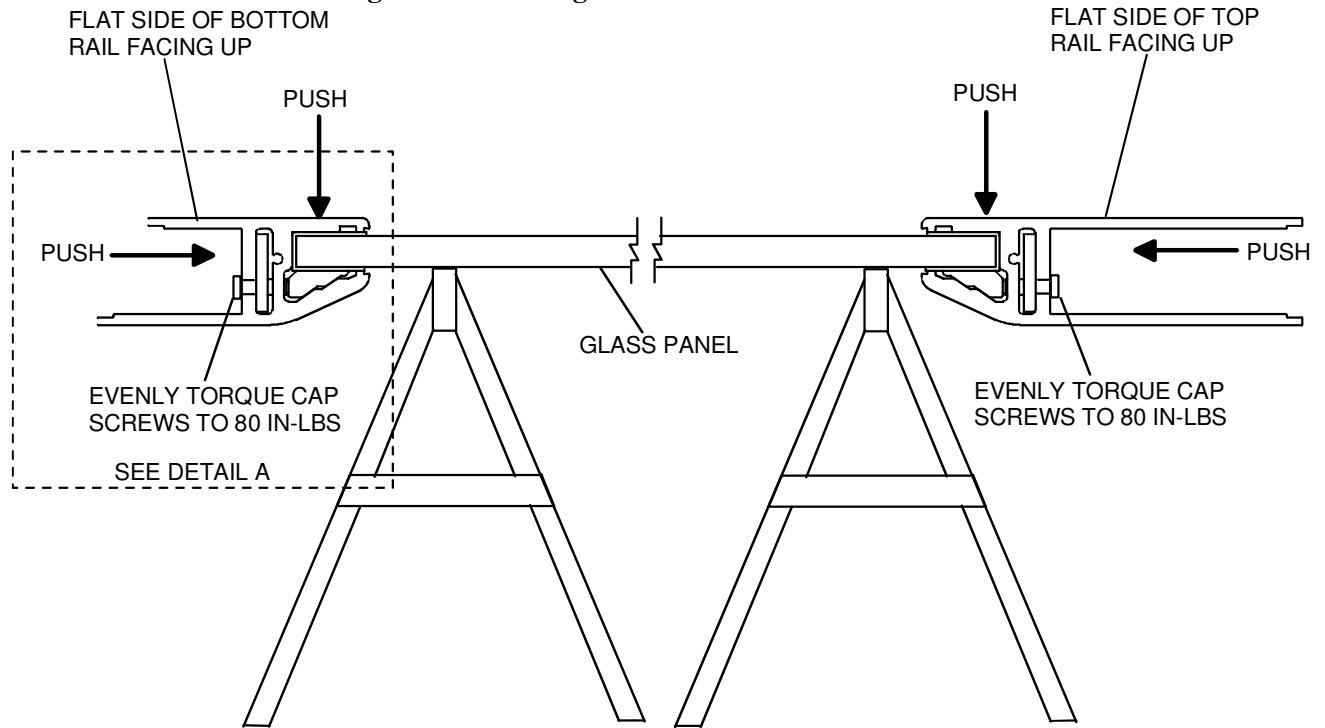
To prevent damage to the glass panels from scratching, saw horse working surfaces should be protected with carpeting or some other soft material.

#### **NOTE**

The instructions for installing the top and bottom rails onto the glass are the same for the O panels and SX panels.

- 3.2.1 Refer to Figure 2, and *carefully* POSITION glass panel onto saw horses.
- 3.2.2 **INSTALL** rubber gasket onto top of glass panel, and **ENSURE** the following:
- Rubber gasket is centered along the width of the glass.
  - Rubber gasket is fully seated against the top of the glass.
- 3.2.3 With flat side of wedge facing upward, **SLIDE** wedge into side of rail.
- 3.2.4 **SLIDE** plate into side of rail.
- 3.2.5 With flat side of rail facing upward, **POSITION** rail over rubber gasket and glass panel.
- 3.2.6 **INSTALL**, but do *not* tighten  $\frac{1}{4}$  -20 X  $\frac{5}{8}$ " cap screws into bottom of rail and plate.
- 3.2.7 **ALIGN** rail onto glass so that the leading edge of the glass butts against the end cap.
- 3.2.8 While pushing rail down and toward bottom edge of glass, *evenly* **TORQUE**  $\frac{1}{4}$  -20 X  $\frac{5}{8}$ " cap screws to **80 in-lbs**.
- 3.2.9 **REPEAT** Section 3.2 for each rail on O and SX panels.

**Figure 2. Installing the Rails onto the Glass Panel**



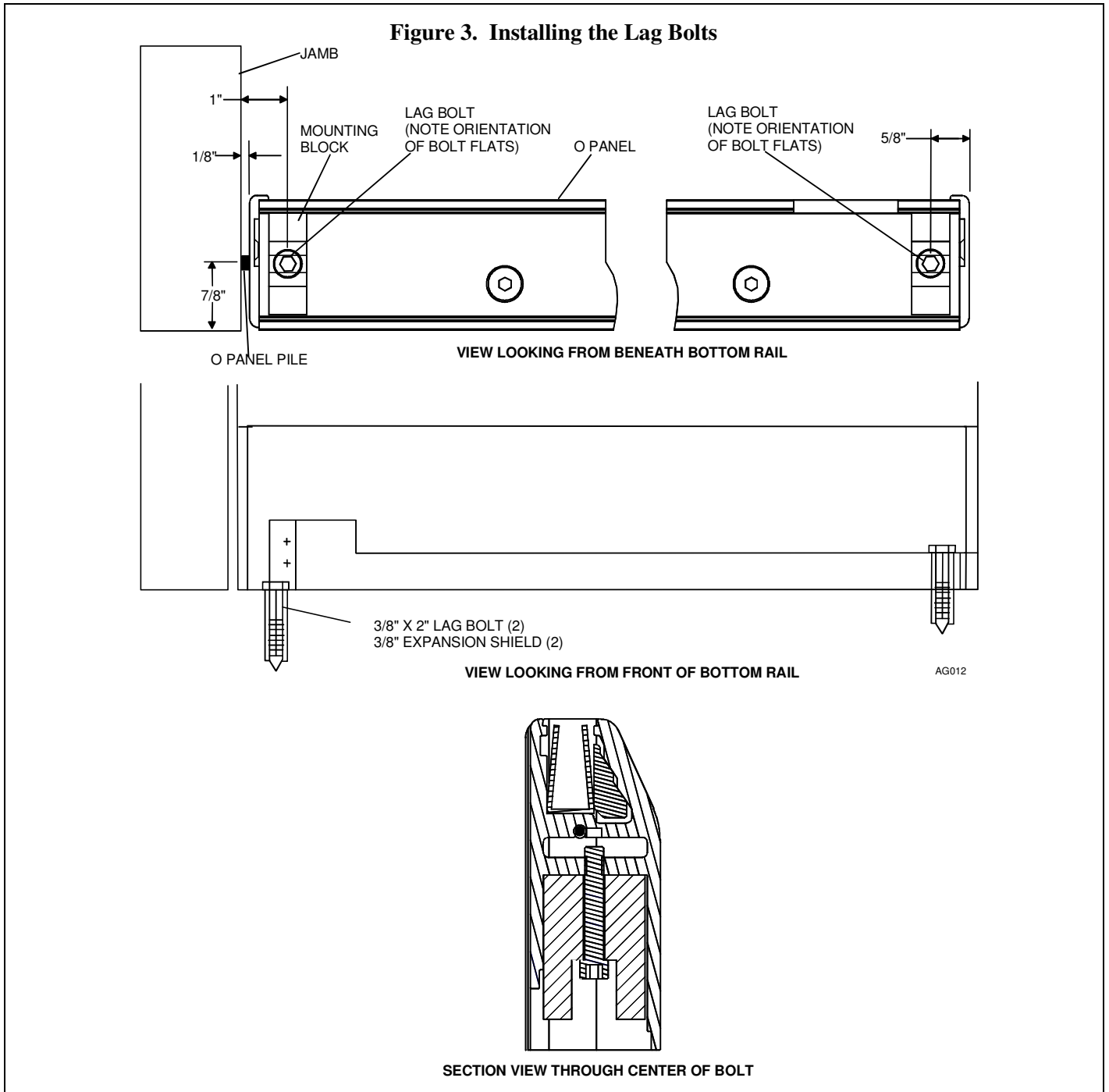
### 3.3 Installing the O-Panel Breakout Switch

3.3.1 Refer to Stanley Access Technologies document No. 203590, "Dura-Glide™ 2000 Installation Manual," and INSTALL the O-panel breakout switch.

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### 3.4 Installing the Lag Bolts

3.4.1 Refer to Figure 3, and, using a plumb bob from the header, MARK the locations for the two O panel lag bolts.



3.4.2 INSTALL the two  $\frac{3}{8}$ " X 2" expansion shields.

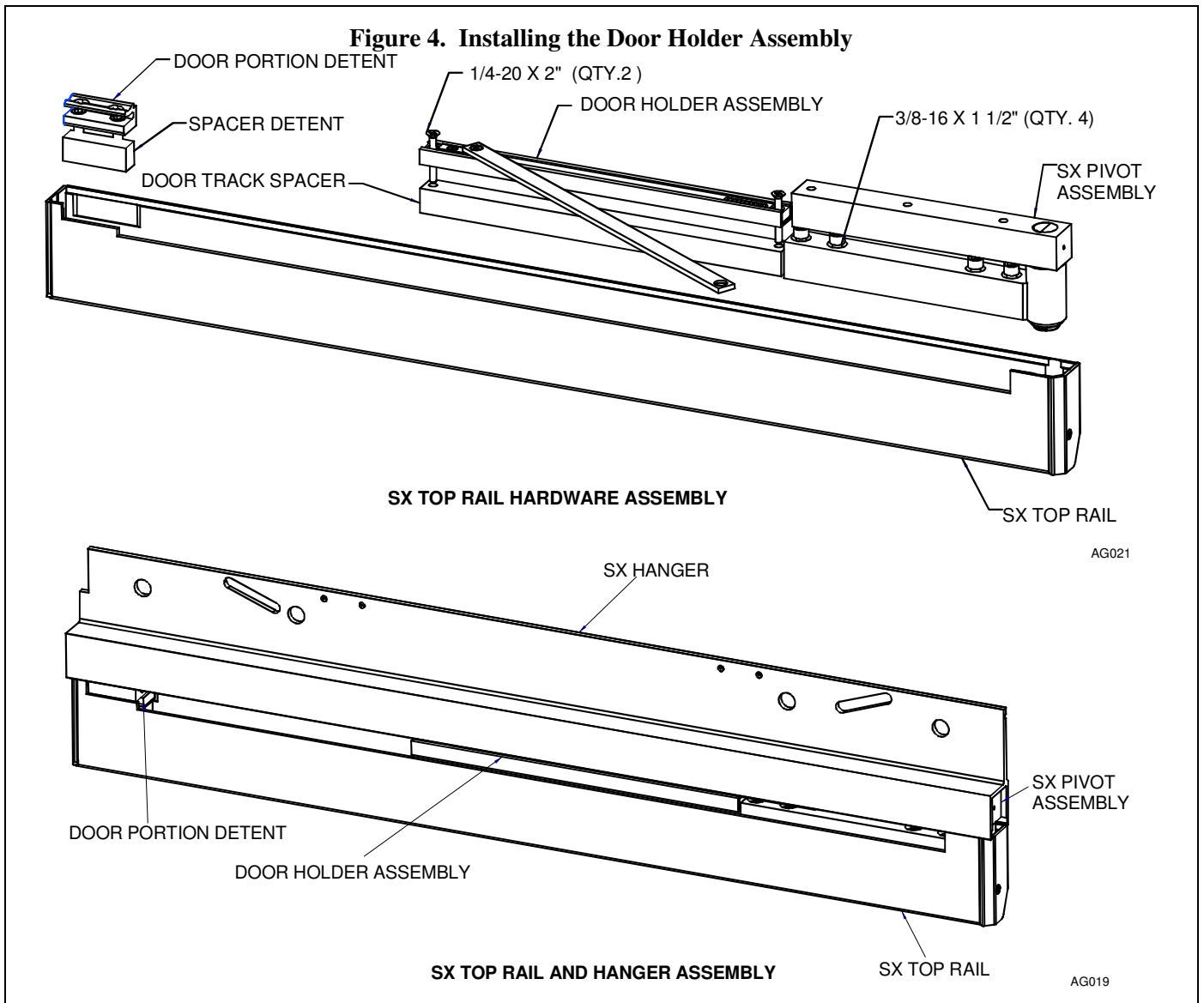
3.4.3 INSTALL the two  $\frac{3}{8}$ " X 2" lag bolts.

### 3.5 Installing the O-Panel(s)

- 3.5.1 Refer to Section 3.2, and INSTALL top and bottom rails onto O panel glass.
- 3.5.2 Refer to Figure 3, and INSTALL O-panel pressure-sensitive pile on jamb tube.
- 3.5.3 Refer to Stanley Access Technologies document No. 203590, "Dura-Glide™ 2000 Installation Manual," and INSTALL the O-panel(s).

### 3.6 Installing the SX Panel(s)

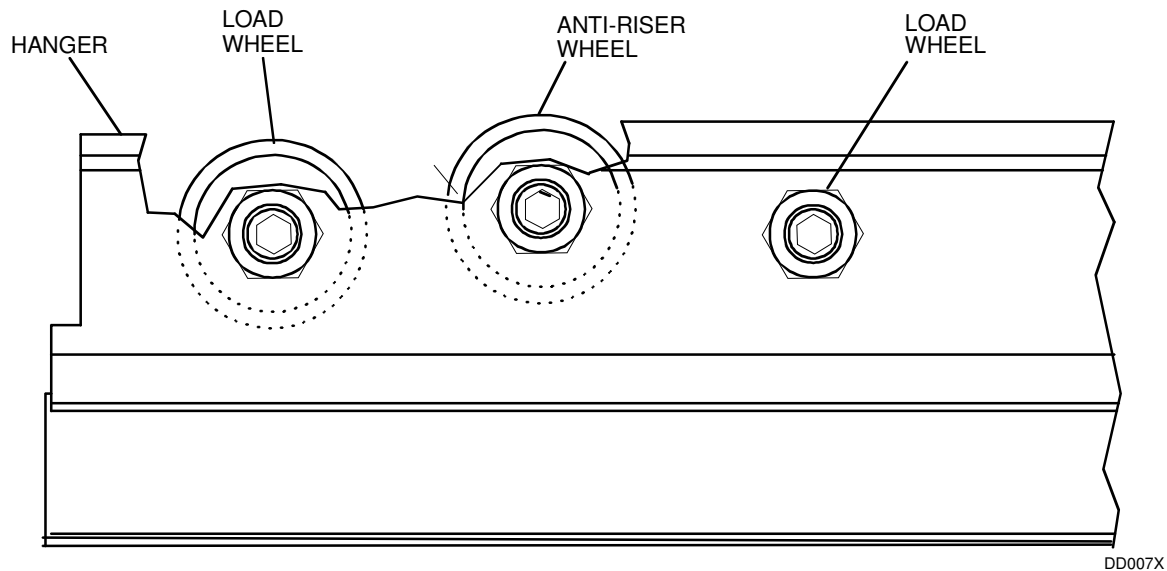
- 3.6.1 Refer to Section 3.2, and INSTALL top and bottom rails onto SX panel glass.
- 3.6.2 Figure 4, and INSTALL the Door holder assembly as follows:
  - a. Using the supplied 1/4"-20 X 2" socket head capscrews and tapped holes, SECURE damper assembly to top rail of door panel.





- b. Using the supplied 1/4"-20 X 1" socket head capscrews, SECURE door holder assembly to header.
- 3.6.3 Refer to Figure 5, and LOOSEN the nuts securing the load wheels and anti-riser wheels to the hanger.

**Figure 5. Setting the Load Wheels and Anti-Riser Wheels**



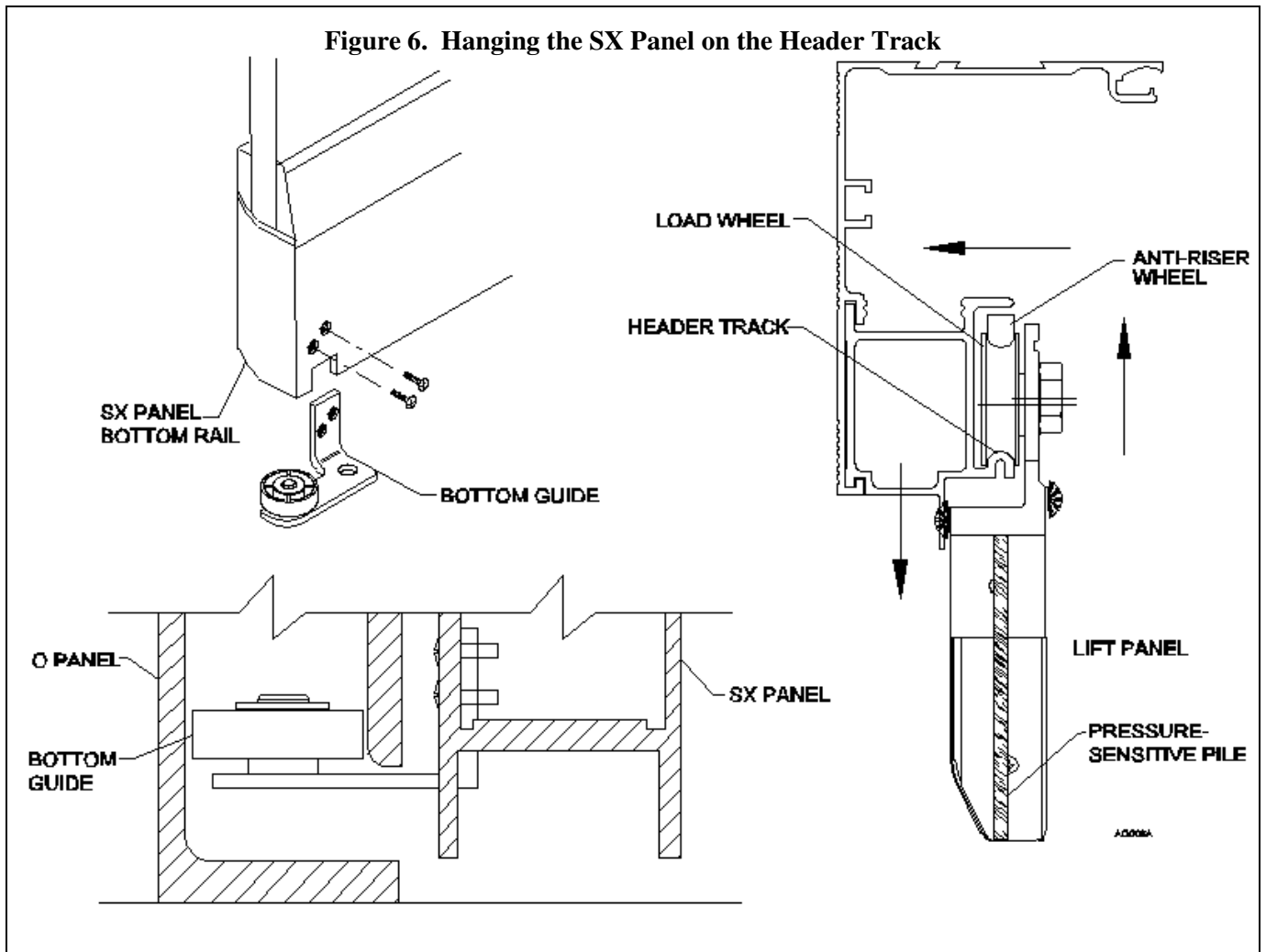
- 3.6.4 Using an Allen wrench SET the load wheels to the midrange of travel position in the hanger. In this position, the top of the load wheel is  $\frac{1}{16}$ " below the top of the hanger.
- 3.6.5 SET the anti-riser wheels so that the top of each wheel is flush with the top of the hanger.
- 3.6.6 TIGHTEN the nuts securing the load wheels and anti-riser wheels to the hanger.
- 3.6.7 Refer to Figure 6, and INSTALL the bottom guide to the SX panel bottom rail.

### WARNING

Whenever the door anti-riser wheels are not set, there is a possibility that the panel could fall off the hanger track. Use extreme caution when handling the slow panels.

- 3.6.8 Refer to Figure 7, and INSERT the SX panel bottom guide into the O panel bottom rail.
- 3.6.9 Carefully LIFT the SX panel and POSITION the panel onto the header track.
- 3.6.10 SET the anti-riser wheels so that there is a  $\frac{1}{64}$ " to  $\frac{1}{32}$ " gap between the top of each wheel and the track.
- 3.6.11 REPEAT Section 3.6 for the opposite SX panel.

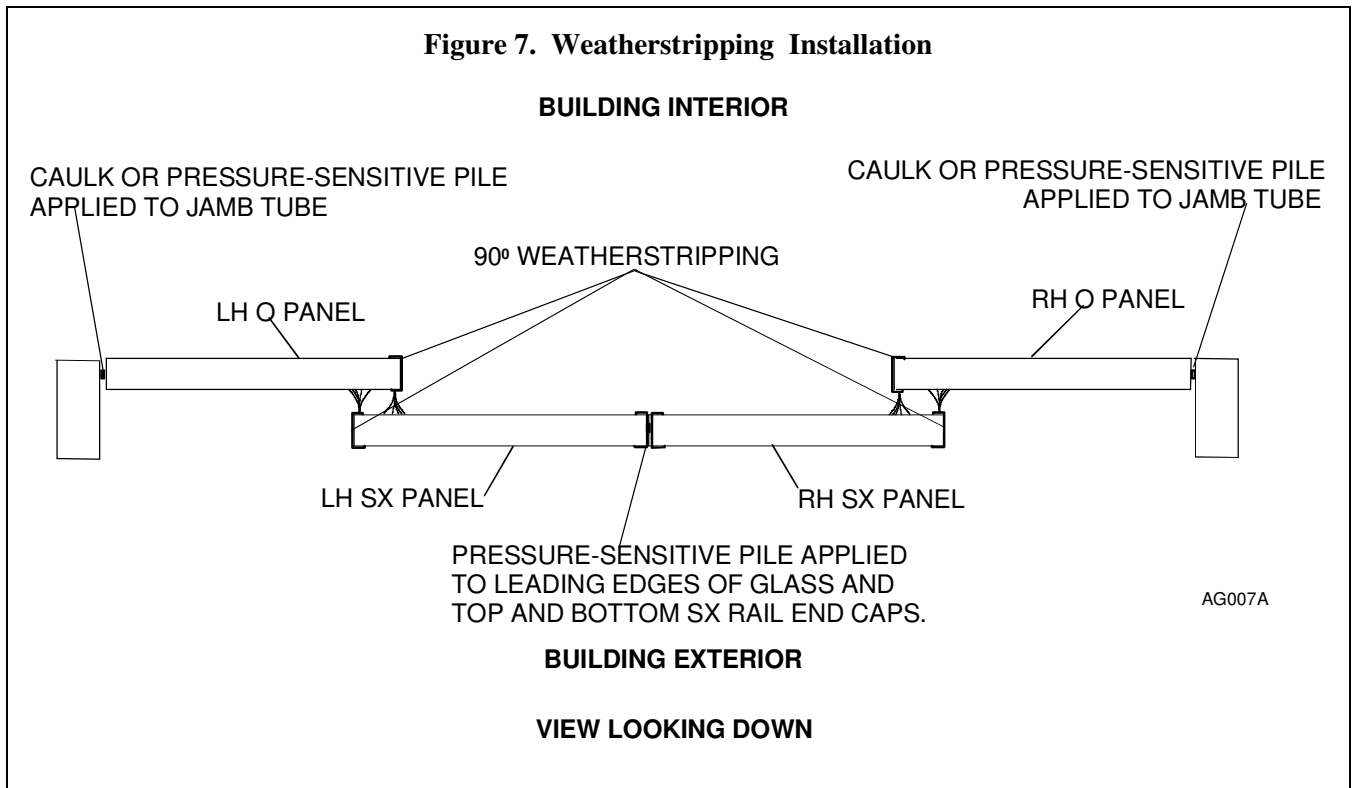
Figure 6. Hanging the SX Panel on the Header Track



### 3.7 Installing the Weatherstripping

- 3.7.1 Refer to Figures 6 and 7, and PRESS pressure-sensitive pile onto leading edge of SX panels.
- 3.7.2 With brush facing the *interior* of the building, INSTALL 90° clear extrusion with weatherstripping onto *leading* edge of O panels.
- 3.7.3 With brush facing the *exterior* of the building, INSTALL 90° clear extrusion with weatherstripping onto *trailing* edge of SX panels.

**Figure 7. Weatherstripping Installation**



### 3.8 Adjusting the SX Panels

3.8.1 Refer to Figure 5, and ADJUST SX panel height as follows:

- a. LOOSEN the nuts securing the upper load wheels to the hanger.

#### **NOTE**

Each load wheel is an eccentric that permits adjustment of the threshold/track-to-panel gap. The total adjustment available from the load wheels is approximately  $\frac{5}{16}$  inch.

- b. Using an Allen wrench, TURN the load wheels until the following occur:
  - Threshold/track-to-panel gap is even across the entire bottom of the door panel.
  - The stiles of both door panels meet and are parallel with no gap at the top or bottom.
- c. WHEN adjustment is complete, TIGHTEN nuts securing load wheels to hanger.

#### **NOTE**

The anti-riser adjustment is performed to prevent the door panel from moving upward. The anti-riser track serves as a roller surface for the anti-riser wheels.

3.8.2 ADJUST the anti-risers as follows:

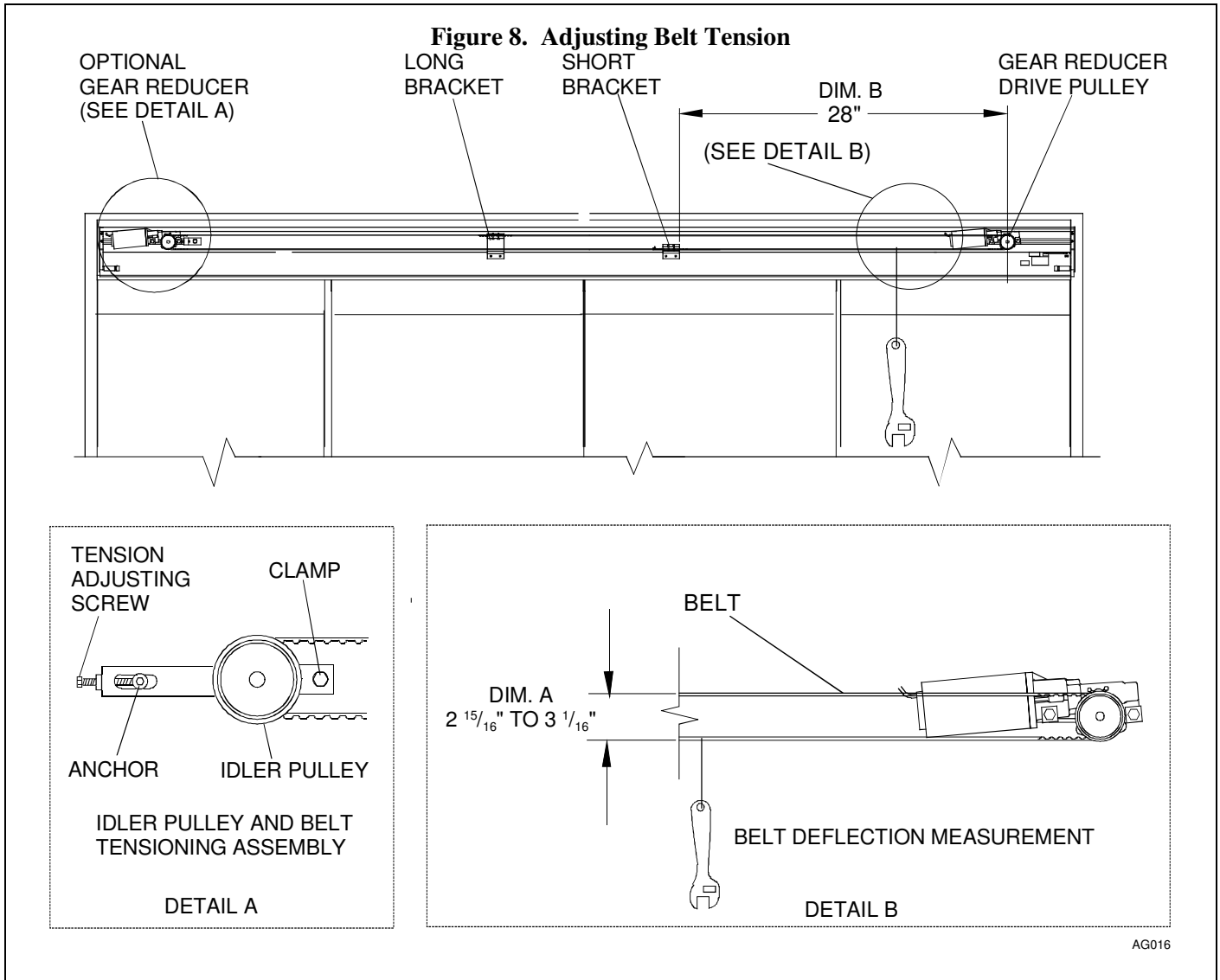
- a. LOOSEN nuts securing the anti-riser wheels to the hanger.

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- b. SLIDE the anti-riser wheels upward in the hanger until there is a  $\frac{1}{64}$ -to  $\frac{1}{32}$ -inch gap between the top of the anti-riser wheels and the bottom of the anti-riser track.
- c. TIGHTEN the nuts securing the anti-riser wheels to the hanger.

### 3.9 Adjusting Belt Tension

- 3.9.1 Refer to Figure 8, and facing cover side of header, OPEN doors until "Dimension B" between short bracket and center of gear reducer drive pulley is 28 inches.



- 3.9.2 At the center of "Dimension B", HANG an  $1\frac{1}{2}$  lb. weight (or 12-inch crescent wrench) from lower portion of belt.
- 3.9.3 MEASURE "Dimension A" from top of belt to bottom of belt

## CAUTION

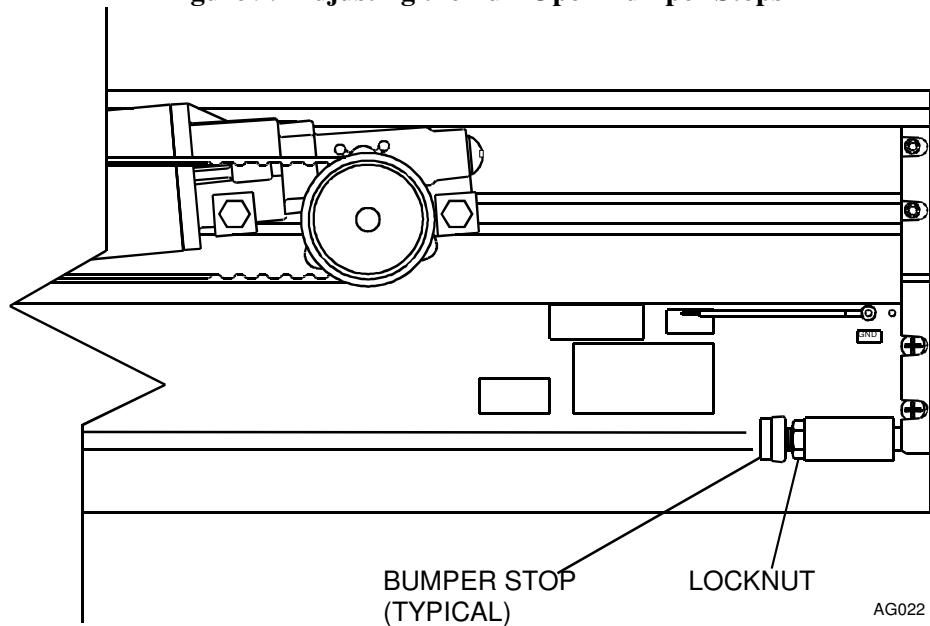
Over long spans, some belt deflection is required. To prevent damage to bearings and gear reducer, belt must *not* be over-tightened.

- 3.9.4 IF "Dimension A" is *not*  $2\frac{15}{16}$  to  $3\frac{1}{16}$  inches, **PERFORM** the following:
- LOOSEN** fastener(s) securing left gear reducer/idler pulley to header mounting track.
  - TURN** belt tension adjusting screw as necessary to achieve proper belt deflection.
  - WHEN belt tension is fully adjusted, **TIGHTEN** fastener(s) securing left gear reducer/idler pulley to header mounting track.

### 3.10 Adjusting the Full-Open Bumper Stops

- 3.10.1 Refer To Figure 9, and **LOOSEN** bumper stop locknut.

**Figure 9. Adjusting the Full-Open Bumper Stops**



- 3.10.2 **THREAD** bumper stop to full-in position.
- 3.10.3 Manually **OPEN** doors to full open position, and **TURN** bumper stop as necessary to ensure both SX panels contact bumper stops at the same time.
- 3.10.4 WHEN adjustment is complete, **TIGHTEN** bumper stop locknuts.

### 3.11 Adjusting the SX Panel Emergency Egress Breakout Detents

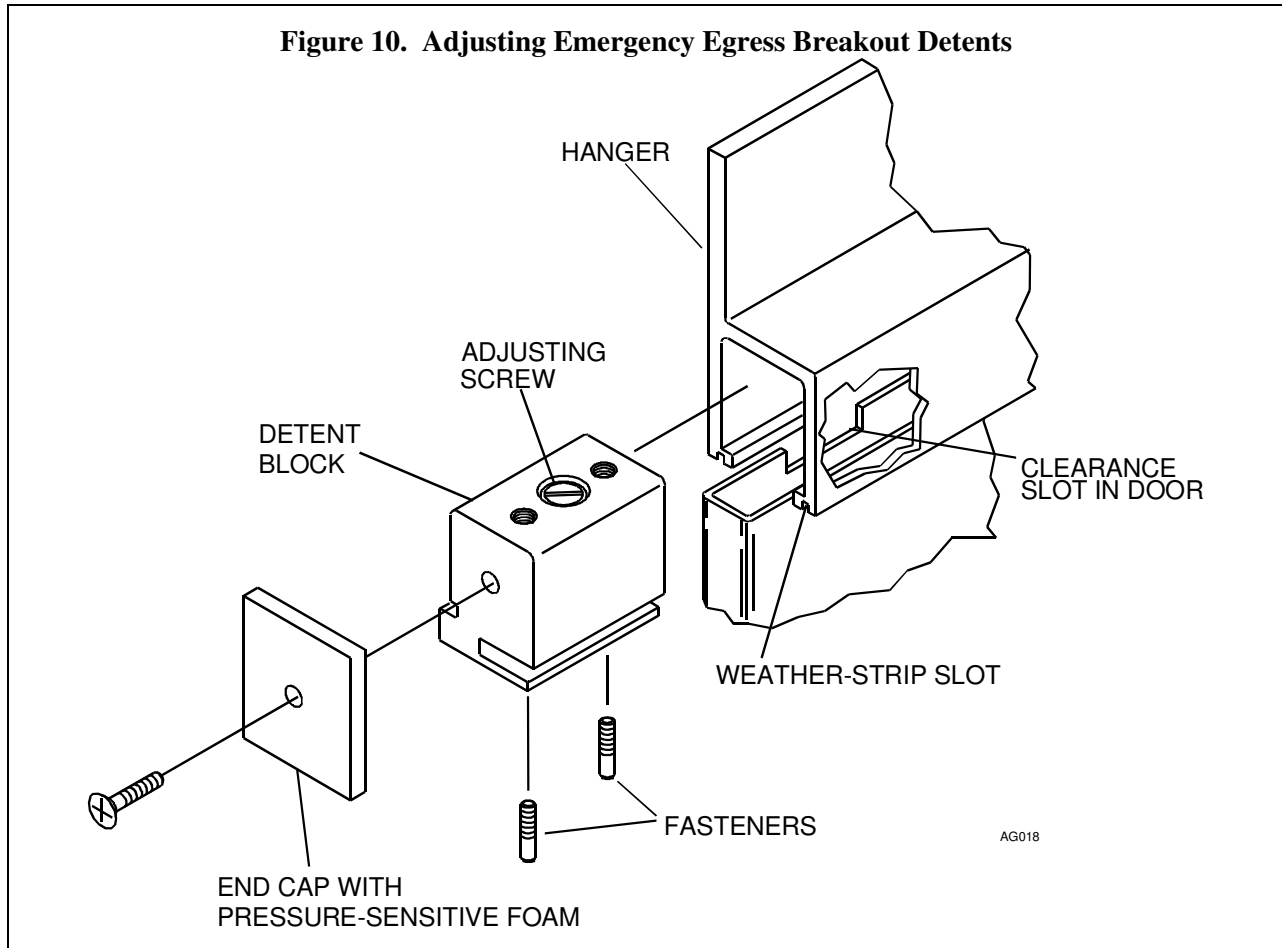
#### NOTE

1. Breakout detents are factory set to average requirements. If more or less breakout force is required to open door, the breakout detents can be adjusted.
2. During door installation, the breakout detents are set tight to prevent the door from swinging out and being damaged. During door tune-in, the breakout detents must be readjusted.

3.11.1 BREAK OUT panel.

3.11.2 Refer To Figure 10, and LOOSEN two fasteners in bottom of detent block.

**Figure 10. Adjusting Emergency Egress Breakout Detents**



3.11.3 REMOVE end cap and detent block from hanger.

3.11.4 INSTALL weather-strips in exterior and interior channel of hanger and CUT weather-strip to length.

#### NOTE

Turning adjusting screw clockwise increases the force required to break out door. Turning adjusting screw counterclockwise decreases the force required to break out door.

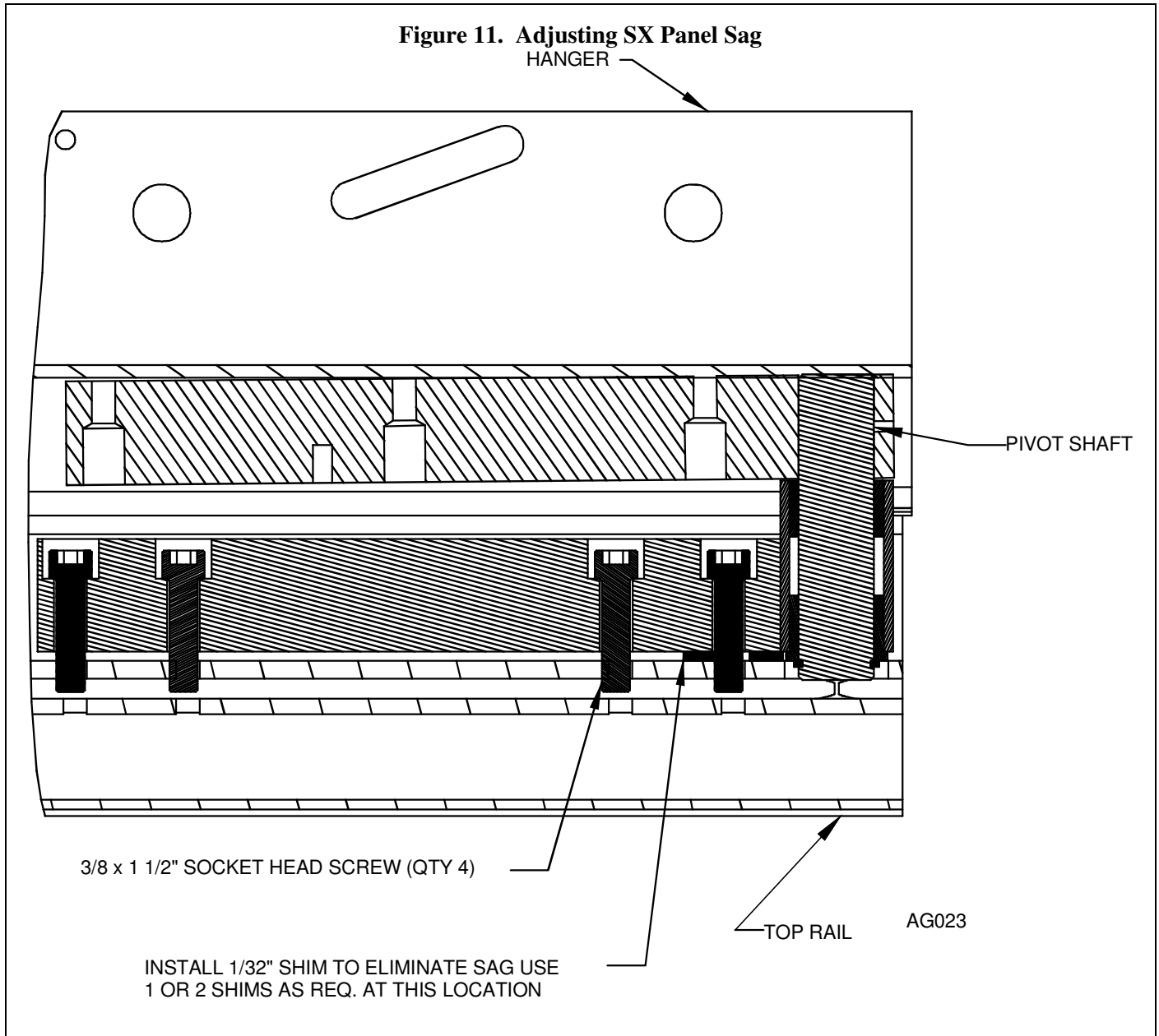
3.11.5 TURN adjusting screw in top of detent block as necessary to ensure door will be tight.

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- 3.11.6 SLIDE detent block and end cap into hanger, and ENSURE detent block is aligned with clearance slot in door.
- 3.11.7 TIGHTEN two fasteners in bottom of detent block.
- 3.11.8 With "TOP" indication facing upward, POSITION end cap over hanger.
- 3.11.9 TIGHTEN fastener securing end cap to detent block.
- 3.11.10 APPLY pressure-sensitive foam to end cap.

3.12 **Adjusting the SX Panel Sag**

- 3.12.1 IF SX panel sag adjustment is required, refer to Figure 11, and ADJUST panel sag.



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### 3.13 **Wiring the Doorway Holding Beams**

- 3.13.1 Refer To doorway holding beam manufacturer's instructions and CONNECT doorway holding beam wiring.

### 3.14 **Installing the SU-100 Motion Sensors**

- 3.14.1 Refer to Stanley Access Technologies document No. 203957, "SU-100 Motion Sensor Installation and Operation," and INSTALL the two SU-100 motion sensors.

### 3.15 **Closing Out**

- 3.15.1 Refer to the following and TUNE-IN door:

- Stanley Access Technologies document No. 204003, "MC521 Controller Installation and Operation Manual"
- Stanley Access Technologies document No. 203957, "SU-100 Motion Sensor Installation and Operation"
- Stanley Access Technologies document No. 203768, "Stanguard Threshold Sensor Installation and Operation"

### 3.16 **Replacement Parts**

- 3.16.1 Refer to Attachment 3 for a listing of replacement parts.



## Attachment 1

### Documents, Definitions, Special Tools, Equipment, Materials, and Consumables

(Sheet 1 of 1)

#### Documents

- Stanley Access Technologies document No. 203590, “Dura-Glide™ 2000 Installation Manual”
- Stanley Access Technologies document No. 204003, “MC521 Controller Installation and Operation Manual”
- Stanley Access Technologies document No. 203957, “SU-100 Motion Sensor Installation and Operation”
- Stanley Access Technologies document No. 203768, “Stanguard Threshold Sensor Installation and Operation”

#### Definitions

- None

#### Special Tools and Equipment (including, but not limited to)

- Caulking gun
- Combination square
- Concrete drill bits
- Electric drill
- Metal drill bit set
- Plumb bob
- Saw horses (with protected working surface)
- Screwdriver kit
- Tape measure
- Torque wrench capable of 80 in lbs (with a  $\frac{5}{32}$ " hex drive)

#### Materials (including, but not limited to)

- Concrete expansion shields
- Lag bolts

#### Consumables (including, but not limited to)

- Clean rags
- Glass cleaner
- Silicone caulk

## Attachment 2 Glass Panel Specifications

(Sheet 1 of 1)

**The SX- and O-panels (provided by others) must meet the following specifications.**

The panel widths and panel heights shown are to be specified on the order. To determine these dimensions for standard size packages, see the Architectural Specifier sheets included in these instructions.

| Note | Criteria             | Specification  |
|------|----------------------|--|
| 1    | Thickness "T"        | 1.750" (without cladding) <i>44.5 mm</i>   |
|      |                      | 1.822" (with 20 GA. (0.359") stainless steel cladding) <i>46.28 mm</i>   |
|      |                      | 1.870" (with 16 GA. (0.598") brass cladding) <i>47.50 mm</i>   |
|      |                      | (Door finish/cladding requirements are to be specified on the order.)  |
| 2    | Glass Thickness      | 1/2" <i>12.7 mm</i>  |
| 3    | Glass Color          | Color to be specified on the order.  |
| 4    | Temper Specification | Glass shall be fully tempered and shall meet or exceed Federal specifications DD-G-001403 and DD-G-451d.   |
| 5    | Warpage              | Glass warpage shall <i>not</i> exceed the tolerance specified in Federal specification DD-G-001403.  |
| 6    | Performance          | Glass shall comply with the requirements in the performance specifications and methods of test for safety glazing materials used in buildings as described in ANSI Z97.1-1975.   |
| 7    | Door Weight          | Weight of door shall not exceed 220 lbs <i>100 kg</i>  |
|      |                      | <p>The product of door weight (lbs) times the door width (inches) divided by 2 shall not exceed 5000 in. lbs.</p> <p><b>Example:</b></p> <p>If door weight = 200 lbs<br/>           And door width = 42 <sup>5</sup>/<sub>16</sub>"<br/>           Then: <math>\frac{200 \times 42.313}{2} = 4231</math> in. lbs</p> <p style="text-align: center;"><b>OR</b></p> <p>Kgs times the door width (m) divided by 2 shall not exceed 565 Nm</p> <p><b>Metric Example:</b></p> <p>If door weight = 100 kg<br/>           And door width = 1.1 m<br/>           Then: <math>\frac{100 \times 1.1}{2} \times 9.8 = 539</math> Nm</p> |

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**Attachment 2**  
**Replacement Parts**  
(Sheet 1 of 1)

| <b>Part No.</b> | <b>Quantity</b> | <b>Description</b>             |
|-----------------|-----------------|--------------------------------|
| 412199          | PER FT.         | VINYL/PILE-SX PANEL-2000AG     |
| 417628          | PER FT.         | GASKET-AG SHOE                 |
| 517004-1 (3,M)  | 1               | END CAP-ANGLE SX RAIL-AG       |
| 517004-2 (3,M)  | 1               | END CAP-ANGLE SX RAIL-AG       |
| 517006-1 (3,M)  | 1               | END CAP-RH-SX RAIL-AG          |
| 517006-2 (3,M)  | 1               | END CAP-LH-SX RAIL-AG          |
| 517007-1 (3,M)  | 1               | ENDCAP-RH-"O"TOP RAIL-2000AG   |
| 517007-2 (3,M)  | 1               | ENDCAP-LH-"O"TOP RAIL-2000AG   |
| 517008-1 (3,M)  | 1               | END CAP-RH- 'O' BOTTOM RAIL-AG |
| 517008-2 (3,M)  | 1               | END CAP-LH- 'O' BOTTOM RAIL-AG |
| 711563          | PER FT.         | PILE-WEATHER STRIP             |
| 413270          | PER FT.         | SEAL-REAR-"SX"-2000AG          |