Sure Stand Seeder

Models SS, SSB, SSP and SSBP

8', 10' and 12'

Operators Manual

12 ft. Pick-Up
with Brome Box and
S-Tine Track Removers

10 ft. Drawbar
with Brome Box and
S-Tine Track Removers

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Chapter 1

Safety Information

Introduction

The implement described in this manual has been designed with care and built by skilled workers using quality materials and processes. Proper assembly, maintenance and safe operation will allow this implement to provide you with satisfactory use for seasons to come.

DANGER

Read this entire manual before attempting to assemble, adjust or operate this implement. Failure to comply with this warning can result in personal injury or death, damage to the implement or its components and inferior operation.

Description of Unit

The Brillion SS Series Seeder combines the features of our popular and reliable Sure Stand Seeder with additional box capacity.

Using this Manual

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

- The information in this manual is current at the time of printing. Some parts may change to assure peak performance.
- Location reference: Right and Left designations in this manual are determined by facing the direction the implement will travel during field operation, unless otherwise stated.

Owner Assistance

If customer service or repairs are needed, contact your Brillion dealer. Your implement's parts should only be replaced with Brillion parts. Have the Serial Number and complete Model Number available when ordering parts from your Brillion dealer. If items covered in this manual are not understood, contact your local Brillion Dealer.

Warranty Registration

Brillion Farm Equipment, by Landoll, shall have no warranty obligation unless each product is registered, within 10 days of retail purchase, using the Landoll Corporation Ag Products on-line registration process. Please refer to the Ag Products Policy and Procedures Manual, accessible at *www.landoll.com* for step by step instructions regarding product registration.

Enter your product information below for quick reference.

_____

MODEL NUMBER

_____

SERIAL NUMBER

_____

DATE OF PURCHASE

Refer to the ID plate as shown in Figure 1-1.

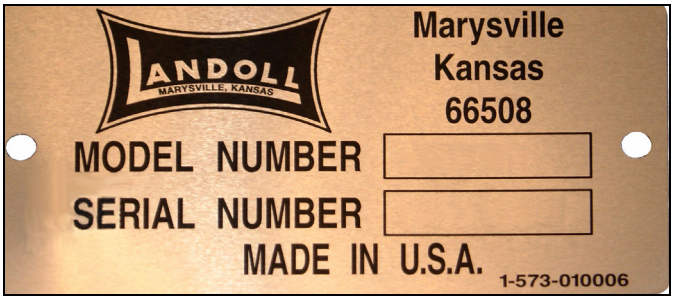

Figure 1-1: ID Plate

Federal law requires that you explain the safety and operating instructions furnished with this implement to all operators before they are allowed to operate the implement. These instructions must be repeated to the operators at the beginning of each season. Be sure to observe and follow the instructions for the safety of anyone operating or near the implement.

NOTE

Investigation has shown that nearly 1/3 of all farm accidents are caused by careless use of machinery. Insist that all people working with you or for you abide by all safety instructions.

Understanding Safety Statements

You will find various types of safety information on the following pages and on the implement decals (signs) attached to the vehicle. This section explains their meaning.

NOTICE

Special notice - read and thoroughly understand.

CAUTION

Proceed with caution. Failure to heed caution may cause injury to person or damage product.

WARNING

Proceed with caution. Failure to heed warning will cause injury to person or damage product.

DANGER

Proceed with extreme caution. Failure to heed notice will cause injury or death to person and/or damage product.

NOTE

You should read and understand the information contained in this manual and on the implement decals before you attempt to operate or maintain this equipment.

Examine safety decals and be sure you have the correct safety decals for the implement. See Safety Sign and Locations for decal locations. See Figures 1-4 and 1-5.

Order replacement decals through your Brillion dealer.

Keep these signs clean so they can be observed readily. It is important to keep these decals cleaned more frequently than the implement. Wash with soap and water or a cleaning solution as required.

Replace decals that become damaged or lost. Also, be sure that any new implement components installed during repair include decals which are assigned to them by the manufacturer.

When applying decals to the implement, be sure to clean the surface to remove any dirt or residue. Where possible, sign placement should protect the sign from abrasion, damage, or obstruction from mud, dirt, oil etc.

Keep Riders Off of Machinery

DANGER

- **Do not allow anyone to ride on tractor or machine. Riders could be struck by foreign objects or thrown from the implement.**
- **Never allow children to operate equipment.**
- **Keep bystanders away from implement during operation.**

Transporting Safety

IMPORTANT

It is the responsibility of the owner/operator to comply with all state and local laws.

When transporting the implement on a road or highway, use adequate warning symbols, reflectors, lights and slow moving vehicle sign (purchased separately) as required. Slow moving tractors and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.

Do not tow an implement that, when fully loaded, weighs more than 1.5 times the weight of the towing vehicle.

Carry reflectors or flags to mark tractor and implement in case of breakdown on the road.

Do not transport at speeds over 20 MPH under good conditions. Never travel at a speed which does not allow adequate control of steering and breaking. Reduce speed if towed load is not equipped with brakes.

Avoid sudden stops or turns because the weight of the implement may cause the operator to lose control of the tractor. Use a tractor 1.5 times heavier than the implement.

Use caution when towing behind articulated steering tractors; fast or sharp turns may cause the implement to shift sideways.

Keep clear of overhead power lines and other obstructions when transporting. Know transport height and width of your implement. Refer to transport dimensions. See Table 5-1.

Attaching, Detaching and Storage

- Do not stand between the tractor and implement when attaching or detaching implement unless both are not moving.
- Before applying pressure to the hydraulic system, be sure all connections are tight and that hydraulic lines and hoses are not damaged.
- Lower implement to ground when not in use so that the shanks are taking the load.
- Block implement so it will not roll when unhitched from the tractor.
- Relieve pressure in hydraulic lines before uncoupling hydraulic hoses from tractor.

NOTE

On most tractors relieving hydraulic pressure can be accomplished by operating valves after the engine is stopped.

Maintenance Safety

- Block the implement so it will not roll when working on or under it to prevent injury in case of hydraulic failure or inadvertent lowering by another person.
- Do not make adjustments or lubricate implement while it is in motion.
- Make sure all moving parts have stopped and all system pressure is relieved.
- Understand all maintenance procedures before doing the work. Use the proper tools and equipment. Refer to “Bolt/Nut Tightening Torques” on page 4-1 for additional information.

High Pressure Fluid Safety

Escaping fluid under pressure can be nearly invisible and have enough force to penetrate the skin causing serious injury. Use a piece of cardboard, rather than hands, to search for suspected leaks.

Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

Avoid the hazard by relieving pressure before disconnecting hydraulic lines.

NOTE

On most tractors relieving hydraulic pressure can be accomplished by operating valves after the engine is stopped. Also, the implement should be lowered to ground so that the shanks are taking the load.

Wear protective gloves and safety glasses or goggles when working with hydraulic systems.

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.

Chemical Safety

Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil and property.

Read chemical manufacture’s instructions and store or dispose of unused chemicals as specified.

Handle chemicals with care and avoid inhaling smoke from any type of chemical fire.

Store or dispose of unused chemicals as specified by the chemical manufacturer.

Prepare for Emergencies

- Keep a First Aid Kit and Fire Extinguisher handy.
- Keep emergency numbers for doctor, ambulance, hospital and fire department near the phone.

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 to allow you to stand to one side, not in front of or over the tire assembly. Use a safety cage if available.

When removing and installing wheels use wheel-handling equipment adequate for the weight involved.

Use the safety chain to help control drawn machinery should it separate from the tractor drawbar.

Safety Chain

Use a chain with a strength rating equal to or greater than the gross weight of towed machinery, which is 10,100 pounds minimum in accordance with ASAE S338.2 specifications. If two or more implements are pulled in tandem, a larger chain may be required. Chain capacity must be greater that the TOTAL weight of all towed implements.

A second chain should be used between each implement.

Attach the chain to the tractor drawbar support or specified anchor location. Allow only enough slack in the chain to permit turning. The distance from hitch pin to attachment point or intermediate support point should not exceed 9 inches. See Figure 1-2.

Implements with a 3 hole drawbar, See Figure 1-3.

Replace the chain if any links or end fittings are broken, stretched or damaged.

Do not use a safety chain for towing.

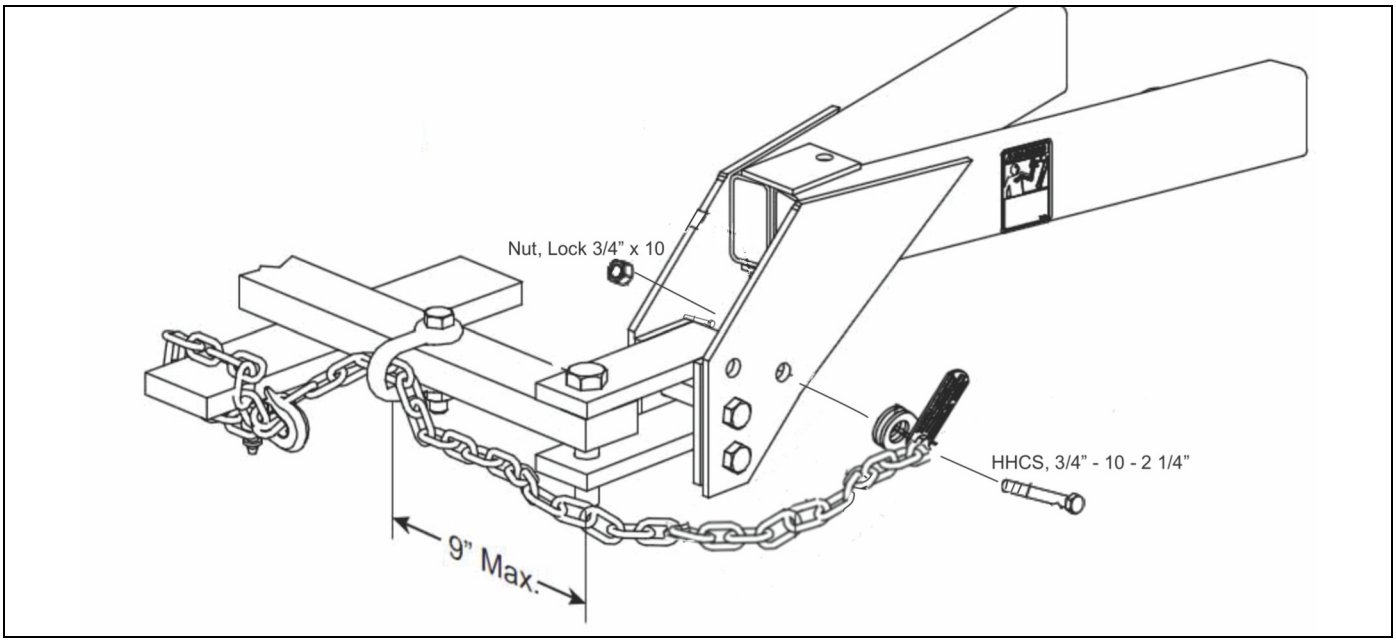

Figure 1-2: Chain Hook-up

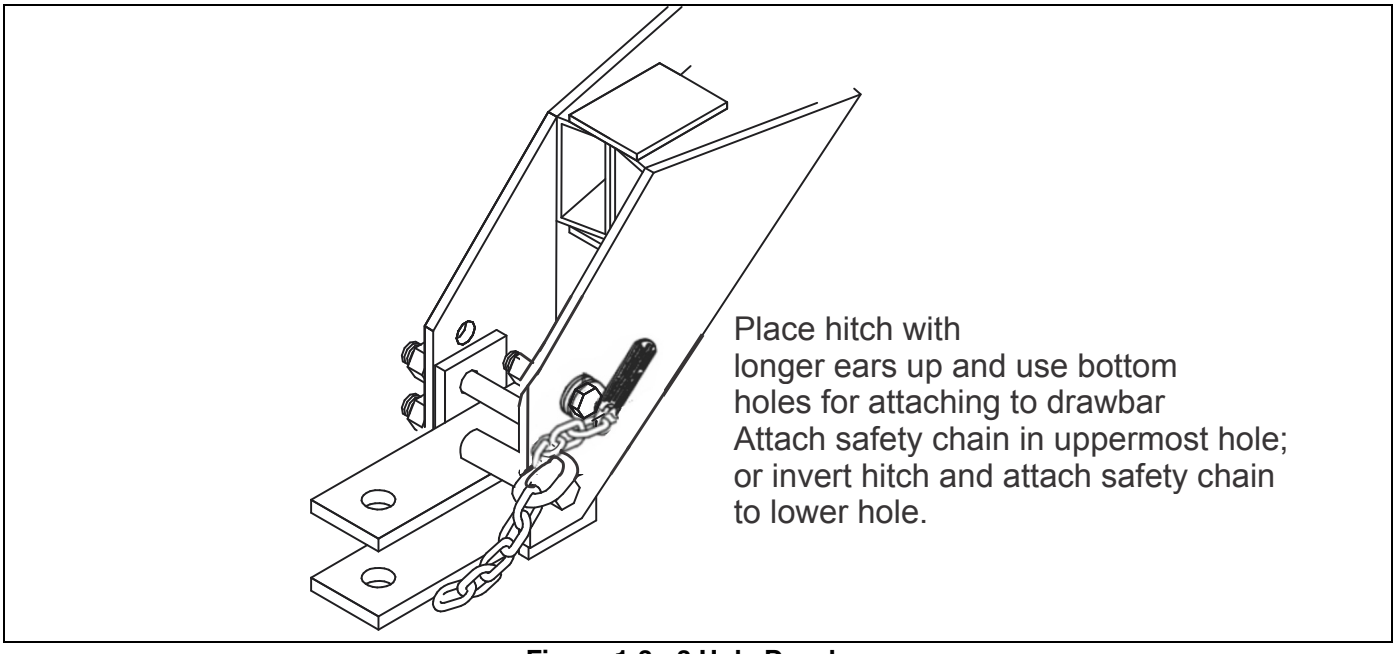

Figure 1-3: 3 Hole Drawbar

Safety Signs

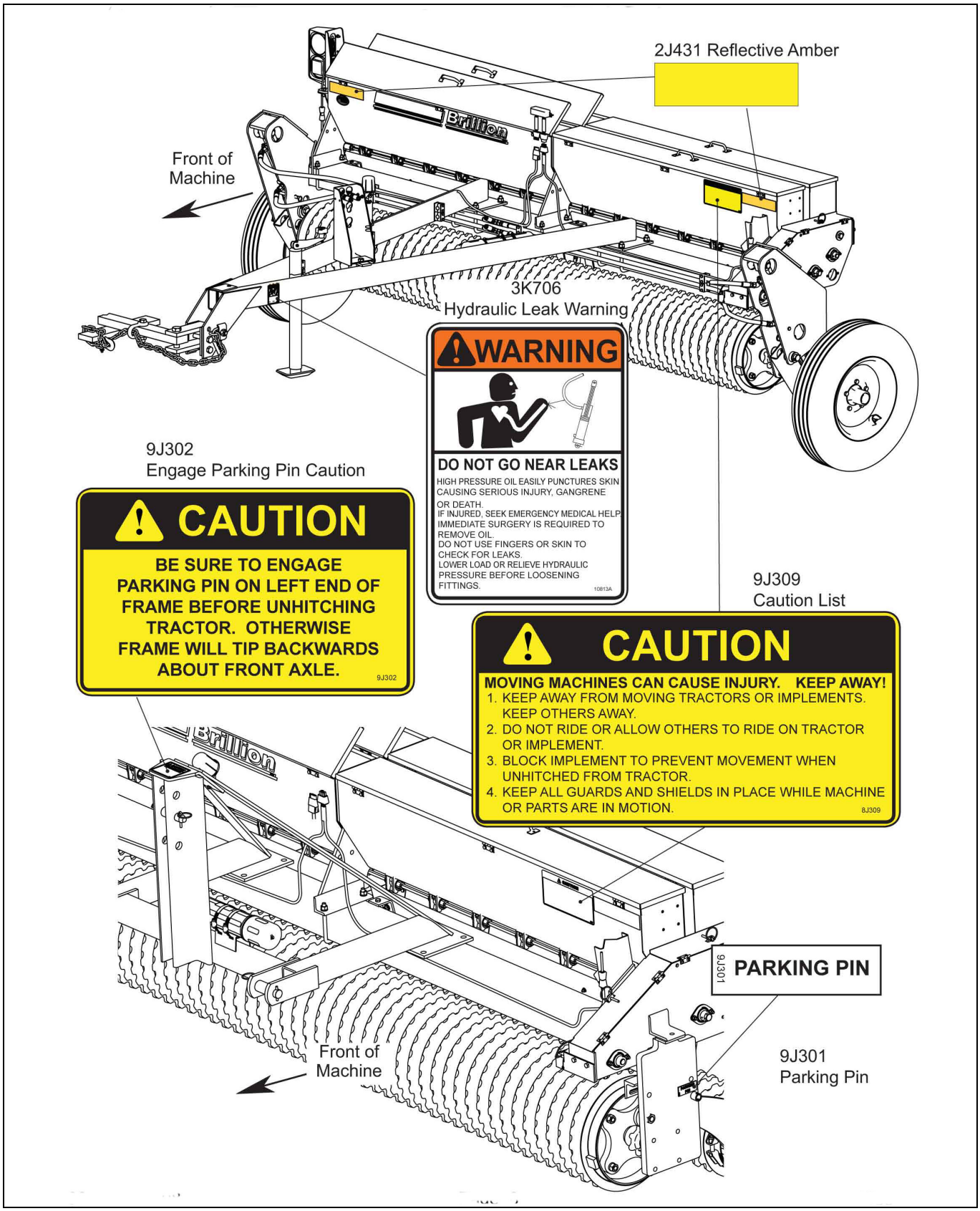

Figure 1-4: Safety Signs (1 of 2)

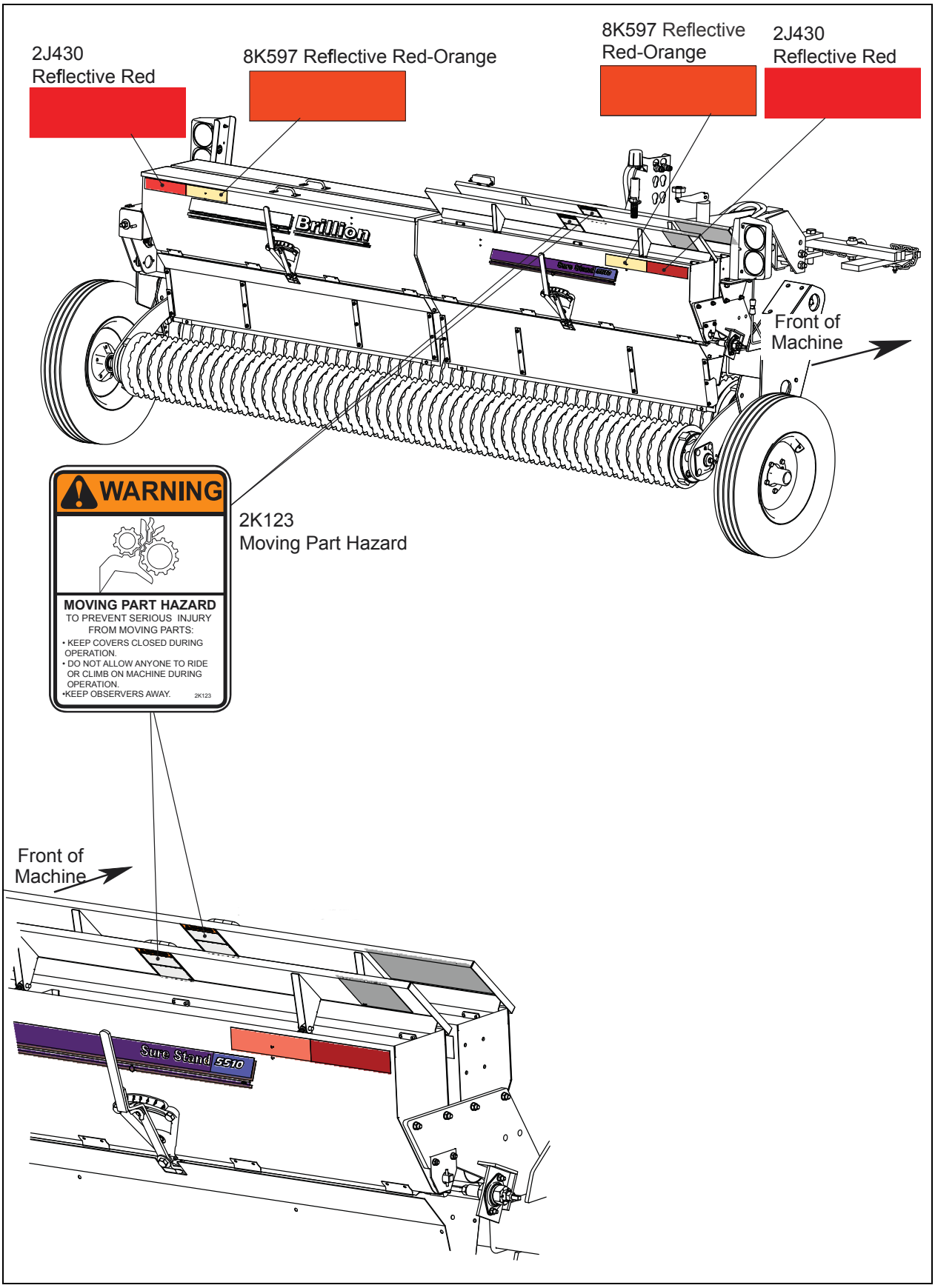

Figure 1-5: Safety Signs (2 of 2)

Chapter 2

Assembly Instructions

The intent of this chapter is to provide instructions to allow you to safely and correctly assemble your Brillion product.

⚠ CAUTION

Do not work on or under this implement unless securely blocked and supported by a hoist or tractor or by other sufficient means!

NOTE

In most of the following illustrations, the Pick Up model is shown. Pull Type seeders are assembled in the same way unless otherwise noted.

If your seeder was shipped with unattached roller assemblies, follow the procedures on page 2-1 through page 2-6.

If your rollers were assembled at the factory, go to page 2-7.

Pick Up Seeders

Step 1

Support the frame and seedbox assembly with a hoist or by similar means capable of supporting its weight without tipping.

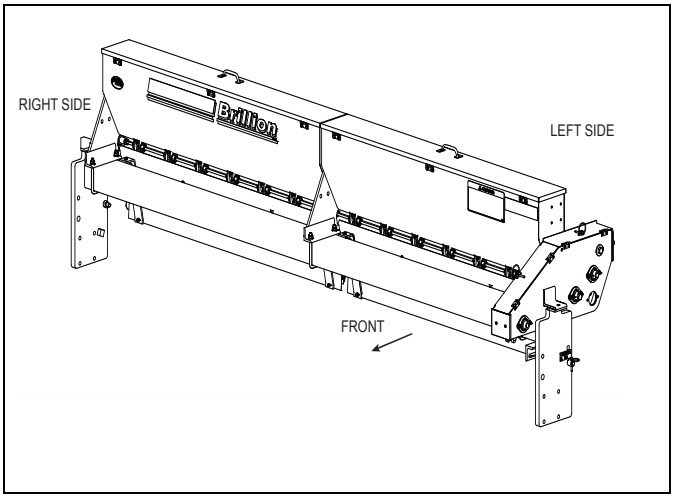

Figure 2-1: Pick Up Seeder

Step 2

Center 3 point hitch assembly on frame and fasten with 5/8” U-bolts, lockwashers and nuts.

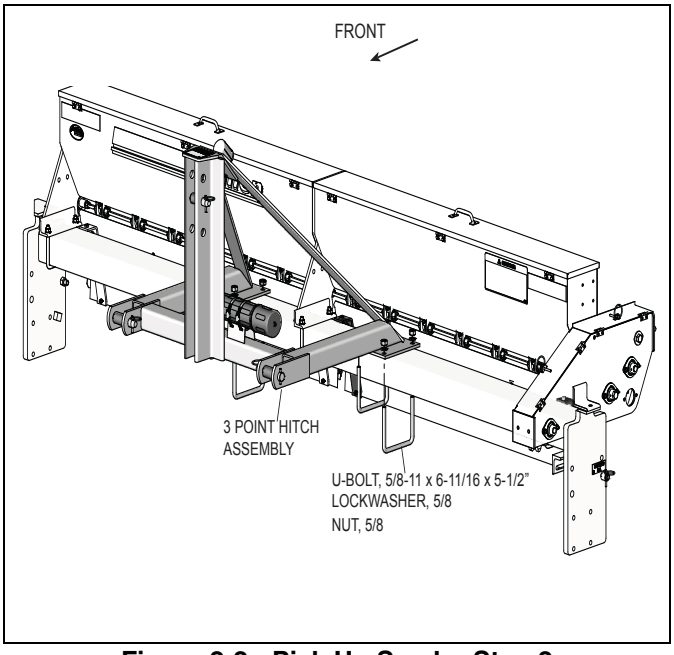

Figure 2-2: Pick Up Seeder Step 2

Pull Type Seeders

Step 1

Support the frame and seedbox assembly with a hoist or by similar means capable of supporting its weight without tipping. Same as Step 1 for pick up model.

Step 2

Attach wheel assemblies to frame. See Figure 2-3.

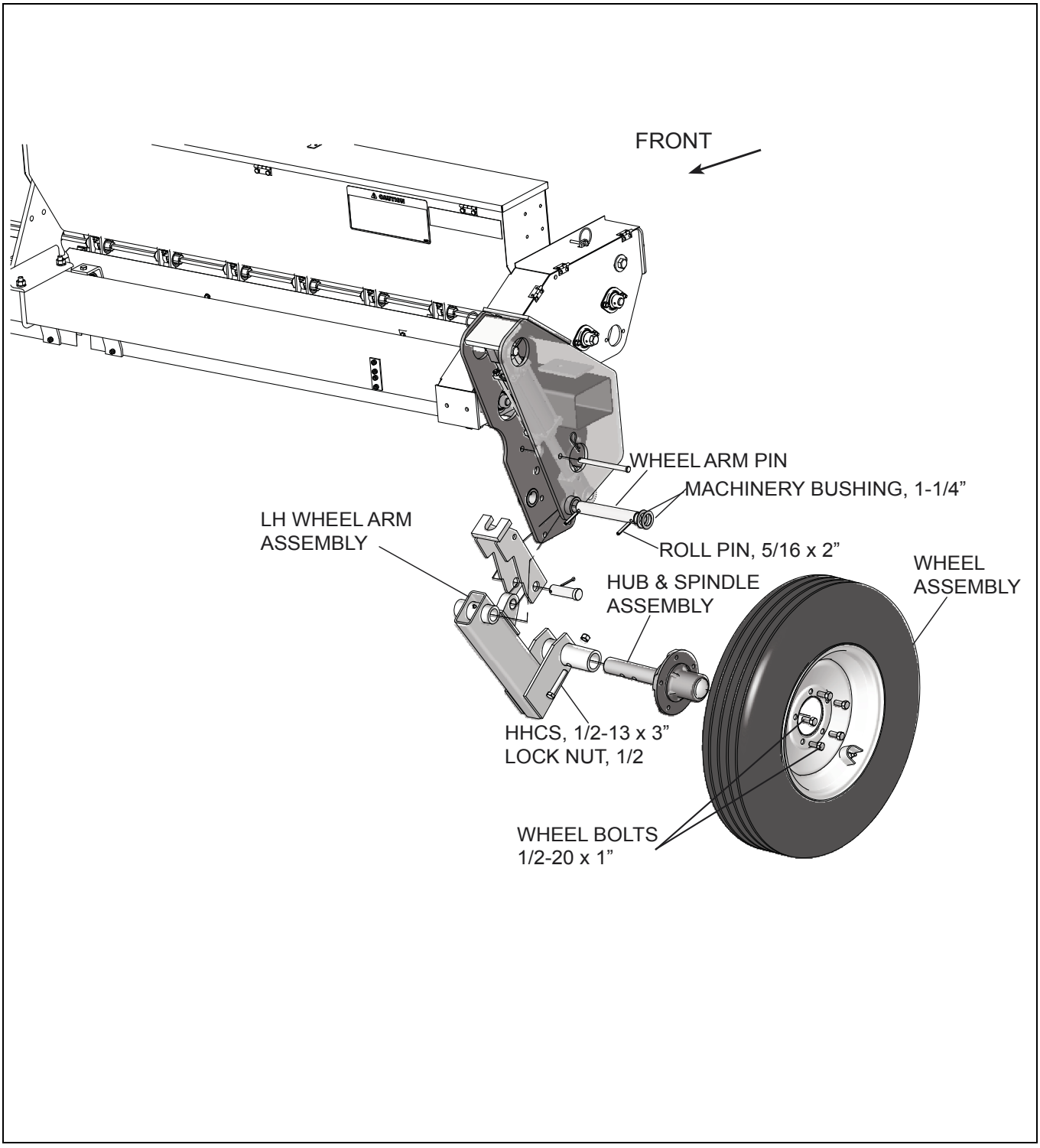

Figure 2-3: Pull Type Seeder Step 2

Step 3

Center the drawbar on the frame and fasten with 5/8" U-bolts, lockwashers, and nuts.

Attach the Jack, Hitch and Hose Support. See Figure 2-4.

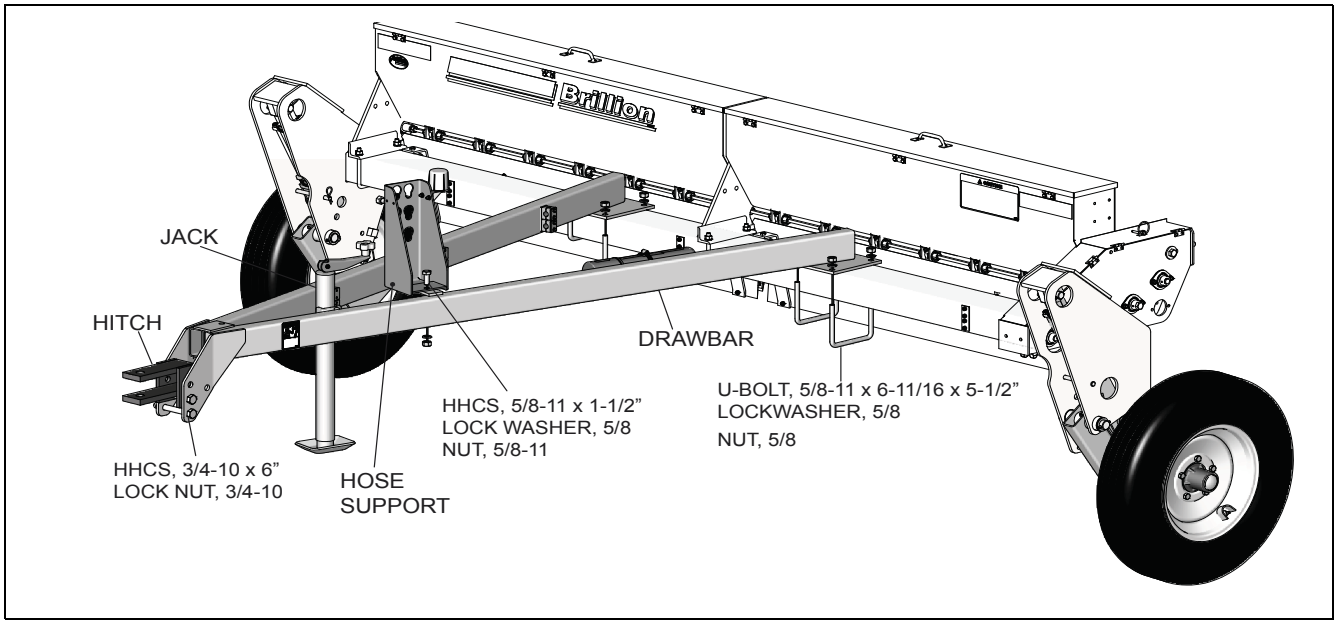

Figure 2-4: Pull Seeder Step 3

Step 4

Run the hoses along frame and down the drawbar toward tractor. Use the hose clamps provided to anchor the hoses to the frame. See Figure 2-5.

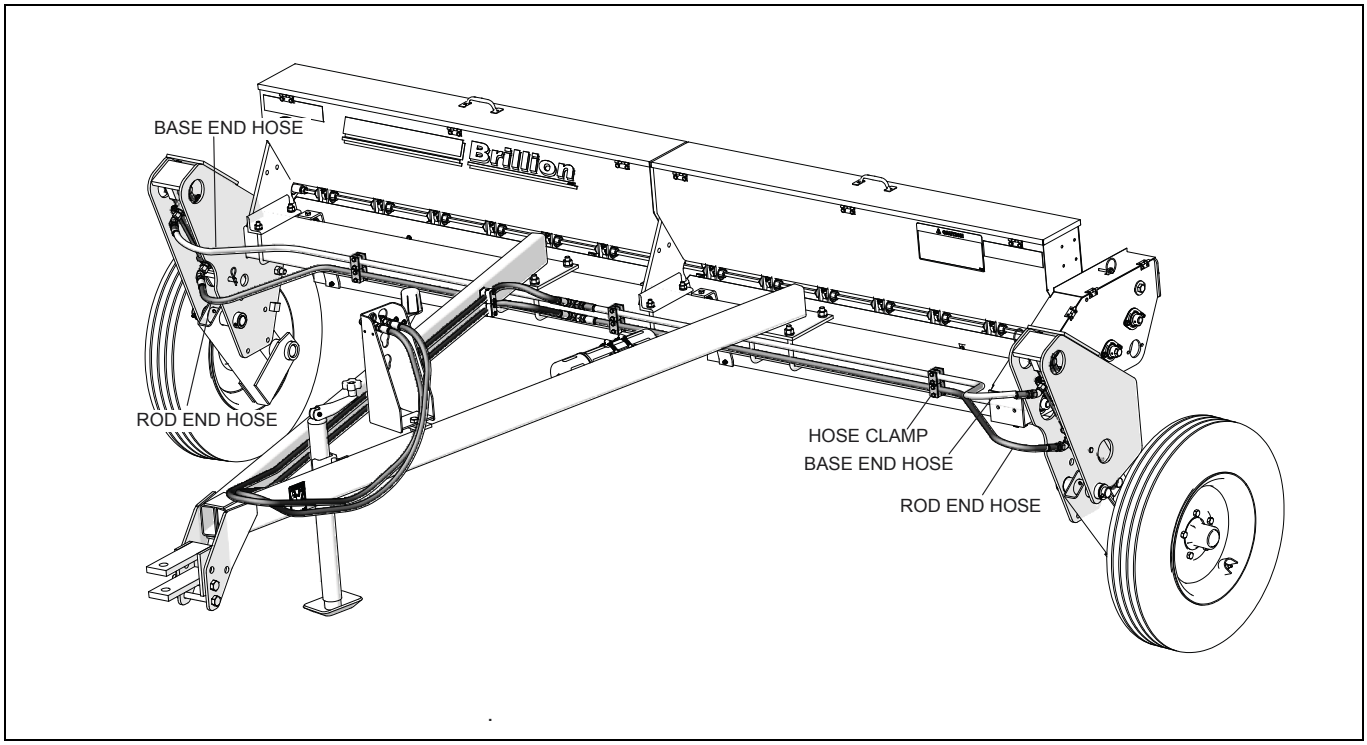

Figure 2-5: Pull Seeder Step 4

Step 5

Charge the Hydraulic System. For a detailed layout of the Hydraulic System, See Figure 2-13.

IMPORTANT

Seeder must be raised with 3 point hitch or hydraulic lift to install roller assemblies.

Step 6

Install stub shafts, long shaft on left end, short shaft on right end of front roller assembly. See Figure 2-6.

Step 7

Install the drive sprocket onto stub shaft on the left side. Secure with 1/2" x 3/4" set screw. See Figure 2-6.

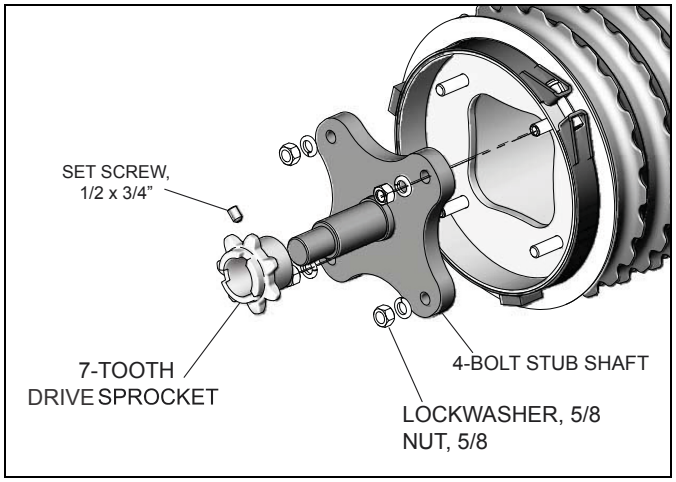

Figure 2-6: Seeder Assembly Steps 6 and 7

Step 8

Install the flange bearings on stub shafts. See Figure 2-7.

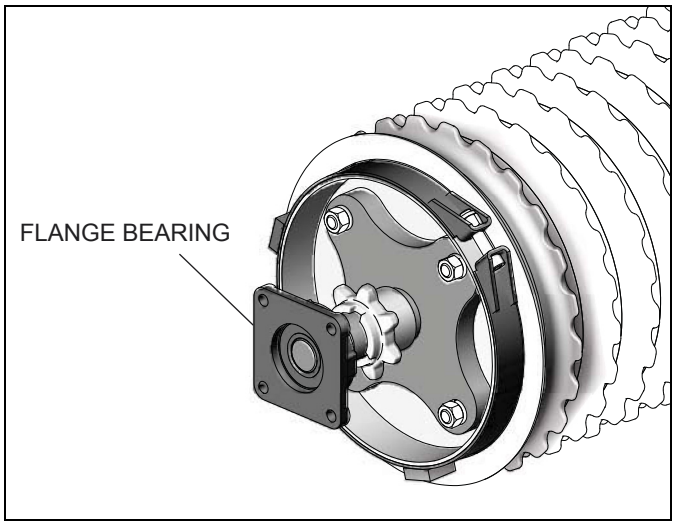

Figure 2-7: Flange Bearing Step 8

Step 9

Position the roller assembly between frame members and attach flange bearing to frame with grease zerks toward the front. See Figure 2-8.

NOTE

Deflectors and transport wheels are not shown in steps 6, 7 and 8 for purposes of clarity.

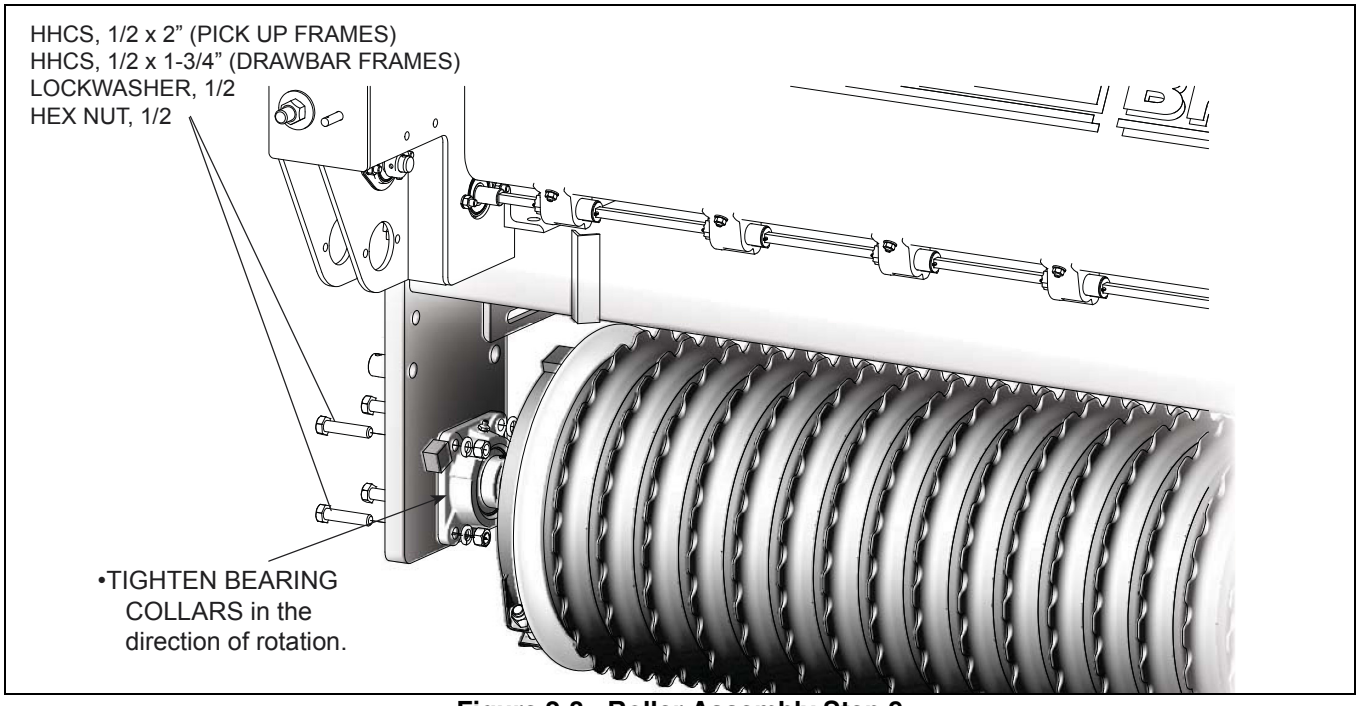

Figure 2-8: Roller Assembly Step 9

Step 10

Attach the Stub Shafts to the rear roller assembly**,** and then add the Rear Arm Assemblies. See Figure 2-9.

Then roll rear roller assembly, with the Rear Arms attached into position, behind the front roller.

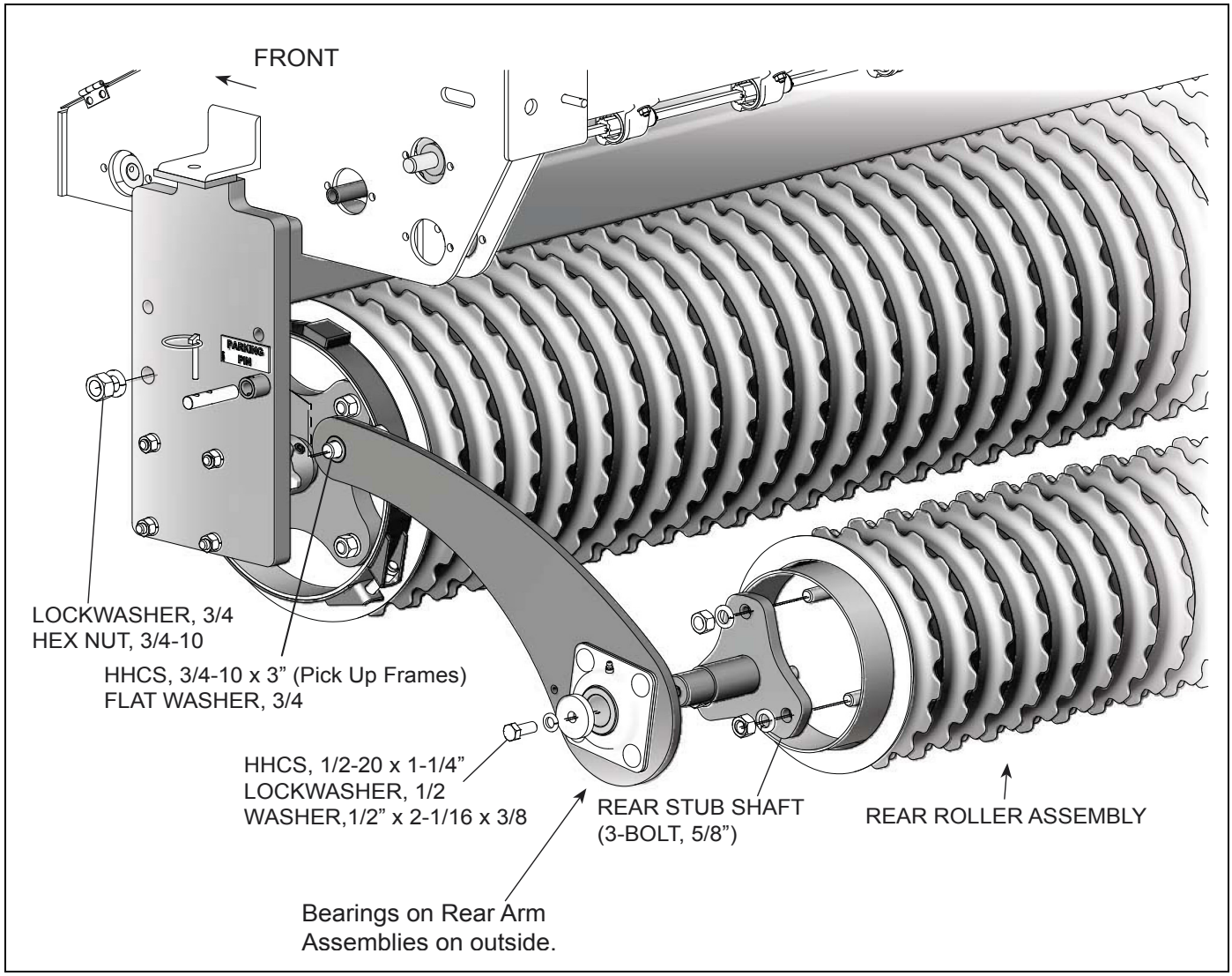

Figure 2-9: Rear Roller Assembly Step 10

Step 11

Attach Left and Right Rear Arm assemblies to the frame. (Drawing shows left side, right side is the same.) Secure to the stub shafts with 3/4" capscrews, lockwashers and nuts. See Figures 2-10 and 2-11.

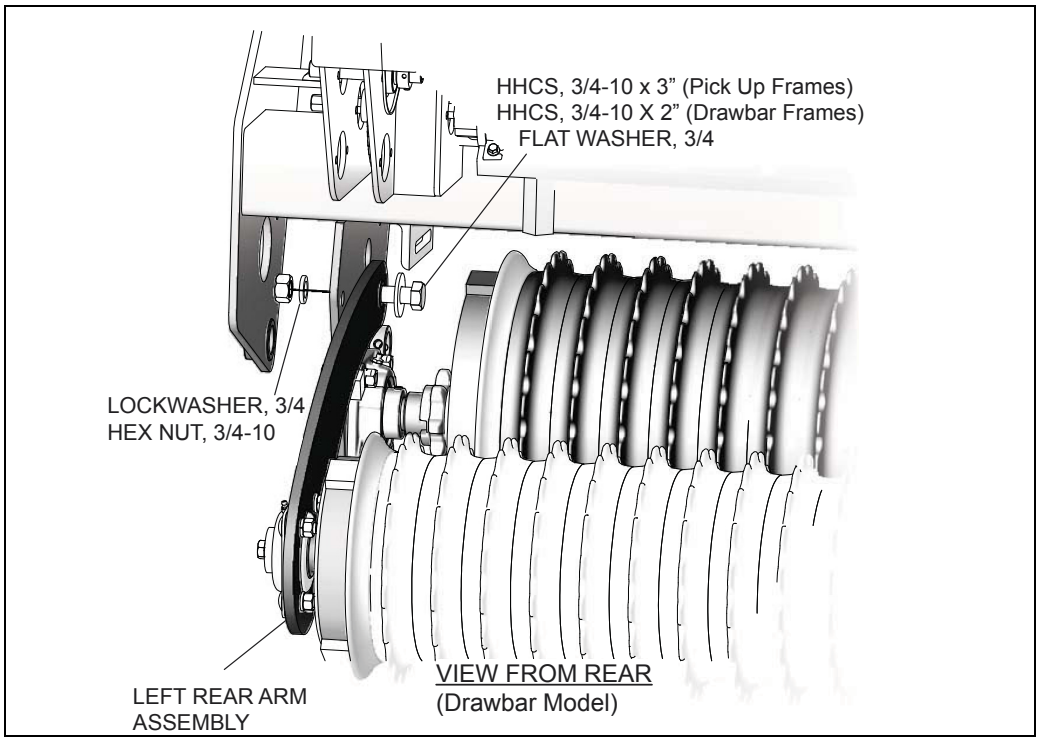

Figure 2-10: Attaching Left and Right Rear Arms

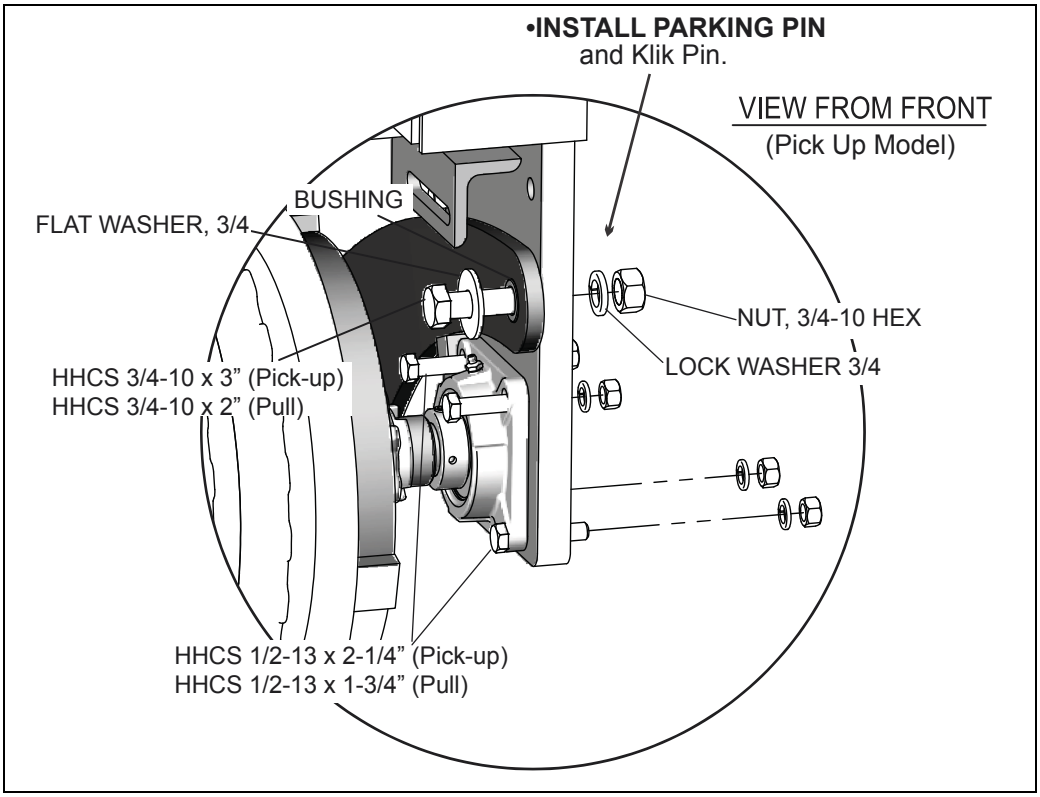

Figure 2-11: Install Parking and Klik Pin (Pick Up model)

Pull Type Seeder

When shipped on factory trucks the seeder comes assembled except for the lights, rims, and drawbar or a 3 pt. Hitch.

NOTE

Your exact seeder model may vary slightly from the illustration. (Additional parts identification and location can be obtained from reviewing parts catalog.)

IMPORTANT

If a pre-assembled component or fastener is temporarily removed, ensure it is correctly re-installed per these instructions.

- Check that all working parts move freely, bolts are tight and cotter pins are spread.
- Park the seeder in a work area that has a level surface and make sure it is blocked securely so that it cannot roll.

NOTE

"Left" and "Right" refer to directions seen as if standing behind the implement and facing in the direction of forward travel.

⚠ CAUTION

Do Not Remove Rear Roller Arm Shipping Bolts Until Step 9!

Pull-type Seeders: Drawbar Assembly

1. Loosen hydraulic hoses from frame in area where drawbar is to be attached.
2. Position drawbar on center of frame and secure with four 5/8" x 6-11/16" x 5-1/2" U-bolts, lockwashers, and nuts from bag in seed box.
3. Fasten the hoses to drawbar with straps provided. See Figure 2-12.

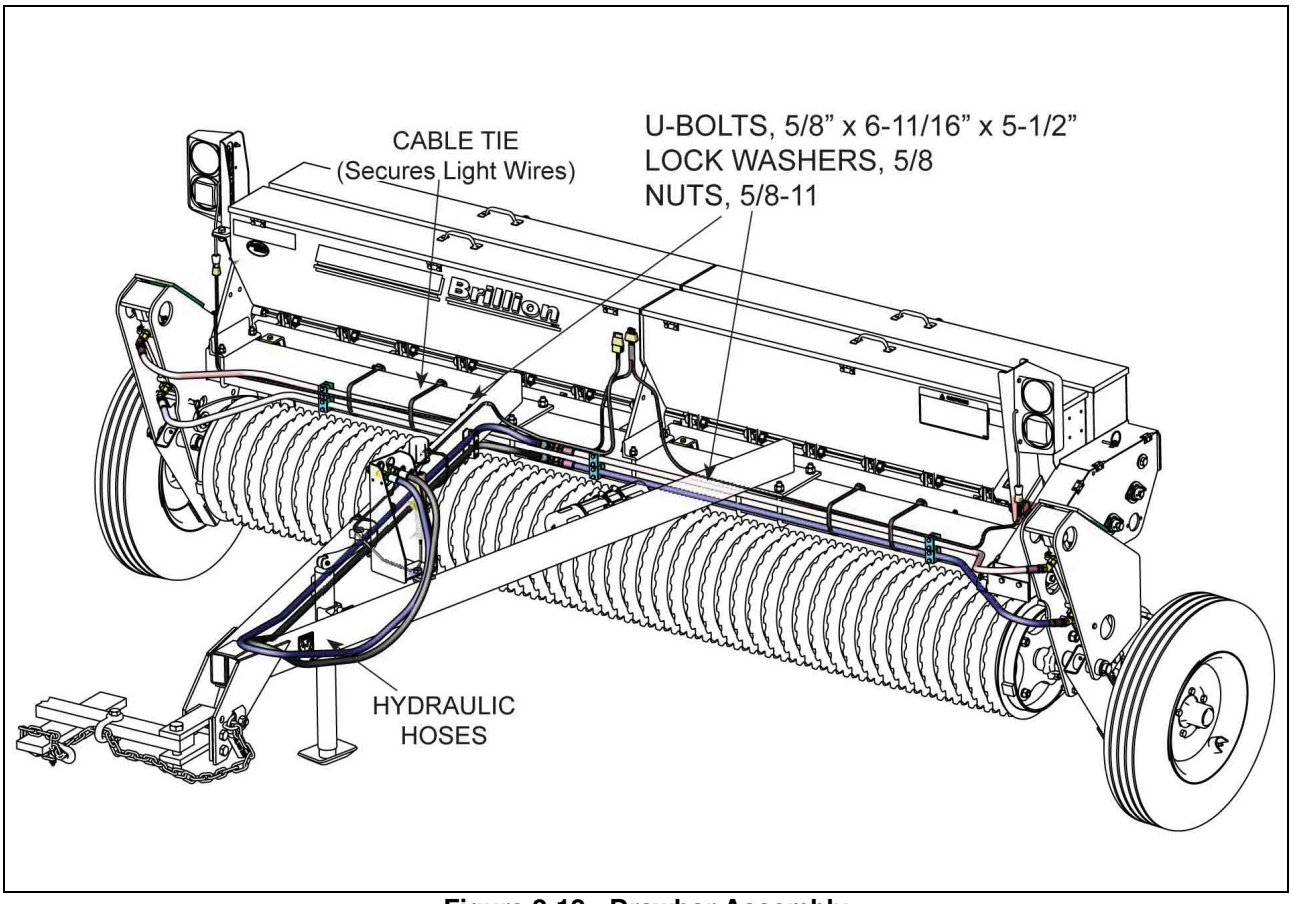

Figure 2-12: Drawbar Assembly

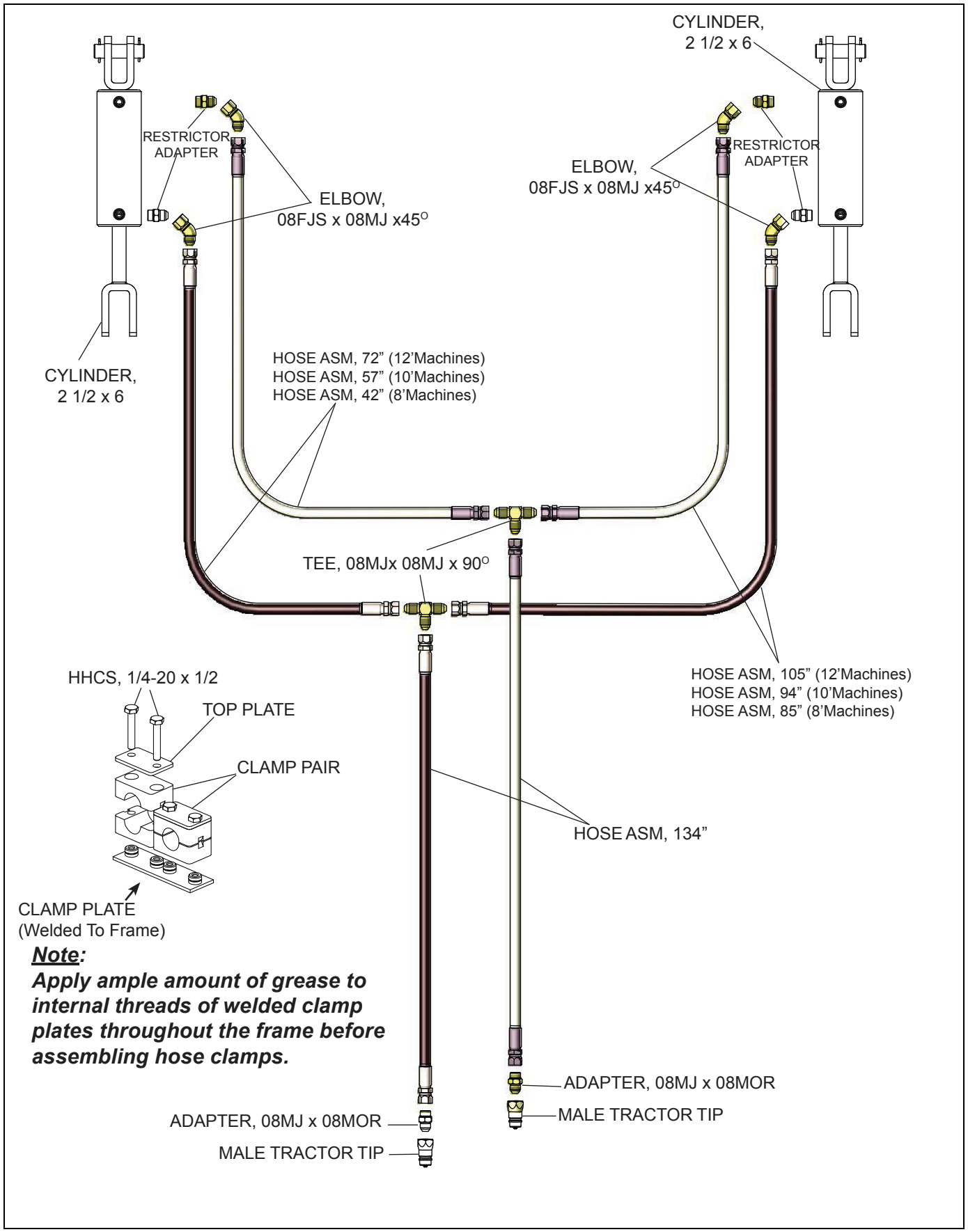

Figure 2-13: Hydraulic Schematic

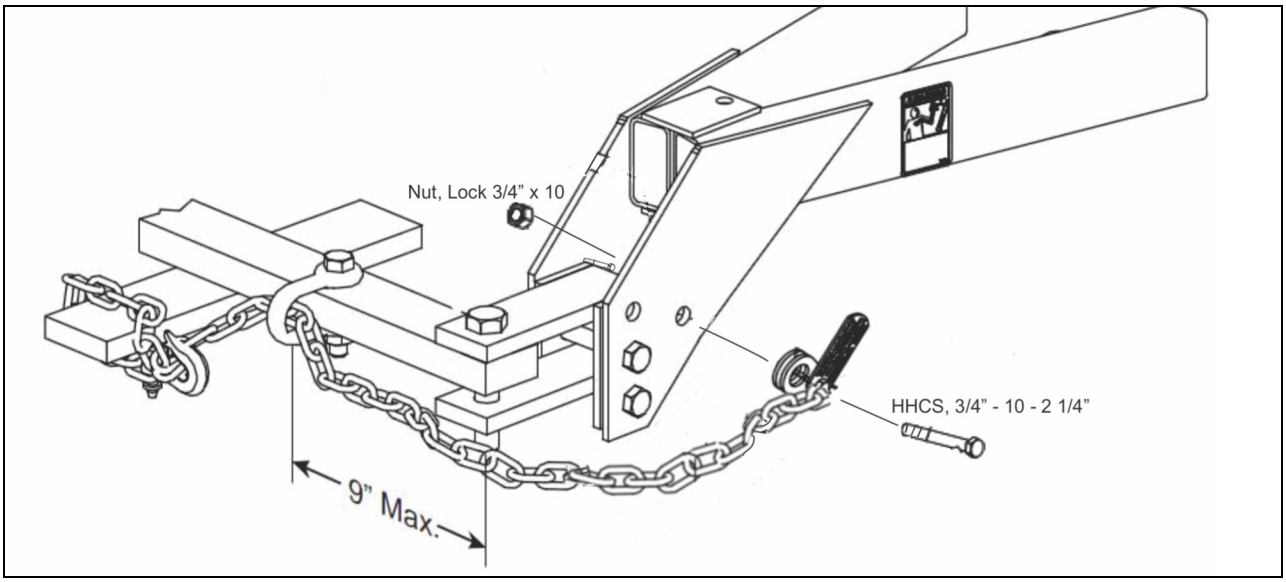

Figure 2-14: Safety Chain Hitch Assembly

Safety Chain, Wheels and Shipping Bolt

1. Attach the hitch for positioning so that the safety chain can be properly attached), and then attach drawbar to a suitable tractor. See Figure 2-14.
2. Install the spindles in the wheel arms and secure in outer spindle holes with 1/2" x 3" capscrews, lockwashers and nuts. See Figure 2-15.
3. Install wheels and tires. Torque wheel bolts to 82 ft-lbs.

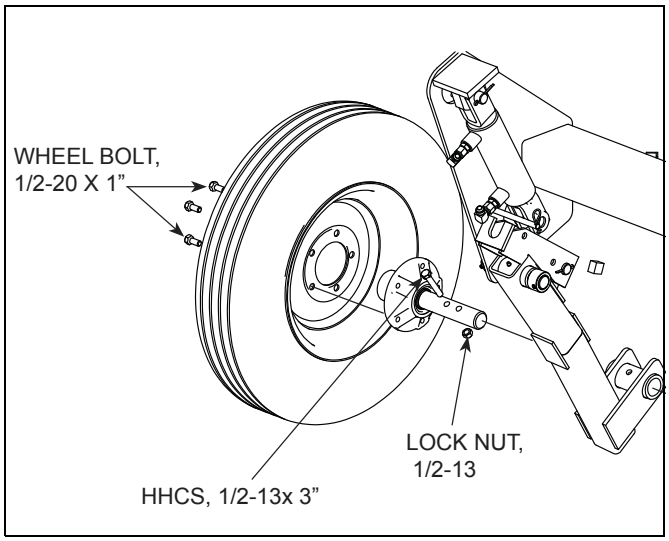

Figure 2-15 Wheel Installation

4. Remove the 5/8" shipping bolts which lock rear roller arms down. One bolt is used on each side of the implement. See Figure 2-16.

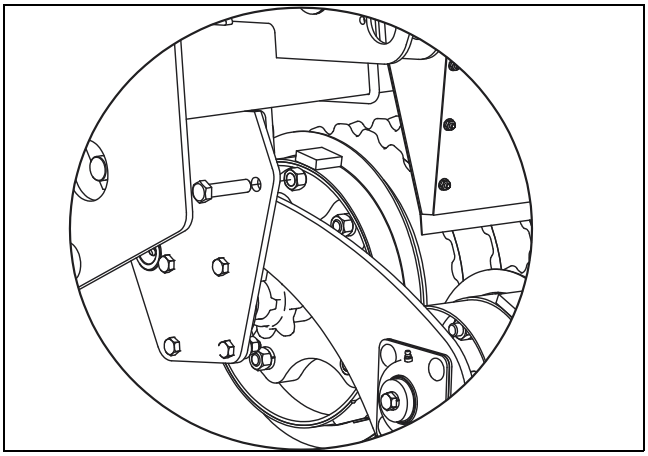

Figure 2-16 Shipping Bolts

NOTE

If the bracket for the Slow Moving Vehicle (SMV) sign has been shipped loose, attach it as shown using 3/8" x 1 1/4" capscrews, washers and nuts provided.

Pick Up Seeder

3 Point Hitch Assembly

1. Position three-point hitch weldment on center of frame and secure with four 5/8" x 6-11/16" x 5-1/2" U-bolts, lock washers and nuts from bag in seed box. See Figure 2-17.
2. Make sure parking pin is engaged before removing bolt.
3. Remove the 5/8" shipping bolt from right side of frame which locks rear roller down. Bolt is located in a position similar to the parking pin. See Figure 2-18.

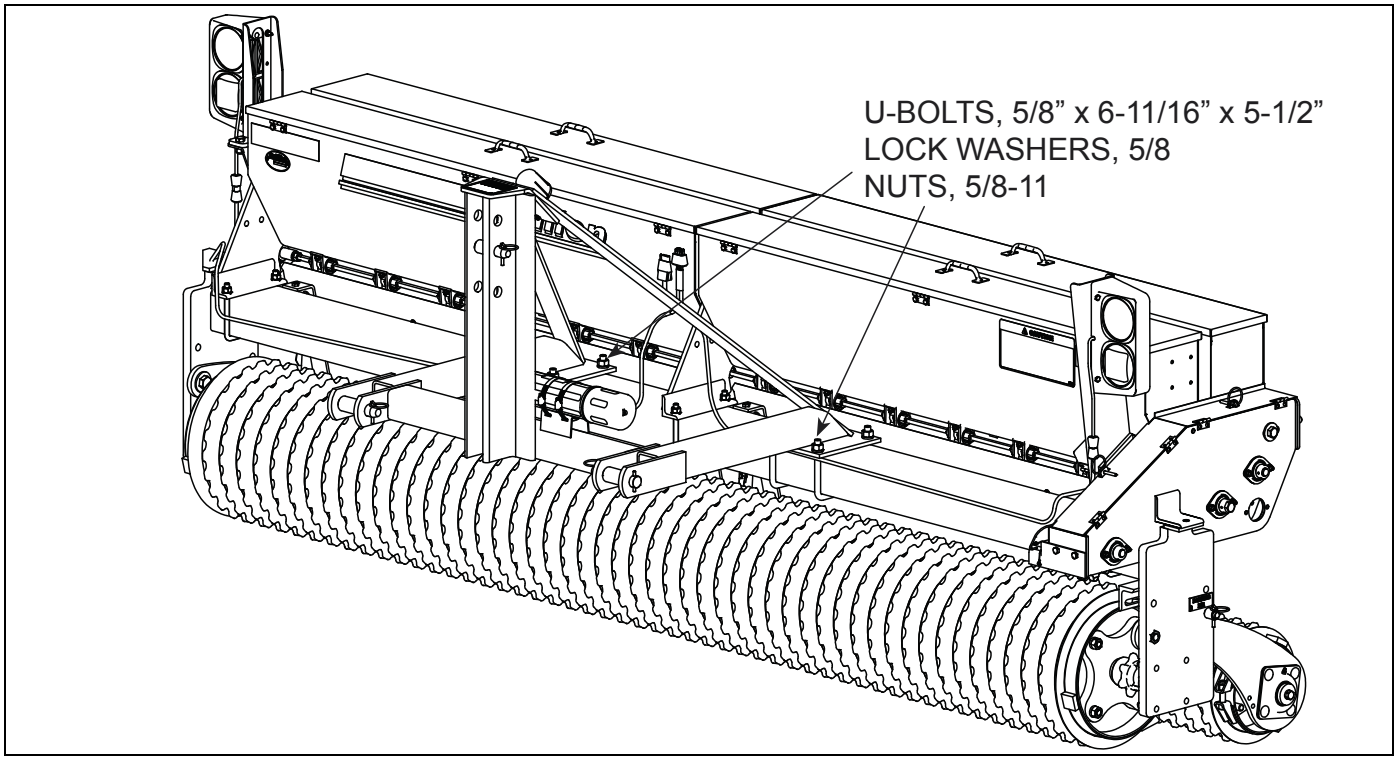

Figure 2-17: 3 Pt. Hitch

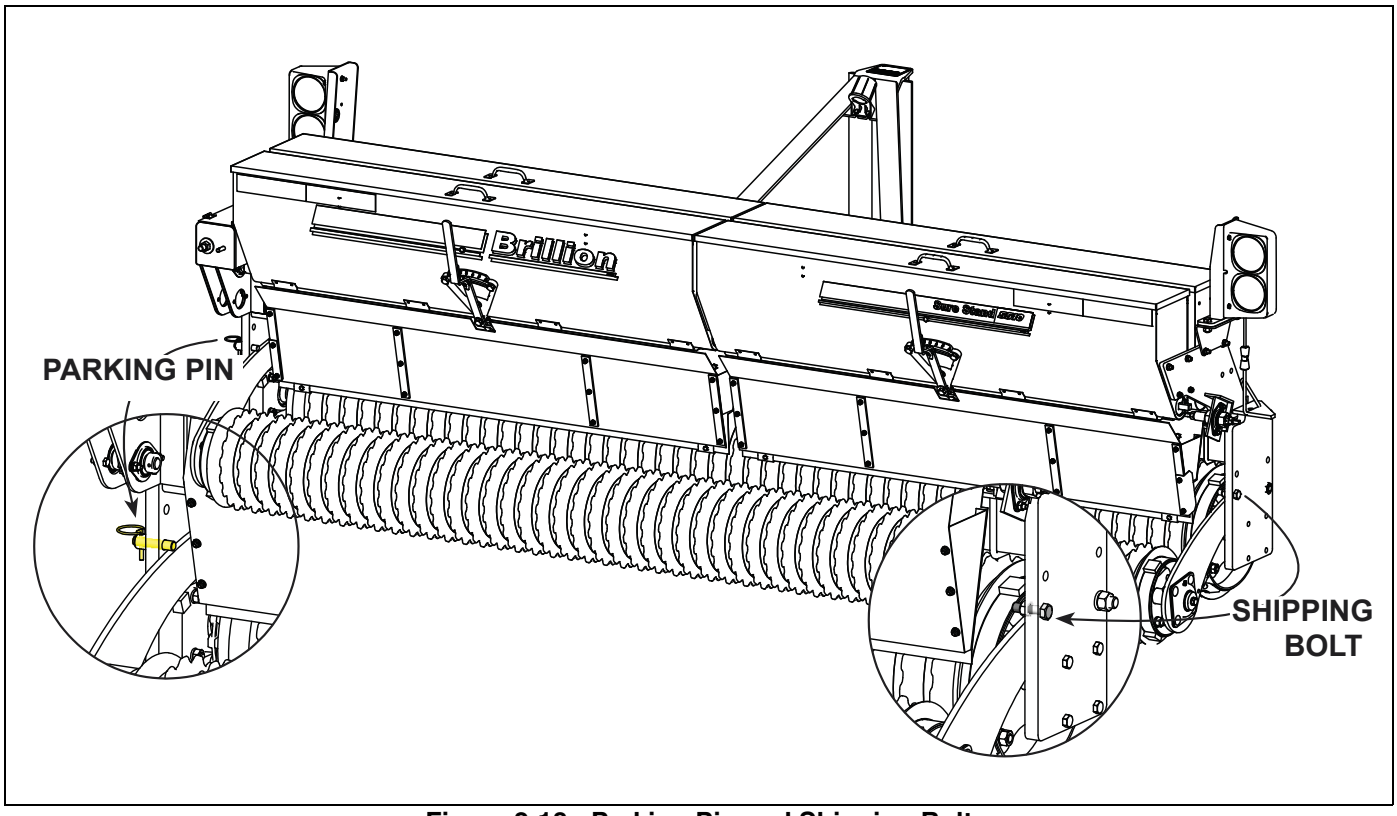

Figure 2-18: Parking Pin and Shipping Bolt

Warning Lights

If warning lights are not installed in the operating position, install them as shown according to your model. See Figure 2-19.

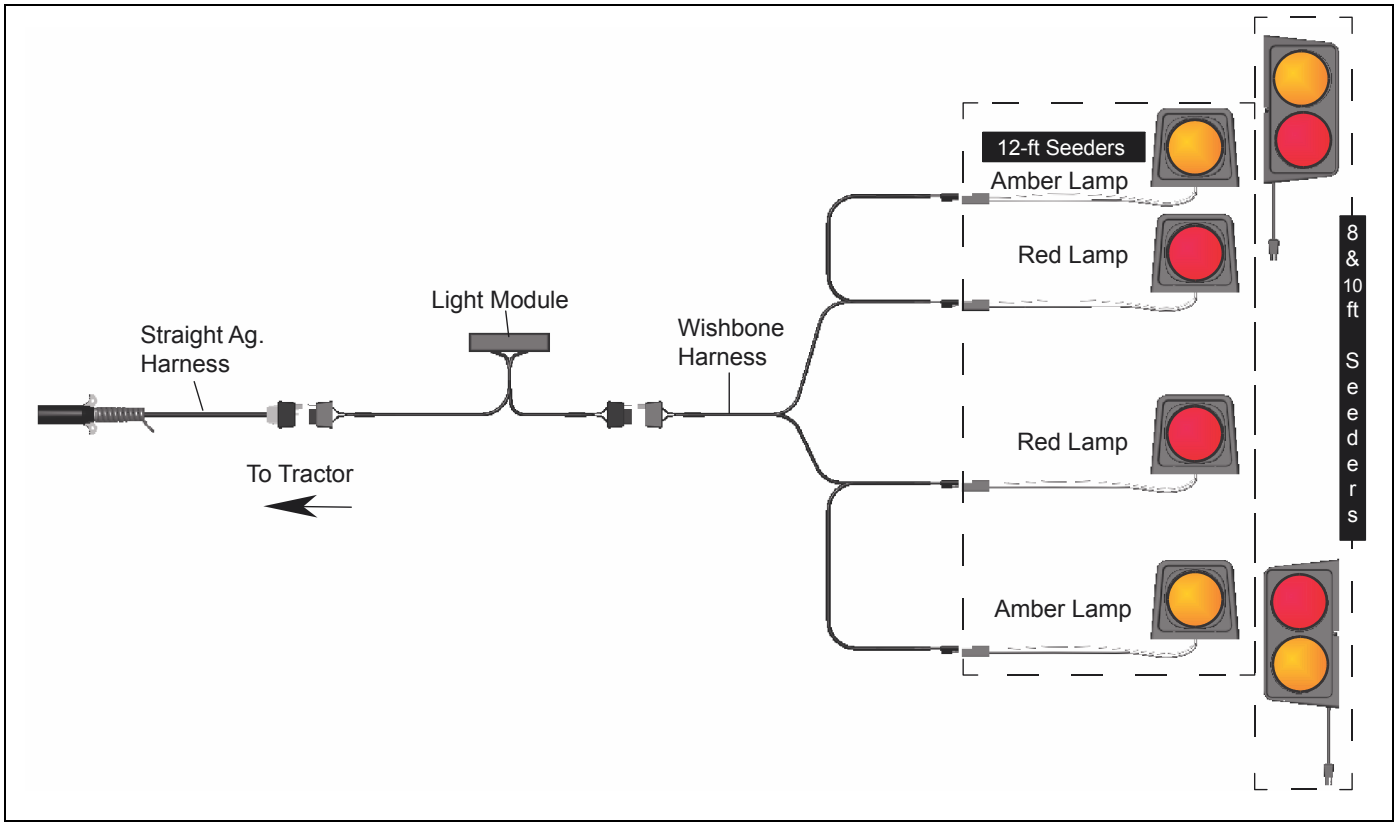

Figure 2-19: Wiring Schematic

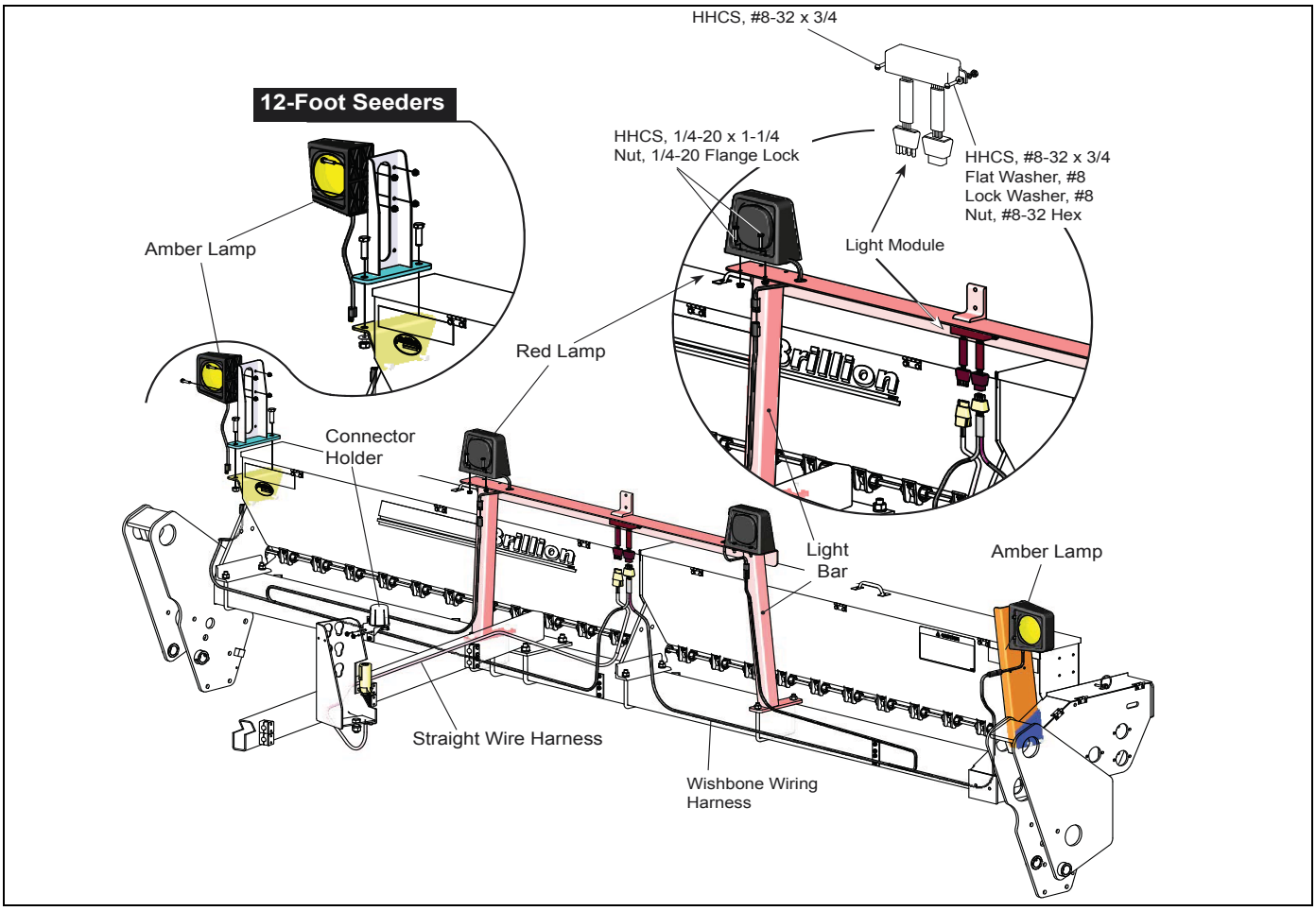

Figure 2-20: 12 Foot Lamp Assembly

Lamp Assembly 12 Foot

1. Assemble the light bar to the top bar on the frame with 3/8-16 U-bolts and lock nuts. The side with the red decals goes toward the rear and the amber only toward the front of the implement.
2. Attach an amber lamp to the left and right hand seed box ends and a red lamp to the two plates toward the center of the light bar, with the red lighted side facing the rear of the implement. See Figure 2-20.
3. Fasten the light module to the front side of the light bar at the center (just under the SMV bracket) with #8-32 x 3/4 screws, lock washers and nuts. Assemble wires and attach harnesses to the frame.

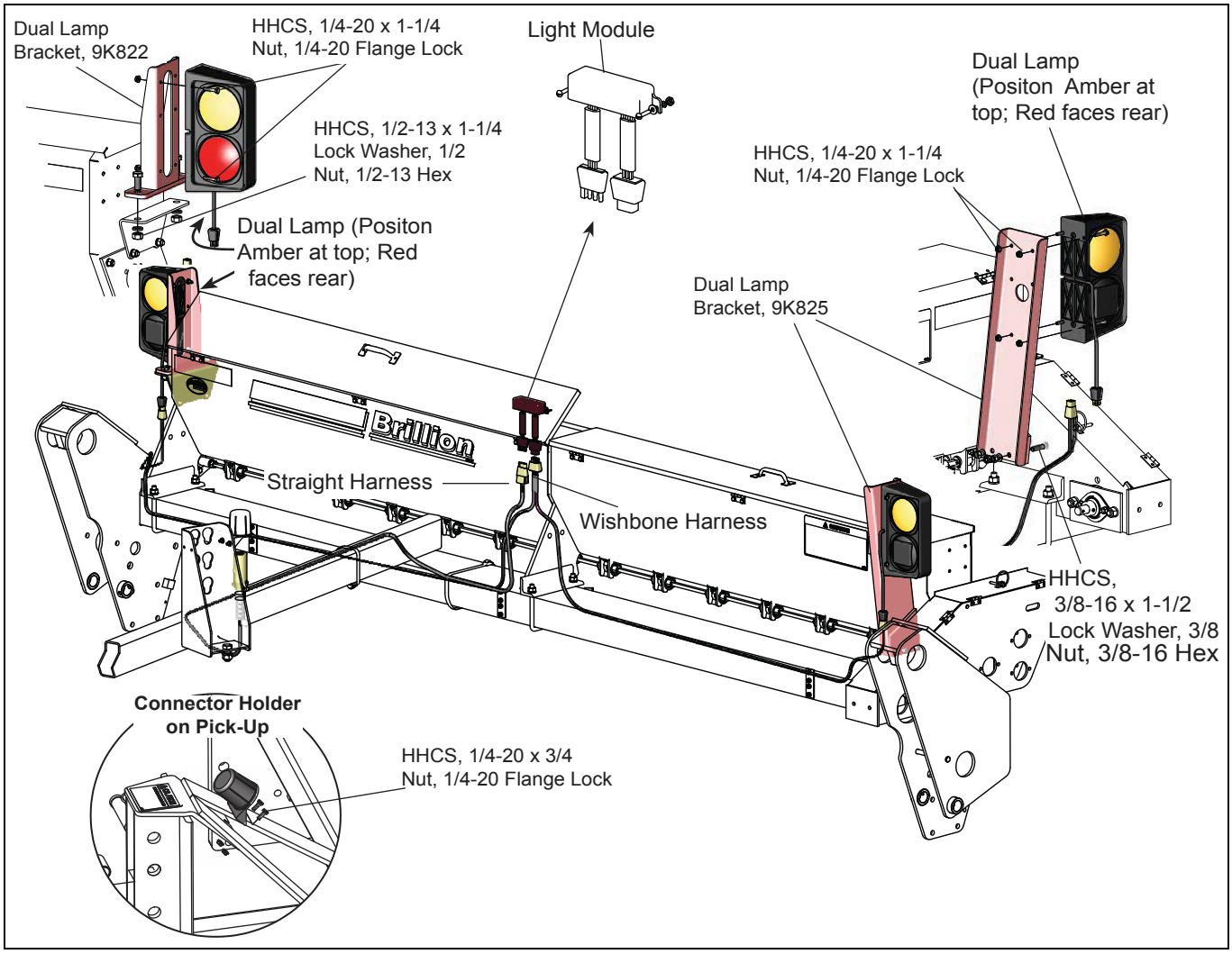

Figure 2-21: 8 and 10 Foot Lamp Assemblies

Lamp Assembly 8 and 10 Foot

1. Assemble the dual lamps to the brackets on the ends of the seedboxes with (4) 1/4-20 NC x 1-1/4" capscrews and flanged lock nuts for each lamp. Make sure the amber light is at the top and that the red light faces the rear.
2. The light module in the above drawing is shown for reference only. There is no specific location for it. Locate the module in a reasonable place near the center of the implement and fasten it down with #8-32 x 3/4" screws, lock washers and nuts.
3. Assemble wires and attach harness to frame. See Figure 2-21.

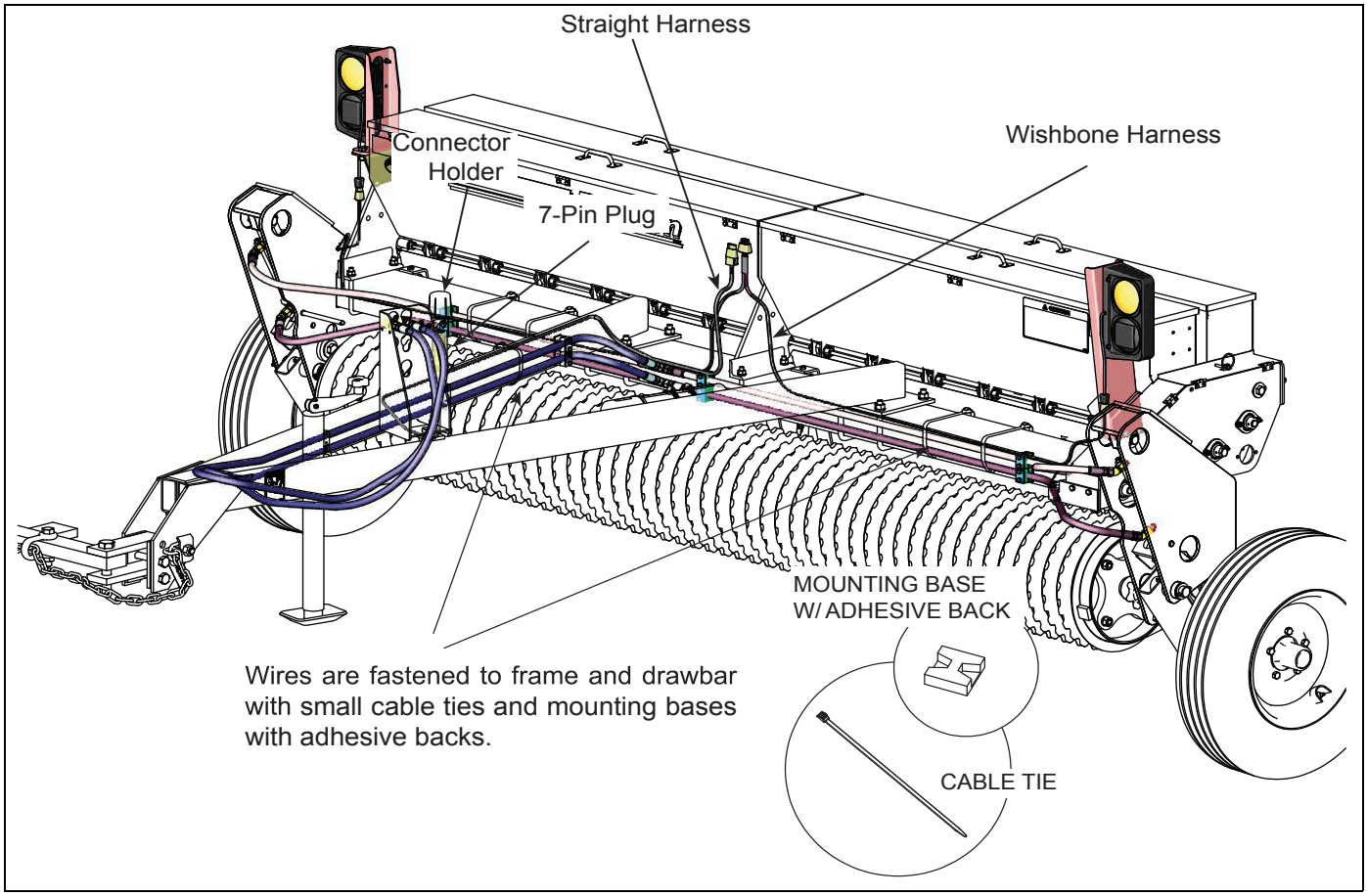

Figure 2-22: Assemble Wires for 8, 10 and 12 Foot Implements

Wiring Harness

1. For 12 foot implements fasten the light module to the front side of the light bar at the center (just under the SMV bracket) with screws, lock washers and nuts. There is no specific location on 8 or 10 foot models. Locate it in a reasonable place near the center.
2. Connect the “wishbone” wiring harness ends to connectors on the lamp assemblies. See Figure 2-22.

IMPORTANT

Wires are color coded on the wishbone harness. Be sure the end with the yellow wire goes to the left light and the green end to the right light.

3. Run the wishbone harness along seedbox, over to hydraulic hose, along the hoses and connect the plug to the light module. (Wires are fastened to seedbox and drawbar with small cable ties and mounting bases with adhesive backs).

NOTE

If your seeder is equipped with an electric clutch, install, route and secure electric clutch wire harness with warning light harness. See page 2-20.

4. Connect “straight section” wiring harness to the other plug on the light module with wishbone harness. Then run harness over to front of drawbar. All wires must be firmly attached to implement frame members or hydraulic lines so they do not sag or become torn loose by field debris.
5. The plug on the other end of the straight harness connects to the tractor socket when in use. When not in use, it can be stored in the connector holder on the hose support bracket or on the 3 pt. hitch. Allow enough harness length to reach tractor socket and roll or fold up excess and then secure to drawbar, hydraulic hose or 3 pt. hitch.

Optional Equipment

Electronic Acre Meter Kit 5K745

Installation:

The acre meter, consisting of three main parts: the acre meter, the pick-up and the magnet wheel, is mounted on the left side of the front seedbox.

1. Use the acre meter bracket as a guide and drill two 13/32” holes into seedbox at location shown in illustration. Then attach the acre meter bracket as shown with two 3/8-16 x 1” capscrews, lock washers and nuts. See Figure 2-23.
2. Attach the pick up switch bracket to the front of the transmission as shown.
3. Attach the pick up switch to the top of the 5K714 bracket with two #8-32 x 1 1/4” machine screws, flat washers, lock washers and nuts. Do not tighten screws at this time. See Figure 2-23.

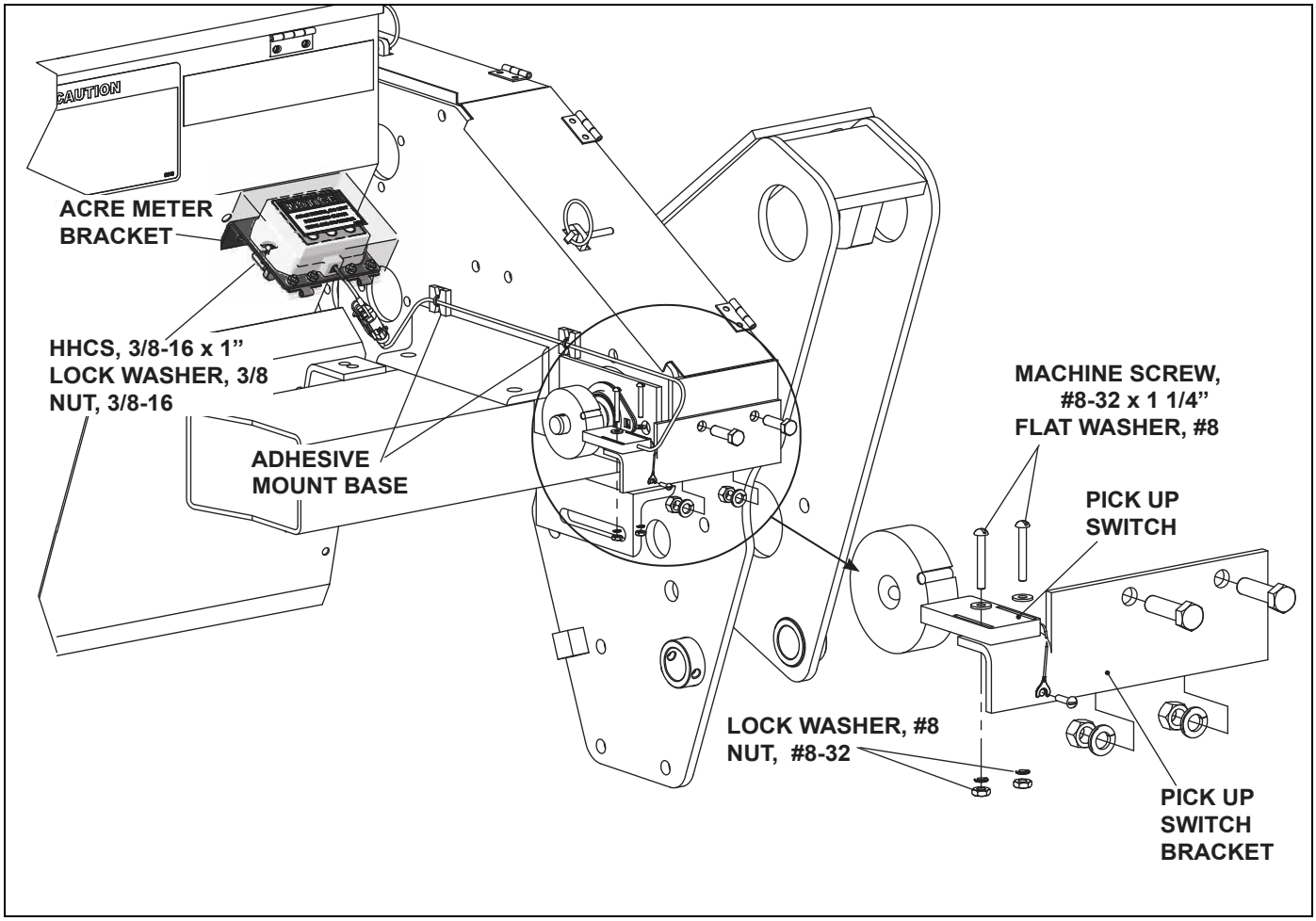

Figure 2-23: Electronic Acre Meter

4. Press the magnetic wheel onto the clutch shaft until it is vertically centered with the pickup switch.
5. Adjust the pickup switch and bracket so the centerline of magnet wheel and pick up switch are horizontally and vertically aligned with maximum 1/8” between magnet wheel and pick up switch. Firmly tighten all screws. See Figure 2-24.

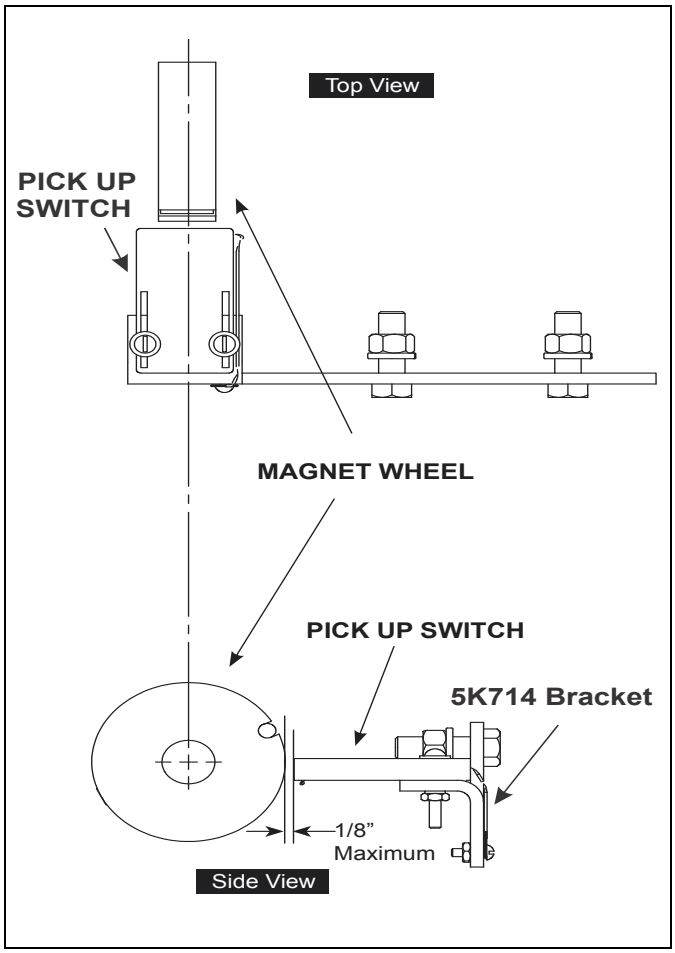

Figure 2-24: Pick Up Switch

NOTE

Alignment of the pickup switch and magnet wheel is critical. Improper alignment will cause the acre counter to record acres erratically or not at all.

6. Attach the short pickup switch ground wire to the small hole in the 5K714 bracket with a #6-32 x 1/2" machine screw, removing paint under the wire connector to assure a good electrical ground connection.
7. Route the wire from the acre meter down the front of the seed box to the pickup switch and connect the mating plugs.
8. Securely fasten the wire to the seed box and transmission drive, using the adhesive mounting bases and wire ties to prevent wire from becoming entangled or rubbing on moving parts.
9. Program the acre counter following the instructions on page 3-7.

Scraper Kit (Optional)

(Cannot be used with Coil Tine track Remover Kit) See Figure 2-27.

1. Assemble the 1K212 brackets onto the front of the seeder frame tube. The three brackets are provided. (If you have a wheel track remover kit on your seeder you will not need these brackets on the outer ends). You can mount to the same brackets provided with the wheel track remover. Do not securely fasten at this time.
2. Attach the vertical brackets loosely and assemble scraper angle to them. Attach two center scrapers at center hole locations and then attach all of the regular scrapers. Center the entire assembly on implement, then position scrapers for proper fit and tighten all hardware.
3. Scrapers should be close enough to the wheels to be functional but not interfere. Some final adjustments may be required in the field.

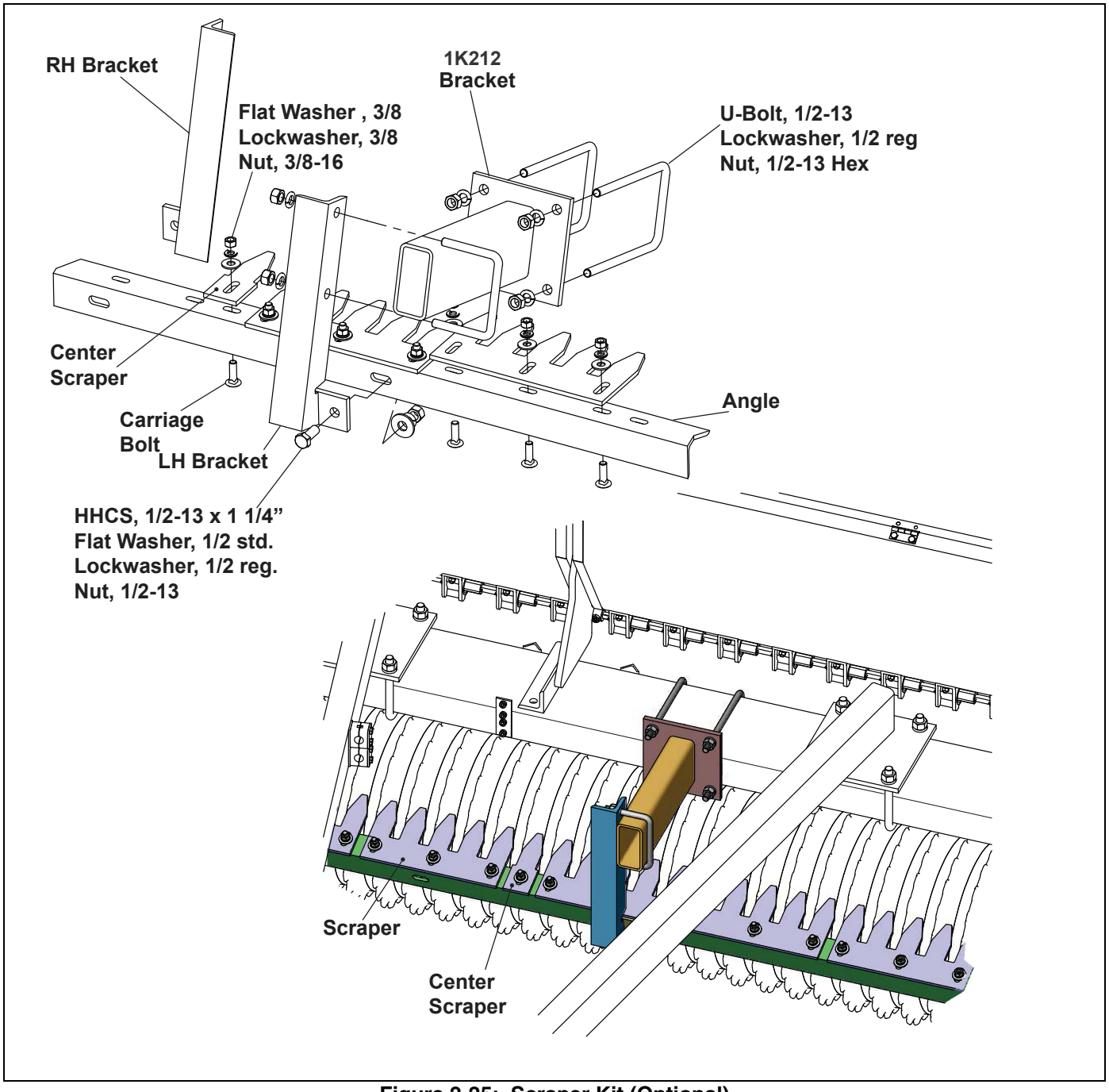

Figure 2-25: Scraper Kit (Optional)

S-Tine Tire Track Remover (Optional)

1. Attach brackets to the frame with u-bolts (1/2" x 4-1/2" centers x 7-1/2" deep), lock washers, and nuts. Note that the long ends of the brackets are downward. The brackets should be about 53" from center of implement. See Figure 2-26.
2. Attach the tube to brackets using straps and bolts (1/2" x 6"), lock washers, and nuts.
3. Locate and install the S-tines as needed to cover the tractor tire tracks. The suggested pattern is to use 1-3/8" point on center tine and 2-1/2" points on each side. If needed, additional tines may be purchased and installed. This kit must be used with standard 9J442 long three point hitch on pickup implements.

The Wheel Track Remover is furnished with 6 S-tines. Additional or fewer tines may be used as required.

NOTE

S-tines should not be operated any deeper than necessary to remove tractor tire tracks. Otherwise, wet soil is brought up which will stick to the rollers, draft load is increased, and under some conditions, tines may deflect back to rollers and break.

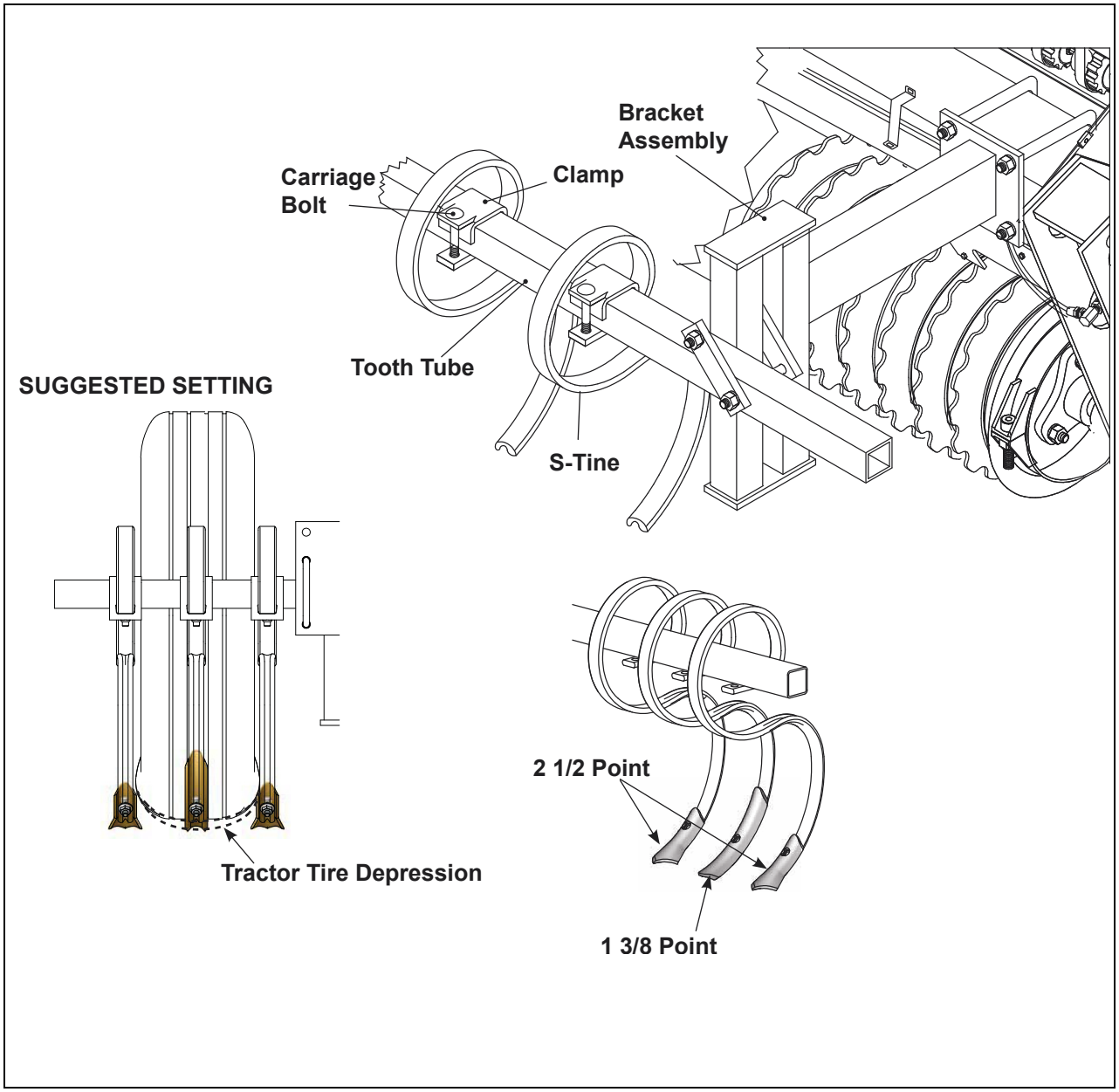

Figure 2-26: S-Tine Setup (Optional)

Coil Tine Track Remover (Optional)

NOTE

Cannot be used with the Scraper Kit

1. Assemble the coil tines and the arm weldments to the 1-1/2” diameter x 29” bar. The arm weldments may be placed anywhere along the bar, but it is suggested that they be mounted in the second hole from the right end, and the third hole from the left end. (Left end and right end designations are those related to the operator when sitting in the operating position). Mount 6 of the coil tines to the bar with 3/8” x 2- 1/2” capscrews, flat washers, lockwashers and nuts. Then mount the other two coil tines to the bar with the 3/8” x 3” capscrews, lockwashers, and nuts which also attach the arm weldments to the bar.
2. Clamp the brackets loosely to the seeder frame with u-bolts, lockwashers, and nuts. Attach the adjusting angles to frame brackets with lockscrews. Secure the adjusting angle from swinging with a 1/2” clevis pin and hair pin cotter. Fasten the bar and tine assemblies to the adjusting angles with 1/2” x 1-3/4” capscrews and locknuts. Tighten the locknuts to allow free side to side swinging. Center the entire wheel track leveler behind the tractor tires. Tighten the u-bolts against the seeder frame. See Figure 2-27.
3. Attach the chains’ end links to the adjusting angles with 3/8” x 1-1/4” capscrews, flat washers, lockwashers and nuts. There is one chain for the left side and one chain for the right side.
4. The vertical position can be changed by removing the clevis pins and lock screws and moving the adjusting angles up or down.
5. To inactivate the tines, remove the 1/2” clevis pins and loosen the lock screws. Then swing the bar and tine assemblies upward and sideways. To hold in place, wrap the chain under the bar and place the chain into the slot in the adjusting angle. Re-tighten the lock screws.

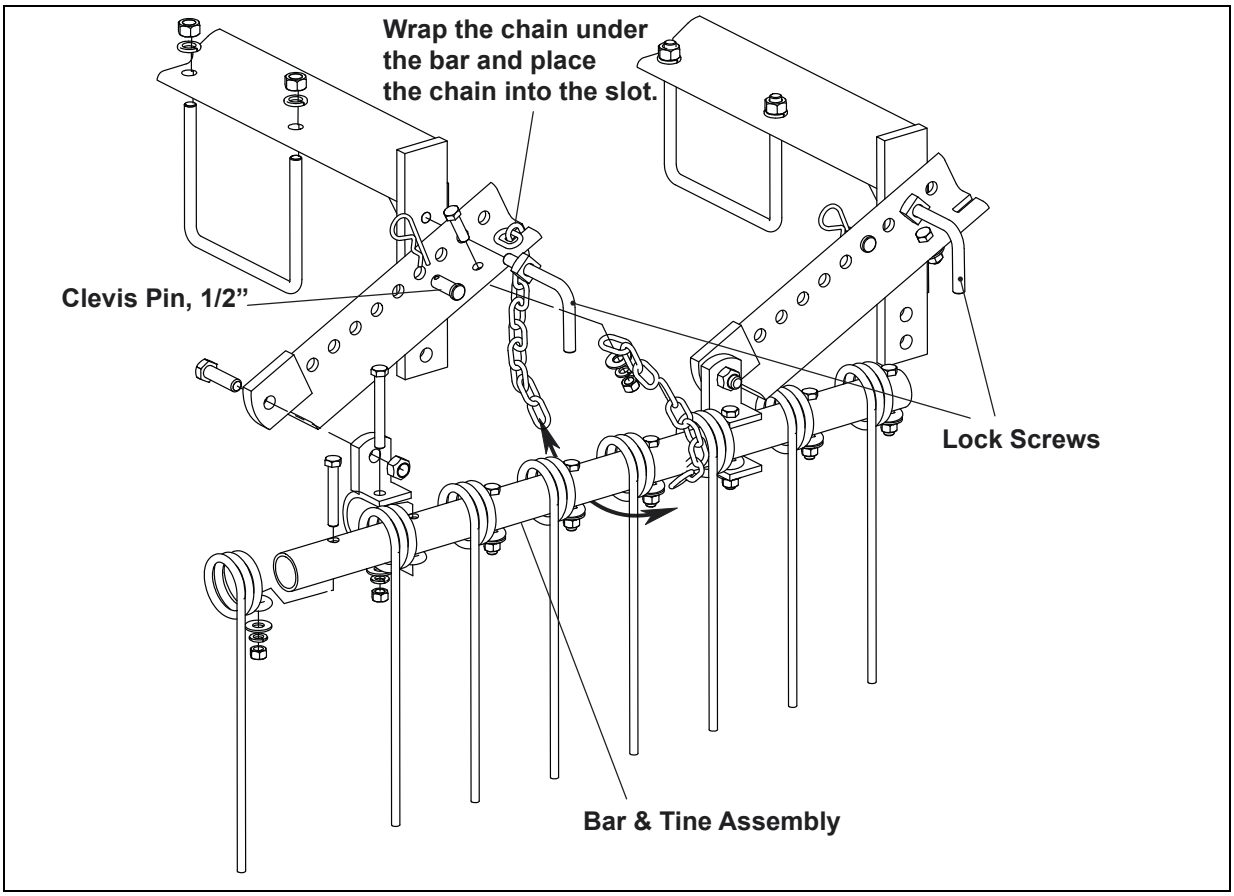

Figure 2-27: Coil Tine Setup

Speed-Up Kit (Optional)

Seed rates can be doubled by using a 26 tooth sprocket and following the procedure below:

1. Loosen and remove both drive chains.
2. Remove 1/4" x 2 1/4" capscrew, lock washer and nut from #55 chain (large) sprocket hub on front transmission shaft.
3. Remove the roll pin from #40 chain (small) sprocket hub on the front transmission shaft.
4. Remove the bearing bolts from the right side of the transmission shaft.
5. Remove the locking collar from the left side of the front transmission shaft.
6. Move the shaft far enough to the right to remove the small sprocket.
7. Install the new 26 tooth sprocket.
8. Replace all items (except #40 chain) in reverse order.
9. Add extra links to #40 chain.
10. Adjust chain tension. See Figure 2-28.

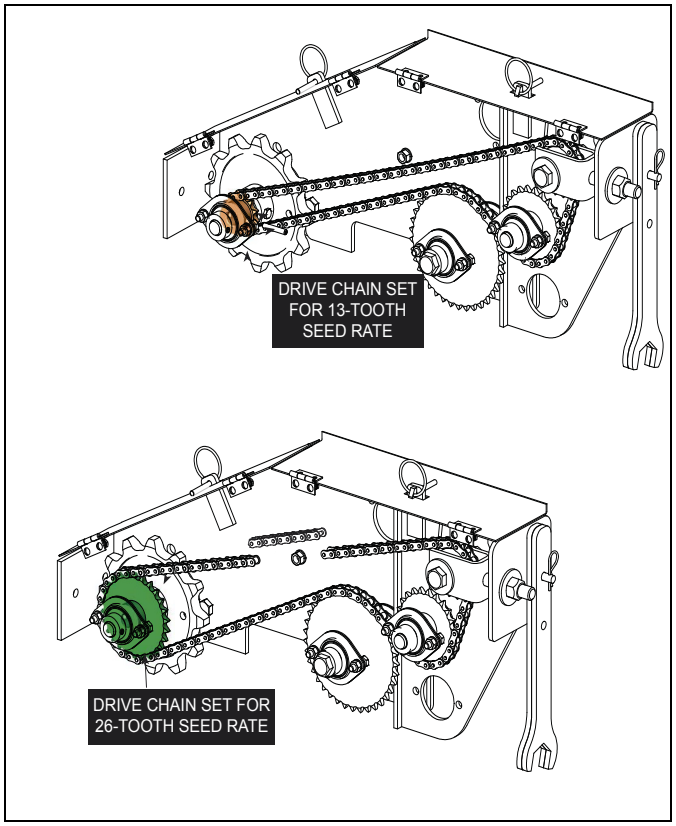

Figure 2-28: Speed Up Kit

Electric Clutch Kit (Optional)

The clutch is controlled by a toggle switch mounted to the tractor by a hook and loop fastener.

Clutch characteristics are as follows:

1. The clutch is disengaged when power (12 volts) is applied. If there is a power failure or electrical problem, the seeder will continue to operate and the implement must be raised to stop seeding.
2. Seed shafts will not rotate when implement is backed up.
3. The Switch box contains a standard 5 amp fuse.
4. The clutch must be disengaged (power applied) when seed shafts are turned manually for calibration.
5. Check that the clutch case has proper clearance between rubber bumper stop. Improper clearance may prevent the clutch from engaging or disengaging. See Figure 2-29.
6. Connect clutch wiring harness to clutch lead, and route wire along frame and drawbar. Secure to frame and drawbar or with hydraulic hoses and warning light harness by cable ties or adhesive mounts.
7. Install switch on tractor in a convenient location with the Hook and Loop included or other type of mount (not included).
8. Attach the wire lead to power source and secure wire.
9. Check clutch operation: Clutch will disengage when power is applied. (Clutch will make a clicking sound). Set seeder on the ground and drive a short distance while turning switch on and off. The seed cup shaft will stop rotating when switch is turned to "OFF" position.
10. Turn switch to "ON" position when seeder is not used to shut off power to prevent possible overheating of clutch coil.

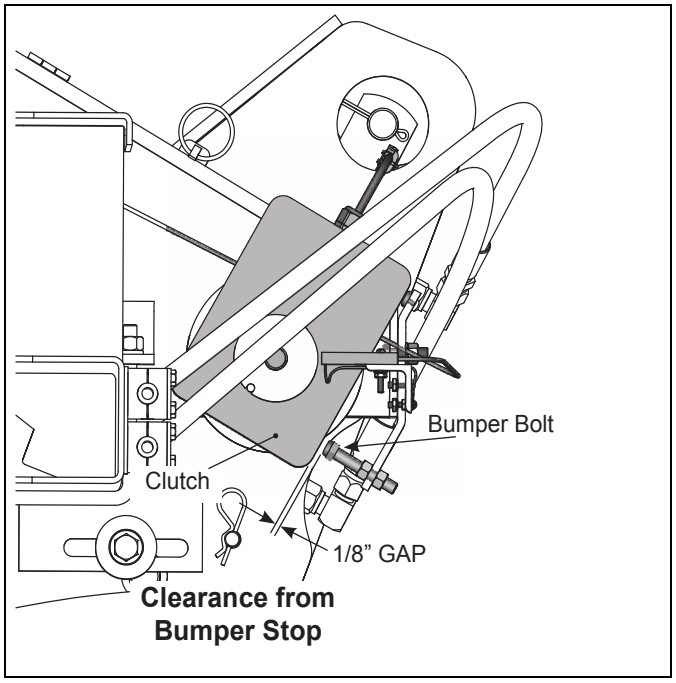

Figure 2-29: Clutch Clearance

Agitator Box (Optional)

Installation of the Agitator (Brome) Box: Loose parts are shipped in a bag assembly placed in the left seed box.

1. Remove bolts holding rear panel to deflector shield assembly and reverse rear panels so that upper lips flare rearward instead of forward. See Figure 2-30.
2. Install coupling on transmission output shaft and secure with 1/4” x 1-1/2” roll pin. See Figure 2-31.
3. Loosen U-bolts which fasten front seed box to frame at center and right end. Replace center and right end support brackets with extended supports which also have holes for mounting a 2nd box (part 9K853 and 9K854). See Figure 2-32.

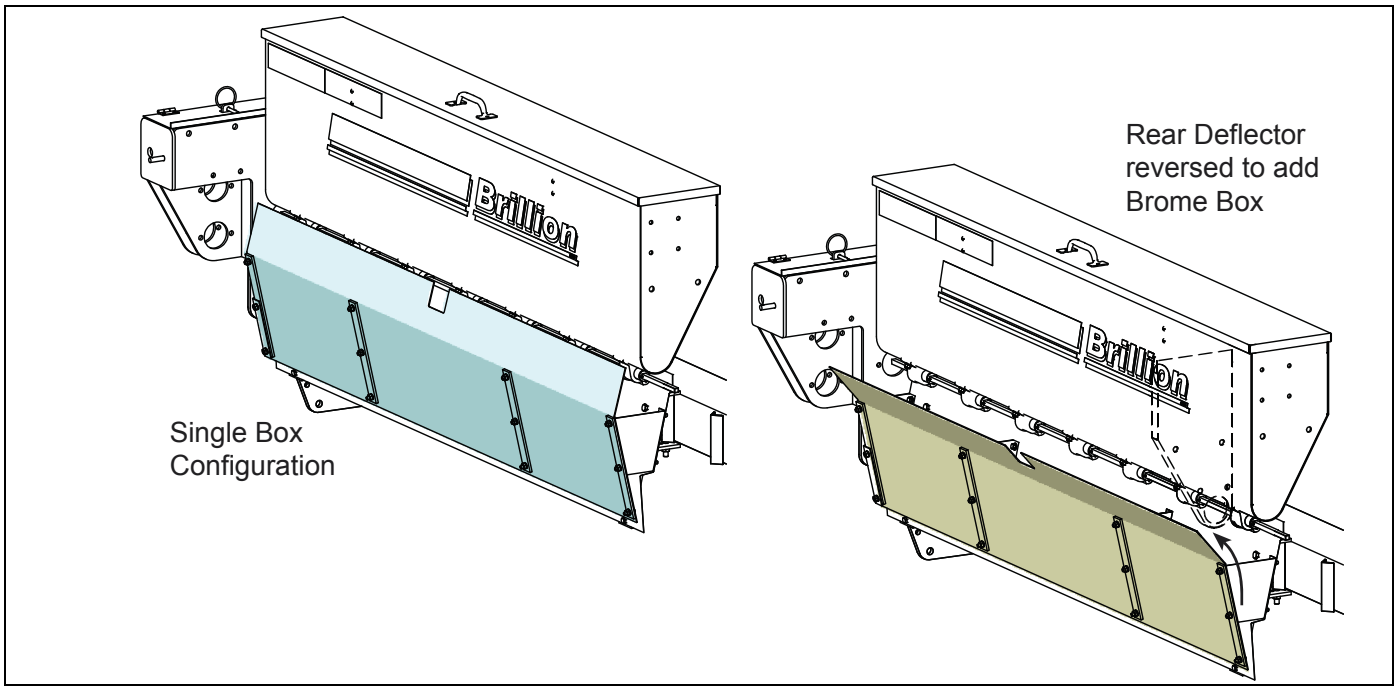

Figure 2-30: Deflector Shield

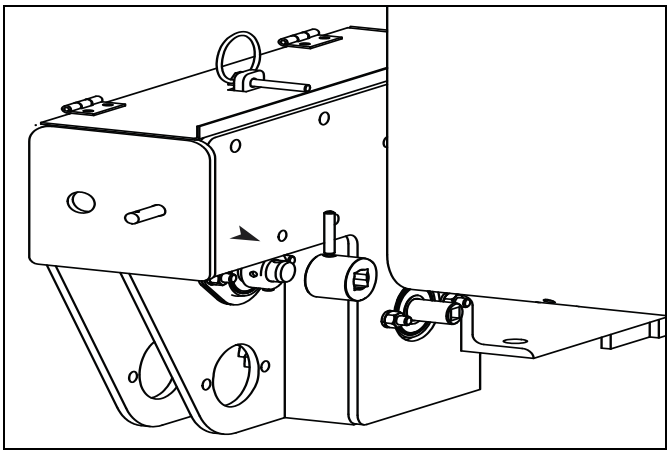

Figure 2-31: Coupling Transmission

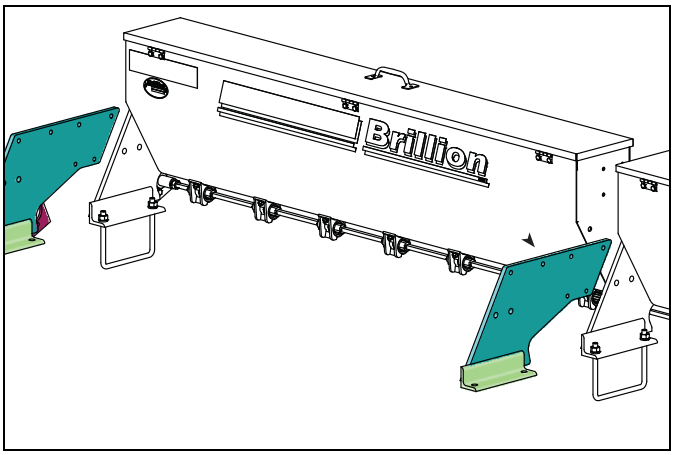

Figure 2-32: U-bolts

4. Install the left and right boxes as shown. Left box fastens to transmission with two 5/16” x 1-1/2” and two 3/8” x 1” cap screws, lock washers and nuts. Left box assembly is the one with one hole in the left end of the 5/8” square shaft. This hole is used only for a shipping wire. See Figure 2-33.
5. Install 4C488 washers to hold the bushing. See Figure 2-34.
6. Position the shift handles on rear of boxes so the pin in the bottom of each handle engages the slotted hole in the slide. Attach handles to shift plates using 1/2” x 1” pivot bolt and flat washer. Tighten bolt just so the handle can move easily and then lock the bolt by installing set screw into tapped hole in cast iron shift plate. See Figure 2-35.

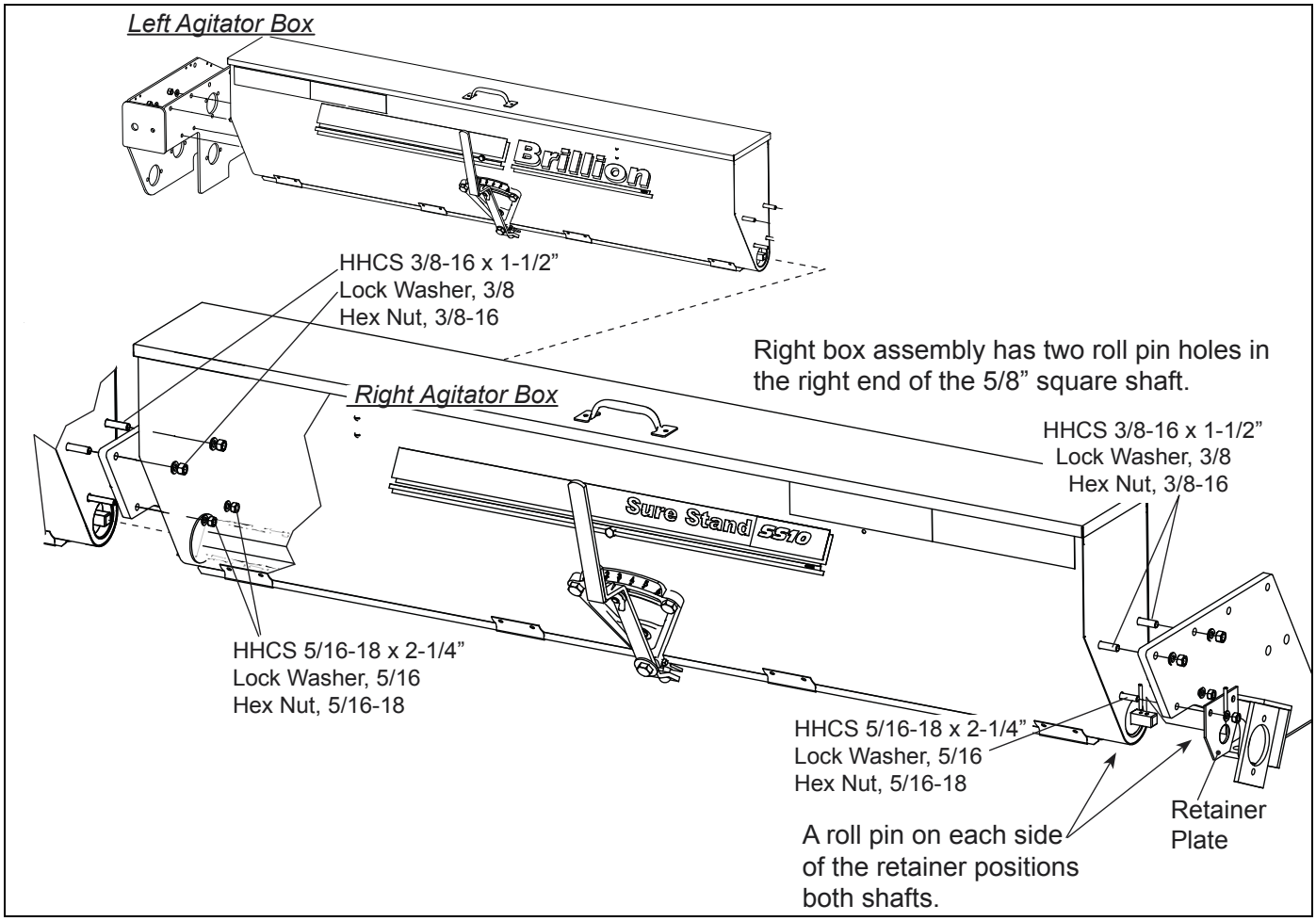

Figure 2-33: Left and Right Agitator Boxes

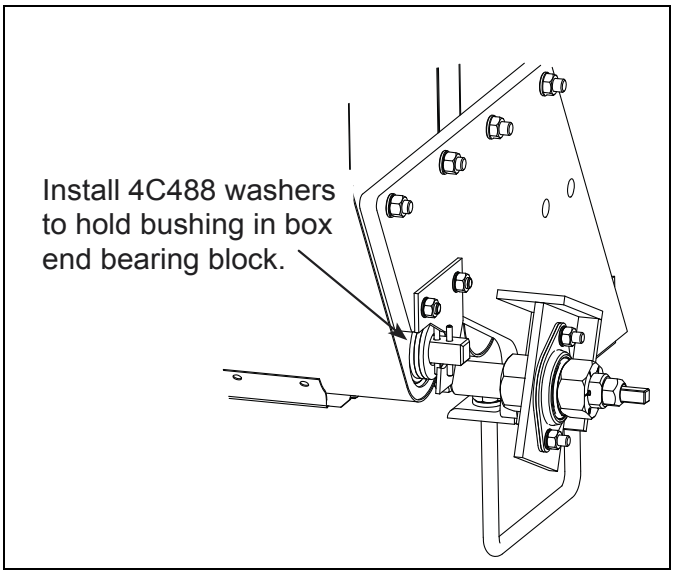

Figure 2-34: Box End Bearing

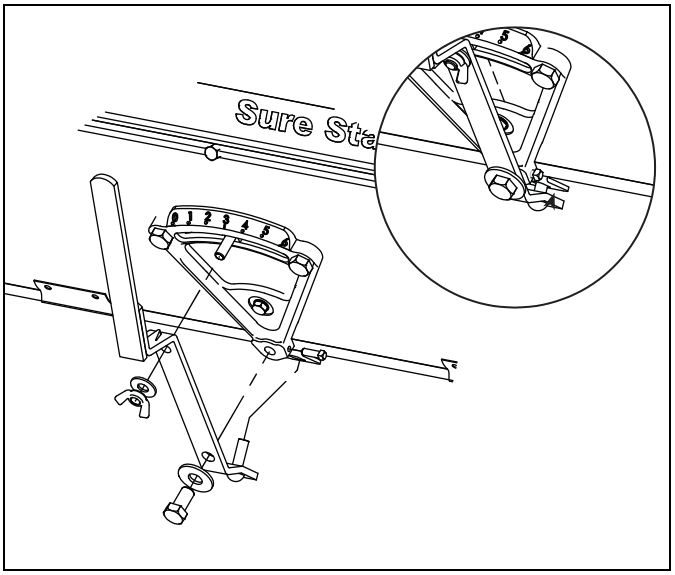

Figure 2-35: Shift Handle

Brush Agitator (Optional)

IMPORTANT

Before proceeding with brush/blade agitator installation, be sure to determine the direction of shaft rotation on your particular seeder model. Direction of rotation is not the same on all models due to transmission differences. See Figure 2-36.

NOTE

The standard Agitator Box Kit comes with cage agitators. Optional brush or blade agitators are also available. See the following pages for information on these options.

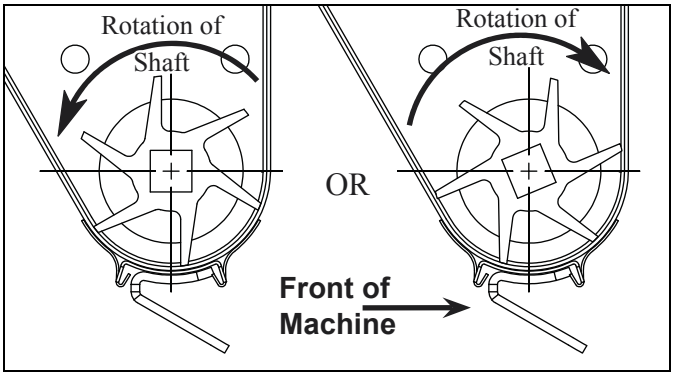

Figure 2-36: Shaft Rotation

Brush Agitators are installed in Brillion seeder as follows:

1. Remove two bolts which hold retainer plate and bearing on right end of right seed box.
2. Slide both shafts out of right end.
3. Observe the diagram of box cross section above as example. Brush agitators must be installed with careful attention to the direction of shaft rotation. The brushes must face backward, away from rotation to wipe over the seed openings.

CAUTION

The brushes will be destroyed if installed backwards. apply decal enclosed with kit (5d505) to front seedbox as a reminder to tractor drive.

4. Install the rear box reel washers on each end of brush agitators to prevent seed leakage out of the bushing and to reduce agitator end play between bearing brackets. With the brush agitators properly seated in the boxes, replace the drive shafts, end washers and retainer plate. The kit may also contain 8J804 shaft retaining clip. This clip is not used on SS8,10 and 12 foot seeders. See Figure 2-37.

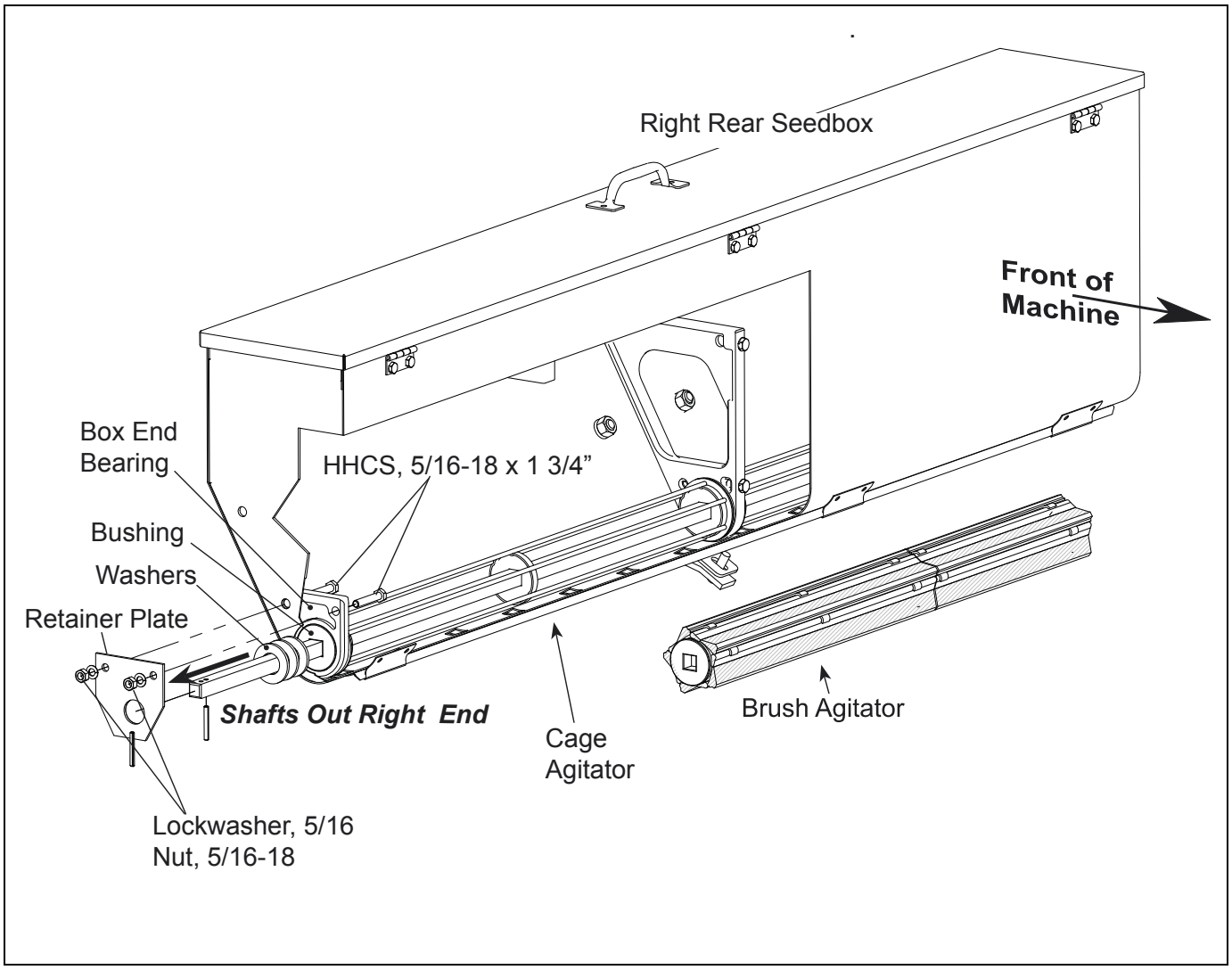

Figure 2-37: Brush Agitator (Optional)

Blade Agitator (Optional)

IMPORTANT

Before proceeding with brush/blade agitator installation, be sure to determine the direction of shaft rotation on your particular seeder model. Direction of rotation is not the same on all models due to transmission differences. See Figure 2-36.

NOTE

The installation of the "Blade Agitator "See Figure 2-38. is the same as the "Brush Agitator". See page 2-24.

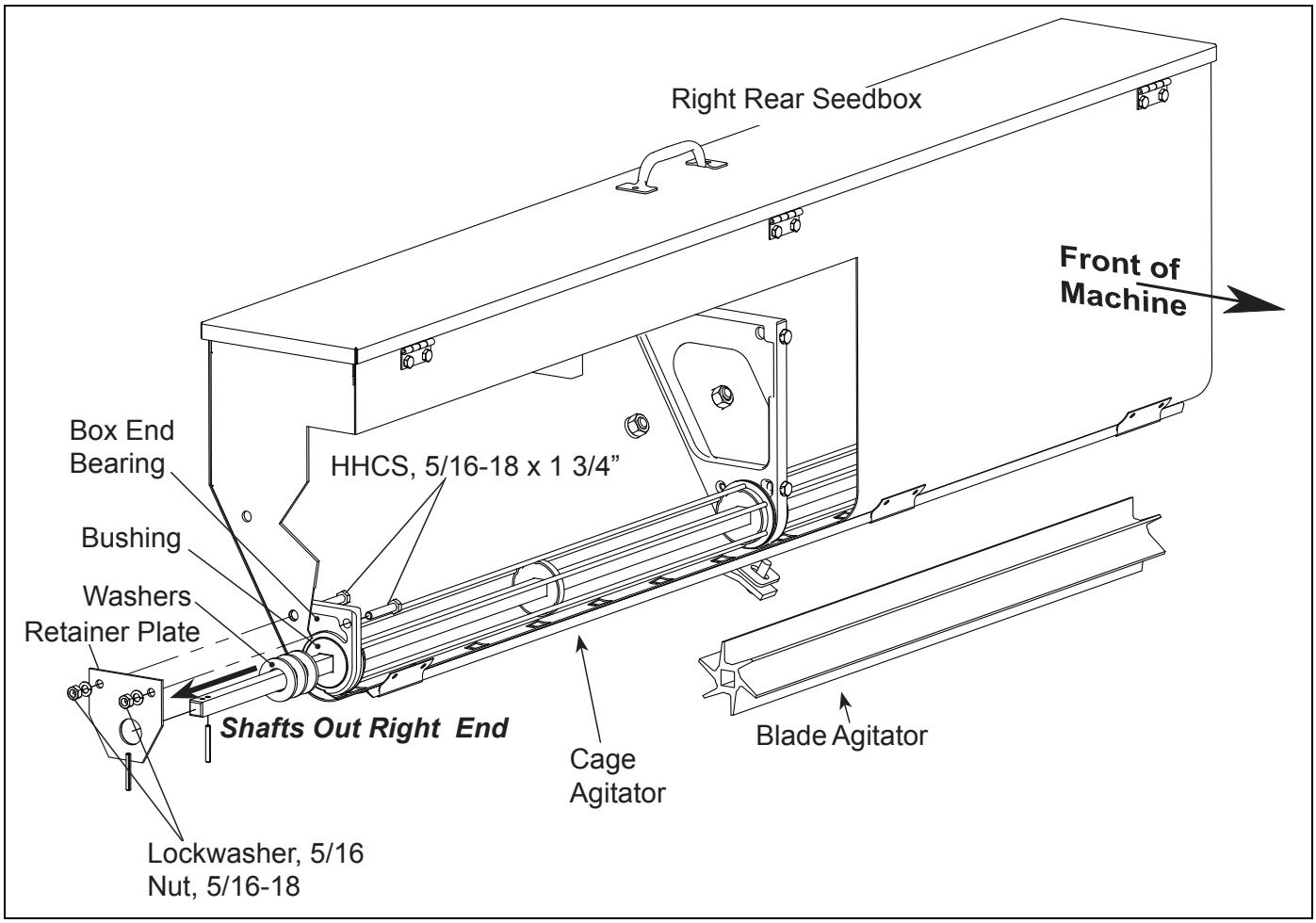

Figure 2-38: Blade Agitator

able provided for your general use with this manual.

NOTES:

Chapter 3

Operation

Seeder Operation

This chapter covers the basic operation and usage procedures for the Landoll Brillion Sure Stand Seeder. Be sure to read and understand the Safety Procedures and Cautions starting on page 1-1.

Seeder Transport Lock (Pull Type Only)

To prepare the machine for transport, raise machine fully and pin transport lock in place on each lift cylinder.

For field operation:

Disengage each transport lock and replace the pin. The lock rests on the wheel arm; the pin is in front of lock. See Figure 3-1.

IMPORTANT

If the pin is not installed, the transport lock may bounce up and cause significant damage to the cylinder and fittings.

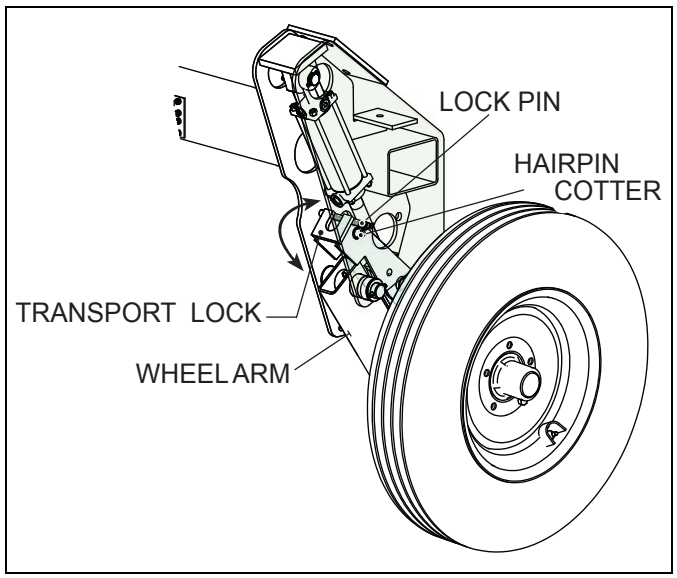

Figure 3-1: Transport Lock

Parking Pin (Pick-up Seeders Only)

WARNING

To prevent the implement from tipping backward on the frame, disengage parking pin only when the seeder is fully attached to the tractor. Be sure to observe the following sequences.

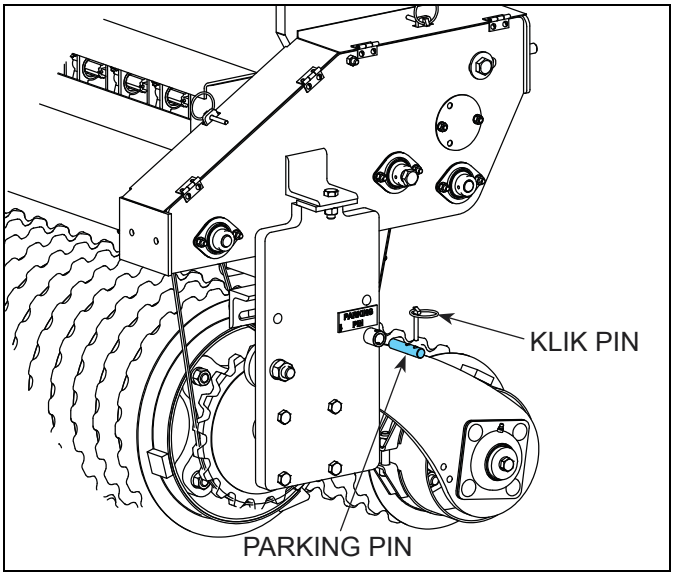

Figure 3-2: Parking Pin

When hooking up the seeders:

1. Attach the tractor.
2. Remove the Klik pin, pull the parking pin into the outer position, replace the Klik pin. See Figure 3-3.

When unhooking the seeders:

1. Remove the Klik pin, push in the parking pin, replace the Klik pin.
2. Disconnect the tractor. See Figure 3-3.

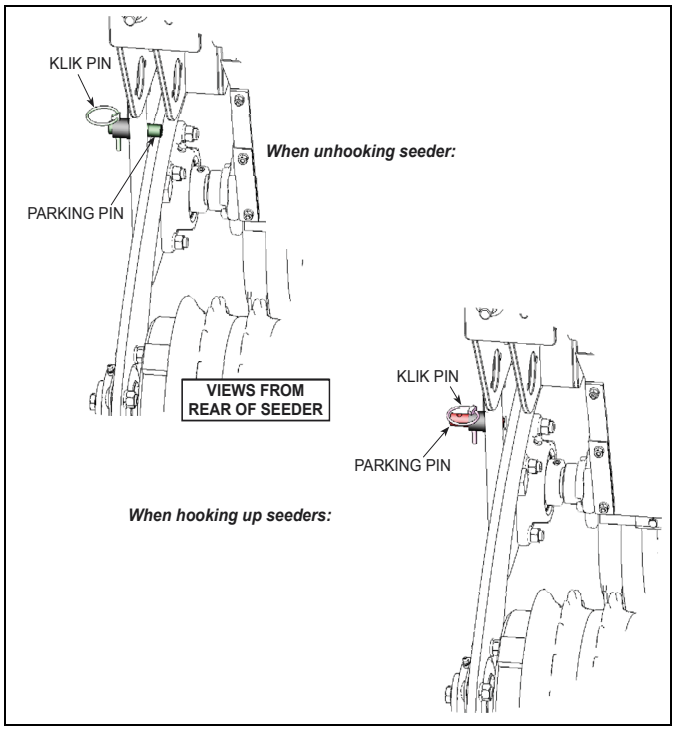

Figure 3-3: Hooking and UnHooking Pick-Up Seeder Only

Seed Rate Adjustment

NOTE

Wrenches for adjustment are stored on a pin at the back of the transmission.

Seed cups discharge to the front of the machine to aid the tractor driver in determining proper operation. In addition, reflective amber decals are placed on the seed shaft to indicate rotation.

WARNING

- **To prevent damage to the seed meters, do not apply excessive force to the adjusting nuts. Failure to do so may result in the seed being pinched between the cut-off and washer inside the seed cup.**
- **Do not close the meters more than 1/8” when there is seed in the meters without rotating the seed shaft. This prevents damage to the rotating washers and retainer rings in the seed meters.**
- **Do not attempt to open meters more than 1”. (Feed rolls could become disengaged from washer in the seed cup.)**

Seed rate charts are located inside the seed box cover and in this manual. See Table 3-1. It should be used as a general guide only. Because of seed variation, a more accurate rate can be determined by turning the 15/16” Hex nut on the transmission and calibrating the seeder.

Seed rate for the front or meter box is set by adjusting the micro-meter on the right side. See Figure 3-4.

1. To increase the rate of seeding, loosen the large locknut on inside of the bearing and turn the seed rate adjusting nut to the desired setting, then tighten the large locknut.
2. To decrease the rate of seeding, loosen the seed rate adjusting nut and set it to the new desired position; then tighten the large locknut.

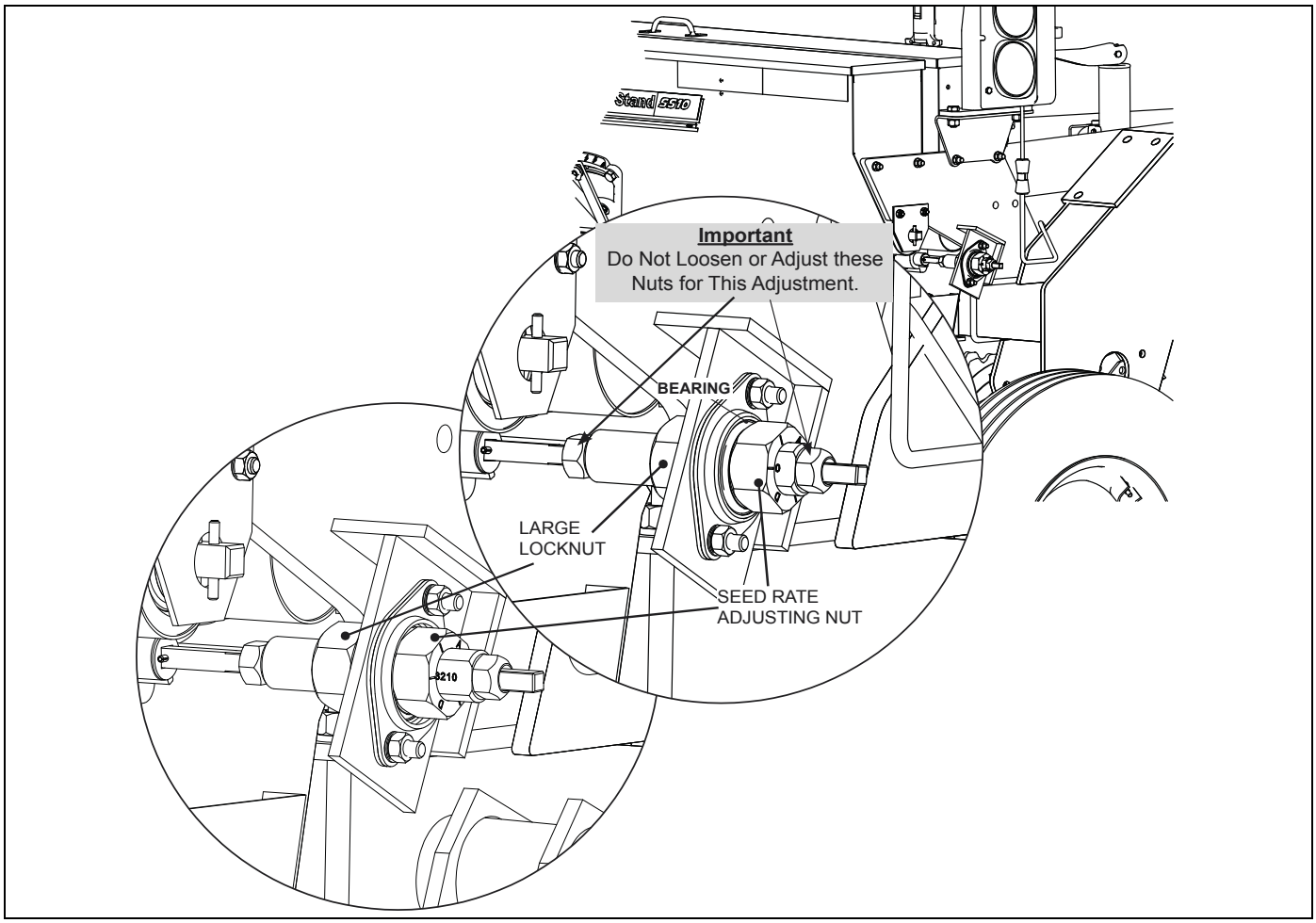

Figure 3-4: Micro-meter

Transmission Drive Bolt

A 1/4” x 2-1/4” Grade 5 bolt connects the 6 tooth #550 roller chain sprocket to the front transmission shaft. This bolt must be removed for calibration and can also be removed if it is desired to use the seeder as a roller only (The Acre Meter will not register when the bolt is removed). See Figure 3-5.

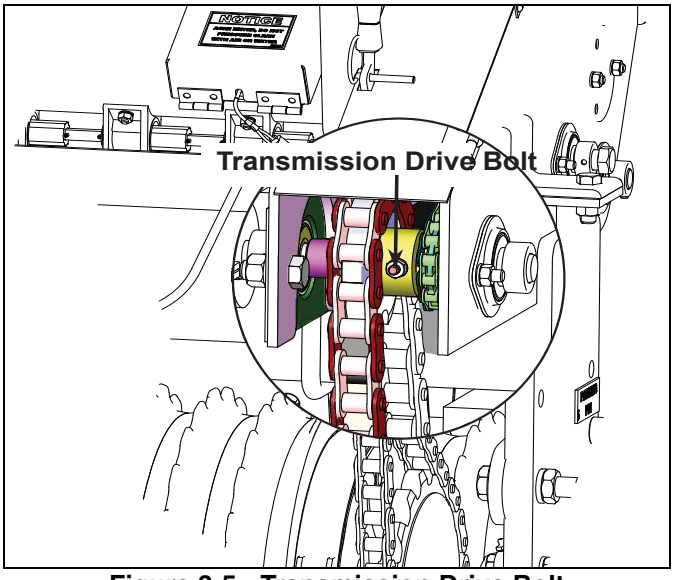

Figure 3-5: Transmission Drive Bolt

Calibration of Seed Boxes

Steps 1-3 apply to all model sizes.

Front Seed Box may be calibrated for unlisted seed as follows:

1. Remove Drive Bolt near 13 tooth (or optional 26 tooth) Driver Sprocket. See Figure 3-6.
2. Raise Machine and Lock in transport position.
3. Place a canvas or tarp under machine to catch seed.

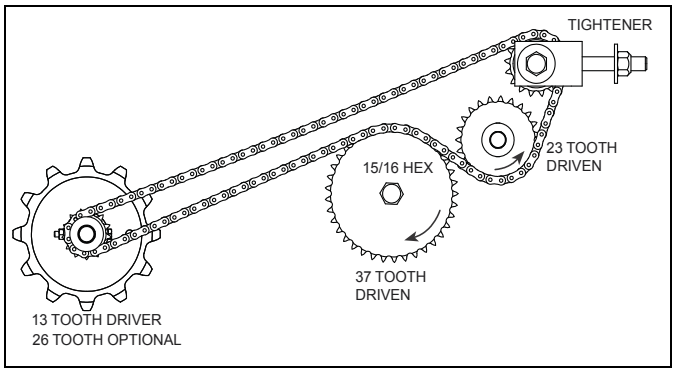

Figure 3-6: Driver Sprocket

8 Foot Seed Box

1. Turn the 15/16 Hex on transmission shaft 250 revolutions clockwise (500 if 26 Tooth driver is used). 50 (fifty) turns may be used if results are adjusted as shown in step #5.
2. Weigh seed for approximate planting rate. Multiply weight by 5 (10 for 26 tooth driver) if only 50 (fifty) turns were used. See Table 3-1.

Table 3-1: Table for 8 Foot Seedbox

INDICATOR SETTING	1A	2A	3A	4A	5A	6A	7A	8A
ALFALFA (UNCOATED)	2	5	9	13	16	20	24	27
BAHIA	1	4	7	10	13	16	19	21
BERMUDA (HULLED)	2	5	9	14	17	21	24	28
BIRDSFOOT TREFOIL (BROADLEAF)	2	6	10	14	21	25	31	36
BLUEGRASS (KENTUCKY)	1	2	3	5	6	8	9	10
BLUE GRASS (PARK KENTUCKY)	1	3	5	8	10	13	15	17
BLUE GRASS (SHERMAN BIG)	-	1	3	4	5	6	7	8
CANOLA	1	5	8	12	15	18	21	25
CENTIPEDE	2	5	6	9	12	14	16	18
CLOVER,(ALSIKE, LADINO, SWEET, RED)	2	6	9	13	17	21	24	28
CLOVER, ALYCE, CALIF., BUR., CRIMSON, HUMBAM	2	5	8	12	17	20	24	30
CRESTED WHEAT	-	1	2	3	4	5	6	7
CROWN VETCH	2	7	11	15	20	24	29	34
FLAX	2	5	8	10	13	16	19	21
HARDING GRASS	1	4	6	9	11	14	16	18
KLEIN GRASS	2	5	10	13	18	23	28	31
LESPEDEZA (KOREAN UNHULLED)	1	4	7	10	14	17	21	24
LESPEDEZA (KOREAN HULLED)	2	5	9	13	16	21	25	28
LESPEDEZA (SERICEA UNHULLED)	1	3	5	8	11	13	15	17

Table 3-1: Table for 8 Foot Seedbox

INDICATOR SETTING	1A	2A	3A	4A	5A	6A	7A	8A
LESPEDEZA (SERICEA HULLED)	2	6	10	15	19	24	29	32
LOVE GRASS (WEEPING)	1	6	10	13	17	22	26	31
LOVE GRASS (SAND)	2	5	8	11	15	19	23	27
MILLET	2	6	10	14	18	22	26	31
RED TOP	1	2	4	5	6	7	8	9
REED CANARY GRASS	1	2	4	6	7	9	10	13
SWITCH GRASS (CLEANED AND HULLED)	-	2	4	5	7	9	11	13
TIMOTHY	2	4	7	11	14	18	22	25

Not recommended: Lentils, Surgeon, Sudan grass.

10 Foot Seed Box

1. Follow steps 1-3 from the previous page. See page 3-4
2. Turn the 15/16” Hex on the transmission shaft 200 revolutions clockwise (400 if 26 tooth driver is used). 40 (forty) turns may be used if results are adjusted as shown in Step 3.
3. Weigh seed for approximate planting rate. Multiply weight by 5 (10 for 26 tooth driver) if only 40 (forty) turns were used. See Table 3-2.

Table 3-2: Table for 10 Foot Seedbox

INDICATOR SETTING	1A	2A	3A	4A	5A	6A	7A	8A
ALFALFA (UNCOATED)	2	5	9	13	16	20	24	27
BAHIA	1	4	7	10	13	16	19	21
BERMUDA (HULLED)	2	5	9	14	17	21	24	28
BIRDSFOOT TREFOIL (BROADLEAF)	2	6	10	14	21	25	31	36
BLUEGRASS (KENTUCKY)	1	2	3	5	6	8	9	10
BLUE GRASS (PARK KENTUCKY)	1	3	5	8	10	13	15	17
BLUE GRASS (SHERMAN BIG)	-	1	3	4	5	6	7	8
CANOLA	1	5	8	12	15	18	21	25
CENTIPEDE	2	5	6	9	12	14	16	18
CLOVER,(ALSIKE, LADINO, SWEET, RED)	2	6	9	13	17	21	24	28
CLOVER, ALYCE, CALIF., BUR., CRIMSON, HUMBAM	2	5	8	12	17	20	24	30
CRESTED WHEAT	-	1	2	3	4	5	6	7
CROWN VETCH	2	7	11	15	20	24	29	34
FLAX	2	5	8	10	13	16	19	21
HARDING GRASS	1	4	6	9	11	14	16	18
KLEIN GRASS	2	5	10	13	18	23	28	31
LESPEDEZA (KOREAN UNHULLED)	1	4	7	10	14	17	21	24
LESPEDEZA (KOREAN HULLED)	2	5	9	13	16	21	25	28
LESPEDEZA (SERICEA UNHULLED)	1	3	5	8	11	13	15	17

INDICATOR SETTING	1A	2A	3A	4A	5A	6A	7A	8A
LESPEDEZA (SERICEA HULLED)	2	6	10	15	19	24	29	32
LOVE GRASS (WEEPING)	1	6	10	13	17	22	26	31
LOVE GRASS (SAND)	2	5	8	11	15	19	23	27
MILLET	2	6	10	14	18	22	26	31
RED TOP	1	2	4	5	6	7	8	9
REED CANARY GRASS	1	2	4	6	7	9	10	13
SWITCH GRASS (CLEANED AND HULLED)	-	2	4	5	7	9	11	13
TIMOTHY	2	4	7	11	14	18	22	25

12 Foot Seed Box

1. Follow steps 1-3 from the previous page. See page 3-4
2. Turn the 15/16” Hex on the transmission shaft 167 revolutions clockwise (333 if 26 tooth driver is used). 33 (thirty three) turns may be used if results are adjusted as shown in Step 3.
3. Weigh seed for approximate planting rate. Multiply weight by 5 (10 for 26 tooth driver) if only 33 turns were used. See Table 3-3.

Table 3-3: Table for 12 Foot Seedbox

INDICATOR SETTING	1A	2A	3A	4A	5A	6A	7A	8A
ALFALFA (UNCOATED)	3	7	13	19	23	29	34	39
BAHIA	1	6	10	14	19	23	27	30
BERMUDA (HULLED)	3	7	13	20	24	30	34	40
BIRDSFOOT TREFOIL (BROADLEAF)	3	9	14	20	30	36	44	51
BLUEGRASS (KENTUCKY)	1	3	4	7	9	11	13	14
BLUE GRASS (PARK KENTUCKY)	1	4	7	11	14	19	21	24
BLUE GRASS (SHERMAN BIG)	-	1	4	6	7	9	10	11
CANOLA	1*	7*	11	17	21	26	30	36
CENTIPEDE	3	7	9	13	17	20	23	26
CLOVER,(ALSIKE, LADINO, SWEET, RED)	3	9	13	19	24	30	34	40
CLOVER, ALYCE, CALIF., BUR., CRIMSON, HUMBAM	3	7	11	17	24	28	34	43
CRESTED WHEAT	-	1	3	4	6	7	9	10
CROWN VETCH	3	10	16	21	29	34	41	49
FLAX	3	7	11	14	19	23	27	30
HARDING GRASS	1	6	9	13	16	20	23	26
KLEIN GRASS	3	7	14	19	23	26	40	44
LESPEDEZA (KOREAN UNHULLED)	1	6	10	14	20	24	30	34
LESPEDEZA (KOREAN HULLED)	3	7	13	19	23	30	36	40
LESPEDEZA (SERICEA UNHULLED)	1	4	7	11	16	19	21	24

INDICATOR SETTING	1A	2A	3A	4A	5A	6A	7A	8A
LESPEDEZA (SERICEA HULLED)	3	9	14	21	27	34	41	46
LOVE GRASS (WEEPING)	1	9	14	19	24	31	37	44
LOVE GRASS (SAND)	3	7	11	16	21	27	33	39
MILLET	3	9	14	20	26	31	37	44
RED TOP	1	3	6	7	9	10	11	13
REED CANARY GRASS	1	3	6	9	10	13	14	19
SWITCH GRASS (CLEANED AND HULLED)	-	3	6	78	10	13	16	19
TIMOTHY	3	6	10	16	20	26	31	36

Acre Meter (Optional)

The battery operated acre meter operates in one of two modes, Sleep mode and Entry mode. In sleep mode, the display is blank and the counter is accumulating acres. Sleep mode will be entered if a button is not pressed for 20 seconds. In entry mode, the display is on and the operator can enter values. To get into entry mode, press the FUNC button.

To Program the Electronic Acre Meter Kit 5K745

1. Press FUNC button to scroll to pulses screen.
2. Enter the number of pulses for the model, as listed, using the up or down button. See Table 3-4.
3. Press the FUNC button to set pulses. (If the screen goes blank before you press the FUNC button, repeat steps 1 and 2).
4. Press the FUNC button to scroll to screen width.
5. Enter the width of the seeder for the model listed on the following table, using the up or down buttons.
6. Press the FUNC button to set width. If the screen goes blank before you press the FUNC button, repeat steps 4 and 5.
7. Press the FUNC button to scroll through the screens to check that the correct pulses and width have been entered.

To Enter the Password

1. Press the FUNC button to scroll to the pass screen.
2. Pick a number and enter it by using the up or down buttons.
3. Press the FUNC button to set the password; the number screen will show (set): record this number, it will be required if you need to disable your password.
4. Let the screen go blank - the password is now entered.

To Disable the Password

1. Press the FUNC button to scroll to pass screen, it will show (ent).
2. Use up or down button to enter password (number).
3. Press the FUNC button to scroll around to pass screen again. Number entered in step 2 will appear.
4. Press up or down to enter 0.
5. Press FUNC button; (dis) will appear. Password is now disabled.

Special Notes

- When the meter is set to the “count” mode on the pulses screen, the meter will register only magnetic wheel revolutions.
- The meter must be in sleep mode (blank screen) to calculate or count pulses.
- The count screen must have a value other than zero (0000) to scroll to other modes or screens.
- To reset the FIELD ACRES screen to zero (0000), press the up and down buttons simultaneously.

Table 3-4: Pulse Rates

MODEL					Pulses Per Acre	Pulses per 1000 sq.'	Width
SSPT604					293	7	5
SSP4			SS4		578	13	4
SSP5			XX		578	13	5
SSP6			SS6		578	13	6
SSP8			SS8		764	18	8
SSP10			SS10		764	18	10
SSP12			SS12		764	18	12
SSP108			SS108		760	17	8
SSP110			SS110		760	17	10
SSP112			SS112		760	17	12
SSP208	SSP2081		SS208	SS2081	764	18	8
SSP210	SSP2101		SS210	SS2101	764	18	10
SSP212	SSP2121		SS212	SS2121	764	18	12
SSP308			SS308		764	18	8
SSP310			SS310		764	18	10
SSP312			SS312		764	18	12
GLP643			SSLP643		917	21	5
SLP8			SL8		4147	95	8
SLP10			SL10		4147	95	10
SLP12			SL12		4147	95	12
SLP204	SLP2041				1690	39	4
SLP206	SLP611				1690	39	6
SLP304					845	19	4
SLP306					845	19	6
LSP5					1690	39	5
LSP6					1690	39	6
LSS6					1690	39	6
SLP208	SLP2081		SL208	SL2081	1528	35	8
SLP210	SLP2101		SL210	SL2101	1528	35	10
SLP212	SLP2121		SL212	SL2121	1528	35	12
SLP308	SLP3081		SL308	SL3081	1528	35	8
SLP310	SLP3101		SL310	SL3101	1528	35	10
SLP312	SLP3121		SL312	SL3121	1528	35	12
BOS4F1	BOS4S1	BOS6F1	BOS6S1		600	14	4
BOSB4F1	BOSB4S1	BOSB6F1	BOSB6S1		600	14	6

Agitator Seed Box Rate

The agitator boxes (optional) are set by means of the control handles on the rear of each box. Loosen the wing nuts to move handles to desired setting and re-tighten nuts. See Figure 3-7.

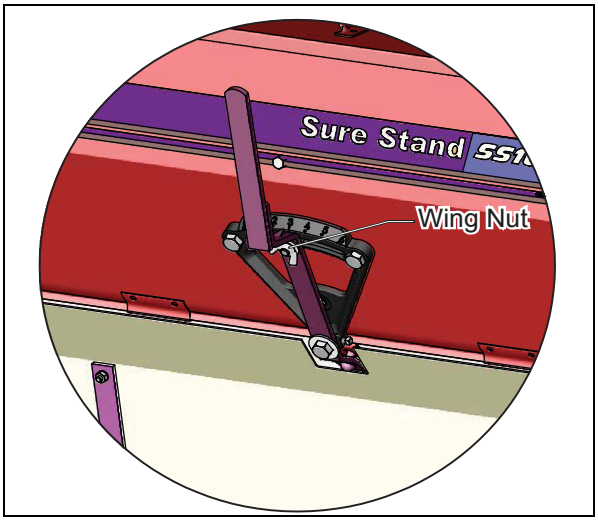

Figure 3-7: Agitator Box Control Handle

A seed rate chart is located inside the seed box cover. As with the front box, calibration as shown in the next section will provide the most accurate rate. Cage agitators are standard on the seeders. Optional brush agitators and blade agitators are also available.

IMPORTANT

If the agitator brush kit has been installed, always raise the seeder fully before backing up. Brushes will be seriously damaged if they are rotated backwards.

Seed Rate Calibration

The provided chart was determined by laboratory tests on various samples. To find rates for specific seed lots or to calibrate for unlisted seeds, proceed as shown on the seed chart. See Table 3-5.

NOTE

Planting Rates For Agitator (Rear) Box In Pounds Per Acre. Rates are for 13 tooth driver, double these values for 26 tooth driver.

1. Rates are intended as a guide only. variations in seed size and cleanliness will affect rates. check acreage and pounds of seed used for best results.
2. Calibration procedure is the same as for meter box.

Table 3-5: Seed Rate for Agitator Rear Box

INDICATOR SETTING	1	2	3	4	5	6	Requires Brush Agitator
BENT (HIGHLAND)	68	118					YES
BLUE GRASS (SHERMAN BIG)	2	13	38				NO
BLUESTEM (PAWNEE BIG) (w/ BEARDS)	1	2	4	5	9	11	YES
BLUESTEM (BONILLA BIG) (w/o BEARDS)	-	1	4	9	18	27	YES
BROME (ERECT MEADOW)	-	2	6	14	25	36	NO
BROME (NORTHERN)	-	2	4	8	14	18	NO
BROME (SOUTHERN)	-	1	2	7	11	13	NO
BUFFALO GRASS	2	19	50	128			NO
DAHLIA GRASS	2	10	30				NO
DALLIS GRASS	2	11	29	61			NO
FESCUE	2	8	27	82	142		NO

Table 3-5: Seed Rate for Agitator Rear Box

INDICATOR SETTING	1	2	3	4	5	6	Requires Brush Agitator
GRAMA (SIDE OATS)	-	2	5	7	12	17	NO
INDIAN GRASS	-	1	2	3	4	6	YES
JOHNSON GRASS			1	2	4	8	NO
ORCHARD GRASS (UNHULLED)	1	6	18	43			NO
RESCUE GRASS		2	4	9	16	21	NO
RYE GRASS	1	8	28	69			NO
TRITICALE			113				NO
Not Recommended: Bluestems other than Show, Zoro Fescue							

Chapter 4

Preventative Maintenance & Adjustment

This chapter is intended to provide maintenance instructions, procedures and guidelines for maintaining your equipment.

Acre Meter

The battery operated acre counter uses 3 AA batteries. The acre counter will display “LObat” when the batteries require replacement. Remove the acre counter from the implement and then the 4 screws on the back of the case. Separate the housing from the rear plate. Replace with 3 quality AA batteries.

Fasteners

Before operating your Brillion machine, check all hardware for tightness. Use the Tightening Torque Table reproduced below as a guide. See Table 4-1.

After a few hours of use, check the entire machine and tighten any loose nuts or bolts. Daily or periodic checks should be made thereafter.

- Values are given in foot-pounds.
- Use GRADE B lock nuts with GRADE 2 and GRADE 5 bolts only.
- Use GRADE C lock nuts with GRADE 8 bolts only.

Table 4-1: Bolt/Nut Tightening Torques

Thread Size	Bolt Grade			Plated, Stover Lock Nuts	
	GRADE 2	GRADE 5	GRADE 8	GRADE B	GRADE C
	Figure 4-1 				
				MIN/MAX	MIN/MAX
1/4-20	5	8	12	5/7	7/10
5/16-18	11	17	24	10/12	11/16
3/8-16	20	30	45	15/20	20/28
7/16-14	30	50	70	23/32	31/43
1/2-13	50	75	105	37/50	45/62
9/16-12	70	110	155	50/70	70/95
5/8-11	100	150	210	70/95	90/122
3/4-10	170	270	375	125/165	155/210
7/8-9	165	430	610	275/375	360/462
1-8	250	645	910		
1 1/8-7	355	795	1290		
1 1/4-7	500	1120	1820		
1 3/8-6	745	1670	2710		
1 1/2-6	870	1950	3160		

Tires

Recommended inflation pressure is a follows:

7.00/7.60-15 6 ply rating.....40 psi

9.5 L-15 6 ply rating.....32 psi

11 L-15 8 ply rating.....28 psi

Lubrication

- All machines have a grease zerk on each bearing end of the front and rear rollers. Pull type machines have a zerk on each wheel arm pivot as well. See Figures 4-2 and 4-3.
- Oil roller chains periodically.
- Repack wheel bearings annually.
- Grease all bearings every 20 working hours.
- Grease wheel arms every 4 hours when machine in constantly raised.
- When the machine is not used for some time, exposed portions of the hydraulic cylinder rods must be cleaned and covered with a thick coat of grease to prevent corrosion, which will damage the seals.

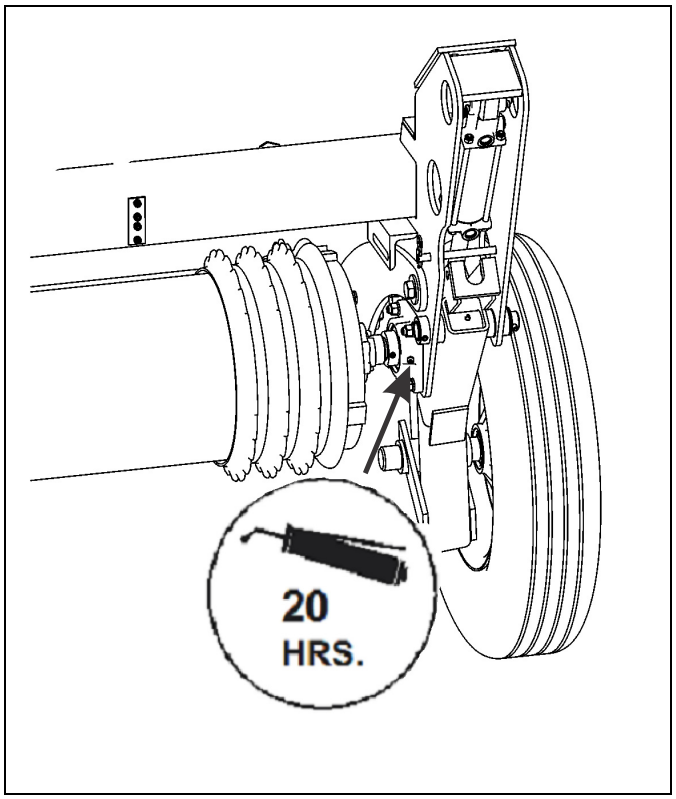

Figure 4-2: Lube Points (1 of 2)

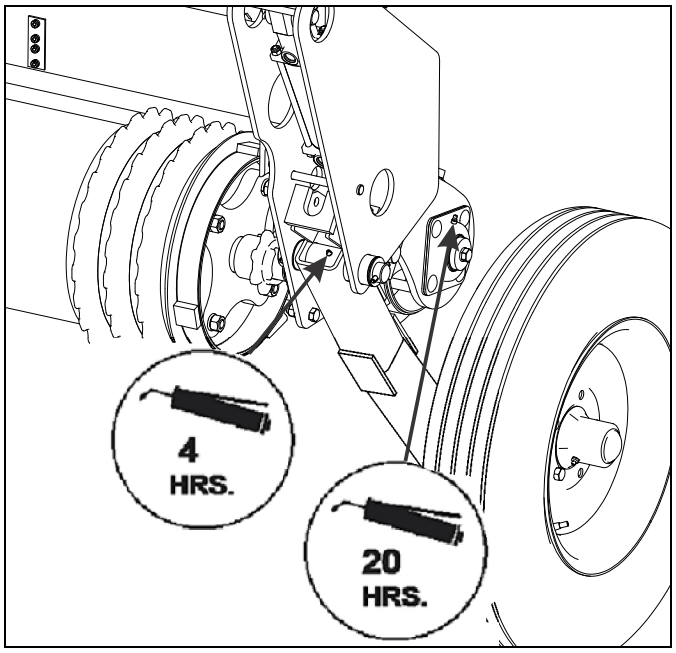

Figure 4-3: Lube Points (2 of 2)

Chain Tension

To adjust the transmission chain, first loosen the 5/8” idle axle bolt and then use the clevis bolt to obtain about 1/8” -1/4” sag. Re-tighten the axle bolt. Be careful not to over-tighten this chain. See Figure 4-4.

Adjust the chain between the front roller and transmission to have approximately 2” of total deflection. See Figure 4-5.

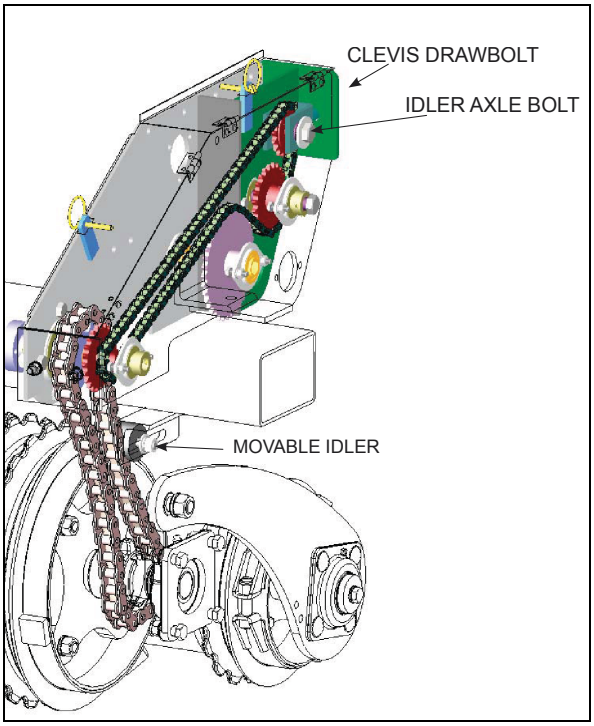

Figure 4-4: Loosen Idle Bolt

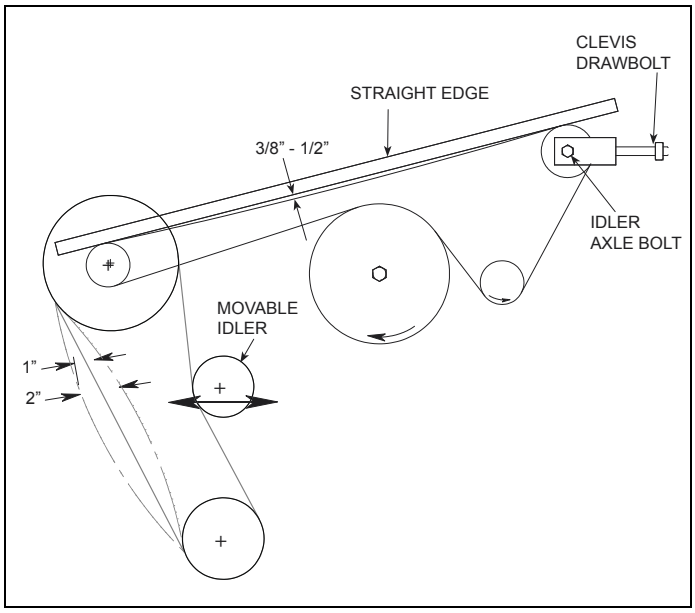

Figure 4-5: Chain Tension

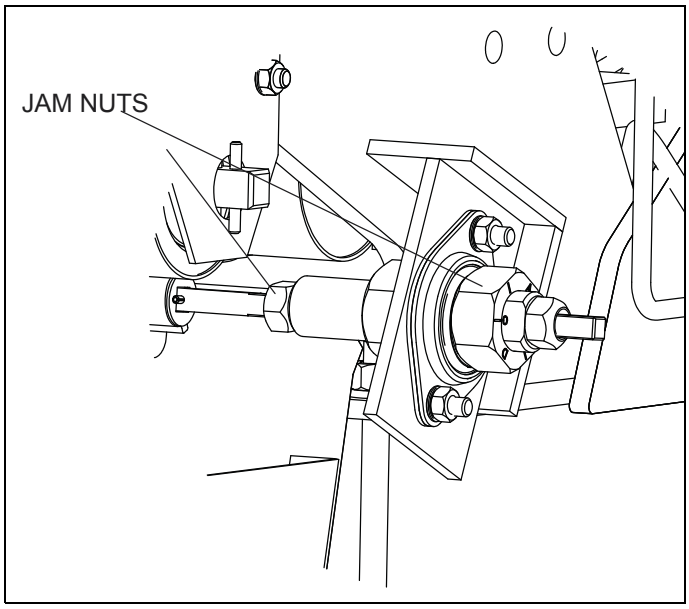

Figure 4-6: Jam Nuts

NOTE

The Vertical chain drive for the optional seed box agitator should be adjusted so both spans of chain are almost taut. Move the chain tension bar on the inside of the transmission as required.

Feed Cup Adjustment

All cups must be set the same to seed uniformly. To check, set the adjusting nut to 0-A. All cups should be closed. If not, there are three adjustments to make as needed.

1. Jam nuts on both ends of the micrometer are used to adjust all cups the same amount. See Figure 4-6.
2. Seed Box: Feed roll coupling which joins the left and right seed shafts changes cups on the left box in comparison with cups on the right box. See Figure 4-7.
3. Individual cups can be adjusted by loosening their mounting bolts, moving cups and then re-tightening. See Figure 4-8.

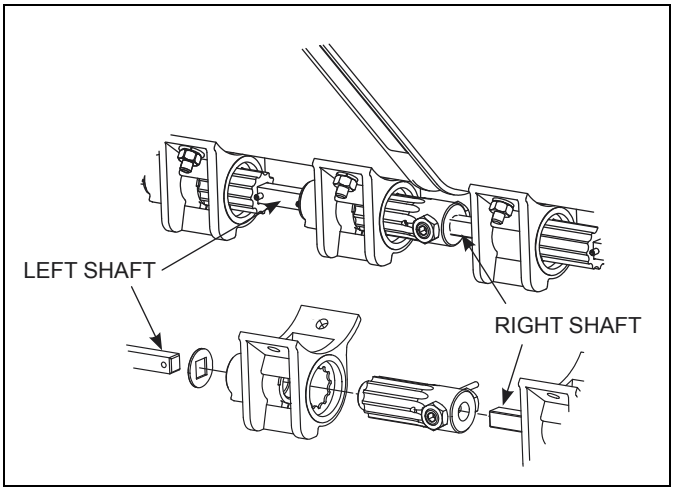

Figure 4-7: Feed Roll Coupling

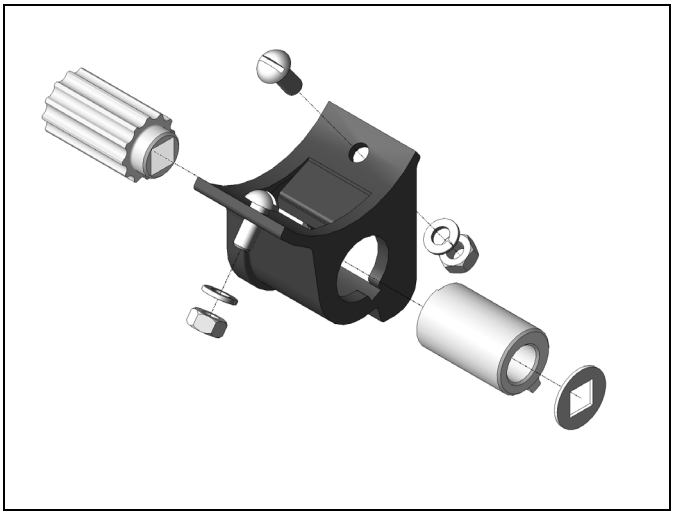

Figure 4-8 Individual Cups

Roller Wheels

IMPORTANT

To maximize seed germination, peaks on rear wheels should line up with valleys on the front wheels. This will require adjusting both end clamps on the rear tube drum and moving the wheels until valleys and peaks line up. 4K913 Turfmaster Sprockets may be added between the wheels to improve the alingment of the peaks and valleys. Add as many sprockets between the wheels as required to achieve proper alingment. each sprocket is 3/8" wide.

Adjustment Procedure

NOTE

Failure to locate the clamp band bolt over the weld will cause clamp band to loosen and slide.

Adjust the front roller wheels first. Loosen clamp bands and slide the wheels snug against each other, centering the entire assembly under the deflector shields. Locate the bolt in the clamp band over the weld on the pipe. Slide the clamp band against the end wheel and tighten the clamp band bolt. See Figure 4-9.

To adjust the rear roller wheels follow the front wheel procedure. Start aligning the peaks of the rear wheels with the valley of the front wheels at the center of the rear roller. This will provide the best alignment of worn wheels.

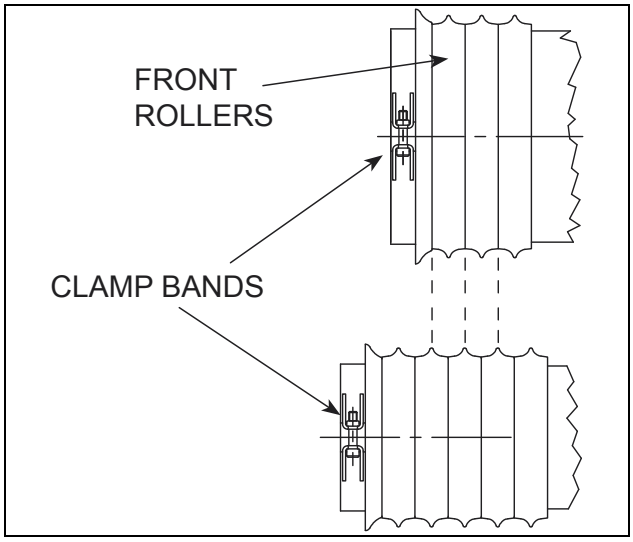

Figure 4-9: Roller Wheel Adjustment

Agitator Box Slide

When properly adjusted, the holes in the slide should line up with the holes in the box, when the control handle is set at "6". To make an adjustment:

1. Loosen the control handle wing nut and move the slide until the holes line up.
2. Move the handle to "0". Holes in the box should be completely covered. If not, continue to step 3. See Figure 4-10.

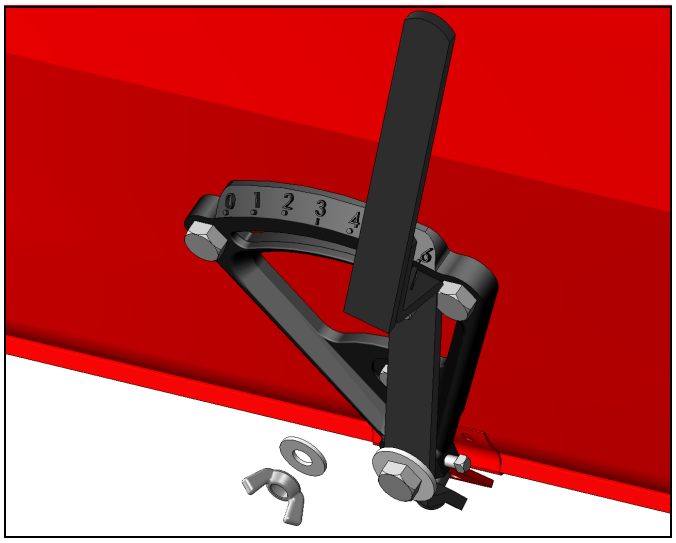

Figure 4-10 Control handle at 6

3. Loosen the three bolts holding the shift plate casting and move it slightly so that the "0" mark is farther from the control handle.
4. Re-tighten the bolts. See Figure 4-11.

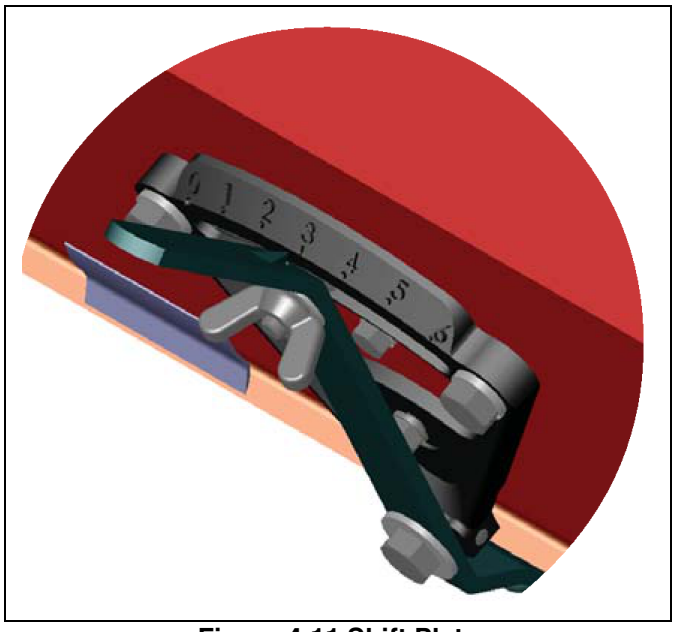

Figure 4-11 Shift Plate

5. Check that the holes in the bottom of the box are fully covered at the "0" position. See Figure 4-12.

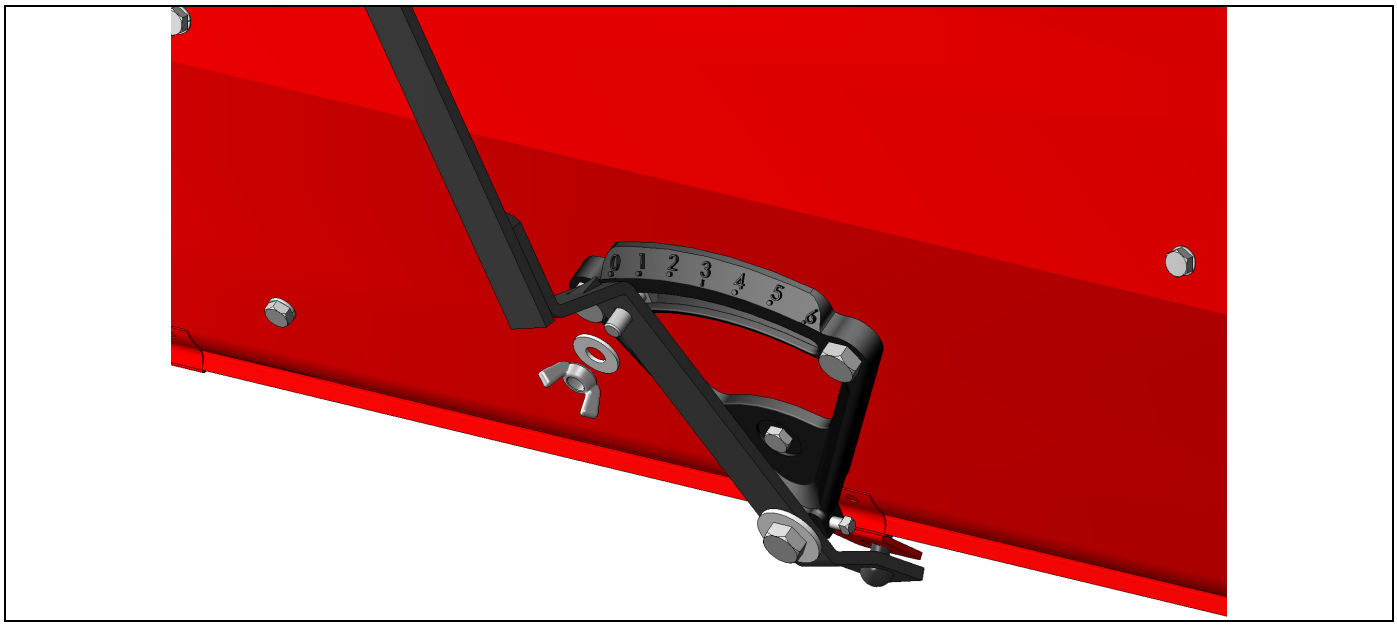

Figure 4-12: Box Slide at "0" Position

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Chapter 5

Reference Tables and Specifications

Table 5-1: 8 Foot Models

	SS-8	SSP-8	SSB-8	SSBP-8
Approximate Weight	2,086 lbs. (939 kg)	1,766 lbs. (795 kg)	2,220 lbs.(999 kg)	1,914 lbs. (861 kg)
Working Width	8 ft. 0 in. (2.4 m)	8 ft. 0 in. (2.4 m)	8 ft. 0 in. (2.4 m)	8 ft. 0 in. (2.4 m)
Transport Width	11 ft. 1 in. (3.33 m)	9 ft. 6 in. (2.85 m)	11 ft. 1 in. (3.33 m)	9 ft. 6 in. (2.85 m)
Transport Height	5 ft. 2 in. (1.55 m)	Tractor Dependent	5 ft. 2 in. (1.55 m)	Tractor Dependent
Road Clearance	10 in. (254 mm)	Tractor Dependent	10 in. (254 mm)	Tractor Dependent
Overall Height	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)
Overall Length	10 ft. 1 in. (3.03 m)	4 ft. 10 in. (1.5 m)	10 ft. 1 in. (3.03 m)	4 ft. 10 in. (1.5 m)
Seed Box	All Steel Construction with Cover	All Steel Construction with Cover	All Steel Construction with Cover	All Steel Construction with Cover
Seed Box Capacity Meter Box	3.5 bu.	3.5 bu.	3.5 bu.	3.5 bu.
Seed Box Capacity Agitator Box	NA	NA	3.5 bu.	3.5 bu.
Seed Meters	“Micro-Meter”	“Micro-Meter”	“Micro-Meter” / Cage Agitator	“Micro-Meter” / Cage Agitator
Seed Meter Drive	Ground Driven	Ground Driven	Ground Driven	Ground Driven
Seed Meter/Opening Spacing	8 in. (203 mm	8 in. (203 mm	8 in. (203 mm) / 4 in. (102 mm)	8 in. (203 mm) / 4 in. (102 mm)
Seed Delivery	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray
Pulverizer Roller Front	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron
Pulverizer Roller Rear	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron
Pulverizer Axle Bearings	Greaseable	Greaseable	Greaseable	Greaseable
Pulverizer Axle Size Front	12.75 in. (324 mm)	12.75 in. (324 mm)	12.75 in. (324 mm)	12.75 in. (324 mm)
Pulverizer Axle Size Rear	8.625 in. (219 mm)	8.625 in. (219 mm)	8.625 in. (219 mm)	8.625 in. (219 mm)

Table 5-1: 8 Foot Models

	SS-8	SSP-8	SSB-8	SSBP-8
Hitch	Pull-Type with Hydraulic Transport	Cat. II Three-Point	Pull-Type with Hydraulic Transport	Cat. II Three-Point
Hydraulic Equipment	Cylinders with Hoses to Hitch Point	NA	Cylinders with Hoses to Hitch Point	NA
Tire Size	9.5L x 15-6 ply Implement Rib	NA	9.5L x 15-6 ply Implement Rib	NA
Safety Lighting	Standard	Standard	Standard	Standard
Brome Box Kit	Optional	Optional	NA	NA
Brush Agitator Kit for Brome Box	Optional	Optional	NA	NA
Blade Agitator Kit for Brome Box	Optional	Optional	NA	NA
S-Tine Wheel Track Remover	Optional	Optional	Optional	Optional
Front Roller Scraper Kit	Optional	Optional	Optional	Optional
Legume Box Divider Kit	Optional	Optional	Optional	Optional
Electronic Acre Meter	Optional	Optional	Optional	Optional
Speed Up Kit (Doubles Output)	Optional	Optional	Optional	Optional
Factory Installed Electric Clutch	Optional	Optional	Optional	Optional
Horsepower Requirements	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.
Recommended Operating Speed	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)

Table 5-2: 10 Foot Models

	SS-10	SSP-10	SSB-10	SSBP-10
Approximate Weight	2,352 lbs. (1,058 kg)	2,032 lbs. (914 kg)	2,527 lbs. (1,137 kg	2,207 lbs. (993 kg)
Working Width	10 ft. 0 in. (3.0 m)	10 ft. 0 in. (3.0 m)	10 ft. 0 in. (3.0 m)	10 ft. 0 in. (3.0 m)
Transport Width	12 ft. 11 in. (3.88 m)	11 ft. 4 in. (3.4 m)	12 ft. 11 in. (3.88 m)	11 ft. 4 in. (3.4 m)
Transport Height	5 ft. 2 in. (1.55 m)	Tractor Dependent	5 ft. 2 in. (1.55 m)	Tractor Dependent
Road Clearance	10 in. (254 mm)	Tractor Dependent	10 in. (254 mm)	Tractor Dependent
Overall Height	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)
Overall Length	10 ft. 1 in. (3.03 m)	4 ft. 10 in. (1.5 m)	10 ft. 1 in. (3.03 m)	4 ft. 10 in. (1.5 m)
Seed Box	All Steel Construction with Cover	All Steel Construction with Cover	All Steel Construction with Cover	All Steel Construction with Cover
Seed Box Capacity Meter Box	4.375 bu.	4.375 bu.	4.375 bu.	4.375 bu.
Seed Box Capacity Agitator Box	NA	NA	4.375 bu.	4.375 bu.
Seed Meters	“Micro-Meter”	“Micro-Meter”	“Micro-Meter” / Cage Agitator	“Micro-Meter” / Cage Agitator
Seed Meter Drive	Ground Driven	Ground Driven	Ground Driven	Ground Driven
Seed Meter/Opening Spacing	8.58 in. (218 mm)	8.58 in. (218 mm)	8.58 in. (218 mm) / 4.29 in. (109 mm)	8.58 in. (218 mm) / 4.29 in. (109 mm)
Seed Delivery	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray
Pulverizer Roller Front	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron
Pulverizer Roller Rear	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron
Pulverizer Axle Bearings	Greaseable	Greaseable	Greaseable	Greaseable
Pulverizer Axle Size Front	12.75 in. (324 mm)	12.75 in. (324 mm)	12.75 in. (324 mm)	12.75 in. (324 mm)
Pulverizer Axle Size Rear	8.625 in. (219 mm)	8.625 in. (219 mm)	8.625 in. (219 mm)	8.625 in. (219 mm)
Hitch	Pull-Type with Hydraulic Transport	Cat. II Three-Point	Pull-Type with Hydraulic Transport	Cat. II Three-Point
Hydraulic Equipment	Cylinders with Hoses to Hitch Point	NA	Cylinders with Hoses to Hitch Point	NA
Tire Size	9.5L x 15-6 ply Implement Rib	NA	9.5L x 15-6 ply Implement Rib	NA
Safety Lighting	Standard	Standard	Standard	Standard
Brome Box Kit	Optional	Optional	NA	NA
Brush Agitator Kit for Brome Box	Optional	Optional	NA	NA

	SS-10	SSP-10	SSB-10	SSBP-10
Blade Agitator Kit for Brome Box	Optional	Optional	NA	NA
S-Tine Wheel Track Remover	Optional	Optional	Optional	Optional
Front Roller Scraper Kit	Optional	Optional	Optional	Optional
Legume Box Divider Kit	Optional	Optional	Optional	Optional
Electronic Acre Meter	Optional	Optional	Optional	Optional
Speed Up Kit (Doubles Output)	Optional	Optional	Optional	Optional
Factory Installed Electric Clutch	Optional	Optional	Optional	Optional
Horsepower Requirements	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.
Recommended Operating Speed	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)

Table 5-3: 12 Foot Models

	SS-12	SSP-12	SSB-12	SSBP-12
Approximate Weight	2,615 lbs. (1,177 kg)	2,396 lbs. (1,078 kg)	2,786 lbs. (1,254 kg)	2,602 lbs. (1,171 kg)
Working Width	12 ft. 0 in. (3.6 m)	12 ft. 0 in. (3.6 m)	12 ft. 0 in. (3.6 m)	12 ft. 0 in. (3.6 m)
Transport Width	15 ft. 0 in. (4.5 m)	13 ft. 3 in. (3.98 m)	15 ft. 0 in. (4.5 m)	13 ft. 3 in. (3.98 m)
Transport Height	5 ft. 2 in. (1.55 m)	Tractor Dependent	5 ft. 2 in. (1.55 m)	Tractor Dependent
Road Clearance	10 in. (254 mm)	Tractor Dependent	10 in. (254 mm)	Tractor Dependent
Overall Height	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)	3 ft. 4 in. (1.0 m)
Overall Length	10 ft. 1 in. (3.03 m)	4 ft. 10 in. (1.5 m)	10 ft. 1 in. (3.03 m)	4 ft. 10 in. (1.5 m)
Seed Box	All Steel Construction with Cover	All Steel Construction with Cover	All Steel Construction with Cover	All Steel Construction with Cover
Seed Box Capacity Meter Box	5.25 bu.	5.25 bu.	5.25 bu.	5.25 bu.
Seed Box Capacity Agitator Box	NA	NA	5.25 bu.	5.25 bu.
Seed Meters	“Micro-Meter”	“Micro-Meter”	“Micro-Meter” / Cage Agitator	“Micro-Meter” / Cage Agitator
Seed Meter Drive	Ground Driven	Ground Driven	Ground Driven	Ground Driven
Seed Meter/Opening Spacing	6 in. (152 mm)	6 in. (152 mm)	6 in. (152 mm) / 4 in. (102 mm)	6 in. (152 mm) / 4 in. (102 mm)
Seed Delivery	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray	Broadcast with Wind Deflector Tray

	SS-12	SSP-12	SSB-12	SSBP-12
Pulverizer Roller Front	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron	15.75 in. (400 mm) Gray Cast Iron
Pulverizer Roller Rear	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron	11.5 in. (292 mm) Gray Cast Iron
Pulverizer Axle Bearings	Greaseable	Greaseable	Greaseable	Greaseable
Pulverizer Axle Size Front	12.75 in. (324 mm)	12.75 in. (324 mm)	12.75 in. (324 mm)	12.75 in. (324 mm)
Pulverizer Axle Size Rear	8.625 in. (219 mm)	8.625 in. (219 mm)	8.625 in. (219 mm)	8.625 in. (219 mm)
Hitch	Pull-Type with Hydraulic Transport	Cat. II Three-Point	Pull-Type with Hydraulic Transport	Cat. II Three-Point
Hydraulic Equipment	Cylinders with Hoses to Hitch Point	NA	Cylinders with Hoses to Hitch Point	NA
Tire Size	9.5L x 15-6 ply Implement Rib	NA	9.5L x 15-6 ply Implement Rib	NA
Safety Lighting	Standard	Standard	Standard	Standard
Brome Box Kit	Optional	Optional	NA	NA
Brush Agitator Kit for Brome Box	Optional	Optional	NA	NA
Blade Agitator Kit for Brome Box	Optional	Optional	NA	NA
S-Tine Wheel Track Remover	Optional	Optional	Optional	Optional
Front Roller Scraper Kit	Optional	Optional	Optional	Optional
Legume Box Divider Kit	Optional	Optional	Optional	Optional
Electronic Acre Meter	Optional	Optional	Optional	Optional
Speed Up Kit (Doubles Output)	Optional	Optional	Optional	Optional
Factory Installed Electric Clutch	Optional	Optional	Optional	Optional
Horsepower Requirements	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.	6 to 8 HP (4.5 to 6 kW) per ft.
Recommended Operating Speed	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)	3 to 6 MPH (5 to 10 km/h)

Table provided for your general use with this manual.

NOTES:

Document Control Revision Log:

Date	Revision	Improvement(s) Description and Comments
7/7/2008	205rev7-7-08	Initial Release
7/2011	205rev0711	Updated Pictures and Drawings. Incorporated ECN 35017.
mm/dd/yyyy		

Equipment from Landoll Corporation is built to exacting standards ensured by ISO 9001:2008 registration at all Landoll manufacturing facilities.

Sure Stand Seeder

Models SS, SSB, SSP and SSBP

8', 10' and 12'

Operator's Manual

Re-Order Part Number 1P480 205rev0711

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