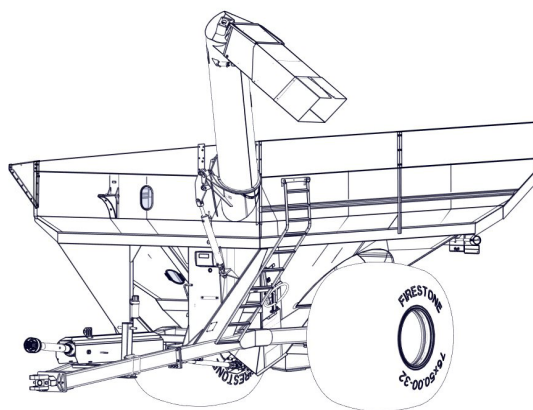


LEANER GRAIN CART SET-UP

OPERATORS MANUAL



Rev. 4.4.2017

J. & M. Mfg. Co., Inc.
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Fort Recovery, OH 45846
Ph: (419) 375-2376 Fax: (419) 375-2708
www.jm-inc.com

Stance

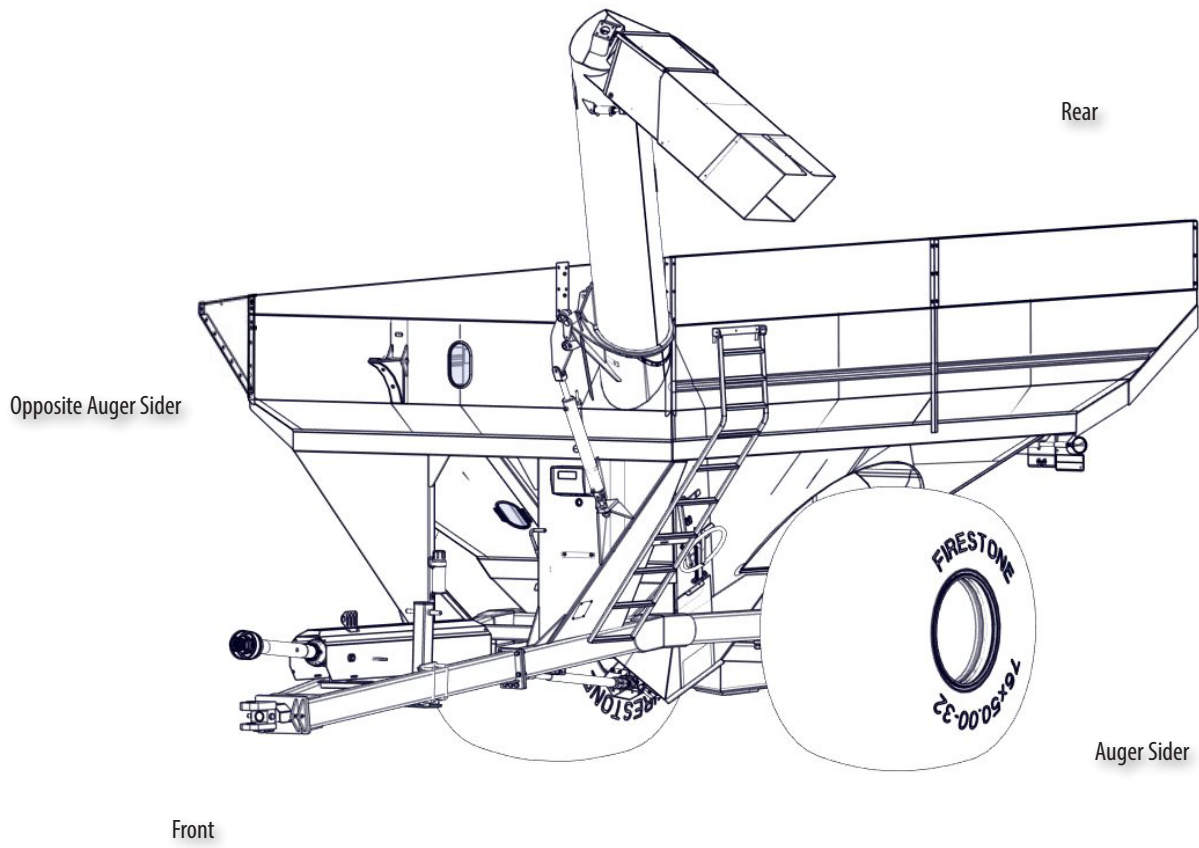


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To The Dealer

Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists are completed before releasing equipment to the owner.

The dealer must complete the Warranty Registration found on the Dealer Portal website located at dealer.jm-inc.com. and return it to J. & M. Mfg. Co., Inc. at the address indicated on the form. Warranty claims will be denied if the Warranty Registration has not been submitted.

EXPRESS WARRANTY:

J. & M. Mfg. Co. Inc. warrants against defects in construction or materials for a period of ONE year. We reserve the right to inspect and decide whether material or construction was faulty or whether abuse or accident voids our guarantee.

Warranty service must be performed by a dealer or service center authorized by J. & M. Mfg. Co., Inc. to sell and/or service the type of product involved, which will use only new or remanufactured parts or components furnished by J. & M. Mfg. Co., Inc. Warranty service will be performed without charge to the purchaser for parts or labor based on the Warranty Labor Times schedule. Under no circumstance will allowable labor times extend beyond the maximum hours indicated in the Warranty Labor Times schedule for each warranty procedure. The purchaser will be responsible, however, for any service call and/or transportation of the product to and from the dealer or service center's place of business, for any premium charged for overtime labor requested by the purchaser, and for any service and/or maintenance not directly related to any defect covered under the warranty. Costs associated with equipment rental, product down time, or product disposal are not warrantable and will not be accepted under any circumstance.

Each warranty term begins on the date of product delivery to the purchaser. Under no circumstance will warranty be approved unless (i) the product warranty registration card has been properly completed and submitted to the equipment manufacturer, and (ii) a warranty authorization number has been issued by the equipment manufacturer. This Warranty is effective only if the warranty registration card is returned within 30 days of purchase.

This warranty does not cover a component which fails, malfunctions or is damaged as a result of (i) improper modification or repair, (ii) accident, abuse or improper use, (iii) improper or insufficient maintenance, or (iv) normal wear or tear. This warranty does not cover products that are previously owned and extends solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this implied, with respect to tires or other parts or accessories not manufactured by J. & M. Mfg. Co., Inc. Warranties for these items, if any, are provided separately by their respective manufacturers.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

In no event shall J. & M. Mfg. Co., Inc. be liable for special, direct, incidental or consequential damages of any kind. The exclusive remedy under this Warranty shall be repair or replacement of the defective component at J. & M. Mfg. Co., Inc.'s option. This is the entire agreement between J. & M. Mfg. Co., Inc. and the Owner about warranty and no J. & M. Mfg. Co., Inc. employee or dealer is authorized to make any additional warranty on behalf of J. & M. Mfg. Co., Inc.

The manufacturer reserves the right to make product design and material changes at any time without notice. They shall not incur any obligation or liability to incorporate such changes and improvements in products previously sold to any customer, nor shall they be obligated or liable for the replacement of previously sold products with products or parts incorporating such changes.

SERVICE:

The equipment you have purchased has been carefully manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and maintenance. Lubricate the unit as specified. Observe all safety information in this manual and safety signs on the equipment.

For service, your authorized J. & M. dealer has trained mechanics, genuine J. & M. service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine J. & M. service parts. Substitute parts may void warranty and may not meet standards required for safety and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

Model No: _____ **Serial No:** _____ **Date of Purchase:** _____

Purchased From: _____


Provide this information to your dealer to obtain correct repair parts.


TO THE OWNER:


The purpose of this manual is to assist you in operating and maintaining your grain cart in a safe manner. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance and help maintain safe operating conditions. If this machine is used by an employee or is loaned or rented, make certain that the operator(s), prior to operating:


1. Is instructed in safe and proper use.
2. Reviews and understands the manual(s) pertaining to this machine.

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING** and **DANGER** are used in conjunction with the Safety-Alert Symbol (a triangle with an exclamation mark) to indicate the degree of hazard for items of personal safety. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury or death.

 This Safety-Alert symbol indicates a hazard and means **ATTENTION!**
BECOME ALERT! YOUR SAFETY IS INVOLVED!

 **DANGER** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

 **WARNING** Indicates a potentially hazardous situation that, if not avoided, will result in death or serious injury, and includes hazards that are exposed when guards are removed.

 **CAUTION** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

IMPORTANT Indicates that failure to observe can cause damage to equipment.

NOTE Indicates helpful information.

General Information

BOLT TORQUE CHART

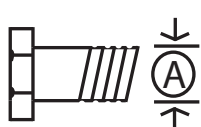
Always tighten hardware to these values unless a different torque or tightening procedure is listed for specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for Metric hardware.

Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 & J1701M (JUL 96)



SAE SERIES TORQUE CHART



SAE Grade 2
(No Dashes)


SAE Bolt Head
Identification

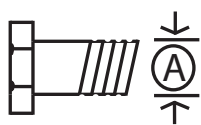


SAE Grade 5
3 Radial Dashes



SAE Grade 8
6 Radial Dashes

 Diameter (Inches)	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		LBS.-FT.	N-m	LBS.-FT.	N-m	LBS.-FT.	N-m
1/4	7/16"	6	8	10	13	14	18
5/16	1/2"	12	17	19	26	27	37
3/8	9/16"	23	31	35	47	49	67
7/16	5/8"	36	48	55	75	78	106
1/2	3/4"	55	75	85	115	120	163
9/16	13/16"	78	106	121	164	171	232
5/8	15/16"	110	149	170	230	240	325
3/4	1-1/8"	192	261	297	403	420	569
7/8	1-5/16"	306	416	474	642	669	907
1	1-1/2"	467	634	722	979	1020	1383

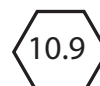


METRIC SERIES TORQUE CHART



Metric
Grade 8.8

Metric Bolt Head
Identification



Metric
Grade 10.9

Diameter & (Millimeters) Thread Pitch	Wrench Size	COARSE THREAD				FINE THREAD				Diameter & (Millimeters) Thread Pitch
		MARKING ON THREAD				MARKING ON THREAD				
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12.1.75	18 mm	68	50	94	70	75	55	103	76	12.1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0



ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be erased by an operator's single careless act. In addition, hazard control and accident prevention are dependent upon the awareness, concern, judgment, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Make certain that the operator(s), prior to operating is instructed in safe and proper use and reviews and understands the manual(s) pertaining to this machine. Also make certain that the operator(s) reviews and understands the operator's manual of the tractor prior to hooking up or operating the grain cart.

Read this manual before you operate this machine. If you do not understand any part of this manual, or need more information, contact the manufacturer or your authorized dealer.

SAFETY

Understand that your safety and the safety of other persons is measured by how you service and operate this machine. Know the positions and functions of all controls before you try to operate them. Make sure to check all controls in a safe area before starting your work.

The safety information given in this manual does not replace safety codes, federal, state or local laws. Make certain your machine has the proper equipment as designated by local laws and regulations.

A frequent cause of personal injury or death is from persons falling off equipment and being run over. Do not permit persons to ride on this machine.

Travel speeds should be such that complete control and machine stability is maintained at all times. Where possible, avoid operating near ditches, embankments and holes. Reduce speed when turning, crossing slopes and rough, slick or muddy surfaces.

Collision of high speed road traffic and slow moving machines can cause personal injury or death. On roads, use flasher lights according to local laws. Keep slow-moving-vehicle emblem visible. Pull over to let faster traffic pass.

Hydraulic oil leaking under pressure can penetrate skin and cause infection or other injury. To prevent personal injury,

- Relieve all pressure, before disconnecting fluid lines,
- Before applying pressure, make sure all connections are tight and components are in good condition,
- Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose.
- If injured by leaking fluid, see your doctor immediately.

When transporting the grain cart, always keep the auger in the stow position.

Use care when moving or operating the grain cart near electric lines as serious injury or death can result from contact.

Never adjust, service, clean, or lubricate the grain cart until all power is shut off. Keep all safety shields in place. Keep hands, feet, hair and clothing away from moving parts while the grain cart is in operation.

The service ladder is for service work only. If you must climb into the grain tank, be certain that all power is shut off and then use extreme caution when climbing into the grain cart.

Make sure that everyone is clear of equipment before applying power or moving the machine.

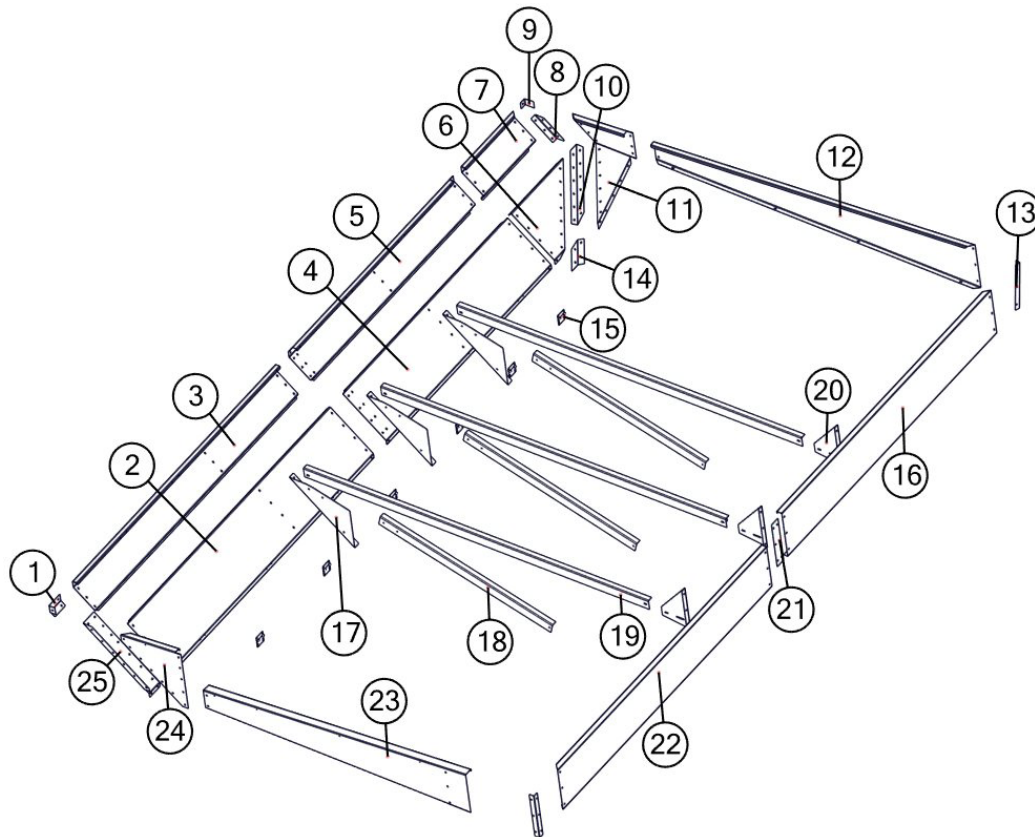
Make sure that the grain cart is fastened securely to the tractor by using a high strength hitch pin, clip and safety chains. Make sure that the grain cart hitch properly matches the hitch type of the tractor. Use a single prong (spade) grain cart hitch with a double prong (clevis) tractor hitch. Use a double prong (clevis) grain cart hitch with a single prong (spade) tractor hitch.

Before filling the grain cart, make certain that no one is inside the grain tank. Never allow children or anyone in, near, or on the grain cart during transport or during loading and unloading of grain. Be aware that moving grain is dangerous and can cause entrapment, resulting in severe injury or death by suffocation.

Never operate the auger system with anyone inside the grain tank. Hands, feet, hair and clothing can fit through the openings in and around the grate. Contact with the auger can cause severe injury or death. Make certain that all power is shut off before service work is performed.

Before unhooking the grain cart from the tractor, be sure the jack stand is properly mounted and in place and the wheels are properly blocked to prevent the cart from moving.

Sideboards for 1122



#	Description	Part. No
1	1122 Front Top Corner	JM0007363
2	1122 12222Front Bottom Sideboard	JM0007303
3	1122 Front Top Sideboard	JM0007304
4	1122 1222 Back Bottom Sideboard	JM0007307
5	1122 Back Top Sideboard	JM0007326
6	1122 1222 Back Side Bottom Triangle	JM0007305
7	1122 Back Corner Top Side Triangle	JM0007334
8	1122 1222 Back Tapered Corner	JM0007370
9	1122 Back Top Corner	JM0007367
10	1122 1222 Back Slope Corner	JM0007368
11	1122 Back Endboard Tr	JM0007362
12	1122 Back Endboard	JM0007341
13	1122 1222 Sideboard Corner	JM0010989

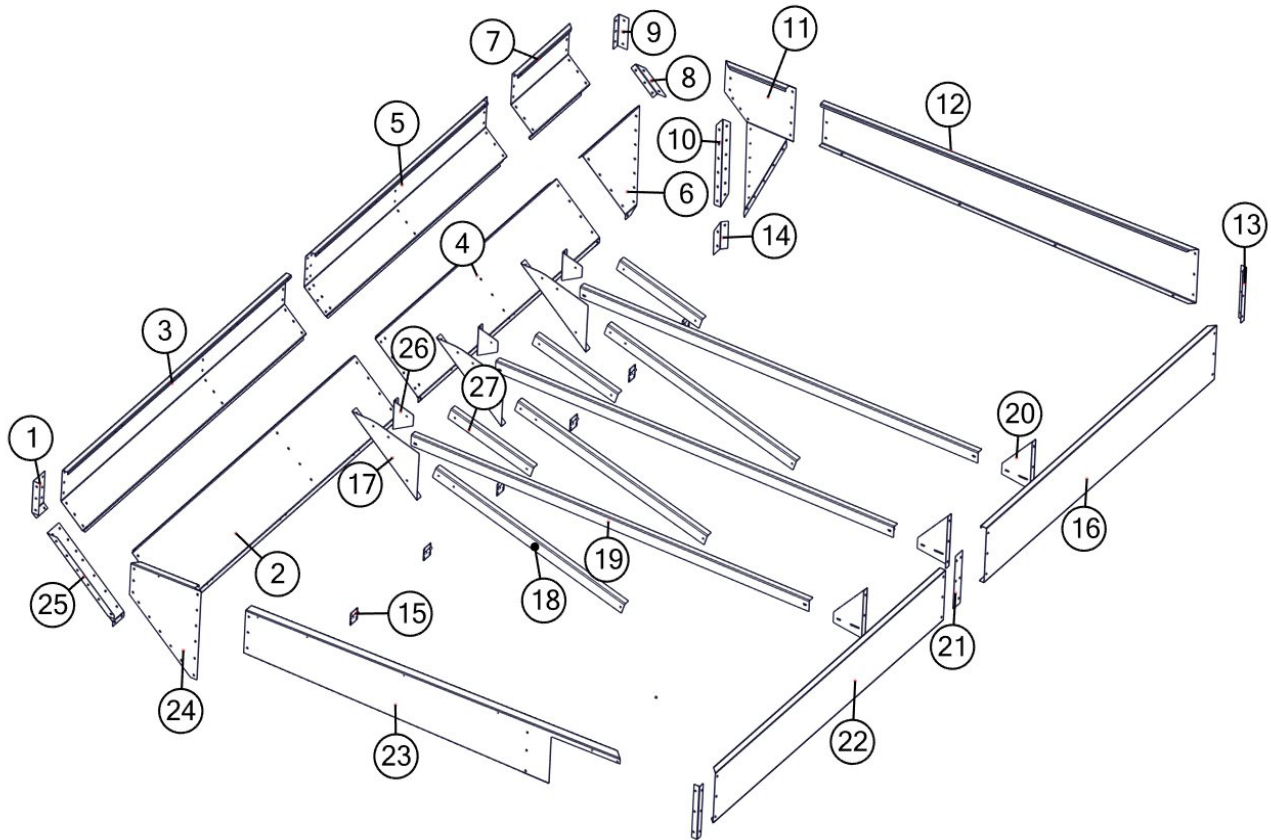
#	Description	Part. No
14	1122 1222 Back Corner Inside Sheddar	JM0007371
15	48in Piano Hinge	JM0025638
16	1122 1222 Back Half High Sideboard	JM0011031
17	1122 1222 Sideboard Brace	JM0007396
18	1122 1222 1522 Inside Brace	JM0007266
19	1122 1222 1522 Center Cross Brace	JM0007265
20	1122 1222 High Sideboard Brace	JM0010920
21	1122 1222 High Sideboard Splice	JM0010965
22	1122 1222 Front Half High Sideboard	JM0024289
23	1122 Front Endboard Slip Cover	JM0007337
24	1122 Front Endboard Triangle	JM0007338
25	1122 Front Triangle Slope Corner	JM0007366

*-R = Red
 *-B = Blue
 *-G = Green
 *-Y = Yellow

When requesting an item with color, end the part number with -R, -B, -G, or -Y. (e.g. JM0000000-R)

Hardware Supplied	Qty.
3/8"x1" SF bolts	90
3/8" SF nuts	100
Round Head Bolts	10
1/4"x3/4" hex bolt	50
1/4" SF nuts	50
1/4"x3/4" Self tapping screws	10

Sideboards for 1222



#	Description	Part. No
1	1222 Front Top Corner	JM0007414
2	1122 1222Front Bottom Sideboard	JM0007303
3	1222 Front Top Sideboard	JM0007400
4	1122 1222 Back Bottom Sideboard	JM0007307
5	1222 Back Top Sideboard	JM0007401
6	1122 1222 Back Side Bottom Triangle	JM0007305
7	1222 Back Corner Top Side Triangle	JM0007402
8	1122 1222 Back Tapered Corner	JM0007370
9	1222 Leaner Back Top Corner	JM0025307
10	1122 1222 Back Slope Corner	JM0007368
11	1222 Back Endboard Triangle	JM0007412
12	1222 Back Endboard	JM0007410
13	1122 1222 Sideboard Corner	JM0010989
14	1122 1222 Back Corner Inside Sheddar	JM0007371

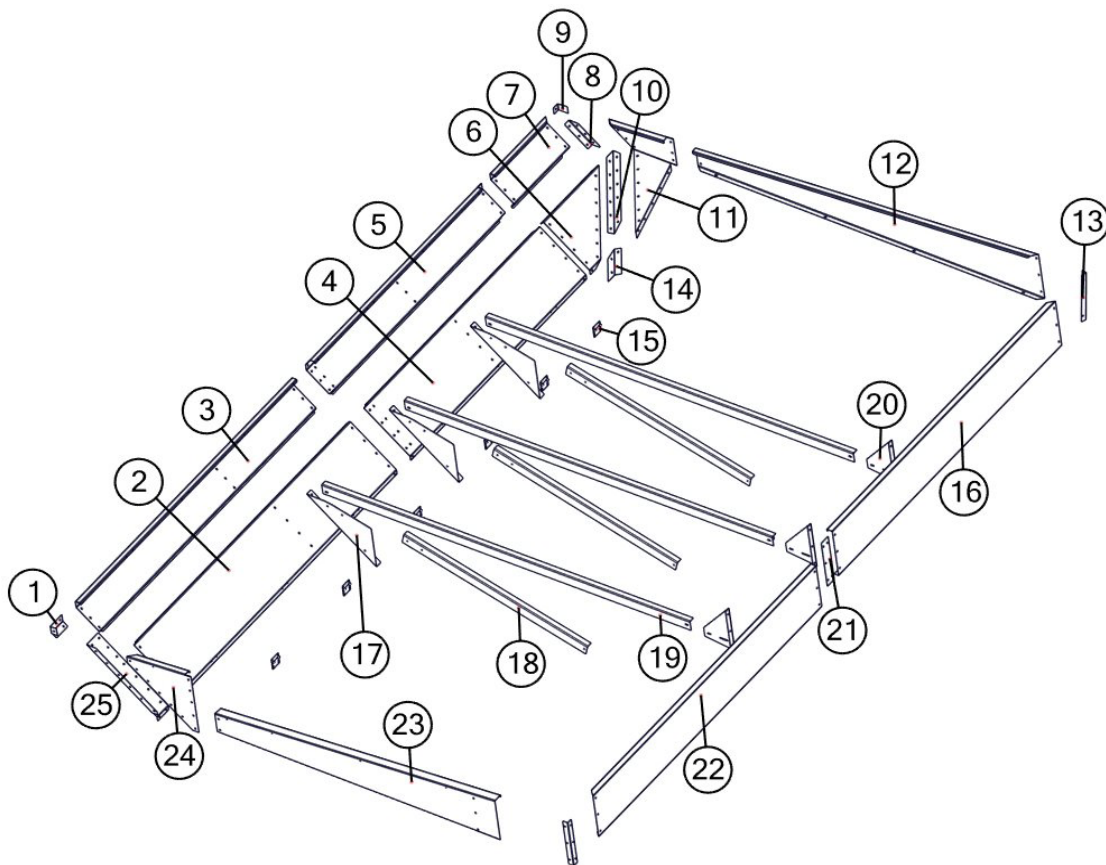
#	Description	Part. No
15	48in Piano Hinge	JM0025638
16	1122 1222 Back Half High Sideboard	JM0011031
17	1122 1222 Sideboard Brace	JM0007396
18	1122 1222 1522 Inside Brace	JM0007266
19	1122 1222 1522 Center Cross Brace	JM0007265
20	1122 1222 High Sideboard Brace	JM0010920
21	1122 1222 High Sideboard Splice	JM0010965
22	1122 1222 Front Half High Sideboard	JM0024289
23	1222 Front Endboard	JM0007404
24	1222 Front Endboard Triangle	JM0007405
25	1222 Front Triangle Slope Corner	JM0007366
26	1222 High Sideboard Brace	JM0007420
27	1222 High to Low Crossbrace	JM0007419

*-R = Red
 *-B = Blue
 *-G = Green
 *-Y = Yellow

When requesting an item with color, end the part number with -R, -B, -G, or -Y. (e.g. JM0000000-R)

Hardware Supplied	Qty.
3/8"x1" SF bolts	90
3/8" SF nuts	100
Round Head Bolts	10
1/4"x3/4" hex bolt	50
1/4" SF nuts	50
1/4"x3/4" Self tapping screws	10

Sideboards for 1522



#	Description	Part. No
1	1522 Front Top Corner	JM0007249
2	1522 Front Bottom Sideboard	JM0007235
3	1522 Front Top Sideboard	JM0007238
4	1522 Back Bottom Sideboard	JM0007239
5	1522 Back Top Sideboard	JM0007240
6	1522 Back Side Bottom Triangle	JM0007233
7	1522 Back Corner Top Side Triangle	JM0007241
8	1522 Back Tapered Corner	JM0007253
9	1522 Back Top Corner	JM0007252
10	1522 Back Slope Corner	JM0007251
11	1522 Back Endboard Triangle	JM0007248
12	1522 Back Endboard	JM0007244
13	1522 High Sideboard Corner	JM0009700

#	Description	Part. No
14	1522 Back Corner Inside Shedder	JM0007254
15	48in Piano Hinge	JM0025638
16	1522 Back Half High Sideboard	JM0017484
17	1522 Sideboard Brace	JM0007268
18	1122 1222 1522 Inside Brace	JM0007266
19	1122 1222 1522 Center Cross Brace	JM0007265
20	1522 High Sideboard Brace (High Side)	JM0007267
21	1522 High Sideboard Splice	JM0009702
22	1522 Front Half High Sideboard	JM0020342
23	1522 Front Endboard	JM0027746
24	1522 Front Endboard Triangle	JM0007243
25	1522 Front Triangle Slope Corner	JM0007250

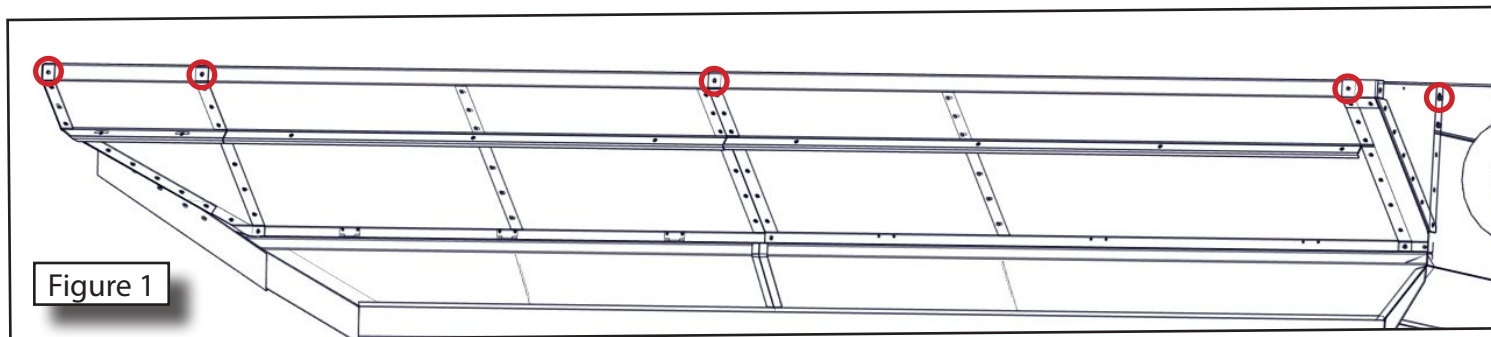
*-R = Red
 *-B = Blue
 *-G = Green
 *-Y = Yellow

When requesting an item with color, end the part number with -R, -B, -G, or -Y. (e.g. JM0000000-R)

Hardware Supplied	Qty.
3/8"x1" SF bolts	90
3/8" SF nuts	100
Round Head Bolts	10
1/4"x3/4" hex bolt	50
1/4" SF nuts	50
1/4"x3/4" Self tapping screws	10

Set-Up Instructions

Note: For carts with the tarp option, make sure the bolts that are highlighted in figure 1 are round head bolts. Replace any other regular bolts in any location where the tarp may hit with a round head bolt.



Install the Corners

- Using 3/8"x1" SF bolts and 3/8" SF nuts install the front and the rear corners as shown in Figures 2&3.

Note: The smaller corner is installed on the front of the cart and the large corner is installed on the rear of the cart.

Figure 2

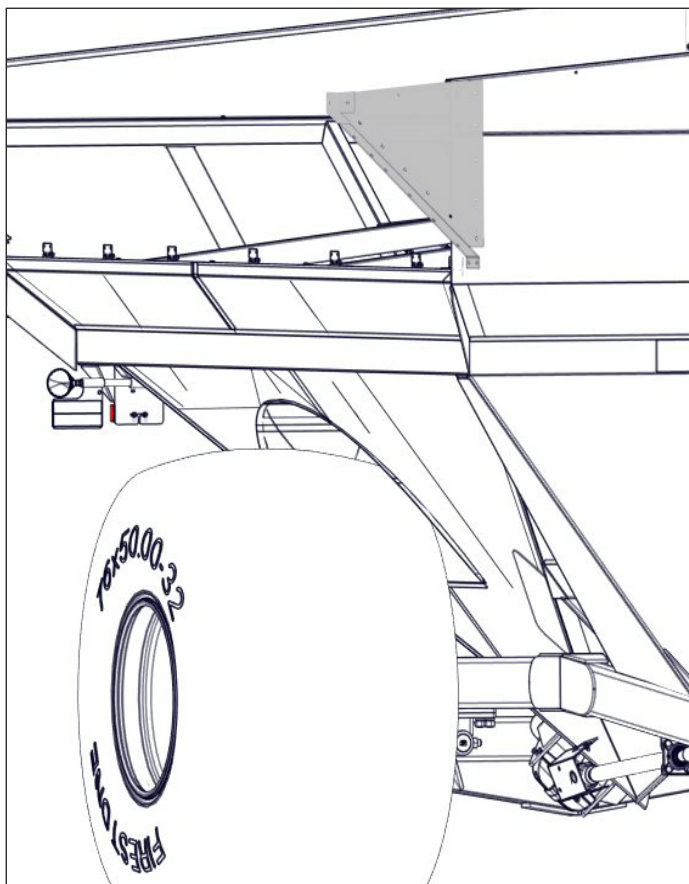
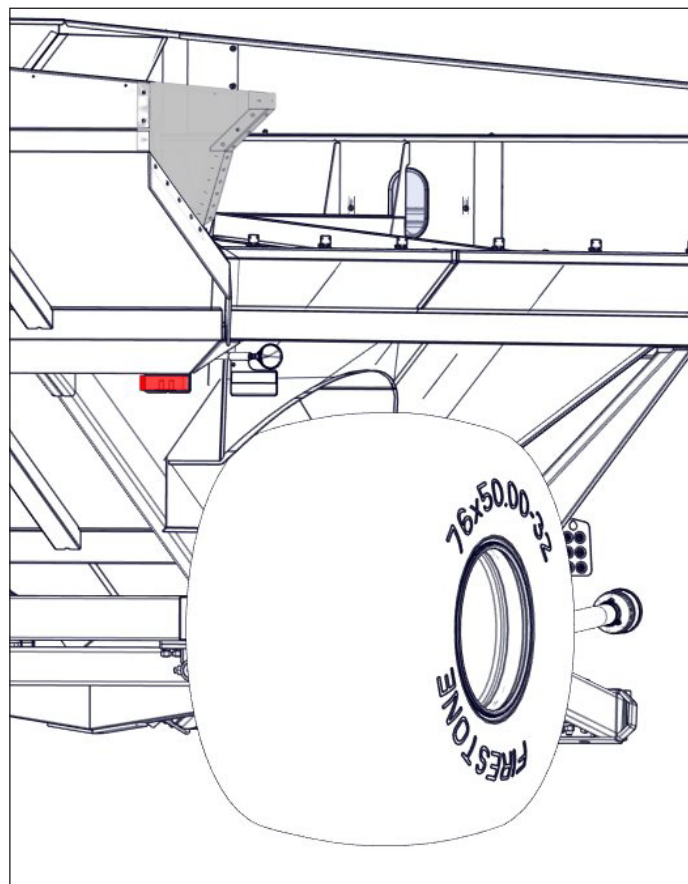


Figure 3



Set-Up Instructions

Unfolding the sideboards

- With two people inside the Grain Cart, loosen the bolts in hole B and remove the bolts from hole D of each inside brace and fold out the side board.
- Insert a 3/8"x1" SF bolt and 3/8" SF nut into hole C of each inside brace.

NOTE: Do Not Tighten the bolts

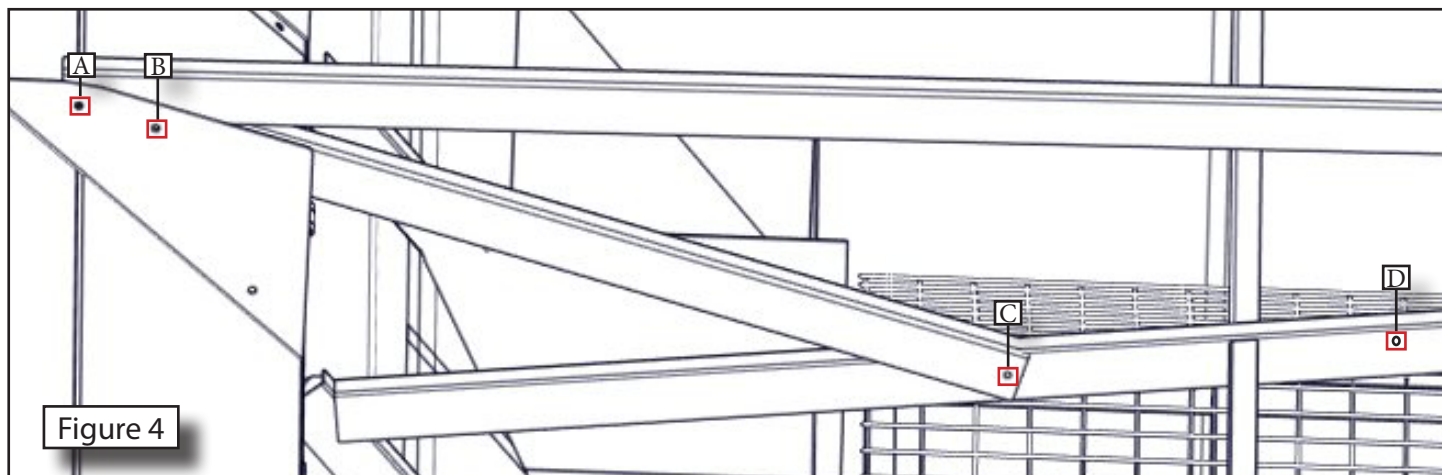
Install Center Cross Brace

- Using (2) 3/8"x1" SF bolts and 3/8" SF nuts attach the 3 center cross braces to hole A on the Opposite Auger Side and High Sideboard Brace on the Auger Side.

For 1222 Models

Attach the 33" High to Low Cross Brace to each of the 3 High Sideboard Braces and the Center Cross Brace using (2) 3/8"x1" SF bolts and 3/8" SF nuts.

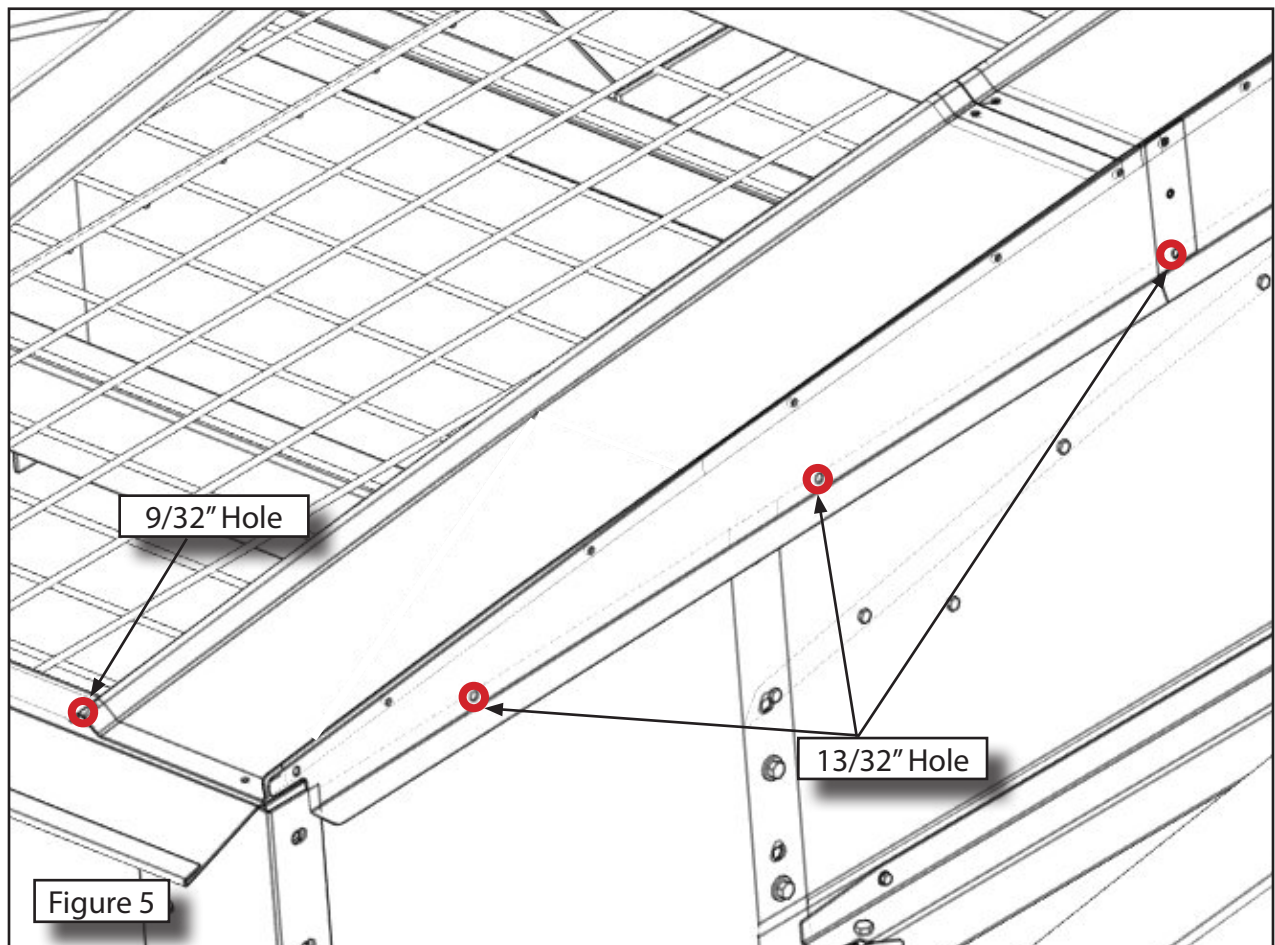
- Insert 3/8"x1" SF bolts and 3/8" SF nuts into the sideboard and the corners.
- Make sure that the side of the grain cart is straight.
- Adjust the sideboards as necessary and tighten all the braces.
- After all braces are tightened, tighten all of the bolts of the front and back corners.

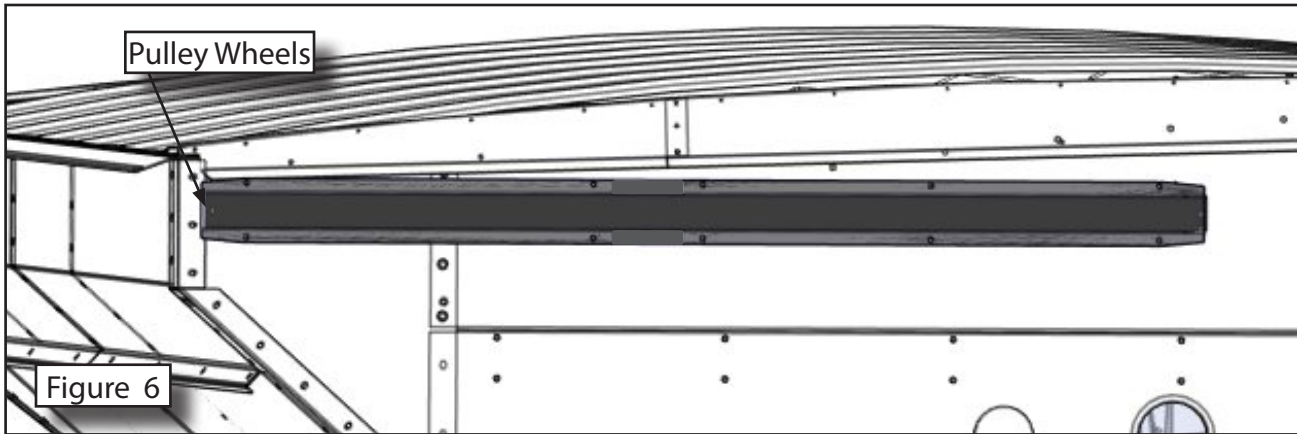


Roll Tarp Installation

- Using a vice grips attach the lip lock to the Opposite Auger Side Sideboards.
- Route the Tarp Bows Under the (4) support cables.
- Using 1/4" x 3/4" bolts and 1/4" SF nuts attach the tarp bows.
- Drill a 13/32" hole in the highlighted locations in figure 5 and attach the front and rear sections of the End Caps using (3) 3/8"x1" SF bolts and 3/8" SF nuts.
- In the front and the rear of the cart drill a 9/32" hole through the sideboard, lip-lock and end cap. Insert a 1/4" SF bolt and 1/4" SF nut. (Figure 5)
- With the cable pulled tight, tighten both locknuts. (Cable on top of the tarp bow)

NOTE: Use a vise grips on the J-Bolt while tightening to keep it from spinning.





Spring Return Installation

- Install the Spring Return on the front of the grain cart using ten 1/4" x 3/4" 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 (figure 6). 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 with the ground. This will help prevent any collisions with the upper auger.

