DBCI
DOORS & BUILDING COMPONENTS

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MINI DOOR WITH SPRING TENSIONER INSTALLATION INSTRUCTIONS SERIES 550 AND 650

IMPORTANT NOTICE

⚠ CAUTION

Use proper lifting equipment and correct lifting procedures to avoid injury.

DO NOT CUT BANDS which hold door in a roll. You will be told at a later time exactly when to cut bands. No guarantee will be given or responsibility accepted by manufacturer if door is not erected as instructed. For proper operation, follow 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 this manual.

POTENTIAL HAZARD	EFFECT	PREVENTION
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 barrel.

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.

1 CHECK DOOR OPENING

A Check width and height of wall opening and verify measurements against sizes shown on door packing slip.
B Check jambs for plumb.
C Check header and floor for level.
D Check for sufficient clearance at jambs and header. See Table A.

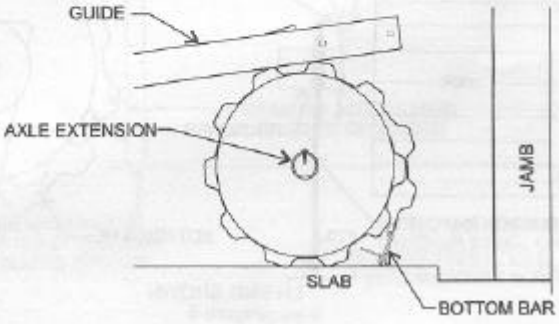
MINIMUM CLEARANCE

OPENING HEIGHT	HEAD ROOM	SIDE ROOM
Thru 7'-4"	13"	3-1/4"
Thru 8'-8"	14"	3-1/4"
Thru 10'-0"	16-1/2"	3-3/4"

Table A

2 DOOR ARRANGEMENT

A Lay door on a clean floor in front of opening, inside of building. See Figure 1.
B Distribute parts bags, guides, stops, and brackets.
C Grease both axle extensions.



RH END SHOWN
Figure 1

3 BRACKET TO GUIDE ATTACHMENT

STANDARD BRACKET

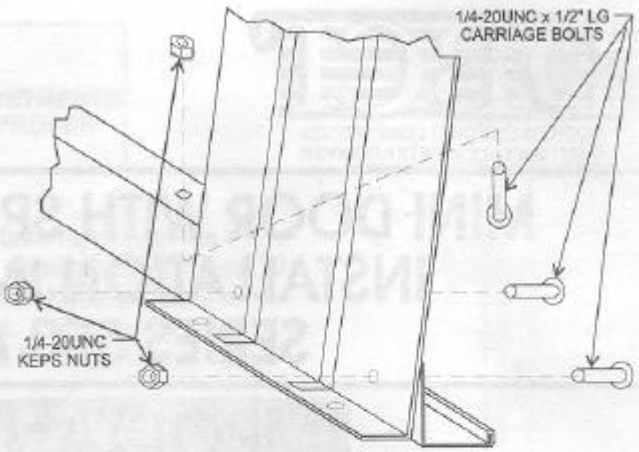
Attach each standard bracket to guide with two 1/4-20UNC X 1/2" LG carriage bolts and 1/4-20UNC KEPS nuts. See Figure 2. Also, place one bolt and nut into the guide where the inside stop will later be attached.

NOTE: Do not attach stop at this time.

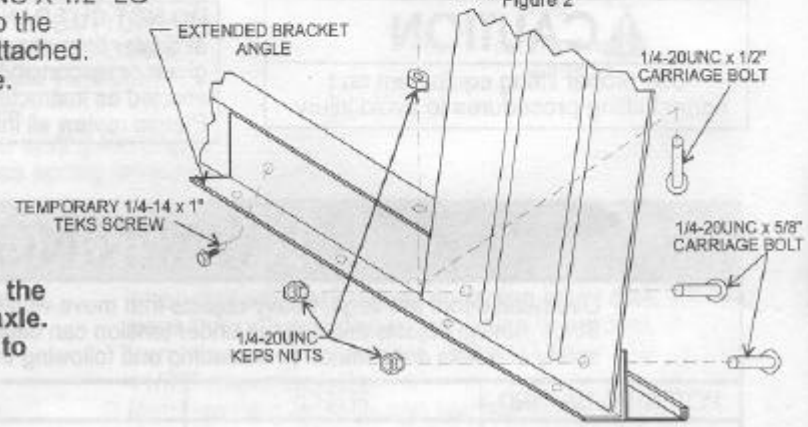
EXTENDED BRACKET

Attach each extended bracket to guide with two 1/4-20UNC X 5/8" LG carriage bolts and 1/4-20UNC KEPS nuts. See Figure 3. **Temporarily** install one TEKS screw through lowest extended bracket angle hole into the back of the guide Also, place one 1/4-20UNC X 1/2" LG carriage bolt and 1/4-20UNC KEPS nut into the guides where the inside stop will later be attached.

NOTE: Do not attach stop at this time.



RH GUIDE AND STANDARD BRACKET SHOWN
Figure 2



RH GUIDE AND EXTENDED BRACKET SHOWN
Figure 3

4 BRACKET TO AXLE ATTACHMENT

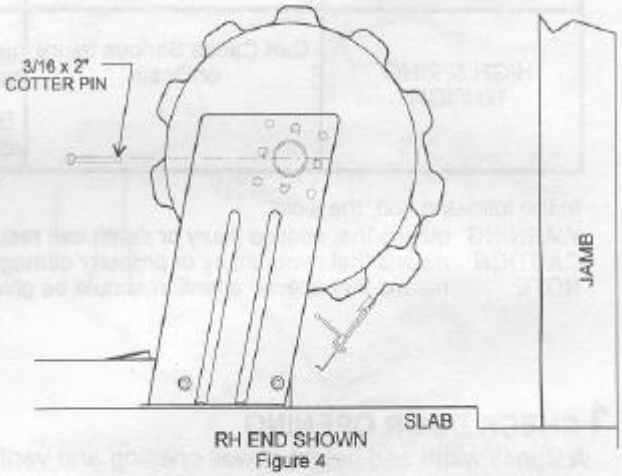
Slide brackets onto axle and secure non-tension end only with cotter pin through hole in axle. See Figure 4.

NOTE: With bearing bracket, (Series 650), the bearing will fit snugly around the axle. Tap lightly on bearing's inner race to move it over the axle.

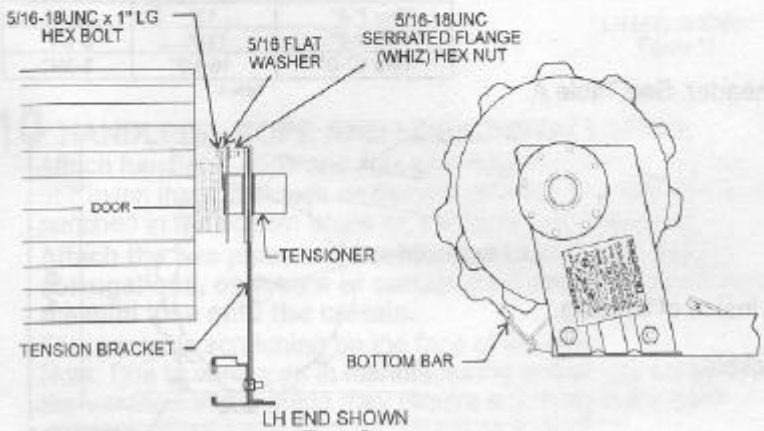
5 SPRING ATTACHMENT

Space tension bracket apart from end of curtain enough to gain access to spring. DO NOT allow bracket to slide off end of axle. Position bottom bar as shown and rotate tensioner to align the single 11/32" diameter hole in the inner most disk with the eye of the spring. Extend spring and attach to disk with 5/16" fasteners. See Figure 5.

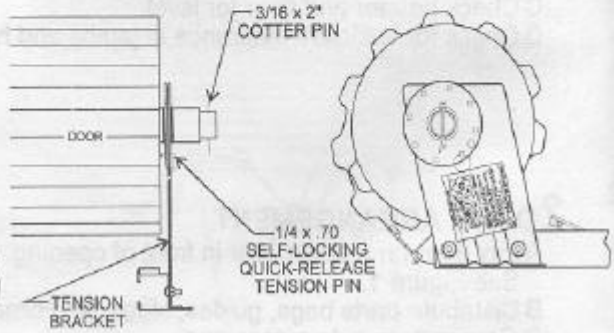
Slide tension bracket back toward curtain and secure with cotter pin through hole in axle. Insert tension pin through one of eight 17/64" diameter holes in outer disk. Tensioner may be rotated 1/16 turn for alignment with one of five holes in bracket. Pin MUST pass through outer disk, bracket and inner disk with ball detent engaging inner disk. DO NOT insert pin in single 11/32" diameter hole. See Figure 6.



RH END SHOWN
Figure 4



LH END SHOWN
Figure 5



LH END SHOWN
Figure 6

6 RAISING DOOR ASSEMBLY

Lift door up and lean it against jambs. See Figure 7.

⚠ WARNING

DO NOT LEAVE DOOR UNATTENDED!

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 DOOR.

RH END SHOWN
Figure 7

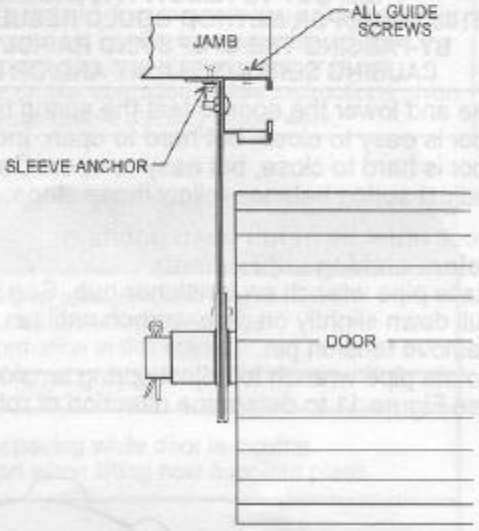
7 LEFT HAND GUIDE AND BRACKET INSTALLATION TO JAMB

Attach left hand 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 8.

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

Table B

NOTE: Two(2) fasteners are provided for each standard bracket and three(3) for each extended bracket. Three(3) fasteners are provided for each guide for doors thru 8'-8" tall and four(4) for doors over 8'-8" tall.



TOP VIEW
Figure 8

⚠ WARNING

DOOR CAN FALL IF NOT SECURELY FASTENED TO WALL. ALL BRACKET TO JAMB ATTACHMENT FASTENERS 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 jamb is not recommended.

8 RIGHT HAND GUIDE AND BRACKET INSTALLATION TO JAMB

Attach right hand guide and bracket to jamb. Use a tape measure at the locations indicated in Figure 9 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 left guide to 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".

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

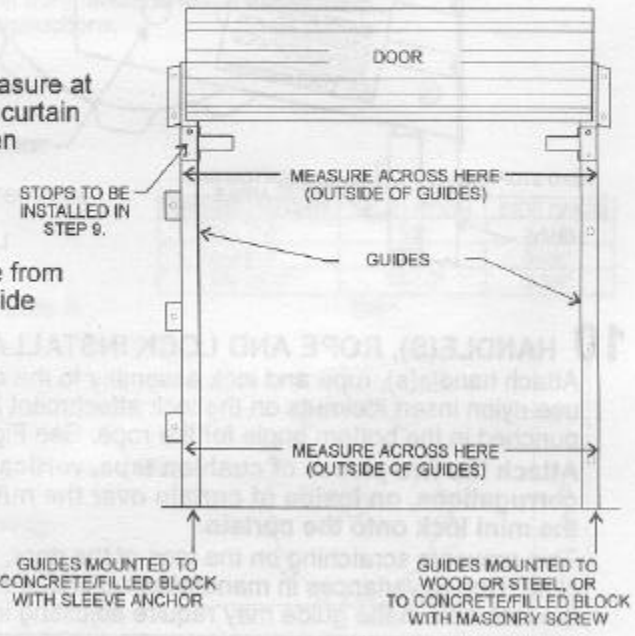


Figure 9

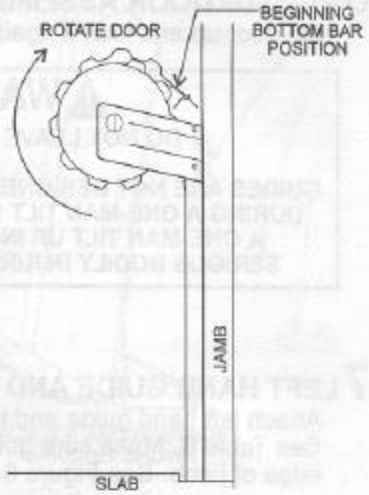
⚠ WARNING

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

9 SETTING SPRING TENSION

After the door is completely secured to the building, it is time to tension the spring. Rotate the door in the direction indicated two full rotations. See Figure 10.

While firmly holding the door, cut the tape and plastic which holds the door in a coil. Roll the curtain down into the guides and secure. Install inside stops by using the bolts and nuts that were previously attached to the guides in step number 3. See Figure 9 for stop location.



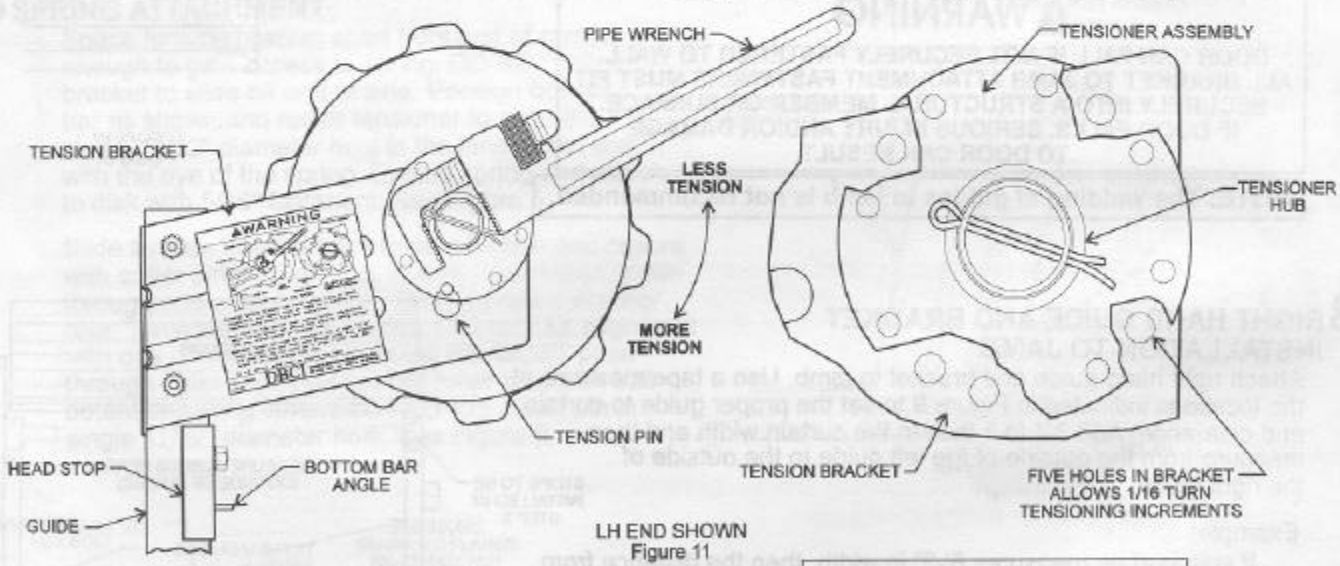
RH END SHOWN
Figure 10

⚠ WARNING

NEVER BOLT INSIDE STOPS TO GUIDES AND THEN BEND THEM OUT TO ALLOW PASSAGE OF BOTTOM BAR. THIS IMPROPER METHOD COULD RESULT IN THE BOTTOM BAR BY-PASSING THE STOPS AND RAPIDLY UNCOILING DOOR, CAUSING SERIOUS INJURY AND/OR DAMAGE TO DOOR.

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.
To adjust spring balance follow these steps:

A Door must be in full open position before making adjustments.
B Place pipe wrench on tensioner hub. See Figure 11.
C Pull down slightly on pipe wrench until pin is loose.
D Remove tension pin.
E Rotate pipe wrench to adjust spring tension. See Figure 11 to determine direction of rotation.
F Insert tension pin in one of eight 17/64" diameter holes in outer disk. Pin MUST pass through outer disk, bracket and inner disk with ball detent engaging inner disk. Pin may pass through any one of five holes in bracket. A 1/16 turn increment is possible. DO NOT insert pin in single 11/32" diameter hole.
G Remove pipe wrench and operate door.
H Repeat steps 9A through 9G as necessary.



LH END SHOWN
Figure 11

10 HANDLE(S), ROPE AND LOCK INSTALLATION

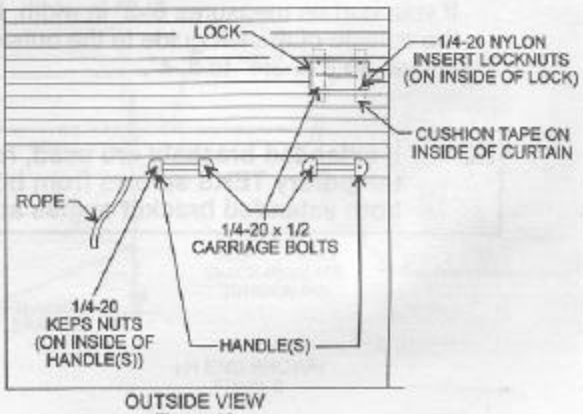
Attach handle(s), rope and lock assembly to the door. Be sure to use nylon insert locknuts on the lock attachment bolts. Holes are punched in the bottom angle for the rope. See Figure 12.

Attach the two pieces of cushion tape, vertically, across corrugations, on inside of curtain over the nuts which hold the mini lock onto the curtain.

This prevents scratching on the face of the door.

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

NOTE: Install the warning label at eye level on guide.



OUTSIDE VIEW
Figure 12