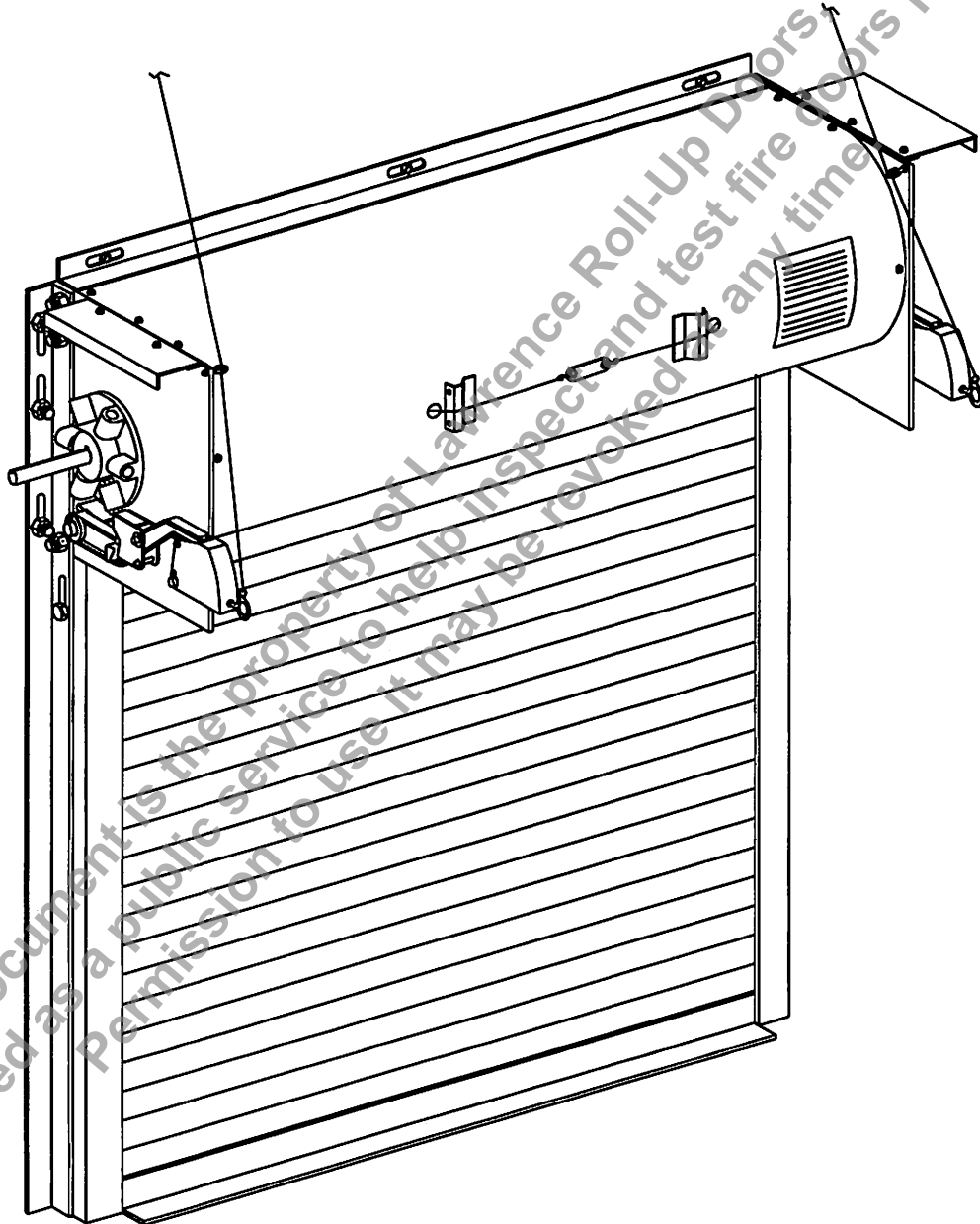


INSTALLATION INSTRUCTIONS FOR ROLLING STEEL FIRE DOORS

IMPORTANT NOTE: Motor operated fire doors must be installed with a U.L. listed electric operator of appropriate capacity. All power operated fire doors must be provided with either (1) a door safety switch mounted on the bottom bar or (2) an actuating device for the motor operator that requires continuous pressure.



WINDSOR DOOR
A United Dominion Company

5800 SCOTT HAMILTON DRIVE, LITTLE ROCK, AR 72209
(501) 582-1872

SERIAL NO. _____
MODEL NO. _____

1370 FURNEAUX ROAD, MARYSVILLE, CA. 95901
(916) 743-1851

Step 1. Locate center of opening and mark the distance from center of opening to the edge of the guides as shown in Figure 1.

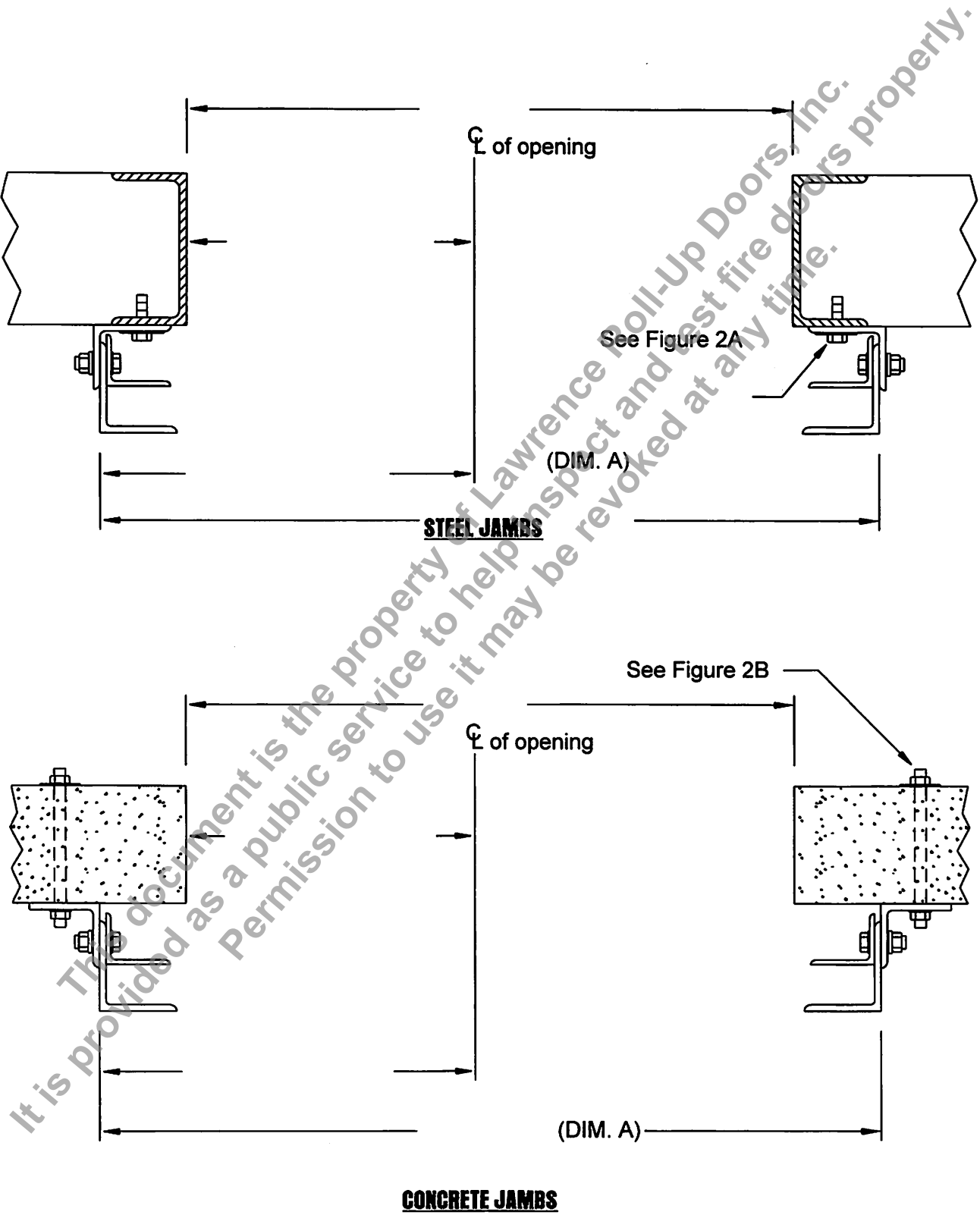


FIGURE 1

Step 2. Check the sill with a level and locate the guide on the high side of the opening first. Bottom of the guide must be placed _____ inch(es) off the floor.

Note: Make allowances for any slope in the sill when locating the second guide. Guides must be level with each other at the top. See Figure 2.

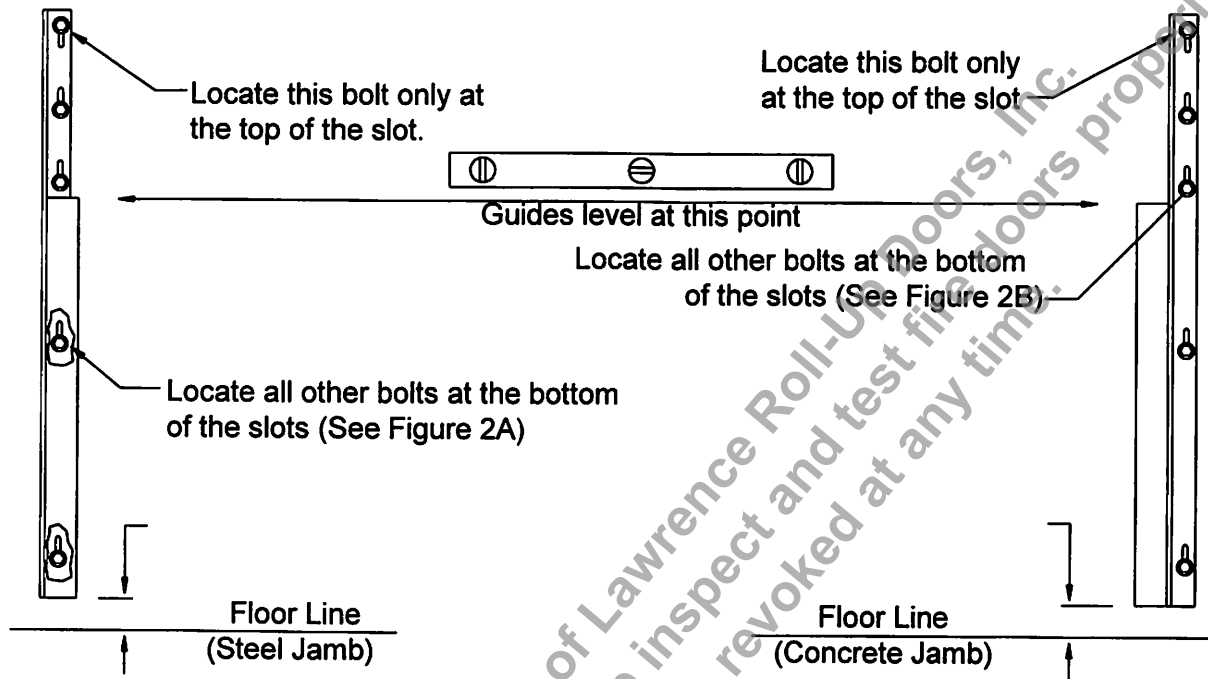
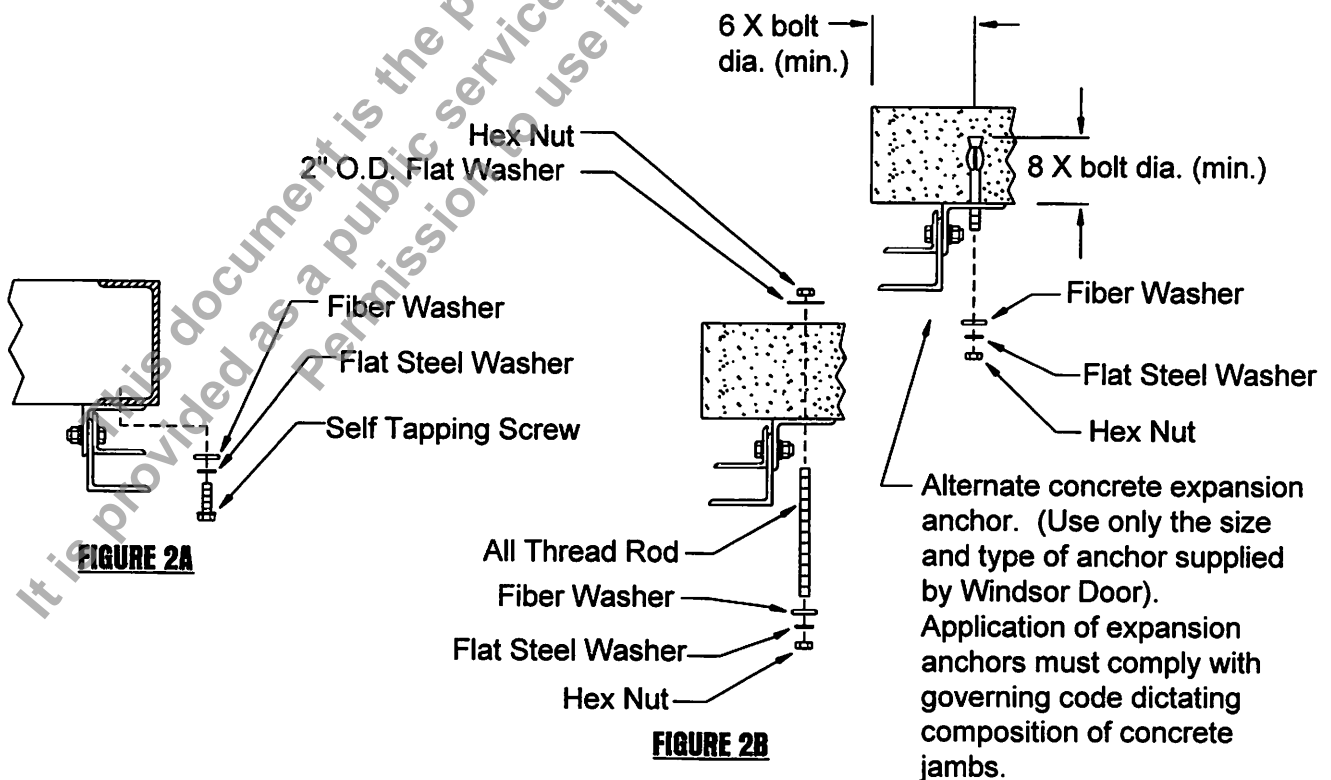


FIGURE 2



Step 3. Assemble barrel and brackets. Place barrel in front of the opening and place washers and spacers as shown. See Figure 3A.

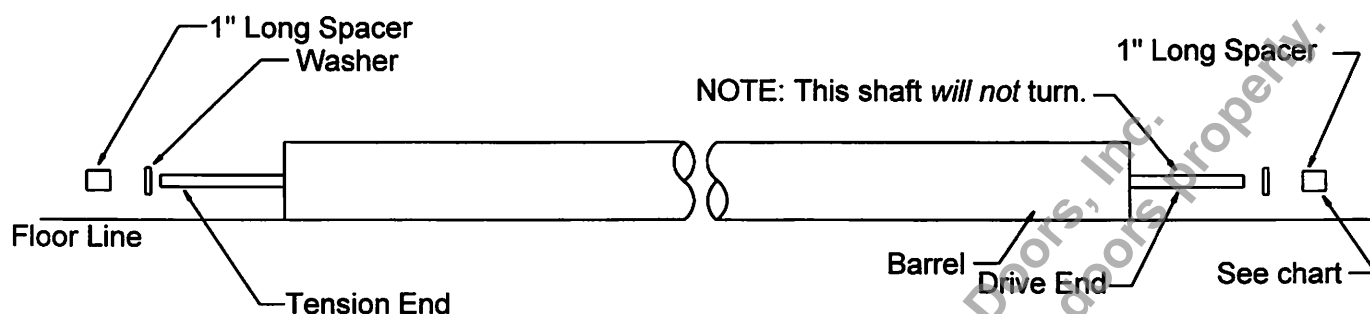


FIGURE 3A

NOTE: Barrel shown is R.H. drive,
L.H. drive is opposite.

BARREL SIZE	TENSION END		DRIVE END	
	1" SPACERS	WASHERS	1" SPACERS	WASHERS
4"	(2) 1" LONG	_____	2	_____
	(1) 1 1/2" LONG	_____	_____	_____
6"	1	1	1	_____
8"	2	1	2	_____
10"	1	1	1	2

Step 3B. Raise barrel off the floor and place the proper bracket on each end of the barrel. See Figure 3B.

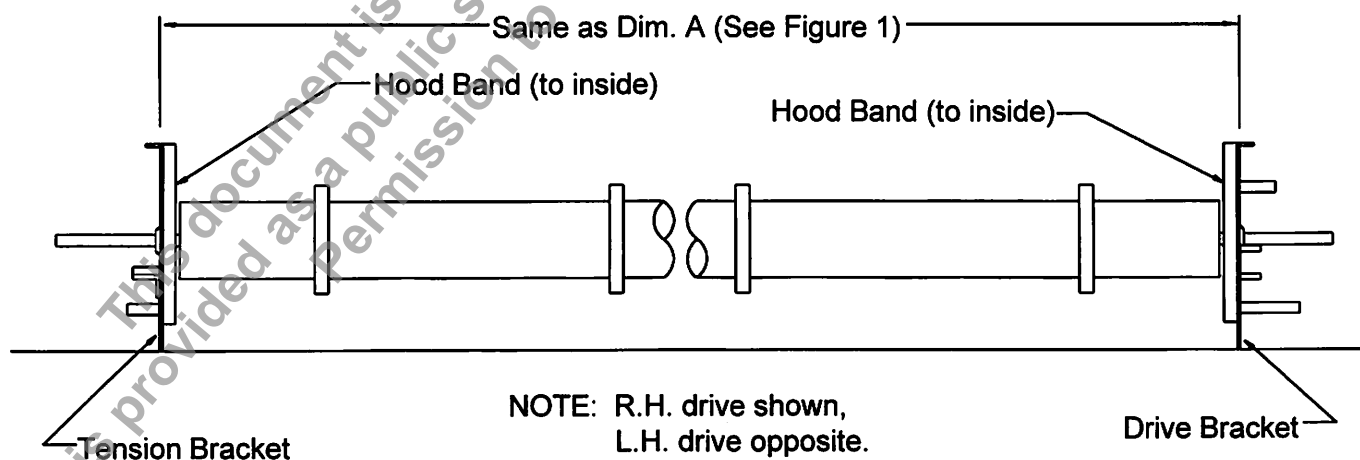


FIGURE 3B

Step 4. Raise the barrel and brackets into position and bolt the brackets to the inside of the guide wall angle as shown in Figure 4.

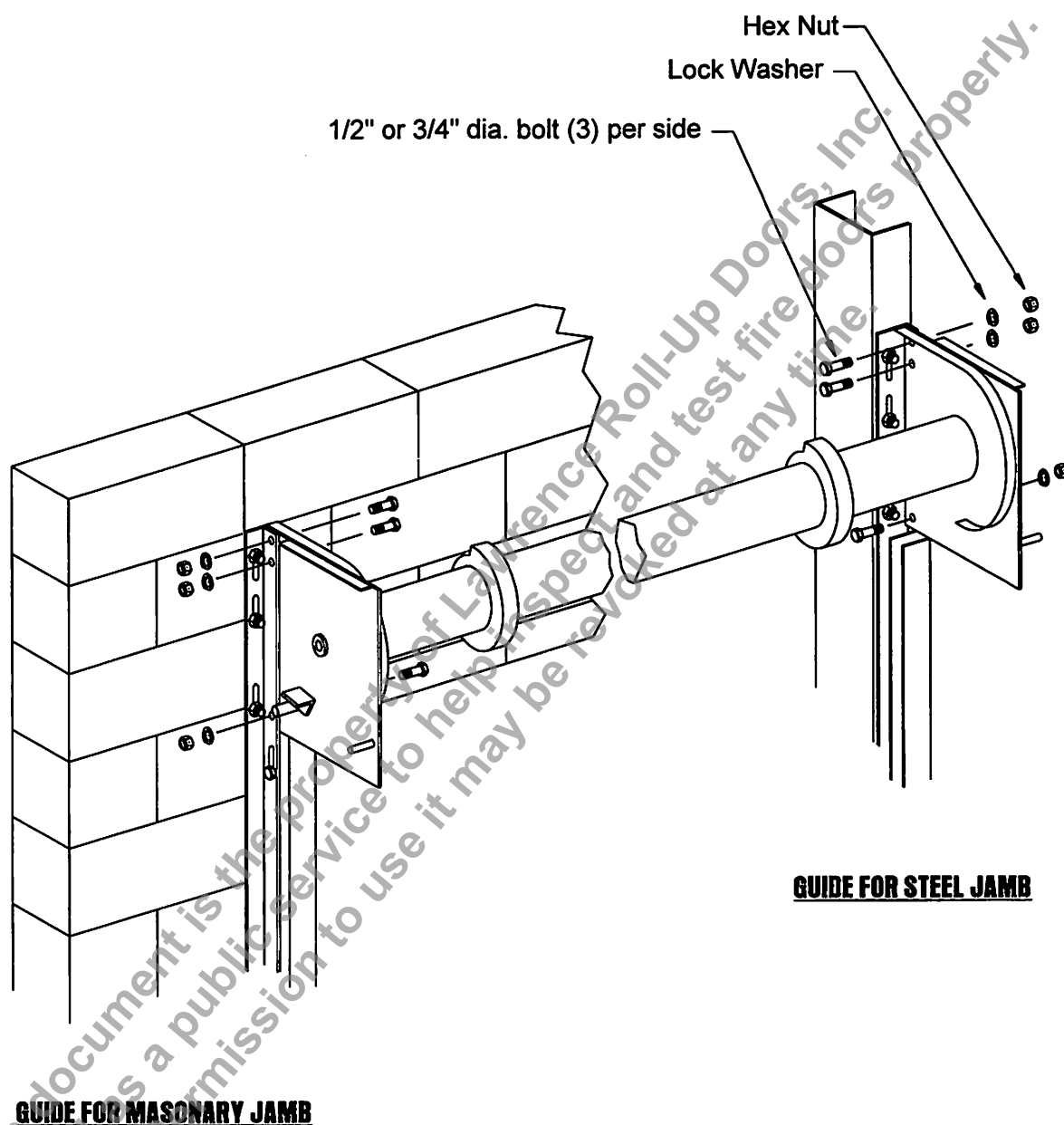


FIGURE 4

R.H. Drive Shown
L.H. Drive Opposite

Step 5. Assemble tension end bracket as shown in Figure 5.

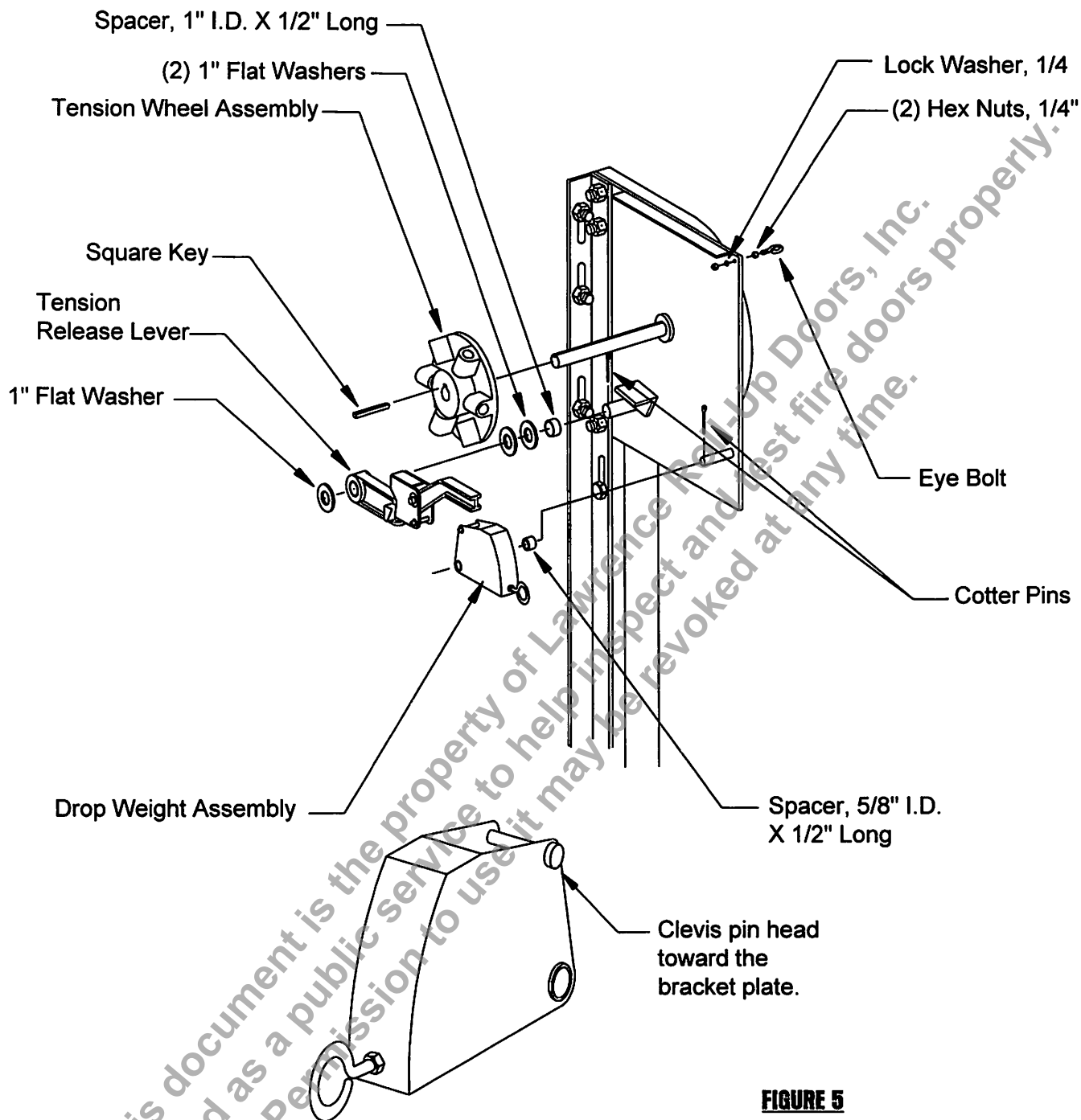
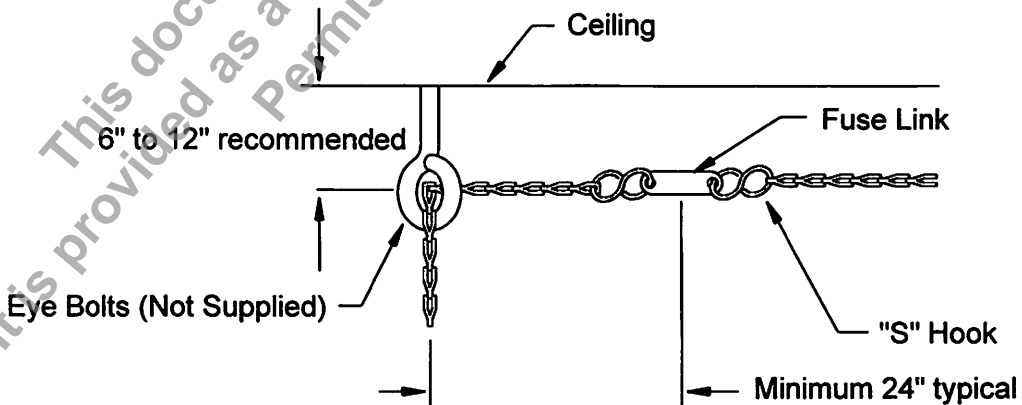
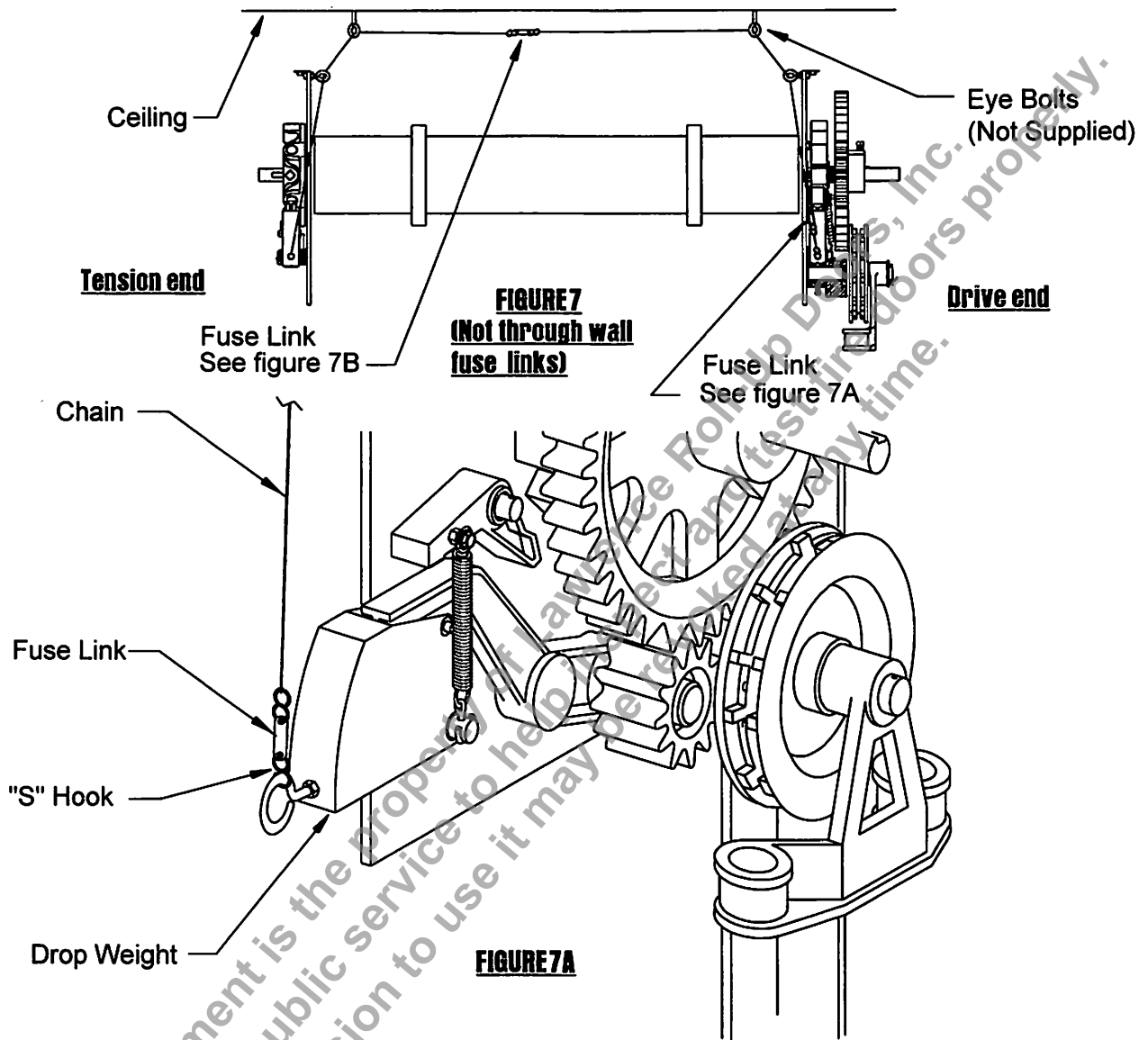


FIGURE 5

Step 6. Assemble the drive end bracket according to the supplementary sheet (Figure 6). Be sure that all of the gears are in line with one another. Put a 1/8" cotter pin in the ends of all stub shafts.

Step 7. Install chain and fuse links to the drop weights as shown in figures 7, 7A and 7B. Chain must go from one drop weight up to the ceiling and across the ceiling and down to the drop weight on the opposite side of the door. If through wall fuse links are required, see Figure 7C also.

NOTE: Chain must be free to slide, permitting drop weights to fall if any of the fuse links separate.



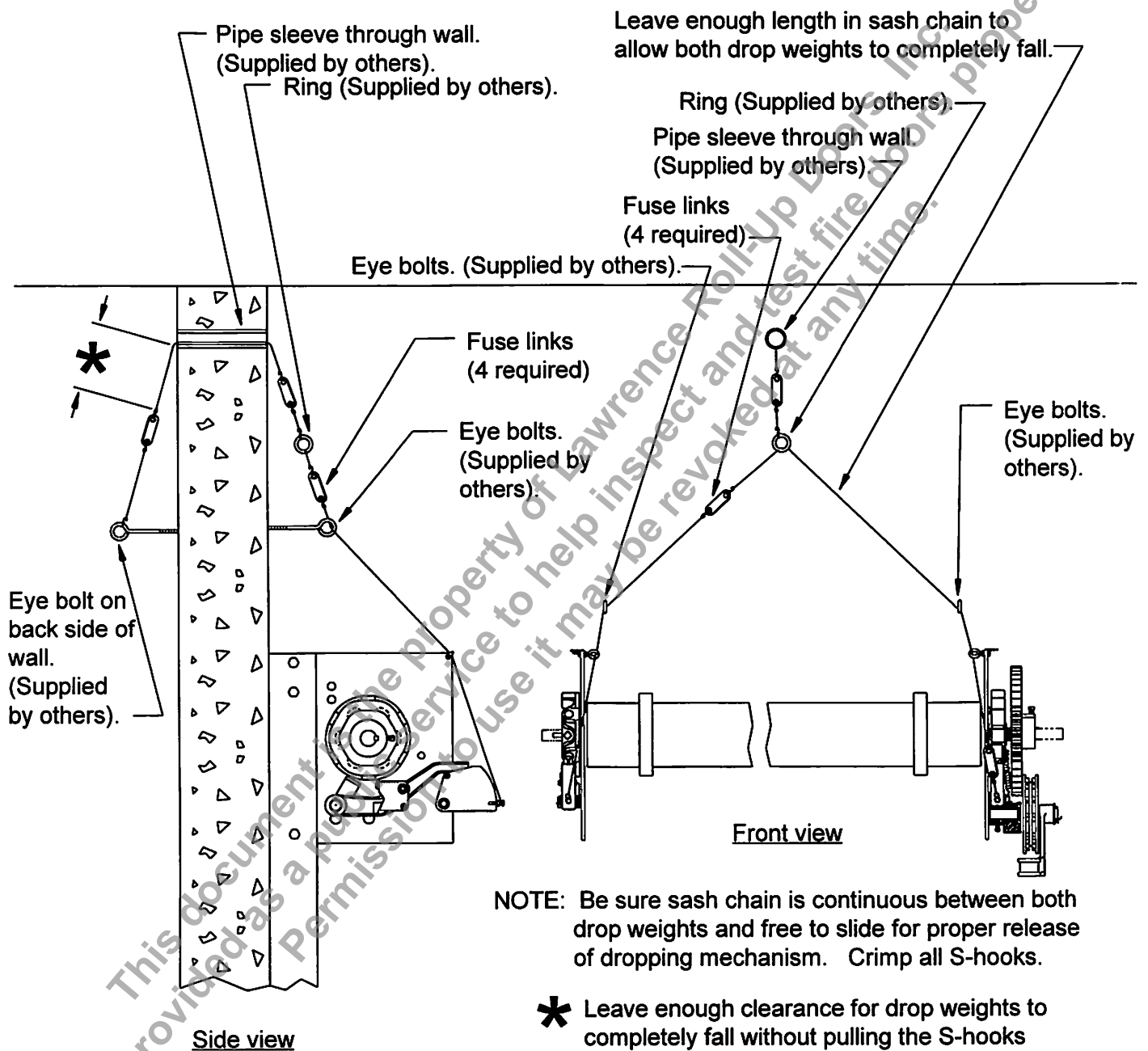


FIGURE 7C
INSTALLATION OF THROUGH WALL FUSE LINKS

Step 8. Raise the curtain into the opening as shown in figure 8. Attach the anchor slats to the barrel as shown in figure 8A.

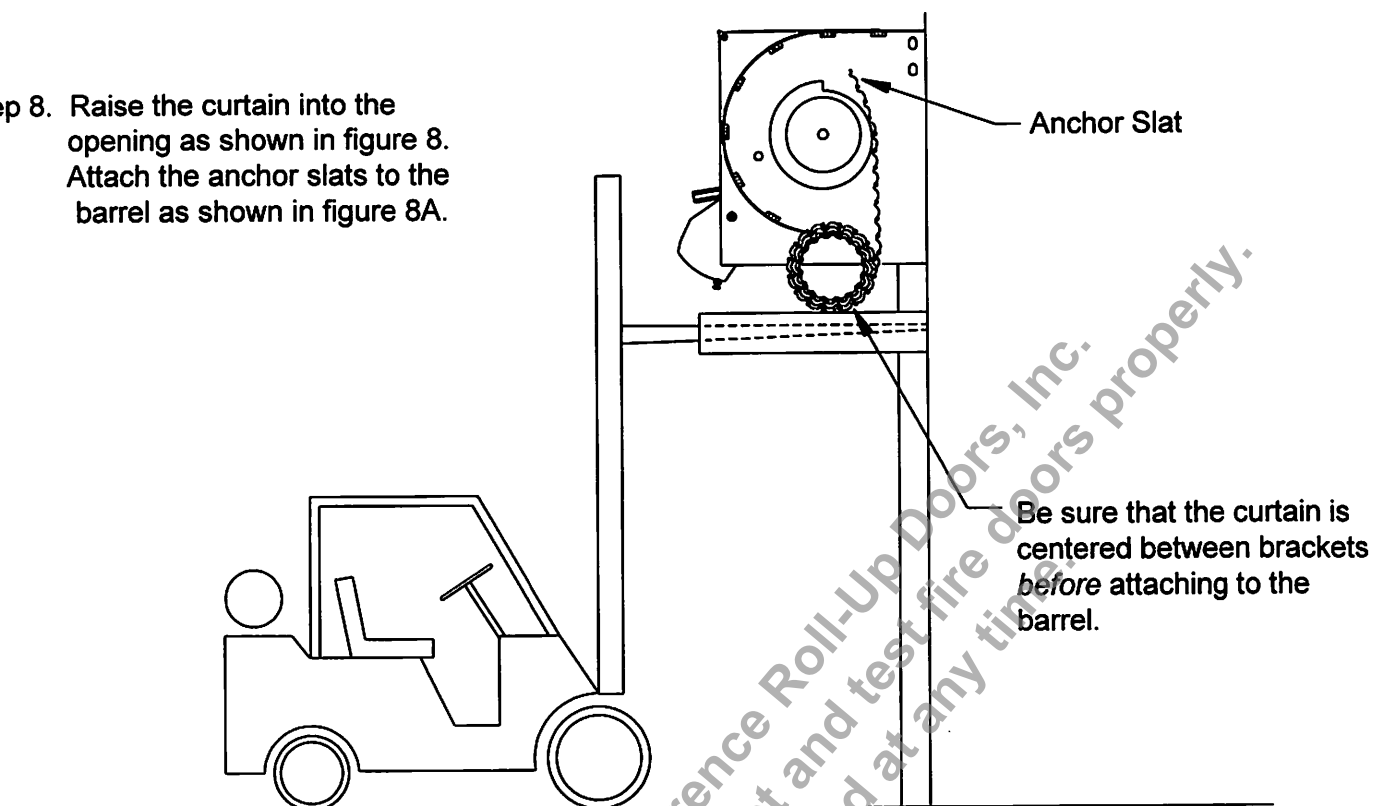


FIGURE 8

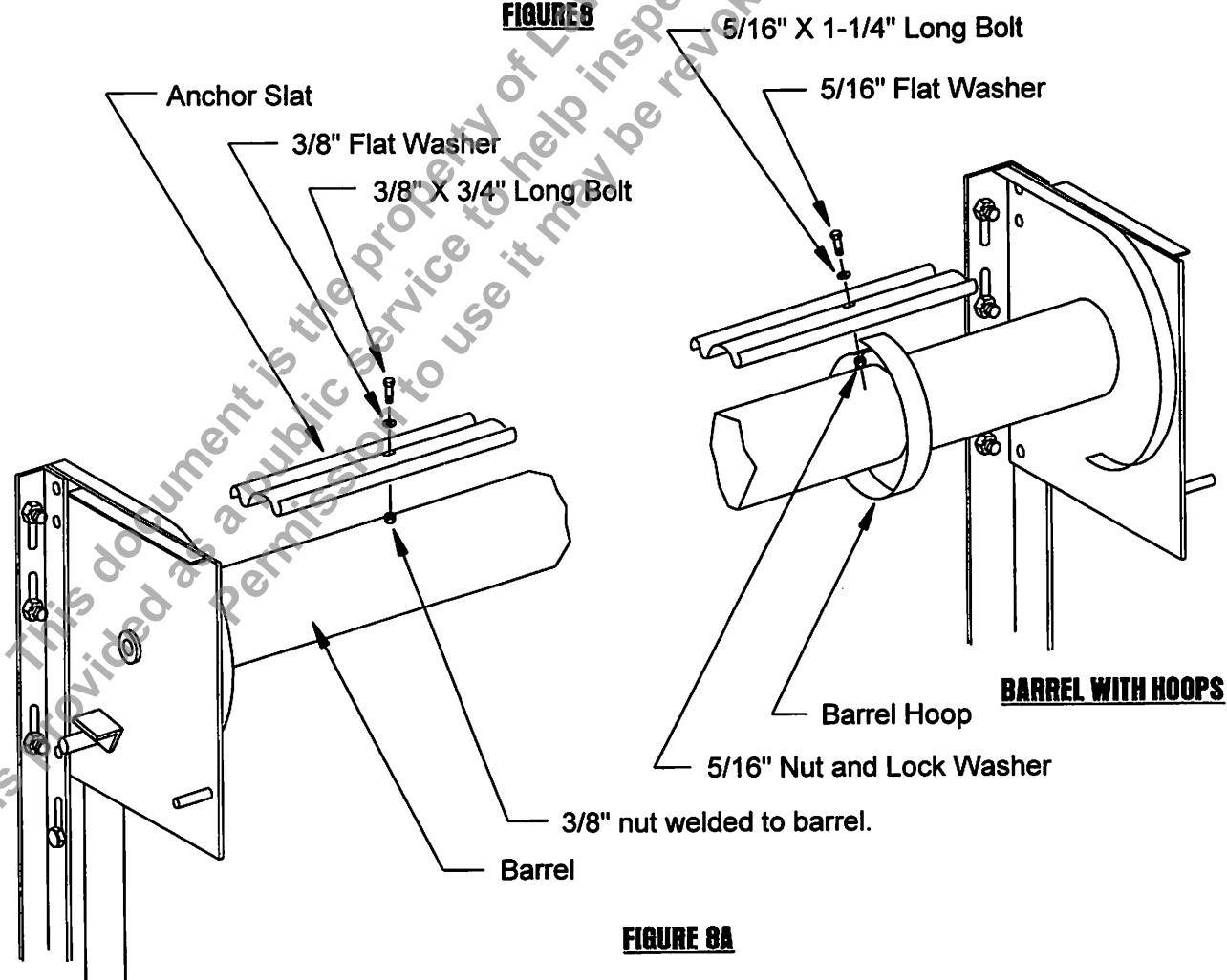


FIGURE 8A

Step 9. Wrap the curtain onto the barrel. For small doors, this can be done by rotating the barrel by hand. For larger doors the barrel can be rotated with the chain hoist or motor hoist.

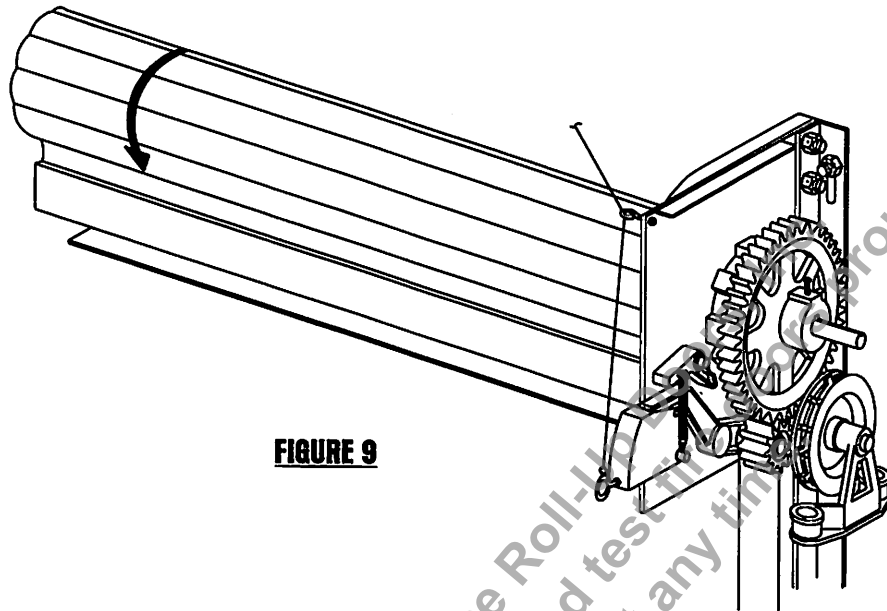


FIGURE 9

Step 10. Lower the bottom bar of the curtain into the guides. Put locking pliers or a C-clamp on *both* guides 3" from the top of the guide to stop the downward travel of the door. Attach the curtain stops to the top of each guide. See figures 10 or 10A.

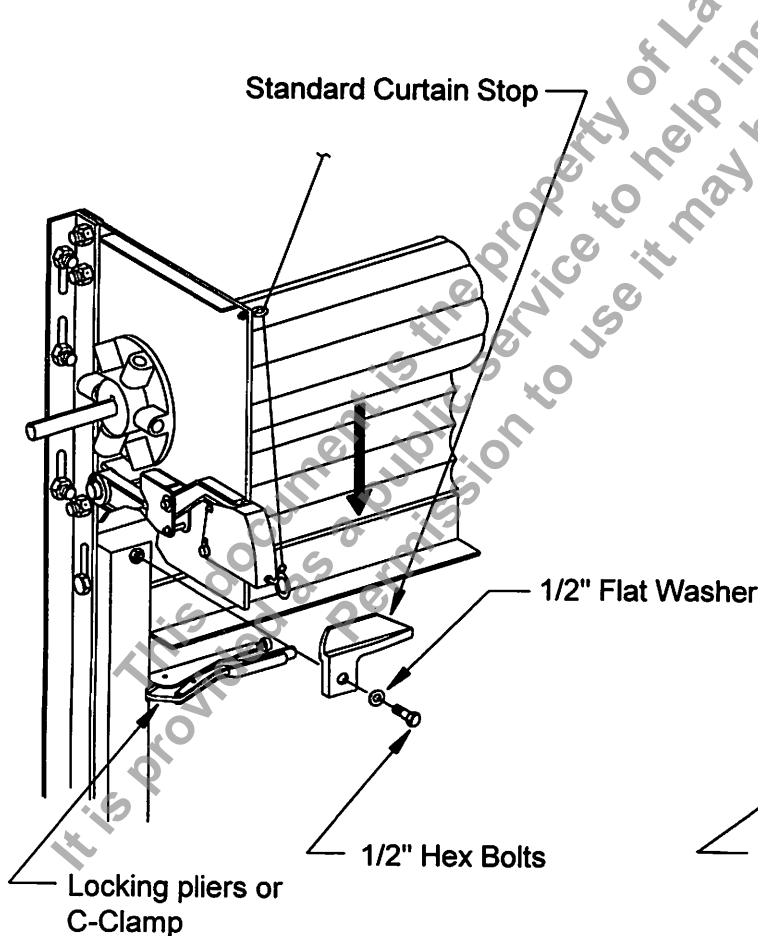


FIGURE 10

**CURTAIN STOP ATTACHMENT FOR
DOORS UP TO 20'-0" WIDE.**

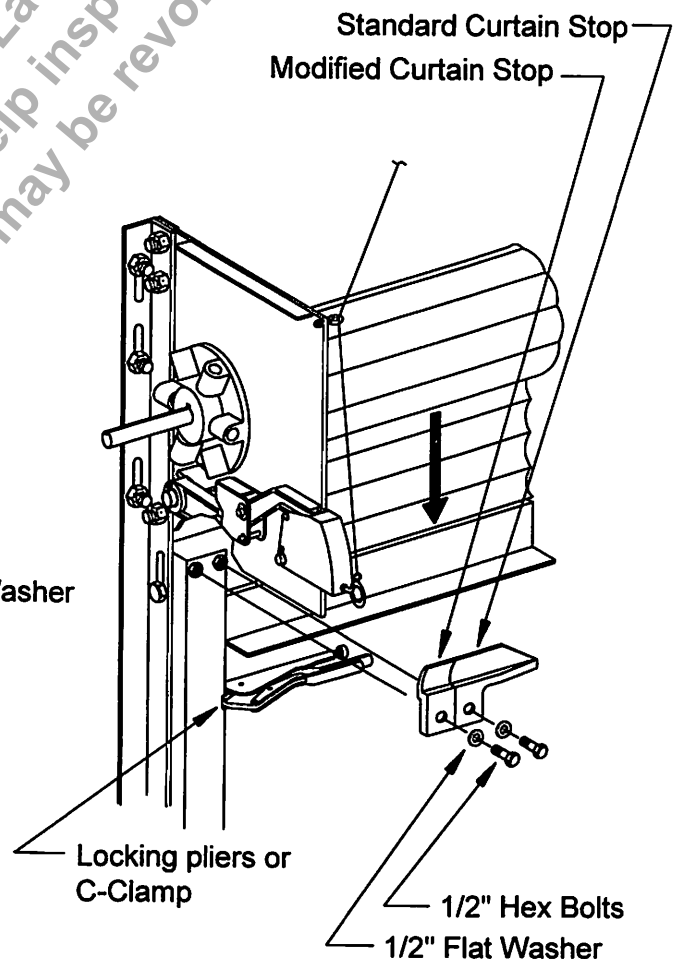


FIGURE 10A

**CURTAIN STOP ATTACHMENT FOR
DOORS OVER 20'-0" WIDE ONLY.**

CAUTION

Door must be clamped in the full open position before winding the springs. See figure 10. *Never attempt to wind or adjust tension with door in the down position.* Use two 3/4" round solid steel bars 18" long (min.) for winding tension on the tension wheel. See figure 11. Always wind in downward direction as shown to add tension.

WARNING

Use extra caution when winding the springs. Use of other tools than shown for winding the springs could cause serious bodily injury. Only experienced qualified rolling door service personnel should install, make adjustments or do repair work on door.

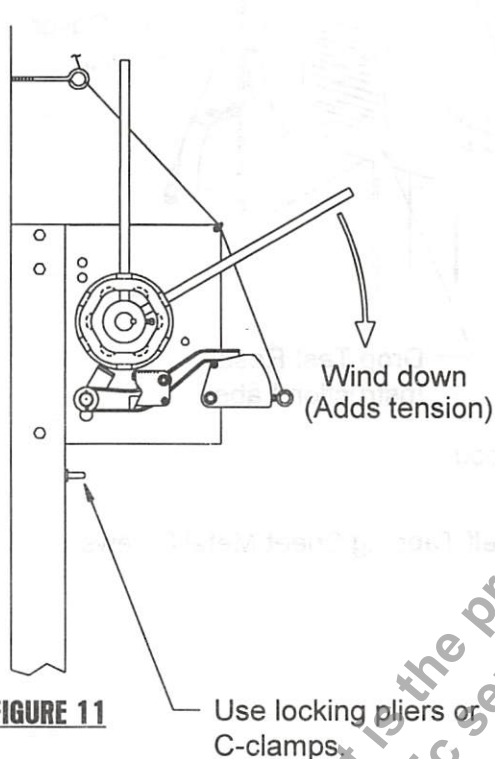


FIGURE 11

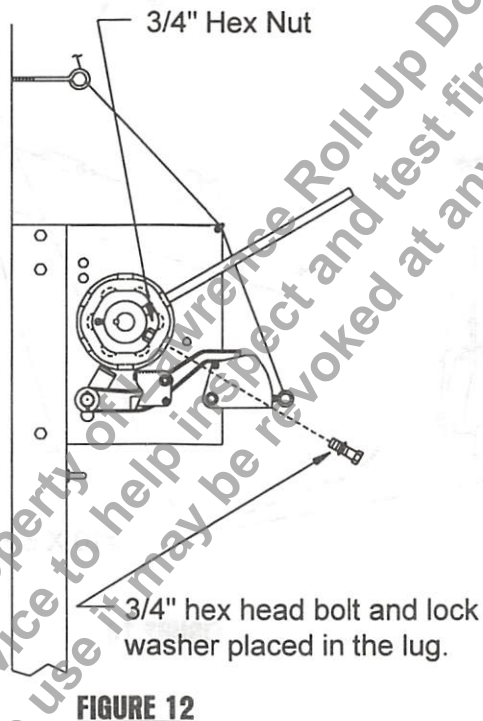


FIGURE 12

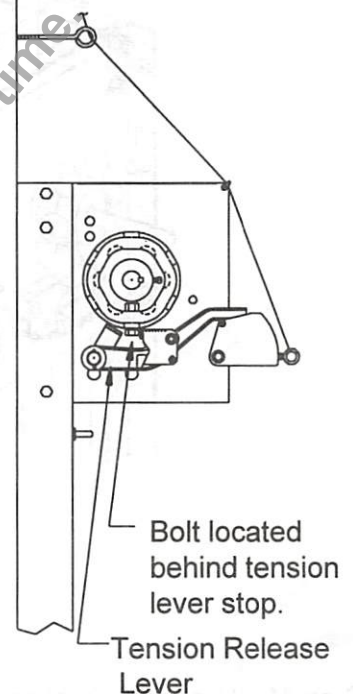


FIGURE 12A

Step 11. Wind initial tension on springs _____ turns are required.

Step 12. While maintaining the tension, place the 3/4" diameter bolt in the tension wheel as shown in figure 12. Continue to wind the tension wheel so the correct number of turns is obtained when the bolt is positioned behind the release lever as shown in figure 12A.

Step 13. Check the operation of the door. To do this, raise and lower the door several times. Check to be sure the door wraps evenly on the barrel and does not rub the end brackets on either side. Door should set on the floor when closed and stay up when open. If the door jumps off the floor and hits the stops at the top of the guides with excessive force, release spring tension one notch at a time until the door sits on the floor. If the door will not stay in the open position and is hard to start off the floor, put more tension on the springs one notch at a time until the door stays in the open position.

CAUTION

Door must be clamped in full open position before attempting to wind or adjust spring tension. See figure 10 and step 11.

Step 14. Install the hood of the door as shown in figure 13.

Attach adhesive backed reset instruction label to hood near the drive end as shown.

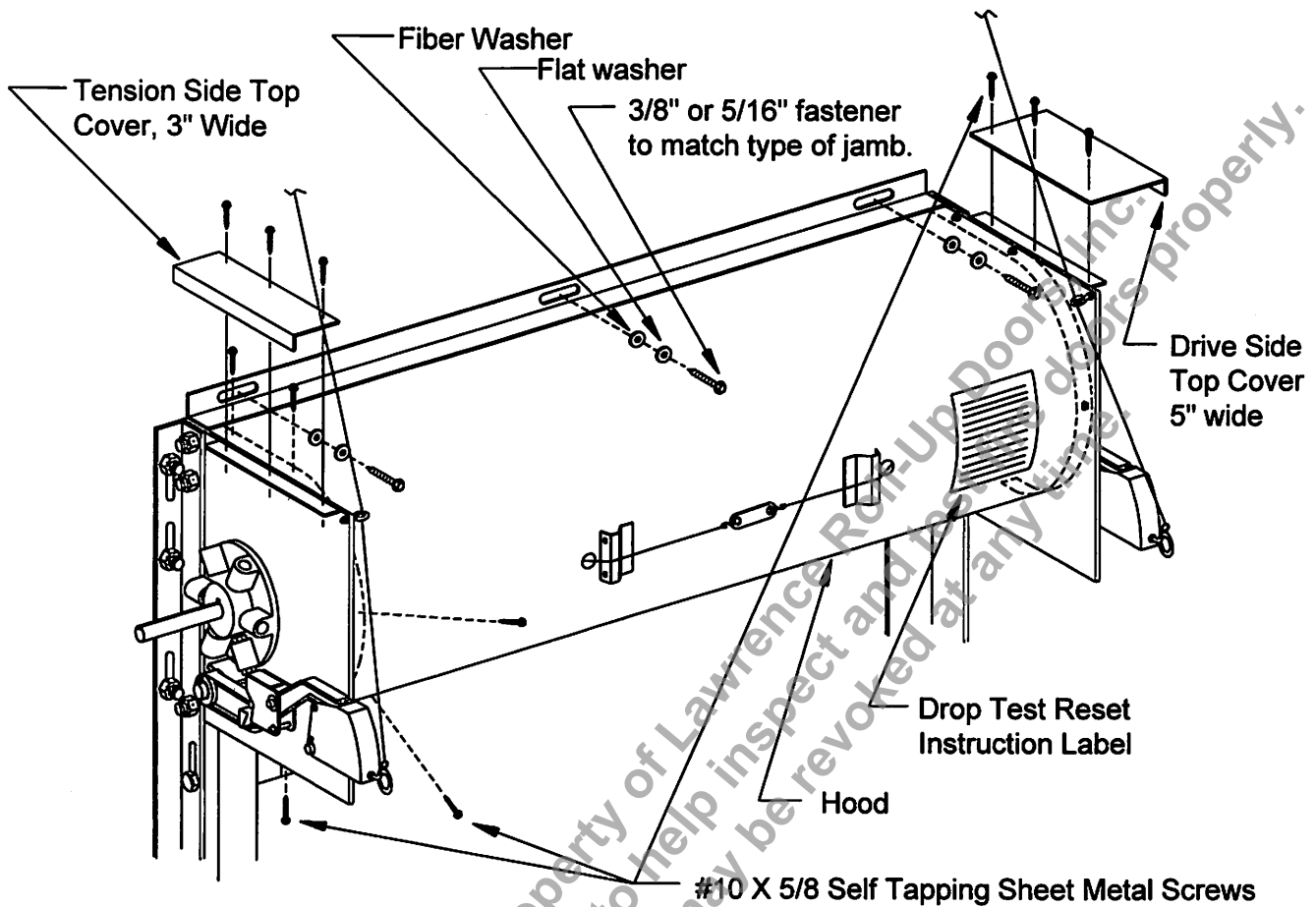


FIGURE 13

Step 15. Drop testing of fire door.

NOTE: *This is the most important step in the fire door installation.* Be sure area around door is clear of obstructions and personnel as a safety precaution.

Disconnect S-hook along sash chain. While doing this, keep tension on both ends of sash chain to keep the drop weights in raised position. Simultaneously release ends of sash chain to allow door to drop. The door should close at a maximum speed of 2 feet per second.

If the door did not function properly for the drop test, engage the gearing by reconnecting the sash chain as shown in figure 7 and raise the door to the open position. Place the vise grips on guides as shown in figure 10 and 10A. Adjust the spring tension by putting more tension if door closed too fast or releasing tension if door closed too slowly.

See step 12. Only adjust tension one lug at a time. While making sure the door will remain in the raised position, remove the vise grips. Repeat the drop test instructions.

Step 16. Attach end covers to both ends of door as shown in figure 13