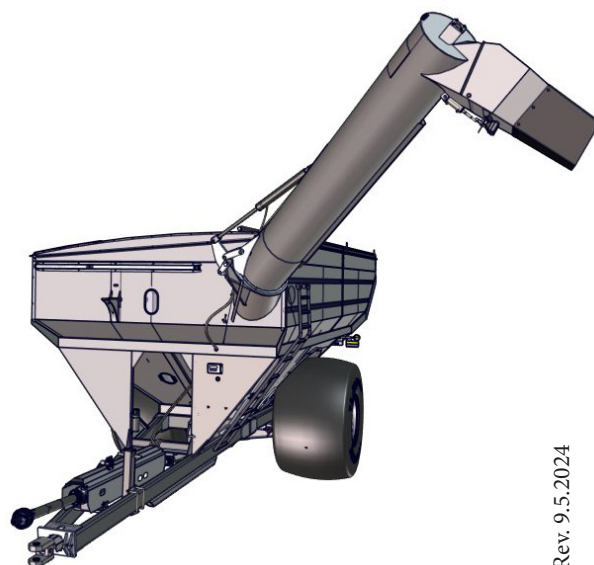


## OPERATORS MANUAL



1520  
1410  
1310  
1220  
1120  
1110  
1010  
810

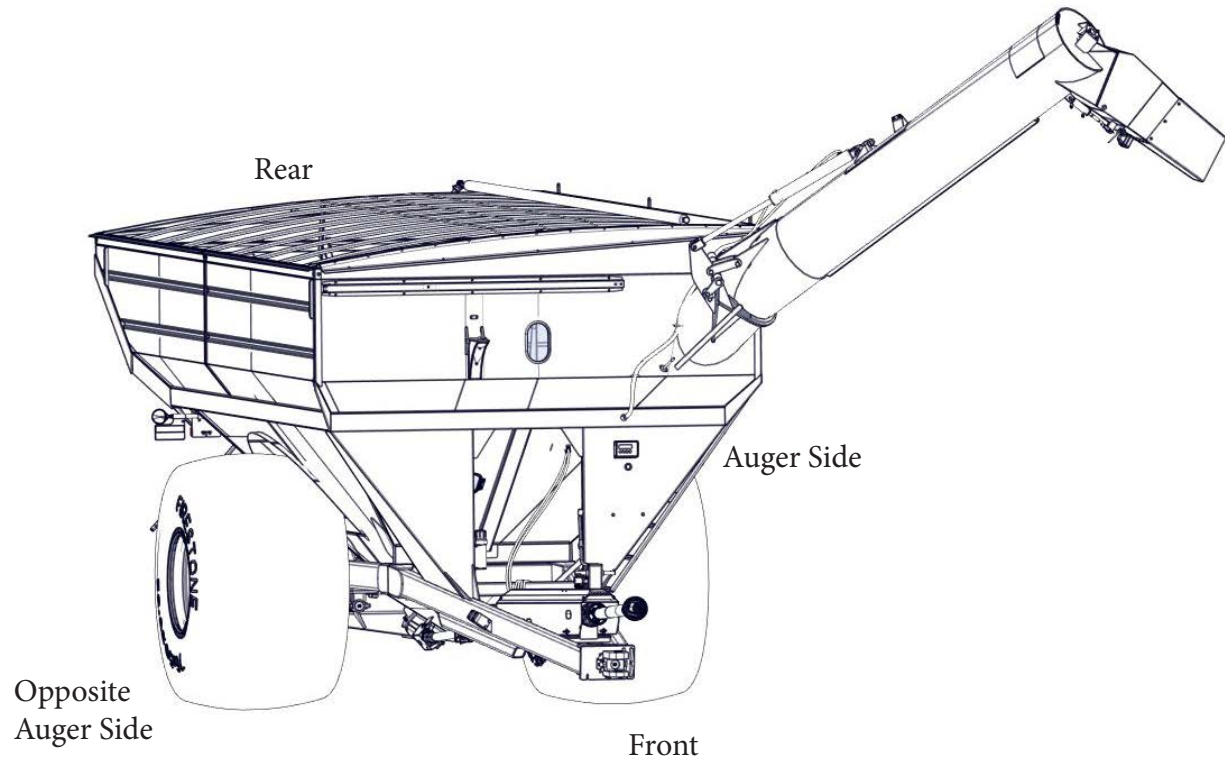
GRAIN CART



Rev. 9.5.2024

J. & M. Mfg. Co., Inc.  
284 Railroad Street - P.O. Box 547  
Fort Recovery, OH 45846  
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## 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](http://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 (attached to the inside of the Operator's Manual) 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.

## Specifications

10 SERIES					
SPECIFICATIONS					
Single Wheel Option	810 (18" Auger)	1010 (20" Auger)	1110 (22" Auger)	1310(22" Auger)	1410 (22" Auger)
Capacity	875 Bushels	1,025 Bushels	1,150 Bushels	1,325 Bushels	1,400 Bushels
Auger, One Vertical	18"	20"	22"	22"	22"
Unload Time (minutes)	2.0 minutes	2.0 minutes	1.9 minutes	2.2 minutes	2.3 minutes
Wheels (2)	21x32, 27x32, 30x32, 31x32 or 25x36	30x32, 31x32, 32x36 or 44x32	30x32 or 44x32	44x32	44x32
Tires (2)	24.5x32, 30.5x32, 35.5x32, 900/60R32 or 66x43.00	900/60R32, 35.5x32, 73x44.00, 76x50.00 or 1250/50R32	900/60R32 (L1185), 76x50.00 or 1250/50R32	76x50.00 or 1250/50R32	76x50.00 or 1250/50R32
Hubs (2)	10 Bolt	10 Bolt	10 Bolt or 20 Bolt	10 Bolt or 20 Bolt	10 bolt or 20 Bolt
Spindles (2)	4 1/2" (Stress-Proof)	4 1/2" (Stress-Proof)	6" Diameter	6" Diameter	6" Diameter
Tongue Weight					
Empty	1,275 lbs.	2,900 lbs.	2,900 lbs.	2,400 lbs.	2,400 lbs.
Loaded	3,800 lbs.	4,200 lbs.	4,200 lbs.	4,800 lbs.	4,800 lbs.
Total Weight (approx.)	9,300 lbs.	12,900 lbs.	13,500 lbs.	16,100 lbs.	16,100 lbs.
Walking Tandem Dual Wheels Option					
Capacity			1,125 Bushels	1,300 Bushels	1,375 Bushels
Wheels (4)			16x42, 18x38, 18x42	18x42 Heavy	18x42 Heavy
Tires (4)			480/80R42, 520/85R38 or 520/85R42	520/85R42	520/85R42
Spindles (4)			4 1/2" Diameter	4 1/2" Diameter	4 1/2" Diameter
Total Weight (approx.)			16,500 lbs.	19,100 lbs.	19,300 lbs.
Tracks Option					
Capacity			1,175 Bushels	1,350 Bushels	1,425 Bushels
Total Weight (approx.)			21,700 lbs.	22,800 lbs.	23,000 lbs.
Compaction Rate (Ground Pressure)			10.67 lbs/sq inch	12.20 lbs/sq inch	12.75 lbs/sq inch

20 SERIES			
SPECIFICATIONS			
Single Wheel Option	1120 (22" Auger)	1220 (22" Auger)	1520 (22" Auger)
Capacity	1,130 Bushels	1,250 Bushels	1,500 Bushels
Auger, One Vertical	22" Diameter	22" Diameter	22" Diameter
Unload Time (minutes)	1.9 minutes	2.1 minutes	2.5 minutes
Wheels (2)	30x32 or 44x32	44x32	44x32
Tires (2)	900/60R32 (L1185) , 76x50.00 or 1250/50R32	76x50.00 or 1250/50R32	76x50.00 or 1250/50R32
Hubs (2)	10 Bolt or 20 Bolt	10 Bolt or 20 Bolt	10 Bolt or 20 Bolt
Spindles (2)	6" Diameter	6" Diameter	6" Diameter
Tongue Weight			
Empty	2,900 lbs.	2,900 lbs.	3,000 lbs.
Loaded	4,200 lbs.	4,200 lbs.	4,800 lbs.
Total Weight (approx.)	14,600 lbs.	14,600 lbs.	14,800 lbs.
Walking Tandem Dual Wheels			
Capacity	1,105 Bushels	1,225 Bushels	
Wheels (4)	16x42, 18x38, 18x42	18x42 Heavy	
Tires (4)	480/80R42, 520/85R38 or 520/85R42	520/85R42	
Spindles (4)	4 1/2" Diameter	4 1/2" Diameter	
Total Weight (approx.)	17,600 lbs.	17,800 lbs.	
Tracks Option			
Capacity	1,155 Bushels	1,275 Bushels	1,500 Bushels
Total Weight (approx.)	22,800 lbs.	23,200 lbs.	24,300 lbs.
Compaction Rate (Ground Pressure)	10.83 lbs/sq inch	11.96 lbs/sq inch	13.69 lbs/sq inch

Note: Specifications are subject to change without notice or obligation.

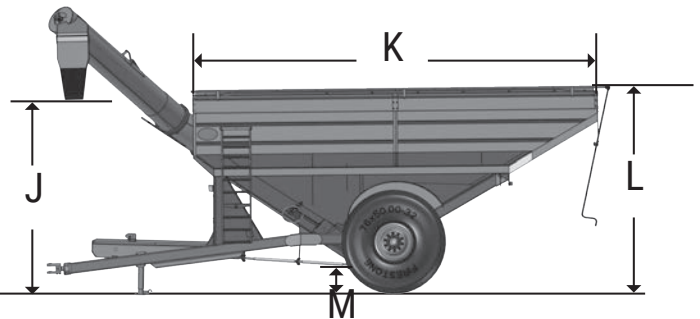
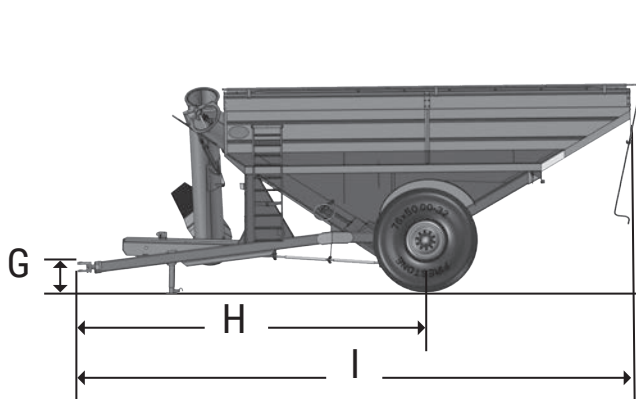
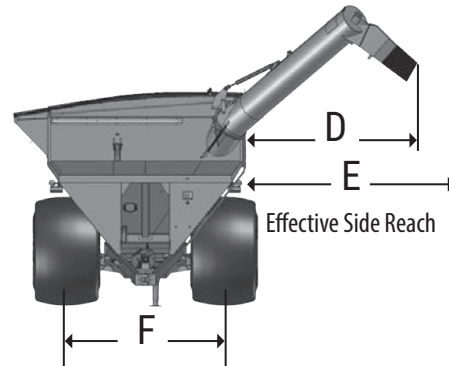
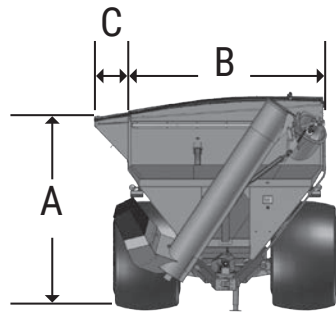
\* Bushel capacities measured with #2 corn at 15% moisture, 56 lb. (25,4 kg) test weight.

\*\* Time varies with rpm and moisture content

## Dimensions

10 SERIES					
	810	1010	1110	1310	1410
A	10'-11"	10'-11"	11'-7"	11'-4"	11'-8"
B	11'-9"	11'-9"	11'-9"	11'-9"	11'-9"
C	NA	NA	NA	NA	NA
D	12'-0"	11'-1"	11'-1"	10'-10"	10'-10"
E	14'-7"	13'-9"	13'-9"	13'-6"	13'-6"
F	10'-0"	10'-0"	10'-0"	10'-0"	10'-0"
G	1'-7"	1'-6"	1'-6"	1'-6"	1'-6"
H	15'-6"	20'-1"	20'-1"	21'-10"	21'-10"
I	22'-8"	30'-7"	30'-7"	34'-5"	34'-5"
J	13'-7"	13'-8"	13'-8"	13'-8"	13'-8"
K	16'-0"	22'	22'	25'-6"	25'-6"
L	11'-6"	12'	12'	12'-2"	12'-2"
M	1'-5"	1'-5"	1'-5"	1'-5"	1'-5"

20 SERIES			
	1120	1220	1520
A	10'-11"	11'-7"	11'-4"
B	13'-9"	13'-9"	13'-9"
C	2'-0"	2'-0"	2'-0"
D	11'-1"	11'-1"	10'-10"
E	13'-9"	13'-3"	13'-6"
F	10'-0"	10'-0"	10'-0"
G	1'-6"	1'-6"	1'-6"
H	20'-1"	20'-1"	21'-10"
I	30'-7"	30'-7"	34'-5"
J	13'-8"	13'-8"	13'-8"
K	22'	22'	25'-6"
L	12'	12'	12'-2"
M	1'-5"	1'-5"	1'-5"



## General Information

### BOLT TORQUE CHART

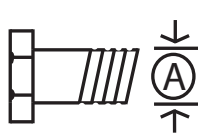
Always tighten hardware to these values unless a different torque or tightening procedure is listed for specific application.

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

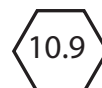


#### METRIC SERIES TORQUE CHART



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

### TIGHTENING WHEEL NUTS

Standard 3/4" wheel studs and nuts should be tightened to torque 500 Ft.-Lbs and standard 22mm studs should be tightened to torque 700 Ft.-Lbs. During initial operation of the grain cart and then checked for proper torque after every 10 hours of use. Failure to do so may damage wheel nut seats. Once seats are damaged, it will become impossible to keep nuts tight.



### **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.

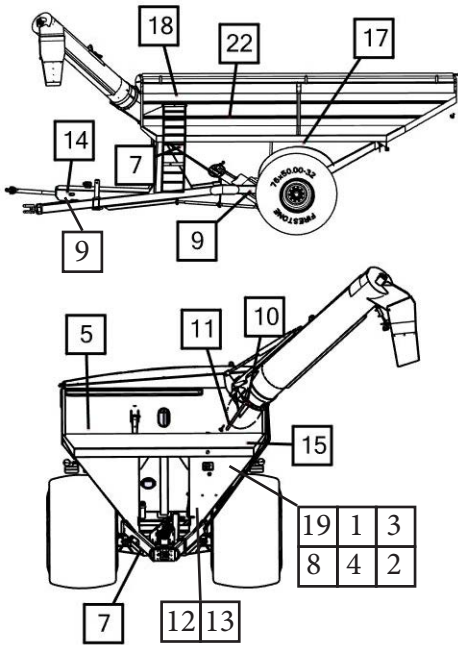
Before unhooking the grain cart from the tractor, be sure the jack stand is properly mounted and in place and the wheels are properly blocked to prevent the cart from moving.

## Safety Rules

**⚠ ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! ⚠**

**Replace Immediately If Damaged or Missing**

**IMPORTANT:** Install new safety signs if the old signs are destroyed, lost, painted over or cannot be read. When parts are replaced that have safety signs, make sure you install a new sign with each new part. New signs are available from the manufacturer or your authorized dealer.



### SAFETY DECALS

#	Part #	Description
1	JM0018044	Operating Instructions
2	JM0010163	Warning, High Pressure
3	JM0014979	Warning, General
4	JM0018038	Farm Use Only
5	JM0015151	J&M Oval Decal, Large
6	JM0010179	J&M Oval Decal, Medium
7	JM0014994	Warning, Pinch Point
8	JM0018037	Danger, Suffocation
9	JM0018036	Danger, Rotating Driveline
10	JM0025433	Open
11	JM0025434	Closed
12	JM0027472	Field Position
13	JM0027473	Storage Position
14	JM0025435	Check PTO Overlap
15	JM0018043	Warning, Check Lug Nuts
16	JM0018039	Warning, Keep Hands Away
17	JM0010150	Warning, Lug Nuts
18	JM0018033	Danger, Do Not Enter Tank
19	JM0015099	Danger, Electric Lines
20	JM0018034	Danger, Keep Off Ladder
21	JM0018035	Danger, Keep Hands Away
22	Specify	AS Stripe Kit
23	Specify	OAS Stripe Kit

### IMPORTANT

#### OPERATING INSTRUCTIONS

- 1) With the gate indicator in the closed position, fill the box with grain.
- 2) With the PTO disengaged, fold the discharge auger to the upright position.
- 3) After the auger is in the upright position, start the PTO at a SLOW RATE OF SPEED until the pin on the upper auger engages the drive dog on the bottom auger (failure to follow this procedure may cause extensive damage to both the drive dog and the pin).
- 4) Increase PTO to the maximum r.p.m. speed and slowly open the inner gate until the pointer is in the halfway position. When grain begins flowing from the discharge auger, adjust the gate to control the rate of flow (Do not slow the speed of the PTO).
- 5) To stop unloading, FIRST return the inner gate to the closed position. For complete clean-out, gradually close the gate. Allow the unloading auger to clean-out before disengaging the PTO. Disengage the PTO and allow the auger to come to a complete stop. Fold the upper auger to the stow position.

#1



#2



#3



#7

**FOR FARM USE ONLY**

#4



#5



#10



#11



#12



#13



#14



#15



#16



#17



#8



#9



#18



#19



#20



#21

## WARNING

### BE CERTAIN THAT ALL POWER IS SHUT OFF BEFORE SERVICING THE GRAIN CART.

Before the grain cart is put into service:

- Have the safety instructions been read and clearly understood by the operator(s) of this machine?
- Has the gearbox been properly filled with EP-80-90 gearbox lubricant?
- Have all nuts, bolts, bearings and braces been properly fastened?
- Has the PTO been checked for proper overlap?

**IMPORTANT:** Has the slip clutch on the PTO been serviced? If the slip clutch is left unchecked, damages to the power-take-off and drive shaft may result. Before using the grain cart, loosen the bolts around the slip clutch. Make sure the friction plates turn free of each other and are not corroded together. Re-tighten the tension bolts. Run the auger system EMPTY and check for proper engagement of the slip clutch.

**CHECK PTO OVERLAP LENGTH.** Overlap length may vary depending on the tractor model and hitch setting. Try to obtain the greatest possible overlap without bottoming out in the extreme operating conditions. Too much overlap may cause the PTO to bottom out and damage the driveline. Not enough overlap may cause the PTO front and back halves to separate. From the fully compressed (shortest) length the PTO should be telescoped (extended) between 10" and 22". Different PTO lengths may need to be purchased to accommodate your terrain. A 4" shorter or a 10" longer PTO can be ordered through your dealer from J&M Manufacturing.

**GREASE BEARINGS:** Are all bearings on the drive line properly greased? Are all set screws in the bearings and U-joints tight? Has the power-take-off shaft been properly greased at all points including the cross bearings? Has the universal joint at the gearbox been greased? Have all grease points at the auger hinge area, including the hanger bushing assembly been greased?

**TIRE PRESSURE:** Are the tires properly inflated? The following is to be used as a **general guide** for tire inflation for cyclic use. Figures can vary depending on specific brand of tire used. **It is important that tires are inspected before and after the unit is loaded. The tire should stand up with no side wall buckling or distress as the tire rolls. Do Not Exceed The Tire Pressure Indicated Below:**

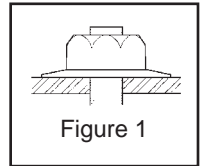
Tire Size	psi
24.5 x 32-R3-2-16	24
30.5 x 32-R1-2	34
30.5 x 32-R1-2-18	36
800/60R32-R3-2	46
900/60R32-R1-2-185	57
66 x 43.00-R1-2	35
900/60R32-R1-2	41
900/60R32-R1-2A	66
35.5 x 32-R3-2	26
1050/50R32-R1-2	56
1250/50R32-R1-2-188	46
480/80R42-4	29
520/85R38-4	29
520/85R42-4	44
900/60R32-R1-2-193	66

## Operating Instructions

**VERY IMPORTANT:** Under no circumstance is it recommended to tow a loaded grain cart in excess of 8 mph.

**WHEEL NUTS:** Are the wheel nuts properly fastened? **Torque to 700 Lbs.-Ft. for standard 22mm wheel studs and nuts. Torque to 500 Lbs.-Ft. for 3/4" wheel studs and nuts. Torque to 350 Lbs.-Ft. for 5/8" wheel studs and nuts. Wheel studs and nuts should be checked after each load during initial operation of the cart and then after every 10 hours of use. Failure to do so may damage wheel studs and nuts.** Once the seats are damaged, it will become impossible to keep the lug nuts tight.

The drawing shows the proper way to mount the wheels using Budd-type nuts. The wheels supplied with your grain cart have straight holes and the Budd nuts will be mounted according to Figure 1. Wheels that are improperly installed on the grain cart, resulting in product failure, will nullify warranty and shift the burden of liability to the owner/operator. **We recommend you inspect your wheel nuts to make sure they are properly installed. Also, check the wheel nuts on a regular basis to ensure they are tight.**



**LIGHTING AND SAFETY DECALS:** Are the rear, amber extremity lights properly positioned? Extend the lights within 16" (40,6cm) of the left and right extremities of the grain cart. Is an SMV Emblem attached to the rear of the grain cart?

Are the lights working properly? Are all lights and reflective decals clean, visible and properly placed?

**BE CERTAIN THAT ALL POWER IS SHUT OFF WHEN HOOKING UP TO TRACTOR OR CONNECTING HYDRAULIC LINES TO TRACTOR.**

Preparing the Grain Cart for Use: Model 810 requires a 150+ HP Tractor. Models 1010, 1110, and 1120 requires a 225+ HP Tractor. Models 1220, and 1310 requires a 250+ HP Tractor. Models 1410 and 1520 require a 300+ HP Tractor.

**IMPORTANT: Do NOT pull a loaded grain cart on highway. For incidental highway travel, observe the section below.**

### Tow Loads Safely

Stopping distance increases with speed and weight of towed loads, and on slopes. Towed loads with or without brakes that are too heavy for the tractor or are towed too fast can cause loss of control. Consider the total weight of the equipment and its load.

Observe these recommended maximum road speeds, or local speed limits which may be lower.

**Road Travel (grain cart empty):** Do not travel more than 32 km/hr (20 mph) and do not tow loads more than 1.5 times the pulling unit's weight.

Ensure the load does not exceed the recommended weight ratio. Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines.

**⚠ WARNING:** For greater stability on uneven or steep terrain, position non-scale wheel spindles at the furthest out setting.

### IMPORTANT:

1) Connect grain cart hitch to tractor drawbar using a good quality hitch pin. Attach the safety chain to the tractor and around the A-frame of the cart as shown. Make sure the grain cart hitch properly matches the hitch of the tractor. Use a single prong (spade) grain cart hitch with a tractor double prong (clevis) hitch. Use a double prong (clevis) grain cart hitch with a single prong (spade) tractor hitch.



#### Safety Chain User Instruction

- Secure the safety chain by looping it around the each side of the grain cart as shown and connecting to the towing machine's attaching bar.
- Do Not allow any more slack than necessary for articulation (maximum 11 inches)
- Do Not use any intermediate support as the attaching point.
- Store the safety chain by securing it around the main axle A-frame of the grain cart.
- Replace the safety chain if one or more links or end fittings are broken, stretched or otherwise damaged or deformed.

2) Attach the power-take-off shaft to the tractor. The PTO must have at least 10" of engagement. Check tractor drawbar for clearance and length and adjust if necessary. **Make sure the PTO does not bottom out when making sharp turns as it may bend the drive shaft.**

3) Make sure the jack stand is removed from the lower support position before the cart is moved. **Never use the jack to support a loaded grain cart.**



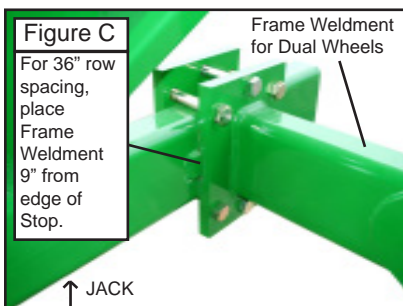
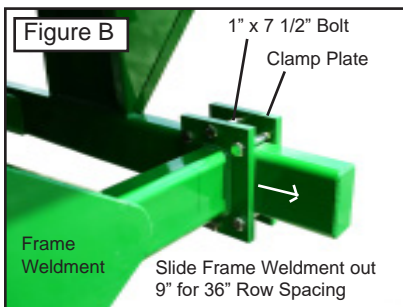
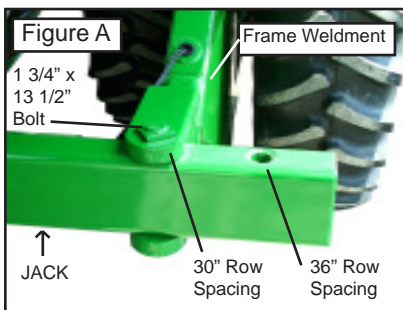
## Operating Instructions (Continued)

- 4) Be sure that no debris or foreign objects are in the grain cart.
- 5) Attach the hydraulic lines to the tractor. Two hydraulic lines (green band) operate the inside gate mechanism. Connect these lines to one service outlet on the tractor. Two hydraulic lines (yellow band) operate the folding mechanism of the auger. Connect these lines to a second service outlet on the tractor. The remaining two hydraulic lines (red band) operate the hydraulic flow control spout located at the end of the upper auger. Connect these lines to a third service outlet on the tractor. Make sure the air is bled from the hydraulic cylinders and hoses.
- 6) Run the auger system EMPTY before loading grain into the tank for actual use. Make certain that the slip clutch is operating and that the upper and lower augers are properly engaged.
- 7) Connect the lighting 7-prong connector end on the main wiring harness to the tractor electrical outlet. Make sure that all flasher and turn indicator lights are working properly before incidental highway travel.

### ⚠ CAUTION

- Do NOT operate the grain cart before reading and understanding the Operator's Manual and ALL danger, warning and caution signs.
- Be sure that a Slow-Moving-Vehicle emblem is attached to the rear of the grain cart.
- Never exceed 1,000 rpm on the PTO and driveline system.
- Never fold or extend the auger until the PTO has come to a complete stop.
- Never fill the grain cart unless the gate indicator is in the closed position.
- Never allow foreign object (shovels, etc.) to be placed inside the grain cart.
- Never engage the lugs and drive dogs on the augers when the system is moving at a high rate of speed.
- Never perform maintenance work or service the grain cart with the tractor running.

## Adjusting Row Spacing For Walking Tandem Duals



- 1) Securely position jacks under the frame of the grain cart as shown in Figures A and C.
- 2) Loosen the rear of the Frame Weldment by removing the 1" x 7 1/2" Gr 8 Bolts and Clamp Plate.
- 3) Remove the 1 3/4" x 13 1/2" Bolt and Jam Nut from the front of the Frame Weldment.
- 4) Slide the Frame Weldment out to the bolt location for 36" row spacings as shown in Figure A and secure using the 1 3/4" x 13 1/2" bolt and jam nut. If the grain cart is equipped with an electronic scale system, be sure not to damage the electronic cord when moving the Frame Weldment.
- 5) Swing the Frame Weldment outward. Switch the tire location by removing both tires and remounting each tire to the hub on the opposite side of the weldment. The tire originally on the outside of the weldment will now be located on the inside of the weldment and vice versa. (The valve stems for 36" row spacing should be facing toward the Frame Weldment, or toward each other.) Be sure to keep the tire tread positioned in the same direction as before.
- 6) After the wheels have been tightened to the hubs, swing the Frame Weldment until the new clamping location is 9" from the original 30" row spacing stop.
- 7) Tighten the rear of the Frame Weldment to the grain cart frame using the six 1" x 7 1/2" Gr 8 Bolts, Hex Nuts and Clamp Plate.
- 8) Torque all bolts to specifications and Repeat on Other Side.

## Lubrication Service Schedule

**IMPORTANT:** Your grain cart has grease fittings at all critical points. These should be serviced before the grain cart is put into operation.

### **⚠ WARNING**

**BE CERTAIN THAT ALL POWER IS SHUT OFF BEFORE SERVICING THE GRAIN CART**

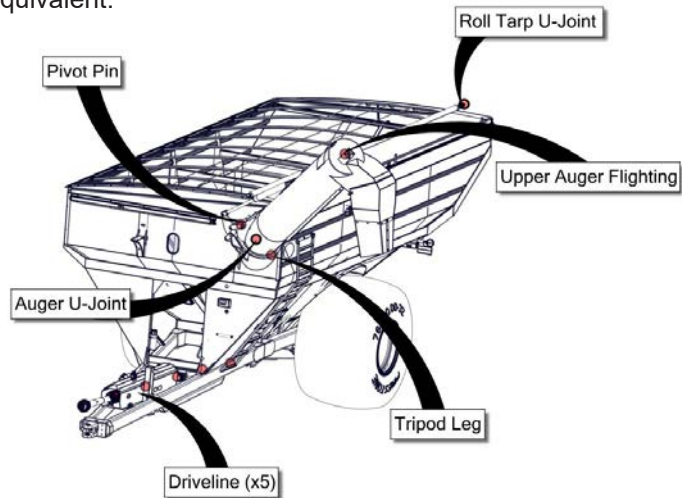
**PTO & DRIVELINE:** The grease fittings on the PTO should be serviced after every 8 hours of use. Service the grease fittings on each of the drive bearings and also the universal joint after every 8 hours of use.

**AUGER FOLDING MECHANISM:** One grease fitting is located on the pivot pin of the folding auger. This fitting should be serviced after every 8 hours of use. Service the grease fitting on the hanger bushing assembly (top end of the lower auger assembly) after every 8 hours of use or as needed.

**SPRING LOADED UPPER AUGER BEARING:** Service the grease fitting on the upper auger bearing (located at the top end of the upper auger assembly) after every 8 hours of use. Lubricate the springs and retaining bolts on the bearing before prolonged storage of the grain cart.

**GEARBOX:** Gearbox lubricant has been added to the gearbox during final assembly. Recheck the lubricant level before initial operation of the grain cart, then periodically according to use. An inspection plug is located in the center of the top of the gearbox mount plate. To check the fluid level, remove the vented inspection plug and drain plug at the bottom of the gearbox. Drain the lubricant. Return the drain plug and refill the gearbox with 24 ounces (0,71 liters)(18" & 20" auger gearbox) or 3 quarts (22" auger gearbox) of gearbox lubricant. The gearbox is properly filled when half full of lubricant. **DO NOT OVERFILL.** Use EP 80-90 gearbox lubricant or equivalent.

Pivot Pin	Once Annually
Roll Tarp U-Joint	Once Annually
Upper Auger Flighting	Every 8hrs of use.
Tripod Leg	Every 8hrs of use.
Auger U-Joint	Every 8hrs of use.
Driveline	Every 8hrs of use.



## Routine Maintenance

### **⚠ WARNING**

**BE CERTAIN ALL POWER IS SHUT OFF WHEN SERVICING THE GRAIN CART**

- Repack the wheel bearings at least once a year. Use Bearing Gard MK1 or equivalent lubricant. Also check the seal for wear and replace if necessary.
- Check the grain cart periodically for cracks in welds and for other structural damage. Have cracked welds fixed immediately. Failure to do so could result in extensive damage to the grain cart and greatly reduce the life of the cart.
- Lubricate the slides on the clean-out door.
- Check all hydraulic hoses for wear and replace as necessary.
- Make sure all tires are properly inflated. See INITIAL OPERATION AND MAINTENANCE in the Owner's Manual for recommended instructions for tire pressure. It is important that tires are inspected before and after unit loaded.
- Check PTO for wear of plates in the slip clutch. Replace if needed.
- Make sure that all guards and shields are in place before operating the grain cart.

## Troubleshooting

### WARNING

**MAKE SURE THAT ALL POWER IS SHUT OFF BEFORE SERVICING THE GRAIN CART. MAINTENANCE AND REPAIR SERVICE WORK TO BE PERFORMED BY QUALIFIED SERVICEMEN ONLY.**

Trouble...	Possible Cause...	Possible Remedy...
Auger will not return to down position or move from stow position.	Dirt In Restrictor (see pg. 17)  Faulty Check Valve  Upper flighting and lower flighting are locked together (see pg. 16)	Remove restrictor fittings from outside hydraulic cylinder and clean out dirt  Replace Check Valve  Bearing on top of upper auger flighting need adjusting. When the auger is in the engaged position, there must be 1/8" (0,32cm) gap between bottom of top bearing and top of upper tube housing (SEE ADJUSTING THE UPPER AUGER FLIGHTING)
Hanger Bushing Assembly at the top of the lower auger flighting is hot	Top of the hanger bushing assembly is rubbing against the drive dog (See pg.17)	Loosen the two bolts and re-adjust the position of the hanger bushing assembly. Re-tighten bolts.  Remove the lower flighting assembly and place a shim between the spline coupler and the gearbox.
Excessive Vibration	Auger flighting or shaft is bent  Drive shaft is bent	Straighten or replace auger flighting  Replace or straighten drive shaft
Grain flow stoppage	Bolt sheared in drive dog  Folding auger before complete stop  PTO key sheared	Replace bolt in drive dog. Engage upper and lower flighting at a slow rate of speed. (Drive dogs and lugs are being engaged too fast.)  Upper and lower flightings are disengaging before auger comes to a complete stop. Replace bolt in the drive dog. Never engage or disengage the upper and lower flightings until the augers come to a complete stop.  Replace key and tighten set screw.
Auger tube is breaking away from the grain cart at the hinge area or the ram in the hydraulic folding cylinder is bent	Upper auger is extended in the upright position while traveling in the field	Repair or place folding cylinder if necessary. Remember to lower auger to the field position after unloading.
Flip-up Auger Rest not flipping over center.	Cable has loosened.	With Auger in Filed position tighten cable to the handle.

## Adjusting the Lower Flighting

### WARNING

#### **MAKE SURE THAT ALL POWER IS SHUT OFF BEFORE ADJUSTING THE FLIGHTING ASSEMBLY.**

If the drive-dog and hanger assembly are becoming excessively hot during unloading, the lower flighting and/or hanger may need adjusting. The hanger bushing assembly has elongated holes where it attaches to the outer tube assembly. Loosen the two 3/8" bolts on the hanger bushing assembly. Adjust the hanger either up or down and vertically center it between the flighting and drive dog. Re-tighten the bolts. Make certain that the flighting center and drive-dogs do not rub the hanger bushing assembly, causing them to become hot.

If the hanger can no longer be adjusted by moving it up or down on the elongated holes, both the hanger bushing assembly and the lower flighting will have to be removed. See instructions on pg. 36 for flighting removal. After removing them from the tube assembly, place a shim [between 1/8" (0,32cm) to 3/16" (0,48cm) thick] where the gearbox and the spline coupler (welded to the lower flighting). Replace the lower flighting and reattach the hanger to the tube assembly. Readjust the hanger assembly. NOTE: The bottom of the lower flighting is not attached to the gearbox with any bolts or set screws but may be 'frozen' fast. Be careful when removing the lower flighting from the gearbox. For easier removal of the lower flighting, keep the gearbox at the bottom intact, remove the 2 3/8" bolts from the hanger bushing assembly and pull the lower flighting off of the gearbox.

After adjusting the lower flighting, move the upper auger to the unload position and check the upper flighting for readjustment.

## Adjusting the Upper Flighting

### WARNING

#### **MAKE SURE ALL POWER IS SHUT OFF BEFORE ADJUSTING THE FLIGHTING ASSEMBLY**

If the upper and lower augers do not properly separate during the unfolding sequence, the upper flighting may need adjusting. Before making adjustment to the upper flighting, check to see if the lugs and drive dogs on the auger assemblies are locking together. If they are not locked together, check to see if dirt is in the restrictor or if a faulty check valve on the hydraulic cylinder used to raise and lower the upper auger assembly may be causing the problem. If dirt is in the restrictor, see "Removing Dirt From Restrictors On Hydraulic Cylinders" below.

Fold the upper tube assembly into the upright position. Position the upper flighting in the engaged position with the lower flighting. Locate the four-hole flange bearing on the top of the upper auger tube housing. With the upper flighting in the engaged position, check the spacing between the upper bearing and the upper tube housing. There must be an 1/8" (0,32cm) space between the base of the four-hole flange bearing and the upper tube housing. If there is NOT a space between the bearing and the upper tube housing, or if there is more than 1/8" (0,32cm) space, the upper flighting will need to be adjusted. To adjust the upper flighting, loosen the 1 1/4" hex nuts both above and below the four-hole flange bearing. Move the 1 1/4" hex nuts up or down the threaded shaft on the top of the auger flighting shaft until the bearing moves to approximately 1/8" (0,32cm) above the base of the upper tube housing. When the four-hole flange bearing is properly located, tighten both 1 1/4" hex nuts together to secure the bearing position.

If the upper and lower flighting still does not separate properly during the folding sequence, a small bevel may need to be removed from the inside of the lugs where they engage the drive dogs on the auger assemblies. Grind approximately 1/8" (0,32cm) from the corner of the lugs where they touch against the drive dogs.



## Removing Dirt From The Restrictors On The Hydraulic Cylinder

### WARNING

**MAKE SURE THAT ALL POWER IS SHUT OFF AND THE UPPER AUGER TUBE IS IN THE DOWN POSITION BEFORE REMOVING THE RESTRICTORS**

Remove restrictors from the 90 degree street elbow on the hydraulic cylinder. Remove dirt from the fitting to allow hydraulic oil to flow through the restrictor. Reattach the restrictor to the street elbow. Use teflon sealant tape or equivalent on the threads of the restrictor before re-attaching.

If the restrictor continues to plug with dirt, replace the restrictor or filter the hydraulic oil in your system.

## Storage Preparation

**IMPORTANT:** When the grain cart is not going to be used for a period of time, store the cart in a dry, protected place. Leaving your grain cart outside, open to the weather will shorten it's life.

Follow the procedure below when your grain cart is placed in storage for periods up to six months.

1. Cover electronic monitor (if equipped) with plastic before washing the grain cart. Wash or clean and completely lubricate the grain cart. See the lubrication service section in this manual.
2. Remove all grain from inside the grain tank, auger tube assemblies, and at the clean-out door.
3. Check the gearbox oil and replace with new EP 80-90 gearbox lubricant or equivalent if necessary.
4. Touch up areas where paint may have worn away. Use a good quality primer paint, especially before re-applying graphite paint to the interior slopes of the grain tank.
5. Retract all hydraulic cylinders to prevent the piston rods from rusting.
6. If the grain cart is equipped with an electronic weigh system, fully charge the battery to prevent freezing. Disconnect the negative (-) ground cable at the battery to prevent possible discharge.
7. Clean the tires before storage. Inflate the tires at regular intervals.
8. Open the clean-out door at the base of the grain tank.
9. Loosen the Slip Clutch Tension Bolts. **(Yellow Comer PTO only)**

## Removing From Storage

- Check the gearbox to make sure it has the appropriate amount of oil.
- If equipped with an electronic scale system, check the battery and make sure that it is fully charged. Reconnect the negative (-) cable.
- Inflate the tires to the correct operating pressure.
- Close the clean out door at the base of the grain tank.
- Make sure all safety shields are in the proper position.
- Tighten the Slip Clutch Bolts on the PTO until the spring length is 1.27 inches (3,23cm). **(Yellow Comer PTO only)**

## Repair Parts List and Diagrams

When performing maintenance work, wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing and head. Follow the Operator's Manual instructions to ensure safe and proper maintenance and repair.

Your local, authorized dealer can supply genuine replacement parts. Substitute parts may not meet original equipment specifications and may be dangerous.

### WARNING

**MAKE SURE ALL POWER IS SHUT OFF BEFORE PERFORMING ANY MAINTENANCE OR REPAIR WORK.**

### WHEEL RIMS FOR GRAIN CARTS

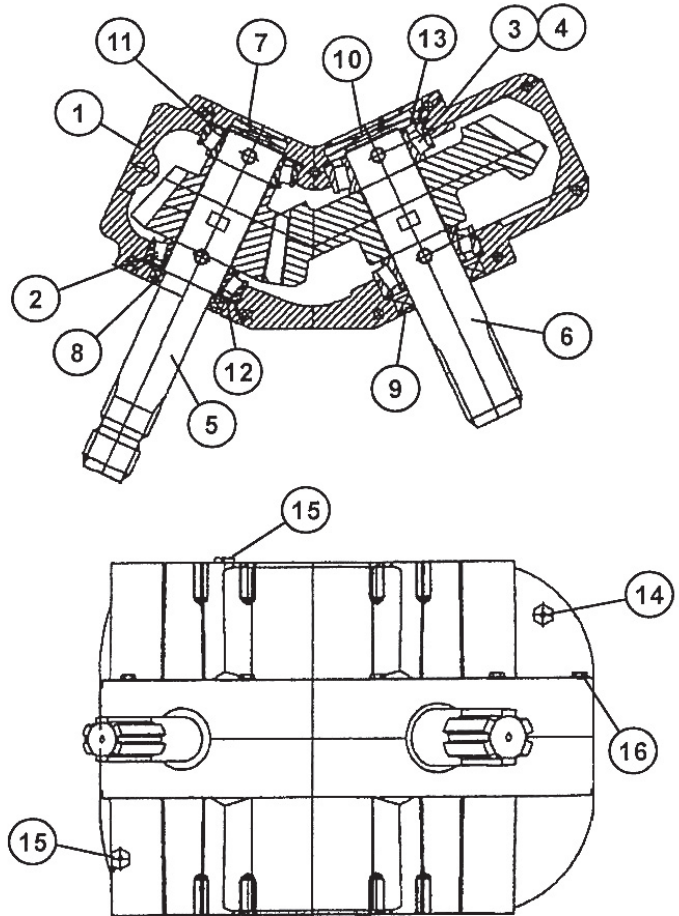
Description	Part. No.
Wheel Rim, 10 hole, 16x42 (11.13 pilot) (13.19 bolt circle)	JM0020015
Wheel Rim, 10 hole, 16x46 (11.13 pilot) (13.19 bolt circle)	JM0026971
Wheel Rim, 10 hole, 18x38 (11.13 pilot) (13.19 bolt circle)	JM0020014
Wheel Rim, 10 hole, 18x42 (11.13 pilot) (13.19 bolt circle)	JM0020016
Wheel Rim, 10 hole, 20x26 (11.13 pilot) (13.19 bolt circle)	JM0020011
Wheel Rim, 10 hole, 20x30 (8.785 pilot) (11.25 bolt circle)	JM0026976
Wheel Rim, 10 hole, 21x32 (8.785 pilot) (11.25 bolt circle)	JM0026977
Wheel Rim, 10 hole, 21x32 (11.13 pilot) (13.19 bolt circle)	JM0020025
Wheel Rim, 10 hole, 25x36 (11.13 pilot) (13.19 bolt circle)	JM0020048
Wheel Rim, 10 hole, 27x32 (11.13 pilot) (13.19 bolt circle)	JM0020026
Wheel Rim, 10 hole, 27x32HD Heavy Duty (11.13 pilot) (13.19 bolt circle) (for 900/60R32 Tires)	JM0020027
Wheel Rim, 10 hole, 31x32 (3 piece) (11.13 pilot) (13.19 bolt circle) (for 35.5x32 R-3 Tires)	JM0020037
Rubber O-Ring Seal for 31x32-10 Wheel Rim (52-49469-00)	JM0020030
Wheel Rim, 10 hole, 32x36 (11.13 pilot) (13.19 bolt circle)	JM0020052

### TIRES FOR GRAIN CARTS

Description	Part. No.
480/80R42 Lug Tire, 12 ply (for 16x42-10 wheel)	JM0020038
480/80R46 Lug Tire, 12 ply (for 16x46-10 wheel)	JM0021536
520/85R38 Lug Tire, 154 LI (for 18x38-10-8.7 and 18x38-10 wheels)	JM0020418
520/85R42 Lug Tire, 162 LI (for 18x42-10 wheel)	JM0020040
23.1x26 Lug Tire, 12 ply (for 20x26-10 and 20x26-10L wheels)	JM0021546
23.1x26 Diamond Tire, 12 ply (for 20x26-10 and 20x26-10L wheels)	JM0026978
24.5x32 Lug Tire, 12 ply (for 21x32-10-8.7 and 21x32-10 wheels)	JM0021550
24.5x32 Diamond Tire, 12 ply (for 21x32-10-8.7 and 21x32-10 wheels)	JM0021539
24.5x32 Diamond Tire, 16 ply (for 21x32-10HD heavy duty wheel)	JM0021549
30.5x32 Lug Tire, 12 ply (for 27x32-10 wheel)	JM0017665
30.5x32 Diamond Tire, 14 ply (for 27x32-10 wheel)	JM0030266
35.5x32 Diamond Tire, 20 ply (for 31x32-10 3-piece wheel)	JM0021557
900/60R32 Lug Tire, 176 LI (for 27x32-10HD heavy duty or 31x32-1P-10 one piece wheel)	JM0017662
900/60R32 Lug Tire, 185 LI (for 27x32-10HD heavy duty or 31x32-1P-10 one piece wheel)	JM0026979
66x43.00 Lug Tire, 16 ply (for 25x36-10 wheel)	JM0021535
73x44.00 Lug Tire, 16 ply (for 32x36-10 wheel)	JM0021537
76x50.00 Lug Tire, 20 ply (for 44x32-10 wheel)	JM0019728

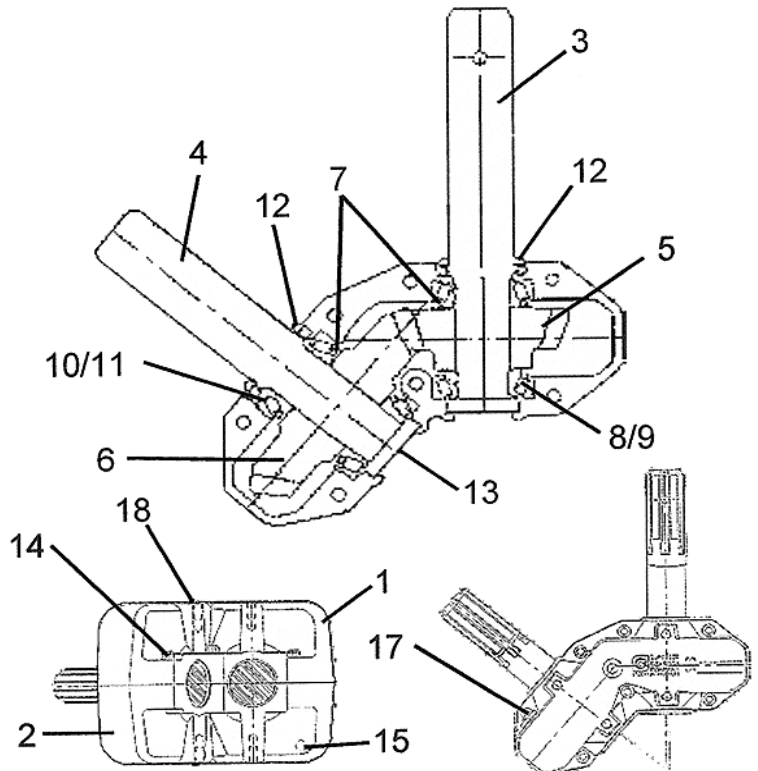
**130 Degree Gearbox Assembly for 22" Diameter Augers (WEASLER)  
For Models 1110, 1310, 1410, 1120, 1220 & 1520 Grain Carts**

#	Description	Part. No.
1	Housing Set (70-001114)	JM0025053
2	Bearing, 32210 (71-20017)	JM0025054
3	Bearing Cone, 3780 (71-20044)	JM0025055
4	Bearing Cup, 3720 (71-20033)	JM0025056
5	1-3/4" Input Shaft & Gear Assembly (74-60123)	JM0025057
6	2" Output Shaft & Gear Assembly (74-60125)	JM0025058
7	End Cap Seal, 2" x .276" (71-40016)	JM0025060
8	Seal, 1.75" x 2.717 x .513 (71-40052)	JM0025061
9	Seal, 2 x 3.196 x .433 (71-40080)	JM0025062
10	End Cap Seal, 3.19 x .315 (71-40079)	JM0025063
11	Spacer (71-50160)	JM0025064
12	Spacer (71-50161)	JM0025065
13	Spacer (71-50172)	JM0025066
14	1/2" Bushing 1/8" Relief Plug (72-20011)	JM0025067
15	1/2" Pipe Plug (72-20007)	JM0025068
16	Cap Screw 3/8"-16 UNC x 2.52" (72-0002)	JM0025069
17	130 Degree Gearbox Complete (130-22W)	JM0018677

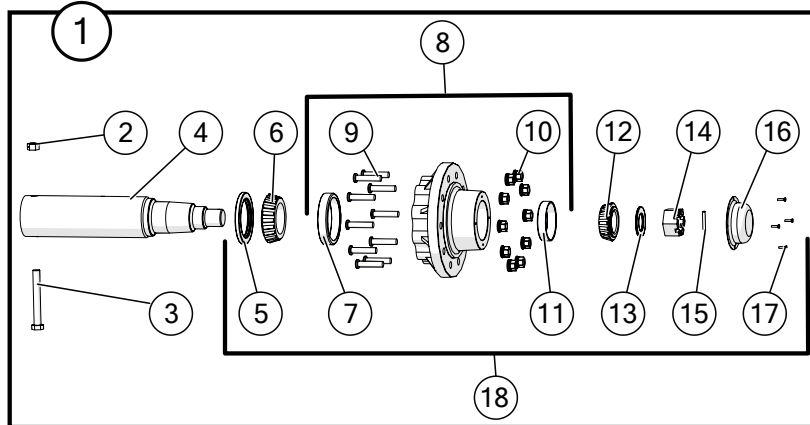


**130 Degree Gearbox Assembly for 18" & 20" Diameter Augers (SUPERIOR)  
For Models 810 & 1010 Grain Carts**

#	Description	Part. No.
1	Casting, Upper Half (A0150)	JM0025088
2	Casting, Lower Half (A0149)	JM0025089
3	1-3/4" Input Shaft (A0142)	JM0025090
4	1-3/4" Output Shaft (A0143)	JM0025091
5	18 Tooth Gear (H61S18)	JM0025092
6	29 Tooth Gear (H61S29)	JM0025093
7	Shim, Arbor (H00101-01)	JM0025094
8	Bearing, Cup (414276)	JM0025077
9	Bearing, Cone (514137)	JM0025078
10	Bearing, Cup (413620)	JM0025095
11	Bearing, Cone (413687)	JM0025096
12	Seal (617285)	JM0025097
13	End Cap (400301)	JM0025076
14	Bolt (438225)	JM0025085
15	Plug (400300)	JM0025080
16	Bushing (4003VB)	JM0025073
17	Plug, Vent (2003PR)	JM0025081
18	Plug (200300)	JM0025075
19	130 Degree Gearbox Complete (H130-9)	JM0017840



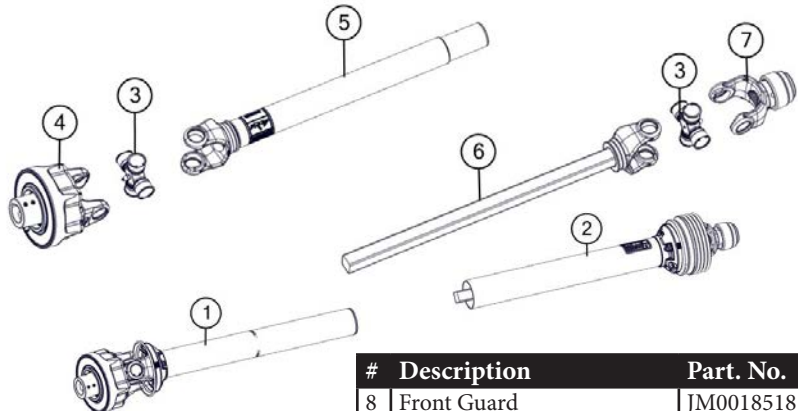
**HUB & SPINDLE ASSEMBLY 250-10**  
For Models 1110, 1310, 1410, 1120, 1220 & 1520 Single  
Grain Carts with 6" Diameter Spindles



Description	Part No.
1 G250-10 Hub, Spindle, and Bearings Assembly with 22mm Studs, Races and Nuts (HSA-1075-22)	JM0019927
2 1"-8 Gr2 Z Centerlock Hex Nut	JM0002149
3 1"-8 x 8" Gr5 Z Hex Bolt	JM0001487
4 Spindle, 6" x 29-3/8" (628)	JM0019102
5 Seal 55179 (Type C) for G250-10, G300-10B, Spring-assisted (CR55179)	JM0019179
6 Large Bearing (71455)	JM0019112
7 Large Race (71750)	JM0019198
8 G250-10 Hub with Races, 22mm Studs & Nuts (13.19 Bolt Circle) (11.13 Pilot) (H25000)	JM0019300
9 Stud 22MM 1.5 x 90MM 3.55L 1.005 Knurl (22-MMS)	JM0019178
10 Wheel Nut 22mm with Washer (22-MMNW)	JM0019192
11 Small Race (653)	JM0019195
12 Small Bearing (663)	JM0019177
13 3/16" Spindle Washer (2-1/2" ID, 4-1/2" OD) (H25000) (EM-25M)	JM0019106
14 2-7/16"-12 Gr5 Z Slotted Spindle Nut (SF-2512)	JM0019108
15 3/8" x 3-1/2" Z Roll Pin (3754)	JM0020001
16 Dust Cap with Gasket (Bolt-on) 7-3/4" OD (D-25000)	JM0019109
17 1/4"-20 x 1" Gr5 Z Hex Bolt	JM0002095
18 G250-10 Hub, Seal, Bearings, Races, Studs, Nuts and Dust Cap	JM0048131

**Power Take-Off (PTO) Shaft Assembly**  
1-3/4" Weasler - Black in Color  
Used on all Extended Reach Grain Carts

#	Description	Part. No.
1	Back Half PTO	JM0018513
1	Back Half PTO (XL)	JM0030331
2	1-3/4" Front Half PTO	JM0018514
2	1-3/4" Front Half PTO (XL)	JM0030330
2	1-3/8" Front Half PTO	JM0024367
2	1-3/8" Front Half PTO (XL)	JM0030640
3	55ECross Kit	JM0018449
4	Auto Clutch	JM0018500
5	Yoke, Tube & Sleeve	JM0018519
5	Yoke, Tube & Sleeve (XL)	JM0031647
6	Yoke & Shaft Assembly	JM0018520
6	Yoke & Shaft Assembly (XL)	JM0031648
7	1-3/4" Spring Lock Yoke	JM0018506
7	1-3/8" Spring Lock Yoke	JM0024353



#	Description	Part. No.
8	Front Guard	JM0018518
8	Front Guard (XL)	JM0030642
8	Back Guard	JM0018517
8	Back Guard (XL)	JM0030645
9	1-3/4" PTO Complete	JM0018443
9	1-3/4" PTO Complete (XL)	JM0030332
9	1-3/8" PTO Complete	JM0024333
9	1-3/8" PTO Complete (XL)	JM0030641

**HUB & SPINDLE ASSEMBLY W-891**  
**1010 Grain Cart with 4-1/2" Diameter Stress-Proof Spindle**

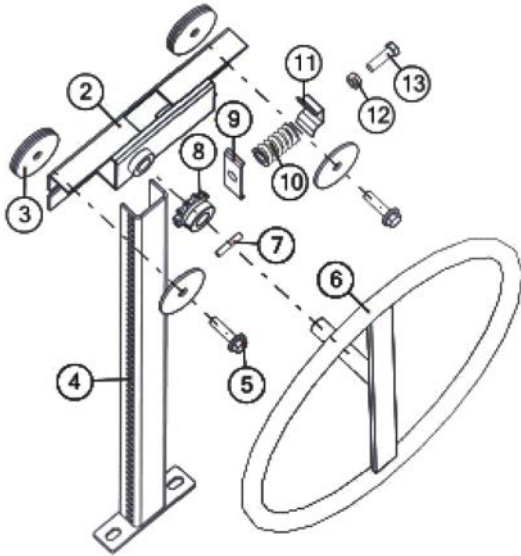
#	Description	Part. No.
1	Hub and Spindle Assembly Complete (1000-20)(Non-Scale)(HSA-1000)	JM0019942
2	1"-8 Gr5 Z Centerlock Hex Nut	JM0002149
3	1" x 7" Gr5 Z Hex Bolt (165400)	JM0016689
4	4-1/2" x 20-1/4" Spindle (1144 Stress-Proof)(281900S)	JM0019937
5	Seal (6" OD) 1-906979 (CR-43771)	JM0018955
6	Large Bearing (910346)	JM0018849
7	Large Race (HM212049) (910344)	JM0018848
8	891 Hub with large and small races, 22MM studs & nuts(W-891)	JM0021227
9	22MM x 90MM Wheel Stud (22-MMS)	JM0019178
10	22 MM Lug Nut (22-MMNW)	JM0019192
11	Small Race (HM212011)	JM0018854
12	Small Bearing (910347)	JM0018852
13	Spindle Washer (913635)	JM0015900
14	Large Castle Nut (912973)	JM0015899
15	Cotter Pin (905945)	JM0018956
16	Dust Cap (909921)	JM0018954
17	1/4"-20 X 1" Gr5 Z Hex Bolt (141G5B)	JM0002095

**HUB & SPINDLE ASSEMBLY W-881**  
**For Model 810 and all Walker Equipped Grain Carts with 4-1/2" Diameter Spindles**

#	Description	Part. No.
1	Hub and Spindle Assembly Complete 20-1/4" (3/4" Studs) (HSA-650D) (Walking Tandem Duals)(FAA)	JM0019940
1	Hub and Spindle Assembly Complete 30-1/2" (3/4" Studs) (Standard Axle)	JM0022057
1	Hub and Spindle Assembly Complete 30-1/2" (22MM Studs) (Standard Axle)	JM0034488
1	Hub and Spindle Assembly Complete 27-1/2" (3/4" Studs)(30.5 Tire & Smaller) (Fully Adjustable Axle)	JM0034483
1	Hub and Spindle Assembly Complete 27-1/2" (22MM Studs)(900 Tire & Larger) (Fully Adjustable Axle)	JM0034354
2	1"-8 Gr5 Z Centerlock Hex Nut	JM0002149
3	1" x 7" Gr5 Z Hex Bolt (165400)	JM0016689
4	4-1/2" Spindle x 30-1/2" (281900)	JM0018794
4	4-1/2" x 27-1/2" Spindle (For 5-Point Scale)	JM0007132
4	4-1/2" x 20-1/4" Spindle (1144 Stress-Proof)	JM0019937
5	Seal (6" OD - 3-3/4" ID) for hub w/ scales (since March 2000)(750-35)	JM0021456
5	Seal (6" OD) 1-906979 (CR-43771)	JM0018955
6	Large Bearing (910346)	JM0018849
7	Large Race (HM212049)	JM0018848
8	Hub with large and small races, 3/4" studs & nuts (13.19 bolt circle) (11.13 pilot)(W-881)	JM0020510
8	Hub with large and small races, 22MM studs & nuts (13.19 bolt circle) (11.13 pilot)(W-881)	JM0034356
9	3/4"-16 Wheel Stud (913564)	JM0018957
9	22mm Wheel Stud	JM0019178
10	3/4"-16 Wheel Nut (913571)	JM0018958
10	22mm Wheel Nut	JM0019192
11	Small Race (HM212011)	JM0018854
12	Small Bearing (910347)	JM0018852
13	Spindle Washer (913635)	JM0015900
14	Large Castle Nut (912973)	JM0015899
15	Cotter Pin (905945)	JM0018956
16	Dust Cap (909921)	JM0018954
17	1/4"-20 X 1" Gr5 Z Hex Bolt (141G5B)	JM0002095

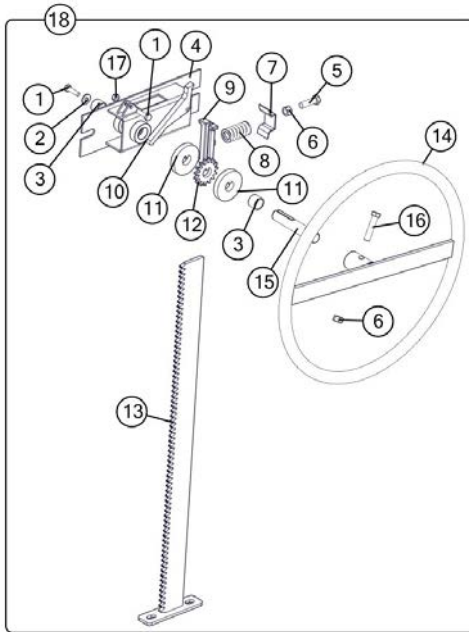


## Door Wheel Assembly 2015 - Prior



#	Description	Part. No.
1	Complete Door Wheel Assembly (20-1/4") (CWA250)	JM0018884
1	Complete Door Wheel Assembly (28") (CWA750)	JM0018879
2	Welded Guide Assembly (WGA-1034)	JM0018864
3	2-1/2" USS Flat Washer	JM0018982
4	Track Assembly (28") (TA-28)	JM0018860
5	3/8-16 x 1-1/2" Gr5 Z SF Hex Bolt (161200)	JM0001633
6	Wheel Pin & Strap Assembly (WPS-250)	JM0018871
7	1-3/8" Roll Pin (138RP)	JM0009896
8	11 Tooth Sprocket (11T40)	JM0018872
9	Galvanized Clip (GL-250)	JM0002850
10	Spring (DS-250)	JM0001688
11	Metal Clip (MC-250)	JM0002851
12	3/8"-16 Gr5 Z Hex Nut (161850)	JM0001707
13	3/8"-16 x 1-1/4" Gr5 Z Hex Bolt (161160)	JM0016675

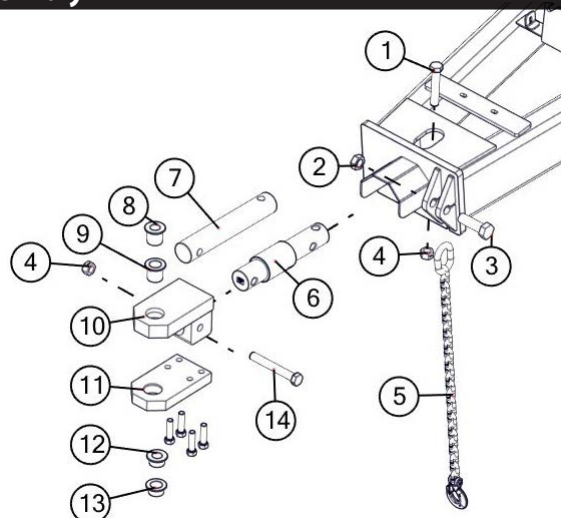
## Door Wheel Assembly 2015 - Newer



#	Description	Part No.
1	1/4"-20 x 1" Gr5 Z Hex Bolt	JM0002095
2	1/4" ID, 3/4" OD Z Flat Washer	JM0003090
3	3/4" ID x 7/8" OD x 5/8" LG Bronze Bushing (BB-34)	JM0009455
4	Nylon Guided Rack Housing Weldment (2015 & Newer)	JM0030635
5	3/8"-16 x 1-1/4" Gr5 Z Hex Bolt	JM0016675
6	3/8"-16 Gr5 Z Hex Nut	JM0001707
7	Scrubber Spring Plate (ST Manual Door) (Door Wheel)	JM0002851
8	Compression Spring (1" x 1-3/4") for Door Assembly & Tongue Latch	JM0001688
9	Nylon Track Guide For Door Wheel (2015 & Newer)	JM0029354
10	Flip Lock For Door Rack (2015 & Newer)	JM0029459
11	Keyway Washer for Door Rack (2015 & Newer)	JM0029454
12	15 Tooth Sprocket - 3/4" Bore w/ Key (2015 & Newer)	JM0029455
13	Rack Track Weldment for Door (27-1/2") 2015 & Newer	JM0030634
14	Rack Wheel Weldment (2015 & Newer)	JM0028897
15	Stub Shaft 3/4" x 4-1/8" w/ Threaded End (2015 & Newer)	JM0029440
16	3/8"-16 x 1-3/4" Gr5 Z Hex Bolt	JM0002097
17	1/4"-20 Gr2 Z Centerlock Hex Nut	JM0001505
18	Complete Door Wheel Assembly (27-1/2") (2016 & Newer)	JM0029460

## Hitch Assembly

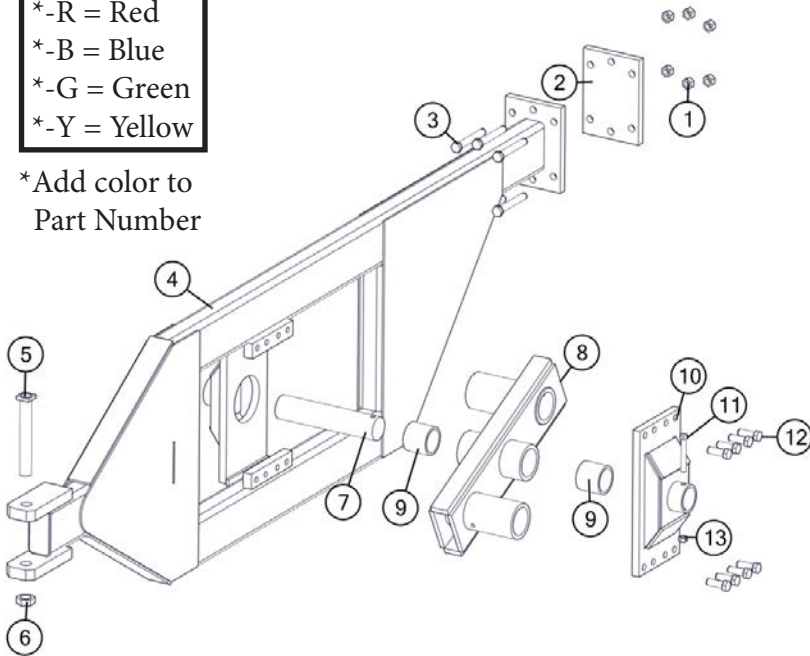
#	Description	Part. No.
1	1"-8 x 5-1/2" Gr5 Z Hex Bolt	JM0002110
2	1-1/4"-7 Gr5 Z Nylon Locking Hex Jam Nut	JM0027201
3	1-1/4"-7 x 4" Gr8 Z Hex Bolt	JM0026073
4	1"-8 Gr5 Z Centerlock Hex Nut	JM0002149
5	30k Lb Safety Chain	JM0027440
6	Digi-Star - 2-7/8" Weigh Bar	JM0000355
7	2-7/8" Long Non Scale Hitch Bar	JM0025227
8	1-1/4" Pin adapter for GC Spade Hitch	JM0019032
9	1-1/2" Pin adapter for GC Clevis Hitch Tang	JM0014203
10	Hitch Weldment	JM0017978
11	Draw Bar	JM0017976
12	1-1/4" Pin adapter for GC Clevis Hitch Tang	JM0019031
13	1-1/2" Pin adapter for GC Clevis Hitch Tang	JM0014206
14	1"-8 x 7-1/2" Gr8 YZ Hex Bolt	JM0017944



## Walking Tandem Dual Wheel Assembly

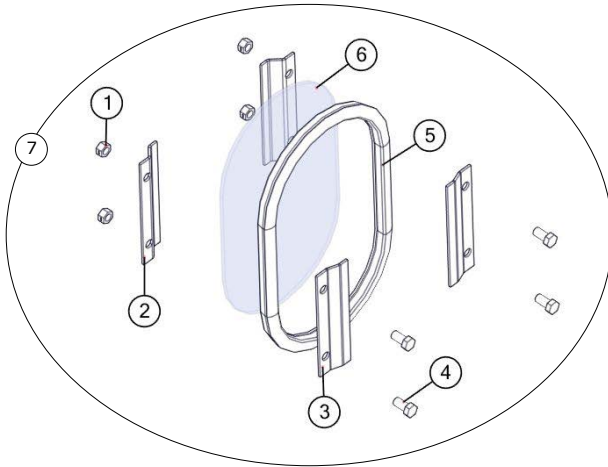
\*-R = Red  
\*-B = Blue  
\*-G = Green  
\*-Y = Yellow

\*Add color to  
Part Number



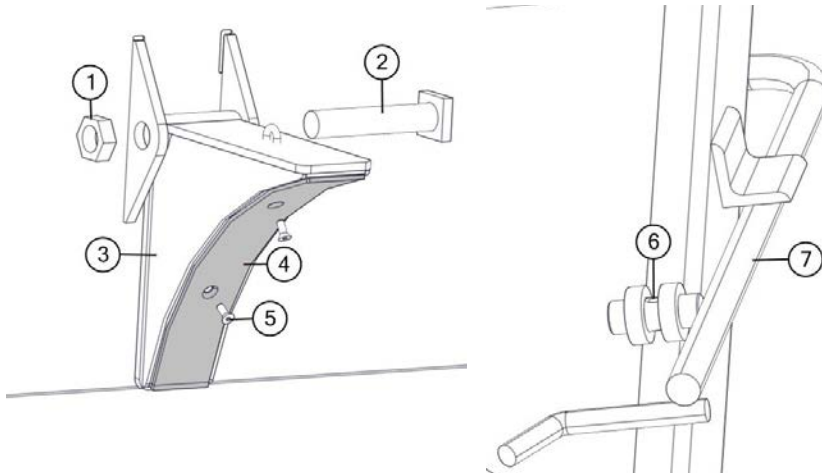
#	Description	Part. No.
1	1"-14 Gr8 YZ Hex Nut (1HNG8)	JM0019926
2	1-1/4" x 8" x 14" Clamp Plate (114814CP)	JM0010145
3	1"-14 x 7-1/2" Gr8 YZ Hex Bolt (1712G8HB)	JM0019925
4	Frame Weldment (Left)(FW-1L)	JM0019922*
4	Frame Weldment (Right)(FW-1R)	JM0010082*
5	1-3/4" x 13-1/2" Bolt (1341312HB)	JM0019981
6	1-3/4"-12 Z Gr5 Hex Jam Nut (134JN)	JM0009752
7	3-3/4" Dia. Pivot Pin (334PP)	JM0019928
8	Pivot Beam Weldment (left)(PBW-1L)	JM0010170*
8	Pivot Beam Weldment (right)(PBW-1R)	JM0010170*
9	3 3/4"ID x 4 1/2"OD Bronze Bushing (BB-334)	JM0010570
10	Pivot Center Weldment (PCW-1)	JM0010076*
11	3/4" x 5 1/2" Grade 5 Bolt (34512G5HB)	JM0015522
12	1"-14 x 3" Grade 8 Bolt (13G8B)	JM0019924
13	3/4" Lock Nut (34-LN)	JM0002147

## Inspection Windows



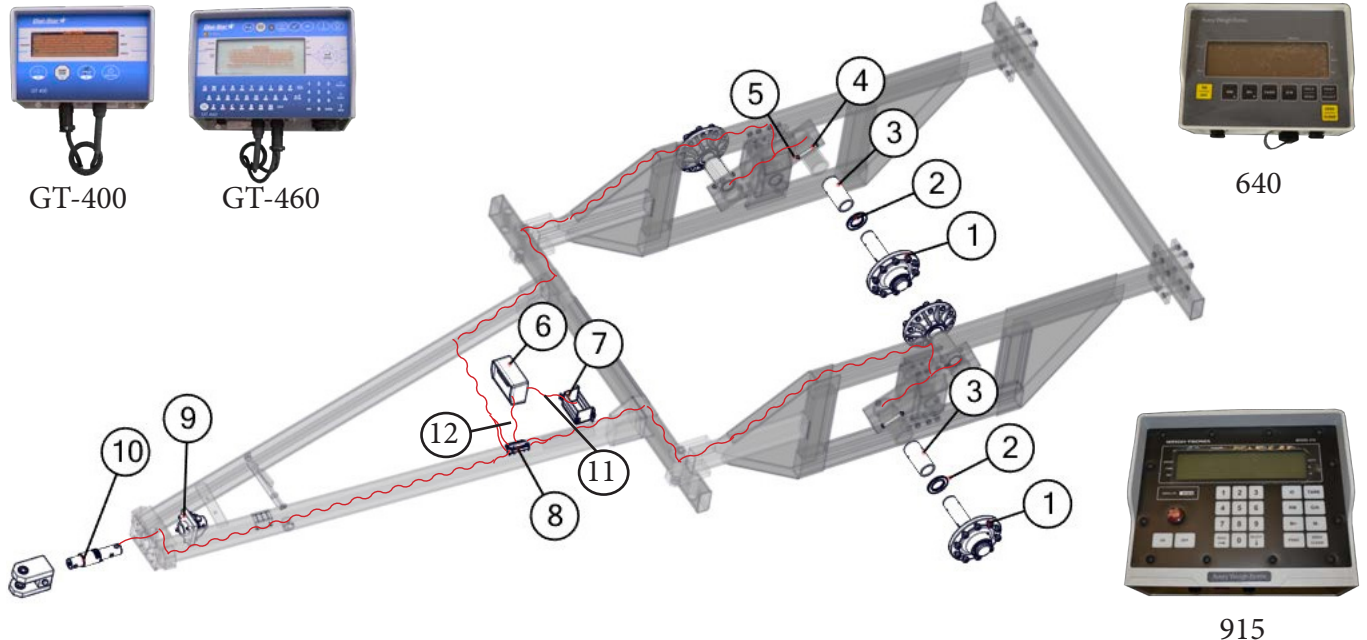
#	Description	Part. No.
1	3/8"-16 Gr5 Z Centerlock Hex Nut (161900)	JM0001512
2	Inside Window Brace (WB-4)	JM0000253
3	Outside Window Brace (WB-4B)	JM0000256
4	3/8-16 x 3/4" Gr5 Z Hex Bolt (161000)	JM0001663
5	Oval Window Grommet (112500)	JM0002454
6	Oval Window (IW-71212)	JM0002455
7	Inspection Window Kit (IWK-1)	JM0025752

## Auger Rest Assembly



#	Description	Part. No
1	1-1/4"-12 Z Gr5 Hex Jam Nut	JM0002158
2	6-1/2" x 1-1/4" Pin	JM0003036
3	Transport Auger Rest	JM0020538
4	Auger Rest Guide Plate	JM0024456
5	5/16"-18 x 5/8" Flat Head Bolt	JM0024448
6	1-3/8" Roll Pin	JM0009896
7	Auger Rest Throw Handle	JM0021843

**WEIGH SCALE SYSTEMS**  
**Digi-Star & Weigh Tronix Scale System**  
**For 1110, 1310, & 1410 with Walking-Tandem Duals**



**For Models 1110 Grain Carts**  
**Digi-Star Scale System**

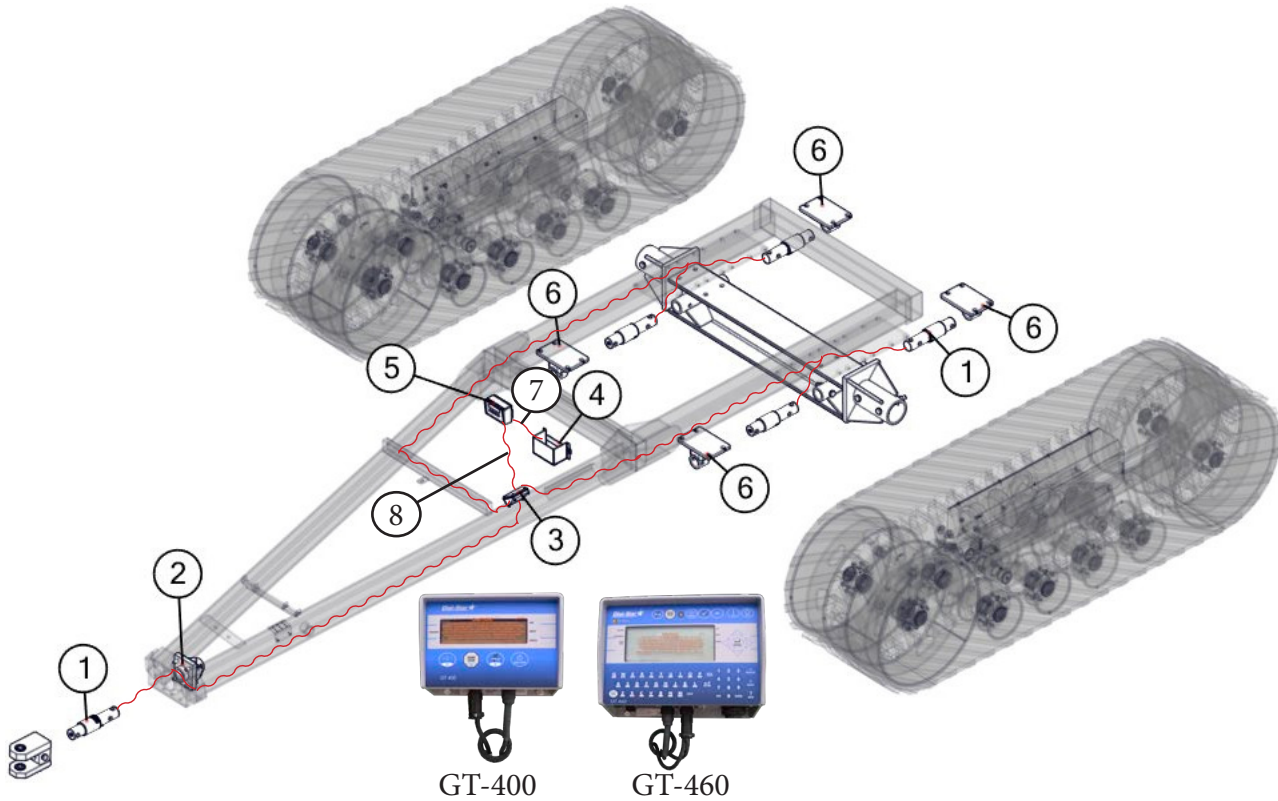
#	Description	Part. No.
1	3-3/4" Weigh Spindle, Digi Star (375WS)	JM0021451
2	Seal for Hub (37605SA)	JM0021456
3	4-1/2" OD Adapter Pipe Tubing (ATP-375-GS)	JM0021453
4	5/8"-11 x 6-1/2" Gr5 Zinc Hex Bolt	JM0019979
5	5/8"-11 Gr5 Z Centerlock Hex Nut	JM0002146
6	GT400 Indicator with Serial Port EZ-150, EZ-2000, EZ-400 (GT400)	JM0019040
6	GT 460 Indicator "Upgrade" includes serial port, downloader USB port and alpha-numeric key pad (GT-460)	JM0015453
7	Battery Box with Strap (BB-2)	JM0000365
8	5 Point Junction Box (JB-5)	JM0019038
9	Weigh Bar Receiver Weldment Scales 2-7/8" (WBW-278)	JM0000019
10	Digi-Star - 2-7/8" Weigh Bar, 1000-20 through 1501-22, 5 Point Scale System (278WB-T)	JM0000355
11	Power Cord to Battery, Digi Star (PC-1)	JM0025812
12	30' Standard Cable for J-Box to Indicator (141837)	JM0025820
13	Indicator Mounting Bracket, GT460 (MBI-1)	JM0019648
14	Indicator Mounting Bracket, GT400 (MBI-1S)	JM0000361
15	10' Long Extension Cord to Mount Indicator in Cab (ECI-1)	JM0025815
16	20' Long Extension Cord to Mount Indicator in Cab (ECI-2)	JM0025816
17	Optional "Y" Cable to Connect both Printer and Downloader (403037)	JM0025817
18	Flashdrive memory stick-programmed (114991)	JM0025819

**For Models 1310 and 1410 Grain Carts**  
**Weigh-Tronix Scale Systems**

#	Description	Part. No.
1	4-1/2" Weigh Spindle, Weigh-Tronix (450WTS)	JM0019970
2	Seal for Hub (37605SA)	JM0021456
4	5/8"-11 x 6-1/2" Gr5 Zinc Hex Bolt	JM0019979
5	5/8"-11 Gr5 Z Centerlock Hex Nut	JM0002146
6	640 Indicator w/serial port (640)	JM0019650
6	915 Indicator (upgrade) w/serial port & alpha-numeric key pad (915)	JM0025823
7	Battery Box with Strap (BB-2)	JM0000365
8	4 point Junction Box, replaces all older 3 pt junction boxes (JB-5-WT)	JM0019960
9	Weigh Bar Receiver Weldment Scales 2-7/8" (WBW-278)	JM0000019
10	2-7/8" Weigh Bar, Weigh-Tronix (278WB)	JM0019969
11	Power Cord to Battery, Weigh Tronix (PC-2)	JM0025824
12	Power Cord to Battery, 2 pin, Weigh Tronix (PC-2-2)	JM0025825
13	Standard Cable for J-box to Indicator (50613-0020)	JM0025826
14	Indicator Mounting Bracket, 640 & 915 (MBI-2)	JM0019967
15	Extension Cord to Mount Indicator In Cab (ECI-1WT)	JM0025827



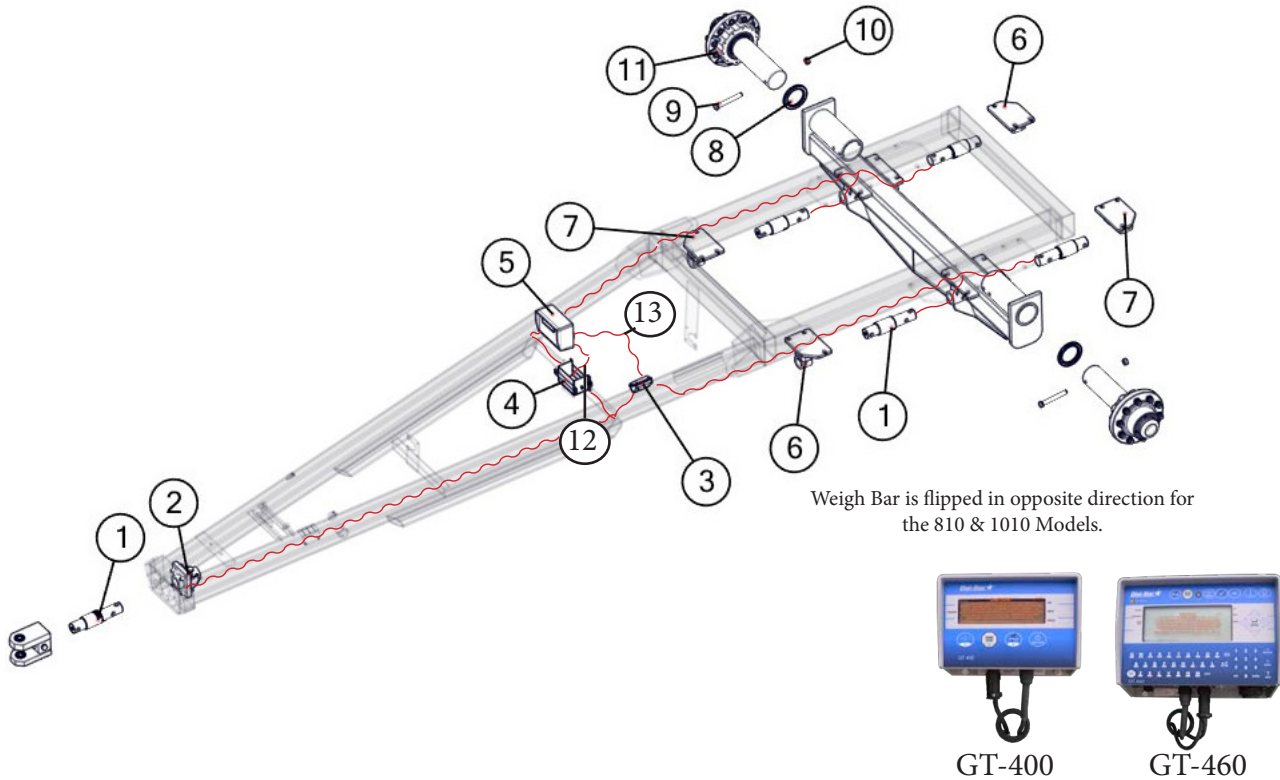
**WEIGH SCALE SYSTEMS**  
**Digi-Star 5-Point Scale System**  
**For Grain Carts equipped with *STORM TRACKER* track systems**



**WEIGH SCALE SYSTEMS**  
**Weigh Scale Scale System for Grain Carts Equipped with STORM TRACKER**  
**Track Systems and 5-Point Scales Systems**

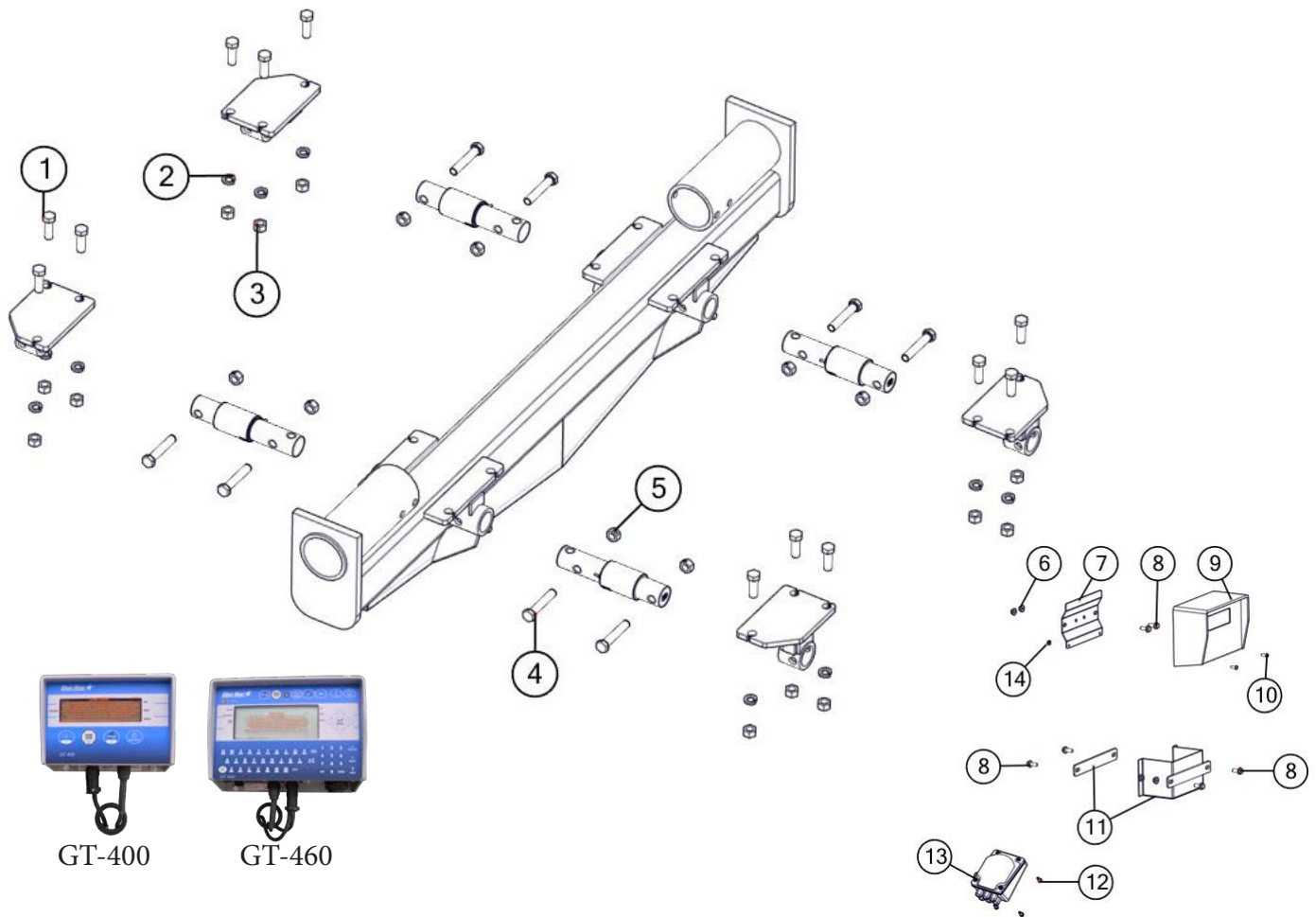
#	Description	Part. No.
1	2-7/8" Weigh Bar, 1" Pin Hole (278WB-T1)	JM0000355
1	2-7/8" Weigh bar, 5/8" Pin Hole (278WB-T)	JM0025856
2	Weigh Bar Receiver Weldment Scales 2-7/8" (WBW-278)	JM0000019
3	5 Point Junction Box (JB-5)	JM0019038
4	Battery Box with Strap (BB-2)	JM0000365
5	GT400 Indicator with Serial Port EZ-150, EZ-2000, EZ-400 (GT400)	JM0019040
5	GT 460 Indicator "Upgrade" includes serial port, downloader USB port and alpha-numeric key pad (GT-460)	JM0015453
6	2-7/8" Weigh Bar Weldment for Track Beam (WBW-278T)	JM0018207
7	Power Cord to Battery, Digi Star (PC-1)	JM0025812
8	30' Standard Cable for J-Box to Indicator (141837)	JM0025820
9	10' Long Extension Cord to Mount Indicator in Cab (ECI-1)	JM0025815
10	20' Long Extension Cord to Mount Indicator in Cab (ECI-2)	JM0025816
11	Optional "Y" Cable to Connect both Printer and Downloader (403037)	JM0025817
12	Flashdrive memory stick-programmed (114991)	JM0025819

**WEIGH SCALE SYSTEMS**  
**Digi-Star 5-Point Scale System**  
**For Single Wheel Applications with Bolt-on Axles**



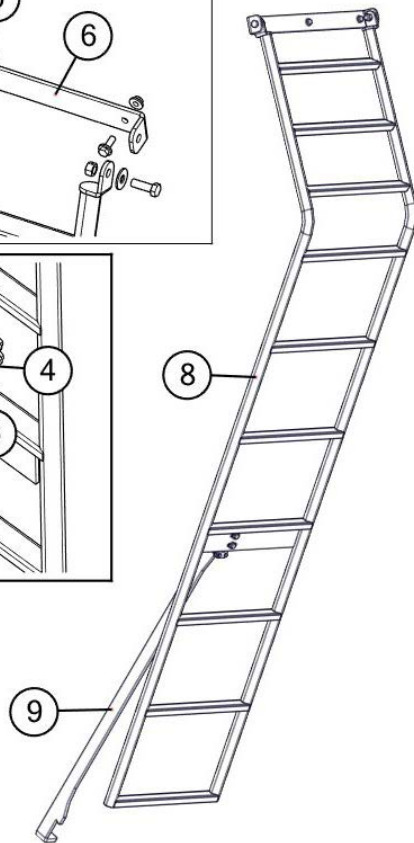
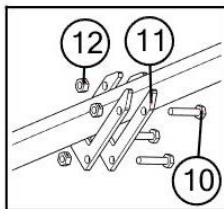
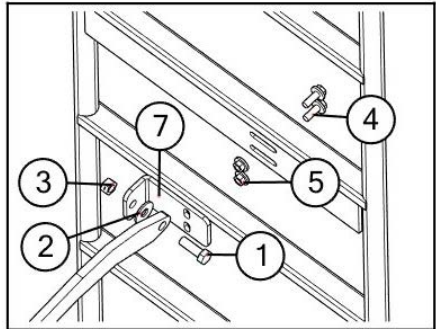
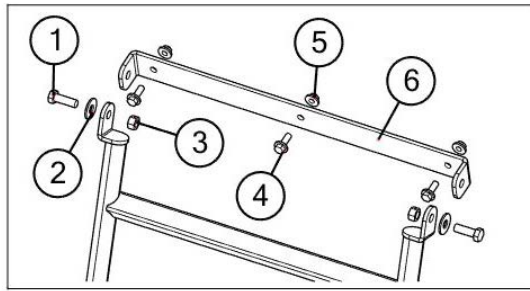
#	Description	Part. No.
1	2-7/8" Weigh Bar, 1" Pin Hole (278WB-T1)	JM0000355
2	Weigh Bar Receiver Weldment Scales 2-7/8" (WBW-278)	JM0000019
3	5 Point Junction Box (JB-5)	JM0019038
4	Battery Box with Strap (BB-2)	JM0000365
5	GT400 Indicator with Serial Port EZ-150, EZ-2000, EZ-400 (GT400)	JM0019040
5	GT 460 Indicator "Upgrade" includes serial port, downloader USB port and alpha-numeric key pad (GT-460)	JM0015453
6	2-7/8" Weigh Bar Weldment, Rear Right, Front Left, Digi-Star,	JM0018226
6	2-7/8" Weigh Bar Weldment, Rear Right, Front Left, Digi-Star, 810, 1010	JM0018985
7	2-7/8" Weigh Bar Weldment, Rear Left, Front Right, Digi-Star	JM0018228
7	2-7/8" Weigh Bar Weldment, Rear Left, Front Right, Digi-Star, 810, 1010	JM0000354
8	Seal for Hub (37605SA)	JM0021456
9	1"-8 x 8" Gr5 Z Hex Bolt	JM0001487
10	1"-8 Gr5 Z Centerlock Hex Nut	JM0002149
11	Hub Assembly	-----
12	Power Cord to Battery, Digi Star (PC-1)	JM0025812
13	30' Standard Cable for J-Box to Indicator (141837)	JM0025820
14	10' Long Extension Cord to Mount Indicator in Cab (ECI-1)	JM0025815
15	20' Long Extension Cord to Mount Indicator in Cab (ECI-2)	JM0025816
16	Optional "Y" Cable to Connect both Printer and Downloader (403037)	JM0025817
17	Flashdrive memory stick-programmed (114991)	JM0025819

**WEIGH SCALE SYSTEMS**  
**Digi-Star 5-Point Scale System Hardware**  
**Hardware for Single Wheel and Track System Bolt-on Axles**



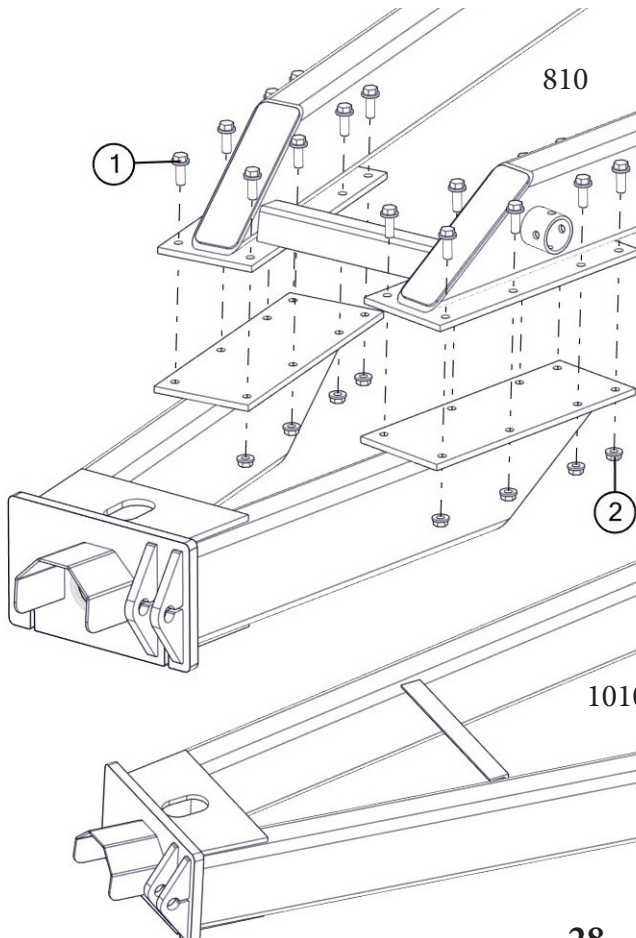
#	Description	Part. No.
1	1"-8 x 3" Gr5 Z Hex Bolt	JM0016686
2	1" Zinc Finish Lock Washer	JM0019203
3	1"-8 Gr5 Z Hex Nut	JM0002127
4	1"-8 x 5-1/2" Gr5 Z Hex Bolt	JM0002110
5	1"-8 Gr5 Z Centerlock Hex Nut	JM0002149
6	3/8"-16 Gr5 Z SF Hex Nut	JM0002152
7	Indicator Mounting Bracket, GT460 (MBI-1)	JM0019648
7	Indicator Mounting Bracket, GT400 (MBI-1S)	JM0000361
8	3/8"-16 x 1" Gr5 Z SF Hex Bolt	JM0002092
9	GT400 Indicator with Serial Port EZ-150, EZ-2000, EZ-400 (GT400)	JM0019040
9	GT 460 Indicator "Upgrade" includes serial port, downloader USB port and alpha-numeric key pad (GT-460)	JM0015453
10	1/4"-20 x 3/4" Gr5 Z Hex Bolt	JM0001507
11	Battery Box with Strap (BB-2)	JM0000365
12	1/4" x 3/4" Self Tapping Screw	JM0001570
13	5 Point Junction Box (JB-5)	JM0019038
14	1/4"-20 Gr5 Z SF Hex Nut	JM0001630

## Ladder Assembly



#	Description	Part. No.
1	1/2"-13 x 1-1/2" Gr5 Z Hex Bolt	JM0002100
2	1/2" USS Flat Washer	JM0003082
3	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
4	3/8"-16 x 1" Gr5 Z SF Hex Bolt	JM0002092
5	3/8"-16 Gr5 Z SF Hex Nut	JM0002152
6	Side Swing Ladder Mount Bracket	JM0012865
7	Swing Out Ladder Adjustable Tab	JM0020977
8	Ladder Weldment	JM0012858
9	Ladder Support Leg	JM0012926
10	1/4"-20 x 1-1/4" Gr5 Z Hex Bolt	JM0016673
11	Ladder Guide	JM0021947
12	1/4"-20 Gr5 Z Centerlock Hex Nut	JM0001505

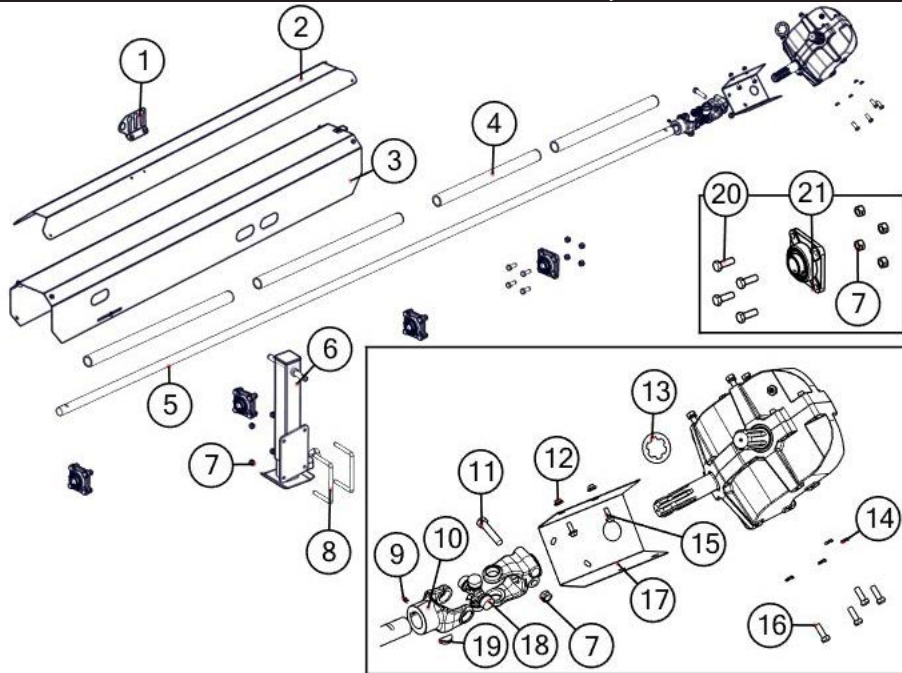
## Bolt-On Frames (810 & 1010)



#	Description	Part. No.
1	5/8"-11 x 1-3/4" Gr5 Z SF Hex Bolt	JM0027674
2	5/8"-11 Gr5 Z SF Hex Nut	JM0001522
3	3/4"-16 x 2-1/2" Gr8 Z Hex Bolt	JM0015323
4	3/4"-16 Gr8 YZ Nylon Locking Hex Nut	JM0027672



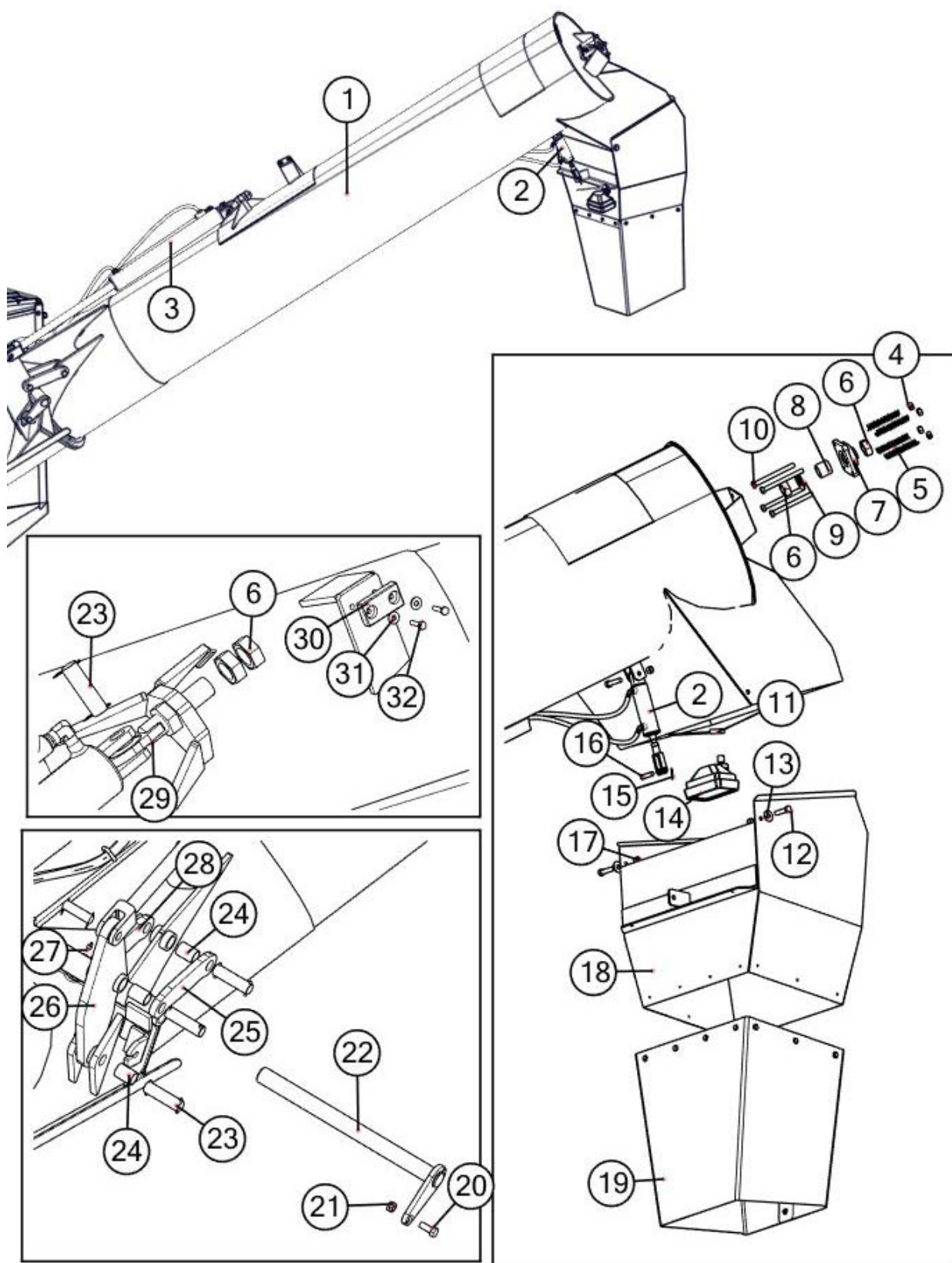
## Driveline Assembly



#	Description	Part. No.
1	Hydraulic Hose Holder (3 Slots)	JM0021437
2	Hydraulic Hose Shield (810)	JM0025770
2	Hydraulic Hose Shield (1010, 1110, 1120, 1220)	JM0022344
2	Hydraulic Hose Shield (1310,1410, 1520)	JM0020941
3	PTO Shield (810)	JM0025769
3	PTO Shield (1010, 1110)	JM0026079
3	PTO Shield (1310,1410)	JM0020935
4	PVC (Cut to length)	JM0027151
5	112" Driveline (810)	JM0025674
5	164-1/2" Driveline (1010, 1110, 1120, 1220)	JM0026002
5	190" Driveline (1310, 1410, 1520)	JM0026235
6	Grain Cart Jack (810)	JM0001480
6	Heavy Duty Grain Cart Jack (1010,1110,1310,1410,1520)	JM0020936
7	5/8"-11 Gr5 Z Centerlock Hex Nut	JM0002146
8	Square U-Bolt	JM0024199
9	3/8"-16 x 1/2" Set Screw	JM0019044
10	44 Series U-Joint	JM0017957
11	5/8"-11 x 3" Gr5 Z Hex Bolt	JM0002105
12	3/8"-16 Gr5 Z SF Hex Nut	JM0002152
13	18" & 20" Gearbox Washer	JM0000083
13	22" Gearbox Washer	JM0020638
14	1/2" Zinc Finish Lock Washer	JM0019021
15	3/8"-16 x 1" Gr5 Z SF Hex Bolt	JM0002092
16	1/2"-13 x 1-1/2" Gr5 Z Hex Bolt	JM0002100
17	Knuckle Guard	JM0012698
18	Cross Kit 44R, CK-44R	JM0017958
19	3/8" x 1-1/2" Half Moon Key	JM0018772
20	5/8"-11 x 1-3/4" Gr5 Z Hex Bolt	JM0016681
21	1-3/4" 4 Bolt Flange Bearing	JM0018774

\*-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)



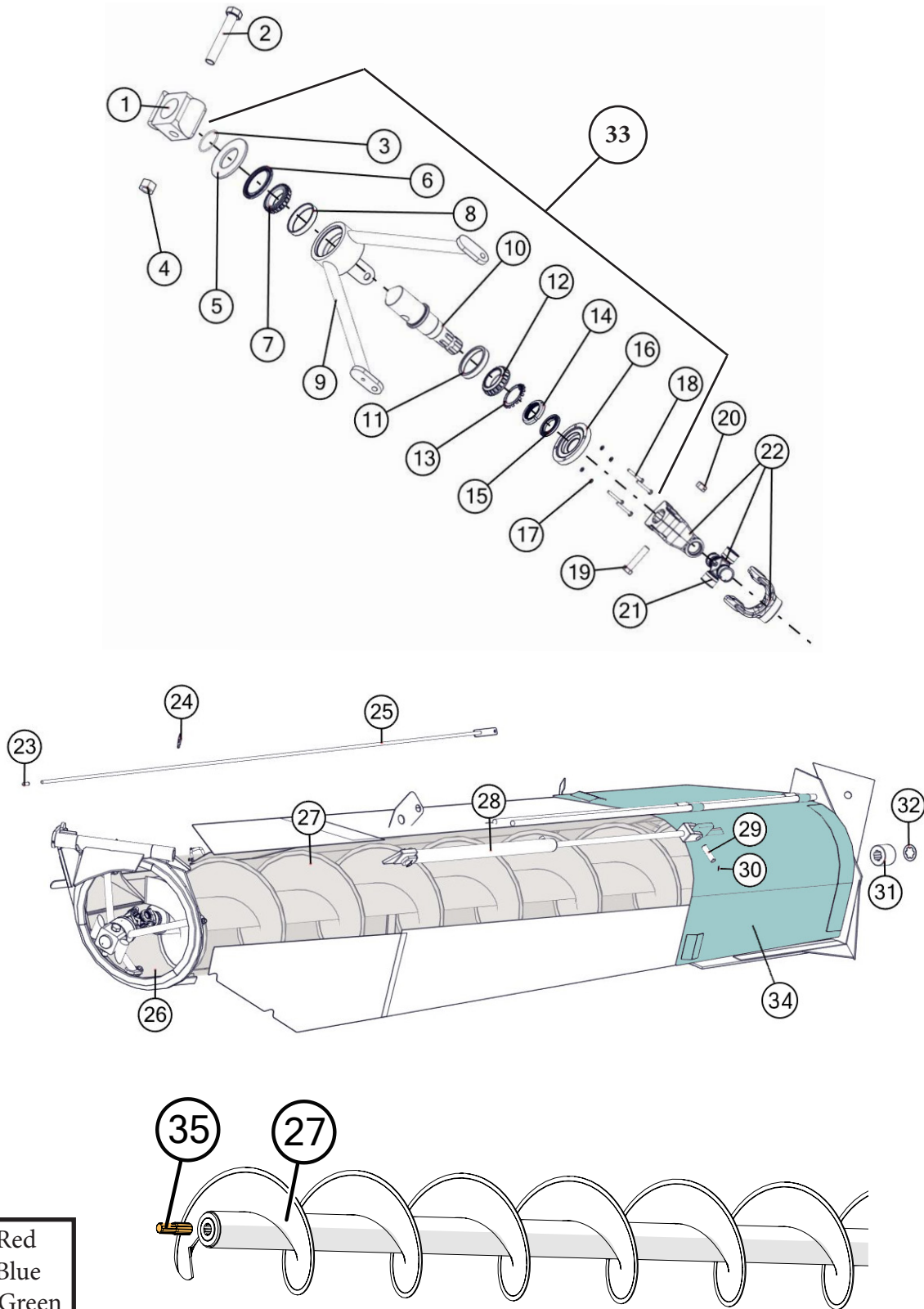
## Top Auger Assembly

#	Description	Part. No.
1	22" Upper Auger Tube Assembly	JM0020409
1	20" Upper Auger Tube Assembly	JM0025878
1	18" Upper Auger Tube Assembly	JM0025351
2	1-3/4" x 4" Hydraulic Cylinder	JM0018564
3	3" x 24" Welded Cushion Cylinder	JM0019644
4	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
5	Springs	JM0018559
6	1/4"-12 PN Gr5 Hex Jam Nut	JM0001606
7	1-1/4" Flange Bearing	JM0018560
8	Spacer 1-1/4" Long	JM0021646
9	1-1/4" USS Flat Washer	JM0020322
10	1/2"-13 x 5-1/2" Gr5 Z Hex Bolt	JM0001498
11	Mercury Switch	JM0017896
12	1/2"-13 x 2" Gr5 Z Hex Bolt	JM0001593
13	1/2" USS Flat Washer	JM0003082
14	Field Light Assembly	JM0001881
15	Cotter Pin	JM0016381
16	Clevis Pin	JM0018264
17	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
18	22" Side Shooter Tip Spout	JM0017838
18	20" Side Shooter Tip Spout	JM0000781
18	18" Side Shooter Tip Spout	JM0017868
19	22" Rubber Tip Spout Addition	JM0014129
19	20" Rubber Tip Spout Addition	JM0014420
19	18" Rubber Tip Spout Addition	JM0026081
20	5/8"-11 x 1-1/2" Gr5 Z Hex Bolt	JM0002103
21	5/8"-11 Gr5 Z Centerlock Hex Nut	JM0002146
22	22" Hinge Pin (also used on 1010 model)	JM0024966
22	18" Hinge Pin	JM0022086
23	Linkage Pin	JM0021649
24	Sleeve	JM0021956
25	Master Link	JM0020451
26	Main Fold Link	JM0020452
27	1/8" Grease Zerk	JM0009756
28	Master Link with Keeper	JM0024178
29	HD Pac Man Weldment	JM0021417
30	Bounce Pad	JM0020802
31	1/4" USS Flat Washer	JM0003090
32	1/4"-20 X 1" Gr5 Z Hex Bolt	JM0002095
33	22" Upper Auger Flighting (126-1/2")	JM0020817
33	20" Upper Auger Flighting (128-7/16")	JM0026679
33	18" Upper Auger Flighting (133-1/4")	JM0025412

\*-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)

## Lower Auger Assembly



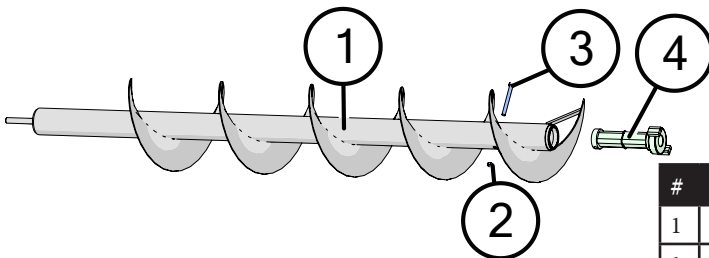
When requesting an item with color, end the part number with -R, -B, -G, or -Y. (e.g. JM0000000-R)



## Lower Auger Assembly

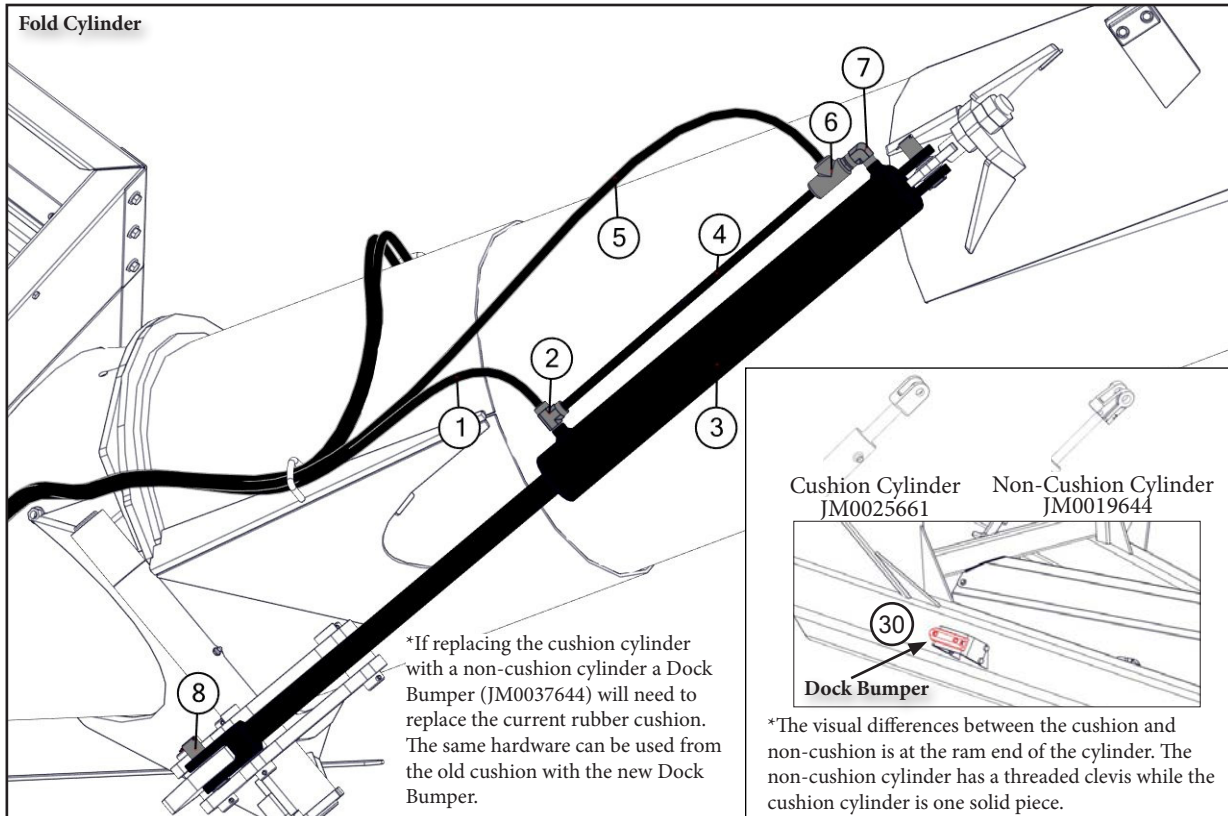
#	Description	Part. No.	#	Description	Part. No.
1	18" & 20" Drive Dog	JM0000093	26	Lower Auger Replacement Liner (810-18)	JM0027749
1	22" Drive Dog	JM0002919	26	Lower Auger Replacement Liner (1010,910-20)	JM0027748
2	1"-8 x 6" Gr5 Z Hex Bolt	JM0002111	26	Lower Auger Replacement Liner (1011,1110,1111,1120,1121,1220,1221)	JM0027747
3	2-1/2" ID Gasket - Auger Bullet Nose Seal	JM0027444	26	Lower Auger Replacement Liner (1310,1311,1410,1411,1520,1521)	JM0027737
4	1"-8 Gr5 Z Hex Nut	JM0002127	27	18" Lower Flighting 810 (139-9/16")	JM0025407
5	2-1/2" USS Flat Washer	JM0030690	27	20" Lower Flighting 1010,910 (167-5/8")	JM0026452
6	Upper Grease Seal	JM0019232	27	22" Lower Flighting 1011,1110,1111,1120,1121,1220,1221 (165-1/4")	JM0026838
7	Tapered Bearing Cone 387A	JM0018101	27	22" Lower Flighting 1310,1311,1410,1411,1520,1521 (182-1/8")	JM0020704
8	Tapered Bearing Cup 382A	JM0018100	28	2" x 36" Hydraulic Cylinder	JM0018523
9	18" Bearing Hanger Tripod	JM0027449	29	1" Clevis Pin	JM0001816
9	20" Bearing Hanger Tripod	JM0026110	30	1" Cotter Pin	JM0003064
9	22" Bearing Hanger Tripod	JM0021965	31	Spline Coupler 1-3/4" ID x 4" OD Weldment (18" & 20" Flighting)	JM0016883
10	Universal Bearing Bullet Nose	JM0015898	31	Spline Coupler 2" ID x 5-15/32" OD Weldment (Weasler Gearbox) (SC-334x3)	JM0009701
11	Tapered Bearing Cup 382A	JM0018100	32	18" & 20" Gearbox Washer	JM0000083
12	Tapered Bearing Cone 387A	JM0018101	32	22" Gearbox Washer	JM0020638
13	Bearing Nut	JM0020773	33	18" Tripod Hanger Assembly Complete	JM0034477
14	Internal Race	JM0020772	33	20" Tripod Hanger Assembly Complete	JM0034571
15	Lower Grease Seal	JM0026572	33	22" Tripod Hanger Assembly Complete	JM0053896
16	Hollow Point Hub Cap	JM0019921	34	810 Shut Off Gate Assembly	JM0030159
17	1/4" Split Lock Washer	JM0027421	34	910 Shut Off Gate Assembly	JM0030152
18	1/4"-20 x 2" Gr5 Z Hex Bolt	JM0001591	34	1011/1111 Shut Off Gate Assembly	JM0030158
19	5/8"-11 x 3" Gr5 Z Hex Bolt	JM0002105	34	1311 Shut Off Gate Assembly	JM0030157
20	5/8"-11 Gr5 Z Centerlock Hex Nut	JM0002146	35	Bullet Nose Drive Shaft (6-1/4" L)	JM0086012
21	55E Cross Kit (Auto Clutch PTO)(1-3/4")	JM0018449			
22	55 Series U-Joint	JM0021235			
23	Yellow Cap	JM0016842			
24	Indicator Guide	JM0024987			
25	Indicator Rod Weldment (810)	JM0022092			
25	Indicator Rod Weldment (1010,1011,1110,1111)	JM0027918			
25	Indicator Rod Weldment (1310,1311)	JM0021282			

## Top Auger and Torsion Arm

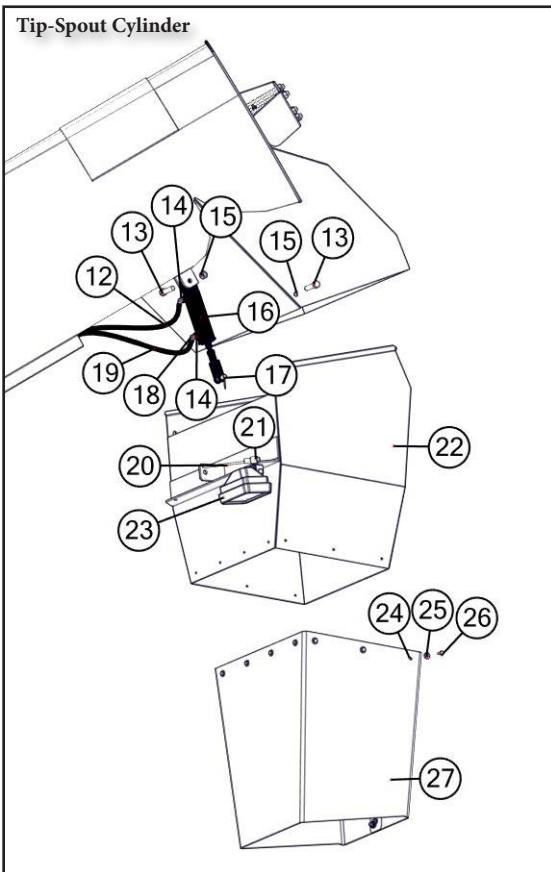


#	Description	Part. No.
1	18" Top Auger Weldment 810 (133-1/4")	JM0025412
1	20" Top Auger Weldment 910,1010 (128-7/16")	JM0026679
1	22" Top Auger Weldment 1011,1111, 1311, 1411 (126-1/2")	JM0020817
2	3/4"-10 Gr5 Z Hex Nut	JM0002125
3	3/4"-10 x 5-1/2" Gr5 Z Hex Bolt (18", 20" Augers)	JM0015522
3	3/4"-10 x 7" Gr5 Z Hex Bolt (22" Auger)	JM0054907
4	18", 20" Torsion Arm (Drive Dog)	JM0027291
4	22" Torsion Arm (Drive Dog)	JM0021621

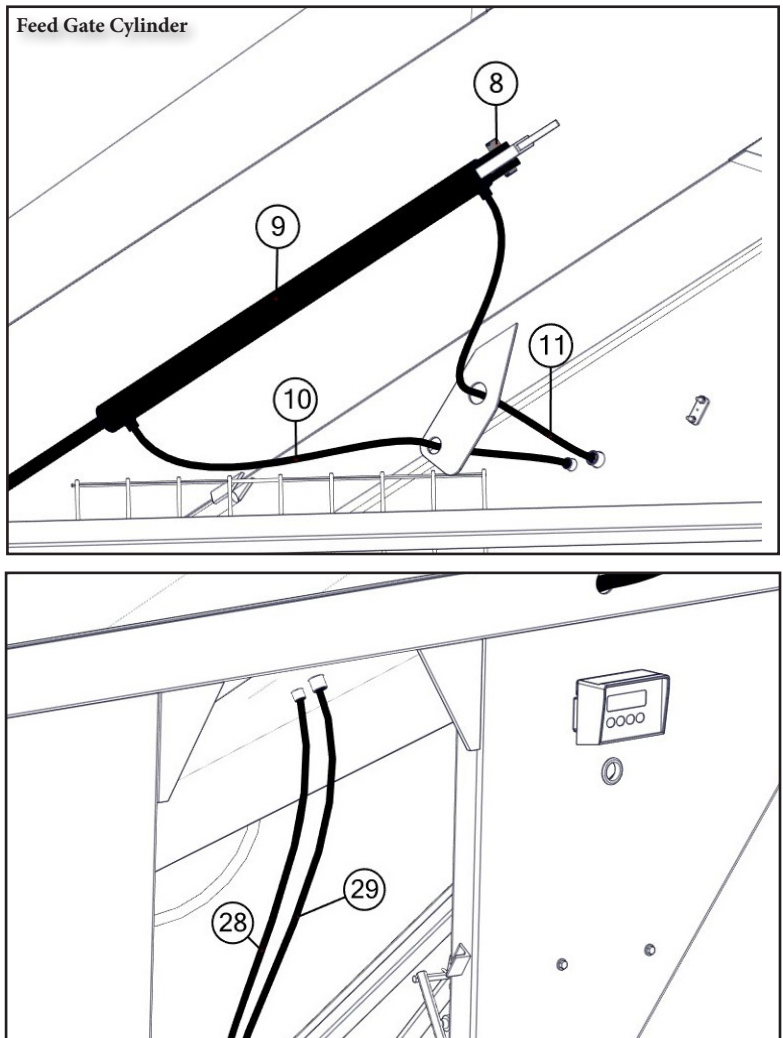
## Fold Cylinder



## Tip-Spout Cylinder



## Feed Gate Cylinder

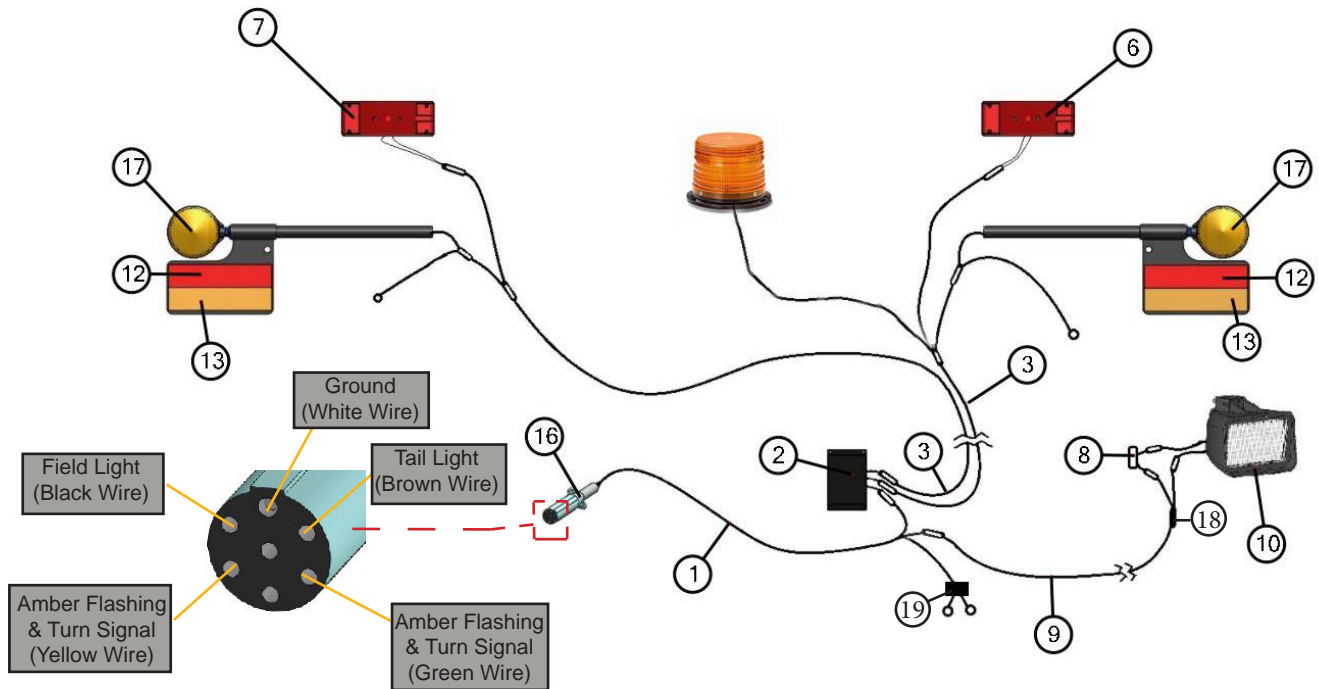


## Hydraulic Cylinders

#	Description	Part. No.
1	Hydraulic Hose 1/4" x 324" (810)	JM0030600
1	Hydraulic Hose 1/4" x 356" (1010, 1110, 1310, 1410)	JM0024983
2	3/8" male NPT x 3/8" female NPT x 3/8" female NPT; Street T	JM0018266
3	3" x 24" Welded Cushion Cylinder	JM0019644
4	Lift Cylinder Hydraulic Hose 1/4" x 21"	JM0024896
5	Hydraulic Hose 1/4" x 346" (810)	JM0027896
5	Hydraulic Hose 1/4" x 374" (1010, 1110, 1310, 1410)	JM0024984
6	PC-37 Check Valve	JM0018233
7	3/8" female NPT x 1/2" male NPT; 90 degree elbow	JM0010292
8	1" x 3.4" Clevis Pin with Cotter Pins	JM0001816
9	2" x 36" Welded Cylinder	JM0018523
10	Hydraulic Hose 1/4" x 61" (810)	JM0024905
10	Hydraulic Hose 1/4" x 43" (1010, 1110, 1310, 1410)	JM0024904
11	Hydraulic Hose 1/4" x 29" (810)	JM0030609
11	Hydraulic Hose 1/2" x 43" (1010, 1110, 1310, 1410)	JM0024906
12	Hydraulic Hose 1/4" x 456" (810)	JM0030610
12	Hydraulic Hose 1/4" x 474" (1010, 1110, 1310, 1410)	JM0024982
13	1/2"-13 x 2" Gr8 Z Hex Bolt	JM0001620
14	1/4" male NPT X 1/4" female NPT rigid; 90 degree elbow	JM0020115

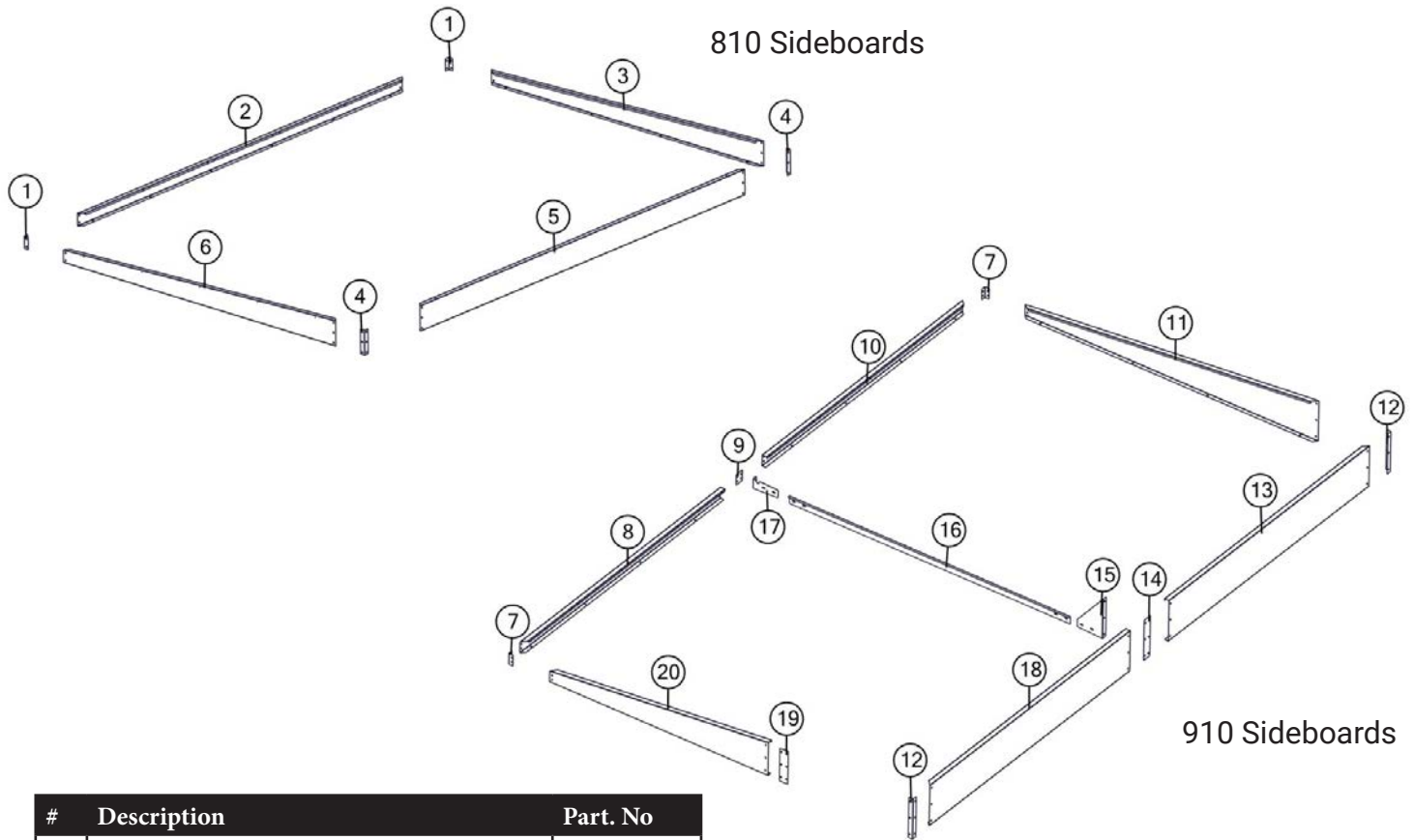
#	Description	Part. No.
15	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
16	1-3/4" x 4" Hydraulic Cylinder with Rod Clevis and Butt Tab	JM0018564
17	1/2" x 1-3/4" Pin	JM0018264
18	1/4" male NPT swivel with .032 orifice	JM0020113
19	Hydraulic Hose 1/4" x 456" (810)	JM0030610
19	Hydraulic Hose 1/4" x 474" (1010, 1110, 1310, 1410)	JM0024982
20	Mercury Switch	JM0017896
21	3/8" Wire Loom	JM0020450
22	22" Side Shooter Tip Spout	JM0017838
23	Field Light Assembly	JM0001881
24	1/4"-20 Gr5 Centerlock Hex Nut	JM0001505
25	1/4" USS Flat Washer	JM0003090
26	1/4"-20 x 1/2" Gr5 Z Hex Bolt	JM0001481
27	22" Rubber Tip Spout Addition	JM0014129
28	Hydraulic Hose 1/4" x 212" (810)	JM0030611
28	Hydraulic Hose 1/4" x 240" (1010, 1110, 1310, 1410)	JM0024985
29	Hydraulic Hose 1/4" x 212" (810)	JM0030611
29	Hydraulic Hose 1/2" x 240" (1010, 1110, 1310, 1410)	JM0024985
30	12" x 2" Dock Bumper	JM0001890

## Light Kit Assembly



#	Description	Part. No.
1	Main Wiring Harness with 7-Prong Connector End	JM0020439
2	Light Enhancer	JM0010566
3	Wiring Harness for Rear Lights (Each)	JM0020437
4	Extendable Amber Light Assembly (Left Side)	JM0018817
5	Extendable Amber Light Assembly (Right Side)	JM0018826
6	Rear Red Light, Right Side	JM0018838
7	Rear Red Light , Left Side	JM0018837
8	Mercury Switch	JM0017896
9	Field Light Wire	JM0020438
10	Field Light	JM0001881
11	Reflective Amber Decal	JM0009946
12	Reflective Red Decal	JM0009945
13	Reflective Orange Decal	JM0009944
14	Slow Moving Vehicle Emblem	JM0001616
15	Rubber Grommet	JM0016924
16	7-Prong Connector End Only	JM0010528
17	Amber Light Only	JM0018819
18	Wire Loom	JM0020450
19	12 Volt to 12 Volt Battery Charger	JM0027090

## Sideboards for 810 & 1010 Models



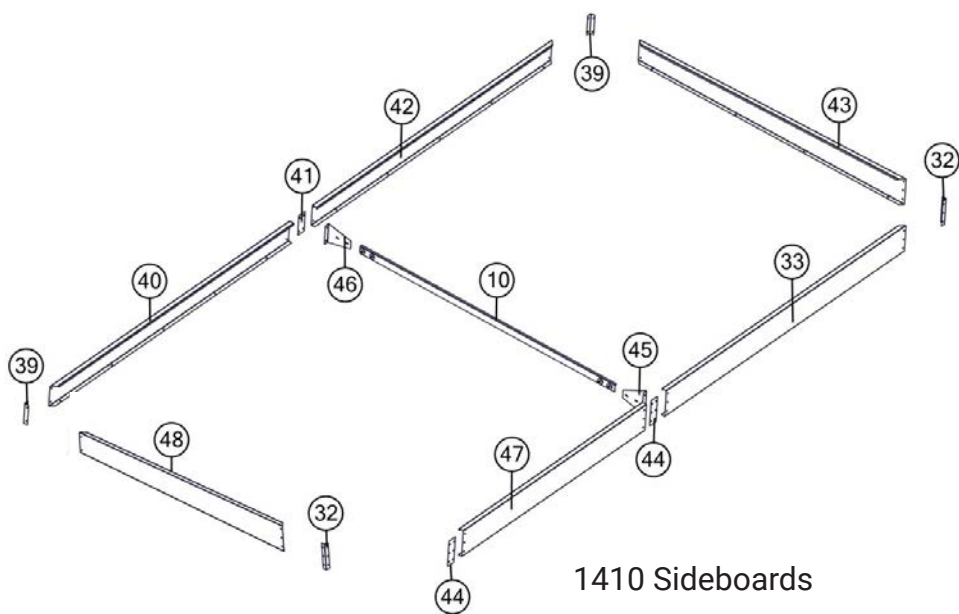
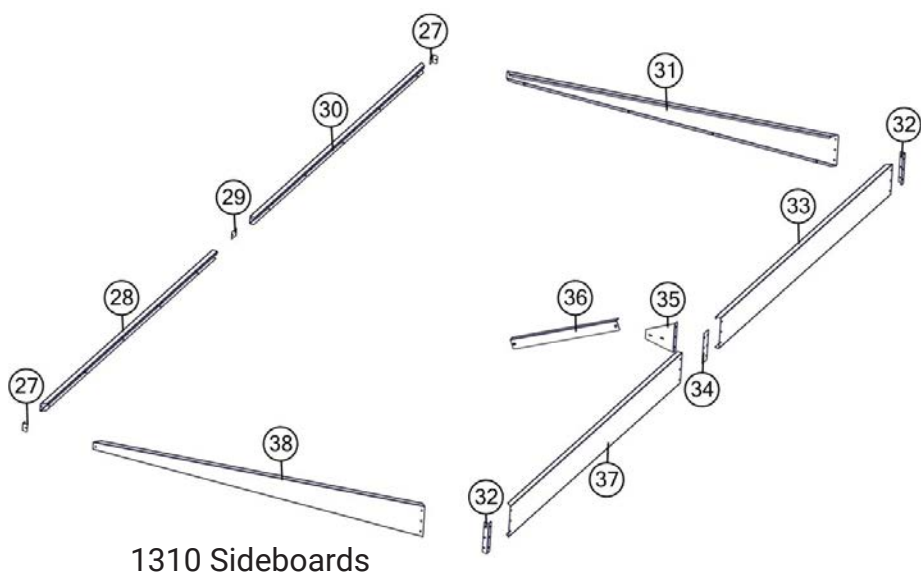
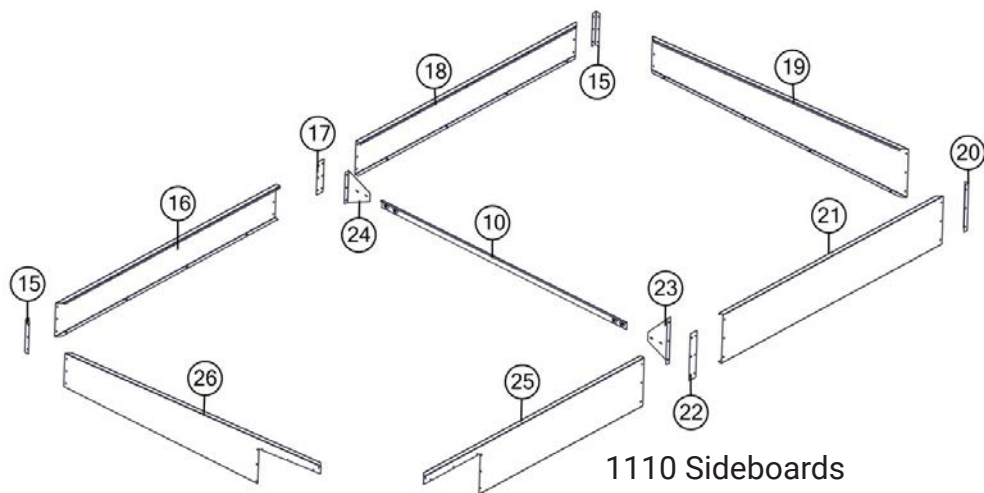
#	Description	Part. No
1	810 Low Sideboard Corner	JM0013113
2	810 Low Sideboard	JM0014019
3	810 Endboard Back	JM0014021
4	810 High Sideboard Corner	JM0013112
5	810 High Sideboard	JM0014020
6	810 Endboard Front	JM0014022
7	1010 Low Sideboard Corner	JM0013701
8	1010 Front & Back Low Sideboard	JM0013675
9	1010 Low Sideboard Splice	JM0013702
10	1010 Front & Back Low Sideboard	JM0013674
11	1010 Back Endboard	JM0013678
12	1010 High Sideboard Corner	JM0013699
13	1010 Back Half High Sideboard	JM0013671
14	1010 High Sideboard Splice	JM0013700
15	1010 High Sideboard Brace	JM0013731
16	Sideboard Brace	JM0020624
17	1010 Low Sideboard Brace	JM0013732
18	1010 Front Half High Sideboard	JM0026160
19	1010 GS Front Endboard Splice	JM0013703
20	1010 Front Endboard	JM0013676
21	810 Sideboard Set Complete	JM0027980
21	1010 Sideboard Set Complete	JM0027985

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 \*-B = Blue  
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Sideboards For 1110, 1310, & 1410 Models



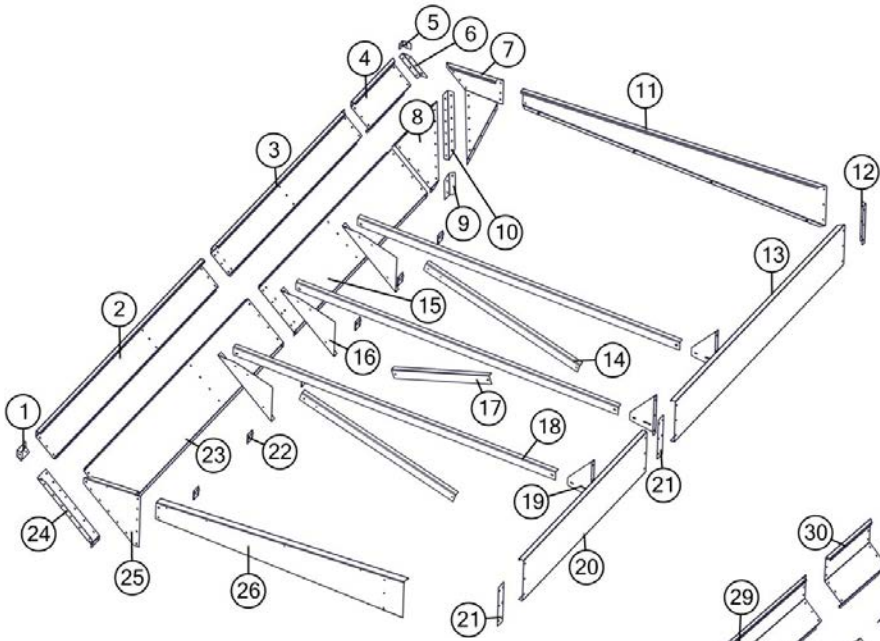
## Sideboards For 1110, 1310, & 1410 Models

#	Description	Part. No.	#	Description	Part. No.
15	1110 Low Sideboard Corner	JM0015092	34	1310 High Sideboard Splice	JM0009702
16	1110 Low Sideboard (Left)	JM0015086	35	1310 High Sideboard Brace	JM0021202
17	1110 Low Sideboard Splice	JM0015093	36	48" Inside Brace (Sideboard Brace)	JM0010933
18	1110 Low Sideboard (Right)	JM0015087	37	1310 Front Half High Sideboard	JM0020342
19	1110 Back Endboard	JM0015089	38	1310 Front End Board	JM0020347
20	1110 High Sideboard Corner	JM0015090	39	1410 Low Sideboard Corner	JM0020613
21	1110 Back Half High Sideboard	JM0015085	40	1410 Front Half Low Sideboard	JM0020609
22	1110 High Sideboard Splice	JM0015091	41	1410 Low Sideboard Brace	JM0020614
23	1110 High Sideboard Brace	JM0015095	42	1410 Back Half Low Sideboard	JM0020606
24	1110 Low Sideboard Brace	JM0015083	43	1410 Back Endboard	JM0020605
25	1110 Front Half High Sideboard	JM0026953	44	1310 High Sideboard Splice	JM0009702
26	1110 Front Endboard	JM0015088	45	1410 High Sideboard Brace	JM0020610
27	1310 Low Sideboard Corner	JM0009703	46	1410 Low Sideboard Brace	JM0020611
28	1310 Front Half Low Sideboard	JM0017351	47	1310 Front Half High Sideboard	JM0020342
29	1310 Low Sideboard Splice	JM0009704	48	1410 Front Endboard	JM0027697
30	1310 Back Half Low Sideboard	JM0017350	*	1110 Complete set with hardware	JM0027997
31	1310 Back Endboard	JM0009596	*	1310 Complete set with hardware	JM0027988
32	1310 High Sideboard Corner	JM0009700	*	1410 Complete set with hardware	JM0027989
33	1310 Back Half High Sideboard	JM0017484			

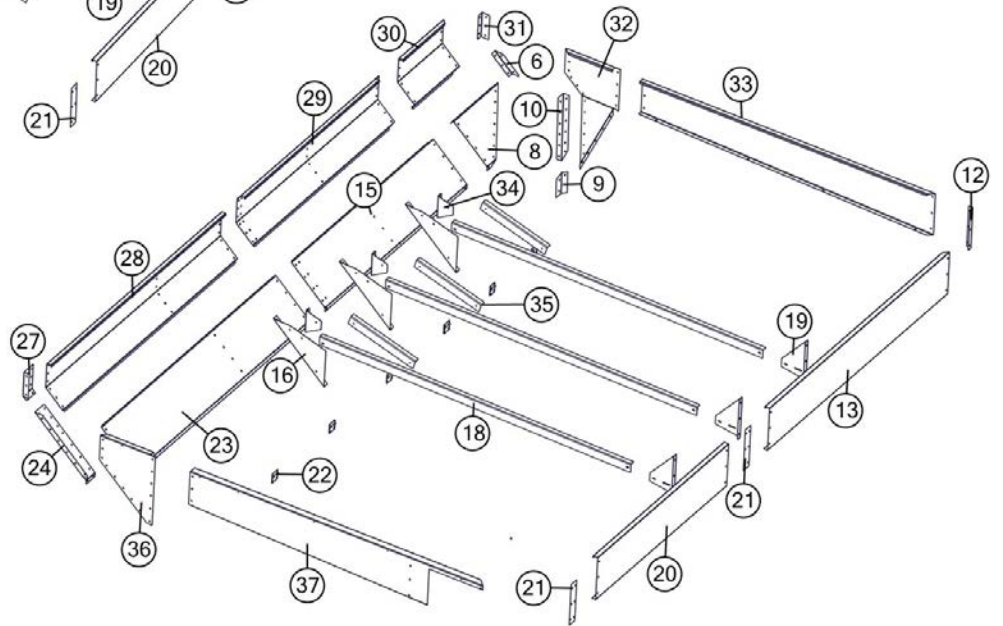
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When requesting an item with color, end the part number with -R, -B, -G, or -Y. (e.g. JM0000000-R)

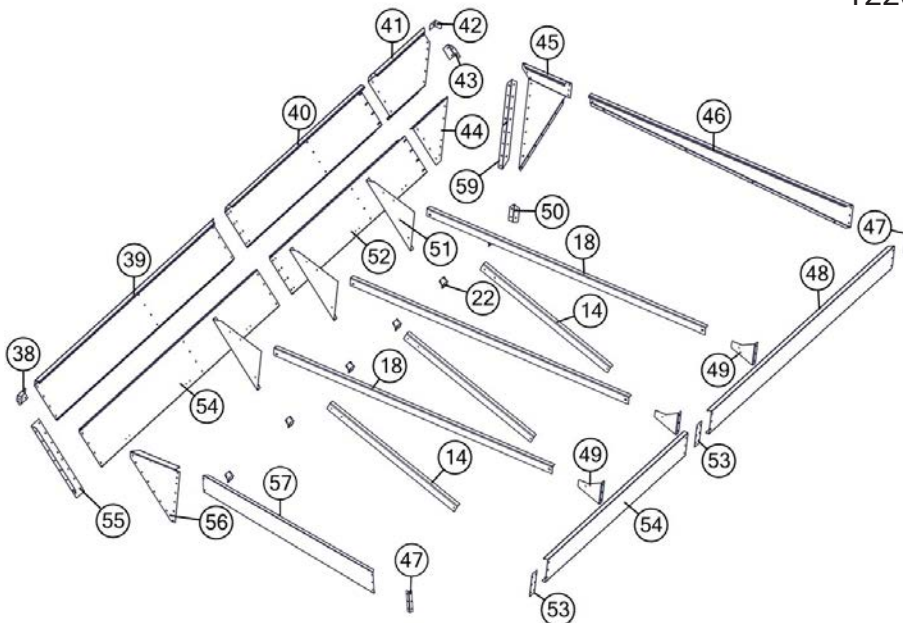
## Sideboards for 1120, 1220, & 1520 Leaner Models



1120 Sideboards



1220 Sideboards



1520 Sideboards



## Sideboards for 1120, 1220, & 1520 Leaner Models

#	Description	Part. No
1	1120 Front Top Corner	JM0007363
2	1120 Front Top Sideboard	JM0007304
3	1120 Back Top Sideboard	JM0007326
4	1120 Back Corner Top Side Tri	JM0007334
5	1120 Back Top Corner	JM0007367
6	1120 Back Tapered Corner	JM0007370
7	1120 Back Endboard Tri	JM0007362
8	1120 Back Side Bottom Tri	JM0007305
9	1120 Back Corner Inside Shedder	JM0007371
10	1120 Back Slope Corner	JM0007368
11	1120 Back Endboard	JM0007341
12	1120 Sideboard Corner	JM0010989
13	1120 Back Half High Sideboard	JM0011031
14	1120 Inside Brace	JM0007266
15	1120 Back Bottom Sideboard	JM0007307
16	Sideboard Brace	JM0007396
17	48" Inside Brace (Sideboard Brace)	JM0010933
18	Center Cross Brace	JM0007265
19	1120 High Sideboard Brace	JM0010920
20	1120 Front Half High Sideboard	JM0011034
21	1120 Sideboard Corner	JM0010989
22	Leaner Hinges	JM0025638
23	1120 Front Bottom Sideboard	JM0007303
24	1120 Front Tri Slope Corner	JM0007366
25	1120 Front Endboard Tri	JM0007338
26	1120 Front Endboard Slip Cover	JM0007337
27	1220 Front Top Corner	JM0007414
28	1220 Front Top Sideboard	JM0007400
29	1220 Back Top Sideboard	JM0007401
30	1220 Back Corner Top Side Tri	JM0007402
31	1220 Leaner Back Top Corner	JM0025307

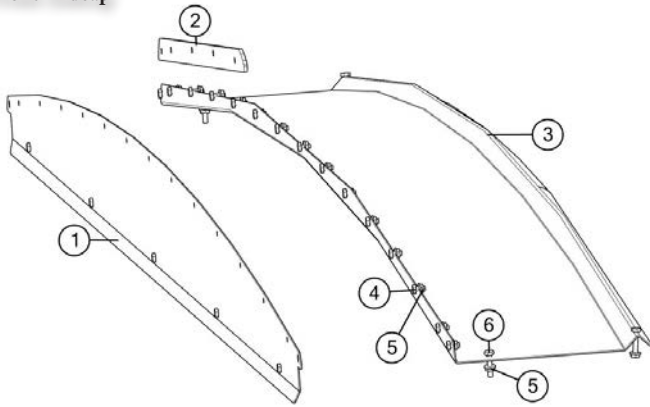
#	Description	Part. No
32	1220 Back Endboard Tri	JM0007412
33	1220 Back Endboard	JM0007410
34	1220 High Sideboard Brace	JM0007420
35	1220 High to Low Crossbrace	JM0007419
36	1220 Front Endboard Tri	JM0007405
37	1220 Front Endboard	JM0007404
38	1520 Front Top Corner	JM0007249
39	1520 Front Top Sideboard	JM0007238
40	1520 Back Top Sideboard	JM0007240
41	1520 Back Corner Top Side Tri	JM0007241
42	1520 Back Top Corner	JM0007252
43	1520 Back Tapered Corner	JM0007253
44	1520 Back Side Bottom Tri	JM0007233
45	1520 Back Endboard Tri	JM0007248
46	1520 Back Endboard	JM0007244
47	1310 High Sideboard Corner	JM0009700
48	1310 Back Half High Sideboard	JM0017484
49	High Sideboard Brace (High Side)	JM0007267
50	1520 Back Corner Inside Shedder	JM0007254
51	1520 Sideboard Brace	JM0007268
52	1520 Back Bottom Sideboard	JM0007239
53	1310 High Sideboard Splice	JM0009702
54	1310 Front Half High Sideboard	JM0017349
55	1520 Front Tri Slope Corner	JM0007250
56	1520 Front Endboard Tri	JM0007243
57	1520 Front Endboard - Slip Cover	JM0027746
58	1310 Front Endboard Splice	JM0009705
59	1520 Back Slope Corner	JM0007251
*	1120 Complete set with hardware	JM0027996
*	1220 Complete set with hardware	JM0027995
*	1520 Complete set with hardware	JM0027993

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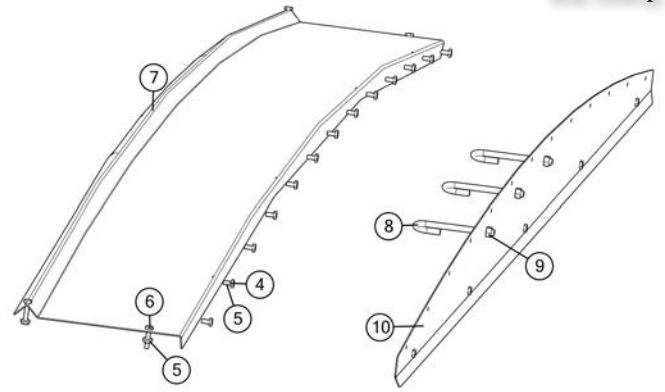
When requesting an item with color, end the part number with -R, -B, -G, or -Y. (e.g. JM0000000-R)

# Roll Tarp Assembly

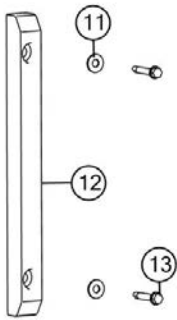
Front Endcap



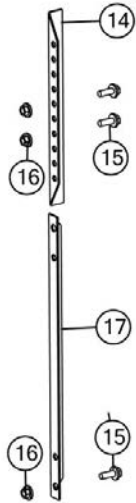
Rear Endcap



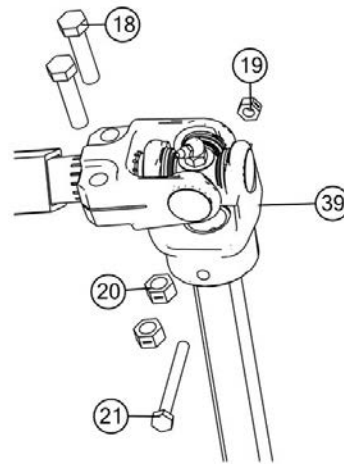
Tarp Stand-Off



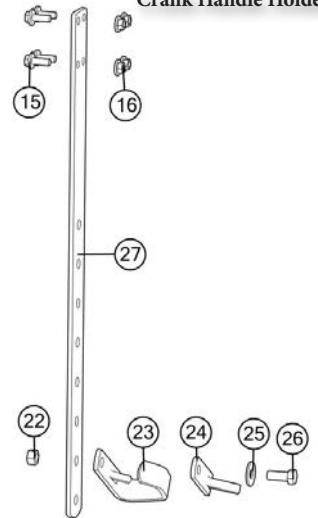
Prop-Up Bars



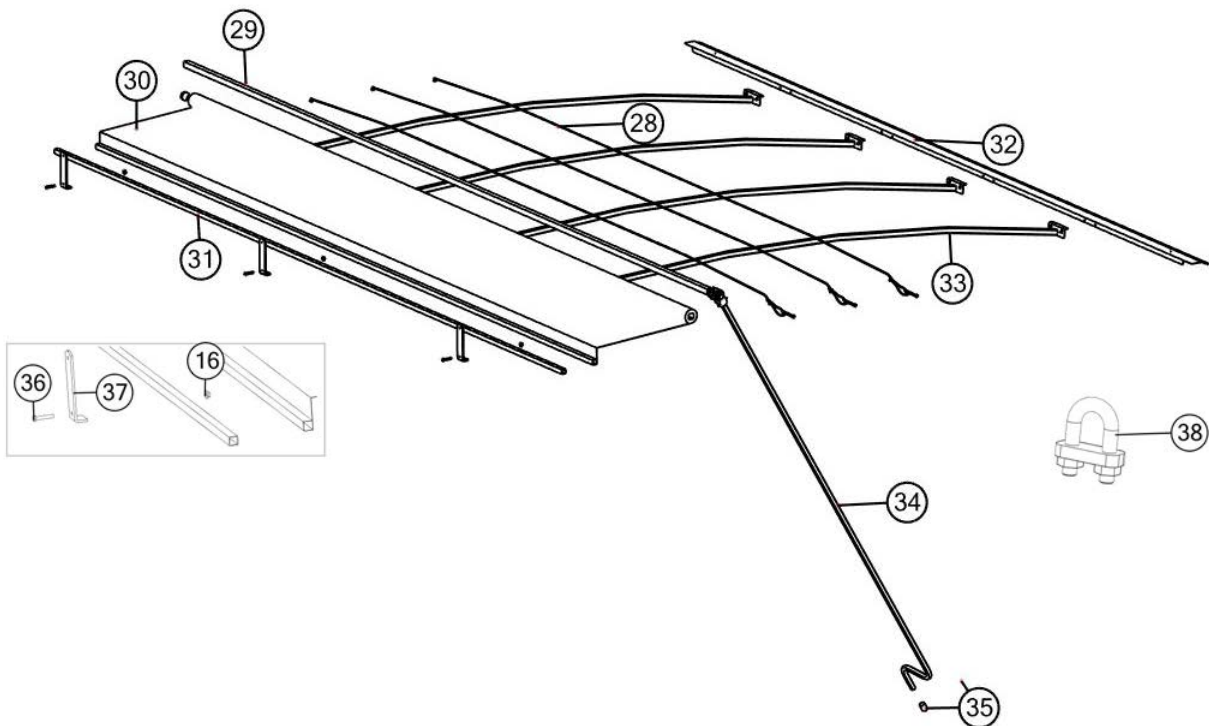
Crank Handle U-Joint



Crank Handle Holder



Tarp Assembly



## Roll Tarp Assembly

#	Description	Part. No.	#	Description	Part. No.
1	Front End Cap Plate (810, 1010, 1110, 1310, 1410)	JM0000194	25	1/2" USS Flat Washer (12FW)	JM0003082
1	Front Long End Cap Plate (1120, 1220, 1520)	JM0007263	26	1/2"-13 x 1-1/4" Gr5 Z Hex Bolt (12114 HB-5)	JM0001513
1	Front Short End Cap Plate (1120, 1220, 1520)	JM0007261	27	Crank Holder (ABCH-1EL)	JM0000164
2	Tarp Nylon Riser	JM0000196	28	3/16" Cable (810)	JM0022194
3	Front Arched End Cap (810, 1010, 1110, 1310, 1410)	JM0000195	28	3/16" Cable (1010, 1120)	JM0021408
3	Front Long Arched End Cap (1120, 1220, 1520)	JM0007259	28	3/16" Cable (1310, 1410, 1520)	JM0015701
3	Front Short Arched End Cap (1120, 1220, 1520)	JM0007256	29	1 1/4" Square Roll Tube (810)	JM0022191
4	1/4"-20 x 1/2" Gr5 Z Hex Bolt	JM0001481	29	1 1/4" Square Roll Tube (1010, 1110, 1120, 1220)	JM0021334
5	1/4"-20 Gr5 Z SF Hex Nut	JM0001630	29	1 1/4" Square Roll Tube (1310, 1410,1520)	JM0018968
6	1/4"-20 x 1-1/4" Gr5 Z Hex Bolt	JM0016673	30	Tarp with Rivets (810)	JM0018184
7	Rear Arched End Cap (810, 1010, 1110, 1310, 1410)	JM0000172	30	Tarp with Rivets (1010, 1110)	JM0021336
7	Rear Long Arched End Cap (1120, 1220, 1520)	JM0007257	30	Tarp with Rivets (1310, 1410)	JM0018966
7	Rear Short Arched End Cap (1120, 1220, 1520)	JM0007255	30	Tarp with Rivets (1120,1220)	JM0021378
8	3/8"-16 Gr5 Z J-Bolt (384JB)	JM0001519	30	Tarp with Rivets (1520)	JM0021379
9	3/8"-16 Gr5 Z Centerlock Hex Nut (38G5LN)	JM0001512	31	1" Square Tie-Down Tube (810)	JM0000188
10	Rear End Cap Plate (810, 1010, 1110, 1310, 1410)	JM0000169	31	1" Square Tie-Down Tube (1010, 1110, 1120,1220)	JM0021331
10	Rear Long End Cap Plate (1120, 1220, 1520)	JM0007262	31	1" Square Tie-Down Tube (1310, 1410,1520)	JM0018962
10	Rear Short End Cap Plate (1120, 1220, 1520)	JM0007260	32	Tightening Lip x 192" (810)	JM0000155
11	1/4" Flat Washer (14-W)	JM0003090	32	Tightening Lip (1010, 1110) Front	JM0013654
12	Tarp Standoff (TSST375)	JM0001889	32	Tightening Lip (1010, 1110) Rear	JM0013653
13	1/4" x 1-1/2" Self Tapping Screw (STS-1L)	JM0001571	32	Tightening Lip (1310, 1520) Front	JM0017842
14	Upper Adjustable Bow Support 13"	JM0021404	32	Tightening Lip (1310, 1520) Rear	JM0017843
15	3/8"-16 x 1" Gr5 Z SF Hex Bolt (381-FB)	JM0002092	32	Tightening Lip (1120, 1220) Front	JM0021397
16	3/8"-16 Gr5 Z SF Hex Nut (38-FN)	JM0002152	32	Tightening Lip (1120, 1220) Rear	JM0021396
17	Lower Adjustable Bow Support 19" (ABS-2)	JM0000179	33	Arched Tarp Bows (810-1410)	JM0000157
18	3/8"-16 x 1-1/2" Gr5 Z Hex Bolt (160022)	JM0001659	33	Arched Tarp Bows (1120,1220,1520)	JM0021405
19	1/4"-20 Gr5 Z Centerlock Hex Nut (HLN-114)	JM0001505	34	Crank with Splined U-Joint (810)	JM0000185
20	3/8"-16 Gr5 Z Centerlock Hex Nut (38G5LN)	JM0001512	34	Crank with Splined U-Joint (1010 - 1520)	JM0019888
21	1/4"-20 x 2-1/2" Gr5 Z Hex Bolt (14212-HB)	JM0001506	35	Yellow Cap (112950)	JM0018963
22	1/2"-13 Gr5 Z Centerlock Hex Nut (12-13LN)	JM0001511	36	3/8"-16 x 2" Gr5 Z Hex Bolt (382-HB)	JM0001510
23	Roll Tarp - Handle Hanger PP (CH-1)	JM0002967	37	Tarp Stop Bracket (TSB-1)	JM0000187
24	Roll Tarp - Handle Hanger Rubber Flap	JM0002551	38	Cable Clamp-Small	JM0001514
			39	U-Joint (SUJ-1)	JM0001517
			39	U-Joint	JM0001517