

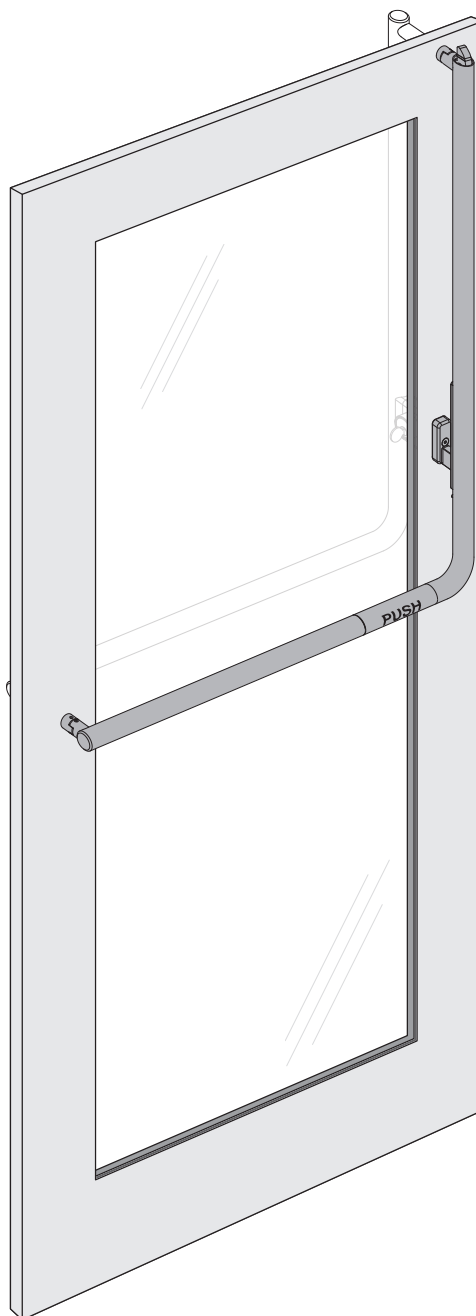
# PDU8500 Series Panic Device

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## **IMPORTANT: PLEASE READ BEFORE INSTALLING THE PANIC DEVICE**

The following instructions will decrease your chances of experiencing problems during the installation and ensure a smooth, trouble-free operation of the Panic Device.



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# 1. Introduction

## 1.1 Description

- The PDU8500 Series Panic Device offers superior functionality for egress and security needs.
- Please read the Installation Instructions in this manual carefully before installing the Panic Device.
- The PDU8500 installs the same on the following door types: Storefront, Wood and Metal.
- The framing conditions are different for Hollow Metal Frames.
- Hollow Metal Frame Requirements:
  - Stop Height:  $\frac{5}{8}$ " This will shift the top of the panic device down on the door when compared to an aluminum frame.
  - Stop Width: Minimum of 3" wide.
  - Reinforcement: Minimum of 12 gauge closer reinforcement along the stop width in the area that the strike will be attached.
- Strike templates can be found on [assaabloydooraccessories.us](http://assaabloydooraccessories.us), [Resource Library](#) > [Product Templates](#) > [Rockwood Templates](#) > [Architectural Line](#).
- If you have questions, please contact us at (800)458-2424.

## 1.2 Tools and Supplies

- The tools and supplies listed below are necessary to complete the installation of the Panic Device.

### Tools

- Allen wrenches:  $\frac{5}{64}$ ",  $\frac{5}{32}$ ",  $\frac{1}{8}$ ",  $\frac{3}{16}$ ",  $\frac{1}{4}$ "
- Latch and Actuator Gauge
- Spanner Wrench
- Wrench:  $\frac{7}{16}$ "

### Supplies included in kit

- Threadlocker
- Synthetic Multi-Purpose Grease
- Latch and Actuator Gauge
- Extra Door Bushings

### Supplies Needed (not included in kit)

- Soft Cloth

## 1.3 Dogging Feature

- The Dogging Feature is located on the bottom of the Panic Device Assembly vertical tube, directly under the Actuator Post Assembly.
- Engage the Horizontal Crash Bar and slide the Dog Button to the up position.
- The Panic Device Assembly is dogged when the Dog Button is in the up position. Refer to Figure 1-1.
- The Panic Device Assembly is un-dogged when the Dog Button is in the down position. Refer to Figure 1-2.

Figure 1-1  
Dogged Position

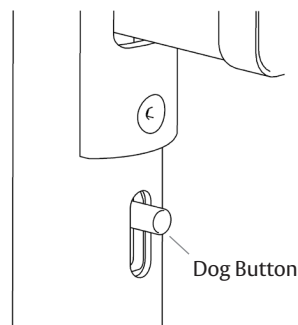
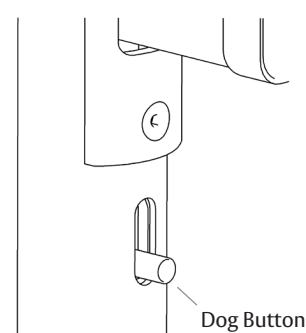


Figure 1-2  
Un-dogged Position



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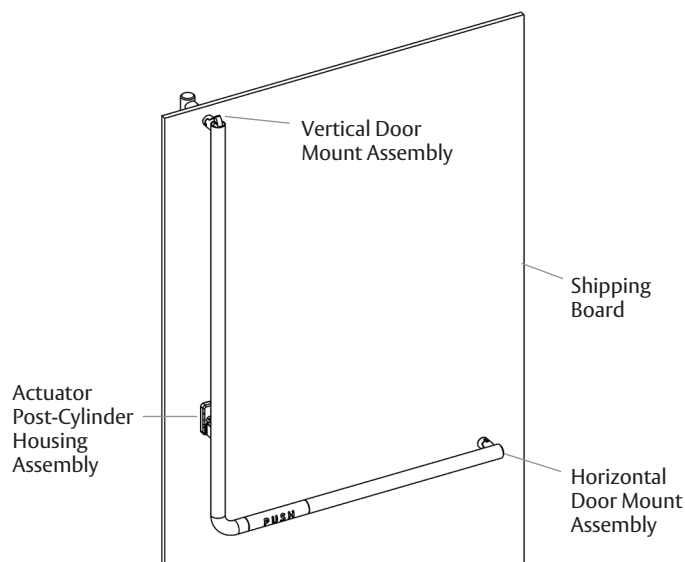
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## 2. Instructions for Storefront, Wood and Metal Doors

### 2.1 Removal from Packaging

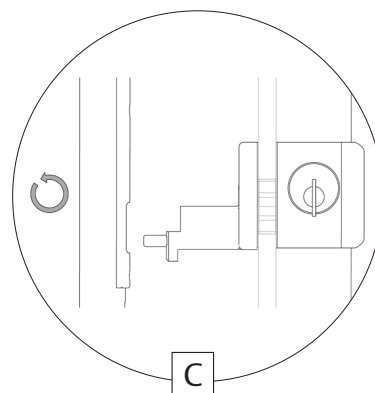
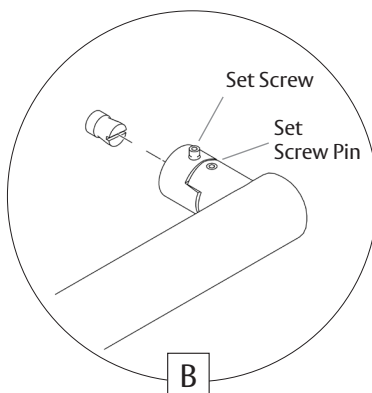
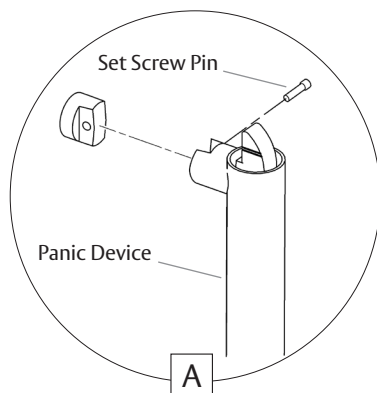
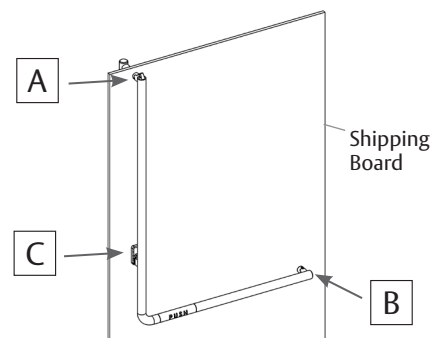
#### 2.1.1 Introduction

- The Panic Device Assembly comes mounted on a Shipping Board inside a shipping crate.
- Before removing from the Shipping Board, make sure that the device is in the un-dogged position. Refer to Introduction, page 3.
- Most of the hardware will be reused. Do not discard any parts at this time.
- Remove the Shipping Board from the shipping crate.
- Make sure that the Vertical Door Mount Assembly, Actuator Post-Cylinder Housing Assembly, and Horizontal Door Mount Assembly are still attached to the Shipping Board when removing from the crate.



#### 2.1.2 Remove Panic Device from Shipping Board

- Remove the Set Screw Pin from the Panic Device Assembly.
- Loosen the two Set Screws ( $\frac{1}{4}$ "-20) on the free end. The Set Screws ( $\frac{1}{4}$ "-20) are not removed in this step.
- Pull the Panic Device away from the Shipping Board by tilting the device.

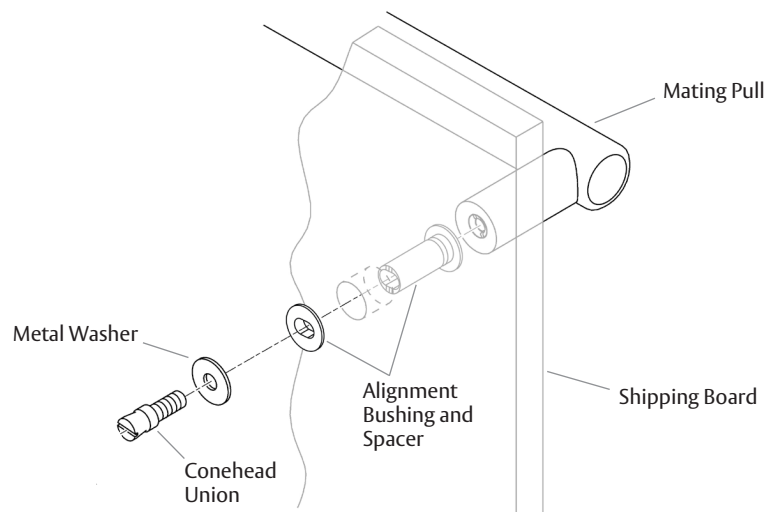


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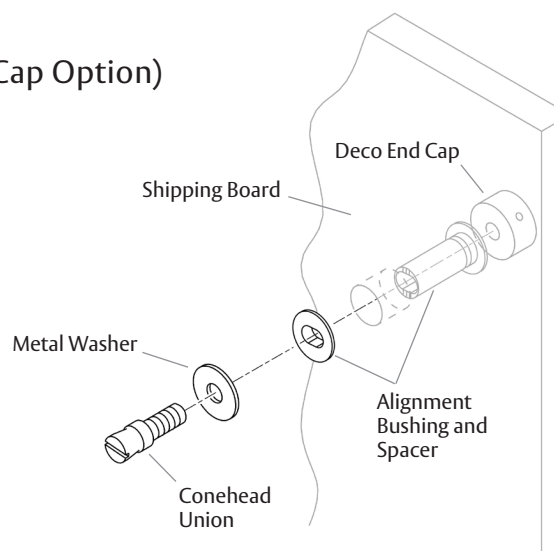
### 2.1.3 Remove Horizontal Door Mount

- Unscrew and remove the Conehead Union ( $\frac{5}{16}$ "-18).
- Remove the Metal Washer, and Alignment Bushing and Spacer.



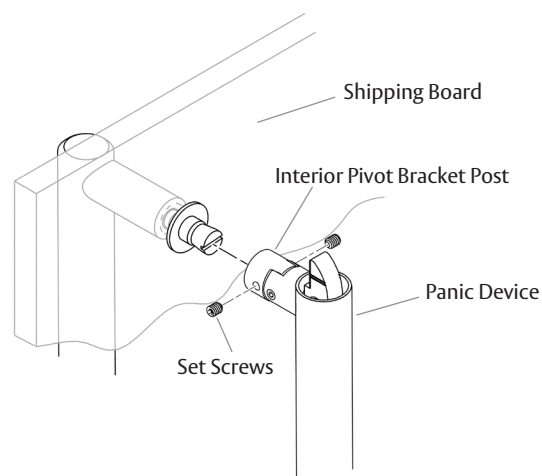
### 2.1.4 Remove Horizontal Door Mount (Deco End Cap Option)

- Unscrew and remove the Conehead Union ( $\frac{5}{16}$ "-18).
- Remove the Deco End Cap.
- Remove the Metal Washer, Alignment Bushing and Spacer.



### 2.1.5 Remove Vertical Door Mount

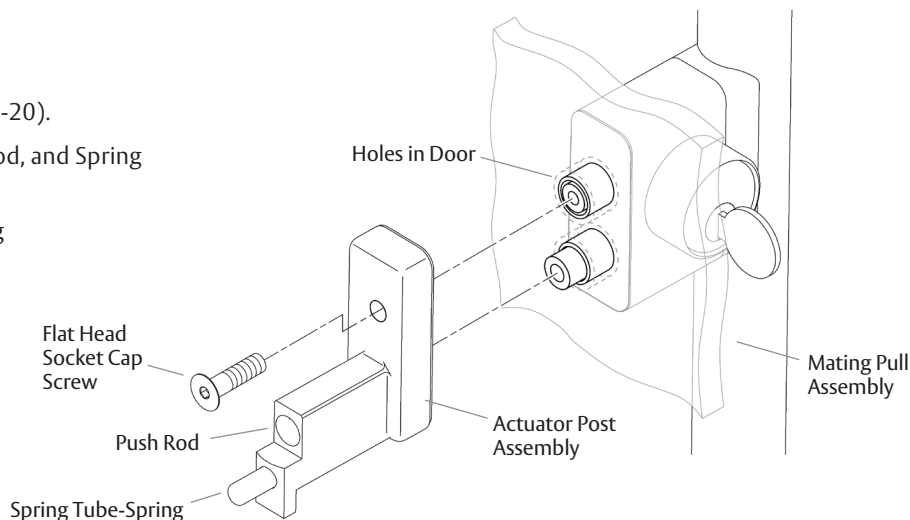
- Remove  $\frac{1}{4}$ "-20 Set Screws on Interior Pivot Bracket Post.
- Unscrew and remove Conehead Union ( $\frac{5}{16}$ "-18).
- Remove Metal Washer, Alignment Bushing and Spacer.



## 2.1.6 Remove Actuator Post Assembly

- Remove the Flat Head Socket Cap Screw ( $\frac{1}{4}$ "-20).
- Remove the Actuator Post Assembly, Push Rod, and Spring Tube-Spring from the Shipping Board.
- Hold the Mating Pull in place while removing the Actuator Post Assembly.
- Remove the Mating Pull from the Shipping Board.
- Remove the Door Bushing.

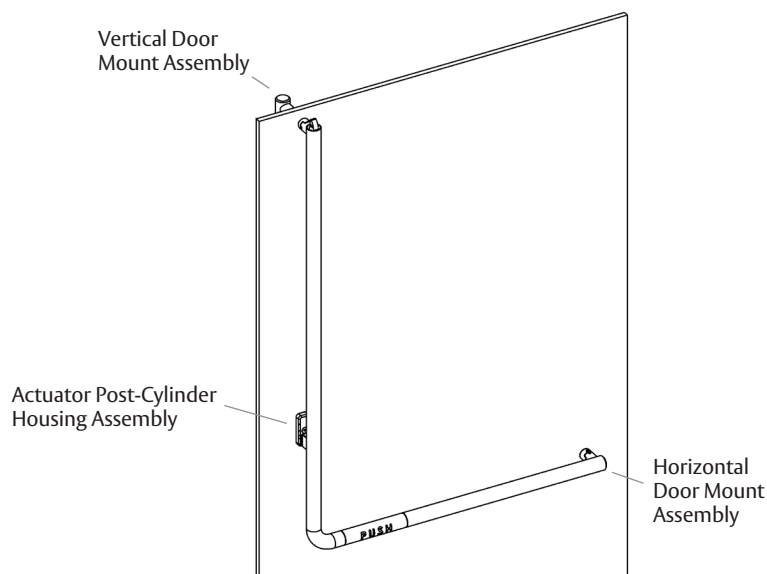
CAUTION: Make sure to contain the Spring inside the Spring Tube-Spring.



## 2.2 Panic Device Installation

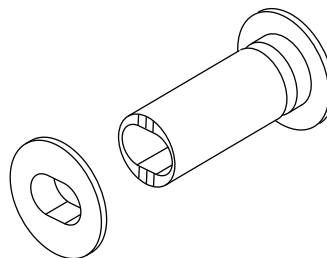
### 2.2.1 Install Panic Device on Door

- Lay the door flat with the exterior side facing down on a pair of saw horses.



### 2.2.2 Install Alignment Bushing and Spacer

- You can adjust the Alignment Bushing and Spacer by rotating it.
- Make the necessary adjustment to get equal spacing between the sides of the Actuator Post Assembly and the tube opening.

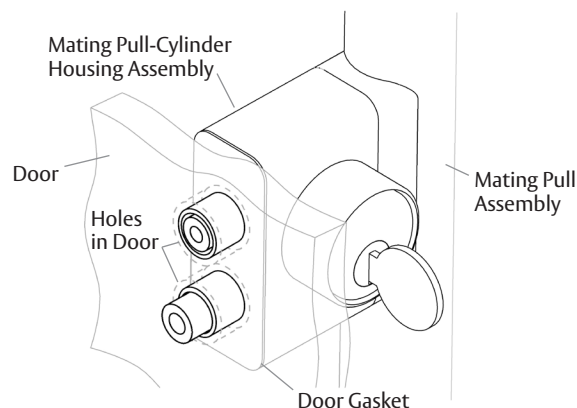


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### 2.2.3 Install Mating Pull

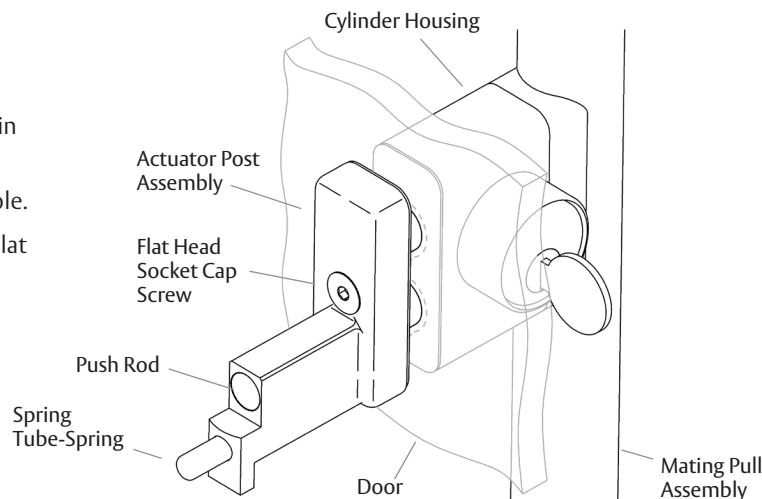
- Place the Mating Pull Assembly on the Door.
- Install the Mating Pull-Cylinder Housing Assembly with the Door Gasket through the holes in the Door.
- Make sure that the posts that are sticking out from the Mating Pull-Cylinder Housing Assembly go through the holes in the door.



### 2.2.4 Install Actuator Post Assembly

- Install the Actuator Post Assembly on top of the opening in the Door to attach to the Cylinder Housing.
- Make sure that the Push Rod goes through the bottom hole.
- Apply a small drop of Threadlocker to the threads of the Flat Head Socket Cap Screw ( $\frac{1}{4}$ "-20).
- Install the Flat Head Socket Cap Screw ( $\frac{1}{4}$ "-20) and secure until tight.

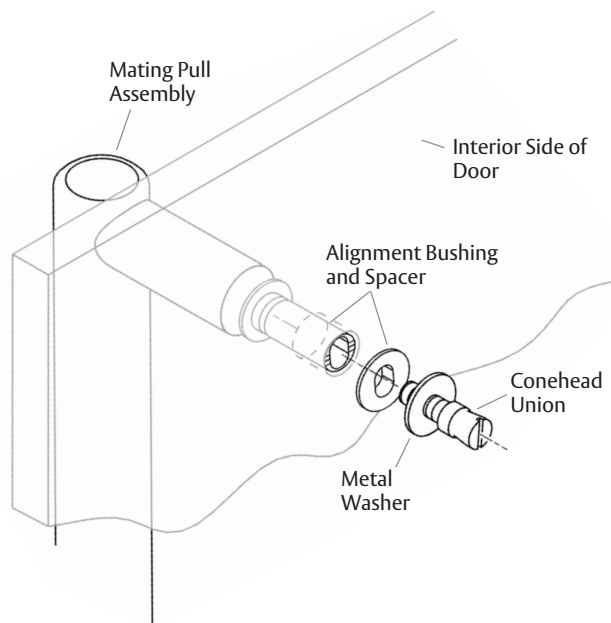
**CAUTION:** Make sure that the Spring Tube-Spring and the Push Rod are inserted into the Actuator Post Assembly.



### 2.2.5 Install Vertical Door Mount

- Place one side of Alignment Bushing and Spacer in the hole of the door.
- When placing the other side of the Alignment Bushing in the hole of the door, orient the pin and push into other side of spacer.
- Position the Mating Pull Assembly against the exterior side of the Door.
- Apply a small drop of Threadlocker to the threads of the Stud ( $\frac{5}{16}$ "-18).
- Slide the Metal Washer onto the Stud ( $\frac{5}{16}$ "-18) until it sits against the Conehead Union ( $\frac{5}{16}$ "-18) on the interior side of the Door.
- Slide the Conehead Union ( $\frac{5}{16}$ "-18) with the Metal Washer through the Alignment Bushing in the hole in the Door.
- Screw the Conehead Union ( $\frac{5}{16}$ "-18) and the Stud ( $\frac{5}{16}$ "-18) into the Mating Pull Assembly Post until tight.

**CAUTION:** Depending on weatherstripping, extra metal washers provided may be required.

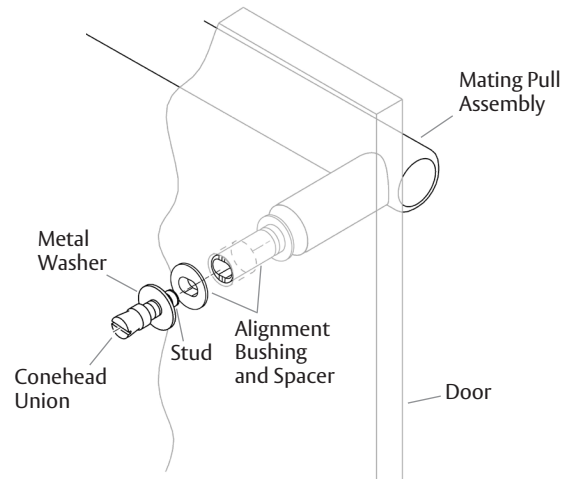


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## 2.2.6 Install Horizontal Door Mount

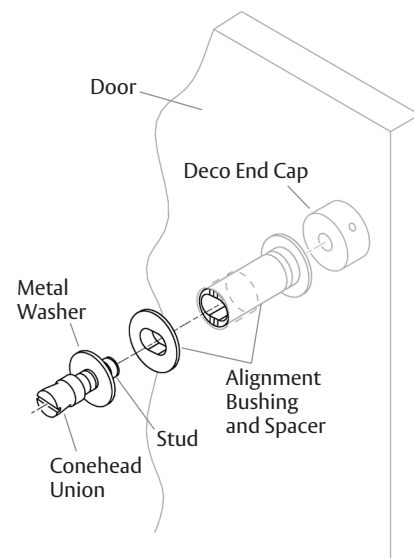
- Place one side of Alignment Bushing and Spacer in the hole of the door.
- When placing the other side of the Alignment Bushing in the hole of the door, orient the pin and push into other side of spacer.
- Position the Mating Pull Assembly against the exterior side of the Door.
- Apply a small drop of Threadlocker to the threads of the Stud ( $\frac{5}{16}$ "-18).
- Slide the Metal Washer onto the Stud ( $\frac{5}{16}$ "-18) until it sits against the Conehead Union ( $\frac{5}{16}$ "-18) on the interior side of the Door.
- Slide the Conehead Union ( $\frac{5}{16}$ "-18) with the Metal Washer through the Alignment Bushing in the hole in the Door.
- Screw the Conehead Union ( $\frac{5}{16}$ "-18) and the Stud ( $\frac{5}{16}$ "-18) into the Mating Pull Assembly Post until tight.



CAUTION: Depending on weatherstripping, extra metal washers provided may be required.

## 2.2.7 Install Horizontal Door Mount (Deco End Cap Option)

- Place one side of Alignment Bushing and Spacer in the hole of the door.
- When placing the other side of the Alignment Bushing in the hole of the door, orient the pin and push into other side of spacer.
- Apply a small drop of Threadlocker to the threads of the Stud ( $\frac{5}{16}$ "-18).
- Insert the Stud ( $\frac{5}{16}$ "-18) into the Deco End Cap.
- Slide the Stud ( $\frac{5}{16}$ "-18) with the Deco End Cap through the Alignment Bushing in the hole in the Door on the exterior side of the door.
- Place the Metal Washer onto the Stud ( $\frac{5}{16}$ "-18) on the interior side of the Door.
- Apply a small drop of Threadlocker to the threads of the Stud ( $\frac{5}{16}$ "-18).
- Screw the Conehead Union ( $\frac{5}{16}$ "-18) onto the Stud ( $\frac{5}{16}$ "-18) on the interior side of the Door.



CAUTION: Depending on weatherstripping, extra metal washers provided may be required.

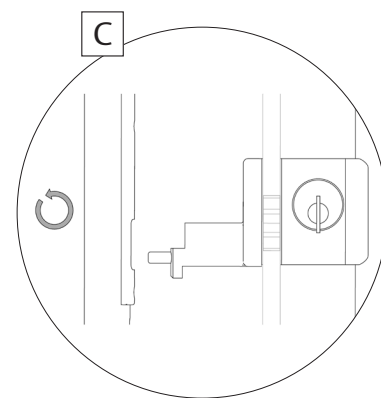
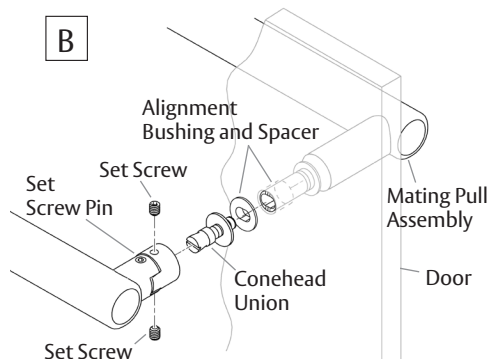
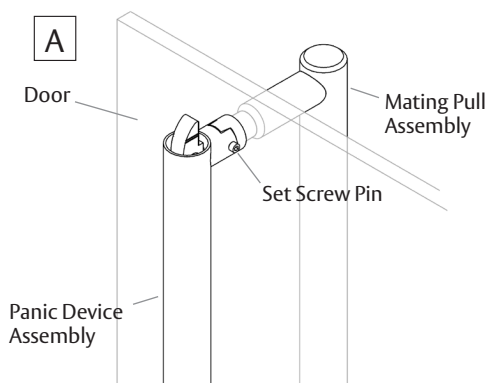
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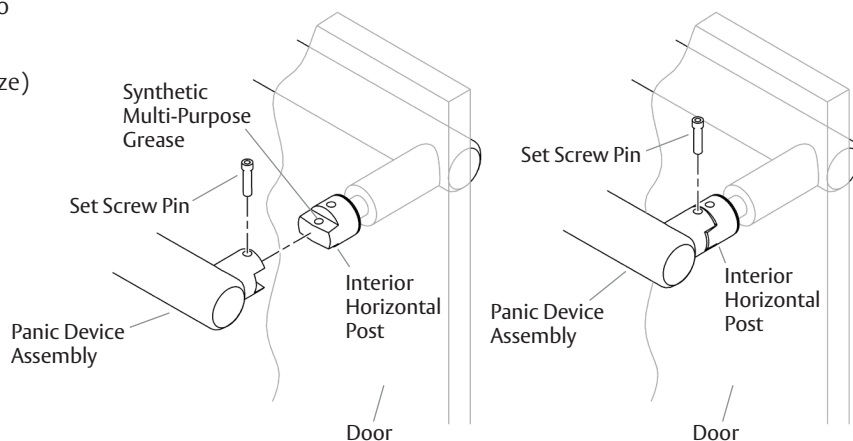
## 2.2.8 Install Panic Device on Door

- Use the tilt method to install the Panic Device Assembly on the Door.
- Attach the Panic Device Assembly to the Conehead Union ( $\frac{5}{16}$ "-18).
- Apply a small drop of Threadlocker to the threads of the Set Screws ( $\frac{1}{4}$ "-20).
- Install the Set Screws ( $\frac{1}{4}$ "-20) and secure until tight.



## 2.2.9 Horizontal End Threadlocker and Lube Application

- Remove the Set Screw Pin and move the Panic Device Assembly to the side to allow access to the Interior Horizontal Post hole.
- Apply Synthetic Multi-Purpose Grease (pea size) to the inside of the hole of the Interior Horizontal Post.
- Install the Panic Device Assembly Handle back on the Panic Device Assembly.
- Apply a small drop of Threadlocker to the threads of the Set Screw Pin.
- Install the Set Screw Pin.

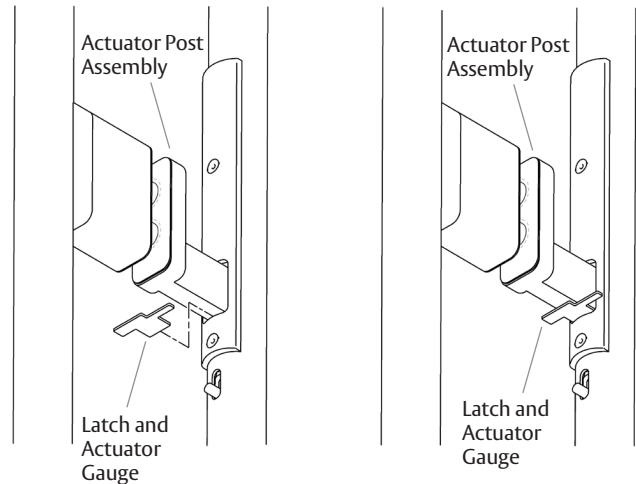


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### 2.2.10 Align Actuator Gauge

- Install the Latch and Actuator Gauge in the bottom of the Actuator Post Assembly.
- If the Latch and Actuator Gauge cannot be installed, the alignment must be adjusted.
- Realign the Panic Device Assembly as necessary. Refer to Section 2.2.2, Install Alignment Bushing and Spacer.
- Do not operate the Panic Device if the Latch and Actuator Gauge does not fit.



## 3. Latch / Door Stop Adjustment / Cylinder Recommendations

### 3.1 Installation and Adjustment of Door Stop-Strike

#### INSTALLATION

- Attach the strike to the header using the Socket Cap Screws (5/16"-18).
- Close the door. The door should come to rest on the rubber stop pads.
- There should be approximately 1/16" play between the latch face and the strike face.
- The retractable latch should automatically move upward and engage in the strike.
- If the retractable latch does not engage in the strike, move the door stops in.
- If the retractable latch is loose inside the strike (door is rattling), move the door stops out.
- Tighten 8-32 screws to lock down adjustment door stops.

#### ADJUSTMENT

- To adjust the stop, loosen the 8-32 set screws and remove the rubber end pieces.
- Use an Allen Wrench (1/4") to rotate in or out as needed.

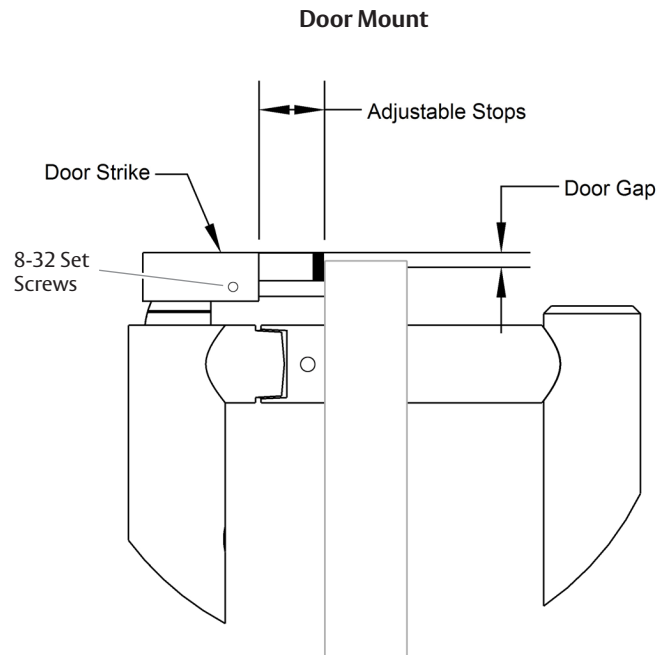


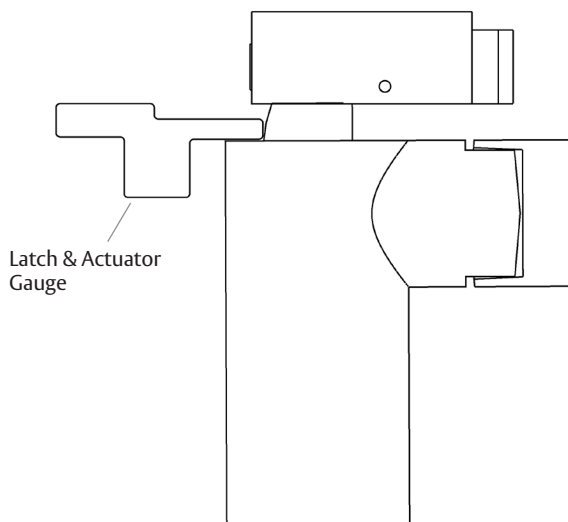
Figure 3-1

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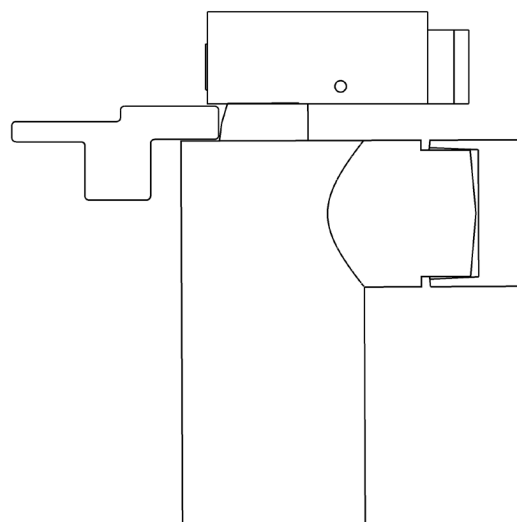
### 3.1 Installation and Adjustment of Door Stop-Strike (Continued)

#### USING THE LATCH AND ACTUATOR GAUGE



**Figure 3-2**

If small side of Gauge does not fit, remove any shims added or adjust door to make gap larger.



**Figure 3-3**

If large side of Gauge does fit, add provided shims to bring strike closer to tube.

## 3.2 Latch Adjustment for Proper Engagement with the Strike

- The Latch can be adjusted up and down. Figures 3-5 and 3-6 show the maximum and the minimum dimensions for the Strike location.
- Remove the Flat Head Screw (6-32) at the top of the Panic Device Assembly Handle with a  $\frac{5}{64}$ " Hex Tool.
- Rotate the Latch a full 360 degrees turn in the left or right direction to get the height adjustment required. Turn in the counter clockwise direction to increase the height. Turn in the clockwise direction to decrease the height.
- Make sure that both of the holes are aligned.
- Apply Threadlocker to the screw before it is replaced.
- After the height adjustment is made, replace the Flat Head Screw (6-32).
- CAUTION: If the screw is not replaced, the latch may rotate. This may cause the Latch to disengage.
- CAUTION: Do not remove the Pan Head Machine Screw (4-40).

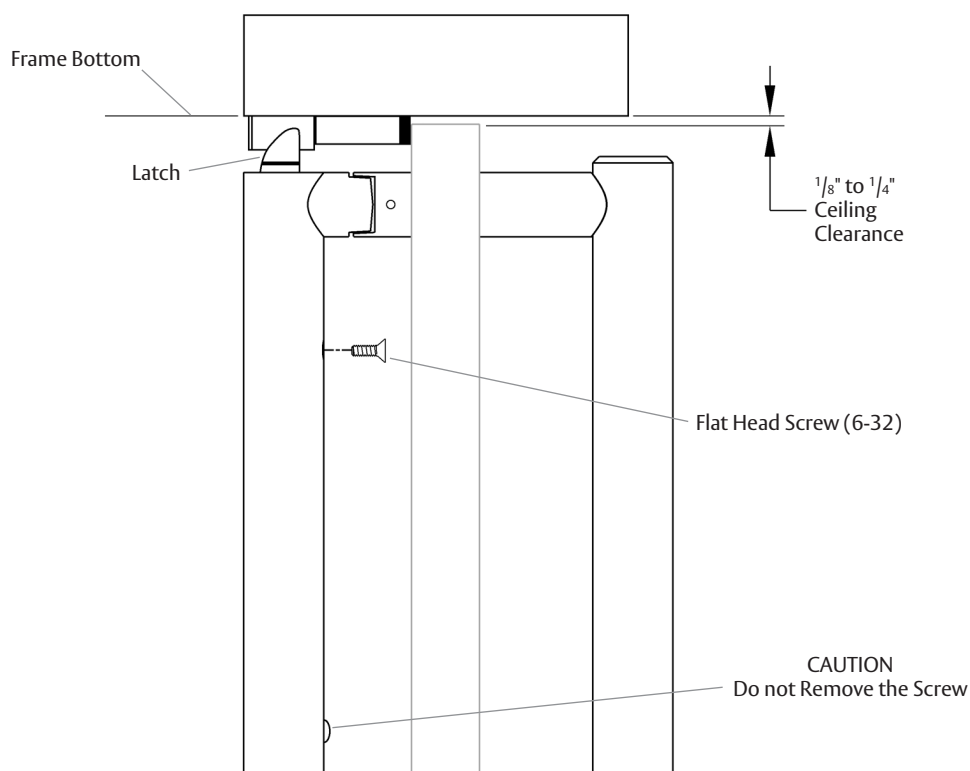


Figure 3-4

### 3.2 Latch Adjustment for Proper Engagement with the Strike (Continued)

- Figure 3-5 is for the maximum height from the top of the Tube to the bottom of the Strike.
- Figure 3-6 is for the minimum height from the top of the Tube to the bottom of the Strike.
- One turn of the Latch equals approximately 0.042 inches.

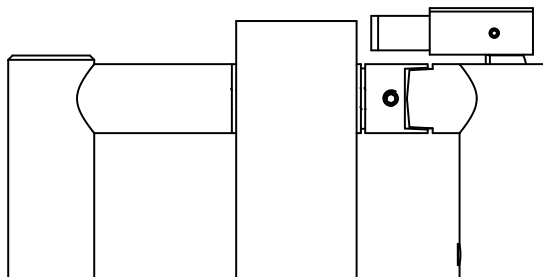


Figure 3-5

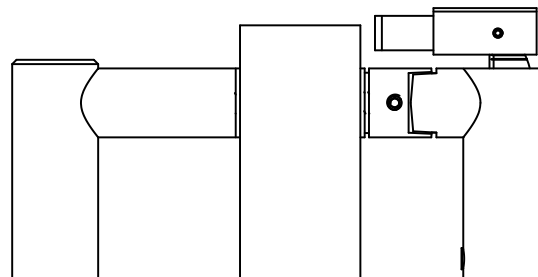


Figure 3-6

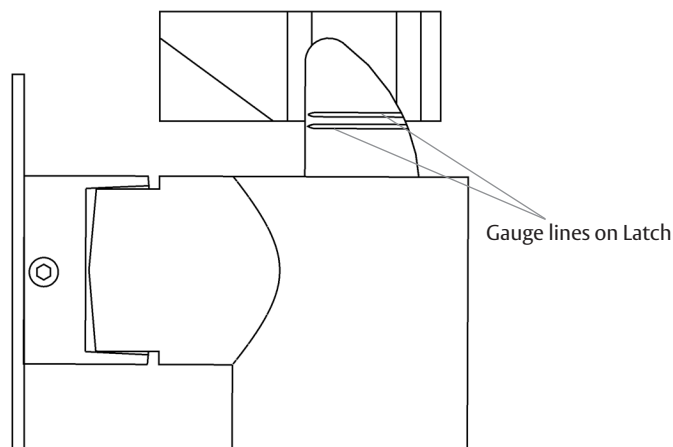


Figure 3-7

### 3.3 Cylinder Recommendations

Total Length	Cylinder Ring Used
1 1/8"	CUSTOM
1 1/4"	PD1212
1 3/8"	PD1335
1 1/2"	CUSTOM

Company	Product #S	Compatible Cam
YALE (Standard)	K660, 2153, 1108	2160, 1161
SARGENT	41 thru 44	#112
CORBIN RUSSWIN	10 Series	A04, A62
SCHLAGE	20, 26, 80, 91 (conventional, SFIC, FSIC)	K510, L583, B502, BS20
ASSA	9851-4; 8851-4; E6551-4; 6551-4; 6151-4; L651-4; 651-4	#5, #7, #10
STANLEY/BEST	1E Series	C128, C129, C136, C208

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## 4. Cleaning and Maintenance

### 4.1 General Maintenance Instructions

- Periodically check the fasteners. The fasteners must not be loose. If the fasteners are loose, reapply threadlocker and tighten as necessary.

### 4.2 Finish Cleaning Instructions

- CAUTION:** Before you clean the entire Panic Device Assembly, clean a small test area to make sure that you are satisfied with the results.
- Frequent cleaning extends the life of all finishes.

Finish Code	Finish	Cleaning Instructions
US32	Polished Stainless Steel	Use a soft cloth and a good metal cleaner. We recommend Mr. Metal by S.C. Johnson Company.
US32D	Satin Stainless Steel	Use a soft cloth and a good metal cleaner. We recommend Mr. Metal by S.C. Johnson Company.
US32DMS	Satin MicroShield Coated	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
US32MS	Polished MicroShield Coated	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
10BE	Oxidized & Oiled Bronze Powder Coat Equivalent	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
BSP	Black Suede Powder Coat	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
WSP	White Suede Powder Coat	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
RPC	Red Powder Coat	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
WPC	White Powder Coat	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
BPC	Black Powder Coat	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
FBPC	Flat Black Powder Coat	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
CUSTOM PC	Custom Powder Coat	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.
314E	Powder Coat Equivalent of 314 Extra Dark Bronze Anodized	Use a soft cloth and mild soap and water. Never use brass polish or an abrasive cleaner unless you intend to remove all clear coat and totally refinish the product.

### 4.3 Mechanical Maintenance

- CAUTION: Make sure the following maintenance steps are completed before operating the Panic Device.
- Refer to the appropriate sections of this Panic Device manual for Threadlocker and Lube applications and their locations.

Threadlocker is applied to the following parts

Part Description	Configuration
Set Screw Pins ( $\frac{1}{4}$ "-20)	All
2x Cup Point Set Screw ( $\frac{1}{4}$ "-20 x $\frac{5}{16}$ ") for Post Base Section	All
Deco End Cap (threads)	All
FHSCS ( $\frac{1}{4}$ "-20) for Actuator Post	All
FHSCS (6-32) for Latch Assembly	All
2x SHCS ( $\frac{5}{16}$ "-18) for Manual Strike	All Single Manual Strike
3x SHCS ( $\frac{5}{16}$ "-18) for Double Manual Strike	All Double Manual Strike
2x SHCS ( $\frac{5}{16}$ "-18) for Electric Strike	All Single Electric Strike
4x SHCS ( $\frac{5}{16}$ "-18) for Double Electric Strike	All Double Electric Strike

Lubricant is applied to the following parts

Part Description	Configuration
Post Base Section	All
Latch	All

Torque Values for different Thread Types

Thread Type	Torque Requirement - in-lbs (N-m)
6-32	9.6 in-lb (1 N-m)
8-32	19.8 in-lb (2.5 N-m)
12-24	55 in-lb (6 N-m)
$\frac{1}{4}$ -20	75.2 in-lb (9 N-m)
$\frac{5}{16}$ -18	132 in-lb (16 N-m)

- Periodically, re-lubricate the above components of the device.

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