

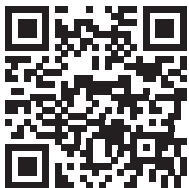
FLEET ENGINEERS

Installation Instructions:

ToughTrak®, PolyTrak®, and PrecisionTrak® Flush Mount Track, Operator and Panels with 2" Rollers

Part Number: INS-15001/B

Revision Date: Rev. 6/2/15



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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.

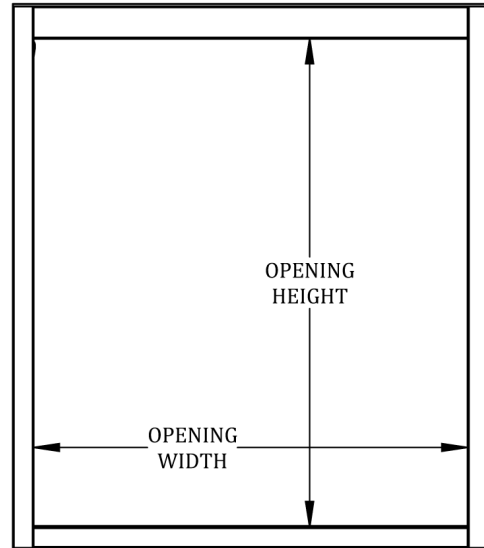
Determining the width of you new door.

* Opening width plus 2.00" for PolyTrak® door

* Opening width plus 2.25" for all other doors

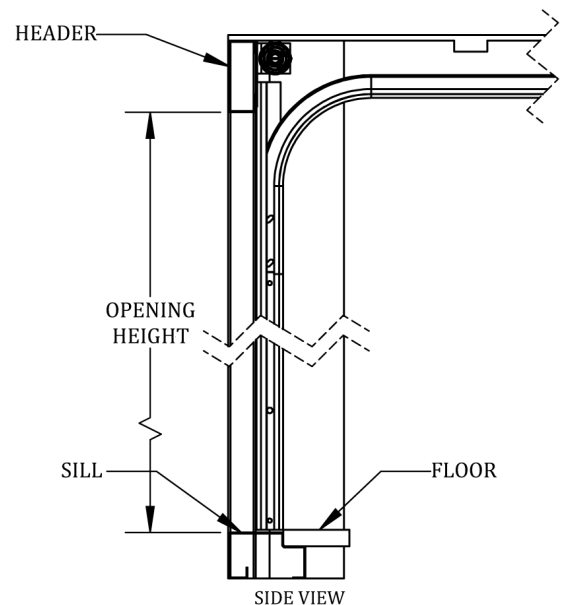
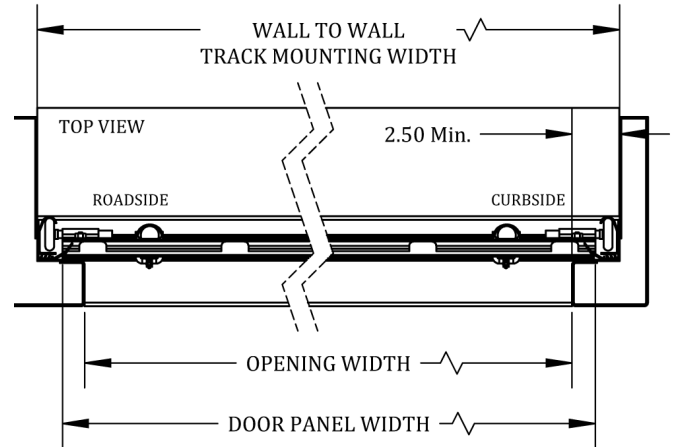
Determining the height of you new door.

* Opening height minus 1/2" for all doors



Standard Panel Arrangements (ref.)

Door Height	Bottom Panel	Intermediate Panels	Top Panel
PolyTrak® Door Height & Panel Size			
75"	15.00"	(4) 12.00"	12.00"
80"	15.00"	(1) 15.00" (3) 12.00"	14.00"
85"	15.00"	(4) 15.00"	10.00"
90"	15.00"	(5) 15.00"	15.00"
95"	15.00"	(3) 15.00" (2) 12.00"	11.00"
96"	15.00"	(3) 15.00" (2) 12.00"	12.00"
100"	15.00"	(4) 15.00" (1) 12.00"	13.00"
105"	15.00"	(2) 15.00" (4) 12.00"	12.00"
110"	15.00"	(4) 15.00" (2) 12.00"	11.00"
114"	15.00"	(5) 15.00" (1) 12.00"	12.00"
ToughTrak® Door Height & Panel Size			
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" (1) 12.00"	15.00"
Wood Flush Mount 2" Roller Door Height			
75"	15.50"	(3) 15.50"	13.00"
80"	15.50"	(2) 15.50" (2) 11.50"	10.50"
85"	15.50"	(3) 15.50" (1) 11.50"	11.50"
90"	15.50"	(4) 15.50"	12.50"
95"	15.50"	(3) 15.50" (2) 11.50"	10.00"
96"	15.50"	(3) 15.50" (2) 11.50"	11.00"
100"	15.50"	(4) 15.50" (1) 11.50"	11.00"
105"	15.50"	(5) 15.50"	12.00"
110"	15.50"	(3) 15.50" (3) 11.50"	13.50"
114"	15.50"	(4) 15.50" (2) 11.50"	13.50"



Track Installation

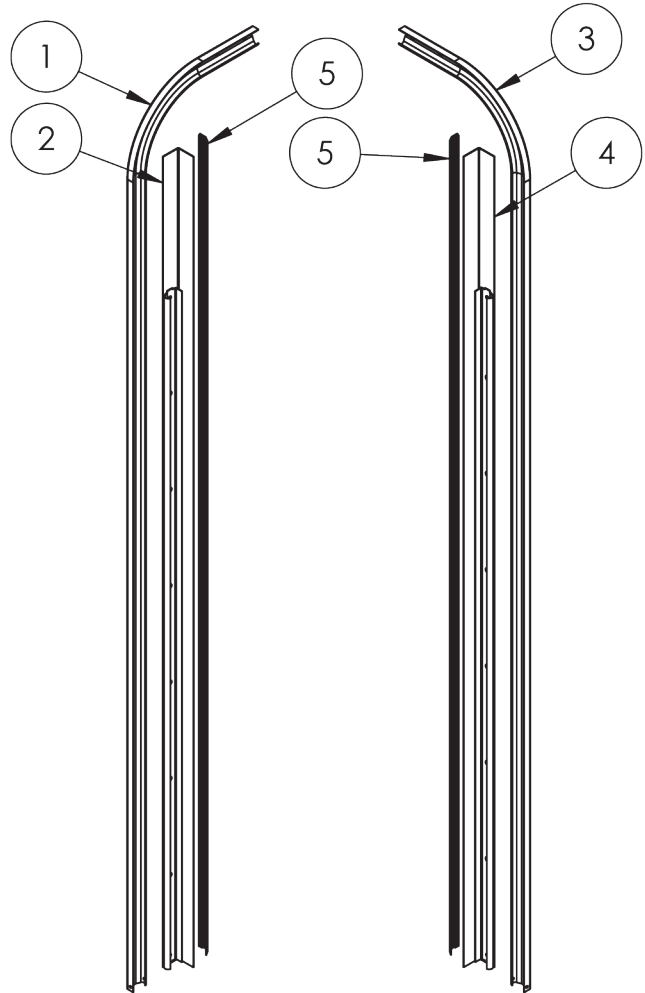
! THINGS TO KNOW BEFORE YOU BEGIN

TOOLS NEEDED

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

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. 8" Radius Horizontal 2.00" Track (curbside)
2. Vertical 2.00" Track with right angle (curbside)
3. 8" Radius Horizontal 2.00" Track (roadside)
4. Vertical 2.00" Track with right angle (roadside)
5. Dual Durometer side seal

Track Installation

Step 1

Calculate vertical track length.

► **A:**
Measure **(A) Opening Height** minus
(B) Horizontal Track Offset
14.68" (14-11/16") = **(X)**.

► **B:**
Confirm clearance dimension **(C)** top
of track to bottom of lowest
obstruction - either a roof bow or
the finished ceiling = 2.0" Min.

(X) = vertical track cut length.

NOTE:

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.

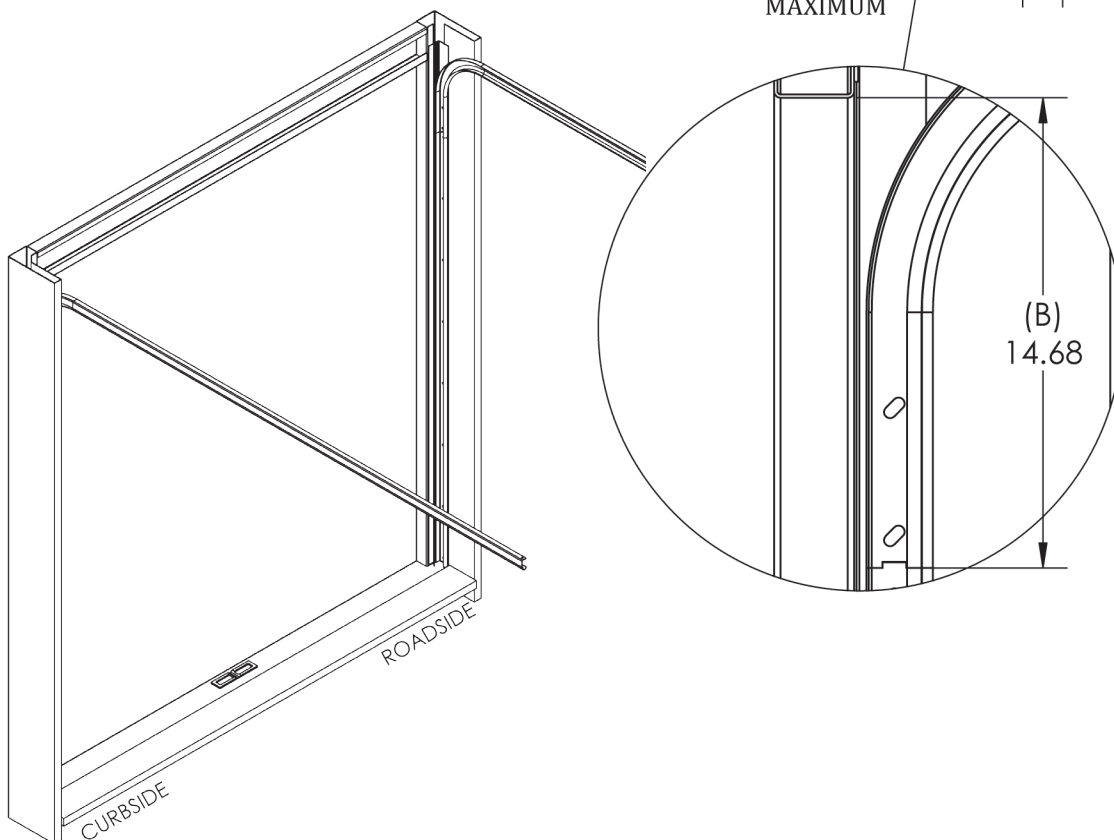
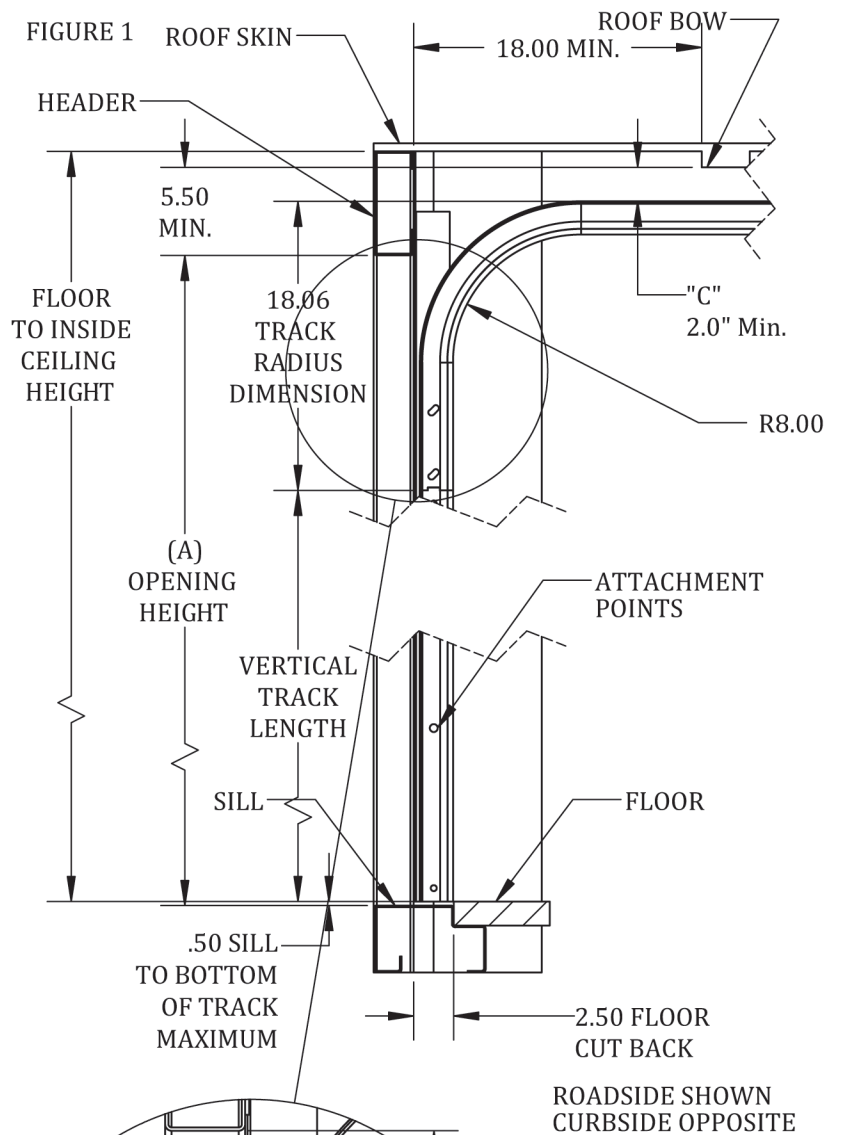


Figure 1

Track Installation

Step 2

Cut vertical track from bottom only to required length as determined in **Figure 2**.

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.

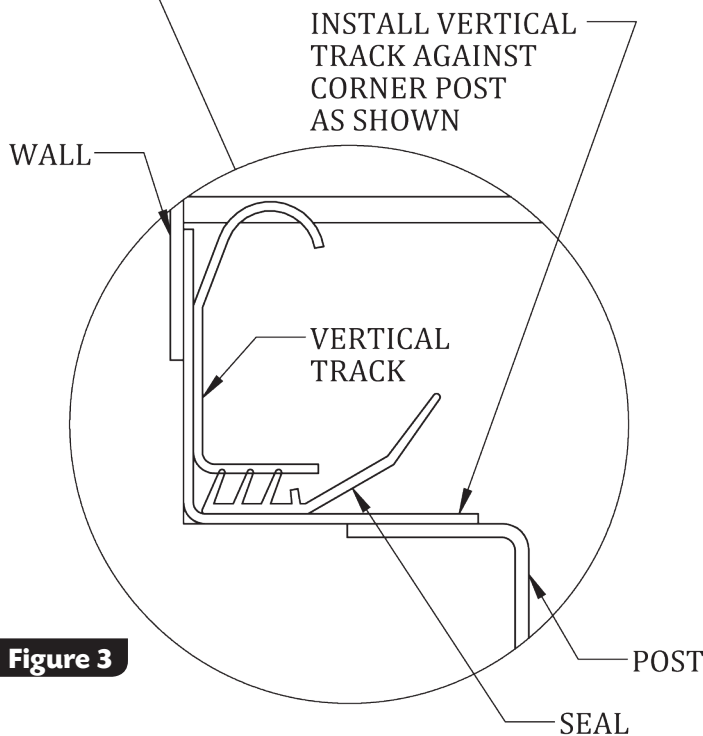
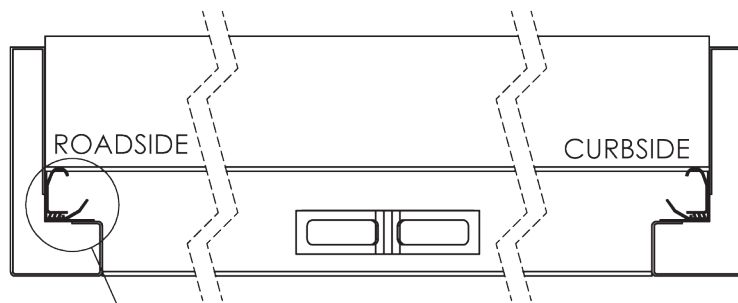


Figure 2

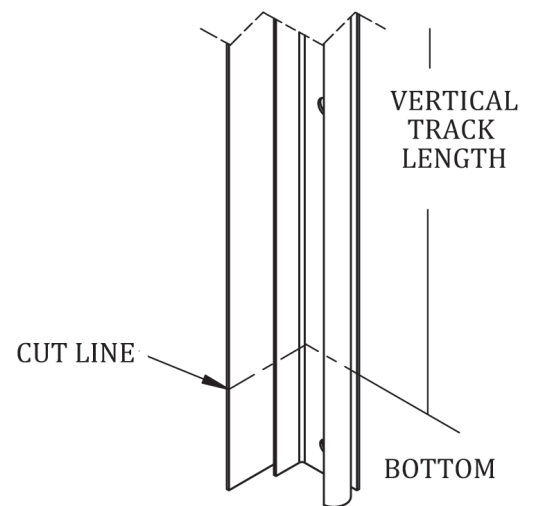
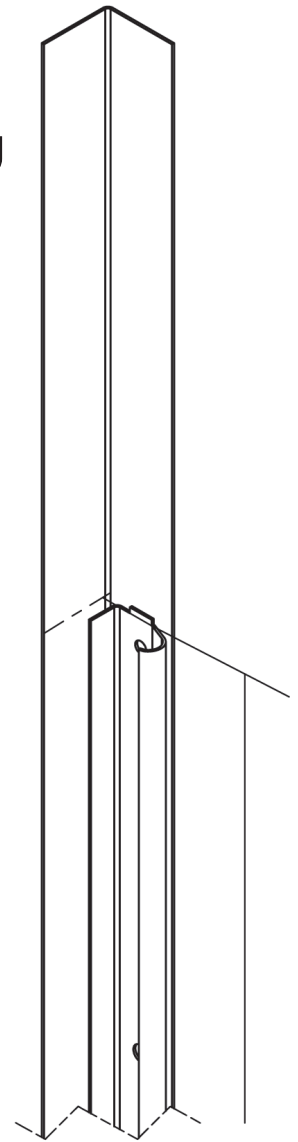


Figure 3

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 1/2" off the sill. Keep both vertical tracks the same length and same distance off sill.

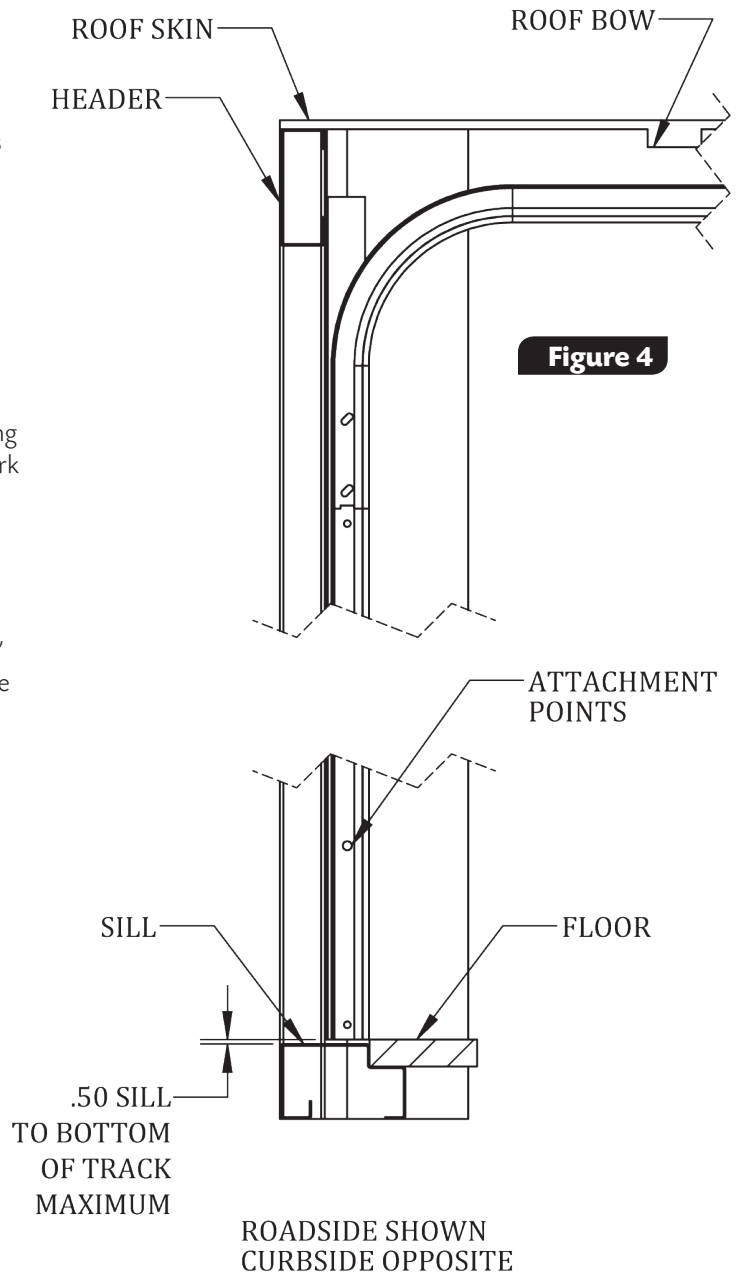


Figure 4

Track Installation

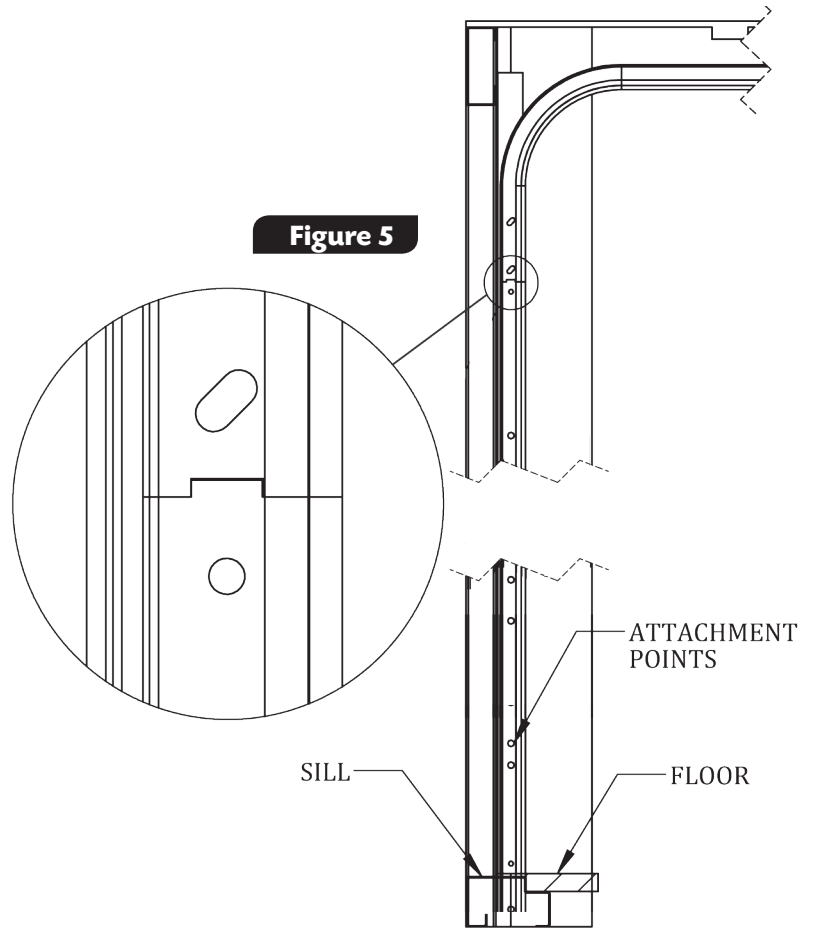
Step 4

Be sure that the tab in the vertical track is aligned in the notch of the horizontal track and not overlapped.

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.



ROADSIDE SHOWN
CURBSIDE OPPOSITE

Step 5

Measure track in several locations to ensure installation is straight and square as shown at top middle and bottom. **Figure 6**

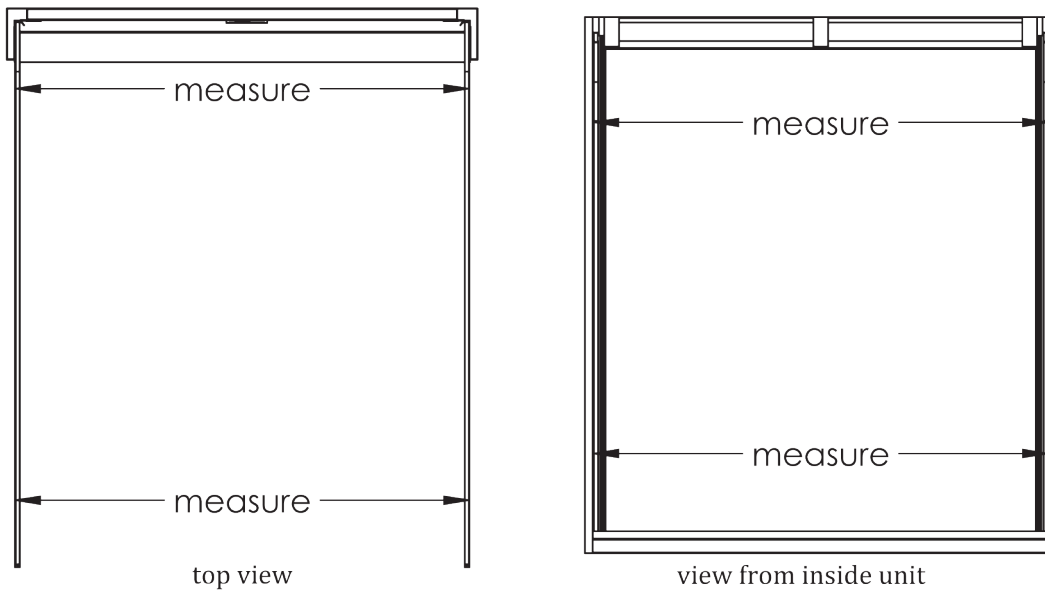


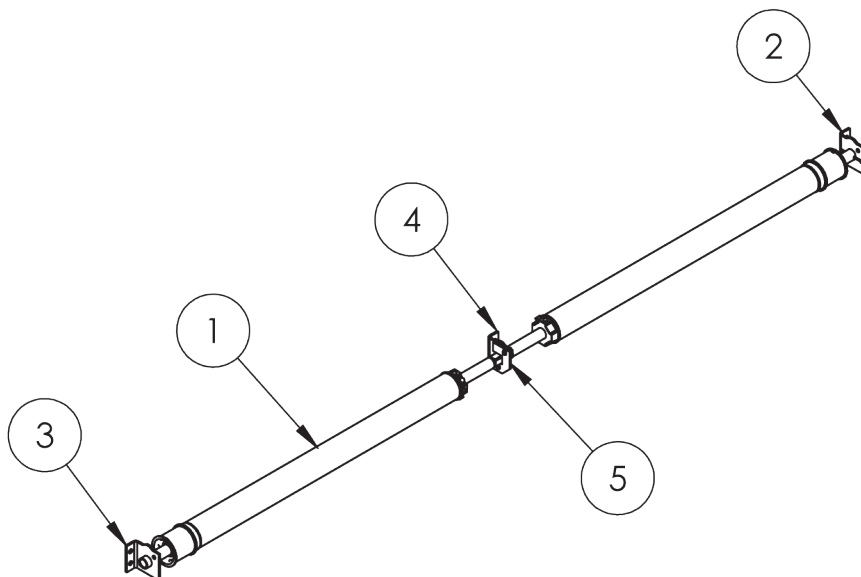
Figure 6

Operator Installation

! THINGS TO KNOW BEFORE YOU BEGIN

TOOLS NEEDED

- C-clamp or locking pliers (2)
- Safety Glasses
- Welder (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)



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 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.

List of Items:

1. Dual Spring operator
2. Bracket End roadside.
3. Bracket End curbside
4. Bracket center
5. Bracket center clamp



WARNING

HIGH TENSION SPRING CAN CAUSE SEVERE INJURY OR DEATH

Operator Installation

Step 1

Determine what type of header you are installing the operator on.

Standard Header "Figure 1"

Shallow Header "Figure 2"

STANDARD

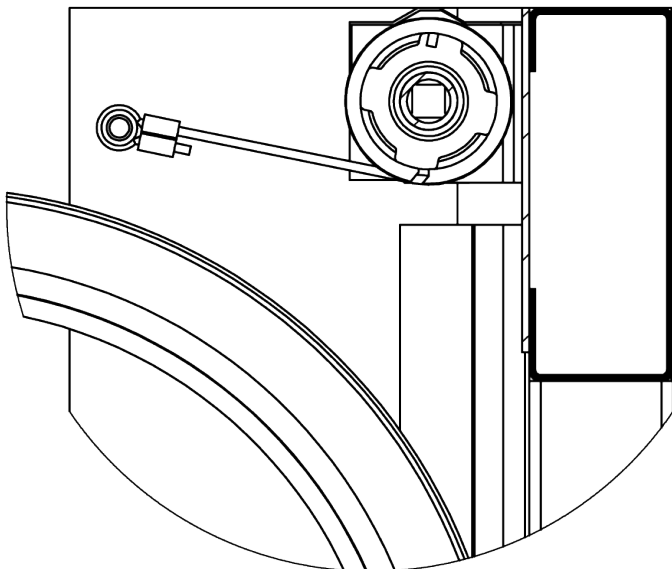


Figure 1

SHALLOW

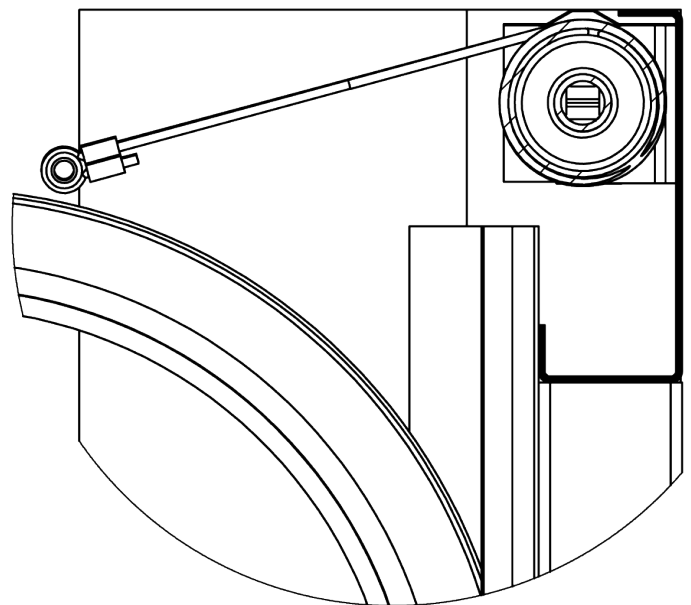


Figure 2

Step 2

Standard Header "Figure 1" continue to the next page for installation instructions.

Shallow Header "Figure 2" turn to page 18 for installation instructions.

Operator Installation - Standard Header

See page 18 for Shallow Header Installation

Step 1

If required for your header application, weld bracket plates in place (3) places as shown.

Figure 1

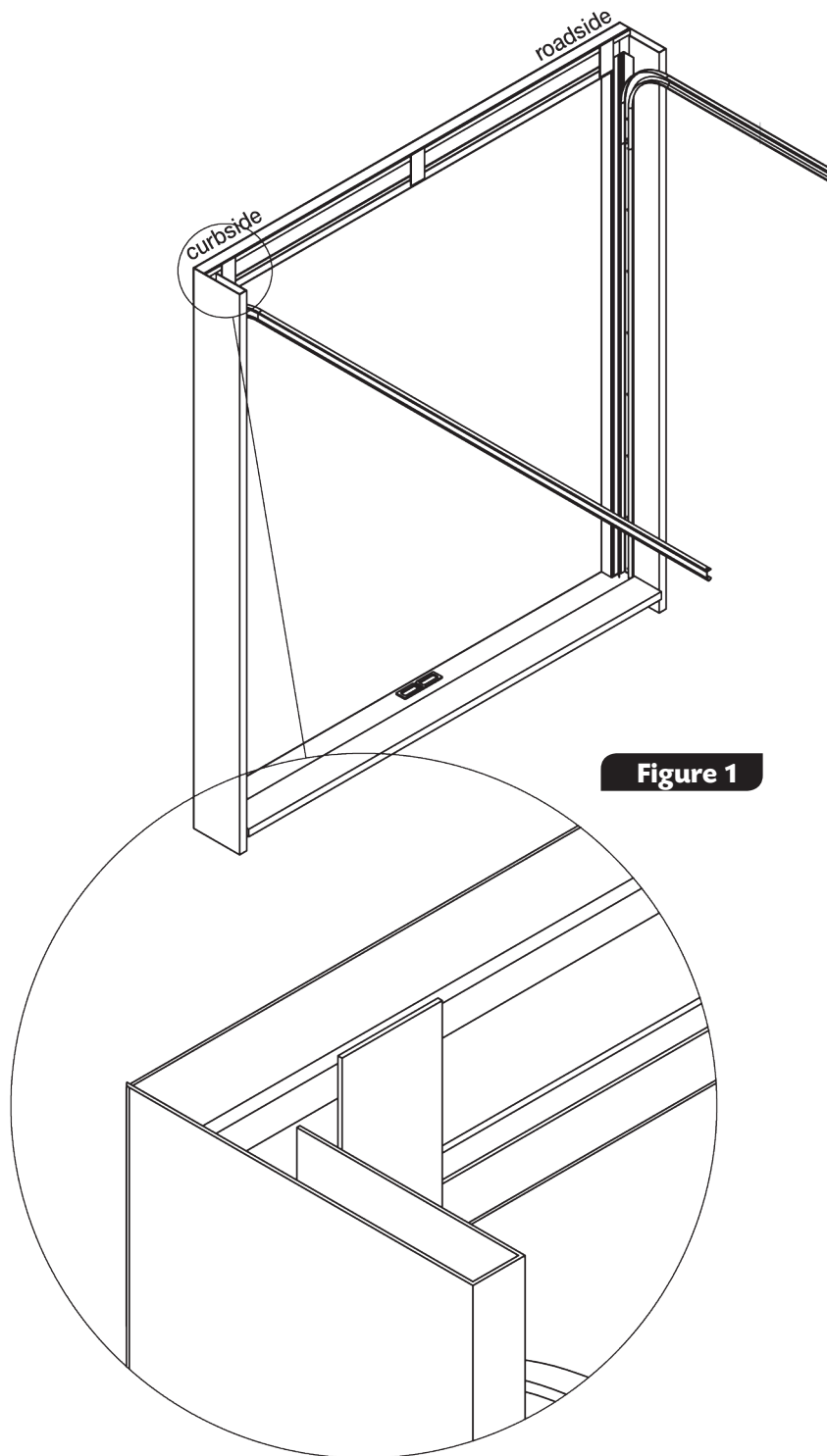


Figure 1

Operator Installation - Standard Header

Step 2

Determine bracket location using chart below.
Figure 2

Bracket Location Determination					
Use on Door Widths	Use on Door Height	Operator Shaft Length	"B" End Bracket Position	"A" Center Bracket Position	Spring Length
> 96.25"	< 90"	96.00"	94.75"	47.88"	33"
90.25"-96"	< 90"	93.00"	91.75"	45.88"	33"
83"-90"	< 90"	87.00"	85.75"	42.88"	33"
> 96.25"	> 91"	96.00"	94.75"	47.88"	35"
90.25"-96"	> 91"	93.00"	91.75"	45.88"	35"
83"-90"	> 91"	87.00"	85.75"	42.88"	35"

Figure 2

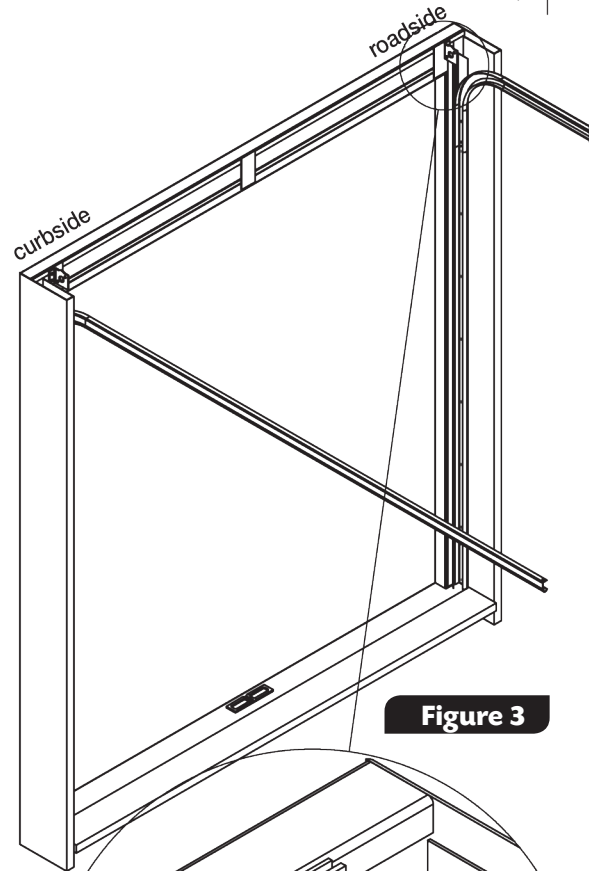
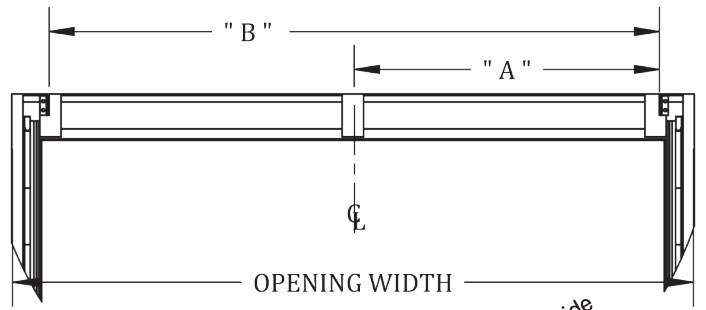


Figure 3

Step 3

Tack weld **ROADSIDE** bracket in position with the tab on the top edge touching the ceiling.
Figure 3

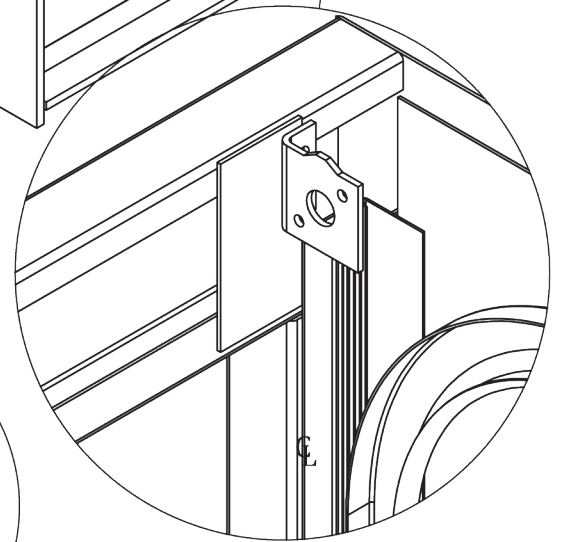
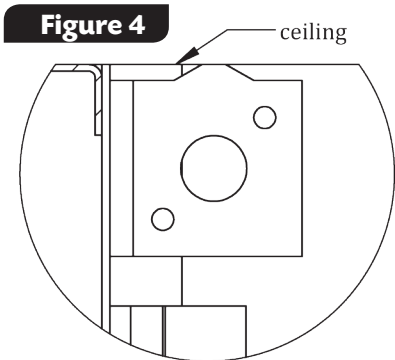
Step 4

Tack weld **CURBSIDE** bracket in position with the tab on the top edge touching the ceiling.
Figure 3

NOTE:

Each bracket has a locating tab on top edge. The brackets must be placed so that this tab touches the ceiling. This is required for proper operator clearance.

Figure 4



Operator Installation - Standard Header

Step 5

With the operator in position, use a level and determine the height position of the center bracket, tack weld bracket in place. **Figure 5**

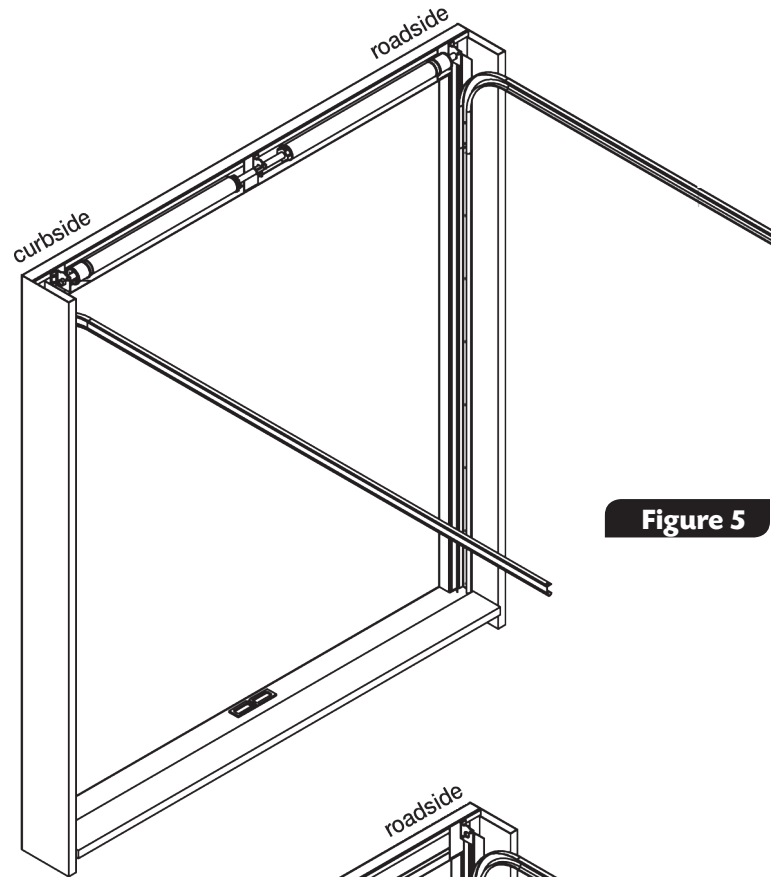


Figure 5

Step 6

Set operator to the side and finish weld all brackets in position. **Figure 6**

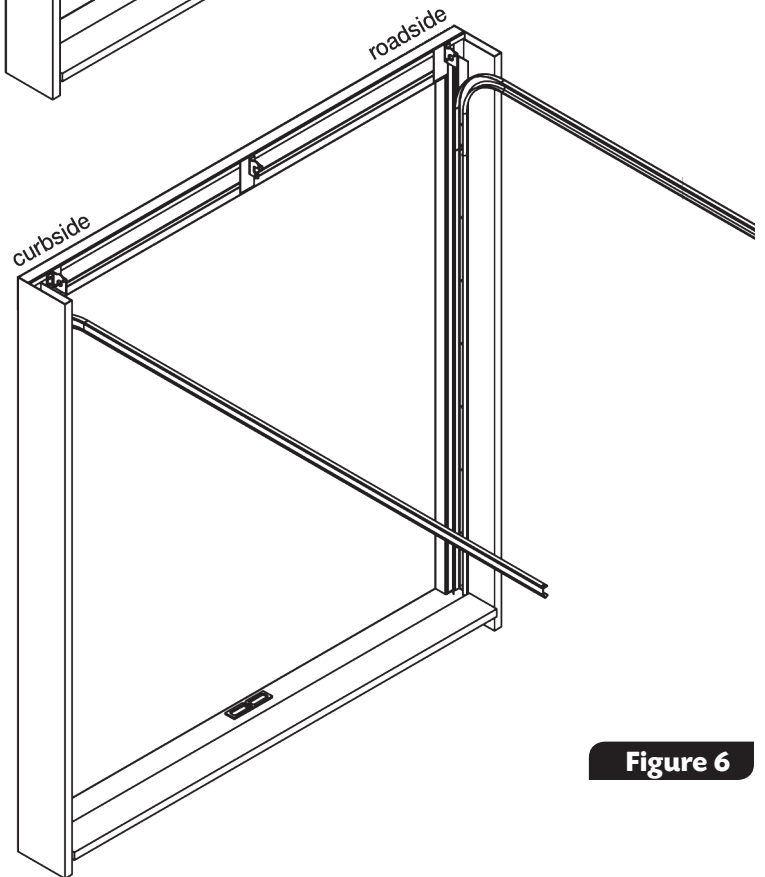


Figure 6

Operator Installation - Standard Header

Step 7

Install the cotter pin in the end of the operator shaft, through the hole closest to the cable drum painted **RED**. The drum is also identified as "Roadside". Figure 7

NOTE:

The complete drum is not painted red. Figure 7a shows the area that is painted red.

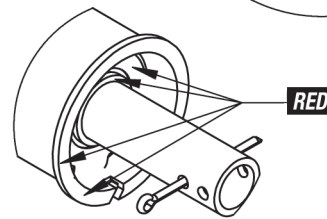
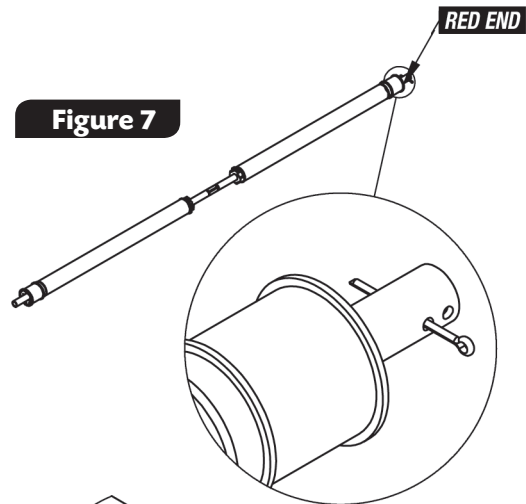


Figure 7a

Step 8

Insert the curbside end of the operator shaft into the bracket. Figure 8

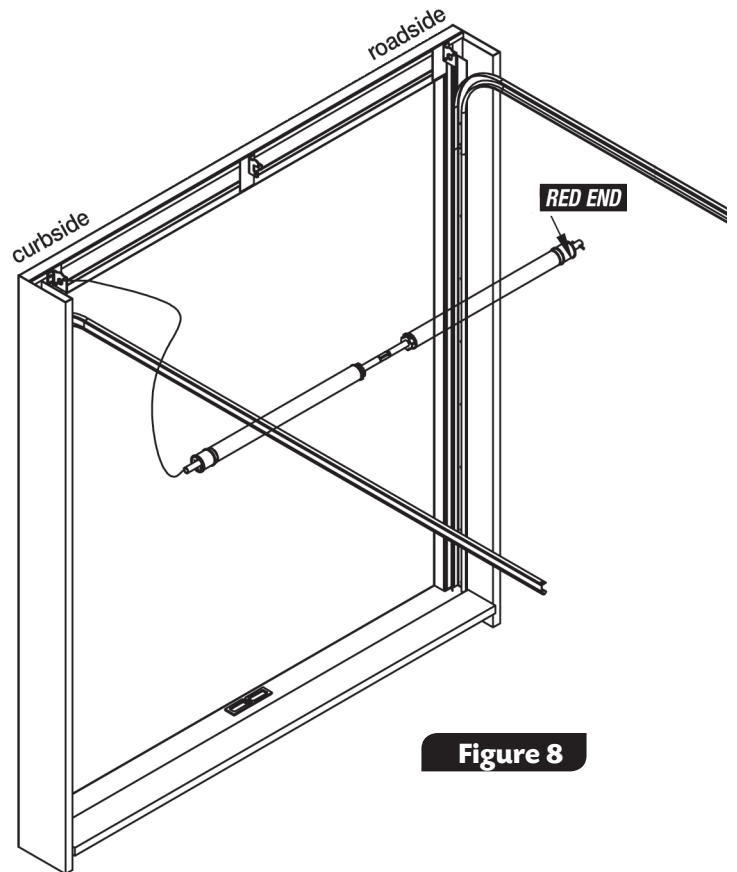


Figure 8

Operator Installation - Standard Header

Step 9

Move the red end of the operator so that the squared portion of the shaft fits into the center bracket. **Figure 9**

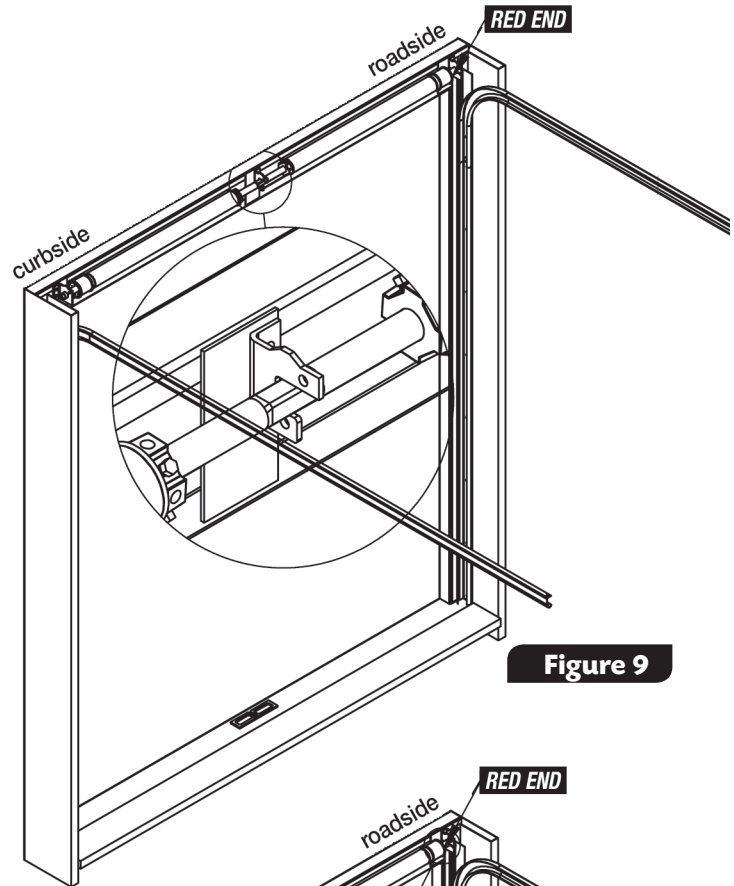


Figure 9

Step 10

Mount the **RED** end into the **ROADSIDE** bracket and install the second cotter pin. The two cotter pins will prevent the operator from shifting from side to side. **Figure 10**

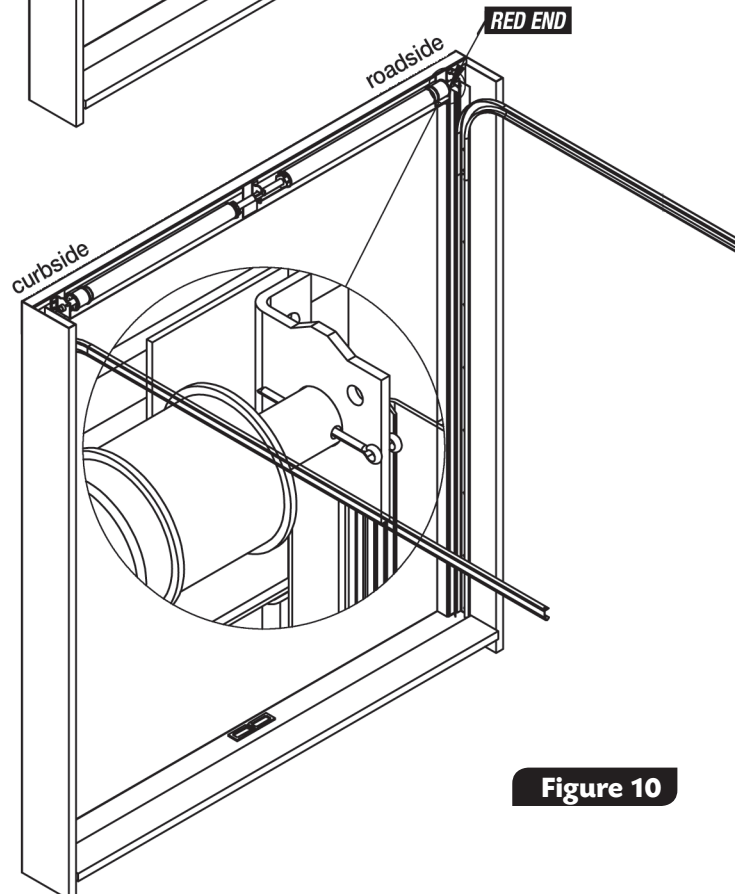


Figure 10

Operator Installation - Standard Header

Step 11

Install operator bracket clamp. Fasten with two nuts included. **Figure 11**

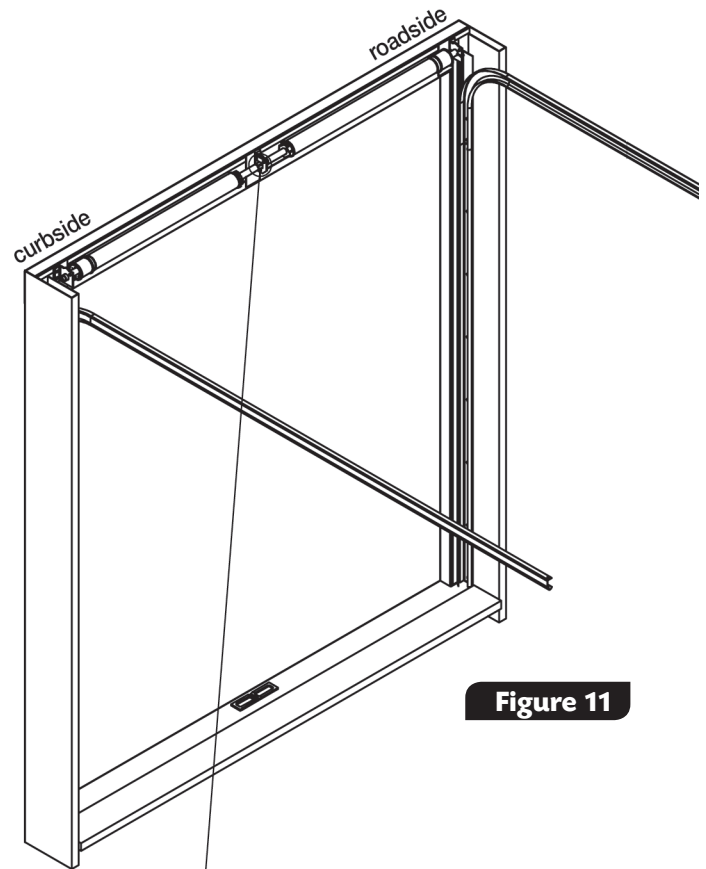
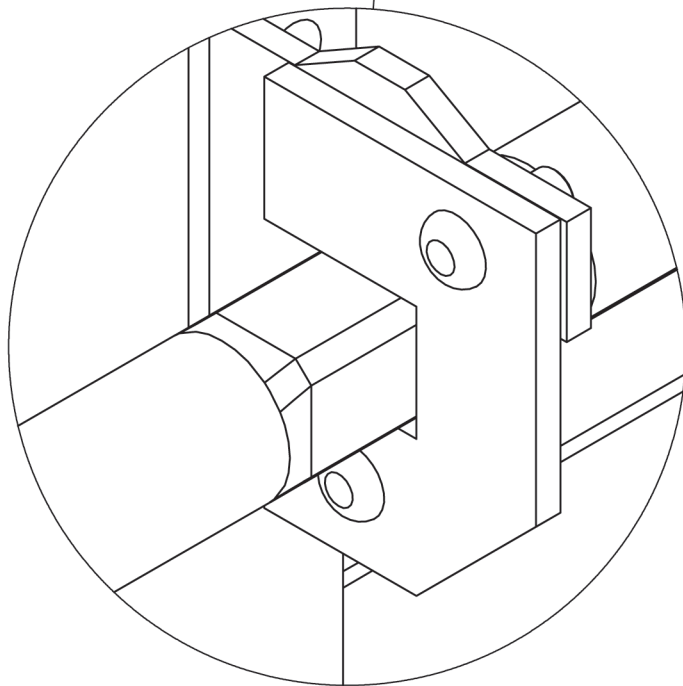


Figure 11



Operator Installation - Standard Header

Step 12

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

Figure 12

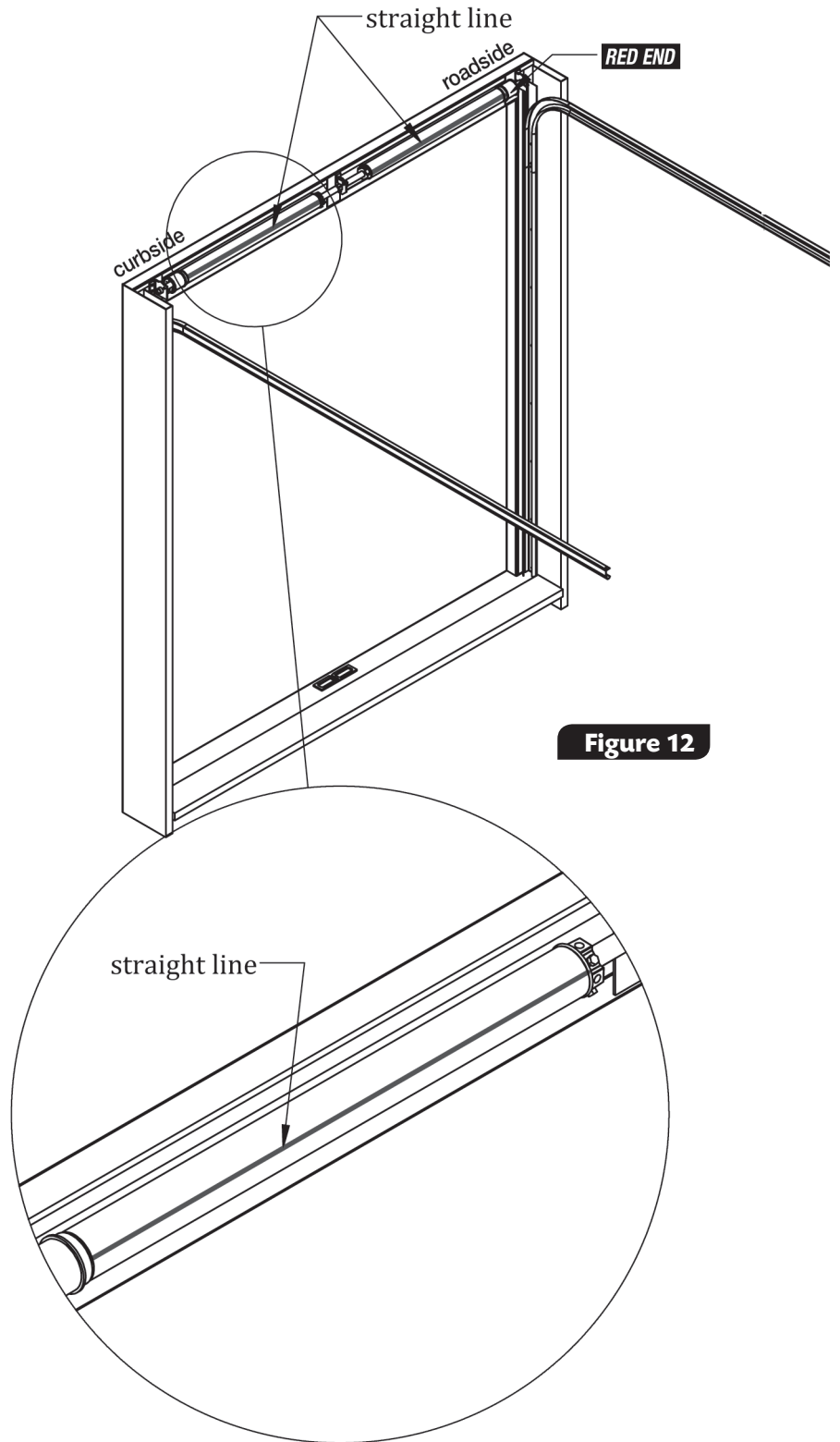


Figure 12

Operator Installation - Standard Header

Operator Winding (dual spring style operator)

Standard Header Operator Installation

See next page for Shallow Header application

Step 13

Loosen set screws in winding cone.

Figure 13

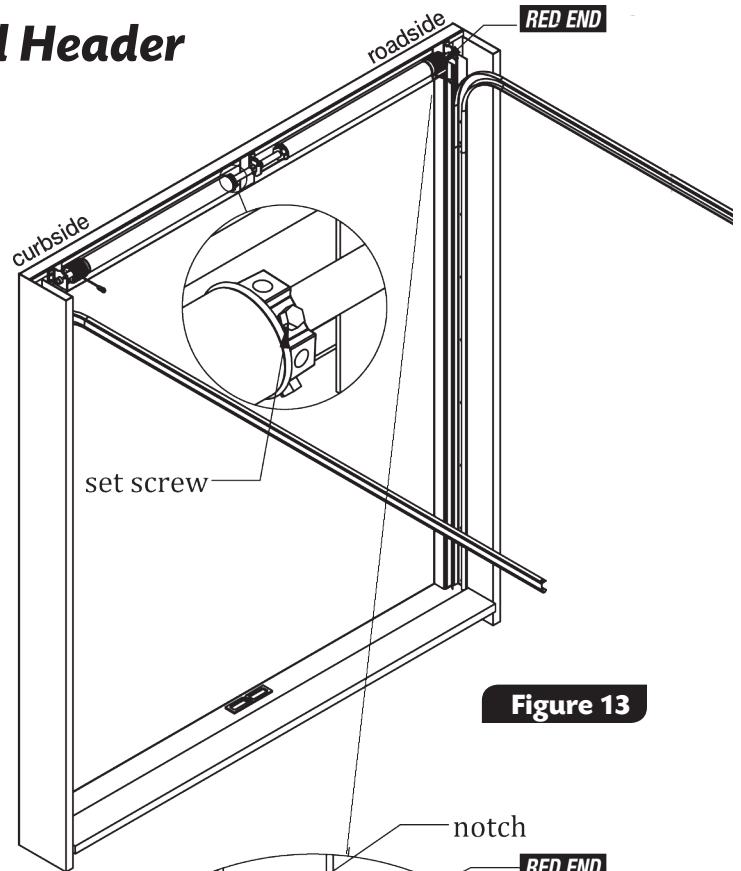


Figure 13

CAUTION

MAKE SURE CABLES ARE ATTACHED TO DOOR AND CABLE DRUMS, THAT CABLES ARE PROPERLY TENSIONED, AND CABLE DRUMS ARE PROPERLY SECURED TO SHAFT AS NOTED IN STEP 16.

Step 14

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 14**

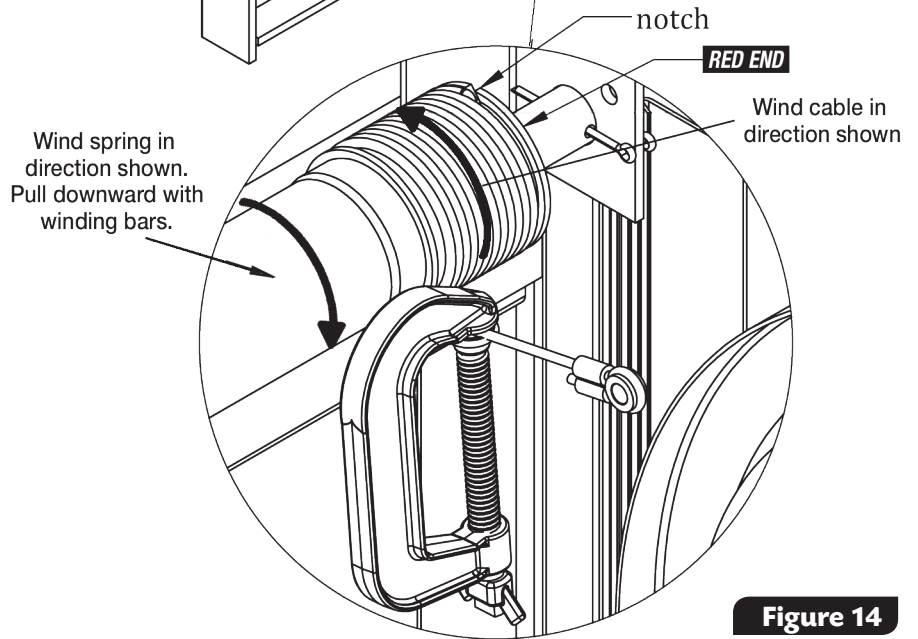


Figure 14

Step 15

When all cable has been put onto drum, continue to wind 4 to 5 full turns. Pull down 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.

Step 16

Repeat for opposite side



Equal number of rotations on each spring.

The direction of your wax line should look similar to this when finished.

NOTE: Actual number of wraps may vary.

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 1

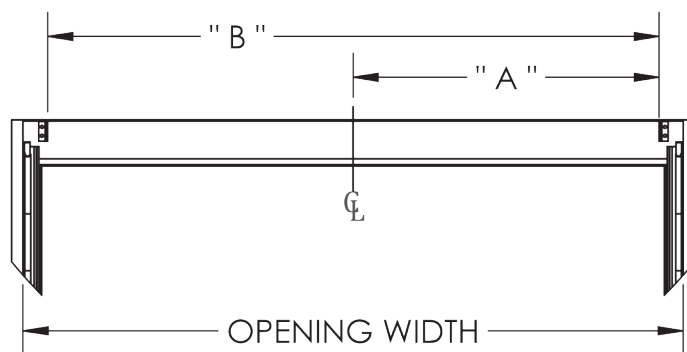
Determine bracket location using chart below.

Figure 1

Bracket Location Determination

Use on Door Widths	Use on Door Height	Operator Shaft Length	"B" End Bracket Position	"A" Center Bracket Position	Spring Length
> 96.25"	< 90"	96.00"	94.75"	47.88"	33"
90.25"-96"	< 90"	93.00"	91.75"	45.88"	33"
83"-90"	< 90"	87.00"	85.75"	42.88"	33"
> 96.25"	> 91"	96.00"	94.75"	47.88"	35"
90.25"-96"	> 91"	93.00"	91.75"	45.88"	35"
83"-90"	> 91"	87.00"	85.75"	42.88"	35"

Figure 1



Step 2

Tack weld **ROADSIDE** bracket in position with the tab on the top edge touching the ceiling.

Figure 2

Step 3

Tack weld **CURBSIDE** bracket in position with the tab on the top edge touching the ceiling.

Figure 2

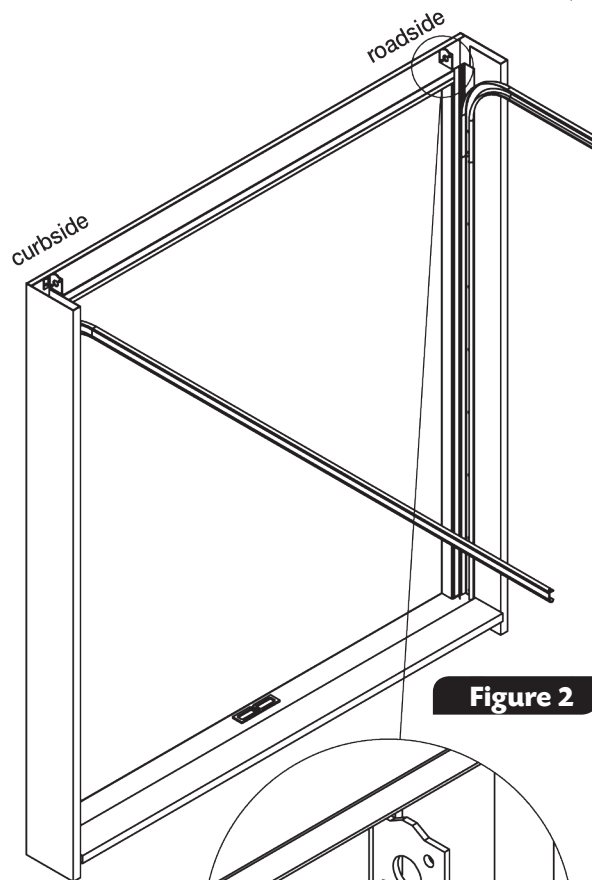
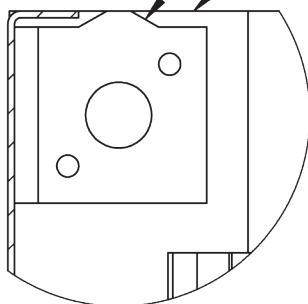


Figure 2

Figure 3

LOCATING TAB
CEILING



NOTE:

Each bracket has a locating tab on top edge. The brackets must be placed so that this tab touches the ceiling. This is required for proper operator clearance.

Figure 3

Operator Installation - Shallow Header

NOTE:

In a **Shallow Header Application** the operator is installed in the opposite direction, the end that is painted red and identified as “roadside” is now installed on the curbside.

Step 4

With the operator in position, use a level and determine the height position of the center bracket, tack weld bracket in place. **Figure 4**

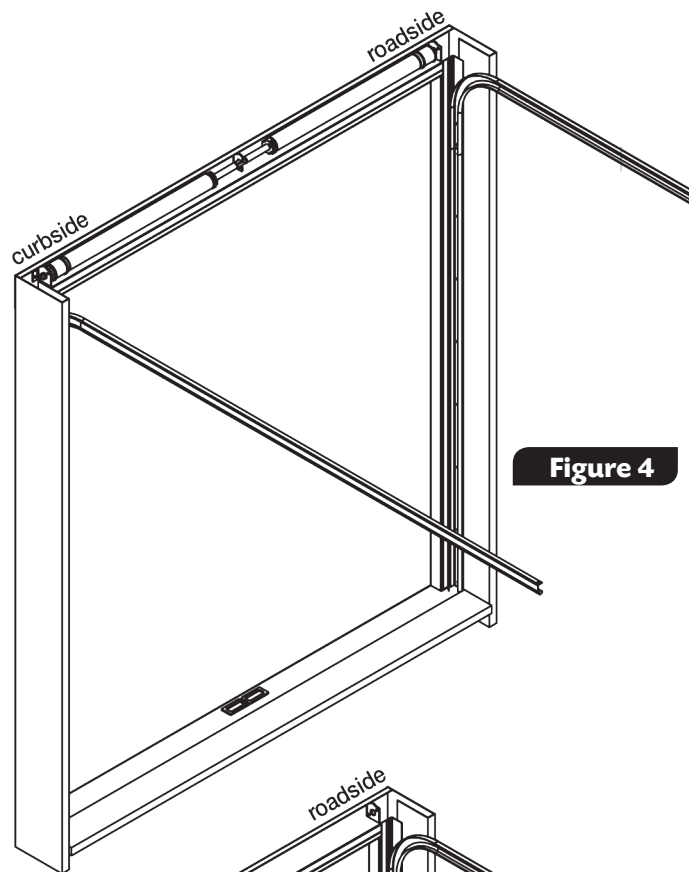


Figure 4

Step 5

Set operator to the side and finish weld all brackets in position. **Figure 5**

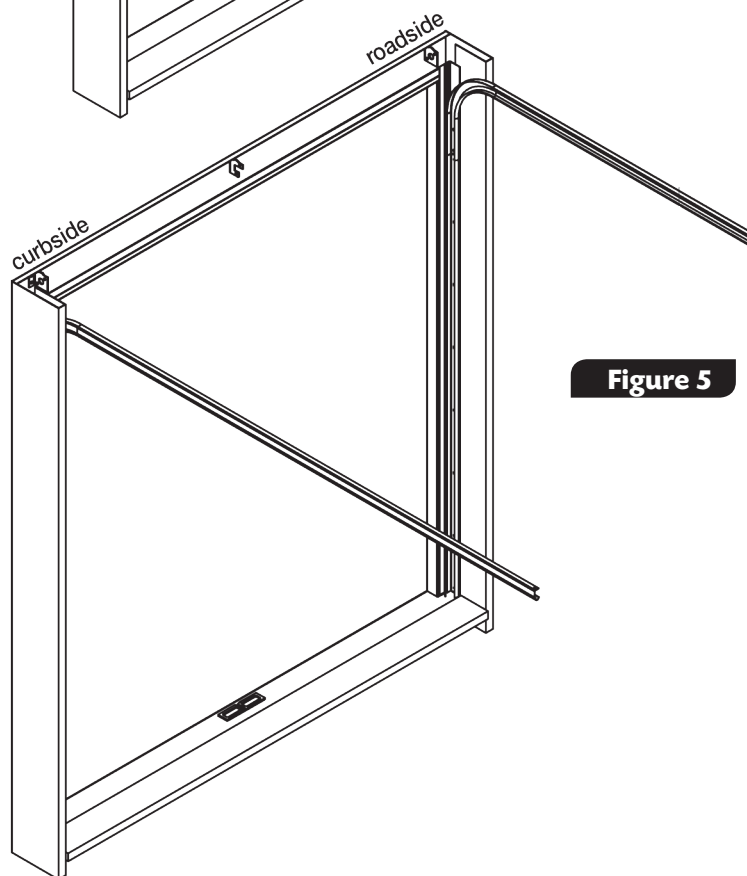


Figure 5

Operator Installation - Shallow Header

Step 6

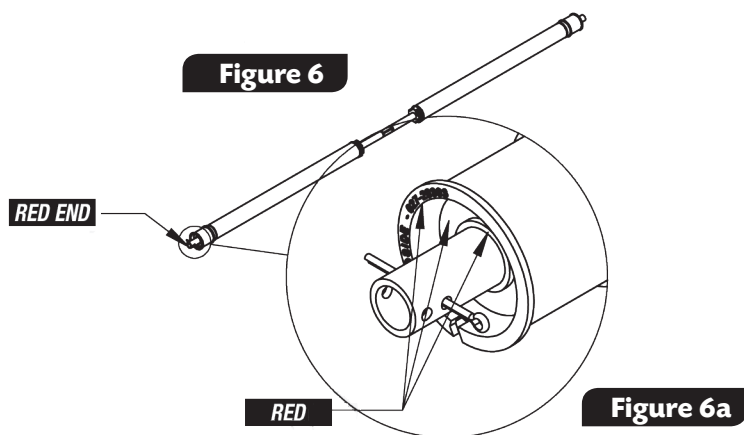
Install the cotter pin in the end of the operator shaft, through the hole closest to the cable drum painted **RED**. The drum is also identified as "roadside". Figure 6

NOTE:

In **Shallow Header Applications** the operator end identified as "roadside" and painted red is actually installed on the curbside.

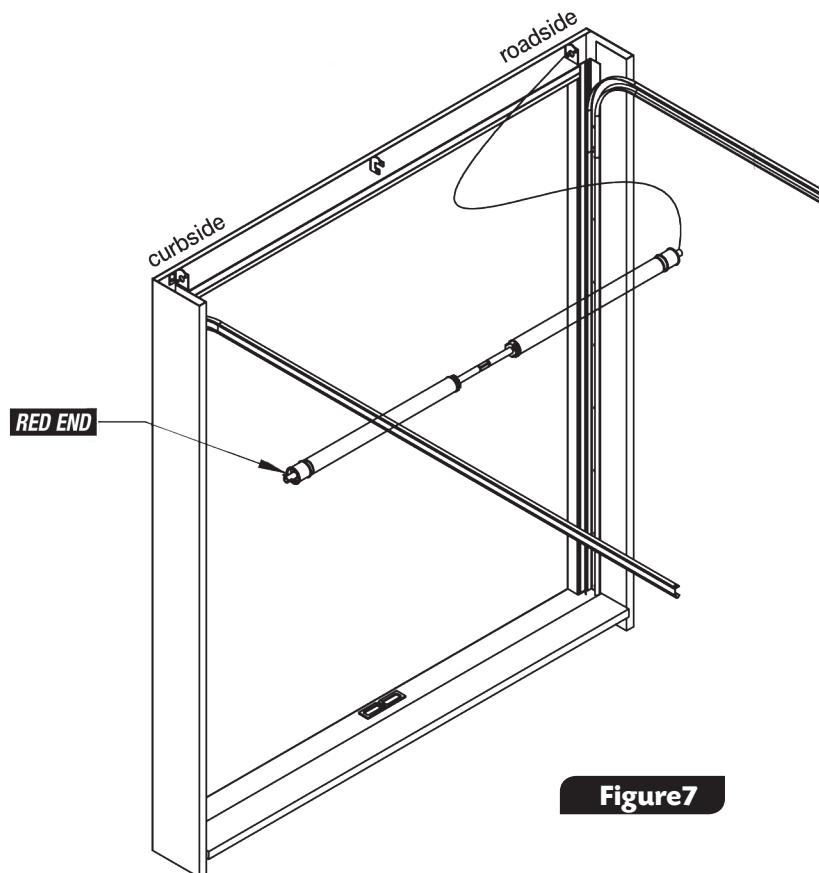
NOTE:

The complete drum is not painted red. **Figure 6a** shows the area that is painted red.



Step 7

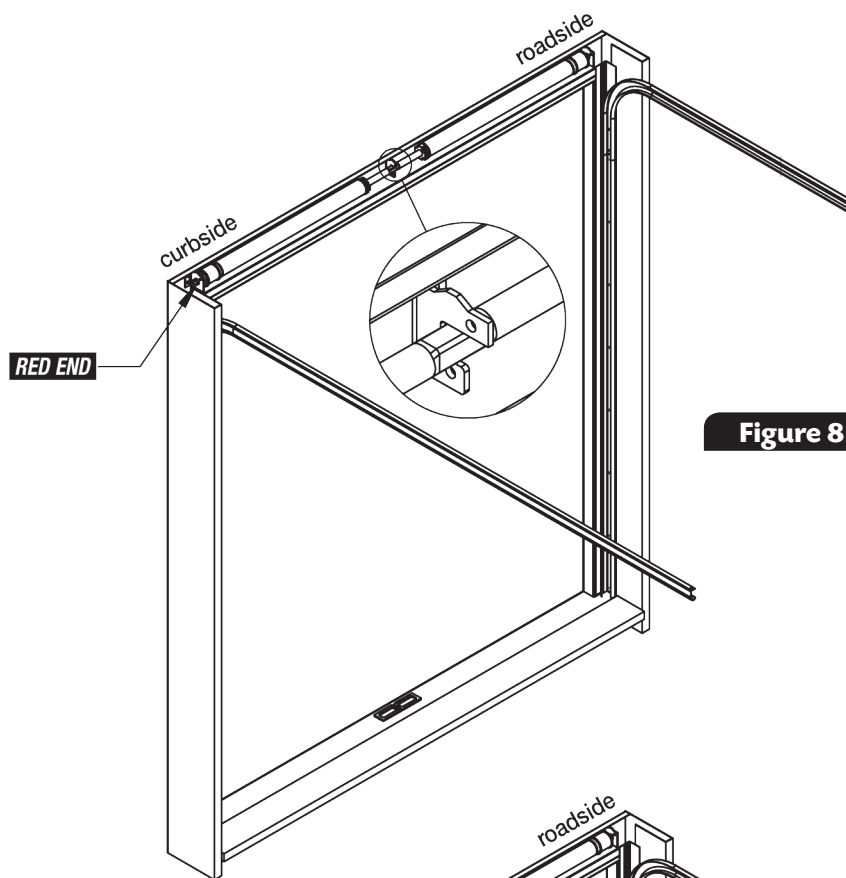
Insert the roadside end of the operator shaft into the bracket. **Figure 7**



Operator Installation - Shallow Header

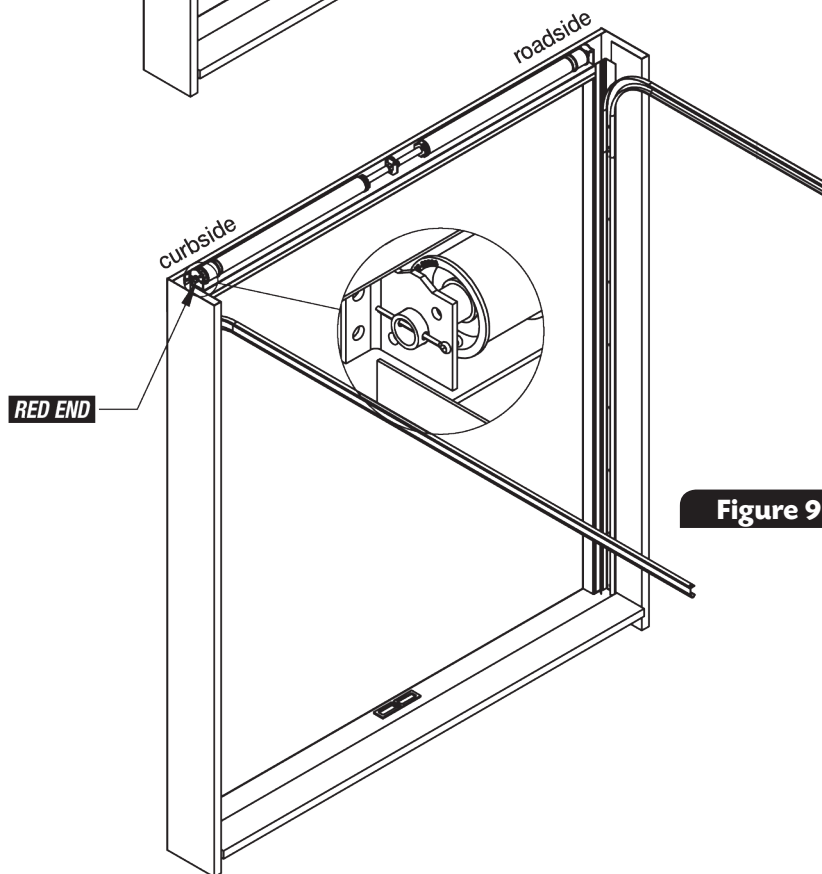
Step 8

Move the operator so that the squared portion of the shaft fits into the center bracket. **Figure 8**



Step 9

With the **RED** end mounted into the **CURBSIDE** bracket, install the second cotter pin. The two cotter pins will prevent the operator from shifting from side to side. **Figure 9**



Operator Installation - Shallow Header

Step 10

Install operator bracket clamp. Fasten with two nuts included. **Figure 10**

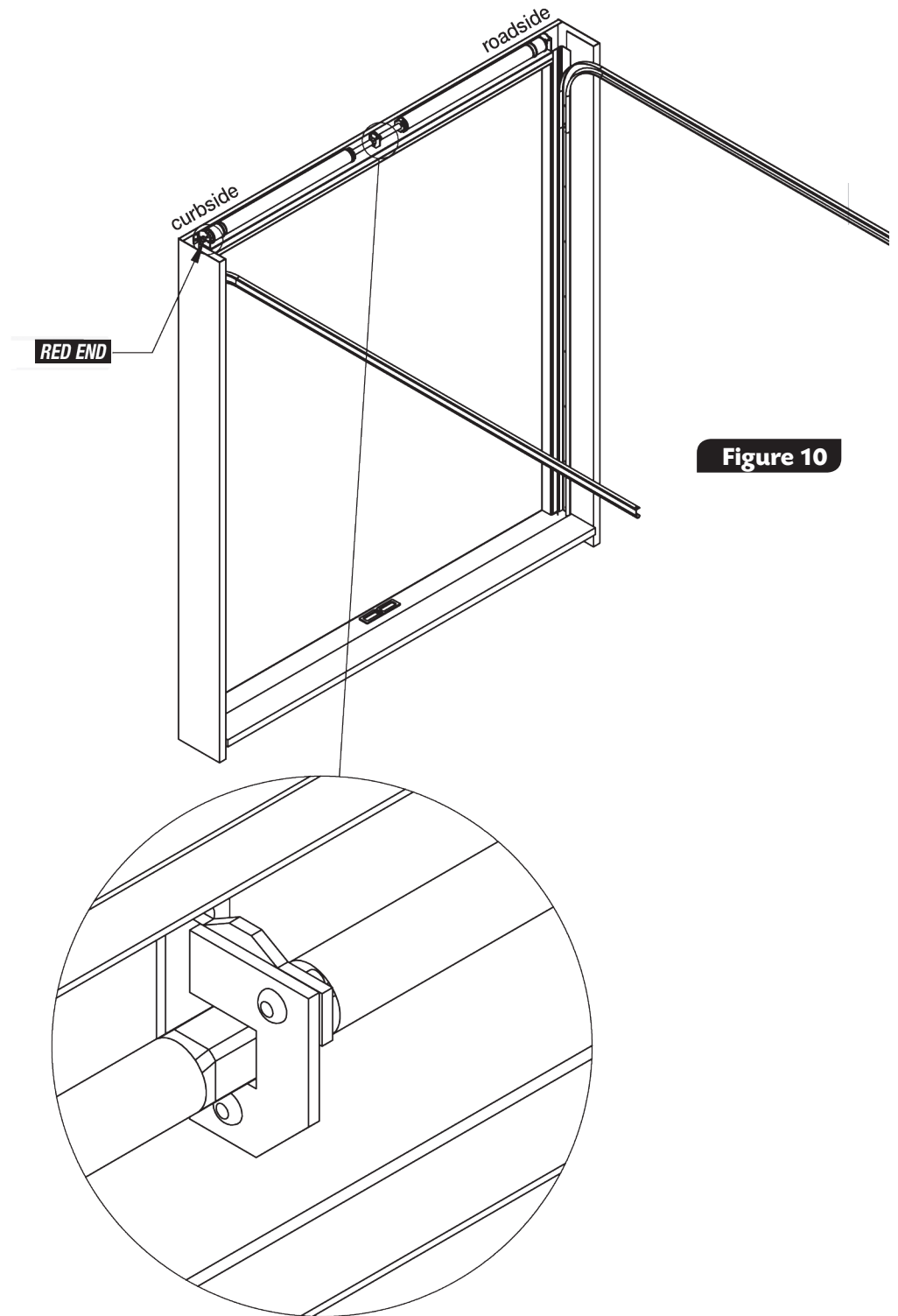


Figure 10

Operator Installation - Shallow Header

Step 11

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

Figure 11

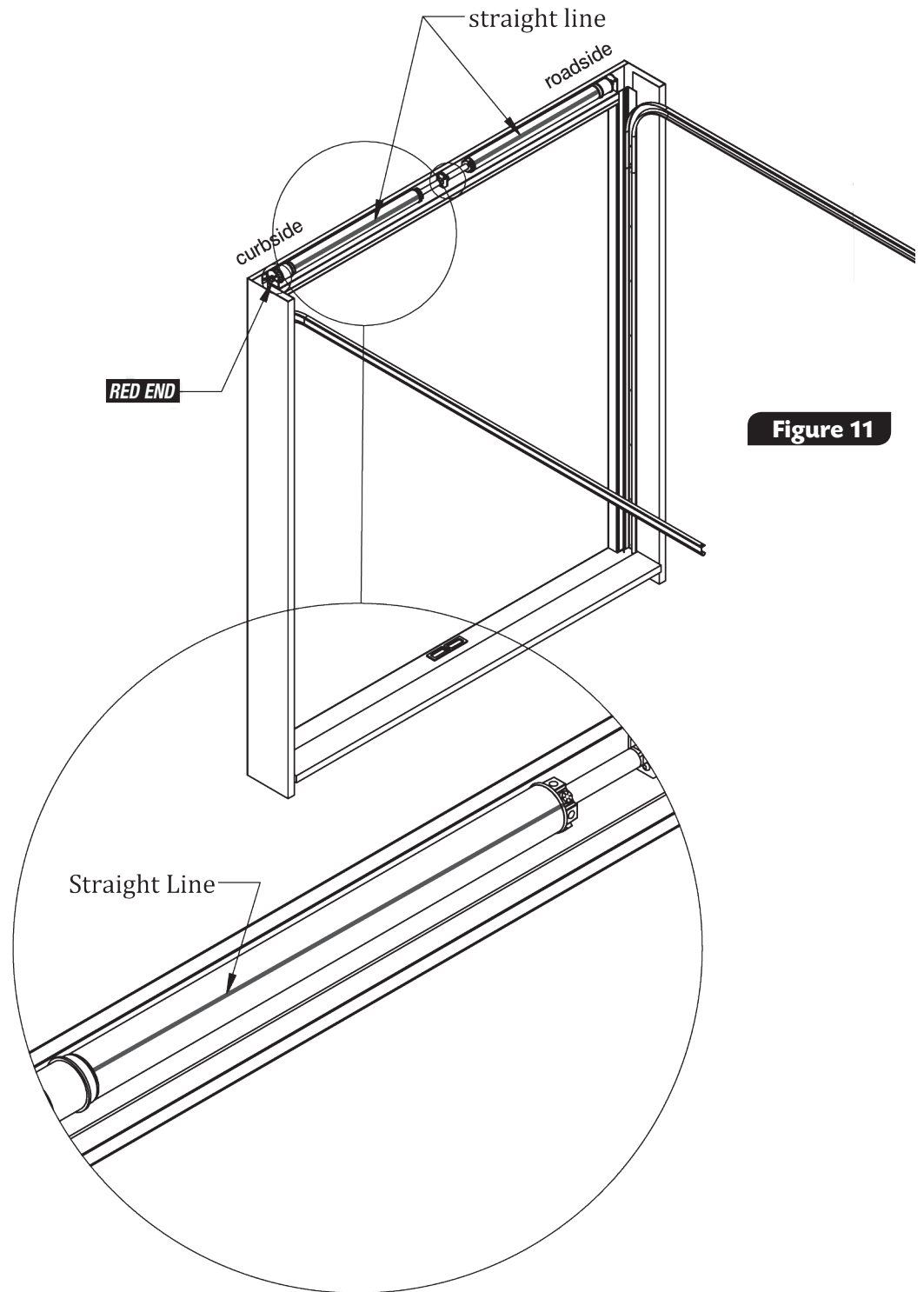


Figure 11

Operator Installation - Shallow Header

Operator Winding (dual spring style operator) Shallow Header Operator Installation

NOTE:

Some installations have a very narrow header, called “shallow header”. A shallow header installation differs from the standard procedure, as the end of the operator, which is painted red, mounts on the curbside.

Step 12

Loosen set screws in winding cone.

Figure 12

CAUTION

MAKE SURE CABLES ARE ATTACHED TO DOOR AND CABLE DRUMS, THAT CABLES ARE PROPERLY TENSIONED, AND CABLE DRUMS ARE PROPERLY SECURED TO SHAFT AS NOTED IN STEP 15.

Step 13

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 13

NOTE:

Shallow header cable winds opposite of a standard installation.

Step 14

When all cable has been put onto drum, continue to wind 4 to 5 full turns. Push up on winding bar for shallow 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.

Step 15

Repeat for opposite side

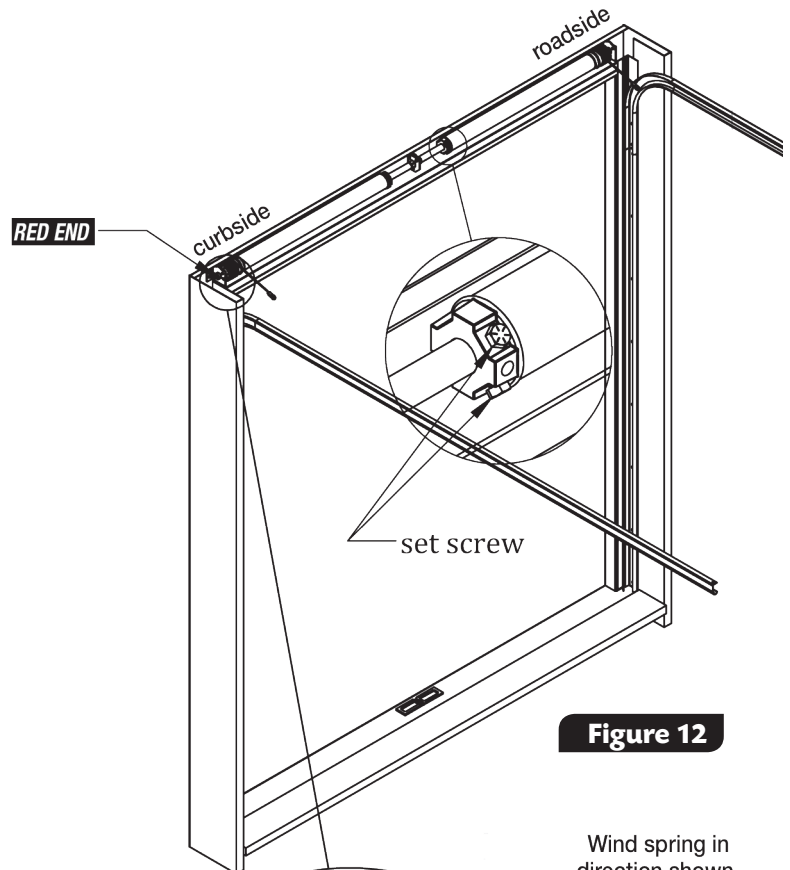


Figure 12

Wind cable in direction shown

Wind spring in direction shown. Push upward with winding bars.

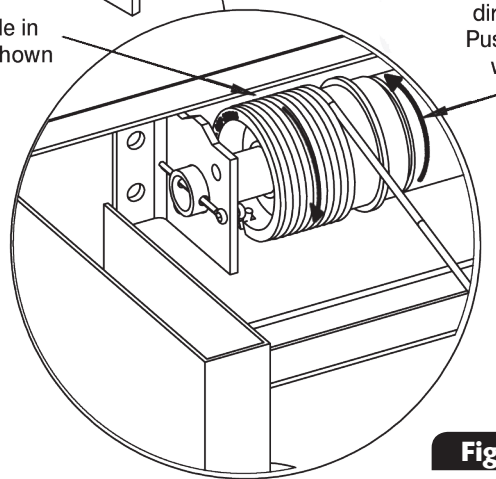


Figure 13



Equal number of rotations on each spring.

The direction of your wax line should look similar to this when finished.

NOTE: Actual number of wraps may vary.

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

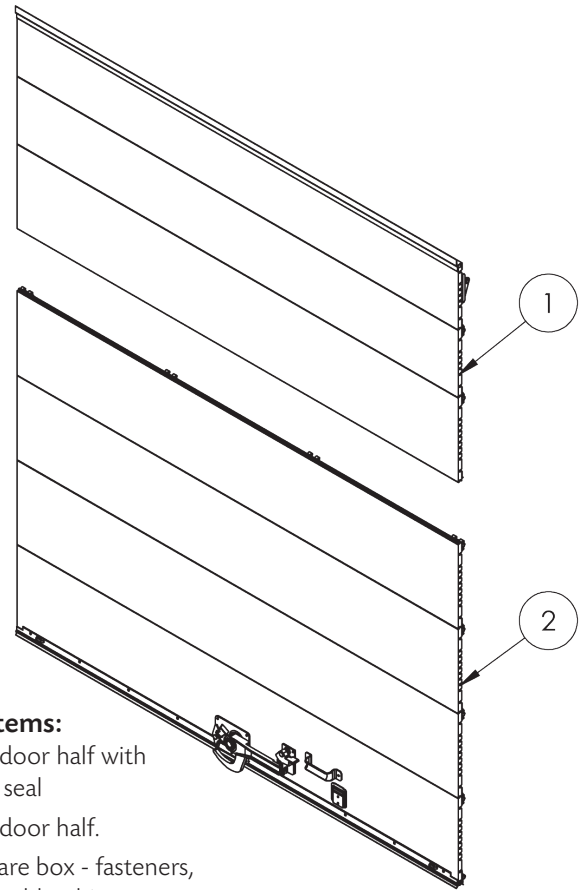
TOOLS NEEDED

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

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

BEFORE YOU BEGIN

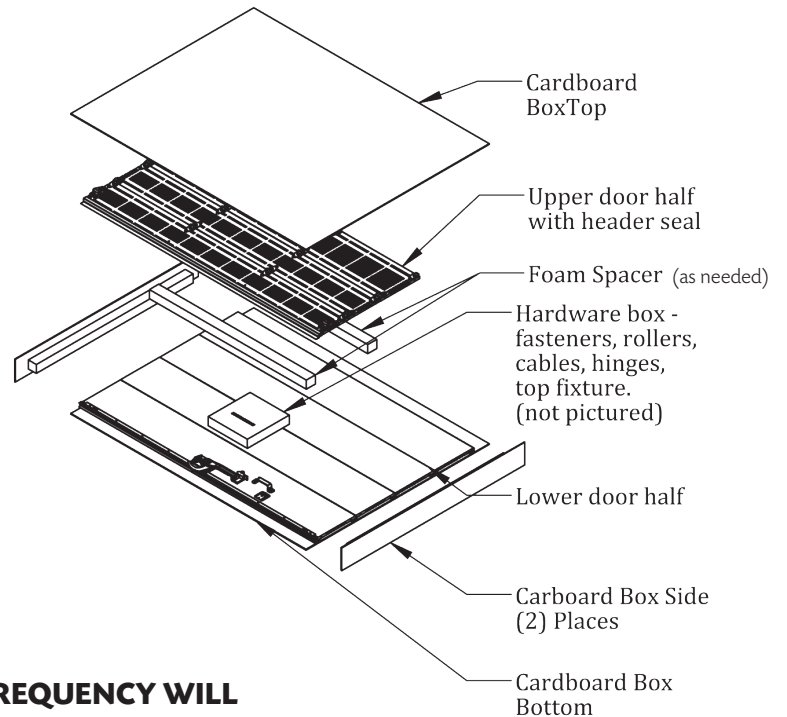
- Read these instructions completely before installing your Fleet Engineers Rollup door.
- Allow enough time to do the work. Just removing an existing door can take in excess of three hours.
- Be sure to have sufficient help. An unsprung door is very heavy.
- Remove your existing door from the track.
- 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.

Add rollers to all hinges as shown

Add spacers to rollers (4) places as shown

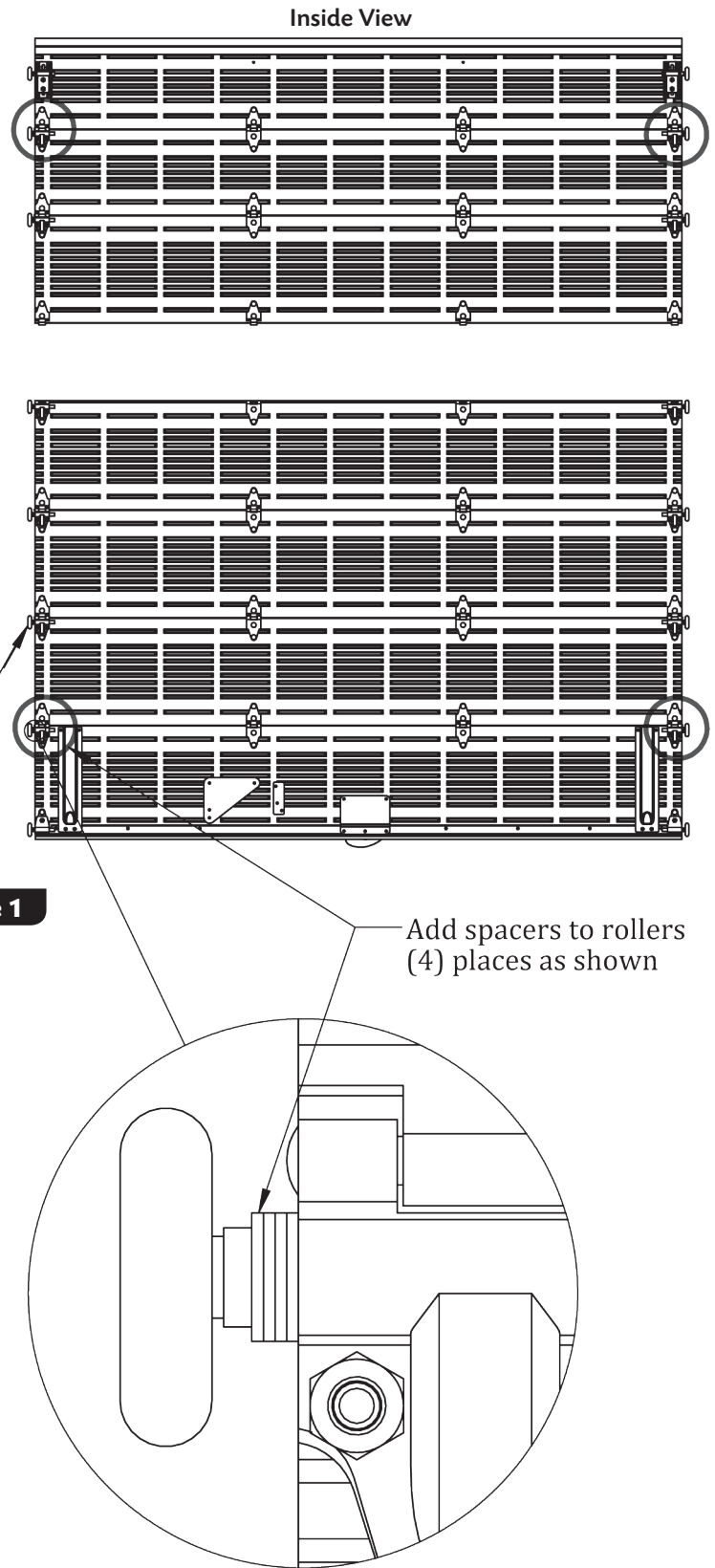
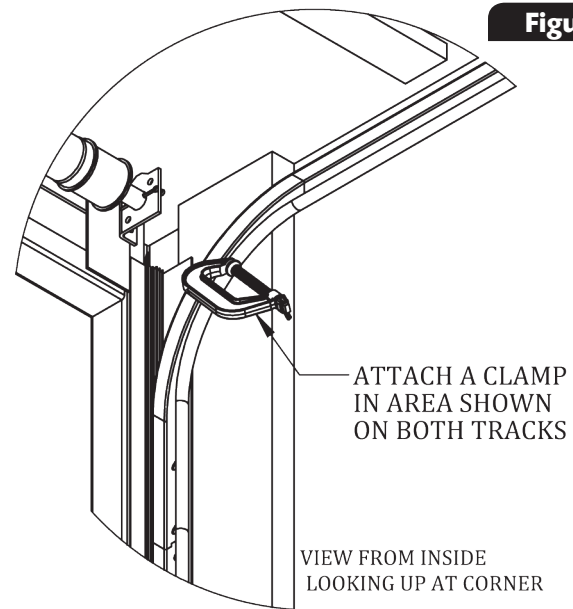


Figure 1

Panel Installation

IMPORTANT:

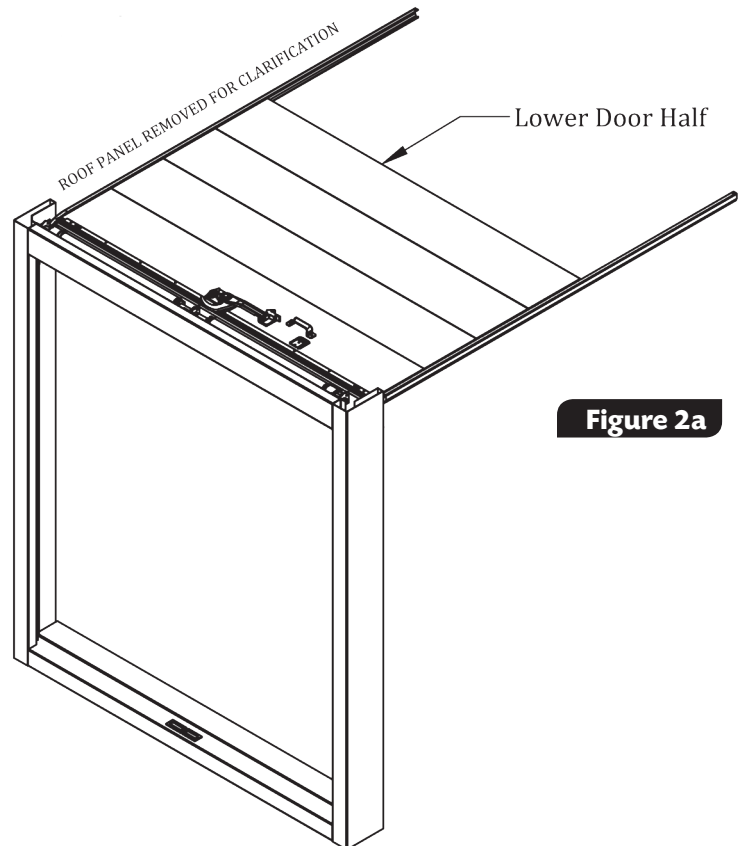
Attach a c-clamp to each track at the radius shown in **Figure 2** to act as a temporary stop during installation



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**



Panel Installation

Step 3

Install upper door half.

Slide upper door half into track until meeting with the lower door half installed in **STEP 2**, then join the upper and lower door halves using the supplied hinge pins. **Figure 3.**

IMPORTANT:

In order to prevent the inside of the door from damage during installation of the pins, use a scrap piece of metal as a shield to protect the door from being marred by hammer blows

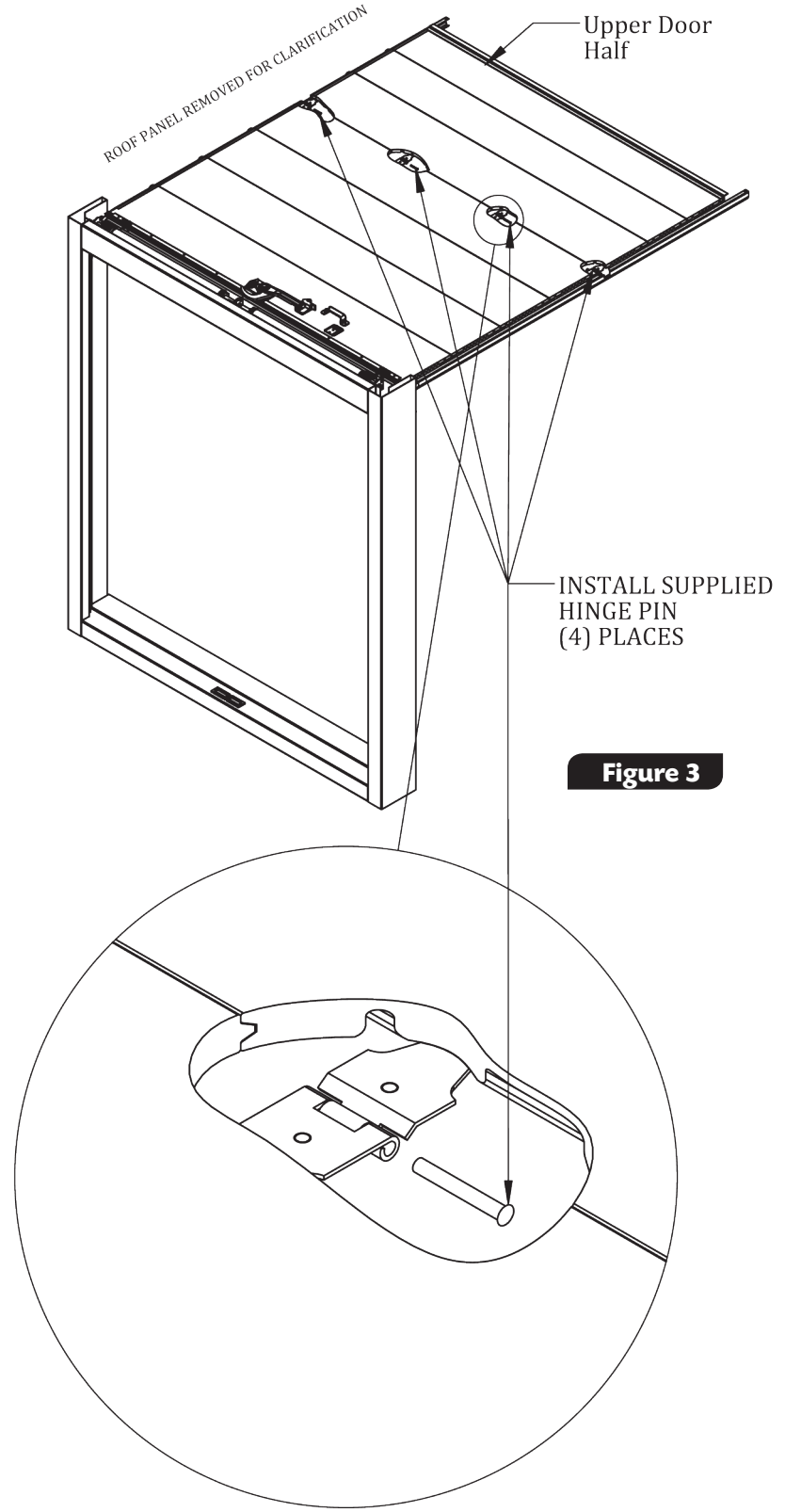


Figure 3

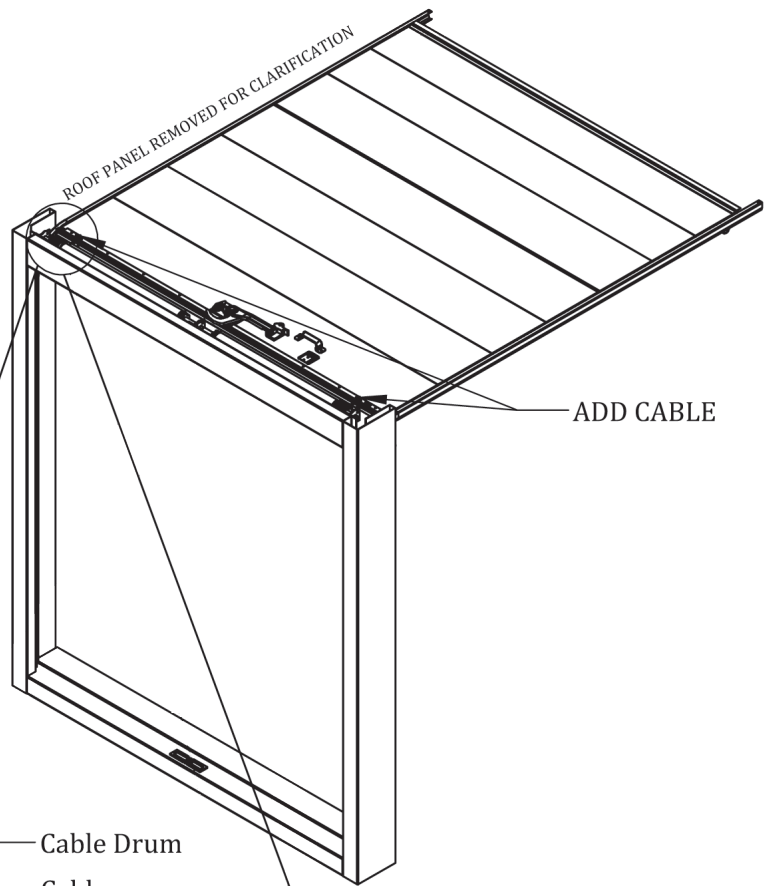
Panel Installation

Step 4

Install roll up door cable.

Figure 4

- Unbolt (2) U-bolts and install cable.
- Wind cable around operator and connect to cable drum.
- Add tension to operator spring until cable is snug. Add 4 to 5 full turns. Pull down on winding bars for standard header.



Step 5

Reinstall (2) U-bolts with washers and nuts.

Figure 5

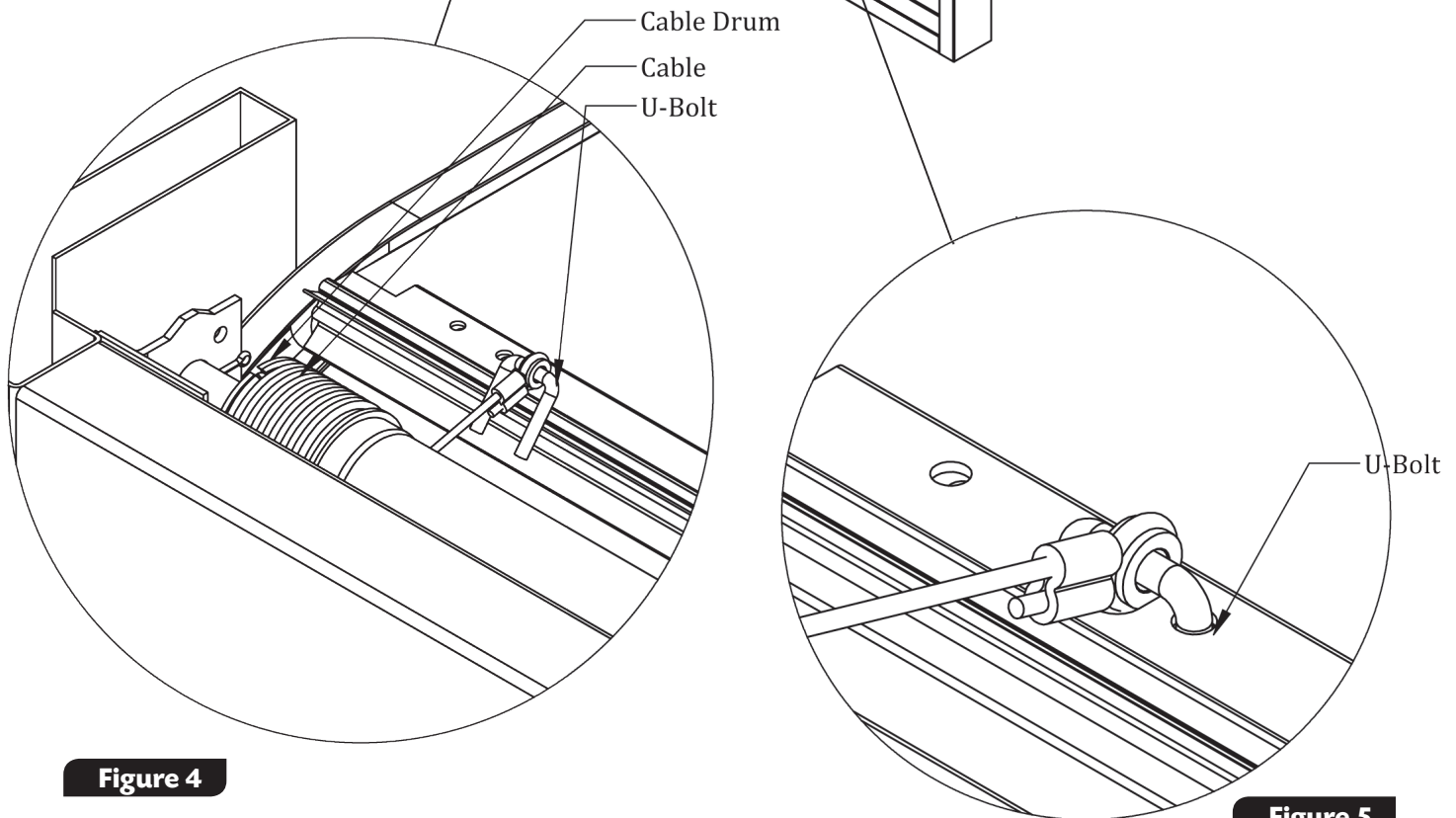


Figure 4

Figure 5

Panel Installation

Step 6

Align door.

- Place (2) spacers at the bottom of the door as spacers. **Figure 6**
- Carefully remove the c-clamps from the track (**Figure 4**) 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 6**) 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.

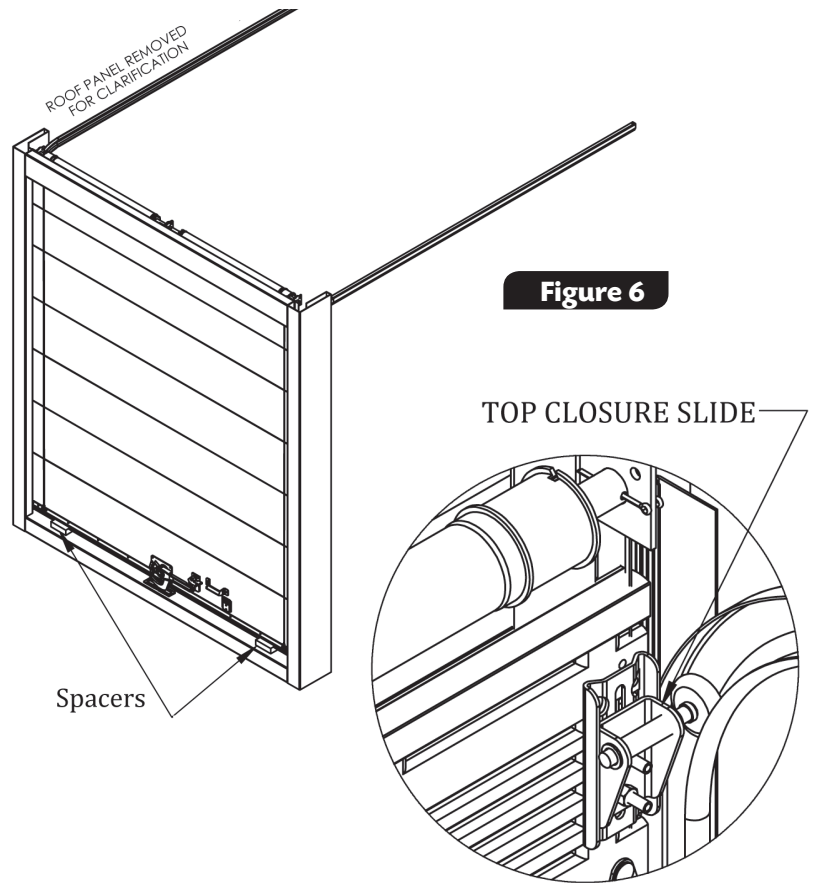


Figure 6

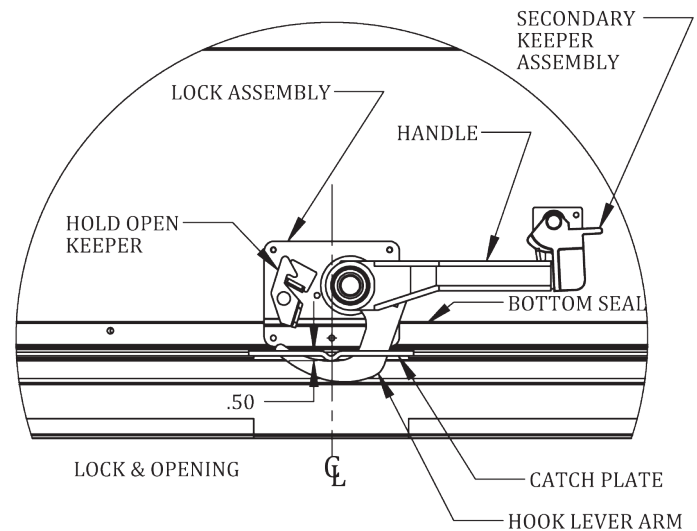
Cutout Area (Ref.)

Step 7

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

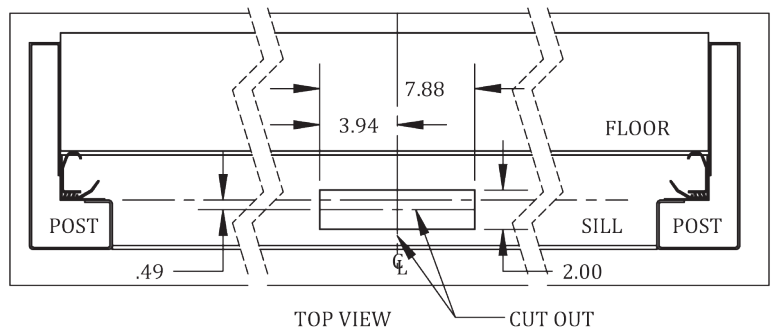
Step 8

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.



TOP VIEW

CUT OUT

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