

# **DOR-O-MATIC®**

**AUTOMATIC DOOR SYSTEMS**

---

## **Series 96K All Glass**

### **Automatic Sliding Door Installation Instructions And Service Manual**



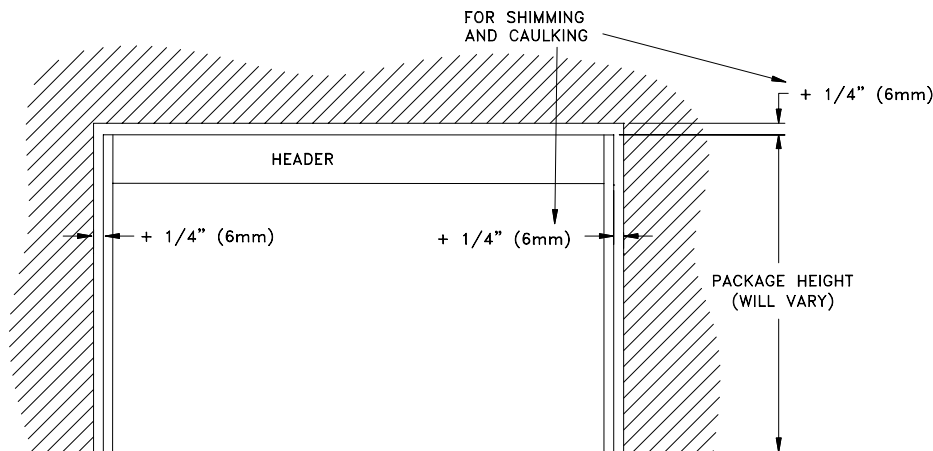
DOR-O-MATIC®  
AUTOMATIC DOOR SYSTEMS  
7350 West Wilson Avenue  
Harwood Heights, IL 60706-4708  
1-800-543-4635  
708-867-7400  
Tech Support: 888-942-9945  
Engineering Fax: 708-867-1177  
[www.doromatic.com](http://www.doromatic.com)

**TABLE OF CONTENTS**

**INSPECTION..... 3**  
**HEADER MOUNTING ..... 4**  
**THRESHOLD INSTALLATION..... 6**  
**GLAZING ..... 7**  
**PACKAGE COMPONENTS..... 10**  
**PANEL (O) INSTALLATION ..... 11**  
**DOOR (SX) INSTALLATION..... 12**  
**ELECTRICAL..... 15**  
**RELEASE FOR SERVICE..... 15**

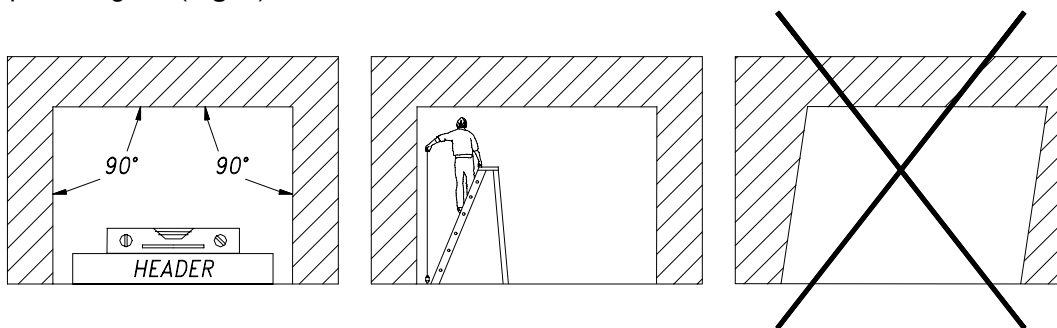
## INSPECTION

1. Verify that the order was shipped complete and correct, including model number, color, and package width and height.
2. Verify at the **job site** that **all conditions** are correct and in accordance with **final approved shop drawings**.
  - A. Check that the opening is the correct size. Correct size is package width plus 1/2" (13mm) and package height plus 1/4" (6mm), for shimming and caulking (**FIG. 1**).



**Fig. 1**

- B. Check that the floor is level. Use a minimum 6'-0" (1829mm) level **or** use the actual aluminum header turned upside down to check floors (**Fig. 2**).
- C. Use a plumb bob to check that the rough opening where the jambs will be mounted is vertical (**Fig. 2**).
- D. Check diagonal measurements to ensure that the opening is a true rectangle, not just a parallelogram (**Fig. 2**).



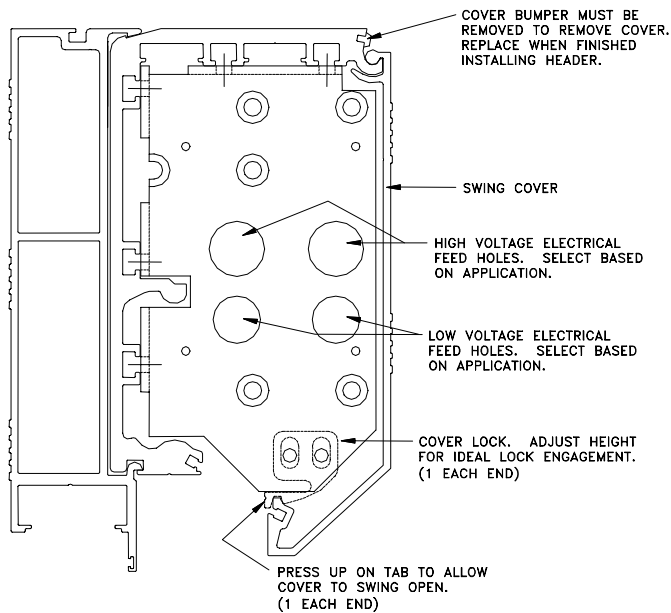
**Fig. 2**

- E. Check that the electrical feed (120V, 15A single phase for North America, 220/240V, 5A single phase for Europe, Asia, etc.) is correctly located in accordance with final approved shop drawings and all conduits and electrical junction boxes for push plates or other activation devices (if required) are likewise correctly located.

**NOTE:** If any of the above items are not correct, **do not attempt to install the Series 96K Slide package!** Report any incorrect items to the general contractor **immediately**. Do not proceed until all conditions are correct.

## HEADER MOUNTING

1. Open the carton marked "96K HEADER". Remove the header and set on a piece of cardboard with the swing cover facing up. Remove the cover bumper near the cover hinge. Do not lose the cover bumper, as it must be re-installed to prevent the cover from coming off when opened. Using a screwdriver, press up on the cover lock tab (one each end) to disengage and open the cover. (Fig. 3).



**NOTE:**  
High voltage (incoming 115 or 230 VAC) wires and low voltage wires cannot share the same access hole. High voltage wires must be routed away from all low voltage wires. Use wire clips supplied on parts board.

Fig. 3

2. Within the header (factory installed), are the motor/gearbox with drive pulley, drive belt, idler pulley and tensioner assembly, control box, holding beam control box, any switches, and the terminal block bracket. Additional items are shipped in the parts board, and these items should be layed out in a convenient location.
3. The standard package height is 7' 7-1/4" (2318mm). On occasion, the approved shop drawings sometimes require a package height of 7' 6-3/4" (2305mm). If this is the case, cut off 1/2" (13mm) from the bottom of each jamb tube in the field. This is generally performed for a recessed threshold application.
4. Align the jamb tubes wit the ends of the header, making sure that the boltholes and electrical feed holes line up, and that the access holes for the safety beams are on the **INTERIOR** side of the opening. Use three 1/4-20 x 1" long bolts on each side to secure the header end cap to each jamb tube. Then install one dress end cap on each side using the #8-32 screws. (Fig. 4)

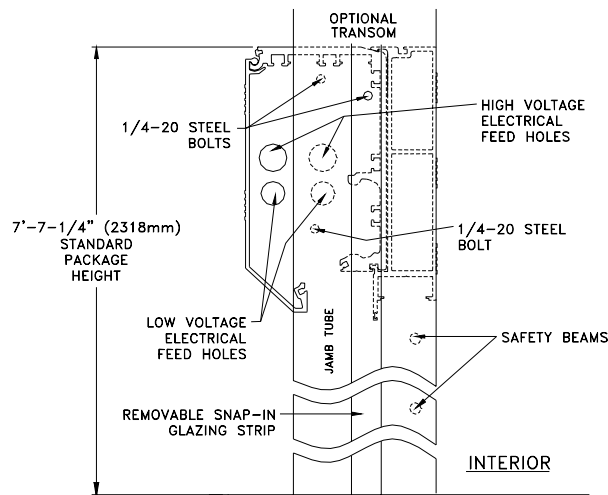


Fig. 4

5. For each jamb, insert wood tapered shims to plumb each jamb. Insert  $\frac{1}{4}$ " (6mm) spacers around the header or horizontal transom tube at anchor locations to keep the tubes from being pulled tight.
6. With a helper, tip up the jamb/header assembly and position it within the rough opening, making sure the swing cover is on the correct side. Verify that the package is located correctly within the rough opening (refer to the final approved shop drawings). The Series 96K Slide package is **usually** centered within the opening or is mounted flush with the curtain wall, but verify the position with the drawings, contractor, architect, etc.
7. Use appropriate fasteners (four per jamb) to anchor through the glazing recess of the jamb tube to the wall or adjacent framing. Check the jamb tubes with a level to be sure that the tubes have not been pulled in by the anchors. Finally, install the snap-in glazing strips into the jamb tubes. **(Fig. 5)**

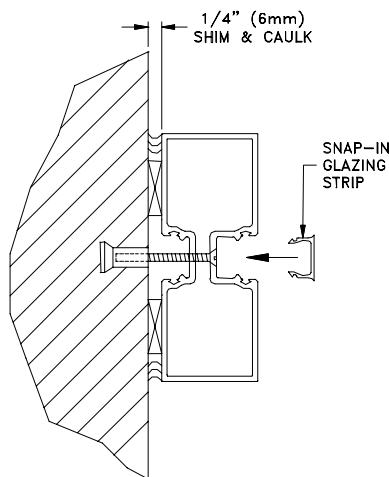
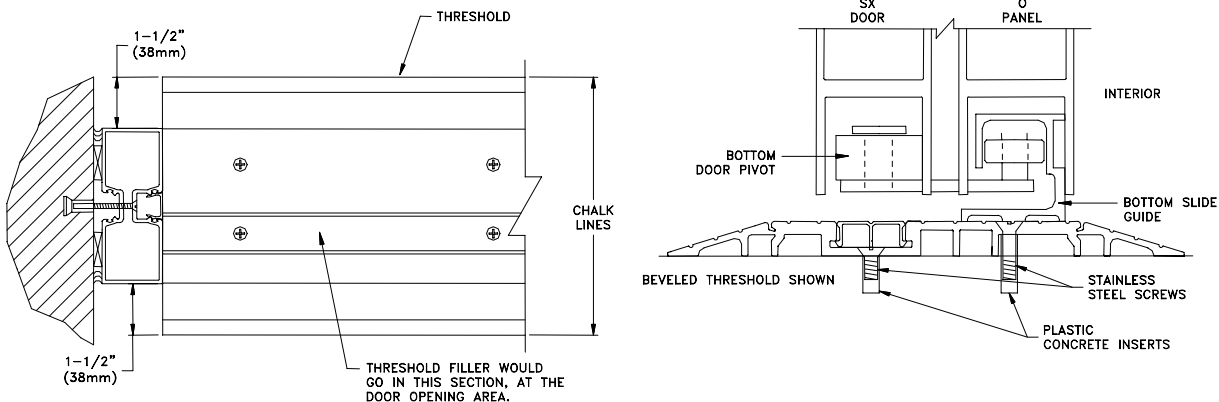


Fig. 5

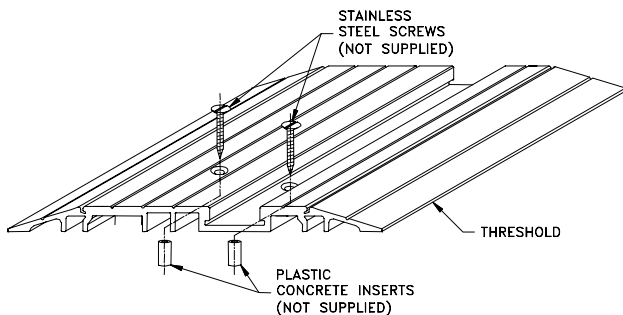
**NOTE:**  
 If the package being installed is over 10' 0" (3048mm) wide and has a transom, a vertical transom tube must be anchored securely to the top transom tube in order to prevent deflection in the header.

## THRESHOLD INSTALLATION

1. After verifying that the floor is level, snap a chalk line 1-1/2" from the face of each jamb on both sides. Place the threshold between the jamb tubes within the chalk lines.
2. Verify that the track portion in the threshold (where the filler is to be located) is on the EXTERIOR side of the opening. Keep the threshold within the chalk lines and use it as a guide to drill through holes into the floor. Place plastic concrete inserts into the drilled holes. Fasten the threshold to the floor. **(Screws and inserts are not supplied. See Fig. 6 and Fig. 7)**
3. Install the threshold filler at the door opening area with a rubber mallet.



**Fig. 6**



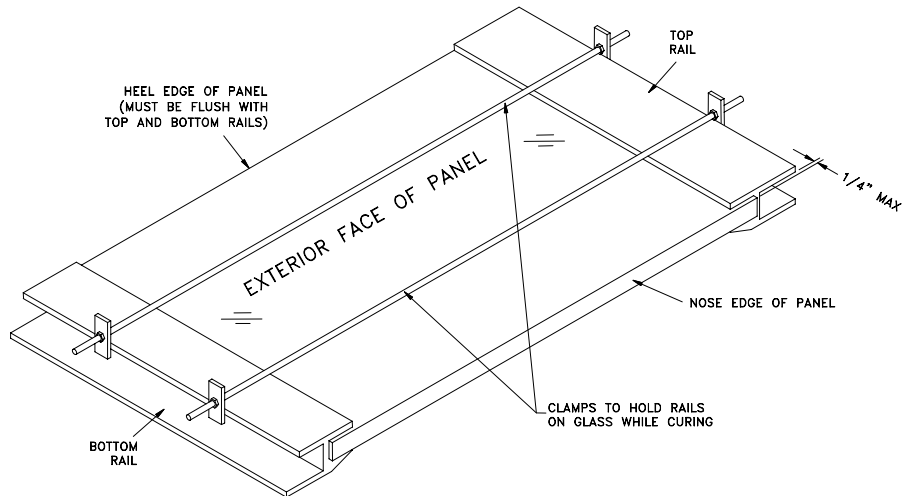
**Fig. 7**

## GLAZING

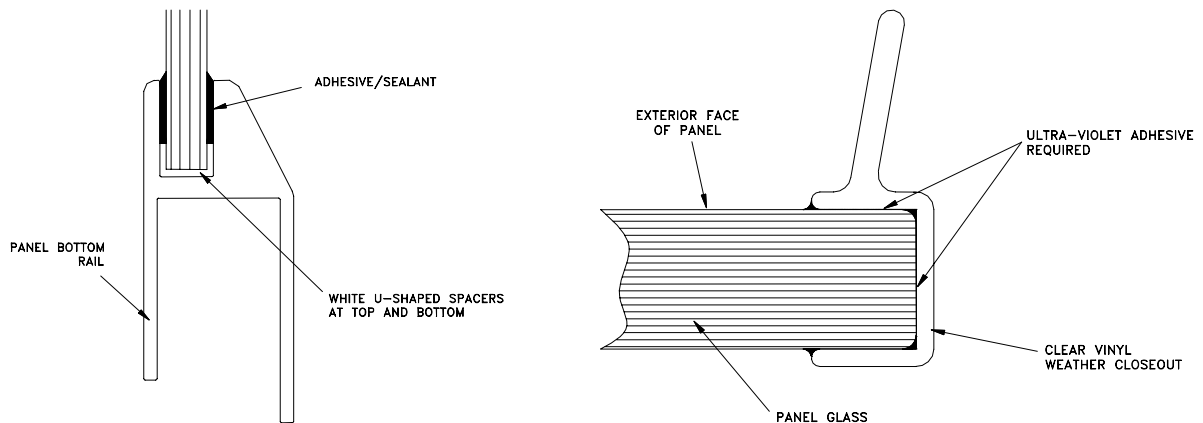
1. Remove the panel rails (top and bottom) from their packaging. Position them with a piece of glass (WITHOUT any holes) and the u-shaped spacers. Adhere all items with silicone RTV or rocktite cement using a clamp device to maintain all items together during curing. (**Fig. 8 and Fig. 9**).

**NOTE:**

Ensure that the heel edge of the panel is maintained **FLUSH** during assembly. Use tape at ends of both rails to prevent adhesive/sealant from leaking until set.



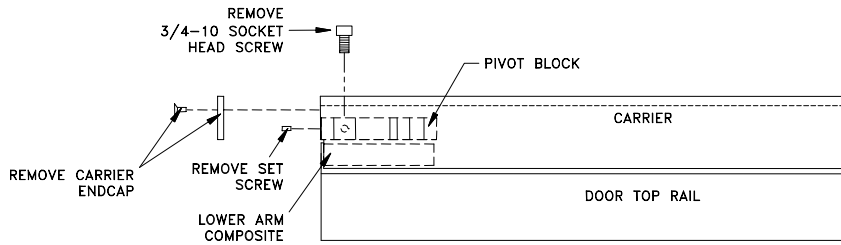
**Fig. 8**  
(Left Hand panel shown)



**Fig. 9**

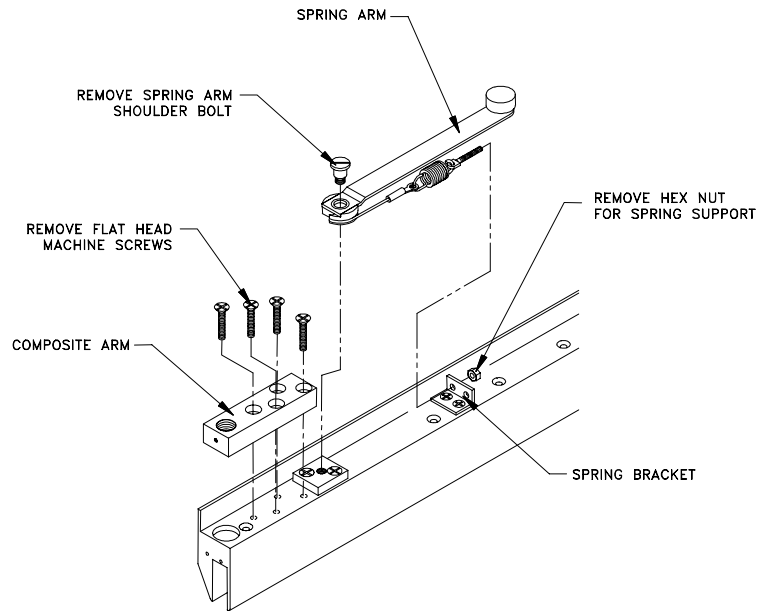
2. Attach clear vinyl weather closeout as shown (**Fig. 9**) with ultra-violet adhesive to prevent yellowing on exterior applications. To prevent injury or damage, allow ALL adhesives/sealants enough time to cure before handling panel.

3. Remove the door rails (top and bottom) from their packaging. Start to disassemble the carrier from the door top rail by removing the  $\frac{3}{4}$ -10 socket head cap screw at the heel end of the carrier, the carrier endcap, and the setscrew on the lower arm (**Fig. 10**).



**Fig. 10**

4. Remove the shoulder bolt from the spring arm, and loosen the spring cable at the hex nut located behind the spring bracket. This would help detach the carrier assembly from the top rail. (**Fig. 11**)



**Fig. 11**

5. Remove the glass hanger from the door top rail as shown (**Fig. 12**), by removing the  $\frac{1}{4}$ -20 flat head machine screws from the door top rail extrusion.

**Fig. 12**

- Position the glass hanger and a piece of glass (WITH 3 holes bored into it) together with black and white u-shaped spacers, and cushion spacers as shown. Ensure that the glass with all items are centered on the glass hanger, while it extends approx. 1/4" MAX from each end. (Fig. 12)

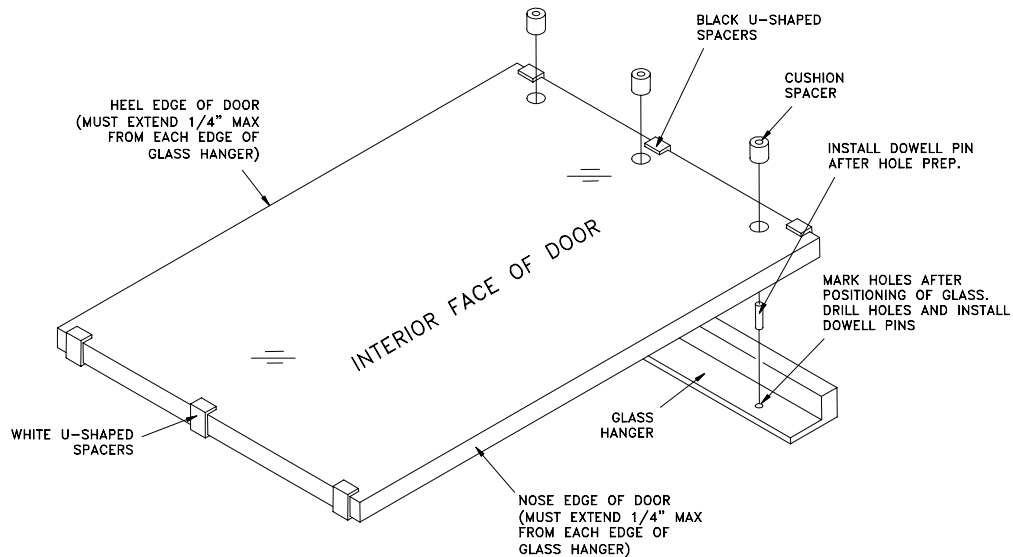


Fig. 12

- Using the holes on the glass (with the cushion spacers) as a template, mark the holes on the glass hanger. Drill all holes to .234 diameter and ream to .249 as required.
- Insert Dowell pins into the newly prepped holes on the glass hanger, with the cushion spacers, and assemble with glass. Leave them in a convenient location for now.
- Install the hanger assembly that you previously prepared, with the top and bottom rails as shown in (Fig.13) using the 1/4-20 flat head screws supplied in the parts board. Glaze and adhere all items as required.

**NOTE:**  
Use tape at ends of both rails to prevent adhesive/sealant from leaking until set. Allow proper curing time for all adhesives and sealants BEFORE handling door(s) and panel(s).

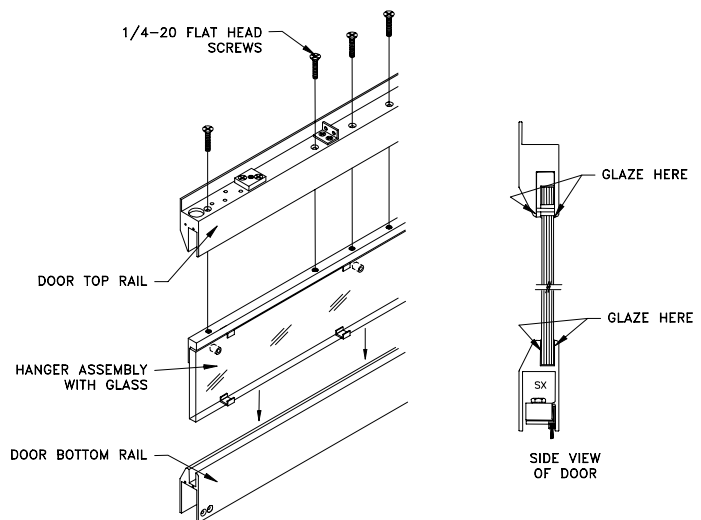
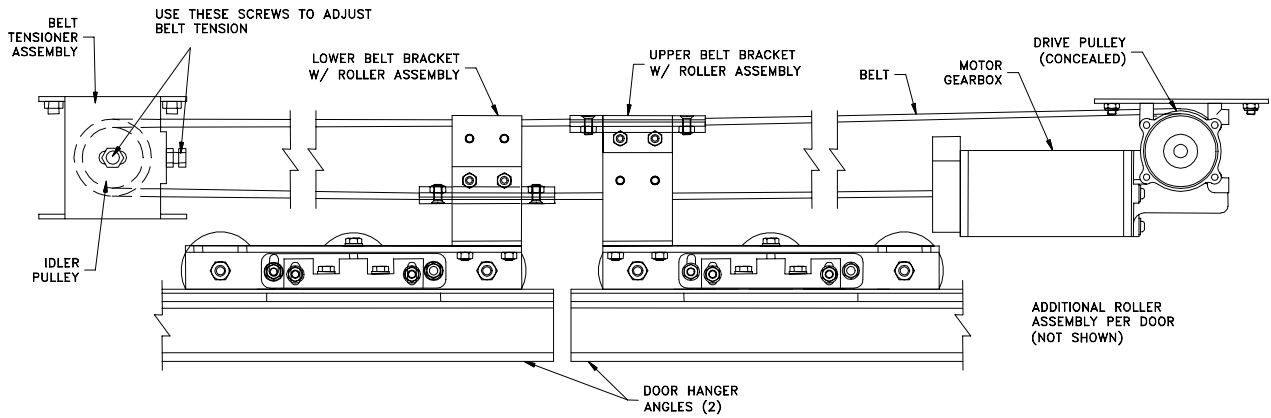


Fig. 13

- Refer to steps 3 and 4 for reattaching the lower arm, the spring, and the carrier as previously assembled.

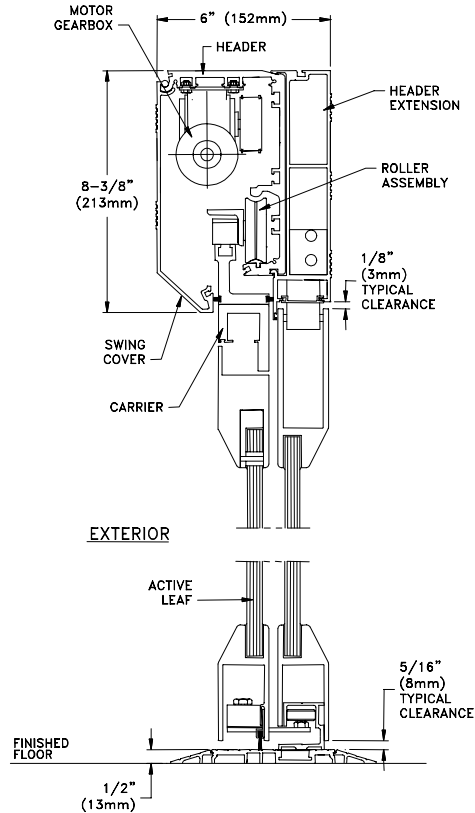
## PACKAGE COMPONENTS

1. Refer to **Fig. 14** for a detailed breakdown of internal drive components.



**Fig. 14**

2. Refer to **Fig. 15** for a detailed section view of a typical Series 96K Slide All Glass application.

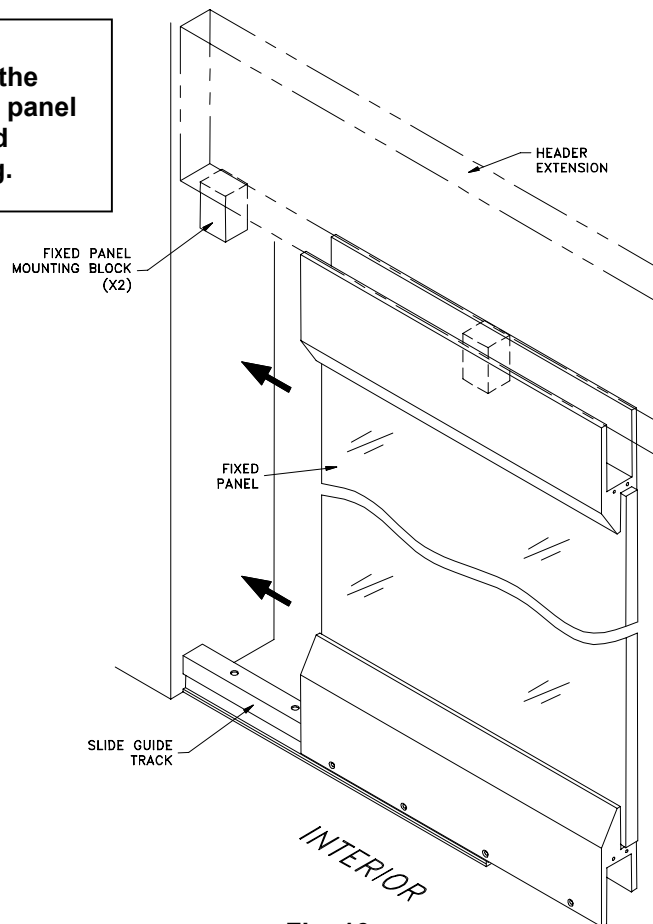


**Fig. 15**

## PANEL (O) INSTALLATION

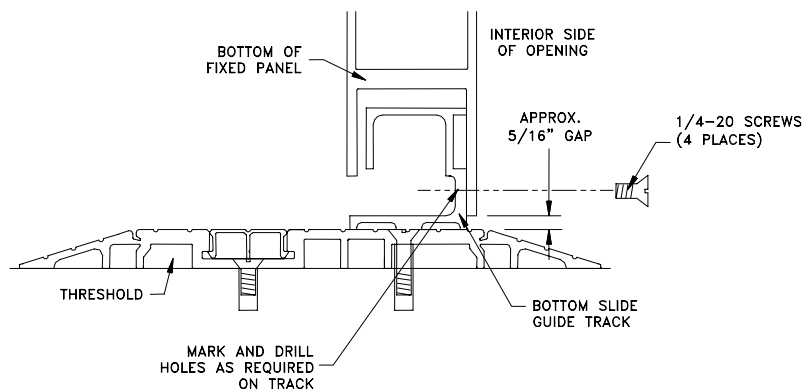
1. Remove the slide guide from its packaging. Use the factory prepped holes on the slide guide as a template to drill the same number of holes into the threshold.
2. With vacuum cup lifters (*load rating of +125lbs; minimum of 2 lifters for each door*), lift the fixed panel and place the bottom rail (factory-prepped rail) onto bottom slide guide, and top rail onto the (2) mounting blocks at the header extension. **(Fig.16)** Ensure that the (4) drilled holes at bottom of panel are facing the INTERIOR side of opening. Slide panel towards jamb tube.

**NOTE:**  
Ensure that the glass on the panel is fully cured before lifting.



**Fig. 16**

3. Mark and prep the holes on the slide guide track using the holes on the bottom rail, and install 1/4-20 flat head screws from the screw bag. **(Fig. 17)**



**Fig. 17**

## DOOR (SX) INSTALLATION

**NOTE:**

All mention of M6 nuts and bolts refers to the thread diameter. Use a 10mm socket or open-end wrench when removing or installing these fasteners.

1. Detach the door angles from the roller assemblies in the header by removing the (2) M6 nuts in front of the hanger block, and the M6 screw and washer at the top. (Fig. 18) Attach the door angles to the carrier on each door (Fig. 19) using the 5/16" flat head screws supplied in the screw bag.

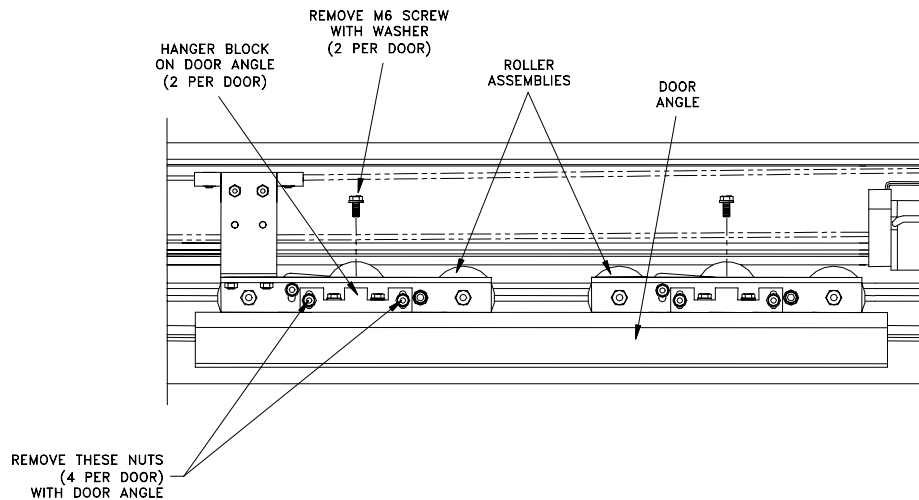


Fig. 18

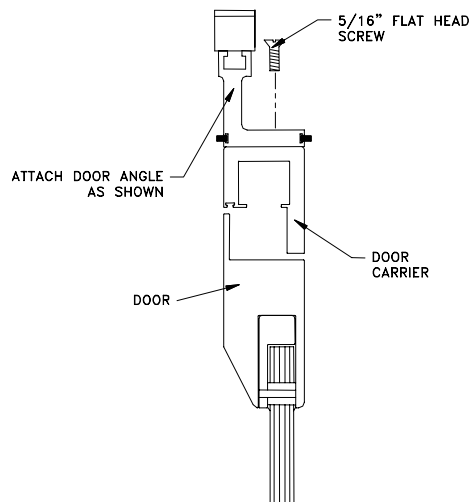
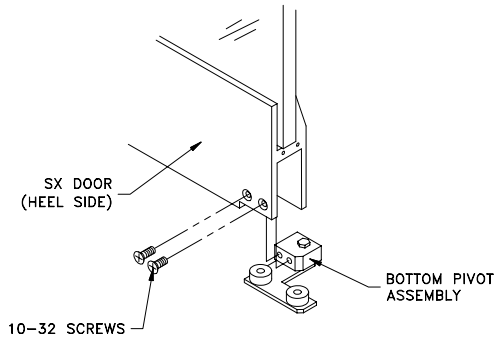


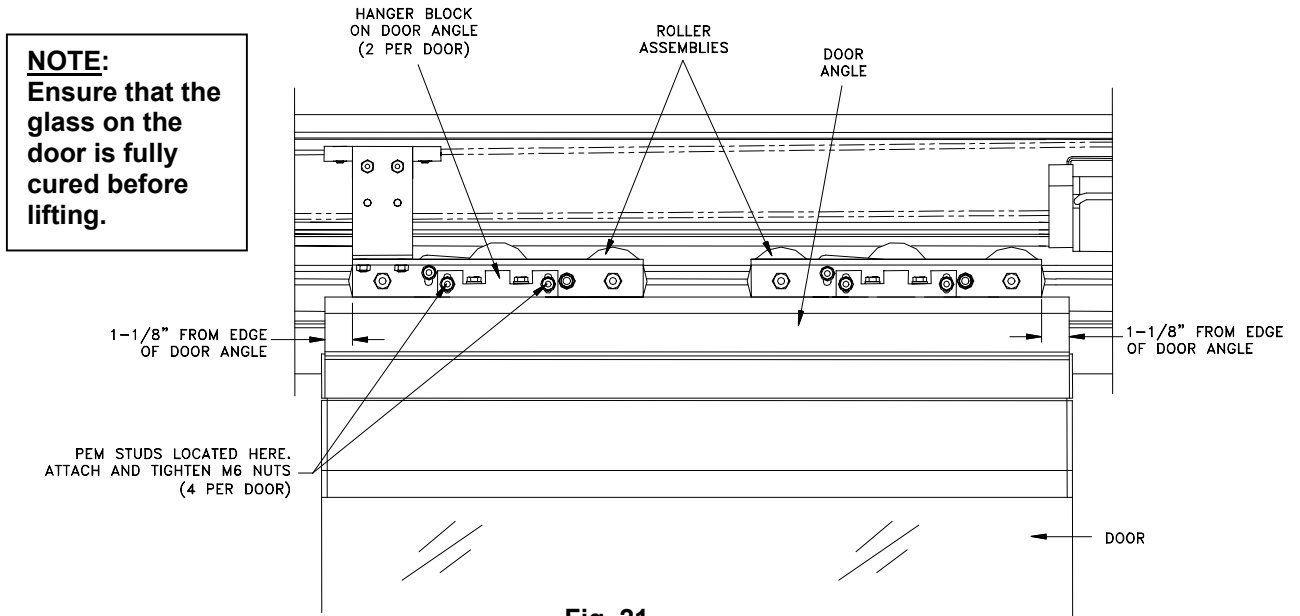
Fig. 19

- Remove the bottom pivot assembly from its packaging and install it on the door using the (2) holes on the "heel" of the bottom rail as shown (**Fig. 20**).



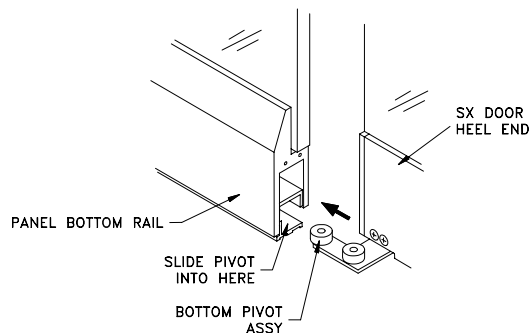
**Fig. 20**

- With vacuum cup lifters (load rating of +125lbs; minimum of 2 lifters for each door), lift the door and hang it onto the threaded studs located on the roller assemblies using the hanger blocks on the door angle. (**Fig. 21**)



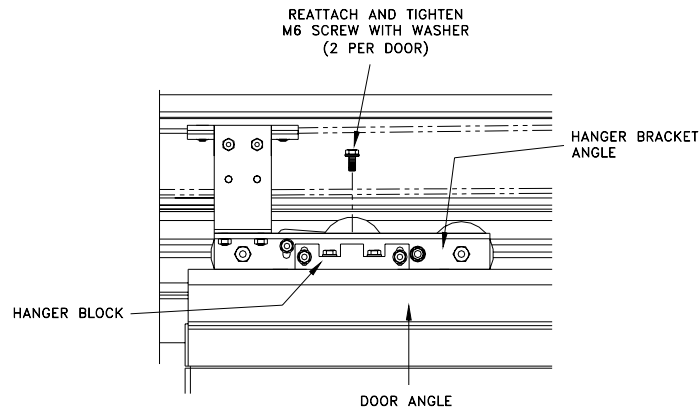
**Fig. 21**

- Slide the door in the direction shown (**Fig. 22**) while engaging the bottom pivot into the bottom rail of the fixed panel.



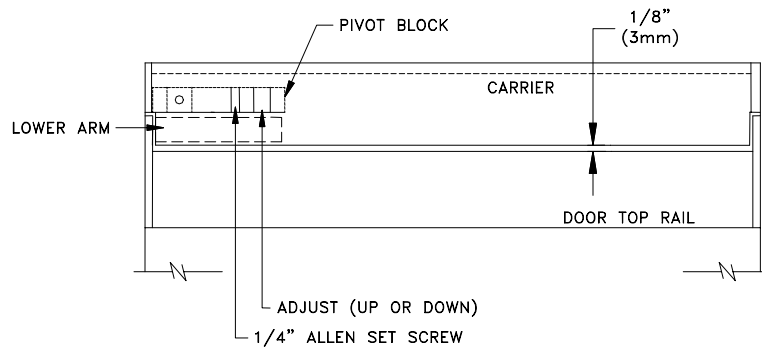
**Fig. 22**

- Adjust the door height by reinstalling and tightening the M6 screw at the top of the hanger bracket angle. **(Fig. 23)** Ensure that there is approximately 5/16" gap between the bottom of the door and the top of threshold or finished floor.



**Fig. 23**

- Next, break open the door and panel. Slowly close the door and check the clearance between the top of the door and the bottom of the carrier. If the clearance is not 1/8" (3mm), loosen the 1/4" (6mm) Allen head set screw at the bottom of the carrier. Adjust the clearances as required by turning the large Allen head bolt. After setting the correct clearance, re-tighten the 1/4" (6mm) Allen headset screw. **(Fig. 24)**



**Fig. 24**

## ELECTRICAL

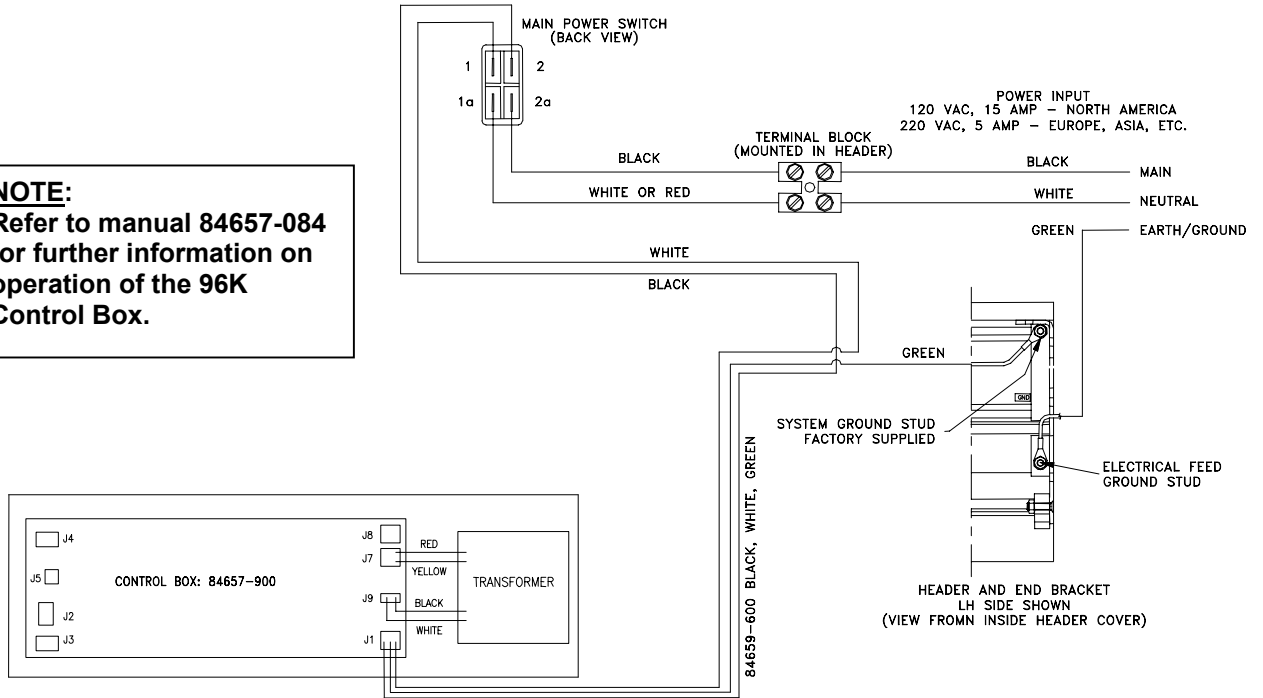
1. Refer to **Fig. 25** for Series 96K Slide power connection requirements.

**NOTES:**

1. Field-prepped wire access holes cannot be larger than 1/2" diameter.
2. The ground wire for incoming 115 VAC and the system ground wire cannot share the same ground stud.
3. All earth/ground wires must be attached to header. Ground wires cannot share the same grounding stud.

**NOTE:**

Refer to manual 84657-084 for further information on operation of the 96K Control Box.



**Fig. 25**

2. Install all safety, motion, and presence sensors (if applicable) according to their proper procedures included in their instruction manuals.

## RELEASE FOR SERVICE

Clean the glass, and install all safety, traffic control, and instruction decals on the door as required. **This is very important! Failure to do so leaves the installer liable for any accident that might occur. This must be done!** Present the keys to the owner or general contractor. Demonstrate the unit; review all safety features as well as the safety check that is to be performed by the owner each morning.

**NOTE:**

Install all safety, traffic control, and instruction decals on the door as required.