

COMMERCIAL DOOR INSTALLATION INSTRUCTIONS



SERIES 1900, 1950, 2000, 2250, 2400, 2500, 2750

IMPORTANT NOTICE

In the following text, the word:

WARNING: Indicates that serious injury or death can result from failure to follow instructions.

CAUTION: Indicates that minor injury or property damage can result from failure to follow instructions.

NOTE: Indicates that special attention should be given to the instructions.

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

DO NOT CUT THE 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 the door is not installed 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. Moving objects and springs under tension can cause injuries. Your safety and the safety of others depends on reading and following the information in these instructions. DBCI recommends that only properly trained personnel install and tension doors.

DISCLAIMER: Windload products are not wind certified if mounted to wood.

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. Before adjusting torsion spring, make sure door is fully open and curtain is wrapped on drums.

COMMERCIAL DOOR SERIES

General Information

1. CHECK DOOR OPENING

- Check the width and height of the door opening and verify the measurements against the sizes shown on the door packing slip.
- To ensure proper door alignment and performance, check door jambs for plumb.
- To ensure proper door alignment and performance, check header and floor level.
- Check to ensure there is sufficient side clearance at the jambs and head room above the door opening (**Table A** or **Table B**).
- The jamb surface to which the guide is to be attached should be flush for mounting purposes.

Table A

MINIMUM DIMENSIONS FOR SERIES 1900-2250 INSTALLATION*

	A-1	A-2	B(Min)	C
Hand Operated-Pull Rope (Thru 10'-0" High)	5"	5"	22"	11"
Chain Operated-Direct or Reduced (Thru 10'-0" High)	8-½"	5"	22"	11"
Chain Operated-Direct or Reduced (Thru 14'-0" High)	8-½"	5"	24"	11"
Chain Operated-Direct or Reduced (Over 14'-0" High)	8-½"	5"	26"	11"

NOTE: For Series 1900 dimension "B" is 2" less than shown in table.

Table B

MINIMUM DIMENSIONS FOR SERIES 2400-2750 INSTALLATION*

	A-1	A-2	B(Min)	C
Hand Operated-Pull Rope (Thru 10'0" High)	6-½"	6-½"	22"	11"
Chain Operated-Direct or Reduced (Thru 10'-0" High)	10"	6-½"	22"	11"
Chain Operated-Direct or Reduced (Thru 14'-0" High)	10"	6-½"	24"	11"
Chain Operated-Direct or Reduced (Over 14'-0" High)	10"	6-½"	26"	11"

*Adjustments may be needed during installation.

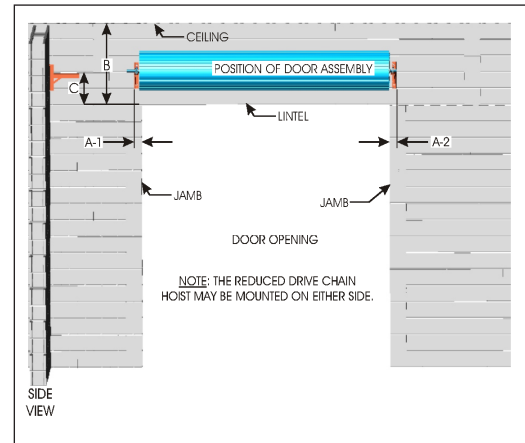


Figure 1 Interior Elevation Door Layout

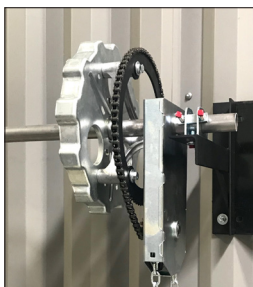
2. DOOR ARRANGEMENT

- Lay door on a clean floor inside of building and in front of opening.
- Distribute part bags, guides, stops and brackets.

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

3. OPTIONAL REDUCED DRIVE SYSTEMS

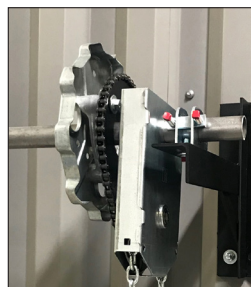
If door is to be operated by a reduced drive unit, install the sprocket on the preferred side (**Figure 1**). Slide the reduced drive assembly over the axle and align the sprockets parallel to each other. Connect the drive chain around both sprockets using the half link and master link units provided. All hardware shown in the pictures below should be installed with the appropriate chain hoist. After adjusting tension on the door (**Section 8**), tighten the set screws for the reduction drive hoist onto the door axle. If further adjustment is required, set fasteners must be loosened for adjustment and then re-tightened after the final adjustment.



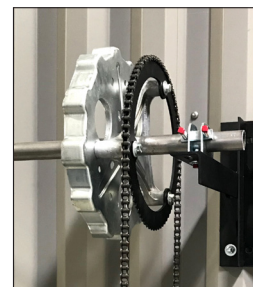
8:1 Reduced Drive Hoist



4:1 Reduced Drive Hoist



4:1 Reduced Drive Hoist
(Low Headroom)

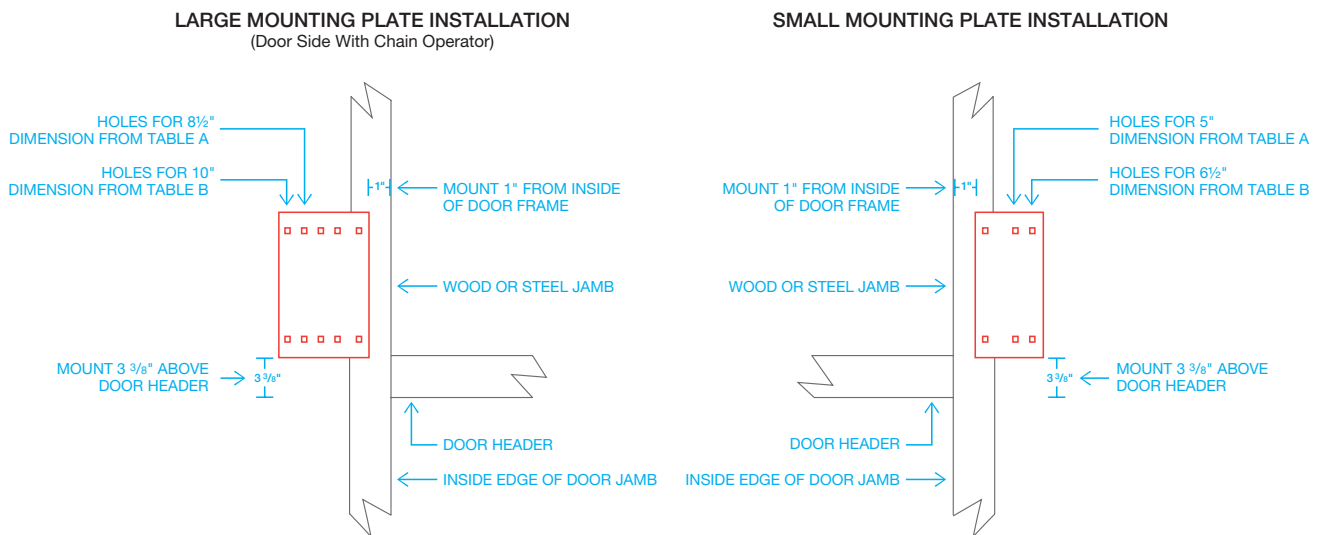


Electric Motor Kit

4. MOUNTING PLATE INSTALLATION

Doors to be mounted to wood or steel jambs require mounting plates to be installed on each jamb. **If your door is to be mounted on a flush surface wall such as a CMU wall, skip this step and go to Step 5.**

- If you are using a chain operator, you will have a large mounting plate for the side of the door on which the chain operator was installed in **Step 3**. A small mounting plate will be installed on the side of the door that does not have the chain operator or on both sides if a chain operator is not used.
- On both the small and large mounting plates, the hole pattern closest to the plate edge will be used for attachment to the door jamb. **CAUTION: The mounting plates must be attached with carriage bolts. Do not use a lag bolt in wood jambs or self-drilling screws in steel jambs.**
- Attach the mounting plates 1" from the edge of the door jamb and $3\frac{3}{8}$ " above the door header.

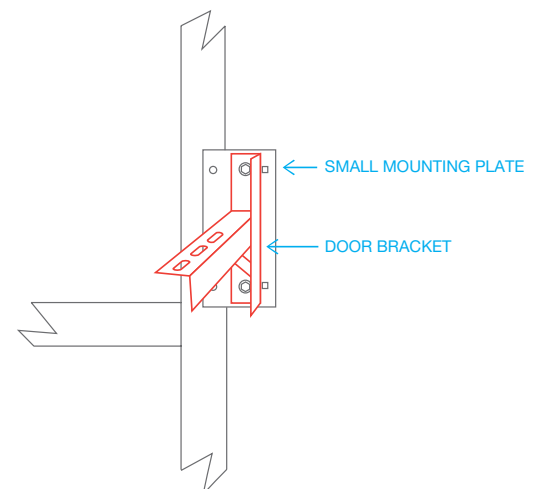


5. DOOR BRACKET INSTALLATION

A. Attachment to Mounting Plates

If you installed mounting plates as shown in **Step 4**, attach the door brackets to the set of holes in the mounting plate that correspond to the appropriate dimensions provided in **Table A** or **Table B**. Use the carriage bolts supplied to attach the door bracket to the mounting plate.

DOOR BRACKET
(Illustration Shows 5" Hand Operated-Pull Rope)



COMMERCIAL DOOR SERIES

General Information

5. DOOR BRACKET INSTALLATION CONTINUED

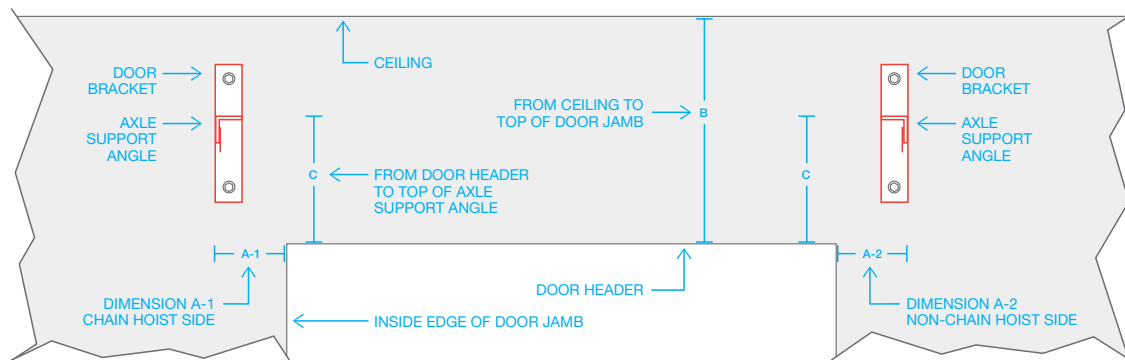
B. Attachment to Flush Wall

1. If you are installing the door to a flush wall, attach the door brackets to the wall using the appropriate dimensions in **Table A** or **Table B**. Use dimension A-1 for the chain hoist side and dimension A-2 for the other side. If the width of the door is less than shown on the packing slip, establish the A-1 and A-2 dimensions by placing the door drum assembly on the floor in front of the door opening and placing the brackets as required to clear the door opening, the door drum and chain gear assembly.
2. The height of the door bracket above the top of the door opening is 11" for all doors. To ensure that adequate door clearance is obtained, measure from the top of the door opening to the ceiling and check against dimension B in **Table A** or **Table B**. If dimension B has not been obtained, lower the brackets accordingly. This will require that the guide length be shortened by the same amount (**This will cause the finished door height to be shorter**).

NOTE: The door brackets must be level with each other for proper door operation.

3. Attach the door brackets to the wall with the fasteners provided.

DOOR BRACKET INSTALLATION - FLUSH WALL MOUNT
(Table A Reference)



NOTE: The chain hoist may be mounted on either side of the door.

6. PREPARING SADDLES FOR AXLE PLACEMENT

- A. Using one (1) saddle per side, with the directional arrow pointing toward the wall, slide the saddle over the axle pipe (**Figure 2**).

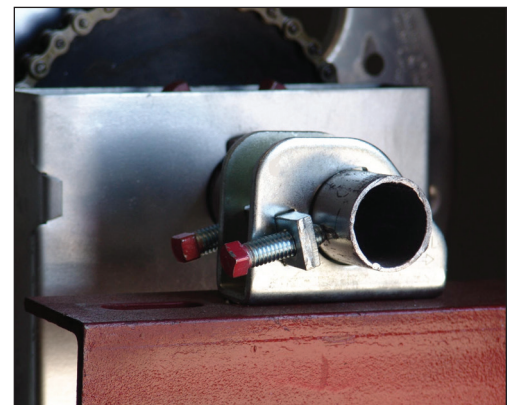


Figure 2 Saddle Installation

7. LIFTING DOOR

It is recommended when using a forklift to adequately pad the “forks” to prevent damage and/or scratches to the door (**Figure 3**).

- Carefully lift the door on to the brackets and attach the saddles (**Figure 4A** or **4B**). Position the door as close to the header as possible but allow enough space for the door to rotate a complete turn. Then, tighten the saddle attachment bolt to 20 foot pounds of torque.
- Center the door over the opening. If side to side adjustments are necessary, make sure that the axle and door move together.
- Tighten all of the saddle set screws to 20 foot pounds of torque.

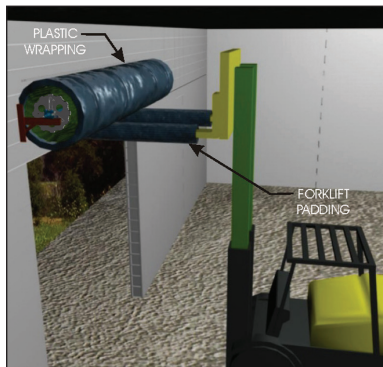


Figure 3 Lifting Door Assembly In Place

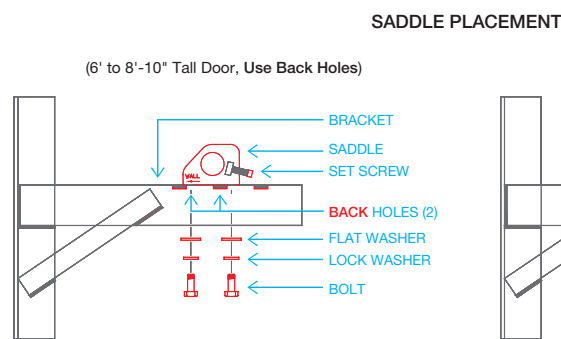


Figure 4A

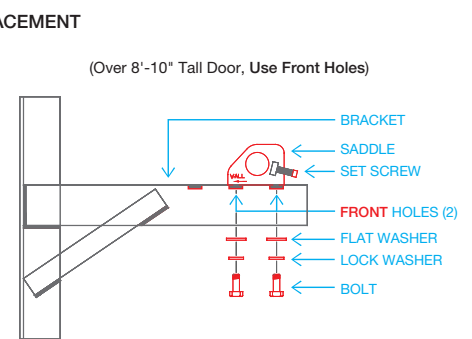


Figure 4B

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 or death can occur.

8. PRE-TENSION DOOR SPRINGS

- The bottom bar should be in a downward or “6 o’clock” position, while the springs are relaxed. Apply tension to the springs by rotating the door two (2) complete turns in a forward direction (**Figure 5**).
- The amount of tension required to properly counter-balance the door will vary from door to door. Final adjustment of springs will be made in **Step 12**.

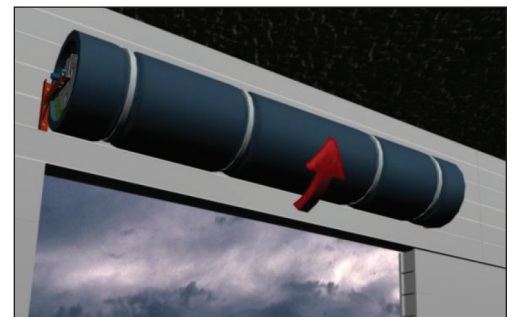


Figure 5 Pre-Tension Door Springs

9. CUTTING THE BANDS

Cut the shipping bands that hold the curtain in a roll. Then pull the curtain down no farther than halfway.

WARNING: At this stage of the mounting process, the door may have a strong tendency to rise with the potential to cause damage or harm. Therefore, it must be securely held in place and kept from turning until the guide and head stops are installed. The door may be held in the desired position by a prop (**Figure 6**). Do not leave door unattended during installation.



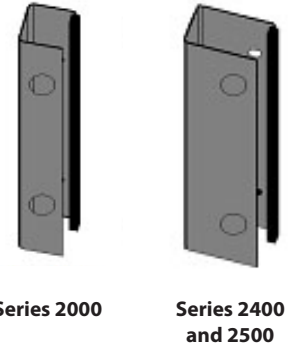
Figure 6 Holding The Door Open

COMMERCIAL DOOR SERIES

General Information

10. INSTALLING GUIDE RAILS, HEAD STOPS AND CHAIN RETAINER CLIP

- Slide the guides over the edge of the door curtain while positioning them firmly against the door jambs. Allow $\frac{1}{4}$ " clearance between the edges of the curtain and the insides of both guides. Confirm that the guides are plumb to ensure proper operation.
- Fasten the guide rails to the door jambs with the fasteners included in the hardware package (**Figures 7A or 7B**).
- Install the removable head stop (**Figure 8A and 8B**).
- Install the chain keeper clip (**Figure 9**).
- Install provided safety label at a readable height on the door drive side guide or jamb.



NOTE: All fasteners are to be installed according to the installation instructions.

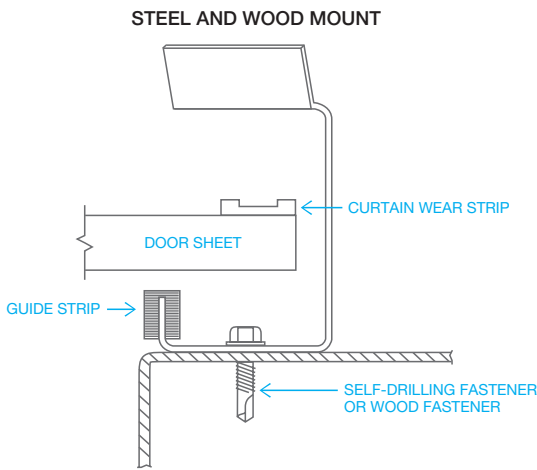


Figure 7A

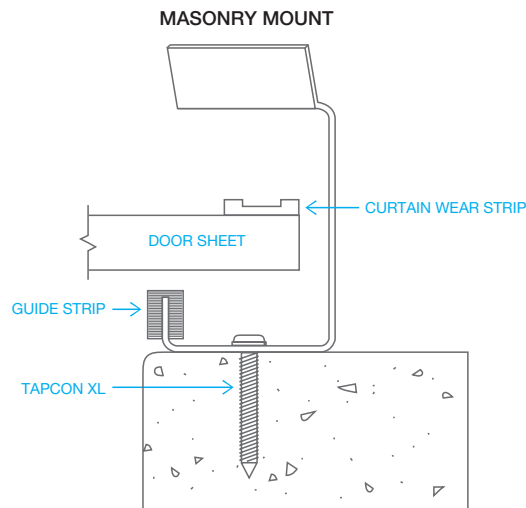


Figure 7B

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

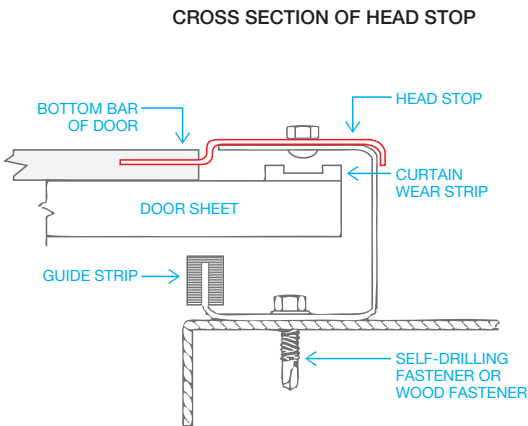


Figure 8A

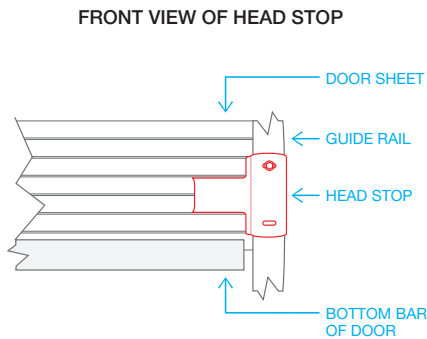


Figure 8B

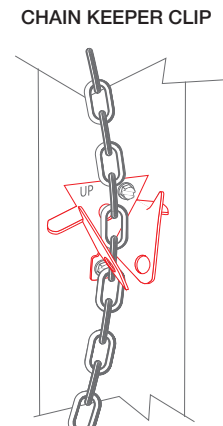


Figure 9

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 bypassing the head stops. Should this happen, the door would rapidly uncoil causing possible injury or death. This may also cause damage to the door and building.

11. INSTALLING THE SLIDE BOLT LOCK AND STEP PLATES

- A. Remove factory installed bolt.
- B. Install the slide lock (**Figure 10**).
- C. Install the step plates (**Figure 10**).

12. CHECKING AND ADJUSTING THE DOOR BALANCE

- A. If door lowers easy and raises hard: INCREASE TENSION.
- B. If door lowers hard and raises easy: DECREASE TENSION.
- C. To prevent the door from falling in the event the wrench slips, secure door in "full up" position by one of the following methods:
 1. Tie a rope around the door roll while still engaged in the guides.
 2. Place a clamp on the guide rails just below the bottom bar.
- D. Place a large pipe wrench on each end of axle in the position (**Figure 12**). Loosen the axle saddles while holding onto the pipe wrench and adjust the tension (**Figure 12**). The pipe wrench may turn due to spring tension. Make sure that you maintain a secure and firm grip on the pipe wrench.

WARNING: Secure the door before loosening saddle bolt. Springs may be under extreme tension. Door may fall causing severe injury or death.

- E. Tighten set screws onto axle to a torque of 20 foot pounds (**Figure 2**).
- F. Test the door as indicated in the previous steps listed above.
- G. Repeat any previous steps as needed if further adjustment is required.

WARNING: Spring installation, repairs and adjustments must be made by trained service personnel using proper tools, methods and instructions.

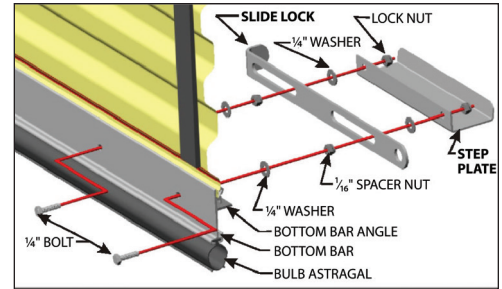


Figure 10 Slide Bolt Lock and Lift Clips

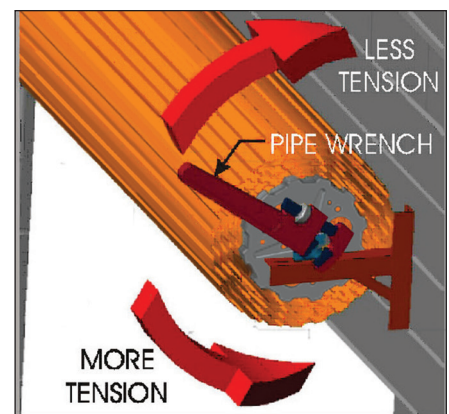


Figure 11 Tensioning Commercial Door

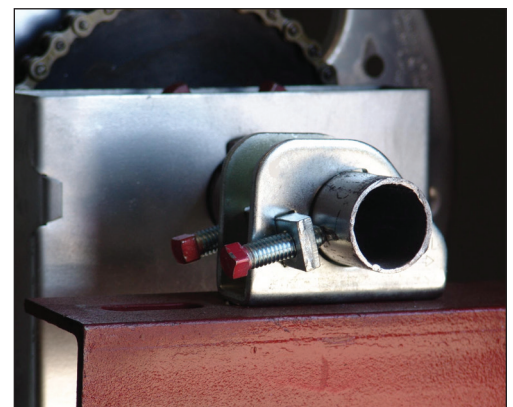
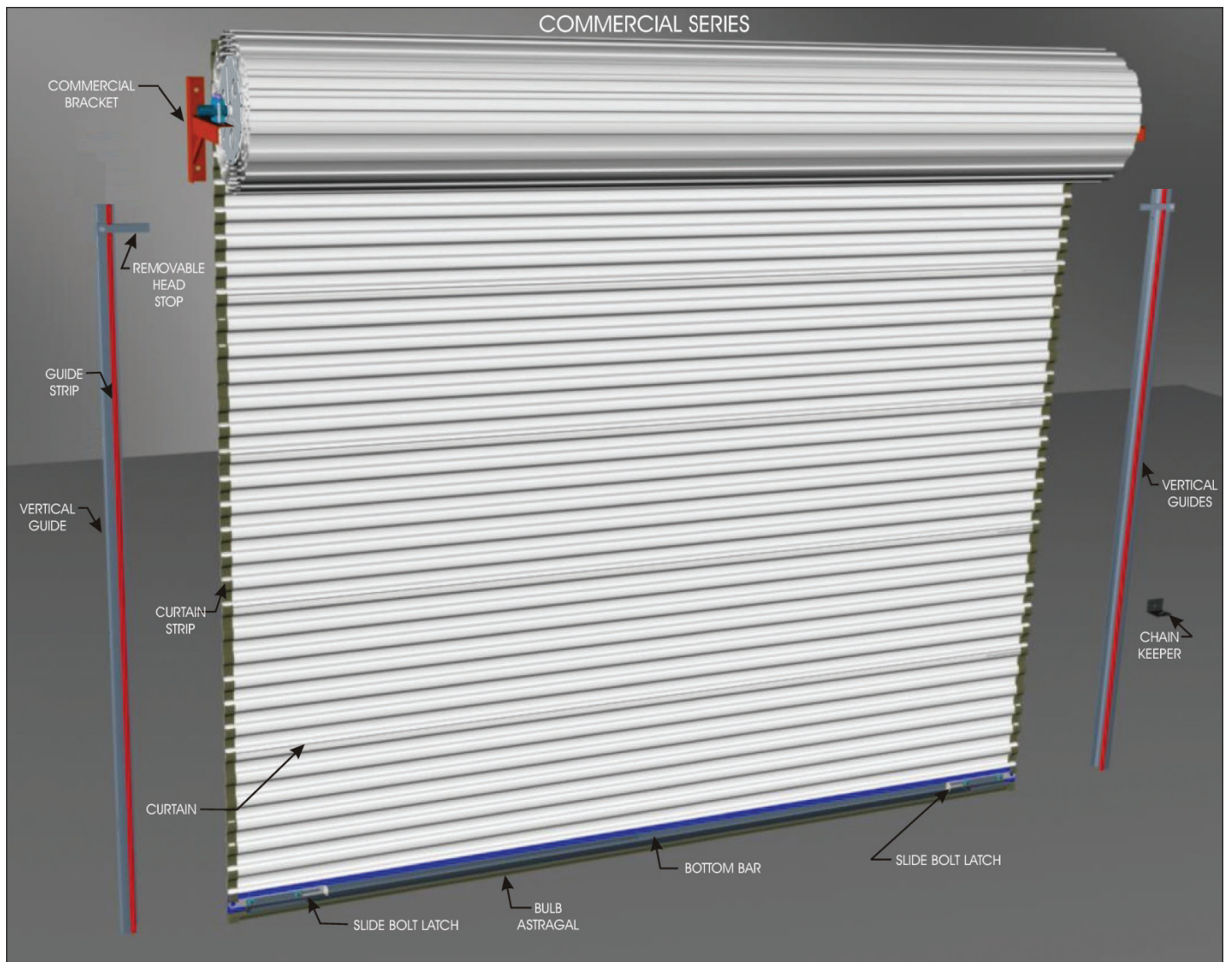


Figure 2 Saddle Installation



MAINTENANCE INSTRUCTIONS

In order to promote longevity of your DBCI door system, it is recommended that the following maintenance procedures be performed approximately one to two times per year:

Astragal: Periodically clean the dirt off of the length of the astragal.

Springs: Periodic adjustments to the spring tension may be necessary. A light coat of lithium-based grease should be applied to 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 VALUED CUSTOMER

DBCI would like to thank you for helping us be the industry leader in door and building components. We endeavor to provide you with the highest quality of craftsmanship in all of our products. If you would like a tour of one of our manufacturing facilities, please feel free to contact us at (800) 542-0501.

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