

INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

800C (ThermoTite™), 800*, 900 and 926

***INCLUDES SECUR-VENT® AND TITAN™ OVERSIZE DOOR OPTIONS.**

ROLLING DOOR

**PLEASE DO NOT RETURN THIS PRODUCT TO
THE STORE**

Please Do Not Return This Product To The Store. Please call 1 (800) 255-3046 (Press Option 1) and follow the prompts to contact the appropriate customer service agent. They will be happy to handle any questions that you may have.

IMPORTANT NOTICES!

Wayne Dalton highly recommends that you read and fully understand the Installation Instructions and Owner's Manual before you attempt this installation.

To avoid possible injury, read the enclosed instructions carefully before installing and operating the garage door. Pay close attention to all warnings and notes. After installation is complete, fasten this manual near garage door for easy reference.

The complete Installation Instructions and Owner's Manual are available at no charge from:

Wayne Dalton, a division of Overhead Door Corporation,
2501 S. State Hwy 121 Business, Lewisville, TX., 75067,
44660, Or Online At **www.Wayne-Dalton.com**

PRE-INSTALLATION

Important Safety Instructions

DEFINITION OF KEY WORDS USED IN THIS MANUAL:

WARNING

INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN SEVERE OR FATAL INJURY.

CAUTION

PROPERTY DAMAGE OR INJURY CAN RESULT FROM FAILURE TO FOLLOW INSTRUCTIONS.

IMPORTANT: REQUIRED STEP FOR SAFE AND PROPER DOOR OPERATION.

NOTE: Information assuring proper installation of the door.

HINT: INDICATES A SUGGESTED STEP TO SIMPLIFY INSTALLATION BASED ON EXPERIENCE.

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING INSTALLATION. IF IN QUESTION ABOUT ANY OF THE PROCEDURES, DO NOT PERFORM THE WORK. INSTEAD, HAVE A TRAINED DOOR SYSTEMS TECHNICIAN DO THE INSTALLATION OR REPAIRS.

1. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS.
2. Wear protective gloves during installation to avoid possible cuts from sharp metal edges.
3. It is always recommended to wear eye protection when using tools, otherwise eye injury could result.
4. Avoid installing your new door on windy days. Door could fall during the installation causing severe or fatal injury.
5. Doors 12'-0" wide and over should be installed by two persons, to avoid possible injury.
6. Operate door only when it is properly adjusted and free from obstructions.
7. If a door becomes hard to operate, inoperative or is damaged, immediately have necessary adjustments and/ or repairs made by a trained door system technician using proper tools and instructions.
8. DO NOT stand or walk under a moving door, or permit anybody to stand or walk under an electrically operated door.
9. DO NOT place fingers or hands in between curtain & guides while door is moving.
10. DO NOT permit children to operate garage door or door controls. Severe or fatal injury could result should the child become entrapped between the door and the floor.
11. Due to constant extreme spring tension, do not attempt any adjustment, repair or alteration to any part of the door, especially to springs, spring brackets, bottom corner brackets, fasteners, counterbalance lift cables or supports. To avoid possible severe or fatal injury, have any such work performed by a trained door systems technician using proper tools and instructions.
12. On electrically operated doors, pull down ropes must be removed and locks must be removed or made inoperative in the open (unlocked) position.
13. Top section of door may need to be reinforced when attaching an electric opener. Check door and/ or opener manufacturer's instructions.
14. Visually inspect door and hardware monthly for worn and or broken parts. Check to ensure door operates freely. Also check to ensure all bolted connections to insure they are secure.
15. Test electric opener's safety features monthly, following opener manufacturer's instructions.
16. This door may not meet the building code wind load requirements in your area. For your safety, you will need to check with your local building official for wind load code requirements and building permit information.
17. This manual is NOT intended to provide "take-down" instructions for existing door. Consult your local Wayne Dalton dealer if existing door needs to be removed.

18. Thoroughly familiarize yourself with the construction codes in your region before initiating work.
19. If the building design and door installation create potential pinch points to users, owner is responsible for the installation of appropriate guarding, in compliance with OSHA regulations.
20. Consider using a multi-person crew for installing, adjusting and/or repairing larger doors.

After installation is complete, fasten this manual near the garage door.

IMPORTANT: RIGHT HAND AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE BUILDING LOOKING OUT.

WARNING

PRIOR TO WINDING OR MAKING ADJUSTMENTS TO THE SPRINGS, ENSURE YOU'RE 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.

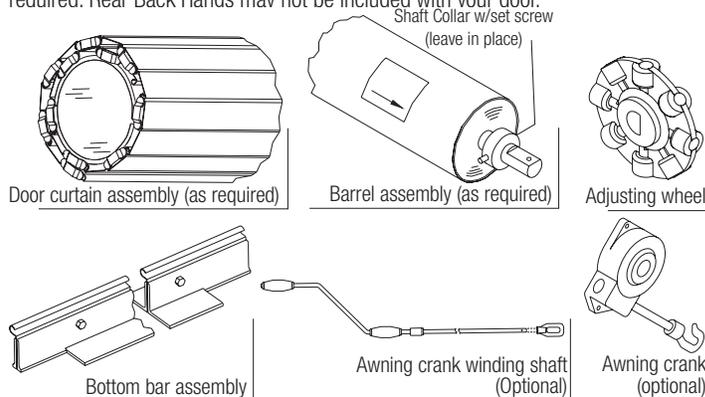
IMPORTANT: RIGHT AND LEFT HAND IS ALWAYS DETERMINED FROM INSIDE THE BUILDING LOOKING OUT.

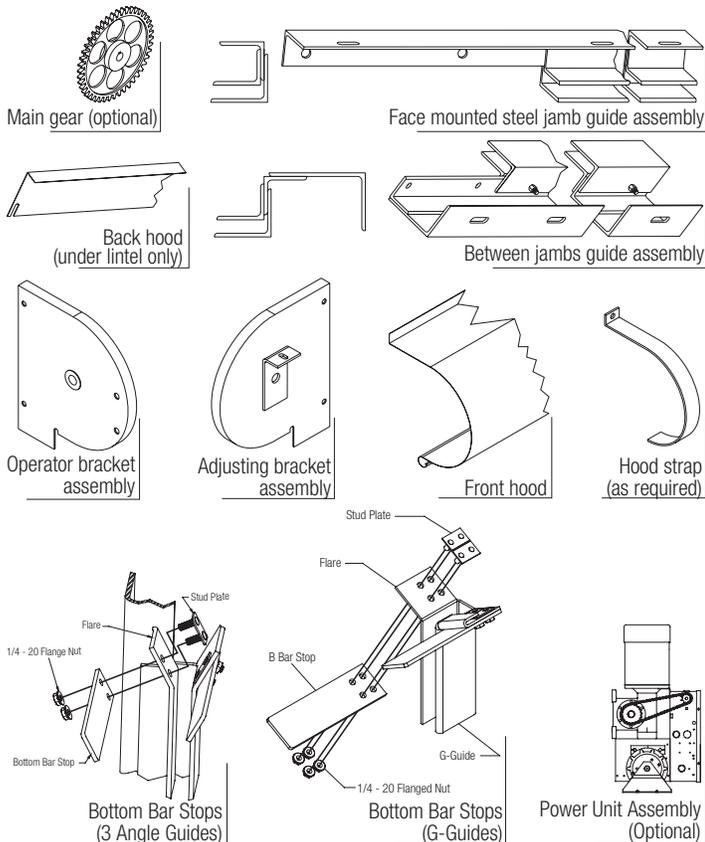
Tools Required

Power drill w/3/8" or 1/2" chuck	Cable cutters and diagonal cutters	Center punch
Masonry drill or impact hammer and bits	Two hardened steel bars w/knurled ends, 1/2" diameter and approximately 18" long, or 3/4" diameter x 24", or 7/8" diameter x 24" (dependent upon door size)	Water-level hose
Chain hoist	Wrenches	Hammer
Ladders and/or scaffolding	Screwdrivers	Tape measure
Two 3/4" diameter steel rods 24" long for checking and correcting guide openings.	Drills	Step Ladder
Electric impact drill with 1/2" chuck.		Level and String level
		Chalk line
		Plumb line
		Vice grips or C-clamps
		Leather gloves
		Safety glasses

Package Contents

NOTE: Depending on the door model, some parts listed will not be supplied if not required. Rear Back Hinges may not be included with your door.





Quantity	Part #	Description	Where used
6	112046	Screws, tapcon, 1/4" x 1-3/4", HWH, BIT	Hood to wall
6	276858	Washer, flat, STL, .250" x .750" x .059"	Hood to wall
10	276016	Screw, selftap, HWH, ZNC, 1/4" - 20 x 1/2"	Hood to brackets / strap
5	278979	Screw, cap, 5/16" - 18 x 3/8", flanged	Top Slat to Ring
8	266102	Stud plate, .250" studs, univ track	Stop to guide
16	100279	Nut, flange, hex, 1/4" - 20	Stop to guide
1	273966	Pin, CTTR, STL, .1875" x 1.50"	AW to tension shaft

Introduction

This manual's main function is to assist the installer in correctly installing the doors to ensure safe operation. Compliance with building codes, enforced in your area, is required.

All Wayne Dalton Rolling Steel Service Doors follow the general guidelines set forth here. Additional installation information for each door shipped is found on the installation drawing(s). There are also bolt and small parts bags sealed separately with accessory lists describing where parts are used.

Preparations

READ THE INSTALLATION INSTRUCTIONS TO BECOME FAMILIAR WITH THE NAMES OF THE VARIOUS COMPONENTS AND THEIR RELATION TO EACH OTHER. IT IS NECESSARY FOR THE INSTALLER TO DETERMINE THE FOLLOWING:

- The type of mounting (face-of wall or between jambs).
- Method of operation (hoist, crank, motor, or push-up).
- The hand of operation (right or left) determined from the coil side of the door.
- Type of jamb (masonry, wood, or steel) the door guides mount and the fasteners required.
- The dimensions for the opening width, opening height, head room, and side room.

Material

Inspect your door prior to leaving for the job site for possible damage or shortage of parts. Report any claims to your door supplier immediately.

Clearances

The installation drawing(s) supplied in the hardware bag contain information on bracket size and head and side room for each door. Be sure that the dimensions are correct for the opening you are working on. Take special note of the "C" dimension. **THIS DIMENSION MUST BE HELD IN ORDER TO PREVENT INTERFERENCE WITH THE PROPER OPERATION OF THE DOOR.** Be sure the required clearances are available prior to installation.

Removing an Existing Door

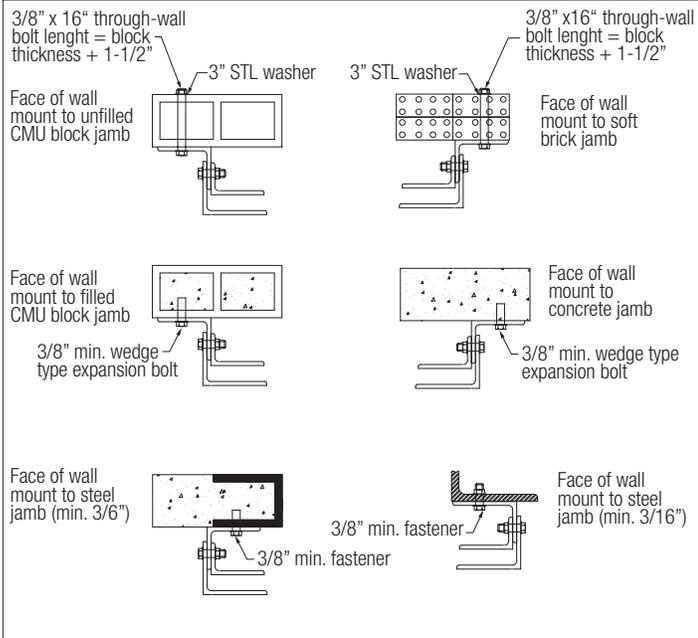
IMPORTANT: COUNTERBALANCE SPRING TENSION MUST ALWAYS BE RELEASED BEFORE ANY ATTEMPT IS MADE TO START REMOVING AN EXISTING DOOR.

Quantity	Part #	Description	Where used
1	275412	RVT, RDH, ZNC, 0.50" x 1.75"	AW to bracket
4	275580	Screws, cap, 1/2" - 13 x 1-1/2", hex, steel	Brackets to guides
4	273803	Nut, hex, STL, ZNC, 1/2" - 13	Brackets to guides
4	276855	Washer, flat, ST, .5625" x 1.375" x .12"	Brackets to guides
6	276863	Washer, flat, STL, .375" x 1.00" x .1"	RH Guide to wall
6	275624	Screw, cap, 3/8" - 16 x 1.00", hex, steel	RH Guide to wall
6	276863	Washer, flat, STL, .375" x 1.00" x .1"	RH Guide to wall
6	275624	Screw, cap, 3/8" - 16 x 1.00", hex, steel	RH Guide to wall
4	276863	Washer, flat, STL, .375" x 1.00" x .1"	Guide to wall at top
4	275624	Screws, cap, 3/8" - 16 x 1.00", hex, steel	Guide to wall at top

WARNING

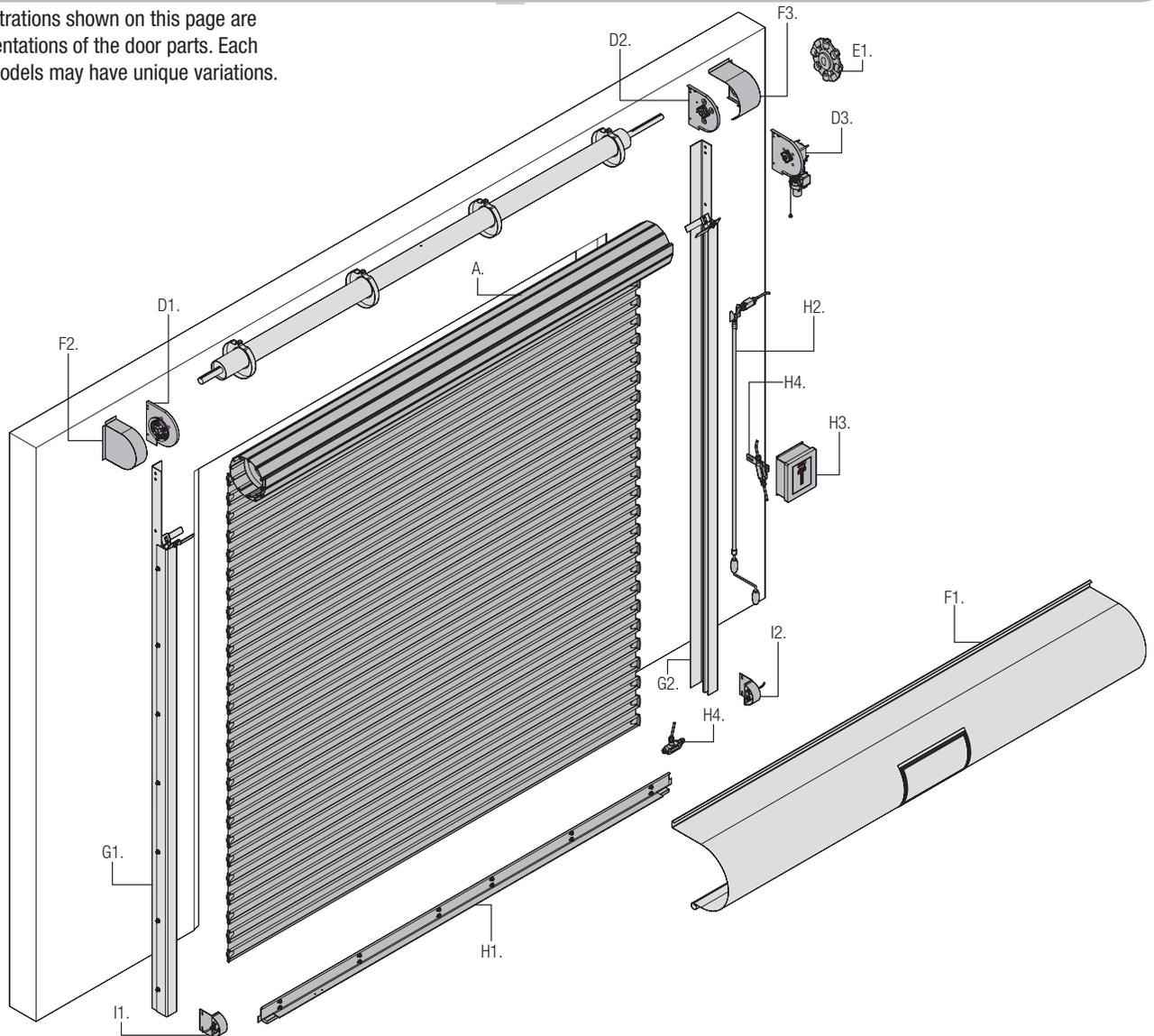
A POWERFUL SPRING RELEASING ITS ENERGY SUDDENLY CAN CAUSE SEVERE OR FATAL INJURY. TO AVOID INJURY, HAVE A TRAINED DOOR SYSTEMS TECHNICIAN, USING PROPER TOOLS AND INSTRUCTIONS, RELEASE THE SPRING TENSION.

Typical Jamb & Guide Attachment



PARTS BREAKDOWN

NOTE: The illustrations shown on this page are general representations of the door parts. Each specific door models may have unique variations.



A. CURTAIN ASSEMBLY:

B. RELEASE HANDLE:

C. STANDARD CHAIN HOIST MECHANISM:

D. BRACKETS:

- D1. Left Hand Bracket
- D2. Right Hand Bracket
- D3. Right Hand Bracket With Motor

E. WHEEL:

- E1. Adjusting Wheel

F. FRONT HOOD:

- F1. Center Front hood
- F2. Left Hand Front hood
- F3. Right Hand Front hood

G. GUIDE ASSEMBLIES:

- G1. Left Hand Guide Assembly
- G2. Right Hand Guide Assembly

H. MISCELLANEOUS:

- H1. Bottom bar assembly:
- H2. Hand Crank
- H3. Control Panel
- H4. Sensing Edge

H3. Sensing Edge Circuit Box

I. PHOTO EYE TRANSMITTER:

- I1. Left Hand Photo Eye Transmitter
- I2. Right Hand Photo Eye Transmitter

INSTALLATION

Before installing your door, be certain that you have read and followed all of the instructions covered in the pre-installation section of this manual. Failure to do so may result in an improperly installed door.

NOTE: Reference TDS 160 for general garage door terminology at www.dasma.com.

1

OPENING CHECKS

Tools Required: Tape measure, Plumb line, Safety glasses, Leather gloves

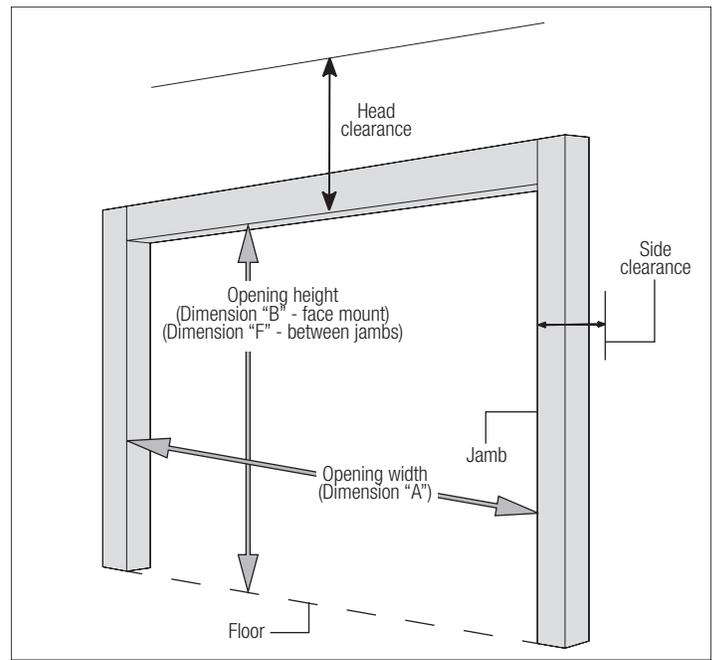
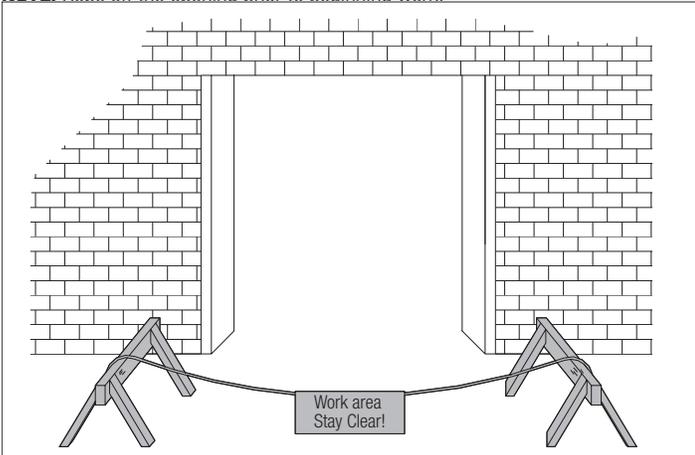
Check the opening width "A" and the opening height "B" or "F" and compare with the installation drawing to be sure the opening is the proper size for the door. Any variation in the actual opening width or height, or plumb of the jambs is to be disregarded when installing the guides. Verify the clearances available meet or exceed those given on the installation drawing.

Unpack and lay out all door components (prior to leaving for the job site, if possible) and review the following:

1. Does barrel hand of operation match the required hand on the drawings?
2. Do guide mounting angles match the required arrangement for masonry or steel?
3. Are all "extras" included such as safety edge, weather stripping, etc.

If **no** is the answer to any of these questions, stop and check with the factory for clarification before proceeding.

NOTE: Rope off the opening prior to beginning work!



2

GUIDE MOUNTING

Tools Required: Chalk line, String level, Drill, Wrenches, Tape measure, Plumb line, Safety glasses, Leather gloves

NOTE: 2A. FACE MOUNTED DOORS (BRACKETS ABOVE LINTEL) (SKIP TO STEP 2B). IF DOOR IS "BETWEEN JAMBS MOUNTED DOORS" IE., BRACKETS BELOW LINTEL)

Refer to the figures below. Write the "**C**" dimension from the installation drawing on the line provided below. With the guides on the floor, measure the distance from the inside of the left guide to the centerline of the slots on the wall angle (dimension "**M**") and record below. Repeat for dimension "**M**" for the right guide and record below. On masonry jambs (with mounting leg out, or "**Z**" guides), add both "**M**" dimensions to the "**C**" dimension to obtain the bolt line ("**BL**") dimension. On steel jambs (with the wall mounting leg turned in, or "**E**" guides), subtract both "**M**" dimensions from the "**C**" dimension to obtain "**BL**".

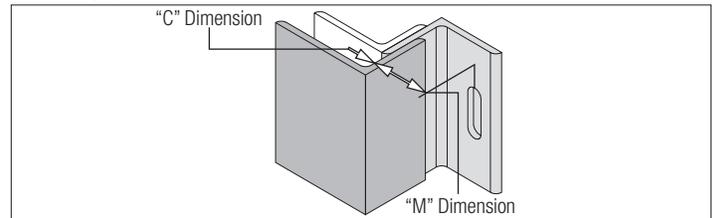
"C" Dimension (from Dwg.): _____

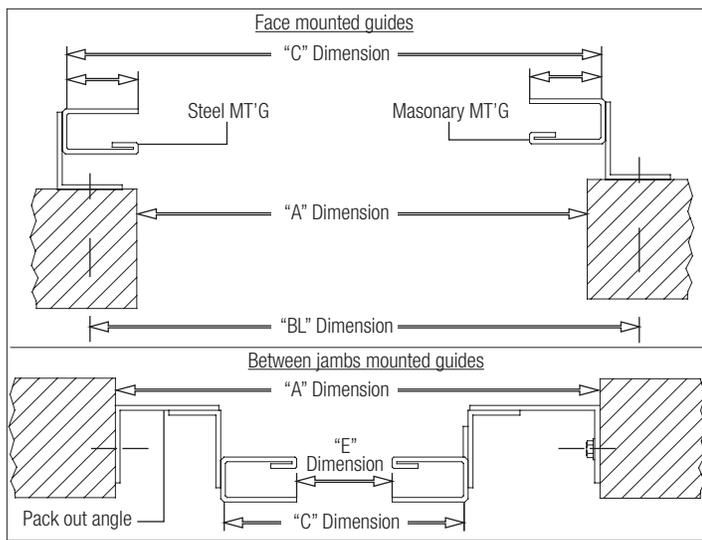
"M" (Left Guide): _____

"M" (Right Guide): _____

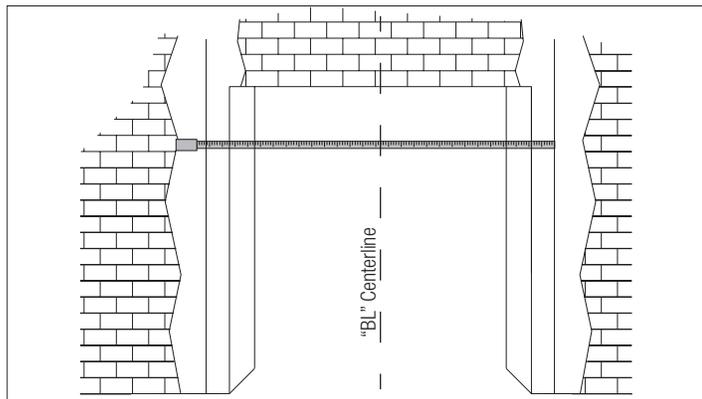
(+ Masonry jamb; - Steel jamb)

Bolt Line (BL): _____





To transfer the location of the bolt line (“BL”) for the guide mounting bolts on the wall, first locate and mark the center of the opening above the lintel. Divide BL in half ($BL / 2$) and measure this distance either side of the opening center mark to obtain the bolt line on each jamb. Drop a plumb line down and make a second mark on the wall at the bottom of each jamb. Using a chalk line, snap a vertical line the length of the “F” dimension (see installation drawing).



shown above. In event that the opening falls in between sizes, use the next higher size up.

Temporarily but securely clamp or hold the guides to jamb, carefully aligning center of wall mounting slots along the chalk “bolt line”.

NOTE: If floor is not level, mark on jamb where floor should be if it were level. Shim guide to this mark prior to scribing guide fastener locations.

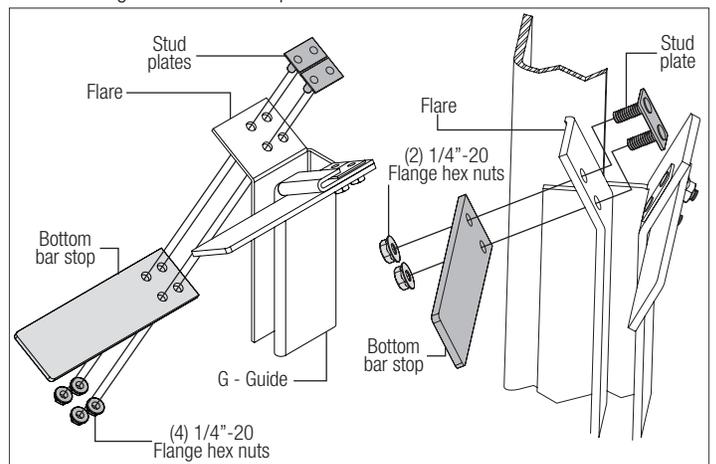
After determining guides, ensure they are plumbed, leveled, properly spaced and inscribe the location of the guide mounting holes on each jamb.

Remove the guides and drill (or tap) the appropriate size mounting holes for the fasteners provided (listed as “Guide-to-Wall” on hardware shipping list) at each hole location.

Attach the opposite coil side bottom bar stop (closest to the wall) to the top of the guide before attaching guides to the wall.

G-GUIDES: Place two 1/4” - 20 stud plates through the holes in the flare at the top of the G-Guide as shown. Line up the four holes in the flat bottom bar stop with the four studs and assemble using four 1/4” - 20 flange nuts. Tighten flange nuts until secure.

3 ANGLE GUIDES: Slide stop bar into the guide channel such that the stop bar hole lines up with the guide channel hole. Thread 3/8” hex head screw into hole as shown and tighten to secure stop.



NOTE: Do not attach coil side bottom bar stops at this time, as it will prevent bottom bar from passing through top of guides.

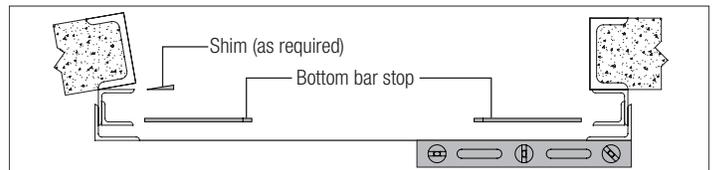
If 3-angle guides have been dis-assembled for ease of erection, be sure to re-assemble and maintain all relative dimensions (such as H, groove depth, “C” dimension, etc.).

IMPORTANT: THE ‘G’ DIMENSION MUST BE SET TO THE DIMENSION SHOWN ON THE INSTALLATION DRAWING. CHECK AND VERIFY (GAUGE BLOCKS ARE AVAILABLE FROM WAYNE DALTON FOR EASY ADJUSTMENTS). FAILURE TO HOLD THE ‘G’ DIMENSION WILL VOID THE WARRANTY.

Install top and bottom bolts in both guides to secure to wall with hardware provided. Check the “C” dimension and compare with the installation drawing.

NOTE: Additional installation details for masonry anchors can be found at the Wayne Dalton website.

IMPORTANT: THE GUIDE TO GUIDE DISTANCE, OR “C” DIMENSION, ON THE INSTALLATION DRAWING MUST BE HELD TO ENSURE PROPER OPERATION.



Using a string and a level, ensure that the guides are parallel to each other, shimming if necessary to achieve vertical and horizontal leveling. Now install the remaining bolts.

IMPORTANT: USE OF ANY OTHER TYPE FASTENER THAN THOSE PROVIDED MUST BE APPROVED BY MANUFACTURER OR LOCAL BUILDING AUTHORITY AND CANNOT BE OF A LESSER DIAMETER OR GRADE.

2B. BETWEEN JAMBS MOUNTED DOORS (BRACKET UNDER LINTEL):

NOTE: A fourth angle (sometimes called the “packout” angle) is provided with the guide assembly for between jambs mounted doors. Unbolt this angle from the

⚠ WARNING

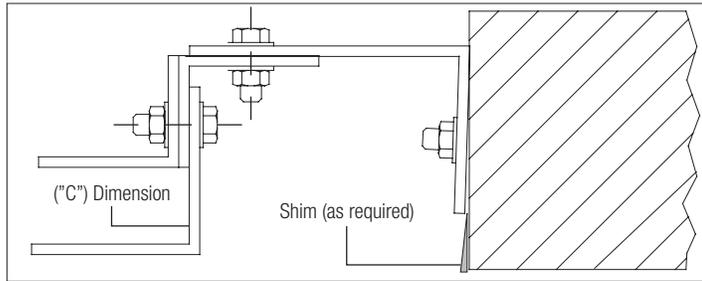
GUIDE ASSEMBLIES ARE EXTREMELY HEAVY. PERSONS WITH PHYSICAL CONDITIONS WHICH MAY LIMIT THEM FROM LIFTING HEAVY OBJECTS SHOULD NOT PERFORM THIS NEXT STEP.

THE CHART SHOWN IS A LISTING OF THE APPROXIMATE WEIGHT (IN POUNDS) FOR EACH JAMB’S GUIDE ASSEMBLY TO BE USED FOR REFERENCE IN HANDLING:

	Opening Height							
	10'0"	12'0"	14'0"	16'0"	18'0"	20'0"	22'0"	24'0"
Up to 12'0"	65	77	89	146	164	182	200	218
12'0" - 13'6"	76	90	128	146	164	182	200	218
13'7" - 16'0"	92	109	128	146	164	182	200	218
16'1" - 20'0"	120	143	165	187	210	232	254	277
20'1" - 24'0"	149	176	204	232	260	288	316	344

This chart is based on standard products. Windload doors, special guide angles, or unusual mounting conditions use guide assemblies much heavier than those

guide assembly (if supplied by factory).



NOTE: THE EXTRA “PACKOUT” ANGLES ARE SELDOM THE SAME SIZE (RIGHT AND LEFT) AND MUST BE REATTACHED TO THE CORRECT SIDE. MARK “L” OR “R” ON THE ANGLE LEG THAT MOUNTS TO THE WALL TO AVOID CONFUSION LATER. Next, determine the location of the “bolt line” (**BL**) for the guide mounting bolts on the wall, (follow this procedure for either masonry or steel jambs.) Mark the top of the jamb where the **BL** is to be located and drop a plumb line and mark **BL** near the bottom of the guide. Snap a chalk line between these two points. Repeat this procedure for the opposite jamb making sure the **BL** is exactly the same distance into the opening.

Choose one “packout” angle to be used as a template. Temporarily clamp the angle in the proper jamb (ie, left angle in left jamb) aligning the center of the slots with the chalk line. After determining that the “packout” angle is plumb, level and properly spaced into the opening, carefully scribe the location of each guide mounting hole on the jamb.

Repeat this procedure for the opposite side making sure that the angle is located at exactly the same distance into the opening. Remove the packout angle and drill the appropriate size mounting holes for the fasteners provided (listed as “Guide-to-Wall” on hardware shipping list).

Re-attach the packout angle to the appropriate guide assembly. Next attach the back bottom bar stop to the top of each guide, as shown in step 2a.

NOTE: Do not attach coil side bottom bar stop at this time, as it will prevent bottom bar from passing through top of guides.

Install both of the guide assemblies on each jamb starting with the top and bottom bolts using the hardware shimming if necessary to achieve vertical and horizontal leveling (see Figure # 6). Now install the remaining bolts.

NOTE: Additional installation details for masonry anchors can be found at the Wayne Dalton website.

IMPORTANT: GUIDE TO GUIDE DISTANCE, OR “**C**” DIMENSION, ON THE INSTALLATION DRAWING MUST BE HELD TO ENSURE PROPER OPERATION.

IMPORTANT: USE OF ANY OTHER TYPE FASTENER THAN THOSE PROVIDED MUST BE APPROVED BY MANUFACTURER OR LOCAL BUILDING AUTHORITY AND CANNOT BE OF LESSER DIAMETER OR GRADE.

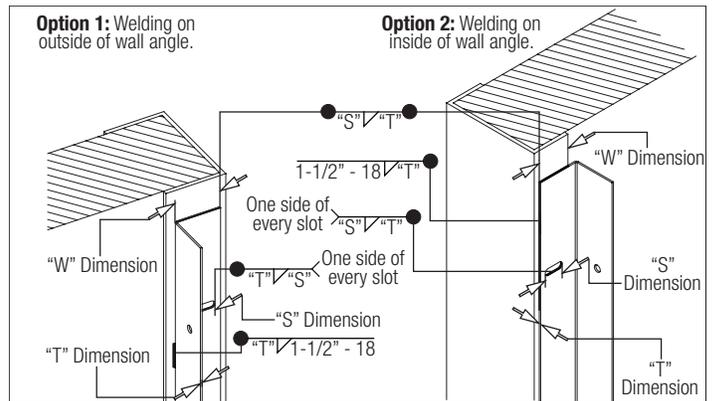
Fastener Table			
Jamb	Type Of Fastener	Drill Bit Size	Jamb Fastener Specifications
Steel	3/8” Self-tap screw	11/32” Dia.	Steel jambs must be minimum 3/16” thick
	1/2” Bolt	27/64” Dia.	
	5/8” Bolt	17/32” Dia.	
	3/4” Bolt	21/32” Dia.	
Concrete	3/8” Wedge anchor	3/8” Dia.	Drill holes at least 4 inches from jamb corner
	1/2” Wedge anchor	1/2” Dia.	
	5/8” Wedge anchor	5/8” Dia.	
	3/4” Wedge anchor	3/4” Dia.	
Filled block	3/8” Expansion Bolt	3/8” Dia.	
	1/2” Expansion Bolt	1/2” Dia.	

Fastener Table			
Jamb	Type Of Fastener	Drill Bit Size	Jamb Fastener Specifications
Wood	3/8” Lag screw	1/4” Dia.	Drill hole 3” deep
Unfilled block	3/8” Thru bolt	7/16” Dia.	Install 3” O.D. steel washer on opposite side of wall
	1/2” Thru bolt	9/16” Dia.	
	5/8” Thru bolt	11/16” Dia.	
	3/4” Thru bolt	13/16” Dia.	

2C. ALTERNATE WELDING OF GUIDES TO STEEL:

On jambs with steel channel, welding of the guides is an approved method of installation providing it is done following the procedures set forth in this manual, and achieve the equivalent strength of each omitted bolt. Refer to Figure # 7 for proper welding method of guides to steel jambs.

IMPORTANT: GUIDE TO GUIDE DISTANCE, OR “**C**” DIMENSION, ON THE INSTALLATION DRAWING MUST BE HELD TO ENSURE PROPER OPERATION.



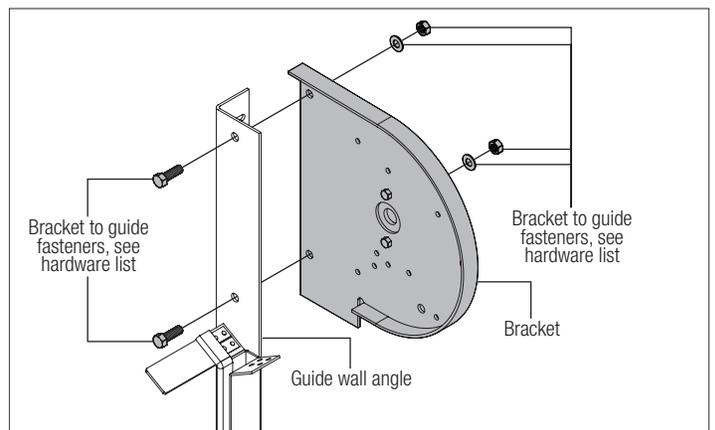
Use minimum 60XX electrodes. All welding is to be done “vertical up” (i.e. starting from the base of an individual weld and welding upwards) in accordance with ASTM procedures. Use fillet welds based on the information provided and in accordance with the local building authority.

3 ATTACHING OPERATOR BRACKET TO WALL ANGLE

Tools Required: Chain hoist / Sling, Wrenches, Safety glasses, Leather gloves

WARNING
BRACKET IS HEAVY; PERSONS WITH PHYSICAL CONDITIONS LIMITING THEM FROM LIFTING HEAVY OBJECTS SHOULD NOT PERFORM THIS STEP.

Lift the operator bracket up and position on the outside of the guide wall angle. Bolt the operator bracket to the guide wall angle as shown.



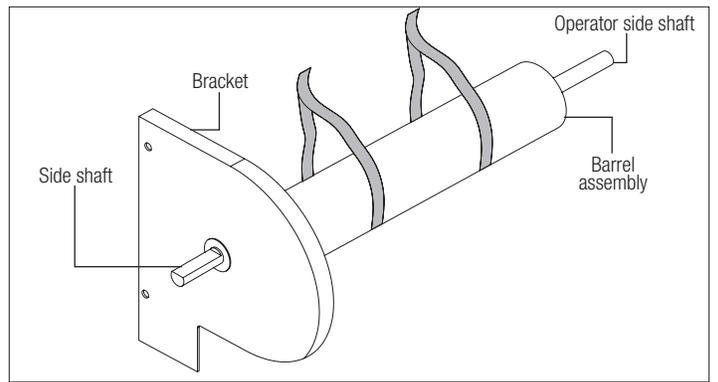
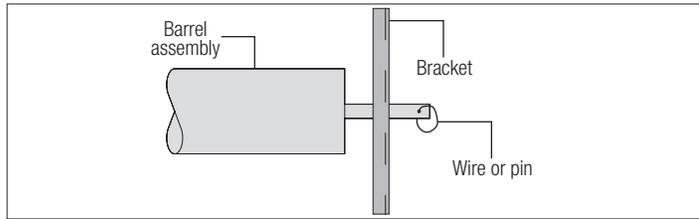
HINT: Insert bottom bracket bolt first, but do not tighten. Bracket will pivot on bottom bolt for easily lining up top bracket bolt. Now tighten all bracket bolts.

IMPORTANT: BOLT HEADS MUST BE ON INSIDE (THREADED SECTION OUT) TO PREVENT INTERFERENCE WITH COIL OPERATION.

4 ATTACHING ADJUSTING BRACKET TO BARREL

Tools Required: Safety glasses, Leather gloves

Slide the adjusting bracket onto the barrel's tension shaft extension (see barrel label). Secure bracket to barrel using wire or the pin provided.



WARNING

BARREL ASSEMBLY WILL FALL IF LIFTED FROM CENTER. SPRINGS ARE CLOSER TO ONE END OF BARREL ASSEMBLY CAUSING THIS SIDE TO BE HEAVIER. CAREFULLY DETERMINE BALANCE POINT PRIOR TO LIFTING ASSEMBLY TO PREVENT BARREL ASSEMBLY FROM FALLING CAUSING SERIOUS INJURY OR DEATH.

WARNING

SECURE BRACKET TO BARREL ASSEMBLY TO PREVENT IT FROM SLIDING OFF DURING LIFTING. FAILURE TO SECURE BRACKET COULD RESULT IN BRACKET FALLING CAUSING SEVERE INJURY OR DEATH.

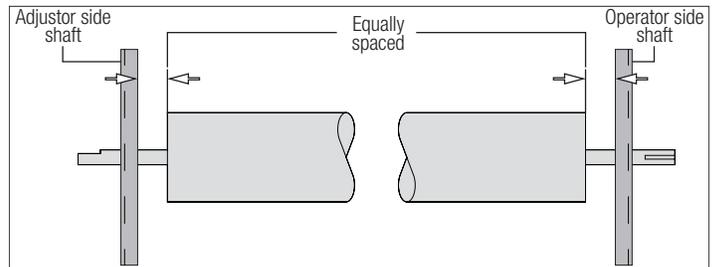
5 INSTALLING BARREL ASSEMBLY

Tools Required: Chain Hoist / Sling, Wrenches, Safety glasses, Leather gloves

Using a chain hoist, fork lift or some means of adequate leverage; determine the center of gravity of the barrel assembly with the bracket on it. Refer to the following table to verify that the lifting capacity of the hoist (or fork truck) exceeds the weights given for the barrel and curtain assemblies:

Model	Formula	Factor	Door	Barrel
924	$Wx(H+1)x$	2.2	2" slat, 24 gauge steel	0.52 X Curtain Wt
922	$Wx(H+1)x$	2.65	2" slat, 22 gauge steel	0.52 X Curtain Wt
920	$Wx(H+1)x$		2" slat, 20 gauge steel	0.52 X Curtain Wt
822	$Wx(H+1)x$	2.65	3" slat, 22 gauge steel	0.52 X Curtain Wt
820	$Wx(H+1)x$	2.95	3" slat, 20 gauge steel	0.52 X Curtain Wt
818	$Wx(H+1)x$	4.05	3" slat, 18 gauge steel	0.52 X Curtain Wt
823C	$Wx(H+1)x$	5.0	Insulated, 22 gauge steel	0.52 X Curtain Wt
821C	$Wx(H+2)x$	5.55	Insulated, 20 gauge steel	0.52 X Curtain Wt
819C	$Wx(H+2)x$	6.25	Insulated, 18 gauge steel	0.52 X Curtain Wt

Where W= door width (feet) and H= door height (feet) (ex: for an 10x8 924 door, Curtain Wt= $10x(8+1)x2.20= 198$; Barrel= $0.52 x 198 = 102.96$)



Secure barrel assembly to lifting means to prevent assembly from falling and lift barrel near position. Feed the operating shaft through the operating bracket already attached, and proceed to attach the adjusting bracket to the guides. Center the barrel assembly between the brackets. Move the shaft collar against the bearing face and tighten the set screw.

HINT: Insert bottom adjusting bracket bolt first, but do not tighten. As barrel is lifted higher, bracket will pivot on bottom bolt for easily lining up top bracket bolt. Now tighten all bracket bolts.

IMPORTANT: BOLT HEADS MUST BE ON INSIDE (THREADED SECTION OUT) TO PREVENT INTERFERENCE WITH COIL OPERATION.

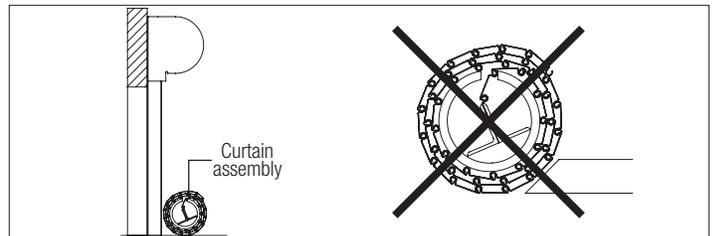
WARNING

SUPPORT BARREL ASSEMBLY UNTIL ALL BRACKET BOLTS ARE INSTALLED AND SECURE. IF ALL BOLTS ARE NOT SECURE, ASSEMBLY COULD FALL CAUSING SERIOUS INJURY OR DEATH.

6 ATTACHING CURTAIN TO BARREL

Tools Required: Chain Hoist, Screwdrivers, Wrenches, Safety glasses, Leather gloves

Position the curtain assembly parallel with the door opening so that the top attachment slat is in front of the rest of the curtain (the hinged part away from the opening).



Determine the best method of lifting the curtain coil to prevent damage to the curtain during installation.

CAUTION

DO NOT ATTEMPT TO SLIDE FORKS OF LIFT TRUCK DIRECTLY BETWEEN FLOOR AND CURTAIN. PERMANENT DOOR DAMAGE MAY RESULT.

Using the chart under “Installing Barrel Assembly”, verify that the lifting capacity of the hoist or fork truck exceeds the weights given for the curtain assemblies. This chart is based on standard products. Upgraded steel gauge or unusual mounting conditions do not apply. In event that the opening falls in between sizes, use the next higher size up.

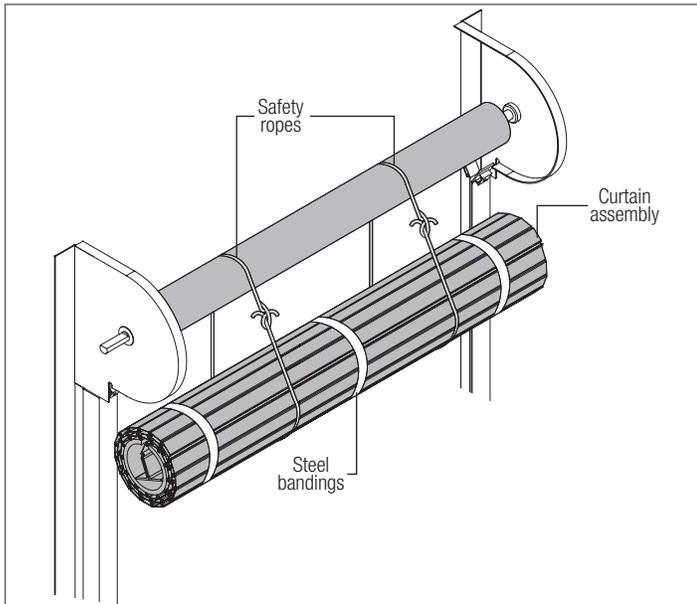
WARNING

CURTAIN MUST BE SECURELY ATTACHED TO LIFTING MECHANISM. OTHERWISE, CURTAIN COULD FALL CAUSING SEVERE INJURY OR DEATH.

WARNING

SAFETY ROPES USED TO SLING CURTAIN MUST BE RATED TO SUPPORT CURTAIN WEIGHT IN TABLE UNDER UNDER “INSTALLING BARREL ASSEMBLY”. INSUFFICIENT STRENGTH ROPES COULD BREAK CAUSING CURTAIN TO FALL, RESULTING IN SEVERE INJURY OR DEATH.

Lift curtain assembly (centered between guide assemblies) to approximately one foot below the barrel assembly. Tie heavy duty safety ropes around barrel assembly and curtain (one for each 6' of door width, with at least two per door). Remove steel banding from around curtain assembly.



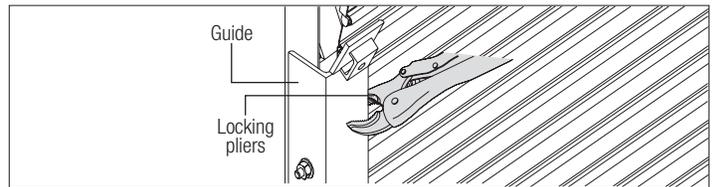
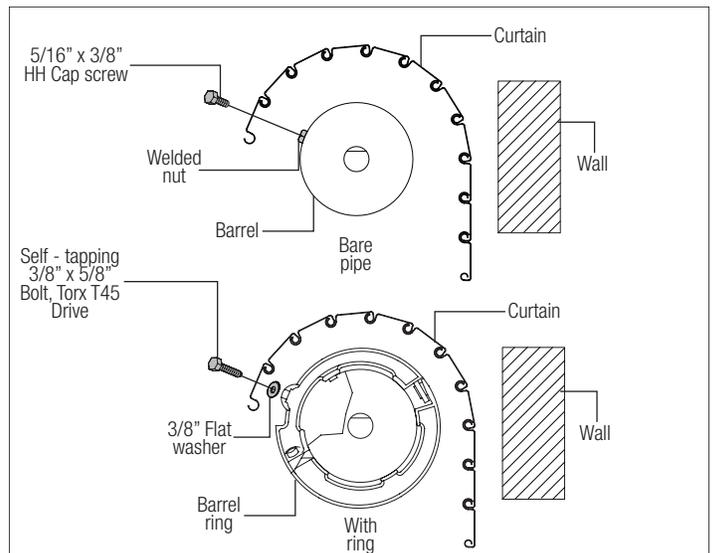
WARNING

BANDING IS UNDER TENSION. WEAR EYE PROTECTION AND DO NOT STAND IN FRONT OF BANDING WHEN CUT TO AVOID POSSIBLE INJURY.

NOTE: If inside AW is provided per step #5d, go to step #5, “Adjusting Wheel Installation and Tension”.

Rotate barrel assembly until top slat attachment point is accessible. Feed top slat around back side of barrel assembly until top slat is out in front of barrel assembly. Install the top slat attachment bolts (and nuts) verifying that the curtain is centered between the brackets.

Continue rolling the curtain up around the barrel assembly until all the curtain is coiled on the barrel assembly. Clamp or block the guide assembly approximately 6” down from the top of the guides. Loosen the safety ropes enough to let the curtain feed into the guide grooves.



WARNING

NO TENSION HAS YET BEEN APPLIED TO DOOR. IF CURTAIN IS ALLOWED TO ROTATE AND FREE FALL, SEVERE INJURY OR DEATH COULD RESULT.

7

ADJUSTING WHEEL INSTALLATION AND TENSION

Tools Required: Vise grips, Winding bars, Safety glasses, Leather gloves

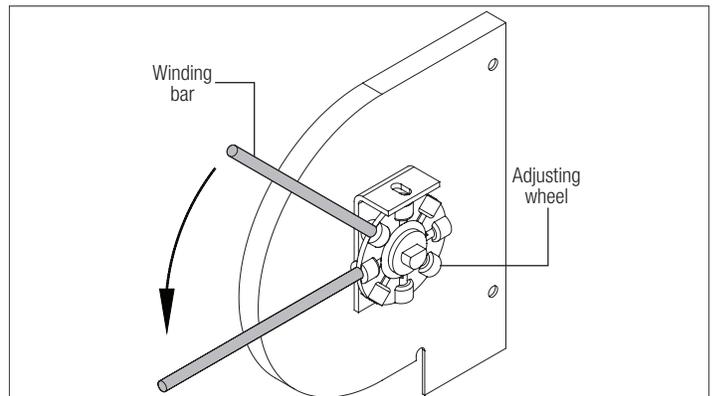
5A OUTSIDE AW:

Slide the adjusting wheel onto the flat of the barrel assembly shaft. Install the cotter pin in the shaft outside of the adjusting wheel.

WARNING

ADJUSTING WHEEL HOLDS SPRING TENSION. FAILURE TO PIN SHAFT COULD ALLOW ADJUSTING WHEEL TO FALL OR DOOR TO FREE-FALL CAUSING SEVERE INJURY OR DEATH. VERIFY THAT THERE IS NO SPRING TENSION OR FORCE ON THE ADJUSTING WHEEL AT THIS TIME.

The amount of initial revolutions (IR's) as indicated on the installation drawing and on the barrel label is the theoretical starting point for the required spring tension. In most cases this figure is correct, but due to variations in steel, springs, friction, etc., slight adjustments may be required. Take note of the prescribed initial revs as noted on the barrel label and on the installation drawing.



⚠️ WARNING

ADJUSTING WHEEL HOLDS SPRING TENSION. FAILURE TO PIN SHAFT COULD ALLOW ADJUSTING WHEEL TO FALL OR DOOR TO FREE-FALL CAUSING SEVERE INJURY OR DEATH. VERIFY THAT THERE IS NO SPRING TENSION OR FORCE ON THE ADJUSTING WHEEL AT THIS TIME.

⚠️ WARNING

SPRING TENSION INCREASES AS DOOR DESCENDS. ALWAYS WIND SPRING WITH DOOR IN THE OPEN POSITION TO AVOID POSSIBLE SERIOUS INJURY OR DEATH CAUSED BY EXCESSIVE SPRING TENSION.

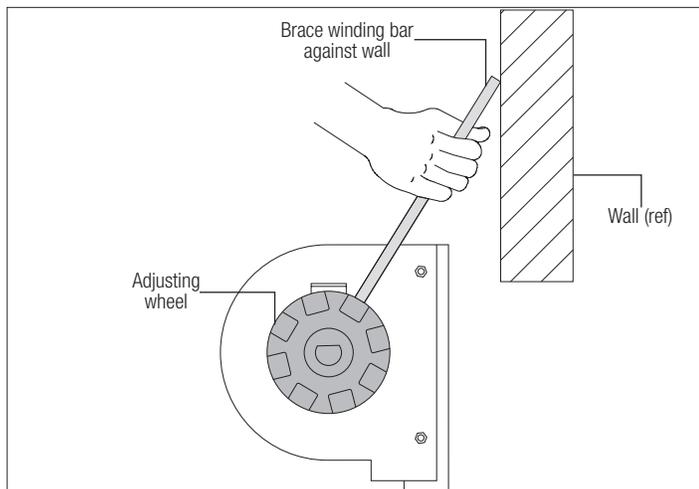
By hand, rotate the adjusting wheel (AW) slightly both directions to determine the neutral point of the spring counterbalance. Mark the hole in the AW that is nearest to the retaining lug on the bracket. Using approved winding bar (per tool list in front of manual), insert the two rods securely into the holes in the AW as shown.

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

⚠️ WARNING

WINDING BAR MUST FIT SNUGLY INTO HOLES IN ADJUSTING WHEEL. DO NOT USE LOOSE FITTING BAR OR SCREWDRIER WHICH COULD COME LOOSE RESULTING IN SERIOUS INJURY OR DEATH.

Apply the initial revolutions (IR's) marked on the barrel label and installation drawing counting from the mark on the AW made earlier. The IR's are the required number of turns (of the spring) to hold the curtain in the open position.



HINT: If conditions permit, use wall as brace for winding rod for a safe procedure of installing AW pin as shown.

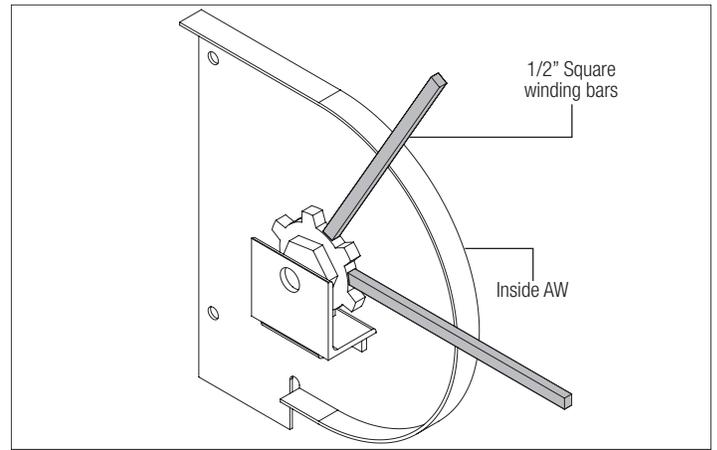
⚠️ WARNING

EXERCISE CAUTION WHEN APPLYING OR ADJUSTING SPRING TENSION. CONTACT WITH RAPIDLY ROTATING ADJUSTING WHEEL OR EXPELLED WINDING ROD CAN CAUSE SERIOUS INJURY OR DEATH.

While holding the winding bar firmly in one hand, insert the AW pin with the other hand through the lug in the bracket and into the hole in the AW to lock the AW at the desired number of revs. Remove winding rods.

5B. INSIDE AW:

See figure to the right for instructions in the winding of an inside AW, should one be provided with the door. The door must be fully closed to provide access to the AW. Using 1/2" square winding bars approximately 36" long, apply the total revs indicated on the rev tag. Test and adjust as required for proper balance.



⚠️ WARNING

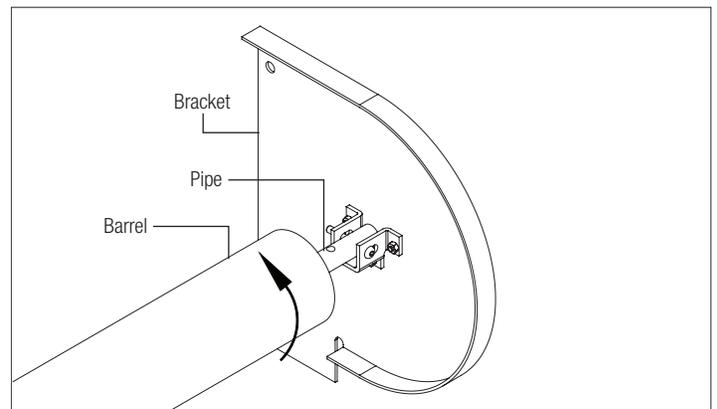
INSIDE AW CAN ONLY BE ACCESSED WITH CURTAIN DOWN. EXERCISE EXTREME CAUTION AS TOTAL TENSION MUST BE APPLIED. DO NOT RELEASE ADJUSTING WHEEL AS CONTACT WITH RAPIDLY ROTATING WHEEL OR EXPELLED WINDING ROD CAN CAUSE SERIOUS INJURY OR DEATH.

5C. COMPOUND AW (SPROCKET REDUCTION):

See Appendix E, "Compound Tension Adjuster Assembly", for instructions to wind a compound AW. With the curtain up, wind the initial revs with 3/4" winding bars approximately 36" long by counting the revs of the large sprocket.

5D. INSIDE DEAD-TENSION ADJUSTER (INSIDE HOLDER):

Lower the curtain into the guides but do not bolt it to the barrel. Bolt the tension shaft to the holder on the bracket with the fasteners listed on the hardware list. Use the hoist to turn the pipe in the direction shown to wind the total revs. Fasten the curtain to the barrel as described in step #4.



8

TESTING DOOR BALANCE

Tools Required: Safety glasses, Leather gloves

Verify that the groove depth ('G' dimension) matches the installation drawing. Tight 'G' dimensions can result in excessive wear on the curtain, and poor balance of the door. Wide 'G' dimensions may allow curtains to disengage from guides under excessive wind speeds. Gauge blocks are available from Wayne Dalton to allow for easy 'G' dimension verification. Contact your Wayne Dalton Customer Service Representative for gauge block availability.

With the adjusting wheel locked, operate the door through several cycles to check door balance. If the door does not balance properly and requires further spring adjustment, repeat the procedure for "Applying Tension" to add or remove spring tension. Ideally, the door should have sufficient spring tension to just allow the door to stay up in the open position and no more.

IMPORTANT: INCREASING THE INITIAL TENSION WILL REDUCE LIFT EFFORT BUT CAN PREVENT DOOR FROM COMPLETELY CLOSING.

METHODS OF OPERATION OF SERVICE DOORS: Mechanically operated door operator brackets are shipped from the factory assembled. Depending on your

operation type, it will be necessary to disassemble certain mechanisms during different stages of installation. Be sure to save all fasteners and pay careful attention to how the mechanisms are assembled and how they relate to one another.

MANUALLY OPERATED DOOR (PUSH-UP): No operator of any kind is required. The door is opened and closed manually by pushing up and down on the bottom bar (taller doors may require a rope or hook to reach the bottom bar in the open position).

CHAIN HOIST: Install the hoist as shown in the following figures.

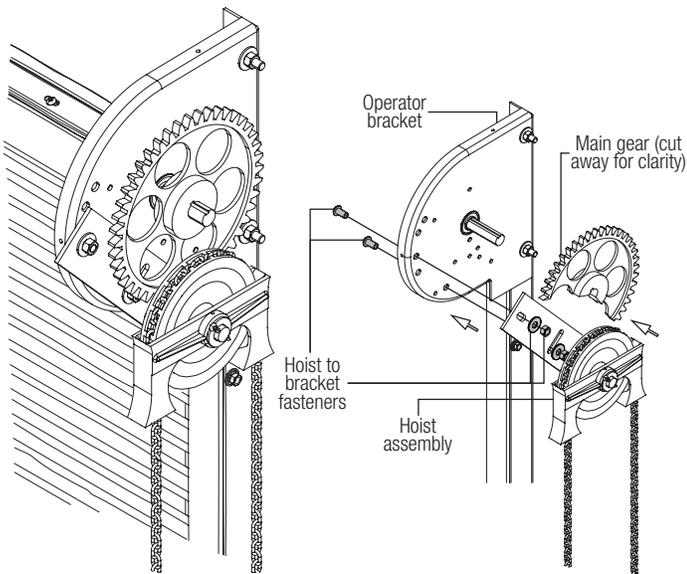
AWNING CRANK OPERATED: Install the awning crank as shown in the following figures.

MOTOR OPERATED: Bracket Mounted: Install the power unit support and operator as shown in the following figures. Wall Mounted: Install operator to wall per instructions provided with the operator. Thru-wall Mounted: See Appendix D for instructions.

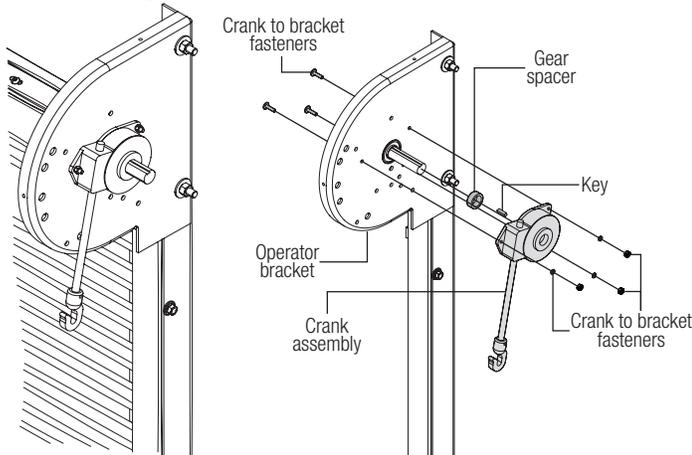
⚠ WARNING

MOVING PARTS CAN CRUSH AND CUT. KEEP HANDS, ARMS, AND CLOTHING FREE OF ALL MOVING MECHANISMS TO PREVENT SEVERE INJURY OR DEATH.

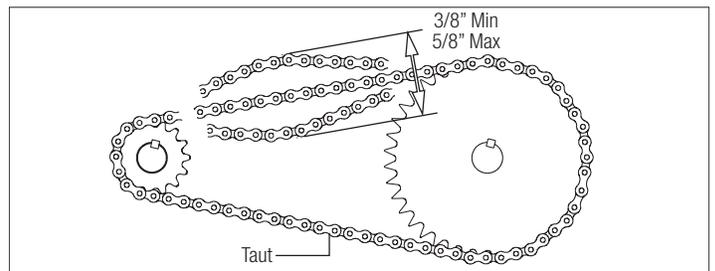
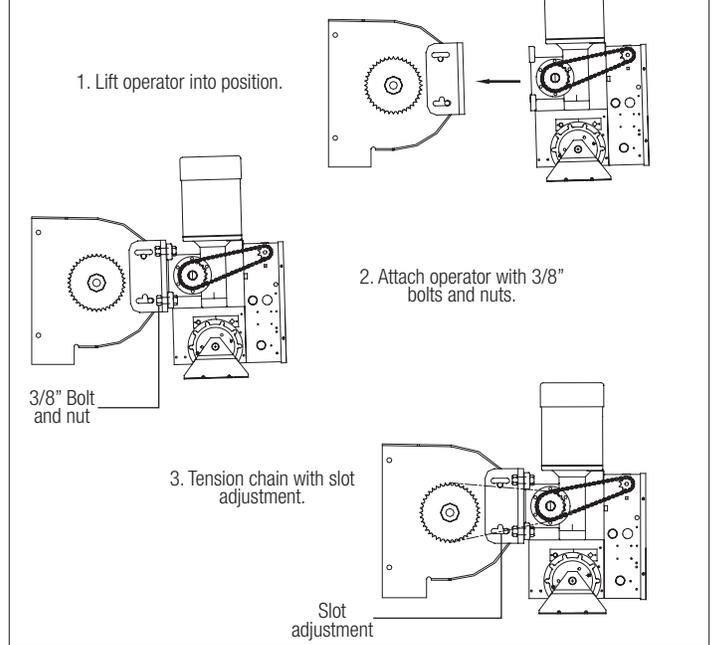
Chain hoist operated service door (right hand shown, Left hand opposite)



Awning Crank Operated Service Door (LH Shwn, RH Opposite)



Bracket mounted motor operated service door (left hand shown, right hand opposite)



⚠ WARNING

GETTING HANDS CAUGHT IN SPROCKETS OR CHAIN CAN CAUSE SEVERE INJURY. A GUARD OR COVER MUST BE INSTALLED IF THESE COMPONENTS ARE WITHIN REACH. COVERS ARE AVAILABLE AS OPTIONS FROM THE FACTORY.

9

LEVEL DOOR (IF NEEDED)

Tools Required: Shims, Level, Safety glasses, Leather gloves

If during previous step the door rolled up level and straight, skip this step.

1. Check that guides are plum, square, level, and are properly mounted onto floor and wall.
2. Check that the pipe is level.
3. 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.

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.

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 unlevelled. 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:

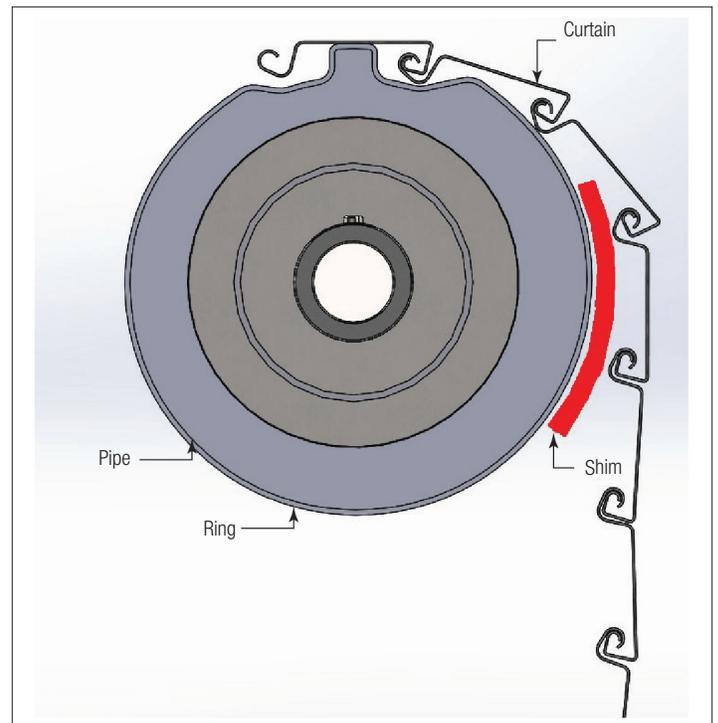
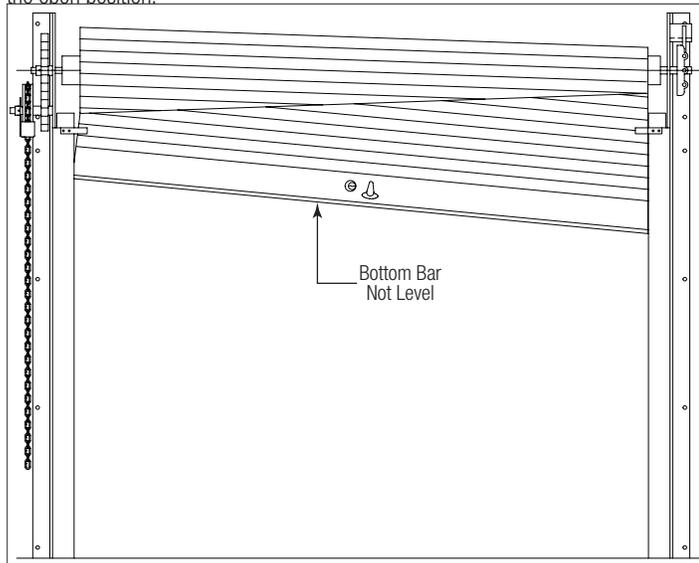
1. Close the door fully.
2. When door is at bottom make sure door is in hand chain mode.
3. Turn off the power to the motor (if applicable) to ensure safe application of the shim.
4. Backwind the door using the chain. Lock chain in place using chain keeper.

⚠ 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.

5. 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.
6. Restore power to the motor (if applicable).
7. 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.

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.



10

INSTALLING HOODS, HOOD SUPPORTS & HOUSINGS

Tools Required: Power drill, Safety glasses, Leather gloves

7A. HOOD (AND HOOD SUPPORT) ATTACHMENT:

HINT: Lower the door to offer the maximum clearance between the coil and the wall. Rest hood strap(s) on coil near its attachment location.

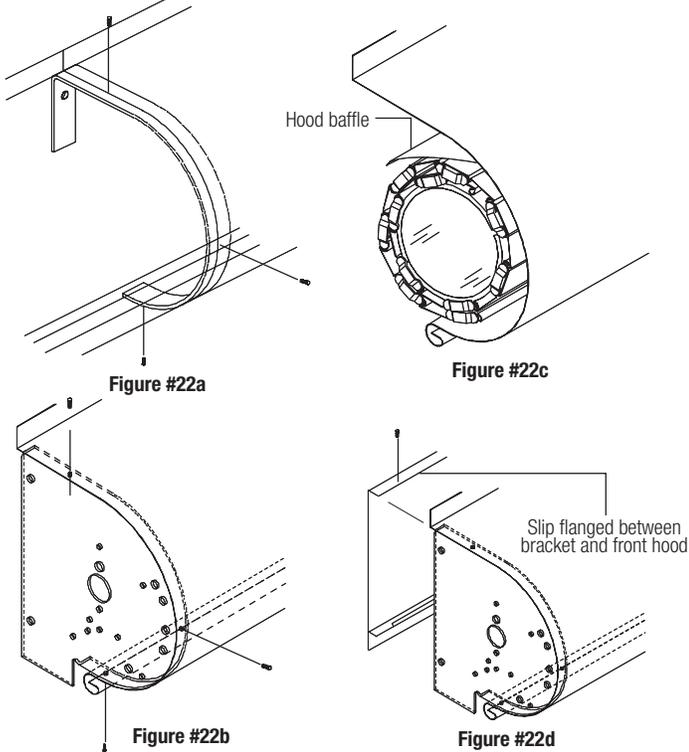
⚠ WARNING

DISCONNECT OPERATOR PRIOR TO WORKING NEAR OPERATOR END OF DOOR WHEN ATTACHING HOOD. SERIOUS INJURY MAY RESULT BY INADVERTENT OPERATION OF THE OPERATOR.

When a two or more piece hood is furnished, fasten the hood support (sometimes called "hood strap") to the wall where the hood is spliced together (see Figure #22a). It may be necessary to add structure on "open steel" type constructions-not provided by manufacturer as standard. If a hood baffle is present, notch the baffle around the support as necessary. Install washers and rivets on each side of support to retain baffle.

Raise the hood carefully over the brackets so the ends of the hood are approximately 3/16" from the outside edge of the brackets. Set the top flange tight against the wall and fasten with hardware provided (see Figure #22b). Fasten the hood to the existing holes in the brackets (and supports) with self drilling/self-tapping screws. If housings are required, do not tighten screws at this time, as housing must slip under hood (see step #7b).

Installing hoods, hood supports and housings



IMPORTANT: NEVER OMIT THE USE OF CENTER HOLE PROVIDED IN BRACKET WHEN ATTACHING HOOD. THIS REDUCES FLEXING OF BRACKETS WHEN OPERATOR IS USED.

IMPORTANT: IF HOOD BAFFLE IS PROVIDED, IT MUST LAY FLAT ON TOP OF COIL AND NOT FOLD OVER THE WRONG WAY (SEE FIGURE #22C).

If a back hood is provided, attach it as shown in Figure #23 with self-tapping screws. Line up the edge of the back hood with the edge of the front hood before tightening screws.

7B. ATTACHING HOUSINGS:

If the door is mechanically operated and the operator is located outside and exposed to the elements, a protective housing may be provided. (See Figure #23).

WARNING

DISCONNECT POWER TO THE OPERATOR WHEN WORKING NEAR IT. SERIOUS INJURY MAY RESULT BY INADVERTENT OPERATION OF THE OPERATOR.

Attach the housing as shown, making sure the flanges of the housing slip between the hood and bracket flange, with self drilling / self-tapping screws provided.

NOTE: Some trim of the housing flanges may be required to offer clearance to obstructions or drive components.

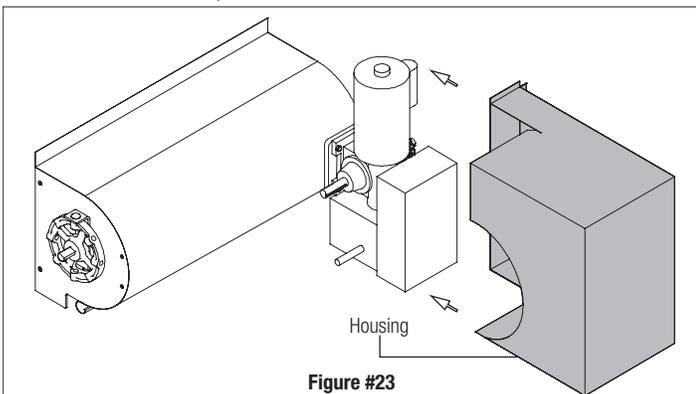


Figure #23

11

MISCELLANEOUS FINAL CHECKLIST

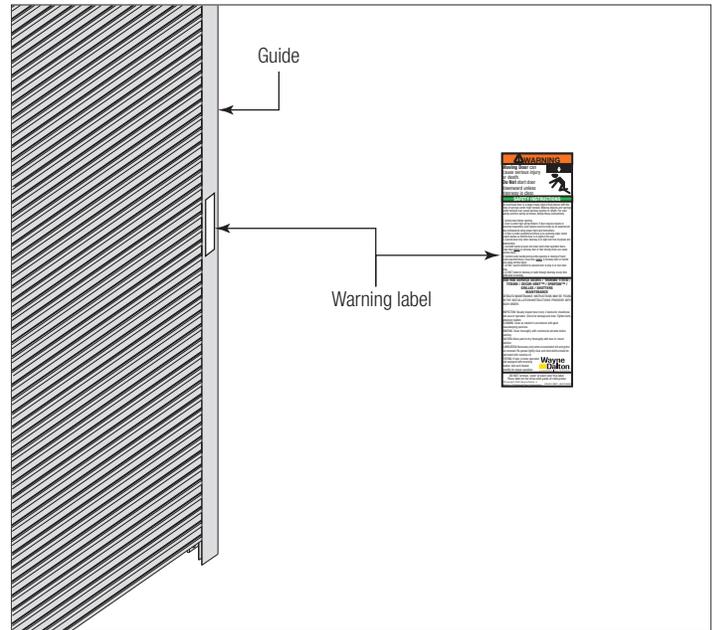
Tools Required: Wrenches, Safety glasses, Leather gloves

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.

Have the customer or his representative sign off on the installation, and exchange all documentation and key to locks at this time. Be sure the customer receives a copy of this manual and of the installation drawing.

Demonstrate the operation of the door and any optional equipment to the customer before leaving the job site.



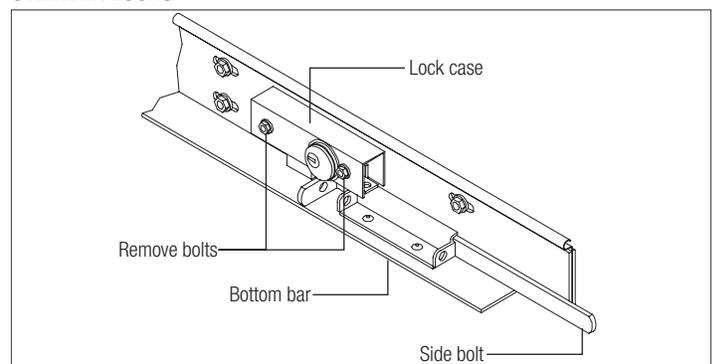
12

APPENDIX A: OPTIONAL COMPONENTS

Tools Required: Wrenches, Power drill, Safety glasses, Leather gloves

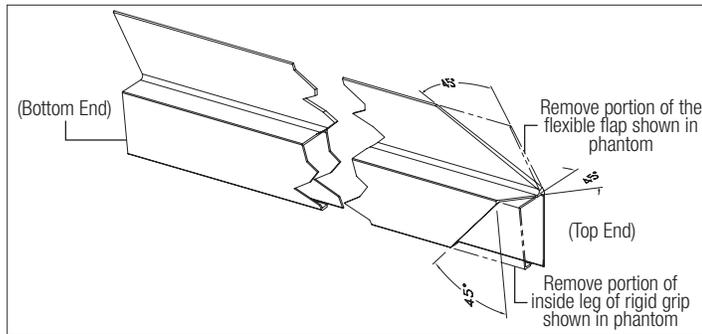
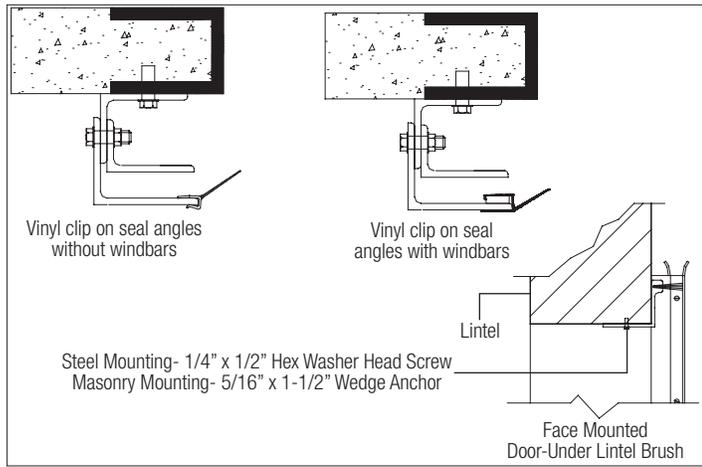
The following are some examples of common options and adjustments for Service Doors:

CYLINDER LOCKS



Slide bolts are provided as a standard feature on manually operated service doors. On doors with cylinder locks on one side only, it may be necessary to remove the (2) bolts securing the lock case to the bottom bar prior to installation.

ELECTRICAL INTERLOCKS (DOORS WITH STRAIGHT SLIDE BOLTS)



NOTE: This step prevents the door from catching on the weatherstrip and pulling it off the guide.

SUPERIMPOSED LOADS ON JAMBS

Wayne Dalton, Non-Insulated Slat #14 Profile 22 gauge Galvanized or Stainless steel superimposed loads on jambs					
Door Width	Design Pressure (PSF)	Superimposed Loads Positive (+)		Superimposed Loads Negative (-)	
		Vx (lbs/ft)	Vy (lbs/ft)	Vx (lbs/ft)	Vy (lbs/ft)
8'0"	20	0	80	0	82
10'0"		0	100	0	102
12'0"		0	120	0	122
14'0"		222	42	224	43
16'0"		508	90	513	92
18'0"		766	128	774	131
20'0"		1011	160	1021	163
22'0"		1429	188	1443	192
24'0"		1486	215	1501	219
8'0"		30	0	120	0
10'0"	0		150	0	153
12'0"	176		144	178	147
14'0"	592		112	598	114
16'0"	960		170	970	173
18'0"	1306		218	1319	222
20'0"	1643		260	1659	265
22'0"	1979		298	1999	304
24'0"	2318		335	2341	342

Wayne Dalton, Non-Insulated Slat #14 Profile 22 gauge Galvanized or Stainless steel superimposed loads on jambs					
Door Width	Design Pressure (PSF)	Superimposed Loads Positive (+)		Superimposed Loads Negative (-)	
		Vx (lbs/ft)	Vy (lbs/ft)	Vx (lbs/ft)	Vy (lbs/ft)
8'0"	40	0	160	0	163
10'0"		0	200	0	204
12'0"		470	144	475	147
14'0"		963	182	973	186
16'0"		1413	250	1427	255
18'0"		1846	308	1864	314
20'0"		2276	360	2299	367
22'0"		2709	408	2736	416
24'0"		3149	455	3180	464
8'0"		50	0	200	0
10'0"	101		227	102	232
12'0"	764		156	772	159
14'0"	1333		252	1346	257
16'0"	1866		330	1885	337
18'0"	2386		398	2410	406
20'0"	2908		460	2937	469
22'0"	3438		518	3472	528
24'0"	3980		575	4020	587
8'0"	60		0	240	0
10'0"		325	227	328	232
12'0"		1058	216	1069	220
14'0"		1704	322	1721	328
16'0"		2318	410	2341	418
18'0"		2926	488	2955	498
20'0"		3541	560	3576	571
22'0"		4168	628	4210	641
24'0"		4812	695	4860	709

WARRANTY

Rolling Steel Service Door Models 800C, 800, 926, 900

Limited Warranty

Wayne Dalton, a division of Overhead Door Corporation, ("Seller") warrants to the original purchaser of the rolling steel service door models 800C, 800, 926 and 900 ("Door"), subject to all of the terms and conditions hereof, that the Door 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 the Door, excluding the counterbalance spring and finish.

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 component is excluded and will be the responsibility of the purchaser.

This warranty is made to the original purchaser of the Door only, and is not transferable or assignable. This warranty does not apply to any unauthorized alteration or repair of the Door, or to any Door 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 applies only to Door 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.

Door Type: _____

Customer Name (Original Purchaser): _____

Customer Installation Location: _____

Order # _____ Date of Installation: _____

Name of Dealer/Installer: _____

Signature of Dealer/Installer: _____

Thank you for your purchase.

PLEASE DO NOT RETURN THIS PRODUCT TO THE STORE

Please Do Not Return This Product To The Store. Please call 1-(800) 255-3046 (Press Option 1) and follow the prompts to contact the appropriate customer service agent. They will be happy to handle any questions that you may have.

After installation is complete, fasten this manual near garage door for easy reference.

Product may be covered by one or more patents.
See **www.wayne-dalton.com/patents** for details.