



GRAINLOGIX

GRAIN BAG STORAGE SYSTEMS

Grain Bag Baler

Model BB 10-300



Owner's Manual and Parts Book (Originating w/Serial Number 87-192)

Model Number:	
Serial Number:	
Date of Purchase:	



201663 Rev. C 01.06.20

LOFTNESS SPECIALIZED EQUIPMENT, INC. LIMITED WARRANTY POLICY

The limited warranty policy begins upon delivery of the unit to the original customers.

All Loftness products have a one (1) year limited warranty. The XLB10 Grain Bag Loader has a two (2) year limited warranty.

If any Loftness product is used as rental equipment the limited warranty period is for only 30 days from the delivery date to the original customers.

Loftness Specialized Equipment, hereinafter referred to as LOFTNESS, a manufacturer of quality machinery since 1956, warrants new LOFTNESS machinery and/or attachments at the time of delivery to the original purchaser, to be free from defects in material and workmanship when properly set up and operated in accordance with the recommendations set forth in the LOFTNESS Operator's Manual.

LOFTNESS' liability for any defect with respect to accepted goods shall be limited to repairing the goods at an authorized dealer or other LOFTNESS designated location, or replacing them as LOFTNESS shall elect. The above shall be in accordance with LOFTNESS warranty adjustment policies.

WARRANTY REQUIREMENTS

Warranty registration form must be filled out and returned to Loftness Specialized Equipment to validate all warranty claims. To receive a warranty claim, a return authorization from LOFTNESS must be obtained. The failed part may then be returned in an untampered status. This warranty does not include freight or delivery charges incurred when returning machinery for servicing. Dealer mileage, service calls and pick-up/delivery charges are the customer's responsibility.

LIMITATIONS OF WARRANTY

LOFTNESS products are designed to provide years of dependable service when proper use and maintenance is adhered to. The potential for misuse in many applications exists; therefore, a limited warranty is provided as follows.

This warranty shall not apply to any machine or attachment which shall have been repaired or altered outside the LOFTNESS factory or authorized LOFTNESS dealership or in any way so as in LOFTNESS' judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident, nor to any machine or attachment which shall not have been operated in accordance with LOFTNESS' printed instructions or beyond the company recommended machine rated capacity. LOFTNESS may elect to have an area representative evaluate the condition of the machine before warranty is considered.

In addition, this limited warranty provides no coverage for general wear or maintenance items, misuse, environmental conditions and/or contamination for which they were not designed or not intended, including but not limited to the following items:

- Use of machine beyond its rated capacity;
- Improper knife replacement;
- Missing knives;
- Striking foreign objects
- Lack of lubrication
- Failures caused by running in an "out-of-balance" condition;
- Tires;
- Conveyors;
- Auger wear;
- Saw blades; and
- Brakes and brake pads.

EXCLUSIONS OF WARRANTY

Except as otherwise expressly stated herein, LOFTNESS makes no representation or warranty of any kind, expressed or implied. The implied warranty of merchantability and fitness for a particular purpose are excluded from this limited warranty. The remedies set forth in this warranty are the only remedies available to any person under this warranty. LOFTNESS shall have no liability to any person for incidental, consequential or special damages of any description, whether arising out of express or implied warranty or any other contract, negligence, or other tort or otherwise. This exclusion of consequential, incidental and special damages is independent from and shall survive any finding that the exclusive remedy failed of its essential purpose. Upon purchase, the buyer assumes all liability, all personal injury and property damage resulting from the handling, possession or use of the goods by the buyer.

No agent, employee or representative of LOFTNESS has any authority to bind LOFTNESS to any affirmation, representation or warranty concerning its machinery and/or attachments except as specifically set forth herein.



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Owner Information

Thank you for your decision to purchase a Model BB 10-300 Grain Bag Baler from Loftness. To ensure maximum performance of your machine, it is mandatory that you thoroughly study the owner's manual and follow the recommendations. Proper operation and maintenance are essential to maximize machine life and prevent personal injury.

NOTE: This manual provides safety, set-up, operation, and maintenance instructions, along with a replacement parts section for the Loftness Grain Bag Baler. There will be some references to operation of the Loftness Grain Bag Unloader within this manual when it pertains to bag winding only. For safety instructions, operation, maintenance, and replacement parts for the grain bag unloader, refer to the Loftness Grain Bag Unloader Owner's Manual.

The Loftness BB 10-300 Grain Bag Baler is designed to wind and bale emptied bags used for grain storage. The baler will handle bags up to 10 ft. (3.05 m) in diameter with a maximum length of 300 ft. (91.4 m).

Operate and maintain this machine in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and/or laws. Follow all on-product labeling and instructions.

Make sure that all personnel have read this owner's manual and thoroughly understand safe and correct operating, installation and maintenance procedures.

Continuous improvement and advancement of Loftness products may result in changes to your equipment that may not be reflected in this publication. Loftness reserves the right to make product improvements to the machine at any time. Although great care has been taken to ensure the accuracy of this publication, Loftness does not assume any liability for errors or omissions.

Loftness Specialized Equipment, Inc. is not responsible for the condition of the grain when it is being stored in or removed from grain bags loaded or unloaded with Loftness built equipment.

Warranty Policy

Be sure to read and understand the Warranty Policy at the beginning of this manual. It is also important that you fill out the Warranty Registration form(s) completely and return to Loftness so as not to void the warranty.

Serial Number Location



The arrows above indicate the location of the serial number tag (1) and the location of the serial number stamped into the frame (2).

Always use your model and serial number when requesting information or when ordering parts

Manual Storage



Keep the owner's manual and the entire documentation packet in the storage compartment provided on the grain bag unloader. The owner's manual must be available for all operators.

NOTE: The manual holder/tool box will be relocated from its current position on the grain bag unloader to the bracket on the bag baler shown above.

Introduction

Grain Bag Baler Features

- Rolls 9 or 10 foot bags up to 300 ft. long.
- Weighs 920 lbs. (417.3 kg).
- Mounts directly onto all new and existing Loftness GBU10 models.
- Simple, easy mounting no drilling or welding.
- Eliminates need for secondary power source and transport.
- Rolls bags directly off of main bag roller.
- Eliminates unrolling bags onto the ground, and handling loose bags in windy conditions.
- Requires one hydraulic outlet.
- Rugged 3 in. x 3 in. steel tube frame.
- 2-1/2 in. bore x 52 in. stroke hydraulic cylinder.
- Enclosed twine ball holder.
- Sliding twine wrapping handle.
- Spring-loaded adjustable bag tensioner.
- Hydraulic drive with two lever control valve.

Safety First

Accidents can be prevented by recognizing the causes or hazards before an accident occurs and doing something about them. Regardless of the care used in the design and construction of this machine, there are some areas that cannot be safeguarded without interfering with accessibility and efficient operation.



Safety Alert Symbol

This message alert symbol identifies important safety messages on the machine and in the owner's manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

In the owner's manual and on decals used on the machine the words **DANGER**, **WARNING**, **CAUTION**, **IMPORTANT**, and **NOTE** are used to indicate the following:

DANGER: This word warns of immediate hazards which, if not avoided, will result in severe personal injury or death. The color associated with Danger is RED.

WARNING: This word refers to a potentially hazardous situation which, if not avoided, could result in severe personal injury or death. The color associated with Warning is ORANGE.

CAUTION: This word refers to a potentially hazardous or unsafe situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is YELLOW.

IMPORTANT: Highlights information that must be heeded.

NOTE: A reminder of other related information that needs to be considered.

If Safety Decals on this machine are ISO two panel pictorial, decals are defined as follows:

- The first panel indicates the nature of the hazard.
- The second panel indicates the appropriate avoidance of the hazard.
- · Background color is YELLOW.
- Prohibition symbols such as \(\infty \times \) and \(\infty \times \) if used, are RFD

Be certain all machine operators are aware of the dangers indicated by safety decals applied to the machine, and be certain they follow all safety decal instructions. Contact Loftness for safety decal replacement.

Loftness cannot anticipate every possible circumstance that may involve a potential hazard. The warnings in this owner's manual are not all inclusive.

Owner's Responsibility

Operate and maintain this machine in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and/or laws and in compliance with on-product labeling and this owner's manual instructions.

Make sure that all personnel have read this owner's manual, and thoroughly understand safe and correct installation, operation and maintenance procedures.

Make sure the machine is installed correctly before being placed in service. At regular intervals thereafter, the machine should be serviced in accordance with procedures outlined in this owner's manual.

Fulfill all warranty obligations so as not to void the warranties. The warranty policy included in this manual outlines the warranty policy of Loftness.

Safety Rules

These are general safety considerations. Additional precautions may be necessary to operate your machine in a safe manner. Be certain you are operating your machine in accordance with all safety codes, OSHA rules and regulations, insurance requirements and local, state, and federal laws.

Operating Safety

- Do not allow anyone to operate the machine until he or she has read the owner's manual and is completely familiar with all safety precautions.
- Do not allow inexperienced persons unfamiliar with the machine, or unfamiliar with safe operating and maintenance procedures, to operate or maintain the machine.
- Do not allow persons under the influence of alcohol, medications, or other drugs that can impair judgment or cause drowsiness to operate or maintain the machine.
- Keep children, bystanders and other workers away from the machine while it is operating. No riders allowed.
- The machine requires an operator at all times. Never leave the machine running and unattended.
- Do not wear loose hanging clothes, neckties or jewelry. Long hair is to be placed under a cap or hat. These precautions will help prevent you from becoming caught in any moving parts on the machine.
- Do wear safety glasses, ear protection, respirators, gloves, hard hats, safety shoes and other protective clothing when required.
- The baler should not be used to handle materials other than those which were specified as part of its design. It is the operator's responsibility to be aware of the specifications and operate the baler accordingly.
- It is the operator's responsibility to be aware of machine operation and work area hazards at all times.
- Never enter the grain bag.

- Operators are responsible to know the location and function of all guards and shields including but not limited to PTO drivelines, gearboxes, chain drives, augers and are responsible to make certain that all guards are in place when operating the machine.
- Operators are responsible to be aware of safety hazard areas and follow instructions on warning, caution, or danger decals applied to the machine.
- Know the area before operating the machine. Be aware of power lines or other equipment. Watch for adequate overhead clearance.
- Always have an operator in the tractor while the machine is in operation.
- · Remove from the emptied bag any foreign objects.
- Disengage PTO, clutch hydraulic valve and shift tractor into neutral or park before starting engine.
- Never operate the machine with a 1000 RPM to 540 RPM adapter.

Transporting Safety (while installed on Grain Bag Unloader)

- Be sure the baler, and grain bag unloader, is in the transport position before transporting on a roadway.
- Do not exceed speed rating (20 mph) on the factory provided tires.
- Disengage PTO, clutch hydraulic valve and shift tractor into neutral or park before starting engine.
- · Always have safety chains attached.
- Safety precautions for towing with a truck. Machine weight with baler is 6680 pounds with a 425 pound hitch weight - hitch weight, mass requires adequate braking.
- Hitch pin size (1-1/8 in. to 1-1/4 in.).
- Ensure tires are in good condition and are inflated to 44 PSI.

Safety Rules (Cont'd)

Maintenance Safety

- Do not allow inexperienced persons unfamiliar with the machine, or unfamiliar with safe operating and maintenance procedures, to operate or maintain the machine.
- Do not allow persons under the influence of alcohol, medications, or other drugs that can impair judgment or cause drowsiness to operate or maintain the machine.
- Make sure the operator's area is clear of any distracting objects. Keep work areas clean and free of grease and oil to avoid slipping or falling.
- Periodically check all guards, shields and structural members. Replace or repair anything that could cause a potential hazard.
- Do not replace components or parts with other than factory-recommended service parts. To do so may decrease the effectiveness of the machine.
- Do not lubricate parts while the machine is running.
- · Do not smoke while servicing the machine.
- Never attempt to make any adjustments while the tractor engine is running or the key is in the "ON" position in the tractor. Before leaving the operator's position, disengage power to the machine and remove ignition key.

Hydraulic Safety



WARNING: Contact with high pressure fluids may cause fluid penetration and burn hazards. Fluid that is under pressure can penetrate body tissue. Fluid penetration can cause serious injury and possible death. If fluid is injected into the skin, seek medical attention immediately!

- Always wear safety goggles or glasses when working on hydraulic system to avoid eye injury.
- The hydraulic system is under high pressure. Make sure all lines and fittings are tight and in good condition. These fluids escaping under high pressure can have sufficient force to penetrate skin and cause serious injury.

- Never check for leaks by using any part of your body to feel for escaping fluid.
- To prevent serious personal injury from escaping high pressure fluid, never attempt to inspect, service or disassemble any part of the hydraulic system until all pressure has been relieved from the system.

PTO Safety

- Keep all guards and shields in place when operating the PTO. Replace any damaged or missing guards and shields before operating the PTO.
- Keep children, bystanders and other workers away from the machine while it is operating or while the PTO is engaged. No riders allowed.
- Do not wear loose hanging clothes, neckties or jewelry. Long hair is to be placed under a cap or hat. These precautions will help prevent you from becoming caught in any moving parts on the machine.
- Read and understand the tractor operation and maintenance manual regarding safe and proper operation for PTO driven equipment.
- Never step over or crawl around the equipment while the PTO is engaged; entanglement could occur.
- Do not exceed 540 RPM PTO speed.
- Disengage PTO driveline and place in the stored position when the machine is transported.
- Never use a steel hammer when connecting or disconnecting a PTO shaft.
- Engage and disengage the PTO slowly at idle speed to prevent unnecessary stress to the driveline.
- DO NOT USE PTO ADAPTERS OF ANY KIND.
- Use only recommended shearbolts.

California Proposition 65 Warning



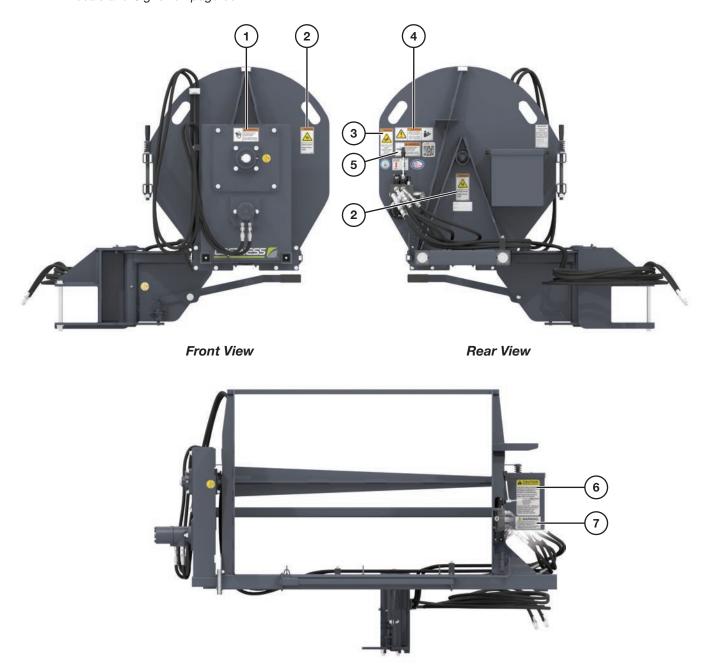
WARNING: This product can expose you to Mineral Oil, which is known to the State of California to cause cancer. For more information, go to www.p65warnings.ca.gov.

A decal with this warning statement is adhered to the machine. If the decal should become worn or missing, replace immediately.

Safety Decal Locations

Check and replace any worn, torn, hard to read or missing safety decals on your machine.

NOTE: This section shows where safety-related decals are applied on the machine. For all machine decals see "Machine Decals and Signs" on page 35.



See the following page for detailed images of the safety decals called out above.

Side View

Safety Decal Locations (Cont'd)



Part No. N68716



Part No. N23507



Part No. N23899



Part No. N22763



Part No. 4189



DO NOT START, OPERATE, OR WORK ON THIS MACHINE UNTIL YOU HAVE CAREFULLY READ AND THOROUGHLY UNDERSTAND THE CONTENTS OF THE OPERATOR'S MANUAL.

NOTE: IF YOU DO NOT HAVE AN OPERATOR'S MANUAL, CONTACT YOUR DEALER OR

LOFTNESS SPECIALIZED EQUIPMENT 650 SOUTH MAIN HECTOR, MN 55342 1-800-828-7624

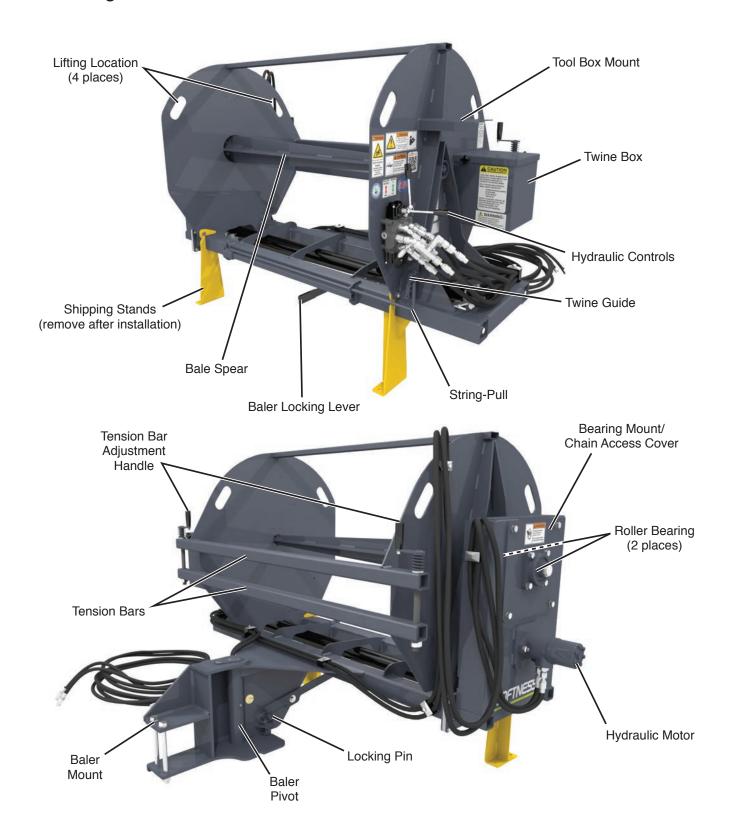
FAILURE TO FOLLOW SAFETY, OPERATING, AND MAINTENANCE INSTRUCTIONS COULD RESULT IN DEATH OR SERIOUS INJURY TO THE OPERATOR OR BYSTANDERS, POOR OPERATION, AND COSTLY BREAKDOWN.

Part No. 4256



Part No. 203264

Grain Bag Baler Identification



Installing the Bag Baler

Overview



The bag baler will be mounted to the tongue beam on the left side of the grain bag unloader shown above.

The installation of the baler requires two people - a forklift/hoist operator, and a ground worker.

IMPORTANT: Only experienced forklift or hoist operators should lift the bag baler.

Moving the Manual Holder/Tool Box

The manual holder/tool box for the grain bag unloader will need to be moved to allow the bag baler to operate.

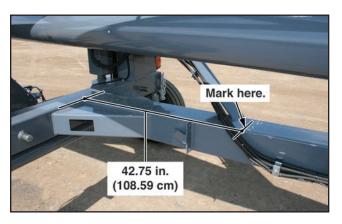


Remove the box from the tongue beam on the grain bag unloader. Move the box (1) to the mounting bracket (2) on the bag baler. Use the existing nuts and bolts (3) to secure.

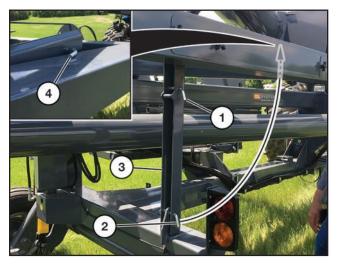
Preparing the Grain Bag Unloader and Bag Baler

IMPORTANT: Make sure the grain bag unloader frame is level before starting. This will ease the mounting of the baler as it is lifted on to the frame. Use the jack on the tongue of

the unloader to level.



Measure 42.75 in. (108.59 cm) from the location shown above on the grain bag unloader and draw a mark. This is where the back side of the baler mount will be aligned.



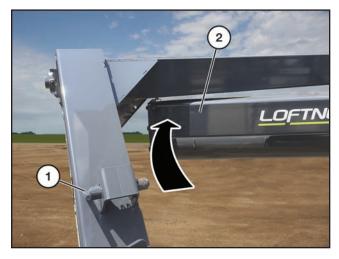
Pull top pin (1) and bottom pin (2) of support arm (3).

Swing support arm up and move into temporary mounting position (4), and secure with pin.

(Procedure continued on following page.)

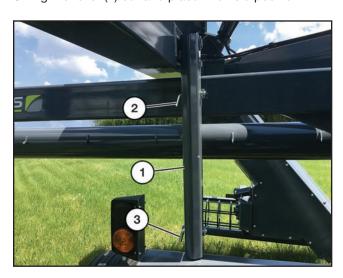
Installing the Bag Baler (Cont'd)

Preparing the Grain Bag Unloader and Bag Baler (Cont'd)



Pull out the spring-loaded locking pin (1) to release the roller

Swing the roller (2) out and place into field position.



With roller in field position, return support arm (1) to its original position and insert top pin (2) and bottom pin (3). Secure pins with the retaining clips.

Lifting the Bag Baler

To lift the baler, use a forklift or power hoist to place the baler onto the grain bag unloader frame.

Use the following instructions, "Lifting Baler with Forklift" or "Lifting Baler with Hoist", for whichever lifting device you will be using.

Common installation procedures will follow these subsections.



DANGER: Crushing Hazard. Failure to safely lift and place the bag baler could result in severe injury or death. Use only a forklift or power hoist that is capable of lifting at least 1,000 lbs. Allow only trained personnel to lift and position the bag baler.

Lifting Baler with Forklift



Position the forks under the bag baler frame as shown above.

IMPORTANT: Do not extend fork ends more than 8 in. (20.3 cm) past baler frame. More than this amount may result in fork ends hitting parts on the unloader frame when mounting baler.

Lift slowly, checking that the baler is as level as possible.

(Procedure continued on following page.)

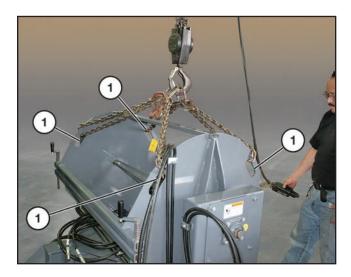
Installing the Bag Baler (Cont'd)



Connect baler to forklift with a chain (1). This will help stabilize the baler and prevent possible tipping during mounting.

Continue with "Mounting the Bag Baler" on the opposite column of this page.

Lifting Baler with Hoist



Use the four slotted holes (1) on the ends of the baler to route the hoist chains through as shown above.

Lift slowly, checking that the baler is as level as possible. Use a chain choker hook and make adjustments as necessary to keep the baler level. Try to keep the mount area of the baler from pointing downward.

Continue with "Mounting the Bag Baler" on the opposite column of this page.

Mounting the Bag Baler



Have the ground person placed on the opposite side of the unloader frame assisting the lifting operator with direction for proper placement.



DANGER: Crushing Hazard. Avoid standing on the same side of the unloader as the baler while it is being mounted. Failure to do so could result in severe injury or death.

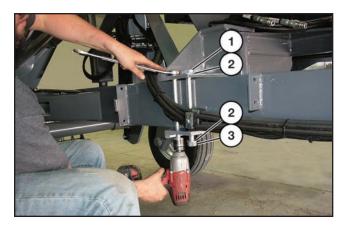


Guide the baler mount onto the unloader frame and position it so the rear side of the baler mount aligns with the mark made earlier (42.75 in. dimension).

(Procedure continued on following page.)

Installing the Bag Baler (Cont'd)

Mounting the Bag Baler (Cont'd)

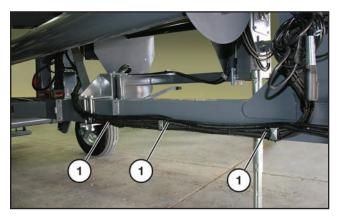


Once in place, insert bolt (1), two washers (2), and nut (3) in the order shown above.

Tighten hardware. Refer to "Torque Specifications" on page 39.

Lifting device(s) can now be removed.

Securing Hydraulic Hoses



Route the baler's hydraulic hoses alongside the existing unloader hydraulic lines and secure with zip ties (1) in three places.



Secure hose ends in the hose holder until ready for operation.

Removing Shipping Stands



Once the baler is installed and secure, remove the two yellow shipping stands and attaching hardware.

Connecting Grain Bag Unloader to the Tractor

The grain bag unloader will likely be set up for bag unloading at this point.

If the gain bag unloader is not connected to the tractor, refer to the directions "Connecting the Grain Bag Unloader" and "Installing Grain Bag Unloader to the Tractor" in the Set-up Instructions section of the grain bag unloader manual for hitch and hydraulic connection instructions.

Connecting Bag Baler Hydraulic Hoses

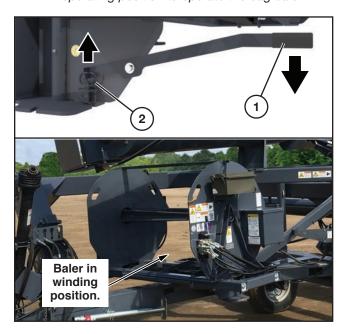
Remove the bag baler hydraulic hose ends from the hose holder on the unloader and make connections at the tractor.

DO NOT start tractor at this time.

Setting Up Baler and Grain Bag Unloader for Bag Baling Operation

NOTE: Set-up and operation for the bag baler will require at least two people

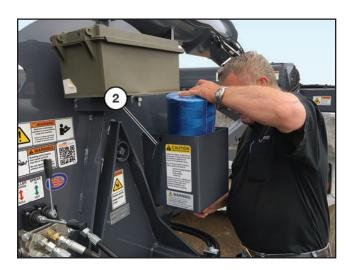
NOTE: It is not necessary to have the top auger in operating position to operate the bag baler.



Push baler locking lever (1) down to release the locking pin (2), allowing the baler to rotate. Swing baler until it locks into winding position as shown.



Loosen and remove the two knobs (1) securing the lid to the twine box.

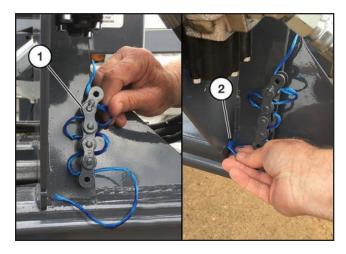


Load the twine roll and pull end of spool through slot (2) on side of the twine box.

Replace cover and knobs.

(Procedure continued on following page.)

Setting Up Baler and Grain Bag Unloader for Bag Baling Operation (Cont'd)

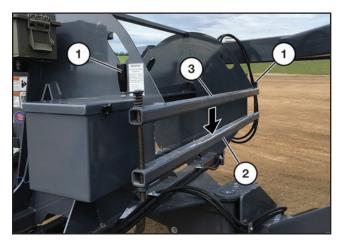


Route twine through links (1) as shown. This provides tension on the twine as it winds around the bale.

Continue routing end through hole on baler frame (2).



Pull the twine end to the D-ring (3) on the end of the string-pull and tie off with a temporary knot.



Use the hand cranks (1) to open the spread distance between the lower and upper tension bar (2 and 3).



Release the two latches (1) and open the roller drive door (2).

(Procedure continued on following page.)

Setting Up Baler and Grain Bag Unloader for Bag Baling Operation (Cont'd)



Pull on the handles to disengage the roller clutch (1) until it locks in the open position. As the baler pulls the bag off of the roller, this allows the roller to "freewheel".

NOTE: The cogs should rest on the inner cogs.

Close roller drive door and secure with the two latches

Winding/Baling Bag



Pull end of bag through the opening in the frame upright and the support arm on the grain bag unloader.



Feed bag end through the tension bars, over the bale spear, and to the front of the bag baler.

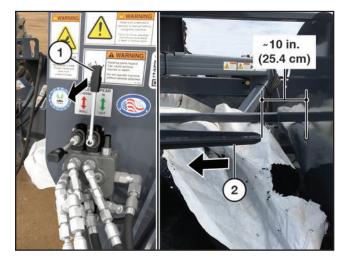
IMPORTANT: Make sure the bag material fills the entire width of the area between the tension bars.

Make sure all ground workers are standing away from the tractor and unloader/baler.

Start the tractor and engage the hydraulics.



WARNING: Always have an operator in the tractor while the machine is in operation.



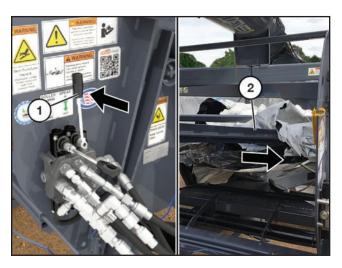
Pull the spear control lever (1) OUT on the control valve to slide the bale spear (2) OUT approximately 10 in. (25.4 cm).

(Procedure continued on following page.)

Winding/Baling Bag (Cont'd)



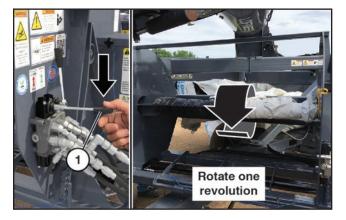
Secure corner/end of bag to spear end as shown.



Push the spear control lever (1) IN on the control valve to bring the spear (2) back IN completely.

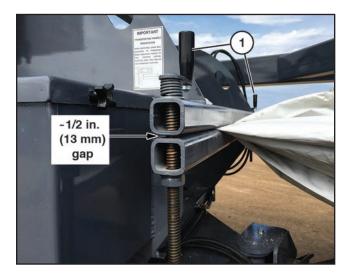


WARNING: *Pinch Point.* Keep hands clear of the bale spear as it returns back into winding position.



Push the roller control lever (1) DOWN on the control valve to ROLL the bag end around the spear <u>one revolution</u>.

Release lever and stop.



Adjust hand cranks (1) evenly and close the gap between the tension bars until they are about 1/2 in. (13 mm) apart.

IMPORTANT: Grain sticking to the bag will make it very difficult to wind a complete 300 ft. bag into one bale. To help with this problem open up the tension bars to 3/4 in. to allow the sticking grain to pass through and then wind 150 ft. onto the spear.

NOTE: This provides tension on the bag during winding, ensuring it is wrapped tightly on the baling spear.

(Procedure continued on following page.)

Winding/Baling Bag (Cont'd)



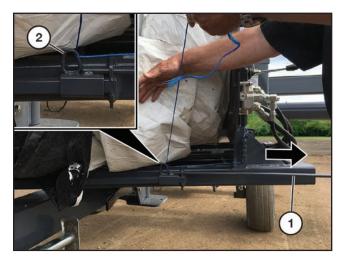
Push DOWN and hold the roller control lever (1) on the control valve to ROLL the entire bag onto the spear.

IMPORTANT: Watch for foreign objects such as sticks, wire, rocks, etc. that may have become trapped or entangled in the grain bag. If any debris is present, stop winding and remove.



Release the ROLL control lever to STOP winding when there is about 18 in. (45.7 cm) remaining. This allows for enough bag material to be tied to the baling twine.

Wrapping Bale



Slide the string-pull (1) out from baler frame until the D-ring (2) reaches the end.

Until the temporary knot made earlier and route the bailing twine through the D-ring as shown.



Tie end of twine to the outside corner of the bag with a secure knot.

(Procedure continued on following page.)

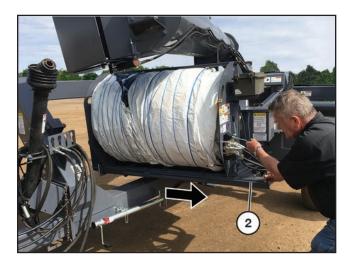
Wrapping Bale (Cont'd)



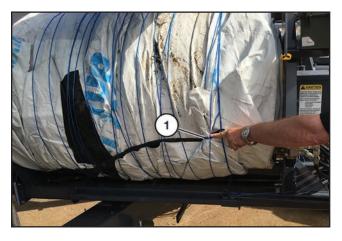
Push DOWN and hold the roller control lever (1) on the control valve to begin wrapping the twine around the bale.

After one full revolution of the bale, slowly begin sliding the string-pull (2) IN as the twine wraps around the bale.

IMPORTANT: Push the string-pull at a steady, even pace to ensure that the twine wraps the bag securely.



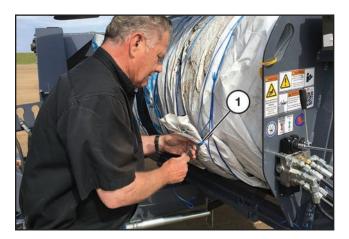
When the twine reaches the far end of the bale, slowly pull the string-pull (2) back at the same pace until the D-ring reaches the end.



Release control lever and stop wrapping when the bagto-twine knot (1) is just above the D-ring.



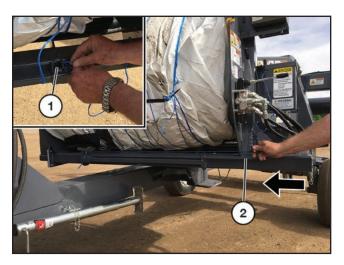
Pull some extra twine and cut.



Tie the end of twine to the bag-to-twine knot (1) made earlier. Make sure all knots are secure.

(Procedure continued on following page.)

Wrapping Bale (Cont'd)



Tie off twine end from spool onto the D-ring (1) with a temporary knot and push string-pull (2) back in.



Push lever (1) down to release and unlock the baler position. Rotate the baler back and lock into storage position.

Removing Bale from Baler



Once in storage/unloading position, lift UP and hold the roller control lever (1) to REVERSE the wrapped bale. Rotate <u>one revolution</u>, then release lever.

NOTE: This releases bag tension caused when winding the bag on to the baling spear, allowing the spear to be pulled out from the bale easier.



Pull OUT and hold the spear control lever (1) on the control valve to pull baling spear OUT of the bale.

(Procedure continued on following page.)

Removing Bale from Baler (Cont'd)



Release lever when spear is completely out of the bale.

Unloading Bale into Truck/Trailer Bed



Drop tailgate and back truck (or trailer) up to bag baler and pull bag off of the baler onto the bed.



CAUTION: A bag bale can weigh up to 500 lbs. (227 kg). Use caution when removing.

Unloading Bale onto the Ground

With extreme caution, the bag bale can be pulled off of the baler and dropped on to the ground and be left to retrieve later.



WARNING: Crushing Hazard. A baled bag can weigh up to 500 lbs. (227 kg). Failure to safely and cautiously remove bag from baler could result in serious injury or death.

Returning Baler and Grain Bag Unloader to Storage/Transport Position





Push IN and hold the spear control lever (1) on the control valve to return the spear back into the baler frame.

Turn tractor off.

(Procedure continued on following page.)

Returning Baler and Grain Bag Unloader to Storage/Transport Position (Cont'd)



Release the two latches (1) and open the roller drive door (2).



Re-engage the clutch (1) by quickly rotating in either direction and snapping back into place.

Close roller drive door and secure with the latches.

NOTE: If more grain bags are to be unloaded, push baler locking lever down and move bag baler into the winding position for easier access to the grain bag unloader hydraulic controls. Make sure baler is in locked position.



General Maintenance

See "Maintenance Safety" on page 5 before performing any service or maintenance on the grain bag baler.



WARNING: Always shut down the tractor, remove the ignition key, set the park brake and remove the PTO shaft from the tractor before performing any inspections or maintenance.

To ensure efficient operation, you should inspect, lubricate, and make necessary adjustments and repairs at regular intervals. Parts that are starting to show wear should be ordered ahead of time, before a costly breakdown occurs and you have to wait for replacement parts. Keep good maintenance records and adequately clean your baler/unloader after each use.

NOTE: Lubricate chains at the end of the day while the chains are warm from operating.

Maintenance Schedule

l		SERVICE REQUIRED					Р
H O U R S	SERVICE POINTS	CHECK	G R E A S E	0 I L	CHANGE	ADJUST	A G E #
Every	Every Outside Spear Bearing		Х				Х
8	Inside Spear Bearing		Χ				Χ
Every	Baler Pivot		Х				Х
100	Spear Chain			Х			Х

Fluids And Lubricants



CAUTION: Use proper safety procedures when handling petroleum products including, but not limited to, the use of rubber gloves and eye protection.

Proper lubrication is important. Too little lubricant will cause premature failure of a bearing. Too much lubrication usually causes high operating temperature and early failure of seals. Follow all lubrication instructions and schedules included in this section.

- Grease Use an SAE multipurpose high temperature grease with extreme-pressure (EP) rating. Also acceptable is an SAE multipurpose lithium based grease.
- 2. Chain Use 80W-90 gear lube.
- Storing Lubricants Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.

Lubrication

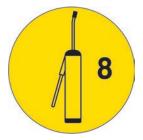
Grease Points



DANGER: Shut down power from the tractor before lubricating.

NOTE:

Replace any broken or missing grease fittings. Be sure to clean fittings before greasing.



NOTE: Lubricate the grease point every "X" hours indicated on the decal adjacent to the grease point.

(Procedure continued on following page.)

Maintenance

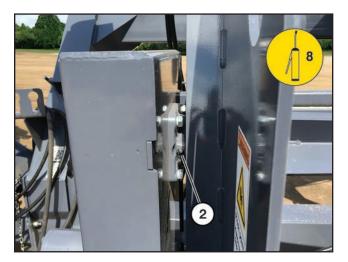
Lubrication (Cont'd)

Grease Points (Cont'd)

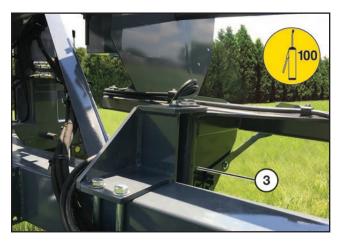
See "Grain Bag Baler Identification" on page 8 for component location and identification.



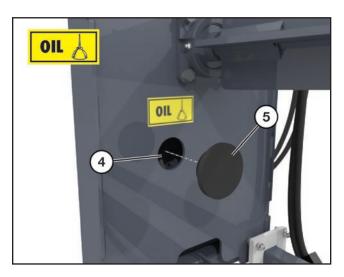
Location: Outside spear bearing (1). **Interval:** Every 8 hours of operation.



Location: Inside spear bearing (2). **Interval:** Every 8 hours of operation.



Location: Baler pivot bushing (3). **Interval:** Every 100 hours of operation.



Location: Baler spear chain (4).

Interval: Every 100 hours of operation.

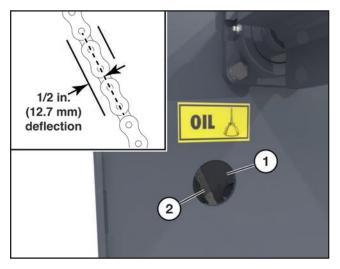
NOTE: Remove plug (5) to access chain.

Bale Spear Chain Inspection And Adjustment



WARNING: Never attempt to make any adjustments while the tractor engine is running or the key is in the "ON" position in the tractor. Before leaving the operator's position, disengage power to the machine and remove ignition key.

Baler Spear Chain Inspection



To access baler spear chain, remove plug from access hole (1).

To check the deflection, press the chain at the location (2) between two sprockets. The chain should move approximately 1/2 in. (12.7 mm).

If the chain deflection is more than 1 in. (25.4 mm), see the directions in the following sub-section adjustment instructions.

If no adjustment is needed, return plug to chain access hole.

Baler Spear Chain Adjustment



To adjust chain deflection, loosen the two nuts (1) securing the motor (2). Slide the motor up or down until the deflection is approximately 1/2 in. (12.7 mm).

NOTE: Do not over tighten the chains. Overtightening the chains will put undue stress on the chains and other components of the roller/spear drive.

Once the correct deflection is set, reinstall the two nuts and tighten.

Return plug to chain access hole.

Maintenance

Troubleshooting

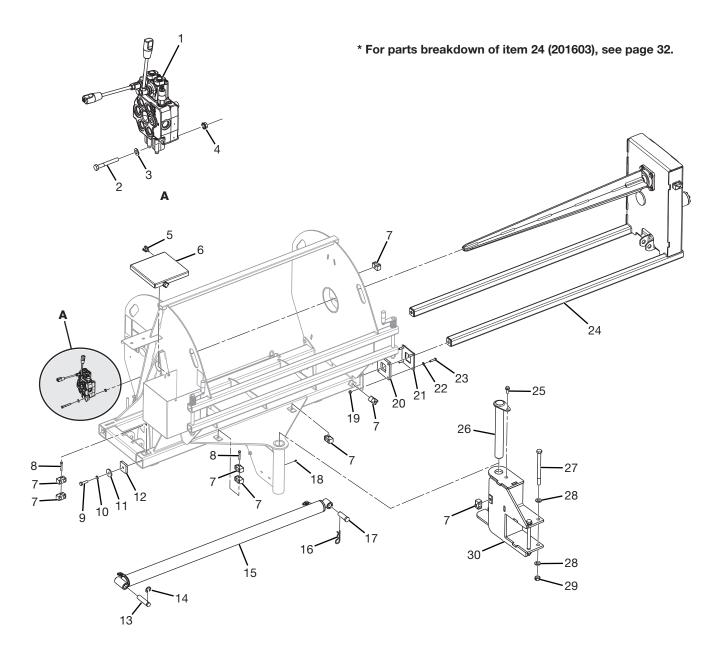
To assist with maintenance and repair, the following list of common problems and corrections is provided.

PROBLEM	CAUSE	SOLUTION
Spear not turning.	Chain not engaged or broken.	Verify chain engagement. Tighten chain. Replace chain.
	Hydraulic hoses not connected to tractor	Connect hoses.
Remote hydraulic controls not functioning correctly.	Hydraulic hoses not installed correctly.	Reverse hydraulic hoses at tractor.
	Hydraulic couplers not opening.	Replace couplers.
Bag will not wrap around spear. Spear stalling.	Tension too tight.	Decrease tension.
Bag not fitting on roller.	Tension too loose.	Increase tension.
	Grain sticking to bag.	Open up tension bars to 3/4 in. to allow sticking grain to pass through and then wind 150 ft. onto spear.
Bag not wrapping around spear evenly.	Tension not set correctly.	Adjust tension.
Bag will not release from spear.	Bag caught on spear.	Reengage spear completely and reverse spear rotation 1 to 2 revolutions.



PARTS IDENTIFICATION

Bag Baler



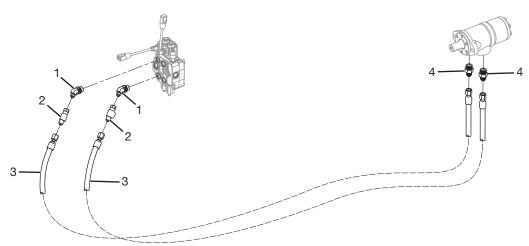
Parts Identification

Bag Baler

#	QTY.	PART #	DESCRIPTION
1	1	201285	VALVE, 2-SECTION MONO
2	2	4204	BOLT, 5/16" X 2-1/2" GRADE 5
3	2	N28927	WASHER, FLAT 5/16 SAE
4	2	N26742	NUT, LOCK 5/16" SER FLG
5	2	N17502	KNOB, 1/4" X 3/4" FOUR PRONG
6	1	201665	PLATE, TWINE BOX COVER
7	8	N21365	CLAMP, 3/8" DOUBLE HOSE
8	2	N28436	BOLT, 5/16" X 2-1/4" GR5
9	2	4014	BOLT, 1/2" X 1-3/4" GRADE 5
10	2	4155	WASHER, LOCK 1/2"
11	2	4074	WASHER, 2" OD X 1/2" ID X 1/4"
12	2	201029	PLATE, BAG ROLLER GUIDE 2
13	1	201701	PIN, BAG BALER
14	1	201702	RING, RETAINING SIDE MOUNT EX
15	1	N154782	CYLINDER, 2.5 X 52
16	1	4389	CLIP, HAIRPIN 3/16" X 3"
17	1	4315	PIN, 1" X 2-1/2"
18	1	4105	GREASE-ZERK, 1/4" SCREW-IN
19	8	4979	NUT, LOCK 3/8" SER FLG
20	2	201028	PLATE, BAG ROLLER GUIDE 1
21	2	201030	PLATE, BAG ROLLER GUIDE 3
22	8	N31741	WASHER, FLAT 3/8" SAE
23	8	4006	BOLT, 3/8" X 1-1/2" GRADE 5
24	1	201603	SLIDE, BAG ROLLER
25	1	N18360	BOLT,1/2-13 X 1-1/4 SER FLG
26	1	201043	PIN, BAG ROLLER
27	2	201065	BOLT, 3/4"-10 X 9-1/2" GR 5
28	4	N35327	WASHER, FLAT 3/4" SAE
29	2	4056	NUT, LOCK 3/4"
30	1	201606	MOUNT, BAG ROLLER FRAME

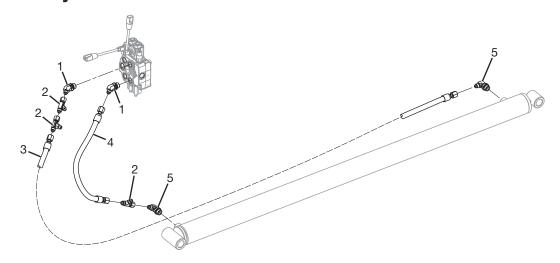
Parts Identification

Hydraulics - Motor



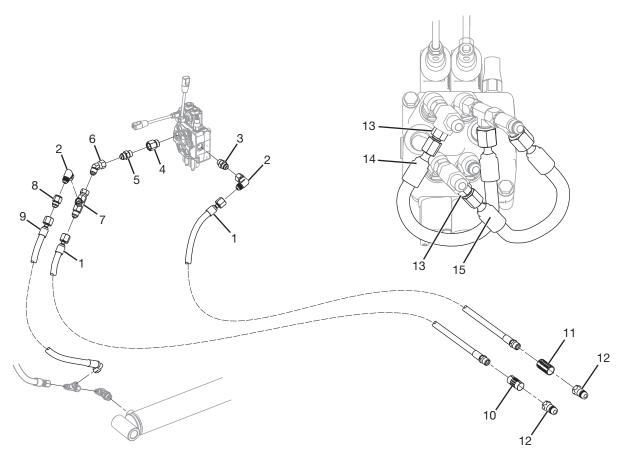
#	QTY.	PART #	DESCRIPTION
1	2	N27928	ELBOW, 45 DEG - 6MJC - 8MOR
2	2	202198	ADAPTER, 6MJIC - 6FJIC -4FOR
3	2	201083	HOSE, 3/8" X 234" -6FJIC -6FJIC
4	2	N28826	ADAPTER, 6MJIC - 10MOR

Hydraulics - Cylinder



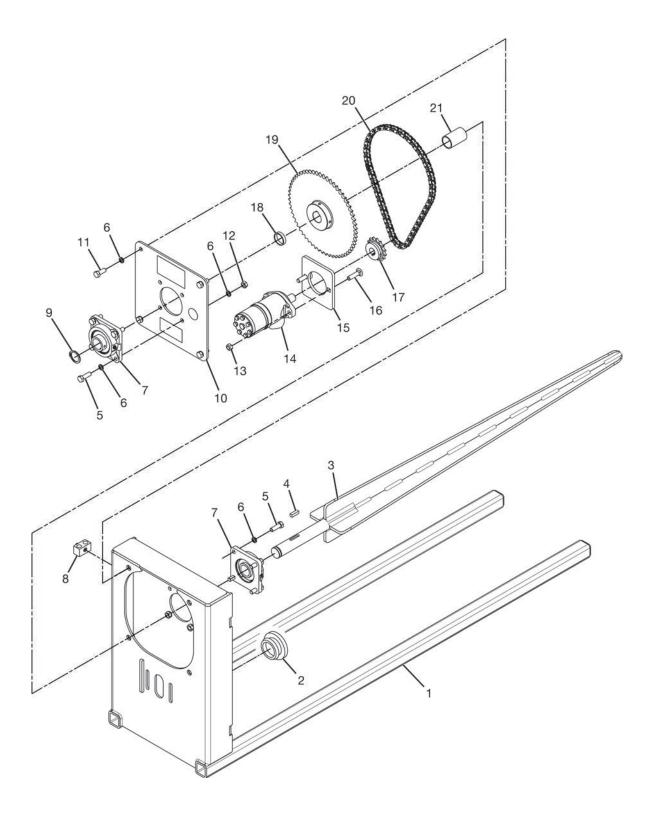
#	QTY.	PART #	DESCRIPTION
1	2	N27928	ELBOW, 45 DEG - 6MJC - 8MOR
2	3	N37279	TEE, -6MJIC-6FJIC-6MJIC
3	1	N29039	HOSE, 3/8" X 80" -6FJIC -6FJIC
4	1	N26319	HOSE, 3/8" X 18" -6FJX -6FJX
5	2	N20037	ELBOW, 90 DEG - 6MJIC - 8MOR

Hydraulics - Tractor Pressure and Tank



#	QTY.	PART #	DESCRIPTION
1	2	N32577	HOSE, 3/8" X 276" 8FJ1C-8MP
2	2	N24827	ELBOW, 90 DEG - 8FJC - 8MJC
3	1	N20228	ADAPTER, 8MJC - 8MOR
4	1	N23446	ADAPTER, 10MOR - 8FOR
5	1	N23447	VALVE, 5 PSI CHECK 8MOR - 8MJC
6	1	N28838	ELBOW, 45 DEG - 8MJIC -8FJIC
7	1	N20549	TEE, 8MJIC-8FJIC-8MJIC SWVL
8	1	202199	ADAPTER, 8FJIC -8MJIC .062 OR
9	1	202293	HOSE, 3/8" X 20" -8FJX -6FJX90
10	1	N24823	DECAL, TANK
11	1	N24822	DECAL, PRESSURE
12	2	N11825	COUPLER, 1/2" MALE PIONEER
13	2	202310	VALVE, 5 PSI CHECK 4MOR - 4MJC
14	1	202289	HOSE, 1/4" X 11.75" -6FJX -4FJX
15	1	202291	HOSE, 1/4" X 9.75" -6FJX -4FJX

Bag Baler Slide (201603)



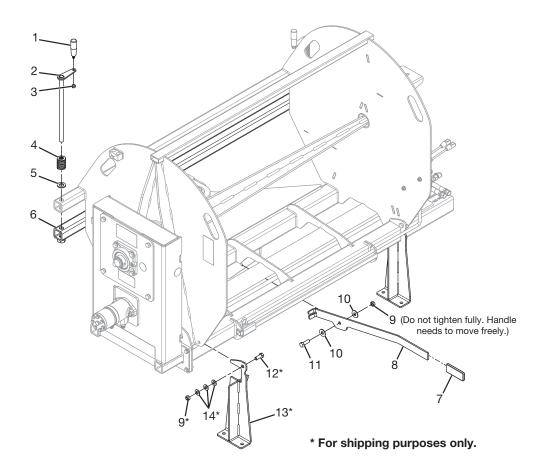
Parts Identification

Bag Baler Slide (201603)

#	QTY.	PART #	DESCRIPTION
1	1	201604	WELDMENT, BAG ROLLER SLIDE
2	1	N33214	PLUG, 2-1/2" CUSTOM RUBBER
3	1	201628	SPEAR, BAG ROLLER BAG SPEAR
4	1	201070	KEY, 3/8" X 1-1/4"
5	8	4013	BOLT, 1/2" X 1-1/2" GRADE 5
6	12	4155	WASHER, LOCK 1/2", ZINC
7	2	N30229	BEARING, 1-1/2" DODGE 4-BLT FLG
8	1	N21365	CLAMP, 3/8" DOUBLE HOSE
9	1	N35331	RING, SNAP EXT 1.5" SHAFT HEAVY
10	1	201631	MOUNT, BAG ROLLER BEARING
11	4	4012	BOLT, 1/2" X 1-1/4" GRADE 5
12	4	N29075	NUT, LOCK 1/2" SER FLANGE
13	2	4054	NUT, LOCK 1/2" TOP
14	1	N157773	MOTOR, 23.6 CI LSHT
15	1	201071	PLATE, BAG ROLLER MOTOR 1
16	2	4524	BOLT, CARRIAGE 1/2" X 2"
17	1	N26077	SPROCKET, 15 x 50; 1" BORE
18	1	201703	SPACER, BAG ROLLER SPEAR 3/8"L
19	1	201289	SPROCKET, 50B60 1.500 BORE
20	1	201624	CHAIN, #50 X 74 PITCH
21	1	201632	SPACER, BAG ROLLER SPEAR

Parts Identification

Bag Baler - Lever and Crank Assemblies



#	QTY.	PART #	DESCRIPTION			
1	2	201642	HANDLE, 3/8-16X3-1/8 REVOLVING			
2	2	201644	BOLT, BAG ROLLER HANDLE			
3	2	4052	NUT, LOCK 3/8"			
4	2	201705	SPRING, HIGH-STRENGTH DIE 2"			
5	2	N35327	WASHER, FLAT 3/4" SAE			
6	1	201621	BAR, BAG ROLLER LOWER TENSION			
7	1	N50757	COVER, PLASTIC HANDLE			
8	1	201650	PLATE, BAG ROLLER HANDLE			
9	3	4054	NUT, LOCK 1/2" TOP			
10	2	4486	WASHER, 1/2" FLAT			
11	1	4013	BOLT, 1/2" X 1-1/2" GRADE 5			
12	2	4012	BOLT, 1/2" X 1-1/4" GRADE 5			
13	2	201659	STAND, BAG ROLLER SHIPPING			
14	6	4068	WASHER, 1/2" SAE FLAT			

Machine Decals and Signs

NOTE: All safety related decals are also shown in the Safety Instructions section along with their location on the machine. See "Safety Decal Locations" on page 6.

Check and replace any worn, torn, hard to read or missing decals on your machine.

Part No. N68716



Part No. N23507



Part No. N23899



Part No. N22763



Part No. 4189



Part No. 4256



DO NOT START, OPERATE, OR WORK ON THIS MACHINE UNTIL YOU HAVE CAREFULLY READ AND THOROUGHLY UNDERSTAND THE CONTENTS OF THE OPERATOR'S MANUAL.

NOTE: IF YOU DO NOT HAVE AN OPERATOR'S MANUAL, CONTACT YOUR DEALER OR

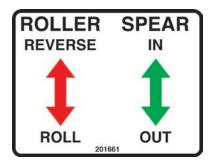
LOFTNESS SPECIALIZED EQUIPMENT 650 SOUTH MAIN HECTOR, MN 55342 1-800-828-7624

FAILURE TO FOLLOW SAFETY, OPERATING, AND MAINTENANCE INSTRUCTIONS COULD RESULT IN DEATH OR SERIOUS INJURY TO THE OPERATOR OR BYSTANDERS, POOR OPERATION, AND COSTLY BREAKDOWN.

Part No. 203264



Part No. 201661



Parts Identification

Machine Decals and Signs (Cont'd)

Part No. 201662

IMPORTANT TRANSPORTING HANDLE ORIENTATION WHEN SWITCHING GRAIN BAG UNLOADER TO TRANSPORT MODE ORIENTATE HANDLE TO THIS POSITION BEFORE ROTATING MAIN BAG ROLLER INTO TRANSPORT POSITION.

Part No. N24822

PRESSURE
PRESSURE
PRESSURE
PRESSURE
PRESSURE
PRESSURE
PRESSURE
PRESSURE

Part No. N24823

TANK TANK TANK TANK TANK TANK TANK

Part No. 4136



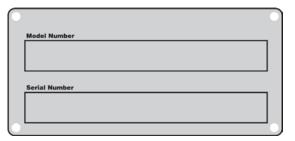
Part No. N28010



Part No. N28013



Part No. N13721



Part No. 4138



Part No. N13517



Part No. N33102



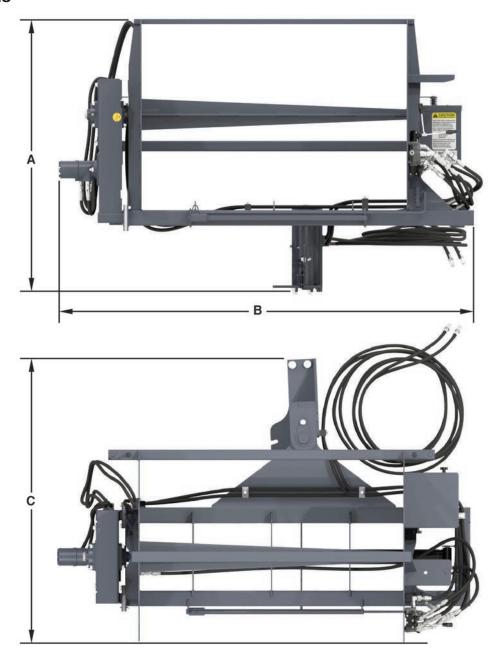
Part No. N26974 (Horizontal Small)



Specifications

DESCRIPTION	MODEL BB 10-300 GRAIN BAG BALER		
Bag Baling Capacity	9 ft. or 10 ft. bags up to 300 ft. long		
Bag Baler Control	Hydraulic		
Bag Baler Lock	Latch Mechanism		
Weight	920 lbs. (417.3 kg)		

Dimensions



DESCRIPTION		MODEL BB 10-300 GRAIN BAG BALER		
Height (A)		51.47 in. (130,7 cm)		
Mialtle (D)	Slide Retracted	78.42 in. (199,19 cm)		
Width (B)	Slide Extended	130.42 in. (331,27 cm)		
Length (C)		53.96 in. (137,06 cm)		
Weight		947 lbs. (429.6 kg)		

Torque Specifications

Inches Hardware and Lock Nuts

TORQUE CHARTS

Minimum Hardware Tightening Torques

Normal Assembly Applications (Standard Hardware and Lock Nuts)

SAE Gr. 2	SAE Grade 5		SAE Grade 8		LOCK NUTS			
Nominal Size	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Grade W / Gr. 5 Bolt	Grade W / Gr. 8 Bolt
1/4	55 inlb.	72 inlb.	86 inlb.	112 inlb.	121 inlb.	157 inlb.	61 inlb.	86 inlb.
	(6.2 N•m)	(8.1 N•m)	(9.7 N•m)	(12.6 N•m)	(13.6 N•m)	(17.7 N•m)	(6.9 N•m)	(9.8 N•m)
5/16	115 inlb.	149 inlb.	178 inlb.	229 inlb.	250 inlb.	324 inlb.	125 inlb.	176 inlb
	(13 N•m)	(17 N•m)	(20 N•m)	(26 N•m)	(28 N•m)	(37 N•m)	(14 N•m)	(20 N•m)
3/8	17 ftlb.	22 ftlb.	26 ftlb.	34 ftlb.	37 ftlb.	48 ftlb.	19 ftlb.	26 ftlb.
	(23 N•m)	(30 N•m)	(35 N•m)	(46 N•m)	(50 N•m)	(65 N•m)	(26 N•m)	(35 N•m)
7/16	27 ftlb.	35 ftlb.	42 ftlb.	54 ftlb.	59 ftlb.	77 ftlb.	30 ftlb.	42 ftlb.
	(37 N•m)	(47 N•m)	(57 N•m)	(73 N•m)	(80 N•m)	(104 N•m)	(41 N•m)	(57 N•m)
1/2	42 ftlb.	54 ftlb.	64 ftlb.	83 ftlb.	91 ftlb.	117 ftlb.	45 ftlb.	64 ftlb.
	(57 N•m)	(73 N•m)	(87 N•m)	(113 N•m)	(123 N•m)	(159 N•m)	(61 N•m)	(88 N•m)
9/16	60 ftlb.	77 ftlb.	92 ftlb.	120 ftlb.	130 ftlb.	169 ftlb.	65 ftlb.	92 ftlb.
	(81 N•m)	(104 N•m)	(125 N•m)	(163 N•m)	(176) N•m	(229 N•m)	(88 N•m)	(125 N•m
5/8	83 ftlb.	107 ftlb.	128 ftlb.	165 ftlb.	180 ftlb.	233 ftlb.	90 ftlb.	127 ftlb.
	(112 N•m)	(145 N•m)	(174 N•m)	(224 N•m)	(244) N•m	(316 N•m)	(122 N•m)	(172 N•m
3/4	146 ftlb.	189 ftlb.	226 ftlb.	293 ftlb.	319 ftlb.	413 ftlb.	160 ftlb.	226 ftlb.
	(198 N•m)	(256 N•m)	(306 N•m)	(397 N•m)	(432 N•m)	(560 N•m)	(217 N•m)	(306 N•m
7/8	142 ftlb.	183 ftlb.	365 ftlb.	473 ftlb.	515 ftlb.	667 ftlb.	258 ftlb.	364 ftlb.
	(193 N•m)	(248 N•m)	(495 N•m)	(641 N•m)	(698 N•m)	(904 N•m)	(350 N•m)	(494 N•m
1	213 ftlb.	275 ftlb.	547 ftlb.	708 ftlb.	773 ftlb.	1000 ftlb.	386 ftlb.	545 ftlb.
	(289 N•m)	(373 N•m)	(742 N•m)	(960 N•m)	(1048 N•m)	(1356 N•m)	(523 N•m)	(739 N•m)



















NEW CLOCK MARKINGS NUTS INCHES AND METRIC





















CENTER LOCK MARKING

LOCK NUT MARKING

LOCK NUT NOTCH MARKING

LOCK NUT LETTER MARKING

Appendix

Torque Specifications (Cont'd)

Metric Hardware and Lock Nuts

TORQUE CHARTS

Minimum Hardware Tightening Torques

Normal Assembly Applications

(Metric Hardware and Lock Nuts)

	Class	s 5,8	Class	s 8,8	Class	10,9	Lock nuts
Nominal Size	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Unplated or Plated Silver	Plated W / ZnCr Gold	Class 8 W / CL. 8,8 Bolt
M4	1.7 N•m	2.2 N•m	2.6 N•m	3.4 N•m	3.7 N•m	4.8 N•m	1.8 N•m
	(15 inlb.)	(19 inlb.)	(23 inlb.)	(30 inlb.)	(33 inlb.)	(42 inlb.)	(16 inlb.)
M6	5.8 N•m	7.6 N•m	8.9 N•m	12 N·m	13 N•m	17 N•m	6.3 N•m
	(51 inlb.)	(67 inlb.)	(79 inlb.)	(102 inlb.)	(115 inlb.)	(150 inlb.)	(56 inlb.)
M8	14 N•m	18 N•m	22 N•m	28 N•m	31 N·m	40 N•m	15 N·m
	(124 inlb.)	(159 inlb.)	(195 inlb.)	(248 inlb.)	(274 inlb.)	(354 inlb.)	(133 inlb.)
M10	28 N•m	36 N•m	43 N•m	56 N•m	61 N•m	79 N•m	30 N•m
	(21 ftlb.)	(27 ftlb.)	(32 ftlb.)	(41 ftlb.)	(45 ftlb.)	(58 ftlb.)	(22 ftlb.)
M12	49 N•m	63 N•m	75 N•m	97 N•m	107 N•m	138 N•m	53 N•m
	(36 ftlb.)	(46 ftlb.)	(55 ftlb.)	(72 ftlb.)	(79 ftlb.)	(102 ftlb.)	(39 ftlb.)
M16	121 N•m	158 N•m	186 N•m	240 N•m	266 N•m	344 N•m	131N•m
	(89 ftlb.)	(117 ftlb.)	(137 ftlb.)	(177 ftlb.)	(196 ftlb.)	(254 ftlb.)	(97 ftlb.)
M20	237 N•m	307 N·m	375 N•m	485 N•m	519 N•m	671 N•m	265 N•m
	(175 ftlb.)	(226 ftlb.)	(277 ftlb.)	(358 ftlb.)	(383 ftlb.)	(495 ftlb.)	(195 ftlb.)
M24	411 N•m	531 N·m	648 N•m	839 N•m	897 N•m	1160 N•m	458 N•m
	(303 ftlb.)	(392 ftlb.)	(478 ftlb.)	(619 ftlb.)	(662 ftlb.)	(855 ftlb.)	(338 ftlb.)

GRADE 2 GRADE 5 GRADE 8
CLASS A CLASS B CLASS C

MANUFACTURER'S IDENTIFICATION
METRIC BOLT MARKING
METRIC NUT MARKING
PROPERTY CLASS

METRIC NUT MARKING
NOTE: CLASS 2 IN METRIC IS 5.8



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