



LEANER SETUP MANUAL

PATENTED SINGLE AUGER

G R A I N C A R T S



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LEANER SETUP MANUAL

Detail #	Description	Quantity
1	3/8"-16 x 1" serrated flange hex bolt	118
2	3/8"-16 x 1" serrated flange hex nut	108
3	3/8"-16 x 1" centerlock hex nut	10

NOTE: This is a general list of parts for a leaner. Some of these will be already installed on arrival or installed in sideboard set up. The purpose of this list here is to provide a visual aid along with the previous page.

NOTE



FOR CARTS WITH THE TARP OPTION:

The boxed in area shown above is to show which bolt holes should have rounded head bolts placed in them during assembly. Use rounded head bolts at any location where it is possible that the tarp may hit the bolt head to avoid damage to the tarp during use.

LEANER SETUP MANUAL

STEP - 1.0



Remove the bolt that holds the two off auger sideboards together for transport.

STEP - 2.0



Install the front corner using 3/8" X 1" bolts and nuts.

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STEP - 3.0



Install the back piece to the rear corner using 3/8" X 1" bolts and nuts.

STEP - 3.1



Install the side piece to the rear corner using 3/8" X 1" bolts and nuts.

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STEP - 4.0



Fold out the front sideboard.

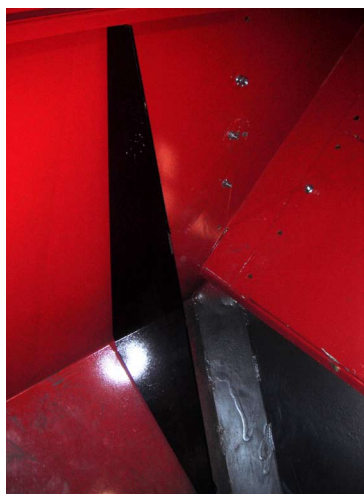
STEP - 5.0



Insert 3/8" X 1" bolt and nut in adjustment brace and shell bracing. Adjust brace until the carts sidewall is straight.

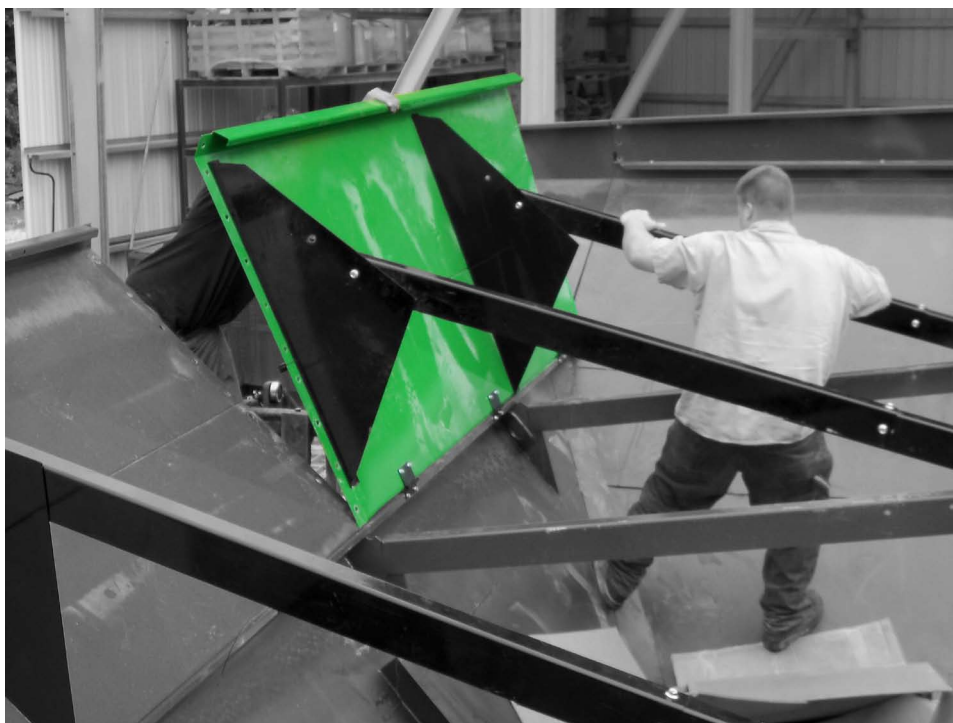
LEANER SETUP MANUAL

STEP - 5.1



Install the Front Off Auger Side Brace and bolt with 3/8" X 1".

STEP - 6.0



Fold out the rear sideboard. Insert bolts and nuts in adjustment braces. Then adjust the braces until the carts sidewall is straight and in line. Complete inserting all bolts to the sideboards and corners and tighten.

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STEP - 7.0



Also note that there are now two styles of triangular bolt on bracing. Above is a new brace that has been added.

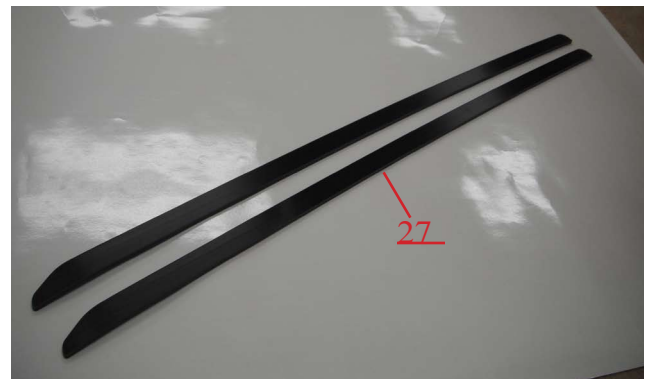
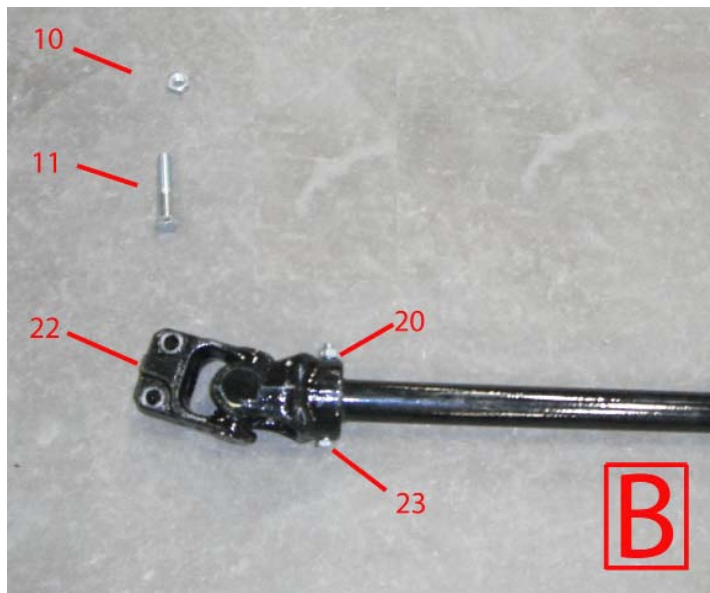
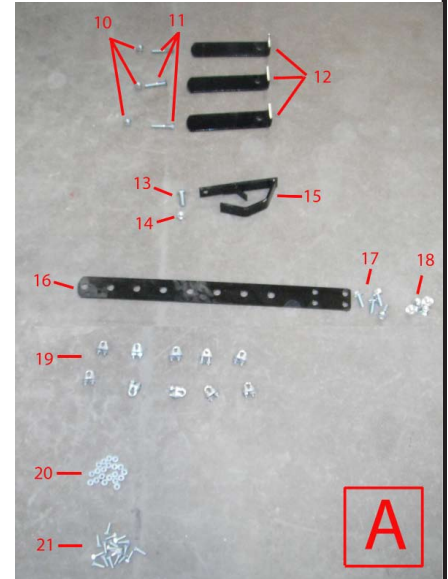
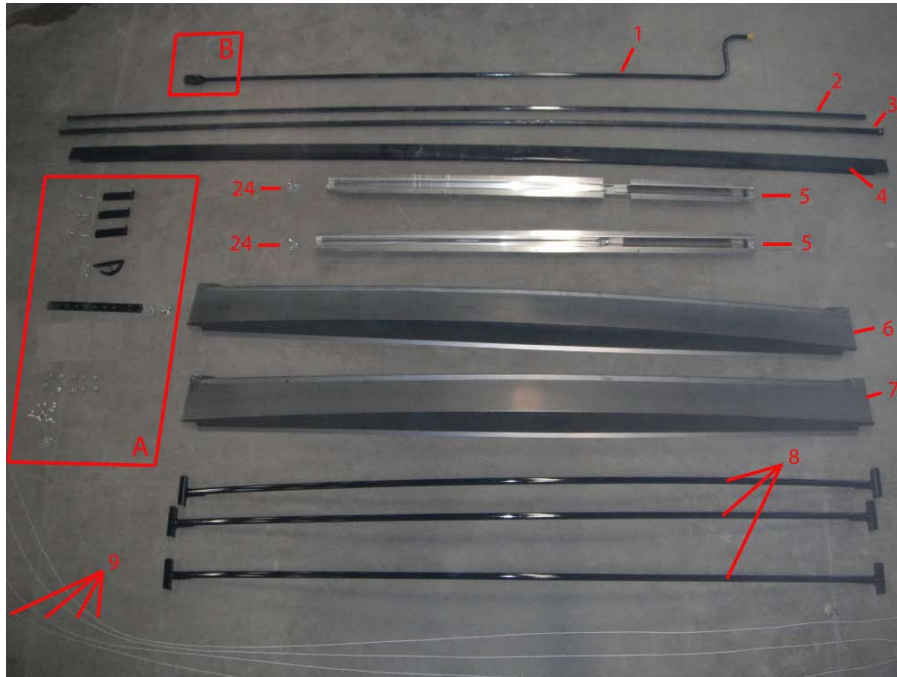
LEANER MODEL GRAIN CART TARP INSTALLATION

INTRO

Grain Cart Tarp Installation:

Generally speaking, tarp installations are similar for all models of J&M Grain Carts. The 1500 Grain Cart does have some differences however compared to the other J&M Grain Carts. In the rest of this manual, the general Grain Cart Tarp Installaion Manual was used and modified to display the correct installation of the Tarp for the 1500 Grain Cart.

LEANER MODEL GRAIN CART TARP INSTALLATION



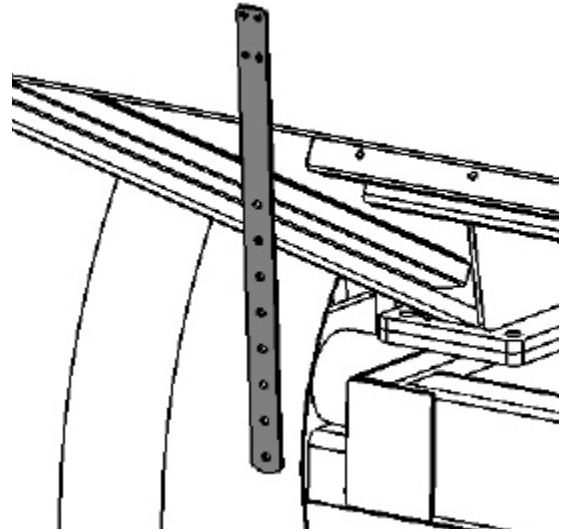
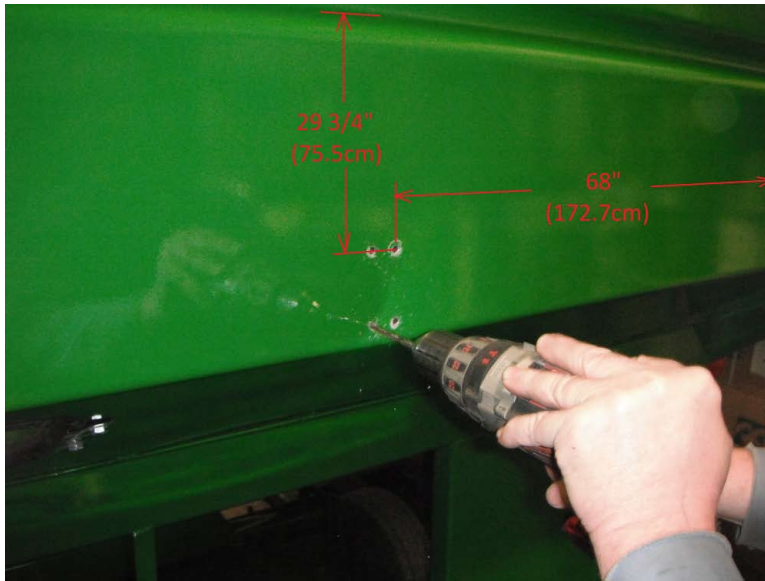
LEANER MODEL GRAIN CART TARP INSTALLATION

Detail #	Description	Quantity
1	Tarp crank handle	1
2	1" schedule 10 x 198" long pipe	1
3	1" x 1" 14ga x 192" long square tubing	1
4	Drip edge	1
5	Spring Return	1
6	Rear End Cap (Bolt Together, No Wind Lip)	1
7	Front End cap (Bolt Together, Wind Lip)	1
7-1	Rear Short End Cap (BT, NWL, 4' Long)	1
7-2	Front Short End Cap (BT, WL, 4' Long)	1
8	*Bows	
	1326's	8
	1000's, 1050's, 1150's	7
	620's, 750's, 875's	4
	525's	3
9	3/16" Diameter Ridge Cable	3
10	3/8"-16 Centerlock Hex Nut	11
11	3/8"-16 x 2" Hex Bolt	5
12	Stop Bracket	3
13	1/2"-13 x 1 1/4" Hex Bolt	1
14	1/2"-13 Centerlock Hex Nut	1
15	Hanger bracket hook	1
16	Hanger bracket	1
17	3/8"-16 x 1" Serrated Flange Hex Bolt	17
18	3/8"-16 Serrated Flange Hex nut	17
19	Cable clamp	6
20	1/4"-20 Centerlock Hex Nut	9
21	1/4"-20 x 3/4" Serrated Flange Hex Bolt	4 per Bow
22	Unviersal joint	1
23	1/4"-20 x 2 1/2" Hex Bolt	1
(Parts Not Shown)		
24	1/4" x 3/4" Self Tapping Bolt	10
25	1/4" drive rivet	8
26	Canvas tarp	1
27	Plast End Cap Rail Attachment	1
28	1/4" x 1 1/2" Self Tapping Bolt	4
29	1/4" x 5/8" Button SKT Cap Screw Zinc	5
30	1/4" x 1/2" Button SKT Cap Screw Zinc	22
31	1/4" Serrated Flange Nut Hard & Zinc	27 + 4 per Bow
32	Plastic J&M Standoffs	2
33	J-bolts	6
34	Prop Up Bar (2 Piece)	2
35	1/4"-20 x 3/4" Hex Bolt	8

NOTE: This is a general list of parts for a leaner with tarp, so some of these will be already installed on arrival or installed in sideboard set up. The purpose of this list here is to provide a visual aid along with the previous page.

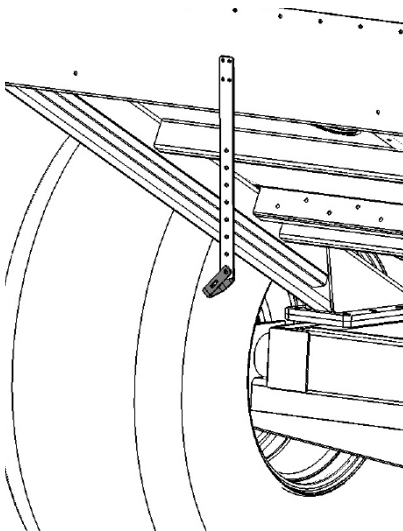
LEANER MODEL GRAIN CART TARP INSTALLATION

STEP - T1.0



Use the Hanger Bracket to mark and drill four 3/8" holes on the rear of the cart as shown above. The 29 3/4" dimension is from the top of the shell, not the top of the sideboard. Attach the hanger bracket to the back wall with four 3/8"-16 x 1" serrated flange hex bolts and four 3/8"-16 serrated flange hex nuts.

STEP - T2.0



Use one 1/2"-13 x 1 1/4" hex bolt and one 1/2"-13 centerlock hex nut to bolt the tarp crank handle hanger hook to the hanger bracket. Do not completely tighten the bolt for the hanger hook. This hook needs to swing freely.

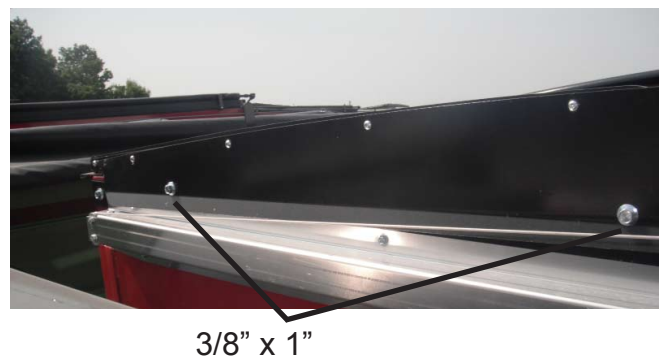
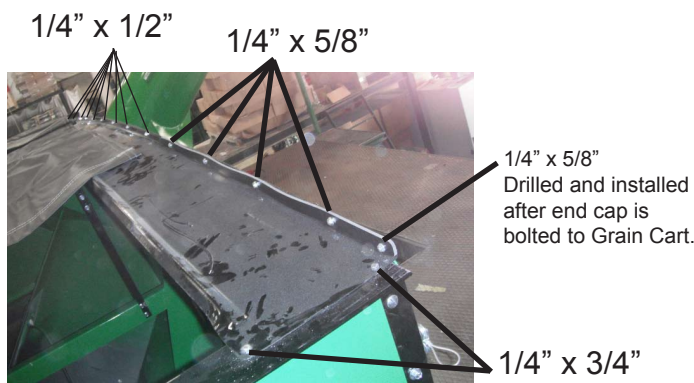
LEANER MODEL GRAIN CART TARP INSTALLATION

STEP - T3.0



Use a pair of vise grips or extra set of hands to temporarily hold the 2 pieces of drip edge (Detail #4) to the newly flipped out sideboards with the bolt holes lined up. Bolts in a later step will secure the drip edge. (The drip edge should be centered from the front to the rear of the cart.) Make sure that the drip edge is flush to the inside of the sideboard.

STEP - T4.0



Bolt together each sets of the end caps using 1/4"-20 x 1/2" button SKT cap bolts and 1/4"-20 serrated flange hex nuts. One set of end caps will have a windlip sticking up and the other will be sticking down. The endcap that has the 1" wind lip sticking up is the front endcap.

Use two 1/4"-20 x 3/4" hex bolts, two 1/4"-20 centerlock hex nuts, four 3/8"-16 x 1" serrated flange hex bolts and four 3/8"-16 serrated flange hex nuts to attach each of the end caps. The end cap is pre-drilled, however, 1/4" holes will need drilled through the top of the sideboards and 3/8" holes will need drilled through the endboards to match the endcaps hole pattern.

LEANER MODEL GRAIN CART TARP INSTALLATION

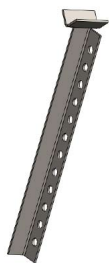
STEP - T5.0



Splice

There should be a splice plate already installed on the end cap that is on the 1500 Grain Cart. Place the 4' Bolt On End Cap (Detail #7-1 and Detail #7-2) over top of this splice, lining up the hole patterns and bolt together using 3/8"-16 x 5/8" serrated flange hex bolts. Insert bolts into the remaining holes. This will need to be done for the front and back 4' Bolt On End Cap. Once all bolts are in place, tighten these along with the bolts in the tarp bows (Detail #8). On the front end cap leave the last four holes empty on the off auger side. Use four 1/4"-20 x 5/8" button SKT cap bolts and four 1/4"-20 serrated flange hex nuts to attach the plastic rail piece at the last four holes to the endcap assembly. After everything is tightened, drill and install one more 1/4"-10 x 5/8" button SKT cap bolt at the end of the front end cap through the plastic rail piece (see STEP-10.0 for picture). The drip edge should be secured now.

STEP - T5.1

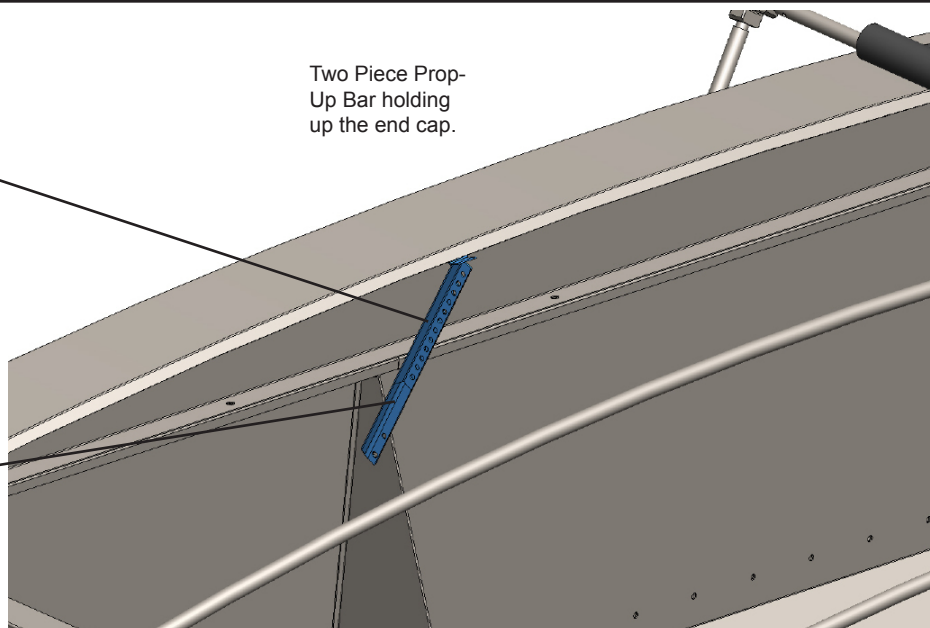


Top Prop-Up Bar Part



Lower Prop-Up Bar Part

Two Piece Prop-Up Bar holding up the end cap.



Install the two piece prop-up bars in the front and rear of the Grain Cart. Install the Lower Prop-Up Bar Part with two 3/8" x 1" Serrated Flange Hex Bolt and two 3/8" Serrated Flange Hex Nut to the rear brace first (holes may not be pre-drilled for this). Then, pushing up on the end cap, attach the Top Prop-Up Bar Part to the Bottom Prop-Up Bar Part with two 3/8" x 1" Serrated Flange Hex Bolt and two 3/8" Serrated Flange Hex Nut so that the Two Piece Prop-Up Bar is pushing the end cap upwards to keep from sagging.

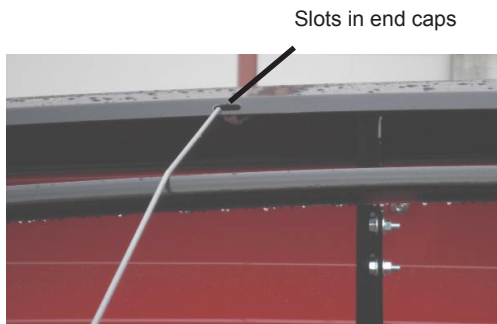
STANDARD GRAIN CART TARP INSTALLATION

STEP - T6.0



Install the Spring Return on the front of the grain cart using ten 1/4"-16 x 3/4" long self tapping bolts on the front of the grain cart. It should be placed as far to the opposite auger side as possible and as high as possible. The pulley wheels should be pointing to the opposite auger side of the grain cart. Try to get the spring return as high up on the wall of the grain cart as possible, while keeping it level. This will help prevent any collisions with the upper auger.

STEP - T7.0



Cable clamp and
ridge cable loop

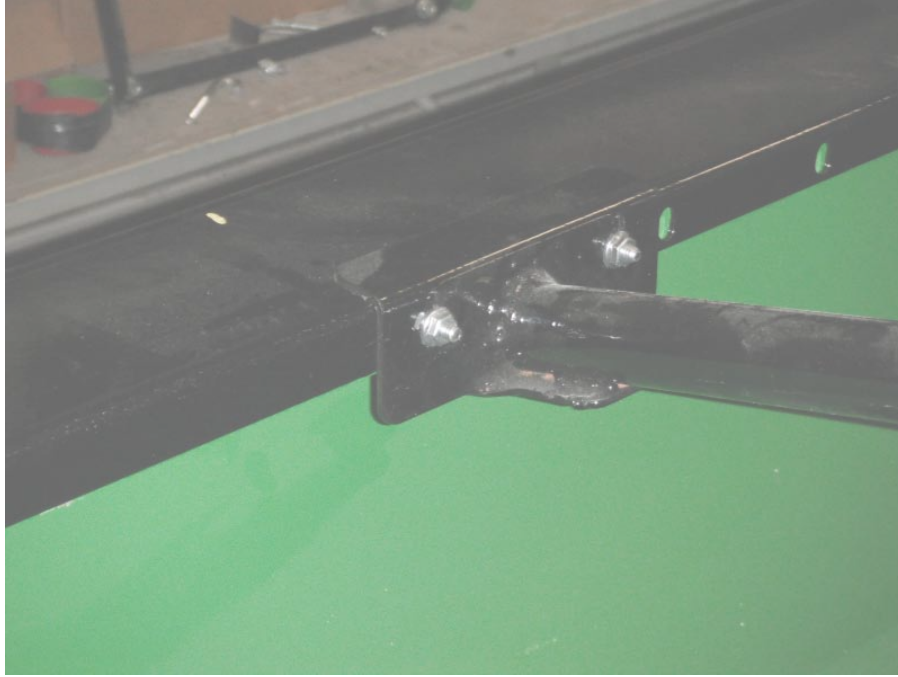
J-hook



Run the ridge cables through the 3 auger side slots in the front end cap so that the nut and washer stop the cable from pulling through the slot. Pull the cables over the tarp bows down to the rear of the cart. (If needed) Drill three 3/8" (10mm) holes in the rear end cap 2" below the three highest slots (three slots closest to auger side of cart) in the endcaps flat plate. Insert the J-hooks in the rear endcap from the inside and put 3/8" (10mm) centerlocking hex nut on each. Run the ridge cables through the rear slots and loop the cable around the J-bolt with the cable clamp. Tighten the 3/8" centerlocking hex nut on the rear J-hook until the ridge cable is brought tight. Grind any excess bolt sticking out from the J-bolts. Cover loose ends with electrical tape. The electrical tape covering loose cable ends will prevent wear to the canvas tarp!

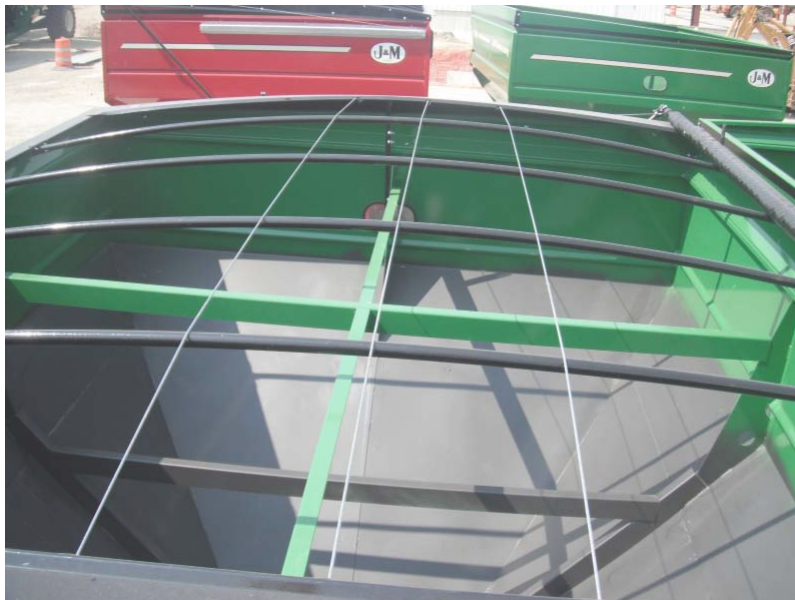
STANDARD GRAIN CART TARP INSTALLATION

STEP - T8.0



Slide all *bows under the pre-tensioned ridge cables. Then install two 1/4"-20 x 3/4" serrated flange hex bolts and two 1/4"-20 serrated flange hex nuts on each end of all *bows. Line the bows up with the holes in the sideboards and not the drip edge if the holes are different. If drip edge holes are different, they will need to be drilled.

STEP - T9.0



View of all *bows installed under three ridge cables.

*See parts list for number of bows needed per cart size.

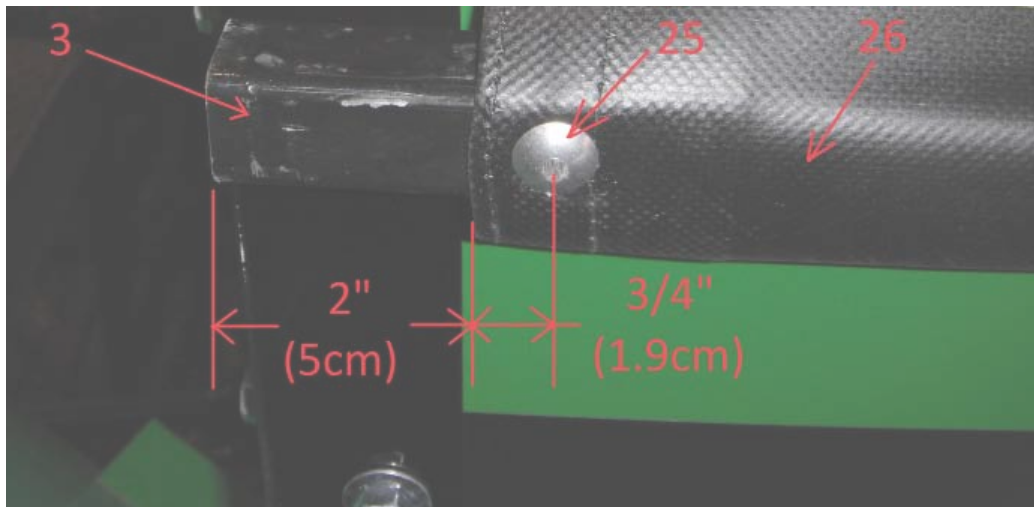
STANDARD GRAIN CART TARP INSTALLATION

STEP - T10.0



Insert the 1"x1" 14ga x 192" long square tube into the sleeve on the Canvas Tarp that is on the opposite side of the Stiffening Patch. Center the canvas tarp on the 1" x 1" 14ga x 192" long square tubing. There should be approximately 2" (5cm) of tubing sticking out each end of the tarp. Use a 1/4" drill bit to drill through the canvas tarp and one wall of the 1" x 1" 14ga x 192" long square tubing. (See STEP-8.1) Repeat and drill a hole at the same location on the opposite end of the tubing. Use a hammer to install both 1/4" (6.35mm) drive rivets.

STEP - T11.0

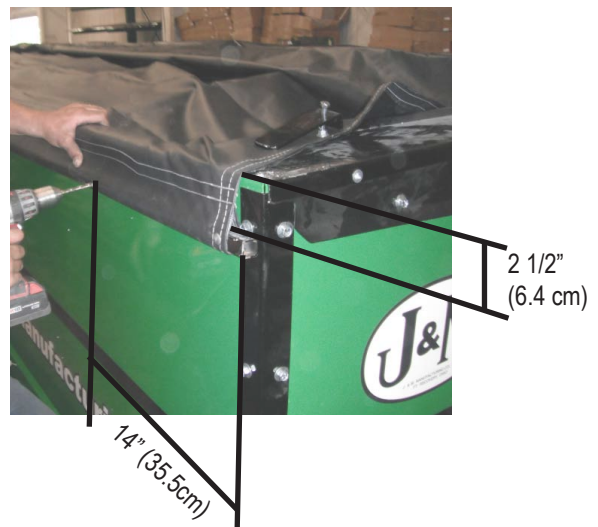


STANDARD GRAIN CART TARP INSTALLATION

STEP - T12.0



Stop Brackets



Center the 1" square tube that is riveted to the canvas tarp on the auger side of the cart. Use a 3/8" drill bit to drill three holes through the square tubing and auger side wall of the cart. The holes should be approximately 2 1/2" down from the top of the sideboard. Two holes should be placed 14" from the ends of the square tubing and the third hole should be centered on the square tubing. Install the three stop brackets with three 3/8"-16 x 2" hex bolts and three 3/8"-16 centerlock hex nuts.

STEP - T13.0



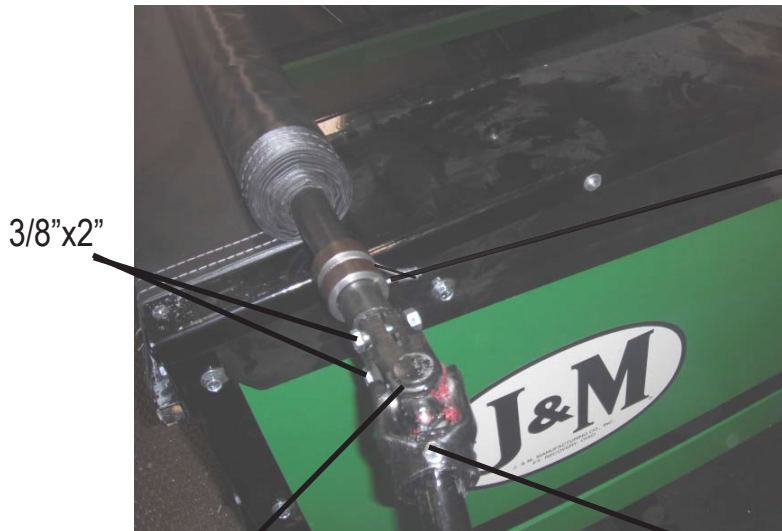
Front Spring Return on Grain cart

Spool on Roll Pipe

On the opposite side of the canvas tarp, slide the 1" schedule roll pipe into the remaining sleeve on the canvas tarp with the spline end towards the rear of the cart. Line up the spool on the roll pipe with the spring return on the front of the grain cart. Drill a hole with a 1/4" drill bit through each of the stiffening patches and roll pipe and drill one 1 1/4" from the edge of the canvas tarp at both ends. (Six holes total). Use a hammer to install six of the 1/4" drive rivets. Slip the spring return-loop over the spool. See the right picture on Step-8.0 for an example of the stiffening patch.

STANDARD GRAIN CART TARP INSTALLATION

STEP - T14.0



3/8"x2"

Universal Joint

1/4"x2 1/2



Crank Handle

Install the universal joint using two 3/8"-16 x 2" hex bolts and two 3/8"-16 centerlock hex nuts. Install the tarp crank handle using one 1/4"-20 x 2 1/2" hex bolt and one 1/4"-20 centerlock hex nut. (Note: Universal joint may be pre-assembled.)

STEP - T15.0

Tarp Standoff



Install each tarp standoff at each end of the grain cart wall on the off auger side with two 1/4" x 1 1/2 self tapping bolts. Place it about 2" down from the drip edge along side of the corner brace.