USER MANUAL

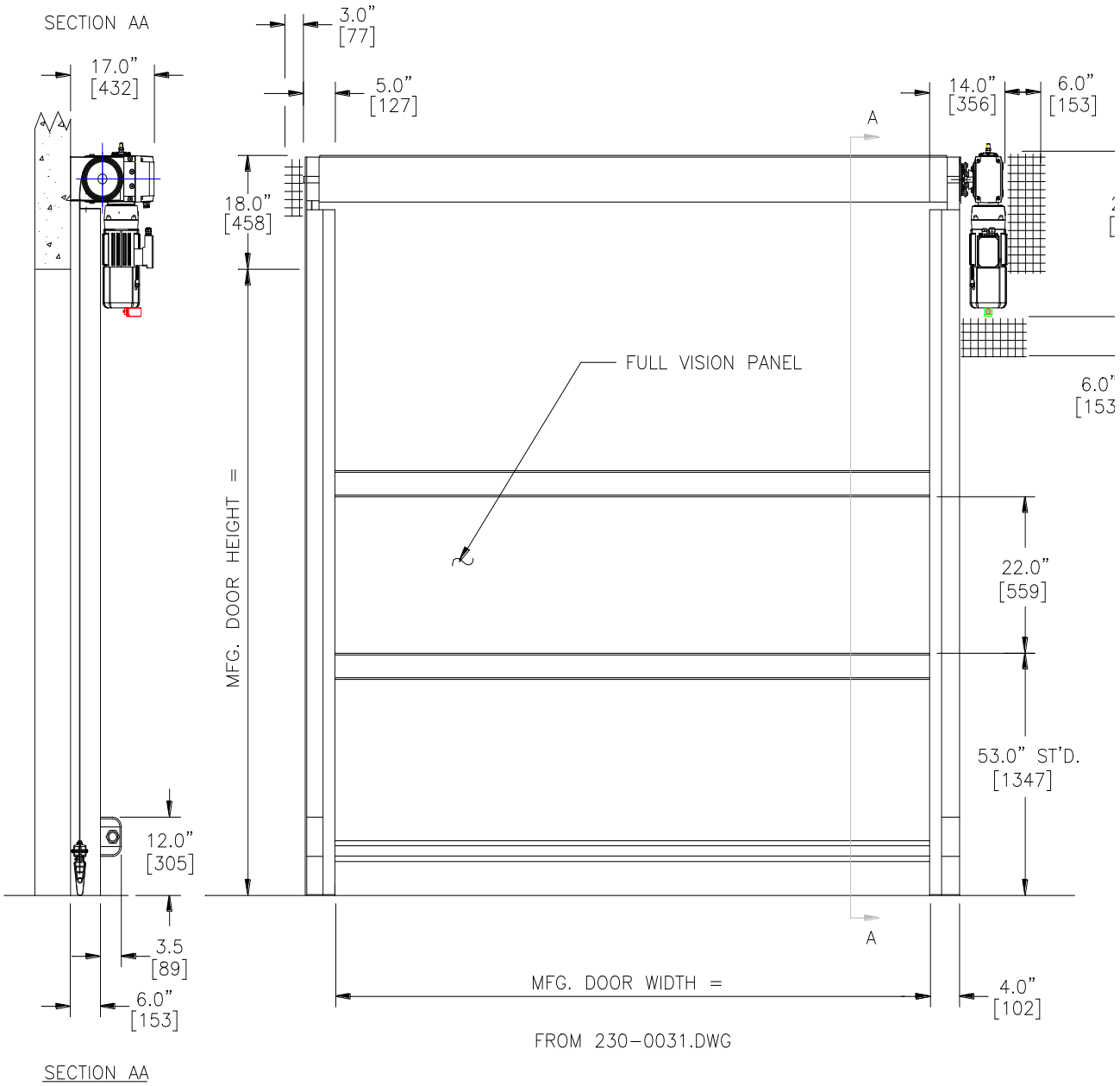
RAPID-ROLL DOOR OWNER'S MANUAL

MODEL 230

975-A OLD NORCROSS ROAD
LAWRENCEVILLE, GA 30045
(770) 338-5000 TEL
(770) 338-5034 FAX
(877) 925-2468 TOLL FREE

Part # 6410T0009

Architectural Drawing of the 230 Rapid Roll Door



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WARNING

DO NOT INSTALL, OPERATE, OR SERVICE THIS PRODUCT UNLESS YOU HAVE READAND UNDERSTAND THE SAFETY PRACTICES, WARNINGS, INSTALLATION, AND MAINTENANCE INSTRUCTIONS CONTAINED IN THIS MANUAL.

All bolts, fasteners, and electrical connections must be checked and retightened while installing the door. Especially the locking collars located on the top roll.

STATEMENT OF WARRANTY
RAPID ROLL® MODEL 230

ONE YEAR WARRANTY ON DOOR PANEL, MECHANICAL & ELECTRICAL COMPONENTS

Albany Door Systems warrants to the original owner of the door that the door panel fabric, mechanical and electrical components will be free of defects in material and workmanship for a period of **twelve (12) months** from the date of shipment. Burrell Leader door panel will be under warranty for a period of one (1) year from date of shipment.

Only defects brought to the attention of Albany International during the warranty period will be covered by this warranty.

Albany Door Systems will replace any component parts, which are found to be defective upon inspection by an **Albany Door Systems** representative.

This warranty does not cover damage caused by collision or other abuse of the product. Adjustments made to the Control Panel or to the mechanical operation of the door without the authorization of **Albany Door Systems** will void this warranty.

The replacement provisions shall be the limit of **Albany Door Systems** responsibility under this warranty **Albany Door Systems** shall not be responsible for any other losses or damages due to the operation of any door or parts covered by this warranty.

No other oral or written representations made by **Albany Door Systems** or its agents are a part of this warranty unless specifically set forth in writing by an authorized **Albany Door Systems** official.

THE ABOVE SET FORTH WARRANTY IS SELLER'S SOLE WARRANTY. SELLER MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED; AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESTATED OBLIGATION ARE HEREBY DISCLAIMED BY SELLER AND EXCLUDED FROM THIS AGREEMENT.

USW-230.99

SAFETY PRACTICES

WARNING

THOROUGHLY READ THESE SAFETY PRACTICES PRIOR TO INSTALLING, OPERATING, OR SERVICING A HIGH-SPEED, RAPID ROLL® DOOR. FAILURE TO FOLLOW THESE SAFETY PRACTICES MAY RESULT IN PROPERTY DAMAGE, PERSONNEL BODILY INJURY, OR DEATH.

1. Do not operate a Rapid Roll® Door while you are under the influence of drugs or alcohol.

2. Do not use the door if any parts appear to be broken or damaged.

3. Stay clear of the door while it is operating.

4. Keep hands and feet clear of the door at all times.

5. Do not drive through the door opening unless door is completely open.

6. Maintain a clear door opening at all times. Keep the door opening free of any obstructions.

7. Remove power at the fused disconnect during all electrical or mechanical service. OSHA requires a disconnect to be properly tagged and locked out during all maintenance or service of equipment.

8. All electrical troubleshooting or service must be performed by a qualified electrician or service person and must meet all applicable local, state, federal, and other governing agency codes.

9. ***USE EXTREME CAUTION*** when it is necessary to service the control panel while it is energized.

If you have any questions, please contact your local Albany service provider for assistance. Otherwise contact Albany Door Systems 1-877-925-2468 for information on your local distributor.

PACKING LIST

Before beginning the installation, thoroughly inspect the crate to ensure all necessary components are there.

MODEL 230 STANDARD

- Left Hand and Right Hand Side Frames with attached Covers (2 sets)
- Top Roll Assembly (1)
- Drive Unit Assembly (1)
- Socket, 6mm Allen, 3/8" Drive for Manually Cranking of Door (1)
- Non-Drive Side Bearing Plate (1)
- Drive Side Bearing Plate (1)
- Top Roll Brush Seal (1)
- Electrical Control Panel (1)
- Reversing Photocells (1 set)
- Pressure Switch Enclosure w/ attached Retractile Cord (1 set)
- Assembly Hardware:
    (1) Stub axle key (taped to stub axle itself)
    (1) Hex head bolt, M10 x 30mm (installed in vibration damper assembly)*
    (4) Flange head bolt, 3/8-16 x ½" (installed in side frames)*
    (2) Photocell mounting brackets

RAPID ROLL® MODEL 230 MECHANICAL INSTALLATION

All bolts, fasteners, and electrical connections must rechecked and tightened while installing the door.

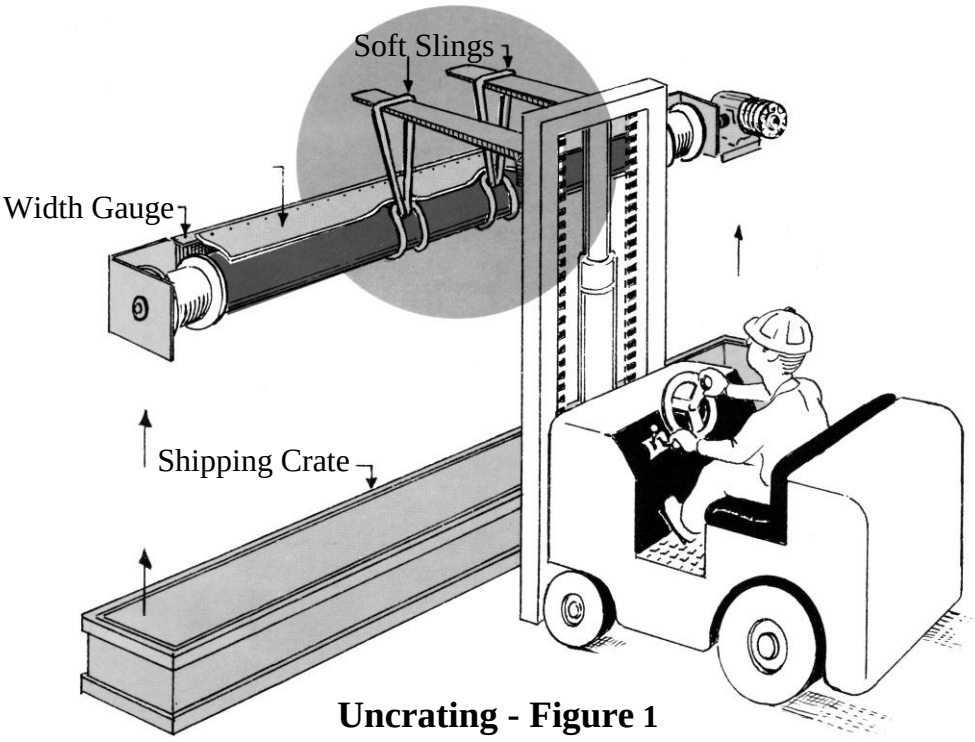
MODEL 230 STANDARD INSTALLATION

Step 1. Unpack crate and inventory parts, comparing them against the packing list in the front of this manual, to verify all parts are on site.

Step 2. Using an approved lifting device, place a lifting strap around the top roll assembly, lift and remove from shipping crate as indicated by **Figure 1**. Lay the top roll assembly on the floor near the door opening on the side of the wall where the door will be mounted.

NOTE

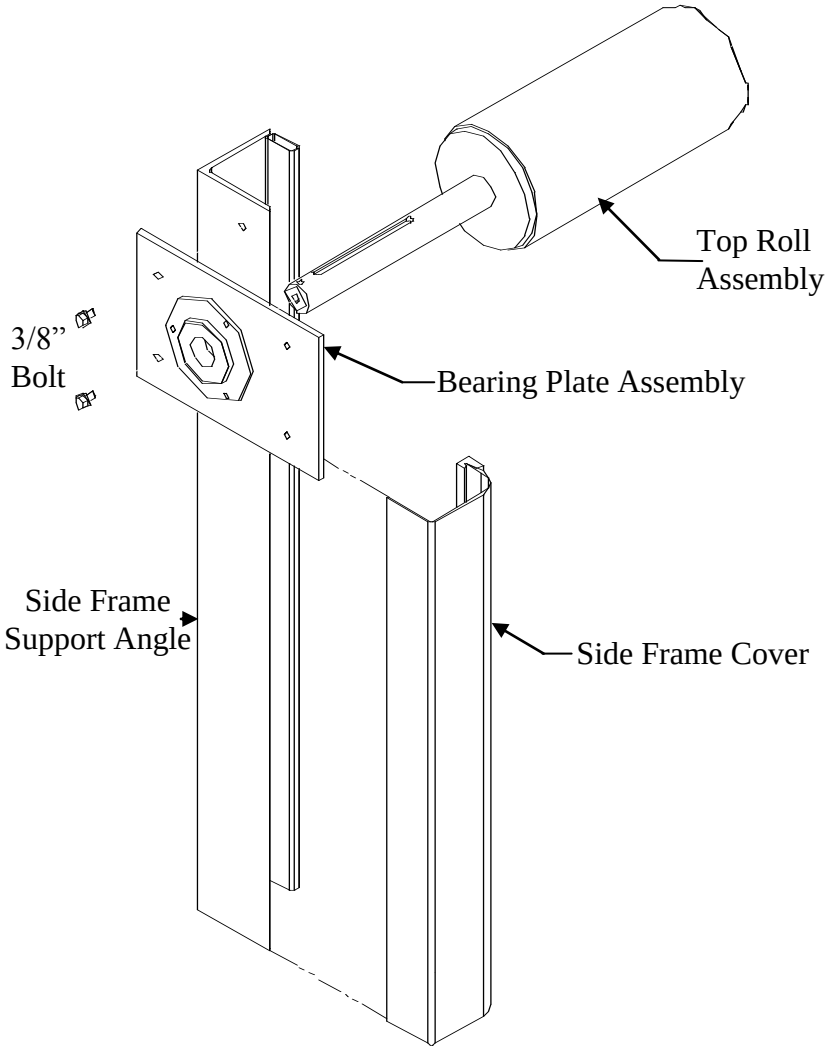
DO NOT REMOVE THE STRAPS HOLDING THE FABRIC AND BOTTOM BEAM TOGETHER AT THIS TIME.



Uncrating - Figure 1

Step 3. Remove covers from both side frames and set aside. Refer to approval drawings for this door to confirm drive side mounting (left or right-hand). The attached vibration damper assembly can identify the drive side.

Step 4. Attach the side frames themselves to both bearing plates using the supplied 3/8-16 x ½" bolts* (**Figure 2**). Ensure the plates are mounted on the outside of the side frames. Place the bearing lock collars on each stub axle up against bearings, and hand tighten. (They will require adjustment later). Current design has a bearing with the locking collar fixed to the bearing and may not require this step.



Non Drive Side frame Assembly - Figure 2

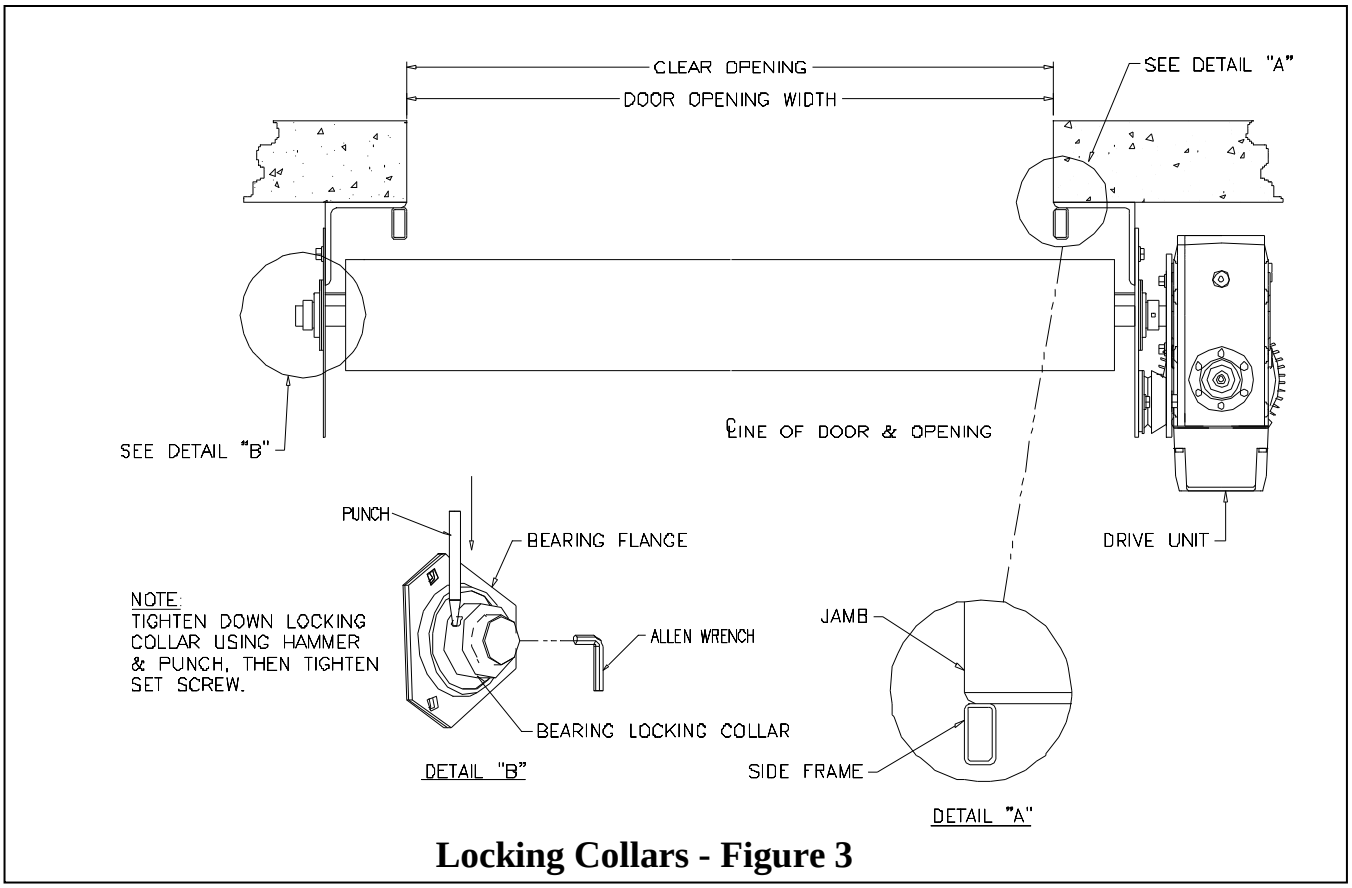
Step 5. Using an approved device, lift the entire assembly.
Figure 1). Move the assembly into position in front of the door opening.

* It is recommended to apply several drops of a thread locking material to the bolt or set screw prior to installing. (i.e. blue Loctite 242).

NOTE

POSITION THE LIFTING DEVICE AND STRAPS ACCORDINGLY, AS THE TOP ROLL ASSEMBLY WILL BE HEAVIER ON THE DRIVE SIDE.

Step 6. Loosen the bearing lock collars. Position the drive side frame at the edge of the door opening.



Locking Collars - Figure 3

Temporarily secure the bottom of the side frame to the wall using C-clamps. Using a tape measure, measure across to the other side frame and position the bottom of the non-drive side frame at the exact door size point. From the inner edge of one side frame to the inner edge of the other should be the exact door ordered width. Temporarily secure the bottom of the non-drive side frame using clamps.

Step 8. Ensure both side frames are plumb and door is level at this time by placing a level on the top roll assembly. Shim either side frame as required to accomplish this.

Step 9. Weld or through-bolt the side frames in position. If welding, a 2 inch weld every 12 inches is recommended. If bolting into place, one bolt within 12" of the bottom, one bolt within 12" from the top, and at least one bolt at an intermediate position is recommended. On doors over 12 feet in height, it is recommended to use two bolts at the top locations.

Step 10. Center the top roll assembly in reference to the clear opening width (**Figure 3**). Tighten the bearing lock collars using a steel pin and hammer (**Detail "A", Figure 3**). Tighten set screws on lock collars†.

Step 11. Remove the tape-holding key in place on drive side stub axle and slide the drive unit assembly onto the stub axle (see **Figure 4**). Insert the supplied mounting bolts through the L-bracket mounted on the gearbox. Tighten down mounting bolts. Then attach the bolt that has a washer with a tab (Item 2). Bend the washer up around the bolt to secure the bolt into the stub axle.

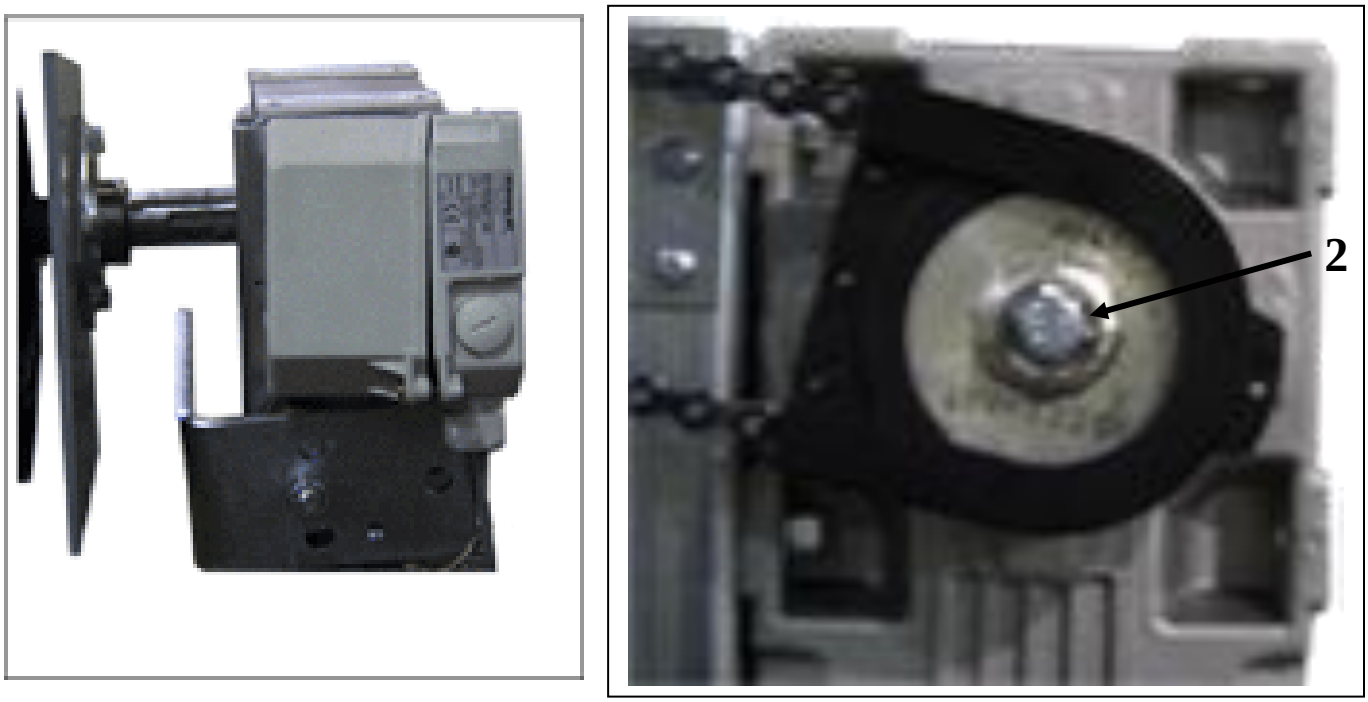
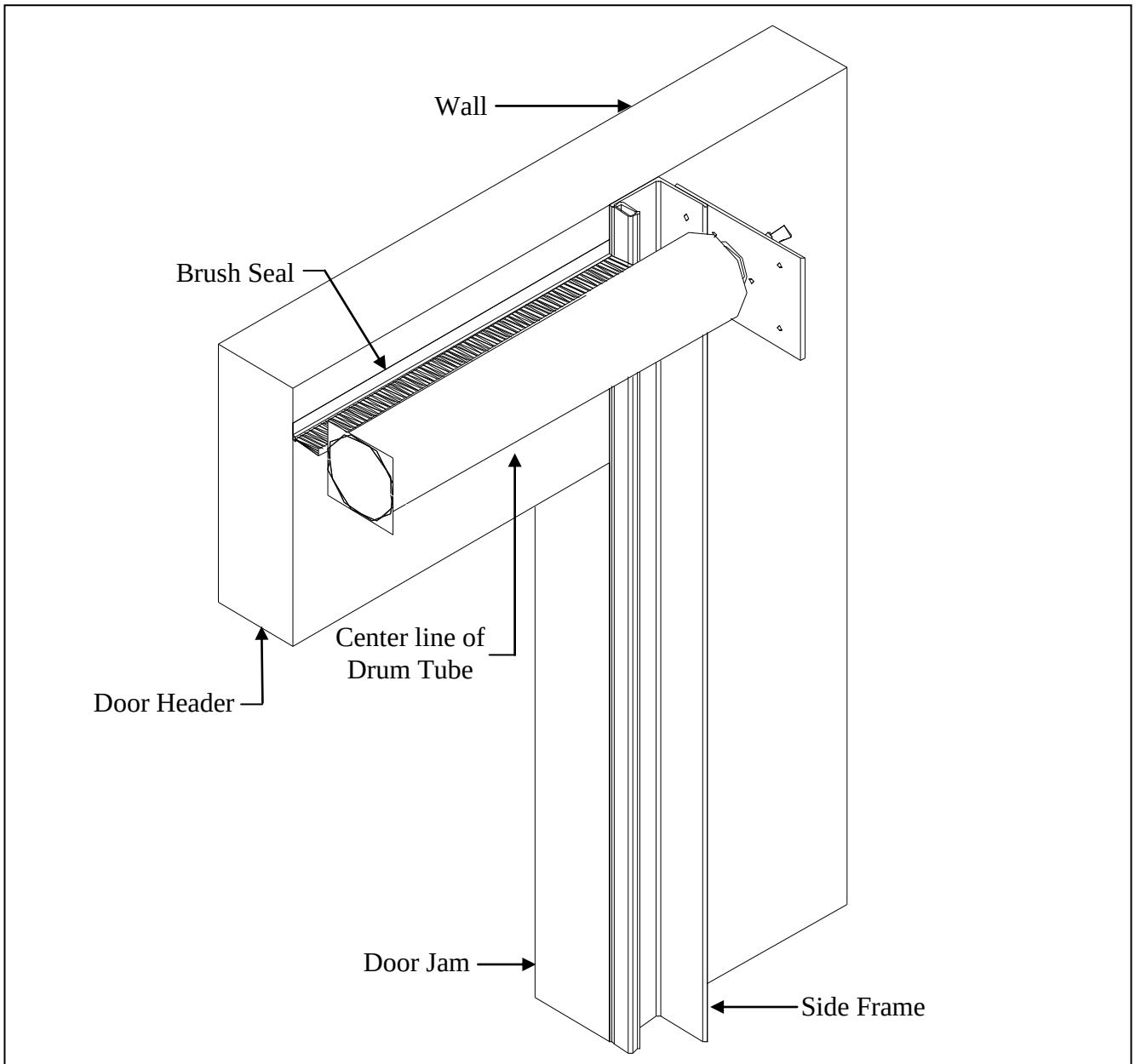


Figure 4

† It is recommended to apply several drops of a thread locking material to the bolt or set screw prior to installing.

Step 12. Remove the straps holding the fabric and bottom beam together. Follow the steps in the MANUAL HAND CRANK OPERATION section below to lower the door to its fully closed position.



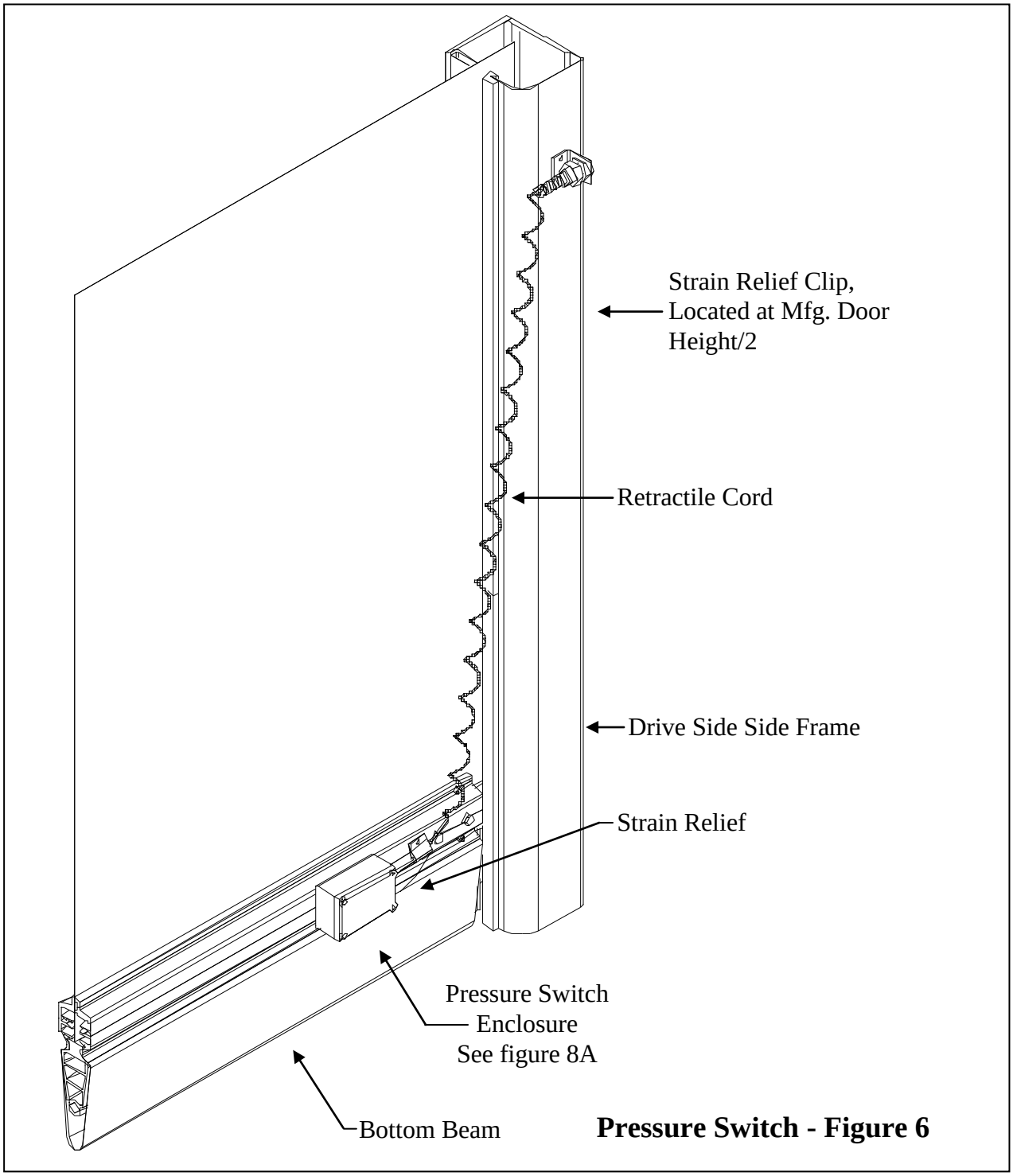
Brush Location - Figure 5

Step 13. Mount the brush seal behind the door top roll on the wall. The brush itself should lightly touch the fabric on the roll when the door is at its lowest position, and must be located above the centerline of the door top roll (**Figure 5**).

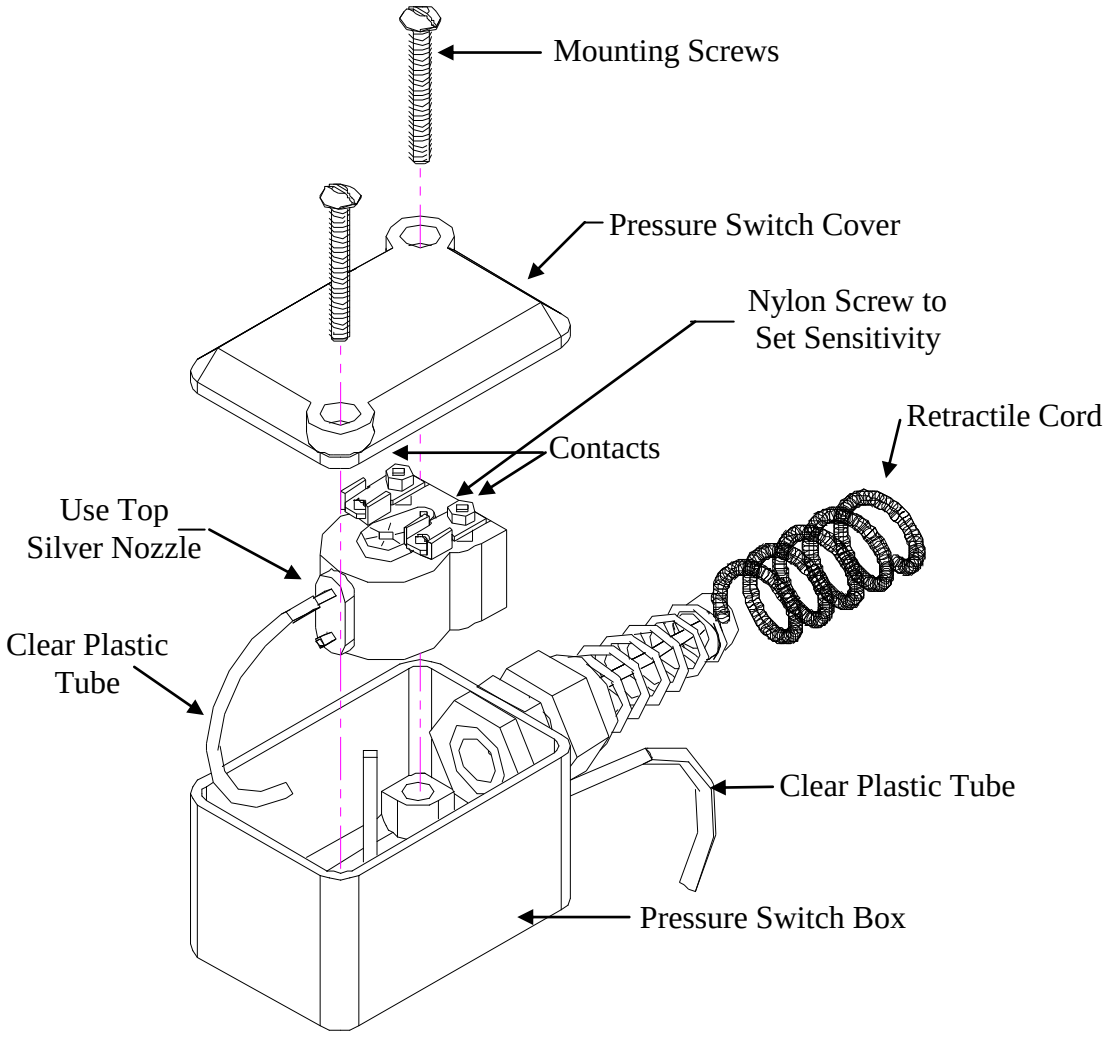
Step 13. Mount the pressure switch enclosure on the bottom beam using the hardware and holes provided. Attach the retractile cord using the cable clamp on the bottom beam and the other to the drive side side frame

(**Figure 6**). Insert clear plastic tube onto nipple on pressure switch enclosure (**Figure 6A, Detail "A**").

Step 14. Re-attach covers to both side frames (**Figure 9**). Ensure there is at least a 1" gap between side frame cover and backside of side frame from top to bottom. This is to prevent wind rib wear and allow the door rapid release system to function properly.



Pressure Switch - Figure 6

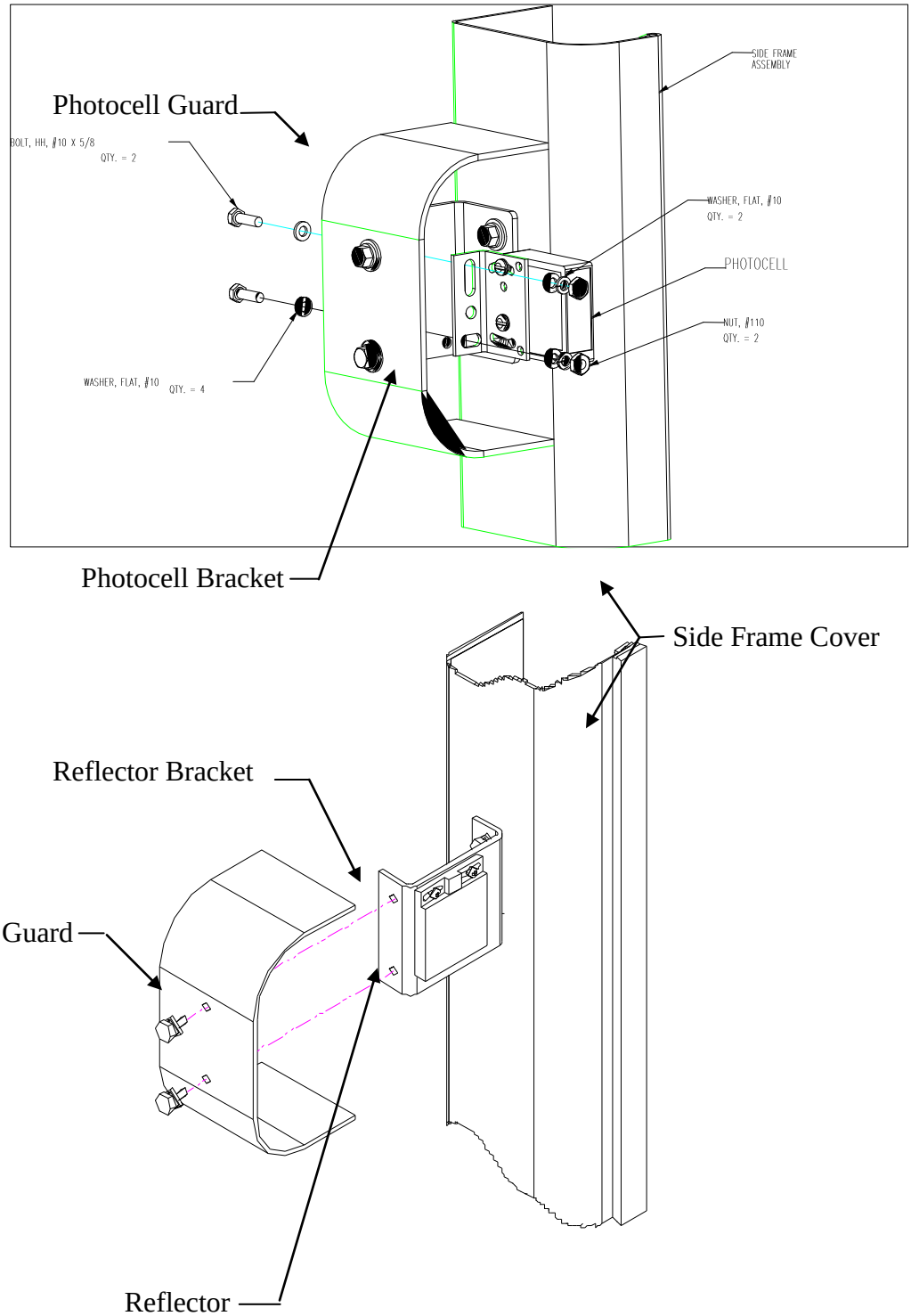


Pressure Switch Detail "A" – Figure 6A

Step 15. Adjustment of the Bircher Pressure switch is as follows:

Using a multi-meter to measure for continuity across the terminals of the Bircher switch. Adjust the nylon screw (counter clockwise) until there is no continuity being read across the terminals. Then turn (clockwise) until continuity is read and then turn nylon screw an additional ¼ turn clockwise.

Side Frame Assembly – Figure 7



Photocell Mounting - Figure 8

Step 16. Mount both photocells (through beam type) or photocell and reflector (reflective type) in mounting brackets on side frame covers. Align the front edge of the photocell(s) to be flush with bracket itself. (**Figure 8**). Adjust the photocells to ensure proper alignment**.**

GENERAL INSTALLATION AND OPERATION

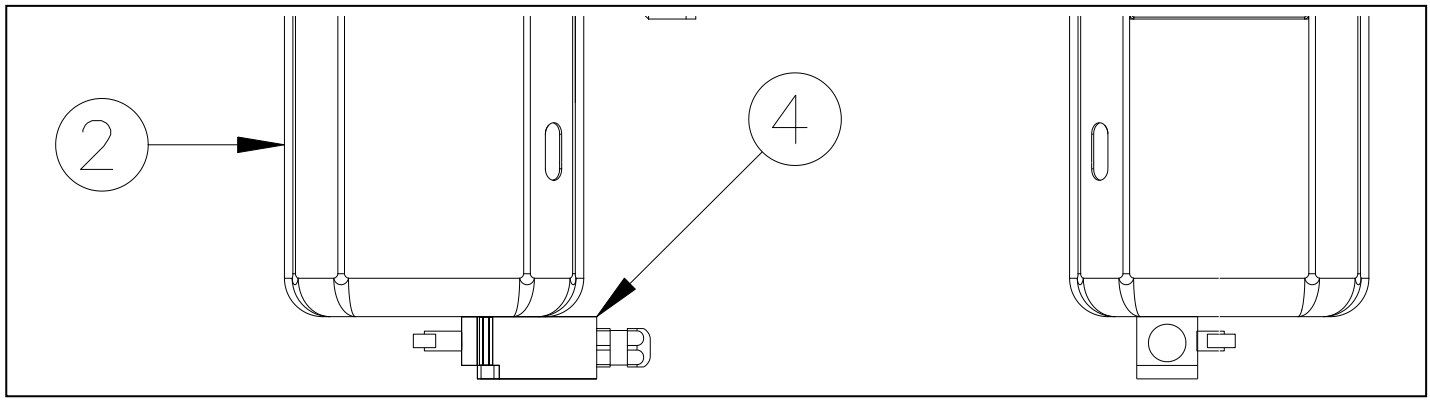
MANUAL HAND CRANK OPERATION

WARNING

THERE IS A CRANK SWITCH LOCATED ON THE BOTTOM OF THE MOTOR, WHICH MUST BE ACTUATED WHENEVER MANUALLY TURNING MOTOR WITH AN ALLEN SOCKET (6MM). THIS IS AN INSTALLED SAFETY FEATURE TO PREVENT PERSONNEL INJURY. ENSURE THAT THIS SWITCH IS PROPERLY INSTALLED AND WIRED PRIOR TO MANUALLY CRANKING MOTOR. IT IS RECOMMENDED TO REMOVE ALL POWER AT THE FUSED DISCONNECT PRIOR TO MANUALLY CRANKING MOTOR. THIS WILL MINIMIZE PERSONNEL RISK IN THE EVENT OF A SUDDEN POWER RESTORATION AFTER AN OUTAGE.

In the case of a power outage or power has been removed to the door, it can be raised or lowered manually using the following procedure. Reference **Figure 9** while performing these instructions:

1. Move the kill switch roller aside and insert the 6mm allen socket into the center hole in the fan cover on the bottom of the motor.
2. Rotate the motor in the desired direction of door travel.
3. Remove allen socket when desired door position is reached.



Hand Crank Location - Figure 9

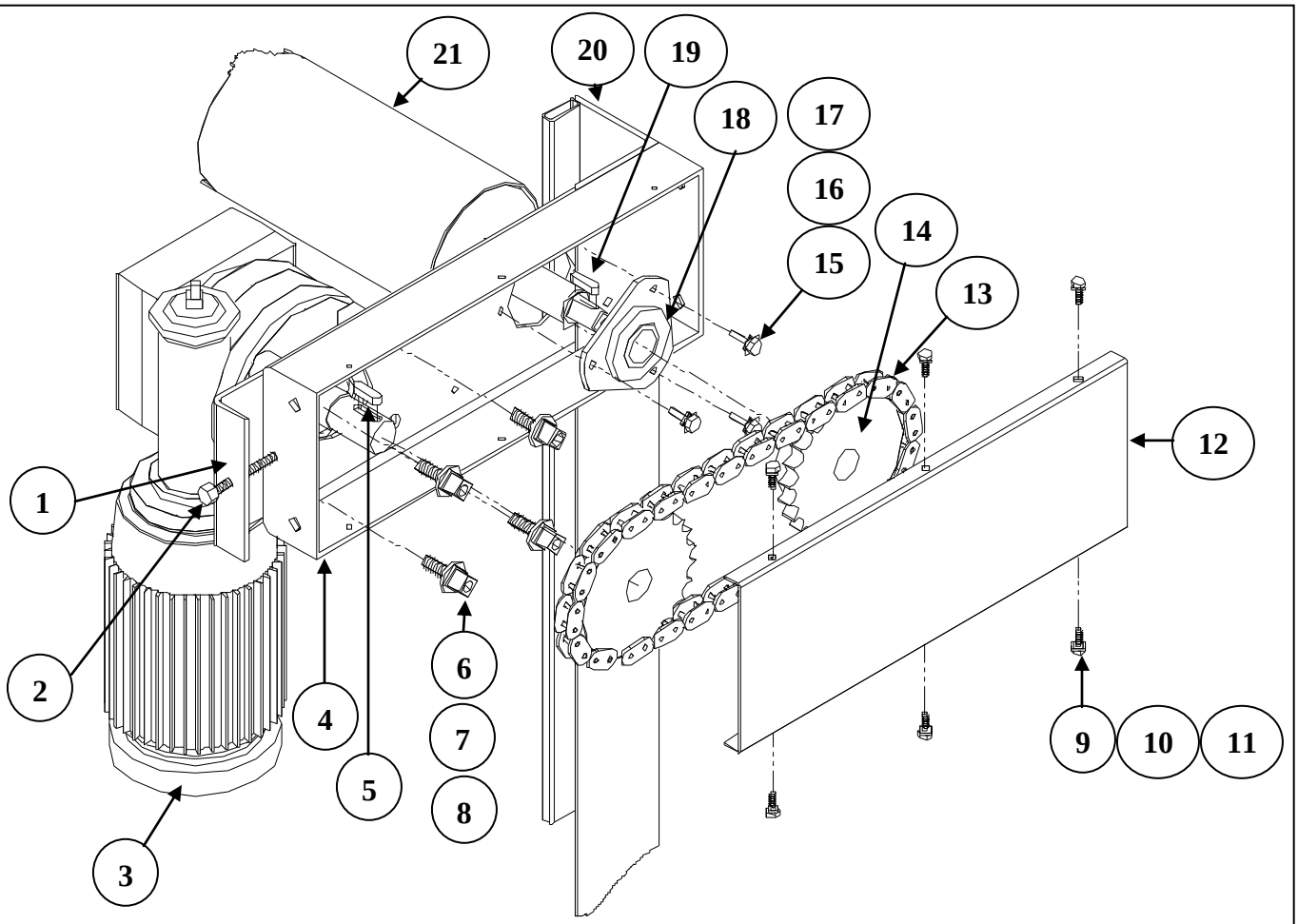
RAPID RELEASE SYSTEM

The door bottom beam is equipped with a pair of "breakaway tabs" that allow it to swing free of the side frames upon impact. To reset door panel after an impact, simply actuate door and allow it to run up to the fully open position. The bottom beam will swing back into place when it clears the side frame covers.

NOTE

ENSURE THERE IS AT LEAST A 1" GAP BETWEEN SIDE FRAME COVERS AND BACKSIDE OF SIDE FRAMES FROM TOP TO BOTTOM. THIS IS TO PREVENT WIND RIB WEAR AND ALLOW THE DOOR RAPID RELEASE SYSTEM TO FUNCTION PROPERLY.

DOOR OPTIONS INSTALLATION



Chain Drive Assembly - Figure 10

CHAIN DRIVE

NOTE

REFERENCE FIGURE 10 WHILE FOLLOWING THIS PROCEDURE.

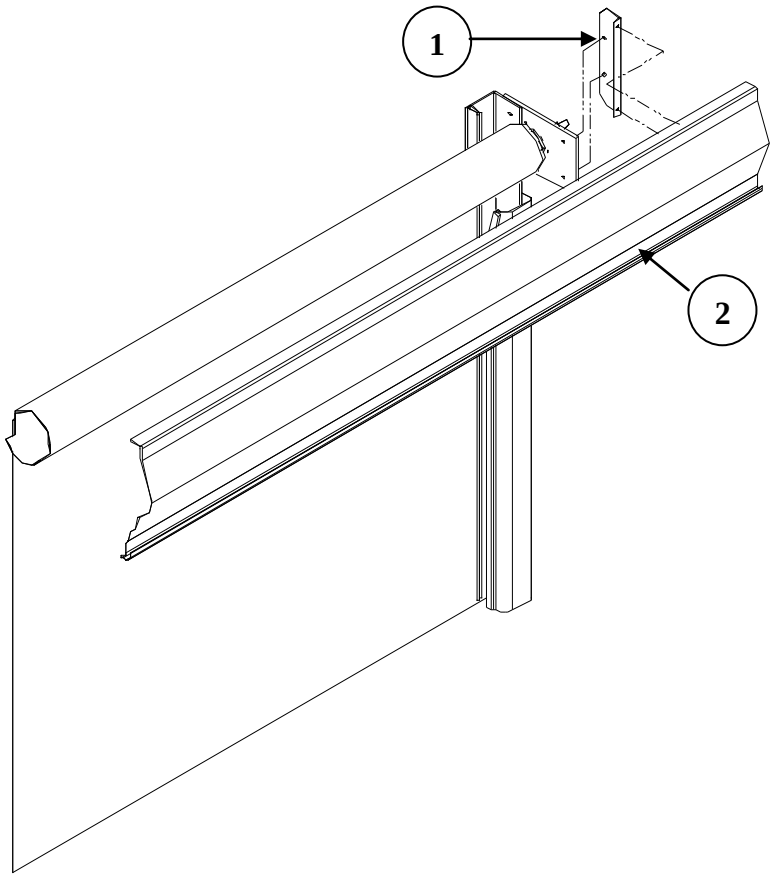
1. Mount the chain drive bracket (part #4) to the side frame using the (4) 3/8" - 16 bolts.
2. Attach the chain sprocket, 1" bore (part #14), to the stub axle and tighten set screw.
3. Mount the drive unit to the chain drive bracket using the (4) M10 x 30mm hex head bolts (part #'s 6,7,8). Ensure chain tensioner bracket ("L" bracket, part #1) is in between gear reducer and chain drive bracket.

4. Attach the 32mm bore chain sprocket to the output shaft of the gear reducer, align both sprockets, and then tighten set screw.
5. Place the chain (part #13) around both chain sprockets and connect the two ends of the chain together using the chain master link. Chain may need to be cut the proper length to remove as much slack as possible.
6. Loosen slightly M10 x 30mm bolts. Apply tension to the chain by turning the jackscrew (on the chain tensioner, part #2) clockwise until chain is tightened. Tighten locknut on bolt. Retighten M10 x 30mm bolts.
7. Attach chain bracket cover (part #12) to other side of chain bracket.

FRONT COVER & FRONT FACIA COVER

NOTE

REFERENCE FIGURE 11 WHILE FOLLOWING THIS PROCEDURE.



Front Cover Assembly - Figure 11

1. Install front cover mounting brackets onto both axle-bearing brackets (part #1).

2. Attach front cover (part #2) to both mounting brackets. (**Figure 11**). Position the cover left or right to cover the gearbox.

FULL ROLL COVER & MOTOR COVER

***NOTE* REFERENCE FIGURE 12 WHILE FOLLOWING THIS PROCEDURE.**

Install full roll cover mounting brackets (part #2) onto both axle bearing brackets (part #1) using (4) 5/16 –18 x ¾" bolts.

Attach full roll cover (part #3) to both mounting brackets using (4) ¼-20 x ¾" screws with flat washers and ¼"-20 nuts. NOTE: Position front cover 4 inches outside the non drive side axle bearing bracket.

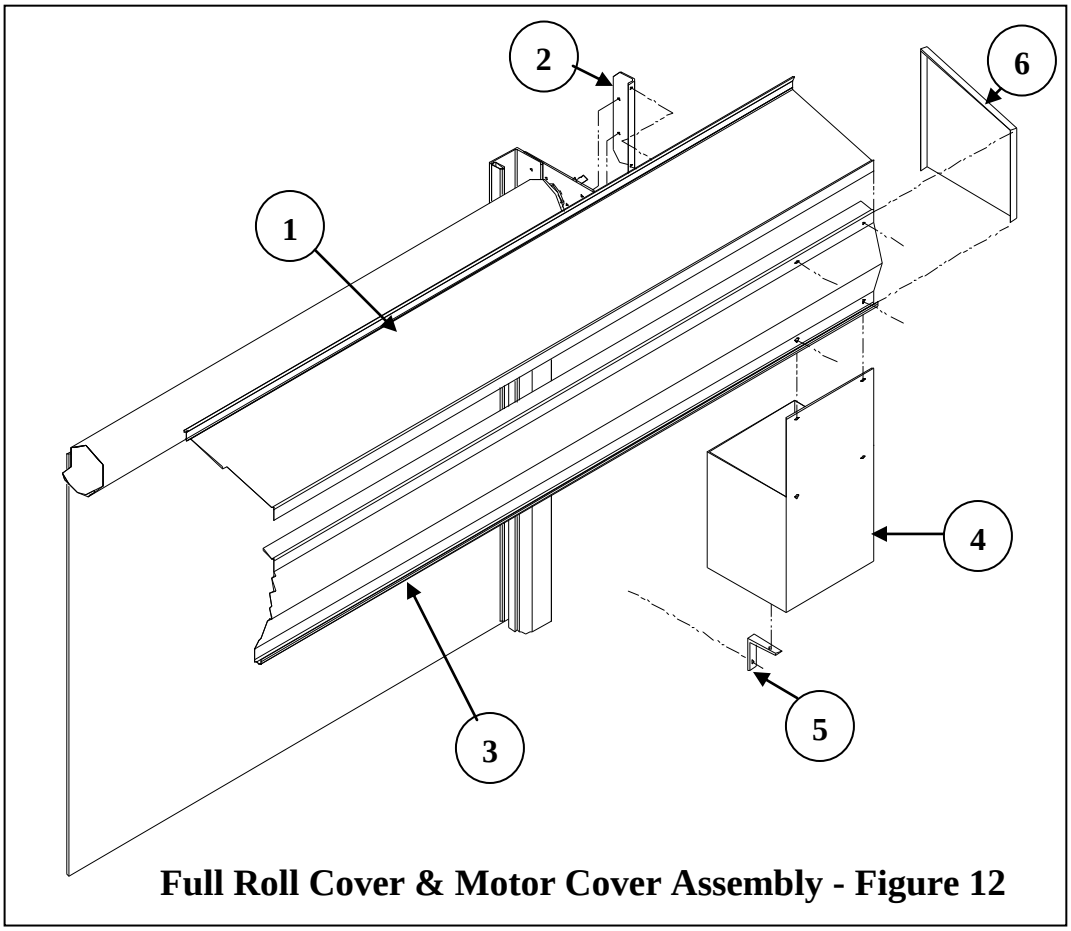
Align top with front cover and secure full roll cover top (part #1) to wall over top roll assembly using appropriate fasteners for local conditions.

Secure leading edge of full roll cover top to front cover using supplied self-drilling screws.

Attach full roll cover endcaps (part #6) to outside ends of cover using supplied self-drilling screws

Attach motor cover (part #4) to full roll cover (open side up) using (4) 5/16-18 x ¾" bolts. The flap on the motor cover will attach to the backside of the full roll cover.

Secure motor cover to wall using supplied "L" bracket (part #5) and appropriate fasteners for the local conditions.



Full Roll Cover & Motor Cover Assembly - Figure 12

FULL VISION PANEL REPLACEMENT

WARNING

REMOVE ALL POWER AT THE FUSED DISCONNECT DURING ALL ELECTRICAL OR MECHANICAL SERVICING. DISCONNECT MUST BE PROPERLY LOCKED OUT DURING MAINTENANCE OR SERVICE OF EQUIPMENT.

1. Ensure door is in the closed position. Remove power to the control panel.
2. Lift bottom beam off floor slightly by hand and place a forklift or similar approved lifting device underneath door fabric. Raise forks approximately one or two feet. This step is remove the weight of the door panel from the attachment on the full vision panel itself and transfer it to a lifting device.
3. Remove all flat head screws and tee nuts attaching clear PVC panel to both windribs. (**Figure 13**).
4. Remove and discard old full vision panel. Place new panel in its place inside the hinge on the top wind rib and hold in place. Using current screw holes as a template, drill new holes in PVC down the entire length of the panel.
5. Close hinge and clamp assembly to "keep" PVC in place (serrated edge inside hinge assembly will hold PVC). Re-install flat head screws and tee nuts ensuring that the tee nuts are installed on the backside of the wind rib inside the channel.
6. Perform steps 4 and 5 for the bottom windrib.

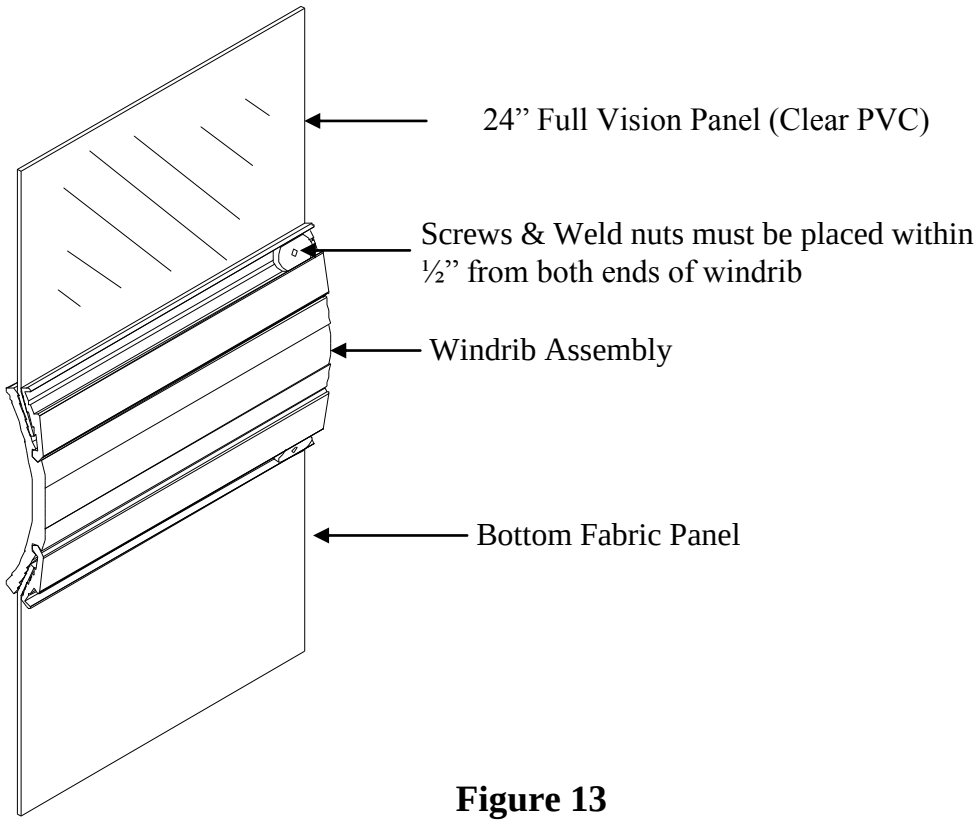


Figure 13

MAINTENANCE

WARNING

REMOVE ALL POWER AT THE FUSED DISCONNECT DURING ALL ELECTRICAL OR MECHANICAL SERVICING. DISCONNECT MUST BE PROPERLY LOCKED OUT DURING MAINTENANCE OR SERVICE OF EQUIPMENT.

DAILY INSPECTION

1. Run through a full door cycle (open/close) and ensure smooth operation. Verify that the door is not jammed or hanging up.
2. Check the door fabric for any visible damage or unusual wear.
3. Check all actuators for proper operation. If applicable, verify the automatic operation of the door.
4. Check the operation of reversing photocells and pneumatic reversing edge.

QUARTERLY INSPECTION

1. Inspect all hardware for proper tightness. Any loose hardware should be tightened. It is recommended to apply a thread locking material to any bolts that are coming loose. i.e. Loctite 242 (blue)

2. Observe both open and close door limits. Ensure that a proper floor seal is intact when door is fully closed. There should be no visible light seen between reversing edge and floor. Ensure that the door stops above door opening, but does not travel up into top roll when it is fully open. If limits are out of adjustment, re-adjust according the procedure outlined in the electrical startup manual.

Bonfiglioli Brake Adjustment

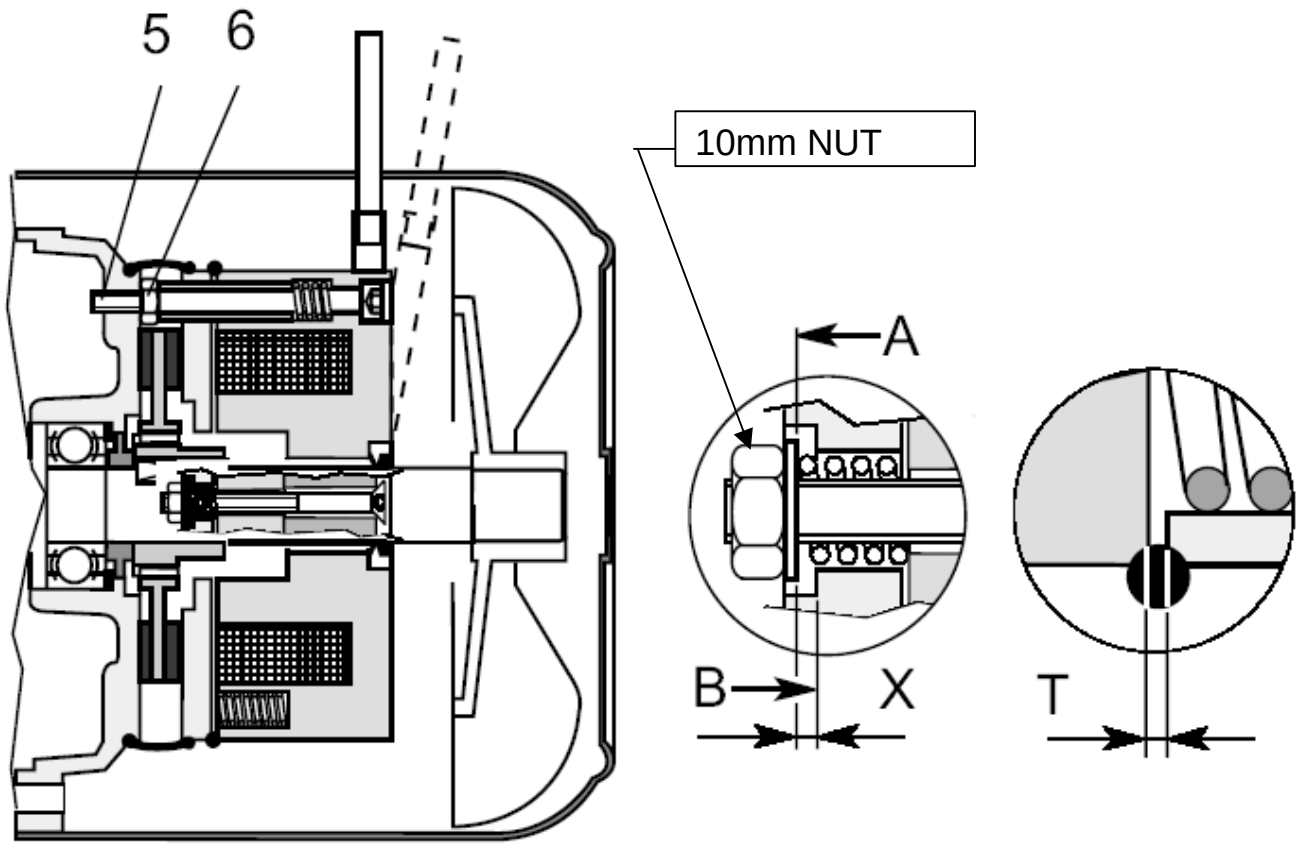
The motor brake is located inside the fan cover compartment of the motor. By removing the fan cover shroud you can access it. Refer to the figure 14 below while following this procedure.

WARNING

MAKE SURE THE DOOR IS POWERED DOWN AND LOCKD OUT BEFORE REMOVING THE FAN COVER. THIS IS TO ASSURE THAT THE MOVING MOTOR PARTS ARE NOT EXPOSED WHILE THIS PROCEDURE IS BEING PERFORMED.

Steps:

1. Remove the fan cover
2. Loosen nut referred to as item 6.
3. Set the air gap "T to 0.3mm (0.012") by adjusting the screw referred to in ***figure below*** as item 5.
4. Tighten nut (referred to as item 6) to lock in the gap setting.
5. Verify that the gap "X" is a minimum of 1.0mm by adjusting the nut shown.
   Perform this procedure whenever the gap "T" grows above 0.45mm. (0.018")



Brake Assembly – Figure 14

NOTES

RAPID ROLL® MODEL 230 INSTALLATION CHECKLIST

Door Serial No. _____	
Date of Installation _____	
Installer's Name _____	Enduser_____
Company _____	_____
City _____ State _____	City _____ State ____ Zip_____
Phone No. _____	

MECHANICAL:

- ❑ Crate fully unpacked. Verified door parts against packing list. No parts are missing and they are undamaged.
- ❑ Drive unit assembled to top roll assembly.
- ❑ Door top roll assembly attached to side frames.
- ❑ Side frames are plumb and door top roll assembly is level.
- ❑ Door secured to wall along side frames.
- ❑ Counter balance spring properly tensioned.‡
- ❑ Door does not bind in any position and has free movement over the entire range of motion.
- ❑ Photocells mounted on side frame covers.

ELECTRICAL:

- ❑ Fused disconnect installed and properly wired to control panel.
- ❑ Three phase power available at control panel.
- ❑ Control panel mounted at a serviceable height.
- ❑ Drive unit, door limit switches, gearbox disconnect switch‡, and brake motor kill switch properly wired to control panel.
- ❑ Door actuators installed and properly wired to control panel (i.e. pushbuttons, pullswitches, floor loops, etc.).
- ❑ Proper phase rotation verified.
- ❑ Door limits properly set.
- ❑ Gearbox breather plug installed.
- ❑ All actuators tested and function properly.
- ❑ Door has been cycled at least 10 times to verify proper operation.

‡ Applies only to doors ordered with a counter balance system.

Notes:_____
_____
_____

FAX COMPLETED FORM TO ALBANY DOOR SERVICE DEPARTMENT AT (770) 338-5034.

NOTES

DOCUMENT TITLE	Rapid Roll Door Owner's Manual, Model 230		
DOCUMENT NUMBER	6410T0009	ISSUE DATE	2004/04/01
DOOR MODEL(S)	230	ELECTRONIC FILE	6410T0009.DOC
ASSEMBLY	Owners Manual	REPLACES	230015-0000
ORIGINATOR	Rick Walton / RMR	MANAGER APPROVAL/DATE	