

# INSTALLATION INSTRUCTIONS SMU9000

Effective date: December 16, 2025

Supercedes: All Previous

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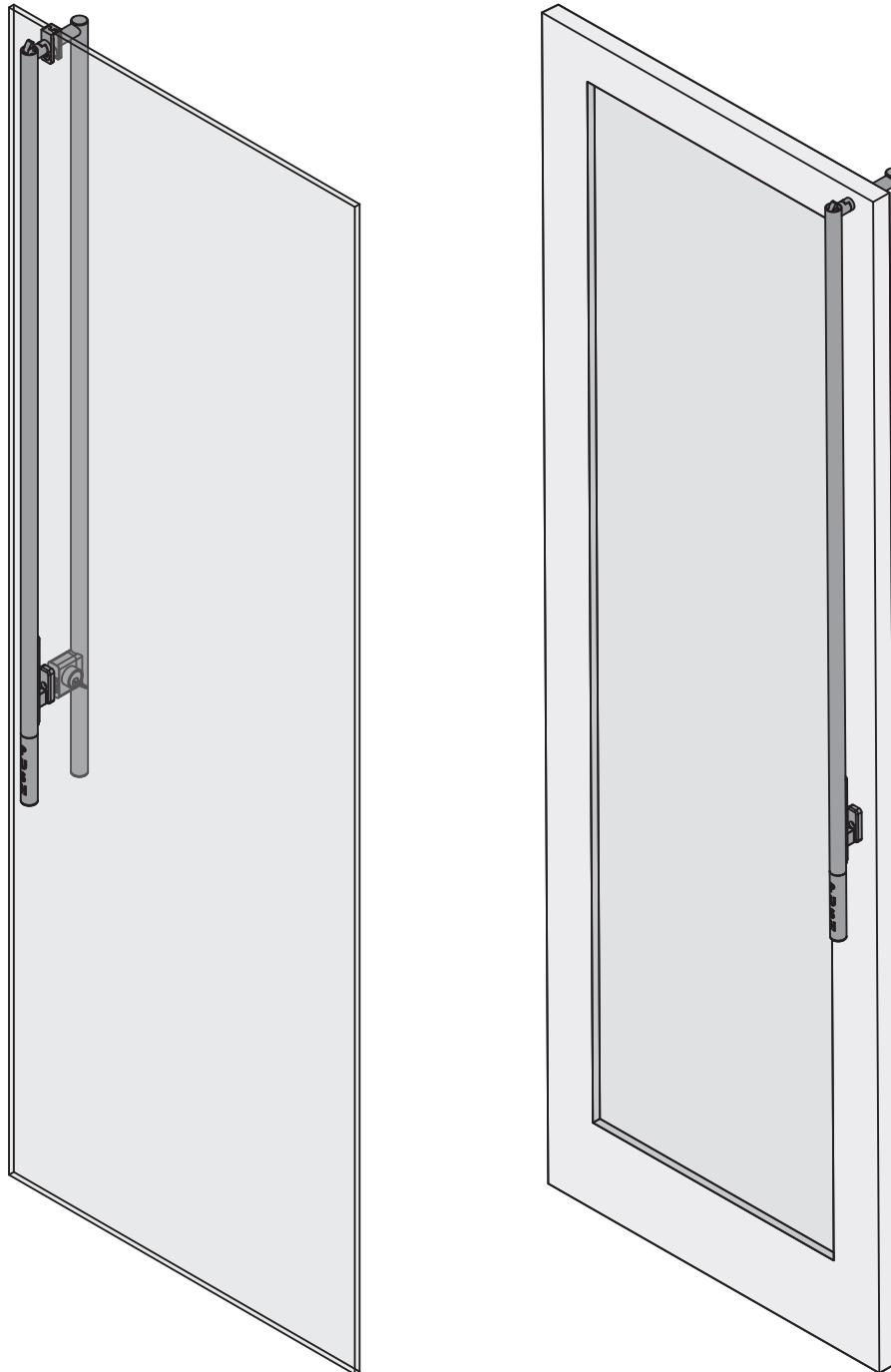
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## ROCKWOOD SMU9000 SINGLE MOTION DEVICE

### **IMPORTANT: PLEASE READ BEFORE INSTALLING THE SMU9000**

The following instructions will decrease your chances of experiencing problems during the installation and ensure a smooth, trouble-free operation of the SMU9000.



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# 1. Introduction

## 1.1 Description

- The SMU9000 installs the same on the following door types: Storefront, Wood, Glass and Metal.
- The framing conditions are different for Hollow Metal Frames.
- Hollow Metal Frame Requirements:
  - Stop Height:  $5/8$ " This will shift the top of the single motion 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 for Storefront, Wood and Metal can be found on [rockwoodmfg.com](http://rockwoodmfg.com), [Library](#) > [Product Documentation](#) > [Templates](#) > [Strikes](#). Strike templates can be found on [assaabloyglass.us](http://assaabloyglass.us), [Library](#) > [Product Documentation](#) > [Templates](#).
- If you have questions, please contact us at (800)458-2424.

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## 1.2 Tools and Supplies

- The tools and supplies listed below are necessary to complete the installation of the SMU9000.

### Tools

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

### 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 SMU9000 Assembly vertical tube, directly under the Actuator Post Assembly.
- Engage the device and slide the Dog Button to the up position.
- The SMU9000 Device Assembly is dogged when the Dog Button is in the up position. Refer to Figure 1-1.
- The SMU9000 Device Assembly is un-dogged when the Dog Button is in the down position. Refer to Figure 1-2.

Figure 1-1  
Dogged Position

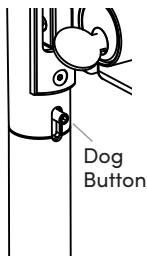


Figure 1-2  
Un-dogged Position

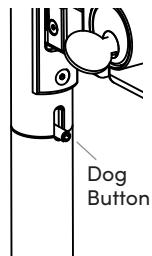


Figure 1-3  
Dogged Position

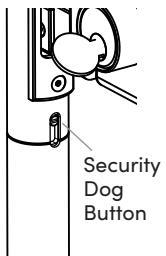
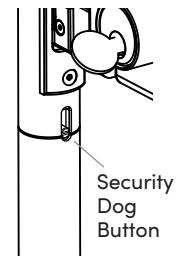


Figure 1-4  
Un-dogged Position

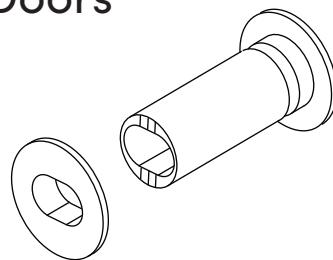


Note: For security dogging use flat head screwdriver to slide dog button into position. Refer to Figure 1-3 and 1-4.

## 2 Instructions for Storefront, Wood and Metal Doors

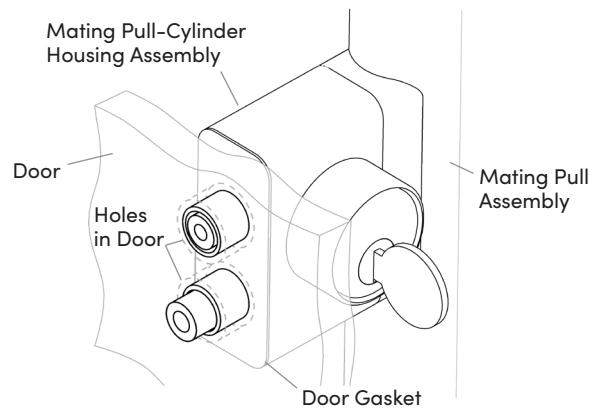
### 2.1 Install Alignment Bushing and Spacer

- 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.



### 2.2 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.



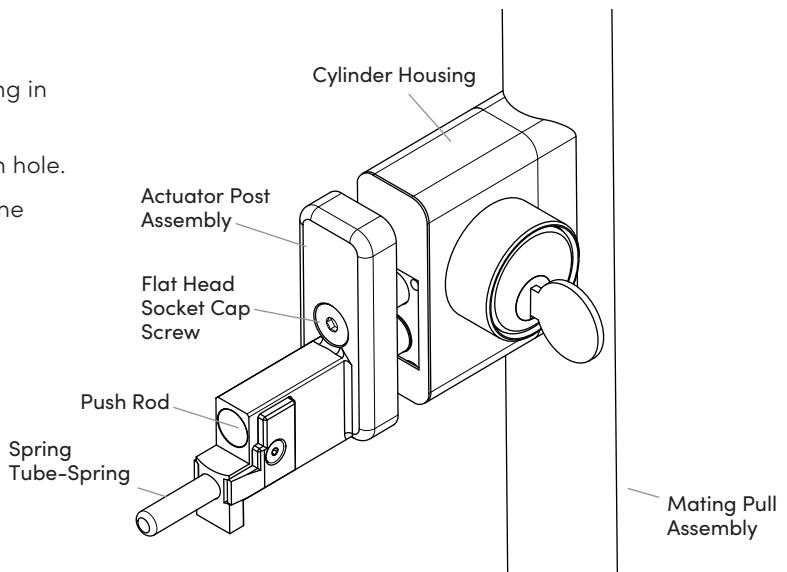
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## 2.3 Install Actuator Post Assembly

- 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 (1/4"-20).
- Install the Flat Head Socket Cap Screw (1/4"-20) and secure until tight.

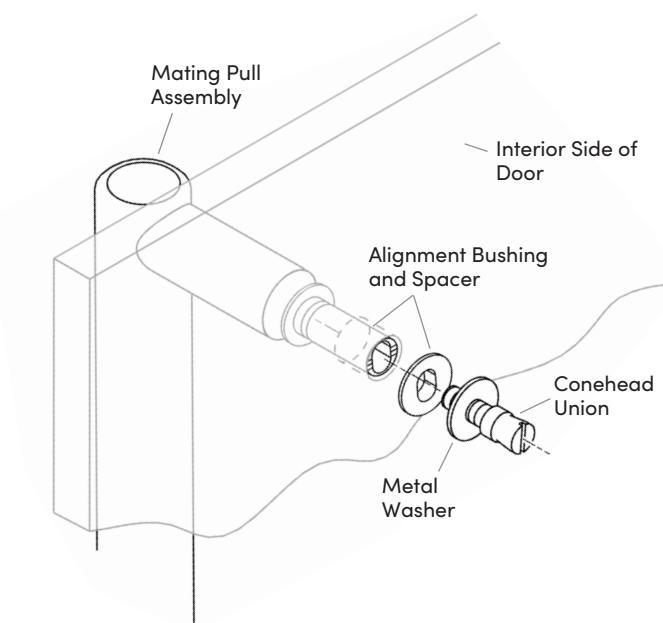
CAUTION: Make sure that the Spring Tube-Spring and the Push Rod are inserted into the Actuator Post Assembly.



## 2.4 Install Vertical Door Mount

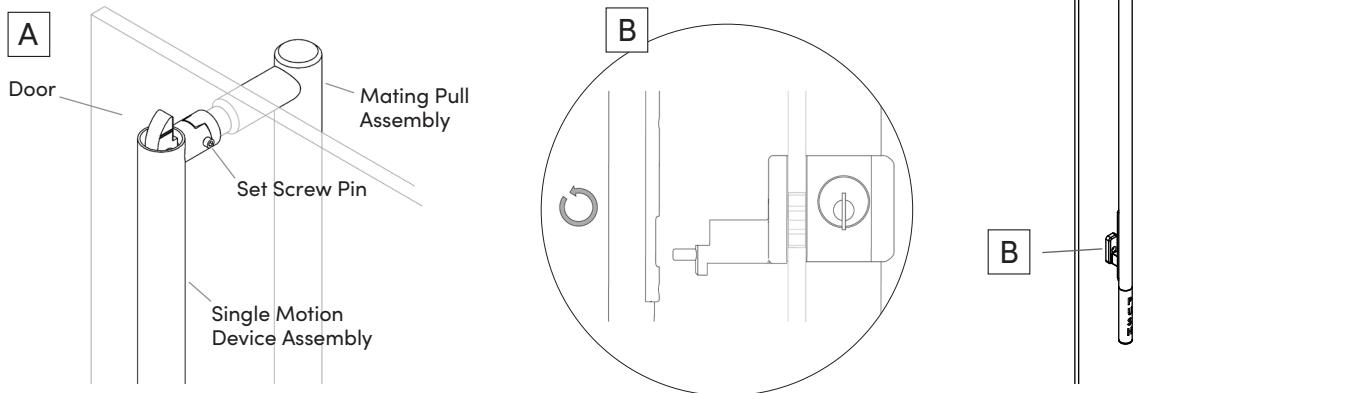
- Place one side of Alignment Bushing and Spacer in the hole of the door.
- When placing the other side of the Alignment Bushing in the hole of the door, orient the pin and push into other side of spacer.
- Position the Mating Pull Assembly against the exterior side of the Door.
- Apply a small drop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

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



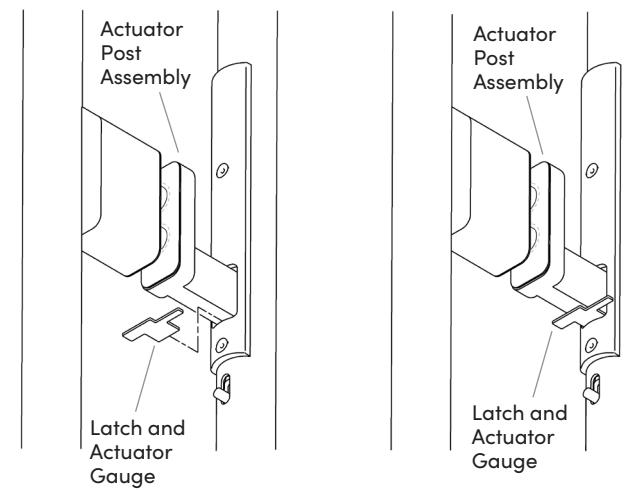
## 2.5 Install Single Motion Device on Door

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



## 2.6 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 Single Motion Device as necessary. Refer to Section 2.1, Install Alignment Bushing and Spacer.
- Do not operate the Single Motion Device if the Latch and Actuator Gauge does not fit.



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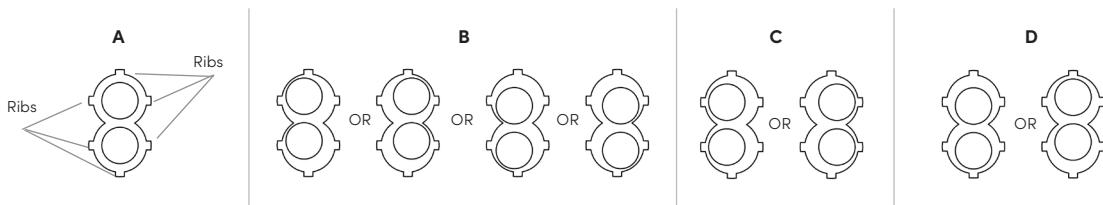
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### 3 Instructions for Glass Doors

#### 3.1 Instructions for Rail Mounted Glass Doors

##### 3.1.1 Install Door Bushings

- There are four Door Bushings in each package.
- Below are the different configurations of the Door Bushings.
- Choose the Door Bushings configuration that best fits your Single Motion Assembly Installation and centers the actuator post in the tube opening.
- Each Door Bushing contains 6 ribs.
- Removal of the rib material may be necessary to ensure a proper fit.



##### 3.1.2 Install Alignment Bushing

- You can adjust the Alignment Bushing by rotating it 360 degrees.
- Make the necessary adjustment to get equal spacing between the sides of the Actuator Post Assembly and the tube opening.
- If there is friction against the right side, adjust the opening of the Alignment Bushing to the right. Refer to Figure B1.
- If there is friction against the left side, adjust the opening of the Alignment Bushing to the left. Refer to Figure B2.

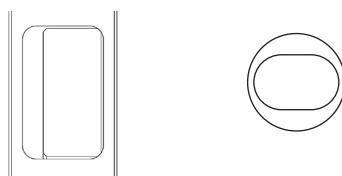


Figure B1

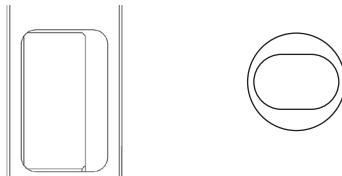
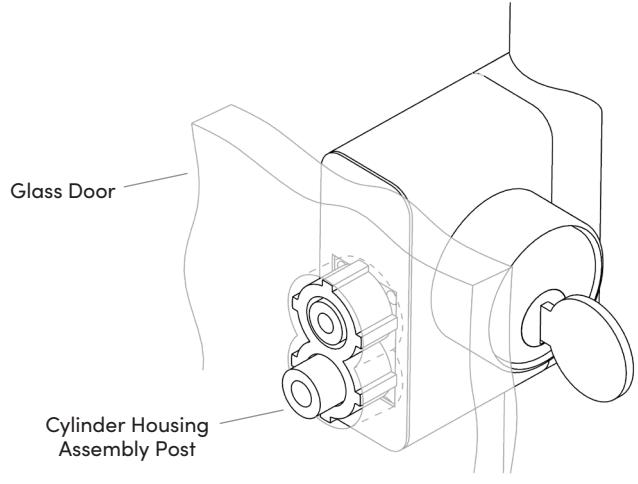


Figure B2

### 3.1.3 Install Mating Pull

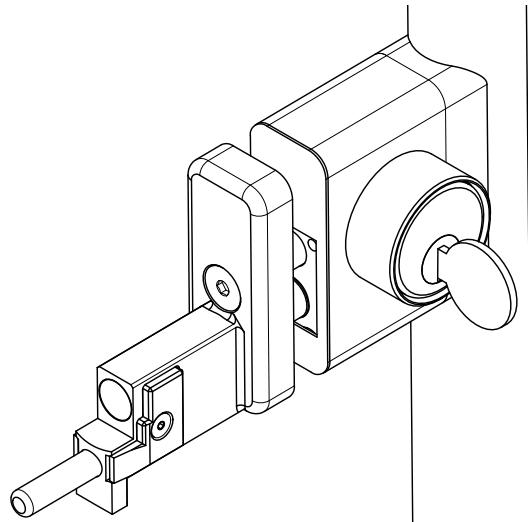
- Place the Mating Pull Assembly on the Door.
- Install the Mating Pull-Cylinder Housing Assembly with the Door Gasket through the holes in the Glass Door.
- Make sure that the posts that are sticking out from the Mating Pull Cylinder Housing Assembly go through the Door Bushing.



### 3.1.4 Install Actuator Post Assembly

- Install the Actuator Post Assembly on top of the opening in the Glass 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 (1/4"-20).
- Install the Flat Head Socket Cap Screw (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.

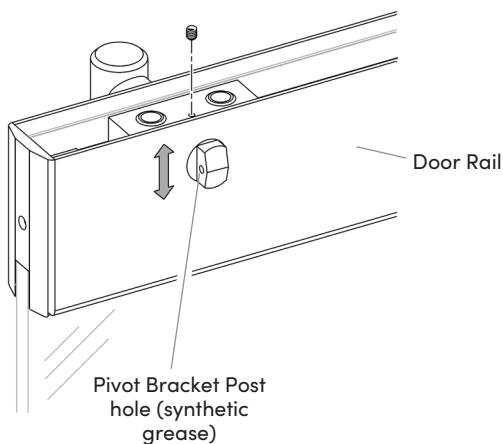
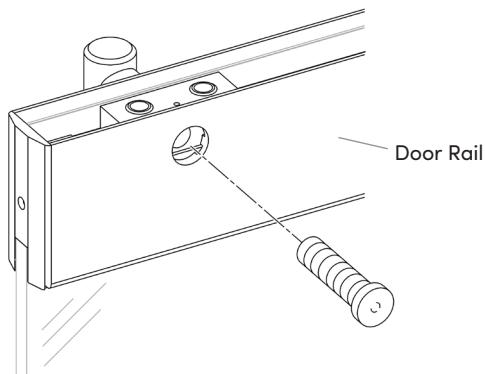


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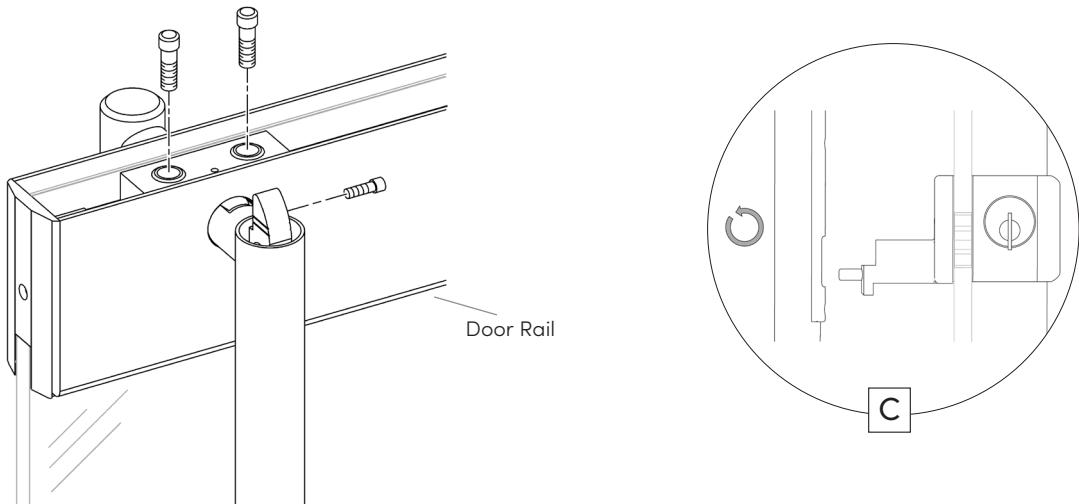
### 3.1.5 Install Vertical Mount

- Position the Adapter Block on the inside of the Door Rail.
- Install the Mating Pull Assembly through the Door Rail and up against the Adaptor Block.
- Apply a small drop of Threadlocker to the threads of the Socket Cap Screw (5/16"-18).
- Attach the Adaptor Block to the Mating Pull Assembly with the Socket Cap Screw (5/16"-18).
- Install the Interior Pivot Bracket Post on the Adaptor Block. Make sure that the Interior Pivot Bracket Post is vertical after it is installed.
- Adjust the Adapter Block Posts until the Interior Pivot Bracket Post is centered vertically.
- Align the Interior Pivot Bracket Post until the slot can be seen on the threads of the post. This is where the Set Screw (8-32) will install.
- Make sure to align the hole on the Door Rail with the hole on the Adapter Block.
- Apply a small drop of Threadlocker to the threads of the Set Screw (8-32).
- Install the Set Screw (8-32).
- Apply Synthetic Grease to the inside of the hole of the Interior Pivot Bracket Post.



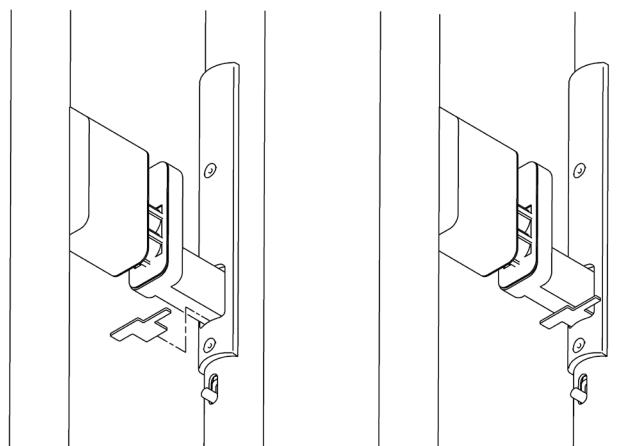
### 3.1.6 Install Single Motion Device on Rail Mount Door

- Push the Adaptor Block forward to expose the Interior Pivot Bracket Post.
- Use the tilt method to install the Single Motion Device Assembly.
- Install the Single Motion Device Assembly on the Interior Pivot Bracket Post that is attached to the Adaptor Block.
- Apply a small drop of Threadlocker to the threads of the Set Screw Pin (1/4"-20).
- Install the Set Screw Pin (1/4"-20).
- Align the Adaptor Block with threaded holes (5/16"-18) inside of the Door Rail.
- Apply a small drop of Threadlocker to the threads of the Socket Cap Screws (5/16"-18).
- Install the Socket Cap Screws (5/16"-18) and secure until tight.
- Apply a small drop of Threadlocker to the threads of the Set Screws (1/4"-20).
- Tighten down both Set Screws (1/4"-20).



### 3.1.7 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 Single Motion Assembly as necessary. Refer to Section 3.1.1 Install Door Bushings.
- Do not operate the Single Motion Device if the Latch and Actuator Gauge does not fit.



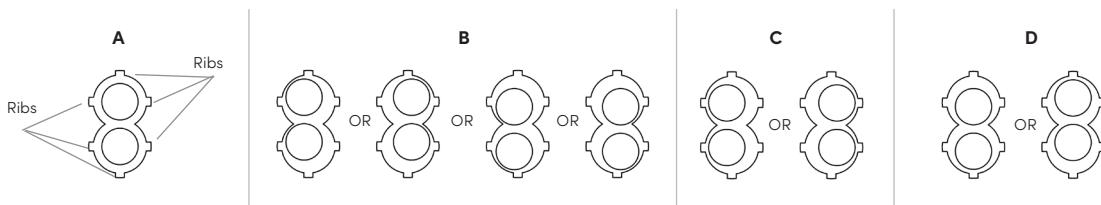
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## 3.2 Installation on All Glass Doors

### 3.2.1 Install Door Bushings

- There are four Door Bushings in each package.
- Below are the different configurations of the Door Bushings.
- Choose the Door Bushings configuration that best fits your Single Motion Assembly Installation and centers the actuator post in the tube opening.
- Each Door Bushing contains 6 ribs.
- Removal of the rib material may be necessary to ensure a proper fit.



### 3.2.2 Install Alignment Bushing

- You can adjust the Alignment Bushing by rotating it 360 degrees.
- Make the necessary adjustment to get equal spacing between the sides of the Actuator Post Assembly and the tube opening.
- If there is friction against the right side, adjust the opening of the Alignment Bushing to the right. Refer to Figure B1.
- If there is friction against the left side, adjust the opening of the Alignment Bushing to the left. Refer to Figure B2.

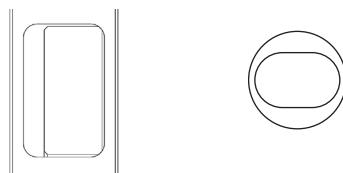


Figure B1

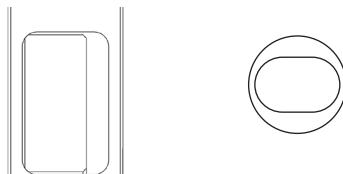
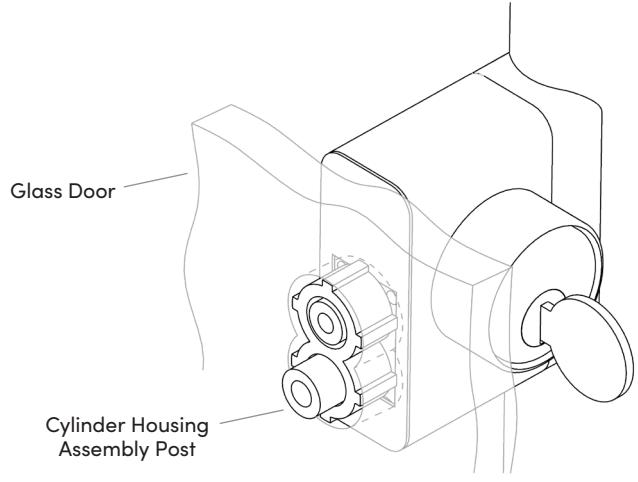


Figure B2

### 3.2.3 Install Mating Pull

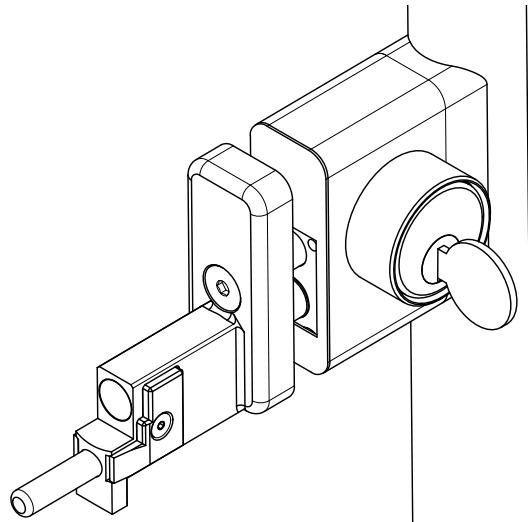
- Place the Mating Pull Assembly on the Door.
- Install the Mating Pull-Cylinder Housing Assembly with the Door Gasket through the holes in the Glass Door.
- Make sure that the posts that are sticking out from the Mating Pull Cylinder Housing Assembly go through the Door Bushing.



### 3.2.4 Install Actuator Post Assembly

- Install the Actuator Post Assembly on top of the opening in the Glass 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 (1/4"-20).
- Install the Flat Head Socket Cap Screw (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.

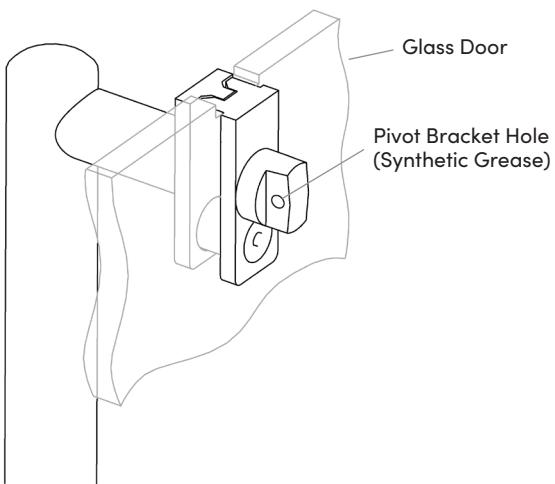
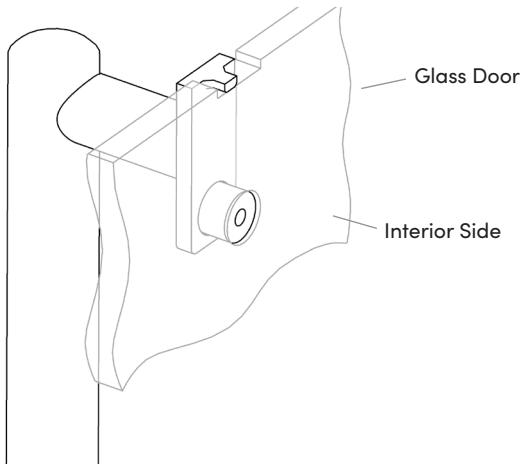


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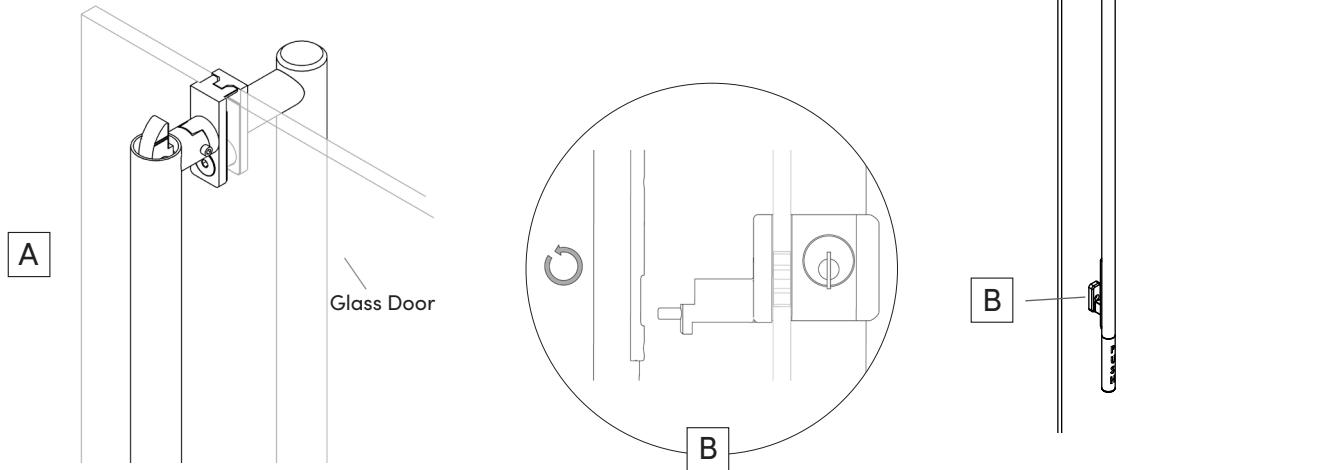
### 3.2.5 Install Vertical Door Mount

- Hold the Mating Pull Assembly on the exterior side of the Glass Door.
- Install the Interior Pivot Bracket Assembly so that it aligns with the Exterior Pivot Bracket Assembly.
- Apply a small drop of Threadlocker to the threads of the Flat Head Socket Screw ( $5/16$ "-18).
- Attach the Interior Pivot Bracket Assembly to the Exterior Pivot Bracket Assembly with the Flat Head Socket Screw ( $5/16$ "-18).
- Apply Synthetic Grease to the inside of the hole of the Interior Pivot Bracket Assembly.



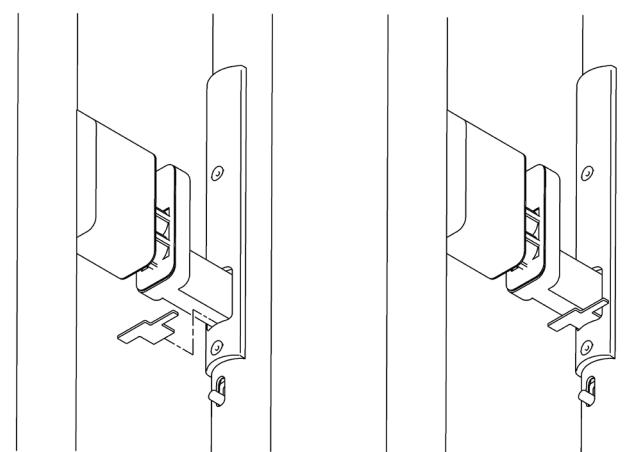
### 3.2.6 Install Single Motion Device on all Glass Door

- Use the tilt method to install the Single Motion Assembly on the Glass Door.
- Apply a small drop of Threadlocker to the threads of the Set Screw Pin (1/4"-20).
- Install the Set Screw Pin (1/4"-20).
- Attach the Single Motion Device Assembly to the Conehead Union (5/16"-18).
- Install the Set Screws (1/4"-20) and secure until tight.



### 3.2.7 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 Single Motion Assembly as necessary. Refer to Section 3.2.1 Install Door Bushings.
- Do not operate the Single Motion Device if the Latch and Actuator Gauge does not fit.



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## 4 Latch / Door Stop Adjustment / Cylinder Recommendations

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

#### Installation

- Attach the strike to the header using the Socket Cap Screws (1/4"-20 or 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.

NOTE: Manual Strike screws located on sides, Electric Strike screws located under coverplate.

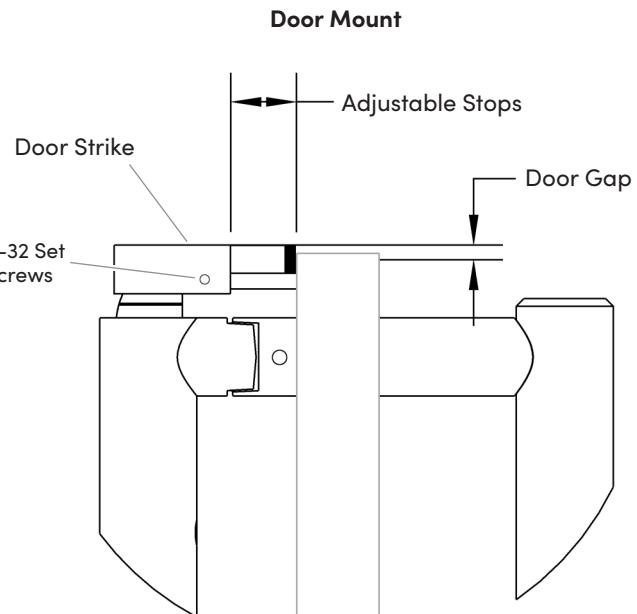


Figure 3-1

#### 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.

#### Using the Latch and Actuator Gauge

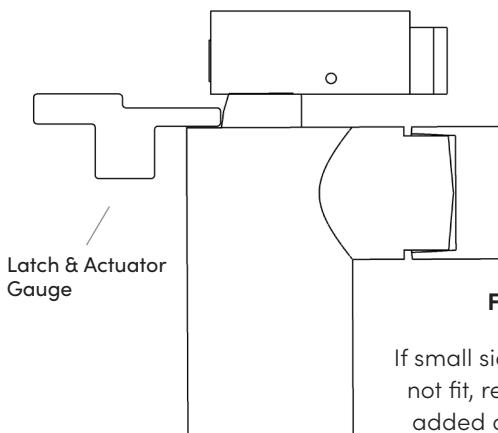


Figure 3-2

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

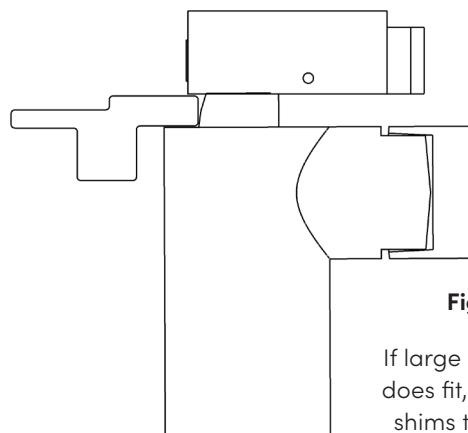


Figure 3-3

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

## 4.2 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 Single Motion Device Assembly Handle with a  $5/64$ " 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).
- Apply Synthetic Grease to the curve portion of the latch.

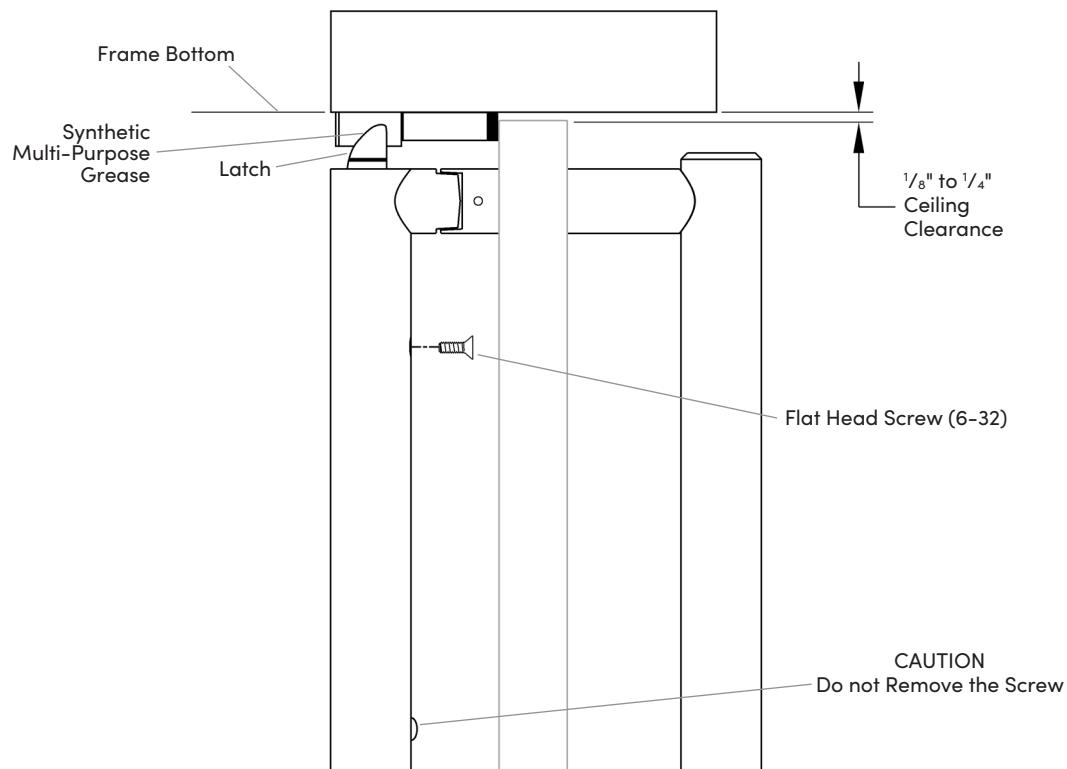


Figure 3-4

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## 4.2 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.

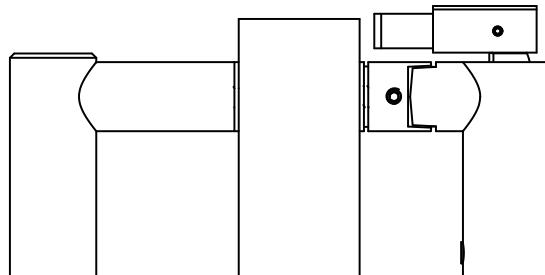


Figure 3-5

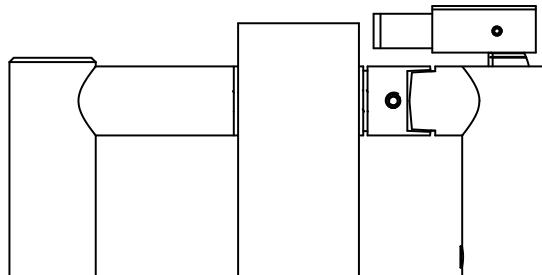


Figure 3-6

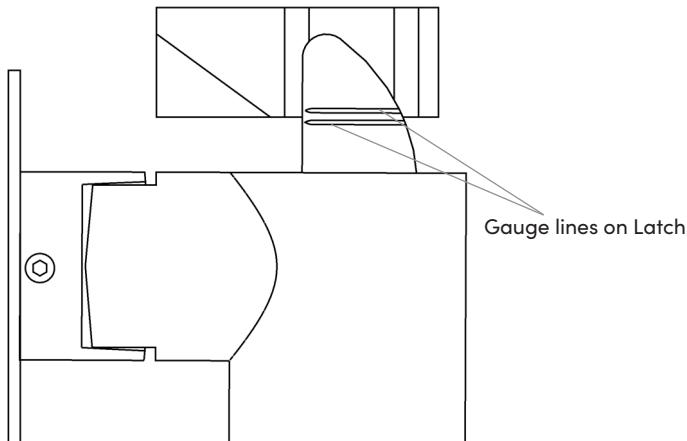


Figure 3-7

## 4.3 Cylinder Recommendations

Total Length	Body w/Cam Length	Cylinder Ring Used
1 1/8"	1"	PD1212
1 1/4"	1 1/8"	PD1212
1 3/8"	1 1/4"	PD1335
1 1/2"	1 3/8"	PD1335
1 5/8"	1 1/2"	PD1370
1 7/8"	1 3/4"	PD1370

Company	Product #'S	Compatible Cam
ACCENTRA (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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# 5 Cleaning and Maintenance

## 5.1 General Maintenance Instructions

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

## 5.2 Finish Cleaning Instructions

- CAUTION: Before you clean the entire Single Motion 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.

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## 5.3 Mechanical Maintenance

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

### Threadlocker is applied to the following parts

Part Description	Configuration
2x SHCS (5/16"-18) for Adaptor Block	Glass with Rails
FHSCS (5/16"-18) for Interior Mounting Bracket	All Glass
Set Screw Pins (1/4"-20)	All
2x Cup Point Set Screw (1/4"-20 x 5/16") for Post Base Section	All
Deco End Cap (threads)	All
FHSCS (1/4"-20) for Actuator Post	All
FHSCS (6-32) for Latch Assembly	All
2x SHCS (5/16"-18) for Manual Strike	All Single Manual Strike
3x SHCS (5/16"-18) for Double Manual Strike	All Double Manual Strike
2x SHCS (1/4"-20 or 5/16"-18) for Electric Strike	All Single Electric Strike
4x SHCS (1/4"-20 or 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
Interior Pivot Bracket	Glass with Rails
Interior Mounting Bracket	All Glass
Latch	All

Note: Synthetic Multi-Purpose Grease should be used.

### 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)
1/4-20	75.2 in-lb (9 N-m)
5/16-18	132 in-lb (16 N-m)

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

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