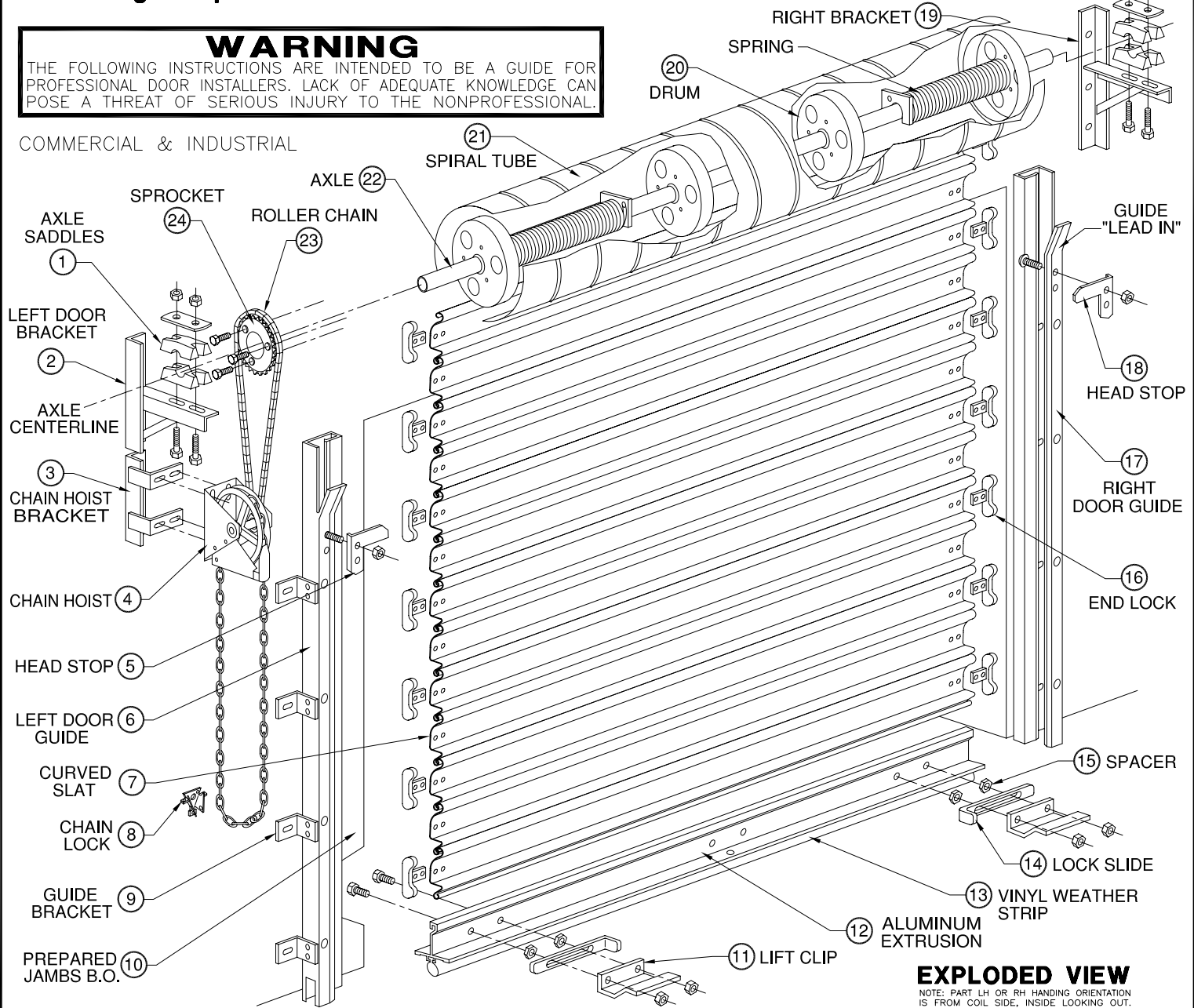


**WARNING**

THE FOLLOWING INSTRUCTIONS ARE INTENDED TO BE A GUIDE FOR PROFESSIONAL DOOR INSTALLERS. LACK OF ADEQUATE KNOWLEDGE CAN POSE A THREAT OF SERIOUS INJURY TO THE NONPROFESSIONAL.

COMMERCIAL & INDUSTRIAL



**EXPLODED VIEW**

NOTE: PART LH OR RH HANDING ORIENTATION IS FROM COIL SIDE, INSIDE LOOKING OUT.

**IMPORTANT REMARKS**

DO NOT CUT THE BANDS WHICH HOLD DOOR IN A ROLL, YOU WILL BE INSTRUCTED AT A LATER TIME EXACTLY WHEN TO CUT THEM. NO GUARANTEE WILL BE GIVEN, OR RESPONSIBILITY ACCEPTED BY MANUFACTURER IF DOOR IS NOT ERECTED AS INSTRUCTED. FOLLOW ALL OF THE INSTRUCTIONS GIVEN FOR PROPER DOOR OPERATION. PLEASE REVIEW ALL INSTRUCTIONS PRIOR TO STARTING ACTUAL WORK.

**PARTS LIST: GIVE ROUGH OPENING SIZE WHEN ORDERING**

ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION
1	U390034	AXLE SADDLE CASTING ASSEMBLY	13	U240002-XXX	VINYL WEATHER STRIP, BULB ASTRAGAL
2	U320015	COMMERCIAL DOOR BRACKET L.H.	14	U320024-C	SLIDE BOLT LOCK
3	U320042	UNIVERSAL CHAIN HOIST BRACKET	15	U210004	5/16"-18 HEX HEAD NUT SPACER
4	U320007	REDUCED DRIVE CHAIN HOIST	16	U320056	NYLON END LOCK, U320066 CAST END LOCK
5	U320021	HEAD STOP, LH	17	U890001-XXXR	DOOR GUIDE, RIGHT HAND, BY DOOR HGT.
6	U890001-XXXL	DOOR GUIDE, LEFT HAND, BY DOOR HGT.	18	U320022	HEAD STOP, RH
7	U230300-GA-XXX	CURVED SLAT, U230310-GA-XXX FLAT SLAT	19	U320016	COMMERCIAL DOOR BRACKET R.H.
8	N.A.	CHAIN LOCK (INCLUDED WITH CHAIN HOIST)	20	U390112	12" COMMERCIAL DRUM
9	U220004	GUIDE J-BRACKET, SUPPLIED ON SOME MODELS	21	U120184-XXX	SPIRAL TUBE
10	N.A.	PREPARED BUILDING JAMBS, 6.0" MINIMUM	22	U280001	AXLE SHAFT
11	U320023-C	LIFT CLIP	23	U320019	#41 ROLLER CHAIN (INCLUDED WITH HOIST)
12	U240018-XXX	ALUMINUM BOTTOM BAR EXTRUSION	24	U320008	72 TOOTH SPROCKET for #41 CHAIN

**STEP 1 CHECK DOOR OPENING**

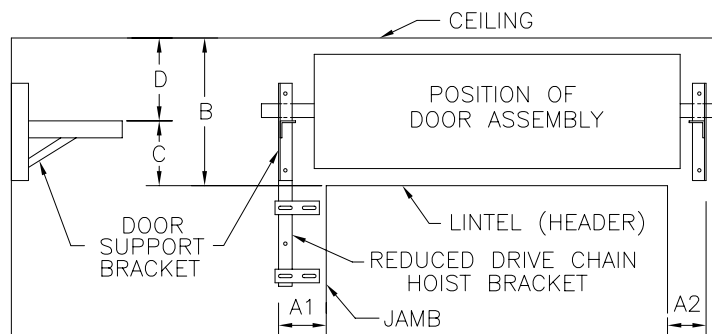
- 1A CHECK THE WIDTH AND HEIGHT OF THE DOOR OPENING AND VERIFY THE MEASUREMENTS AGAINST THE SIZES SHOWN ON THE DOOR PACKING SLIP.
- 1B CHECK BOTH DOOR JAMBS FOR PLUMB.
- 1C CHECK HEADER AND FLOOR FOR LEVEL.
- 1D CHECK TO BE SURE THAT THERE IS SUFFICIENT CLEARANCE AT THE JAMBS AND AT THE HEAD (SEE TABLE AT RIGHT).

**DOOR SUPPORT BRACKET LOCATION TABLE**

MDL 700/701	MINIMUM SIDE ROOM		MINIMUM HEADROOM		
	A1	A2	B	C	D
	DOOR HEIGHT				
	CHAIN OPERATOR-REDUCTION GEAR				
UP TO 10'-0" HIGH	7.5"	5.25"	22"	11"	11"
10'-1" TO 12'-0" HIGH	7.5"	5.25"	23"	11.5"	11.5"
12'-1" TO 14'-0" HIGH	7.5"	5.25"	24"	12"	12"

**STEP 2 INSTALL SUPPORT BRACKETS**

- 2A FROM DIMENSION ON TABLE AT RIGHT, MARK THE LOCATION FOR DOOR SUPPORT BRACKET, IF THE DOOR WAS SUPPLIED WITH A CHAIN HOIST USE THE DIMENSIONS SHOWN FOR A1 ON THE SIDE HOIST IS TO BE INSTALLED.
- 2B IF OPENING IS GREATER OR LESS THAN SHOWN ON THE PACKING SLIP, ADJUST THE A1 AND A2 DIMENSIONS TO COMPENSATE FOR THE DIFFERENCE. IF OPENING IS MORE THAN 1" WIDER THAN SHOWN ON PACKING SLIP THE DOOR WILL NOT WORK. THE EDGE OF THE GUIDES WILL EXTEND INTO THE DOOR OPENING.
- 2C MARK FOR HEIGHT LOCATION OF DOOR SUPPORT BRACKETS BY USING DIMENSION "C". VERIFY THAT THERE IS AMPLE CLEARANCE ABOVE THE BRACKET, DIMENSION "D". IF CLEARANCE IS NOT AVAILABLE, YOU CAN LOWER THE BRACKET TO OBTAIN THE REQUIRED SPACE. THE DOOR WILL HANG IN THE HEAD WHATEVER DISTANCE YOU LOWER THE BRACKETS. IT WILL BE NECESSARY TO CUT THE SAME AMOUNT OFF THE BOTTOM OF BOTH GUIDES AND RE-NOTCH FOR SLIDE BOLT LOCK CLEARANCE.
- 2D FASTEN DOOR SUPPORT BRACKETS TO BUILDING WITH FASTENERS SUPPLIED. USE A FASTENER IN ALL HOLES OF THE SUPPORT BRACKETS.  
STEEL JAMBS USE: 3/8"x 1 1/2" HEX HEAD BOLTS.  
MASONRY JAMBS USE: 3/8"x 1 7/8" SLEEVE ANCHOR.  
NOTE: 3/8" DIAMETER THROUGH BOLTS (NOT SUPPLIED) ARE REQUIRED WHEN MOUNTING TO SOFT BRICK OR BLOCK. IF STEEL MOUNTING PLATES (OPTIONAL) ARE TO BE USED, ATTACH MOUNTING PLATE TO BUILDING AS SHOWN IN FIGURE 1.



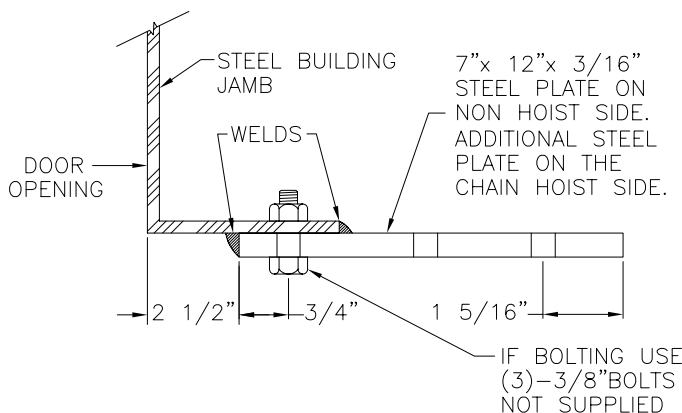
**SIDE VIEW**

**INTERIOR ELEVATION**

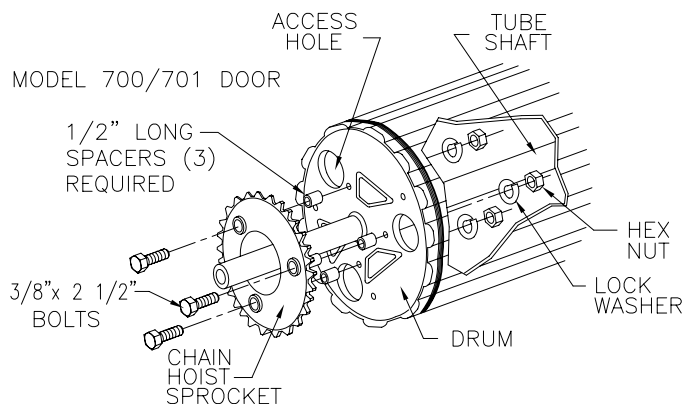
NOTE: REDUCED DRIVE CHAIN HOIST MAY BE ON EITHER SIDE. VERIFY WITH DOOR ASSEMBLY.

**CHAIN HOIST**

IF DOOR IS TO BE CHAIN HOIST OPERATION, INSTALL SPROCKET ON APPROPRIATE END OF DOOR BEFORE LIFTING DOOR INTO POSITION ON BRACKETS (SEE FIGURE 2).



**FIGURE 1**



**FIGURE 2**

DO NOT CUT BANDS WHICH HOLD DOOR IN A ROLL. YOU WILL BE TOLD AT A LATER TIME EXACTLY WHEN TO CUT THEM (STEP 6). NO GUARANTEE WILL BE GIVEN OR RESPONSIBILITY ACCEPTED BY MANUFACTURER IF DOOR IS NOT ERECTED AS INSTRUCTED. FOR PERFECT OPERATION FOLLOW INSTRUCTIONS GIVEN. PLEASE REVIEW ALL INSTRUCTIONS BEFORE STARTING ACTUAL WORK.

**& Building Components**

**STEP 3 LIFTING THE DOOR ASSEMBLY**

IT IS RECOMMENDED TO USE A FORKLIFT WITH ADEQUATE PADDING TO PREVENT DAMAGE TO THE DOOR (SEE FIGURE #3 BELOW).

- 3A CENTER DOOR IN OPENING, LIFT DOOR UP ONTO SADDLE CASTINGS (AXLE SHOULD SIT IN BOTTOM OF SADDLE CASTINGS). SEE STEP 4 FOR SECURING THE AXLE TO BRACKETS.
- 3B CENTER DOOR IN OPENING, IF SIDWAYS MOVEMENTS ARE NECESSARY, MAKE SURE DOOR AND DOOR AXLE MOVE TOGETHER WHEN REPOSITIONING. CASTINGS MUST STAY IN CONTACT WITH TOP OF BRACKETS.
- 3C POSITION DOOR AS CLOSE AS POSSIBLE TO THE BACK OF BUILDING HEADER. DOOR ASSEMBLY MUST BE ABLE TO ROTATE DOOR FULLY WITHOUT CONTACTING OR SCRAPING BACK OF BUILDING HEADER.

**STEP 5 PRETENSION THE DOOR SPRINGS**

- 5A APPLY TENSION TO SPRINGS BY ROTATING DOOR (SEE CHART 5) REQUIRED TURNS IN A FORWARD DIRECTION (SEE FIGURE 5). BOTTOM ANGLE SHOULD BE POSITIONED AT 3 O'CLOCK.
- 5B THE AMOUNT OF TENSION REQUIRED TO PROPERLY COUNTERBALANCE DOOR WILL VARY. THE FINAL ADJUSTMENT OF SPRINGS WILL BE MADE LATER IN STEP 9.

**DO NOT CUT THE BANDS**

YOU WILL BE TOLD AT A LATER TIME EXACTLY WHEN TO CUT THEM.

NOTE: IN MANY CASES THE DOOR CAN BE LIFTED INTO PLACE IN THE SHIPPING BOX; SEE INSTRUCTION STICKER AFFIXED TO THE RIGHT END CAP OF SHIPPING BOX.

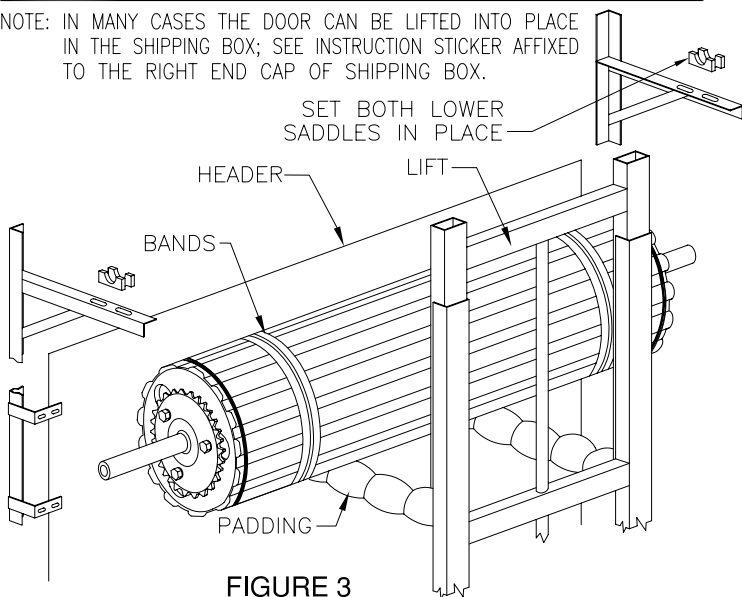


FIGURE 3

**STEP 4**

**SECURE AXLE SADDLES AND CHAIN HOIST**

- 4A PLACE SADDLE CASTING ON DOOR SUPPORT BRACKET. LAY AXLE INTO LOWER SADDLE CASTING. INSTALL KEEPER PLATE, WASHER AND NUTS AS SHOWN IN FIGURE 4. TAKE VERY GREAT CARE TO TIGHTEN BOTH NUTS VERY TIGHTLY TO A TORQUE OF 40 FOOT POUNDS. (THIS IS A 40 POUND PULL AT THE END OF A 12" WRENCH.)
- 4B ATTACH CHAIN HOIST (IF SUPPLIED) TO DOOR SUPPORT BRACKET USING (4) - 3/8" DIAMETER HEX HEAD BOLTS. POSITION ROLLER CHAIN ON PERIMETER OF BOTH SPROCKETS. ADJUST HEIGHT OF HOIST BRACKET SO CHAIN IS TAUT (NO SLACK) AND TIGHTEN THE MOUNTING BOLTS. NOW INSTALL THE HAND CHAIN ON THE CHAIN WHEEL.

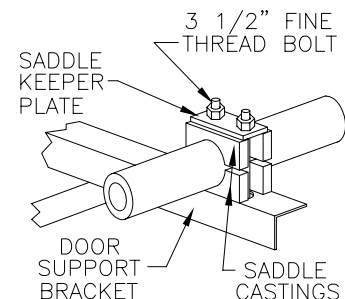


FIGURE 4

PRETENSION DOOR	
MAX. DOOR HEIGHT	TURNS
10'-0" HIGH	.75
12'-0" HIGH	.75
14'-0" HIGH	.75

CHART 5

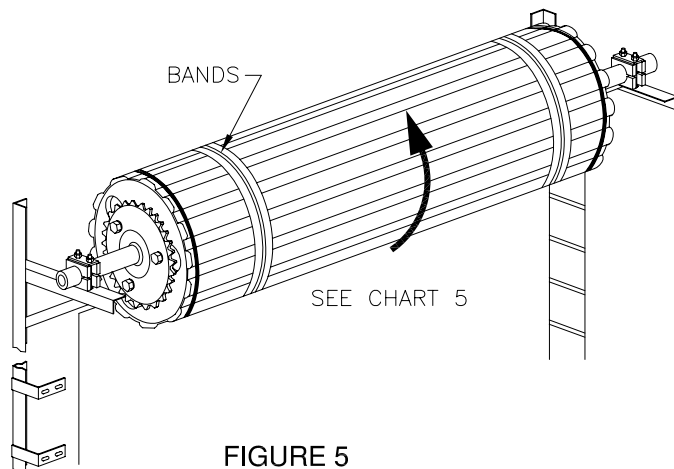


FIGURE 5

**STEP 6 CUTTING THE BANDS**

- 6A CUT THE BANDS THAT HOLD CURTAIN, THEN LOWER THE DOOR NO FURTHER THAN HALF WAY (SEE FIGURE 6) (DO NOT LET GO OF DOOR).

**CAUTION: SPRINGS ARE UNDER TENSION AND DOOR COULD UNWIND IF LET GO. MAINTAIN COMPLETE CONTROL OF DOOR.**

- 6B THE DOOR MAY HAVE A STRONG TENDENCY TO RAISE OR LOWER AND CAUSE DAMAGE. THEREFORE, IT MUST BE SECURELY HELD FROM TURNING UNTIL GUIDES AND HEAD STOPS ARE INSTALLED. THE DOOR MAY BE HELD BY A PROP AS SHOWN IN FIGURE 6.

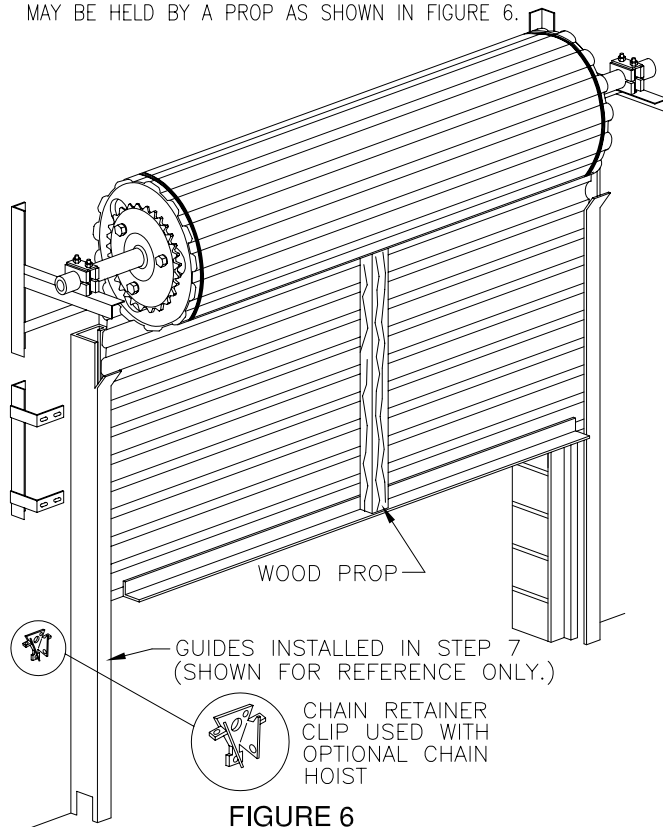


FIGURE 6

## & Building Components

### STEP 7 INSTALLING GUIDES

SLIDE STEEL GUIDE OVER THE EDGES OF THE CURTAIN AND POSITION AGAINST THE DOOR OPENING ALLOWING CLEARANCE AS SHOWN BELOW ON EACH SIDE OF CURTAIN. CHECK THE GUIDES FOR PLUMB USING A SPIRIT LEVEL. INSTALLATION FOR STEEL BUILDINGS: FASTEN GUIDES TO JAMB USING #14 SELF-TAPPING TEK SCREWS. INSTALL CHAIN RETAINER CLIP APPROXIMATELY 4 FEET ABOVE THE FLOOR.

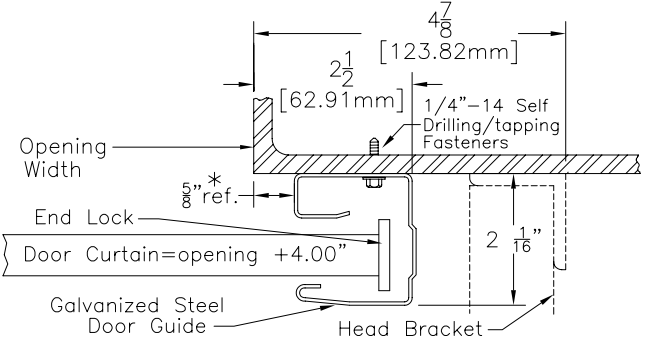


FIGURE 7A STEEL JAMBS

INSTALLATION FOR MASONRY OR CONCRETE BUILDINGS: FASTEN GUIDES TO JAMB WITH 5/16\"/>

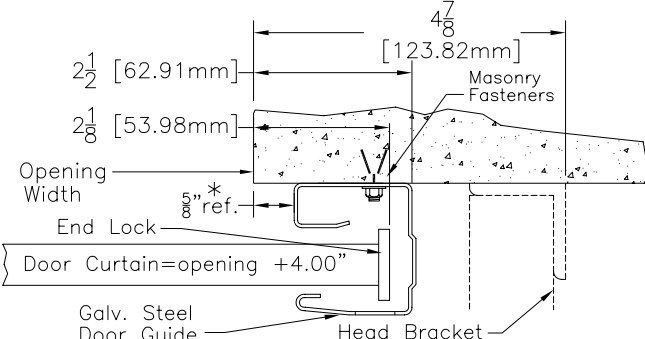


FIGURE 7B MASONRY JAMBS

### STEP 8 INSTALLING HEAD STOPS

INSTALL HEAD STOPS ON BOTH GUIDES AS SHOWN IN FIGURE 8.

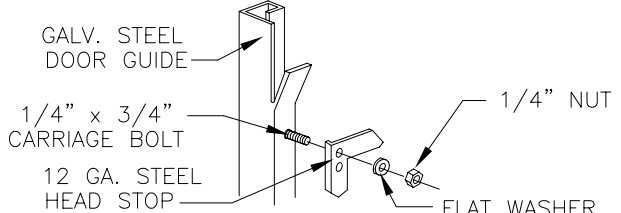


FIGURE 8

### STEP 9 CHECK AND ADJUST BALANCE

- 9A IF DOOR LOWERS EASY AND RAISES HARD, MORE TENSION IS REQUIRED.
- IF DOOR LOWERS HARD AND RAISES EASY, LESS TENSION IS REQUIRED.

**WARNING: BEFORE ADJUSTING THE SPRINGS BE SURE THE DOOR IS IN FULL UP POSITION.**

- 9B SECURE DOOR IN FULL TOP POSITION BY ONE OF THE FOLLOWING METHODS TO PREVENT THE DOOR FROM FALLING IF THE WRENCH SLIPS.
  1. TIE A ROPE AROUND THE DOOR ROLL.
  2. PLACE A CLAMP IN THE GUIDE AT THE TOP.

### STEP 9 cont.

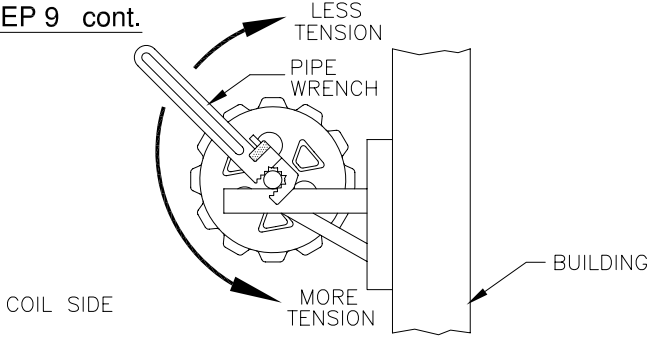


FIGURE 9

**WARNING: WHEN SADDLES ARE LOOSENED, HOLD TIGHT; SPRINGS WILL BE VERY STRONG.**

- 9C PLACE LARGE PIPE WRENCH IN POSITION SHOWN. LOOSEN AXLE SADDLES AND PULL DOWN FOR MORE TENSION, LET UP FOR LESS TENSION (FIGURE 9).
- 9D TIGHTEN AXLE SADDLES TO 40 FOOT POUNDS AS PER STEP 4, THEN TEST DOOR FOR PROPER BALANCE. REPEAT IF FURTHER ADJUSTMENT IS REQUIRED.
- 9E INSTALL CHAIN HOIST AS REQUIRED.

### STEP 10 INSTALL SLIDE BOLT LOCKS

INSTALL SLIDE BOLT LOCK AND LIFT CLIP AS INDICATED.

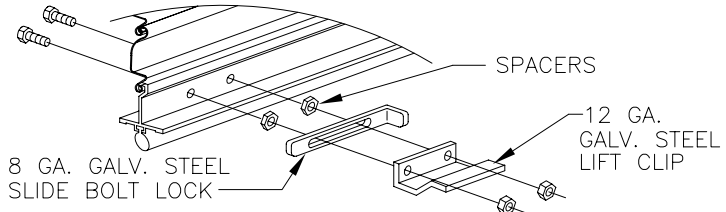


FIGURE 10

### STEP 11 INSTALL LIFT CLIP (Manual Operation Only)

INSTALL CENTER LIFT CLIP AND PULL ROPE AS INDICATED.

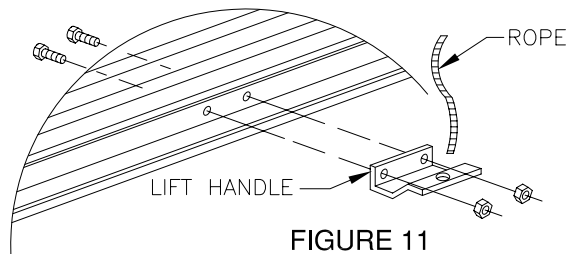


FIGURE 11

### STEP 12 CHECK OPERATION OF DOOR

OPERATE DOOR THROUGH SEVERAL COMPLETE CYCLES. IF DOOR DOES NOT OPERATE CORRECTLY, SEE TROUBLE SHOOTING GUIDE BELOW.

#### IF DOOR DOES NOT OPERATE PROPERLY (WITH GUIDES INSTALLED)

1. CHECK THE DOOR GUIDES FOR TWIST OR BOW. REPAIR OR REPLACE.
2. CHECK BOTH DOOR GUIDES FOR PLUMB. ADJUST AS REQUIRED.
3. CONFIRM THE MOUNTING SURFACE IS FLAT AND SQUARE TO OPENING.
4. ADJUST THE "LEAD IN" ON TOP OF EACH GUIDE; BEND OUT AT A 30° ANGLE.
5. ARE GUIDES SET TO WIDE OR TO NARROW? THERE SHOULD BE A 3/8" SPACE BETWEEN END OF CURTAIN AND BACK OF TRACK. IF NOT; LOOSEN GUIDE AND MOVE IN SLOTTED HOLES.

#### IF CURTAIN DOES NOT ROLL TRUE (WITHOUT GUIDES INSTALLED)

1. VERIFY THAT THE BRACKETS ARE LEVEL WITH A WATER LEVEL OR LASER LEVEL. MOVE BRACKETS AS REQUIRED.
2. CONFIRM THAT THE BRACKETS ARE MOUNTED THE CORRECT HEIGHT AND WIDTH FROM DOOR OPENING. SEE PAGE 2 OF THIS INSTRUCTION BOOKLET, MOVE AS REQUIRED.