

R Y T E C

PredaDoor NXT[®]

Installation Manual



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[Revision: July 24th, 2014, R1060168-0, ©Rytec Corporation 2009]

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INTRODUCTION

The information contained in this manual will allow you to install your Rytec PredaDoor NXT® Door in a manner that will ensure maximum life and trouble-free operation.

Any unauthorized changes in procedure, or failure to follow the steps as outlined in this manual, will automatically void the warranty. Any changes to the working parts, assemblies, or specifications as written, that are not authorized by Rytec Corporation, will also cancel the warranty. The responsibility for the successful operation and performance of this door lies with the owner of the door.

DO NOT OPERATE OR PERFORM MAINTENANCE ON THIS DOOR UNTIL YOU READ AND UNDERSTAND THE INSTRUCTIONS CONTAINED IN THIS MANUAL.

If you have any questions, contact your Rytec representative or call the Rytec Technical Support Department at 800-628-1909. Always refer to the serial number of the door when calling the representative or Technical Support. The serial number plate is located on the small edge of the left side column. (See Figure 1.)

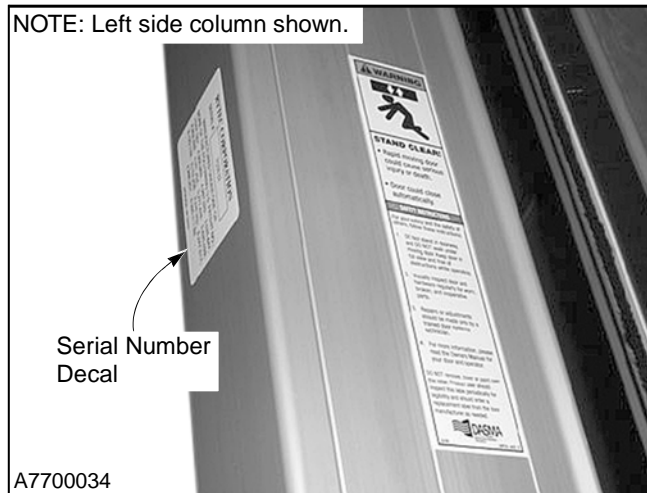


Figure 1

The wiring connections in this manual are for general information purposes only. A wiring schematic is provided with each individual door specifically covering the control panel and electrical components of that door. That schematic was shipped inside the control panel.

DOOR SERIAL NUMBER(S)

Your **DOOR SERIAL NUMBER** information can be found in three universal locations. These are at the small edge of the left side column (shown in figure 1), on the drive motor, and on the System 4 control panel. (See Figure 2.)

IMPORTANT: When installing multiple doors of the same model but in different sizes, verify the serial number on the control panel with the one on the side column.

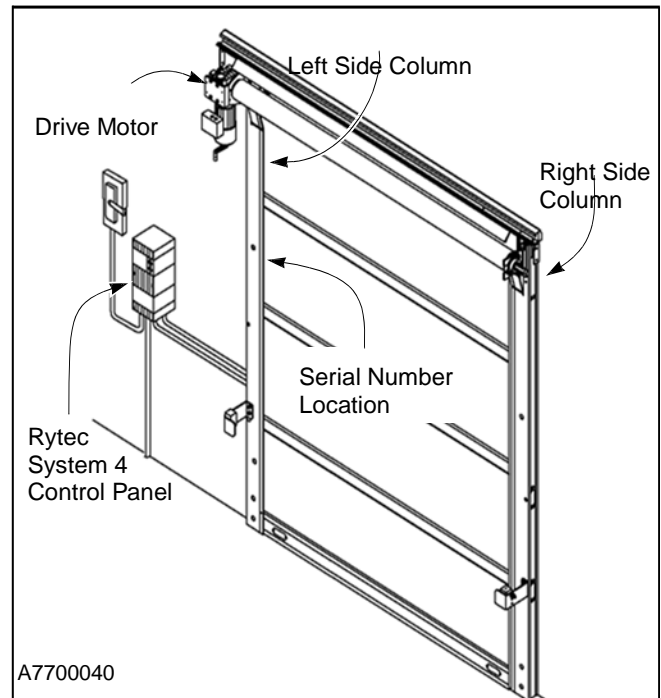


Figure 2

HOW TO USE MANUAL

Throughout this manual, the following key words are used to alert the reader of potentially hazardous situations, or situations where additional information to successfully perform the procedure is presented:



WARNING is used to indicate the potential for personal injury, if the procedure is not performed as described.



CAUTION is used to indicate the potential for damage to the product or property damage, if the procedure is not followed as described.

IMPORTANT: *IMPORTANT* is used to relay information that is **CRITICAL** to the successful completion of the procedure.

NOTE: *NOTE* is used to provide additional information to aid in the performance of the procedure or operation of the door, but not necessarily safety related.

INSTALLATION—TOOLS AND EQUIPMENT REQUIRED

INSTALLATION

TOOLS AND EQUIPMENT REQUIRED

1. Socket and wrench set.
2. Concrete anchor bolts (½-in. diameter).
(See “ANCHORING METHODS” on page 3.)
3. Threaded rod (½-in. diameter).
(See “ANCHORING METHODS” on page 3.)
4. Two ladders (taller than the door opening height).
5. Forklift.
6. Carpenter's level (4-ft. minimum length).
7. Carpenter's square.
8. Hammer drill.
9. Masonry drill bit (½-in. diameter).
10. Three or four bar clamps (1-ft. length).
11. Hammer and mallets.
12. Crowbar or pry bar.
13. Assorted hand tools (pliers, tape measure, etc.).
14. Assorted shim stock.
15. Water level, line level, or transit.

FLOOR LOOP EQUIPMENT REQUIREMENTS

1. Wet-type concrete saw.
2. Wet vac.
3. 200–500 feet of 16-gauge, 19-strand, type XLPE, copper, crosslink polyethylene jacket wire (or equivalent). The length of wire is determined by the size of the loop.
4. Bondo® P606 flexible embedding sealer (or equivalent) — required to fill grooves in floor. For cold temperature sealing applications, Bondo P610 speed set must be added to the P606 to ensure proper curing of the filler.
5. Water supply and garden hose (for concrete saw).

NOTE: For complete floor loop installation instructions, refer to the installation instructions provided with your floor loop.

BASIC JOB REQUIREMENTS

1. A forklift must be supplied by the customer, dealer, or installer.
2. Two installers are required.

NOTE: One installer must be a qualified electrical technician, and all electrical work must meet applicable codes. If the installer is not qualified, an electrician must be present during installation.

3. The customer must guarantee 100% access to the door opening during the installation. No traffic should be allowed through the door during the installation.
4. If an electrician is used, that person must make all electrical connections. The electrician should be present one hour after installation begins.
5. The Rytec control box and a fusible disconnect should be installed prior to the start of the door installation. (See Figure 1 for layout.)

ELECTRICIAN'S RESPONSIBILITIES

For complete details on the responsibilities of the electrician, refer to the Rytec System 4 Drive & Control Installation & Owner's Manual.

GENERAL ARRANGEMENT OF DOOR PARTS

Figure 3 shows the location of the major components of your PredaDoor NXT. This illustration should be used as reference only and should not be used as part of the installation instructions.

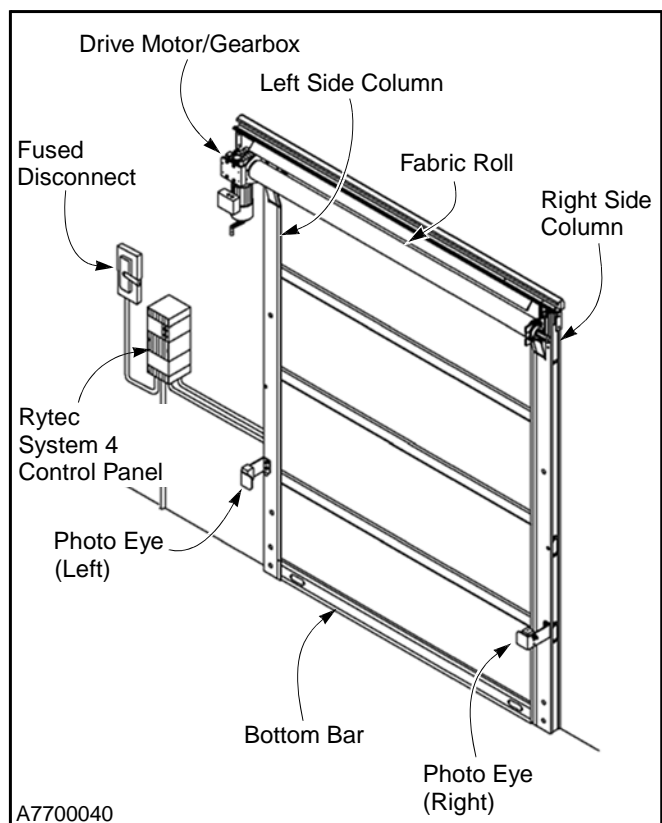


Figure 3

NOTE: The above illustration shows the front side of the door. Left and right are determined when viewing the front side of the door.

ANCHORING METHODS

Correct anchoring of the side columns to the wall and the floor is important for the smooth and safe operation of the door. The wall material should be strong enough to support the weight of the door and all wall anchors.

Figure 4 through Figure 7 show anchoring methods for various types of walls. Use the method that is best suited for your particular installation site.

All necessary anchoring hardware and material required for the installation of this door is the responsibility of the door owner. If you have any questions, call your Rytec representative or the Rytec Technical Support Department at 800-628-1909.

NOTE: Use $\frac{1}{2}$ -in. diameter threaded through bolts or $\frac{1}{2}$ -in. diameter threaded rods to anchor the door to all wall applications. Use $\frac{1}{2}$ -in. diameter concrete anchor bolts to anchor the door to a concrete floor or wall.

If expansion anchors are used, a quarterly inspection should be implemented for safe and secure door operation.

Concrete, Block, or Brick Walls

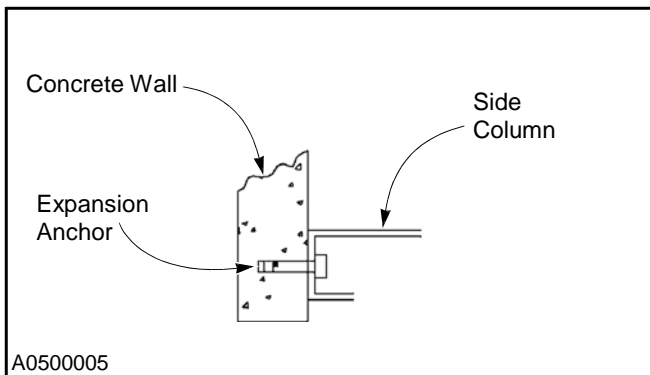


Figure 4

Wood, Block, Brick, or Insulated Walls

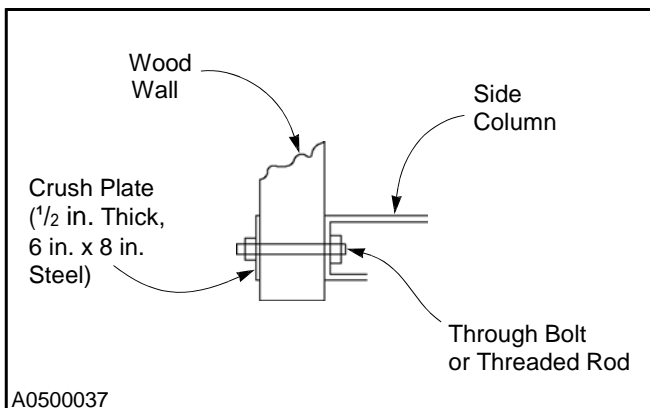


Figure 5

Insulated Walls

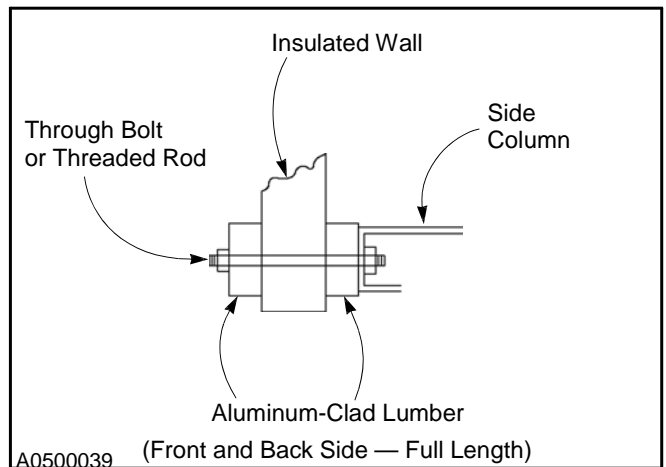


Figure 6

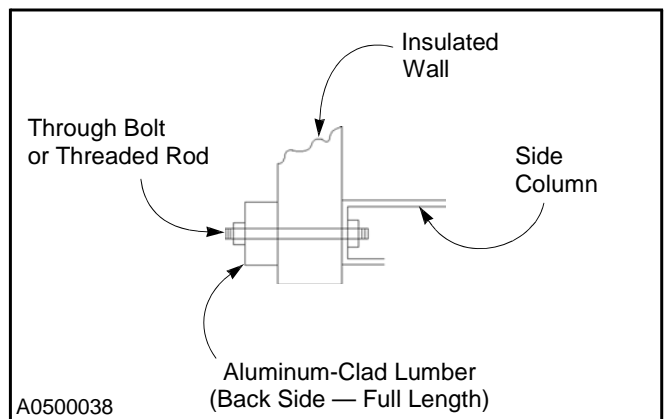


Figure 7

LOCATING CENTERLINE OF DOOR OPENING

NOTE: Accurate measurements are critical for the proper installation and operation of your Rytec door. Verify all measurements.

1. Measure the width of the door opening.
2. Divide the measurement in half to locate the centerline. Then mark the centerline along the floor. (See Figure 8.)

INSTALLATION—LOCATING SIDE COLUMNS

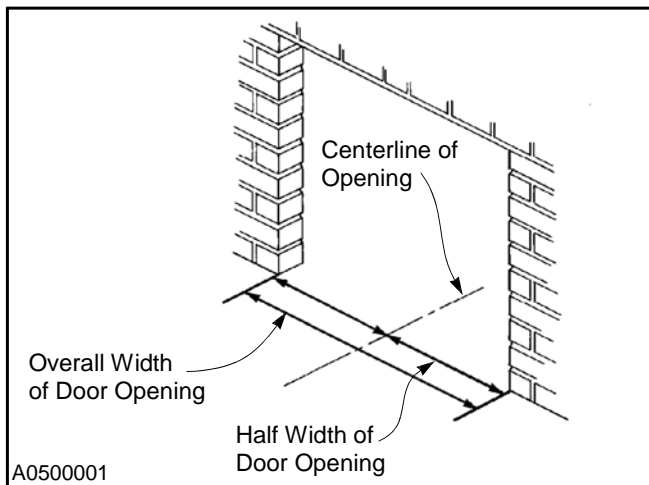


Figure 8

LOCATING SIDE COLUMNS

1. Locate the layout drawing of the door. It should be attached to the small parts carton packed inside the shipping crate. This drawing identifies the production width of your door.
2. Using the centerline as a reference point, lay out and mark half of the door's production width along the floor. (See Figure 9.)



This door is equipped with a breakaway bottom bar assembly. To ensure that it works properly, the width of the door opening must not be smaller (narrower) than the production width of the door.

If the width of the opening is narrower than the width of the door, do not proceed with the installation. Contact your Rytec representative or Rytec Technical Support Department at 800-628-1909.

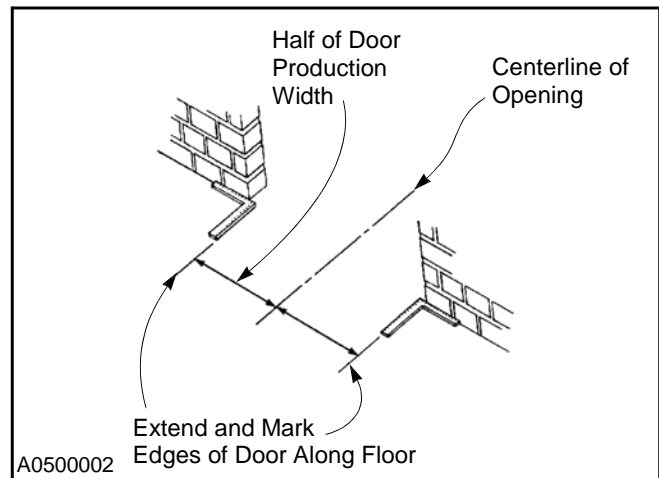


Figure 9

3. With a carpenter's square placed against the wall, mark both sides of the door along the floor. Extend the line along each edge.
4. Check the floor for level across the door opening. The floor must be level within 0.12 in. from side to side. If one side of the opening is higher than the other, a shim under the side panel will be required.

Figure 10 and Figure 11 show two methods that can be used to ensure level side columns.

NOTE: Contact the Rytec Technical Support Department if the floor is more than 1 in. out of level.

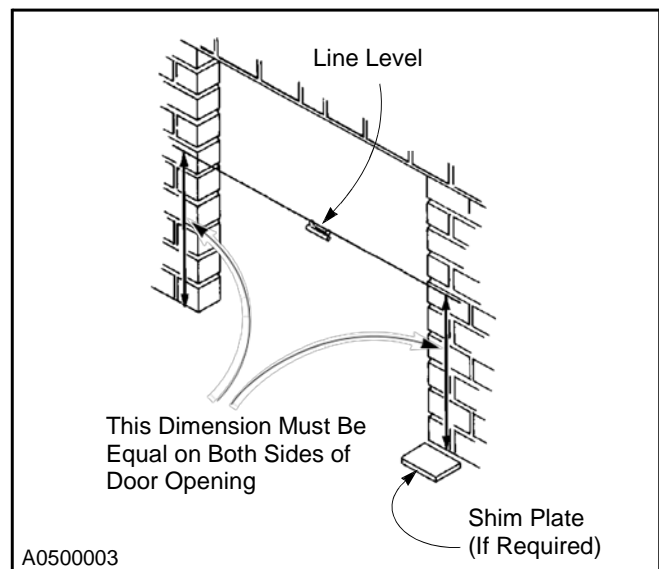


Figure 10

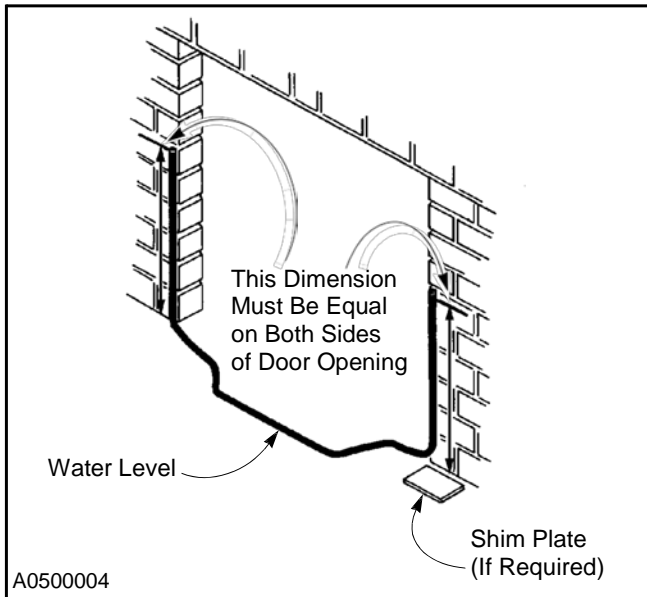


Figure 11

SIDE COLUMNS

NOTE: The standard mounting location for the motor/gearbox assembly on a PredaDoor NXT door is on the left but can be ordered to be mounted on the right. DO NOT change the location of the drive motor without first contacting your Rytec representative or the Rytec Technical Support Department at 800-628-1909.

The PredaDoor NXT has only one access hole in each side column.

1. Remove the drive motor side column from the shipping crate. The drive motor side column is identified by the wire access hole along its outside edge. (See Figure 12.)

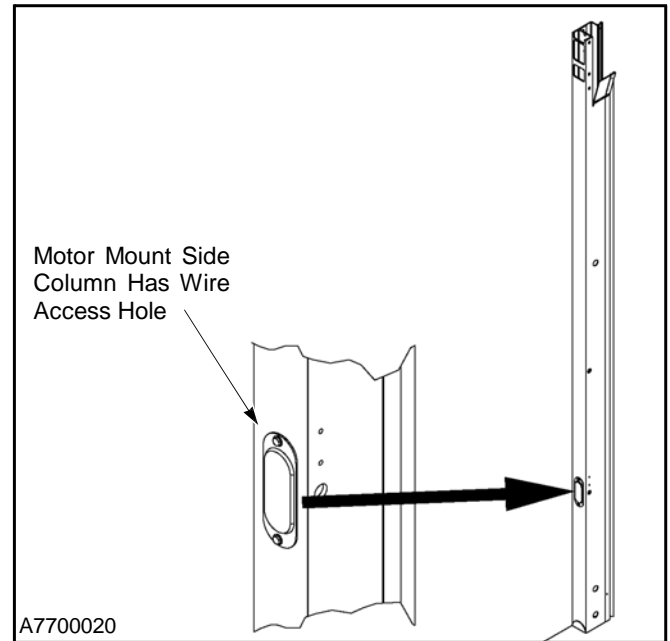


Figure 12

2. Stand the drive motor side column on the floor and tight against the wall. To determine on which side of the door to place the side column, be sure that the access holes are facing away from the door opening.
3. Align the inside edge of the side column with the production width line laid out earlier on the floor. The side column must be located on the outside edge of the layout line. (See Figure 13.)

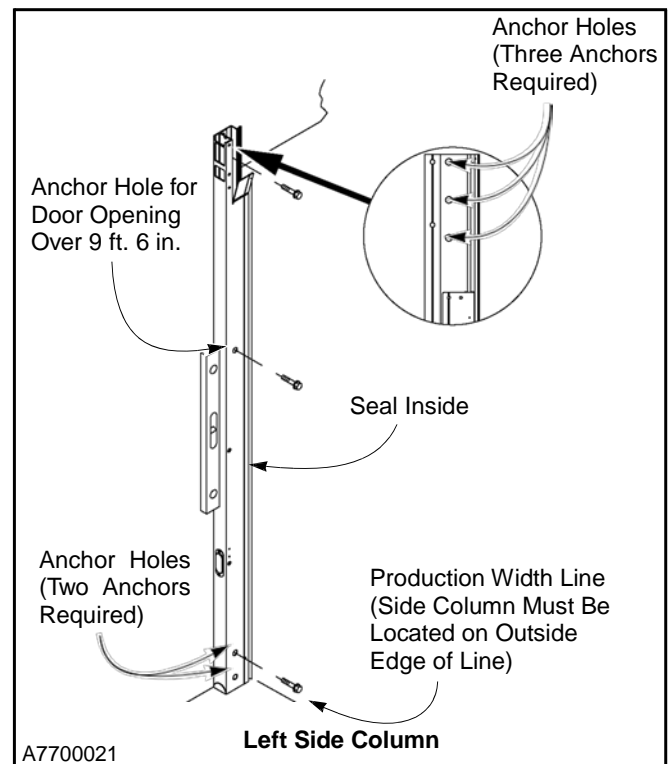


Figure 13

CAUTION

It is critical that the side columns are mounted level and square to the wall and floor, both vertically and horizontally. A 4-ft. level and carpenter's square are recommended for this procedure.

The use of bar clamps to secure the side columns to the wall during installation is recommended, as these hold the columns securely in place, while allowing for slight adjustments of either side column during the installation of the head assembly.

NOTE: All necessary anchor hardware and material is the responsibility of the door owner.

- Once the side column is properly positioned, secure it to the wall using the appropriate anchors. (See "ANCHORING METHODS" on page 3.) Anchor holes have been provided in the side column. (See Figure 13.) DO NOT tighten the anchor hardware at this time.

NOTE: Use $\frac{1}{2}$ -in. diameter expansion shell stud-type anchors for concrete walls or $\frac{1}{2}$ -in. diameter threaded through bolts for brick walls and other applications where expansion bolts are not acceptable.

Use a tape measure to ensure that proper width alignment is maintained between the side columns, at the top and bottom ends of each column. DO NOT tighten the anchors at this time.

- Mount the other side column to the wall in the same manner as outlined above for the first side column.

SPREADER ASSEMBLY

Door without Hood Assembly

- Attach an L-shaped support bracket to each end of the spreader extrusion using two $\frac{3}{8}$ -16 x $1\frac{1}{4}$ -in. serrated-flange hex screws and nuts. The brackets and mounting hardware were shipped in the small parts carton. (See Figure 14.)

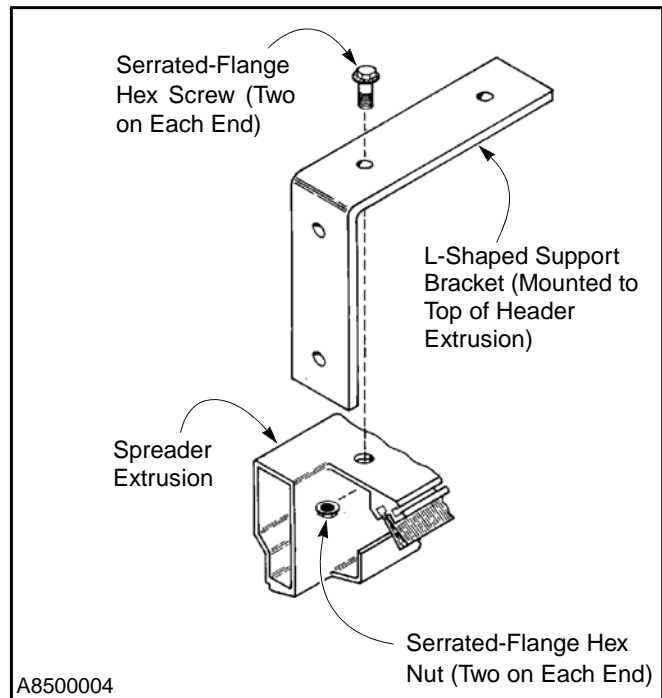


Figure 14

- Attach the spreader assembly to the inside face of each side column using two $\frac{3}{8}$ -16 x $1\frac{1}{4}$ -in. serrated-flange hex screws and nuts at each end of the assembly. Face the spreader so the brush is toward the front of the door. (See Figure 15.)

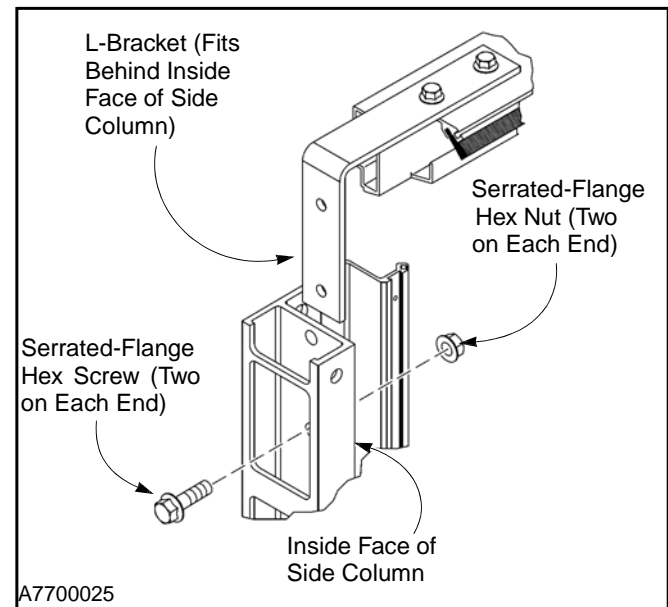


Figure 15

- Check that the side columns are plumb and square with the floor and wall.
- Tighten all anchor hardware securing both side columns (or pullouts) to the wall.

- Remove any bar clamps that may have been used to temporarily hold the side columns (or pullouts) to the wall.

Door with Hood Assembly

NOTE: DO NOT change the location of the drive motor without first contacting your Rytec representative or the Rytec Technical Support Department at 800-628-1909.

- Identify the drive motor side column by the wire access holes along its outside edge. This is important for the proper installation of the spreader assembly.
- Attach a spreader assembly U-bracket on the outside face of each side column using two $\frac{3}{8}$ -16 x $1\frac{1}{4}$ -in. serrated-flange hex screws and nuts for each bracket. The U-brackets and mounting hardware were shipped in the small parts carton. (See Figure 16.)

IMPORTANT: Attach the large U-bracket to the drive motor side column with the screw hole located $6\frac{3}{4}$ -in. from the end of the bracket, nearest to the outside face of the side column. (See Figure 16.)

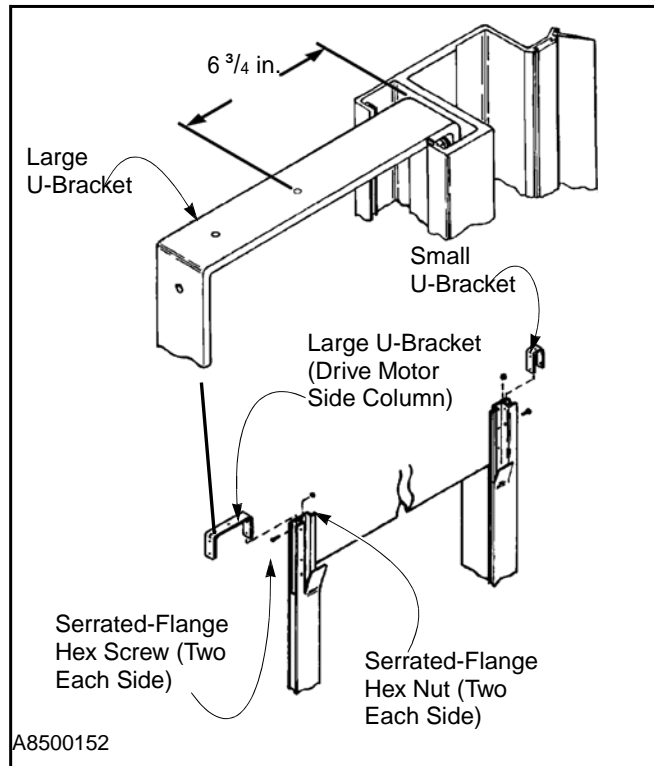
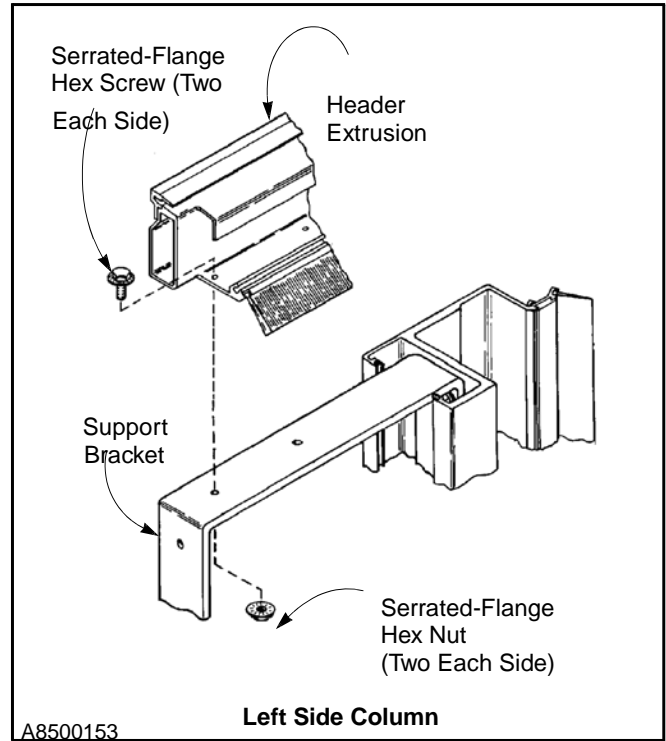


Figure 16

- Attach the spreader assembly to the U-brackets using two $\frac{3}{8}$ -16 x $1\frac{1}{4}$ -in. serrated-flange hex screws and nuts at each end of the assembly. Face the spreader so the brush is toward the front of the door. (See Figure 17.)



Left Side Column

Figure 17

- Check that the side columns are plumb and square with the floor and wall.
- Tighten all anchor hardware securing both side columns (or pullouts) to the wall.
- Remove any bar clamps that may have been used to temporarily hold the side columns (or pullouts) to the wall.

HEAD ASSEMBLY

- Before removing the head/fabric roll assembly from the shipping crate, locate four $\frac{1}{2}$ -13 x $1\frac{1}{4}$ -in. serrated-flange hex screws, four $\frac{1}{2}$ -13 serrated-flange nuts, and the flange bearing assembly in the small parts carton.

NOTE: On a door configured with pullouts, the four $1\frac{1}{4}$ -in. long serrated-flange hex screws mentioned above in step 1 were not shipped with the door. Instead, the longer $\frac{1}{2}$ -13 x 6-in. hex screws that were installed earlier will be used to attach the head assembly to the side columns.

INSTALLATION—HEAD ASSEMBLY

Also, some oversized doors (with or without pullouts) require a steel spacer between both side columns and the head assembly. If your door is oversized, locate two 9-in. x 1³/₄-in. steel spacers shipped in the small parts carton. (The spacers are further identified by a hole at each end.)

If spacers were included in the small parts carton but the door does not include pullouts, four 1¹/₂-13 x 2-in. serrated-flange hex screws were substituted for the slightly shorter 1¹/₂-13 x 1¹/₄-in. screws mentioned above in step 1. The 2-in. screws were shipped in the small parts carton.

2. Remove the head/fabric roll assembly from the shipping crate.

WARNING

Before lifting the roll assembly, secure both side columns to the building wall.

Secure the roll assembly to the forklift before lifting. Failure to secure the side columns or the roll assembly can result in serious injury and property damage. DO NOT remove the forklift until the assembly is secured to both side columns.

CAUTION

Use care when handling the fabric roll to ensure that the fabric is not torn or damaged. DO NOT remove the shipping bands holding the fabric to the roll.

IMPORTANT: The fabric and bottom bar, unroll from the back of the drum assembly.

IMPORTANT: If your door is oversized, two large spacers were included in the small parts carton. Failure to install a spacer between the motor mounting bracket and flange bearing assembly could result in damage to the door. (See Figure 18 and Figure 19.)

5. Attach the motor mounting bracket to the side column using two 1¹/₂-13 x 1¹/₄-in. serrated-flange hex screws and nuts (or two 1¹/₂-13 x 2-in. screws and nuts). Doors with 3 or more windribs will have spacers for the drive and non-drive side to shim the drum roll assembly away from the rear spreader. Failure to install these spacers (if supplied) will cause the drum roll to jamb against the rear spreader due to the diameter of the drum roll. Doors with 2 windribs or less will not have the shim material. DO NOT tighten the hex nuts at this time. (See Figure 18.)

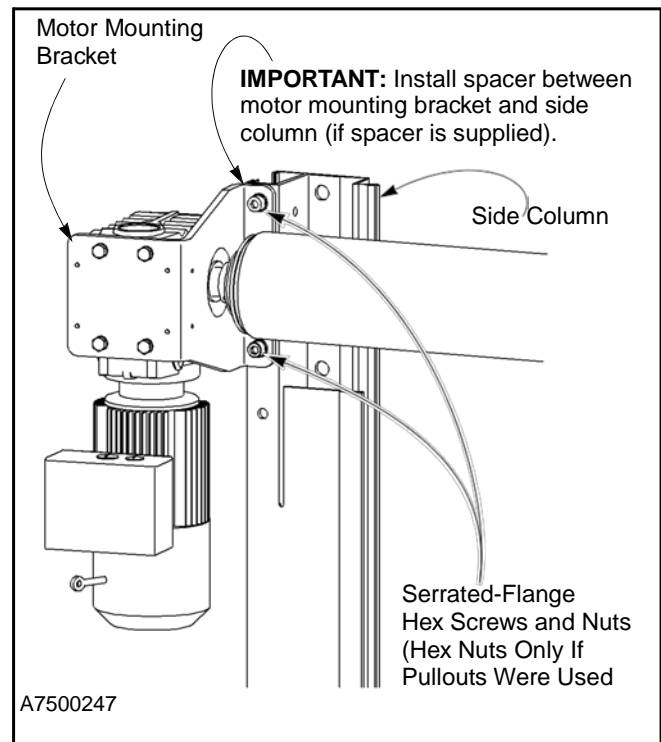


Figure 18

3. Using a forklift, lift the head/fabric roll assembly in place.
4. Position the head assembly in front of the pair of holes near the top of each side column. Align the holes in the motor mounting bracket with the holes in the side column. (See Figure 18.)

6. Slide the flange bearing assembly over the drum shaft at the non-drive end of the head/fabric roll assembly. (See Figure 19.)

IMPORTANT: If your door requires spacers, be sure to install a spacer between the flange bearing assembly and the side column. (See Figure 19.)

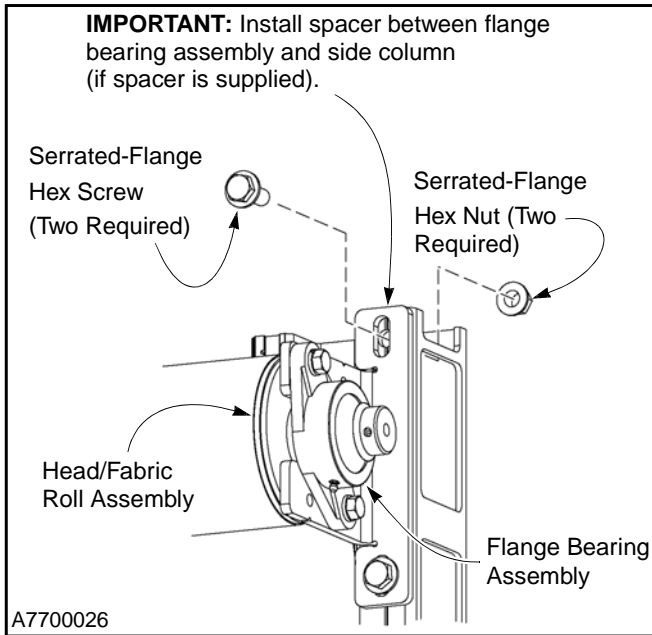


Figure 19

7. Bolt the flange bearing assembly to the side column using two $\frac{1}{2}$ -13 x $1\frac{1}{4}$ -in. serrated-flange hex screws and nuts (or two $\frac{1}{2}$ -13 x 2-in. screws and nuts if spacers are required, or nuts only if 6-in. screws were installed earlier). DO NOT tighten the hex nuts at this time.

IMPORTANT: If the drum/fabric roll assembly cannot be made level by adjusting the flange bearing mounting bracket up or down, verify that the side columns are plumb, square and level and make any necessary adjustments.

8. Place a carpenter's level along the length of the drum/fabric roll assembly and adjust the flange bearing mounting bracket up or down, as required, until the drum/fabric roll assembly is level.

Tighten the hardware securing the motor and the flange bearing mounting brackets to the side columns. Then tighten the set screw to lock the flange bearing to the drum shaft. (See Figure 20 and Figure 21.)



For a door with pullouts, verify that the two hex nuts threaded on each 6-in. screw are tight against their associated side column and mounting bracket. Failure to tighten all eight nuts could result in damage to the side columns. (See Figure 21.)

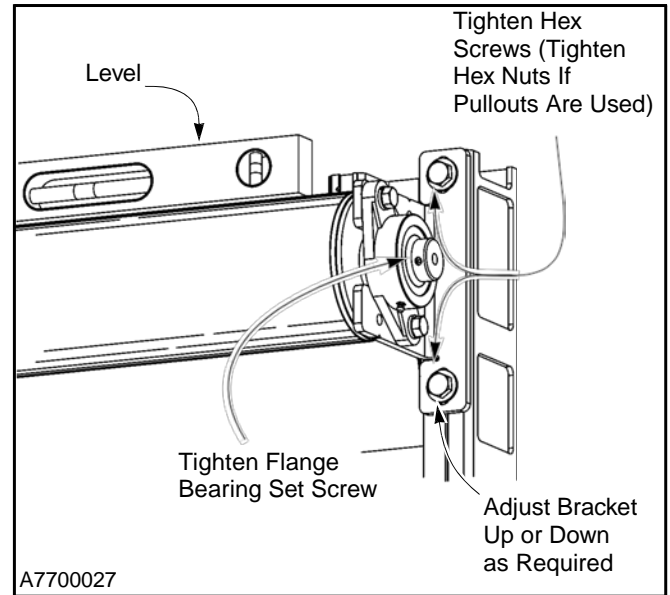


Figure 20

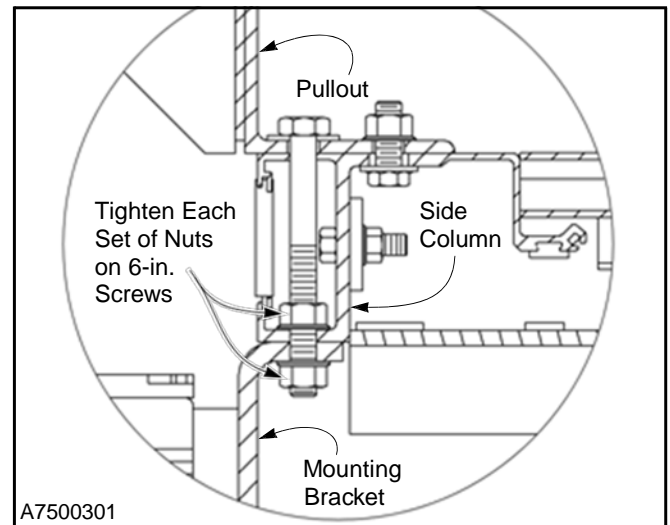


Figure 21



DO NOT remove the shipping bands holding the fabric material to the drum roll assembly at this time.

9. Do not remove the shipping bands securing the fabric material to the drum roll. Only remove the fasteners securing the drum assembly to the forklift. Then lower and move the forklift out of the way.

INSTALLATION—BOTTOM BAR

BOTTOM BAR

1. Check the brake release lever located on the motor/brake assembly. The brake must be in the engaged position. (See Figure 22.)

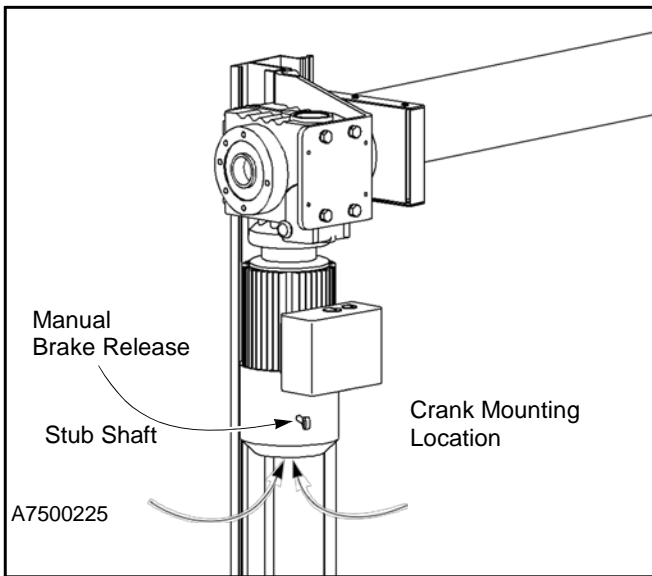


Figure 22

NOTE: When released, the motor brake will default to the ENGAGED position.

2. Cut and remove the shipping bands holding the fabric to the roll.
3. Insert the plastic tabs on the bottom bar into the slot of each side column. (See Figure 23.)

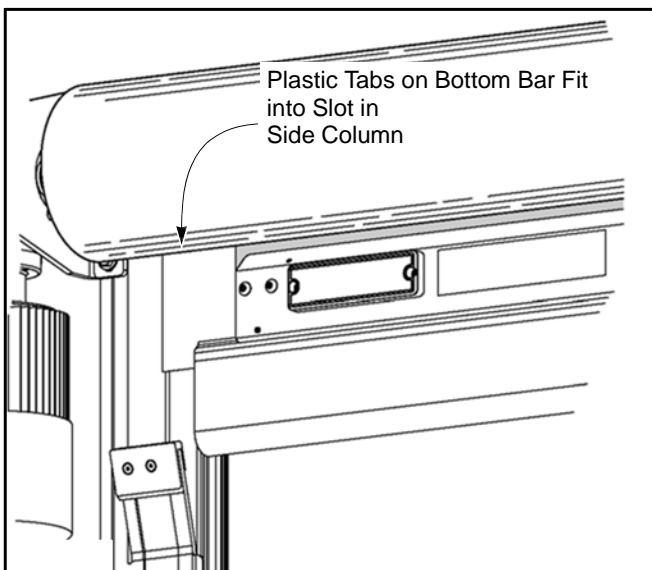


Figure 23

WIRELESS ANTENNA, ENCODER, ANCHOR HOLE PLUGS, AND CAULKING

Wireless Antenna

The installation of the wireless antenna is performed in the field during the installation of the door. The wireless system has two main assemblies: the mobile unit located in the bottom bar under the plastic cover and the stationary antenna mounted to the motor assembly.

1. Locate the wireless antenna assembly in the parts carton inside the crate. (See Figure 24.)

NOTE: The antenna is fragile; remove packing material carefully. The wireless antenna assembly is preassembled at the factory.



Figure 24

2. Locate the four ¼-20x½" Hex bolts in the encoder small parts bag taped to the encoder wireless assembly bracket. Lift the wireless assembly bracket into place and install the four bolts. (See Figures 25 & 26)

*NOTE: Support the encoder during the bracket installation. **DO NOT** let the encoder hang from the antenna cable.*

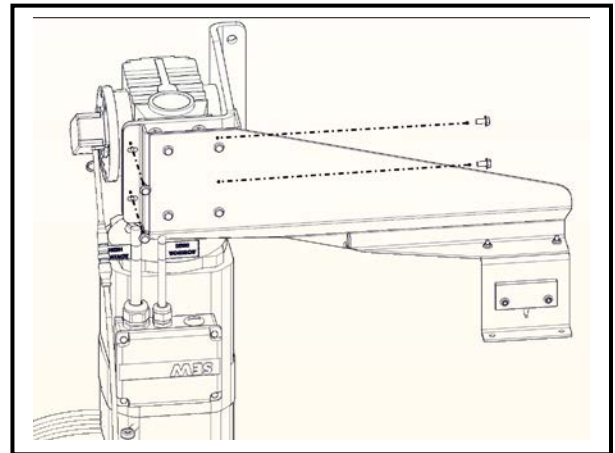


Figure 25

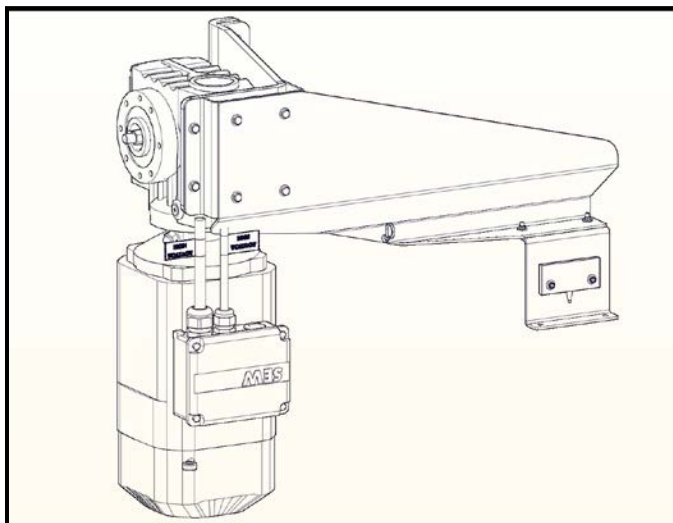


Figure 26

1. The Shaft end Feig encoder is located in the clear plastic bag attach to the antenna assembly. Mount the shaft end onto the coupler shaft, push the shaft end tightly onto the coupler shaft. The shaft end has a small set screw to tighten onto the coupler shaft. Apply mild thread lock to the small set screw to prevent loosening. (See Figure 27)

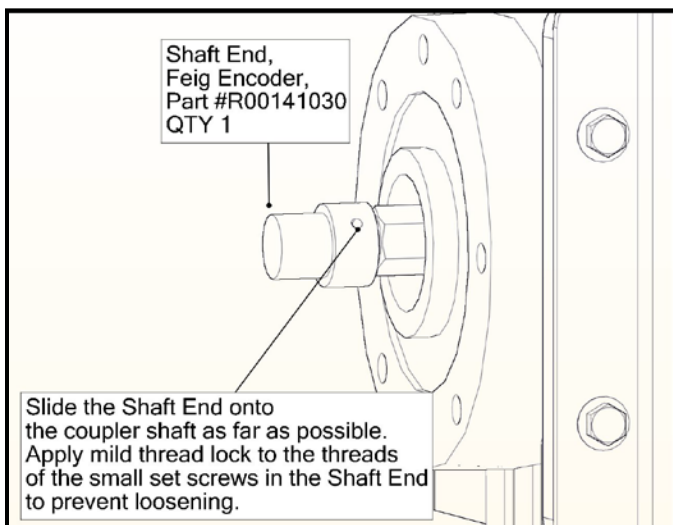


Figure 27

2. Slide the encoder and white UHMW mounting bracket over the Shaft End Feig Encoder and install the three (3) Allen head cap screws located in the small parts carton. (see Figure 28)

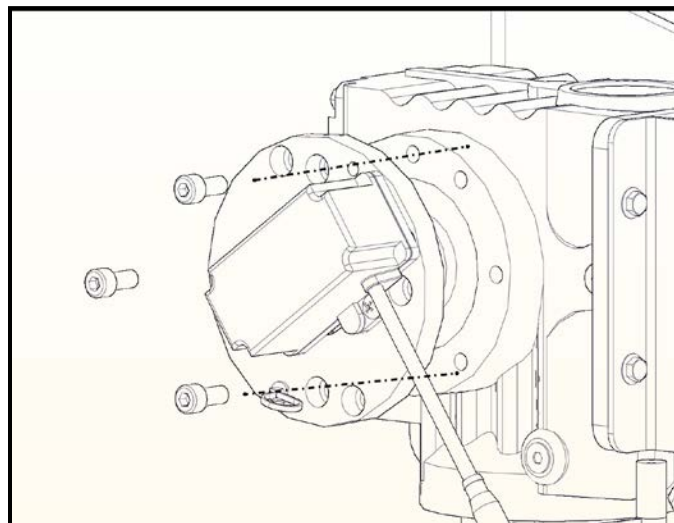


Figure 28

3. Two (2) cable ties are provided to route the antenna cable. (See figure 29)

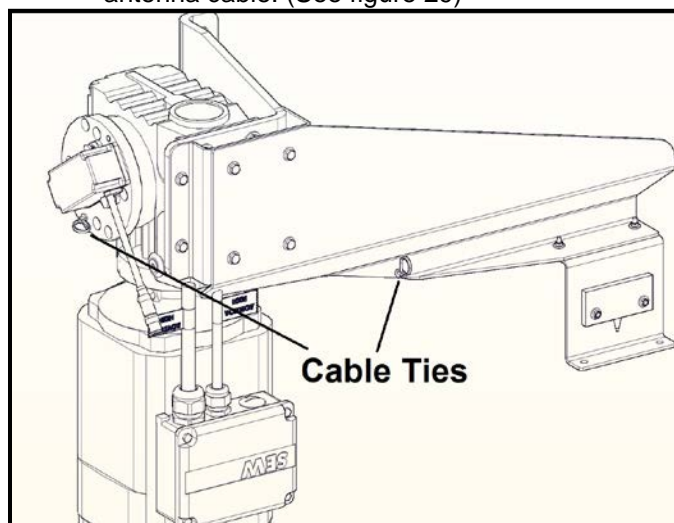


Figure 29

4. Locate the encoder cable in the small parts carton and screw the quick disconnect together. Route the encoder cable back to the control and make electrical connections per the provided electrical schematic.

NOTE: DO NOT run HIGH and LOW voltage cables in the same conduit or in the side column channel together. DO NOT coil excess cable near the motor or in the control panel. Cut the Encoder and motor cable to length before terminating.

INSTALLATION—PHOTO EYE

PHOTO EYE

The photo eye is a safety measure and therefore needed for proper door operation. When installing photo eyes on the back side of the door, make sure the installation is opposite from the front. The end result would be photo eye beams that cross. (See Figure 29 and Figure 30.)

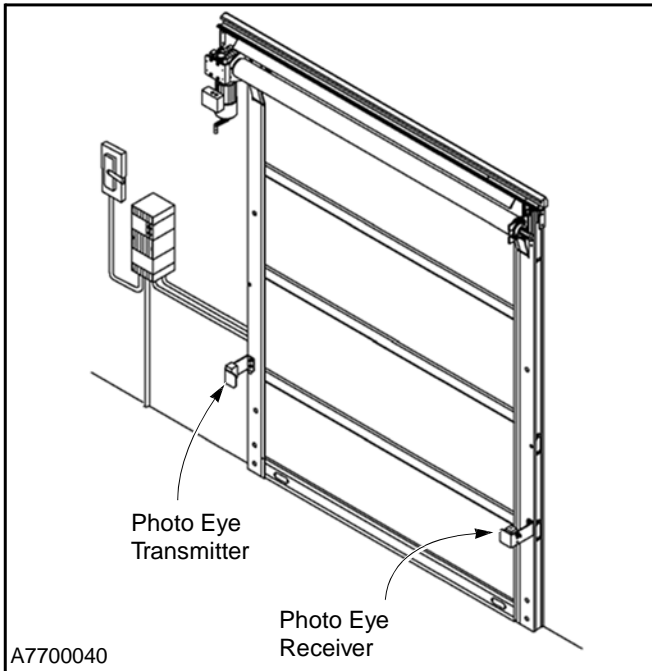


Figure 29

IMPORTANT: When installing the rear set of photo eyes, be sure that the assembly is installed in reverse order from the front. This is to prevent crosstalk between the photo eyes. (See Figure 30.)

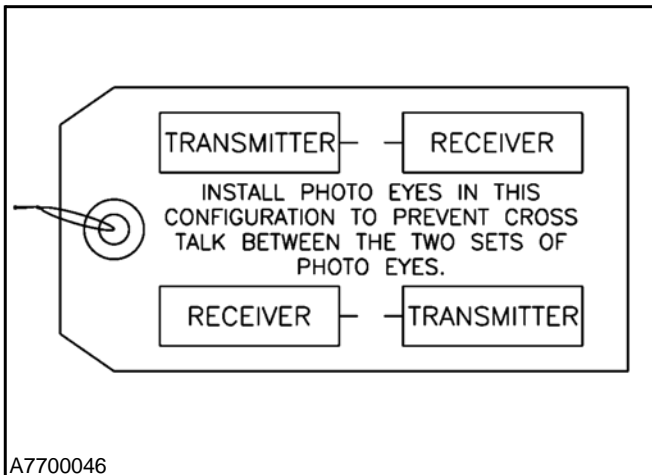


Figure 30

The transmitter and receiver can be identified two ways. The transmitter is designated SMT 3000 on the white label or by a single green light that comes on at the clear end of the transmitter. (See Figure 31.) The receiver is designated SMR 3215 on the white label or by a yellow light that illuminates only when it is in proper alignment with the transmitter. (See Figure 32.)

NOTE: When the cable is connected to the photo eye, there is only a 1/4-inch window to see the green or yellow LED light. (See Figure 32.)



Figure 31



Figure 32

1. Install the photo eye assembly on the motor mount side column with two $\frac{1}{4}$ -20 x $\frac{3}{4}$ -in. serrated-flange hex screws. The mounting holes are located approximately 40 in. from the floor. (See Figure 33.)

NOTE: Photo eyes and mounting hardware are shipped in the small parts carton. The two sets of photo eyes provided must both be properly installed. (See Figure 29.)

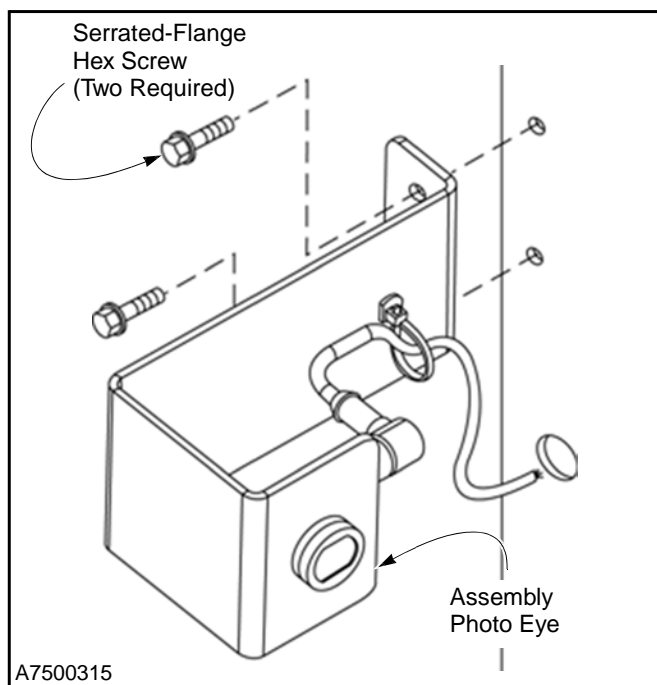


Figure 33

2. Install the cord grip in the side column, just below the photo eye assembly. (See Figure 34.)
3. Feed photo eye cable through the cord grip. Remove all slack in the cord between the photo eye and grip. Tighten the cord grip. (See Figure 34.)

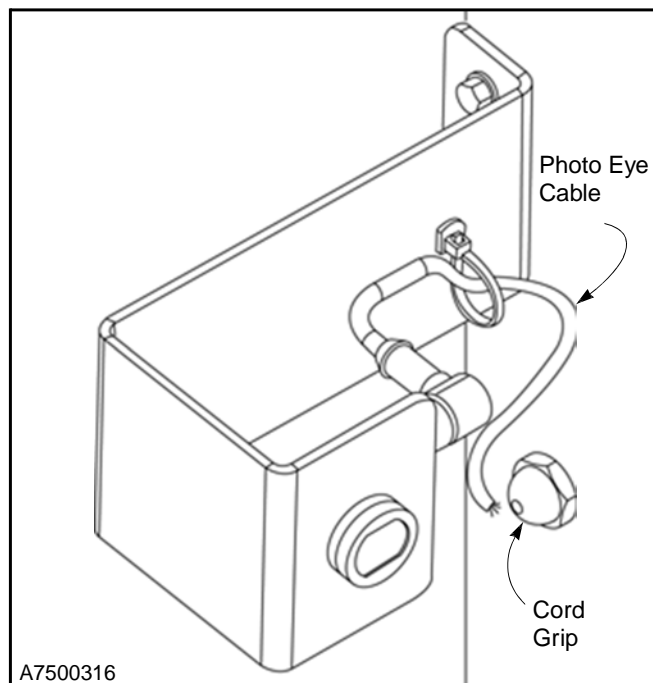


Figure 34

4. Install photo eye assembly on the non-drive side column with two $\frac{1}{4}$ -20 x $\frac{3}{4}$ -in. serrated-flange hex screws.
5. Feed photo eye cable through the cord grip. Remove all slack in the cord between the photo eye and grip. Tighten the cord grip.

NOTE: Mounting hardware for the second set of photo eyes has been provided. If this hardware will not work for your application, any additional required hardware becomes the responsibility of the installer.

6. Mount the second photo eye assembly on the wall adjacent to the back of the door. The photo eye emitter and receiver are to be mounted at the same height as the photo eye assembly on the front of the door, but as close to the door as possible.

Testing Photo Eye Modules

When power is on, the green light indicates the photo eye module is powered up. When the yellow light on the receiver module is also lit, the transmitter and receiver modules are properly aligned. Placing your hand in front of the receiver breaks the light path and causes the yellow light to go out. Removing your hand causes the yellow light to go back on.

ELECTRICAL WIRING ROUTING

1. Locate the Rytec control box and fused disconnect as shown in Figure 35.

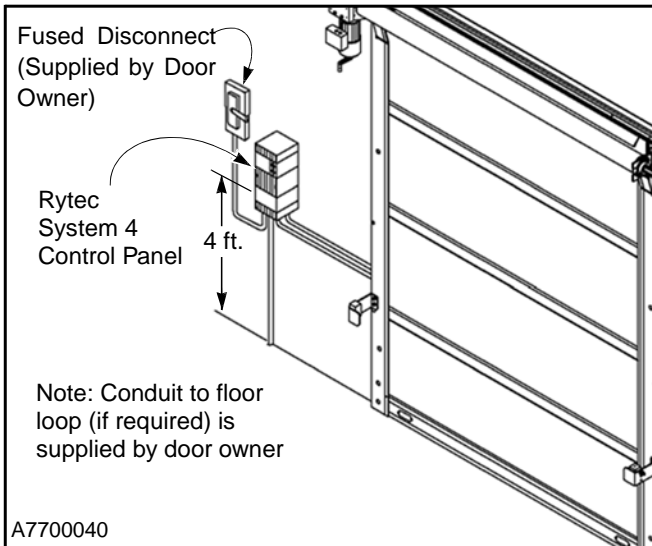


Figure 35

⚠ WARNING

The fused disconnect must be in the OFF position and the fuses removed before wiring of the control box begins.

2. Locate and remove the access covers and hole plugs from the side column to gain access to the wires. (See Figure 36.)

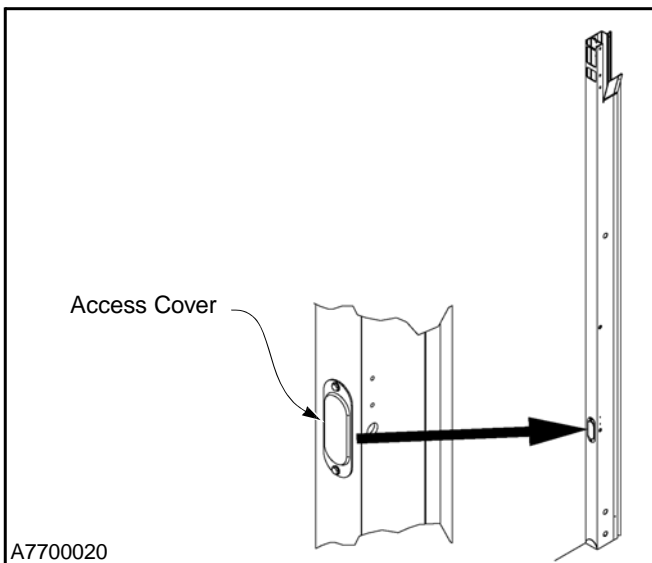


Figure 36

3. Run wires from the encoder and over the top of the motor mount side column cover. Run wires down to the access hole in the side column cover. (See Figure 37.)

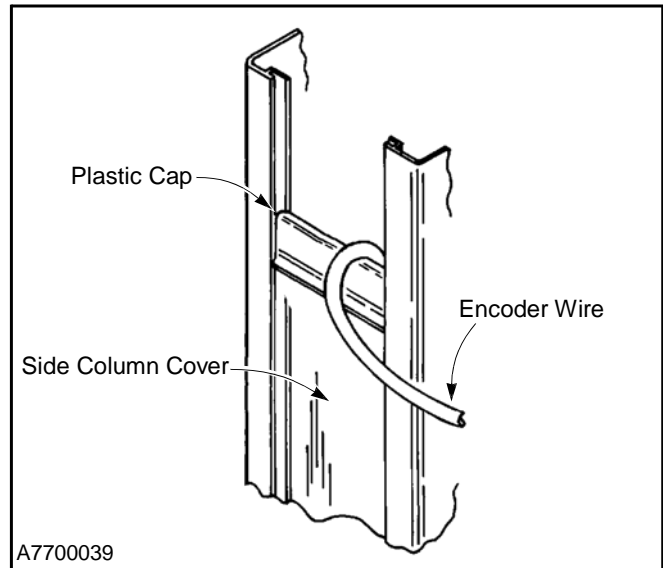


Figure 37

IMPORTANT: Never run high and low voltage wires together.

CONTROL PANEL AND ELECTRICAL CONNECTIONS

Once the door has been assembled, see the Rytec System 4 Drive & Control Installation & Owner's Manual for information on control panel installation, electrical connections, door limit settings, and initial door start-up procedure.

NOTE: If a floor loop is used, all wiring from the fused disconnect to the control box and from the control box to the motor mount side column, as well as conduit running from the control box to the floor, is provided by the door owner/installer or the electrician. All wiring and conduit must meet all local and state codes. Wires provided with the door are labeled with terminal or contact numbers.

DOOR OPEN- AND CLOSE-LIMIT POSITIONS

See the Rytec System 4 Drive & Control Installation & Owner's Manual for the proper procedure for setting the open and close door limits. The door open- and close-limit positions are detailed below.

Close-Limit Position

The close-limit position should be adjusted so that the door travel allows the yellow vinyl loop on the bottom bar to gently seal against the floor. (See Figure 38.)

DO NOT allow the rubber reversing edge, enclosed in the yellow vinyl loop, to come in contact with the floor.

CAUTION

Damage to the rubber reversing edge or other bottom bar parts can occur if the door seal is allowed to seal too tightly against the floor.

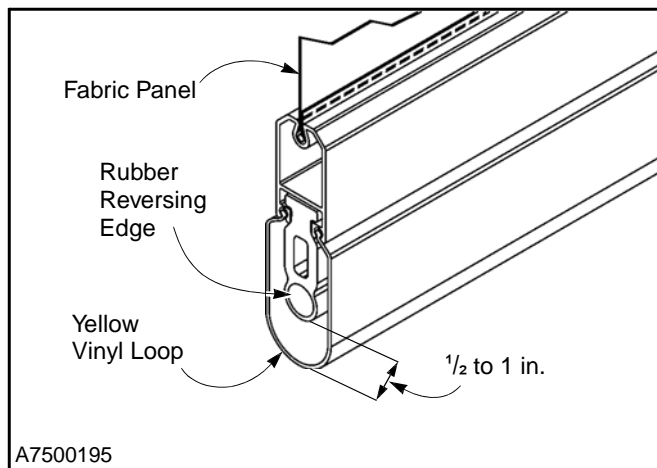


Figure 38

Open-Limit Position

The open-limit position should be adjusted so that the door travel allows the bottom bar assembly to stop at the position shown in Figure 39.

NOTE: It is important that the plastic breakaway tabs on the ends of the bottom bar are above the black plastic tab on the side column. This open-limit setting height allows the door to be jogged to the proper height to allow for the re-setting of the bottom bar if the door is broken away.

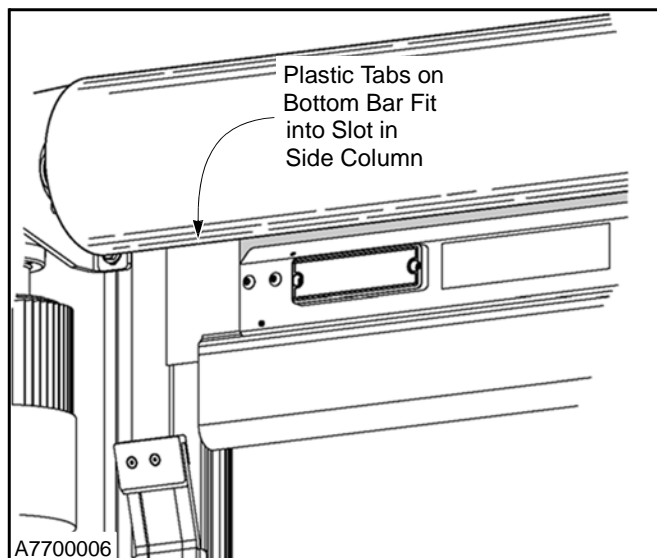


Figure 39

PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT

WARNING

Do not stand under the door panel when making check. If reversing edge switch is not working properly, panel could strike person performing check.

To check the reversing edge switch operation, run the door through the down cycle. As the door is lowering, tap the bottom of the reversing edge. If the reversing edge switch is operating properly, the door should immediately reverse and run to the full open position. Push the control box push-button to close the door after the check is completed.

If the door does not reverse, check the air bleed and sensitivity of the reversing edge switch. The switch is in the bottom bar on the side opposite the door motor.

Reversing Edge Switch Air Bleed Check

1. The reversing edge switch is located inside the bottom bar assembly. To inspect and/or adjust the switch, remove the access cover from the face of the bottom bar assembly. (See Figure 40.)

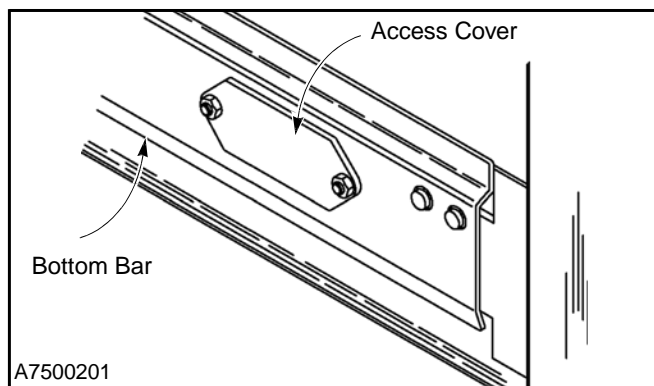


Figure 40

2. Make sure the clear PVC hose is in tight contact with the air input post so that air leakage cannot occur and that vibration will not cause the hose to fall off. Make sure the hose is not kinked. (See Figure 41.)
3. The air bleed has been set at the factory and should not require adjustment. To check the air bleed, turn the air bleed adjustment screws located on the front and back of the switch fully clockwise, but do not overtighten. Then turn the screws counterclockwise one full turn. (See Figure 41.)

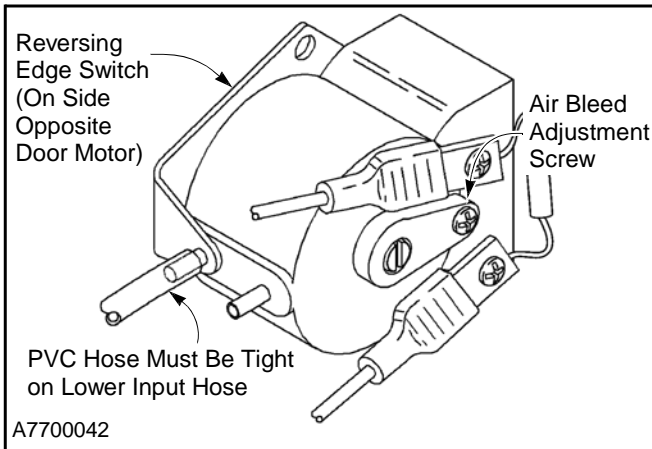


Figure 41

Reversing Edge Switch Sensitivity Adjustment

1. The reversing edge switch is a normally open contact. The PVC hose is on the lower air input post. To adjust the switch, first remove the wires and resistor from the contact terminals and attach an ohmmeter across the two terminals. (See Figure 42.)
2. Turn the adjustment screw, located on the face of the switch, clockwise or counterclockwise until continuity is achieved. Then turn the screw two full turns counterclockwise. The ohmmeter should no longer show continuity. Turning the screw counterclockwise decreases sensitivity. Turning the screw clockwise increases sensitivity. (See Figure 42.)

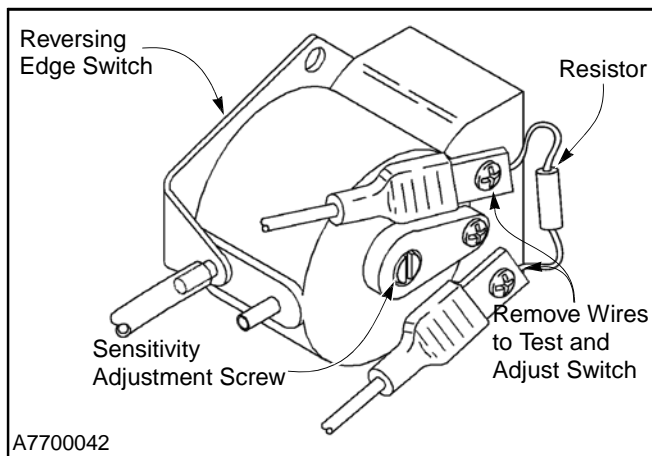


Figure 42

3. Reattach resistor and wires and then replace the access cover on the bottom bar.

NOTE: If the reversing edge is set too sensitive, the door may reverse direction during the closing cycle, without the reversing edge coming in contact with an object. If this occurs, readjust the reversing edge switch.

PNEUMATIC KILL SWITCH CHECK AND ADJUSTMENT

A kill switch has been mounted in the bottom bar assembly. The purpose of this switch is to prevent the door from being operated if the breakaway bottom bar becomes separated from either side column.

Kill Switch Check



Take precautions to prevent the door from being opened or closed while performing the following procedure.

1. Raise or lower the door to approximately head or chest height and stop the door.

NOTE: It should not be possible to restart the door until the door has been reassembled and the control system reset.

2. Push the breakaway bottom bar out of the side column. Door should not operate until control box is reset. (See Figure 43 and Figure 44.)

If the kill switch did not operate properly: Adjust the kill switch and then recheck it. (See "Kill Switch Air Bleed Adjustment" on page 17.)

If the kill switch operated properly: Reinstall the bottom bar into the side column. (See "RESETTING BOTTOM BAR ASSEMBLY" on page 18.)

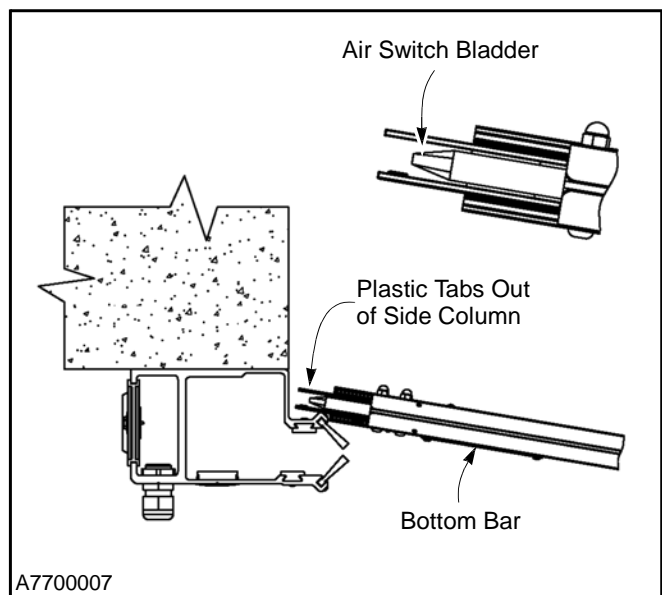


Figure 43

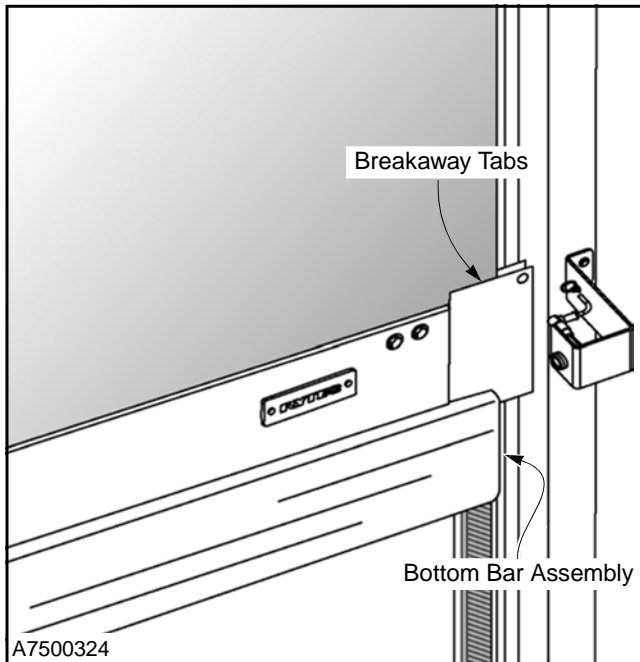


Figure 44

Kill Switch Air Bleed Adjustment

1. The kill switch is mounted in the bottom bar assembly, on the same side as the door motor. To access the switch, first remove the access cover. (See Figure 45.)

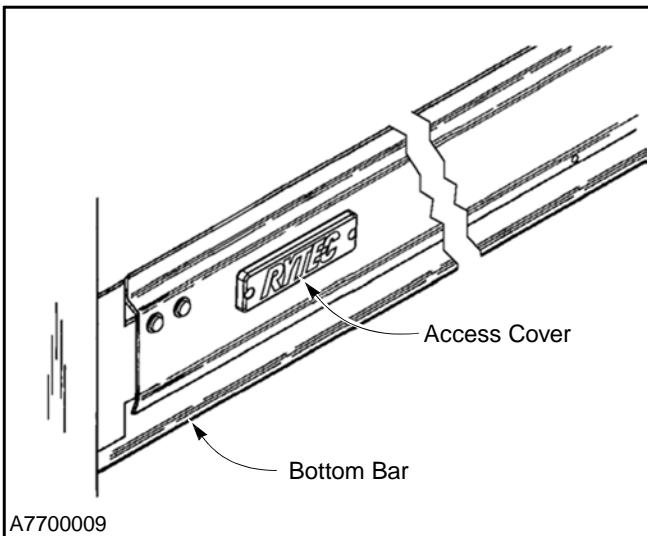


Figure 45

2. Make sure the clear PVC hose is tight on the air input post so that air leakage cannot occur and vibration will not cause the hose to fall off. Also make sure the hose is not kinked. (See Figure 46.)

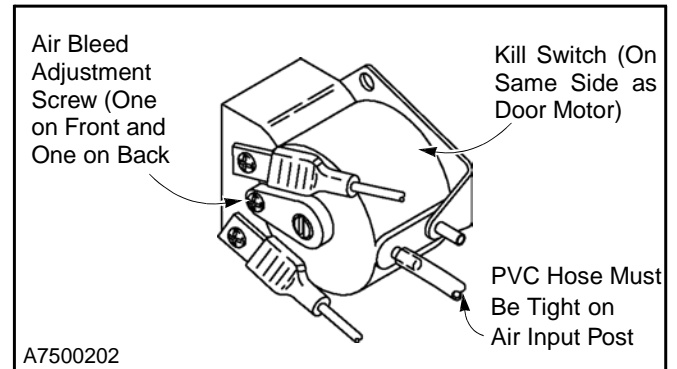


Figure 46

3. The air bleed has been set at the factory and should not require adjustment. To adjust the air bleed, turn the air bleed adjustment screws located on the front and back of the switch fully clockwise, but do not overtighten. Then turn each screw counterclockwise one full turn. (See Figure 46.)
4. To adjust the kill switch sensitivity, see "Kill Switch Sensitivity Adjustment" on page 17.

Kill Switch Sensitivity Adjustment

The kill switch assembly is a normally closed contact. The PVC hose is on the upper air input post.

1. Remove the wires from the contact terminals and attach an ohmmeter across the two terminals. (See Figure 47.)
2. To adjust the switch turn the small adjusting screw located on the face of the switch clockwise or counterclockwise until continuity is achieved.
3. Turn the screw 2 fully clockwise for final adjustment.

NOTE: The ohmmeter should continue to show continuity. Turning the screw clockwise decreases sensitivity. Turning the screw counterclockwise increases sensitivity.

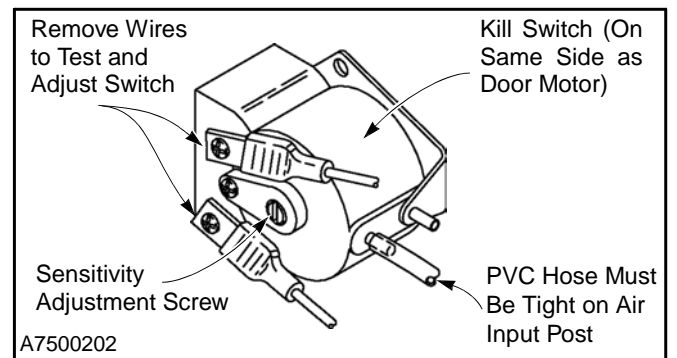


Figure 47

4. Reconnect the wires onto the switch. Replace the access cover on bottom bar.

INSTALLATION—RESETTING BOTTOM BAR ASSEMBLY

NOTE: If the kill switch is set too sensitive, it may cause the door to stop during the opening or closing cycle. If this occurs, readjust the kill switch sensitivity setting.

RESETTING BOTTOM BAR ASSEMBLY



If the bottom bar or door panel assembly has been damaged, remove door from service.

1. Position the breakaway tabs of the bottom bar in front of the side column where the angled guide plate is located. (See Figure 48.)

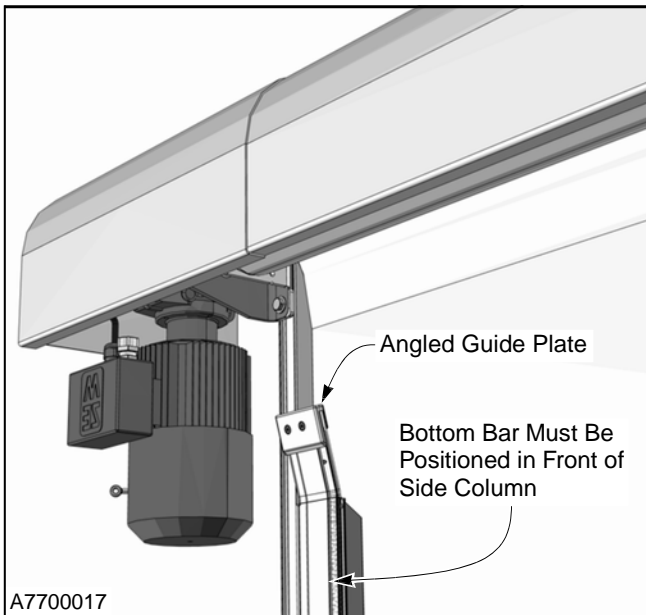


Figure 48

2. Press and hold the up arrow on the control panel until the door is in the fully open position.
3. Press the down arrow and the door will close in automatic mode and be ready for service.

NOTE: Check to make sure that the fabric is inside each channel.

4. Perform operations check on the door.

PHOTO EYE ADJUSTMENT

The photo eye is always set at maximum adjustment. If less sensitivity is required, contact the Rytec Technical Support Department at 800-628-1909 before any adjustments are made. (See Figure 49.)

NOTE: When adjusting photo eyes, be sure to adjust them **BOTH**.

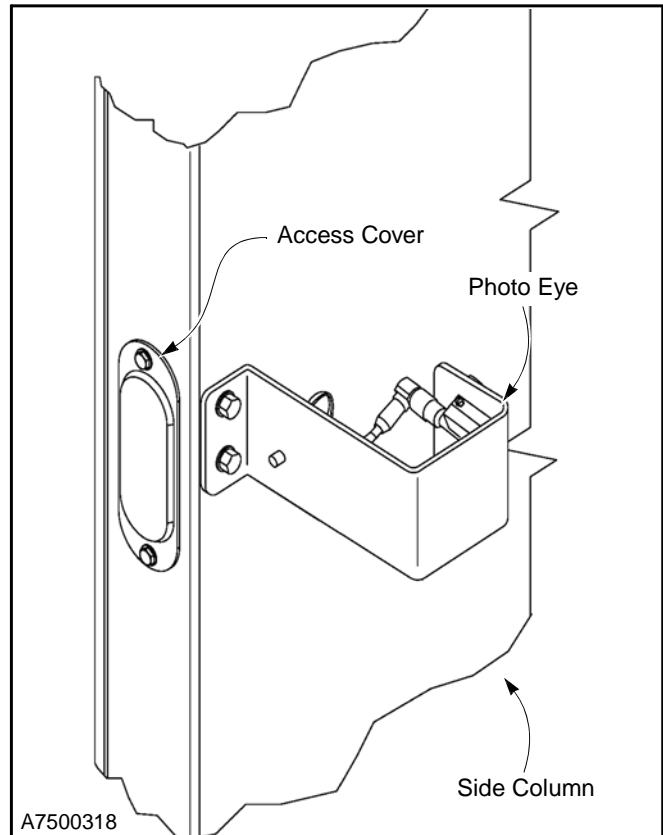


Figure 49

1. Check to see that the photo eye on the front side of the door has been installed for a horizontal beam across the door opening. (See Figure 50.)

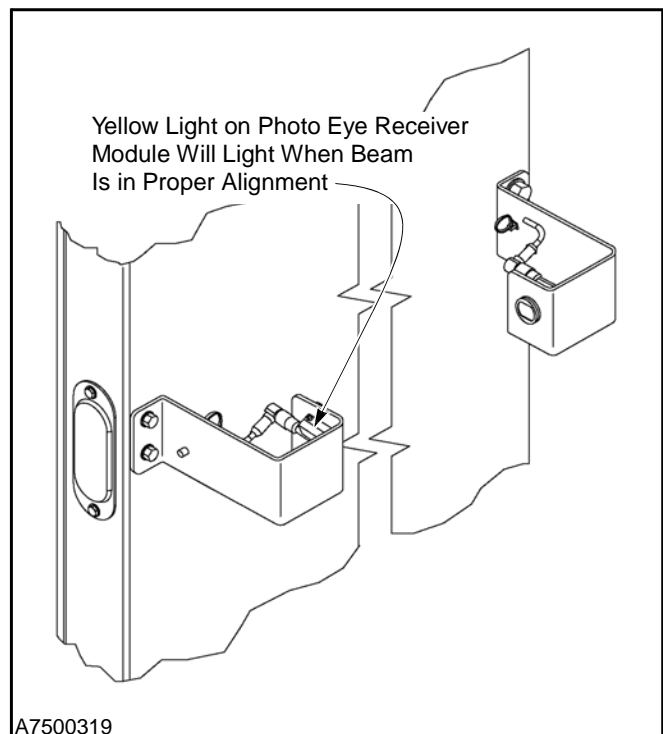


Figure 50

2. Align the photo eyes on the front side of the door.
(See Figure 50.)
3. Adjust the photo eyes on the rear side of the door as required, dependent on the type of mounting used by the installer.

NOTE: Pre-drilled mounting holes have been provided in the side columns to mount the photoeyes. However, it is important to verify with the customer what type of equipment is moving through the door. Large equipment may allow the photoeye beam to shoot under the equipment causing the door to close on the equipment. Different mounting locations may be required.

ALUMINUM HOOD (OPTIONAL)

NOTE: The following procedure is required only if your door was shipped with an optional hood assembly.

A door with a production width of up to 8 ft. 3 in. will have a one-piece hood. A door with a production width greater than 8 ft. 3 in. will have a three- or four-piece hood. The installation procedure is the same for either style of hood except where noted.

1. Attach the hood end covers to their respective U-bracket installed earlier on the side columns. Use two $\frac{3}{8}$ -16 x $1\frac{1}{4}$ -in. serrated-flange hex screws and nuts for each end cover. (See Figure 51.)

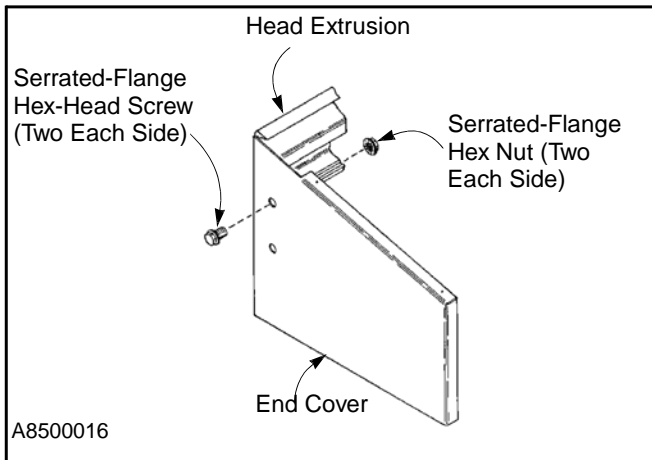


Figure 51

2. Attach the center hood cover section (one-piece hood) or the end hood cover sections (three- or four-piece hood) to the head extrusion. (See Figure 52.) Secure cover to extrusion and end panels using #12 x $\frac{3}{4}$ -in. self-tapping sheet metal screws.

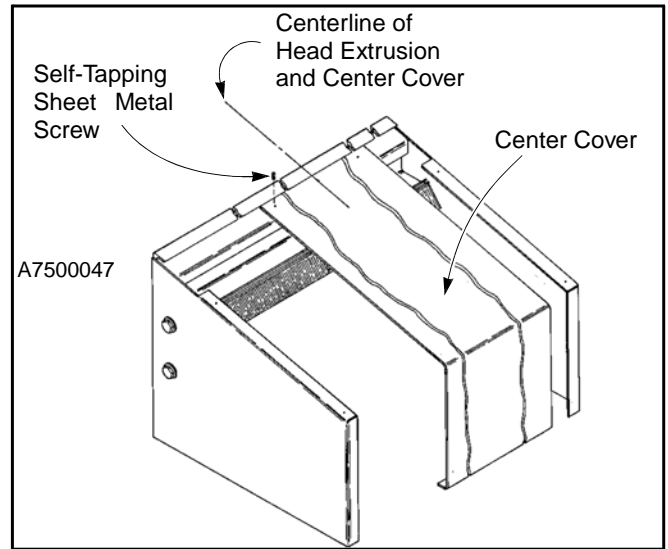


Figure 52

3. Three- or four-piece hood only: Install hood center section(s) and secure to hood end sections using #12 x $\frac{3}{4}$ -in. self-tapping sheet metal screws. (See Figure 53.)

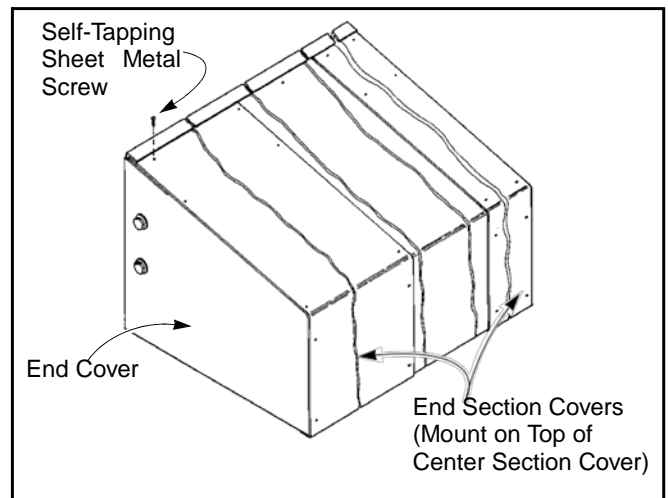


Figure 53

ABS HOOD (OPTIONAL)

1. Attach the hood support assembly to the top of the side columns using two $\frac{3}{8}$ -16 x 1-in. serrated-flange hex screws and nuts on each end. (See Figure 54.)

INSTALLATION—ABS HOOD (OPTIONAL)

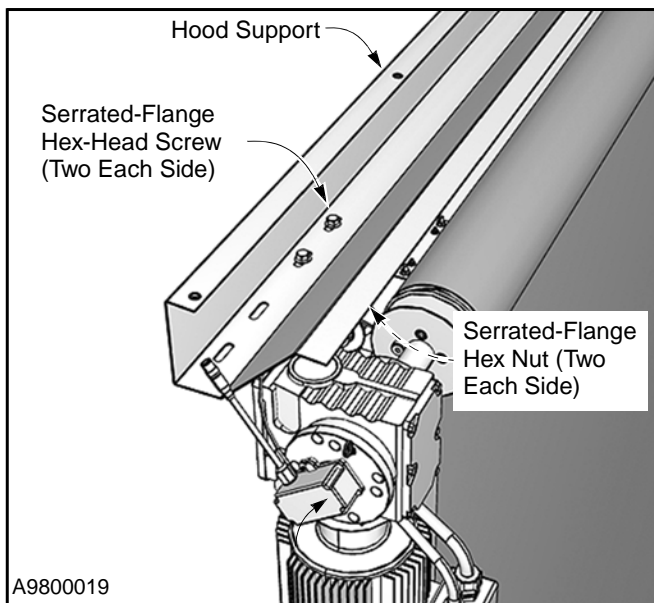


Figure 54

2. Assemble the motor cover, motor bracket, hood cap, and hood using $\frac{1}{4}$ -20 UNC x $\frac{3}{4}$ serrated-flange hex screws. (See Figure 55.)

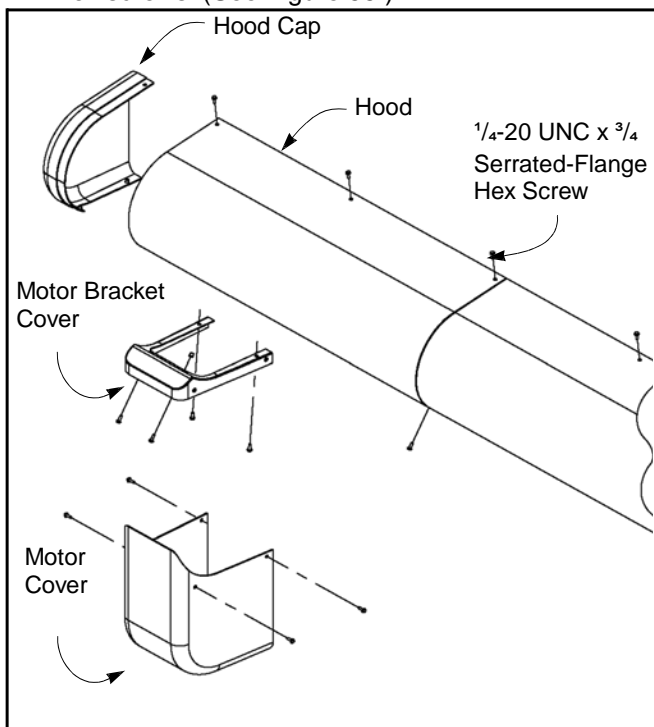


Figure 55

3. Install the center hood piece(s) and other hood cap.

NOTE: Pay close attention to the reliefs in the hood assembly. The middle hood sections overlap each piece for a smooth and clean assembly. The two hood caps tuck under the middle hood sections, followed by screws to tighten and finish off the assembly.

FINAL CHECKS

Side Columns: Check to see that the side columns are installed plumb and square and that all anchor bolts are securely tightened.

Header Assembly: Check all mounting hardware to see if it is tight.

Head Assembly: Fabric roll must be level. All mounting hardware must be tight.

Caulking: See that side columns and head assembly have been caulked where they meet the building wall.

Bottom Bar: The bottom bar must travel up and down in the side column without binding.

Open and Close Limits: Check that limits are set properly. Downward travel of the door panel must stop when the yellow vinyl loop seals against the floor as shown in Figure 38. Upward travel should be as shown in Figure 39.

Motor Operation: Verify that the motor cycles the door in the proper direction when keys on front of the control box are pressed.

Reversing Edge Switch: Door should return to full open position if reversing edge on the bottom bar comes in contact with an object during the down travel of the door panel. See “PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT” on page 15 for test and adjustment procedures.

Kill Switch: Door travel should stop when the bottom bar is disengaged from one or both of the side columns. See “PNEUMATIC KILL SWITCH CHECK AND ADJUSTMENT” on page 16 for test and adjustment procedures.

Timers: Timers must be set to ensure proper closing of the door. See Rytec System 4 Drive & Control Installation & Owner’s Manual for more information on timer settings.

Activator Settings: *Recheck all settings and adjust as required.*

Coil Cord: Run the door through two or three cycles. Check the coil cord when the door is in the closed position. The coil cord should not contact the floor or hang in front of or interfere in any way with the photo eye.

Photo Eyes: Check to see that front and rear photo eyes are operating properly. See “PHOTO EYE ADJUSTMENT” on page 18 for adjustment procedure.

Refer to PredaDoor NXT Owner’s Manual for proper complete operating, inspection, and maintenance procedures.

