

# **FLEET ENGINEERS**

## **Installation Instructions:**

Recessed Mount 1" Roller (with single spring operator)  
Track, Operator and Door Installation

**Part Number:** INS-15002

**Revision Date:** 2/25/15



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# How to measure for your new Fleet Engineers Rollup Door

Measure existing door frame, both width and height; confirm opening size.

*Determining the width of you new door.*

\* Opening width plus 2.25"

*Determining the height of you new door.*

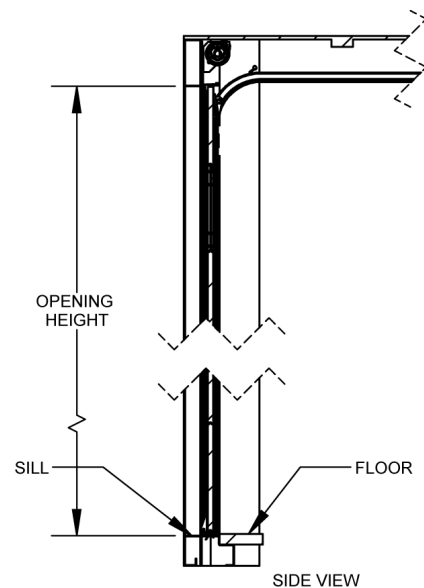
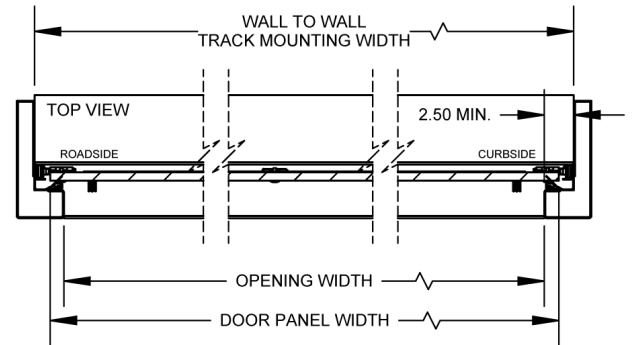
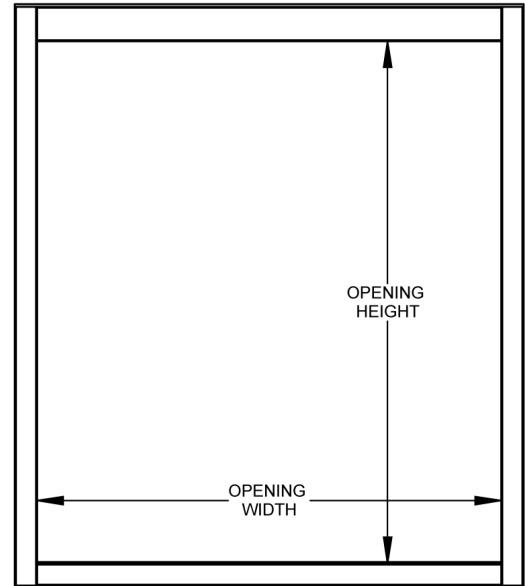
\* Opening height minus 1/2" for all doors

## Standard Panel Arrangements (ref.)

**Door Height Panel Intermediate Panels Top Panel**

### Wood Recessed Mount 1" Roller Door Height

75"	15.00"	(4) 12.00"		12.00"
80"	15.00"	(2) 15.00"	(2) 12.00"	11.00"
85"	15.00"	(3) 15.00"	(1) 13.00"	12.00"
90"	15.00"	(4) 15.00"		15.00"
95"	15.00"	(2) 15.00"	(3) 12.00"	14.00"
96"	15.00"	(3) 15.00"	(2) 12.00"	12.00"
100"	15.00"	(5) 15.00"		10.00"
105"	15.00"	(5) 15.00"		15.00"
110"	15.00"	(3) 15.00"	(3) 12.00"	14.00"
114"	15.00"	(4) 15.00"	(2) 12.00"	15.00"



# Track Installation

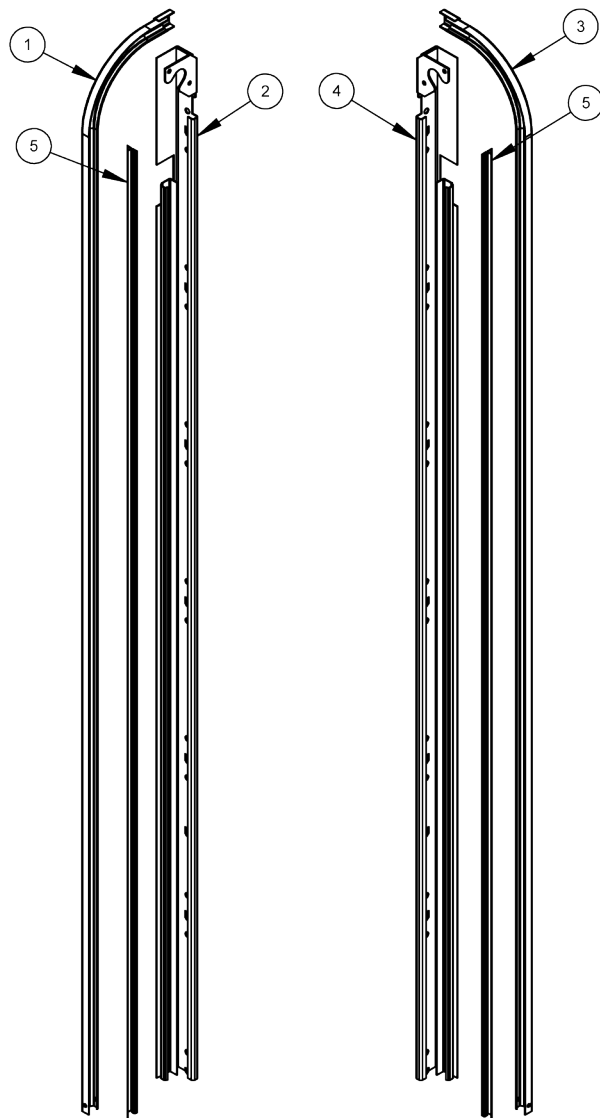
## ! THINGS TO KNOW BEFORE YOU BEGIN

### TOOLS NEEDED

- C-clamp or locking pliers (4)
- Safety Glasses
- Welder (optional)
- Rivet gun (optional)
- Hammer
- Light
- Saw or Cutting Torch
- Locking pliers
- Square
- Tape measure
- Socket wrench kit
- Step ladder (2)
- Portable lights

### BEFORE YOU BEGIN

- Read these instructions completely before installing the door track.
- Allow enough time to do the work.
- Be sure to have sufficient help.
- Measure the opening on your trailer to confirm that you have the correct Fleet Engineers track.
- Check your shipment to confirm that your order is complete and that all parts are included. Please note any shortages or damage on delivery receipt as Fleet Engineers cannot be responsible for parts lost or damaged in shipping.
- Become familiar with the components before assembling to reduce installation time. Be sure all components for your new track are included with your shipment. If any parts are missing, please contact Fleet Engineers toll-free at (800) 333-7890.



### List of Items:

1. 6" Radius Horizontal 1.00" Track (curbside)
2. Vertical 1.00" Track with right angle (curbside)
3. 6" Radius Horizontal 1.00" Track (roadside)
4. Vertical 1.00" Track with right angle (roadside)
5. Dual Durometer side seal

# Track Installation

## Step 1

Calculate vertical track length.

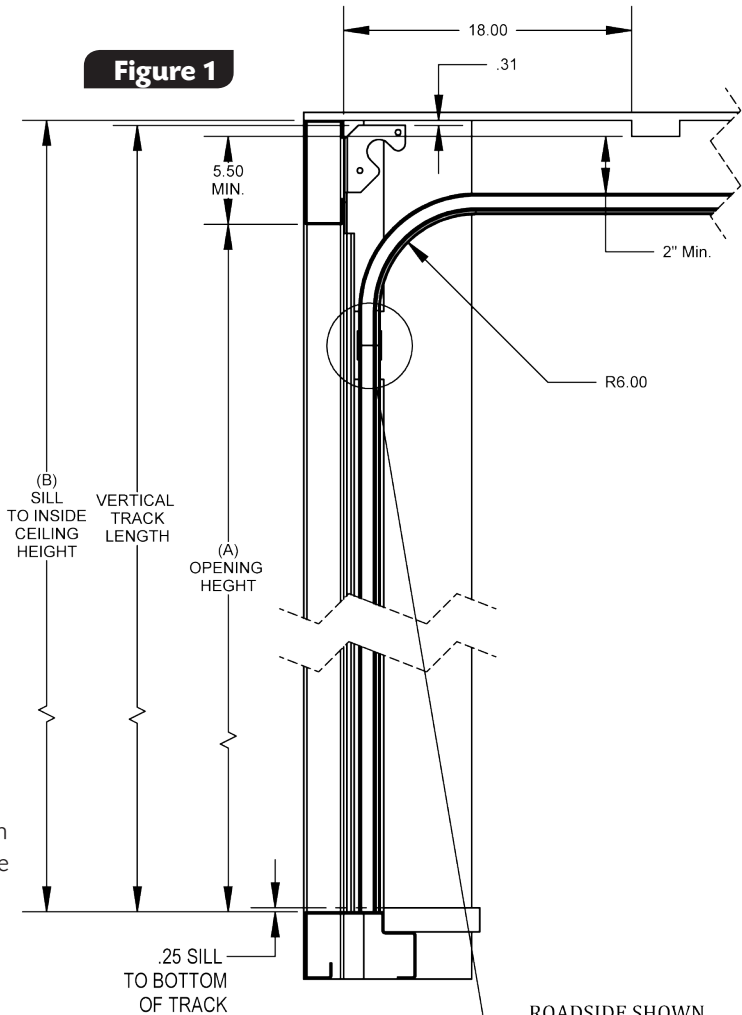
► **A:**  
Measure **(B) Sill to Inside Opening**  
minus .31" (5/16") = **(X)**.

**(X)** = vertical track cut length.

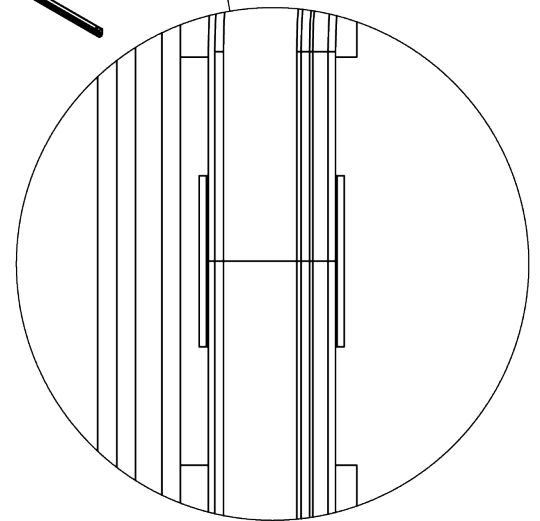
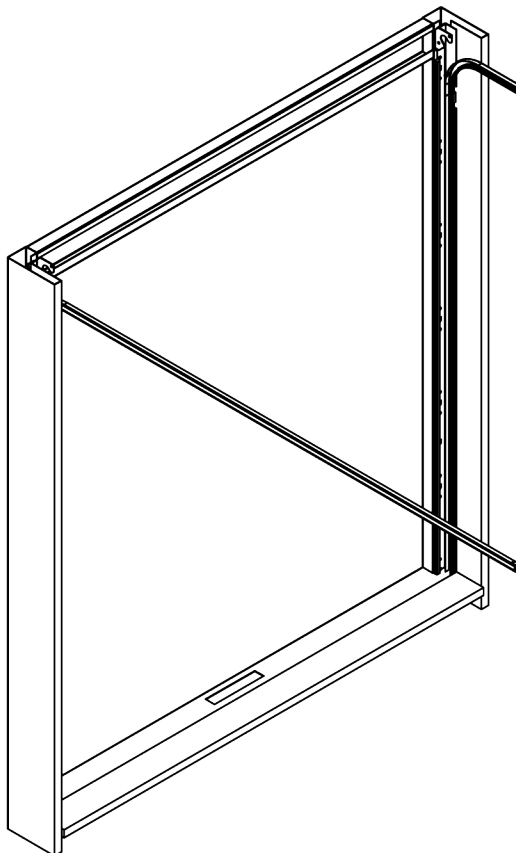
The vertical track assembly may be raised a maximum of 1/2" off the sill.  
Keep both vertical tracks the same length and same distance off sill.

### NOTE:

The vertical track assembly may be raised a maximum of 1/4" off the sill. Keep both vertical tracks the same length and same distance off sill.



ROADSIDE SHOWN  
CURBSIDE OPPOSITE



# Track Installation

## Step 2

Cut vertical track from bottom only to required length as determined in **Step 1**.

### NOTE:

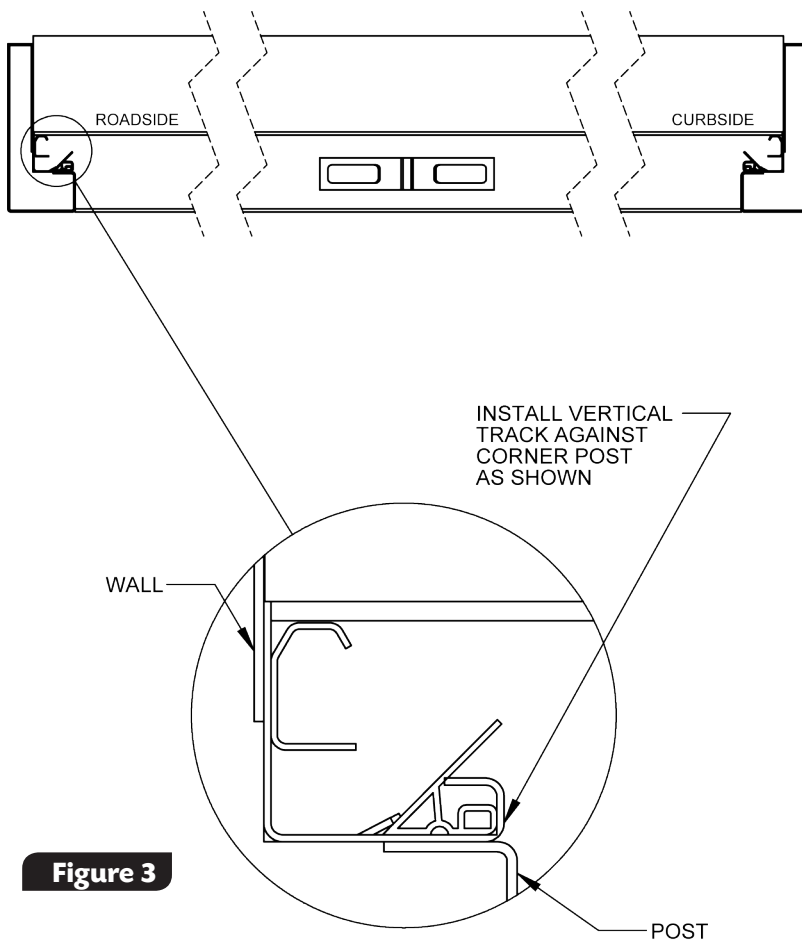
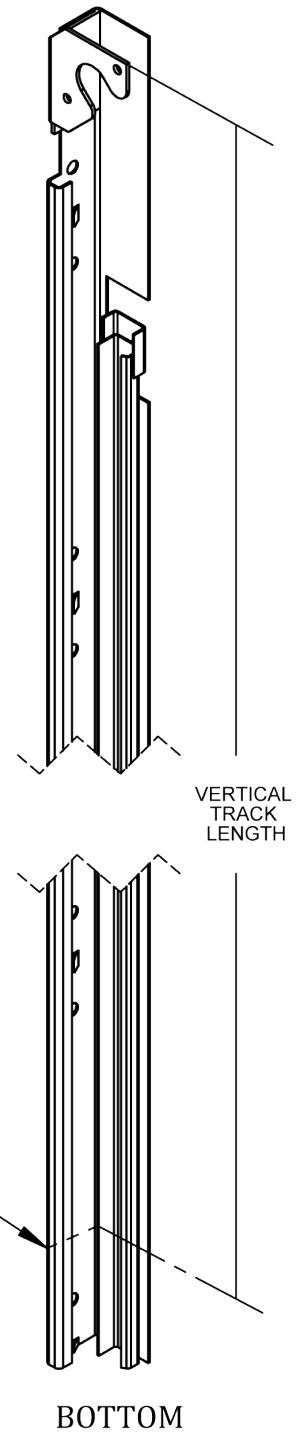
Roadside vertical track shown, **Figure 2**.  
Cut equally from both roadside and curbside tracks.

Mount the vertical track mounting angle flush with the inside edge of the corner post, plumb to frame. **Figure 3**

### NOTE:

It is critical that the vertical track is installed square. check the opening measurements at several points between the vertical tracks, then measure diagonally. If your measurements are equal, the door track is square.

**Figure 2**



**Figure 3**

# Track Installation

## Step 3

The vertical track is to be welded through the plug weld holes to the post on 12" to 15" centerline. **Figure 4.**

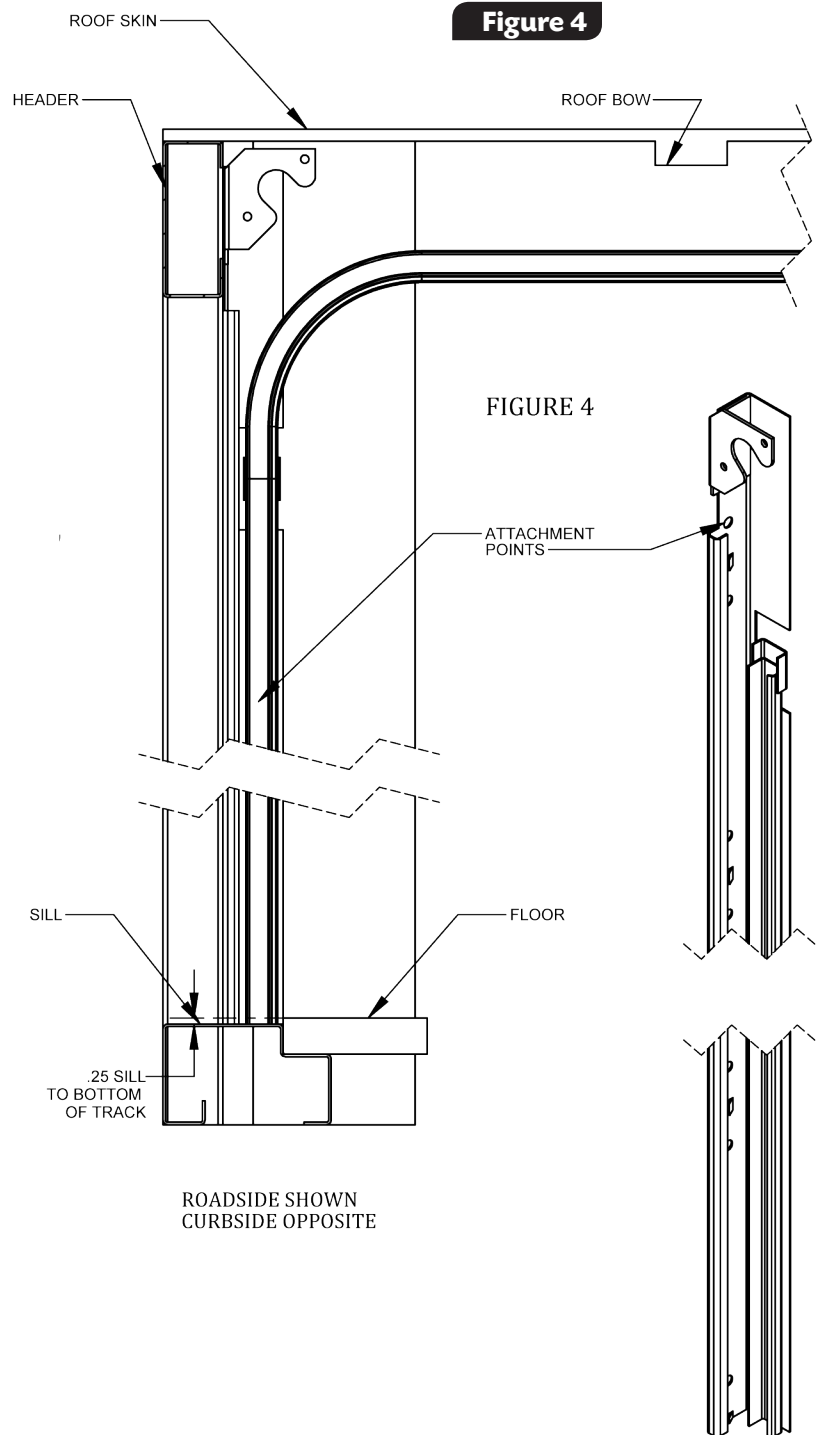
### Optional mounting:

After the tracks have been properly positioned, they can be attached either by rivets or bolts.

**A word of caution:** Be very careful when putting anything inside the tracks. Fasteners should have a low head profile. They must be inserted squarely-never at an angle. A protruding head will interfere with roller travel and cause the door to work "hard" as well as develop maintenance problems later on.

### NOTE:

The vertical track assembly may be raised a maximum of 1/4" off the sill. Keep both vertical tracks the same length and same distance off sill.



# Track Installation

## Step 4

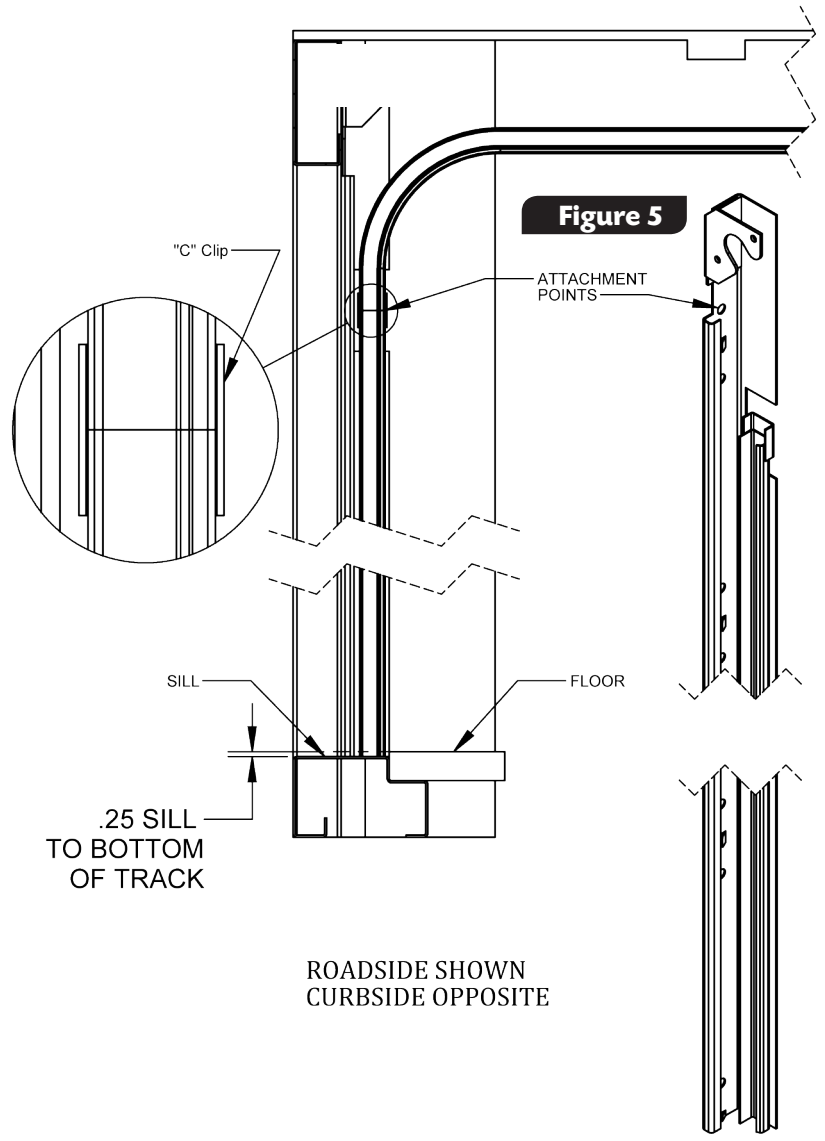
Align both vertical and horizontal tracks in the c-clip (attached to the horizontal track). Do not overlap tracks, weld in position

This positions the track and provides a smooth transition for the rollers; the backside of the tracks should be in line. Plug weld holes are provided to secure the horizontal tracks to the mounted angles.

**Figure 5**

### NOTE:

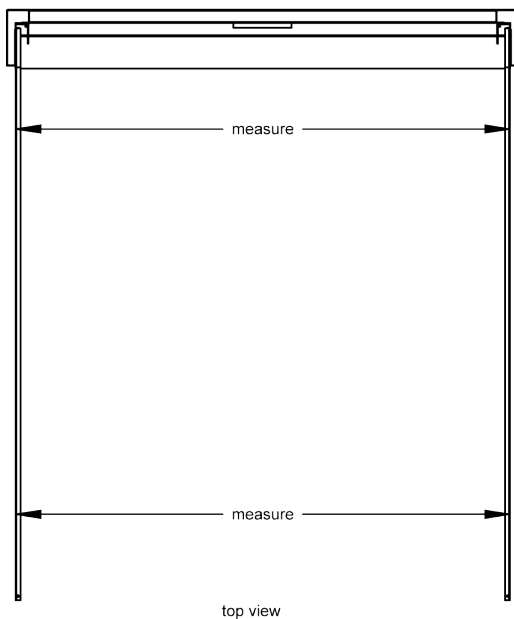
The top of the horizontal track should be parallel to and below the ceiling of the unit, by a minimum of 2" for a 3/4" rollup door.



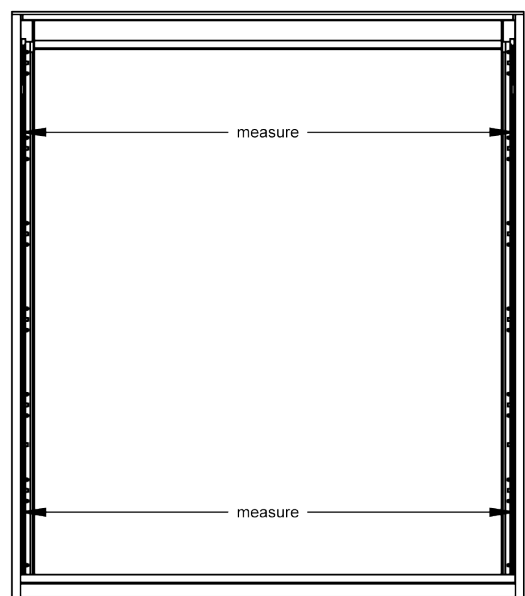
## Step 5

Measure track in several locations to ensure installation is straight and square as shown at top middle and bottom.

**Figure 6**



top view



view from inside unit

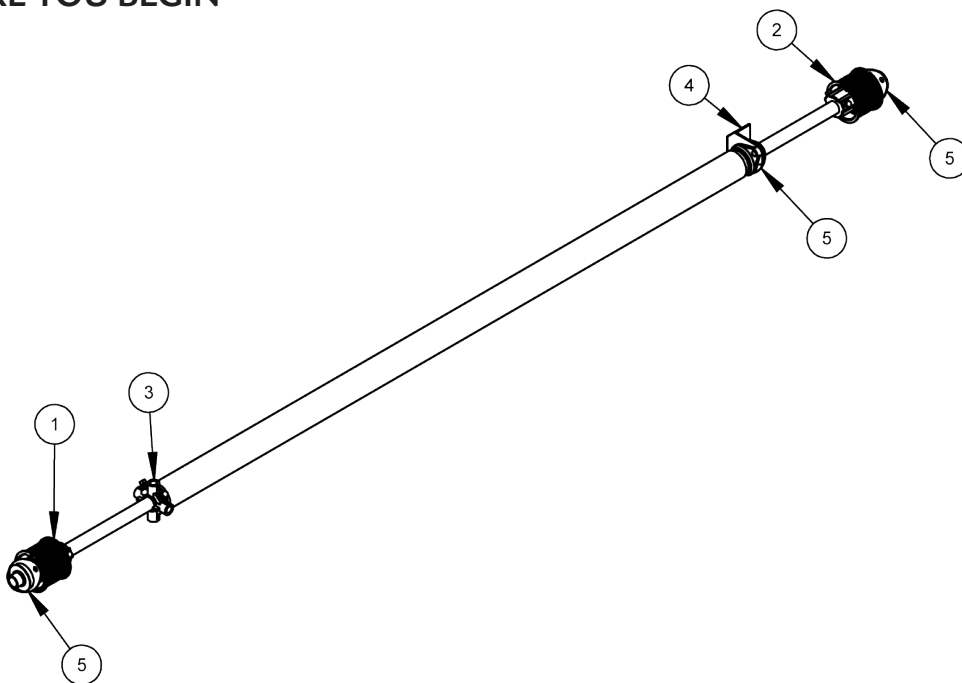
**Figure 6**

# Operator Installation

## ! THINGS TO KNOW BEFORE YOU BEGIN

### TOOLS NEEDED

- C-clamp or locking pliers (4)
- Safety Glasses
- Welder (optional)
- Rivet Gun (optional)
- Hammer
- Light
- Saw or Cutting Torch
- Locking pliers
- (2) 3/8" x 12" winding bars
- Square
- Tape measure
- Socket wrench kit
- Step ladder (2)
- Portable Lights
- Two (2) 1/2" dia. x 18" long winding bars



### IMPORTANT

Lubricate the operator spring, tracks, bearings, rollers and hinges liberally with WD 40 lubricant.

**Do NOT use grease.**

### List of Items:

1. Cable drum (curbside)
2. Cable drum (roadside)
3. Single spring assembly
4. Operator Bracket
5. Bearing and Bracket Plate Assembly

### BEFORE YOU BEGIN

- Read these instructions completely before installing the door operator.
- Allow enough time to do the work.
- Be sure to have sufficient help.
- Measure the opening on your trailer to confirm that you have the correct Fleet Engineers operator.
- Check your shipment to confirm that your order is complete and that all parts are included. Please note any shortages or damage on delivery receipt as Fleet Engineers cannot be responsible for parts lost or damaged in shipping.
- Become familiar with the components before assembling to reduce installation time. Be sure all components for your new operator are included with your shipment. If any parts are missing, please contact Fleet Engineers toll-free at (800) 333-7890.



**WARNING**

**HIGH TENSION SPRING CAN CAUSE SEVERE INJURY OR DEATH**

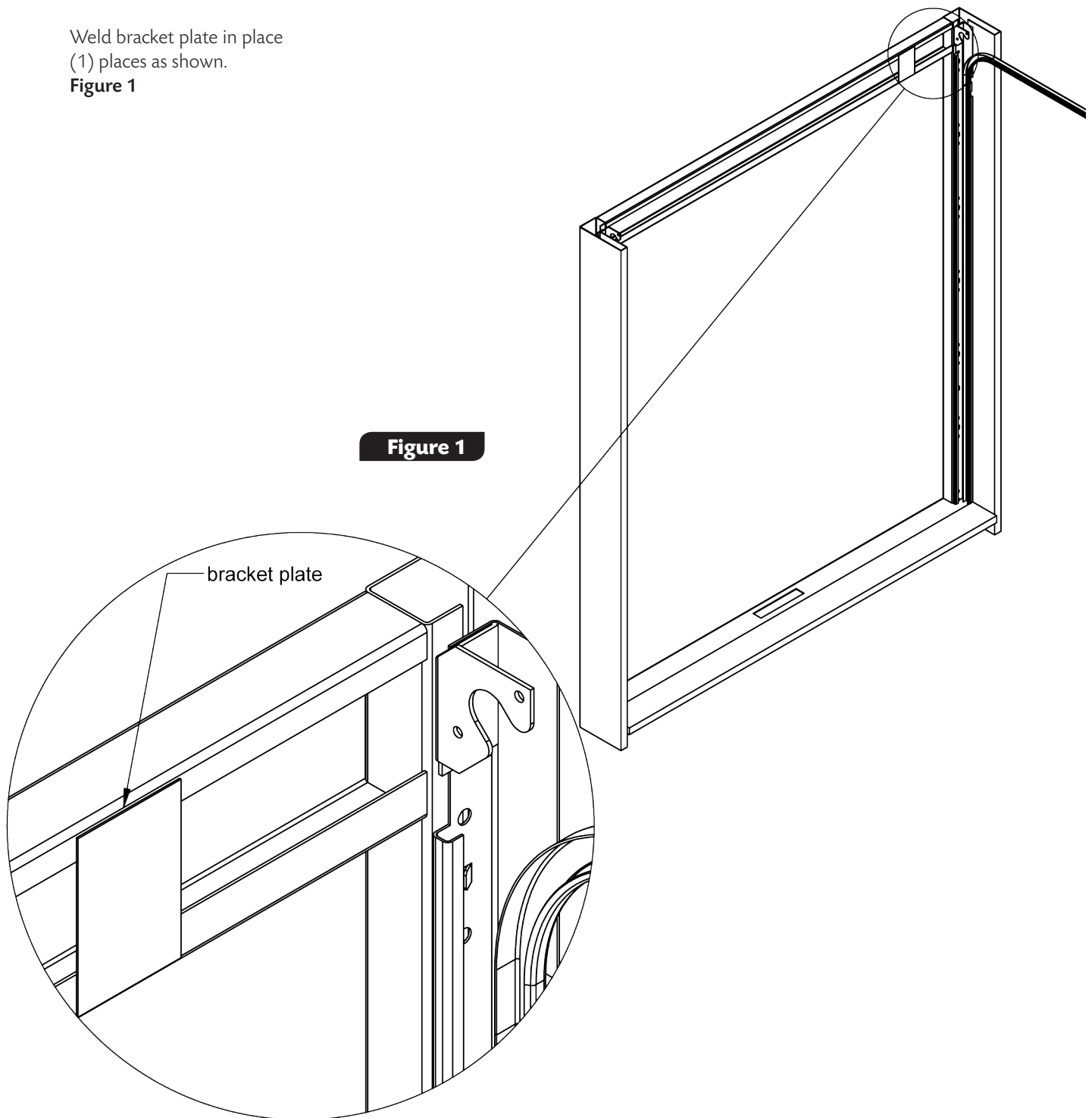


# Operator Installation

## Step 1

Weld bracket plate in place  
(1) places as shown.

Figure 1



# Operator Installation

## Step 2

Determine length of operator shaft

Measure inside wall to wall. minus 2"  
from this measurement.

Figure 2

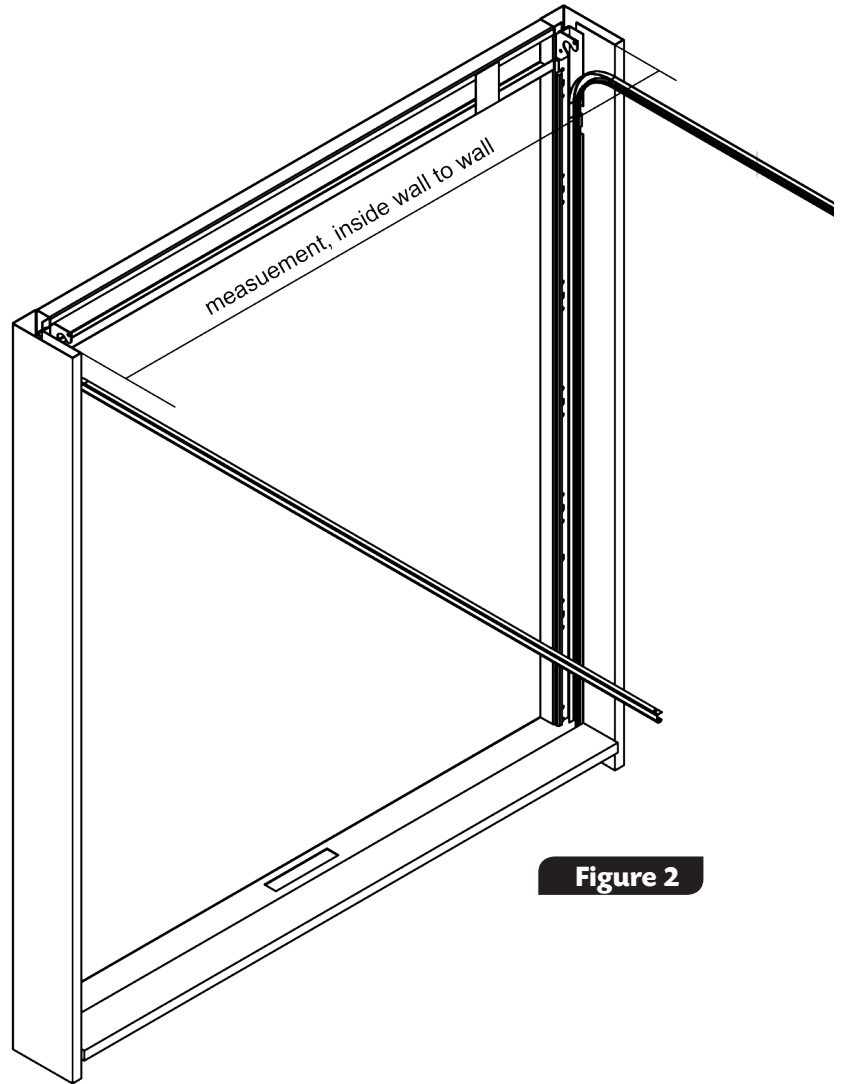


Figure 2

## Step 3

If required, cut length of operator  
shaft as determined in step 2.

Figure 3

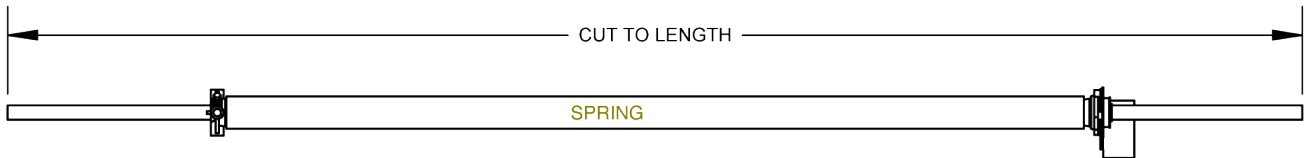


Figure 3

# Operator Installation - Standard Header

See page 14 for Shallow Header Installation

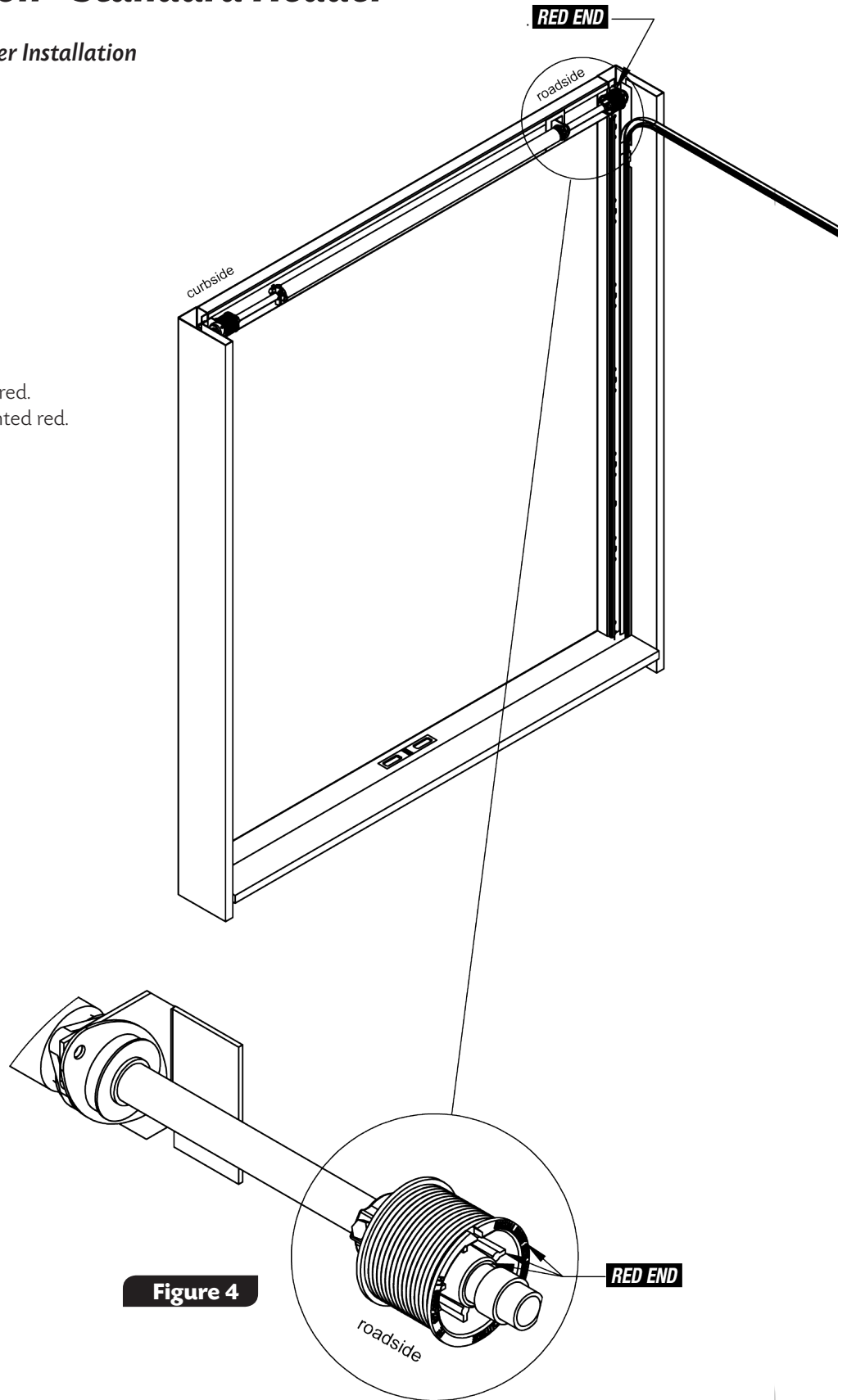
## Step 4

Install operator with the **RED** drum on the Roadside.

Installation hardware is included.

### NOTE:

The complete drum is not painted red. **Figure 4** shows the area that is painted red.

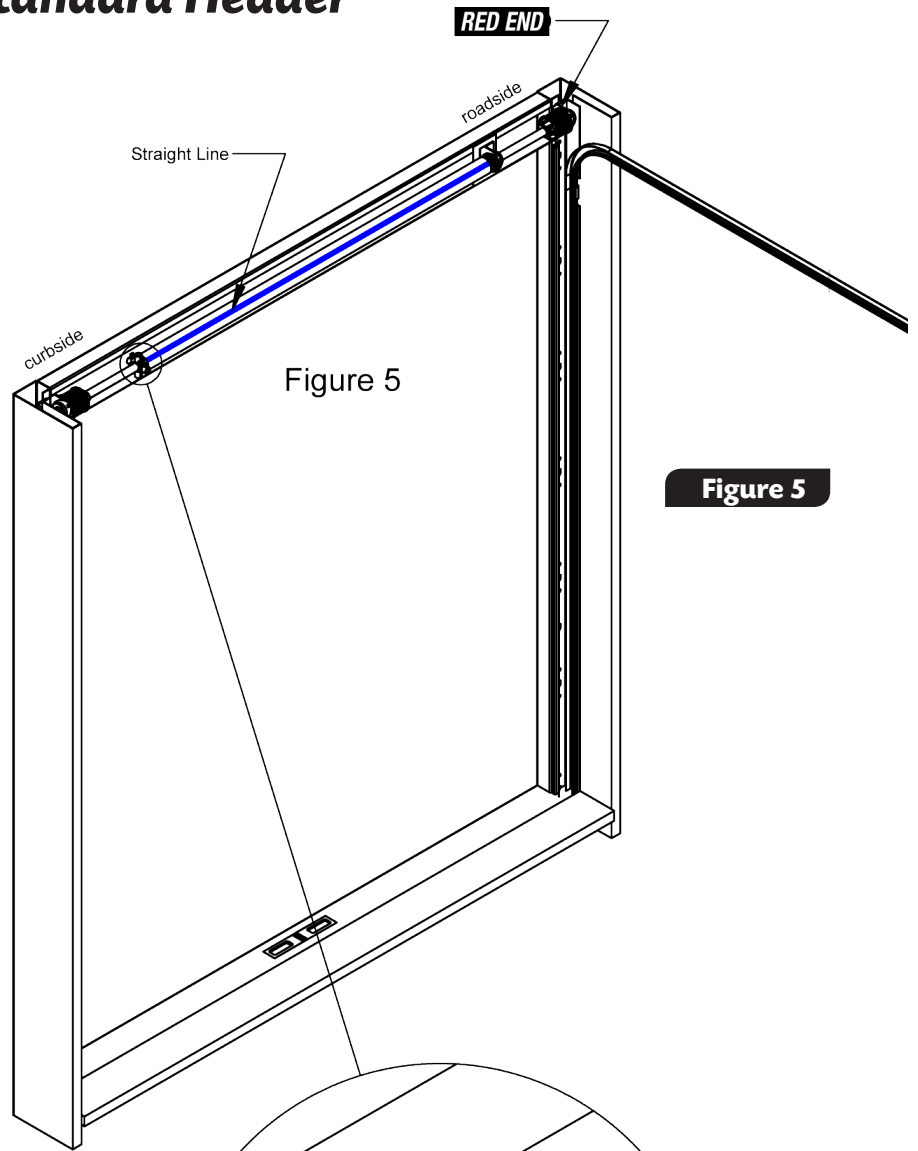


# Operator Installation - Standard Header

## Step 5

Using a wax pen, draw a straight line from end to end on both springs.

Figure 5

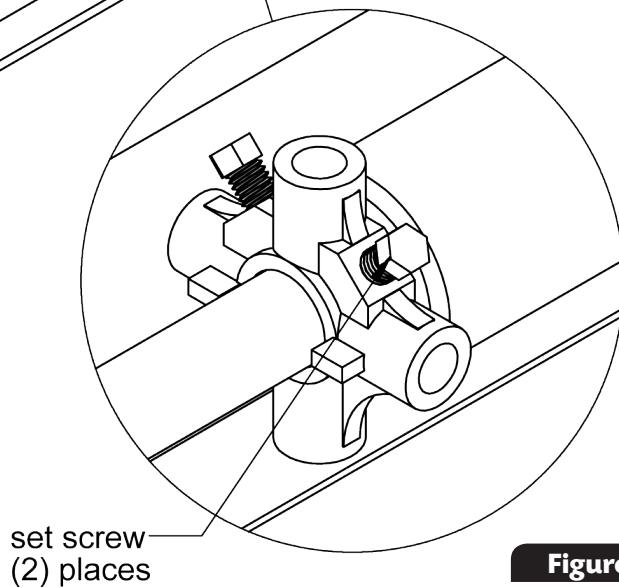


## Operator Winding (single spring style operator)

## Step 6

Loosen set screws in winding cone.

Figure 6



# Operator Installation - Standard Header

## CAUTION

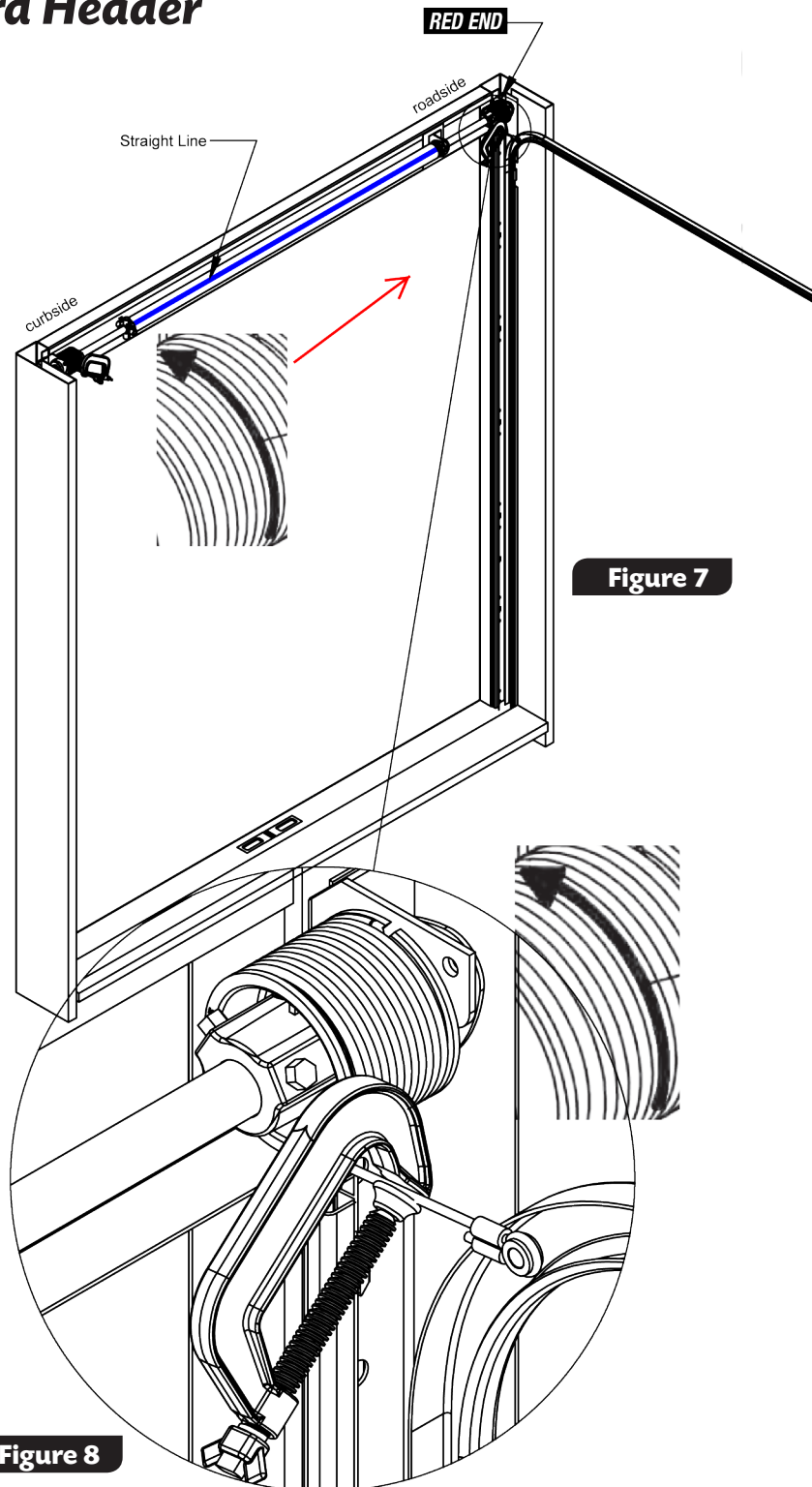
**MAKE SURE CABLES ARE ATTACHED TO CABLE DRUMS, THAT CABLES ARE PROPERLY TENSIONED, AND CABLE DRUMS ARE PROPERLY SECURED TO SHAFT**

### Step 7

Wind cable onto cable drum following grooves. It is important that the end of the cable is inserted fully into the notch. If this is not done properly, it could interfere with the drum movement. **Figure 7**

### Step 8

When all cable has been put onto drum, continue to wind 4 to 5 full turns. Push upward on winding bar for standard header. Add clamp to hold cable. Make sure cable drum is positioned about 1/4" from operator end bracket and tighten all set screws in winding cone. **Figure 8**



## WARNING

**HIGH-TENSION SPRINGS CAN CAUSE SEVERE INJURY OR DEATH. REPAIRS AND ADJUSTMENTS MUST BE MADE BY TRAINED SERVICE PERSONNEL.**

# Operator Installation - Shallow Header

## Step 4

Install operator with the **RED** drum on the Curbside.

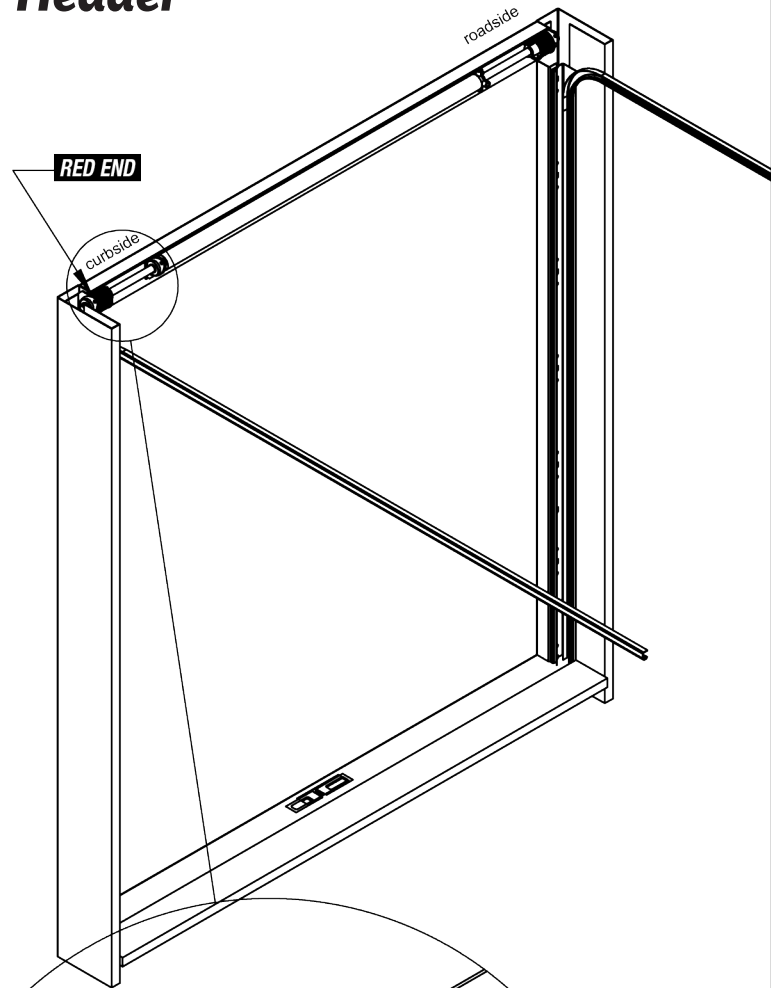
Installation hardware is included.

### NOTE:

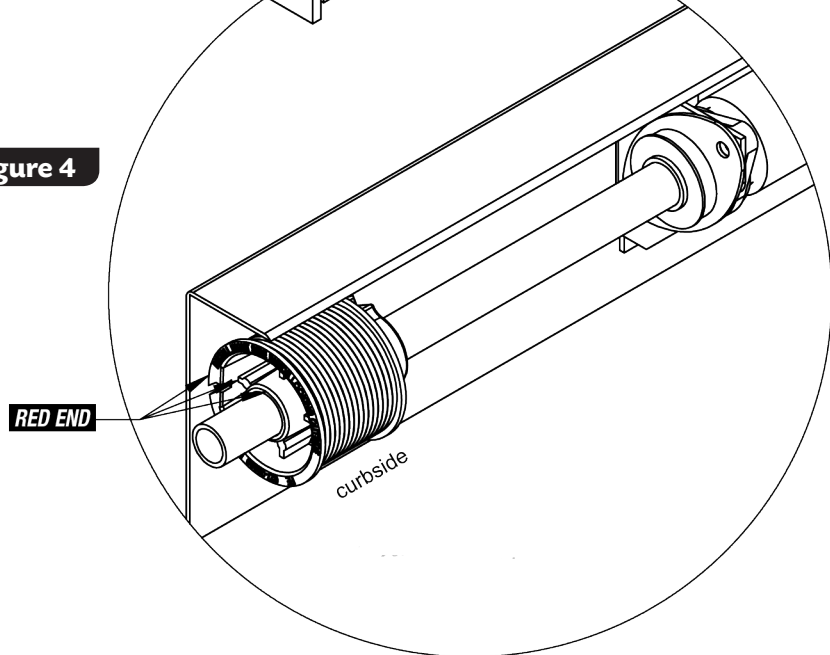
*The operator is installed in the opposite direction for shallow header applications.*

### NOTE:

The complete drum is not painted red. **Figure 4** shows the area that is painted red.



**Figure 4**



# Operator Installation - Shallow Header

## Operator Winding (single spring style operator)

### Step 5

Using a wax pen, draw a straight line from end to end on both springs.

Figure 5

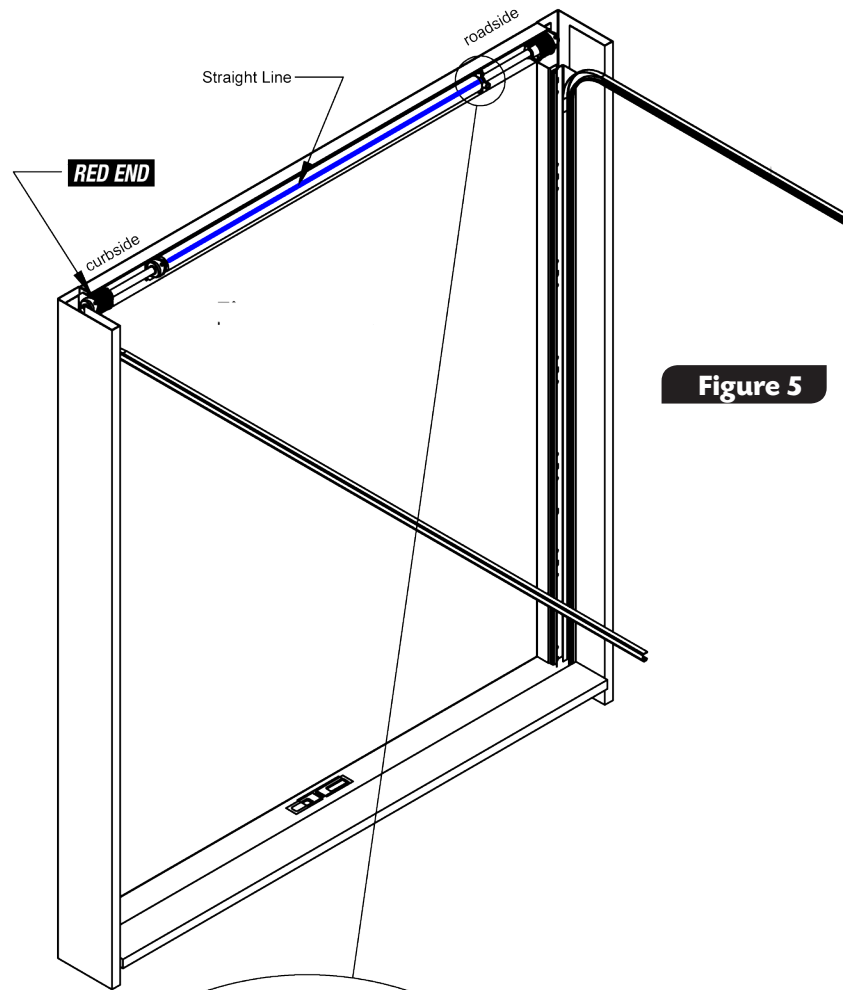


Figure 5

### Step 6

Loosen set screws in winding cone.

Figure 6

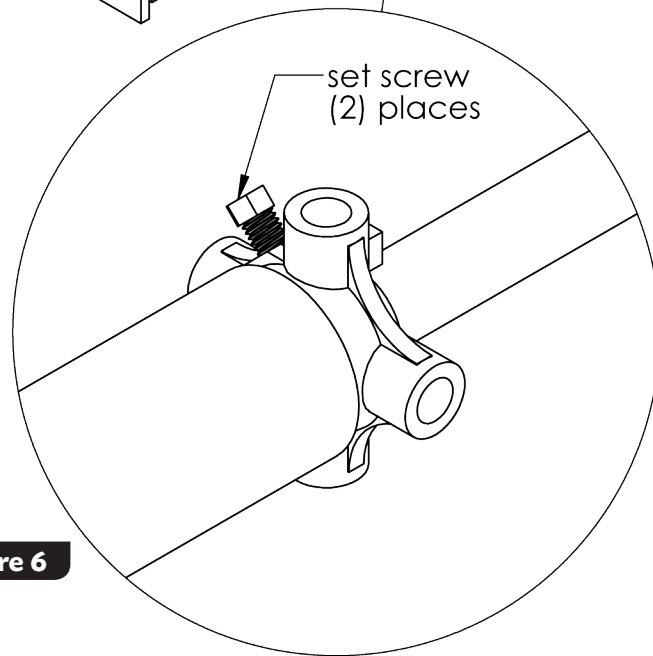


Figure 6

# Operator Installation - Shallow Header

## CAUTION

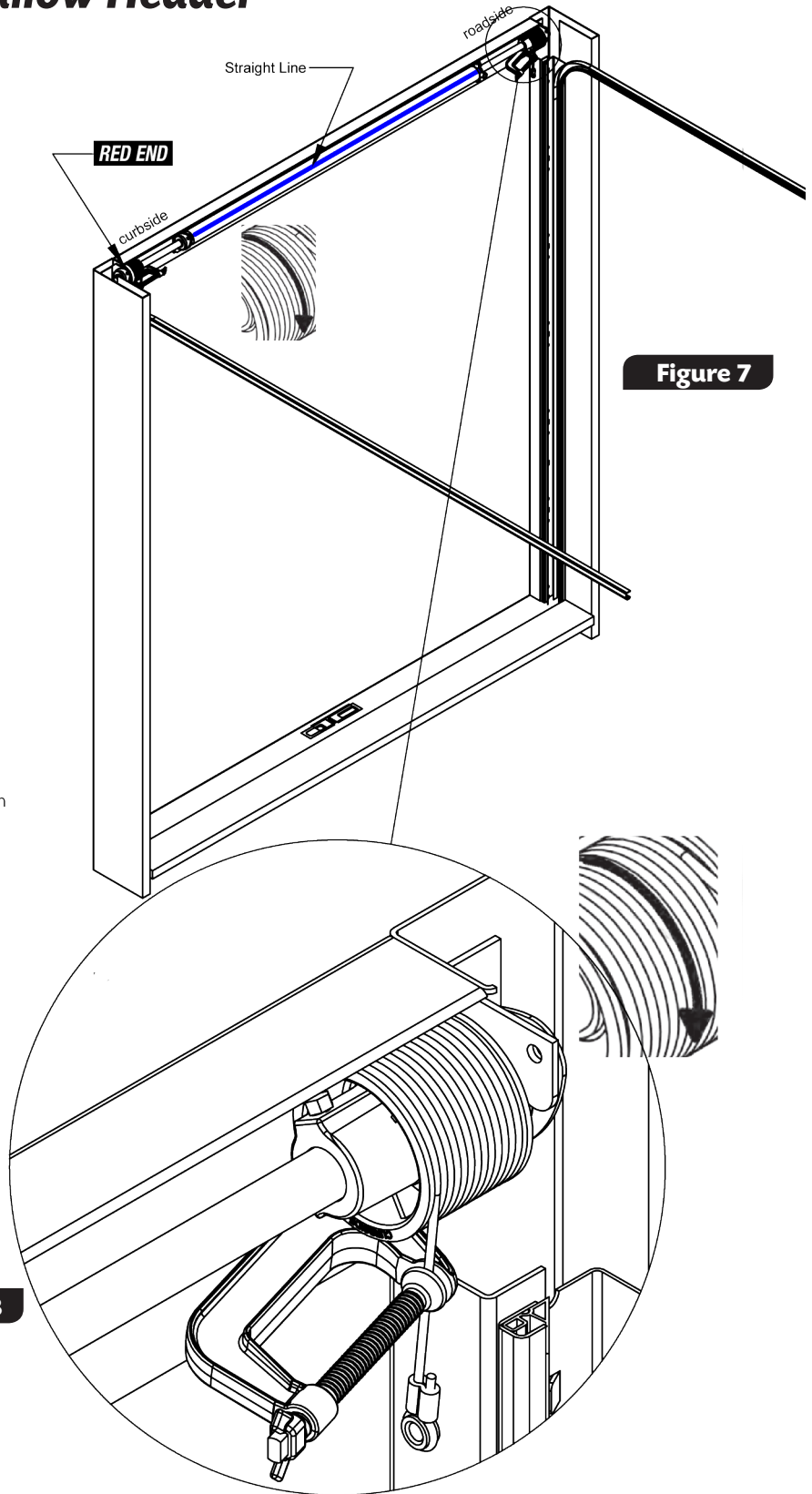
**MAKE SURE CABLES ARE ATTACHED TO CABLE DRUMS, THAT CABLES ARE PROPERLY TENSIONED, AND CABLE DRUMS ARE PROPERLY SECURED TO SHAFT**

### Step 7

Wind cable onto cable drum following grooves. It is important that the end of the cable is inserted fully into the notch. If this is not done properly, it could interfere with the drum movement. **Figure 7**

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When all cable has been put onto drum, continue to wind 4 to 5 full turns. Push upward on winding bar for standard header. Add clamp to hold cable. Make sure cable drum is positioned about 1/4" from operator end bracket and tighten all set screws in winding cone. **Figure 8**



**Figure 7**

**Figure 8**

## WARNING

**HIGH-TENSION SPRINGS CAN CAUSE SEVERE INJURY OR DEATH. REPAIRS AND ADJUSTMENTS MUST BE MADE BY TRAINED SERVICE PERSONNEL.**



# Panel Installation

## ! THINGS TO KNOW BEFORE YOU BEGIN

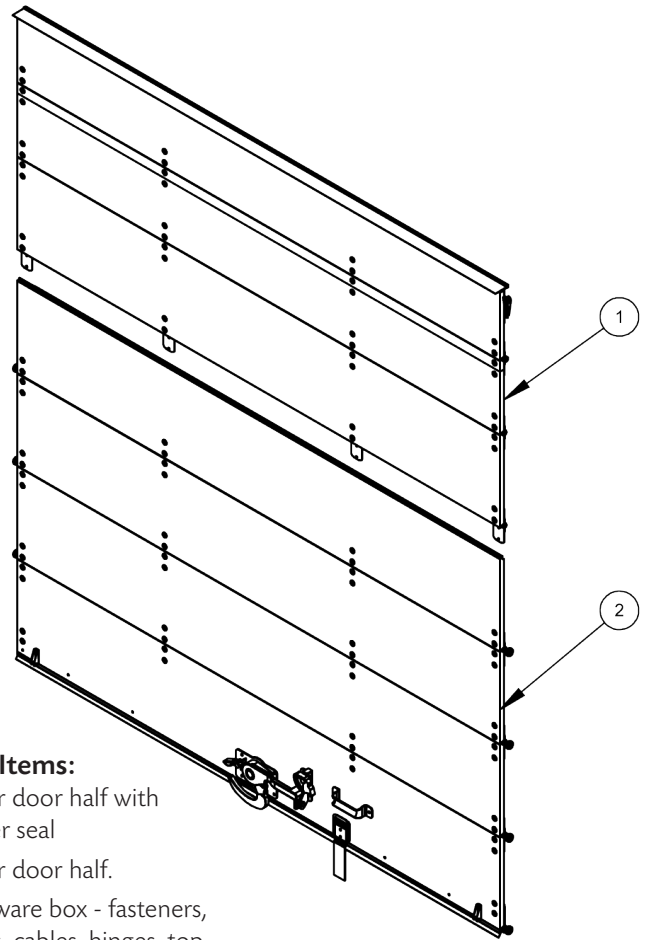
### TOOLS NEEDED

- C-clamp or locking pliers (2)
- Safety Glasses
- Safety Glasses
- Portable Light
- Hammer
- Tape measure
- Socket wrench kit
- Step ladder (2)
- Saw horses (optional) with carpet or other soft material on top surface.

- **IMPORTANT** Lubricate the operator spring, tracks, bearings, rollers and hinges liberally with WD 40 lubricant. **Do NOT use grease.**

### BEFORE YOU BEGIN

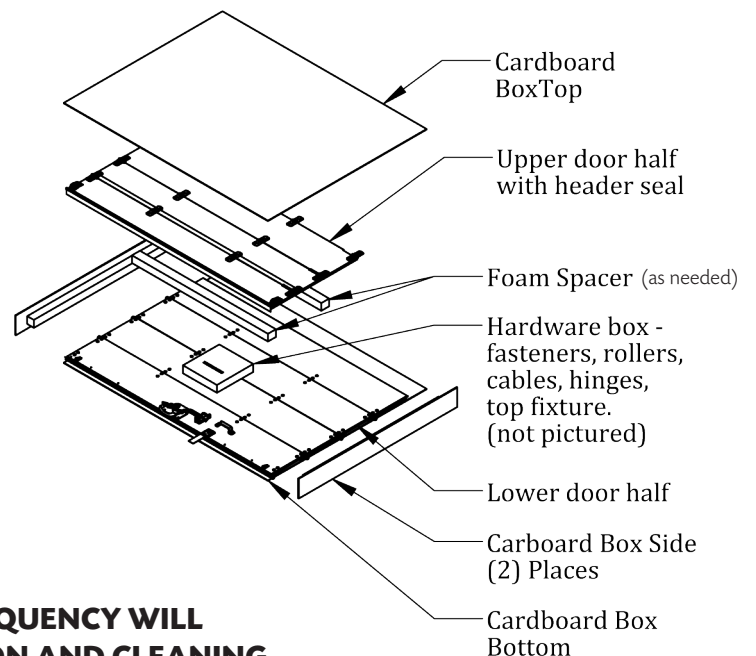
- Read these instructions completely before installing your Fleet Engineers Rollup door.
- Allow enough time to do the work. Just removing an existing door can take in excess of three hours.
- Be sure to have sufficient help. An unsprung door is very heavy.
- Remove your existing door from the track.
- Measure the opening on your trailer to confirm that you have the correct Fleet Engineers door per your order.
- Check your shipment to confirm that your order is complete and that all parts are included. Please note any shortages or damage on delivery receipt as Fleet Engineers cannot be responsible for parts lost or damaged in shipping.
- Become familiar with the components before assembling to reduce installation time. Be sure all hardware components for your new Fleet Engineers door are included with your shipment. If any parts are missing, please contact Fleet Engineers toll-free at (800) 333-7890.



### List of Items:

1. Upper door half with header seal
2. Lower door half.
3. Hardware box - fasteners, rollers, cables, hinges, top fixture. (not pictured)

### How Fleet Engineers Door Are Packaged



## ! WARNING

**DOOR MAINTENANCE AND LUBRICATION FREQUENCY WILL VARY WITH USE OF DOOR, CLIMATE CONDITION AND CLEANING PROCEDURES.**

**DO NOT OPERATE DOOR WITH BROKEN SPRING OR CABLE.**

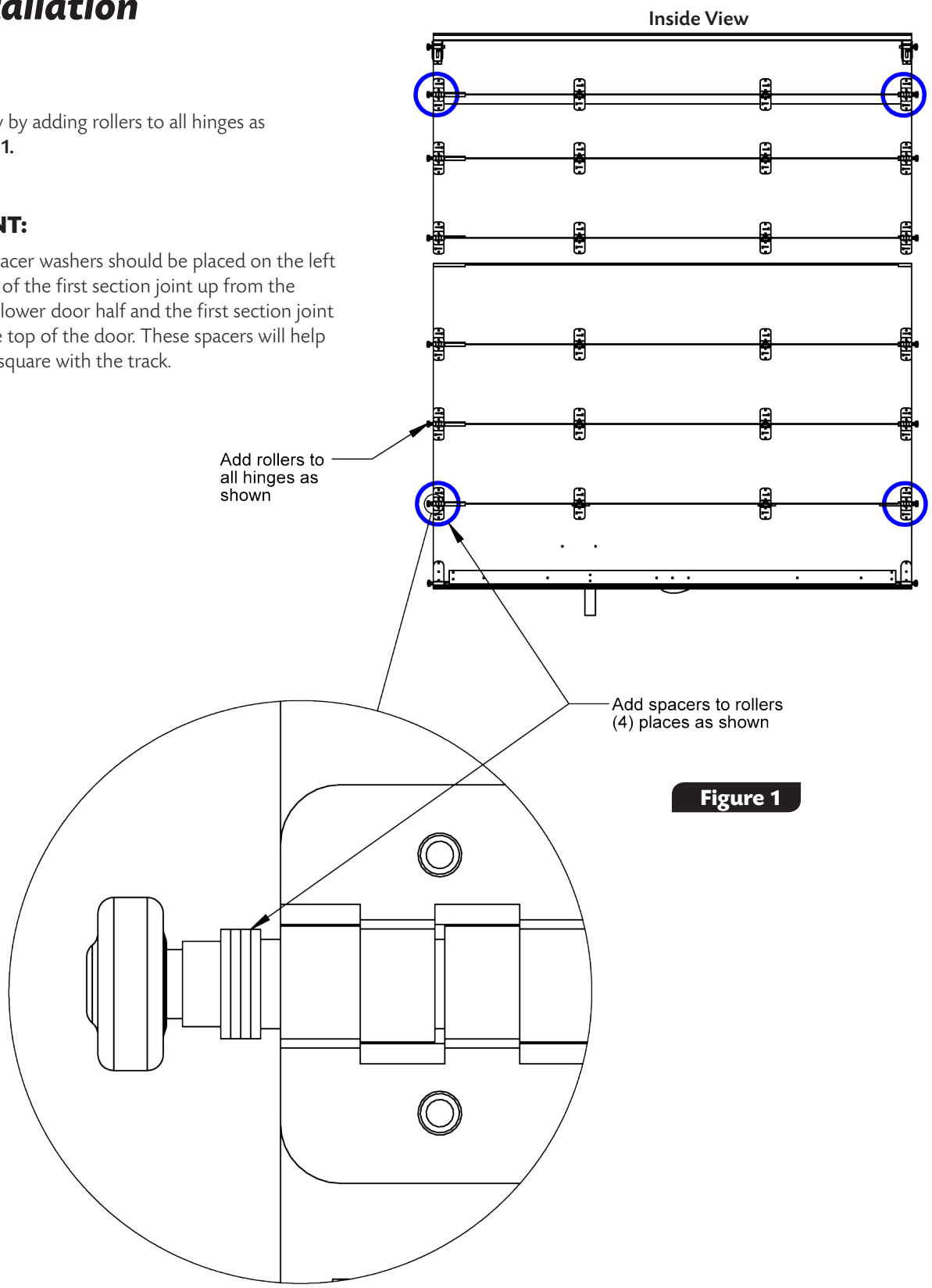
# Panel Installation

## Step 1

Begin assembly by adding rollers to all hinges as shown. **Figure 1.**

### IMPORTANT:

One to four spacer washers should be placed on the left and right sides of the first section joint up from the bottom of the lower door half and the first section joint down from the top of the door. These spacers will help hold the door square with the track.

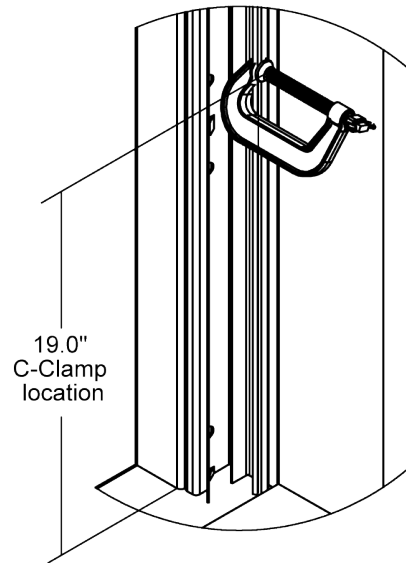


**Figure 1**

# Panel Installation

## IMPORTANT:

Attach a c-clamp to each track at the position shown in **Figure 2** approx. 19" up from sill to act as a temporary stop during installation

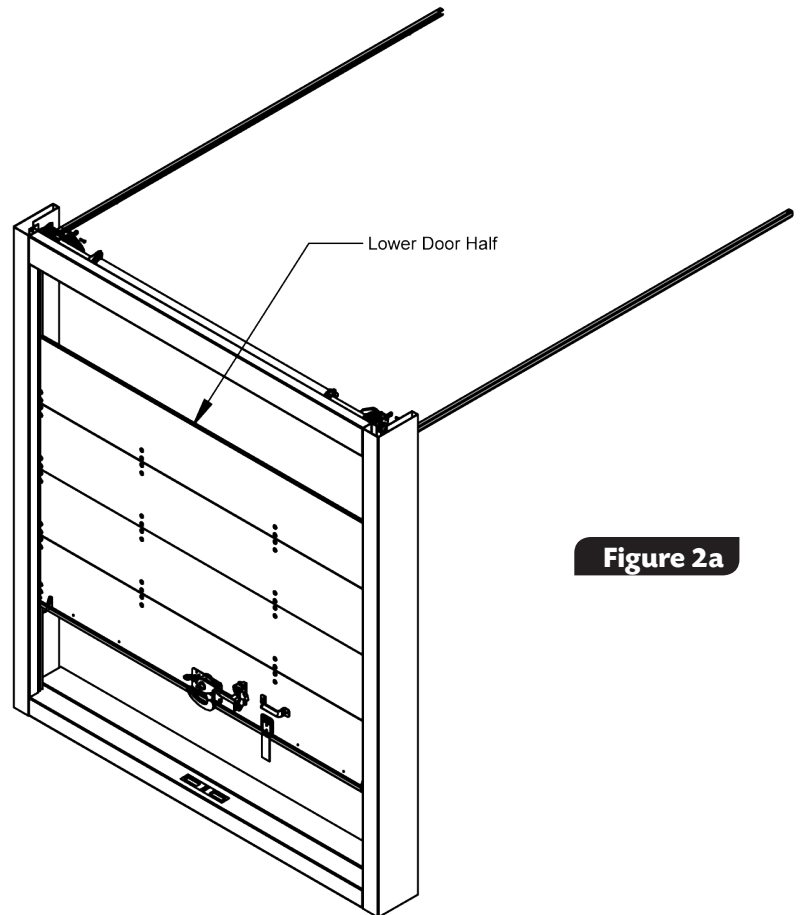


**Figure 2**

## Step 2

Install lower door half. **Figure 2a**

\* There are various techniques for installing Rollup Door's. Since the door is shipped in two pieces, it can be installed one half at a time and joined together once in the track as shown in **Figure 2a** and **Figure 3**



**Figure 2a**

# Panel Installation

## Step 3

### NOTE:

Make sure rollers are installed in all hinges as shown in **step 1** (page18).

### Install upper door half.

Slide upper door half into track until meeting with the lower door half installed in **STEP 2**, (page19) then join the upper and lower door halves using the supplied rivets, two rivets per hinge. **Figure 3.**

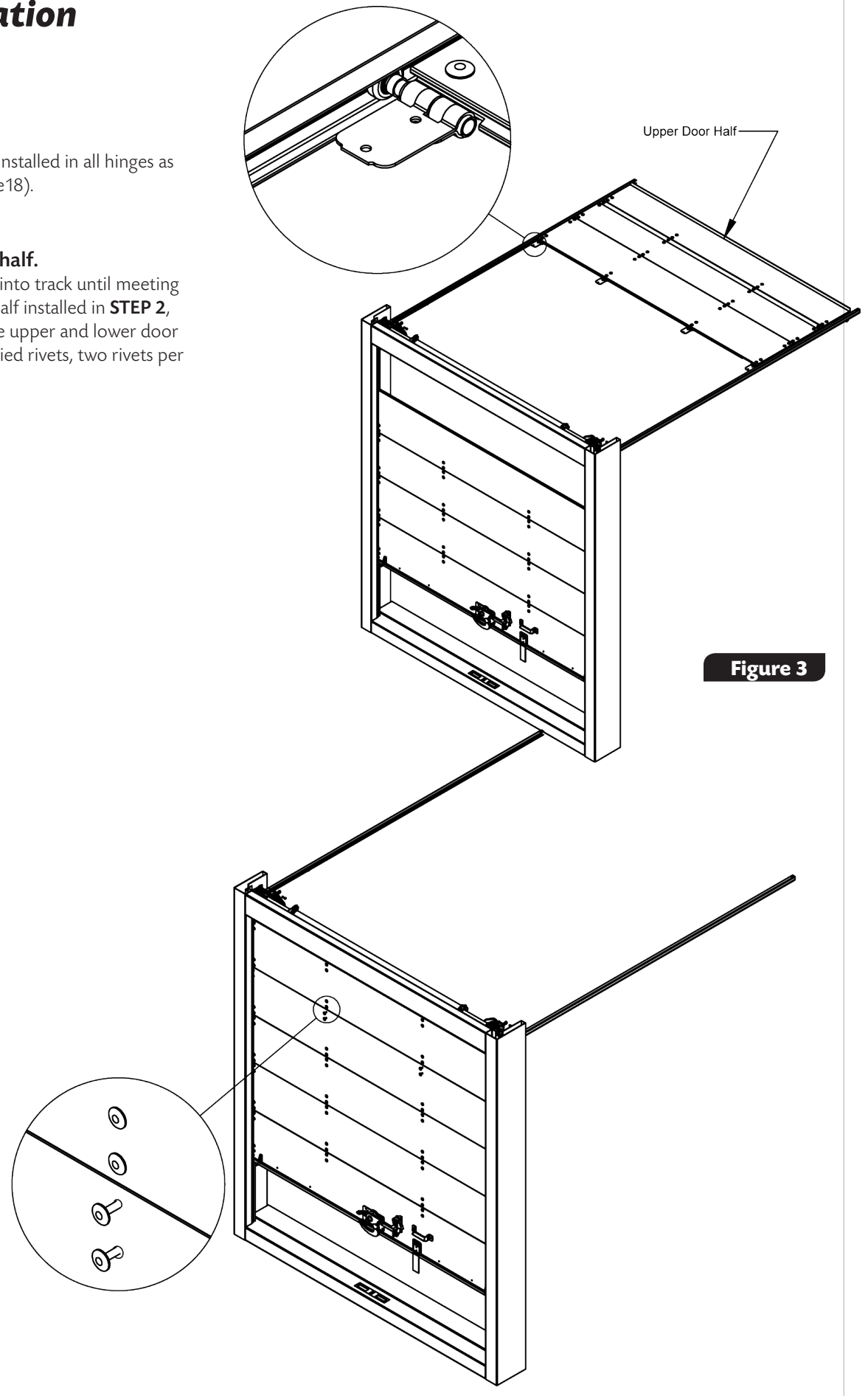
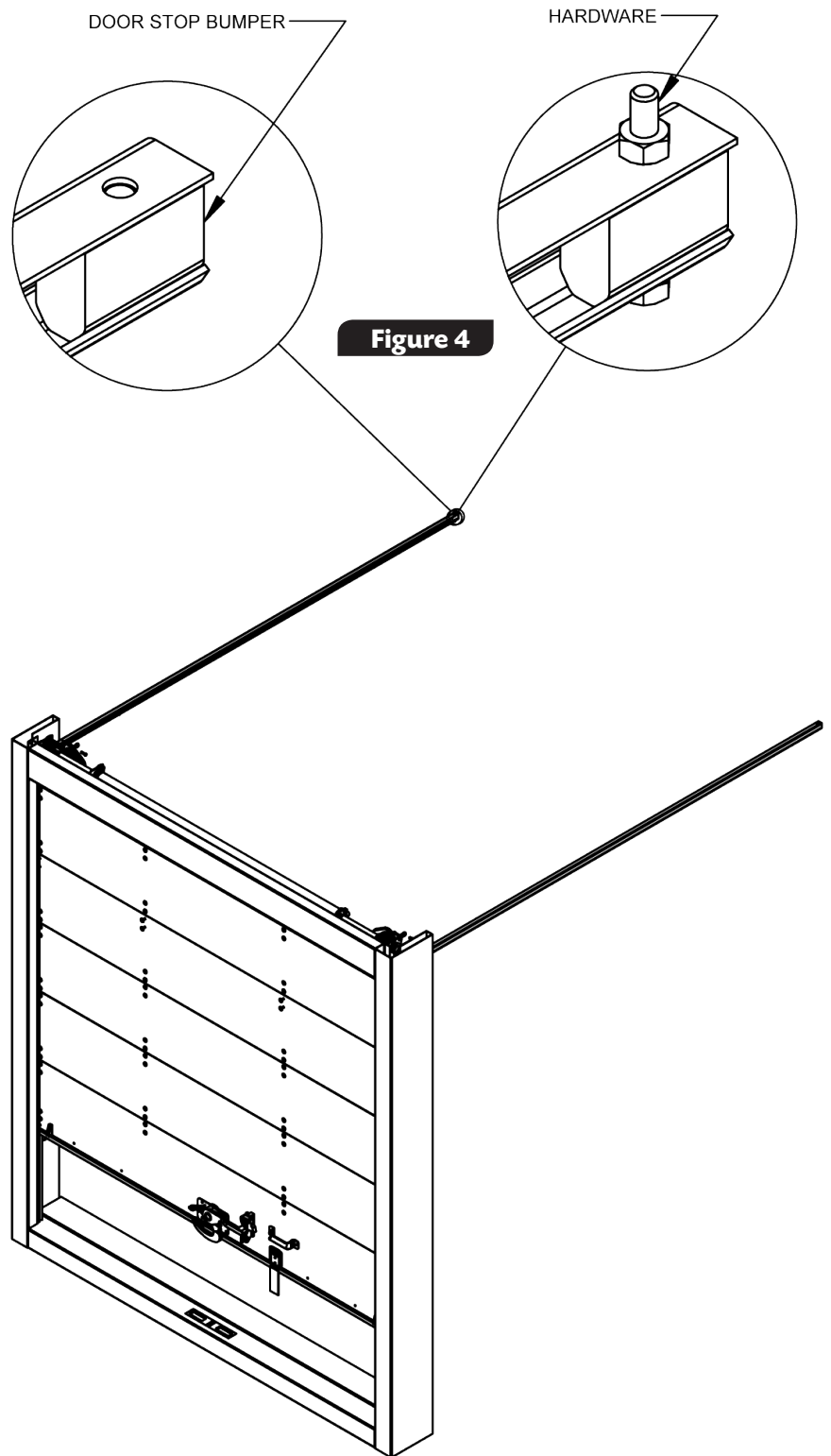


Figure 3

# Panel Installation

## Step 4

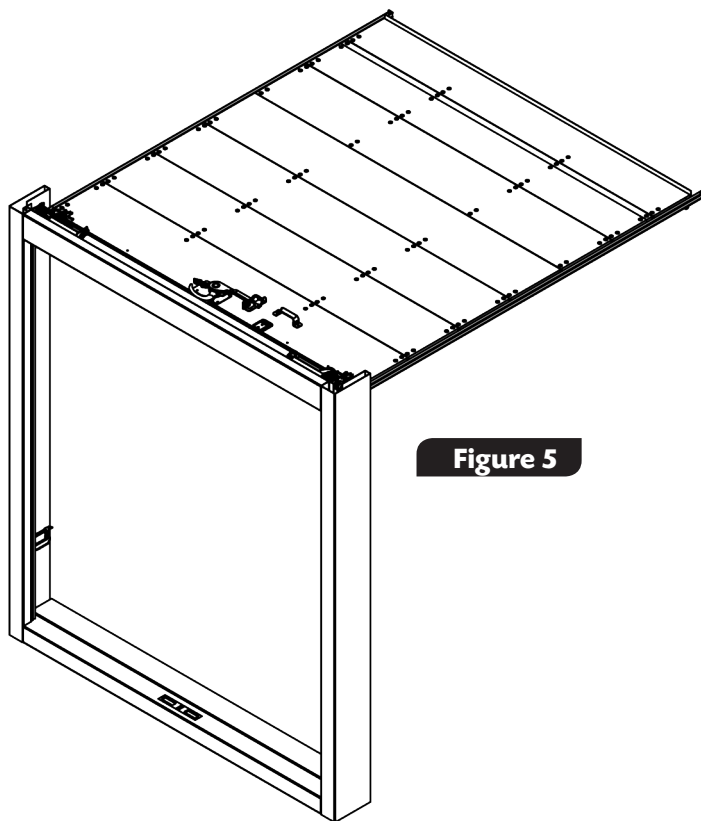
Install doorstop bumper, one in each horizontal track with mounting hardware included.  
**Figure 4**



# Panel Installation

## Step 5

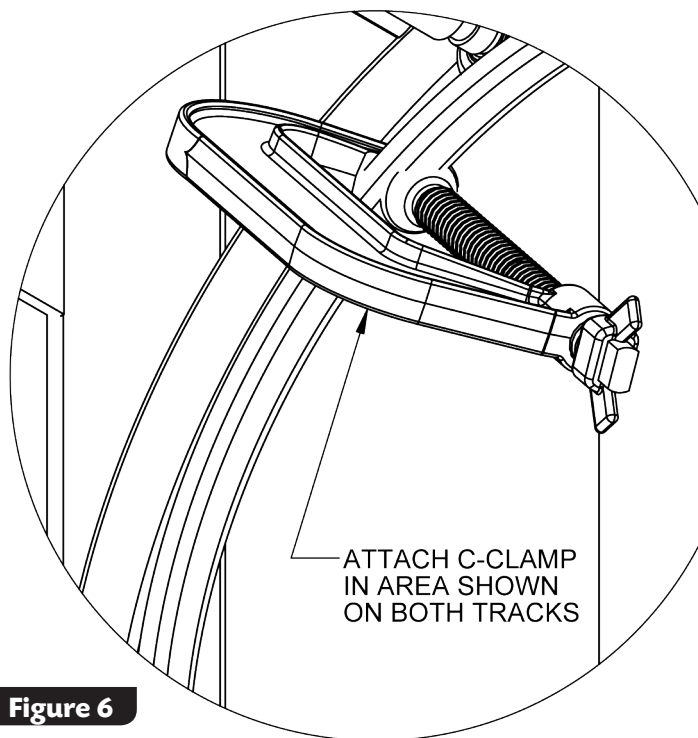
Slide door to the open position and attach C-clamps to each track at radius as shown in **Figure 5**.



**Figure 5**

## Step 6

Attach C-clamps to each track at radius as shown in **Figure 6**.



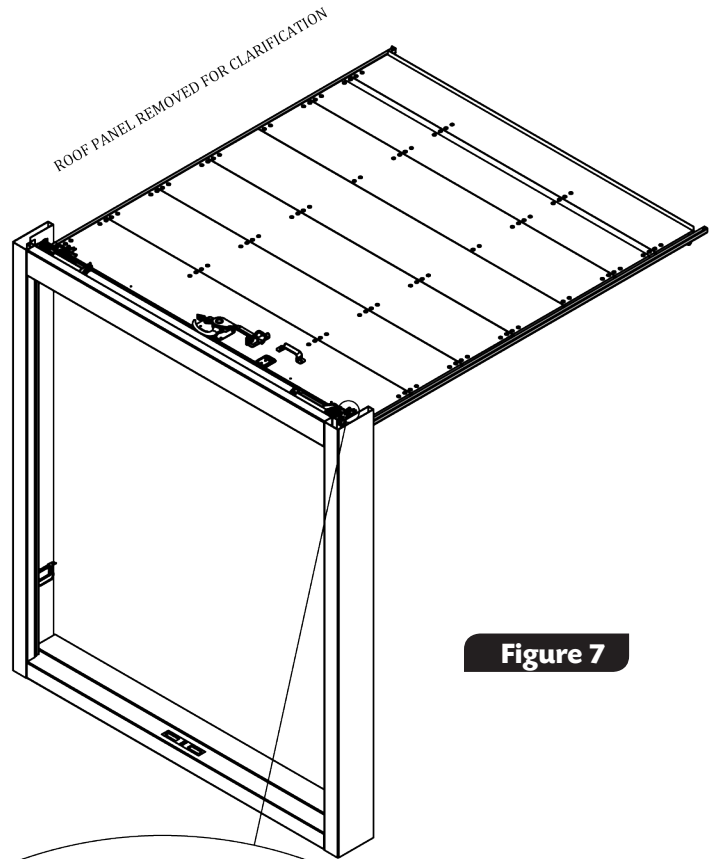
**Figure 6**

VIEW FROM INSIDE  
LOOKING UP AT CORNER

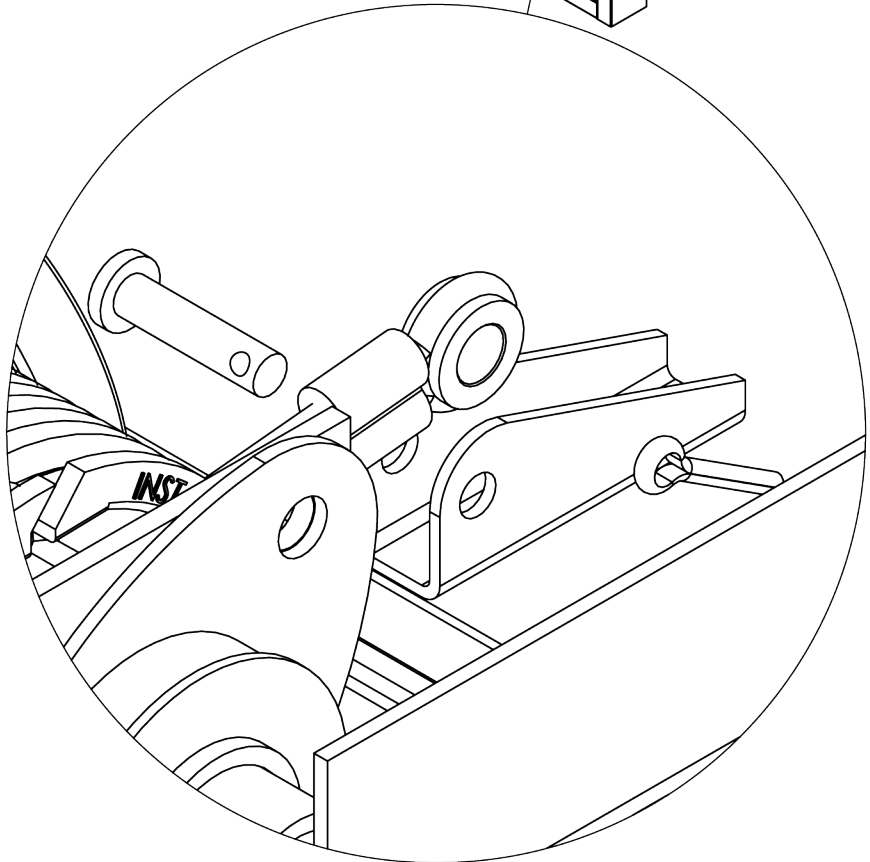
# Panel Installation

## Step 7

Install roll up door cable. Attach cable to door bracket using pin and cotter pin supplied. Both sides of door. **Figure 7**



**Figure 7**



# Panel Installation

## Step 8

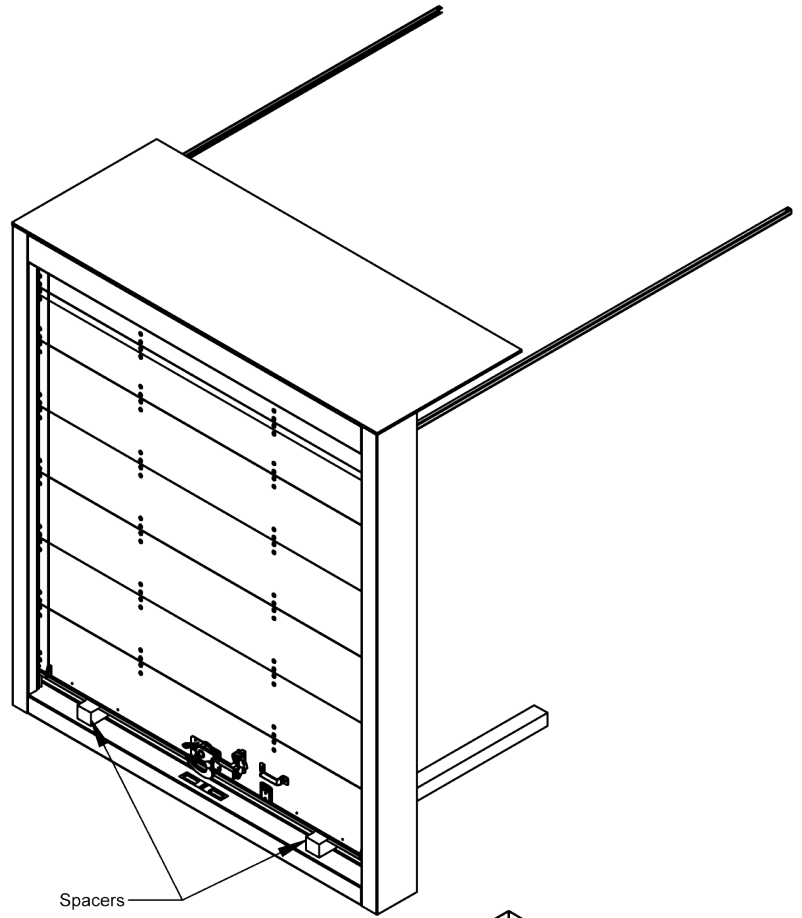
Align door.

- Place (2) spacers at the bottom of the door. **Figure 8**
- Carefully remove the c-clamps from the track (**Figure 6, Page 22**) and close door, this will add tension to the operator spring. test the door for proper tension.

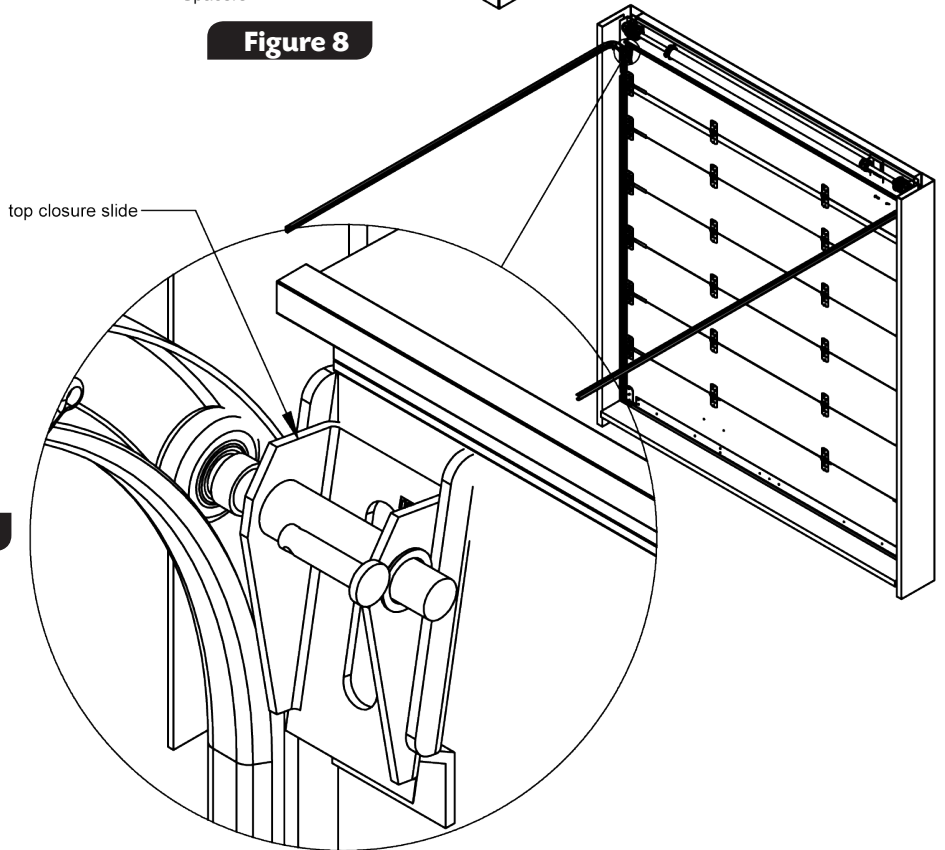
### NOTE:

A properly adjusted operator will cause the door to open slowly.

- From the inside, remove foam spacers, close the door and loosen the top closure slide (**Figure 9**) and adjust the location so that the top panel seals against both the header and side seals. As the roller bracket is moved down, the top panel will get closer to the operator when the door opens. The top seal can be notched to clear the cables.



**Figure 8**



**Figure 9**



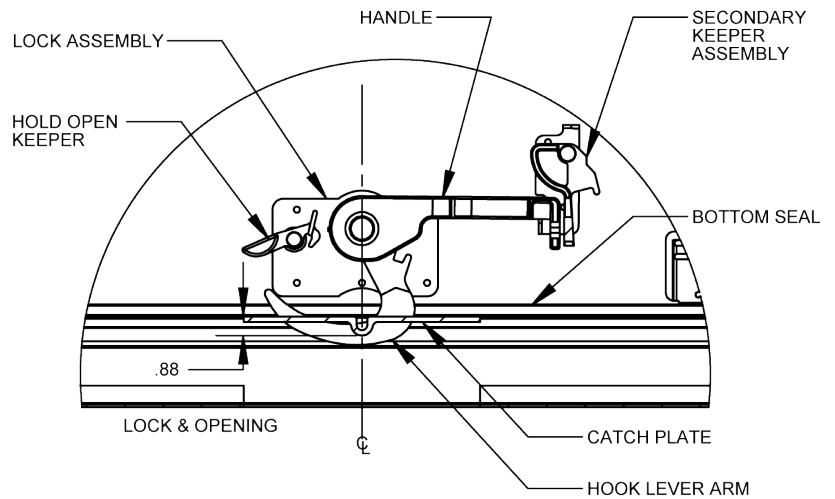
# Cutout Area (Ref.)

## Step 9

From the outside, close the door and confirm that the handle and latch operate correctly.

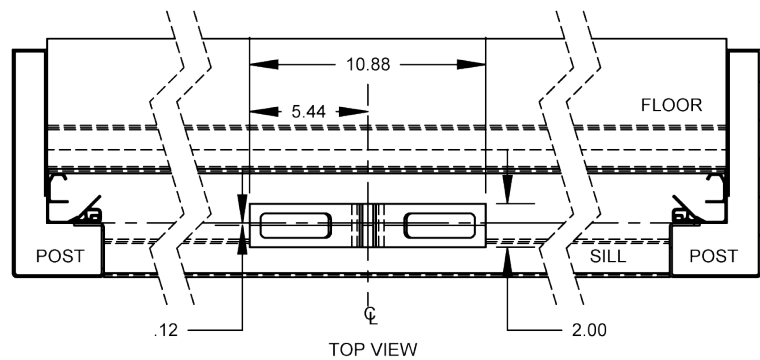
## Step 10

Cutout size and location, From the outside, close the door and confirm that the hook lever operate correctly into the cutout area.



### NOTE:

The latch plate is attached to the sill, usually by welding. Latch plates vary in type, style, material, size and location depending on the lock.



### NOTE:

To determine the amount of winds on the counterbalance spring when additional spring tension is required, divide 10 into the door opening height in inches and add 3 turns.

.....  
*Example:* 75 divided by 10 = 7.5 turns + 3 turns + 10.5  
 or 10 and one-half turns  
 .....

Place a 1/2" diameter x 18" winding bar in the hole in the spring winding plug. Wind the spring by lifting up the bar. While holding the first bar, place a second bar in the next hole and lift in the same manner after removing the first bar. Repeat this until the correct number of complete turns are obtained by counting the chalk marks which show up as stripes as the spring is wound.

**! IMPORTANT**

**USE 1/2" DIAMETER X 18" WINDING BARS ONLY. DO NOT USE BENT WINDING BARS, SCREWDRIVERS OR TAPERED PUNCHES FOR WINDING.**

# **FLEET ENGINEERS**

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