



MINI DOOR INSTALLATION INSTRUCTIONS SERIES 650

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.

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.

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 and repairs must be made by a trained service person using proper tools, methods and instructions.

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 snap 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)

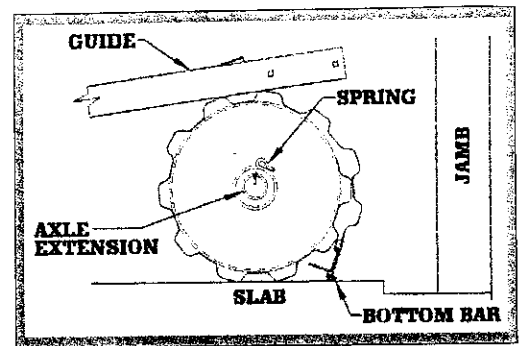
Note: Do not attach head stop at this time.

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

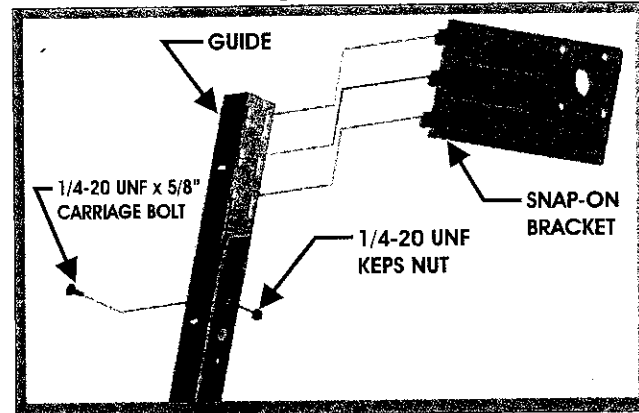
Attach each extended bracket to guide with two 1/4-20UNF x 5/8" long carriage bolts and 1/4-20UNF KEPS nuts. See Figure 4.

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)

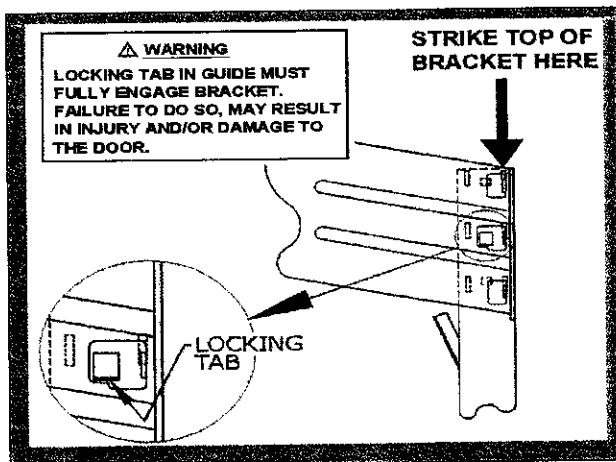
Note: Do not attach head stop at this time.



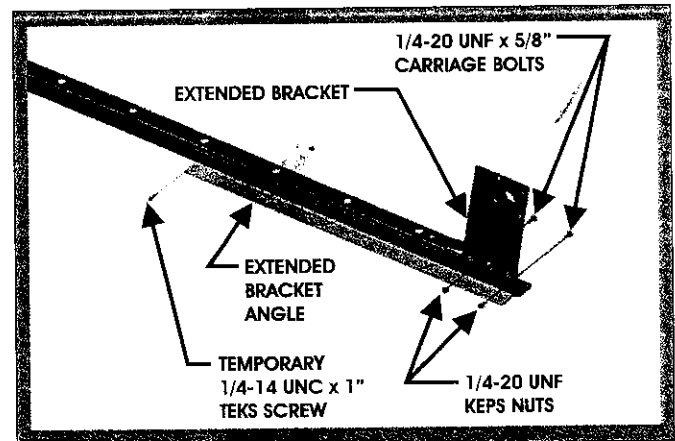
RIGHT END
Figure 1



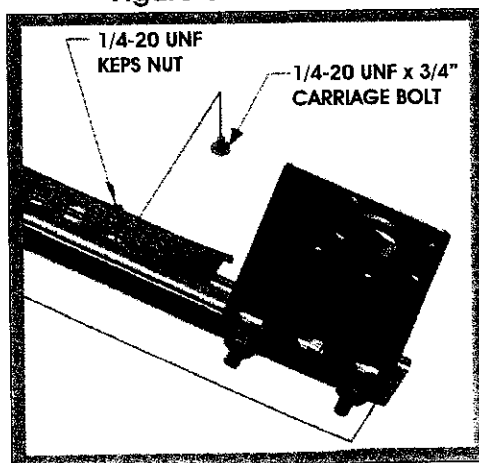
NEW SNAP-ON STANDARD BRACKET
Figure 2



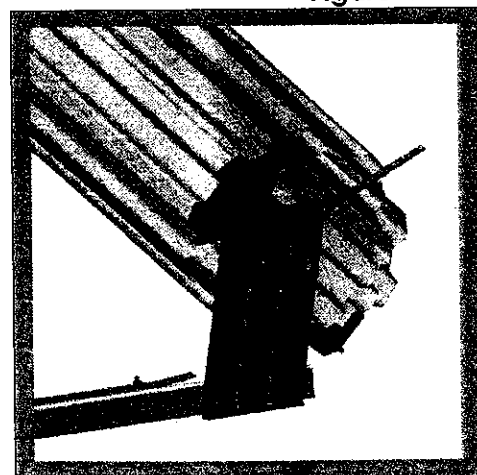
RIGHT GUIDE AND STANDARD BRACKET
Figure 3



RIGHT GUIDE AND EXTENDED BRACKET
Figure 4



HEAD STOP PREPARATION
Figure 5



RIGHT END COTTER PIN
Figure 6

2)

SERIES 650

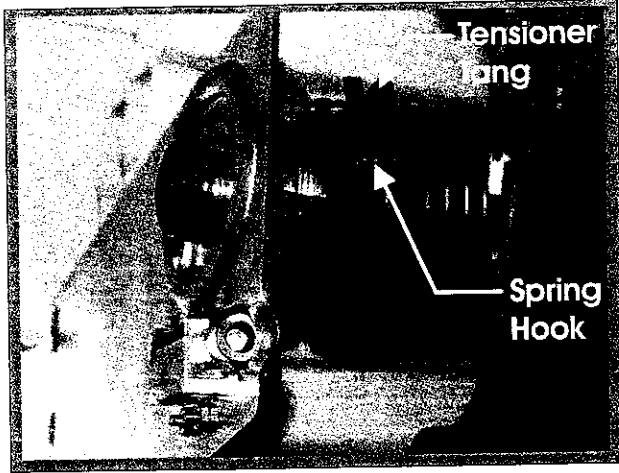
4 BRACKET TO AXLE ATTACHMENT.

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

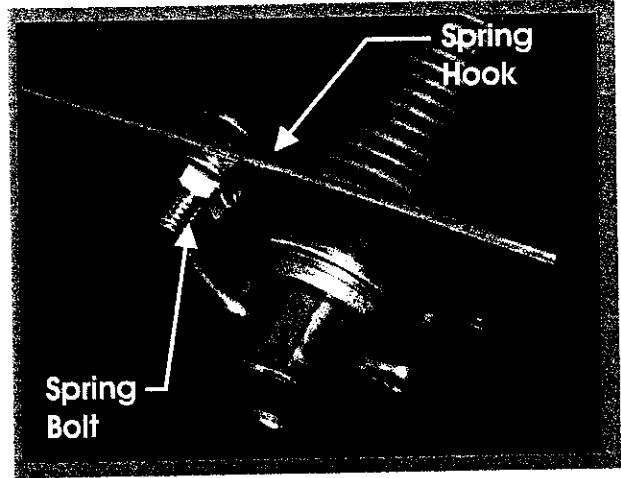
NOTE: The bearing may fit snugly around the axle. Tap lightly on the bearing's inner race to move it along the length of the axle. Only the Left Bracket will include the 650 Tensioner Assembly.

5 SPRING ATTACHMENT.

Place the Left Spring Hook over the Left End Tensioner Tang as shown in Figure 7A. Spring Alignment Sleeve must be inside spring.



LEFT END (SPRING ATTACHMENT)
Figure 7A

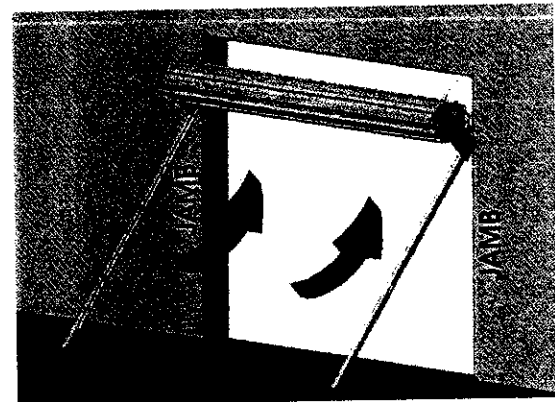


RIGHT END SPRING ATTACHMENT
Figure 7B

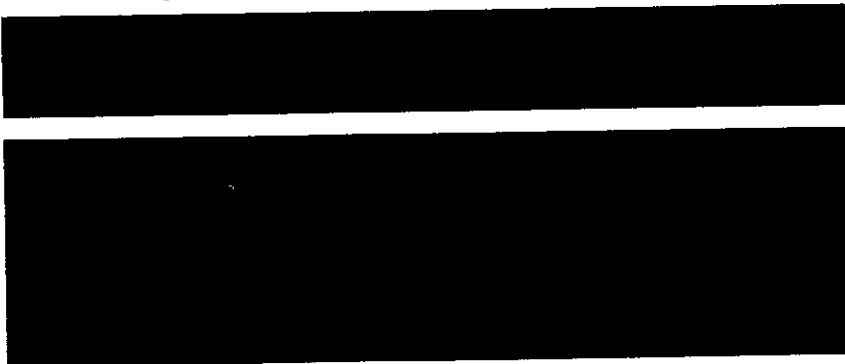
NOTE: FOR OPENING HEIGHTS OVER 8'-8" THRU 10'-0" WITH AN OPENING WIDTH OVER 6'-0" THRU 9'-0", AND ANY HEIGHT DOOR WITH AN OPENING WIDTH GREATER THAN 9'-0" WILL BE SUPPLIED WITH 2 SPRINGS. **BOTH SPRINGS MUST BE PROPERLY ATTACHED TO ENSURE PROPER OPERATION OF DOOR!** FOR SECOND SPRING ATTACHMENT SEE FIGURE 7B.

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 8. 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.

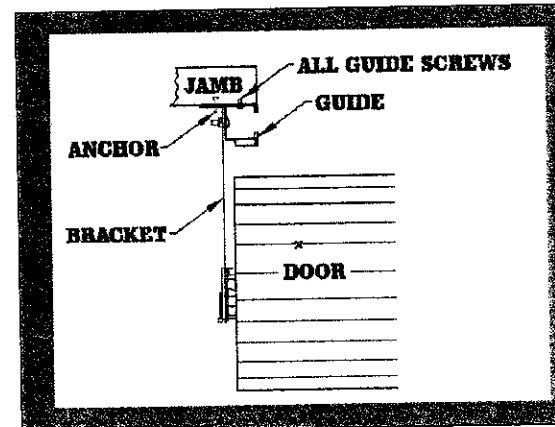


"TWO MAN TILT UP"
Figure 8



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 9)



TOP VIEW
Figure 9

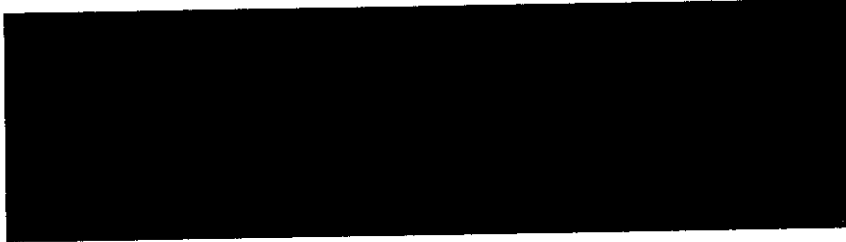


NOTE: The bottom and middle guide anchor positions **must** be the correct width. The top anchoring position should be approximately 1/2" wider on each side of the top and 1/4" wider on each side of the bottom, to ensure ease of entry by the curtain as it descends into the guide rails.

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

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.

TABLE B



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 10 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.

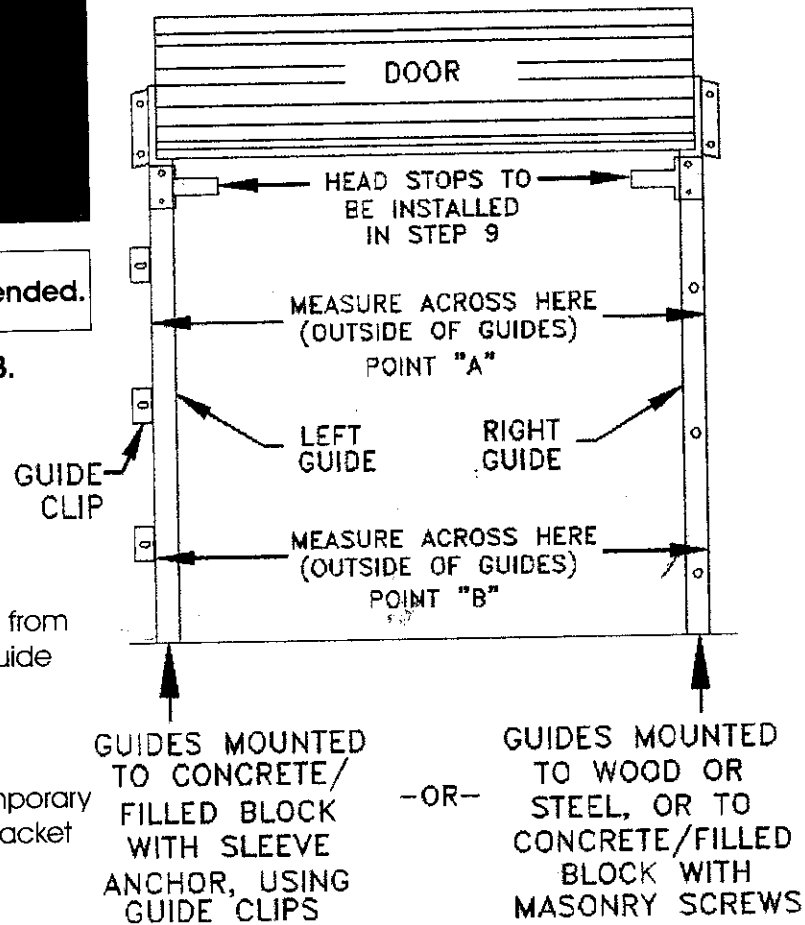
9 SETTING SPRING TENSION.

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



Rotate the door in the direction indicated three full rotations. See figure 11. **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.



INSIDE VIEW
Figure 10



Adding the removable Headstops.

- A. 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).
- B. Place the Headstop on the 1/4-20 UNF Carriage bolt with it's tab facing towards the curtain (as shown in Figure 13) using the 1/4-20 UNF KEPS nut previously removed.
- C. Tighten the 1/4-20 UNF KEPS nut onto the carriage bolt until secure.
- D. Repeat the previous steps on the other guide, using the other Headstop included in this package.
- E. When completed, both Headstops should face each other (as shown in Figure 10).



RIGHT END VIEW
Figure 11

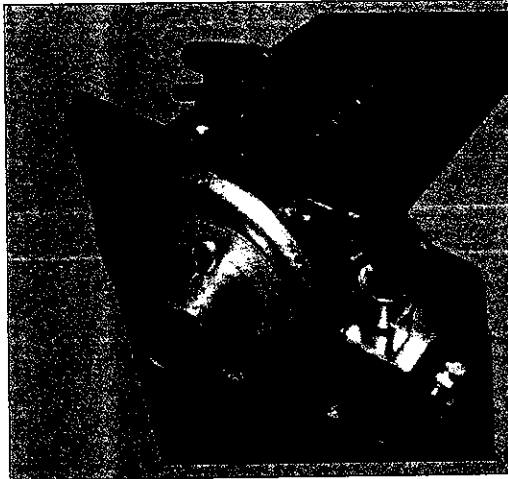


Figure 12A

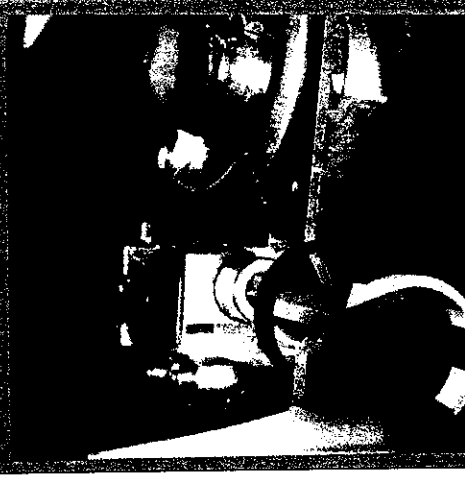


Figure 12B

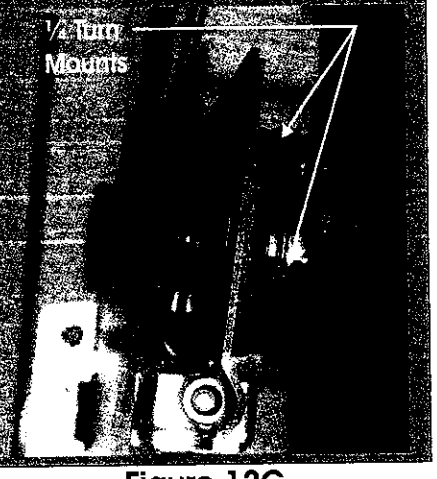


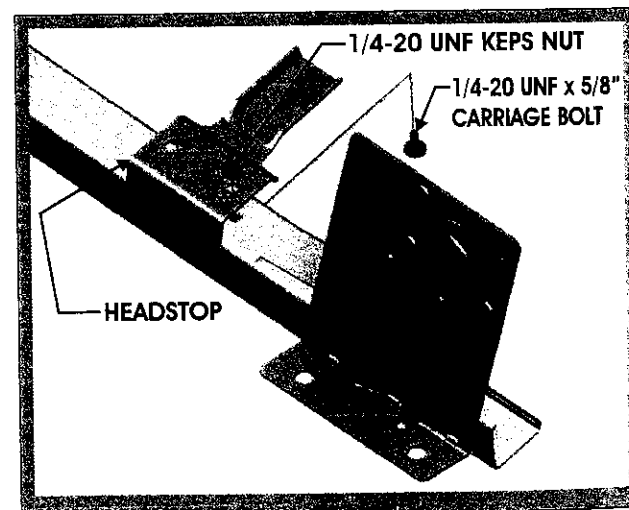
Figure 12C

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 4 turns are required to get proper door operation, please contact DBCI immediately.

TO ADJUST SPRING BALANCE FOLLOW THESE STEPS:

- A. Engage a 5/16" Allen wrench into the worm drive. (Figure 12A)
- B. Rotate the worm drive in a clockwise direction to reduce tension (Red Arrow) on the spring and counter-clockwise to increase tension (Yellow Arrow) on the spring. (Figure 12B)
- C. Using the four tab mounts, connecting the bearing to the gear, count the number of 1/4 turns added/subtracted. Each tab represents 1/4 turn.(Figure 12C)
- D. Repeat raising and lowering of door after each 1/4 turn to test the tension and evaluate the need for further adjustment.



HEAD STOP MOUNTING
Figure 13

LO HANDLE(S), ROPE AND LATCH INSTALLATION

Attach handle(s), rope and latch assembly to the door. (See Figure 14).

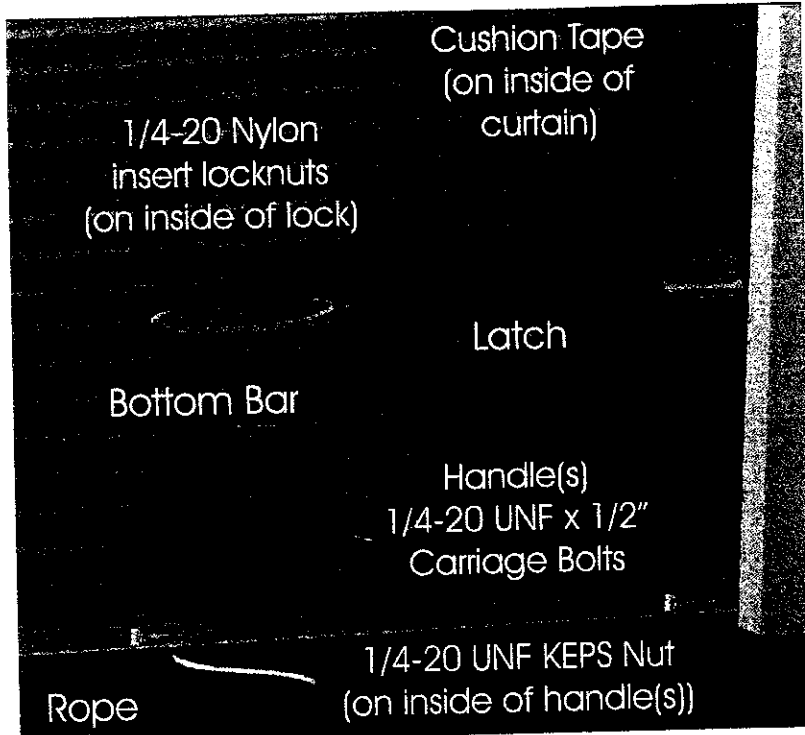
Be sure to use nylon insert locknuts on the latch attachment bolts. If cylinder lock feature is used, attach latch back plate to back of curtain.

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 14



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.



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