

Rev. 4.13.2017

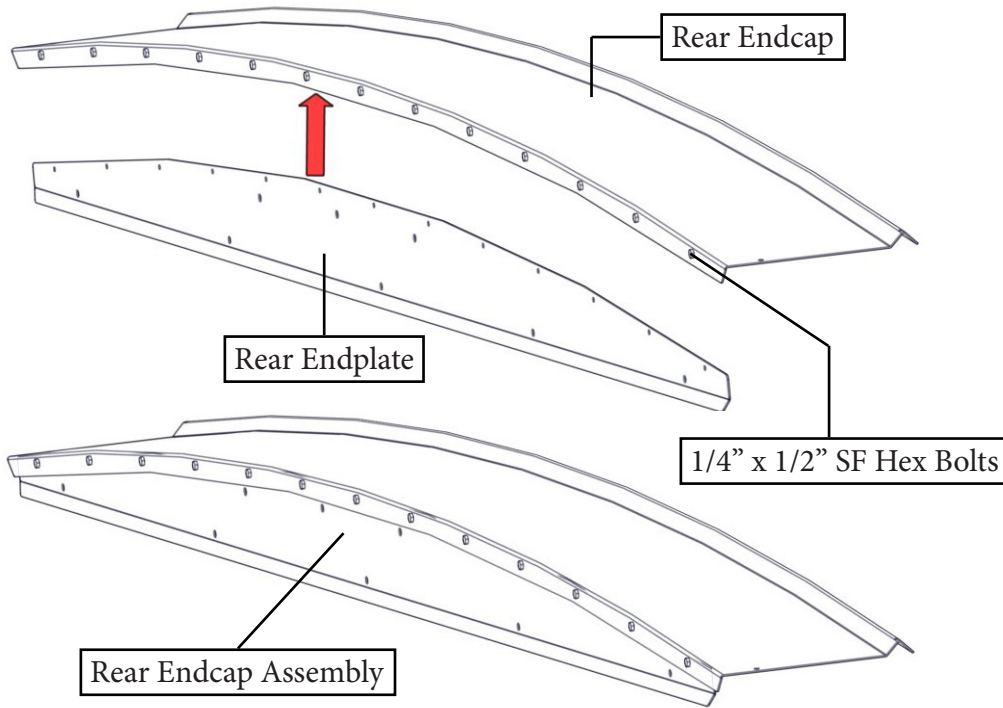
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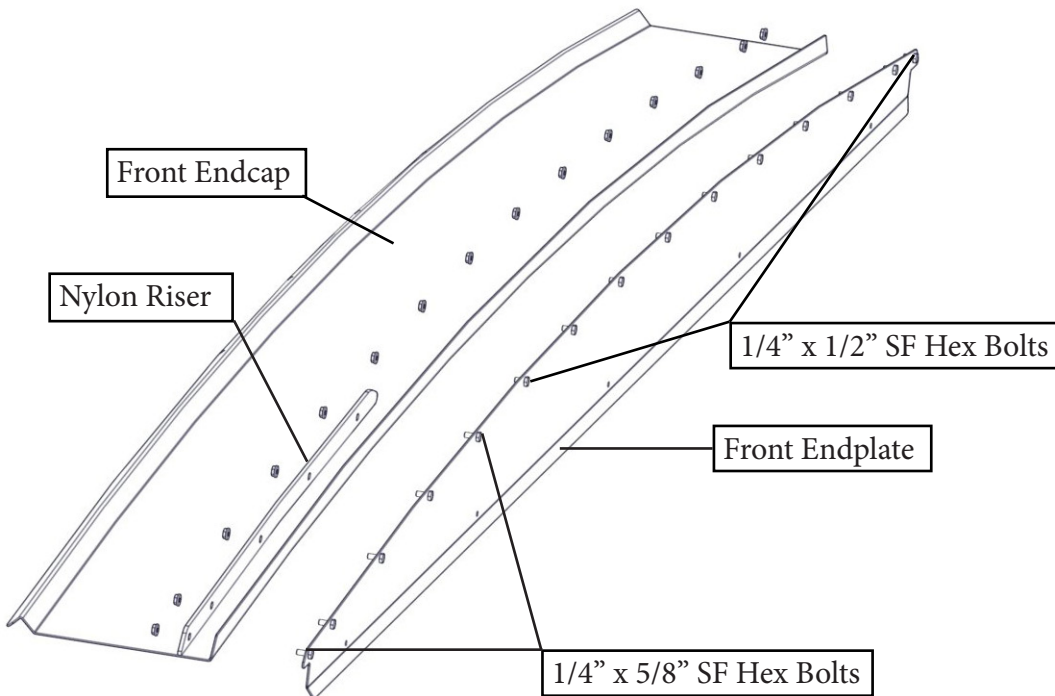
Rear Endcap Assembly

NOTE: Before beginning assembly, read the grain carts operator's manual and comply with all safety rules and operation procedures.



Assemble the rear endcap at the ground level. Attach the rear endplate to the rear endcap using 1/4" x 1/2" serrated flange hex bolts and 1/4" serrated flange hex nuts. **Tighten the hardware once finished.**

Front Endcap Assembly

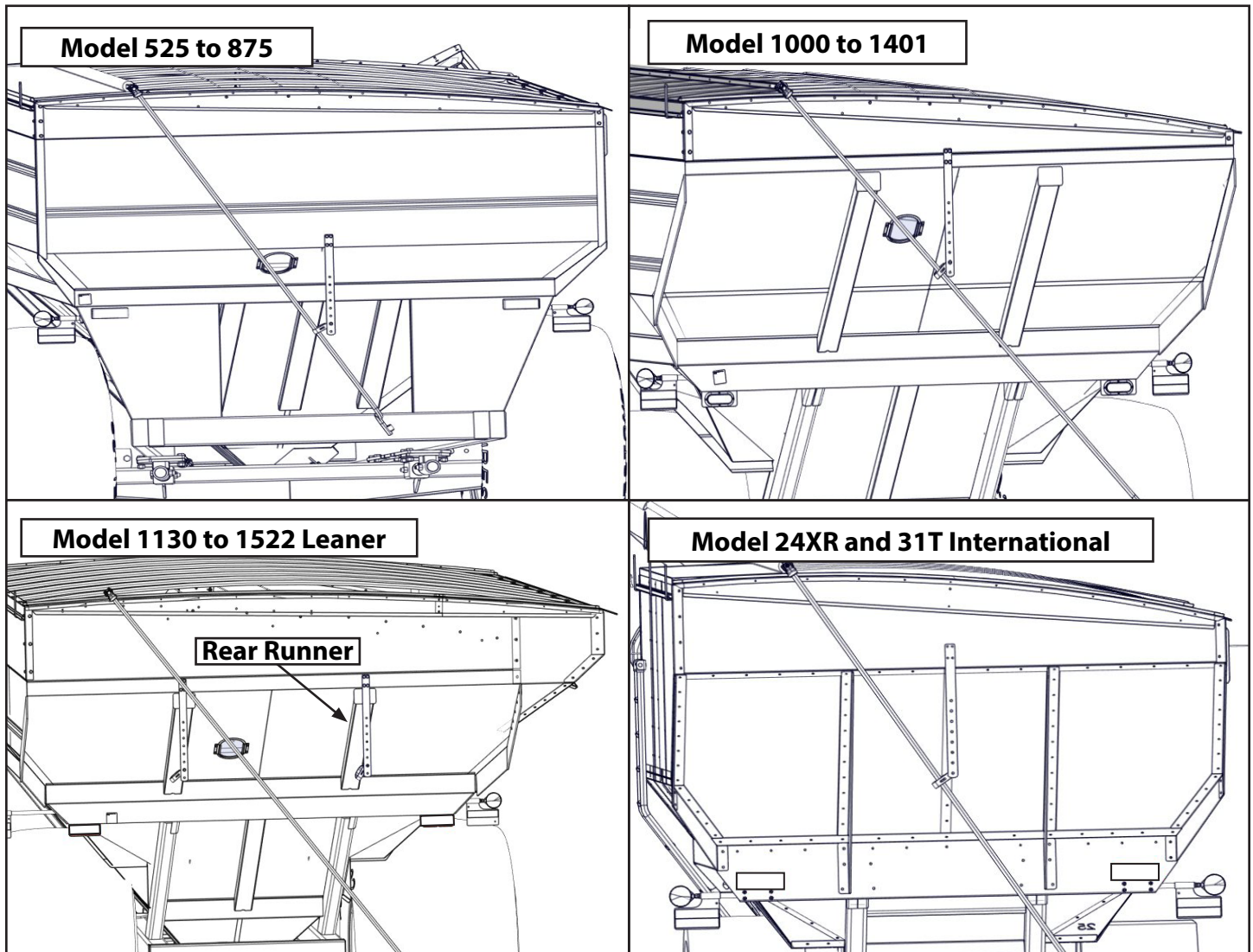


Assemble the front endcap at the ground level. Attach the front endplate to the front endcap using 1/4" x 1/2" serrated flange hex bolts and 1/4" serrated flange hex nuts. For the last 5 holes use 1/4" x 5/8" serrated flange hex bolts and 1/4" serrated flange hex nuts. Before inserting the last 5 bolts, the nylon riser will need to be inserted behind the endcap. Drill the last hole through the endcap using a 1/4" drill bit. **Tighten the hardware once finished.**

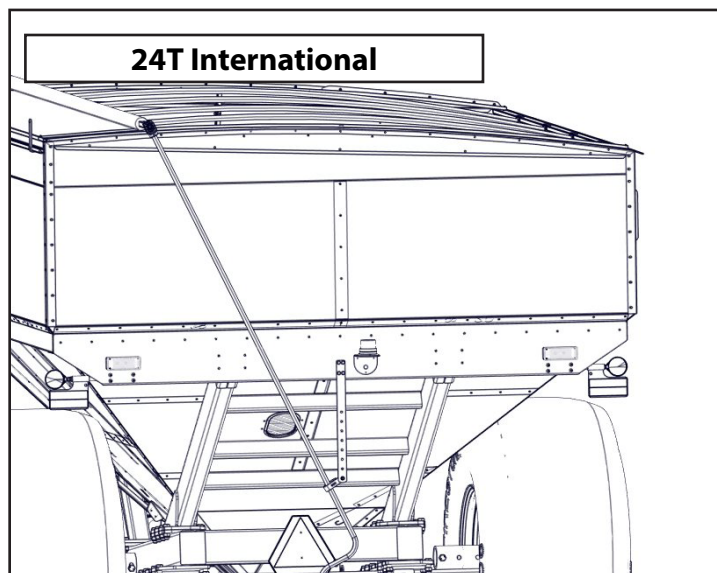
Hanger Bracket

NOTE: If you are installing the optional Electric Roll Tarp skip to Tightening Lip on pg. 5.

Place the hanger bracket with the four hole pattern, positioned at the top, in the center of the rear wall on the cart. Keep the hanger bracket as low as possible on the rear wall. Mark the four holes then drill with a 7/16" bit. See figure below for specific model.



NOTE: All Leaner models have (2) hanger brackets. Center the hanger brackets with the rear runners and place the bracket as low as possible on the rear wall.



Hanger Bracket Standard Grain Carts

Install the roll tarp hanger bracket. Use (4) 3/8"-16 x 1" Gr5 Z serrated flange hex bolts and (4) 3/8"-16 Gr5 Z serrated flange hex nuts to attach the hanger bracket to the rear end panel brace. Tighten the hardware once installed.

Next install the hanger bracket hook and the rubber flap. Use a 1/2"-13 x 1-1/4" Gr5 Z hex bolt and a 1/2"-13 x 1-1/4" Gr5 Z centerlock hex nut to attach the hook and flap to the hanger bracket. Tighten the hardware once installed.

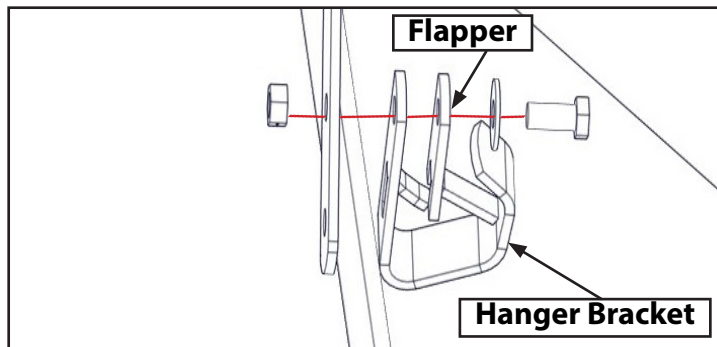
Note: Make sure that hanger bracket hook is facing towards the cart when installed.

International Grain Carts

Install the roll tarp hanger bracket. Use (4) M10-1.5 x 25 Gr8.8 YZ serrated flange hex bolts and (4) M10-1.5 Gr8.8 YZ serrated flange hex nuts to attach the hanger bracket to the rear end panel brace. Tighten the hardware once installed.

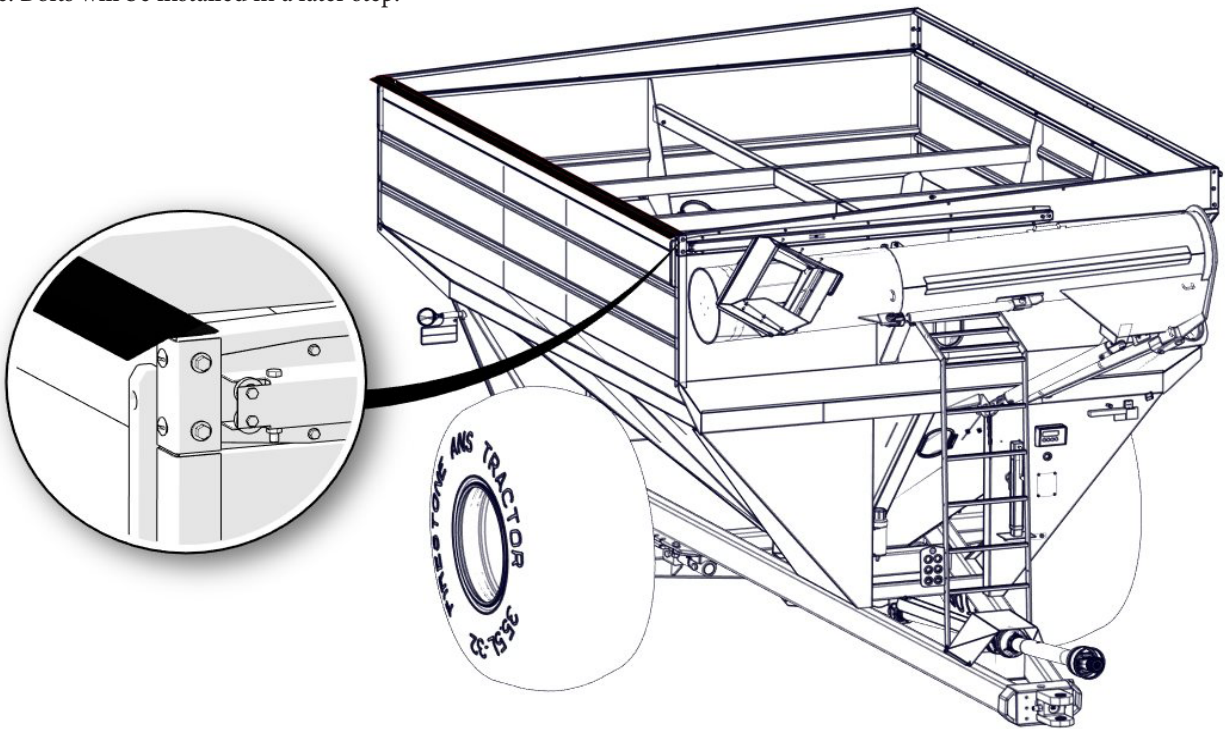
Next install the hanger bracket hook and the rubber flap. Use a M12-1.75 x 50 Gr8.8 YZ hex bolt and a M12-1.75 Gr8.8 YZ nylon locking hex nut to attach the hook and flap to the hanger bracket. Tighten the hardware once installed.

Note: Make sure that hanger bracket hook is facing towards the cart when installed.



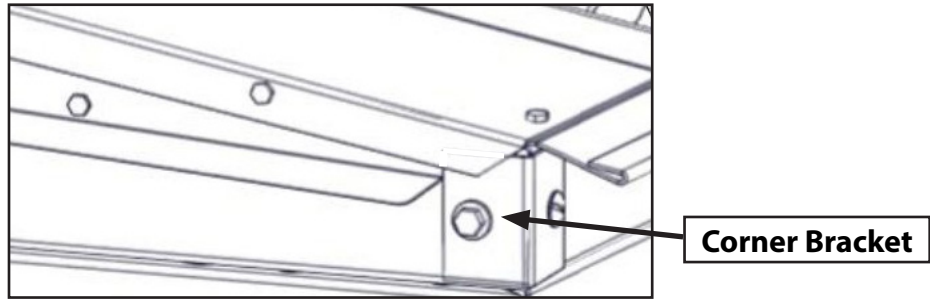
Tightening Lip

Center the tightening lip from the front to the rear of the cart on the opposite auger side of the grain cart. Depending on the length of your grain cart, there may be a total of two tightening lips. If there is two, position the inside edge of each tightening lip to the center of the grain cart. Make sure that the tightening lip is flush to the inside of the sideboard. The holes may already be pre-drilled for installation or they may need to be drilled out with a 1/4" drill bit. Use a pair of C-clamp vise grips to temporarily hold the tightening lip in place. Bolts will be installed in a later step.



Install the Rear Endcap

Place the Rear Endcap Assembly onto the back of the grain cart. Slide the endcap to the right until it makes contact with the corner bracket.

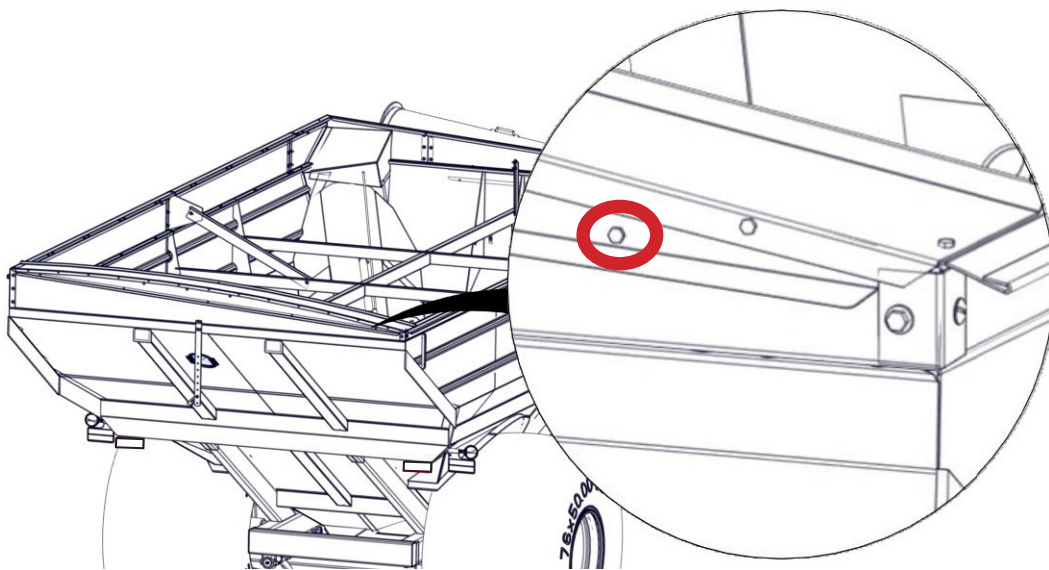


Using a 1/4" drill bit, drill through the hole closest to the corner bracket. Once drilled, fasten with a 1/4" x 1/2" serrated flange hex bolt and nut. Now drill the opposite side and fasten with a 1/4" x 1/2" serrated flange hex bolt and nut.

Now drill the remaining holes for the rear endcap. All the holes that need drilled run horizontally with the hole that was just drilled.

Note: While drilling, pull up on the front of the endcap so the faceplate will lie parallel with the rear grain cart wall.

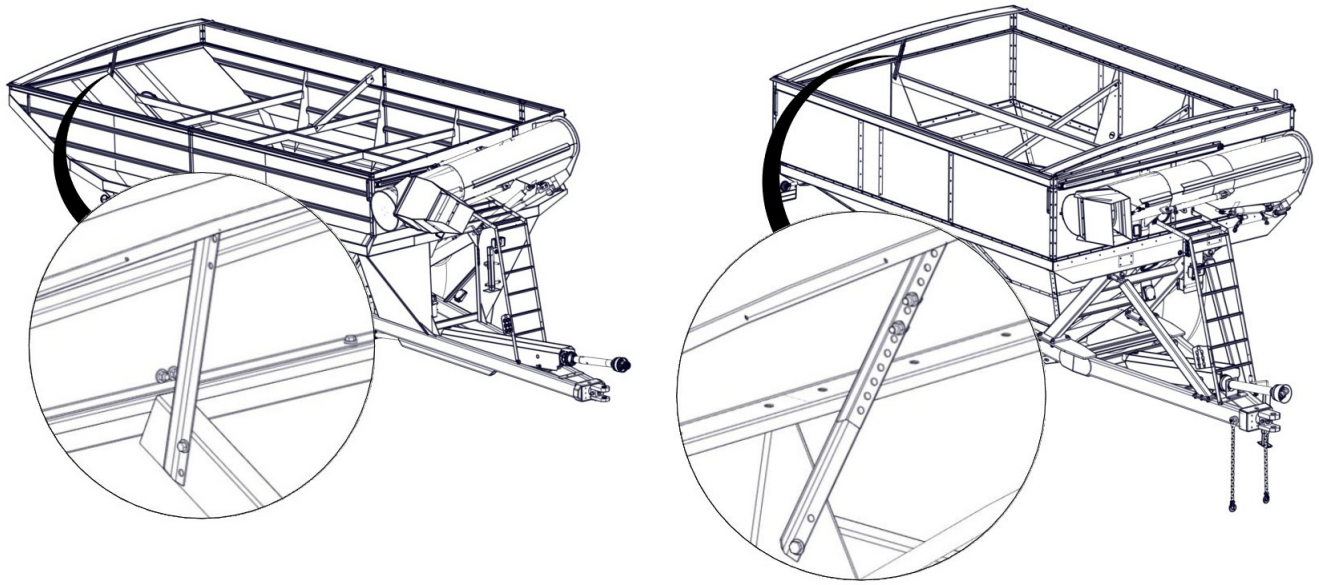
Place 1/4" x 1/2" serrated flange hex bolts and nuts in the remaining holes and tighten the hardware once finished.



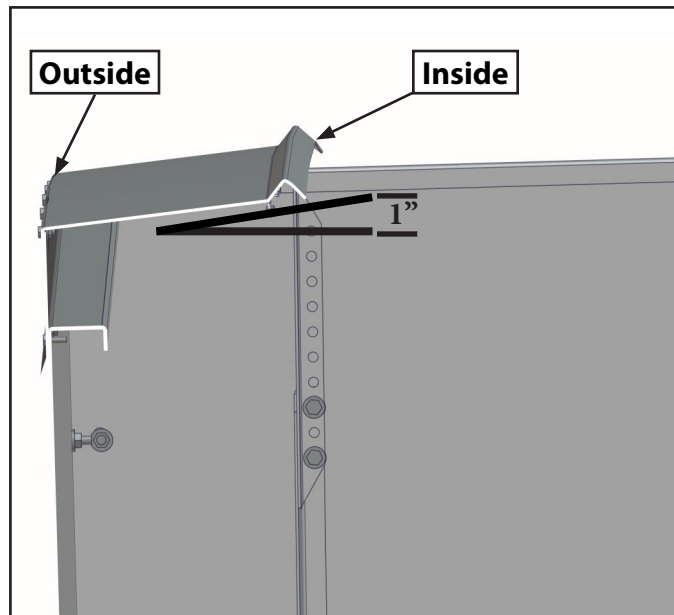
NOTE: While drilling, pull up on the front of the endcap so the faceplate will lie parallel with the rear grain cart wall.



Rear Endcap Support Brace

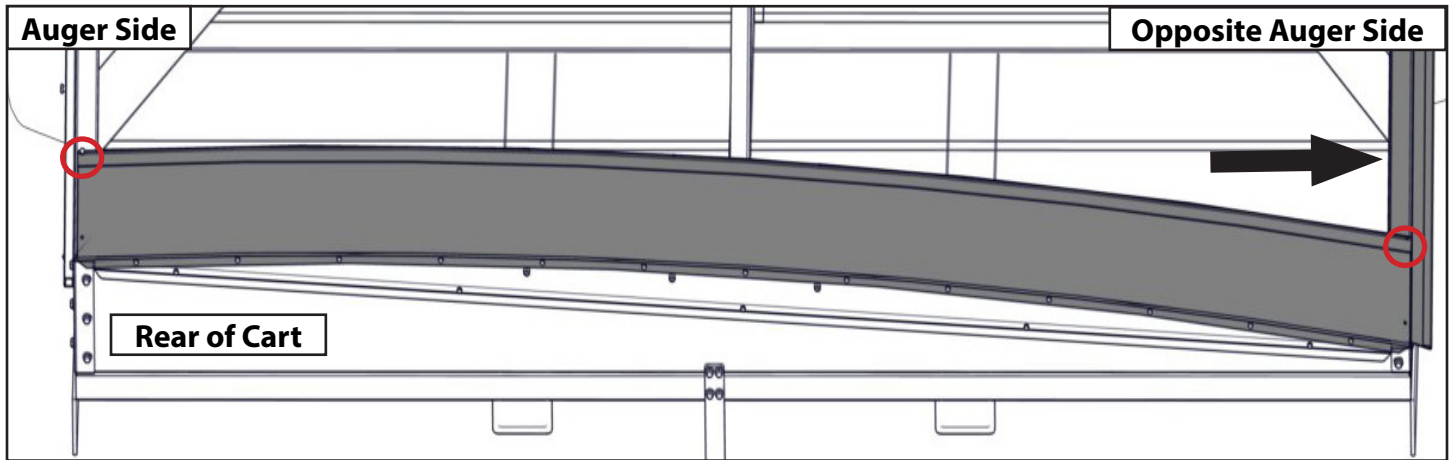


Install the endcap brace. The purpose of the endcap brace is to hold the inside of the endcap up approximately 1" higher than the outside of the endcap. Drill a hole using a 1/4" drill bit first followed by a 7/16" drill bit. The hole should be placed onto the nearest crossbrace which is welded to the shell body. The hole should be located somewhere between the middle of the endcap and the inside of the endcap. There are two braces that can be used to support the endcap. Some carts will need one brace and some will need two. Use the combination that raises the inside lip of the endcap 1" above the outside edge of the endcap. Use 3/8" x 1" serrated flange hex bolts and nuts to attach the braces to the grain cart.



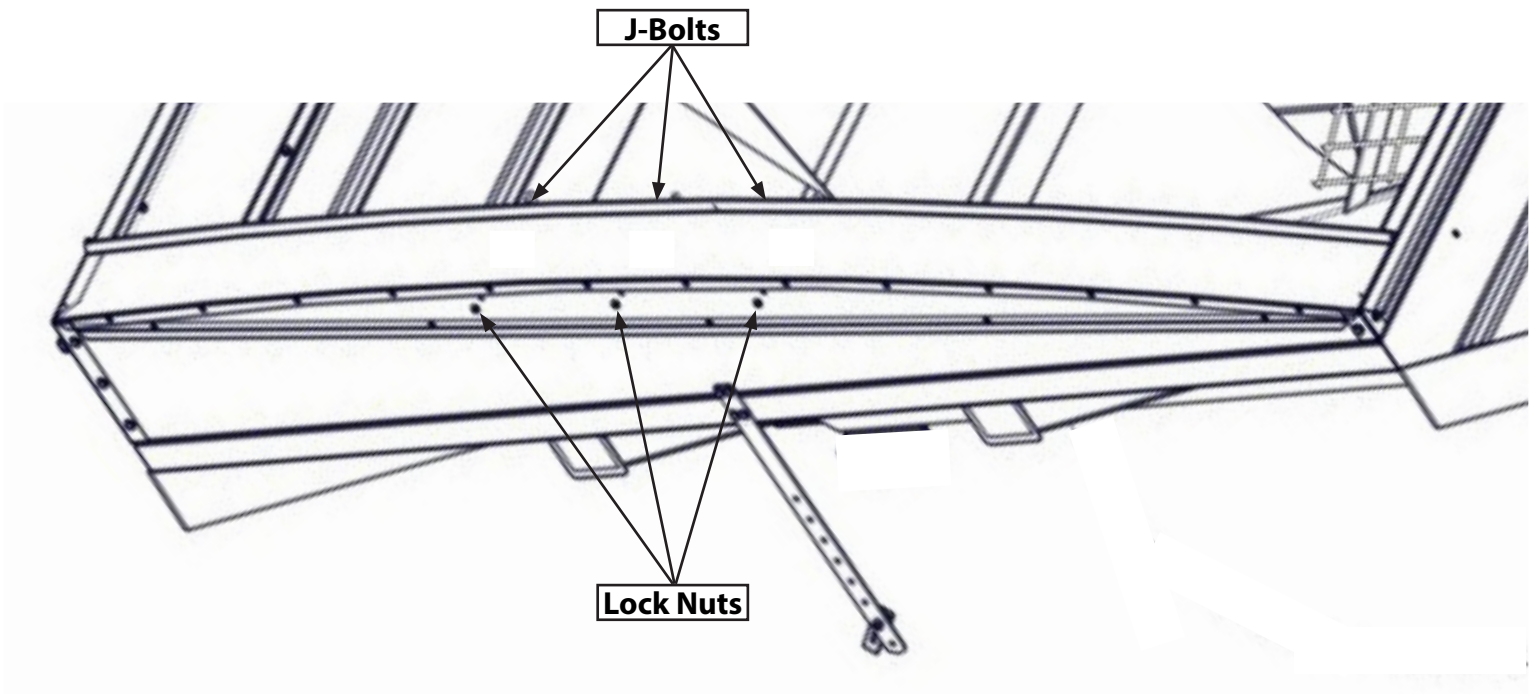
Tighten Rear Endcap

Pull the tightening lip tight against the opposite auger side of the grain cart. Using a 1/4" bit, drill through the hole on the top of the endcap. Fasten the endcap by using a 1/4" x 1-1/2" bolt and 1/4" serrated flange nut. Tighten the bolt. Now go to the other end of the endcap and repeat the same procedure.



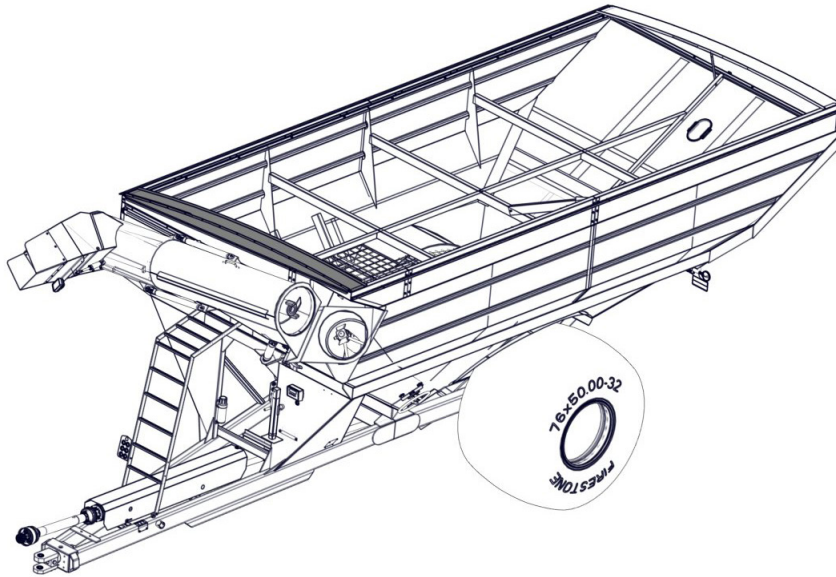
Install J-Bolts

Now place (3) 3/8" j-bolts into the three remaining holes in the rear endcap. Fasten the j-bolts with (3) 3/8" locknuts.
NOTE: DO NOT tighten past flush.



Install the Front Endcap

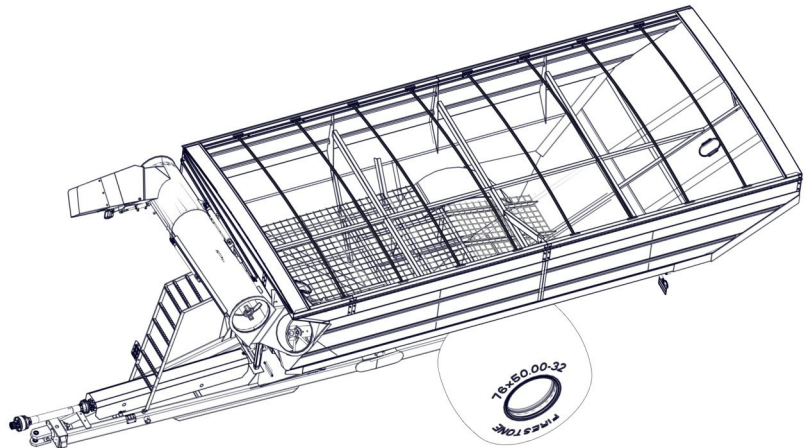
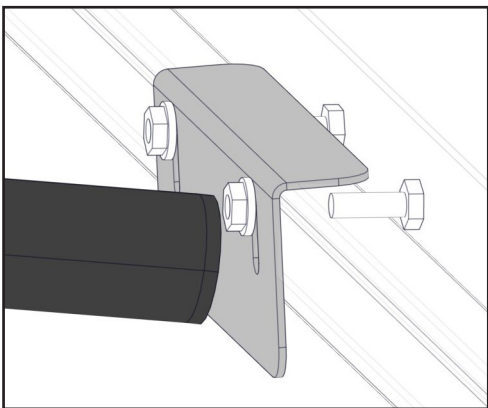
Install the front endcap assembly using the same procedure used to install the rear endcap assembly. The front endcap does not use j-bolts therefore there are no holes for them. Do not forget the **endcap brace**. (See pages 6-8)



Tarp Bows

Install all of the tarp bows. Use (4) 1/4" x 3" hex bolts and (4) 1/4" serrated flange nuts for each bow.

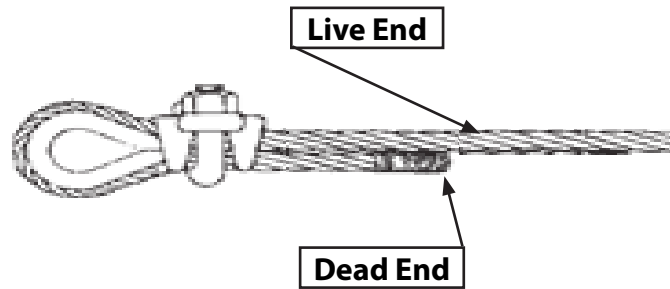
NOTE: If your tightening lip is centered and there are no holes visible through your lip lock and sideboard, holes will need to be drilled wherever there are slots in the lip lock. Use a 1/4" drill bit to accomplish this. Now make sure that all of the tarp bows are perpendicular to the auger side of the cart and drill 1/4" holes through the sideboards. This should only be the case on later model grain carts.



Install Cable Clamps

Using a cable clamp, feed one end of the cable through the cable clamp, make a small loop then tighten the cable. Do this with all three cables.

NOTE: Make sure that the base of the clip bears on the live end of the rope and the “U” of the bolt bears on the dead end.



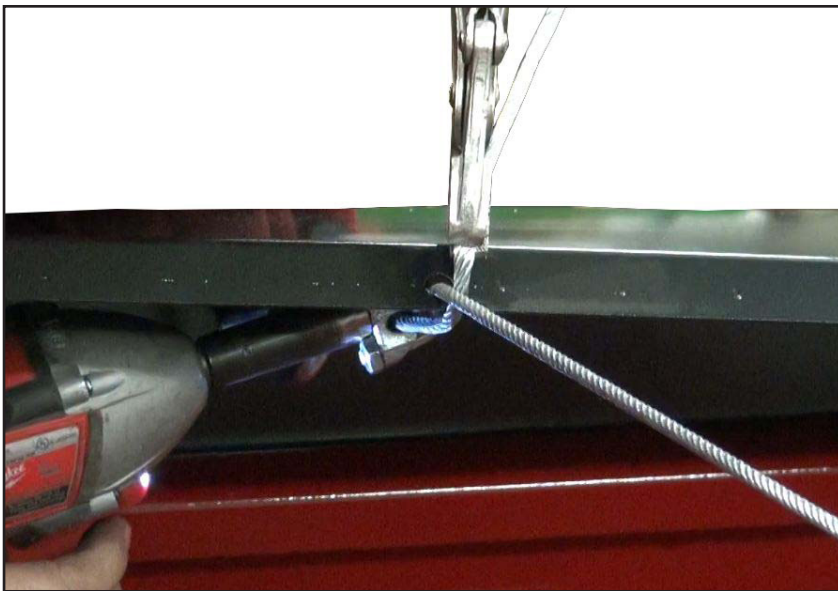
Now route all three cables through the front endcap pulling the end without the cable clamps through first.

NOTE: Make sure to pull from front to back.

Next route the cables over the arched bows and thread them through the existing holes on the rear endcap. Now feed the cables through the cable clamps.

NOTE: Make sure that the base of the clip bears on the live end of the rope and the “U” of the bolt bears on the dead end.

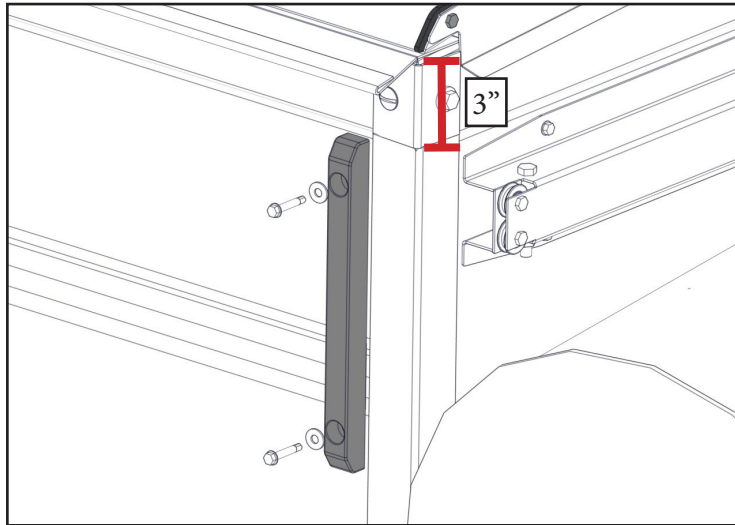
Place the loop into the j-bolt. Use a vise grip to pull on the cable. Pull the cable tight, then tighten the cable clamp. Once the clamps are tightened, tighten the j-bolts. Insert a wrench into the hook of the j-bolt and tighten the nut.



Use wrench or bolt to hold the j-bolt while tightening.

Install Tarp Standoffs

Install the plastic stand-offs. Place the standoff approximately 3 inches from the top of the sideboard extension. Butt the stand-off against the welds that are on the corner of the grain cart. Mark holes with a 1/4" drill bit, then drill (2) holes. Use (2) 1/4" self tapping screws and (2) 1/4" washers to fasten the standoff to the grain cart. Do this for the opposite auger front and rear section of the grain cart.

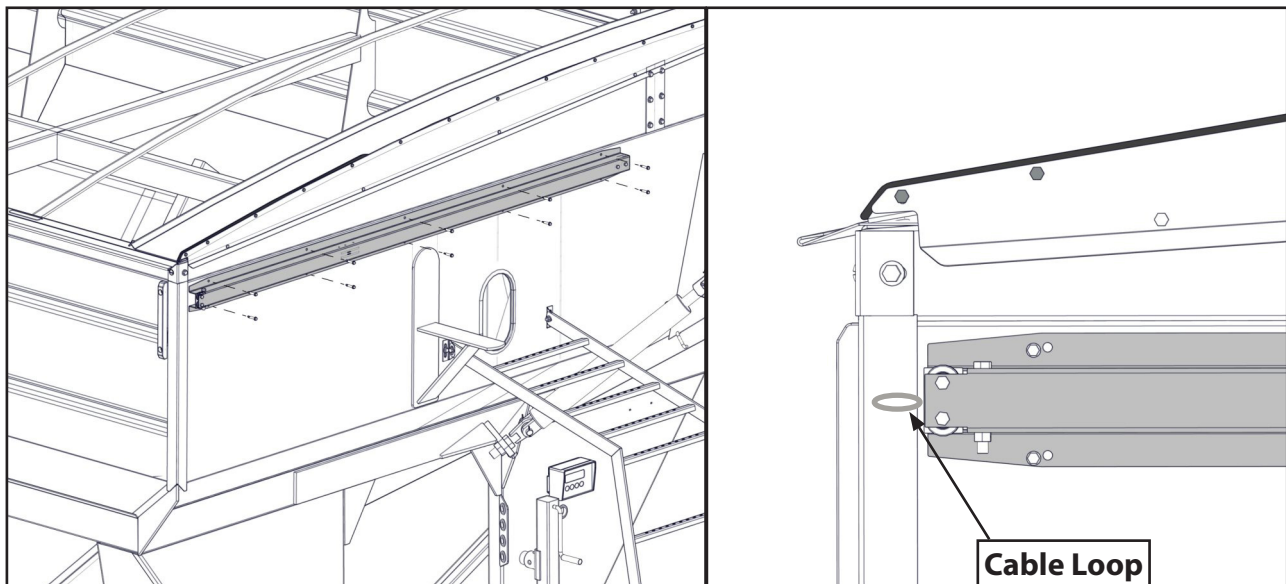


Install the Spring Return

Place the spring return as close to the front endcap and butt the side of the spring return, with the cable loop, against the welds on the corner of the grain cart.

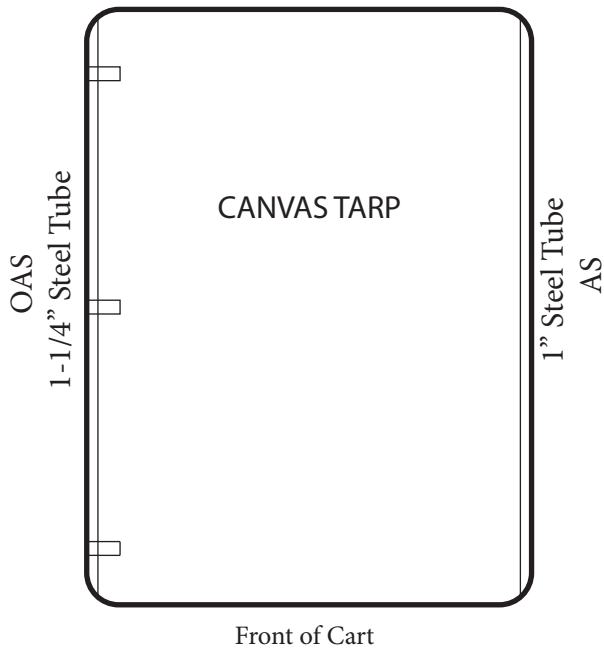
NOTE: Make sure that the spring return is level with the ground and that the spring return is not hindered by any part of the cart.

Use a 1/4" drill bit to make your first hole. Then fasten the spring return to the cart using 1/4" x 3" self tapping screws. Next drill through the remaining holes and insert the self tapping screws.

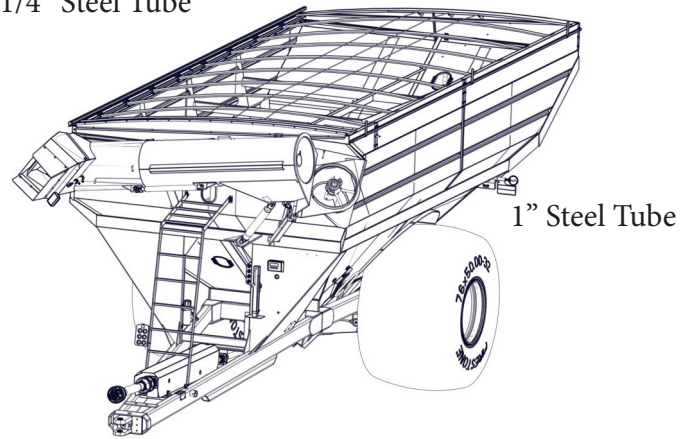


Insert Roll Tarp Tubes

Prepare the canvas tarp. Spread the canvas tarp out so that the (3) stiffening patches are on the opposite auger side with the shiny side down. Install the 1-1/4" steel tube through the opposite auger side canvas tarp end. Then feed the 1" steel tube through the auger side tarp end.



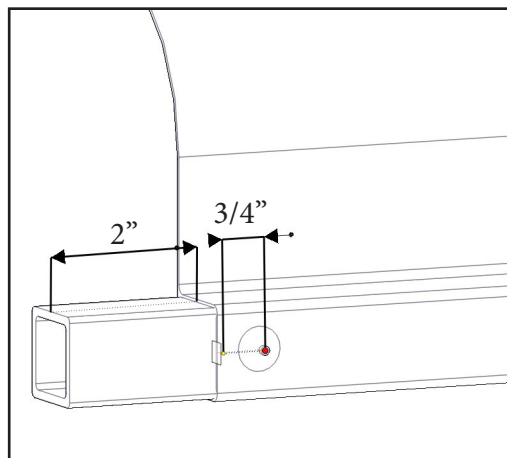
1-1/4" Steel Tube



1" Steel Tube

Install Stop Tube

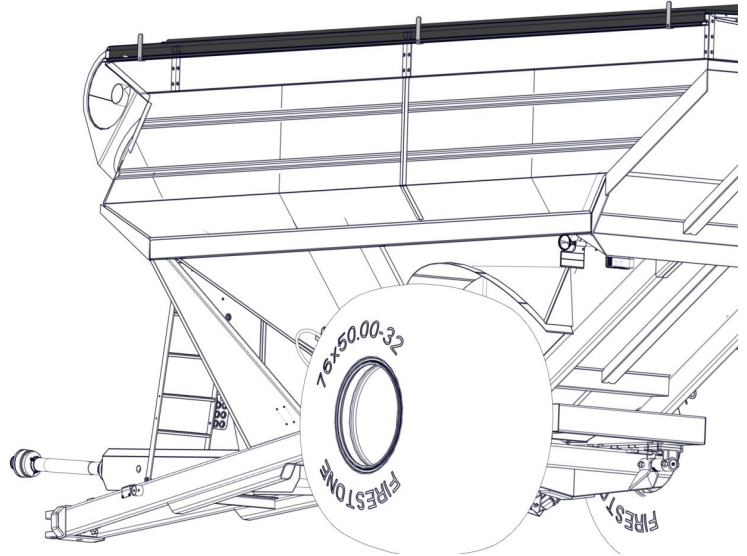
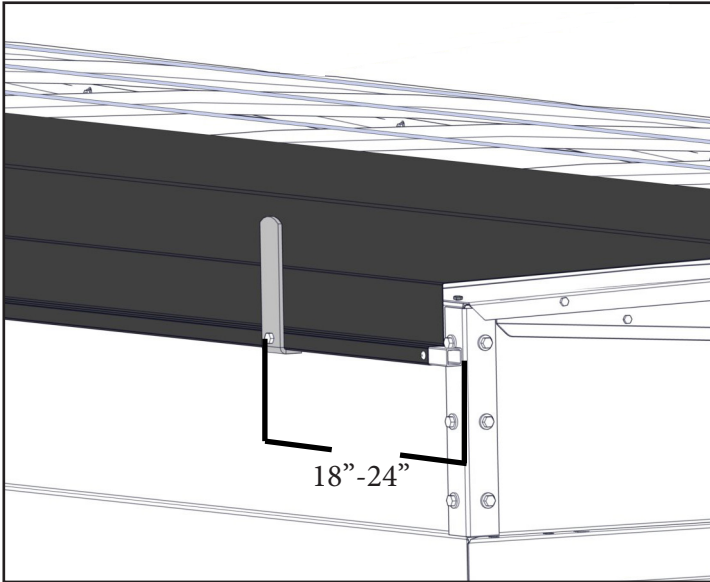
On the auger side of the grain cart, measure 2" from the end of the tube. This is where the canvas tarp should stop. Now measure 3/4" over onto the canvas tarp. Drill a 1/4" hole through the tarp and the first wall on the tube. Next install a pop rivet using a hammer. Now go to the opposite end of the same tube and pull the tarp tight. Measure 3/4" from the end of the tarp, drill a 1/4" hole and install another pop rivet.



Install the Roll Tarp Stops

Next place the 1" tube under the top bolt of the back corner bracket on the auger side. Drill a 1/4" hole through the tube and sidewall approximately 18" to 24" in from the corner of the cart. Then re-drill the hole with a 7/16" bit. Place a 3/8" x 2" bolt through the Roll Tarp Stop, 1" tube, and grain cart sidewall. Fasten with a 3/8" serrated flange nut. Now repeat this process at the front of the cart. For the center hole slightly push the 1" tube to the top of the sidewall and repeat the process to drill a 7/16" hole. Place a 3/8" x 2" bolt through the Roll Tarp Stop, 1" tube, and grain cart sidewall.

NOTE: For Grain Carts that have a center splice make sure that the 1" tube is above the top bolt of the center splice.



Install Pop Rivets on Roll Tube

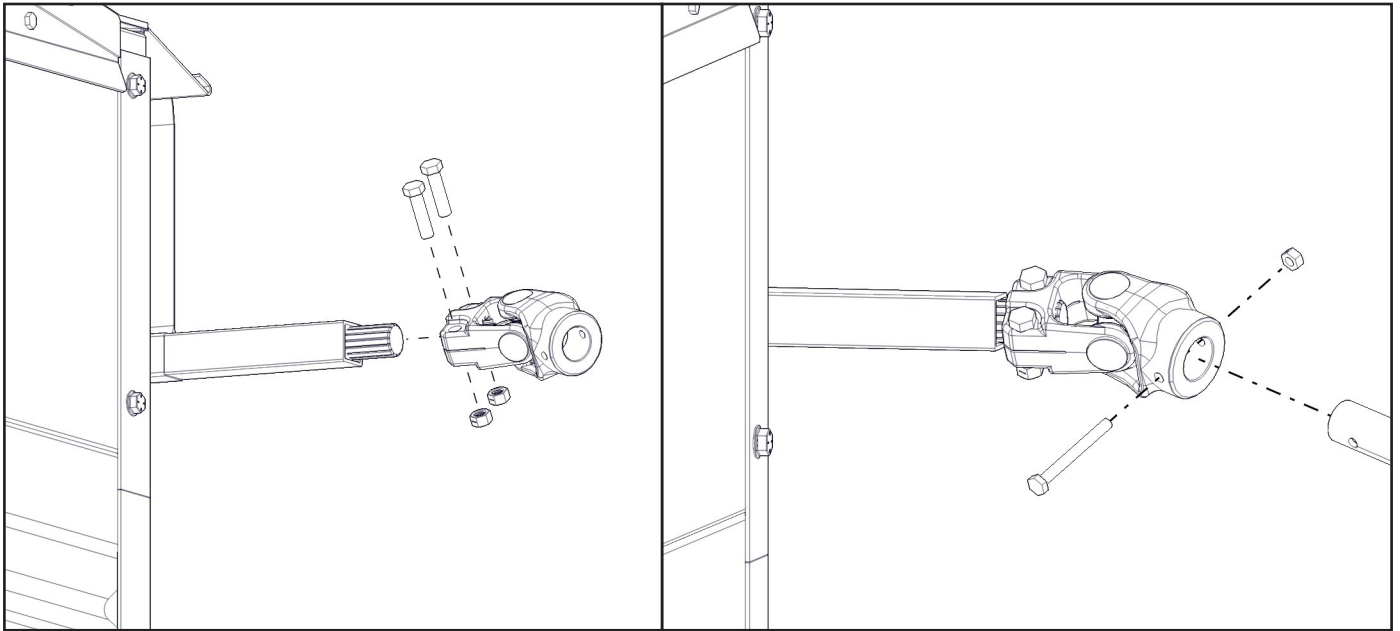
Line the roll tube spool up with the spring return cable. Drill a 1/4" hole through the first stiffening patch. Fasten the canvas tarp using a pop rivet. Go to the rear of the cart, pull the canvas tarp tight, and repeat the process. Then install pop rivets at the remaining stiffening patches. Once finished slip the Spring Return cable loop over the spool.



Install the Crank Handle

NOTE: If you are installing the optional Electric Roll Tarp go to top of the next page.

Attach the knuckle to the roll pipe. Use (2) 3/8" x 2" hex bolts along with (2) 3/8" lock nuts. Now attach the crank handle to the universal joint. Install the crank handle using (1) 1/4" x 2-1/2" bolt and (1) 1/4" locknut. The universal joint may be pre-assembled to the crank handle.

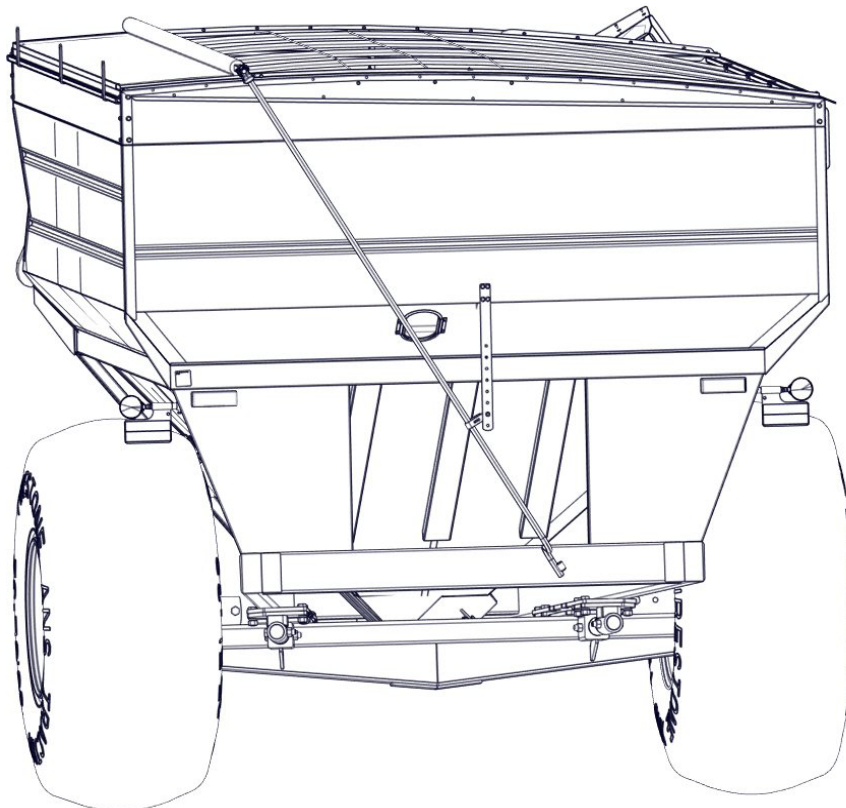


Check for proper function of the of the Roll Tarp.

NOTE: To insure proper function of the roll tarp make sure to lightly push towards the front of the grain cart while rolling the tarp to the auger side.

Set up of the roll tarp is complete.

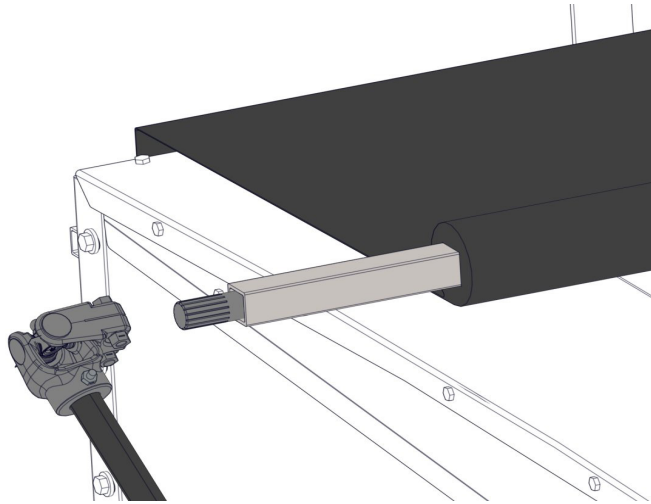
Auger Side



Opposite Auger Side

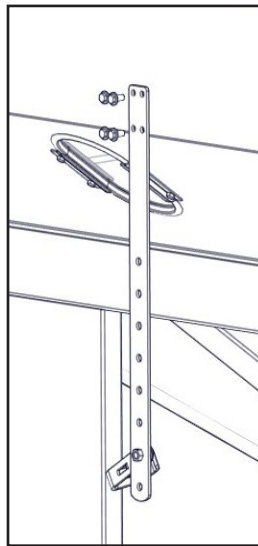
Install Electric Roll Tarp

Remove the Knuckle from the roll tube if previously installed. Un-tighten both 3/8" locknuts, then pull the knuckle away from the tarp. Keep knuckle and crank handle.



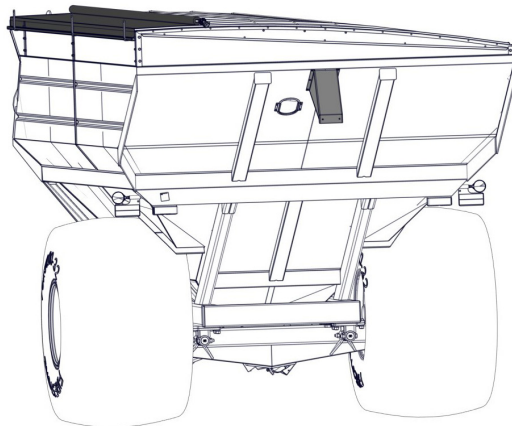
Remove the Hanger Bracket

Un-install the hanger bracket if previously installed. Remove the (4) 3/8" x 1" serrated flange hex bolts and nuts then remove the hanger bracket from the grain cart. Install the bolts back into their original holes. Keep the hanger bracket.



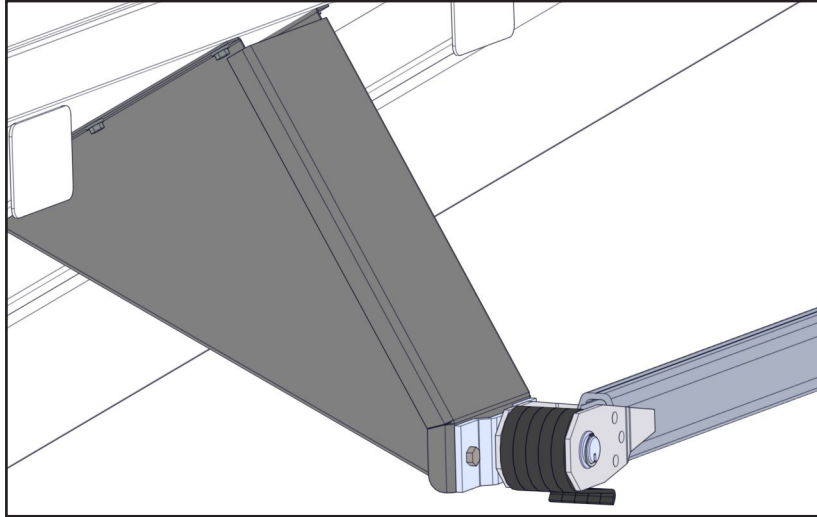
Electric Roll Tarp Mount

Place the electric roll tarp mount in the middle of rear slope as far up as it can go. Mark and drill (6) 7-16" holes. Attach the mount to the grain cart using (6) 3/8"x 1" serrated flange hex nuts and bolts. Tighten hardware once installed.



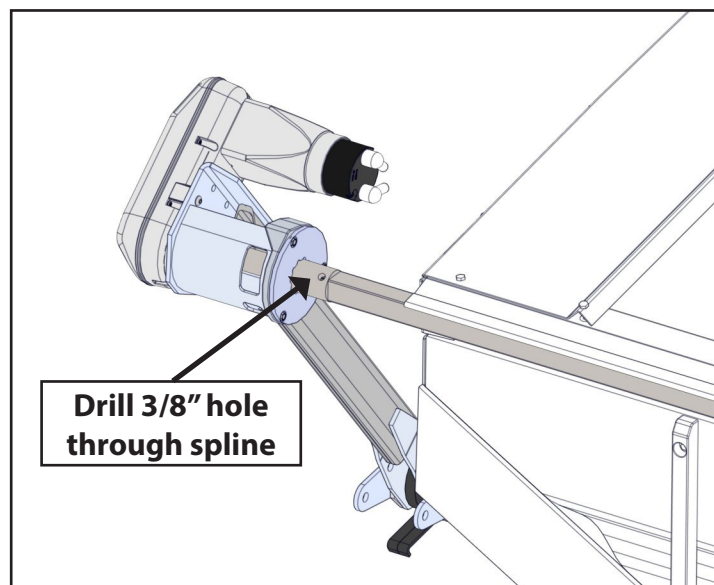
Attach Electric Roll Tarp Arm

Attach the electric roll tarp arm to the mount. Use (2) 1/2" x 1" hex bolts and (2) 1/2" hex nuts.



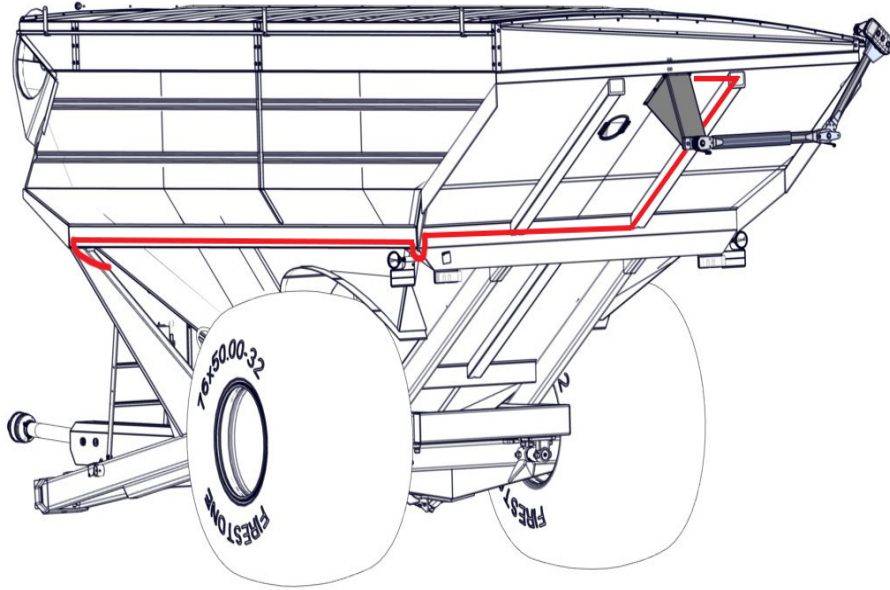
Attach the Electric Roll Tarp Motor

Adjust the roll tarp arm to the correct length, tighten the two set screws, and attach the motor to the roll tube. Once the motor is attached drill a 3/8" hole through the spline using the hole in the motor shaft as a guide. Fasten the motor to the roll tube using a 5/16" x 2" hex bolt and a 5/16" locknut. Tighten hardware once finished.



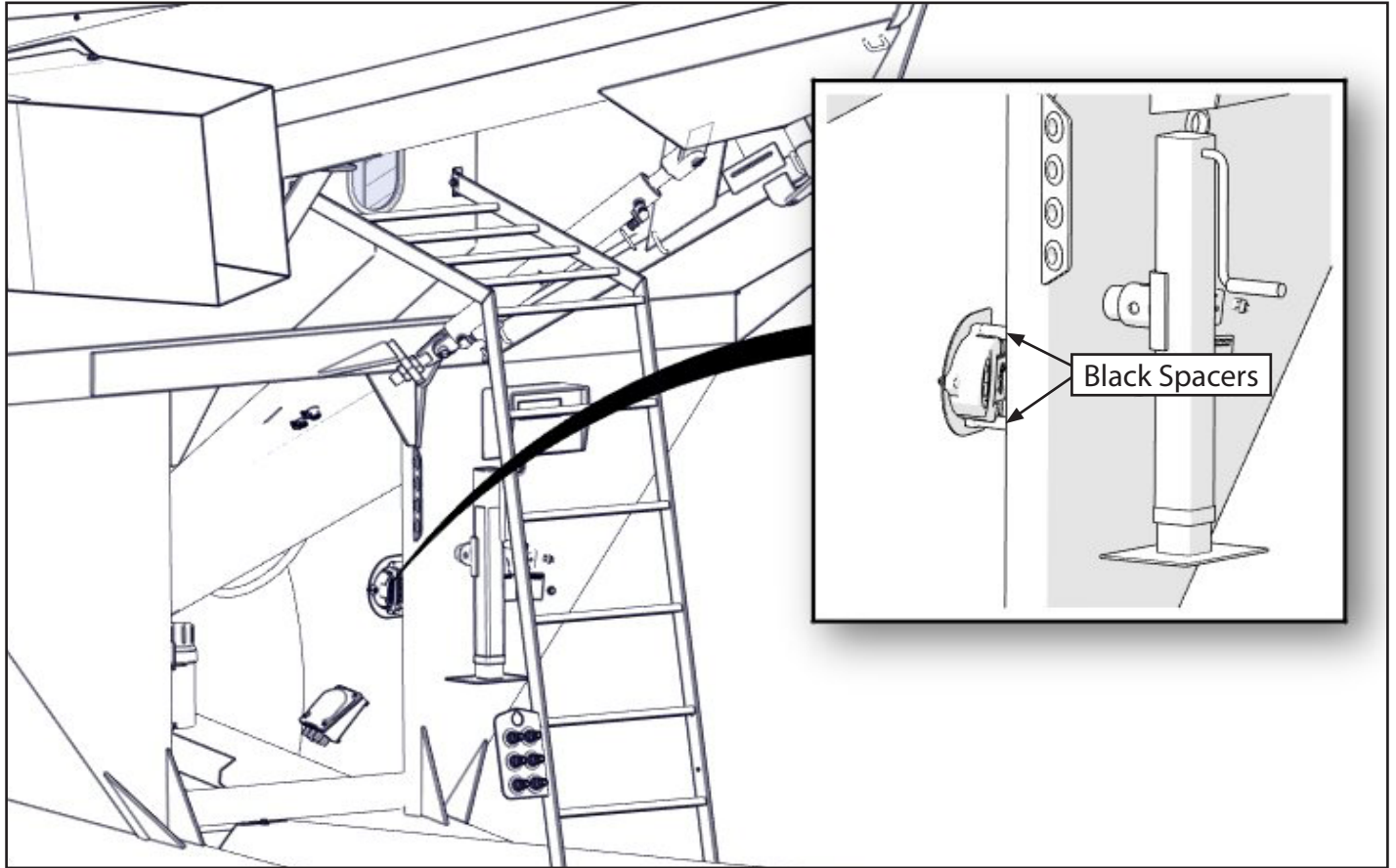
Harness Installation

Route the two wires coming from the electric tarp arm to the front leg. Drill holes accordingly.



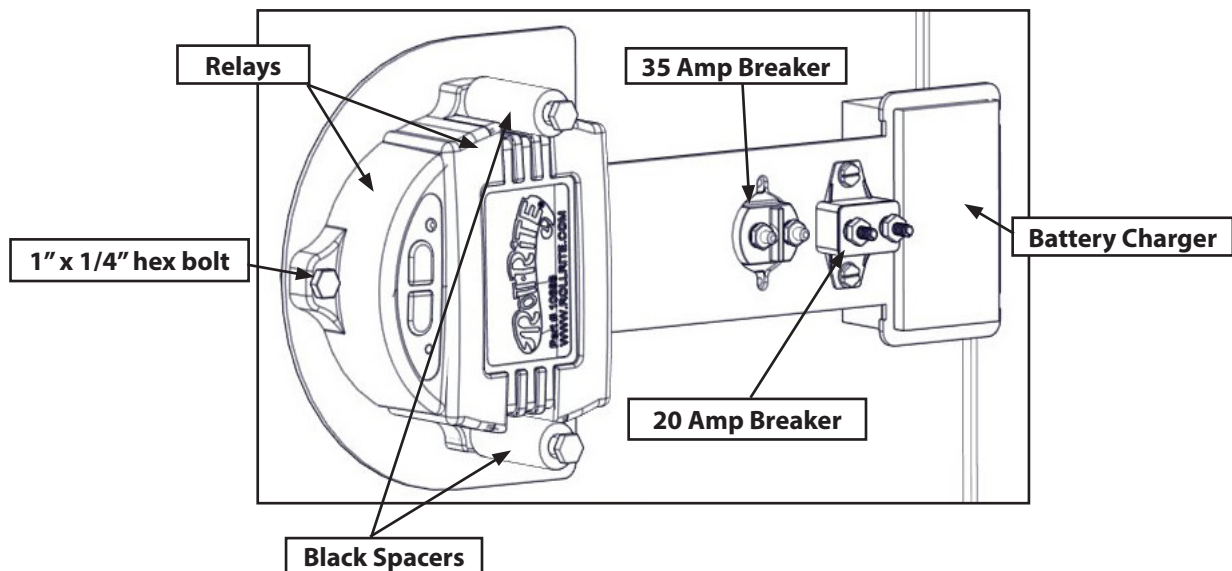
Switchboard

Position the Electric Roll Tarp Switch Mount on the front auger side leg in a position that it will not interfere with any other component of the grain cart and so that the power cables will reach from the battery to the Switchboard. Use the electric roll tarp switch mount as a guided to mark the two holes. Once marked, drill (2) 9/32" holes.



Attach both of the relays to the electric roll tarp switch mount using a 1" x 1/4" hex bolt and 1/4" serrated flange hex nut. Attach the 35 amp breaker with (2) 8-32 x 5/8" phillips pan head bolts. Using (2) 10-24 x 1" slotted hex head bolt and (2) 10-24 serrated flange hex nuts attach the 20 amp breaker and snap the 12V to 12V battery charger into the bracket.

Now install the assembled mounting bracket using (2) 1/4" x 3-1/2" hex bolts, (2) 1/4" locking hex nuts and (2) 2" black spacers.



Now make all of the connections using the provided wires and hardware according to the schematic on the next page.

Aligning the Tarp / Troubleshooting

Incorrect



Figure 1

Correct



Figure 2

1. When the tarp is in closed position roll the tarp up to the tightening lip so the tarp is taught.
2. Open the tarp.
3. If the tarp is rolling at an angle (Figure 1), close the tarp until it's in the same position as Figure 3.
4. Now insert a 5" section of 1/8" self-adhesive rubber into the rear end of the roll tube. Figure 4
5. Repeat steps 1-4 until the tarp rolls correctly.

NOTE: If the tarp is not rolling in the right direction when the open/close buttons are pushed, switch the black and yellow wires that are connected to M1 and M2 of the motor.

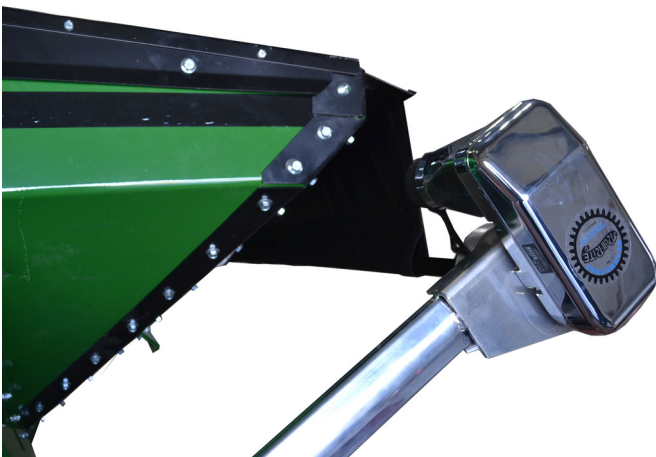


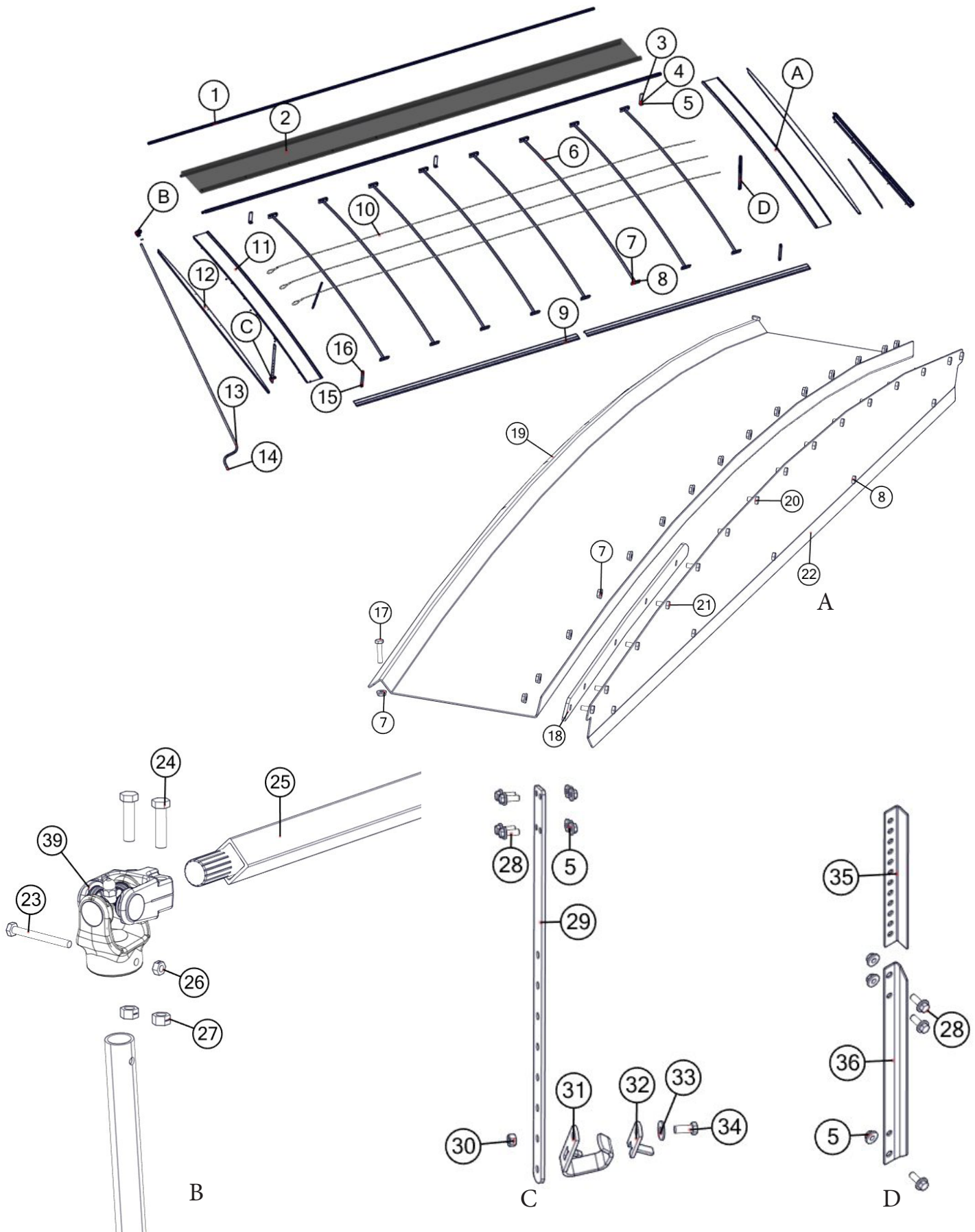
Figure 3

1/8" Self Adhesive Rubber



Figure 4

Repair Parts (Extended Reach Model Grain Carts)

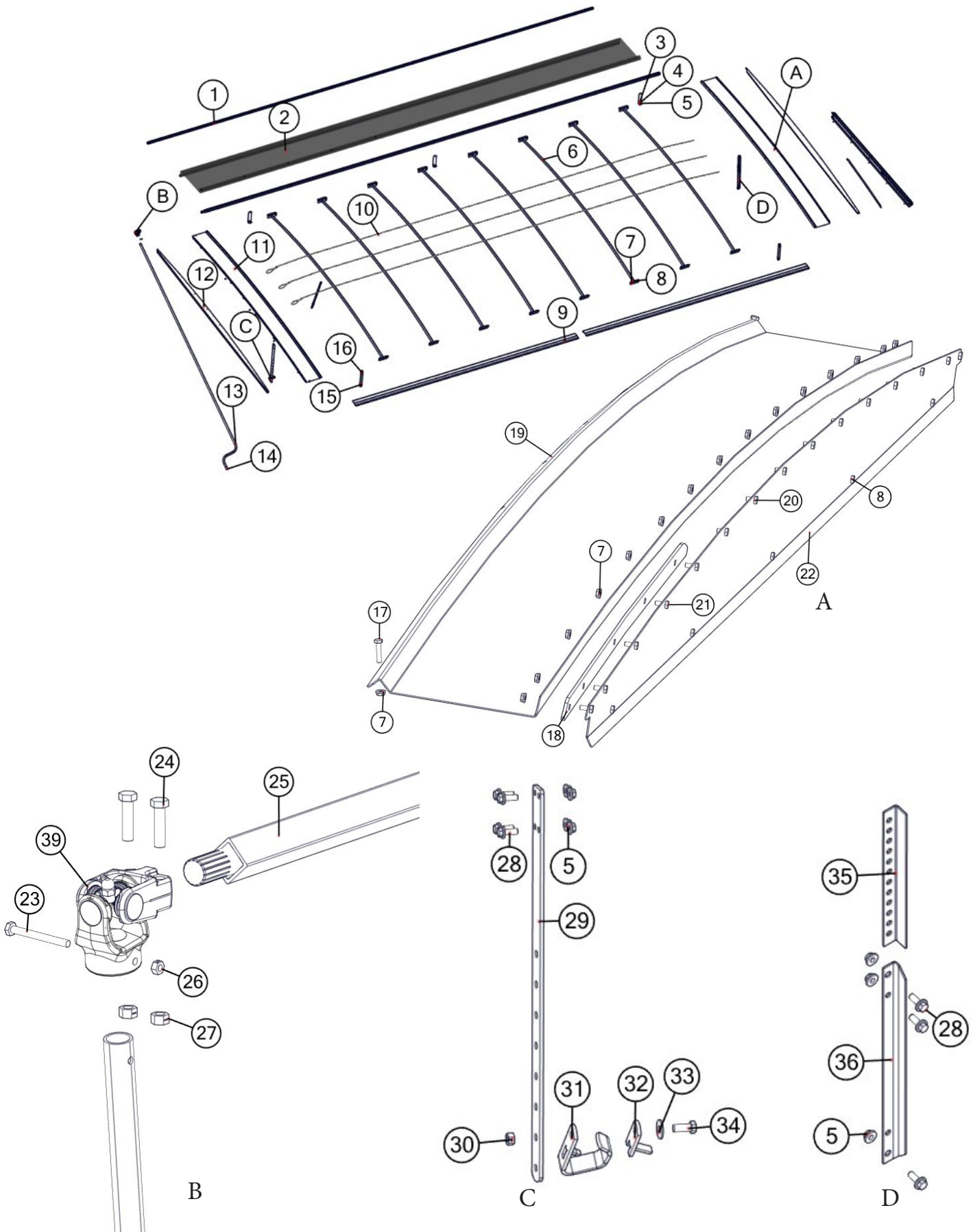


Repair Parts (Extended Reach Model Grain Carts)

#	Description	Part. No.
1	1" Square Tie-Down Tube (812)	JM0000188
1	1" Square Tie-Down Tube (1012, 1112, 1122, 1222)	JM0021331
1	1" Square Tie-Down Tube (1312, 1412, 1522)	JM0018962
2	Tarp with Rivets (812)	JM0018184
2	Tarp with Rivets (1012, 1112)	JM0021336
2	Tarp with Rivets (1312, 1412)	JM0018966
2	Tarp with Rivets (1122,1222)	JM0021378
2	Tarp with Rivets (1522)	JM0021379
3	Tarp Stop Bracket	JM0000187
4	3/8"-16 X 2" Gr5 Z Hex Bolt	JM0001510
5	3/8"-16 Gr5 Z SF Hex Nut	JM0002152
6	Arched Tarp Bows (812-1412)	JM0000157
6	Arched Tarp Bows (1122, 1222, 1522)	JM0021405
7	1/4"-20 Gr5 Z SF Hex Nut	JM0001630
8	1/4"-20 X 3/4" Gr5 Z Hex Bolt	JM0001507
9	Tightening Lip x 192" (812)	JM0000155
9	Tightening Lip (1012, 1112) Front	JM0013654
9	Tightening Lip (1012, 1112) Rear	JM0013653
9	Tightening Lip (1312, 1412) Front	JM0017842
9	Tightening Lip (1312, 1412) Rear	JM0017843
9	Tightening Lip (1122, 1222) Front	JM0021397
9	Tightening Lip (1122, 1222) Rear	JM0021396
10	3/16" Cable (812)	JM0022194
10	3/16" Cable (1012, 1112, 1122, 1222)	JM0021408
10	3/16" Cable (1312, 1412, 1522)	JM0015701
11	Rear Arched End Cap (812, 1012, 1112, 1312, 1412)	JM0000172
11	Rear Long Arched End Cap (1122, 1222, 1522)	JM0007257
11	Rear Short Arched End Cap (1122, 1222, 1522)	JM0007255
12	Rear End Cap Plate (812, 1012, 1112, 1312, 1412)	JM0000169
12	Rear Long End Cap Plate (1122, 1222, 1522)	JM0007262
12	Rear Short End Cap Plate (1122, 1222, 1522)	JM0007260
13	Crank with Splined U-Joint (812)	JM0000185
13	Crank with Splined U-Joint (1012 - 1522)	JM0019888

#	Description	Part. No.
14	Yellow Cap	JM0018963
15	Tarp Standoff	JM0001889
16	1/4" X 1-1/2" Self Tapping Screw	JM0001571
17	1/4"-20 X 1-1/4" Gr5 Z Hex Bolt	JM0016673
18	Tarp Nylon Riser	JM0000196
19	Front Arched End Cap (812, 1012, 1112, 1312, 1412)	JM0000195
19	Front Long Arched End Cap (1122, 1222, 1522)	JM0007259
19	Front Short Arched End Cap (1122, 1222, 1522)	JM0007256
20	1/4"-20 X 1/2" Gr5 Z Hex Bolt	JM0001481
21	1/4"-20 X 5/8" Gr5 Z Hex Bolt	JM0001479
22	Front End Cap Plate (812, 1012, 1112, 1312, 1412)	JM0000194
22	Front Long End Cap Plate (1122, 1222, 1522)	JM0007263
22	Front Short End Cap Plate (1122, 1222, 1522)	JM0007261
23	1/4"-20 X 2-1/2" Gr5 Z Hex Bolt	JM0001506
24	3/8"-16 X 1-1/2" Gr5 Z Hex Bolt	JM0001659
25	1 1/4" Square Roll Tube (812)	JM0022191
25	1 1/4" Square Roll Tube (1012, 1112, 1122, 1222)	JM0021334
25	1 1/4" Square Roll Tube (1312, 1412, 1522)	JM0018968
26	1/4"-20 Gr5 Z Centerlock Hex Nut	JM0001505
27	3/8"-16 Gr5 Z Centerlock Hex Nut	JM0001512
28	3/8"-16 X 1" Gr5 Z SF Hex Bolt	JM0002092
29	Crank Holder	JM0000164
30	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
31	Roll Tarp - Handle Hanger PP	JM0002967
32	Roll Tarp - Handle Hanger Rubber Flap	JM0002551
33	1/2" USS Flat Washer	JM0003082
34	1/2"-13 X 1-1/4" Gr5 Z Hex Bolt	JM0001513
35	Upper Adjustable Bow Support 13"	JM0021404
36	Lower Adjustable Bow Support 19" (812)	JM0000179
36	Lower Adjustable Bow Support 27" (1012-1522)	JM0021403
37	3/8"-16 Gr5 Z J-Bolt	JM0001519
38	Cable Clamp-Small	JM0001514

Repair Parts (Standard Grain Cart Models)

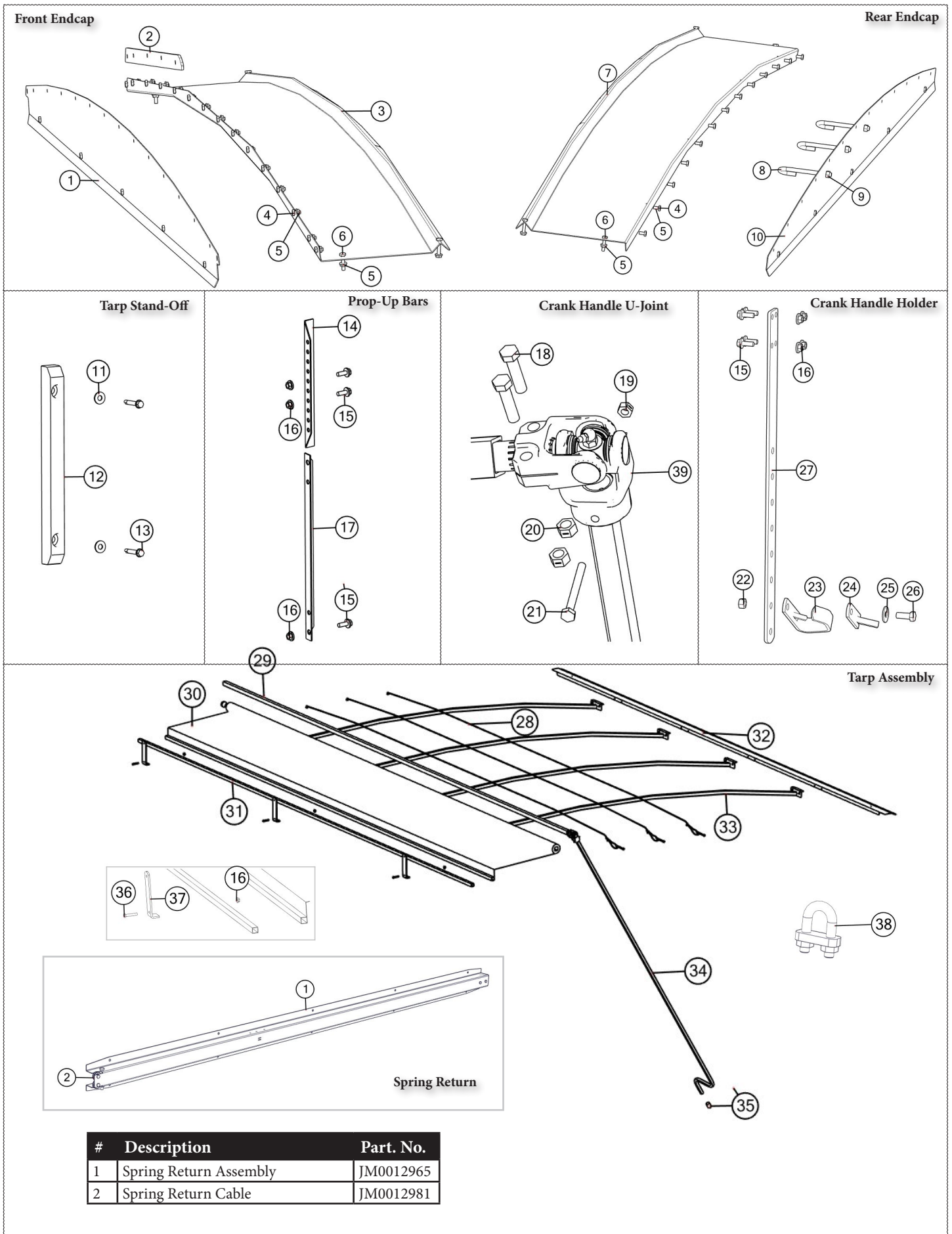


Repair Parts (Standard Grain Cart Models)

#	Description	Part. No.
1	1" Square Tie-Down Tube (525)	JM0021364
1	1" Square Tie-Down Tube (620)	JM0021366
1	1" Square Tie-Down Tube (750)	JM0021367
1	1" Square Tie-Down Tube (875)	JM0000188
1	1" Square Tie-Down Tube (1000, 1050, 1051, 1130,1150, 1151, 1250)	JM0021331
1	1" Square Tie-Down Tube (1325, 1326,1400, 1401,1500, 1501)	JM0018962
2	Tarp with Rivets (525)	JM0021375
2	Tarp with Rivets (620)	JM0021374
2	Tarp with Rivets (750)	JM0021376
2	Tarp with Rivets (875)	JM0018184
2	Tarp with Rivets (1000, 1050, 1051, 1150, 1151)	JM0021336
2	Tarp with Rivets (1325, 1326, 1400, 1401)	JM0018966
2	Tarp with Rivets (1130,1250)	JM0021378
2	Tarp with Rivets (1500)	JM0021379
3	Tarp Stop Bracket	JM0000187
4	3/8"-16 X 2" Gr5 Z Hex Bolt	JM0001510
5	3/8"-16 Gr5 Z SF Hex Nut	JM0002152
6	Arched Tarp Bows (525)	JM0021406
6	Arched Tarp Bows (620-1400)	JM0000157
6	Arched Tarp Bows (1130,1131,1250,1251,1500,1501)	JM0021405
7	1/4"-20 Gr5 Z SF Hex Nut	JM0001630
8	1/4"-20 X 3/4" Gr5 Z Hex Bolt	JM0001507
9	Tightening Lip x 144" (525)	JM0012670
9	Tightening Lip x 158" (620)	JM0012671
9	Tightening Lip x 168" (750)	JM0013083
9	Tightening Lip x 192" (875)	JM0000155
9	Tightening Lip (1000, 1050, 1051, 1150, 1151) Front	JM0013654
9	Tightening Lip (1000, 1050, 1051, 1150, 1151) Rear	JM0013653
9	Tightening Lip (1325, 1326, 1500, 1501) Front	JM0017842
9	Tightening Lip (1325, 1326, 1500, 1501) Rear	JM0017843
9	Tightening Lip (1130, 1131, 1250,1251) Front	JM0021397
9	Tightening Lip (1130, 1131, 1250, 1251) Rear	JM0021396
10	3/16" Cable (525)	JM0024881
10	3/16" Cable (620)	JM0024884
10	3/16" Cable (750)	JM0024240
10	3/16" Cable (875)	JM0022194
10	3/16" Cable (1000, 1050, 1051, 1150, 1151)	JM0021408
10	3/16" Cable (1325, 1326, 1400, 1401, 1500, 1501)	JM0015701
11	Rear Arched End Cap (525)	JM0020231
11	Rear Arched End Cap (620, 750, 875, 1000, 1050, 1150, 1325, 1400)	JM0000172
11	Rear Long Arched End Cap (1130, 1131, 1250, 1251, 1500, 1501)	JM0007257
11	Rear Short Arched End Cap (1130, 1131, 1250, 1251, 1500, 1501)	JM0007255
12	Rear End Cap Plate (525)	JM0020229
12	Rear End Cap Plate (620, 750, 875, 1000, 1050, 1150, 1325, 1400)	JM0000169
12	Rear Long End Cap Plate (1130, 1131, 1250, 1251, 1500, 1501)	JM0007262

#	Description	Part. No.
12	Rear Short End Cap Plate (1130, 1131, 1250, 1251, 1500, 1501)	JM0007260
13	Crank with Splined U-Joint (620, 750, 875)	JM0000185
13	Crank with Splined U-Joint (1000 - 1500)	JM0019888
14	Yellow Cap	JM0018963
15	Tarp Standoff	JM0001889
16	1/4" X 1-1/2" Self Tapping Screw	JM0001571
17	1/4"-20 X 1-1/4" Gr5 Z Hex Bolt	JM0016673
18	Tarp Nylon Riser	JM0000196
19	Front Arched End Cap (525)	JM0020230
19	Front Arched End Cap (620, 750, 875, 1000, 1050, 1150, 1325, 1400)	JM0000195
19	Front Long Arched End Cap (1130, 1131, 1250, 1251, 1500, 1501)	JM0007259
19	Front Short Arched End Cap (1130, 1131, 1250, 1251, 1500, 1501)	JM0007256
20	1/4"-20 X 1/2" Gr5 Z Hex Bolt	JM0001481
21	1/4"-20 X 5/8" Gr5 Z Hex Bolt	JM0001479
22	Front End Cap Plate (525)	JM0020232
22	Front End Cap Plate (620, 750, 875, 1000, 1050, 1150, 1325, 1400)	JM0000194
22	Front Long End Cap Plate (1130, 1131, 1250, 1251, 1500, 1501)	JM0007263
22	Front Short End Cap Plate (1130, 1131, 1250, 1251, 1500, 1501)	JM0007261
23	1/4"-20 X 2-1/2" Gr5 Z Hex Bolt	JM0001506
24	3/8"-16 X 1-1/2" Gr5 Z Hex Bolt	JM0001659
25	1 1/4" Square Roll Tube (525)	JM0024498
25	1 1/4" Square Roll Tube (620)	JM0024882
25	1 1/4" Square Roll Tube (750)	JM0024227
25	1 1/4" Square Roll Tube (875)	JM0022191
25	1 1/4" Square Roll Tube (1000, 1050, 1051, 1150, 1151,1130,1131,1250,1251)	JM0021334
25	1 1/4" Square Roll Tube (1325, 1326, 1400,1401,1500,1501)	JM0018968
26	1/4"-20 Gr5 Z Centerlock Hex Nut	JM0001505
27	3/8"-16 Gr5 Z Centerlock Hex Nut	JM0001512
28	3/8"-16 X 1" Gr5 Z SF Hex Bolt	JM0002092
29	Crank Holder	JM0000164
30	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
31	Roll Tarp - Handle Hanger PP	JM0002967
32	Roll Tarp - Handle Hanger Rubber Flap	JM0002551
33	1/2" USS Flat Washer	JM0003082
34	1/2"-13 X 1-1/4" Gr5 Z Hex Bolt	JM0001513
35	Upper Adjustable Bow Support 13"	JM0021404
36	Lower Adjustable Bow Support 19" (525-875)	JM0000179
36	Lower Adjustable Bow Support 27" (1000-1500)	JM0021403
37	3/8"-16 Gr5 Z J-Bolt	JM0001519
38	Cable Clamp-Small	JM0001514

Roll Tarp Assembly



Roll Tarp Assembly

#	Description	Part. No.
1	Front End Cap Plate (525)	JM0020232
1	Front End Cap Plate (812 - 1412, 620 - 1401)	JM0000194
1	Front Long End Cap Plate (1122, 1222, 1522)	JM0007263
1	Front Short End Cap Plate (1122, 1222, 1522)	JM0007261
2	Tarp Nylon Riser	JM0000196
3	Front Arched End Cap (525)	JM0020230
3	Front Arched End Cap (812 - 1412, 620 - 1401)	JM0000195
3	Front Long Arched End Cap (1122, 1222, 1522)	JM0007259
3	Front Short Arched End Cap (1122, 1222, 1522)	JM0007256
4	1/4"-20 x 1/2" Gr5 Z Hex Bolt	JM0001481
5	1/4"-20 Gr5 Z SF Hex Nut	JM0001630
6	1/4"-20 x 1-1/4" Gr5 Z Hex Bolt	JM0016673
7	Rear Arched End Cap (525)	JM0020231
7	Rear Arched End Cap (812 - 1412, 620 - 1401)	JM0000172
7	Rear Long Arched End Cap (1122, 1222, 1522)	JM0007257
7	Rear Short Arched End Cap (1122, 1222, 1522)	JM0007255
8	3/8"-16 Gr5 Z J-Bolt (384JB)	JM0001519
9	3/8"-16 Gr5 Z Centerlock Hex Nut (38G5LN)	JM0001512
10	Rear End Cap Plate (525)	JM0020229
10	Rear End Cap Plate (812 - 1412, 620 - 1401)	JM0000169
10	Rear Long End Cap Plate (1122, 1222, 1522)	JM0007262
10	Rear Short End Cap Plate (1122, 1222, 1522)	JM0007260
11	1/4" Flat Washer (14-W)	JM0003090
12	Tarp Standoff (TSST375)	JM0001889
13	1/4" x 1-1/2" Self Tapping Screw (STS-1L)	JM0001571
14	Upper Adjustable Bow Support 13"	JM0021404
15	3/8"-16 x 1" Gr5 Z SF Hex Bolt (381-FB)	JM0002092
16	3/8"-16 Gr5 Z SF Hex Nut (38-FN)	JM0002152
17	Lower Adjustable Bow Support 19" (525-875, 812)	JM0000179
17	Lower Adjustable Bow Support 27" (1012-1522, 1000-1401)	JM0021403
18	3/8"-16 x 1-1/2" Gr5 Z Hex Bolt (160022)	JM0001659
19	1/4"-20 Gr5 Z Centerlock Hex Nut (HLN-114)	JM0001505
20	3/8"-16 Gr5 Z Centerlock Hex Nut (38G5LN)	JM0001512
21	1/4"-20 x 2-1/2" Gr5 Z Hex Bolt (14212-HB)	JM0001506
22	1/2"-13 Gr5 Z Centerlock Hex Nut (12-13LN)	JM0001511
23	Roll Tarp - Handle Hanger PP (CH-1)	JM0002967
24	Roll Tarp - Handle Hanger Rubber Flap	JM0002551
25	1/2" USS Flat Washer (12FW)	JM0003082
26	1/2"-13 x 1-1/4" Gr5 Z Hex Bolt (12114 HB-5)	JM0001513
27	Tarp Handle Hanger Mount Plate - 875 Bu. and Down	JM0029818
27	Tarp Handle Hanger Mount Plate - 1000 Bu. and Up	JM0000164
28	3/16" Cable (525)	JM0024881
28	3/16" Cable (620)	JM0024884
28	3/16" Cable (750)	JM0024240

#	Description	Part. No.
28	3/16" Cable (812, 875)	JM0022194
28	3/16" Cable (1012, 1122, 1000, 1050, 1150)	JM0021408
28	3/16" Cable (1312, 1412, 1522, 1326, 1401)	JM0015701
29	1 1/4" Square Roll Tube (525)	JM0024498
29	1 1/4" Square Roll Tube (620)	JM0024882
29	1 1/4" Square Roll Tube (750)	JM0024227
29	1 1/4" Square Roll Tube (812 875)	JM0022191
29	1 1/4" Square Roll Tube (1012, 1112, 1122,1222, 1000, 1050, 1150)	JM0021334
29	1 1/4" Square Roll Tube (1312, 1412,1522, 1326, 1401)	JM0018968
30	Tarp with Rivets (525)	JM0021375
30	Tarp with Rivets (620)	JM0021374
30	Tarp with Rivets (750)	JM0021376
30	Tarp with Rivets (812, 875)	JM0018184
30	Tarp with Rivets (1012, 1112, 1000, 1050, 1150)	JM0021336
30	Tarp with Rivets (1312, 1412, 1326, 1401)	JM0018966
30	Tarp with Rivets (1122,1222)	JM0021378
30	Tarp with Rivets (1522)	JM0021379
31	1" Square Tie-Down Tube (525)	JM0021364
31	1" Square Tie-Down Tube (620)	JM0021366
31	1" Square Tie-Down Tube (750)	JM0021367
31	1" Square Tie-Down Tube (812, 875)	JM0000188
31	1" Square Tie-Down Tube (1012, 1112, 1122,1222, 1000, 1050, 1150)	JM0021331
31	1" Square Tie-Down Tube (1312, 1412,1522, 1326, 1401)	JM0018962
32	Tightening Lip x 144" (525)	JM0012670
32	Tightening Lip x 158" (620)	JM0012671
32	Tightening Lip x 168" (750)	JM0013083
32	Tightening Lip x 192" (812, 875)	JM0000155
32	Tightening Lip (1012, 1112, 1000, 1050, 1150) Front	JM0013654
32	Tightening Lip (1012, 1112, 1000, 1050, 1150) Rear	JM0013653
32	Tightening Lip (1312, 1522) Front	JM0017842
32	Tightening Lip (1312, 1522) Rear	JM0017843
32	Tightening Lip (1122, 1222) Front	JM0021397
32	Tightening Lip (1122, 1222) Rear	JM0021396
33	Arched Tarp Bows (525)	JM0021406
33	Arched Tarp Bows (812-1412, 620-1401)	JM0000157
33	Arched Tarp Bows (1122,1222,1522)	JM0021405
34	Small Crank with U-joint (525)	JM0027754
34	Crank with Splined U-Joint (812, 620, 750, 875)	JM0000185
34	Crank with Splined U-Joint (1012 - 1522, 1000 - 1401)	JM0019888
35	Yellow Cap (112950)	JM0018963
36	3/8"-16 x 2" Gr5 Z Hex Bolt (382-HB)	JM0001510
37	Tarp Stop Bracket (TSB-1)	JM0000187
38	Cable Clamp-Small	JM0001514
39	U-Joint (SUJ-1)	JM0001517

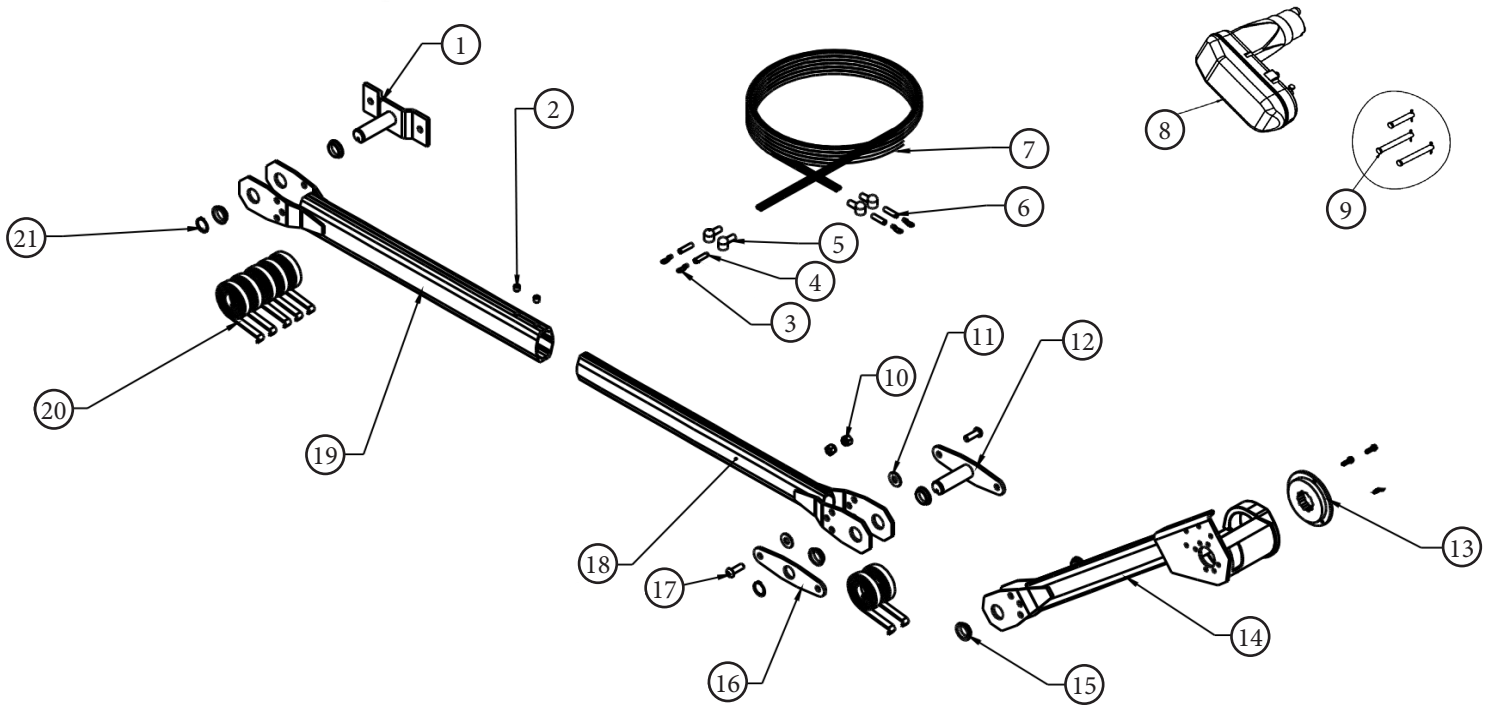
Repair Parts List

Part	525	620	750	875 812	1000 1050 1012 1150 1112
Tarp Crank Handle	S	L	L	L	XL
Square Tubing (1" x 1" Sq. Tube) 14 Gauge	144"	158"	168"	192"	264"
Roll Tube (1.25" x 1.25" Sq. Tube) 11 Gauge	160"	164"	174"	198"	270"
Drip Edge	144"	157.5"	168"	192"	132"x2
Front Endcap	120.25"	141.25"	141.25"	141.25"	141.25"
Back Endcap	120.25"	141.25"	141.25"	141.25"	141.25"
Front End Plate	119.5"	140.5"	140.5"	140.5"	140.5"
Back Endplate	116"	137.25"	137.25"	137.25"	137.25"
Tarp Bows	116.5" x 3	137.5" x 4	137.5" x 4	137.5" x 4	137.5" x 7
Ridge Cable (3 Per) (4 per Leaner)	144"	158"	168"	192"	264"
Canvas Tarp	525	620	750	875	1050
Nylon Strip	1	1	1	1	1
Stop Bracket	3	3	3	3	3
Prop Up Bar - Upper (2 Per)	19"	19"	19"	19"	27"
Prop Up Bar - Lower (2 Per)	13"	13"	13"	13"	13"
Plastic Standoffs	2	2	2	2	2
J-Bolt Small	3	3	3	3	3
Hanger Bracket	23"	23"	23"	23"	29"
Hanger Bracket Hook	1	1	1	1	1
1/4" Flange Nuts	54	62	62	62	74
1/4" x 1/2" SF Bolt	29	33	33	33	33
1/4" x 5/8" SF Bolt	5	5	5	5	5
1/4" Locknut	1	1	1	1	1
1/4" x 2-1/2" Bolt	1	1	1	1	1
1/4" x 3/4" Bolt	20	24	24	24	36
3/8" SF Nuts	13	13	13	13	13
3/8" x 1" SF Bolts	10	10	10	10	10
3/8" x 2" Bolts	5	5	5	5	5
3/8" Locknuts	3	3	3	3	3
1/2" Locknuts	1	1	1	1	1
1/2" x 1-1/4" Bolts	1	1	1	1	1
3/16" Cable Clamp	6	6	6	6	6
Universal Joint	1	1	1	1	1
1/4" Drive Rivet	10	10	10	10	10
1/4" x 1-1/2" STS	14	14	14	14	14
Yellow Rubber Cap	1	1	1	1	1
Rubber Flap	1	1	1	1	1
GrainCart Spring Return (95" Long)	1	1	1	1	1
Leaner End Cap Top Splice Plate	0	0	0	0	0

Repair Parts List

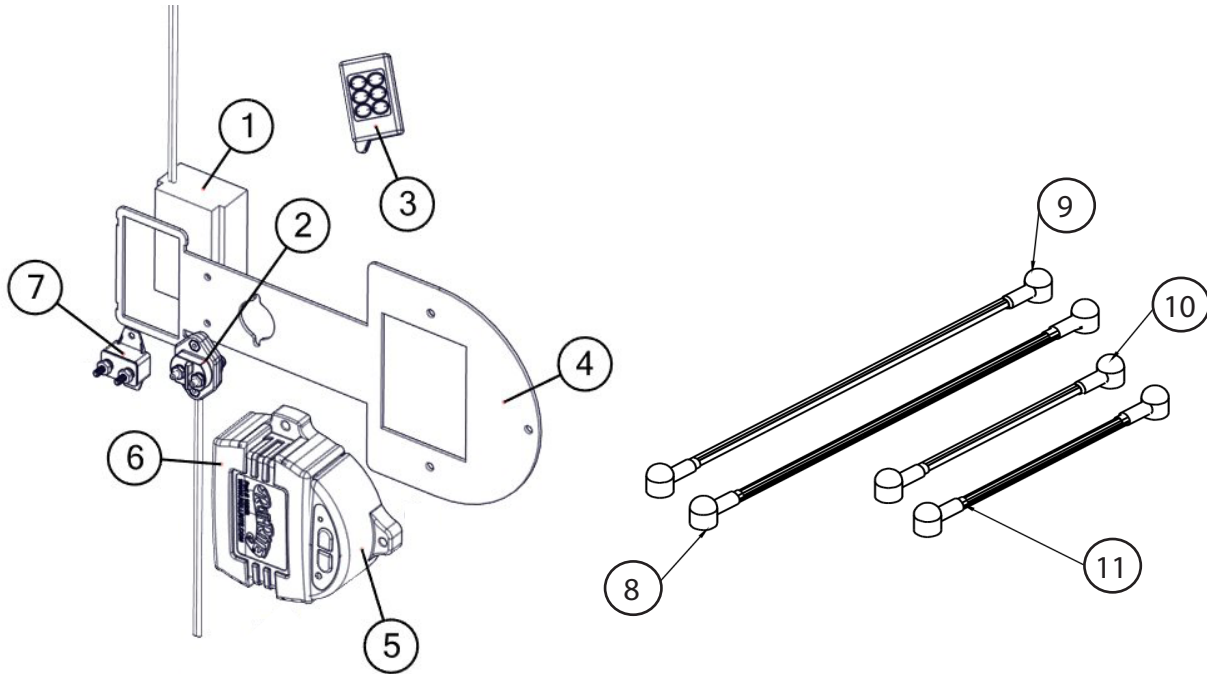
Part	1325 1400 1312 1412	1122 1222 Leaner	1522 Leaner
Tarp Crank Handle	XL	XL	XL
Square Tubing (1" x 1" Sq. Tube) 14 Gauge	306"	264"	306"
Roll Tube (1.25" x 1.25" Sq. Tube) 11 Gauge	312"	270"	312"
Drip Edge	153"x2	99"Front 165" Back	153"x2
Front Endcap	141.25"	46.187" & 119.187"	46.187" & 119.187"
Back Endcap	141.25"	46.187" 119.187"	46.187" 119.187"
Front End Plate	140.5"	48.5" & 118.875"	48.5" & 118.875"
Back Endplate	137.25"	46.25" & 117"	46.25" & 117"
Tarp Bows	137.5" x 7	161.75" x 7	161.75" x 8
Ridge Cable (3 Per) (4 per Leaner)	306"	264"	306"
Canvas Tarp	1325	1130 1250	1500
Nylon Strip	1	1	1
Stop Bracket	3	3	3
Prop Up Bar - Upper (2 Per)	27"	27"	27"
Prop Up Bar - Lower (2 Per)	13"	13"	13"
Plastic Standoffs	2	2	2
J-Bolt Small	3	4	4
Hanger Bracket	29"	29"	29"
Hanger Bracket Hook	1	1	1
1/4" Flange Nuts	74	100	104
1/4" x 1/2" SF Bolt	33	45	45
1/4" x 5/8" SF Bolt	5	19	19
1/4" Locknut	1	1	1
1/4" x 2-1/2" Bolt	1	1	1
1/4" x 3/4" Bolt	36	32	40
3/8" SF Nuts	13	13	13
3/8" x 1" SF Bolts	10	10	10
3/8" x 2" Bolts	5	5	5
3/8" Locknuts	3	4	4
1/2" Locknuts	1	1	1
1/2" x 1-1/4" Bolts	1	1	1
3/16" Cable Clamp	6	8	8
Universal Joint	1	1	1
1/4" Drive Rivet	10	10	10
1/4" x 1-1/2" STS	14	14	14
Yellow Rubber Cap	1	1	1
Rubber Flap	1	1	1
GrainCart Spring Return (95" Long)	1	1	1
Leaner End Cap Top Splice Plate	0	2	2

Repair Parts



#	Description	Part. No.
	Arm Kit, Adjustable Arm for 142" -166" Grain Carts	JM0022105
1	Pivot Pin, Raw 5-Spring (No Snap Ring)	JM0022096
2	Screw, 1/2" x 5/8" Set Screw	JM0022139
3	Terminal, D1R 8ga. Ring with 1/4" Ring	JM0027586
4	Shrink Tube 3/8" x 1-1/2" Red	JM0027584
5	Boot, Rubber for Motor	JM0022132
6	Shrink Tube 3/8" x 1-1/2" Black	JM0027588
7	Wire, Dual Conductor 8 Gage 43' 1"	JM0027587
8	Gear Motor, Super Duty Extreme	JM0022098
9	Hardware Bag, Clevis Pins for Single Arm 5 Spring Ext Pivot Power Kit	JM0022108
10	Nut, 1/2" - 13 Nylock	JM0022149
11	Washer, 1/2" Flat Washer	JM0022143
12	Pivot Pin, 3 spring knuckle pivot pin for SS arm No face Plate	JM0022164
13	Bushing, Axle Stabilizer for 1.75" Axle Adapter	JM0022100
14	Pivot Tube, Raw 26-1/4" Upper w/SD Mount (No T- Bushings)	JM0022103
15	Bushing, 1-1/4" Poly T- Bushing for Pivot Pin	JM0022160
16	Plate, Knuckle Pin Plate w/o Pin (Double Ended, Al)	JM0022163
17	Bolt, 1/2" x 1 1/2" Button Head Bolt	JM0022140
18	Pivot Tube, Raw Base Tube for top Mount STS (31" tube)	JM0022097
19	Pivot tube, Raw 5 spring Ext Pivot Tube Socket (30"- No T-bushings or hardware)	JM0022102
20	Spring, Spiral Torsion Sp 1-1/4"	JM0022161
21	Snap Ring, 1 1/4" External for Pivot Pin	JM0022159

Repair Parts



#	Description	Part. No.
1	12V to 12V Battery Charger	JM0027090
2	Breaker, 35A Outdoor Manual Reset Circuit Breaker	JM0022133
3	Electric Roll Tarp Key Fob	JM0027061
4	Electric Roll Tarp Switch Mount	JM0040671
5	RF Module	JM0027059
6	Reversing Relay	JM0022088
7	20 Amp Auto-Reset Breaker	JM0022133
8	Wire, 8 Gage Jumper w 3/8" Ring Terminals 16"	JM0027589
9	Wire 8 Gauge Jumper with 1-3/8" and 1-1/4" Terminal 16"	JM0027590
10	Wire 8 Gauge Jumper with 1-3/8" and 1-1/4" Terminal 9"	JM0027591
11	Wire 8 Gauge Jumper with 2-1/4" Terminal 9"	JM0027592