



**COMMERCIAL DOOR INSTALLATION INSTRUCTIONS
 SERIES 5000**

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 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.

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 should install and 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. Before adjusting 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. To ensure proper door alignment and performance check door jambs for plumb.
 - C. To ensure proper door alignment and performance check header and floor level.
 - D. Check to ensure there is sufficient side clearance at the jambs and 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.

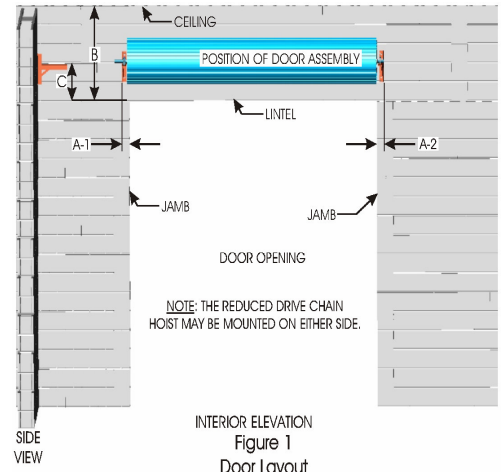
MINIMUM DIMENSIONS FOR SERIES 5000 INSTALLATION*

Chain Operated or Motor Driven	A-1	A-2	B(Min)	C
Thru 8'-0" High	10"	6-1/2"	19"	11"
Thru 10'-0" High	10"	6-1/2"	21"	11"
Thru 14'-0" High	10"	6-1/2"	23"	11"
Thru 16'-0" High	10"	6-1/2"	24"	11"
Thru 18'-0" High	10"	6-1/2"	25"	11"
Thru 20'-0" High	10"	6-1/2"	26"	11"

Table A

*Adjustments may be needed during installation

NOTE: Drive side should meet A-1 required dimensions.



2. DOOR ARRANGEMENT

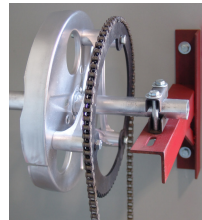
A. Lay door on a clean floor inside of building and in front of opening.

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

B. Distribute part bags, guides, stops and brackets.



8:1 Reduced Drive Hoist



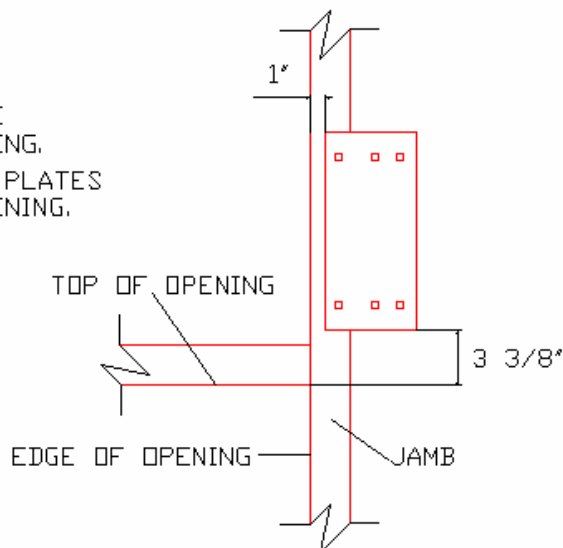
Electric Motor Kit

3. OPTIONAL REDUCED DRIVE SYSTEMS

If door is to be operated by a reduced drive unit, install the sprocket on the preferred side (See note in 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 above pictures should be installed with the appropriate chain hoist. After adjusting tension on the door (as shown in Section 8), tighten the set screws for the reduction drive hoist onto the door axle. If further adjustment is required, set screws must be loosened for adjustment and then re-tightened after the final adjustment.

MOUNTING PLATE INSTRUCTION FOR STEEL MOUNT DOORS

1. HOLE PATTERN CLOSEST TO MOUNTING PLATE EDGE TO BE ATTACHED TO JAMB.
2. BOTH MOUNTING PLATES TO BE LOCATED 1" FROM EDGE OF OPENING.
3. LOCATE BOTTOM OF MOUNTING PLATES AT 3-3/8" ABOVE TOP OF OPENING.
4. WHEN A LARGE AND A SMALL MOUNTING PLATE ARE PROVIDED, INSTALL THE LARGE PLATE ON THE DRIVE SIDE OF OPENING.



4. **INSTALL DOOR BRACKETS**

- A. From dimensions in Table A, mark the location of brackets by using dimension "A-1" for the chain hoist side and dimension "A-2" for the other side. If opening width of the door is less than shown on the packing slip, establish dimension "A-1" and "A-2" by placing the door drum assembly on the floor in front of the door opening; placing the brackets as required to clear the door opening, the door drum, chain gear assembly, etc.
- B. Mark the height of the bracket by using dimension "C". Measure the ceiling clearance and check this against dimension "B" to verify that the minimum ceiling clearance has been obtained. If dimension "B" has not been obtained, lower the brackets accordingly. This will require the guide length to be reduced the same amount from the bottom.

NOTE: The finished door height will be shorter

- C. Attach brackets with fasteners provide.

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

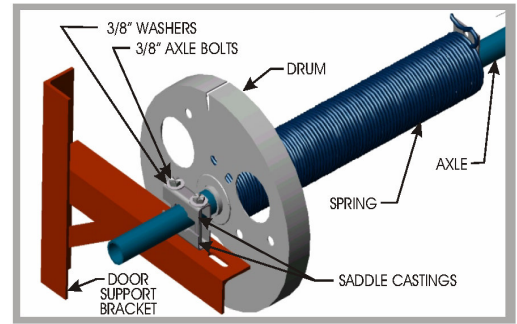
5. **PREPARING SADDLES FOR AXLE PLACEMENT**

- A. Using one saddle per bracket, place the axle saddles on the top of the bracket with its "teeth" facing upward by inserting the shoulder bolts in the appropriate slots as illustrated in Figures 6A and 6B. Saddles are directional (See Figure 5).

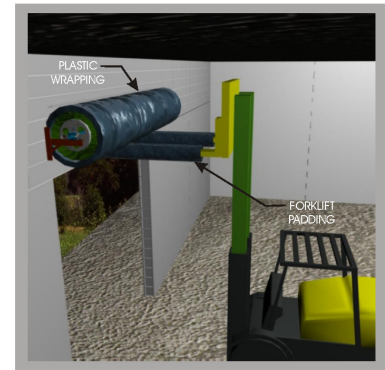
6. **LIFTING DOOR**

It is recommended when using a forklift to adequately pad the "forks" to prevent damage and/or scratches to door (See Figure 4).

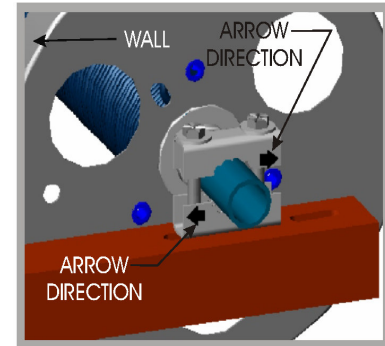
- A. Carefully lift the door and position on axle saddles. Loosely fasten saddles to the mounting brackets. (See Figure 6A and 6B)
- B. Center the door over the opening. If side to side adjustments are necessary, make sure that the door and axle move together.
- C. Position the door as close as possible to the header. Make sure you are still able to rotate the door freely around the axle.
- D. When placing the axle within the axle saddles, ensure the indication arrows are in the direction shown in Figure 5. This is the only position which will allow the axle saddles to lock the axle into place. Improper position of saddles will not allow tensioning.
- E. Install the bolts, washers and hex nuts (as shown in Figures 6A and 6B). BOTH hex nuts must be tightened to a torque of 20 foot pounds.



BRACKET MOUNT PREPARATION
Figure 3

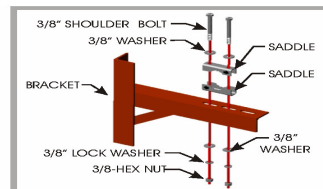


LIFTING DOOR ASSEMBLY IN PLACE
Figure 4

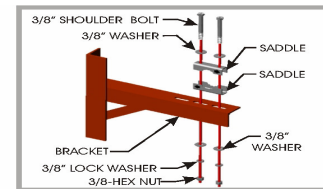


SADDLE ARROW DIRECTIONS
Figure 5

CAUTION
Over tightening of the hex nuts can cause damage to parts of the mechanism.



SADDLE PLACEMENT: 6'-0" TO 8'-10" TALL DOOR
FIGURE 6A



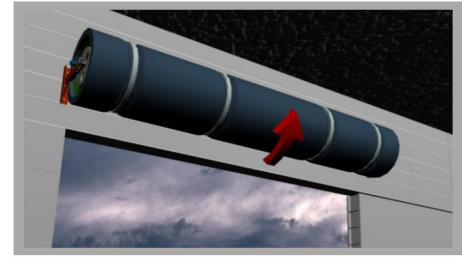
SADDLE PLACEMENT: OVER 8'-10" TALL DOOR
FIGURE 6B

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.

7. **PRE-TENSION DOOR SPRINGS**

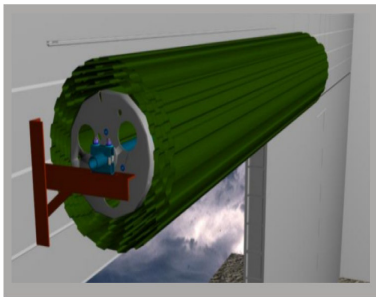
- The bottom bar should be in a downward or "6 o'clock" position, while the springs are relaxed. Apply tension to the springs by rotating the door 2 complete turns in a forward direction (As shown in Figure 7).
- The amount of tension required to properly counter-balance the door will vary from door to door. Final adjustment of springs will be made in Step 12.



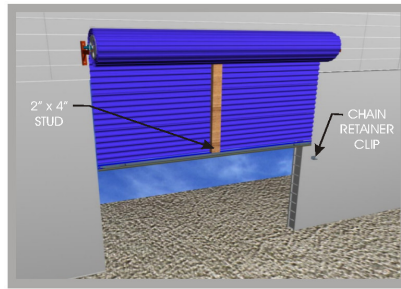
PRE-TENSION DOOR SPRINGS
Figure 7

8. **CUTTING THE BANDS**

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



CUTTING THE BANDS
Figure 8



HOLDING THE DOOR OPEN
Figure 9

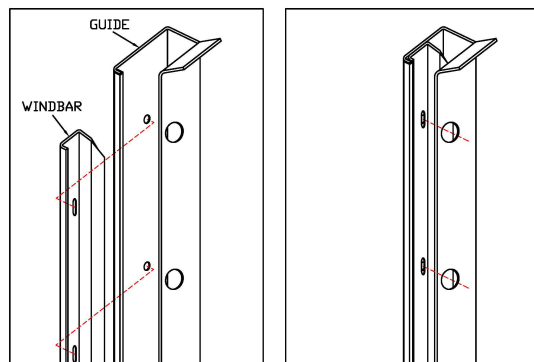
WARNING

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 (As shown in Figure 9).

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

WARNING

Do not leave door unattended during installation.



SERIES 5000 GUIDE AND WINDBAR
FIGURE 10

9. **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 (As shown in Figures 11A and 11B).
- Install the removable head stop (Figure 14).
- Install the chain keeper clip (Figure 14).

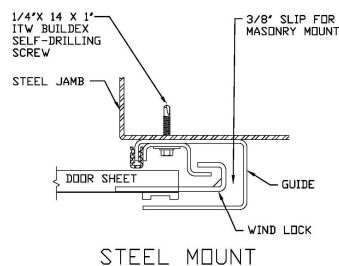


FIGURE 11A

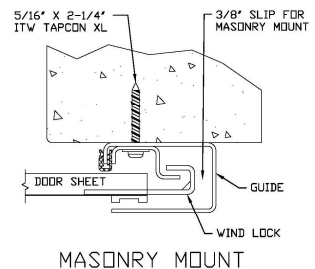


FIGURE 11B

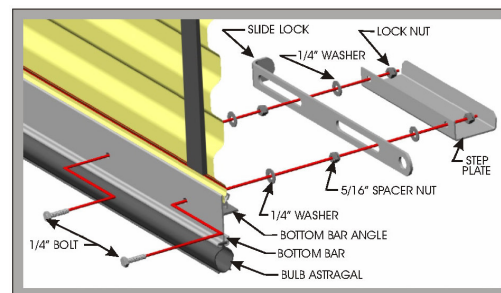
NOTE: All fasteners are to be installed according to the installation instructions.

10. INSTALLING THE SLIDE BOLT LOCK AND STEP PLATES

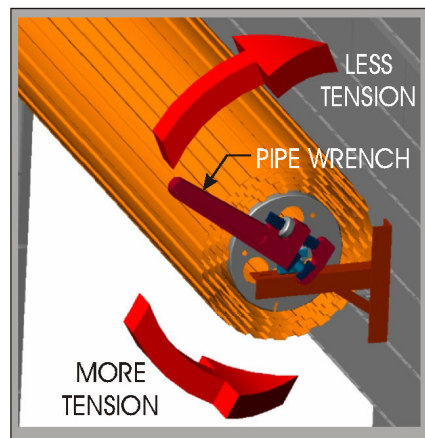
- A. Remove factory installed bolt.
- B. Install the slide lock (As indicated in Figure 12).
- C. Install the step plates (As indicated in Figure 12).

11. CHECKING AND ADJUSTING THE DOOR BALANCE

- A. If door lowers easy and raises hard: MORE tension is required
- B. If door lowers hard and raises easy: LESS tension is required
- 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 as shown in Figure 13. Loosen the axle saddles while holding onto the pipe wrench and adjust the tension as shown in Figure 13. The pipe wrench may turn due to spring tension. Make sure that you maintain a secure and firm grip on the pipe wrench.



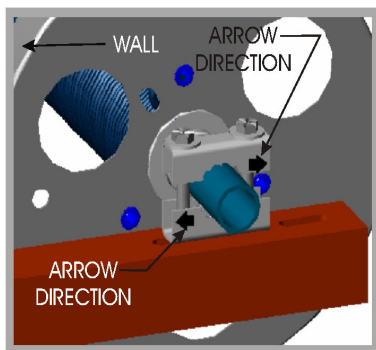
SLIDE BOLT LOCK & LIFT CLIPS
Figure 12



TENSIONING COMMERCIAL DOOR
Figure 13

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

- E. Tighten the axle saddles down onto the door bracket to a torque of 20 foot pounds (As shown in Figure 5).
- F. Test the door as indicated in the previous steps listed above.



SADDLE ARROW DIRECTIONS
Figure 5

- 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.

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 door and building.

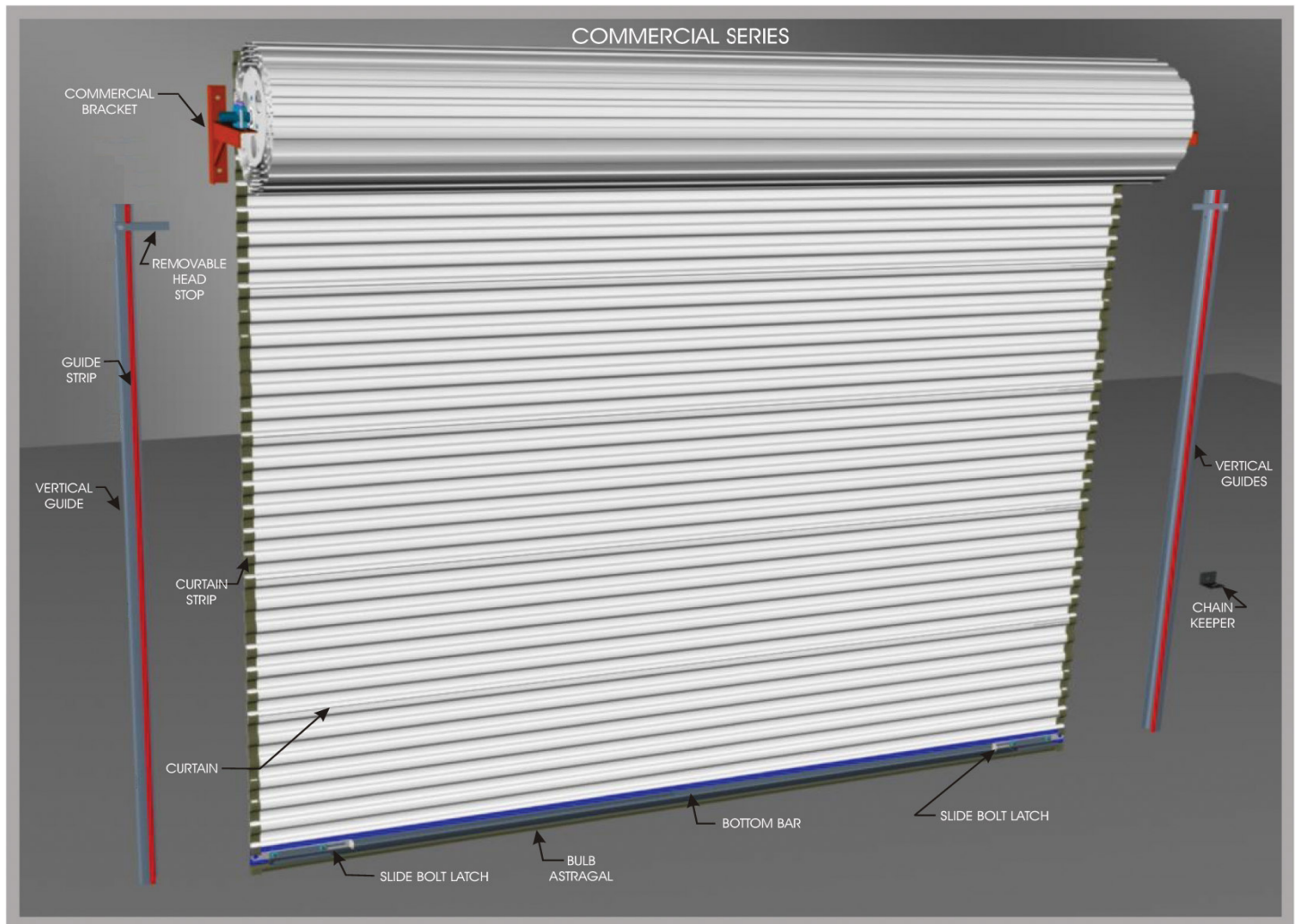


Figure 14
MAINTENANCE INSTRUCTIONS

IN ORDER TO PROMOTE LONGEVITY OF YOUR DBCI DOOR SYSTEM, PERIODIC MAINTENANCE IS REQUIRED:

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

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If properly maintained this will be last door you ever buy.

THANK YOU