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5 General Reference and Specifications
Chapter 1

Introduction and 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 and maintenance will 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 4620-24 Folding Seeder was designed with versatility in mind.

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 time of printing. Some parts may have changed to assure top 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. They have trained personnel, parts and service equipment specially designed for Brillion products. Your implement's parts should only be replaced with Brillion parts. 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](http://www.landoll.com) for step by step instructions regarding product registration.

Enter your product information below for quick reference.

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERIAL NUMBER</td>
</tr>
<tr>
<td>DATE OF PURCHASE</td>
</tr>
</tbody>
</table>

Refer to the ID plate shown below. See Figure 1-1.

![Figure 1-1: ID Plate](image-url)
INTRODUCTION AND SAFETY INFORMATION

Safety

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 implement. 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 Figure 1-2. 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.

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 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 the 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 stopping. 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 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 the transport height and width of your implement.

ATTACHING, DETACHING AND STORAGE

- Do not stand between the tractor and implement when attaching or detaching implement unless both are blocked from moving.
- Block implement so it will not roll when unhitched from the tractor.
Maintenance Safety

• Block the implement so it will not roll when working on or under it to prevent injury.
• Do not make adjustments or lubricate the machine while it is in motion.
• Make sure all moving parts have stopped.
• Understand the procedure before doing the work. Use proper tools and equipment.

Protective Equipment

• Wear protective clothing & 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.

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.

Chemical Safety

Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil & property.
Read chemical manufactures instructions and store or dispose of unused chemicals as specified. Handle chemicals with care & 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 phone.

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.
Figure 1-3: Decal Locations (1 of 3)
Figure 1-4: Decal Locations (2 of 3)
INTRODUCTION AND SAFETY INFORMATION

Table provided for general use.

NOTES:
The 4620-24 Folding Seeder is almost completely assembled prior to shipping. If some components need removed or adjusted follow the below instructions.

**NOTE**

*Refer to the repair parts manual F-885 for identification of parts and for the approximate relationship of the parts in assembly.*

**IMPORTANT**

- If pre-assembled parts or fasteners are temporarily removed, remember where they go. It is best to keep parts separated.
- Check that all working parts move freely, bolts are tight and cotter pins spread.
- Refer to the Torque Table for proper torque valves. Note the different torque requirements for bolts with lock nuts. See Page 4-1.

“Left” and “Right” refer to directions seen as if standing behind the machine and facing in the direction of forward travel.

To ensure alignment of assemblies, **leave the nuts loose until completion** of final assembly. Use lock washers or flat washers as specified. Spread all cotter pins.

**After completion of final assembly, tighten all nuts evenly** to prevent misalignment, distortion or binding. Tighten all screws and nuts to the recommended torques.

**IMPORTANT**

All harnesses must be firmly attached to machine frame members, so they don't sag or become torn loose by field debris. Use the tie straps provided.

Check to be sure the harnesses at center of machine is slack enough so as not to be stretched or interfered with while rotating frame from transport to field working position and vice versa.
Seeder Undercarriage Assembly to Wing Arm Installation

**WARNING**

Do not attempt to lift heavy parts manually. Use a hoist or a fork lift to move these parts into position.

1. With Wing Arms partially unfolded, position a Seeder Undercarriage Assembly behind each Wing Arm. Align the mounting hole on the undercarriage with the Wing Arm mounting hole. See Figure 2-1.

2. Place 1/2” Nylon Thrust Washer onto Spindle Carrier and insert into Wing Arm. Place 3/4” Nylon Thrust Washer between Wing Arm and Undercarriage Frame and onto the Spindle Carrier.

3. Slide Seeder Undercarriage onto the Spindle Carrier.

4. Insert the Threaded Pin through the Spindle Carrier. Install Slotted Nut onto the Threaded Pin. Do Not tighten.

5. Connect Pivot Lock Links to the Seeder Undercarriage Assembly Tie Rods with 3/4-10 x 2-1/2 Bolts and secure with Locknuts.


Figure 2-1: Seeder to Wing Arm Connection
7. **Harness Connection:** Plug the Left and Right Hand Wing Harness into the Seeder Harness. Secure with Tie Straps. See Figure 2-2.

![Figure 2-2: Wing to Seeder Harness Connection](image)

8. **Hydraulic Connection:** Connect the Left and Right Hand Wing Hydraulic Hoses to the Bulkhead Tee. See Figure 2-3 and ( “Hydraulic Fitting Torque Specifications” on page 4-2.)

![Figure 2-3: Wing Hydraulic Connection](image)

**NOTES**

2 x 3 Hydraulic Cylinders will extend when 3-1/2 x 16 Wing Slide Lock Hydraulic Cylinder retracts. See Figures 3-5, 3-6 and 3-7.

**Tool Storage**

Place the Calibration Crank and Wrench’s in the Toolbox. See Figure 2-4.

![Figure 2-4: Tool Storage](image)
LED Warning Lamps Installation
Occasionally for shipping, the 4620-24 Folding Seeder has the left and right hand Lamp Brackets removed to reduce transport width.

1. Attach the Left and Right Lamp Brackets with 5/8-11 U-Bolts and Locknuts. See Figure 2-6.

**IMPORTANT**

Cords are marked Left or Yellow / Right or Green

2. Plug Red Lamps into Warning Lamp Harness Red Connector.

3. Route the RH Amber Lamp Harness Connector through the inside of the RH Lamp Bracket until it protrudes out of the Amber Lamp Mounting Plate. Repeat this step on the LH side.

4. Plug Amber Lamp into Warning Lamp Harness Amber Connector.

5. Ensure when assembling Amber Lamps onto the brackets, that the wires are not pinched when tightening the hardware. Attach Amber Lamps with 1/4-20 x 1-1/2 Bolts, Flat Washers and Locknuts.

6. Bundle and secure any excess cord with TyWraps.

**IMPORTANT**

All wires must be firmly attached to machine frame members, or air lines, so they don’t sag or become torn loose by field debris. Use the cable and hose ties provided.

Check to be sure that wiring at center of machine is slack enough so as not to be stretched or interfered with while rotating frame from transport to field working position and vice versa.

**NOTE**

The 7 Pin harness connects to the tractor socket when in use. When not in use, it can be stored in the Plug Holder on the frame. See Figure 2-5. Allow enough harness length to reach tractor socket and roll or fold up excess and secure hydraulic hoses.
Figure 2-6: LED Warning Lamps Installation
Acre Meter Installation

The Acre Meter, consists of three main parts: the Acre Meter, the Pick-up Switch and the Magnet Wheel Assembly.

1. Attach the Acre Meter Angle to the transmission housing using two 5/16-18 x 1 Bolts, Lock Washers and Nuts. See Figure 2-8.

2. Attach the Pick-up Switch to the Acre Meter Angle using two #8-32 x 1-1/2 Screws, Lock Washers and Nuts. Do not tighten screws at this time.

3. Attach the short Pick-up Switch Ground Wire to the small hole in the Acre Meter Angle with a #6-32 x 1/2" Screw and Nut, removing paint under the wire connector to assure a good electrical ground connection. See Figure 2-7.

4. Adjust the Pick-up 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 2-7.

   NOTE

   Alignment of the Pick-up Switch and Magnet Wheel Assembly is critical. Improper alignment will cause the acre counter to record acres erratically or not at all.

5. Attach the Acre Meter Assembly to the Frame Tube using a 1/2-13 U-Bolt and Flanged Locknuts.

6. Connect the Acre Meter to the Pick-up Switch.

7. Securely fasten the wire to the Flex Drive Cable to allow Seeder Undercarriage Assembly to pivot. Use TyWraps to prevent wire from becoming entangled or rubbing on moving parts.

8. Program the Acre Counter following the instructions on ("Electronic Acre Meter Kit" on page 3-11.)
Figure 2-8: Acre Meter Installation

- Acre Meter Angle
- Washer, Lock 5/16
- Nut, 5/16-18
- Screw, #8-32 x 1-1/2
- Washer, Flat #8
- Nut, #8-32
- Magnet Wheel Asm
- Screw, #6-32 x 1/2
- U-Bolt, 1/2-13
- Locknut, Flange 1/2-13
Clutch and Seed Shaft Sensor Console Tractor Installation

Refer to Figure 2-10 for Clutch and Seed Shaft Sensor Schematic.

1. Mount Clutch and Seed Shaft Sensor Console Angle Bracket onto Tractor Bracketry where convenient for the operator. See Figure 2-9.

2. Attach Straight Bracket to Angle Bracket using 1/2-13 x 1-1/2 Bolt and Flanged Ny-Lok Nut.

3. Attach the Clutch and Seed Shaft Sensor Console to the Straight Bracket with 1/4-20 x 1 Bolt, Flat Washers and Locknut.

4. Plug Clutch and Seed Shaft Sensor Console 3 Pin Power Cable into the Tractor Convenience Outlet and 9 Pin Cable into the Seeder Harness.

5. Secure Console Harness.

6. Check clutch operation: Clutch will engage 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 shaft will stop rotating when switch is turned to “NO SEED” position. ( “Clutch Operation” on page 3-10.)

Figure 2-9: Clutch and Seed Shaft Sensor Console
Figure 2-10: Clutch and Seed Shaft Sensor Schematic
Coil Tine Harrow Installation

1. Attach the Harrow Mounts to the frame using 5/8-11 U-Bolts and Locknuts. See Figure 2-11.

2. Insert the Harrow Assembly into the Harrow Mount. Align the holes and insert 3/8-16 x 1-1/4 Bolts.

3. Start by using the top holes in the Harrow Mount. Adjust as needed. Ensure it's equally spaced from side to side.

4. Repeat for the other side.

Figure 2-11: Coil Tine Harrow
Chapter 3

Operations

**DANGER**

Never allow anyone to ride on the 4620-24 Folding Seeder at any time. Allowing a person to ride on the machine can inflict serious personal injury or death to that person.

**DANGER**

Always lock the Tractor Drawbar in the center position when transporting the unit. Failure to do so can result in serious injury or death and cause damage to the machine.

**WARNING**

All hydraulically adjusted equipment must have Transport Locks installed or be lowered to the ground when servicing or when equipment is idle. Failure to take preventive measures against accidental lowering can result in serious personal injury.

**DANGER**

Keep all bystanders away from the machine when folding/unfolding or transporting.

**DANGER**

When transporting the unit, place Transport Locks in position after fully extending the Hydraulic Lift Cylinders. Insert Bent Pins to secure the Transport Locks. Failure to use the Transport Locks can cause the unit to settle during transport, which can result in serious injury or death and cause damage to the equipment.

**CAUTION**

When transporting farm implements on public roads, it is the responsibility of the operator to abide by state and local laws concerning wide loads, speed, safety emblems and safety lighting equipment. Drive at safe speeds, particularly when rounding corners, crossing rough ground or driving on hillsides, to prevent tipping the tractor.
OPERATIONS

Tractor Preparation

The 4620-24 Folding Seeder is designed to be pulled by a Semi-Mounted Two Point Hitch.

Before attaching the Seeder Hitch, prepare the tractor as follows:

1. The Seeder is designed to be used with Free Link CAT 2, 3; Quick Hitch Coupler CAT 2, 3N, 3. Be sure Tractor’s Hitch Capacity is not exceeded by the Laden Mass of the Seeder. Refer to Tractor Operator’s Manual.

2. Be sure Tractor is properly ballasted. A minimum 25% of Tractor Laden Mass must be on Tractor Front Wheels in transport position to maintain stability. Calculate the Loaded Seeder Mass. (See “General Reference and Specifications” on page 5-1.) (Seeder weight plus the seed box capacity with desired seed.) Refer to Tractor Operator’s Manual.

3. Inflate the rear tractor tires equally and add ballast according to the tractor operator’s manual.

Seeder Preparation

1. Prior to operating the 4620-24 Folding Seeder, read and understand the operator’s manual and all decals.

2. Inspect the machine thoroughly for good operating condition.

3. Replace worn or missing parts.

4. When the machine is new, check the bolt tightness after a few hours of operation. Tighten any loose nuts or bolts. Check the lift wheel lug bolts daily.

5. Check the lift wheel tire inflation. Inflate all tires equally to avoid side draft. Follow the tire manufacturer’s recommended pressures listed on the sidewall of the tires.


7. Check that all safety decals and reflectors are correctly located and legible. Replace if damaged.

Attaching Seeder to the Tractor

**WARNING**

Escaping fluid under pressure can penetrate the skin causing serious personnel injury. Avoid the hazard by relieving system pressure before disconnecting hydraulic lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes which eject fluid under high pressure. Wear protective gloves and safety glasses when working with hydraulics. Use a piece of cardboard or paper, not body parts to search/check for leaks. (See Figure 3-1.) If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

**DANGER**

Do not allow any bystanders to stand between the tractor and the implement while backing up to the implement.

1. Carefully back the tractor into position until the hitch is in line with the tractor arms.

2. Back the tractor into final position, and install the hitch pins or lock Quick Hitch if equipped.

3. Connect the Hydraulic Hoses.

4. Fully raise the Seeder and install the Transport Locks over the Hydraulic Lift Cylinders. See Figure 3-3.

5. Remove 3/4 inch pins and lift the Parking Stand all the way up. Re-insert pins.

6. Plug the 7 Pin connector to tractor outlet, routing cable by avoiding pinch points.
• Make sure the tractor has a good clean receptacle, free of dirt and corrosion.
• Make sure the 7 Pin Connector is inserted ALL the way in. With tighter fitting pins, operator may think the connector is all the way in, but really isn't.
• Make sure the tractor receptacle cover latches over the keyway on the 7 Pin Connector to hold the connector in place.
• If an operator plugs in the 7 Pin connector, but the lights do not seem to work right, check the above items to make sure there is a good connection with the 7 Pin connector. (See “LED Warning Lamps” on page 4-7.)

7. Install Clutch Console. Connect 3 Pin Power Cable to the tractor Power Convenience Outlet and 9 Pin Connector to the Seeder Harness. (See “Clutch and Seed Shaft Sensor Console Tractor Installation” on page 2-8.)

8. Adjust or lock tractor sway stabilizers if equipped, centering the Seeder with the Tractor. Refer to the Tractor Operator's Manual.

Transport Locks

1. Transport Locks are provided to secure the 4620 Folding Seeder in raised and folded positions. Do not rely totally on hydraulics when working beneath raised equipment.

!!! WARNING !!!

Install transport locks before attempting to service, adjust, or transport raised equipment.

2. To install the Transport Locks, fully raise the machine. Remove the Transport Lock from the storage position and install it over the Hydraulic Cylinder Rod. See Figures 3-2 and 3-3.
OPERATIONS

Hydraulic Lift System

**WARNING**

Escaping hydraulic fluid can cause serious personnel injury. Relieve system pressure before repairing, adjusting, or disconnecting. Wear proper hand and eye protection when searching for leaks. Use cardboard instead of hands (See Figure 3-4.) Keep all components (cylinders, hoses, fittings, etc.) in good repair.

**Figure 3-4: Hydraulic Leak Detection**

The 4620-24 FoldingSeeder is equipped with a hydraulic lift system to raise and lower the unit from transport to planting position.

1. If the hydraulic system is not filled with oil it should be purged of air before transporting and field operations. Carefully hitch the Seeder to the tractor and connect the hydraulic lift hoses.

2. Remove the Transport Locks and locate Locks to Storage Position. See Figure 3-2.

3. Check to make sure the tractor hydraulic reservoir is full of the manufacturer’s recommended oil.

4. Slowly raise the machine until all lift cylinders are fully extended. Lower and raise the unit to verify that all cylinders are working throughout the stroke. Fully extend the lift cylinders and continue to hold the lever until all cylinder rod movement stops. Raise/Lower machine 5 times to purge air from the system.

5. Do not loosen any hoses or fittings. Recheck tractor reservoir to make sure it is within operating limits.

6. Re-install Transport Locks. See Figure 3-3.

**Lift Circuit Hydraulic Fluid approximate requirement:**

- Transport Position = 2.26 gallons.
- Field Position = 2.03 gallons
Hydraulic Fold and Wing Lock System

**DANGER**

The Folding Seeder should be folded/unfolded on a large level area large enough to accommodate the seeder when unfolded. Be sure other people and pets are a safe distance away. Tractor should be stopped and not moving, with the engine at a slow idle.

**DANGER**

Keep all bystanders away from the machine when folding/unfolding or transporting.

The 4620-24 Folding Seeder is equipped with hydraulic cylinders to fold and unfold the seeder from transport to field position. A combination of the Fold, Lift and Wing Lock Hydraulics will be used to fold/unfold the seeder.

1. Before unfolding/folding the seeder, be sure the seeder is properly hitched to the tractor. See “Attaching Seeder to the Tractor” on page 3-2.

2. When UnFolding:
   a. Fully raise the Seeder to relieve pressure off the Transport Locks. Remove Transport Locks and relocate to storage position. See Figures 3-2 and 3-3.
   b. Activate Wing Fold Circuit. Continue to unfold the seeder until the 4 x 20 Hydraulic Fold Cylinders have fully extended.
   c. Activate the Wing Lock Circuit (Auxiliary) retracting the 3-1/2 x 6 Slide Lock Cylinder and extending the two 2 x 3 Contour Lock Cylinders on each wing. Slide Lock Hooks should be engaged on each side of the Frame Tube and each wing will now move fore-aft and laterally. See Figures 3-5 and 3-6.
   d. Lower Seeder with 3Pt Hitch and Seeder Hydraulic Lift to begin seeding.

3. When Folding:
   a. Raise seeder completely with Seeder Hydraulic Lift and tractor 3Pt Hitch.
   b. Activate the Wing Lock Circuit (Auxiliary) extending the 3-1/2 x 6 Slide Lock Cylinder completely and retracting the two 2 x 3 cylinders on each wing. Seeder wings should now be locked to prevent fore-aft and lateral movement. See Figures 3-5 and 3-7.
   c. Activate the Wing Fold Circuit. Fold the wings forward completely.
   d. Install Transport Locks over Lift Cylinder Rods and secure with bent pins and hair pin cotters. See Figure 3-3.

![Figure 3-5: Wing Slide Lock](image)

**Fold Circuit Hydraulic Fluid approximate requirement:**
- Transport Position = 2.25 gallons.
- Field Position = 2.66 gallons.

**Wing Lock Circuit Hydraulic Fluid approximate requirement:**
- Transport Position = 1.05 gallons.
- Field Position = 1.06 gallons.
Figure 3-6: Pivot Lock Disengaged

Figure 3-7: Pivot Lock Engaged
Seed Rate Adjustment

**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.)

**NOTE**

To avoid seed meter damage, if there is seed in the meters, decrease rate in small increments. Decrease rate no more than one nut revolution and rotate seed shaft to purge seed from meters. Continue adjustment as needed.

**NOTE**

Before filling with seed be sure seed shaft turns freely and seed meters are free of any foreign matter. Wrenches for adjustment and the Calibration Crank Assembly are stored in the toolbox. See Figure 3-8.

**IMPORTANT**

The clutch must be disengaged (power off) when seed shafts are turned manually for calibration. The seed rate chart is located inside the seed box cover and in this manual. See Figure 3-10. It should be used as a general guide only. Because of seed variation, a more accurate rate can be determined by turning the 3/4” Hex Nut on the transmission to calibrate the seeder. (See “Calibration for Unlisted Seeds” on page 3-9.)

On the right side, the Seed Rate for the Seed Meters can be set by adjusting the Seed Rate Adjusting Nut and Adjusting Screw. See Figure 3-9.

**IMPORTANT**

DO NOT Loosen or Adjust the Hex Nuts with Set Screws.

1. To increase the rate of seeding, loosen the 1-8 Nut on inside of the Bearing and turn the Seed Rate Adjusting Nut to the desired setting, then tighten the 1-8 Nut using supplied wrenches.
2. To decrease the rate of seeding, loosen the Seed Rate Adjusting Nut and set it to the new desired position, then tighten the 1-8 Nut using supplied wrenches.
## Seed Rate Chart

### Planting Rates for 4620, 15 Bu Micrometer, Ground Drive in Pounds per Acre

Rates are intended as a guide only. Variations in size and cleanliness will affect rates. Check acreage and pounds of seed used for best results.

<table>
<thead>
<tr>
<th>Indicator Settings</th>
<th>1A</th>
<th>2A</th>
<th>3A</th>
<th>4A</th>
<th>5A</th>
<th>6A</th>
<th>7A</th>
<th>8A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa (Uncoated)</td>
<td>3</td>
<td>7</td>
<td>13</td>
<td>19</td>
<td>23</td>
<td>29</td>
<td>34</td>
<td>39</td>
</tr>
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<td>1</td>
<td>6</td>
<td>10</td>
<td>14</td>
<td>19</td>
<td>23</td>
<td>27</td>
<td>30</td>
</tr>
<tr>
<td>Bermuda (Hulled)</td>
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<td>7</td>
<td>13</td>
<td>20</td>
<td>24</td>
<td>30</td>
<td>34</td>
<td>40</td>
</tr>
<tr>
<td>Birdsfoot Trefoil (Broadleaf)</td>
<td>3</td>
<td>9</td>
<td>14</td>
<td>20</td>
<td>30</td>
<td>36</td>
<td>44</td>
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<td>14</td>
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<td>7</td>
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<td>14</td>
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<td>11</td>
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<td>19</td>
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<td>14</td>
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<tr>
<td>Lespedeza (Korean Hulled)</td>
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<td>11</td>
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<tr>
<td>Lespedeza (Sericea Hulled)</td>
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<td>Love Grass (Weeping)</td>
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<td>19</td>
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<td>Love Grass (Sand)</td>
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<td>Millet</td>
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<td>7</td>
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<td>Reed Canary Grass</td>
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<td>Switch Grass (Cleaned And Hulled)</td>
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<td>Timothy</td>
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<td>10</td>
<td>16</td>
<td>20</td>
<td>26</td>
<td>31</td>
<td>36</td>
</tr>
</tbody>
</table>

* Will crack some seeds at these settings. Not recommended: lentils, sorghum, Sudan Grass

![Figure 3-10: 4620-24 Seed Rate Chart](image)
Calibration for Unlisted Seeds

**IMPORTANT**

The clutch must be disengaged (power off) when seed shafts are turned manually for calibration.

Landoll assumes no liability pertaining to seeding rates achieved with this seeder. Rates listed are general in nature and should be used as starting points only. Seed varieties and blends listed represent those calibrated through in-house test meters. Variations in actual rates may be realized due to differences in seed lots. For accurate rates with seeds being used, follow the calibration instructions listed on the seed chart inside the box cover or refer to the Operator’s Manual. The information listed in the above seed charts is subject to change without notice.

Calibrate Unlisted Seeds as follows:

1. Seed Shaft turns 163 Revolutions per Acre Seeded.
2. Raise machine and lock in Transport Position.
3. Place a canvas or tarp under machine to catch any seed.
4. Disengage Clutch. Turn 3/4 Hex on Transmission Shaft 163 revolutions Counter-Clockwise (CCW) with provided Crank, 41 turns may be used if results are adjusted as stated in Step 5.
5. Weigh seed for approximate planting rate in lbs/acre multiply weight by 4 if only 41 turns were used.

![Calibration Diagram](image-url)
Clutch Operation

The Clutch is controlled by a Toggle Switch on the Console. See Figure 2-16.

Clutch characteristics are as follows:

1. The Clutch is **engaged** when power (12 volts) is applied.
2. The Seeder has provisions to mechanically lock the Clutch to drive the Seed Metering System, by aligning the hole in the Clutch Shaft with the slot in the Clutch Hub and securing with a 1/4 x 1-3/4 Bolt, Flat Washers and Locknut. See Figure 3-12.
3. The Clutch must be disengaged (power off) when Seed Shafts are turned manually for calibration.
4. Check clutch operation: Clutch will engage 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 Shaft will stop rotating when switch is turned to “NO SEED” position.

**IMPORTANT**

At no time use high pressure water or air to clean the clutch as damage could occur.
Electronic Acre Meter Kit

The battery operated acre counter operates in one of two modes. 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. If you continue to press the */FUNC button, the acre counter will cycle through the functions that it can perform. The LEDs above the display indicate which function is selected.

The available functions are:
Field Acres, Total Acres, Pulses per 400 ft, Width, Password and Low Battery

Field Acres
Press the */FUNC button until the “FIELD” LED is lit. The digits indicate the acres covered since the field acre counter was cleared.

To clear the field acre count, press the UP and DOWN buttons simultaneously for two seconds. If a password has been entered, you will not be able to clear the total acre count. Field acres will count in tenths of an acre up to 99999.9 acres.

Total Acres
Press the */FUNC button until the “FIELD” and “TOTAL” LEDs are lit. The digits indicate the acres covered since the total acre counter was cleared.

To clear the total acre count, press and hold the UP and DOWN buttons for two seconds. If a password has been entered, you will not be able to clear the total acre count. Total acres will count from 1 to 999999 acres.

Pulses Per 400 Feet
Press the */FUNC button until the “PULSES” LED is lit. The number in the display indicates how many pulses are generated for every 400 feet driven. There are two methods to enter the pulses per 400 feet:
If you know the number, select it using the UP and DOWN buttons. When you press the */FUNC button, the Acre Counter will accept the number in the display as the new pulses per 400 feet. See Figure 3-13.
If you do not know the pulses per mile, press and hold the UP and DOWN buttons until the “0000” appears in the display. The “PULSES” LED will blink. The acre counter is now counting shaft rotations. Enter the cab and drive 400 feet.

Press the */FUNC button to wake up the acre counter. The “PULSES” LED will again blink. The number displayed is the pulses per 400 feet. Press the */FUNC button to accept the setting. The “PULSES” LED will stop blinking and remain on.

If a password is set, you will not be able to adjust the pulses per 400 feet.

Width
Press the */FUNC button until the “WIDTH” LED is lit. The number displayed is the length of your implement in feet.

To adjust the width, press the UP and DOWN buttons. If a password has been entered, you will not be able to adjust the width.

The width can be adjusted from .1 to 99.9 feet, in tenths of a foot.

Password
The password function allows you to protect the total acre count, pulses per 400 feet, and width settings with a password. This stops anyone from accidentally changing those settings. When the acre counter is shipped, the password is disabled. You can modify the pulses per 400 feet and implement width at any time.

Press the */FUNC button until the “PASS” LED is lit. The digits will display the word “Ent” or “dis”.

If the display shows “dis”: The password is disabled. The total acre count, pulses/400 ft, width, and password settings can be adjusted using the UP and DOWN buttons. The password can also be changed using the UP and DOWN buttons.

If the password is correct, you will be able to change the acre counter settings. The password will be viewable until the acre counter powers down. When the acre counter is powered up again, you will have to re-enter the password to change settings.

If the password is not correct, you will not be able to change the acre counter settings. When the “PASS” function is selected again, “Ent” will appear in the display.

Changing the Password
Select a new password using the UP and DOWN buttons. Press the */FUNC button until the word “Set” appears in the display. Release the */FUNC button. The number in the display is your new pass code. Make sure you record this number. Press and hold the */FUNC button until the word “dis” appears in the display.

If the password is forgotten, it can be disabled by removing the batteries. The password is intended for rental units. It is recommended that a seal be affixed to the rear plate of the acre counter to determine if the settings have been tampered with.
<table>
<thead>
<tr>
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<td>SSP4</td>
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<tr>
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<td>8.0</td>
</tr>
<tr>
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</tr>
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</tr>
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</tr>
<tr>
<td>SSP310/3101</td>
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</tr>
<tr>
<td>X19-27</td>
<td>90</td>
<td>per Model</td>
</tr>
</tbody>
</table>

Figure 3-13: Acre Meter Quick Setting Chart
**Coil Tine Harrow**

The Seeder has a Standard Coil Tine Harrow to remove tire tracks before the rollers compact the soil. The coils are individually mounted for flexibility and backup protection. The Tines depth should be adjusted so the tips are approximately 2" into the soil.

**NOTE**

The tines will hang straight down when the implement is raised.

1. The Coil Tine may be adjusted up or down as needed.
2. Adjust the Coil Tine Harrow depth by removing the 3/8-16 x 1-1/4 Bolts and Locknuts and moving the Harrow Assembly up or down to achieve the desired depth. (The holes are 1-1/4 inches apart)
   Re-Insert 3/8-16 x 1-1/4 Bolts and secure with Locknuts. Both sides should be set at the same depth. **See Figure 3-14.**

**Figure 3-14: Coil Tine Harrow Adjustment**

**General Operation**

1. The minimum horsepower requirements are typically 150 horsepower. This will vary widely due to speed, depth, moisture, and types of soils. Local dealers can help in making recommendations for your areas.
2. 3 Point Hitch Lift Capacity requirement is 7500 pounds minimum.
3. Operating speed is typically 4.5-6 mph. Excessive speed can result in undesirable germination, seeder bouncing, or other unpredictable results. Reduce speed in rocky conditions to prevent wheel breakage.

**Transporting the Seeder**

1. Check and follow all federal, state, and local requirements before transporting the Folding Seeder.
2. The Seeder should be transported only by a tractor required for field operation. The implement weight should not exceed more than 1.5 times the tractor weight. Unless noted on the implement, maximum transport speed is 20 mph for the implement and is designated on the speed identification symbol (SIS) located on the front of the implement.

**CAUTION**

Excessive speed may result in loss of control of the tractor and implement, reduced braking, or failure of the implement tires or structure. Do not exceed the implement maximum specified ground speed regardless of the capability of the maximum tractor speed.

3. Always fully fold Seeder Wings prior to transport.
4. Maximum transport speed shall be the lesser of travel speed specified in the operators manual, speed identification symbol, information sign of towed implement, or limit of road condition.
5. Slow down when driving on rough roads. Reduce speed when turning, or on curves and slopes to avoid tipping. Equipment altered other than the place of manufacture may reduce the maximum transport speed. Additional weight, added tanks, markers, harrow attachments, etc. may reduce the implements carrying capabilities.
6. Before transporting:
   a. Know the height and width of the implement being towed. Markers, tanks, attachments, etc. can increase the height and width of the implement.
b. Check to see that the tractor hitch capacity is rated to carry the weight of the Folding Seeder Hitch.

c. Use provided pins that properly fits the Lift Arms or Quick Hitch and Implement Hitch.

d. Plug in the safety lights to the tractor seven-pin connector.

e. Fully raise the Seeder Hydraulic Lift and 3Pt Hitch.

f. Make sure all transport locks and pins are installed. (See “Transport Locks” on page 3-3.)

![WARNING]

Failure to use transport lock pins during transport may result in permanent equipment damage, serious injury, or death.

g. Check all tires for proper inflation, and that lug nuts are properly torque. (See “Tires” on page 4-3.)

h. Verify that all warnings lights, SMV sign, reflectors, and safety decals are clearly visible and functioning properly.

i. Transport during daylight hours whenever possible. Always use flashing warning lights, except where such use is prohibited by law. Make sure lights, reflectors and SMV emblem are clearly visible and operating. Remove any obstructions such as dirt, mud, stalks or residue that restricts view before transporting.
Seed Shaft Console LED with Clutch Control

Basic Operation:
During normal operation the Console LED for each Seed Shaft will not be illuminated. The Shaft Sensor will be activated by the Spacer with Magnet installed on the Seed Shaft being monitored. The Shaft Sensors are standard Loup Shaft Sensors, set to 20 second delay timing. When no signal is detected for 20 seconds by the sensor, the corresponding LED in the Console will illuminate and the audible alarm will sound indicating a fault. The alarm will become silent after 30 seconds and will not sound again until all Seed Shafts return to a fully functional condition. The Console LED for other Seed Shafts will indicate a second fault but the alarm will not sound unless all Seed Shafts are functional after the INITIAL alarm.

NOTE
If Shaft Sensor stall alarm occurs, be aware that the affected Seed Box has not been planting for 20 seconds. The Clutch Master toggle switch allows you to go from “SEED” to “NO SEED” operations or you can control individual clutches by toggling the appropriate switch.

Hose Identification
1. The hydraulic hoses are color coded to help identify and match the attaching hoses on the Folding Seeder. An identification decal is placed on the front of the hitch to help identify the hoses. See Figure 3-15.
2. For the Folding Seeder, hoses will be identified as follows:
   Blue - Lift Wheels
   Yellow - Wing Fold
   Black - Wing Locks (Auxiliary)

Figure 3-15: Hitch Hoses and Color Designations
PARKING THE FOLDING SEEDER

1. When unhitching the Folding Seeder from the tractor, it is best to park in the folded position whenever possible. This gives the seeder the smallest storage footprint. Park the seeder on a level area to prevent rolling and shifting. To park the seeder with the wings in the folded position:
   a. Fully raise the seeder extending the lift cylinders. Fully raise tractor 3Pt Hitch. Install Transport Locks. See Figure 3-3.
   b. Lower the Front Parking Jack Stands and Pin in the parking position. See Figure 3-16. If storing on soft ground, place board/plate under the Jack Stands for a wider footprint.
   c. Slowly lower 3Pt Hitch until weight is relieved from the tractor.
   d. Disconnect the Console Harness and 7 Pin Warning Lamp Connector
   e. Disconnect the hydraulic hoses and place in the storage bracket above the hitch.
   f. Carefully disconnect the 3Pt Hitch.

2. To park the seeder with the wings unfolded:
   a. Fully raise the Folding Seeder to relieve pressure off the Transport Locks. Remove Transport Locks and relocate to storage position. See Figures 3-2 and 3-3.
   b. Activate Wing Fold Circuit. Continue to unfold the seeder until the 4 x 20 Hydraulic Fold Cylinders have fully extended.
   c. Activate the Wing Lock Circuit (Auxiliary) retracting the 3-1/2 x 6 Slide Lock Cylinder and extending the two 2 x 3 Contour Lock Cylinders on each wing. Slide Lock Hooks should be engaged on each side of the Frame Tube and each wing will now move fore-aft and laterally. See Figures 3-5, 3-6 and 3-7.
   d. Lower seeder with 3Pt Hitch and Rear Hydraulic Lift to begin seeding.
## General Torque Specifications

(rev. 4/97)

This chart provides tightening torques for general purpose applications when special torques are not specified on process or drawing. Assembly torques apply to plated nuts and cap screws assembled without supplemental lubrication (as received condition). They do not apply if special graphite moly-disulfide or other extreme pressure lubricants are used. When fasteners are dry (solvent cleaned) add 33% to as received condition torque. Bolt head identification marks indicate grade and may vary from manufacturer to manufacturer. Thick nuts must be used on grade 8 cap screws. Use value in [ ] if using prevailing torque nuts.

### TORQUE SPECIFIED IN FOOT POUNDS

<table>
<thead>
<tr>
<th>UNC SIZE</th>
<th>SAE Grade 2</th>
<th>SAE Grade 5</th>
<th>SAE Grade 8</th>
<th>UNF SIZE</th>
<th>SAE Grade 2</th>
<th>SAE Grade 5</th>
<th>SAE Grade 8</th>
</tr>
</thead>
</table>

### METRIC:

Coarse thread metric class 10.9 fasteners and class 10.0 nuts and through hardened flat washers, phosphate coated, Rockwell “C” 38-45. Use value in [ ] if using prevailing torque nuts.

<table>
<thead>
<tr>
<th>Nominal thread diameter (mm)</th>
<th>Newton Meters (Standard Torque)</th>
<th>Foot Pounds (Standard Torque)</th>
<th>Nominal Thread Diameter (mm)</th>
<th>Newton Meters (Standard Torque)</th>
<th>Foot Pounds (Standard Torque)</th>
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<td>60 [75]</td>
<td>33</td>
<td>1790 [1950]</td>
<td>1340 [1450]</td>
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<td>275 [330]</td>
<td>205 [245]</td>
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</tbody>
</table>
# Maintenance

## Hydraulic Fitting Torque Specifications

### 37 degree JIC, ORS, &ORB (REV. 10/97)

This chart provides tightening torques for general purpose applications when special torques are not specified on process or drawing. Assembly torques apply to plated nuts and capscrews assembled without supplemental lubrication (as received condition). They do not apply if special graphite moly-disulfide or other extreme pressure lubricants are used. When fasteners are dry (solvent cleaned) add 33% to as received condition torque. Bolt head identification marks indicate grade and may vary from manufacturer to manufacturer. Thick nuts must be used on grade 8 capscrews. Use value in [ ] if using prevailing torque nuts.

### Torque Specified in Foot Pounds

#### Parker® Brand Fittings

<table>
<thead>
<tr>
<th>Dash Size</th>
<th>37 Deg. JIC</th>
<th>O-ring (ORS)</th>
<th>O-ring boss</th>
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<tr>
<td>-4</td>
<td>11-13</td>
<td>15-17</td>
<td>13-15</td>
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<tr>
<td>-5</td>
<td>14-16</td>
<td>--------------</td>
<td>21-23</td>
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<td>20-22</td>
<td>34-36</td>
<td>25-29</td>
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<td>-8</td>
<td>43-47</td>
<td>58-62</td>
<td>40-44</td>
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<td>-10</td>
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<td>-32</td>
<td>250-290</td>
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<td>310-340</td>
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#### Aeroquip® Brand Fittings

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<td>-5</td>
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<td>38-42</td>
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<td>79-87</td>
<td>65-70</td>
<td>125-135</td>
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<td>-14</td>
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<td>160-180</td>
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<td>210-280</td>
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<td>-24</td>
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#### Gates® Brand Fittings

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<th>O-ring boss</th>
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<td>10-12</td>
<td>14-16</td>
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<td>65-80</td>
<td>111-125</td>
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<td>-14</td>
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<td>65-80</td>
<td>133-152</td>
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<td>-16</td>
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<tr>
<td>-32</td>
<td>219-243</td>
<td>--------------</td>
<td>270-360</td>
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</tbody>
</table>

### Fasteners

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

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

When replacing bolts, be sure to use fasteners of equal grade.
Tires

**Recommended Tire Size:** 12.5L x 15 FI

**Tire Inflation Pressure:** 52PSI

When Re-Installing the 5/8-18 Wheel Nuts tighten to 50 foot-pounds using the sequence in Figure 4-1. Then tighten to full torque of 130-150 ft-lbs.

9. Tighten the Slotted Nut while rotating the Hub until there is a slight resistance to wheel rotation. Then, back the Slotted Nut off one notch, until the wheel rotates freely without end play.

10. Slide the Triple Lip Seal to the Hub and install the Seal in the Hub.

11. Install a new Cotter Pin and re-install the Hub Cap.

12. Grease Wheels Hubs every 50 hrs. See Figure 4-2.

---

**Wheel Hub Bearing Maintenance**

Wheel Bearing maintenance should be performed at the beginning of every season of use. Check the Wheel Bearings periodically for excessive end play. If needed, adjust or replace them using the following procedure:

1. Place the Frame on blocks or stands sufficient to lift the Tire clear of the ground.
2. Remove the Tire.
4. Remove the Hub. Clean and inspect the Bearings and Hub Cavity. Replace any worn or defective parts.
5. Repack the Bearings using a high-quality Wheel Bearing Grease.
6. Slide the Triple Lip Seal onto the Spindle. Do not install the Seal into the Hub.

**Note**
The Triple Lip Seals should point away from the Hub to keep contaminants out and allow grease to pass.

7. Slide the Inner Bearing Cone and Hub onto the Spindle.
8. Install the Outer Bearing Cone, Washer and Slotted Nut.

---

**Lubrication Maintenance**

The 4620-24 Double Seeder is equipped with maintenance free bearings in the lifts and wing assemblies. These areas require no lubrication. Roller assembly bearings are sealed with a triple lip seal and are non-lubricable.

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 seal.
Hydraulic Maintenance

**IMPORTANT**

Unfold, lower the unit to the ground, and relieve hydraulic pressure before attempting to service any hydraulic component.

**WARNING**

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

1. Check the hydraulic fluid level per tractor owner's manual and after any leakage. Check hydraulic fluid level when the wings are folded and machine is raised for transport.
2. If a cylinder or valve leaks, disassemble the parts to determine the cause of the leak. Any time a cylinder is opened up, or whenever any seal replacement is necessary, it is advisable to clean all parts and replace all seals. Seal kits are available from your Brillion dealer.
3. Check all hydraulic hoses weekly. Look for binding or cracking. Replace all worn or defective parts immediately.
4. Transport locks are provided to hold the implement in a raised position. See Figure 3-3. Do not attempt to perform any service work under the implement without first installing the transport locks. Before servicing any hydraulic component, lower the implement to the ground and relieve all system pressure. If a hydraulic component is disconnected, repaired, or replaced, it will be necessary to purge the system of air before operation. “Hydraulic Lift System” on page 3-4 and “Hydraulic Fold and Wing Lock System” on page 3-5, on how to purge the hydraulic systems.

**Hydraulic Fluid Approximate Capacity**

**Lift** - Transport 2.28 gallons, Field 2.03 gallons  
**Fold** - Transport 2.25 gallons, Field 2.66 gallons  
**Wing Lock** - Transport 1.05 gallons, Field 1.06 gallons  
**Transport Total** - 5.57 gallons  
**Field Total** - 5.75 gallons

Roller Axle Assembly

After an initial run of 5-10 hours, check the Roller Axle Assemblies to insure that the wheels are tight to one another. If not slide the wheels tight together and adjust the Axle Clamps. Front Roller push wheels against welded Roller End Plate. See Figure 4-3.

**Clamp Tightening**

Tighten the Clamp Socket Head Bolt. Torque to 75ft/lbs. Thereafter check assemblies every 50-100 hours. See Figure 4-4. Clamps must be assembled with the open section straddling the welded seam of the drum pipe.

**NOTE**

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

**IMPORTANT**

All the Seed Meters MUST BE CLOSED! It may be necessary to individually adjust Seed Meter Adapter with Seed Meter attached or Seed Meter if Meter Adapter is not used.

All Seed Meters must be set the same to ensure seeding uniformity. To check, set the Seed Rate Adjusting Nut to 0-A. The “A” on the Seed Rate Adjusting Nut is positioned over the “0” (the nut covers half of the “0”) and snug against the bearing. All Seed Meter Cups should be closed. If not, there are three adjustments to make as needed. See Figure 4-5.

**Figure 4-5: Seed Rate Adjuster**

1. Hex Nuts with Set Screws on both ends of the Adjusting Screw are used to adjust all Seed Meters the same amount. See Figure 4-5. To adjust Seed Meters to be closed at “0A”, loosen Hex Nuts with Set Screws (remove set screws first) and set adjusting screw to “0A”. Slide Seed Shaft to close all Seed Meters. Tighten Hex Nuts with Set Screws against Adjusting Screw and install set screws to lock against Seed Shaft flats.

2. There are 4 sections of Seed Meters grouped together per seedbox. On each end of each section there are 3/8 Square Bore Collars with Set Screws. Loosen Collar Set Screws to move that particular section as needed.

**Figure 4-6: Seed Meter Section**

3. Individual Seed Meter Adapters with Seed Meter Cup attached or Seed Meter Cups (if Meter Adapter is not used) can be adjusted as required. Adjustments can be made by loosening the 1/4-20 x 3/4 Machine Screws that mount the Seed Meter Adapter or Seed Meter Cup to the Seedbox and the 1/4-20 Nut that attaches the Seed Meter Support to the Seed Meter Cup. Adjust the affected Seed Meters so the Feed Cut Off is against the star washer in the Seed Meter Cup (closed). Be sure the Meter Feed Roll stays engaged in the Seed Meter Star Washer. See Figure 4-7. After adjustments have been made seal the Seed Meter Adapter to Seedbox with clear Silicone.

**Figure 4-7: Individual Seed Meter Cup**
Servicing Seed Shaft Assembly

**IMPORTANT**

The clutch must be disengaged (power off) when Seed Shafts are turned manually.

After you have serviced a Seed Shaft, Seed Meters or related components you will need to Zero out the Seed Meters to ensure that you are seeding uniformly. Refer to Seed Meter Adjustment. The following is a list of things to be conscience of when re-assembling the Seed Shafts.

- Ensure that the Thrust Washers are adjacent to Seed Meter Feed Cut Offs and Spacers or Square Bore Collars. See Figure 4-8.

![Figure 4-8: Seed Shaft Assembly](image)

- Ensure RH Seed Shaft is threaded into the Feed Roll Coupling Assembly between 1/2” to 3/4”. Seed Shaft should be visibly past the set screw hole when the set screw is removed from the Coupler. Tighten Feed Roll Coupler Assembly Set Screws against the flats of the Seed Shaft.

- Ensure that the Seed Shaft can turn freely without any binding when the Seed Meters are open or closed after servicing. You may need to make adjustments to the Seed Meter Supports at each Seed Meter.

Acre Meter

**IMPORTANT**

If your machine is equipped with an Acre Meter at no time use high pressure water or air to clean it, as this can damage the unit.

![NOTICE](image)

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.
LED Warning Lamps

When plugging in the LED 7 Pin Warning Lamp Connector:

1. Make sure the tractor has a good clean receptacle, free of dirt and corrosion.
2. Make sure the LED 7 Pin Warning Lamp Connector is inserted ALL the way in. With tighter fitting pins, operator may think the connector is all the way in, but really isn't.
3. Make sure the tractor receptacle cover latches over the keyway on the LED 7 Pin Warning Lamp Connector to hold the connector in place.

If an operator plugs in the LED 7 Pin Warning Lamp Connector, but the lights do not seem to work right, check the above items to make sure there is a good connection with the LED 7 Pin Warning Lamp Connector.

Figure 4-10: LED Warning Lamps
Storage

1. The service life of the 4620 Double Seeder will be extended by proper off-season storage practices. Prior to storing the unit, complete the following procedures:
   a. Completely clean the unit, blow all seed out of meters.
   b. Inspect the machine for worn or defective parts. Replace as needed.
   c. Repaint all areas where the original paint is worn off.
   d. Grease all exposed metal surfaces of shanks and points.
   e. Apply a light coating of oil or grease to exposed cylinder rods to prevent them from rusting.
   f. Lubricate each point of the machine as stated in “Lubrication Points and Intervals” on page 4-3.

2. Store the unit in a shed or under a tarpaulin to protect it from the weather. The ground tools and tires should rest on boards, or some other object, to keep them out of the soil.

3. If the unit is stored in the folded position, make sure the transport lock pins are installed to prevent settling.

4. Relieve Hydraulic Pressure in hoses after locks are installed.

5. Block wheels before unhitching from tractor.
## Chapter 5

General Reference and Specifications

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<td>Approximate Weight (Empty)</td>
<td>24 ft. (7.3 m) Agricultural Seeder</td>
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<tr>
<td>Working Width</td>
<td>24 ft. (7.3 m)</td>
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<tr>
<td>Transport Width</td>
<td>13 ft. 9 in. (4.2 m)</td>
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<tr>
<td>Overall Length (Transport)</td>
<td>31 ft. 2 in. (9.5 m)</td>
</tr>
<tr>
<td>Hitch</td>
<td>Semi-Mounted Two-Point Hitch</td>
</tr>
<tr>
<td>Hitch Category</td>
<td>Cat. 2 &amp; 3 Free Link; Cat. 2, 3N, 3 Quick Coupler</td>
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<tr>
<td>Transport Tires</td>
<td>(4) 12.5L x 15 Fl</td>
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<tr>
<td>Hydraulic Circuits Required</td>
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<tr>
<td>Seed Box</td>
<td>All Steel Construction</td>
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<tr>
<td>Seed Box Capacity</td>
<td>15 Bushels (528.6 l) Each Wing</td>
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<tr>
<td>Seed Metering</td>
<td>Micro-Meters with 6 in. (152 mm) Spacing</td>
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<tr>
<td>Seed Metering Drive</td>
<td>Ground Driven with Independent Electric Seeder Clutches</td>
</tr>
<tr>
<td>Pulverizer Rollers</td>
<td>Cast Iron with Notched Profile</td>
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<tr>
<td>Front Roller</td>
<td>15.75 in. (400 mm) Diameter</td>
</tr>
<tr>
<td>Rear Roller</td>
<td>15.75 in. (400 mm) Diameter</td>
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<tr>
<td>Pulverizer Roller Bearings</td>
<td>1.75 in. (45 mm) Flange Bearing</td>
</tr>
<tr>
<td>Seeder Wings</td>
<td>Float 5 Degrees Left to Right and 5 Degrees Front to Rear on Torsion Springs</td>
</tr>
<tr>
<td>Pivot Points</td>
<td>Utilize Maintenance Free Polymer Bearings</td>
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<tr>
<td>Coil Tine Track Remover</td>
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<td>Electric Clutch with Seed Shaft Sensor and Monitor</td>
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<td>Electronic Acre Meter Kit</td>
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<tr>
<td>LED Safety Warning Lights &amp; SMV Emblem</td>
<td>Standard</td>
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<tr>
<td>Powder Coat Paint, Red</td>
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<tr>
<td>Harrow Assembly</td>
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<td>Horsepower Requirements</td>
<td>Minimum of 150 HP (111.8 kW)</td>
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<td>Three-Point Hitch Lift Capacity</td>
<td>7,500 lbs. (3,402 kg)</td>
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<tr>
<td>Recommended Operating Speed</td>
<td>4.5 to 6.0 MPH (7.2 to 9.7 km/h) Dependent on Conditions</td>
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Table 5-1: Model Specifications
Table provided for general use.

NOTES:
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<th>Improvement(s) Description and Comments</th>
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<td>0519</td>
<td>Initial Release</td>
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Equipment from Landoll Corporation is built to exacting standards ensured by ISO 9001 registration at all Landoll manufacturing facilities.

Folding Seeder
Model 4620-24
Operator’s Manual

Re-Order Part Number F-886-0519

LANDOLL CORPORATION
1900 North Street
Marysville, Kansas 66508
(785) 562-5381
800-428-5655 ~ WWW.LANDOLL.COM

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