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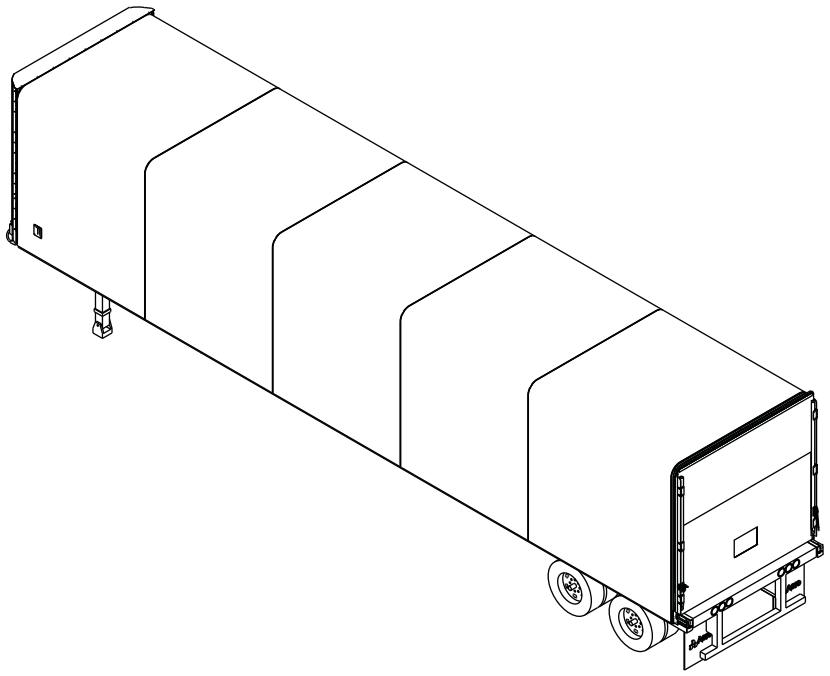

CONESTOGA® XP™

Safe. Fast. Versatile.

Installation Instructions

Attention Dealers: Please give this owners manual to the customer when the product is delivered.

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Installation Instructions Directory

This manual explains how to install the Conestoga Express. Be sure to read the entire manual before beginning your installation.

Types of Safety Messages

DANGER: Risk of death or serious injury to operator or bystander will result.

WARNING: Risk of death or serious injury to operator or bystander could result.

CAUTION: Risk of injury to operator or bystander could result.

NOTICE: Risk of product or vehicle being damaged.

NOTE: Contains information critical to the installation or operation of this product.

Safety Considerations

WARNING: Read this entire manual before installing this product. Read all labels before operating.

WARNING: Be sure that your working platform is secure as you work on the truck. Use OHSA approved ladders or scaffolding to work above ground level.

WARNING: Always wear safety glasses during installation and operation.

WARNING: Always check for overhead obstructions before opening and closing. Do not operate under low hung power lines.

CAUTION: Keep all clothing clear of moving parts.

CAUTION: Keep everyone clear of the area. Always check to make sure that no one is at the rear of the box or in the immediate area of the tarp as it operates.

Tools Required for Installation

Forklift	Tape measure
Hoist	12” combination square
Welding equipment	Die grinder with cutoff wheel
6' & 12" ladder	18” slide ”C” clamps
Step ladder	6” level
Electric or pneumatic 1/2", 3/4”, 3/8” drills	Dead blow sledge hammer
Electric or pneumatic impact wrench	Hammer
"11", "G", 5/16", 3/8" drill bit	Rubber mallet
1/2” & 3/4" drill bit (minimum 6” in length)	Wire brush
80 degree countersink tool	11” Vise grip clamps
Large punch	Scissors
5/16” hex allen wrench (prefer impact driver)	Felt marker
7/16", 1/2", 3/4", 1 1/8" socket	2” x 4” x 12” wood blocks
7/16", 3/4”, 1 1/8" combination wrench	1/4” x 2” x 4” aluminum or steel flat bar
1/2", 5/8", 3/4" wrench	1-1/8” combination wrench
Tape measure	1-1/8” socket
Circular saw	Canola Oil
Band saw	WD-40 (optional, see step 1-20)
Rivet gun	Low viscosity oil or maiden oil

Trailer Preparation

1) See Figure 1. To locate the starting point of the aluminum rail, the thickness of the bulkhead must be known. Measure the bulkhead front-to-back and transfer that measurement to the front of the trailer. A Conestoga 2 bulkhead is typically 10 1/4" from the front of the bulkhead to the back of the wing, however, it is a good practice to measure each bulkhead for greater accuracy.

Note: DO NOT include any pockets or a rub rail across the front of the trailer when transferring the measurement.

2) See Figure 2 At the transferred dimension, use a combination square to mark a vertical line on the side rail of the trailer. This is where the front of aluminum rail will start.

3) If you are installing a bulkhead on a 102" wide trailer, rub rails and any pockets or support spools will need to be cut off at the location of the bulkhead leg prior to the start of the aluminum rail installation. The 102" bulkhead leg must fit against the trailer side rail.

4) If the trailer is narrower that 95 1/2" for a 96" trailer or 101 1/2" for a 102" trailer, spacers will be required to build the trailer up to the appropriate width. This can be achieved by welding a flat bar, no less than 2" tall, along the length of the trailer or by welding spacers, no less than 4" tall, at each location the aluminum rail bolts to the side of the trailer.

5) Repeat Steps 1 through 4 on the other side of the trailer.

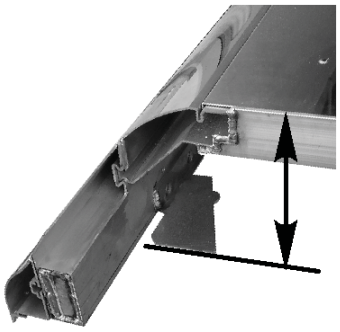

Figure 1

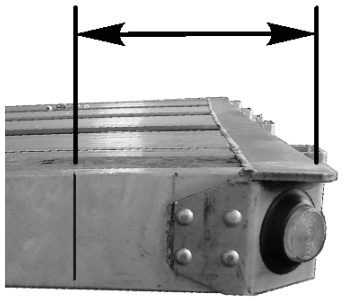

Figure 2

STEP 1

Install the Aluminum Rail to the Trailer

Index	Description	Qty	Index	Description	Qty
1	Aluminum Extruded Rail	Varies	8	Rear Rail Stop P.S.	1
2	Rail Insert SS, 8' Section	12	9	3" Rubber Dust Guard Insert	108'
3	1/2-13 x 1 3/4" FHCS	76	10	Rail Inspection Plate Connector	2
4	1/2-13 Nylon Hex Nut	76	11	10-24 x 3/4" Pan Head Screw	8
5	1/2 Flat Washer	76	12	10-24 Hex Nut	8
6	Stainless Upper Rail Support	2	13	1/4 x 3/8 Rivet	12
7	Rear Rail Stop D.S.	1			

Aluminum Rail Preparation

Note: The aluminum extruded rail (1) comes in 8', 12', or 24' sections.

1) Lubricate the "T"-shaped channel on the back of the aluminum rail (1) in preparation to install the rubber dust guard insert (9). Use liquid soap.

2) On the end of the rubber dust guard, cut an arrowhead shape into the"T"-shaped portion of the guard. This will ease the installation of the guard into the channel.

3) See Figure 3. The dust guard insert (9) must be oriented so the small curl at the edge of the guard faces up when the rail is installed.

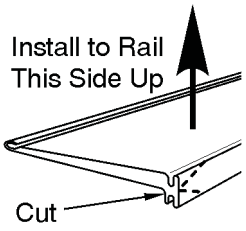

Figure 3

4) Pull the dust guard insert (9) into the channel of the aluminum rail, leaving 3" of excess rubber at each end of each section of rail.

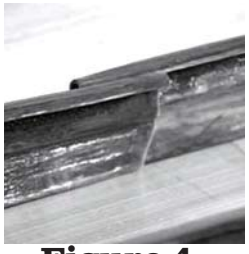

Figure 4

Note: DO NOT install the dust guard on the last section of rail or the rails that are cut for the inspection plates. These 4 rail sections (two each side) will be cut to length before the dust guard is installed.

5) See Figure 4. Where the sections of aluminum rail (1) will meet, cut off only the "t"-shaped portion of the dust guard. The remaining portion of the guard is intended to overlap when the rails are installed.

Note: The trailer width at the bulkhead must be within 1/2" of either 96" or 102" for proper installation and operation of the Conestoga Express system. If required, install spacers as described in step 4 prior to installing the aluminum rail.

Install the Aluminum Rail to the Trailer

6) See Figure 5. A 1/4" x 2" x 4" piece of flat bar is used as a spacer to help align the rail 1/4" below the deck of the trailer. Locate or fabricate a spacer for installing the rail.

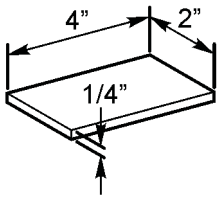

Figure 5

7) **See Figure 6.** Trailers equipped with raised-edge rub rails must use an appropriately sized shim between the rub rail and the Conestoga 2 rail at every fastener location. Failure to use shims can cause the rail to become deformed. The shims are 3/4" wide by 4" long and thicknesses are 1/16", 1/8", and 3/16".

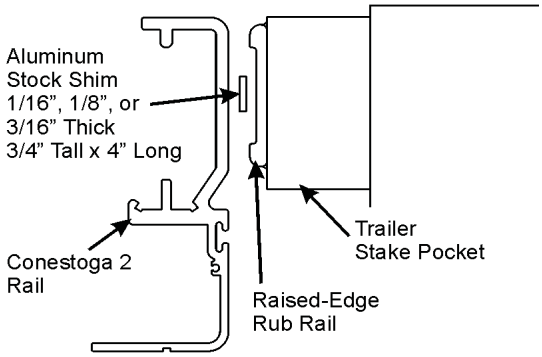

Figure 6

8) **See Figure 7.** Align the aluminum rail (1) with the vertical line made in step 2. Clamp each end of the rail section to the side of the trailer slightly below the deck of the trailer.

9) **See Figure 8.** At the front of the trailer, place the spacer mentioned in Step 11 on top of the aluminum rail. Place a level across the spacer to the deck of the trailer. Use a rubber mallet to adjust the rail up or down to level and front to back to align with the vertical line.

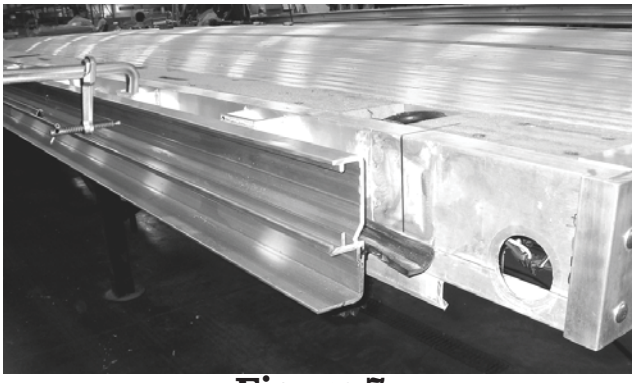

Figure 7

Note: The rail is mounted 1/4" below the deck to reduce the chance of damaging rail while loading or unloading.

10) **See Figure 9.** Drill a 1/2" hole though the rail, shim, rub rail, and stake pocket. Drill a second hole offset from the first. Countersink the holes, but only enough to make the bolt head set flush to 1/8" below the surface of the rail.

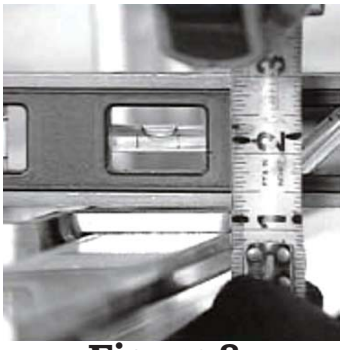

Figure 8

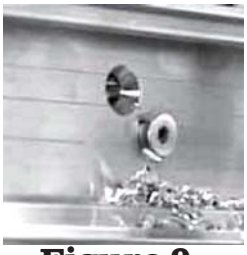

Figure 9

Note: Make sure both bolts are through the rub rail. If the bolts are above or below the rail, the Conestoga 2 rail will try to roll.

11) **See Figure 10.** Fasten the section of rail to the trailer with the 1/2-13 x 1 3/4" FHCS (3), 1/2 flat washers (5), and 1/2-13 nylon hex nuts (4). Use an impact wrench with a hex driver and a 3/4" combination wrench to tighten the fasteners. Make sure the cap screw heads are flush or slightly below the surface (no more than 1/8") of the aluminum rail as shown.

12) Move to the back of the section of rail and check that the rail is level with the trailer as described in Step 4. Drill and fasten the rail to the trailer as described in Step 5 and 6.

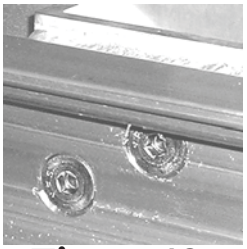

Figure 10

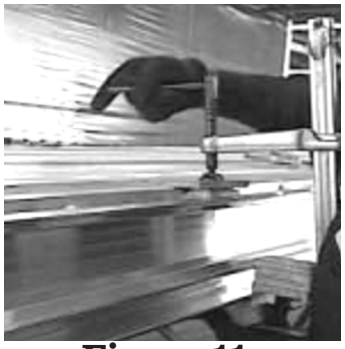

Figure 11

Note: See Figure 11. In cases of greater trailer camber, it may be necessary to force the rail extrusion to the desired height (1/4" down from the top of the trailer.) There are various was to accomplish this task. Use "C" clamps and 2 x 4's to pull the rail up or use a hydraulic jack under the rail to force it up. When the rail is into place at that location, drill and fasten the rail as described in previous steps. Proceed going towards the front until the first rail is installed.

Note: High trailer camber can make installation of the stainless steel inserts difficult. To ease installation, the inserts can be installed on the rail before mounting the rail to the trailer. See Steps 19 and 20.

13) After the front and back of the rail have been bolted to the trailer, move towards the front and repeat Step 4, 5, and 6 at approximately every 4' (every other stake pocket location). Install one bolt (not two) at each location and alter placement of the screws towards the top and bottom of the pockets.

Note: See Figure 12. Two bolts will be installed into each piece of rail at every splice location. If a stake pocket is not located at the rail splice, install an additional bolt through the rub rail for support as shown.

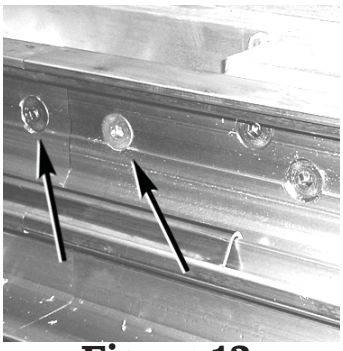

Figure 12

14) Clean out the rail with an air hose, blowing all debris off the rail.

15) See Figure 13. Oil the rail with WD-40 to prepare it for the rail insert SS (2). No oil is required if the insert was installed prior to the rail installation. Oil the rail insert SS (2). From the front of the trailer, slide a rail insert onto the receiver in the rail extrusion and push towards the rear. Oil the second rail insert and insert it directly behind the first and push it towards the rear until at least 3" extends beyond the rear of the rail.

Note: If it is necessary to force the stainless rail insert through the rail extrusion using a dead blow sledge hammer, use a block of wood or other material to cover the end of the rail as not to damage it. DO NOT trim the excess rail insert at this time.

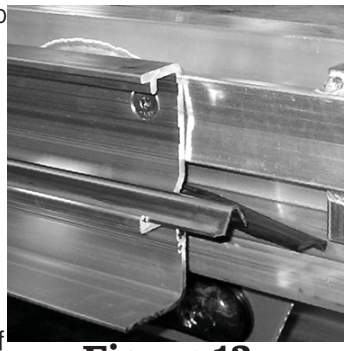

Figure 13

16) Repeat Step 1 - 10 on the other side of the trailer.

Note: Depending on the size of the installation crew, once the first sections of rail are installed, the bulkhead installation can begin.

17) Oil the insert groove on the second section(s) of rail and the rail inserts (2) extending 3" from the first sections of rail.

18) Use the rail insert (2) on the first sections of rail as a guide, and install the second section of rail onto the insert. Slide the second section of rail tight against the first and clamp the back of the rail to the trailer. If required, use a rubber mallet to tap the end of the second rail so that it aligns tightly with the first rail.

Figure 14

19) Use the spacer and level to set the 1/4" depth at the rear of the rail.

20) See Figure 14. Clamp the rail where the two ends meet. Install the second section(s) of rail as described in Step 10 - 15.

21) Push additional rail inserts (2) from the front of the trailer onto the rail, leaving the 3" of insert to extend beyond the second section of rail.

Note: Always stagger the seams of the rail and the rail insets (2). They should never be aligned. If needed, cut and insert a shorter section of the rail insert (2) so that the rail extends at least 3" past the rail.

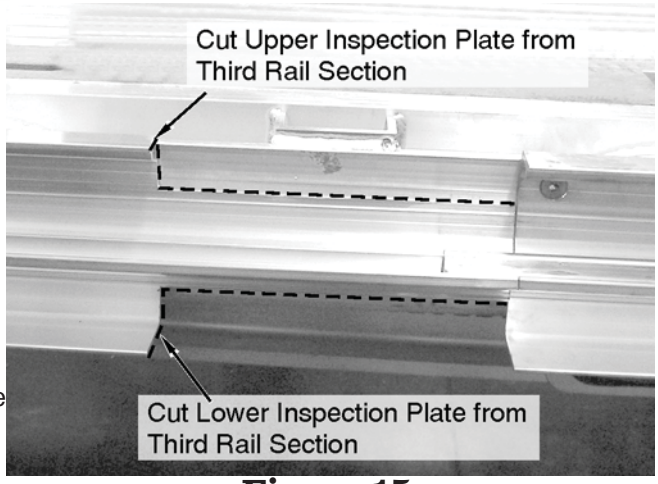

Figure 15

Notice: See Figure 15. Before preparing and installing the third rail* from the front, inspection access plates must be cut out. It is very important that this is done, as the inspection plates are required for additional installation steps and for access to the front cars in case inspection or replacement is needed. (*Depending on the length of the trailer).

Note: The inspection plates must be cut out before the rubber dust guard is inserted.

22) See Figure 15. To create the upper inspection plate, use a band saw to cut out a 12" x 2 1/2" section from the top front of the rail. To create the lower inspection plate, cut another 12" section up to the seal groove on the front of the rail. Retain the inspection plates cut from the rail and install the third section(s) of rail described in Step 10 - 15.

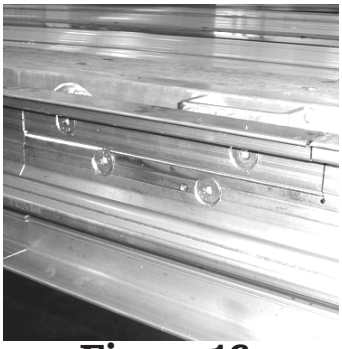

Figure 16

23) See Figure 16. Install the upper inspection plate onto the rub rail by drilling 1/2" holes into the plate and into the rail. Follow Step 11 to install the hardware. The inspection plates must be flush with the rail surfaces after installation. Add shims if needed.

24) See Figure 17. The back of the lower inspection plate is shown. Secure a rail inspection plate connector (10) to the back of the lower inspection plate using 1/4 x 3/8 rivets (13). Install the lower inspection plate to the rail using #10-24 x 3/4 pan head screws (11) and #10-24 hex nuts (12). To allow periodic installation and removal, screws must be used to attach the strap/inspection plate to the rails.

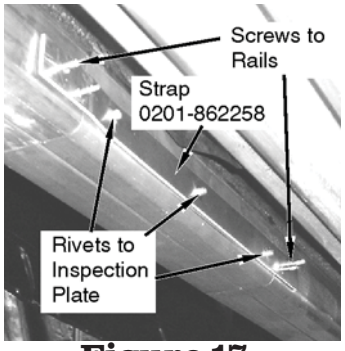

Figure 17

25) Prepare and install all remaining rail sections as described in above steps with the exception of the rear section. The rear rail will be cut to length, but must also be at least 38" in length and span two stake pockets. Make adjustments to the next to last section of rail to meet this requirement.

26) Measure the distance from the next to last rail to the rear of the trailer. Cut the last rail using this measurement. Insert the rubber dust guard (9) and cut the rubber even with the end of the rail.

Note: DO NOT include rubber bump rails or stake pockets in this measurement. A good rule of thumb is to use a whole length of rail extrusion whenever possible. Try not to have any rail sections shorter that 4 feet in length.

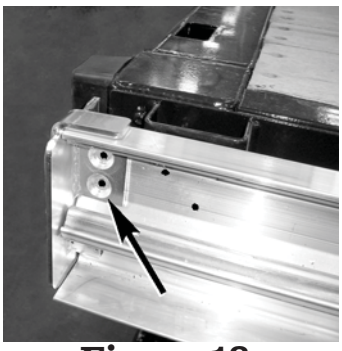

Figure 18

27) Prepare and install the last rail extrusion(s) as described in earlier steps, but do not drill the last set of holes at the back of the trailer.

28) See figure 18. Insert the rear rail stop (7 & 8) into the rear rail extrusion with the holes in the roll stop plate against the inside of the rail. Using the holes in the rail stop as a guide, mark the rail. Drill 1/2" holes through the rail, rub rail, shim and stake pocket.

Note: Mark the drill holes for the rear rail stop and the rail at the same time, this will ensure that the hole for the rail does not overlap the for the rail stop.

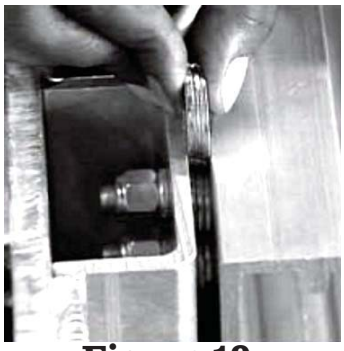

Figure 19

Note: See Figure 19. Washers may need to be installed on the inside of the rail to make up for the width of the rub rail. To do so, insert washers between the rail and the pocket.

29) See Figure 20. Measure back 1" from the end of the last piece of rail and place the upper rail support (6) on the upper portion of the rail. Mark the hole locations on the rail with a felt pen using the holes in the support as a guide. Drill Holes in the Rail using a "G" drill bit. Rivet the upper rail support (6) in place.

30) Oil the rail insert (2). Push the rail insert from the back until it lines the last rail. (Tap the rail into place if needed.)

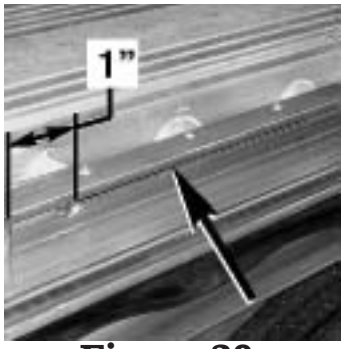

Figure 20

Note: The seams of the aluminum rail and the rail insert should never align. Always stagger the seams. If needed, cut and insert a shorter section of the rail insert so that the rail extends at least 3" past the seam. This will help keep the rail and rail insert aligned, plus it will give the wheels on the car a smooth surface on which to ride.

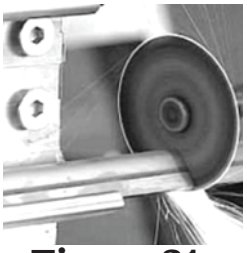

Figure 21

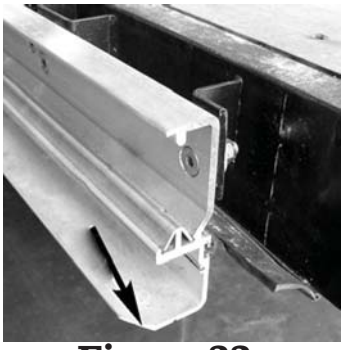

Figure 22

31) See Figure 21. Mark the length of the rail insert (2) so that it is flush with the end of the last rail and cut to length.

32) See Figure 22. Cut a 3/4" chamfer in the bottom corner of the front rails as shown. This clearance is needed for installation of the bulkhead.

3**3) See Figure 23.** Loosely install the rear rail stops using the 1/2-13 x 1 3/4" FHCS (3), 1/2 flat washer (5), and 1/2-13 nylon hex nut (4). Make sure the cap screws are flush or slightly below the surface of the steel plate. The rail stops do no need to be securely tightened at this time; the installation of other Conestoga Express components requires the stops to be removed.

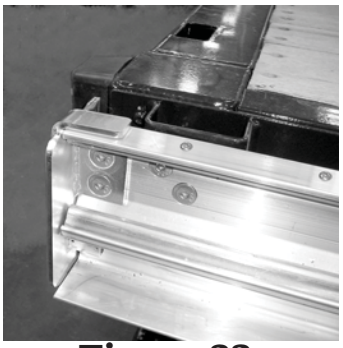

Figure 23

STEP 2

Install the Bow Assembly

Index	Description	Qty
1	**Pre assembled Bow Unit**	1

1) Make sure the side rails are properly installed, clean and free from debris.

2) Remove the bow stops at the rear of the rails and set them a side.

3) See Figure 24. Orient the bow assembly with the trailer so the covered bow (font bow) is toward the front of the trailer an the partially covered bow (rear bow) is toward the rear of the trailer. Figure 24 shows a typical fork lift extension fixture.

4) Use a fork lift with extensions and raise the pre assembled bow unit.

5) Slide the front bow, intermediate bows and rear bow off the fork lift extensions and onto the side rails.

6) See Figure 25. Use the car locks to keep the assembly from rolling off of the trailer. The locks are located under the tarp material, on each side of the front and rear bows.

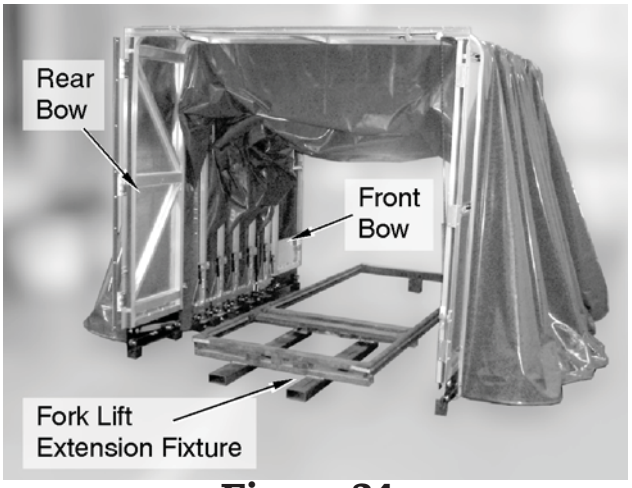

Figure 24

Figure 25

STEP 3

Install the Uplift Bow Supports

Index	Description	Qty	Index	Description	Qty
1	Primary Uplift Box	10	6	1 1/8" Split Ring	40
2	Secondary Uplift Bow	10	7	Compression Spring	40
3	Uplift Connector	40			
4	5/16 x 1 7/8" Clevis Pin	40			
5	3/4 O.D. X .313 I.D. Flat Washer	40			

Install the Uplift Bow Supports

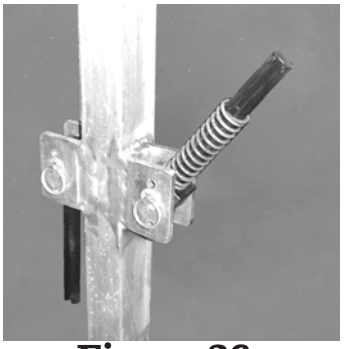

Figure 26

Note: Primary uplift bows use the lower brackets on the intermediate bow assemblies. The optional secondary uplift bows use the upper brackets.

1) See Figure 26. Install a uplift connector (3) to each lower bracket on each intermediate bow with a 5/16 x 1 7/8" clevis pin, (4)3/4 O.D. X .313 I.D. flat washer (5), and 1 1/8" split ring (6). Install the clevis pin so the split ring is toward the inside of the trailer. The bracket for the uplift support is configured with upper, middle, and lower mounting holes. Any of the three positions can be used; However, use the same position on all bows.

2) See Figure 26. Install a spring on each uplift support.

3) If installing the secondary uplift bows, repeat steps 1 and 2 on each upper bracket of each intermediate bow.

Install the Uplift Bow Supports

4) See Figure 27. Install an uplift bow onto each pair of supports.

5) See Figure 28. Swing each uplift bow up toward the tarp and buckle in place with straps on the tarp. Trim or secure the remaining strapping to keep it out of the way.

6) Repeat the steps 4 and 5 for each of the remaining uplift bows.

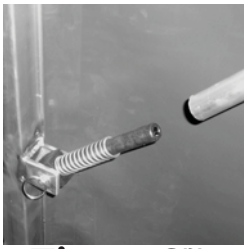

Figure 27

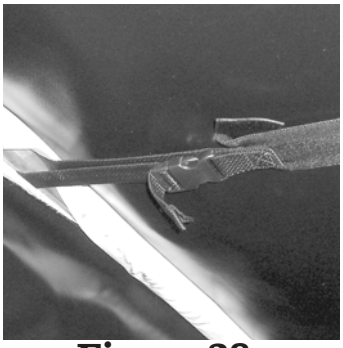

Figure 28

STEP 4

Install the Bulkhead

Index	Description	Qty	Index	Description	Qty
1	Bulkhead	1	7	3/4-10 x 4 1/2 Hex Bolt	2
2	1/4-20 x 1 1/4 Hex Bolt	2	8	3/4 Flat Washer	4
3	1/4-20 Nylon Hex Nut	2	9	3/4 Lock Washer	2
4	1/2-13 x 1 1/2 Hex Head Bolt	6	10	3/4-10 Hex Nut	2
5	1/2-13 Nylon Hex Nut	6	11	Sikaflex 221 Gray Sealant	2
6	1/2 Flat Washer	12	12	D-Foam	30'

Figure 29

Figure 30

1) See Figure 29. Use a hoist to raise the bulkhead (1) over the front of the trailer.

2) See Figure 30. Slowly lower the bulkhead (1) into position. Align the front of the bulkhead flush with the front of the trailer. The legs on the sides of the bulkhead panel will help with side-to-side alignment. The bulkhead should fit as shown.

3) See Figure 31. With the bulkhead properly aligned, drill four holes through the bottom plate of the bulkhead; make the holes in the first and third pockets from each side of the trailer. Use compressed air to blow drill shavings off the trailer and side rails.

Figure 31

4) See Figure 32. Install a 1/2 flat washer (6) onto 1/2-13 x 1 1/2 hex bolt (4) and insert through the four bulkhead holes and into the trailer. Install 1/2 flat washer (6) and 1/2-13 nylon hex nut (5) on each of the bolts and loosely tighten the nuts. Two people are needed to bolt the bulkhead to the trailer; one on the top deck and the other under the trailer.

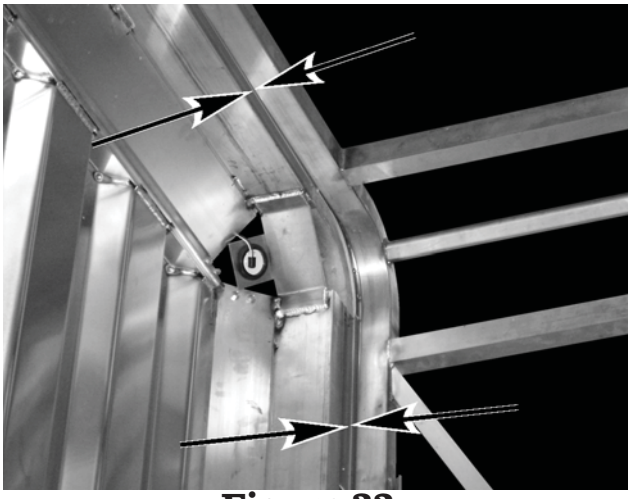

Figure 32

5) Slide the front bow assembly toward the bulkhead and check the alignment between the bulkhead and front bow assembly. The bulkhead should align closely and evenly around the top and sides of the front bow assembly.

6) Slide washers or shim stock under the edges of the bulkhead as needed to bring it into alignment. Tighten the four bulkhead nuts on the underside of the trailer.

7) See figure 33. Locate and mark the bulkhead legs for a hole 4" from the bottom of the bulkhead legs and centered between the two lines inscribed on the legs. Drill a 3/4" hole through the legs and into the trailer. Use compressed air to blow drill shavings off the side rails.

8) See figure 34. Install a 3/4 flat washer (8) onto a 3/4-10 x 4 1/2 hex bolt (7) and insert it into the bulkhead and trailer. Install a washer and nut onto the bolt and tighten.

9) Repeat steps 8 and 9 on the other side of the trailer.

10) Recheck the alignment between the bulkhead and front bow assembly as described in step 5. Make adjustments as needed to ensure a proper fit.

11) See figure 35. Apply sikaflex 221 gray sealant (11) around the bottom- front of the bulkhead where it contacts the trailer floor.

Install D-Foam on Front Bow

12) See figure 36. Install the D foam (12) to the front bow where the bow contacts the bulkhead. Start and stop the gasket flush with the top of the car assembly.

Install D-Foam on Bulkhead

13) See figure 37. Install the D foam (12) on the front edge of the flat on the side of the bulkhead. The length should be the same as the lock assembly.

14) Repeat step 13 on the other side of the trailer.

Figure 33

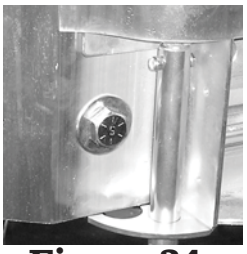

Figure 34

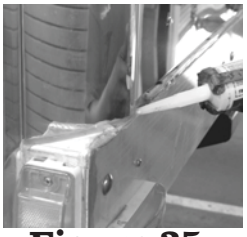

Figure 35

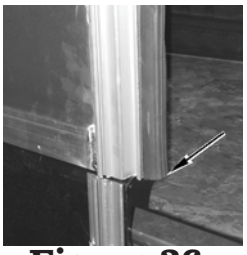

Figure 36

Figure 37

STEP 5

Install Front Lock Handle and Cane Bolt Assembly

Index	Description	Qty	Index	Description	Qty
1	Front Lock Handle	2	5	Cane Bolt	2
2	1/4-20 x .5 Set Screw	2	6	.845 O.D. X 3" Spring	2
3	Cane Bolt Mounting Bracket	4	7	1/4 x 1 1/2 Spring Pin	4
4	#14 x 1 Pan Head Phillips	8			

Front Lock Handle

1) See Figure 38. Place the front lock handle (1) into the block at bottom of bulkhead lock assembly and secure using 1/4-20 x .5 set screw (2).

2) Drill a 1/4" hole thru the top side of the block and thru the front lock handle (1) and secure with 1/4 x 1 1/2 spring pin (7).

3) Repeat for opposite side of trailer.

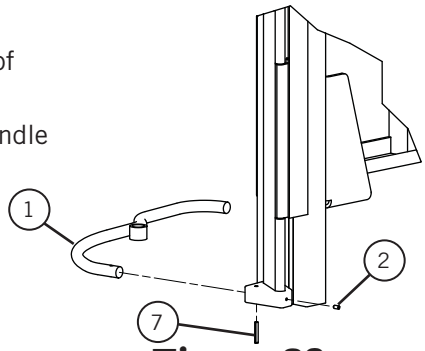

Figure 38

Cane Bolt Assembly

Note: Make sure to choose a location that the spring will fit between the two mounting brackets.

1) See Figure 39 & 40. Locate the lower cane bolt mounting bracket (3) so that the bend comes out over top of the front lock handle and the hole is in line with tube. The bracket can be mounted with it facing up or down. Secure bracket with #14 x 1 pan head phillips screws (4).

2) See Figure 39 & 40. Determine how the upper cane bolt mounting bracket (3) is to be mounted (up or down). Slide the cane bolt mounting bracket (3) onto the cane bolt (5), in the correct orientation, then slide the .845 O.D. X 3" spring (6) and insert the 1/4 x 1 1/2 spring pin (7) into the cane bolt to secure the spring.

3) Locate and secure the assembled cane bolt with #14 x 1 pan head phillips screws (4).

4) Repeat for opposite side of trailer.

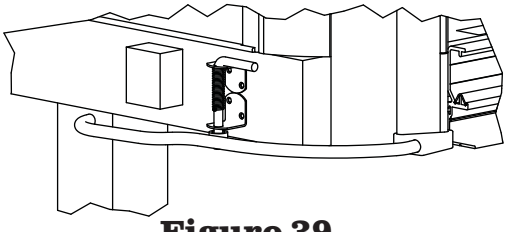

Figure 39

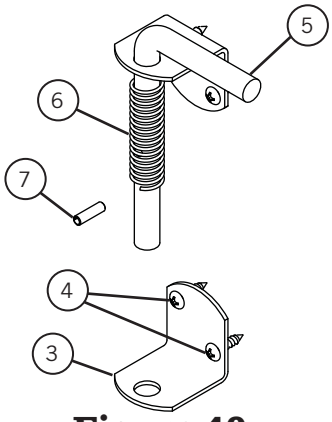

Figure 40

STEP 7

Install the Rear Locking Shoes and Rear Rail Stop

Index	Description	Qty	Index	Description	Qty
1	Rear Rack - Lock	2	3	1/4-20 x 1 1/2 Hex Head Tap Bolt	2
2	Stop Shim	2	4	1/4-20 Hex Jam Nut	2

Rear Locking Shoe

1) See Figure 41. Determine rack placement by first locking the front bow to the bulkhead and stretching the cover to the rear of the trailer. Use jacks to force the rear bow back to stretch the tarps tight. DO NOT use the I-bow make sure the bottom of the jack is against the trailer. Do this for both sides of the rear bow.

2) See Figure 42. Place the rear rack - lock (1) on the side rail with opening of the notches facing the rear. With the lock assembly in the locked position and in the forward most notch in the rear rack-lock mark it's location. Repeat on the other rail.

Note: From the back of the last side rail to the back of the car on the rear bow should be between 4" and 5" with 4 1/2" being ideal. If measurement is less than 3 1/2" or more than 7" contact Aero customer service.

3) Release both jacks and roll the rear bow forward to get it out of the way. Place the rack on the rail where marked and make sure it is equally spaced from the sides of the rail, weld all around edges of the rear rack - lock (1) to the rail. Repeat step 3 on the other rail.

5) Clean the welded area with a wire brush on other rail.

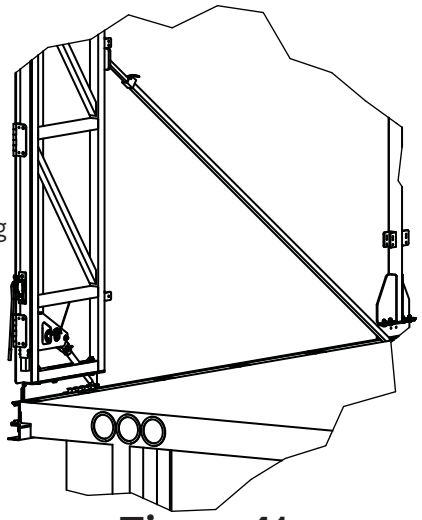

Figure 41

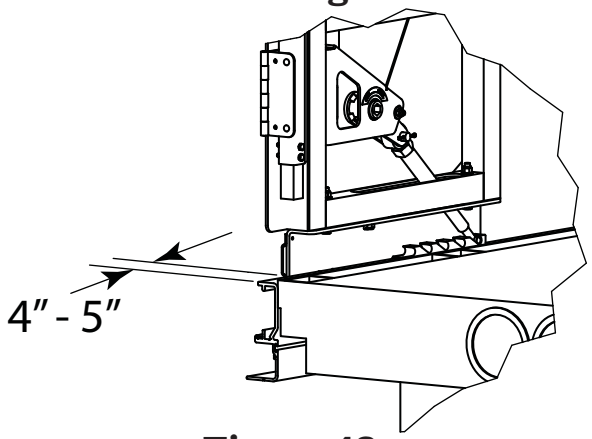

Figure 42

Rear Rail Stop

7) See figure 43. The rear rail stops were removed in step 2. Re-install them with the 1/2-13 x 1 3/4 FHCS with 1/2 flat washer and 1/2-13 nylon hex nut and tighten making sure the flat head cap screws are flush or slightly below the surface.

8) See figure 44. Install the stop shim (2), 1/4-20 x 1 1/2 hex head tap bolt (3), and 1/4-20 hex jam nut (4) onto the rear rail stop. Thread the bolt through the mounting lug until the stop shim (2) is pressed firmly against the underside of the middle track. Tighten the jam nut against the lug to prevent the bolt from backing out.

9) Repeat steps 7 and 8 on the other side of the trailer.

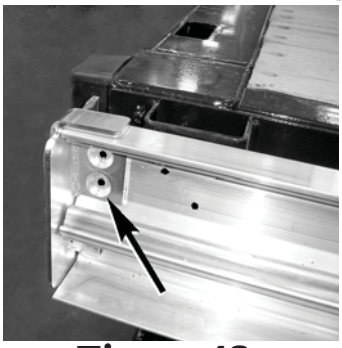

Figure 43

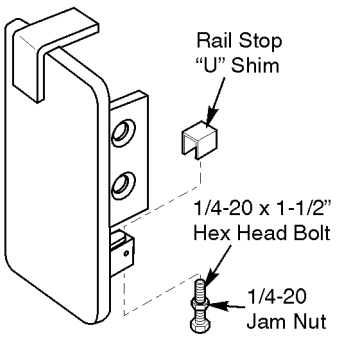

Figure 44

STEP 8

Install the Rear Curtain

Index	Description	Qty
1	Rear Curtain Assembly	1

Draw Curtain

1) See Figure 45. Remove the rear curtain cover plate with a 7/16" wrench.

2) Oil the groove in the aluminum track with liquid dish soap before installing curtain.

3) Assistance is required to install the curtain. One person inserts the bead of the curtain into the groove and feeds the rest of the curtain while another person pulls the curtain into place. Make sure that the curtain is centered in the rear bow.

4) See Figure 45. The black tracer rope with the red tracer can be untied from the "j" hooks. The curtain will be pulled through the ropes, with the footman loop rope inside the trailer. The other vertical and horizontal lines will be on the outside.

5) Replace the rear curtain cover plate.

6) See figure 46. Draw the curtain and tie it in the up position.

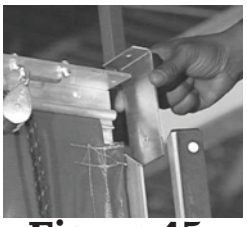

Figure 45

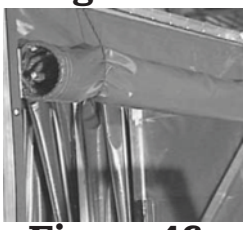

Figure 46

Roll Curtain

1) Oil the groove in the aluminum track with a low viscosity oil such as maiden oil before installing curtain.

2) See Figure 47. Assistance is required to install the curtain. On person inserts the bead of the curtain into the groove and feeds the rest of the curtain while another person pulls the curtain into place. Make sure that the curtain is centered in the rear bow. Allow the curtain to drop after it is installed in the entire track.

3) See Figure 48. Measure 2" from the end of the curtain. Drill a hole and secure with a rivet.

4) Assemble the roll up bar and roll the curtain on top of the rear bow.

Figure 47

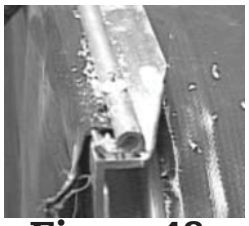

Figure 48

STEP 9

Adjust Panels

Inspect Panel fit and Appearance

For best performance, the Conestoga Express panels must be flat and tight when the system is covering a load. Ripples or slack in the panels can be removed using the following methods:

- Tightening the Uplift Bow Straps
- Tightening the Rear Bow Lock
- Individual Panel Adjustment

Most ripples and slack can be removed from the panels by tensioning the rear bow locks evenly and tightly. If the panels seem to sag at the top, tighten the straps that hold the uplift bows in place. Remaining gaps or looseness can usually be corrected by the rear bow adjustment screws. If the panels are still not flat and tight, individual panel adjustment is necessary. Refer to"Individual Panel Adjustment".

Individual Panel Adjustment

If proper panel fit and appearance can mot be achieved with the rear bow lock or tightening the re==uplift bow straps, adjustment of individual panels is required.

1) Remove the bottom inspection plate to allow access to the "J" brackets, where the panel set screws are located.

2) Loosen the square-head set screws of the panel to be adjusted. Loosen the set screws so they are only installed by one or two threads.

3) Lubricate the grooves holding the tarp panels with liquid dish soap.

4) Use vise grip pliers with jaws that will not damage the tarp to pull the panel into position. A ratcheting hold down strap ma be needed to apply adequate force.

5) When the panel is flat and tight, tighten the set screws.

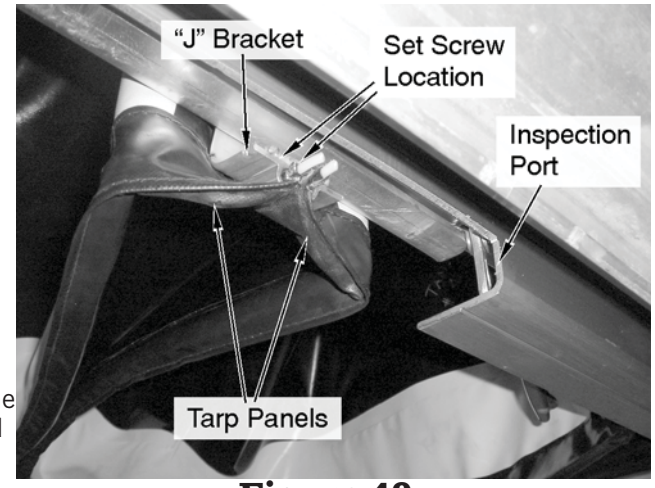

Figure 49

6) After adjustments are complete, install the bottom inspection plate.

STEP 10

Install Front Pull Handle

Index	Description	Qty
1	Handle Pull Assembly	2
2	3/16 x 7/8" Rivet	8

1)See Figure 50 & 51. With the Conestoga Express in the closed position, locate the cut out for the front pull handle on the front bow and cut 'X' in the tarp inside the cut out and fold to the inside.

2) See Figure 52. Insert the handle pull assembly (1) in the cut out and secure with 3/16 x 7/8" rivet (2). You may need to poke holes in the tarp at the hole locations.

3) Repeat for opposite side of trailer.

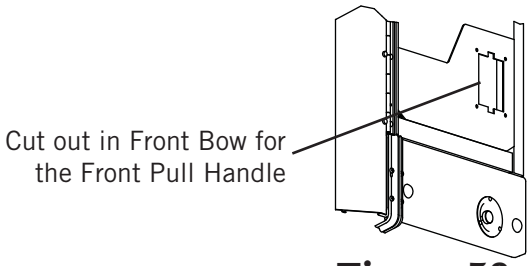

Figure 50

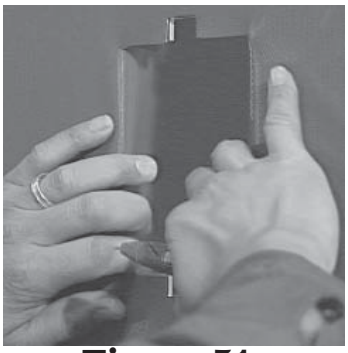

Figure 51

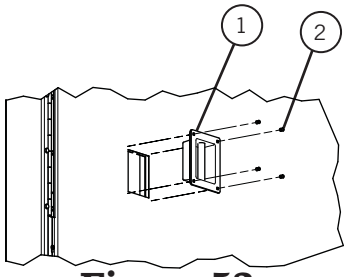

Figure 52

STEP 11

Install Retaining Washer

Index	Description	Qty
1	Washer, Large Retaining	2
2	3/16 x 7/8" Rivet	6

1)See Figure 53. Using your finger from one hand, press to find the lock shaft. Keeping your finger on that point, using a utility knife, cut a hole in the tarp to access the lock shaft.

2) Center the retaining ring for the shaft on the outside with the installation holes at 3, 6, and 9 o'clock.

3) See Figure 54. Drill a #11(.191") hole thru the holes in the large retaining washer (1).

4) See Figure 54. Secure the large retaining washer (1) with 3/16 x 7/8" rivets (2).

5) Repeat for other side of trailer.

Figure 53

Figure 54

STEP 12

Install Hex Drive on Tether

Index	Description	Qty
1	Winch Handle Adapter	2
2	Cable Box Door 18"	2
3	3/16 x 7/8" Rivet	4

1)See Figure 55 & 56. On the rear bow locate and mark a point on the rear most tube and aligned horizontally with the rear lock shaft. Drill #11 hole thru one wall.

2) See Figure 56. Rivet the winch handle adapter (1) to the cable box door 18" (2) with 3/16 x 7/8" rivet (3).

3) Rivet cable box door 18" (2) to the rear bow in the hole drilled in the first step using 3/16 x 7/8" rivet (3).

3) Repeat for the opposite side of the rear bow.

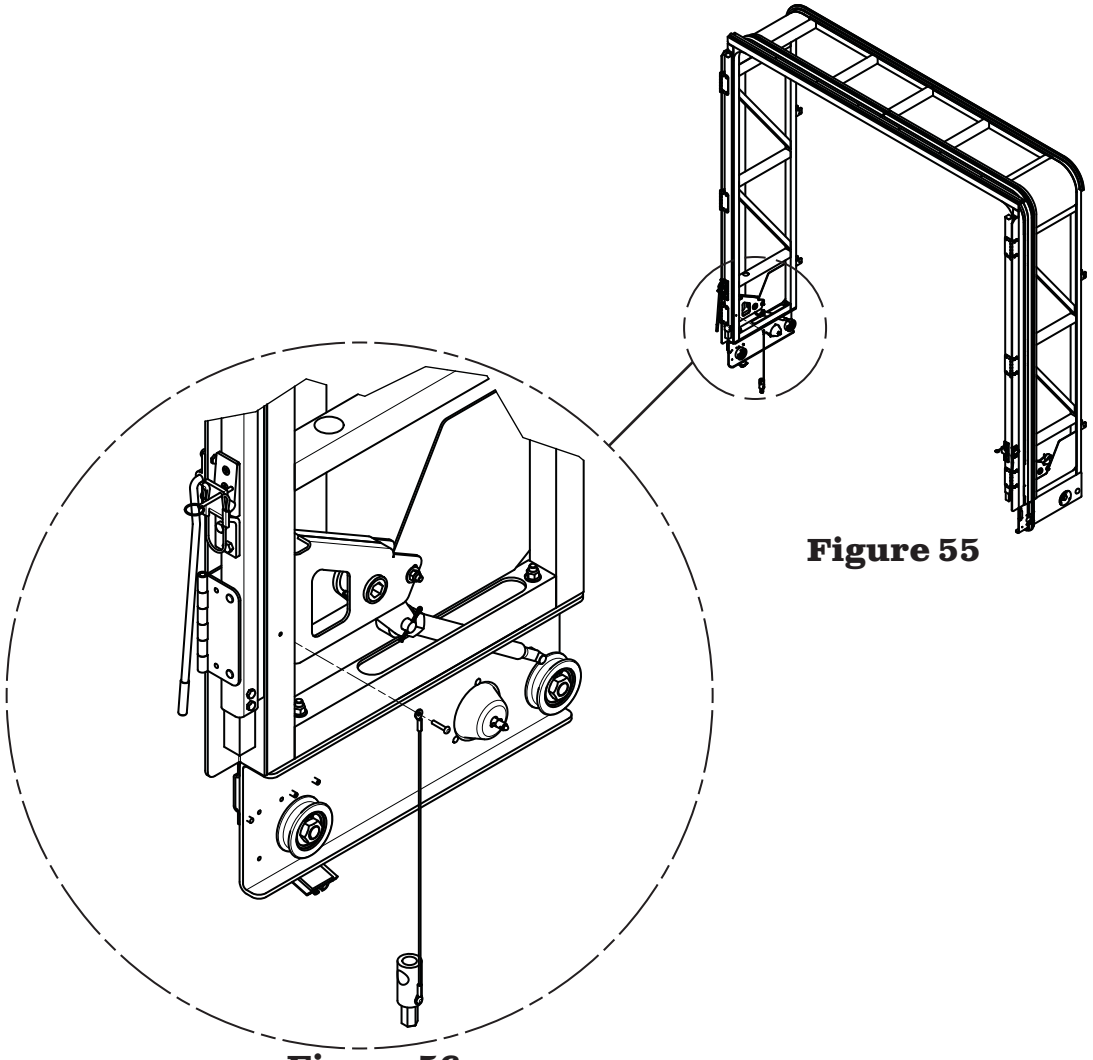

Figure 55

Figure 56

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