



DOORS & BUILDING COMPONENTS  
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## MINI DOOR INSTALLATION INSTRUCTIONS SERIES 650

### IMPORTANT NOTICE!!!

In the following text, the word:

**WARNING** means that serious injury or death can result from failure to follow instructions.

**CAUTION** means that minor injury or property damage can result from failure to follow instructions.

**NOTE** means that special attention should be given to the instructions.

**CAUTION**

Use proper lifting equipment and correct procedures to avoid injury.

**DO NOT CUT TAPE OR PLASTIC**, which holds the door in a roll. You will be told at a later time exactly when to cut these items. No guarantee will be given or responsibility accepted by the manufacturer if door is not erected as instructed. For proper operation, follow the instructions given. Please review all instructions before starting actual work.

### WARNING

Overhead doors are large, heavy objects that move with the help of springs under high tension. Since moving objects and springs under tension can cause injuries, your safety and the safety of others depends on your reading and following the information in these instructions. DBCI recommends that only properly trained personnel should install tension doors.

<b>POTENTIAL HAZARD</b>	<b>EFFECT</b>	<b>PREVENTION</b>
MOVING DOOR	Can cause serious injury or death	Keep people clear of opening while door is moving. Get help or use support when lifting new door into place.
HIGH SPRING TENSION	Can cause serious injury or death	Installation, repairs and adjustments must be made by a trained service person using proper tools, methods and instructions. Before winding torsion spring, make sure door is fully open and curtain is wrapped on drums.

**1 CHECK DOOR OPENING.**

**A** Check the width and height of the door opening and verify the measurements against the sizes shown on the door packing slip.

**B** Check door jambs for plumb, to ensure proper door alignment and performance.

**C** Check header and floor for level, to ensure proper door alignment and performance.

**D** Check to be sure that there is sufficient side clearance at the jambs and at the head room above the door opening. (See table A).

**E** The jamb surface, to which the guide is to be attached, should be flush for mounting purposes.

**MINIMUM CLEARANCE**

OPENING HEIGHT	HEAD ROOM	SIDE ROOM
THRU 7'-4"	15-1/2"	3-1/4"
THRU 8'-8"	16"	3-1/4"
THRU 10'-0"	18"	3-1/2"

**TABLE A**

## 2 DOOR ARRANGEMENT.

**A** Lay door on a clean floor inside of building and in front of opening. See Figure 1.

**NOTE: Door can be damaged if laid on unclean surface.**

**B** Distribute parts bags, guides, stops and brackets.

## 3 BRACKET TO GUIDE ATTACHMENT.

### NEW SNAP-ON STANDARD BRACKET

Attach each snap on bracket to top of guide by inserting the three bracket hooks into the three rear guide slots (as shown in Figure 2). Strike top of bracket (as shown in Figure 3) until the locking tab in the guide fully engages and secures the bracket. Place one 1/4-20 UNF x 3/4" long carriage bolt and one 1/4-20 UNF KEPS nut into the guide where the head stop will be attached later in step 9. (See Figure 2)

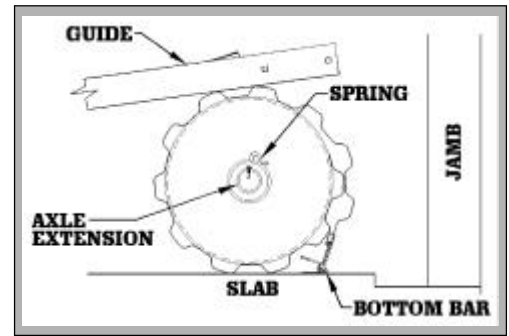
**Note: Do not attach head stop at this time.**

### EXTENDED BRACKET (for doors taller than 8'-8")

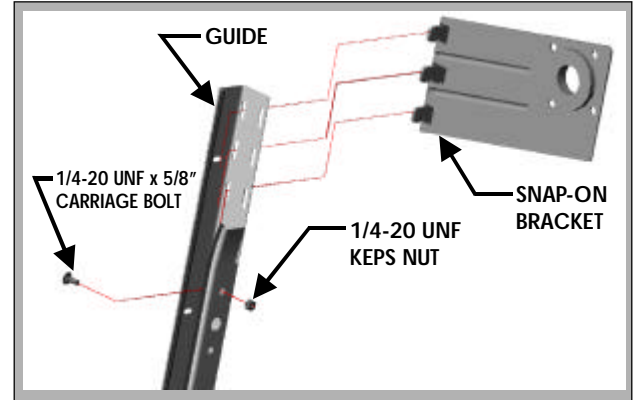
Attach each extended bracket to guide with two 1/4-20UNF x 5/8" long carriage bolts and 1/4-20UNF KEPS nuts. See Figure 4.

**Temporarily** install one 1/4-14UNC x 1" long TEKS screw through the lowest extended bracket angle hole into the back of the guide. (After bracket is installed on jamb, this TEKS fastener will be removed.) Also, place one 1/4-20UNF x 1/2" long carriage bolt and 1/4-20UNF KEPS nut into the guide where the head stop will be attached later, in step 9. (See Figure 5)

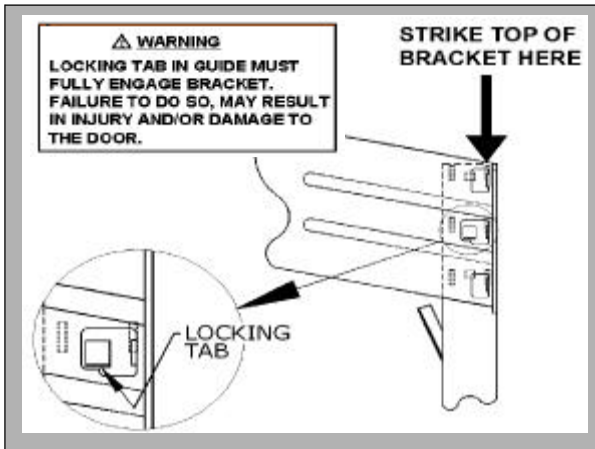
**Note: Do not attach head stop at this time.**



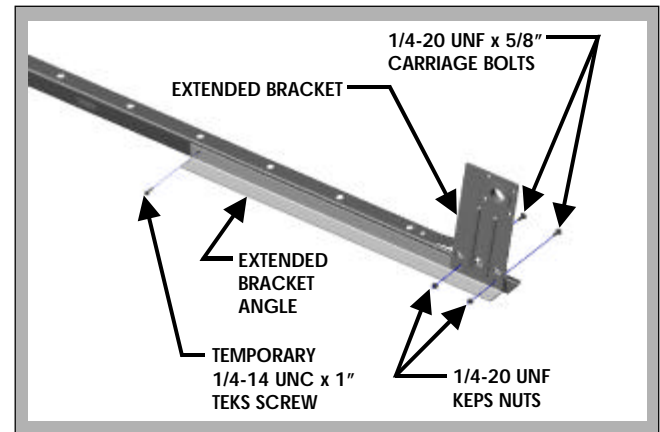
RIGHT END  
Figure 1



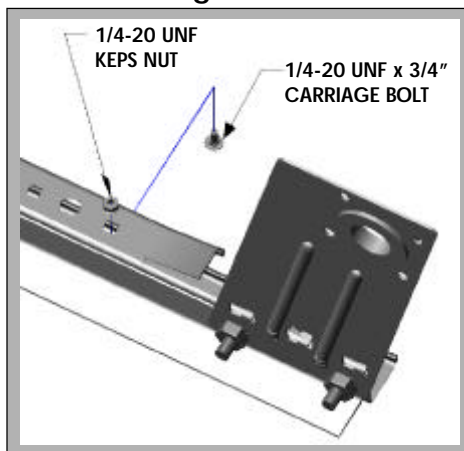
NEW SNAP-ON STANDARD BRACKET  
Figure 2



RIGHT GUIDE AND STANDARD BRACKET  
Figure 3



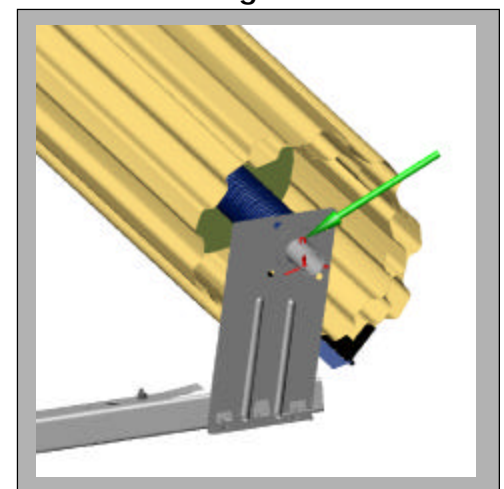
RIGHT GUIDE AND EXTENDED BRACKET  
Figure 4



HEAD STOP PREPARATION  
Figure 5

**WARNING**  
BALL DETENT ON TENSION PIN  
MUST FULLY ENGAGE BRACKET  
(AS SHOWN IN FIGURE 7).

**CAUTION**  
DO NOT REMOVE SMALL  
TEKS SCREW FROM  
THE TENSIONER ASSEMBLY  
(AS SHOWN IN FIGURE 7).



RIGHT END COTTER PIN  
Figure 6



#### 4 BRACKET TO AXLE ATTACHMENT.

Slide brackets onto axle and secure each side with a cotter pin through the holes at each end of the axle. (See Figure 6)

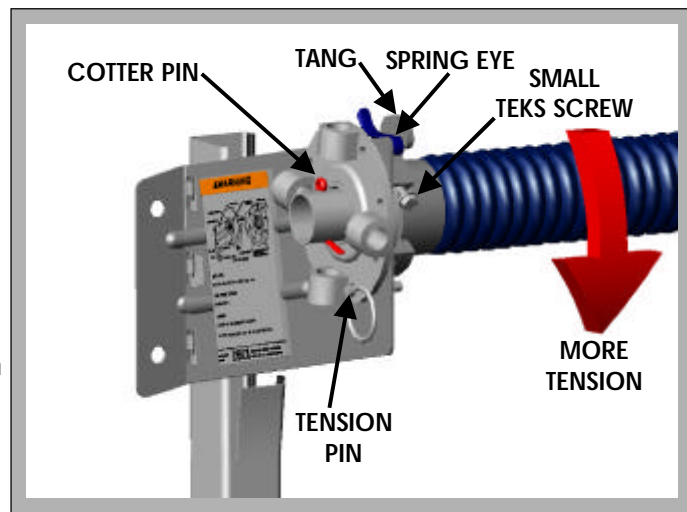
**NOTE:** The bearing may fit snugly around the axle. Tap lightly on the bearing's inner race to move it along the length of the axle. Only the Left Bracket will include the Cast Tensioner Assembly.

#### 5 SPRING ATTACHMENT.

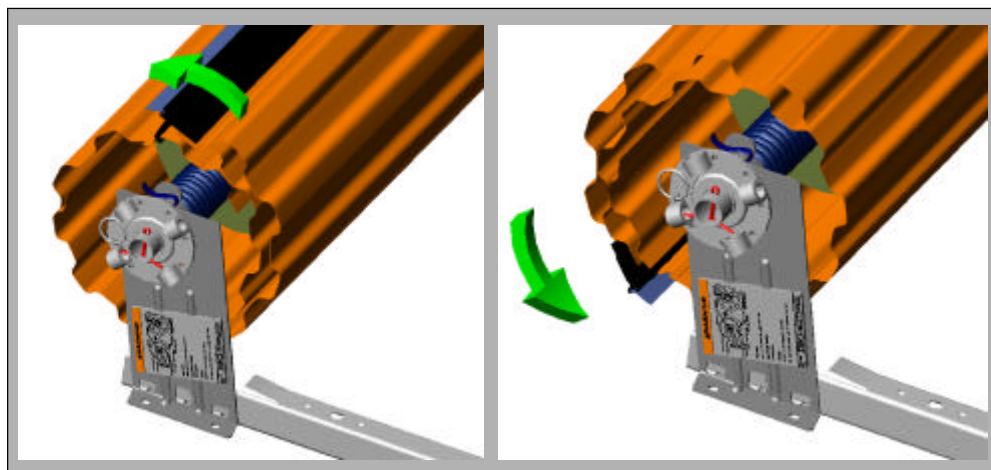
Position bottom bar at the beginning position as shown in Figure 8A. Space tensioner bracket apart from curtain enough to gain access to the spring.

Remove tension pin from tensioner assembly. Pull spring toward and over the tensioner and hold spring. When spring is flush with the tensioner, rotate the tensioner counter-clockwise until the spring eye engages the tensioner tang.

Release spring and rotate the tensioner slightly in the "more tension" direction (indicated by arrow) and install the tension pin fully through tensioner and bracket. (See Figure 7) Rotate the bottom bar ½ a turn in direction shown from the beginning position to the ending position. (as shown in Figure 8B)

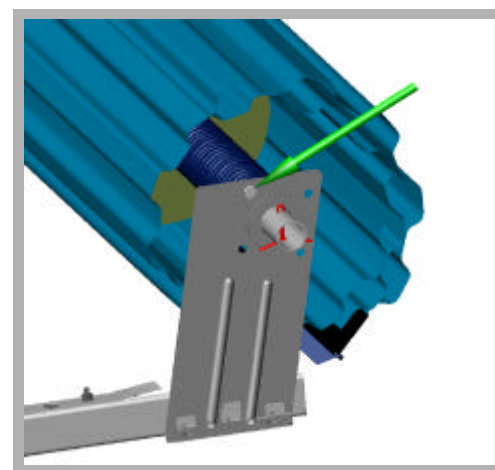


LEFT END COTTER & DETENT PINS  
Figure 7



LEFT END (STARTING POSITION)  
Figure 8A

LEFT END (ROTATED A ½ TURN)  
Figure 8B



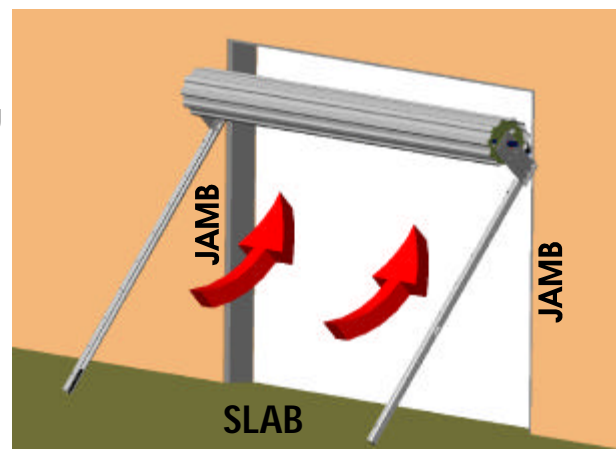
RIGHT END SPRING HOOK  
Figure 9

#### 6 RAISING DOOR ASSEMBLY.

Using two people, move the curtain assembly close to the door jambs, lift it vertically at the areas indicated by the arrows in Figure 9. Lean the curtain assembly against the door jambs, and after ensuring that the guides are the correct width, one person holds the assembly in place, the other person anchors the assembly to the jambs using the middle guide anchor holes.

**WARNING**  
DO NOT LEAVE DOOR UNATTENDED!

**WARNING**  
GUIDES ARE NOT DESIGNED TO SUPPORT CURTAIN WEIGHT DURING A ONE-MAN TILT UP INSTALLATION. ATTEMPTING A ONE-MAN TILT-UP INSTALLATION CAN RESULT IN SERIOUS BODILY INJURY AND/OR DAMAGE TO THE DOOR.

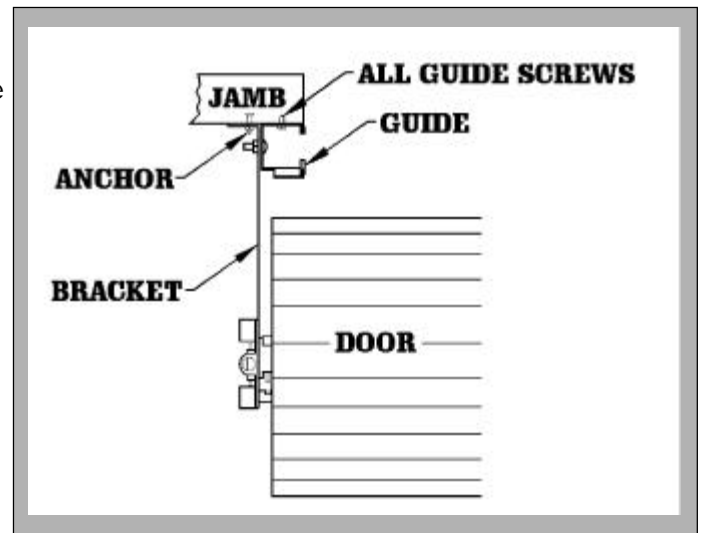


"TWO MAN TILT UP"  
Figure 10

## 7 LEFT GUIDE AND BRACKET INSTALLATION TO JAMB.

Attach left guide and bracket to jamb with fasteners provided. See Table B. Make sure guide is plumb. Locate edge of guide with edge of jamb. (See Figure 11)

**NOTE:** The bottom and middle guide anchor positions must be the correct width. The top anchoring position should be approximately 1/2" wider on each side of the top and 1/4" wider on each side of the bottom, to ensure ease of entry by the curtain as it descends into the guide rails.



TOP VIEW  
Figure 11

ITEMS	JAMB	FASTENERS	DRILL SIZE
Brackets	Concrete or Filled Block	5/16" x 1-1/2" Sleeve Anchor	5/16" Dia.
Guides	Concrete or Filled Block	5/16" x 1-1/2" Sleeve Anchor or 1/4" x 1-1/4" Masonry Screw	5/16" Dia. Rawl 2785 or 2796
Brackets and Guides	Steel-Structural Steel-Rollup Frame Wood	1/4-14 UNF x 1" TEKS Screw 1/4-14 UNF x 7/8" Stitch TEKS Screw 1/4-10 UNC x 1" Lag Screw	None None None

TABLE B

**NOTE:** Three fasteners are provided for each extended bracket.

Three fasteners are provided for each guide for doors thru 8'-8" tall and four for doors over 8'-8" tall.

## WARNING

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

**NOTE:** The welding of guides to jambs is NOT recommended.

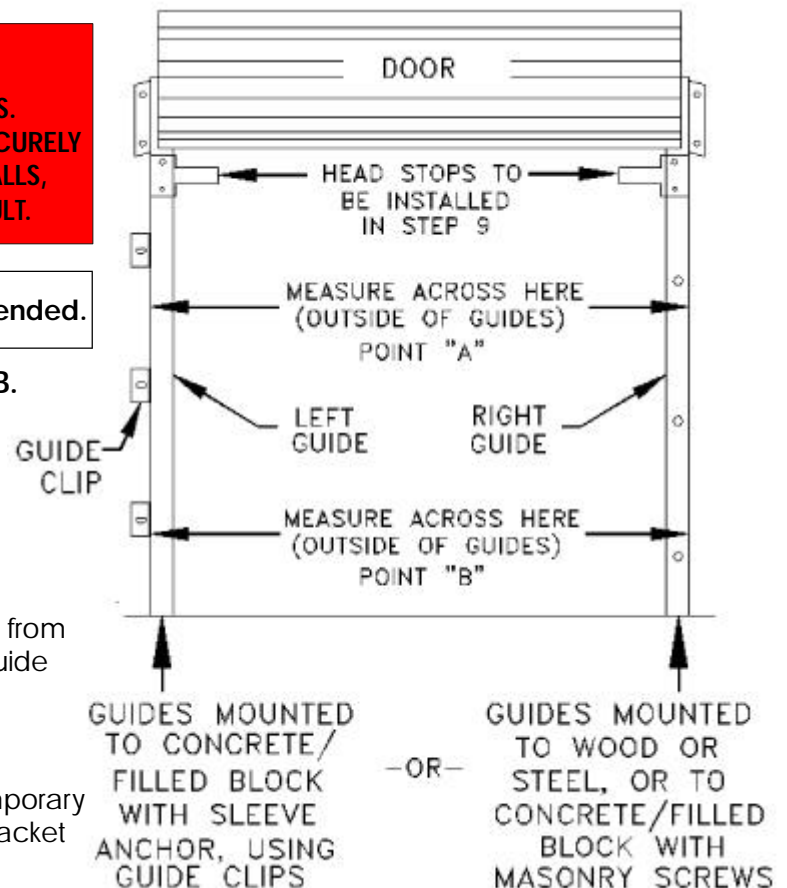
## 8 RIGHT GUIDE AND BRACKET INSTALLATION TO JAMB.

Attach right guide and bracket to jamb. Use a tape measure at the locations indicated in Figure 12 to set the proper guide to curtain end clearance. Add 3/4 to 1 inch to the curtain width and then measure from the outside of the right guide.

### EXAMPLE

If your curtain measures 8'-3" in width, then the distance from the outside of the left guide to the outside of the right guide should be 8'-3 3/4" to 8'-4" at measuring point "A" and 8'-3 1/2" at measuring point "B."

**NOTE:** If extended brackets are used, remove the temporary TEKS screw from the bottom hole of both extended bracket angles at this time.



INSIDE VIEW  
Figure 12

SERIES 650

## 9 SETTING SPRING TENSION.

After the door is completely secured to the building, it is time to tension the spring.

### WARNING

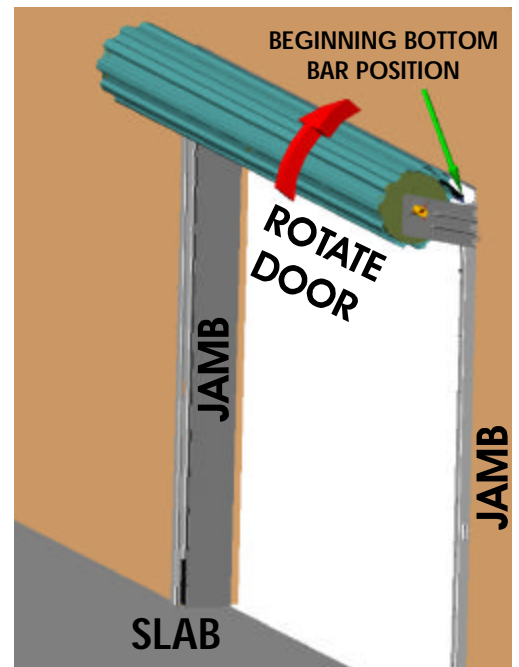
HIGH TENSION SPRING INSTALLATION, REPAIRS AND ADJUSTMENTS MUST BE MADE BY A TRAINED SERVICE PERSON USING PROPER TOOLS, METHODS AND INSTRUCTIONS.

Rotate the door in the direction indicated two full rotations, which total 2-1/4 turns when combined with the 1/4 initial turn added in step 5. See figure 7. **WHILE FIRMLY HOLDING THE DOOR AT THE BOTTOM BAR** cut the tape and plastic which holds the door in a coil.

Roll the curtain down into the guides and secure. Install head stops by using the bolts and nuts that were previously attached to the guides in step number 3. See Figure 14 for head stop location.

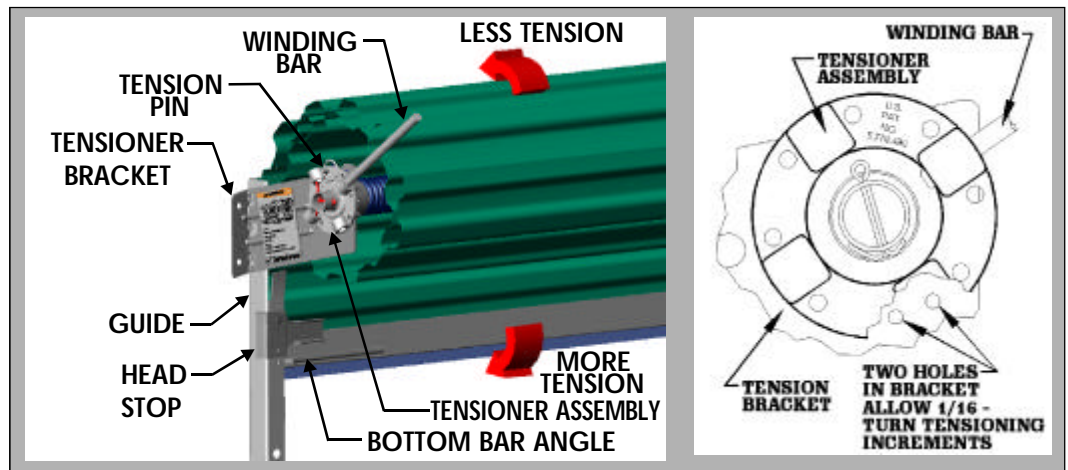
#### Adding the removable Headstops.

- Remove the 1/4-20 UNF KEPS nut from the 1/4- 20 UNF carriage bolt that was attached in step 3 (see Figure 5).
- Place the Headstop on the 1/4-20 UNF Carriage bolt with it's tab facing towards the curtain (as shown in Figure 14) using the 1/4-20 UNF KEPS nut previously removed.
- Tighten the 1/4-20 UNF KEPS nut onto the carriage bolt until secure.
- Repeat the previous steps on the other guide, using the other Headstop included in this package.
- When completed, both Headstops should face each other (as shown in Figure 12).



RIGHT END VIEW  
Figure 13

**WARNING**  
NEVER BOLT HEAD STOPS TO GUIDES AND THEN BEND THEM OUT TO ALLOW PASSAGE OF THE BOTTOM BAR. THIS IMPROPER METHOD COULD RESULT IN THE BOTTOM BAR BY-PASSING THE HEAD STOPS. SHOULD THIS HAPPEN, THE DOOR WOULD RAPIDLY UNCOIL CAUSING SERIOUS INJURY AND/OR DAMAGE TO THE DOOR.



LEFT END  
Figure 14

Raise and lower the door to test the spring balance.

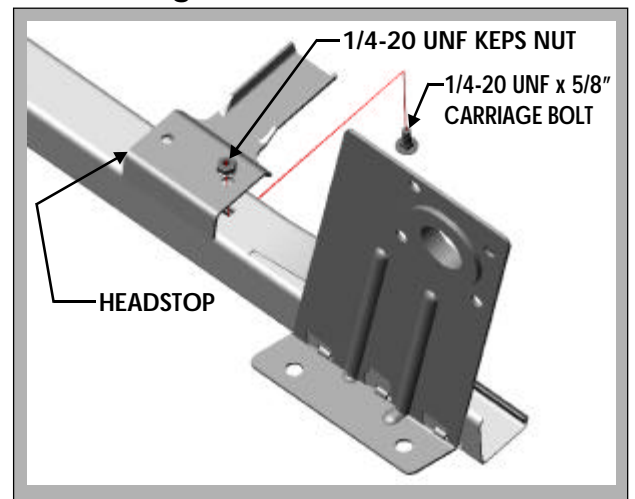
If door is easy to close, but hard to open: Increase spring tension.

If door is hard to close, but easy to open: Decrease spring tension.

If more than 3 turns are required to get proper door operation, please contact DBCI immediately.

#### TO ADJUST SPRING BALANCE FOLLOW THESE STEPS:

- DOOR MUST BE IN FULL OPEN POSITION BEFORE MAKING ADJUSTMENTS.
- Never remove the tension pin without first securing the spring tension with a winding bar.
- Winding bar must be a minimum of 3/8" diameter solid steel rod.
- Rotate the tension device as illustrated in Figure 14.
- Tension pin must be inserted in one of the eight 5/16" diameter holes in the tensioner assembly and must pass through a 17/64" diameter hole in the bracket with a ball-detent pin fully engaged in the bracket.



HEAD STOP MOUNTING  
Figure 15

5)

## 10 HANDLE(S), ROPE AND LATCH INSTALLATION

Attach handle(s), rope and latch assembly to the door. (See Figure 16).

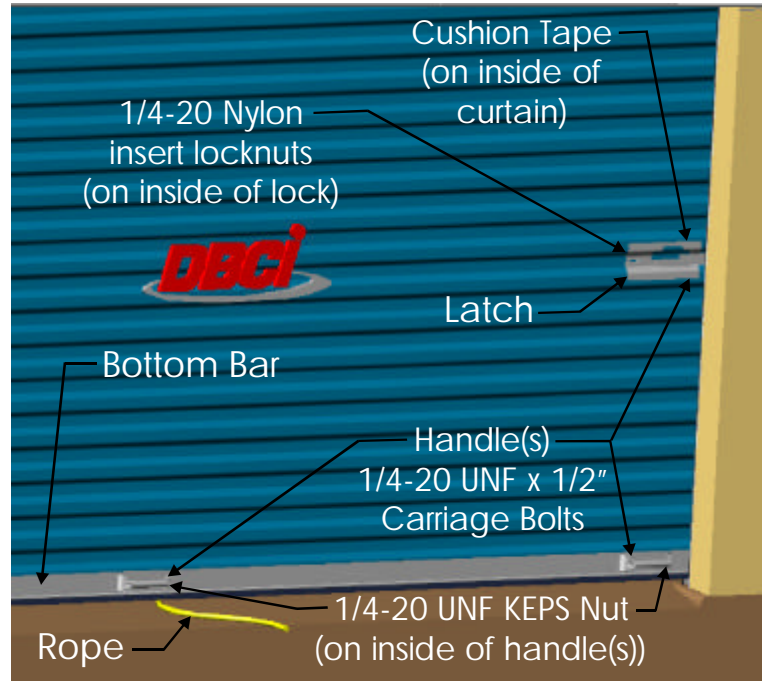
Be sure to use nylon insert locknuts on the latch attachment bolts. If cylinder lock feature is used, attach latch back plate to back of curtain.

Holes are punched in the bottom angle for insertion of the pull rope.

If the standard DBCI Mini Latch is requested, the Latch will be factory installed.

After installing the latch, **ATTACH THE TWO PIECES OF CUSHION TAPE, VERTICALLY ACROSS THE CORRUGATIONS, ON INSIDE OF CURTAIN, OVER THE NUTS WHICH HOLD THE MINI LATCH ONTO THE CURTAIN. THIS TAPE PREVENTS SCRATCHING THE FACE OF THE DOOR.**

**NOTE:** Due to variances in manufacturing and/or site conditions, the latch hole in the guide may require adjusting in the field.



OUTSIDE VIEW

Figure 16

## ADDENDUM TO INSTALLATION INSTRUCTIONS.

### SERIES 500 & 650

FOR OPENING HEIGHTS OVER 8'-8" THRU 10'-0" WITH AN OPENING WIDTH OVER 6'-0" THRU 9'-0", AND ANY HEIGHT DOOR WITH AN OPENING WIDTH GREATER THAN 9'-0" WILL BE SUPPLIED WITH 2 SPRINGS. **BOTH SPRINGS MUST BE PROPERLY ATTACHED TO ENSURE PROPER OPERATION OF DOOR!**

### SERIES 500

FOR 2 SPRING SETUPS REFER TO SECTION #5 OF INSTALLATION INSTRUCTIONS, ENTITLED "SPRING ATTACHMENT." FOLLOW THE INSTRUCTIONS FOR BOTH THE LEFT HAND AND RIGHT HAND SPRING. **BOTH SPRINGS MUST BE PROPERLY ATTACHED TO ENSURE PROPER OPERATION OF DOOR!**

## **MAINTENANCE INSTRUCTIONS**

IN ORDER TO PROMOTE LONGEVITY OF YOUR DBCI DOOR SYSTEM, IT IS RECOMMENDED THAT THE FOLLOWING MAINTENANCE PROCEDURES BE CARRIED OUT EACH TIME A STORAGE UNIT BECOMES EMPTY, OR APPROXIMATELY ONCE A YEAR.

### ASTRAGAL

Periodically wipe the dirt off of the length of the Astragal.

### SPRINGS

Periodic adjustments to the spring tension may be necessary.

Apply a light coat of grease on springs to reduce friction and prevent rust.

### GUIDE STRIPS

Guides are self-lubricating, but must be kept free from dirt to work their best. Wipe dirt from inside of guides to assure smooth operation of doors. A greaseless lubricant, such as silicone spray, may be used.

## TO OUR MANY CUSTOMERS

We at DBCI would like to thank you for making us the industry leader in door and building systems. As always, we endeavor to infuse the highest quality of craftsmanship into all of our products and we hope that this is evident to you, our customers. If you would like a tour of our manufacturing facility, please feel free to contact us at 1 (800) 542-0501. We know that you will enjoy many years of trouble-free service. Again, we thank you.