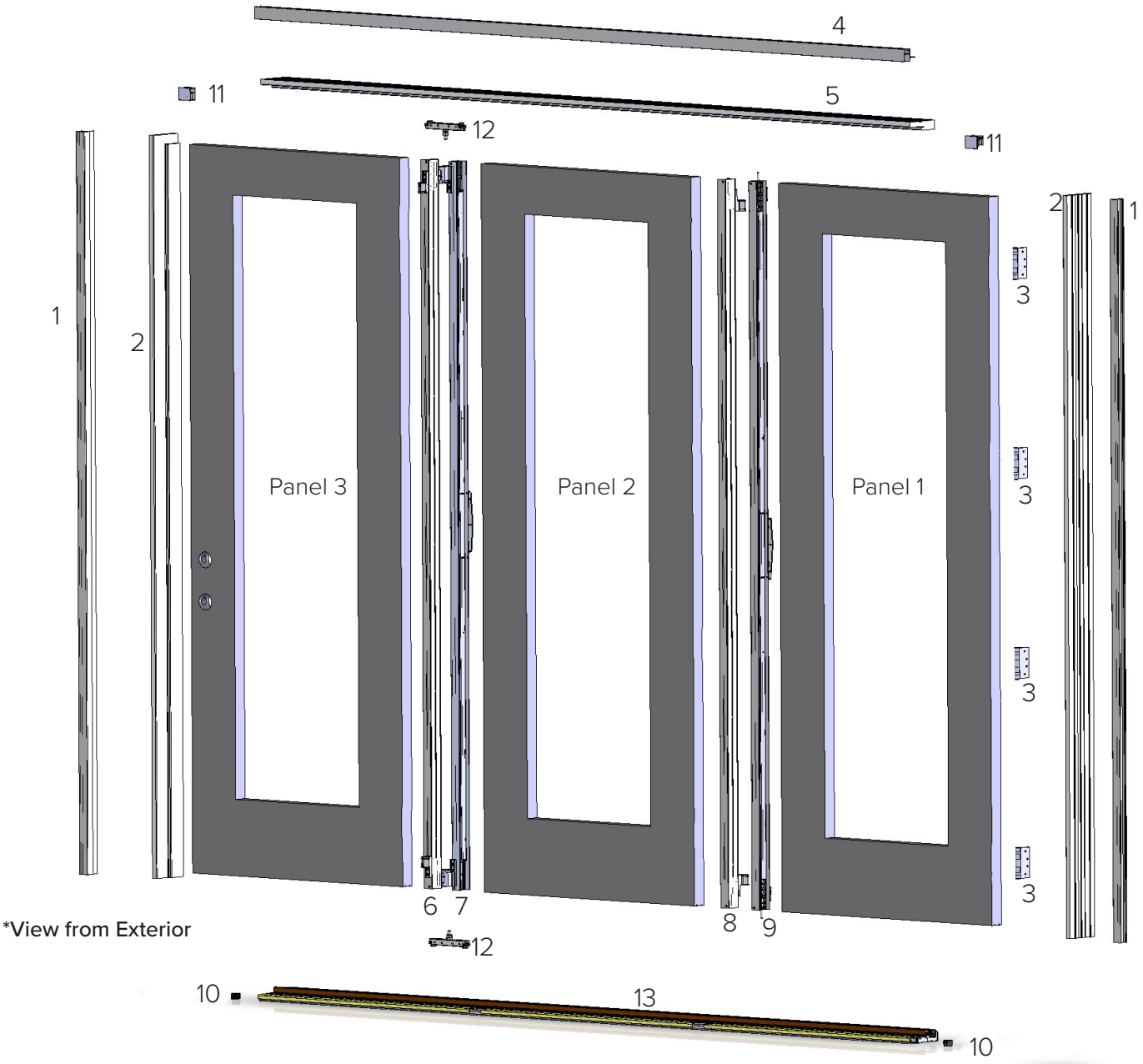
MIRAVISTA®
FOLDING DOOR SYSTEM

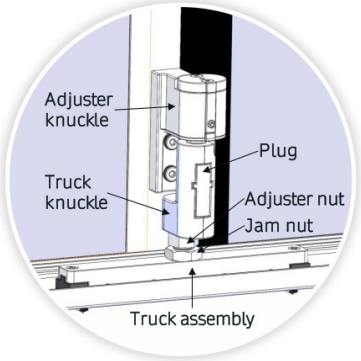
POWERED BY ENDURA

MiraVista Field Installation Instructions

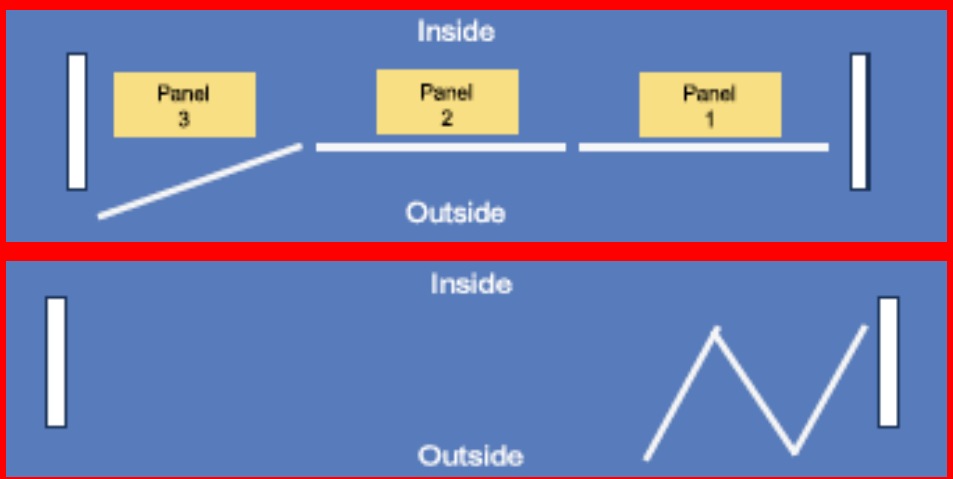


*View from Exterior

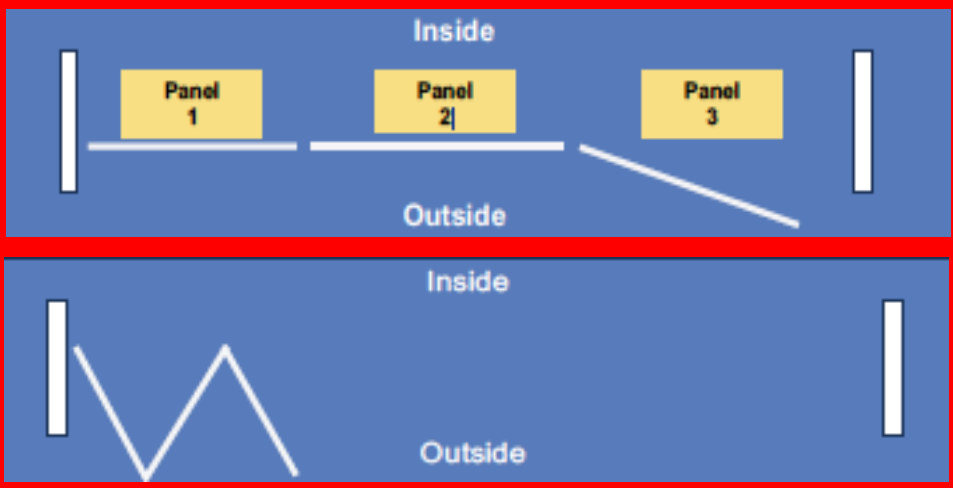
1. Side Trim
2. Jamb
3. Hinges
4. Upper Track
5. Header
6. Hinge Bar D
7. Hinge Bar C
8. Hinge Bar B
9. Hinge Bar A
10. Sill Draining Plugs
11. Jamb End Caps
12. Truck Assemblies
13. Sill



LEFT HAND OUTSWING – RIGHT HAND STACK



RIGHT HAND OUTSWING – LEFT HAND STACK



Overview of Process

PHASE 1 - FRAME INSTALLATION KIT

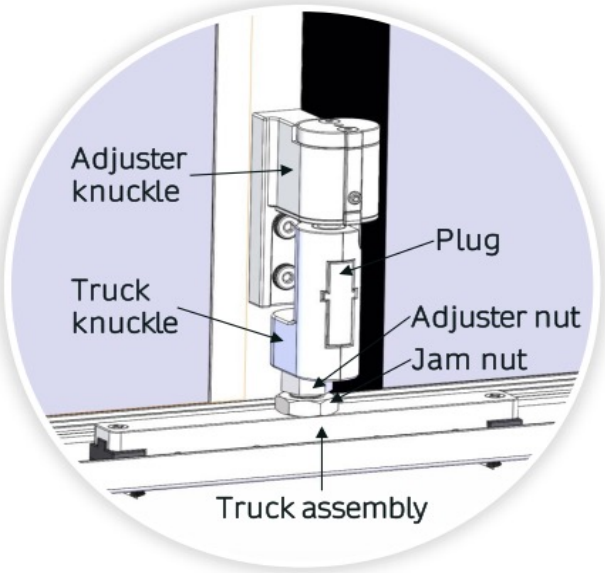
STEP 1: Confirm that you have all the pieces that you need. → **STEP 2:** Assemble the frame. Verify frame size to rough opening size. → **STEP 3:** Install the frame into the rough opening without twist. → ***Critical Step:*** *Check opening and door unit are square, plumb, level, and without twist.*

PHASE 2 - PANEL INSTALLATION KIT

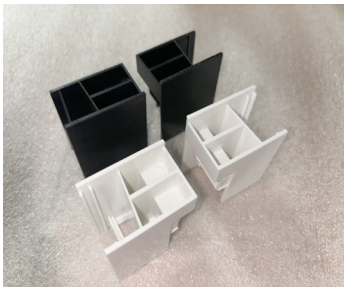
STEP 4: Install & Secure Panel 1 (Hinge Panel). → **STEP 5:** Install Panel 2 (Center Panel). → **STEP 6:** Install the trucks – top and bottom –and adjust. → **STEP 7:** Install Panel 3 (Locking Active Panel).

STEP 8: Final Adjustments

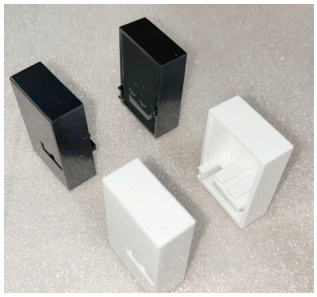
STEP 9: Finishing touches and final operation checks.



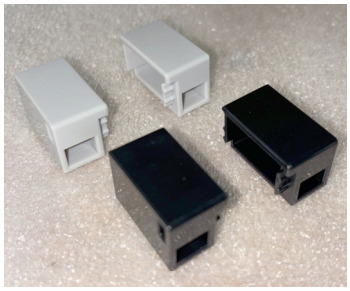
Master Parts List



(1) Pair Jamb End Caps (New Construction) 1 pair per color.



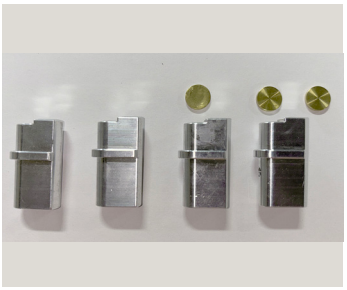
(1) Pair Jamb End Caps (Repair & Remodel) 1 pair per color.



(1) Pair Sill Draining Plugs. 1 pair per color.

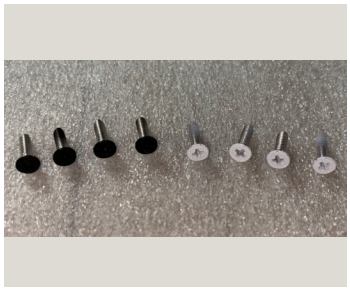
(2) Hinge Bar Pin Captures for the Sill

(2) Hinge Bar Pin Reinforcing Plates for the Header (includes 4 screws)



(4) Dowel Plugs (shown with (3) Bearing Discs for the bottom truck knuckles)

(4) 1” Dowel Pins



(8) #6-32 FH Screws (4-White and 4-Black). Used to secure dowel pins.

(2) Truck Assemblies- Fully Assembled

Drill Guide for Bolt Locations
Tool Bag

3/32” Hex Wrench (Gold)
Tool Bag

1/8” Hex Wrench (Black)
Tool Bag

5/32” Hex Wrench (Silver)
Tool Bag

Adjustment Wrench
Tool Bag*

Shipped by Prehanger

- **Panels (3) w/ Hinge Bars (Installed)**
- **Header w/ Upper Track (Installed)**
- **Sill**
- **Jambs w/exterior side casing (if applicable)**

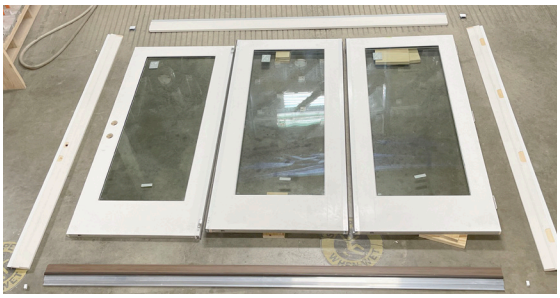
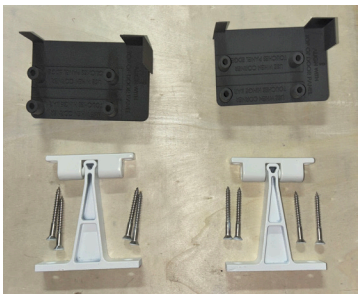


Image shown is a: Left Hand Outswing; Right Hand Stack



(2) sets Panel Clasps w/screws and mounting template. Color matched.

Revised 8-6-2024

Tools and supplies needed.

PHASE 1 - SUPPLIED FRAME KIT

- KIT – End Caps for Upper Track
  - * New Construction: (2) White, (2) Black
  - *Repair & Remodel: (2) White, (2) Black
- KIT – Sill Draining Plugs - (2) Silver, (2) Black
- KIT – Screw Packs:
  - * (30) #8 x 2-1/2” Screws for Frame Assembly
  - * (5) #10 x 2-1/2” Screws
- Screws 1 5/8” (included in parts bag)
- Screws 3” (included in parts bag)

PHASE 2 - FRAME INSTALLATION MATERIALS NEEDED

- Shims (composite shims suggested)
- Tape Measure
- 8’ Level/Straight Edge
- 6’ level
- Masonry string (rack testing)
- Framing square (Large)
- Something to cut shims. (oscillating tool / carpentry knife)
- 1/4” Impact Driver w/ #2 Phillips Bits
- Flashing Tape
- Caulk Sealant

PHASE 2 - SUPPLIED PANEL INSTALLATION KIT

- KIT – Dowel Pin Plugs (4) - Color Matched
- KIT – Dowel Pins (4)
- KIT – Thrust Discs (3)
- KIT – Screws for Dowel Pin Plugs (4 White, 4 Black)
- KIT – Truck Assemblies (2) Color-Matched
- KIT – Header Plates & Bolt Retainers
- KIT – Panel Clasps - Color-Matched
- KIT – Tool Bag:
  - *1/8” Ball Hex Wrench (included in tool bag)
  - *5/32” Hex Wrench (included in tool bag)
  - *Thin Wrench (included in tool bag)
  - *Drill Guide (included in tool bag)

PHASE 2 - PANEL INSTALLATION MATERIALS NEEDED

- Drill
- 1/8” Drill Bit
- 3/8” Drill Bit
- 5/8” Drill Bit
- Shims (composite shims suggested)
- Flathead Screwdriver
- #2 Phillips Head Screwdriver
- Suction Cup Lifters (highly suggested option)
- Selected Finish of 4x4 Ball Bearing Exterior Hinges
  - * (3) - 6/8 Height
  - * (4) - 8/0 Height
  - **Light Commercial Hinges Recommended

Section 2: Frame Assembly

STEP 2A

Identify the components needed for this step of the installation.

STEP 2B

Remove the weatherstripping from the jamb legs and header and set aside.

STEP 2C

Assemble the jamb legs, header and sill to create the frame using (3) 1-5/8" Screws in each corner.

Note: The sill to jamb connection must be predrilled.

Use gaskets or caulk to seal between the jamb/sill and jamb/header.

Section 2: Frame Assembly

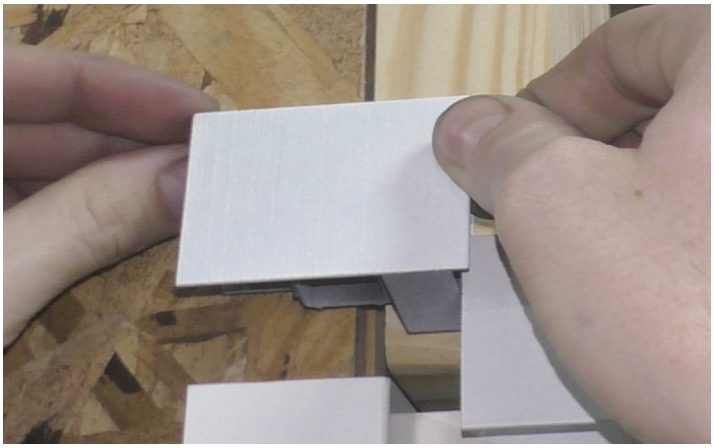
STEP 2D

Install the sill draining plugs onto the sill.

Note: The color of the sill draining plugs will be black or silver gray.

STEP 2E (New Construction End Caps)

Install the end caps for the upper track on the jamb trim for retention. (*showing new construction end caps-left side)



STEP 2F (Repair & Remodel End Caps)

Install the end caps for the upper track on the jamb trim for retention. (*showing repair & remodel end caps – left side)

Section 3: Install frame into rough opening

STEP 3A

Check the subfloor and subfloor support for flatness and level along both the width and length of the opening. Make any changes necessary if the supporting surfaces are not level. Create shim packs using composite shims to compensate for anything not level. **This step is critical.**

New construction, verify the rough opening to the assembled frame.

Remodel projects, stand assembled frame up to existing door for visual size comparisons before removing exisiting unit.

STEP 3B

If sill pan is not being used, caulk the subfloor. Place the door frame unit into the rough opening. Attach the frame into the rough opening by loosely fastening a 2-1/2” screw close to the weatherstrip kerf on the hinge jamb and the strike side jamb. For a 6/8 door install the screw below the 2nd hinge. For a 8/0 door install above the 2nd hinge from the top.

STEP 3C

Hinge Jamb: Shim behind the hinge pockets to insure the hinge jamb is square and plumb. Secure the hinge jamb into the rough opening by using a long screw through each hinge.

Section 3: Install frame into rough opening

STEP 3D

Using a framing square check for squareness between the header. Add shims in between the rough opening and the header to achieve this.

STEP 3E

Check squareness between the sill and the hinge jamb. Additionally, ensure the exterior edge of the sill is supported by the subfloor or kickboard.

STEP 3F

Header: Secure the header into the rough opening by installing (3) 2-1/2” screws near the weatherstrip kerf along the length of the header. Ensure the screw heads are flush and their placement will not interfere with where the door panels will line up when closed.

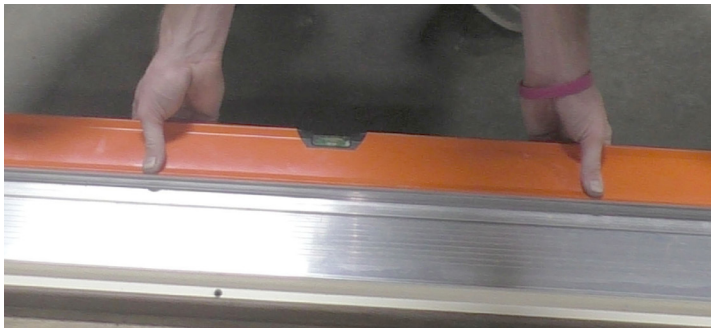
STEP 3G

Sill: Remove the sill cap by prying it upwards from the exterior.

Section 3: Install frame into rough opening

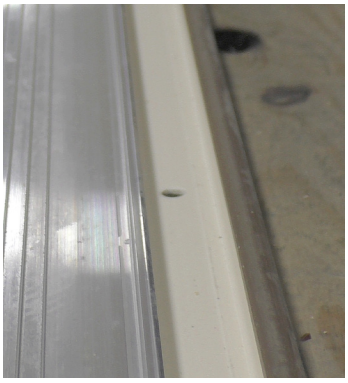
STEP 3H

Put a 8’ level/straight edge across the front wall of the track to ensure there is contact all the way across.



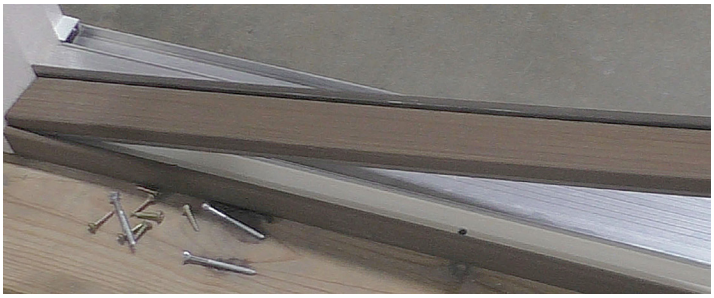
STEP 3I

Install 1-5/8” screws through the cap channel into the subfloor approximately every 18”. Ensure the screw heads are flush or below to avoid interference with the cap. Caulk the screwheads



STEP 3J

Reinstall the cap



Section 3: Install frame into rough opening

STEP 3K

Strike Jamb: Check that the strike jamb has remained square and plumb. Readjust using shims to bring it into alignment. *Note: Seal the seam between the sill and jambs.

STEP 3L

Once the strike jamb is aligned, install a shim pack and 2-1/2” screws directly across from the long screw locations, reinforcing the center strike location by putting screws & shims on each side of the prep.

STEP 3M

Critical Step: Confirm the entire unit has remained square, plumb, level and without twist. Some recommended strategies to do this would be using your framing square to check your corners, a string test to check twist and a 6’ level to confirm the jambs are level on both the exterior edge and face of the jambs.

Section 4: Install panel 1 into the assembly/rough opening.

STEP 4A

Locate the tools and supplies needed for this step.

STEP 4B

Lift Panel 1 (hinge prepped panel) into the frame and secure the hinge leaves together by inserting the hinge pin into the barrel.

STEP 4C

Once the hinges are fastened, review the margin and make any adjustments as needed.The margin will be dictated by the hinge swage.

Section 4: Install panel 1 into the assembly/rough opening.

STEP 4D

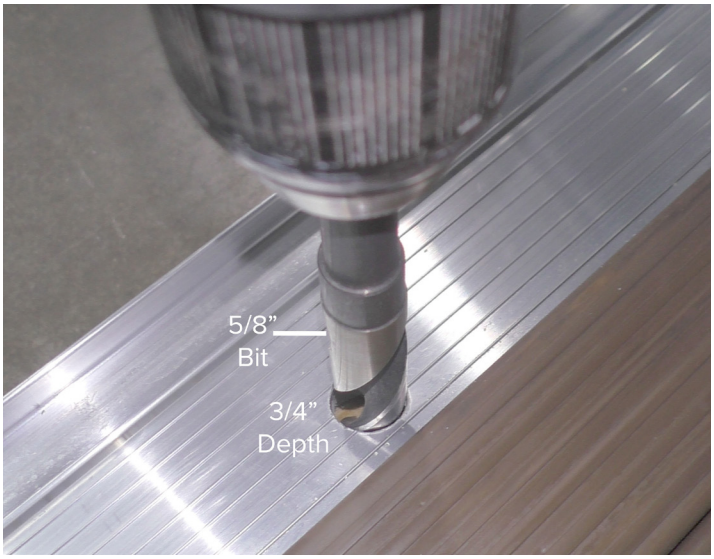
Close the door panel so the connector pin aligns over the sill.

STEP 4E

Flip the lever on the hinge bar down to engage the hinge bar pin. Mark the placement of the pin using the drill guide. Remove the weatherstrip and set it aside.

STEP 4F

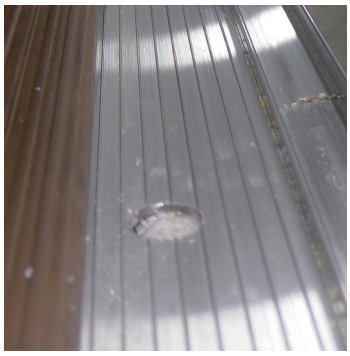
Starting with a 1/8” pilot hole (no paddle bits), drill 3/4” into the sill using a 5/8” drill bit.



Section 4: Install panel 1 into the assembly/rough opening.

STEP 4G

Insert the hinge bar pin capture in the sill. The slot should run parallel with the front edge of the sill. Use a rubber mallet to fully seat the pin capture.

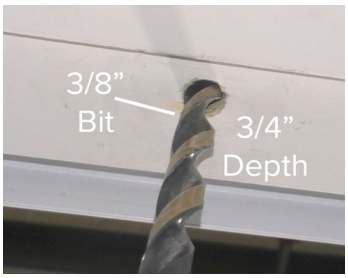


STEP 4H

Flip the lever on the hinge bar down again to engage the connector pin. Mark the placement of the upper pin on the header.

STEP 4I

Using a 3/8” drill bit, drill at least 3/4” into the header.



STEP 4J

Check the placement of the connector pin in both the sill and header holes. Once confirmed, install the hinge bar pin reinforcing plate into the header.

Section 5: Install panel 2 into the assembly/rough opening.

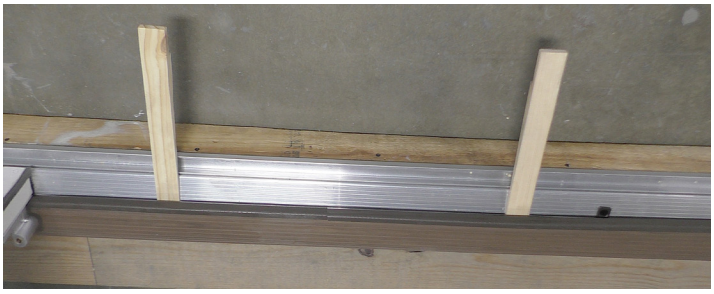
STEP 5A

Locate the tools and supplies needed for this step.

STEP 5B

Critical Step: Lay shims on top of the sill deck where Panel 2 will rest. This step will protect your sill deck from the door panel and should hold the door panel to be about 1/16” taller than Panel 1.

Note: Composite shims recommended.



STEP 5C

Place Panel 2 on top of the shims, ensuring the knuckles do not collide as you manuever the door.

STEP 5D

Align the knuckles of the two panels vertically

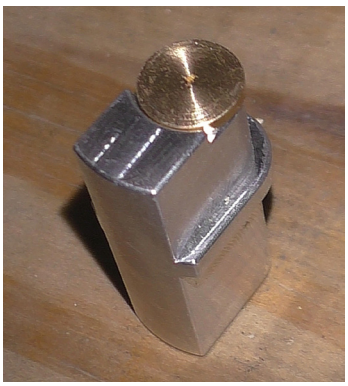
STEP 5E

Install the 1” dowel pin through LOWER floating knuckle into the adjuster knuckle. Use a flathead screwdriver to push & fully seat the dowel pin into the holes.

Section 5: Install panel 2 into the assembly/rough opening.

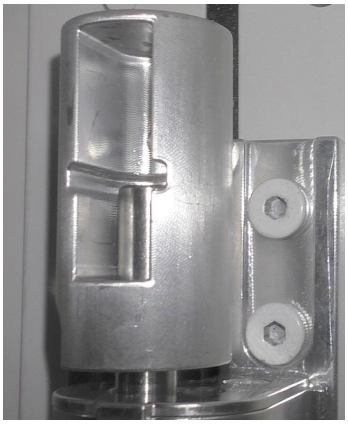
STEP 5F

Place the thrust disc (only used for lower floating knuckle) on the plug and install the two components together into the T-Shaped opening in the LOWER knuckle floating. Note: The screw will be installed in step 6 to hold plugs in.



STEP 5G

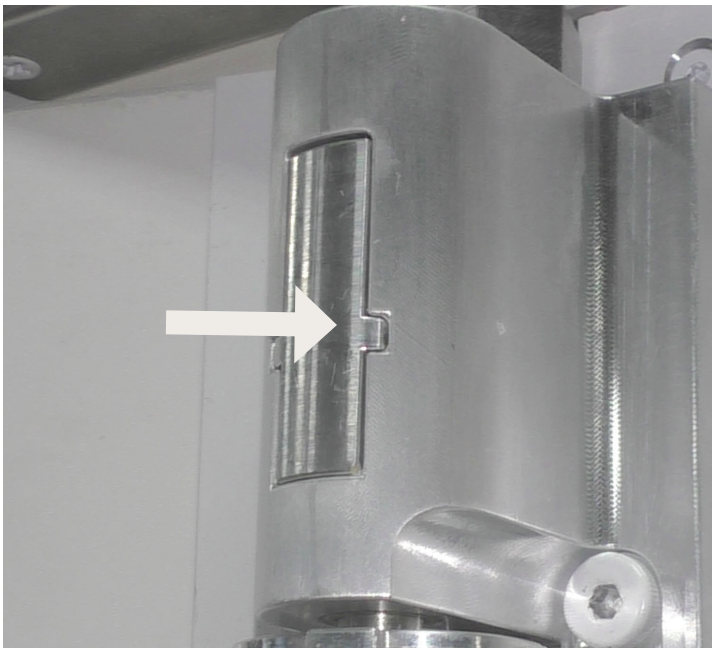
Install the 1” Dowel through the UPPER floater knuckle into the adjuster knuckle. Use a flathead screwdriver to push & fully seat the dowel into the holes.



STEP 5H

Install plug into the T-Shaped opening in the UPPER floating knuckle.

Note: No thrust disc is needed for the upper knuckle.



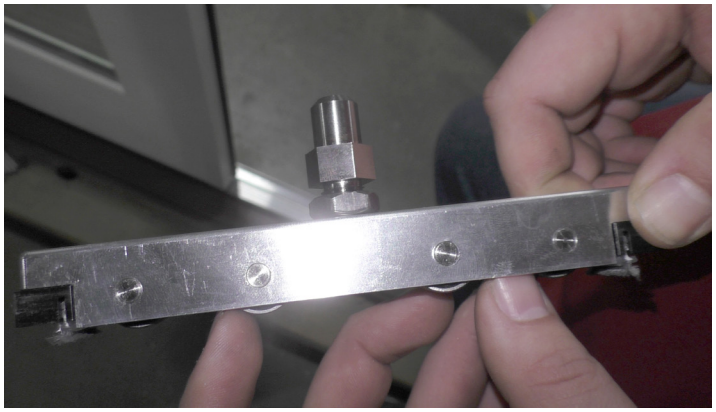
Section 6: Install the top and bottom trucks.

STEP 6A

Ensure the sill track is free of debris and locate all necessary materials for this step

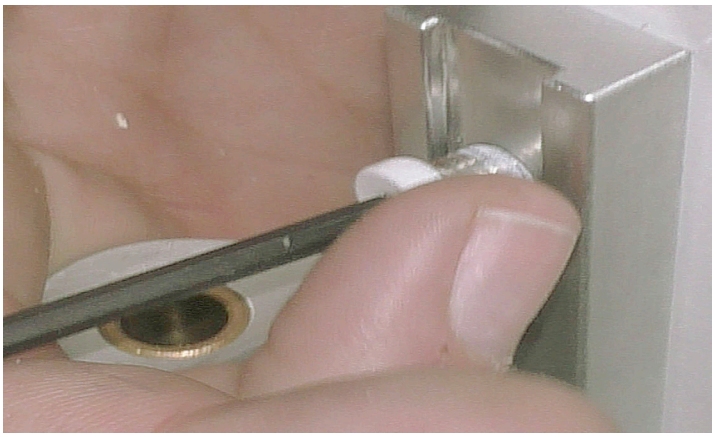
STEP 6B

Thread the truck stud into the truck body. (If already assembled, go to next step)



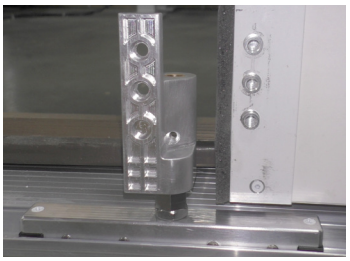
STEP 6C

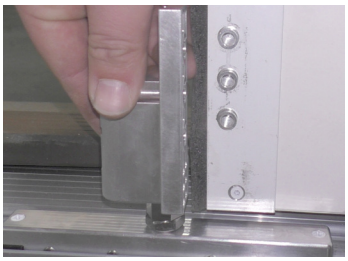
Using 1/8” hex wrench, remove the truck knuckle from the panel. Set aside the (2) 1/4-28 x 1/2” fasteners, you will need them to install the knuckles.

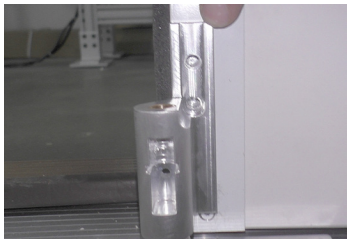


STEP 6D

Insert the truck into the sill track and slide the knuckle/truck assembly along the track until they are directly in front of the attachment holes on panel 2.







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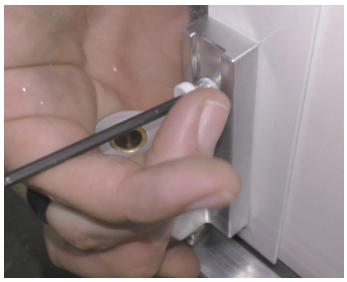
Section 6: Install the top and bottom trucks.

STEP 6E

Using the provided wrench, loosen the jam nut. Use a 5/8” or 16mm wrench to rotate the truck stud and adjust the knuckle height as needed.

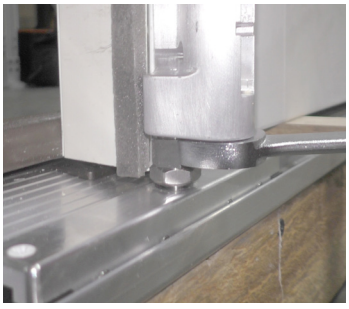
STEP 6F

Install (2) 1/4”-28 x 1/2” Fasteners using a 1/8” Hex (black) Wrench. Make sure there is no gap between Connector and Knuckle.



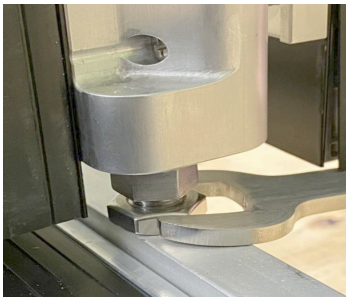
STEP 6G

Turn the truck stud clockwise to lower; or turn the truck stud counterclockwise to raise; to adjust the height of Panel 2. Panel 2 should be adjusted to achieve a margin of 1/8” between the inside edge of the door panel and the top of the sill deck.



STEP 6H

Tighten the jam nut located on the truck.



Section 6: Install the top and bottom trucks.

STEP 6I

Remove the shims that were keeping Panel 2 off the door sill.

STEP 6J

Installing Top Truck: Thread the truck stud into the truck body.

STEP 6K

Installing Top Truck: Using 1/8” hex wrench, remove the truck knuckle from the panel. Set aside the (2) 1/4-28 x 1/2” fasteners, you will need them to install the knuckles.

STEP 6L

Installing Top Truck: Insert the truck into the header track and slide the knuckle/truck assembly along the track until they are directly in front of the attachment holes on panel 2.

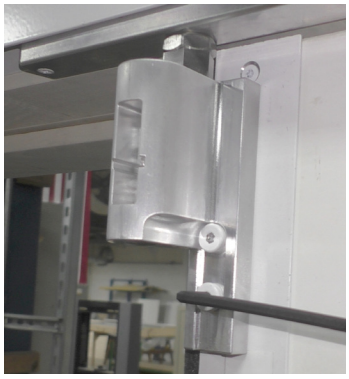
Section 6: Install the top and bottom trucks.

STEP 6M

Installing Top Truck: Using the provided wrench, loosen the jam nut. Use a 5/8” or 16mm wrench to rotate the truck stud and adjust the knuckle height as needed.

STEP 6N

I**nstalling Top Truck:** Install (2) 1/4”-28 x 1/2” Fasteners using a 1/8” Hex (black) Wrench. Make sure there is no gap between Connector and Knuckle.



STEP 6O

Installing Top Truck: Turn the truck stud clockwise to lower; or turn the truck stud counterclockwise to raise.

STEP 6P

Installing Top Truck: Tighten the jam nut located on the truck.

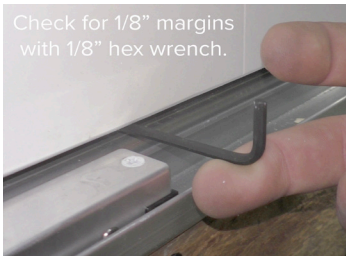
Section 6: Install the top and bottom trucks.

STEP 6Q

Clean the top and bottom tracks to ensure debris has been cleared.

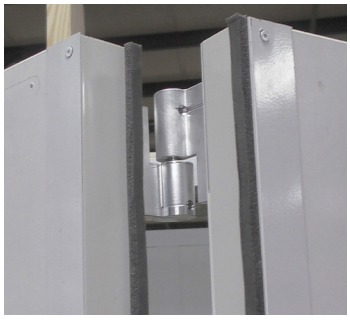
STEP 6R

Measure the margin between the bottom of the door panel and the top of the sill. Confirm that this measurement is at 1/8” to prevent damaging the sill.



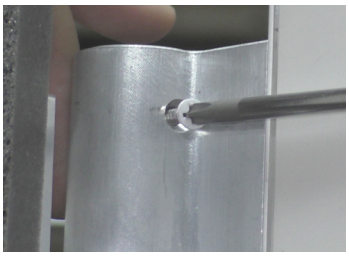
STEP 6S

Slowly accordion the doors open by unlocking bolts on hinge bar A, pushing out on hinge bar A & B. Once they begin to fold you can pull the hinge bar towards the hinge jamb.



STEP 6T

Secure the plugs in Hinge Bar A using #6-32 x 1/2” flathead screws in both the top and bottom knuckles. **Hand Tighten the Screws.**



STEP 6U

Once the screws are installed, close the doors and lock hinge bar A (between panels 1 & 2).

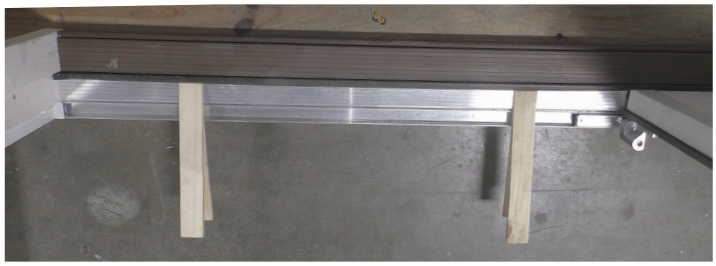
Section 7: Install panel 3 (locking panel) into the door unit.

STEP 7A

Locate the tools and supplies needed for this step.

STEP 7B

Critical Step: Lay shims on top of the sill deck where Panel 3 will rest. This step will protect your sill deck from the door panel and should hold the door panel to be about 1/32” - 1/8” taller than Panels 1 & 2.



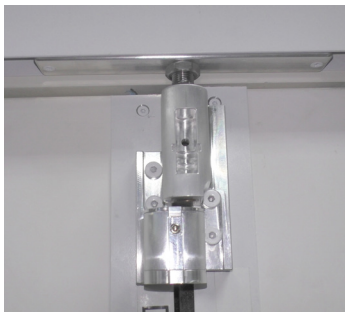
STEP 7C

Place Panel 3 on top of the shims, ensuring the knuckles do not collide as you manuever the door.

Section 7: Install panel 3 (locking panel) into the door unit.

STEP 7D

Align the knuckles of the two panels vertically.



STEP 7E

Install the 1” Dowel Pin through the LOWER truck knuckle into the adjuster knuckle. Use a flathead screwdriver to push & fully seat the dowel into the holes.

STEP 7F

Place the thrust disc (only used for lower floating knuckle) on the plug and install the two components together into the T-Shaped opening in the LOWER truck knuckle.

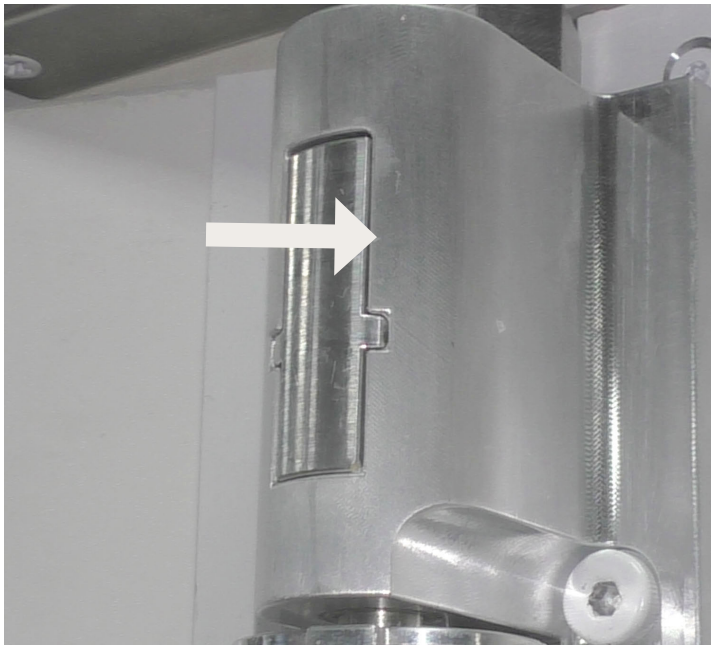
Section 7: Install panel 3 (locking panel) into the door unit.

STEP 7G

Install the 1” Dowel through the UPPER floater knuckle into the adjuster knuckle. Use a flathead screwdriver to push & fully seat the dowel into the holes.

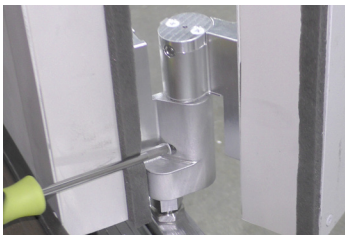
STEP 7H

Place the plug (no bearing disc needed) into the T-Shaped opening in the truck knuckle.



STEP 7I

Secure the plugs in Hinge Bar using #6-32 x 1/2” flathead screws in both the top and bottom knuckles. Hand Tighten the Screws.



Section 8: Final Adjustments

STEP 8A

Locate the tools and supplies needed for this step

STEP 8B

With all three door panels closed, examine the margin between the edge of Panel 3 and the strike jamb. This margin measurement is recommended to be 5/32”. If all margins are within tolerance, skip to step 8F.

STEP 8C

Loosen the #10-32 Set Screws in the top and bottom adjuster knuckles located on hinge bar B using the 3/32” hex wrench.

STEP 8D

Use the 5/32” HexWrench to adjust the panels.

Section 8: Final Adjustments

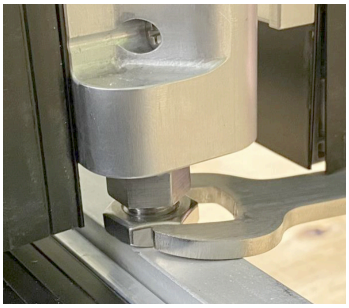
STEP 8E

Once the margin looks good (5/32”), retighten the set screws in both adjuster knuckles using the 3/32” hex wrench.

STEP 8F

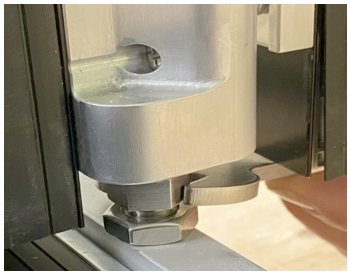
To adjust the bottom margin, loosen the jam nut.

Note: No need to adjust if margin is 1/8”



STEP 8G

Using the 5/8” Open End Wrench, turn the stud adjuster flats until the bottom margin is 1/8” between the top of the sill deck and inside edge of the door.

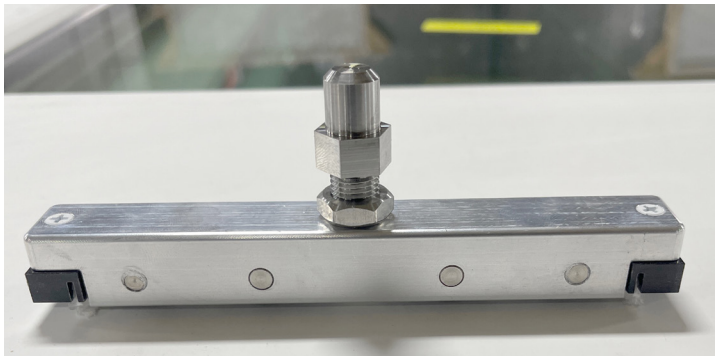


STEP 8H

Ensure the top truck is positioned so that it will accept the adjustment without bottoming out.

STEP 8I

Lock the jam nut using the 3/4” flat while holding the 5/8” wrench on the stud adjuster flats.



STEP 8J

Adjust the top truck with a 5/8” wrench along with the Endura supplied thin wrench so it will not bottom out in the top track.

Section 8: Final Adjustments

STEP 8K

After all of the truck adjustments, close panel 3 to reconfirm the margins around the door match the recommended measurements.

Note: If neccessary, adjust the top margin. Use the shims and screws to adjust to the correct top margin (1/8”). If adjustments were made, ensure the top truck is also adjusted as necessary. Do not bottom in top truck.

STEP 8L

As Panel 3 is closed, align the Hinge Bar pin over the sill.

STEP 8M

Flip the lever on the Hinge Bar down to engage the connector pin. Mark the placement of the pin using the drill guide.

Section 8: Final Adjustments

STEP 8N

Starting with a 1/8” pilot hole (no paddle bits), drill 3/4” into the sill using a 5/8” drill bit.

STEP 8O

Insert the connector pin capture in the sill. The slot should run parallel with the front edge of the sill. Use a rubber mallet to fully seat the pin capture.

STEP 8P

Flip the lever on the Hinge Bar down again to engage the pin. Mark the placement of the upper pin on the header.

Section 8: Final Adjustments

STEP 8Q

Using a 5/8” drill bit, drill at least 3/4” into the header.

STEP 8R

Check the placement of the pin in both the sill and header holes. Once confirmed, install the Hinge Bar Pin Reinforcing Plate into the header.

STEP 8S

Lock both Hinge Bars by flipping the levers down to secure the pins in the sill and header.

Section 9: Finishing touches & operation checks.

STEP 9A

Tighten all fasteners throughout the system and ensure all margins are correct.

STEP 9B

Trim any excess shim material that may be sticking out or left on the sill deck.

STEP 9C

Open and close the active door panel to ensure the functionality of the door is working correctly.

STEP 9D

Unlock the Hinge Bar pins and fold the doors against the hinge jamb. Please take caution while folding Panel 3 into Panel 2 during this initial test to protect the finish on the panels before the clasps are installed.

STEP 9E

Lock and unlock the Hinge Bar levers to ensure the pins are correctly interfacing with the reinforcing plate and pin capture.

STEP 9F

Reinstall the weatherstrip around the frame of the door and in the sill cap.

STEP 9G

Install the panel clasps into each panel (exterior of panels 2 and 3 / interior of panels 1 and 2).

STEP 9F

Ensure the top and bottom tracks are free of any debris. Reinstall sill covers.