

R Y T E C

Turbo Seal Insulated[®] Gen 2

Owner's Manual



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TURBO-SEAL® INSULATED TS6000-INS LIMITED WARRANTY

Rytec Corporation ("Seller"), an Illinois corporation with its principal place of business at One Cedar Parkway, PO Box 403, Jackson, WI 53037, warrants to the original registered end-user commercial purchaser ("Buyer") that the **Turbo-Seal® Insulated TS6000-INS** ("Product") sold to the Buyer will be free of defects in materials and workmanship (ordinary wear and tear excepted) for the time periods set forth below:

- **Mechanical** components for a period of **One (1) Year** from the date of shipment of the Product from the Seller's plant ("Shipment").
- **Electrical** components for a period of **One (1) Year** from Shipment.
- **Coil Cords, fiberglass panel guides, side column brush/vinyl seals, counterweight straps, vinyl loop seal, wireless mobile unit battery** are considered wear items and are not covered under this Limited Warranty.
- **Aftermarket parts, accessories, and assemblies** for a period of **Ninety (90) Days** from the date of Shipment.

Remedies. Seller's obligation under this Limited Warranty is limited to repairing or replacing, at Seller's option, any part which is determined by Seller to be defective during the applicable warranty period. Such repair or replacement shall be the Seller's sole obligation and the Buyer's exclusive remedy under this Limited Warranty.

Labor. Except in the case of aftermarket parts, accessories, and assemblies, labor is warranted for one year. This means that Seller will provide warranty service without charge for labor in the first year of the warranty period. Thereafter, a charge will apply in to any repair or replacement under this Limited Warranty. In the case of aftermarket parts, accessories, and assemblies, Seller will provide replacement parts only.

Claims. Claims under this Limited Warranty must be made (i) within 30 (thirty) days after discovery and (ii) prior to expiration of the applicable warranty period. Claims shall be made in writing delivered to the Seller at the address provided in the first paragraph of this warranty. Buyer must allow Seller and Dealer, or their agents, a reasonable opportunity to inspect any Product claimed to be defective and shall, at Seller's option, either (x) grant Seller and Dealer or their agents access to Buyer's premises for the purpose of repairing or replacing the Product or (y) return of the Product to the Seller, f.o.b. Seller's factory.

Original Buyer. This Limited Warranty is made to the original Buyer of the Product and is not assignable or transferable. This Limited Warranty shall not be altered or amended except in a written instrument signed by Buyer and Seller.

Not Warranted. Seller does not warrant against and is not responsible for, and no implied warranty shall be deemed to cover, damages that result directly or indirectly from: (i) the unauthorized modification or repair of the Product, (ii) damage due to misuse, neglect, accident, failure to provide necessary maintenance, or normal wear and tear of the Product, (iii) failure to follow Seller's instructions for installation, operation, or maintenance of the Product, (iv) use of the Product in a manner that is inconsistent with Seller's guidelines or local building codes, (v) movement, settling, distortion, or collapse of the ground, or of improvements to which the Products are affixed, (vi) fire, flood, earthquake, elements of nature or acts of God, riots, civil disorder, war, or any other cause beyond the reasonable control of Seller, (vii) improper handling, storage, abuse, or neglect of the Product by Buyer or by any third party.

DISCLAIMERS. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER REPRESENTATIONS AND WARRANTIES, EXPRESS OR IMPLIED, AND THE SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PURPOSE. SELLER SHALL NOT BE SUBJECT TO ANY OTHER OBLIGATIONS OR LIABILITIES, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORIES OF LAW, WITH RESPECT TO THE PRODUCTS SOLD OR SERVICES RENDERED BY THE SELLER, OR ANY UNDERTAKINGS, ACTS, OR OMISSIONS RELATING THERETO.

LIMITATION OF LIABILITY. IN NO EVENT WILL SELLER BE RESPONSIBLE FOR, OR LIABLE TO ANYONE FOR, SPECIAL, INDIRECT, COLLATERAL, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF SELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Such excluded damages include, but are not limited to, personal injury, damage to property, loss of goodwill, loss of profits, loss of use, cost of cover with any substitute product, interruption of business, or other similar indirect financial loss.

Product Descriptions. Any description of the Products, whether in writing or made orally by the Seller or the Seller's agents, including specifications, samples, models, bulletins, drawings, diagrams, engineering or similar materials used in connection with the Buyer's order, are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by the Seller or the Seller's agents regarding the use, application, or suitability of the Product shall not be construed as an express warranty unless confirmed to be such in writing by the Seller.

Limited Warranty Void. This Limited Warranty shall be void in its entirety if:

- a. The Product is modified in a manner not approved in writing by Seller; or
- b. Buyer fails to maintain the Product in accordance with instructions contained in the Owner's Manual for the Product.

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INTRODUCTION

The information contained in this manual will allow you to operate and maintain your Rytec Turbo-Seal Insulated® 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 in 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 inside one of the side columns.

A wiring schematic is provided with each individual door specifically covering the control panel and electrical components of that specific door.

HOW TO USE MANUAL

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

⚠ WARNING

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

⚠ CAUTION

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 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.*

DOOR SERIAL NUMBER(S)

To obtain your **DOOR SERIAL NUMBER**, there are four universal locations where this information can be found. They are:

1. On the door of the System 4 control panel(s)
2. On the front of the left and right side column covers at approximately eye level
3. In the drive motor/head assy. (See Figure 1)

IMPORTANT: *When installing multiple doors of the same model, verify & match the serial numbers of all the components for each door (i.e. control panel, side columns, head assembly, etc.).*

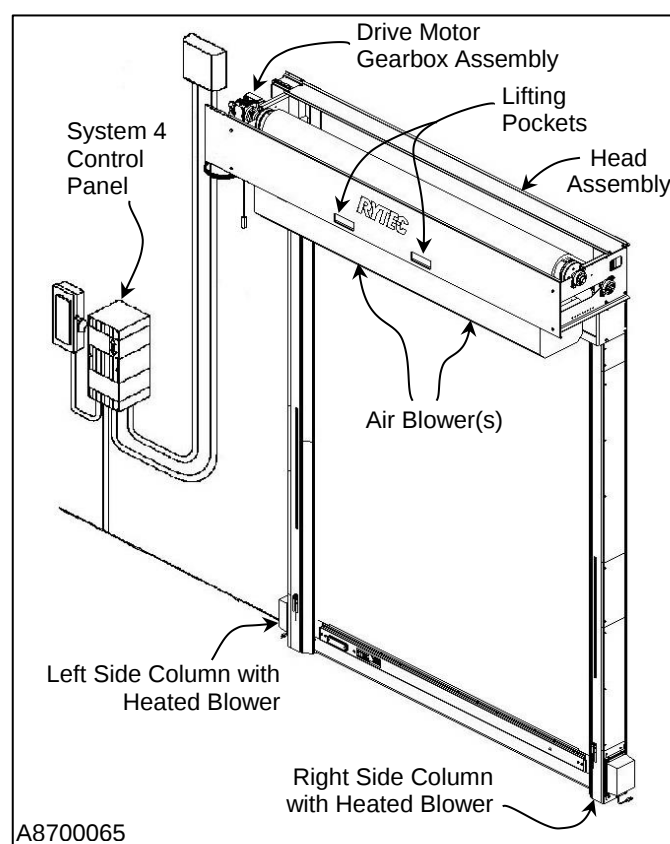


Figure 1

NOTE: *The lifting pockets in the head assembly are there for forklift handling only.*

OPERATION—GENERAL ARRANGEMENT OF DOOR COMPONENTS

GENERAL ARRANGEMENT OF DOOR COMPONENTS

Figure 2 shows the location of the major components of the door and the general placement of the associated control sub-assemblies for a typical installation.

This illustration is provided to you for informational purposes only. It should not be relied upon solely for operating or performing maintenance on your door and its sub-assemblies.

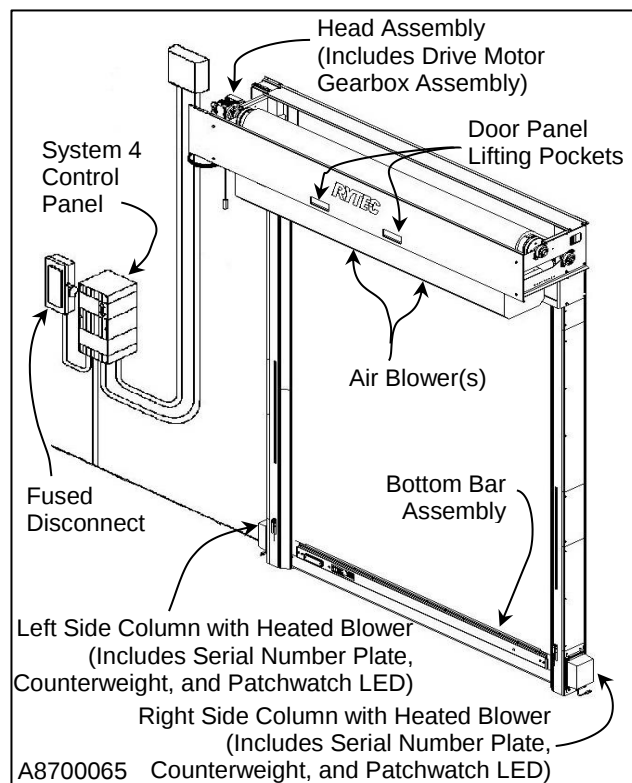


Figure 2

NOTE: Figure 2 shows the front side of the door. Left and right are determined when viewing the front side of the door.

OPERATION

CONTROL PANEL

The Turbo-Seal Insulated door is equipped with the Rytec System 4 Drive & Control, a solid-state, micro-processor-based control system designed exclusively to operate Rytec high-performance doors. It provides connections for multiple activators, close-delay timers, and status indicators. All command functions to operate the drive and control system are software controlled.

For information on control panel operation see the Rytec System 4 Drive & Control Installation and Owner's Manual.

PHOTO EYES

The photo eyes are provided as a safety feature. If the photo eyes are correctly installed, interrupting either set of eyes as the door is closing will reverse the direction of the door and hold it in the fully open position until the interruption is removed.

The Turbo-Seal Insulated door is equipped with four photo eyes (2 pairs) to monitor the front and back sides of the door panel. Each photo eye is a paired transmitter and receiver. 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 3) 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 4)

NOTE: When the cable is connected to the photo eye, there is only a $\frac{1}{4}$ -inch window to see the green or yellow LED light.

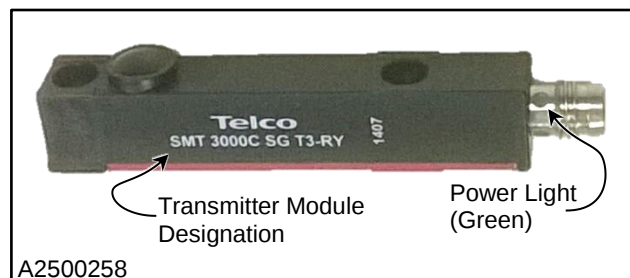


Figure 3

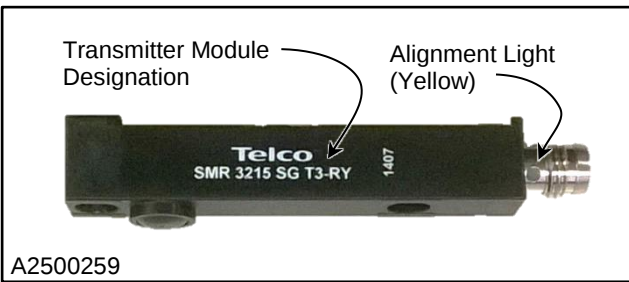


Figure 4

The front set of photo eyes monitors the front side of the door — they are mounted 18 inches from the bottom. The rear set of photo eyes monitors the back side of the door — they are mounted 28 inches from the bottom. (See Figure 5)

NOTE: The photo eyes are not intended to be used as door activators and will not open the door when it is closed.

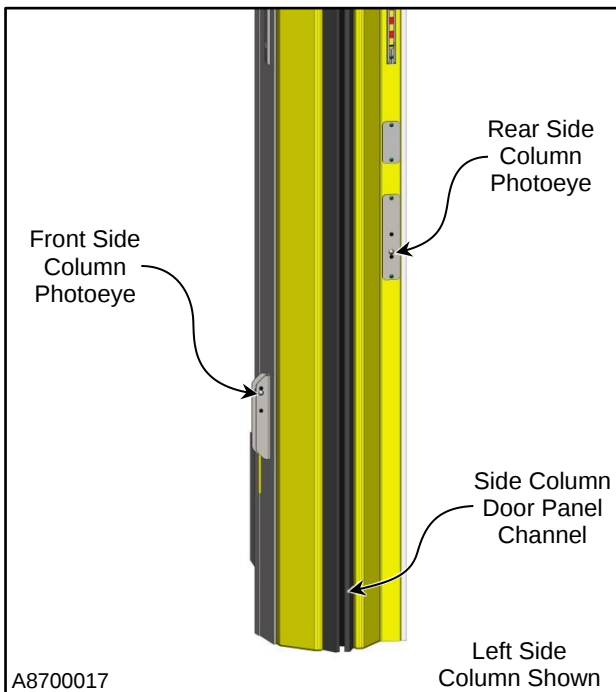


Figure 5

PATHWATCH LED™ WARNING LIGHTS

The amber and red warning lights indicate that the door panel is closing. The light strip itself is 36 inches long, and there are two per side column. One is in front of the door panel, and the other is behind. When viewing a complete door assembly, the amber and red lights are located on the inner part of the side columns. (See Figure 6)

NOTE: The warning lights are not intended to be used as door activators and will not open the door when it is closed or closing.

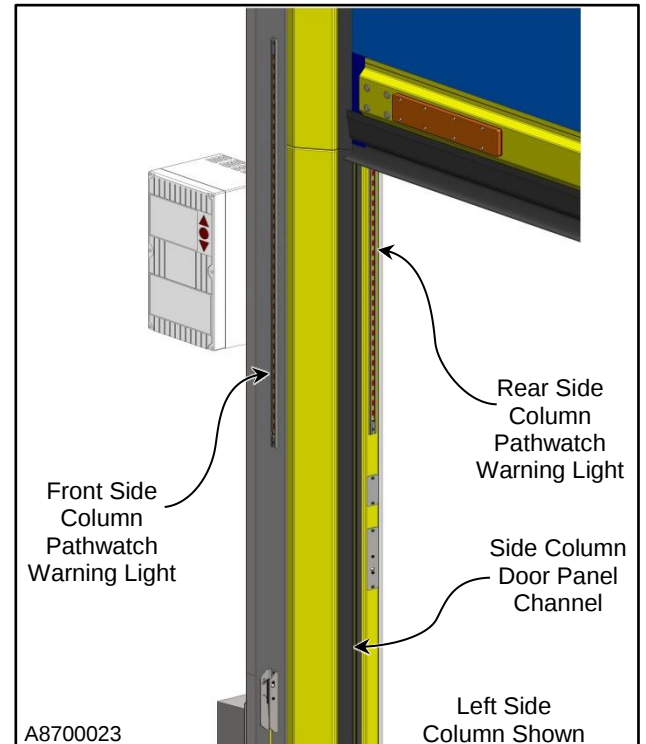


Figure 6

BOTTOM BAR ASSEMBLY

The bottom bar assembly has three features: break-away capability, a reversing edge, and self repair.

Breakaway Capability

Breakaway tabs mounted at each end of the bottom bar assembly provide adequate strength to keep the bottom bar in place during normal operation. However, the tabs are flexible enough to allow the bottom bar to separate from either side column if it is struck by a vehicle or load passing through the door.

An impact detecting assembly, containing an impact sensor, is mounted in the bottom bar. It will stop the door if the bottom bar receives an impact/hit. After a brief moment the door will go into repair mode. (See Figure 7)

OPERATION—BOTTOM BAR ASSEMBLY

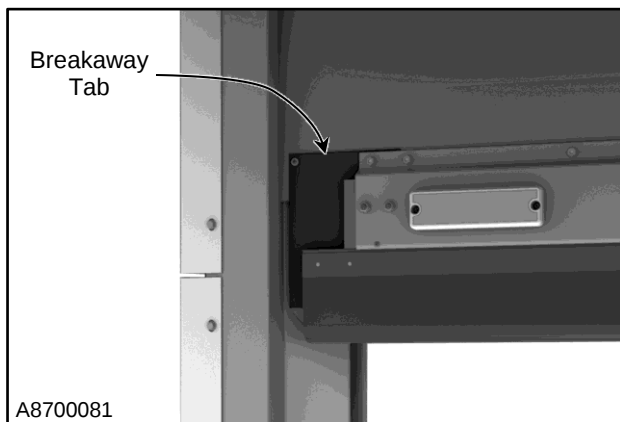


Figure 7

Reversing Edge

A pneumatically operated reversing edge is mounted in the bottom bar assembly. It helps prevent damage to the door panel in the event that the door comes in contact with an object left in its path while it is closing. If the pressure sensitive edge detects an object, the door will automatically reverse direction and move to the fully open position. (See Figure 8)

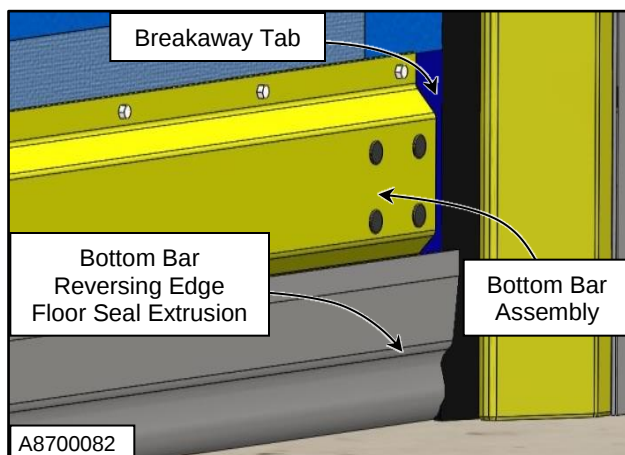


Figure 8

Self Repair

The Turbo-Seal Insulated door is a fully automated, self-resetting door. After a strike and a clear sensor path, the door will automatically reset the bottom bar. The door should go through the following process:

1. The breakaway tabs are knocked or popped out of the side column's door panel channel due to impact. (See Figure 9)

NOTE: If the door panel has been damaged during the impact, remove the door from service and repair. If you have any questions, contact your Rytec representative or call the Rytec Technical Support Department at 800-628-1909.

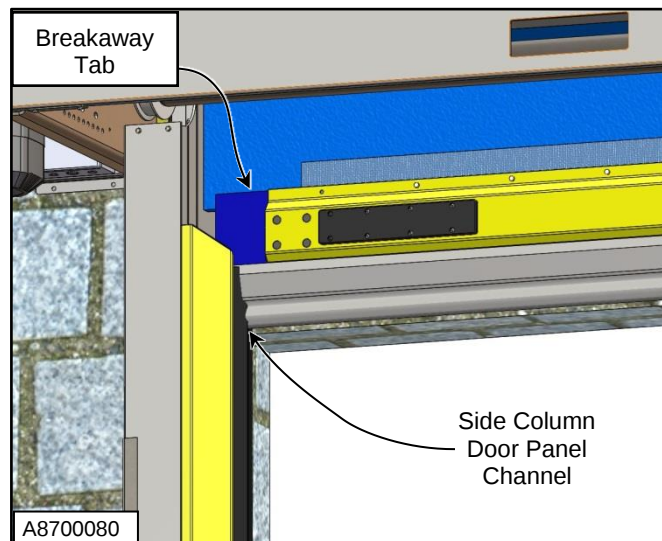


Figure 9

2. The door panel will momentarily pause and then execute the reset procedure.
3. The door panel's breakaway tabs will roll upward above the side columns' channels. (See Figure 10)

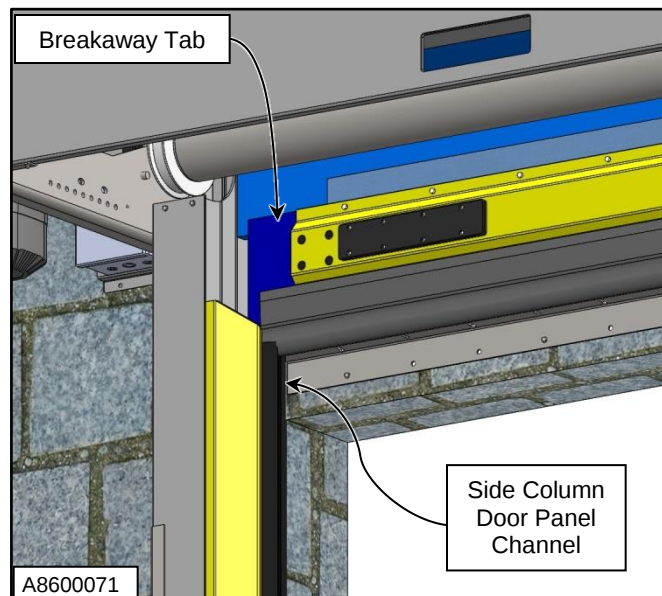


Figure 10

4. The photo eye senses if the path is clear of any obstructions.

- Then the door panel will guide itself into the channel and resume its normal operation. (See Figure 11)

NOTE: Cycling the door and checking for proper door operation is not required unless prescribed.

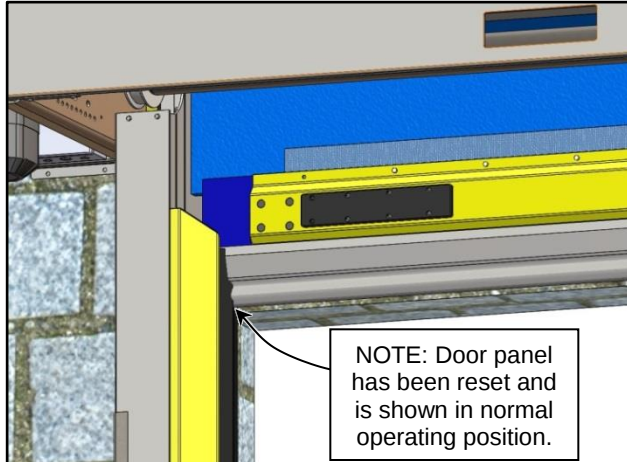


Figure 11

NOTE: There is no warning light or horn if the door panel cannot or does not reset itself due to an obstruction beyond the photo eye parameter. If that option is required, these items can be added to the system.

DEFROST SYSTEM

The Turbo-Seal Insulated door is engineered for freezer use by utilizing an air blower defrost system coupled with side column heaters. This helps prevent frost build-up on the warm side of the door.

POWER DRIVE SYSTEM

The Turbo-Seal Insulated power drive system consists of a drive motor gearbox assembly and an electric brake system.

The power drive system incorporates an electric brake used to stop the door travel when electrical power to the door is shut off. A manual brake release is provided for manual opening or closing of the door if there is a power failure or if routine maintenance needs to be done with the power disconnected. (See Figure 12)

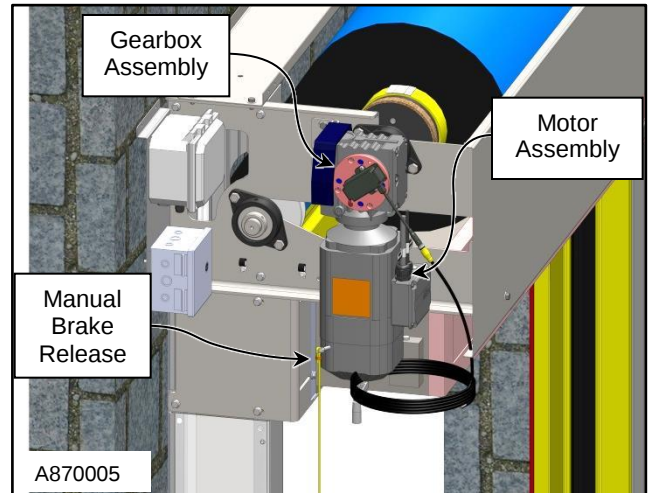


Figure 12

COUNTERBALANCE SYSTEM

The door is counterbalanced by means of a counterweight on a pulley system that is installed in each side column assembly. The counterbalance is designed to reduce the effort required to open and close the door. (See Figure 13)

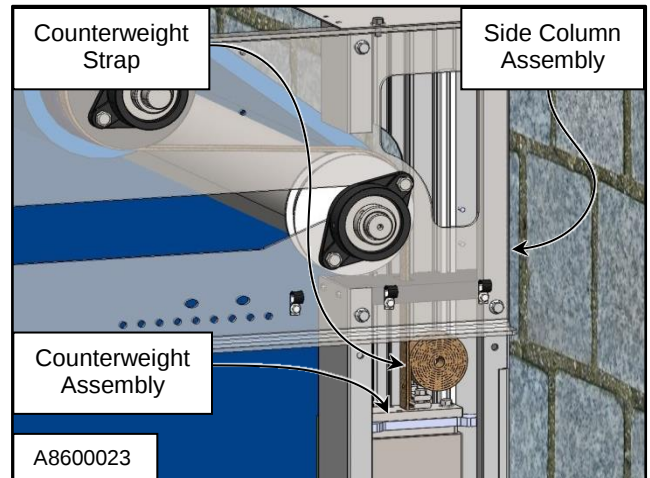


Figure 13

GENERAL CLEANING

Household cleaners are sufficient for general cleaning of the door panel. Isopropyl alcohol can be used on more difficult areas but avoid using bleach and industrial grade cleaners or solvents.

PLANNED MAINTENANCE—RECOMMENDED SCHEDULE

PLANNED MAINTENANCE

RECOMMENDED SCHEDULE

NOTE: The following maintenance schedule is recommended for your Rytec Door.

	Daily	Quarterly
Visual Damage Inspection		
Check Door Operation		
Reversing Edge Inspection		
Photo Eye Inspection (Front and Rear)		
Pathwatch LED Inspection (Front and Rear)		
Bottom Bar Edge Seal		
Hardware Inspection		
Door Panel Inspection		
Weather Seal Inspection		
Close-Limit Inspection		
Open-Limit Inspection		
Motor Brake Inspection		
Bottom Bar Inspection		
Kill Switch Inspection		
Counterweight Inspection		
Counterweight Strap Inspection		
Activator and Control Panel Inspection		
Electrical Connection Inspection		
Lubrication		
Blower Inspection		
Wall Anchor Inspection		

DAILY INSPECTION

Visual Damage Inspection

Visually inspect the door to see that components have not been damaged. Example: bent bottom bar assembly, torn door panel, damage to side columns, etc. (See Figure 14)

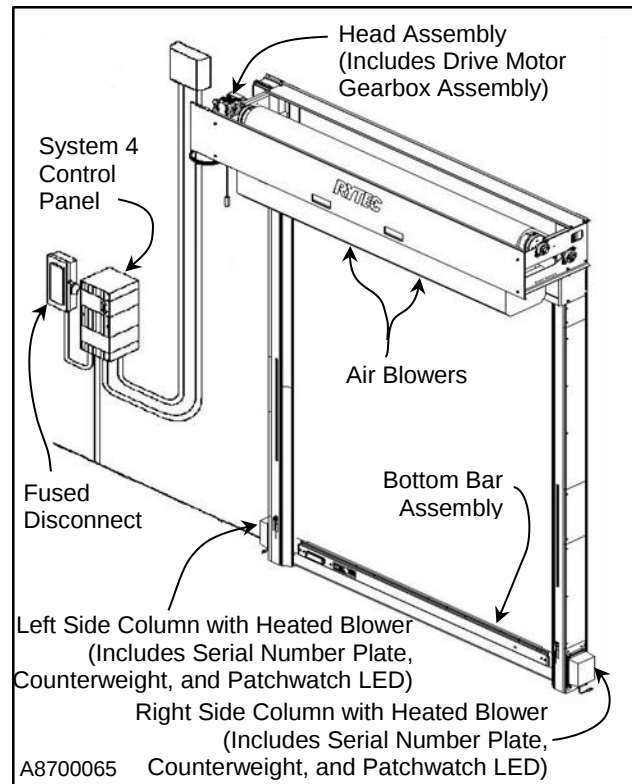


Figure 14

Head Assembly: Inspect for dents or damage that may prevent the door from opening or closing properly.

Door Panel: Inspect panel for holes, tears, and worn areas. — clean or replace as required.

Side Columns and Covers: Inspect for damage that may prevent the door from operating properly.

Photo Eyes: Inspect the lens of each photo eye for damage or dirt that may prevent the photo eyes from working properly — clean or replace as required.

Warning Lights: Inspect the lens of each light for damage or dirt that may prevent the lights from working properly — clean or replace as required.

Bottom Bar: Inspect the bottom bar for damaged, missing, or loose hardware. Inspect the bottom edge seal along the lower edge of the bottom bar for tears and holes. Inspect the reversing edge itself.

Counterweights and Straps: Counterweights must be properly adjusted. Counterweight straps must be in good working condition, securely attached to the counterweights and the drum assembly, and tracking properly on all rollers.

Check Door Operation

Run the door through four or five complete cycles to verify that the door is operating smoothly and efficiently, and that binding or unusual noises do not exist. DO NOT continue to operate the door if it is not running properly, as this could compound the damage.

Reversing Edge Inspection



Do not stand under the door panel while testing the door reversing function. If the reversing edge switch is not working properly, the panel could strike the person performing the test. Also, do not continue to use the door if the reversing edge is not operating properly.

While the door is running through the down cycle, tap the bottom of the reversing edge. If the reversing edge is operating properly, the door will immediately reverse and run to the fully open position. Push the control panel down arrow key to close the door after the inspection is complete. If the reversing edge is not working properly, see “PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT” on page 14 and/or “BOTTOM BAR BREAKAWAY-IMPACT SENSOR ADJUSTMENT” on page 18 for the adjustment procedures.

Photo Eye Inspection

NOTE: Photo eyes act as a safety device to prevent the door from closing if an object or person is within the photo eye beam. The photo eyes are not meant to be used as door activators.

1. Raise the door to the fully open position by pushing the up arrow key on the front of the control panel.
2. Break the beam of light on the front side of the door by placing an object between the photo eyes, transmitter and receiver.
3. Press the down arrow key on the front of the control panel. The door should not operate.

4. If the photo eyes don't operate properly, the transmitter or receiver may be dirty. Clean as required using window cleaner and a clean, soft cloth. If cleaning does not solve the problem, see “PHOTO EYE ADJUSTMENT” on page 15 for adjustment procedures.

5. Repeat the procedure on the back side of the door.

Pathwatch LED Inspection

The amber and red warning lights indicate that the door panel is closing. The light strip itself is 36 inches long, and there are two per side column. One is in front of the door panel, and the other is behind. When viewing a complete door assembly, the amber and red lights are located on the inner part of the side columns. (See Figure 15)

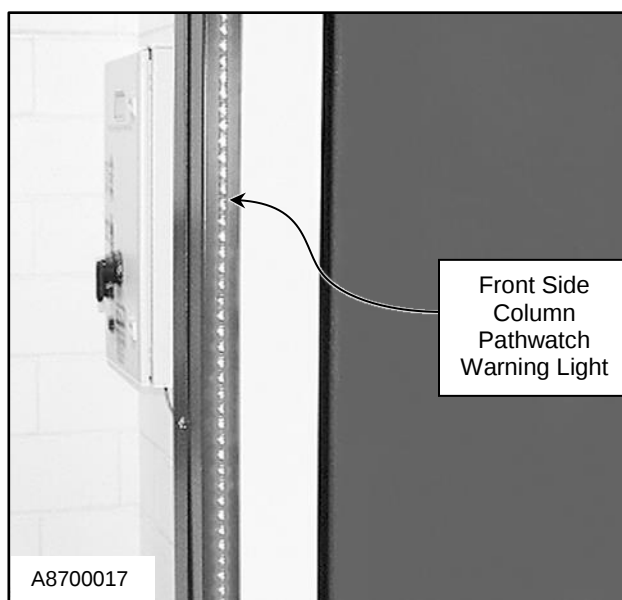


Figure 15

NOTE: Pathwatch LED warning lights act as a safety device to warn personnel that the door is closing. The warning lights are not a door activator or opener.

1. Raise the door to the fully open position by pushing the up arrow key on the front of the control panel.
2. Press the down key on the front of the control panel.
3. As the door is closing, the amber and red warning lights will flash.
4. Repeat the procedure on the opposite side of the door.

PLANNED MAINTENANCE—QUARTERLY INSPECTION

Bottom Bar Edge Seal

The bottom bar edge seal is a barrier which provides an air seal between door sides. With regular usage and elements of weather, the edge seal will require cleaning. Pull the bottom bar and panel out of the side columns to gain full access to the edge seal. Check the edge seal for wear, tears, ice or dirt buildup, and any other damage which would prevent the seal from performing properly. (See Figure 16)

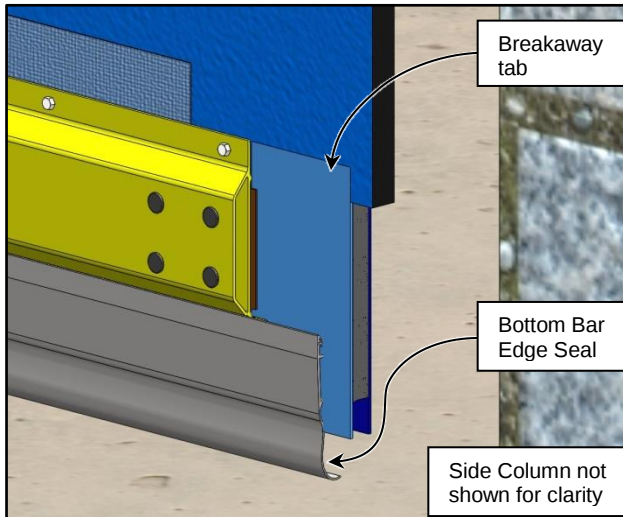


Figure 16

QUARTERLY INSPECTION



The disconnect must be in the OFF position and properly locked and tagged before performing the following procedures.

Hardware Inspection

Make sure all nuts, bolts, set screws, and anchors are tight throughout the door. Example: motor mounting bolts, wall mounting hardware, floor anchors, shaft set screws, etc. (See Figure 17 - Figure 22)

BEARING BLOCK AND ROLLER ASSEMBLY

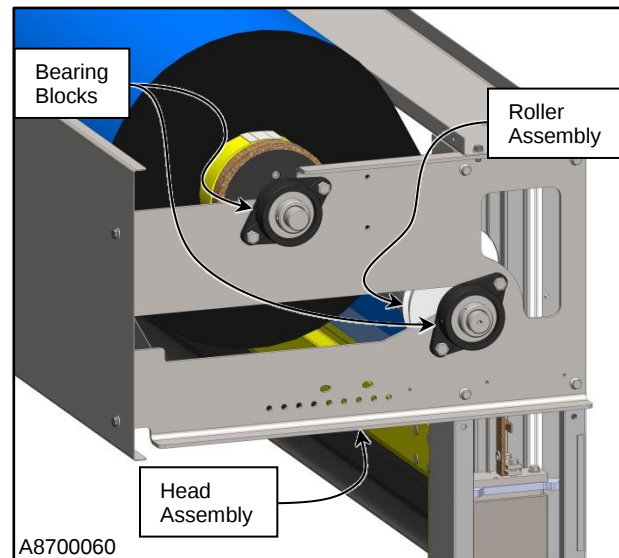


Figure 17

ENCODER

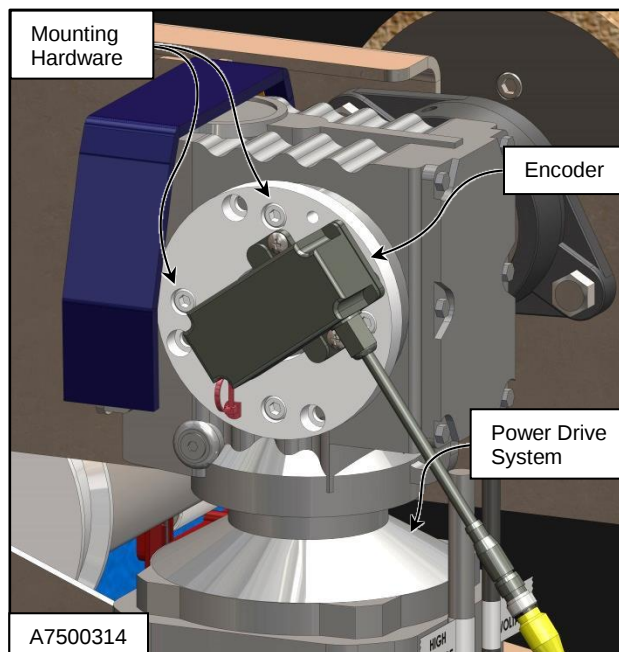


Figure 18

HEAD ASSEMBLY

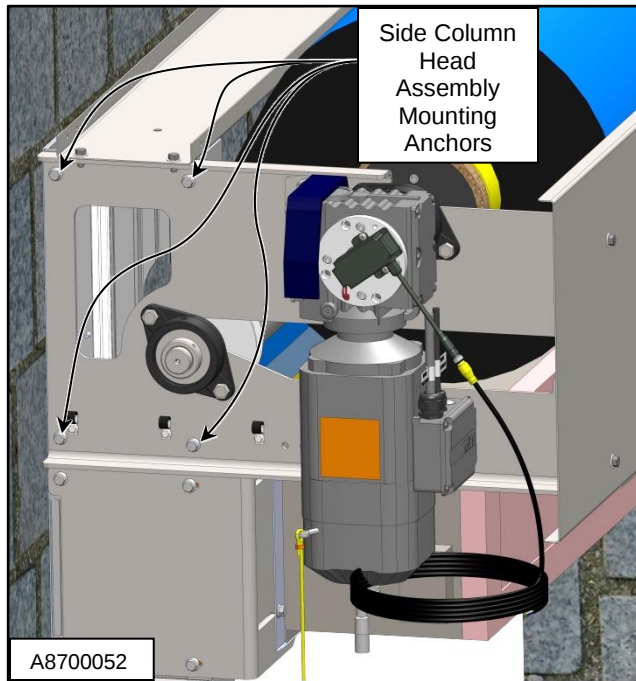


Figure 19

SIDE COLUMN ANCHORS

NOTE: To access the floor and wall anchors, you must first remove the cover from each side column.

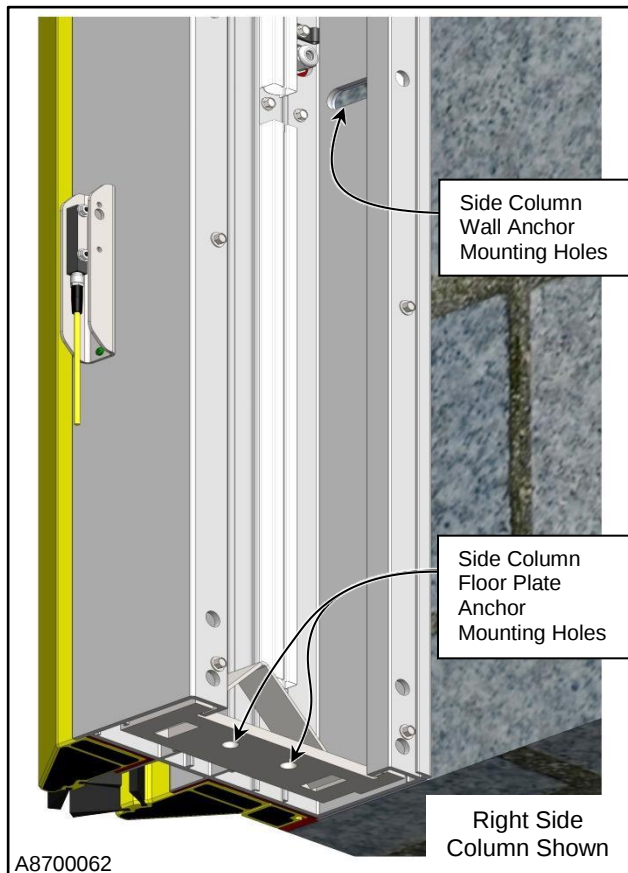


Figure 20

Door Panel Inspection

1. Check the door panel for tears. Repair or replace as required.
2. Check the door panel for delamination. Repair or replace as required.
3. Ensure that the panel is securely fastened to the bottom bar assembly. Tighten or replace loose or damaged mounting hardware as required. (See Figure 21)

BOTTOM BAR

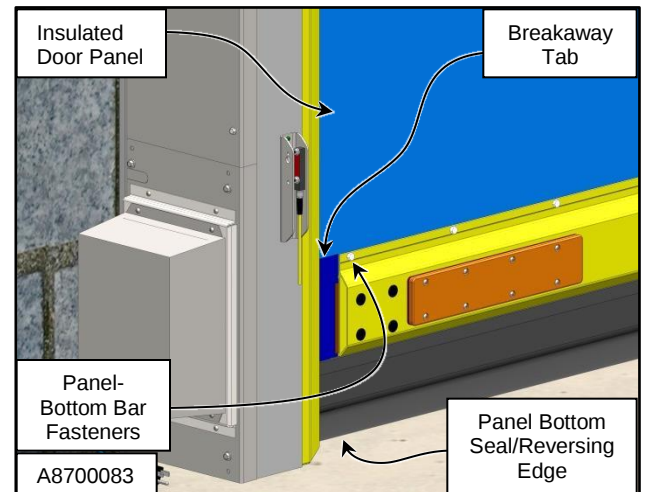


Figure 21

Weather Seal Inspection

HEAD ASSEMBLY

NOTE: A brush weather seal is mounted on the under-side of the head assembly, on the wall/back side of the door panel roll.

1. Inspect the entire length of the weather seal for wear and damage. Replace if necessary. (See Figure 22)

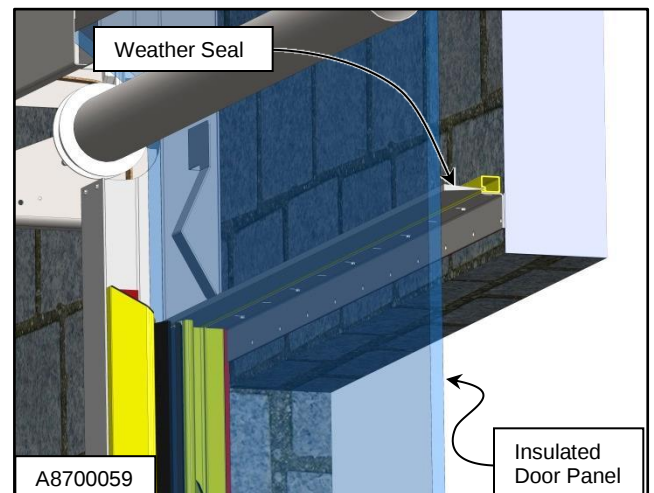


Figure 22

PLANNED MAINTENANCE—QUARTERLY INSPECTION

2. Check brush and door panel seal. If necessary, loosen the fasteners and adjust the brush seal so the door panel and brush are in contact. Tighten down the seal with the fasteners.

SIDE COLUMNS

Inspect the entire length of both brush seals for wear and damage. Replace if necessary. (See Figure 23)

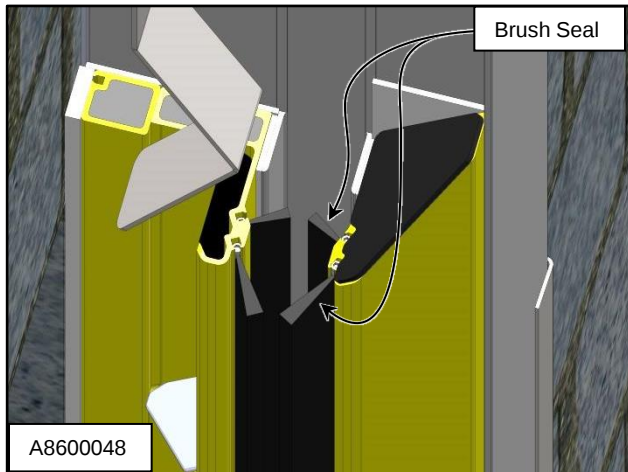


Figure 23

Door Limit Inspection

CLOSE LIMIT

With the door in the closed position, check the black edge seal on the bottom bar. It should be in the position shown in Figure 25.



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. (See Figure 24)

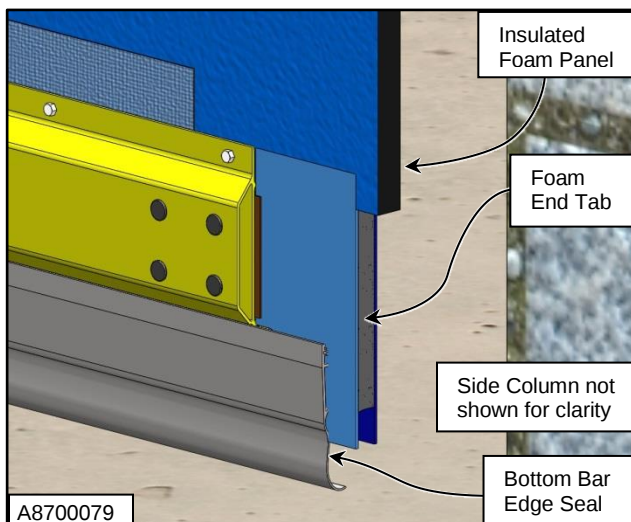


Figure 24

If the reversing edge does not seal properly against the floor, see the Rytec System 4 Drive & Control Installation & Owner's Manual for proper adjustment procedure.

OPEN LIMIT

The open limit switch should be adjusted so that the door travel allows the bottom bar assembly to stop with approximately half of the breakaway end tab into the yellow channel guide and the edge seal level with the door lintel. (See Figure 25)

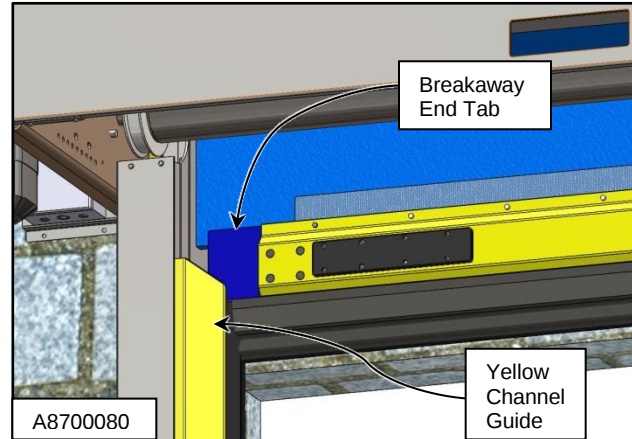


Figure 25

Motor Brake Inspection

The power drive brake assembly is designed to stop the door panel travel at the locations indicated in the limit switch inspection section. If the limit switches are set properly and the door drifts past the set limits, the brake should be adjusted. (See "MOTOR BRAKE ADJUSTMENT" on page 16)

Bottom Bar Inspection

1. Inspect all hardware used to secure the breakaway tab assembly to the bottom bar. Tighten hardware as required.
2. Inspect the reversing edge to ensure that it is tightly secured to the bottom bar.

3. Inspect the bottom seal along the bottom bar assembly for wear, tears, and/or abrasion. Replace any worn or damaged parts as required. (See Figure 26)
4. Inspect fasteners securing the bottom bar to the door panel. Tighten any that are loose and replace any that may be missing.

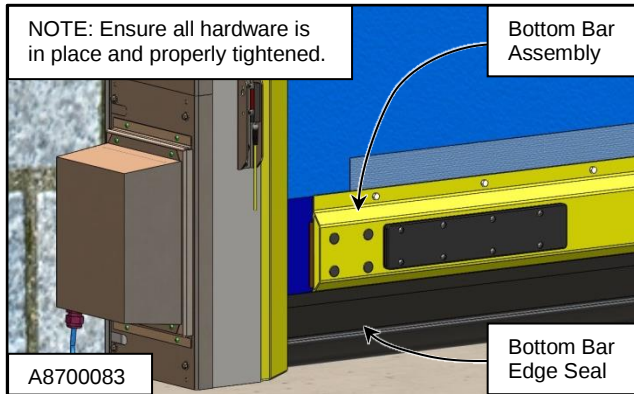


Figure 26

Counterweight Inspection



The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

1. Release the motor brake by pulling on the brake release cable. Then manually move the door to the fully closed position. (See Figure 27)

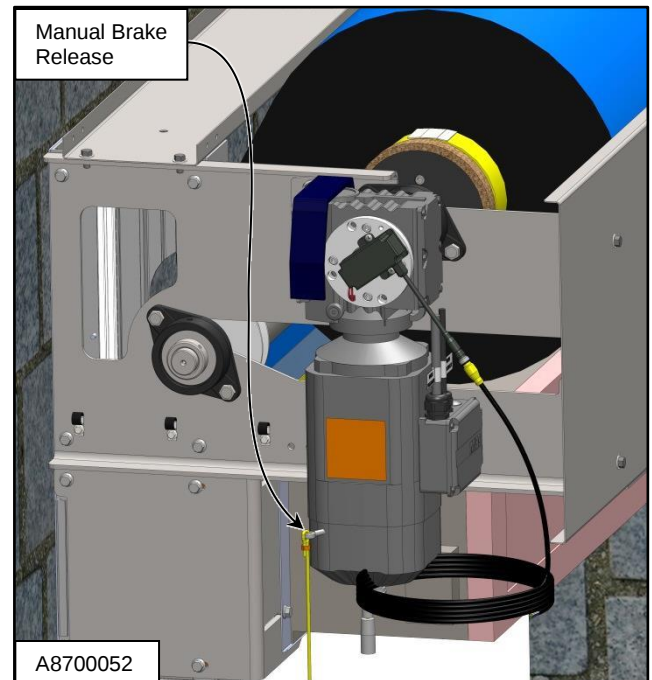


Figure 27

2. Remove the cover from each side column.
3. Measure the distance between the top of each counterweight and the top of its associated side column. The clearance between each weight and column must be at least 2 in.

If an adjustment is necessary, move the door to the fully open position. After placing a support block under the counterweight, readjust the strap, as required, until the 2-in. clearance is achieved.

If either counterweight requires an adjustment, see "COUNTERWEIGHT ADJUSTMENT" on page 17.

PLANNED MAINTENANCE—QUARTERLY INSPECTION

4. Manually move the door in the fully open position.
5. Measure the distance between the bottom of each counterweight and the base of the side column. The distance between each counterweight and associated base plate should be 8 to 10 in. (See Figure 28)

If either counterweight requires an adjustment, see “COUNTERWEIGHT ADJUSTMENT” on page 17.

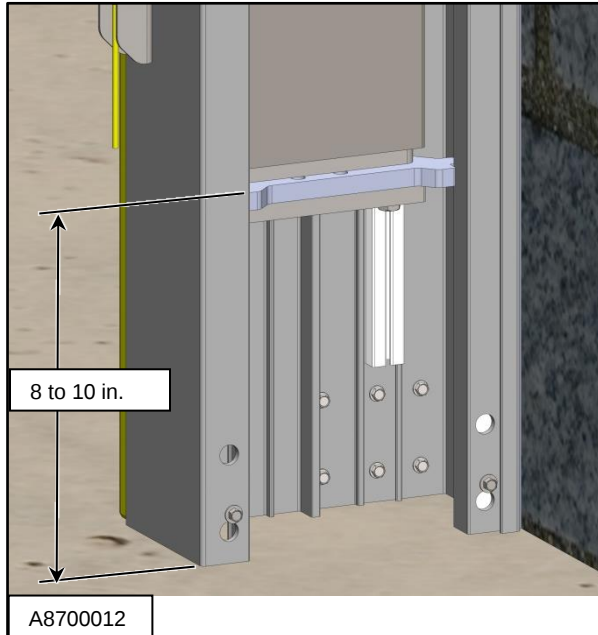


Figure 28

Counterweight Strap Inspection

WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

1. Remove the side column covers.
2. Inspect both counterweight straps for tears and frayed edges. Also inspect each strap for abrasions that might indicate a seized pulley or misaligned drum roll. (See Figure 29)

Inspect the entire length of each strap by releasing the motor brake and manually moving the door to the fully open and fully closed positions.

If either strap needs to be replaced, see “COUNTERWEIGHT STRAP REPLACEMENT” on page 20.

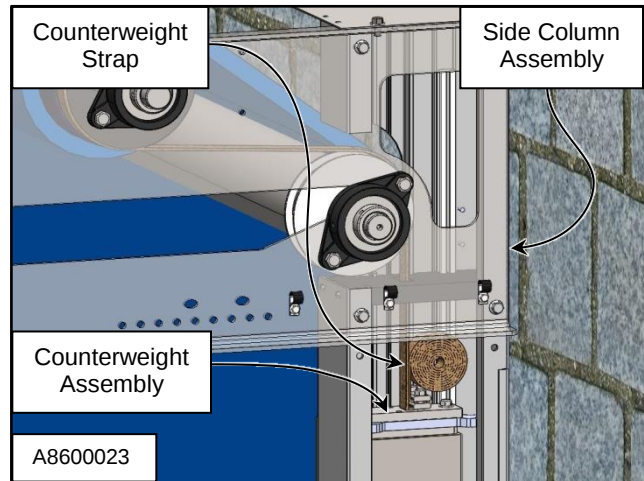


Figure 29

Activator and Control Panel Inspection

1. Inspect all warning and safety labels. All labels should be intact, clean, and clearly legible. Replace any label when necessary.
2. Operate the door five or six complete open and close cycles with each activator installed with the door. Make any necessary adjustments or repairs. Refer to the associated manual supplied with each activator installed with your door.

Typical activators may include a floor loop, pull cord, push button, motion detector, radio control, or photo eye. The door open cycle is controlled by the activator. The door close cycle can be controlled by an activator or by a timer internal to the control panel.

3. Check the control panel for proper operation. If an adjustment or repair is necessary, refer to the Rytec System 4 Drive & Control Installation & Owner's Manual that was shipped with your control panel.

Electrical Connection Inspection

WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

1. Turn off power to the door.
2. Inspect all electrical connections to the power drive system. All connections must be secure and tight.
3. Inspect the electrical connections in the junction boxes located in the head assembly. All connections must be secure and tight.
4. For the proper control panel electrical connection inspection procedure, see the Rytec System 4 Drive

Lubrication



The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

1. Turn off power to the door.
2. **Flange Block Bearings:** The drum roll/door panel is supported by two bearings, which are located at both ends of the assembly. The bearings have a grease fitting. (See Figure 30)

The bearing should be lubricated quarterly using a lithium-based grease conforming to NLGI grade 2 standard. It should be a medium-viscosity, low-torque rated grease, with an approved operating temperature range of -30°F to 200°F.

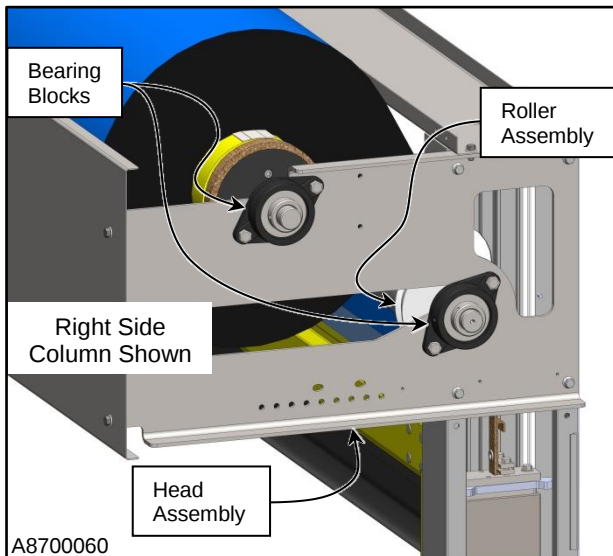


Figure 30

3. **Drive Motor Gearbox Assembly:** The oil level in the gearbox should be checked regularly. The oil level is checked at the plug located on the gearbox. (See Figure 31)

Recommended oil for refilling the gearbox is SHC 630 synthetic gear oil. The gearbox is full when a small amount of oil runs out of the lower plug hole. Replace the O-ring on the refill plug as needed to maintain a tight seal.

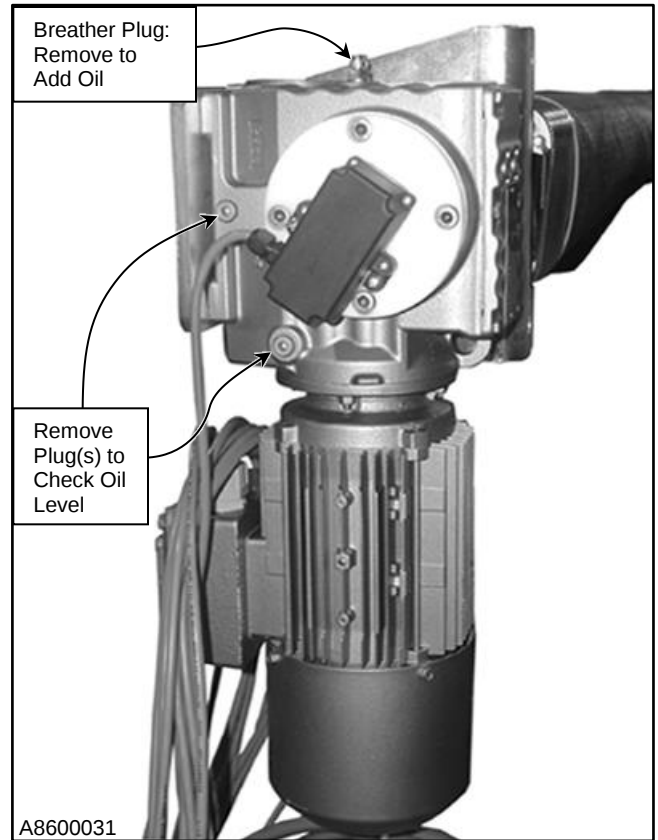


Figure 31

NOTE: Plug removal will depend on the horizontal or vertical orientation of the drive motor assembly.

4. Install the side covers.
5. Turn on power to the door.

Side Column Heated Blower Inspection

1. Turn off power to the blowers.



The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

2. Inspect the air inlet screen, blower wheels, and motor. Vacuum all dirt and dust from all components and make necessary repairs.
3. Turn on power to the blowers.

ADJUSTMENTS—PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT

Wall Anchor Inspection

1. Turn off power to the door.

WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

2. Gain access to wall anchors.
3. Inspect for loose or worn wall anchor(s).
4. Tighten, repair, or replace wall anchor(s) as needed.

NOTE: Remove door from service if any repairs are needed. All repairs must be done in accordance with building code.

5. Remove door from service if any repairs are needed. All repairs must be done in accordance with building code.

ADJUSTMENTS

PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT

WARNING

Do not stand under the door panel when testing the reversing edge. If the reversing edge switch is not working properly, the panel/bottom bar could strike personnel and cause injury.

To check the reversing edge switch, run the door through the down cycle. As the door is lowered, tap the bottom of the reversing edge. If the switch is working properly, the door will immediately reverse direction and run to the open position. Code F:361 “Edge Trip” will appear on the display. Push and hold the STOP/RESET button 3 to 5 seconds and the control will reset. Push the down arrow key to close the door.

If the door does not reverse, check the air bleed and sensitivity of the reversing edge switch.

Reversing Edge Switch Air Bleed Check

WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

1. The reversing edge switch is located inside the bottom bar assembly, on the end same as the drive motor. To inspect and/or adjust the switch, remove the access cover from the face of the bottom bar assembly. (See Figure 32)

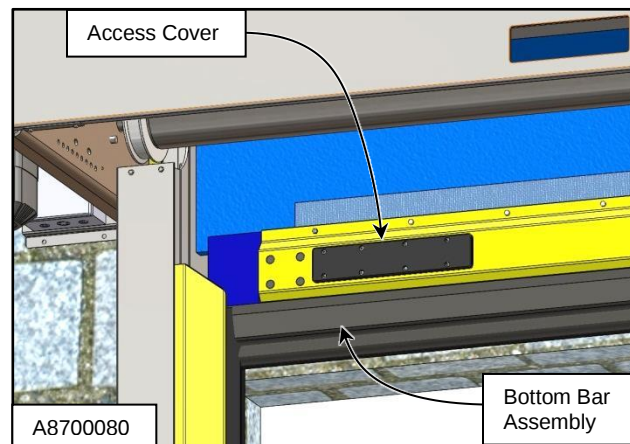


Figure 32

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 33)

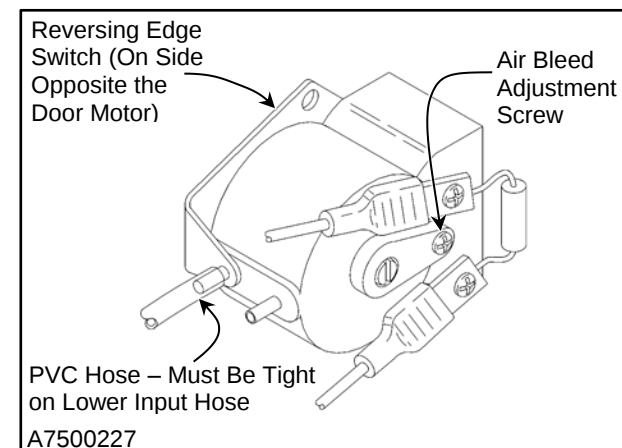


Figure 33

3. The air bleed has been set at the factory and should not require adjustment. If adjustment is necessary, 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 back (counterclockwise) one full turn.

Reversing Edge Switch Sensitivity Adjustment



WARNING
The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

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 resistor from the contact terminals and attach an ohmmeter across the two terminals. (See Figure 34)
2. Turn the sensitivity adjustment screw clockwise until continuity is achieved. Then turn the sensitivity screw two full turns counterclockwise for a standard setting. Some doors may require a further adjustment counterclockwise. (See Figure 34)

NOTE: Testing the reversing edge is the best way to determine sensitivity.

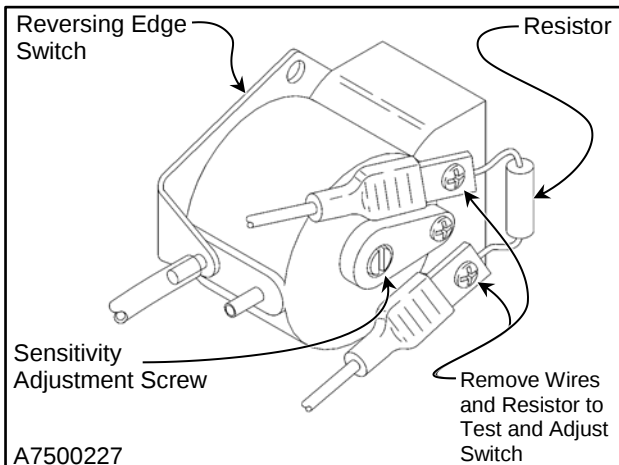


Figure 34

3. Reattach the 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.

PHOTO EYE ADJUSTMENT

IMPORTANT: The photo eyes on the freezer doors have sensitivity settings that cannot be adjusted. Contact the Rytec Customer Support Department for further questions.

The photo eyes are provided as a safety feature. If the photo eyes are correctly installed, interrupting either set of eyes as the door is closing will reverse the direction of the door and hold it in the fully open position until the interruption is removed.

Your Turbo-Seal Insulated door is equipped with two sets of photo eyes. The front set of eyes monitors the front side of the door — they are mounted in a bracket 18 inches from the side column bottom. The rear set of eyes monitors the back side of the door — they are mounted in a hole 28 inches from the side column bottom.

The transmitter and receiver can be identified in two ways. The transmitter is designated SMT 3000 on the label or by a single green light that comes on at the clear end of the transmitter. (See Figure 35) 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 36)

The cutout in the bracket is an exact fit for the photo eye; therefore, adjustments are minimal. If the yellow alignment light on the receiver is not lit, perform the following procedures:

- Check for obstruction in the path of the photo eyes.
- Clean lens on photo eyes.
- Check electrical connections.

If any of the procedures listed above do not work, troubleshoot the system and replace parts as necessary.

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. If needed, adjust mounting bracket(s).



Figure 35

ADJUSTMENTS—MOTOR BRAKE ADJUSTMENT

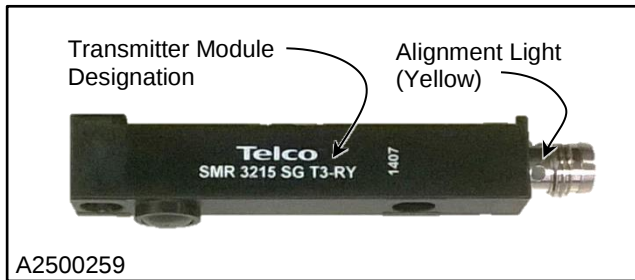


Figure 36

MOTOR BRAKE ADJUSTMENT

1. Remove the manual brake release lever.
2. Loosen hex-head bolts retaining the dust cover to the motor assembly. Remove the cover. (See Figure 37)

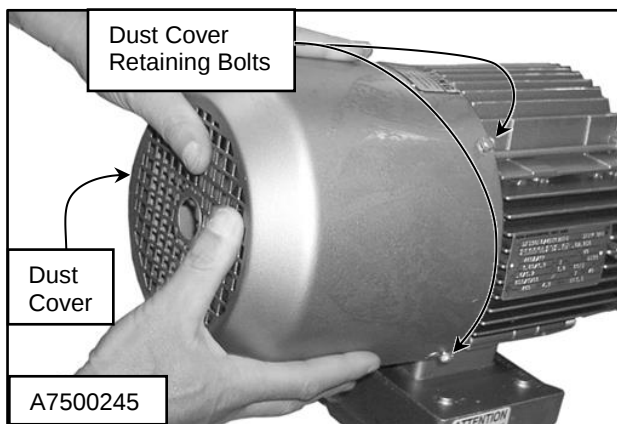


Figure 37

3. Remove sealing band. (See Figure 38)

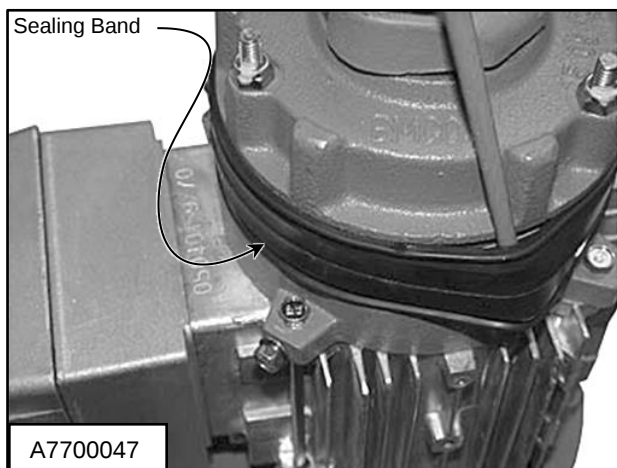


Figure 38

4. Using a feeler gauge and a nut driver, adjust the retaining nuts until you achieve the proper air-gap (0.010–0.024-in.). (See Figure 39 and Figure 40)

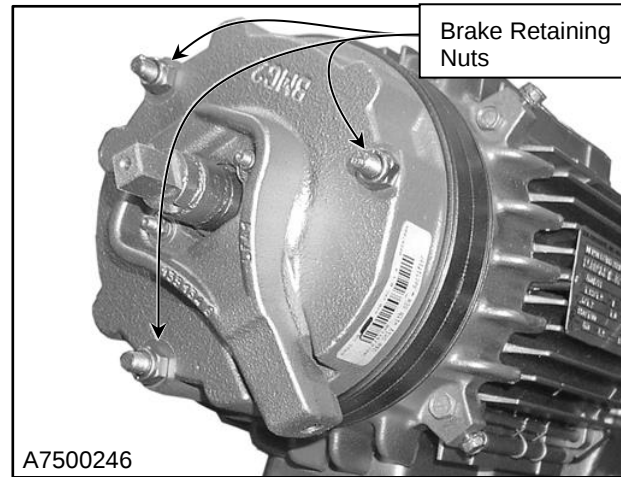


Figure 39



All retaining nuts and air-gap must be equally set throughout the entire circumference of the brake or the parts will wear unevenly.

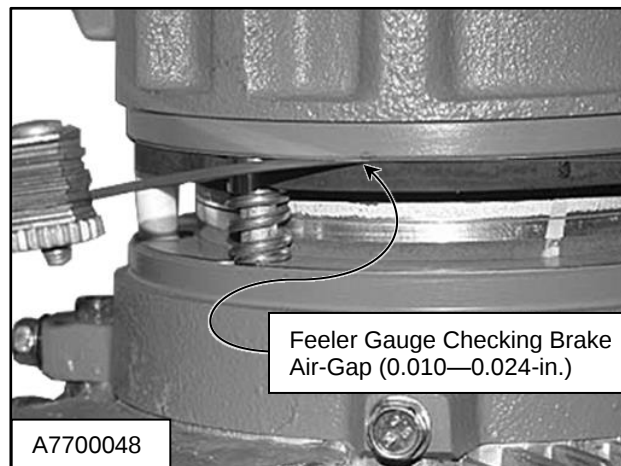


Figure 40

5. Reinstall the dust cover and the manual brake release lever.
6. Restore power to the door and perform operations check.

COUNTERWEIGHT ADJUSTMENT

1. Raise the door panel to the fully open position.
2. Remove the side column covers.
3. Turn off power to the door.

⚠ WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

NOTE: The 8 to 10 in. dimension shown in Figure 42 is adequate for most Turbo-Seal Insulated doors. However, for some very wide or short doors, the counterweight may have to be adjusted closer to the bottom of the side column. Also, make sure the counterweight guides are properly positioned.

4. With the door panel in the fully open position, the counterweights should be positioned 8 to 10 in. above the bottom of the side column. (See Figure 41)

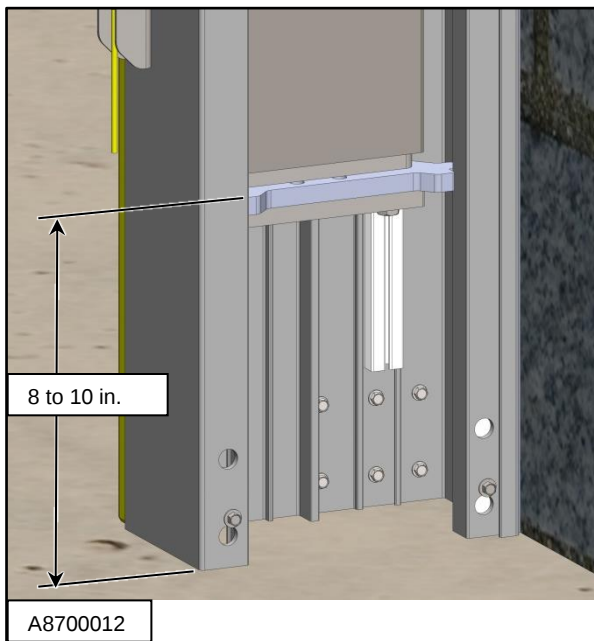


Figure 41

5. To adjust the counterweights, securely block the counterweights in the position indicated in Figure 41.

⚠ WARNING

Counterweights must be securely blocked and the drum assembly locked (motor brake set) before any adjustments can be made.

6. Loosen the clamp bars that secure the strap to the counterweight. (See Figure 42)

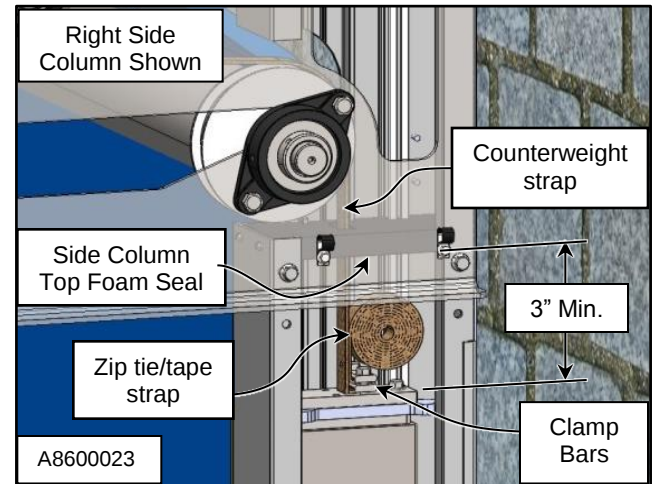


Figure 42

7. Raise or lower the counterweight by adjusting the strap through the clamp bars as required.
8. Secure the strap by tightening the clamp bars.
9. Remove the blocking from under the counterweight.

NOTE: Use care when removing the blocking to ensure the strap does not come off the rollers.

⚠ WARNING

Take precautions to prevent the door from being operated as you perform the following procedure. Also, be cautious around the moving parts exposed in the side columns.

10. Turn on power to the door and cycle the door panel several times.

NOTE: With the door fully closed, there should be at least 3 inches of clearance between the foam of the counterweight and the foam at the upper end of the side column (See Figure 43). With the door fully open, the counterweight guides must be properly positioned. Make any necessary adjustments to properly position either counterweight .

11. Check the position of each counterweight with the door in the fully open and fully closed positions. Make any necessary adjustments.
12. Once the counterweights are adjusted, install the side column covers and return the door to service.

ADJUSTMENTS—BOTTOM BAR BREAKAWAY-IMPACT SENSOR ADJUSTMENT

BOTTOM BAR BREAKAWAY-IMPACT SENSOR ADJUSTMENT

The Breakaway/Impact Sensor comes factory preset and does not need any adjustment. However, if for any reason this sensor is not functioning properly or as desired, this sensor may be adjusted. The sensor levels range from level 1 which is the lightest to level 5 which is the heaviest tripping impact.

Impact Sensor Adjustment

1. Move the door panel to the fully closed position or whatever height is preferable for accessing the bottom bar wireless control assembly enclosure. (See Figure 43)

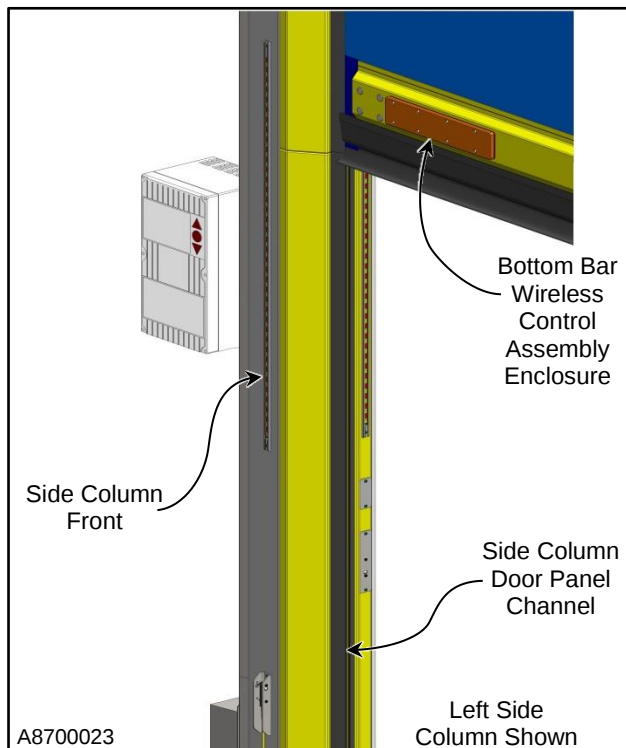


Figure 43

2. Turn off power to the door.



The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

IMPORTANT: Note how the wires are routed so they may be replaced in exactly the same position when reinstalled.

3. Remove the wireless enclosure cover from the bottom bar. Carefully pull the cover away from the enclosure as the antenna transmitter is secured to this and wires are routed to it also. (See Figure 44)

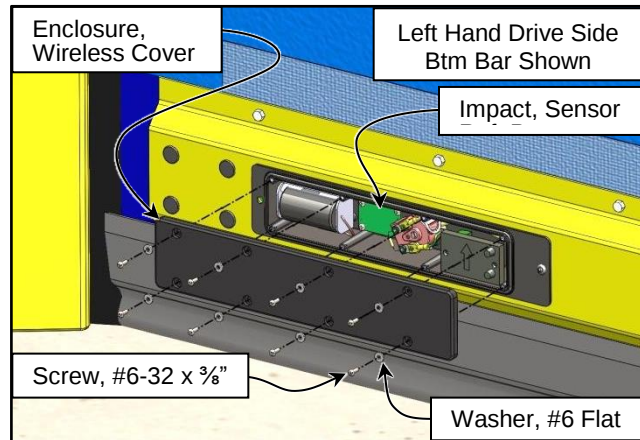


Figure 44

4. Identify the items contained in the bottom bar wireless control assembly and specifically the impact sensor. (See Figure 44)
5. Locate and identify the control setting button on the sensor. (See Figure 45)

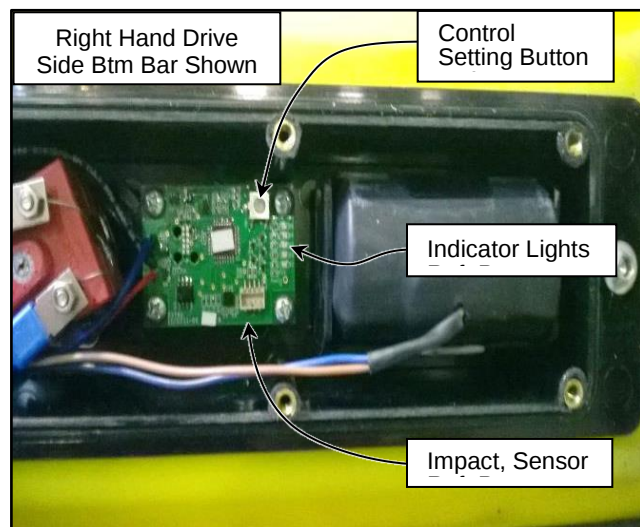


Figure 45

ADJUSTMENTS—BOTTOM BAR BREAKAWAY-IMPACT SENSOR ADJUSTMENT

6. Check to see what the current setting is on the Impact Sensor. Do so by quickly pressing and releasing the Control Setting Button. The factory setting is @ 3. The indicator lights will light up as shown for approximately 3 seconds. (See Figure 46)
i.e. If the setting is currently @ 3, 3 lights will light up. If it is @ 4, 4 lights will light up, etc.

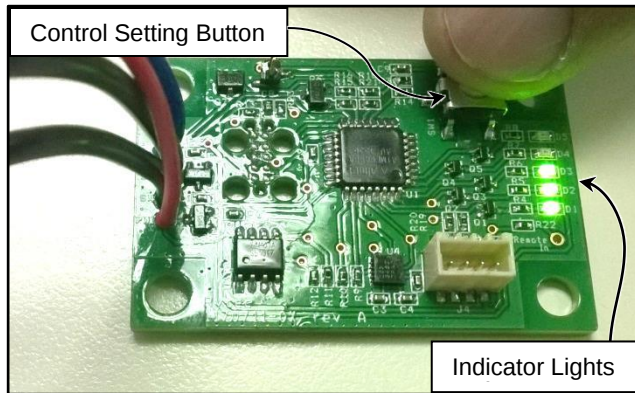


Figure 46

7. To change the setting you must quickly press and release the Control Setting Button and after the lights turn on but before they turn off, you can press the button to cycle through the settings. They can only cycle progressively, not regressively through the cycle.
i.e. you can change from 1 to 2 to 3 to 4 to 5 then back to 1.
 8. After the desired setting is reached simply let the sensor lights turn off which indicates it is set to operational mode. They will turn off after about 3 seconds.
 9. Reposition the wires and replace the cover on the bottom bar.
 10. Restore power to the door.
 11. Cycle the door several times to confirm that it is operating per specifications.
2. Turn off power to the door.
 3. Remove the wireless enclosure cover from the bottom bar. Carefully pull the cover away from the enclosure as the antenna transmitter is secured to this and wires are routed to it. (See Figure 44)
 4. Identify the items contained in the bottom bar wireless control assembly and specifically the impact sensor. (See Figure 44)
 5. Locate and identify the control setting button on the sensor. (See Figure 45)
 6. RESET the Impact Sensor by depressing the Control Setting Button and holding it down until the level indicator lights (D1 thru D5) turn on and then turn off. (See Figure 46)
 7. Immediately after the level indicator lights turn off release the Control Setting Button. Upon releasing the button the lights will once again turn on for a couple seconds, turn off, then a single light will momentarily turn on and then turn off. After this cycle is complete the Impact Sensor should be reset to the factory settings.
 8. Reposition the wires and replace the cover on the bottom bar.
 9. Restore power to the door.
 10. Cycle the door several times to confirm that it is operating per specifications.

WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

IMPORTANT: Note how the wires are routed so they may be replaced in exactly the same position when reinstalled.

Impact Sensor RESET

At any time the Impact Sensor may be RESET to the factory settings by performing the following procedure.

1. Move the door panel to the fully closed position or whatever height is preferable for accessing the bottom bar wireless control assembly enclosure. (See Figure 43)

REPLACEMENT PROCEDURES—COUNTERWEIGHT STRAP REPLACEMENT

REPLACEMENT PROCEDURES

COUNTERWEIGHT STRAP REPLACEMENT

1. Raise the door to the fully open position.

⚠ WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

2. Turn off power to the door.
3. Make sure the motor brake is set and locked.
4. Remove the side column cover(s).
5. Securely block the counterweight in the position shown in Figure 47.

IMPORTANT: The 8 to 10 in. mounting height for each counterweight, as indicated in Figure 44, is adequate for most Turbo-Seal Insulated doors. However, for extra-wide or -short doors, the counterweights may have to be adjusted closer to the bottom of the side column. Also, the guides on the counterweight must be properly positioned in the side column.

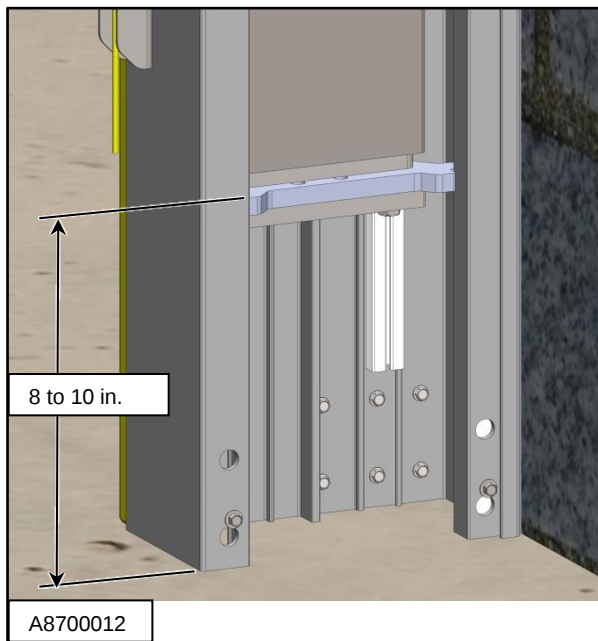


Figure 47

⚠ CAUTION

A counterweight can weigh in excess of 100 pounds. Make sure that safe handling procedures are followed and that each counterweight is securely supported during the following procedure. If not handled properly, a counterweight can damage door components and cause serious personal injury.

6. Remove the tape wrapped around the loose end of the strap. (See Figure 48)

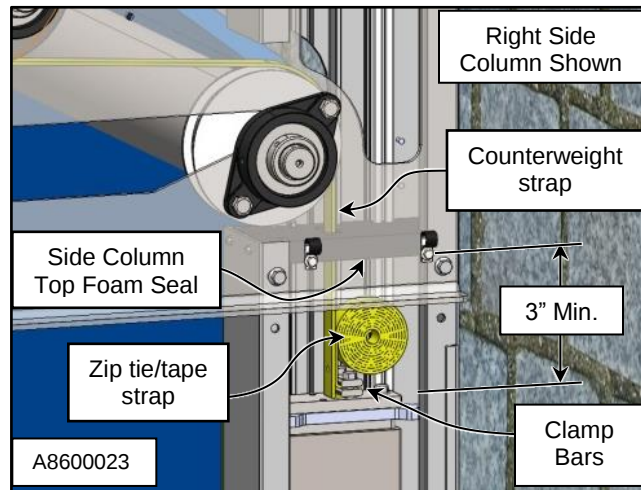


Figure 48

7. Loosen the hex head cap screws to release the clamp bars that secure the strap to the counterweight. (See Figure 49)

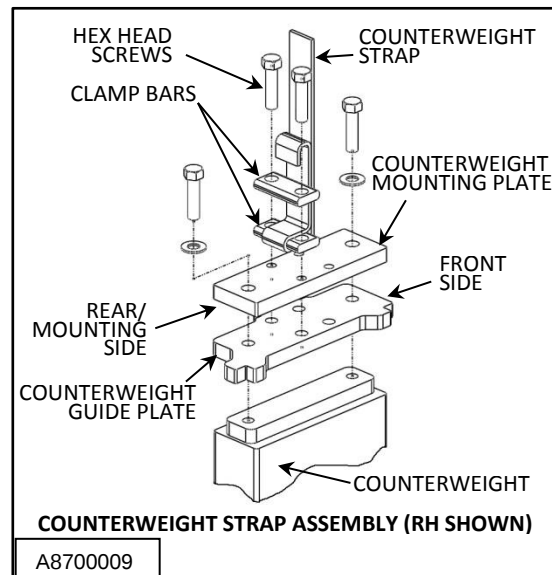


Figure 49

REPLACEMENT PROCEDURES—COUNTERWEIGHT STRAP REPLACEMENT

8. Remove and save the screw securing the strap to the drum spool. (See Figure 50)

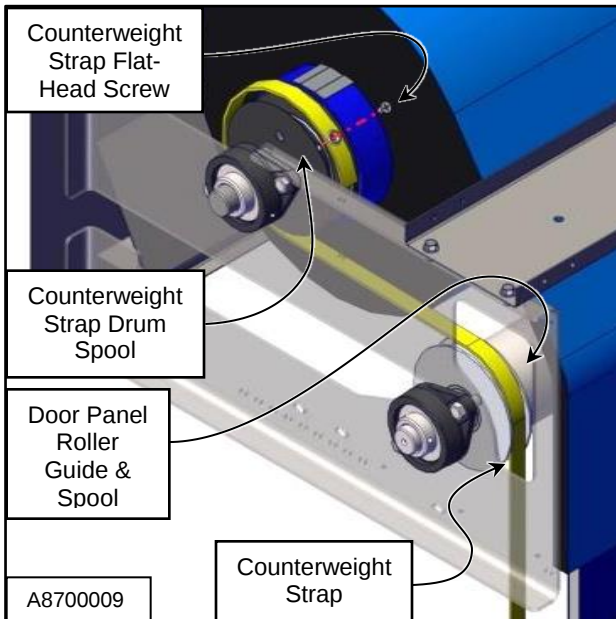


Figure 50

9. Attach the new strap to the drum spool in the same manner as the old strap using the saved screw. (See Figure 50)

CAUTION

A counterweight can weigh in excess of 100 pounds. Make sure that safe handling procedures are followed and that each counterweight is securely supported during the following procedure. If not handled properly, a counterweight can damage door components and cause serious personal injury.

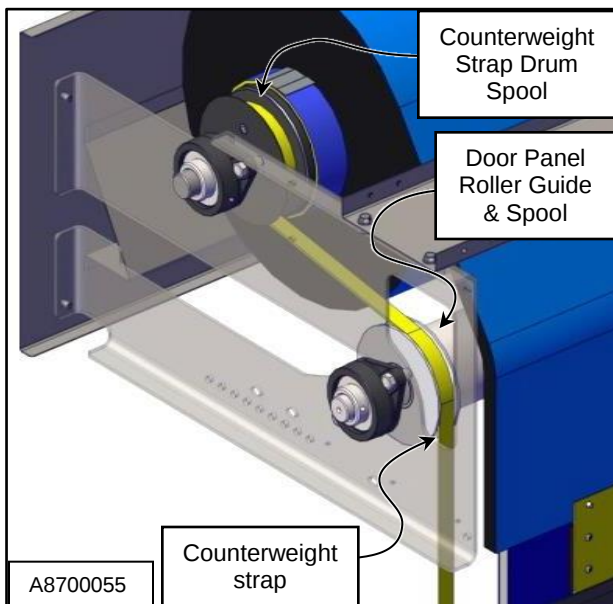


Figure 51

10. Wrap the strap around the spool three times. The strap must hang off the front of the spool as shown. (See Figure 51)

NOTE: The counterweight strap is installed at the factory. The factory standard is three pre-wraps around the counterweight spool.

11. Route the counterweight strap over the idler pulley and feed it through the access hole in the head assembly.
12. Attach the new strap to the counterweight by routing the strap through the clamp bars in the same manner as the old strap. Tighten the hex screws to clamp the strap to the weight. (See Figure 52)

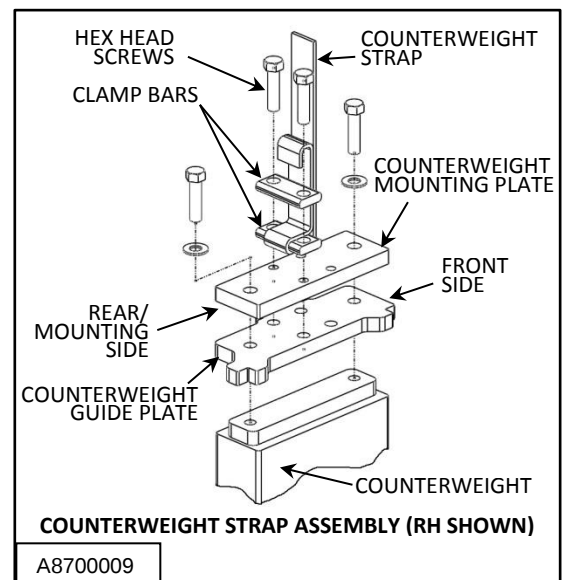


Figure 52

13. Remove the blocking from under the counterweight.
14. Adjust the counterweight as required. (See "COUNTERWEIGHT ADJUSTMENT" on page 17)
15. Wrap tape around the loose end of the strap to prevent it from fraying. Cut off any excess strap hanging past the taped end. Then, to hold the loose end of the strap out of the way, tape it to the main length of strap.

REPLACEMENT PROCEDURES—BRUSH SEAL REPLACEMENT

WARNING

Take precautions to prevent the door from being operated as you perform the following procedure. Also, be cautious around moving parts exposed in the side columns.

16. Turn on power to the door.
17. Cycle the door several times to verify that the strap is operating correctly. Verify that the counterweight is properly adjusted. Then make any necessary adjustments (with power turned off).
18. After all adjustments are complete, reinstall the side column cover.

BRUSH SEAL REPLACEMENT

Head Assembly

WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

NOTE: The brush seal is mounted on the underside of the head assembly to the wall and forms a seal to the back side of the fabric roll.

1. Turn off power to the door.
2. Remove the #12-14 x 1.0 Hex head Tek screws. (See Figure 53)

NOTE: There is a minimum quantity of six truss head screws to hold the brush seal in place. Since all doors are custom built, wider doors will have more hardware to fasten the brush seal to the wall.

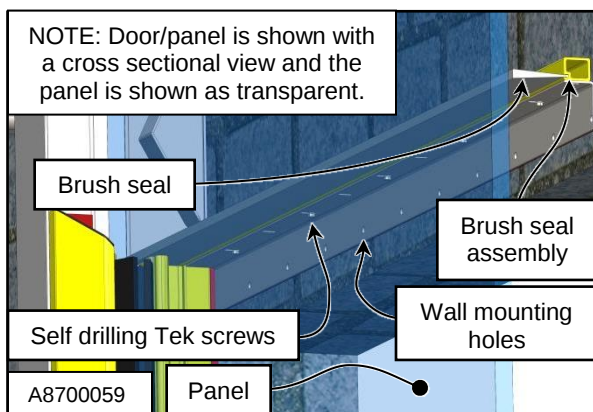


Figure 53

3. Replace the brush in the brush seal assembly and reinstall the hardware.
4. Restore power and return the door to service.

NOTE: Properly align and do not over-tighten the self-tapping tek screws. Care must be taken to prevent stripping the threads or the seal integrity, performance, and function may be compromised.

Side Column Assembly-Lower Section

WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

1. Turn off power to the door.
2. Gain access to top of brush seals.
3. Remove screw(s) from the top of the brush seal. (See Figure 54)

NOTE: Brush seals may be replaced one at a time.

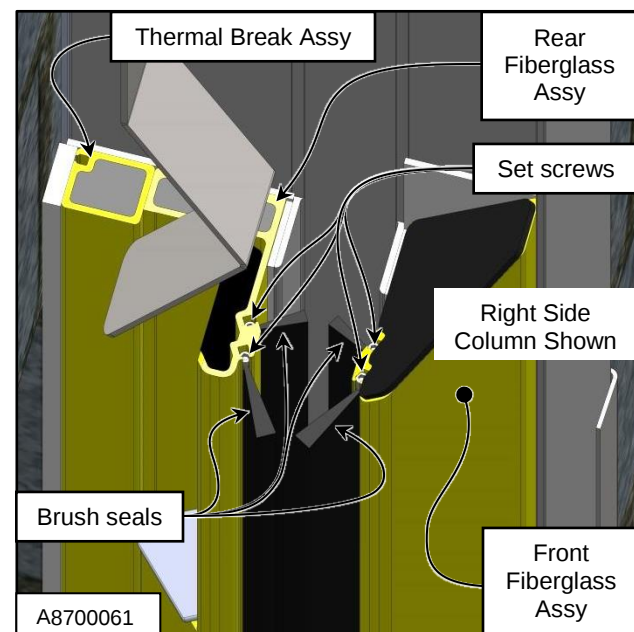


Figure 54

4. Remove the old brush seal by sliding it out of the track. (See Figure 54)
5. Slide a new brush seal into the track.
6. Re-Install screw(s) into the track to lock the new brush seal in place. (See Figure 54)

NOTE: Properly align and do not over-tighten the screws. Care must be taken to prevent stripping the threads or the seal integrity, performance, and function may be compromised.

REPLACEMENT PROCEDURES—BRUSH SEAL REPLACEMENT

Side Column Assembly-Lower Section (When applicable)

WARNING

The disconnect must be in the OFF position and properly locked and tagged before performing the following procedure.

1. Close the door and turn off power to the door.
2. Remove the lower side column cover(s) behind the lower fiberglass assembly sections after removing the screws holding them in place. (See Figure 55)

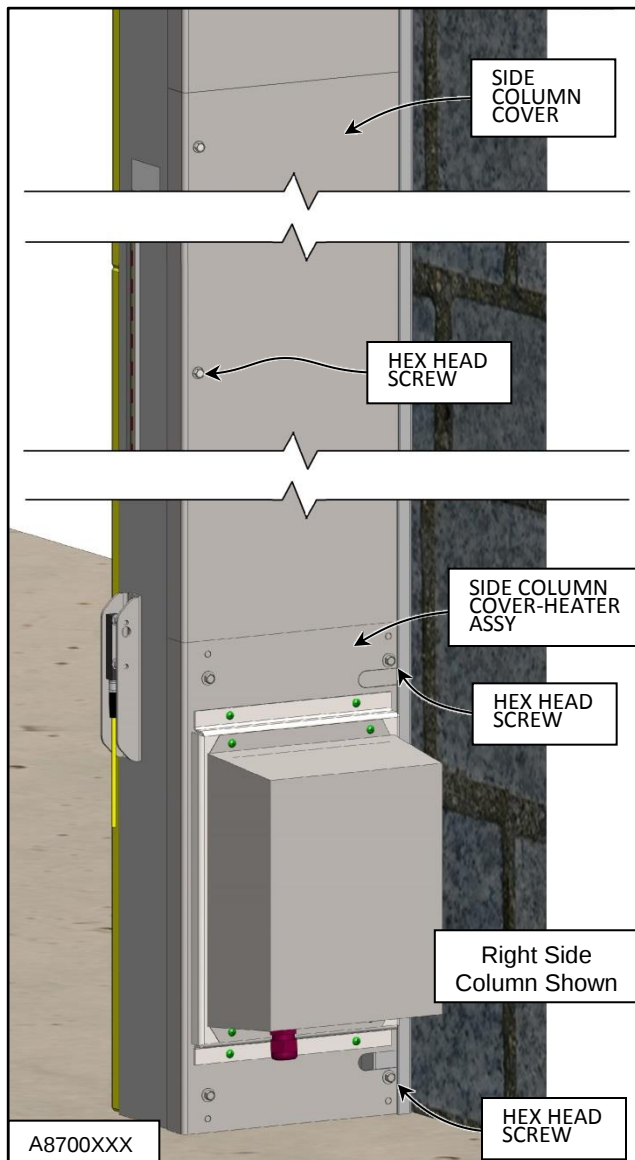


Figure 55

3. Remove the self drilling hex head tek screws securing the front fiberglass seal assembly to the side column. Do not strip the threads cut into the assembly. (See Figure 56)

4. Remove the assembly from the side column. Remove the old brush seal(s) by sliding it/them out of the track. The brushes are held in place by silicone at the bottom and needs to be removed.
5. Slide a new brush seal into the track. Apply fresh silicone at the bottom.
6. Re-install the assembly into side column in exact same location. Do not over-tighten the fasteners. This may strip threads. Align assembly in side column w/ the upper assembly.

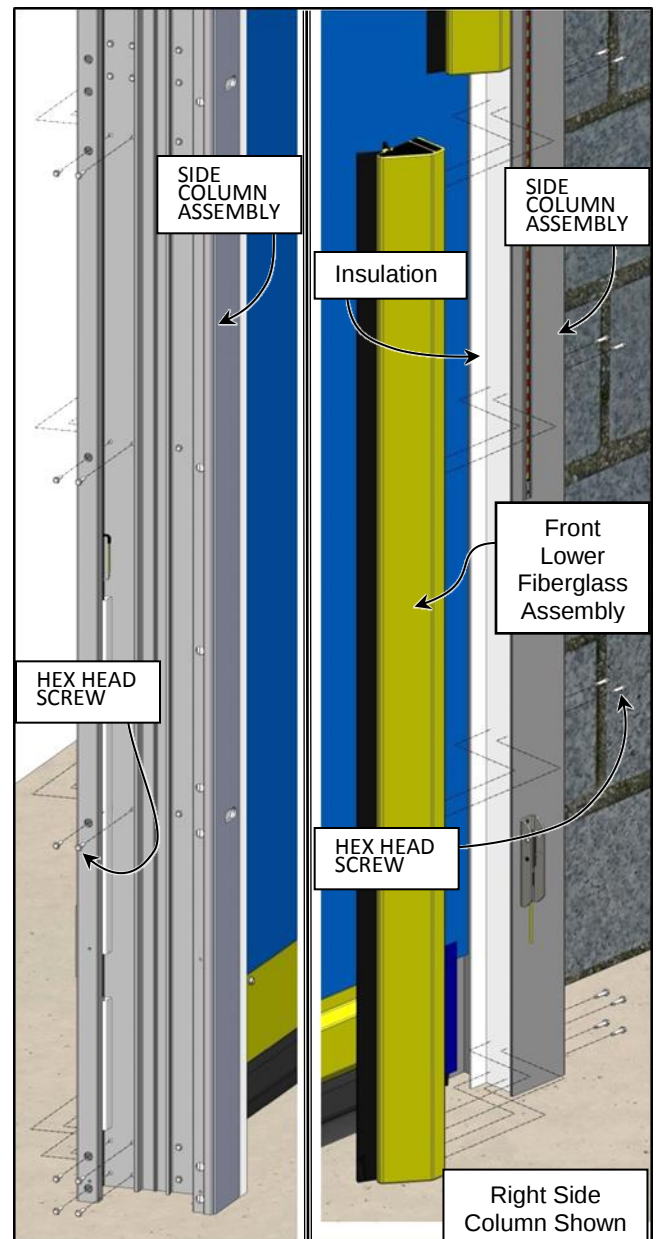


Figure 56

7. Repeat this procedure for rear lower fiberglass assembly.
8. Re-install the lower side column cover(s).
9. Repeat this procedure for the opposite side assemblies.

PARTS LIST—PARTS ORDERING INFORMATION

PARTS LIST

PARTS ORDERING INFORMATION

How to Order Parts

1. Identify the parts required by referring to the following pages for part numbers and part descriptions.
2. To place an order, contact your local Rytec representative or the Rytec Technical Support Department at 800-628-1909 or 262-677-2058 (fax). Rytec Corporation also has an on-line store at WWW.Rytecparts.com access to this on-line store requires an invitation from Rytec. The on-line store is open 24/7, 365 days. Some items are available to ship next day. Not all Rytec parts are carried in the on-line store.
3. To ensure the correct parts are shipped, please include the serial number of your door with the order. The serial number is located on the front of both the left and right side column covers @ about eye level, on the drive motor gearbox in the head assembly, or on the door of the System 4 Control Panel. All these serial numbers should match. (See Figure 57)

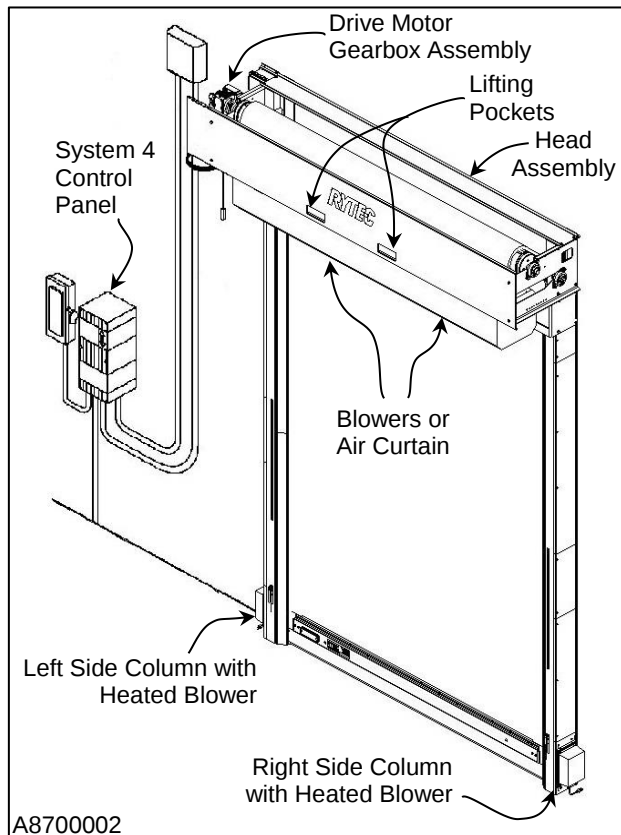


Figure 57

Substitute Parts

Due to special engineering and product enhancement, the actual parts used on your door may be different from those shown in this manual.

Also, if a part has been improved in design and bears a revised part number, the improved part will be substituted for the part ordered.

Return of Parts

Rytec will not accept the return of any parts unless they are accompanied by a Return Merchandise Authorization (RMA) form.

Before returning any parts, you must first contact the Rytec Technical Support Department to obtain authorization and an RMA number.

IMPORTANT: Obtain an incident number from the Rytec Technical Support Technician.

RYTEC TECHNICAL KNOWLEDGE CENTER

At WWW.Rytecdoors.com under the "Contact Us" pull down tab, a link to the Rytec Technical Knowledge Center can be found by selecting the "Customer Support" option. You will be directed to the Customer Support webpage. Within the "Technical Documents and Manuals" section you will find the link "Rytec Technical Knowledge Center". This knowledge center contains on-line manuals, service bulletins, and video presentations of various Rytec models and repair information.

RYTEC ON-LINE WEBSTORE

Rytec Corporation in partnership with Amazon have developed an on-line webstore for purchasing Rytec replacement parts.

Access to the Rytec webstore is by invitation only. Invitations are processed through the following e-mail address, webstore@Rytecdoors.com. Please include name and contact information (account holder). All inquiries will be reviewed however, Rytec maintains the authority to grant or deny access to the webstore at all times. The Rytec webstore is open 24/7/365. Parts available on-line require a credit card for purchase. Items in stock routinely ship the same day. The account is strictly for the account holder. All ship to, bill to and ordering information is the responsibility of the account holder. Currently, over one hundred Rytec parts are available at the on-line store. Shipping rates for the products on line are the lowest rates available.

RETURNS POLICY FOR ON-LINE WEBSTORE

Customer may return new, unopened items within 30 days of delivery for a full refund.

Items should be returned in their original packaging. The buyer will need to pay for the return shipments; return shipping costs will be refunded if the return is a result of merchant or Amazon error.

All refunds go to the original purchaser. A full refund will be due provided the return is received within the return window.

Replacements and exchanges are not supported; customers can return their original order for a refund and create a new order for the replacement.

Items classified as hazardous are not returnable. Please contact merchant; concerning these items.

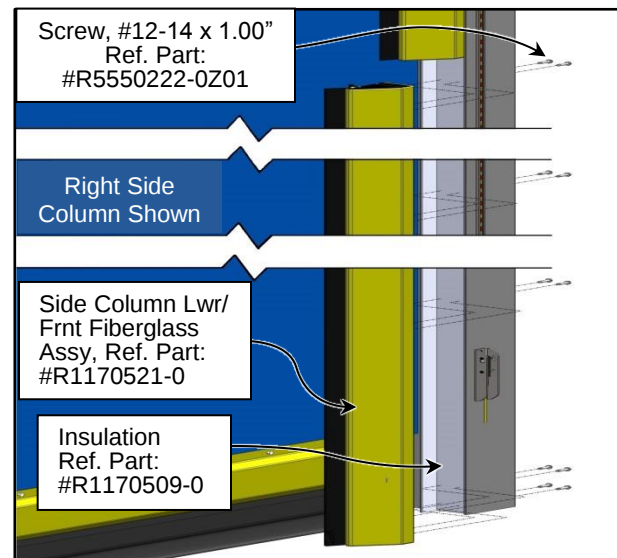
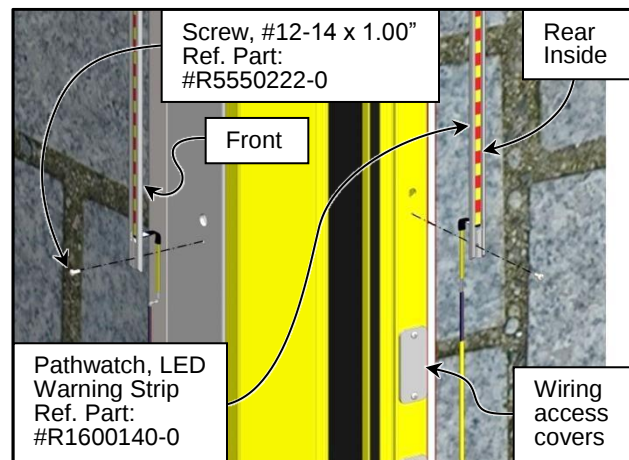
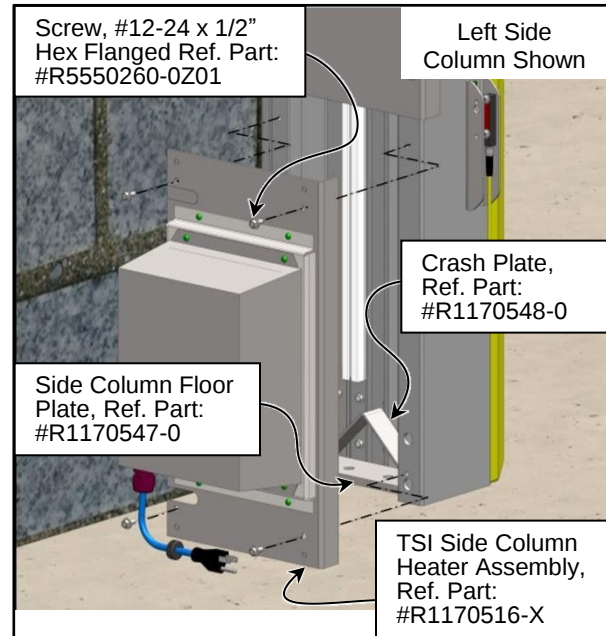
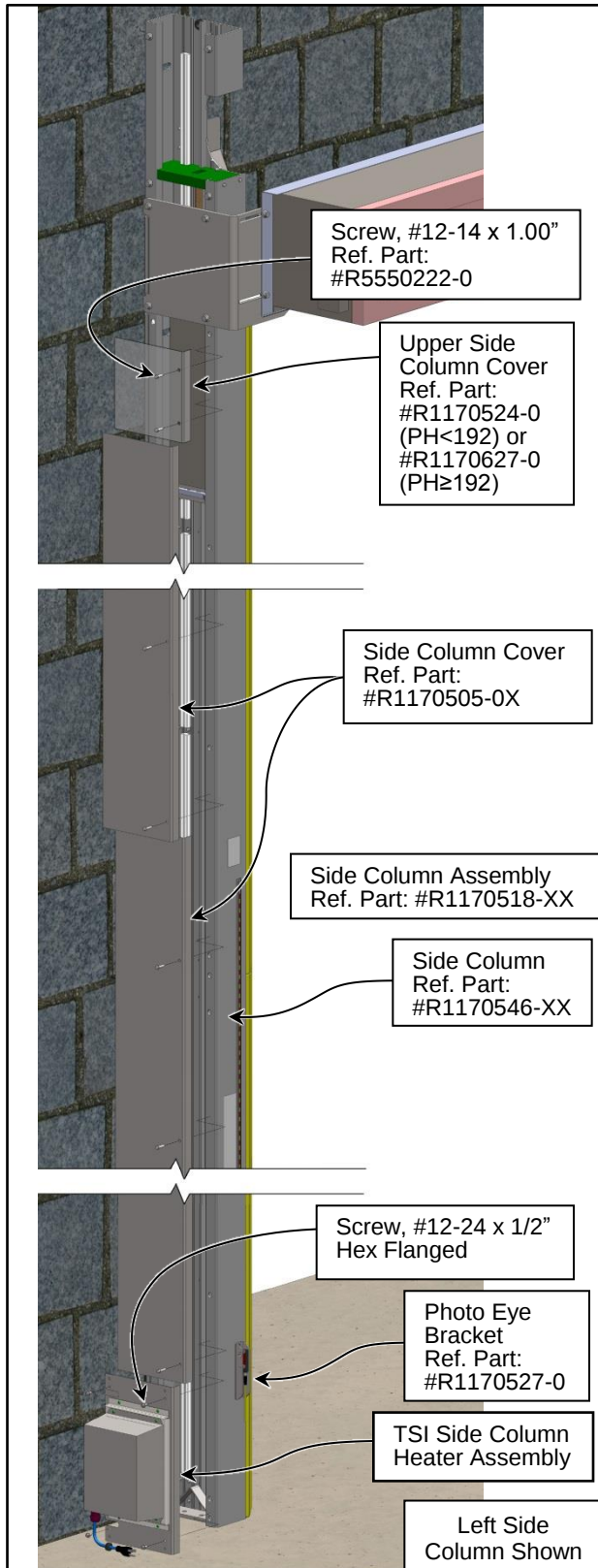
WEBSTORE ITEM RETURN INSTRUCTIONS:

1. Visit return center within your account to create a return merchandise authorization.
2. Print the returns slip and the shipping label.
3. Include the returns slip inside the box and affix the shipping label to the box.
4. Ship package.

Prices are subject to change.

PARTS LIST – SIDE COLUMN ASSEMBLY

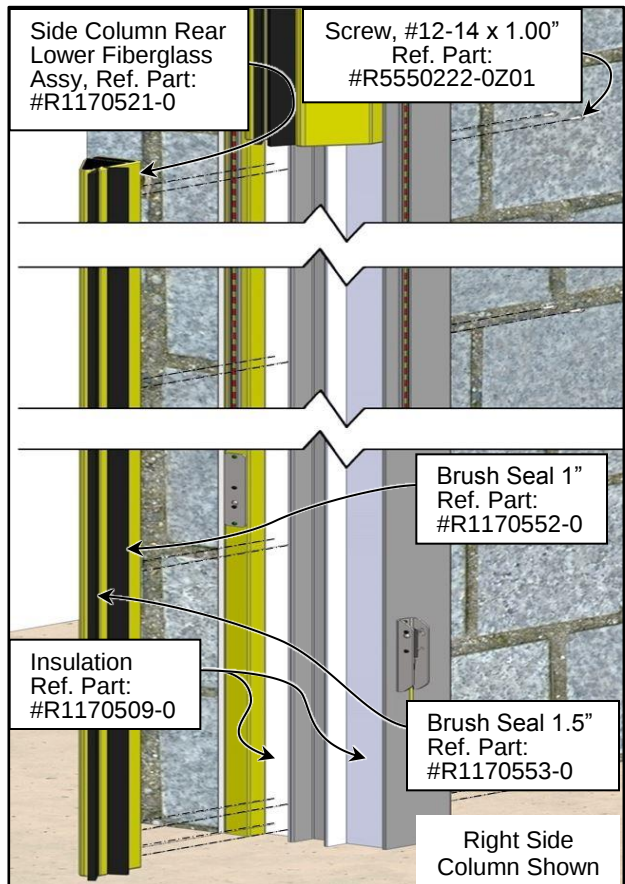
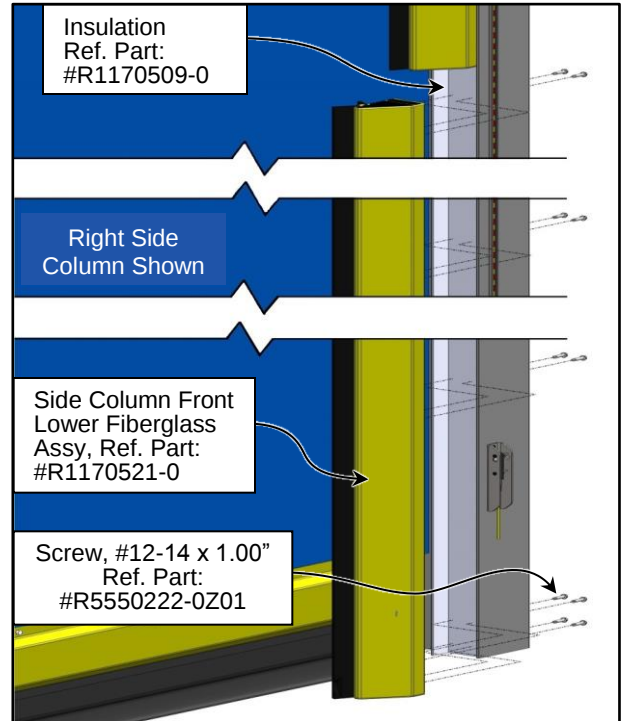
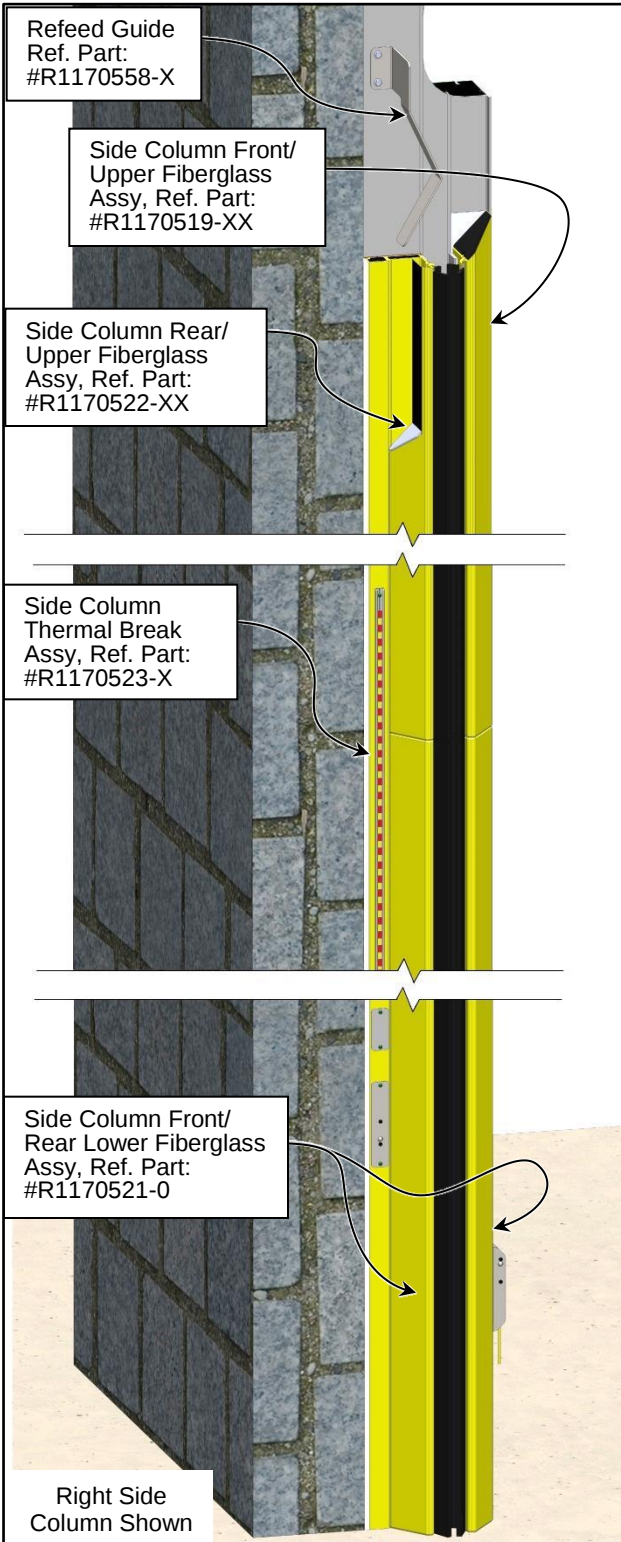
SIDE COLUMN ASSEMBLY



ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

SIDE COLUMN ASSEMBLY

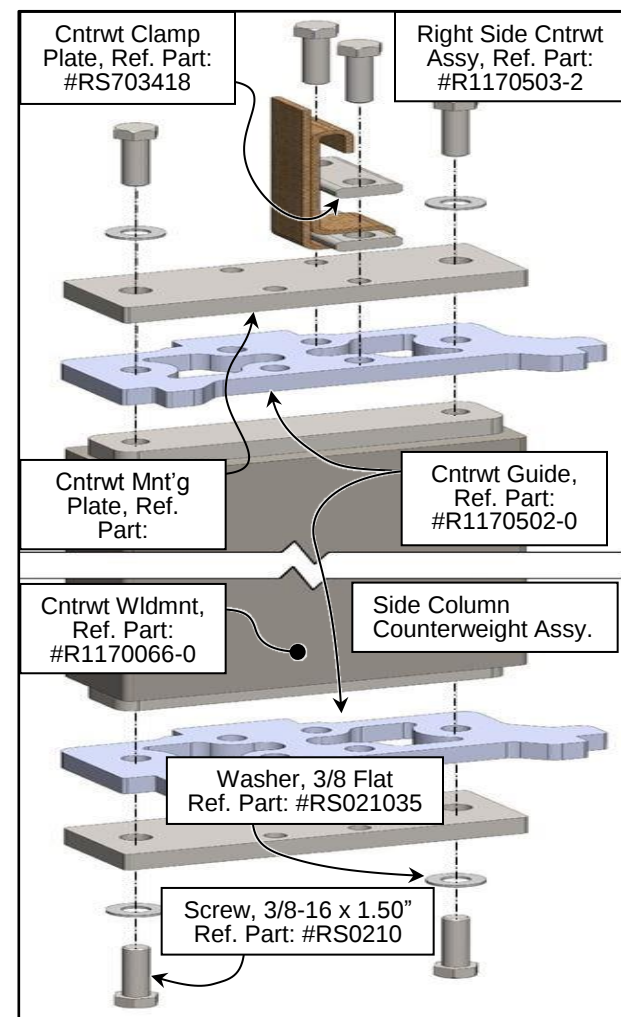
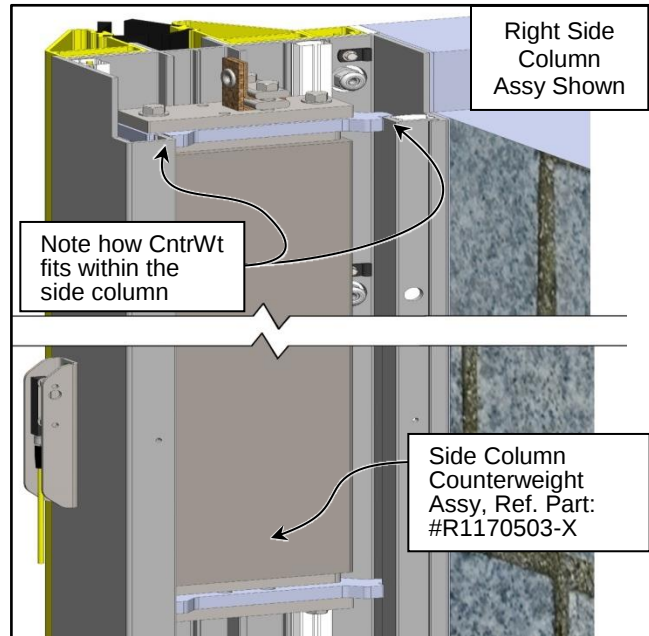
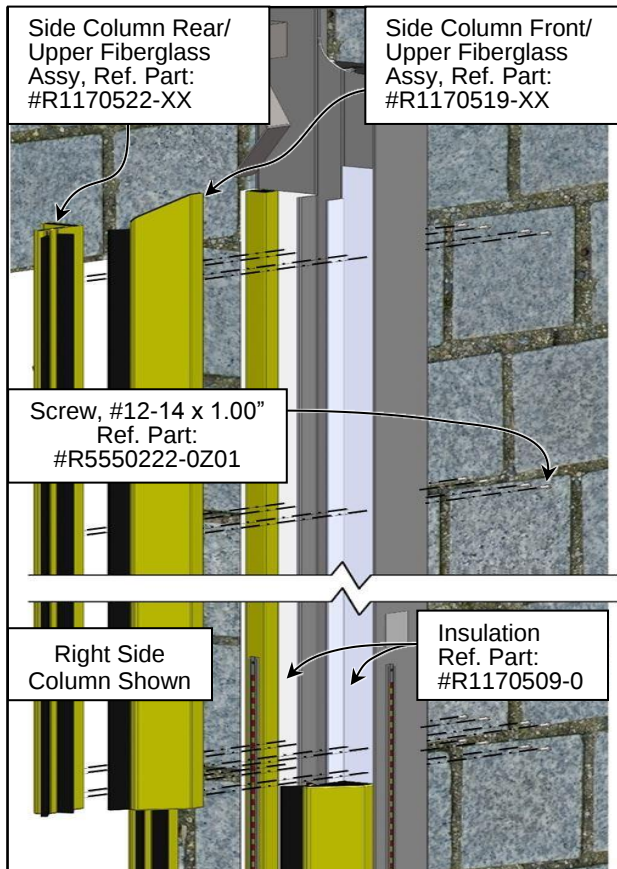
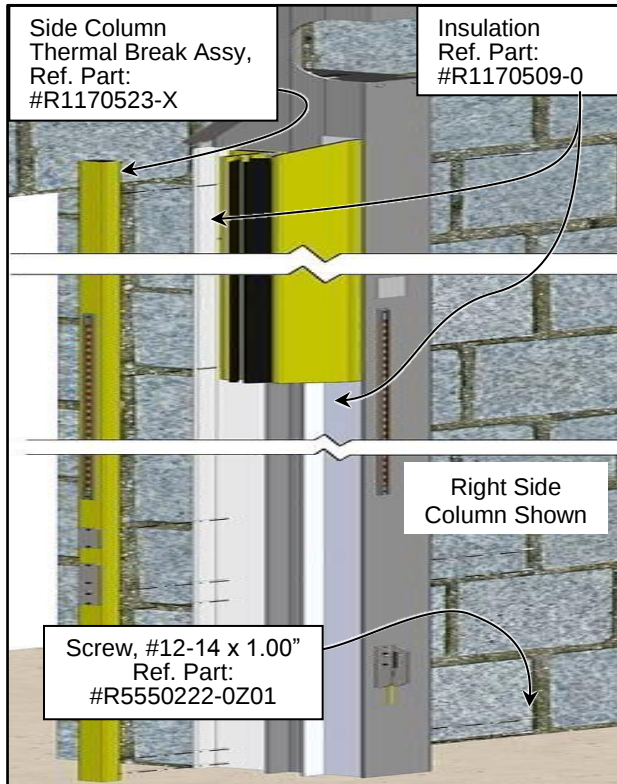


ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

PARTS LIST – SIDE COLUMN & COUNTERWEIGHT ASSEMBLY

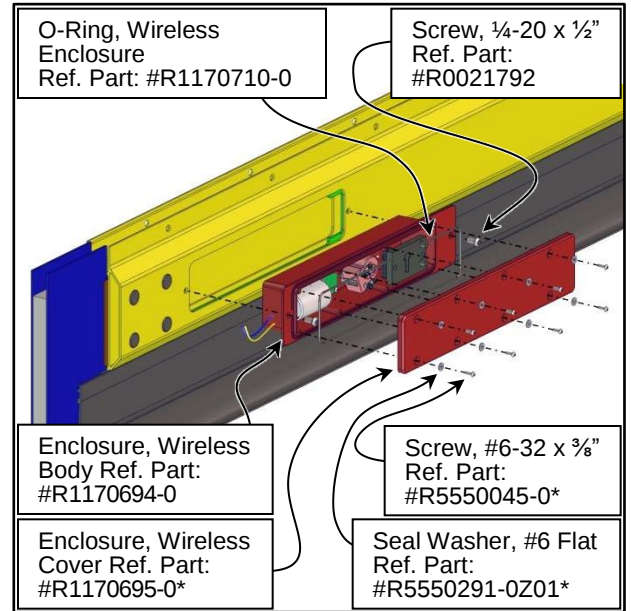
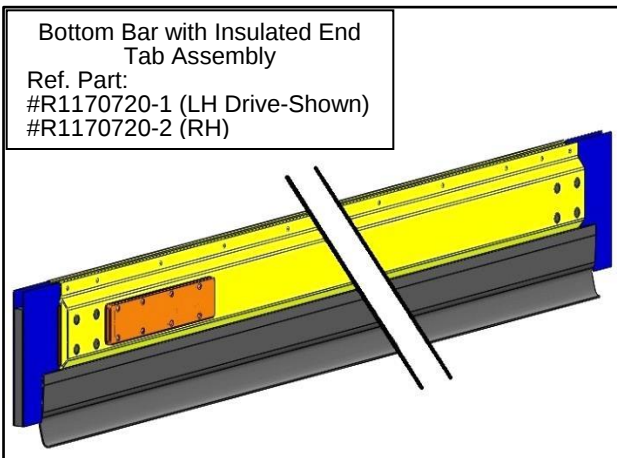
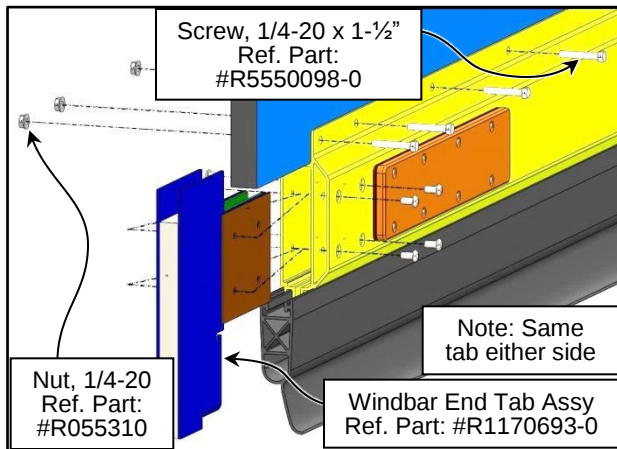
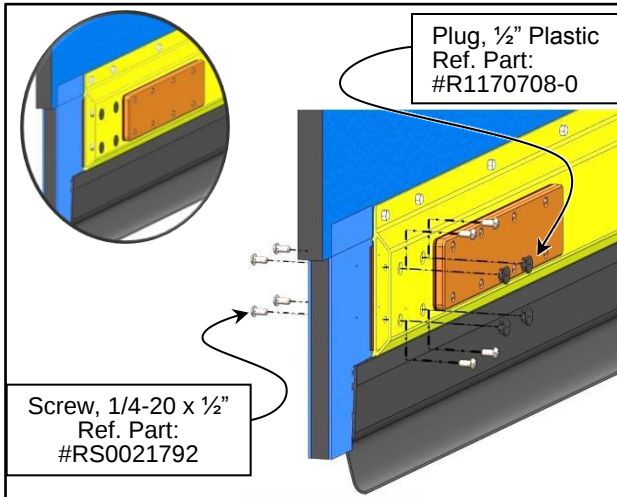
SIDE COLUMN & COUNTERWEIGHT ASSEMBLY



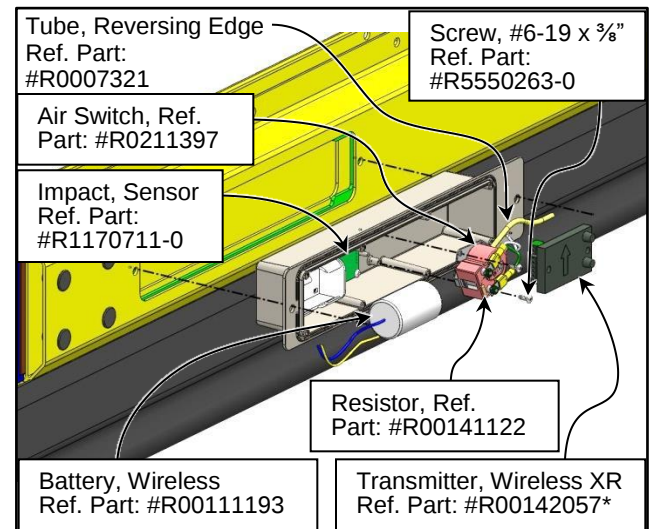
ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

BOTTOM BAR ASSEMBLY



* Contained in Assembly #R1180001-0C



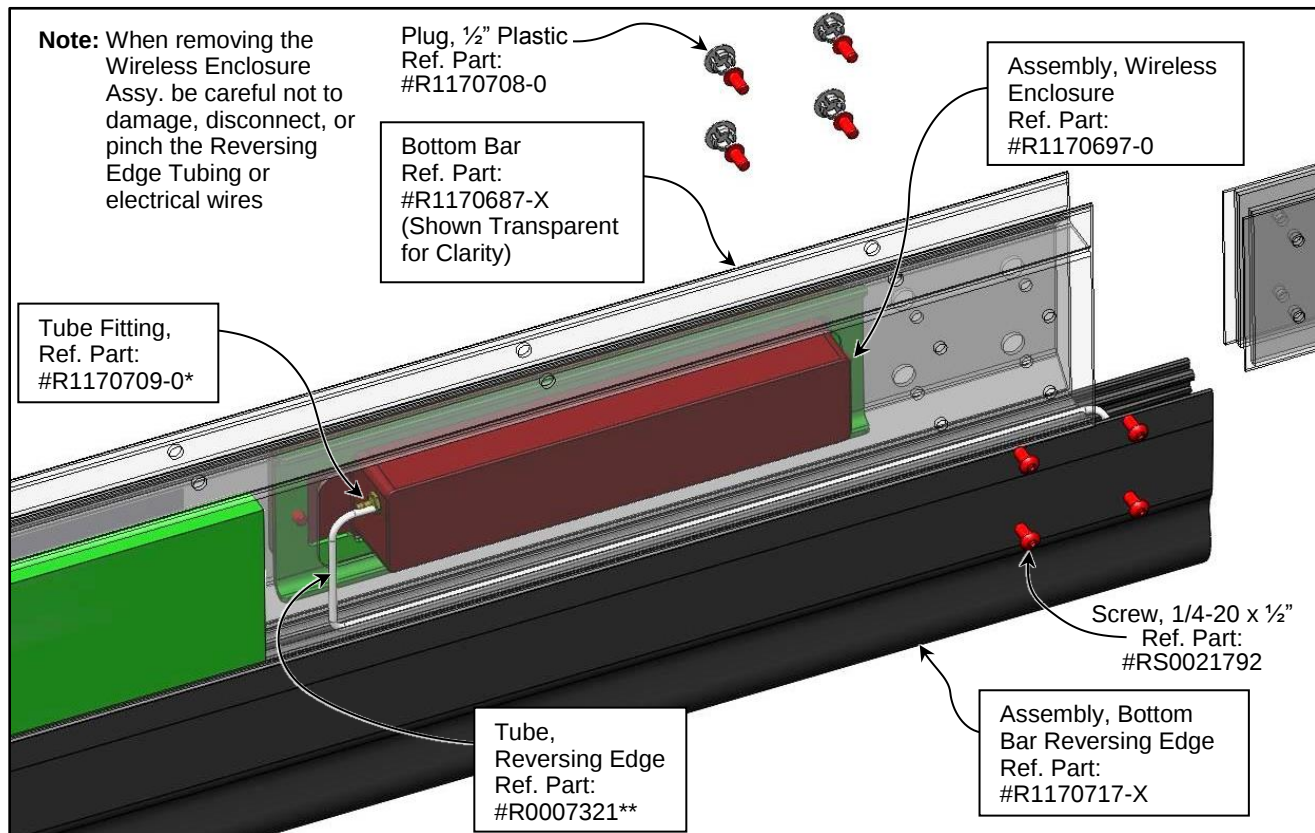
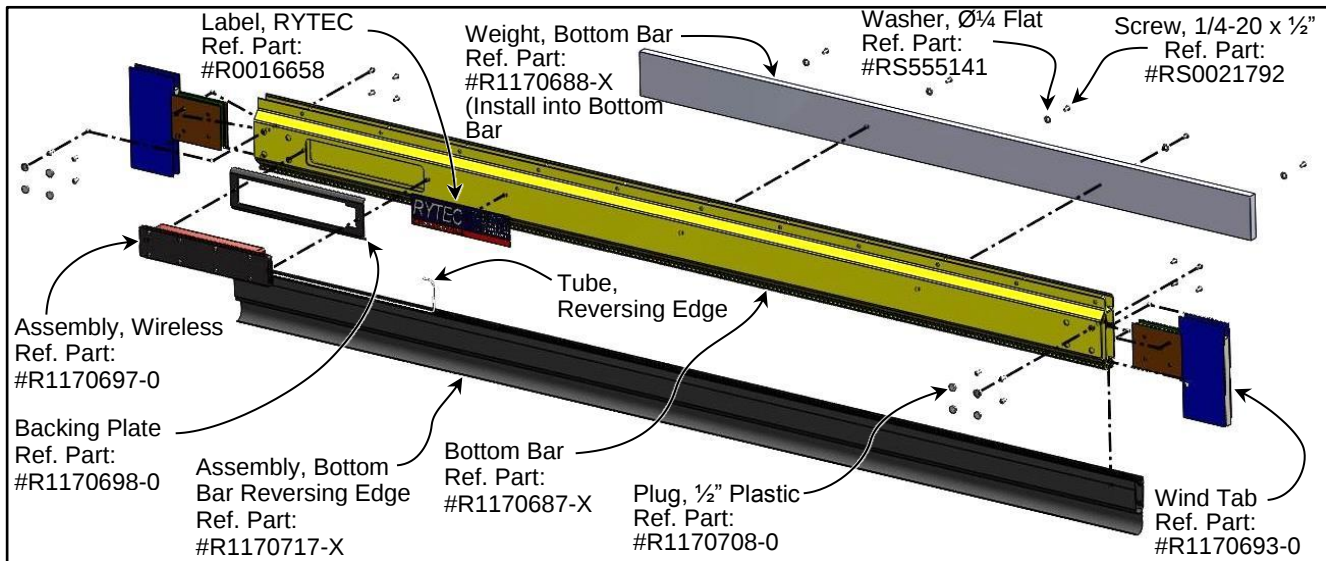
* Contained in Assembly #R1180001-0C

ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

PARTS LIST – BOTTOM BAR ASSEMBLY

BOTTOM BAR ASSEMBLY



* Contained in Assembly #R1170697-0

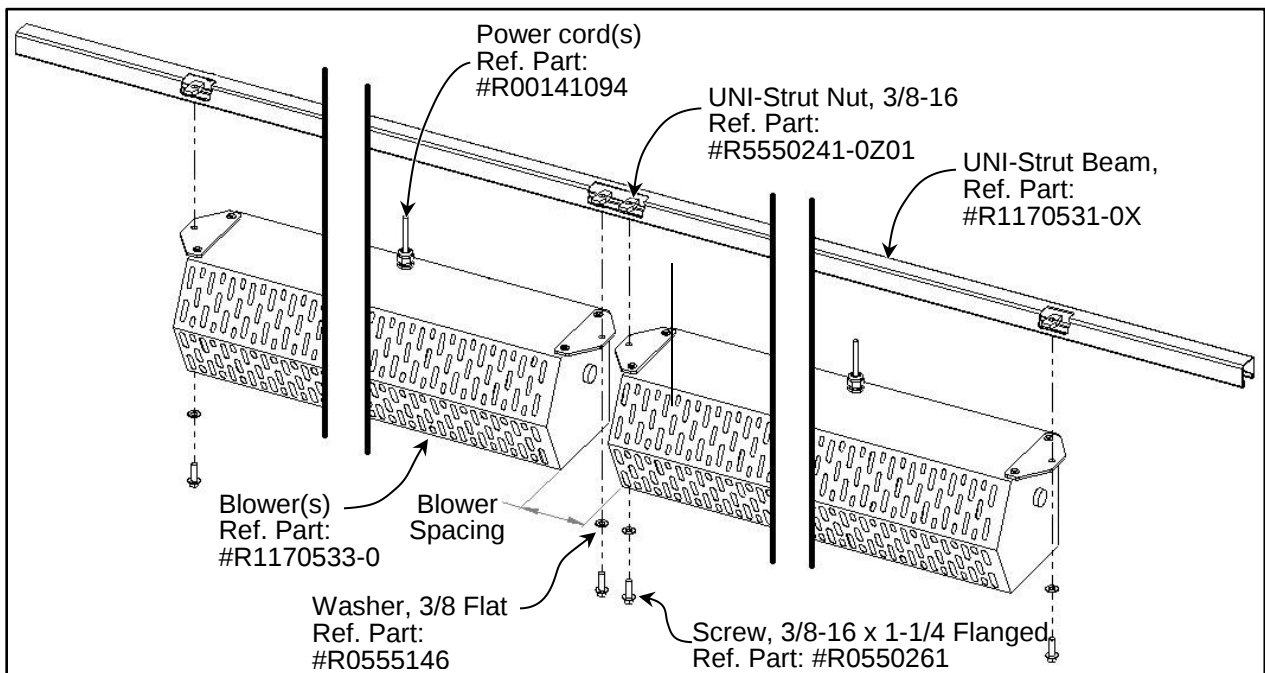
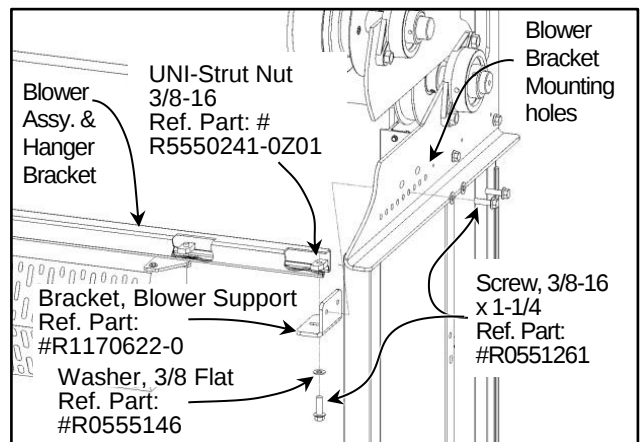
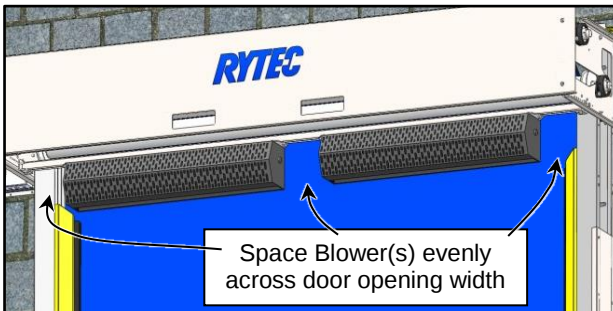
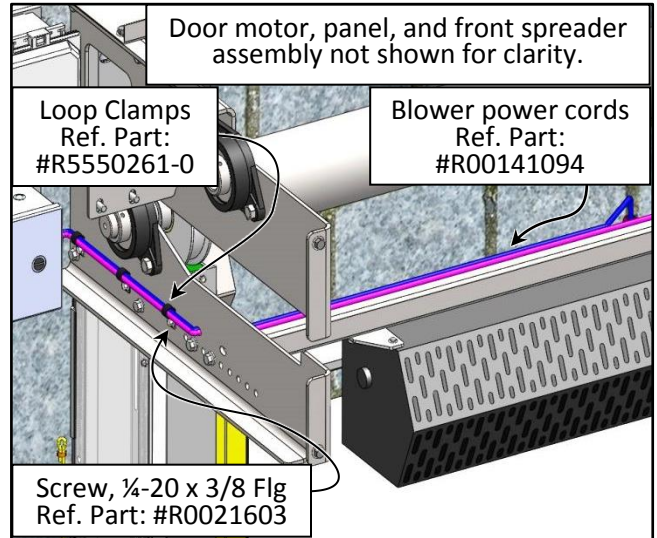
** Contained in Assembly #R1170717-0

ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

PARTS LIST – AIR BLOWER & BRACKET ASSEMBLY

AIR BLOWER & BRACKET ASSEMBLY PH ≤ 16 ft

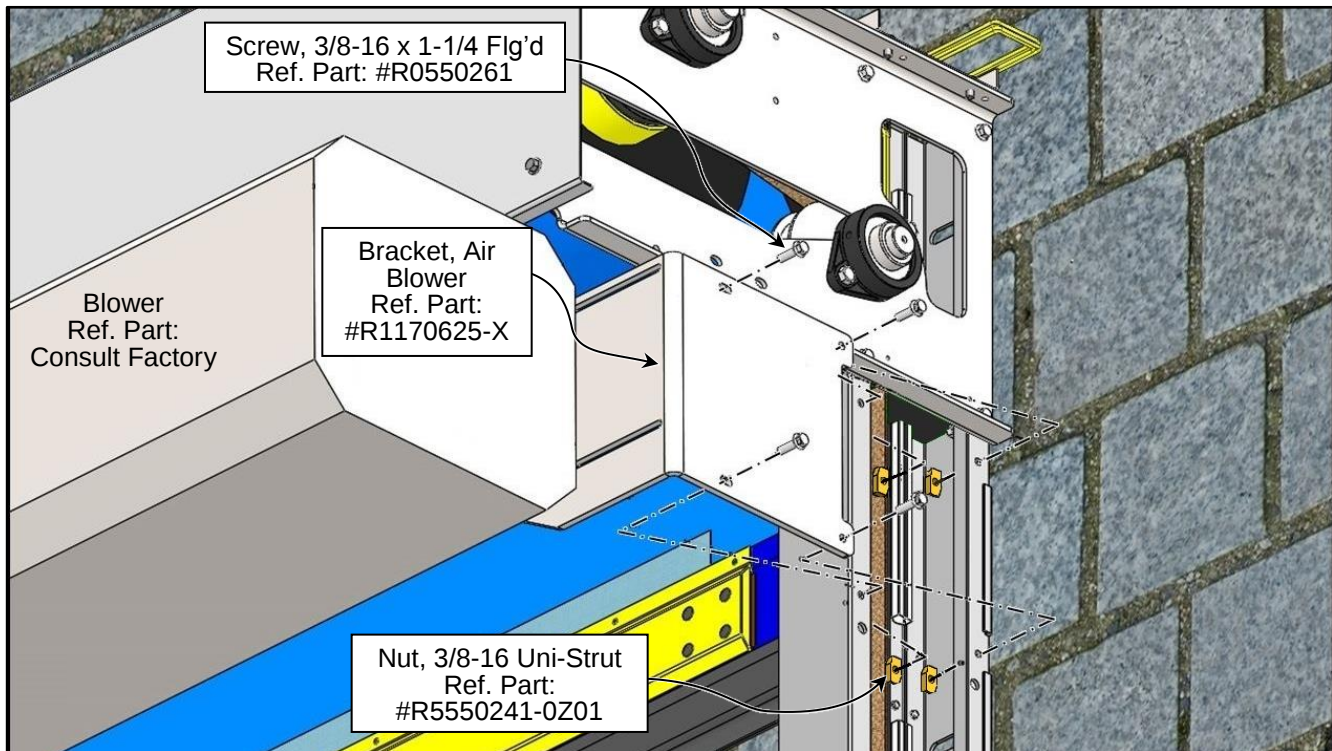
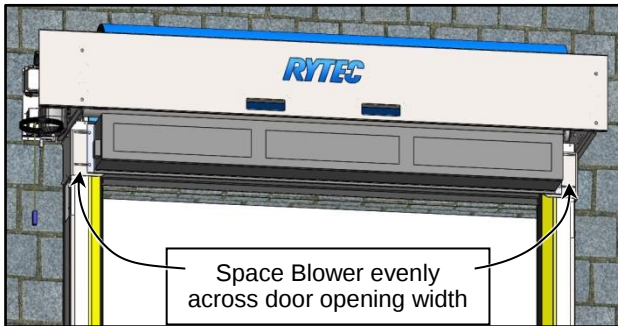
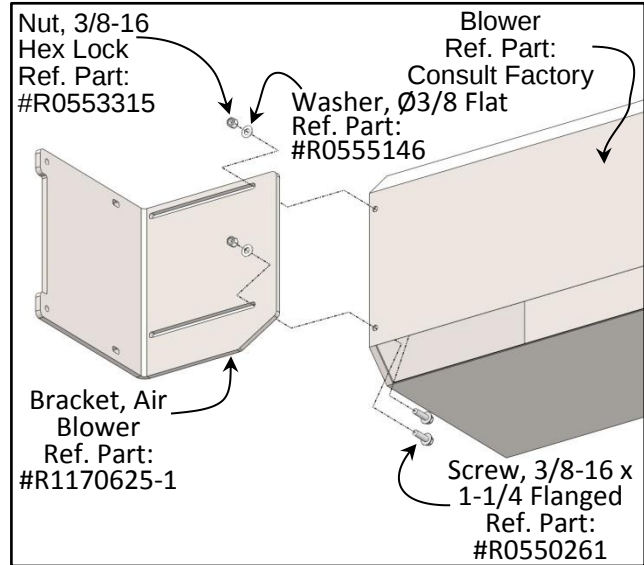
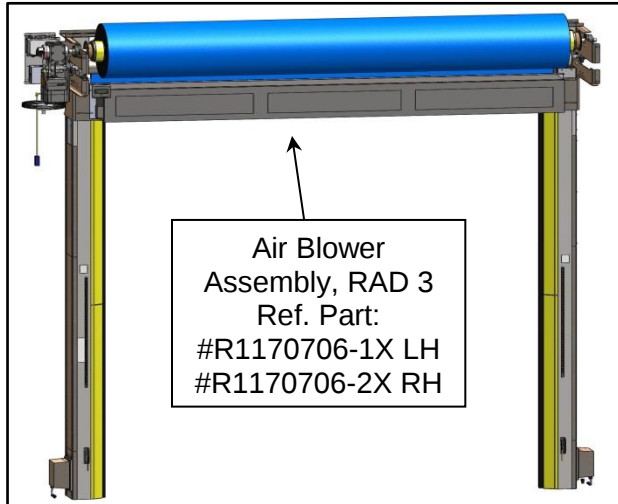


ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

PARTS LIST – AIR BLOWER & BRACKET ASSEMBLY

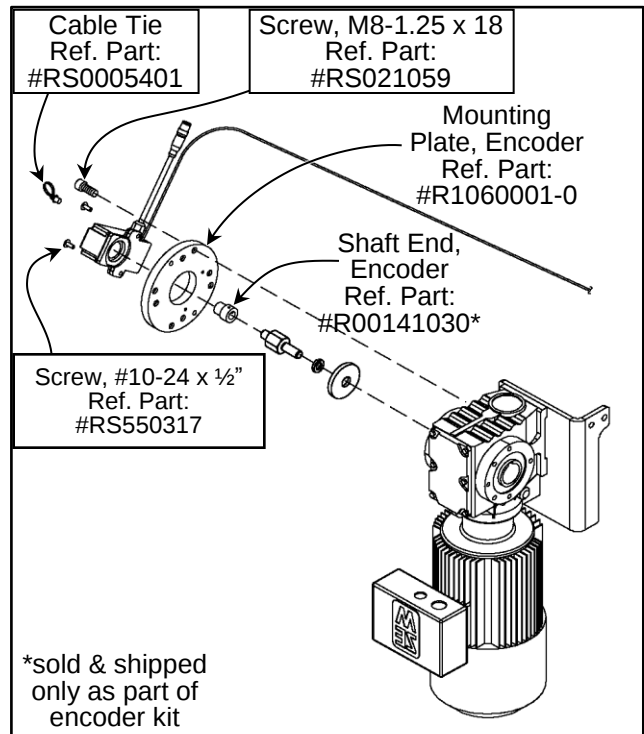
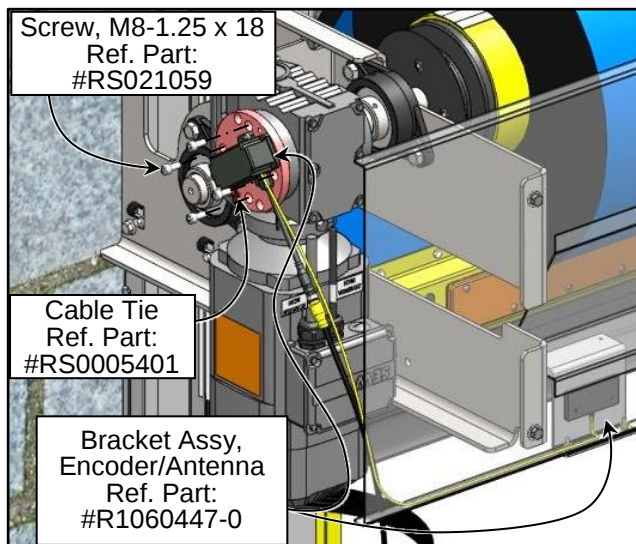
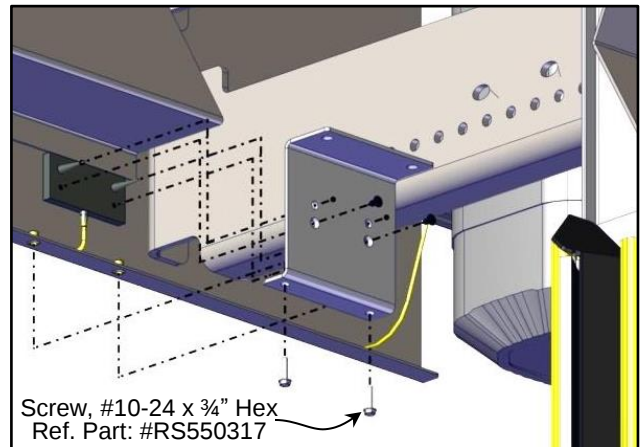
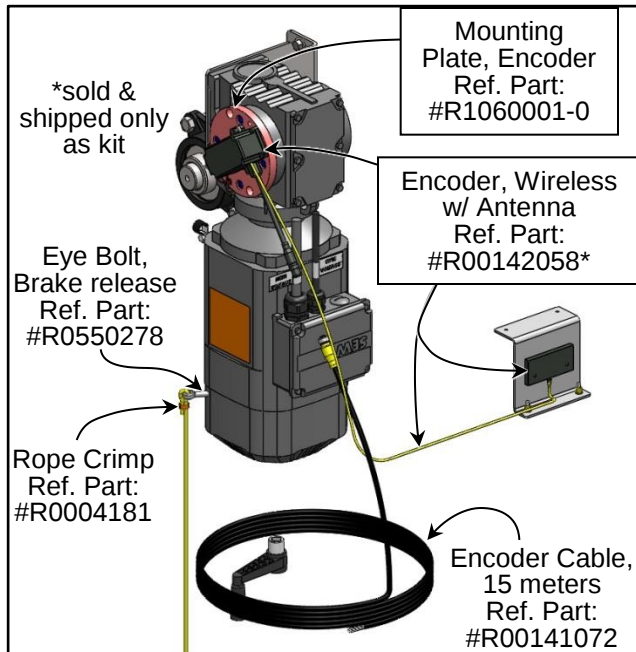
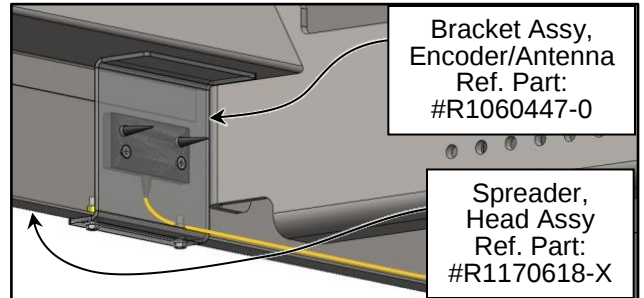
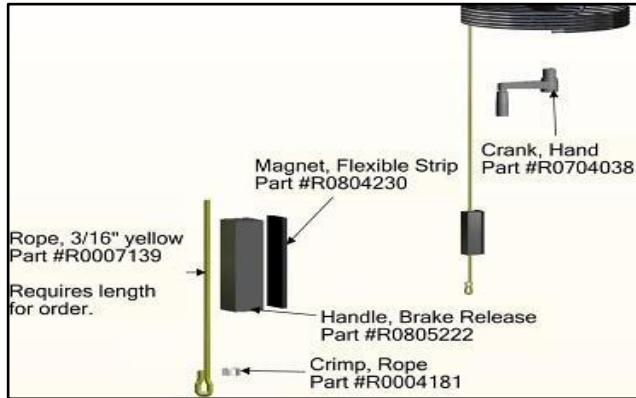
AIR BLOWER & BRACKET ASSEMBLY PH > 16 ft



ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

MOTOR & ENCODER ASSEMBLY

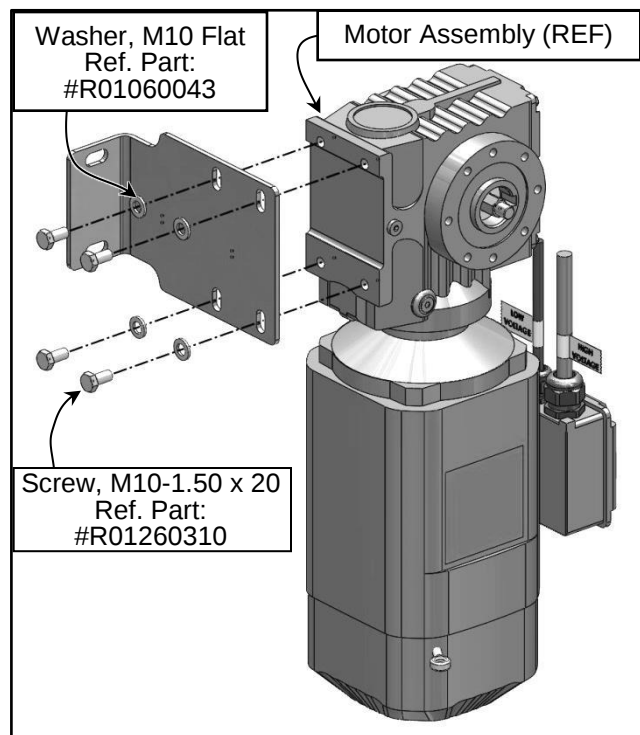
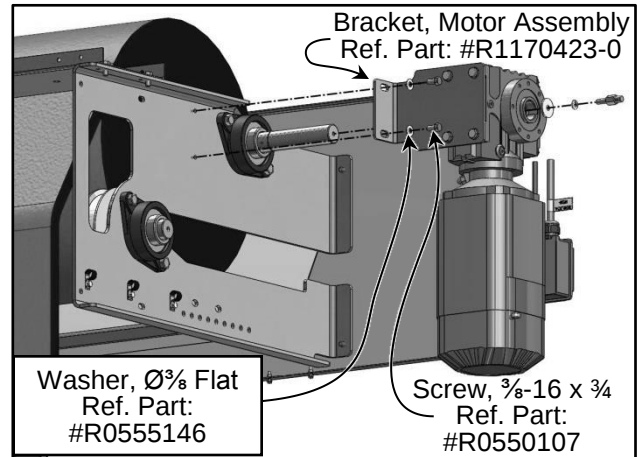
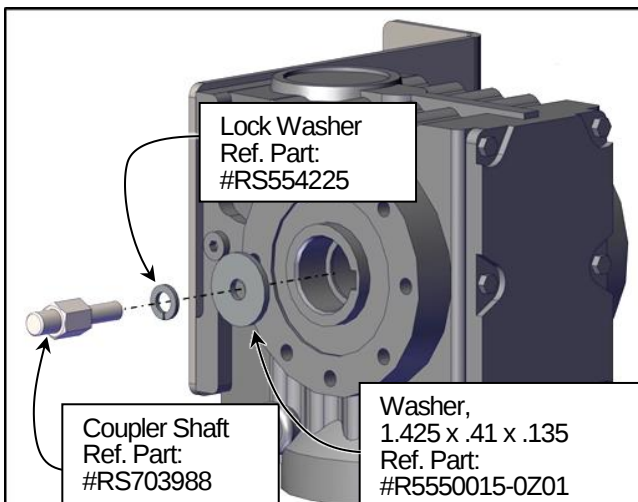
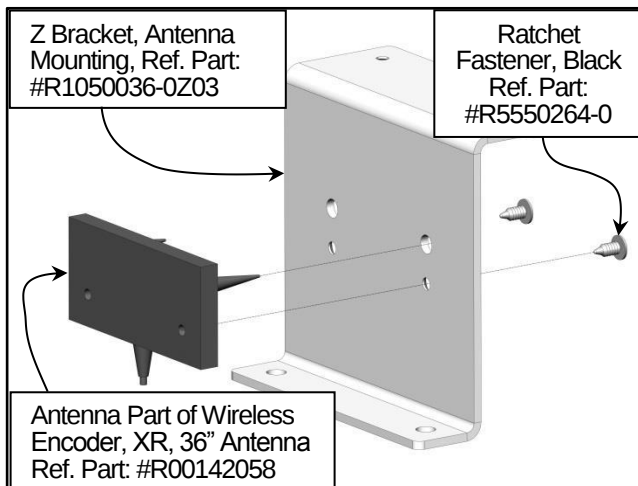
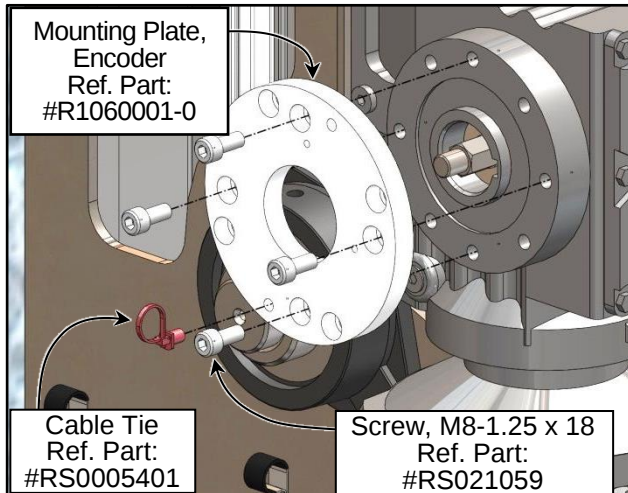


ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

PARTS LIST – MOTOR & ENCODER ASSEMBLY

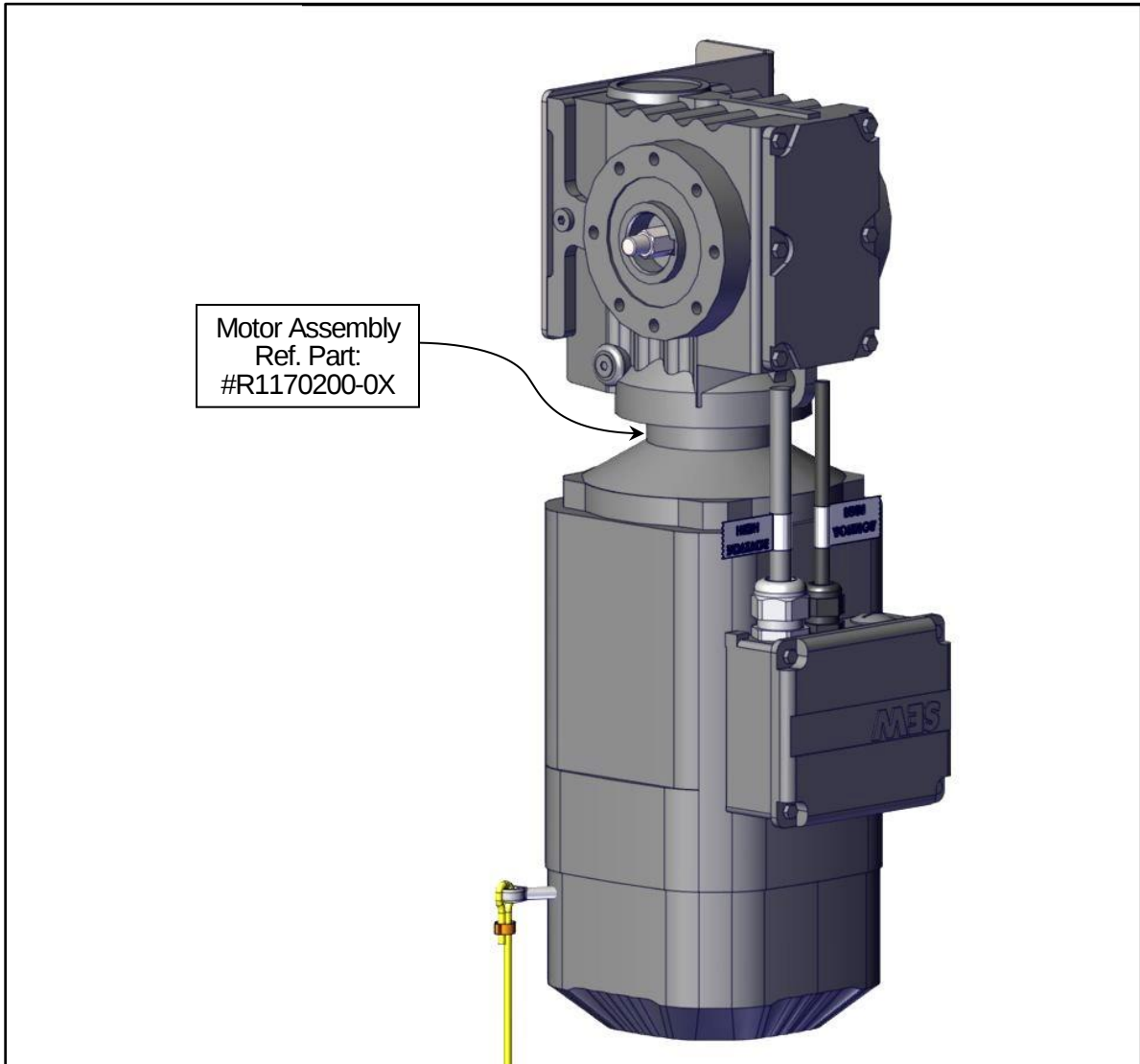
MOTOR & ENCODER ASSEMBLY



ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

MOTOR ASSEMBLY

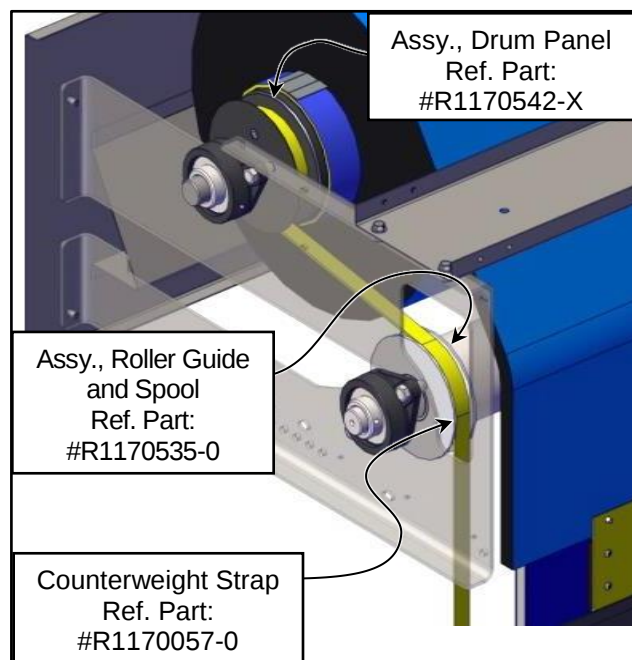
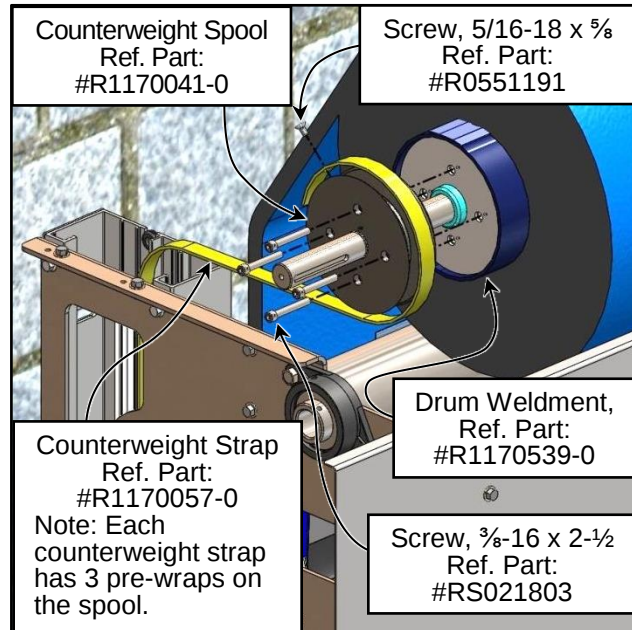
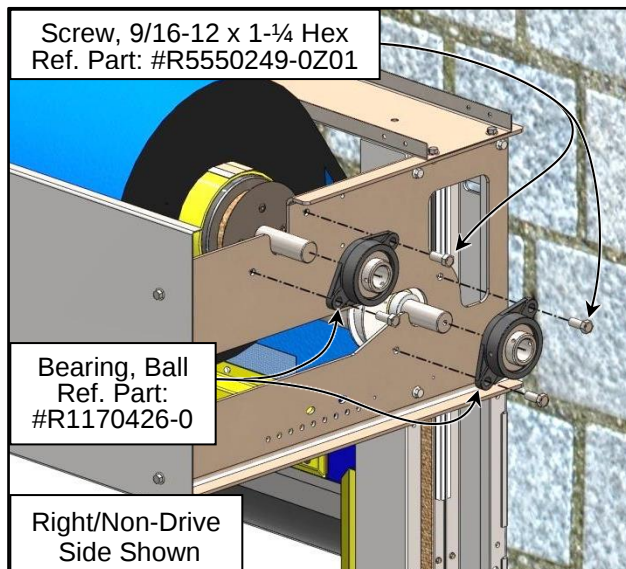
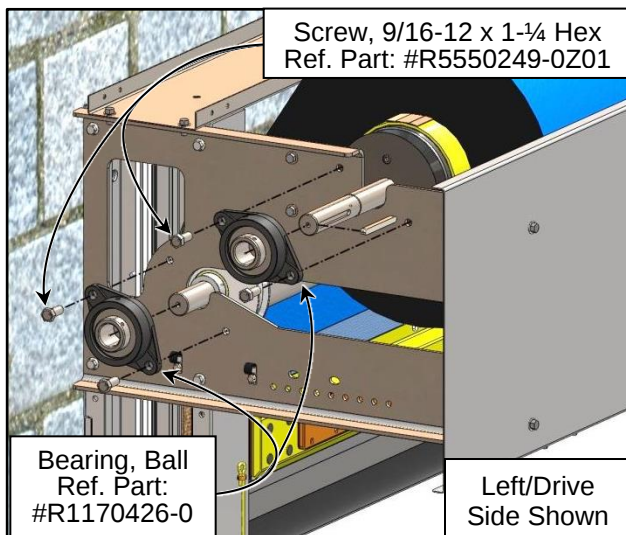
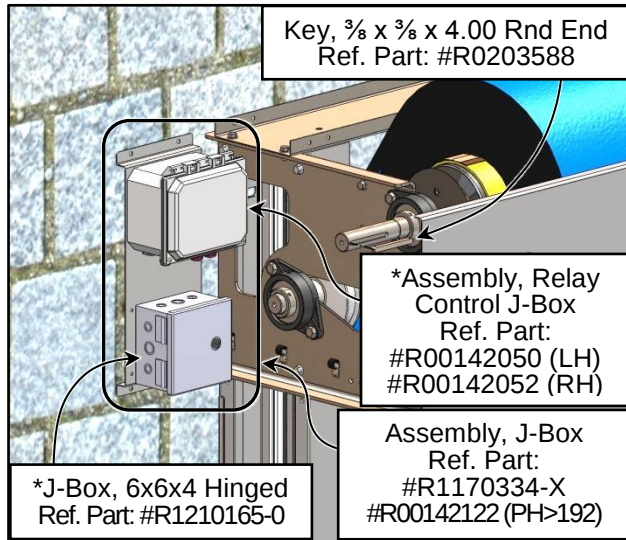


ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

PARTS LIST – HEAD ASSEMBLY

HEAD ASSEMBLY

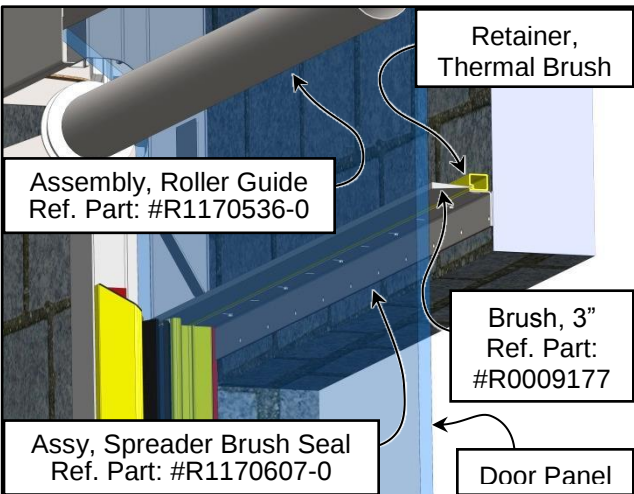
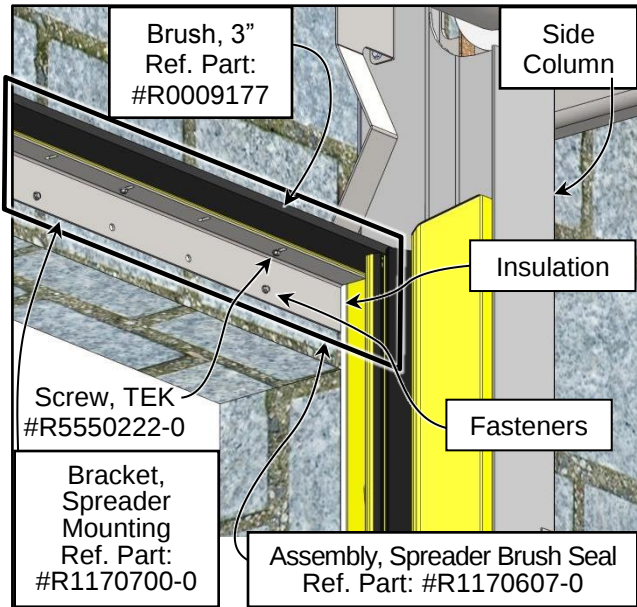
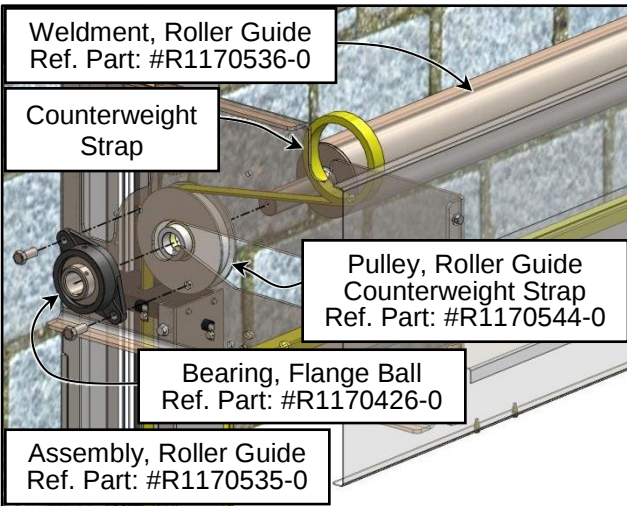
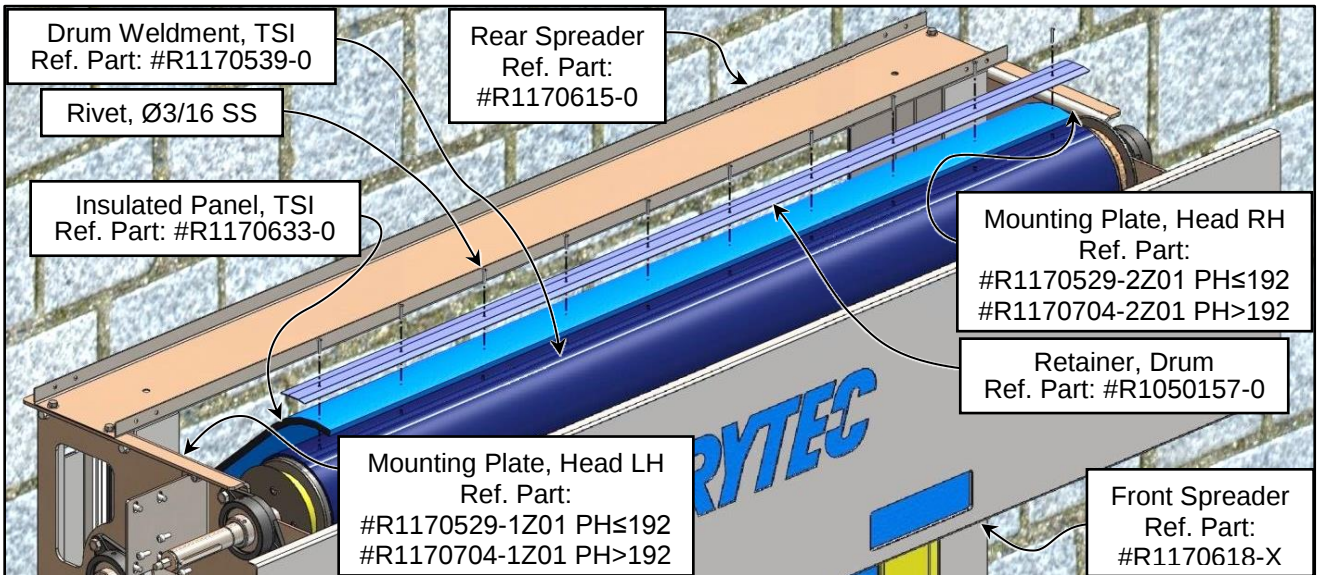


* Not included on Assemblies (PH>192)

ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

HEAD ASSEMBLY

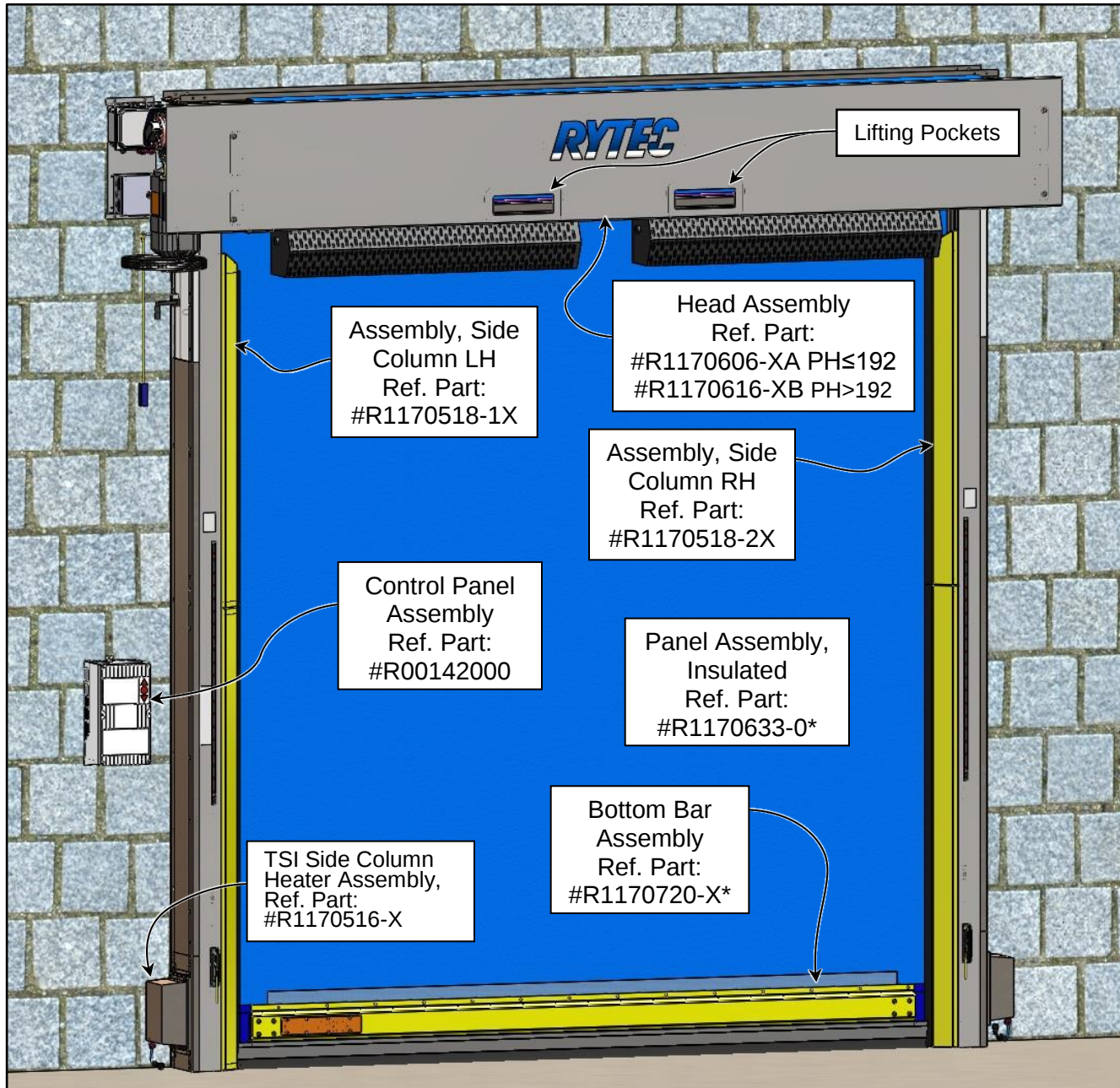


ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

PARTS LIST – LIFTING POCKET & DOOR ASSEMBLY LAYOUT

LIFTING POCKET & DOOR ASSEMBLY LAYOUT



* Contained in Head Assembly #R1170616-0

ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

PARTS LIST: Common Spare Parts**Common Miscellaneous Parts**

PART #	Description
R00111193	Battery Wireless
R1160153-0	Photo Eye, Telco 3000, Transmitter
R1160145-0	Photo Eye, Telco 3215, Receiver
R1160059-0X	Photo Eye Cable, for Telco SG10
R00142058	Encoder Wireless Extended Range 36" Antenna
R00142057	Mobile Unit, Transmitter, Extended Range
R1600140-0	Pathwatch™ LED Warning Strip
R0211397	Air Pressure Switch
R1170057-0	Counterweight Strap, requires length or door serial # for order.
R1170502-0	Counterweight Plate/Slide, White UHMW plastic
R1170552-0	1" Brush for Side Columns, Requires length or door serial # for order.
R1170553-0	1-1/2" Brush for Side Columns, Requires length or door serial # for order.
R0009177	3" Brush for top lenti, Requires door serial # or length for order.
R0012242*	Falcon Motion Detector*
R0012867*	IS40 Motion/Presence Detector*
R0012145*	BEA Universal Remote*
R0012210*	Pull Cord/Wall Switch*
R00121002*	Pushbutton, Black Mushroom*
R00122000*	Loop Module, System 4*

*** Items used where applicable.**

ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

Due to product enhancement, the actual parts on your door may be different from those shown in this manual.

NOTES

NOTES

