R Y T E C

Pharma Seal®

Owner's Manual



PHARMA SEAL® PS5000 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 **Pharma Seal® PS5000** ("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.
- Standard door panels, including standard 2-ply USDA, for a period of Three (3) Years from Shipment.
- Vinyl loop seal, vision panel sections, windows, wind knobs 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 Pharma-Seal[®] 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 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.

The wiring connections and schematics 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.

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 inside the left side column (approximately eye level), on the drive motor, and on the door of the System 4 control panel. (See Figure 1.)

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

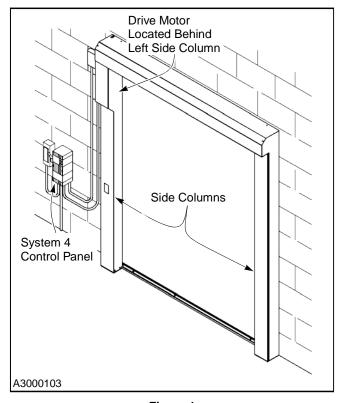


Figure 1

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 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 ARRANGEMENT OF DOOR PARTS

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 general information purposes only. It should not be relied upon solely for the operation and maintenance of your door and its subassemblies.

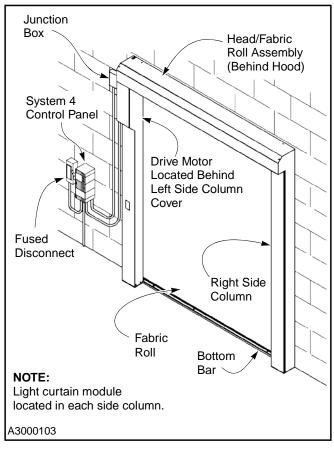


Figure 2

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 Pharma-Seal 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.

LIGHT CURTAIN SYSTEM

The Pharma-Seal is equipped with a two-module state-of-the-art RyBeam^{™1} light curtain system. One module is located in the right side column; the other is located in the left side column. A light curtain module is located in the gap between each side column and its cover.



Avoid spraying or wiping any type of cleaner or solvent on either light curtain module — especially when cleaning the door panel. (The light curtain modules are located in the side columns, behind the outer edges of the fabric panel.)

Some cleaning agents and solvents can cause serious damage to the electrical components. If you find it necessary to clean either side column or the door panel, use a mild detergent and only apply the detergent by hand — making sure to avoid all electrical components.

The light curtain modules produce an infrared curtain that covers nearly the entire area of the door opening, from the floor to a height of approximately 8 feet. (See Figure 3.)

In the event that a vehicle, person, or object interrupts the infrared light curtain anytime the door is closing, the light curtain modules will immediately signal the control panel to move the door to the fully open position, where the door will remain until the object is cleared from the door opening and the door close button is pushed.

The light curtain is not active when the door is stopped. The light curtain is powered up only when the door is closing. Also:

- 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.

1. RyBeam is a trademark of Rytec Corporation.

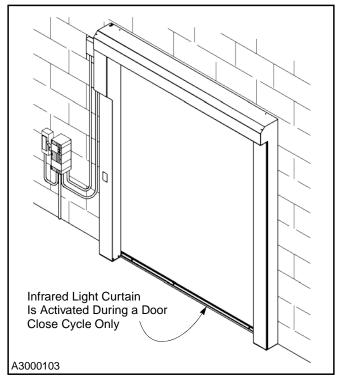


Figure 3

POWER DRIVE SYSTEM

The Pharma-Seal power drive system consists of a variable-speed motor, an electric brake mechanism, a reduction gear assembly, and an encoder. The control system, by way of the encoder, varies the speed of the door, depending on the position of the door.

The power drive system incorporates an electric brake mechanism that locks the drive motor when electrical power to the door is disabled. A brake release is provided to allow the door to be manually opened should there be a power failure, or when routine maintenance calls for power to be disconnected. (See Figure 4.)

The encoder, mounted on the end of the drive motor, generates electrical signals as the door panel moves. These signals are used by the control system to monitor the position of the door and to control the operating speed of the drive motor.

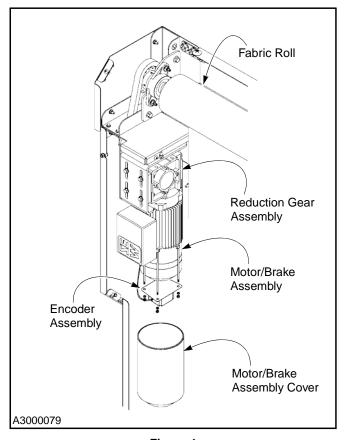


Figure 4

MANUALLY ASSISTED EGRESS



The 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.



Do not allow the bottom bar assembly to come in contact with the drum assembly when performing the following procedure. Otherwise, serious damage to the door could result.

2. Pull and hold the brake release lever located on either side of the door. (See Figure 5.)

NOTE: The counterweight system in the right side column will automatically lift the door to the egress position — the minimum egress position is at least half the height of the door opening.

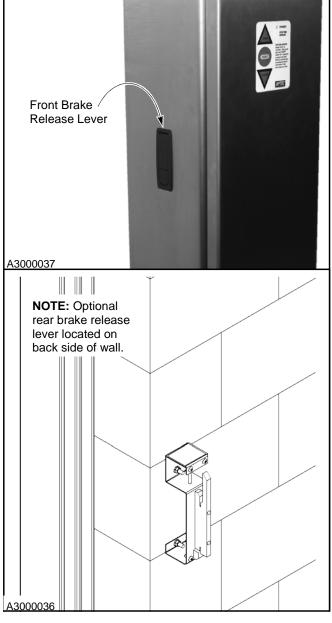


Figure 5

 Place the brake release lever back in its locked position to engage the brake mechanism and lock the door in the egress position.

NOTE: Power must be restored to the control system before the door can be closed. Once power is restored, set the door open and close limits as detailed in the Rytec System 4 Drive & Control Installation & Owner's Manual.

PLANNED MAINTENANCE RECOMMENDED SCHEDULE

	Daily	Quarterly
Damage Inspection		
Door Operation Inspection		
Light Curtain Inspection		
Egress System Inspection		
Mounting Hardware Inspection		
Electrical Connections Inspection		
Control Panel/Activator Inspection		
Drive Chain Inspection		
Lubrication		
Motor Brake Inspection		
Fabric and Wind Knob Inspection		
Bottom Bar Inspection		
Door Limit Inspection		
Wall Anchor Inspection		

DAILY INSPECTION

Damage Inspection

Inspect the door to make sure components have not been damaged. For example: bent bottom bar, torn fabric panel, damage to either side column or light curtain modules, etc. (See Figure 6.)

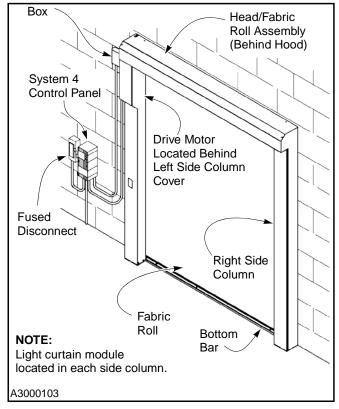


Figure 6

Door Operation

Run the door through four or five complete open and close cycles to make sure the door is operating smoothly and efficiently, without binding or unusual noise. DO NOT operate the door if it is not operating properly, as this could lead to additional damage.

Light Curtain Inspection



DO NOT stand under the door panel when performing the following inspection. If the light curtain is not working properly, the bottom bar could strike the person performing the inspection. DO NOT use the door if the light curtain does not operate properly. If the door does not reverse direction when the light curtain is tested, see "LIGHT CURTAIN MODULES" on page 10.

While the door is running through the down cycle, pass an object, such as a broom handle, through the door opening. If the reversing edge is operating properly, the door should immediately reverse direction and run to the fully open position.

Press the down key on the control panel or remote keypad to close the door after the inspection is complete. If the light curtain does not work properly, see "LIGHT CURTAIN MODULES" on page 10.

Egress System Inspection



Stay clear of the door when performing the following procedure.

- 1. With the door in the fully closed position, pull the brake release handle on the front side of the door.
 - The door should automatically open to about half the height of the door opening. If the door does not open to the required egress position, refer to "MANUALLY ASSISTED EGRESS" on page 3 and readjust the counterweight assembly.
- 2. Reset the control panel and repeat the test using the brake release handle on the back side of the door the results should be the same as described above for the front release lever test.
 - For further assistance, contact your Rytec representative or call the Rytec Technical Support Department at 800-628-1909.

QUARTERLY INSPECTION

Mounting Hardware Inspection

Check all mounting hardware to ensure it is tight. Example: motor mounting hardware, anchor or thru wall bolts, bearing block, and mounting hardware, etc. (See Figure 7 through Figure 10.)

MOTOR MOUNTING HARDWARE

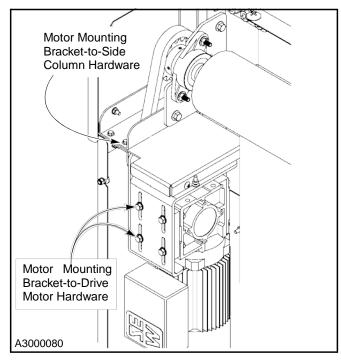


Figure 7

ENCODER HARDWARE

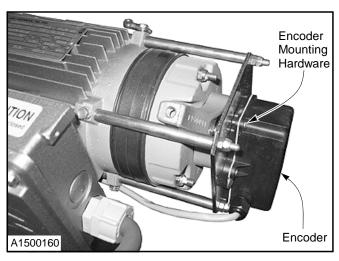


Figure 8

SIDE COLUMN HARDWARE

Inspect the hardware securing both side columns to the wall and floor. The hardware must be tightly secured. Also make sure the snap bushings that hold the side column covers to the columns are tight. (See Figure 9.)

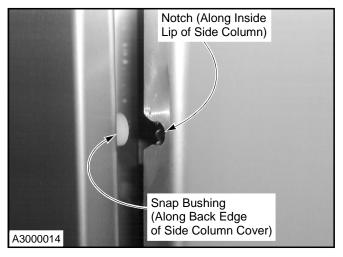


Figure 9

BEARING ASSEMBLY HARDWARE

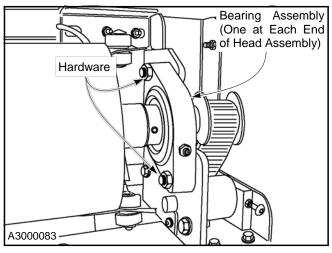


Figure 10

COUNTERWEIGHT HARDWARE

Inspect the hardware that secures the counterweight to the strap; it must be tight. (See Figure 11.)

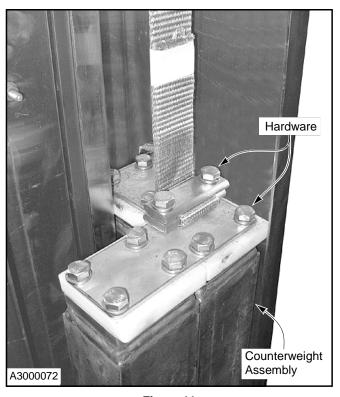


Figure 11

Electrical Connections Inspection



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

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

Control Panel/Activator Inspection

- Inspect all warning/safety labels. All warning labels should be intact and clearly readable. Replace labels as needed.
- Check the control panel for proper operation. If any adjustments or repairs are required, refer to the Rytec System 4 Drive & Control Installation & Owner's Manual.

 Operate the door five or six complete cycles with each activator installed on the door. Make any necessary repairs or adjustments. Refer to the manufacturer's instructions included with each activator.

Typical activators may include 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 within the control panel.

Drive Chain Inspection

- Inspect the drive chain for wear and tear. Replace when necessary. Make sure the master link is fully locked. (See Figure 12.)
- 2. Verify the chain tension is properly set. Adjust if necessary. The chain is properly tensioned when there is a 1/4 in. deflection on both sides of the chain.

To adjust the chain tension, first loosen the hex head cap screws securing the drive motor to the motor mounting bracket. Then move the drive motor up or down along the bracket until the proper tension is achieved. Tighten the screws to lock in the adjustment.

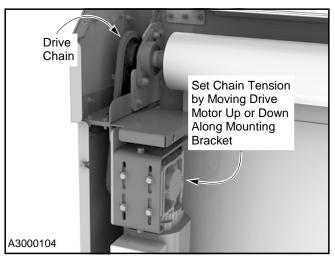


Figure 12

Lubrication

3. Lubricate Bearing Assemblies: The head/fabric roll assembly is supported at each end by a flanged bearing assembly. Each bearing assembly has a grease fitting to make it possible to lubricate the sealed bearings in the assembly. (See Figure 13 and Figure 14.)

The recommended lubrication for the bearing assembly is a lithium-based grease conforming to NLGI Grade 2 standards (a medium-viscosity, low-torque grease with an operating temperature range of -30°F to +200°F).

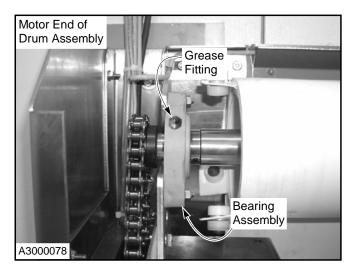


Figure 13

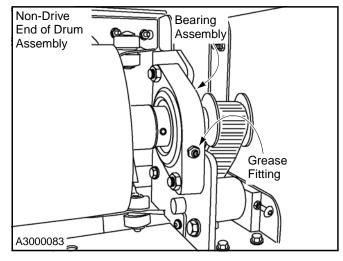


Figure 14

Motor Brake Inspection

The motor brake assembly is designed to stop the door panel travel at the positions indicated in the limit inspection section. If the limits are set properly and the door drifts past the set limit positions, adjust the motor brake. (See "MOTOR BRAKE ADJUSTMENT" on page 16 for procedures.)

Fabric and Wind Knob Inspection

1. Run the door to the fully closed position.



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

- Turn off power to the door.
- 3. Remove the side column covers. Save all hardware.

- NOTE: For assistance with repairing the fabric panel or replacing a wind knob, call Rytec Technical Support at 800-628-1909.
- 4. Check the fabric panel for wear and tear. Repair or replace as necessary.
- 5. Inspect the wind knobs along the outer edges of the panel. They must be in place and secure. Repair or replace them as required. (See Figure 15.)

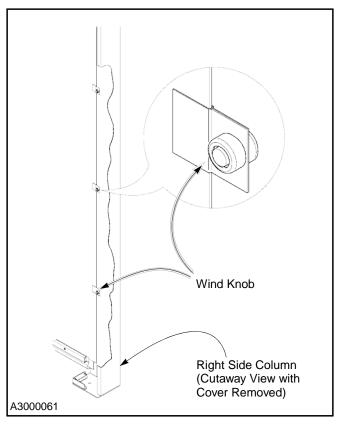


Figure 15

- Verify the door forms a tight seal between the fabric panel and both side columns. Make any necessary adjustments or repairs.
- 7. Check the vision panel for clarity. Clean or replace the panel as required.

IMPORTANT: To clean the vision panel, use a household window cleaner and a clean, soft cloth. DO NOT use an abrasive cleaner or a petroleumbased solvent.

 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 reattached to the plastic tab, replace panel. 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 TRACKING" on page 16.

Bottom Bar Inspection

To thoroughly inspect the bottom bar, it will be necessary to remove the cover from both side columns.

 Inspect the screws securing the bottom bar to the fabric panel. It is critical that all the hardware along the length of the bar, on both sides of the bar, is tight to prevent the fabric panel from shifting in the bar. Tighten the hardware as required. (See Figure 16.)

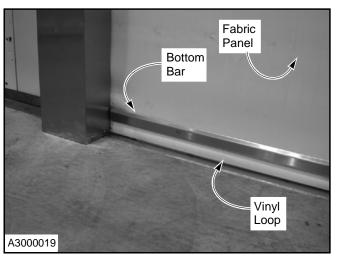


Figure 16

- 2. Inspect the condition of the plastic tab at each end of the bottom bar. Replace the tabs as necessary.
- 3. Verify the hardware securing the plastic tabs is tightly secured. Tighten the hardware as necessary.
- Inspect the vinyl loop along the length of the bottom bar for abrasion or tears. Replace if required. It should also be tightly secured to the bottom bar. Tighten the hardware as required.

Door Limit Inspection

CLOSE LIMIT

1. With the door in the fully closed position, check that the vinyl loop along the bottom bar gently seals against the floor. (See Figure 17.)



Damage to the bottom bar can occur if the door seals too tightly against the floor.

IMPORTANT: A high air pressure condition may result with the panel bowing and the bottom bar lifting off the floor. If this occurs, it will be necessary for you to readjust the door close-limit position.

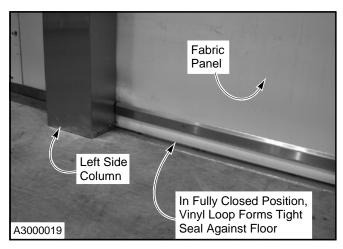


Figure 17

 If the vinyl loop is not sealing properly against the floor, see the Rytec System 4 Drive & Control Installation & Owner's Manual for the close-limit adjustment procedure.

OPEN LIMIT

The door open limit is properly adjusted when the vinyl loop along the bottom bar is flush with top of the door opening. (See Figure 18.)

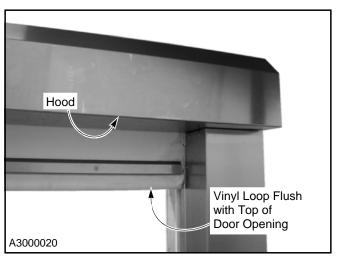


Figure 18

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

Wall Anchor Inspection

1. Turn off power to door.



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. Restore power to the door and return in service.

REPLACEMENT PROCEDURES SIDE COLUMN COVERS AND HOOD

IMPORTANT: Remove the hood before the side column covers.

Each side column cover is held in place by a pair of screws located at both ends of the column. Additionally, the drive motor side column cover has an extra screw along its angled edge. If the door includes the optional remote keypad on the drive motor side column, there is a wire cable plugged into the back of the keypad. The cable must be unplugged before the side column cover can be lifted away. (See Figure 19.)

The screws securing the hood are located along the back edge and ends of the hood.

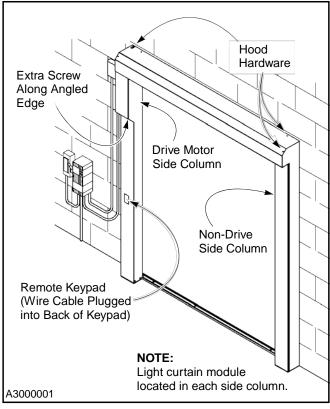


Figure 19

LIGHT CURTAIN MODULES



Before work can begin on a light curtain, move the door to the fully open position.

1. Run or jog the door to the fully open position.



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.
- To replace either light curtain module, its associated side column cover must first be removed. (Refer to "SIDE COLUMN COVERS AND HOOD" on this page.) Then remove the light curtain module using the following procedure.



Use care when handling a light curtain module. The light curtain is IP 65/NEMA 4 rated, which is a washdown rating. Protect it from dirt, dust, and any cleaning or chemical solvents. The listed items will affect the performance of the system if the light curtain isn't properly cleaned. Do not touch the electronic components or circuitry on the module.

4. Loosen the two screws securing the connector plug bracket to the upper end of the light curtain module. Do not completely back the screws out of the bracket. (See Figure 20.)

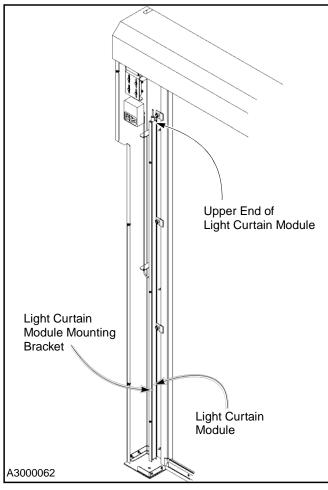


Figure 20

- 5. Carefully slide the upper end of the light curtain module out of its mounting bracket just enough to expose the upper end of the module.
- Hold on to the upper end of the light curtain module with one hand to prevent it from coming out of the mounting bracket and use your other hand to carefully disconnect the plug from the module.
- 7. With the plug disconnected, slide the light curtain module back into its mounting bracket.
- 8. Remove the screws that secure the light curtain module to the mounting bracket attached to the side column. Save all hardware for later use.

IMPORTANT: Keep dust and other foreign particles from entering through the open end of the light curtain module — contamination could cause the module to fail.

- 9. Locate the replacement module and install it in the side column using the saved hardware.
- 10. Install the connector plug bracket on the new light curtain module.

COUNTERWEIGHT STRAP



Before work can begin on the counterweight strap, the door must be in the fully open position.

1. Run or jog the door to the fully open position.



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. Disconnect the counterweight assembly from the nylon strap. Save all hardware for later use.



To avoid damage to the door, make sure the new strap is wrapped around the drive shaft in the same direction and for the same number of wraps originally used for the old strap (two wraps are generally used).

- 4. While keeping track of the number of wraps (typically two) and the direction the strap was originally wrapped around the drive shaft, unwrap the old nylon strap from the spool.
- 5. Release the old nylon strap from the spool by removing the two phillips head screws near the end of the shaft. Save all hardware. (See Figure 21.)

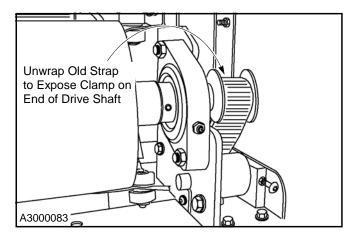


Figure 21

- Unravel the new strap and attach it to the spool in the same direction as the old strap — the phillips head screws must be tightly secured.
- Wrap the new strap around the spool with the strap coming off the front of the spool. (The strap must be wrapped in the direction opposite the door fabric panel.)
- Feed the strap through the slot just behind and under the idler pulley. Then allow the entire length of strap to drop down through the side column. (See Figure 22.)

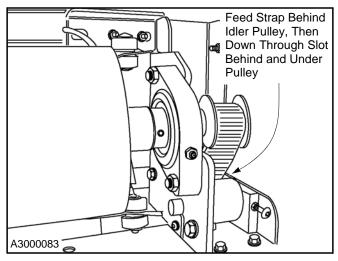


Figure 22

 Secure the strap to the counterweight using the strap clamp and saved hardware. Make sure the clamp is placed as close to the pin as possible with the clamp assembly tightly secured. (See Figure 23.)

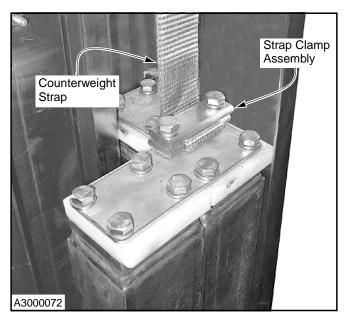


Figure 23

AWARNING

Do not jog the door until the counterweight assembly is tightly secured.

10. Have another person slowly jog the door to the fully closed position. As the door closes, check to make sure the counterweight assembly has sufficient travel and that it does not come in contact with the side column top plate. Also, the counterweight strap must roll up straight on itself by tracking evenly along the shaft of the drum.

If the counterweight strap is tracking to the right, turn the idler pulley adjustment screw clockwise. If the strap is tracking to the left, turn the adjustment screw counterclockwise. Once the strap tracks evenly, lock the jam nut behind the adjustment screw to lock in the setting. (See Figure 24.)

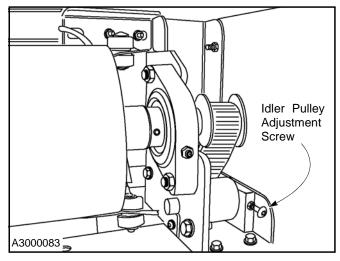


Figure 24



Stay clear of any moving or exposed parts when performing the following procedure.

11. With the door jogged to the fully closed position, pull the brake release handle on the front side of the door. The door should automatically open to about half the height of the door opening.

Reset the control panel and repeat the test using the brake release lever located on the back side of the door — the results should be the same as when the front lever is pulled. For assistance, contact your Rytec representative or call the Rytec Technical Support Department at 800-628-1909.

Once the egress system is adjusted and working properly, trim off any excess strap to within a few inches of the strap clamp. To prevent fraying, wrap masking tape around the free end of the strap.

COUNTERWEIGHT ASSEMBLY

AWARNING

Before work can begin on the counterweight assembly, the door must be in the fully open position.

1. Run or jog the door to the fully open position.

AWARNING

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.
- Remove the hood and right side column cover. (Refer to "SIDE COLUMN COVERS AND HOOD" on page 10.) Save all hardware for later use.
- Remove the light curtain module from the right side column — the module can remain in its mounting bracket. Save all hardware. (Refer to "LIGHT CUR-TAIN MODULES" on page 10 for instructions on removing the module.) (See Figure 25.)

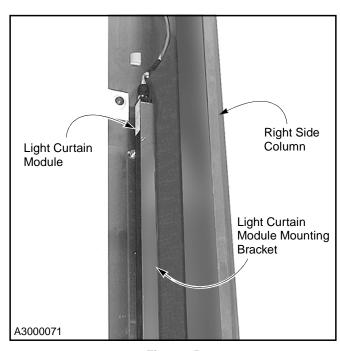


Figure 25

AWARNING

The counterweight is extremely heavy and could cause serious personal injury if not handled properly. Use extreme care when performing the following procedures.

- Disconnect the counterweight assembly from the nylon strap. Save all hardware for later use. (See Figure 26.)
- 6. Remove the counterweight from the side column. (See Figure 26.)

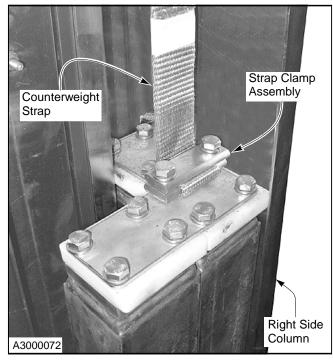


Figure 26

 Verify that the counterweight strap is in good working condition and that it is not frayed or worn.
 Replace the strap if necessary. (See "COUNTER-WEIGHT STRAP" on page 11.)



When performing the following procedure, it is also important that the counterweight strap is not twisted and that it hangs straight in the side column.

8. Reinstall the counterweight using the strap clamp and saved hardware. Make sure the clamp is placed as close to the pin as possible — with the clamp assembly tightly secured.



Do not jog the door until the counterweight assembly is tightly secured to the base of the side column.

9. Have another person slowly jog the door to the fully closed position. As the door closes, check to make sure the counterweight assembly has sufficient travel and that it does not come in contact with the side column top plate. Also, the counterweight strap must roll up straight on itself by tracking evenly along the shaft of the drum.



Failure to adjust the idler pulley as detailed in the following paragraph may result in serious damage to the counterweight strap. The counterweight strap must track evenly along the idler pulley as the door opens and closes.

If the counterweight strap is tracking to the right, turn the idler pulley adjustment screw clockwise. If the strap is tracking to the left, turn the adjustment screw counterclockwise. When the strap is tracking evenly, tighten the jam nut against the idler pulley bracket to lock in the setting. (See Figure 27.)

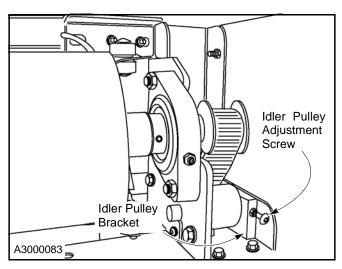


Figure 27



Stay clear of any moving or exposed parts when performing the following procedure.

10. With the door jogged to the fully closed position, pull the brake release handle on the front side of the door. The door should automatically open to at least half the height of the door opening.

Reset the control panel and repeat the test using the brake release lever located on the back side of the door — the results should be the same as when the front lever is pulled. For assistance, contact your Rytec representative or call the Rytec Technical Support Department at 800-628-1909.

WIND KNOB



Working on the fabric panel with either side column cover removed, as required in the following procedure, will require that you tag the rear egress lever and station someone on the back side of the door to prevent anyone from activating the rear egress lever. Activating the rear egress lever with the door closed and either side column exposed could result in serious personal injury.

1. Jog or run the door to the fully closed position.



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. Remove the side column cover adjacent to the wind knob that is to be replaced. (See Figure 28.)

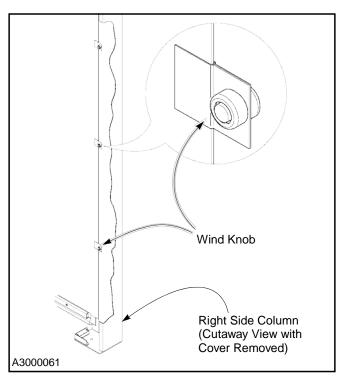


Figure 28

4. Remove as much of the damaged wind knob from the fabric panel as possible, without damaging the fabric panel. (See Figure 29.)

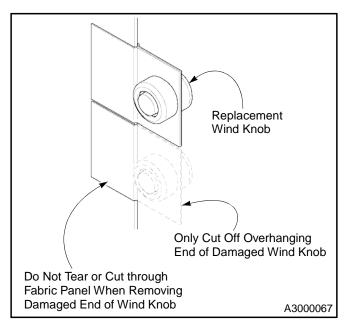


Figure 29

- 5. Install the replacement wind knob directly above (or below) the area previously occupied by the damaged wind knob. Do not attach the new wind knob to the area occupied by the old knob. Use Loctite^{®1} 495 or an equivalent cyanoacrylate adhesive to attach the new wind knob to the fabric panel.
- 1. Loctite $^{\mbox{\scriptsize B}}$ is a registered trademark of the Henkel Corporation.

IMPORTANT: Use the proper adhesive when attaching the new wind knob. If the adhesive is not available locally, contact Rytec Technical Support at 800-628-1909. The Rytec part number for Loctite 495 is R0004136.

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 loop along the bottom bar to gently seal against the floor. (See Figure 30.)

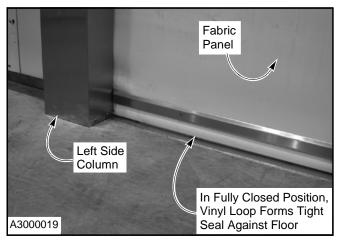


Figure 30

Open-Limit Position

The open-limit position should be adjusted so that the door travel allows the bottom bar to stop flush with the top of the door opening. (See Figure 31.)

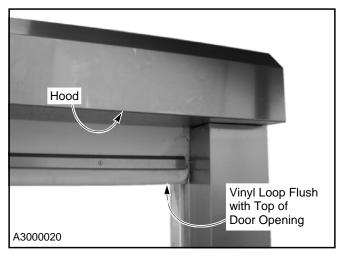


Figure 31

FABRIC ROLL TRACKING

 If the fabric is not tracking properly, verify that the fabric roll is level. If the fabric roll is not level, the side columns will have to be shimmed level with each other. Start by shimming the side column at the low end of the fabric panel. (See Figure 32.)

To shim a side column, loosen the wall anchor hardware securing that side column to the wall. Loosen the anchor hardware just enough to slide a shim under the side

column base plate. Once the fabric roll assembly is level, don't forget to tighten the anchor hardware.

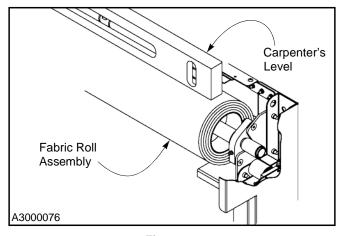


Figure 32

MOTOR BRAKE ADJUSTMENT

- 1. Remove the manual brake release lever.
- Loosen hex-head bolts retaining the dust cover to the motor assembly. Remove the cover. (See Figure 33.)

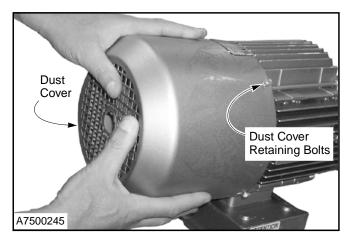


Figure 33

3. Remove sealing band. (See Figure 34.)

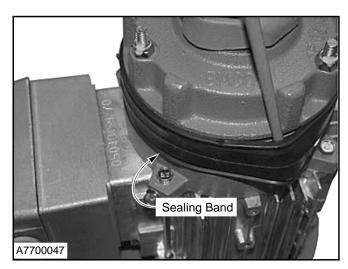


Figure 34

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 35 and Figure 36.)

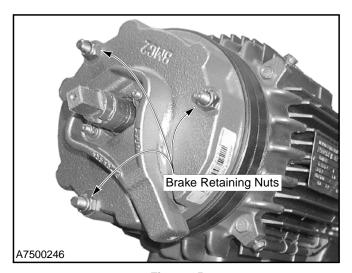


Figure 35



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

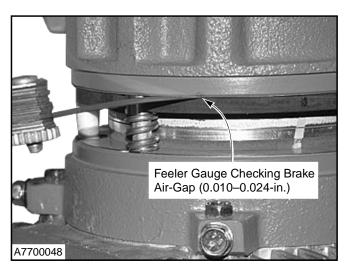


Figure 36

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

DRIVE CHAIN

The drive chain is properly tensioned with approximately $\frac{1}{4}$ in. deflection on both sides of the chain. (See Figure 37.)

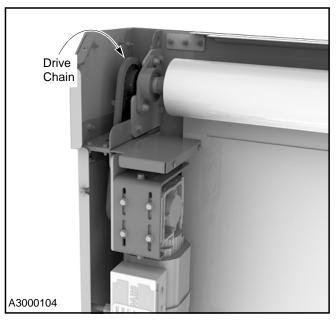


Figure 37

 To adjust the tension, first loosen the four hex head cap screws located on the front of the drive motor mounting bracket (the cap screws secure the drive motor to the mounting bracket). (See Figure 38.)

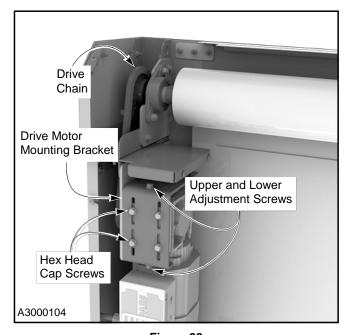


Figure 38

- Reposition the drive motor along the mounting bracket by turning the upper and lower adjustment screws at the top and bottom ends of the bracket, as necessary:
 - Increase chain tension loosen the upper adjustment screw, then tighten the lower adjustment screw.

ADJUSTMENTS—DRIVE CHAIN

 Decrease chain tension — loosen the lower adjustment screw, then tighten the upper adjustment screw.

IMPORTANT: The drive motor must be vertical.

- 3. Once the chain is properly tensioned, lock in the adjustment by tightening the four cap screws that were loosened earlier on the front of the bracket.
- 4. Make sure the drive motor and drum assembly sprockets are aligned, with adequate clearance on both sides of the chain.
- Verify the drive motor and drum/fabric roll sprockets are aligned, with adequate clearance on both sides of the chain. Make any necessary adjustments by repositioning the sprocket along the drive shaft of the drum/fabric roll assembly. (See Figure 39.)

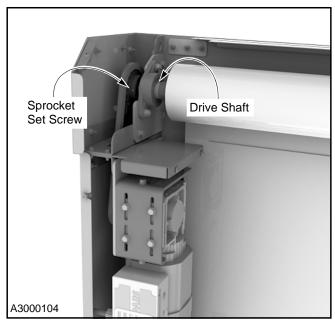


Figure 39

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 <u>WWW.Rytecparts.com</u> access to this on-line store requires an invitation from Rytec. The online 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. There are three universal locations where your DOOR SERIAL NUMBER can be found. These are at the inside of the left side column (approximately eye level), on the drive motor and on the door of the System 4 control panel. (See Figure 40.)

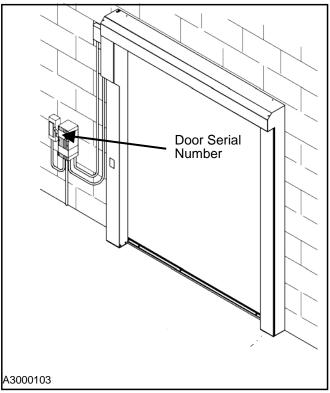


Figure 40

SUBSTITUTE PARTS

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

Also if the 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.

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

RYTEC TECHNICAL KNOWLEDGE CENTER

At <u>WWW.Rytecdoors.com</u> under the "Customer Support" tab a link to the Rytec Technical Knowledge Center can be found. 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 on on-line webstore for purchasing Rytec replacement parts

Access to the Rytec webstore is by invitation only. Invitations are processed through the following eaddress, 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 with 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 for issues concerning these items.

Instructions on how to return items:

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

Prices subject to change.

DOOR ASSEMBLY

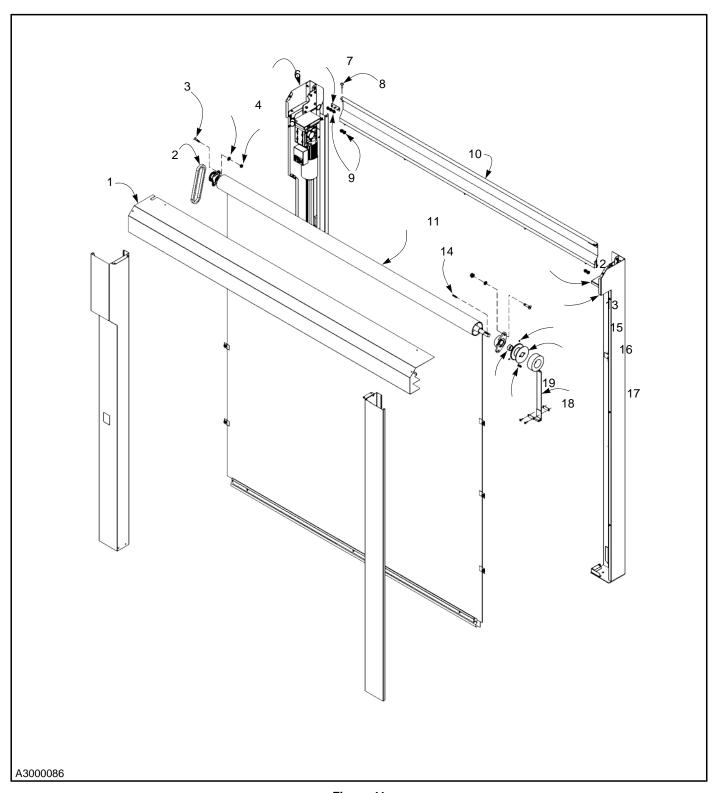


Figure 41

ITEM	QTY.	PART #	DESCRIPTION
1 2	1	RPR990027* R0001096	Hood Assembly Chain, UST Domestic, RS50 x ⁵ / ₈ in., TS6000
3	4	RS021850	Screw, 3/8-16 Flat Head Slotted Cap Screw,
4	4	RS021035	L/N 18-8 SS Washer, ³/₅ Flat, SS
5	4	RS553229	Nut, ³/₅-16 Hex Head Serrated-Flange, L/N 18-8 SS
6	1	R1100163-1X*	Side Column Assembly, LH, Low-Profile, Motor Cover (see page 22)
7	2	RPR020023	Clip, Rear Spreader
8	10	RS021797	Screw, 1/4-20 UNC x 3/4 in., Phillips Truss Head, 18-8 SS
9	10	RS553103	Nut, ¹ / ₄ -20 UNC Serrated- Flange, 18-8 SS
10	1	R1100120-0*	Rear Spreader Assembly (Includes Items 9, 20, and 21)
11	1	R1100060-0*	Drum Assembly, w/ Fabric Panel and Bottom Bar
12	2	RPR030018	Assembly (see page 36) Clamp, Counterweight Strap
13	1	R1100163-2X*	Side Column Assembly, RH, Low-Profile, Straight (see page 30)
14	1	RPC030033	Key, Spool
15	2	RS021687	Screw, ¹ / ₄ -20 UNC x ⁷ / ₁₆ in., Set Cup Point, 18-8 SS
16	1	RPR050011	Spool, Counterweight
17	1	RPR070004	Strap, Counterweight
18	2	RS550181	Screw, 1/4-20 UNC x 1/2 in., Flat Head Socket Cap, 18-8 SS
19 20	1	RPR050012 RPR990034	Spacer, Spool Brake Release Assembly, Thru Wall (not shown, see page 40)
21	1	RPR150002	Label, Front Brake Release (not shown)
22	1	RPR150003	Label, Thru Wall Brake Release (not shown)
23	2	RPR150004	Label, Wipe-Down Caution (not shown)
24	4	RS021035	(not snown) Washer, ³/₅ in. Flat, SS (not shown)
25	4	RS550014	Screw, ³/₅-16 UNC x 1¹/₄ in. HHCS, 18-8 SS (not shown)

^{*=} Part Requires Door Serial # for order

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.

LEFT SIDE COLUMN (DRIVE SIDE)

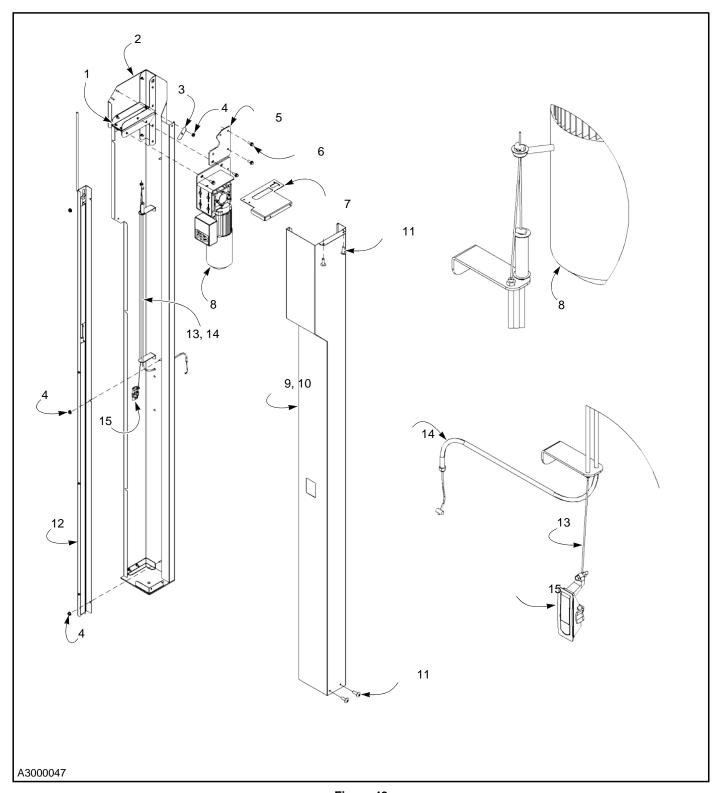


Figure 42

ITEM	QTY.	PART #	DESCRIPTION
-	1	R110163-1X*	Side Column Assembly, LH, Low-Profile, Motor Cover (Figure 42)
1	4	R0550016	Screw, HFSMS ¹ / ₄ -20 x ³ / ₄ in., GR5.2, Zinc
2	1	RPR990003	Weldment, LH Side Column, Low-Profile, Motor Cover
3	1	RPR990030*	Weldment, Hood Bracket
4	11	RS553103	Nut, 1/4-20 UNC x Serrated- Flange, 18-8 SS
5	1	RPR030003	Mounting Plate, Drum, Drive Side
6	7	R0550330	Screw, HFSMS ³/₅-16 x 1 in., GR5.2, Zinc
7	1	RPR990011*	Weldment, Top Plate, LH, Low-Profile, Motor Cover
8	1	R1100147-0*	Motor Assembly,
9	1	RPR990005*	Side Column Cover Assembly, LH Low-Profile, Motor Cover w/ Remote Key Pad (see page 24)
10	1	RPR990049	Side Column Cover Assembly, LH Low-Profile, Motor Cover w/o Remote
11	5	RS021797	Key Pad (see page 26) Screw, ¹ / ₄ -20 UNC x ³ / ₄ in. Phillips Truss Head, 18-8 SS
12	1	RPR990075* RPR990076* RPR990077*	2000MM Telco Receiver 2400MM Telco Receiver 2800MM Telco Receiver Assembly includes Mounting Bracket, LH
13	1	RPR040004*	Cable, Front Brake Release
14	1	RPR040005*	Cable, Rear Brake Release Thru Wall
15	1	RPR040003	Handle Assembly, Brake Release
16	1	RPR030014	Screw, Brake Release Cable (not shown)

^{*=} Part Requires Door Serial # for order

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—LEFT SIDE COLUMN COVER (DRIVE SIDE) W/ OPTIONAL REMOTE KEY PAD LEFT SIDE COLUMN COVER (DRIVE SIDE) W/ OPTIONAL REMOTE KEY PAD

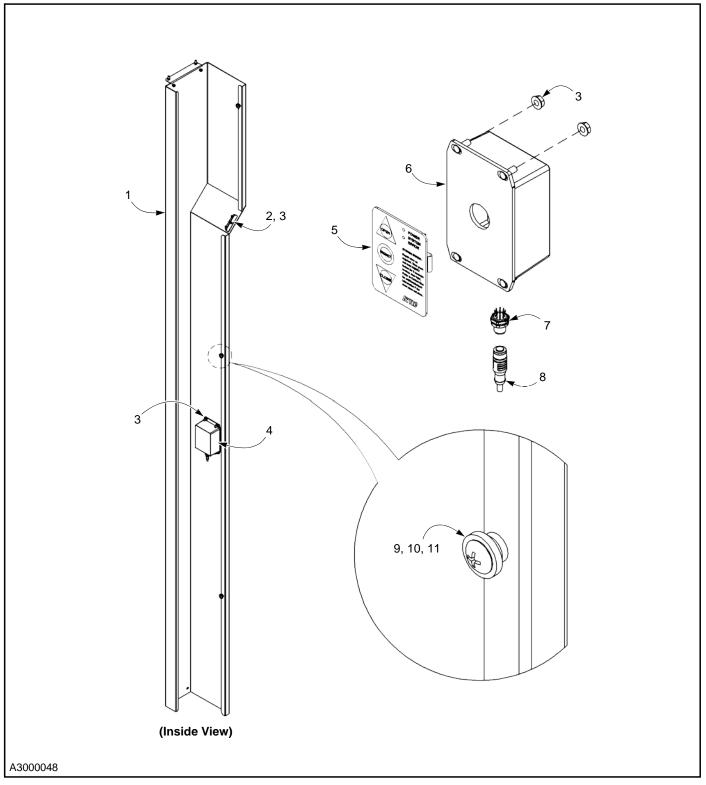


Figure 43

ITEM	QTY.	PART#	DESCRIPTION
-	1	RPR990005*	Side Column Cover Assembly, LH Low-Profile, Motor Cover w/ Remote Key Pad
1	1	RPR990007*	Weldment, LH Side Column, Low-Profile, Motor Cover
2	1	RPR990030	Weldment, Hood Bracket
3	6	RS553103	Nut, ¹ / ₄ -20 UNC Serrated- Flange, 18-8 SS
4	1	R00121083	Remote Key Pad Assembly, System 3, Open-Close-Stop w/ LEDs (Includes Items 5 thru 8, 12, and 13)
5	1	R00121082	Key Pad, Remote Membrane
6	1	R00111127	Enclosure, w/ Flanged Lid
7	1	RPR140000	Connector Receptacle, 8-Pin, M12, Male End w/ 0.5 Meter Leads, Turck #FS-8-0.5
8	1	RPR140001	Cable, 8-Connector, M12, Straight Connector, 10 Meter, Turck #RKC-8T-10
9	3	RS021056	Nut, ¹ / ₄ -20 Locking, SS
10	3	RPR050003	Snap Bushing, Side Column Cover
11	3	RS021797	Screw, 1/4-20 UNC x 1/4 in., Phillips Truss Head, 18-8 SS
12	1	R00111133	Connector-Terminal Block, 7-Position (not shown)

^{*=} Part Requires Door Serial # for order

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.

LEFT SIDE COLUMN COVER (DRIVE SIDE) W/O REMOTE KEY PAD

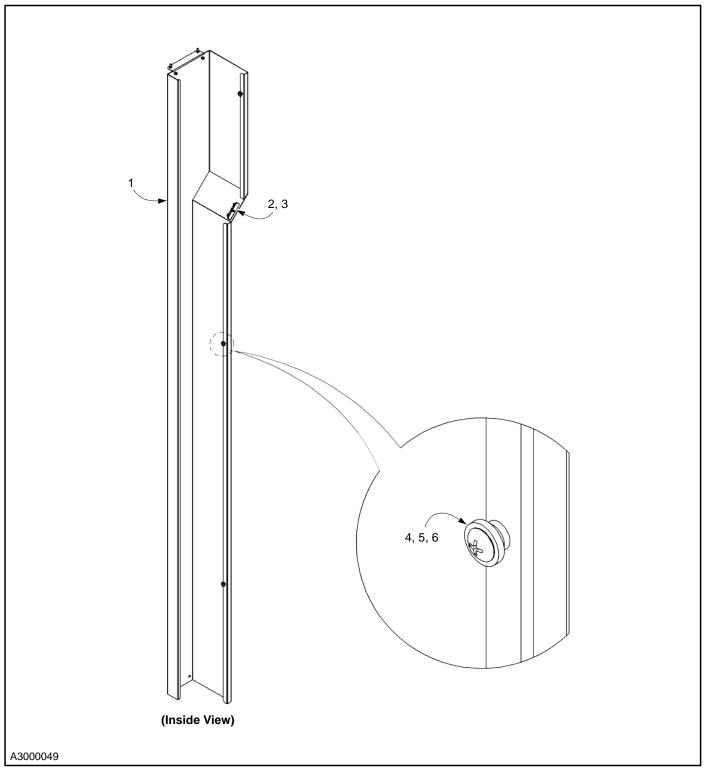


Figure 44

ITEM	QTY.	PART #	DESCRIPTION
-	1	RPR990049*	Side Column Cover Assembly, LH Low Profile, Motor Cover w/o Remote Key Pad
1	1	RPR990048*	Weldment, LH Side Column, Low Profile, Motor Cover
2	1	RPR990030	Weldment, Hood Bracket
3	2	RS553103	Nut, ¹ / ₄ -20 UNC Serrated- Flange, 18-8 SS
4	3	RS021056	Nut, 1/4-20 Locking, SS
5	3	RPR050003	Snap Bushing, Side Column Cover
6	3	RS021797	Screw, ¹ / ₄ -20 UNC x ¹ / ₄ in., Phillips Truss Head, 18-8 SS

^{*=} Part Requires Door Serial # for order

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

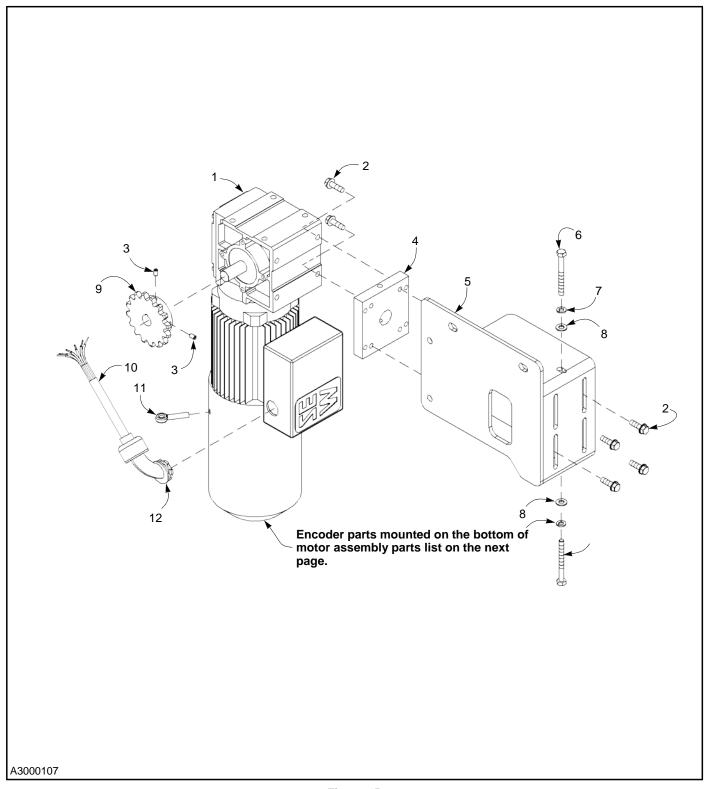


Figure 45

ITEM	QTY.	PART #	DESCRIPTION
-	1	R110164-0*	Motor Assembly
2	8	R0550060	Screw, HSFMS, ⁵ / ₁₆ -18 x 1 in., GR5.2 Zinc
3	2	RS021687	Screw, ¹ / ₄ -20 UNC x ⁷ / ₁₆ in. Lg., Set Cup Point, 18-8 SS
4	1	RPR030005	Mounting Plate, Motor
5	1	RPR990016	Weldment, Motor Mounting Plate
6	2	RS021798	Screw, ⁵ / ₁₆ -18 UNC x 3 in. Lg., Full Thread, HHCS, SS
7	2	RS554227	Washer, ⁵/₁₅ in. Split Lock, SS
8	2	RS021034	Washer, ⁵ / ₁₆ in. Flat, SS
9	1	RPR040000	Sprocket, Drive
10	1	R00141007	Cable, 16 GA., 6-Conductor Shielded, Type SEOOW, 600V, 90C
11	1	R0550278	Eye Bolt, Brake Release, Eurodrive
12	1	R0014496	Connector, Sweep, 3/4 in.
13	1	R00142058	Encoder XL wireless (not shown, bottom of motor)

^{*=} Part Requires Door Serial # for order

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.

RIGHT SIDE COLUMN (NON-DRIVE)

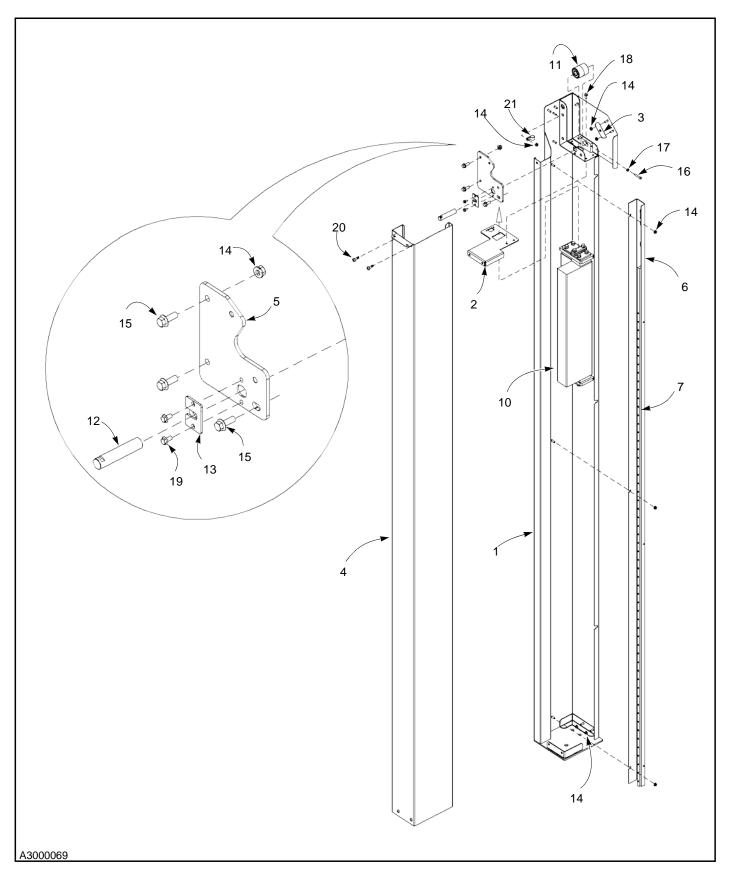


Figure 46

ITEM	QTY.	PART #	DESCRIPTION
-	1	R1100163-2X*	Side Column Assembly, RH, Low Profile, Straight
1	1	RPR990004*	Weldment, Side Column, RH, Low Profile, Straight
2	1	RPR990012	Weldment, Top Plate, RH
3	1	RPR990030	Weldment, Hood Bracket
4	1	RPR990006*	Cover Assembly, Side Column, RH
5	1	RPR030004	Mounting Plate, Drum, Non-Drive Side
6	1	RPR020090* RPR020091* RPR020092*	2000MM Telco Transmitter Mounting Bracket, RH 2400MM Telco Transmitter Mounting Bracket, RH 2800MM Telco Transmitter Mounting Bracket, RH
7	1	RPR990078* RPR990079* RPR990080*	2000MM Telco Transmitter 2400MM Telco Transmitter 2800MM Telco Transmitter
10	1	RPR990081*	Counterweight Assembly
11	1	RPR990029	Idler Roller Assembly, Counterweight Strap
12	1	RPR030013	Pin, Idler Roller
13	1	RPR020024	Plate, Idler Pin
14	11	RS553103	Nut, 1/4-20 UNC Serrated-
15	3	R0550330	Bolt, 3/8" – 16 X 1" Long
16	1	R021793	Screw, ¹ / ₄ -20 UNC x 1 ¹ / ₂ in.
17	1	RS021794	Nut, ¹ / ₄ -20 UNC, Jam, SS
18	4	R0550016	HFSMS, ¹ / ₄ -20 x ³ / ₄ in.,
			GR 5.2, ZN
19	2	R0021048	HFSMS, ¹ / ₄ -20 x ¹ / ₂ in., GR 5.2, ZN
20	4	RS021797	Screw, ¹ / ₄ -20 UNC x ³ / ₄ in. Lg., Phillips Truss Head
21	2	R0904030	Cable Clip, ³ / ₈ in. ID
			* D(D

^{*=} Part Requires Door Serial # for order

RIGHT SIDE COLUMN COVER

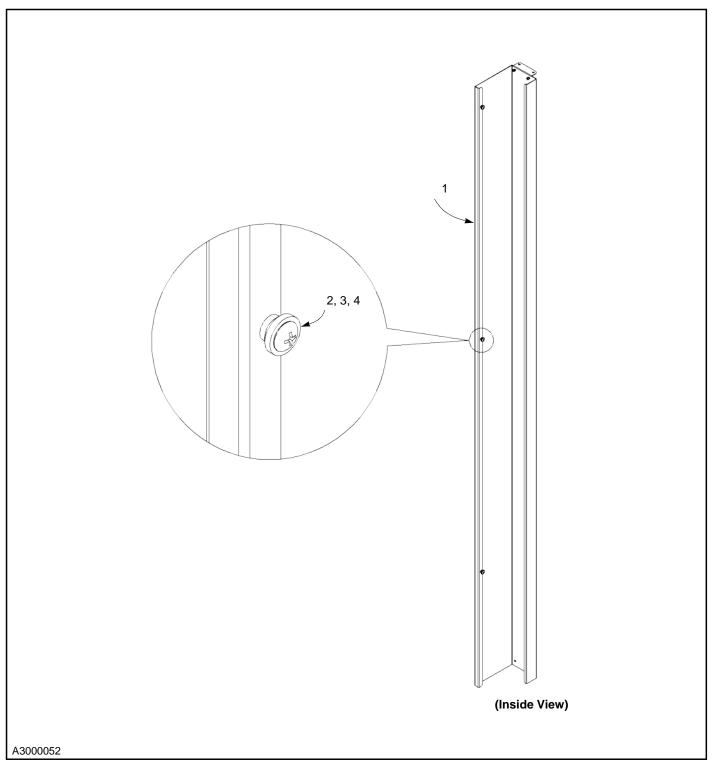


Figure 47

ITEM	QTY.	PART #	DESCRIPTION
4	4	DDD000000*	Side Column Couer DII
ı	1	RPR990006*	Side Column Cover, RH Low-Profile
2	3	RPR050003	Snap Bushing, Side Column Cover
3	3	RS021851	Screw, ¹ / ₄ -20 UNC x 1 in., Phillips Truss Head,
4	3	RS021056	18-8 SS Nut, ¹ / ₄ -20 Locking, SS

^{*=} Part Requires Door Serial # for order

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.

COUNTERWEIGHT ASSEMBLY

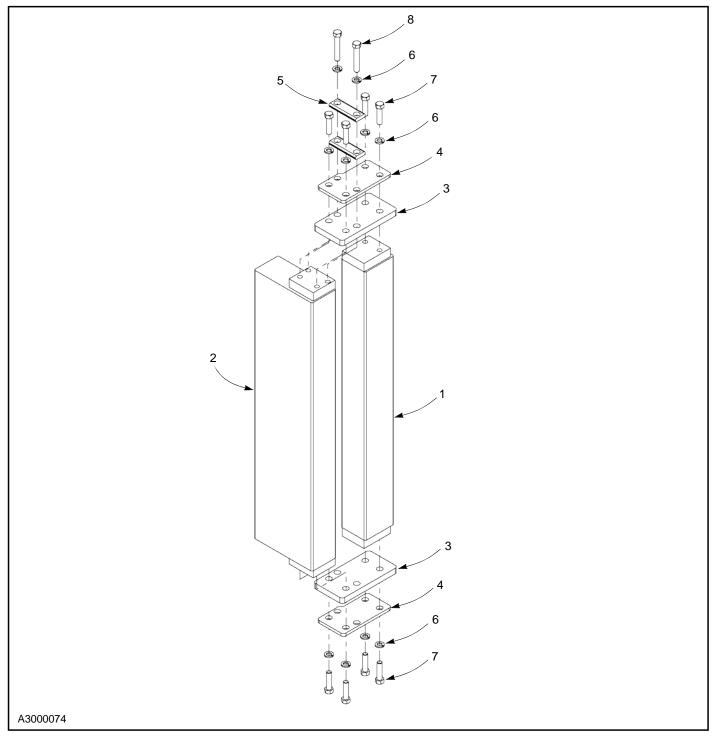


Figure 48

ITEM	QTY.	PART #	DESCRIPTION
1 2	1	RPR990082* RPR990083*	Counterweight, Rear Counterweight, Front
3	2	RPR050013	Guide, Straight
4	2	RPR030038	Plate, Mounting
5	2	RPR030028	Clamp, Counterweight Strap
6	10	RS554225	Washer, ³/₅ in., Split Lock, SS
7	8	RS021069	Screw, ³ / ₈ -16 x 1 ¹ / ₂ in., HHCS, UNC, SS
8	2	RS021874	Screw, $^3/_{8}$ -16 x $2^1/_{4}$ in., HHCS, UNC, SS

^{*=} Part Requires Door Serial # for order

DRUM ASSEMBLY

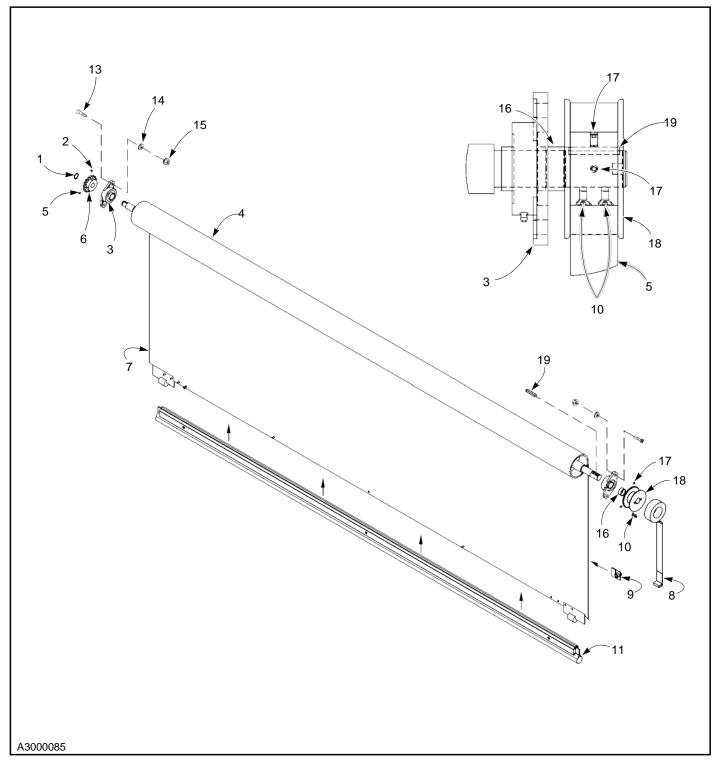


Figure 49

ITEM	QTY.	PART #	DESCRIPTION
1	1	R0804155	Retaining Ring, 1 in. O.D.
2	1	RPR030015	Key, Drive Sprocket
3	2	R0704010	Bearing, 1¹/₄ in. Dia., Flange Mounted
4	1	R1100157-0*	Drum Weldment
5	4	RS021687	Screw. ¹ / ₄ -20 UNC x ⁷ / ₁₆ in. Lg., Set Cup Point, 18-8 SS
6	1	RPR040001	Sprocket, Drive
7	1	R1100159-0X*	Panel Assembly
8	1	RPR070004*	Strap, Counterweight- (PH + 46") - CW
9	6	R1100037-0	Wind Knob Tab Assembly
10	2	RS550181	Screw, ¹ / ₄ -20 UNC x ¹ / ₂ in. Flat Head Socket Cap, 18-8 SS
11	1	PR990026*	Bottom Bar Assembly (see page 38)
12	1	R0702010*	Clamp, Panel Strap (not shown)
13	4	RS021850	Screw, ³ / ₈ -16 Flat Head Slotted Cap Screw, L/N 18-8 SS
14	4	RS021035	Washer, ³ / ₈ Flat, SS
15	4	RS553229	Nut, ³/₃-16 Hex Head Serrated-Flange, L/N 18-8 SS
16	1	RPR050012	Spacer, Spool
17	2	RS021687	Screw, ¹ / ₄ -20 UNC x ⁷ / ₁₆ in.,
	_		Set Cup Point, 18-8 SS
18	1	RPR050011	Spool, Counterweight
19	1	RPR030033	Key, Spool

^{*=} Part Requires Door Serial # for order

BOTTOM BAR ASSEMBLY

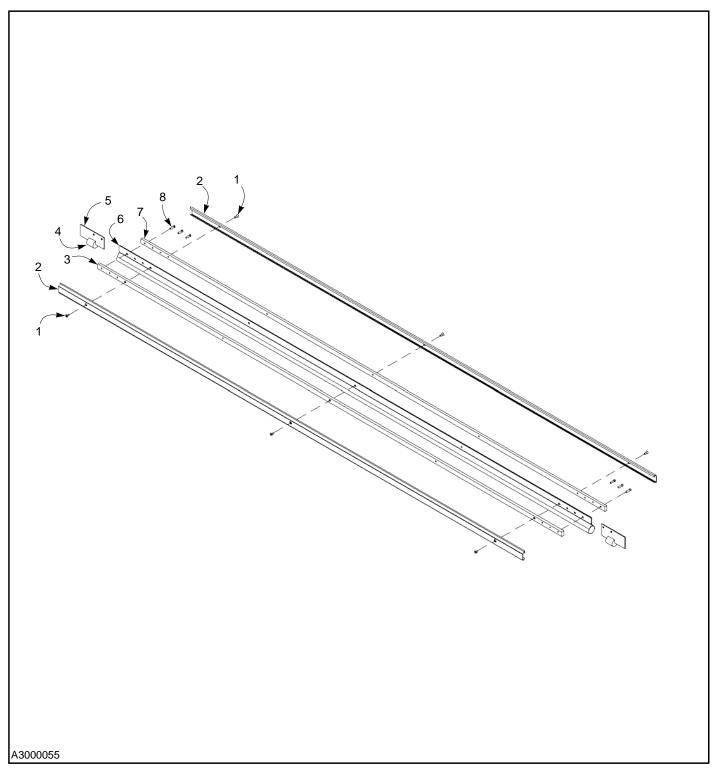


Figure 50

ITEM	QTY.	PART#	DESCRIPTION
- 1	1 6	RPR990026* RS550181	Bottom Bar Assembly Screw, 1/4-20 UNC x 1/2 in. Long., Flat Head, 18-8 SS
2	2	RPR020020*	Shell
3	1	RPR030012*	Weight, Rear (PW-2")
4	2	RPR130000	Plug, Bottom Bar Loop
5	2	RPR050000	Breakaway Tab
6	1	R1100166-0*	Bottom Loop
7	1	RPR030011*	Weight, Front (PW-2")
8	8	RS021786	Screw, $^{1}/_{4}$ -20 UNC x $^{7}/_{8}$ in. Long., SHCS, SS

^{*=} Part Requires Door Serial # for order

BRAKE RELEASE ASSEMBLY (THRU WALL)

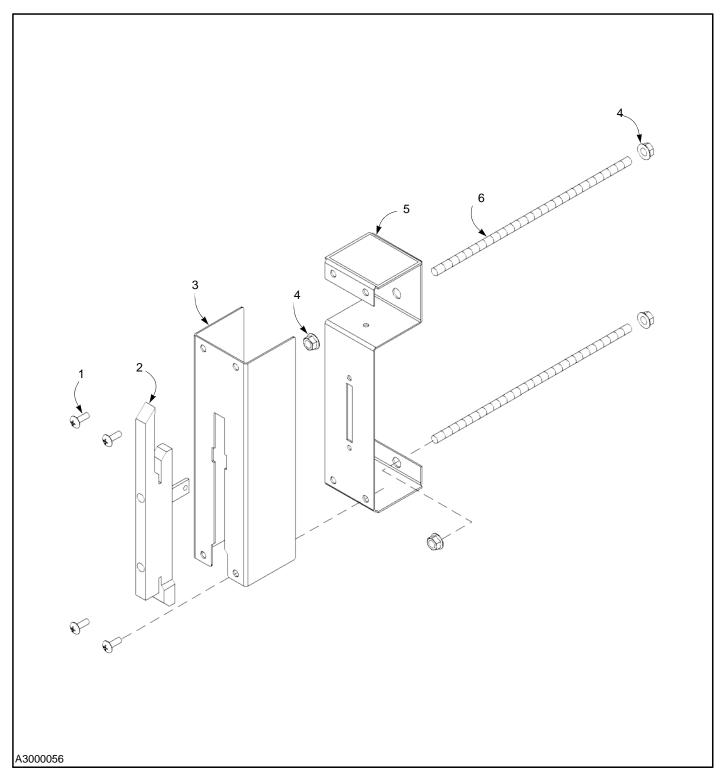


Figure 51

ITEM	QTY.	PART#	DESCRIPTION
-	1	RPR990034	Brake Release Assembly, Thru Wall
1	4	RS021797	Screw, ¹ / ₄ -20 UNC x ³ / ₄ in. Long., Phillips Truss Head, 18-8 SS
2	1	RWN524C01	Lever, Brake Release
3	1	RPR020030	Cover, Thru Wall Brake Release Assembly
4	4	RS553229	Nut, ³ / ₈ -16 Hex Head Serrated-Flange, L/N 18-8 SS
5	1	RPR990035	Weldment, Mounting Bracket
6	2	RPR030017	Threaded Rod

^{*=} Part Requires Door Serial # for order