

The Genuine. The Original.



***Installation Instructions for  
FACE MOUNTED  
ROLLING STEEL STORM SHELTER DOOR  
with  
NON-TENSION RELEASE AUTOMATIC CLOSURE  
GOVERNOR CONTROLLED  
Model 610F, FE  
Rolling Steel Storm Shelter Doors may be mounted on steel or  
masonry construction.***

**READ COMPLETE INSTRUCTIONS BEFORE INSTALLING DOORS**

This document also refers to the following other documents or specifications:

Expansion Anchor Requirement 500436-0001

RHX Commercial Operator Installation Manual 111593.500141

# Safety Information




## ⚠ WARNING

Overhead doors are large, heavy objects that move with the help of springs under high tension and electric motors. Since moving objects, springs under tension, and electric motors can cause injuries, your safety and the safety of others depend on you reading the information in this manual. If you have questions or do not understand the information presented, call your nearest trained door system technician.

In this section and those that follow, the words "**DANGER**", "**WARNING**", and "**CAUTION**" are used to stress important safety information. The word:

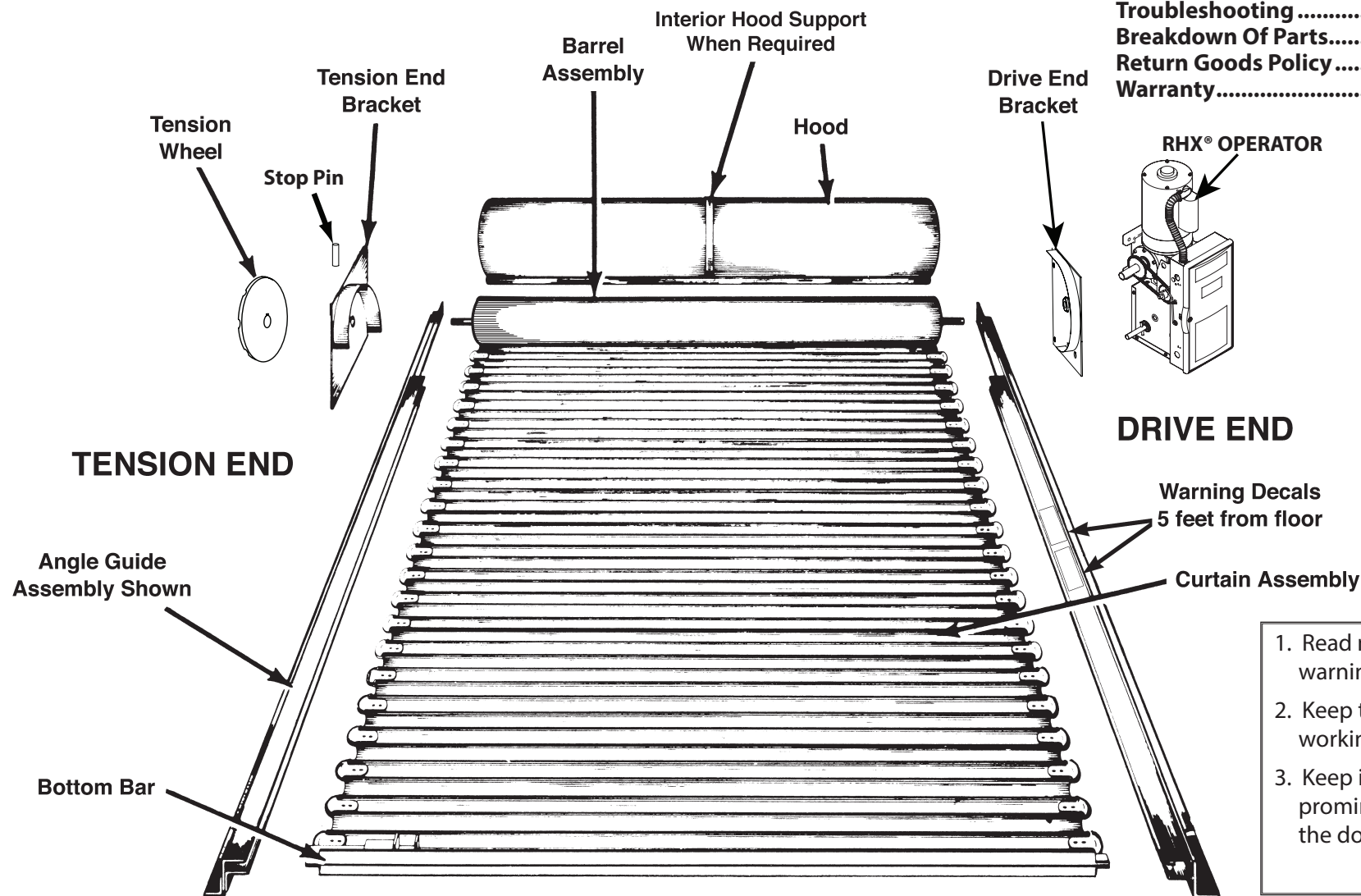
- ⚠ **DANGER** Indicates a hazardous situation that, if not avoided, will result in death or serious injury.
- ⚠ **WARNING** Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
- ⚠ **CAUTION** Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

The word **NOTE** is used to indicate important steps to be followed or important considerations.

POTENTIAL HAZARD	EFFECT	PREVENTION
 MOVING DOOR	⚠ <b>WARNING</b> Could Result In Death Or Serious Injury	Keep people clear of opening while Door is moving. Do <b>NOT</b> allow children to play with the Door Operator. Do <b>NOT</b> operate a Door that jams or one that has a broken spring.
 ELECTRICAL SHOCK	⚠ <b>WARNING</b> Could Result In Death Or Serious Injury	Turn <b>OFF</b> electrical power before removing Control Panel cover. When replacing cover, make sure wires are not pinching or near moving parts. Operator must be properly grounded.
 HIGH SPRING TENSION	⚠ <b>WARNING</b> Could Result In Death Or Serious Injury	Do <b>NOT</b> try to remove, install, repair or adjust springs or anything to which door spring parts are fastened, such as, wood blocks, steel brackets, cables or other like items. Installations, repairs and adjustments must be made by a trained door system technician using proper tools and instructions.

# Key Drawing

Pictorial view of a Rolling Steel Storm Shelter Door with parts and their names. See also the Breakdown Of Parts on pages 22-23.



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1. Read manual and warnings carefully.
2. Keep the door in good working condition.
3. Keep instructions in a prominent location near the door system.

## Data Sheet

Your "DATA SHEET" is shown below. It is found inside the door hardware box. You will need to refer to the data on this sheet during installation.

Verify that the "Factory Order Number" on the door components matches the one shown on the DATA SHEET.

# Jobless Traveler Report

SO#	SO Line#:	SO Line Item:
Org Code:	Qty:	Desc:
Cust. PO:	Customer:	Customer Job:
Job Name:		
Schl'd Ship Dt:		
Product Desc:		

CURTAIN:  
OPERATION:  
BOTTOM BAR:  
GUIDE:

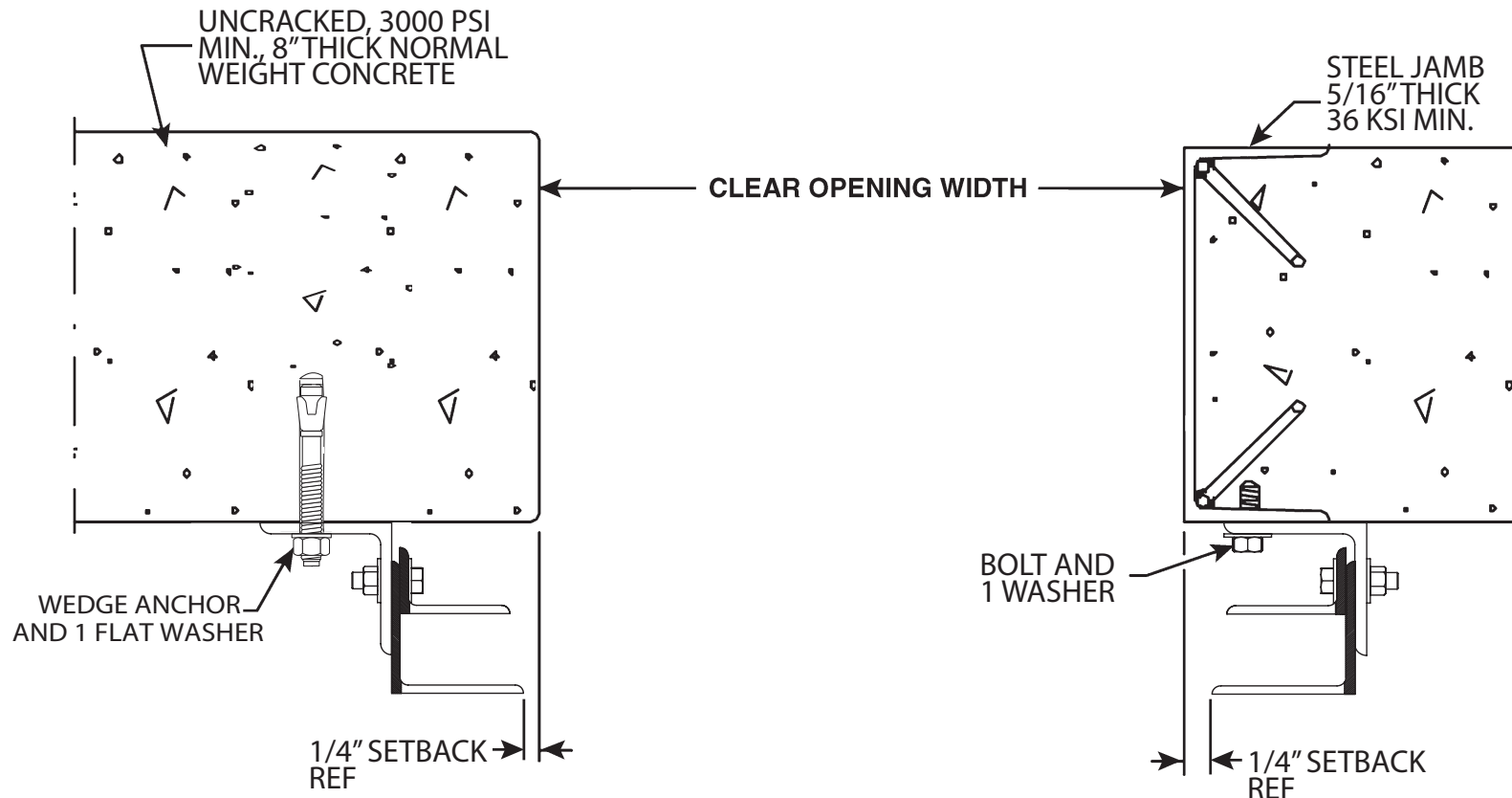
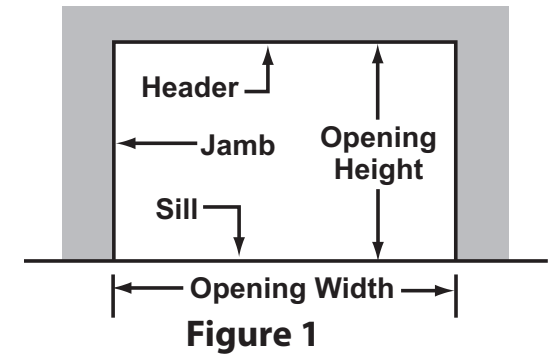
HOOD / CRATE :

*****	DOOR	INSTALLATION	DATA	*****	*****	*****	*****
MODEL:				S-REFERENCE:			
OPENING WIDTH:		OPENING HEIGHT:		HAND OF OPERATION:		GUIDE TYPE:	
INITIAL TURNS:		RELEASE TURN:		OPERATION TYPE:		CURTAIN/BOTTOM BAR WT:	
TOTAL TURNS:		OPER MODEL:/ VOLTAGE:		DRIVE NO:		PIPE ASSEMBLY WT:	
GUIDE GAP:		OPER MOUNT TYPE:		GUIDE FINISH:		BRACKET FINISH:	
***** WORK ORDER MESSAGES *****							
**							
**							
**							

# Pre-Installation

VERIFY THAT THE DOOR INSTALLATION can be accomplished before proceeding:

- Insure the wall opening matches the Opening Width and Height shown on the "DATA SHEET" and in Figure 1.
- Are the jambs suitable to hold the guides? See jambs details below.
- Are the guides you received suitable for the jambs? Compare the guide type shown on the "DATA SHEET" with Figure 2.
- Can the guides be installed plumb?
- Measure the length of the guide jamb angle and the height of the jamb opening. The difference must allow expansion of the guides  $1/8"$  per foot of opening height. Attachment bolts or anchors must be installed at top of slot on wall angle. See Figure 5.

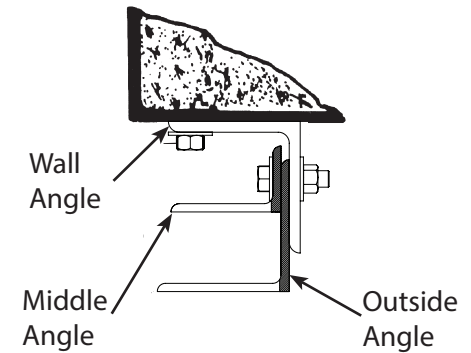


**Figure 2**

# Pre-Door Install

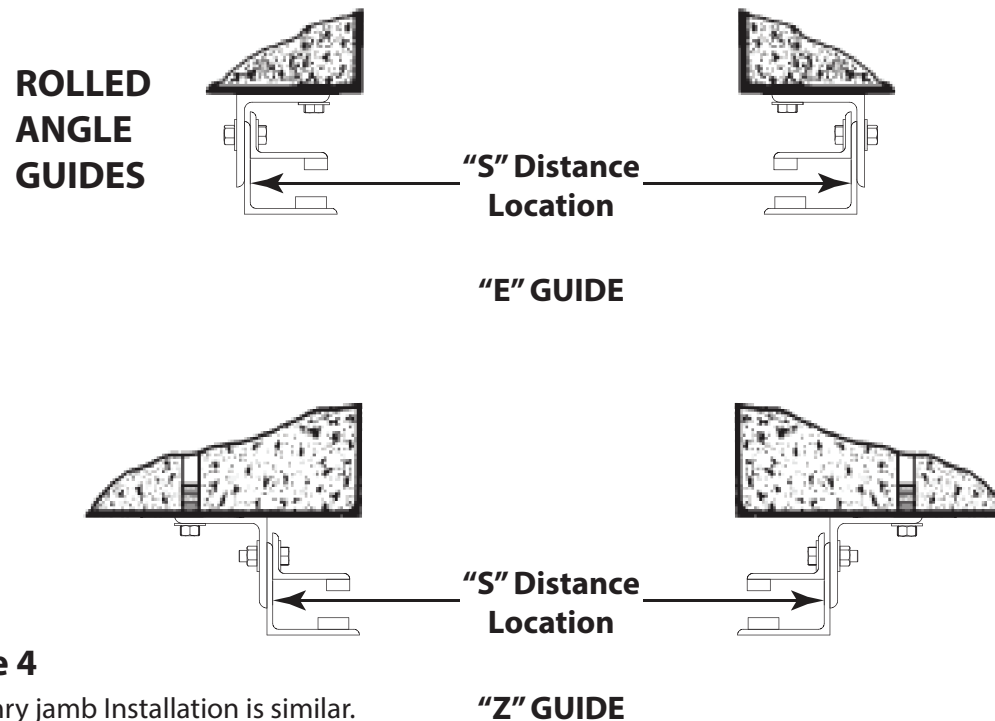
## 1. INSTALL GUIDE ASSEMBLIES

- Locate the guide assemblies such that the "S" dimension exists between the guides, as shown in Figure 4.
- The "S" dimension is shown on the "DATA SHEET".
- Both guides MUST be on a level line and both guides MUST be plumb.
- The "S" dimension must be held within 1/8" over the entire height of guides.
- Guide assemblies are designed to rest on floor.



**Figure 3**

**NOTE:** If outside angle is flared, then unbolt the Outside Angle and the Middle Angle from the Wall Angle. They will be bolted to the Wall Angle after the curtain installation is complete in Step 13.



**Figure 4**

Masonry jambs shown, non-masonry jamb Installation is similar.

# Pre-Door Install (continued)

## A. MASONRY JAMBS

Hold "Z" guide wall angle against wall and drill mounting holes through the top of slots using drill size shown below. Install jamb fasteners on one guide. Recheck "S" distance, and continue with installation. Refer also to Expansion Anchor Instructions 500436-0001.

## B. STEEL JAMBS SCREW ATTACHMENT OPTION

Hold "E" guide wall angle against steel jamb and mark the spot to be drilled at top of slots. Drill holes through the top of slots using drill size shown below. Install all jamb fasteners on one guide. Recheck "S" distance, and continue with installation.

**NOTE:** When steel jamb does not extend above the opening, use three thru-bolts to fasten each wall angle above the opening. See Figure 5.

JAMB	FASTENER	DRILL SIZE	JAMB FASTENER SPECIFICATIONS
Steel	3/4" bolt	21/32" diameter	Steel jambs must be minimum 5/16" thick
Concrete	3/4" expansion bolt	13/16" diameter	5-1/2" EMBED HILTI KBTZ2 OR EQUIVALENT 6" O.C. MIN 8 1/2" EDGE DISTANCE Drill hole at least 8-1/2" from jamb corner per OHD Installation Instruction 500436.0001.

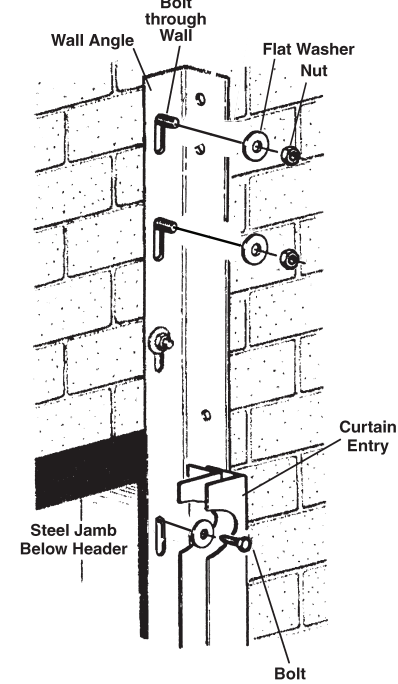


Figure 5

## 2. IDENTIFY HEADPLATE BRACKETS

See Figure 6.

Right Hand Drive shown; Left Hand Drive is opposite.

### HEADPLATE BRACKETS

RH Drive shown, LH Drive opposite

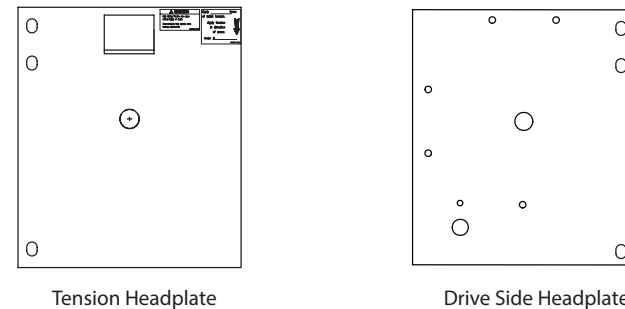


Figure 6

# Pre-Door Install (continued)

## 3. IDENTIFY BARREL ASSEMBLY DRIVE END

Right hand drive shown in Figure 7; left hand drive is opposite. Look for an "R" for right hand drive or an "L" for left hand drive stamped on the end of the drive shaft.

### SPRING CONFIGURATION

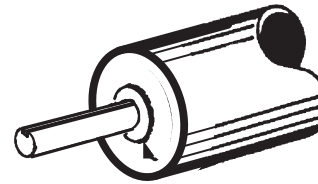
See Figure 7.

- Left hand drive counterbalance has end of spring pinned to barrel near tension end.
- Right hand drive counterbalance has end of spring pinned to barrel several feet from tension end.
- At tension end of barrel the bearing assembly is pinned to the barrel, as shown in Figure 8.

## BARREL ASSEMBLY

RH Drive shown, LH opposite

### TENSION END



### DRIVE END

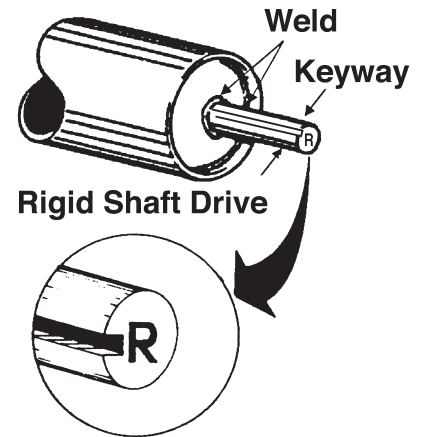


Figure 7

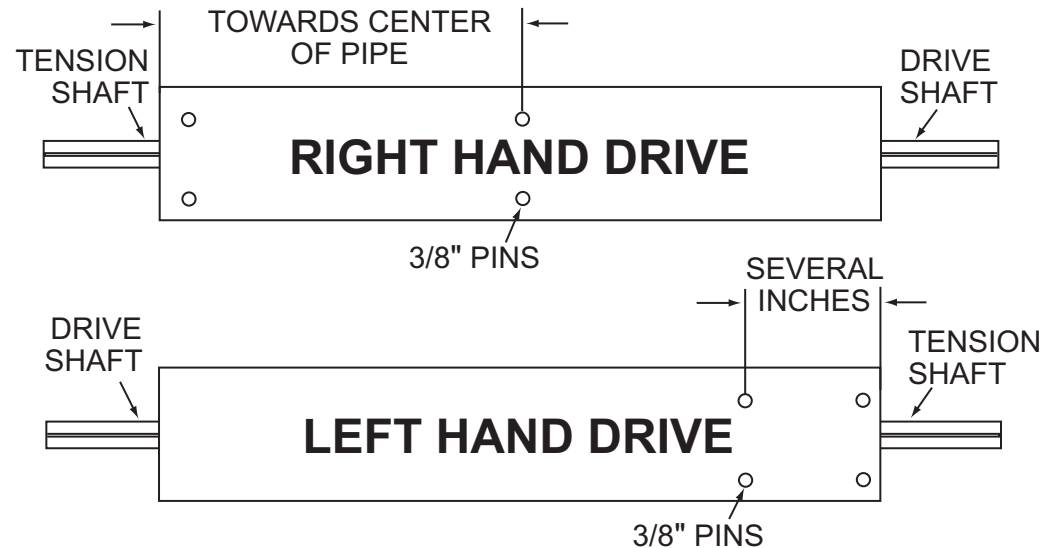


Figure 8



# Pre-Door Install (continued)

## 4. BARREL AND HEADPLATE BRACKETS

- Set barrel assembly on blocks or sawhorses so headplate brackets clear the floor. See Figures 9 and 10.
- Install set collar on tension shaft BEFORE sliding tension headplate on.
- Slide drive end of barrel assembly through drive bracket bearing, and tension end through tension bracket.
- The distance between the headplate brackets should be the "S" dimension on the "DATA SHEET".

### ⚠ WARNING

Counterbalance damage could allow curtain to close rapidly which could result in death or serious injury. A right hand drive headplate must be used with right hand barrel assembly to prevent damage; left hand drive headplate and left hand barrel must also match.

## 5. TENSION WHEEL

- Secure tension wheel to tension shaft, as shown in Figure 9.
- Use a 3/8 or 1/2 key to secure Tension Wheel to shaft. See Figure 11a and 11b.
- If Tension Wheel is 11" in diameter or larger, slide set collar next to Tension Wheel and secure to tension shaft, as shown in Figure 9.

**NOTE:** Tension wheel must remain free of spring tension until instructed to apply tension.

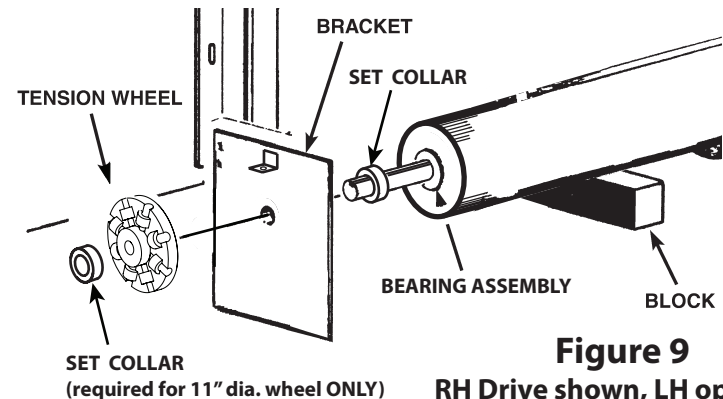
### ⚠ WARNING

Tension Wheel holds spring tension. Failure to key shaft could allow Tension Wheel to fall or door to freefall causing severe injury or death. Verify that set collar is installed to retain the adjusting wheel.

## 6. DRIVE SHAFT

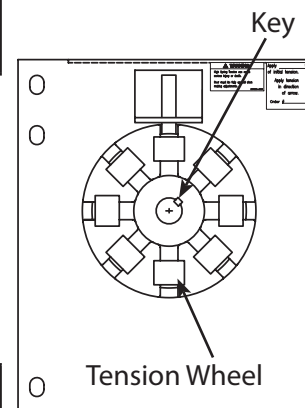
- Slide Drive Shaft Sprocket onto Drive Shaft up against the head plate bracket. Place key in Drive Shaft such that it aligns with keyway in Sprocket.
- Loosely secure the set screw in the Drive Shaft Sprocket to the Drive shaft, as shown in Figure 12.

**NOTE:** The drive sprocket will be fully tightened after the operator is installed and aligned with it.

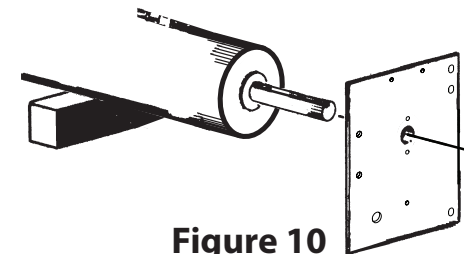


**Figure 9**

**RH Drive shown, LH opposite**

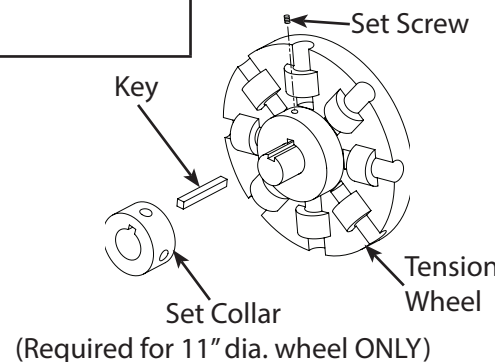


**Figure 11a**

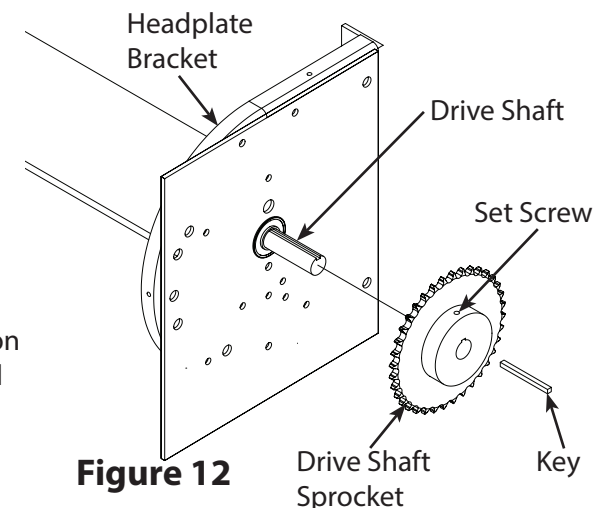


**Figure 10**

**RH Drive shown, LH opposite**



**Figure 11b**

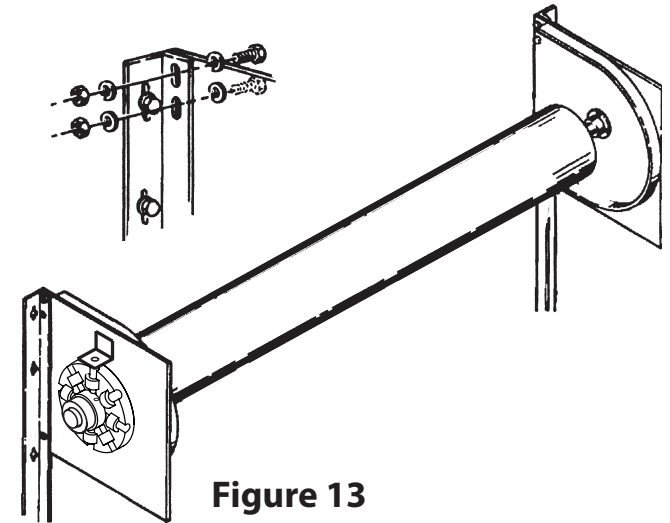


**Figure 12**

## Pre-Door Install (continued)

### 7. LIFT BARREL AND HEADPLATE BRACKETS AND BOLT THEM TO GUIDE WALL ANGLES

- Use hex bolts to fasten headplate brackets to the inside of the guide wall angle.
- Bolt heads must be on the inside of the headplate brackets. See Figure 13.  
Brackets may have 2 or 3 mounting slots.
- Put flat steel washer under bolt head and under nut.
- Headplate brackets must be square to the wall and parallel.
- Center barrel between brackets.
- Barrel must be level.
- Tighten set screws in drive headplate bearing and slide set collar on tension shaft against inside of tension headplate and tighten setscrews to lock counterbalance between headplates.

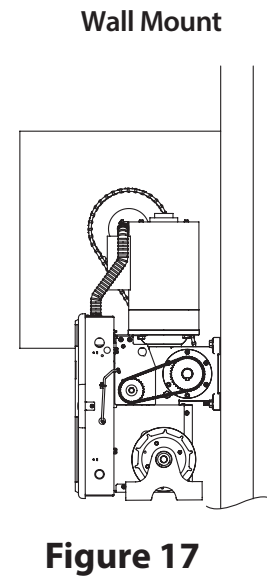
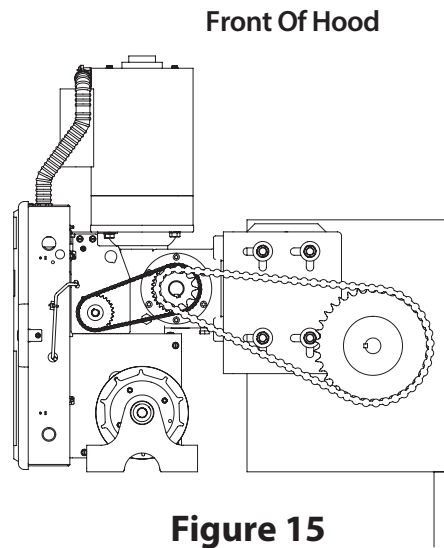
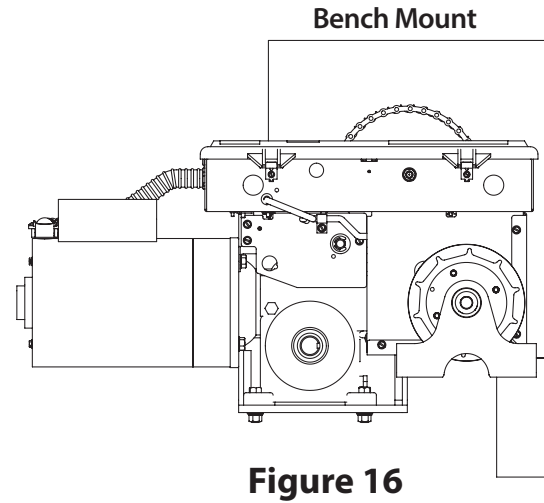
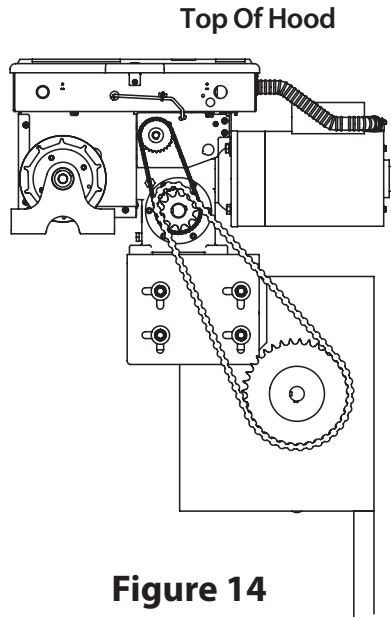


**Figure 13**

# Operator Install Mounting Options

## 8. OPERATOR MOUNTING OPTIONS

- For Additional Installation Details, Refer To Provided Operator Installation Manual (111593.500141).



# Final Door Install

## 9. INSTALL CURTAIN

See Figure 18

- The Sling Method is recommended because rolling the curtain onto the barrel assembly from the floor can cause curtain damage.
- Suspend the curtain below the barrel on two or more slings or ropes rated for the weight of the curtain, shown on the "DATA SHEET".
- Fasten the top slat to sling/rope and rotate the sling/rope to bring the top slat into position.
- The top slat will have slots to attach to barrel. Hook curtain over studs and fasten with 5/16" round head screws and washers and TWO clamp washers provided.
- See Figure 19.
- Coil curtain completely onto barrel using chain hoist.

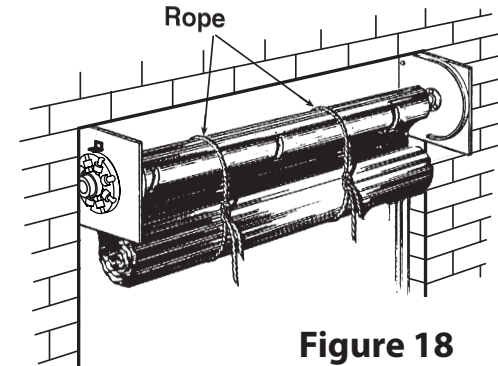


Figure 18

## ⚠ WARNING

Rapidly closing curtain could result in death or serious injury. Use slings/ropes and locking pliers on both guides to keep curtain in the open position until spring tension is applied to the barrel assembly.

## 10. INSTALL SENSING EDGE MODULE

See Figure 20

- Install the sensing edge wireless modules onto the bottom bar angle using #8 x 1/2" Phillips Pan Head Screws. Refer to provided install manual inside of wireless module kit.

Headplate  
NOT shown  
for clarity

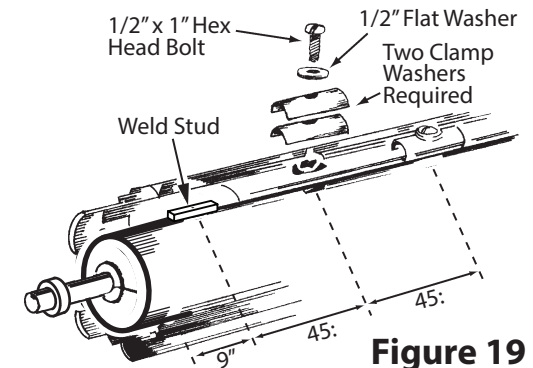


Figure 19

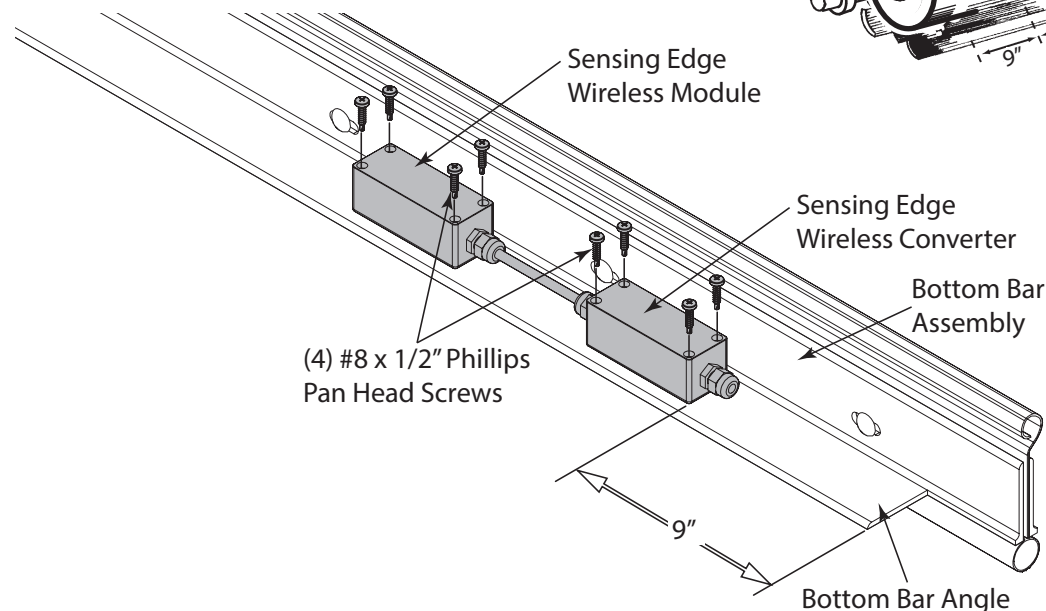


Figure 20

# Final Door Install (continued)

## 11. COMPLETE GUIDE INSTALLATION

- If guides are flared, then bolt the middle angles and the outside angles to the wall angles, as shown in Figure 21.
- The Guide Gap MUST be set to the value shown on the "DATA SHEET".

## 12. INSIDE SLIDE STOPS

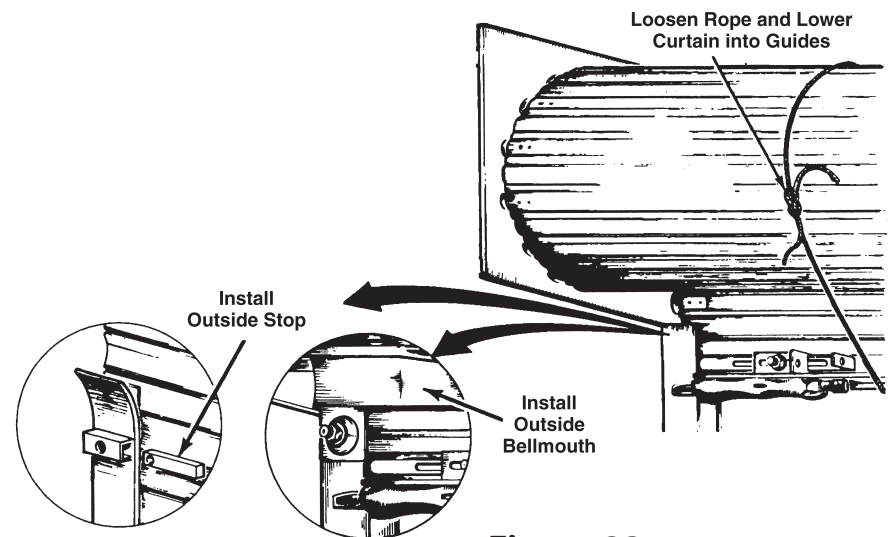
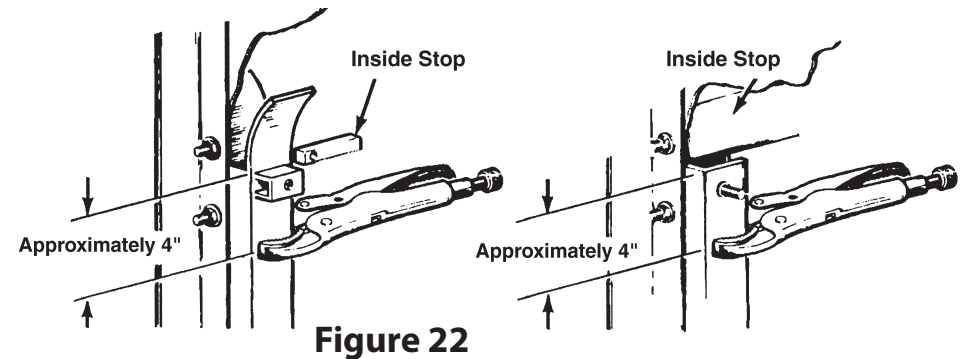
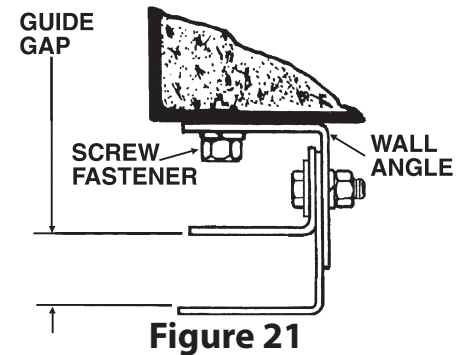
- If the door has flared guides:  
Install "Inside Stop" on LH and RH guides as shown in Figure 22. Slide stop into inside channel holder and secure with 3/8"-16 x 1/2" capscrew and washer. Attach locking pliers approximately 4" below the top of channel holder on both LH and RH guides, as shown in Figure 22.
- If the door uses bellmouths:  
Install inside bellmouths and attach locking pliers approximately 4" below entrance to both LH and RH guides, as shown in Figure 23.

## 13. LOWER CURTAIN INTO GUIDES

- The next step is to lower curtain into guides, but before loosening the ropes which holds the coiled curtain, enough initial spring tension must be applied to cause the bottom bar to rotate about 45 degrees; then leave one winding bar in the tension wheel with the winding bar resting against the header.
- Loosen ropes and lower curtain into guides. Do not remove slings/ropes now. Bottom bar angles will pass by inside stops by twisting angle and come to rest against locking pliers.
- Install outside stops. See Figure 23 for flared guides and for guides with bellmouths.

### ⚠ WARNING

Rapidly closing curtain could result in death or serious injury. Use slings/ropes and locking pliers on both guides to keep curtain in the open position until spring tension is applied to the barrel assembly.



## Final Door Install (continued)

### ⚠ WARNING

Verify that at this point, the Tension Wheel is free and there is no spring tension.

### ⚠ WARNING

Tension Wheel will be placed under high spring tension and it could spin rapidly resulting in death or serious injury. Door must be open when adjusting spring tension. Use two steel rods 3/4" diameter x 3 feet long (not provided) as winding bars.

### ⚠ WARNING

Winding bar must fit snugly into holes in Tension Wheel. DO NOT use loose fitting bar or screwdriver which could dislodge resulting in possible serious injury or death.

#### 14. COUNTERBALANCE ADJUSTMENT

- Align Tension Wheel under bracket so Stop Pin can rest in Tension Wheel slot.
- Set Stop Pin in place. See Figure 24D.

Read completely before you set initial turns to the value shown on "DATA SHEET" and on Tension Headplate decal.

Locate the door in the full up position such that the bottom bar is against the bottom bar stops and place a clamp on each guide no more than 6" below the bottom bar. Make certain that the clamping force will be sufficient to stop the door when it rests on the clamps.

Carefully lower the curtain using the chain hoist so that the bottom bar rests on the clamps. By hand, rotate the Tension Wheel slightly both directions to determine the neutral point of the spring counterbalance. Mark the hole in the TENSION WHEEL that is nearest to the retaining lug on the bracket.

**NOTE:** Tension is applied in the direction the coil would turn as the door moves upward.

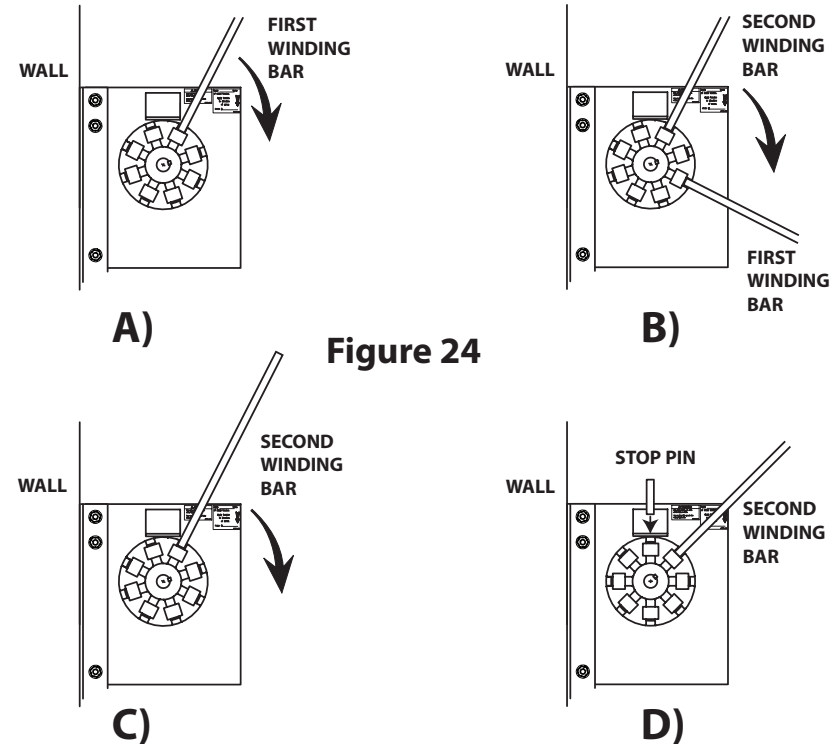
- Insert winding bar into tension wheel and pull down. See Figure 24, A.
- Rotate tension wheel 1/8 to 1/4 turn and stop.
- Hold first bar and insert second bar into tension wheel. See Figure 24, B and C.
- Pull down on second bar while removing the first bar.

### ⚠ DANGER

Exercise caution when applying or adjusting spring tension. Contact with rapidly rotating Tension Wheel or expelled winding rod can cause serious injury or death.

### ⚠ DANGER

Tension Wheel holds spring tension. Failure to stop pin shaft could allow Tension Wheel to spin uncontrolled possibly causing serious injury or death.



- Perform one complete manual CLOSE-OPEN cycle of the door with the chain hoist. Ensure the door is running smoothly and free of obstruction, the door counterbalance is properly balanced, and the FDO clutch is adjusted properly. If troubleshooting support is required, contact the factory technical support specialist."

### ⚠ WARNING

Failure to perform a manual chain hoist CLOSE-OPEN cycle inspection prior to motorized operation of the door may result in curtain damage, serious injury and/or death

# Operator Install (continued)

**15. LEVEL DOOR (IF NEEDED)**—If during previous step the door rolled up level and straight, skip this step.

A. Check that guides are plum, square, level, and are properly mounted onto floor and wall.

B. Check that the pipe is level.

C. Check that the attachment of the curtain is straight on the pipe.

If all of the above is correct and the door still rolls up out of level, a shim may need to be added, as shown in Figure 25.

## Shim materials:

- A piece of rubber is the desired material for a shim.
- A piece of cardboard could be used but may deteriorate over time.
- Use a 1/8" x 6" x 6" thick piece of material and increase thickness or pieces depending on the result acquired, as shown in Figure 26.

## Application of shim:

- To determine the side in which the shim will be applied, the door will need to be in the open position.
- When facing the door, the bottom bar will be unlevel. The lower side of the bottom bar will be the side in which the shim needs to be placed.
- The hood may need to be loosened or removed for the application of the shim.

To apply the shim, two laborers might be required.

## Installing the shim:

D. Close the door fully.

E. When door is at bottom make sure door is in hand chain mode.

F. Turn off the power to the motor (if applicable) to ensure safe application of the shim.

G. Backwind the door using the chain. Lock chain in place using chain keeper.

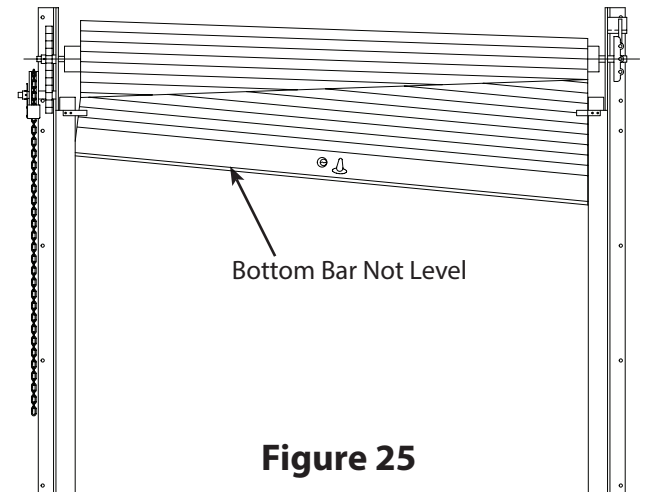
## ⚠ WARNING

When the door is wound backwards there is a force in which the door will want to wind forward. Secure the door in this position by locking hand chain onto chain keeper to prevent injury.

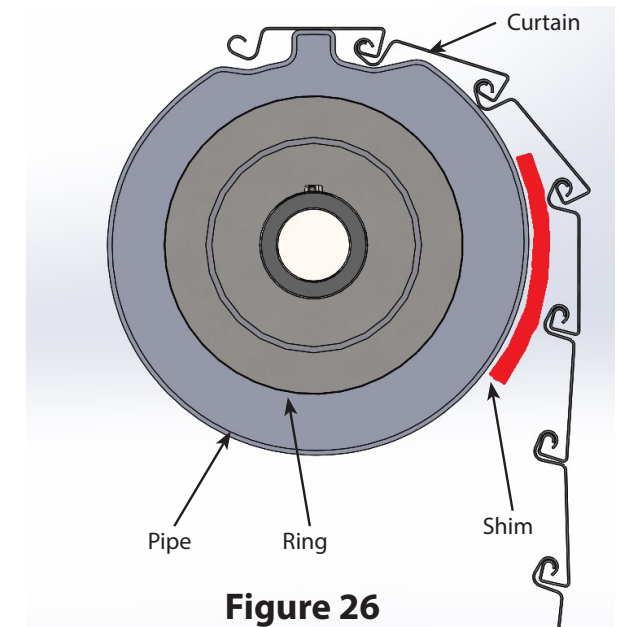
H. As the curtain is wound backwards apply the shim to the lower side between the pipe and slats or on the ring of the low side.

I. Restore power to the motor (if applicable).

J. Check the level of the bottom bar while door is in the open position. If it is not level, add a second shim and check again.



**Figure 25**



**Figure 26**

**NOTE:** If the door has wind locks there may be some stacking interference in the wind locks as the door is wrapping during operation. This is a normal characteristic. For wind lock applications the doors bottom bar should be level at the open position.



# Final Door Install (continued)

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## 16. TEST PROCEDURES

### GENERAL INFORMATION

The Operator is intended for use on rolling storm shelter doors. All models are normally-energized fail-safe operators incorporating internal batteries and proprietary control circuitry. All comply with UL864. The operators respond to emergency conditions generated by manual or automatic initiating devices and shall be installed in accordance with NFPA and UL864 standards.

The available operator features include patented annual test standard compliance technology, test plate interface, selectable time delays, minimum 24 hour battery support for release and smoke detectors, form-C relay outputs, notification appliance and troubleshooting capabilities.

The fail-safe design incorporates an annual internal clock/calendar which generates a test trouble signal if the system has not been tested within 365 days per National Fire Code requirements.

### **⚠ CAUTION**

Review all installation instructions, procedures, cautions and warnings contained within this manual prior to installing and/or servicing this product. As with all releasing device systems, maximum fire protection is provided when installed in accordance with factory specifications and used with fuse link systems.

### **⚠ CAUTION**

Fail-safe operation can only be provided once input power has been applied. Do not install this unit without factory training.

### **⚠ WARNING**

To prevent possible serious injury or death, keep the door opening clear of all personnel. RSX® FDO operated Storm Shelter doors could drop at any time.



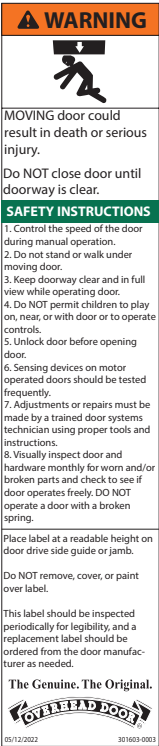
# Final Door Install (continued)

## STEP 17

### PRODUCT SAFETY INSTRUCTIONS

The door installer has the following responsibilities:

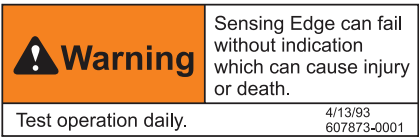
- Find labels in hardware box.
- Attach Product Safety Label 301603 as directed on each label.
- Demonstrate to the door user the correct way to control the closing speed of the rolling door with crank, hand chain or push-up operation; show that two hands should be used to control the hand chain.
- Inform the door user of the following recommendations per ANSI Z535.4: "Product safety labels should be periodically inspected and cleaned by the product user as necessary to maintain good legibility." The product user should regularly clean each label surface to maintain legibility or order replacement safety labels from the door manufacturer as required to maintain legibility.
- Electric operators must be installed on the door in accordance with the instructions from the manufacturer of the operator.
- Doors with sensing edge must have Safety Label 607873 attached to the bottom bar and at eye level on the drive side guide or jamb.



## STEP 18

### BOTTOM BAR WARNING DECAL

Doors with sensing edge on the bottom bar must have the warning decal shown below mounted on the bottom bar and at eye level on the drive side guide or jamb.



## STEP 19

### HAND CHAIN KEEPER

Hand chain operated doors are provided without a hand chain "keeper" provided with rolling service doors. For safety reasons the hand chain may be held out of the opening by a wire loop fastened to a wall with the hand chain hanging inside the loop.

## STEP 20

### CHAIN AND RELEASE CABLE STORAGE

Electric operators have a hand chain and release cables hanging below the operator in the opening. For safety reasons the hand chain and release cables may be stowed in a bag below the operator, or held out of the opening by a wire loop fastened to a wall with the hand chain hanging inside the loop.

# Final Door Install (continued)

## 21. CHECK THE FOLLOWING ITEMS BEFORE HOOD INSTALLATION

- Verify through entire travel of the door that endlocks on each side of the curtain are not rubbing on the headplate brackets. Operate the door several times in order to make this determination.
- Verify that the bottom bar is level in full down and full up positions and that the curtain is not binding on the guides.
- If curtain is level at bottom and not level at top, put shims between curtain and barrel on the low side.
- The guides may be lubricated with paste wax or silicone spray. **DO NOT USE GREASE.**
- Verify good mechanical connection and tightness of all fasteners, i.e., guides, headplates, set screws and roller chain links.
- Apply all warning labels in the appropriate locations before leaving the installation site.
- Check the area for any extra parts, and be sure these were not omitted in the installation process.
- Re-check all bolted connections to verify all are securely tightened.
- Clean up the area and make sure it is secure, with the handle engaged with the pin provided.
- If the building owner or facility manager is unfamiliar with the product, demonstrate the operation of the door and any optional equipment before leaving the job site. Point out the importance of Pad- Locking the release handle to avoid possible tampering.
- Have the customer or his representative sign off on the installation provided in the hardware bag. Keep a completed copy of this form in your maintenance files. Exchange all documentation and keys to locks at this time.
- Be sure to report (in writing) to the factory any complaints or recommendations the customer may register at the completion of the installation that may have a bearing on future designs.
- **IMPORTANT: WARNING LABEL MUST BE APPLIED TO OPERATED SIDE OF THE ROLLING DOOR, ON THE GUIDE, 5 FEET ABOVE THE FLOOR.**

## 22. HOOD INSTALLATION FOR ONE PIECE HOOD

- Hood flange must be securely fastened to the wall.
- On masonry walls use masonry fasteners through each hole in the hood flange.

- On steel walls the hood flange must be fastened to each connection point by drilling holes through the hood flange and into wall.
- Attach the hood to the hood band on headplate bracket by drilling a 7/32" hole through the hood and band. Then secure hood with 1/4" tapping screw, maximum length 7/16". Longer screws can prevent door closing. Use four screws per bracket. See Figure 27.
- Install hood support at each hood splice if required.

## 23. INSTALLATION FOR HOOD SEGMENTS AND HOOD SUPPORTS

- Snap a chalk line across the header at the top of headplate brackets.
- Measure the length of the top flange on the left hand hood segment.
- Position top of internal hood support just under chalk line with right hand edge of hood support at a distance from the headplate that is equal to length of top flange on LH hood segment; and fasten hood support to wall.
- Place the LH hood segment of the headplate hood bands and on hood support. The distance between the flame baffle and the hood support should be one inch or less. Flame baffle must be free to drop without interference with hood support. Models 610F and 610FE will have no flame baffle.
- Fasten hood flange to wall with fasteners appropriate for wall construction.
- Place second hood segment onto headplate hood bands and hood support and fasten hood flange to wall with fasteners appropriate for wall construction.
- Attach the hood to hood bands and hood support with 1/4" dia. by 3/8" long tapping screws; longer screws may prevent door closure. Use four screws on each hood band and support. See Figure 27.

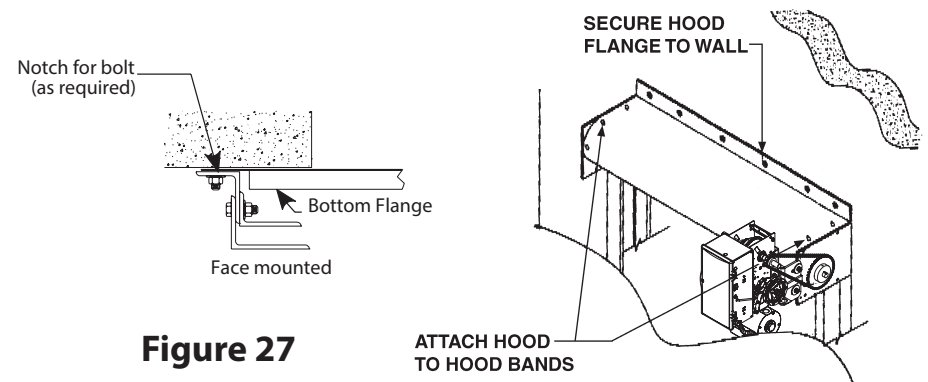


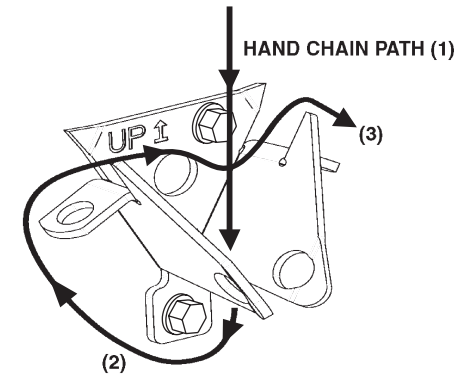
Figure 27

## ***Final Door Install (continued)***

### **24. HAND CHAIN KEEPER**

The emergency hand chain for this door can be locked.

- Instruct door users to wrap hand chain, as shown in Figure 28.



**Figure 28**

# Maintenance

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## REPLACEMENT BOTTOM BAR

This procedure is for replacing a bottom bar and slats or adding additional slats. Verify that the replacement bottom bar and slats are suitable for the door mounted on the wall opening.

- Obtain permission to block traffic thru the opening in the wall.
- Set up barricades or warning cones to prevent traffic thru the opening from both directions and provide a safe work area.
- Open the door.
- Remove the stops from the top of the guides
- Remove the bottom bar and curtain from between the guide angles. Lower the curtain and bottom bar outside the guides to a working position above the floor.
- Remove one windlock, so the damaged bottom bar (and damaged slats) can be removed from the curtain.
- Insert the replacement bottom bar and slats onto the bottom of the curtain and reattach the windlock.
- Carefully raise bottom bar back to the top of guide angles. BEWARE OF RAPID MOVEMENT OF BOTTOM BAR PAST TOP OF THE GUIDES.
- Insert the bottom bar and curtain back into the guide angles and lower the bottom bar 6" into the guides.
- Install locking pliers below bottom bar.
- Attach the stops to the top of the guide angles.
- Remove locking pliers.
- Open and close the door to verify proper operation.
- Remove barricades or warning cones and notify customer that the repair is complete.

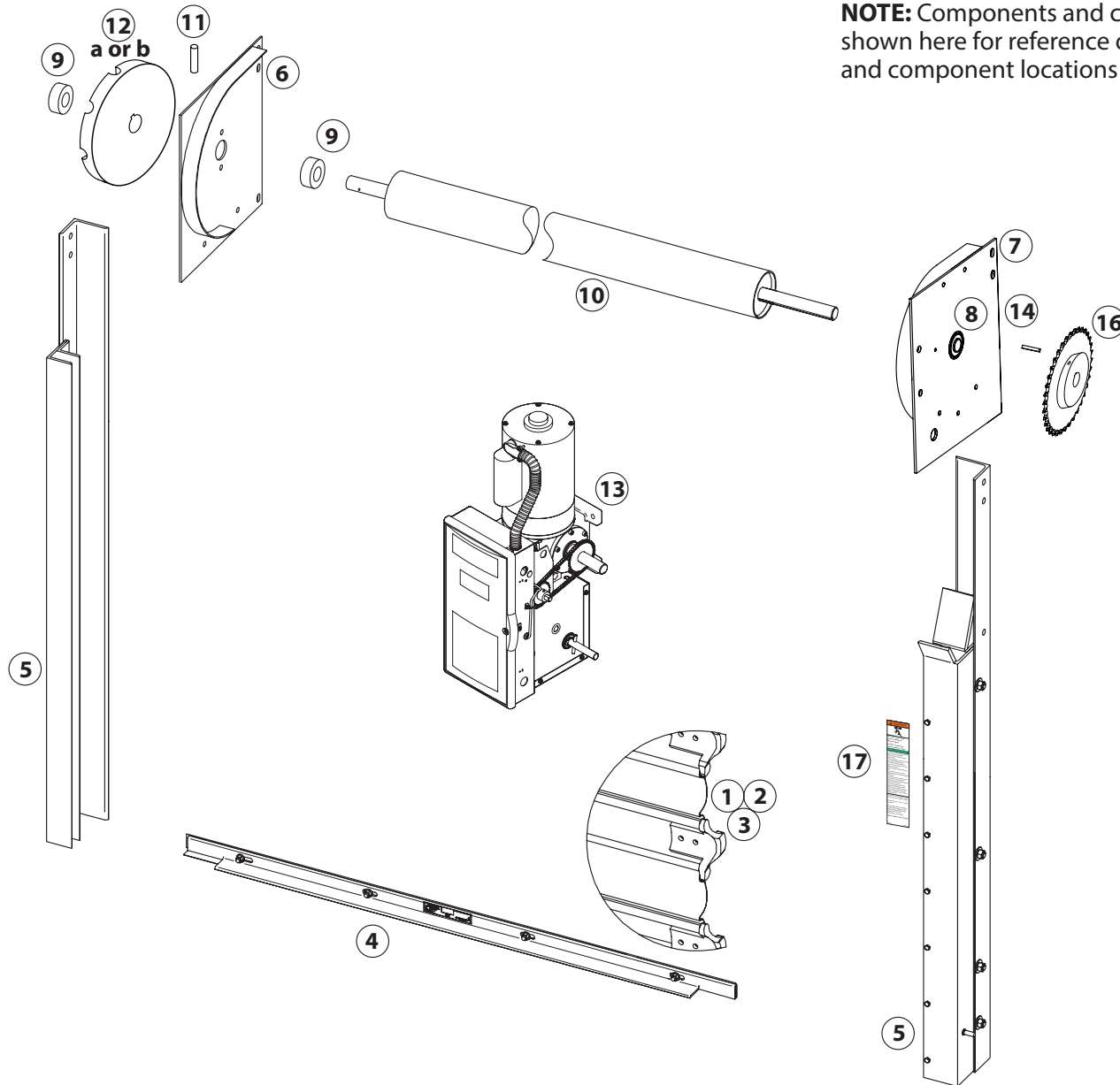
# TROUBLESHOOTING

The chart below is a list of possible problems with the operation of the door. The possible causes listed are the most common, and are not meant to include all possibilities. With the variety of the product and the field conditions, other factors may be involved. If assistance beyond this troubleshooting chart is needed, please contact your Overhead Door Distributor. Factory support is available to them, should it be necessary, in order to resolve your problem.

Trouble	Possible Cause(s)	Remedy
Curtain runs to one side	*Broken endlocks *Barrel not level	*Check and replace *Check and level barrel
Door sticks when closing	*Bent guide angle(s)	*Inspect for bent or kinked guides. *Straighten guides and check width of groove.
Door coil makes cracking sound	*Bent slats	*Inspect, remove and straighten or replace
Door squeaks when operating	*Tight guides *Dirty guides	*Check alignment and distance between guides. *Inspect and clean inside of guide. Do not lubricate with grease. Use WD-40 or silicone spray.
Door is difficult to raise, will not stay open	*Insufficient Counterbalance *Broken spring	*Increase spring tension and repeat drop test procedure *Remove barrel and replace.
Operator moves, door does not operate	*The Operator sprocket or drive sprocket are not keyed to the shaft *The drive chain is broken or has slipped	*Ensure sprockets are secure *Ensure drive chain hasn't broken or slipped.

# Breakdown Of Parts

## Parts Drawing



**NOTE:** Fasteners and some parts not shown for clarity. Check the Parts List for any parts.

**NOTE:** Components and component locations are shown here for reference only. Your unit installation and component locations may be different.

**PARTS LIST on next page**

# Breakdown Of Parts (continued)

## Table of Part Numbers

<b>BEFORE ORDERING PARTS</b> <b>LOCATE YOUR ORIGINAL DOOR NUMBER</b> <b>Found on the Nameplate Attached to your Bottom Bar</b>							
Item	Description	Reference Part Number	Built to Order?	Item	Description	Reference Part Number	Built to Order?
1	Curtain Assembly, Complete	830300	Yes				
2	Slat	345525	Yes				
3	Windlock	300672					
4	Bottom Bar Assembly	830500	Yes				
5	Guide Assembly	830400	Yes				
6	Tension end head plate assy	308309	Yes				
7	Drive end head plate assy	308313	Yes				
8	Bearing assembly kit	308399	Yes				
9	Set Collar	604297	Yes				
10	Counterbalance Assembly,	308417	Yes				
11	Tension end stop pin	046167	Yes				
12	Tension wheel	305617 or 307953	Yes				
13	RHX, 1/2 HP	Inquire	Yes				
	RHX, 3/4 HP	Inquire	Yes				
	RHX, 1 HP	Inquire	Yes				
	RHX, 3 HP	Inquire	Yes				
14	Key, 3/8 x 1.50"	080340-0029	Yes				
	Key, 1/2 x 2.00"	080340-0036	Yes				
15	Hood Assembly (not shown)	307582	Yes				
	Hood Logo, Service Doors (not shown)	273483					
16	Drive Sprocket	601061 or 086446	Yes				
	Drive Sprocket Chain	080837	Yes				
	Operator Sprocket (If Req.)	601061-1220	Yes				
17	LBL,WARNING,ROLLING,DOORS	301603					
18	LBL,WARNING,SEN EDGE,ELEC/PNEU (not shown)	607873-0001					
<b>OPTIONAL ACCESSORIES</b>							

"Built to Order" parts are specific to each door manufactured, and may be subject to manufacturer's standard lead-times.

# ***Return Goods Policy***

## ***Return Procedure for FACE MOUNTED ROLLING STORM SHELTER DOOR Model 610F, FE***

The Overhead Door Rolling Steel Division will only accept returned materials that are in warranty. Products being returned must be accompanied by a Return Authorization (RA) Tag. To obtain a RA Tag please use the following guidelines;

- Complete Door Systems will not be replaced without prior approval from an Rolling Steel Division Commercial RM Coordinator. Every attempt will be made to correct the malfunction to the installed product in the field.
- To return a defective part, the authorized Overhead Door Distributor must contact the Customer Service Group of the Rolling Steel Division at 1-800-929-2553. The Factory Order number is required (found on the bottom bar of door). The Customer Service Group will issue, via mail, an RA Tag for the defective part.
- Upon receipt of the defective part, the Rolling Steel Division will evaluate the part for a manufactured defect in material and/or workmanship. If it is determined there is a defect, the Overhead Door Distributor will be credited the cost of the part. If it is determined there is not a defect in material and/or workmanship, no credit will be issued.



# Limited Warranty



## Rolling Service Door and Operator System Limited Warranty Model 610F and Model 610FE

Overhead Door Corporation ("Seller") warrants to the original purchaser of the Model 610F and 610FE commercial rolling service fire door ("Door") and the model RSX®, RMX®, or RHX® commercial door operator ("Operator") (Door and Operator purchased and installed together collectively referred to as the "System"), subject to all of the terms and conditions hereof, that the System and all components thereof will be free from defects in materials and workmanship under normal use for the following periods, measured from the date of installation:

- SELLER WARRANTS ALL PARTS AND COMPONENTS OF THE SYSTEM, EXCEPT THE COUNTERBALANCE SPRING AND FINISH, TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR THREE (3) YEARS FROM THE DATE OF INSTALLATION OR 10,000 CYCLES, WHICHEVER OCCURS FIRST.

Seller's obligation under this warranty is specifically limited to repairing or replacing, at its option, any part which is determined by Seller to be defective during the applicable warranty period. Repair or replacement labor for any defective Door part or component is included for a period of one (1) year from the date of installation. After that, any labor charges are excluded and will be the responsibility of the purchaser. Labor charges related to any Operator defect are excluded and will be the responsibility of the purchaser.

This warranty is made to the original purchaser of the System only, and is not transferable or assignable. This warranty does not apply to any unauthorized alteration or repair of the System, or to any System or component which has been damaged or deteriorated due to misuse, neglect, accident, failure to provide necessary maintenance, normal wear and tear, or acts of God or any other cause beyond the reasonable control of Seller. This warranty does not cover replacement batteries or apply to any damage or deterioration caused by door slats rubbing together as the door rolls up upon itself or caused by exposure to salt water, chemical fumes or other corrosive or aggressive environments, whether naturally occurring or man-made, including, but not limited to, environments with a high degree of humidity, sand, dirt or grease. This warranty applies only to Systems (a Door and Operator purchased and installed together simultaneously) and not to any Door or Operator purchased independently from the other, regardless of whether subsequently paired together.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

IN NO EVENT SHALL 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, loss of goodwill, loss of profits, loss of use, cost of any substitute product, interruption of business, or other similar indirect financial loss.

Claims under this warranty must be made promptly after discovery, within the applicable warranty period, and in writing to the Seller or to the authorized distributor or installer whose name and address appear below. The purchaser must allow Seller a reasonable opportunity to inspect any System claimed to be defective prior to removal or any alteration of its condition. Proof of the purchase and/or installation date, and identification as the original purchaser, may be required. This Warranty is not valid unless the fields below are completed by the installer at the time of installation.

*<sup>1</sup>The number of cycles referred to herein shall be measured by an integrated cycle counter contained in or attached to the Operator. If the*

DOOR TYPE	_____
OPERATOR TYPE	_____
ORIGINAL PURCHASER	_____
INSTALLATION ADDRESS	_____
SELLER:	_____
SELLER'S ADDRESS:	_____
FACTORY ORDER #:	_____
DATE OF INSTALLATION:	_____
SIGNATURE OF SELLER:	_____