

# INSTALLATION INSTRUCTIONS

## MODEL 523RX RESIDENTIAL EXTERIOR SECURITY SHUTTER, WITH SIDE MOUNT MOTOR ENCLOSURE

**Wayne**  
 **Dalton**<sup>®</sup>  
GARAGE DOORS

This installation manual provides the trained door technician information required to install this door.

**READ COMPLETE INSTRUCTIONS BEFORE INSTALLING DOOR.**

Some installation tasks listed in this document are found in other documents. Please refer to the appropriate document(s) as directed;

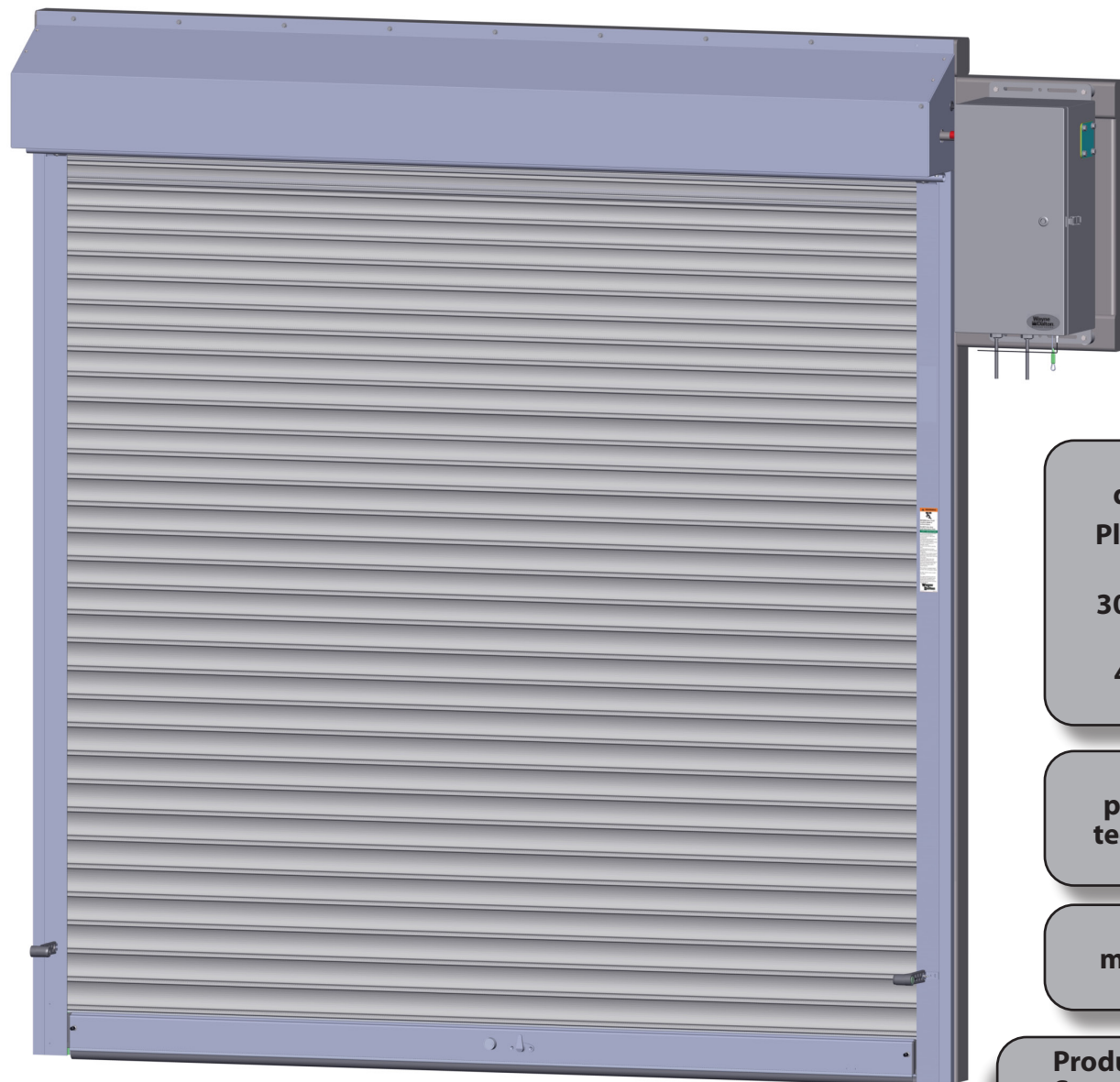
**308577 Hilti Kwik Bolt Installation found on Ribbon Connect**

**41510.00119 Installation Instructions for Motor Enclosure (Included)**

This manual is intended **ONLY** for professional use by a trained door systems technician. All others please refer to the end user manual provided to you.

After installation is complete, leave this manual with the Homeowner. Maintenance instructions on page 20.

Product may be covered by one or more patents. See [www.wayne-dalton.com/patents](http://www.wayne-dalton.com/patents) for details.





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# SECTION 1 - SAFETY INFORMATION

## OVERVIEW OF POTENTIAL HAZARDS READ THIS SAFETY INFORMATION




### ⚠ WARNING

Upward Rolling Doors doors are large, heavy objects that move with the help of electric motors. Since moving objects and electric motors can cause injuries, your safety and the safety of others depends on you reading the information in this manual. If you have any questions or do NOT understand the information presented, call technical support at 1-800-764-1457.

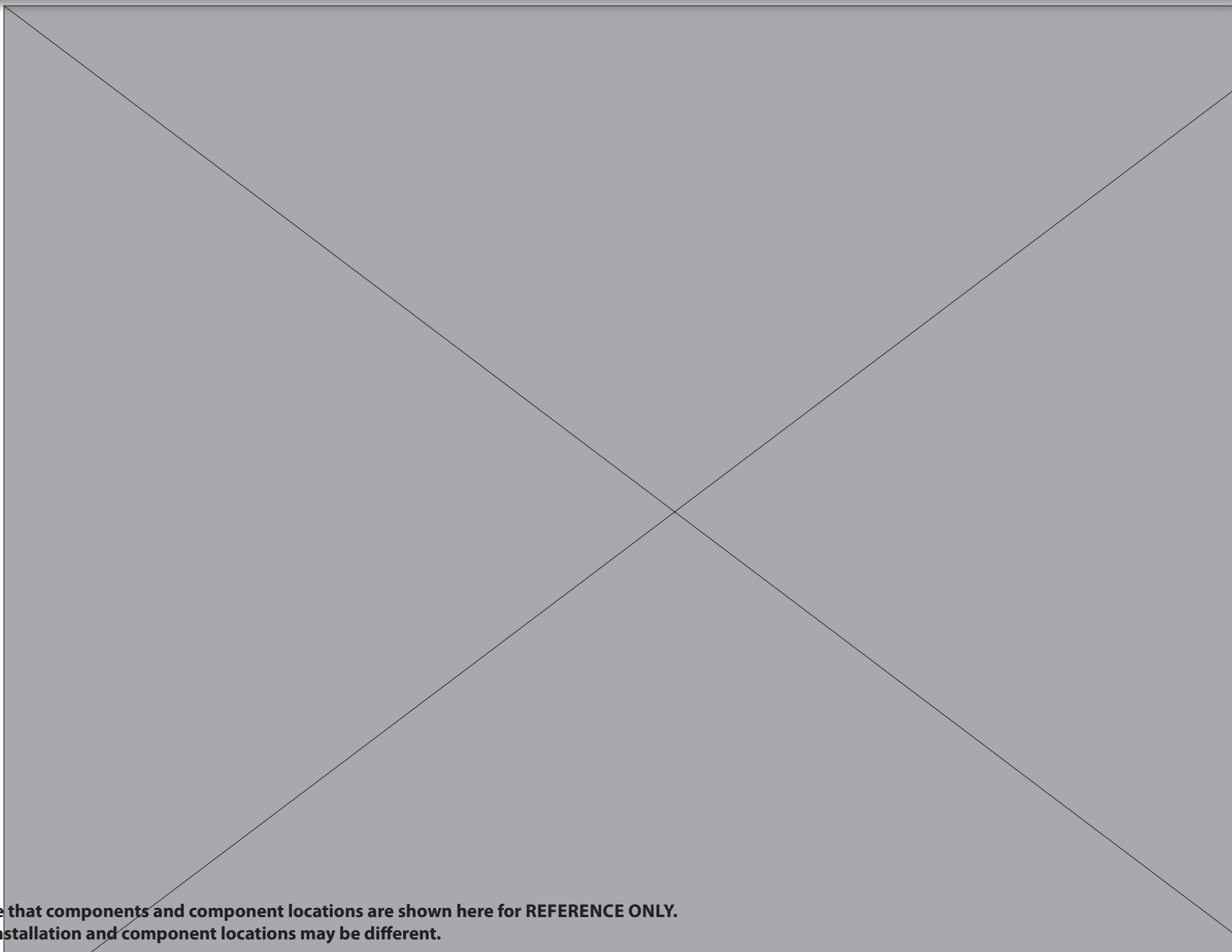
In this section and those that follow, the words "**DANGER**", "**WARNING**", and "**CAUTION**" are used to stress important safety information. The word:

- ⚠ **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
- ⚠ **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
- ⚠ **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in injury or property damage.

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 wiring switch and motor to supply.
 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 done by a trained door system technician using proper tools and instructions.

## SECTION 2 - KEY DRAWING



**Please note that components and component locations are shown here for REFERENCE ONLY.  
Your unit installation and component locations may be different.**

# SECTION 3 - DOOR INSTALLATION DATA SHEET

A sample of the "DOOR INSTALLATION DATA" sheet is shown here. Locate the work order "Door Installation Data" sheet inside the door hardware box. You will need to refer to the "Door Installation Data" sheet. See FIG 2.

Factory order number on door components must match with factory order number on the "Door Installation Data" sheet. Each door has it's own individual sheet.

## Jobless Installer 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 TYPE:		GUIDE FINISH:		BRACKET FINISH:	
***** WORK ORDER MESSAGES *****							
**							
**							
**							

FIG 2

# SECTION 4 - PRE-INSTALLATION CHECK LIST

Verify that the door installation can be accomplished before proceeding:

- Locate the work order "DOOR INSTALLATION DATA" sheet, see FIG 2, inside the door hardware box.
- Does the wall opening shown in FIG 3 match the Opening Width and Height shown on the "Door Installation Data" sheet?
- Are the guides you received suitable for the jambs? Compare the guides type shown on the "Door Installation Data" sheet with FIG 4.
- Can the guides be installed plumb?
- Check the sill for level. If sill is not level, mark the high sill location on the low side jamb.
- Guides are designed to rest on sill.

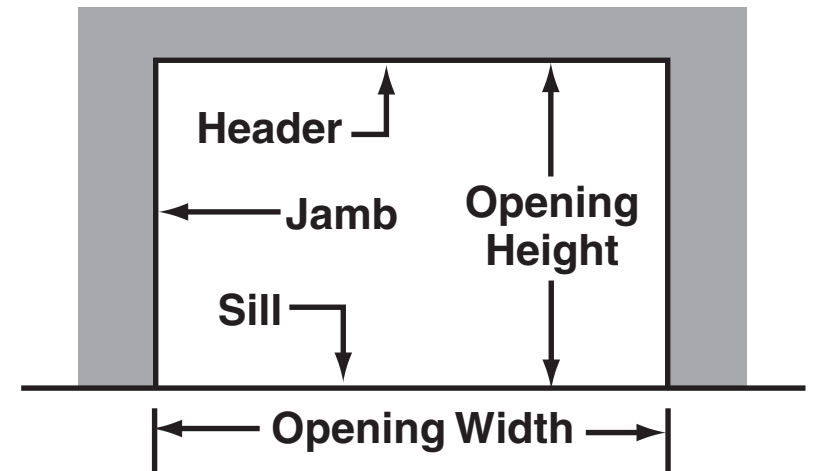


FIG 3

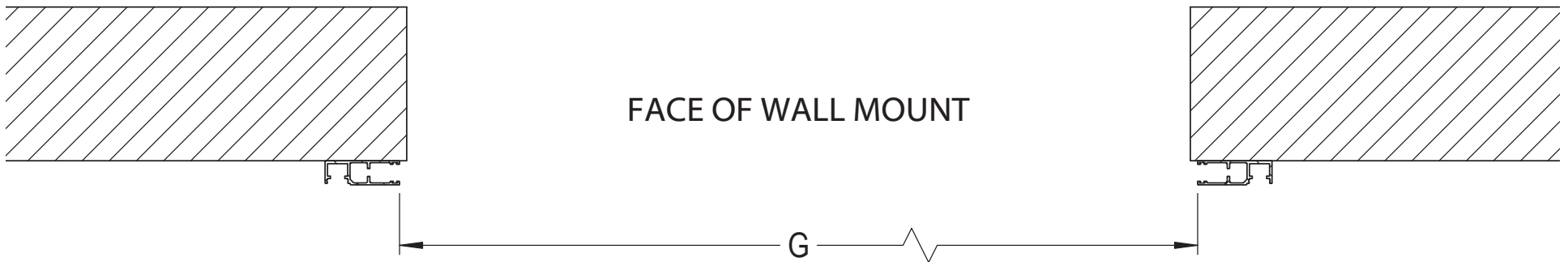


FIG 4

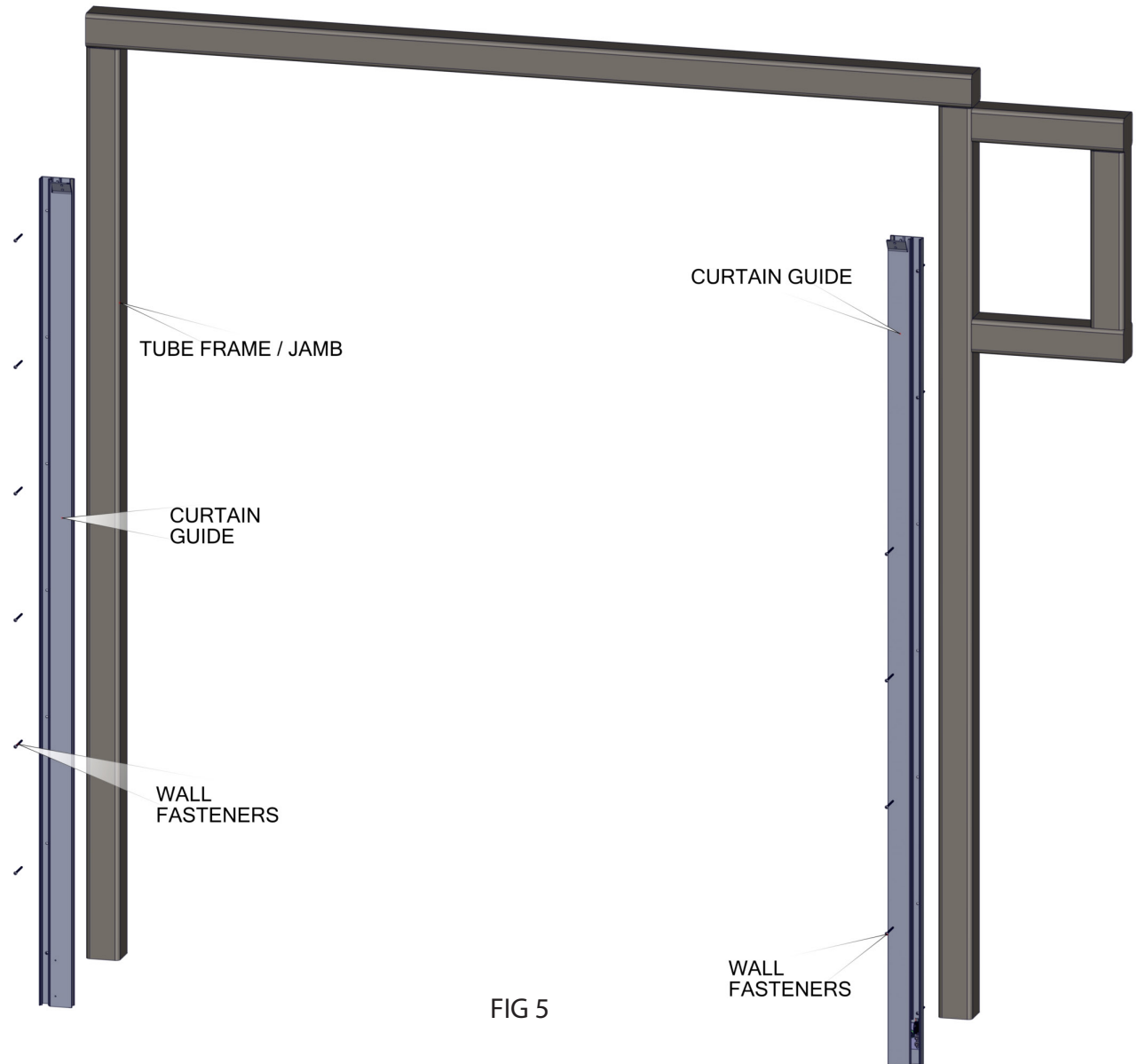
# SECTION 5 - INSTALLATION

## STEP 1 INSTALL CURTAIN GUIDES TO JAMB

- Mount curtain guides to the surface using supplied fasteners. See FIG 5A and 5B.
- Check "G" Dimension as illustrated in FIG 4 on page 5. "G" Dimension must match your "DOOR INSTALLATION DATA" sheet.
- Both guides MUST be on a level line and both guides MUST be plumb.
- The "G" Dimension must be held within 1/8" over the entire height of the guides.

### **⚠ WARNING**

Follow instructions and use proper lifting equipment and correct lifting procedure to avoid serious injury or death.



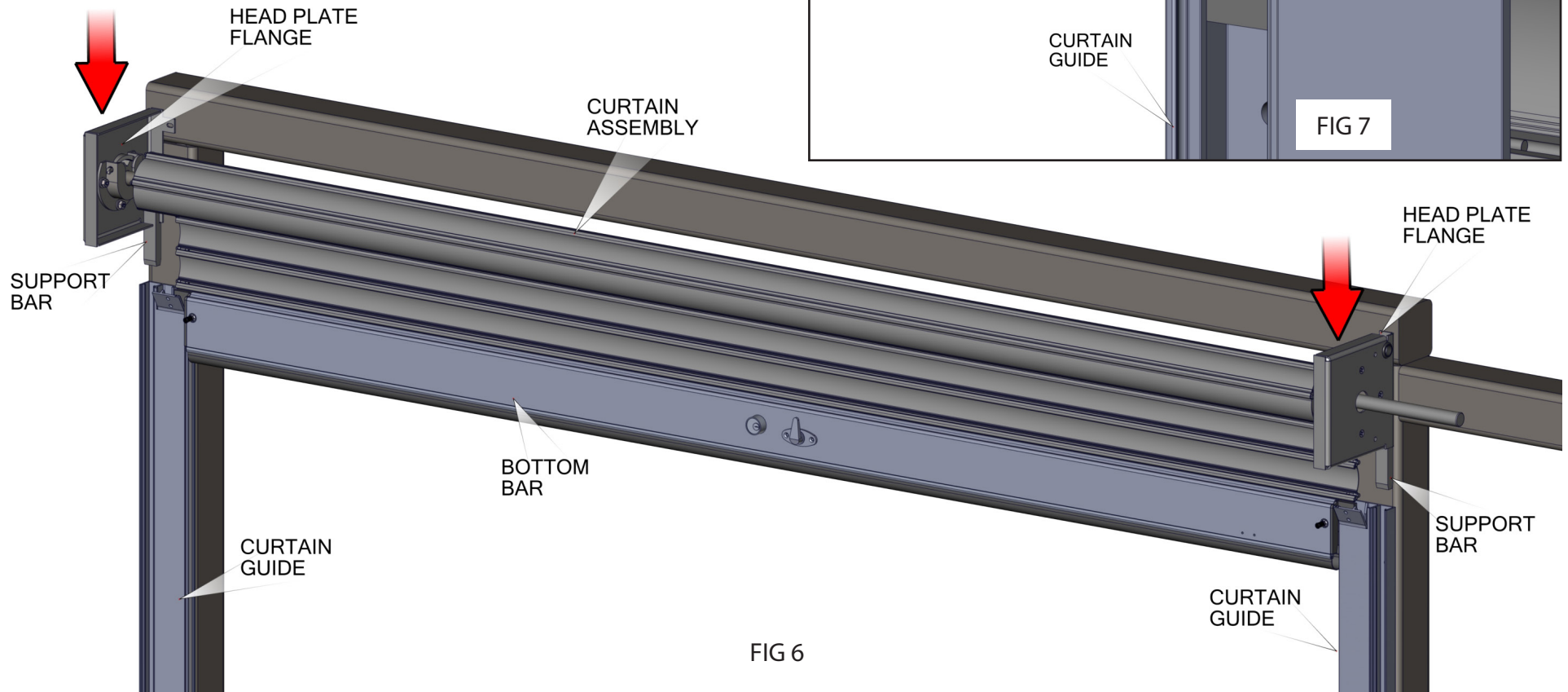
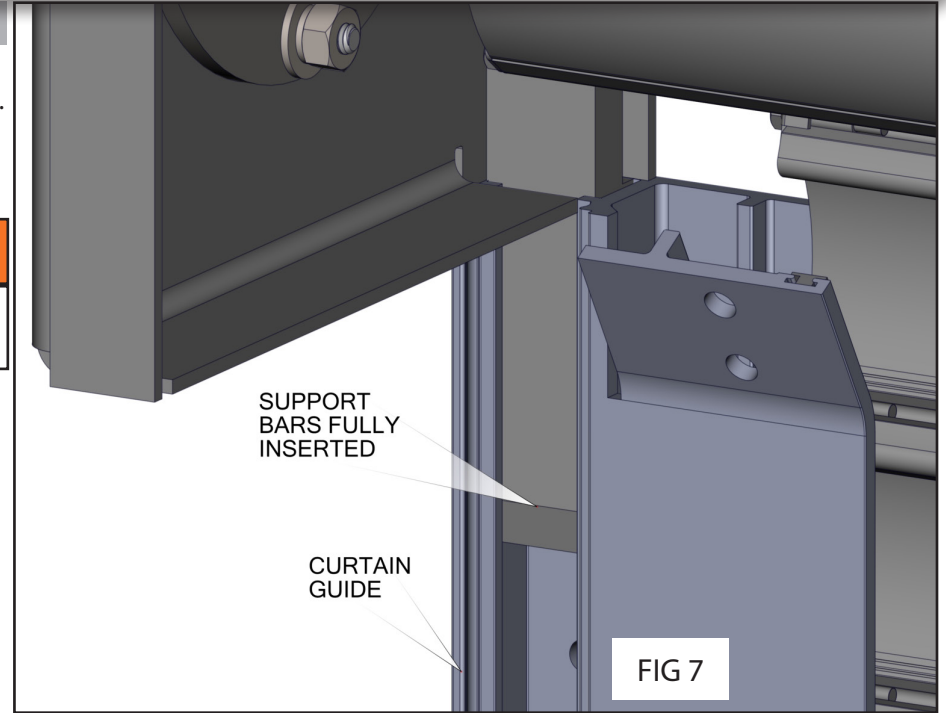
# SECTION 5 - INSTALLATION

## STEP 2 INSTALL HEAD ASSEMBLY

- Lift the head assembly using a fork lift or other appropriate lifting equipment and lower it onto the top of the guides, inserting the support bars into the guide as shown in FIG 6.
- Be sure the support bars are fully inserted into the guides on both sides. See FIG 7
- Install the wall fasteners provided into the head plate flanges to attach it to the jamb. See FIG 7

### **WARNING**

Rapidly closing curtain could result in death or serious injury. Do not remove factory binding around curtain assembly until step 3.





# SECTION 5 - INSTALLATION

## STEP 2 INSTALL HEAD ASSEMBLY (Continued...)

- Lift the fascia plate using a fork lift or other appropriate lifting equipment and lower it, attaching it to the back of the jamb, as shown in FIG 8.
- Be sure the bottom of the fascia plate is approximately 4-1/2" below the top of the guides, leveled and centered; Fasten it with wall fasteners. See FIG 9 and FIG 10.
- Install the wall fasteners provided into the head plate flanges to attach it to the jamb. See FIG 10.



FIG 8

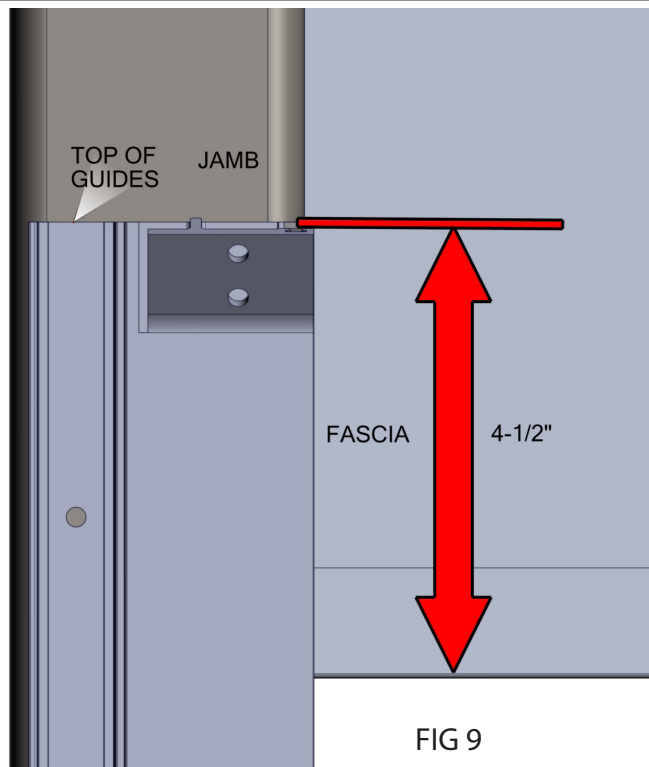


FIG 9

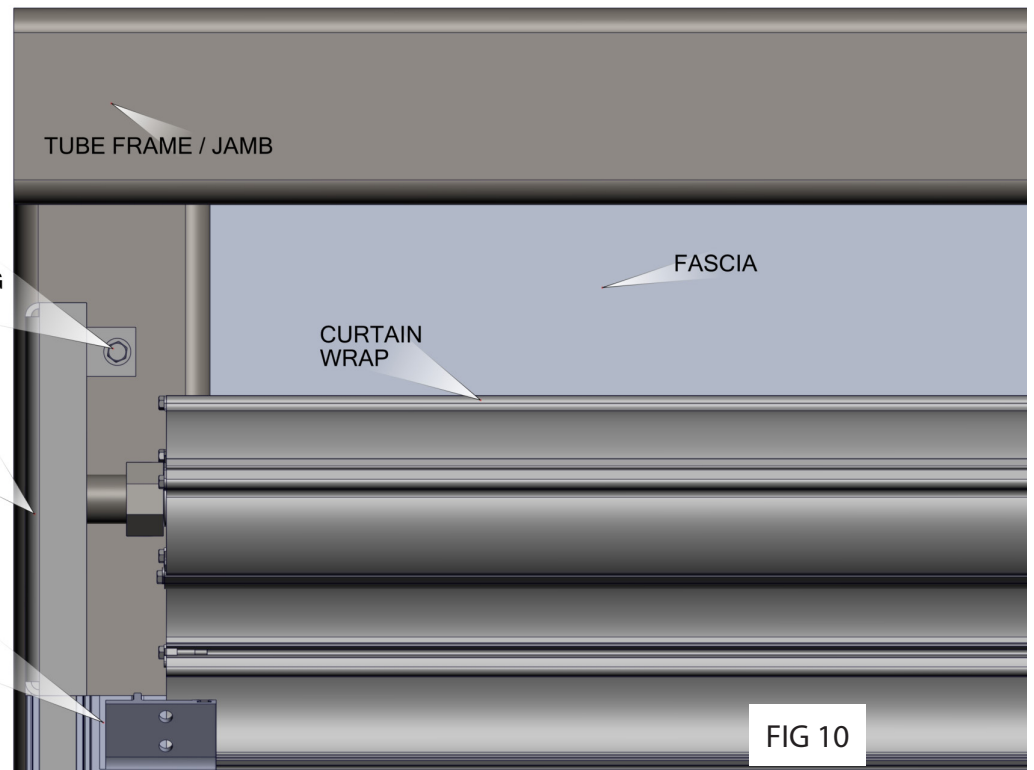


FIG 10

# SECTION 5 - INSTALLATION

## STEP 3 WIND SPRINGS

### **⚠ WARNING**

Prior to winding or making adjustments to the springs, ensure you are winding in the proper direction as stated in the Installation Instructions. Otherwise the spring fittings may release from spring if not wound in the proper direction and could result in severe or fatal injury.

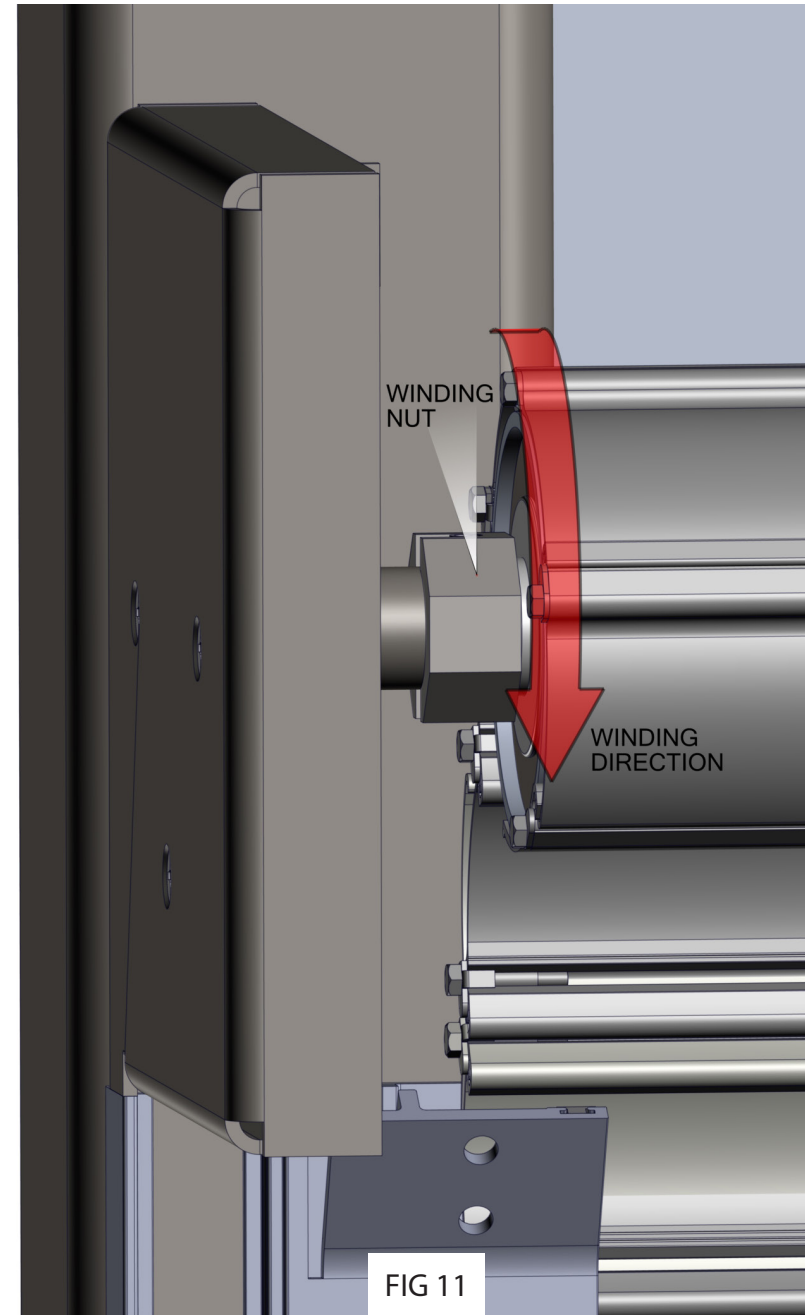
### **⚠ WARNING**

Winding torsion spring(s) is an extremely dangerous procedure and should be performed only by a trained door system technician using proper tools and instructions.

### **⚠ WARNING**

Rapidly closing curtain could result in death or serious injury. Use caution when lowering curtain before spring tension is applied.

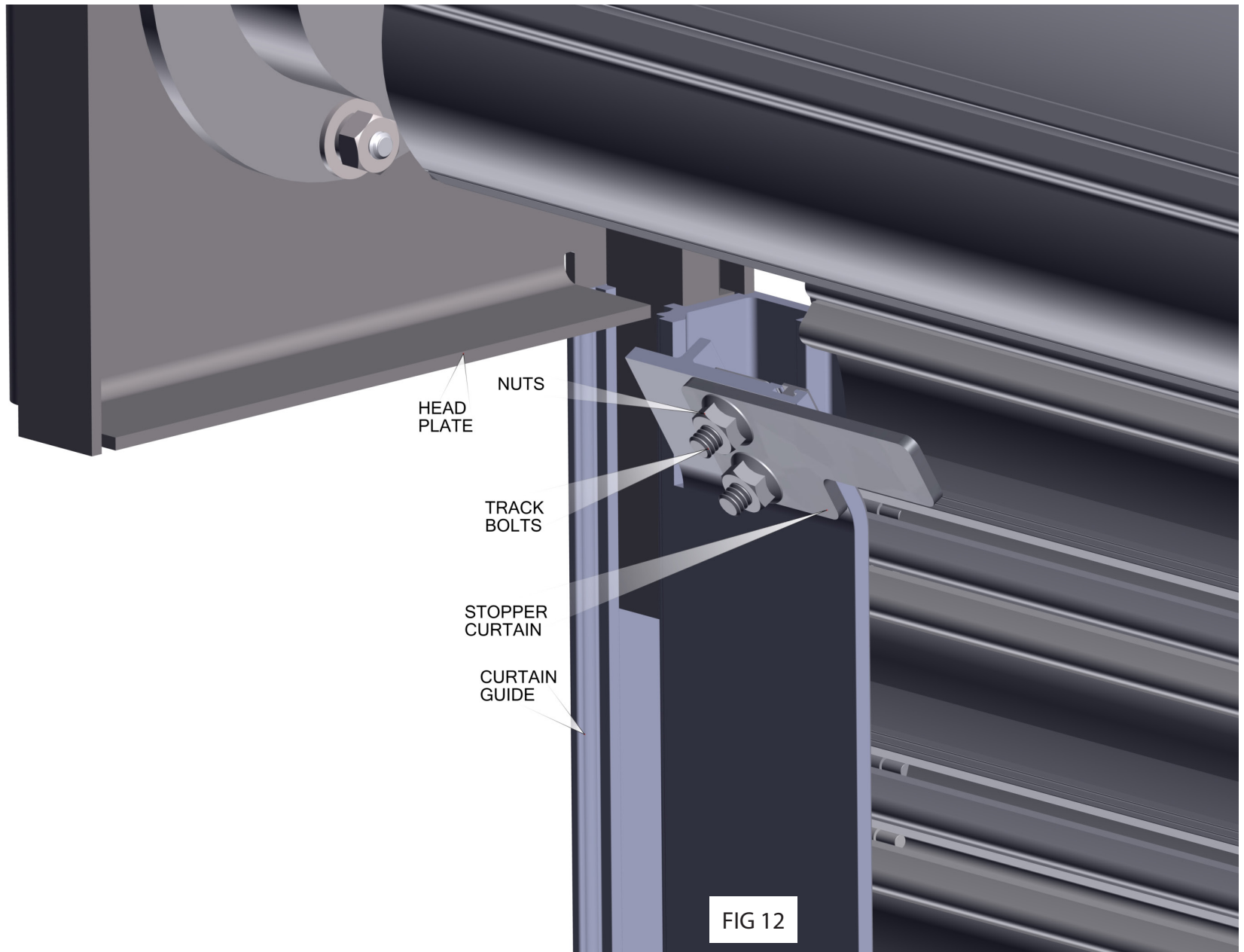
- Cut the banding and carefully lower the curtain into the guides to the fully closed position.
- Using a 1-1/2" open end wrench wind the spring by turning the Winding Nut the specified number of turns indicated on your door installation data sheet. The winding direction would be the same as the direction to open the door for both left and right hand drive. See FIG 11.
- Check the balance of the door. If needed raise the door and adjust the number of turns to achieve proper balance.



# SECTION 5 - INSTALLATION

## STEP 4 ATTACH BOTTOM BAR STOPPER

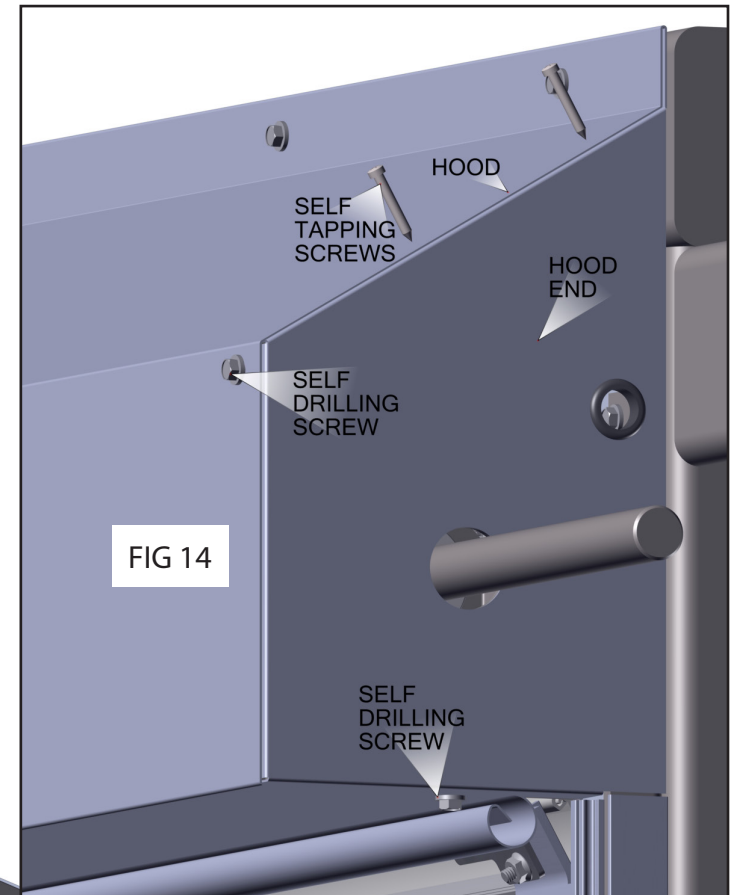
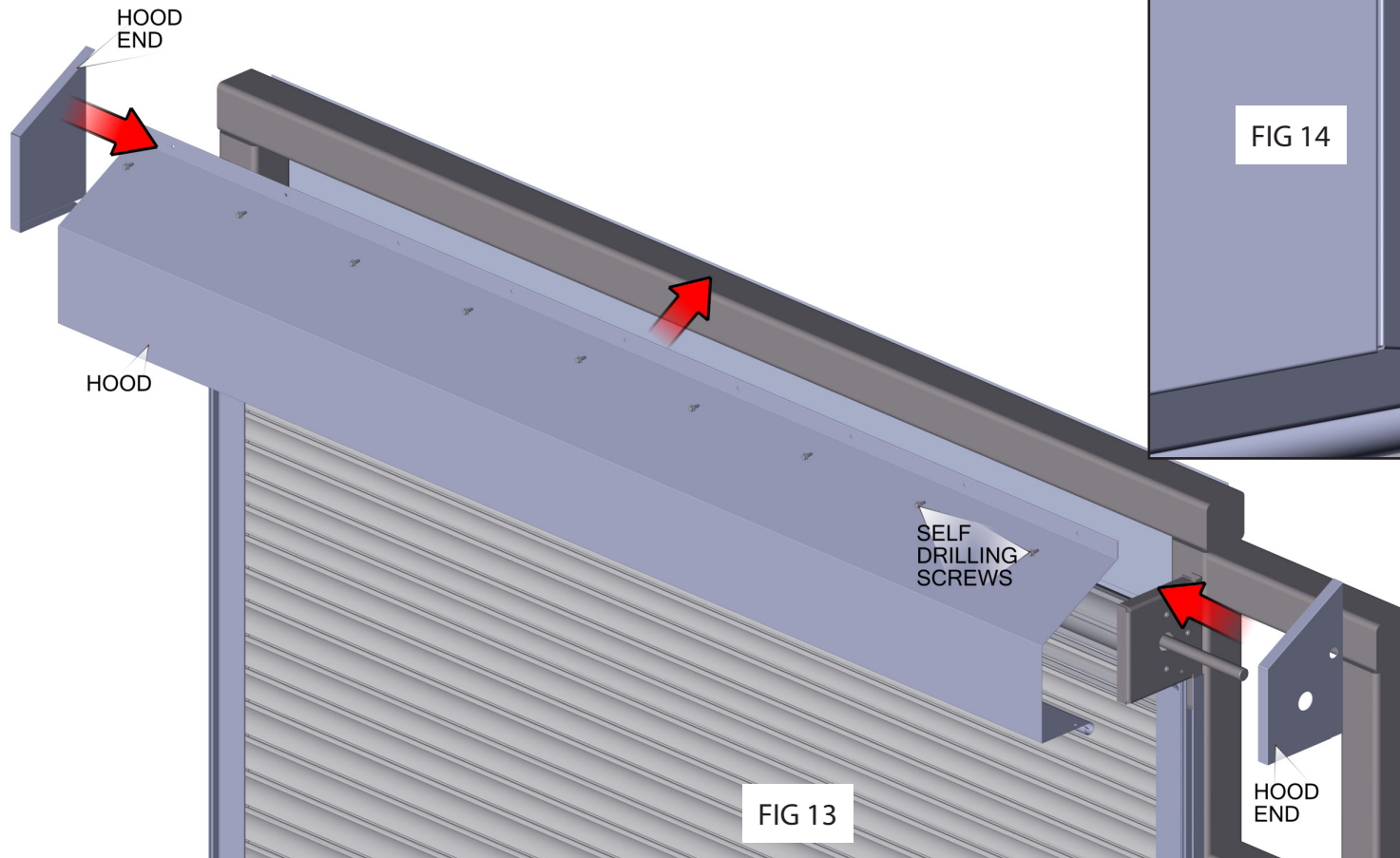
- With door in the closed position attach stopper using track bolts and nuts provided, as shown in FIG 12.



# SECTION 5 - INSTALLATION

## STEP 5 ATTACH FRONT HOOD

- Position the hood in place, as shown in FIG 13.
- Align the hood and attach using the screws and wall fasteners provided. See FIG 13 and FIG 14.
- If your door is 12'-0" or wider you must also attach the hood to the hood band, supporting the center of the hood with screws provided.



# SECTION 5 - INSTALLATION

## STEP 6 INSTALL OPERATOR

- Lift the Motor Enclosure using appropriate lifting equipment and align the center of the bearing with the shaft. Insert the bearing onto the shaft all the way through the coupler attached to jackshaft operator in the box. See FIG 15 and FIG 16.
- Once the Motor Enclosure is in position and aligned, mark the four locations onto the jamb. See FIG 16.
- Remove the Motor Enclosure. Pre-drill the four marked hole locations.
- Re-install the Motor Enclosure onto the shaft. Verify that the Motor Enclosure is aligned and there is no binding. Secure box to wall, as shown in FIG 17.
- Tighten all set screws in coupler in the box. See FIG 15.

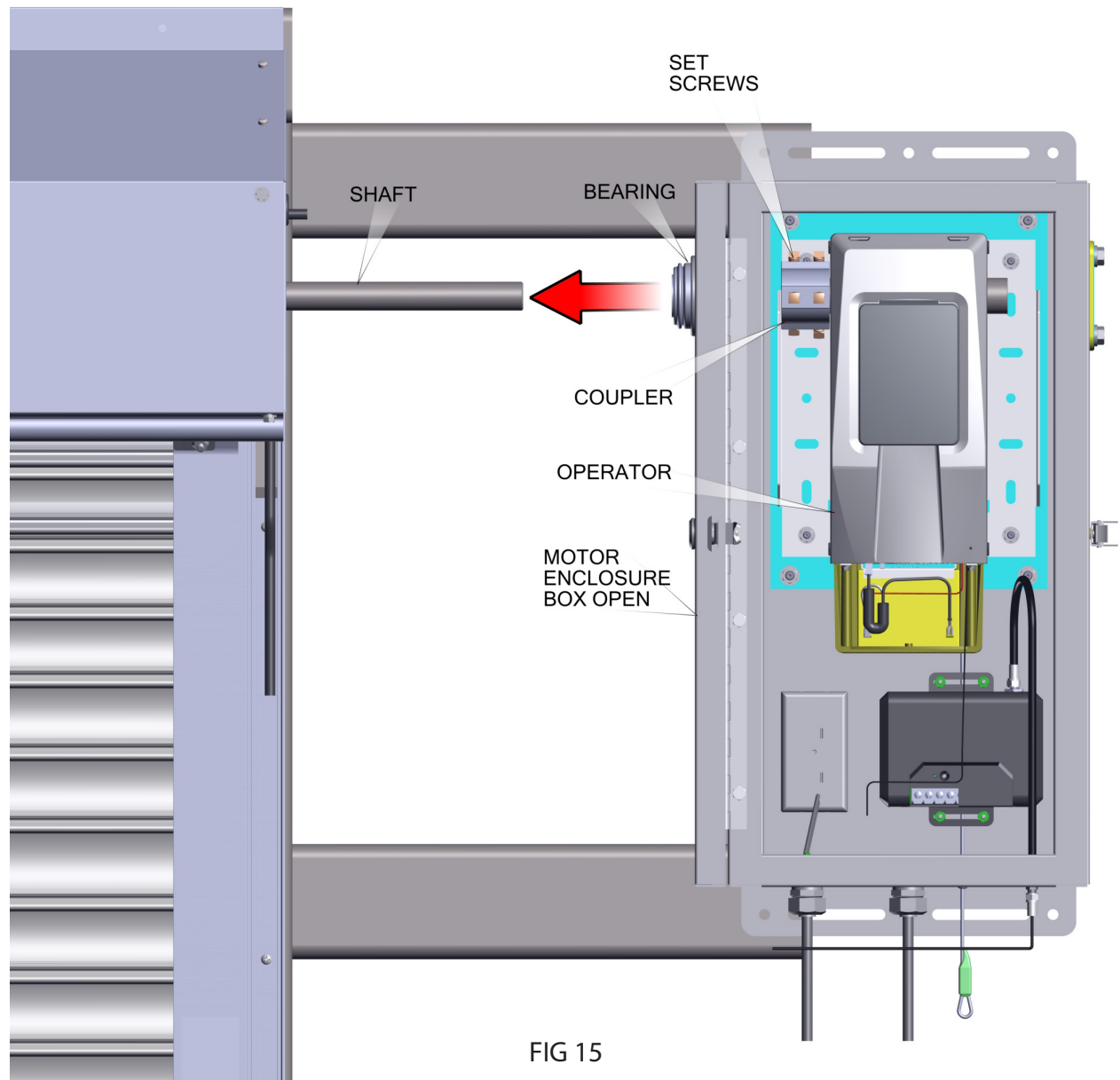
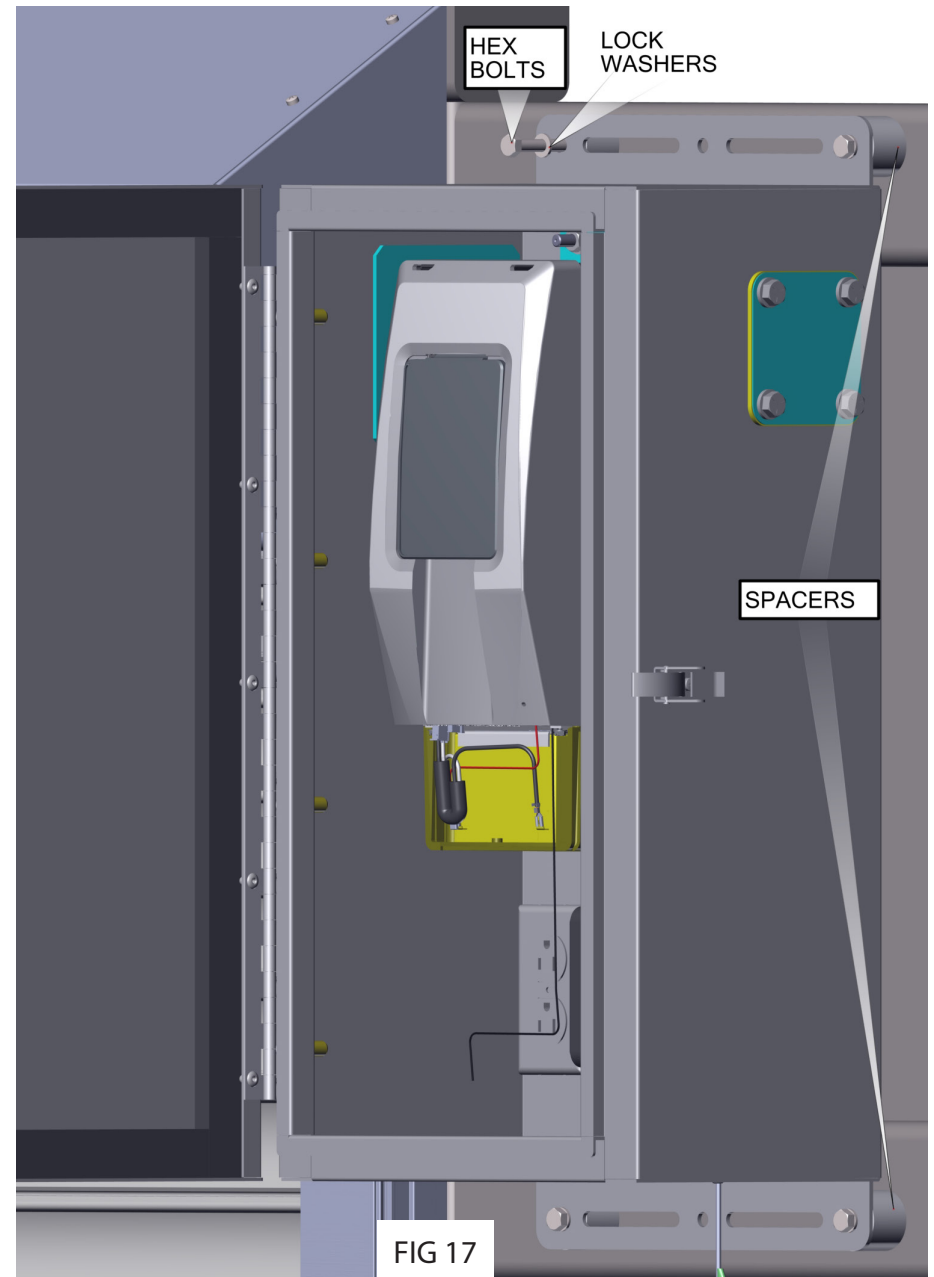
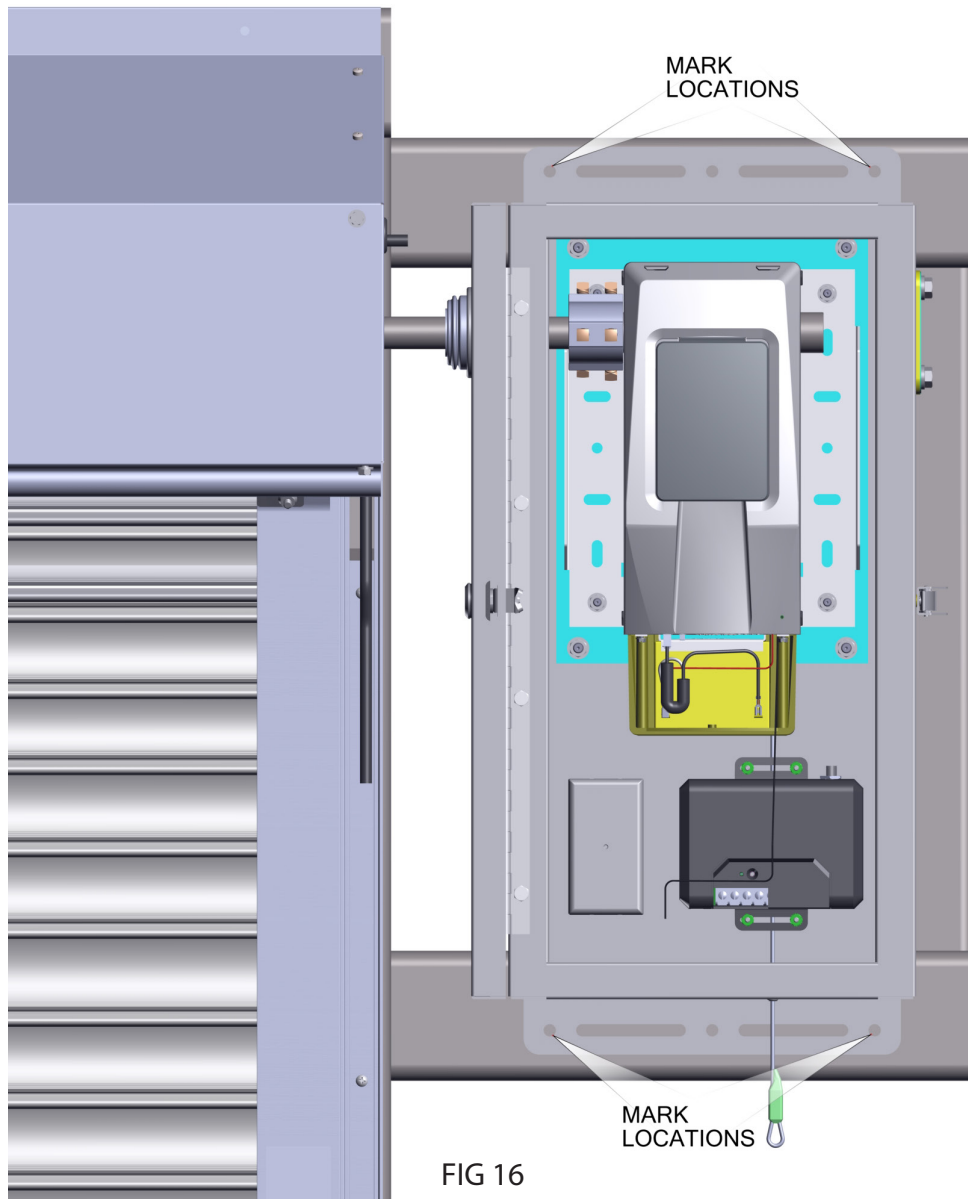


FIG 15

# SECTION 5 - INSTALLATION

## STEP 6 INSTALL OPERATOR (Continued...)



# SECTION 6 - MOTOR WIRING

**IMPORTANT:** REFER TO YOUR MOTOR ENCLOSURE INSTALLATION INSTRUCTIONS FOR WIRING AND PROGRAMMING THE OPENER.

## ⚠ WARNING

Incoming power must meet all NEC and local building codes, plus be properly sized for the motor. To avoid the risk of electrical shock, the motor must be properly grounded. Always install the power cable with a drip loop to prevent water penetration.

## ⚠ WARNING

To avoid serious injury or death:

- It is recommended that line voltage wiring be performed by a qualified electrician.
- Be sure that electrical power has been disconnected from the input wires being connected to the operator prior to handling these wires. An appropriate lock-out/tag-out procedure is recommended.
- Line voltage must meet all local building codes.
- Make sure operator voltage, phase, and frequency ratings are identical to the job site line voltage ratings.
- Input power wiring must be properly sized for the operators amperage rating.
- This motor requires 115V, single phase, 60Hz power.

## ⚠ WARNING

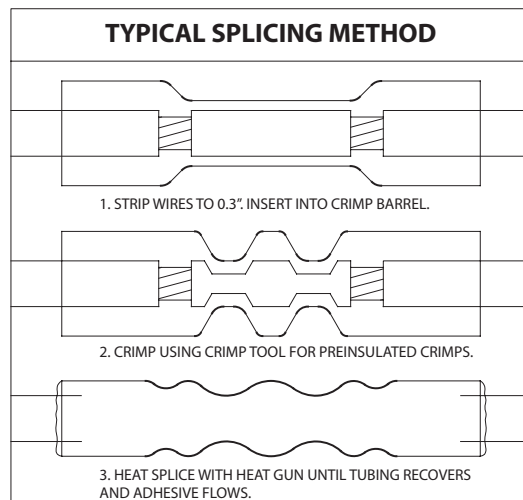
To avoid serious injury or death wall controls must be located within sight of the door.

## ⚠ WARNING

To avoid serious injury or death DO NOT calibrate motor or operate door unless doorway is in sight and free of obstructions. Keep clear of opening while door is moving.

## ⚠ WARNING

To avoid serious injury or death use the waterproof connectors and cable provided. DO NOT use the metal guide rail as one of the conductors from the limit switch back to the Operator. Don't connect like automotive wiring where the chassis is used as a common ground wire.



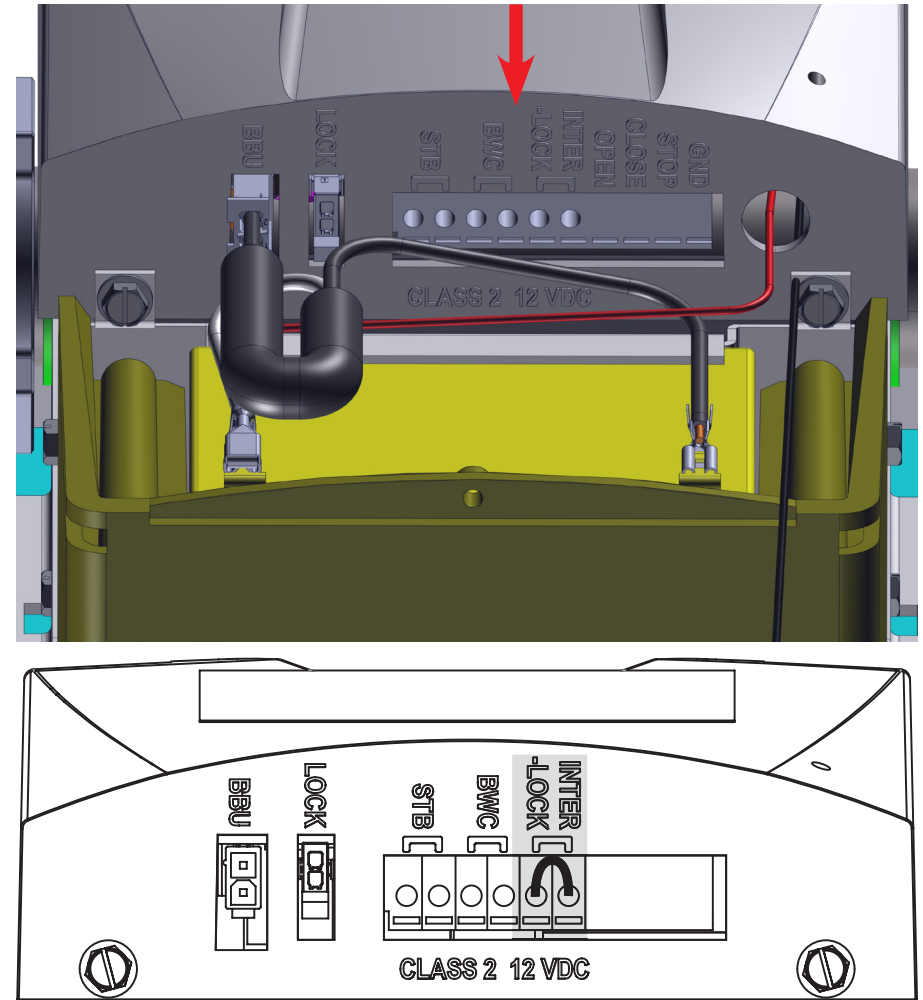
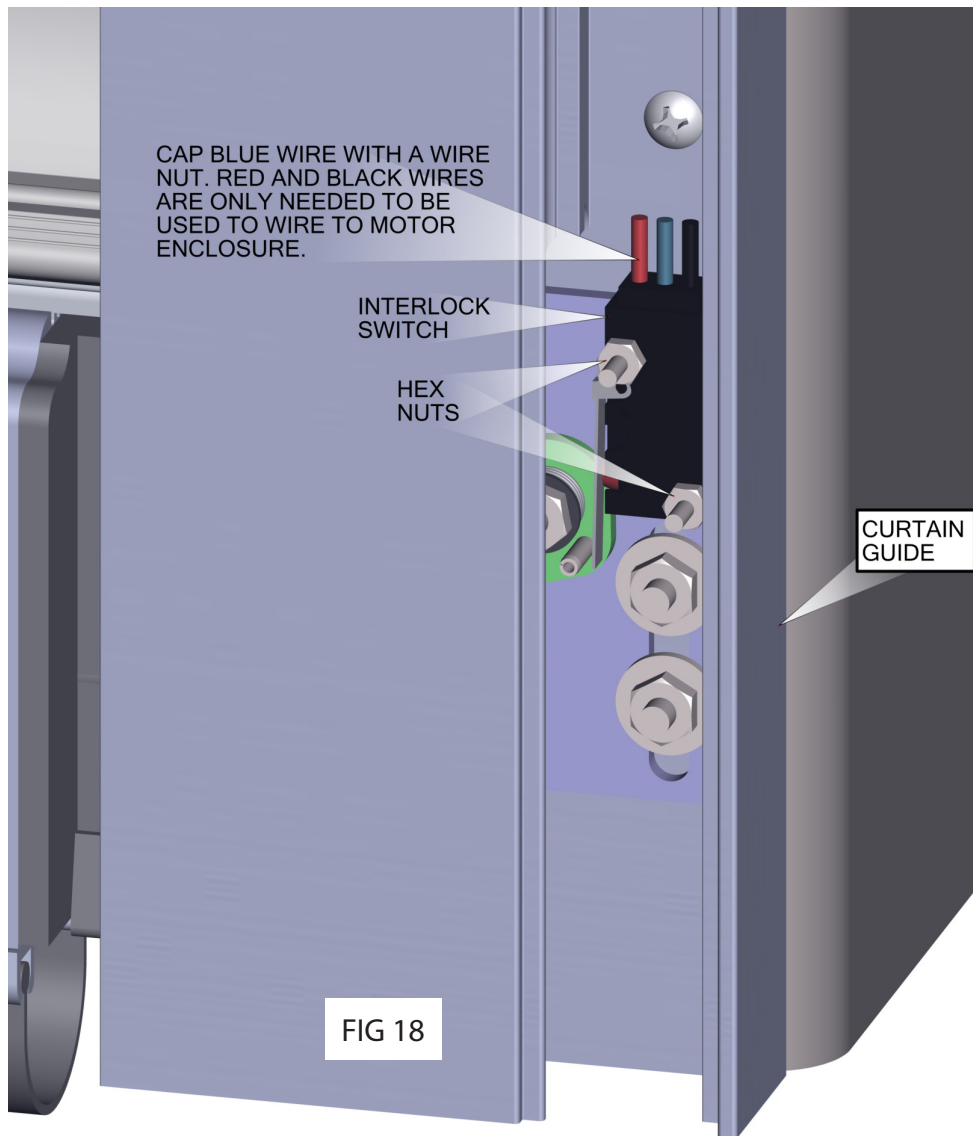
# SECTION 6 - MOTOR WIRING

## STEP 7 INSTALL INTERLOCK SWITCH (SKIP THIS STEP IF YOUR DOOR DID NOT COME WITH A INTERLOCK SWITCH)

• Install interlock switch to the curtain guide, as shown in FIG 18.

**IMPORTANT:** DO NOT REMOVE FACTORY INSTALLED INTERLOCK WIRE UNLESS INSTALLING AN INTERLOCK. THIS JUMPER IS REQUIRED FOR PROPER OPENER OPERATION.

• Wire the interlock switch up through the inside of the curtain guide up through the top hole in the headplate and through the hole on the bottom of the Motor Enclosure using cable gland (water-tight) connector and to the INTERLOCK connection, as shown in FIG 19.



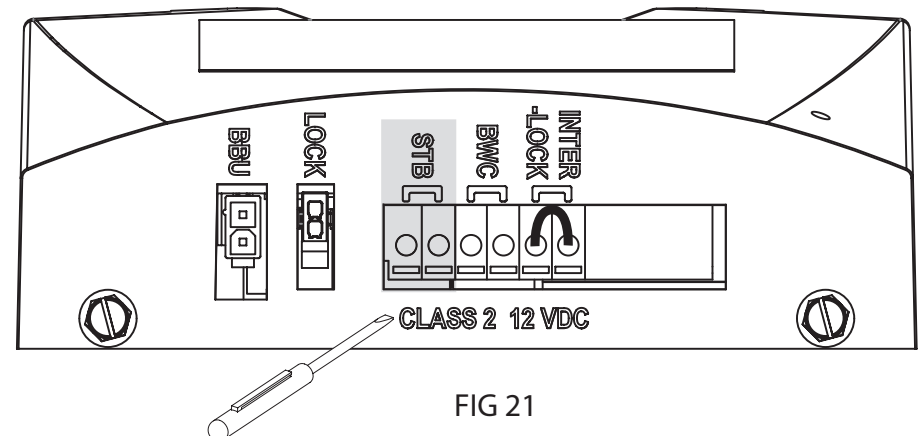
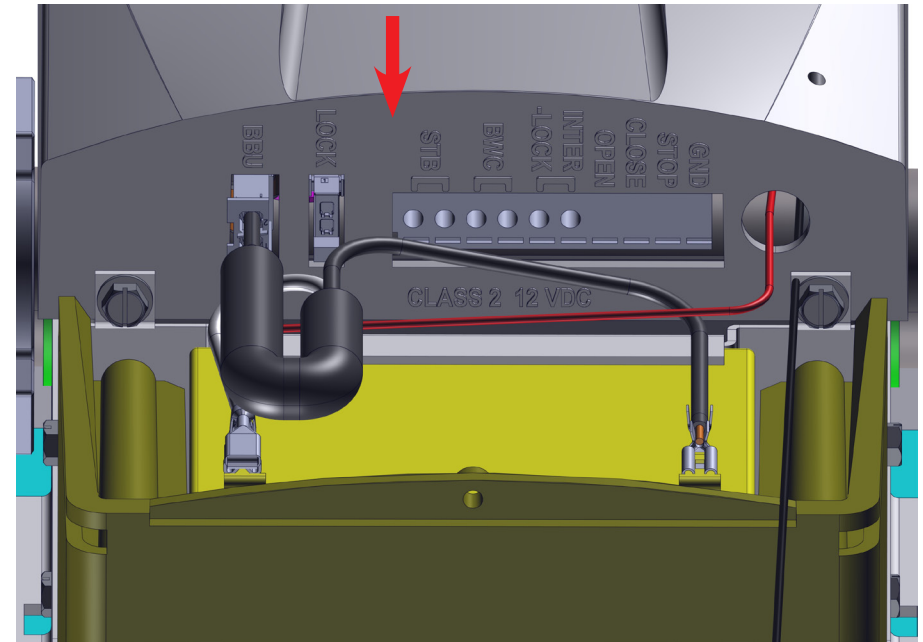
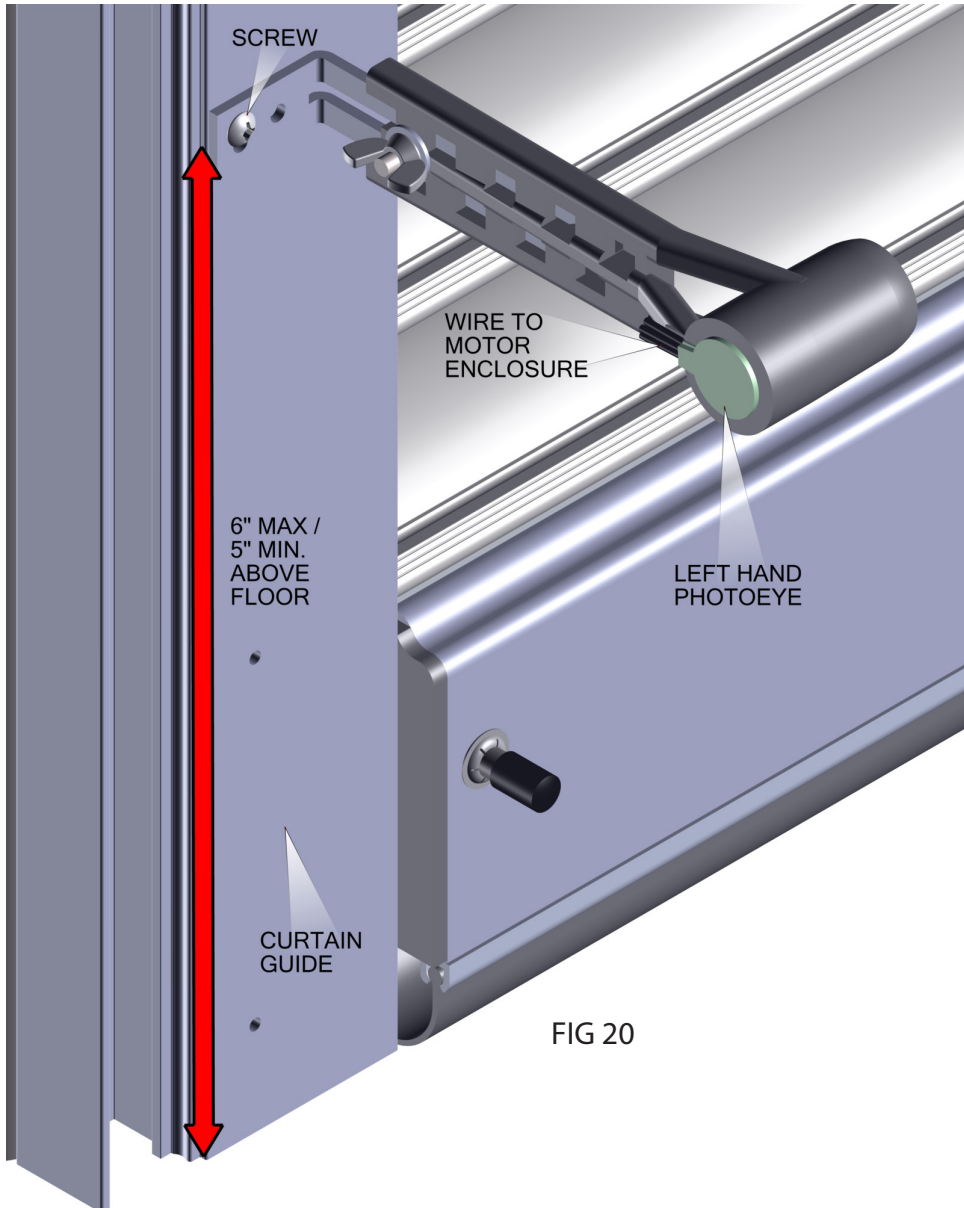


# SECTION 6 - MOTOR WIRING

## STEP 8 INSTALL PHOTO EYES

- Install photo eyes onto the curtain guides, as shown in FIG 20.
- Wire the photo eyes to the bottom of the Motor Enclosure using cable gland (water-tight) connector and to the STB connection, as shown in FIG 21.

**IMPORTANT:** ONCE THE MOTOR ENCLOSURE IS COMPLETELY WIRED AND PROGRAMMED CORRECTLY, PROCEED WITH THE STEPS BELOW.



# SECTION 7 - FINAL INSTALLATION

## STEP 9 ATTACH GUIDE COVERS

- Align guide covers on guides and snap into place. See FIG 22 and FIG 23.

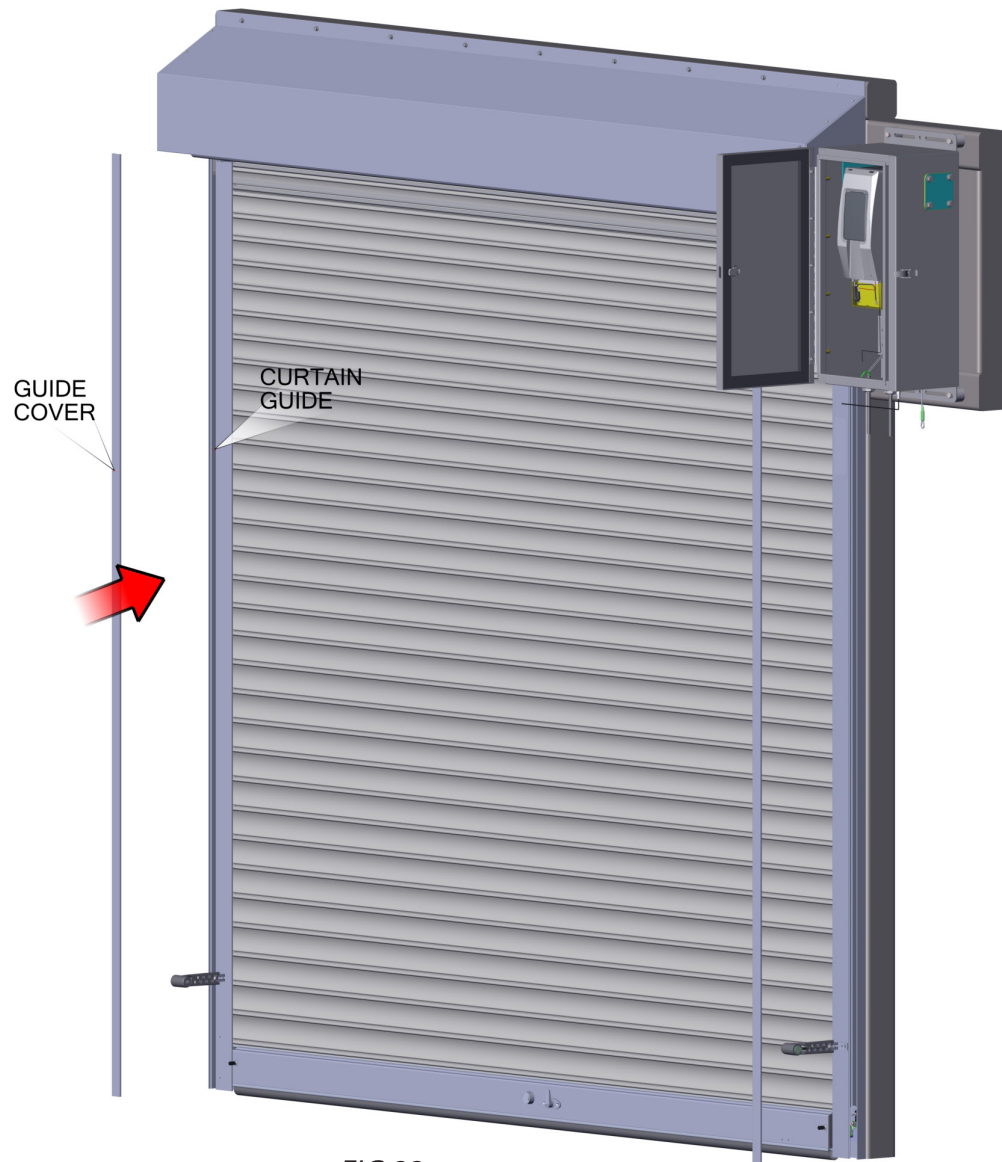


FIG 22

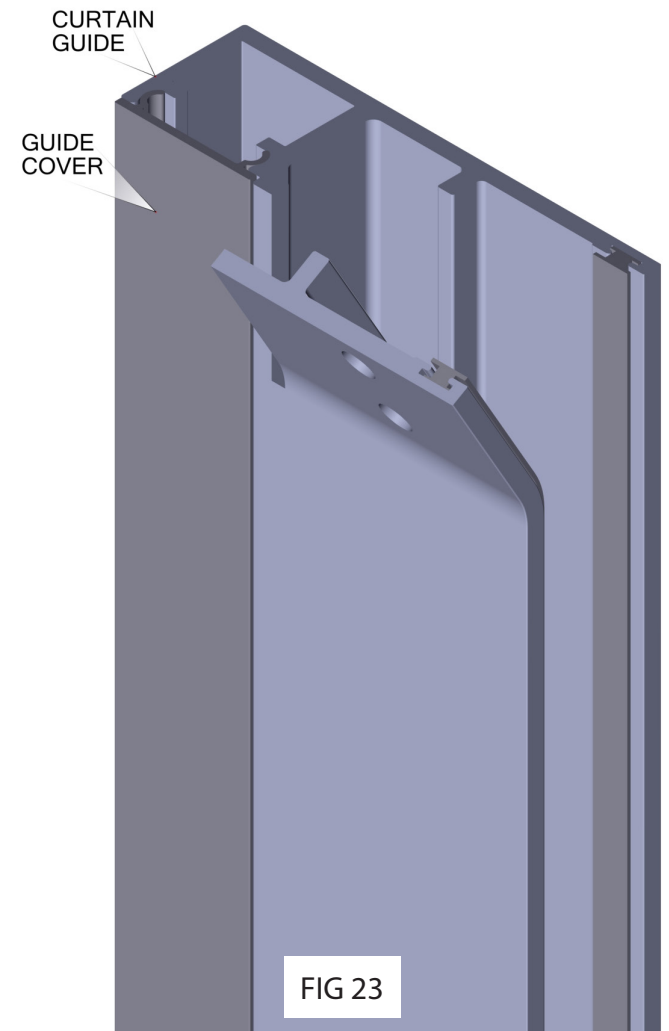


FIG 23

# SECTION 7 - FINAL INSTALLATION

## STEP 10 PLACE WARNING LABEL

- Place warning label on drive side guide at eye level. See FIG 24.

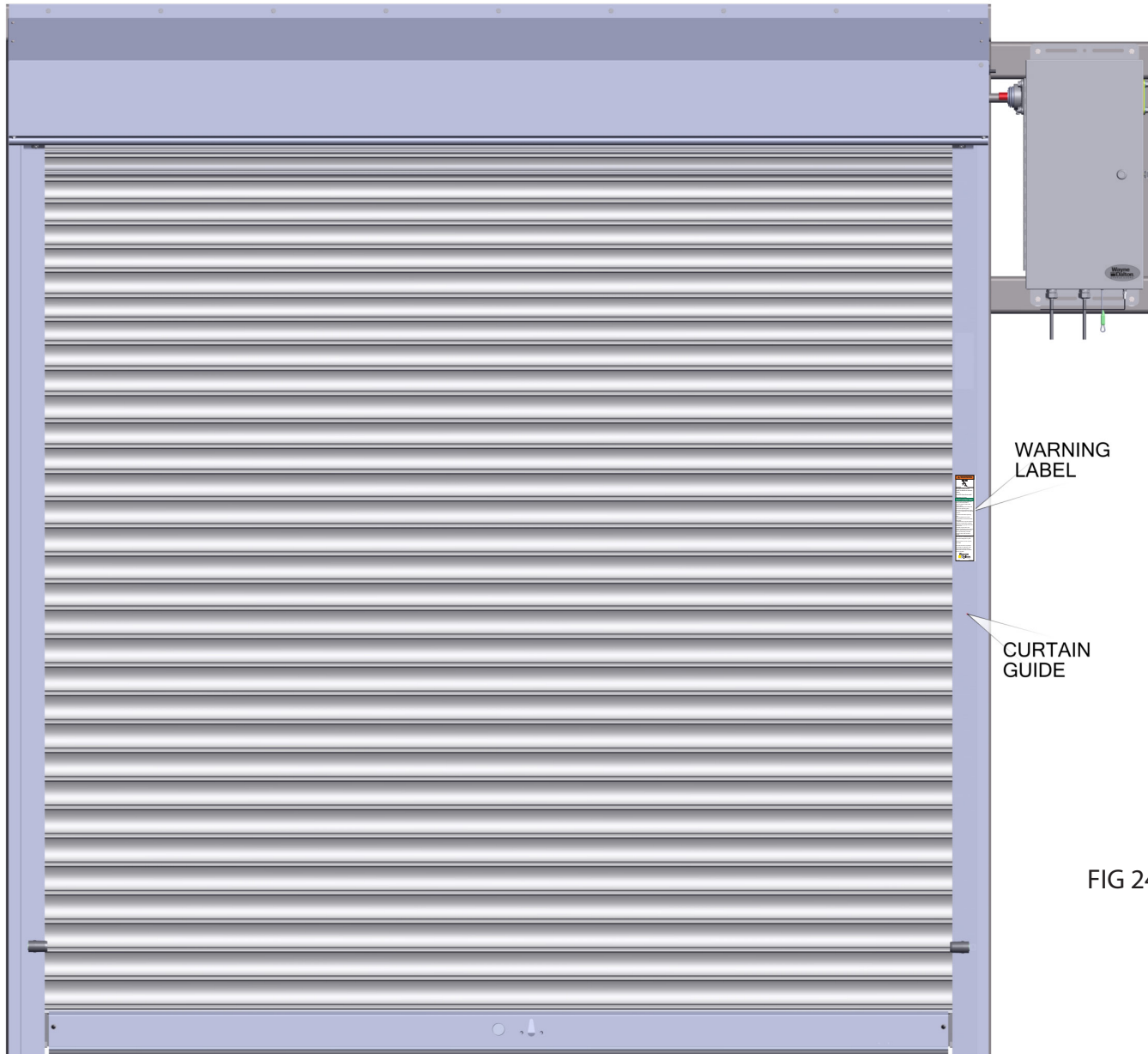




FIG 24


<b>WARNING</b>
MOVING door could result in death or serious injury. Do NOT close door until doorway is clear.
<b>SAFETY INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. Control the speed of the door during manual operation.</li><li>2. Do not stand or walk under moving door.</li><li>3. Keep doorway clear and in full view while operating door.</li><li>4. Do NOT permit children to play on, near, or with door or to operate controls.</li><li>5. Unlock door before opening door.</li><li>6. Sensing devices on motor operated doors should be tested frequently.</li><li>7. Adjustments or repairs must be made by a trained door systems technician using proper tools and instructions.</li><li>8. Visually inspect door and hardware monthly for worn and/or broken parts and check to see if door operates freely. DO NOT operate a door with a broken spring.</li></ol>
Place label at a readable height on door drive side guide or jamb. Do NOT remove, cover, or paint over label. This label should be inspected periodically for legibility, and a replacement label should be ordered from the door manufacturer as needed.
 Wayne Dalton COMMERCIAL DOORS
05/12/2022 273491 REV A

**WARNING LABEL**

# MAINTENANCE INSTRUCTIONS

## **OWNER'S RECOMMENDED PREVENTATIVE MAINTENANCE**

To keep shutter in good working condition, these are some things we recommend doing:

- Keep guides of shutter system free from any debris at all times.

### **Every month**

- Wipe down the inside of shutter system guides with a damp towel to remove any dirt or debris.
- If you so choose, you can wash the security shutter curtain. Be sure to completely close the shutter and wipe down curtain with towel and a mild cleanser. Be sure to wipe off any cleanser with a clean towel.

### **Every six months**

The above frequency of maintenance is for normal low cycle operation. Frequency of operation or unusual operating conditions may require modification of the times between maintenance.

- The guides should be lubricated with a paste wax or silicone spray.
- The bearing with a grease fitting, located on bracket attaching motor to shaft should be lubricated.

## **BENEFITS OF PROFESSIONAL PREVENTATIVE MAINTENANCE PROGRAM**

There are many benefits to opting into a Professional Preventative Maintenance Program, where the local dealer's technician services your shutter system on a scheduled basis. Contact your local Wayne Dalton dealer for more details on their program offering.

- Increase operational efficiency, safety and reliability
- Extend useful life of your equipment
- Reduce probability of equipment malfunctioning
- Decrease costly downtime
- Priority scheduling for service
- Establish relationship with experienced, service-oriented professionals

## **RECOMMENDED SCOPE OF WORK FOR PROFESSIONAL SECURITY SHUTTER PREVENTIVE MAINTENANCE PROGRAM**

It is recommended that you arrange for a Wayne Dalton dealer's professional installer/technician to perform the following as precautionary measures to keep your shutter system running smoothly and to maximize the life of the product.

### **SECURITY SHUTTER:**

## **⚠ WARNING**

Never remove, adjust, or loosen the bolts, screws and/or lag screws on the spring system of the door. These components are connected to the spring(s) and are under extreme tension. To avoid possible severe or fatal injury, have any such work performed by a trained door systems technician using proper tools and instructions.

- 1) Inspect shutter alignment and level.
- 2) Inspect slats and endlocks for damage.
- 3) Inspect all guides, bottom bar and hood for damage.
- 4) Inspect all bottom astragal for wear or damage.
- 5) Inspect and lubricate bearings.
- 6) Inspect fasteners.
- 7) Inspect locks for proper operation.
- 8) Inspect safety labels, placement and condition.

### **MOTOR OPERATORS:**

- 1) Inspect and adjust limit switches.
- 2) Inspect operator mounting.
- 3) Inspect and test disconnect for manual override.



## Model 523RX Residential Exterior Security Shutter

### Limited Warranty

Wayne Dalton, a division of Overhead Door Corporation, ("Seller") warrants to the original purchaser of the Residential Exterior Security Shutter model 523RX for use as driveway security access door ("Product"), subject to all of the terms and conditions hereof, that the Product thereof will be free from defects in materials and workmanship under normal use for the following periods, measured from the date of installation:

- **24 MONTHS** on all parts and components of the Product
- **Covered Components with Powder Coat Finish: Two (2) years against excessive fading, cracking, blistering, flaking or peeling of the Powder Coat Finish;** Covered Components shall mean: metal guides, bottom bars, head plates, hood and curtain slats of the Product

Seller's obligation under this warranty is specifically limited to repairing or replacing, at its option, any part or component which is determined by Seller to be defective during the applicable warranty period. Any labor charges are excluded and will be the responsibility of the purchaser.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty is made to the original purchaser of the Product only and is not transferable or assignable. This warranty applies only to Product installed in a residential or other non-commercial application. This warranty does not apply to any unauthorized alteration or repair of the Product, or to any Product 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 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 does not apply if the Product is installed within 2000 meters of any ocean or other body of saltwater. This warranty specifically excludes any damage resulting from scratching, abrasion or impact by any hard object, and any fading or color change which may not be uniform due to unequal exposure of the curtains to sunlight or other elements. Wearing away of the painted surfaces of the Product is a common occurrence resulting from the curtain repeatedly coiling upon itself and uncoiling during normal usage (See DASMA #274) and is specifically excluded from this warranty. Product repaired or replaced under this warranty shall receive a factory original finish. This warranty does not cover the costs to repaint Product.

ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN TIME TO THE APPLICABLE WARRANTY PERIOD REFLECTED ABOVE. NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE LIMITED WARRANTY PERIOD HAS EXPIRED. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. 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. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Claims under this warranty must be made promptly after discovery, within the applicable warranty period, and in writing to the authorized dealer 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. There are no established informal dispute resolution procedures of the type described in the Magnuson-Moss Warranty Act.

Product Type: \_\_\_\_\_  
Customer Name (Original Purchaser): \_\_\_\_\_  
Customer Installation Location: \_\_\_\_\_  
Order # \_\_\_\_\_ Date of Installation: \_\_\_\_\_  
Name of Dealer/Installer: \_\_\_\_\_  
Signature of Dealer/Installer: \_\_\_\_\_

Rev. 09.2020