

# Multi-Point Astragal

## Prehanger Installation Instructions



8817 West Market Street  
Colfax, NC 27235 | 800.334.2006  
www.enduraproducts.com

### Tools Required:

- Endura Router Template (or equivalent)
- Router with 5/8" diameter guide collar
- 1/2" Router Bit
  - Recommended Bit:
    - 1/2" Diameter Straight Flute
    - 1/2" Diameter Shank
    - 2-1/2" Cut Length  
(Amana Bit 45427 or equivalent)
- Phillips Screwdriver
- 1" Spade Drill Bit
- 1/8" Diameter Drill Bit
- Power Driver with #2 Phillips Bit
- Tape Measure
- Pencil
- Clamps (2)

### Kit Includes:

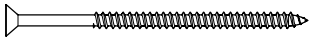
- Full Astragal
- Full Piece of Trim Strip
- Screw Pack
- Keeper Pack
- Field Pack

### NOTES:

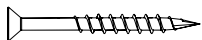
1. Pre-drill pilot holes where indicated.
2. Only tighten screws until flush with mating surfaces.
3. Overtightening of screws may cause improper operation.
4. Minimum handle height for use with this astragal is 33-1/4".

### Screw Pack Includes:

Please note that all screws may not be used.



(4) #8 x 3" Painted Screws

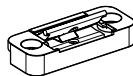


(12) #8 x 1-1/2" Painted Screws

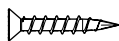


(4) 1" Mounting Screws

### Keeper Pack Includes:



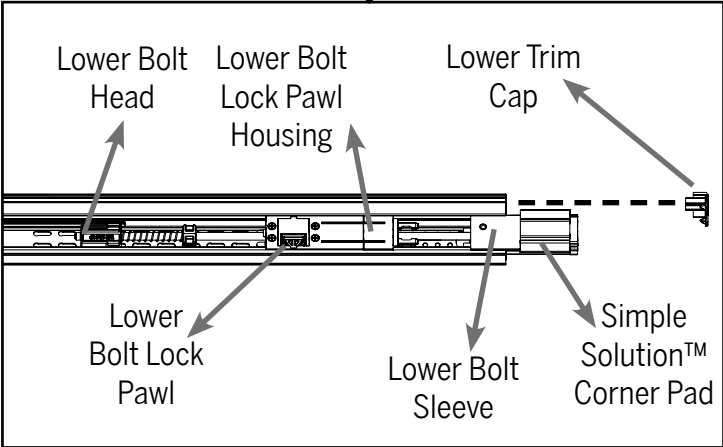
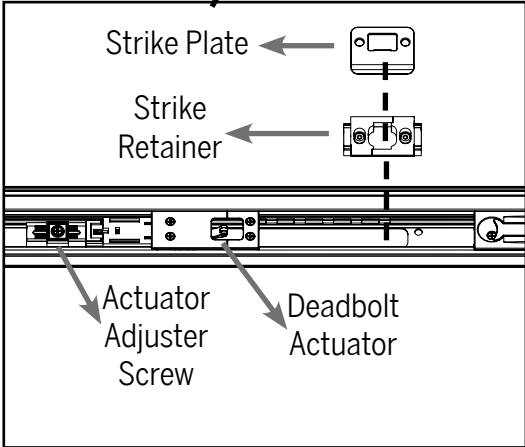
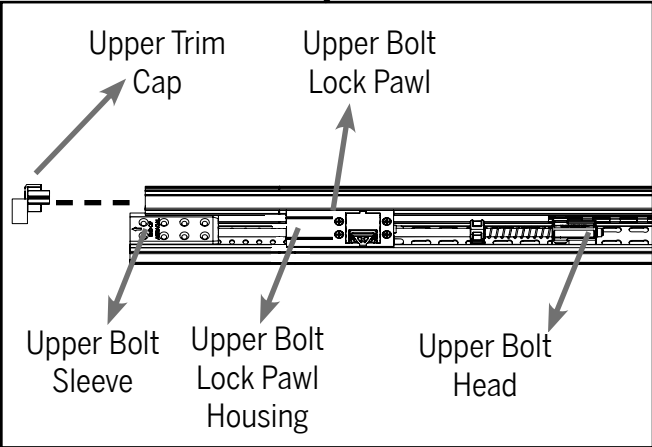
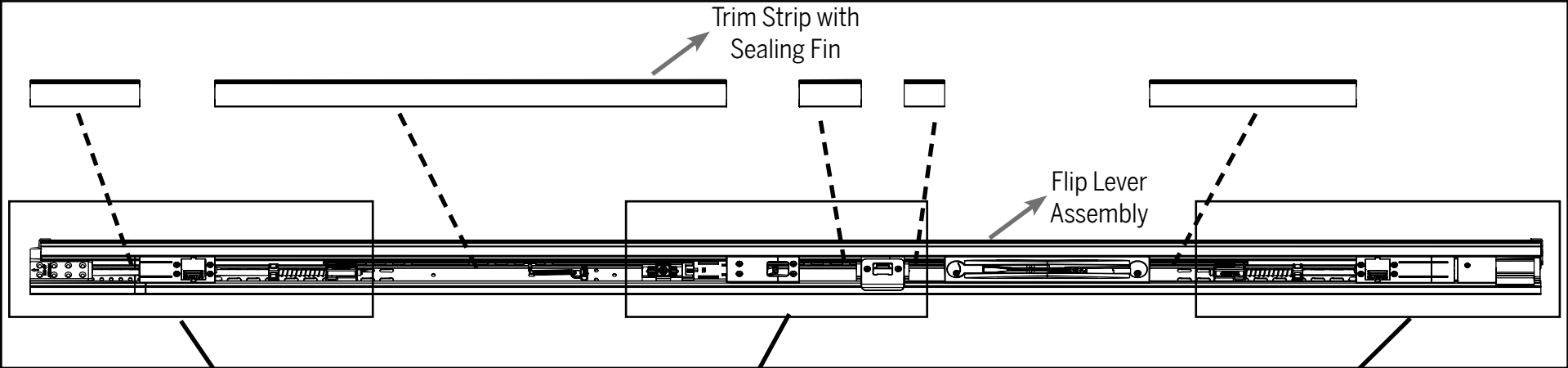
(2) Keeper Assemblies



(4) #8 x 1" Mounting Screws

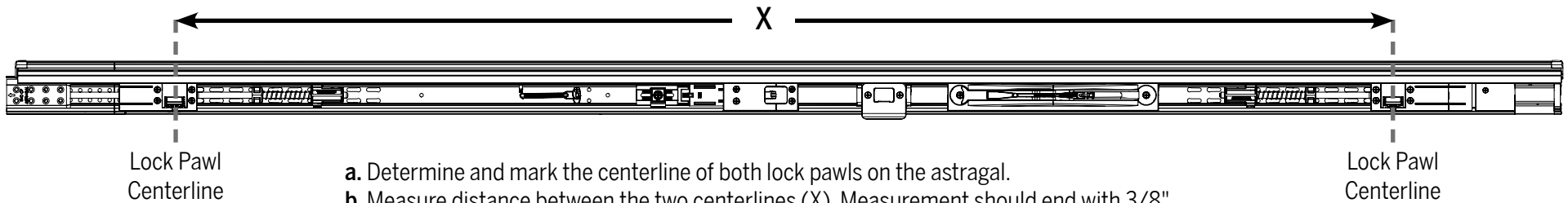
Rev. Date: 10.31.2017  
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U.S. Patents Pending  
P/N 211159-MPPREHINST

# Endura Multi-Point Astragal Product Reference Guide:



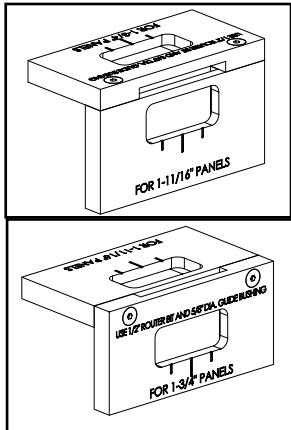
# PART A: ROUTING INSTRUCTIONS FOR KEEPER ASSEMBLIES AND DEADBOLT ACTUATOR

## STEP 1: MEASURE DISTANCE BETWEEN LOCK PAWL CENTERLINES

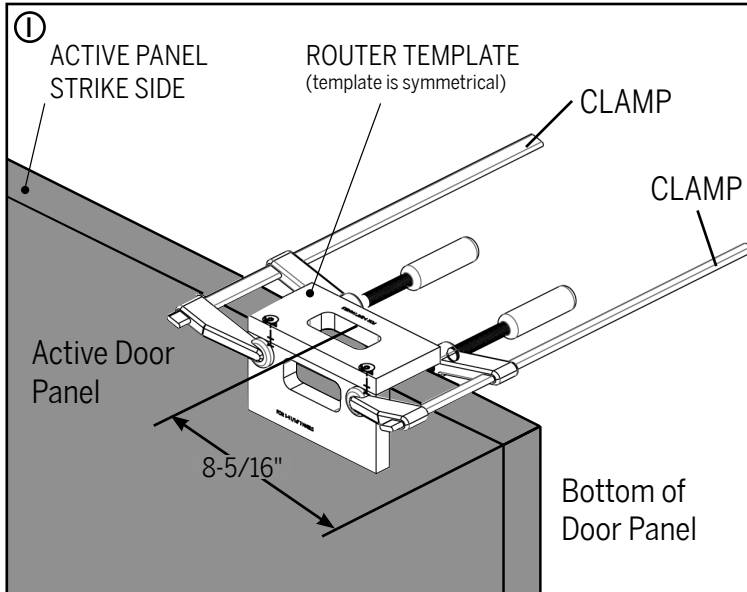


- a. Determine and mark the centerline of both lock pawls on the astragal.
- b. Measure distance between the two centerlines (X). Measurement should end with 3/8".
- c. Record measurement for use with Endura template.

## STEP 2A: ROUT ACTIVE DOOR PANEL FOR KEEPER ASSEMBLY (WITH ENDURA ROUTING TEMPLATE)



Each side of the template corresponds to either a 1-3/4" door or 1-11/16" door panel and is labeled accordingly.

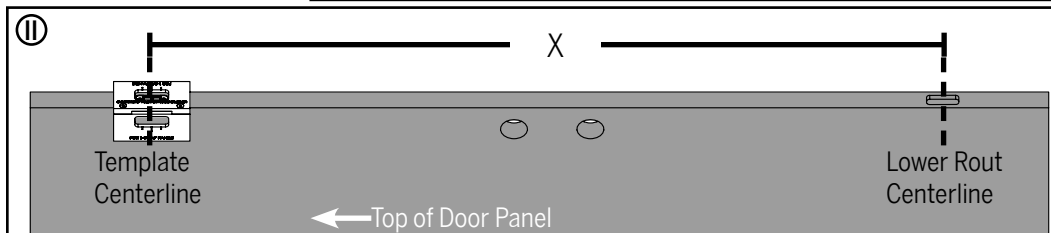


### I. LOWER ROUT:

- a. Depending on the panel thickness (either 1-3/4" thick or 1-11/16" thick), identify the corresponding side of the template.
- b. Position the router template so that the centerline of the template is 8-5/16" from the bottom of the door panel.
- c. Securely clamp router template in place.
- d. Using a 5/8" diameter collar and 1/2" bit, rout the pocket for the keeper assembly.

### II. UPPER ROUT:

- a. Determine the position of the upper rout by adding 8-5/16" to the measurement of distance between the lock pawls' centerline (X) on the astragal from Step 1 ( $X + 8-5/16"$ ). Distance will always end in 11/16" and will vary in 1" increments.  
 Example: If the centerline distance is 60-3/8", the template position would be 65-11/16" ( $60-3/8" + 8-5/16" = 68-11/16"$ )
- b. Measure from the centerline of the template in the lower rout position and mark the new position as the centerline of the template in the upper rout position.
- c. Securely clamp router template in place.
- d. Using a 5/8" diameter collar and 1/2" bit, rout the pocket for the keeper assembly.



## STEP 2B: ROUT ACTIVE DOOR PANEL FOR KEEPER ASSEMBLY (WITHOUT ENDURA ROUTING TEMPLATE)

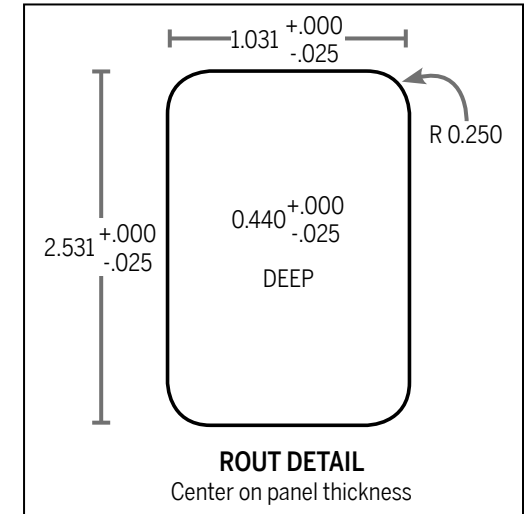
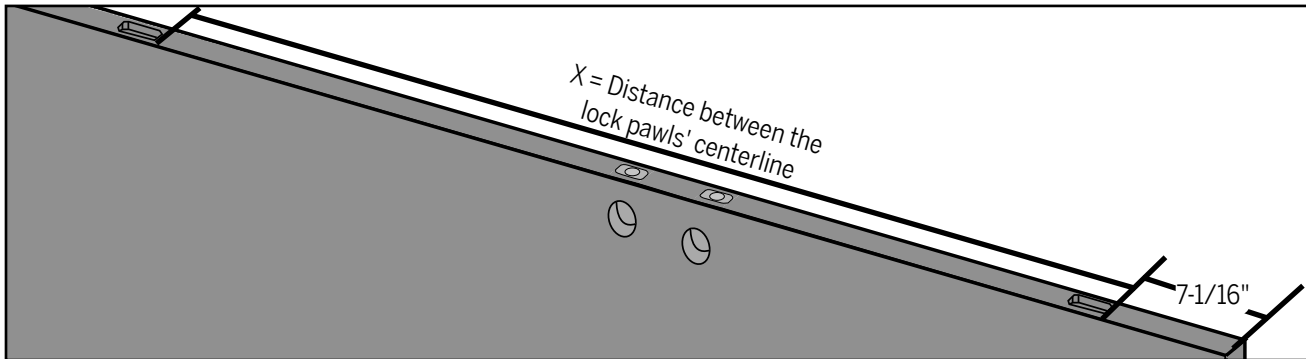
**NOTE:** If you completed Step 2A, please proceed to Step 3. The steps below are only for routing without an Endura template.

**a. Determine Lower Rout Pocket Position:** The bottom of the lower rout pocket should be  $7\text{-}1/16"$  from the bottom of the door panel.

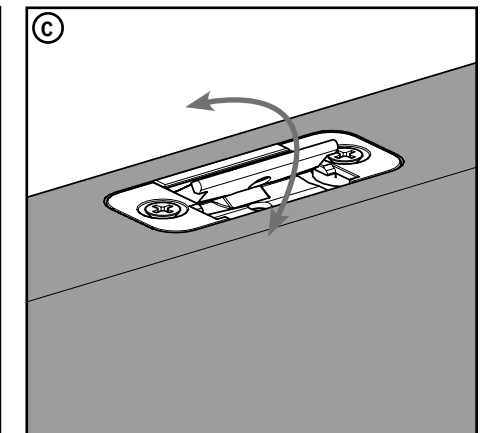
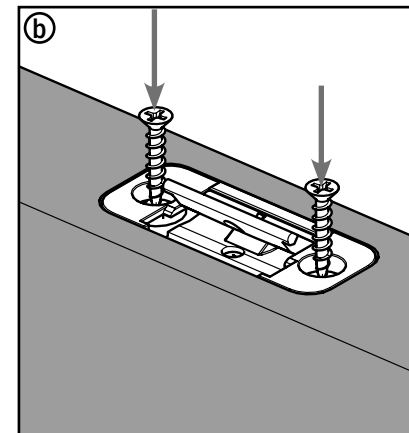
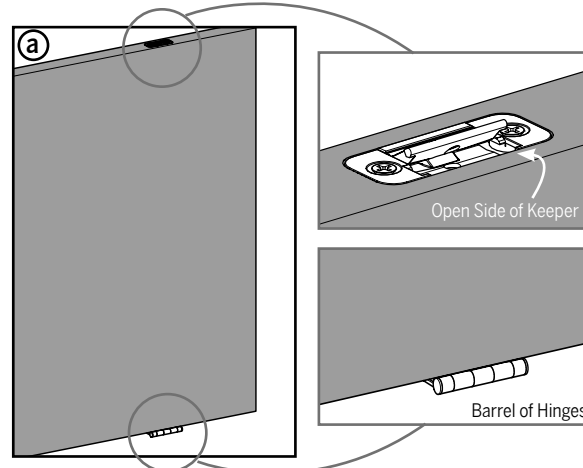
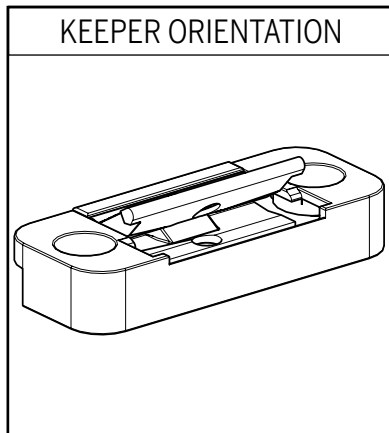
**b. Determine Upper Rout Pocket Position:** The bottom of the upper rout pocket should be  $X$  (the distance between the lock pawls' centerline) +  $7\text{-}1/16"$  from the bottom of the door panel ( $X+7\text{-}1/16"$ ). The distance will end in  $7/16"$  and will vary in 1" increments:

Example: If the centerline distance is  $60\text{-}3/8"$ , the pocket position would be  $67\text{-}7/16"$   
 $(60\text{-}3/8" + 7\text{-}1/16" = 67\text{-}7/16")$

**c.** Once the pocket positions are located and clearly marked, rout the door panel using the measurements included in the **ROUT DETAIL** guide on the right.



## STEP 3: INSTALL KEEPER ASSEMBLY INTO ACTIVE DOOR PANEL



**NOTE:** Keeper pivot arm rests in an open position.

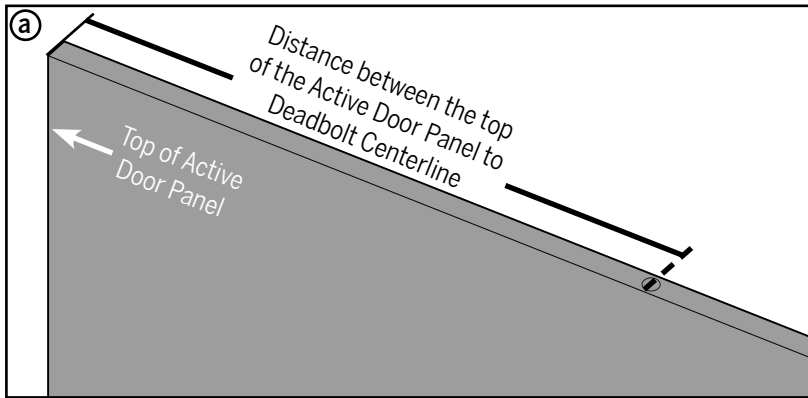
**a.** Insert keeper assembly into each pocket as shown. The open side of the keeper must face the same side as the barrel of the hinges on the opposite door panel.

**b.** Secure the keeper assemblies by installing two #8 x 1" screws into each keeper.

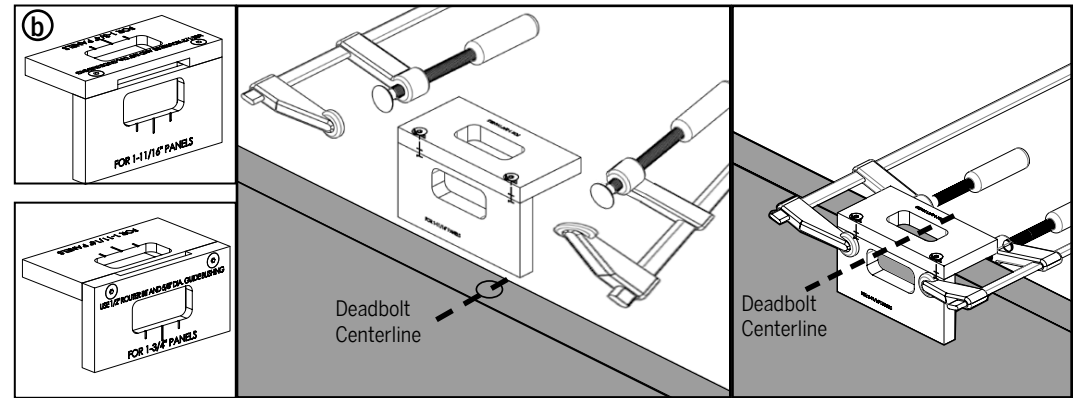
**⚠ Overtightening of screws may cause improper operation.**

**c.** To confirm proper operation, check that the pivot arm moves freely.

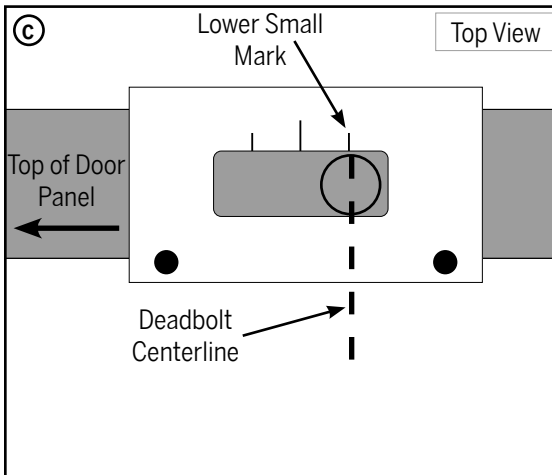
## STEP 4A: ROUT INACTIVE DOOR PANEL FOR DEADBOLT ACTUATOR (WITH ENDURA ROUTING TEMPLATE)



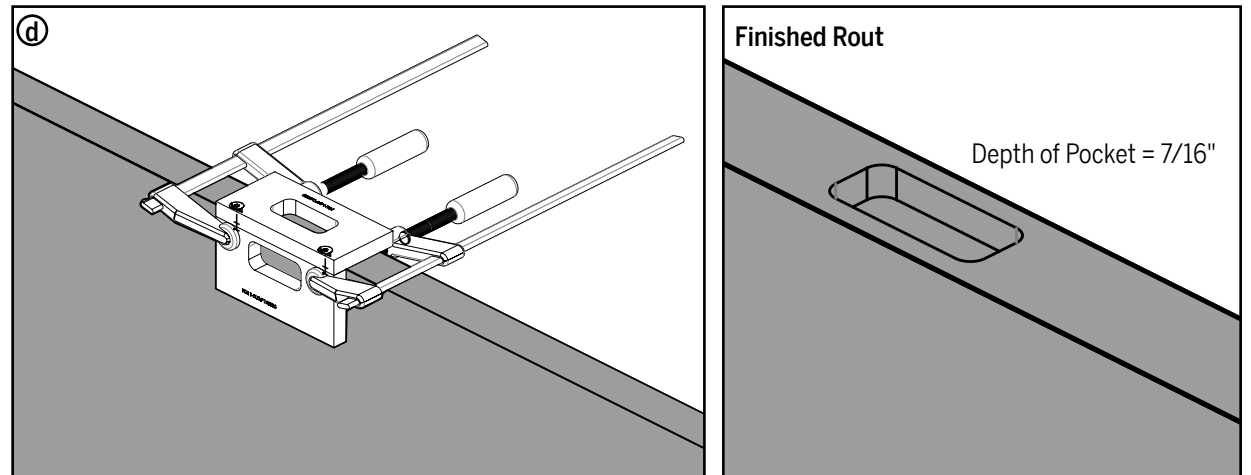
a. Mark the center of the rout location at the centerline of the deadbolt crossbore.



b. Position the deadbolt centerline to be lined up with the lower small mark on the template. Make sure to use the side of the template that matches the door panel thickness.



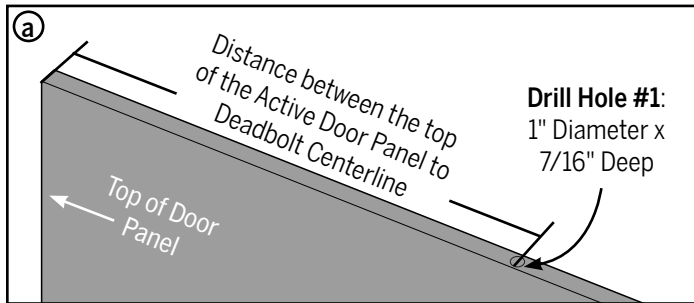
c. The template should be aligned as shown above.



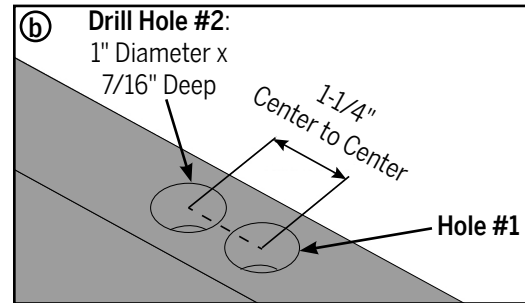
d. Rout the pocket using a 1/2" router bit with 5/8" diameter collar, rout slot in the door panel 7/16" deep.

## STEP 4B: ROUT INACTIVE DOOR PANEL FOR DEADBOLT ACTUATOR (WITHOUT ENDURA ROUTING TEMPLATE)

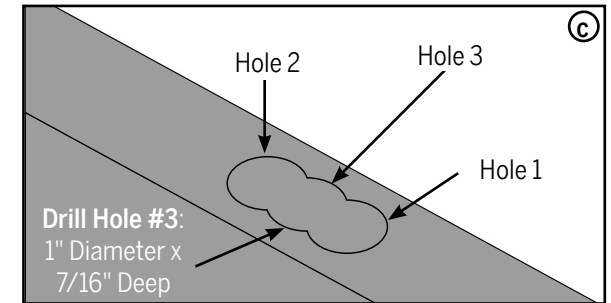
**NOTE:** If you completed Step 4A, please proceed to Step 5. Below steps are for routing without an Endura template only.



a. Mark the center of the rout location at the centerline of the deadbolt crossbore. Once marked, drill a hole that is 1" in diameter and 7/16" deep.



b. Drill a second hole 1-1/4" above the first hole. This hole will also be 1" in diameter and 7/16" deep.

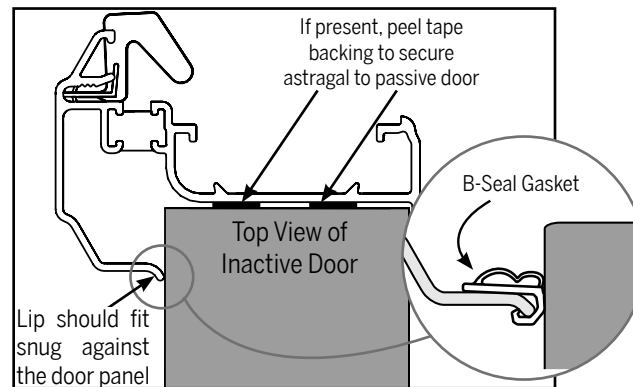


c. Drill a third hole directly in between holes 1 and 2. This hole will be 1" in diameter and 7/16" deep.

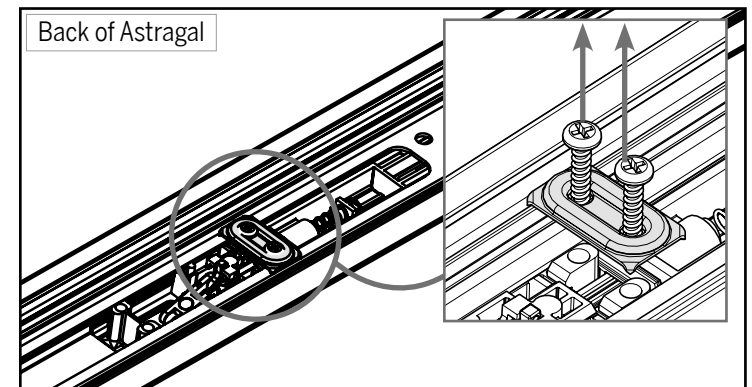
## PART B: INSTALL ASTRAGAL ONTO INACTIVE DOOR PANEL

### INITIAL PREPARATION

- Ensure that you have the correct length and handing of astragal for your door.
- Remove the trim strip and screw pack from the astragal body and set aside.
- If tape is present on the back of the astragal, peel off the backing.

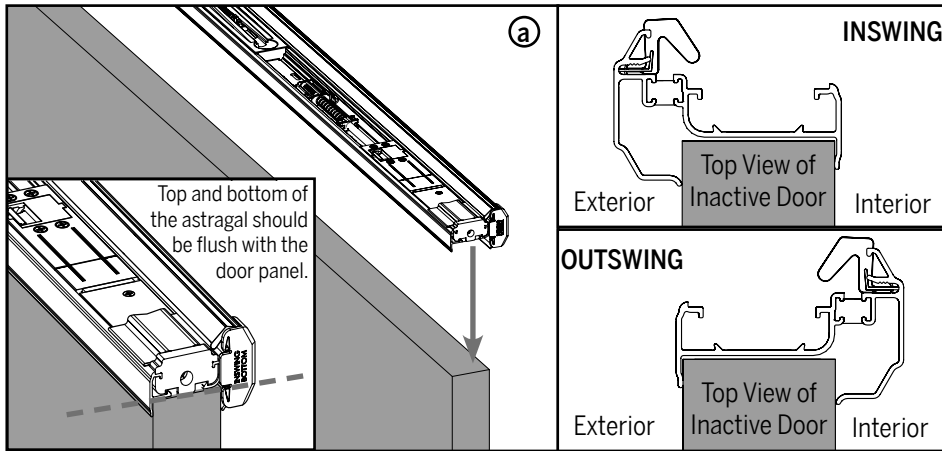


Confirm the thickness of your door panel. For door panels with thicknesses of **1-11/16"**, apply the available B-seal gasket to accommodate the gap between the panel face and astragal.

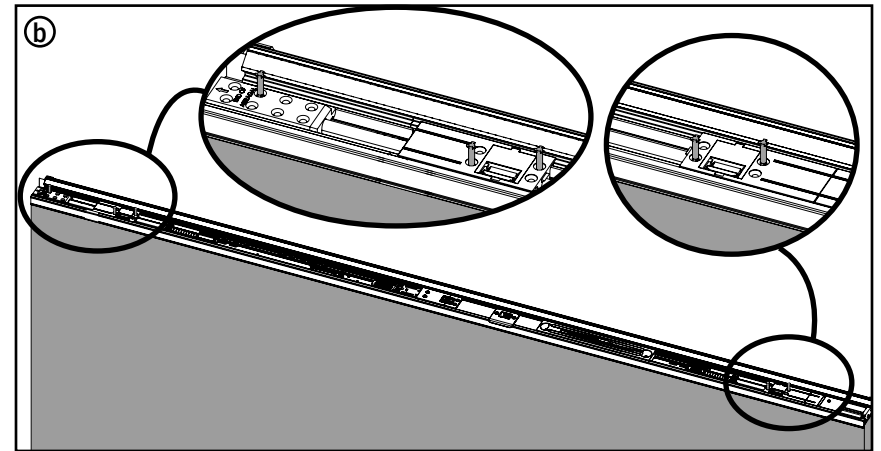


On the back of the astragal, a shipping clip secures the deadbolt actuator. Using a Phillips Screwdriver, remove the screws and discard the shipping clip.

## STEP 5: PLACE ASTRAGAL ON DOOR PANEL



**a.** Place the astragal onto the door panel. For **Inswing** doors, the wide side of astragal goes on outside of the door. For **Outswing** doors, the wide side of astragal goes on inside of the door. The top and bottom of the astragal should be flush with the top and bottom of the door panel.



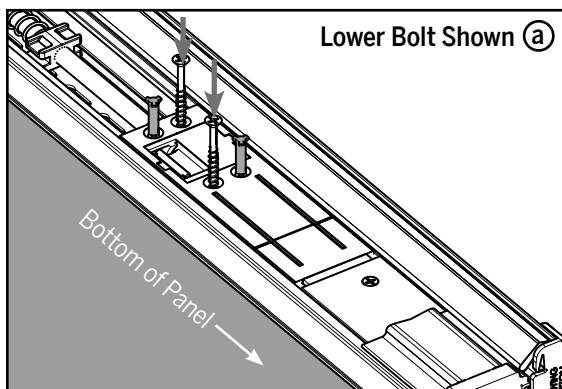
**b.** Press the astragal down along the length of the panel. A total of five orange securing pins will pop up around the lower and upper lock pawls, and the upper bolt sleeve.



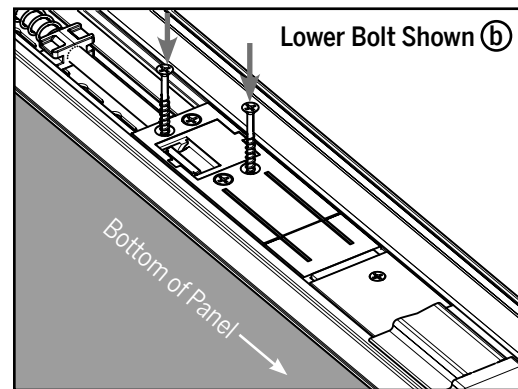
**If present, ensure the backing of the tape is removed before pressing down.**

## STEP 6: SECURE ASTRAGAL TO DOOR PANEL

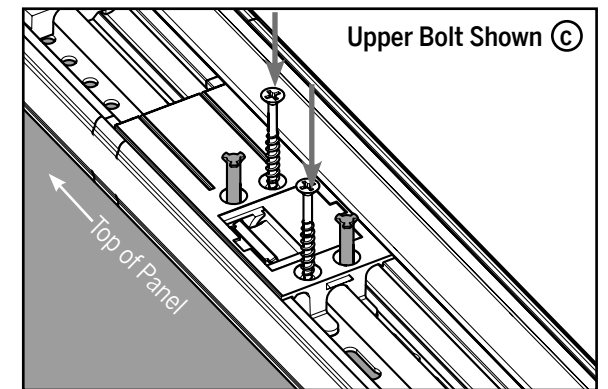
Please refer to the Product Reference Guide on Page 2 to identify the different components within the astragal. For Step 6, only tighten screws until flush with mating surfaces. **Do not overtighten the screws.**



**a.** Keeping the orange securing pins in place, install #8 x 1-1/2" screws in the holes adjacent to the pins.

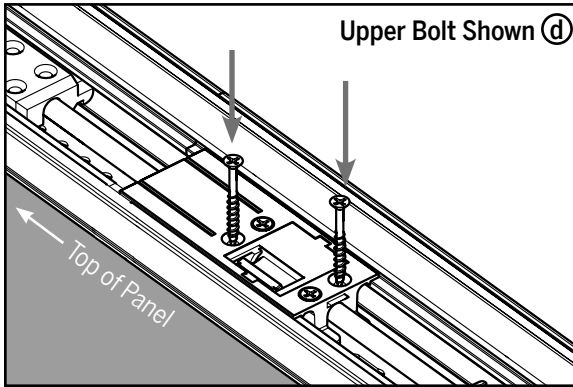


**b.** Remove the orange securing pins from the lower bolt and replace them with #8 x 1-1/2" screws.

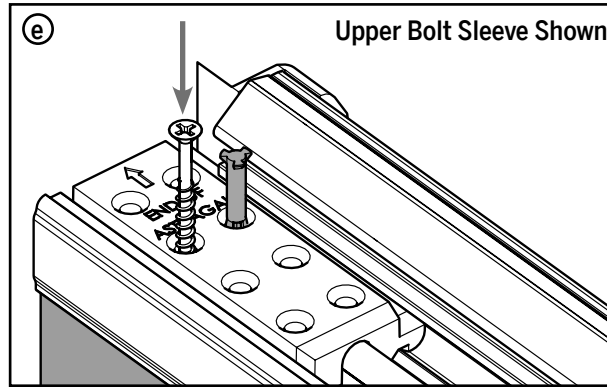


**c.** Keeping the orange securing pins in place, install #8 x 1-1/2" screws into the open holes around the upper lock pawl, next to the pins.

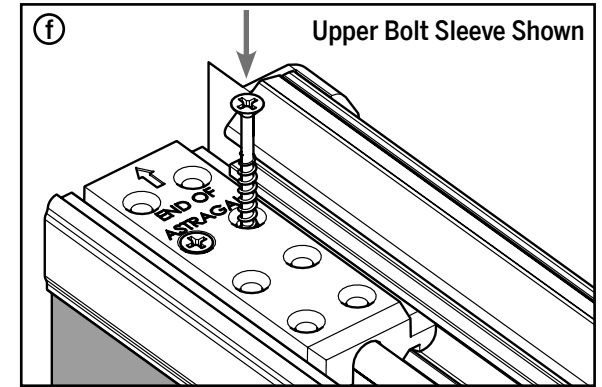
## STEP 6 (CONT.): SECURE ASTRAGAL TO DOOR PANEL



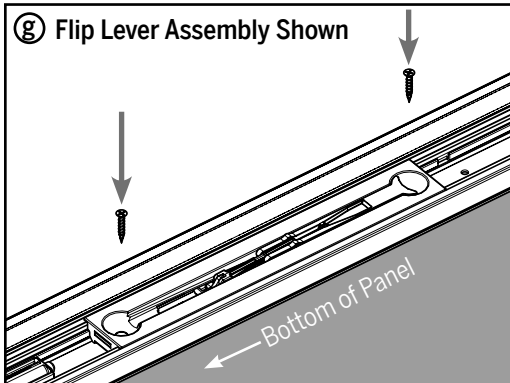
d. Remove the orange securing pins from the upper bolt and replace them with #8 x 1-1/2" screws.



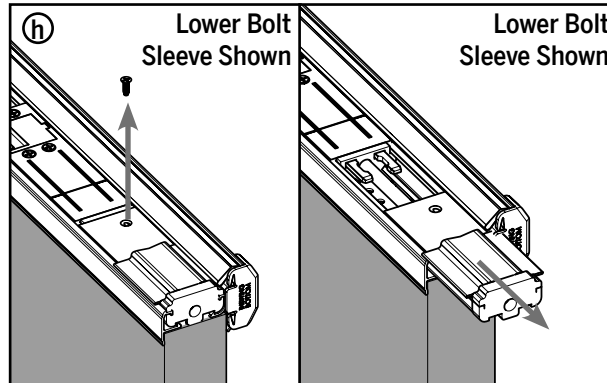
e. Install a #8 x 1-1/2" screw next to the popped orange securing pin on the upper bolt sleeve.



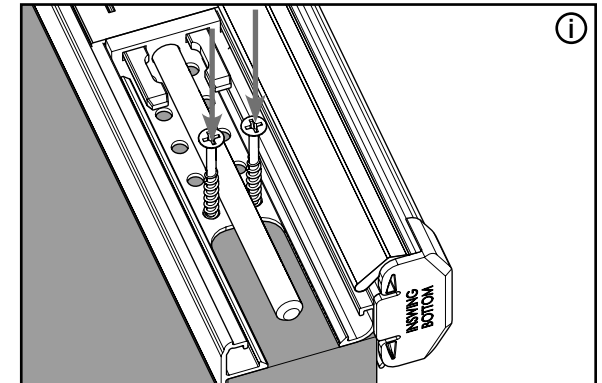
f. Remove the orange securing pin from the upper bolt sleeve and replace it with a #8 x 1-1/2" screw.



g. Secure the flip lever assembly with two #8 x 1-1/2" screws.



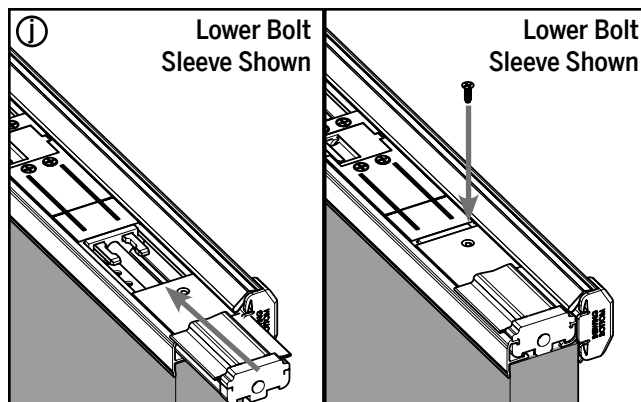
h. Remove the lower bolt sleeve retainer screw and slide out the lower bolt sleeve.



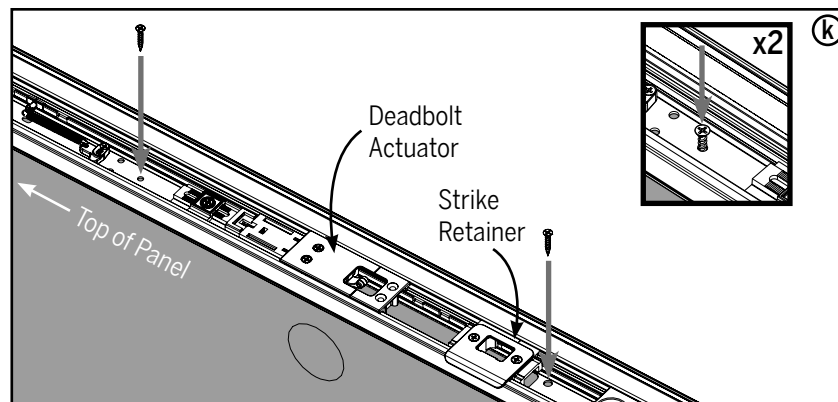
i. Install #8 x 1" screws into the holes directly above the U-notch on the astragal body.



## STEP 6 (CONT.): SECURE ASTRAGAL TO DOOR PANEL

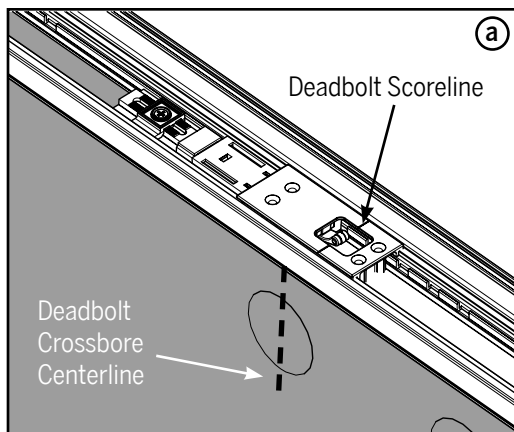


**j.** Return the bolt sleeve onto the lower bolt and reinstall the screw securing the bolt sleeve.

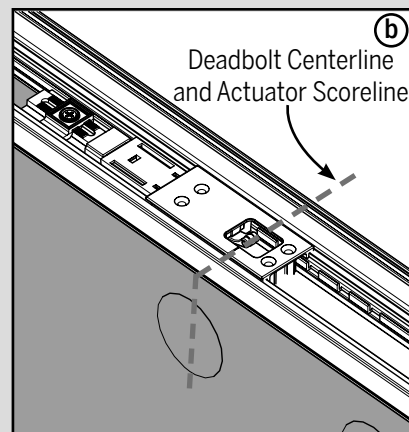


**k.** Install two #8 x 1" screws into the holes in the astragal body on either side of the strike retainer and deadbolt actuator.

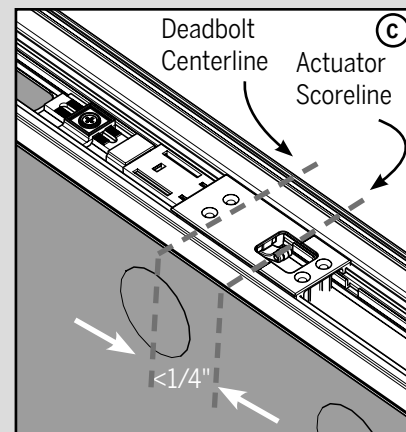
## STEP 7: DETERMINE DEADBOLT ACTUATOR POSITION



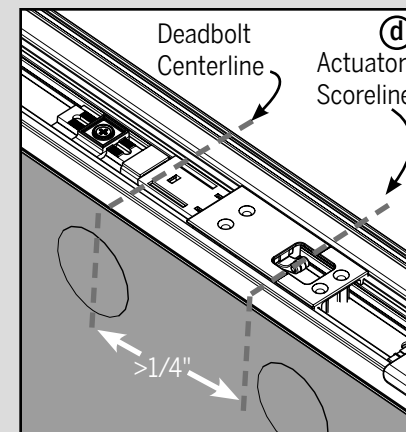
**a.** Check where the deadbolt actuator scoreline is positioned relative to the deadbolt centerline.



**b.** If the actuator scoreline is in line with the panel deadbolt crossbore centerline, skip to **Step 9**.

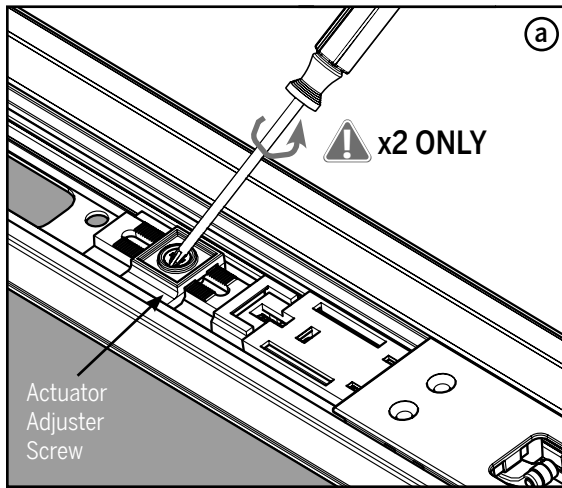


**c.** If the actuator scoreline is within 1/4" of the panel deadbolt crossbore centerline, follow **Step 8A**.

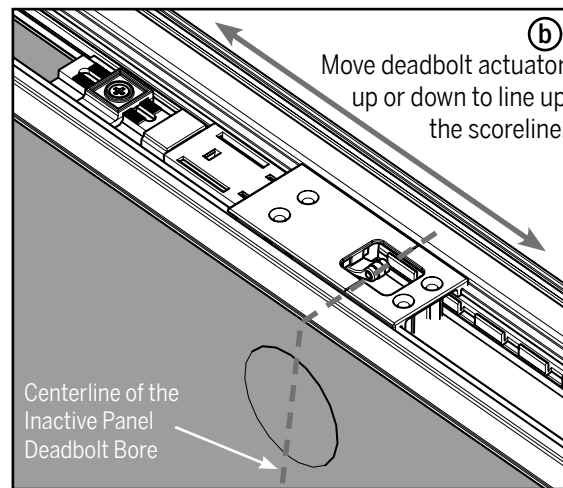


**d.** If the actuator scoreline is more than 1/4" from the panel deadbolt crossbore centerline, follow **Step 8B**.

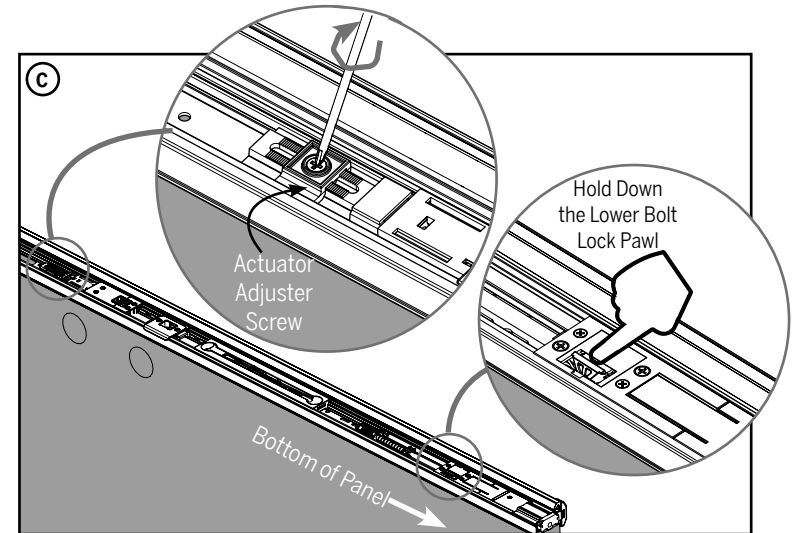
## STEP 8A: ALIGN ACTUATOR WITH DEADBOLT HOLE (ONLY ADJUSTMENTS UNDER 1/4")



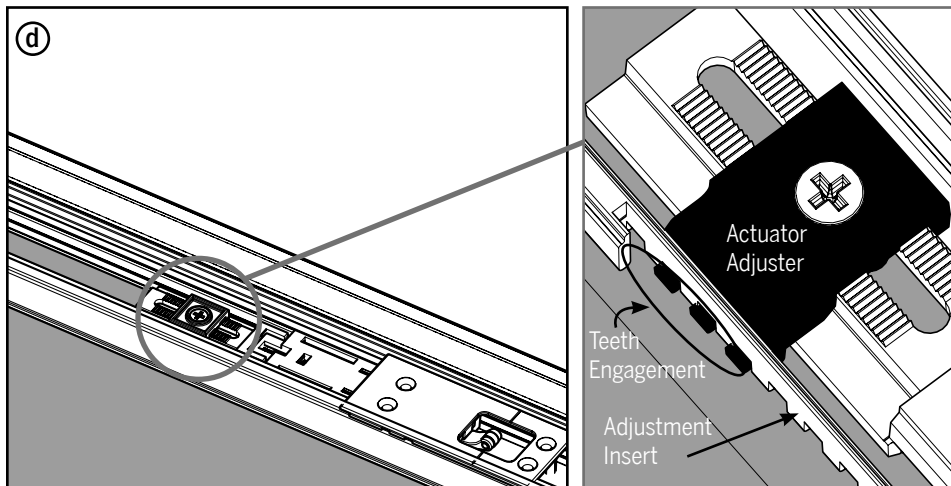
a. Loosen the actuator adjuster screw **TWO TURNS ONLY!**



b. Move the actuator up or down to line up the score line on the actuator body with the center of the deadbolt crossbore.

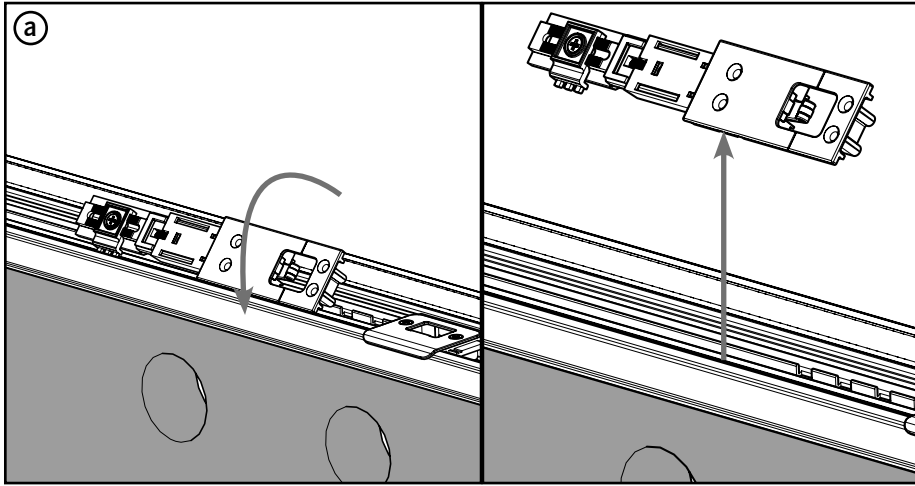


c. While holding down the lock pawl on the bottom bolt, tighten the deadbolt actuator adjuster screw.

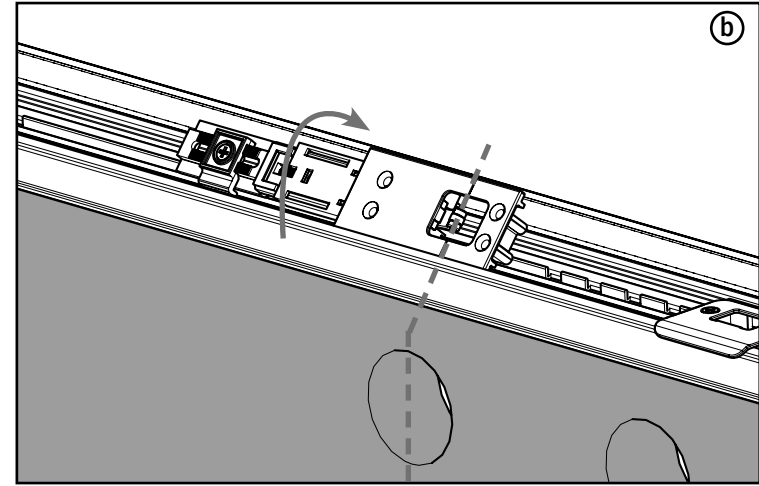


d. Ensure the teeth on the actuator adjuster engage into the rack teeth on the adjustment insert.

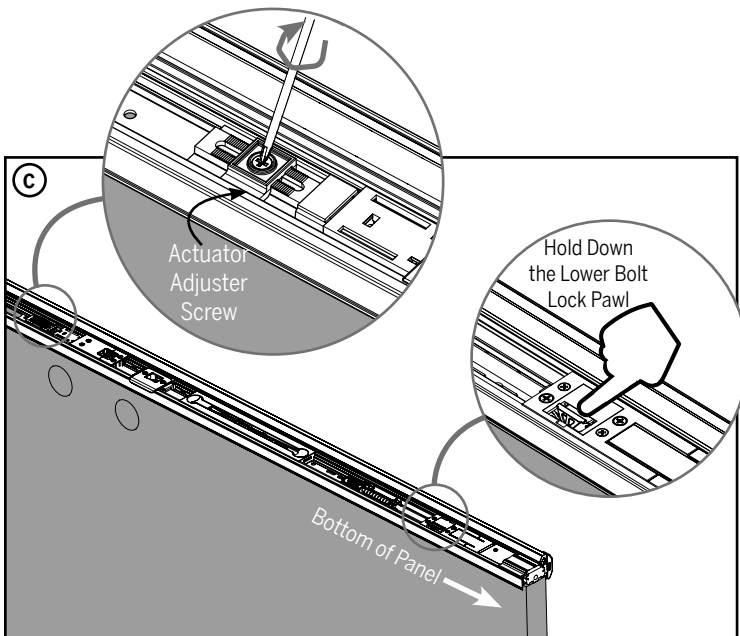
## STEP 8B: ALIGN ACTUATOR WITH DEADBOLT HOLE (ONLY ADJUSTMENTS OVER 1/4")



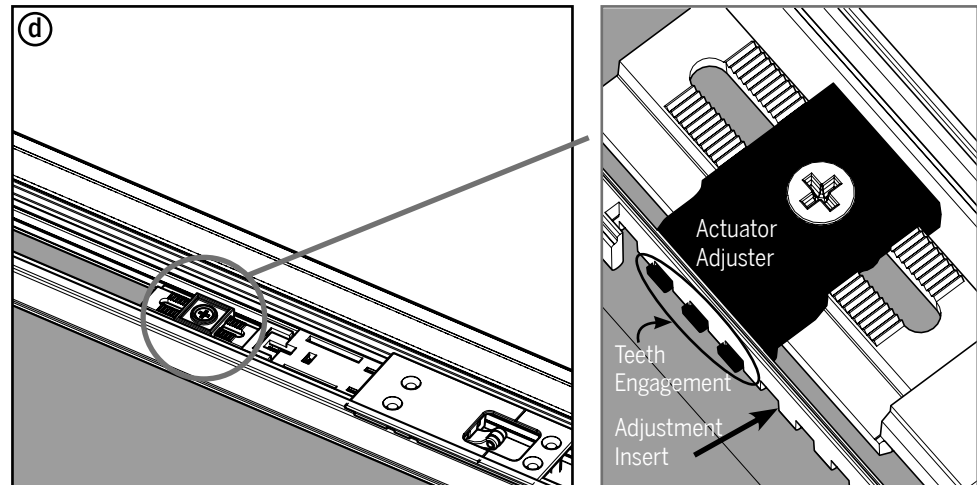
a. Rotate the actuator out of the astragal body toward the narrow edge of the astragal.



b. Line up the scoreline on the actuator body with the center of the inactive panel deadbolt crossbore and rotate the actuator into the astragal body, starting at narrow edge of astragal.

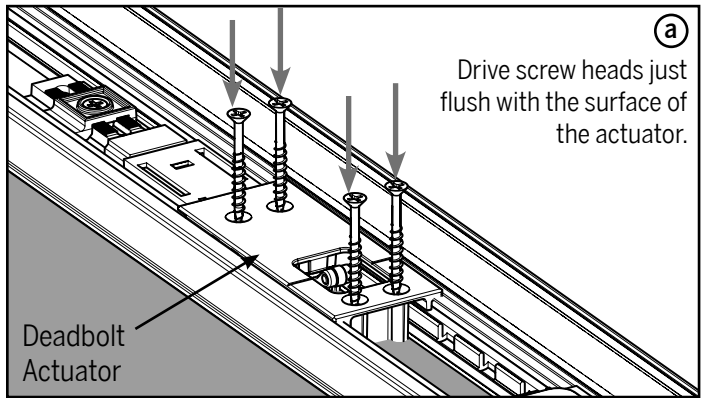


c. While holding down the lock pawl on the bottom bolt, tighten the deadbolt actuator adjuster screw.



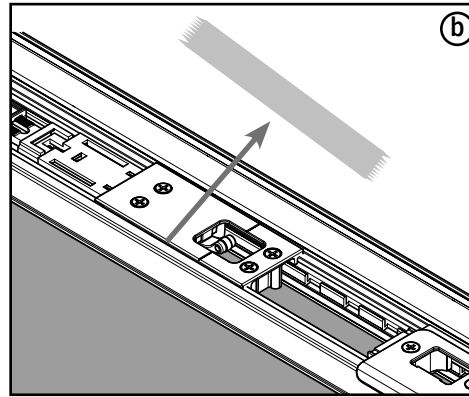
d. Ensure the teeth on the actuator adjuster engage into the rack teeth on the adjustment insert.

## STEP 9: SECURE THE DEADBOLT ACTUATOR



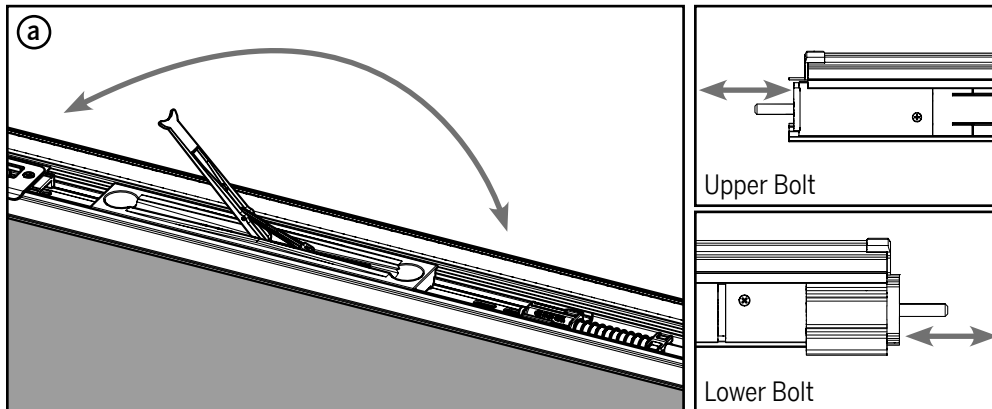
a. Drill  $\text{\O}1/8"$  x  $1-1/2"$  deep pilot holes at each deadbolt actuator hole. Install four #8 x 3" painted screws into each actuator hole.

⚠ Do not overtighten the screws.



b. After securing the actuator, remove the tape which holds the actuator in place during installation.

## STEP 10: CONFIRM FLIP LEVER OPERATION

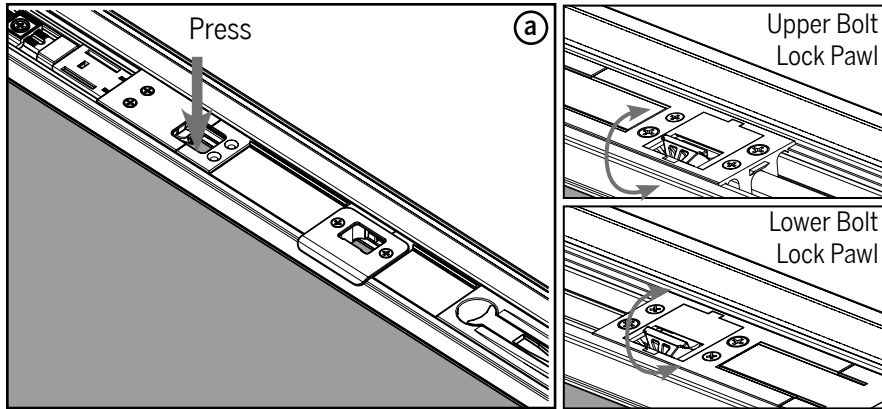


a. Engage the flip lever assembly and ensure both the upper and lower bolts move in and out smoothly.

b. If the bolts **do not** operate smoothly:

- Check for bolt obstructions.
- Check that the screws in the astragal are not overtightened in the astragal body. The top of the screw should be flush with the astragal body.
- If the lever operation is difficult, slightly loosen the screws securing the flip lever assembly.

## STEP 11: CONFIRM DEADBOLT ACTUATOR OPERATION

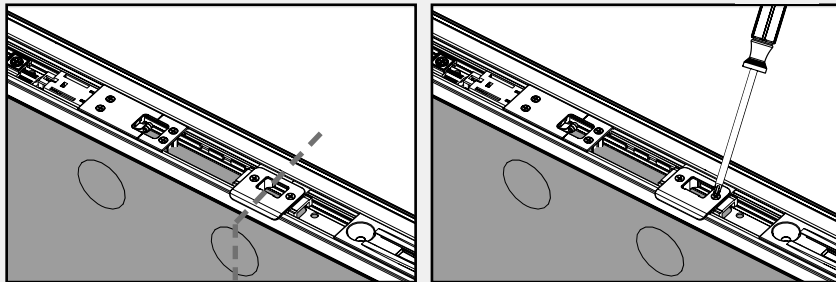


a. Operate the deadbolt actuator by pressing down on it. Ensure the top and bottom lock pawls move between engaged and disengaged positions.

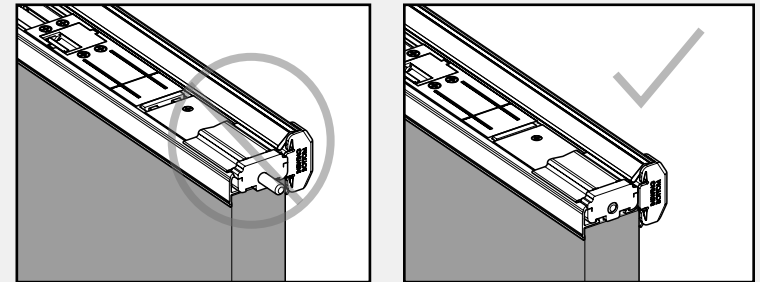
## STEP 12: SIZE AND INSTALL TRIM STRIP

Trim strip is included as a single, full-length piece and must be sized to fit appropriately between the astragal components. For each segment, measure, cut and install the trim strip, ensuring the sealing fin side of the trim strip is installed on the side closest to the weatherstrip on the astragal.

Before measuring the length between astragal components, check the following:

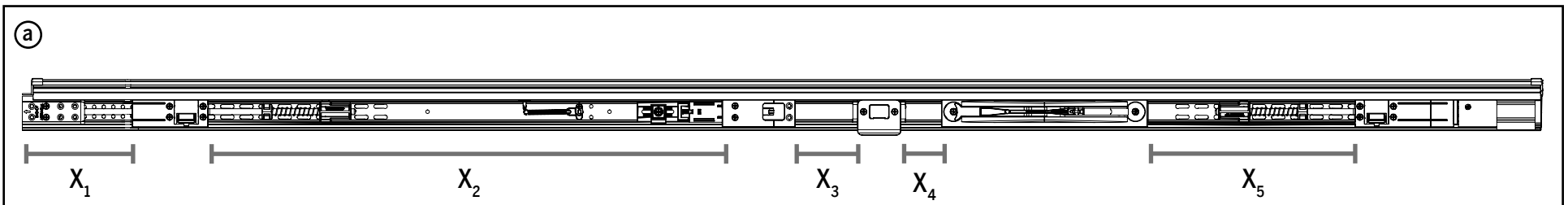


Secure the strike plate into the proper location by aligning it with the lever crossbore hole and tighten the screws into the retainer.



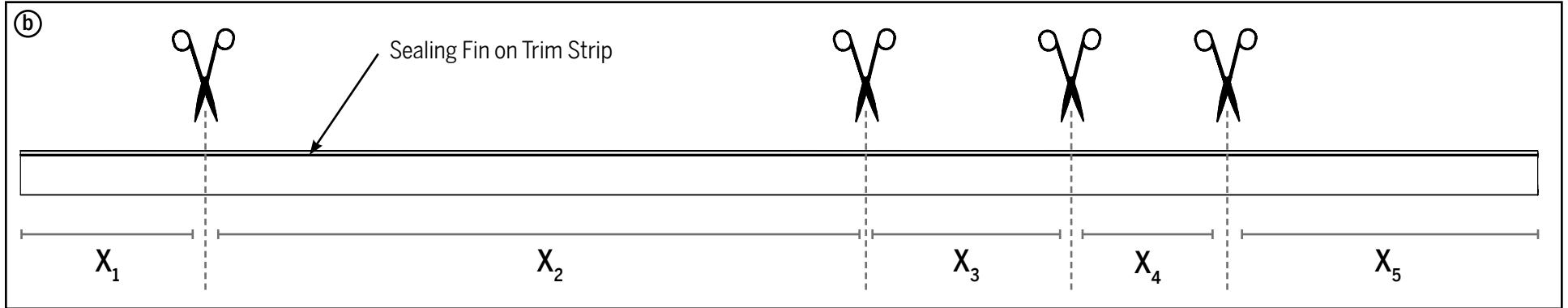
Ensure the upper and lower bolts are in the retracted position.

a. Measure the length between the astragal components.

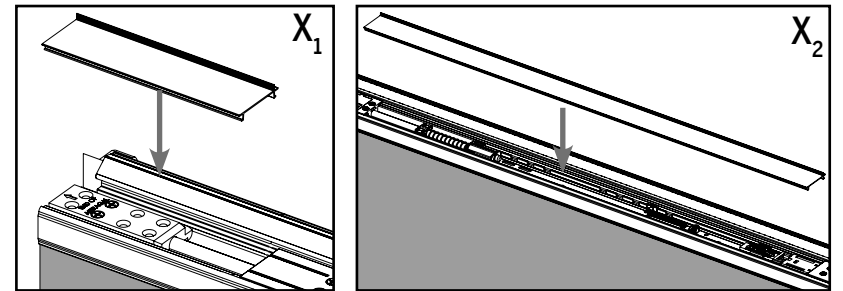
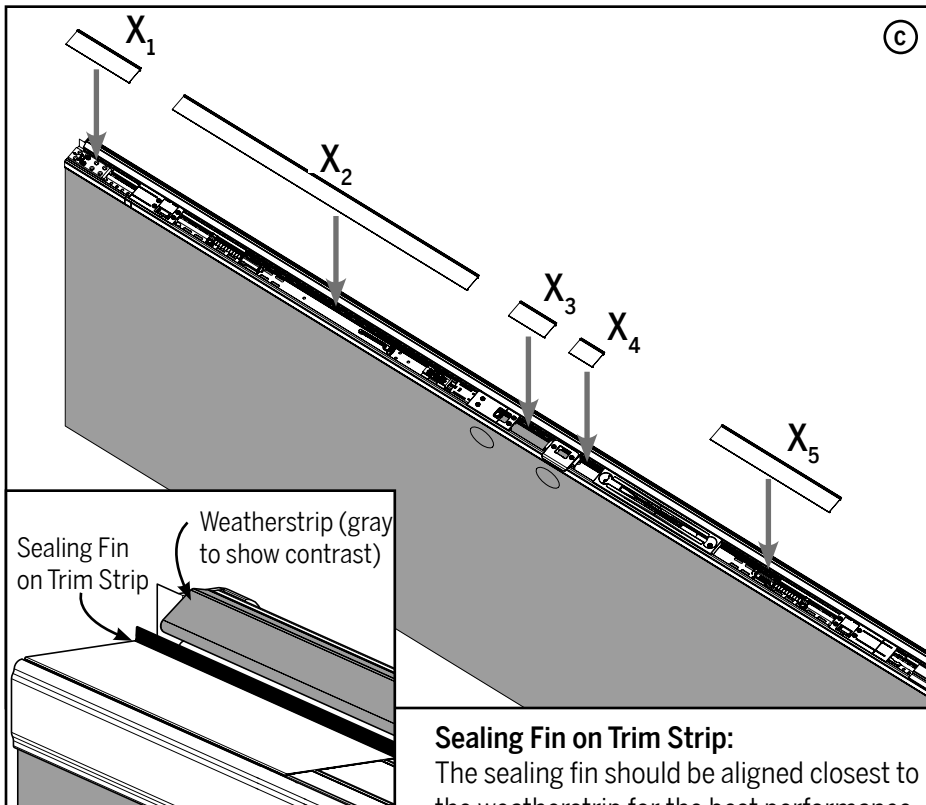


## STEP 12 (CONT.): SIZE AND INSTALL TRIM STRIP

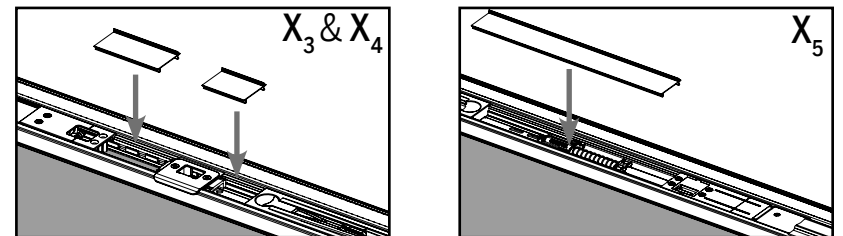
b. Cut the trim strip into appropriate sizes.



c. Install trim into astragal body.



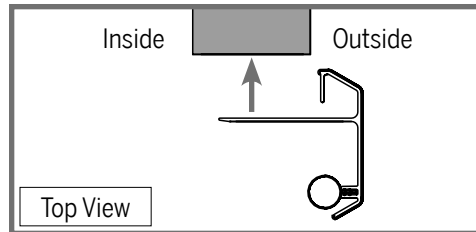
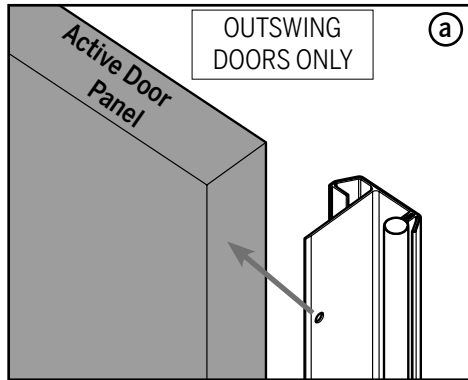
**Upper Trim Strips:** Align  $X_1$  with the top of the upper bolt and top of the upper lock pawl housing. Press down to secure. Align  $X_2$  with the bottom of the upper lock pawl housing and the top of the deadbolt actuator. Press down to secure.



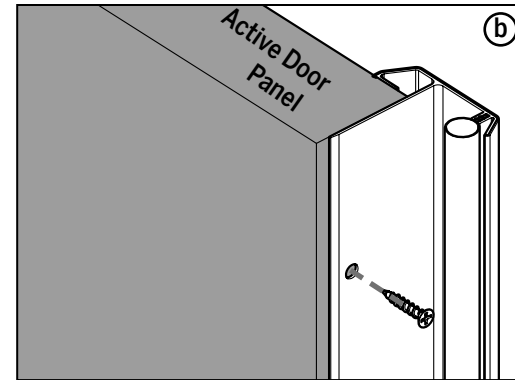
**Middle Trim Strips:** Align  $X_3$  with the bottom of the deadbolt actuator and the top of the strike retainer. Press down to secure. Align  $X_4$  with the bottom of the strike retainer and the top of the flip lever assembly. Press down to secure.

**Lower Trim Strip:** Align  $X_5$  with the bottom of the flip lever assembly and the top of the lower lock pawl housing. Press down to secure.

## STEP 13: INSTALL OPTIONAL SECURITY FLANGE (OUTSWING ONLY)

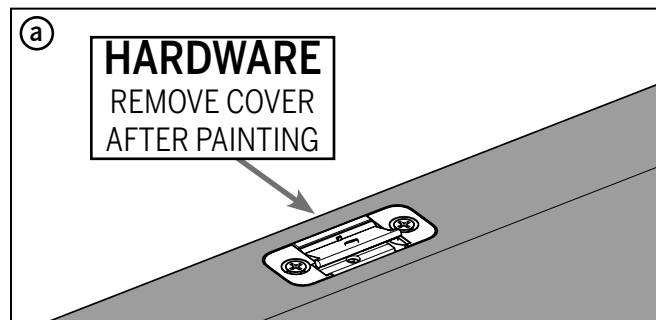


**a.** Position the security flange on the active door panel with the wide flange facing the outside of the house. Peel the tape backing and secure against the active panel.



**b.** Install the screws through the predrilled holes to secure the flange snug against the face of the active door.

## STEP 14: APPLY HARDWARE PROTECTIVE COVERS OVER KEEPERS



**a.** Place the adhesive backed protective covers over each keeper assembly.