MEGA-PRO HEAVY DUTY SWINGING TRAFFIC DOOR
INSTALLATION INSTRUCTIONS
#1 HINGE DESIGN

I. Receiving and Handling
1. Upon receipt of the Mega-Pro HD Traffic Door, unpack and inspect contents for shipping damage or missing hardware and if necessary prepare claims against the freight carrier for any damage discovered.

Important Note:
Any damage to the box or packaging material should be noted on the shipping paperwork. Exterior damage may indicate concealed damage. This notation will preserve your rights should a freight claim be necessary.

II. Door Opening Preparation
2. In order to achieve proper installation of the Mega-Pro HD, several aspects of the door opening must be checked.

The door lintel must be level and the side jambs must be plumb and square with the lintel. Also, the materials comprising the lintel and jambs must be solid and in good condition to facilitate the mounting of the door.

III. Installation
Note: Refer to DRAWING # 1

3. Mount the upper pivots (#13) on the wall thickness centerline of the lintel, ensuring that the knives (#14) are aligned. If necessary, insert shims between the lintel and the upper pivots.

ENSURE THAT THE MOUNTING HARDWARE IS LEVEL. For wooden or masonry jambs, fasten with 5/16" flat head type screws of sufficient length to ensure a solid attachment to the mounting surface. Welding is preferred when attaching to steel jambs.

4. Attach the bottom pivots (#7) to the side jambs at floor level. Ensure that the "footstep" is plumb with the centerline of the upper pivot bearing. If necessary, insert shims between the pivots and the jambs.

5. The torsion spring mechanism (#10 and 11) is factory lubricated. Check it to be sure it is greased by withdrawing it from the tubular frame (#1), then return to its position.

6. Lubricate and screw the threaded end (#6) with locking nut (#5) into the threaded bushing (#4) at the bottom of the tubular frame (#1). Insert the steel ball (#8) with a liberal amount of grease into the threaded end (#6). A conical bearing replaces the steel ball in a CHD construction.

7. Lift the doorframe and position the threaded end (with ball) onto the "footstep" of the bottom pivot. Raise the door by backing out the threaded end until the top of the torsion spring mechanism fits into the ball bearing located in the upper pivot. Be sure that the upper pivot spring arms (#12) straddle both the knife of the doorframe (#14), and the knife of the upper pivot (#13). NOTE: The top stud of the torsion spring mechanism should be inserted most of its length into the bore of the upper pivot bearing. However, backing out the threaded end too much (over-tightening) can result in binding, which prevents smooth closing of the door. You should have 1/16" clearance between the upper pivot and the top of the upper pivot spring arms (#12).

8. SAFETY STEP
Turn the threaded end (#6) until the flat portion lines up with the position of the set screw (#9) in the threaded bushing (#4). (Do not over-tighten as mentioned in step 7.) Tighten the set screw (#9) down onto the milled flat only. DO NOT tighten the set screw (#9) onto

Turn the threaded end (#6) until the flat portion lines up with the position of the set screw (#9) in the threaded bushing (#4). (Do not over-tighten as mentioned in step 7.) Tighten the set screw (#9) down onto the milled flat only. DO NOT tighten the set screw (#9) onto threads as the resulting thread damage will prevent future disassembly of the door. Turn the locking nut (#5) up tight against the threaded bushing. These steps ensure that the threaded end cannot screw back into the bushing.

IV. Door Tension Adjustments
NOTE: The torsion spring mechanisms are adjusted at the factory; the tension on them is sufficient for normal operation of the doors. Releasing the tension completely is not advised. For the sake of clarity, we refer to the spring arms (#12, Drawing 1) as left and right hand, and to set screw adjusting collar (#9, Drawing 1) as the inner and outer (adjusting) collars.

Note: Refer to DRAWING # 3
STEP 1. To increase the tension of the door spring, place yourself in the door opening and face the door leaf to be tensioned. Locate the locking pin in the adjusting collar.

STEP 2. Open the door partially to your left until a steel pin 0.32" diameter x 4" long (not supplied) can be put into the second hole to the left of the locking pin. NOTE: A pin of less than 0.32" diameter might spring loose).

STEP 3. Close the door. Because its spring has been locked, the right hand spring arm swings to the right. You may now remove the locking pin with a pair of pliers.

STEP 4. Move the spring arm back towards the closed position (in the direction of the door leaf) so that the locking pin can be put into the next hole of the outer collar that lines up with the single hole of the inner collar. Be sure to fully insert the pin.

STEP 5. Open the door slightly to the left until the 0.32" diameter x 4" long steel pin can be removed. The above procedure increases the spring tension by one increment of adjustment (1/8 turn). Repeat this procedure to further increase spring tension. You may repeat it a maximum of six times before maximum spring tension is reached. Over tightening may result in spring damage. To reduce spring tension, repeat steps 1-3. At step 4 move the right hand spring arm away from the left hand arm so that the locking pin can be put into the next hole. Then repeat step 5.

*The holes in the PVC upon which the door us hung are drilled to a larger circumference than the bolts that pass through them. This is done intentionally to relieve stress on the PVC and prevent excessive curving. It is also recommended that the buts and bolts are not overly tightened, giving the PVC panel room to move.
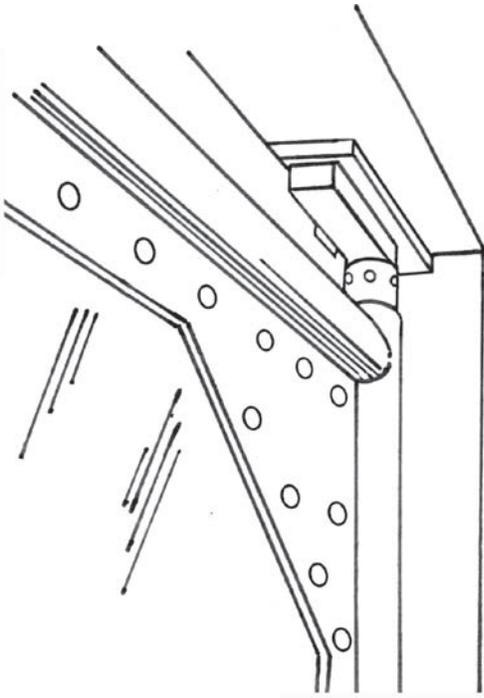
DRAWING 1
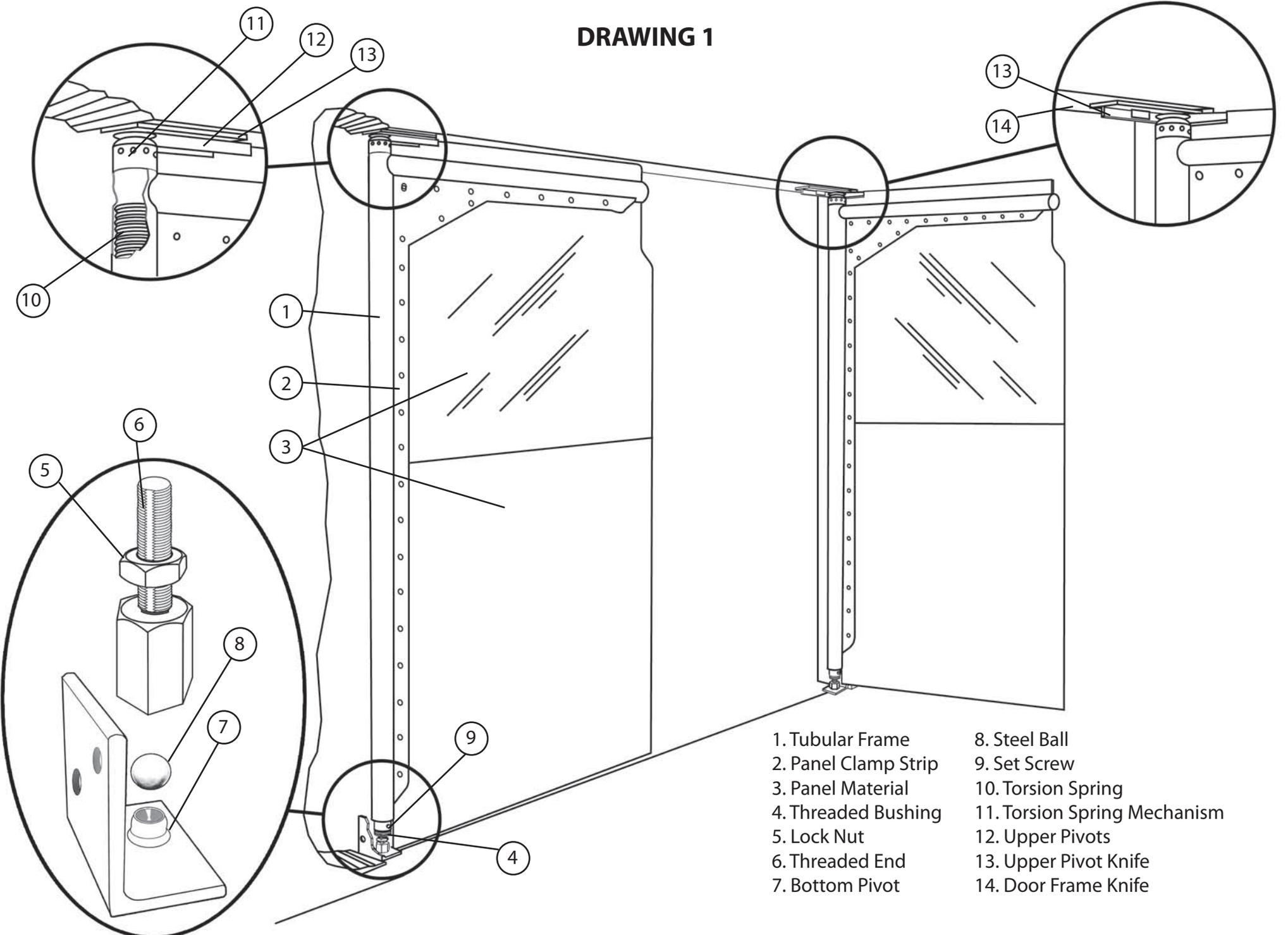
1. Tubular Frame
2. Panel Clamp Strip
3. Panel Material
4. Threaded Bushing
5. Lock Nut
6. Threaded End
7. Bottom Pivot
8. Steel Ball
9. Set Screw
10. Torsion Spring
11. Torsion Spring Mechanism
12. Upper Pivots
13. Upper Pivot Knife
14. Door Frame Knife

DRAWING 2
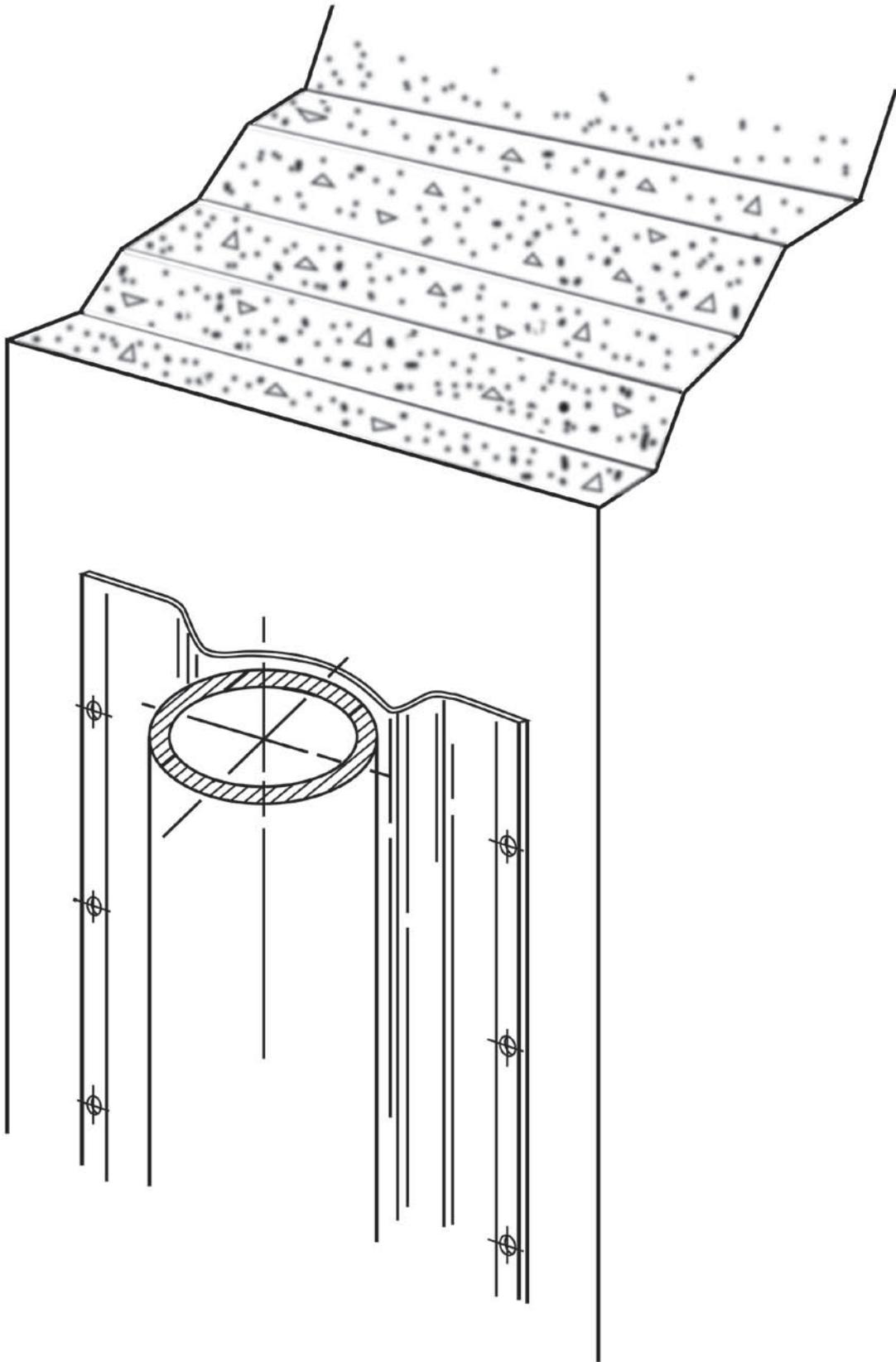
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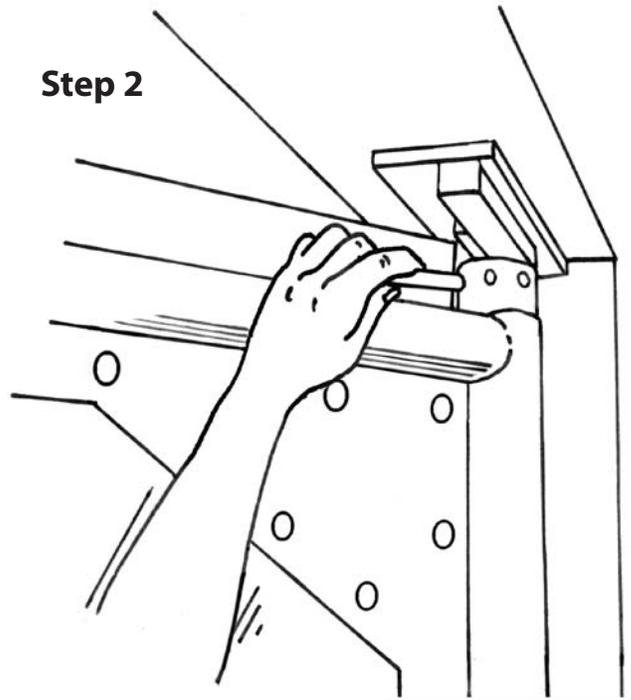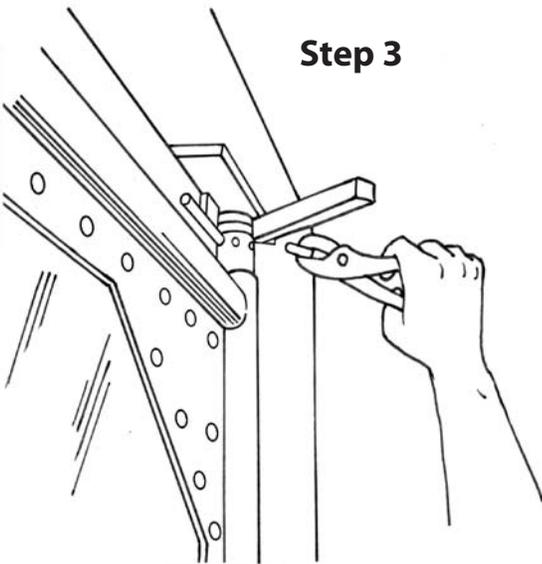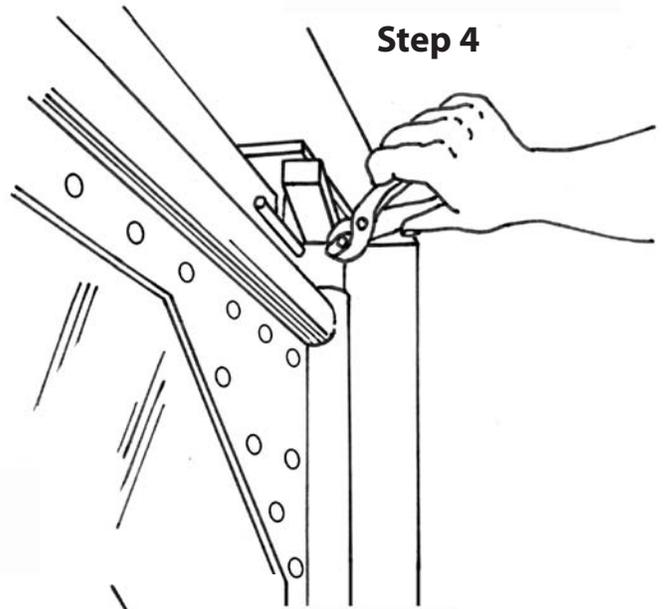
Step 1

Step 2

Step 3

Step 4

Step 5