

Pre-Delivery Manual

3P3025AH
3-Point 30 Foot Stack-Fold Row- Hopper
Yield-Pro® Planter with Air-Pro® Seed Meters



Read the operator manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!



Illustrations may show alternate spacings and/or optional equipment not supplied with standard unit.

ORIGINAL INSTRUCTIONS



© Copyright 2016

Printed 2016-12-21

411-332Q

[Table of Contents](#)

[Table of Contents](#)



Table of Contents

Important Safety Information	1	Front Gauge Wheel Installation.....	10
Introduction	5	Raising the Drill.....	11
Document Family.....	5	Wings: Do Not Lift with Hoist or Forklift.....	11
Intended Usage.....	5	3-Point Hitch Lifting Adapter.....	11
Using This Manual.....	5	Unloading.....	13
Models Covered.....	5	Lift Assist Wheel Installation.....	14
Description of Unit.....	5	Gullwing Switch Adjustment Without Lift Assist.....	15
Definitions.....	6	Gullwing Switch Adjustment With Lift Assist.....	16
Owner Assistance.....	6	Seeding Switch, Planters With Hydraulic Drive.....	17
Further Assistance.....	6	Planters Without Rear Lift Assist.....	17
Assembly	7	Planters With Rear Lift Assist.....	18
Tools Required.....	7	Torque Values Chart.....	19
Pre-Assembly Checklist.....	7	Tire and Wheel Information.....	20
Pre-Delivery	8		

© Copyright 2015, 2016 All rights Reserved

Great Plains Manufacturing, Inc. provides this publication “as is” without warranty of any kind, either expressed or implied. While every precaution has been taken in the preparation of this manual, Great Plains Manufacturing, Inc. assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. Great Plains Manufacturing, Inc. reserves the right to revise and improve its products as it sees fit. This publication describes the state of this product at the time of its publication, and may not reflect the product in the future.

Trademarks of Great Plains Manufacturing, Inc. include: AccuShot, Max-Chisel, Row-Pro, Singulator Plus, Short Disk, Swath Command, Terra-Tine, Ultra-Chisel, and X-Press.

Registered Trademarks of Great Plains Manufacturing, Inc. include: Air-Pro, Clear-Shot, Discovator, Great Plains, Land Pride, MeterCone, Nutri-Pro, Seed-Lok, Solid Stand, Terra-Guard, Turbo-Chisel, Turbo-Chopper, Turbo-Max, Turbo-Till, Ultra-Till, Whirlfilter, and Yield-Pro.

Brand and Product Names that appear and are owned by others are trademarks of their respective owners.

Printed in the United States of America



Important Safety Information

Look for Safety Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.



Be Aware of Signal Words

Signal words designate a degree or level of hazard seriousness.

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



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



Prepare for Emergencies

- ▲ *Be prepared if a fire starts*
- ▲ *Keep a first aid kit and fire extinguisher handy.*
- ▲ *Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.*



Be Familiar with Safety Decals

- ▲ *Thoroughly read and understand "Safety Decals" starting on page 6 of the 411-332M Operator Manual.*
- ▲ *Read all instructions noted on the decals.*
- ▲ *Keep decals clean. Replace damaged, faded and illegible decals.*



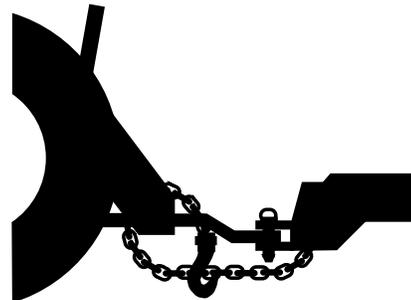
Wear Protective Equipment

- ▲ *Wear protective clothing and equipment.*
- ▲ *Wear clothing and equipment appropriate for the job. Avoid loose-fitting clothing.*
- ▲ *Because prolonged exposure to loud noise can cause hearing impairment or hearing loss, wear suitable hearing protection such as earmuffs or earplugs.*
- ▲ *Because operating equipment safely requires your full attention, avoid wearing entertainment headphones while assembly or operating machinery.*



Use A Safety Chain

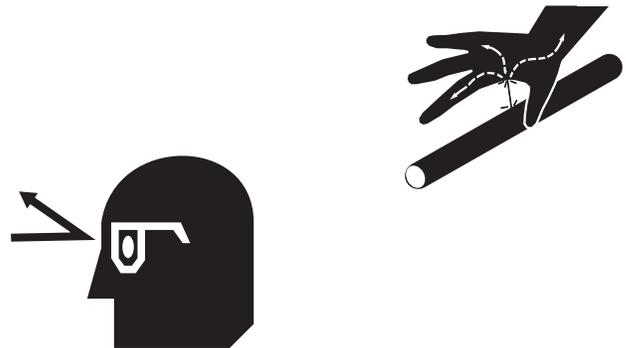
- ▲ *Use a safety chain to help control drawn machinery should it separate from tractor draw-bar.*
- ▲ *Use a chain with a strength rating equal to or greater than the gross weight of towed machinery.*
- ▲ *Attach chain to tractor draw-bar support or other specified anchor location. Allow only enough slack in chain to permit turning.*
- ▲ *Replace chain if any links or end fittings are broken, stretched or damaged.*
- ▲ *Do not use safety chain for towing.*



Avoid High Pressure Fluids

Escaping fluid under pressure can penetrate the skin, causing serious injury.

- ▲ *Avoid the hazard by relieving pressure before disconnecting hydraulic lines.*
- ▲ *Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.*
- ▲ *Wear protective gloves and safety glasses or goggles when working with hydraulic systems.*
- ▲ *If an accident occurs, seek immediate medical assistance from a physician familiar with this type of injury.*



Minimize Radiation Exposure

The radar is an intentional radiator of RF energy. Although its radiated energy level is far below the limits set by EN 61010-1:1993 A2:1995-Chapter 12.4, it is advisable not to look directly into the face of the unit.

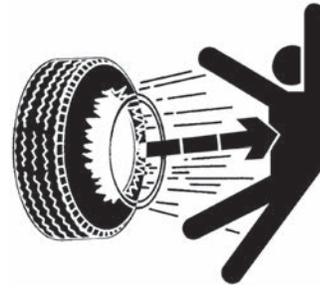
The radar must radiate toward the ground and at least 20 cm (8 inches) away from a human during use to comply with the RF human exposure limits as called out in FCC 47 CFR Sec.2.1091. **DO NOT RE-MOUNT OR USE THE RADAR IN A MANNER INCONSISTENT WITH ITS DEFINED USE.**



Tire Safety

Tire changing can be dangerous and should be performed by trained personnel using correct tools and equipment.

- ▲ When inflating tires, use a clip-on chuck and extension hose long enough for you to stand to one side—not in front of or over tire assembly. Use a safety cage if available.
- ▲ When removing and installing wheels, use wheel-handling equipment adequate for weight involved.



Use Safety Lights and Devices

Slow-moving tractors and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.

- ▲ Use flashing warning lights and turn signals whenever driving on public roads.



Use lights and devices provided with implement

Keep Riders Off Machinery

Riders obstruct the operator's view. Riders could be struck by foreign objects or thrown from the machine.

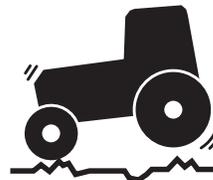
- ▲ Never allow children to operate equipment.
- ▲ Keep all bystanders away from machine during operation.



Transport Machinery Safely

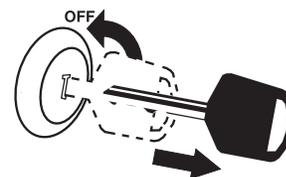
Maximum transport speed for implement is 30 kph or 20 mph. Some rough terrains require a slower speed. Sudden braking can cause a towed load to swerve and upset.

- ▲ Do not exceed 30 kph or 20 mph. Never travel at a speed which does not allow adequate control of steering and stopping. Reduce speed if towed load is not equipped with brakes.
- ▲ Comply with state and local laws.
- ▲ Do not tow an implement that, when fully loaded, weighs more than 1.5 times the weight of towing vehicle.
- ▲ Carry reflectors or flags to mark drill in case of breakdown on the road.
- ▲ Keep clear of overhead power lines and other obstructions when transporting. Refer to transport dimensions under "Specifications and Capacities" in Operator manual.
- ▲ Do not fold or unfold the drill while the tractor is moving



Shutdown and Storage

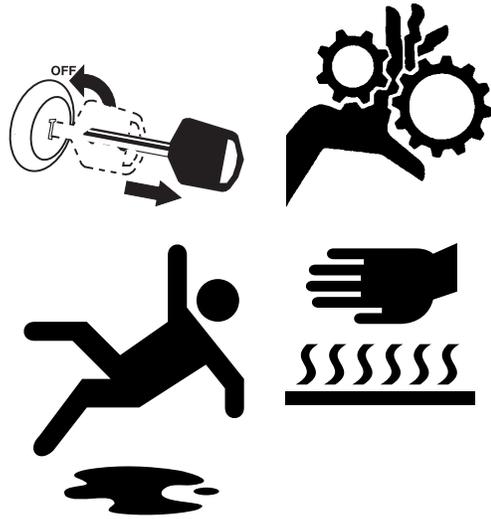
- ▲ Unfold and lower drill.
- ▲ Block tires or use optional drill parking brakes.
- ▲ Detach and store drill in an area where children normally do not play.



Practice Safe Maintenance

Understand procedure before doing work. Use proper tools and equipment. Refer to this manual. For brake work, see specific safety information in the Operator manual.

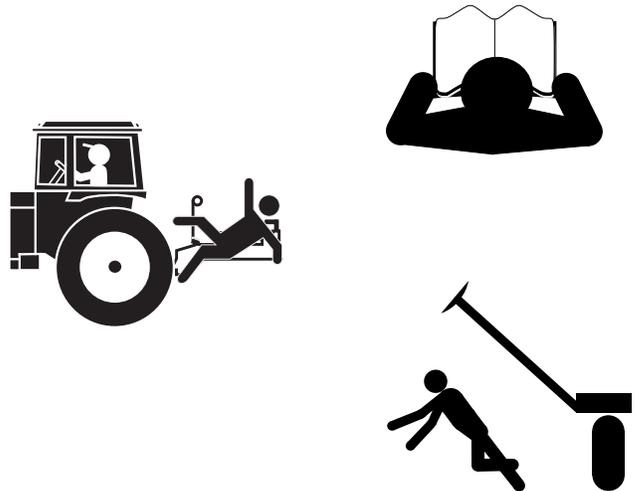
- ▲ Work in a clean, dry area.
- ▲ Unfold and lower the drill, put tractor in park, turn off engine, and remove key before performing maintenance.
- ▲ Make sure all moving parts have stopped and all system pressure is relieved.
- ▲ Allow drill to cool completely.
- ▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems.
- ▲ Welding: Disconnect battery ground. Protect hydraulic lines. Avoid fumes from heated paint.
- ▲ Inspect all parts. Make sure parts are in good condition and installed properly.
- ▲ Remove buildup of grease, oil or debris.
- ▲ Remove all tools and unused parts from drill before operation.



Safety At All Times

Thoroughly read and understand the instructions in this manual before operation. Read all instructions noted on the safety decals.

- ▲ Be familiar with all drill functions.
- ▲ Operate machinery from the driver's seat only.
- ▲ Do not leave drill unattended with tractor engine running.
- ▲ Do not stand between the tractor and drill during hitching.
- ▲ Keep hands, feet and clothing away from power-driven parts.
- ▲ Wear snug-fitting clothing to avoid entanglement with moving parts.
- ▲ Watch out for wires, trees, etc., when folding and raising drill. Make sure all persons are clear of working area.





Introduction

Great Plains welcomes you to its growing family of new product owners. The Full Product Name (3P3025AH) has been designed with care and built by skilled workers using quality materials. Proper setup, maintenance, and safe operating practices will help you get years of satisfactory use from the machine.

Models Covered

30-foot single-row models

Product #2315	23-row, 15 inch spacing
Product #1820	18-row, 20 inch spacing
Product #1622	16-row, 22 inch spacing
Product #1230	12-row, 30 inch spacing
Product #0836	8-row, 36 inch spacing
Product #0838	8-row, 38 inch spacing
Product #0840	8-row, 40 inch spacing
Product #1270	12 row, 70 cm spacing

30-foot twin row models

Product #2430	24 row, 30 in. pair spacing
Product #1636	16 row, 36 in. pair spacing
Product #1638	16 row, 38 in. pair spacing
Product #1640	16 row, 40 in. pair spacing

Description of Unit

The 3P3025AH drill is a 3-point mounted seeding implement for use in conventional and minimum tillage conditions. The three section stack-folding tool bar has a working width of 30 feet (9.14 m).

Planters with ground drive use A DICKEY-john PM400 seed monitor. Planters with hydraulic drive use a DICKEY-john AI-120 monitor.

Row units are equipped with 25 Series double-disc openers, side depth wheels, Air-Pro seed meters, with seed gravity fed by 1.6 bushel (56 liter) or 3.0 bushel (105 liter) hoppers. Frame options include lift assist, wing flex, and wing lock. Row options available include row cleaners, coulters, seed firmers, scrapers, press wheels and drags.



Figure 1
3P3025AH Planter

38342

Document Family

411-332Q	Pre-delivery Manual (this document)
411-332M	Operator Manual
411-099B	Seed Rate Manual
411-332P	Parts Manual
11001-1372	DICKEY-john PM400 Operator's Manual
401-909M	DICKEY-john Quick AI-120 Reference Guide
110011606	DICKEY-john AI-120 VT Manual

Intended Usage

Use the 3P3025AH Drill to seed production agriculture crops only. Do not modify the planter for use with attachments other than Great Plains options and accessories specified for use with the Product.

Using This Manual

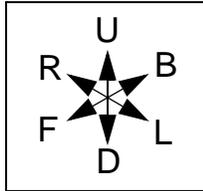
This manual will familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.

The information in this manual is current at printing. Some parts may change to assure top performance.

Definitions

The following terms are used throughout this manual.

Right-hand and left-hand as used in this manual are determined by facing the direction the machine will travel while in use unless otherwise stated. An orientation rose in some line art illustrations shows the directions of: Up, Back, Left, Down, Front, Right.



NOTICE

Outcome to Avoid:

A crucial point of information related to the current topic. Read and follow the directions to remain safe, avoid serious damage to equipment and ensure desired field results.

 Useful information related to the preceding topic.

Owner Assistance

If you need customer service or repair parts, contact a Great Plains dealer. They have trained personnel, repair parts and equipment specially designed for Great Plains products.

Refer to Figure 2

Your machine's parts were specially designed and should only be replaced with Great Plains parts. Always use the serial and model number when ordering parts from your Great Plains dealer. The serial-number plate is located in front, above the left-hand lower 3-point hitch.

Record your Drill model and serial number here for quick reference:

Model Number: _____

Serial Number: _____

Further Assistance

Great Plains Manufacturing, Inc. wants you to be satisfied with your new product. If for any reason you do not understand any part of this manual or are otherwise dissatisfied, please contact:

Great Plains Service Department
 1525 E. North St.
 P.O. Box 5060
 Salina, KS 67402-5060

Or go to www.greatplainsag.com and follow the contact information at the bottom of your screen for our service department.

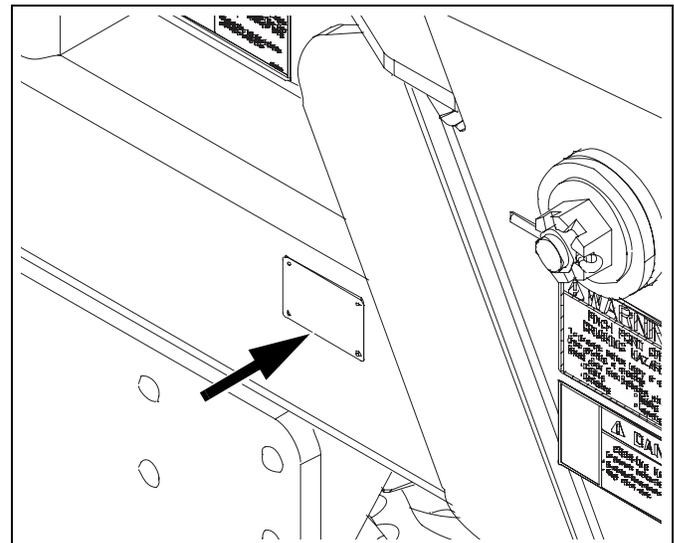


Figure 2
Serial Number Plate

38339



The following headings are step-by-step instructions for assembling the 3P3025AH Planter. Begin with “Tools Required” and “Pre-Assembly Checklist” to make sure you have all necessary parts and equipment. Follow each step to make the job as quick and safe as possible and produce a properly working machine.

The 3P3025AH Planter is shipped via flat bed truck. It is the dealer’s responsibility to unload the new machine.

Pre-Assembly Checklist

1. Before assembling, read and understand “Important Safety Information,” page 1.
2. Have at least two people on hand while assembling.
3. Make sure assembly area is solid, level, and free of obstructions (preferably an open concrete area).
4. Make sure that after unloading there is room enough to connect a tractor to the planter and pull the planter away.
5. Have all major components.
6. Have all fasteners and pins that were shipped with 3P3025AH Planter.

NOTICE

If a pre-assembled part or fastener is temporarily removed, remember where it goes. Keep the parts separated.

7. Have a copy of the parts manual on hand. If unsure of proper placement or use of any part or fastener, refer to the parts manual.
8. Check that all working parts are moving freely, bolts are tight, and cotter pins are spread.
9. Check for proper tension and alignment on all drive chains.
10. Check that all safety decals and reflectors are located correctly and legible. Replace if improperly located or damaged. See “Safety Decals” in the operator’s manual.
11. Inflate tires to recommended pressure as listed on the “Tire and Wheel Information,” page 20.
12. Tighten wheel bolts as specified in “Torque Values Chart.” page 19.

Tools Required

- General hand tools
- Unloading the planter with one forklift.
Use a 3-point hitch adapter that fits the planter and the forklift. The capacity of the forklift must be 7257 kg. (16 000 lb) or greater.
- Unloading the planter using three forklifts.
The total capacity of the forklifts must be 7257 kg. (16 000 lb) or greater.

The forklift used at the front of the planter must have a capacity of 4310 kg (9500 lb) or greater.

The two forklifts used at the rear of the planter must have a capacity of 1474 kg (3250 lb) each.

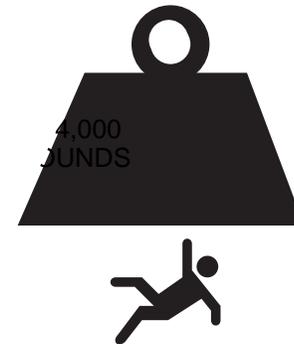
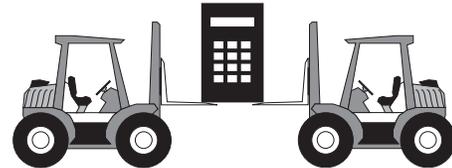


Pre-Delivery

Plan the Unload

Unloading the planter can be a safe, smooth operation if it is properly planned in advance.

- ▲ *Scope the lift equipment and team size required.*
- ▲ *Make sure there is room after lowering the planter to connect a tractor to the planter.*
- ▲ *If the planter does not have lift assist, install the gauge wheels on the front of the planter before unloading.*
- ▲ *If the planter has lift assist, install the rear gauge wheels after the planter is unloaded.*
- ▲ *Review the steps with all lift team members.*
- ▲ *For multiple lifters, gather lifters and practice simultaneous lift. Learn control operations for equal lift rates.*
- ▲ *Designate an observer to be lift leader.*
- ▲ *Have an agreed signalling or command for simultaneous halting of the lift if any team member detects a problem.*
- ▲ *Release any straps or chains securing the planter to the trailer bed.*
- ▲ *Lift the product and move the trailer, not the drill.*



Lifting Equipment

NOTICE

If the planter does not have lift assist, install the gauge wheels on the front of the planter before unloading the planter.

If the planter has lift assist, do not install the gauge wheels on the rear of the planter until the planter is removed from the trailer.

Unloading with 3-Point Hitch Lifting Adapter

Attach the forklift 3-point adapter to the 3-point hitch points on the planter. The forklift must be rated for 7257 kg (16 000 lb) or higher.

Unloading with Fork Lifts

Use three forklifts with a combined capacity of 7257 kg (16 000 lb) or higher.

Do not use less than three forklifts. There is one lift point on the front and two lift points on the rear.

Capacity of front forklift: 4310 kg (9500 lb) or greater.

Capacity of two rear forklifts combined: 2948 kg (6500 lb) or greater. Minimum of 1474 kg (3250 lb) each.

When using multiple forklifts, do not assume that each lifter has an equal amount of the load. Plan excess capacity. Monitor load indicators and overload indications or alarms.

Location Requirements

Until unloaded, the planter cannot be moved using a tractor. The mainframe needs to be unloaded directly above the spot where final assembly takes place.

This location needs to be:

- solid, level ground or pavement - the parking stand loads can approach 100 psi
- there must be adequate space to pull the trailer out from under the lifted mainframe, without turns,
- there must be adequate space at the front and rear of the planter to easily maneuver forklifts
- there must be adequate space in front of the drill to attach a tractor and move forward for delivery.

Mark the parking location with traffic cones or pavement markers.

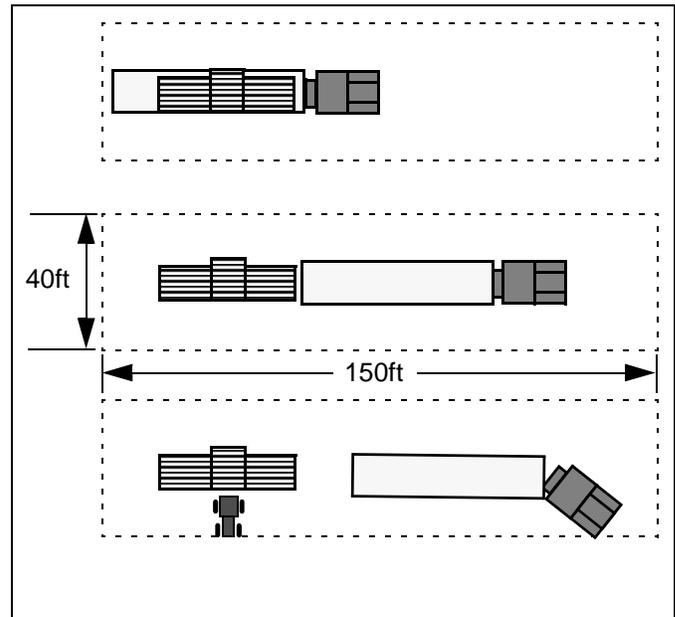


Figure 3
Suggested Unload Clearances

Front Gauge Wheel Installation

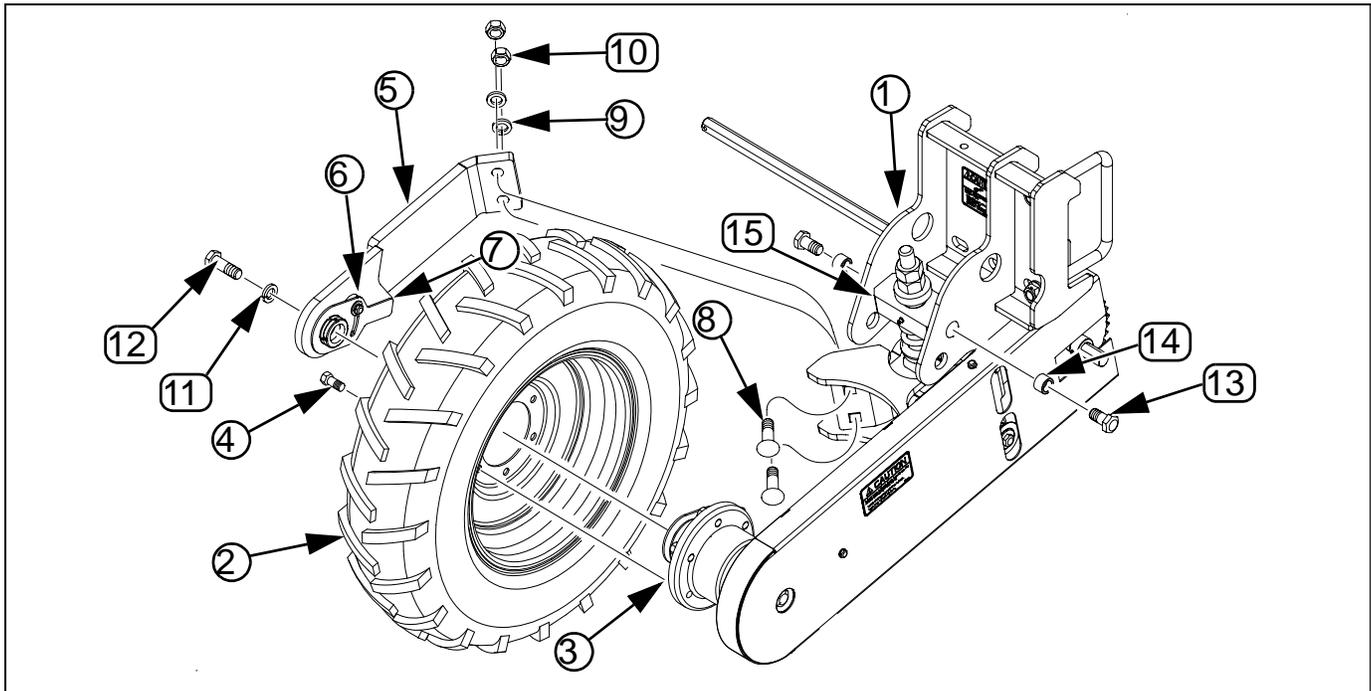


Figure 4
Front Gauge Wheel Installation

38744

NOTICE

If the planter does not have rear lift assist, the gauge wheels are mounted on the front of the planter. Install the gauge wheels on the planter before unloading the planter from the trailer.

Before installing the gauge wheel assemblies, check the area above the mounting weldment ① for a gullwing switch. Refer to Figure 4.

- If the planter has a gullwing switch in this location, remove the mounting hardware from the gullwing switch.
- Set the gullwing switch aside to prevent damage during installation of the gauge wheel assembly.
- After the planter is on the ground, install and adjust the gullwing switch for the gauge wheel. See **“Gullwing Switch Adjustment Without Lift Assist”** on page 15.

Refer to Figure 4

- Install the wheel ② on the hub ③.
- Install the wheel bolts ④.
- On the removable arm ⑤ loosen, but do not remove, the cap screw ⑥ in the spindle nut lock wrench ⑦.
- Raise the wheel to put the removable arm in the mounting position.
- Loosely install the two RHSN bolts ⑧. Install the two lock washers ⑨ and then the two nuts ⑩ on each RHSN bolt.
- Install the lock washer ⑪ and the cap screw ⑫ in the end of the spindle.
- Install the spindle nut lock wrench on the lock nuts on the spindle.
- Tighten the cap screw in the spindle nut lock wrench. Tighten the RHSN bolts in the removable arm.
- Remove the two cap screws ⑬ and sleeves ⑭ from the sides of the adjustment linkage ⑮.
- Align the adjustment linkage with the mounting holes in the wheel mounting weldment. Install the sleeves and the cap screws. Tighten the cap screws.
- After the planter is on the ground and connected to a tractor, adjust the gullwing switch for the gauge wheels. See **“Gullwing Switch Adjustment Without Lift Assist”** on page 15.

Raising the Drill

Wings: Do Not Lift with Hoist or Forklift

Refer to Figure 5

Lift only by the center section.

⚠ DANGER

Lift Failure Hazard:

Do not lift on the wings outboard of the lock-down pins. There is significant risk of hinge failure and lift collapse, with possible serious injury or death, and major damage to both drill and lift equipment.

The folding/stacking wings of the product must not be used for lifting. Although they are shipped in the pinned-down configuration, the hinge/arm system is designed only to carry the weight of the wings, and not the center section.

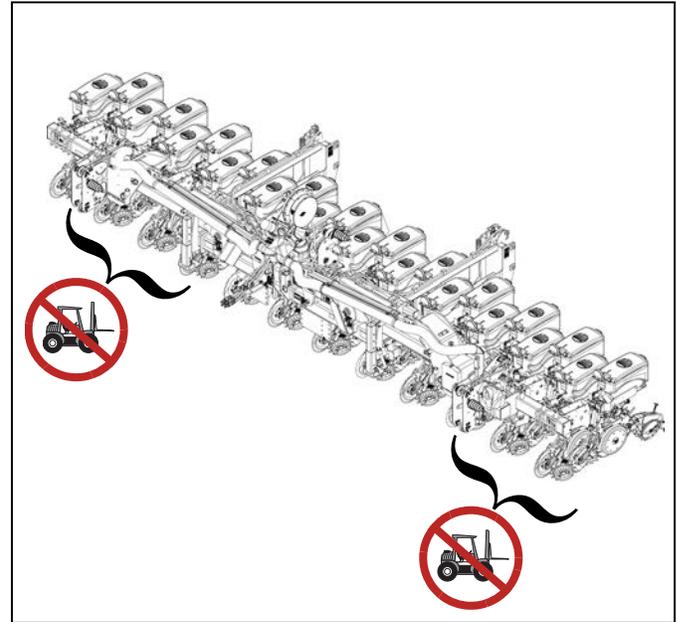


Figure 5
No-Lift/No-Hoist Areas

38342C

3-Point Hitch Lifting Adapter

Refer to Figure 6

Attach the forklift 3-point adapter to the 3-point hitch points ① on the planter.

⚠ DANGER

Do not use a forklift on the 3-point hitch points without using a 3-point adapter.

See "Unloading" on page 13.

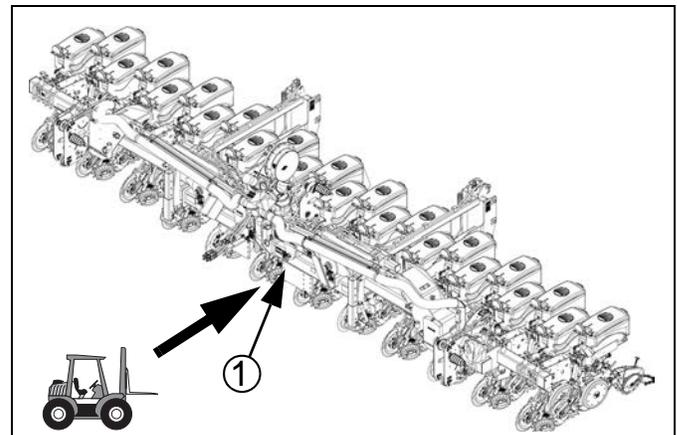


Figure 6
3-Point Hitch Adapter

38342C

Three Fork Lifts

Refer to Figure 7

NOTICE

If the planter has rear assist lift, make sure the rear gauge wheels and linkage have not been installed.

Use three forklifts with a combined capacity of 7257 kg (16 000 lb) or higher

Do not use less than 3 forklifts. There is one lift point on the front and two lift points on the rear.

Capacity of front forklift: 4310 kg (9500 lb) or greater.

Capacity of two rear forklifts combined: 2948 kg (6500 lb) or greater. Minimum of 1474 kg (3250 lb) each.

When using multiple forklifts, do not assume that each lifter has an equal amount of the load. Plan excess capacity. Monitor load indicators and overload indications or alarms.

Position the fork lift with the highest capacity at the center of the frame front. Lift at the center frame side tubes.

Position the other two fork lifts to support the lift assist frames.

NOTICE

Unbalanced Load Risk:

Two observers are needed, one for front-back level, and the other for side-to-side.

The observers need to pay close attention to drill level, and signal each lift operator how to compensate if imbalance is detected.

See “**Unloading**” on page 13.

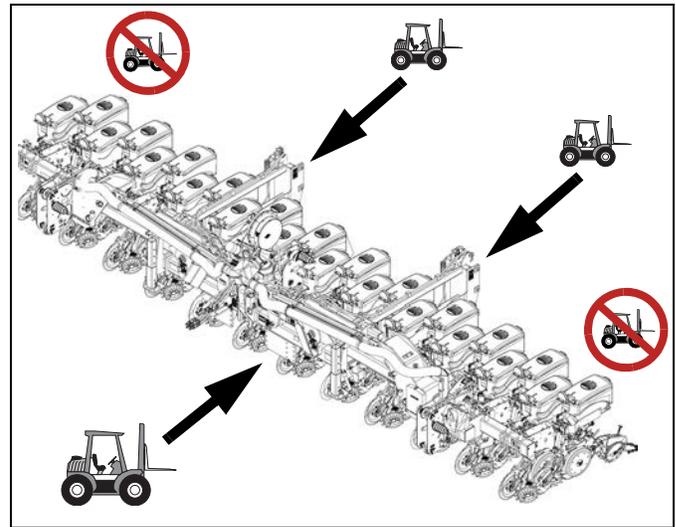


Figure 7
Three Forklifts

38342C

Unloading

Have the driver spot the truck as marked during
See “**Plan the Unload**” on page 8.

Unload Smaller Items First

NOTICE

If the planter does not have rear lift assist, make sure the front gauge wheels are installed on the planter.

Unloading the planter is a potentially dangerous operation.

Reduce risk and complication by first unloading any miscellaneous crates.

Place these components well out of the maneuvering area needed for unloading the planter.

Unload The Planter

1. Double-check that all chains and tie-down straps have been released and stowed.
2. If the planter does not have rear lift assist, make sure the front gauge wheels are installed on the planter.
3. Make sure that all team members are fully briefed and ready.
4. Set parking brake on trailer tractor.
5. Put the lifting equipment in position. See “**Raising the Drill**” on page 11.

NOTICE

Lifter-Trailer Contact Risk:

Do not move the fork lifts or crane so far in that trailer wheels will not be able to clear them when pulling trailer out from under drill.

NOTICE

Load “Wedging” Risk:

If using multiple fork lifts, do not drive the fork lifts fully forward into the drill, unless the fork lifts are known to have precisely vertical motion. If the load moves forward while lowering, the drill will tend to push the fork lifts backward.

6. Slowly lift the drill off the trailer bed.
7. Stop lifting about 12in above the bed.
8. Have the truck driver slowly pull the trailer straight out from under the drill.
9. Making sure to keep level from front to back and side to side, slowly lower the drill to the ground.
10. Lower forks and withdraw fork lifts.

Lift Assist Wheel Installation

Refer to Figure 8

NOTICE

If the planter has rear lift assist, do not install the gauge wheels until after the planter is unloaded from the trailer.

Before installing the lift assist wheel assemblies,

- Find the extension ① on the rear of the mainframe used for mounting gullwing switch ②.
- Remove the hardware from the gullwing switch. Move the gullwing switch away from the mounting plate to prevent damage when installing the lift assist wheel assembly.
- Check the upper tube ③ of the parallel arm assemblies for a switch cam ④.
- Make sure the lift assist wheel assembly with the cam is installed to the frame extension with the gullwing switch.
- After the planter is on the ground, install and adjust the gullwing switch. See **"Gullwing Switch Adjustment With Lift Assist"** on page 16

Refer to Figure 9

- Remove the cap screws ①, flat washers ②, lock washers ③, and nuts ④ stored in the pivot tubes ⑤ in the loose ends of the parallel arms ⑥.
- Remove the pivot tubes from the ends of the parallel arms. Make sure the bushings stay in the parallel arms.
- Use a hoist to lift the lift assist wheel assembly into position. Make sure the rod end of the lift cylinder is out of the way.
- Align the lower parallel arm with the lower holes in the lift assist extension weldment.
- Install the pivot tube.
- Install the bolt, flat washer, lock washer, and the nut.
- Repeat the procedure for the upper parallel arm.
- Remove the hairpin ⑦ and the clevis pin ⑧ from the clevis at the rod end of the lift cylinder. Make sure the bushings are still in the clevis.
- Install the cylinder clevis on the mounting ear in the caster wheel assembly. Install the clevis pin and the hairpin.
- After the planter is connected to a tractor, install and adjust the gullwing switch. See **"Gullwing Switch Adjustment With Lift Assist"** on page 16

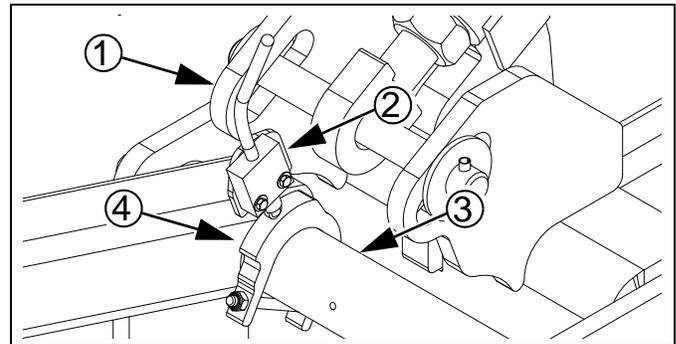


Figure 8
Gullwing Switch and Switch Cam

38481

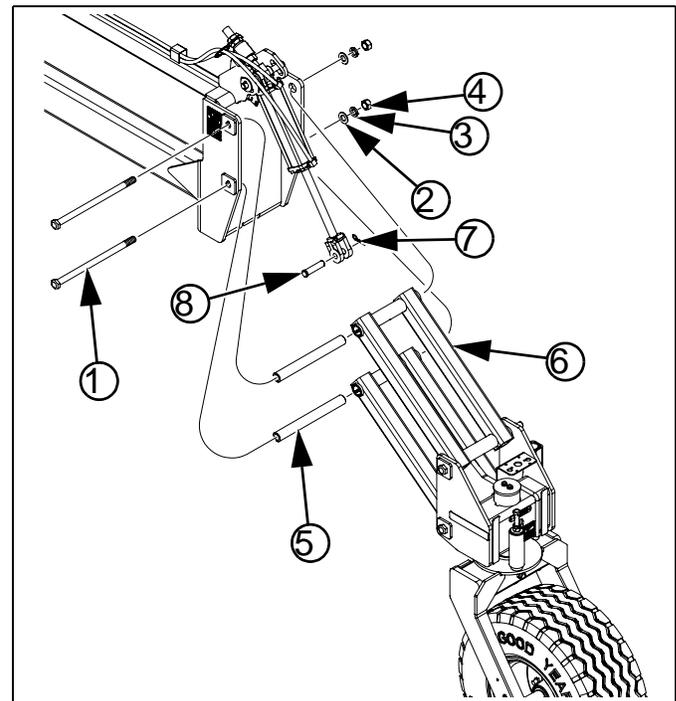


Figure 9
Lift Assist Wheel Installation

38743

Gullwing Switch Adjustment Without Lift Assist

Refer to Figure 10

1. Hitch the planter to a tractor.
2. Put the planter in the field position.
3. Raise the planter.
4. Apply the tractor parking brake and stop the engine. Take the key with you to prevent unauthorized starting.
5. Loosen the cap screws ① that hold the gullwing switch ②.
6. Raise the gullwing switch all the way.
7. Slowly lower the gullwing switch until roller ③ contacts the plate ④.
8. Continue to lower the gullwing switch until you hear the internal contacts move. Approximately 1/8 inch.
9. Hold the gullwing switch in position and carefully tighten the cap screws.

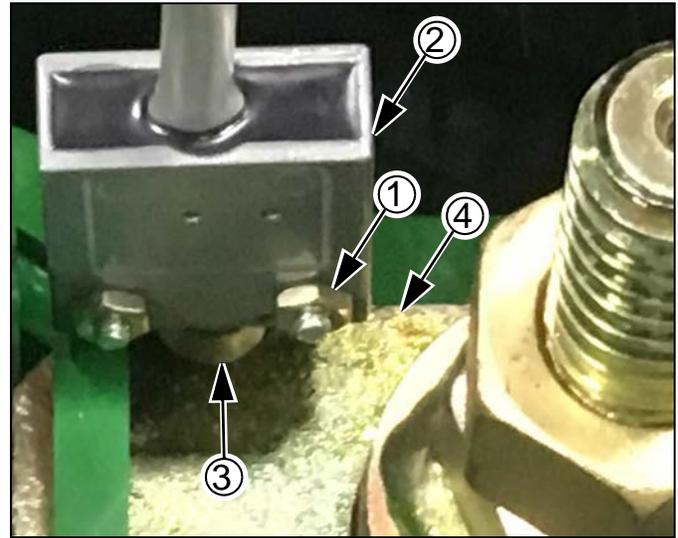


Figure 10
Gullwing Switch at Gauge Wheel

38559

Gullwing Switch Adjustment With Lift Assist

Refer to Figure 11

1. Hitch the planter to a tractor.
2. Lower the lift assist to the point where you want the wings to start raising. The row units should be just off the ground.
3. Apply the tractor parking brake and stop the engine. Take the key with you to prevent unauthorized starting.
4. Loosen the bolt ① in the switch cam ②.
5. Rotate the switch cam until the roller ③ on the gullwing switch ④ is on the high area of the switch cam.
6. Tighten the bolt in the switch cam.
7. Loosen the bolts in the gullwing switch.
8. Raise the gullwing switch. Slowly lower the lift assist to the point where you hear the internal contacts move. Hold gullwing switch and carefully tighten the bolts.

Refer to Figure 12

9. Loosen the bolt ① in the switch cam ②.
10. Rotate the top of the switch cam rearward until the roller is just at the bottom of the ramp ③ leading up to the high area on the switch cam.
11. Tighten the bolt in the switch cam.
12. Before checking the adjustment, put an alignment marks on the switch cam and the shaft ④. If adjustment is necessary, this will allow you to see how far you have rotated the cam.
13. Test the operation of the gullwing switch.

If the wings move too early, the top of the switch cam must be rotated a small amount toward the rear.

If the wings move too late, the top of the switch cam must be rotated a small amount toward the front.

14. Apply the tractor parking brake and stop the engine. Take the key with you to prevent unauthorized starting.
15. Loosen the clamp bolt for the switch cam.
16. Carefully rotate the switch cam as necessary.
17. Tighten the clamp bolts.
18. Test the operation of the gullwing switch again and adjust the switch cam as necessary.
- 19.

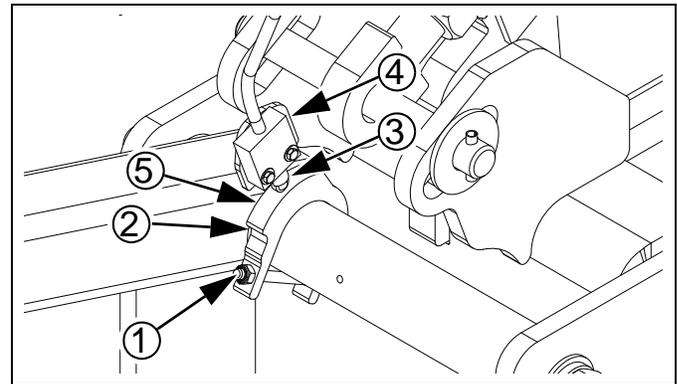


Figure 11
Gullwing Switch on High Area of
Switch Cam

38481

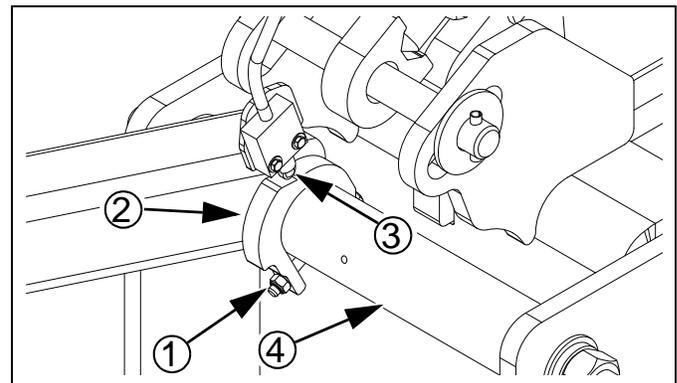


Figure 12
Gullwing Switch at Beginning of
Ramp on Switch Cam

23481

Seeding Switch, Planters With Hydraulic Drive

Planters Without Rear Lift Assist

Refer to Figure 13

The seeding switch ① signals the seed monitor when the drill is lowered for planting. If the drill has hydraulic drive for the row units, the seeding switch also activates the hydraulic drive.

Great Plains recommends adjusting the seeding switch for your exact field conditions and planting depth. Check the seeding switch seasonally thereafter, or when planting conditions change. Also perform this adjustment if the seeding switch is replaced or dislodged.

The switch bracket ② uses a magnet ③ for mounting. The seeding switch must be mounted where the toggle arm ④ is actuated by the lift arms on the tractor.

When installing, adjusting, or replacing the seeding switch, make sure the cable exit ⑤ is at the bottom. If the cable exit is at the top, moisture will accumulate in the seeding switch, causing failure.

1. Put the planter in the field position.
2. Lower the drill to the height at which seed delivery is to begin.
3. Apply the tractor parking brake, stop the engine, and take the key with you.
4. Find a location where the switch bracket can be mounted with the magnet. The toggle arm must be actuated by the lift arms on the tractor while planting. the toggle switch must be free of the lift arms when the planter is raised by the 3-point arms.
5. Slide the switch bracket to move seeding switch up or down. Adjust switch bracket so toggle arm just makes contact with tractor 3-point lift arms.
6. Move the switch bracket down $\frac{1}{4}$ inch (6.4 mm).

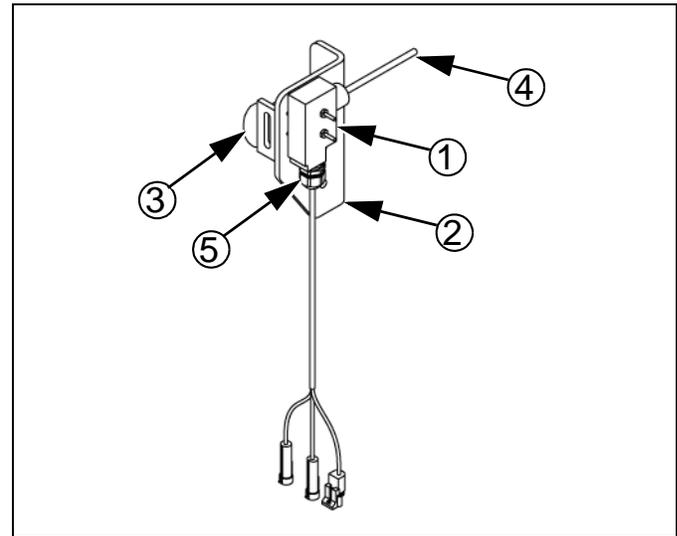


Figure 13
Seeding Switch

68092

Planters With Rear Lift Assist

Refer to Figure 14

The seeding switch ① signals the seed monitor (and activates the hydraulic drive), when the drill is lowered for planting.

Although factory-preset for typical planting conditions, Great Plains recommends adjusting the seeding switch for your exact field conditions and planting depth. Check the seeding switch seasonally thereafter, or when planting conditions change. Also perform this adjustment if the seeding switch is replaced or dislodged.

The mounting bracket ② for the seeding switch is mounted to a lift assist mounting bracket using a magnet ③. One of the lift assist arms actuates the toggle arm ④ in the seeding switch.

 When adjusting or replacing the seeding switch, make sure the cable exit ⑤ is at the bottom. If the cable is at the top, moisture will accumulate in the seeding switch, causing failure.

Refer to Figure 15

1. Lower the drill to the height at which seed delivery is to begin.
2. Apply the tractor parking brake, stop the engine, and take the key with you.
3. Slide the switch bracket ① to move the seeding switch ② up or down. Adjust switch bracket so switch toggle arm ③ just makes contact with top of upper parallel arm ④.
4. Move the switch bracket down $\frac{1}{4}$ inch (6.4 mm).

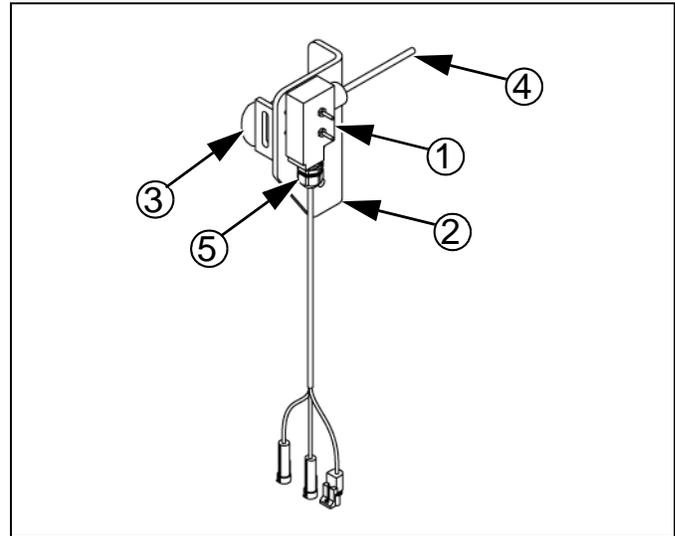


Figure 14
Seeding Switch

68092

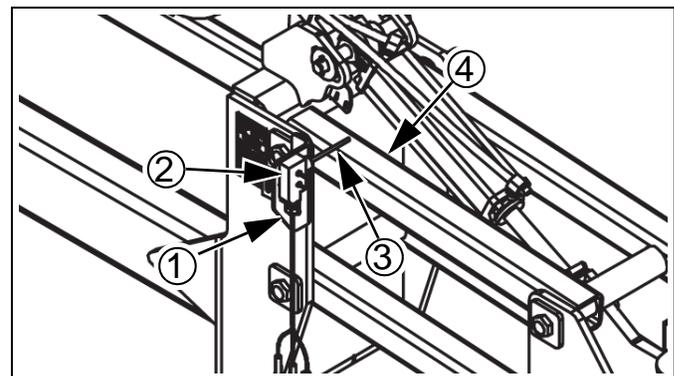


Figure 15
Seeding Switch Mounting

68102

Torque Values Chart

Bolt Size in-tpi ^a	Bolt Head Identification						Bolt Size mm x pitch ^c	Bolt Head Identification					
	Grade 2		Grade 5		Grade 8			Class 5.8		Class 8.8		Class 10.9	
	N-m ^b	ft-lb ^d	N-m	ft-lb	N-m	ft-lb		N-m	ft-lb	N-m	ft-lb	N-m	ft-lb
1/4-20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4-28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16-18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16-24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8-16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8-24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16-14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16-20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2-13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2-20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16-12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16-18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8-11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8-18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4-10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4-16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8-9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8-14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1-8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1-12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1 1/8-7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1 1/8-12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1 1/4-7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1 1/4-12	750	555	1680	1240	2730	2010							
1 3/8-6	890	655	1990	1470	3230	2380							
1 3/8-12	1010	745	2270	1670	3680	2710							
1 1/2-6	1180	870	2640	1950	4290	3160							
1 1/2-12	1330	980	2970	2190	4820	3560							

- a. in-tpi = nominal thread diameter in inches-threads per inch
- b. N·m = newton-meters
- c. mm x pitch = nominal thread diameter in mm x thread pitch
- d. ft-lb = foot pounds

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.

25199

Tire and Wheel Information

Tire and Wheel Chart			
Wheel	Tire Size	Inflation	Hardware Torque
Gauge Wheel	7.60-15 6-Ply Lug	40 psi (275 kPa)	120 lb ft (165 N m)
Lift-Assist (Option)	380/55R-16.5 Load Rating F	80 psi (550 kPa)	80 lb ft (110 N m)

Tire Warranty Information

All tires are warranted by the original manufacturer of the tire. Tire warranty information is found in the brochures included with your Operator's and Parts Manuals or online at the manufacturer's web sites listed below. For assistance or information, contact your nearest Authorized Farm Tire Retailer.

Manufacturer Web site

Firestone www.firestoneag.com

Gleason www.gleasonwheel.com

Titan www.titan-intl.com

[Table of Contents](#)



Great Plains, Mfg.
1525 E. North St.
P.O. Box 5060
Salina, KS 67402