

Grain Cart

Roll Tarp

ALL MODELS



Rev. 8.25.2021

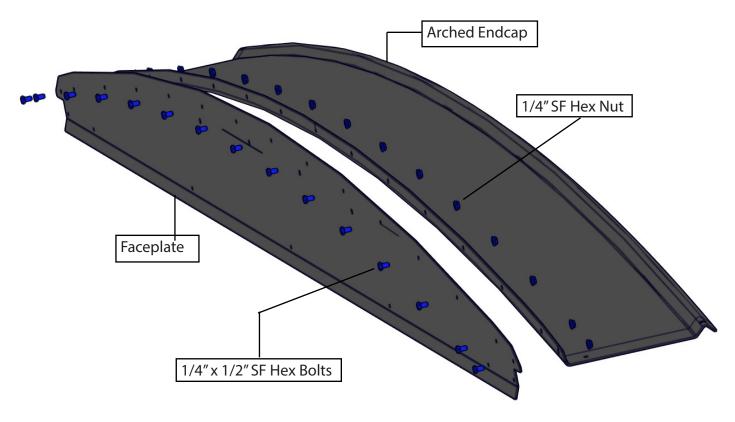
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Endcap Assembly

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



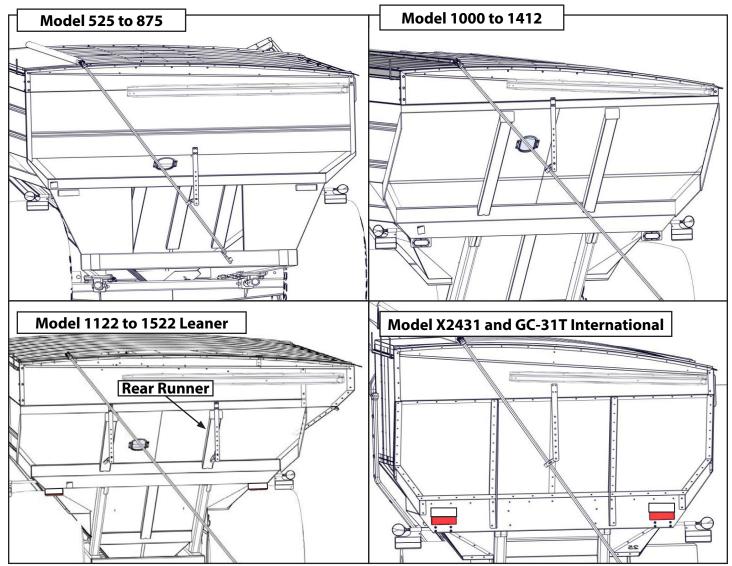
Assemble endcap at the ground level. Attach the endplate to the endcap using 1/4" x 1/2" serrated flange hex bolts and 1/4" serrated flange hex nuts. **Tighten the hardware once finished.**



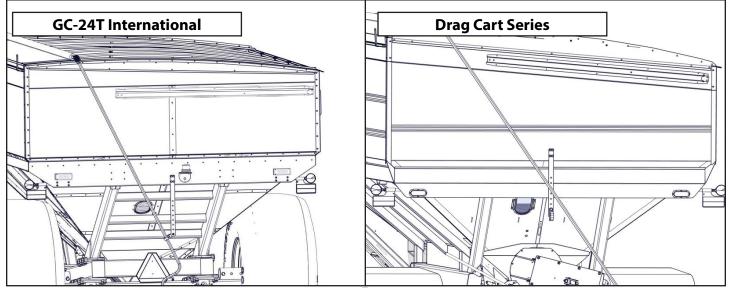
Hanger Bracket

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 bellow for specific model. For 1312, 1326, and 1522 models, the spring return in the rear of the cart will obstruct where the hanger brackets are supposed to be installed. Instead use a bent hanger bracket (JM0048492) and install directly under the sideboard at the top of the angled shell.



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) $3/8''-16 \times 1''$ 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 $1/2''-13 \times 1-1/4''$ Gr5 Z hex bolt and a $1/2''-13 \times 1-1/4''$ Gr5 Z centerlock hex nut to attach the hook and flap to the hanger bracket. Tighten the hardware once installed.

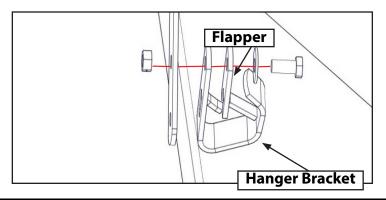
Note: Make sure that hanger bracket hook is facing towards the cart when installed.

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.

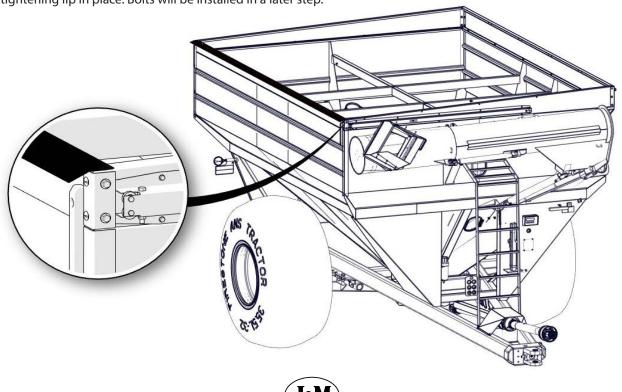
Next install the hanger bracket hook and the rubber flap. Use a M12-1.75 x 50 Gr8.8 YZ hex bolt and a M12-1.75 Gr8.8 YZ nylon locking hex nut to attach the hook and flap to the hanger bracket. Tighten the hardware once installed.

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



Tightening Lip

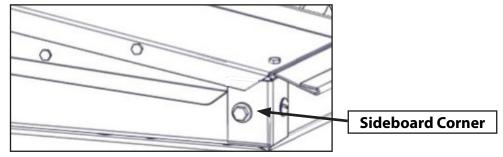
Center the tightening lip from the front to the rear of the cart on the opposite auger side of the grain cart. Depending on the length of your grain cart, there maybe a total of two tightening lips. If there is two, position the inside edge of each tightening lip to the center of the grain cart. Make 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.



Installing 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.

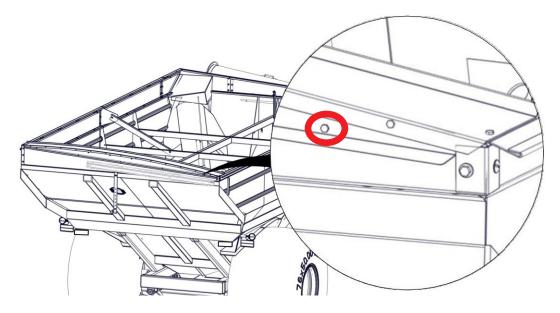


Using a 1/4" drill bit, drill through the hole closest to the corner bracket. Once drilled, fasten with a 1/4" x 1/2" serrated flange hex bolt and nut. Now drill the opposite side and fasten with a 1/4" x 1/2" hex bolt and serrated flange nut.

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" hex bolts and serrated flange nuts in the remaining holes and tighten the hardware once finished.



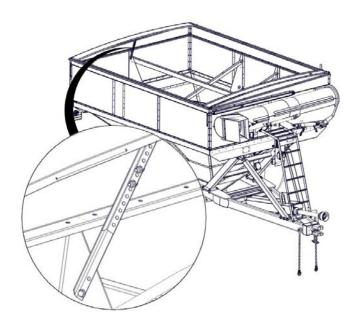


NOTE: While drilling, pull up on the front of the endcap so the faceplate will lie parallel with the rear grain cart wall.

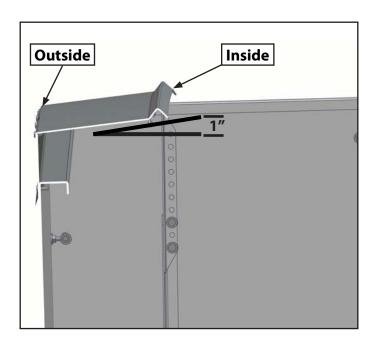




Rear Endcap Support Brace



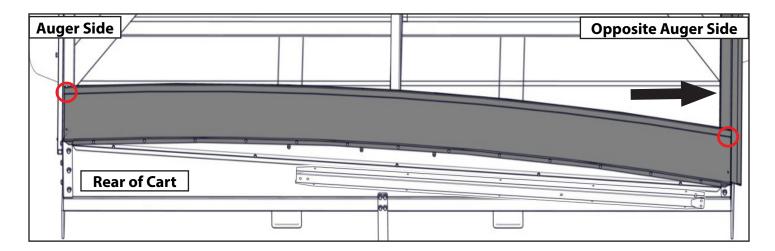
Install the endcap brace. The purpose of the endcap brace is to hold the inside of the endcap up approximately 1" higher than the outside of the endcap. Drill a hole using a 1/4" drill bit first followed by a 7/16" drill bit. The hole should be placed onto the nearest crossbrace which is welded to the shell body. The hole should be located somewhere between the middle of the endcap and the inside of the endcap. To accomodate for height adjustment, two braces will be used to support the endcap. 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.





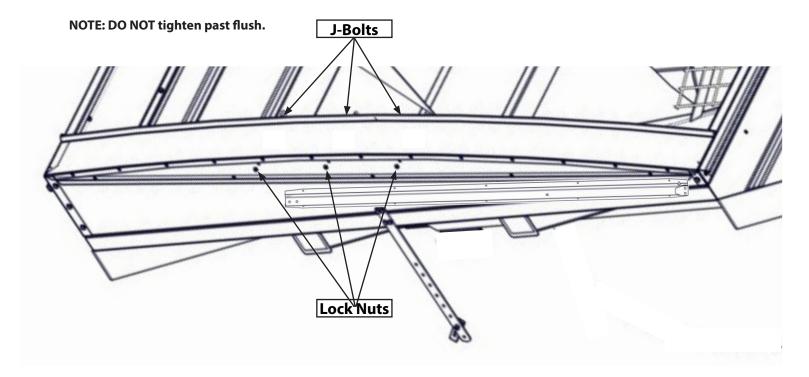
Tightening Rear Endcap

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.



Installing J-Bolts

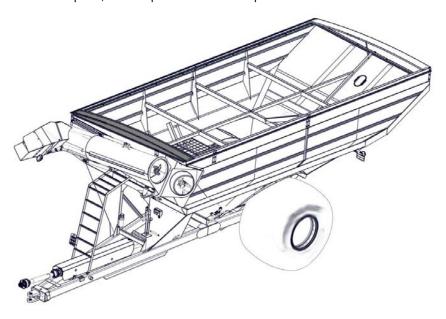
Now place (3) 3/8" J-bolts into the three holes closest to the auger side in the rear endcap. Fasten the J-bolts with (3) 3/8" locknuts. Use the plastic 3/8" ribbed push in rivet to plug the remaining hole. Leaner carts use four J-bolts and wont require a ribbed push in rivet.





Installing the Front Endcap

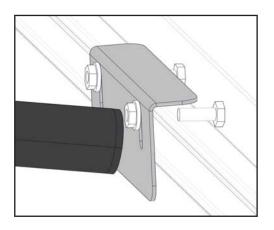
Install the front endcap assembly using the same procedure used to install the rear endcap assembly. Do not forget the **endcap brace**. (See pages 6-8) On the front faceplate, use the plastic 3/8" ribbed push in rivets to fill the four 3/8" holes.

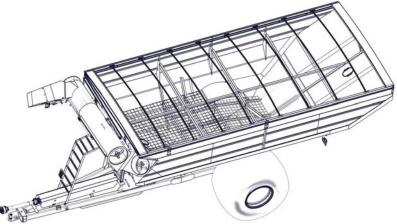


Installing Tarp Bows

Install all of the tarp bows. Use (4) 1/4" x 3/4" 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.



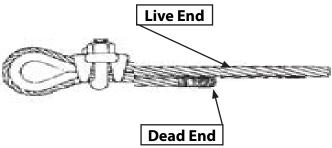




Installing Cable Clamps

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 thread 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 guide 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. To remove all slack from the cable, aggressively tap the cable while applying tension with the vise grips. 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.

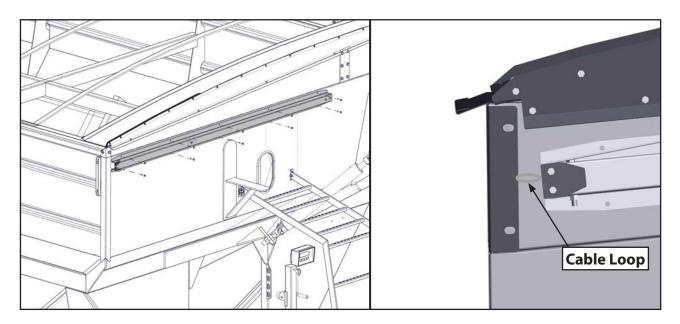


Installing the Spring Return

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: For single auger cart 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. The exception to this rule is the 32 series cart. They have the spring return lined up with top 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. Repeat process for back side of grain cart, installing the spring return on the opposite auger side.



Locations for 1522 carts are shown below.



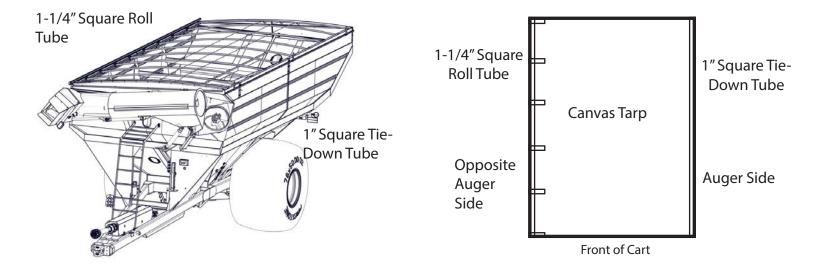


Installing 1-1/4" Square Roll Tube

Prepare the canvas tarp. Spread the canvas tarp out so that the stiffening patches are on the opposite auger side with the shiny side down.

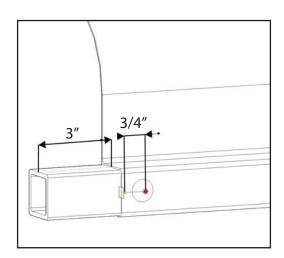
For grain carts with a capacity of 875 bushels and lower, slide the tarp guide roller onto the 1-1/4" square roll tube. Install the 1-1/4" square roll tube through the front end of the opposite auger side canvas tarp end.

For grain carts with a capacity of 1,000 bushels or greater, slide the 1-1/4" square roll tube through the rear end of the opposite auger side canvas tarp end. Slide the tarp guide roller onto the front end of the 1-1/4" square roll tube. Slide the cable spool into the front end of the 1-1/4" square roll tube. Line up the holes in the cable spool with the holes in the 1-1/4" square roll tube and insert the roll pin.



Installing 1"Tie Down Tube

Feed the 1" square tie-down tube through the auger side tarp end. On the front of the grain cart, measure 3" from the end of the tube. This is where the canvas tarp should stop. Now measure 3/4" on 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.

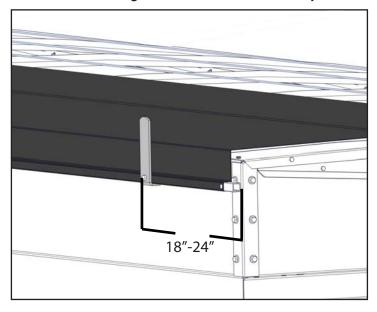


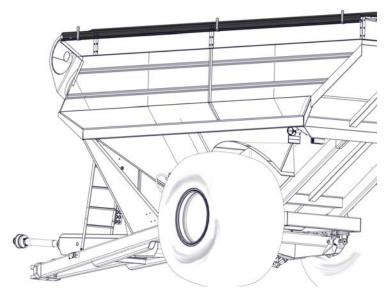


Installing the Roll Tarp Stops

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" square tie-down 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 lift the 1" square tie-down tube approximately 1" higher than the two other holes. Repeat the process to drill a 7/16" hole. Place a 3/8" x 2" bolt through the roll tarp stop, 1" square tie-down tube, and grain cart sidewall and fasten with a 3/8" serrated flange nut.

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





Installing Pop Rivets on Roll Tube

Push down on the 1-1/4" square roll tube on both ends and in the center to fully extend the canvas. Line the roll tube cable 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 cable spool.

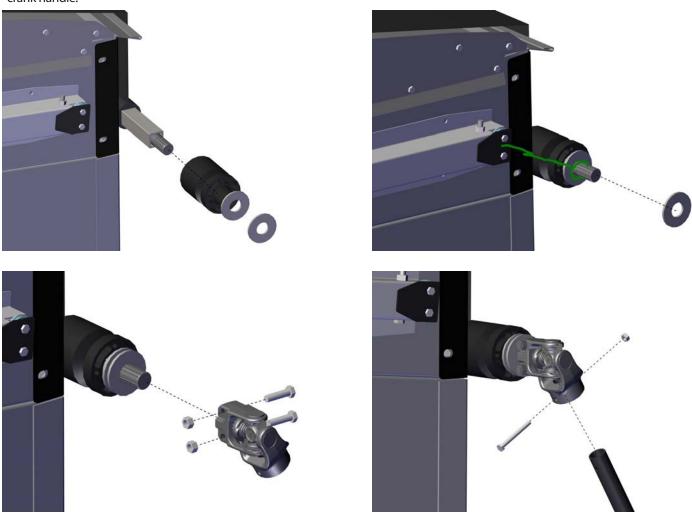




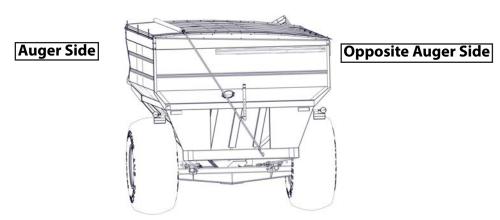
Installing the Crank Handle

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

Slide tarp guide roller over rear end of 1-1/4" square roll tube. Then slide one washer over, then the spring return cable, then the next washer. Now attach the knuckle to the roll pipe. Use (2) 3/8" x 2" hex bolts along with (2) 3/8" lock nuts. 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 Roll Tarp.





Tarp Rope

The process below is to be completed at the front and back ends of the cart.

- Unroll the roll tarp completely and let it hang down to its lowest point on the opposite auger side.
- Line bracket up below where the roll tube ends and right behind the lip on the endcap, and use 1/4" x 1-1/2" self tapping screw to attach bracket to the cart. (See Pictures 1 & 2)
- Roll the tarp all the way up.
- Drape rope completely across the cart. Pull the rope to eliminate slack then let hang so that rope is not too tight and aligned right behind endcap lip. (See Picture 3)
- Mark bracket where rope ends and fasten bracket to cart with 1/4" x 1-1/2" self tapping screws.





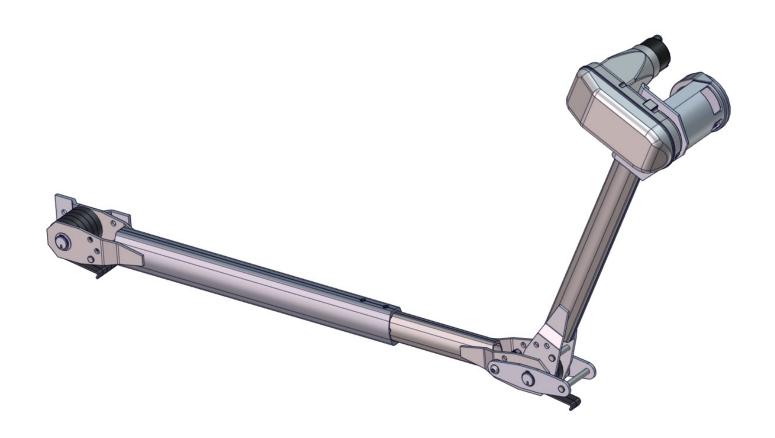
Picture 1 Picture 2





Picture 3

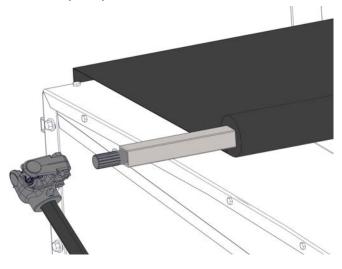
Installing Electric Roll Tarp





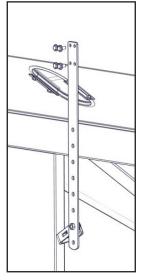
Removing Parts (if previously installed)

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.

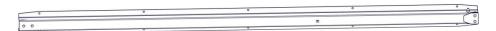


Un-install the hanger bracket if previously installed. Remove the (4) 3/8" x 1" serrated flange hex bolts and nuts then remove the hanger bracket from the grain cart. Install the bolts back into their original holes. Keep the

hanger bracket.



The Spring return on the rear of the cart doesn't need to be removed.



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.

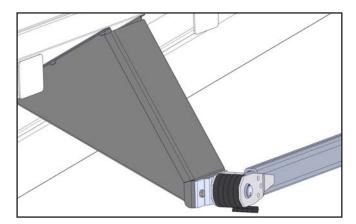


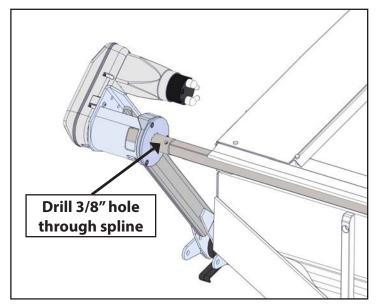


Attach Electric Roll Tarp Arm and Motor

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

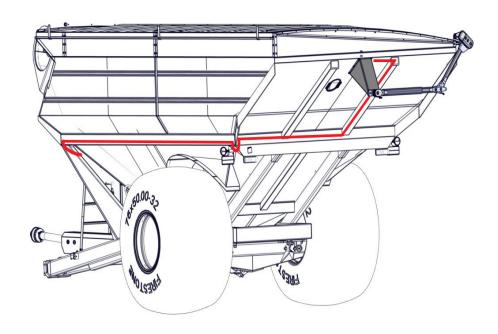
Adjust the roll tarp arm to the correct length, tighten the two set screws, and attach the motor to the roll tube. Once the motor is attached drill a 3/8" hole through the spline using the hole in the motor shaft as a guide. Fasten the motor to the roll tube using a 5/16" x 2" hex bolt and a 5/16" locknut.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





Harness Installation

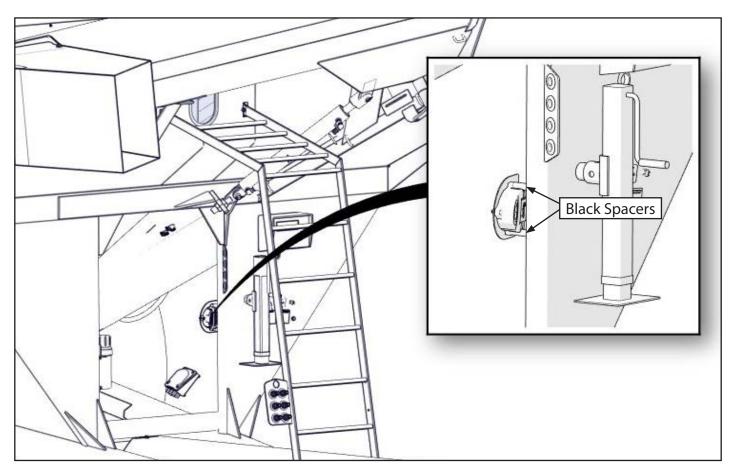
Route the two wires coming from the electric tarp arm to the front leg. Drill holes accordingly.





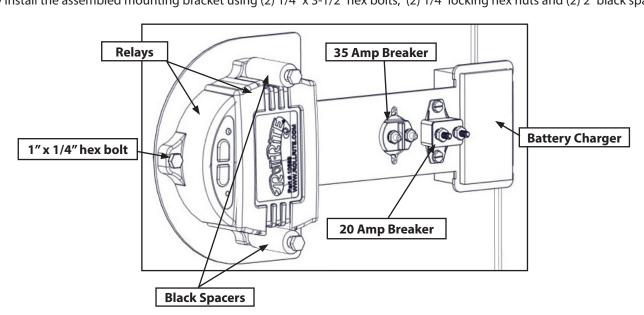
Switchboard

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.

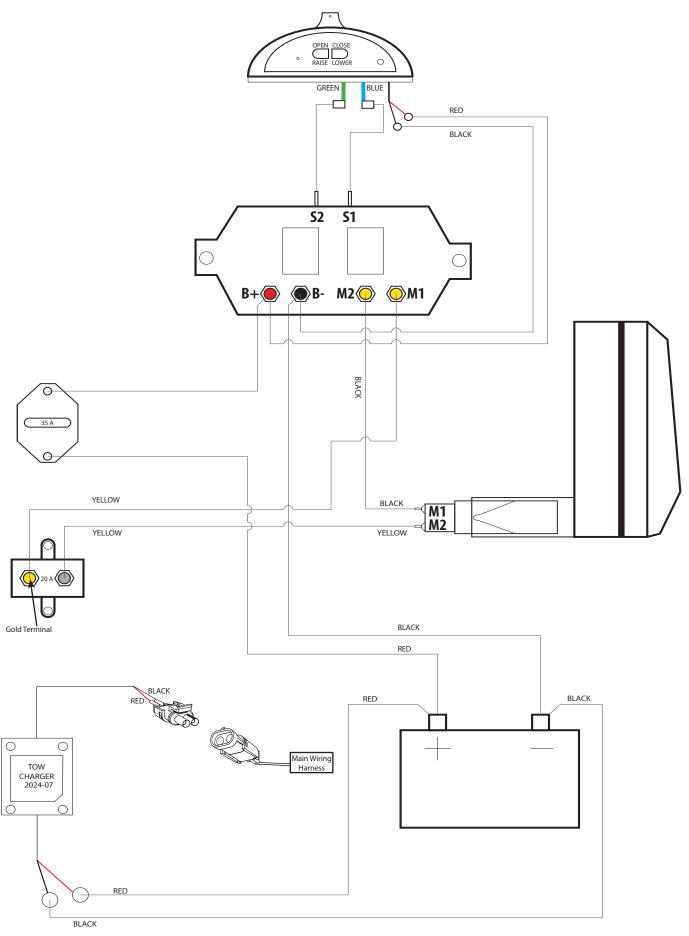
Now install the assembled mounting bracket using (2) 1/4" x 3-1/2" hex bolts, (2) 1/4" locking hex nuts and (2) 2" black spacers.



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



Wiring





Aligning the Tarp/Troubleshooting



- 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.

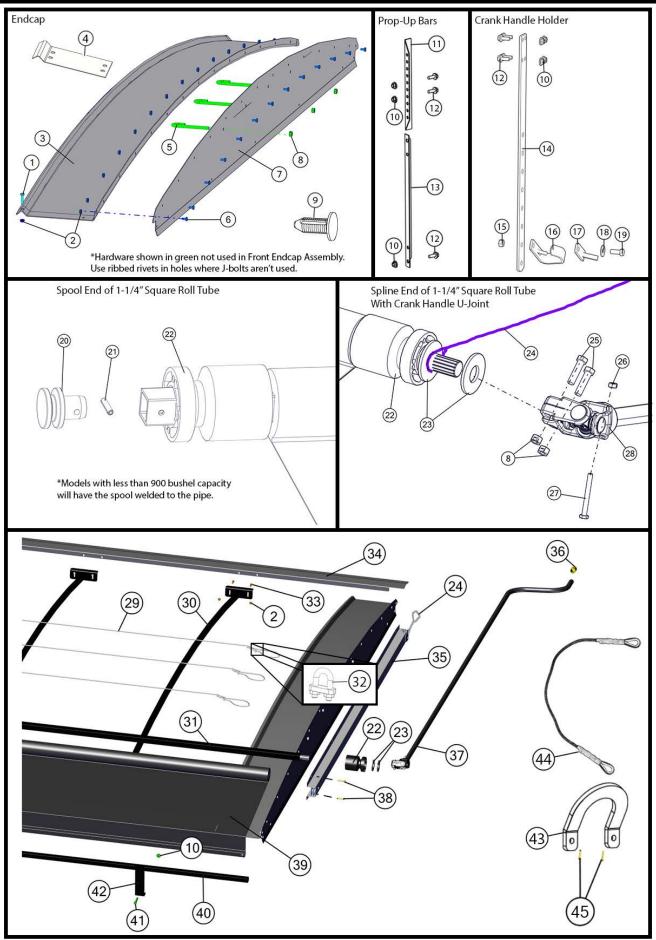




Figure 4



Repair Parts



Repair Parts

	Book day	n.cpa				
	Description	Part No.		Description	Part No.	
1	1/4"-20 x 1-1/4" Gr5 Z Hex Bolt	JM0016673	31		JM0048406	
2	1/4"-20 Gr5 Z SF Hex Nut	JM0001630	31		JM0048408	
3	Arched Top Endcap for DSR - Grain Cart 141-1/2"	JM0044731	31		JM0048404	
3	Arched Top Endcap for DSR - Leaner Large 121"	JM0045289	21	1522)	1110010577	
3	Arched Top Endcap for DSR - Leaner Small 45"	JM0045291	31		JM0048577	
4	Endcap Splice for Leaner	JM0007264	31		JM0048613 JM0001514	
5	3/8"-16 Gr5 Z J-Bolt (384JB)	JM0001519	-	1/8" Cable Clamp 1/4"-20 x 3/4" Gr5 Z Hex Bolt		
6	1/4"-20 x 1/2" Gr5 Z Hex Bolt	JM0001481	33		JM0001507	
7	End Cap Plate for DSR - Grain Cart 140-7/8"	JM0045315	34	Tightening Lip x 144" (525)	JM0012670	
7	End Cap Plate for DSR - Leaner Large 121-5/8"	JM0045320	34	Tightening Lip x 158" (620)	JM0012671	
7	End Cap Plate for DSR - Leaner Small 45-5/8"	JM0045322	34	Tightening Lip x 168" (750)	JM0013083	
8	3/8"-16 Gr5 Z Centerlock Hex Nut	JM0001512	34	3 3 1 1	JM0000155	
9	3/8" Ribbed Push in Rivet	JM0037396	34	Tightening Lip (1000 - 1151, 1012, 1112) Front	JM0013654	
10	3/8"-16 Gr5 Z SF Hex Nut	JM0002152	34	3 3 1 1 7 7	JM0013653	
11	End Cap Prop 13" - Upper	JM0021404	34	Tightening Lip (1131, 1251, 1122, 1222) Front	JM0021397	
12	3/8"-16 x 1" Gr5 Z SF Hex Bolt	JM0002092	34	Tightening Lip (1131, 1251, 1122, 1222) Rear	JM0021396	
13	Endcap Prop - Lower 19" (ABS-2)	JM0000179	34	Tightening Lip Front 153" (1326, 1401, 1312, 1412, 1522)	JM0017842	
13	Endcap Prop - Lower 27" (ABS-2L)	JM0021403	34	Tightening Lip Rear 153" (1326, 1401, 1312, 1412, 1522)	JM0017843	
14	1/4" x 2" x 29" Bar for Crank Holder (1000 Bushel Carts and	JM0000164	34	Tightening Lip 137" Front 1132, 1432	JM0041727	
1.4	Higher (ABCH-1EL))	1040040402	34	Tightening Lip 137" Rear 1132, 1432	JM0041728	
14	1/4" x 2" x 29" Bar with 120° Bend for Crank Handle	JM0048492	34	Tightening Lip 179-7/8" Front 1832, 2032, 2332	JM0042760	
14	(1312,1326,1522) 1/4" x 2" x 23" Bar for Crank Holder (875 Bushel Carts and	JM0029818	34	Tightening Lip 179-7/8" Rear 1832, 2032, 2332	JM0042848	
14	Lower)	JIVIUU29616	35	Spring Return Assembly Complete (Grain Cart)	JM0002911	
15	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511	36	'	JM0018963	
16	Crank Holder (zinc plated)(CH-1)	JM0001911	37	9-1/2' Crank w/ Splined U-Joint (CUJ-1L)	JM0000185	
17	Roll Tarp - Handle Hanger Rubber Flap	JM0002551	37	12' Crank w/ Splined U-Joint (CUJ-1LN)	JM0019888	
18	1/2" ID 1-3/8" OD Z Flat Washer	JM0003082	38	1/4" x 3/4" Self Tapping Screw	JM0001570	
19	1/2"-13 x 1-1/4" Gr5 Z Hex Bolt	JM0001513	39	Tarp with Rivets (525)	JM0021375	
20	Spool End for Roll Tube	JM0001313	39	12'8" x 13'6"Tarp w/ Rivets for DSR (620)	JM0048411	
21	1/4" x 1-1/4" HD Spiro Roll Pin	JM0046782	39	13'6" x 13'8"Tarp w/ Rivets for DSR (750)	JM0048412	
22	Roll Tarp Guide Roller	JM0038446	39		JM0048348	
23	1"USS Flat Washer	JM00030440	39	21'8" x 13'6"Tarp w/ Rivets for DSR (1000-1151, 1012, 1112)	JM0048415	
_	Spring Return Cable (Grain Carts)	JM0012981	39	25'2" x 13'6"Tarp w/ Rivets for DSR (1326, 1401, 1312, 1412)	JM0048416	
	3/8"-16 x 1-1/2" Gr5 Z Hex Bolt	JM0001659	_	21'4" x 15'5"Tarp w/ Rivets for DSR (1131, 1251, 1122, 1222)		
26	1/4"-20 Gr5 Z Centerlock Hex Nut	JM0001635		25' x 15'6"Tarp w/ Rivets for DSR (1522)	JM0048418	
27	1/4"-20 x 2-1/2" Gr5 Z Hex Bolt	JM0001506	39		JM0048076	
28	Universal Joint - Roll Tarp (SUJ-1)	JM0001500	39		JM0048071	
29	3/16" Cable x 144" (525) (316C-150)	JM0024881	40	7 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	JM0021364	
29	3/16" Cable x 158" (620) (316C-156)	JM0024884	40	22 242 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	JM0021366	
29	3/16" Cable x 168" (750) (316C-164)	JM0024884 JM0024240	40		JM0021367	
29	3/16" Cable x 108" (875, 812) (316C-198)	JM0024240 JM0022194	40	1" x 192" Square Tie-Down Tube (875, 812, GC24t-1)(192TT)	JM0000188	
		JM0022194 JM0021408	40	1	JM0021331	
29	3/16" Cable x 270" (1000-1151, 1012, 1112, 1222, GC31t-1) (316C-1050)	JIVIUU21406	40	1122, 1222)(1050TT) 1"x 306" Square Tie-Down Tube (1326, 1401, 1312, 1412,	JM0018962	
29	3/16" Cable x 306" (1326, 1401, 1312, 1412, 1522) (316C-	JM0015701		1522)(1325TT)	31110010302	
	1325)		40	1" x 274" Square Tie-Down Tube (1132, 1432)	JM0043692	
29	3/16" Cable x 280" (1132, 1432)	JM0048090	40	1" x 360" Square Tie-Down Tube (1832, 2032, 2332)	JM0048617	
29	3/16" Cable x 359" (1832, 2032, 2332)	JM0048576	41	3/8"-16 x 2" Gr5 Z Hex Bolt	JM0001510	
30	Arched Tarp Bows (525) (116ATB)	JM0021406	42	Tarp Stop Bracket (TSB-1)	JM0000187	
30	137" Arched Tarp Bows (Regular)(137ATB)	JM0000157	43	Tarp Rope Bracket	JM0047700	
30	160" Arched Tarp Bows (Leaner)	JM0021405	44	Tarp Rope Standard	JM0048662	
31	1-1/4" x 150" Roll Tube for Roll Tarp (525)	JM0024498	44	Tarp Rope Leaner	JM0048670	
31	1-1/4" x 161" Roll Tube for DSR (620)	JM0048400	45	1/4" x 1-1/2" Self Tapping Screw	JM0001571	
31	1-1/4" x 171" Roll Tube for DSR (750)	JM0048402				



Repair Parts List - Standard Carts

Part	620	750	875	1000 1051 1151	1326 1401
Tarp Crank Handle	L	L	L	XL	XL
Square Tubing (1" x 1" Sq. Tube) 14 Gauge	158"	168"	192"	264"	306"
Roll Tube (1.25" x 1.25" Sq. Tube) 11 Gauge	164"	174"	198"	270"	312"
Tightening Lip	157.5"	168"	192"	132″x2	153"x2
Endcap (2 Per)	141.5"	141.5"	141.5"	141.5"	141.5"
Endcap Plate (2 Per)	140.875"	140.875"	140.875"	140.875"	140.875"
Tarp Bows	137.5" x 4	137.5" x 4	137.5" x 4	137.5" x 7	137.5" x 8
Ridge Cable (3 Per) (4 per Leaner)	158"	168"	192"	264"	306"
Canvas Tarp	620	750	875	1050	1325
Stop Bracket	3	3	3	3	3
Prop Up Bar - Upper (2 Per)	13"	13"	13"	13"	13"
Prop Up Bar - Lower (2 Per)	19"	19"	19"	27"	27"
J-Bolt Small	3	3	3	3	3
Hanger Bracket	23"	23"	23"	29"	29" (1326 - Bent)
Hanger Bracket Hook	1	1	1	1	1
1/4" Flange Nuts	70	70	70	110	114
1/4" x 1/2" SF Bolt	26	26	26	26	26
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	44	44	44	84	88
3/8" SF Nuts	15	15	15	15	41
3/8" x 1" SF Bolts	12	12	12	12	38
3/8"-16 x 1-1/2" Gr5 Z Hex Bolt	2	2	2	2	2
3/8" x 2" Bolts	3	3	3	3	3
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 3/4" Self Tapping Screw	20	20	20	20	20
1/4" x 1-1/2" Self Tapping Screw	8	8	8	8	8
1" USS Flat Washer	2	2	2	2	2
Yellow Rubber Cap	1	1	1	1	1
Rubber Flap	1	1	1	1	1
GrainCart Spring Return (95"Long)	2	2	2	2	2
Endcap Splice for Leaner	0	0	0	0	0
3/8" Ribbed Push in Rivet	5	5	5	5	5
1/2" USS Washer	2	2	2	2	2
Spoll End for Roll Tube	0	0	0	1	1
1/4" Roll Pin	0	0	0	1	1
Roll Tarp Guide Roller	2	2	2	2	2
Tarp Rope Standard	2	2	2	2	2
Tarp Rope Leaner	0	0	0	0	0
Tarp Rope Bracket	4	4	4	4	4



Repair Parts List - Extended Reach Carts

Part	812	1012 1112	1312 1412	1122 1222	1522
Tarp Crank Handle	L	XL	XL	XL	XL
Square Tubing (1" x 1" Sq. Tube) 14 Gauge	192"	264"	306"	264"	306"
Roll Tube (1.25" x 1.25" Sq. Tube) 11 Gauge	198"	270"	312"	270"	312"
Tightening Lip	192"	132"x2	153″x2	99"Front 165" Back	153″x2
Endcap (2 Per)	141.5"	141.5"	141.5"	45" & 121"	45" & 121"
Endcap Plate (2 Per)	140.875"	140.875"	140.875"	45.625" & 121.625"	45.625" & 121.625"
Tarp Bows	137.5" x 4	137.5" x 7	137.5" x 8	161.75" x 7	161.75" x 8
Ridge Cable (3 Per) (4 per Leaner)	192″	264"	306"	264"	306"
Canvas Tarp	875	1050	1325	1130 1250	1500
Stop Bracket	3	3	3	3	3
Prop Up Bar - Upper (2 Per)	13"	13"	13"	13"	13"
Prop Up Bar - Lower (2 Per)	19"	27"	27"	27"	27"
J-Bolt Small	3	3	3	4	4
Hanger Bracket	23"	29"	29" (1312-Bent)	29"	29" Bent
Hanger Bracket Hook	1	1	1	1	1
1/4" Flange Nuts	70	110	114	80	84
1/4" x 1/2" SF Bolt	26	26	26	44	44
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	44	84	88	36	40
3/8" SF Nuts	15	15	41	15	41
3/8" x 1" SF Bolts	12	12	38	12	38
3/8"-16 x 1-1/2" Gr5 Z Hex Bolt	2	2	2	2	2
3/8" x 2" Bolts	3	3	3	3	3
3/8" Locknuts	3	3	3	4	4
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	8	8
Universal Joint	1	1	1	1	1
1/4" Drive Rivet	10	10	10	10	10
1/4" x 3/4" Self Tapping Screw	20	20	20	20	20
1/4" x 1-1/2" Self Tapping Screw	8	8	8	8	8
1" USS Flat Washer	2	2	2	2	2
Yellow Rubber Cap	1	1	1	1	1
Rubber Flap	1	1	1	1	1
GrainCart Spring Return (95"Long)	2	2	2	2	2
Endcap Splice for Leaner	0	0	0	2	2
3/8" Ribbed Push in Rivet	5	5	5	4	4
1/2" USS Washer	2	2	2	2	2
Spoll End for Roll Tube	0	1	1	1	1
1/4" Roll Pin	0	1	1	1	1
Roll Tarp Guide Roller	2	2	2	2	2
Tarp Rope Standard	2	2	2	0	0
Tarp Rope Leaner	0	0	0	2	2
Tarp Rope Bracket	4	4	4	4	4

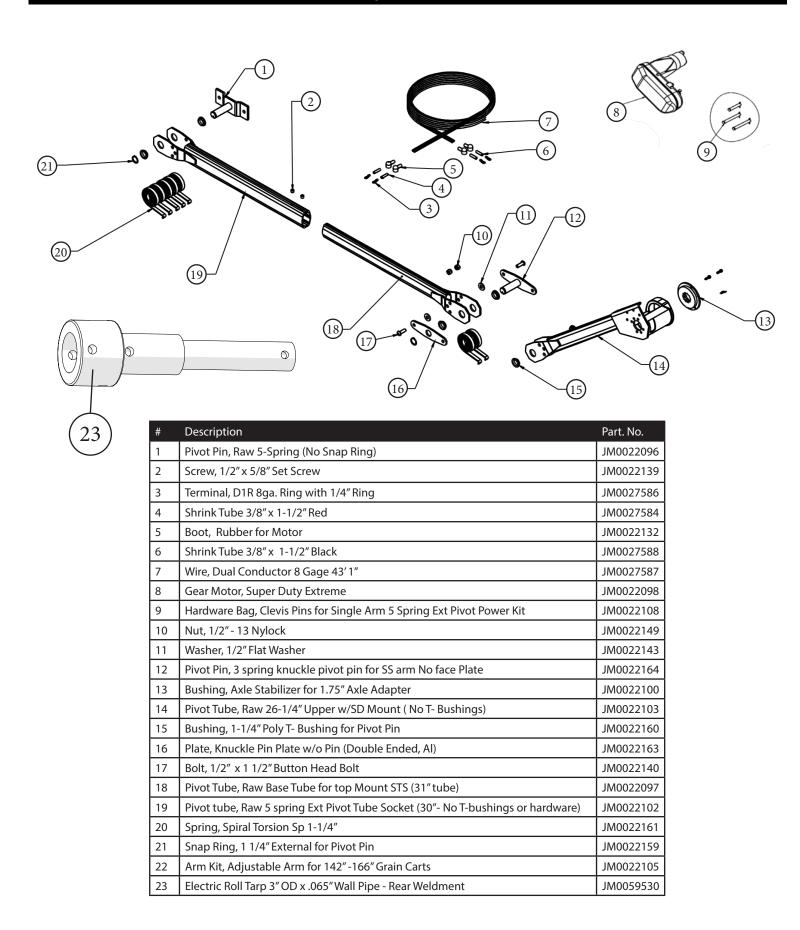


Repair Parts List - Drag Series Cart

	4400 4400	4000 0000 0000
Part		1832, 2032, 2332
Tarp Crank Handle	XL	XL
Square Tubing (1" x 1" Sq. Tube) 14 Gauge	274"	360"
Roll Tube (1.25" x 1.25" Sq. Tube) 11 Gauge	280"	366"
Tightening Lip	137" x 2	179-7/8" x 2
Endcap (2 Per)	141.5"	45" & 121"
Endcap Plate (2 Per)	140.875"	45.625" & 121.625"
Tarp Bows	137.5" x 8	161.75" x 8
Ridge Cable (3 Per) (4 per Leaner)	280"	359"
Canvas Tarp	1132	1832
Stop Bracket	3	3
Prop Up Bar - Upper (2 Per)	13"	13"
Prop Up Bar - Lower (2 Per)	27"	27"
J-Bolt Small	4	4
Hanger Bracket	29"	29″
Hanger Bracket Hook	1	1
1/4" Flange Nuts	76	102
1/4" x 1/2" SF Bolt	30	42
1/4" Locknut	1	1
1/4" x 2-1/2" Bolt	1	1
1/4" x 3/4" Bolt	46	60
3/8" SF Nuts	13	15
3/8" x 1" SF Bolts	10	12
3/8"-16 x 1-1/2" Gr5 Z Hex Bolt	2	2
3/8" x 2" Bolts	3	3
3/8" Locknuts	4	4
1/2" Locknuts	1	1
1/2" x 1-1/4" Bolts	1	1
3/16" Cable Clamp	8	8
Universal Joint	1	1
1/4" Drive Rivet	10	11
1/4" x 3/4" Self Tapping Screw	20	20
1/4" x 1-1/2" Self Tapping Screw	8	8
Yellow Rubber Cap	1	1
Rubber Flap	1	1
GrainCart Spring Return (95"Long)	2	2
Endcap Splice for Leaner	2	2
3/8" Ribbed Push in Rivet	5	4
1" USS Flat Washer	2	2
1/2" USS Washer	2	2
Spoll End for Roll Tube	1	1
1/4" Roll Pin	1	1
Roll Tarp Guide Roller	2	2
Tarp Rope Standard	2	0
Tarp Rope Leaner	0	2
Tarp Rope Bracket	4	4

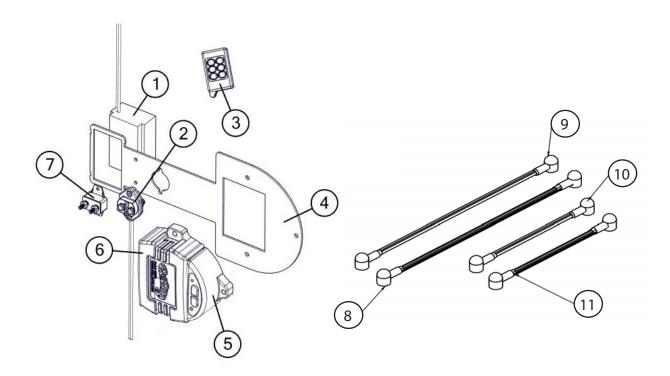


Repair Parts





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	JM0022109
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



