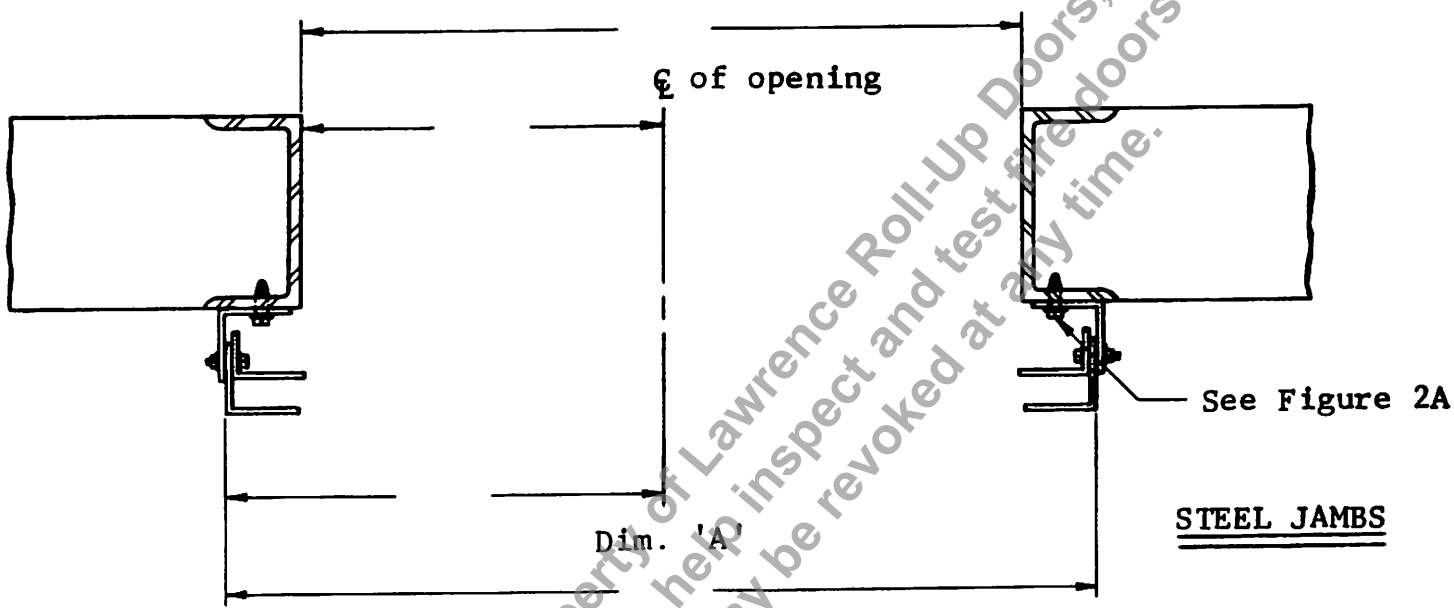
INSTALLATION INSTRUCTIONS FOR ROLLING FIRE DOORS

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.

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



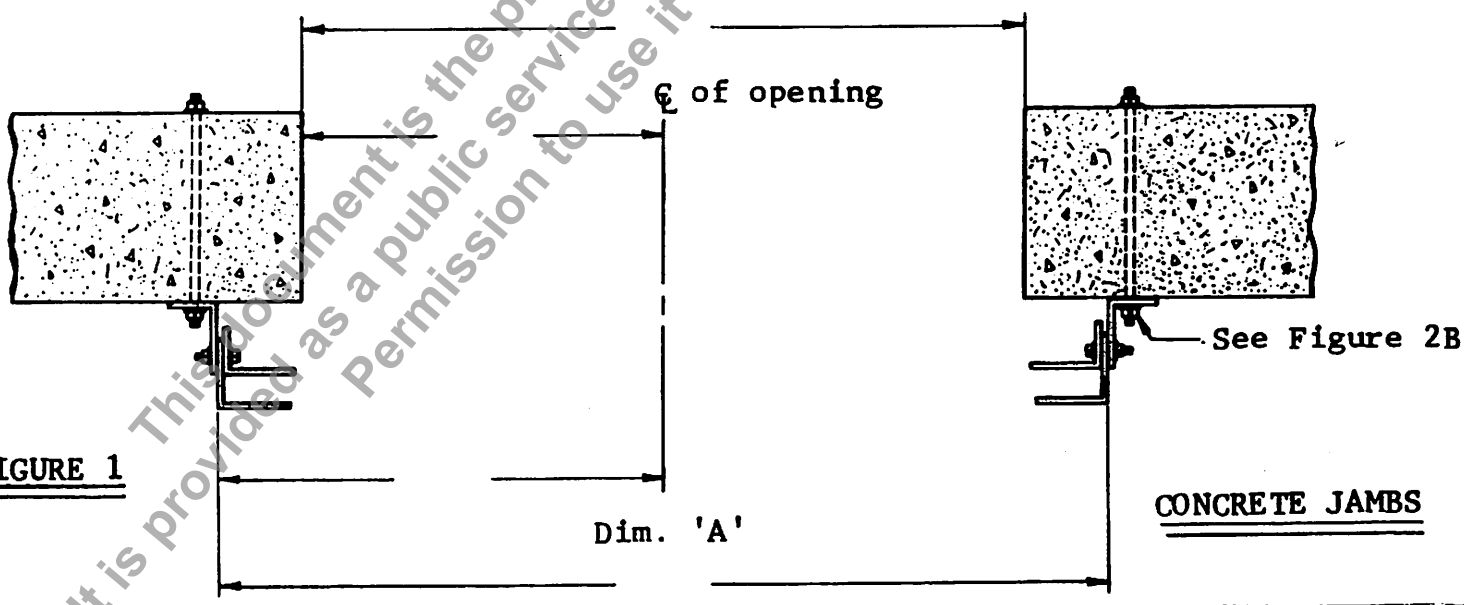


FIGURE 1

Ceco/Windsor Door
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(501) 562-1872
1370 FURNEAUX ROAD, MARYSVILLE, CA 95901
(916) 743-1851

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 _____ inches off the floor.

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

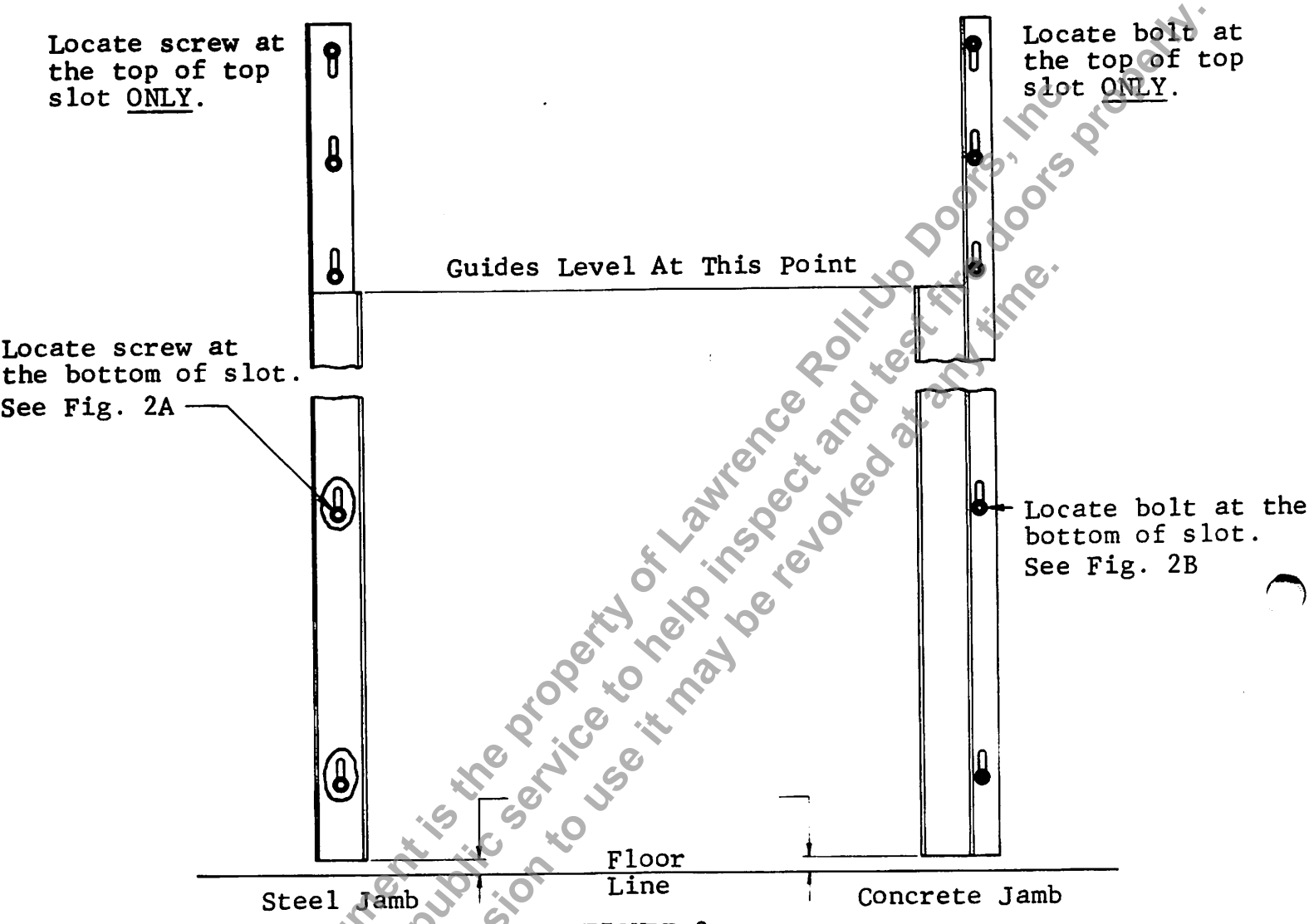


FIGURE 2

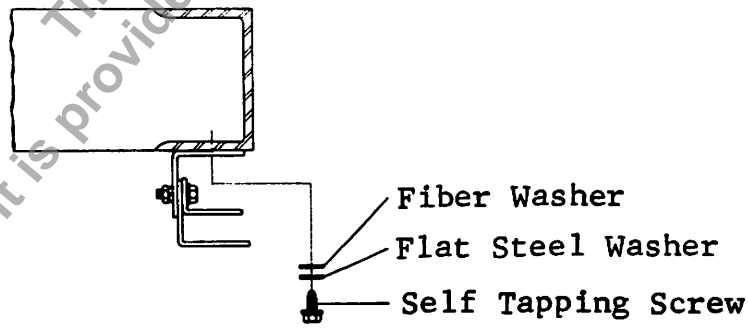


FIGURE 2A

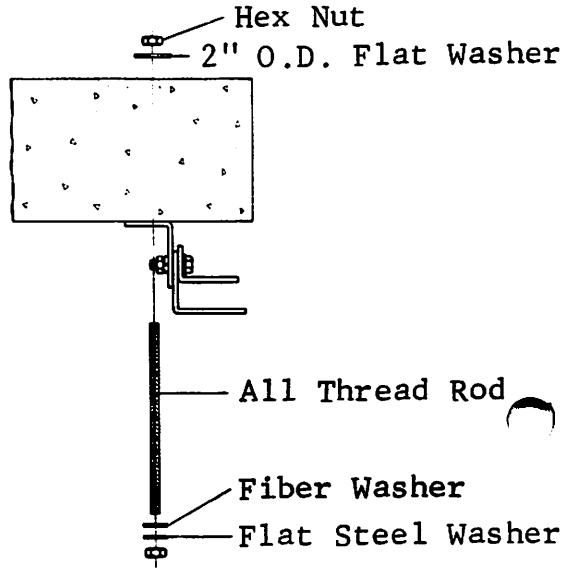
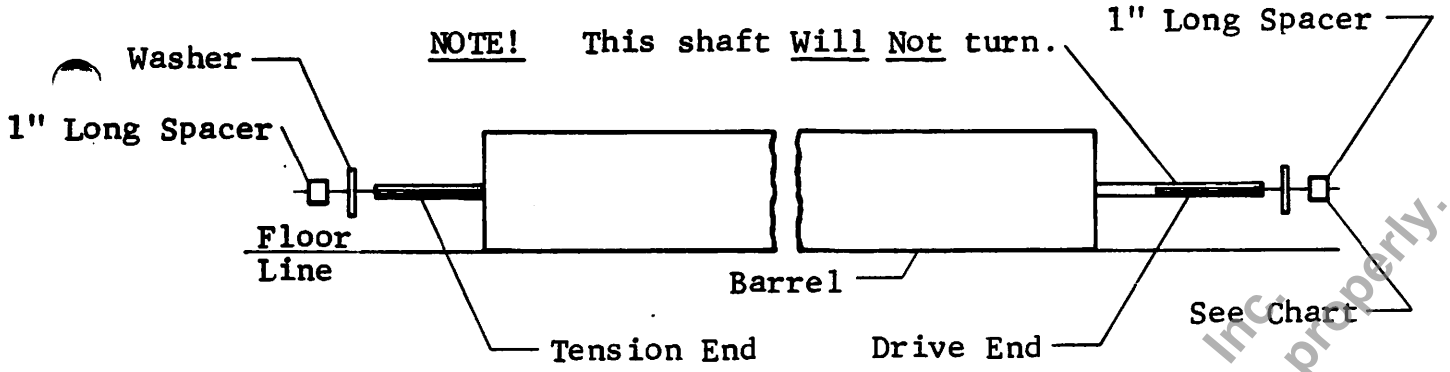


FIGURE 2B

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

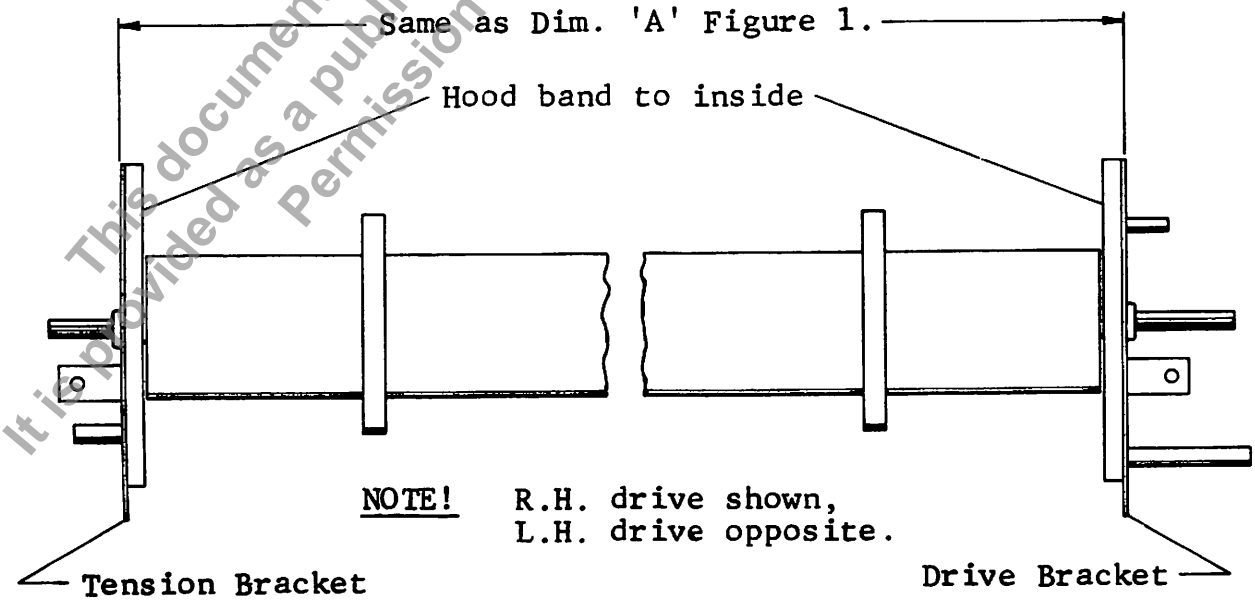


NOTE! Barrel shown is R.H. drive, L.H. drive is opposite.

FIGURE 3A

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

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



NOTE! R.H. drive shown, L.H. drive opposite.

FIGURE 3B

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

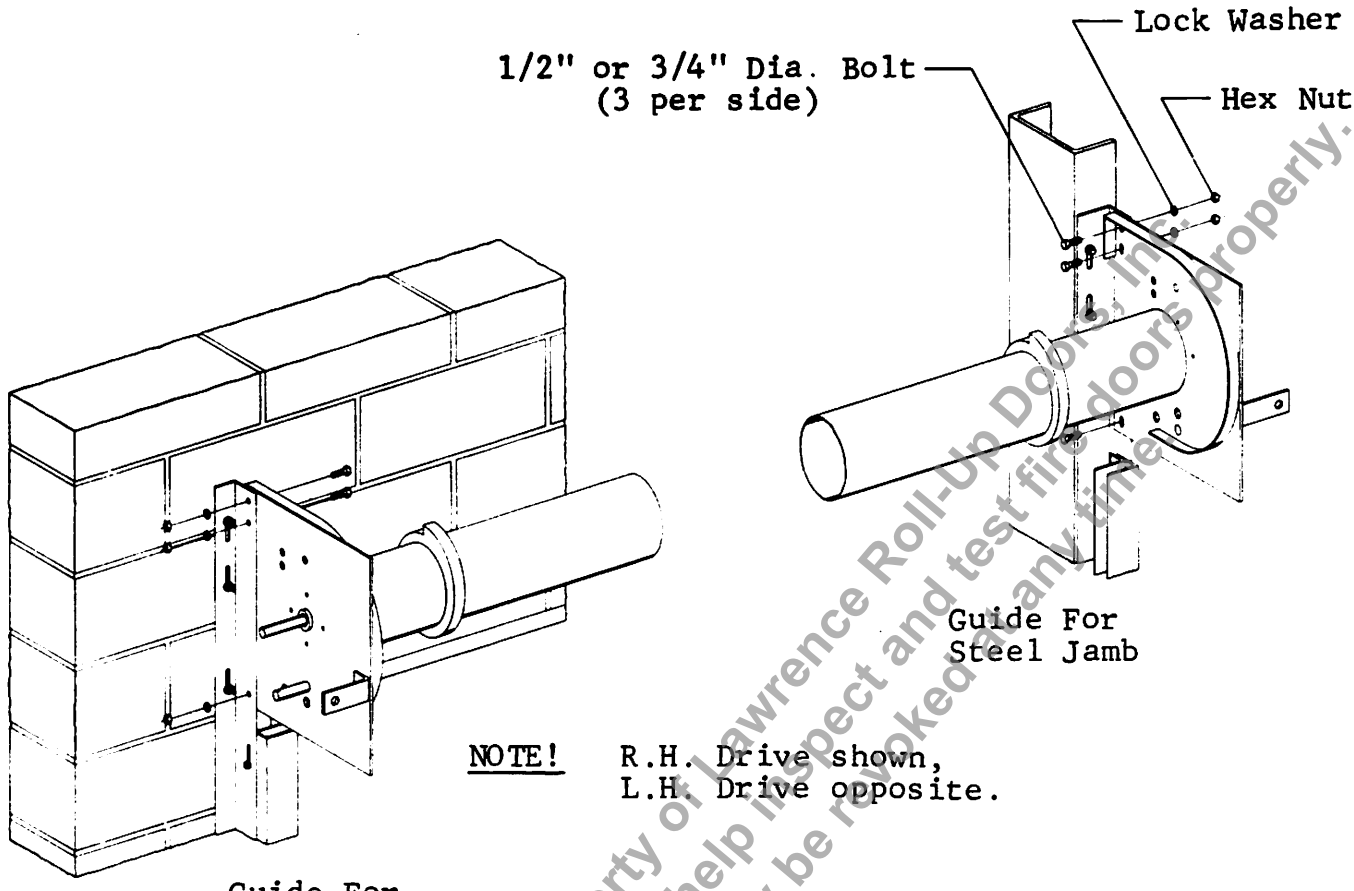


FIGURE 4

STEP 5 Assemble tension end bracket as shown in Figure 5A or 5B.

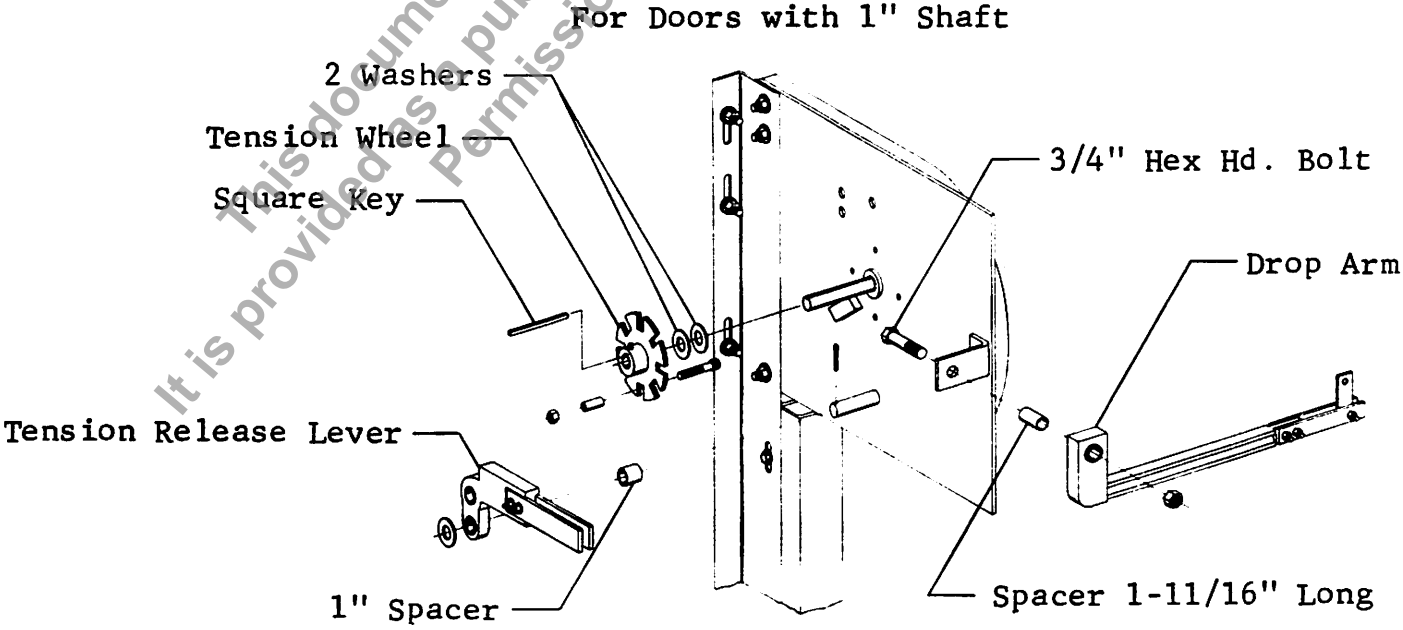


FIGURE 5A

For Doors with 1-1/4", 1-3/8" or 1-3/4" Shafts

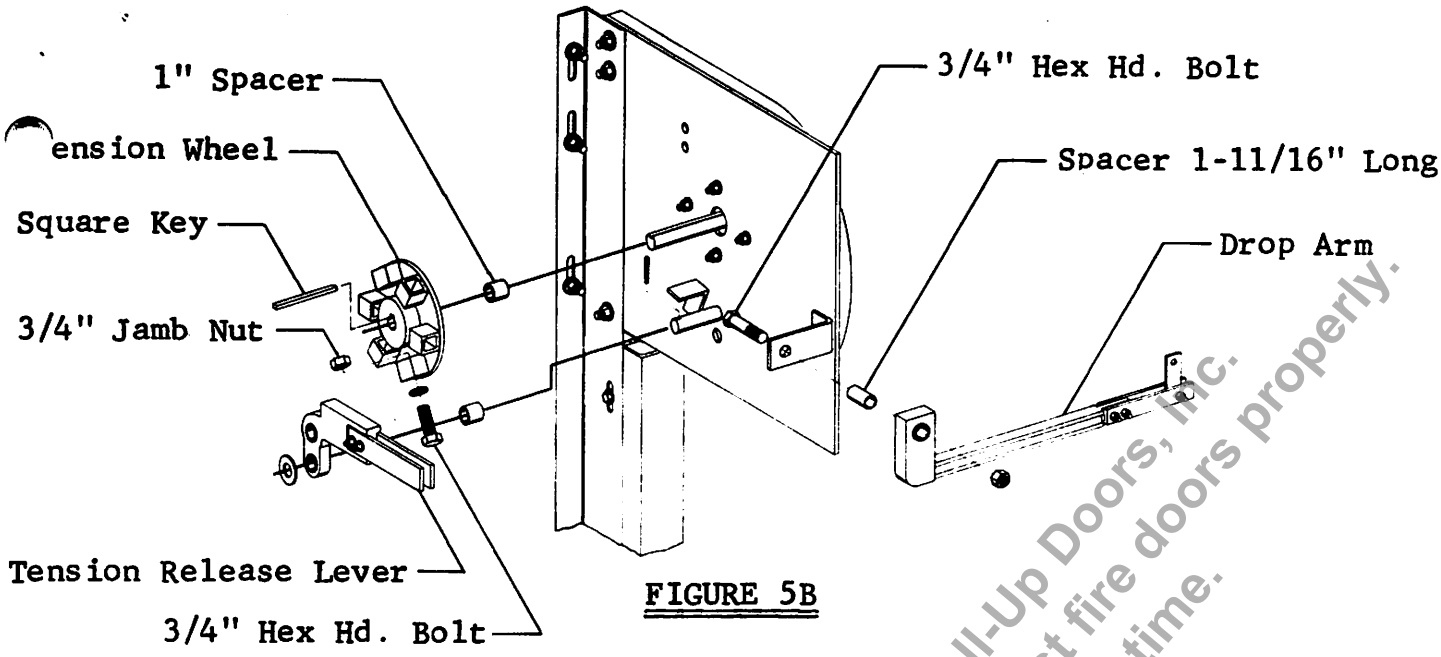


FIGURE 5B

STEP 6 Assemble the drive end bracket as shown in Figure 6A or 6B. Be sure that all gears are in line. Put a 1/8" cotter pin in the ends of all stub shafts.

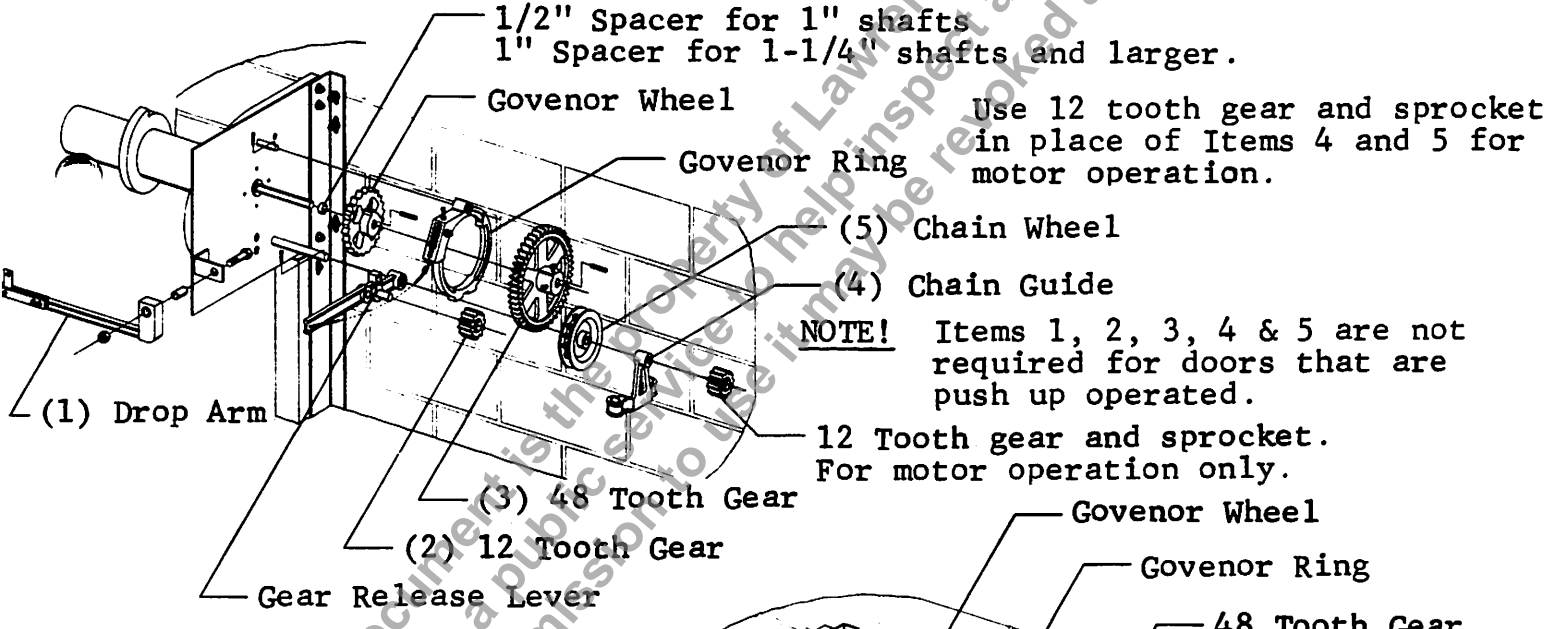


FIGURE 6A

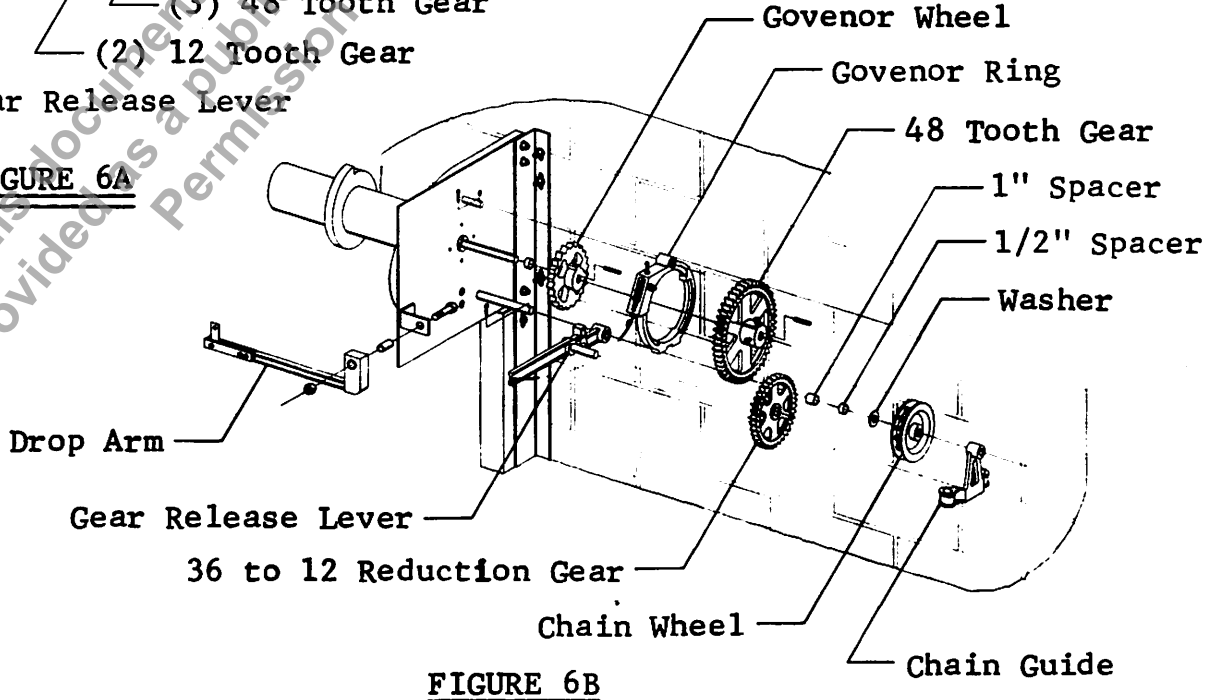


FIGURE 6B

STEP 7 Raise the curtain into the opening as shown in Figure 7. Attach the anchor slats to the barrel as shown in Figure 7A, 7B or 7C.

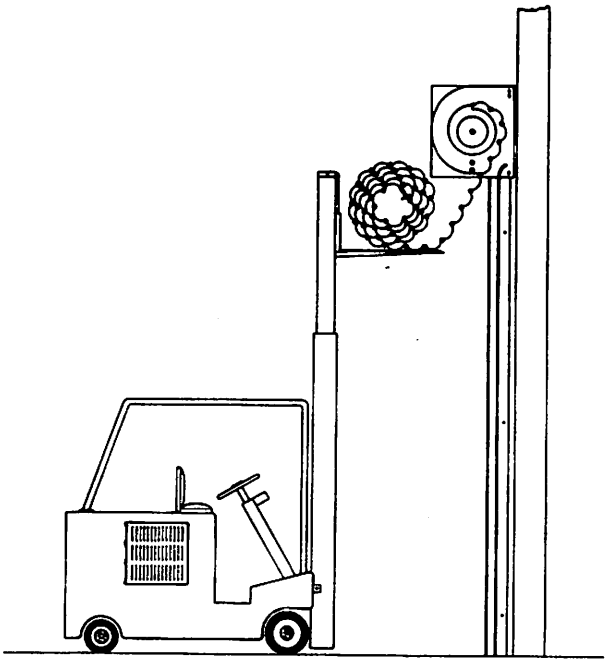


FIGURE 7

NOTE! Be sure that the curtain is centered between brackets before attaching to the barrel.

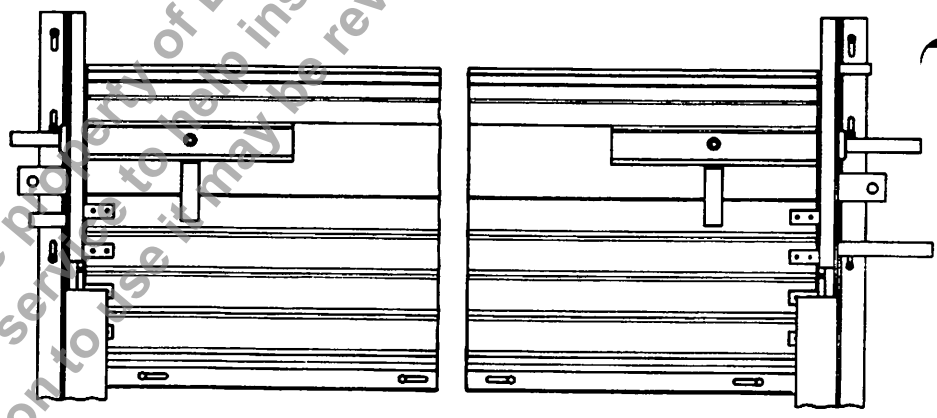
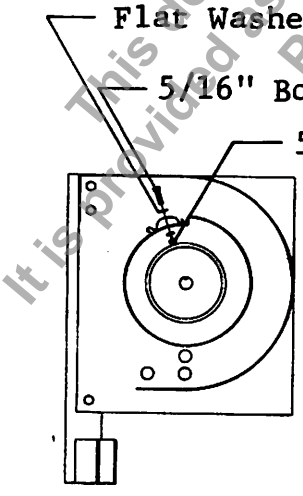
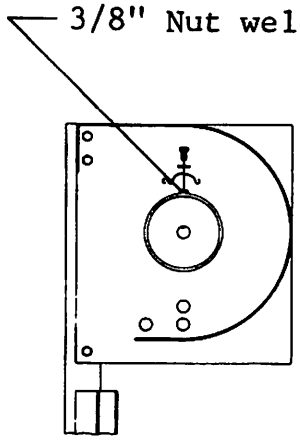


FIGURE 7A



Barrel with Hoop

FIGURE 7B



No Hoops

FIGURE 7C

STEP 8 Wrap the curtain onto the barrel. For small doors, this can be done by rotating the barrel by hand. For larger doors with chain hoist or motor the barrel can be rotated by chain hoist or motor operation. To do this it will be necessary to temporarily engage the gearing. See Figure 8 To disengage govenor ring at this time see Figure 15.

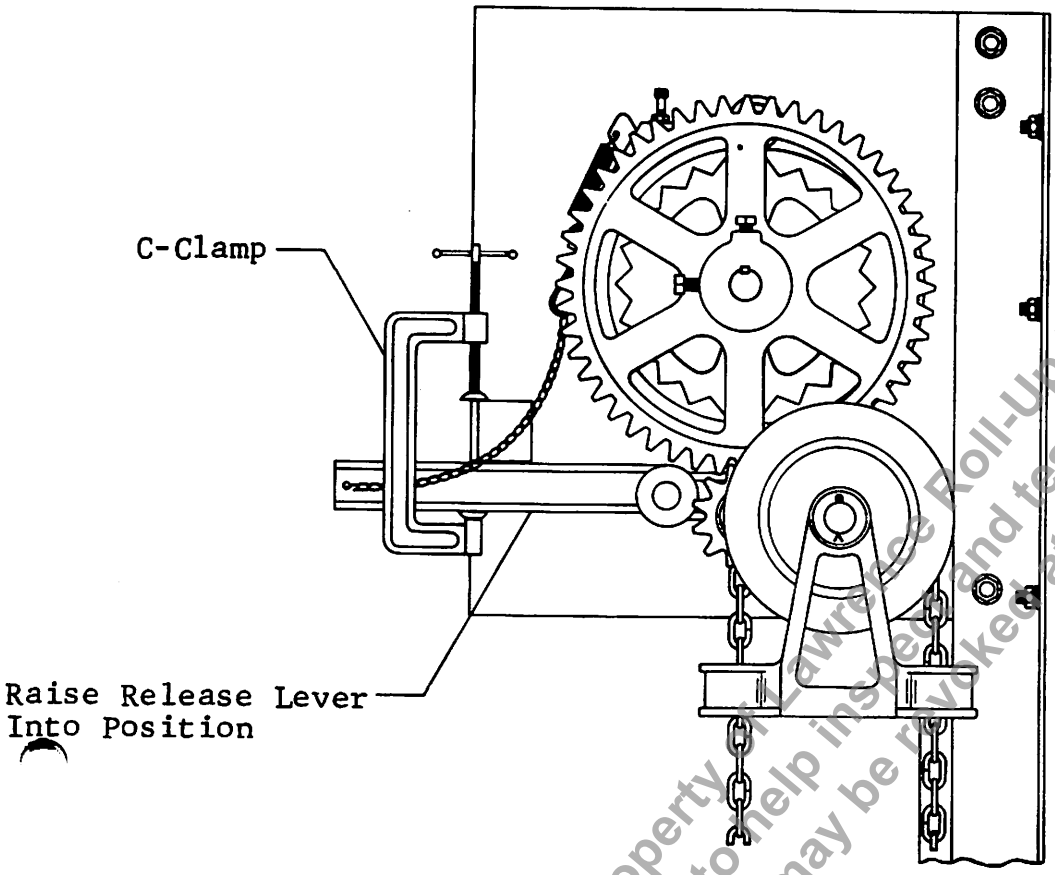


FIGURE 8

STEP 9 Lower the bottom bar of the curtain into the guides and attach the curtain stops to the top of each guide. See Figure 9. Put a c-clamp on both guides 6" from the top of the guide to stop the downward travel of the door.

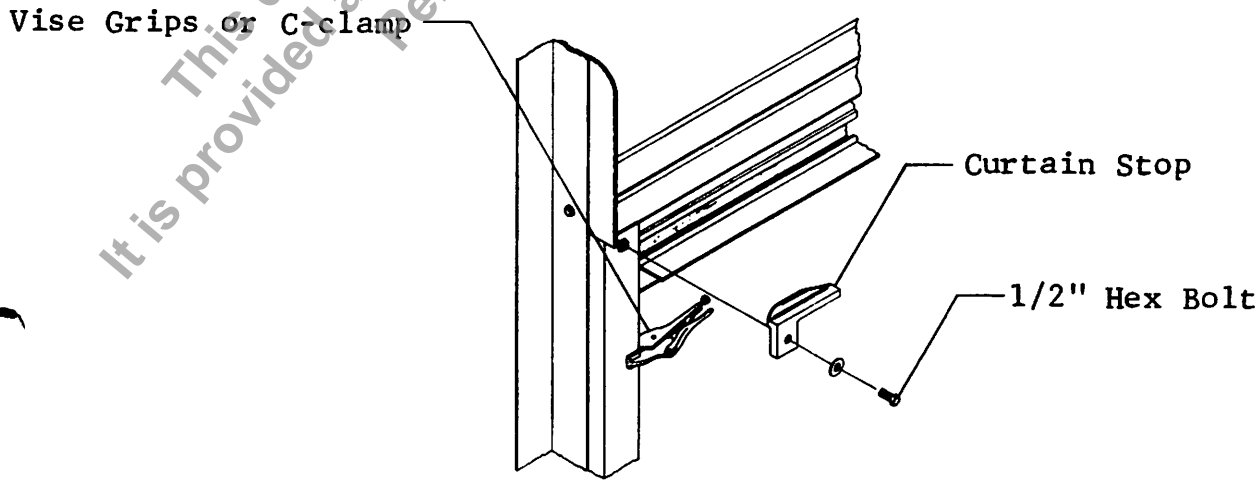


FIGURE 9

STEP 10 Wind initial tension on the springs. _____ turns are required.

NOTE! Door must be clamped in the full open position before winding the springs. See Figure 9.

Use a 3/4" round steel bar 18" long for winding tension on the heavy duty tension wheels, and 1/2"x 1"x 18" long rectangular steel bar for winding the light duty tension wheels. See Figure 10.

CAUTION! Use extra caution when winding the springs. Use of other tools than shown for winding of the springs could cause serious bodily injury.

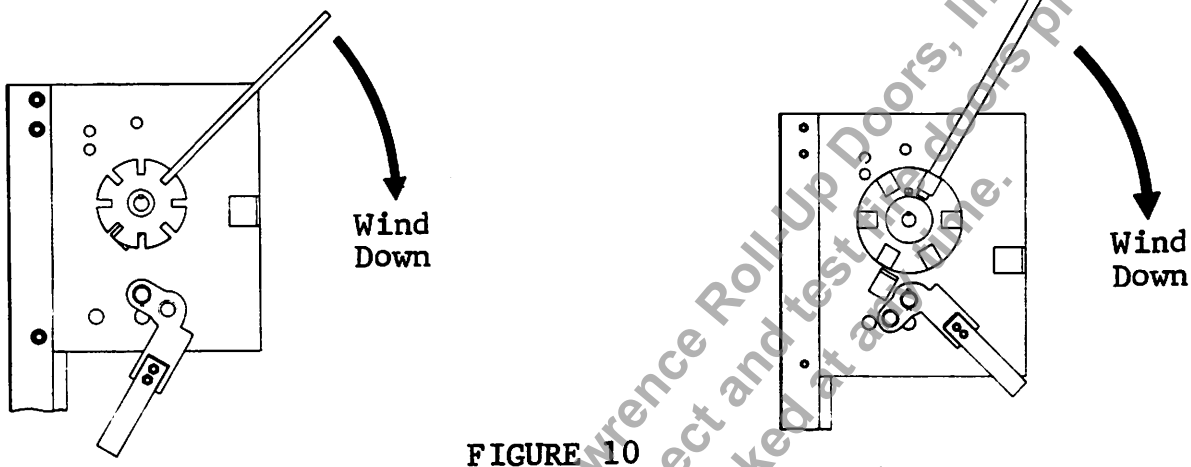


FIGURE 10

STEP 11 When correct number of turns are wound on the springs, place either a 3/4" dia. bolt in the heavy duty tension wheel or the bolt and spacer on the light duty tension wheel. See Figure 11. Then raise the tension release lever into position and clamp into place. See Figures 5A or 11A

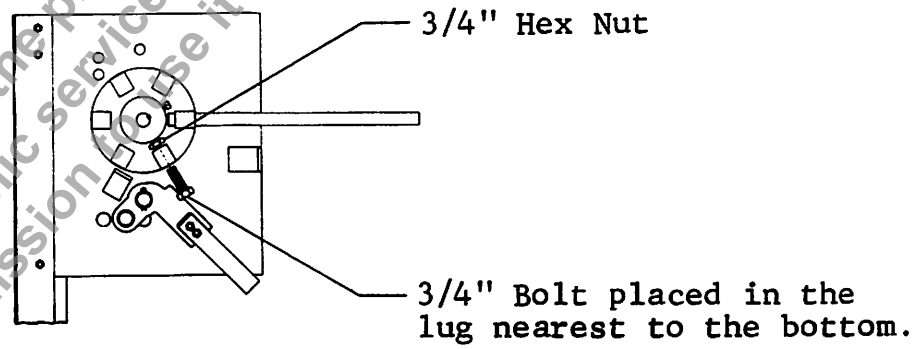


FIGURE 11

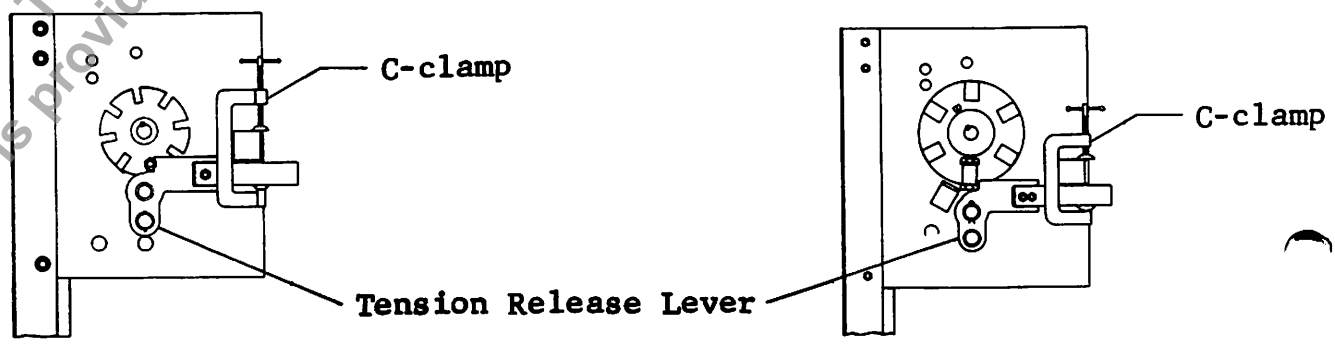


FIGURE 11A

STEP 12 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 snap into the open position. 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.

STEP 13 Install the hood of the door as shown in Figure 12.

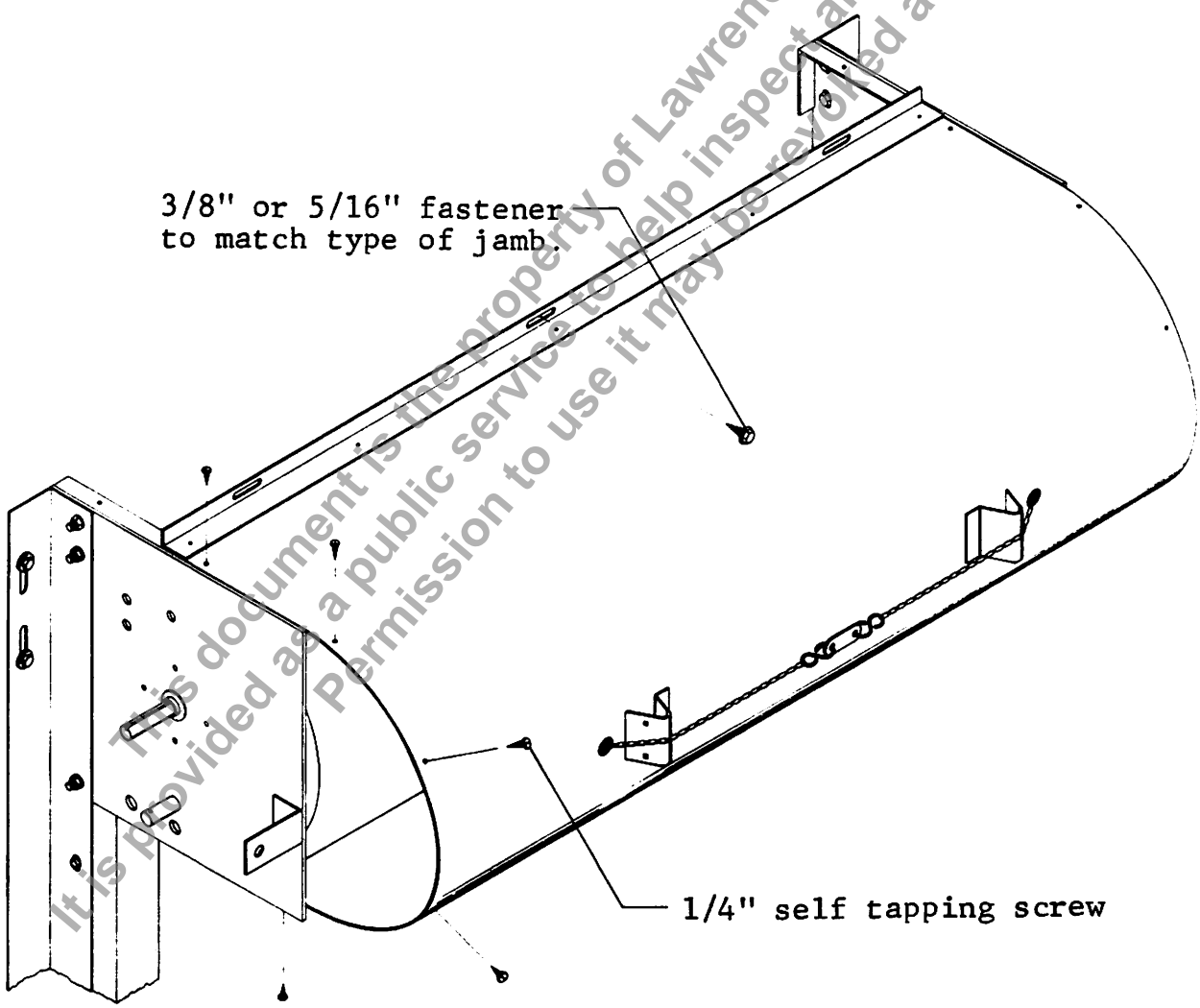
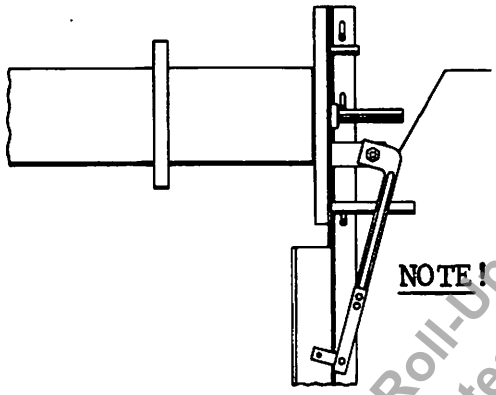


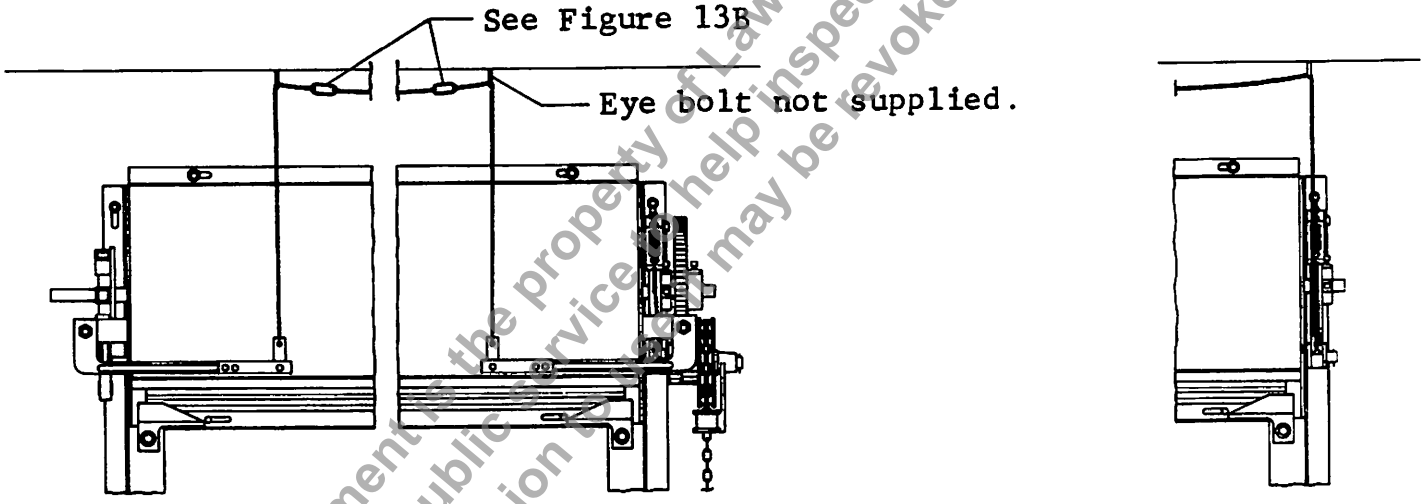
FIGURE 12

STEP 14 Install drop arms on both brackets. See Figure 13. Install chain and fusible links to the drop arms as shown in Figures 13A and 13B. Chain must go from one drop arm up to the ceiling and across the ceiling and down to the drop arm on the opposite side of the door. Note! Chain must be free to slide, permitting drop arms to fall if any one of the fusible links seperate. After the chain is installed, remove the C-clamps from both brackets.



NOTE! Drop arm is required on tension bracket only for push up operated doors.

FIGURE 13



Chain or Motor Operated Doors

Push Up Doors

FIGURE 13A

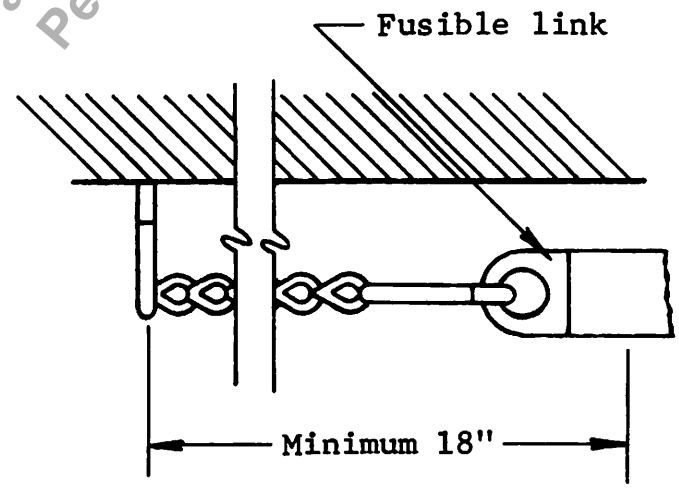


FIGURE 13B

STEP 15 Drop testing of the fire door. NOTE! This is the most important step in the fire door installation. Remove a S-hook at one of the drop arms. When removing the S-hook, keep tension on the chain and hold the drop arm in position. See Figure 15.

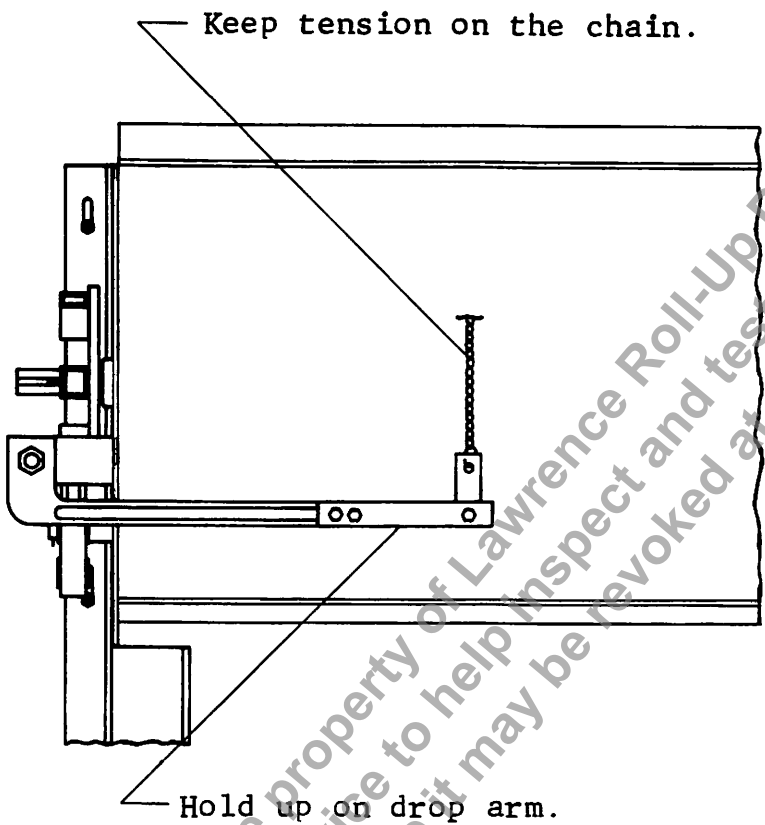


FIGURE 14

Release the arm and chain at the same time. When the arm and chain are released, approximately 3/4 turn of spring tension is released, the gearing is released, the governor pawl is engaged and the door starts closing. The door should close at a maximum speed of 2 feet per second, or 5 seconds or longer for a 10 foot high door. If the door is closing too fast or fails to completely close, adjust the depth of the governor pawl. See Figures 15 and 15B. Do not change the pawl depth by more than one turn on the adjusting bolt at a time.

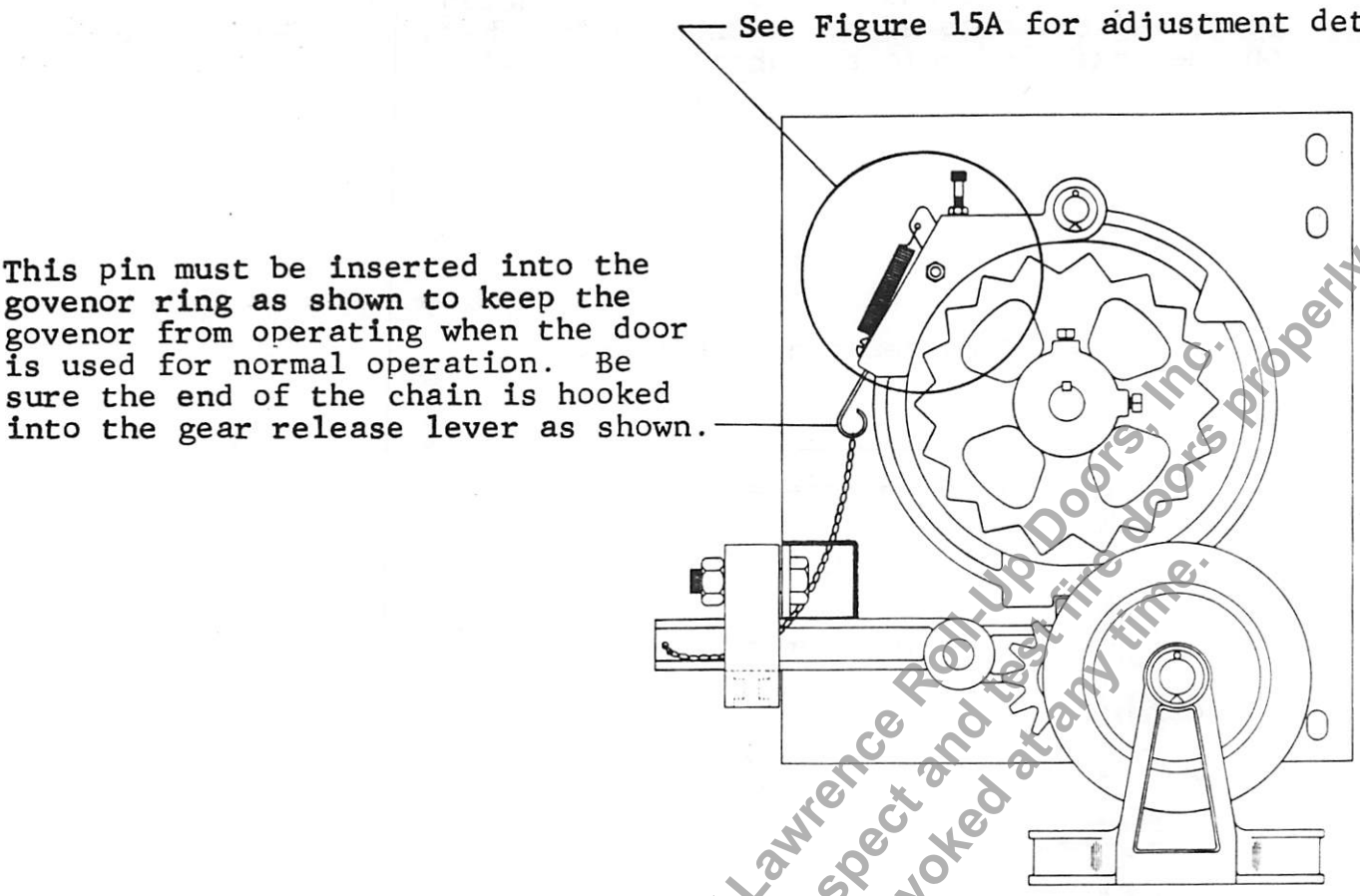


FIGURE 15

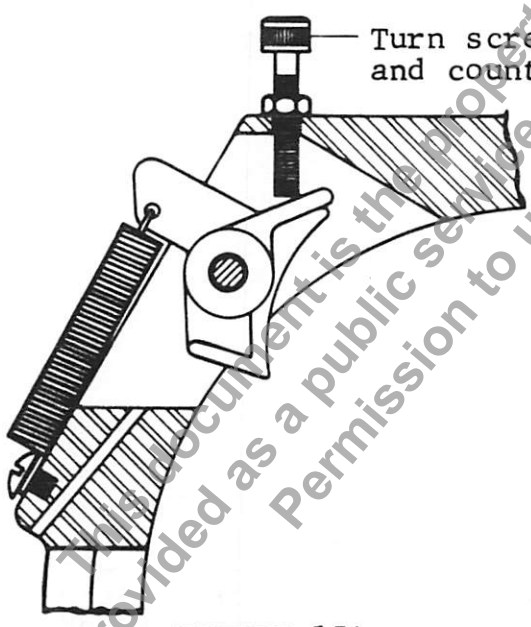


FIGURE 15A

If the door did not function properly for the drop test, engage gearing using a C-clamp as shown in Figure 8 and raise the door to the open position. It will not be necessary to rewind the springs until the door drops in the proper manner. After the govenor is adjusted for the door to properly drop, raise the door to open position, put tension back on the springs and hook up the drop arms. Remember no installation can be considered complete until the door is adjusted so it will close the opening in case of a fire.

DROP TEST & RESET INSTRUCTIONS

FOR FIRE DOOR AUTOMATIC RELEASE MECHANISM —DOOR MODELS FD& FFD

N O T E: READ ENTIRE INSTRUCTIONS BEFORE DROP TESTING OR RESETTING THE FIRE DOOR

⚠WARNING

DOOR IS UNDER EXTREME SPRING TENSION.
CAN CAUSE SEVERE INJURY.
ONLY QUALIFIED EXPERIENCED ROLLING FIRE DOOR SERVICE PERSONNEL SHOULD PERFORM DROP TESTING, RESETTING, REPAIR WORK, OR ANY ADJUSTMENTS ON THIS PRODUCT.

DROP TEST

STEP 1. BEFORE ATTEMPTING TO DROP TEST THE FIRE DOOR, BE SURE IT IS IN PROPER WORKING ORDER AND ALL COMPONENTS HAVE BEEN INSTALLED IN ACCORDANCE WITH CECO/ WINDSOR'S FIRE DOOR INSTALLATION INSTRUCTIONS. INSTRUCT ALL PERSONS TO STAY CLEAR OF THE DOOR OPENING WHEN CONDUCTING THE DROP TEST AND RESETTING.

STEP 2. WITH THE DOOR IN THE OPEN POSITION, REMOVE S—HOOK FROM THE DROP ARM ON THE SPRING TENSION END OF THE DOOR. WHILE REMOVING THE S—HOOK, KEEP TENSION ON THE SASH CHAIN AND HOLD THE DROP ARM IN POSITION. (SEE FIG. 1). RELEASE THE SASH CHAIN AND THE DROP ARM AT THE SAME TIME. WHEN THE DROP ARM AND CHAIN ARE RELEASED, APPROXIMATELY 3/4 TURN OF SPRING TENSION IS RELEASED, THE DRIVE GEARING IS RELEASED FOR CHAIN HOIST AND MOTOR OPERATION, THE GOVERNOR PAWL IS ENGAGED AND THE DOOR STARTS CLOSING. THE DOOR SHOULD CLOSE AT A MAXIMUM SPEED OF TWO FEET PER SECOND. IF THE DOOR CLOSES TOO FAST OR FAILS TO COMPLETELY CLOSE, MAKE THE NECESSARY ADJUSTMENTS AS DESCRIBED IN THE MAIN FIRE DOOR INSTALLATION INSTRUCTIONS.

Ceco/Windsor Door
A Division of The Ceco Corporation

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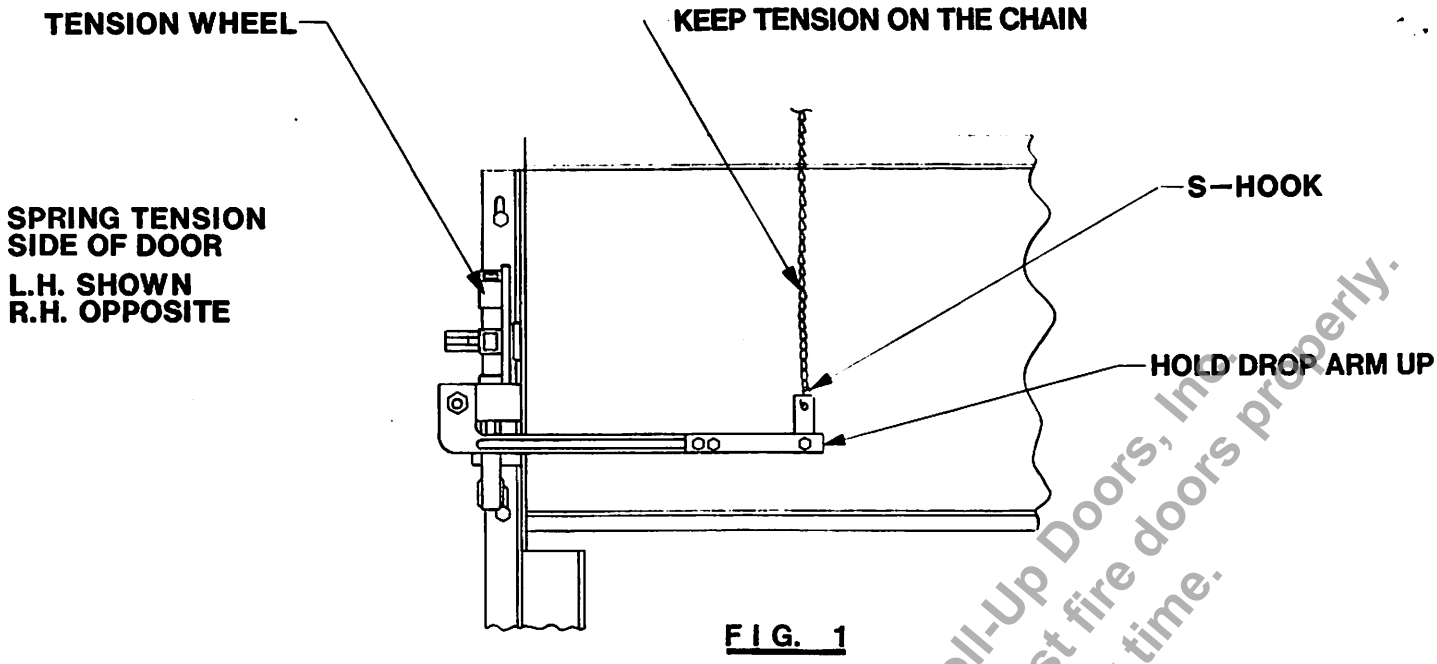

FIG. 1

RESET OF RELEASE MECHANISM

STEP 3. AFTER THE DOOR HAS SUCCESSFULLY BEEN DROP TESTED TO THE CLOSED POSITION, RAISE THE DRIVE SIDE GEAR RELEASE LEVER IN POSITION AND SECURE IN PLACE WITH A C—CLAMP AS SHOWN IN FIGURE 2. (NOTE: ON MOTOR OPERATED DOORS, RUN THE OPERATOR THROUGH THE CLOSE CYCLE BEFORE RAISING THE RELEASE LEVER TO ENGAGE THE GEARING.) SLIDE THE BRASS PIN THROUGH THE HOLE IN THE GOVENOR RING AND INTO THE HOLE OF THE SPRING LOADED GOVERNOR PAWL. (SEE FIG. 2A).

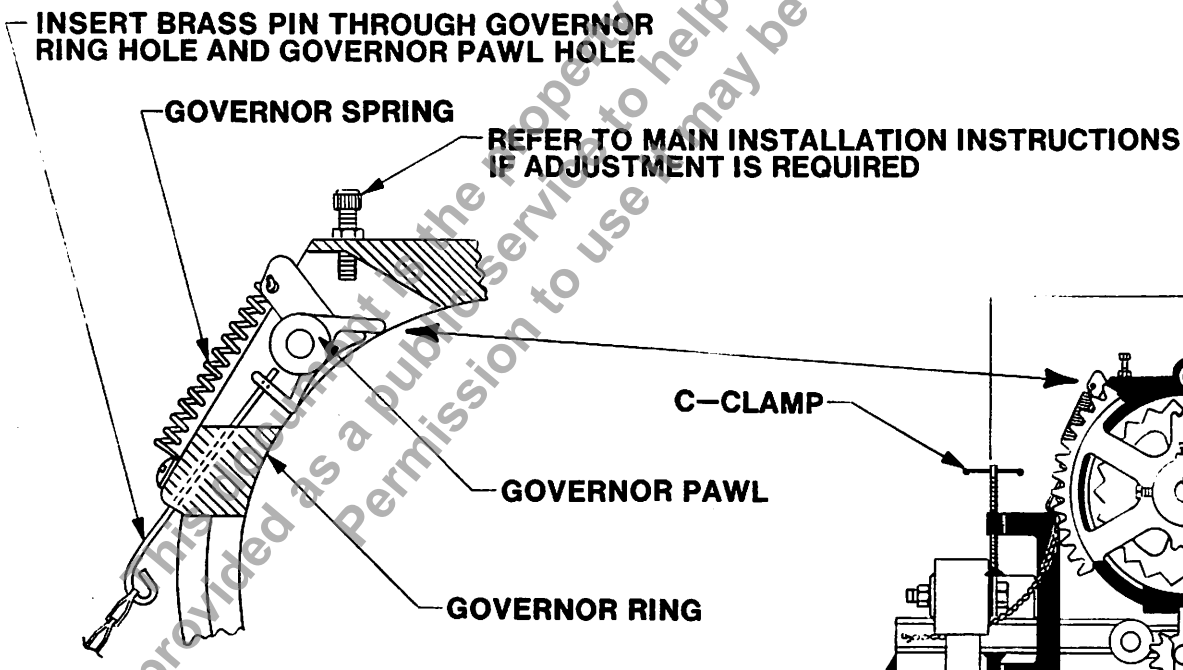

FIG. 2A

FIG. 2
DRIVE SIDE OF DOOR.
R.H. SHOWN
L.H. OPPOSITE

STEP 4. RAISE THE DOOR MANUALLY WITH THE CHAIN HOIST OR WITH THE MOTOR (WHICHEVER APPLIES) TO THE FULL OPEN POSITION AND CLAMP VICE GRIPS TO EACH GUIDE AS SHOWN IN FIG. 4 TO KEEP THE DOOR FROM ACCIDENTLY CLOSING. RE–CHARGE THE SPRINGS BY WINDING THE SPRING TENSION WHEEL 3/4 TURN UNTIL THE TENSION BOLT IS POSITIONED AT APPROXIMATELY 6:00 O'CLOCK BEHIND THE TENSION RELEASE LEVER AS SHOWN IN FIG. 3 OR 3A.

⚠CAUTION

TO WIND TENSION WHEEL USE 3/4" DIAMETER ROUND SOLID STEEL BARS 18" LONG FOR HEAVY DUTY TENSION WHEELS AND 1/2" × 1" RECTANGULAR SOLID STEEL BARS 18" LONG FOR LIGHT DUTY TENSION WHEELS. KEEP A FIRM GRIP ON WINDING BARS AT ALL TIMES. SEE FIG. 3 (LIGHT DUTY) OR 3A (HEAVY DUTY). USE OF ANY OTHER TOOL THAN SHOWN COULD CAUSE SEVERE INJURY. NEVER WIND SPRING TENSION WHEEL WITH DOOR IN CLOSED POSITION.

WHILE HOLDING THE SPRING TENSION WITH THE WINDING BAR, HAVE AN ASSISTANT RAISE THE TENSION RELEASE LEVER INTO POSITION AND HOLD IN PLACE WITH C–CLAMP AS SHOWN IN FIG. 3 OR 3A.

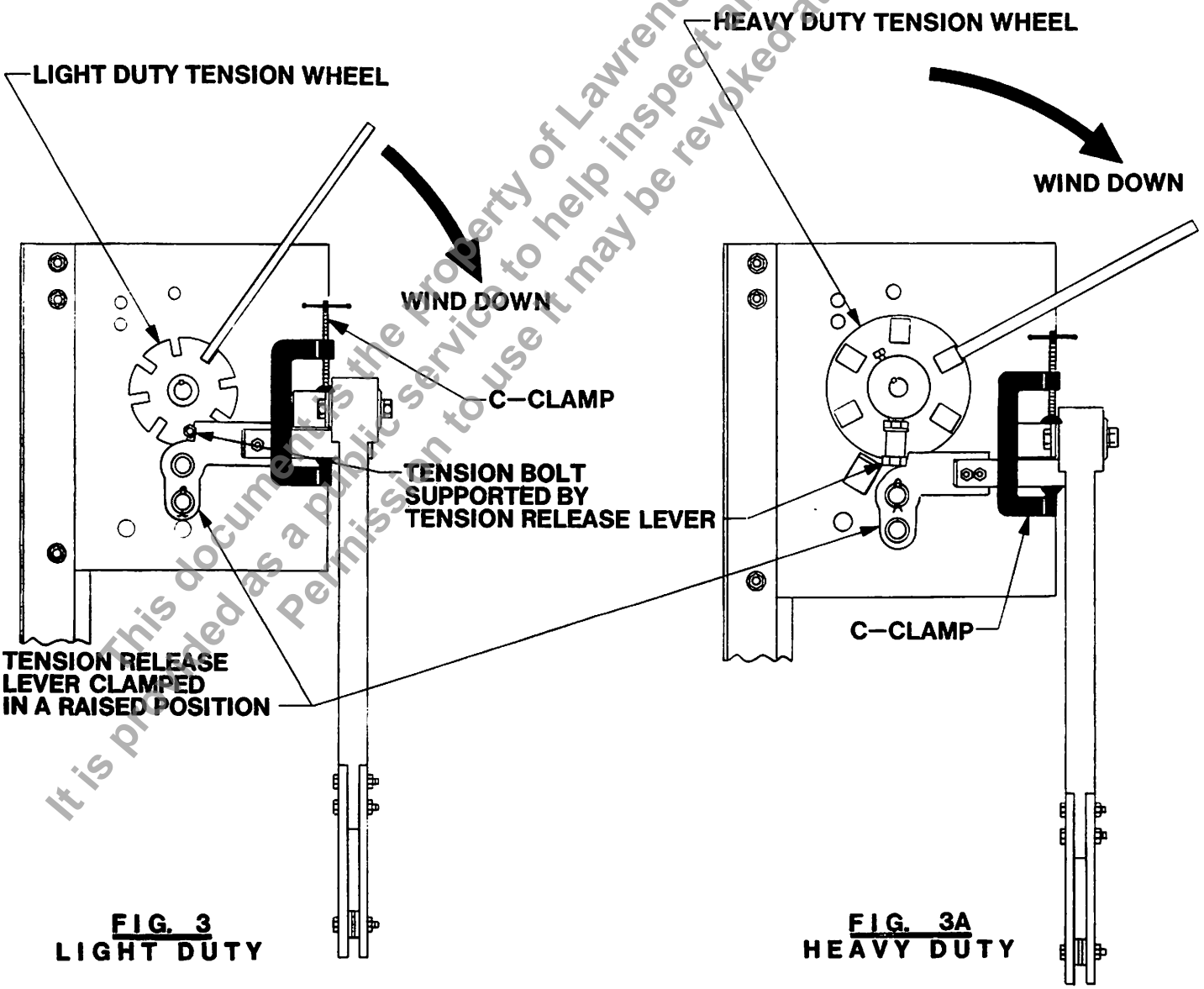

FIG. 3
LIGHT DUTY

FIG. 3A
HEAVY DUTY

STEP 5. RAISE DROP ARMS INTO POSITION AND ATTACH THE S—HOOK THAT WAS EARLIER REMOVED IN THE DROP TEST TO THE DROP ARM AS SHOWN IN FIG 4. NOTE: KEEP TENSION ON SASH CHAIN IN ORDER TO PROPERLY HOLD THE DR ARMS IN POSITION. REMOVE THE C—CLAMPS AND VICE GRIPS. THE DOOR I NOW RESET FOR NORMAL OPERATION.

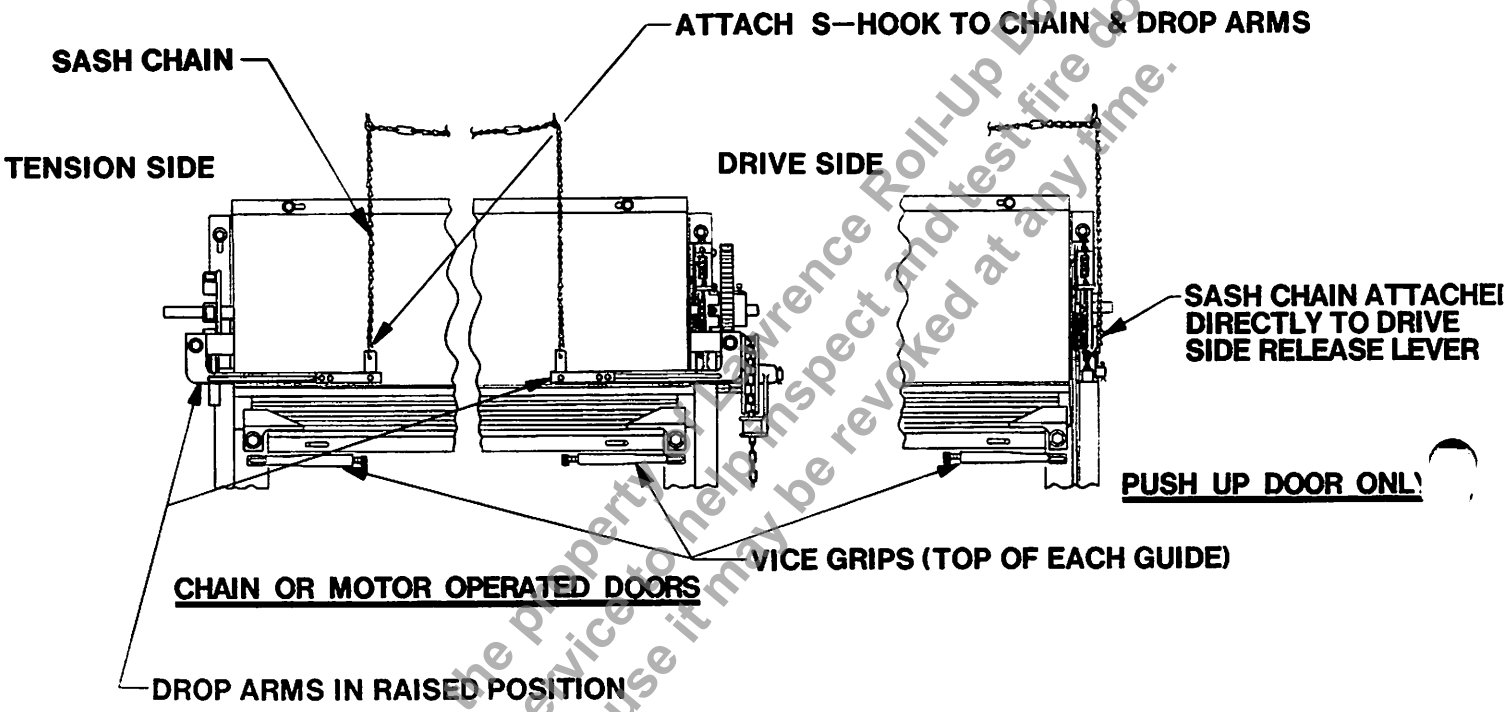

FIG. 4