

# COUNTER FIRE DOOR INSTRUCTION SUPPLEMENT

## WARNING

Installation Instructions must be followed exactly to prevent personal injury or damage to product.

## IMPORTANT

All mounting holes must be drilled at bottom of slots to allow for downward expansion in event of a fire.

## IMPORTANT

Guide bottom seals are a U. L. requirement for each Fire Door to keep fire from passing thru expansion gap under guides. THEY ARE NOT OPTIONAL.

## CAUTION

Care should be exercised when lifting curtain and barrel. Devices such as spreader bars, slings, or fork lift trucks should be used whenever possible. Due to weight of curtain and barrel, deformation of slats will occur unless load is properly distributed and cushioned on lifting devices.

## CAUTION

To prevent personal injury use extreme caution when using Tension Wrench to set " Tension Initial Turns " to Tension Wheel, or when adjusting release setting.

## IMPORTANT

All Fire Doors must be Drop Tested to insure proper operation in the event of a fire or other emergency.

## CAUTION

DO NOT DRILL THRU FLAME BAFFLE.  
DO NOT PAINT FUSIBLE LINKS.

# COUNTER FIRE DOOR INSTALLATION INSTRUCTIONS

READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING TO INSTALL THIS DOOR.

## GENERAL NOTES

1. Installation of this door on any type of structure other than concrete, masonry, or steel will impair its useful function. DO NOT install this door or any of its components on wood structures.
2. Complete assemblies have been exploded in drawings for the purpose of parts identification or to clarify installation details. It is not necessary to disassemble complete assemblies.
3. If installation requires the use of Wedge Type Expansion Bolts, see OHD Instructions, P/N 304725-0001, for information regarding installation. DO NOT SUBSTITUTE ANY OTHER TYPE OF FASTENER.
4. If installation requires the use of Sleeve Type Expansion Anchors, see OHD Instructions, P/N 605313-0001, for information regarding installation. DO NOT SUBSTITUTE ANY OTHER TYPE OF FASTENER.
5. These installations employ the use of PVC (plastic) flat washers. It is extremely important that these washers be used where and as shown. DO NOT OMIT any PVC washers or use any that have been damaged.
6. DO NOT WELD GUIDES TO JAMBS.
7. See the "DOOR IDENTIFICATION DATA" decal, P/N 305730-0001, located inside Tension End Cover to ensure that door is the correct size for opening.
8. Door jambs should be plumb. Counter and header should be level.
9. After door installation is complete, install SAFETY DECAL, P/N 301603-0001, in a place where it can be clearly seen such as on Jamb, Guide, etc.

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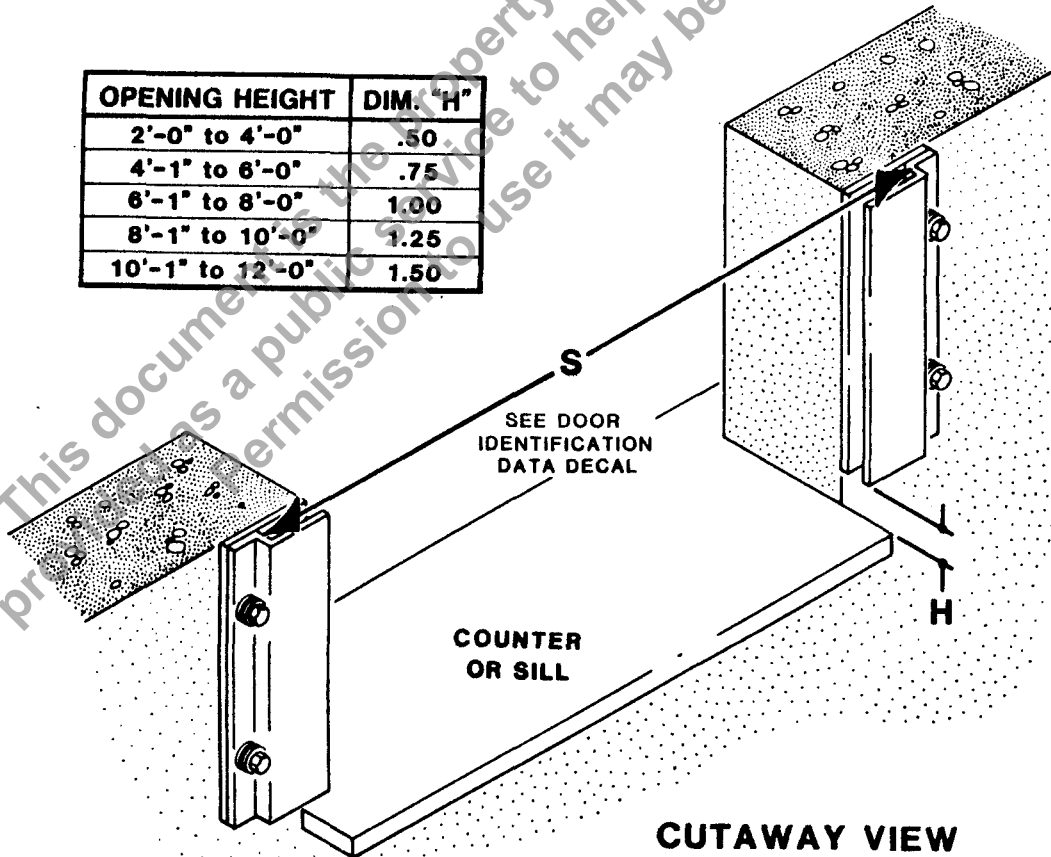
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# LOCATING TOP MOUNTING HOLE

1. Check to see if counter is level. If counter is higher on one side, guide will have to be installed first on the jamb at the higher side of the opening.
2. If door is mounted on face of jambs, use Guide to locate top mounting hole.  
If door is mounted between jambs, use Jamb Angle to locate top mounting hole.
3. Hold Wallplate or Jamb Angle in mounting position flush with opening and above counter according to the drawing "H" dimension below.
4. Mark top mounting hole location on jamb and remove Wallplate or Jamb Angle.
5. Drill mounting holes in jamb according to installation and fastener requirements, then install fasteners.
6. Locate top mounting hole for opposite Wallplate or Jamb Angle in a similar manner. Guides must be parallel and spaced according to the "S" dimension.

**IMPORTANT**  
Tops of Wallplates or Jamb Angles must be level with each other.

OPENING HEIGHT	DIM. "H"
2'-0" to 4'-0"	.50
4'-1" to 6'-0"	.75
6'-1" to 8'-0"	1.00
8'-1" to 10'-0"	1.25
10'-1" to 12'-0"	1.50



# DOOR GUIDE INSTALLATION

## FACE OF JAMB MOUNT

1. Temporarily attach Wallplate to jamb at top bolt hole.
2. Wallplate should be plumb and flush with opening.
3. Drill mounting holes in jamb using slots in Wallplate as a guide. See Drill Chart for drill size.

### IMPORTANT

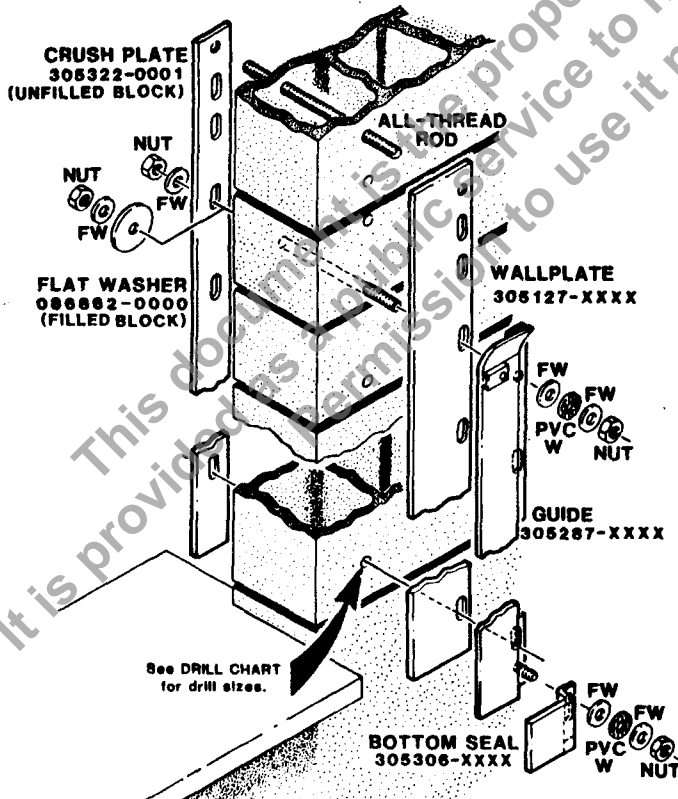
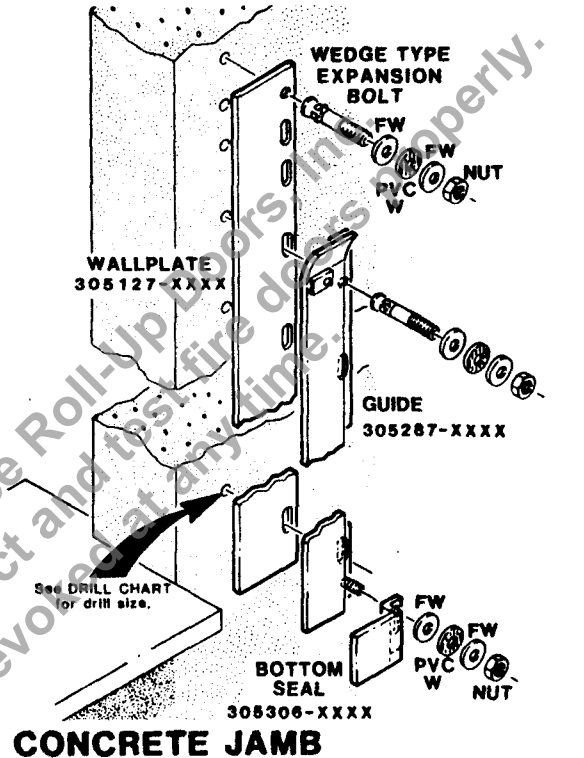
All mounting holes must be drilled at bottom of slots.

4. Secure Wallplates and Guides to jamb with appropriate fasteners.
5. Position Bottom Seal on Guide over weld stud. Bottom Seal should rest on counter.
6. Secure Bottom Seal to Guide using (1) PVC washer between (2) steel washers and a nut.
7. Install opposite guide and seal in a similar manner.

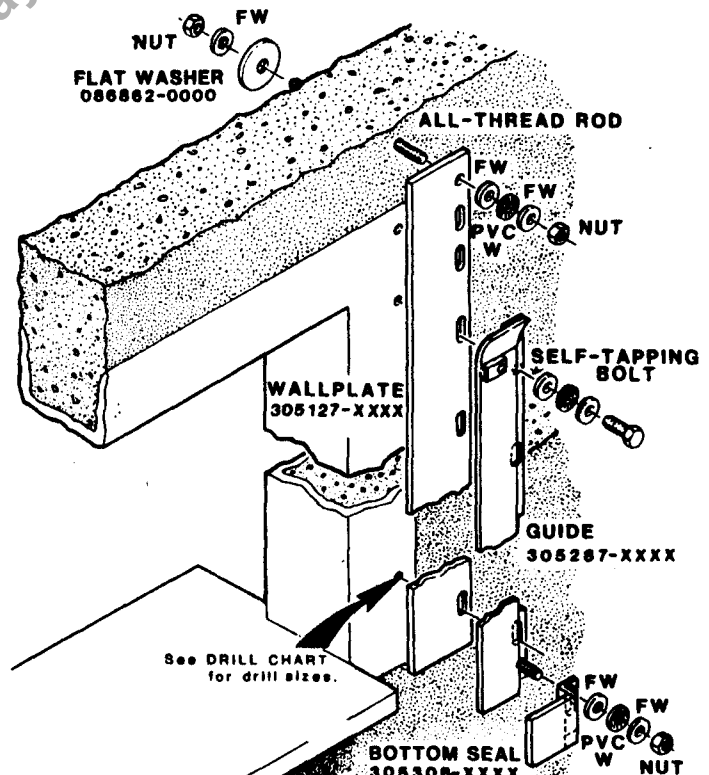
DRILL CHART

BOLT	DRILL SIZE
3/8" SELF TAPPING	11/32"
1/2" BOLT	27/64" **
3/8" ALL THREAD	7/16"
1/2" ALL THREAD	9/16"
WEDGE TYPE EXPANSION	*

\* See OMD Instructions P/N 304725-0001  
 \*\* Tap hole with 1/2-13 TAP.



**MASONRY BLOCK JAMB  
(FILLED OR UNFILLED)**



**STEEL JAMB**

# BETWEEN JAMB MOUNT

1. Loosely attach Jamb Angle to jamb at top bolt hole. Jamb Angle must be plumb and flush with opening.
2. Drill mounting holes in jamb using slots in Jamb Angle as a guide. See Drill Chart for drill size.

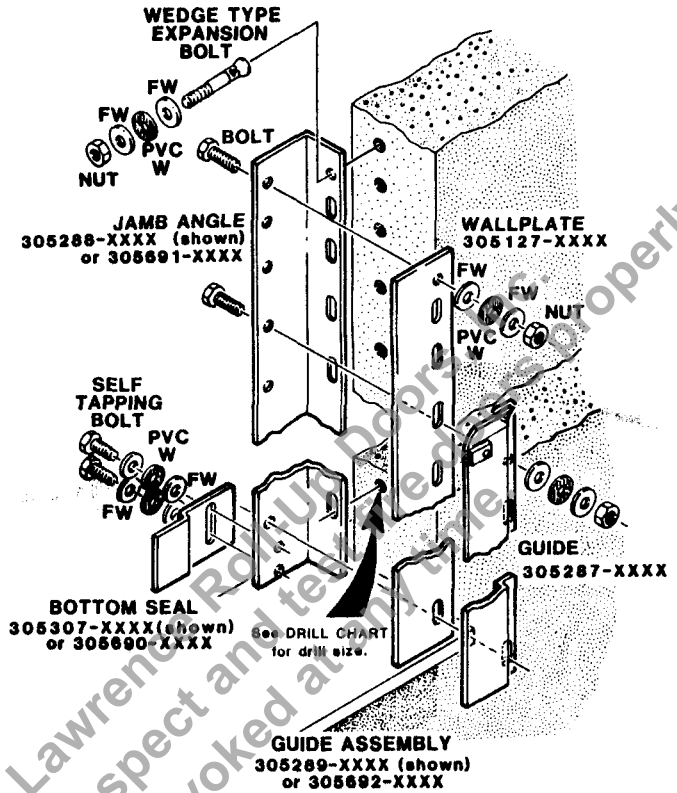
DRILL CHART

BOLT	DRILL SIZE
3/8" SELF TAPPING	11/32"
1/2" BOLT	27/64" **
3/8" ALL THREAD	7/16"
1/2" ALL THREAD	9/16"
WEDGE TYPE EXPANSION	*

\* See QHD Instructions P/N 304728-0001  
 \*\* Tap hole with 1/2-18 TAP.

## IMPORTANT

All mounting holes must be drilled at bottom of slots.

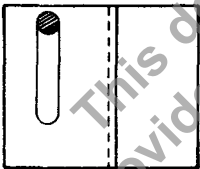


3. Secure Jamb Angle, using appropriate fasteners.

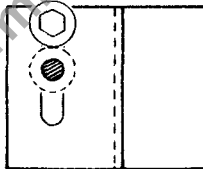
## CONCRETE JAMB

### GUIDE BOTTOM SEAL

4. Position Bottom Seal against Jamb Angle. With Bottom Seal resting on counter, side of Seal should butt against jamb.
5. Drill first hole at top of slot (Detail A). Using 3/8" self-tapping bolt and (1) PVC washer between (2) steel washers, secure Seal to Jamb Angle.

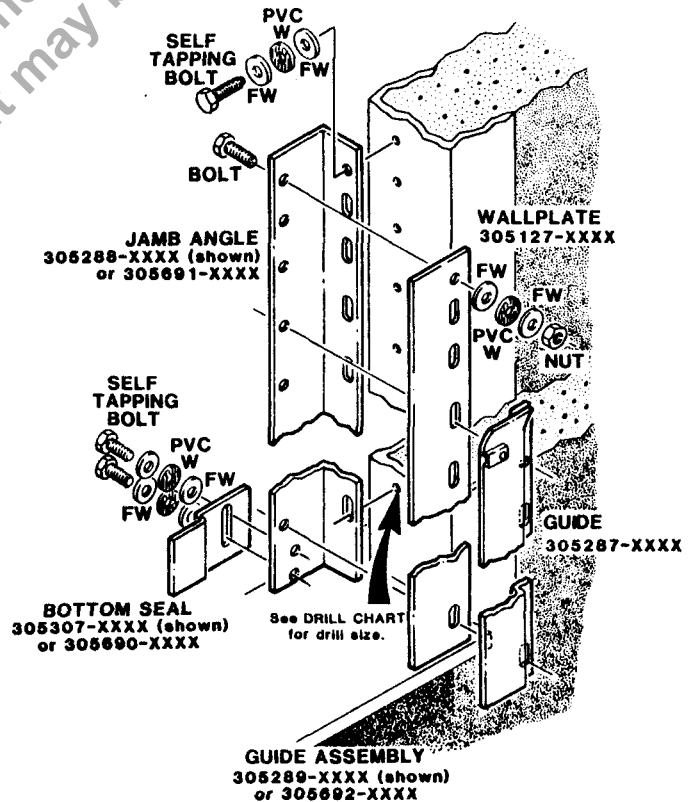


DETAIL A



DETAIL B

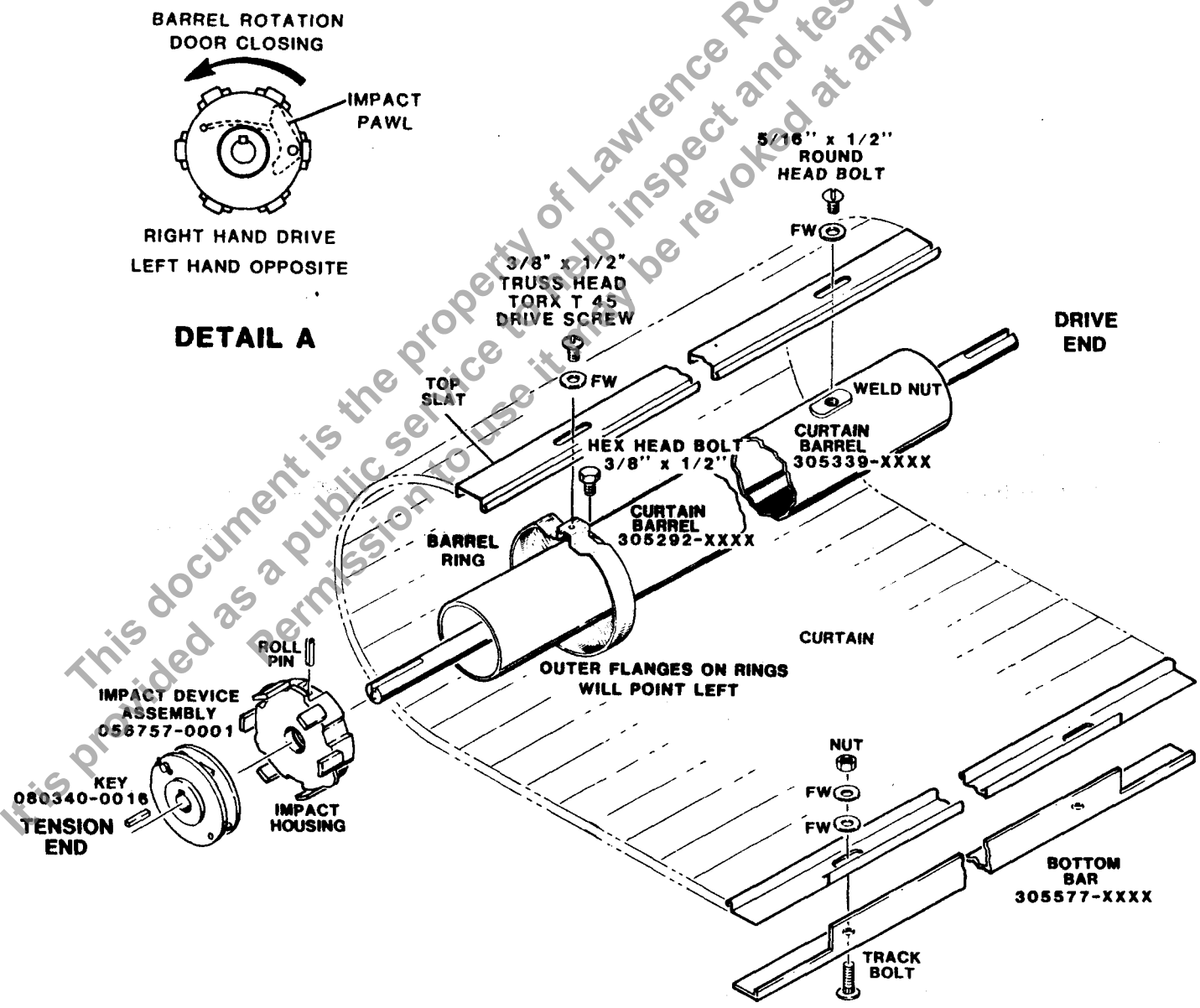
6. Position second washer over slot below and touching first washer (Detail B). Drill hole through second washer.
7. Install appropriate fasteners in second hole.
8. Install opposite Guide and Seal in a similar manner.



## STEEL JAMB

# CURTAIN PREPARATION

1. Place protective material in area where curtain will be unrolled to prevent marring of curtain surface.
2. Position Curtain in front of and parallel to door opening.
3. Unroll Curtain. Top Slat should be nearest the door.
4. Position Curtain Barrel on floor at Top Slat end of Curtain. Shaft ends are stamped "R" for right hand drive and "L" for left hand drive.
5. Doors over 5'-0" high are equipped with an Impact Device Assembly on the Tension End of the Curtain Barrel. Pawl must point in direction of Barrel rotation when door is closing (See Detail A).

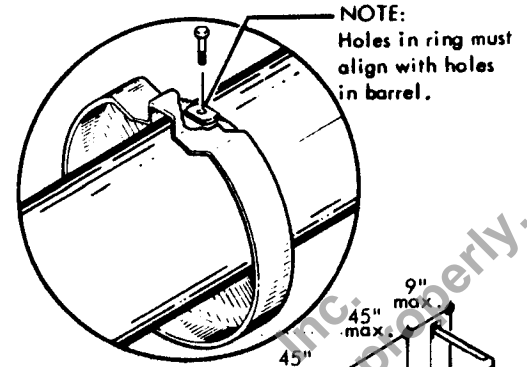


# CURTAIN PREPARATION

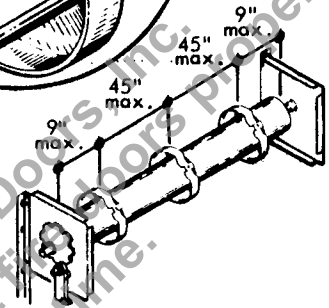
6. There are two methods of attaching Curtain to Barrel, use appropriate instructions.

## A. ONE PIECE RING

- Slide Rings onto Barrel and align holes in Ring with holes in Barrel. Refer to Detail B. Outer flanges on Rings **MUST** point left as shown in Detail B. Refer to Page 5.
- Insert 3/8 x 1/2" Hex Head Bolt through Ring Weld Nut to attach the Rings to Barrel.
- Check Drive End - Curtain Overlap, readjust if necessary, and secure Top Slat to Rings.



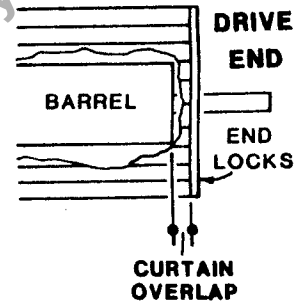
**DETAIL B**



## B. WELD NUT

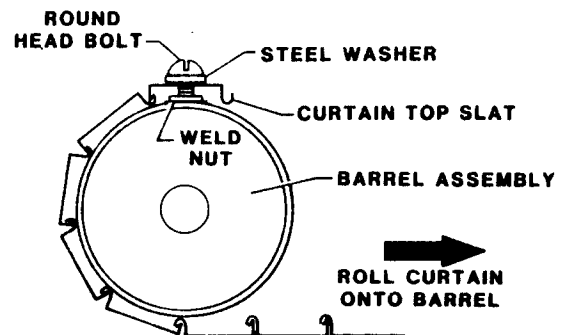
- Lay Curtain Barrel on Curtain and adjust Drive End - Curtain Overlap (Detail C).
- Wrap Curtain over Barrel until slotted holes in Top Slat align with weld nuts and install fasteners (Detail D).
- Check Drive End - Curtain Overlap, readjust if necessary, and secure Top Slat to Barrel.

OPENING WIDTH	CURTAIN OVERLAP
0' to 8'-0"	5/16"
8'-1" to 12'-0"	1/16"



**DETAIL C**

7. Roll Curtain tightly and squarely onto Barrel and secure with rope.

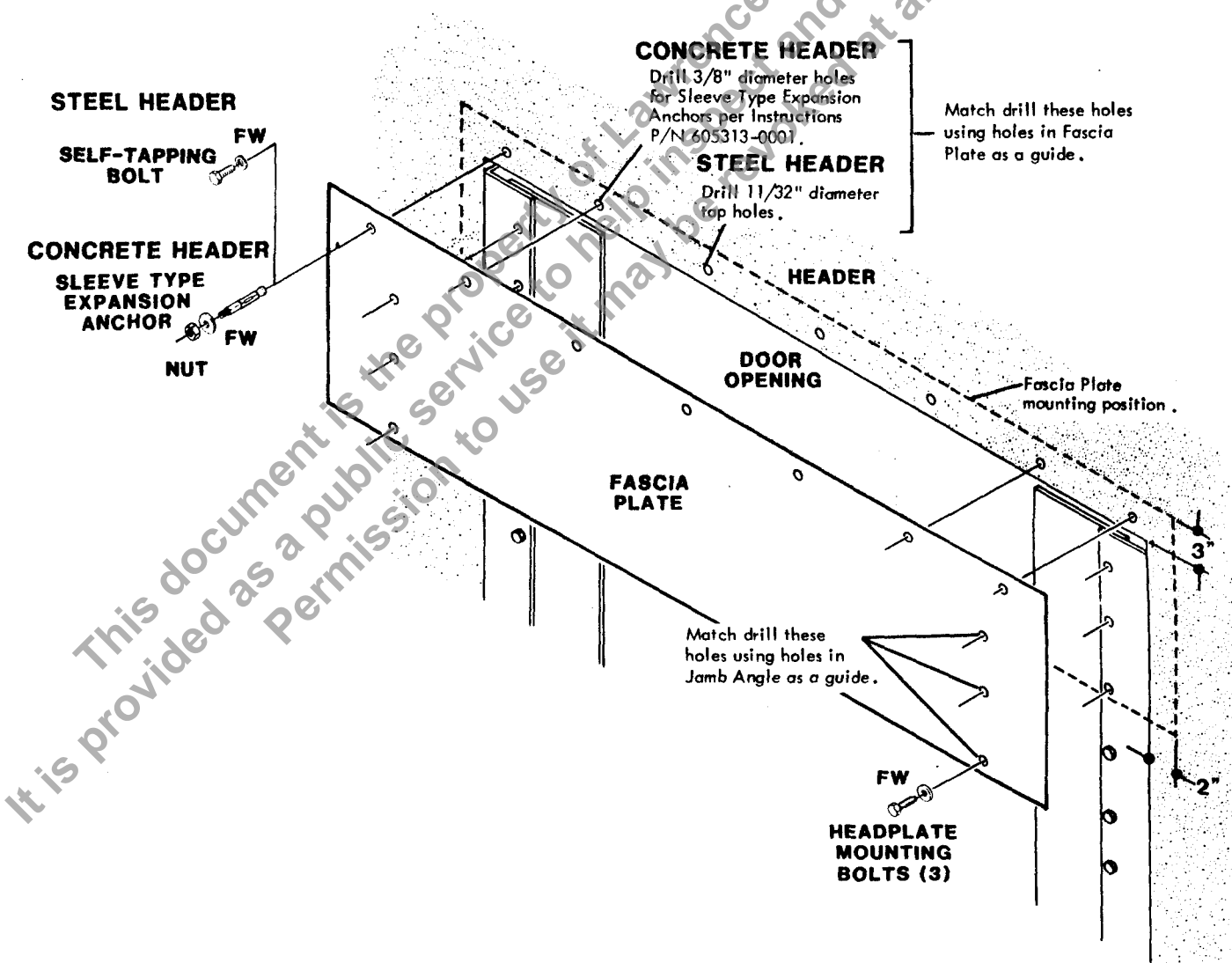


**DETAIL D**

# FASCIA PLATE INSTALLATION BETWEEN JAMB MOUNT ONLY

The Fascia Plate is designed to cover the Curtain Barrel which is left exposed when installing a door between jamps.

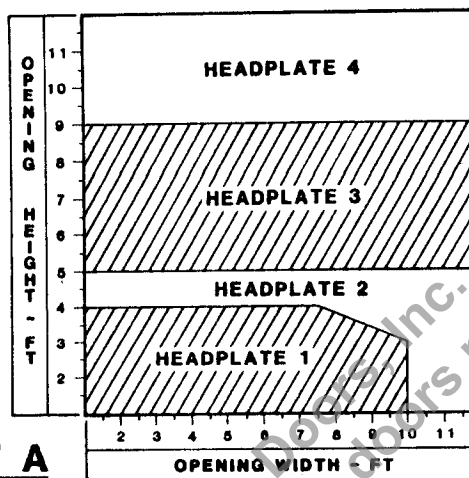
1. Position top edge of Fascia Plate 3" above door opening.
2. Fascia Plate should extend 2" beyond each side of opening.
3. Using holes in top edge of Fascia Plate as a guide, match drill header and install Fascia Plate with appropriate fasteners.
4. Using top three holes in Jamb angle as a guide, match drill Fascia Plate.
5. Headplate mounting bolts will secure Fascia Plate when Headplates are installed.



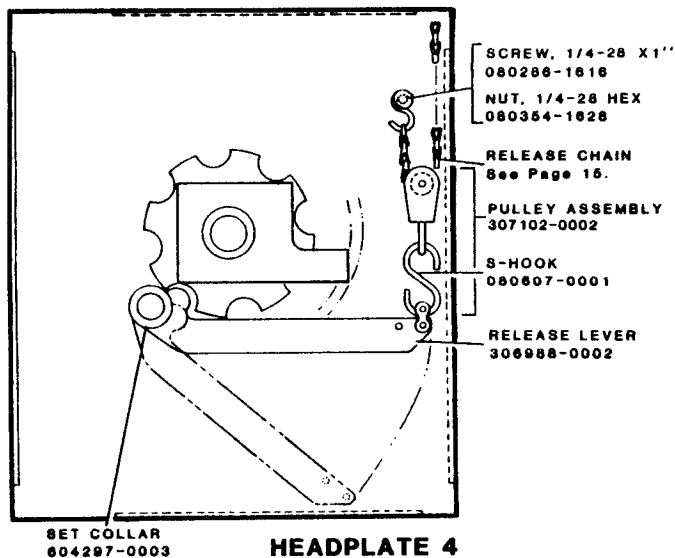
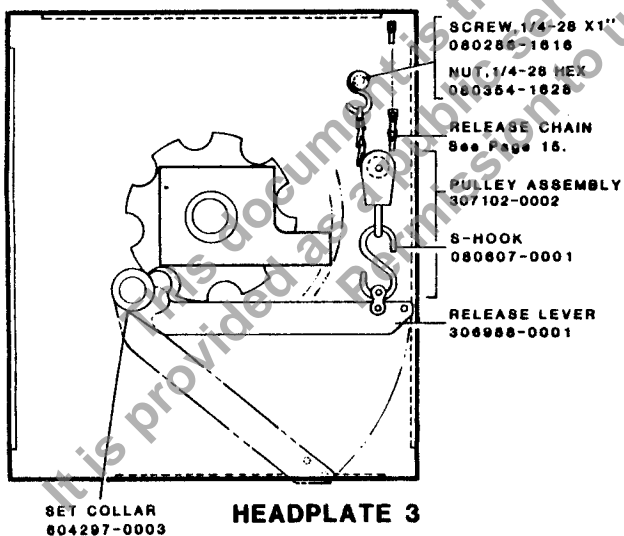
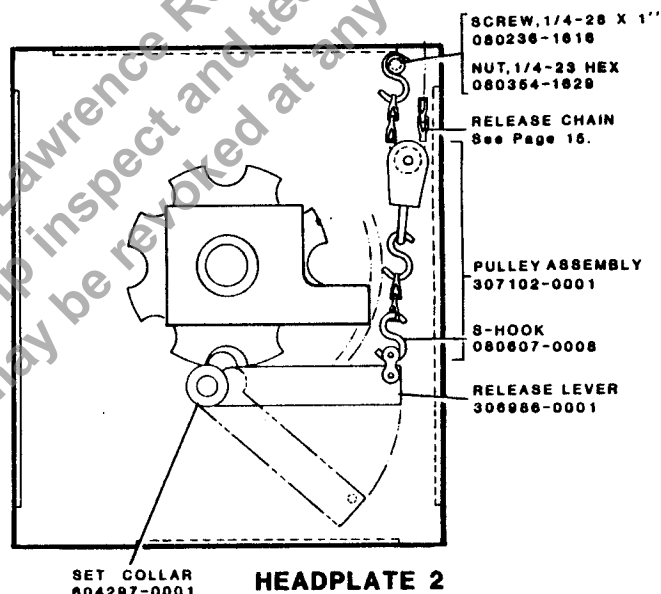
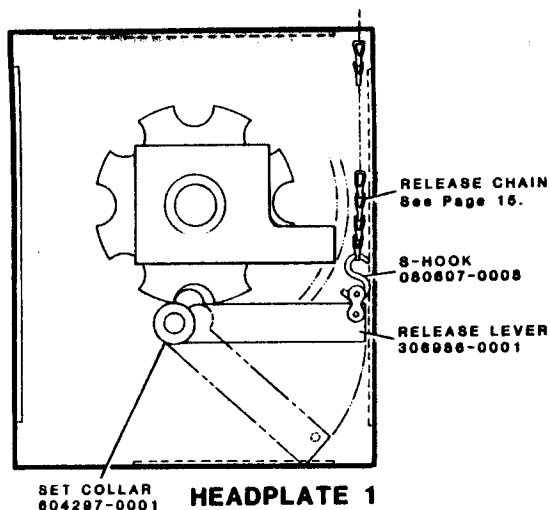


# TENSION HEADPLATE IDENTIFICATION

There are four tension Headplate Configurations. The one supplied with your Door depends on the opening size. Chart A relates the headplate configuration to the opening size.



**CHART A**

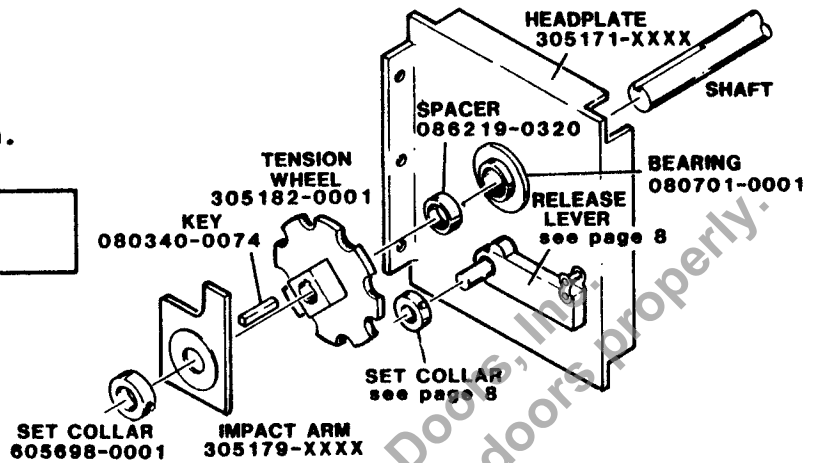


# TENSION END PREPARATION

1. Position Tension End Headplate on Door Shaft.
2. Install remaining parts on Shaft as shown.

**NOTE**

Do not tighten Setscrews in Set Collars.

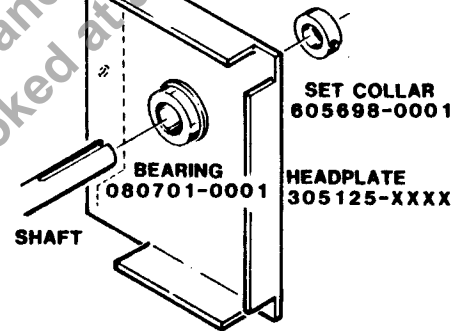


# DRIVE END PREPARATION PUSH-UP OPERATION DOORS 5'-0" HIGH AND UNDER

1. Position Headplate Assembly and Set Collar on Door Shaft.

**NOTE**

Do not tighten Setscrews in Set Collar.



# DRIVE END PREPARATION PUSH-UP OPERATION DOORS OVER 5'-0" HIGH

1. Position Headplate Assembly and Set Collar on Door Shaft.

**NOTE**

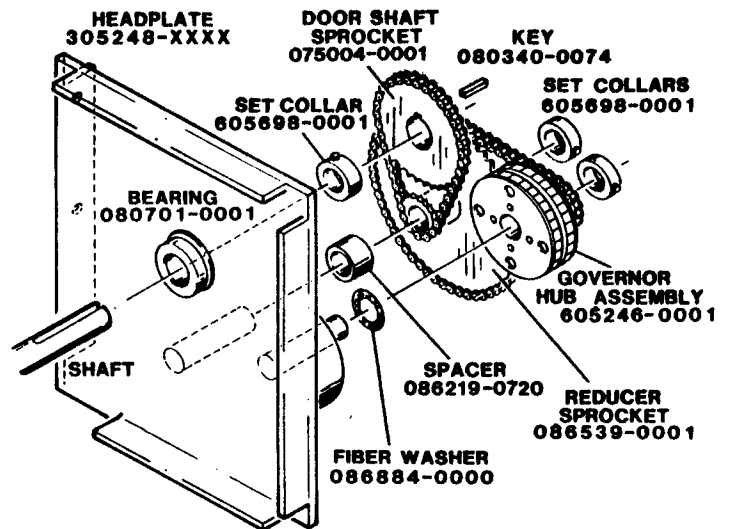
Do not tighten Setscrews in Set Collar.

2. Install Door Shaft Sprocket (075004-0001) on Door Shaft and insert Key.

**NOTE**

DO NOT tighten Setscrews in Sprocket and Set Collars.

3. Using Connecting Link, assemble Drive Chain on Sprockets as shown.



Specify chain length when ordering Roller Chain (080837-0002) and Connecting Link (080884-0003).

# DRIVE END PREPARATION

## CRANK-UP OPERATION

### DOORS 5'-0" HIGH AND UNDER

#### IMPORTANT

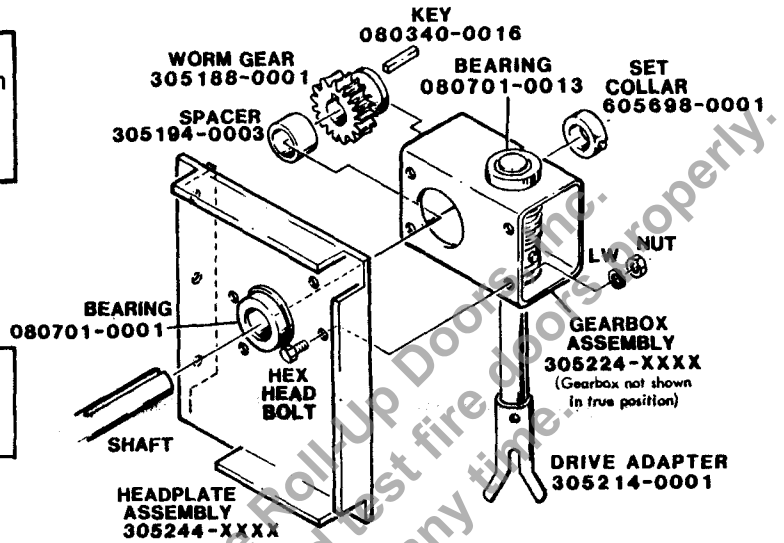
When installing Headplate Assembly, Worm Gear, Key and Spacer must be positioned on Door Shaft inside Gearbox.

1. Install Headplate on tip of Door Shaft.

#### NOTE

If Worm Gear is supplied with Setscrew- remove it.

2. Hold Spacer and Worm Gear with Key in mounting position and push complete assembly onto Door Shaft.
3. Install Set Collar but do not tighten Setscrews.



## CRANK-UP OPERATION

### DOORS OVER 5'-0" HIGH

1. Position Headplate Assembly and Set Collar on Door Shaft.

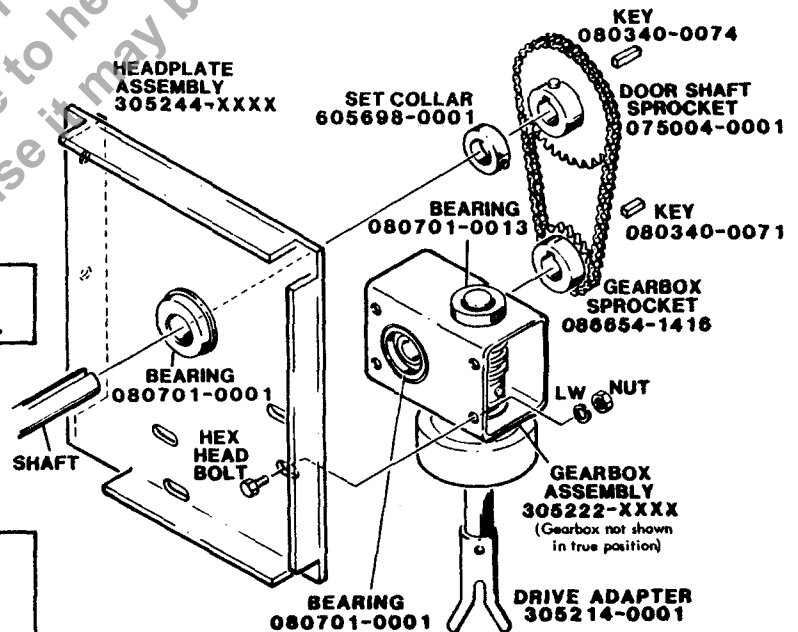
#### NOTE

Do not tighten Setscrews in Set Collars.

2. Install and align Door Shaft Sprocket (075004-0001) on Door Shaft and insert Key.

#### NOTE

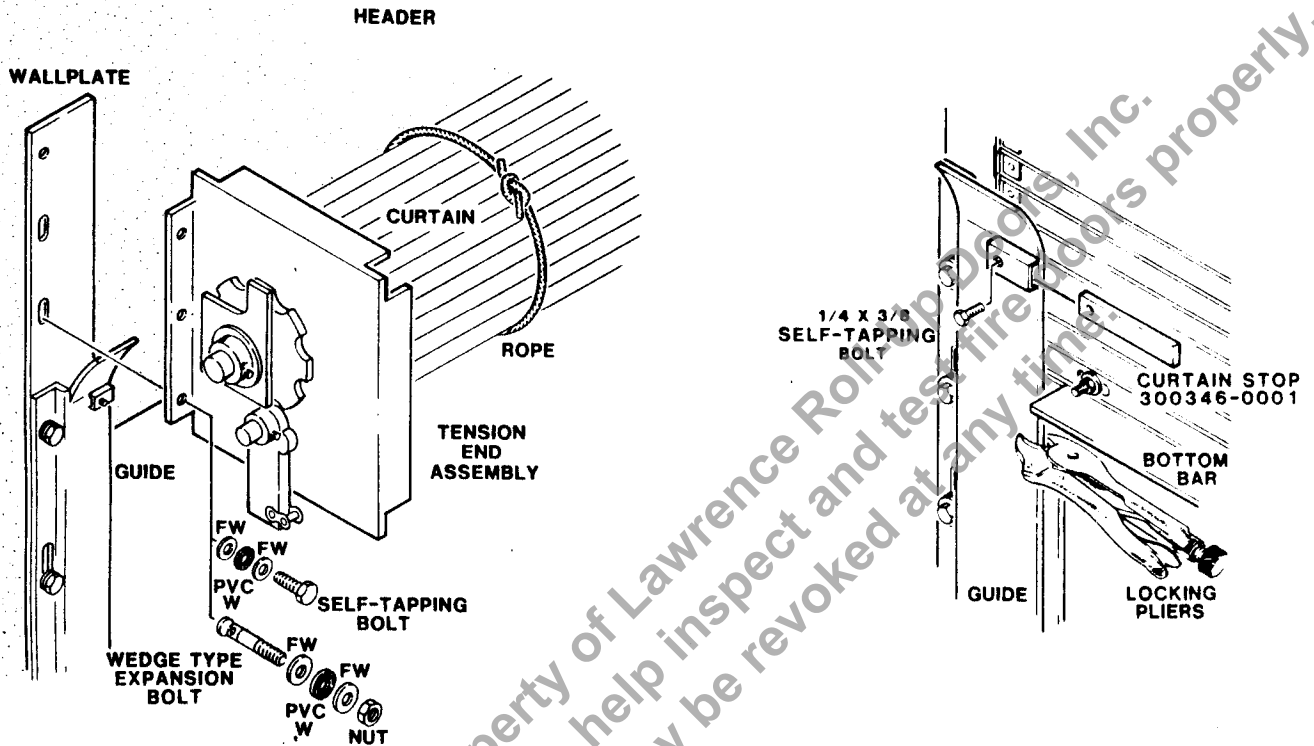
Hub of Door Shaft Sprocket must be installed toward Headplate.



3. Using Connecting Link, assemble Drive Chain on Sprockets as shown.

Specify chain length when ordering Roller Chain (080837-0002) and Connecting Link (080884-0003).

# CURTAIN INSTALLATION



1. On face of wall installation, remove fasteners from top three Wallplate mounting holes. Do not remove thru-wall All-thread Rods or Expansion Bolts.
2. Using a forklift, raise Curtain Assembly with Headplates into mounting position.
3. Secure Headplates to Header or Jamb Angles using top three mounting fasteners.
4. Clamp Locking Pliers on and 4" below top of each Guide.
5. Loosen rope. Unroll and lead Curtain Bottom Bar into Guides. The Bottom Bar should rest on Locking Pliers.
6. Install Curtain Stops.

# CURTAIN ADJUSTMENT

## IMPORTANT

Curtain must be centered between Headplates and in fully raised position before making any adjustments.

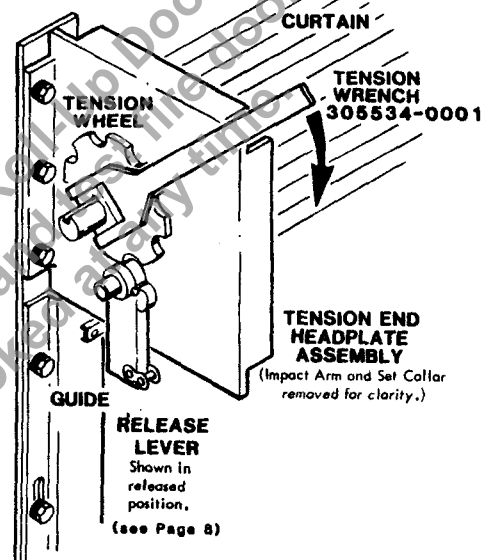
After centering Curtain, position Set Collar against Drive End Headplate and secure Set-screw. Align Sprockets and Tighten Setscrews. Position Set Collar against Impact Arm at Tension End Headplate and Tighten Setscrews.

## COUNTERBALANCE ADJUSTMENT TENSION INITIAL TURN SETTING

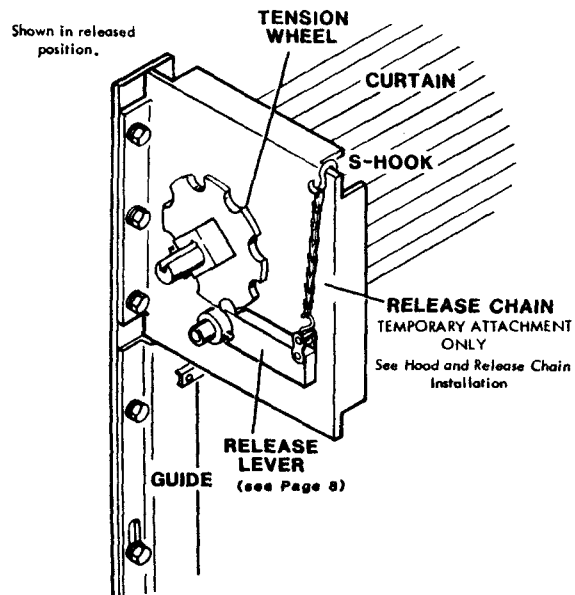
### CAUTION

Door **MUST** be in full open position when making tension adjustments.

1. See Door Identification Data Decal located inside End Cover to determine amount of "Tension Initial Turns" on Tension Wheel.
2. Using Tension Wrench, apply amount of "Tension Initial Turns" to Tension Wheel in direction shown in Detail A.
3. Engage Release Lever and temporarily attach Release Chain as shown in Detail B.
4. Remove locking pliers from guides.
5. Lower and raise Curtain at least twice to allow Curtain to align itself.
6. With Counterbalance properly adjusted, Curtain should raise and lower without difficulty and bottom bar should stay in head when Curtain is fully raised.
7. Increase or decrease amount of "Tension Initial Turns" to obtain proper operation of Curtain.



DETAIL A



DETAIL B

# INITIAL IMPACT ADJUSTMENT

## TENSION RELEASE SETTING

1. See Door Identification Data Decal located inside End Cover to determine amount of "Tension Release Turns" on Impact Arm.
2. Adjust Impact Arm according to the number of "Tension Release Turns". For example: 1/2 turn position would be 180° from released position as shown in Detail C.

### NOTE

Impact Arm may be adjusted in 1/8 turn increments.

3. Secure Set Collar against Impact Arm.

## DROP TESTING

### NOTE

Door must be in fully raised position before attempting Drop Test.

4. There are two things to consider before drop testing Door:
  - a) When Release Lever is disengaged, the Curtain must not fall faster than an average of 2 feet per second.
  - b) Bottom Bar must come to rest directly on the counter or sill upon completion of Curtain travel
5. Manually disconnect Release Chain, thereby disengaging Release Lever.

### CAUTION

Impact Arm will rotate rapidly - keep hands, clothing, tools, etc. clear of its path.

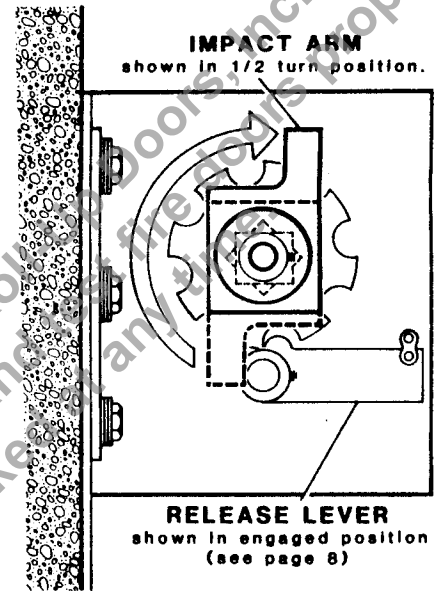
6. If Curtain falls too fast, decrease the amount of "Tension Release Turns" in 1/8 turn increments. If Curtain falls too slowly, increase the amount of "Tension Release Turns" in 1/8 turn increments.

### IMPORTANT

"Tension Release Turns" must not be reduced to an amount that will not allow Curtain to drop. Be sure to reset Tension Release after any spring adjustments.

### IMPORTANT

Door should be drop tested periodically.



# HOOD AND RELEASE CHAIN INSTALLATION

## HOOD

### NOTE

If Hood has been factory assembled, disregard steps 3, 6, 7, and 8.

1. Position Hood on Headplates.
2. Position Hood Angle on Hood against Header.
3. Mark Hood Angle mounting location on Hood.
4. Using holes in Hood Angle as a guide, mark fastener hole locations on Header.
5. Remove Hood Angle and Hood.
6. Clamp Hood Angle in mounting position on Hood.
7. Using holes in Hood Angle as a guide, match drill 13/64" diameter holes in Hood.
8. Using 3/16" diameter steel rivets, secure Hood Angle to Hood and remove clamps.

### NOTE

Install rivets from inside Hood.

### IMPORTANT

DO NOT USE ALUMINUM RIVETS.

9. Drill mounting holes in Header per fastener requirements.

### NOTE

Holes must be at center of slots.

10. If Flame Baffle has not been installed, see procedure below.
11. Install Hood over Headplates. Secure Hood Angle to Header using appropriate fasteners.

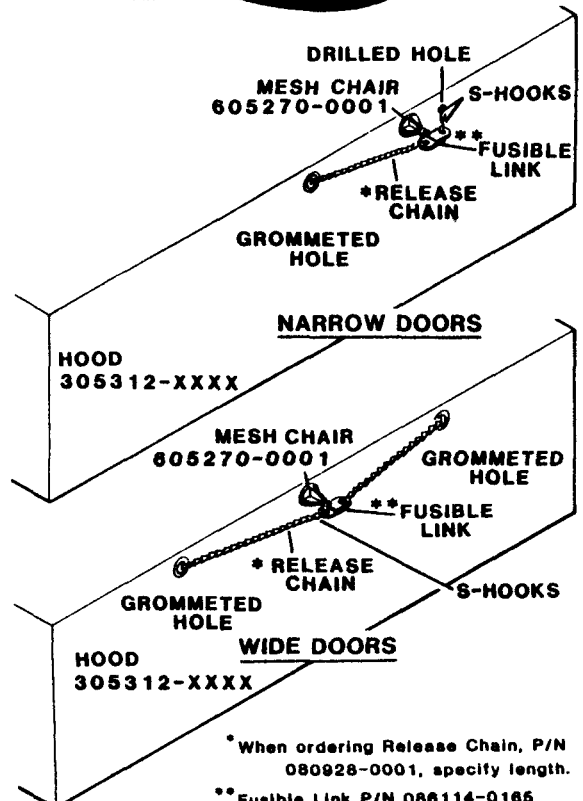
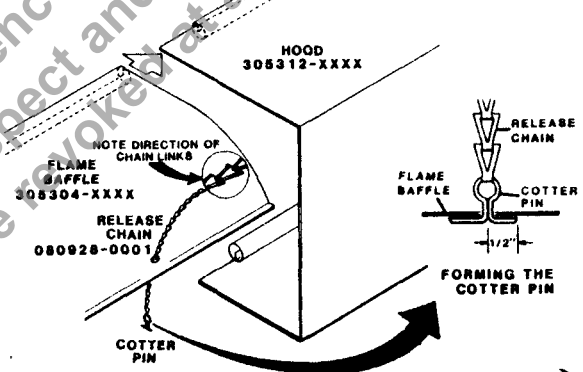
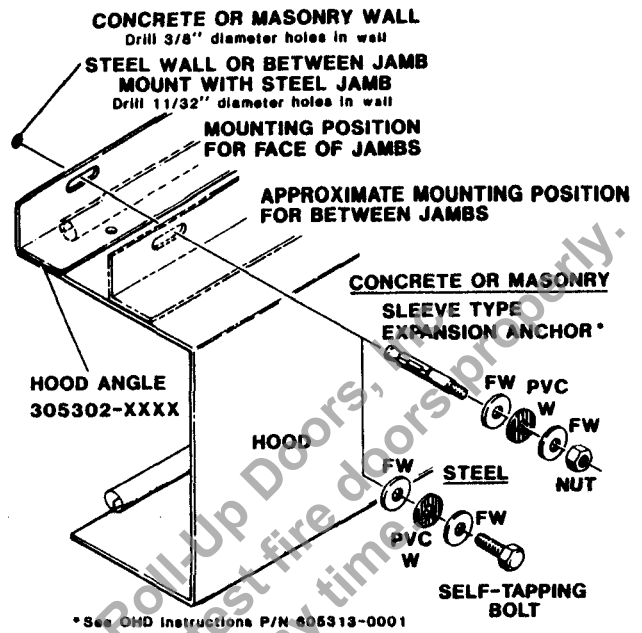
## FLAME BAFFLE AND RELEASE CHAIN

If Flame Baffle and Release Chains have been pre-installed, disregard the following procedures.

1. Attach Release Chain(s) to Flame Baffle.
2. Slide interlocking lip of Flame Baffle into interlocking lip of Hood.
3. Route Flame Baffle Release Chain(s) through grommeted holes in Hood.
4. Install Release Chain(s) and Fusible Link(s) as shown. Flame Baffle must be pulled up tightly against Hood.

### NOTE

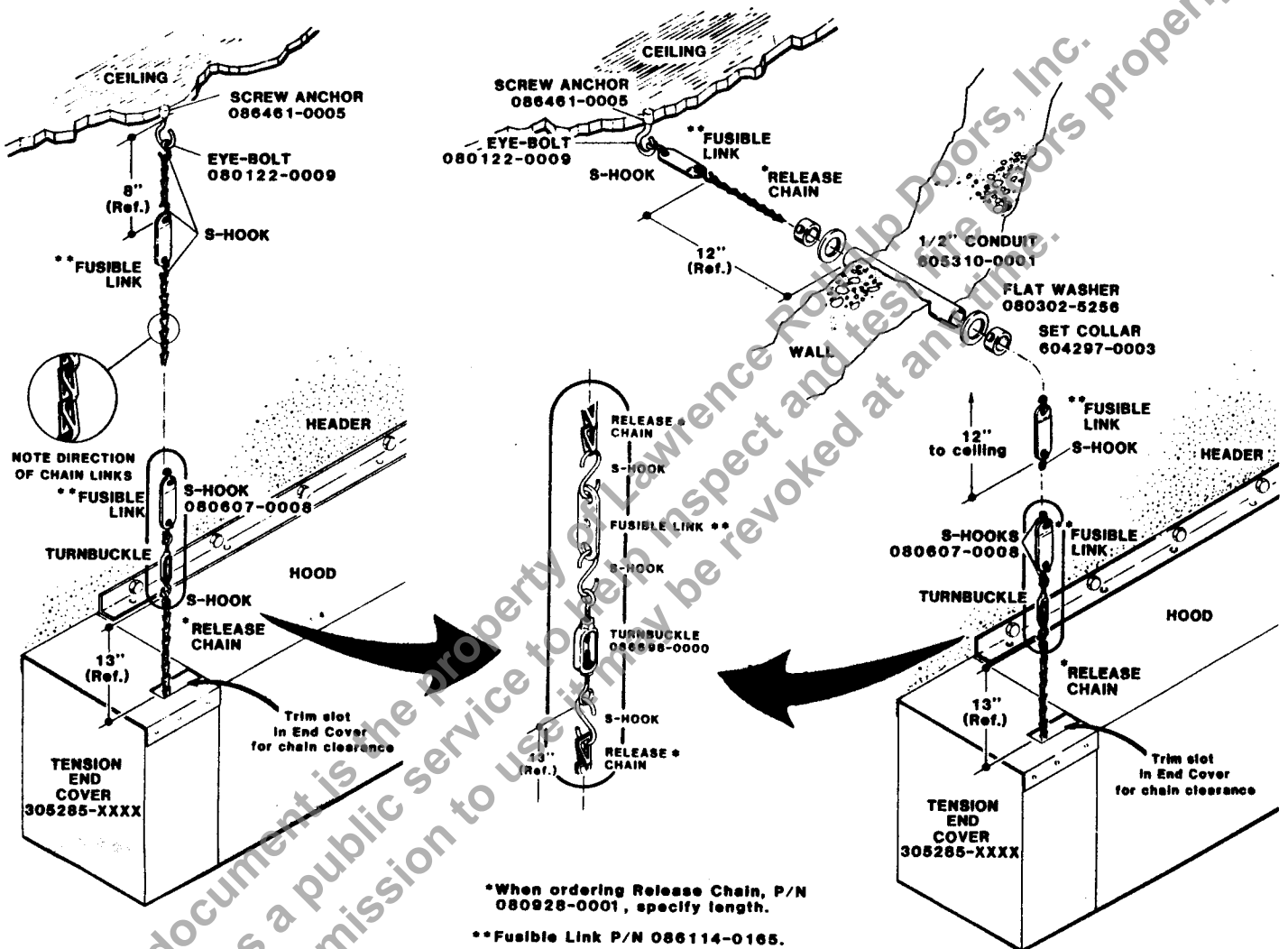
Close "S" Hooks completely.



# TENSION END RELEASE CHAIN INSTALLATION

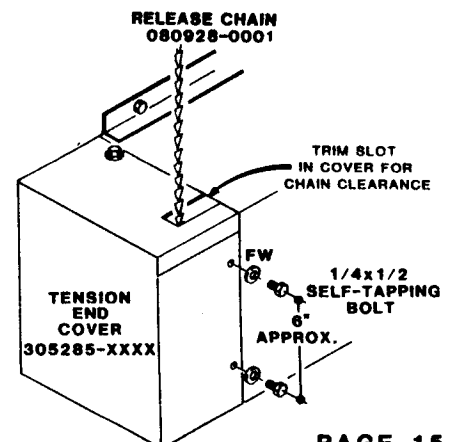
Install Tension End Release Chain and Fusible Links according to applicable diagrams. Release Chain tension MUST hold Release Lever in "Engaged" position.

**NOTE**  
Close All "S" Hooks completely.



## HOOD AND END COVER INSTALLATION

1. Notch Tension End Cover to allow clearance for Release Chain.
2. Notch Drive End Cover as necessary to clear sprocket or gear box assembly.
3. Install End Covers on Headplates over the Hood.
4. Drill 7/32" diameter tap holes through End Cover, Hood, and Headplate flanges.
5. Secure End Covers and Hood to Headplates.





# GUIDE TRIM INSTALLATION (OPTIONAL)

1. Guide Trim must be notched to clear Lock Slide Bolt (and Guide Seal on Face of Jamb Doors).
2. Hold Trim in approximate mounting position and mark areas to be notched.
3. Remove Trim, notch and install.

**CAUTION**  
DO NOT over tighten screws.

