

# Platform Manual

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24" 11X7



## **LAMBTON CONVEYOR LIMITED**

102 Arnold Street  
Wallaceburg, ON N8A 3P4  
Canada



**ONE SOURCE • ONE SOLUTION**

Telephone: (519) 627-8228  
Toll free: (888) 239-9713 (North America)  
Fax: (519) 627-0250  
[www.lambtonconveyor.com](http://www.lambtonconveyor.com)

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## **Platform Placement**

Lambton Conveyor platforms have been specifically designed for placement on certain areas of the bucket elevator. Below is a list of the different types of platforms, their uses, and recommended placement. Any other use or placement aside from the ones mentioned below could result in serious injury or death.

### **Rest Platform**

The Lambton Conveyor rest platform is intended to be used as a safety platform while climbing the elevator to prevent serious injury in the case of a fall. It is to be located every 20' for federal applications, or every 30' as a provincial standard. When standing a bucket elevator in two or more sections the rest platform should be mounted in an adequate position to allow for trunking to be connected (just below the joint).

### **Work Platform**

The Lambton Conveyor work platform is intended to be mounted approximately 6' below the elevator distributor to the trunking and should be used for servicing the distributor and installing down spouts only. Due to various layouts it may be necessary to mount the platform lower in order to miss the distributor valves or spouting.

### **Head Service Platform**

The Lambton Conveyor head service platform is intended to be mounted directly to the elevator head or just below the head with smaller elevators in order to service and repair problems with the head itself or drive assembly. The service platform is not intended to be used anywhere else on the elevator.

**It is the owners'/operators' responsibility to ensure all unauthorized personnel are kept clear of these assemblies and that all workers/operators are aware of the necessary safety precautions.**





# **Owners Installation Manual**

**24" 11X7 Standard Rest Platform**

**Parts List**

<b>Part Name</b>	<b>#</b>	<b>Part#</b>	<b>Description</b>	<b>Length</b>	<b>Quantity</b>
Primary Support Channel	1	urest117.000	C-Channel	50 ½"	3
Secondary Support Channel	2	urest117.001	C-Channel	60 ½"	2
Kick Braces	3	urest117.007	Angle	59"	2
Door Support	4	urest117.013	Angle	24"	2
Door Stiffener	5	urest117.010	Angle	23"	2
Hinge Stiffener	6	urest117.011	Angle	26 ½"	2
Floor Stiffener	7		Angle	Not needed	Ø
Door Toe Boards - short	8B	urest117.012	Angle	7 ¾"	2
Door Toe Board - long	8A	urest117.012	Angle	31"	1
Long Toe Board	9	urest117.002	Angle	67 ½"	2
Short Toe Board	10	urest117.003	Angle	42 ½"	2
Rail Post	11	urest117.009	Angle	42"	4
Long Handrails	12	urest117.004	Angle	66¾"	4
Short Handrails	13	urest117.006	Angle	42"	4
Floor Panel with Door	14	urest117.008	Flat Sheet	41 ¾" x 48 ¾"	1
Small Panel	15	urest117.005	Flat Sheet	41 7/8" x 17 ¾"	1
Door Handle	H	NA	NA	NA	1
5/16" x ¾" hex bolts	<b>All bolts used are Grade 8 strength ONLY Torque to 120 ft. lbs. minimum.</b>				60
5/16" x ¾" truss slot (button head) bolts					70
5/16" hex nut					130
Hinge kit					1

**NOTE:** Use truss slot bolts for all floor panel connections.

This platform includes two half “Flared ( Starter ) cage hoops” which are meant to start the safety cage continuing up the leg.

### **Step #1**

Start by mounting the (3) primary support channels to the trunk using the existing  $\frac{5}{16}$ " x  $\frac{3}{4}$ " bolts in the trunk hemlock. (2) are mounted at the same height and the 3<sup>rd</sup> is mounted (4) sets of holes lower, on the same side the ladder is mounted on.



**Primary Support Channel  
(1)**

### Step #2

The (2) secondary support channels can now be mounted on top of the primary channels. The kick braces can also be added at this stage. They bolt from the ends of the secondary support channels to the top lip of the lower primary support channel using  $\frac{5}{16}$  X  $\frac{3}{4}$ " bolts as shown below. \*NOTE\* the ends of the kick braces will need to be bent approximately 45° to fit properly.

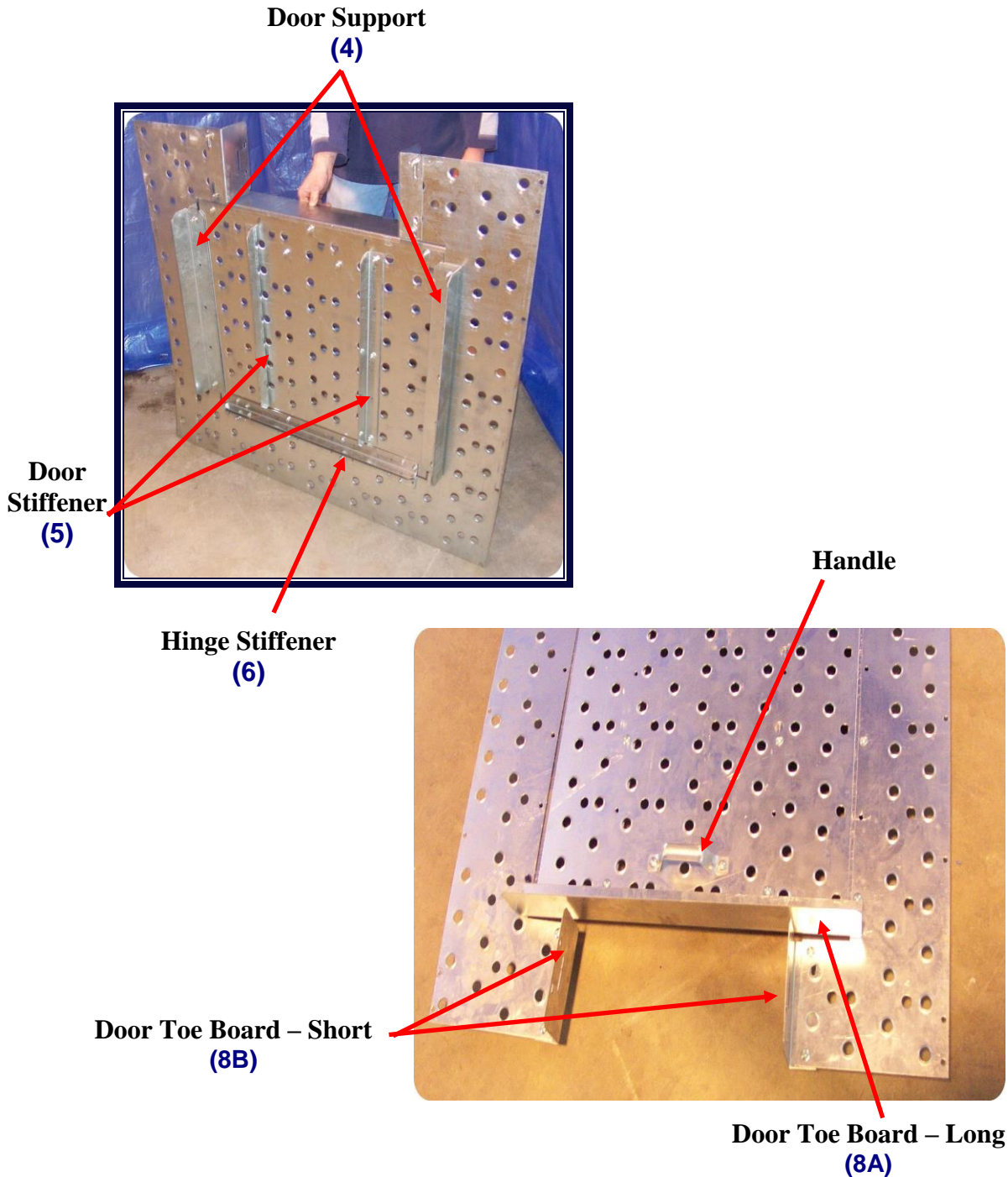


**Secondary Support  
Channel  
(2)**

**Kick Braces  
(3)**

### Step #3

Now locate the door panel and the floor panel. The door panel needs (2) hinge stiffener angles, (4) hinges, (2) door support angles, (2) door stiffener angles, and the (3) door toe board angles bolted as shown below. All pieces will be bolted together by  $\frac{5}{16}$  X  $\frac{3}{4}$  bolts, except for the hinges and hinge stiffeners, which will use  $\frac{1}{4}$  X 1 bolts. \*NOTE\* The (4) hinges, (1) 31" toe board and handle bolt on the top side of the panel. All other parts bolt on the underside.



#### **Step #4**

The (4) remaining toe boards and the floor panels can now be bolted to the secondary support channels. The toe



boards go under the floor panels. **\*NOTE\*** the offset can go to the left side or to the right side of the trunking. Our pictures show offset to the right.

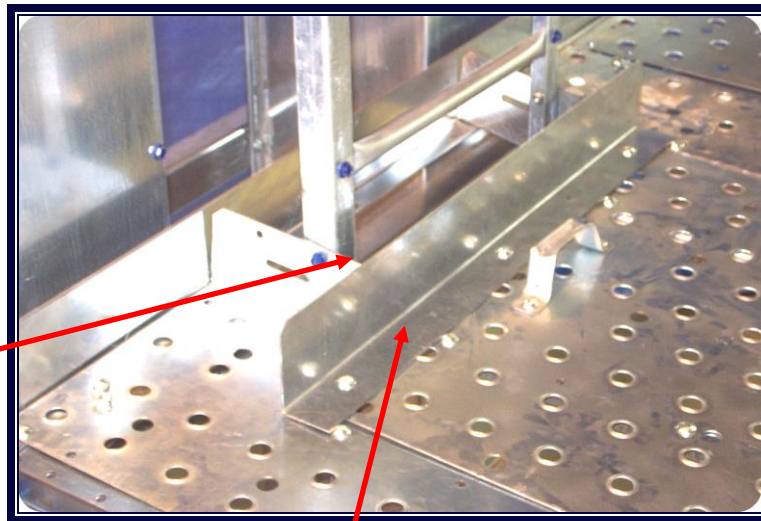


**Short toe board  
(10)**

**Long toe board  
(9)**

### **Step #5**

With the door panel and toe boards in place, the ladder will need to be drilled and bolted to the short toe board on each side of the door, using  $\frac{5}{16}$  X  $\frac{3}{4}$ " bolts.

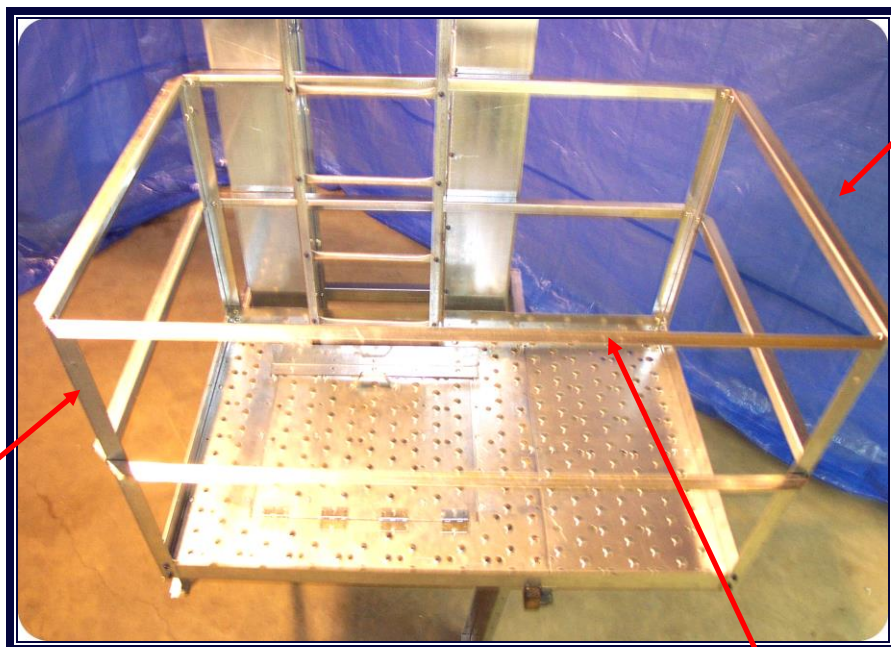


**Drill & Bolt  
(each side)**

This toe board gets bolted to the topside of the door panel.  
(All other toe boards are bolted beneath the floor panels)

### **Step #6**

The final step is to attach the (4) rail posts and handrails as shown.



**Rail post  
(11)**

**Short Handrail  
(13)**

**Long Handrail  
(12)**



# **Owners Installation Manual**

## **24" 11X7 Small Work Platform**

**NOTE:**

The two kick braces will bolt to the floor supports from step 8. Bolt the braces so that they angle in toward the trunking, thus supporting the large floor panel. The other end of the braces will bolt to the trunking by removing and re-bolting at the hemlock.

Use truss slot bolts for all floor panel connections.

### **Step# 1**

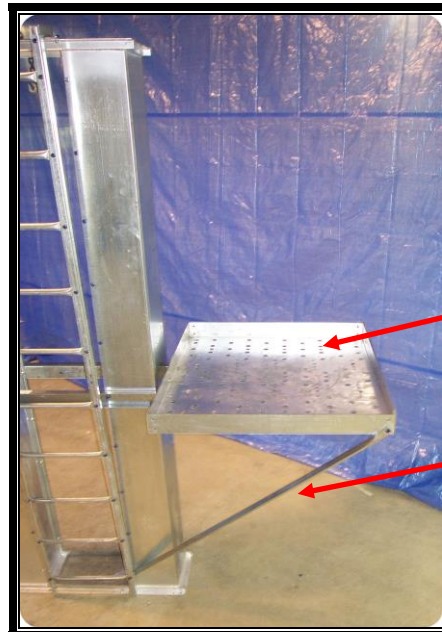
To assemble your small work platform start by mounting the 2 primary support channels to the trunk using the existing trunk hemlock bolts. Keep in mind that the top of the primary support channels should be approximately 6' below the distributor or valve. This distance allows ample room so that the handrails do not interfere with the downspouts.



**Primary Support Channels**

### **Step# 2**

Now place the floor panel on top of the primary support channels and bolt using the  $\frac{5}{16}$ " x  $\frac{3}{4}$ " button head bolts. The 2 -1  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " kick brace angles can also be attached now. The kick brace angles bolt from the front corners of the floor panel and extend down to the existing bolts in the trunk hemlock. The ends of the brace angles will need to be bent slightly to allow the braces to bolt flat.



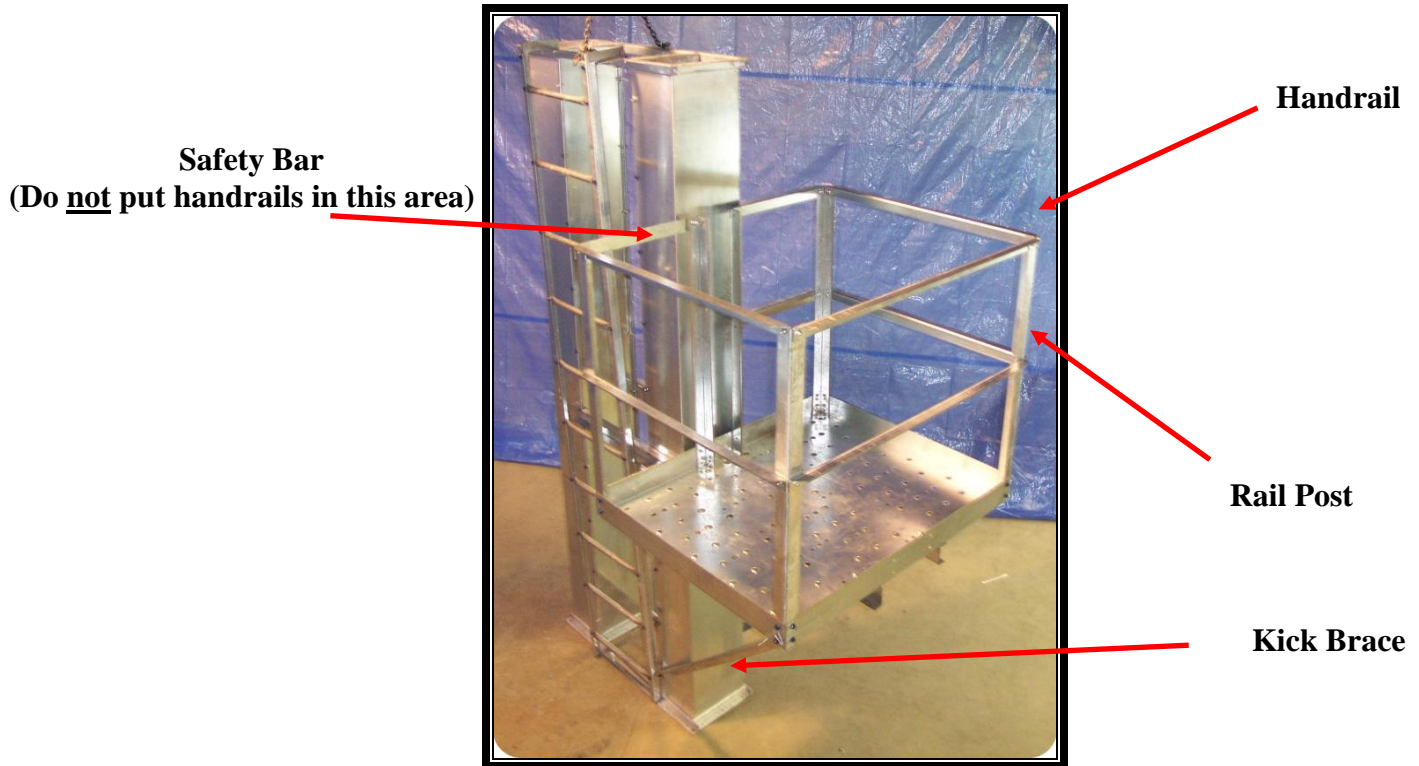
**Floor Panel**

**Kick Brace**

### **Step #3**

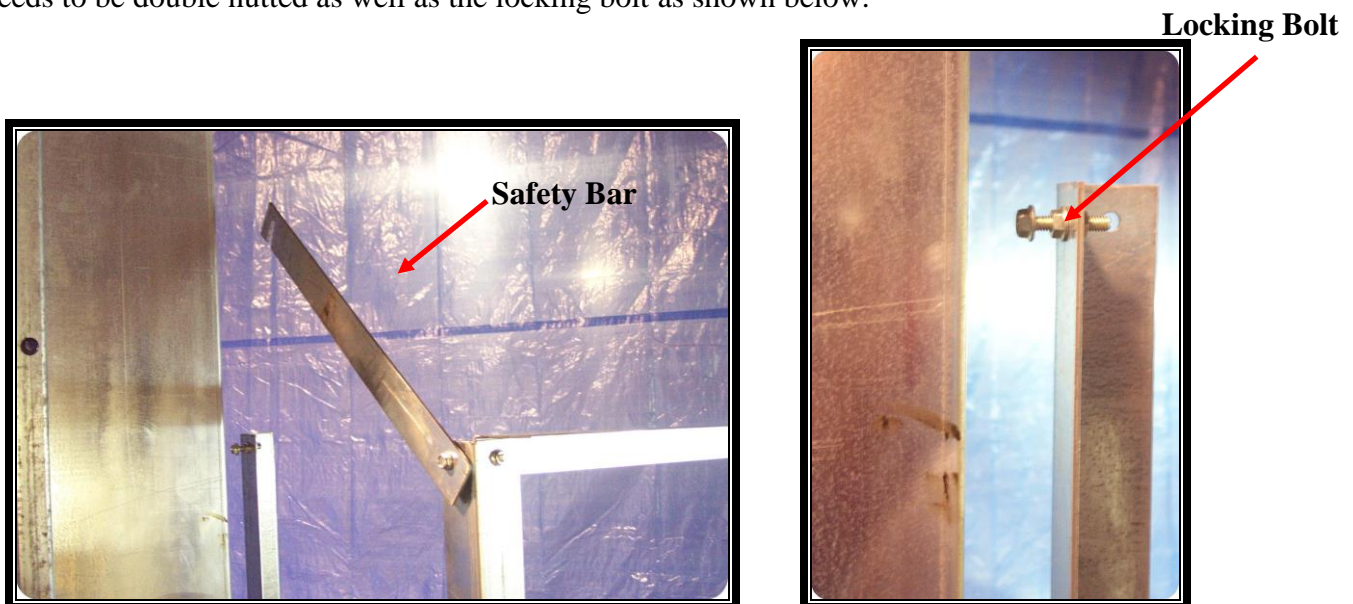
Now attach the 6 2"x 2" rail posts to the floor panel. 1 rail post goes in each corner. The remaining 2 go along the back side of the platform near the center. The 1  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " handrail angles can also be

added using  $\frac{5}{16}$  x  $\frac{3}{4}$ " hex head bolts. Do not put handrails on the rear-ladder side of the platform.



#### **Step #4**

Finally, on the rear ladder side of the platform attach the flat safety bar. This allows access onto and off the platform. The safety bar needs to be able to pivot. To accomplish this, the  $\frac{5}{16}$ " x  $1\frac{1}{4}$ " pivot bolt needs to be double nutted as well as the locking bolt as shown below.



Your platform is now complete and should resemble the picture below.



To access the platform from the leg ladder you must step out of the safety cage and across to the platform. You may want to remove or modify 1 or 2 of the vertical cage straps in this area to make access easier. For safety reasons we do **not** recommend removing all the safety cage in this area.



# **Owners Installation Manual**

## **24" 11x7 Large Work Platform**

**Please read through all directions carefully before beginning the assembly of the platform.**

The platform is designed to be built on either side of the trunk (depending on where the ladder is). Due to this, the pictures enclosed may not be an exact representation of your specific application.

The work area platform should be assembled on the distributor side of trunk approximately 6' below the distributor.

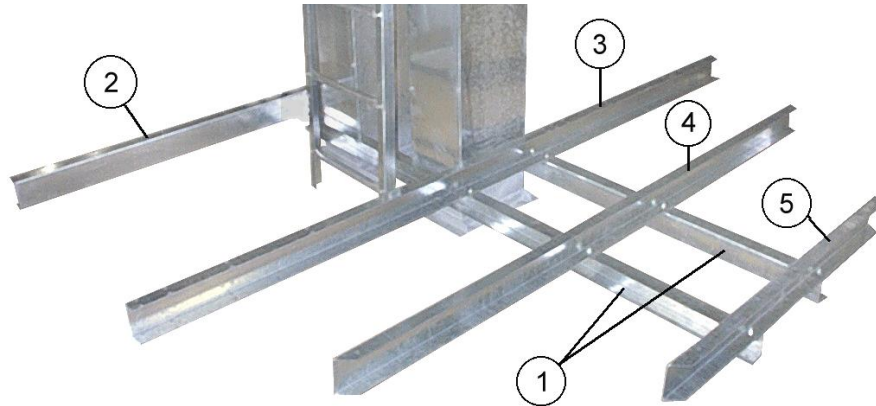
**1)** Bolt two 90 ½ " main support C-channels **(1)** to outside of trunking. This will require removal of two hem locking bolts on each side and then re-bolting them. Bolt to these primary C-channels, the 60 ¾ " back secondary support C-channel **(2)**, the 104" rear secondary support C-channel, the 83 7/8 middle secondary support C-channel, and



the 43 3/8 front secondary support C-channel.

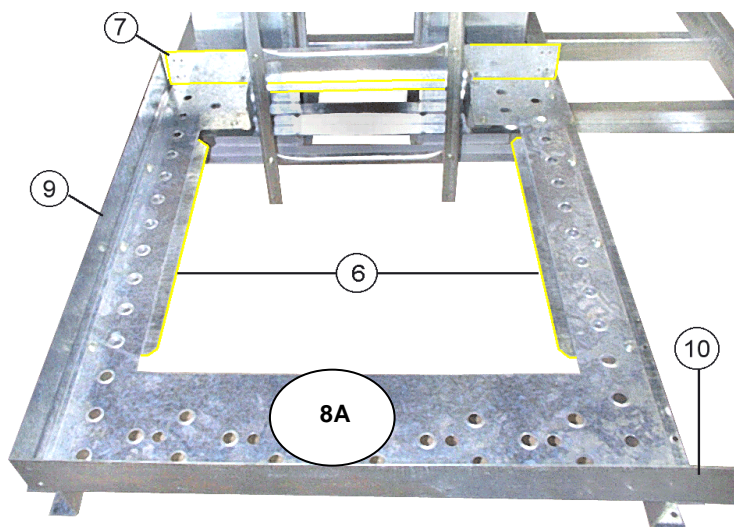
**Figure 1**

**2)** Position the 49" rear ladder toe board **(7)** behind the ladder. Position the 48 3/4 x 41 7/8 **(8)** floor panel/door frame. Position the 42 1/4 door-side toe board **(9)** and the 58 door-



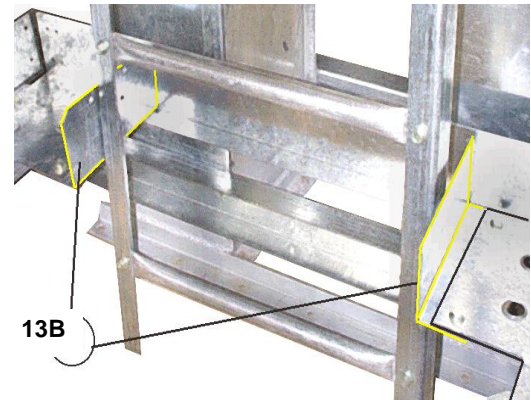
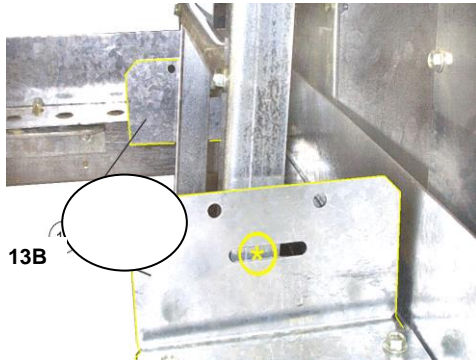
front toe board **(10)**. Orientate the toe boards so that they are on top of the C-channels, but under the floor. Bolt down the floor panel/door frame (leave holes by ladder in rear ladder toe board, empty for next step). To the underside of the floor/door frame, bolt on the 24 1/4 floor/door support angles **(6)**.

**Figure 2**



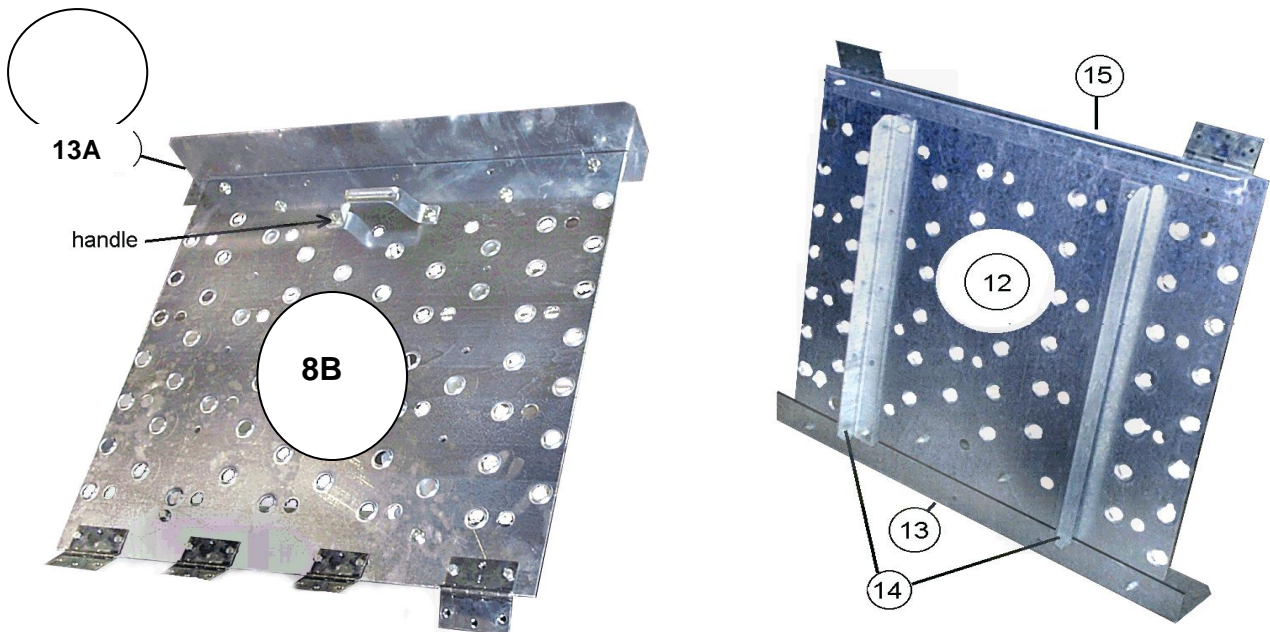
**3)** Position the two 49" ladder toe boards **(11)** under the floor panel but on top of the rear ladder toe board. Bolt through the ladder toe board into the ladder channel upright **(\*)** (this may require drilling a hole in the ladder channel). Bolt the ladder toe board to

the floor.



**Figure 3**

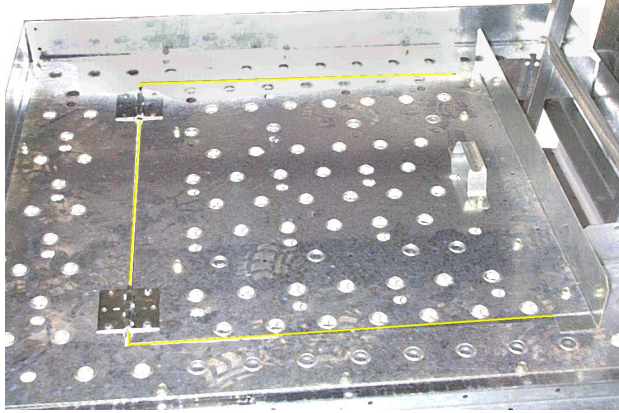
**4) Assemble the 28 ½ x 26 ¾ floor/door panel (12). Bolt on the 31" door toe board (13), two 23" floor/door supports (14), handle, 26 ¾ hinge stiffener (15), and the four hinges. Use the hardware provided with the hinges and handle to bolt them down. Hinges go on top of door; bolt hinge, door and hinge stiffener together.**



**Figure 4**

**5) Position door assembly in floor/door frame. Bolt the hinges down through the floor. Install the second 26¾ hinge stiffener (15) to the underside before installing the nuts**

on the hinge bolts.

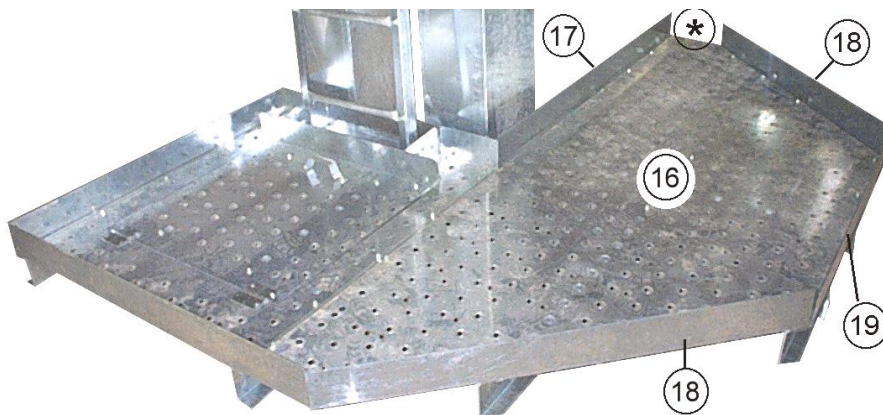


**Figure 5**

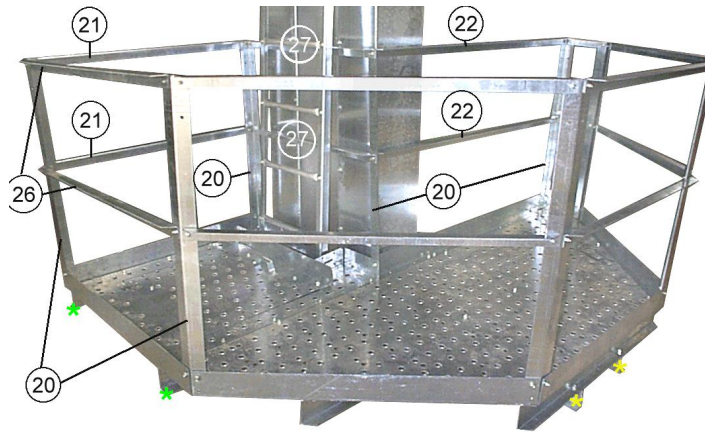
**6)** Position the  
103" x 40 $\frac{3}{8}$ "

work area floor panel **(16)** on the supporting C-channels.  
Around the perimeter (under the floor panel on top of C-channel) position the 61  $\frac{5}{16}$ " rear work area toe board **(17)**, the two 45  $\frac{3}{16}$ " front angle toe boards **(18)**, and the 40" front work area toe board **(19)**. Bolt down the floor panel on all edges. ( \* ) Now the 9  $\frac{1}{2}$ " short work area toe board (part list #19a) may be bolted in.

**Figure 6**

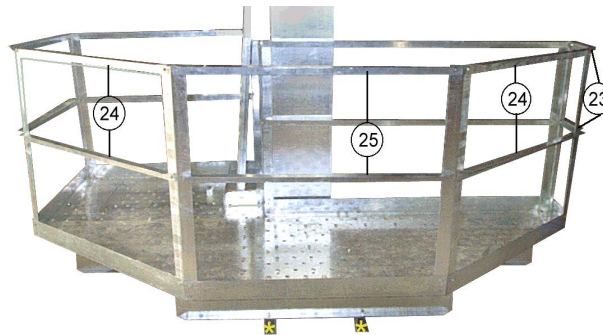


7) Bolt the eight 42" railing up-rights (**20**) in all platform corners (on insides of toe boards). Bolt on all handrails with bend facing outward, rounded edge facing in. Two 41 5/8" door-side hand rails (**21**), two 60 5/8" rear work area hand rails (**22**), two 8 7/8" short work area hand rails (**23**), four 44 9/16" front angle hand rails (**24**), two 39 1/2" front work area hand rails (**25**), two 57 7/16" door-front handrails (**26**), and two 47 11/16" rear ladder handrails (**27**).



**Figure 7**

(\*) bolt the 80 7/16" kick braces to main support C-channels at positions marked, extend them down and bolt ends to hem-lock bolts below (part #28).



**Figure 7A**

(\*) bolt the 56 7/8" kick braces (part #29) to door supporting C-channels at the positions marked. Extend them down. Where they meet the trunk, bolt the 50 1/2" C-channel (part #30) to the trunk (remove and re-bolt the hem lock bolts). Bolt the kick braces to either end of this channel (this channel spreads the kick braces apart allowing more ladder clearance).

## Parts List

Part	#	PART #	DESCRIPT.	LENGTH	QUANT.
main support	1	uwork117.000	C-channel	90	2
back secondary support	2	uwork117.012	C-channel	61 ¾	1
rear secondary support	3	uworkp16.001	C-channel	104	1
middle secondary support	4	uworkp16.002	C-channel	83 ⅞	1
front secondary support	5	uworkp16.003	C-channel	43 ⅞	1
Door support	6	uservp24.002	Angle	24	2
rear ladder toe board	7	uwork117.001	Angle	49	1
floor panel with door	8A	userv117.000		48 ¾	1
door-side toe board	9	uwork117.013	Angle	42 ¼	1
door-front toe board	10	uwork117.004	Angle	58	1
ladder toe board	13B	uservp16.008	Angle	7 ¾	2
door panel	8B	userv117.000	Angle	28 ½	1
door toe board	13A	uservp16.008	Angle	31	1
door support	14	uservp16.004	Angle	23	2
hinge stiffener	15	uservp16.005	Angle	26 ¾	2
work area floor panel	16	uworkp16.m21	Flat	120	1
rear work area toe board	17	uwork117.002	Angle	61 5/16	1
front angle toe board	18	uworkp16.007	Angle	42 ¼	2
front work area toe board	19	uworkp16.006	Angle	40	1
short work area toe board	19A	uworkp16.006	Angle	9 ½	1
railing post	20	uworkp16.005	Angle	42	8
door-side hand rail	21	uwork117.006	Angle	41 ⅝	2
rear work area hand rail	22	uwork117.008	Angle	60 ⅝	2
short work area hand rail	23	uworkp24.012	Angle	8 ⅞	2
front angle hand rail	24	uworkp24.014	Angle	44 9/16	4
front work area hand rail	25	uworkp24.011	Angle	39 ½	2
door-front hand rail	26	uwork117.005	Angle	57 7/16	2
rear ladder hand rail	27	uwork117.007	Angle	47 11/16	2
kick brace (work side)	28	uwork117.010	Angle	80 7/16	2
kick brace (door side)	29	uwork117.011	Angle	56 ⅞	2
C-channel (kick) brace support	30	uwork117.009		50 ½	1
Floor Stiffener	31	Uworkp24.007	Angle	17 ⅞	7
Hex bolt				3/4" x 5/16"	90
Truss slot (button head) bolt				3/4" x 5/16"	100
Hex nut				5/16"	190
Hinge kit					1

**NOTE:** Use truss slot bolts for all floor panel connections.

This platform includes two half "Flared (Starter) cage hoops" which are meant to start the safety cage continuing up the leg.





# **Owners Installation Manual**

**24" 11x7 Head Service Platform**

The Lambton Conveyor Head Service Platform is intended to be mounted directly to the elevator head in order to service and repair problems. The service platform is not intended to be used anywhere else on the elevator. It is the owner's responsibility to ensure all unauthorized personnel are kept clear of these assemblies.

### Parts List

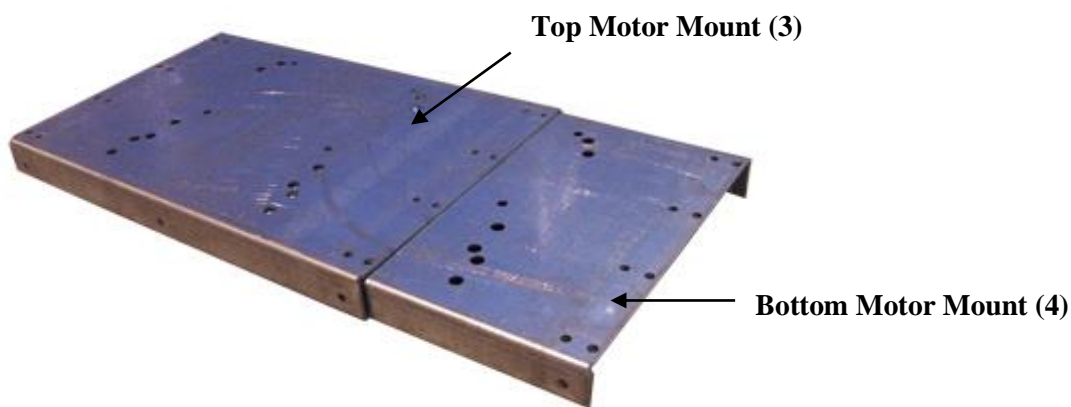
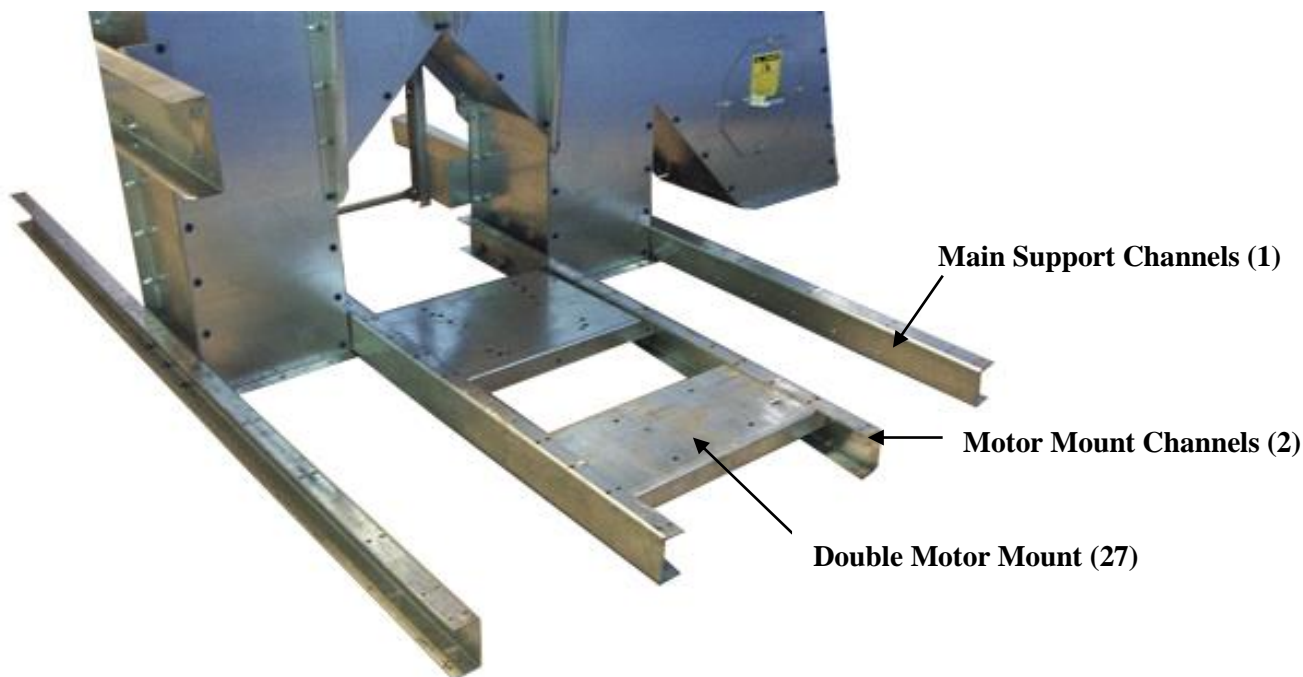
Part	#	Part#	Description	Length	Quantity
<b>11x7-24 Head Service Platform</b>		<b>uservp.117</b>			1
Main Support Channels	1	uservp24.022	C-Channel	104"	2
Motor Mount Channels	2	userv117.008	C-Channel	59 5/8"	2
Top Motor Mount	3	userv117.009	Plate / Channel	20 1/8"	1
Bottom Motor Mount	4	userv117.010	Plate / Channel	19 5/16"	1
Door Side Panel	5	userv117.000	Flat Sheet	48 3/4" x 41 7/8"	1
Door Panel	6	userv117.000	Flat Sheet		1
Handle	7	gla-handle	NA	NA	1
Door Toe Board (long)	8	uservp16.008	Angle	31"	1
Door Stiffeners	9	uservp16.004	Angle	23"	2
Hinge Stiffeners	10	uservp16.005	Angle	26 3/8"	2
Door Supports	11	uservp24.002	Angle	24"	2
Door Toe Boards (short)	12	uservp16.008	Angle	7 3/4"	2
Side Toe Boards	13	userv117.002	Angle	86 3/4"	2
Front / Rear Toe Board	14	userv117.003	Angle	103 7/8"	2
Floor Panel (motor side)	15	userv117.001	Flat Sheet	48 3/4" x 41 7/8"	1
Inner Toe Boards	16	userv117.007	Angle	13 5/8"	4
Floor Stiffeners	17	uservp16.007	Angle	37 1/4"	2
Floor Panel (rear)	18	uservp24.m03	Flat Sheet	103" x 37"	1
Torque Arm Brackets	19	uservp30.019	Angle	NA	2
Torque Arm Channel	20	uservp30.020	C-Channel	37 7/8"	1
Rail Posts	21	uservp16.018	Angle	42"	7
Handrail (front)	22	userv117.005	Angle	39 1/8"	4
Handrail (side)	23	userv117.004	Angle	86 1/16"	4
Handrail (rear)	24	userv117.006	Angle	103 1/4"	2
Platform Kick Braces	25	userv117.014	Angle	80 3/4"	2
Motor Mount Kick Braces	26	userv117.013	Angle	39"	2
Double Motor Mount Plate	27	userv117.011	Plate / Channel	16 1/8"	1
Guard Centre Plate	Not shown	userv117.015	Flat Sheet	53 3/4" x 22 1/2"	1
Short Guard Side	Not shown	userv117.016	Angled Sheet	NA	1
Long Guard Side	Not shown	userv117.017	Angled Sheet	NA	1
Guard Bracket (top) (31)	Not shown	userv117.018	Angle	22 1/4"	2
Guard Bracket (bottom) (32)	Not shown	userv117.019	Angle	10"	1
Access Cover (33)	Not shown	userv117.012	Flat Sheet	19" x 10"	1
5/16" x 3/4" hex head bolts	<b>Use Grade 8 Strength Bolts Only Torque to 120 ft. lbs minimum</b>				100
5/16" truss slot (button head) bolts					140
5/16" nuts					240
Hinge kit					1

**NOTE:** Use truss slot bolts for all floor panel connections.



## **Step #1**

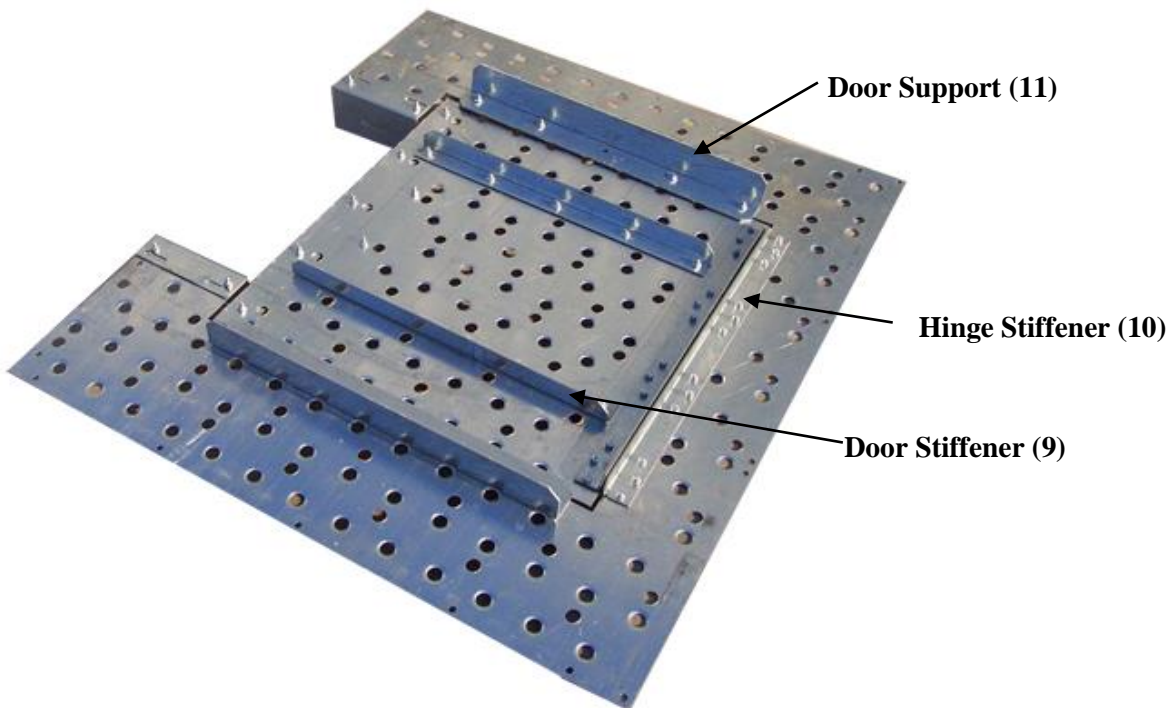
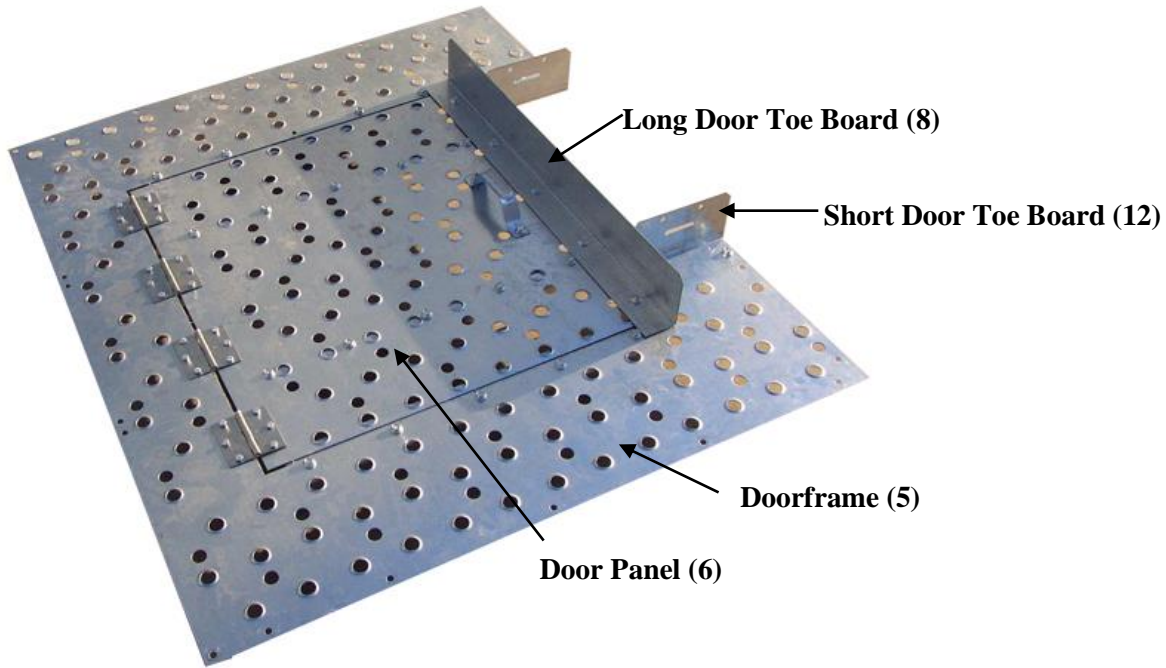
With the head sitting on a solid level area, locate the two Main Support Channels (1) and two Motor Mount Channels (2) then fasten as shown. The motor mount can also be assembled and installed at this stage. Locate the Motor Mount Top Plate (3), and the Motor Mount Bottom Plate (4). The bottom slides inside the top plate and bolts to the sides. The motor mount can be positioned as shown but not bolted at this stage. Shown is a double motor setup, a single motor setup would have the inner mount only.



**Note:** double motor mounts have single plate only no reinforcements are required.

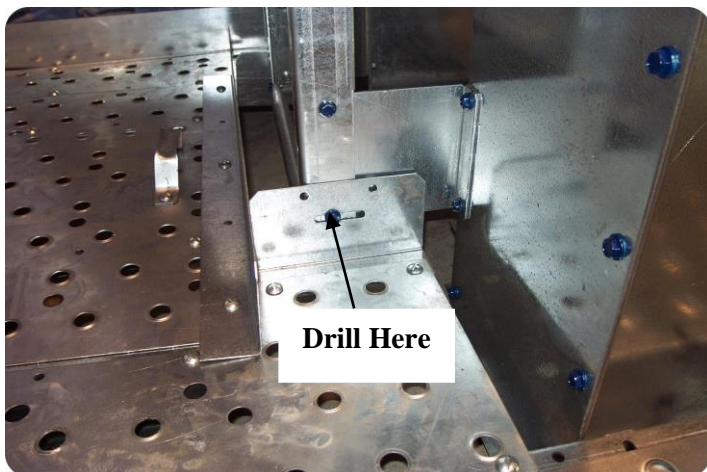
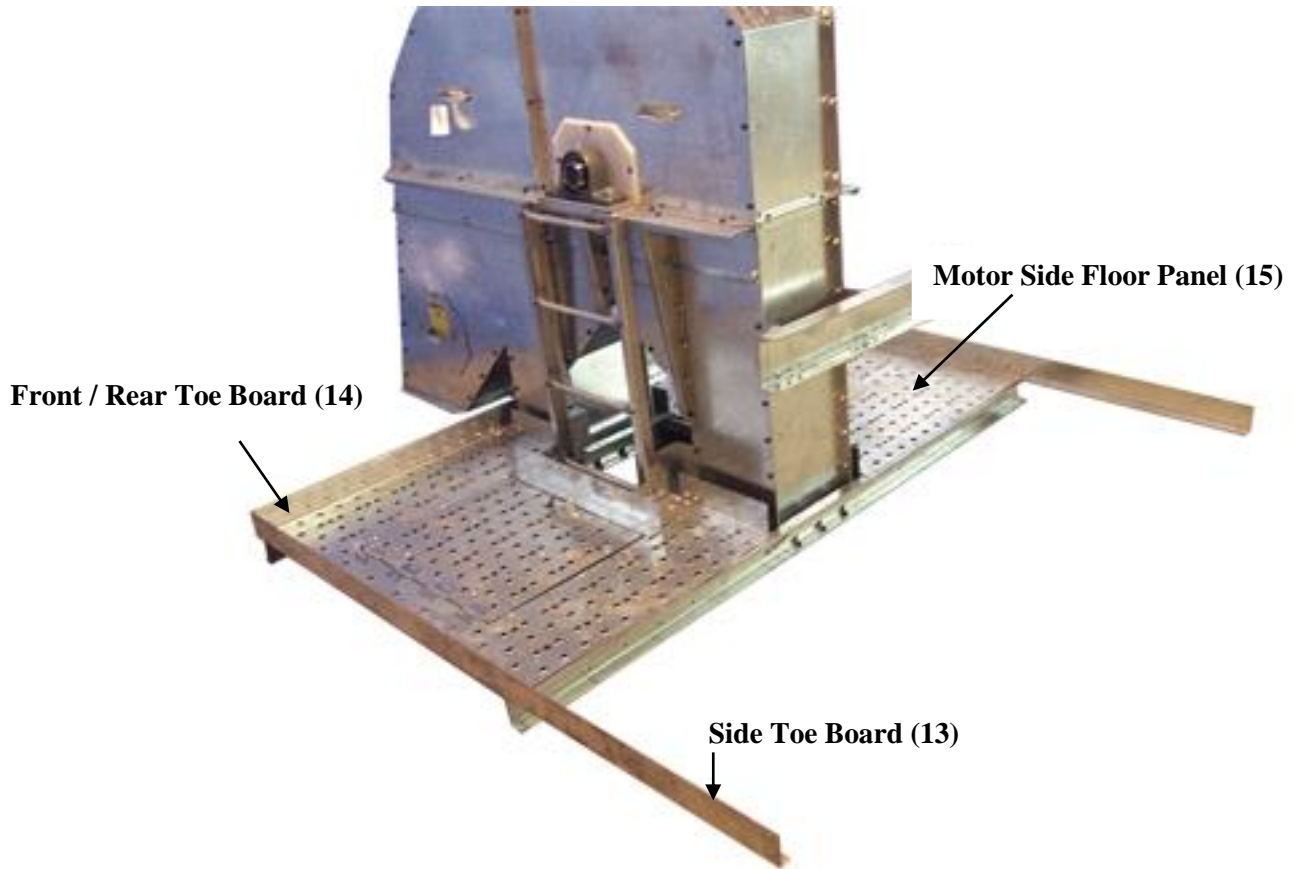
## Step #2

Next locate the Doorframe (5), and Door Panel (6). The door panel will require the Handle (7), Long Door Toe Board (8), and four hinges mounted to the top. Mounted to the bottom are two Door Stiffeners (9), and a Hinge Stiffener (10). The Door frame gets two Door Supports (11), two Short Door Toe Boards (12) and the remaining Hinge Stiffener (10) mounted to the bottom while the door is mounted to the top. Note: the hinges are fastened using  $\frac{1}{4}$ " x 1" bolts while all others are fastened using  $\frac{5}{16}$ " x  $\frac{3}{4}$ " button head bolts.



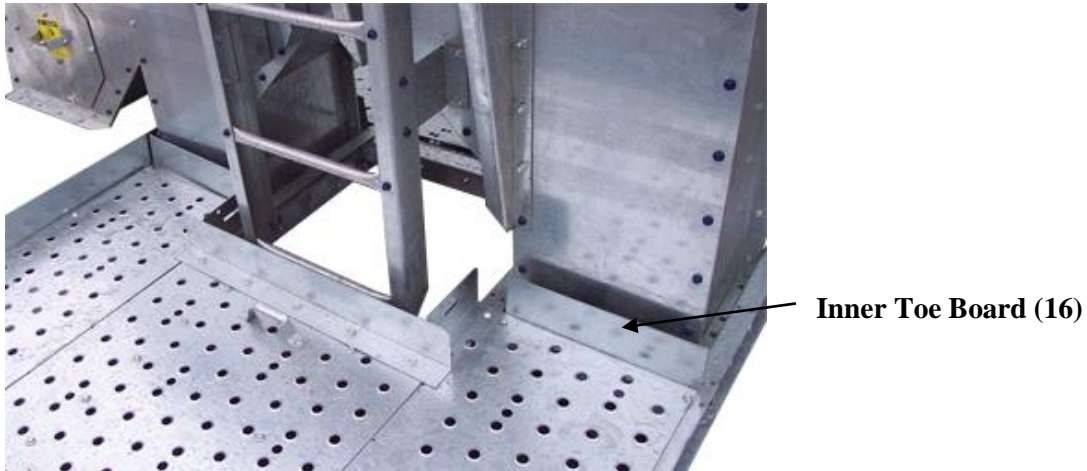
### Step #3

Now the two Side Toe Boards (13), one Front/Rear Toe Board (14), the doorframe, and Motor Side Floor Panel (15) should all be mounted to the main support channels using 5/16" x 3/4" button head bolts. The motor mount can also be bolted into place during this step. The ladder will need to be drilled using a 5/16" bit in order for the short door toe boards to bolt to it.



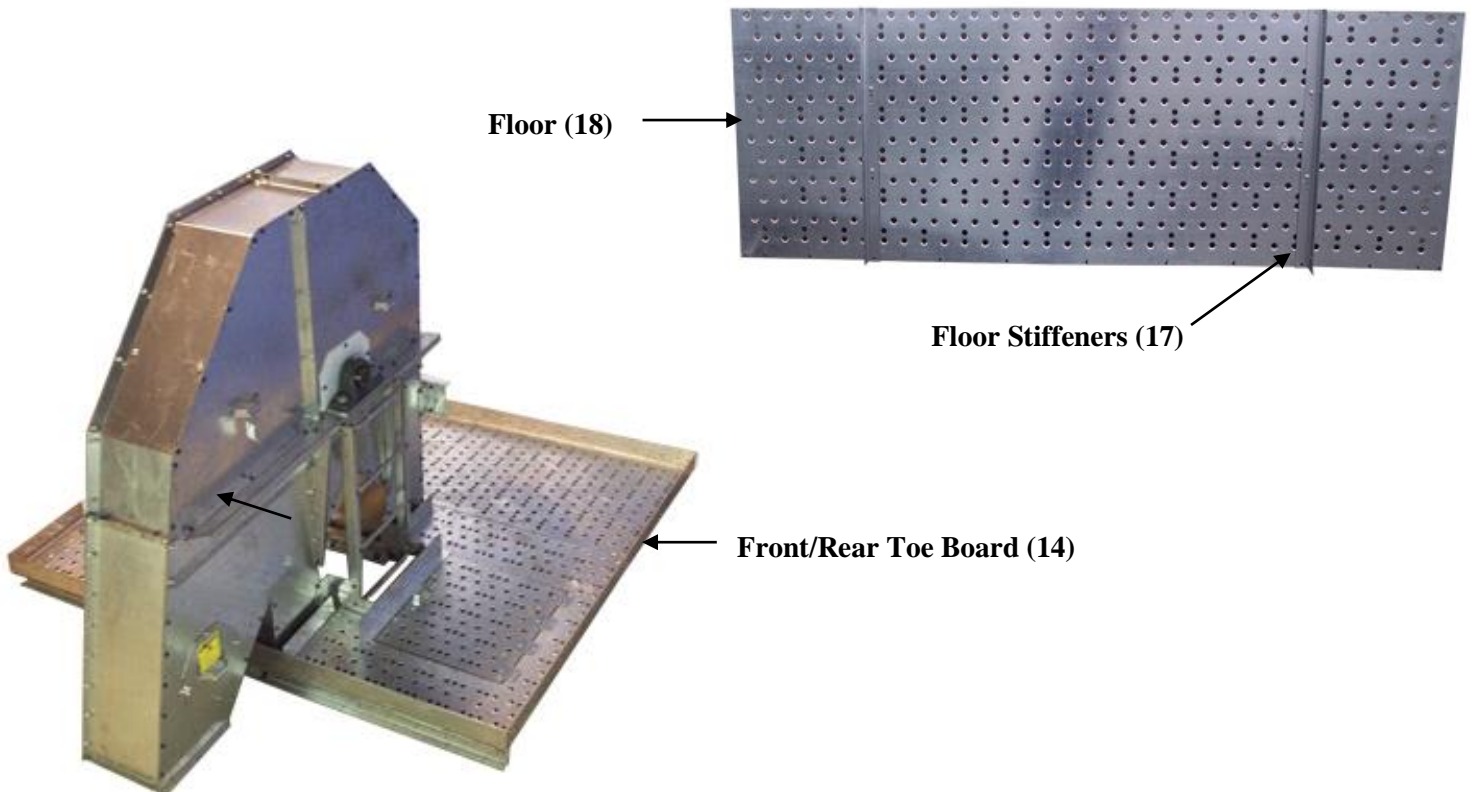
#### **Step #4**

Now position the four Inner Toe Boards (16) into place at each side of the trunking as shown in the diagram, using 5/16" x 3/4" button head bolts fasten.



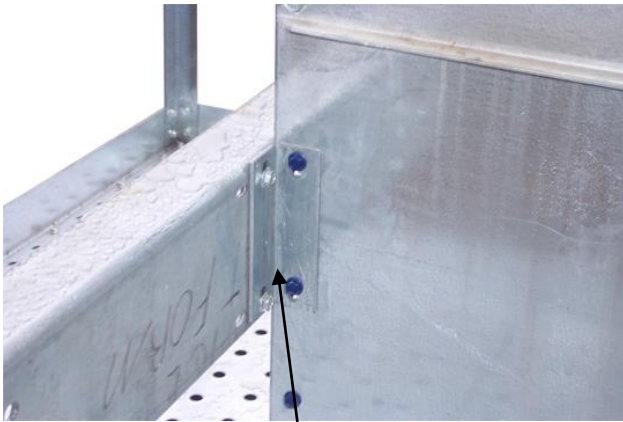
#### **Step #5**

Now locate the two Floor Stiffeners (17) and bolt to the underside of the Rear Floor Panel (18). The floor panel and remaining Front/Rear Toe Board (14) can now be set into position and fastened using 5/16" x 3/4" button head bolts all around.



## Step #6

Now locate the Torque Arm Brackets (19) and Torque Arm Channel (20) the brackets will mount to the first set of bolts down on the back of the head, once in place the channel can be mounted. The seven Rail Posts (21) can now be bolted into place (six around the outside one to trunking on motor side). All handrails can be mounted in this step with angles facing in using 5/16" x 3/4" hex head bolts. **Note:** rail posts are to be fastened to main bearing channels of head where applicable.



**Torque Arm Brackets (19)**



**Torque Arm (20)**



**Mount 7<sup>th</sup> Rail Post Here**

**Rail Post (21)**



### **Step #7**

With all bolts in the platform tightened, the head will need to be tipped back and attached to a piece of trunking in order to install the kick braces. Locate the two Platform Kick Braces (25), mount to the fourth hole in on the rear toe board and extend to the fourth set of hemlock bolts down from the head on the trunking. Now locate the two Motor Mount Kick Braces (26) and attach to the fourth hole in on the motor mount channels then extend to the third set of holes down from the head on the trunking.



**Motor Mount Kick Braces (26)**

**Platform Kick Braces (25)**

### **Step #8**

The Motor access cover is fastened using 4 self-tapping screws (included). Refer to the Drive Assembly section in the Bucket Elevator manual for information on mounting motors, reducer and guard.