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Assembly Instructions
Vertical Vinyl Curtain Door
"Projection Mount"

Valued Shaver's Customer: We have pre-assembled the roller, valence, and bracketry components for your door system. This should dramatically simplify the installation procedure. While the installation is very straightforward, please note the following details.

System Overview:

Your Shaver's Vertical Curtain Door is a high quality, high performance flexible door system based on proven components and our many years of experience in the vinyl partition fabrication business. We are confident that it will bring you and/or your customer years of reliable and trouble-free service.

Your specific system is a vinyl roll-up curtain door with projection-mount bracketry. The design dimensions for your door were based on the field survey information that we had available for your door configuration. Should the sizes be incorrect or if you experience difficulty with the installation of your door please contact the factory. Field modifications for changing the width or height of the finished door are very difficult and it is usually best to return the unit to the factory for the appropriate changes. Note that the vertical extrusions are cut to the same height as your stated door opening, which will place the entire motorized roll, upper bracketry, and valence box above the door header.

Unpacking and Inspection:

Please unpack your systems carefully and notify the factory immediately if there are any shortages or if any items have been damaged during transit. Your kit(s) should have all of the necessary hardware and components for a complete installation with the following exceptions (installer-provided hardware):

1. Mounting hardware for securing the custom extrusions bracketry to the building fascia.
2. Hardware and conduit associated with the professional electrical installation of the 115VAC source power.

System Assembly:

Roll-Tube Enclosure Mounting:

Prior to installing the Roll Tube Enclosure the projection supports must be firmly mounted to the fascia of your building. To determine the mounting locations for the supports it is first necessary to measure the "ear to ear" distance on your assembled enclosure as shown in the following photo (Photo 1). This dimension will typically be a few inches wider than the installed width of your existing overhead door tracks. This dimension will be referred to as DIM "A".

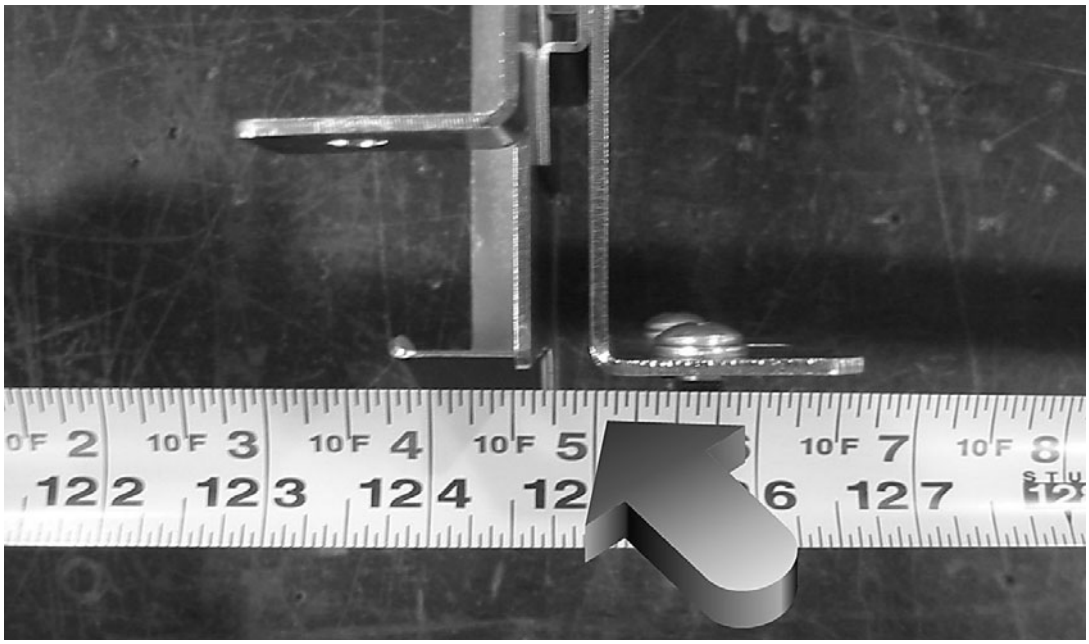

Photo #1
(Measuring Dim "A")

Now measure the length of your Shaver's Custom Vertical Extrusions. This dimension will typically be the same as the vertical height of your door opening. Subtract 1¼" (1.25 inches) from this length. This dimension will be referred to as DIM "B".

Secure the projection supports to your building fascia per the following diagram (Diagram 1). The width of the mounting locations (DIM "A") should be centered about your existing door opening or overhead door track locations. Use a strong and rigid fastening method since there will be a substantial cantilever load applied to these supports.

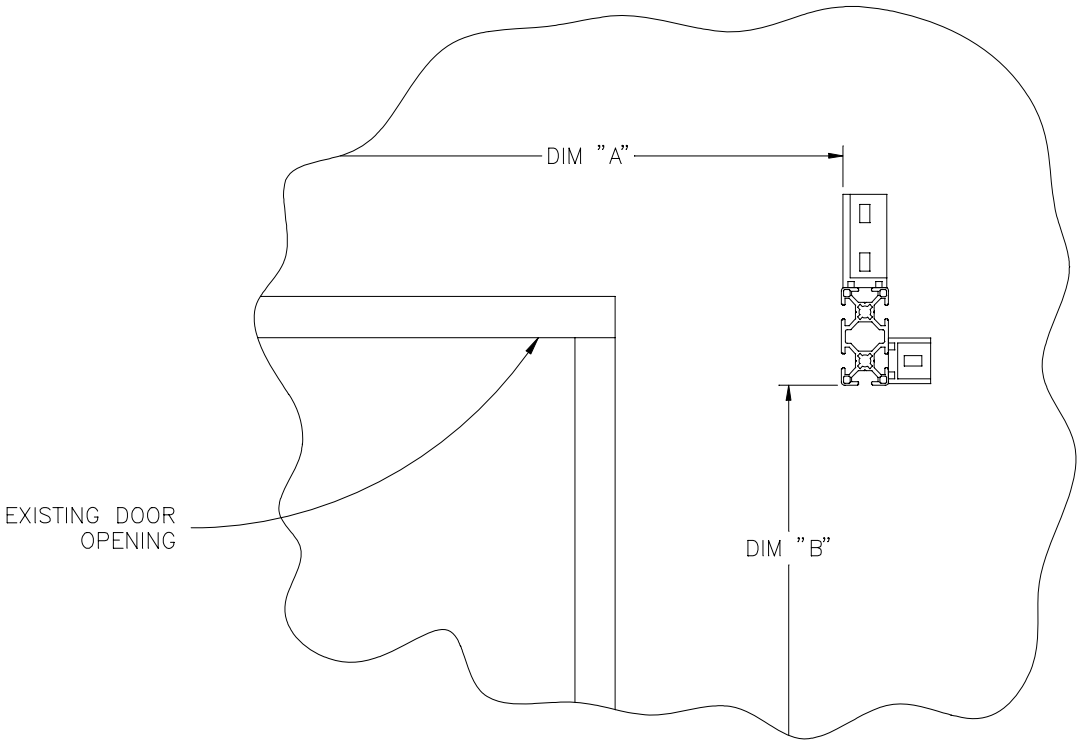

Diagram #1
(Projection Support Mounting Location)

When you're done your projection support installation should resemble the following photo (Photo 2):

Photo #2
(Projection Support Mounting)

Before installing the Roll Tube Enclosure orient the “T-Nuts” so that they will easily drop down into the slots in the projection supports. This can be accomplished by loosening the four 1/4 -20 Phillips head fasteners and rotating the “T-Nuts” as shown in the following photo (Photo 3):

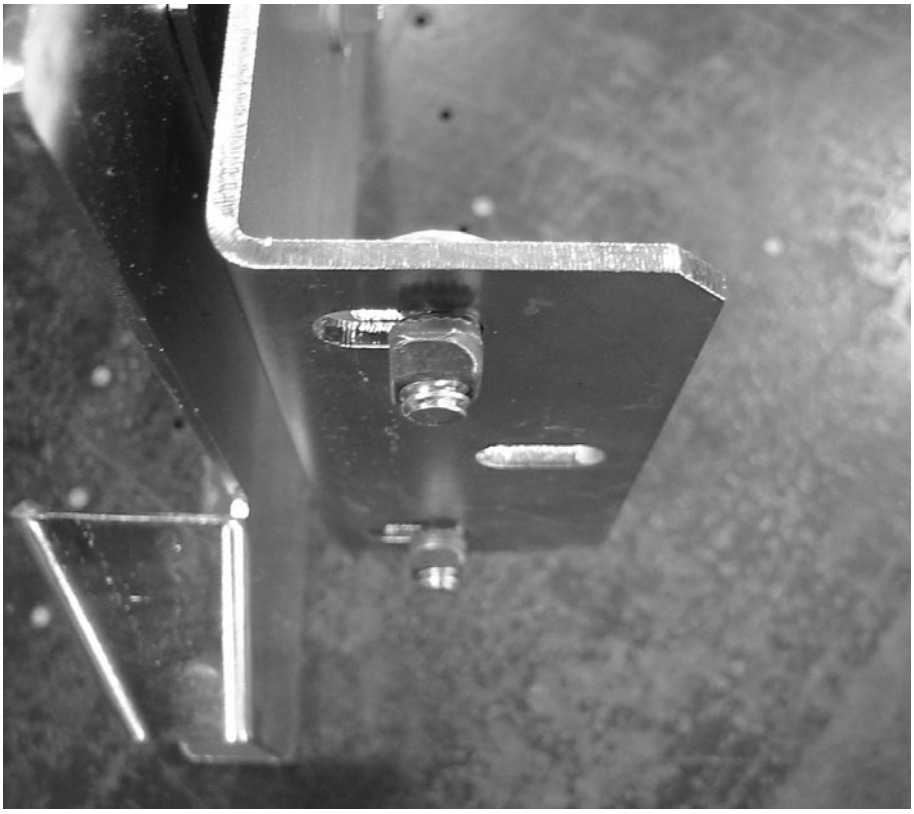

Photo #3
(T-Nut Orientation)

The Roll Tube Enclosure can now be installed by carefully placing it on top of the projection supports. The Roll Tube Enclosure should be orientated so that the Shaver logo on the valence faces away from the door opening. Ensure that the T-Nuts drop down into the slots in the projection supports. Slide the Roll Tube Enclosure along the projection support until there is approximately 1” of clearance between the enclosure and the existing overhead door tracks. Your installation should resemble the following photo (Photo 4):

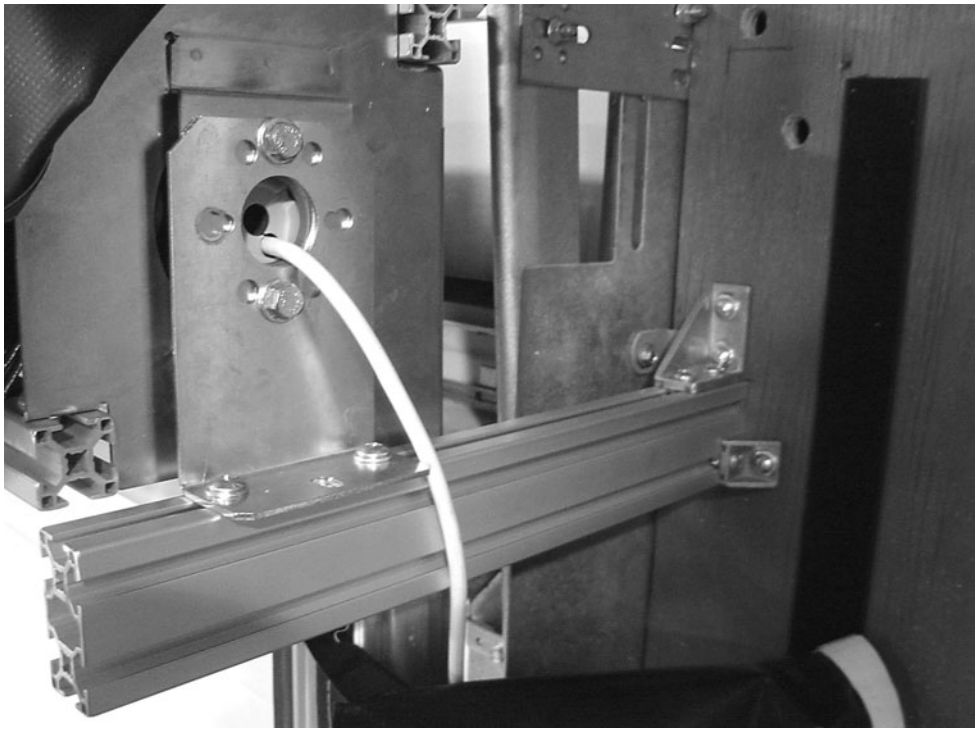

Photo #4
(Roll Tube Enclosure Installation)

Secure the Roll Tube Enclosure brackets to the projection supports via the T-Nuts. This can easily be accomplished by loosening the ¼-20 Phillips head screws a few turns, and then re-tightening them completely. Ensure that the T-Nuts have properly rotated and are fully engaging the slots in the projection supports. See the following photo (Photo 5):

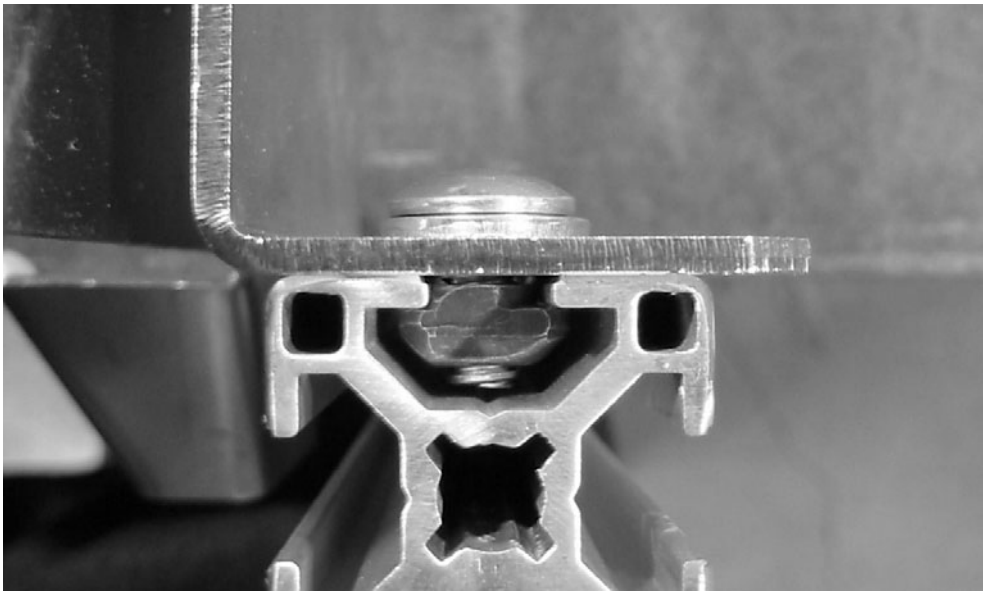

Photo #5
(T-Nut Engagement)

Vertical Extrusion Mounting:

The Vertical Extrusions mount to the upper projection support and are further supported by projection bars mounted at their base and approximate midpoint. The proper orientation of the Vertical Extrusions is crucial to the proper operation of your door assembly. Please refer to the following diagram (Diagram 2) for the correct orientation:

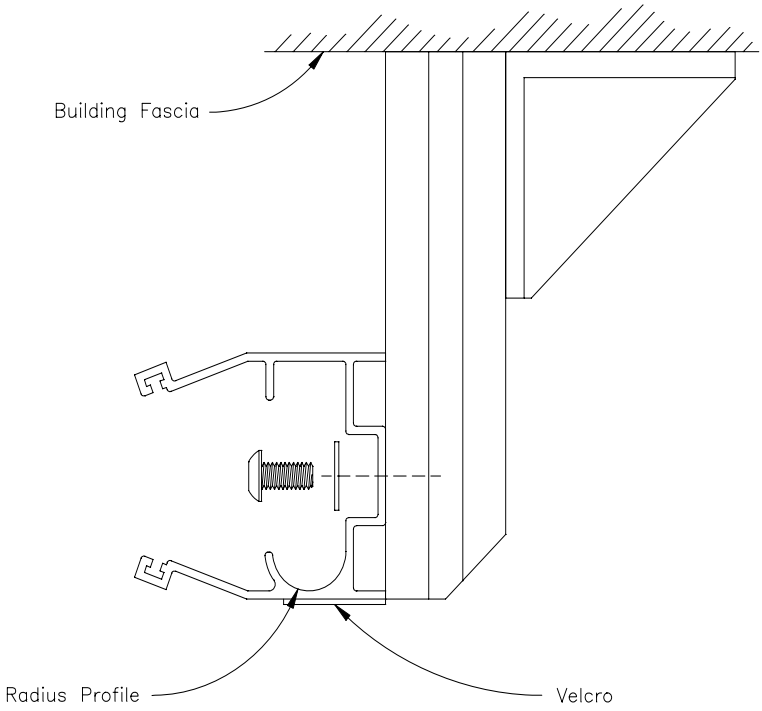

Diagram #2
(Vertical Extrusion Orientation)

After selecting the proper Vertical Extrusion and ensuring its orientation, secure it to the projection support as shown in the following photo (Photo 6). Use the slots in the projection support and Roll Tube Enclosure mounting brackets to adjust the units so that there is a smooth and uniform transition between the “funnel lead-in” on the enclosure bracketry and the Vertical Extrusion. Any abrupt transition may “snag” a door wheel and cause the door to malfunction. Manually unwrap one to two turns of material from the roll and check the engagement and transition of the roller from the side brackets into the custom extrusion. Adjust and/or shim the brackets or vertical extrusions as required to ensure a smooth and repeatable roller transition into the extrusion. See Photo 7.

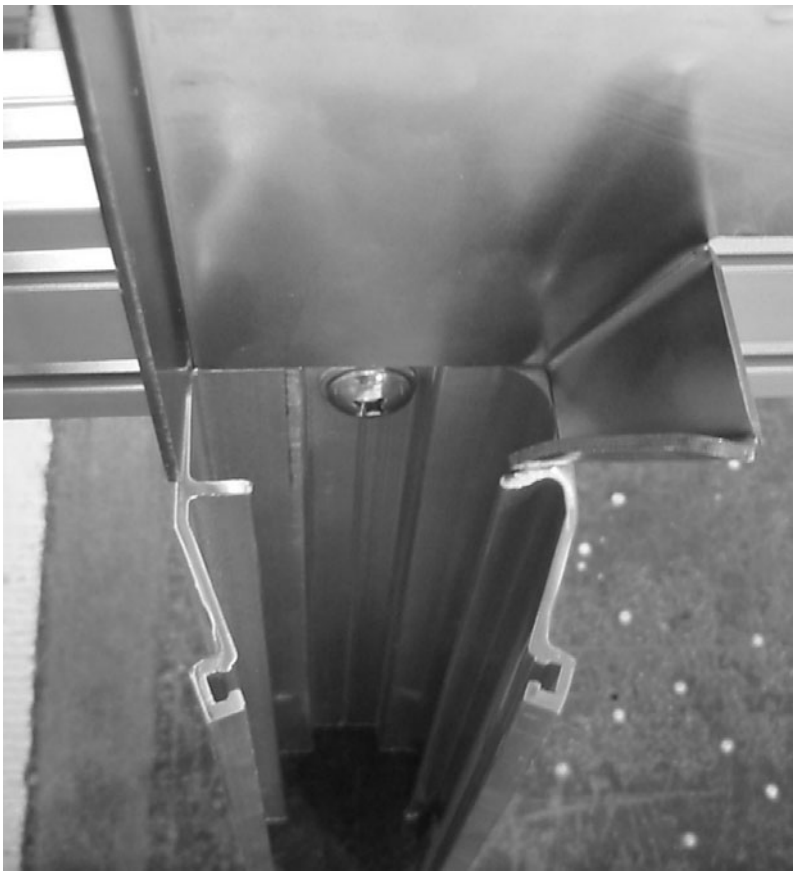

Photo #6
(Bracketry to Extrusion Transition)

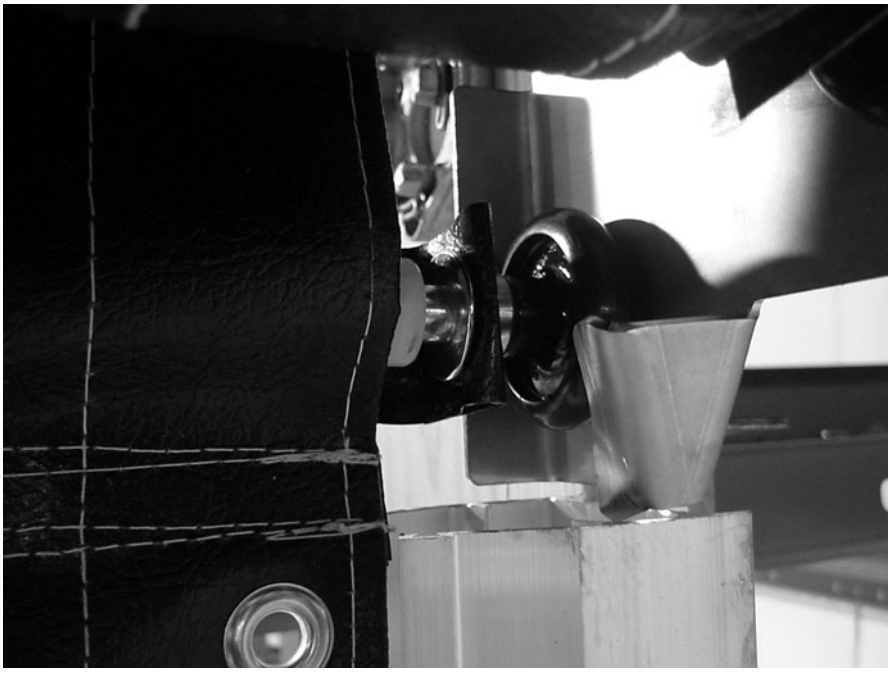

Photo #7
(Roller into Extrusion Transition)

Locate the lower extrusion mounting projection bar. The lower unit has a full-size (four fastener) corner gusset and is occasionally shorter then the midpoint unit. Secure the bar to the bottom hole in the Vertical Extrusion and then mount the bar gusset firmly to the building fascia per the following photo (Photo 8). Ensure that the Vertical Extrusion is completely vertical (left to right) before securing the gusset to the building. The Vertical Extrusions must be parallel to one another within ¾" (.75 inch) from proper operation of the curtain door.

Photo #8
(Bottom Support Bar Mounting)

Select an appropriate location at the approximate midpoint of the Vertical Extrusion for mounting the center (mid) projection bar. It will be necessary to drill a ¼" (.25 inch) hole through the extrusion for the fastener. Be very careful when drilling the Vertical Extrusions as to not damage the EPDM seal strips. The center projection bar only uses a half-size (two fastener) corner gusset. The assembly should resemble the following photo (Photo 9):

Photo #9
(Bottom Support Bar Mounting)

Repeat the above procedure for the other Vertical Extrusion. Double check the parallelism of the two Vertical Extrusion and ensure that they are within ¾" (.75 inch). The angle of the Vertical Extrusion with respect to the building fascia can be adjusted using the slots in the projection bars. If the angle is extreme it may be necessary to adjust the mounting angle of the Roll Tube Enclosure to ensure a smooth transition between the funnel lead-in and the tops of the Vertical Extrusions. The mounting holes in the angle brackets on the Roll Tube Enclosure are slightly slotted, and it is possible to adjust its angle by loosening the mounting bolts/nuts and rotating the entire enclosure as shown in the following photo (Photo 10). Be sure to re-tighten the fasteners after the adjustment has been made.

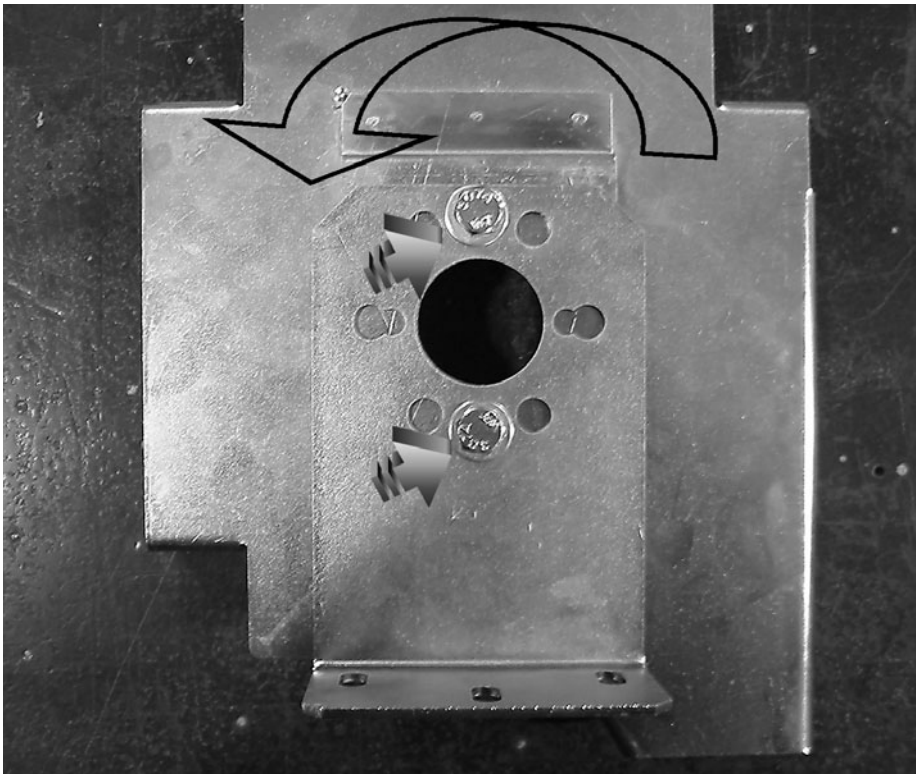

Photo #10
(Rotating Enclosure Bracketry)

At this point the curtain door should be slightly "unrolled" and the bottom set of rollers should be engaged with the vertical extrusions.

Final Mechanical Assembly:

Door-Seal Modification:

We have installed a moly-filled nylon “flap-seal” on the rear of the Roll Tube Enclosure to provide a bridge between the projection mount and your existing overhead door. This seal can easily be trimmed with a standard scissors to create clearance for items such as your vertical overhead door tracks. The overall extension of the flap-seal can also be adjusted (via trimming) to create a reasonable amount of deflection (typically about ½” interference) when it contacts your overhead door. Please see the following photos (Photo 11 & 12) for a typical installation:

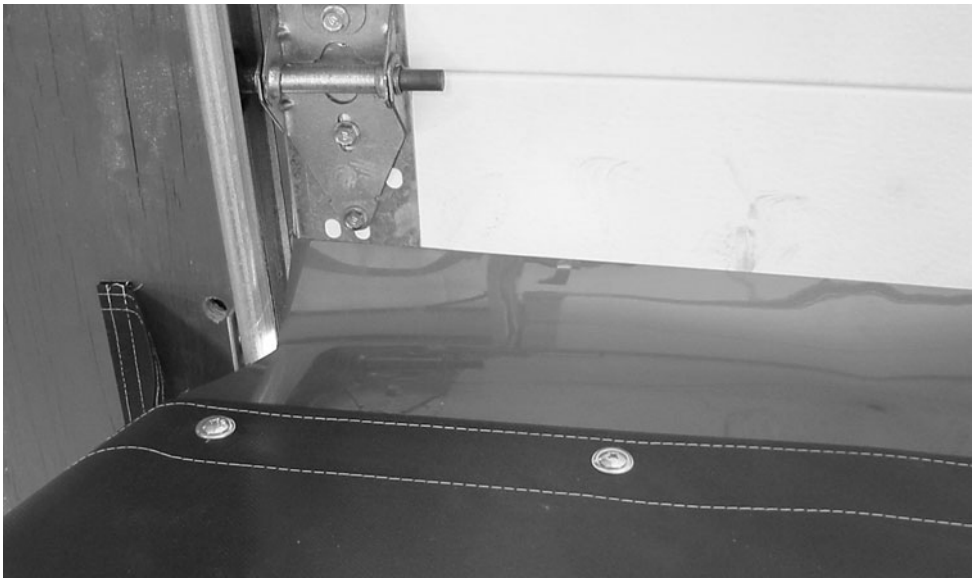

Photo #11
(Flap Seal Modification)

Photo #12
(Flap Seal Deflection)

Side Seal Installation:

We have provided you with two vinyl side-seals to bridge the gap between the Custom Vertical Extrusions and the fascia of your building. These seals may have a taper profile which is designed to match the anticipated installation angle of your specific installation. One vertical edge of the side seal (the edge with the "notch") will attach to the Vertical Extrusion via the "Velcro™" style loop fastener that has been pre-installed on the edge of the extrusion. For the other vertical edge we have included a number of 4' (four foot) sections of Velstick™ industrial loop material. This material can be cut to the appropriate length and attached to the fascia of your building via any "best practices" methodology. Typical attachment processes include nails, sheet-metal screws, industrial double-faced adhesive tape, and construction adhesives. The Velstick™ should be installed just "outboard" of the projection bar gussets as shown in the following photo (Photo 13):

Photo #13
(Velstick Installation)

With the side-seals installed you should have a configuration that resembles the following photo (Photo 14):

Photo #14
(Velstick Installation)

We have also included a number of sections of adhesive-backed "hook and loop" fasteners which should be used to attach the side flap of the Roll Tube Enclosure vinyl cover to the top section of the side-seals. This will create an integrated and "finished" appearance.

Electrical Connections:

The electrical connections to the in-tube motor should be made in a manner that conforms to all local and national electrical codes. The use of a licensed electrical professional is strongly recommended.

The roll tube motor is controlled by a single "maintained" center-off toggle switch. Only one switch can be used per motor, and wiring multiple switches in parallel or series will **NOT** allow for the proper operation of the motor.

Refer to the following diagram (Diagram 3) for the appropriate AC Power wiring diagram for you motor:

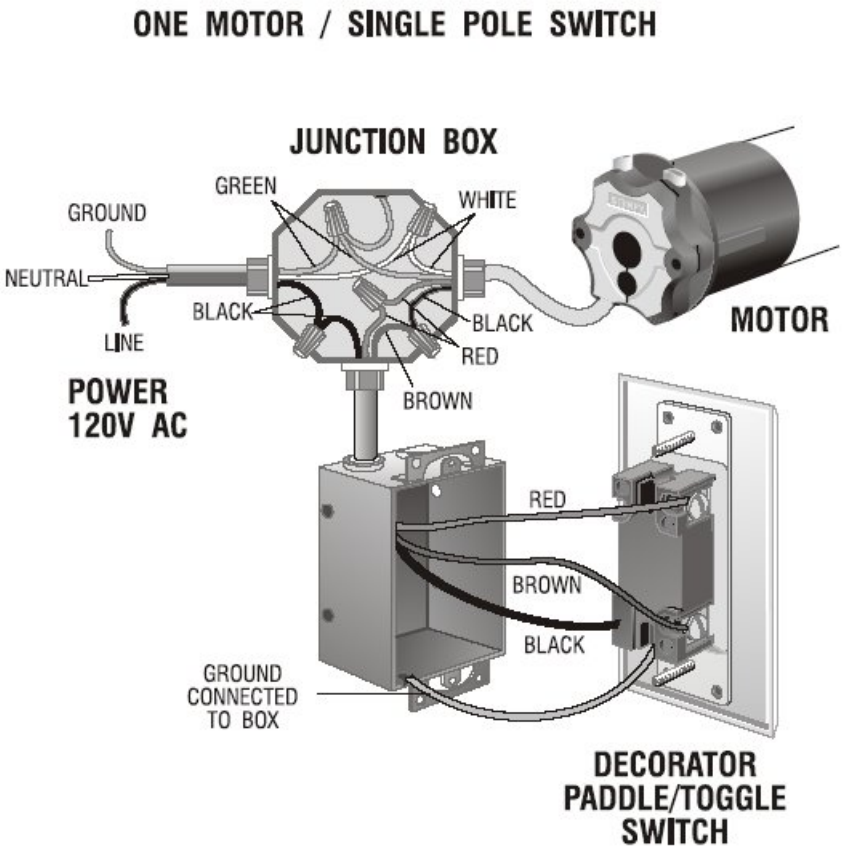

Diagram #3
(AC Wiring Connections)

NOTE: Your switch may not exactly represent the unit depicted in the above diagram. If not, connect the BLACK (AC Power HOT) to the BLACK screw of the switch. Connect the BROWN (Motor Direction #1) to one of the brass-tone screws, and connect the RED (Motor Direction #2) to the remaining brass-tone screw. Reverse the BROWN/BLACK and RED connections if the motor is installed on the LEFT side of your door opening.

Setup and Operation:

After the power wiring has been installed (and power has been enabled to the unit) it will be necessary to check/modify the direction of motor rotation and set the curtain door end-stop positions. Care should be exercised during these operations to avoid damage to the assembly and ensure a long service life of the unit.

Check/Modify Motor Rotation:

To check the direction of motor rotation it is necessary to completely disable the end-stop limit switches for the motorized roll. To do this, first make sure the toggle switch is in the center (STOP) position. Note the location of the Open and Close buttons as shown in the following photo (Photo 15) **(NOTE: The limit buttons on the motors are now flush with the motor body. It is necessary to use a pencil, screwdriver, or other object to depress them)(NOTE: The function of the buttons will be REVERSED if the motor is installed on the LEFT side of your door opening. Yellow will correspond to the Open position and White will correspond to Close.)**:

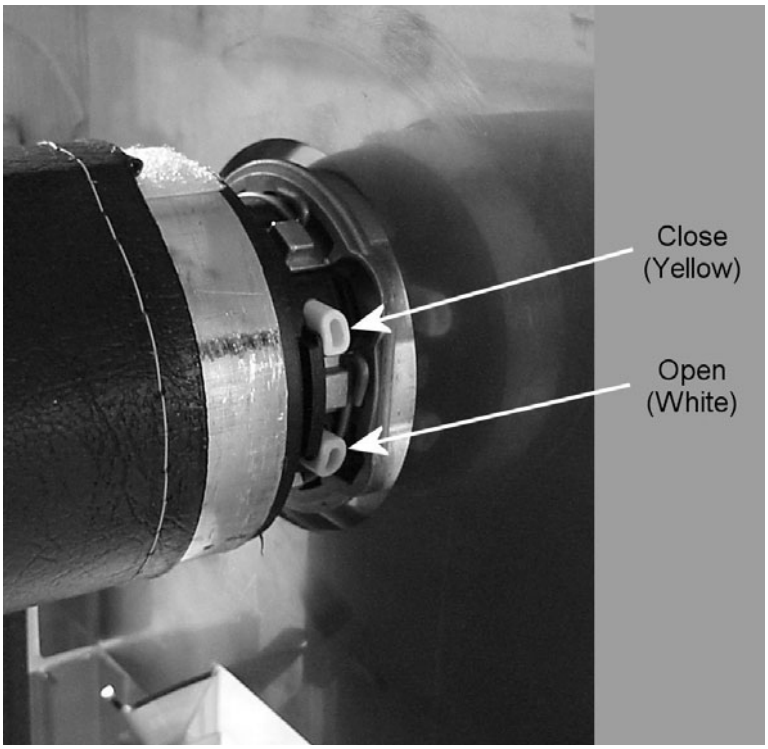

Photo #15
(Limit Switch Buttons)

To disable the limits, press each button firmly. The buttons should detent into a "depressed" position. It is wise to repeat this operation a few times to guarantee that the buttons have locked into the depressed position.

Index the toggle switch to the “Close” (DOWN) position and observe the direction of door movement. Center (STOP) the toggle switch as soon as this as been determined. If the “Close” direction is correct and corresponds to the “unwrapping” of the curtain door then proceed to the next section (Setting End Stop Positions). If not, the direction control wiring must be reversed. This can most readily be accomplished by reversing the direction connections at the screw terminals of the toggle switch. With power removed, disconnect the Brown (Motor Direction #1) and Red (Motor Direction #2) connections from the screw terminals and reverse the connections. After the change has been made, enable the power and verify the proper directional operation of the door.

Setting End Stop Positions:

Once the direction control of the motorized roll has been verified it is necessary to set the end stop positions for the door. This is a two-step operation and either end stop can be modified at any time without upsetting the other position. To set the “Full Down” (Closed) position index the toggle switch to the “Close” position and monitor the position of the door. Index the toggle switch to “Stop” as soon as the weighted bottom seal of the door contacts the floor and begins to compress. This exact position can be adjusted by using the “Open”, “Close”, and “Stop” toggle switch positions in quick succession in order to “jog” the door. After the position as been established lock it into the motorized roll memory by depressing the Yellow (Close) button. The button should release from the “depressed” position and “pop out”. You can repeat this process a few times to verify that the button is no longer depressed.

To set the “Full Up” (Open) position index the toggle switch to the “Open” position and monitor the position of the door. Index the toggle switch to the “Stop” position as soon as the bottom set of door rollers are within ~2” of the top of the vertical extruded channels. **DO NOT** allow the curtain door to continue above this point. If it should happen to disengage the custom extruded tracks and completely wrap around the motorized roll it will become necessary to manually reset the rollers into the track and reestablish the “Full Down” position via the above procedure. The exact “Open” position can be adjusted by using the “Open”, “Close”, and “Stop” toggle switch positions in quick succession in order to “jog” the door. After the position as been established lock it into the motorized roll memory by depressing the White (Open) button. The button should release from the “depressed” position and “pop out”. You can repeat this process a few times to verify that the button is no longer depressed.

The assembly, installation, and set-up of your Shaver's Motorized Curtain Door is now complete and it is ready for typical operation. It is a virtually maintenance free unit and should give you years of reliable service.

We want to thank you again for your business and the opportunity to partner with your firm on this project. Please don’t hesitate to contact us if you have any questions regarding these instructions or encounter any problems with the installation or performance of your door.

Addendum

Installation of Track Rollers after the Motor Tube is Mounted:

The track rollers can easily be installed after the Motor Tube and Curtain Assembly have been mounted. It is essential that the appropriate steps for applying power to the motor and setting the preliminary end stop positions have already been performed prior attempting this step.

The rollers can be installed on one side and then the other, or on both sides simultaneously. To install a roller into one of the middle pulltrusion (stiffener) tubes, index the motor until the pulltrusion pocket is approximately 8" below the junction of the bracket "funnel" and top of the custom extrusion. Stop the motor at that position and pull the edge of the pulltrusion pocket out of the track and clear of the edge of the building. Locate the nylon bushing at the end of the pulltrusion tube and slide the shaft of a roller into it as indicated in the following photo (Photo 16):

Photo #16
(Roller Installation)

Raise the roller up, slide it across the face of the Motor or Idler bracket, and drop it into the "funnel" of the bracketry as shown in the following photo (Photo 17):

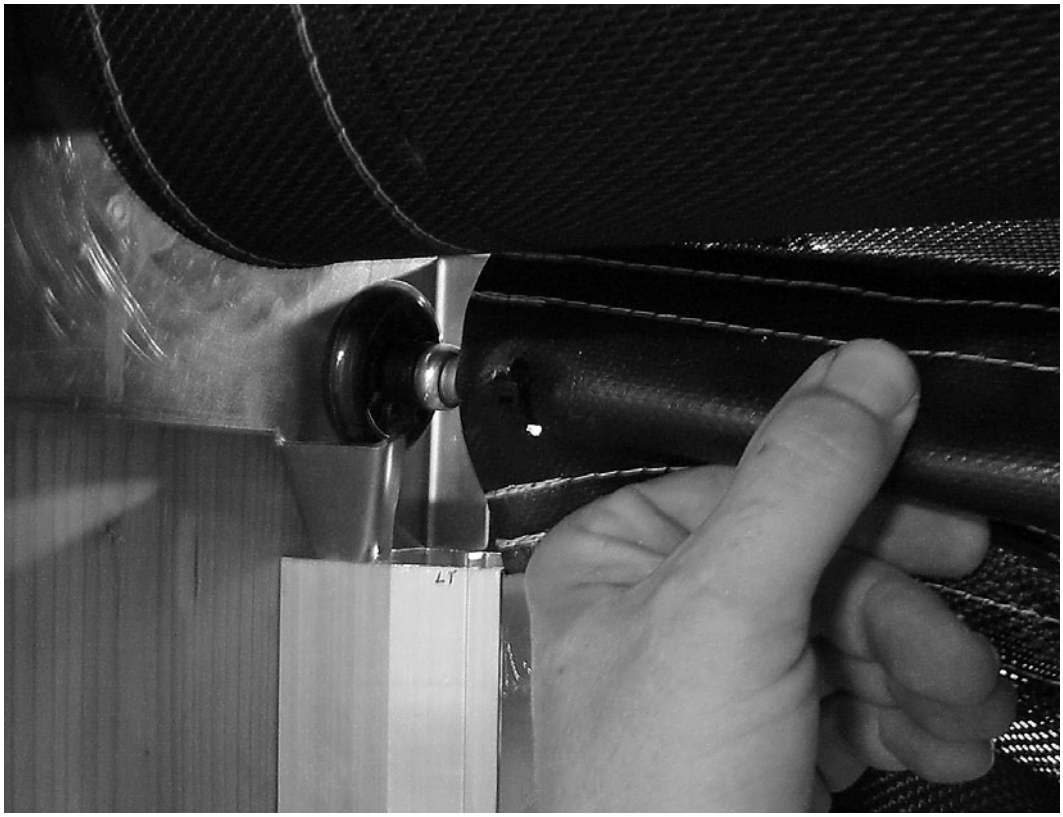

Photo #17
(Roller Into Funnel)

Repeat this procedure for the remaining pulltrusion tubes, including the bottom tube directly above the chain pocket. Ensure that the rollers enter the custom extrusion properly and that the edges of the curtain "pop" into the extrusion and/or EPDM seals.