

R Y T E C

# PredaFlex™

PredaDoor NXT® with optional flexible edge

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## Owner's Manual



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## PREDAFLEX™ 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 **PREDAFLEX™** ("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 **Two (2) Years** from the date of shipment of the Product from the Seller's plant ("Shipment").

**Electrical** components for a period of **Two (2) Years** from Shipment.

**Standard door panels**, including **Vinyl**, for a period of **One (1) Year** from Shipment.

**Optional door panels**, including **screen, windows**, for a period of **One (1) Year** from shipment.

**Coil Cords, Brush or vinyl seals, Side column wear strips, Side column self-repair guides, Vinyl Loop Seal, Vision Panel Sections**, 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 PredaFlex™ 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 UNDER- STAND 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 panels.

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.

**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.

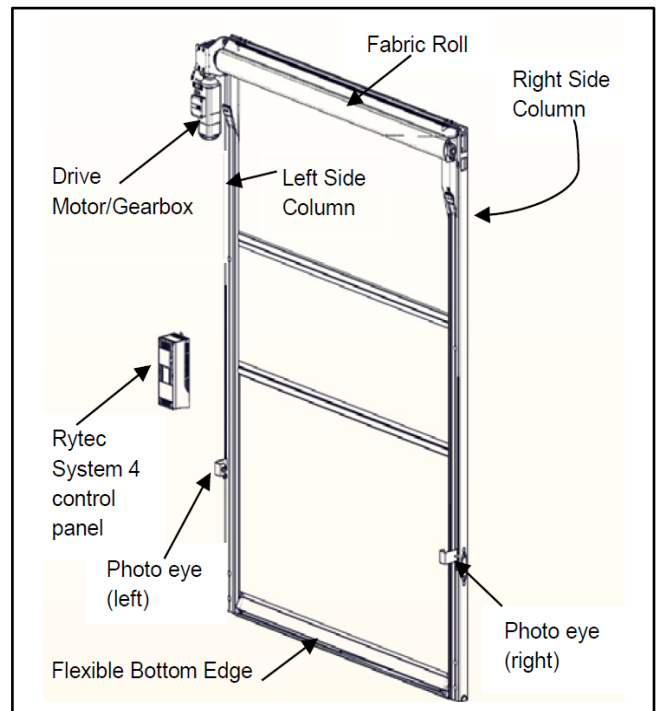
**IMPORTANT: IMPORTANT** is used to relay information that is **CRITICAL** to the successful completion of the procedure.

**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.

**GENERAL ARRANGMENT OF DOOR PARTS**

Figure 1 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 general information purposes only. It should not be relied upon solely for the operation and maintenance of your door and its sub-assemblies.



**Figure 1**

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

**PLANNED MAINTENANCE  
RECOMMENDED SCHEDULE**

	Daily	Quarterly
Damage Inspection		
Door Operation		
Flexible bottom Edge Inspection		
Photo Eye Inspection		
Mounting Hardware Inspection		
Fabric Inspection		
Door Limit Inspection		
Motor Brake Inspection		
Flexible Bottom Edge Inspection		
Breakaway tab Inspection		
Lubrication		
Brush Seal Inspection		
Activator/Control Panel Inspection		
Electrical Connection Inspection		
Wall Anchor Inspection		
Safety Decals		

**DAILY INSPECTION**

**Damage Inspection**

Inspect the door to see that components have not been damaged. Example: tear in fabric panel, damage to side column(s), etc. (See Figure 2.)

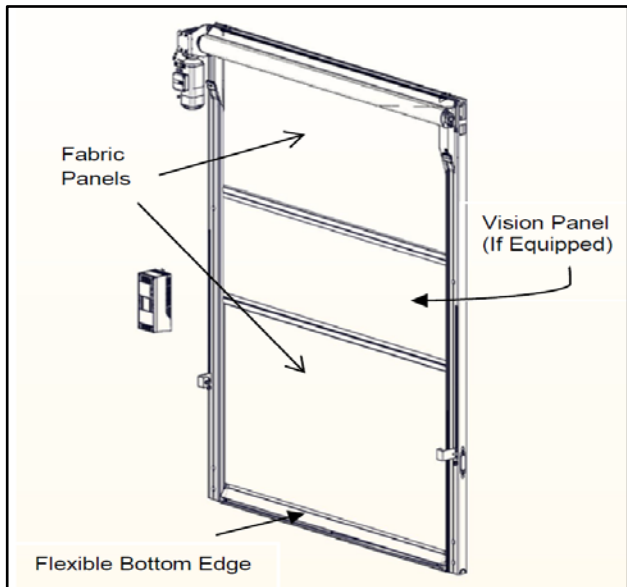


Figure 2

**Door Operation**

Run the door through four or five complete cycles to ensure 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 cause additional damage.

**Flexible Bottom Edge Inspection**



**DO NOT stand under the door panel when performing the following inspection.**

While the door is running through the down cycle, hold your arm out to contact the Flexible bottom edge. The edge should flex around your arm and cause the breakaway tabs to be removed from the side columns. This will create a “Door Ajar” to appear on the display. The door will not reverse there is no reversing edge switch in the Flexible bottom edge. The breakaway tabs have magnets installed on them and complete a closed circuit when the tabs are in the side columns. When the Flexible Bottom Edge is impacted the breakaway tabs are removed from the side columns and the door ajar circuit is opened. Magnetic reed switches placed in the side columns identify the breakaway tabs are in place and the door is ready for operation. If the Flexible Bottom Edge has been knocked out of the side columns, simply move the flexible bottom edge to the front side of the door and use the UP arrow to jog the door to the reset position. This allows the flexible bottom edge to reset and the door to become operational.

**Photo Eye Inspection**

NOTE: Two sets of photo eyes have been provided with the PredaFlex™ The photo eyes are safety devices to prevent the door from closing if an object is within the photo eye beam. The photo eyes are not meant to be used as door activators.

1. Raise the door to the full-open position by pressing the up key on the front of the control panel.
2. Place an object in front of the photo eye in a position where it will break the photo eye beam.
3. Press the down key on the front of the control panel. The door should not operate.



**Personnel being used for this inspection should not be in the path of the door panel. DO NOT use the door if the photo eyes do not operate properly.**

4. If a photo eye does not operate properly, the photo eye lens may be dirty. Clean as required using window cleaner and a clean, soft cloth. If cleaning does not solve the problem, see “PHOTO EYE TESTING” on page 10 for test procedures.

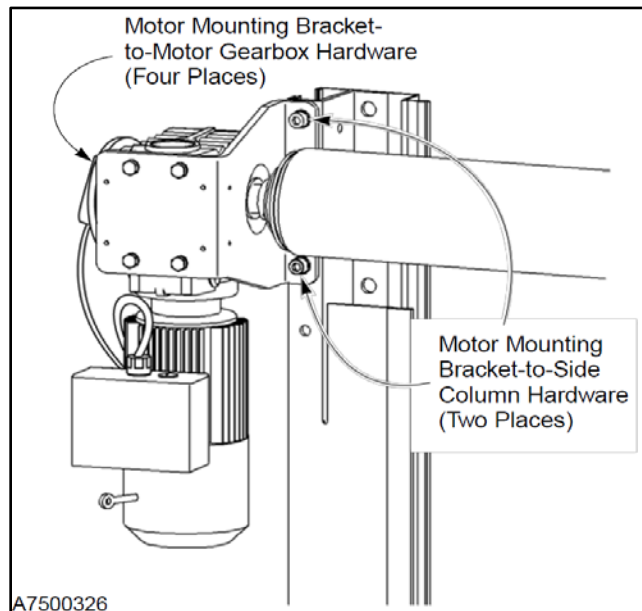


**QUARTERLY INSPECTION**

**Mounting Hardware Inspection**

Check all mounting hardware to ensure all nuts, bolts, and set screws are tight. Example: motor mounting hardware, anchor or through wall bolts, bearing block, mounting hardware, etc. (See Figure 3 through Figure 6.)

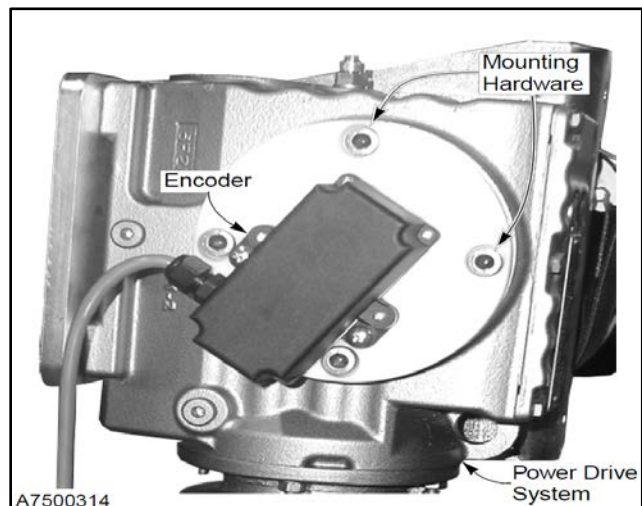
**MOTOR MOUNTING HARDWARE**



**Figure 3**

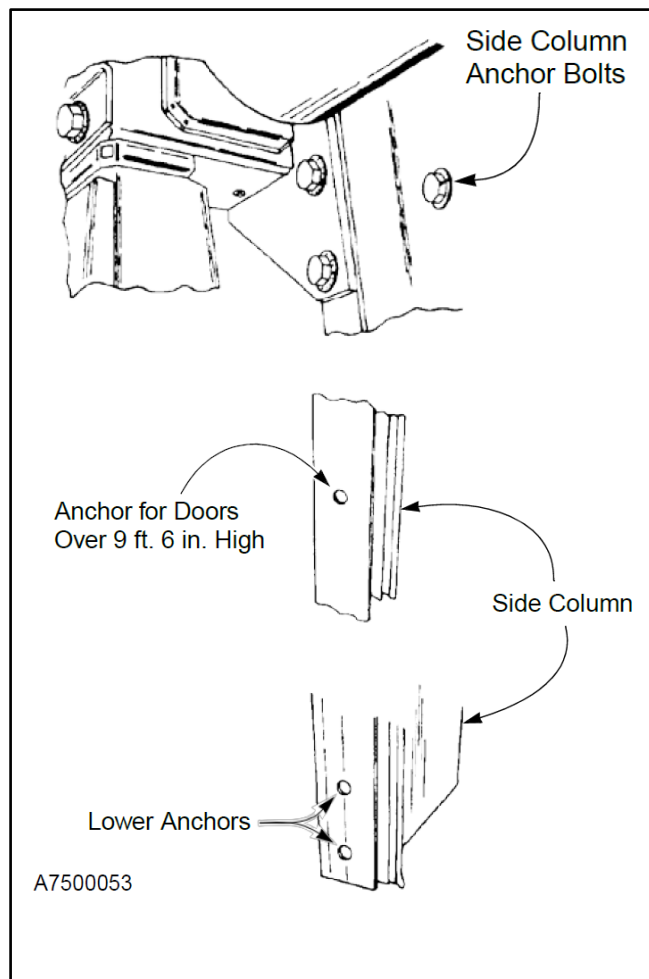
1. Tighten four bracket-to-gearbox screws to 15–20 foot-pounds.
2. Tighten the two bracket-to-side column socket head cap screws, if loose.

**ENCODER HARDWARE**



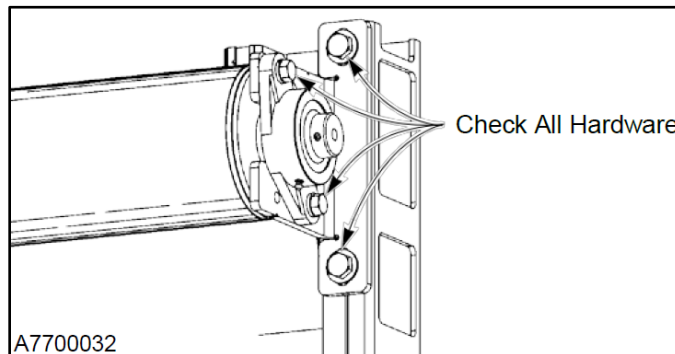
**Figure 4**

**SIDE COLUMN HARDWARE**



**Figure 5**

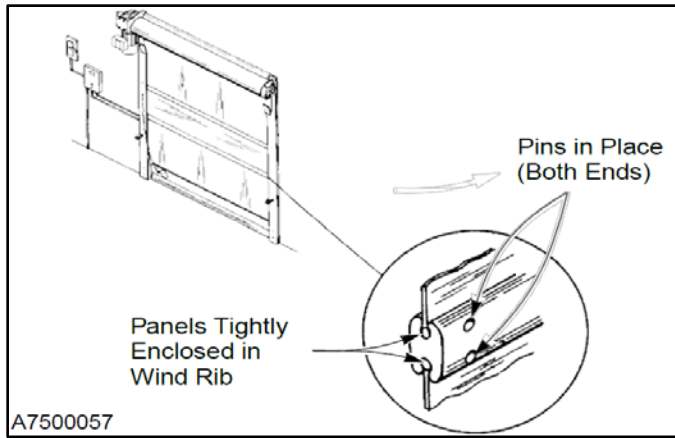
**BEARING BLOCK HARDWARE**



**Figure 6**

**Fabric Inspection**

1. Check fabric panels for tears. Replace if required.
2. Check all panels to ensure they are tightly enclosed in the wind ribs and pins are in place in wind ribs. (See Figure 7.)



**Figure 7**

3. Check the vision panel for clarity. Clean or replace the panel as required.

**IMPORTANT: Use any good brand of window cleaner and a clean, soft cloth to clean vision panel. DO NOT use an abrasive cleaner or a petroleum-based solvent.**

4. Check lower panel to ensure that it is fastened to the plastic tab at each end of the bottom bar. Tighten or replace hardware, if required. If fabric is torn and cannot be re-bolted to the plastic tab, replace panel.
5. Run the door through two or three cycles. Check that the panels are tracking properly in the side columns. If the panels do not track properly, see "FABRIC ROLL ADJUSTMENT" on page 11.

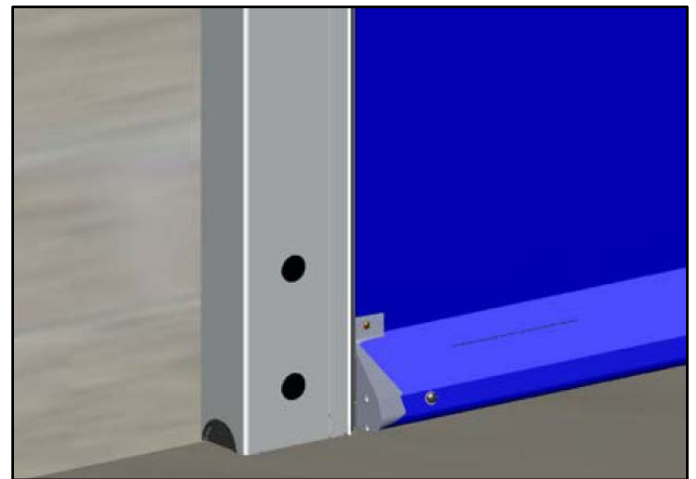
**Door Limit Inspection**

**CLOSE LIMIT**

1. With the door in the closed position, check the Flexible bottom edge it should be in the position shown in figure 8.



**Damage to the Flexible bottom edge or other parts can occur if the door is allowed to seal too tightly against the floor. (See Figure 8.)**

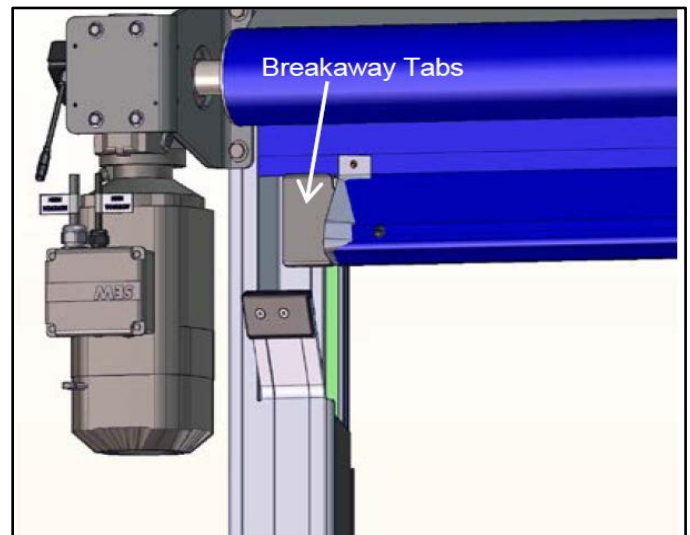


**Figure 8**

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

**OPEN LIMIT**

1. With the door in the open position, check the location of the black breakaway tabs on the flexible bottom edge. It should be in the position shown in Figure 9.



**Figure 9**

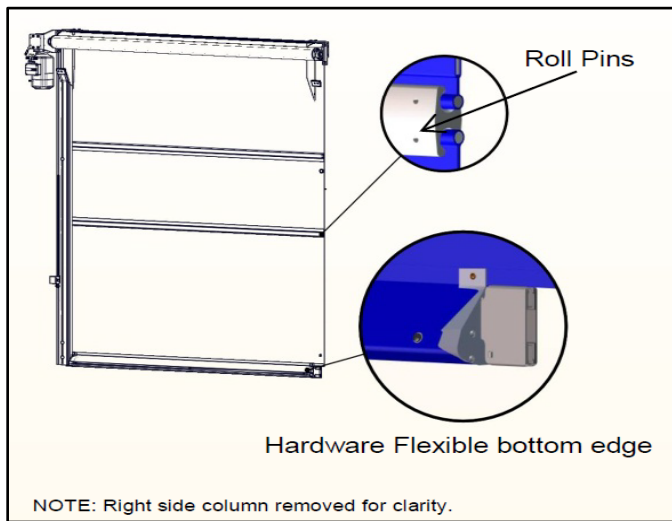
2. If the panel does not stop in the proper location, see the Rytec System 4 Drive & Control Installation & Owner's Manual for adjustment procedure

**Motor Brake Inspection**

The motor brake assembly is designed to stop the door panel travel at the locations indicated in the limit inspection section. If the limits are set properly and the door drifts past the set limits, adjust the brake. (See “MOTOR BRAKE ADJUSTMENT” on page 11 for procedures.)

**Flexible Bottom Edge Inspection**

1. Inspect the roll pins securing the bottom panel to the windrib. It is critical that hardware is tight to prevent shifting of the fabric. (See Figure 10.)



**Figure 10**

2. Check hardware used to secure the breakaway assembly to the flexible bottom edge on both sides. Tighten as required.
3. Check the flexible edge to see that it is tightly secured in the bottom vinyl loop.
4. Inspect the lower panel and flexible edge loop for tears. Repair or replace if needed.

**Kill Switch Inspection**

A kill switch assembly has been installed. One portion of the switch is the magnets located on the breakaway tabs. The other portion of the breakaway switch is located in the side column. The side columns each contain a magnetic reed switch that work with the magnets on the breakaway tabs. If the flexible bottom edge is knocked out the magnetic reed switch sends a signal to the controller to stop the door. The door will remain in a jog mode until the breakaway tabs are placed back into the side columns.

To check the kill switch assembly, proceed as follows:

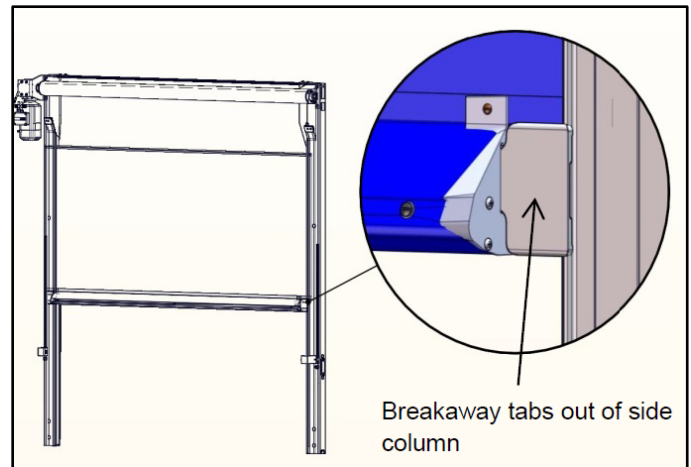


**Take precautions to prevent the door from being opened or closed while performing the following procedure.**

1. 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.

2. Push the Flexible bottom bar out of one of the side columns. (See Figure 11).



**Figure 11**

3. The display will read “Door Ajar”.
4. The controller automatically places the door into a “JOG MODE”. The “JOG MODE” only allows operation from the buttons on the control panel; no automatic operation is possible until the “Door Ajar” is repaired. Jog the door to the full OPEN position. The breakaway tabs will fall back into the side columns and the door will be placed back into automatic operation.

**Lubrication**

1. **Flanged Bearing:** The fabric roll is supported by a flanged bearing located on the roll shaft end opposite the motor/brake assembly. The flanged bearing is equipped with a grease fitting. Recommended lubrication is lithium-based grease conforming to NLGI Grade 2 standards. It should be medium viscosity, low torque, with an operating temperature range of –30°F to +200°F. (See Figure 12.)

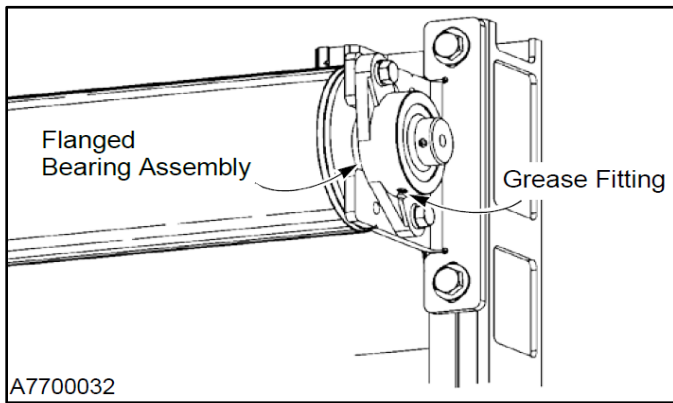


Figure 12

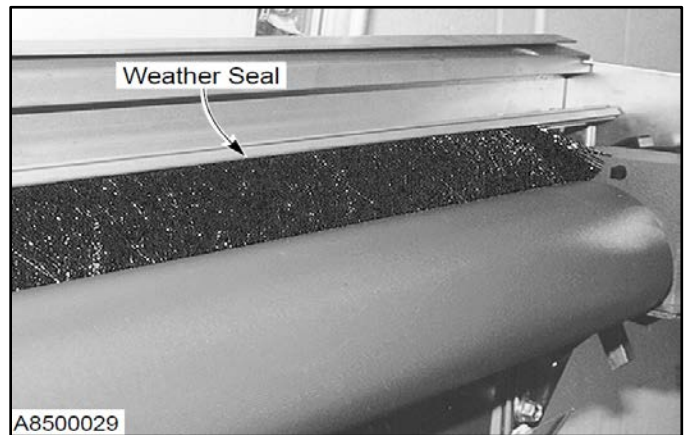


Figure 14

**2. Motor Gearbox Assembly:** The motor gearbox is filled with synthetic oil, which does not need to be changed but should be checked regularly for proper oil level. The level can be checked at the plug located on the lower section of the gearbox.

Recommended oil for refill is as follows:

- Mobil®<sup>1</sup> SHC 630 Synthetic Gear Oil (Mobilgear 630)

Fill the gearbox by removing the breather at the top of the gearbox and add oil through exposed hole. Add oil until it starts draining from the check plug hole. (See Figure 13.)

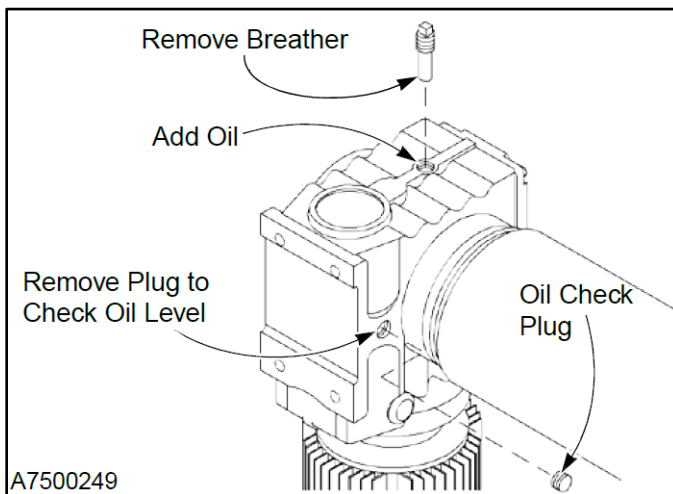


Figure 13

**Brush Seal Inspection**

**HEADER ASSEMBLY**

Inspect the header brush weather seal for wear or damage. (See Figure 14.) Replace if necessary. (See “BRUSH WEATHER SEAL” on page 12.)

1. Mobil is a registered trademark of Exxon Mobil Corporation.

**SIDE COLUMNS**

Inspect the side column brush weather seal for wear or damage. (See Figure 15.) Replace if necessary. (See “BRUSH WEATHER SEAL” on page 16.)

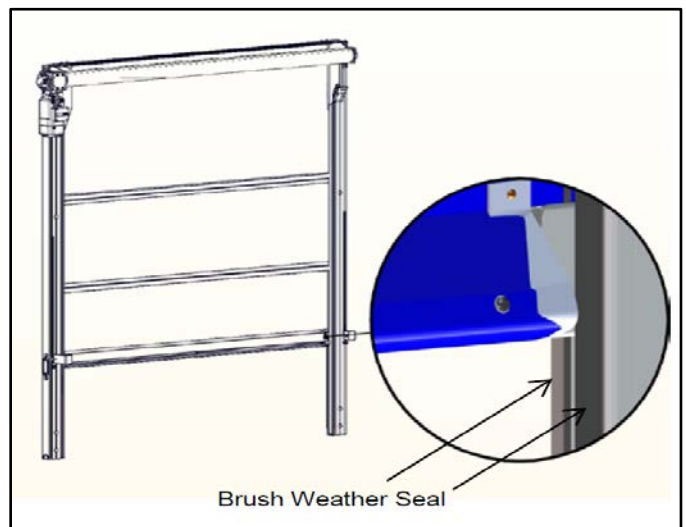


Figure 15

**Activator/Control Panel Inspection**

1. Inspect all warning/safety decals. All warning decals should be intact and clearly readable. Replace decals as needed.
2. Operate the door five or six complete cycles with each activator that has been installed on the door. Check the control panel for proper operation. If adjustment or repair is required, see the activator instructions or Rytec System 4 Drive & Control Installation & Owner’s Manual.

Typical activators may be floor loops, pull cords, push buttons, motion detectors, radio controls, photo eyes, etc. The opening is controlled by the activator, and closing may be controlled by the activator or a timer in the control panel.

**Electrical Connection Inspection**



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

1. Inspect electrical connections to the power drive assembly and encoder assembly.
2. Inspect connections of wires in the side column.
3. Inspect control panel wiring. See Rytec System 4 Drive & Control Installation & Owner’s Manual for control panel inspection procedure.

**Wall Anchor Inspection**

1. Turn off power to the door.



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

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

NOTE: Restrict access to the area around the door and remove it from service if any repairs are needed. All repairs must be done in accordance with building codes.

5. When all repairs and adjustments have been made, restore power to the door and return to service.

**Safety Decal Inspection**

Safety decals are vital to the door. This is to inform the owner and operators of procedures, proper operation, and possible hazardous situations. See Figure 16 and Figure 17 for a sample of how a safety decal should look at all times.

1. Check text on safety decals. It must be clear and readable. Replace as necessary.
2. Check for worn-out safety decals. No rips, tears, or missing information is allowed in an instructional area. Replace as necessary.

NOTE: Notify building maintenance of any safety decal discrepancies.



Figure 16

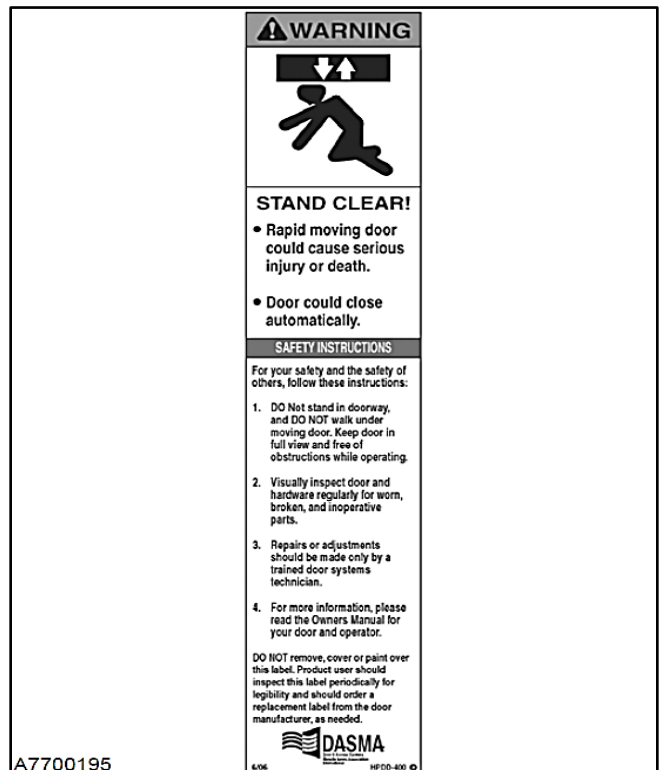


Figure17

**OPERATION**

**CONTROL PANEL**

The PredaFlex™ Door is equipped with the Rytec System 4 Drive & Control, a solid-state, microprocessor- 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 & Owner’s Manual.

**PHOTO EYES**

Your PredaFlex™ is equipped with two sets of photo eyes, one mounted on the front and one field-installed on the back of the door. The purpose of these photo eyes is to hold the door open or, if the door is closing, reverse the door to the open position if a vehicle, person, or any object is in the path of the photo eye beam.

The photo eye is not active when the door is closed. After the obstruction breaking the photo eye beam is removed:

- The door will remain open if it was originally opened by a non-automatic activator until it is closed by a non-automatic activator.
- The door will close automatically if it was originally opened with an automatic activator.

**FLEXIBLE BOTTOM EDGE ASSEMBLY**

The Flexible bottom edge provides a low impact design, should the edge be struck, the System 4 control places the door in a stop mode.

**Breakaway Capability**

**IMPACT**

Plastic tabs mounted at each end of the Flexible bottom edge provide adequate strength to keep the assembly in contact with the side columns during normal operation. The tabs and flexible edge however, are flexible enough to allow the edge to separate from either or both of the side columns should the flexible bottom edge be struck by a vehicle or load passing through the door. A kill switch assembly made up of magnets and electronic reed switches mounted in each of the side columns will place the door into “DOOR AJAR”, if the flexible bottom edge is separated from the side column(s). This feature helps prevent the flexible bottom edge from being bent or damaged if struck by a vehicle or load. (See Figure 18.)

NOTE: If the bottom bar has been impacted, DOOR AJAR will appear on the display. This is expected, and the DOOR AJAR error places the door into a "JOG" mode.

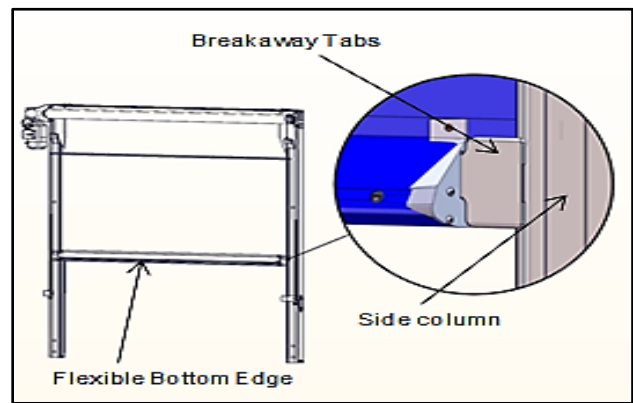


Figure 18

**RESET FLEXIBLE BOTTOM EDGE ASSEMBLY**



**If the flexible bottom edge or door panel assembly has been damaged, remove door from service.**

1. Position the breakaway tabs on the flexible edge in front of the side column where the angled guide plate is located. (See Figure 19.)

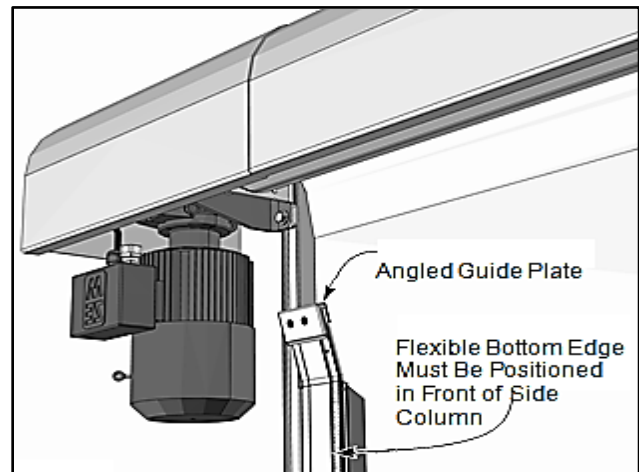


Figure 19

2. Press and hold the up arrow on the control panel until the door is in the full-open position. This will allow the tabs to fall back into the side columns.
3. Press the down arrow and the door will close in automatic mode and be ready for service.

NOTE: Verify the panel material is in the side columns.

4. Check operation of door.

**POWER DRIVE SYSTEM**

The PredaFlex™ power drive system consists of an electric motor/brake assembly, reduction gear assembly, and encoder. The standard PredaFlex™ is equipped with a variable-speed motor. The control system will vary the door speed depending on door position. The power drive system can be mounted on either the right or left end of the fabric roll.

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 should there be a power failure, or when routine maintenance needs to be performed with the power disconnected. A hand crank (provided with your door) is used to manually open or close the door. (See Figure 21.)

An encoder, mounted on the end of the fabric drum shaft, generates electrical signals as the door panel moves. These signals are used by the control system to monitor the position of the door.

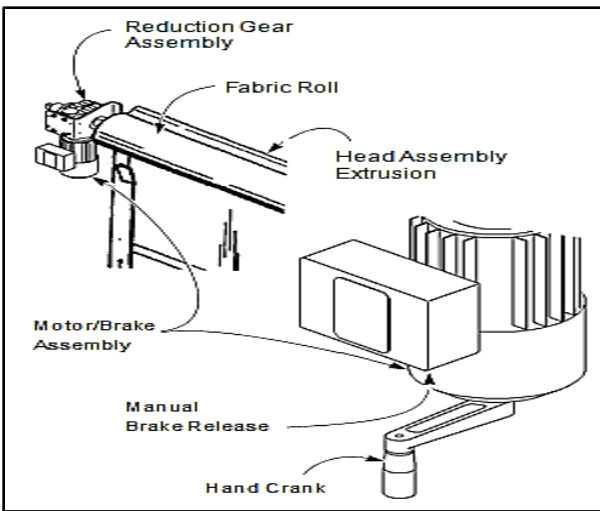


Figure 21

**MOVE THE DOOR MANUALLY**



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

DO NOT stand under the door panel when moving the door.

1. Turn OFF power to the door.
2. To lower the door:



The door panel will close very quickly if the brake is fully released. Releasing the brake partially will allow the door to close smoothly. Failure to restrict motor movement using the brake can result in the panel free-falling to the closed position, which can result in damage to the flexible bottom edge and fabric panel, and/or personal injury.

- a. Partially pull down and hold the manual brake release to disengage the brake. Allow the door to close smoothly to the desired height. (See Figure 22.)

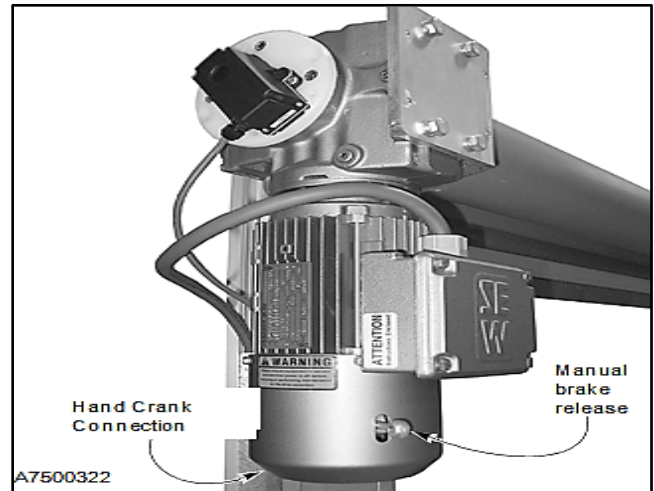


Figure 22

- b. Release the manual brake release to engage the brake and lock the door in place.

**3. To raise the door:**

- a. Place the crank handle on the shaft at the bottom of the motor.

NOTE: Hold the crank firmly while disengaging the brake to prevent the door from closing.

- b. Pull down and hold the manual brake release to disengage the brake.
- c. Using the crank, hand turn the motor shaft to raise the door as needed.
- d. Release the manual brake release to fully engage the brake.
- e. Remove crank.

4. Repeat steps 3b-3d until the door is raised to the desired height.



Remove the crank handle before applying power to the door. Failure to remove the crank handle could result in personal injury and property damage.

5. Turn ON power to the door.

**ADJUSTMENTS**

**DOOR OPEN- AND CLOSE-LIMIT POSITIONS**

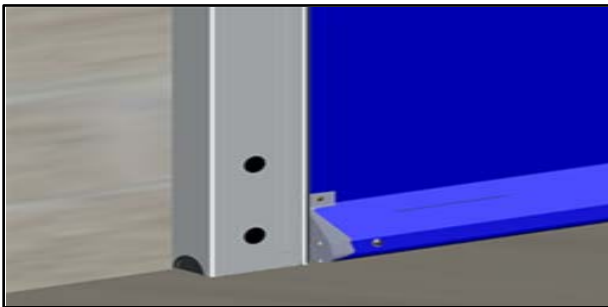
See the Rytec System 4 Drive & Control Installation & Owner’s Manual for the proper procedure for adjusting the open and close door limits. The open- and close-limit door positions are detailed below.

**Close-Limit Position**

The close-limit position should be adjusted so that the door travel allows the vinyl covered flexible bottom edge to gently seal against the floor. (See Figure 23.)



**Damage to the vinyl, flexible bottom edge or other bottom edge parts can occur if the door is allowed to seal too tightly against the floor.**

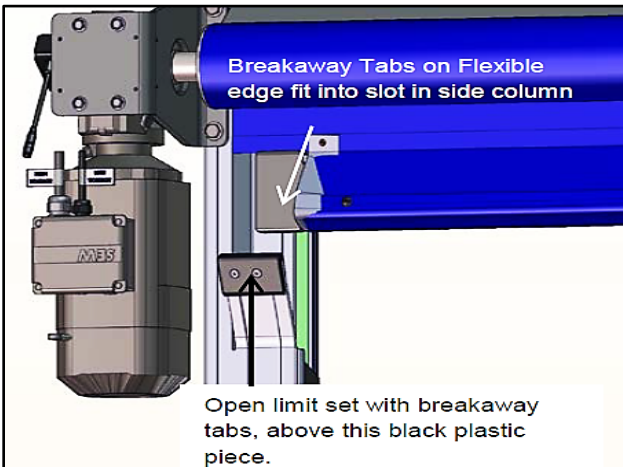


**Figure 23**

**Open-Limit Position**

The open-limit position should be adjusted so that the door travel allows the flexible edge assembly to stop at the position shown in Figure 24.

NOTE: It is important that the plastic breakaway tabs on the ends of the flexible bottom edge 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 flexible bottom edge if the door is broken away.



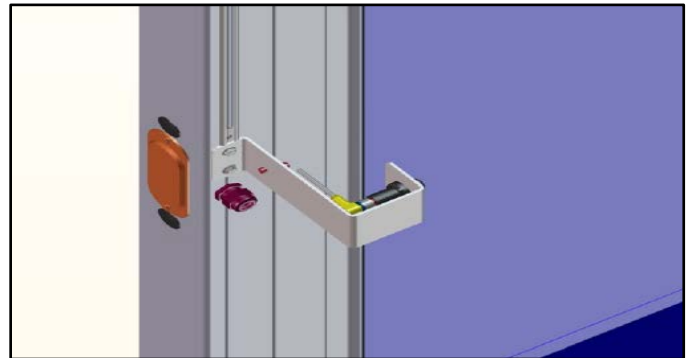
**Figure 24**

**FLEXIBLE BOTTOM EDGE**

The PredaFlex™ door functions differently than the Rytec PredaDoor NXT®. The flexible bottom edge has no reversing edge or switches to adjust. The edge is flexible which allows the edge to bend therefore, pulling the breakaway tabs out of the side columns stopping the door. The breakaway tabs contain magnets that complete the magnetic reed switch circuit. When the edge is impacted and the tabs are knocked out of the side columns (DOOR AJAR) the magnetic reed switch stops the door. Raise (JOG) to the full OPEN position, the door will reset and operate normally. It is not necessary to RESET the door after impact. The signal wires for the magnetic reed sensors are connected to terminals 291 & 292 in the System 4 controller.

**PHOTO EYE TESTING**

The PredaFlex™ has two sets of photo eyes. During closing block the photo eye and door should reverse. This is the same process to test the other set of photo eyes. When the photo eye is blocked a message should appear on the display indicating the photo eye is blocked. The message will remain until the blockage is removed. If nothing appears to be blocking the photo eyes further troubleshooting may be necessary. The photo eyes are black cylindrical, SMT3000 designates transmitter, while SMR 3215 designates the receiver. The transmitter should have a constant GREEN light near the cable connection point. This indicates power to the transmitter. The receiver will have a GREEN light indicating power with a YELLOW alignment light. The YELLOW light will go off when the receiver is blocked or not in alignment. Front set of photo eyes shown in Figure 25.



**Figure 25**



**FABRIC ROLL ADJUSTMENT**

1. If the fabric is not tracking properly, verify that the fabric roll is level. Adjust as required. (See Figure 26.)

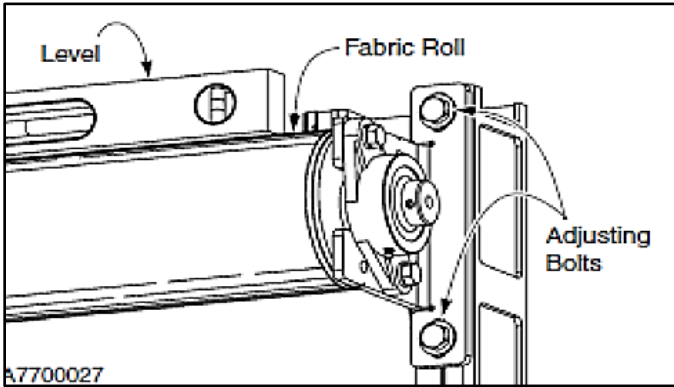


Figure 26

If the fabric roll is level and the fabric does not track properly, ensure that the side columns are plumb. Adjust as required.

**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 27.)



Figure 27

3. Remove sealing band. (See Figure 28.)

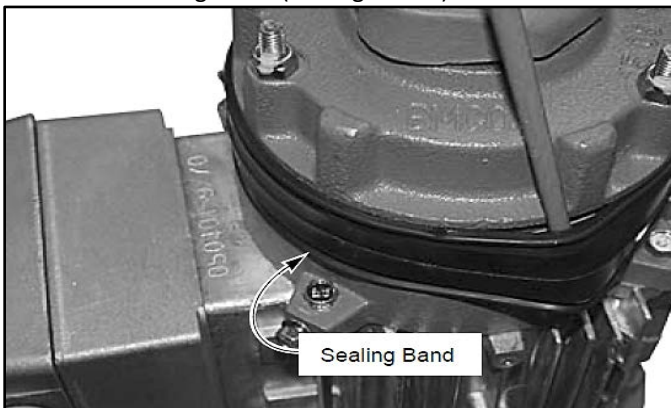


Figure 28

4. Using a feeler gauge and a nut driver, adjust the retaining nuts until you achieve the proper air-gap of 0.010–0.024 in. (See Figure 29 and Figure 30.)

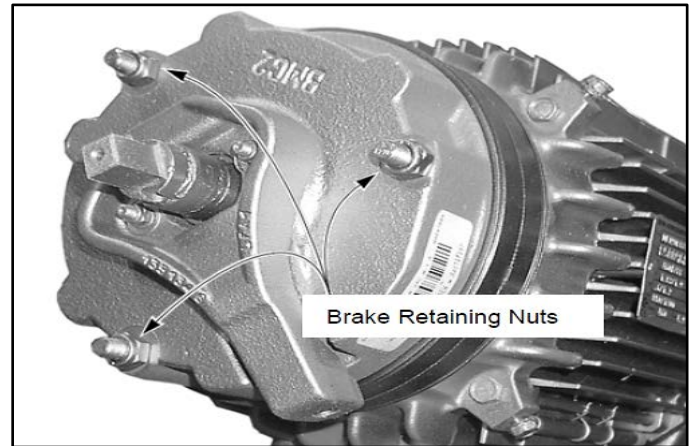


Figure 29



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

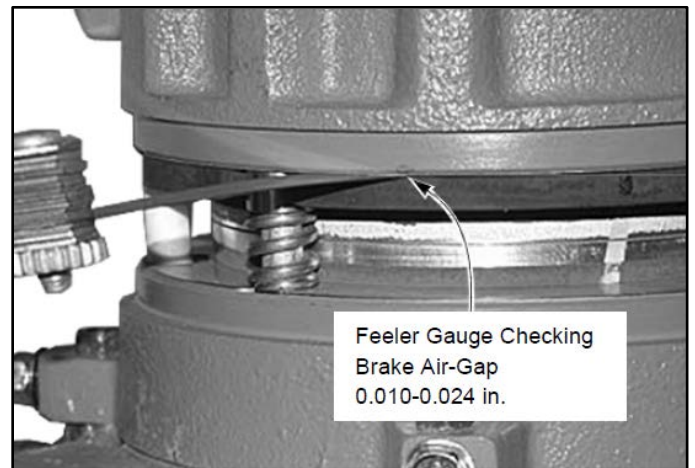


Figure 30

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

REPLACEMENT PROCEDURES

BRUSH WEATHER SEAL

Header Assembly

NOTE: On doors equipped with a hood, the hood will have to be removed to gain access to the weather seal.

1. From either side, remove two serrated-flange hex screws and nuts securing the header extrusion and support bracket to the side column. (See Figure 31.)

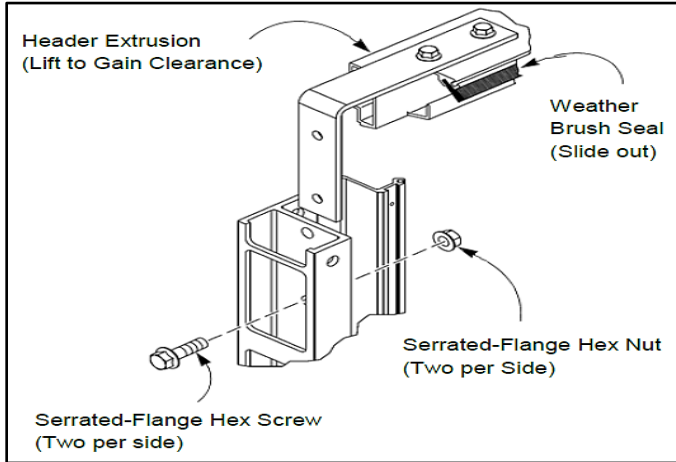


Figure 31

2. Lift the header extrusion slightly to gain clearance and remove the damaged brush weather seal by sliding it out of the extrusion.
3. Insert the new brush weather seal in the channel. (See Figure 32 and Figure 33 for positions.)

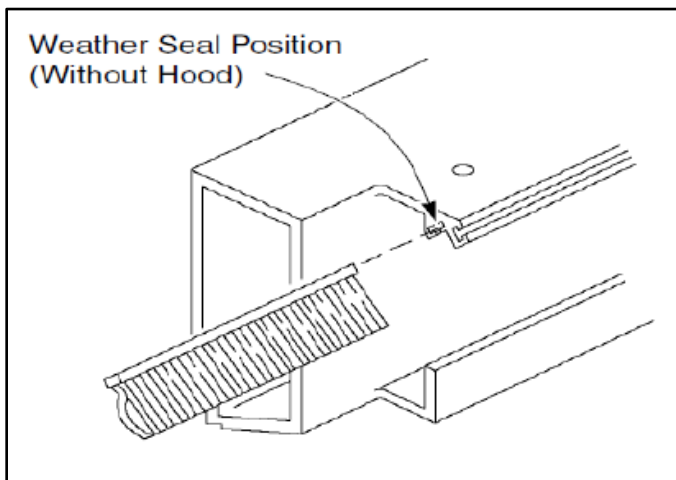


Figure 32

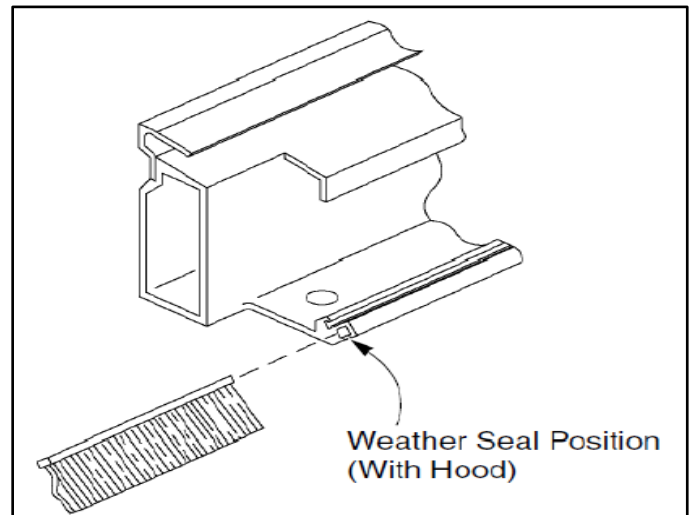


Figure 33

4. Lower the header extrusion and secure to the side column with serrated-flange hex screws and nuts.

Side Columns

1. Remove set screws in side columns and remove the old seals. (See Figure 34.)

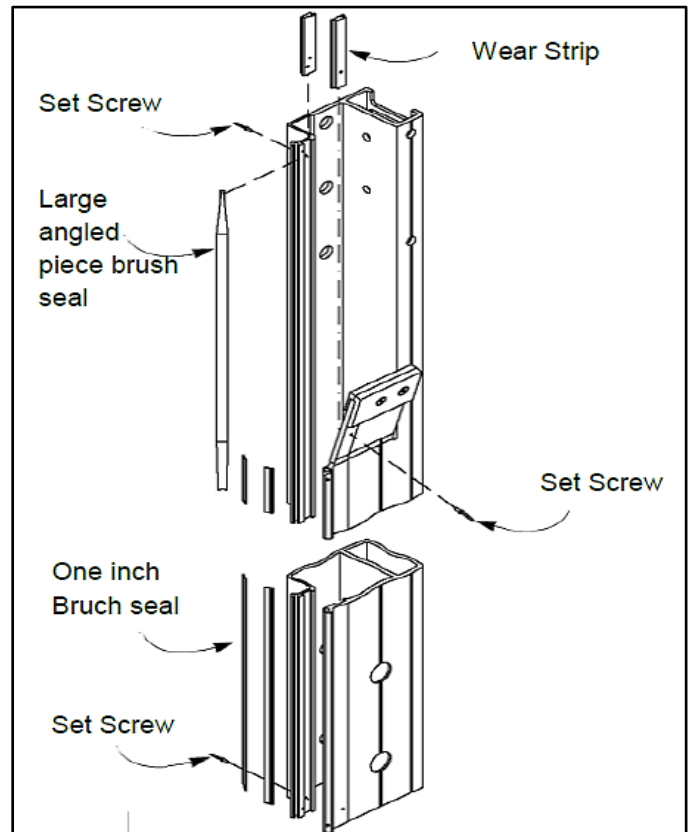


Figure 34

2. Install new brush seals and set screw in place.

### REPLACING MAGNETIC REED SWITCHES

The PredaFlex™ uses a magnetic reed switch located in each of the side columns. The reed switches are held closed by the magnets attached to the breakaway tabs. As the door travels the magnets continuously hold the reed switches closed and the door is allowed to operate. When the breakaway tabs are removed from the side column the magnetic reed sensor can no longer see the magnets and the switch opens the “DOOR AJAR” circuit stopping the door. The system can be reset by placing the flexible bottom edge back into the guides or “JOGGING” the door to the full OPEN position using the UP arrow on the System 4 control. The magnetic reed sensor is installed into a plastic extrusion to protect the sensors. The plastic extrusion is mounted inside each side column using self-tapping screws. (See Figure 35 & 36)

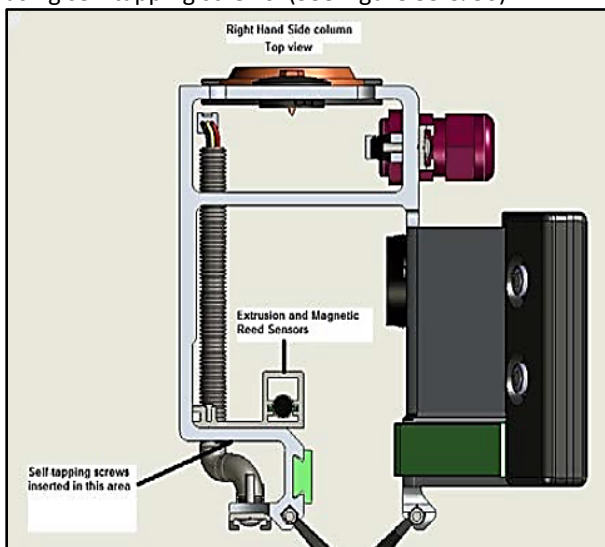


Figure 35

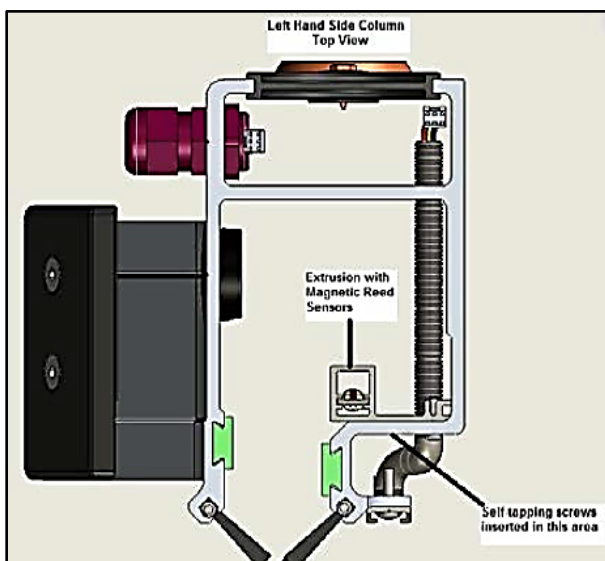


Figure 36

The magnetic reed sensor is made with a series of magnetic reed switches. Each piece of the magnetic reed sensor is approximately 17 inches long and contains seven individual switches. The height of the door will determine how many sections of the magnetic reed sensor may be on your particular door. Some doors may contain a small section (less than 7 switches). The sections of magnetic reed switches are connected together using a small white plastic connector. The end of the magnetic reed has small silver tab that simply slides into the white connector. A small drop of glue is used with the white connectors. Slight pulling force may be required to pull the sections apart. **DO NOT** bend or twist the switches more damage could occur. An infinite number of magnetic reed switches can be connected in this fashion. When replacing the magnetic reed switches and the extrusion caution should be used. **Too much flexing the extrusion and/or reed switches could cause damage to the switches.** (See Figure 37)



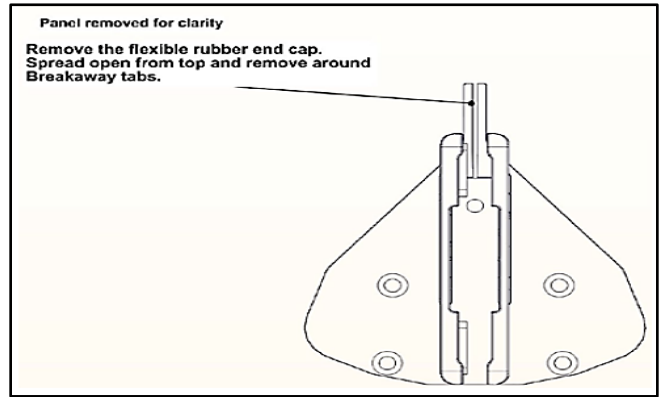
Figure 37

**Breakaway Tab Replacement**

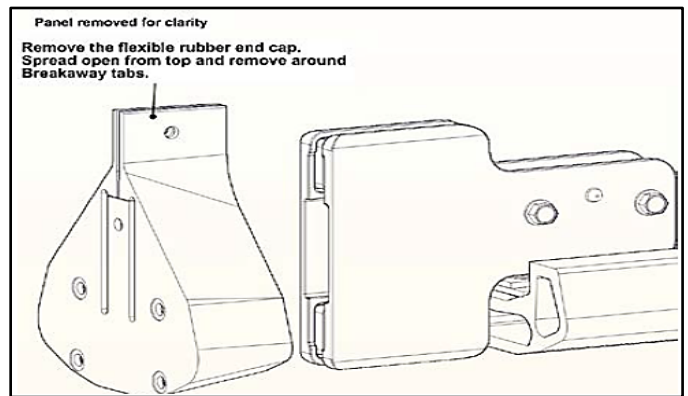
In the event one of the back plastic breakaway tabs needs replacing. The following steps will assist you in the replacement process. The breakaway tabs for the PredaFlex™ door are different than other breakaway tabs used in other models of Rytec doors. The breakaway tabs for the PredaFlex™ have a front and rear tab and also contain magnets for the magnetic reed sensors in the side columns. When the breakaway tabs leave the track of the side columns the magnetic reed switch no longer see the magnets and stop the operation of the door. Below are the steps to replace the breakaway tabs.

1. Place the door in "JOG MODE" by pushing the STOP and DOWN arrow at the same time until the display reads, "JOG MODE".
2. Jog the door to a comfortable working height, typically shoulder height.
3. Lock out and tag out the electrical supply.
4. Lift the flexible edge out of the side column to expose the end of the edge with the broken breakaway tab/s.
5. Remove the screws that attach the rubber end cap. (See Figure 38 & 39)

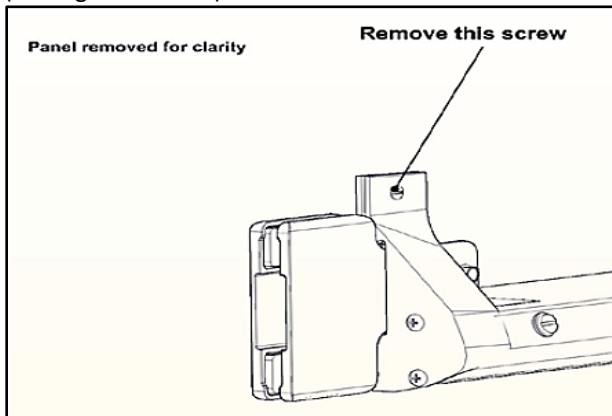
6. Remove the rubber end cap from the flexible edge. Spread the rubber end cap from the top near the screw that was removed attaching the rubber tabs to the vinyl panel. (See Figure 40 & 41).



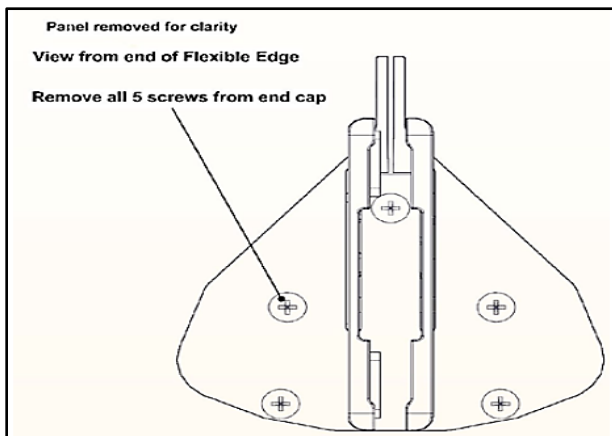
**Figure 40**



**Figure 41**

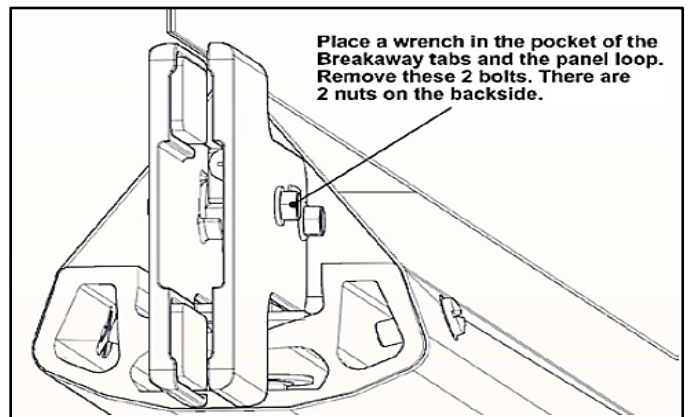


**Figure 38**



**Figure 39**

7. Remove the two bolts and nuts holding the breakaway tabs. (See Figure 42).



**Figure 42**

8. Replace with the new breakaway tabs and re-assemble. (See Figure 43).

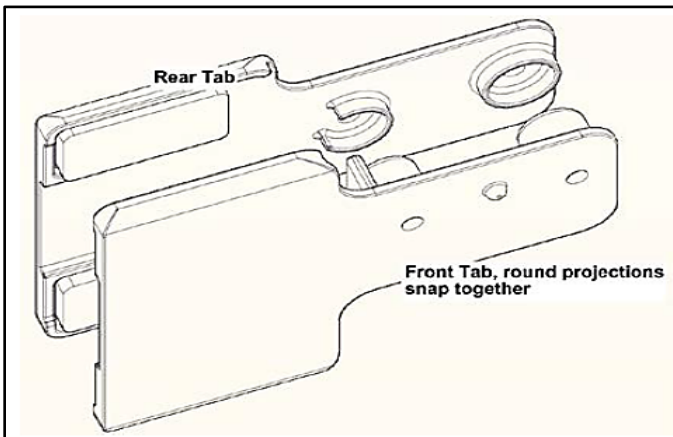


Figure 43

9. Place the flexible edge back into the side columns.
10. Remove the lock out tag out and check operation of the door.

**Replacing the flexible bottom edge assembly**

The bottom panel and the flexible edge are replaced in a complete assembly. Two (2) roll pins, one located on each end of the windrib are removed and the entire panel assembly is slid left or right out of the windrib. The new assembly is slid into place and the roll pins replaced.

1. Lock out and tag out the electrical control.
2. Lift and remove the flexible bottom edge and windrib from the side columns.
3. Remove roll pins (See Figure 44).

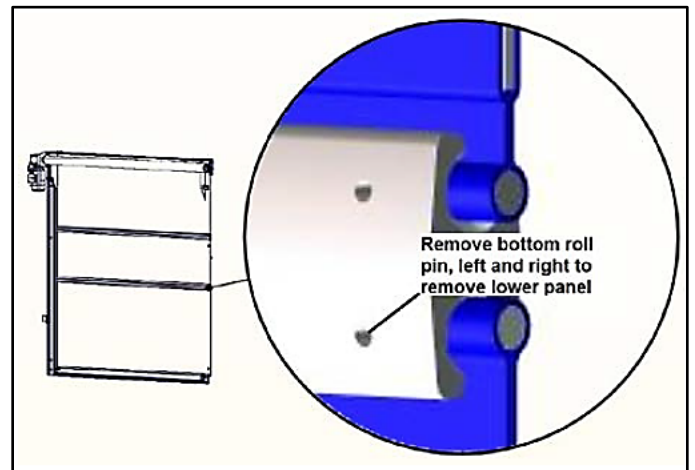


Figure 44

4. Slide the new assembly into the windrib and replace the roll pins.
5. Place the windrib and flexible bottom edge back into the side columns.
6. Remove the lockout, tag out and check operation of the door.



## 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 Dept. at 800-628-1909 or 262-677-2058 (fax).
3. To ensure that the correct parts are shipped, please include the serial number of your door with the order. The serial number is located on the left hand side column, on the drive motor gearbox or inside the System 4 control panel. (See Figure 47.)

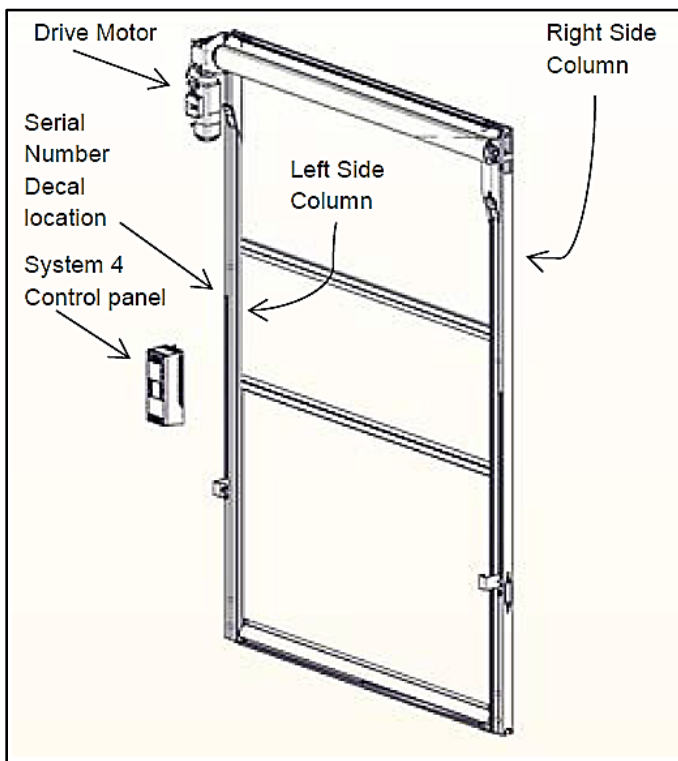


Figure 47

### 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) and an incident number.

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

### DOOR SERIAL NUMBER(S)

To obtain your DOOR SERIAL NUMBER, there are three universal locations where this information can be found. These are at the outside edge of the left side column (approximately eye level), on the drive motor, and on the inside of the System 4 control panel.

SIDE COLUMNS WITH ALUMINUM HOOD

PARTS LIST - SIDE COLUMNS WITH ALUMINUM HOOD

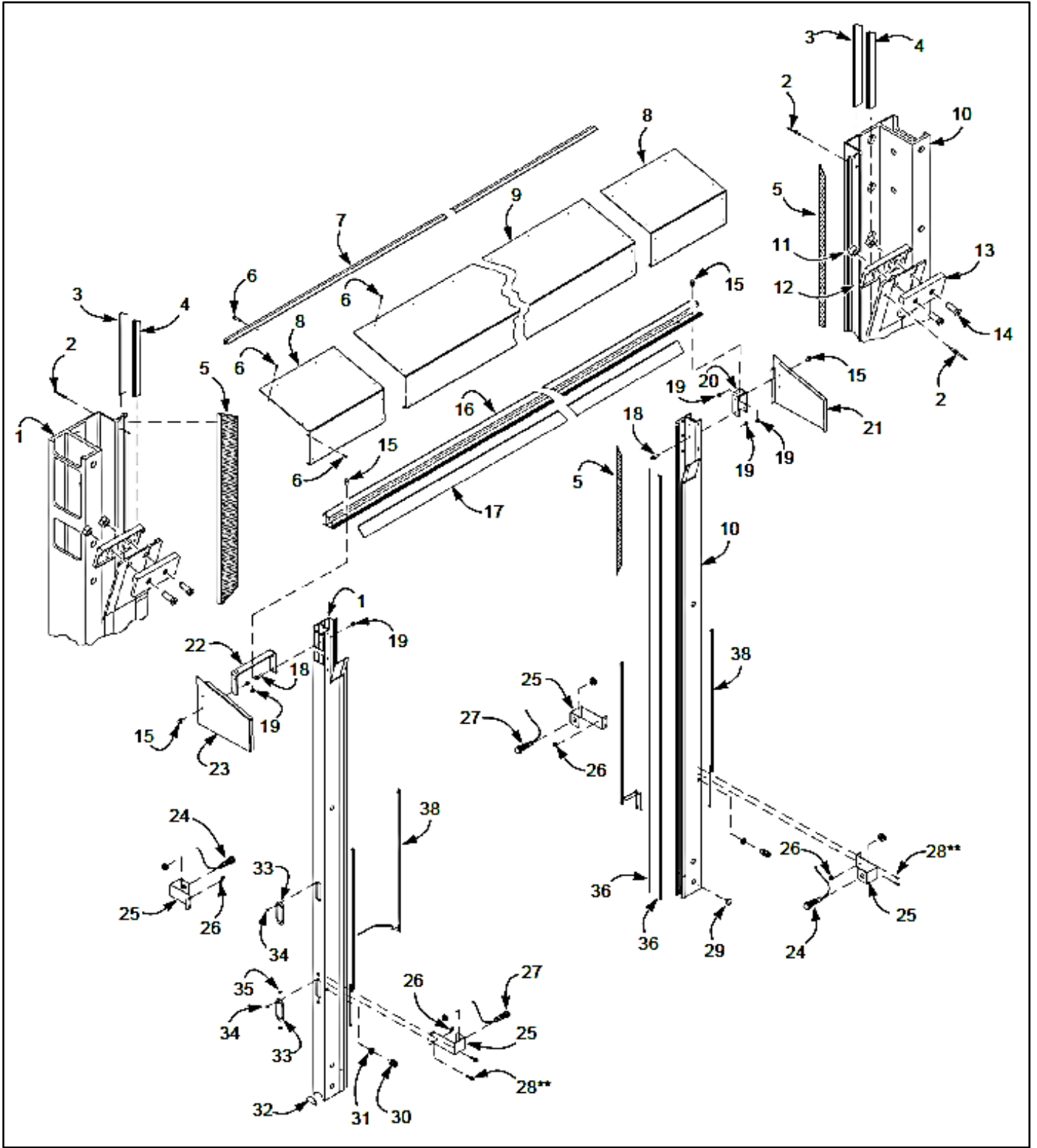


Figure 48



ITEM	QTY.	PART #	DESCRIPTION	ITEM	QTY.	PART#	DECIPTION
1	1	Consult Factory*	Side Column, Left	19	11	0553229	Nut, 3/8-16
2	12	0556323	Rivet, 1/8 in. Dia.				Serrated-Flange
3	2	0705011*	Wear Strip, Rear	20	1	0703024	Support Bracket, Non-Drive Side
4	2	0705011*	Wear Strip, Front				(w/ optional hood)
5	2	106015-2*	Weather Seal, Brush	21	1	0702012	Hood Cover, Right (optional)
6	A/R	0551050	Screw, 5/16 <sub>s</sub> -18 x 3/4 in. Tapping Sheet Metal	22	1	0703837	Support Bracket, Drive Side (w/ optional hood)
7	1	0703839*	Extrusion, Cover	23	1	0702011	Hood Cover, Left (optional)
8	2	0702013	Hood Cover, End Section (optional)	24	2	00141088	Photo Eye, Receiver, Telco Space Master
9	1	0702598*	Hood Cover, Center (optional)	25	4	1210029-0	Bracket, Mounting, Photo Eye
10	1	Consult Factory*	Side Column, Right	26	4	0005401	Tie, Cable, Push Stud
11	2	0553277	Nut, 1/4-20, Hex, Nyloc, Zinc, Thin	27	2	00141087	Photo Eye, Transmitter, Telco Space Master
12	1	1060118-2B	Guide, Side Column Refeed, Right Rear, NXT, Molded	28**	4	0550006	Screw, 1/4-20 x 3/4 in. Serrated-Flange
13	1	1060118-2A	Guide, Side Column Refeed, Right Front, NXT, Molded	29	6	5550088-0	Plug, 1 1/4 in. Dia., Dome
14	2	S021698	Screw, 1/4-20 UNC X 0.75 LG, FHSCS, 18-8	30	1	0014491	Cord Grip, 1/2 in. NPT
15	7	0550254	Screw, 3/8-16 x 3/4 in. Serrated-Flange	31	2	0014492	Lock Nut
16	1	0799026*	Extrusion, Spreader	32	2	1060115-0	Hole Plug, Half Moon, Rubber, PD NXT
	1	Consult Factory	Extrusion, Spreader (used w/ right side motor w/ hood and thru beam emitter)	33	2	0004004	Cover, Outlet Box
	1	Consult Factory	Extrusion, Spreader (used w/ left side motor w/ hood and thru beam emit- ter)	34	4	0551325	Screw, #10-16 x 1/2 in. Phillips Pan-Head, Self- Tapping, Serrated-Flange
17	A/R	0009177*	Weather Seal, Brush 3 in.	35	A/R	0704008	Plug, 7/8 in. Dia., Dome
18	4	0550261	Screw, 3/8-16 x 1-1/4 in. Serrated-Flange	36	1	1200141-0*	Weather Seal
				37	4	1210173-0	LED Warning Strip
				38	1	0016333	Serial Number Plate (not shown)

A/R = as required

\*Items are produced based on manufactured height and width of door.

\*\*Not part of assembly.

#### ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER

To ensure you receive the correct parts when placing an order, always include the serial number of your door. Also, due to product enhancement, the actual parts on your door may be different from those shown in this manual.

DRUM ASSEMBLY

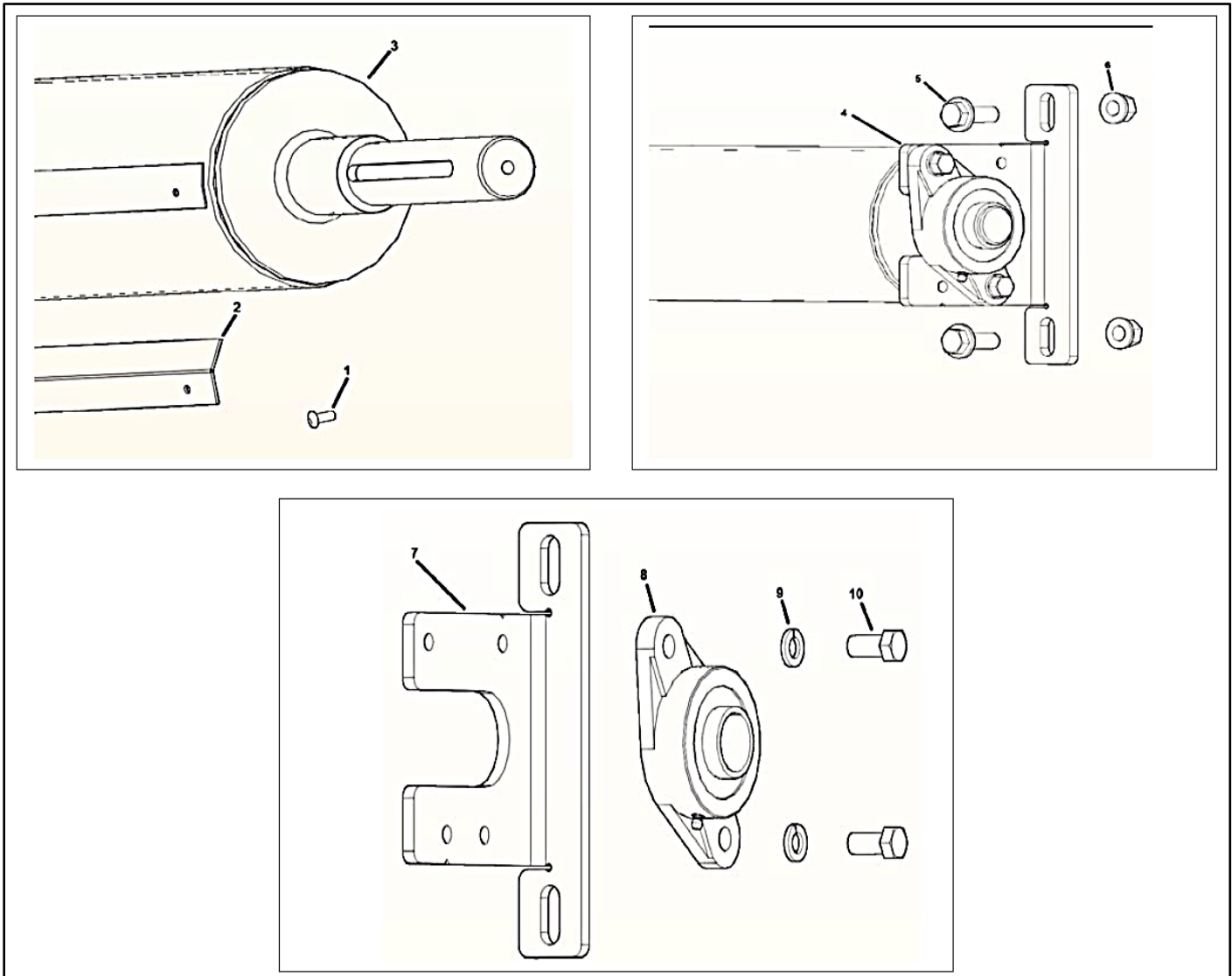


FIGURE 49

ITEM	QTY.	PART#	DESCRIPTION
1	A/R	0556167	Rivet, 3/16 in. Stainless
2	1	0702010*	Strap, Clamp, Panel Mounting
3	1	0703019*	Drum Assembly*
4	1	1060108-0	Bearing Bracket Assembly
5	2	0550303	Bolt, 1/2-13 X 1-1/4 in
6	2	0553100	Nut, 1/2-13, Hex, Flang
8	1	0704010	Bearing Lock washer, 7/16

## MOTOR/GEARBOX ASSEMBLY

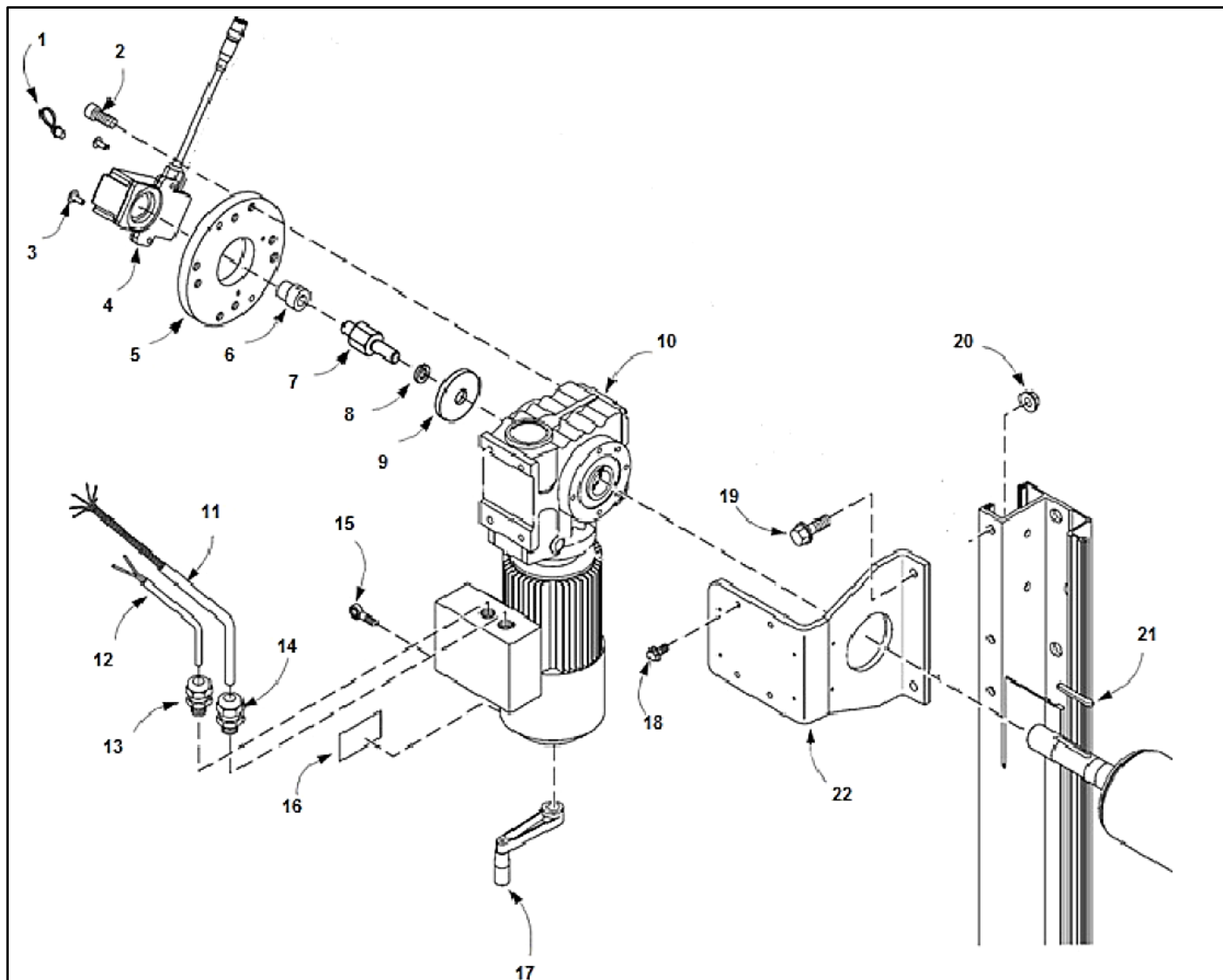


FIGURE 50

A/R = as required

\*Items are produced based on manufactured height and width of door.

\*\*Not part of assembly.

**ALWAYS INCLUDE SERIAL NUMBER OF DOOR WHEN PLACING ORDER**

To ensure you receive the correct parts when placing an order, always include the serial number of your door. Also, due to product enhancement, the actual parts on your door may be different from those shown in this manual.

**PARTS LIST – MOTOR/GEARBOX ASSEMBLY**

<b>ITEM</b>	<b>QTY.</b>	<b>PART#</b>	<b>DESCRIPTION</b>
1	1	0005401	Tie, Cable, Push Stud Mounting
2	2	S021059	Screw, M8 x 1.25 x Socket Head Cap SS
3	2	S550317	Screw, 10-34 UNC x Phillips Truss Head
4	1	00141028	Encoder
5	1	1060001-0	Mounting Plate,
6	1	00141030	Shaft End, Encoder,
7	1	S703988	Shaft, Encoder
8	1	0554118	Washer, <sup>3</sup> / <sub>8</sub> in., Split
9	1	5550015-	Washer, Eurodrive
10	1	Consult	Motor/Gearbox
11	1	00141007	Cable, 16/6, Shielded,
12	1	0014435	Cord, 18/
14	1	0014791	Cord Grip, 1/2 in.
	1	0014734	Cord Grip, 3/4 in.
15	1	0550278	6 Conductor, (3-hp Brake Release Eye
16	1	A0500042	Decal, Manual Door Operation
17	1	0704038	Crank Handle
18	4	0021757	Hex Bolt Serrated M10-1.5 x 30 mm
19	2	0550303	Screw, 1/2-13 x 1-1/4 Serrated Flange, Hex-Head
	2	0550024	Screw, 1/2-13 x 2 in. Serrated-Flange, Hex-Head (used w/ item
20	2	0553100	Nut, 1/2-13, Serrated-Flange, Hex
21	1	0704094	Key, 5/16 x 5/16 x 3.98 Round Ends
22	1	0703911	LH Bracket, Motor
	1	0703912	RH Bracket, Motor

## OPTIONAL HOOD ASSEMBLY

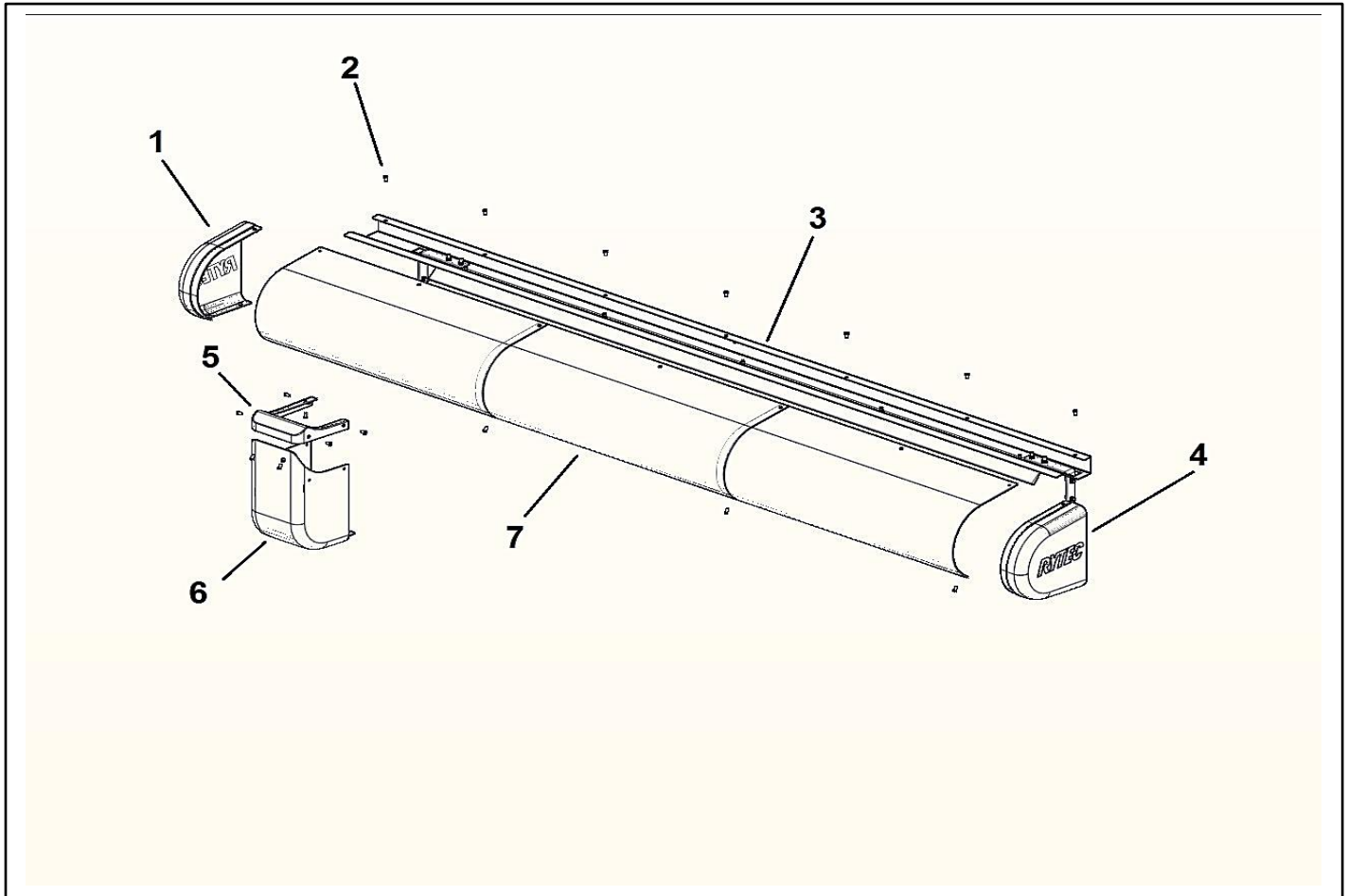


FIGURE 51

ITEM	QTY.	PART #	DESCRIPTION
1	1	1160076-1	Cap Assembly, Hood, LH
2	19	S021797	Screw, ¼-20 ¾, SS
3	1	1160055-0Z04	Support, Hood Assembly
4	1	1160076-2	Cap Assembly, Hood, RH
5	1	1060252-1	Bracket, Motor Cover Assembly LH
6	1	1160253-1	Cover, Motor LH drive
7		*	Hood Assembly, covers

\*Items are produced based on  
manufactured height and width of door.  
Door serial number required to order part.

PANEL ASSEMBLY

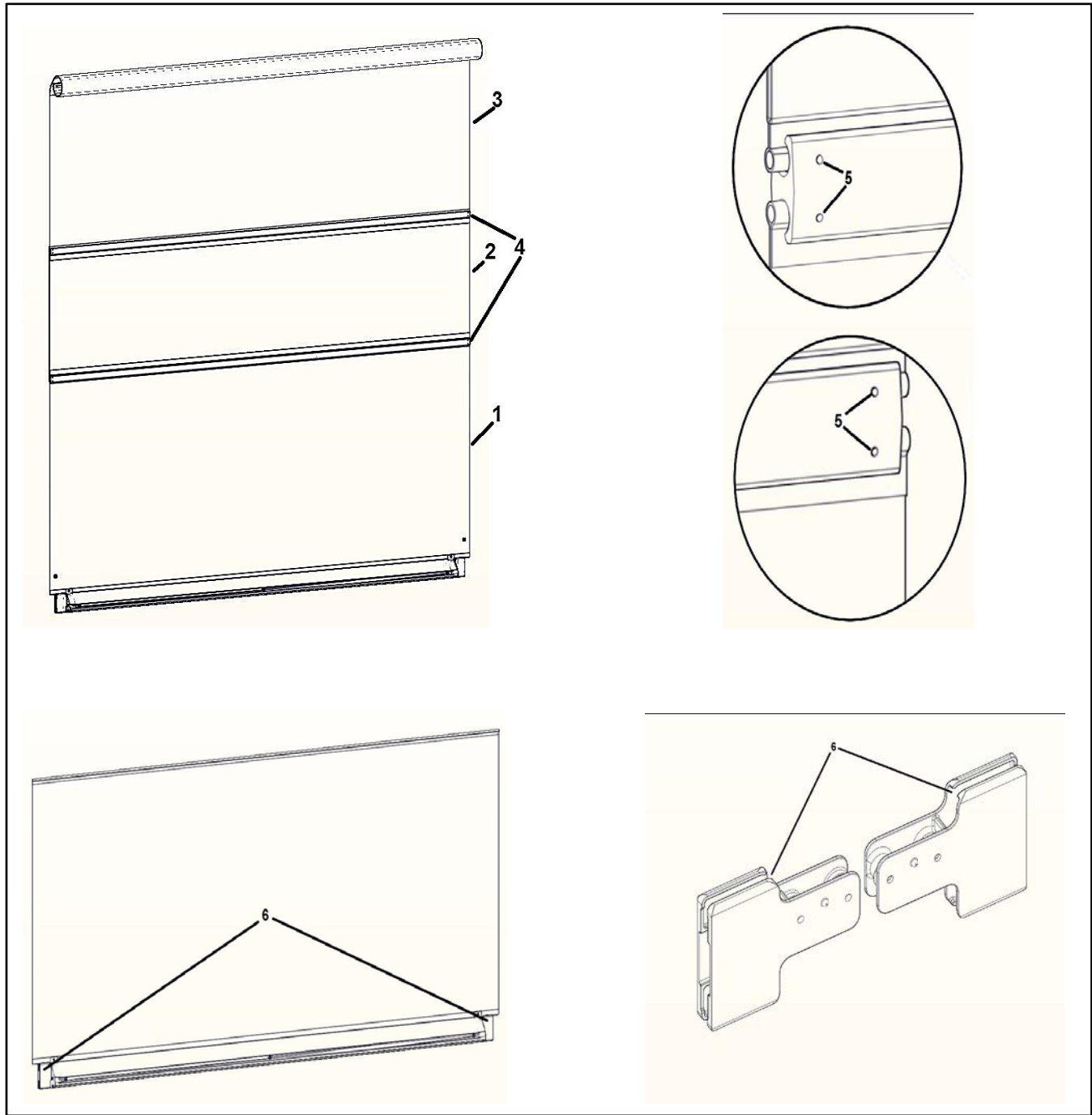


FIGURE 52

ITEM	QTY.	PART #	DESCRIPTION
1	1	1060347*	Bottom Panel Assembly
2	1	1060328*	Vision Panel
3	1	1060328*	Upper Panel
4	2	1060154*	Windrib
5	4	0552324	Roll Pin, 1/8 in X 5/8 in L
6	1	1060442-0	Breakaway tabs 4 pack

\*Items are produced based on manufactured height and width of door. Door serial number required to order part.

PARTS LIST – MAGNETIC REED SWITCH

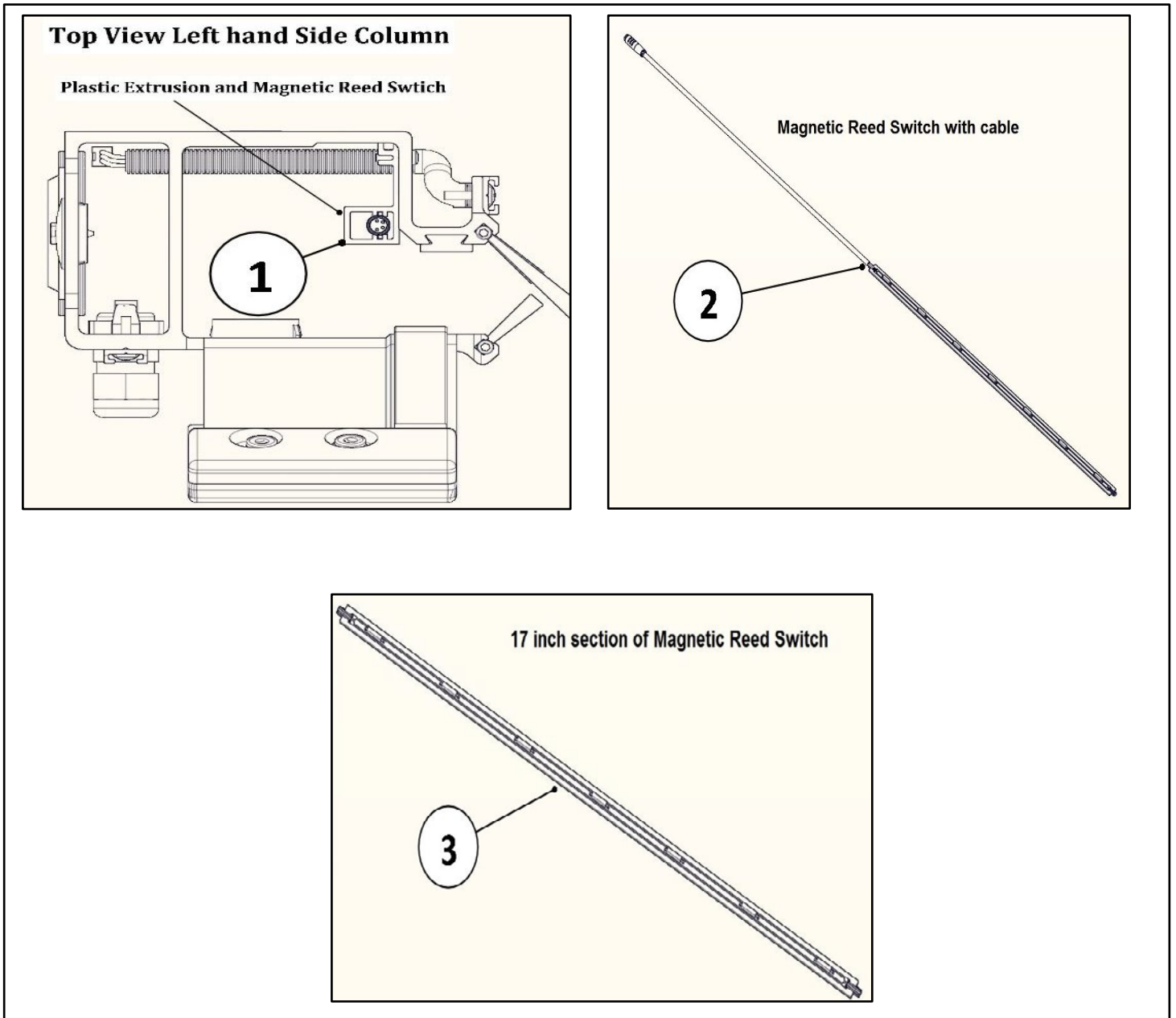


FIGURE 53

ITEM	QTY.	PART NUMBER	DESCRIPTION
1	1	1060426-1	Extrusion, Reed Sensor Housing LH
1	1	1060426-2	Extrusion, Reed Sensor Housing RH
2	2	1060427-0	Assembly, Reed Sensor W/Connector
3	A/R	1060424-0	Reed Sensor Section, 17"

