

Platform Manual

30" 9x6 / 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

Revised: March 3, 2009

Table of Contents

Platform Placement **Pg. 3**

Rest Platform **Pg. 5-11**

Small Work **Pg. 13-16**

Large Work **Pg. 17-22**

Head Service **Pg. 23-30**

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

30" Standard Rest Platform

The Lambton Conveyor rest platform is intended to be used as a safety platform located every 20' of ladder to prevent life threatening injuries in the case of a fall, any other use is strictly prohibited. It is the owner's responsibility to ensure all unauthorized personnel are unable to access these assemblies. Failure to follow these precautions could result in injury or death.

Parts List

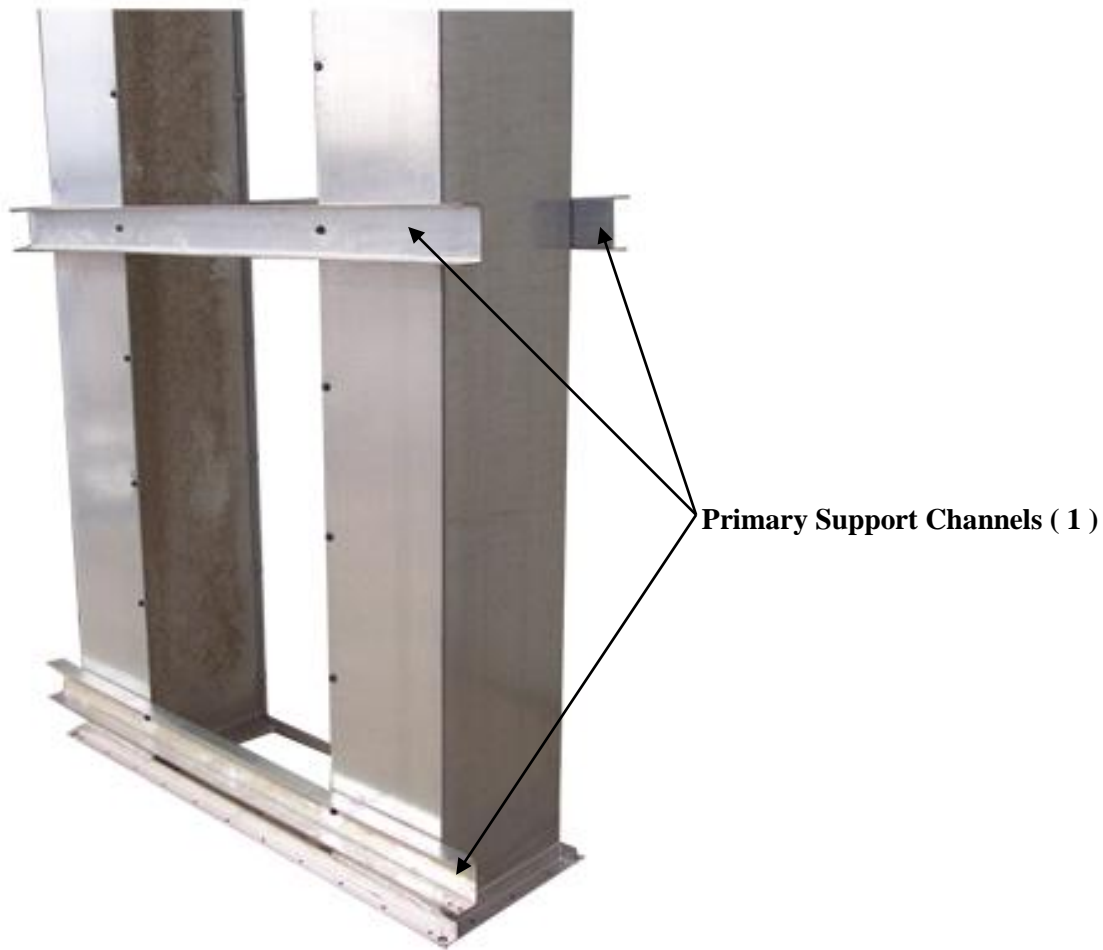
Part Name	Letter	Part#	Description	Length	Quantity
11x7-30 Rest Platform		mrurestp.030			1
Primary Support Channels	1	urestp30.000	C-Channel	58 5/16"	3
Secondary Support Channels	2	urestp30.001	C-Channel	61 3/4"	2
Kick Braces	3	urestp30.006	Angle	59 1/16"	2
Door Panel	4	urestp30.007	Flat Sheet	28 1/2" x 26 3/4"	1
Floor Panel	5	urestp30.007	Flat Sheet	56 9/16" x 41 7/8"	1
Door Toe Board (long)	6A	urestp30.011	Angle	31"	1
Door Handle	7	NA	NA	NA	1
Door Stiffeners	8	urestp30.009	Angle	23"	2
Hinge Stiffeners	9	urestp30.010	Angle	26 3/8"	2
Door Toe Boards (short)	6B	urestp30.011	Angle	7 3/4"	2
Door Supports	11	urestp30.012	Angle	24 1/4"	2
Front / Rear Toe Board	12	urestp30.002	Angle	57 7/16"	2
Side Toe Boards	13	urestp30.003	Angle	42 1/2"	2
Rail Posts	14	urestp30.008	Angle	42"	4
Short Handrails	15	urestp30.005	Angle	41 7/8"	4
Long Handrails	16	urestp30.004	Angle	56 13/16"	4
5/16" x 3/4" hex bolts	Use Grade 8 strength bolts Only. Torque to 120 ft. lbs minimum.				50
5/16" x 3/4" truss slot (button head) bolts					50
5/16" hex nuts					100
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.

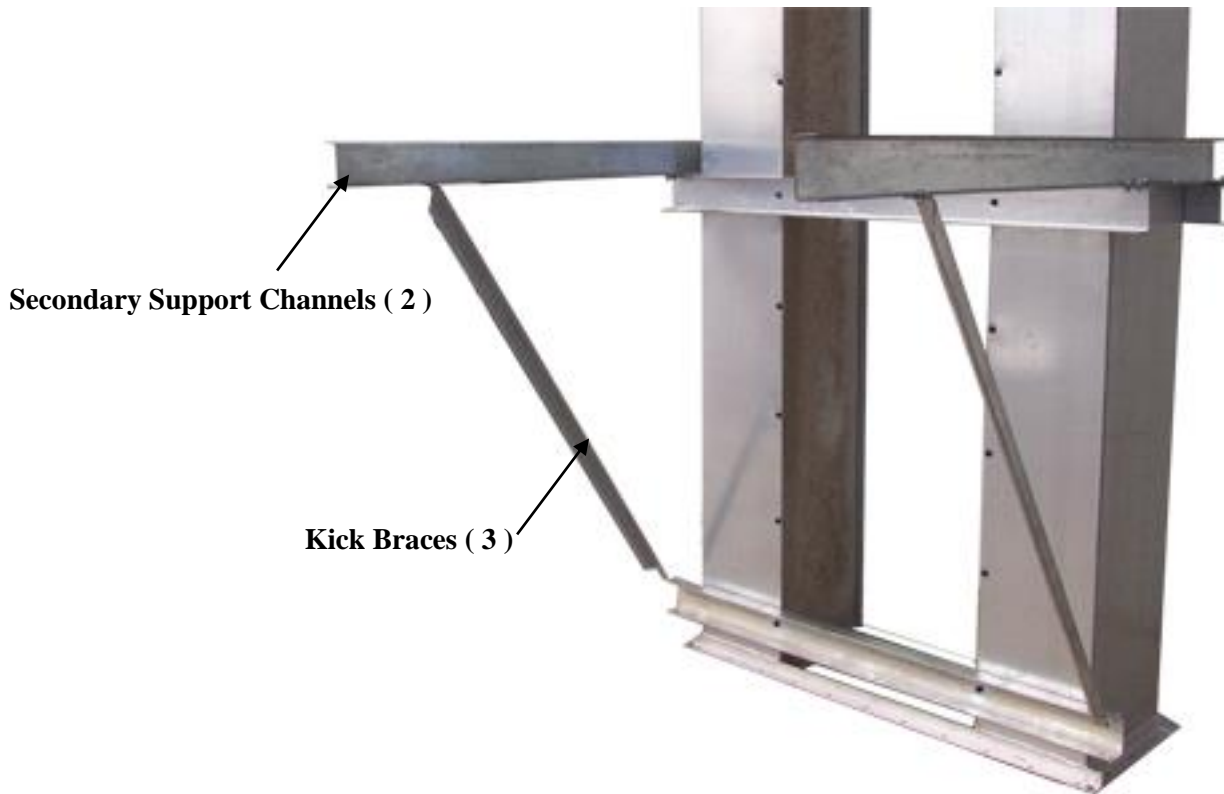
Step #1

When standing a Bucket Elevator in two or more sections, your Rest Platform should be mounted in an adequate position to mount the upper section of trunking (just below the joint). Start by bolting the Primary Support Channels (1) on both sides of the elevator trunking at the desired height of the rest platform. Also bolt the third Primary Support Channel (1) in the fourth set of holes down from the original support channels on the ladder side, as shown in the diagram.



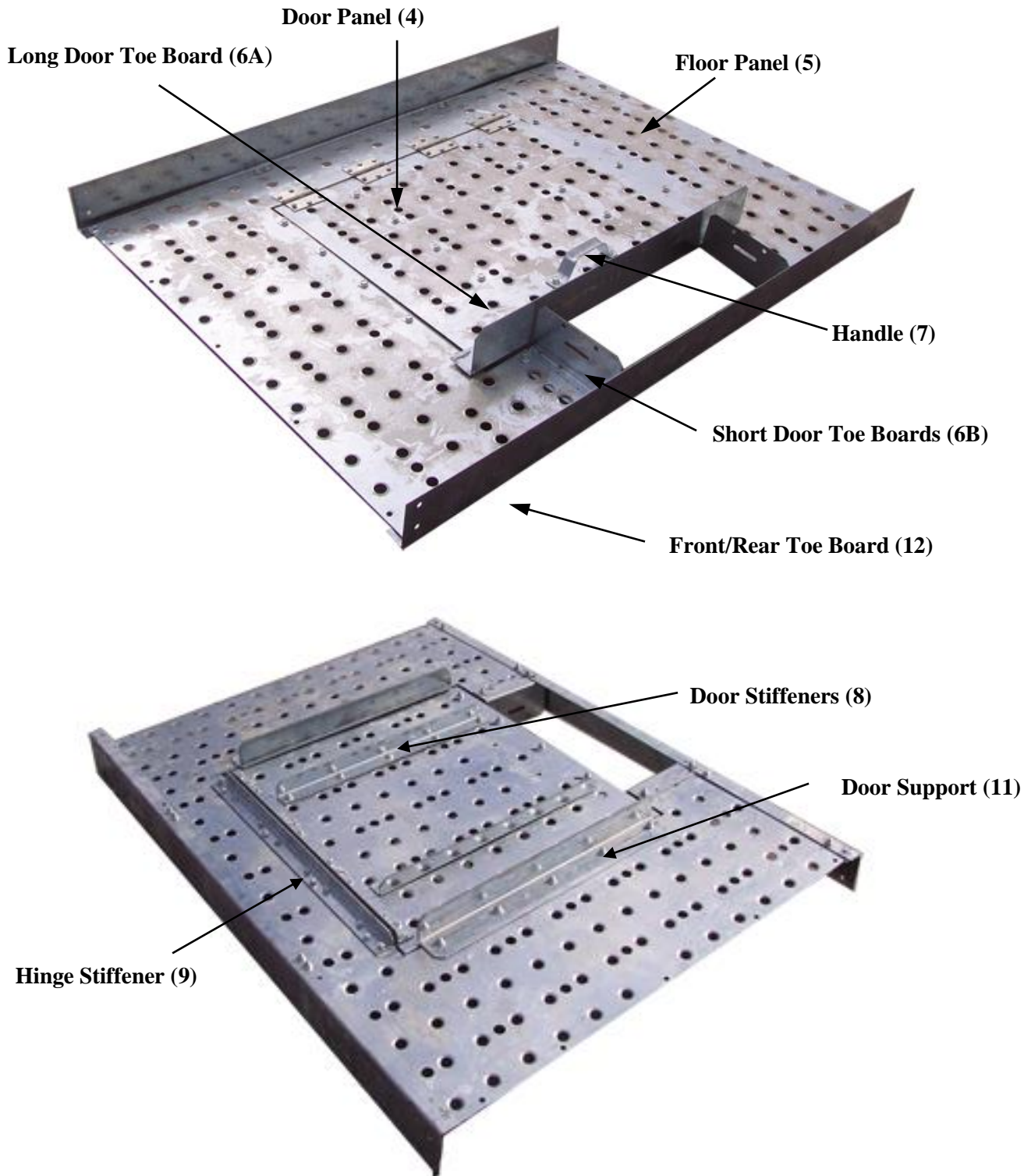
Step #2

Now bolt the (2) Secondary Support Channels (2) to the top of the primary support channels. The (2) Kick Braces (3) can also be mounted at this stage. They mount from the second bolt in on the Secondary Support Channel to the upper lip of the Primary Support Channel. Note: the kick brace ends require approximately a 45° bend to properly fit.



Step #3

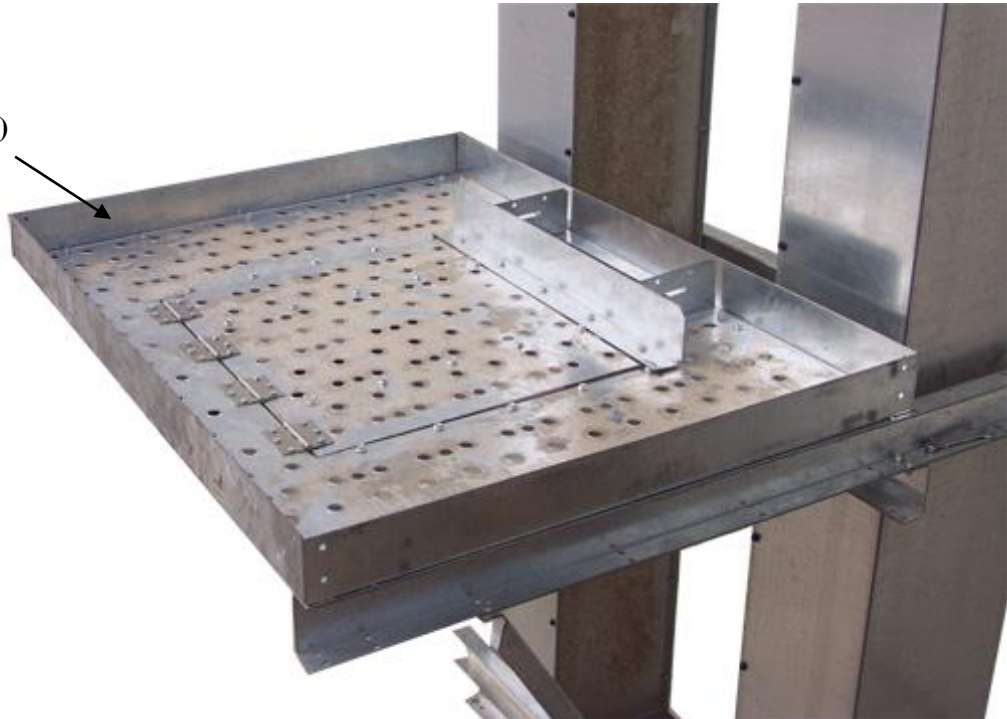
Now locate the Door Panel (4), and Floor Panel (5). The Door Panel will require 4 hinges, the Toe Board (long) (6A), and Handle (7) mounted to the top. (2) Door Stiffeners (8), and a Hinge Stiffener (9) will bolt to the underside of the door. The floor requires, the door assembly to be mounted to the top. A Hinge Stiffener (I), (2) Door Toe Boards (short) (6B), (2) Door Supports (11), and (2) Front/Rear Toe Boards (12) are bolted to the underside of the Main Floor Panel. Note: hinges are to be fastened using $\frac{1}{4}$ " x 1" bolts, nuts, and lock washers.



Step #4

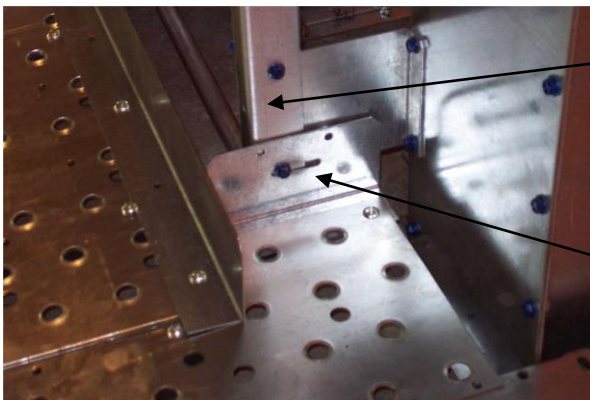
Now place the Floor Section on the secondary supports and bolt all four corners securely to insure it stays in place. The (2) Side Toe Boards (13) can also be installed at this stage beneath the floor section on the secondary supports as shown. All floor bolts can now be installed.

Side Toe Board (13)



Step #5

With the Door Panel & Toe Boards in place the ladder will need to be drilled and bolted to the short door toe boards on each side using (2) $5/16'' \times 3/4''$ bolts.

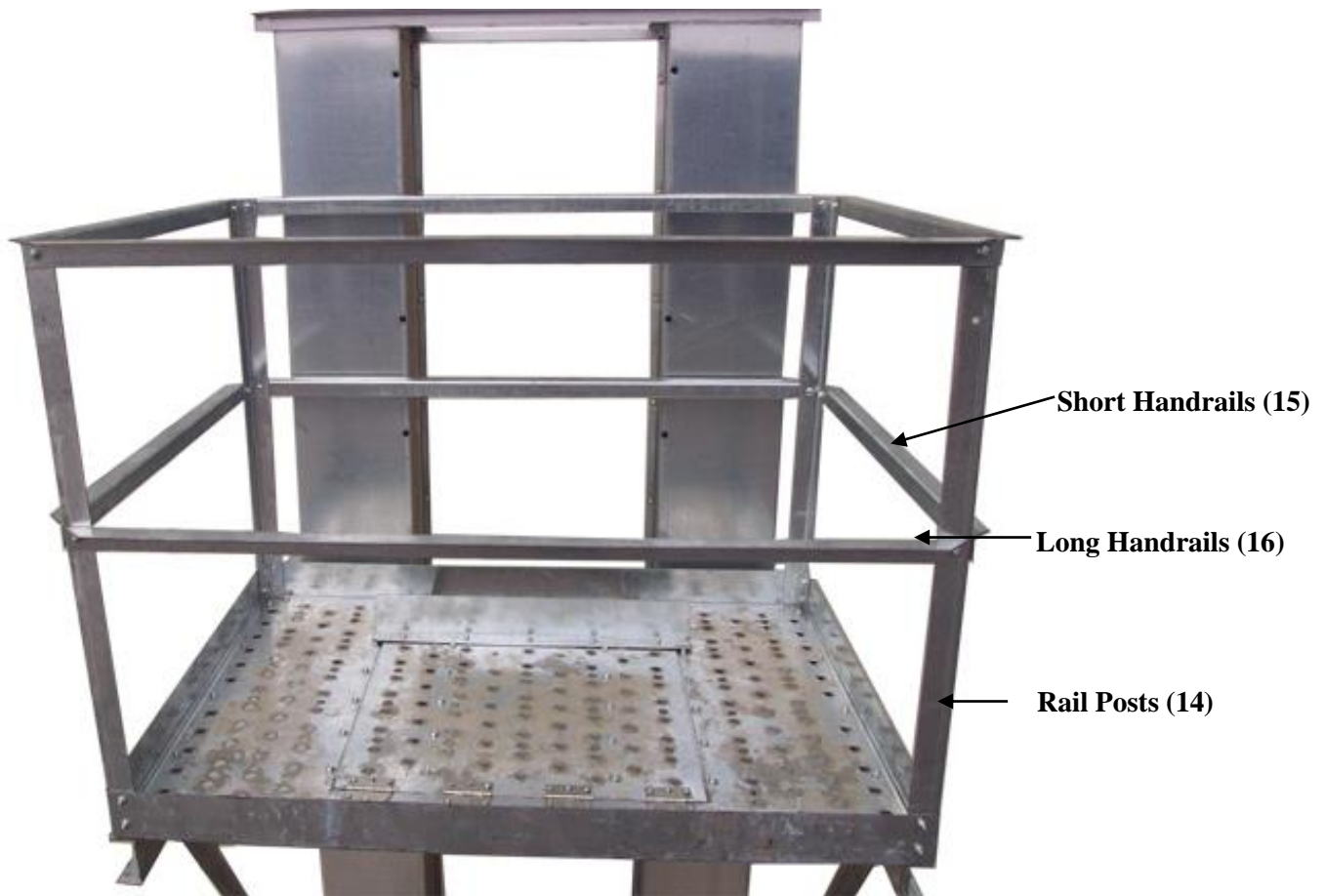


Ladder

Toe Board (short)

Step# 6

Install 4 Rail Posts (14) at the 4 corners of the platform, attach the (4) Short Handrails (15) to the Posts then attach the (4) Long Handrails (16) to the Posts.





Owners Installation Manual

30" 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 backside of the platform near the center. The 1 1/2" X 1 1/2" handrail angles can also be added using 5/16" X 3/4" hex head bolts. Do not put handrails on the rear-ladder side of the platform.

Safety Bar
(Do not put handrails
in this area)

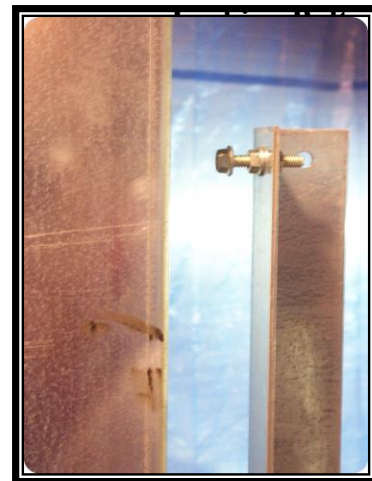
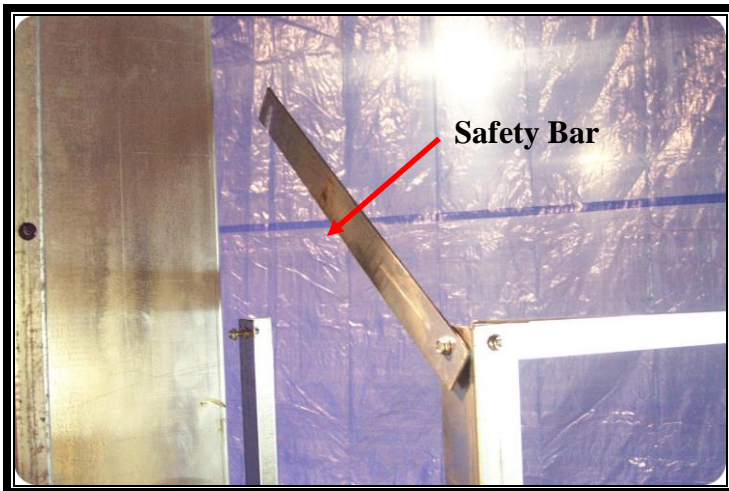


Handrail

Rail Post

Step #4

Finally, on the rear ladder side of the platform attach the flat safety bar. This allows access onto and off of the platform. The safety bar needs to be able to pivot. To accomplish this, the 5/16" X 1 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 of the safety cage in this area.



Owners Installation Manual

30" Large 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 only. Due to various layouts it may be necessary to mount the platform lower in order to miss the distributor valves and spouting. It is the assemblers, and user's responsibility to ensure safe working conditions in any situation. In order to maintain a safe working environment, ladders and cages may be necessary additions to the platform. Due to the many applications a kit is not available. It is also the owner's responsibility to ensure all unauthorized personnel cannot access these assemblies.

Parts List

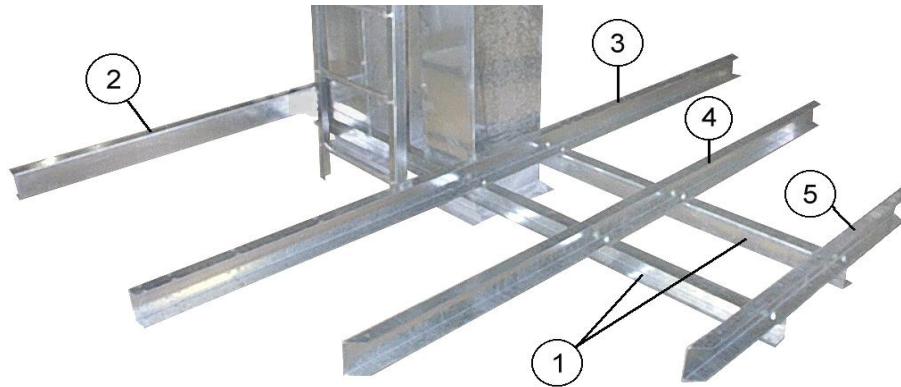
#	Part	Description	Length	Quantity	Part #
1	Primary Support Channel	C-Channel	98 5/16"	2	uworkp30.000
2	Back Secondary Support Channel	C-Channel	61 3/4"	1	uworkp30.017
3	Rear Secondary Support Channel	C-Channel	104"	1	uworkp16.001
4	Middle Secondary Support Channel	C-Channel	83 13/16"	1	uworkp30.002
5	Front Secondary Support Channel	C-Channel	43 3/8"	1	uworkp30.001
6	Floor / Door Support Angle	Angle	24"	2	uservp24.002
7	Rear Ladder Toe Board	Angle	57 7/16"	1	uworkp30.018
8	Floor Panel	Flat Sheet	56 9/16" x 41 7/8"	1	uservp30.001
9	Door-side Toe Board	Angle	42 1/2"	1	uworkp30.016
10	Door-front Toe Board	Angle	65 15/16"	1	uworkp30.007
11	Ladder Toe Board	Angle	7 3/4"	2	uservp16.008
12	Door Panel	Flat Sheet	28 1/2" x 26 3/4"	1	userv117.000-2
13	Door Toe Board	Angle	31"	1	uservp16.008
14	Door Stiffener	Angle	23"	2	uservp16.004
15	Hinge Stiffeners	Angle	26 3/8"	2	uservp16.005
16	Work Area Floor Panel	Flat Sheet	103" x 40 3/8"	1	uworkp16.m21
17	Rear Work Area Toe Board	Angle	61 1/8"	1	uwrkp30.006
18	Front Angle Toe Board	Angle	45 3/16"	2	uworkp30.005
19	Front Work Area Toe Board	Angle	40 1/8"	1	uworkp30.003
19a	Short Work Area Toe Board	Angle	9 1/4"	1	uworkp30.004
20	Railing Uprights	Angle	42"	8	uworkp16.005
21	Door-side Handrail	Angle	41 7/8"	2	uworkp30.020
22	Rear Work Area Handrail	Angle	60 1/2"	2	uworkp30.013
23	Short Work Area Handrail	Angle	8 13/16"	2	uworkp30.012
24	Front Angle Handrail	Angle	44 5/8"	4	uworkp30.010
25	Front Work Area Handrail	Angle	39 1/2"	2	uworkp30.011
26	Door-front Handrail	Angle	56 13/16"	2	uworkp30.009
27	Rear Ladder Handrail	Angle	55 13/16"	2	uworkp30.008
28	Kick Brace (work side)	Angle	80 13/16"	2	uworkp30.014
29	Kick Brace (door side)	Angle	59 1/16"	2	uworkp30.006
30	Kick Brace Support Channel	C-Channel	58 5/16"	1	uworkp30.015
	5/16" x 3/4" bolts	Use Grade 8 strength bolts only. Torque to 120 ft. lbs Minimum.		90	
	5/16" x 3/4" truss slot (button head) bolts			100	
	5/16" hex nuts			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.

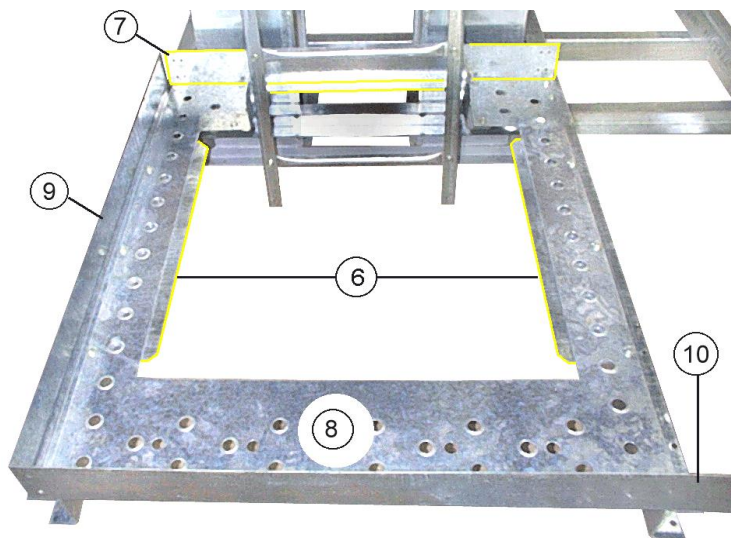
Step #1

Bolt the Primary Support Channels (1) to the trunking at the desired height of the platform using the existing bolts. Now bolt the Back Secondary Support Channel (2), Rear Secondary Support Channel (3), Middle Secondary Support Channel (4), and Front Secondary Support Channel (5) into place as shown on the diagram.



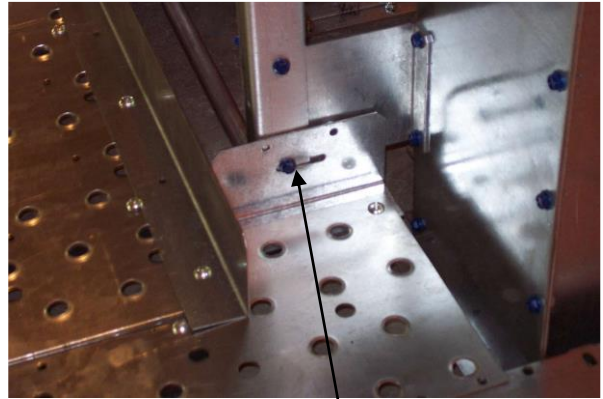
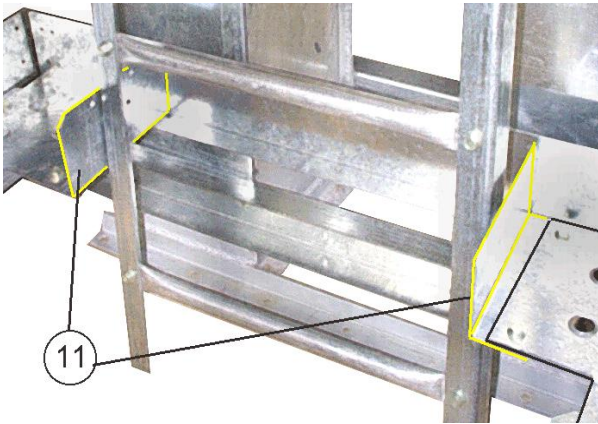
Step #2

Locate the Rear Ladder Toe Board (7) and position behind the ladder. Place the Floor Panel (8) on the secondary supports along with the Door Side Toe Board (9), and Door Front Toe Board (10). The toe boards should be mounted underneath the flooring but on top of the supports, and bolted into place. The Floor/Door Support Angles (6) can also be mounted on the underside of the flooring as shown.



Step #3

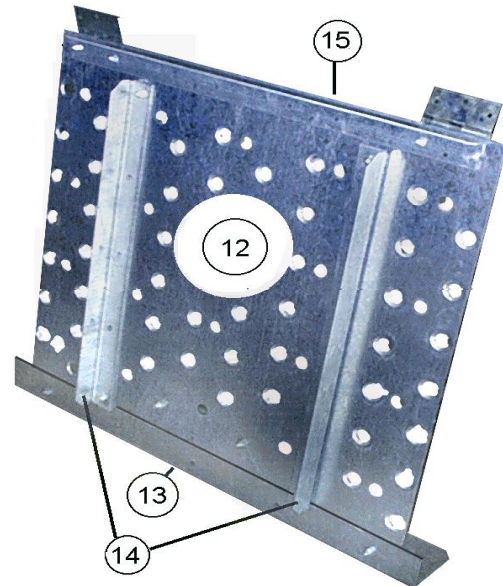
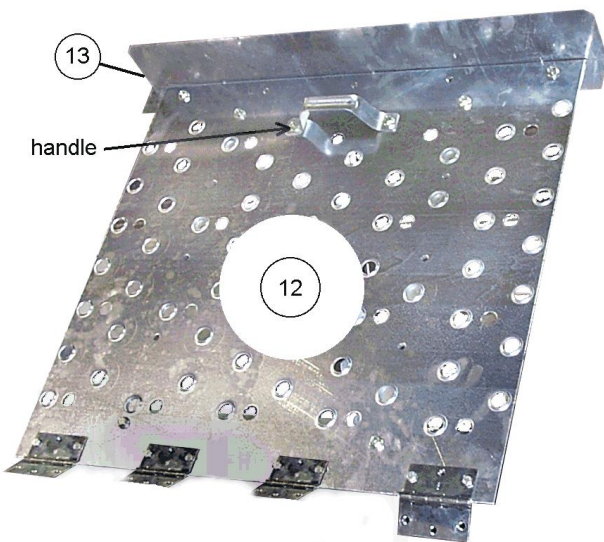
Locate the Ladder Toe Boards (11) and position under the floor panel but on top of the rear ladder toe board. Bolting through the flooring and to the ladder. **Note:** bolting to the ladder will require drilling two 5/16 holes.



Drill & Bolt Here

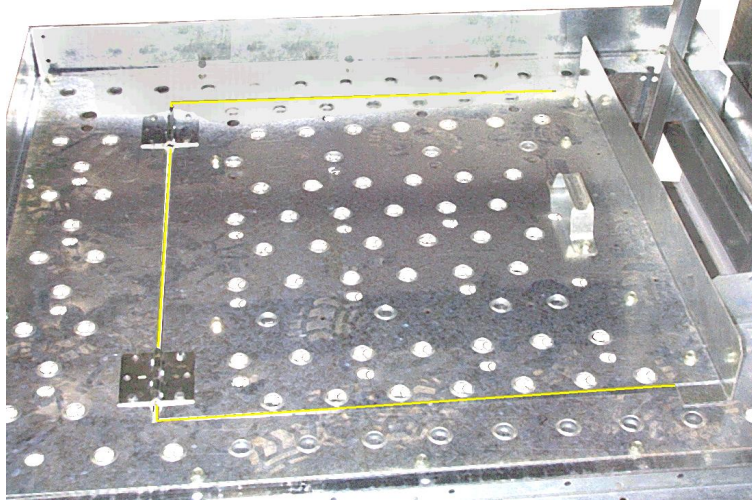
Step #4

Now locate the Door Panel (12) bolting the Door Toe Board (13), Handle and Hinges to the Top. The Door Supports (14) and Hinge Stiffener (15) get bolted to the bottom. Note: use 1/4" x 1" bolts, locks and nuts to fasten hinges into place.

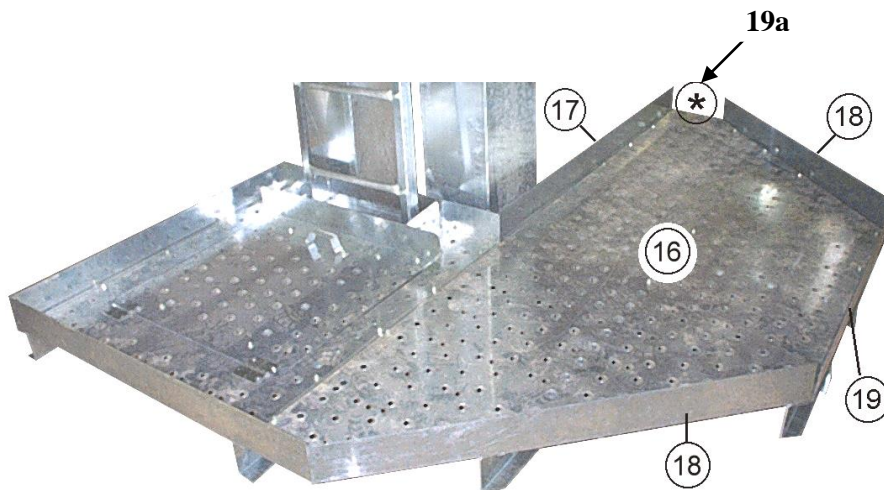


Step #5

Position the door assembly in the doorframe bolting the hinges down through the floor while installing the second Hinge Stiffener (15) to the underside before hand. Fasten using ¼" x 1" bolts, locks, and nuts.

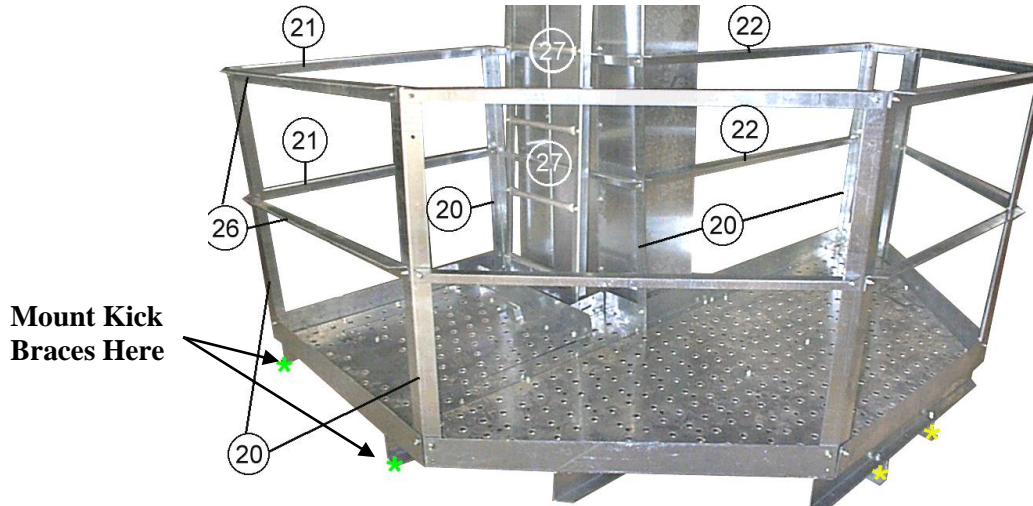
**Step #6**

Now locate the Work Area Floor Panel (16) and place on the support channels as shown. Under the floor position the Rear Work Area Toe Board (17), the (2) Front Angle Toe Boards (18), and the Front Work Area Toe Board (19). After bolting the floor panel on all edges the Short Work Area Toe Board (19a) can be installed.



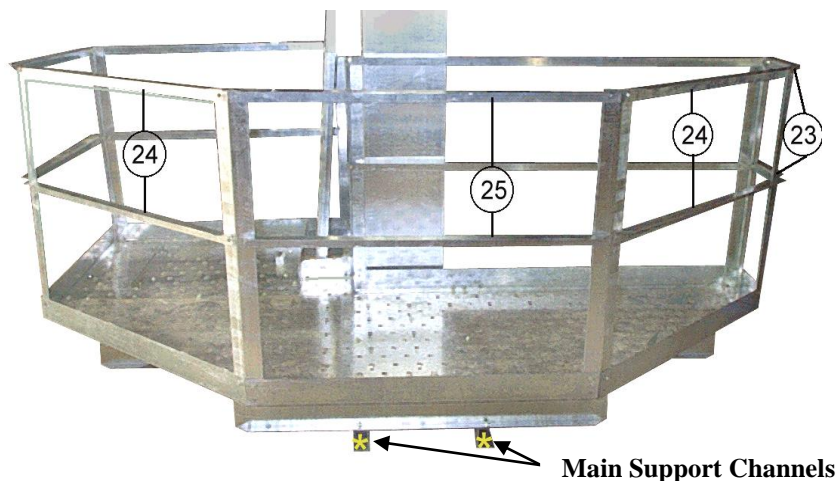
Step #7

Now locate the (8) Railing Uprights (20) and fasten at all corners of the platform. Proceed to bolt the two Door Side Handrails (21), two Rear Work Area Handrails (22), two Short Work Area Handrails (23), four Front Angle Handrails (24), two Front Work Area Handrails (25), two Door-Front Handrails (26), and two Rear Ladder Handrails (27) into place with the angle facing in as shown.



Step #8

The Door Side Kick Braces (29) can be installed by mounting the Kick Brace Support (30) to the trunking in the fourth set of holes down from the platform (use the hemlock bolts), the kick braces can then be mounted to the marked channels, and the ends of the support channel.



Step #9

Now bolt the Work Side Kick Braces (28) to the main support channels then extend down and bolt to the hemlock bolts in the trunking.

Caution: Never use handrails to access the distributor or any other part above the platform.



Owners Installation Manual

30" 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.

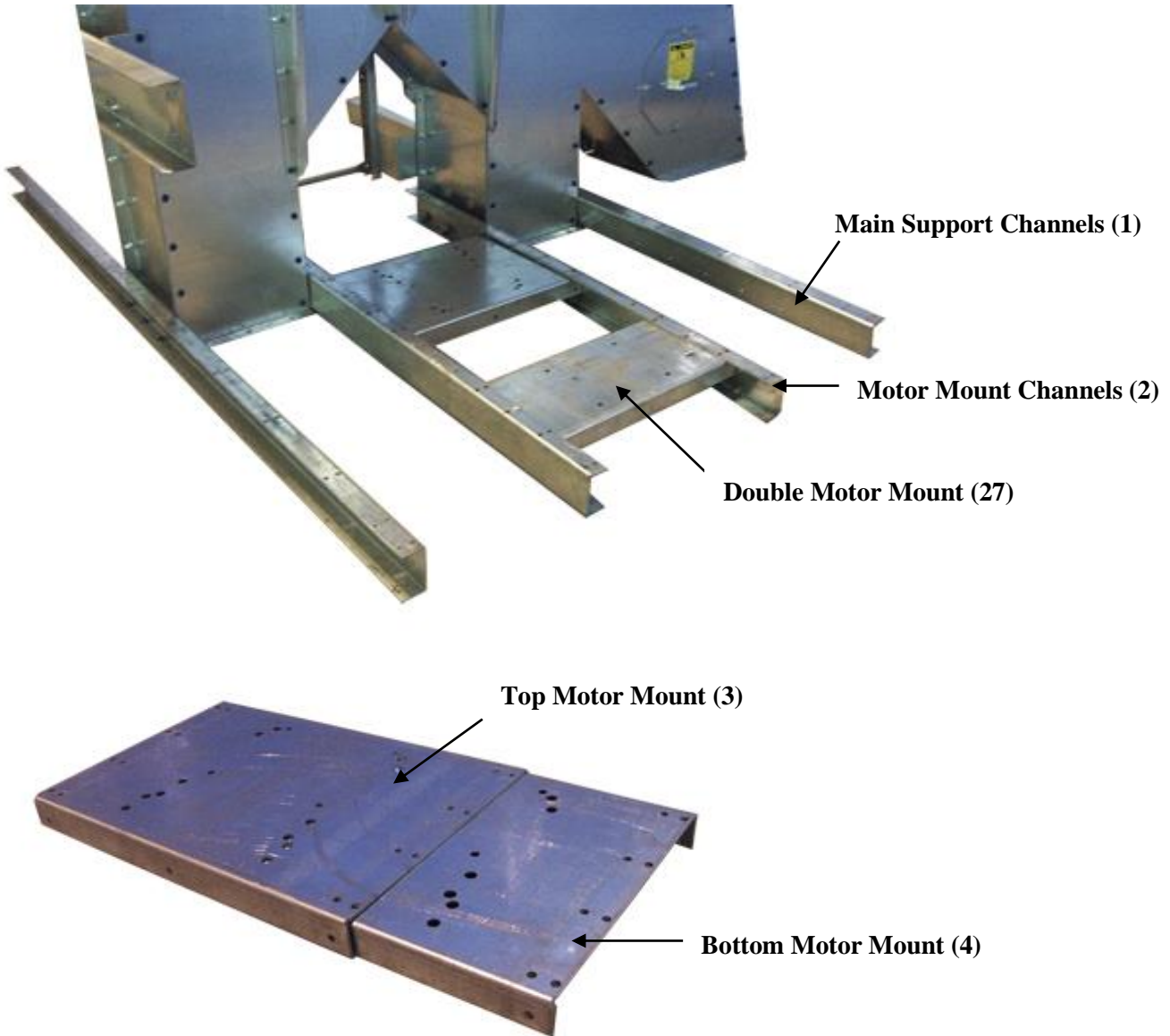
Parts List

Part	#	Part#	Description	Length	Quantity
11x7-30 Head Service Platform		uservp.030			1
Primary Support Channels	1	uservp24.022	C-Channel	104"	2
Motor Mount Channels	2	uservp30.015	C-Channel	59 5/8"	2
Top Motor Mount	3	uservp30.006	Plate / Channel	24" x 20 1/8"	1
Bottom Motor Mount	4	uservp30.005	Plate / Channel	24" x 19 7/16"	2
Door Side Panel	5	uservp30.001	Flat Sheet	56 9/16" x 41 7/8"	1
Door Panel	6	uservp30.001	Flat Sheet		1
Handle	7	gla-handle	NA	NA	1
Long Door Toe Board	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	uservp30.007	Angle	94 9/16"	2
Front / Rear Toe Board	14	uservp30.008	Angle	103 7/8"	2
Floor Panel (motor side)	15	uservp30.002	Flat Sheet	56 9/16" x 41 7/8"	1
Inner Toe Boards	16	uservp30.009	Angle	16 3/16"	4
Floor Stiffeners	17	uservp16.007	Angle	37 1/4"	2
Floor Panel (rear)	18	uservp30.000	Flat Sheet	103" x 37"	1
Torque Arm Brackets	19	hdpl11x7.425	Angle	NA	2
Torque Arm Channel	20	hdpl11x7.525	C-Channel	37 7/8"	1
Rail Posts	21	uservp30.016	Angle	42"	7
Handrail (front)	22	uservp30.010	Angle	39 1/8"	4
Handrail (side)	23	uservp30.011	Angle	93 15/16"	4
Handrail (rear)	24	uservp30.012	Angle	103 1/4"	2
Platform Kick Braces	25	uservp30.014	Angle	83 7/16"	2
Motor Mount Kick Braces	26	uservp30.013	Angle	50 9/16"	2
Double Motor Mount Plate	27	uservp30.004	Plate / Channel	24"	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"	1
Guard Bracket (bottom) (32)	Not shown	userv117.019	Angle	10"	1
Access Cover (33)	Not shown	uservp30.003	Flat Sheet	19" x 10"	1
5/16" x 3/4" hex head bolts	Use Grade 8 Strength Bolts Only Torque to 120 ft. lbs minimum				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.

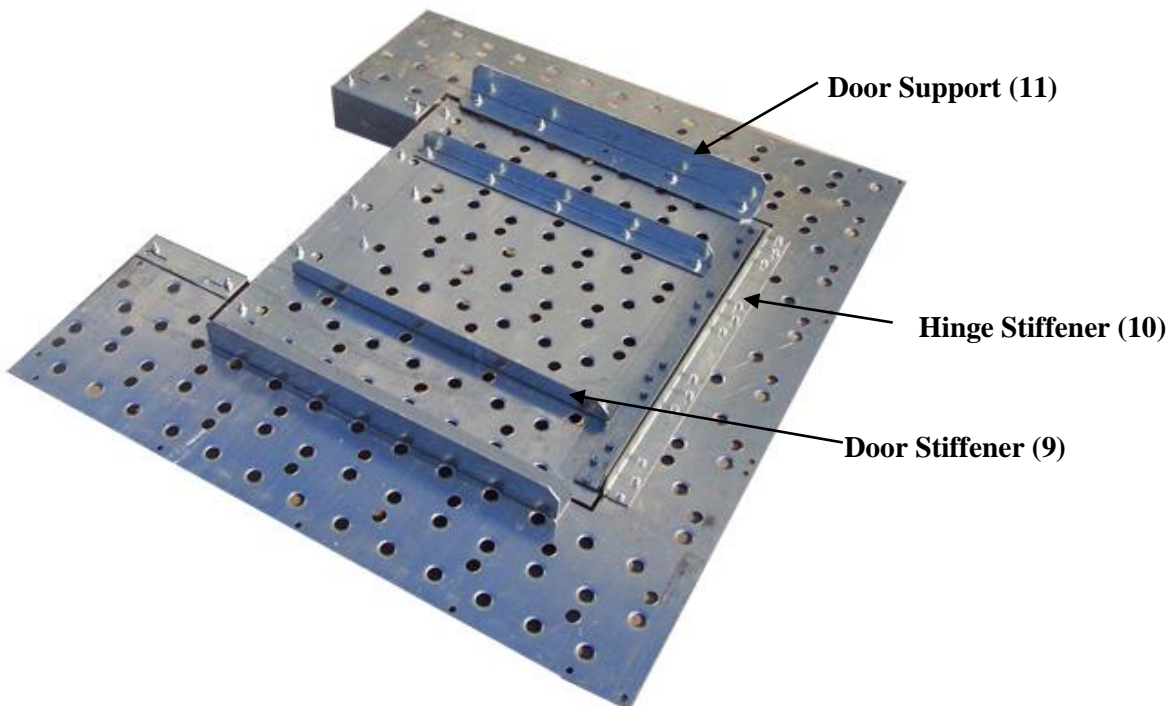
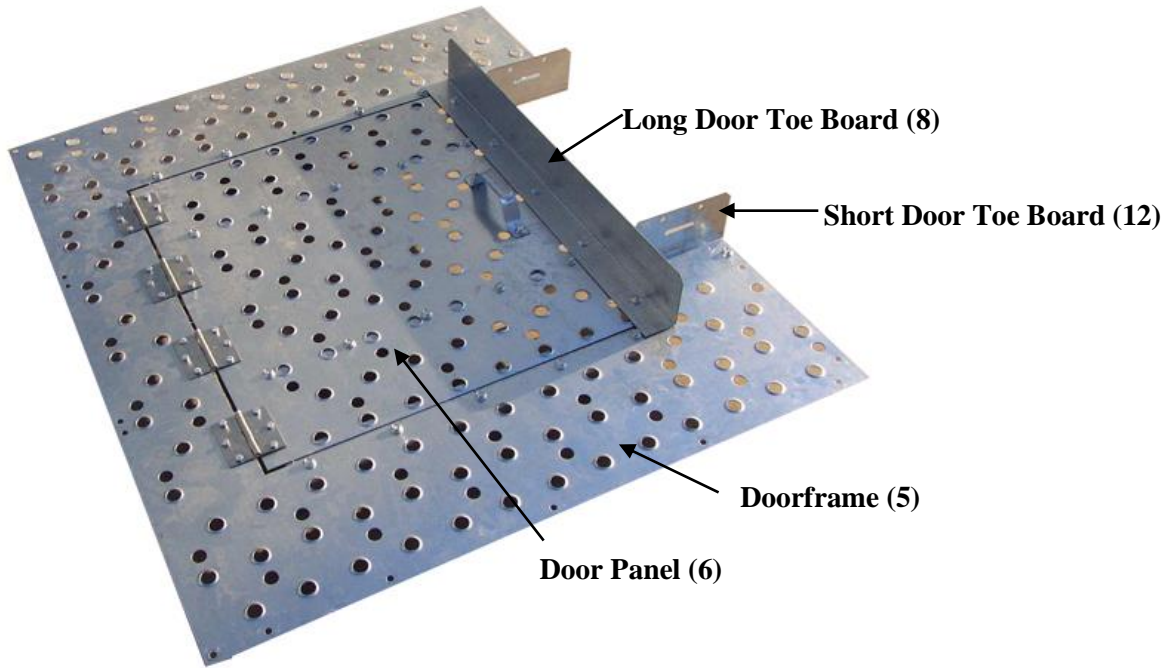


Note: double motor mounts have single plate only no reinforcements are required.

Step #2

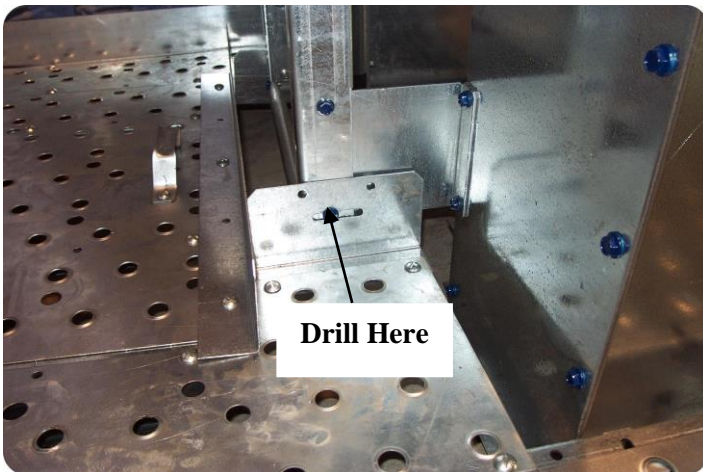
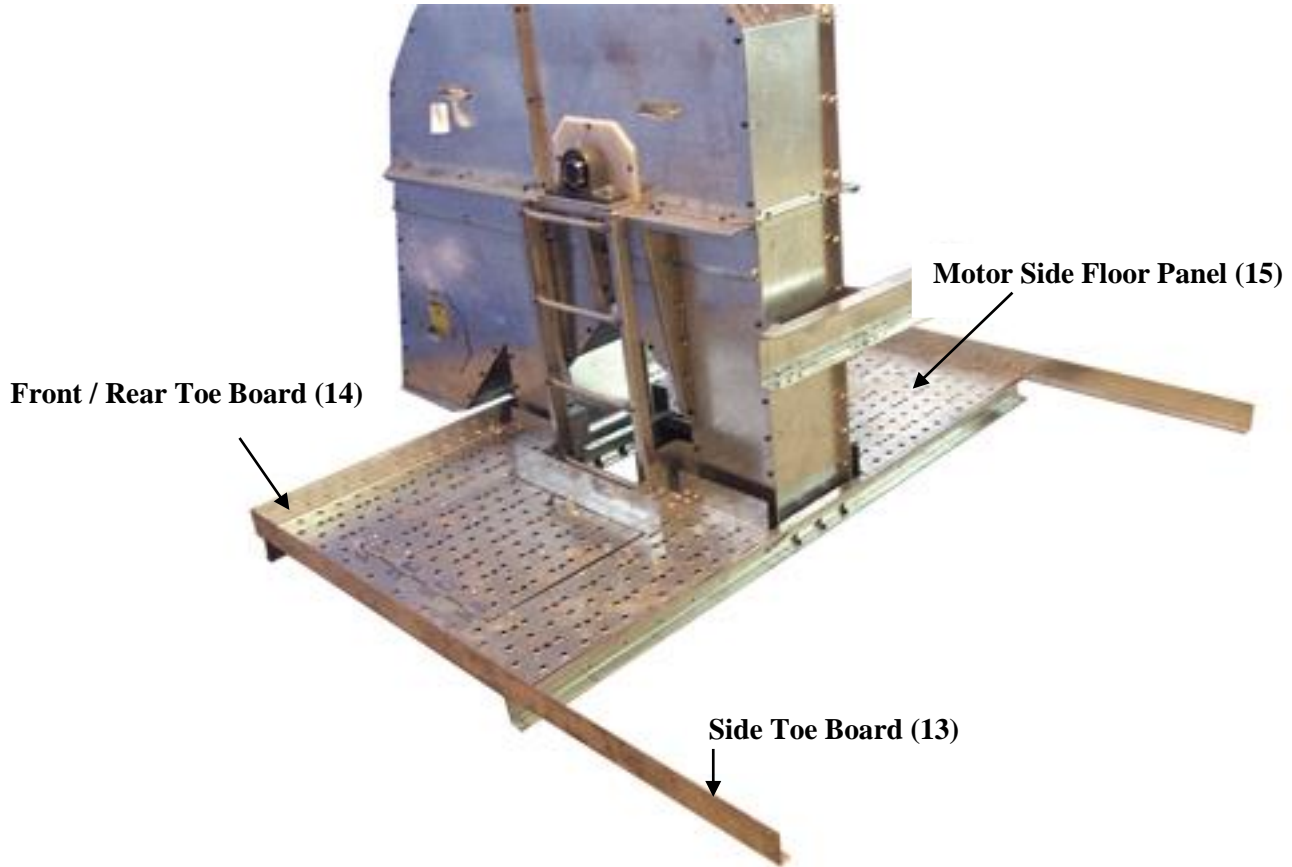
Next locate the Doorframe (5), and Door Panel (6). The door panel will require the Handle (7), Long Door Toe Board (8), and four hinges mounted to the top. Mounted to the bottom are two Door Stiffeners (9), and a Hinge Stiffener (10). The Doorframe gets two Door Supports (11), two Short Door Toe Boards (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.



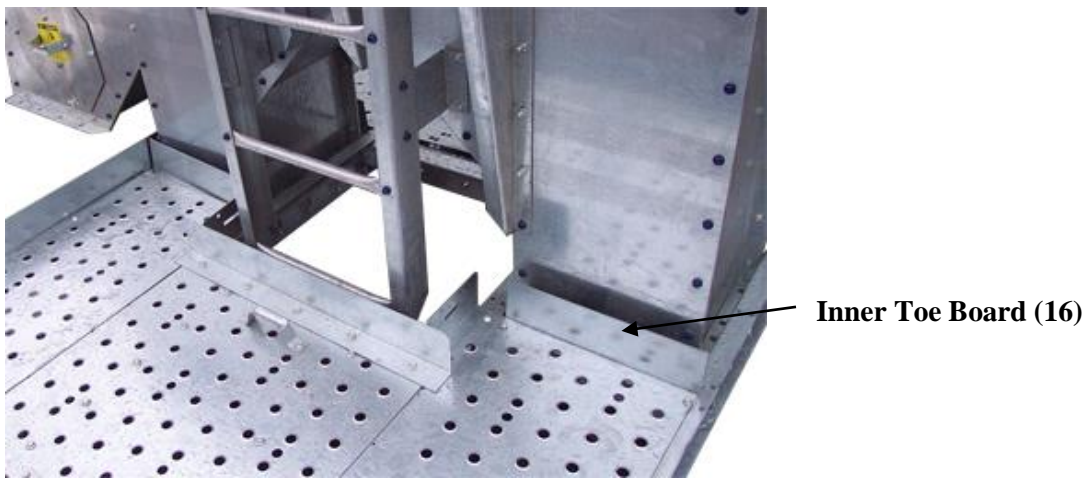
Step #3

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.

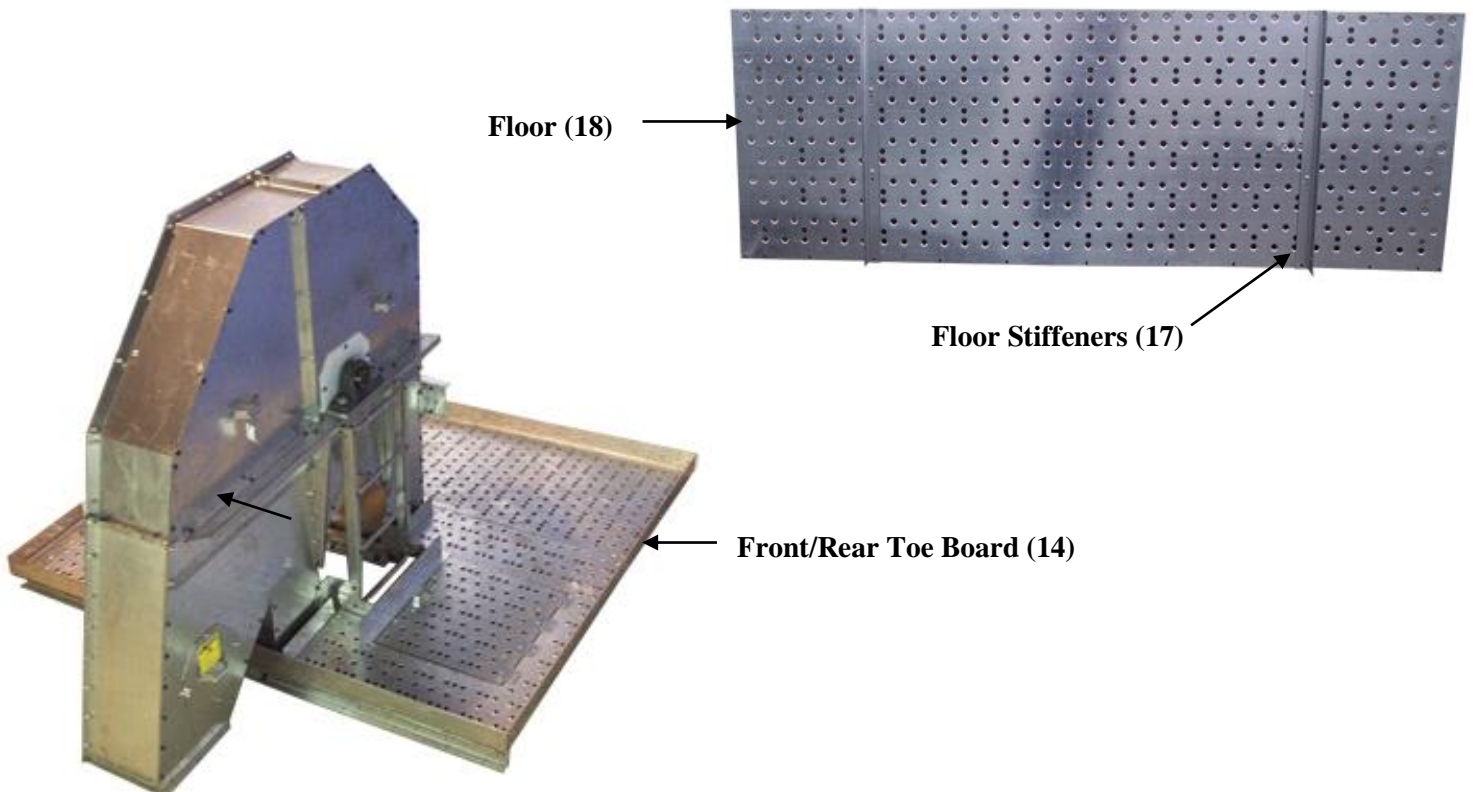


Step #4

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.

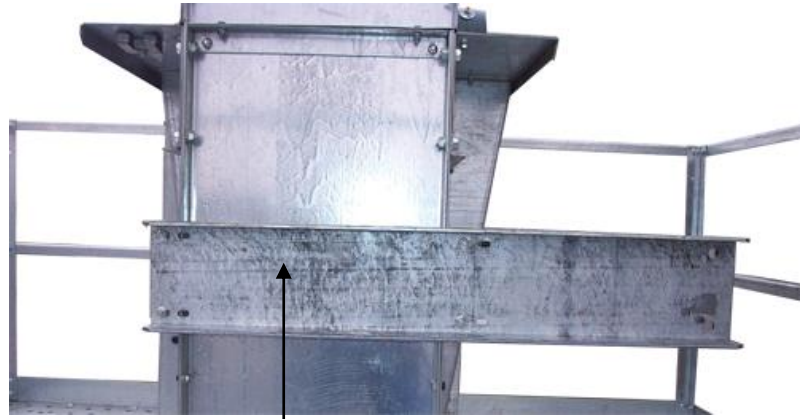
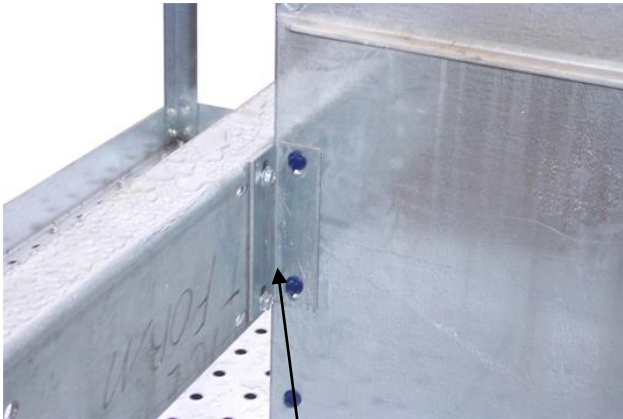
**Step #5**

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.

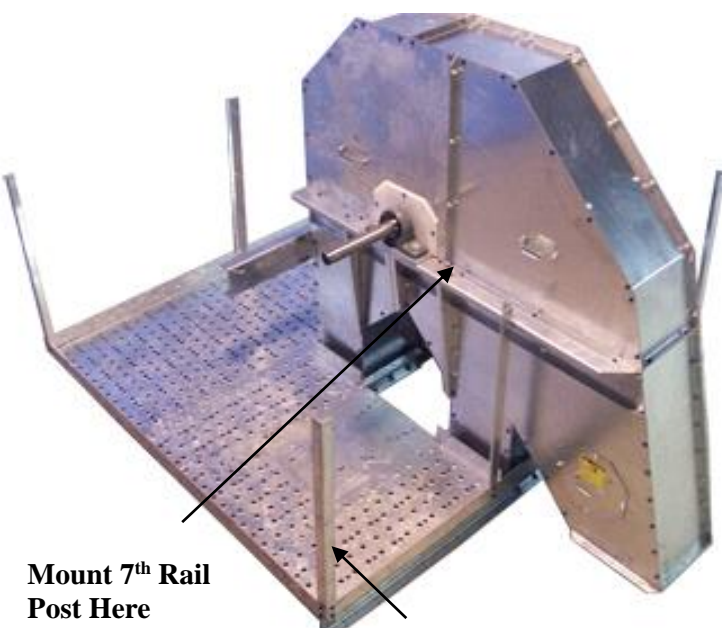


Step #6

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)



Mount 7th 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 Reducer Drive assembly section for information on guard bracket mounting points and guard assembly.