

Series 9000 · Electric Super Fold Strip Door

INSTALLATION INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE INSTALLING DOOR. SUPER SEAL MFG. LTD. WILL NOT BE HELD RESPONSIBLE FOR IMPROPER INSTALLATION OF ANCHORING DEVICES, OR FOR INSTALLATION INTO AGED OR UNSOUND CONCRETE, CONCRETE BLOCK, OR OTHER WALL OR FLOOR MATERIAL WHICH MAY RESULT IN PREMATURE PRODUCT WEAR, PRODUCT FAILURE, PROPERTY DAMAGE, OR PERSONAL INJURY.

1. Check Order

- a. **Measure door opening height and width.** Compare to Purchase Order.
- b. **Check Components List and Hardware Supplied List.** Make sure all components and hardware are present.
- c. **Check Recommended Tools List.** Make sure all recommended tools are available.
- d. **Determine method of mounting door to wall.** Examine wall construction and decide whether to weld, use concrete anchors, use threaded rod, or use another fastening technique. This door must be securely fastened to the wall.

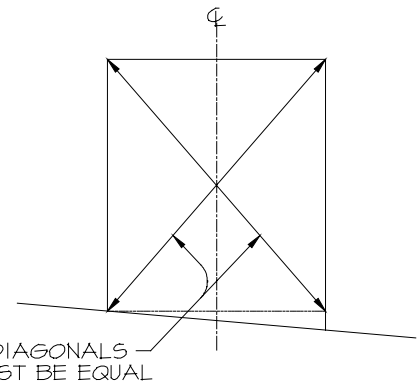


FIG. 1

2. Prepare Door Frame

- a. **Correct door opening height and width.**
 - **Measure left and right sides** of door opening from top to bottom. The height of the left and right sides of the opening should be the same.
 - **Measure the top and bottom** of door opening from side to side. The width of the top and bottom of the opening should be the same.
 - **If measurements do not coincide**, see Figures 1, 2, and 3. These figures show how some tolerance for a sloped floor (Figure 1), a badly aligned wall (Figure 2), or a crooked jamb (Figure 3) might be accommodated.



FIG. 2

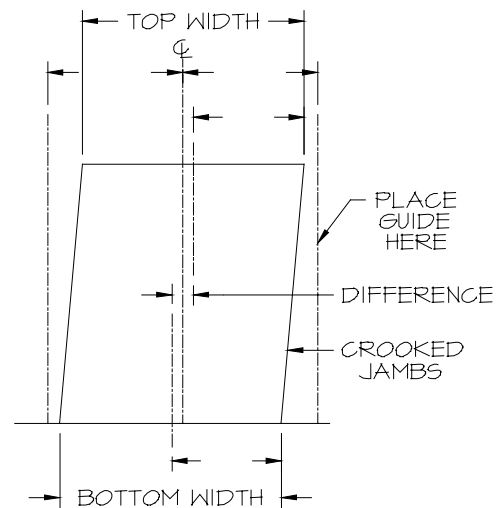


FIG. 3

3. Mark Wall for Offwall Brackets

a. Bifold door.

- **Measure and mark center of Track Assembly** between the two Mounting Studs (Figure 4).
- **Measure** from center of Track Assembly to center of a Mounting Stud. This is Dimension X (Figure 4).
- **Measure and mark center of door opening** on wall above lintel (Figure 5).
- **Measure and mark Vertical Line.**
 - * From the center line above lintel, **measure** over to right door jamb using Dimension X (Figure 6).
 - * **Mark** wall.
 - * **Draw a level Vertical Line** through mark, extending above the lintel.
- **Measure and mark Horizontal Line.**
 - * From corner of jamb, **measure** 8" up above lintel (Figure 6).
 - * **Mark** wall.
 - * **Draw a level Horizontal Line** from the 8" mark through the Vertical Line.
- **Repeat** marking Vertical and Horizontal Line for left side.
- **Check** that left side and right side intersections are level to each other.

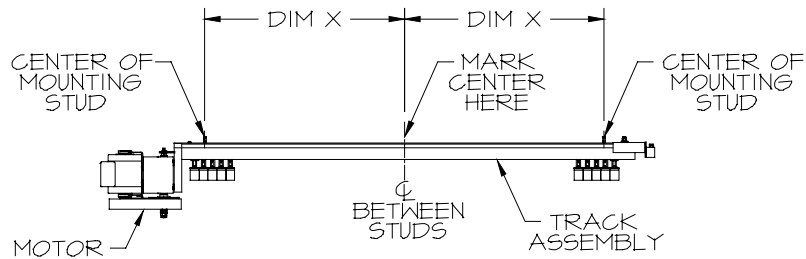


FIG. 4

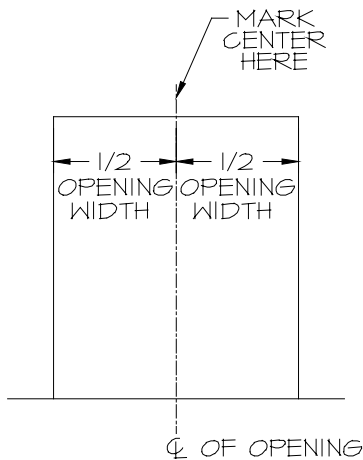


FIG. 5

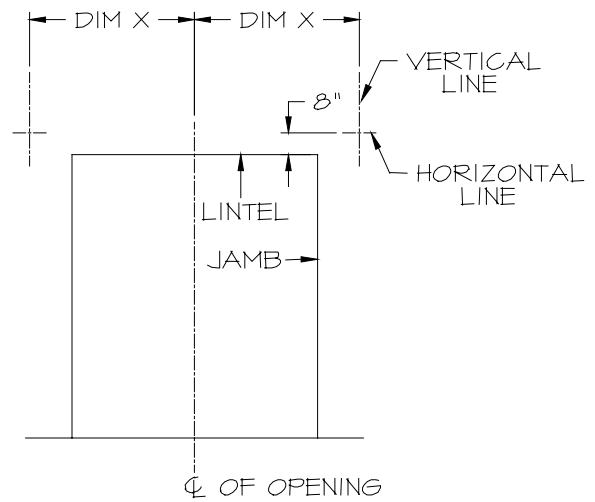


FIG. 6

3. Mark Wall for Offwall Brackets, continued

b. Single Slide door.

- **Check purchase order** for Motor location.
- **Measure Track Assembly** from center of Mounting Stud to center of Mounting Stud. This is Dimension X (Figure 7).
- **Measure and mark non-Motor side Vertical Line.**
 - * From corner of jamb, **measure 2"** to the side of the door (Figure 8).
 - * **Mark wall.**
 - * **Draw a level Vertical Line** through the 2" mark, extending above lintel.
- **Measure and mark non-Motor side Horizontal Line.**
 - * From corner of jamb, **measure 8"** up above lintel (Figure 8).
 - * **Mark wall.**
 - * **Draw a level Horizontal Line** from the 8" mark through the Vertical Line.
- **Measure and mark Motor side Vertical Line.**
 - * Using Dimension X, **measure** from the intersection of the horizontal and Vertical Lines on the non-Motor side across to the Motor side of door opening (Figure 8).
 - * **Mark wall**, making sure that mark is level to non-Motor side intersection.
 - * **Draw a level Vertical Line** through the mark.
- **Measure and mark Motor side Horizontal Line.**
 - * From corner of jamb, **measure 8"** up above lintel (Figure 8).
 - * **Mark wall.**
 - * **Draw a level Horizontal Line** from the 8" mark through the Vertical Line.
- **Check** that non-Motor side and Motor side intersections are level to each other.

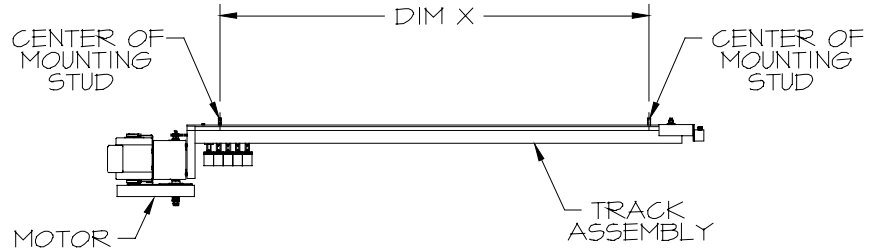


FIG. 7

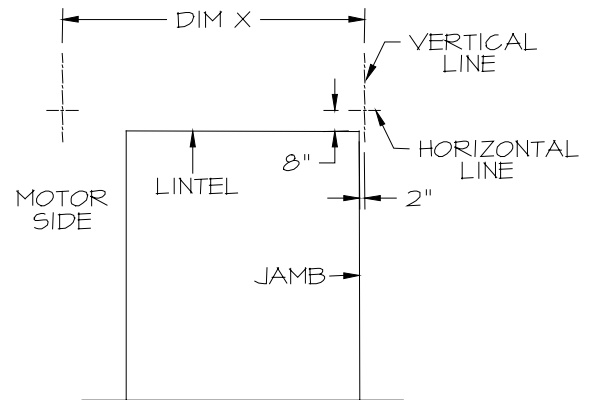


FIG. 8

4. Attach Offwall Brackets

- a. **Position Offwall Bracket** at intersection of horizontal and Vertical Lines (Figure 9).
 - **Place** underside of Perpendicular Angle flush to Horizontal Line.
 - **Align** center of Offwall Bracket with Vertical Line.
- b. **Attach Offwall Bracket** using predetermined method or provided sleeve anchors.
- c. **Repeat** for other side.

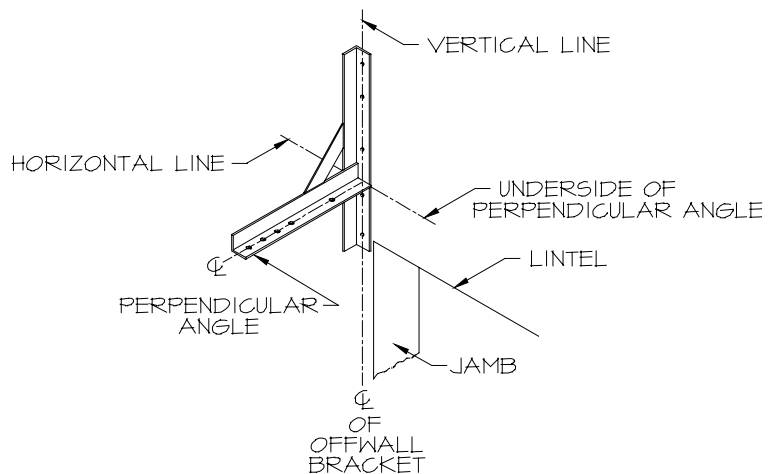


FIG. 9

5. Attach Track Assembly to Offwall Brackets

- a. **Determine how to lift** Track Assembly onto Offwall Brackets.
 - Do not damage Track Assembly.
- b. **Determine door projection** from wall.
 - **Measure depth** of any doors or other barriers that the door will cover, if needed.
 - **Decide which hole** on the Perpendicular Angle to use: 15-1/2", 18", or 20-1/2".

NOTE: For standard wall with no barriers, use the 15-1/2" hole.
- c. **Lift Track Assembly up** to the underside of the Perpendicular Angle (Figure 10).
 - Mounting Studs should **protrude up through** the Perpendicular Angle holes.
- d. **Secure Track Assembly** to Perpendicular Angle with supplied hardware.
- e. **Repeat attachment** for other side.
 - If needed, **slightly loosen** Offwall Bracket anchors to insert Track Assembly Mounting Studs.
 - **Tighten** Offwall Bracket anchors when Track Assembly is secure.
- f. **Ensure Track Assembly is level.**
 - If not, **adjust** now.

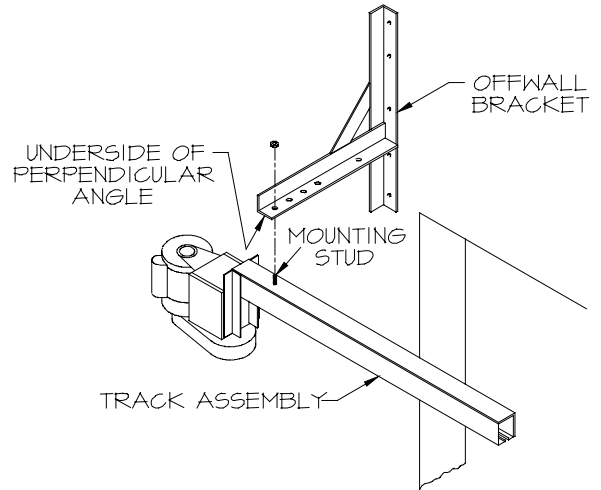


FIG. 10

6. Attach Side P.V.C. Brackets and Side P.V.C. Filler Strips

- a. **Trim** Side P.V.C. Brackets and Side P.V.C. Filler Strips to proper length, if necessary (Figure 11).

Perpendicular Angle Hole	Side P.V.C. Bracket Length
15-1/2"	13-3/4" (A)
18"	16-1/4" (B)
20-1/2"	18-3/4" (C)

- b. **Attach Side P.V.C. Brackets to Perpendicular Angle** using supplied 3/8" nut and bolt (Figure 11).
 - **On non-Motor end, use first pair** of Side P.V.C. Bracket holes.
 - **On Motor end, use second pair** of Side P.V.C. Bracket holes.
- c. **Place Side P.V.C. Filler Strip** onto Side P.V.C. Bracket, covering the opening between the Perpendicular Angle and the Side P.V.C. Bracket.
- e. **Secure.**

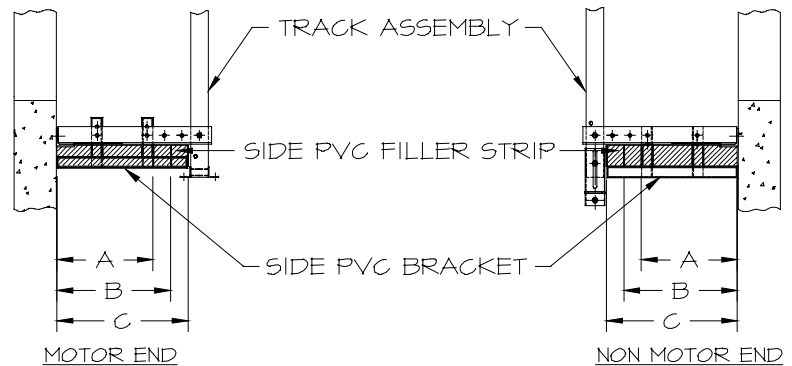


FIG. 11

7. Prepare P.V.C. Door Strips

- a. **Remove Motor Hood.**
- b. **Hand turn large pulley** so Scissor Assembly opens half-way.
- c. **Open** all Jamb Edge P.V.C. and Vertical P.V.C. Strip packages at one end.
 - **Pull Strips out one at a time** from center of package as Strips are attached.
- d. **Protect P.V.C. Strips** from dirt and debris.

8. Attach Vertical, Jamb Edge, and Leading Edge P.V.C. Strips to Scissor Assembly

a. Single Slide door (Figure 12A).

- **Attach Vertical P.V.C. Strips** from the left jamb to the right jamb.
 - * If Motor is on left, **the Jamb Edge P.V.C. Strip is attached first.**
 - * If Motor is on right, **the Jamb Edge P.V.C. Strip is attached last.**
- **Continue with Step 8c.**

b. Bifold door (Figure 12B).

- **Attach Vertical P.V.C. Strips** from the left jamb to the right jamb.
 - * **The Jamb Edge P.V.C. Strip** is the first Strip attached on the left and the last Strip attached on the right.
 - * **If Leading Edge P.V.C. Strips are required**, one Leading Edge P.V.C. Strip is the last Strip on the left Scissor Assembly, and one Leading Edge P.V.C. Strip is the first Strip on the right Scissor Assembly.
- **Continue with Step 8c.**

c. Attach P.V.C. Strip to Curtain Bracket (Figure 13).

- **Place P.V.C. Strip** in front of Curtain Bracket with curve of P.V.C. facing the right door jamb.
- **Align** holes in P.V.C. with holes in Curtain Bracket.
- **Attach P.V.C. Strip** to Curtain Bracket.
 - * On left side of Curtain Bracket, **insert hardware** so that the Track Bolt head and washer is on the front and the nut is on the back (Figure 13).
 - * **Secure** nut and repeat for other holes on left side of Curtain Bracket.
 - * On right side of Curtain Bracket, **insert hardware** so that the Track Bolt head is on the back and the washer and nut are on the front (Figure 13).
 - * **Secure** nut and repeat for other holes on right side of Curtain Bracket.
- **Attach remaining P.V.C. Strips** to Curtain Brackets from the left jamb to the right jamb.

NOTE:

- * **The P.V.C. curve** must always face the right jamb of the door.
- * **The washer** must always be against the P.V.C. Strip.
- * **Make sure each P.V.C. Strip** hangs straight before final tightening.

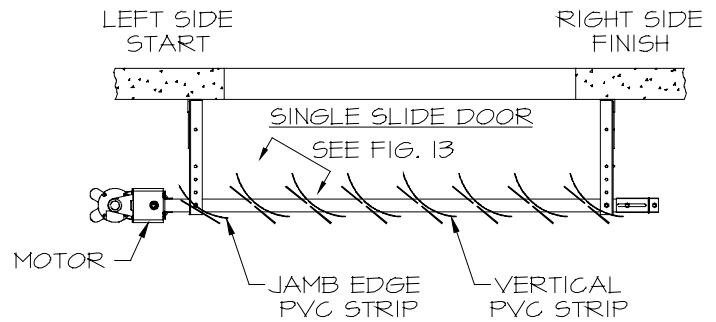


FIG. 12A

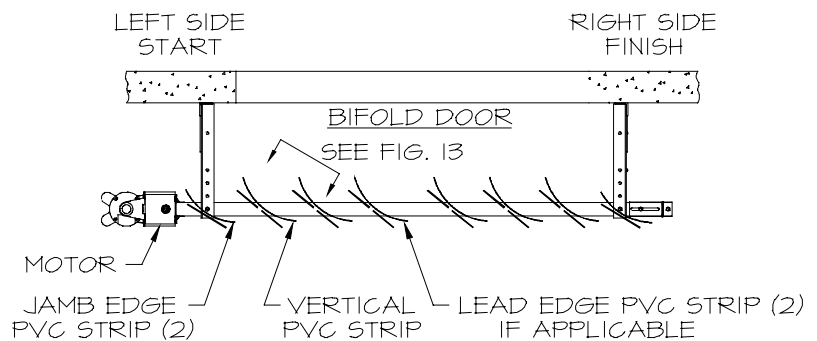


FIG. 12B

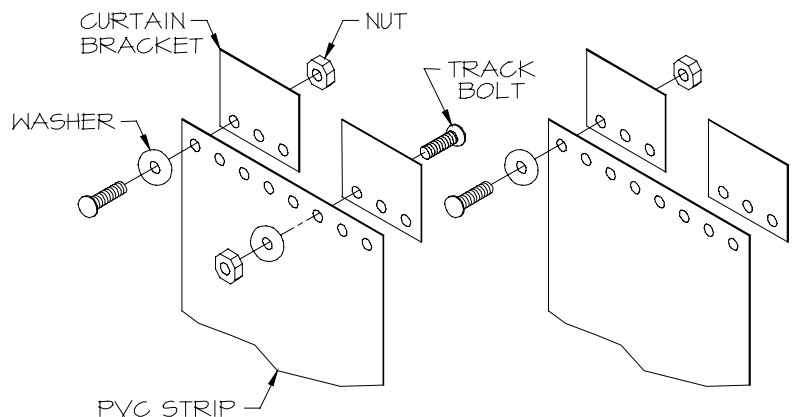


FIG. 13

9. Attach End P.V.C. Strips to Side P.V.C. Brackets

- a. **Open End P.V.C. Strip** package at one end.
 - **Pull Strips out one at a time** from center of package as Strips are attached.
- b. **Face unit from outside.**
- c. **Place an End P.V.C. Strip** onto front of Side P.V.C. Bracket at the wall, with curve facing towards center of door (Figure 14).
 - Starting from the wall, **insert bolt** so that the head is behind the Side P.V.C. bracket and the washer and nut are in front.
 - **Secure nut.**
 - **Repeat** for first couple of holes on wall end.
- d. **Place another End P.V.C. Strip** onto front of Side P.V.C. Bracket at the Track Assembly with curve facing towards center of door.
 - Starting from Track Assembly, **insert bolt** so that the head is behind the Side P.V.C. Bracket and the washer and nut are in front.
 - **Secure nut.**
 - **Repeat** for first couple of holes on Track Assembly end.
- e. **Overlap End P.V.C. Strips** at the center of the Side P.V.C. Bracket.
 - **Finish inserting and securing hardware** as noted above.
- f. **Notch** Motor side and non-Motor side End P.V.C. Strips using measurements shown in Figure 14.

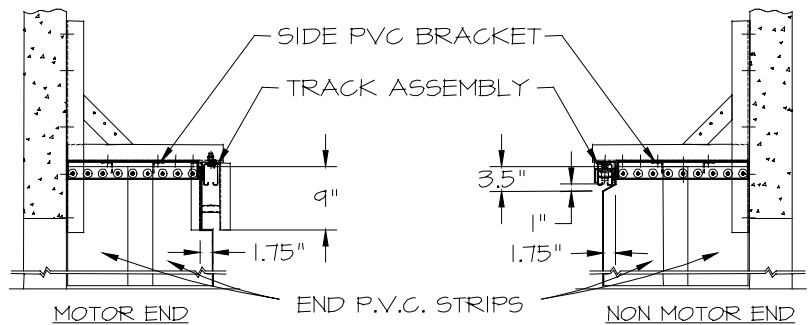


FIG. 14

10. Attach Header P.V.C. Strip

- a. **Rotate top P.V.C. Support Strips** towards the wall so that support Strips are perpendicular to Track Assembly (Figure 15).
- b. **Open Header P.V.C. Strip package.**
- c. **Unroll Header P.V.C. Strip** onto the top P.V.C. support Strips from left Offwall Bracket to the right Offwall Bracket.
 - **Attach** to left Perpendicular Angle self-drilling screws.
 - * Secure at each end and in the middle
- d. On right side of door, **pull Header P.V.C. Strip snug** across top.
 - **Attach** to right Perpendicular Angle with self-drilling screws.
 - * Secure at each end and in the middle
 - **Trim** excess P.V.C., if needed.

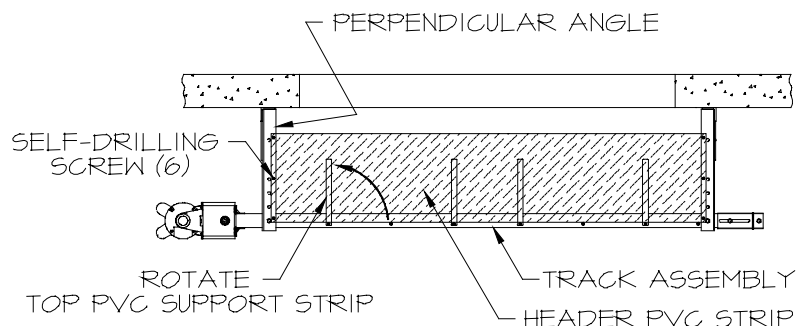


FIG. 15

11. Close Door and Trim P.V.C. Strips

- a. **Manually close the door** after all P.V.C. Strips are attached.
 - **Make sure P.V.C. Strips hang properly.**
 - **Make sure Curtain Brackets close** without interfering.
- b. **Trim P.V.C. Strips** at bottom so Strips do not drag or hinder proper door operation.
- c. **Open door fully** and replace Motor Hood.

READ ALL INSTRUCTIONS AND PURCHASE ORDER BEFORE INSTALLING ELECTRICAL COMPONENTS. ELECTRICAL INSTALLATION AND HOOK UP MUST BE PERFORMED BY A LICENSED ELECTRICIAN. ELECTRICAL INSTALLATION MUST BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL ELECTRICAL CODES AND REGULATIONS. ALL HARDWARE AND ELECTRICAL SUPPLIES ARE PROVIDED BY THE CUSTOMER.

1. Mount Control Box and Activation Devices.

- a. The wiring schematic enclosed in each control box illustrates where the limit switches, incoming power, Motor lead, and actuator are connected.
 - Mount control box and install electrical connections as per local customer requirements.

2. Prepare door for testing.

- a. Make sure all parts are installed.
- b. Ensure that all necessary electrical connections are complete.
- c. Motor Rotation:
 - Manually open the door half-way.
 - Turn on control box power.
 - Press the OPEN button located on the front of the box.
 - If the door opens, proceed to test the door.
 - If the door closes, press the E-STOP button immediately. Reverse the MOTOR WIRING for proper rotation.

3. Test door.

- a. Turn on control box power.
- b. Press the ACTIVATOR button. The door should open fully.
- c. Press the ACTIVATOR button. The door should close fully.
- d. Repeat 1/2 dozen times and observe the operation.
- e. Adjust timer, if needed.

4. Activate actuators and test.

- a. Ensure door activators work properly (e.g. pull cord, floor loop, etc.)
- b. Repeat door testing as noted above.
- c. Ensure door does not glide past its limit switches.
- d. Adjust limit switches, if required (see Troubleshooting section for instructions).

5. Complete Electrical Installation

- a. Make sure the door is running smoothly.
- b. Turn power off.
- c. Install all covers and Motor guard.
- d. Turn power on. Door is ready for operation.

TROUBLESHOOTING GUIDE

1. **The door does not work when activated.**
 - a. Make sure all electrical connections follow the provided schematics.
 - b. Make sure power is supplied to the control box.
 - c. Make sure all actuators are connected and working properly.
 - d. Make sure there is 24 VAC at terminals 2 and 10.
2. **The door does not completely open or close.**
 - a. Reset the breaker.
 - b. Make sure the Track Assembly is free and does not bind.
 - c. Make sure the contactor is pulled in and the Motor is not running.
3. **The door does not open or close and the Motor is running.**
 - a. Turn off power.
 - b. Tighten bottom clutch jamb nuts to increase tension on spring. This increases the tension on the clutch.
4. **The door does not open or close smoothly or easily.**
 - a. Make sure the P.V.C. Strips clear the floor. If not, trim Strips as needed.
 - b. Make sure the P.V.C. Strips are properly attached to the Scissor Assembly.
 - c. Make sure the P.V.C. Strips hang straight to the floor and do not bind.
5. **The door will not close.**
 - a. Make sure power is supplied to the control box.
 - b. Check the timer for proper operation.

IF ANY OF THE ABOVE PROBLEMS REMAIN AFTER PERFORMING THESE CHECKS, PLEASE CONTACT SUPERSEAL MFG. LTD.

MAINTENANCE

1. **Maintain Chain, Motor, and P.V.C. Strips**
 - a. Turn off power and barricade doorway before performing any maintenance.
 - b. Chain Maintenance.
 - Lubricate chain every 6 months or 35,000 cycles.
 - Inspect all parts and surfaces for wear.
 - Check chain for tension. Adjust if necessary.
 - c. Motor Maintenance.
 - Remove Switch Box cover and lubricate the limit shaft.
 - Inspect belt for wear.
 - d. P.V.C. Maintenance.
 - Make sure P.V.C. Strips are securely and properly attached to Scissor Assembly.
 - Clean P.V.C. Strips if necessary.
 - Replace any torn or badly damaged strips.

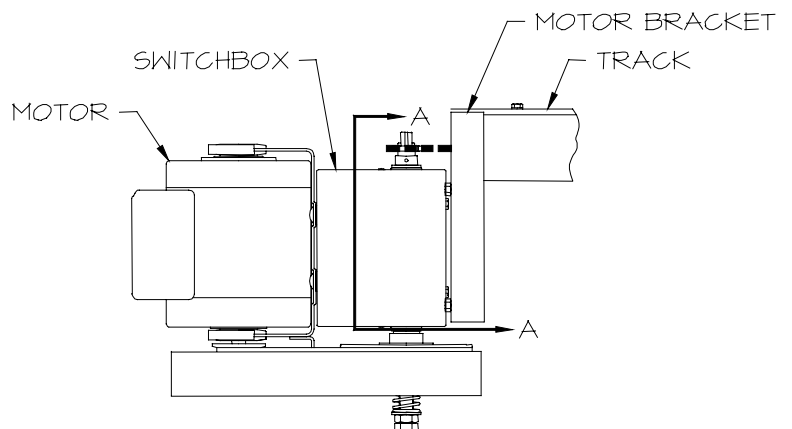


FIG. 16

2. Adjust Rotary Limit Switches.

- a. Turn off power at source.
- b. Remove Switch Box cover.
- c. Pry the cam guide away from the Limit Cam by inserting a screwdriver or bar in the lever hole. Hold lever in place while adjusting limit cams.
- d. Gently rotate the Limit Cams with your fingers until they move in the desired direction.
 - To increase the open stroke, move the top limit cam counter-clockwise.
 - To decrease the close stroke, move the bottom limit cam clockwise.
- e. Gently release the lever to reposition the cam guide.
 - Make sure the cam guide fits into the matching slots on the top and bottom limit cams. **Failure to do so will damage the limit switches.**

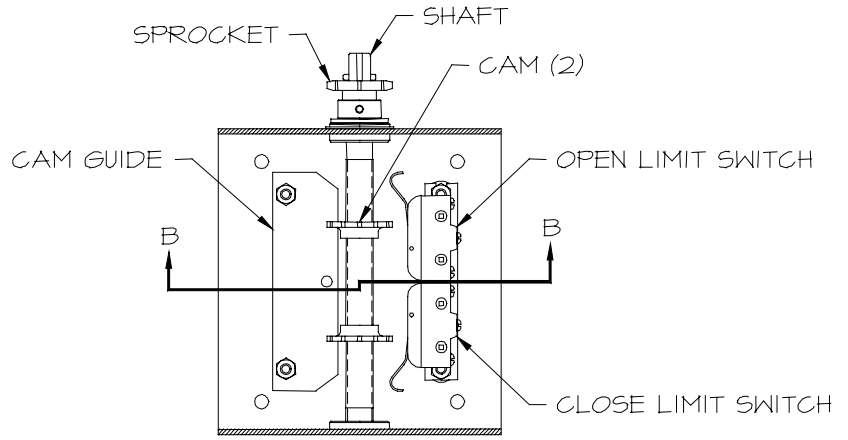


FIG. 17
SECTION A-A

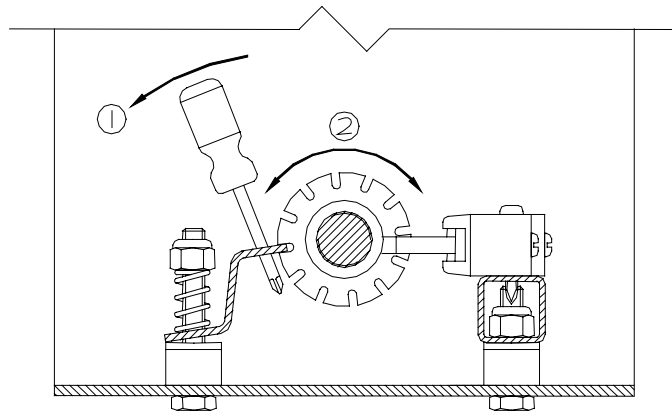


FIG. 18
SECTION B-B

Components List (per Unit, Basic Installation, not including Options)

No.		Qty.
1	Track Assembly with Motor	1
2	Offwall Bracket	2
3	Side P.V.C. Bracket	2
4	Vertical P.V.C. Strips	1-2 rolls
5	Jamb Edge P.V.C. Strips	1 roll
6	Header P.V.C. Strips	1 roll
7	Side P.V.C. Strips	1 roll
8	Leading Edge P.V.C. Strips (if needed)	1 roll
9	Control Panel	1
10	Limit Switches	2
11	Rope	50 ft

Hardware Supplied List (per Unit)

No.		Qty.
1	3/8"-16 x 1-1/4" Hex Bolt	4
2	3/8"-16 Locknut	4
3	3/8" B.S. Plate Washer	8
4		
5	1/4"-20 x 3/4" Track Bolts	*
6	1/4"-20 Hex Nut	*
7	1/4" B.S. Fender Washer	*
8	3/8" x 1-7/8" Sleeves	10
9	Installation Instructions	1
	*Quantity depends on door size	

**Recommended Tools List
(Basic Installation, not including Options or Electrical)**

Qty.	
1	Tape Measure
1	Plumb line or Level
1	Pencil or Marker
1	Square
1	Power Drill
1	Hammer Drill
1	3/8" Masonry Drill Bit
1	1/2" Wrench
1	3/4" Wrench
1	3/8" Drive Socket
1	7/16" Wrench
1	Hammer