

PACIFIC ROLLING DOOR COMPANY  
15900 WORTHLEY DR. SAN LORENZO, CALIF.  
A PACIFIC STEEL ROLLING FIRE DOOR

A Pacific Steel Rolling Fire Door has two jobs - one as a Standard Service Door in which the "Fire Door" mechanism does not go into action, and secondly as a "Fire Door" when the Automatic Mechanism is tripped and the opening is closed to flame and smoke.

Study Figure #1. Note the Fuse Links connected by a chain from the Drop Ball, thru Eye Bolt in ceiling then thru the conduit in the wall to other side of the wall to another eye bolt. This arrangement is one of the most important parts of the Fire Door.

The chain connecting the Fuse Links must be tight to have the door operate correctly.

There is another chain with Fuse Links running horizontally along the Door Hood. This line is not connected to the Fuse Link line that runs thru the wall. This one is attached to the Flame Baffle as shown. This line must be kept tight also.

When any one of the "thru the wall" Fuse Links is broken, the Drop Ball falls and allows the Fire Door mechanism to operate.

There are two separate springs inside of the Fire Door Barrel, one is the Balance Spring for normal manual operation, controlled by the Tension Wheel. The second spring is the Driving Spring which drives the door down when the mechanism is tripped. This spring is controlled and set by the Governor Wheel on the opposite end of Barrel from the Tension Wheel.

The Guides are to be set at least  $3/4$ " up from floor to allow for expansion and prevent distortion.

All bolts holding the Wall Angles are thru the wall and each are to have a Galvanized Washer to allow the Angle to slip while expanding.

Locate center at top of opening. Use plumb bob to get center at floor. Cut a guage stick one-half the distance of the heel to heel of wall angles. Mark each side from the center line at top and bottom of wall with a vertical line.

Take guides apart and stand wall angles in line with top and bottom marks. Check floor for level and set Wall Angles  $3/4$ " above floor level.

Mark and strike a chalk line thru holes, then draw lines both ways so that centers can be noted while drilling.

Bolt Wall Angles in place, bolt Tension Bracket on wall angle of tension side. A Brass washer is to be placed between the Bracket and barrel on tension side.

(See Figure #2.)

1. Place 1-3/4" Roller Bearing into Bracket hub.
2. Place one 1-3/4" brass washer (to be between Barrel Plug and Bracket Hub)
3. Place brass washer, then the Spiral Wheel on Barrel Shaft. (Make sure that the spiral is in the correct direction.)
4. Put Governor Plate in position with one brass washer on each side of the hub.
5. Place one 1" brass washer between the Spiral Wheel and Governor Wheel then use the 1/4" pin (Y) to fasten wheel onto shaft. (Do not place the Follower in position yet.)
6. Set the Drop Arm into place.

Raise Barrel into place and bolt Mechanism Bracket to Wall Angle. Use  $\frac{1}{2}$ " x  $1\frac{1}{2}$ " M.B. in top hole, and  $\frac{1}{2}$ " x  $1\frac{1}{2}$ " buttonhead bolt in bottom hole of bracket.

If clearance is very close, both brackets must be put on Barrel before raising into position and bolting onto Wall Angles.

Level Barrel by raising or lowering Wall Angles. Tighten wall bolts again and try Barrel to ascertain if it turns freely.

7. Wire (temporarily) Drop Ball into horizontal position, holding Drop Plate up.

Lift curtain into slings and bolt top slat of Curtain (with endlocks equal distance from brackets.)

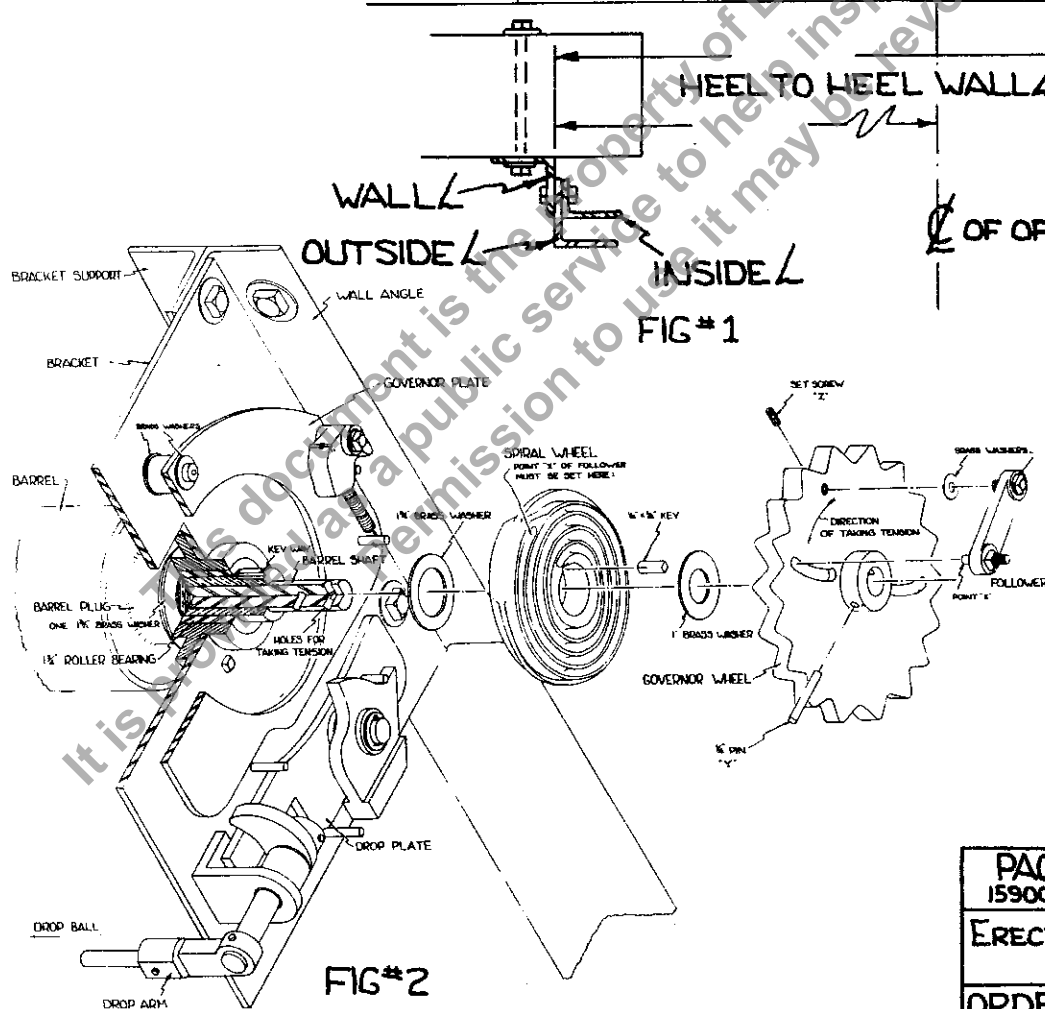
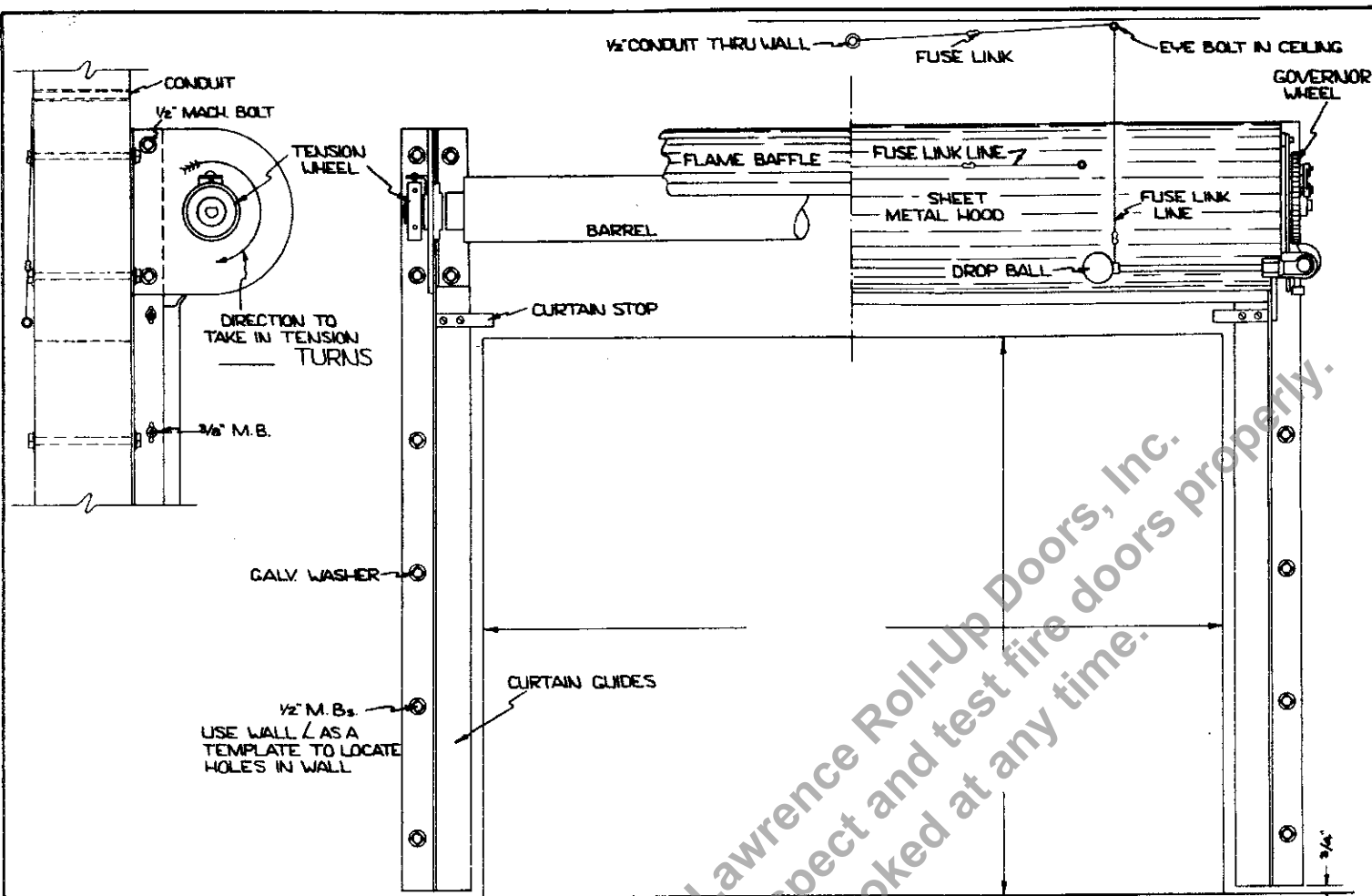
Assemble guides, put on Curtain Stops. Footpiece should be about 3 inches below Curtain Stops.

Place Tension Wheel on Shaft, take up tension as indicated by arrow (about 2 turns) until footpiece just goes up to Curtain Stops. Lock Tension Wheel with rivet.

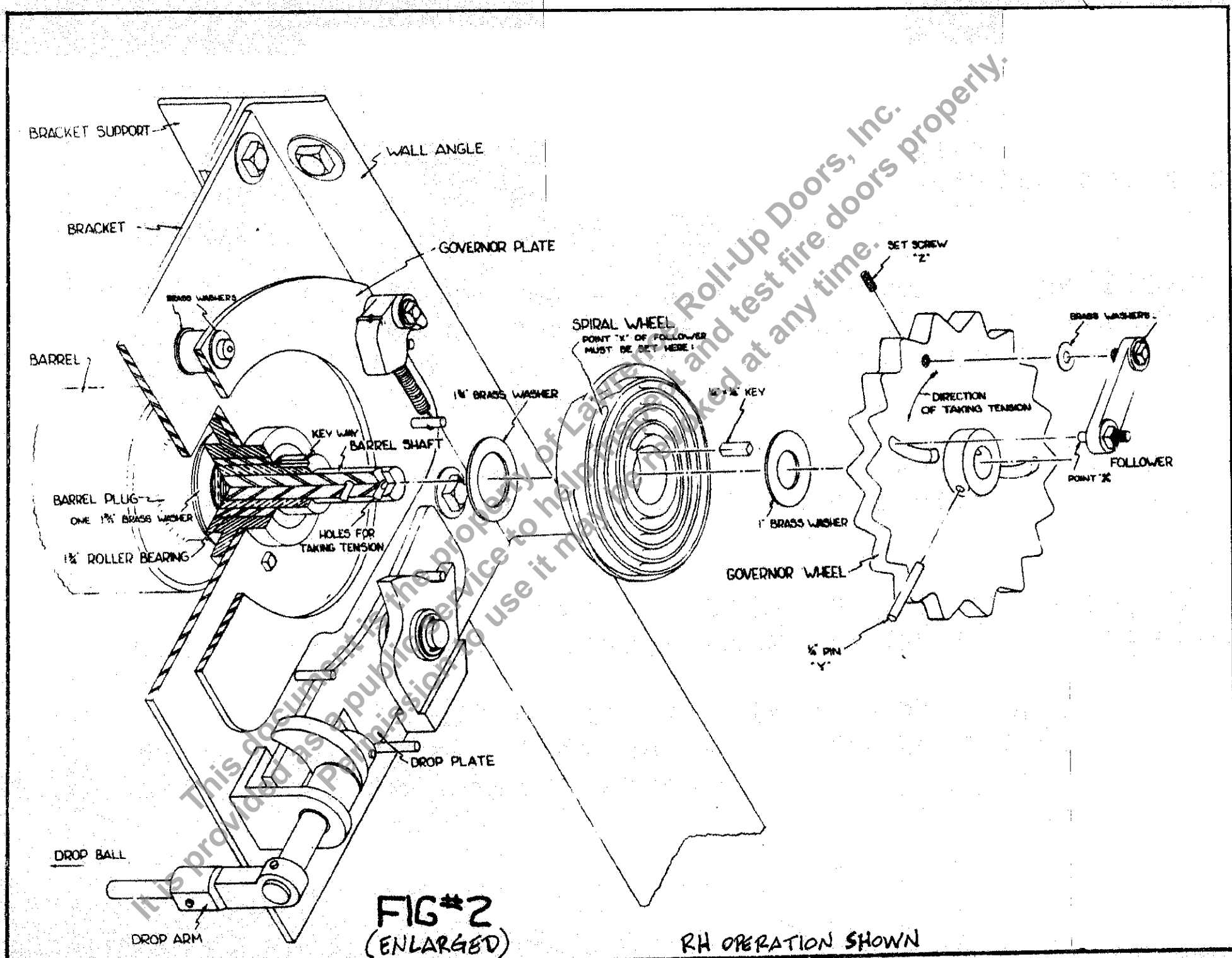
Try door by hand operation and adjust by taking in or letting out tension. **WARNING: Do not take up or let out tension unless Curtain is up.**

(See Figure #1.)

8. Open door to Stops, turn Barrel Shaft in direction indicated by arrow \_\_\_\_\_ turns.
9. Place Follower - to contact spiral at point "X", tighten Set Screw "Z". (Point X on Follower must be at the end of spiral when Curtain is rolled up.)
10. Release Drop Ball, door should be forced down by Follower to floor. If door is not driven to floor, use one additional turn of tension on Barrel Shaft.



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ERECTION INSTRUCTIONS FOR A	
ROLLING FIRE DOOR	
ORDER#	JOB#



FIG#2  
(ENLARGED)

RH OPERATION SHOWN