

Rev. 1.5.2018

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.

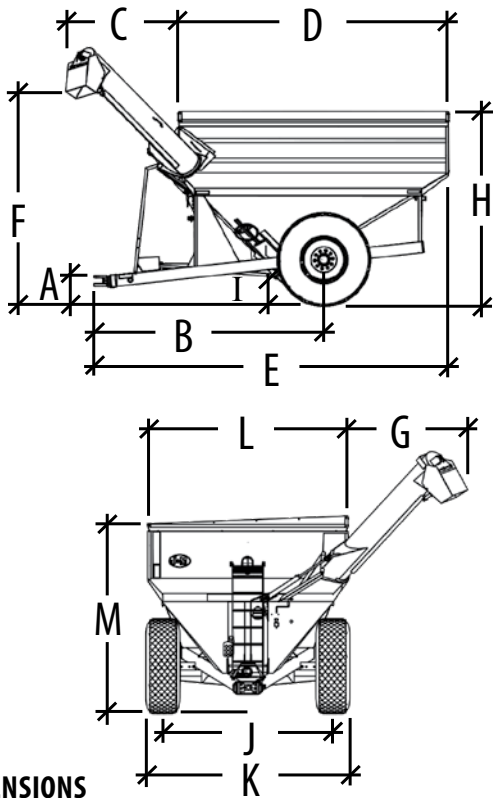
Use only genuine J. & M. service parts. Substitute parts may void warranty and may not meet standards required for safe and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

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

Purchased From: _____

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

Specifications



SPECIFICATIONS

750-16	
Capacity	750 Bushels
Auger, One Vertical	16" Diameter
Unload Time	3.5 minutes
Wheels (2)	21x32, 27x32, 18x42 16x46 or 25x36
Spindles (2)	4 1/2" Diameter
PTO	1,000 rpm
Tires (2)	24.5x32, 30.5x32, 520/85R42-2, 800/60R32-R3-2
Tongue Weight	
Empty	1,150 lbs.
Loaded	2,850 lbs.
Total Weight (approx.)	7,650 lbs.

DIMENSIONS

Model	A	B	C	D	E	F	G	H	I	J	K	L	M
750-16	1'-7"	12'-9"	6'-5" 7'-9"	14'-0"	19'-1"	12'-7" 13'-10"	7'-0" 8'-0"	11'-5"	1'-5"	10'-0" 12'-0"	12'-6"	11'-9"	10'-11"


General Information


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

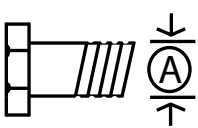
Always tighten hardware to these values unless a different torque or tightening procedure is listed for specific application.

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

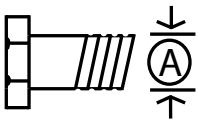


SAE Grade 5
3 Radial Dashes



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

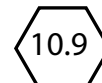


METRIC SERIES TORQUE CHART



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

TIGHTENING WHEEL NUTS

Standard 3/4" wheel studs and nuts should be tightened to torque 500 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.

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Safety Rules



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 (CDI-112)
2	JM0010163	Warning, High Pressure (CDW-108)
3	JM0014979	Warning, General (CDW-107)
4	JM0018039	Warning, Keep Hands Away (CDW-109)
5	JM0010150	Warning, Lug Nuts (CDW-110)
6	JM0018035	Danger, Keep Hands Away (CDD-102)
7	JM0018034	Danger, Keep Off Ladder (CDD-101)
8	JM0015099	Danger, Electric Lines (CDD-104)
9	JM0018033	Danger, Do Not Enter Tank (CDD-103)
10	JM0018037	Danger, Suffocation (CDD-105)
11	JM0018036	Danger, Rotating Driveline (CDD-106)
12	JM0018038	Farm Use Only (CDI-113)
13	JM0025433	Open (CDI-114)
14	JM0025434	Closed (CDI-115)
15	JM0025435	Check PTO Overlap
16	JM0018043	Warning, Check Lug Nuts (CDW-110)
17	JM0015151	J&M Oval Decal, Large (CDD-111)
18	JM0010179	J&M Oval Decal, Medium (CDD-116)
19	Specify	OAS Black Fade Stripe
20	Specify	AS Black Fade Stripe

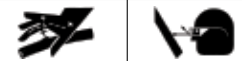
IMPORTANT

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 slow position.

ITEM #1

⚠ WARNING



HIGH PRESSURE FLUID HAZARD

- To prevent serious injury or death:
- Relieve pressure on system before repairing or adjusting or disconnecting
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair.

ITEM #2

⚠ WARNING

- DO NOT ADJUST, SERVICE, CLEAN OR LUBRICATE THE MACHINE UNTIL ALL POWER IS SHUT OFF.
- KEEP ALL SAFETY SHIELDS IN PLACE.
- KEEP PEOPLE AND OBJECTS CLEAR OF EQUIPMENT BEFORE APPLYING POWER OR MOVING THE MACHINE.
- PREVENT PEOPLE FROM RIDING ON THE MACHINE. FALLING CAN CAUSE SERIOUS INJURY OR DEATH.
- BEFORE HIGHWAY TRAVEL, SECURE A SLOW-MOVING VEHICLE EMBLEM TO THE REAR OF THE MACHINE. MAKE SURE ALL FLASHER, TURN INDICATOR AND BRAKE LIGHTS ARE WORKING PROPERLY BEFORE HIGHWAY TRAVEL.

ITEM #3

⚠ WARNING

KEEP HANDS, FEET, HAIR AND CLOTHING AWAY FROM MOVING PARTS

ITEM #4

⚠ WARNING

KEEP LUG NUTS TIGHTENED

ITEM #5

⚠ DANGER



KEEP HANDS AND CLOTHING AWAY FROM MOVING PARTS

ITEM #6

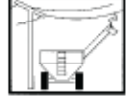
⚠ DANGER



KEEP OFF THE LADDER WHILE THE MACHINE IS OPERATING. IN TRANSPORT OR THE UNLOADING AUGER IS IN MOTION

ITEM #7

⚠ DANGER



SERIOUS INJURY OR DEATH CAN RESULT FROM CONTACT WITH ELECTRIC LINES. USE CARE WHEN WORKING OR OPERATING THIS MACHINE NEAR ELECTRIC LINES TO AVOID CONTACT.

ITEM #8

⚠ DANGER



DO NOT ENTER GRAIN TANK WHEN AUGER IS RUNNING.

ITEM #9

⚠ DANGER



ROTATING DRIVELINE CONTACT CAN CAUSE DEATH. KEEP AWAY!

- Keep all guards in place when operating.
- Do NOT stand on steps or climb ladder until all power is shut off.
- Keep hands, feet, hair and clothing away from moving parts.

ITEM #11

OPEN

ITEM #13

CLOSED

ITEM #14

CHECK PTO OVERLAP

CHECK MANUAL FOR PTO LENGTH. INCORRECT PTO OVERLAP MAY CAUSE EXTENSIVE DAMAGE TO DRIVE SYSTEM.

ITEM #15

CHECK ALL WHEEL NUTS

DEALER OR MANUFACTURER IS NOT RESPONSIBLE FOR DAMAGE CAUSED BY LOOSE WHEEL NUTS.

ITEM #16

FOR FARM USE ONLY

ITEM #12

⚠ DANGER

FLOWING GRAIN TRAPS AND SUFFOCATES VICTIMS IN SECONDS!

NEVER PLAY IN OR ON GRAIN CART



YOU CAN DIE IN SECONDS IN FLOWING GRAIN!



ITEM #10



ITEM #20



ITEM #19



ITEM #17



ITEM #18

Initial Operation and Maintenance

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?

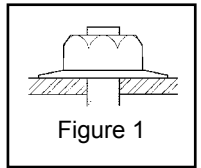
TIRE PRESSURE: Are the tires properly inflated? The following is to be used as a **general guide** for tire inflation for cyclic use. Figures can vary depending on specific brand of tire used. **It is important that tires are inspected before and after the unit is loaded. The tire should stand up with 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-R1-2	24
24.5 x 32-R3-2	24
520/85R42-2	44
30.5 x 32-R1-2	34
30.5 x 32-R1-2-18	36
800/60R32-R3-2	46

Operating Instructions

WHEEL NUTS: Are the wheel nuts properly fastened? **Torque to 500 Lbs.-Ft. for 3/4" 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?

WARNING

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 750-16 requires a 200 hp tractor or larger.

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 objects (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.

Loading and Unloading the Grain Cart

- 1) With the gate indicator in the closed position, fill the tank with grain.
- 2) With the PTO disengaged, fold the discharge auger to the upright position.
- 3) **IMPORTANT:** After the upper auger is in the upright position, be sure to start the PTO at a SLOW RATE OF SPEED until the lugs on the upper auger engage the drive dog on the bottom auger. Failure to follow this procedure may cause extensive damage to both the drive dog and the drive line.
- 4) Increase the PTO speed and slowly open the inside tank gate until the gate indicator rod located above the upper auger is halfway between the Open and Closed position. When grain begins flowing from the discharge auger, continue to open the gate to obtain the desired unload rate.
- 5) To stop unloading grain, return the inside tank gate to the closed position and allow the material inside the auger to unload. **For complete cleanout, gradually close the inside tank gate.** Once the grain has ceased to flow, disengage the PTO and allow its rotation to come to a complete stop. The upper auger is now ready to be returned to the stow position. **IMPORTANT:** Do Not Pull the grain cart through the field with the unloading auger in the upright position. Failure to return the auger to the lowered stow position may damage the hinge and greatly reduce the life of the auger system.

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

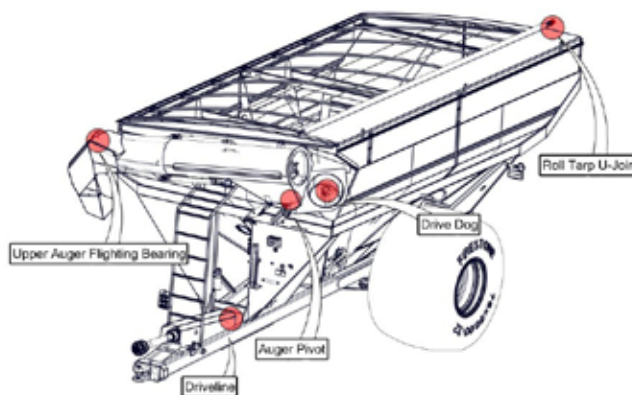
PTO & DRIVELINE: The grease fittings on the PTO should be serviced after every 8 hours of use. Service the grease fittings on each of the drive bearings and also the universal joint after every 8 hours of use.

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. Re-check 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) of gearbox lubricant. The gearbox is properly filled when half full of lubricant. DO NOT OVERFILL. Use EP 80-90 gearbox lubricant or equivalent.

Roll Tarp U-Joint	Once Annually
Upper Auger Flighting	Every 8hrs of use.
Auger Pivot	Every 8hrs of use.
Driveline	Every 8hrs of use.
Drive Dog	Every 8hrs of use.



Routine Maintenance

WARNING

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

- Re-pack 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 is 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.
- Make sure wheel nuts are tight before operating the grain cart. Wheel Nuts should be checked during initial operation of the cart and after every 10 hours of use.
- Make sure set screws are tight in bearings along drive line and in U-joints.

Trouble Shooting

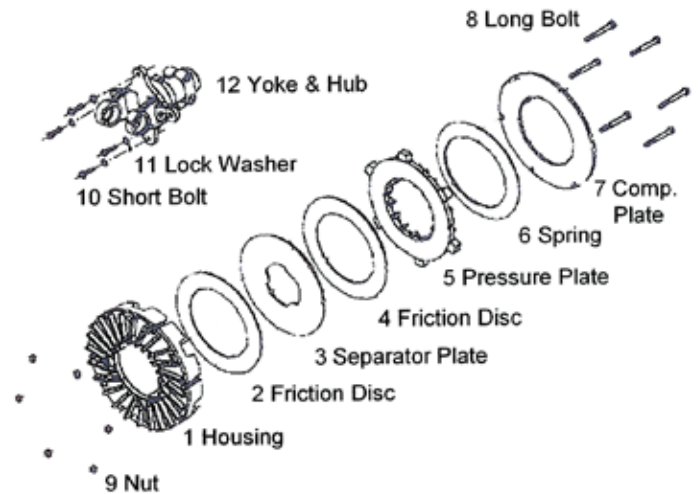
WARNING

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. 14)	Remove restrictor fittings from outside hydraulic cylinder and clean out dirt
	Faulty Check Valve	Replace Check Valve
	Upper flighting and lower flighting are locked together (see pg. 14)	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.13)	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	Straighten or replace auger flighting
	Drive shaft is bent	Replace or straighten drive shaft
Grain flow stoppage	Bolt sheared in drive dog	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.)
	Folding auger before complete stop	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.
	PTO key sheared	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 replace folding cylinder if necessary. Remember to lower auger to the field position after unloading.

Adjusting the Slip Clutch

- 1) Make sure the tractor is off and the PTO is disengaged.
- 2) Disconnect the driveline from the tractor.
- 3) Locate the (6) bolts (Item 8) on the O.D. of the clutch pack. Loosen the bolts until they rotate freely, finger tighten each bolt, and then tighten each bolt one half turn.
- 4) Attach the implement to the tractor with a hitch pin, and the drive line to the tractor PTO shaft.
- 5) Start the tractor. Engage the PTO and run a few seconds, or until the friction clutch visibly smokes.
- 6) Disengage the tractor PTO and shut the tractor off.
- 7) Disconnect the driveline from the tractor.
- 8) Tighten the (6) bolts (Item 8) on the O.D. of the clutch pack until the compression plate (Item 7) is in contact with the housing (Item 1), then keep tightening each bolt to 30 ft. lbs.
- 9) Locate the (4) bolts (Item 10) that attach the yoke & hub (Item 12) to the clutch pack and check that each bolt is tightened to 30 ft. lbs.



Adjusting the Lower Flighting and Hanger Bushing Assembly

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 reattaching.

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 its 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.

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.

Repair Parts List and Diagrams

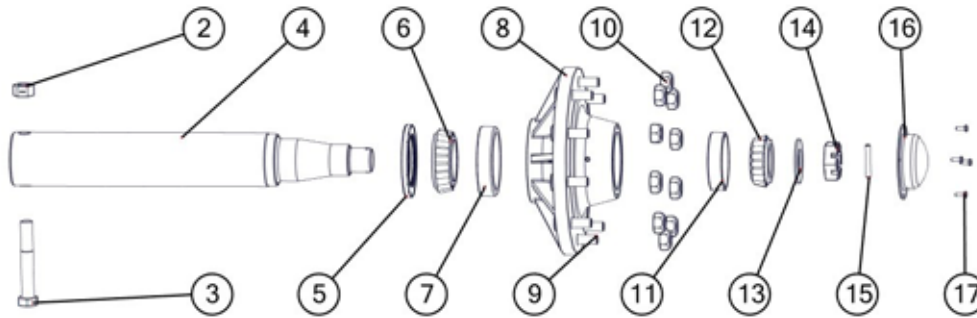
When performing maintenance work, wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing and head. Follow the Operator's Manual instructions to ensure safe and proper maintenance and repair.

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

WARNING

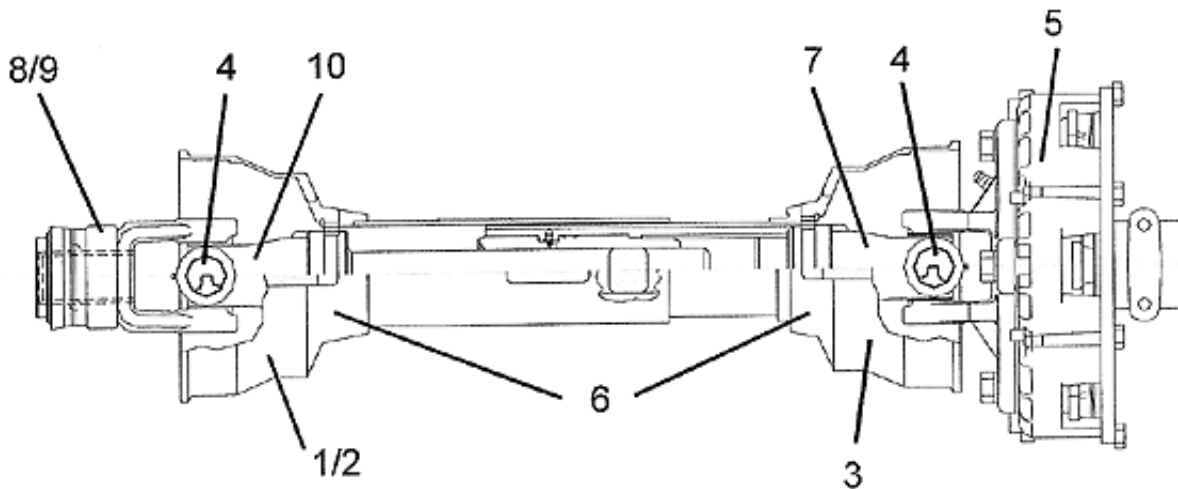
MAKE SURE ALL POWER IS SHUT OFF BEFORE PERFORMING ANY MAINTENANCE OR REPAIR WORK.

Hub & Spindle Assembly W-881



#	Description	Part. No.
1	Hub and Spindle Assembly Complete 20-1/4" (3/4" Studs) (HSA-650D) (Walking Tandem Duals)(FAA)(HSA-650D)	JM0019940
1	Hub and Spindle Assembly Complete 30-1/2" (3/4" Studs) (Standard Axle)(HSA-650)	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) (HSA-650-34-BOA)	JM0034483
1	Hub and Spindle Assembly Complete 27-1/2" (22MM Studs)(900 Tire & Larger) (Fully Adjustable Axle)(HSA-650-22MM-BOA)	JM0034354
2	1"-8 Gr5 Z Centerlock Hex Nut (1G5LN)(HLN-1)	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 (281900BOA)	JM0007132
4	4-1/2" x 20-1/4" Spindle (281900S)(4122014-1144)	JM0019937
5	Seal (6" OD - 3-3/4" ID) for hub w/ scales (since March 2000)(750-35)(37605SA)	JM0021456
5	Seal (6" OD) 1-906979 (CR-43771)	JM0018955
6	Large Bearing (910346)(4T-HM218248)	JM0018849
7	Large Race (HM212049)(910344)	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)	JM0034356
9	3/4"-16 Wheel Stud (913564)	JM0018957
9	22mm Wheel Stud (22-MMS)	JM0019178
10	3/4"-16 Wheel Nut (913571)	JM0018958
10	22mm Wheel Nut (22-MMNW)	JM0019192
11	Small Race (HM212011)(910384)	JM0018854
12	Small Bearing (910347)(HM212049)	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

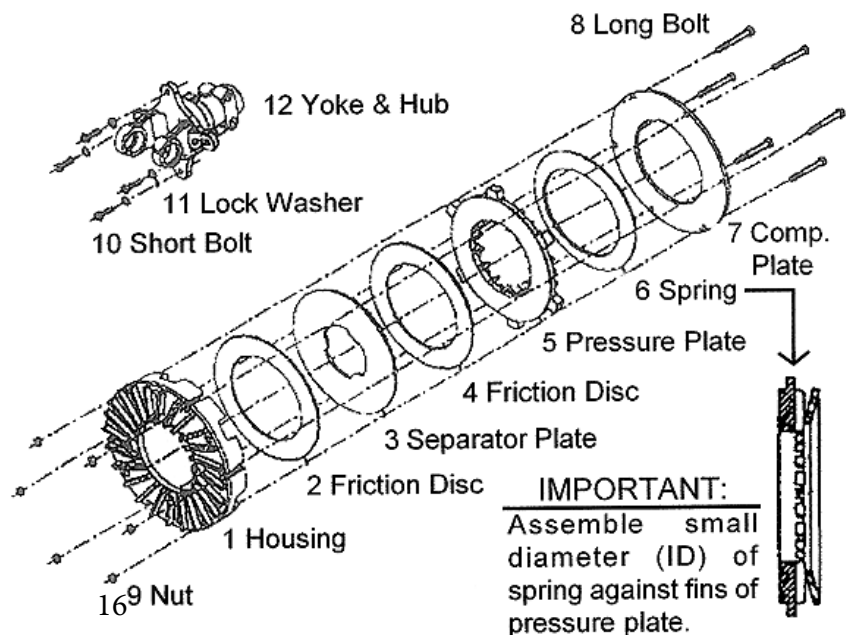
Power Take-Off (PTO) Shaft Assembly
Weasler Manufactured PTO with New Style Slip Clutch (Since June 1997)(Black in Color)



#	Description	Part. No.
1	Front Half of PTO, 1-3/8"-21 Spline (91-1400-F-138)	JM0026025
2	Front Half of PTO, 1-3/4"-20 Spline (91-1400-F-134)	JM0026026
3	Back Half of PTO with Slip Clutch, Self Adjusting (97-18615B)	JM0026027
4	14R Cross Kit, PTO or U-Joint (03-10134)	JM0024310
5	Lining, Friction Disc, Old Style, 5-1/4" OD - 3-1/2" ID, (11-10143)	JM0026029
5	Lining, Friction Disc, New Style, 6-1/4" OD - 3-7/8" ID, Started June 1997 (11-11167)	JM0026031
6	Complete Shield with Nylon Bearing Retainer (1628ICS)	JM0026032
6	Front Half of Shield with Retainer (1628ICS-F)	JM0026033
6	Back Half of Shield with Retainer (1628ICS-B)	JM0026034
7	Yoke & Tube Assembly (98-15972)	JM0026035
8	Spring-Lok Yoke 1-3/8" (14122-1012)	JM0026036
9	Spring-Lok Yoke 1-3/4" (14011-1960)	JM0026037
10	Yoke & Shaft Assembly (99-16281)	JM0026038
11	PTO Shaft Complete 1-3/8" (91-1400-138)	JM0026039
11	PTO Shaft Complete 1-3/4" (91-1400-134)	JM0026045

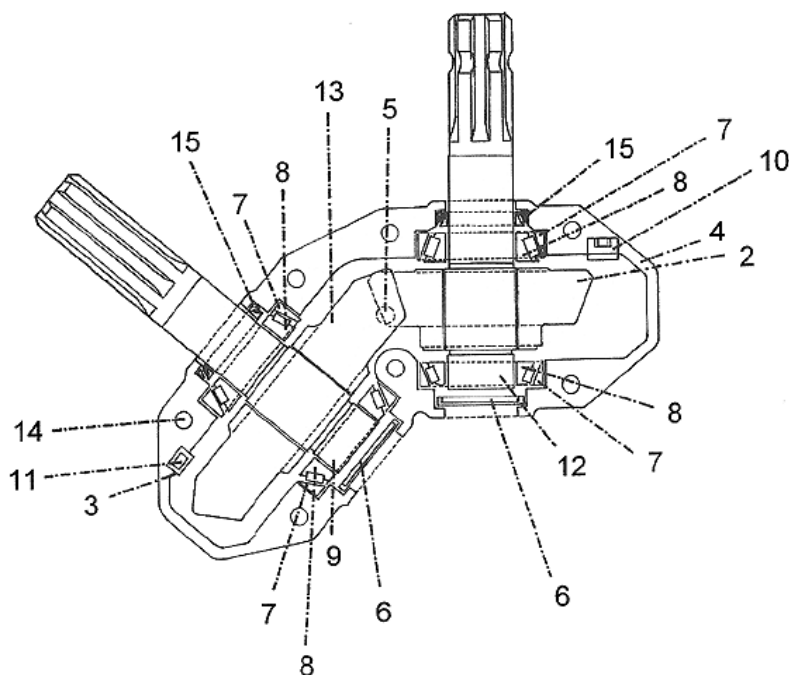
Self Adjusting Slip Clutch (Since June 1997)

#	Description	Part. No.
1	Housing (11-01HS)	JM0026046
2	Friction Disc (11-11167)	JM0026031
3	Separator Disc (11-02SP)	JM0026047
4	Friction Disc (11-11167)	JM0026031
5	Pressure Plate (11-05PP)	JM0026048
6	Spring (11-06SP)	JM0026049
7	Compression Plate (11-07CP)	JM0026050
8	Long Bolt (11-08LB)	JM0026051
9	Nut (11-09NT)	JM0026052
10	Short Bolt (11-10SB)	JM0026053
11	Lock Washer (11-11LW)	JM0026054
12	Yoke & Hub (11-12YH)	JM0026055
13	Slip Clutch Complete (11-13SC)	JM0026056

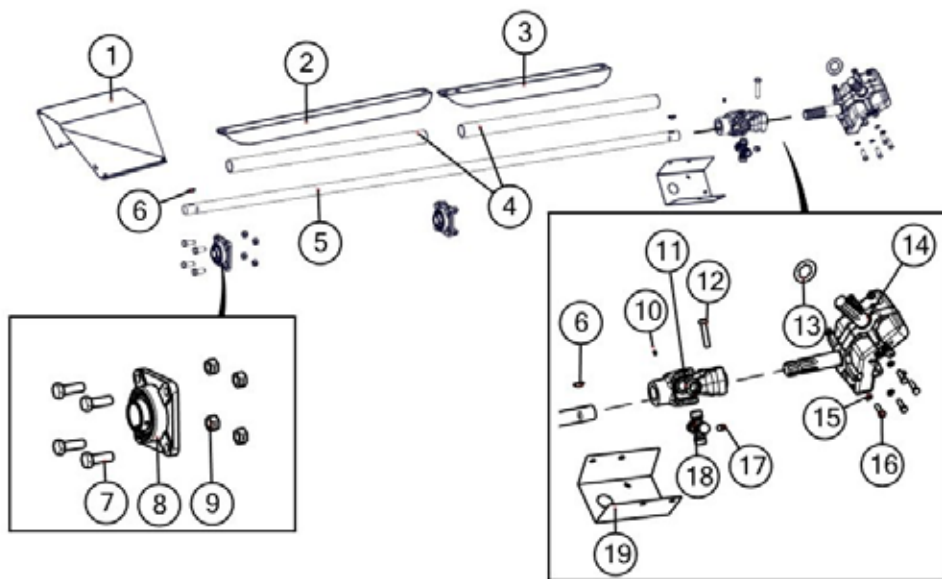


130 Degree Gearbox Assembly For 14" & 16" Diameter Augers (SUPERIOR)

#	Description	Part. No.
1	130 Degree Gearbox Complete (H51AES)	JM0018766
2	18 Tooth Gear, 1.6-1 (H51S18)	JM0025071
2	19 Tooth Gear 1.47-1 (H51S19)	JM0025072
3	Bushing, 1/2" x 1/4" Reducer (4003VB)	JM0025073
4	Casting Mod Complete, 2 pieces (H00001-1)	JM0025074
5	Plain Plug (200300)	JM0025075
6	End Cap (400301)	JM0025076
7	Bearing Cup, 14276 (414276)	JM0025077
8	Bearing Cone, 14137A (514137)	JM0025078
9	Output Shaft, 8-3/8" Long (H00111-02)	JM0025079
10	Solid Plug (400300)	JM0025080
11	Vented Plug (2003PR)	JM0025081
12	Input Shaft, 7-7/8" Long (H00111-01)	JM0025082
13	29 Tooth Gear, 1.61-1 (H51S29)	JM0025083
13	28 Tooth Gear (H51S28)	JM0025084
14	2-1/4" Bolt (438225)	JM0025085
15	Seal, 1-3/8" (CR13569)(513569)	JM0025086



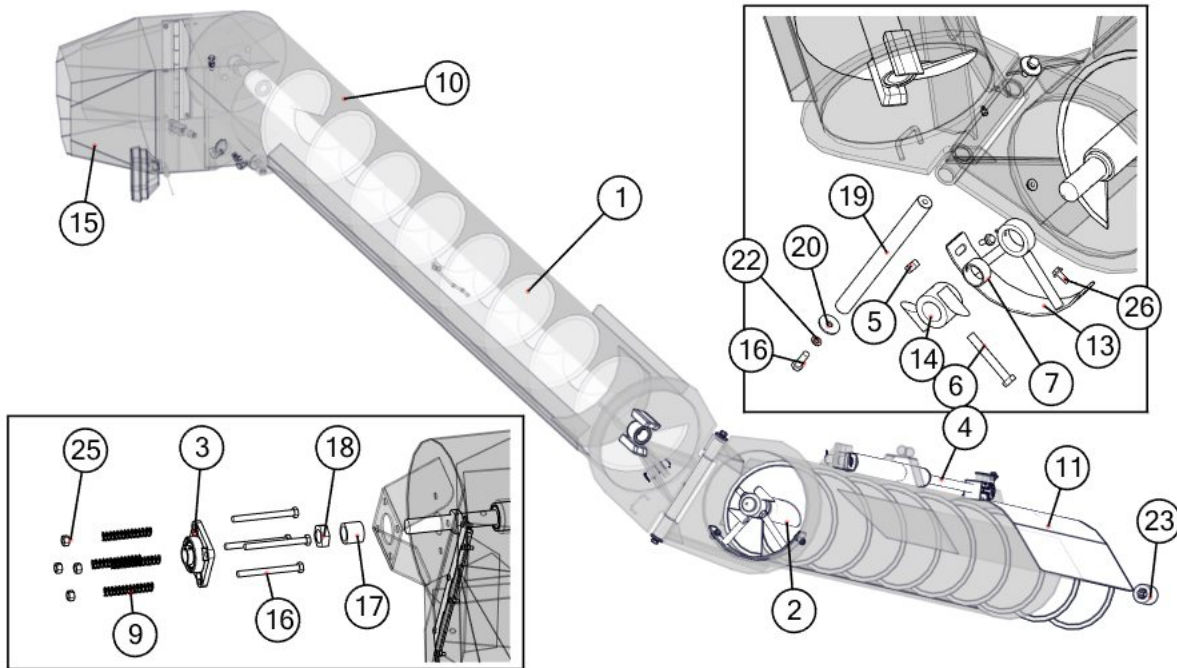
Drive Line Assembly



#	Description	Part. No.
1	Step Shield	JM0013388
2	Driveline Shield 14" (GDS-114-F)	JM0012692
3	Driveline Shield 14" (GDS-114-F)	JM0012692
4	Driveline Cover (PVC)	JM0027151
5	Driveline 89" x 1-1/4" (DS-89)	JM0024309
6	Driveline Key 5/16" x 1-1/4" (516114)	JM0024326
7	5/8"-11 x 1-3/4" Gr5 Z Hex Bolt (58134G5B)	JM0016681
8	1-1/4" Flange Bearing 4 hole (GRAF-206)	JM0018560
9	5/8"-11 Gr5 Z Centerlock Hex Nut (58G5LN)	JM0002146

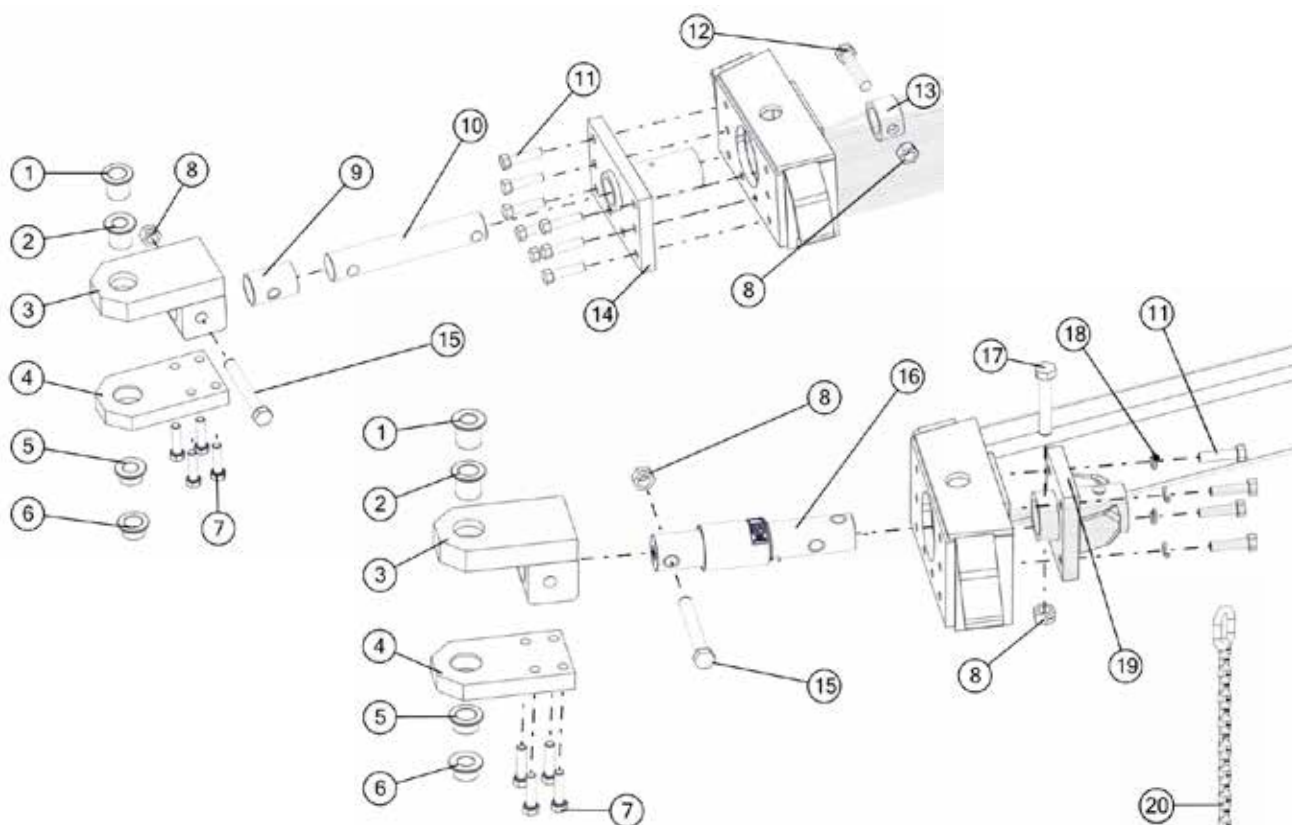
#	Description	Part. No.
10	3/8"-16 x 1/2" Set Screw (SS-3812)	JM0019044
11	U-Joint Assembly 750-16 (M-6635-A)	JM0024318
12	1/2"-13 x 3" Gr5 Z Hex Bolt (123G5B)	JM0016678
14	Gearbox Assembly (See Pages 24 through 26)	-----
15	1/2" Zinc Finish Lock Washer (12-LW)	JM0019021
16	1/2"-13 x 1-1/2" Gr5 Z Hex Bolt (12112HB)	JM0002100
17	1/2"-13 Gr5 Z Centerlock Hex Nut (12LN)	JM0001511
18	Cross Kit 14R (03-10134)	JM0024310
19	Knuckle Guard (3S-DUJ)	JM0012698

Upper & Lower Auger Assembly



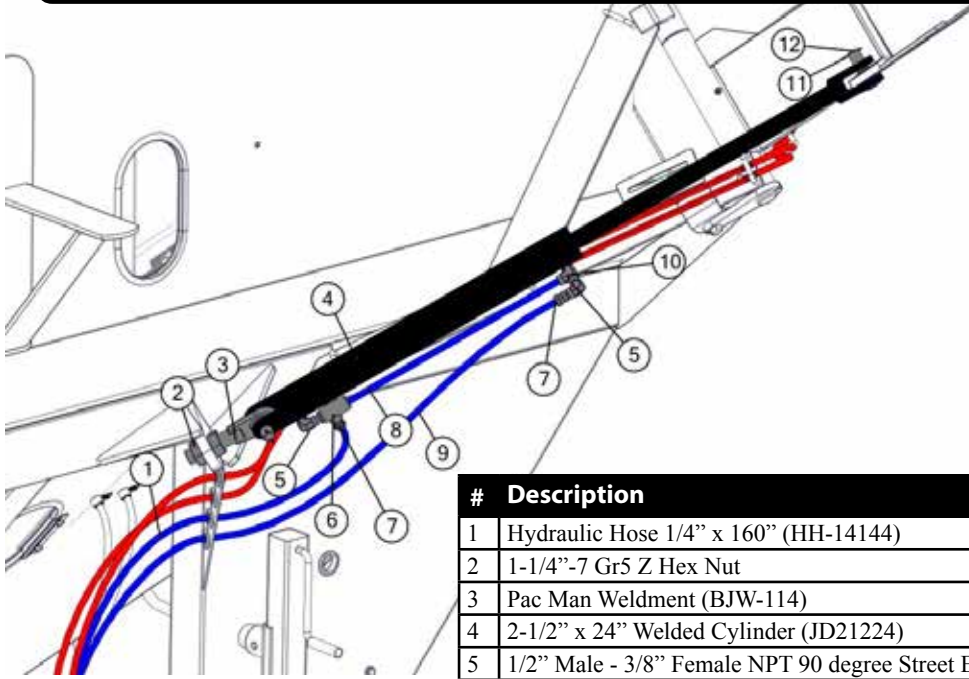
#	Description	Part. No.
1	16" Upper Flighting welded to 2 1/2" x 119" pipe with 8" shaft (R/H)(UF-16-F6R)	JM0026514
1	16" Longer Upper Flighting welded to 2 1/2" x 120" pipe with 19" shaft (R/H)(LUA-16-F)	JM0026524
2	16" Lower Flighting welded to 2 1/2" x 120" pipe (R/H)(LF-16-F5R)	JM0026517
2A	16" Lower Auger Liner (LAL-16)	JM0026518
3	1-1/4" Flange Bearing, 4 hole (GRAF-206)	JM0018560
4	2" x 24" Hydraulic Cylinder (JD20024)	JM0018210
5	5/8" Lock Nut (LN-58)	JM0008428
6	5/8" x 4-1/2" Grade 8 Bolt (58412GR8)	JM0020316
7	1-3/4" x 2" OD Bronze Bushing (EB-134)	JM0002244
8	Grease Fitting (1610BL)	JM0009756
9	Compression Spring (CMSUAA-4)	JM0018559
10	16" Upper Auger Tube Assembly (UAH-16-R)	JM0024288*
10	16" Longer Upper Auger Tube Assembly (LUA-16-T-R)	JM0026522 *
11	Auger Gate Cover for 16" Diameter Cart (AGC-875)	JM0017682
12	Gate Indicator 750-14, 750-16, 875-16, 1075-16 (GI-12-6)	JM0022092
13	Hanger Bushing Assembly for 16" Diameter Auger (HBA-875)	JM0024419
14	Drive Dog Weldment (DDW-214)	JM0024412
15	16" Tip Spout Weldment (SFS-2)	JM0024294
16	1/2"-13 X 1.25" Gr5 Z Hex Bolt	JM0001513
17	1-1/2" Long Spacer (112S)	JM0016792
18	1-1/4" Hex Jam Nut (HN-114)	JM0002158
19	1-3/4" Diameter Pin in Hinge Assembly for 16" Diameter Auger (134-PIH)	JM0024407
20	1-7/8" OD x 1/2" ID Large Washer (12W)	JM0026504
21	1/2" x 1-1/4" Bolt (12114HB-5)	JM0001513
22	1/2" Lock Washer (LW-12)	JM0019021
23	2" x 2-7/16" OD Spine Coupler (SC-2X2716)	JM0019659
24	Seal Kit for JD20024 Hydraulic Cylinder (JD244)	JM0024894
25	1/2"-13 Gr5 Z Centerlock Hex Nut (12-13LN)	JM0001511
26	3/8"-16 x 1" Gr8 Z Hex Bolt (160020)	JM0001485

Hitch Assembly



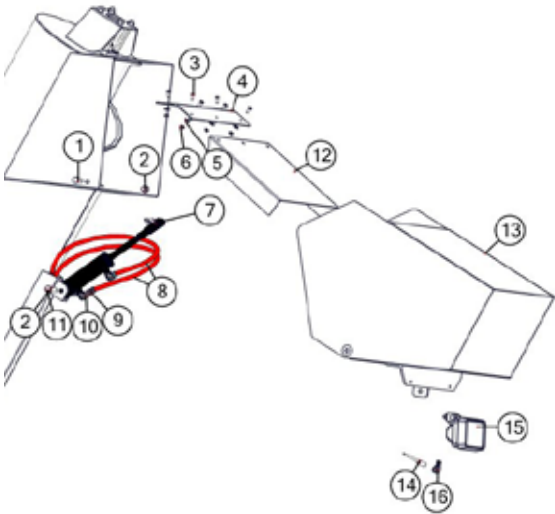
#	Description	Part. No.
1	1-1/2" Pin adapter for Grain Cart Clevis Hitch Tang	JM0014203
2	1-1/4" Pin adapter for Grain Cart Spade Hitch	JM0019032
3	Hitch Weldment	JM0017978
4	Grain Cart Draw Bar	JM0017976
5	1-1/4" Pin adapter for Grain Cart Spade Hitch	JM0019032
6	1-1/2" Pin adapter for Grain Cart Clevis Hitch Tang	JM0014203
7	3/4"-16 X 3" Fine Thread Hex Bolt (164150)	JM0002107
8	1"-8 Gr5 Z Centerlock Hex Nut (HLN-1)	JM0002149
9	2-1/2" Hitch Spindle Sleeve	JM0018258
10	2-1/2" Hitch Spindle, 360-14 through 875-18, Non-Scale (212PC)	JM0018259
11	3/4"-16 X 3" Gr8 YZ Hex Bolt (343HB)	JM0018542
12	1"-8 X 4-1/2" Gr5 Z Hex Bolt (1412G5B)	JM0016687
13	2-1/2" Hitch Spindle Collar	JM0018219
13	2-7/8" Hitch Spindle Collar	JM0025785
14	Hitch Spool Plate 2-1/2" (HSPS-1)	JM0018192
14	Hitch Spool Plate 2-7/8" (HSPS-2)	JM0025783
15	1"-8 X 7-1/2" Gr8 YZ Hex Bolt (165410)	JM0017944
16	Weigh Tronix - 2-1/2" Weigh Bar, 360-14 through 875-18, 3 Point Scale System (25WB)	JM0024206
16	Digi-Star - 2-1/2" Weigh Bar, 360-14 through 875-18, 3 Point Scale System (250WB)	JM0024207
17	1"-8 X 5-1/2" Gr5 Z Hex Bolt (1512G5B)	JM0002110
18	3/4" Zinc Finish Lock Washer (160018)	JM0018544
19	Weigh Bar Receiver Weldment Scales 2-7/8" (WBW-278)	JM0000019
19	Weigh Bar Receiver Weldment Scales 2-1/2" (WBW-1)	JM0024208
20	30k LB Safety Chain (One Chain)	JM0031890

Lift Cylinder



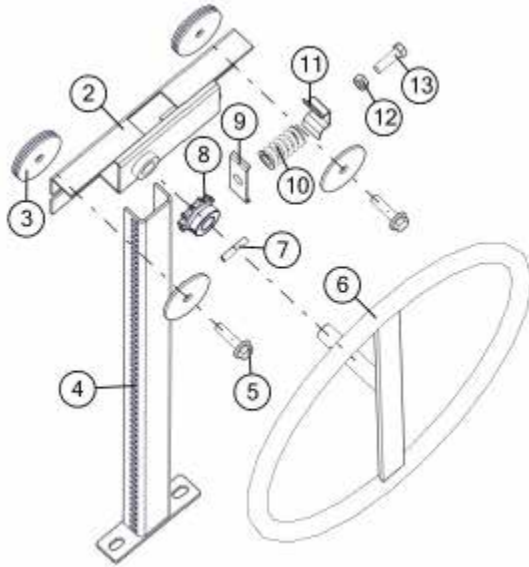
#	Description	Part. No.
1	Hydraulic Hose 1/4" x 160" (HH-14144)	JM0024898
2	1-1/4"-7 Gr5 Z Hex Nut	JM0001700
3	Pac Man Weldment (BJW-114)	JM0007386
4	2-1/2" x 24" Welded Cylinder (JD21224)	JM0021280
5	1/2" Male - 3/8" Female NPT 90 degree Street Elbow (12M38F)	JM0010292
6	PC-37 Check Valve (PC-37)	JM0018233
7	3/8" male NPT X 3/8" female NPT swivel; WITH .062 orifice (1404-062)	JM0018362
8	Hydraulic Hose 1/4" x 21" (HH-1421)	JM0024896
9	Hydraulic Hose 1/4" x 176" (HH-14160)	JM0024899
10	3/8" male NPT x 3/8" female NPT x 3/8" female NPT; Street T(5602-6-6)	JM0018266
11	Cotter Pin (105200)	JM0003064
12	1" x 3.4 Clevis Pin with Cotter Pins	JM0019407

Flow Control Spout



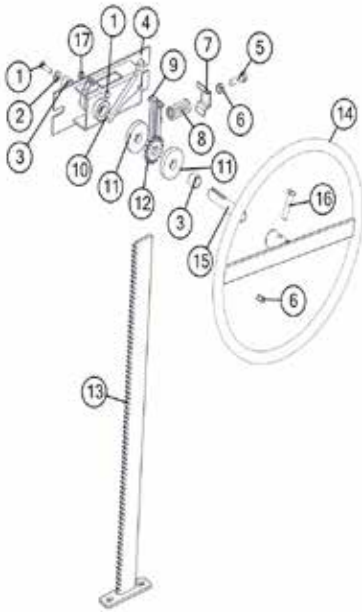
#	Description	Part. No.
1	1/2"-13 X 2" Gr5 Z Hex Bolt (122-HHMB)	JM0001593
2	1/2"-13 Gr5 Z Centerlock Hex Nut (12G5LN)	JM0001511
3	1/4"-20 x 5/8" Gr5 Z Hex Bolt (1458-HB)	JM0001479
4	16" Hinge Plate (HP-16)	JM0024296
5	1/4" USS Flat Washer (14-W)	JM0003090
6	1/4"-20 Gr5 Z Centerlock Hex Nut (HLN-114)	JM0001505
7	1/2" x 1-3/4" Pin	JM0018264
8	1/4" x 336" (28') Hydraulic Hose (All Models 525, 620, 750, 875 and 1075 Grain Carts) (HH-14336)	JM0024907
9	1/4" male NPTswivel with .032 orifice (SR-14)	JM0020113
10	1/4" male NPT x 1/4" female NPT rigid; 90 degree elbow (55020404)	JM0020115
11	1/2"-13 x 2" Gr5 Z Hex Bolt (122-HHMB)	JM0001593
12	16" Baffle Plate (BP-16)	JM0013110
13	16" Flow Control Spout Housing (FSH-16)	JM0024294
14	Mercury Switch (MS-1)	JM0017896
15	Field Assembly Light (FLDLT-1)	JM0001881
16	3/8" Wire Loom (WLC-1)	JM0020450

Door Wheel Assembly (2015 & Older)



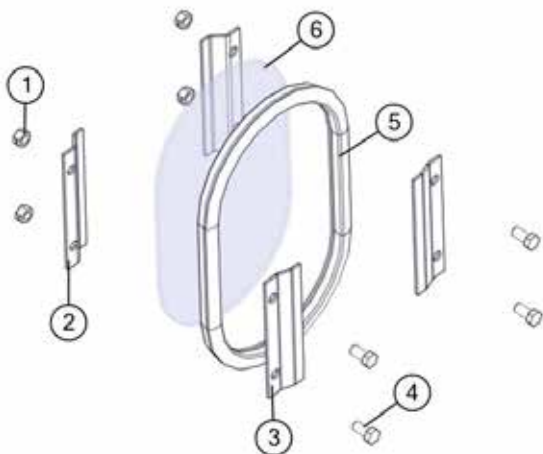
#	Description	Part. No.
1	Complete Door Wheel Assembly (20-1/4") (CWA250)	JM0018884
1	Complete Door Wheel Assembly (28") (CWA750)	JM0018879
2	Welded Guide Assembly (WGA-1034)	JM0018864
3	2-1/2" USS Flat Washer (12-W-212)	JM0018982
4	Track Assembly (20-1/4") (TA-2014)	JM0018861
4	Track Assembly (28") (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)



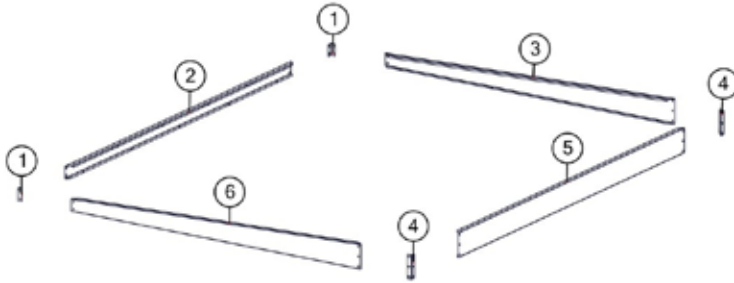
#	Description	Part. No.
1	1/4"-20 x 1" Gr5 Z Hex Bolt (141G5B)	JM0002095
2	1/4" USS Flat Washer (14-W)	JM0003090
3	.754 ID x .874 OD x .625 LG Bronze Bushing (BB-34)	JM0009455
4	Nylon Guided Rack Housing Weldment	JM0030635
5	3/8"-16 x 1-1/4" Gr5 Z Hex Bolt (161160)	JM0016675
6	3/8"-16 Gr5 Z Hex Nut	JM0001707
7	Rack Track Guide (Scrubber Plate) (MC-250)	JM0002851
8	Small Compression Spring (DS-250)	JM0001688
9	Nylon Track Guide	JM0029354
10	Flip Lock	JM0029459
11	Keyway Washer	JM0029454
12	15 Tooth Sprocket - 3/4" Bore w/ Key	JM0029455
13	Nylon Guided Rack Track 20-1/4" Weldment	JM0030651
13	Nylon Guided Rack Track 27-1/2" Weldment	JM0030634
14	Rack Wheel Weldment	JM0028898
15	Stub Shaft - 3/4" x 4-1/8" with Threaded End	JM0029440
16	Complete Nylon Door Wheel Assembly (20-1/4")	JM0030652
16	Complete Nylon Door Wheel Assembly (27-1/2")	JM0029460

Inspection Windows



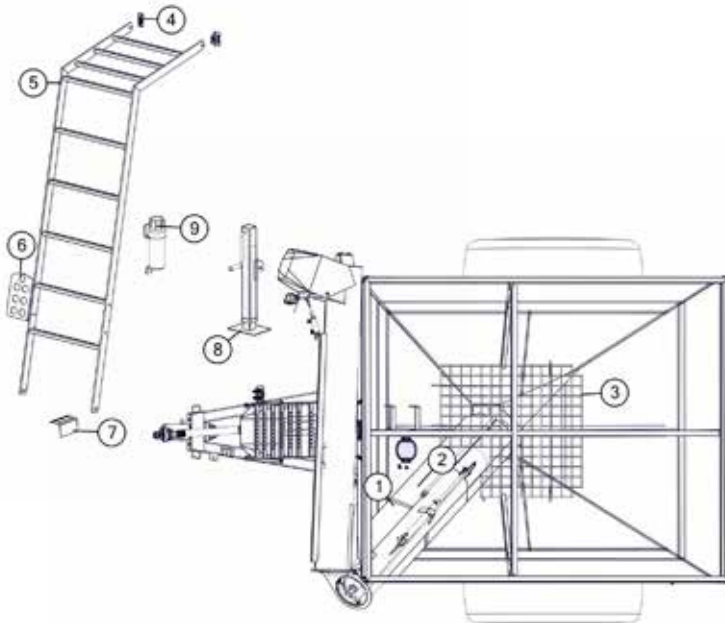
#	Description	Part. No.
1	3/8"-16 Gr5 Z Centerlock Hex Nut (161900)	JM0001512
2	Inside Window Brace (WB-4)	JM0000253
3	Outside Window Brace (WB-4B)	JM0000256
4	3/8-16 x 3/4" Gr5 Z Hex Bolt (161000)	JM0001663
5	Oval Window Grommet (112500)	JM0002454
6	Oval Window (IW-71212)	JM0002455
7	Inspection Window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

Sideboards



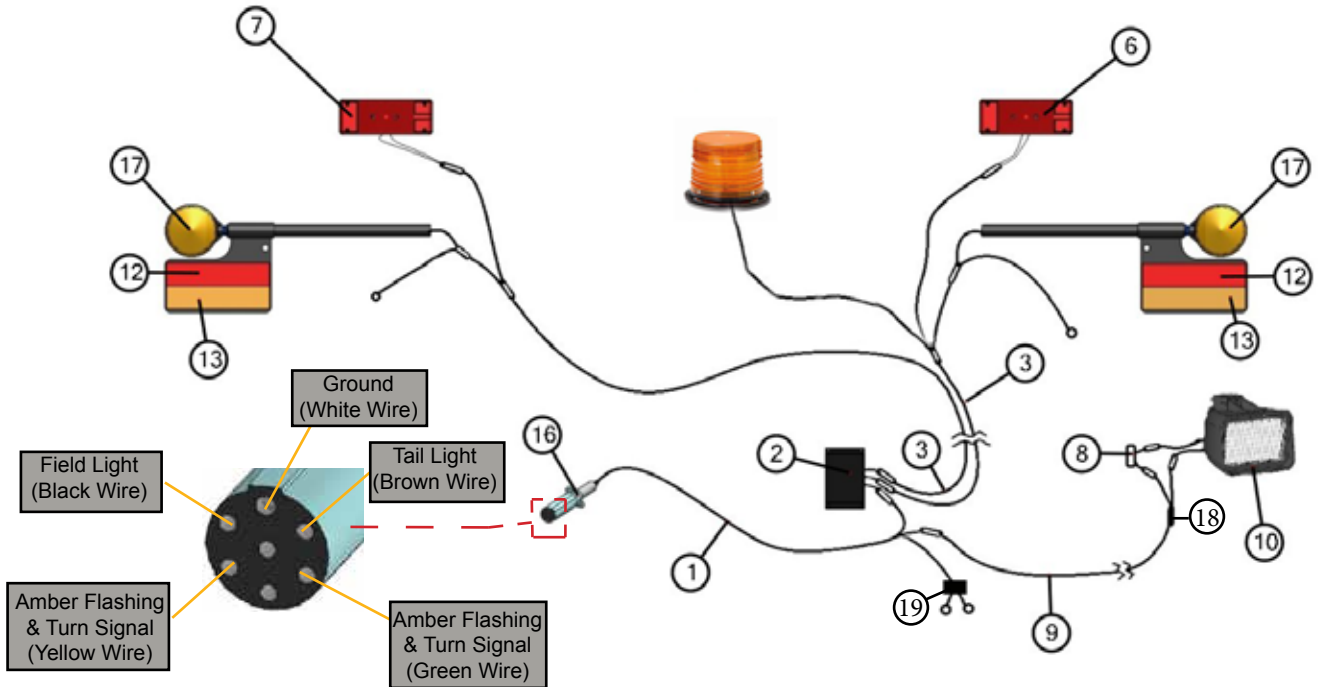
#	Description	Part. No.
1	Low Sideboard Corner (TTE-75016LC)	JM0013113
2	750-16 Low Sideboard (Straight) (TTE-75016LS)	JM0013085
3	750-16 Endboard Back (TTE-75016TR)	JM0013086
4	10-1/4" Auger Corner (TTE-75016HC)	JM0000056
5	750-16 High Sideboard (Straight) (TTE-75016HS)	JM0013084
6	750-16 Endboard Front (TTE-75016TF)	JM0013087

Miscellaneous



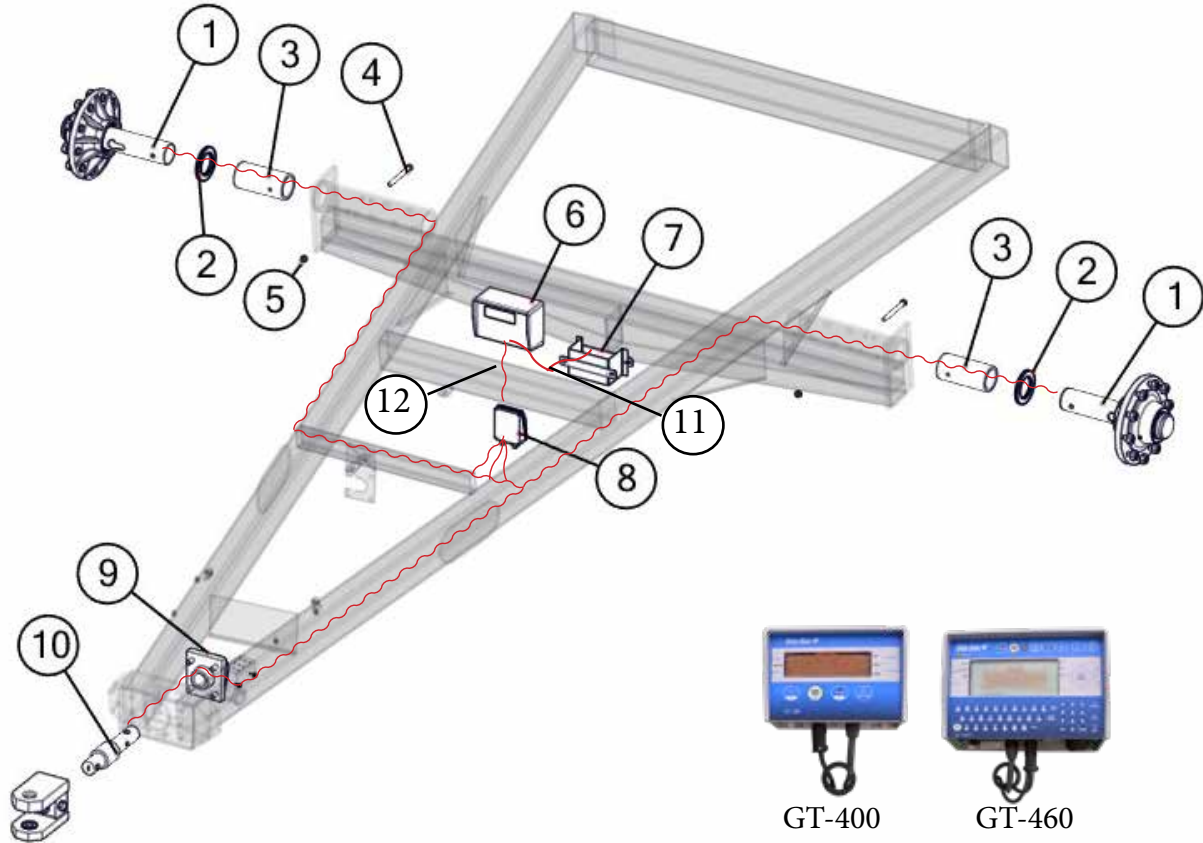
#	Description	Part. No.
1	1/4" x 41" Hydraulic Hose (HH-14412)	JM0024925
2	1/4" x 29" Hydraulic Hose (HH-1429)	JM0024903
3	750-16 GC Screen (SG-875)	JM0024268
4	Universal Ladder Bracket	JM0016922
5	3 Rung Ladder Platform (LA-6S-F)	JM0000262
6	Hydraulic Hose Holder (HHB-1C)	JM0012711
7	Frame Rail Step (SSGC-1)	JM0019030
8	8,000 LB Jack Stand Assembly (TWL-200)	JM0010191
9	Manual Canister (OMST-1)	JM0010115

Light Kit Assembly



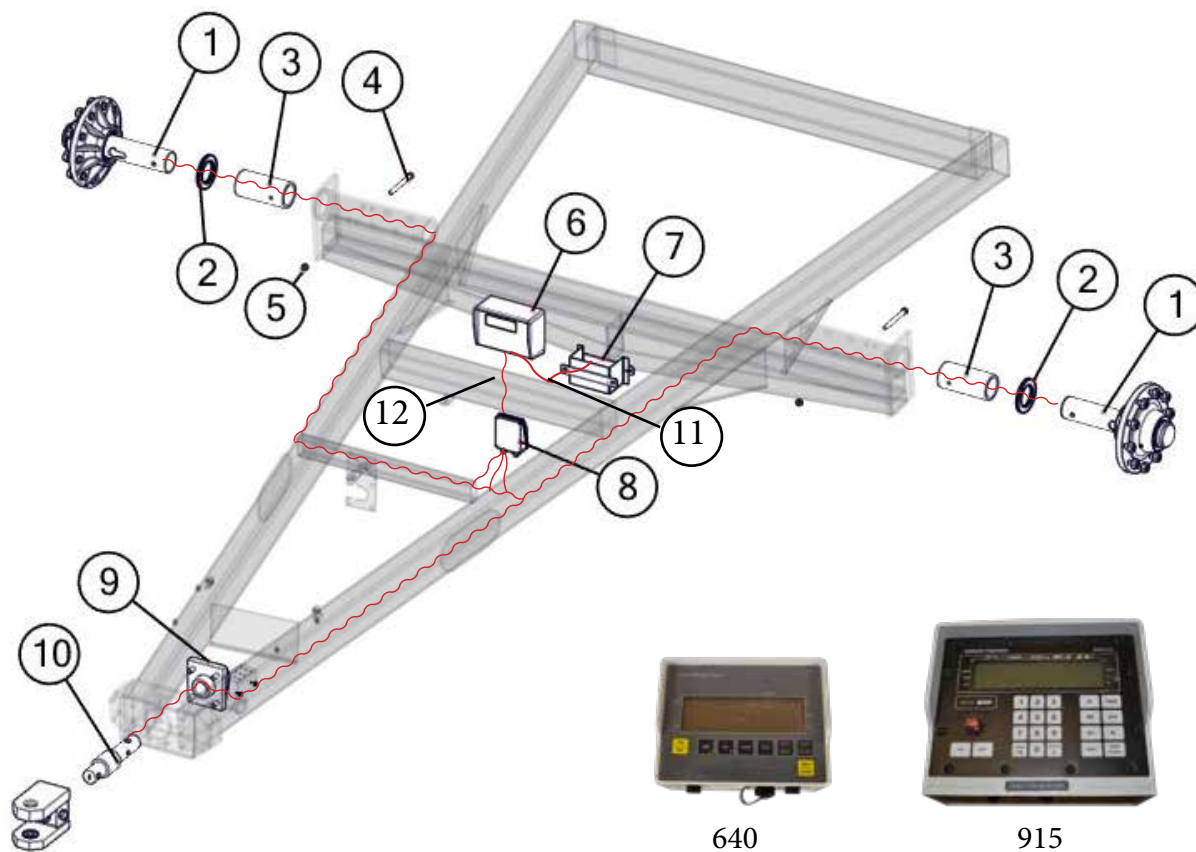
#	Description	Part. No.
1	Main Wiring Harness with 7-Prong Connector End (8WH-7PC)	JM0020439
2	Light Enhancer (LE-1B)	JM0010566
3	Wiring Harness for Rear Lights (Each) (WH-1)	JM0020437
4	Extendable Amber Light Assembly (Left Side) (EL-LED1)	JM0018817
5	Extendable Amber Light Assembly (Right Side)	JM0018826
6	Rear Red Light, Right Side (112310)	JM0018838
7	Rear Red Light, Left Side (112313)	JM0018837
8	Mercury Switch (MS-1)	JM0017896
9	Field Light Wire (FLW-1)	JM0020438
10	Field Light (FLDLT-1)	JM0001881
11	Reflective Amber Decal (RD-1A)	JM0009946
12	Reflective Red Decal (RD-1R)	JM0009945
13	Reflective Orange Decal (RD-1O)	JM0009944
14	Slow Moving Vehicle Emblem (SMV-1)	JM0001616
15	Rubber Grommet (GR-1)	JM0016924
16	7-Prong Connector End Only (7-WCE)	JM0010528
17	Circular Amber Light Only (112322)	JM0018819
18	Wire Loom (WLC-1)	JM0020450
19	12 Volt to 12 Volt Battery Charger (Trickle Charger)	JM0027090

**WEIGH SCALE SYSTEM
DIGI-STAR 3-Point**



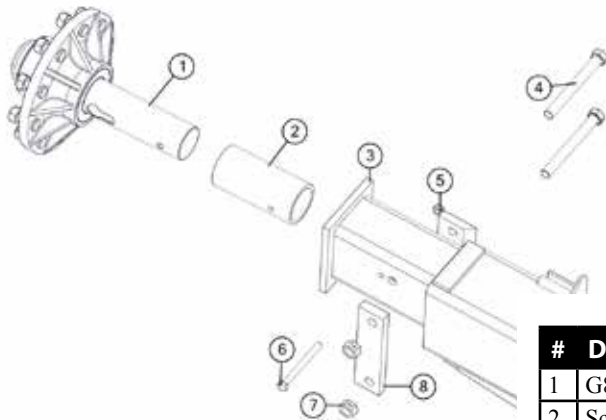
#	Description	Part. No
1	2-7/8" Weigh Spindle, Digi-Star, 525-14 (278WS)	JM0025842
1	3-3/4" Weigh Spindle, 525-14W, 620-14, 750, 875, Digi-Star (375WS)	JM0021451
2	Seal for Hub (37605SA)	JM0021456
3	4-1/2" OD Adapter Pipe Tubing (ATP-375)	JM0021453
4	5/8"-11 x 6-1/2" Gr5 Zinc Hex Bolt	JM0019979
5	5/8"-11 Gr5 Z Centerlock Hex Nut (58G5LN)	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	4 Point Junction Box {replaces 3 point} (JB-1)	JM0019649
9	2-1/2" Weigh Bar Receiver Weldment (WBW-1)	JM0024208
10	2-1/8" Hitch Weigh Bar, 525-14, Digi-Star (218WB)	JM0025810
10	2-1/2" Hitch Weigh Bar, 525-14W, 620, 750, 875, Digi-Star (250WB)	JM0024207
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

WEIGH SCALE SYSTEM
Weigh-Tronix 3 Point



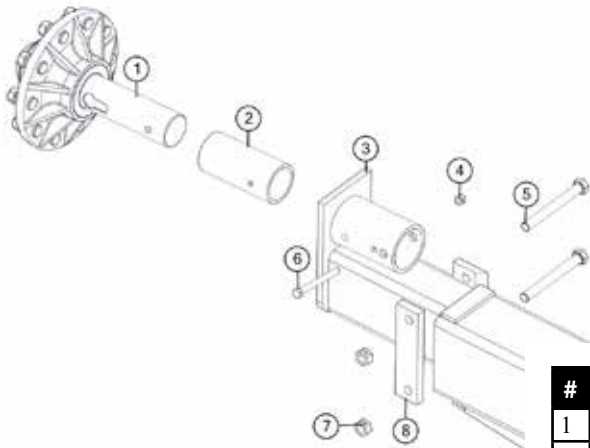
#	Description	Part. No.
1	3-3/4" Weigh Spindle, Weigh Tronix (375WTS)	JM0025829
2	Seal for Hub (37605SA)	JM0021456
3	4-1/2" OD Adapter Pipe Tubing (ATP-375)	JM0021453
4	5/8"-11 x 6-1/2" Gr5 Zinc Hex Bolt	JM0019979
5	5/8"-11 Gr5 Z Centerlock Hex Nut (58G5LN)	JM0002146
6	640 Indicator w/serial port (640)	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-4WT)	JM0019960
9	2-1/2" Weigh Bar Receiver Weldment (WBW-1)	JM0024208
10	2-1/2" Hitch Weigh Bar (25WB)	JM0024206
11	Power Cord to Battery, Weigh Tronix (PC-2)	JM0025824
11	Power Cord to Battery, 2 pin, Weigh Tronix (PC-2-2)	JM0025825
12	Standard Cable for J-box to Indicator (50613-0020)	JM0025826
13	Indicator Mounting Bracket, 640 & 915 (MBI-2)	JM0019967
14	Extension Cord to Mount Indicator In Cab (ECI-1WT)	JM0025827

Fully Adjustable Rice Axle



#	Description	Part. No.
1	G881 Hub 3-3/4" Digi Star Weigh Spindle (example)	JM0022057
2	Scale Sleeve - 4-1/2" OD x 3-3/4" (ATP-375)	JM0021453
3	Fully Adjustable Rice Axle Insert - 54" Large - Left	JM0021902
3	Fully Adjustable Rice Axle Insert - 54" Large - Right	JM0021901
3	Fully Adjustable Rice Axle Insert - XL - 58" - Right	JM0021884
3	Fully Adjustable Rice Axle Insert - XL - 58" - Left	JM0021900
4	1"-8 X 9" Gr8 Z Hex Bolt (19G8B)	JM0001708
5	5/8"-11 Gr5 Z Centerlock Hex Nut (58G5LN)	JM0002146
6	5/8"-11 x 6-1/2" Gr5 Zinc Hex Bolt	JM0019979
7	1"-8 Gr5 Z Centerlock Hex Nut (1G5LN)	JM0002149
8	Clamp Plate (CP-1B)	JM0024183

Fully Adjustable Standard Axle



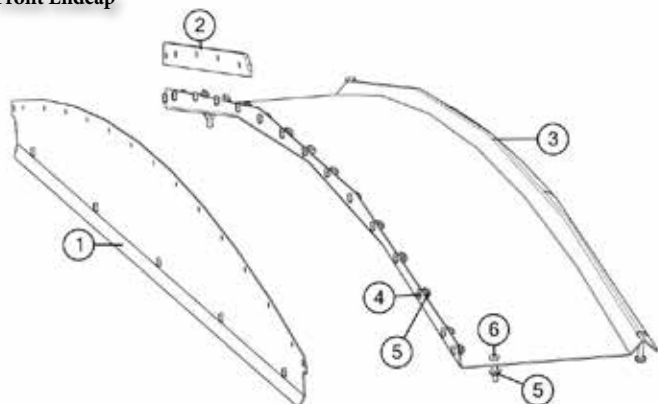
#	Description	Part. No.
1	G881 Hub 3-3/4" Digi Star Weigh Spindle (example)	JM0022057
2	Scale Sleeve - 4-1/2" OD x 3-3/4" (ATP-375)	JM0021453
3	Fully Adjustable Axle Insert - 54" Large - Left (FAA-1L)	JM0022249
3	Fully Adjustable Axle Insert - 54" Large - Right (FAA-1R)	JM0022250
3	Fully Adjustable Axle Insert - 58" XL- Left	JM0022243
3	Fully Adjustable Axle Insert - 58" XL- Right	JM0022240
4	1"-8 X 9" Gr8 Z Hex Bolt (19G8B)	JM0021709
5	5/8"-11 Gr5 Z Centerlock Hex Nut (58G5LN)	JM0002146
6	5/8"-11 X 6-1/2" Gr5 Zinc Hex Bolt	JM0019979
7	1"-8 Gr5 Z Centerlock Hex Nut (1G5LN)	JM0002149
8	Clamp Plate (CP-1B)	JM0024183



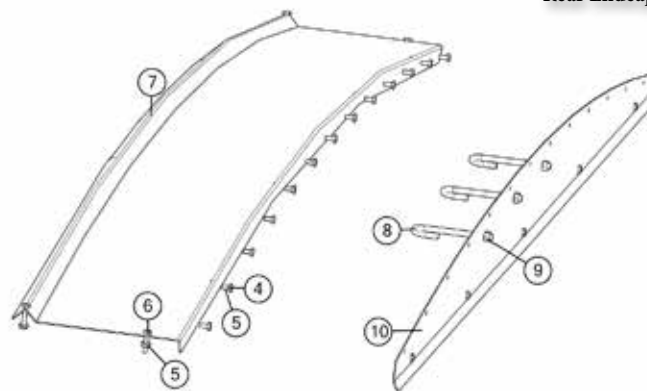
#	Description	Part. No.
1	Auto-Logger 25' Wire Bundle	JM0015445
2	Rotation Counter Sensor Wire bundle	JM0015447
3	Rotation Counter Mounting Bracket	JM0015448
4	Steel Sensor Target Screw Clamp	JM0015450
5	Rotation Counter Sensor Extension Wire Bundle	JM0015452

Roll Tarp Assembly

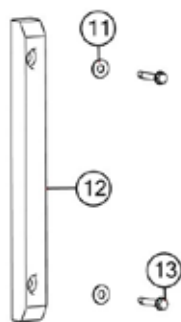
Front Endcap



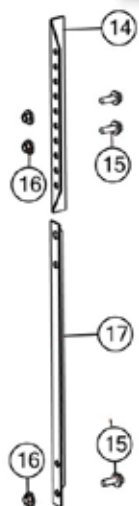
Rear Endcap



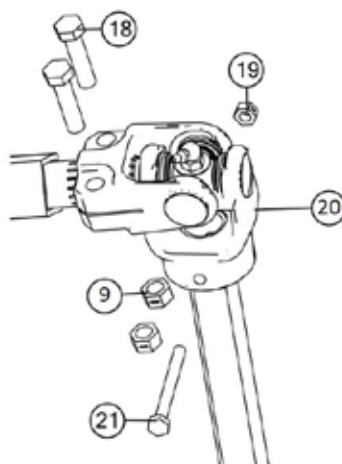
Tarp Stand-Off



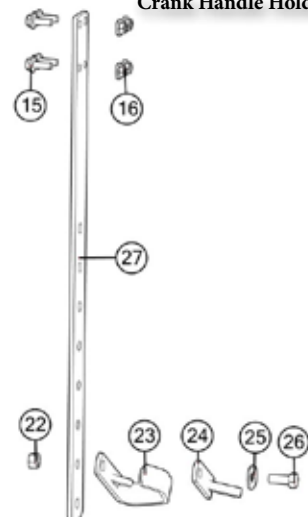
Prop-Up Bars



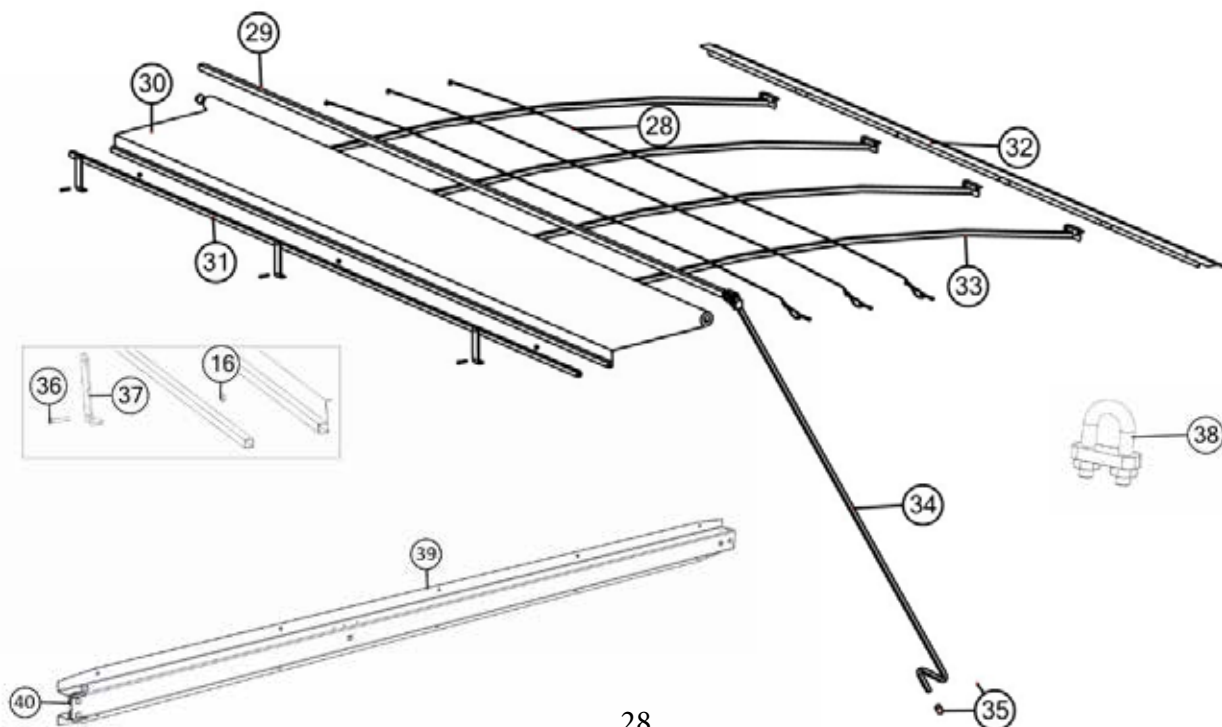
Crank Handle U-Joint



Crank Handle Holder



Tarp Assembly



Roll Tarp Assembly

#	Description	Part. No.
1	Front End Cap Plate	JM0000194
2	Tarp Nylon Riser (TNR1)	JM0000196
3	Front Arched End Cap (141FAEC)	JM0000195
4	1/4"-20 x 1/2" Gr5 Z Hex Bolt (1412-HB)	JM0001481
5	1/4"-20 Gr5 Z SF Hex Nut (160009)	JM0001630
6	1/4"-20 x 1-1/4" Gr5 Z Hex Bolt	JM0016673
7	Rear Arched End Cap (620) (141RAEC)	JM0000172
8	3/8"-16 Gr5 Z J-Bolt (384JB)	JM0001519
9	3/8"-16 Gr5 Z Centerlock Hex Nut (38G5LN)	JM0001512
10	Rear End Cap Plate	JM0000169
11	1/4" Flat Washer (14-W)	JM0003090
12	Tarp Standoff (TSST375)	JM0001889
13	1/4" x 1-1/2" Self Tapping Screw (STS-1L)	JM0001571
14	Upper Adjustable Bow Support 13" (PUBU)	JM0021404
15	3/8"-16 x 1" Gr5 Z SF Hex Bolt (381-FB)	JM0002092
16	3/8"-16 Gr5 Z SF Hex Nut (38-FN)	JM0002152
17	Lower Adjustable Bow Support 19" (ABS-2)	JM0000179
18	3/8"-16 x 1-1/2" Gr5 Z Hex Bolt (160022)	JM0001659
19	1/4"-20 Gr5 Z Centerlock Hex Nut (HLN-114)	JM0001505
20	U-Joint (SUJ-1)	JM0001517
21	1/4"-20 x 2-1/2" Gr5 Z Hex Bolt (14212-HB)	JM0001506
22	1/2"-13 Gr5 Z Centerlock Hex Nut (12-13LN)	JM0001511
23	Roll Tarp - Handle Hanger PP (CH-1)	JM0002967
24	Roll Tarp - Handle Hanger Rubber Flap	JM0002551
25	1/2" USS Flat Washer (12FW)	JM0003082
26	1/2"-13 x 1-1/4" Gr5 Z Hex Bolt (12114 HB-5)	JM0001513
27	Crank Holder (ABCH-1EL)	JM0000164
28	3/16" Cable (525) (316C-150)	JM0024881
28	3/16" Cable (620) (316C-156)	JM0024884
29	1 1/4" Square Roll Tube (174RT)	JM0024227
30	Tarp with Rivets (750CT)	JM0021376
31	1" Square Tie-Down Tube (168TT)	JM0021367
32	Tightening Lip x 144" (525) (TL-144)	JM0012670
32	Tightening Lip x 158" (620) (TL-158)	JM0012671
33	Arched Tarp Bows (620) (137ATB)	JM0000157
34	Crank with Splined U-Joint (CUJ-1LN)	JM0019888
35	Yellow Cap (112950)	JM0018963
36	3/8"-16 x 2" Gr5 Z Hex Bolt (382-HB)	JM0001510
37	Tarp Stop Bracket (TSB-1)	JM0000187
38	Cable Clamp-Small	JM0001514
39	Spring Return Assembly	JM0012965
40	Spring Return Cable	JM0012981

Service / Maintenance Record

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