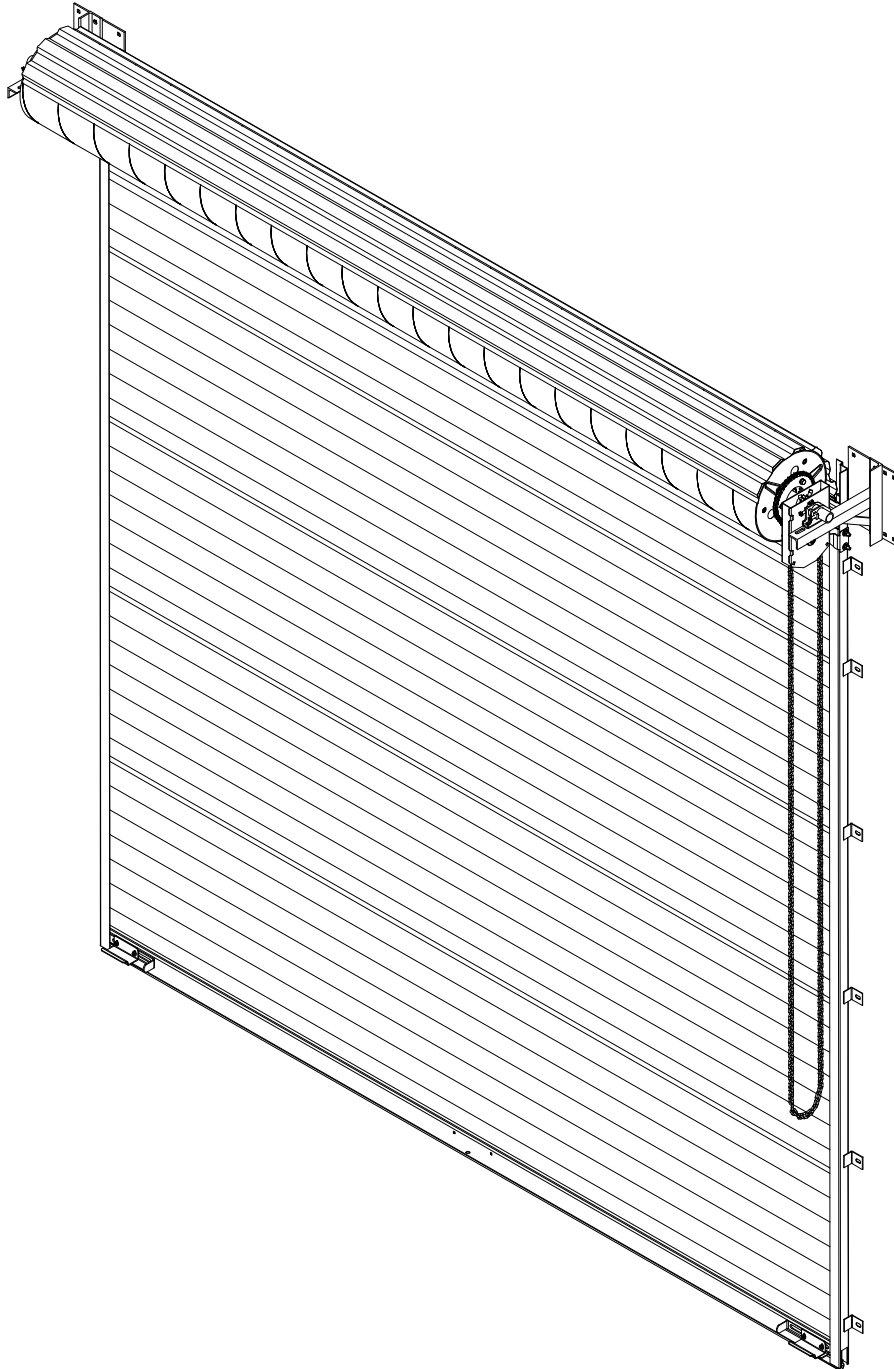


200 SERIES INSTALLATION GUIDE

Date: 11/17/2020



IMPORTANT INFORMATION

ASTA™ DOORS MUST BE INSTALLED BY TRAINED ROLLING DOOR TECHNICIANS QUALIFIED TO INSTALL PRODUCT SAFELY WITH PROPER KNOWLEDGE, TOOLS, SAFETY AND INSTALLATION EQUIPMENT. CAREFULLY READ INSTALLATION INSTRUCTIONS. FAMILIARIZE YOURSELF WITH ALL INSTALLATION PROCEDURES, WARNINGS, CAUTIONS, AND NOTES BEFORE ATTEMPTING TO INSTALL DOOR. ASTA AMERICA WILL NOT WARRANTY OR ACCEPT RESPONSIBILITY FOR DOORS NOT INSTALLED PER THESE INSTALLATION INSTRUCTIONS.

- IMPORTANT SAFETY INFORMATION -

- CAREFULLY READ INSTALLATION INSTRUCTIONS. FAMILIARIZE YOURSELF WITH ALL INSTALLATION PROCEDURES, WARNINGS, CAUTIONS, AND NOTES BEFORE ATTEMPTING TO INSTALL DOOR.
- INSPECT RECEIVED DOOR ASSEMBLY FOR VISIBLE DAMAGE AND/OR COMPONENT SHORTAGES.
 - a. SHIPPING DAMAGE: FILE DAMAGE CLAIM IMMEDIATELY WITH FREIGHT CARRIER. PROVIDE DOOR SUPPLIER WITH PHOTO DOCUMENTATION TO RECEIVE REPLACEMENT COMPONENTS.
 - b. PART SHORTAGE: IMMEDIATELY CONTACT DOOR SUPPLIER WITH PARTS SHORTAGE CLAIM. ORDER NUMBER, DOOR MODEL, PHOTO DOCUMENTATION IS ENCOURAGED TO EXPEDITE PROCESS.
 - c. INCORRECT PARTS: IF RECEIVED DOOR COMPONENTS AND PARTS DO NOT MATCH THOSE REFERENCED IN THESE INSTALLATION INSTRUCTIONS, IMMEDIATELY CONTACT DOOR SUPPLIER.
- IF AT ANY TIME BEFORE OR DURING INSTALLATION YOU ARE UNFAMILIAR, UNCOMFORTABLE, OR CONFUSED BY INSTALLATION PROCEDURES OUTLINED IN THESE INSTALLATION INSTRUCTIONS DO NOT ATTEMPT TO INSTALL DOOR ASSEMBLY. IMMEDIATELY CONTACT DOOR SUPPLIER WITH QUESTIONS/CONCERNS.

ASTA™ DOORS MUST BE INSTALLED BY TRAINED ROLLING DOOR TECHNICIANS QUALIFIED TO INSTALL PRODUCT SAFELY WITH PROPER KNOWLEDGE, TOOLS, SAFETY AND INSTALLATION EQUIPMENT.

- READ ALL WARNINGS BELOW -

- USE APPROPRIATE SAFETY EQUIPMENT TO AVOID SERIOUS INJURY.
- CLEAR FLOOR AT OPENING OF ALL DEBRIS BEFORE INSTALLING PRODUCT.
- USE APPROPRIATE LIFTING EQUIPMENT AND CORRECT LIFTING PROCEDURES TO AVOID DAMAGE, SERIOUS INJURY OR DEATH.
- MOVING DOOR COULD RESULT IN DEATH OR SERIOUS INJURY. DO NOT CLOSE DOOR UNTIL DOORWAY IS CLEAR.
- CONTROL THE SPEED OF THE DOOR DURING MANUAL OPERATION.
- DO NOT STAND OR WALK UNDER A MOVING DOOR.
- KEEP DOORWAY CLEAR AND IN FULL VIEW WHILE OPERATING DOOR.
- DO NOT PERMIT CHILDREN TO PLAY ON, NEAR, OR WITH DOOR, OR OPERATE DOOR CONTROLS.
- UNLOCK DOOR BEFORE OPENING DOOR.
- SENSING DEVICES ON MOTOR OPERATING DOORS SHOULD BE TESTED FREQUENTLY.
- VISUALLY INSPECT DOOR AND HARDWARE MONTHLY FOR WORN AND/OR BROKEN PARTS AND CHECK IF DOOR OPERATES FREELY. DO NOT OPERATE A DOOR WITH A BROKEN SPRING.
- COMPONENTS ARE UNDER EXTREME SPRING TENSION COULD RESULT IN DEATH OR SERIOUS INJURY.
- DOOR MUST BE FULLY OPENED WHEN MAKING ADJUSTMENTS.

► **Retain these instructions for reference.**

► **Operation & Maintenance Manual available via pdf download at www.astaamerica.com or upon request.**

HANDLE WITH CARE - DO's & DON'T's

DO's

- CAREFULLY INSPECT ALL PRODUCT FOR DAMAGE UPON RECEIPT.
- USE PROTECTIVE FOAM BETWEEN PRODUCT AND ANY SURFACE OR OBJECT IT MAY COME INTO CONTACT WITH WHILE IN TRANSIT AND/OR STORAGE.
- WHEN SECURING PRODUCT FOR TRANSIT, USE FOAM BARRIER BETWEEN PRODUCT AND STRAPS, ROPES, ETC.
- CAREFULLY UNLOAD PRODUCT FROM ANY TYPE OF CRATING MATERIAL ASSURING NO CONTACT WITH FASTENERS OR SHARP EDGES.
- CLEAR FLOOR AT OPENING OF ALL DEBRIS BEFORE INSTALLING PRODUCT.
- SINGLE PERSON LIFTING OF PRODUCT COULD CAUSE INJURY. USE ASSISTANCE WHEN MOVING OR LIFTING.
- INSTALL PRODUCT WITH APPROPRIATE LIFTING EQUIPMENT ASSURING A PROTECTIVE BARRIER IS MAINTAINED BETWEEN PRODUCT AND ANY SURFACE OR OBJECT IT MAY COME INTO CONTACT WITH.

DON'T's

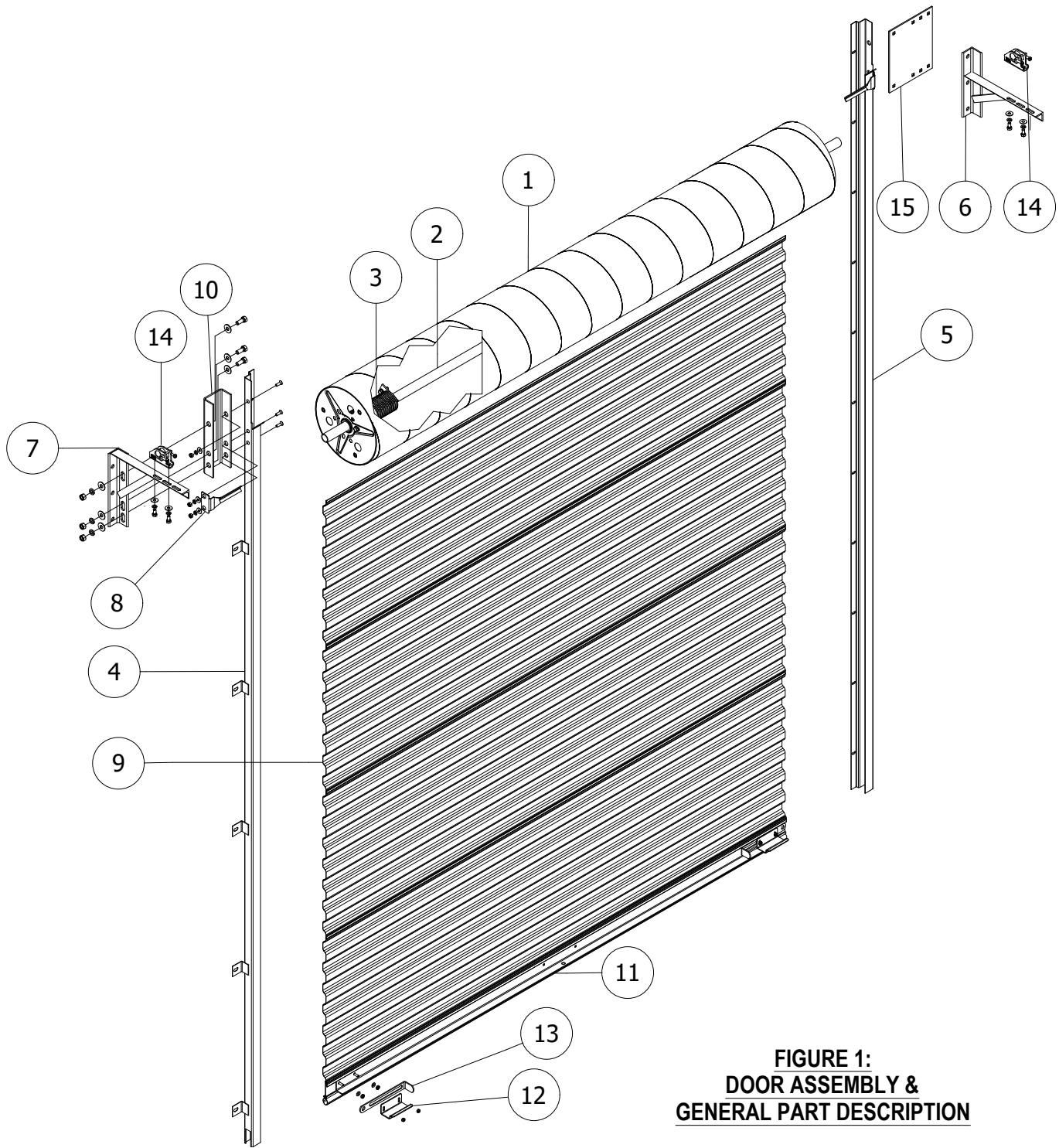
- DO NOT - STAND ON PRODUCT.
- DO NOT - CLIMB ON PRODUCT.
- DO NOT - WALK ON PRODUCT.
- DO NOT - DROP PRODUCT.
- DO NOT - SLIDE PRODUCT ACROSS ANY SURFACE.
- DO NOT - THROW OR TOSS PRODUCT.
- DO NOT - SET OR STACK PRODUCT ON GRAVEL, DEBRIS, OR UNEVEN SURFACES.
- DO NOT - ALLOW SHARP OBJECTS TO COME IN CONTACT WITH PRODUCT.
- DO NOT - LEAVE PRODUCT UNSECURED WHILE IN TRANSIT OR DURING INSTALLATION.

FAILURE TO ADHERE TO THE ABOVE CONDITIONS WILL RESULT IN PERSONAL INJURY OR PRODUCT DAMAGE NOT COVERED UNDER ASTA AMERICA PRODUCT WARRANTY. ALWAYS HANDLE PRODUCT WITH CARE, AND REVIEW ALL INSTRUCTIONS, WARNINGS, AND NOTES BEFORE INSTALLING PRODUCT.

REVIEW DOOR ASSEMBLY AND GENERAL PARTS DESCRIPTIONS BILL OF MATERIAL FROM PAGE 4, FIGURE 1 TO FAMILIARIZE YOURSELF WITH COMMON PARTS OF ROLLING SHEET DOOR ASSEMBLY.

DOOR ASSEMBLIES ARE MANUFACTURED PER OPENING WIDTHS AND HEIGHTS SPECIFIED AT TIME OF ORDER. ASTA AMERICA WILL NOT BE HELD RESPONSIBLE FOR OPENING WIDTHS OR HEIGHTS THAT DO NOT MATCH THOSE SPECIFIED AT TIME OF ORDER.

DOOR ASSEMBLY & GENERAL PART DESCRIPTIONS



**FIGURE 1:
DOOR ASSEMBLY &
GENERAL PART DESCRIPTION**

GENERAL BILL OF MATERIALS

ITEM	DESCRIPTION / PART NUMBER	ITEM	DESCRIPTION / PART NUMBER	ITEM	DESCRIPTION / PART NUMBER
1	12" Spiral Barrel	6	RH Commercial Support Bracket	11	Bottom Bar Assembly w/ Astragal
2	1 $\frac{5}{16}$ " O.D. Axle	7	LH Adjustable Support Bracket	12	Door Stop Lift Clip
3	Spring/Counterbalance Assembly	8	Commercial Headstop	13	Slide Lock
4	LH, 14Ga, Commercial Guide	9	26 Ga. Corrugated Curtain	14	SAS 1 $\frac{5}{16}$ " Stamped Axle Support
5	RH, 14Ga, Commercial Guide	10	Adjustable Mounting Plate	15	Standard Mounting Plate

STANDARD BRACKET HEADROOM/SIDEROOM DIMENSIONAL REFERENCES

FIGURE 2a: STANDARD BRACKET HEADROOM REQUIREMENT CHART

STANDARD BRACKET HEADROOM REQUIREMENT				
OPENING HEIGHT	VERTICAL HEADROOM	HORIZONTAL HEADROOM	X	Y
≤ 8'-0"	22"	20"	11"	11"
≤ 10'-0"	22"	21"	11"	11"
≤ 18'-0"	23"	23"	12"	11"
< 20'-0"	24"	24"	13"	11"

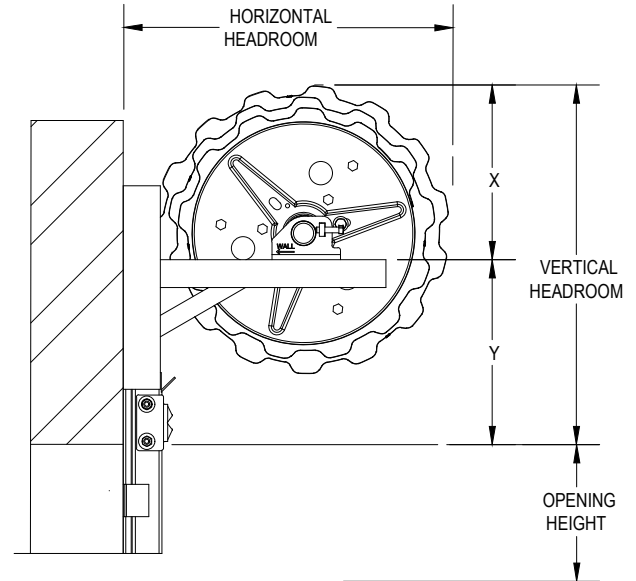
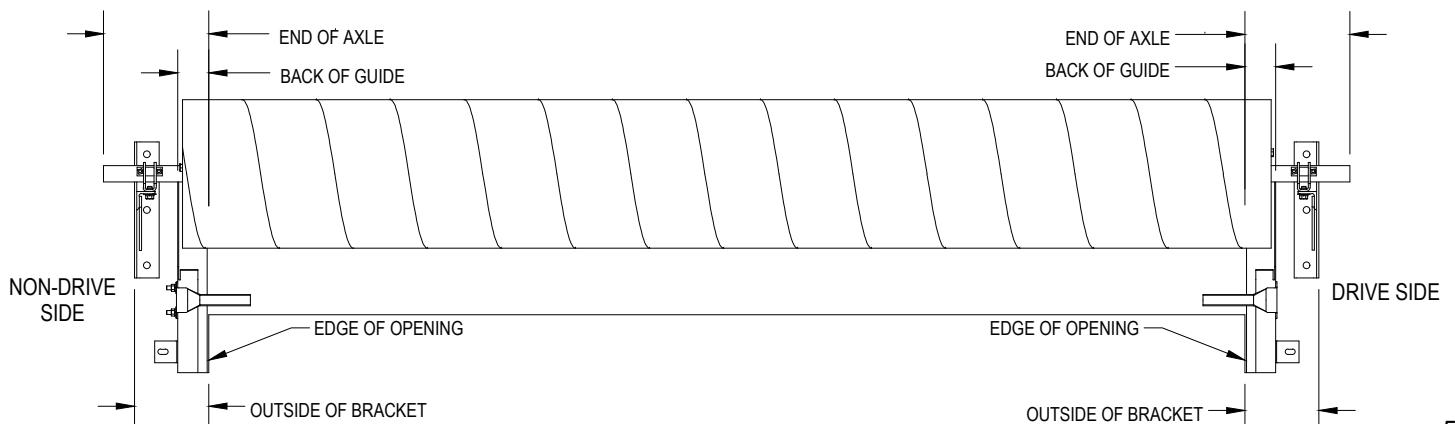


FIGURE 3a: STANDARD BRACKET SIDEROOM CLEARANCE REQUIREMENT CHART

STANDARD BRACKET SIDEROOM CLEARANCE REQUIREMENTS (PER SIDE)				
MODEL 201 & 202	DRIVE SIDE - OUTSIDE OF BRACKET	NON-DRIVE SIDE - OUTSIDE OF BRACKET	BACK OF GUIDE	END OF AXLE
PUSH-UP / ROPE	6"	6"	2-1/2"	9"
4:1 OR 8:1 POCKET WHEEL HOIST	7"	6"	2-1/2"	9"
2000R-40 & 72 CHAIN HOIST	7-1/2"	6"	2-1/2"	9"
ELECTRIC OPERATOR	7-1/2"	6"	2-1/2"	9"
MODEL 201HD, 202HD & 205				
PUSH-UP / ROPE	7"	7"	3-1/2"	11"
4:1 OR 8:1 POCKET WHEEL HOIST	8"	7"	3-1/2"	11"
2000R-40 & 72 CHAIN HOIST	7-1/2"	7"	3-1/2"	11"
ELECTRIC OPERATOR	7-1/2"	7"	3-1/2"	11"
MODEL 203, 203IM & 204				
PUSH-UP / ROPE	7-1/2"	7-1/2"	4"	11"
4:1 OR 8:1 POCKET WHEEL HOIST	9"	7-1/2"	4"	11"
2000R-40 & 72 CHAIN HOIST	7-1/2"	7-1/2"	4"	11"
ELECTRIC OPERATOR	7-1/2"	7-1/2"	4"	11"



ADJUSTABLE BRACKET HEADROOM/SIDEROOM DIMENSIONAL REFERENCES

FIGURE 2b: ADJUSTABLE BRACKET HEADROOM REQUIREMENT CHART

HEADROOM REQUIREMENT				
OPENING HEIGHT	VERTICAL HEADROOM	HORIZONTAL HEADROOM	X	Y
≤ 8'-0"	22"	20"	11"	11"
≤ 10'-0"	22"	21"	11"	11"
≤ 18'-0"	23"	23"	12"	11"
< 20'-0"	24"	24"	13"	11"

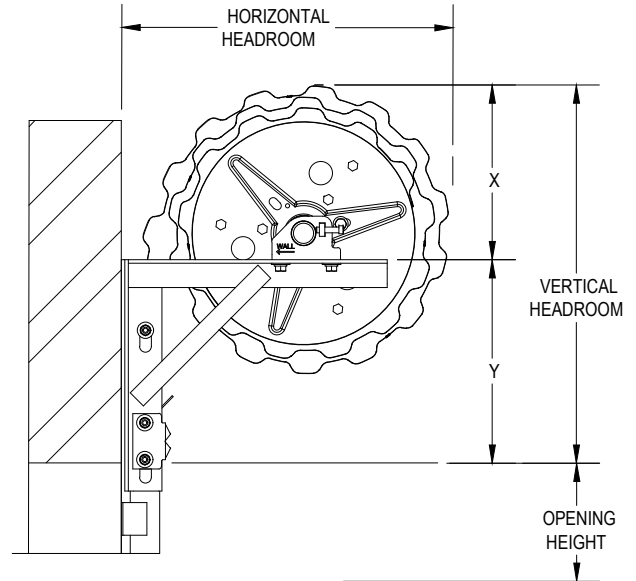
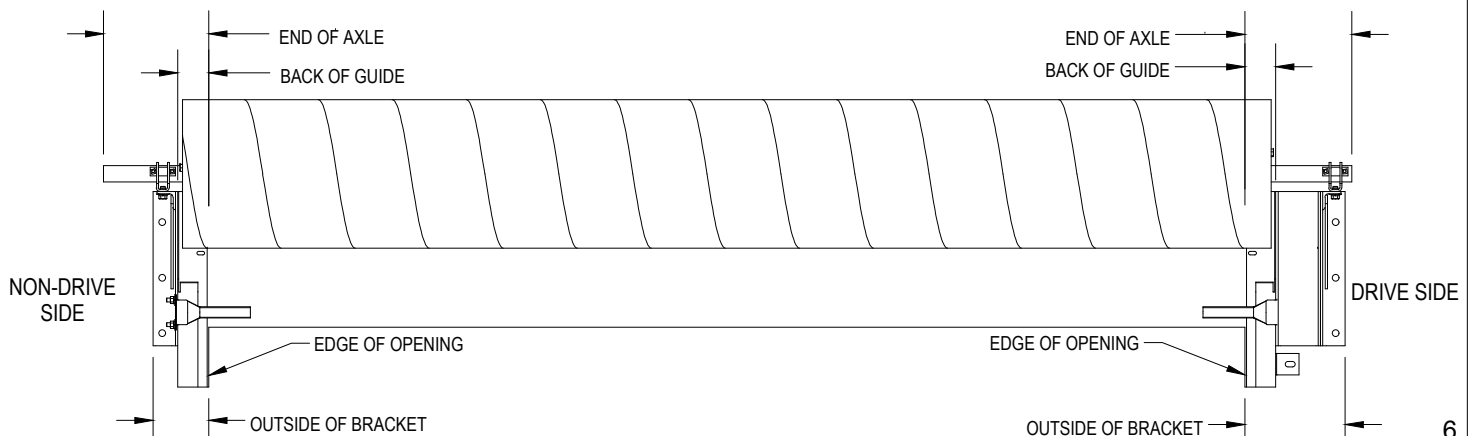


FIGURE 3b: ADJUSTABLE BRACKET SIDEROOM CLEARANCE REQUIREMENT CHART

ADJUSTABLE BRACKET SIDEROOM CLEARANCE REQUIREMENTS (PER SIDE)				
MODEL 201 & 202	DRIVE SIDE - OUTSIDE OF BRACKET	NON-DRIVE SIDE - OUTSIDE OF BRACKET	BACK OF GUIDE	END OF AXLE
PUSH-UP / ROPE	4-1/2"	4-1/2"	2-1/2"	9"
4:1 OR 8:1 POCKET WHEEL HOIST	8-1/8"	4-1/2"	2-1/2"	9"
2000R-40 & 72 CHAIN HOIST	8-1/8"	4-1/2"	2-1/2"	9"
ELECTRIC OPERATOR	8-1/8"	4-1/2"	2-1/2"	9"
MODEL 201HD, 202HD & 205				
PUSH-UP / ROPE	5-1/2"	5-1/2"	3-1/2"	11"
4:1 OR 8:1 POCKET WHEEL HOIST	9-1/8"	5-1/2"	3-1/2"	11"
2000R-40 & 72 CHAIN HOIST	9-1/8"	5-1/2"	3-1/2"	11"
ELECTRIC OPERATOR	9-1/8"	5-1/2"	3-1/2"	11"
MODEL 203, 203IM & 204				
PUSH-UP / ROPE	6"	6"	4"	11"
4:1 OR 8:1 POCKET WHEEL HOIST	9-5/8"	6"	4"	11"
2000R-40 & 72 CHAIN HOIST	9-5/8"	6"	4"	11"
ELECTRIC OPERATOR	9-5/8"	6"	4"	11"



BRACKET AND GUIDE MOUNTING REFERENCE

ITEM	JAMB	FASTENERS	DRILL SIZE
BRACKETS	STEEL	$\frac{3}{8}$ - 16 X 1 $\frac{1}{4}$ " CARRIAGE BOLT & NUT	$\frac{7}{16}$ "
BRACKETS	CONCRETE / FILLED BLOCK	$\frac{1}{2}$ X 2 $\frac{1}{4}$ " SLEEVE ANCHOR	$\frac{1}{2}$ "
BRACKETS	WOOD	$\frac{3}{8}$ X 3" LAG SCREW	-
GUIDES	STEEL	#14 X $\frac{3}{4}$ " TEK SCREW	-
GUIDES	CONCRETE / FILLED BLOCK	$\frac{1}{4}$ X 1 $\frac{3}{4}$ " TAPCON SCREW	$\frac{3}{16}$ "
GUIDES	WOOD	$\frac{1}{4}$ X 3" LAG SCREW	-

GUIDE TYPE	W DIMENSION	Z DIMENSION
MODEL 201 & 202	OPENING WIDTH + 5"	2 1/2"
MODEL 201HD, 202HD & 205	OPENING WIDTH + 7"	3 1/2"
MODEL 203, 203IM & 204	OPENING WIDTH + 8"	4"

WARNING!

DOOR CAN FALL IF BOTH BRACKETS ARE NOT SECURELY FASTENED TO THE JAMBS. ALL FASTENERS ATTACHING BRACKETS TO JAMBS MUST FIT SECURELY INTO A STRUCTURAL MEMBER OR SURFACE. IF DOOR FALLS, SERIOUS INJURY OR DEATH AND/OR DAMAGE TO DOOR CAN RESULT.

NOTE: DOOR ASSEMBLES ARE MANUFACTURED PER OPENING WIDTHS AND HEIGHTS SPECIFIED AT TIME OF ORDER. ASTA AMERICA WILL NOT ASSUME RESPONSIBILITY FOR OPENING WIDTHS OR HEIGHTS THAT DO NOT MATCH THOSE SPECIFIED AT TIME OF ORDER.

GUIDE MOUNTING IS DICTATED BY APPLICATION AND JAMB TYPE.

See Pages 8 and 9. for appropriate mounting.

- ▶ **STEEL JAMBS:** 1/4" X 3/4". TEK SCREW. **SEE PAGE 8 FIGURE 4.**
- ▶ **MASONRY JAMBS:** 1/4" X 1-3/4" TAPCON. **SEE PAGE 8 FIGURE 5.**
- ▶ **WOOD JAMBS:** 1/4" X 3" LAG SCREW. **SEE PAGE 8 FIGURE 6.**

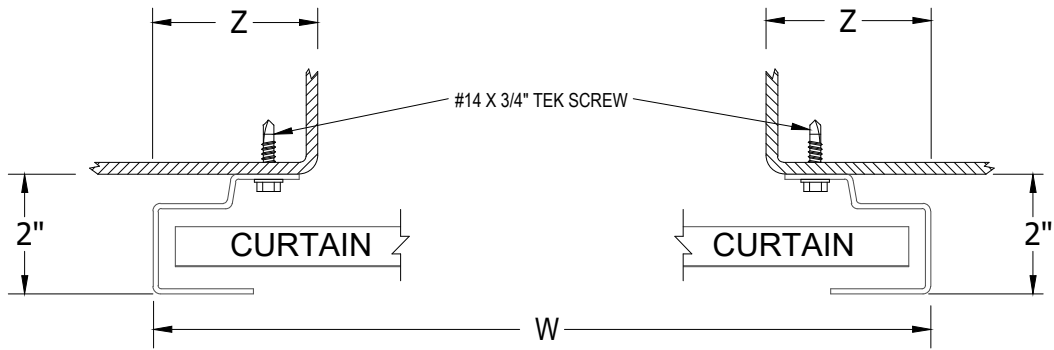


FIGURE 4: STEEL JAMBS

► See **Table 2 on Page 7** to determine the Z & W dimensions for your model of guides.

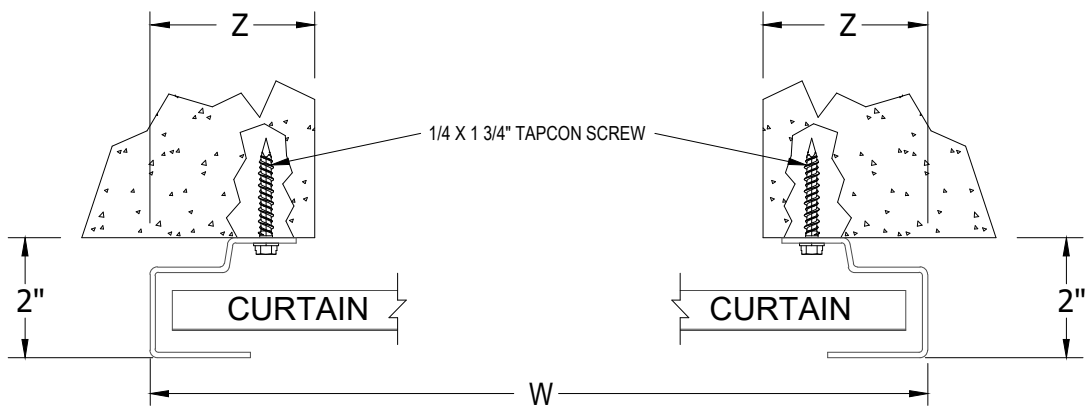


FIGURE 5: CONCRETE / MASONRY JAMBS

► See **Table 2 on Page 7** to determine the Z & W dimensions for your model of guides.

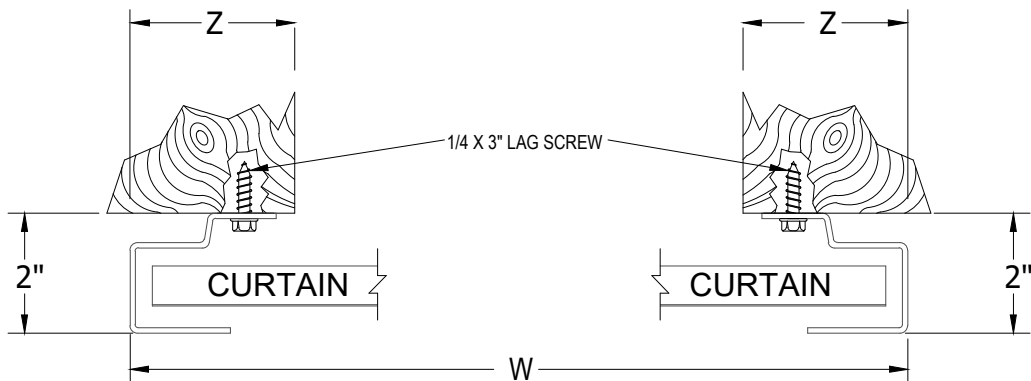


FIGURE 6: WOOD JAMBS

► See **Table 2 on Page 7** to determine the Z & W dimensions for your model of guides.

NOTES:

- Install guides and brackets with fasteners supplied.
- Install guides per mounting option detail that applies to specific installation applications.

STEP 1: WALL OPENING

- ▶ Check wall opening width and height and verify these measurements against size of door to be installed.
- ▶ Verify that jambs are plumb.
- ▶ Check floor and header for level.
- ▶ Check for adequate side clearance at jambs and clearance above and at sides of header.
Check vertical and horizontal headroom requirements. *See Figures 2a & 3a or Figures 2b & 3b* for minimum requirements per Support Bracket Option, Guide Model and Type of Operation.
- ▶ Verify that the guide mounting surface on the jamb is flush.
- ▶ Make sure all parts required for installation are with the door.

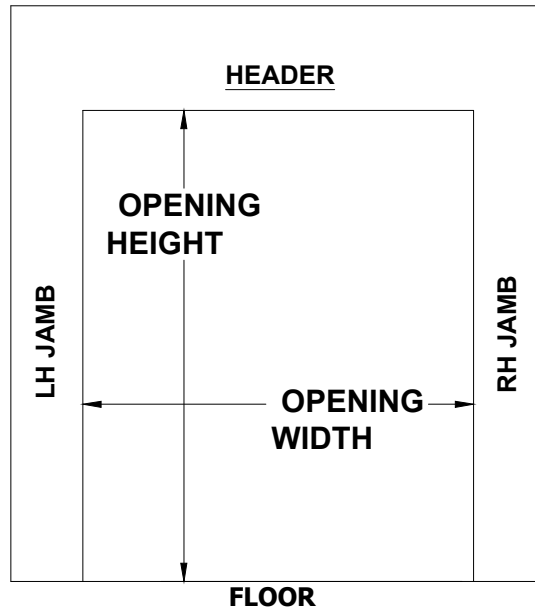


FIGURE 7:
WALL OPENING

STEP 2: MOUNTING PLATES FOR STANDARD BRACKETS

- ▶ If door will install to steel jambs, mounting plates for the door brackets are required and may be welded or bolted to the jambs.
- ▶ Mounting plates should be located vertically using the Y dimension from **Figure 2a page 5**. It is critical that the plate location will allow the Support Brackets to be mounted level with each other along the Y dimension line as shown in **Figure 8**.
- ▶ Mounting Plates should be located horizontally using the dimension for the Drive Side and Non-Drive Side Outside of Bracket from **Figure 3a page 5**. With brackets aligned with the sets of holes that best suits your application, locate mount plates so that the measurement from outside of bracket to the jamb edge equals the dimension in **Figure 3a** for drive side and non-drive side.

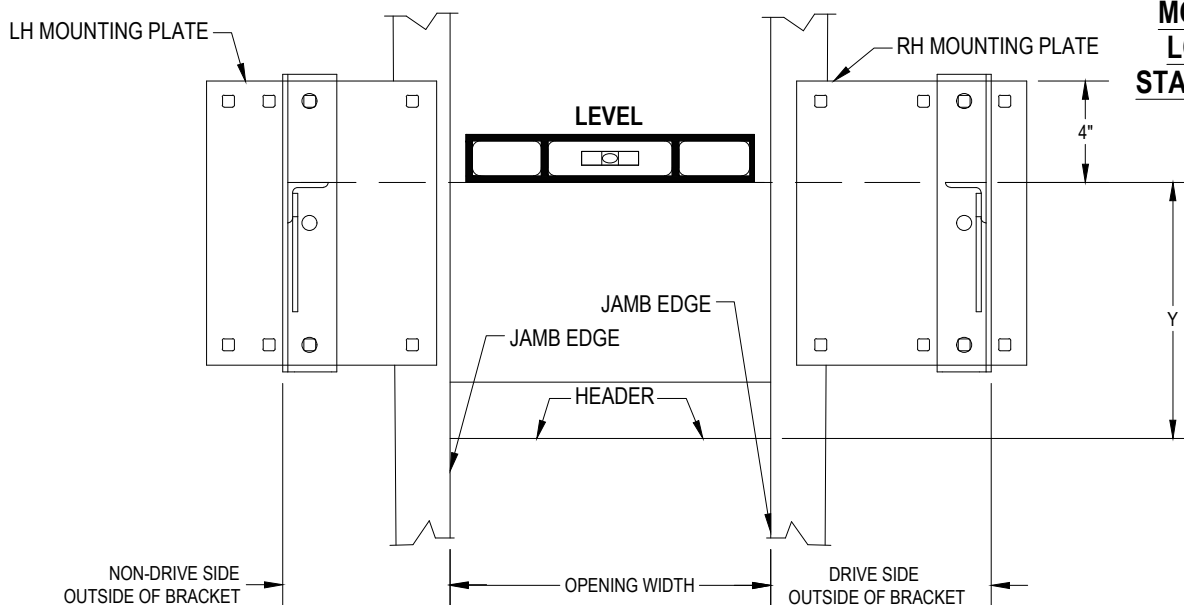


FIGURE 8:
MOUNTING PLATE
LOCATIONS FOR
STANDARD BRACKET

GUIDE MOUNTING

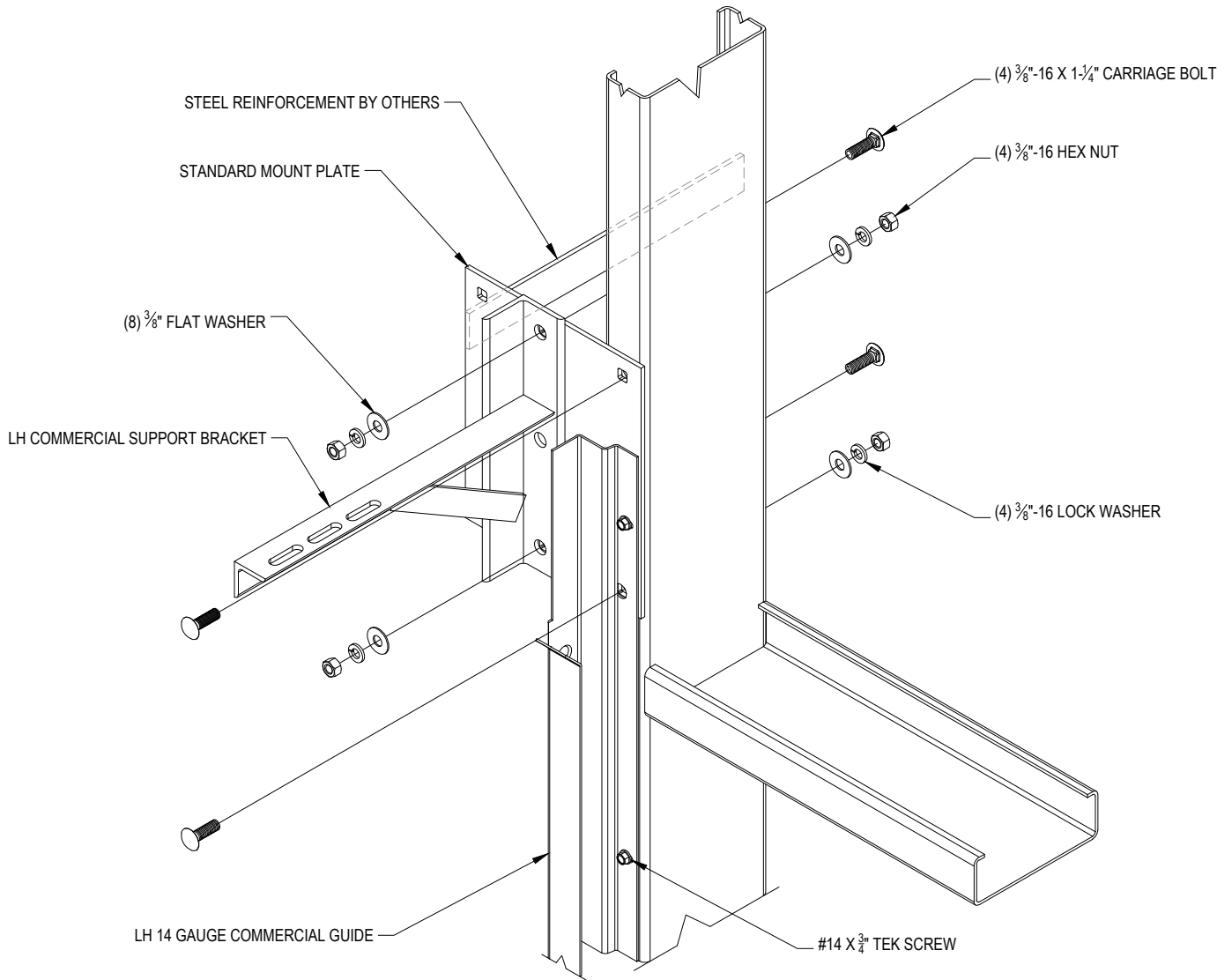


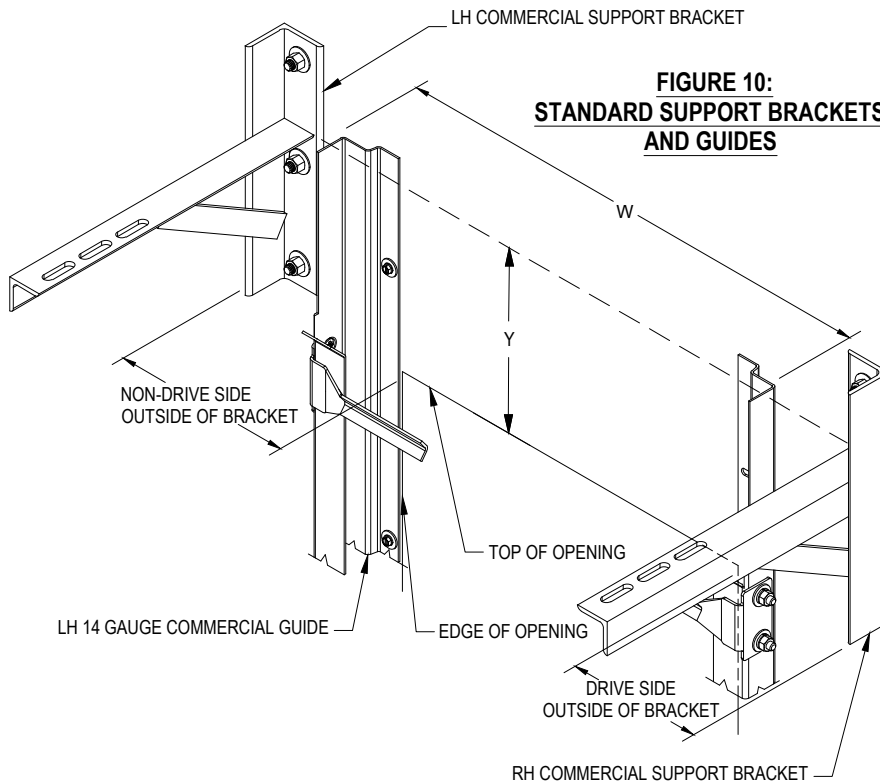
FIGURE 9:
BRACKETS MOUNT TO STEEL
JAMBS VIA MOUNTING PLATES

NOTE: DOOR CAN FALL IF BOTH BRACKETS ARE NOT SECURELY FASTENED TO THE JAMBS. ALL FASTENERS ATTACHING BRACKETS TO JAMBS MUST FIT SECURELY INTO A STRUCTURAL MEMBER OR SURFACE. IF DOOR FALLS, SERIOUS INJURY OR DEATH AND/OR DAMAGE TO DOOR CAN RESULT.

NOTE

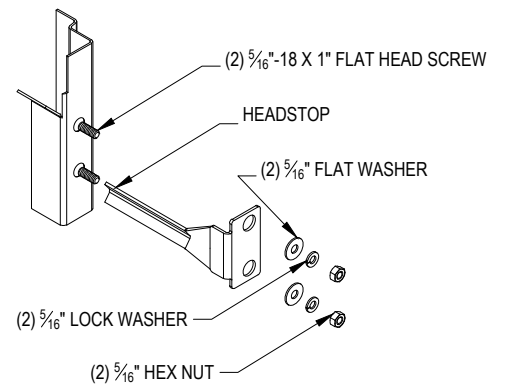
STEP 3: STANDARD SUPPORT BRACKET **SEE FIGURE 10**; STEP 3: ADJUSTABLE BRACKET OPTION **SEE FIGURE 11**.

STEP 3: MOUNT STANDARD SUPPORT BRACKETS AND GUIDES

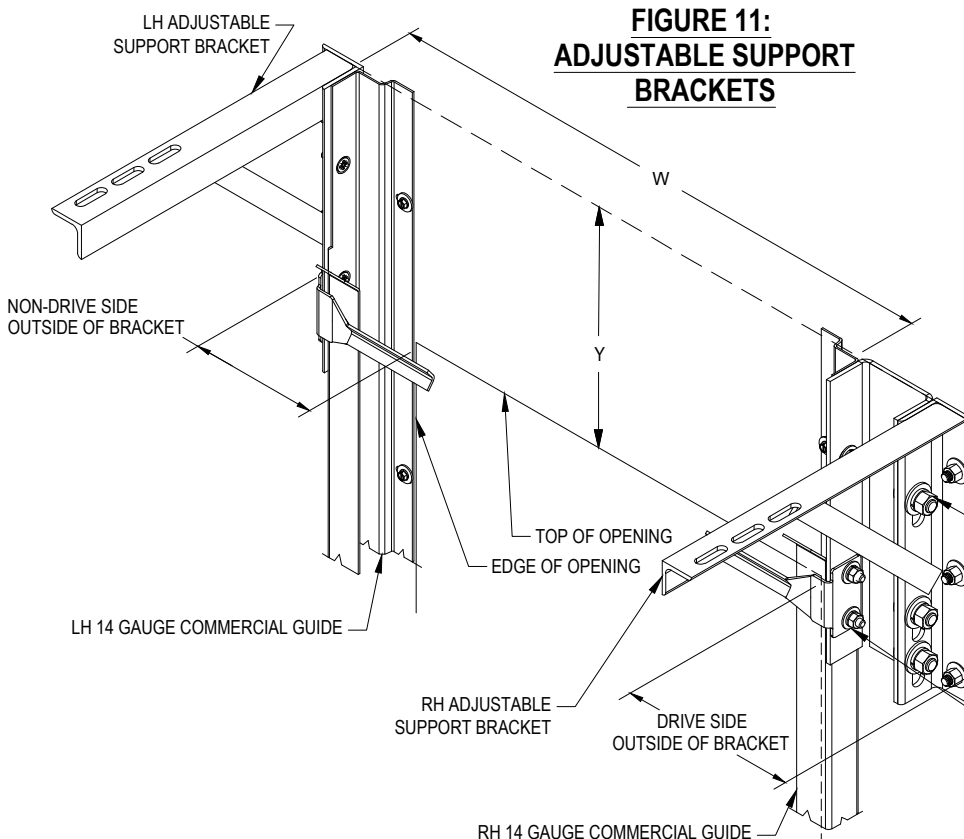


**FIGURE 10:
STANDARD SUPPORT BRACKETS
AND GUIDES**

- ▶ Refer to **Figure 2a page 5** for the Y dimension to vertically locate Support Brackets & **Figure 3a page 5** to locate the drive side and non-drive side Support Brackets horizontally.
- ▶ Refer to **Table 1 page 7** for Bracket and Guide fastener type and size for your jamb type.
- ▶ Securely mount support brackets plumb and level with each other at the Y dimension line.
- ▶ Refer to the Figure on **page 8** for your jamb type. The Z & W dimensions are listed in **Table 2 page 7**.
- ▶ Mount guides plumb & centered on opening at W" from back of guide to back of guide. Top of guides are to be level with each other.
- ▶ Secure Headstops to guides with supplied fasteners.



STEP 3: (ADJUSTABLE BRACKET OPTION) MOUNT ADJUSTABLE BRACKETS AND GUIDES



**FIGURE 11:
ADJUSTABLE SUPPORT
BRACKETS**

- ▶ Refer to **Table 1 page 7** for Bracket and Guide fastener type and size for your jamb type.
- ▶ Refer to the Figure on **page 8** for your jamb type. The Z & W dimensions are listed in **Table 2 page 7**.
- ▶ Mount guides plumb & centered on opening at W" from back of guide to back of guide. Top of guides are to be level with each other.
- ▶ Attach Adjustable Support Bracket and Headstop to Guide on non-drive side using supplied fasteners.
- ▶ Attach Adjustable Support Bracket, Adjustable Mount Plate & Headstop to Guide on drive side using supplied fasteners.
- ▶ Refer to **Figure 2b page 6** for the Y dimension. Level the drive side and non-drive side bracket with each other along the Y dimension line and securely tighten fasteners.
- ▶ Anchor Adjustable Support Brackets to sufficient substructure using supplied fasteners listed in **Table 1 page 7**.

- (3) 1/2"-13 X 1-1/4" HEX HEAD BOLT
- (6) 1/2" FLAT WASHERS
- (3) 1/2" LOCK WASHERS
- (3) 1/2" HEX NUTS

- (3) 5/16" -18 X 1" FLAT HEAD SCRE
- (6) 5/16" FLAT WASHERS
- (3) 5/16" LOCK WASHERS
- (3) 5/16" HEX NUTS

NOTE

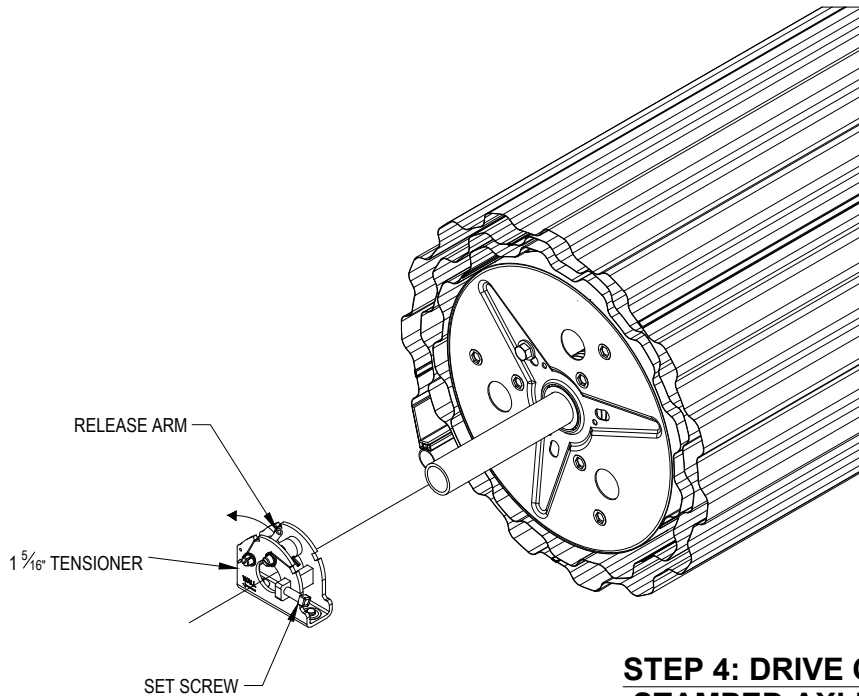
STEP 4: STANDARD NON-TENSION AXLE SUPPORT SEE FIGURE 13: STEP 4: TENSION AXLE SUPPORT OPTION SEE FIGURE 12.

STEP 4: NON-DRIVE SIDE (OPTIONAL) TENSION AXLE SUPPORT

- ▶ With arrow pointing toward wall rotate Release arm forward to release tension. Slide tensioner over axle, until approximately 2-7/8" of axle is outside of tensioner. Allow release arm to rotate back to holding position. See Figure 12.
- ▶ Tighten set screw when in place.

WARNING!

TENSIONER ASSEMBLY MUST BE ORIENTED ON AXLE WITH THE ARROW POINTING TOWARD THE WALL. IF THIS IS NOT DONE, IT WILL NOT OPERATE AS DESIGNED, WHICH MAY CAUSE SERIOUS INJURY OR DEATH DUE TO THE DOOR SUDDENLY LOSING SPRING TENSION AND RAPIDLY MOVING DOWNWARD.

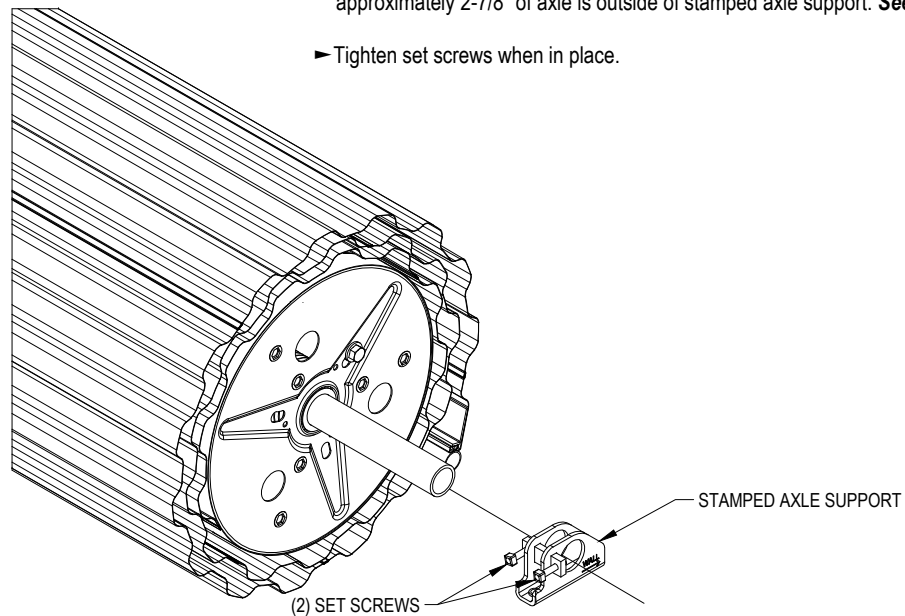


**FIGURE 12:
TENSION AXLE SUPPORT
(OPTIONAL)**

STEP 4: DRIVE OR NON-DRIVE SIDE STANDARD STAMPED AXLE SUPPORT

- ▶ With arrow pointing toward wall, slide stamped axle support over axle until approximately 2-7/8" of axle is outside of stamped axle support. See figure 13.
- ▶ Tighten set screws when in place.

**FIGURE 13:
STANDARD STAMPED
AXLE SUPPORT
(USE THIS DETAIL FOR
BOTH SIDES.)**



NOTE

STEP 5: SEE FIGURE 14 OR 15 BASED ON THE OPERATOR SUPPLIED. STEP 5: PUSH UP SEE FIGURE 13.

STEP 5: DRIVE SIDE SPROCKET AND AXLE SUPPORT FOR POCKET WHEEL CHAIN HOIST

- ▶ Fasten supplied sprocket to drum with (3) 3/8" - 16 x 1-1/2" grade 5 hex bolts and 3/8" lock washers.
- ▶ Slide Pocket Wheel Chain Hoist onto axle. Align sprockets. Tighten set screws.
- ▶ With arrow pointing toward wall, slide stamped axle support over axle until approximately 2-7/8" of axle is outside of stamped axle support. *See figure 14.*
- ▶ Tighten set screws when in place.

FIGURE 14:
4:1 POCKET WHEEL CHAIN HOIST

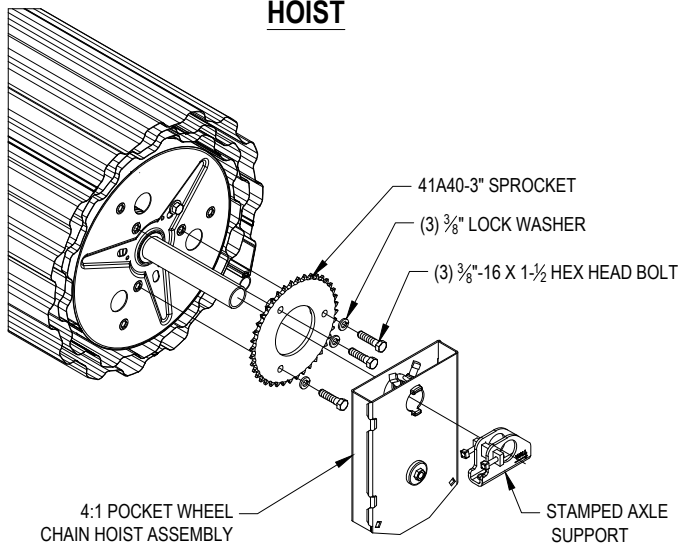
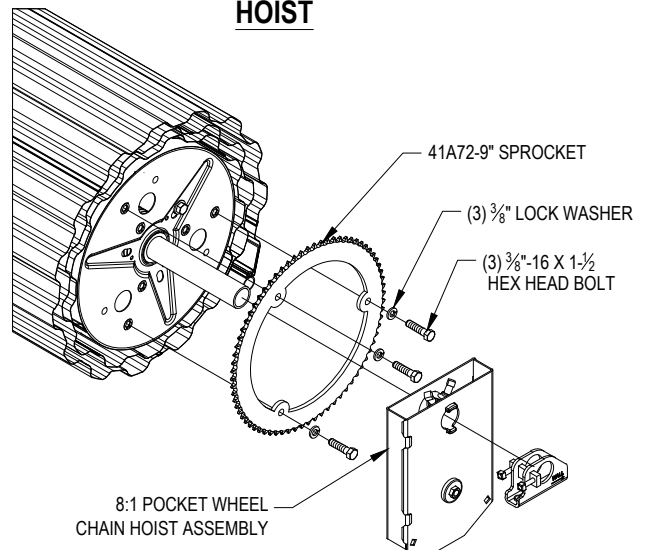


FIGURE 14:
8:1 POCKET WHEEL CHAIN HOIST



STEP 5: DRIVE SIDE SPROCKET AND AXLE SUPPORT FOR 2000R-72 OR 40 AND ELECTRIC OPERATOR

- ▶ Fasten supplied sprocket to drum with (3) 3/8" - 16 x 1-1/2" grade 5 hex bolts and 3/8" lock washers
- ▶ Slide stamped axle support over axle, with arrow pointing toward wall, until approximately 1-3/8" of axle is outside of stamped axle support. *See Figure 15.*
- ▶ Tighten set screws when in place.

FIGURE 15:
2000R-40

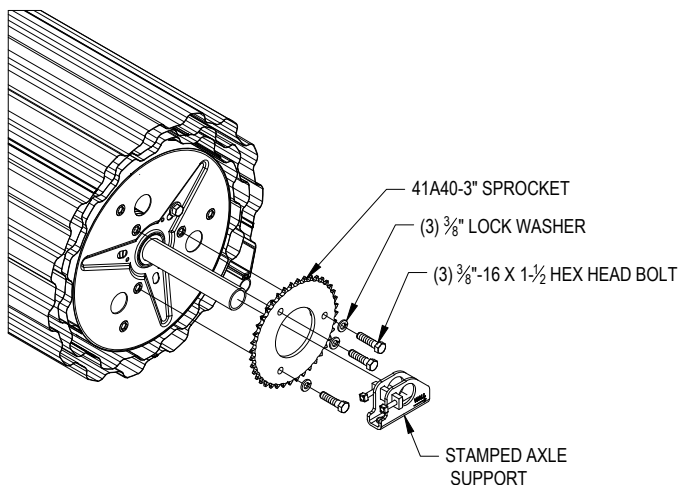
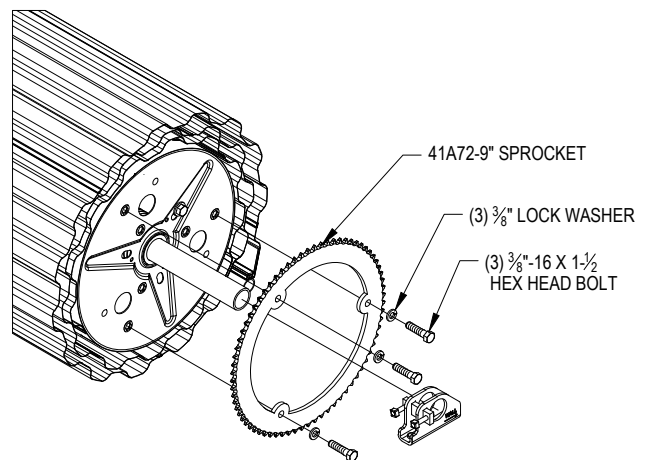


FIGURE 15:
2000R-72 AND ELECTRIC OPERATOR



WARNING!

BEFORE LIFTING DOOR INTO POSITION, ASSURE THAT ALL SET SCREWS ARE TIGHTENED TO ADEQUATELY SECURE AXLE SUPPORTS. FAILURE TO SECURE WILL RESULT IN FALLING PARTS WHICH WILL LEAD TO SERIOUS INJURY OR DEATH.

STEP 6: LIFTING DOOR ASSEMBLY

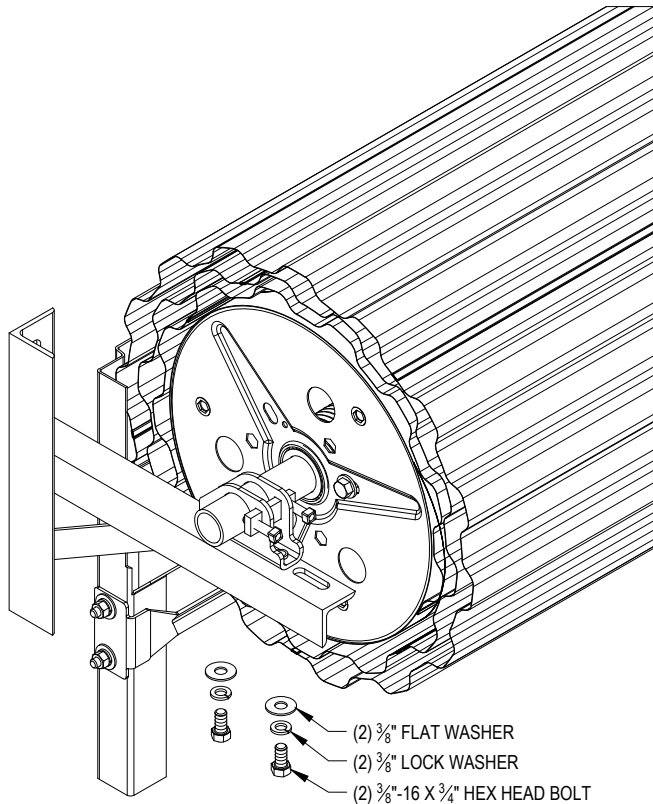
- ▶ Raise door using appropriate lifting equipment, assuring a protective barrier is maintained between product and any surface or object that it may come into contact with.
- ▶ Door should be positioned as close as possible to the header and still be able to rotate and clear bottom bar.
- ▶ Each end of door should be equal distance from the header and the curtain must be centered in the opening.

WARNING!

DO NOT ALLOW DOOR ASSEMBLY TO ROLL OFF BRACKETS OR MOVE SIDWAYS OFF EDGE OF BRACKET. IF DOOR FALLS, SERIOUS INJURY OR DEATH AND/OR DAMAGE TO DOOR CAN RESULT.

STEP 7: NON-DRIVE SIDE

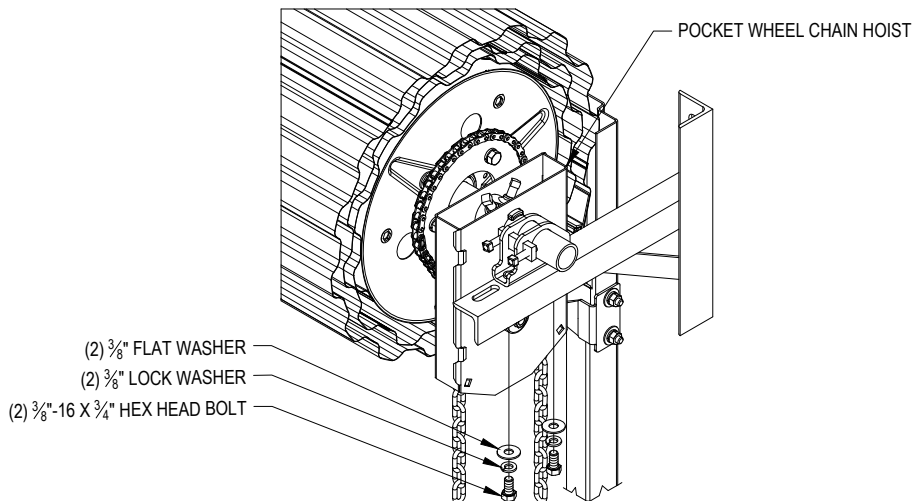
- ▶ Attach the Stamped Axle Support to the Standard Support Bracket using two (2) 3/8 - 16 x 3/4" grade 5 hex bolts, (2) 3/8" lock washers and (2) 3/8" flat washers.



**FIGURE 16:
NON-DRIVE SIDE**

STEP 8: DRIVE SIDE 4:1 & 8:1 POCKET WHEEL CHAIN HOIST (4:1 SHOWN)

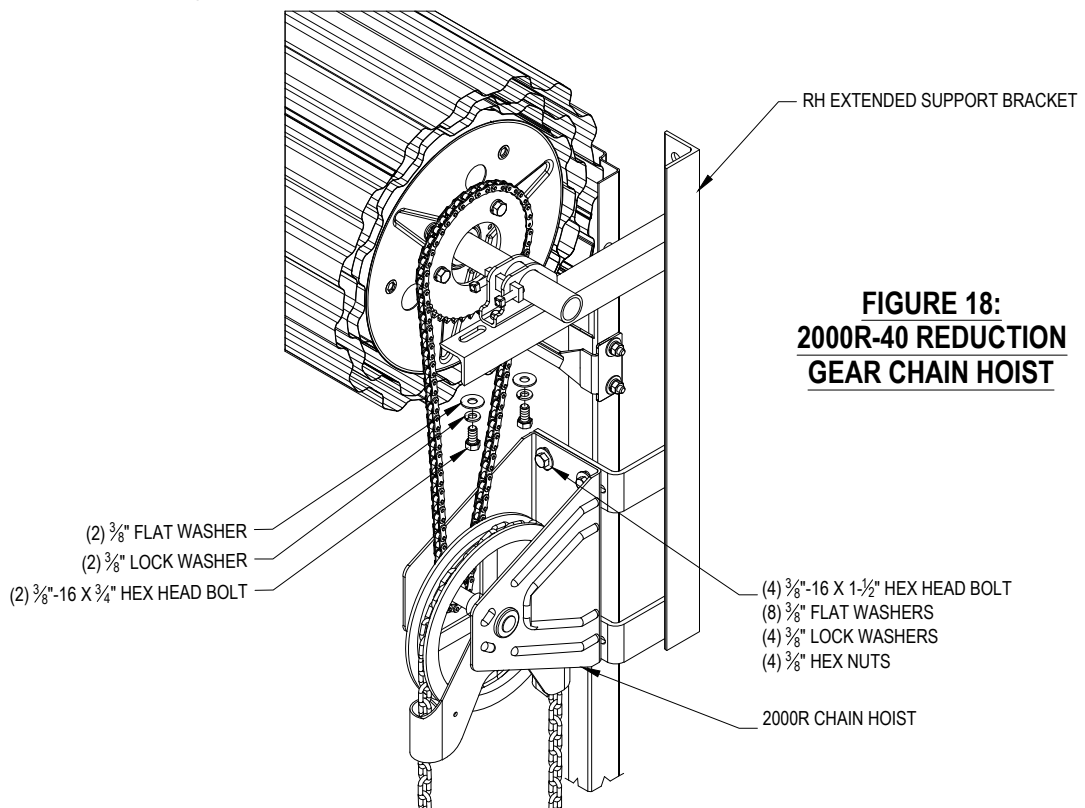
- ▶ Attach stamped axle support to Standard Support Bracket using (2) 3/8" - 16 x 3/4" grade 5 hex bolts, (2) 3/8" lock washers and (2) 3/8" flat washers.
- ▶ Verify drum sprocket and chain hoist sprocket are aligned & that curtain and barrel are centered between guides. Loosen set screws and adjust as necessary. Install the #41 roller chain and master link around both sprockets.
- ▶ Tighten set screws on the Pocket Wheel Assembly after the tension has been adjusted. (Step 9.)
- ▶ Feed hand chain over chain pocket wheel and through hoist. Connect ends of hand chain, being careful not to twist chain. Hand chain may be lengthened or shortened as necessary.
- ▶ Install hand chain keeper on wall or jamb.



**FIGURE 17:
4:1 POCKET WHEEL
CHAIN HOIST**

STEP 8: 2000R-40 & 2000R-72 REDUCTION GEAR CHAIN HOIST (2000R-40 SHOWN)

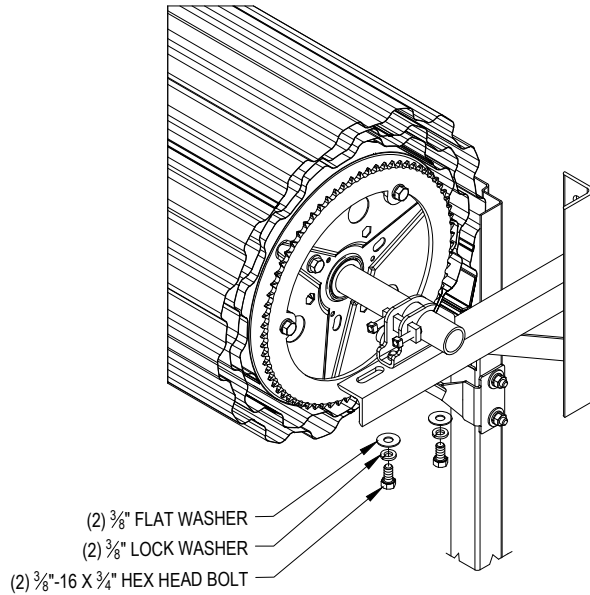
- ▶ Attach stamped axle support to Extended Support Bracket using (2) 3/8" - 16 x 3/4" grade 5 hex bolt, 3/8" lock washer and 3/8" flat washer.
- ▶ Mount Chain Hoist Assembly to the Extended Support Bracket Mount Clips using (4) 3/8" - 16 x 1 1/2" grade 5 hex bolts, (8) 3/8" flat washers, (4) 3/8" lock washers and (4) 3/8" -16 grade 5 hex nuts.
- ▶ Verify drum sprocket and chain hoist sprocket are aligned & that curtain and barrel are centered between guides. Loosen set screws and adjust as necessary. Install the #41 roller chain and master link around both sprockets.
- ▶ Feed hand chain over chain pocket wheel and through hoist. Connect ends of hand chain, being careful not to twist chain. Hand chain may be lengthened or shortened as necessary.
- ▶ Install hand chain keeper on wall or jamb.



**FIGURE 18:
2000R-40 REDUCTION
GEAR CHAIN HOIST**

STEP 8: ELECTRIC OPERATOR

- ▶ Attach stamped axle support to door bracket using two (2) each 3/8" - 16 x 3/4" grade 5 hex bolts, 3/8" lock washers and 3/8" flat washers.



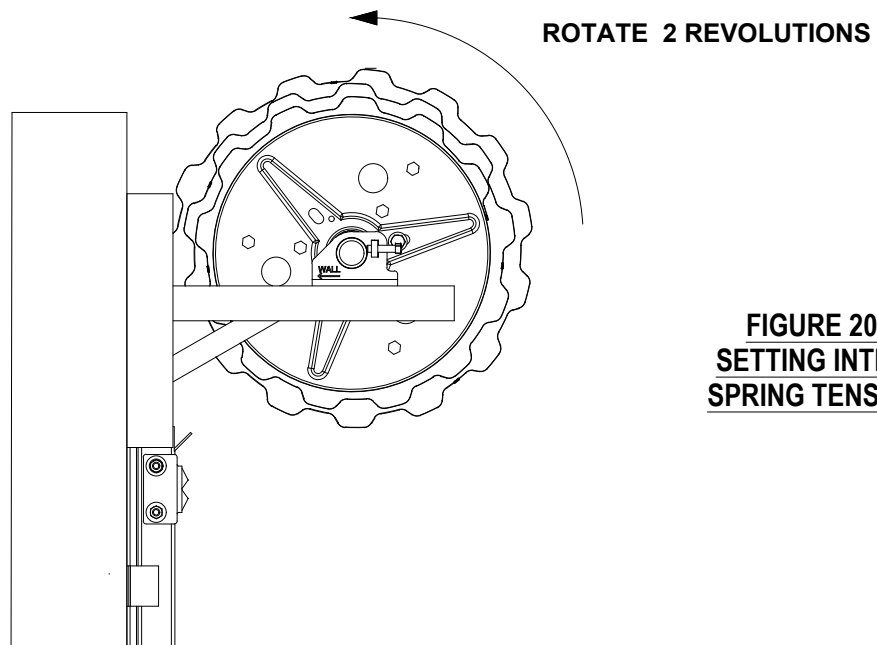
**FIGURE 19:
ELECTRIC OPERATOR DRIVE SIDE**

STEP 9: SETTING INITIAL SPRING TENSION

- ▶ Rotate door two (2) revolutions in the direction that would send the bottom bar down through the guides.
- ▶ While firmly holding the door at the bottom bar, cut the tape and plastic wrap that holds the door in a coil. Direct the bottom bar down into the guides, stopping just past the head stop area.

WARNING!

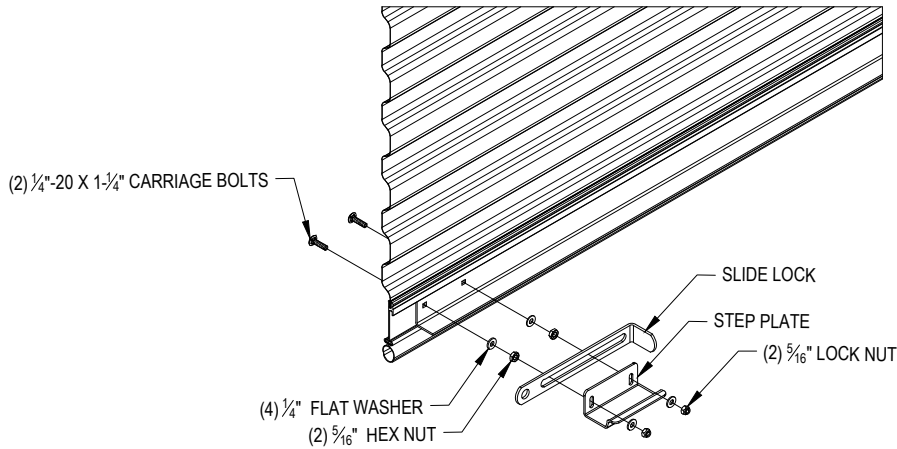
EXTREME SPRING TENSION CAN CAUSE SERIOUS INJURY OR DEATH. INSTALLATION, REPAIRS AND ADJUSTMENTS MUST BE MADE BY A TRAINED ROLLING SERVICE DOOR SYSTEMS TECHNICIAN USING PROPER TOOLS AND INSTRUCTIONS. DOOR MUST BE FULLY OPEN WHEN MAKING ADJUSTMENTS.



**FIGURE 20:
SETTING INITIAL
SPRING TENSION**

STEP 10: SLIDE LOCK AND STEP PLATE

- ▶ Lower bottom bar and install slide lock and step plate using (2) 1/4" - 20 x 1-1/4" carriage bolts, (2) 5/16" - 18 hex nuts, (4) 1/4" flat washers and (2) 1/4" - 20 nylon insert lock nuts. Do this at both ends of bottom bar. **See figure 21.**
- ▶ For push-up operation only, install rope in one of the holes at the center of the horizontal leg of the bottom bar angle.



**FIGURE 21:
SLIDE LOCK & STEP PLATE**

STEP 11: POSITION DOOR

- ▶ Fully open door.
- ▶ At both ends of the door, slightly loosen the 3/8" X 3/4" hex bolts that fasten the axle support, and chain hoist to brackets.
- ▶ Push door assembly toward header leaving enough room for door to rotate freely. Each end of door to be an equal distance from the header. Curtain is to be centered in opening.
- ▶ Tighten securely all 3/8" - 16 x 3/4" hex head bolts loosened in above step.
- ▶ Tighten all 3/8" - 16 square head setscrews in axle support at both ends of door.

STEP 12: CHECK DOOR OPERATION

- ▶ Cycle door by raising and lowering door to its fully closed and fully opened position.
- ▶ Set limits of electrically operated doors at this time.
- ▶ Evaluate spring tension. If adjustments to spring tension are required, **Proceed to Step 13.**

NOTE: BEFORE CYCLING DOOR TO TEST DOOR OPERATION, ASSURE THAT ALL FASTENERS AND SET SCREWS ARE TIGHTENED AND SECURING ALL COMPONENTS.

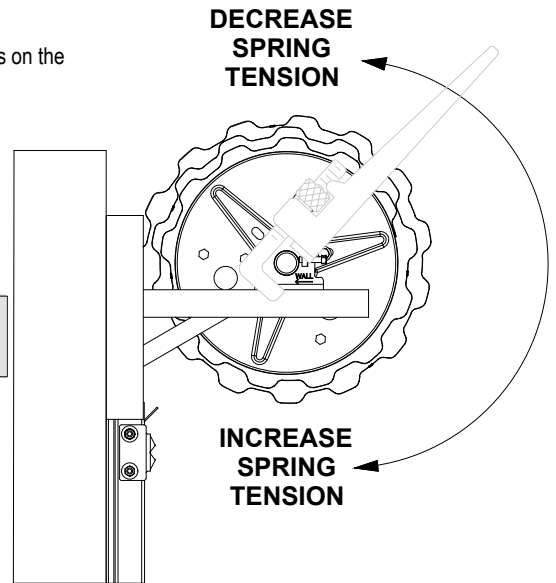
WARNING!

EXTREME SPRING TENSION CAN CAUSE SERIOUS INJURY OR DEATH. INSTALLATION, REPAIRS AND ADJUSTMENTS MUST BE MADE BY A TRAINED ROLLING SERVICE DOOR SYSTEMS TECHNICIAN USING PROPER TOOLS AND INSTRUCTIONS. DOOR MUST BE FULLY OPEN WHEN MAKING ADJUSTMENTS.

STEP 13: ADJUST SPRING TENSION (if required)

- ▶ If door closes easily but is hard to open then more tension is required.
- ▶ If door is hard to close but easy to open then less tension is required.
- ▶ Each person should firmly place a large pipe wrench on the axle. Loosen the set screws on the axle supports and the pocket wheel reduction drive if applicable.
- ▶ Pull down on wrench to increase tension or push up on wrench to decrease tension.
- ▶ Tighten set screws on axle supports and the pocket wheel reduction drive if applicable.
- ▶ Test door and repeat the above steps as necessary.

**FIGURE 22:
ADJUST SPRING TENSION**



WARNING!

TWO PEOPLE REQUIRED TO ADJUST DOOR TENSION SAFELY.

STEP 14: PRODUCT SAFETY LABELS

- ▶ Visual ✓ for RDD-201 on tension bracket. (page 18)
- ▶ Visual ✓ for RDD-204 on bottom bar. (page 18)
- ▶ Install RDD-202 door drive side, guide or jamb. (page 18)

- ▶ ASTA America requires the following product safety/labels to be in place and/or installed to fully complete installation.
- ▶ Any case where product safety labels are missing or damaged, contact ASTA America immediately to obtain replacements.

PRODUCT SAFETY LABELS

WARNING

Moving door could result in death or serious injury
Do NOT close door until doorway is clear

SAFETY INSTRUCTIONS

- Control the speed of the door during manual operation.
- Do not stand or walk under moving door.
- Keep doorway clear and in full view while operating door.
- Do NOT permit children to play on, near, or with door, or operate door controls.
- Unlock door before opening door.
- Sensing devices on motor operated doors should be tested frequently.
- Adjustments or repairs must ONLY be made by a trained door systems technician using proper tools and instructions.
- Visually inspect door and hardware monthly for worn and/or broken parts and check if door operates freely. DO NOT operate a door with a broken spring.

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.

12/07 RDD-202 ©

RDD-202 Rolling Door Safety Label

WARNING

Components under extreme spring tension could result in death or serious injury.

SAFETY INSTRUCTIONS

- Repairs and adjustments must be made by a trained rolling door systems technician using the proper tools and instructions.
- Door must be fully opened when making adjustments.

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.

12/07 RDD-201 ©

Order # _____

RDD-201 Tension Safety Label

WARNING

Moving door could result in death or serious injury.
Do NOT close door until doorway is clear.

SAFETY INSTRUCTIONS

- Control the speed of the door while manually operating.
- Do not stand or walk under moving door.
- Keep doorway clear and in full view while operating door.
- Do NOT permit children to play on, near, or with door, or operate door controls.
- Unlock door before opening door.
- Sensing devices on motor operated doors should be tested frequently.
- Adjustments or repairs must ONLY be made by a trained door systems technician using proper tools and instructions.
- Visually inspect door and hardware monthly for worn and/or broken parts and check if door operates freely. DO NOT operate a door with a broken spring.

Attach label to bottom bar.
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.

12/07 RDD-204 ©

RDD-204 Rolling Door Bottom Bar Label

Operation and Maintenance Manual

The following manual is provided to evaluate the operational performance and future maintenance of ASTA America Rolling Sheet door product line. ASTA America mandates rolling sheet door product installation by trained rolling door technicians and future maintenance by experienced/qualified personnel. Specific parts, components, assemblies, etc. that are determined to be defective, worn, or unsafe by performance evaluations or preventative maintenance programs must result in rolling sheet door assembly taken out of service. All repairs, part replacements or adjustments must be made by trained rolling door technicians to place rolling sheet door assembly back into service. It is **MANDATORY that all** ASTA America door technicians and other technicians, installers and future maintenance staff comply fully with all safety information, procedures, and instructions contained in this manual. **Failure to do so could result in premature part/component failure resulting in serious injury or death to others** and, with respect to ASTA America door technicians, immediate termination of employment

Adjustments, part replacement, repairs, etc. must be performed by trained rolling door technician

ROLLING SHEET DOOR PERFORMANCE EVALUATION

- Rolling Door operation should be easy at/near the open and closed positions. Rolling Door may require more effort to open through the middle portion of travel.
- Rolling Door operation to the open position should result in bottom bar angle resting against head stops and remain in the open position.
- Rolling Door operation should not exceed 35lb. of force for hand chain operation, and 30 lb. for manual operation.
- Rolling Door operational balance evaluation:

If door operation is easy to close, but hard to open; spring tension needs to be increased

If door operation is hard to close, but easy to open; spring tension needs to be decreased

Spring tension adjustments must be made by trained rolling door technician. Refer to Rolling Door installation instructions for tension adjustment procedure.

▲ **WARNING: Extreme spring tension can cause serious injury or death** ▲

- Rolling Door electrical motor operation should be evaluated quarterly.
- Prior to Rolling Door electrical motor operation assure that doorway is clear and in full view before and during complete operation cycle.
- UL 325 requires constant pressure to close for doors without sensing edges or photoelectric sensors/eyes.
- Sensing devices should be tested at least weekly. Sensing edges should be tested at both ends to evaluate proper operation. Photoelectric eyes must be tested by breaking beam to evaluate proper operation.
- Evaluate operator limit setting at door travel open and closed positions. If operator limit setting has become out of sync with door open and close positions, refer to operator installation instructions to reset limits to an appropriate setting in relationship to door open and closed positions.
- If at any time during Rolling Door electrical motor operation, motor sounds like it is under excessive load or stress to open the door:
 - ▲ Close door using motor operator. Engage motors manual operation feature to manually operate the door to the open position.
 - ▲ If door operation is heavy, cannot be completely opened or hard to open and will not stay in open position; Spring Assembly counterbalance evaluation is required, which may require adjustment or replacement.
 - ▲ **Spring tension adjustments or repairs must be made by trained rolling door technician. Refer to Rolling Door installation instructions for tension adjustment procedure.**
 - ▲ **Determination of counterbalance repair must result in Rolling Door taken out of service until required repairs are complete.**

VISUAL INSPECTION

Guides:

- Guide fasteners must be present and secured in each existing hole/slot provided with fasteners supplied by ASTA America.
- Guides must not be bent, crushed, or damaged in a way that binds the curtain and/or bottom bar assembly at any portion of travel.
- Head stops must be securely fastened in place at top of guide to prevent bottom bar from traveling out of the top of the guides when rolling door curtain is fully raised to the open position.
- Inspect guide wear strip (when provided) for excessive cracking, tearing, wear or absence.

Curtain:

- During rolling door operation, curtain and bottom bar assembly must move freely inside guides and not contact header or ceiling.
- Latches, Lift Clips, Slide locks, Wind locks, etc. (when provided) must always be securely fastened to curtain assembly.
- **Wind locks should never be removed from curtain.**
- Inspect curtain wear material or felt tape (when provided) for excessive tearing, wear, or absence.
- Inspect weather seals; Top Draft Stop, side draft stop, brush (when provided)

Brackets/Mounting Plates:

- All Fasteners must be present and secured with fasteners detailed in installation instructions.
- Brackets & Mounting plates (when provided) must not be bent, or damaged in a way that adversely effects the safe operation of door assembly.

Hood Assembly:

- When provided, all fasteners attaching hood endcaps, hood support (when provided), and hood to wall must be secure.
- Hood endcaps or hood must not be bent or crushed in a manner which binds the curtain thus hindering the proper operation of rolling door.

Chain Hoist Gears:

- Fasteners attaching all chain hoist components, & gears must be securely fastened.
- Visually inspect gears for broken, cracked, missing or extremely worn teeth.
- Clear debris from gear teeth.

Sprockets and Roller Chain Drive:

▲ Sprocket misalignment will result in excessive wear and could cause roller chain to jump off of sprocket during operation or lead to premature failure of roller chain assembly.▲

- Visually inspect sprocket alignment between Rolling Door sprocket and output sprocket of motor operator. Align sprockets and tighten set screws as needed.
- Inspect roller chain for excessive wear or damage.
- Roller Chain Lubrication: SAE 20 oil to be used for service temperatures between 32° F and 104° F. Apply oil where chain tension is minimal.
- Check fasteners and tighten as required.

Tensioning Devices & Axle Supports:

- Fasteners attaching all tensioning devices and axle supports must be securely fastened.
- Set screws securing axle must be securely fastened.
- Inspect components for damage or deformity.

▲ Determination of tensioning device repair or replacement must result in Rolling Door taken out of service until required repairs are complete. Repair or replacement must be performed by trained rolling door technician▲

▲ Product safety labels should be periodically inspected and cleaned by the product user as necessary to maintain good legibility for safe viewing distance.

Product safety labels should be replaced by the product user when they no longer meet the legibility requirements for safe viewing distance. In any case where products have an extensive expected life or where exposed to extreme conditions, the product user should immediately contact ASTA America to obtain replacements.