R Y T E C

PredaDoor®

Owner's Manual

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WARRANTY

The PredaDoor High-Speed Door purchased by you (Buyer) should not be installed or operated before you read all associated product manuals explaining the proper method of installing, operating, and maintaining the equipment.

Rytec Corporation (Seller) warrants that the PredaDoor High-Speed Door (Product) sold to the Buyer will be free of defects in materials and workmanship under normal use for a period of twelve (12) months from the date of shipment of the Product from the Seller's plant. Electrical components are warranted for a period of ninety (90) days from the date of shipment. In addition, the Seller offers an extended two (2) year warranty on the two-ply Rilon door panel material. This extended warranty covers parts only. If within the applicable period any Products shall be proved to the Seller's satisfaction to be defective, such Products shall be repaired or replaced at the Seller's option. Such repair or replacement shall be the Seller's sole obligation and the Buyer's exclusive remedy hereunder and shall be conditioned upon the Seller receiving written notice of any alleged defect within ten (10) days after its discovery and, at the Seller's option, return of such Product to the Seller, f.o.b. its factory. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER REPRESENTATION AND WARRANTIES, EXPRESS OR IMPLIED, AND THE SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE.

PARTS AND ASSEMBLIES sold separately by Rytec Corporation that fail due to defects in material or workmanship within ninety (90) days from the date of shipment will be replaced under warranty provided installation has been carried out in accordance with all Rytec procedures. This warranty is limited to providing a replacement part only. This warranty does not cover freight, special charges, or any costs associated with the installation of the replacement part.

Any description of the Product, whether in writing or made orally by the Seller or the Seller's agents, 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.

The Seller's liability with respect to the Product sold to the Buyer shall be limited to the warranty provided herein. THE 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 PRODUCTS SOLD OR SERVICES RENDERED BY THE SELLER, OR ANY UNDERTAKINGS, ACTS, OR OMISSIONS RELATING THERETO. Without limiting the generality of the foregoing, the Seller specifically disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits or revenues, services, downtime, shutdown, or slowdown costs, or for any other types of economic loss, and for claims of the Buyer's customers or any third party for any such damages. THE SELLER SHALL NOT BE LIABLE FOR AND DISCLAIMS ALL CONSEQUENTIAL, INCIDENTAL, AND CONTINGENT DAMAGES WHATSOEVER.

This warranty shall be void in its entirety if the failure of any product shall be caused by any installation, operation, or maintenance of the Product which does not conform with the requirements set forth by the Seller in the applicable product manuals or is the result of any cause other than a defect in the material or workmanship of the Product.

TABLE OF CONTENTS

INTRODUCTION

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

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

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

If you have any questions, contact your Rytec representative or call the Rytec Customer Support Department at 1-800-628-1909. Always refer to the serial number of the door when calling the representative or Customer 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

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

⚠ CAUTION

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

IMPORTANT: IMPORTANT is used to relay information 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 ARRANGEMENT 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.

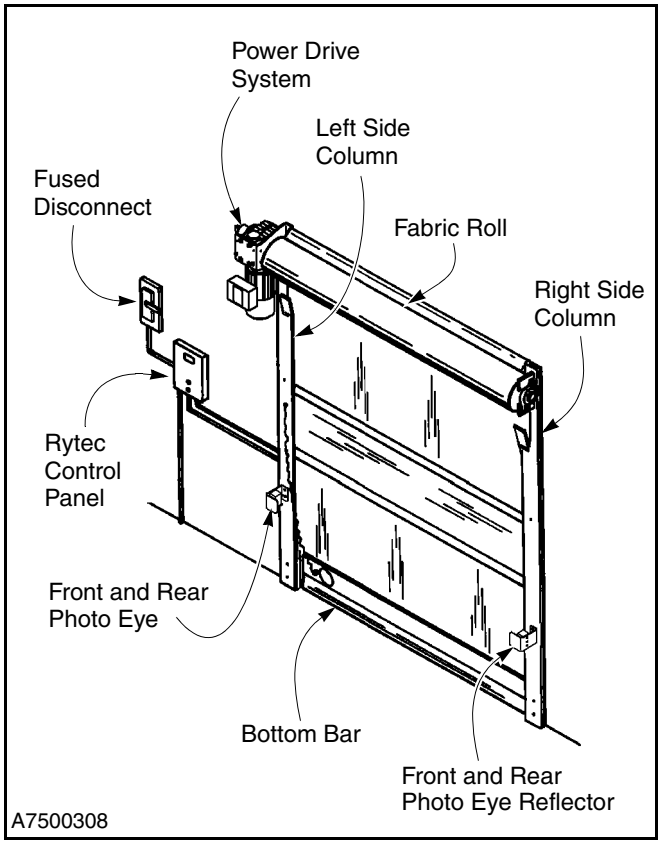

Figure 1

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

OPERATION

CONTROL PANEL

The PredaDoor door is equipped with the Rytec System 3 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 3 Drive & Control Installation & Owner's Manual.

PHOTO EYES

Your PredaDoor is equipped with two 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.

BOTTOM BAR ASSEMBLY

The bottom bar assembly provides two functions: breakaway capability and reversing edge.

Breakaway Capability

IMPACT

Plastic tabs mounted at each end of the bottom bar provide adequate strength to keep the assembly in contact with the side columns during normal operation. The tabs, however, are flexible enough to allow the bottom bar to separate from either or both of the side columns should the bottom bar be struck by a vehicle or load passing through the door. A kill switch assembly made up of air bladders and a pressure switch mounted in the bottom bar will turn off electrical power to the door if the bottom bar is separated from the side column. This feature prevents the bottom bar from being bent or damaged if struck by a vehicle or load. (See Figure 2.)

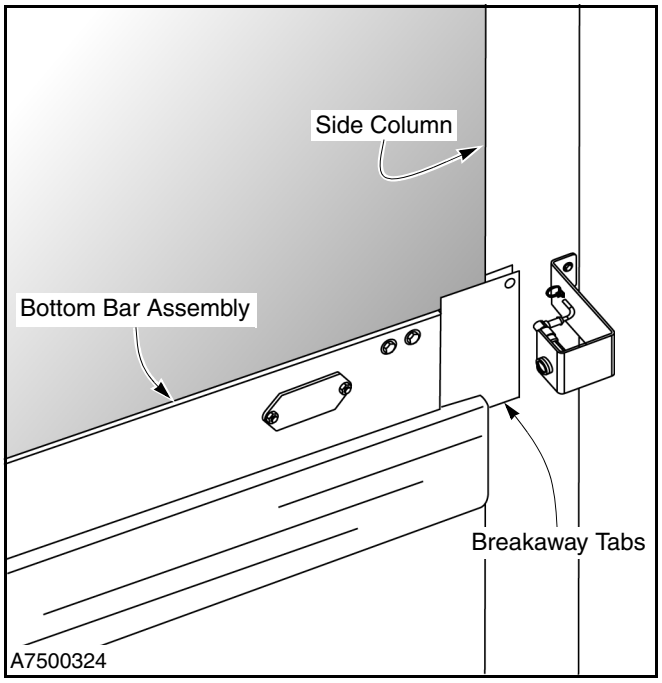

Figure 2

REPAIR (RETURN TO OPERATING POSITION)

⚠ WARNING

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

1. Position the breakaway tabs on one end of the bottom bar assembly in the side column channel. Lift the other end of the bottom bar and position the breakaway tabs in the side column channel. (See Figure 3.)

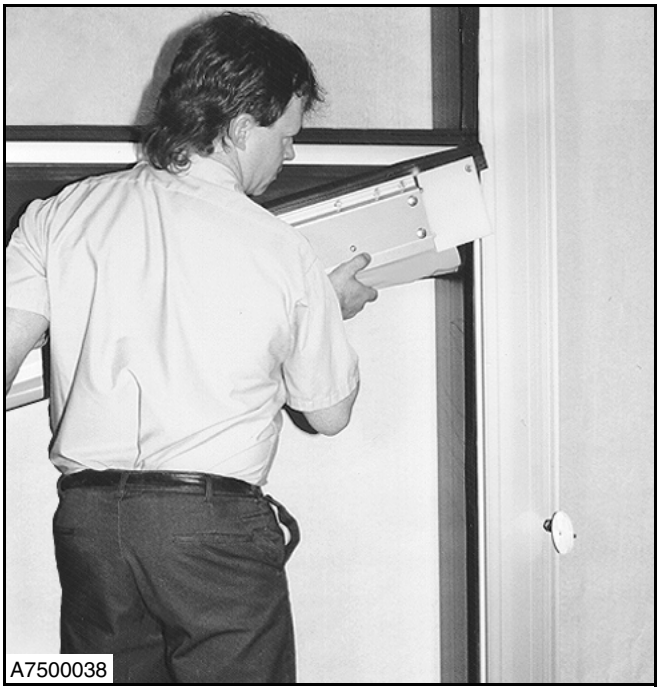

Figure 3

2. Check to make sure that the fabric is inside each channel. (See Figure 4.)

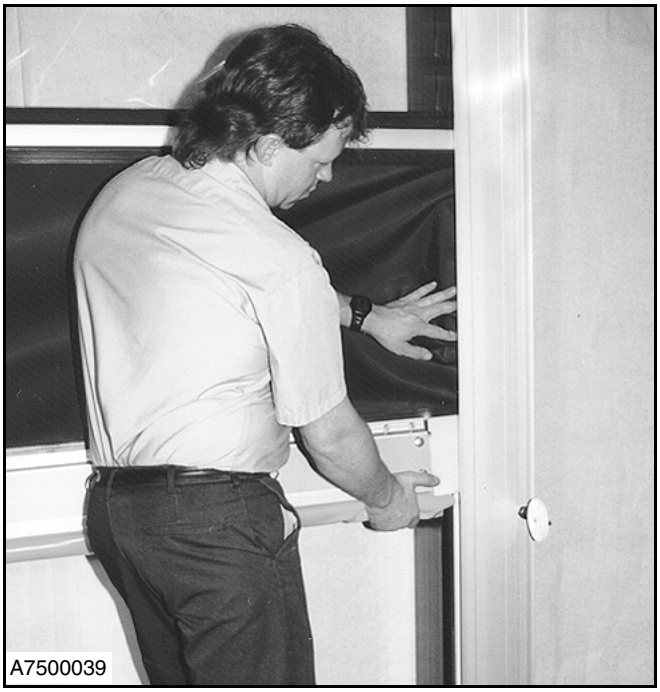

Figure 4

3. Turn power ON. Reset the control panel if required.
4. Check operation of door.

Reversing Edge

The door is equipped with a pneumatic reversing edge mounted at the bottom of the bottom bar assembly. If an object is left in the path of the door panel as it closes, the pressure-sensitive edge will sense the contact with the object and automatically reverse the door to the open position, thus preventing damage to the bottom bar. (See Figure 5.)

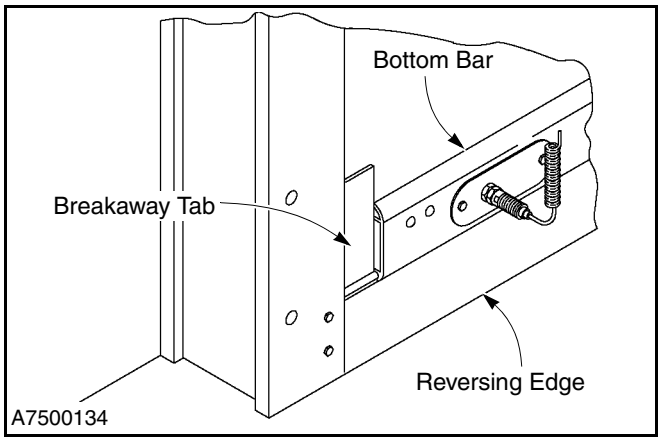

Figure 5

POWER DRIVE SYSTEM

The PredaDoor power drive system consists of an electric motor/brake assembly, reduction gear assembly, and encoder. The standard PredaDoor 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 6.)

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.

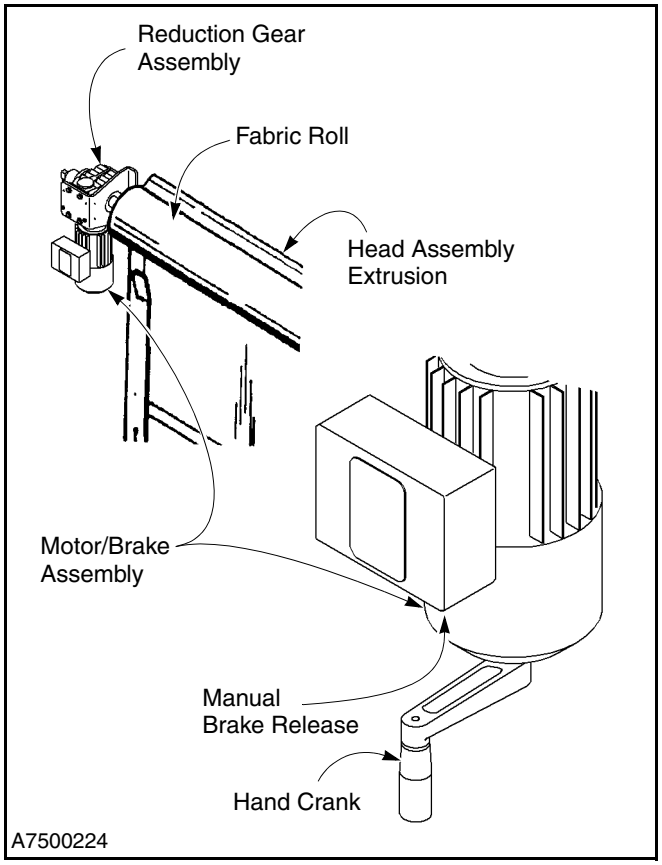

Figure 6

MOVE THE DOOR MANUALLY

⚠WARNING

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.
2. **To Lower the Door:**

⚠WARNING

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 bottom bar 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 7.)

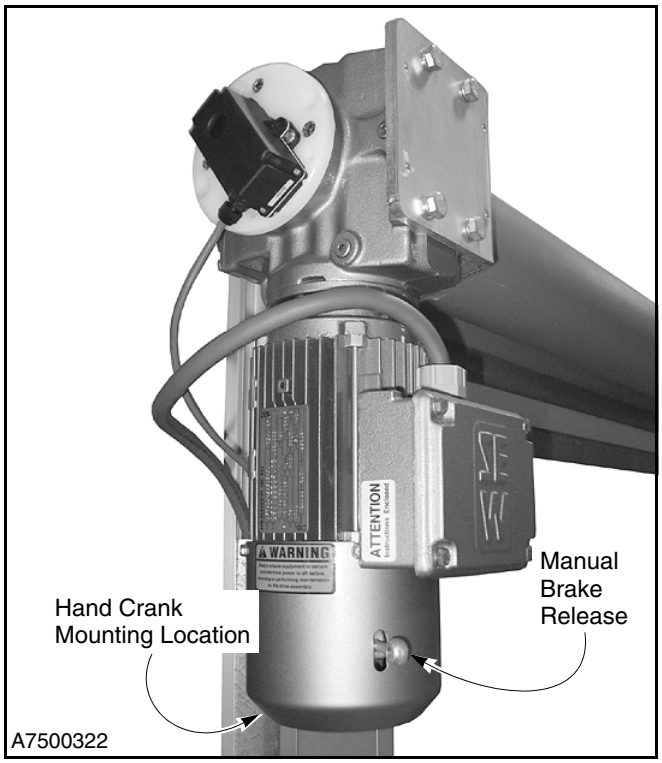

Figure 7

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.

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

⚠WARNING

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

e. Remove crank.

5. Turn on the power to the door.

PLANNED MAINTENANCE

RECOMMENDED SCHEDULE

	Daily	Quarterly
Damage Inspection	■	
Door Operation	■	
Reversing Edge Inspection	■	
Photo Eye Inspection	■	
Mounting Hardware Inspection		■
Fabric Inspection		■
Door Limit Inspection		■
Motor Brake Inspection		■
Bottom Bar Inspection		■
Kill Switch Inspection		■
Lubrication		■
Weather Seal Inspection		■
Activator/Control Panel Inspection		■
Electrical Connection Inspection		■
Wall Anchor Inspection		■

DAILY INSPECTION

Damage Inspection

Inspect the door to see that components have not been damaged. Example: bent bottom bar, tear in fabric panel, damage to side column(s), etc.
(See Figure 8.)

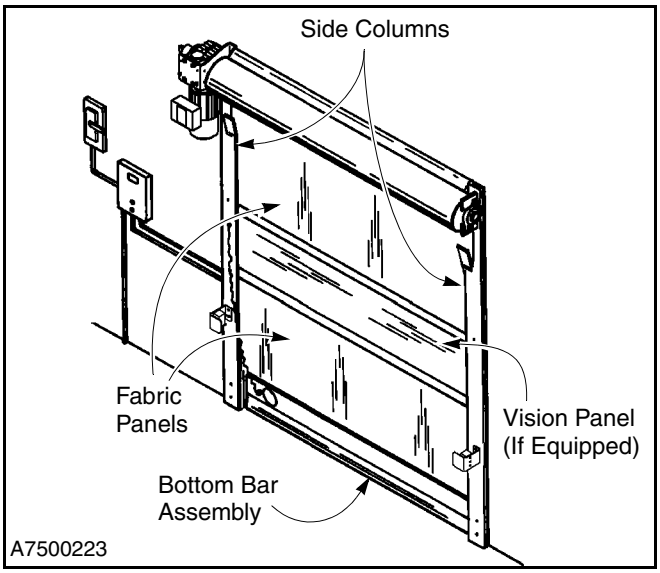

Figure 8

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.

Reversing Edge Inspection

⚠ WARNING

DO NOT stand under the door panel when performing the following inspection. If the reversing edge is not working properly, the bottom bar could strike the person performing the inspection. DO NOT use the door if the reversing edge does not operate properly. If the door does not reverse properly, see "PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT" on page 10.

While the door is running through the down cycle, tap the bottom of the reversing edge. If the reversing edge is operating properly, the door should immediately reverse and run to the full-open position. Press the control panel down key to close the door after the inspection is complete. If the reversing edge does not work properly, see "PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT" on page 10 for adjustment procedure.

Photo Eye Inspection

NOTE: Two sets of photo eyes have been provided with the PredaDoor. These photo eyes act as a safety device 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.

⚠ WARNING

Personnel or objects being used for this inspection should not be in the path of the door panel when this check is made. If the photo eyes are not working properly, the door panel will lower, striking personnel or objects in its path. 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 ADJUSTMENT” on page 13 for adjustment 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 9 through Figure 12.)

MOTOR MOUNTING HARDWARE

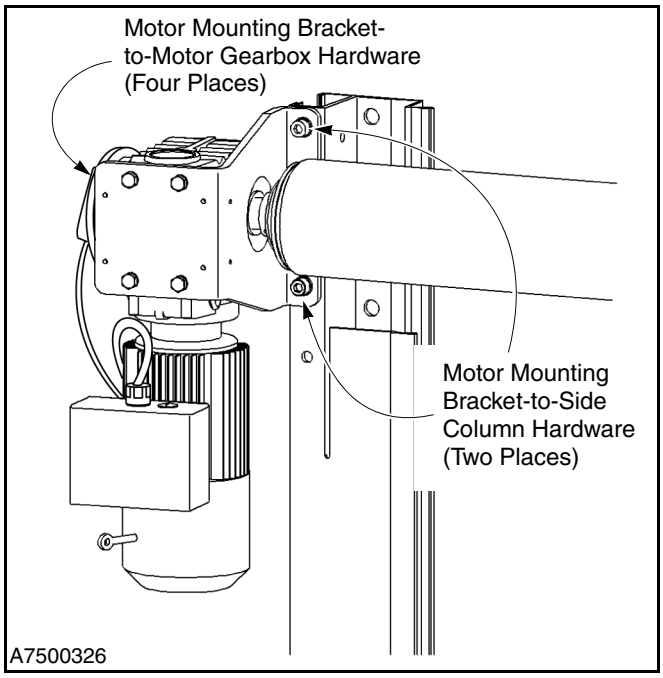

Figure 9

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

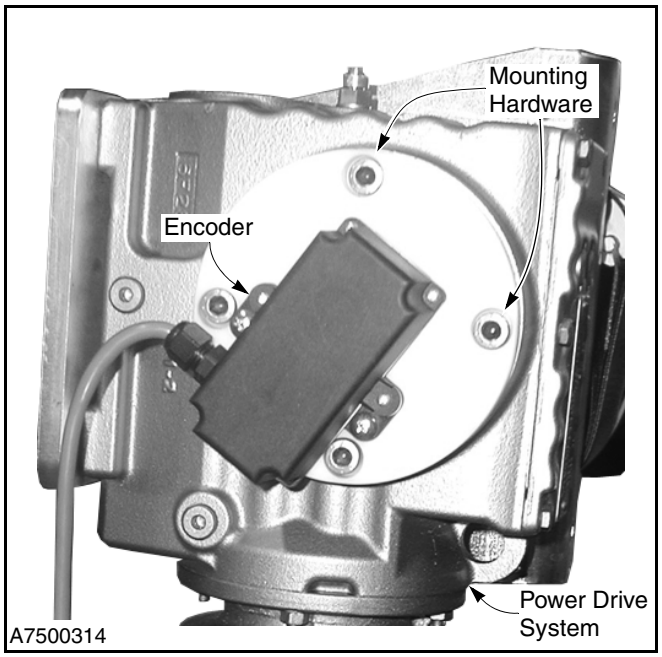

Figure 10

SIDE COLUMN HARDWARE

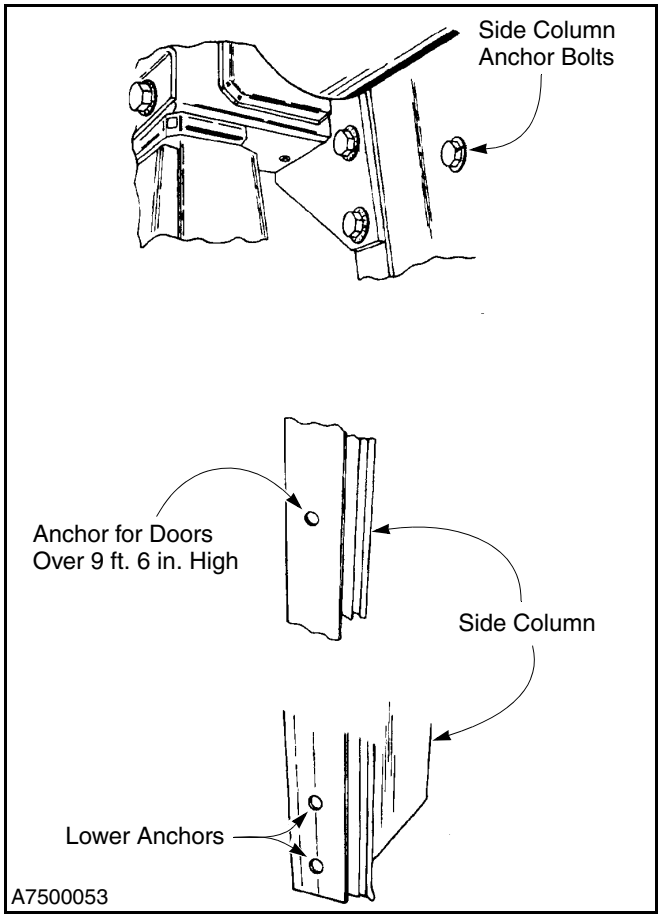

Figure 11

BEARING BLOCK HARDWARE

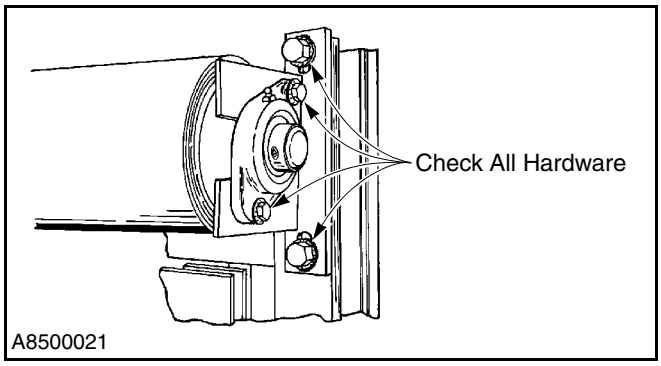

Figure 12

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 13.)

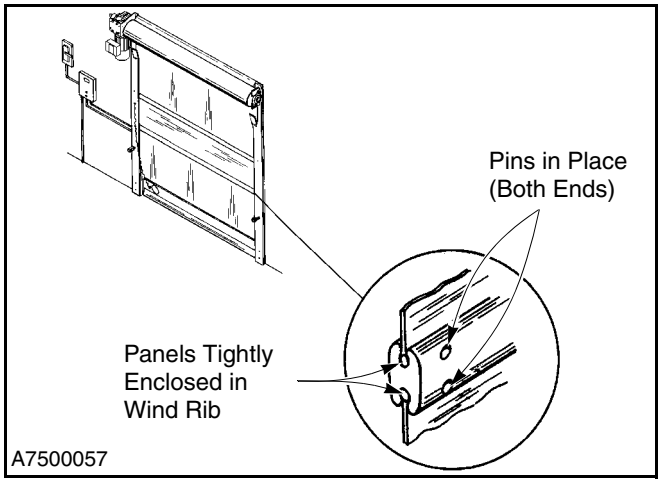

Figure 13

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 13.

Door Limit Inspection

CLOSE LIMIT

1. With the door in the closed position, check the yellow vinyl loop on the bottom bar. It should be in the position shown in Figure 14.

⚠ CAUTION

Damage to the rubber reversing edge or other bottom bar parts can occur if the door is allowed to seal too tightly against the floor. (See Figure 14.)

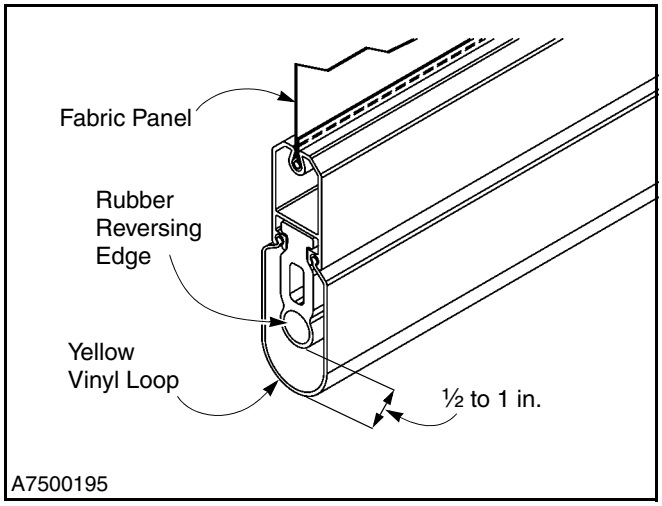

Figure 14

2. If the reversing edge does not seal properly against the floor, see the Rytec System 3 Drive & Control Installation & Owner's Manual for adjustment procedure.

OPEN LIMIT

1. With the door in the open position, check the location of the yellow vinyl loop on the bottom bar. It should be in the position shown in Figure 15.

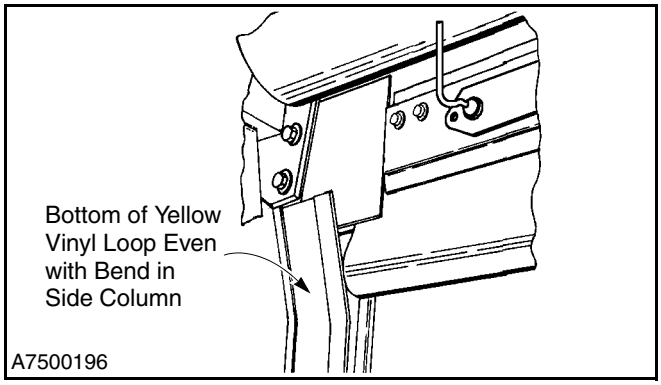

Figure 15

2. If the panel does not stop in the proper location, see the Rytec System 3 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 14 for procedures.)

Bottom Bar Inspection

1. Inspect the roll pins securing the bottom bar to the fabric. It is critical that hardware is tight to prevent shifting of the fabric in the bottom bar. (See Figure 16.)

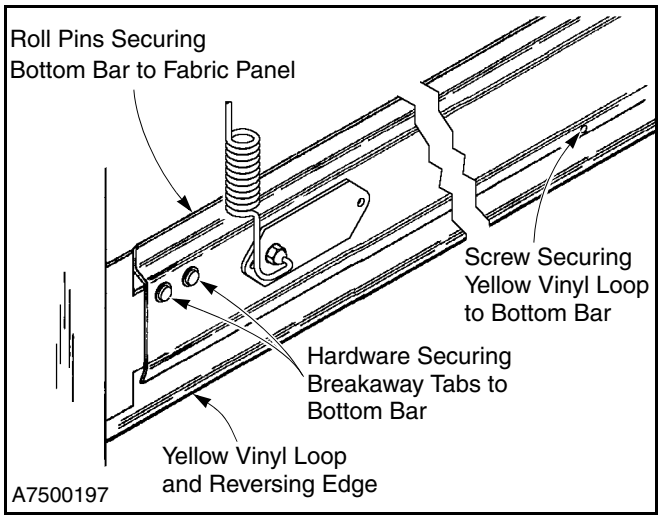

Figure 16

2. Check hardware used to secure the breakaway assembly to the bottom bar on both sides. Tighten as required.
3. Check the reversing edge to see that it is tightly secured in the bottom bar.
4. Inspect the yellow vinyl loop of the reversing edge for abrasion or tearing. Replace if required. Make sure screw securing vinyl loop is in place and tight.

Kill Switch Inspection

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

To check the kill switch assembly, proceed as follows:

⚠ WARNING

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 and the control system reset.

2. Push the breakaway bottom bar out of one of the side columns. (See Figure 17.)

   If the kill switch operated properly: Reinstall the bottom bar into the side column and repeat the procedure on the remaining column. (See "BOTTOM BAR ASSEMBLY" on page 2.)

   If the kill switch did not operate properly: Check the switch for damage. Replace if required. Check all switch wiring. Correct if required. Adjust if required. (See "PNEUMATIC KILL SWITCH ADJUSTMENT" on page 11.) Retest kill switch.

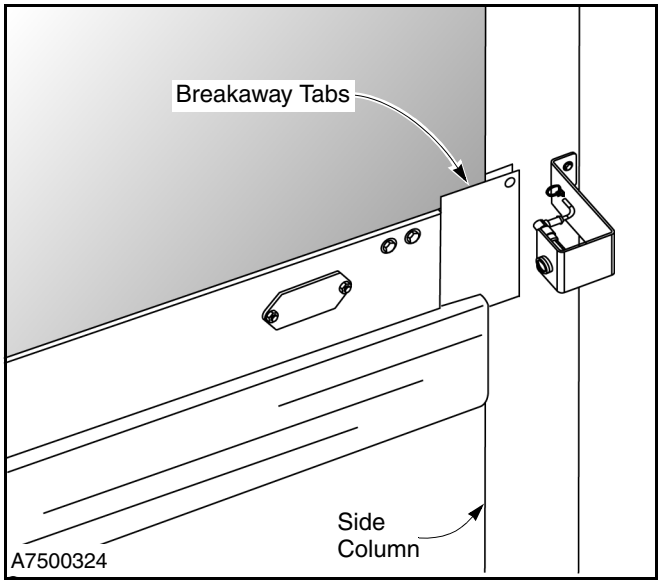

Figure 17

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 a lithium-based grease conforming to NLG1 Grade 2 standards. It should be medium viscosity, low torque, with an operating temperature range of –30°F to +200°F. (See Figure 18.)

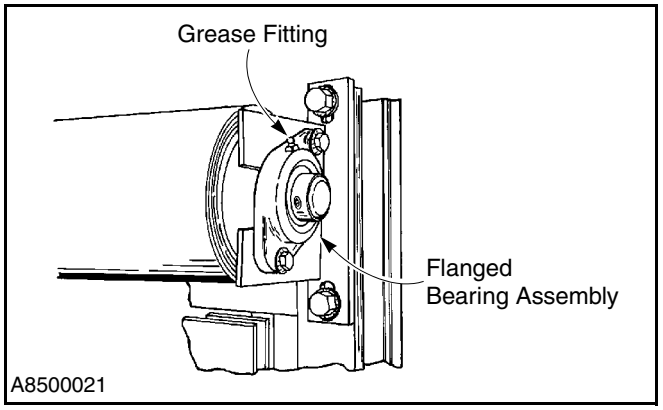

Figure 18

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®[1] 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 19.)

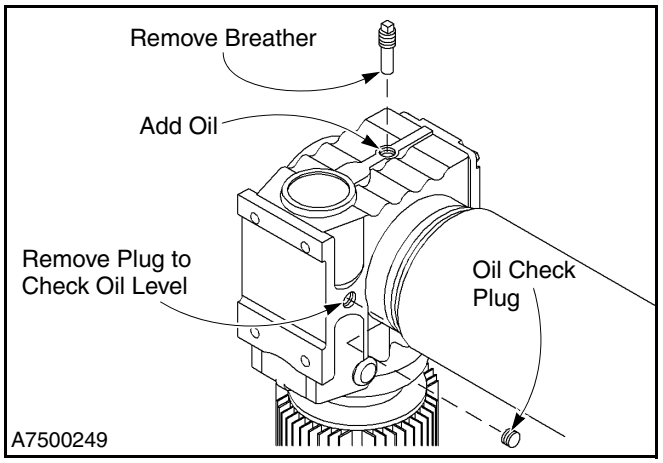

Figure 19

Weather Seal Inspection

HEADER ASSEMBLY

Inspect the header weather seal for wear or damage. (See Figure 20.) Replace if necessary. (See “WEATHER SEAL” on page 15.)

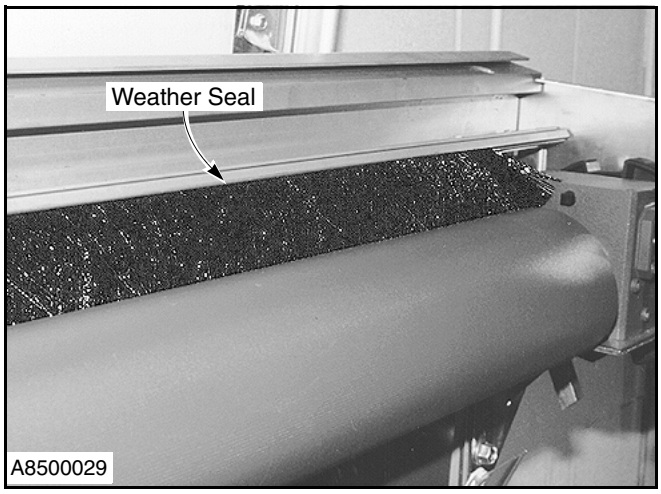

Figure 20

SIDE COLUMNS

Inspect the side column weather seal for wear or damage. (See Figure 21.) Replace if necessary. (See “WEATHER SEAL” on page 15.)

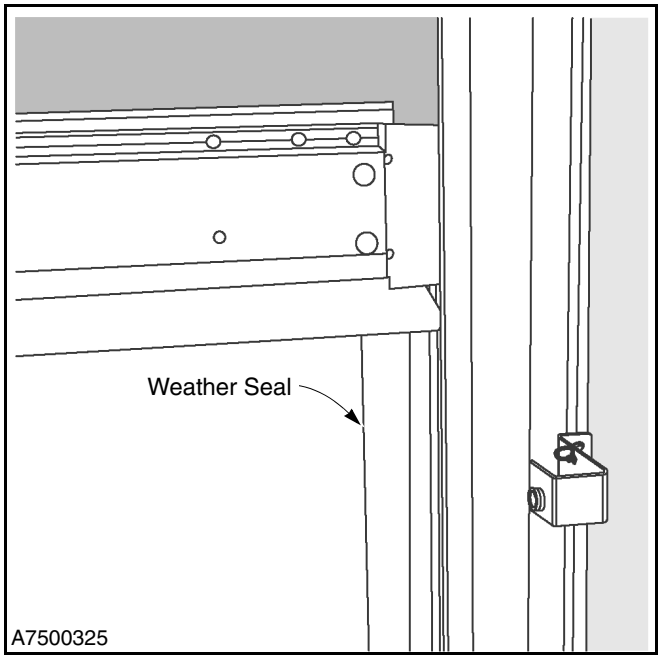

Figure 21

Activator/Control Panel Inspection

1. Inspect all warning/safety labels. All warning labels should be intact and clearly readable. Replace labels 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 3 Drive & Control Installation & Owner’s Manual.

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

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

⚠ WARNING

The 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 3 Drive & Control Installation & Owner's Manual for control panel inspection procedure.

ADJUSTMENTS

DOOR OPEN- AND CLOSE-LIMIT POSITIONS

See the Rytec System 3 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 yellow vinyl loop on the bottom bar to gently seal against the floor. (See Figure 22.)

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

⚠ CAUTION

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

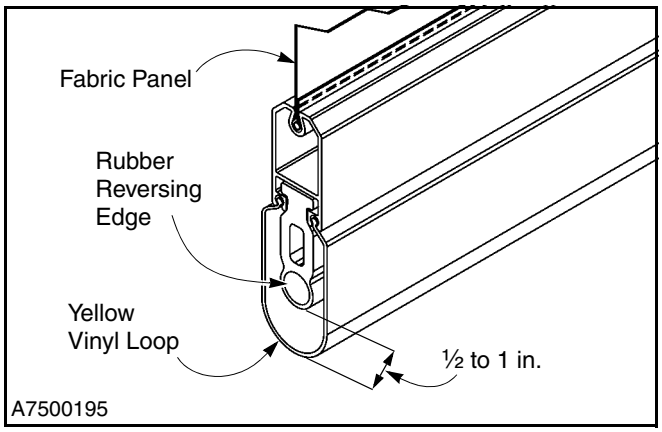

Figure 22

Open-Limit Position

The open-limit position should be adjusted so that the door travel allows the bottom bar assembly to stop at the position shown in Figure 23.

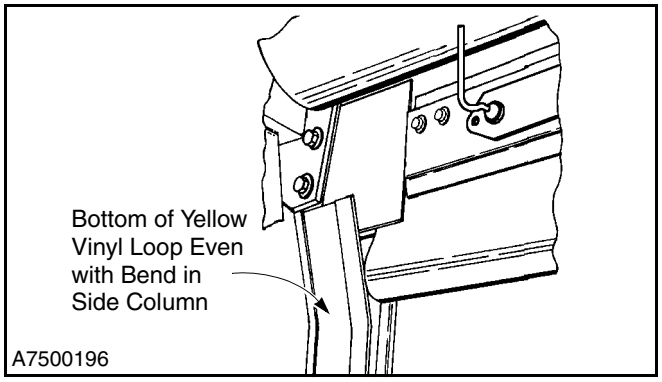

Figure 23

PNEUMATIC REVERSING EDGE SWITCH ADJUSTMENT

⚠ WARNING

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

To check the reversing edge switch, run the door through the down cycle. As the door is lowering, tap the bottom of the reversing edge. If the reversing edge switch is operating properly, the door will immediately reverse and run to the full-open position. Reset the control system after the check is completed.

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

Reversing Edge Switch Air Bleed Check

1. The reversing edge switch is located inside the bottom bar assembly. To inspect or adjust the switch, remove the access cover from the face of the bottom bar assembly. (See Figure 24.)

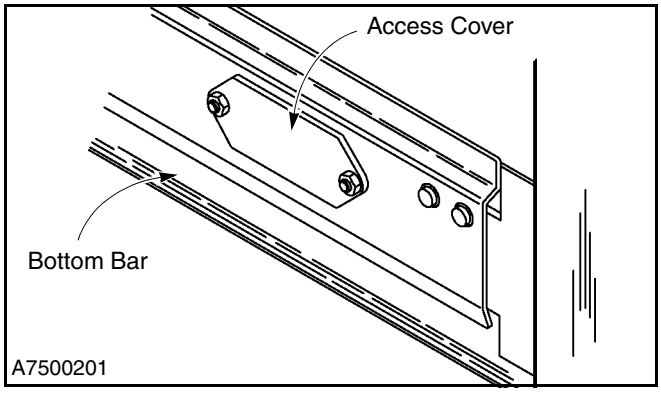

Figure 24

2. Make sure the clear PVC hose is in tight contact with the air input post so that air leakage cannot occur and that vibration will not cause the hose to fall off. Make sure the hose is not kinked. (See Figure 25.)
3. The air bleed has been set at the factory and should not require adjustment. To check the air bleed, turn the air bleed adjustment screws, located on the front and back of the switch, fully clockwise but do not overtighten. Then turn the screws counterclockwise one full turn. (See Figure 25.)

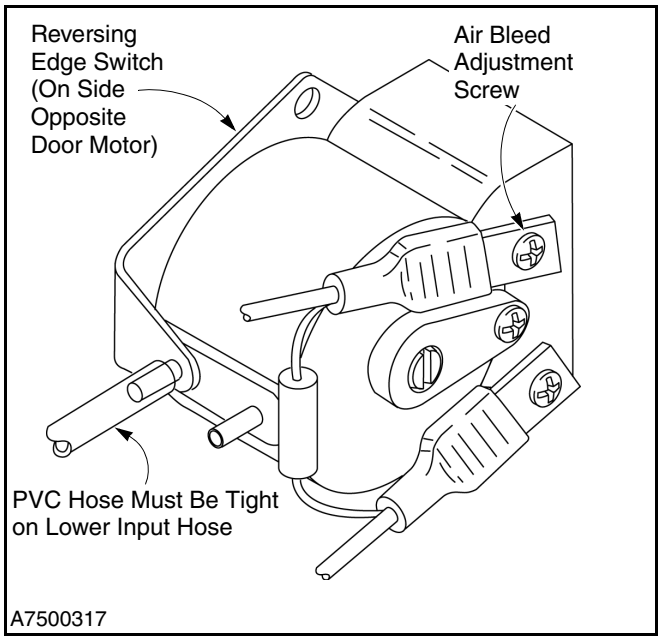

Figure 25

Reversing Edge Switch Sensitivity Adjustment

1. The reversing edge switch is a normally-open contact. The PVC hose is on the lower air input post. To adjust the switch, first remove the wires and resistor from the contact terminals and attach an ohmmeter across the two terminals. (See Figure 26.)
2. Turn the adjustment screw, located on the face of the switch, clockwise or counterclockwise until continuity is achieved. Then turn the screw ¾ turn counterclockwise. The ohmmeter should no longer show continuity. Turning the screw counterclockwise decreases sensitivity. Turning the screw clockwise increases sensitivity. (See Figure 26.)

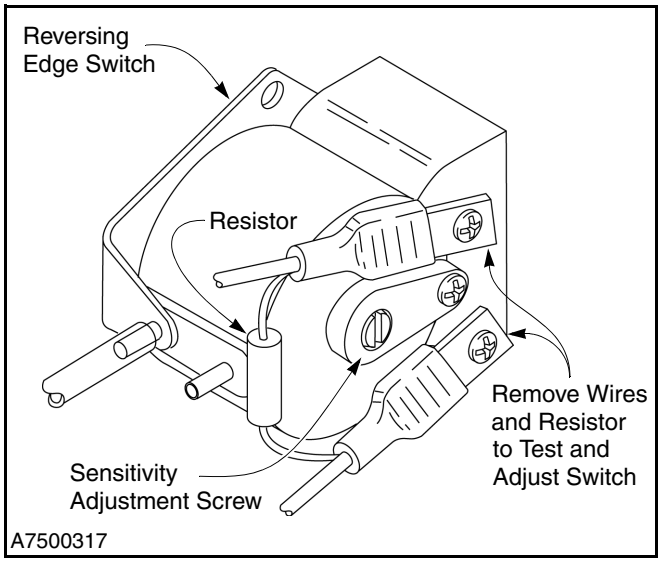

Figure 26

3. Reattach resistor and wires to the contact terminals. Replace the access cover on the bottom bar.

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

PNEUMATIC KILL SWITCH ADJUSTMENT

1. With the bottom bar separated from the side columns, locate the kill switch assembly bladder at each end of the bottom bar, then inspect each bladder for damage. Replace if required. (See Figure 27.)

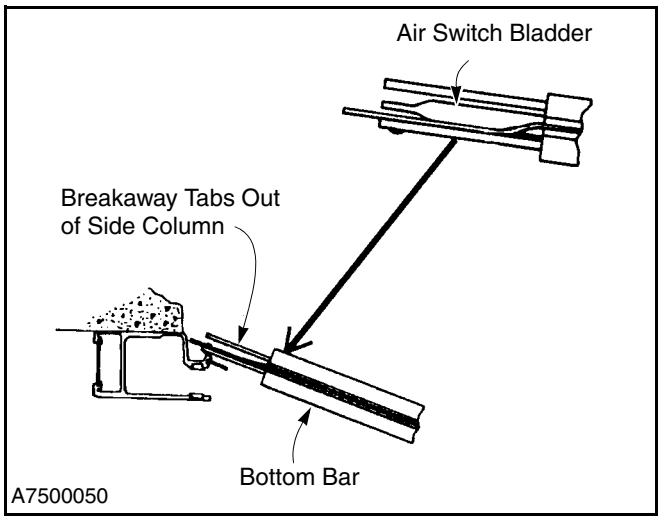

Figure 27

2. Remove the kill switch assembly access cover from the bottom bar. The kill switch is located on the same side as the door motor. (See Figure 28.)

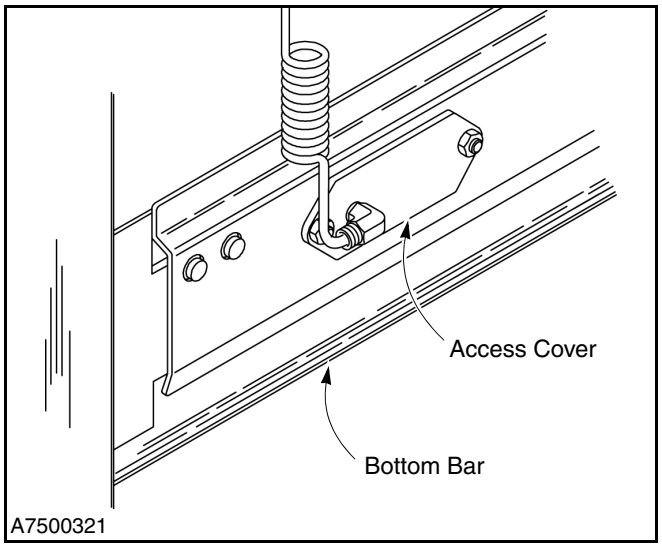

Figure 28

Kill Switch Air Bleed Check

1. Make sure the clear PVC hose is tight on the air input post so that air leakage cannot occur and vibration will not cause the hose to fall off. Make sure the hose is not kinked. (See Figure 29.)
2. The air bleed has been set at the factory and should not require adjustment. To check the air bleed, turn the air bleed adjustment screws, located on the front and back of the switch, fully clockwise but do not overtighten. Then turn the screws counterclockwise one full turn. (See Figure 29.)

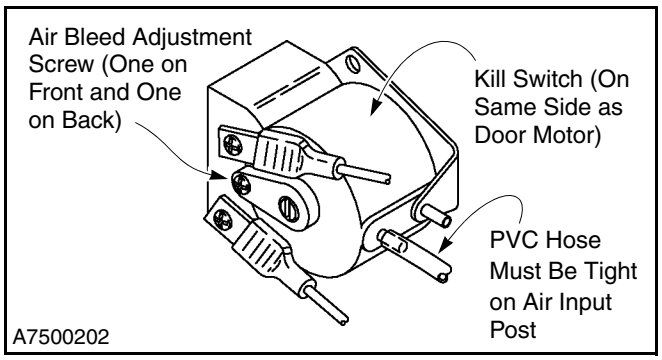

Figure 29

3. To adjust the kill switch sensitivity, see "Kill Switch Sensitivity Adjustment" below.

Kill Switch Sensitivity Adjustment

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

1. Remove the wires from the contact terminals and attach an ohmmeter across the two terminals. (See Figure 30.)

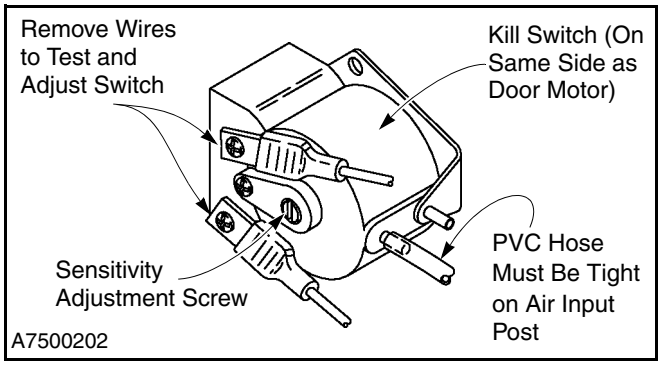

Figure 30

2. To adjust the switch, turn the small adjusting screw, located on the face of the switch, clockwise or counterclockwise until continuity is achieved. Then turn the screw two turns clockwise for final adjustment. Turning the screw clockwise decreases sensitivity. Turning the screw counterclockwise increases sensitivity.
3. Reconnect the wires onto the switch. Replace the access cover on the bottom bar.

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

PHOTO EYE ADJUSTMENT

The photo eye is always set at maximum adjustment. If less sensitivity is required, contact the Rytec Customer Support Department at 800-628-1909 before any adjustments are made. (See Figure 31.)

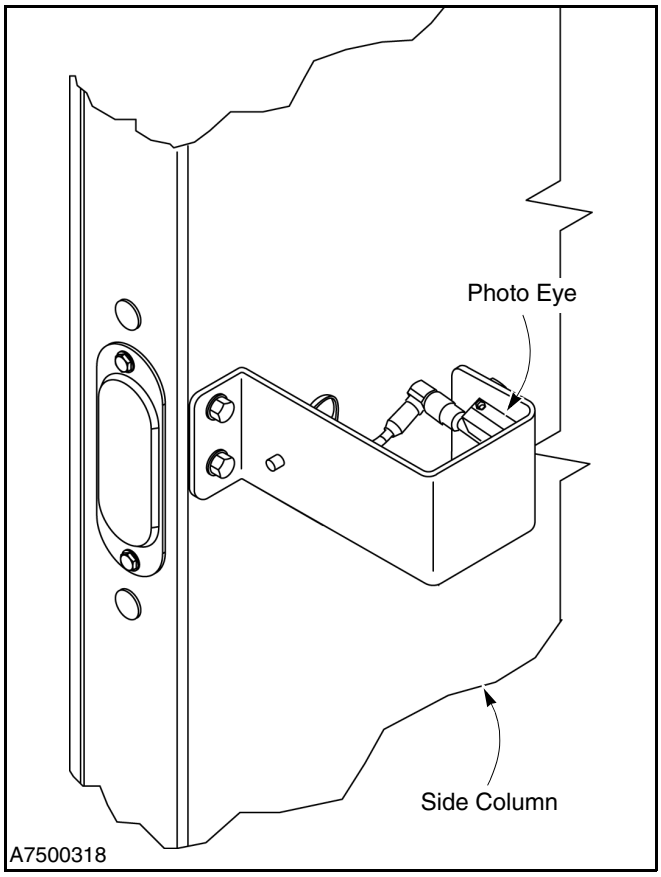

Figure 31

1. Check to see that the photo eye on the front side of the door has been installed for a horizontal beam across the door opening. (See Figure 32.)

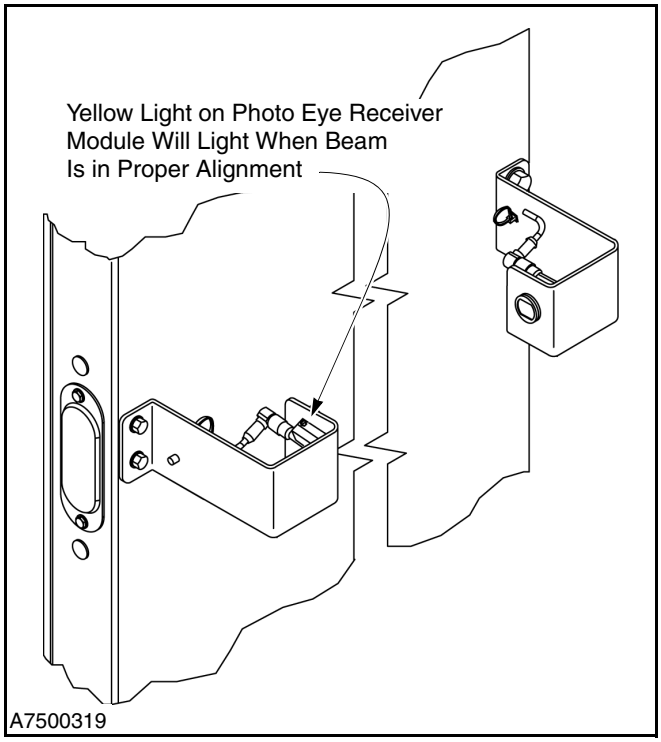

Figure 32

2. Align the photo eyes on the front side of the door.

NOTE: Loosening the cap screws will give you a small amount of adjustment of the mounting bracket.

When the photo eyes are aligned, the yellow light on the top of the receiver module will be illuminated. (See Figure 32.)

3. Adjust the photo eyes on the rear side of the door as required, depending on the type of mounting used by the installer.

FABRIC ROLL ADJUSTMENT

1. If the fabric is not tracking properly, verify that the fabric roll is level. Adjust as required. (See Figure 33.)

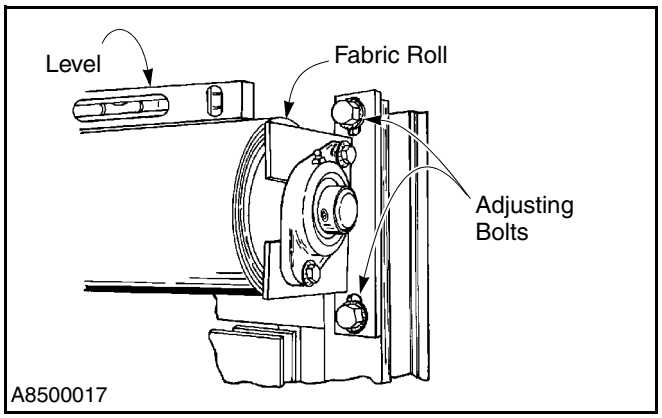

Figure 33

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 34.)

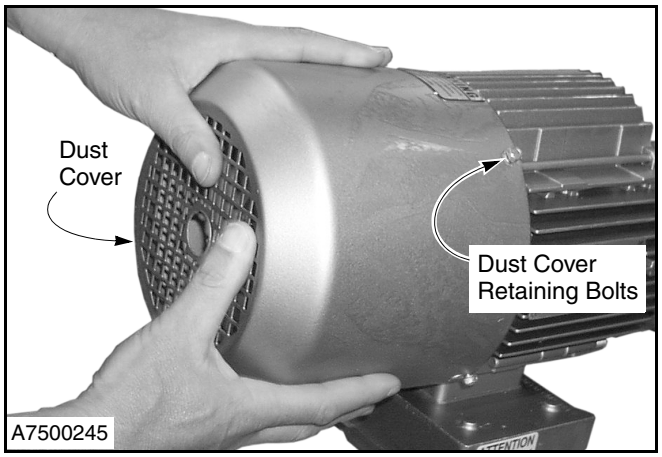

Figure 34

3. Securely tighten all brake adjusting nuts. (See Figure 35.)

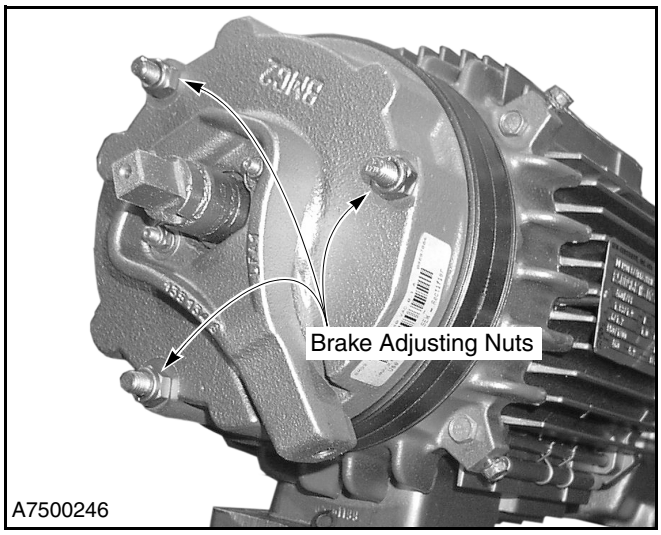

Figure 35

⚠ CAUTION

All adjusting nuts must be equally set or the brake parts will wear unevenly.

4. Back off all brake adjusting nuts ½ turn.
5. Reinstall the dust cover and the manual brake release lever.
6. Turn on power to the door.

REPLACEMENT PROCEDURES

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 36.)

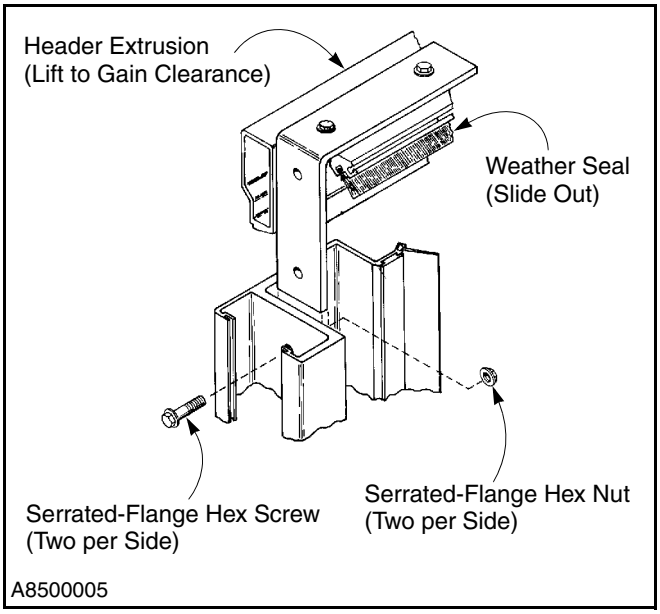

Figure 36

2. Lift the header extrusion slightly to gain clearance, and remove the damaged weather seal by sliding it out of the extrusion.
3. Insert the new weather seal in the channel. (See Figure 37 and Figure 38 for positions.)

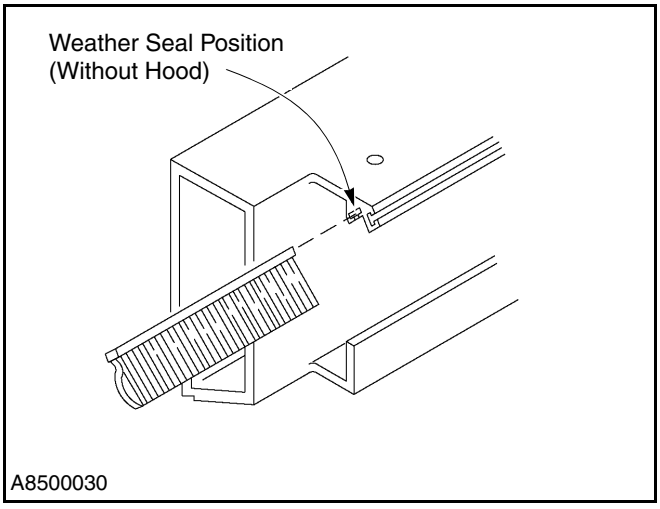

Figure 37

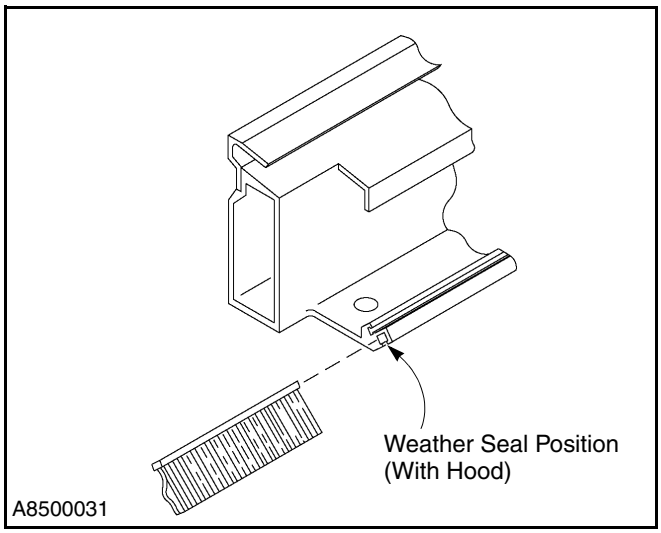

Figure 38

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

Side Columns

1. Drill out rivets in side columns and remove the old seal. (See Figure 39.)

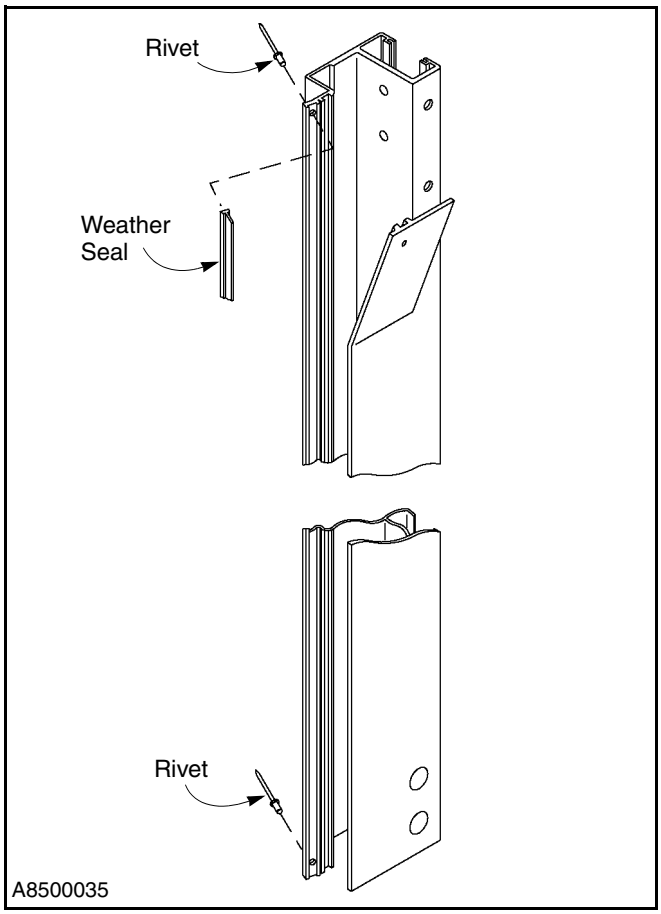

Figure 39

2. Install new seal and rivet in place.

NOTES

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 Customer Support Department at 1-800-628-1909 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 inside one of the side columns, on the drive motor gearbox or inside the door of the System 3 Control Panel. (See Figure 40.)

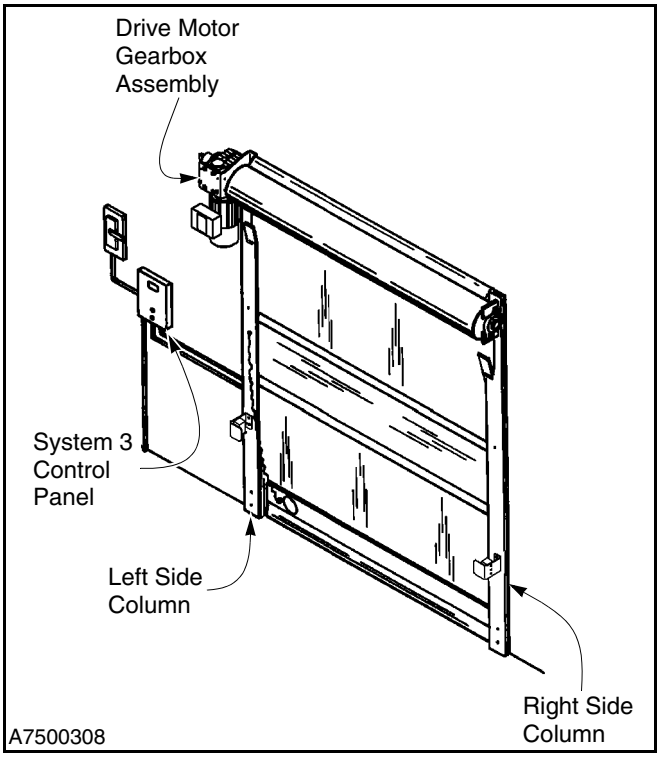

Figure 40

Substitute Parts

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

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

Return of Parts

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

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

DOOR SERIAL NUMBER(S)

To obtain your door ***DOOR SERIAL NUMBER***, there are three universal locations where this information can be found. These are at the inside of either side column (approximately eye level), on the drive motor, and on the inside door of the System 3 control panel.

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.

SIDE COLUMNS AND HOOD

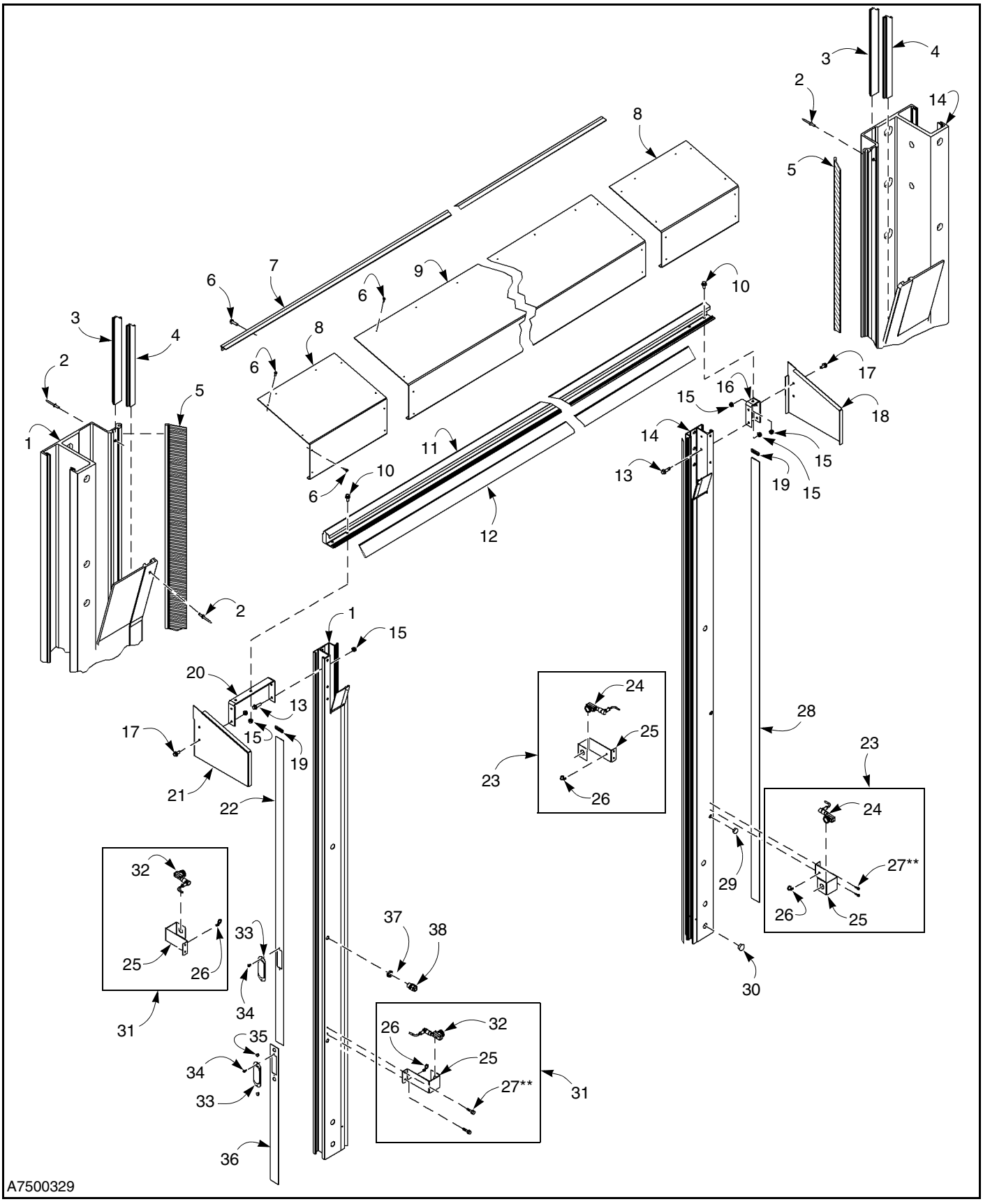

Figure 41

ITEM	QTY.	PART #	DESCRIPTION
1	1	0703022*	Side Column, Left
	1	0703916	Side Column, Left, used w/ Pullout (see page 20)
2	12	0556323	Rivet, 1/8 in. Dia.
3	2	0705011*	Wear Strip, Rear
4	2	0705011*	Wear Strip, Front
5	2	0007178	Weather Seal
6	A/R	0551050	Screw, 5/16-18 x 3/4 in. Self-Tapping Sheet Metal
7	1	0703839*	Extrusion, Cover
8	2	0702013	Hood Cover, End Section (optional)
9	1	0702598*	Hood Cover, Center (optional)
10	8	0550261	Screw, 3/8-16 x 1 1/4 in. Serrated-Flange
11	1	0703838*	Extrusion, Spreader
	1	0703874	Extrusion, Spreader (used w/ right side motor w/ hood and thru beam emitter)
	1	0703875	Extrusion, Spreader (used w/ left side motor w/ hood and thru beam emitter)
12	1	0009177*	Weather Seal, Brush 3 in.
	1	0009178*	Weather Seal, Brush 4 in.
	1	0009179*	Weather Seal, Brush 5 in.
13	4	0550261	Screw, 3/8-16 x 1 1/4 in. Serrated-Flange
14	1	0703021*	Side Column, Right
	1	0703917	Side Column, Right, used w/ Pullout (see page 20)
15	19	0553229	Nut, 3/8-16 Serrated-Flange
16	1	0703024	Support Bracket, Non-Drive Side (w/ optional hood)
17	6	0550254	Screw, 3/8-16 x 3/4 in. Serrated-Flange
18	1	0702012	Hood Cover, Right (optional)
19	2	0704004	Liner, Edge
20	1	0703837	Support Bracket, Optional w/ Hood, Drive Side
21	1	0702011	Hood Cover, Left (optional)
22	1	0702016*	Side Cover, Top Drive Side
23	1	12100300	Assembly, Transmitter, Photo Eye
24	1	0014077	Photo Eye, Transmitter, Pepperl & Fuchs
25	1	12100290	Bracket, Mounting, Photo Eye
26	1	0005401	Tie, Cable, Push Stud
27**	2	05500016	Screw, 1/4-20 x 3/4 in. Serrated-Flange
28	1	0702019*	Side Cover, Bottom Non-Drive Side
29	2	0704006	Plug, 0.53 in. Dia., Dome
30	A/R	0704005	Plug, 1 1/4 in. Dia., Dome
31	1	12100310	Assembly, Receiver, Photo Eye
32	1	0014078	Photo Eye, Receiver, Pepperl & Fuchs
33	2	0004004	Cover, Outlet Box
34	4	0551325	Screw, #10-16 x 1/2 in. Phillips Pan-Head, Self-Tapping, Serrated-Flange
35	A/R	0704008	Plug, 7/8 in. Dia., Dome
36	1	0702193	Side Cover, Bottom Drive Side
37	2	0014492	Lock Nut
38	1	0014491	Cord Grip, 1/2 in. NPT
39	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.

PULLOUTS

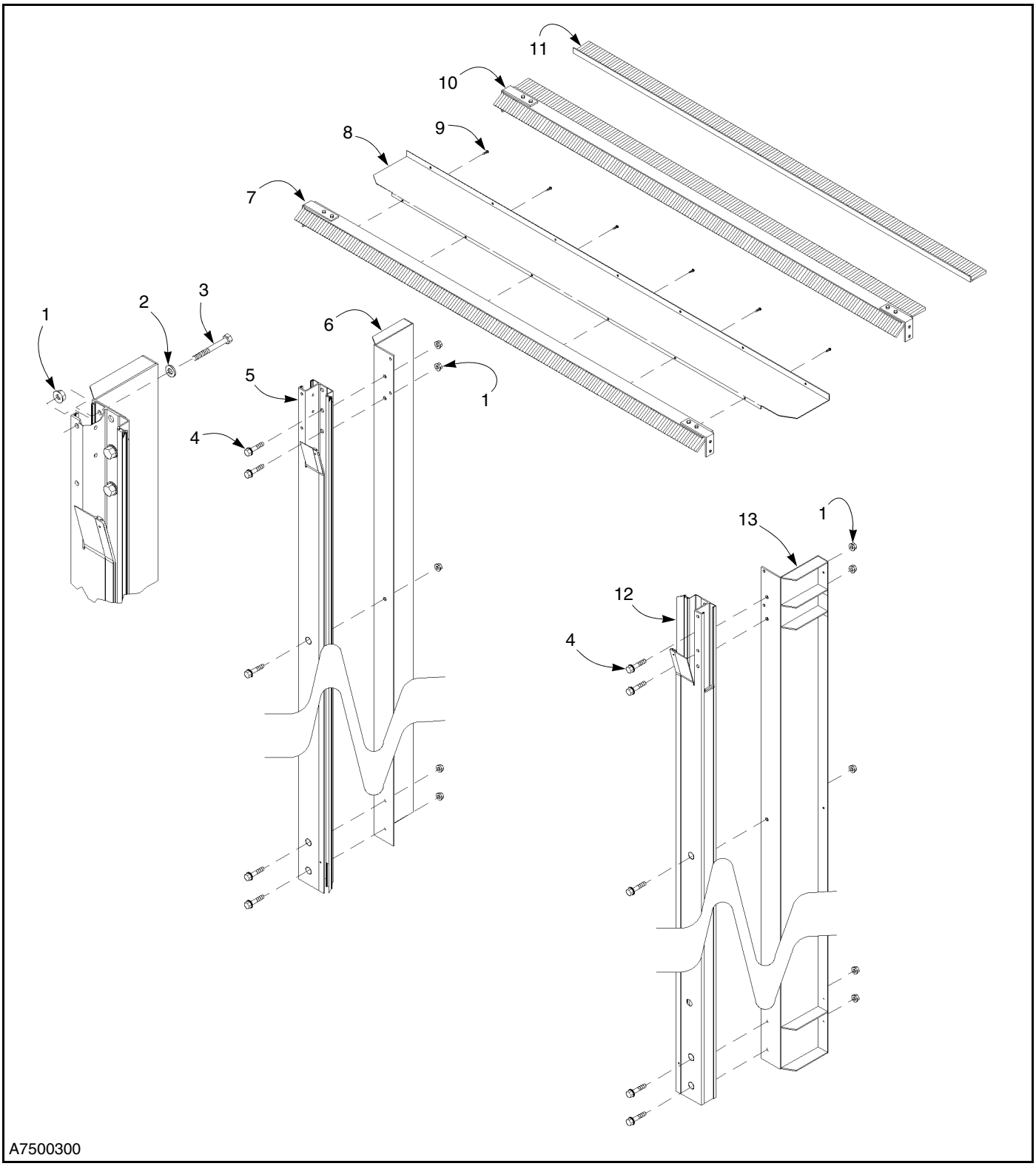

Figure 42

ITEM	QTY.	PART #	DESCRIPTION
1	14	0553100	Nut, ½-13 Serrated-Flange Hex
2	4	0555145	Washer, ½ in. Flat
3	4	0021703	Screw, Hex, ½-13 x 6 in., Grade 5
4	10	0550303	Screw, ½-13 x 1¼ in. Serrated-Flange Hex, Grade 5
5	1	0703022*	Side Column, Left (see page 18)
6	1	0799504	Pullout, Left
7	1	0799507	Rear Spreader, Angle Z-Section Pullout, w/o Brush (optional item used w/ items 6 and 13)
8	1	0702804	Filler Sheet, Top, Angle Z-Section Pullout (optional item used w/ items 6 and 13)
9	10	0551014	Screw, ¼ in. x 1 in. Self-Tapping Sheet Metal
10	1	0799507	Rear Spreader, Angle Z-Section Pullout, w/ Brush (optional item used w/ items 6 and 13)
11	1	0009129	Retainer Seal, 90° (optional item used w/ items 6 and 13)
12	1	0703021*	Side Column, Right (see page 18)
13	1	0799505	Pullout, Right

A/R = as required

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DOOR PANEL AND FABRIC ROLL

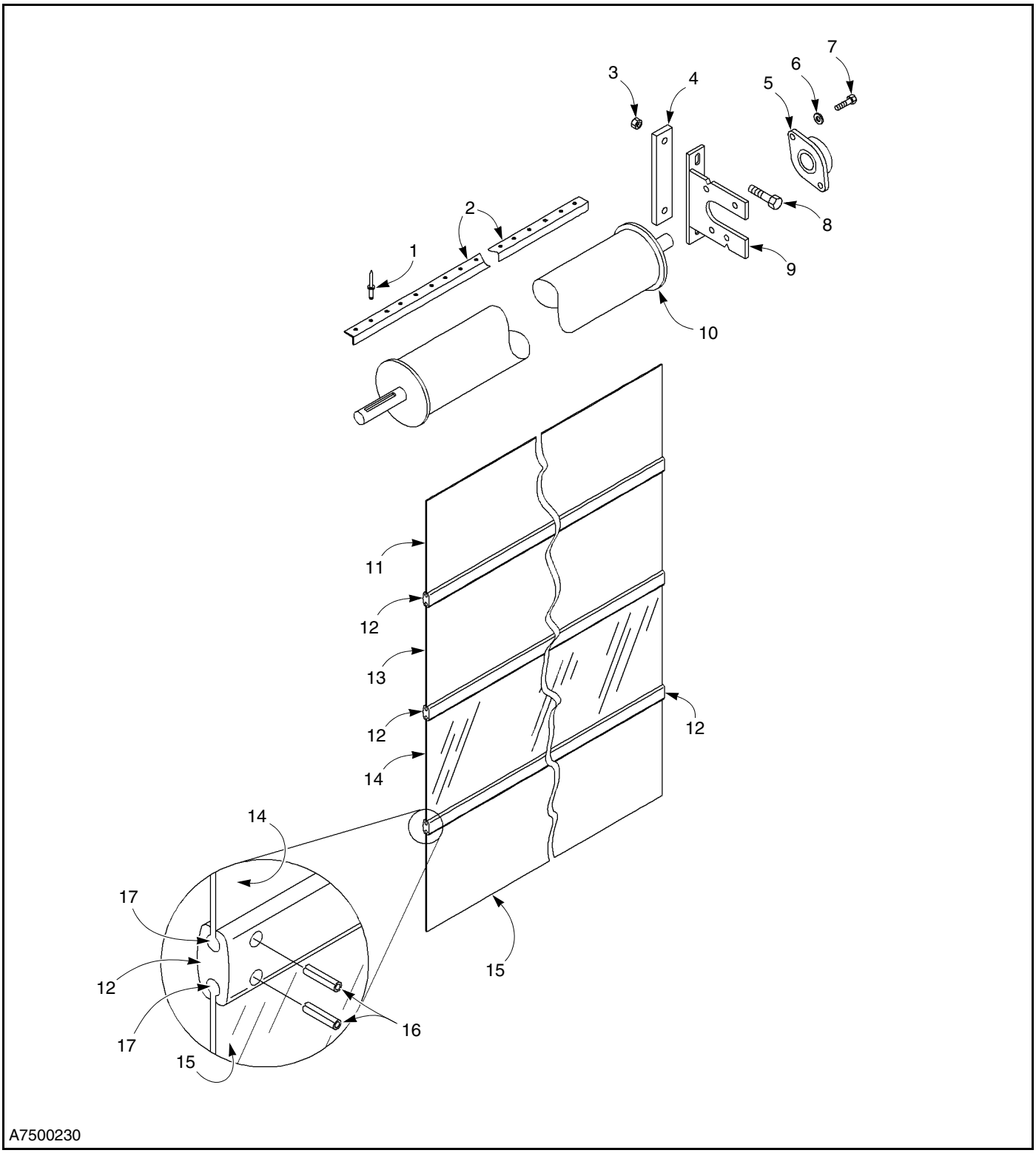


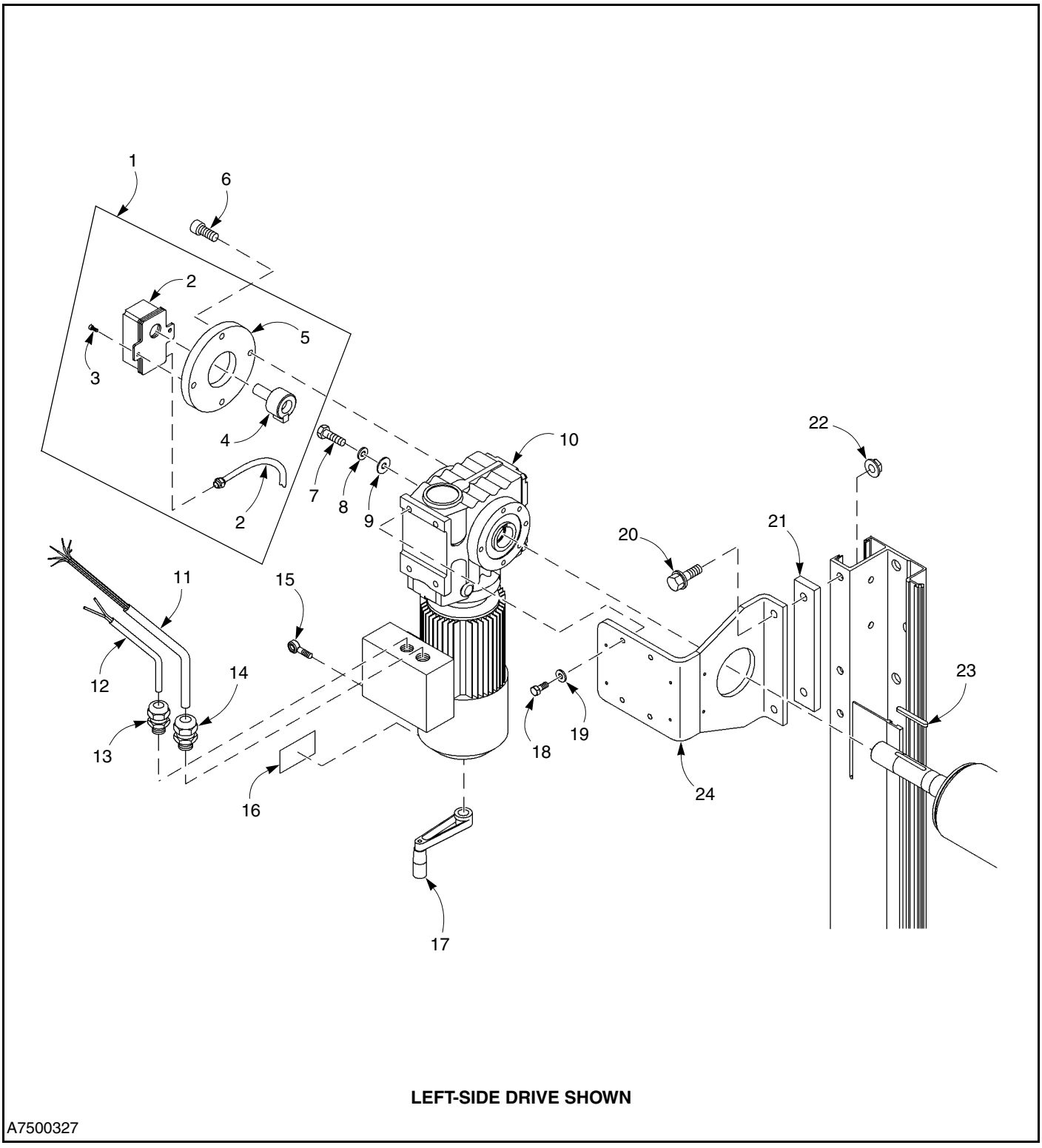
Figure 43

ITEM	QTY.	PART #	DESCRIPTION
1	A/R	0556167	Rivet, 3⁄16 in. Stainless
2	1	0702010*	Strap, Clamp, Panel Mounting
3	2	0553100	Nut, ½-13 Serrated-Flange Hex
4	1	0703353	Spacer (required for over-sized doors only)
5	1	0704010	Bearing
6	2	0555119	Lock Washer, 7⁄16 in.
7	2	0550011	Screw, 7⁄16-14 x 1 in. Hex-Head Cap
8	2	0550303	Screw, ½-13 x 1¼ in. Serrated-Flange, Hex-Head
	2	0550024	Screw, ½-13 x 2 in. Serrated Flange, Hex-Head (used w/ item 4)
9	1	07991238	Bracket, Bearing Mounting
10	1	07991732*	Weldment, Drum, 5 in. Dia.
	1	07991733*	Weldment, Drum, 5¼ in. Dia.
11	1	0707005*	Upper Panel, Vinyl
	1	Consult Factory*	Upper Panel, Rilon
	1	0707018*	Upper Panel, 2-Ply
12	A/R	0703010*	Extrusion, Wind Rib
13	1	0707003*	Intermediate Panel, Vinyl (4-panel door only)
	1	Consult Factory*	Intermediate Panel, Rilon (4-panel door only)
14	1	0707019*	Solid Vision Panel, Vinyl (optional)
	1	0707002*	Vision Panel, Standard
	1	0707022*	Solid Vision Panel, 2-Ply (optional)
15	1	0707001*	Lower Panel Section, Vinyl
	1	Consult Factory*	Lower Panel Section, Rilon
	1	0707014*	Lower Panel Section, 2-Ply
16	A/R	0552324	Roll Pin, ⅛ in. Dia. x ⅝ in.
17	A/R	0705012	Cord, ¼ in. Dia. x (length as required)

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.

MOTOR/GEARBOX ASSEMBLY



LEFT-SIDE DRIVE SHOWN

A7500327

Figure 44

ITEM	QTY.	PART #	DESCRIPTION
1	1	07991603	Encoder and Shaft Assembly
2	1	00141028	Encoder (with Cable)
3	1	0021690	Screw, M3-0.5 x 10 mm
4	1	S7991558	Shaft, Encoder Coupling
5	1	0705090	Encoder Mounting Plate
6	1	S021059	Screw, M8 x 1.25 x 18 mm Stainless Steel, Socket-Head Cap
7	1	0021096	Screw, ½-13 x 1 in., Hex-Head Cap
8	1	0554121	Washer, ½ in. Split Lock
9	1	0021095	Washer, Eurodrive
10	1	Consult Factory	Motor/Gearbox Assembly
11	1	0141007	Cable, 16/6, Shielded, Type SEOOW, 600V, 90°C, 20 ft.
12	1	0014435	Cord, 18/2, SO (only on motors w/ brake heaters)
13	1	0014791	Cord Grip, ½ in. (only on motors w/ brake heaters)
14	1	0014791	Cord Grip, ½ in. (1- and 2-hp motors)
	1	0014734	Cord Grip, ¾ in. 6 Conductor, (3-hp motor)
15	1	0550278	Brake Release Eye Bolt
16	1	0716001	Decal, Manual Door Operation
17	1	0704038	Crank Handle Assembly
18	4	0021670	Screw, M10-1.5 x 30 mm Hex-Head Cap
19	4	0021620	Washer, M10 Split Lock
20	2	0550303	Screw, ½-13 x 1¼ in. Serrated Flange, Hex-Head
	2	0550024	Screw, ½-13 x 2 in. Serrated-Flange, Hex-Head (used w/ item 22)
21	1	0703353	Spacer (required for over-sized doors only)
22	2	0553100	Nut, ½-13, Serrated-Flange, Hex
23	1	0704094	Key, 5⁄16 x 5⁄16 x 3.98 in., Round Ends, Stainless Steel
24	1	0703475	Bracket, Motor Mounting, (w/ 3.63 in. centerline and rotary limit switch)
	1	0703908	Bracket, Motor Mounting (w/ 2.88 in. centerline and rotary limit switch)
	1	0703911	Bracket, Motor Mounting, (w/ 2.88 in. centerline and System 3)
	1	0703912	Bracket, Motor Mounting (w/ 3.63 in. centerline and System 3)

A/R = as required

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

***Not part of assembly.*

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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.

BOTTOM BAR ASSEMBLY

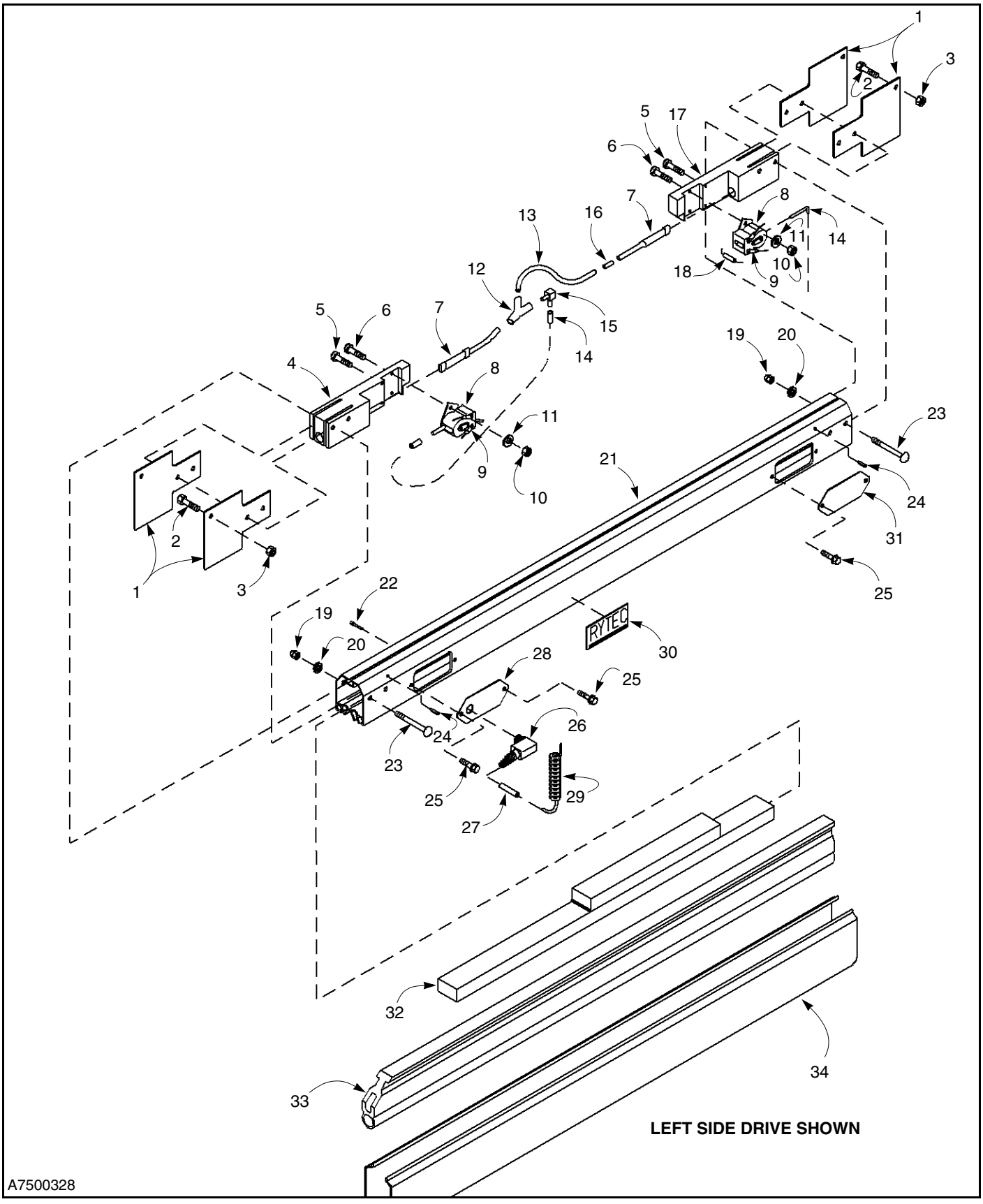

Figure 45

ITEM	QTY.	PART #	DESCRIPTION
1	4	0705094	Breakaway Tab
2	2	0021531	Screw, ¼-20 x ⅜ in. Phillips Flat-Head
3	2	0553103	Nut, ¼-20 Serrated-Flange Hex
4	1	0705014	End Block, Left
5	4	S021025	Screw, #10-12 x ¾ in. Truss-Head, Stainless Steel
6	4	0021029	Threaded Stud, 8-32 x ½ in.
7	2	0713000	Air Switch
8	2	0211397	Pressure Switch
9	4	0014483	Wire Terminal, Slip-on, Female
10	4	0553180	Nut, 8-32
11	4	0554179	Lock Washer, #8
12	1	0804336	Y-Connector Tube, 3⁄16 in.
13	1	0804219*	Tube, 3⁄16 in. I.D. Vinyl
14	2	0007321	Tube, 4 mm O.D. x 5 in. Vinyl
15	1	0204552	Hose Fitting, 90° Elbow
16	1	0804337	Connector Tube, 3⁄16 in. Union
17	1	0705013	End Block, Right
18	1	00141005	Resistor
19	4	S021070	Nut, ⅜-16 UNC Acorn, Stainless Steel
20	4	S554225	Washer, ⅜ in. Split Lock, Stainless Steel
21	1	0703807*	Bottom Bar
22	2	0021748	Screw, #6 x 1½ in. Phillips Pan-Head
23	4	S021652	Screw, ⅜-16 UNC x 2½ in. Hex-Head Stainless Steel
24	2	0021093	Roll Pin
25	4	0021603	Screw, ¼-20 x ¾ in. Serrated-Flange
26	2	0014824	Cord Grip, ½ in. NPT
27	2	0013006	Tube
28	1	S703217	Cover, w/ Hole
29	A/R	0704075	Coil Cord Assembly, 4-Conductor, 24 in.
	A/R	0704035	Coil Cord Assembly, 4-Conductor, 36 in.
30	1	0016658	Decal, Rytec
31	1	S703009	Cover, w/o Hole
32	1	0703002*	Weight, Bottom Bar
33	1	07991514*	Foam Reversing Edge Assembly
34	1	07991752*	Loop Seal, Yellow Vinyl
	1	07991753*	Loop Seal, White Vinyl
	1	07991754*	Loop Seal, Screen Material
	1	07991782*	Loop Seal, Black Vinyl
	A/R	07991000*	Loop Seal, Hypalon, Low Profile
35	1	0716002	Warning Tag, Coil Cord (not shown – used w/ item 29)