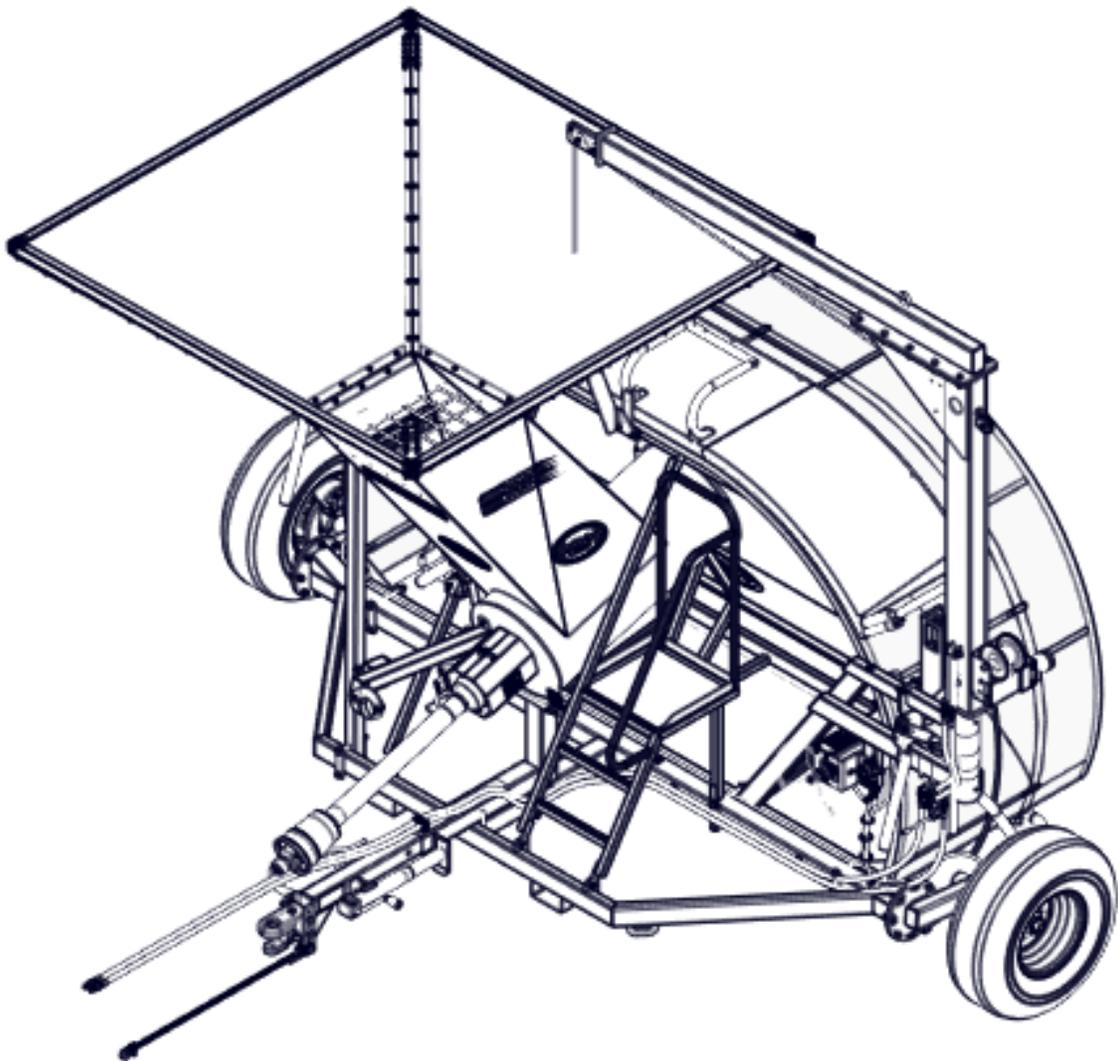




**1020C Grain Bagger
Operator's & Parts Manual
P.T.O.
Model No. 981000-0030.06**



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INTRODUCTION

Congratulations on your decision to purchase a Renn Grain Bagger. This machine has been designed to provide you with the highest standards of quality, reliability and durability. This manual has been prepared to familiarize you with the operation and maintenance of your bagger. We urge you to read the manual carefully and refer to it extensively for correct operating procedure.

The Renn Bagger allows the operator the flexibility to load from either a grain truck, trailer, or from a machine into the optional surge hopper.

This manual includes a Warranty Policy, a Safety Section, and a Lubrication and Maintenance Schedule. We urge you to read through this information carefully. This will help ensure safe and trouble-free operation of your bagger. All information, illustrations and specifications in this manual are based on the latest product information available. We, the manufacturer, reserve the right to make any changes at any time without prior notice.

LIMITED WARRANTY



• NEW EQUIPMENT WARRANTY

Subject to the limitations and exclusions set out herein, RENN Mill Center LP. ("Renn") warrants that if any component or part of a machine manufactured by RENN proves to be defective in material or workmanship within

1. (1) year from the delivery date of the original sale to a purchaser who purchases the equipment for their own farming operation use; OR
2. (90) days from the delivery date of the original sale to any other purchaser.

Renn will at RENN's option either repair or replace the defective part without charge. No payments will be made in lieu of repair to the machine. This limited warranty may be enforced by the first purchaser or first consumer user; all subsequent purchasers acquire the product "as is" without any benefit of this limited warranty.

• LIMITATIONS AND EXCLUSIONS

This limited warranty by RENN does not extend to or include:

1. New tires - installed on the equipment which are subject to a separate warranty by the tire manufacturer—see warranty sheet included with your owners manual. All warranty claims must be submitted to the tire manufacturer for approval and payment.
2. Used tires
3. Drive Belts
4. Drive Chains

This limited warranty covers defects in material and workmanship in the parts manufactured by RENN except:

1. Damage resulting from accident, misuse, abuse, neglect or from other than normal and ordinary use of the equipment.
2. Damage resulting from failure to clean or use the product in accordance with the manufacturer's instructions.
3. RENN reserves the manufacturer's right to determine the responsibility for damage as detailed in 1 and 2 above.

RENN shall, as to each defect, be released from all obligations and liabilities under this warranty if;

1. The equipment shall have been operated with any accessory, equipment, component or part not manufactured by RENN or not approved for use by RENN.
2. The equipment shall have been repaired, altered or modified without RENN's approval or if the equipment shall have been operated subsequent to its involvement in an accident or breakdown unless the purchaser furnishes reasonable evidence that such repair, modification or operation subsequent to its involvement in an accident or breakdown was not the cause of the defect;
3. If the purchaser or consumer does not, within 30 days from the date of discovery of the defect, return the defective machine, accessory, equipment component or part at the purchaser's or users expense to an authorized dealer, purchaser shall be responsible for submission of reasonable evidence or proof of date of discovery of subsequent defect.

• WARRANTY AND PARTS REPLACED BY WARRANTY

RENN further warrants that if any genuine RENN part or component utilized by authorized RENN dealers in accordance with this limited warranty proves to be defective in material or workmanship within 90 days of such utilization, RENN will, at RENN's option either repair or replace the defective part without charge. Purchaser shall be responsible for any shipping charges including freight to and from the place where the warranty work is done or performed.

• WHAT YOU MUST DO TO ENFORCE THIS WARRANTY

1. Warranty services must be performed by a dealer authorized by RENN. The purchaser must, at the purchaser's expense, deliver, mail or ship the defective part to any duly authorized dealer in the purchaser's area. If the purchaser is unable to locate a dealer in the purchaser's area, please contact RENN. RENN will either refer you to an authorized dealer or instruct you where to return the product. Do not return the product to RENN, without RENN's prior authorization
2. Purchaser must pay any postage, shipping charges, insurance costs, freight and other expenses to and from the place where the warranty work is done or performed if required to return equipment or any component or part to an authorized dealer or as directed by RENN. Purchaser shall be obligated to pay any premium payable for overtime labour if overtime is incurred as a result of a request by the purchaser.

• UNAPPROVED SERVICE OR MODIFICATION

All obligations of RENN under this warranty shall be terminated:

1. If service is performed by someone other than a dealer authorized by RENN or,
2. If equipment is altered or modified in ways not approved by RENN.

Accidents and normal maintenance

This warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper maintenance, improper protection in storage or improper use. The cost of normal maintenance and replacement of service items, oil filters, cutting parts, tires, bearings, chains, sprockets or brake parts shall be paid for by the purchaser.

• NO REPRESENTATION OR IMPLIED WARRANTY

1. Where permitted by law, neither RENN nor any company affiliated with it makes any warranties, representation or promises expressed or implied as to the quality or performance of its products other than those set forth above.
2. RENN makes no warranty of merchantability or fitness for a particular purpose.

• IMPROVEMENTS OR CHANGES

RENN reserves the right to make improvements or changes in design and specifications at any time without incurring any obligation to owners of previously sold units.

• WARRANTY CLAIM PROCEDURE

Warranty Claim Form must be delivered to RENN within 60 days after the warranty work was performed. Defective parts must be held for inspection for 90 days after the work was performed. RENN may request that parts be returned to the RENN factory for inspection. If approved, RENN will issue a credit within 60 days of receiving the warranty claim.

• ACKNOWLEDGEMENT REQUIRED

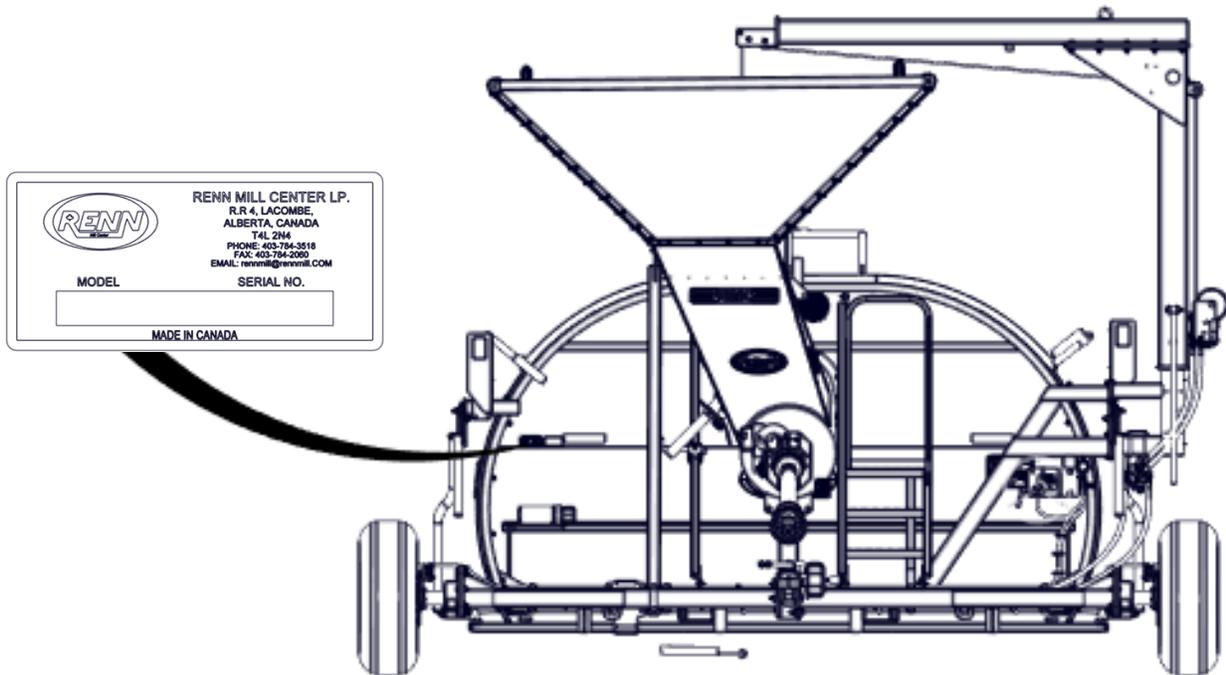
RENN shall have no obligation under this warranty unless the "Warranty Registration" included with your owners manual signed by purchaser and dealer is delivered to RENN within 30 days from the date of sale.

IMPORTANT NOTICE

To activate warranty coverage, the owner / dealer must complete the Warranty Registration form that can be found online and return to RENN Mill Center LP. R.R. 4, Lacombe, Alberta, Canada, T4L 2N4 within 30 days of retail sale.

SERIAL NUMBER LOCATION

The serial number plate is located on the passenger side of the push plate near the manual canister of the machine.



IMPORTANT: For fast, correct service when ordering parts, supply the following information to your local Renn Dealer:

- 1) The model number
- 2) The serial number

This information is essential when ordering parts for your Renn Grain Bagger.



2 SAFETY

Safety Alert Symbol

This Safety Alert symbol means

**ATTENTION!
BE ALERT!
YOUR SAFETY IS
INVOLVED!**



The Safety Alert symbol identifies important safety messages on the Renn Grain Bagger and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

3 Big Reasons

Accidents Disable and Kill

Accidents Cost

Accidents Can Be Avoided

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING**, and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guidelines:

DANGER -

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

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. It may also be used to alert against unsafe practices.

CAUTION -

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

2 SAFETY



You are responsible for the SAFE operation and maintenance of your Renn Grain Bagger . YOU must ensure that you and anyone else who is going to operate, maintain or work around the bagger be familiar with the operating and maintenance procedures and related SAFETY information contained in this manual. This manual will take you step-by-step through your working day and will alert you to all good safety practices that should be adhered to while operating the bagger.

Remember, YOU are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that EVERYONE operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Bagger owners must give operating instructions to operators or employees before allowing them to operate the bagger, and at least annually thereafter per OSHA regulation 1928.57.
- The most important safety device on this equipment is a SAFE operator. It is the operator's responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow them. All accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think SAFETY! Work SAFELY!

2.1 General Safety

1. Only trained, competent persons should operate the bagger. An untrained operator is not qualified to operate the machine.
2. Have a first-aid kit available for use, should the need arise, and know how to use it.
3. Have a fire extinguisher available for use, should the need arise, and know how to use it.
4. Wear appropriate protective gear. This list includes but is not limited to:
 - A hard hat
 - Protective shoes with slip resistant soles
 - Protective goggles
 - Hearing protection
5. Review safety related items with all personnel annually.

2 SAFETY



2.2 Operating Safety

1. Read and understand the Operator's Manual and all safety signs before using.
2. Place all controls in neutral, stop the engine, set the parking brake, remove the ignition key, wait for all moving parts to stop and disengage the PTO before servicing, adjusting, repairing or unplugging.
3. Install and secure all guards and shields before starting or operating.
4. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
5. Do not allow riders on the bagger or tractor during operation or transportation.
6. Clear the area of all bystanders, especially children, before starting.
7. Stay away from the bagger when swinging the bag crane out, and never operate the bag lift with someone standing under the load. Always stand well clear of the suspended load.
8. Attach any necessary flags and signs to the bagger before transporting.
9. Attach securely to the towing unit using a hardened pin with a retainer and a safety chain. The pin should be the maximum allowable size possible.
10. The bagger is designed to bag GRAIN. It is not suggested to use the bagger to bag fertilizer or other corrosive materials.
11. Do not exceed a safe travelling speed.
12. Use a light kit on the bagger when transporting.
13. Ensure that adequate lighting is available when bagging at night.
14. Use caution while bagging on uneven terrain.
15. Always check behind you when backing up. The bagger may block parts of your view.
16. Never unhook the bagger while it is in use.
17. Be careful on slopes of more than 3 degrees as the tractor weight can cause the bag to stretch.
18. Before pressurizing the hydraulic system, make sure all components are tight and that hoses, fittings and couplings are in good condition.
19. Review safety instructions annually.

2.3 Maintenance Safety

1. Place all controls in neutral, stop the engine, set the parking brake, remove the ignition key, wait for all moving parts to stop and disengage the PTO before servicing, adjusting, repairing or unplugging.
2. Perform a lock out tag out (LOTO) procedure if required.
3. Depressurize the hydraulic circuit before servicing or disconnecting from the tractor.
4. Place stands or blocks under the frame before working beneath the machine or when changing tires.
5. Only use tools, jacks and hoists appropriate for the job.
6. Install and secure all guards and shields before resuming operation.

2 SAFETY



2.4 Hydraulic Safety

1. Always place all tractor hydraulic controls in neutral before dismounting.
2. Make sure that all components in the hydraulic system are kept in good condition and are clean.
3. Replace any worn, cut, abraded, flattened or crimped hoses.
4. Do not attempt any makeshift repairs to the hydraulic fittings or hoses by using tape, clamps or cements. The hydraulic system operates under extremely high pressures. Such repairs will fail suddenly and create a hazardous and unsafe condition.
5. Wear proper hand and eye protection when searching for a high pressure hydraulic leak. Use a piece of wood or cardboard as a shield instead of hands to isolate and identify a leak.
6. If injured by a concentrated high pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop from hydraulic fluid piercing the skin surface.
7. Before applying pressure to the system, make sure all components are tight and that hoses, fittings and couplings are in good condition.

2.5 Storage Safety

1. Store the unit in an area away from human activity.
2. Do not permit children to play on or around the stored bagger.

2.6 Safety Decals

1. Keep safety decals clean and legible at all times.
2. Replace safety decals that are missing or have become illegible.
3. Replaced parts that previously displayed a safety decal should also display the same decal.
4. Safety decals are available through your authorized Renn Dealer.

2 SAFETY



2.7 Sign-Off Form

Anyone operating and/or maintaining the bagger must read and clearly understand ALL Safety, Operating, and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Review this information annually, before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all of your equipment. We feel that an untrained operator is unqualified to operate this machine. A sign-off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understood the information in the Operator's Manual and have been instructed in the operation of the equipment.

Sign-Off Form

<i>DATE</i>	<i>EMPLOYEE SIGNATURE</i>	<i>EMPLOYER SIGNATURE</i>

3 DECAL LOCATIONS

3.1 Safety Decal Locations

The types of safety decals and the locations on the equipment are shown in the following illustrations. Good safety requires that you familiarize yourself with the various safety decals, the type of warning and the area, or particular function related to that area, that requires your SAFETY AWARENESS.

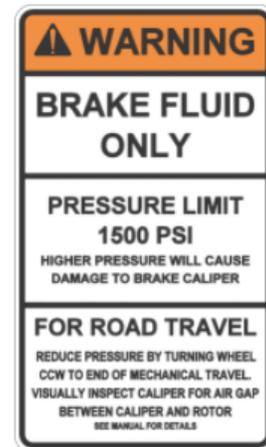
- THINK SAFETY!!, WORK SAFELY!!



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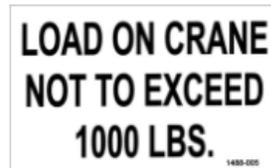
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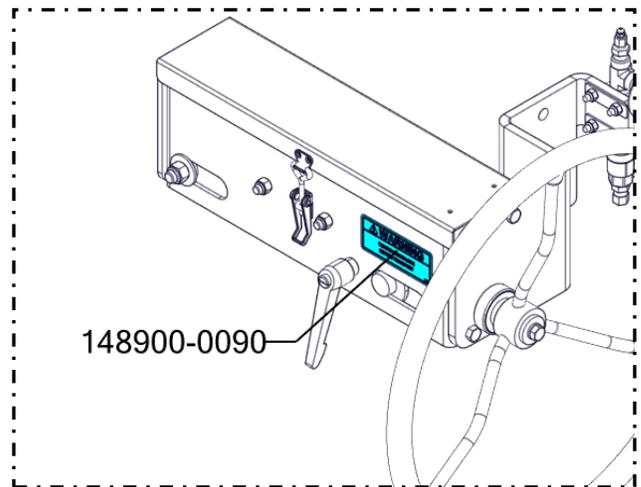
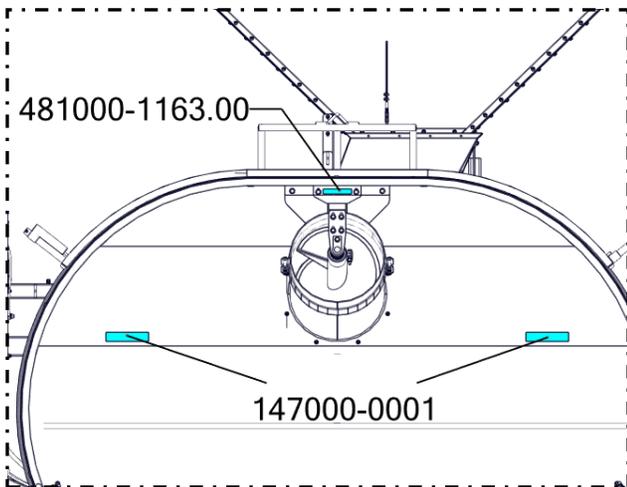
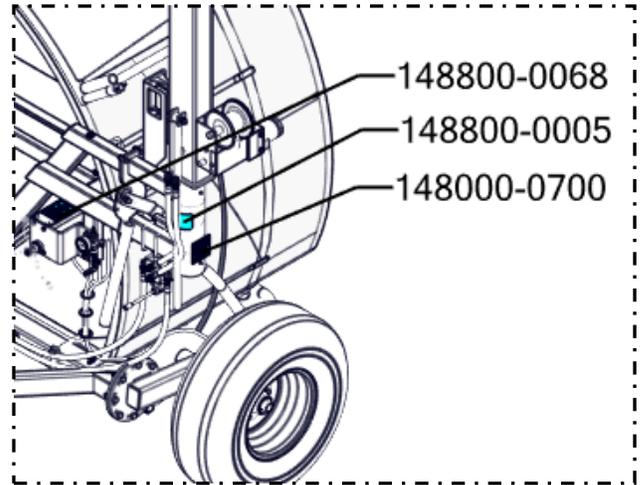
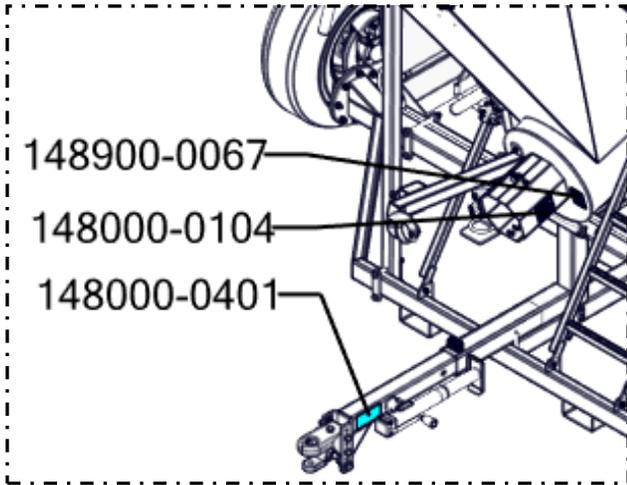


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REMEMBER - If safety decals have been damaged, removed, become illegible or parts that have been replaced do not contain safety decals, new decals must be applied. New safety decals are available from your authorized dealer.

3 DECAL LOCATIONS

3.1 Safety Decal Locations



3 DECAL LOCATIONS

3.2 Information Decal Locations

The types of informational and operational decals and locations on the equipment are shown in the following illustrations. Good operation requires that you familiarize yourself with the various operational decals, the type of warning and the area, or particular function related to that area, that requires your AWARENESS.

- WORK SAFELY!!



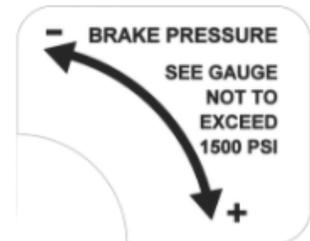
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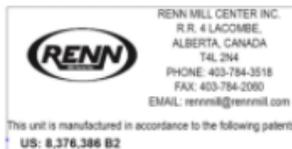
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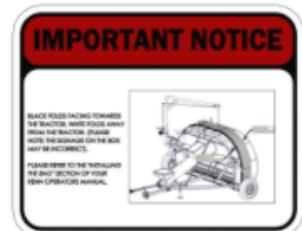
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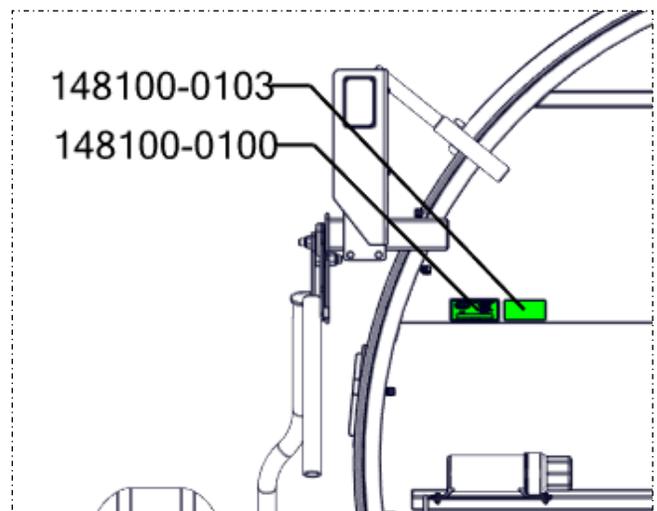
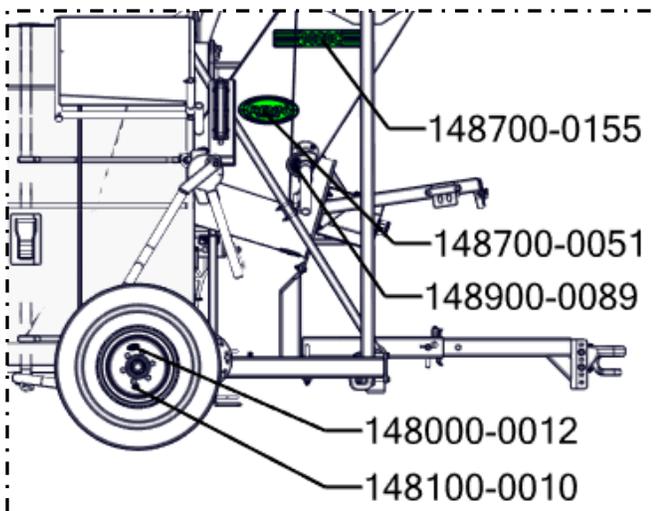
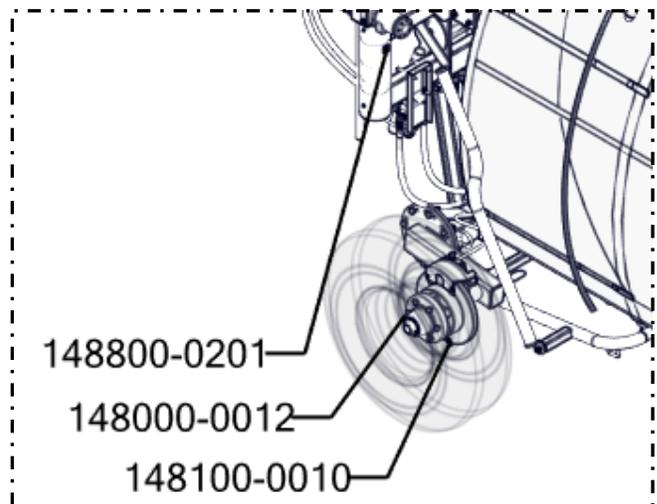
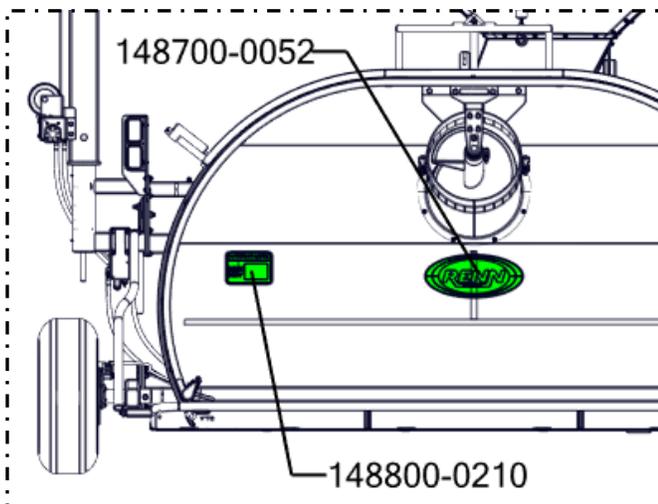
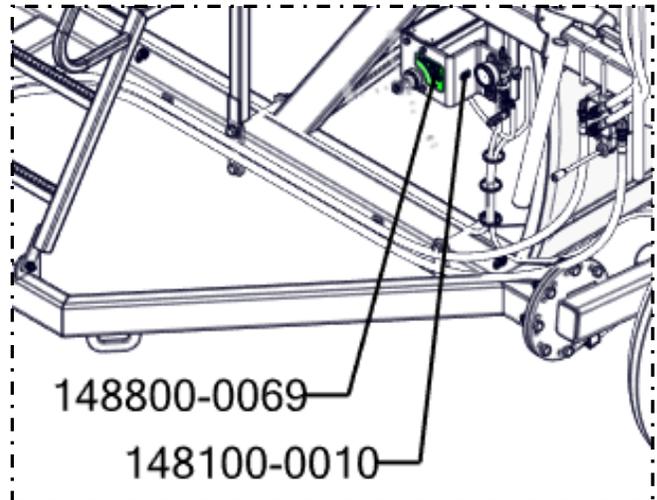
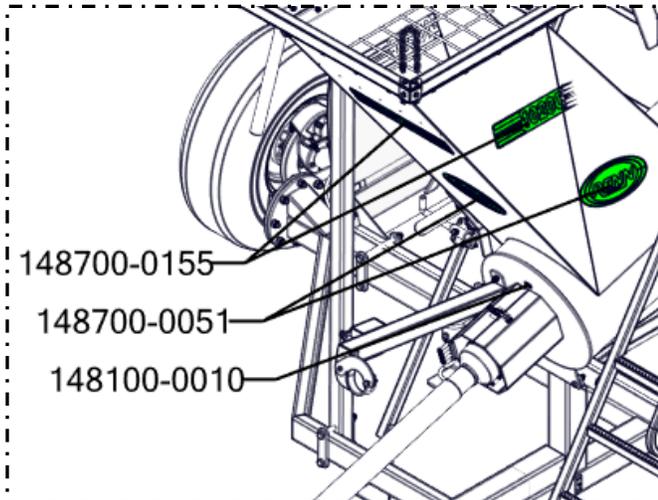
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3 DECAL LOCATIONS

3.2 Information Decal Locations



4 OPERATION

4.1 To the New Operator or Owner

The Renn Grain Bagger is designed to receive dry grain from a combine, grain buggy, truck or gravity wagon and deposit that grain into the bag. Be familiar with the machine before starting.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, and prudence of personnel involved in the operation, transportation, maintenance and storage of equipment or in the use and maintenance of facilities.

It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. Follow all safety instructions exactly. Safety is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders and the area around the work site. Untrained operators are not qualified to operate the machine.

Many features incorporated into this machine are the result of suggestions made by customers like you. Read this manual carefully to learn how to operate the machine safely and efficiently. By following the operating instructions in conjunction with a good maintenance program, your bagger will provide you with many years of trouble-free service.

For more information, please refer to Section 2.3 & Section 5 for further maintenance directions.

4.2 Before You Begin

Read the set-up instructions completely. Decide in advance where and how much you're going to bag, and how you plan to unload the grain from the bag. Thinking through the process can save panic and frustration later. Set up your bagger before you need it, not when you need it. Do a small trial run if this is your first time using the machine or the process.

4.3 Machine Components

The Renn 10ft Bagger consists of a central auger which directs grain into the bag. The bag is carried on a tunnel which contains the grain as it moves into the bag, and also controls the flow of the bag off of the tunnel via a strap. The bottom of the bag is supported on a bag pan. The unit also contains a bag lift which lifts the new bag onto the tunnel via a winch operated overhead crane.

The bagger is fitted with hydraulic brakes which can be set to retard the forward movement of the bagger, thus resulting in a 'stretching' of the circumference of the bag for optimum storage.

4 OPERATION

4.4 Pre-Operational Checklist

The efficient and safe operation of the Renn Grain Bagger requires that each operator read and understand the operating procedures and all related safety precautions outlined in this section. A pre-operational checklist is provided for the operator. It is important for both personal safety and for the maintenance of the good mechanical condition of the bagger that this checklist be followed.

Before operating the bagger and each time thereafter, the following areas should be checked:

1. Inspect the machine if it is the start of the season.
2. Lubricate the machine per the schedule outlined in the Maintenance Section (section 5).
3. Be sure that the machine is properly attached to the tractor. Be sure that a mechanical retainer is installed through the drawbar pin and the safety chain is installed.
4. Adjust the hitch position to make the bagger level with the tractor.
5. Inspect all hydraulic lines, fittings and couplers.
6. Check all bearing locking collars to ensure that they are tight on the shafts and in good condition. Check that all set screws on the bearing collars are tight. Check that all bearing mounting hardware is secure.
7. Make sure all safety shields are properly installed.
8. Before connecting the PTO shaft to the tractor:
 - Check that the auger turns freely by rotating the driveshaft by hand.
 - Ensure that the shear bolt is in the yoke on the bagger PTO drive shaft.
 - When connecting the bagger to the tractor PTO shaft, be sure that the cross pin on the yoke is seated in the groove on the tractor PTO shaft.

4.5 Break-in

Do not fill the surge hopper at any time, and especially not during break-in. Filling even the lower portion of the hopper will fill the auger to a point where it will jam. The hopper may need to be drained to be operational once again. Filling the surge hopper puts significant stress on the auger assembly - use the hopper as a funnel only.

It is recommended that the augers be run at moderate to full operational speeds and at 1/2 to 2/3 capacity during the first hour of operation. This allows the frictional forces to diminish significantly within the auger tube, and allows the free flow of grain to approach acceptable levels in the system.

Keep this in mind after the bagger has been stored for extended periods of time as well. It is also recommended that the following mechanical items be checked:

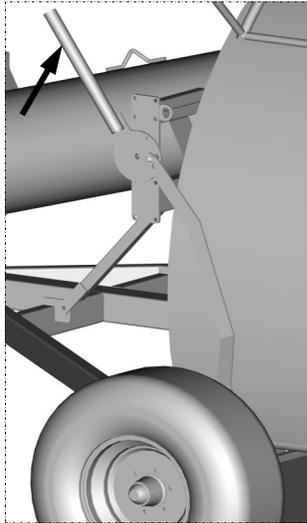
1. After operating for a 1/2 hour:
 - Re-torque all wheel bolts, fasteners and hardware.
 - Check that all hydraulic connections are tight.
 - Check that no hydraulic hoses are being pinched or crimped. Reroute as required.
 - Lubricate all grease fittings.
2. After 5 hours and 10 hours of operation:
 - Re-torque all wheel bolts, fasteners and hardware.
 - Check that all hydraulic connections are tight.
 - Check that no hydraulic hoses are being pinched or crimped. Reroute as required.
 - Lubricate all grease fittings - do not over-grease.
 - See the normal servicing and maintenance schedule as outlined in the Maintenance Section (section 5).

4 OPERATION

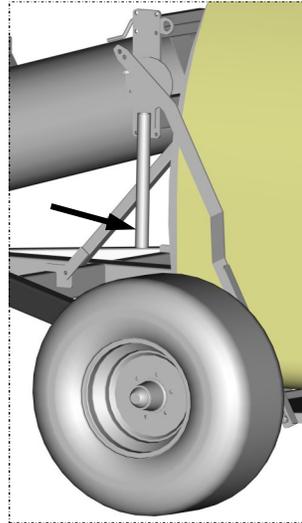
4.6 Controls

4.6.1 Bag Pan Lower/Raise

Using the two handles provided, you can raise the bag pan in one motion. In the upmost position, the pan is locked in place.



Bag Pan in Lowered Position



Bag Pan in Raised Position

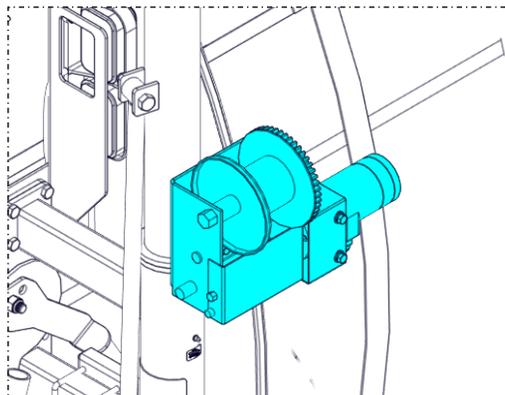
4.6.2 Winch - Bag Lifting Crane

The bag lifting crane allows the raising of the bag onto the tunnel. With the bag lift attached to the lift hook, the crane is rotated so that the bag lift hangs off of the rear of the tunnel, giving it room to be lowered to the ground below. The bag is then loaded onto the bag lift, and then raised into position (see instructions on section 4.7, steps 7 and 8).

The hydraulically driven bag lift system is protected from being overstrained by a relief valve located on the directional control valve. The relief valve has been set at 750 psi. This will provide ample lifting capacity and avoid any damage to the bagger components.

“Do not exceed a 1000lb lift load or else damage will occur!”

Safety Note: Never stand under the load being lifted. Mechanical or hydraulic failure could cause serious injury or death!



4 OPERATION

4.6.3 Ratchet & Strap

To set the strap length, pull the excess strap length through ratchet until the slack is gone. Pump the handle to increase strap tension.

To release, open the handle upward and away from the ground while pulling the release cog at the same time and pull the ratchet assembly out or down to unwind the strap.



4.6.4 Brake Pump

The braking system is used to hold back the weight of the grain pushing the machine forward. Using brake fluid, the braking system pushes fluid to the calipers, pressing the brake pads against the brake rotors at the wheel assembly. Increased fluid pressure (registered on the gauge) results in increased braking capacity.

Turn the steering wheel clockwise to increase the brake pressure. To reduce brake pressure, turn the steering wheel counter-clockwise. The ball valve is put in place to restrict flow as a secondary measure. Turning the valve clockwise will reduce flow. Typical pressure ranges from 500 to 750 PSI.

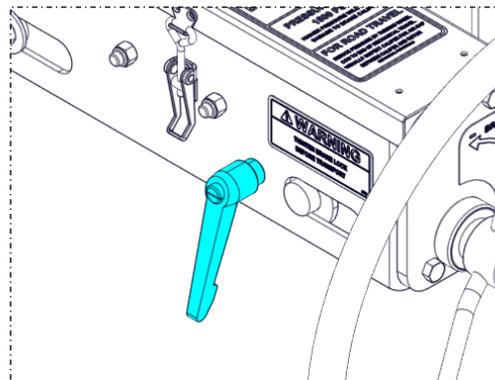
When transporting, turn the steering wheel counter-clockwise until it will no longer turn. At this point the reading on the pressure gauge should be zero. Use the clamping handle latch to lock the steering wheel in place.

Caution is always advised when there is pressure on the bagger created by grain push. It is best to stand clear of the machine when relieving brake pressure.

Note: The Ball Valve should always be in vertical position except during bagging.



Ball Valve

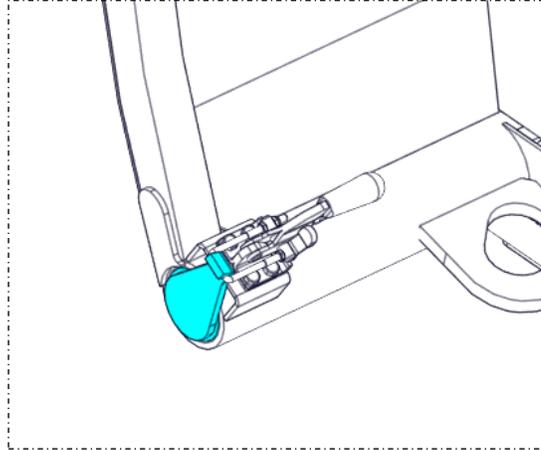


Clamping handle latch

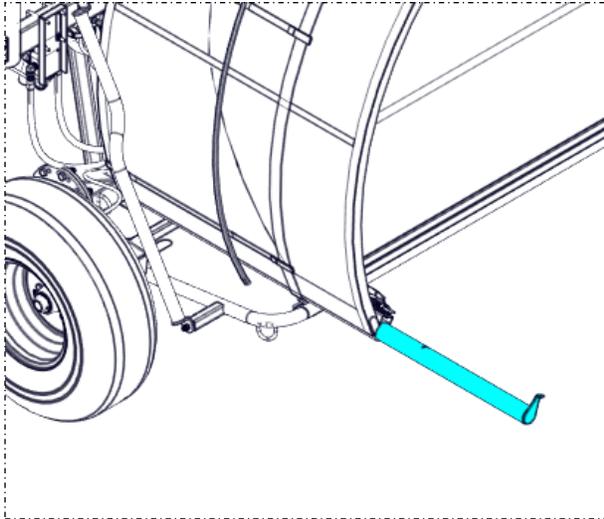
4 OPERATION

4.6.5 Bag Installation Pull-Out Bar

The pull-out bar is designed to help the operator during the bag installation process. The bar can be pulled out and held by the bail of the clamp in the hold slot. Make sure to lock the clamp during bagging and while transporting.



Bar locked into bagging position.



Bar extended into bag installation position.



Clamp bail in hold slot.

4 OPERATION

4.7 Setting Up the Grain Bagger

1. Tow the Renn Grain Bagger to the desired location and align the bagger with the desired tracking path.

Ensure that the location is:

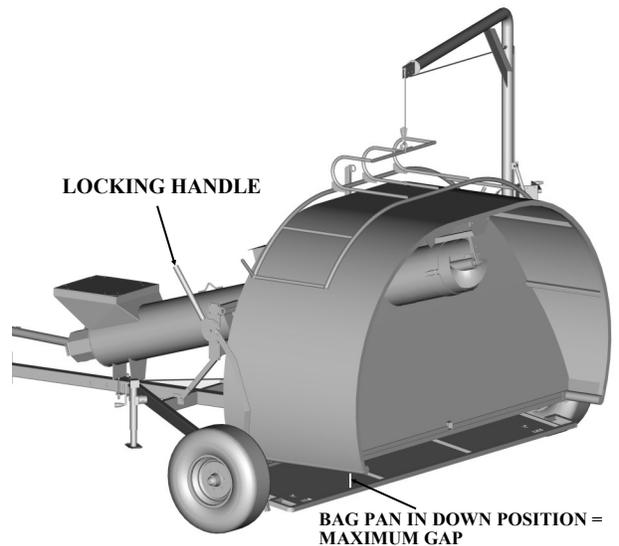
- a well drained, hard surface (crushed gravel, concrete or asphalt are ideal sites)
- in an area suited for easy grain removal
- in an area protected from livestock and rodents
- in an area protected from the wind

A slight uphill slope works best - it drains water and it allows the unloader to travel downhill, which works best when the time comes to unload.

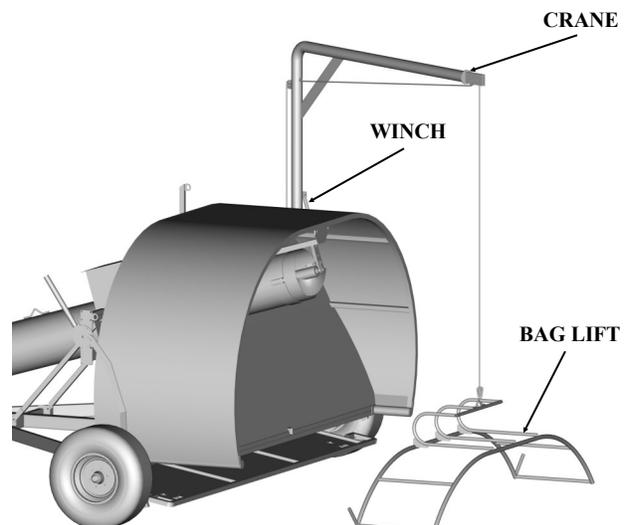
2. Loosen and remove the strap and tension cord harness from the tunnel (if already installed). This allows the bag to be loaded onto the tunnel.

3. Lower the bag pan all the way so that there is sufficient room to slide the bag into position. Do so by taking the locking handles and raising them vertically (see Section 4.6.1).

Note: When transporting between fields, the winch hook can be secured to the Cradle ring on top of the bag tunnel, and the winch tightened slightly to hold the arm in place.



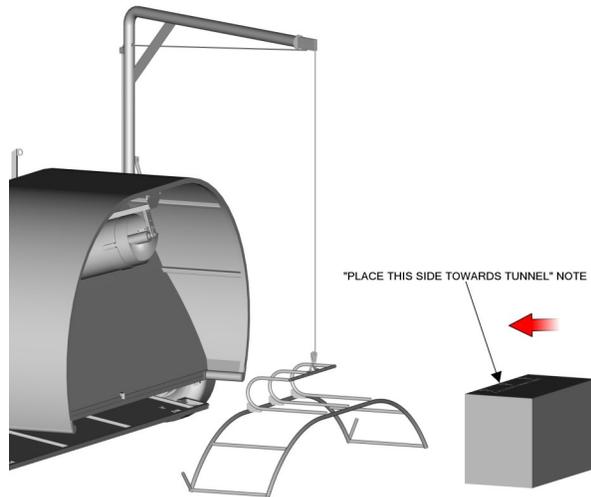
4. Lower the bag lift to the ground.



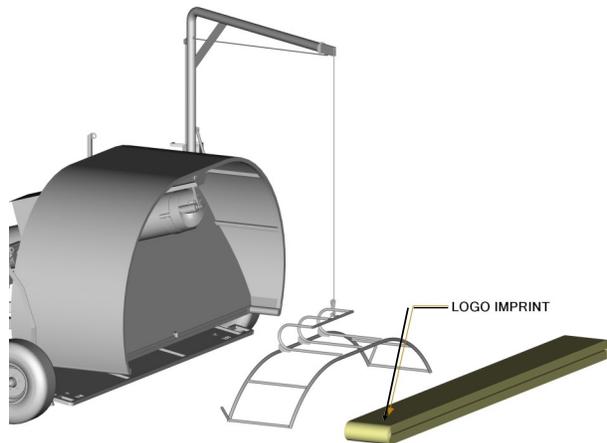
4 OPERATION

4.7 Setting Up the Grain Bagger (Cont'd)

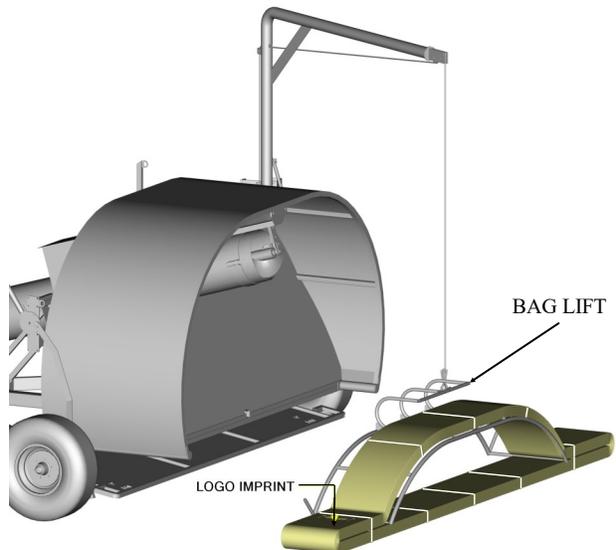
5. Place the box containing the grain bag behind the machine, taking notice of the message “Place this side towards tunnel”. Double check to make sure that the white side of the bag is pointed away from the tunnel and the black side is pointed towards the tunnel. *Note that color orientation trumps signage.*



6. Lay the bag out flat so that the logo is upright from the side view and in the position shown.



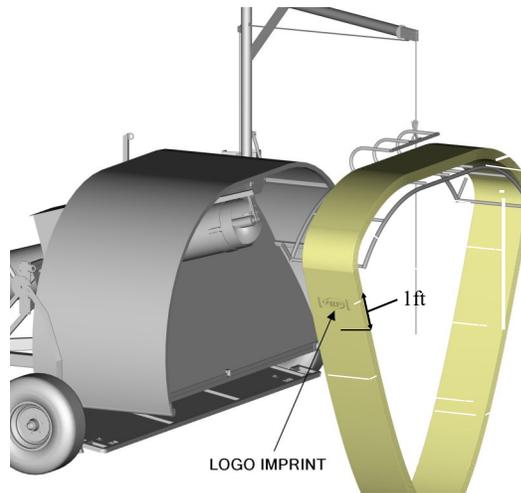
7. Mount the bag along with the strapping ropes onto the bag lift. Make sure that the folds remain flat. Ensure that the logo located on the side of the bag is visible and accessible (the logo contains the stretch bar and codes which are necessary for properly filling the bag and for warranty information - see manufacturer's instructions for precise location of the stretch bar). You may now remove the ropes/tape from around the folds, but only those located in contact with the bag lift.



4 OPERATION

4.7 Setting Up the Grain Bagger (Cont'd)

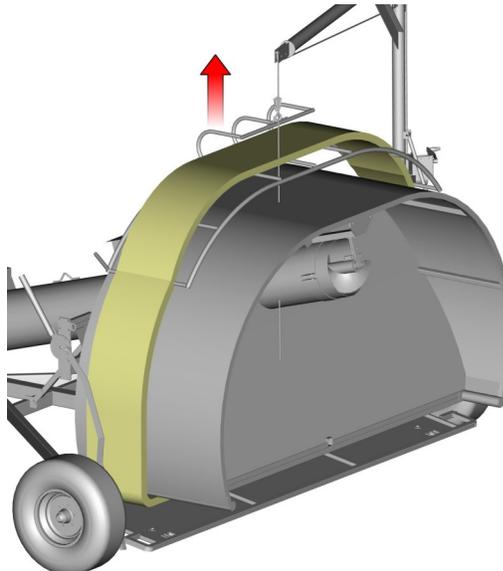
8. Before raising the bag, ensure that all bystanders are clear of the load. Never stand beneath a suspended load. Do not exceed the crane's 1000lb lifting capacity. Raise the bag lift until it is at the same height as the tunnel and push it halfway onto the tunnel. Begin fitting the bag to the bottom corners of the tunnel.



9. Position the folded bag on the tunnel so that the folds are as far forward on the tunnel as possible.



10. Raise the bag lift further to eliminate any creases or bunches of folded bag in the bag pan region. This will eliminate plastic bunched under the bag. Do not overload the bag crane and watch for any downward deflection of the horizontal arm.

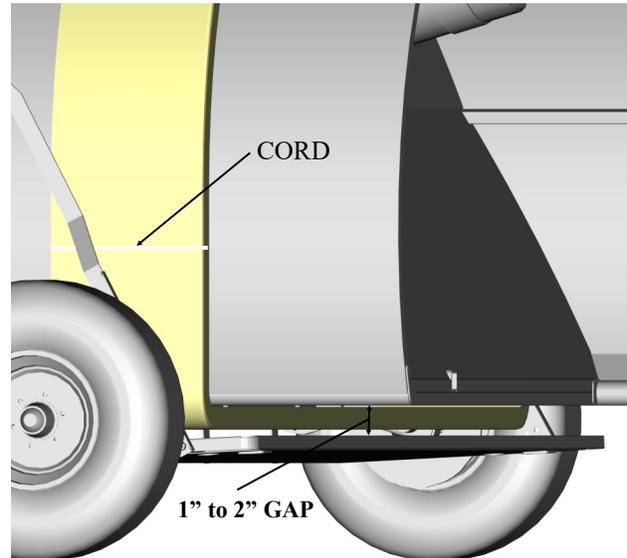


4 OPERATION

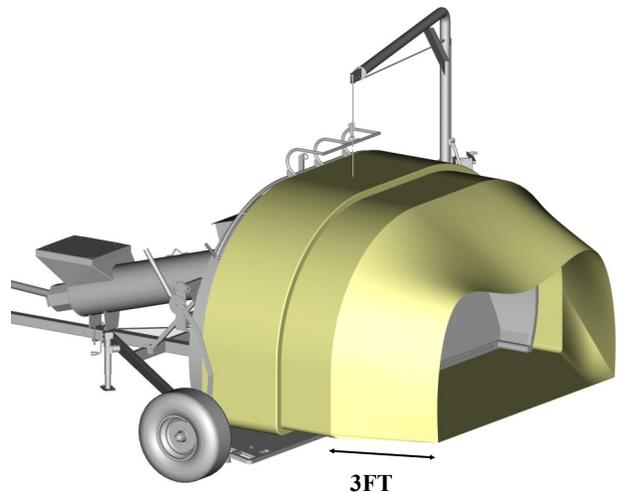
4.7 Setting Up the Grain Bagger (Cont'd)

11. Raise the bag pan until there is about 1"-2" of space between the bottom of the tunnel and the bag pan. Lower the bag lift until it rests on the tunnel. Cut and remove the strapping tapes, rope or twine that are located around the folded bag.

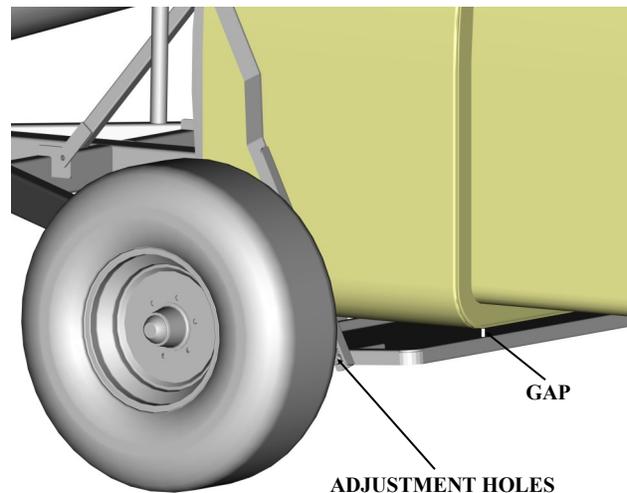
Use the bag lift cradle holder to hold the bag lift cradle to the bag tunnel. The cradle holder is designed to wrap around the tractor side of the tunnel and prevent the bag lift cradle from moving.



12. Carefully take hold of the leading edge (inside fold) and pull approximately 1 fold (3ft) off of the tunnel. Use one hand to pull and the other hand to keep the rest of the folding in place. The outside of the bag should be white and the interior black.



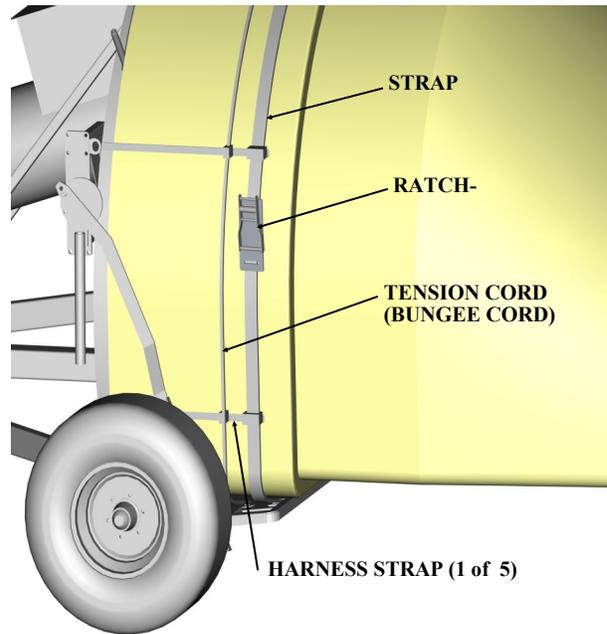
13. Tighten the bag pan until there is approximately 1" space between the bottom of the tunnel and the bag pan. *Do not pinch the plastic between the bag pan and the bagger tunnel!*



4 OPERATION

4.7 Setting Up the Grain Bagger (Cont'd)

14. Place the tension cord and strap over the tunnel and bag (as shown) and secure tightly using the 5 harness straps provided. Position the tension cord just in front of the folds so that only one layer of plastic comes off the tunnel at any one time. Position the strap over the single layer of plastic to keep the grain from flowing toward the front of the bagger. Take the excess slack out of the strap but do not tighten at this point. Pull the tension cord tight to tie the knot, and then remove the knot from the 'V' to create slack in the tension cord for now (see figures below). The cord is routed thru D rings in the pan.



Strap components

4 OPERATION

- 14.1 Take the ratchet strap (red) and spread it straight across.
- 14.2 Take each harness strap (black) and put it through the ratchet strap in the same orientation as in Figure 4.5.
- 14.3 Have just one harness strap on the short side of the ratchet.



Figure 4.5



Figure 4.6

- 14.4 Take the other 4 harness strap (black) and put it through the ratchet strap in the same orientation as in Figure 4.7.
- 14.5 Have the other 4 harness straps on the long side of the ratchet (Figure 4.8).



Figure 4.7



Figure 4.8

4 OPERATION

14.6 Insert the bungee cord through the harness straps as in Figure 4.9.

14.7 Spread the harness strap on the ratchet strap and the bungee cord as in Figure 4.10.



Figure 4.9



Figure 4.10

14.8 Put the straps on the bagger and latch the harness straps on to the “D” rings (Figure 4.11).

14.9 Insert the ratchet through the side by side “D” ring and latch it to the outer “D” ring as in Figure 4.12.



Figure 4.11



Figure 4.12

4 OPERATION

14.10 Do not tighten the ratchet strap all the way, but leave at least two fingers' worth of room (Figure 4.13).

14.11 Insert the bungee cord through the double "D" ring and tie a knot at the end of the bungee cord.



Figure 4.13



Figure 4.14

14.12 Place the bungee cord knot on the v weldment, pointed out in Figure 4.15.

14.13 On the other side, repeat steps 9 and 10. Then pull the bungee cord as in figure 4.16 to remove excess slack.



Figure 4.15



Figure 4.16

4 OPERATION

14.14 Place the bungee cord knot on the v weldment as in Figure 4.17.



Figure 4.17

An alternate way to tie the bungee cord (Figure 4.18),

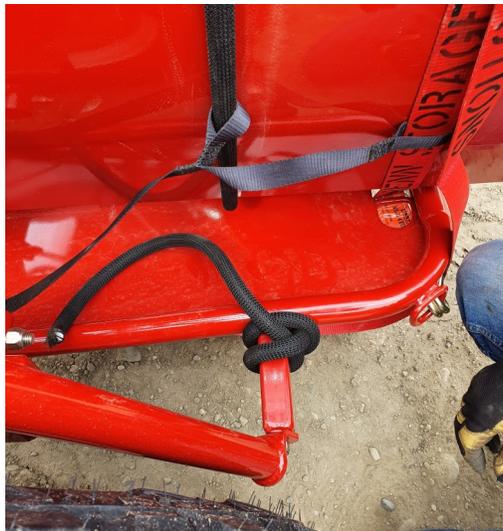
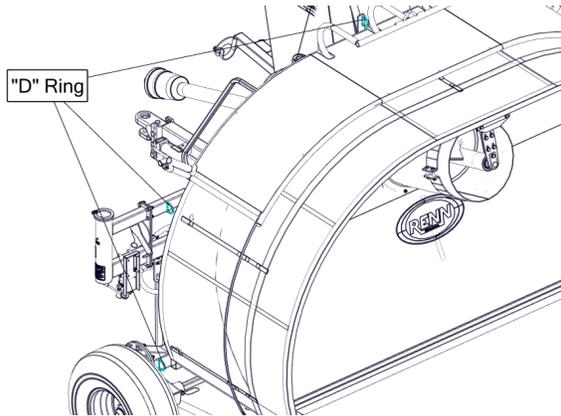


Figure 4.18

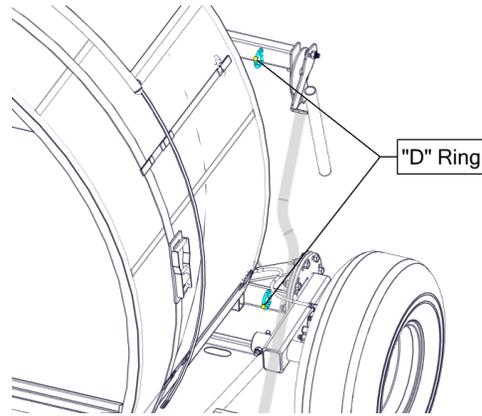
4 OPERATION

4.7 Setting Up the Grain Bagger (Cont'd)

NOTE: The harness strap has two settings to connect to the “D” ring. Use the longest setting for a 500ft bag with 21” folds. Use the shorter setting for a 300ft bag with 18” folds.



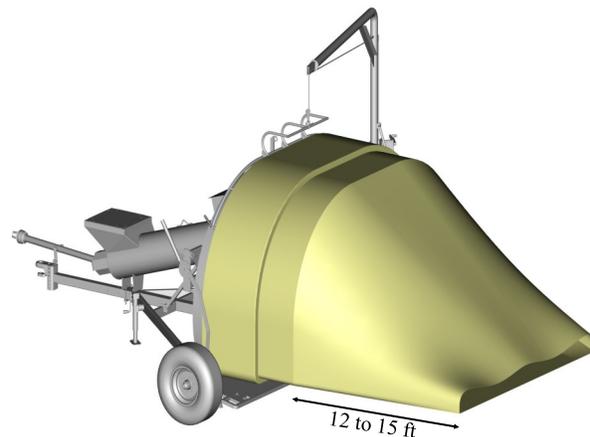
Longest setting (500ft bag)



Shorter setting (300 ft bag)

The 500 ft bag is about 4 1/4” thick. The 300 ft bag is about 3 3/4” thick. The goal is to keep the folds from bunching up against the red strap. The two settings are to place the bungee cord just ahead of the folds. If the longer setting is used on a 300 ft bag, the folds could move back against the red strap. As the 500 ft bag comes off the tunnel it may be advantageous to raise the bag cradle to help keep the bottom corners from bunching.

15. Pull 12 - 15 ft of plastic off of the tunnel to tie off the end of the bag.

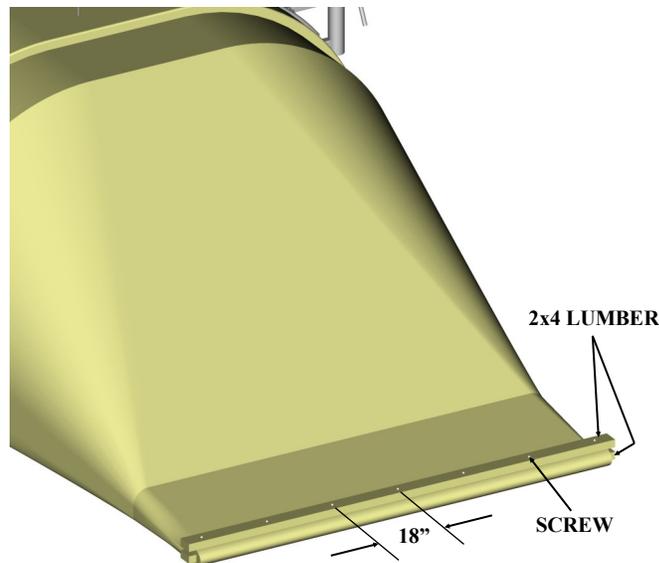


4 OPERATION

4.7 Setting Up the Grain Bagger (Cont'd)

16. With one person at each side of the bag, pull the bag flat.

Consider how you are going to empty the bag. If using an unloader, do not use a knot to seal this end of the bag. Instead, use a pair of 16ft 2x4 lumber (or something similar). Narrow the end of the bag to 13ft minimum by folding in once from each side. Lay one 2x4 across the end of the bag, 10" from the end. Fold the end of the bag (the 10") on top of the 2x4 and secure with staples (or something similar). Roll the 2x4 with the bag attached onto the bag three times, then lay the second 2x4 on top. Screw the 2x4's together every 18" to create a seal. Do not push the screws through the lumber. Sharp tips will create holes in the bag.



17. Pull another 3-4 ft of plastic from the tunnel and position the sealed end underneath the bag (this method ensures that when grain is placed in the bag, the end will remain hidden underneath the bag, providing an excellent seal).

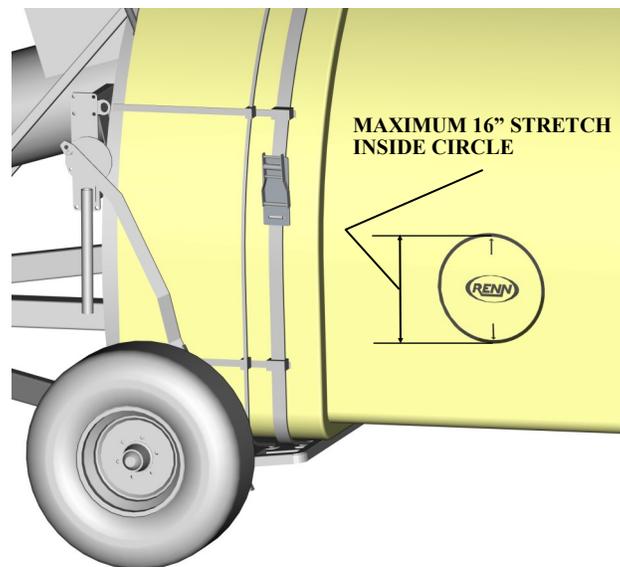
18. Replace the tension cord knots into the 'V's on the front of the bag pan (see step 14). Using the ratchet, tighten the strap until you have just enough room to get two fingers underneath it - be careful not to pull up on the bag pan and pinch the plastic.

19. Go to Section 4.8 to continue.

4 OPERATION

4.8 Filling the Bag with Grain

1. Ensure that the bag seal (boarded or otherwise - it is recommended to not use a knot if you are using an unloader to empty the bag. If using a vacuum or manually unloading, a knot is fine.) is underneath the bag and confirm that there is a sufficient amount of plastic pulled from the bottom (rather than the top) of the tunnel before filling. This provides a ready made bag for the initial grain to enter.
2. Place the tractor transmission into neutral. Do not set the grain bagger brake at this time unless you are on a downward slope.
3. During the filling of the bag, the tractor and bagger will be forced ahead by the grain flowing into the bag.
4. Take notice of the logo and stretch bar located on the side of the bag. This stretch bar is an indicator of the amount of grain that can be safely put into the bag. Do not allow the bar to stretch more than what is allowable for the bag you are using. Consult the bag information provided with your bag.



4 OPERATION

4.8 Filling the Bag with Grain (Cont'd)

5. **Adjust the grain bagger brakes.** Start with minimal brake pressure and work your way toward the desired setting. Note that disc cleanliness will affect performance, so check brake operation periodically to adjust as necessary.

CAUTION! Releasing the brake will allow the bagger to move ahead. Adjust the brake positioning arm so that the brake is positioned out and away from the bagger. Be prepared to move with the bagger when it does move. Failure to do so could result in injury.

6. As the bag is nearing the end, a series of yellow “Caution” tapes may appear. This is an indication that the end of the bag is near. Consider stopping the input of grain as you will need sufficient loose plastic to close the bag and to begin the unloading process. 10-15ft of loose plastic is suggested as an absolute minimum to begin unloading and to properly tie the bag off with boards when using the Renn 1214 Unloader (*When using the Renn 1014 Unloader, less loose plastic is required - the recommended amount is 10-12’*). Note that the grain will slope down to the floor of the bag at a slope of approximately 2½ft of run for every foot of rise. This requires approximately 16ft of plastic to go from ‘Bagging Mode’ to ‘Bagger Free Mode’. It is therefore suggested to stop bagging with at least 7 folds (21ft) left on the tunnel.
7. If the bag is full, release the brake and advance the tractor and bagger forward. This will allow the remaining plastic to be pulled off the tunnel. Releasing the strap and cord tension is suggested prior to pulling the final folds off, but only after releasing the brake.
8. The end of the bag must be sealed to keep out moisture and rodents. There are various methods for sealing off the bag.
 - a) Pull the top and bottom edges out flat. Fold the two outside edges inward as necessary to match the length of your 2x4. Lay these folded edges along a single 2x4 piece of lumber and tack the bag down using a staple gun (or something similar). Roll the board and plastic 2 or 3 times and place a second 2x4 piece of lumber on top. Nail the two boards together using 2-1/2” nails (or screws), 6 to 8 inches apart at a slight alternating angle.
 - b) Seal the bag using Polyfastener - this is a two piece plastic extrusion comprised of a channel and an insert. Place a length of channel underneath the bag, along the edge of the grain. Pull the top and bottom edges of the bag out flat over the top of the channel. Using the poly tool, insert the strip into the channel, locking the film in-between the strip and channel.

4 OPERATION

4.9 Attaching/Unhooking Tractor/Bagger

Follow this procedure when attaching the bagger to the tractor:

1. Make sure that all bystanders, especially small children, are clear of the working area.
2. Make sure there is enough room and clearance to safely back up to the machine.
3. Attaching the bagger:
 - A. Slowly back the tractor until the holes on the hitch and drawbar are aligned. The hitch tongue can be moved vertically to give a wider variety of connection locations.
 - B. Lift the hitch with the hitch jack and install the drawbar pin and the retainer.
 - C. Attach the safety chain securely around the tractor drawbar cage to prevent unexpected separation.
 - D. Retract the hitch jack, remove the connecting cross pin, turn the jack 90 degrees so that it falls in line with the hitch pole, and replace the cross pin to fix the jack into transport position.
 - E. The bagger hitch is also horizontally adjustable, allowing for the proper PTO extension during operation. Use the longest setting available, ensuring a minimum of 5" overlap in the PTO during operation.
 - F. Connect the hydraulics:
 1. Use a clean rag or paper towel to clean the dirt from couplers on the hose ends and the tractor.
 2. Connect the hoses to the tractor couplers. Be sure the couplers are securely seated.
 3. Reset hoses in the hose support arm so that hoses do not rub on the PTO shield.



5 SERVICE AND MAINTENANCE

5.1 Servicing Record

See Lubrication and Maintenance sections for details of service. Copy this page to continue record.

ACTION CODE: CL.....CLEAN T.....TIGHTEN
 L.....LUBRICATE CH.....CHECK

<div style="display: flex; justify-content: space-between;"> MAINTENANCE Hours Serviced By </div>									
10 Hours of Driveline Use									
L U-Joint									
L Drive Line Bearing - Lower Auger									
Annually									
T All Fasteners									
T Re-torque Wheel Bolts									
L Wheel Hubs									
L Bag Crane Pivot Post									
CL Machine									
CH Brake Rotor and Pads									
CH Brake Fluid Level - Brake Pump									
CH Brake lines for leaks									
CH Crane cable for damage									

5 SERVICE AND MAINTENANCE

5.2 Servicing Intervals

Grease

Use an S.A.E. multi-purpose high temperature grease with extreme pressure (EP) performance. An S.A.E. multi-purpose lithium base grease is also acceptable.

Use the Maintenance Checklist provided to keep a record of all scheduled maintenance.

1. Only use a hand-held grease gun for all greasing.
2. Wipe grease fittings with a clean cloth before greasing to avoid injecting dirt and grit.
3. Replace and repair broken fittings immediately.
4. If a fitting will not take grease, remove it and clean it thoroughly. Clean the lubricant passageway also. Replace fittings as necessary.

Oil

Only use a standard brake fluid in the brake system.

PTO, front and rear yoke, grease zerk (every 8 hours)



PTO, mid grease zerk, extend PTO and rotate shield to find zerk (every 8 hours)

Lower auger bearing grease zerk (8 hours)



IMPORTANT: Retorque wheels after 100Kms of towing or 8 hours of operation. Refer section 10 for torque specification.

5 SERVICE AND MAINTENANCE

5.2 Servicing Intervals

Annually

Check pad wear and clearance, rough spots on discs; check for leaks; torque bolts to spec



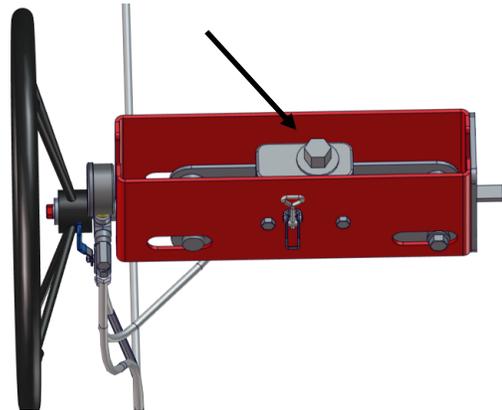
Bleed lines when necessary



Auger, end bearing set, sealed units; torque clamp bolts; check bearing seal on outer bearing and set collar tight and set screw locked



Check/Fill point for brake pump
(Use brake fluid only)



Grease wheel hubs (2 locations). Apply a generous amount of grease. *NOTE:* Over-greasing may lead to seal damage.



Grease bag crane pivot post.



6 PRE-DELIVERY INSTRUCTION (OPTIONAL)

1. Carefully set the bagger up onto 4 safety stands. Protect surfaces appropriately, especially the rear, as this working surface is in contact with the bag.



1020 Bagger Packaged

2. Install and fasten the tires on both sides of the bagger (Figure 6.1). Torque wheel bolts to spec (Section 10.3).

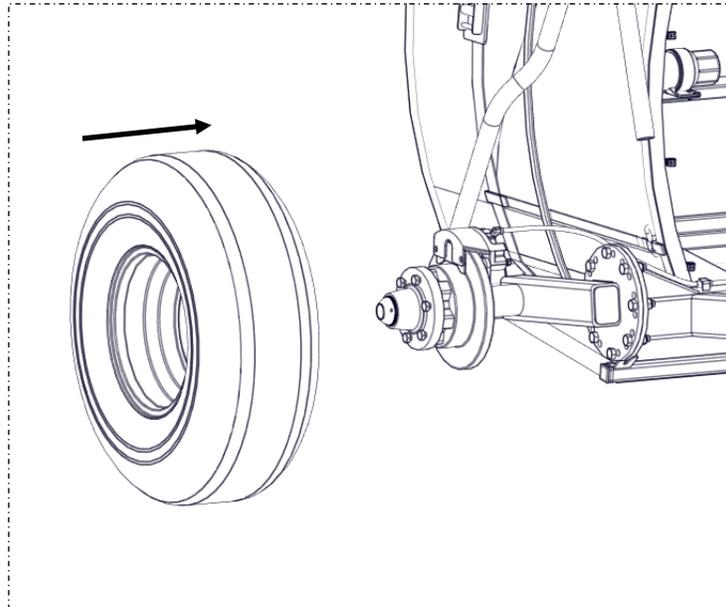


Figure 6.1

IMPORTANT: Retorque wheels before towing or any operation. Refer section 10 for torque specification.

6 PRE-DELIVERY INSTRUCTION (OPTIONAL)

3. Once the tires are installed, insert the hitch assembly into the hitch receiver and use the cross pin and hair pin to secure it in place (Figure 6.2).
4. Once the hitch assembly is in place, secure the jack to the hitch assembly (Figure 6.3).

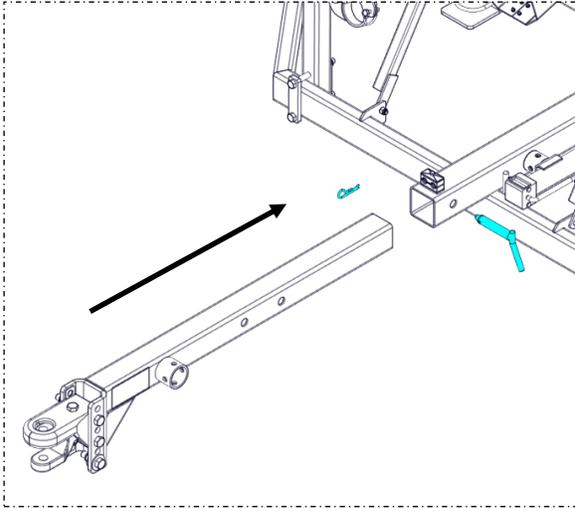


Figure 6.2

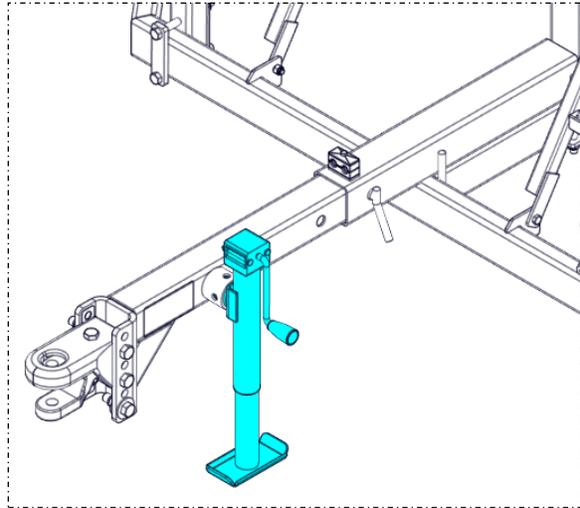


Figure 6.3

5. Install the PTO support onto the machine using the provided hardware (Figure 6.4).
6. Install the PTO shaft using the cross bolts provided and torque as instructed in the manual (Figure 6.5).

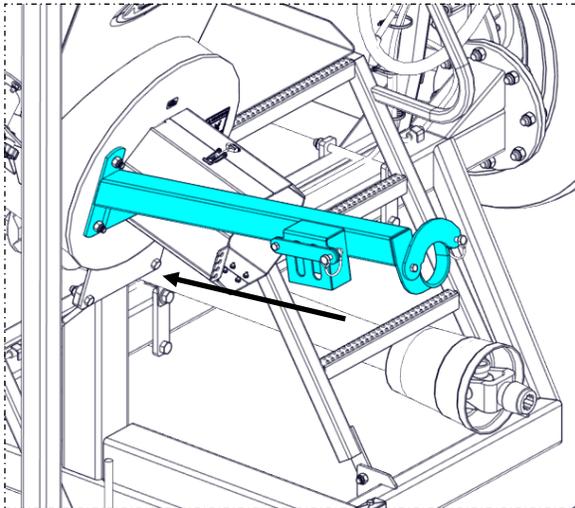


Figure 6.4

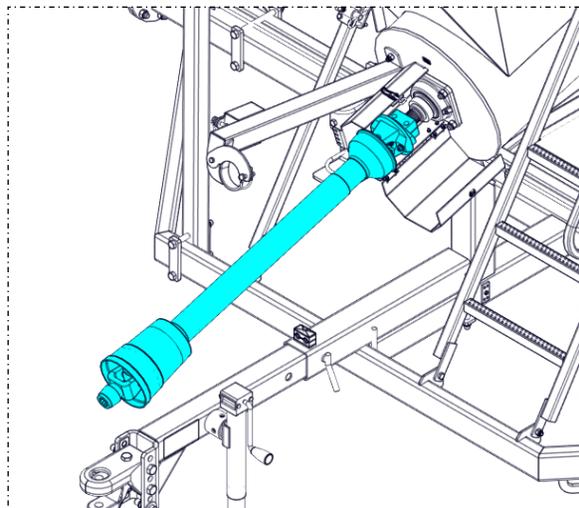


Figure 6.5

6 PRE-DELIVERY INSTRUCTION (OPTIONAL)

7. Place the crane base pipe into the receiver.



Crane Base Pipe



Receiver

8. Connect the hydraulics to the orbit motor (Figure 6.6).
9. Connect the hook to the bag lift device (Figure 6.7).

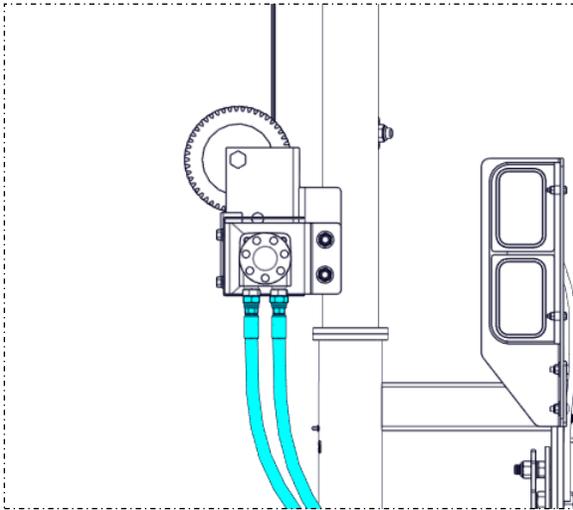


Figure 6.6

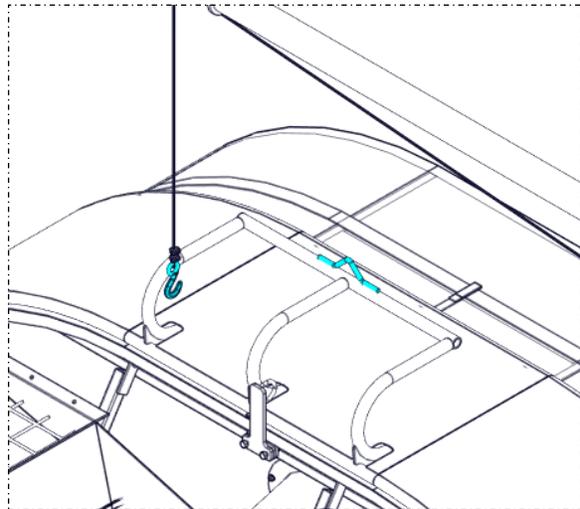


Figure 6.7

6 PRE-DELIVERY INSTRUCTION (OPTIONAL)



tires



jack



straps and bungee cords

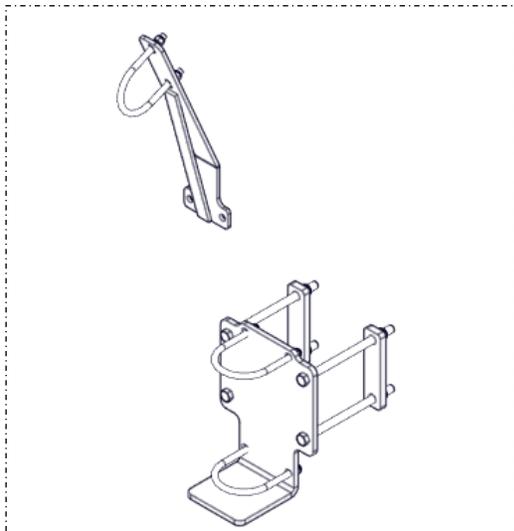


PTO

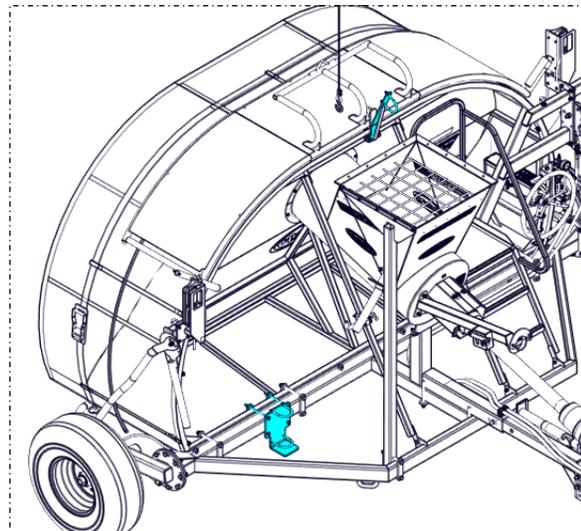


hitch assembly

Note: The shipping parts are to be removed and scrapped.



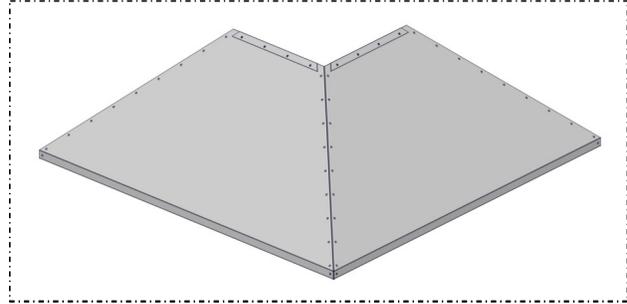
Shipping parts



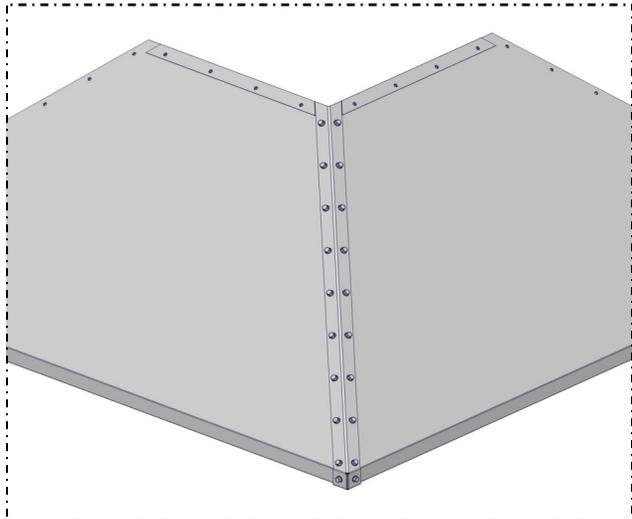
6 PRE-DELIVERY INSTRUCTION (OPTIONAL)

6.1 Setting Up the Surge Hopper

1. Note that the panels are symmetrical.
Take 2 panels and 1 corner bracket. Set the panels up on a padded surface with the corners raised off of surface.

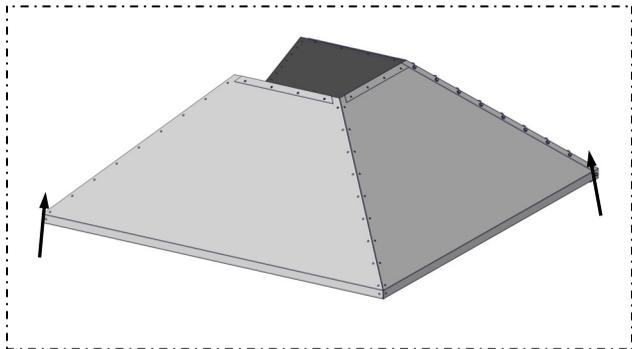


2. Set the corner bracket in place and install the top 2 bolts (to prevent large amounts of grain from piling up, install the bolts so that the nut will be on the outside of the hopper). Install the rest of the bolts. Do not tighten.

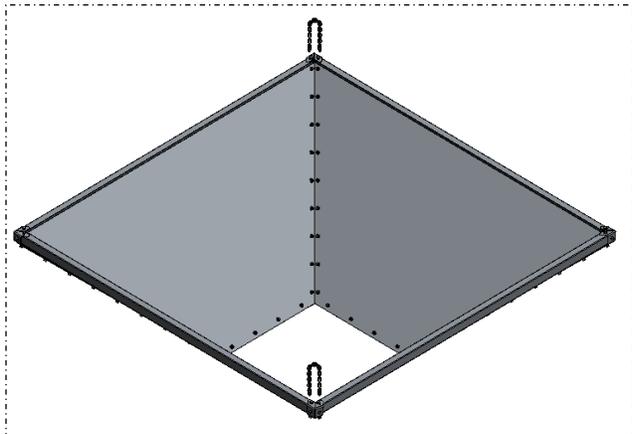


Note: The corner brackets are designed to fit tightly as a means to help keep the hopper square. A prybar or pinbar may be required to get all of the bolt holes to line up.

3. Install the remainder of the panels and corner brackets and bolts until complete.
Torque the bolts to spec (3/8" NC). Remember to bolt the chain loops into the bottom corners (2 chains set diagonally across from each other) to aid in lifting the hopper into position.



4. Turn the hopper over and install it onto the machine. Use a long, rigid support so that the corners are lifted directly upward so as not to deform the squareness of the hopper during installation.



Two lengths of chain have been provided to bolt into opposing corners of the hopper to assist with lifting the hopper onto the bagger

7 TRANSPORTATION



1. Check with local authorities regarding bagger transportation on public roads. Obey all applicable laws and regulations.
2. Always travel at a safe speed. Use caution when going around corners or meeting traffic.
3. Make sure an SMV (Slow Moving Vehicle) sign and all of the lights and reflectors that are required by local highway and transportation authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic.
4. If possible use a light kit when transporting. Be sure all lights attached to the rear of the bagger are working to safeguard against rear end collisions. Daybreak and dusk are particularly dangerous and pilot vehicles are recommended.
5. Be sure that the bagger is hitched positively to the towing vehicle and a retainer is used through the drawbar pin. Always use a safety chain between the machine and the towing unit.
6. Keep to the side and yield the right-of-way to allow faster traffic to pass. Drive on the shoulder of the road if safe to do so and permitted by law.
7. Do not exceed a 25mph (40kph) travelling speed. Reduce speed on rough roads and surfaces. Reduce speed when going around tight bends and corners in the road. Be especially careful when traveling on roads with a significant center crown, or when moving to the shoulder of the road with one wheel.
8. Always use the hazard warning flashers on the tractor when transporting unless prohibited by law.
9. Make sure to lock the clamp on the pull-out bar while transporting.

Do not transport the bagger without all of the transport pins and clamps installed and fastened.

8 STORAGE

8.1 Placing in Storage

At the end of the operating season, the machine should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent any unnecessary down time at the beginning of the next season. Follow this procedure:

1. Empty the conveyor of any residual material.
2. Thoroughly clean the machine to remove all dirt, mud, debris or residue.
3. Lubricate all grease points. Make sure all grease cavities have been filled with grease to remove any water left over from clean up.
4. Inspect all hydraulic hoses, couplers and fittings. Tighten any loose fittings. Replace any hose that is badly cut, nicked, abraded or is separating from the crimped end of a fitting.
5. Touch up all paint nicks and scratches to prevent rusting.
6. Move the machine to the storage location.
7. Select an area that is dry, level and free of debris.
8. Chock the tires, front and rear, to prevent the machine from rolling.
9. Place planks under the jack for added support if required.
10. Unhook the machine from the tractor.

8.2 Removing from Storage & Pre-Season Preparation

When removing from storage and preparing to use, follow this procedure:

1. Clear the area of bystanders, especially small children, and remove foreign objects from the machine and the working area.
2. Remove any storage covers used to protect the machine.
3. Attach the bagger to the tractor.
4. **INSPECTION:**
 - a) Check that all hydraulic lines are seated and completely coupled.
 - b) Check that all of the bearing locking collars on the shafts are tight and in good condition.
 - c) Check that all set screws on the bearing collars are tight.
 - d) Check that all bearing mounting bolts are tight.
 - e) Check that all tires are inflated per the recommended pressures.
 - f) Re-torque all wheel bolts.
5. Lubricate all grease fittings.
6. Replace any defective parts.
7. Go through the **Pre-Operational Checklist** (Section 4.4) before using.

9 TROUBLESHOOTING GUIDE

SHEAR BOLT

SYMPTOM	PROBABLE CAUSE	SOLUTION
Shear bolt breaking	Loading the hopper/auger prior to starting auger	Ensure auger is turning prior to filling.
	Incorrect shear bolt	Install factory recommended shear bolt.
	Foreign element in auger	Clear all objects out of auger path.

BAGGING

SYMPTOM	PROBABLE CAUSE	SOLUTION
Ripped bag at base of machine	Bag pinched by bag pan	Increase pan gap to factory recommended gap.
Grain leaking around tunnel	Brake pressure too high	Reduce brake pressure.
Grain passing by strap	Strap not tight enough	Tighten strap.
	Brake pressure too high	Reduce brake pressure.
Bag sliding off of tunnel	Bungee rope tension	Tighten bungee rope.
	Bungee rope placement	Ensure bungee rope is tight just in front of bag pile.
Brake pressure off, bungee cord tight and still grain wants to push around the strap	Too much weight to push	Use smaller tractor.
		Hill is too steep.
Not filling bag to maximum stretch marks	Not enough brake pressure	Increase brake pressure by 50lbs and re-check bag stretch marks.

9 TROUBLESHOOTING GUIDE

BRAKING

SYMPTOM	PROBABLE CAUSE	SOLUTION
Brake pressure not registering	Master Cylinder malfunction	Repair or replace master cylinder.
	Lacking brake fluid	Fill pump with fluid as per manual instructions. Follow above instructions to pressurize system.
Brake pressure goes down by itself	Ball valve open	Close ball valve to act as secondary lock.
	Leak in line	Check lines and brake assemblies for leaks. Tighten fittings as necessary.
Brake pressure goes up and down by itself periodically	Note that ambient temperature changes can affect brake pressure	Adjust as necessary.
Brakes not holding bagger back with lots of pressure	Wet/dirty discs	Dry/clean off discs, check pad.
	Stretching bag too much	Reduce stretching of bag to within limits prescribed by manufacturer.
	Air in system	Bleed brakes. Start with passenger side wheel, then driver side, and then top bleed at gauge

10 SPECIFICATIONS

10.1 General Specifications

Weight.....	4425 lbs
Minimum Tractor Horsepower.....	60 hp - PTO
Auger Discharge Size.....	20"
Auger Discharge Capacity.....	550 Bu/min = 15 Ton/min
Surge Hopper Size - Top Entry.....	96" x 96"
Surge Hopper Size - Bottom Discharge.....	26" x 26"
Surge Hopper Capacity.....	83 cu.ft

10.2 Tire Specifications

Tire/Rim	33 x 12.5 x 15
Tire Pressure	Check Tire for Info

10.3 Bolt Torque Specifications

Wheel Bolts 9/16"-18 NF x 1-1/4" - 635 Hub.....	128 ft-lbs
PTO shear bolts 3/8" NC x 2" Gr.5 Shear Bolt	30 ft.lbs.

..... *All Other Bolts—Refer to Bolt Torque Chart On Following Page*

10 SPECIFICATIONS

BOLT TORQUE CHART

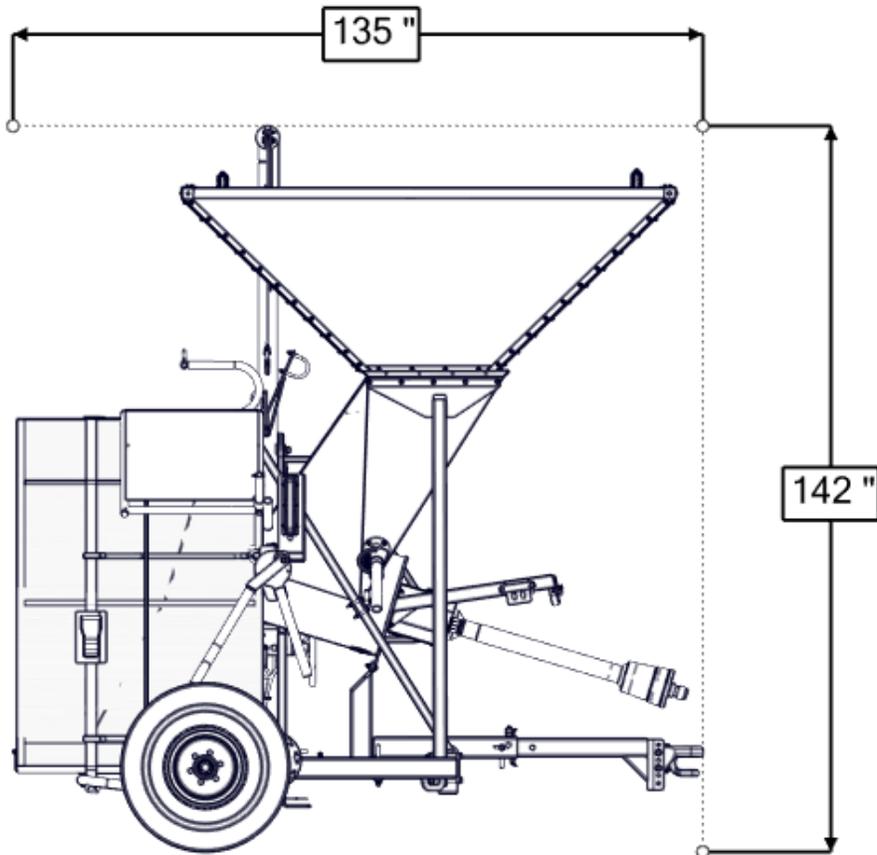
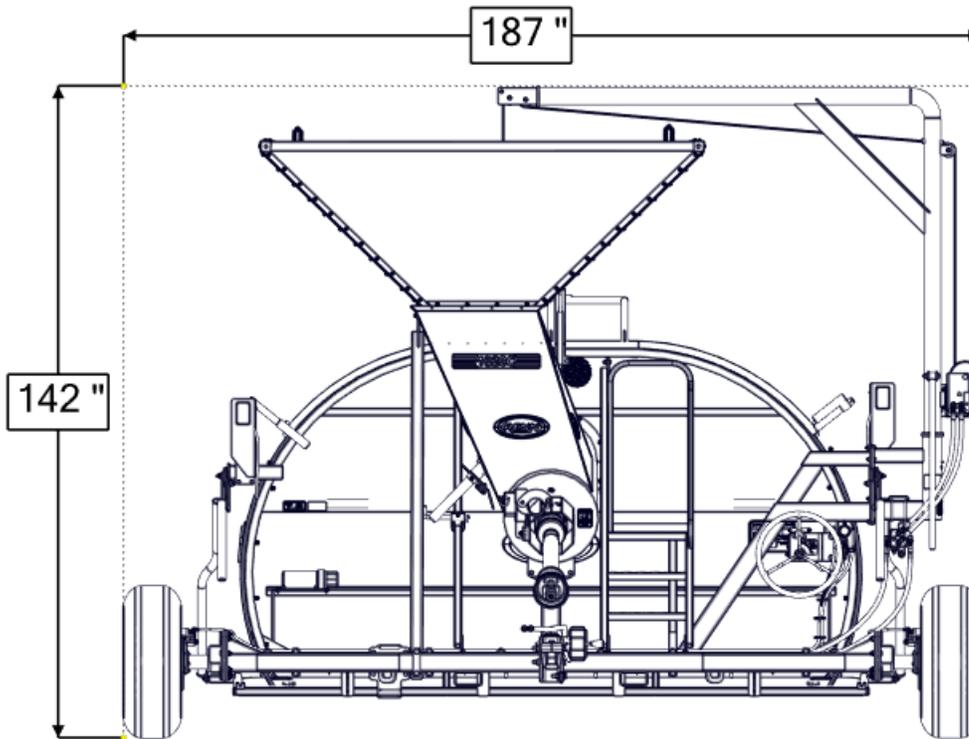
SIZE							
	SAE GRADE 2		SAE GRADE 5		SAE GRADE 8		L9
	ASSEMBLY TORQUE DRY	LUBRICATED	ASSEMBLY TORQUE DRY	LUBRICATED	ASSEMBLY TORQUE DRY	LUBRICATED	ASSEMBLY TORQUE LUBRICATED
1/4-20	66*	49*	8	75*	12	9	11
1/4-28	76*	56*	10	86*	14	10	13
5/16-18	11	8	17	13	20	18	21
5/16-24	12	9	19	14	25	20	23
3/8-16	20	15	30	23	45	30	33
3/8-24	23	17	35	25	50	35	38
7/16-14	30	24	50	35	70	55	60
7/16-20	35	25	55	40	80	60	65
1/2-13	50	35	75	55	110	80	95
1/2-20	55	40	90	65	120	90	105
9/16-12	65	50	110	80	150	110	140
9/16-18	75	55	120	90	170	130	150
5/8-11	90	70	150	110	220	170	185
5/8-18	100	80	180	130	240	180	205
3/4-10	160	120	260	200	380	280	290
3/4-16	180	140	300	220	420	320	355
7/8-9	190	140	400	300	600	460	505
7/8-14	210	155	440	320	660	500	585
1-8	220	160	580	440	900	680	775
1-14	240	170	640	480	1000	740	900
1 1/8-7	300	220	800	600	1280	960	1150
1 1/8-12	340	260	880	660	1440	1080	1325
1 1/4-7	420	320	1120	840	1820	1360	1600
1 1/4-12	460	360	1240	920	2000	1500	1750
1 3/8-6	560	420	1460	1100	2380	1780	—
1 3/8-12	640	460	1680	1260	2720	2040	—
1 1/2-6	740	560	1940	1460	3160	2360	3250
1 1/2-12	840	620	2200	1640	3560	2660	3650

**ITEMS WITH * = INCH POUNDS
ALL OTHERS = FOOT POUNDS**

**"LUBRICATED"
INCLUDES LUBRICANTS, LUBRIZING, PLATING, AND HARDENED WASHERS**

10 SPECIFICATIONS

10.4 Overall Dimensions



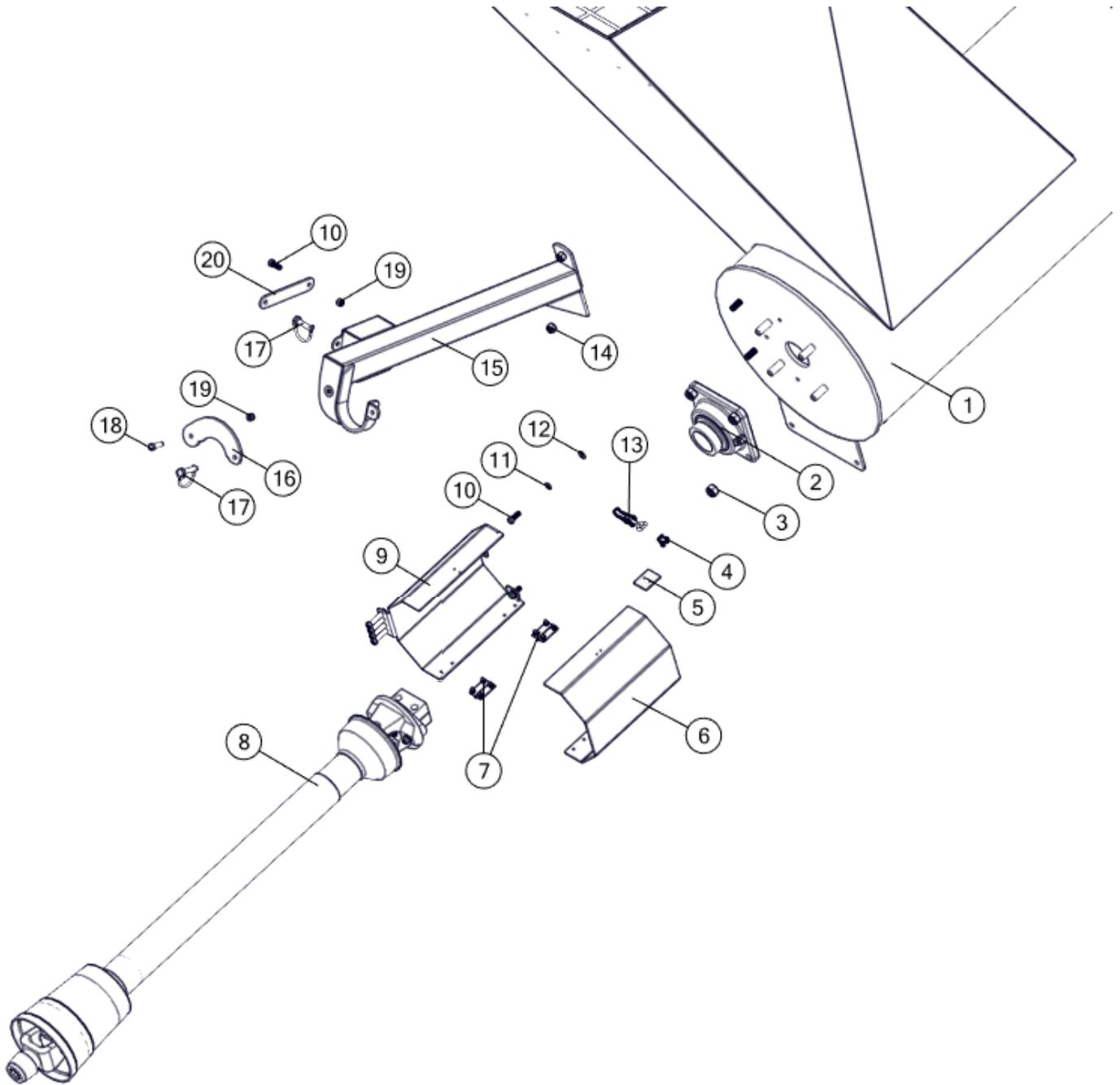
11 PARTS

11.1 Auger Offset Assembly

REF #	PART #	DESCRIPTION	QTY
1	681000-0406.01	Auger Offset Weldment	1
2	114000-0253	NTN 2-7/16" 4 Bolt Flange Bearing	1
3	167200-0690	Nyloc Nut - 5/8" NC Gr.5 PL	4
4	154000-0143	Catch - Overcenter Latch - 3.5"	1
**	159300-0515	Stove Bolt - 8-32 x 1/2"	2
**	167000-0519	Hex Nut - 8-32 PL	2
5	414000-0906.01	Lap Flat	1
6	481000-0802.00	PTO Shield - XT	1
7	153000-0800	Butt Hinge - 2" x 1-1/2"	2
**	159300-0501	Stove Bolt - #10-24 x 5/8"	8
**	167000-0520	Hex Nut - #10-24 PL	8
8	375000-0353	Series 35, CAT 4 CV PTO	1
9	481000-0801.00	PTO Shield - for 5/16 Bolts - 2.4375 brg - XT	1
**	159400-0003	Hex Bolt 3/8" NC x 2" Gr.5 PL	4
**	167200-0412	Top Lock Nut 3/8" NC	4
10	159300-0961	Hex Bolt - 3/8" NC x 1" Gr.5 PL	4
11	168600-0071	Lock Washer - 3/8" PL	3
12	168000-0540	Flat Washer - 3/8" SAE	3
13	154000-0142	Overcenter Latch - 3.5"	1
**	159300-0515	Stove Bolt - 8-32 x 1/2"	2
**	167000-0519	Hex Nut - 8-32 PL	2
14	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	2
15	681000-0263.01	Driveline Support Weldment 2018	1
16	481000-0848.00	Clamp Plate	1
17	161500-0498	Quick Pin, 3/8" x 1-5/8"	2
18	159300-0979	Hex Bolt - 3/8" NC x 1-1/4" Gr.5 PL	1
19	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	2
20	481000-0876.00	Clamp Plate - Hose Hanger	1

11 PARTS

11.1 Auger Offset Assembly



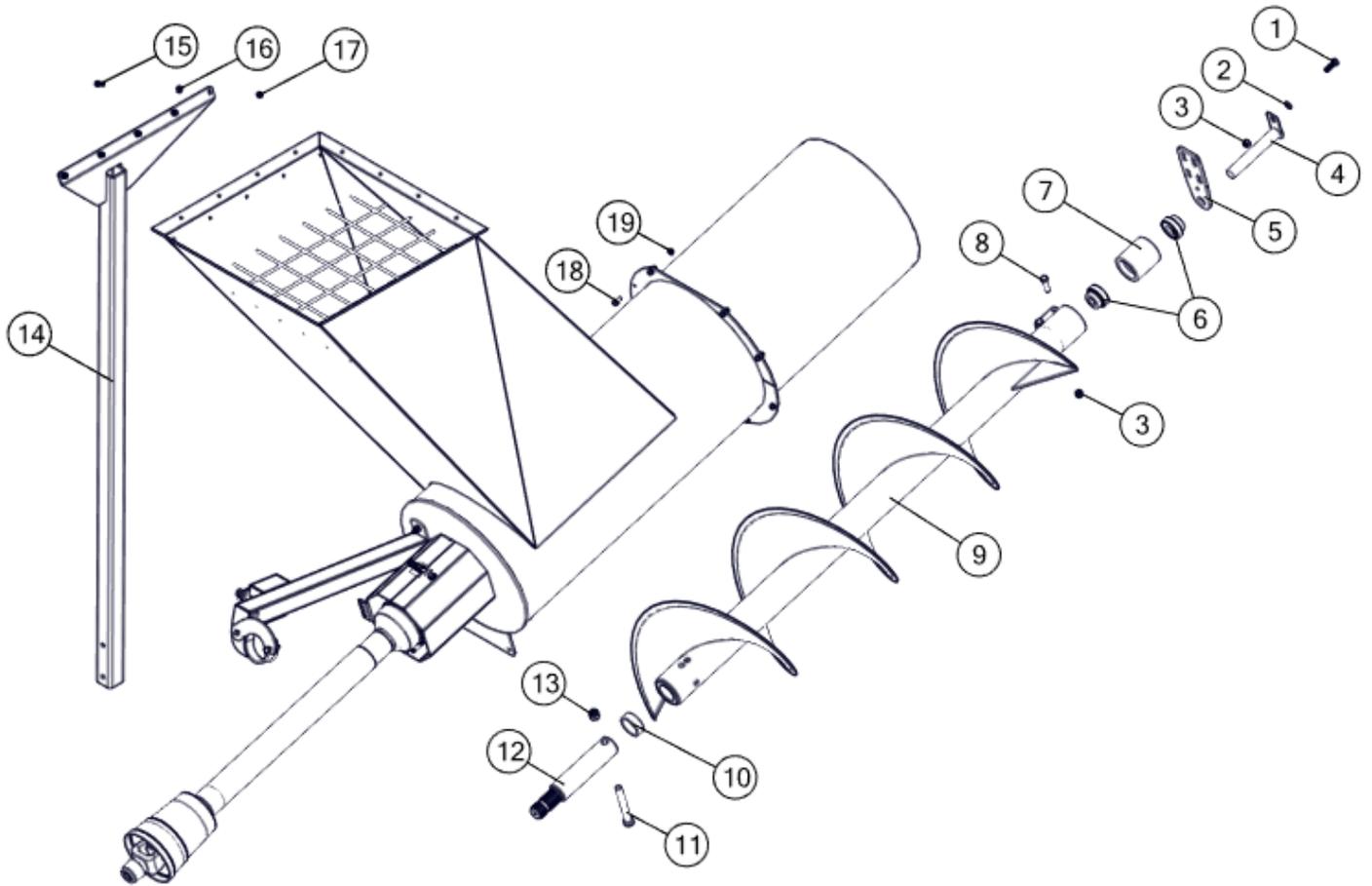
11 PARTS

11.2 Auger Weldment and Flighting

REF #	PART #	DESCRIPTION	QTY
1	159400-0401	Hex Bolt - 1/2" NC x 1-1/2" Gr.5 PL	1
2	168000-0544	Flat Washer - 1/2" SAE PLTD	1
3	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	3
4	681000-0053.00	Rear Bushing Support	1
5	481200-0457.05	Bolt Plate - Auger Support Bracket	1
6	114000-0129	BEARING 1.25id ECC 72mm CYL. OD FAFNIR	2
7	481200-0463.01	Bearing Holder - Packing Auger	1
8	159400-0427	Hex Bolt - 1/2" NC x 2" Gr.5 PL	2
9	681000-0224.01	Auger Weldment - 20" short	1
10	481200-0279.00	Bushing - Main Auger	1
11	159500-0266	Hex Bolt 3/4" NC x 6" Gr.8 PL	1
12	481200-0465.00	Splined Drive Stub Shaft - Packing Auger	1
13	167200-0692	Nyloc Nut - 3/4" NC Gr.5 PL	1
14	681000-0458.00	Support Weldment	1
15	159300-0961	Hex Bolt - 3/8" NC x 1" Gr.5 PL	5
16	168000-0540	Flat Washer - 3/8" SAE	5
17	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	5
18	159300-0945	Hex Bolt - Flanged - 3/8" NC x 3/4" Gr.5 PL	8
19	167200-0510	Hex Nut - Flanged - 3/8" NC Gr.5 PL	8

11 PARTS

11.2 Auger Weldment and Flighting



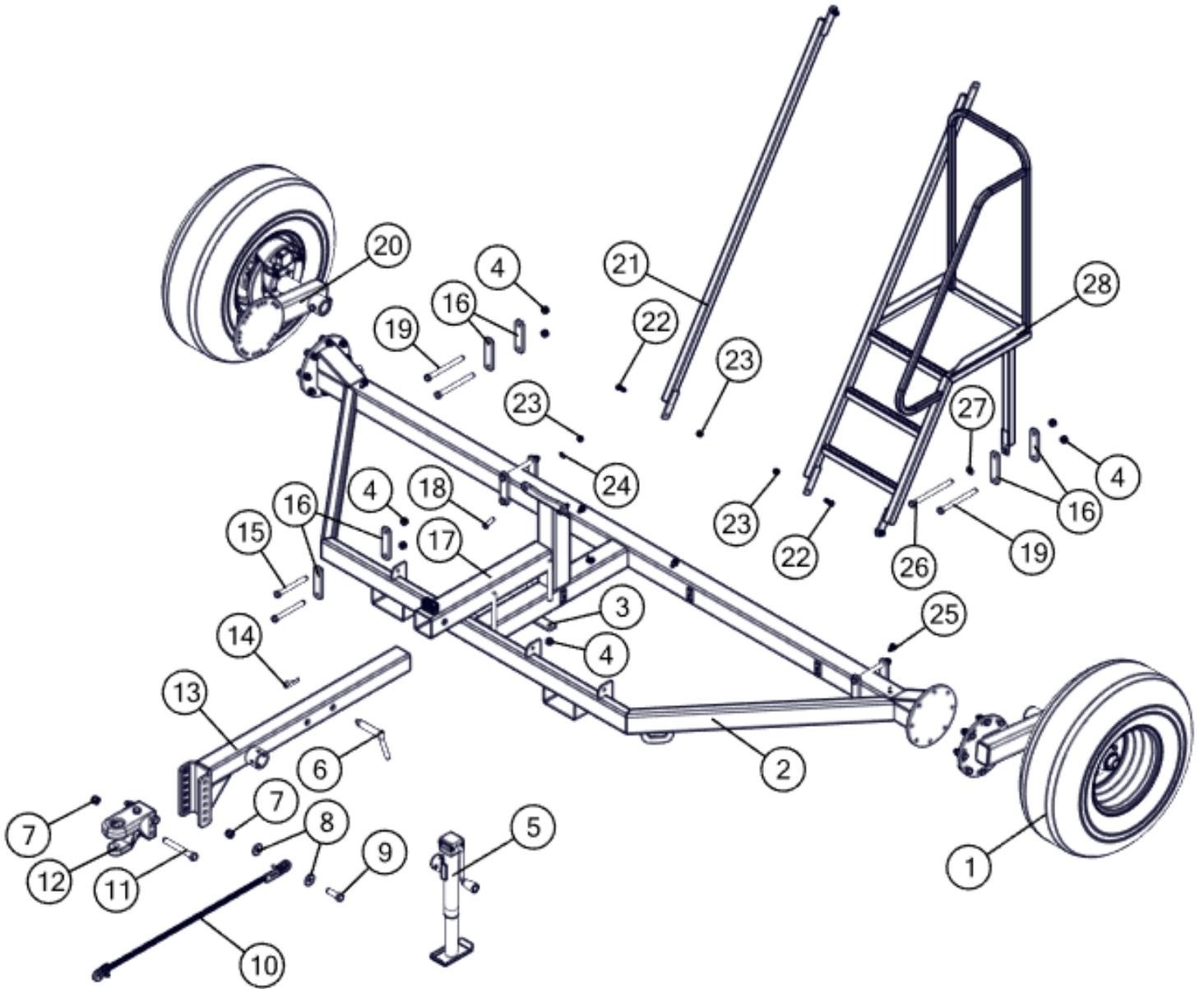
11 PARTS

11.3 Frame Assembly

REF #	PART #	DESCRIPTION	QTY
1	781000-0101.01	Wheel Assembly - Left Side - single caliper	1
2	681000-0456.00	Base Frame - 2022 1020 short	1
3	481000-0758.00	Bolt Plate - Surge Support	2
4	167200-0690	Nyloc Nut 5/8" NC Gr.5 PL	14
5	341100-0050	Jack - 7000lb x 10" - Side Wind	1
6	120000-0504	PLATED 5-1/2" CROSS PIN	1
7	167200-0692	Nyloc Nut - 3/4" NC Gr.5 PL	3
8	168000-0090	Flat Washer - 3/4" USS PL	2
9	159400-0806	Hex Bolt - 3/4" NC x 2-1/2" Gr.5 PL	1
10	140000-0490	Safety Chain	1
11	159400-0819	Hex Bolt - 3/4" NC x 6-1/2" Gr.5 PL	2
12	343000-0299	Base Hitch/Clevis Assembly Cat. 2	1
13	681000-0229.00	Hitch Weldment	1
14	161300-0776	Hairpin 3/16" x 3-3/4" #6	1
15	159400-0741	Hex Bolt 5/8" NC x 6.5" Gr.5 PL	2
16	481000-0028.00	Bolt Plate - Tunnel Attachment	10
17	681000-0457.00	Hitch Receiver Assembly	1
18	159400-0410	Hex Bolt - 1/2" NC x 1-3/4" Gr.5 PL	2
19	159400-0750	Hex Bolt 5/8" x 8" Gr.5 PL	7
20	781000-0100.01	Wheel Assembly - Right Side - single caliper	1
21	681000-0459.00	Support Tunnel Bar	1
22	159400-0395	Hex Bolt - 1/2" NC x 1-1/4" Gr.5 PL	4
23	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	6
24	168000-0544	Flat Washer - 1/2" SAE PLTD	2
25	147100-0430	3/8" ID x 1/4" Bolt Hole Rubber Cushion Cable Clamp	3
25	159400-0755	Hex Bolt 5/8" x 9" Gr.5 PL	1
26	168000-0580	Flat Washer - 5/8" SAE PL	1
27	681000-0460.00	10' Bagger Stairs	1

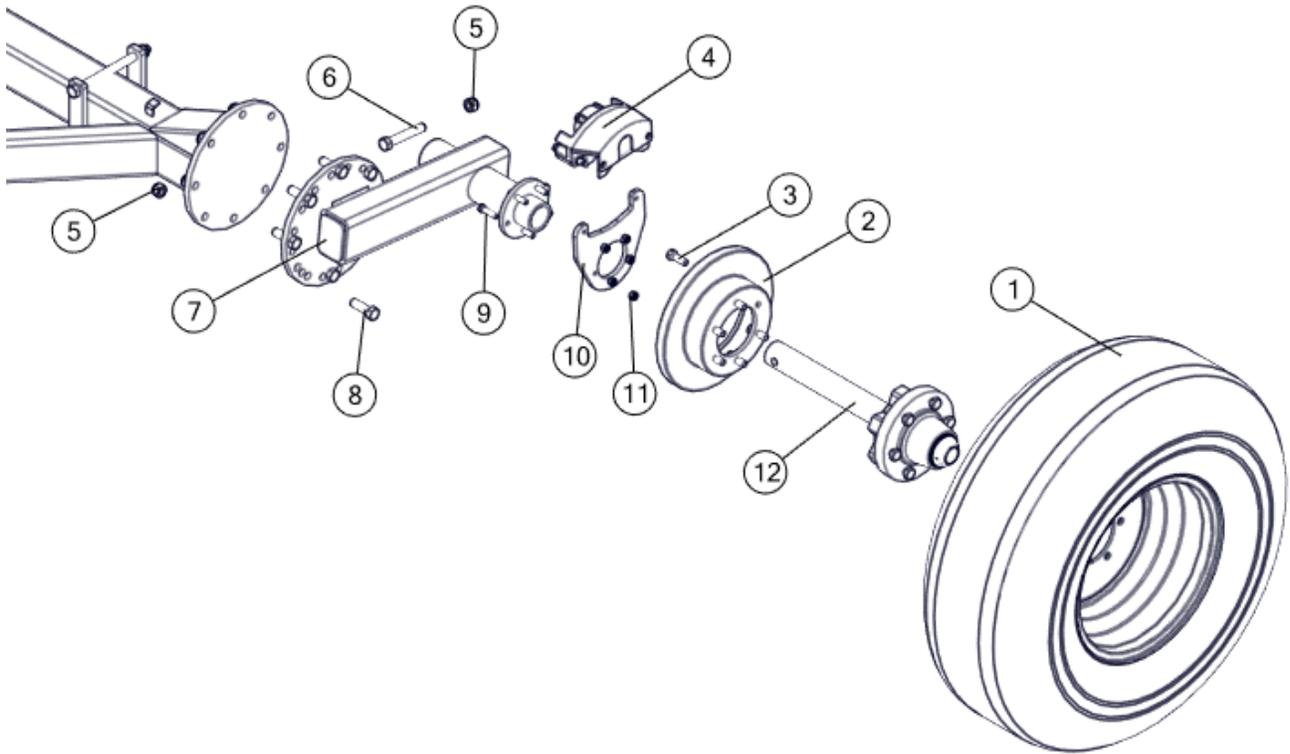
11 PARTS

11.3 Frame Assembly



11 PARTS

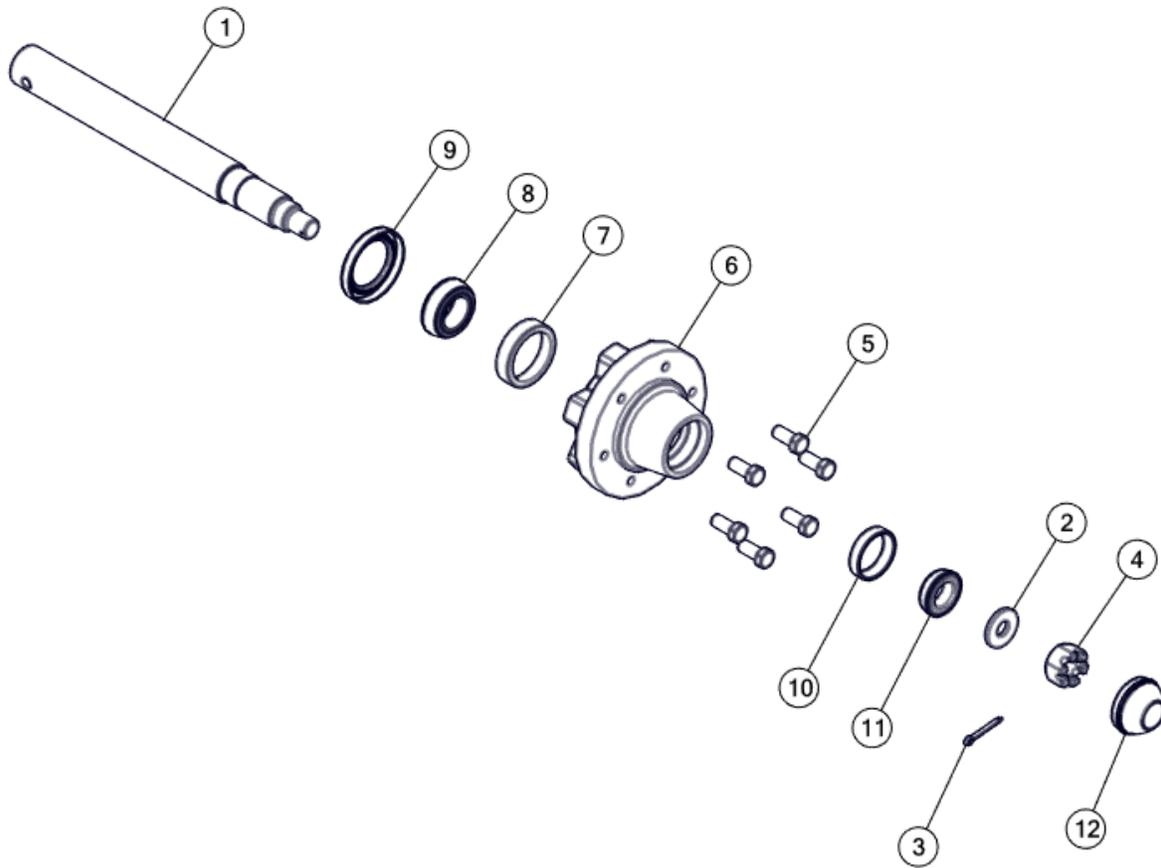
11.3.1 Wheel Assembly (781000-0101.01 & 781000-0100.01)



REF #	PART #	DESCRIPTION	QTY
1	100100-0435	Tire & Rim - 33 x 12.5 x 15	2
2	481000-0554.00	Rotor - Brake Assembly	2
3	340300-0010	Wheel Bolt 1/2"-20 UNF x 1-1/4"	12
4	147800-0118	Brake Assembly inc. Bolts and Caliper - Brake Fluid	2
**	147800-0110	Brake Pad Kit	4
5	167200-0690	Nyloc Nut - 5/8" NC Gr.5 PL	20
6	159400-0720	Hex Bolt 5/8" NC x 4" Gr.5 PL	2
7	681000-0136.00	Brake and Axle Assembly - Right Side	1
**	681000-0137.00	Brake and Axle Assembly - Left Side (Not Shown In Picture)	1
8	159400-0628	Hex Bolt - 5/8" NC x 2" Gr.5	16
9	159500-0220	Bolt-Hex 3/8 NC x 1-1/2 Gr8 PL	10
10	481000-0559.00	Support Plate - Single Brake Caliper - 10' only 2012	1
11	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	10
12	341000-0635	635 Hub and Spindle Complete	2

11 PARTS

11.3.2 635 Hub & Spindle Assembly (Part # 341000-0635)



REF #	PART #	DESCRIPTION	QTY
1	481000-0229	Spindle Assembly Complete (includes #2, 3, & 4)	1
2	340700-0517	Spindle Washer 7/8" i/d, 2" o/d, 0.187" thick	1
3	170000-0200	Cotter Pin	1
4	340700-0033	Spindle Nut 1"-14 UNF	1
5	340300-0012	Wheel Bolts 9/16"-18 NF x 1-1/4"	6
6	340000-0635	Hub Complete with Cups & Bolts (includes #5, 7, & 10)	1
7	115000-0031	Inner Cup (25520)	1
8	114500-0030	Inner Cone (25580)	1
9	340100-0030	Grease Seal	1
10	115000-0027	Outer Cup (LM-48510)	1
11	114500-0022	Outer Cone (LM-48548)	1
12	340200-0015	Dust Cap	1

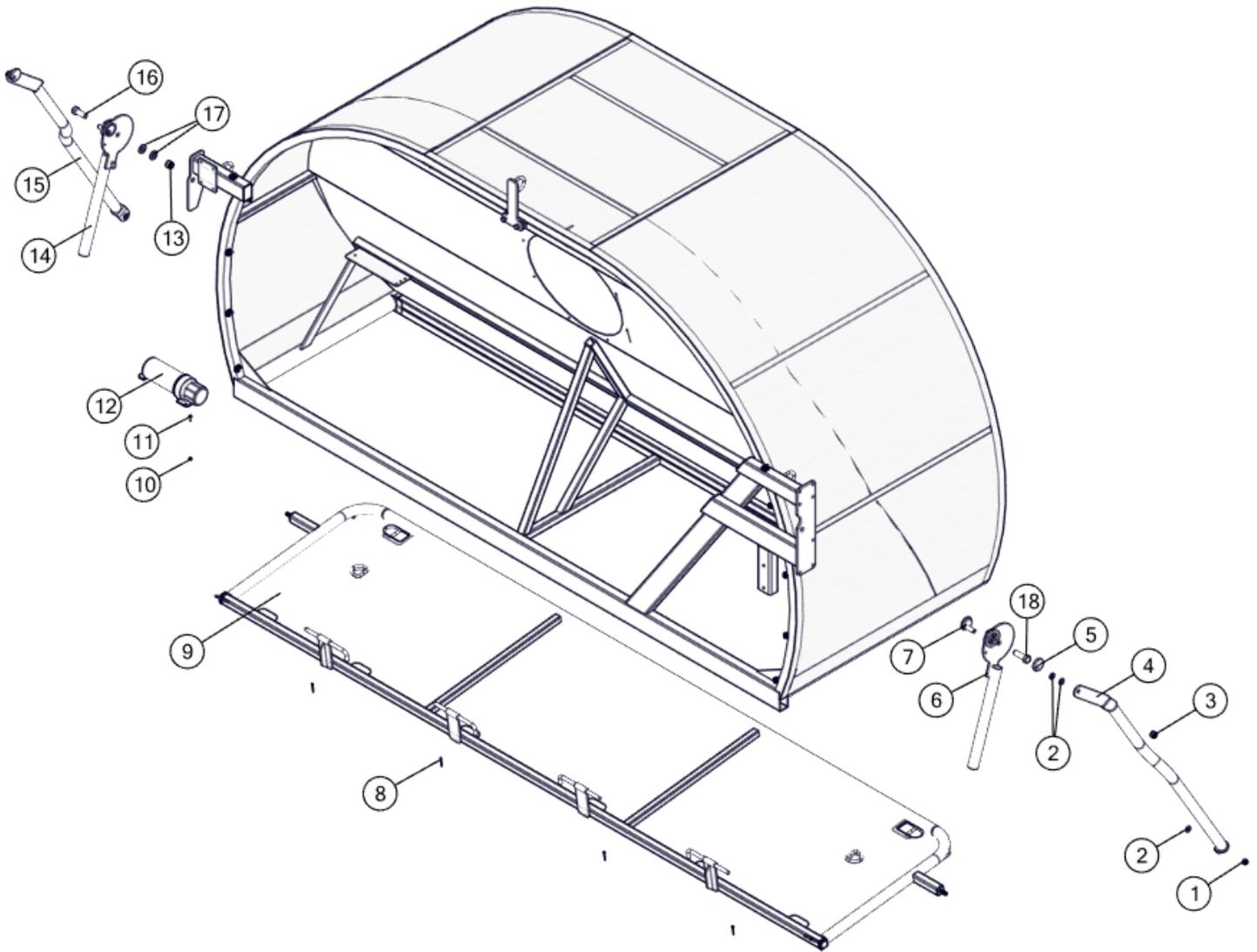
11 PARTS

11.4 Bag Pan Assembly

REF #	PART #	DESCRIPTION	QTY
1	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	2
2	168000-0544	Flat Washer - 1/2" SAE PLTD	6
3	167200-0690	Nyloc Nut - 5/8" NC Gr.5 PL	2
4	681000-0441.00	Bag Pan Arm D.S	1
5	481000-1418.00	Inner Octagon Plate - Bag Pan Adjuster	2
6	681000-0436.01	D.S. Rotating Lift Arm - Bag Pan Adjuster	1
7	681000-0437.01	Eccentric Cap Weldm't - Bag Pan Adjuster	2
8	170000-0095	1/8" x 1-1/4" COTTER PIN	4
9	681000-0321.02	Bag Pan Frame - Modular	1
**	120000-0500	PLATED HINGE ROD	4
10	167200-0642	Nyloc Nut - 1/4" NC Gr.5 PL	2
11	159300-0543	Hex Bolt - 1/4" NC x 3/4" Gr.5 PL	2
12	147000-0010	Manual Canister	1
13	167200-0692	Nyloc Nut - 3/4" NC Gr.5 PL	2
14	681000-0435.01	P.S. Rotating Lift Arm - Bag Pan Adjuster	1
15	681000-0440.00	Bag Pan Arm P.S	1
16	159400-0800	Hex Bolt - 3/4" NC x 2" Gr.5 PL	1
17	168000-0587	Flat Washer - 3/4" SAE PL	4
18	159400-0806	Hex Bolt - 3/4" NC x 2-1/2" Gr.5 PL	1

11 PARTS

11.4 Bag Pan Assembly



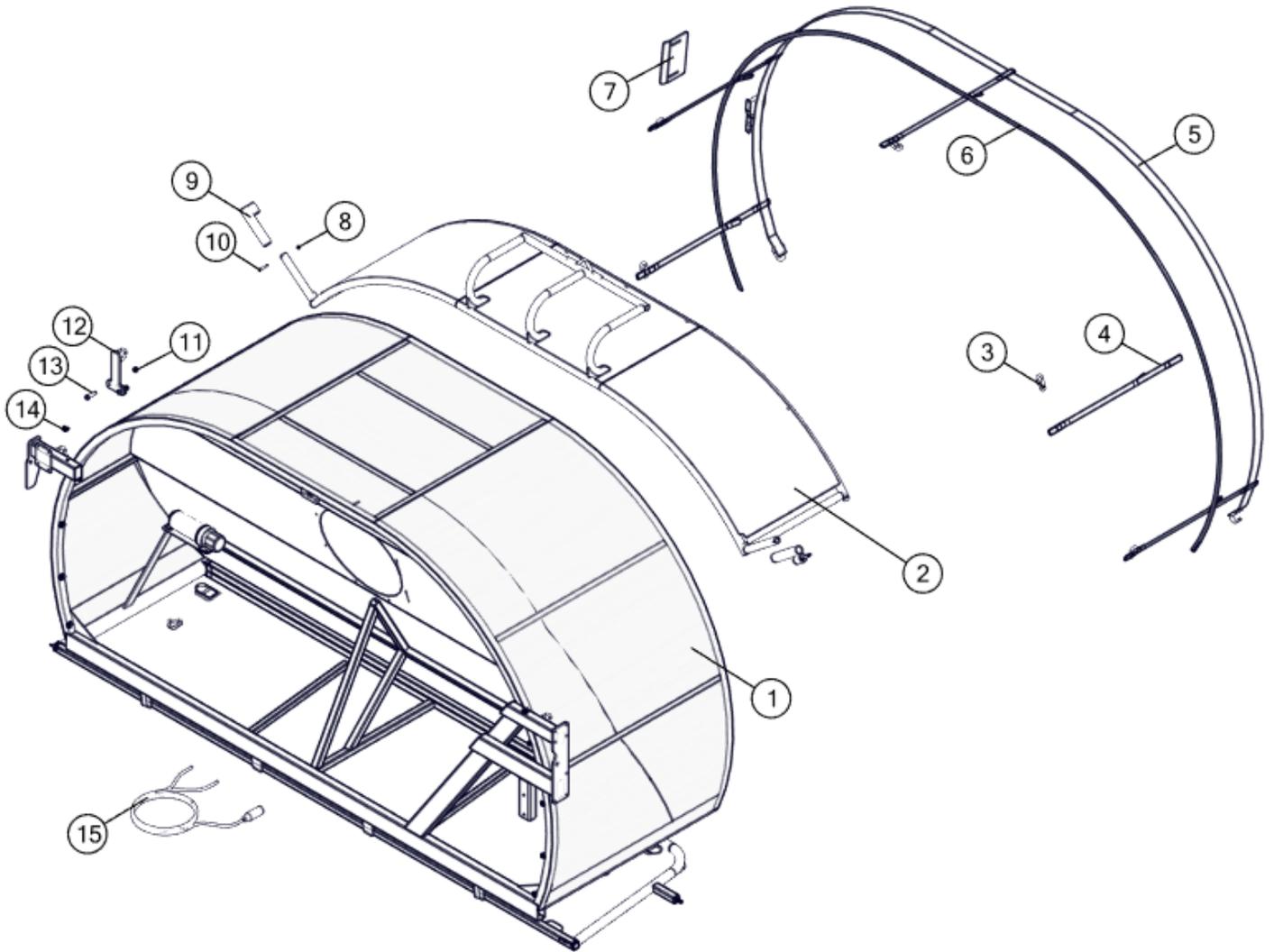
11 PARTS

11.5 Tunnel Assembly

REF #	PART #	DESCRIPTION	QTY
1	681000-0382.00	Bagger Tunnel - 1016T - 2019	1
2	681000-0248.02	Bag Lift - 2017	1
3	140000-0150	Snap Latch	5
4	481000-1299.01	Harness Strap (Bungee Relief)	5
5	140000-0205	Ratchet Strap	1
6	481000-1352.00	Bungee Cord 3/4" x 25'	1
7	481200-0370.02	Ratchet Slide Plate	1
8	167200-0642	Nyloc Nut - 1/4" NC Gr.5 PL	12
9	681000-0324.00	Cradle Holder - Bag Lift	2
10	159300-0560	Hex Bolt 1/4" NC x 2" Gr.5 PL	2
11	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	2
12	681000-0325.00	Strap Anchor Weldment - Top Strap - 2019	1
13	159400-0427	Hex Bolt - 1/2" NC x 2" Gr.5 PL	2
14	147100-0430	3/8" ID x 1/4" Bolt Hole Rubber Cushion Cable Clamp	10
15	147000-0612	1016T WIRE HARNESS 15 X 9 X 9	1

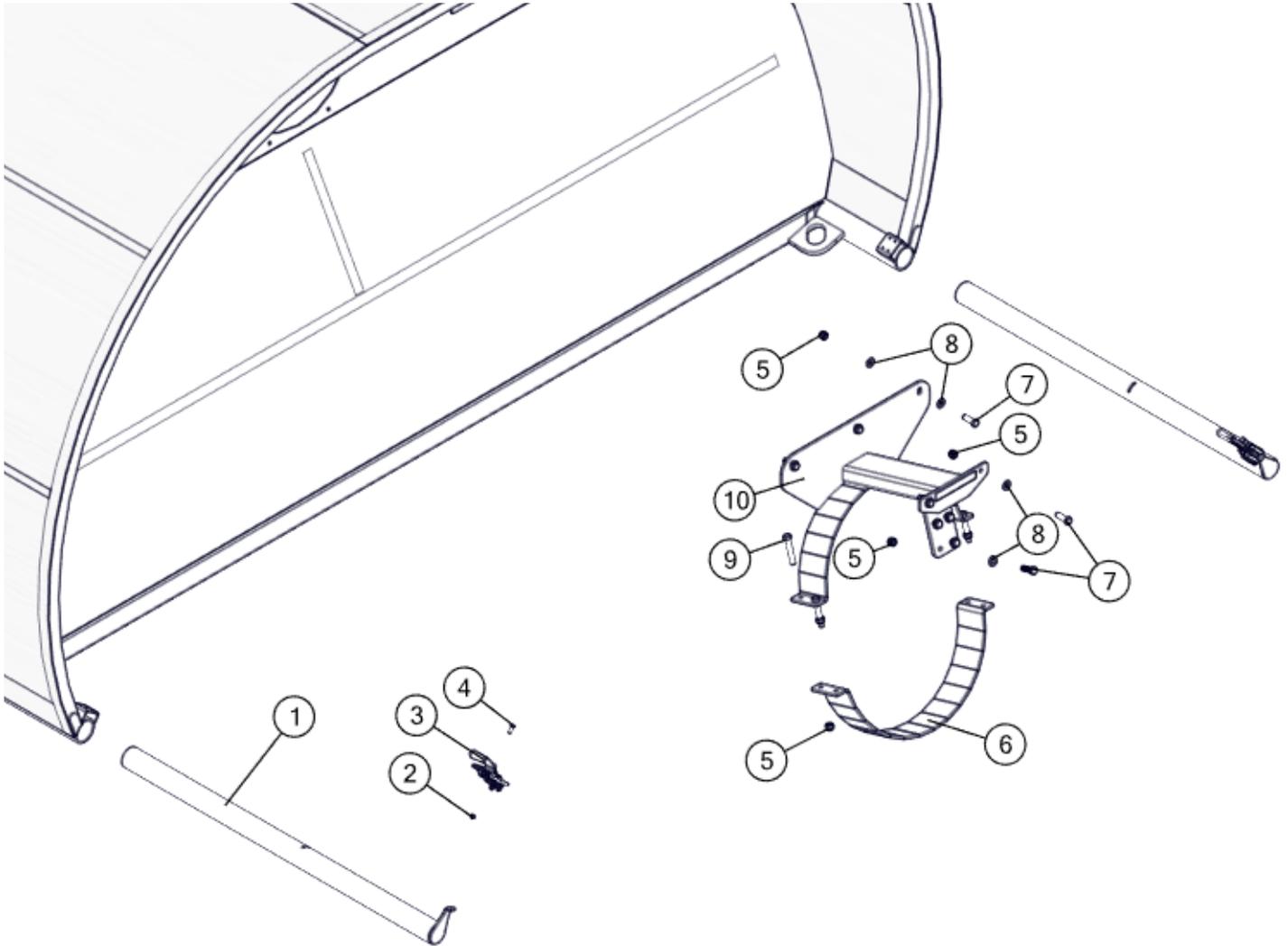
11 PARTS

11.5 Tunnel Assembly



11 PARTS

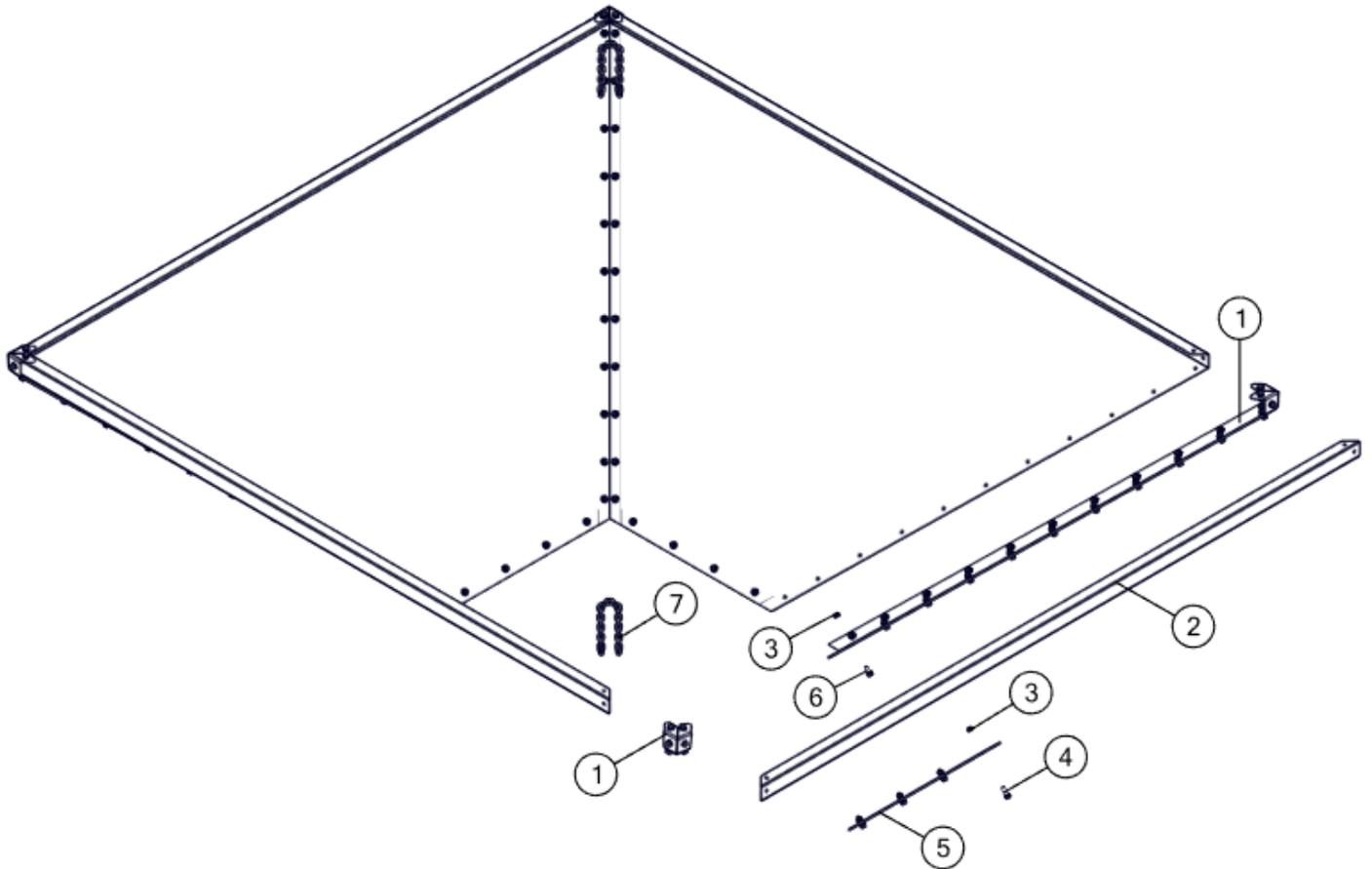
11.5.1 Tunnel - Rear End



REF #	PART #	DESCRIPTION	QTY
1	681000-0253.00	Rear Pull-out Pipe - Tunnel - 2018	2
2	167200-0642	Nyloc Nut - 1/4" NC Gr.5 PL	8
3	154000-0177	Toggle Clamp	2
4	159300-0543	Hex Bolt - 1/4" NC x 3/4" Gr.5 PL	8
5	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	13
6	481200-0072.01	1/2 Clamp - 20" - Rear Auger Support	1
7	159400-0401	Hex Bolt - 1/2" NC x 1-1/2" Gr.5 PL	9
8	168000-0544	Flat Washer - 1/2" SAE PLTD	12
9	159400-0460	Hex Bolt - 1/2" NC x 3" Gr.5 PL	4
10	681000-0184.02	Auger Support Weldment - 20"	1

11 PARTS

11.6 Surge Hopper



REF #	PART #	DESCRIPTION	QTY
1	481000-0704.01	Panel Connector - 8' x 8' surge	4
2	481000-0703.00	Surge Hopper Panel - 8' x 8'	4
3	167200-0510	Hex Nut - Flanged - 3/8" NC Gr.5 PL	121
4	159300-0963	Hex Bolt - Flanged - 3/8" NC x 1" Gr.5 PL	20
5	481200-0630.00	Panel Spacer	4
6	159300-0945	Hex Bolt - Flanged - 3/8" NC x 3/4" Gr.5 PL	100
7	481200-0728.00	Surge Hopper Lift Chain	2

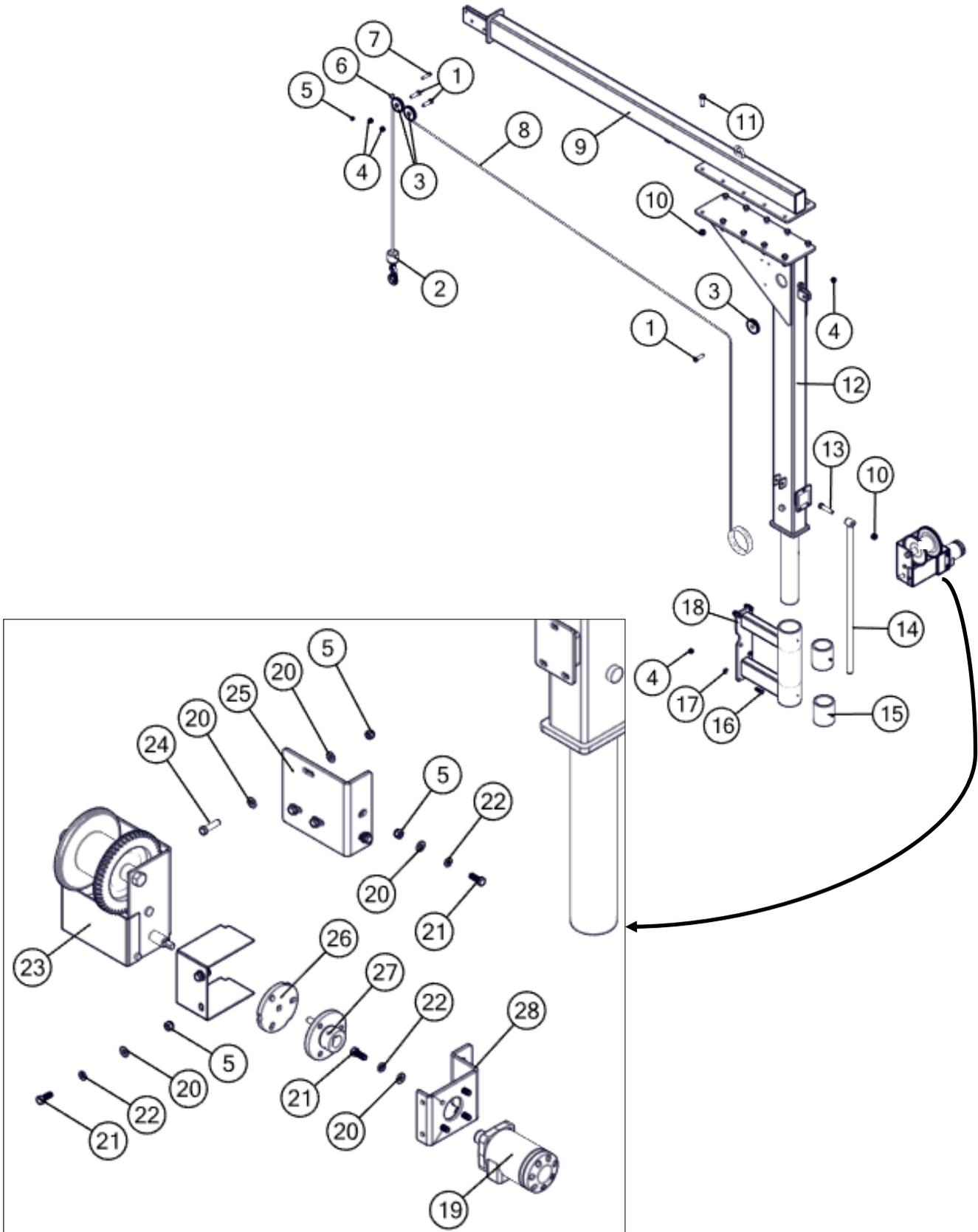
11 PARTS

11.7 Crane Assembly

REF #	PART #	DESCRIPTION	QTY
1	159400-0427	Hex Bolt - 1/2" NC x 2" Gr.5 PL	3
2	481000-1570.00	Winch cable hook stopper	1
3	142600-0004	Pulley 1/4" Cable x 3" OD	3
4	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	9
5	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	7
6	481000-0186.00	Pully Spacer	1
7	159400-0003	Hex Bolt - 3/8" NC x 2" Gr.5 PL	1
8	142600-0030	30ft Cable and Hook Assembly	1
9	681000-0474.00	Crane Beam	1
10	167200-0690	Nyloc Nut - 5/8" NC Gr.5 PL	10
11	159400-0628	Hex Bolt - 5/8" NC x 2" Gr.5	10
12	681000-0473.00	Crane Mast	1
13	159400-0646	Hex Bolt 5/8" NC x 3" Gr.5 PL	1
14	681000-0234.00	Bag Crane Handle - Custom (M1996)	1
15	147100-0233	Devlon "S" Grade blue Bushing	2
**	133200-0040	Grease Nipple - 1/8" NPT	2
16	159400-0401	Hex Bolt - 1/2" NC x 1-1/2" Gr.5 PL	6
17	168000-0544	Flat Washer - 1/2" SAE PLTD	6
18	681000-0477.00	Bag Crane Anchor - HD 2023	1
19	111100-0101	Hydraulic Motor - 4.5 cu.in.	1
20	168000-0540	Flat Washer - 3/8" SAE	14
21	159300-0961	Hex Bolt - 3/8" NC x 1" Gr.5 PL	8
22	168600-0071	Lock Washer - 3/8" PL	8
23	139000-0370	2500 LB HAND WINCH	1
24	159300-0988	Hex Bolt - 3/8" NC x 1-1/2 Gr.5 PL	3
25	481000-1268.00	Large Base Plate - Hyd Winch	1
26	481000-1355.00	Bolt Plate - Hyd 2500 Winch	1
27	650000-0063.00	Hyd Motor Connector - Winch	1
28	481000-0583.02	Motor Plate - Hyd Winch	1

11 PARTS

11.7 Crane Assembly



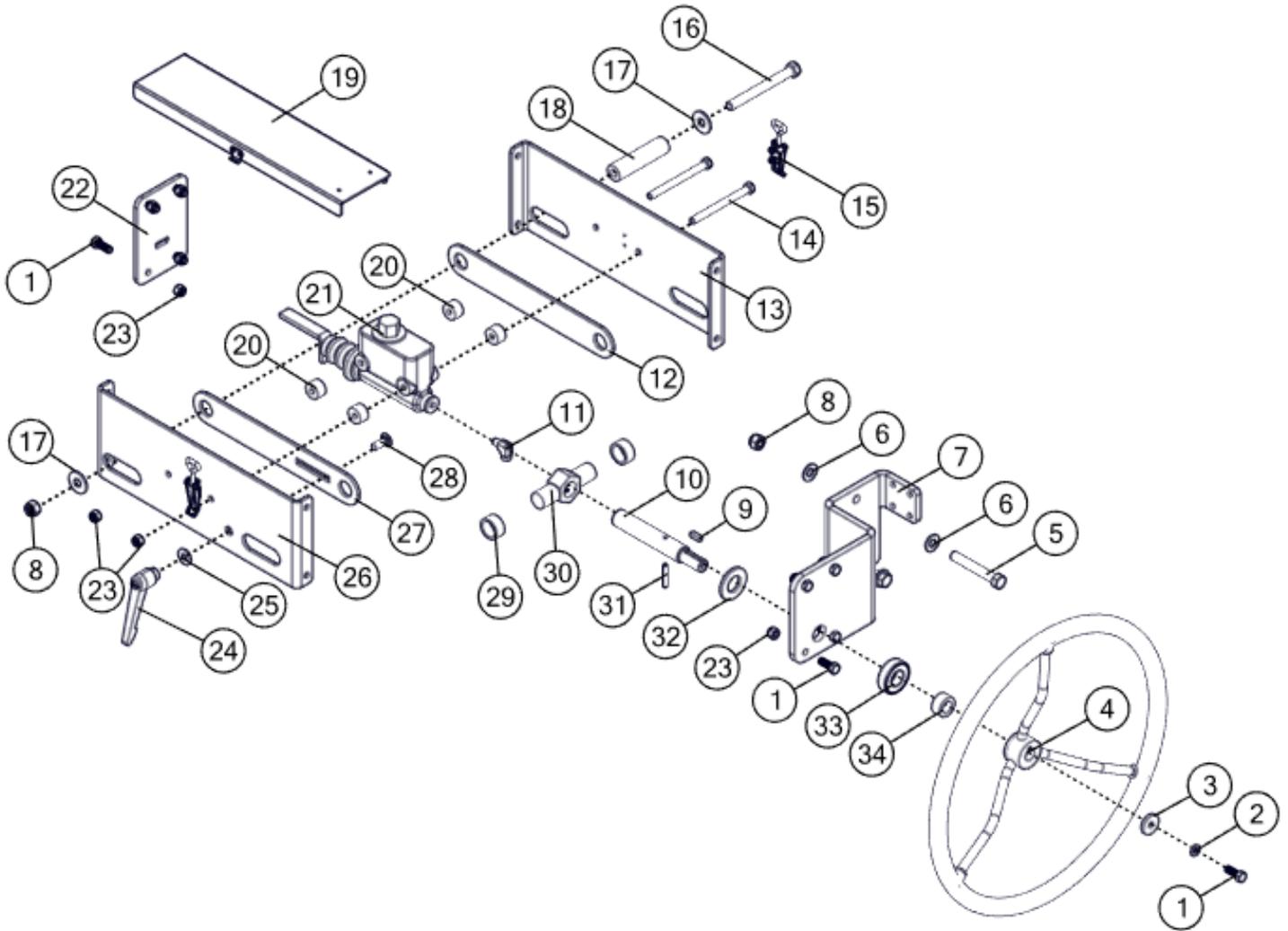
11 PARTS

11.8 Brake System Assembly

REF #	PART #	DESCRIPTION	QTY
1	159300-0961	Hex Bolt - 3/8" NC x 1" Gr.5 PL	9
2	168600-0071	Lock Washer - 3/8" PL	1
3	481000-0729.00	Stop Washer - Wheel - Brake Unit	1
4	147800-0013	Wheel Assy - Brake Unit	1
5	159400-0485	Hex Bolt - 1/2" NC x 3-1/2" Gr.5 PL	2
6	168000-0544	Flat Washer - 1/2" SAE PLTD	4
7	481000-1303.01	Fixed Brake Housing Plate	1
8	167200-0688	Nyloc Nut - 1/2" NC Gr.5 PL	3
9	481000-1155.00	key stock - brake unit	1
10	481000-1264.01	Rod - brake unit ACME thread- 1" dia	1
11	085500-0202	Elbow 90deg 1/8" MPT x 1/8" FPT	1
12	481000-0694.01	Pull Plate	1
13	481000-0674.04	Side Plate - Brake box	1
14	159400-0015	Hex Bolt - 3/8" NC x 4-1/2" Gr.5 PL	2
15	154000-0142	Overcenter Latch - 3.5"	2
**	159300-0515	Stove Bolt - 8-32 x 1/2"	4
**	167000-0519	Hex Nut - 8-32 PL	4
16	159400-0510	Hex Bolt - 1/2" NC x 5" Gr5 PL	1
17	168000-0065	Flat Washer - 1/2" USS PLTD	2
18	481000-0692.01	cross member - push rod	1
19	681000-0390.00	Cover Weldment - Brake unit	1
20	481000-0696.00	spacer - brake body	4
21	112000-0006	Master Cylinder	1
22	481000-1527.00	End Plate - Brake Unit	1
23	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	10
24	154000-0155	Teardrop Clamping handle Latch	1
25	168000-0049	Flat Washer 3/8" USS PL	1
26	481000-1437.00	Side Plate - Brake box	1
27	481000-1436.00	Slotted - Pull Plate	1
28	163000-0507	Carriage Bolt - 3/8" NC x 1" Gr.5 PL	1
29	481000-1265.00	bushing - brake	2

11 PARTS

11.8 Brake System Assembly



30	681000-0381.00	Push cross brake system	1
**	133200-0031	Straight Grease Fitting - 1/4" 28UNF	1
30	172200-0780	Spring Pin - 1/4" x 1-1/2"	1
31	168000-0598	Flat Washer - 1" SAE PL	1
32	114000-0099	1" ID - Thrust Tapered Roller Bearing	1
33	481000-1156.00	Steering Wheel Spacer	1

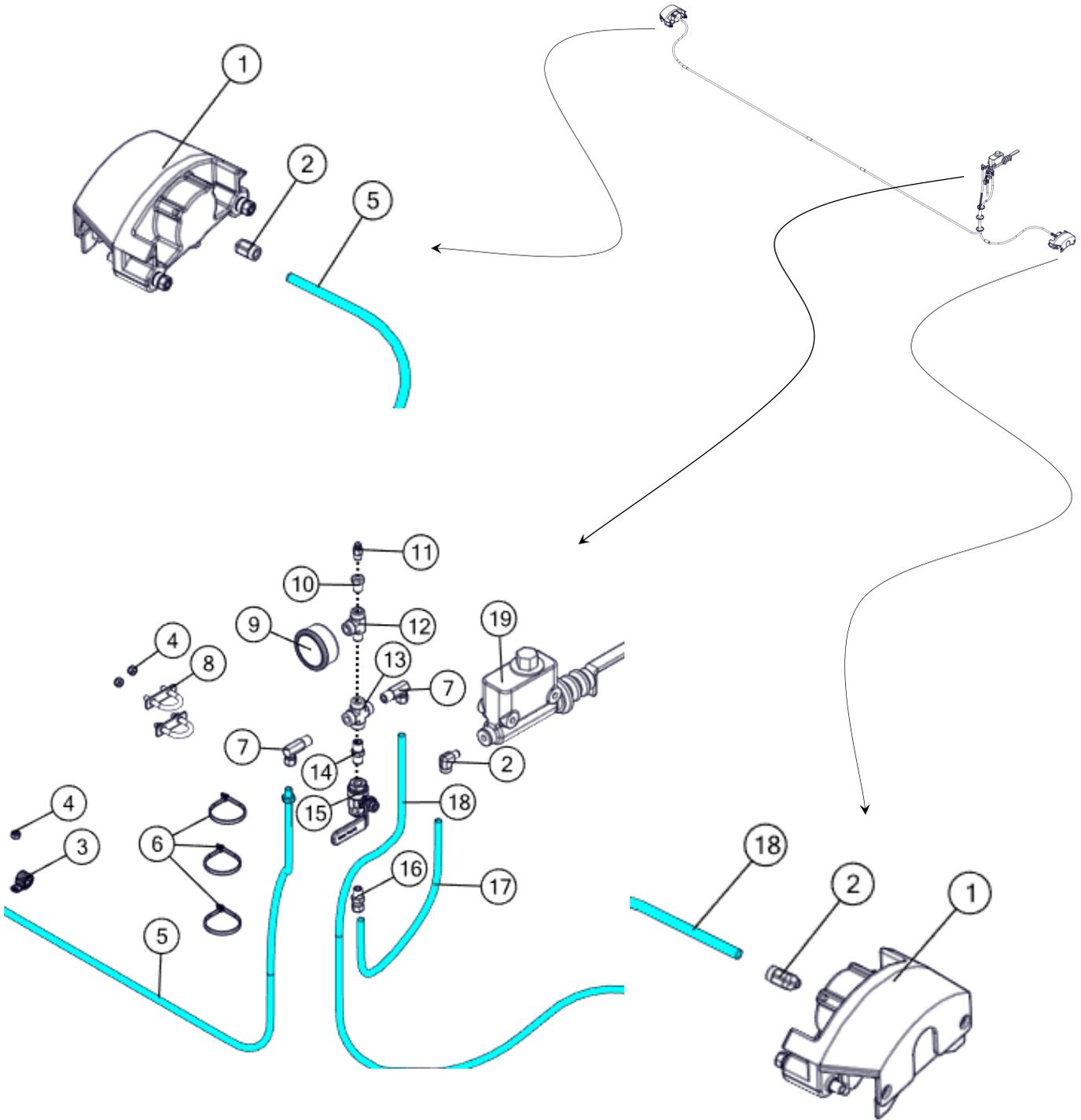
11 PARTS

11.9 Brake System Hydraulics

REF #	PART #	DESCRIPTION	QTY
1	147800-0118	Brake Assembly inc. Bolts and Caliper - Brake Fluid	2
2	085500-0202	Elbow 90 1/8"MPT x 1/8"FPT	3
3	147100-0430	3/8" ID x 1/4" Bolt Hole Rubber Cushion Cable Clamp	5
4	167200-0642	Nyloc Nut 1/4" NC Gr.5 PL	9
5	390000-0010	3/16" x 180" SS Braided Hose-1/8 MP to1/8 MPT	1
6	100200-0636	Plastic Tie Wrap 8" Natural	3
7	082600-0402	Elbow 90 1/4"MPT x 1/8"FPSw	2
8	159000-0420	1/4" x 1-1/4" U-Bolt	2
9	110300-0031	SS Pressure Gauge - Center Back 0-1500 lbs.	1
10	085400-0402	Reducer 1/4" MPT x 1/8" FPT	1
11	147800-0108	Brass Bleed Port - 1/8" NPT	1
12	085600-0404	Tee 1/4" MPT x 1/4" FPT x 1/4" FPT	1
13	081100-0200	1/4" MPT Cross	1
14	085200-0404	Hex Nipple 1/4"MPT x 1/4"MPT	1
15	110200-0496	1/4" SS Ball Valve	1
16	081400-0402	Adaptor 1/4"MPT x 1/8"FPsw	1
17	390000-0012	3/16" x 16" SS Braided Hose-1/8 MPTto1/8 MPT	1
18	390000-0011	3/16" x 62" SS Braided Hose-1/8 MPTto1/8 MPT	1
19	112000-0006	Master Brake Cylinder	1

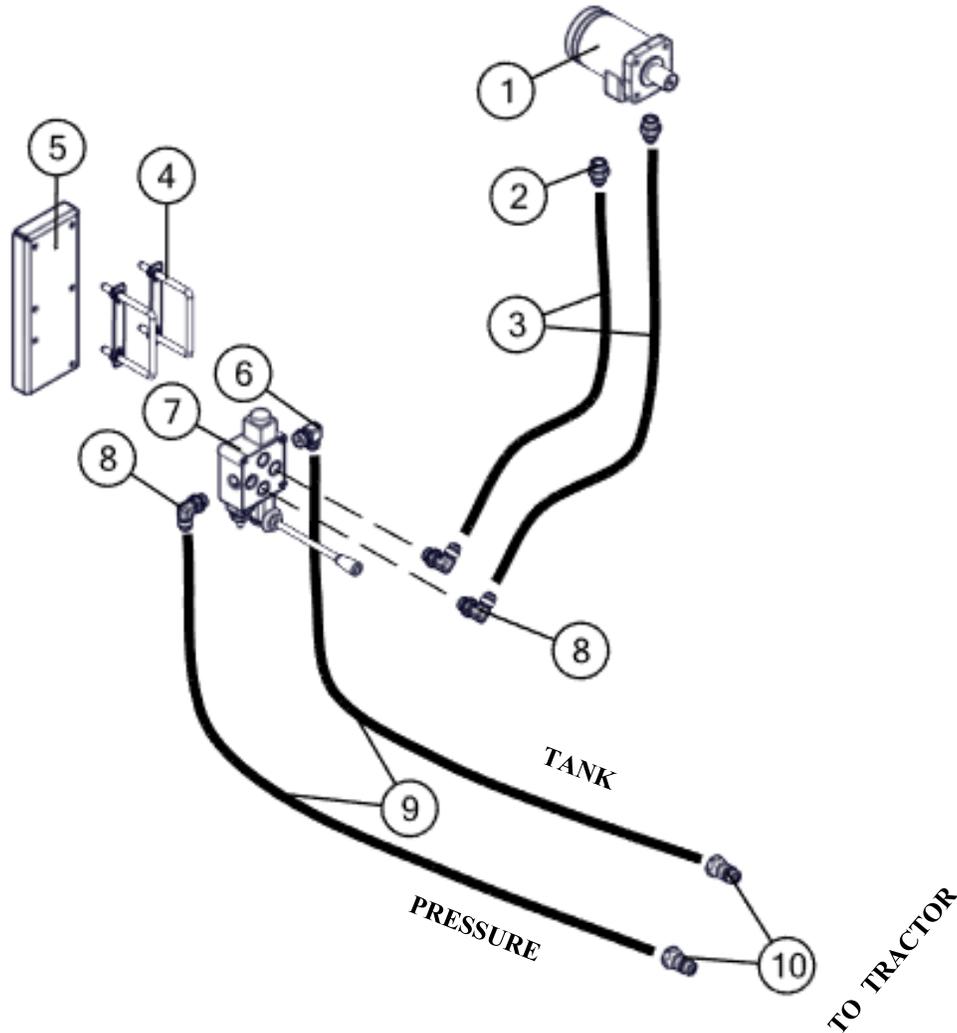
11 PARTS

11.9 Brake System Hydraulics



11 PARTS

11.10 Winch Hydraulics



REF #	PART #	DESCRIPTION	QTY
1	111100-0101	Hydraulic Motor - 4.5 cu.in.	1
2	086400-0812	Hex Nipple - #8 JICM x #10 ORBM	2
3	393400-0040	3/8"2w x 40" long #8JICF x #8JICF	2
4	159000-0415	3/8 x 4" SQUARE U-BOLT	2
5	481000-0850.00	Valve Plate - Winch drive	1
6	086800-0910	Elbow 90° - #10 ORBM x #8 JICM	1
7	110100-0421	Hydraulic Valve - single section	1
8	086800-0808	90° Elbow - #8 ORB x #8 JICM-sw	3
9	392700-0214	3/8" 2w x 214" long #8JICF x 1/2" MPT	2
10	104000-0610	Hydraulic - Q/C Male Poppet 1/2" FNPT	2

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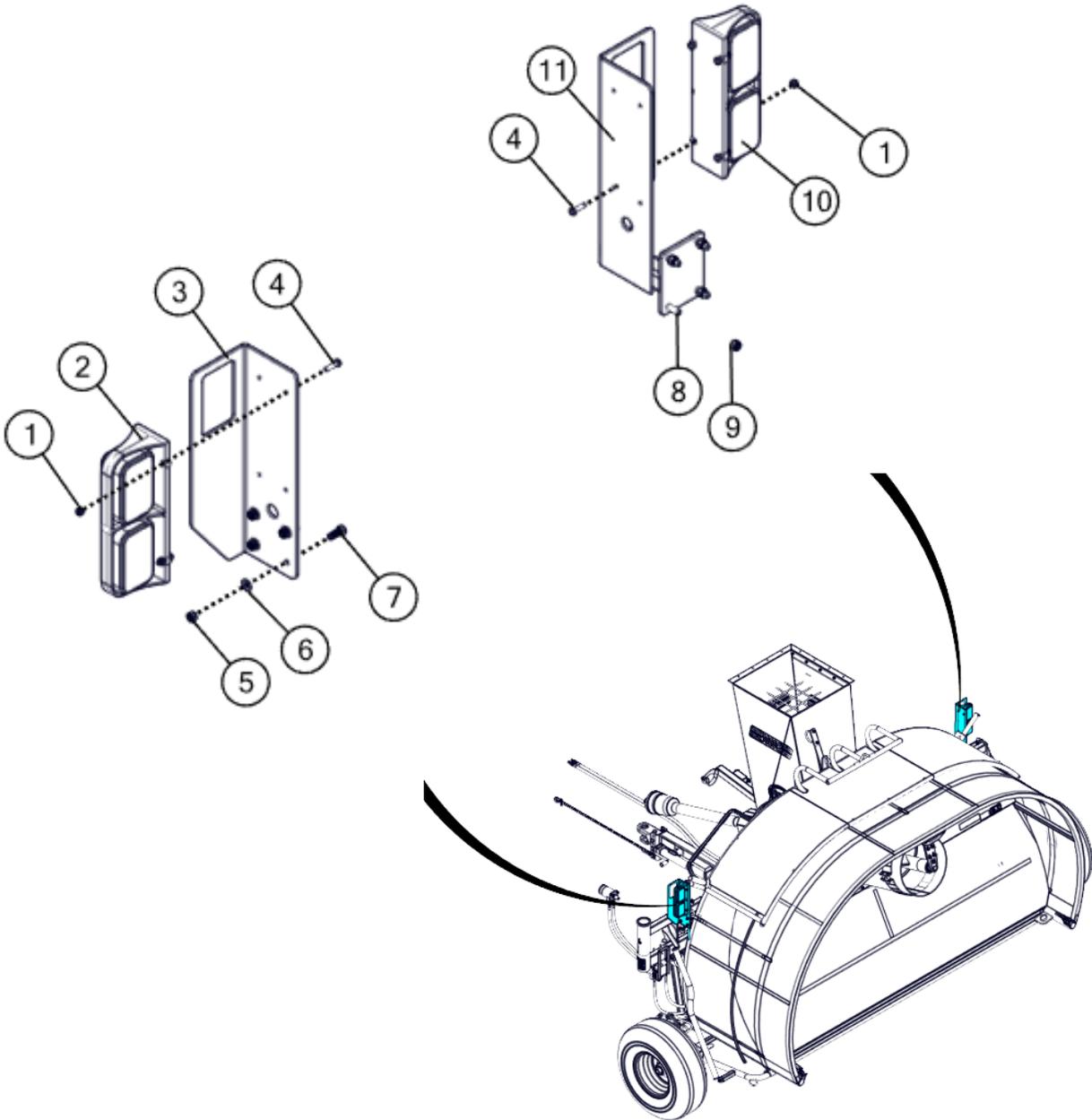
11 PARTS

11.11 Light Kit

REF #	PART #	DESCRIPTION	QTY
1	167200-0642	Nyloc Nut - 1/4" NC Gr.5 PL	8
2	147000-0600	LED Dual Tail Light Kit - Left	1
3	481000-1145.01	D.S Bagger Light Bracket	1
4	159300-0544	Hex Bolt - 1/4" NC x 1" Gr.5 PL	8
5	167000-0787	Hex Nut - 3/8" NC Gr.5 PL	4
6	168000-0540	Flat Washer - 3/8" SAE	4
7	159300-0961	Hex Bolt - 3/8" NC x 1" Gr.5 PL	4
8	159300-0979	Hex Bolt - 3/8" NC x 1-1/4" Gr.5 PL	4
9	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	4
10	147000-0601	LED Dual Tail Light Kit - Right	1
11	681000-0346.00	P.S Light Weldment	1

11 PARTS

11.11 Light Kit



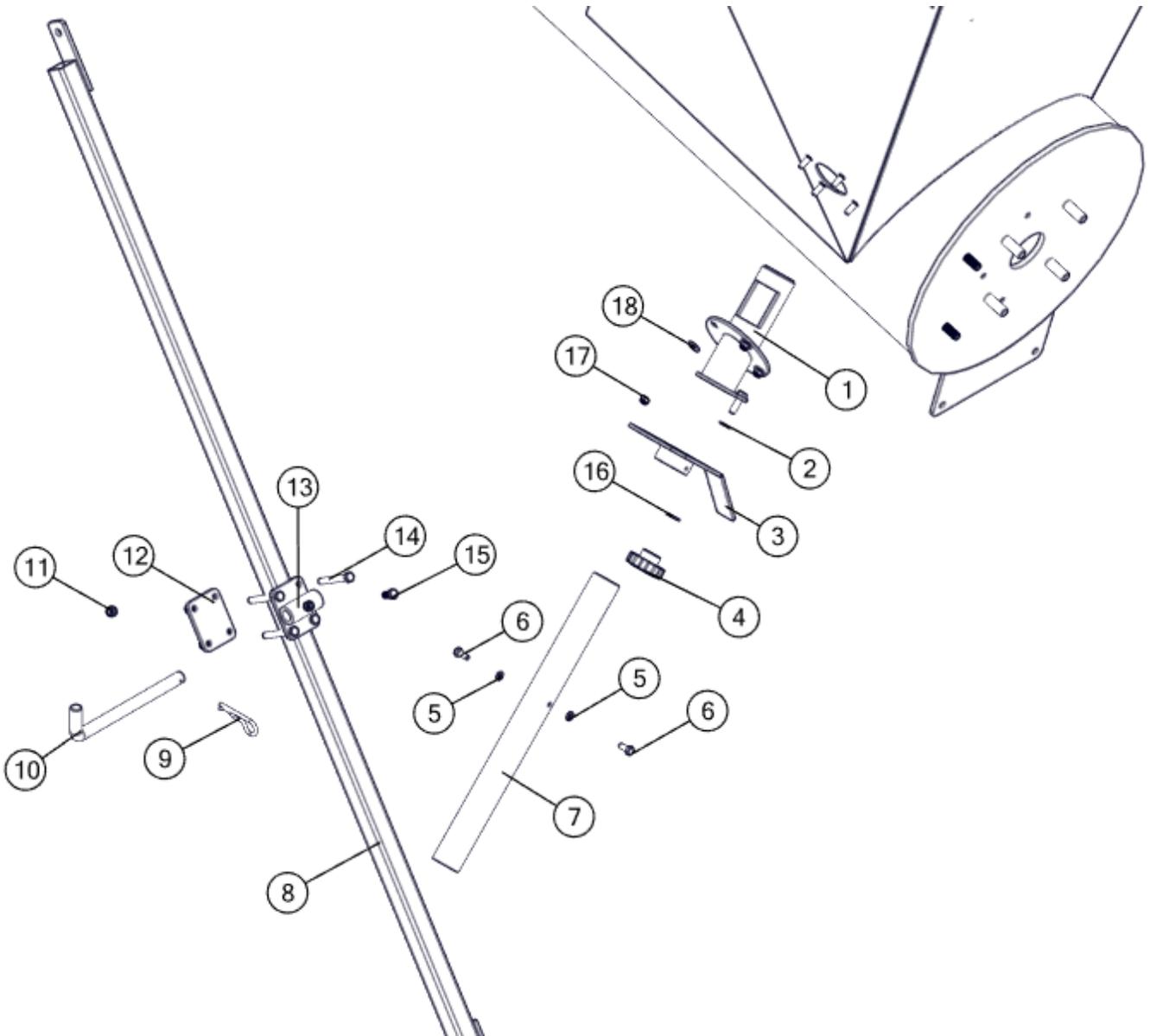
11 PARTS

11.12 Grain Sampler & Pail Hanger

REF #	PART #	DESCRIPTION	QTY
1	681000-0408.01	Collar Weldment - Grain Sampler	1
2	168000-0540	Flat Washer - 3/8" SAE	1
3	681000-0409.00	Handle Weldment - Grain sampler	1
4	140000-0224	Lock Knob	1
5	168600-0062	Lock Washer - 5/16" PL	2
6	159300-0730	Hex Bolt - 5/16" NC x 3/4" Gr.5 PL	2
7	481000-1310.02	1-1/2 ABS Plastic Pipe	1
8	681000-0459.00	Support Tunnel Bar	1
9	161300-0776	Hairpin 3/16" x 3-3/4" #6	1
10	120000-0503	Pale Pin	1
11	167200-0652	Nyloc Nut - 3/8" NC Gr.5 PL	4
12	481000-1335.00	Bolt Plate - Hanger	1
13	681000-0404.00	Pale Hanger - Weldment	1
14	159400-0005	Hex Bolt - 3/8" NC x 3" Gr.5 PL	4
15	159300-0944	Hex Bolt - 3/8" NC x 3/4" Gr.5 PL	1
16	168000-0049	Flat Washer - 3/8" USS PL	1
17	167200-0648	Nyloc Nut - 5/16" NC Gr.5 PL	4
18	168000-0040	Flat Washer - 5/16" USS PL	4

11 PARTS

11.12 Grain Sampler & Pail Hanger





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