



# 32 Series

## GRAIN CART OPERATOR'S MANUAL

MODEL



Serial Number 1903820-2010989



Rev. 5.13.2020

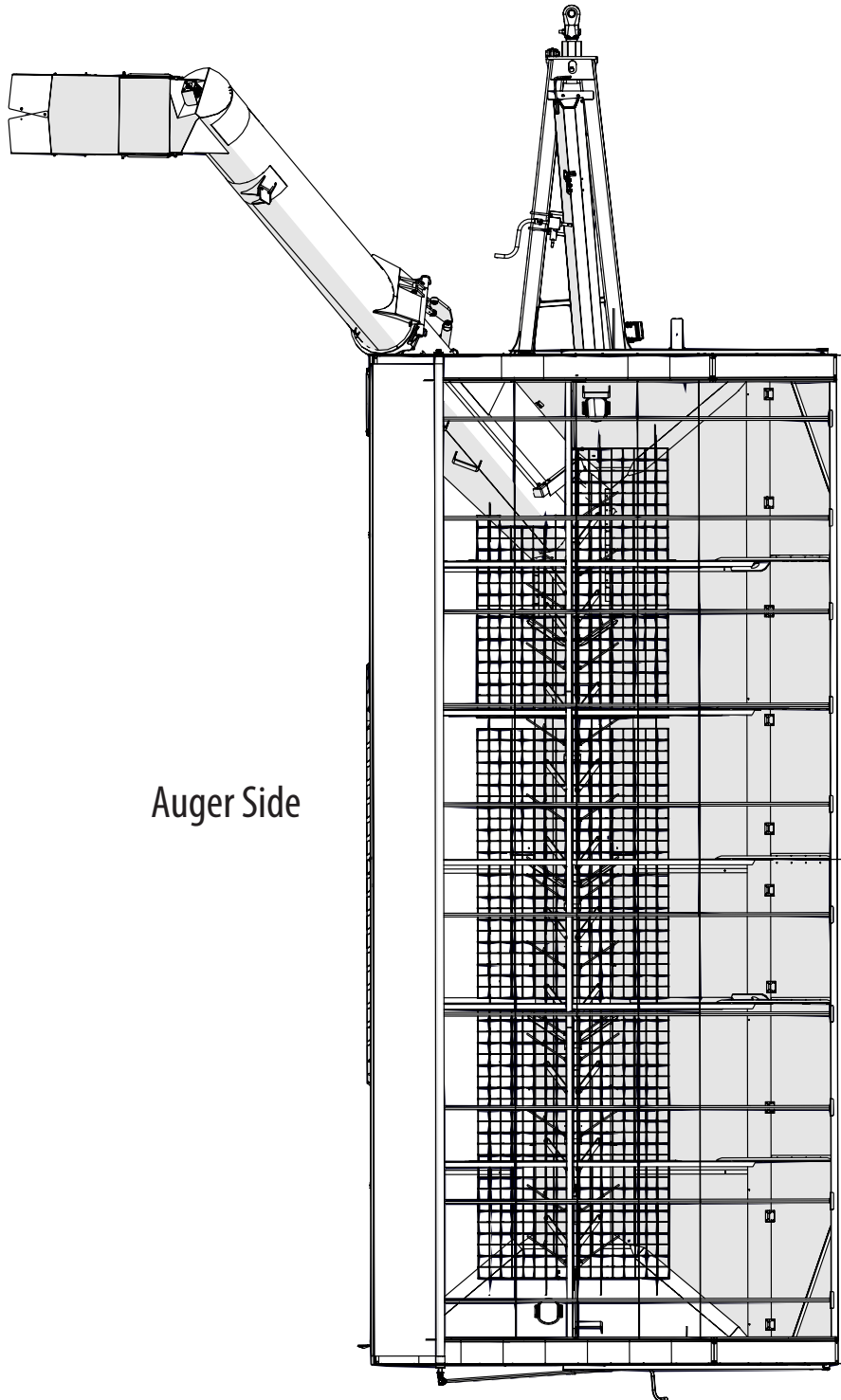
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[www.jm-inc.com](http://www.jm-inc.com)

# Stance

Front



Auger Side

Opposite Auger Side

Rear

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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 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 Warranty does not transfer to the third party purchaser in any way. J&M Mfg. Co., Inc. makes no Warranty, express or 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:** 1432    **Serial No:** \_\_\_\_\_    **Date of Purchase:** \_\_\_\_\_

**Purchased From:** \_\_\_\_\_

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



# 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, could 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

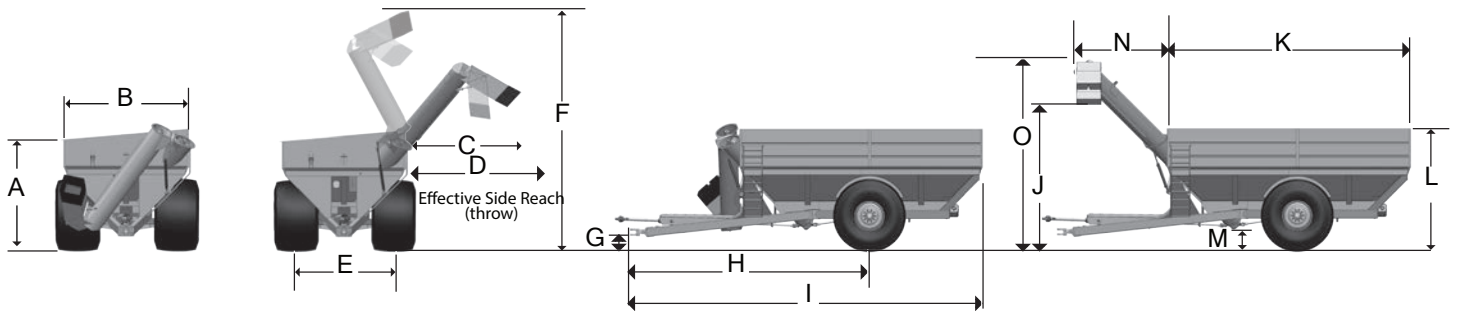
## SPECIFICATIONS

| Single Wheel Option MODEL 1432 |                           |
|--------------------------------|---------------------------|
| Capacity                       | 1,450 Bushels             |
| Auger, One Vertical            | 22"                       |
| Auger, One Horizontal          | 20"                       |
| Unload Rate                    | Up to 760+ Bushels/Minute |
| Wheels (2)                     | 44x32                     |
| Tires (2)                      | 1250/50R32                |
| Hubs (2)                       | 10 Bolt or 20 Bolt        |
| Spindles (2)                   | 6" Diameter               |
| Tongue Weight                  |                           |
| Empty                          | 2,650 lbs.                |
| Loaded                         | 4,200 lbs.                |
| Total Weight (approx.)         | 19,050 lbs.*              |

| Walking Tandem Dual Wheels Option |                 |
|-----------------------------------|-----------------|
| Capacity                          | 1,425 Bushels   |
| Wheels (4)                        | 18x42 Heavy     |
| Tires (4)                         | 520/85R42       |
| Spindles (4)                      |                 |
| Total Weight (approx.)            | 4-1/2" Diameter |
|                                   | 22,100 lbs.     |

| Tracks Option          |                  |
|------------------------|------------------|
| Capacity               | 1,475 Bushels    |
| Tracks (2)             | 36"x146"         |
| Total Weight (approx.) | 25,800 lbs.      |
| Compaction Rate        | 13.4 lbs/sq inch |

## Dimensions



### MODEL 1432\*

|   |         |
|---|---------|
| A | 11'-3"  |
| B | 11'-9"  |
| C | 11'-0"  |
| D | 13'-8"  |
| E | 10'-0"  |
| F | 22'-2"  |
| G | 1'-6"   |
| H | 22'-4"  |
| I | 33'-0"  |
| J | 13'-6"  |
| K | 22'-10" |
| L | 12'-5"  |
| M | 1'-11"  |
| N | 8'-6"   |
| O | 17'-8"  |

\* Measured with 1250/50R32 tires, scales, roll tarp installed and a 20" hitch height

# 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. Make sure fastener threads are clean and you start thread engagement properly. **Use these values when tightening all bolts and nuts with the exception of wheel nuts.**

## SAE Fasteners

| Coarse Thread Series               |            |              |            |              |
|------------------------------------|------------|--------------|------------|--------------|
|                                    | Grade 5    |              | Grade 8    |              |
| <i>Diameter and Pitch (Inches)</i> | <i>Dry</i> | <i>Oiled</i> | <i>Dry</i> | <i>Oiled</i> |
| 1/4"-20                            | 8 ft-lbs   | 6 ft-lbs     | 12 ft-lbs  | 9 ft-lbs     |
| 5/16"-18                           | 17         | 13           | 25         | 18           |
| 3/8"-16                            | 31         | 23           | 44         | 33           |
| 7/16"-14                           | 49         | 37           | 70         | 52           |
| 1/2"-13                            | 75         | 57           | 106        | 80           |
| 9/16"-12                           | 109        | 82           | 154        | 115          |
| 5/8"-11                            | 150        | 113          | 212        | 159          |
| 3/4"-10                            | 267        | 200          | 376        | 282          |
| 7/8"-9                             | 429        | 322          | 606        | 455          |
| 1"-8                               | 644        | 483          | 909        | 681          |
| Fine Thread Series                 |            |              |            |              |
| <i>Diameter and Pitch (Inches)</i> | <i>Dry</i> | <i>Oiled</i> | <i>Dry</i> | <i>Oiled</i> |
| 1/4"-28                            | 10 ft-lbs  | 7 ft-lbs     | 14 ft-lbs  | 10 ft-lbs    |
| 5/16"-24                           | 19         | 15           | 27         | 20           |
| 3/8"-24                            | 35         | 26           | 49         | 37           |
| 7/16"-20                           | 55         | 41           | 78         | 58           |
| 1/2"-20                            | 85         | 64           | 120        | 90           |
| 9/16"-18                           | 121        | 91           | 171        | 128          |
| 5/8"-18                            | 170        | 127          | 240        | 180          |
| 3/4"-16                            | 297        | 223          | 420        | 315          |
| 7/8"-14                            | 474        | 355          | 669        | 502          |

## Stud and Wheel Nut Torque Specifications

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. Make sure fastener threads are clean and you start thread engagement properly. **Use these values when tightening all studs and wheel nuts.**

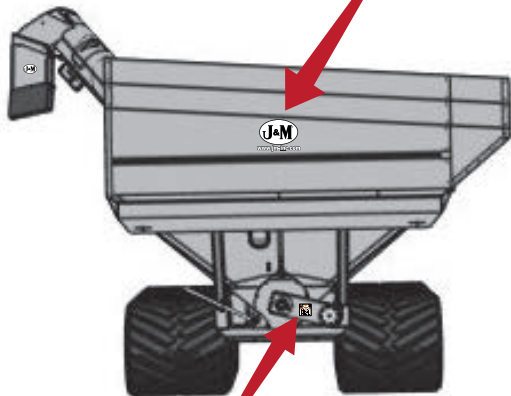
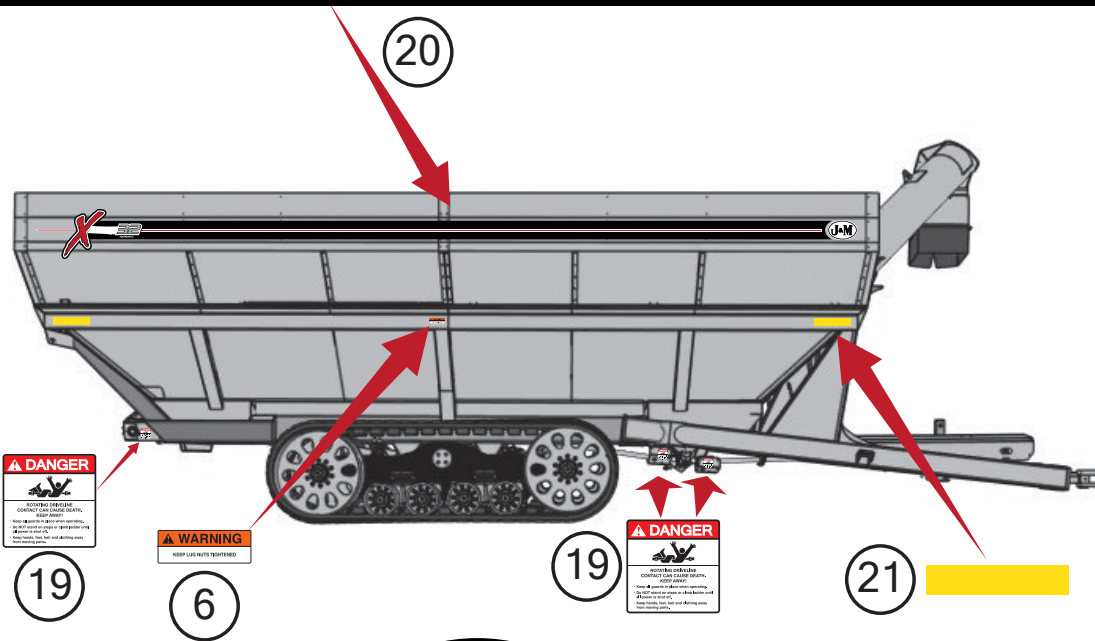
| Stud     | Tightening Torque |
|----------|-------------------|
| 1/2"-20  | 120 ft-lbs        |
| 9/16"-18 | 170 ft-lbs        |
| 5/8"-18  | 300 ft-lbs        |
| 3/4"-16  | 400 ft-lbs        |
| 20mm     | 475 ft-lbs        |
| 22mm     | 640 ft-lbs        |

**TIGHTENING WHEEL NUTS:** Standard **3/4" wheel studs and nuts should be tightened to torque 400 ft-lbs** and standard **22mm wheel studs should be tightened to torque 640 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.

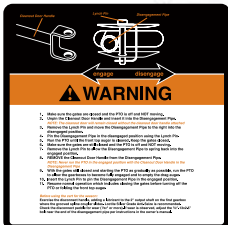
Decals



# Decals



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| Description                                               | Part No.  |
|-----------------------------------------------------------|-----------|
| 1 1432 Auger Side Stripe Kit                              | JM0044292 |
| 2 Danger, Electric Lines Decal                            | JM0015099 |
| 3 Danger, Do Not Enter Grain Tank Decal                   | JM0018033 |
| 4 Warning, Pinch Point Decal                              | JM0014994 |
| 5 X-Tended Reach Light Harness and Hydraulic Hoses Decal  | JM0046492 |
| 6 Warning, Keep Lug Nuts Tightened Decal 1-5/8" x 4"      | JM0010150 |
| 7 X-Tended Reach Logo w/ Oval and Website Decal 25" x 13" | JM0048321 |
| 8 Caution Lower Rest Decal                                | JM0037662 |
| 9 Important, 3x Wide Turns Tracks Decal                   | JM0021247 |
| 10 Open and Close Decal for 32 Series Indicator           | JM0043138 |
| 11 Warning, Keep Hands Away Decal                         | JM0018039 |
| 12 Danger, Keep Hands and Clothing Away Decal             | JM0018035 |
| 13 J&M Oval Decal (Medium) 5-1/2"x8-1/2"                  | JM0010179 |
| 14 Warning, Falling Or Lowering Decal                     | JM0014992 |
| 15 Lock and Load Indicator Lights Decal                   | JM0044289 |
| 16 Danger Warning Important Decal                         | JM0037665 |
| 17 Field Position/Storage Position Decal                  | JM0037661 |
| 18 Check PTO Overlap Decal                                | JM0025435 |
| 19 Danger, Rotating Driveline Decal                       | JM0018036 |
| 20 1432 Opposite Auger Side Stripe Kit                    | JM0044293 |
| 21 Amber Reflective Decal (2" x 9") (RD-1A)               | JM0009946 |
| 22 J&M Oval Decal (Large) 9-1/2" x 15"                    | JM0015151 |
| 23 www.jm-inc.com Decal                                   | JM0019239 |
| 24 Drag Auger Disengage Instructions Decal                | JM0048320 |



# 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 always maintained. 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. Be sure the tractor pin is at least 1/4" smaller in diameter than the pin hole in the grain cart hitch to ensure enough free movement when traversing through uneven terrain.

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.

# 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 SAE 80W-90 gearbox lubricant?
- Have all nuts, bolts, bearings and braces been properly fastened?
- Has the PTO been checked for proper overlap?

**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.

**FOLDING AND UNFOLDING THE AUGER:** X-Tended Reach grain carts offer three positions for the auger, depending on your use:

- Storage - For when the grain cart is stationary and not in use.
- Field - For when using the grain cart in the field. The auger must be elevated in the field to avoid ground interference and kicking soil into the tip spout.
- Unload - For when the auger is in use. To maximize the life of the grain cart, return the auger to field position between unloading.

To unfold the auger from the storage position, keep the throw handle in field position and unfold the auger.

To use in field position, move the auger above the flip-up auger rest (the throw handle will remain in field position) and lower the auger onto the rest. The auger rest prevents the auger from moving into storage position as it unfolds.

To return to the storage position, unfold the auger, lift the auger above the rest, move the throw handle and flip auger rest to the storage position, and fold the auger completely. The auger rest will automatically move to field position through this pass.



**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:**

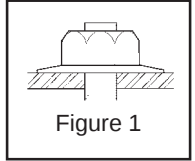
| Tires                                                                                     | psi |
|-------------------------------------------------------------------------------------------|-----|
| IF520/85R42 Lug Tires (Firestone) (169 LI) (for 18x42-10 Hole Wheels)                     | 44  |
| 520/85R42 Lug Tires (Alliance) (169 LI) (for 18x42-10 Hole Wheels)                        | 50  |
| IF1250/50R32 Lug Tires (Firestone) (201B LI) (for 44x32-10 Hole and 44x32-20 Hole Wheels) | 46  |
| IF1250/50R32 Lug Tires (Alliance) (201A8 LI) (for 44x32-10 Hole and 44x32-20 Hole Wheels) | 46  |

# 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 640 Ft.-Lbs. for standard 22mm wheel studs and nuts. Torque to 400 Ft.-Lbs. 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.** To ensure that wheel nuts do not loosen, it may be helpful to mark the location of one side of the nut and wheel rim with paint. This will help when observing if any rotation of the nut occurs. 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.**

Tractor requirements for proper towing: Model 1432 grain carts require 250+HP 4WD Tractor.

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

**TOW LOADS SAFELY:** Observe these recommended maximum road speeds, or local speed limits which may be lower:

- **Grain cart empty:** Do not travel more than 20 mph (32 km/hr) and do not tow loads more than 1.5 times the pulling unit's weight.
- **Grain cart loaded:** Do not travel more than 8 mph (12 km/hr) and do not tow loads more than 1.5 times the pulling unit's weight.

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. 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 through one chain loop provided on either side of the grain cart frame 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

- a) Secure the safety chain by running the 1-1/4"-7 x 4" Gr8 Z Hex Bolt through the holes on the tabs on the front of the grain cart and the large end link on the safety chain. Secure the bolt with the 1-1/4"-7 Gr5 Z Nylon Locking Hex Jam Nut. Connect the chain around the towing machine's attaching bar (pictured to the left).
- b) Do not allow any more slack than necessary for articulation.
- c) Do not use any intermediate support as the attaching point.
- d) Store the safety chain by securing it around the main axle A-frame of the grain cart.
- e) 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.** Check for adequate clearance between telescoping PTO and tractor hitch. Suggested clearance is 7 inches.
3. Make sure the jack stand is repositioned from the lower support position before the cart is moved. **Never use the jack to support a loaded grain cart.**
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.



# Operating Instructions

6. Run the auger system EMPTY before loading grain into the tank for actual use. Make certain that the upper, lower, and horizontal 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.

## 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 SERVICE PERSONNEL ONLY.

| Trouble                                                                                                                | Possible Cause                                                               | Possible Remedy                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Auger will not return to down position or move from stow position                                                      | Faulty check valve                                                           | Replace check valve                                                                                                                                                                                                                                         |
|                                                                                                                        | Faulty lock and load solenoid                                                | Disconnect power to lock and load. If the auger can move, the lock and load solenoid needs to be replaced.                                                                                                                                                  |
|                                                                                                                        | Upper flighting and lower flighting are locked together                      | Bearing on top of upper auger flighting needs 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 Lower and Upper Flighting" on page 16). |
|                                                                                                                        | Feed gate open                                                               | Close the feed gate.                                                                                                                                                                                                                                        |
|                                                                                                                        | Lock and Load not operating correctly                                        | Make sure the limit switch on the feed gate indicator assembly is functioning properly.                                                                                                                                                                     |
| 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          | 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.                                                                                                                                                                                                                          |
|                                                                                                                        | Rear auger disconnect disengaged                                             | Engage rear auger disconnect.                                                                                                                                                                                                                               |
| 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 field position, tighten cable to the handle.                                                                                                                                                                                                  |
| Feed gate indicator not moving                                                                                         | Debris lodged in feed gate                                                   | Make sure indicator slider moves freely and feed gate is clear of debris.                                                                                                                                                                                   |
| Clutch disconnecting                                                                                                   | Auto-clutch torque exceeded                                                  | Operate rear auger disconnect.                                                                                                                                                                                                                              |

# Lubrication Service Schedule

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

**90 DEGREE REAR GEARBOXES:** Gearbox lubricant has been added to the gearboxes during final assembly. Recheck the lubricant level before initial operation of the grain cart, then periodically according to use. For the gearbox on the left while looking at the rear of the cart, the fluid level should be between the bottom and halfway point of the 2" output shaft that bisects the gearbox. The recommended fluid level range is pictured in Figure 1 and Figure 2 below. The minimum level is pictured in green and the maximum level is pictured in red. A pressure relief plug is in the center of the top of the gearbox mount plate. To check the fluid level, remove the vented inspection plug and view the fluid level from above. When filled to the maximum level (shown in red), the gearbox should have 80 ounces of SAE 80W-90 lubricant. Change the oil annually before use.

For the gearbox on the right while looking from the rear of the cart, the fluid level should rest at the inspection plug, pictured in red in Figure 3 below. When filled to the proper level, the gearbox should have 80 ounces of SAE 80W-90 lubricant. Change the oil annually before use.

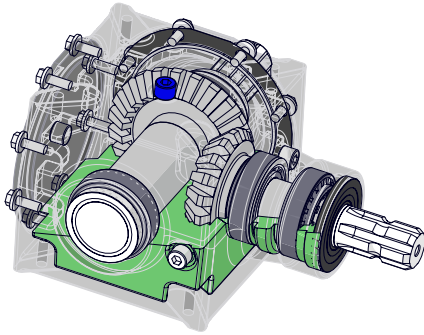


Figure 1

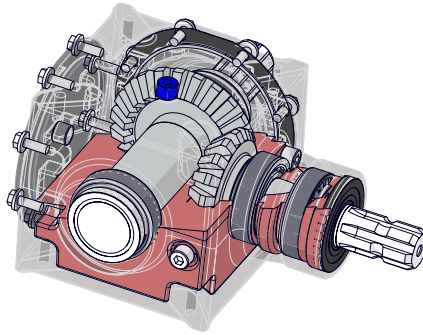


Figure 2

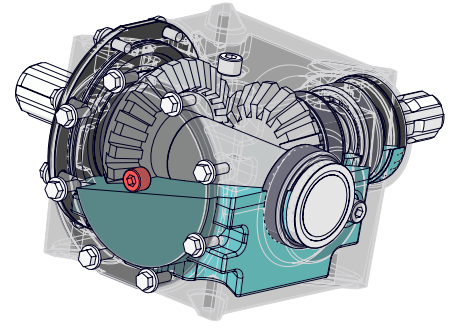


Figure 3

**3-WAY FRONT 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. The fluid level should rest at the inspection plug, pictured in blue in Figure 4 below. When filled to the proper level, the gearbox should have 96 ounces of SAE 80W-90 lubricant. Change the oil annually before use.

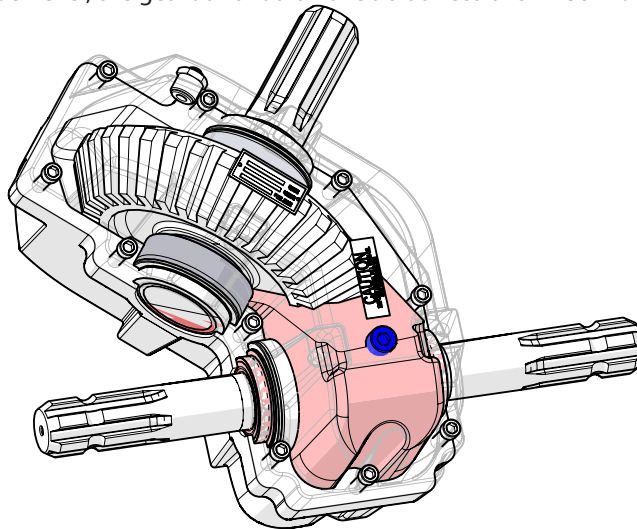


Figure 4

**REAR DISCONNECT GROOVED SPLINE COUPLER:** Exercise the disconnect handle, adding a lubricant to the 2" output shaft on the first gearbox where the grooved spline coupler slides. Loctite Silver Grade Anti-Seize is recommended. Perform this maintenance annually.

# Lubrication Service Schedule

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

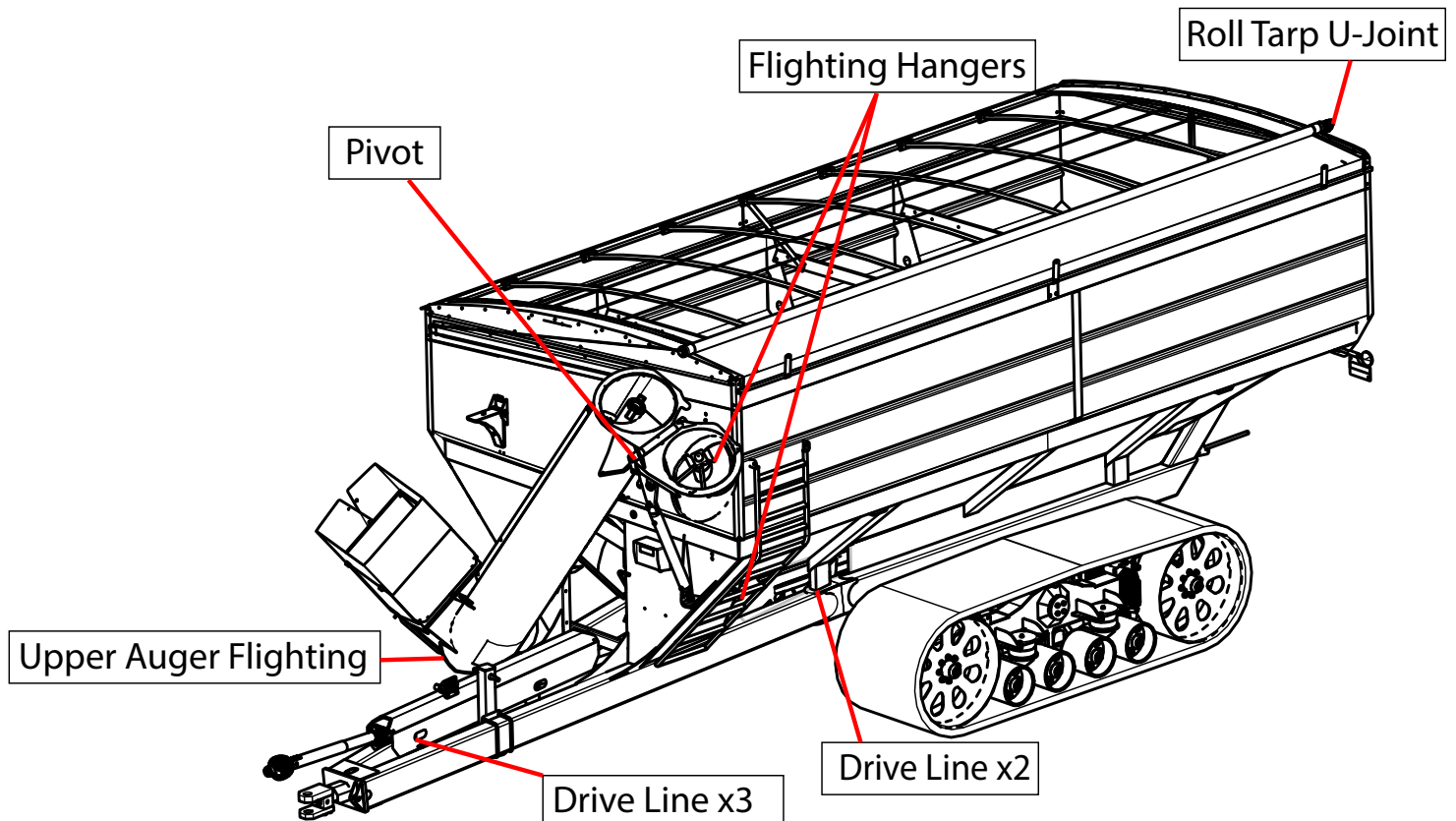
**PTO & DRIVELINE:** The grease fittings on the PTO should be serviced after every 8 hours of use. Service the grease fittings on each of the drive bearings and the universal joints after every 8 hours of use.

**AUGER ASSEMBLY:** 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) as well as the horizontal auger hangers after every 8 hours of use or as needed.

**SPRING LOADED UPPER AUGER BEARING:** Service the grease fitting on the upper auger bearing (1 pump) (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.

**ROLL TARP U-JOINT:** Service the grease fitting on the U-Joint of the roll tarp crank handle once annually.

| Grease Fittings                           |                      |
|-------------------------------------------|----------------------|
| Pivot Pin                                 | Once Annually        |
| Roll Tarp U-Joint                         | Once Annually        |
| Upper Auger Flighting                     | Every 8 hours of use |
| Driveline                                 | Every 8 hours of use |
| Horizontal and Vertical Flighting Hangers | Every 8 hours of use |



# Adjusting the Lower and Upper Flighting

## WARNING

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

**LOWER FLIGHTING** - 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 1/2" 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.

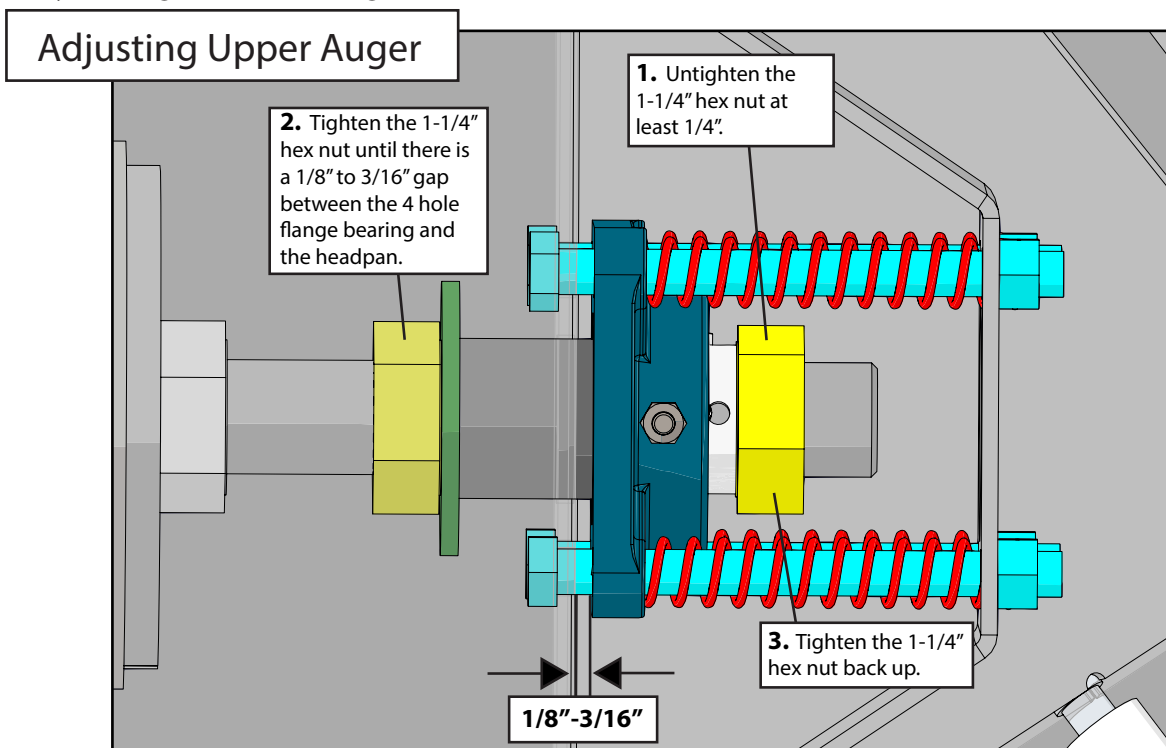
If the hanger can no longer be adjusted by moving it up or down on the elongated holes, both the hanger bushing assembly and the lower flighting will have to be removed. After removing them from the tube assembly, place a shim [between 1/8" (0,32cm) to 3/16" (0,48cm) thick] where the gearbox and the 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 two 1/2" bolts from the hanger bushing assembly and pull the lower flighting off the gearbox.

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

**UPPER FLIGHTING** - 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 a faulty check valve on the hydraulic cylinder used to raise and lower the upper auger assembly may be causing the problem.

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.



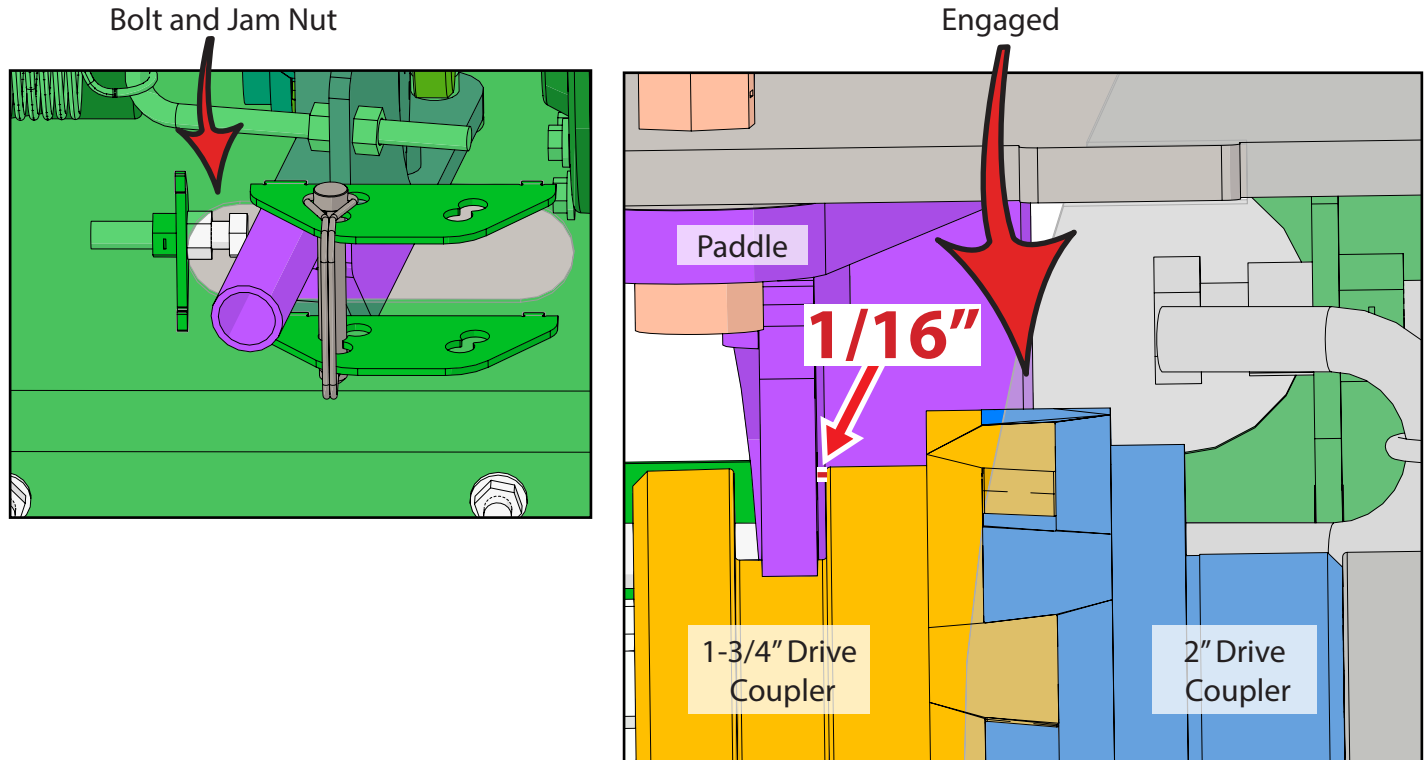
# Rear Disconnect Annual Maintenance

Before using the cart for the season:

1. Exercise the disconnect handle, adding a lubricant to the 2" output shaft on the first gearbox where the grooved spline coupler slides. Loctite Silver Grade Anti-Seize is recommended.
2. Check the face of the disconnect paddle for excessive wear ( $1/32"$  or more). In the event of excessive wear ( $1/32"$  or more), contact the J&M Service Department.

## Disengage Paddle, and Back Plate Settings

The back plate has a tab welded on the inside with a nut. A bolt and jam nut are screwed into it. The proper bolt setting maintains the gap shown in the bottom right picture. The paddle is shown in purple here, and when the drivedogs are engaged there should be a  $1/16"$  gap between the paddle and the drivedog. Having the gap will ensure that there is no unnecessary wear on parts.



## 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 elbow on the tip spout hydraulic cylinder. Remove dirt from the fitting to allow hydraulic oil to flow through the restrictor. Reattach the restrictor to the 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.

## Routine Maintenance

### **⚠ WARNING: BE CERTAIN ALL POWER IS SHUT OFF WHEN SERVICING THE GRAIN CART**

- Repack the bearings in the hub assembly once a year or as needed. Use a good quality LS EP2 Severe Duty, High Shock Load, Lithium based Grease. 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.
- Exercise horizontal and vertical clean out doors. Lubricate hinge points if necessary.
- Check all hydraulic hoses for wear and replace as necessary.
- Make sure all tires are properly inflated. Refer to "Initial Operation and Maintenance" on page 11 for recommended instructions on tire pressure. It is important that tires are inspected before and after unit loaded.
- Make sure that all guards and shields are in place before operating the grain cart.

## Storage

**IMPORTANT:** When the grain cart is not in use, store the cart in a dry, protected place. Leaving your grain cart outside, open to the weather will shorten its life.

### Procedure for Storage Preparation

1. Cover electronic monitor (if equipped) with plastic before washing the grain cart. Wash or clean and completely lubricate the grain cart. See "Lubrication Service Schedule" on page 14.
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 SAE 80W-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. Clean the tires before storage. Inflate the tires at regular intervals.
7. Open the clean-out doors at the base of the grain tank.

### Removing from Storage

1. Check the gearboxes to make sure they have the appropriate amount of oil.
2. Inflate the tires to the correct operating pressure.
3. Close the clean out doors at the base of the grain tank.
4. 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.**

## Wheel Rims and Tires

### Wheel Rims for Single Wheel Carts

|                          |
|--------------------------|
| 44x32-10 Hole Wheel Rims |
|--------------------------|

|                          |
|--------------------------|
| 44x32-20 Hole Wheel Rims |
|--------------------------|

### Tires for Single Wheel Carts

|                                                                                           |
|-------------------------------------------------------------------------------------------|
| IF1250/50R32 Lug Tires (Firestone) (201B LI) (for 44x32-10 Hole and 44x32-20 Hole Wheels) |
|-------------------------------------------------------------------------------------------|

|                                                                                           |
|-------------------------------------------------------------------------------------------|
| IF1250/50R32 Lug Tires (Alliance) (201A8 LI) (for 44x32-10 Hole and 44x32-20 Hole Wheels) |
|-------------------------------------------------------------------------------------------|

### Wheel Rims for Walking Tandem Dual Carts

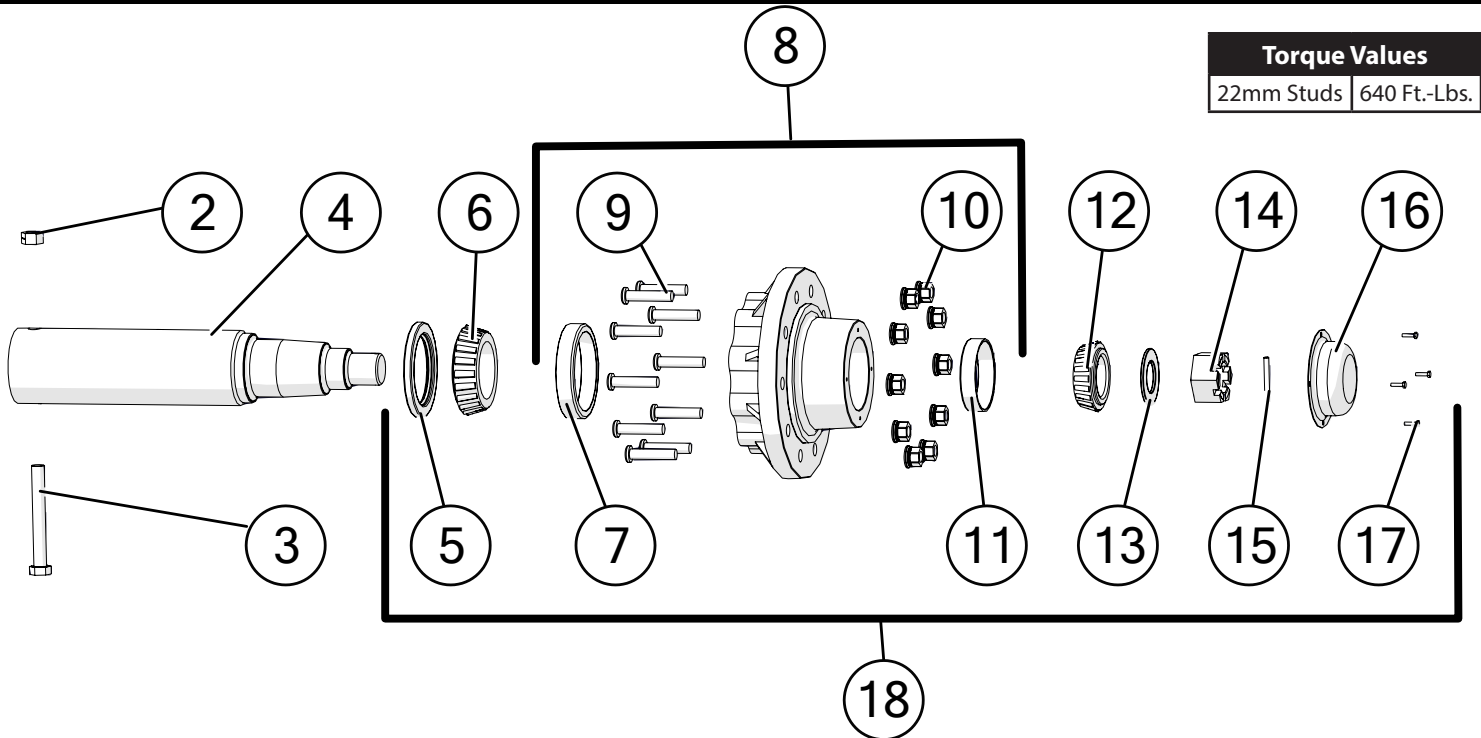
|                          |
|--------------------------|
| 18x42-10 Hole Wheel Rims |
|--------------------------|

### Tires for Walking Tandem Dual Carts

|                                                                       |
|-----------------------------------------------------------------------|
| IF520/85R42 Lug Tires (Firestone) (169 LI) (for 18x42-10 Hole Wheels) |
|-----------------------------------------------------------------------|

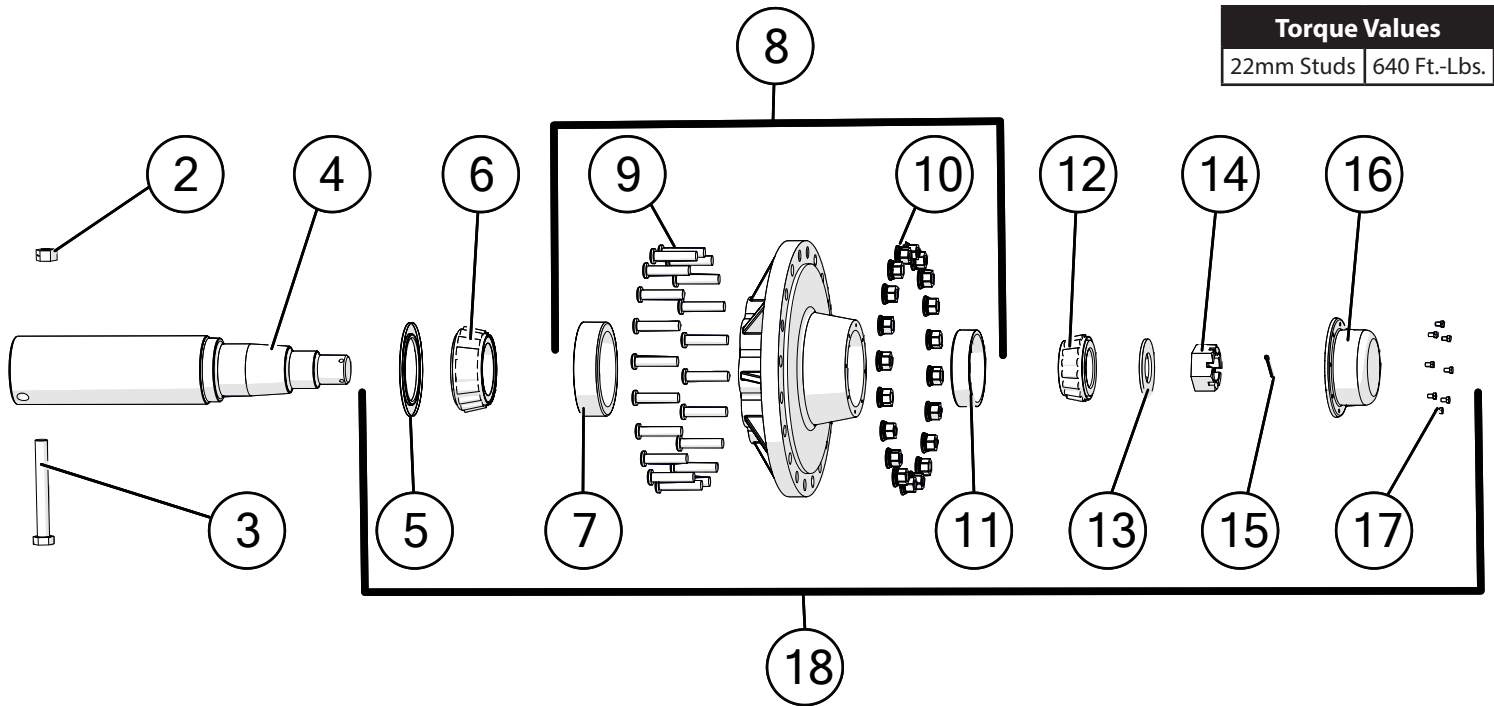
|                                                                    |
|--------------------------------------------------------------------|
| 520/85R42 Lug Tires (Alliance) (169 LI) (for 18x42-10 Hole Wheels) |
|--------------------------------------------------------------------|

# Hub & Spindle Assembly 250-10 (Single Wheel Grain Carts)



| 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 (165450)                                                         | 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 Hub with Races, 22mm Studs & Nuts (13.19 Bolt Circle) (11.13 Pilot) (H25000)              | JM0019300 |
| 9 Wheel Stud (22mm x 90mm) (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 |

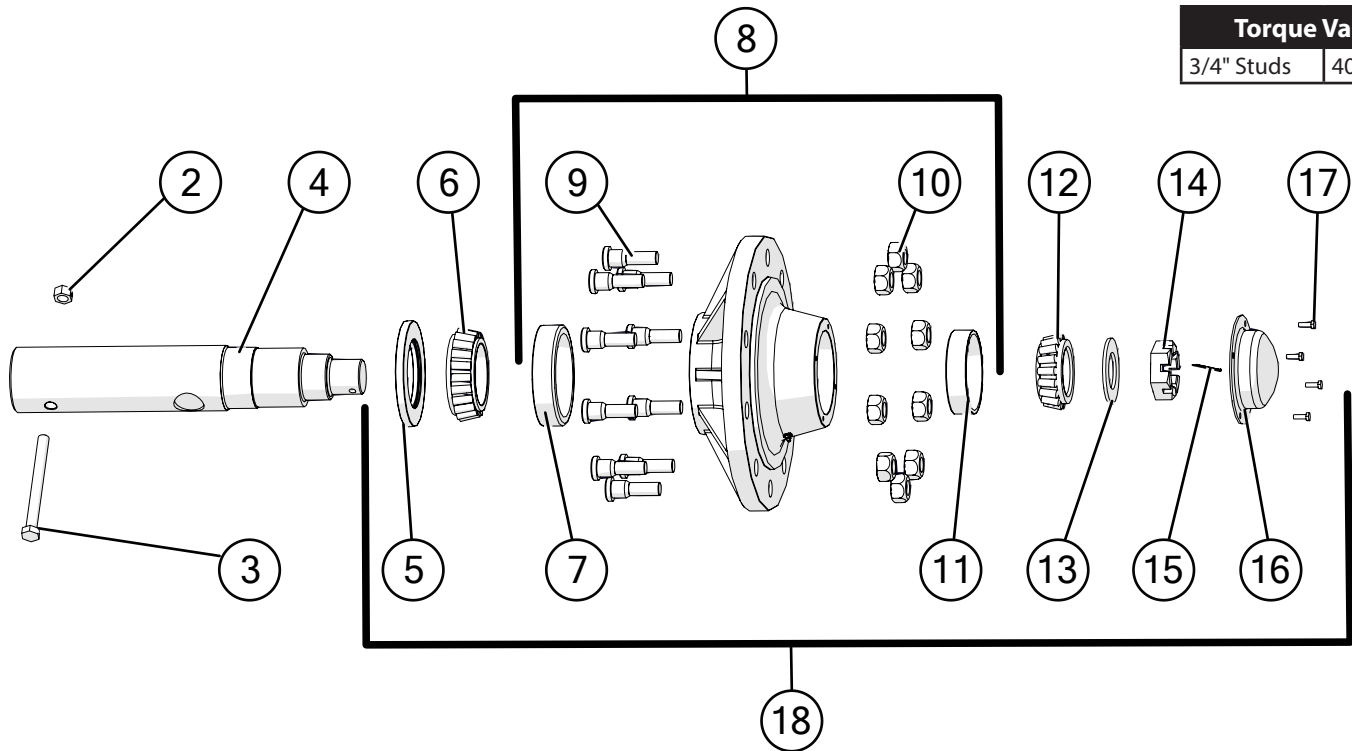
# Hub and Spindle Assembly 550-20 (Single Wheel Grain Carts)



| Torque Values |              |
|---------------|--------------|
| 22mm Studs    | 640 Ft.-Lbs. |

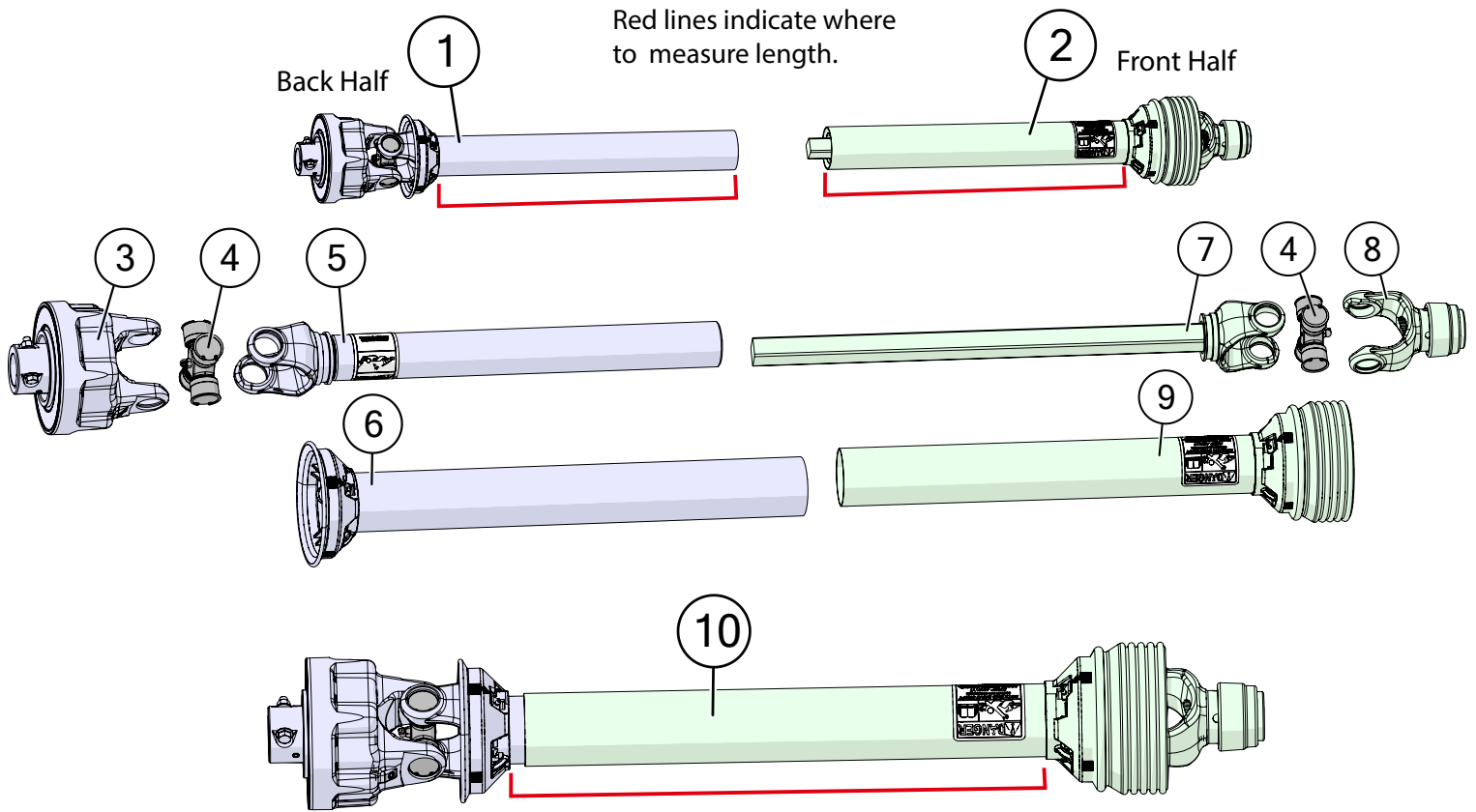
| Description                                                                    | Part No.  |
|--------------------------------------------------------------------------------|-----------|
| 1 G550-20 Hub, Spindle, and Bearings Assembly with 22mm Studs, Races, and Nuts | JM0034272 |
| 2 1"-8 Gr2 Z Centerlock Hex Nut                                                | JM0002149 |
| 3 1"-8 x 8" Gr5 Z Hex Bolt                                                     | JM0001487 |
| 4 Spindle, 6" x 29-3/8" for 20 Bolt Hub                                        | JM0019723 |
| 5 Grease Seal, G550-20                                                         | JM0019219 |
| 6 Large Bearing (938)                                                          | JM0019214 |
| 7 Large Race (930)                                                             | JM0019211 |
| 8 G550-20 Hub with Studs, Lugs, and Races                                      | JM0019209 |
| 9 Wheel Stud (22mm x 90mm) (22-MMS)                                            | JM0019178 |
| 10 Wheel Nut 22mm with Washer (22-MMNW)                                        | JM0019192 |
| 11 Small Race (832)                                                            | JM0019212 |
| 12 Small Bearing (842)                                                         | JM0019215 |
| 13 2-1/2" USS Flat Washer                                                      | JM0030690 |
| 14 2-1/2"-12 Gr5 Z Castle Hex Nut                                              | JM0034274 |
| 15 3/16" X 2-1/2" Cotter Pin                                                   | JM0027684 |
| 16 G550-20 Dust Cap                                                            | JM0019217 |
| 17 5/16"-18 x 1/2" Gr5 Z Hex Bolt                                              | JM0016674 |
| 18 G550-20 Hub, Seal, Bearings, Races, Studs, Nuts and Dust Cap                | JM0048276 |

# Hub & Spindle Assembly W-881 (Walking Tandem Dual Wheels)



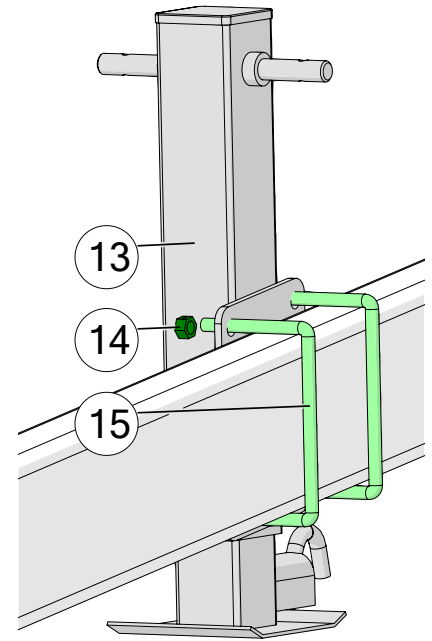
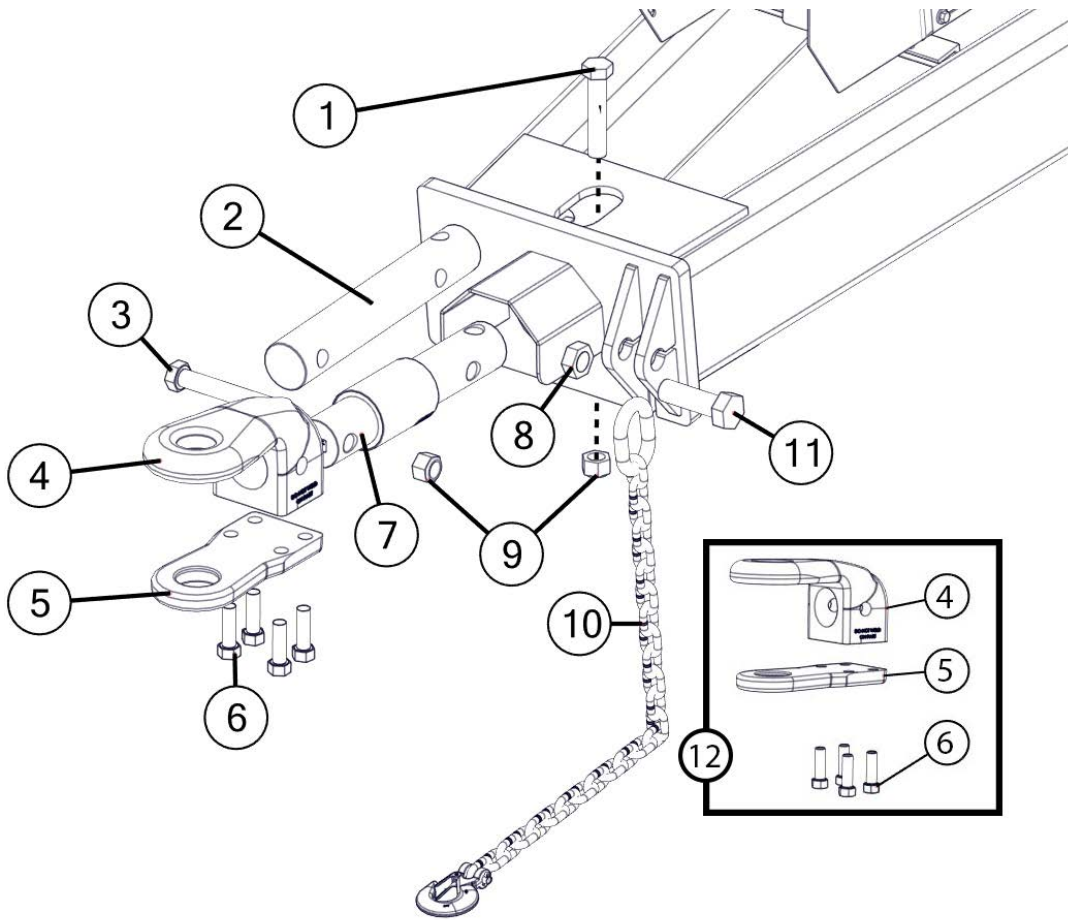
| Description                                                                                     | Part No.  |
|-------------------------------------------------------------------------------------------------|-----------|
| 1 Hub and Spindle Assembly Complete 20-1/4" (3/4" Studs) (HSA-650D) (Walking Tandem Duals)(FAA) | JM0019940 |
| 2 1"-8 Gr2 Z Centerlock Hex Nut                                                                 | JM0002149 |
| 3 1"-8 x 7" Gr5 Z Hex Bolt                                                                      | JM0016689 |
| 4 Spindle, 4-1/2" x 20-1/4" for Walking Tandem Dual Wheel or Fully Adjustable Axle (2819005)    | JM0019937 |
| 5 Seal (4-1/4" ID, 6" OD) for Hub (CR-43771)                                                    | JM0018955 |
| 6 Large Bearing (HM218248)                                                                      | JM0018849 |
| 7 Large Race (HM218210)                                                                         | JM0018848 |
| 8 W-881 Hub with Large and Small Races, 3/4" Studs & Nuts (11.13 Pilot)                         | JM0020510 |
| 9 Wheel Stud (3/4"-16 x 1-3/4")                                                                 | JM0018957 |
| 10 Wheel Nut 3/4"-16                                                                            | JM0018958 |
| 11 Small Race (HM212011)                                                                        | JM0018854 |
| 12 Small Bearing (HM212049)                                                                     | JM0018852 |
| 13 2-1/8" ID, 3-3/4" OD Flat Washer (3/16")                                                     | JM0015900 |
| 14 2"-12 Gr5 Z Castle Hex Nut (912973)                                                          | JM0015899 |
| 15 3/8" x 2-3/4" Z Roll Pin (905945)                                                            | JM0018956 |
| 16 Dust Cap 6-1/4" OD (for W-881 & W-891 Hub) (909921)                                          | JM0018954 |
| 17 1/4"-20 x 1" Gr5 Z Hex Bolt                                                                  | JM0002095 |

# Power Take-Off (PTO) Shaft Assembly



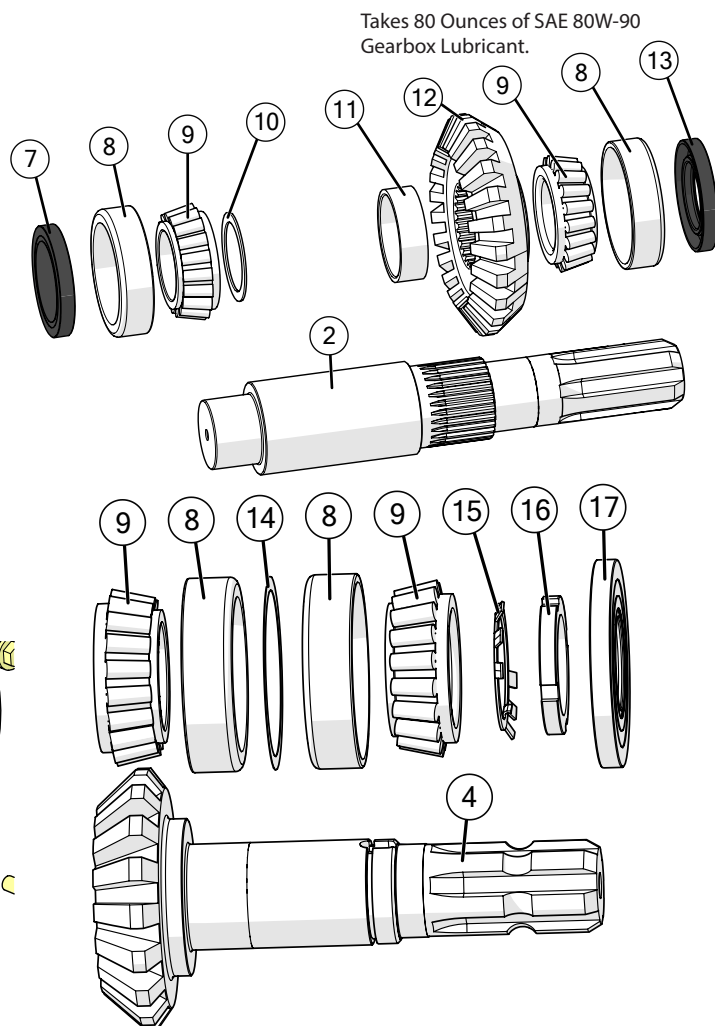
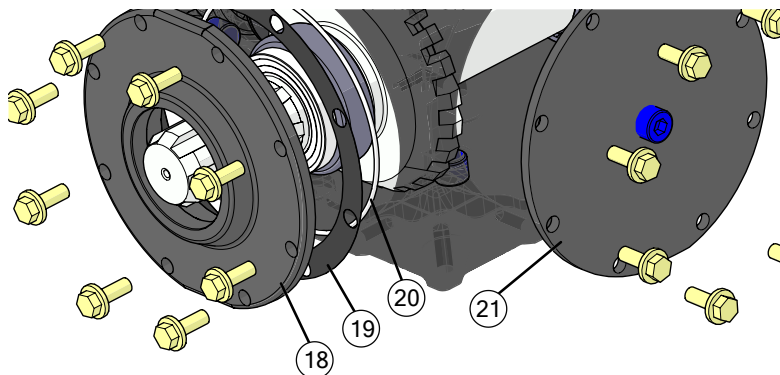
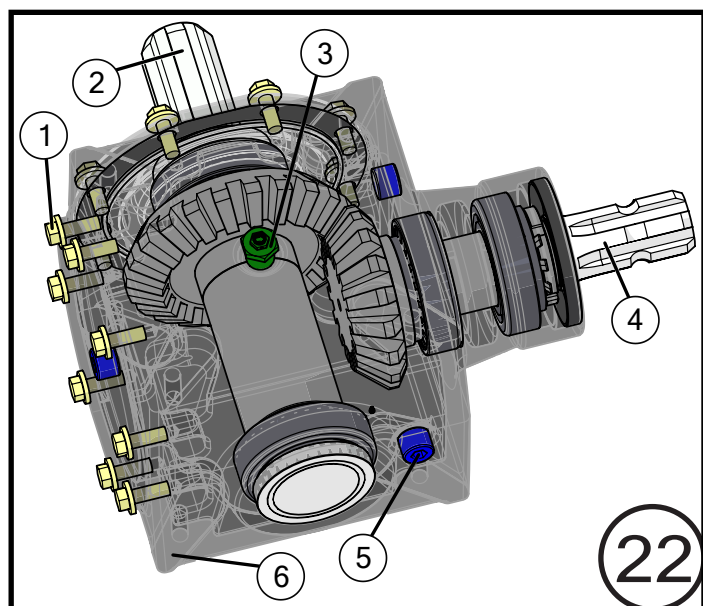
|    | Description                                                | Part No.  |
|----|------------------------------------------------------------|-----------|
| 1  | Back Half Weasler PTO (1-3/4") (Auto Clutch) 25-3/4"       | JM0018513 |
| 1  | Back Half Weasler PTO (1-3/4") (Auto Clutch) (XL) 31-3/4"  | JM0030331 |
| 2  | Front Half Weasler PTO (1-3/4") (Auto Clutch) 25"          | JM0018514 |
| 2  | Front Half Weasler PTO (1-3/4") (Auto Clutch) (XL) 30-1/4" | JM0030330 |
| 2  | Front Half Weasler PTO (1-3/8") (Auto Clutch) 25"          | JM0024367 |
| 2  | Front Half Weasler PTO (1-3/8") (Auto Clutch) (XL) 30-1/4" | JM0030640 |
| 3  | Auto Clutch for Weasler                                    | JM0018500 |
| 4  | 55E Cross Kit (Auto Clutch PTO)                            | JM0018449 |
| 5  | Yoke, Tube & Sleeve (Weasler Auto Clutch) (55E)            | JM0018519 |
| 5  | Yoke, Tube & Sleeve (XL) Weasler                           | JM0031647 |
| 6  | Weasler Auto Clutch Back Guard (25-3/4")                   | JM0018517 |
| 6  | Weasler XL Auto Clutch Back Guard (31-3/4")                | JM0030645 |
| 7  | Yoke & Shaft Assembly (Weasler Auto Clutch) (55E)          | JM0018520 |
| 7  | Yoke & Shaft Assembly (XL) Weasler                         | JM0031648 |
| 8  | Spring Lock Yoke (1-3/4" PTO) (Weasler)                    | JM0018506 |
| 8  | Spring Lock Yoke (1-3/8" PTO) (Weasler)                    | JM0024353 |
| 9  | Weasler Auto Clutch Front Guard (25")                      | JM0018518 |
| 9  | Weasler XL Auto Clutch Front Guard (30-1/4")               | JM0030642 |
| 10 | Complete 1-3/4" Weasler PTO (Auto Clutch) 25-3/4"          | JM0018443 |
| 10 | Complete 1-3/4" Weasler PTO (Auto Clutch) (XL) 31-3/4"     | JM0030332 |
| 10 | Complete 1-3/8" Weasler PTO (Auto Clutch) 25-3/4"          | JM0024333 |
| 10 | Complete 1-3/8" Weasler PTO (Auto Clutch) (XL) 31-3/4"     | JM0030641 |

# Hitch Assembly



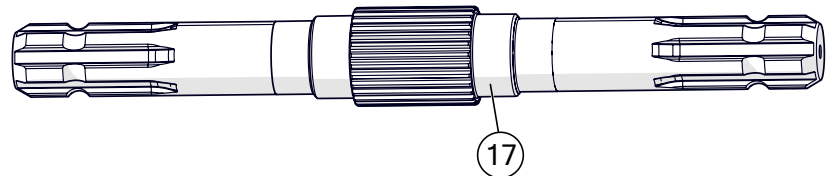
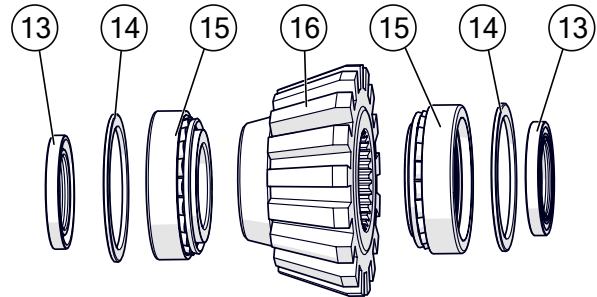
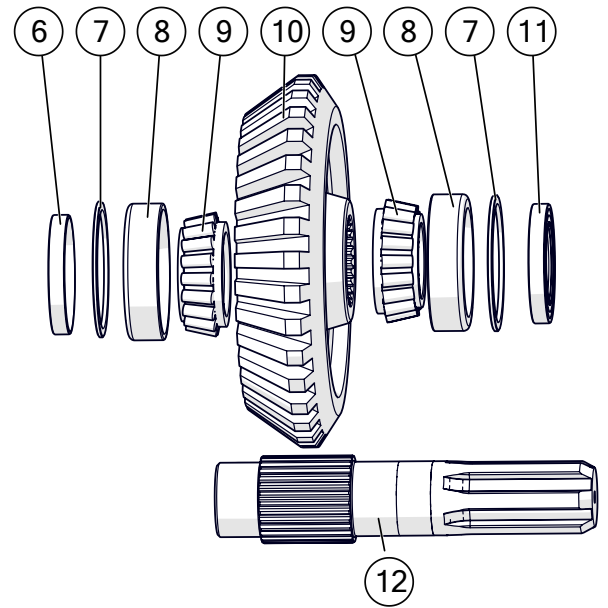
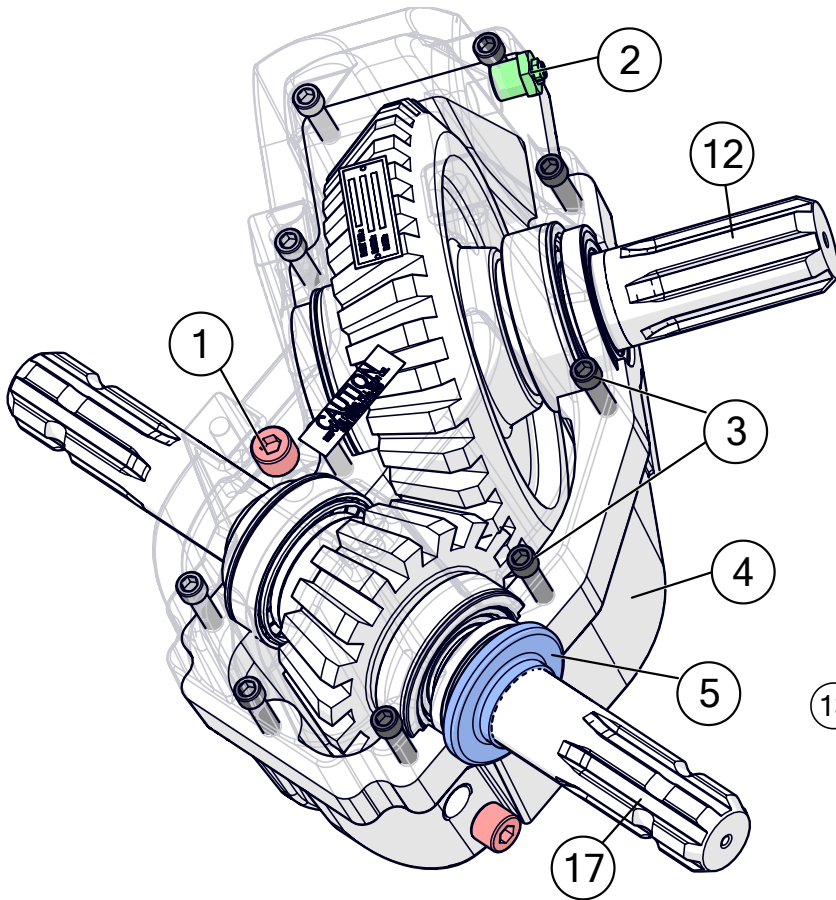
| Description                                                                         | Part No.  |
|-------------------------------------------------------------------------------------|-----------|
| 1 1"-8 x 5-1/2" Gr5 Z Hex Bolt                                                      | JM0002110 |
| 2 2-7/8" x 16-3/4" Non-Scale Hitch Bar                                              | JM0025227 |
| 3 1"-8 x 7" Gr8 YZ Hex Bolt                                                         | JM0042653 |
| 4 Cast Iron Spade 2-1/4" Pin Hole                                                   | JM0020529 |
| 5 Cast Iron Clevis (Bolt-On) 2-1/4" Pin Hole                                        | JM0020527 |
| 6 3/4"-16 x 2-1/2" Gr8 YZ Fine Thread Hex Bolt                                      | JM0015323 |
| 7 2-7/8" Digi-Star Weigh Bar, 1" Pin Hole (278WB-T1)                                | JM0000355 |
| 8 1-1/4"-7 Gr5 Z Nylon Locking Hex Jam Nut                                          | JM0027201 |
| 9 1"-8 Gr2 Z Centerlock Hex Nut                                                     | JM0002149 |
| 10 40k Lb Safety Chain                                                              | JM0029261 |
| 11 1-1/4"-7 x 4" Gr8 Z Hex Bolt                                                     | JM0026073 |
| 12 Cast Iron Clevis Hitch Assembly                                                  | JM0020537 |
| 13 Jack with 10" tall Frame Tube Mount Plate                                        | JM0040578 |
| 14 5/8"-11 Gr2 Z Centerlock Hex Nut                                                 | JM0002146 |
| 15 Square U-Bolt 10-3/32" Inside Width x 6-15/32" Length, 0.625-11TH - Round Corner | JM0040576 |

# 90 Degree Gear Box



| Description                                                     | Part No.  |
|-----------------------------------------------------------------|-----------|
| 1 3/8"-16 x 1" Gr5 Z SF Hex Bolt                                | JM0002092 |
| 2 Shaft Cross (09-70312)                                        | JM0046081 |
| 3 1/2" NPT Bushing 1/8" NPT Relief Plug (72-20011)              | JM0025067 |
| 4 Gear Shaft - 17 Teeth (71-06194)                              | JM0046075 |
| 5 1/2"-14 NPT Pipe Plug for Weasler Gearbox (72-20007)          | JM0025068 |
| 6 Housing - 6490 Machining (70-06144)                           | JM0046076 |
| 7 End Cap Seal (3-3/16" x 7/16") for Weasler Gearbox (71-40079) | JM0025063 |
| 8 Bearing Cup (3720)                                            | JM0027905 |
| 9 Bearing Cone (3780)                                           | JM0027906 |
| 10 Spacer (51 x 65 x 1.4) (11-40615)                            | JM0046104 |
| 11 Spacer (60 x 68 x 20) (11-40615)                             | JM0046083 |
| 12 Gear - 23 Teeth (71-06119)                                   | JM0046080 |
| 13 Seal (2 x 3.196 x 0.4333) for Weasler Gearbox (71-40080)     | JM0025062 |
| 14 Spacer (80 x 92.9 x .02) (11-40566)                          | JM0046085 |
| 15 Retaining Shim (51 x 61 x 1.2) (11-40564)                    | JM0046086 |
| 16 Locknut - M50 x 1-1/2 (11-30027)                             | JM0046087 |
| 17 Seal (45 x 100 x 10) (28-11013)                              | JM0046084 |
| 18 End Cap - 64990 Machined (70-16093)                          | JM0046078 |
| 19 Gasket Kit - 6000 Series (19-16611)                          | JM0046077 |
| 20 O-Ring (160 x 3.1) (28-1007)                                 | JM0046089 |
| 21 Top Cover (90 Deg. Gearbox) (7-7/8" OD)                      | JM0046079 |
| 22 90 Degree Gearbox Complete (1.35-1) (2" Output) (6490-0819)  | JM0044943 |

# 3 Directional Gear Box

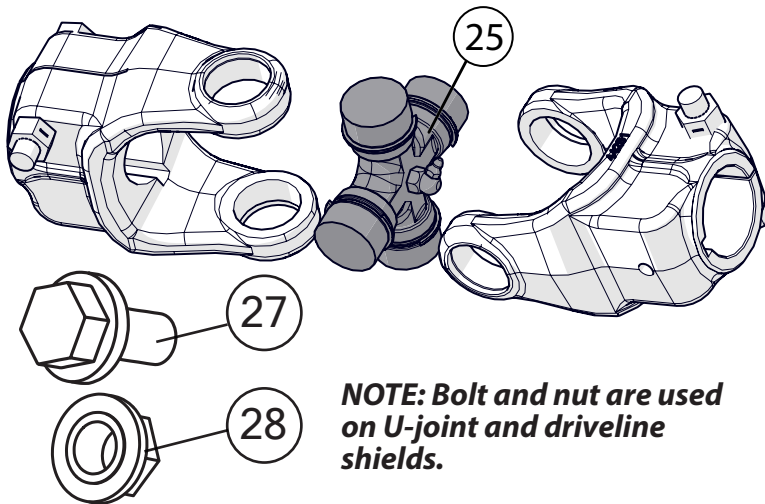
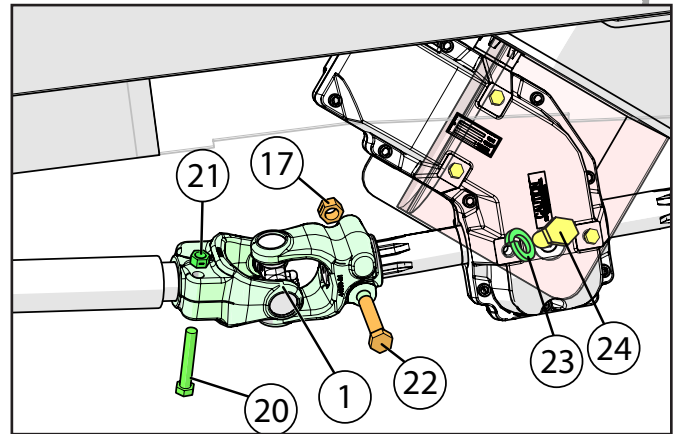
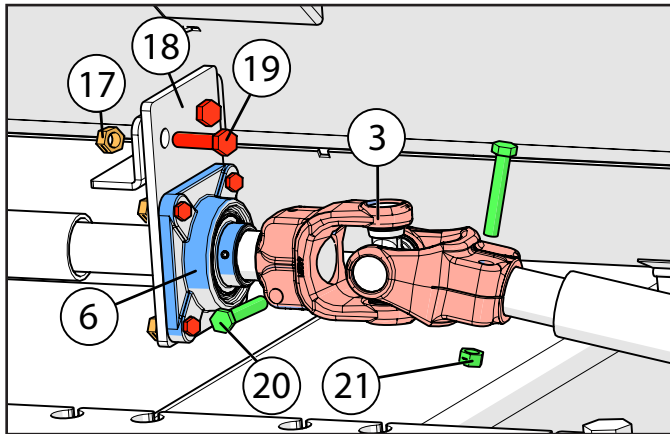
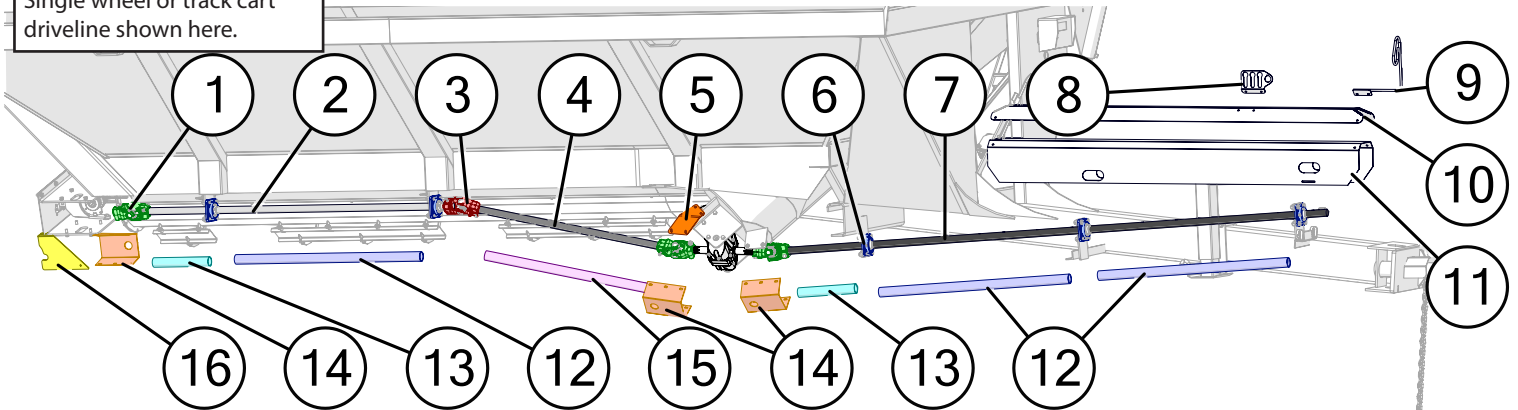


Takes 96 Ounces of SAE 80W-90  
Gearbox Lubricant.

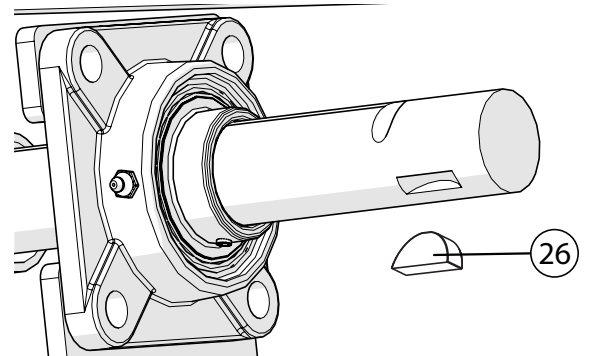
| Description                                                         | Part No.  |
|---------------------------------------------------------------------|-----------|
| 1 1/2"-14 NPT Pipe Plug for Weasler Gearbox (72-20007)              | JM0025068 |
| 2 1/2" NPT Bushing 1/8" NPT Relief Plug (72-20011)                  | JM0025067 |
| 3 3/8"-16 UNC x 2-1/2" Gr5 Cap Screw for Weasler Gearbox (72-0002)  | JM0025069 |
| 4 Housing Set (Top and Bottom) for Weasler Gearbox (70-76010)       | JM0046058 |
| 5 Gearbox Exterior Dust Seal 1-3/4" ID                              | JM0049020 |
| 6 End Cap Seal (3-3/16" x 7/16") for Weasler Gearbox (71-40079)     | JM0025063 |
| 7 Spacer Kit (19-16630)                                             | JM0046073 |
| 8 Bearing Cup (3720)                                                | JM0027905 |
| 9 Cone Bearing (3780)                                               | JM0027906 |
| 10 Gear - 34 Teeth (71-06135)                                       | JM0046061 |
| 11 Seal (2 x 3.196 x 0.4333) for Weasler Gearbox (71-40080)         | JM0025062 |
| 12 Single End Shaft (09-70194)                                      | JM0046062 |
| 13 Seal (1-3/4" x 2-23/32" x 33/64") for Weasler Gearbox (71-40052) | JM0025061 |
| 14 Spacer Kit (19-16631)                                            | JM0046074 |
| 15 Bearing and Race Set (32210) for Weasler Gearbox (71-20017)      | JM0025054 |
| 16 Gear - 17 Teeth (71-06134)                                       | JM0046059 |
| 17 Double End Shaft (09-70244)                                      | JM0046060 |
| 18 3 Directional Gearbox for Drag Carts (6050-0760)                 | JM0045977 |

# Driveline

Single wheel or track cart driveline shown here.

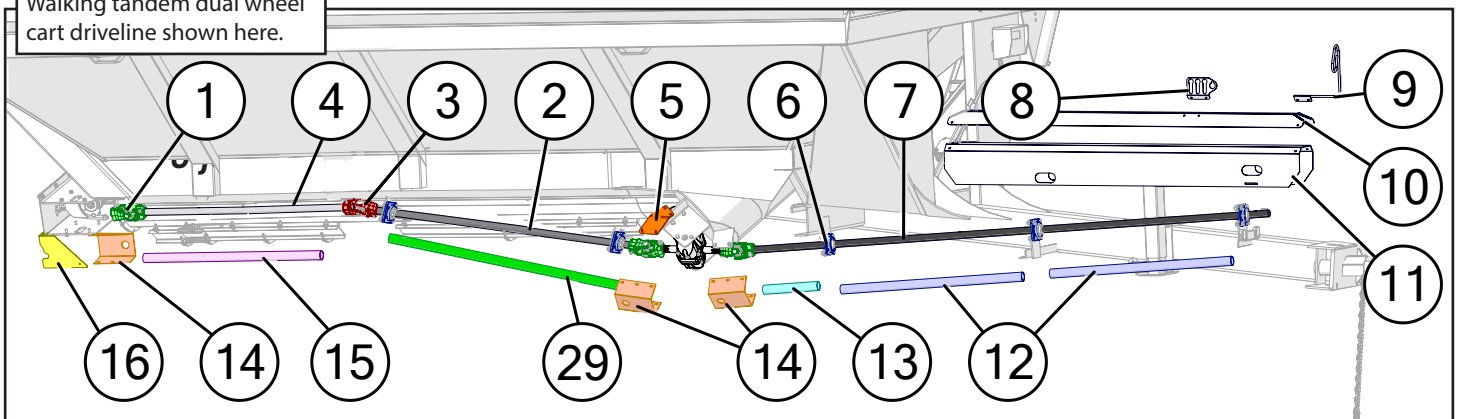


**NOTE: Bolt and nut are used on U-joint and driveline shields.**



**NOTE: Cart uses 2 half moon keys on each driveline.**

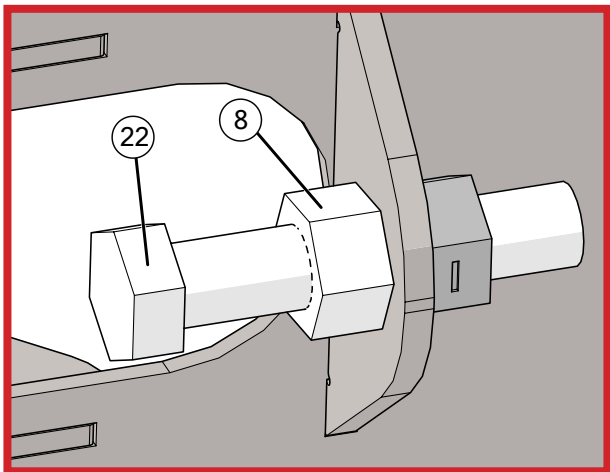
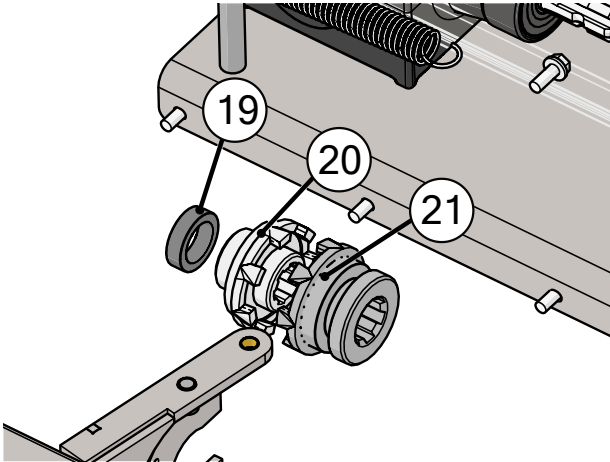
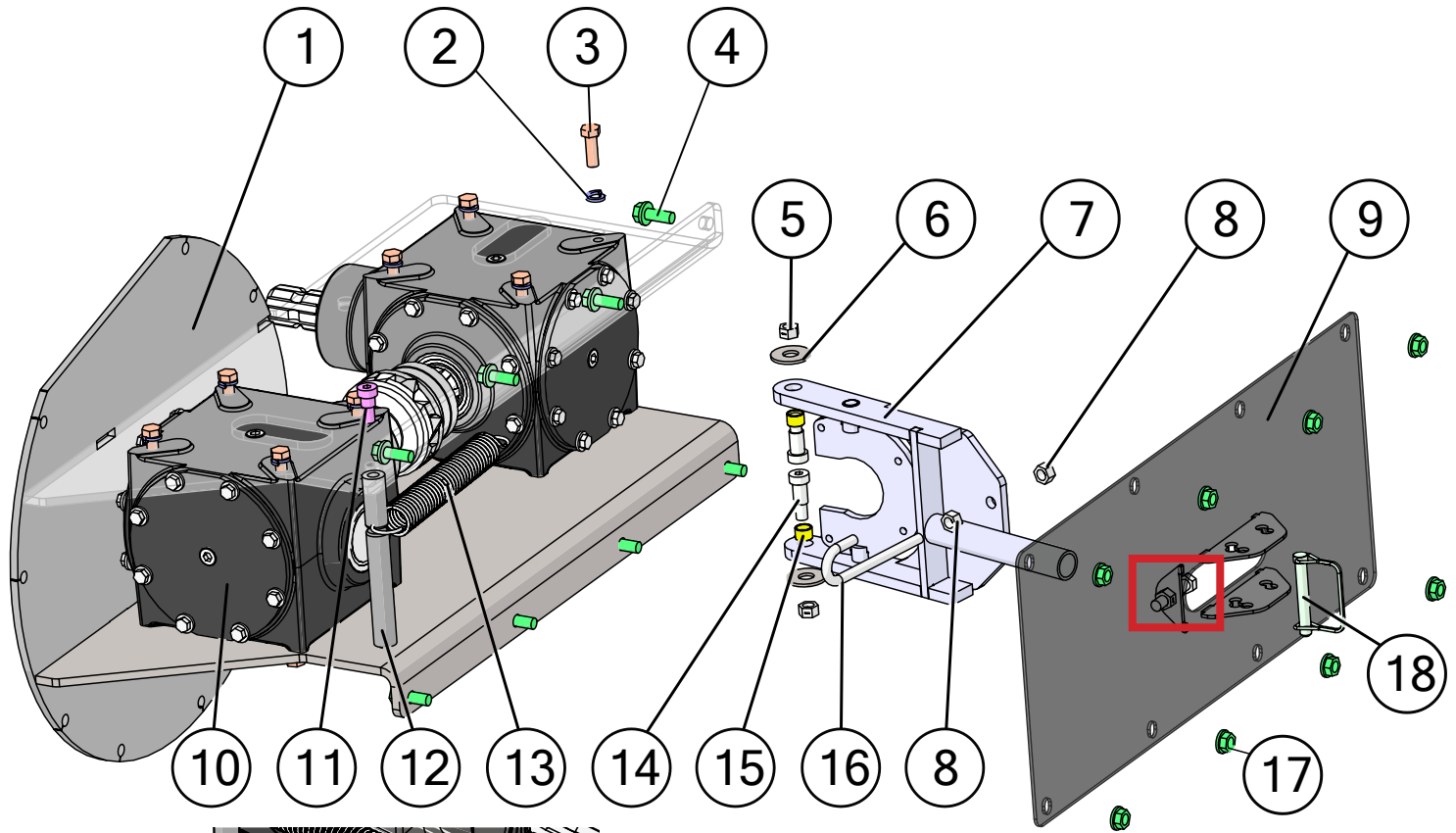
Walking tandem dual wheel cart driveline shown here.



# Driveline

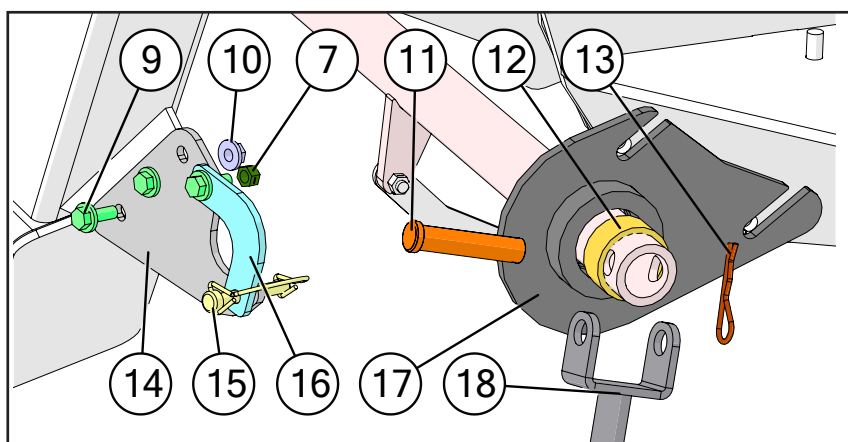
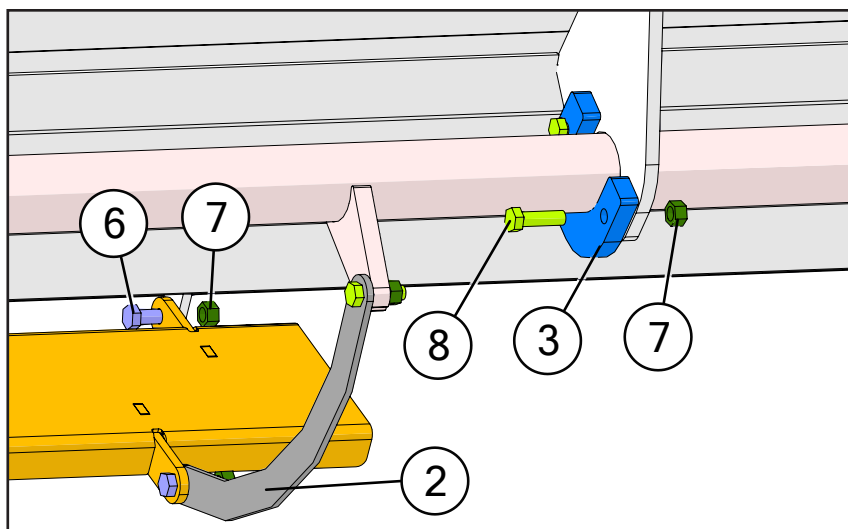
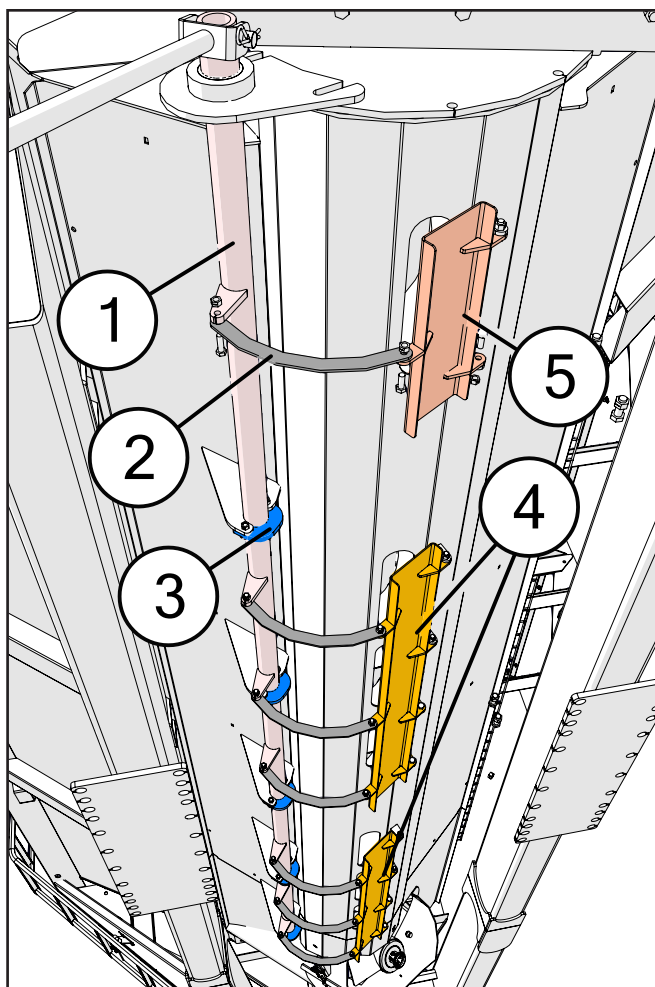
|    | Description                                                         | Part #    |
|----|---------------------------------------------------------------------|-----------|
| 1  | 44R U-Joint - (252288) 1-3/4" Spline x 1-3/4" Round Clamp - Weasler | JM0041389 |
| 2  | Drive Shaft, 1-3/4" x 84"                                           | JM0040633 |
| 3  | 44R U-Joint - 1-3/4" Round Clamp x 1-3/4" Round Clamp Weasler       | JM0041390 |
| 4  | Drive Shaft, 51-1/2" x 1-3/4"                                       | JM0037108 |
| 5  | Knuckle Shield Mount Extension for Dual Auger Carts                 | JM0051601 |
| 6  | 1-3/4" 4 Bolt Flange Bearing, 5/8" Bolt Hole (UCF-20928)            | JM0018774 |
| 7  | Drive Shaft, 1-3/4" x 144" (DS-134144)                              | JM0021242 |
| 8  | 3 Keyed LF Hydraulic Hose Holder                                    | JM0021437 |
| 9  | Long Fold Hydraulic Hose Holder Weldment                            | JM0049268 |
| 10 | 97" Hydraulic Hose Shield (1312, 1412, 1522, 32 series)             | JM0020941 |
| 11 | 32 Series PTO Shield                                                | JM0038119 |
| 12 | 2" x 48" PVC Pipe                                                   | JM0039449 |
| 13 | 2" x 15" PVC Pipe                                                   | JM0046562 |
| 14 | U-Joint Shield                                                      | JM0012698 |
| 15 | 2" x 44" PVC Pipe                                                   | JM0018795 |
| 16 | 90 Deg Gearbox U-Joint Shield                                       | JM0042637 |
| 17 | 5/8"-11 Gr2 Z Centerlock Hex Nut                                    | JM0002146 |
| 18 | Drive Shaft Support Plate 5" x 8-2/5"                               | JM0000227 |
| 19 | 5/8"-11 x 1-3/4" Gr5 Z Hex Bolt                                     | JM0016681 |
| 20 | 1/2"-13 x 3" Gr5 Z Hex Bolt                                         | JM0016678 |
| 21 | 1/2"-13 Gr2 Z Centerlock Hex Nut                                    | JM0001511 |
| 22 | 5/8"-11 x 3" Gr5 Z Hex Bolt                                         | JM0002105 |
| 23 | 1/2" Gr2 Z Lock Washer                                              | JM0019021 |
| 24 | 1/2"-13 x 1-1/2" Gr5 Z Hex Bolt                                     | JM0002100 |
| 25 | Cross Kit (U-Joint) (44R) (CK-44R)                                  | JM0017958 |
| 26 | 3/8" x 1-1/2" Half Moon Key                                         | JM0018772 |
| 27 | 3/8"-16 x 1" Gr5 Z SF Hex Bolt                                      | JM0002092 |
| 28 | 3/8"-16 Gr5 Z SF Hex Nut                                            | JM0002152 |
| 29 | 2" x 64" PVC Pipe                                                   | JM0046559 |

# Drag Auger Disengage

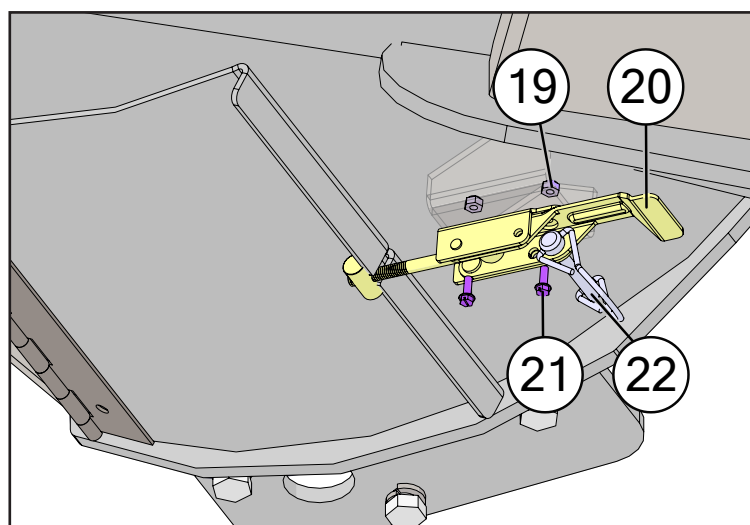


|    | Description                                                                  | Part No.   |
|----|------------------------------------------------------------------------------|------------|
| 1  | Rear Gearbox Mount Weldment                                                  | JM0046340  |
| 2  | 1/2" Gr2 Z Lock Washer                                                       | JM0019021  |
| 3  | 1/2"-13 x 1-1/2" Gr5 Z Hex Bolt                                              | JM00002100 |
| 4  | 1/2"-13 x 1-1/4" Gr5 Z SF Hex Bolt                                           | JM0010002  |
| 5  | 1/2"-13 Gr2 Z Centerlock Hex Nut                                             | JM0001511  |
| 6  | 5/8" USS Flat Washer                                                         | JM0003073  |
| 7  | Gearbox Disconnect - Swivel Paddle                                           | JM0046232  |
| 8  | 1/2"-13 Gr5 Z Hex Nut                                                        | JM0002124  |
| 9  | Rear Disconnect - Back Plate (29" x 12-15/16")                               | JM0046341  |
| 10 | 90 Degree Gearbox Complete (1.35-1) (2" Output) (6490-0819)                  | JM0044943  |
| 11 | 5/8" Shoulder Dia x 1/2" Shoulder Length x 1/2"-13 Socket Head Shoulder Bolt | JM0046218  |
| 12 | Spring Holder (1" OD x 7-15/16")                                             | JM0046216  |
| 13 | Extension Spring 8-1/2" x 1-1/2" OD x .162" Wire                             | JM0046308  |
| 14 | 5/8" Shoulder Dia x 1" Shoulder Length x 1/2"-13 Socket Head Shoulder Bolt   | JM0045388  |
| 15 | Bronze Bushing 5/8" ID x 3/4" OD x 1/2" (BB-58)                              | JM0003189  |
| 16 | 1/2"-13 x 6" Gr5 Z J-Bolt                                                    | JM0002168  |
| 17 | 1/2"-13 Gr5 Z SF Hex Nut                                                     | JM0002153  |
| 18 | 1/2" x 3-1/2" Lynch Pin                                                      | JM0046223  |
| 19 | Gearbox Disconnect - 1-3/4" ID Drive Coupler - Shaft Spacer                  | JM0047913  |
| 20 | Gearbox Disconnect - 1-3/4" Drive Coupler Weldment                           | JM0046175  |
| 21 | Gearbox Disconnect - 2" Drive Coupler Weldment                               | JM0046777  |
| 22 | 1/2"-13 x 2-1/2" Gr5 Z Hex Bolt                                              | JM0001648  |

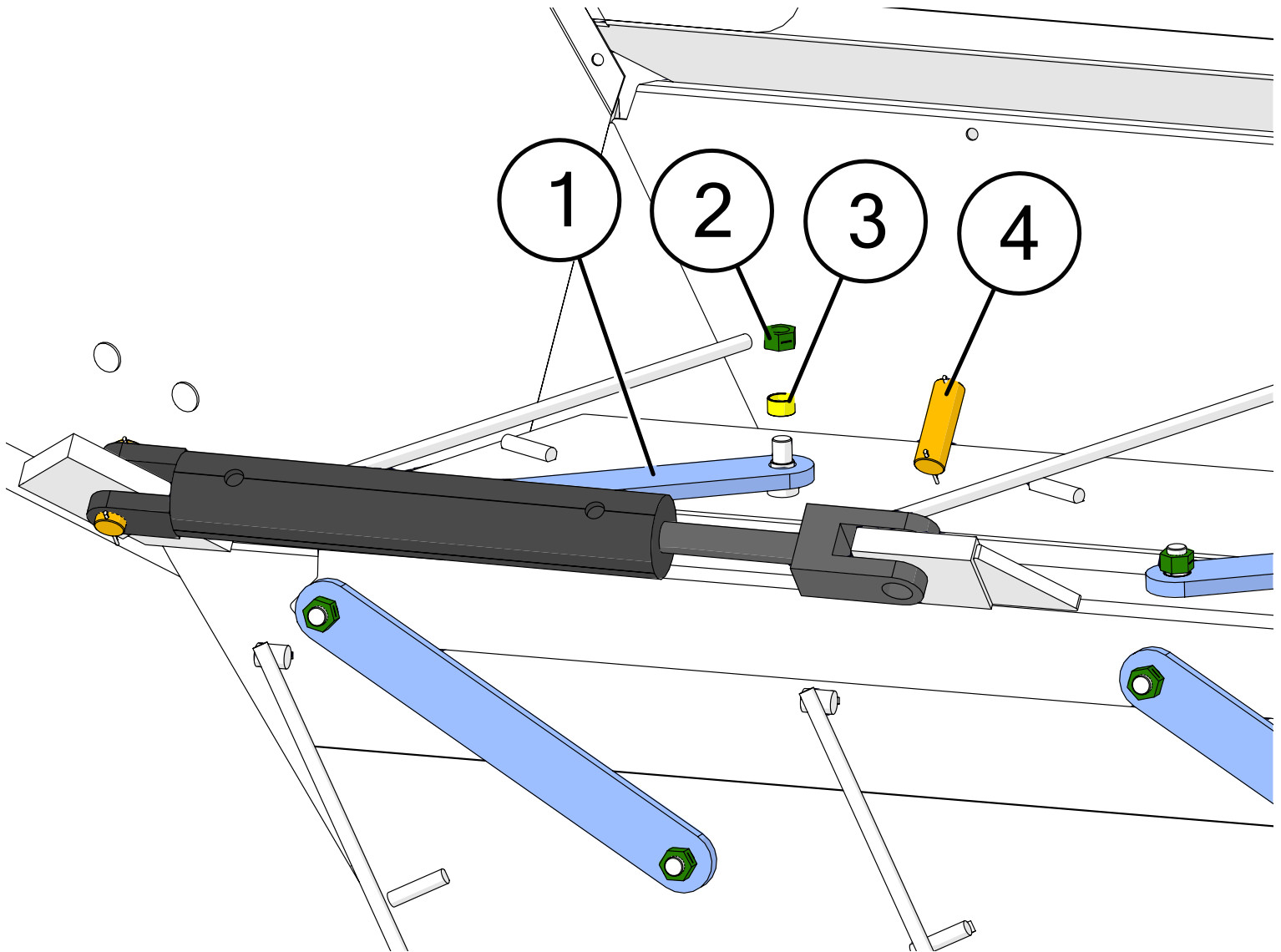
# Clean Out Doors



| Description                                           | Part No.  |
|-------------------------------------------------------|-----------|
| 1 Torsion Tube Weldment (150") (1132, 1432)           | JM0041241 |
| 2 Feed Gate Master Link (11-7/8" x 3")                | JM0051067 |
| 3 2" Pipe Guide (1/2" x 3" x 3-7/8")                  | JM0041232 |
| 4 Front Long Clean Out Gates 44-13/16" (1132, 1432)   | JM0050778 |
| 5 Rear Clean Out Gates (15-1/8" x 10-3/16")           | JM0050772 |
| 6 3/8"-16 x 1" Gr5 Z Hex Bolt                         | JM0001592 |
| 7 3/8"-16 Gr2 Z Centerlock Hex Nut                    | JM0001512 |
| 8 3/8"-16 x 1-1/4" Gr5 Z Hex Bolt                     | JM0016675 |
| 9 3/8"-16 x 1" Gr5 Z SF Hex Bolt                      | JM0002092 |
| 10 3/8"-16 Gr5 Z SF Hex Nut                           | JM0002152 |
| 11 3/4" x 3-1/2" (3-1/4" Usable Length) Z Clevis Pin  | JM0042973 |
| 12 2" ID x 2-3/8" OD x 1" LG Bronze Bushing (EB-2)    | JM0027653 |
| 13 3/16" x 2-1/2" Hair Clip Pin (316HP)               | JM0001657 |
| 14 Clean Out Handle - Nylon Mount Plate               | JM0042708 |
| 15 3/8" x 2-1/2" Z Round Wire Lynch Pin               | JM0014929 |
| 16 Drag Auger Clean Out Door Handle Latch             | JM0047593 |
| 17 Clean Out Gate Pipe Guide Weldment                 | JM0045561 |
| 18 32 Series Clean Out Gate Handle (32-1/4")          | JM0043146 |
| 19 #8-32 Z Nylon Locking Hex Nut                      | JM0012334 |
| 20 Vertical Clean Out Door Latch (32 Series)          | JM0049152 |
| 21 #8-32 x 1/2" Slotted Hex Washer Head Machine Screw | JM0012333 |
| 22 1/4" x 1-3/4" Lynch Pin                            | JM0001478 |

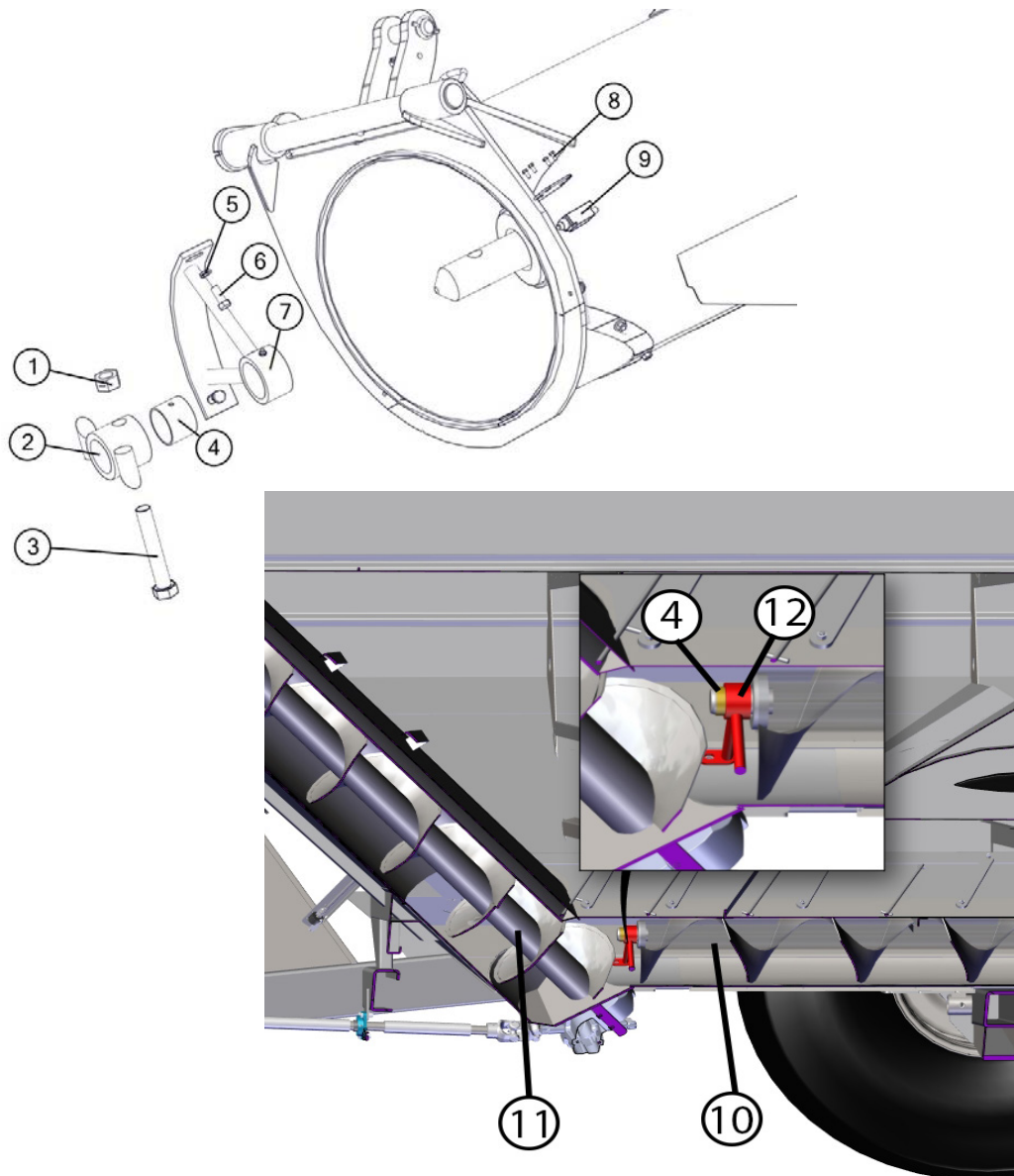


# Feed Gate



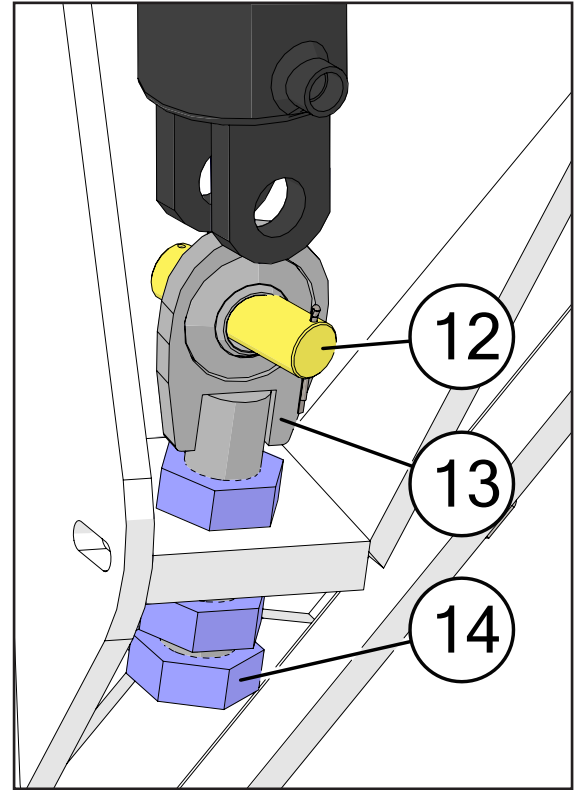
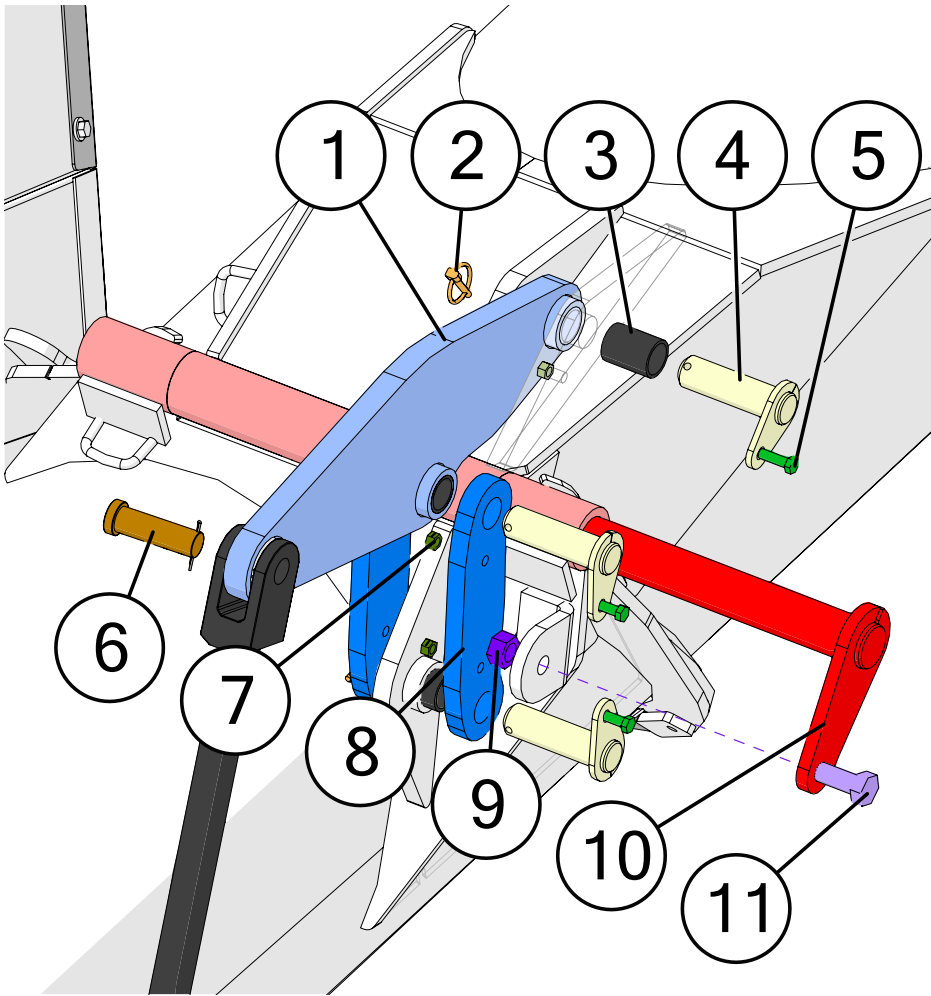
| Description |                                                       | Part No.  |
|-------------|-------------------------------------------------------|-----------|
| 1           | Feed Gate Master Link 1/2" Thick with Bronze Bushings | JM0051055 |
| 2           | 5/8"-11 Gr5 Z Centerlock Hex Nut                      | JM0002146 |
| 3           | Bronze Bushing 3/4" ID x 7/8" OD x 1/2"               | JM0051109 |
| 4           | 1" x 3" Clevis Pin with Cotter Pins                   | JM0019407 |

# Lower Auger Assembly



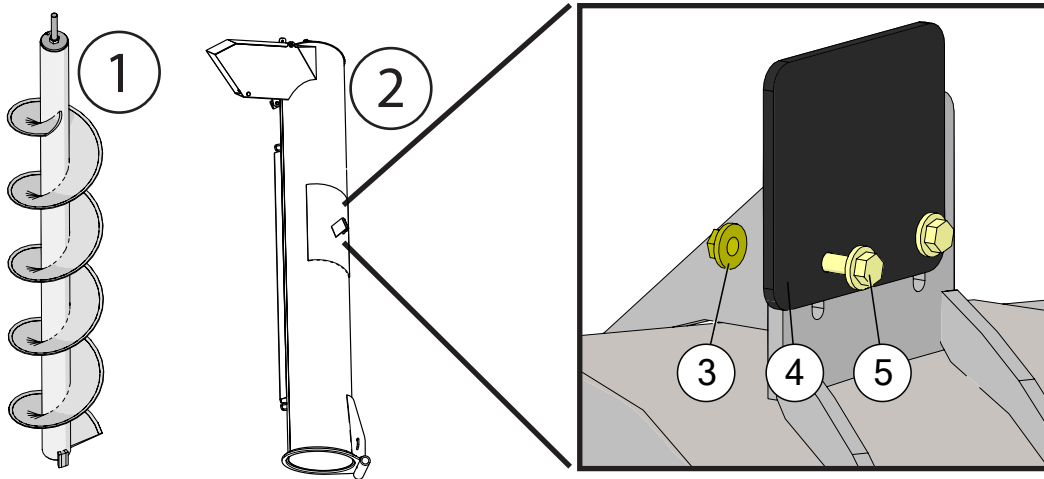
|    | Description                                      | Part No.  |
|----|--------------------------------------------------|-----------|
| 1  | 1"-8 Gr2 Z Centerlock Hex Nut                    | JM0002149 |
| 2  | Drive Dog Weldment, 2-1/2" ID                    | JM0002919 |
| 3  | 1"-8 x 6" Gr8 Z Hex Bolt                         | JM0046609 |
| 4  | 2-1/2" ID Bronze Bushing (BB-212)                | JM0016841 |
| 5  | 1/2" Gr2 Z Lock Washer                           | JM0019021 |
| 6  | 1/2"-13 x 1-1/4" Gr5 Z Hex Bolt                  | JM0001513 |
| 7  | Hanger Bushing Assembly (22") (HBA-22)           | JM0019656 |
| 8  | M5-0.8 x 12 Gr8.8 Z Hex Bolt                     | JM0036046 |
| 9  | Limit Switch for Field Light (ME-8111)           | JM0036040 |
| 10 | Horizontal Auger (158-3/8" Lg) (1132, 1432)      | JM0036894 |
| 11 | Bottom Vertical Auger (145-3/16" Lg) (32 Series) | JM0036809 |
| 12 | 20" Horizontal Auger Hanger Bracket              | JM0038732 |

## Upper Auger Linkage



|    | Description                                                   | Part No.  |
|----|---------------------------------------------------------------|-----------|
| 1  | Main Fold Link (22-1/2" x 7-7/16" x 1")                       | JM0034658 |
| 2  | 1/4" Diameter Snap Ring                                       | JM0001870 |
| 3  | 1-1/4" ID x 1-1/2" OD x 2" Long Sleeve Composite Bushing      | JM0021957 |
| 4  | 1-1/4" Pin Keeper (4-5/8" Lg)                                 | JM0035930 |
| 5  | 3/8"-16 x 1-1/4" Gr5 Z Hex Bolt                               | JM0016675 |
| 6  | 1" x 3-1/4" Clevis Pin (X-Tended Reach)                       | JM0047300 |
| 7  | 3/8"-16 Gr2 Z Centerlock Hex Nut                              | JM0001512 |
| 8  | Master Link w/ Keeper (11-1/8" x 3" x 3/4")                   | JM0035075 |
| 9  | 5/8"-11 Gr2 Z Centerlock Hex Nut                              | JM0002146 |
| 10 | 22" Hinge Pin w/ Keeper Weldment (23" Lg) (12,22 & 32 Series) | JM0024966 |
| 11 | 5/8"-11 x 1-1/2" Gr5 Z Hex Bolt                               | JM0002103 |
| 12 | 1" x 3-1/2" Clevis Pin with Cotter Pins                       | JM0001817 |
| 13 | HD Adjustable Pac Man Weldment                                | JM0021417 |
| 14 | 1-1/4"-12 Gr5 Z Hex Jam Nut                                   | JM0002158 |

## Upper Auger Assembly

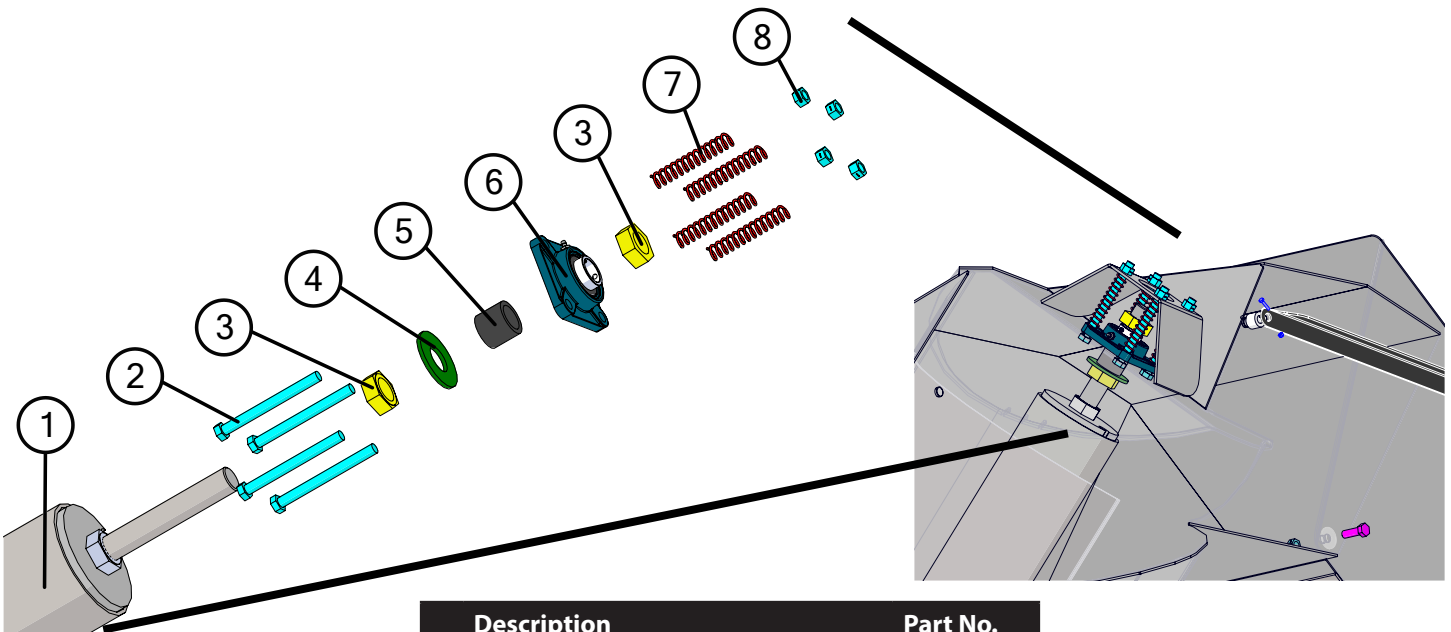


\*-R = Red  
\*-B = Blue  
\*-G = Green  
\*-Y = Yellow  
\*-BLK = Black

|   | Description                     | Part No.   |
|---|---------------------------------|------------|
| 1 | 22" Upper Flighting (127" Lg)   | JM0038528  |
| 2 | 22" 32 Series Top Tube Weldment | JM0037727* |
| 3 | 3/8"-16 Gr5 Z SF Hex Nut        | JM0002152  |
| 4 | Upper Auger Rest Plate          | JM0034981  |
| 5 | 3/8"-16 x 1" Gr5 Z SF Hex Bolt  | JM0002092  |

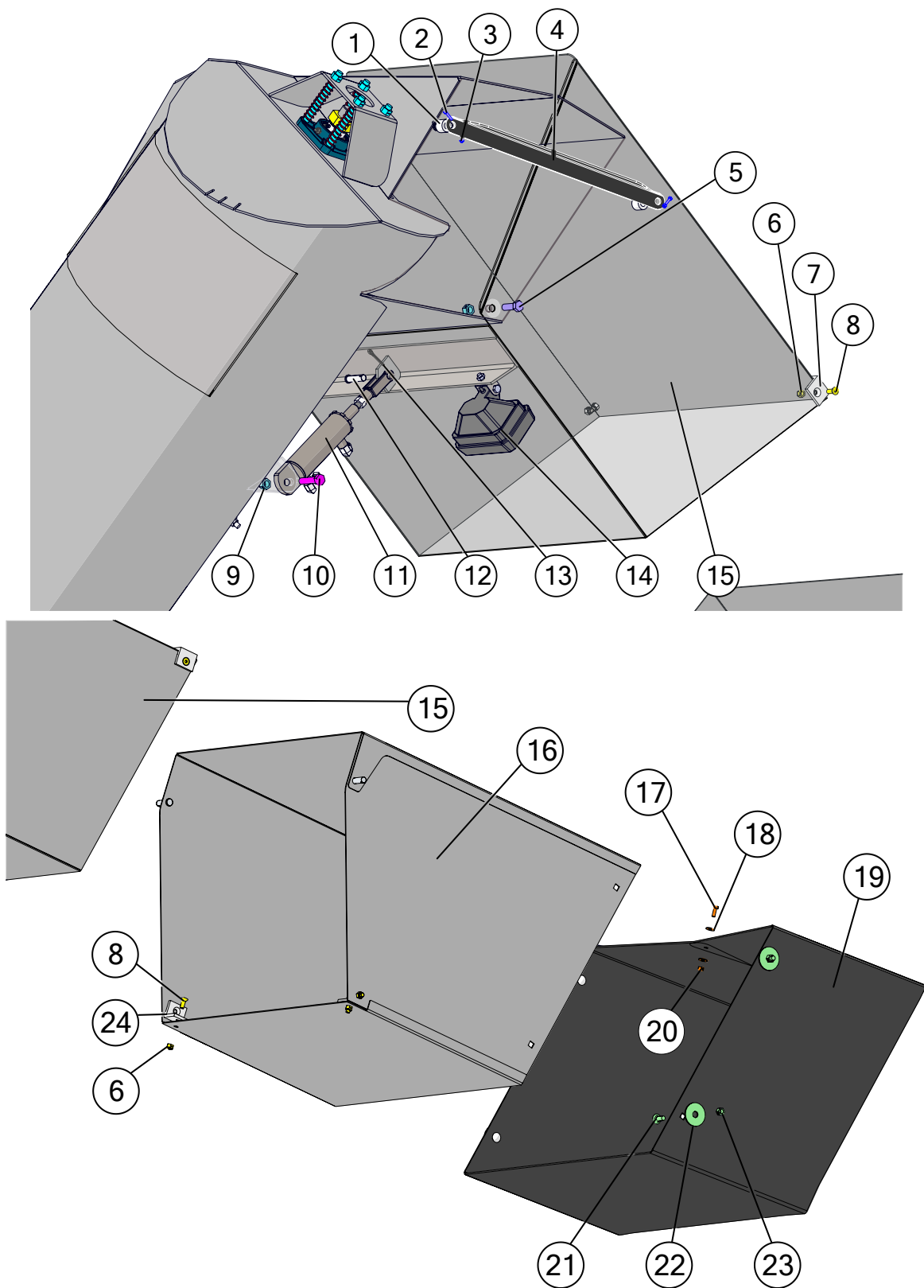
When requesting an item with color, end the part number with -R, -B, -G, -Y, or -BLK. (e.g. JM0000000-R)

## Upper Auger Bearing Assembly



|   | Description                              | Part No.  |
|---|------------------------------------------|-----------|
| 1 | 22" Upper Flighting (127" Lg)            | JM0038528 |
| 2 | 1/2"-13 x 5-1/2" Gr5 Z Hex Bolt          | JM0001498 |
| 3 | 1-1/4"-12 PN Gr5 Hex Jam Nut             | JM0001606 |
| 4 | 1-3/8", ID 3" OD Flat Washer             | JM0015731 |
| 5 | Top Auger Collar 2-1/4" Long (1-3/4" OD) | JM0016792 |
| 6 | 1-1/4" Flange Bearing, 4 Hole (GRAF-206) | JM0018560 |
| 7 | 4-1/2" Compression Spring (CMSUAA-4)     | JM0018559 |
| 8 | 1/2"-13 Gr2 Z Centerlock Hex Nut         | JM0001511 |

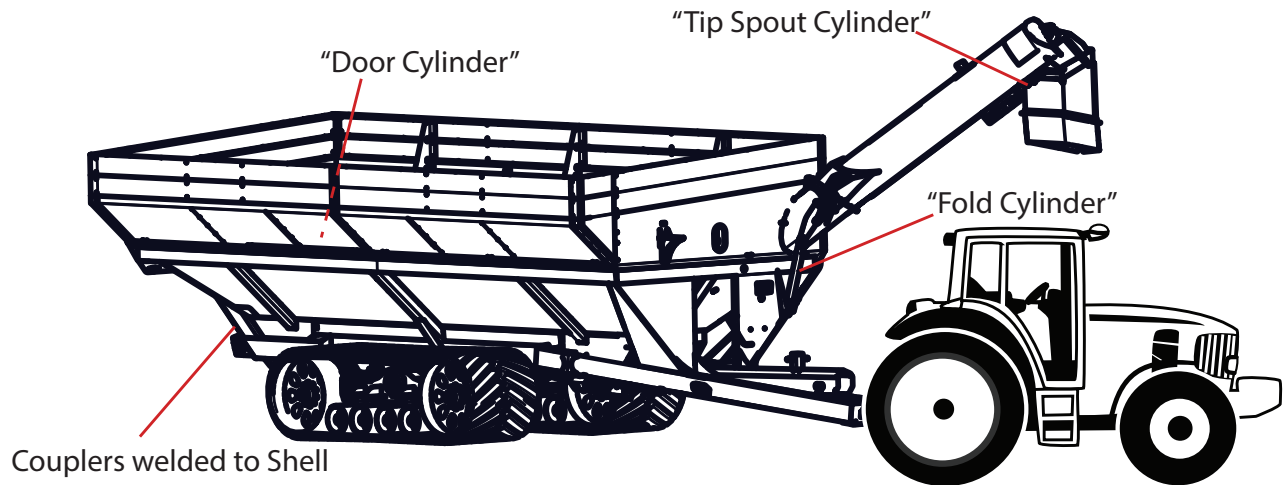
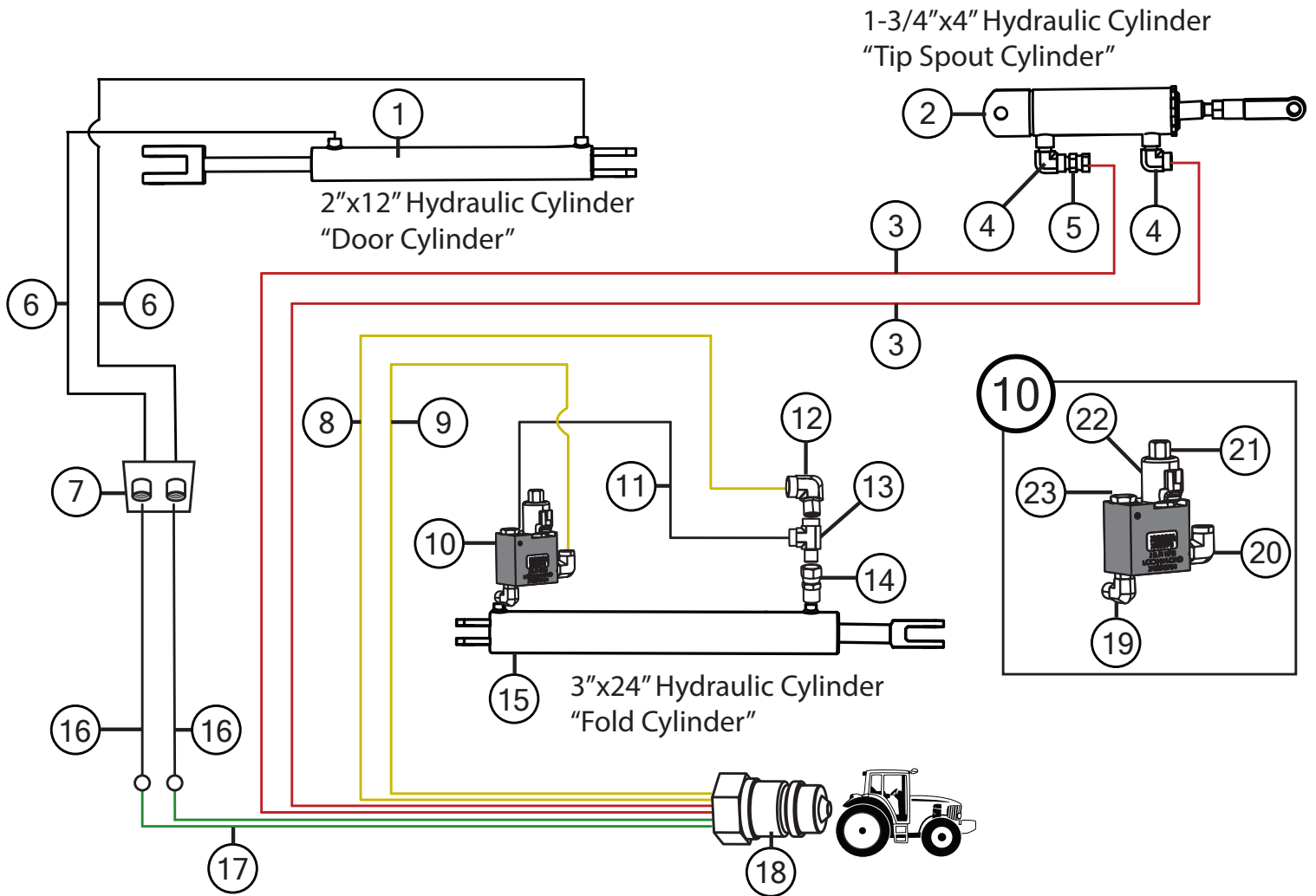
# Spout Assembly



# Spout Assembly

|    | Description                                                        | Part No.  |
|----|--------------------------------------------------------------------|-----------|
| 1  | 1" OD 33/64" ID x 3/4" L Black UV Nylon Spacer                     | JM0001962 |
| 2  | M4-0.7 x 20 Gr8.8 Z Hex Bolt                                       | JM0049074 |
| 3  | M4-0.7 Gr8.8 YZ Nylon Locking Hex Nut                              | JM0049075 |
| 4  | Telescoping Spout Main Linkage Rod                                 | JM0034363 |
| 5  | 1/2"-13 x 1-1/2" Gr5 Z Hex Bolt                                    | JM0002100 |
| 6  | 5/16" - 18 Gr5 Z Nylon Locking Hex Nut                             | JM0049059 |
| 7  | Spout Guide (Nylon)                                                | JM0035132 |
| 8  | 5/16"-18 x 5/8" Flat Head Bolt Z                                   | JM0024963 |
| 9  | 1/2"-13 Gr2 Z Centerlock Hex Nut                                   | JM0001511 |
| 10 | 1/2"-13 x 2" Gr5 Z Hex Bolt                                        | JM0001593 |
| 11 | 1-3/4" x 4" Hydraulic Cylinder (1/2" Clevis and Tab Ends) (HC-FCS) | JM0018564 |
| 12 | 1/2" x 1-3/4" Clevis Pin, Usable Length 1-1/2"                     | JM0018264 |
| 13 | 5/32" x 1-1/2" Cotter Pin                                          | JM0014348 |
| 14 | LED Field Light with Bullet Connector                              | JM0050949 |
| 15 | 22" Inner Telescoping Spout                                        | JM0038218 |
| 16 | 22" Outer Telescoping Spout                                        | JM0038227 |
| 17 | 1/4"-20 x 3/4" Gr5 Z Hex Bolt                                      | JM0001507 |
| 18 | 1/4" ID, 3/4" OD Z Flat Washer                                     | JM0003090 |
| 19 | 4-Sided Telescoping Spout Rubber Extension                         | JM0037795 |
| 20 | 1/4"-20 Gr2 Z Centerlock Hex Nut                                   | JM0001505 |
| 21 | 3/8"-16 x 1" Gr5 Z Carriage Bolt                                   | JM0001632 |
| 22 | 1/2" ID x 2-1/4" OD Flat Washer - 1/8" Thick                       | JM0019081 |
| 23 | 3/8"-16 Gr2 Z Centerlock Hex Nut                                   | JM0001512 |
| 24 | UHMW - 0.25 Angle Iron - Spout Guide                               | JM0034308 |
| 25 | 32 Series Tip Spout Assembly                                       | JM0047941 |

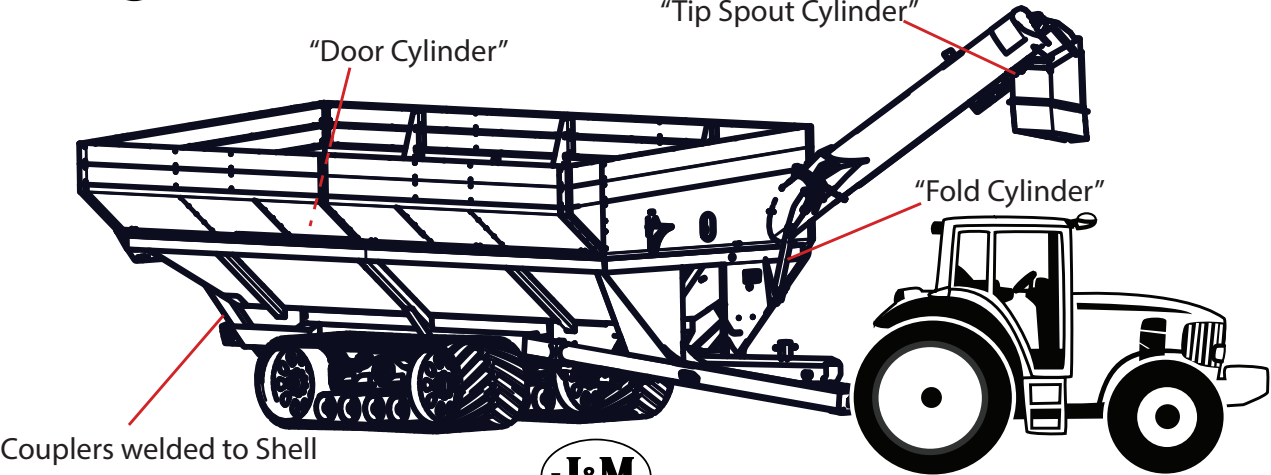
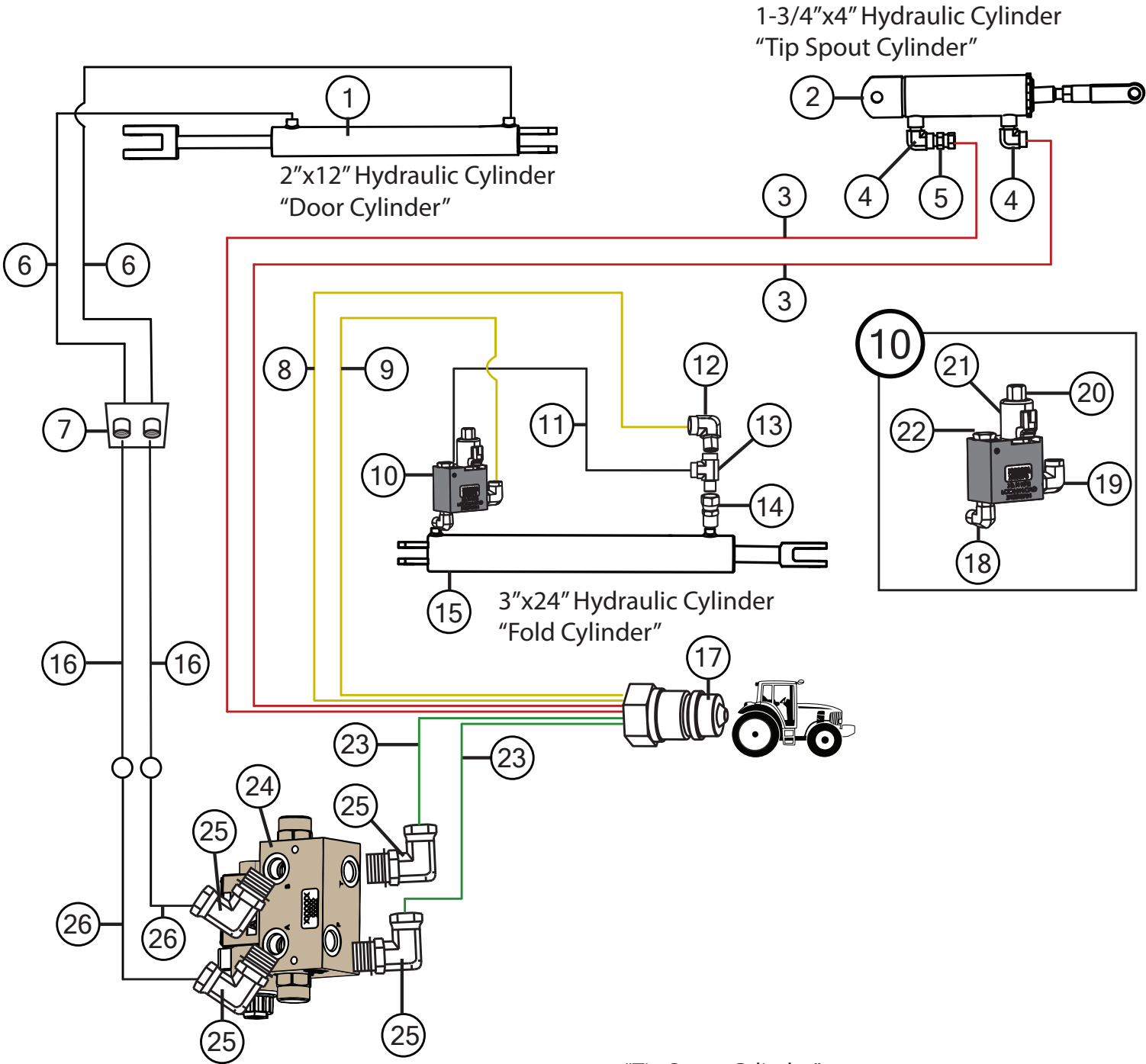
# Hydraulic Hoses & Cylinders



# Hydraulic Hoses & Cylinders

|    | Description                                                           | Part No.  |
|----|-----------------------------------------------------------------------|-----------|
| 1  | 2" x 12" Hydraulic Cylinder with 1-1/8" Shaft                         | JM0025341 |
| 1  | Seal Kit for 2" Red Lion Hydraulic Cylinder (RK20TR-112)              | JM0026606 |
| 2  | 1-3/4" x 4" Hydraulic Cylinder (1/2" Clevis and Tab Ends) (HC-FCS)    | JM0018564 |
| 2  | Seal Kit for 1-3/4" x 4" Cylinder (SKHC-FCS) (JD459)                  | JM0024892 |
| 3  | 1/4" x 478" Hydraulic Hose 478inch4M3k-4G-8MP-4G-4MP                  | JM0046246 |
| 4  | 1/4" Male NPT x 1/4" Female NPT, 90 Degree Elbow                      | JM0020115 |
| 5  | 1/4" Male NPT Swivel with .032 Orifice (Restrictor)                   | JM0020113 |
| 6  | 1/4" x 19" Hydraulic Hose 19inch4M3k-4G-6MPX-4G-6MP                   | JM0048197 |
| 7  | 3/8" Standard Coupling                                                | JM0019562 |
| 8  | 1/4" x 304" Hydraulic Hose 304inch4M3k-4G-8MP-4G-6MPX                 | JM0046245 |
| 9  | 1/4" x 286" Hydraulic Hose 286inch4M3k-4G-8MP-4G-6MP                  | JM0047274 |
| 10 | Lock & Load Assembly (1106640)                                        | JM0048754 |
| 11 | 1/4" x 21" Hydraulic Hose 21inch4M3k-4G-4MP-4G-6MPX                   | JM0024896 |
| 12 | 3/8" Male NPT x 3/8" Female NPT; 90 Degree Elbow                      | JM0030059 |
| 13 | 3/8" Male NPT x 3/8" Female NPT x 3/8" Female NPT; Street T           | JM0018266 |
| 14 | 3/8" Male NPT x 3/8" Female NPT Swivel with .062 Orifice (Restrictor) | JM0018362 |
| 15 | 3" x 24" x 1-1/2" Welded Cylinder (JD324)                             | JM0019644 |
| 15 | Seal Kit 3" x 24" Cylinder (JD324-1) (JD480)                          | JM0037895 |
| 16 | 1/4" x 216" Hydraulic Hose 216inch4M3k-4G-8FP-4G-6MPX                 | JM0059224 |
| 17 | 1/4" x 236" Hydraulic Hose 236inch4M3k-4G-6MPX-4G-8MPX                | JM0046664 |
| 18 | 1/2" Female NPT Pioneer (PQC-1)                                       | JM0018254 |
| 19 | 3/8" Male ORB x 3/8" Male NPT; 90 Degree Elbow                        | JM0047350 |
| 20 | 1/2" Male ORB x 3/8" Female NPT; 90 Degree Elbow                      | JM0047348 |
| 21 | Solenoid Valve for Lock and Load (Black)                              | JM0026256 |
| 22 | Solenoid Coil for Lock and Load (Black)                               | JM0026255 |
| 23 | Check Valve for Lock and Load (Black)                                 | JM0026250 |

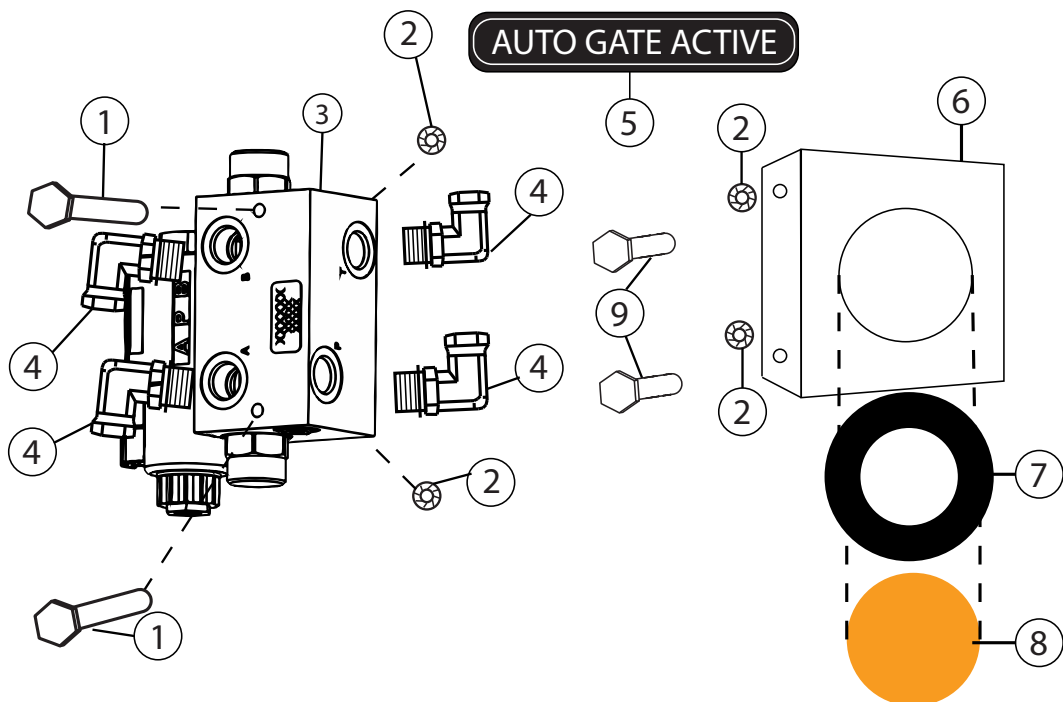
Auto-Gate Shut-Off Hydraulics



# Auto-Gate Shut-Off Hydraulics

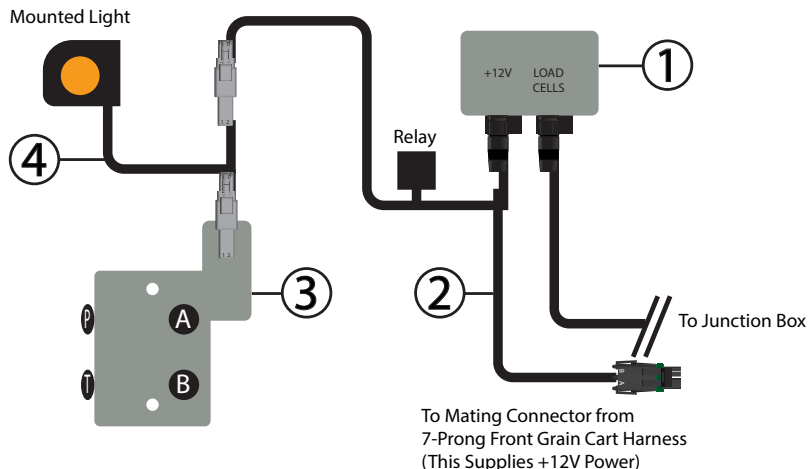
|    | Description                                                           | Part No.  |
|----|-----------------------------------------------------------------------|-----------|
| 1  | 2" x 12" Hydraulic Cylinder with 1-1/8" Shaft                         | JM0025341 |
| 1  | Seal Kit for 2" Red Lion Hydraulic Cylinder (RK20TR-112)              | JM0026606 |
| 2  | 1-3/4" x 4" Hydraulic Cylinder (1/2" Clevis and Tab Ends) (HC-FCS)    | JM0018564 |
| 2  | Seal Kit for 1-3/4" x 4" Cylinder (SKHC-FCS) (JD459)                  | JM0024892 |
| 3  | 1/4" x 478" Hydraulic Hose 478inch4M3k-4G-8MP-4G-4MP                  | JM0046246 |
| 4  | 1/4" Male NPT x 1/4" Female NPT, 90 Degree Elbow                      | JM0020115 |
| 5  | 1/4" Male NPT Swivel with .032 Orifice (Restrictor)                   | JM0020113 |
| 6  | 1/4" x 19" Hydraulic Hose 19inch4M3k-4G-6MPX-4G-6MP                   | JM0048197 |
| 7  | 3/8" Standard Coupling                                                | JM0019562 |
| 8  | 1/4" x 304" Hydraulic Hose 304inch4M3k-4G-8MP-4G-6MPX                 | JM0046245 |
| 9  | 1/4" x 286" Hydraulic Hose 286inch4M3k-4G-8MP-4G-6MP                  | JM0047274 |
| 10 | Lock & Load Assembly (1106640)                                        | JM0048754 |
| 11 | 1/4" x 21" Hydraulic Hose 21inch4M3k-4G-4MP-4G-6MPX                   | JM0024896 |
| 12 | 3/8" Male NPT x 3/8" Female NPT; 90 Degree Elbow                      | JM0030059 |
| 13 | 3/8" Male NPT x 3/8" Female NPT x 3/8" Female NPT; Street T           | JM0018266 |
| 14 | 3/8" Male NPT x 3/8" Female NPT Swivel with .062 Orifice (Restrictor) | JM0018362 |
| 15 | 3" x 24" x 1-1/2" Welded Cylinder (JD324)                             | JM0019644 |
| 15 | Seal Kit 3" x 24" Cylinder (JD324-1) (JD480)                          | JM0037895 |
| 16 | 1/4" x 234" Hydraulic Hose 234inch4M3k-4G-6MPX-4G-6MP                 | JM0048584 |
| 17 | 1/2" Female NPT Pioneer (PQC-1)                                       | JM0018254 |
| 18 | 3/8" Male ORB x 3/8" Male NPT; 90 Degree Elbow                        | JM0047350 |
| 19 | 1/2" Male ORB x 3/8" Female NPT; 90 Degree Elbow                      | JM0047348 |
| 20 | Solenoid Valve for Lock and Load (Black)                              | JM0026256 |
| 21 | Solenoid Coil for Lock and Load (Black)                               | JM0026255 |
| 22 | Check Valve for Lock and Load (Black)                                 | JM0026250 |
| 23 | 1/4" x 236" Hydraulic Hose 236inch4M3k-4G-6MPX-4G-8MPX                | JM0046664 |
| 24 | Auto-Gate Hydraulic Valve                                             | JM0026247 |
| 25 | 1/2" Male ORB x 3/8" Female NPT Swivel; 90 Degree Elbow               | JM0027285 |
| 26 | 1/4" x 42-1/2" Hydraulic Hose 42.5inch4M3k-4G-6MP-4G-6MP              | JM0046650 |

# Auto-Gate Shut-Off Assembly



|   | Description                                             | Part No.  |
|---|---------------------------------------------------------|-----------|
| 1 | 1/4"-20 x 3-1/2" Gr5 Z Hex Bolt                         | JM0046621 |
| 2 | 1/4"-20 Gr5 Z SF Hex Nut                                | JM0001630 |
| 3 | Auto-Gate Hydraulic Valve                               | JM0026247 |
| 4 | 1/2" Male ORB x 3/8" Female NPT Swivel; 90 Degree Elbow | JM0027285 |
| 5 | Auto Gate Active Decal                                  | JM0046612 |
| 6 | 3-1/2" Round LED Mount                                  | JM0034956 |
| 7 | 3-1/2" Round LED Grommet                                | JM0001902 |
| 8 | 3-1/2" Amber Round LED Light                            | JM0001895 |
| 9 | 1/4"-20 x 3/4" Gr5 Z SF Hex Bolt                        | JM0001642 |

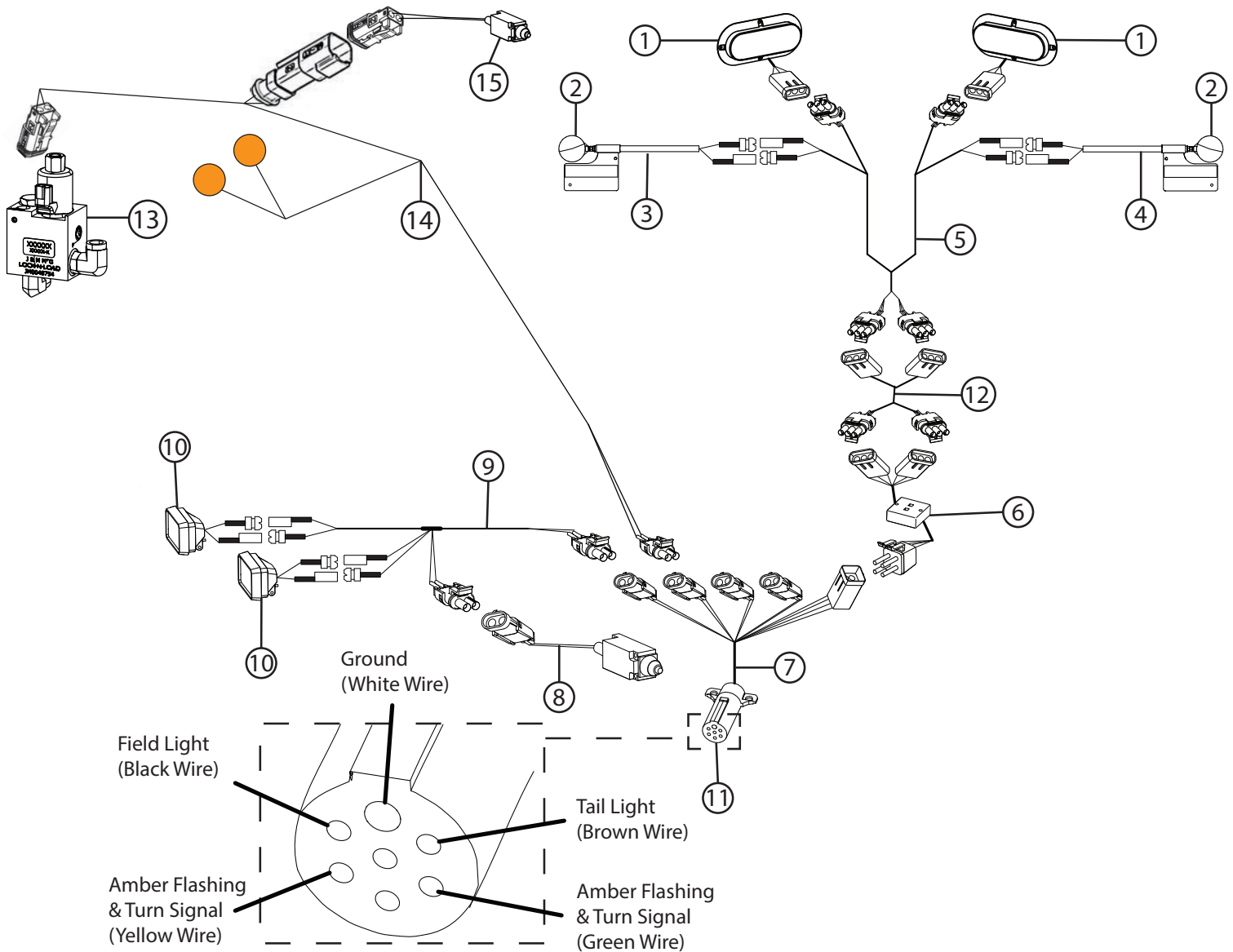
# Auto-Gate Shut-Off Wiring Schematic



|   | Description                                   | Part No.  |
|---|-----------------------------------------------|-----------|
| 1 | GT 560 Digi-Star Scale Display Monitor        | JM0044177 |
| 2 | Auto-Gate Harness (Standard GT 560)           | JM0026813 |
| 3 | Auto-Gate Hydraulic Valve                     | JM0026247 |
| 4 | Auto Gate Light Harness (LED Light "Y" Cable) | JM0046624 |

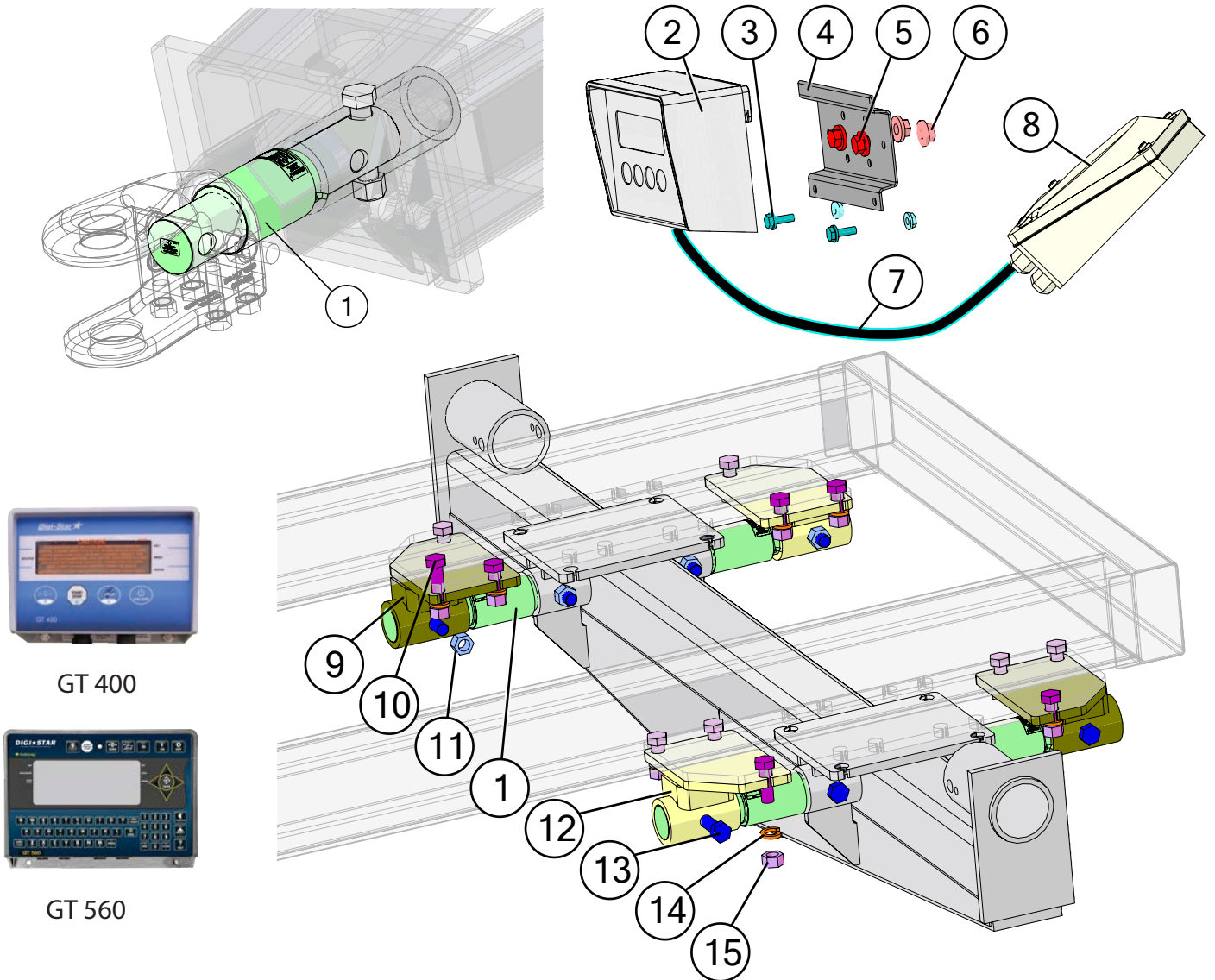
Note: Mount the hydraulic valve after all the hoses are attached but not tightened. This will ensure the hoses will reach.

# Lights and Wiring



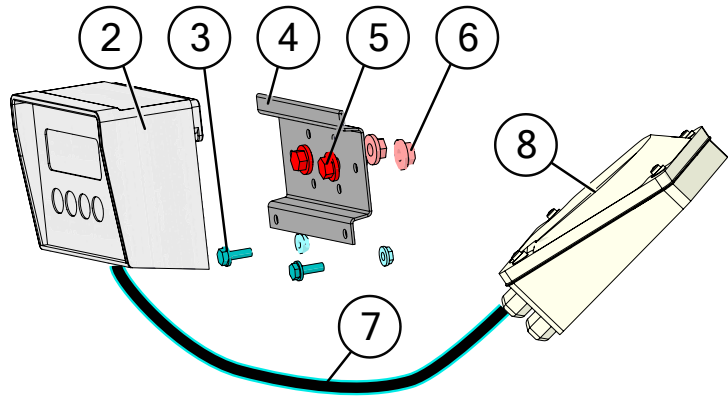
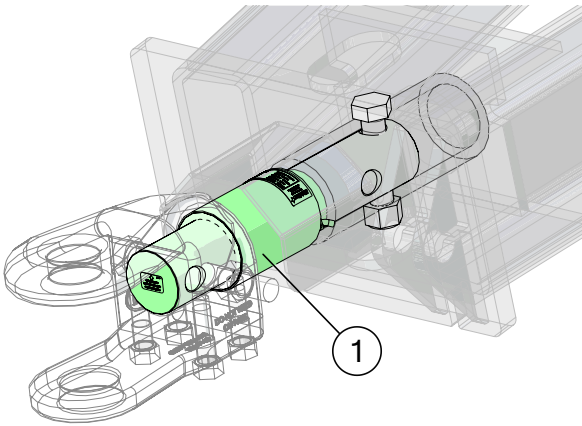
|    | Description                                            | Part No.  |
|----|--------------------------------------------------------|-----------|
| 1  | Red Oval LED Tail Light                                | JM0034389 |
| 2  | LED Amber Light (Circular)                             | JM0018819 |
| 3  | Extendable Amber Light Assembly (Left Side)            | JM0018817 |
| 4  | Extendable Amber Light Assembly (Right Side)           | JM0018826 |
| 5  | Wiring Harness, Rear Half of Grain Cart                | JM0020437 |
| 6  | Light Enhancer and Adapter Kit (3 Wires)               | JM0010566 |
| 7  | Main Harness with 7-Prong Connector End for Grain Cart | JM0020439 |
| 8  | Limit Switch for Field Light (ME-8111)                 | JM0036040 |
| 9  | Field Light Wire Harness                               | JM0020438 |
| 10 | LED Field Light with Bullet Connector                  | JM0050949 |
| 11 | 7-Prong Connector                                      | JM0010528 |
| 12 | 85" Extension Cord for Lights                          | JM0043127 |
| 13 | Lock and Load Assembly                                 | JM0048754 |
| 14 | Grain Cart Lock and Load Harness                       | JM0044755 |
| 15 | Limit Switch for Lock and Load - 72" Long Cable        | JM0046717 |

# 5-Point Scale System for Single Wheel Grain Carts



| Description                                                         | Part No.  |
|---------------------------------------------------------------------|-----------|
| 1 2-7/8" Digi-Star Weigh Bar, 1" Pin Hole (278WB-T1)                | JM0000355 |
| 2 GT 400 Digi-Star Scale Display Monitor                            | JM0019040 |
| 2 GT 560 Digi-Star Scale Display Monitor                            | JM0044177 |
| 3 1/4"-20 x 3/4" Gr5 Z Hex Bolt                                     | JM0001507 |
| 4 GT 560 Scale Monitor Display Bracket                              | JM0046976 |
| 4 GT 400 Scale Monitor Display Bracket                              | JM0000361 |
| 5 3/8"-16 x 1" Gr5 Z SF Hex Bolt                                    | JM0002092 |
| 6 3/8"-16 Gr5 Z SF Hex Nut                                          | JM0002152 |
| 7 8' Cable from J-Box to Indicator (Digi-Star)                      | JM0047238 |
| 8 Digi-Star 6-Point Junction Box (JB-5)                             | JM0019038 |
| 9 2-7/8" Weigh Bar Weldment, Rear Left, Front Right (6-1/8" Spool)  | JM0000354 |
| 10 1"-8 x 3" Gr5 Z Hex Bolt                                         | JM0016686 |
| 11 1"-8 Gr2 Z Centerlock Hex Nut                                    | JM0002149 |
| 12 2-7/8" Weigh Bar Weldment, Rear Right, Front Left (6-1/8" Spool) | JM0018985 |
| 13 1"-8 x 5-1/2" Gr5 Z Hex Bolt                                     | JM0002110 |
| 14 1" Zinc Finish Lock Washer                                       | JM0019203 |
| 15 1"-8 Gr5 Z Hex Nut                                               | JM0002127 |
| 16 30' Extension Cable Kit (Load Cell and Power) (ECI-3)            | JM0041218 |
| 17 Flash Drive Memory Stick for Digi-Star GT 560 (114991)           | JM0025819 |

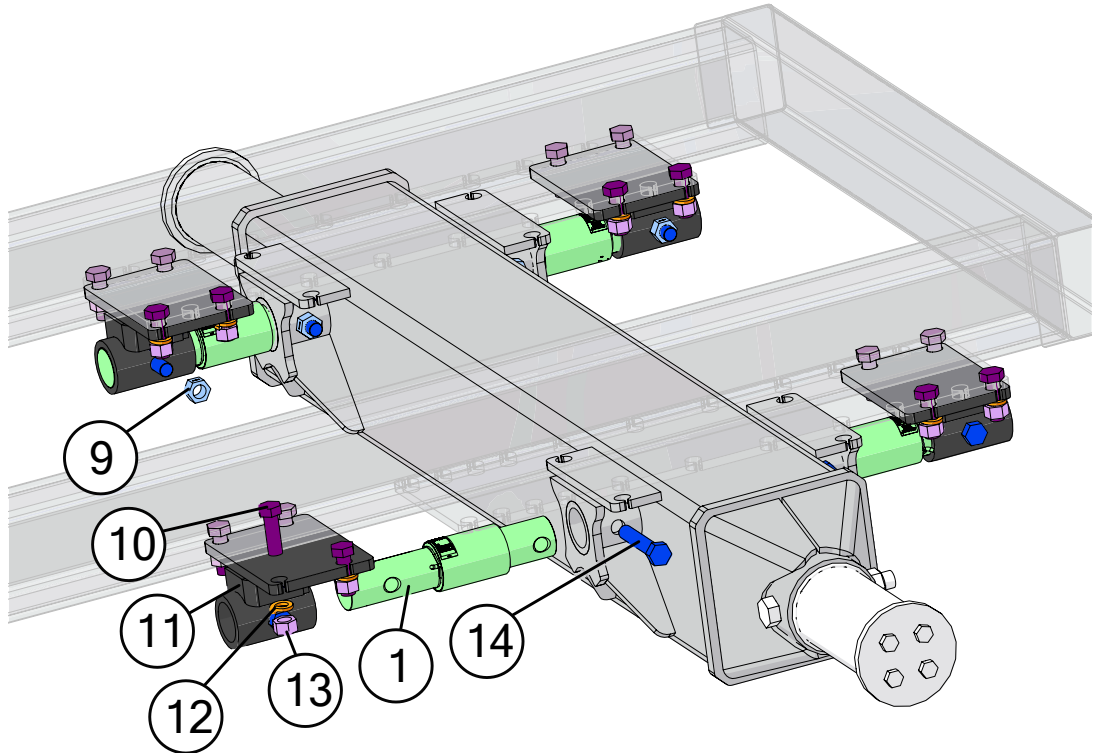
# 5-Point Scale System for Grain Carts with Tracks



GT 400

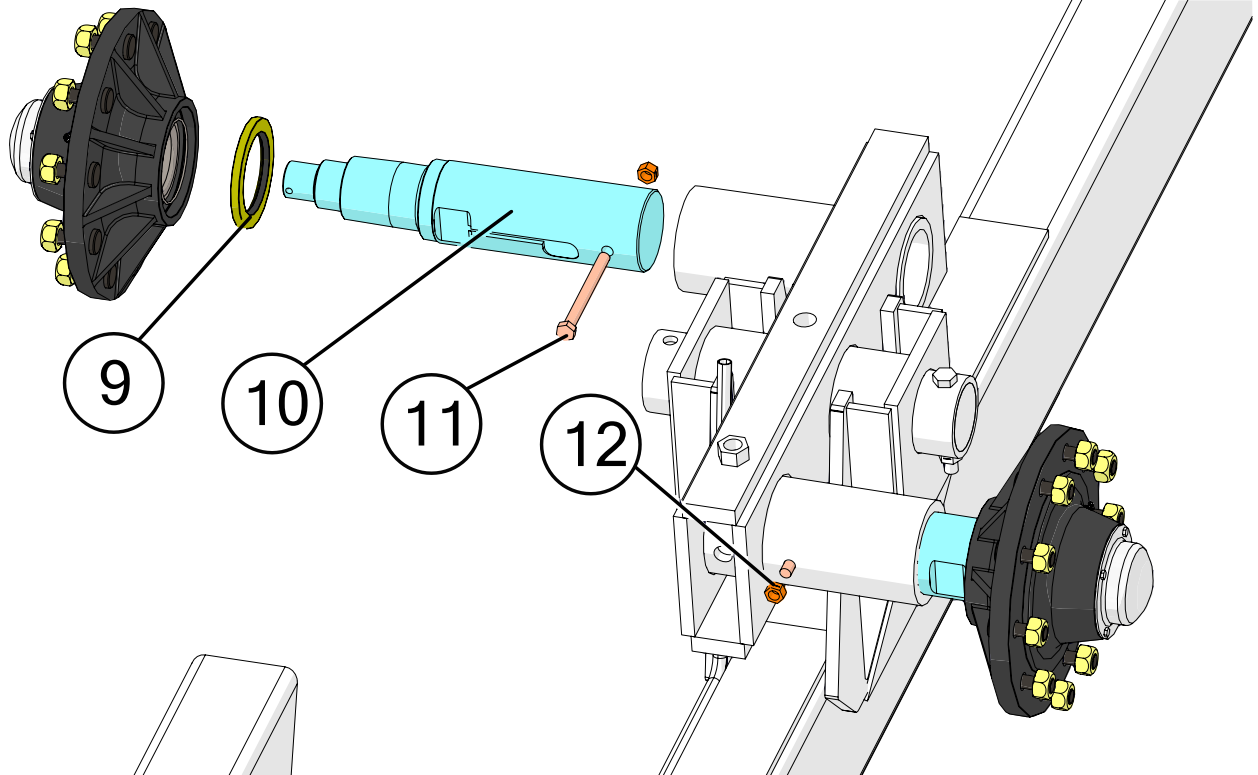
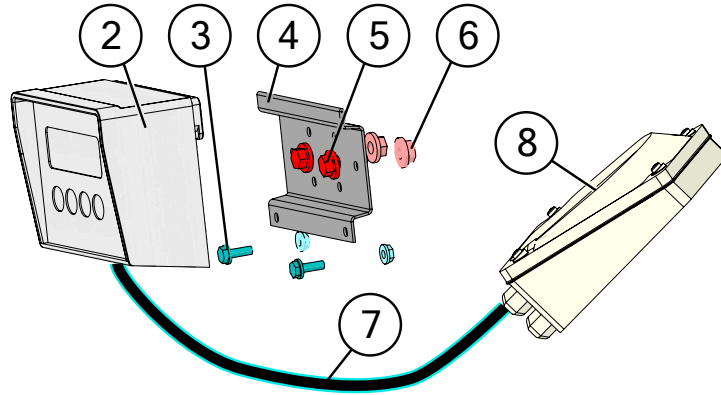


GT 560



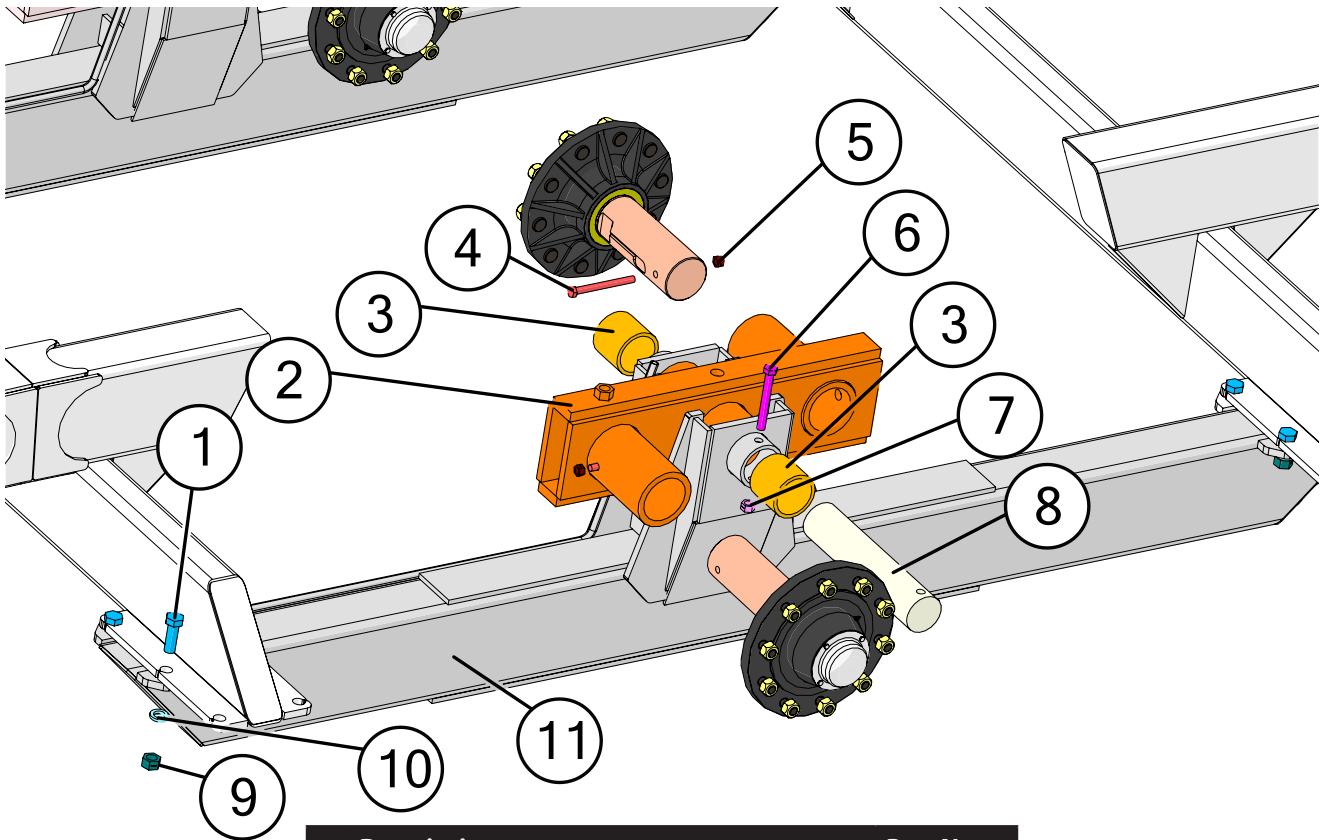
| Description                                               | Part No.  |
|-----------------------------------------------------------|-----------|
| 1 2-7/8" Digi-Star Weigh Bar, 1" Pin Hole (278WB-T1)      | JM0000355 |
| 2 GT 400 Digi-Star Scale Display Monitor                  | JM0019040 |
| 2 GT 560 Digi-Star Scale Display Monitor                  | JM0044177 |
| 3 1/4"-20 x 3/4" Gr5 Z Hex Bolt                           | JM0001507 |
| 4 GT 560 Scale Monitor Display Bracket                    | JM0046976 |
| 4 GT 400 Scale Monitor Display Bracket                    | JM0000361 |
| 5 3/8"-16 x 1" Gr5 Z SF Hex Bolt                          | JM0002092 |
| 6 3/8"-16 Gr5 Z SF Hex Nut                                | JM0002152 |
| 7 8' Cable from J-Box to Indicator (Digi-Star)            | JM0047238 |
| 8 Digi-Star 6-Point Junction Box (JB-5)                   | JM0019038 |
| 9 1"-8 Gr2 Z Centerlock Hex Nut                           | JM0002149 |
| 10 1"-8 x 3" Gr5 Z Hex Bolt                               | JM0016686 |
| 11 2-7/8" Weigh Bar Weldment for Track Beam (WBW-278T)    | JM0018207 |
| 12 1" Zinc Finish Lock Washer                             | JM0019203 |
| 13 1"-8 Gr5 Z Hex Nut                                     | JM0002127 |
| 14 1"-8 x 5-1/2" Gr5 Z Hex Bolt                           | JM0002110 |
| 15 30' Extension Cable Kit (Load Cell and Power) (ECI-3)  | JM0041218 |
| 16 Flash Drive Memory Stick for Digi-Star GT 560 (114991) | JM0025819 |

## 5-Point Scale System for Walking Tandem Dual Wheels



| Description                                               | Part No.  |
|-----------------------------------------------------------|-----------|
| 2-7/8" Weigh Bar, Weigh-Tronix (1" Hole)(278WB)           | JM0019969 |
| GT 400 Digi-Star Scale Display Monitor                    | JM0019040 |
| GT 560 Digi-Star Scale Display Monitor                    | JM0044177 |
| 1/4"-20 x 3/4" Gr5 Z Hex Bolt                             | JM0001507 |
| GT 560 Scale Monitor Display Bracket                      | JM0046976 |
| GT 400 Scale Monitor Display Bracket                      | JM0000361 |
| 3/8"-16 x 1" Gr5 Z SF Hex Bolt                            | JM0002092 |
| 3/8"-16 Gr5 Z SF Hex Nut                                  | JM0002152 |
| 15' Cable from J-Box to Indicator (Weigh-Tronix)          | JM0050445 |
| Avery Weigh-Tronix Junction Box 5 pt (JB-5-WT)            | JM0019960 |
| Seal (4-1/4" ID, 6" OD) for Hub (CR-43771)                | JM0018955 |
| 4-1/2" Weigh-Tronix Weigh Spindle (AWT27-500002) (450WTS) | JM0019970 |
| 5/8"-11 x 6.5" Gr8 YZ Hex Bolt                            | JM0050351 |
| 5/8"-11 Gr2 Z Centerlock Hex Nut                          | JM0002146 |
| 30' Extension Cable Kit (Load Cell and Power) (ECI-3)     | JM0041218 |
| Flash Drive Memory Stick for Digi-Star GT 560 (114991)    | JM0025819 |

# Walking Tandem Dual Wheel Assembly

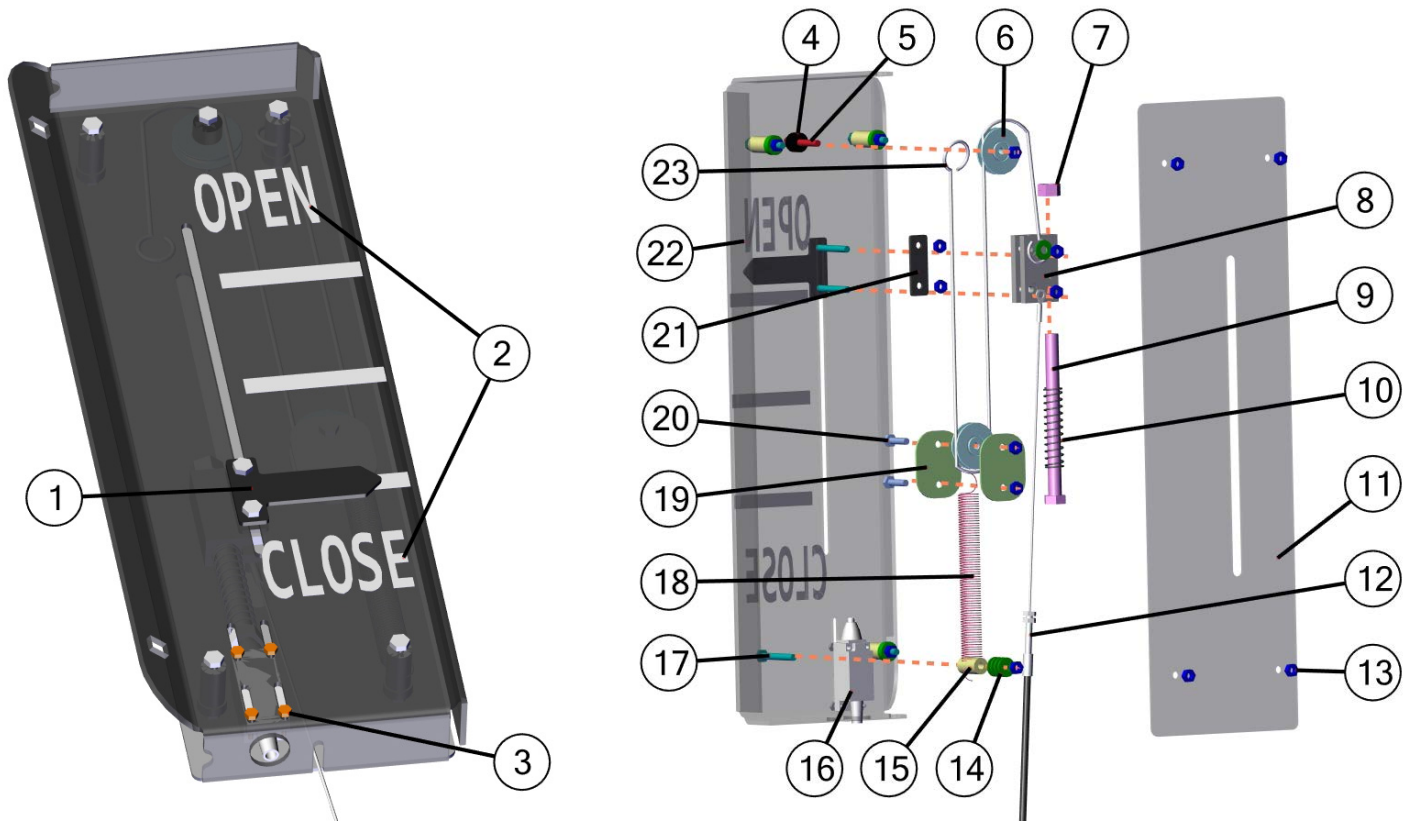


\*-R = Red  
 \*-B = Blue  
 \*-G = Green  
 \*-Y = Yellow  
 \*-BLK = Black

|    | Description                                          | Part No.   |
|----|------------------------------------------------------|------------|
| 1  | 1"-8 x 3" Gr5 Z Hex Bolt                             | JM0016686  |
| 2  | Walker - Triple Pivot Weldment - AS (PBW-1L)         | JM0025721* |
| 2  | Walker - Triple Pivot Weldment - OAS (PBW-1R)        | JM0010170* |
| 3  | 3-3/4" ID, 4-1/2" OD Bronze Bushing (4" Lg) (BB-334) | JM0010570  |
| 4  | 5/8"-11 x 6-1/2" Gr8 YZ Hex Bolt                     | JM0050351  |
| 5  | 5/8"-11 Gr2 Z Centerlock Hex Nut                     | JM0002146  |
| 6  | 3/4"-10 x 6" Gr5 Z Hex Bolt                          | JM0016683  |
| 7  | 3/4"-10 Gr2 Z Centerlock Hex Nut                     | JM0002147  |
| 8  | 3-3/4" x 17-1/2" Pivot Pin (334PP)                   | JM0019928  |
| 9  | 1"-8 Gr2 Z Centerlock Hex Nut                        | JM0002149  |
| 10 | 1" Zinc Finish Lock Washer                           | JM0019203  |
| 11 | 1132/1432 Walker - AS Frame Weldment                 | JM0045751* |
| 11 | 1132/1432 Walker - OAS Frame Weldment                | JM0045750* |

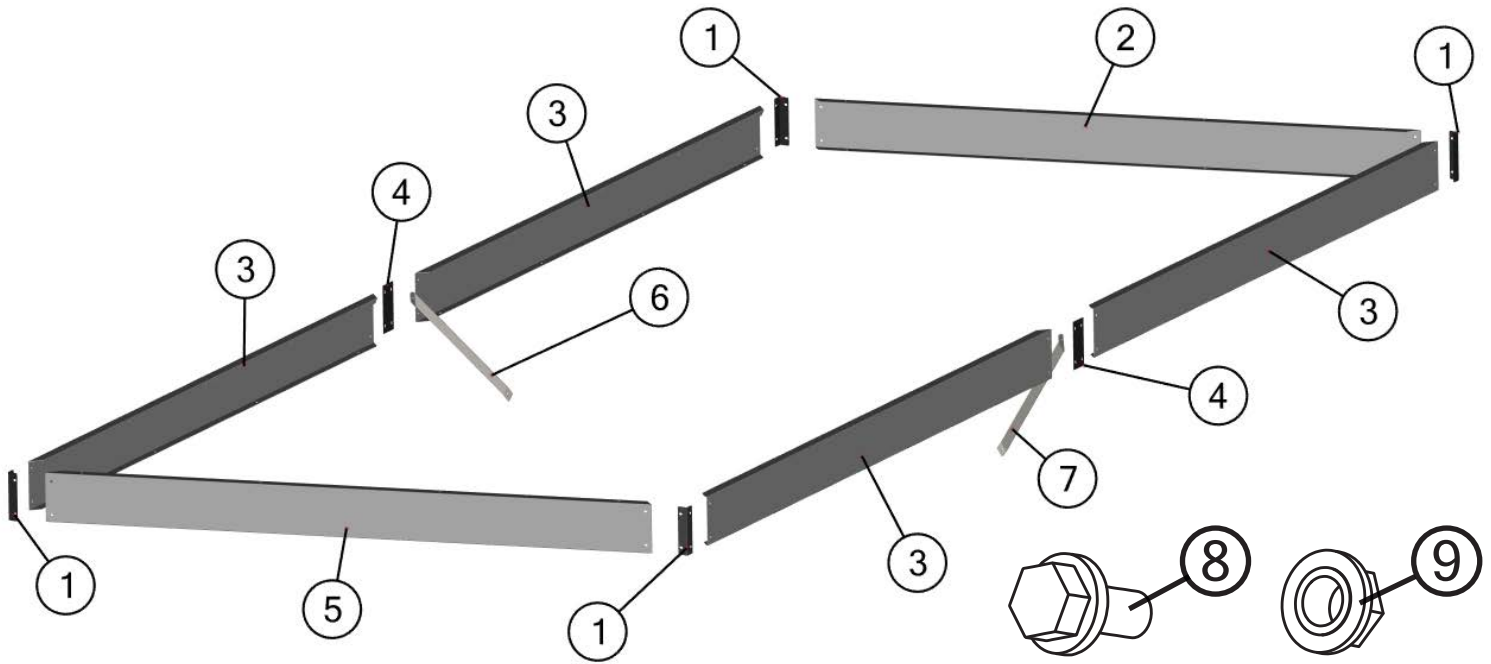
When requesting an item with color, end the part number with -R, -B, -G, -Y, or -BLK. (e.g. JM0000000-R)

# Gate Indicator Display Assembly



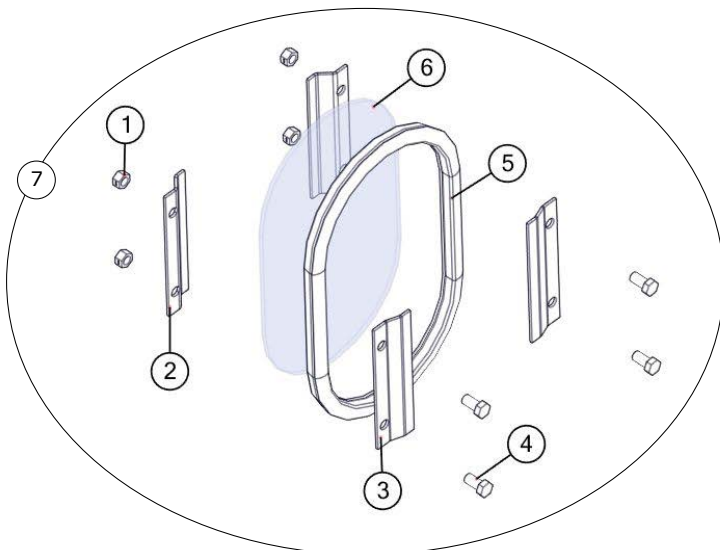
|    | Description                                                         | Part No.  |
|----|---------------------------------------------------------------------|-----------|
| 1  | Indicator Slide - T Shaped                                          | JM0041671 |
| 2  | Open and Close Decal for 32 Series Indicator                        | JM0043138 |
| 3  | #6-32 x 3/4" Hex Bolt                                               | JM0048557 |
| 4  | 9/32" ID, 3/4 OD x 7/16" Plastic Spacer for 32 Series Indicator Box | JM0048556 |
| 5  | 1/4"-20 x 2" Gr5 Z Hex Bolt                                         | JM0048072 |
| 6  | 1-5/8" Idler Pulley (Long Spring Return)                            | JM0012970 |
| 7  | 1/2"-13 Gr2 Z Centerlock Hex Nut                                    | JM0001511 |
| 8  | Drag Cart Lock and Load Switch Trigger                              | JM0046358 |
| 9  | 1/2"-13 x 6" Gr5 Z Hex Bolt                                         | JM0016679 |
| 10 | 0.72OD, 3" Free Length, 0.059 Wire Compression Spring               | JM0045011 |
| 11 | Indicator Plate on Conduit - Lock and Load Switch                   | JM0046367 |
| 12 | 20'2" Indicator Rod Cable with Nuts and Washers Included            | JM0048555 |
| 13 | 1/4"-20 Gr2 Z Centerlock Hex Nut                                    | JM0001505 |
| 14 | 1/4" ID, 3/4" OD Z Flat Washer                                      | JM0003090 |
| 15 | 1/4" ID, 5/8" OD x 1-1/8" Long Nylon Bolt Spacer                    | JM0046481 |
| 16 | Limit Switch for Lock and Load - 72" Long Cable                     | JM0046717 |
| 17 | 1/4"-20 x 2" Gr5 Z Hex Bolt                                         | JM0001591 |
| 18 | 8" Spring for 32 Series Indicator Gate                              | JM0048357 |
| 19 | Indicator Mechanism - Pulley Rack Plate                             | JM0041667 |
| 20 | 1/4"-20 x 1" Gr5 Z Hex Bolt                                         | JM0002095 |
| 21 | Indicator Slide - Backing Plate                                     | JM0042207 |
| 22 | Indicator Plate Bolted to Conduit                                   | JM0046375 |
| 23 | 26" Indicator Gate Cable                                            | JM0048275 |
| 24 | 32 Series - Indicator Display Assembly                              | JM0046362 |

## Sideboards



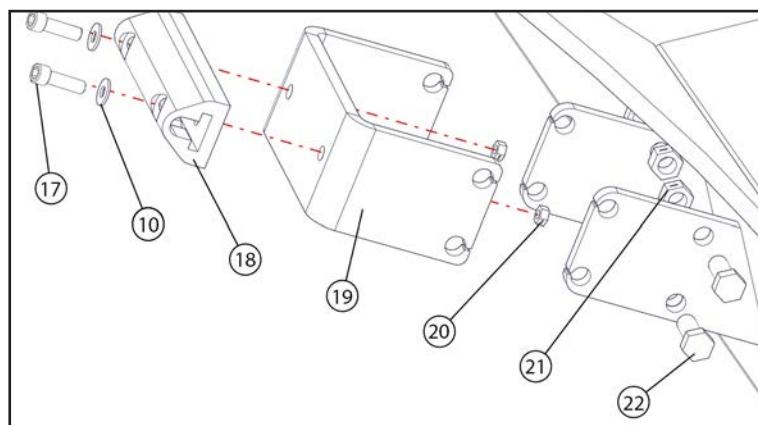
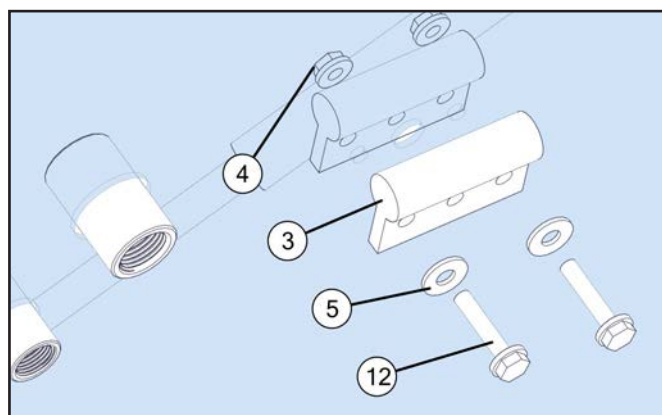
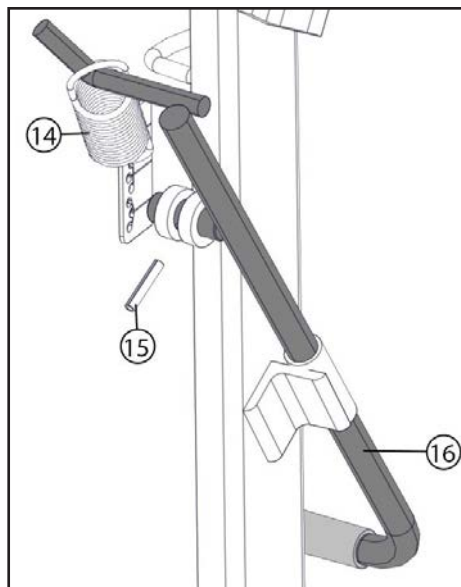
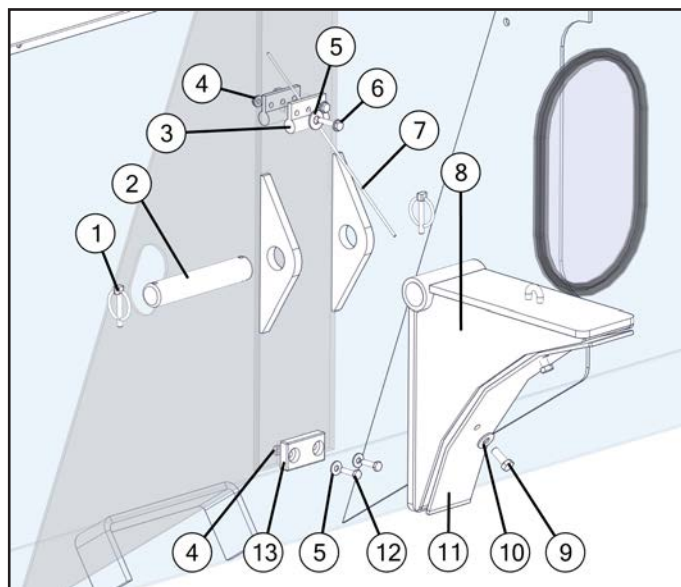
|   | Description                                           | Part No.  |
|---|-------------------------------------------------------|-----------|
| 1 | Low Sideboard Corner 10" (1412, 1401, 1432)           | JM0020613 |
| 2 | Rear End Board 14-3/4" x 142-1/8" (1432, 2032, 2332)  | JM0038548 |
| 3 | Sideboard 14-3/4" x 136-3/4" (1432)                   | JM0038542 |
| 4 | Low Sideboard Splice 10" x 4" (1412, 1401, 1132-2332) | JM0020614 |
| 5 | Front End Board 142-1/8" x 14-3/4" (1432)             | JM0038601 |
| 6 | Low Sideboard Brace - 32 Series (30-3/16")            | JM0039012 |
| 7 | High Sideboard Brace - 32 Series (36-15/16")          | JM0039010 |
| 8 | 3/8"-16 x 1" Gr5 Z SF Hex Bolt                        | JM0002092 |
| 9 | 3/8"-16 Gr5 Z SF Hex Nut                              | JM0002152 |

## Inspection Windows



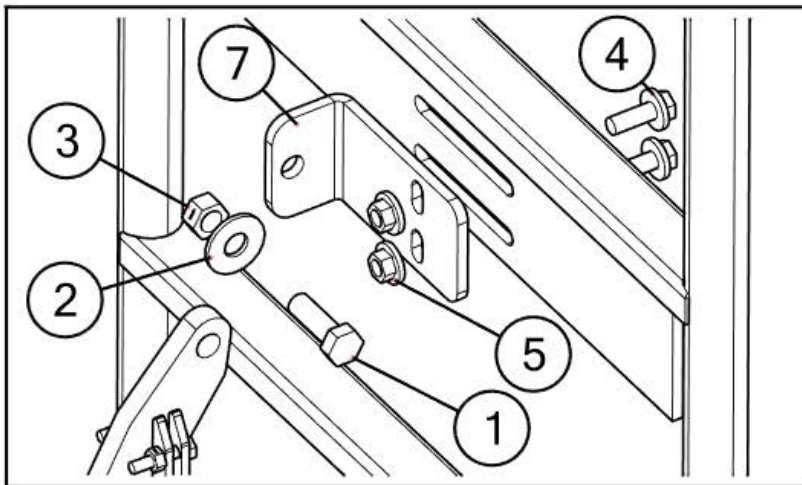
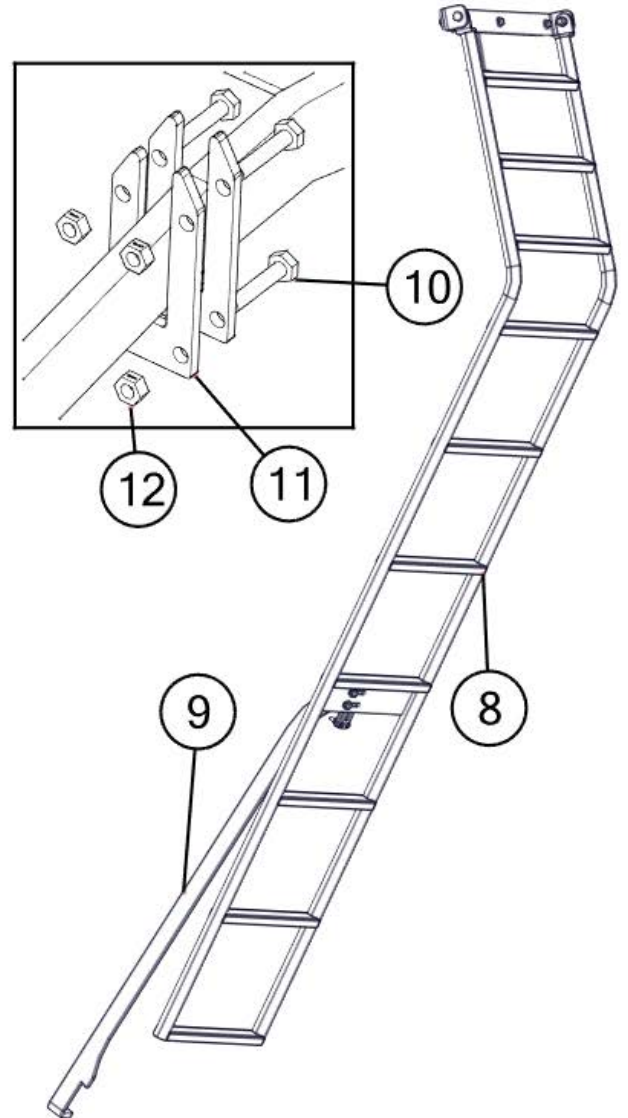
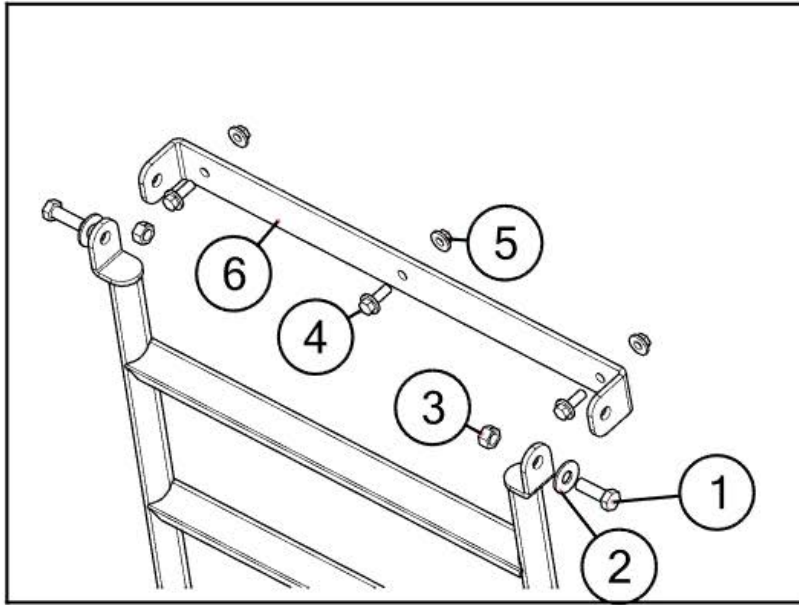
|   | Description                      | Part No.  |
|---|----------------------------------|-----------|
| 1 | 3/8"-16 Gr2 Z Centerlock Hex Nut | JM0001512 |
| 2 | Inside Window Clip - Deep        | JM0000253 |
| 3 | Outside Window Clip - Shallow    | JM0000256 |
| 4 | 3/8"-16 x 3/4" Gr5 Z Hex Bolt    | JM0001663 |
| 5 | Window Seal 3/4" S' Strip        | JM0000254 |
| 6 | Standard Inspection Window       | JM0000255 |
| 7 | Inspection Window Kit            | JM0025752 |

# Auger Rest Assembly



|    | Description                                                       | Part No.  |
|----|-------------------------------------------------------------------|-----------|
| 1  | 1/4" Diameter Snap Ring                                           | JM0001870 |
| 2  | Flip Up Auger Rest Pin (6-7/8" x 1-1/4")                          | JM0028218 |
| 3  | Cable Guide for X-tended Reach Auger Rest                         | JM0046922 |
| 4  | 1/4"-20 Gr2 Z Centerlock Hex Nut                                  | JM0001505 |
| 5  | 1/4" ID, 3/4" OD Z Flat Washer                                    | JM0003090 |
| 6  | 1/4"-20 x 2" Gr5 Z Hex Bolt                                       | JM0001591 |
| 7  | 1/8" Auger Rest Cable                                             | JM0037202 |
| 8  | Flip Up Auger Rest - Long Fold                                    | JM0020538 |
| 9  | 3/8"-16 x 1" Gr5 Z Hex Bolt                                       | JM0001592 |
| 10 | 3/8" ID, 1" OD Z Flat Washer                                      | JM0003061 |
| 11 | 3" x 17-1/2" Auger Rest Guide Plate UHMW                          | JM0024456 |
| 12 | 1/4"-20 x 1-1/2" Gr5 Z Hex Bolt                                   | JM0002447 |
| 13 | 2-3/4" x 1-1/2" Rest Pad                                          | JM0020802 |
| 14 | Extension Spring 5-3/8" OAL x 1-1/2" OD x .148" Wire, Zinc Plated | JM0024976 |
| 15 | 1/4" x 1-3/8" Roll Pin                                            | JM0009896 |
| 16 | Flip Up Auger - Throw Handle                                      | JM0021843 |
| 17 | 3/8"-16 x 1-1/4" Socket Head Cap Screw                            | JM0047163 |
| 18 | 6" x 2" Storage Position Auger Rest Triangle Pad                  | JM0037644 |
| 19 | Storage Position Auger Rest                                       | JM0020787 |
| 20 | 3/8"-16 Gr2 Z Centerlock Hex Nut                                  | JM0001512 |
| 21 | 1/2"-13 Gr2 Z Centerlock Hex Nut                                  | JM0001511 |
| 22 | 1/2"-13 x 1-1/2" Gr5 Z Hex Bolt                                   | JM0002100 |

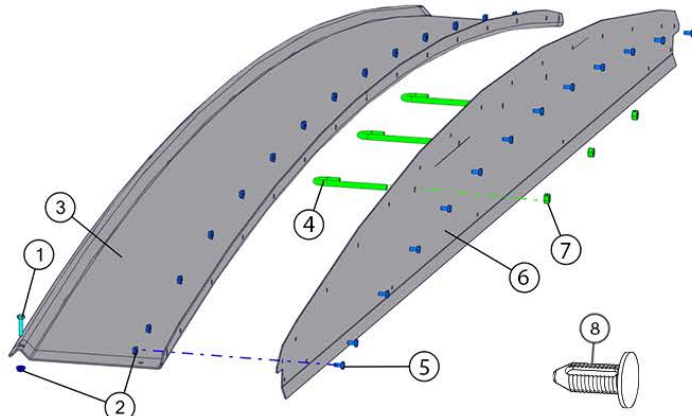
# Ladder Assembly



|    | Description                      | Part No.  |
|----|----------------------------------|-----------|
| 1  | 1/2"-13 x 1-1/2" Gr5 Z Hex Bolt  | JM0002100 |
| 2  | 1/2" ID, 1-3/8" OD Z Flat Washer | JM0003082 |
| 3  | 1/2"-13 Gr2 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  | 32 Series Ladder                 | JM0038740 |
| 9  | Ladder Support Leg               | JM0012926 |
| 10 | 1/4"-20 x 1-1/4" Gr5 Z Hex Bolt  | JM0016673 |
| 11 | Ladder Guide - 3/16" Thick       | JM0021947 |
| 12 | 1/4"-20 Gr2 Z Centerlock Hex Nut | JM0001505 |

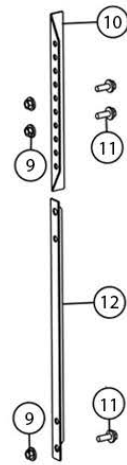
# Roll Tarp Assembly

Endcap

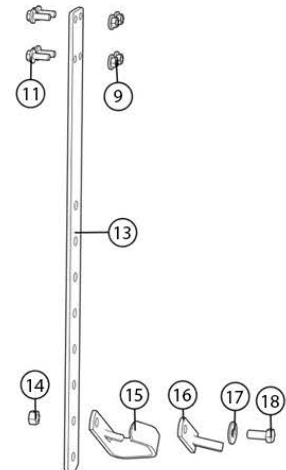


\*Hardware shown in green not used in Front Endcap Assembly. Use ribbed rivets in holes where J-bolts aren't used.

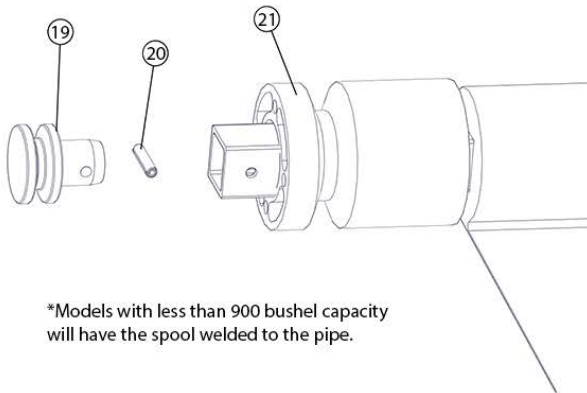
Prop-Up Bars



Crank Handle Holder

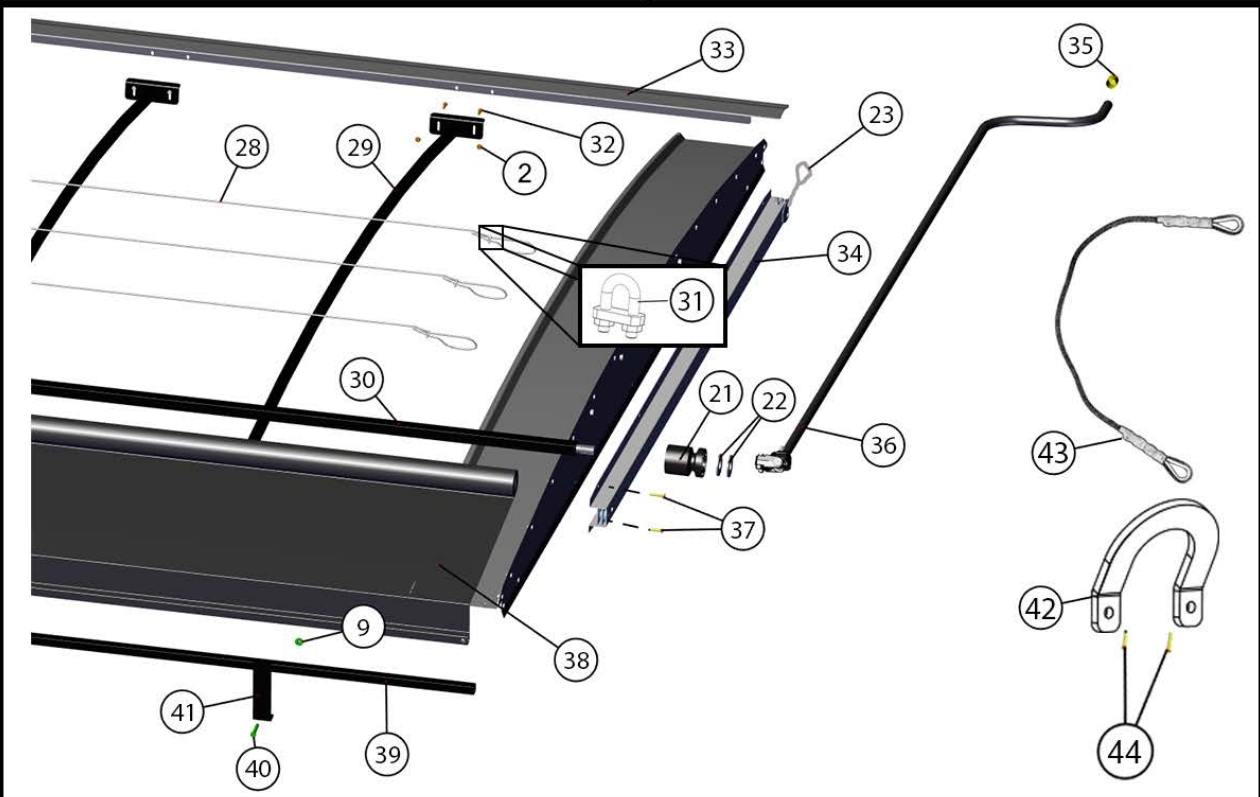
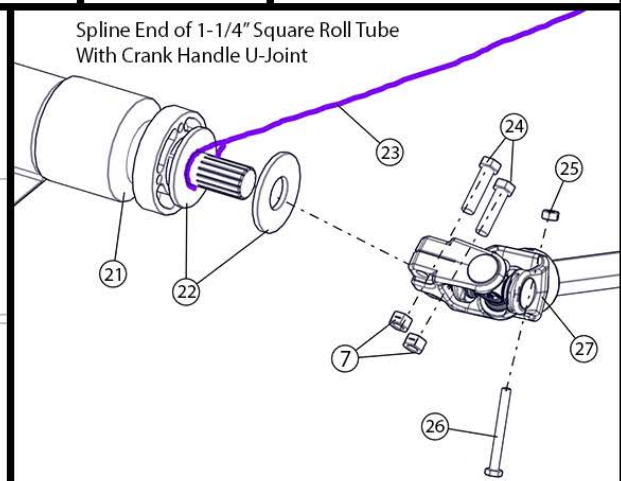


Spool End of 1-1/4" Square Roll Tube



\*Models with less than 900 bushel capacity will have the spool welded to the pipe.

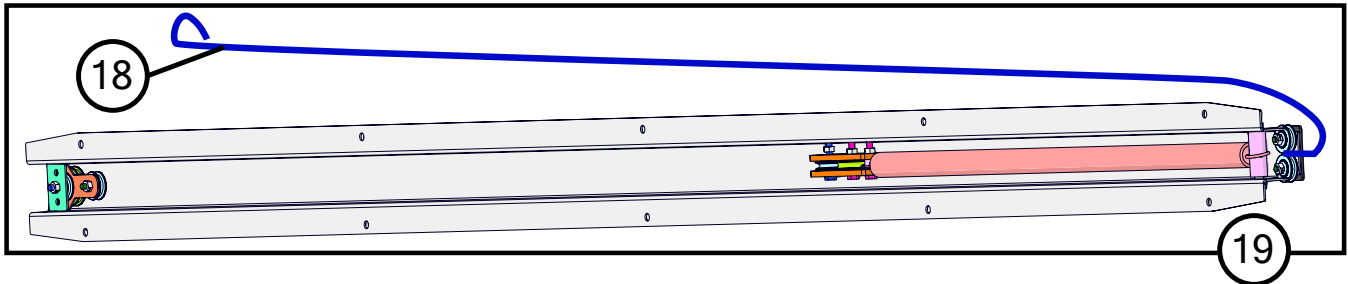
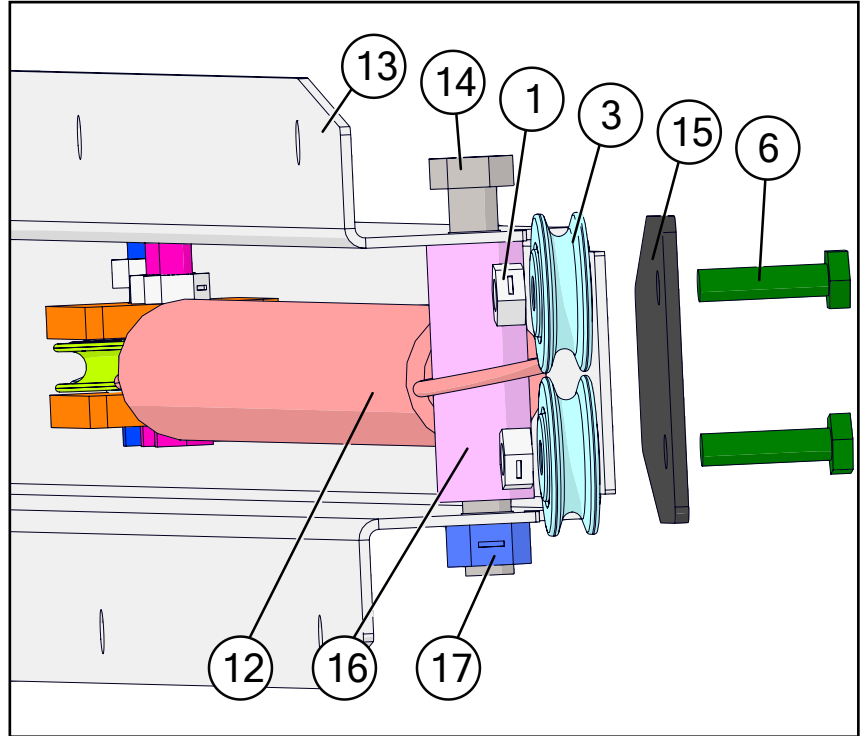
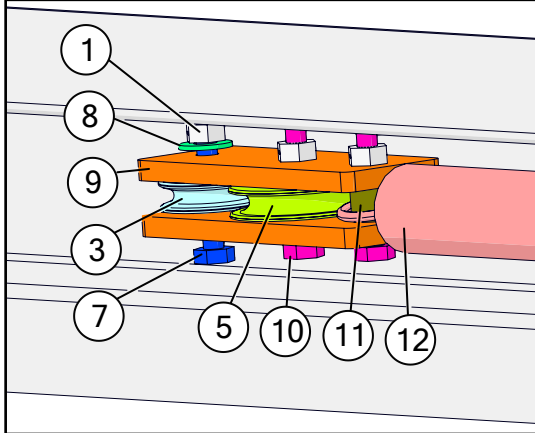
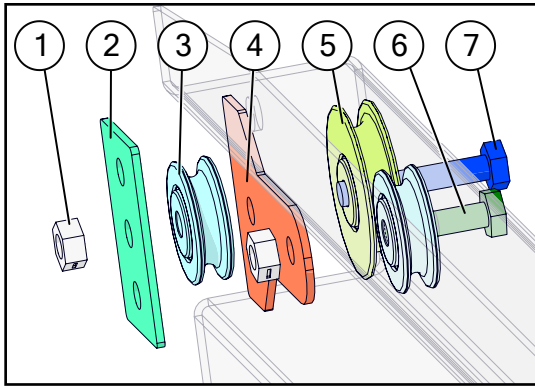
Spline End of 1-1/4" Square Roll Tube With Crank Handle U-Joint



# Roll Tarp Assembly

|    | Description                                                                    | Part No.  |
|----|--------------------------------------------------------------------------------|-----------|
| 1  | 1/4"-20 x 1-1/4" Gr5 Z Hex Bolt                                                | JM0016673 |
| 2  | 1/4"-20 Gr5 Z SF Hex Nut                                                       | JM0001630 |
| 3  | Arched Top Endcap for Glide Right - Grain Cart 141-1/2"                        | JM0044731 |
| 4  | 3/8"-16 Gr5 Z J-Bolt (384JB)                                                   | JM0001519 |
| 5  | 1/4"-20 x 1/2" Gr5 Z Hex Bolt                                                  | JM0001481 |
| 6  | End Cap Plate for Glide Right - Grain Cart 140-7/8"                            | JM0045315 |
| 7  | 3/8"-16 Gr2 Z Centerlock Hex Nut                                               | JM0001512 |
| 8  | 3/8" Ribbed Push in Rivet                                                      | JM0037396 |
| 9  | 3/8"-16 Gr5 Z SF Hex Nut                                                       | JM0002152 |
| 10 | End Cap Prop - Upper 19"                                                       | JM0021404 |
| 11 | 3/8"-16 x 1" Gr5 Z SF Hex Bolt                                                 | JM0002092 |
| 12 | Endcap Prop - Lower 19" (ABS-2)                                                | JM0000179 |
| 13 | 1/4" x 2" x 29" Bar for Crank Holder (1000 Bushel Carts and Higher (ABCH-1EL)) | JM0000164 |
| 14 | 1/2"-13 Gr2 Z Centerlock Hex Nut                                               | JM0001511 |
| 15 | Crank Holder (Zinc Plated) (CH-1)                                              | JM0002967 |
| 16 | Roll Tarp - Handle Hanger Rubber Flap                                          | JM0002551 |
| 17 | 1/2" ID 1-3/8" OD Z Flat Washer                                                | JM0003082 |
| 18 | 1/2"-13 x 1-1/4" Gr5 Z Hex Bolt                                                | JM0001513 |
| 19 | Spool End for Roll Tube                                                        | JM0002449 |
| 20 | 1/4" x 1-1/4" HD Spiro Roll Pin                                                | JM0046782 |
| 21 | Roll Tarp Guide Roller                                                         | JM0038446 |
| 22 | 1" USS Flat Washer                                                             | JM0003063 |
| 23 | Spring Return Cable (Grain Carts)                                              | JM0012981 |
| 24 | 3/8"-16 x 1-1/2" Gr5 Z Hex Bolt                                                | JM0001659 |
| 25 | 1/4"-20 Gr2 Z Centerlock Hex Nut                                               | JM0001505 |
| 26 | 1/4"-20 x 2-1/2" Gr5 Z Hex Bolt                                                | JM0001506 |
| 27 | Universal Joint - Roll Tarp (SUJ-1)                                            | JM0001517 |
| 28 | 3/16" Cable x 280" (1132, 1432)                                                | JM0048090 |
| 29 | 137" Arched Tarp Bows (Regular) (137ATB)                                       | JM0000157 |
| 30 | 1-1/4" x 277" Roll Tube for Glide Right (1132, 1432)                           | JM0048577 |
| 31 | 1/8" Cable Clamp                                                               | JM0001514 |
| 32 | 1/4"-20 x 1" Gr5 Z Hex Bolt                                                    | JM0002095 |
| 33 | Tightening Lip 137" Front 1132, 1432                                           | JM0041727 |
| 33 | Tightening Lip 137" Rear 1132, 1432                                            | JM0041728 |
| 34 | Spring Return Assembly Complete (Grain Cart)                                   | JM0002911 |
| 35 | S-Cap Yellow - 1.062 ID x 1-1/2" x 1/16                                        | JM0018963 |
| 36 | 12' Crank w/ Splined U-Joint (CUJ-1LN)                                         | JM0019888 |
| 37 | 1/4" x 3/4" Self Tapping Screw                                                 | JM0001570 |
| 38 | 22'4" x 13'6" Tarp w/ 10 Rivets (1132, 1432)                                   | JM0048077 |
| 39 | 1" x 274" Square Tie-Down Tube (1132, 1432)                                    | JM0043692 |
| 40 | 3/8"-16 x 2" Gr5 Z Hex Bolt                                                    | JM0001510 |
| 41 | Tarp Stop Bracket (TSB-1)                                                      | JM0000187 |
| 42 | Tarp Rope Bracket                                                              | JM0047700 |
| 43 | Tarp Rope Assembly 14' 8" Glide Right Standard Cart                            | JM0048662 |
| 44 | 1/4" x 1-1/2" Self Tapping Screw                                               | JM0001571 |

# Spring Return Assembly



|    | Description                                                      | Part No.  |
|----|------------------------------------------------------------------|-----------|
| 1  | 1/4"-20 Gr2 Z Centerlock Hex Nut                                 | JM0001505 |
| 2  | Aluminum Spacer for Spring Return (1-3/8" x 2-3/16") Rectangular | JM0002445 |
| 3  | 1-1/4" Idler Pulley (1/4" ID)                                    | JM0002439 |
| 4  | Large Spring Return Pulley Spacer (2 Holes)                      | JM0018897 |
| 5  | 1-5/8" Idler Pulley (Long Spring Return)                         | JM0012970 |
| 6  | 1/4"-20 x 1" Gr5 Z Hex Bolt                                      | JM0002095 |
| 7  | 1/4"-20 x 1-1/2" Gr5 Z Hex Bolt                                  | JM0002447 |
| 8  | 1/4" ID, 3/4" OD Z Flat Washer                                   | JM0003090 |
| 9  | Rectangular Plastic Spacer for Spring Return                     | JM0012973 |
| 10 | 1/4"-20 x 1-1/4" Gr5 Z Hex Bolt                                  | JM0016673 |
| 11 | 2" Black Plastic Spacer (1/4" ID x 1/2" OD)                      | JM0002442 |
| 12 | Spring Return Spring                                             | JM0000207 |
| 13 | Grain Cart Spring Return Housing                                 | JM0012974 |
| 14 | 3/8"-16 x 3" Gr5 Z Hex Bolt                                      | JM0001666 |
| 15 | Spring Return Stiffening Plate                                   | JM0034548 |
| 16 | 3/4" x 2" Plastic Spacer                                         | JM0002444 |
| 17 | 3/8"-16 Gr2 Z Centerlock Hex Nut                                 | JM0001512 |
| 18 | Spring Return Cable (Grain Carts)                                | JM0012981 |
| 19 | Spring Return Assembly (Grain Cart)                              | JM0002911 |

## Service Notes

[illegible]