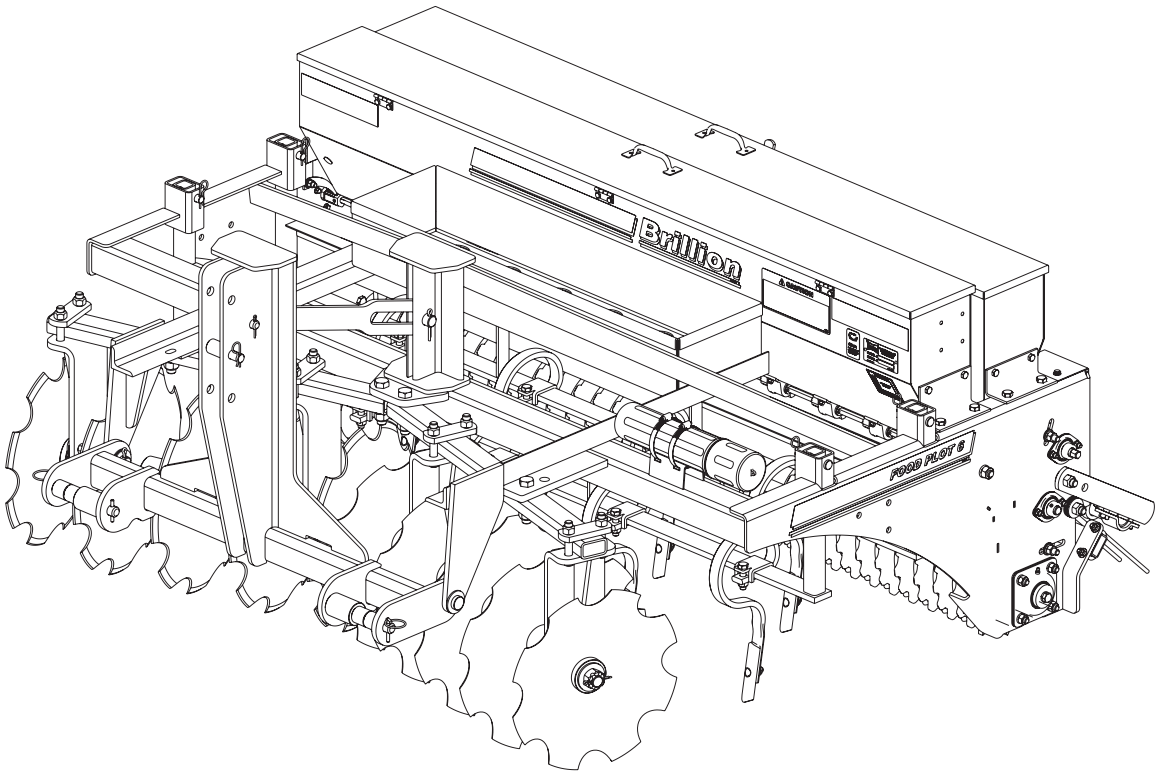
Food Plot Seeder
Models FPS6, FPST6, FPSB-6, FPSBT6
Operator's Manual



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2P102-2405

Manuals for Food Plot Seeder

Manual Number	Manual Type
2P102	Operator's Manual
2P103	Parts Manual

DANGER

DO NOT operate or perform any maintenance tasks on this equipment until you have completed the following:

1. **Receive proper training to operate this equipment safely.**
2. **Read and understand the operator's manual.**
3. **Be thoroughly trained on inspection and repair procedures.**

Failure to comply with this warning may result in serious injury or possibly death.

Table of Contents

Chapter 1
Safety

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 Brillion 6FT Food Plot Seeder features a front Meter Seed Box for small seed varieties and a rear Agitator Seed Box for bulky and chaffy seed varieties as well as small seeds at a high rate. Micro-Meters are adjusted to permit precise seed metering, and 8-Row Brush Agitators and adjustable slide, meters a wide variety of seed across the full width of the Seeder. The seeder is driven off the Rear Roller to allow for constant seed metering regardless of operating speed. Disc Gangs with adjustable angle and S-Tines with adjustable depth provide the necessary seedbed preparation.

Models are equipped with 3-PT Hitch Category 1 and 2 Free Link and Category 1 and 2 Quick Coupler.

Optional equipment include Rear Coil Tine Drag, Cargo/Rock Box and Acre Meter.

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. Implement 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.

Refer to the Data Plate as shown. **See Figure 1-1.**

MODEL NUMBER _____

SERIAL NUMBER _____

DATE OF PURCHASE _____

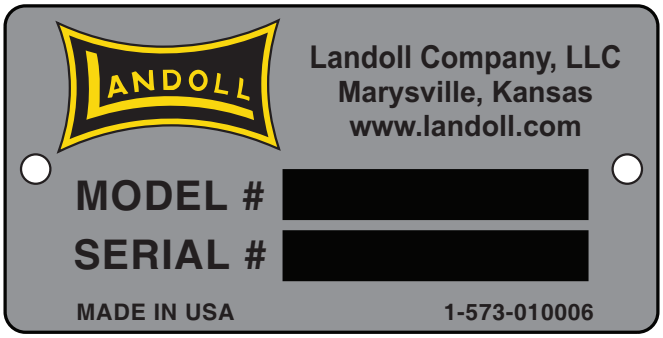


Figure 1-1: Data Plate

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 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 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.

⚠ DANGER

- **Do not allow anyone to ride on the tractor or implement. 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 machine on a road or highway, use adequate warning symbols, reflectors, lights and slow moving vehicle sign as required. Slow moving tractors and towed machines can create a hazard when driven on public roads. They are difficult to see, especially at night.
- Do not tow a machine 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 machine 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 machine 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 machine to shift sideways.
- Keep clear of overhead power lines and other obstructions when transporting. Know the transport height and width of your machine. **See “Specifications” on page 5-1.**

Safety Instructions for Towing Vehicles

The maximum travel speed is the lesser of

- The limit of the road conditions;
- The maximum specified ground speed;
  - — for towing operations as indicated in this manual or SIS;
  - — of the towed vehicle as indicated in its operator's manual, SIS, or information sign;
- The maximum ground speed of the towed equipment combination shall be limited to the lowest specified ground speed of any of the towed machines. This speed is the ground speed limitation.

EXAMPLE: If the tractor is capable of 25 mph, the first implement has a SIS for 19 mph, and the last implement's operator's manual states its specified ground speed is 15 mph, the towed equipment combination ground speed limitation is 15 mph.

Attaching, Detaching and Storage

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

Maintenance Safety

- Block the machine so it will not roll when working on or under it.
- Transport Locks installed.
- Do not make adjustments or lubricate machine while it is in motion.
- Make sure all moving parts have stopped and all system pressure is relieved.
- Understand the procedure before doing the work. Use the proper tools and equipment.

Protective Equipment

- Wear protective 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 manufacturer'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

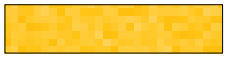
- Keep a First Aid Kit and Fire Extinguisher handy.
- Keep emergency numbers for doctor, ambulance, hospital and fire department near the phone.

Decals

ITEM 1 - 4K036

ITEM 2 - 4K037

ITEM 3
528933



ITEM 4
528934

ITEM 5
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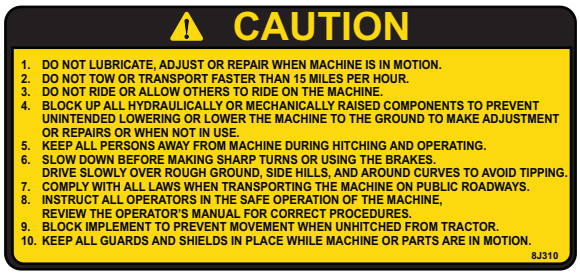
ITEM 7 - 232192



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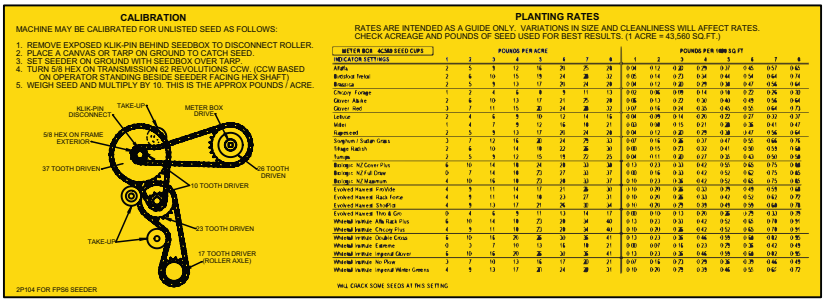
2K123



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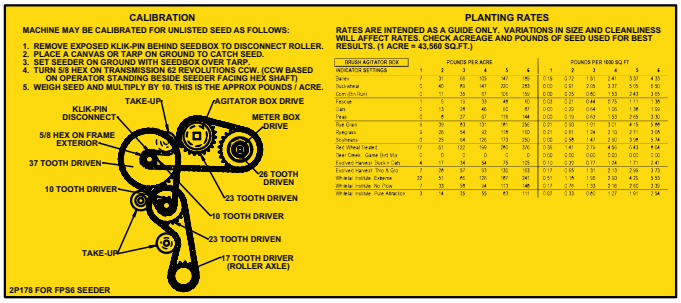
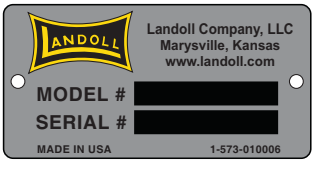


ITEM 9 - 2P178

ITEM 12
2-573-010198

ITEM 10 - 2P046



ITEM 13 - 1-573-010006

Figure 1-2: Decals

Decal Locations

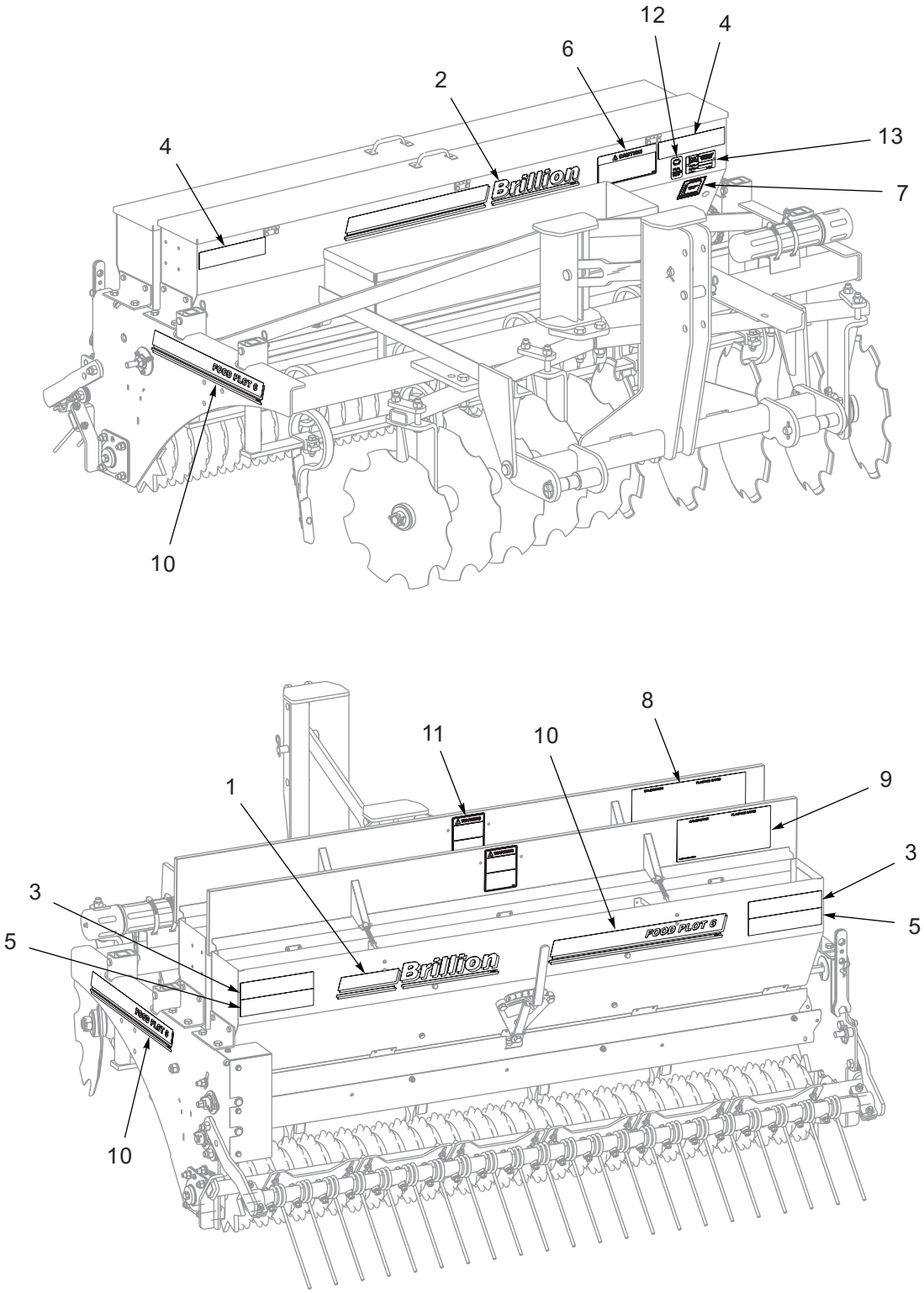


Figure 1-3: Decal Locations

Table provided for general use.

NOTES:

Chapter 2

Assembly

CAUTION

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

WARNING

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

NOTE

Refer to the repair Parts Manual 2P103 for identification of parts and for approximate relationship of the parts in assembly.

To ensure alignment of assemblies, leave the nuts loose until completion of final assembly. Use lock washers or flat washer 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

- **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 locknuts.**

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

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 wraps 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 from transport to field working position and vice versa.

Agitator Seed Box - If not equipped

NOTE

The Seed Deflector at the rear of the Seeder must be reversed prior to the installation of the Agitator Seed Box.

1. Lower Seeder.
2. Disconnect and remove the Acre Meter Assembly, if equipped.
3. Remove the Seed Deflector from the rear of the frame. **See Figure 2-1.** Turn the Seed Deflector around so that the upper lip flares rearward instead of forward. **See Figure 2-2.** Re-install Seed Deflector to the frame.

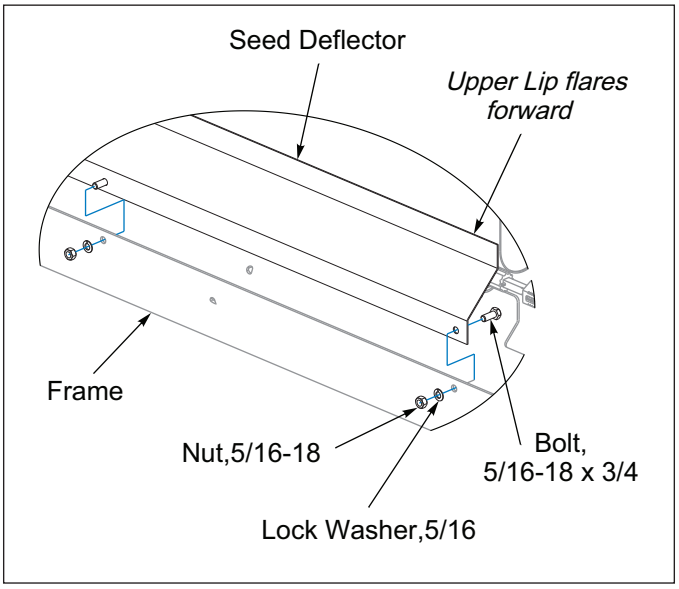


Figure 2-1: Deflector Lip Flares Forward

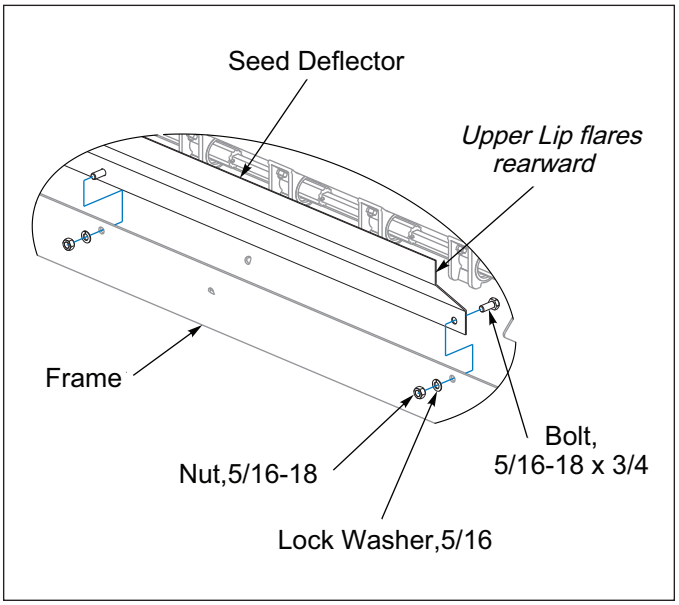


Figure 2-2: Deflector Lip Flare Rearward

4. Remove existing Seed Box Drive Chain and set it aside.
5. Attach the Mounting Brackets to the ends of the Agitator Seed Box Assembly with 3/8-16 x 1 Bolts, Lock Washers, and Nuts. **See Figure 2-4.**
6. Slide the 12ga Square Bore Washer onto Cotter Pin end of the Agitator Seed Box Seed Shaft. *If the 12ga Washer keeps falling off the end of the Seed Shaft it may be necessary to remove the outer Cotter Pin and re-insert it after the Agitator Seed Box has been installed on the Frame.*
7. Position the Agitator Seed Box Assembly Mounting Brackets onto the Frame End Plates. Secure with 1/2-13 x 1-1/4 Bolts, Lock Washers, and Nuts.
8. Add the #40 x 4 Pitches Roller Chain to the existing Seed Box Drive Chain. Install the chain. **See Figure 2-3.**
9. Remove the 3/8-16 Wing Nut and Flat Washer from the Square Head Bolt in the Shifter Plate.
10. Insert Shifter Handle Pin into the Agitator Seed Box Slide Tab. Place the Shifter handle top hole onto the Square Head Bolt in the Shifter Plate. Attach the Shifter Handle at the bottom of the Shifter Plate with 1/2-13 x 1 Bolt and Flat Washer.
11. Re-install Wing Nut and Flat Washer onto the Square Head Bolt.
12. Apply Red Reflective Decals, Red/Orange Decals, Food Plot Decal, and Brillion Decal to the rear of the Agitator Seed Box. **See Figure 2-5.**
13. Check Agitator Seed Box Shifter functionality in relationship with the Shifter Plate. **See "Agitator Box Slide Adjustment" on page 4-7.**
14. Install and Connect the Acre Meter Assembly, if equipped, on the rear of the Agitator Seed Box Assembly. **See "Acre Meter Kit - Optional" on page 2-8.**

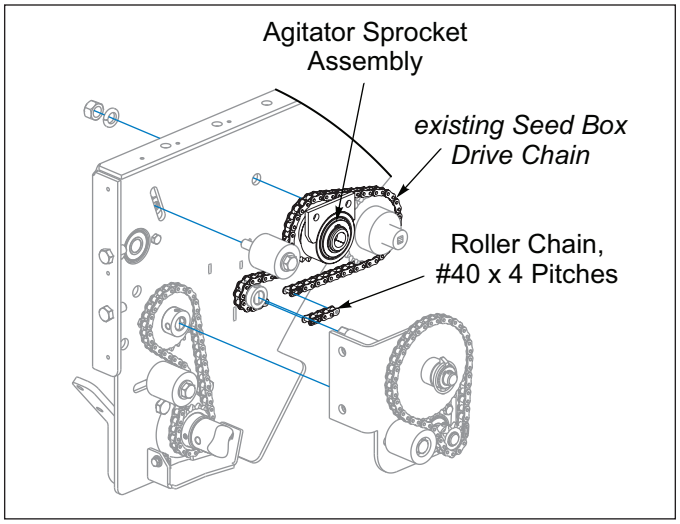


Figure 2-3: Double Seed Box Drive Chain

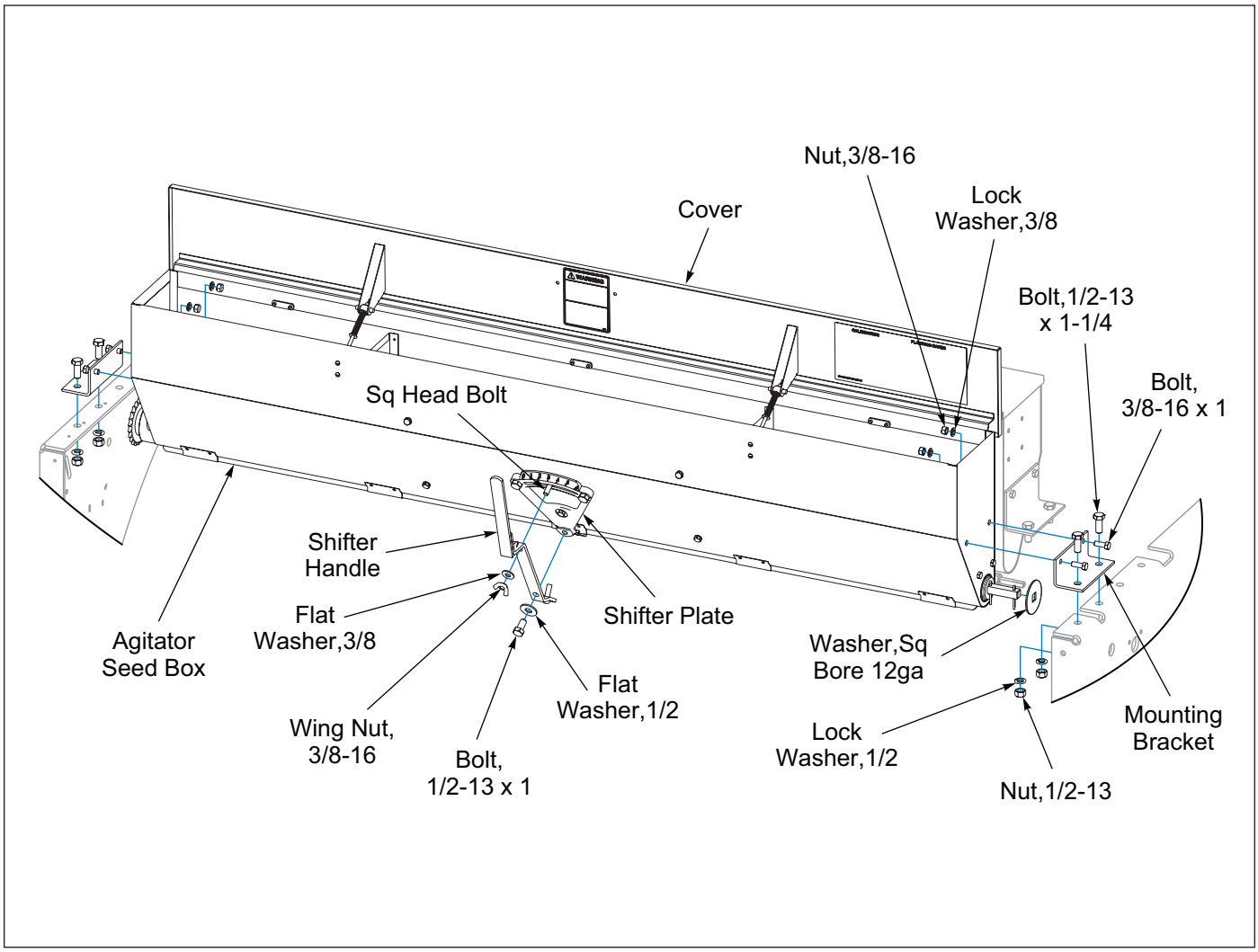


Figure 2-4: Agitator Seed Box Assembly

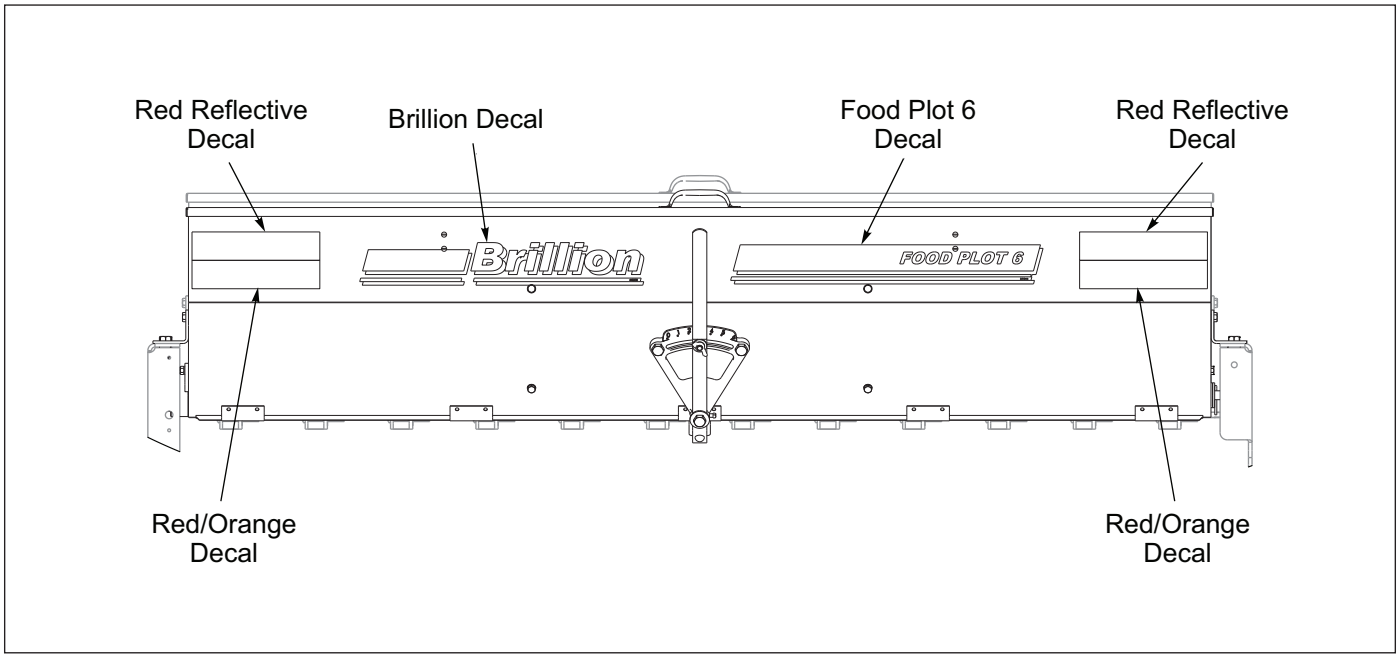


Figure 2-5: Agitator Seed Box Decals

Cargo/Rock Box - Optional

1. Attach Cargo/Rock Box to Frame angles just in front of the Seed Box with 1/2-13 x 1-1/2 Bolt, Flat Washers and Locknuts. **See Figure 2-6.**

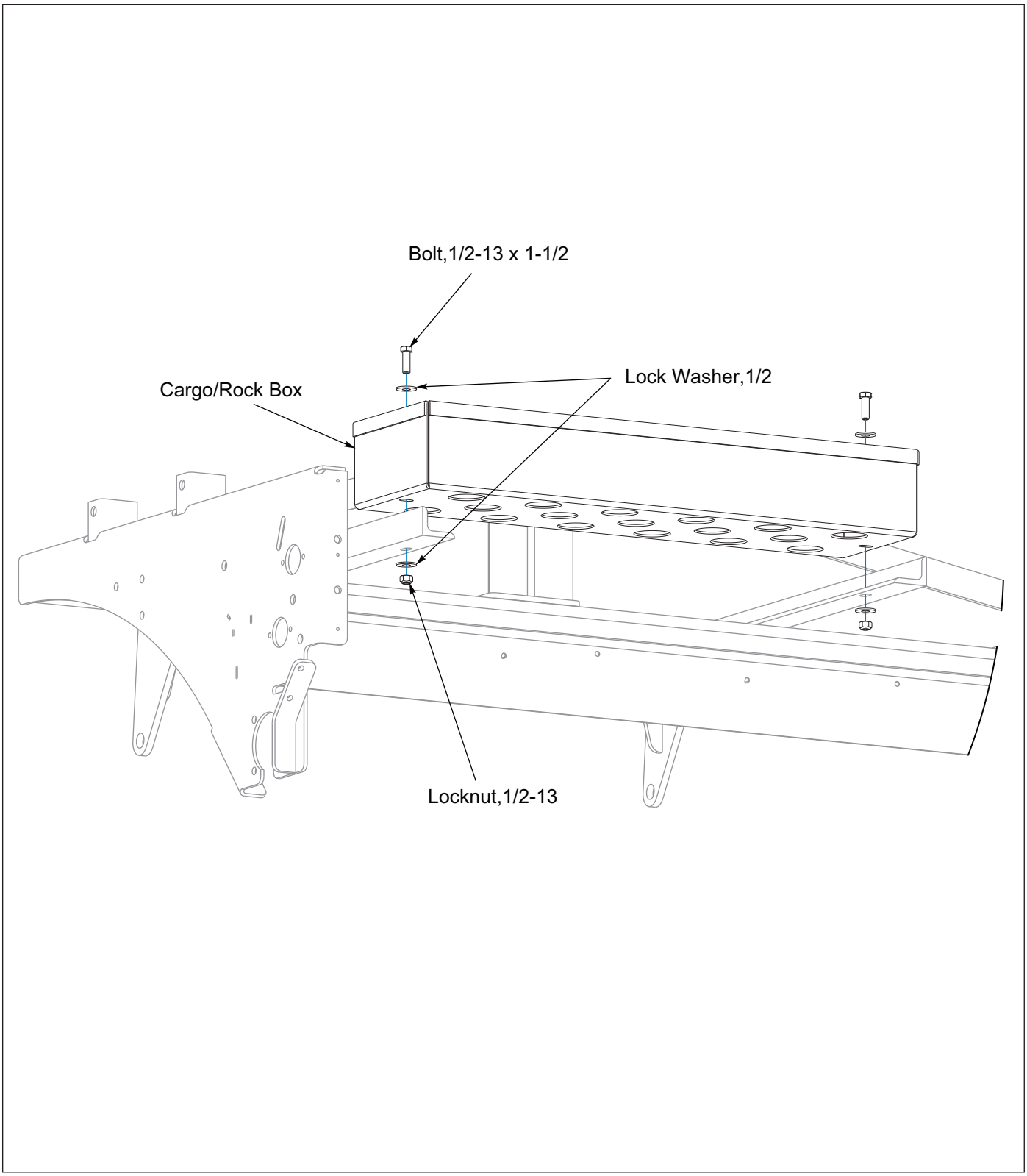


Figure 2-6: Cargo/Rock Box

Coil Tine Drag - Optional

1. Insert a 5/8-11 x 1-3/4 Bolt from the inside out into each RH and LH Frame End Plate lower 21/32" hole. On the outside of each end plate, place four Flat Washers on the Bolt and secure with a Locknut. **See Figure 2-7.**
2. Assemble the RH and LH Coil Tine Brackets to the RH and LH Frame End Plates upper 21/32" hole with 5/8-11 x 1-3/4 Bolts, Flat Washers and Locknuts.
3. Attach the Pipe and Tine Assembly to the RH and LH Coil Tine Brackets with Clamps, 1/2-13 x 1-1/2 Bolts, and Locknuts.
4. Install 5/8 x 2-5/16 Pin into RH Frame End Plate Bushing. Secure with Klik Pin. Pin is used to raise the Coil Tine Drag up out of the soil.

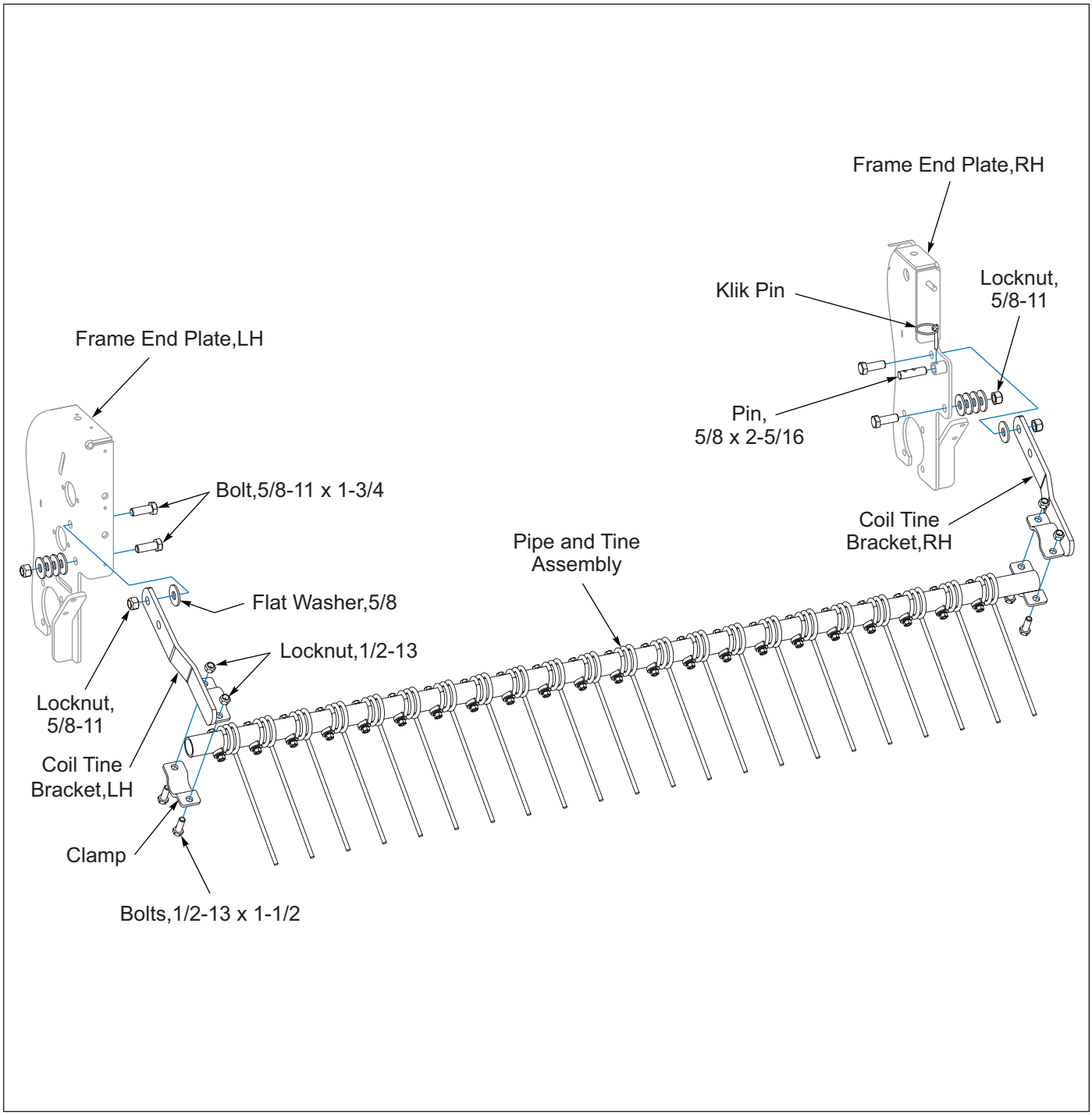


Figure 2-7: Coil Tine Setup

Positive Drive Roller - Optional

1. Lower Seeder on a level surface.
2. Removed Coil Tine Drag, if equipped.
3. Remove Scraper Assembly from the Rear of the Seeder Frame.
4. Remove Transmission Upper and Lower Guards. **See Figure 2-10.**
5. Remove Primary Drive Chain. **See Figure 2-8.**
6. Remove the Thick Washers from the ends of the Firming Roller Assembly.
7. Remove the Flanged Bearings for the Frame End Plates.
8. Remove Firming Roller Assembly from frame.
9. Remove the 17 Tooth Sprocket from the Firming Roller Assembly and install it onto the Positive Drive Roller Assembly in the same position. Secure with 1/4 x 2 Roll Pin. **See Figure 2-11.**
10. Place the Positive Drive Roller Assembly inside the Frame.
11. Install the Flanged Bearings onto the Positive Drive Roller Shafts and the Frame End Plates with 1/2-13 Hardware.
12. Secure Positive Drive Roller Assembly in frame with Thick Washer and 1/2-20 Hardware.
13. Install the Primary Drive Chain.
14. Install the Upper and Lower Transmission Guards.
15. The Scraper Assembly needs to be adjusted to accommodate the extra Star Sprockets between the sets of wheels on the Positive Drive Roller Assembly. Starting with the left side of the Scraper Assembly, remove the 2nd Scraper, it will not be used. Adjust the next Scraper so that the space between the first and this Scraper is 3-5/16". **See Figure 2-9.** Continue to adjust the space between each Scraper to 3-5/16". Do not tighten the hardware.
16. Install Scraper Assembly onto the rear of the Seed Frame.
17. With the Positive Driver Roller on a level surface, adjust the Scrapers to the Positive Drive Roller Wheel and tighten Scraper hardware.
18. Install Coil Tine Drag, if equipped.

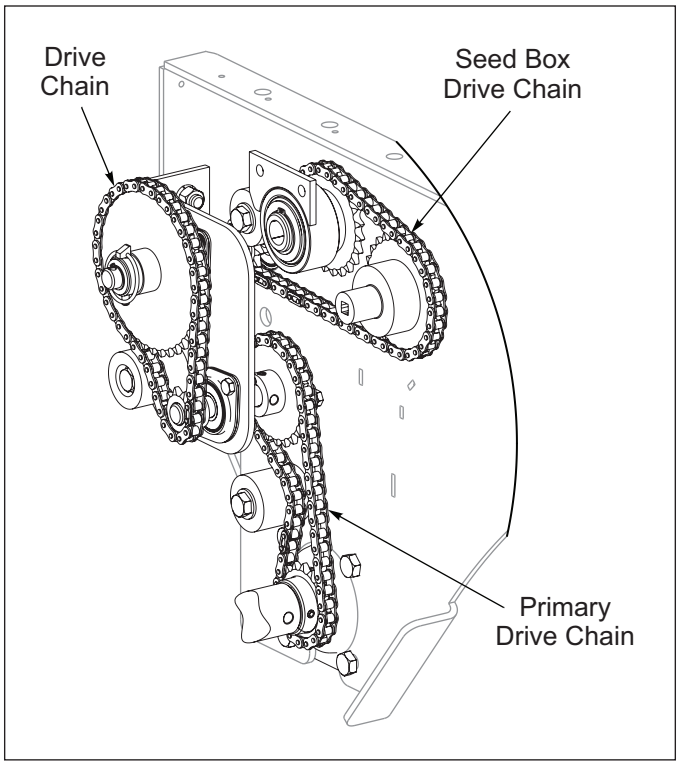


Figure 2-8: Seeder Transmission

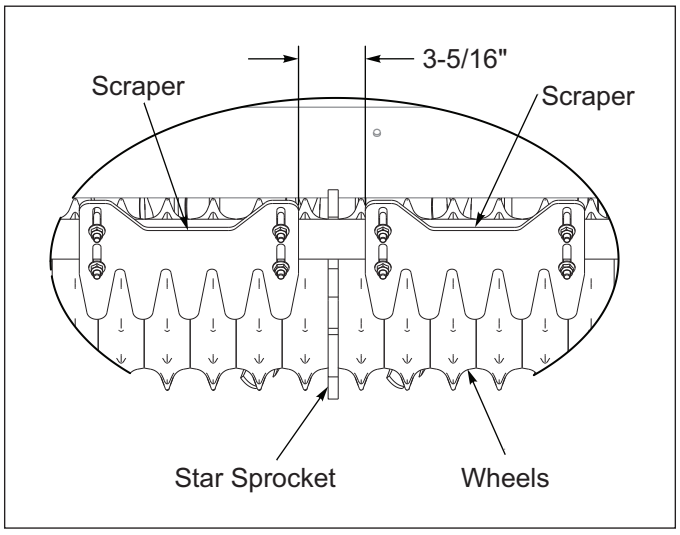


Figure 2-9: Positive Drive Roller Scraper Position

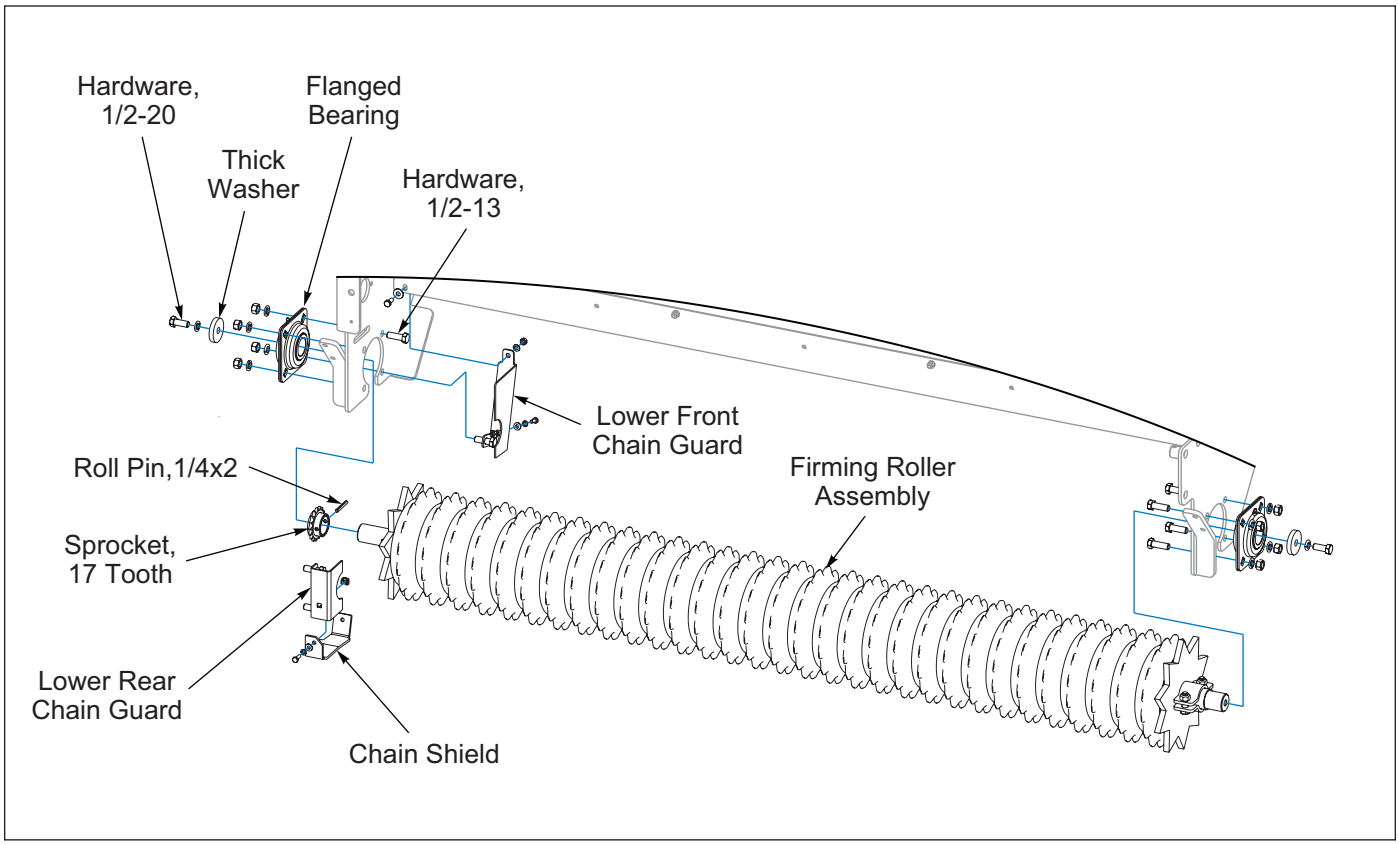


Figure 2-10: Firming Roller Assembly

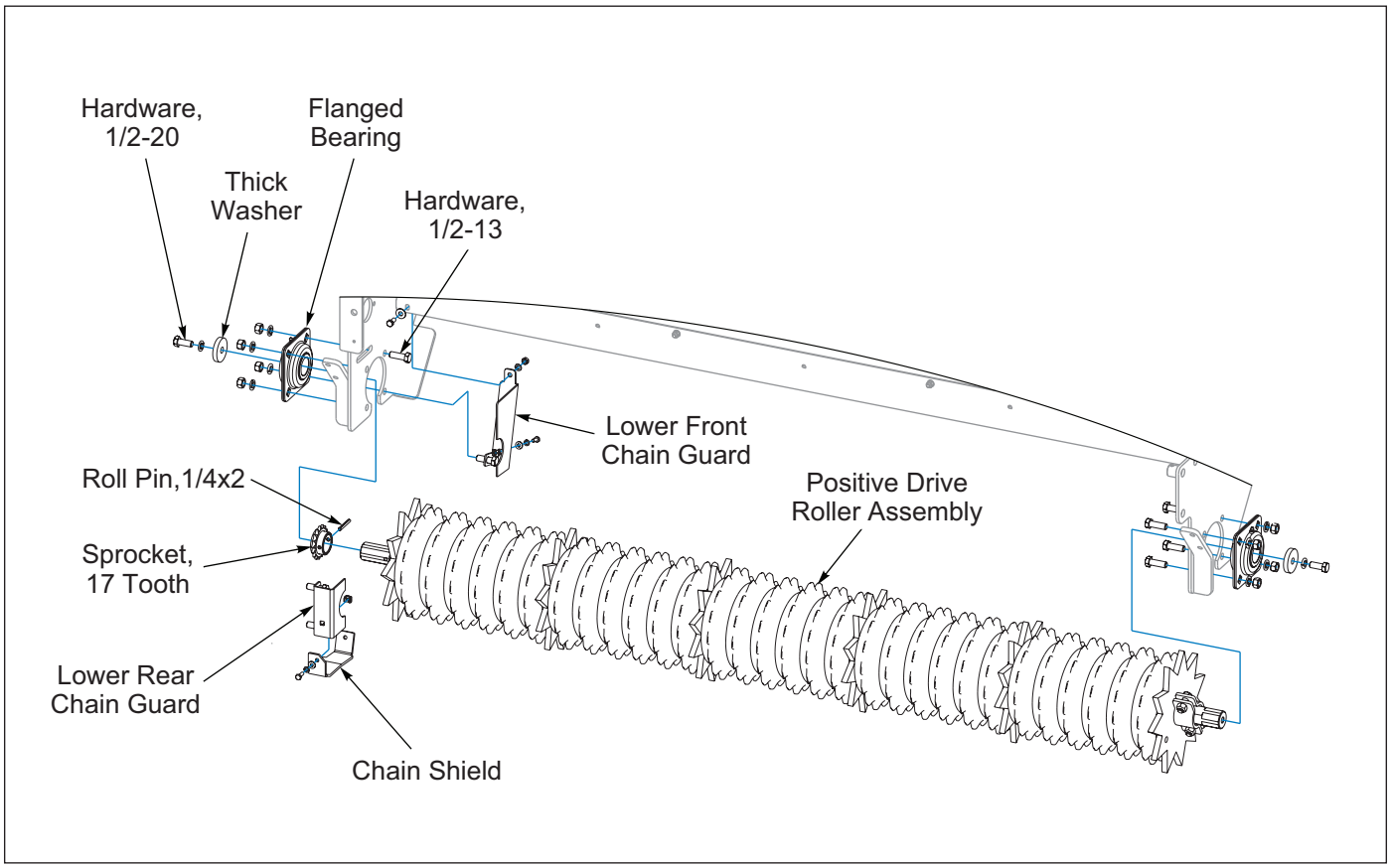


Figure 2-11: Positive Drive Roller Assembly

Acre Meter Kit - Optional

The Acre Meter consists of three main parts, the Acre Meter, the Pick-Up Switch and the Magnet Wheel Assembly. The Acre Meter is mounted on the rear left side of the Agitator Seed Box.

WARNING

Do not pressure clean with air or water.

NOTE

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

1. Remove from the end of the Transmission Output Shaft the 37 Tooth Sprocket and related Hardware. **See Figure 2-16.**
2. Remove from the end of the Transmission Input Shaft the 10 Tooth Sprocket and Roll Pin.
3. Transmission Output Shaft bearing in the Transmission Mount needs the Bolts to be reoriented. The Bolt Head needs to be towards the Frame LH End Plate.
4. Loosen the Bearing Collars from Bearings in the Transmission Mount and remove Transmission Mount from the frame.
5. Press the Magnet Wheel Assembly onto the Transmission Output Shaft. Secure to Shaft with Set Screw.
6. Drill two 11/32" diameter holes in the Frame LH End Plate to mount the Switch Bracket. **See Figure 2-12.**

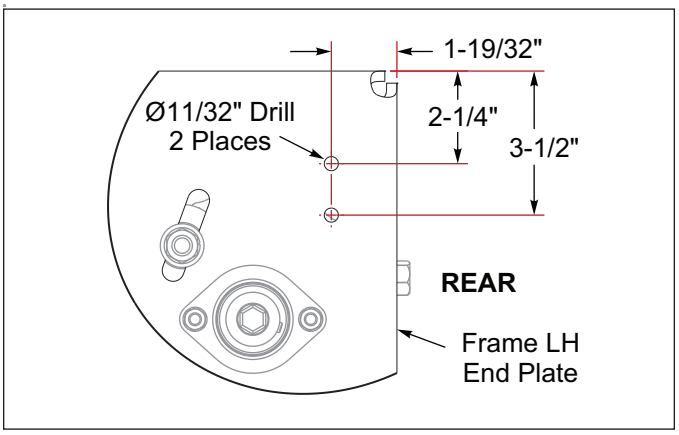


Figure 2-12: Mounting Switch Bracket

7. Install the Switch Bracket on the inside of the Frame LH End Plate with 5/16-18 x 1 Bolts, Flat Washers, Lock Washers, and Nuts.
8. Attach the Pick-Up Switch to the Switch Bracket with #8-32 X 1-1/2 Screws, Flat Washers and Flange Locknut. Do not tighten at this time.
9. Attach the Pick-Up Switch short ground wire to the small hole in the Switch Bracket with #6-32 x 1/2 Screw and Nut. Remove paint under the wire connector to assure a good electrical ground connection.
10. Adjust the Pick-Up Switch on the Switch Bracket so the centerline of Magnet Wheel Assembly and Pick-Up Switch are horizontally and vertically aligned with maximum 1/8" between the Magnet Wheel Assembly and the Pick-Up Switch. Tighten #8-32 Screws. **See Figure 2-13.**

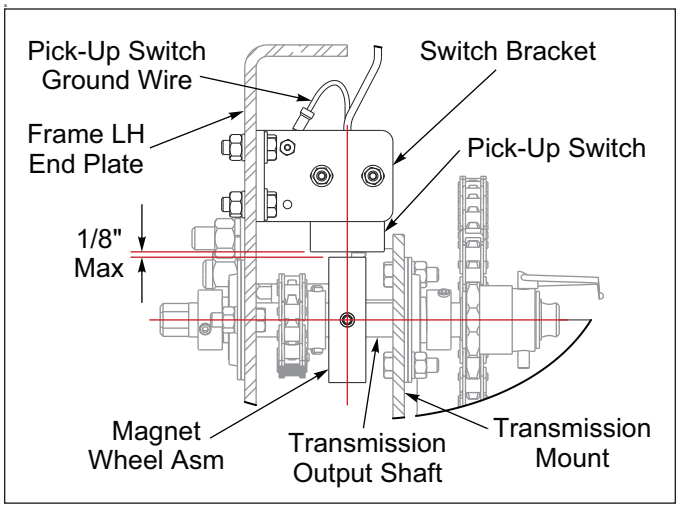


Figure 2-13: Pick-Up Switch Adjustment

11. Reinstall Transmission Mount with 1/2-13 Hardware and lock Bearing Collars.
12. Reinstall 10 tooth Sprocket on Transmission Input Shaft with 1/4 x 1-1/2 Roll Pin.
13. Reinstall 37 Tooth Sprocket on Transmission Output Shaft with Flat Washers, Snap Rings and Klick Pin.
14. Mount the Acre Meter Assembly to the rear left side of the Agitator Seed Box below the bend. **See Figure 2-14.** Place the Acre Meter Assembly Bracket against the Seed Box as a guide for the two 13/32" diameter holes. Drill holes into the Seed Box.

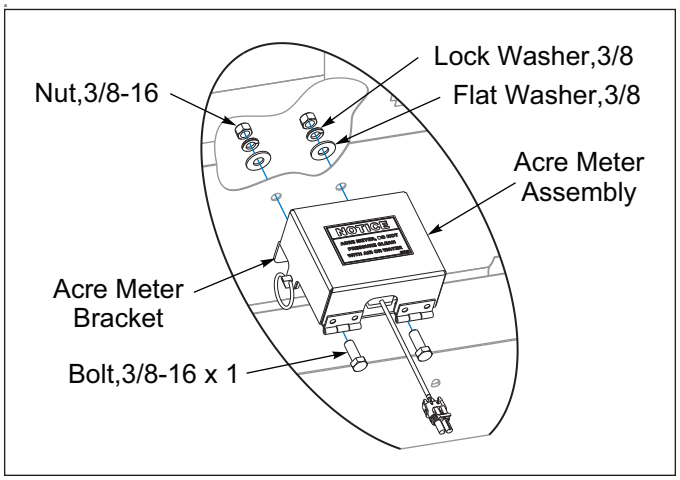


Figure 2-14: Mounting Acre Meter

15. Attach the Acre Meter Assembly Bracket to the Seed Box with 3/8-16 x 1 Bolts, Flat Washers, Lock Washers, and Nuts.
16. Connect the Acre Meter and Pick-Up Switch Connectors.
17. Install Transmission Shield. Make sure that the shield is not pinching the Acre Meter or Pick-Up Switch cords.
18. Securely fasten the cords with tie wraps and Adhesive Mount Bases to the Agitator Seed Box to prevent cords from becoming entangled or rubbing on moving parts. **See Figure 2-15.**
19. Program the Acre Meter. **See "Loup Acre Meter Kit - Optional (After 05/15/2012)" on page 3-14.**

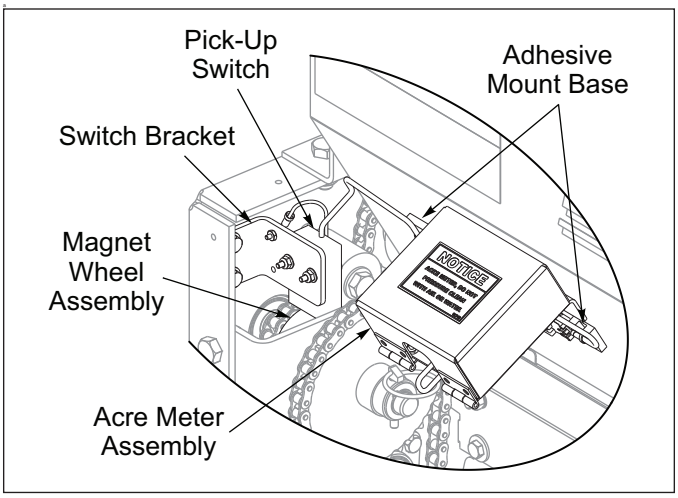


Figure 2-15: Secure Acre Meter Cords

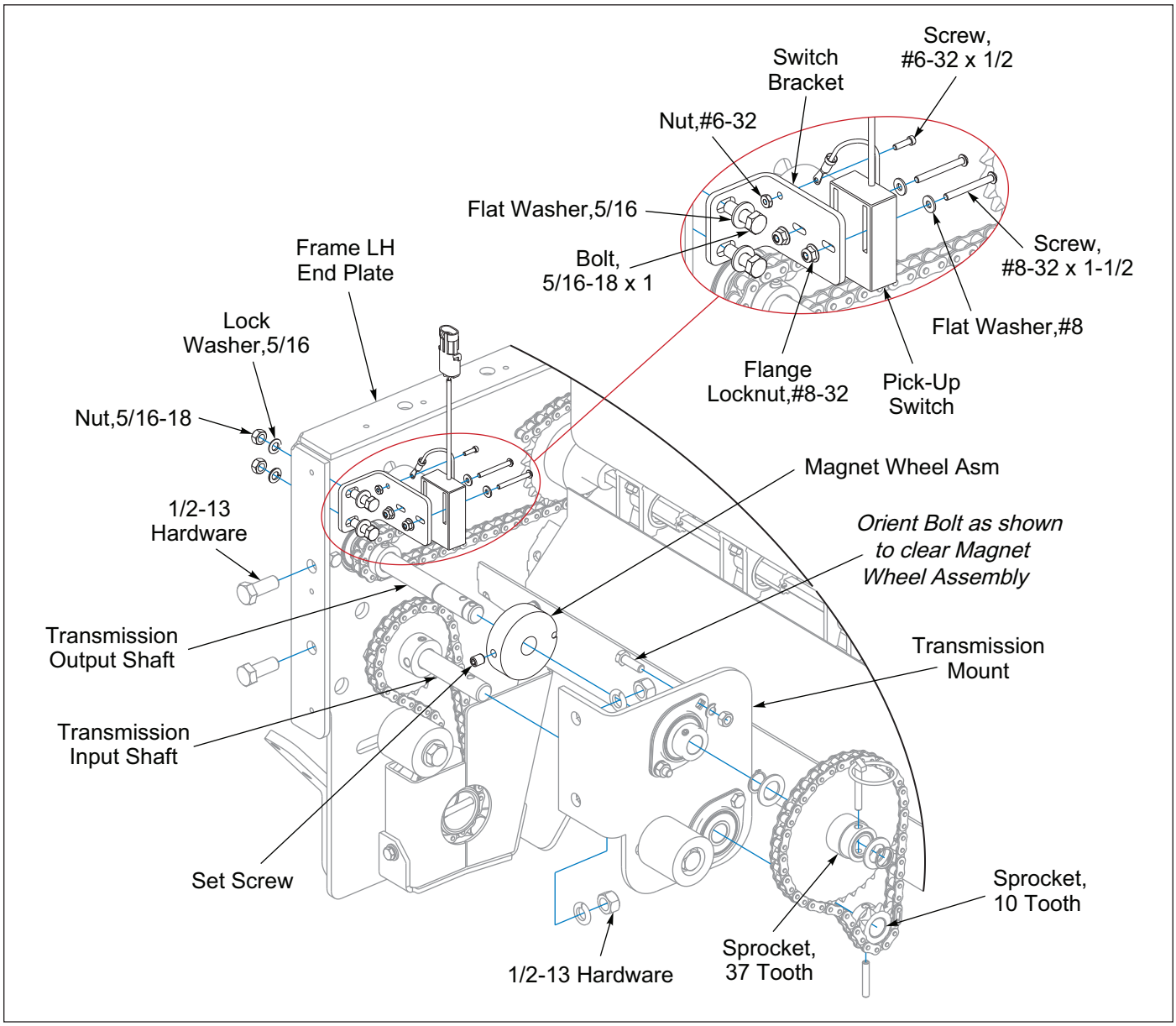


Figure 2-16: Kit 210914

Table provided for general use.

NOTES:

Chapter 3

Operation

DANGER

Never allow anyone a ride on the seeder at any time. Allowing a person to ride on the machine can inflict serious personal injury or death to that person.

WARNING

All 3-PT Hitch mounted equipment must be lowered to the ground, when servicing or when equipment is idle. Failure to take preventative measures against accidental lowering can result in serious personal injury.

WARNING

Always be sure that the tractor hitch capacity is rated to carry the weight of the Seeder. Refer to “Specifications” and Tractor’s Operator’s Manual.

DANGER

Keep all bystanders away from the machine when transporting.

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 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.

Tractor Preparation - Attaching/Detaching

Tractor Preparation

1. The Seeder is designed to be used with Category 1 or 2 Free Link, Category 1or 2 Quick Hitch. **See Figures 3-2 and 3-3.** 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 and Equipment Laden Mass must be on Tractor Front Wheels in transport position to maintain stability. Calculate the Loaded Seeder Mass. **See "Specifications" on Page 5-1.** (Seeder weight plus the seed box capacity with desired seed.) **Refer to Tractor Operator's Manual.**
3. Check the Tractor tire inflation levels to ensure that they are properly inflated for the additional Laden Seeder Mass. **Refer to the Tractor Operator's Manual.** Be sure not to over ballast and exceed Tractor Tire Capacity.
4. Set Tractor 3-PT Lower Links to allow lateral (torsional) float. **Refer to Tractor Operator's Manual.** If left rigid, your Brillion Seeder may not follow ground contours resulting in poor germination.
5. Set Lift Rod length long enough to ensure Seeder can float downward in the case of a furrow or waterway. Lower Links should be the same height, leveling your Brillion Seeder side to side. Fine adjustments may need to be made after hookup is completed. **Refer to the Tractor Operator's Manual.**

Attaching to Tractor

NOTE

The Floating Link Pin must be in the center of the Floating Link Slot, allowing the Seeder to follow the soil contour.

1. Attach Seeder to the Tractor's 3-PT Free Link or Quick Hitch using the appropriate size pins and bushings. Be sure to use the hardware provided and is in good working order. **See Figures 3-2 and 3-3.**
2. **Refer to the Tractor Operator's Manual** for Quick Hitch Operation.
3. Raise Seeder.
4. Adjust or lock tractor sway stabilizers if equipped, centering the Seeder with the Tractor. **Refer to the Tractor Operator's Manual.**
5. Lower Seeder on level surface. If necessary, level Seeder side to side (laterally) by adjusting Lift Rod length. Level Seeder front to back by adjusting the Tractor Upper Link length, as necessary. **Refer to the Tractor Operator's Manual.**
6. With the Seeder on level surface and attached to the tractor, adjust the tractor 3-PT Hitch Upper Link so that the Float Link Pin is at the center of the Float Link Slot for proper floating during seeding. **See Figure 3-1.**

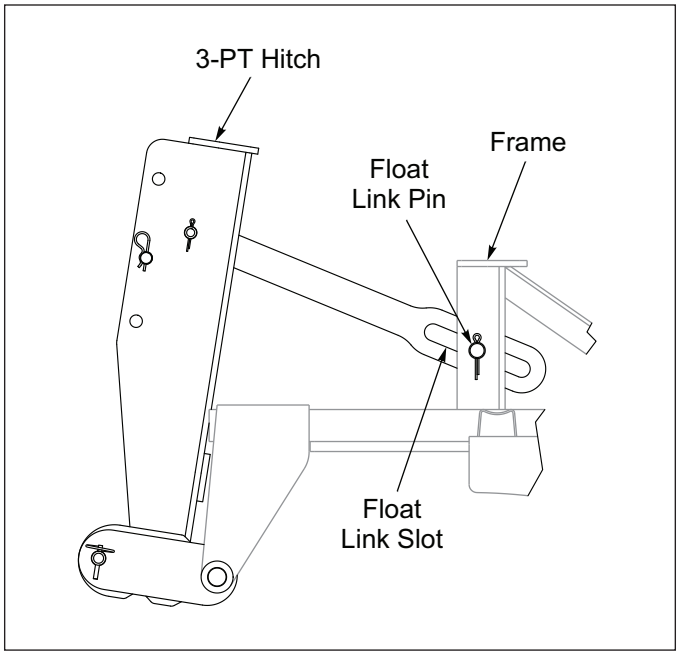
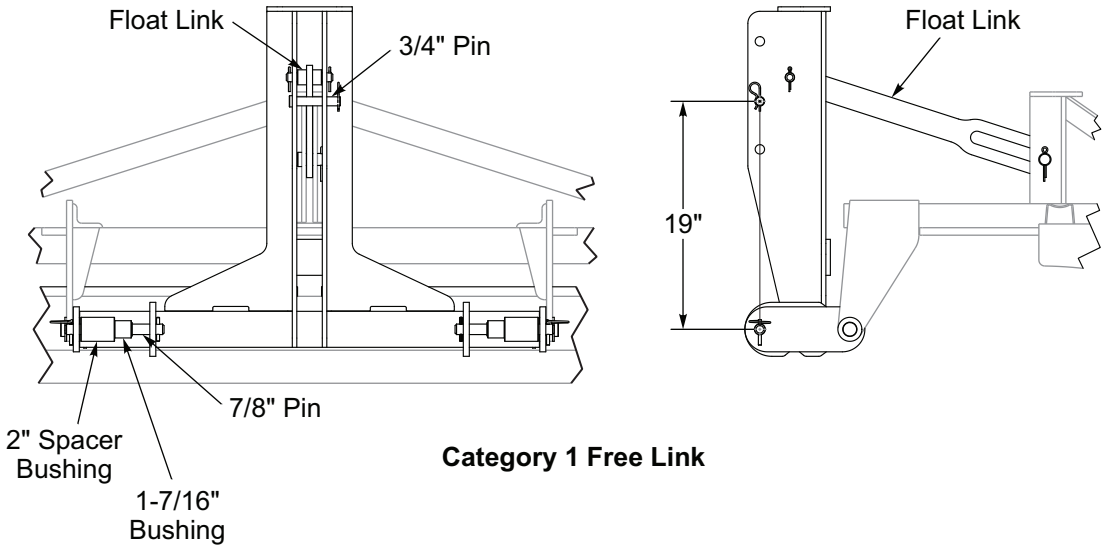


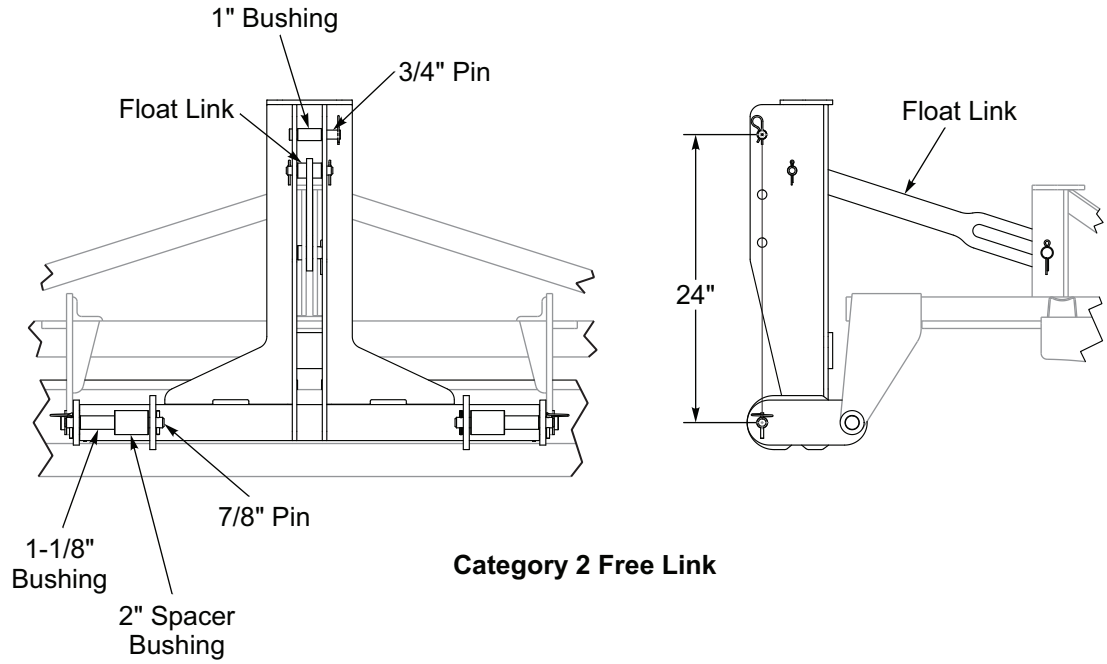
Figure 3-1: Floating Hitch

Detaching Tractor from Seeder

1. Raise Seeder.
2. Raise the S-Tines. **See "S-Tine Adjustment" on Page 3-7.**
3. Raise rear Coil Tine Drag, if applicable.
4. Lower Seeder on a flat or even surface. Chock or block Rear Roller.
5. Disconnect the Tractor from the Seeder.

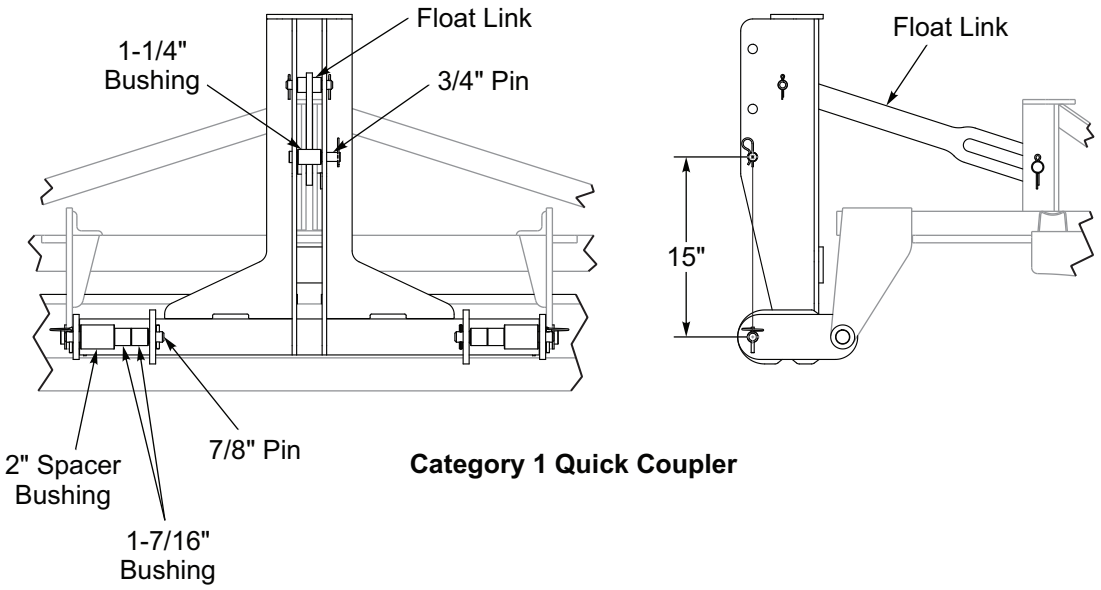


Category 1 Free Link

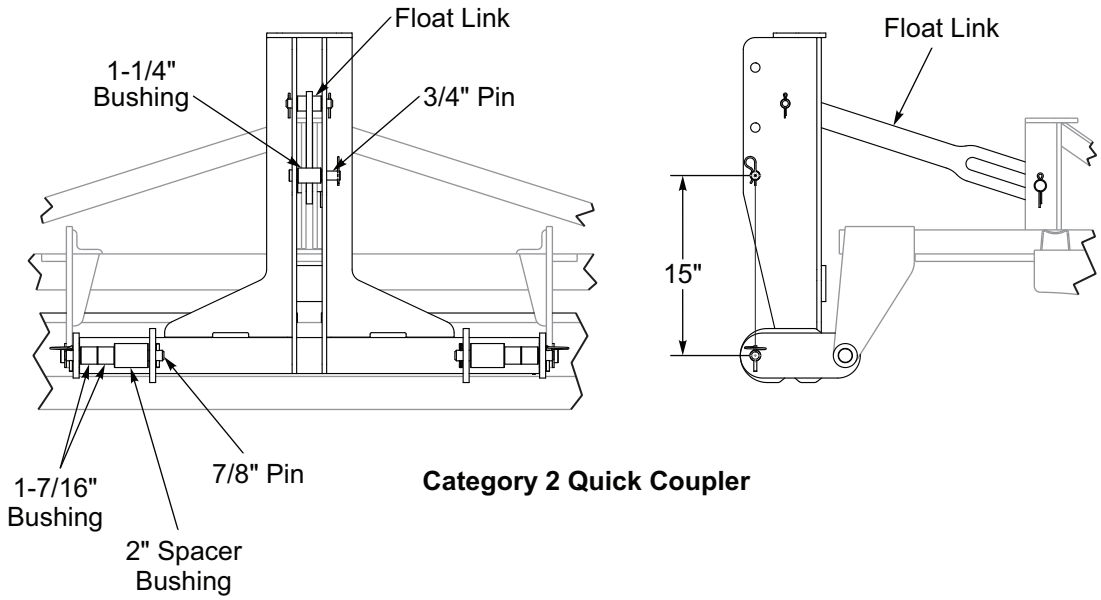


Category 2 Free Link

Figure 3-2: 3-PT Hitch Free Link



Category 1 Quick Coupler



Category 2 Quick Coupler

Figure 3-3: 3-PT Hitch Quick Coupler

General Operation

1. The minimum horsepower requirement is 35 HP. This will vary widely due to speed, moisture, and types of soils. Local dealers can help in making recommendations for your areas.
2. 3-PT Hitch capacity is based on the Seeder weight plus the Seed Box capacity with desired seed. **See "Specifications" on Page 5-1.** Tractor must be sized accordingly. **Refer to Tractor's Manual.**
3. Operating speed is 3-5 mph. Excess speed can result in poor germination, seeder bouncing, or other unpredictable results. Reduce speed in rocky conditions.
4. The seed metering system drive can be disengaged by removing the exposed Klik Pin from the Sprocket Hub at the rear of the Seeder and placing it in the end of the shaft for storage. **See Figure 3-4.**
5. When not in use, lower Seeder to a flat or even surface. Chock or block Rear Roller before unhitching from tractor.

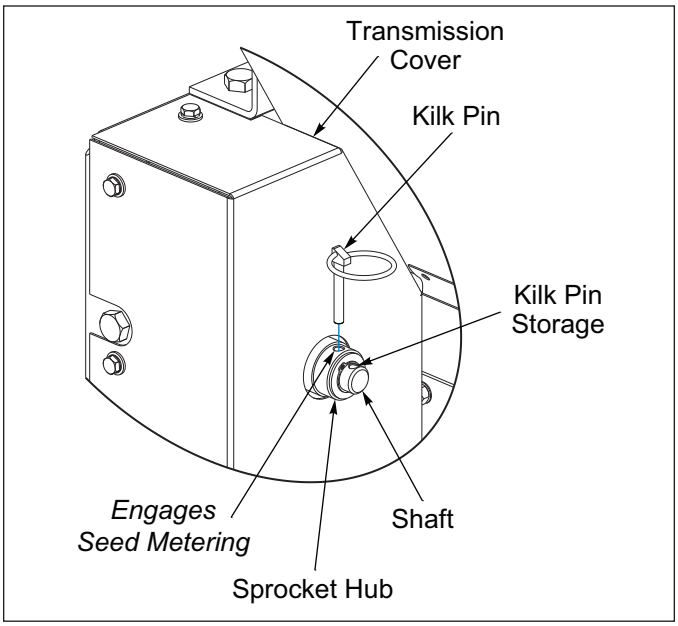


Figure 3-4: Disengage/Engage Seed Metering System Drive

Tillage Techniques

It may take several passes across the soil to get an acceptable seedbed. The Food Plot Seeder is versatile enough to be used as a rough tillage tool, a complete tillage tool and a firming roller for seedbed preparation.

Rough Tillage Tool

The seeder can be used as a disc harrow by shortening the tractor 3-PT Hitch Upper Link which puts the seeder full forward so that only the Disc Gangs contact the soil. This provides a rough tillage surface for a first or second pass.

Complete Tillage Tool

With Seeder attached to tractor, lower on a level surface. Disengage the Seeder Transmission. **See Figure 3-4.** Adjust the tractor 3-PT Hitch Upper Link so that the Float Link Pin is centered in the Float Link Slot. **See Figure 3-1.** The Disc Gangs, S-Tines, and rear Firming Roller are used as a complete tillage tool for seedbed preparation.

Firming Roller

If the final seedbed is loose and fluffy, raise the 3-PT hitch arms slightly, lengthen the tractor 3-PT Hitch Upper Link to put the weight of the entire Seeder on the Firming Roller to firm the seedbed before planting. Raise S-Tines as needed to adjust to conditions.

Seeding Techniques

IMPORTANT

The seed metering system drive must be engaged to seed the seedbed. Check that the exposed Klik Pin at the rear of the Seeder is installed into the Sprocket Hub.

Once the seedbed is firm, set the tractor 3-PT Upper Link length to get the desired tillage. Engage the seed metering system drive and proceed with the seeding operation. **See Figure 3-4.** In some cases, it may be necessary to roll the seedbed after seeding to improve seed to soil contact.

Large Seeds

When seeding large seeds such as soybeans or peas, it may be necessary to plant in a rougher seedbed with S-Tines creating ridges for deeper seed placement. Make additional passes after planting to level and firm the seedbed to improve seed to soil contact.

Large and Small Seeds

To ensure that small seeds such as alfalfa or clover are not placed too deep in the seedbed when planting both large and small seeds, it is recommended to plant the large seeds on the first pass with the Seeder forming ridges with the S-Tines in the seedbed. Plant the smaller seeds on the Final pass, in a level and firm seedbed.

Disc Gang Adjustment

Disc Gangs should be set approximately 1/2" deep during seeding.

The depth of the Disc Gang can be controlled by adjusting the tractor 3-PT Hitch Upper Link. To increase to penetration of the Disc Gangs in hard soil, up to 200 pounds can be added to the optional Cargo/Rock Box.

Disc Gangs can be adjusted to a 10 or 15 degree Gang Angle. *Gang Angle of 15 degrees will throw more soil outward.*

To adjust the Gang Angle:

1. Loosen the inner 3/4-10 x 3-1/2 Bolt and Locknut. **See Figure 3-5.**
2. Remove the outer 3/4-10 Bolt and Locknut.
3. Rotate outer end of the Disc Gang to the front 15 degree hole or rear 10 degree hole.
4. Re-install outer 3/4-10 Bolt and Locknut.
5. Tighten all Disc Gang 3/4-10 Hardware.

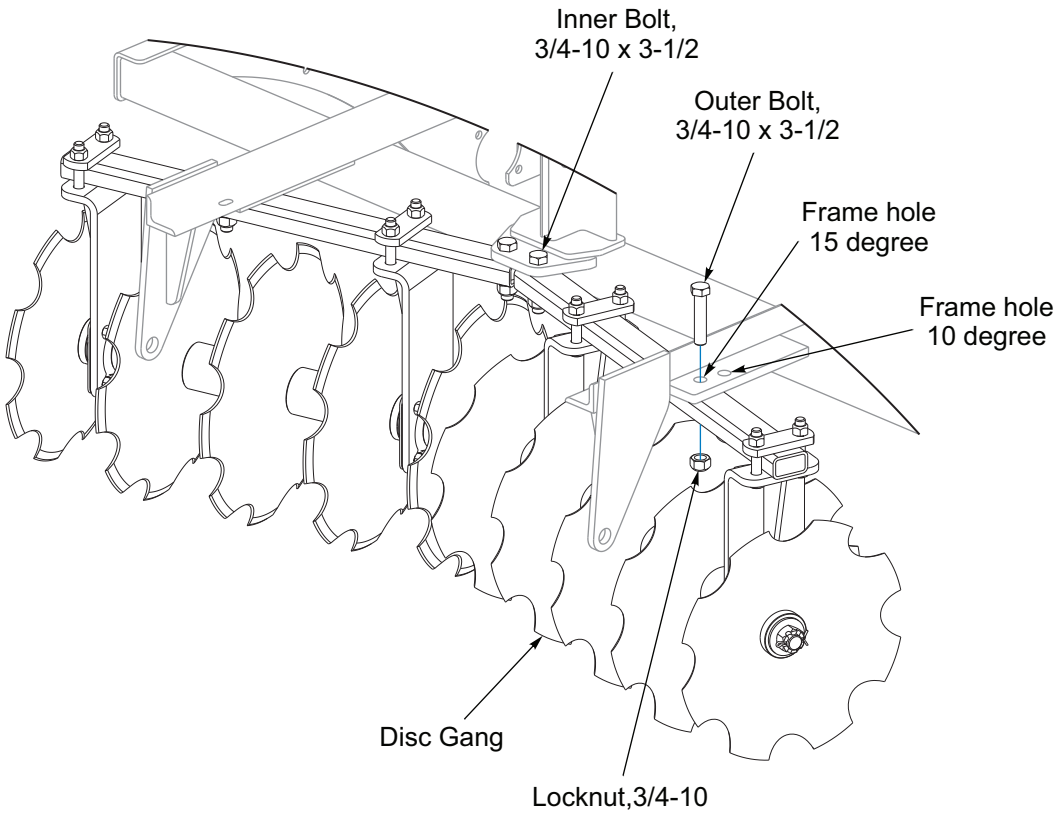


Figure 3-5: Disc Gang Adjustment

S-Tine Adjustment

S-Tine Depth can be adjusted by raising and lowering the Front and Rear S-Tine Tooth Bars. A good starting point is to set the S-Tines depth level with the Disc Gangs. S-Tine Tooth Bars can raise the S-Tines completely out of the soil for instances where they are not needed.

To adjust S-Tine Depth:

1. Raise the Seeder slightly, enough to adjust the intended S-Tine depth.
2. Remove the Hair Pin Cotter from the 5/8 x 3-1/2 Pins that hold the S-Tine Tooth Bar in position. **See Figure 3-6.**
3. Raise or lower the S-Tine Tooth Bar to the desired depth.
4. Re-install the 5/8 x 3-1/2 Pins and secure with Hair Pin Cotters.

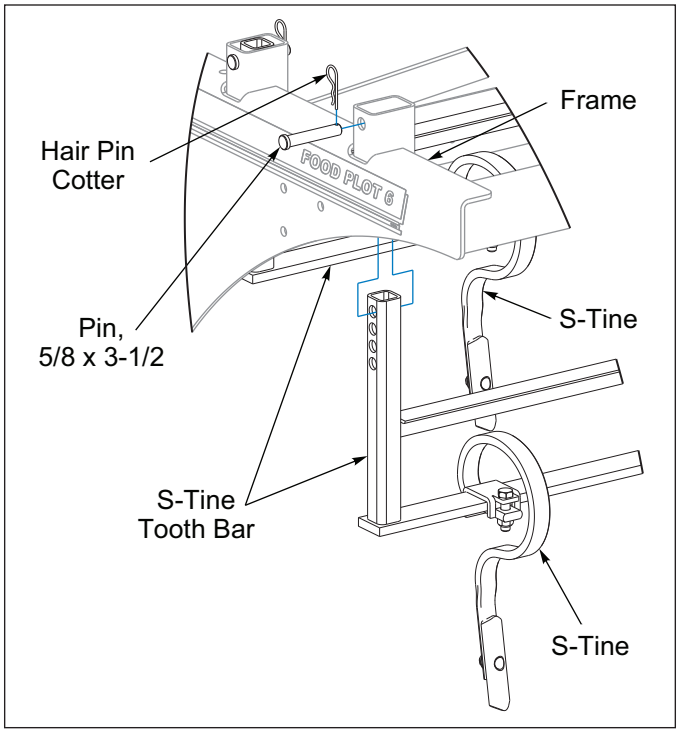


Figure 3-6: S-Tine Adjustment

Scraper Adjustment

The Food Plot Seeder has Scrapers on the Firming Roller to keep moist soil from building up on the roller wheels. Check Firming Roller to ensure that Wheels and Star Sprockets are tight together. **See "Firming Roller Adjustment" on Page 4-4.**

To adjust Scrapers:

1. Lower Seeder on a level surface.
2. Adjust scrapers to 1/8" gap between the scraper and wheels. **See Figure 3-7.**
3. Tighten Scraper Hardware.

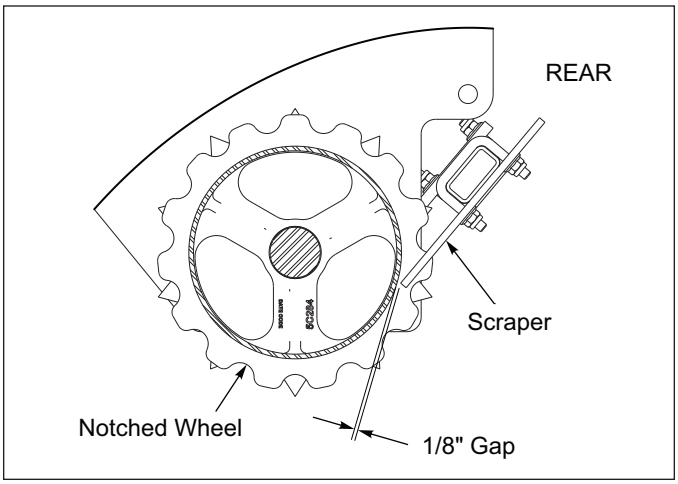


Figure 3-7: Scraper Adjustment

Coil Tine Drag Adjustment – Optional

The Coil Tine Drag floats freely on the rear of the Food Plot Seeder to help disperse soil and residue over the contour of a seeded seedbed. The angle of the Coil Tine Drag can be adjusted. **See Figure 3-8.**

To adjust Coil Tine Drag:

1. Loosen the clamps on the end brackets.
2. Rotate the Coil Tine Drag Pipe.
3. Tighten Clamp Hardware.

To raise Coil Tine Drag when not in use:

1. On the rear RH side of the Seeder Frame, raise the Coil Tine Drag until the hole in the Coil Tine Drag End Bracket aligns with the hole in the Frame End Plate.
2. Remove the Klik Pin and Slide the 5/8 x 2-5/16 Pin into the hole in the Coil Tine Drag Bracket.
3. Install Klik Pin into the Frame Sleeve and the Pin end hole.

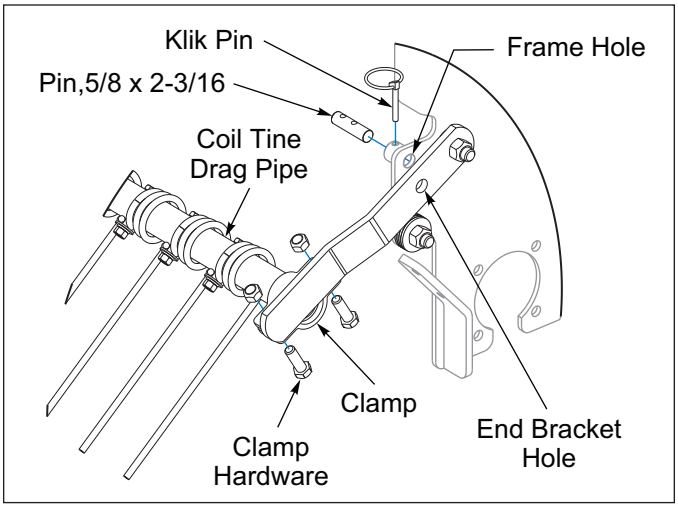


Figure 3-8: Coil Tine Drag Adjustment

Front Seed Box Seed Rate Adjustment

WARNING

- **To prevent damage to the seed meters, do not apply excessive force to adjusting nuts. Failure to do so may result in 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 the meters more than 1". (Feed rolls could become disengaged from the 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 are stored on a Pin at the rear of the Seeder Frame RH End Plate. **See Figure 3-9.**

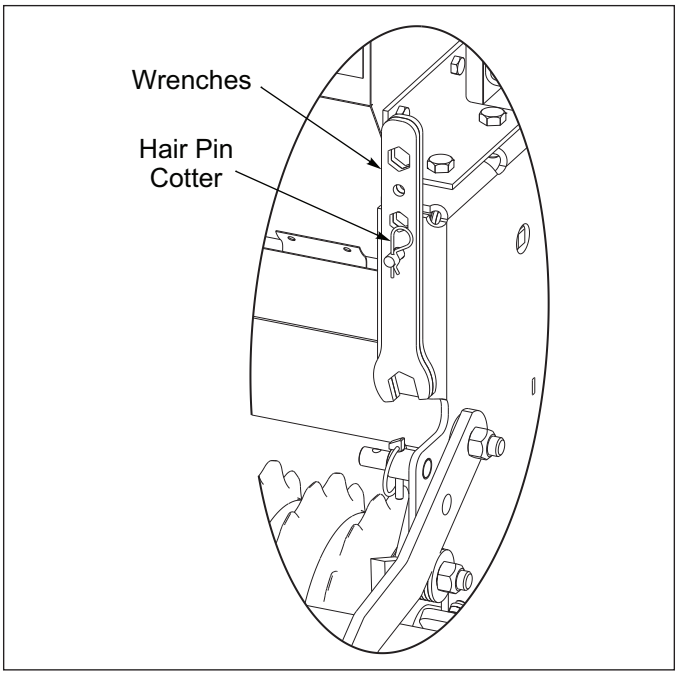


Figure 3-9: Adjustment Wrenches

Seed Rate Chart is located inside the Seed Box Cover and in this manual. **See Figure 3-14.** It should be used as a reference only. Because of seed variation, a more accurate rate can be determined by performing **Front Meter Box Seed Calibration Procedure** to calibrate the seed.

On the right side Seed Shaft Extension, the Seed Rate for the Seed Meters can be set by adjusting the inner or outer 5/8-11 Adjusting Hex Nut on each side of the bearing. **See Figure 3-10.**

IMPORTANT

Do Not Loosen the Seed Shaft Extension Set Screw when adjusting the Seed Rate. Set screw is only loosened when zeroing out the Seed Meters. See "Seed Meter Adjustment" on page 4-6.

1. To **increase** the rate of seeding, loosen the outer 5/8-11 Adjusting Hex Nut with supplied wrenches. Back the outer 5/8-11 Adjusting Hex Nut away from the Bearing. Turn the inner 5/8-11 Adjusting Hex Nut until the Pointer is aligned with the notch in the Seed Shaft Extension Hex for the desired Seed Rate. Tighten the outer 5/8-11 Adjusting Hex Nut against the Bearing inner race.
2. To **decrease** the rate of seeding, loosen the inner 5/8-11 Adjusting Hex Nut with supplied wrenches. Back the inner 5/8-11 Adjusting Hex Nut away from the Bearing. Turn the outer 5/8-11 Adjusting Hex Nut until the Pointer is aligned with the notch in the Seed Shaft Extension Hex for the desired Seed Rate. Tighten the inner 5/8-11 Adjusting Hex Nut against the Bearing inner race.

Seed Meters discharge to the rear of the machine.

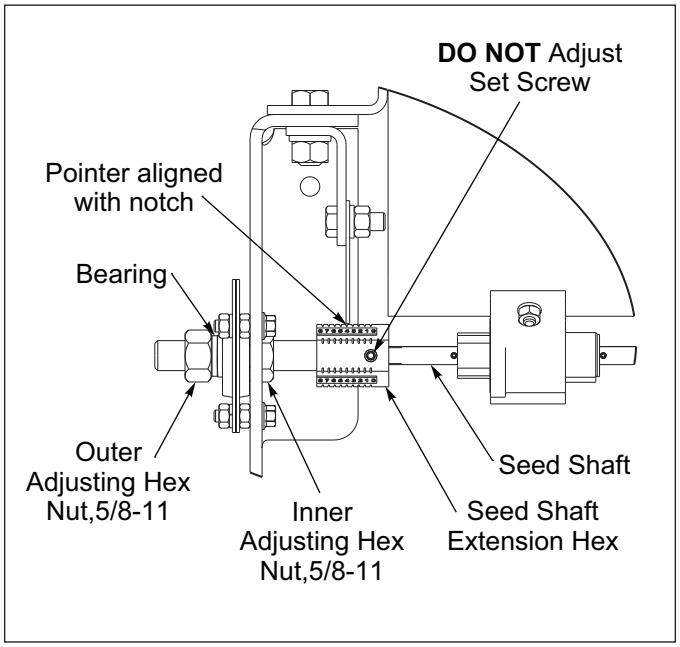


Figure 3-10: Seed Meter Adjustment

Front Meter Box Seed Calibration Procedure

NOTE

The information listed in the Seed Charts is subject to change without notice.

IMPORTANT

Planting rates are in pounds per acre.

Brillion 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 Charts inside the Seed Box Cover or refer to this manual. **See Figures 3-13 and 3-14.** *The information listed in the Seed Chart is subject to change without notice.*

IMPORTANT

To calibrate the Front Meter Seed Box, the Rear Agitator Seed Box openings must be closed or the Seed Box emptied if it contains seed.

Calibrate unlisted seeds as follows:

1. Disengage the seed metering system drive by removing the exposed Klik Pin in the Sprocket Hub at the rear of the Seeder and placing it in the end of the shaft for storage. **See Figure 3-11.**
2. Raise Seeder.
3. Place a canvas or tarp under the Seeder to catch seed.
4. If the Rear Agitator Seed Box contains seed, close the Seed Box openings or empty seed out of the Seed Box.
5. Lower Seeder with the Seed Box over the canvas or tarp.
6. Turn 5/8 Calibration Hex on the outside of the transmission 62 revolutions Counterclockwise (CCW) based on operator standing beside the seeder facing the Calibration Hex. **See Figure 3-12.** *Reference, the shaft with the hex rotates 620 revolutions per acre seeded.*
7. Weigh seed in Lbs. Multiply by 10 for approximate Planting Rate in Lbs/Acre.
8. After the calibration is complete, engage the seed metering system drive by re-installing the Klik Pin into the Sprocket Hub to seed.

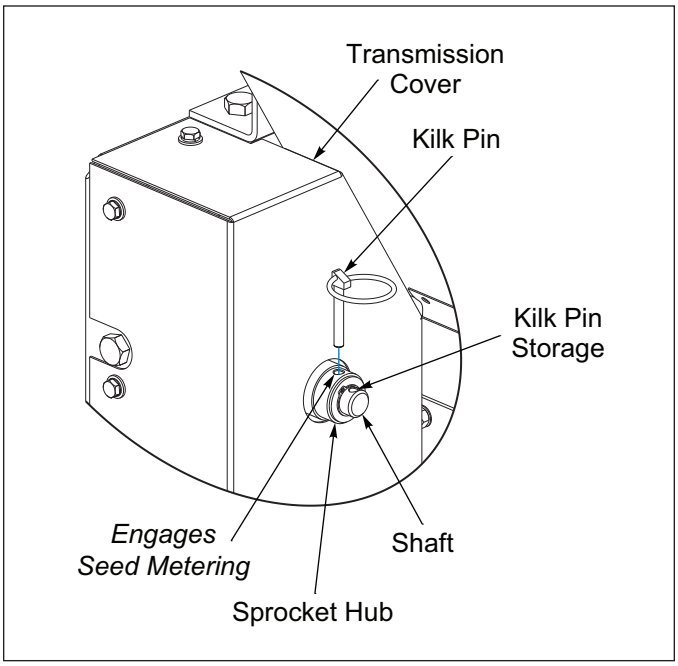


Figure 3-11: Disengage/Engage Seed Metering System Drive

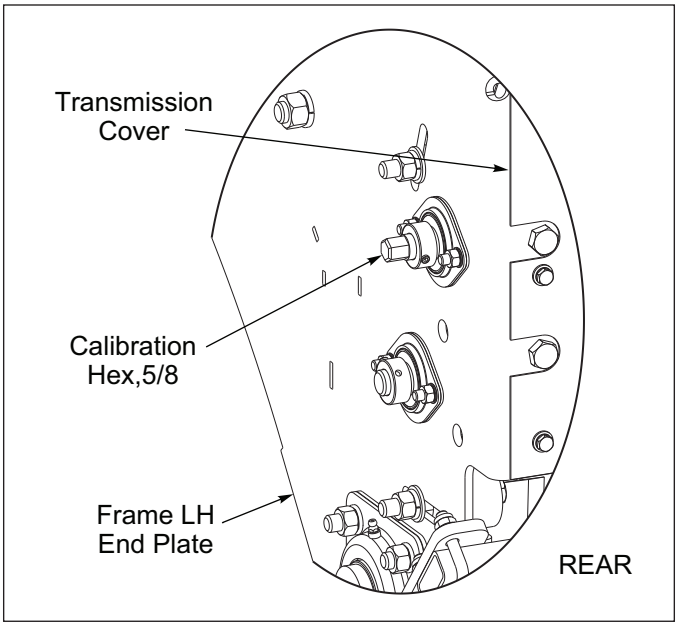


Figure 3-12: Calibration Hex

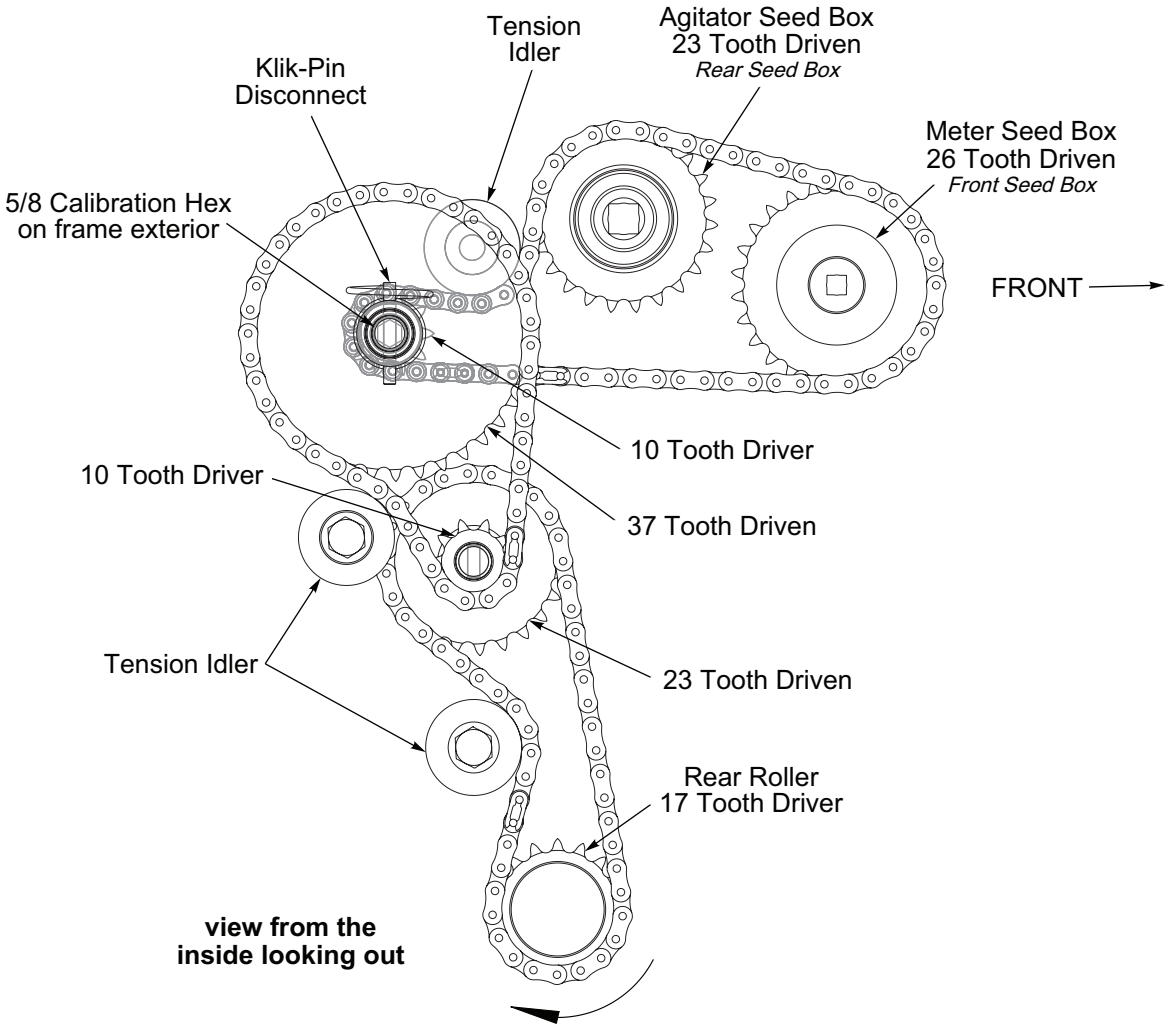


Figure 3-13: Transmission

PLANTING RATES

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. (1 ACRE = 43,560 SQ.FT.)

METER BOX - 4C589 SEED CUPS	POUNDS PER ACRE								POUNDS PER 1000 SQ FT							
INDICATOR SETTINGS	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Alfalfa	2	5	9	12	16	20	25	28	0.04	0.12	0.20	0.29	0.37	0.45	0.57	0.65
Birdsfoot Trefoil	2	6	10	15	19	24	28	32	0.05	0.14	0.23	0.34	0.44	0.54	0.64	0.74
Brassica	2	5	9	13	17	20	24	28	0.04	0.12	0.20	0.29	0.38	0.47	0.56	0.64
Chicory, Forage	1	2	4	6	8	9	11	13	0.02	0.06	0.09	0.14	0.18	0.22	0.26	0.30
Clover, Alsike	2	6	10	13	17	21	25	28	0.06	0.13	0.22	0.30	0.40	0.49	0.56	0.64
Cover, Red	3	7	11	15	20	24	28	32	0.07	0.16	0.24	0.35	0.45	0.55	0.64	0.73
Lettuce	2	4	6	9	10	12	14	16	0.04	0.09	0.14	0.20	0.22	0.27	0.32	0.37
Millet	1	4	7	9	12	16	18	21	0.03	0.08	0.15	0.21	0.28	0.36	0.41	0.47
Rapeseed	2	5	9	13	17	20	24	28	0.04	0.12	0.20	0.29	0.38	0.47	0.56	0.64
Sorghum / Sudan Grass	3	7	12	16	20	24	29	33	0.07	0.16	0.26	0.37	0.47	0.55	0.66	0.76
Tillage Radish	2*	6	10	14	18	22	26	30	0.00*	0.15	0.23	0.32	0.41	0.50	0.59	0.68
Turnips	2	5	9	12	15	19	22	25	0.04	0.11	0.20	0.27	0.35	0.43	0.50	0.58
Biologic, NZ Cover Plus	6	10	14	18	24	28	33	38	0.13	0.23	0.33	0.42	0.55	0.65	0.75	0.88
Biologic, NZ Full Draw	0	7	14	18	23	27	33	37	0.00	0.16	0.33	0.42	0.52	0.62	0.75	0.85
Biologic, NZ Maximum	4	10	16	18	23	28	33	37	0.10	0.23	0.36	0.42	0.52	0.65	0.75	0.85
Evolved Harvest, ProVide	4	9	11	14	17	21	26	30	0.10	0.20	0.26	0.33	0.39	0.49	0.59	0.68
Evolved Harvest, Rack Force	4	9	11	14	18	23	27	31	0.10	0.20	0.26	0.33	0.42	0.52	0.62	0.72
Evolved Harvest, ShotPlot	4	9	13	17	21	26	30	34	0.10	0.20	0.29	0.39	0.49	0.59	0.68	0.78
Evolved Harvest, Thro & Gro	0*	4	6	9	11	13	14	17	0.00*	0.10	0.13	0.20	0.26	0.29	0.33	0.39
Whitetail Institute, Alfa-Rack Plus	6	10	14	18	23	28	34	40	0.13	0.23	0.33	0.42	0.52	0.65	0.78	0.91
Whitetail Institute, Chicory Plus	4	9	11	18	23	28	34	40	0.10	0.20	0.26	0.42	0.52	0.65	0.78	0.91
Whitetail Institute, Double-Cross	6	10	16	20	26	30	36	41	0.13	0.23	0.36	0.46	0.59	0.68	0.82	0.95
Whitetail Institute, Extreme	0	3	7	10	13	16	18	21	0.00	0.07	0.16	0.23	0.29	0.36	0.42	0.49
Whitetail Institute, Imperial Clover	6	10	16	20	26	30	36	41	0.13	0.23	0.36	0.46	0.59	0.68	0.82	0.95
Whitetail Institut,e No-Plow	3	7	10	13	16	17	20	21	0.07	0.16	0.23	0.29	0.36	0.39	0.46	0.49
Whitetail Institute, Imperial Winter Greens	4	9	13	17	20	24	28	31	0.10	0.20	0.29	0.39	0.46	0.55	0.65	0.72

*WILL CRACK SOME SEEDS AT THIS SETTING.

Figure 3-14: Seed Rate Chart - Meter Seed Box

Rear Agitator Box Seed Rate Adjustment

The Seed Rate is adjusted by Shifting the Shifter Handle on the back of the Seed Box. Loosen the Wing Nut to move the Shifter Handle to the desired setting and re-tighten the Wing Nut. **See Figure 3-15.**

A Seed Rate Chart is located inside the Seed Box Cover and in this manual. **See Figure 3-16.** It should be used as a reference only. Because of seed variations, a more accurate rate can be determined by performing the **Rear Agitator Box Seed Calibration Procedure** to calibrate the seed.

8-Row Brush Agitators are standard. Contact the Brillion office for rates and compatibility of unlisted seed varieties.

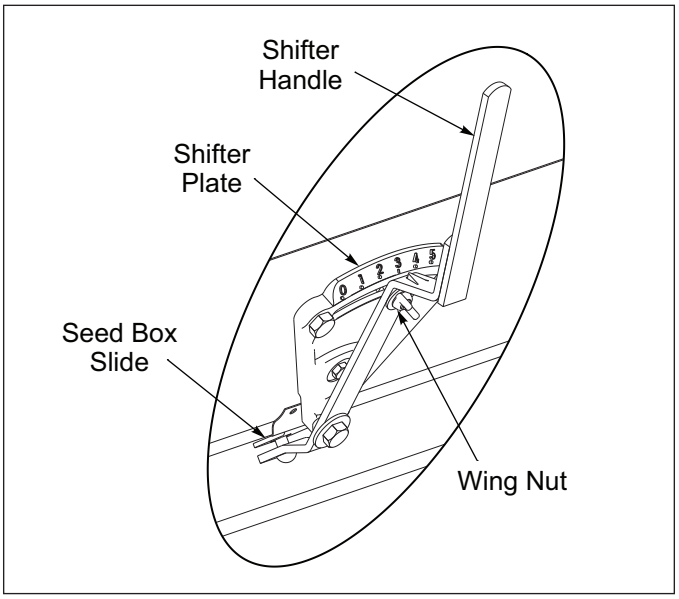


Figure 3-15: Shifter Handle Adjustment

Rear Agitator Box Seed Calibration Procedure

NOTE

The information listed in the Seed Charts is subject to change without notice.

IMPORTANT

Planting rates are in pounds per acre.

Brillion 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 Seed Box Cover or refer to this manual. **See Figure 3-16.** *The information listed in the Seed Chart is subject to change without notice.*

IMPORTANT

To calibrate the Rear Agitator Seed Box, the Front Seed Box must be emptied if it contains seed.

Calibrate unlisted seeds as follows:

1. Disengage the Seed Metering System Drive by removing the exposed Klik Pin in the Sprocket Hub at the rear of the Seeder and placing it in the end of the shaft for storage. **See Figure 3-11.**
2. Raise Seeder.
3. Place a canvas or tarp under the Seeder to catch seed.
4. Empty Front Seed Meter Box if it contains seed.
5. Lower Seeder with the Seed Box over the canvas or tarp.
6. Turn 5/8 Calibration Hex on the outside of the transmission 62 revolutions Counterclockwise (CCW) based on operator standing beside the seeder facing the Calibration Hex. **See Figure 3-12.** *Reference, the shaft with the hex rotates 620 revolutions per acre seeded.*
7. Weigh seed in Lbs. Multiply by 10 for approximate Planting Rate in Lbs/Acre.
8. After the calibration is complete, engage the seed metering system drive by re-installing the Klik Pin into the Sprocket Hub to seed.

PLANTING RATES

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. (1 ACRE = 43,560 SQ.FT.)

8-ROW BRUSH AGITATOR BOX	POUNDS PER ACRE						POUNDS PER 1000 SQ FT					
INDICATOR SETTINGS	1	2	3	4	5	6	1	2	3	4	5	6
Barley	7	31	66	105	147	189	0.15	.072	1.51	2.41	3.37	4.33
Buckwheat	0	40	89	147	220	283	0.00	0.91	2.05	3.37	5.05	6.50
Com (Bin-Run)	0	11	35	67	106	159	0.00	0.25	0.80	1.53	2.43	3.65
Fescue	1	9	19	33	48	60	0.03	0.21	0.44	0.75	1.11	1.38
Oats	0	13	28	46	60	87	0.00	0.29	0.64	1.06	1.38	1.99
Peas	0	8	27	67	116	144	0.00	0.19	0.63	1.53	2.65	3.30
Rye Grain	9	39	83	131	181	256	0.21	0.90	1.91	3.01	4.15	5.88
Ryegrass	9	26	54	92	118	160	0.21	0.61	1.24	2.10	2.71	3.68
Soybeans	0	25	64	126	173	250	0.00	0.58	1.47	2.90	3.98	5.74
Red Wheat Treated	17	61	122	199	280	376	0.39	1.41	2.79	4.56	6.43	8.64
Deer Creek - Game Bird Mix	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
Evolved Harvest Buck'n Oats	4	17	34	54	75	105	0.10	0.39	0.77	1.24	1.71	2.41
Evolved Harvest, Thro & Gro	7	28	57	93	130	163	0.17	0.65	1.31	2.13	2.99	3.73
Whitetail Institute, Extreme	22	51	86	126	187	241	0.51	1.18	1.96	2.90	4.29	5.53
Whitetail Institute, No-Plow	7	33	58	94	113	148	0.17	0.76	1.33	2.16	2.60	3.39
Whitetail Institute, Pure Attraction	3	14	35	55	83	111	0.07	0.33	0.80	1.27	1.91	2.54

Figure 3-16: Seed Rate Chart - Agitator Seed Box

Loup Acre Meter Kit - Optional (After 05/15/2012)

IMPORTANT

Acre Meter is dust and splash resistant, under no circumstances should this unit be submerged in any conductive, corrosive, or flammable liquid. At no time use high pressure water or air to clean it, as this can damage the unit. See "Electric Clutch - Optional" on Page 5-10.

Settings for Loup Acre Meters

The battery operated Acre Meter operates in one of two modes.

1. 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.
2. 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 feet, Width, Password and Low Battery. **See Figure 3-17.**

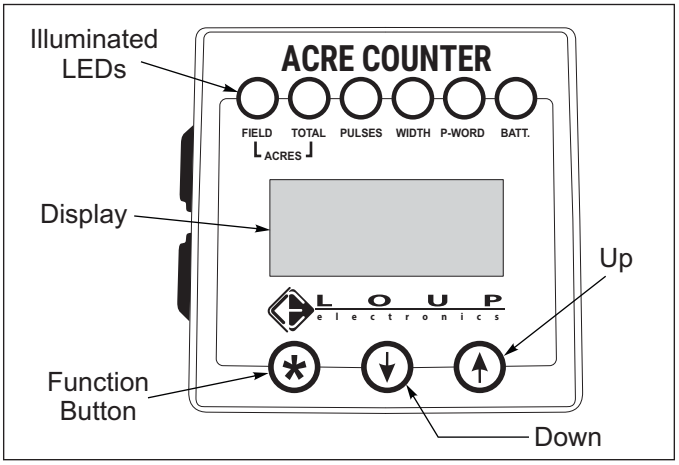


Figure 3-17: Acre Meter

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 9999.9 acres.

Total Acres

Press the ***/FUNC** button until the "**TOTAL**" LED is 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 99999 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:

1. 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 Table 3-1.**
2. If you do not know the pulses per 400 feet, press and hold the **UP** and **DOWN** buttons until the "0" appears in the display. The "**PULSES**" LED will blink. The acre counter is now counting shaft rotations. Enter the cab, lower seeder, engage clutch if equipped, and drive 400 feet. Press the ***/FUNC** button to wake up the acre counter. The "**PULSES**" LED will light. The number displayed is the pulses per 400 feet. Press the ***/FUNC** button to accept the setting.

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

Width

Press the ***/FUNC** button until the "WIDTH" LED is lit. The number displayed is the length of your machine 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 machine 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 feet, 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 display shows "**Ent**": You must enter your password using the **UP** and **DOWN** buttons. When your password is displayed, press the ***/FUNC** button to test the password. If the password is correct, you will be able to change the acre counter settings. The password will be viewable until the acre counter enters sleep mode. When the acre counter is in entry mode 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.

Battery Replacement

The battery operated acre counter uses 3 AA batteries. The "**BATT**" LED will light when the batteries require replacement. Remove the acre counter from the machine and undo the 4 screws on the back of the case. **See Figure 3-18.** This will separate the housing from the rear plate. Replace the batteries with 3 high quality AA alkaline batteries.

See "Acre Meter Troubleshooting" on Page 4-8.

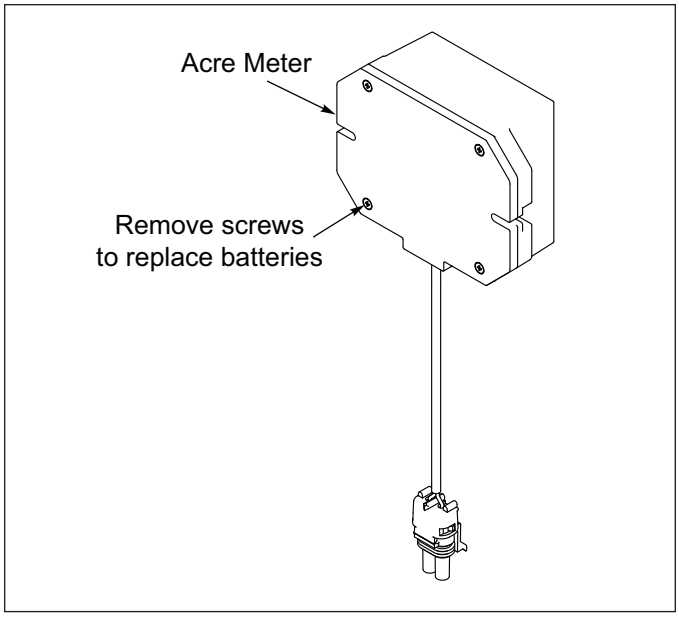


Figure 3-18: Battery Replacement

Acre Meter Settings

MODEL				Pulses per 400 FT	Width (Feet)
SSPT604				22	5.0
SSP4	SSB4	SS4		44	4.0
SSP5	SSB5	SS5		44	5.0
SSP6	SSB6	SS6		44	6.0
SSP8	SSBP8	SS8	SSB8	58	8.0
SSP10	SSBP10	SS10	SSB10	58	10.0
SSP12	SSBP12	SS12	SSB12	58	12.0
SSP16	SS16	4610-16		45	16.0
SSP108	SS108			58	8.0
SSP110	SS110			58	10.0
SSP112	SS112			58	12.0
SSP208/2081	SS208/2081			58	8.0
SSP210/2101	SS210/2101			58	10.0
SSP212/2121	SS212/2121			58	12.0
SSP308/3081	SS308/3081			29	8.0
SSP310/3101	SS310/3101			29	10.0
SSP312/3121	SS312/3121			29	12.0
SLP8	SL8			314	8.0
SLP10	SL10			314	10.0
SLP12	SL12			314	12.0
SLP204/2041	SLPB204/2041			128	4.0
SLP206/2061	SLPB206/2061			128	6.0
SLP304/3041	SLPB304/3041			64	4.0
SLP306/3061	SLPB306/3061			64	6.0
LSP5	LS5			128	5.0
LSP6	LS6			128	6.0
LSS6				128	6.0
SLP208/2081	SLPB208/2081	SL208/2081	SLB208/2081	116	8.0
SLP210/2101	SLPB210/2101	SL210/2101	SLB210/2101	116	10.0
SLP212/2121	SLPB212/2121	SL212/2121	SLB212/2121	116	12.0
SLP308/3081	SLPB308/3081	SL308/3081	SLB308/3081	58	8.0
SLP310/3101	SLPB310/3101	SL310/3101	SLB310/3101	58	10.0
SLP312/3121	SLPB312/3121	SL312/3121	SLB312/3121	58	12.0
BOS4F1	BOS4S1	BOSB4F1	BOSB4S1	45	4.0
BOS6F1	BOS6S1	BOSB6F1	BOSB6S1	45	6.0
BPS6	BPSB6			51	6.0
BPS8				50	8.0
GLP643	SSLP643			69	5.0
4620-24				45	24.0
4630-36				per Seeder	36.0
X20-26	XL28-36	XXL38-46		90	per Model
WFP23-37	WFP38-52			90	per Model
FPSB-6	FPS6			89	6.0

Table 3-1: Acre Meter Settings

Transporting the Seeder

1. Check and follow all federal, state, and local requirements before transporting the Seeder.
2. The Seeder should be transported only by tractor required for field operation. The machine weight should not exceed more than 1.5 times the tractor weight. Maximum transport speed for the Seeder is 20 mph.

CAUTION

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

3. 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, harrowing attachments, etc. may reduce machine load carrying capabilities.
4. Know the transport height and width of the implement being transported. Use caution when transporting near bridges and power lines.

DANGER

Stay away from power lines when transporting, extending implement. Electrocution can occur without direct contact.

5. Check to see that the tractor hitch capacity is rated to carry the weight of the Seeder. **Refer to Tractor Operator's Manual.**
6. Use pins and bushings that properly fit the Tractor Lift Arms or Quick Hitch.
7. Raise the Seeder to full transport height.
8. Verify that reflectors and Safety Decals are clearly visible.
9. Verify that tractor lamps are functioning properly and tractor SMV Sign is clearly visible.
10. Transport during daylight hours whenever possible. Always use tractor 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. **See Figure 3-19.**

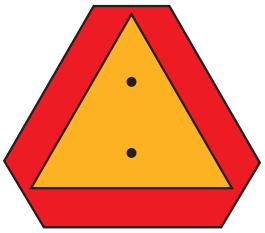


Figure 3-19: SMV Sign

Table provided for general use.

NOTES:

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 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

UNC SIZE	SAE Grade 2	SAE Grade 5	SAE Grade 8	UNF SIZE	SAE Grade 2	SAE Grade 5	SAE Grade 8
1/4-20	4 [5]	6 [7]	9 [11]	1/4-28	5 [6]	7 [9]	10 [12]
5/16-18	8 [10]	13 [13]	18 [22]	5/16-24	9 [11]	14 [17]	20 [25]
3/8-16	15 [19]	23 [29]	35 [42]	3/8-24	17 [21]	25 [31]	35 [44]
7/16-14	24 [30]	35 [43]	55 [62]	7/16-20	27 [34]	40 [50]	60 [75]
1/2-13	35 [43]	55 [62]	80 [100]	1/2-20	40 [50]	65 [81]	90 [112]
9/16-12	55 [62]	80 [100]	110 [137]	9/16-18	60 [75]	90 [112]	130 [162]
5/8-11	75 [94]	110 [137]	170 [212]	5/8-18	85 [106]	130 [162]	180 [225]
3/4-10	130 [162]	200 [250]	280 [350]	3/4-16	150 [188]	220 [275]	320 [400]
7/8-9	125 [156]	320 [400]	460 [575]	7/8-14	140 [175]	360 [450]	500 [625]
1-8	190 [237]	408 [506]	680 [850]	1-14	210 [263]	540 [675]	760 [950]
1-1/8-7	270 [337]	600 [750]	960 [1200]	1-1/8-12	300 [375]	660 [825]	1080 [1350]
1-1/4-7	380 [475]	840 [1050	1426 [1782]	1-1/4-12	420 [525]	920 [1150]	1500 [1875]
1-3/8-6	490 [612]	1010 [1375]	1780 [2225]	1-3/8-12	560 [700]	1260[1575]	2010 [2512]
1-1/2-6	650 [812]	1460 [1825]	2360 [2950]	1-1/2-12	730 [912]	1640[2050]	2660 [3325]

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.

Nominal Thread Diameter (mm)	Newton Meters (Standard Torque)	Foot Pounds (Standard Torque)	Nominal Thread Diameter (mm)	Newton Meters (Standard Torque)	Foot Pounds (Standard Torque)
6	10 [14]	7 [10]	20	385 [450]	290 [335]
7	16 [22]	12 [16]	24	670 [775]	500 [625]
8	23 [32]	17 [24]	27	980 [1105]	730 [825]
10	46 [60]	34 [47]	30	1330 [1470]	990 [1090]
12	80 [125]	60 [75]	33	1790 [1950]	1340 [1450]
14	125 [155]	90 [115]	36	2325 [2515]	1730 [1870]
16	200 [240]	150 [180]	39	3010 [3210]	2240 [2380]
18	275 [330]	205 [245]			

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			
Dash Size	37 Deg. JIC	O-ring (ORS)	O-ring boss
-4	11-13	15-17	13-15
-5	14-16	----------	21-23
-6	20-22	34-36	25-29
-8	43-47	58-62	40-44
-10	55-65	100-110	58-62
-12	80-90	134-146	75-85
-16	115-125	202-218	109-121
-20	160-180	248-272	213-237
-24	185-215	303-327	238-262
-32	250-290	----------	310-340

GATES® BRAND FITTINGS			
Dash Size	37 Deg. JIC	O-ring (ORS)	O-ring boss
-4	10-11	10-12	14-16
-5	13-15	----------	----------
-6	17-19	18-20	24-26
-8	34-38	32-40	37-44
-10	50-56	46-56	50-60
-12	70-78	65-80	75-83
-14	----------	65-80	----------
-16	94-104	92-105	111-125
-20	124-138	125-140	133-152
-24	156-173	150-180	156-184
-32	219-243	----------	----------

AEROQUIP® BRAND FITTINGS			
Dash Size	37 Deg. JIC	O-ring (ORS)	O-ring boss
-4	11-12	10-12	14-16
-5	15-16	----------	16-20
-6	18-20	18-20	24-26
-8	38-42	32-35	50-60
-10	57-62	46-50	75-80
-12	79-87	65-70	125-135
-14	----------	----------	160-180
-16	108-113	92-100	200-220
-20	127-133	125-140	210-280
-24	158-167	150-165	270-360

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.

Lubrication Maintenance

WARNING

Do Not lubricate Seeder while in motion. If any Guards is opened for lubricating, it must be closed before operating.

- Oil Roller Chains periodically. It is a good practice to lubricate chain immediately after use while the chain is still warm for best penetration.
- Seeder has Greaseable Bearings on the ends of the Firming Roller and should be greased every 20 hrs. **See Figure 4-1.**
- Grease Disc Gang Assembly Bearings daily at the start of each work day. **See Figure 4-1.**
- Guards must be closed after lubricating the Transmission Roller Chains before operating.

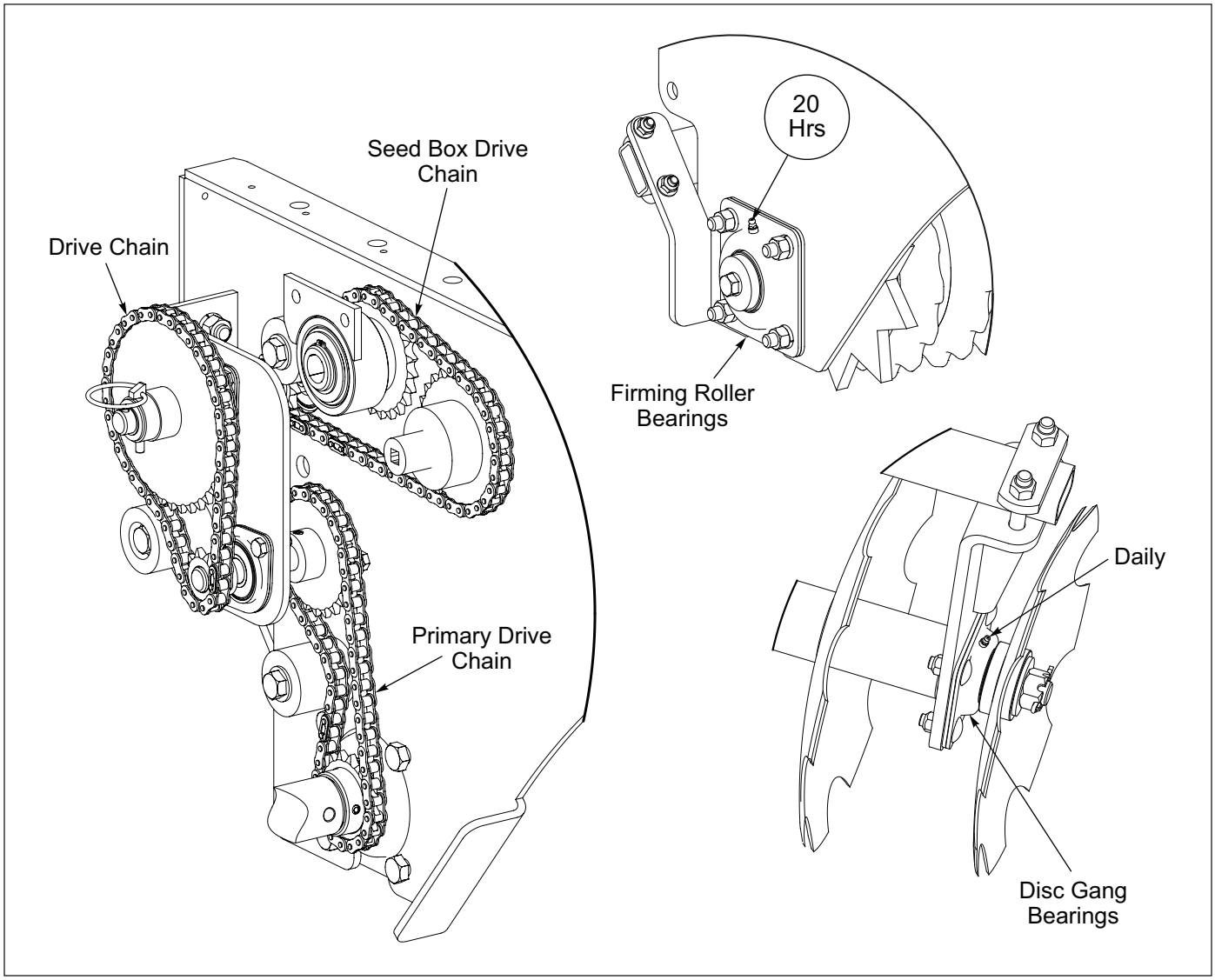


Figure 4-1: Lubrication Locations

Firming Roller Adjustment

After an initial run of 5-10 hours, check the Firming Roller Assembly to ensure that the Roller Wheels and Star Sprockets are tight to one another and that the clamped Star Sprocket 1/2-13 Hardware on the RH end of the Forming Roller is tight. **See Figure 4-3.** If not, loosen the clamped Star Sprocket hardware and slide the Star Sprocket and Roller Wheels tight together against the pinned Star Sprocket on the LH end of the Firming Roller Assembly. **See Figure 4-2.** Tighten the clamped Star Sprocket 1/2-13 hardware per torque chart. **See "General Torque Specifications" on Page 4-1.** Thereafter, check the Firming Roller Assembly every 50-100 hours.

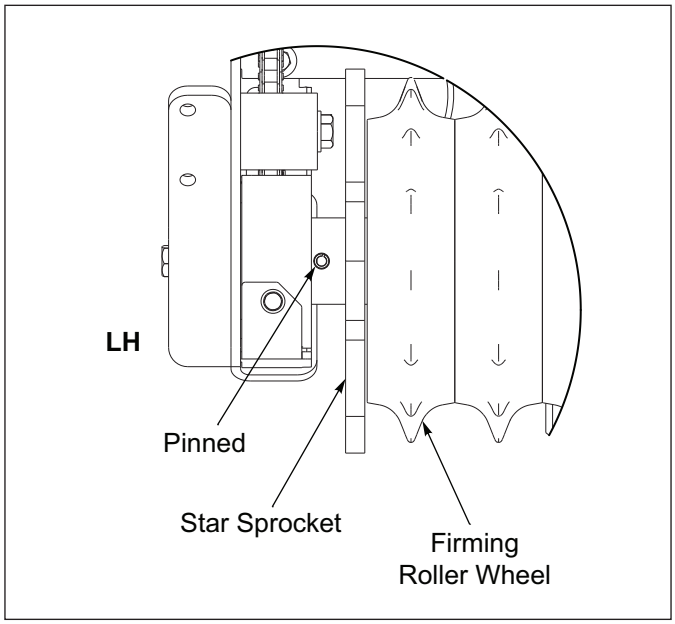


Figure 4-2: Firming Roller Pinned End

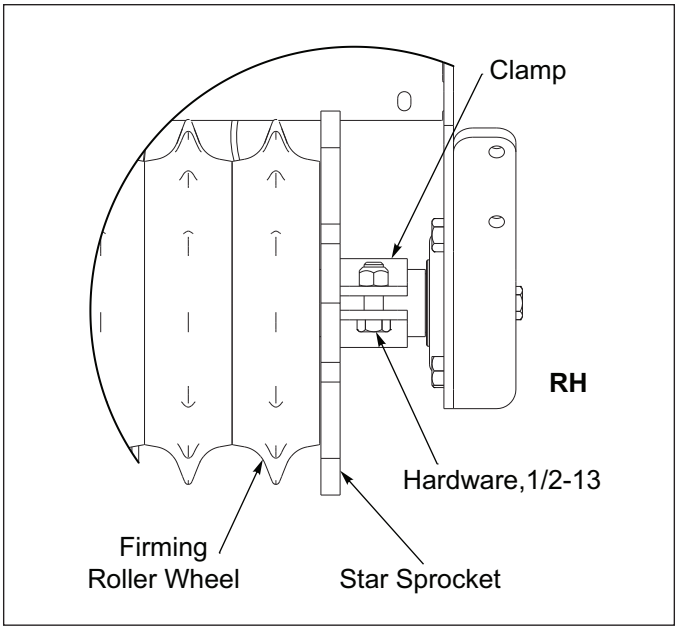


Figure 4-3: Firming Roller Clamped End

Chain Tension

IMPORTANT

Do not over-tighten the Seed Box Drive Chain. Over-tightening will cause the 26 Tooth Sprocket Assembly Bearing to fail.

Food Plot Seeder Transmission Primary Drive Chain, Drive Chain, and Seed Box Drive Chain tension should be about 1/8" to 3/16" slack. **See Figure 4-4.**

To adjust, loosen the appropriate Tension Idler Hardware and move the Tension Idler until 1/8" to 3/16" slack is achieved. Retighten the Tension Idler Hardware.

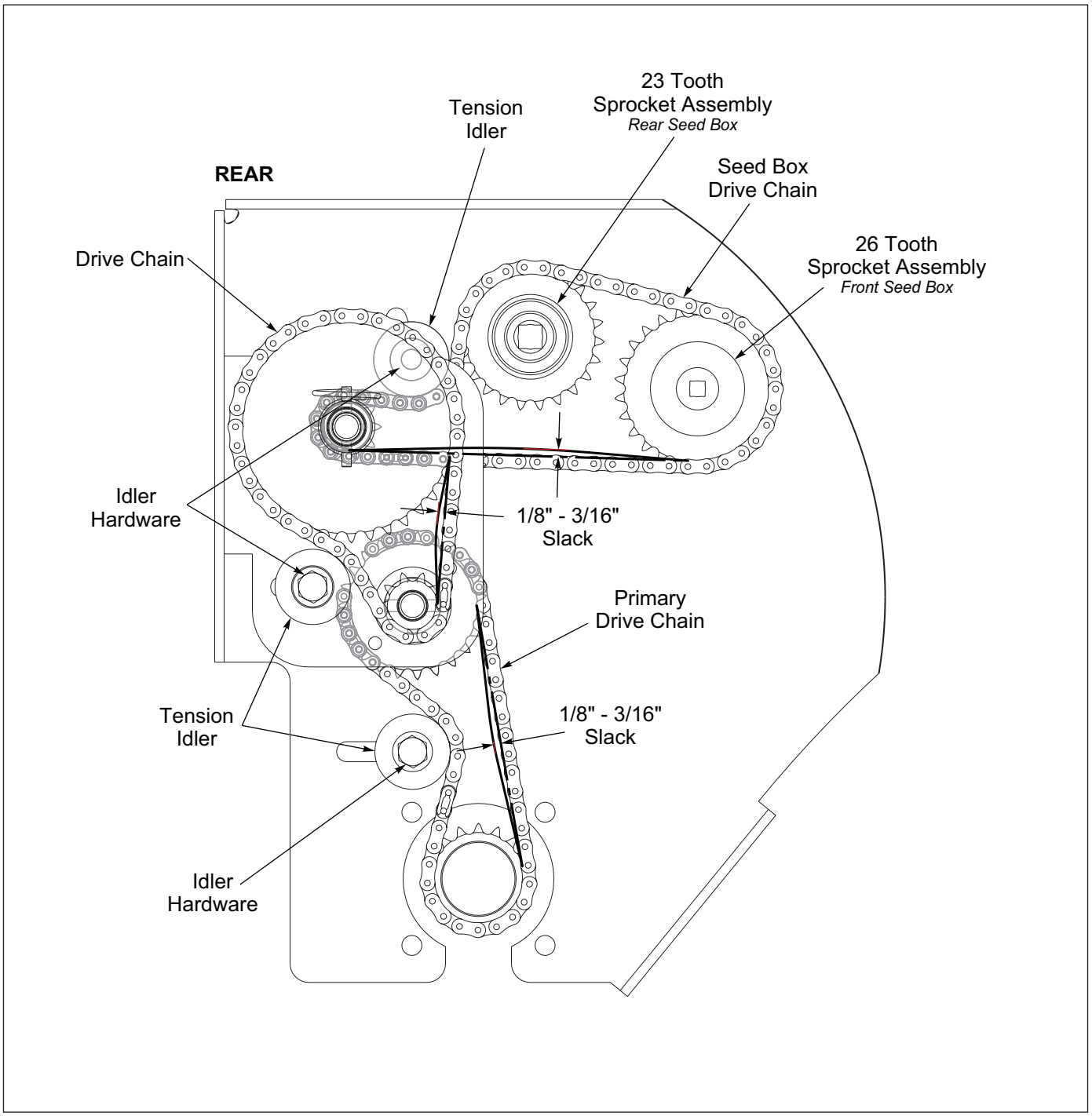


Figure 4-4: Chain Tension

Seed Meter Adjustment

IMPORTANT

Remove all seed out of the Meter Seed Box and Seed Meters before adjusting the Seed Meters.

IMPORTANT

All the Seed Meters MUST BE CLOSED! It may be necessary to individually adjust Seed Meter Cups.

All Seed Meters must be set the same to ensure uniform seeding. To check, adjust the inner and outer 5/8-11 Adjusting Hex Nuts on the Seed Shaft Extension until all the Seed Metering Cups are closed. Seed Meters are closed when the Seed Meter Feed Shutoff is against the Seed Meter Cup Star Washer in the Seed Meter Cup. **See Figure 4-5.** If not, adjust the Individual Seed Meter Cups by loosening the 1/4-20 x 5/8 Screws that mount the Seed Meter Cup to the Seed Box. Adjust the affected Seed Meter Cup so the Feed Shutoff is against the Seed Meter Cup Star Washer in the Seed Meter Cup (closed). Re-tighten 1/4-20 x 5/8 Screws. Be sure the Feed Roll stays engaged in the Seed Meter Cup Star Washer. **See Figure 4-6.**

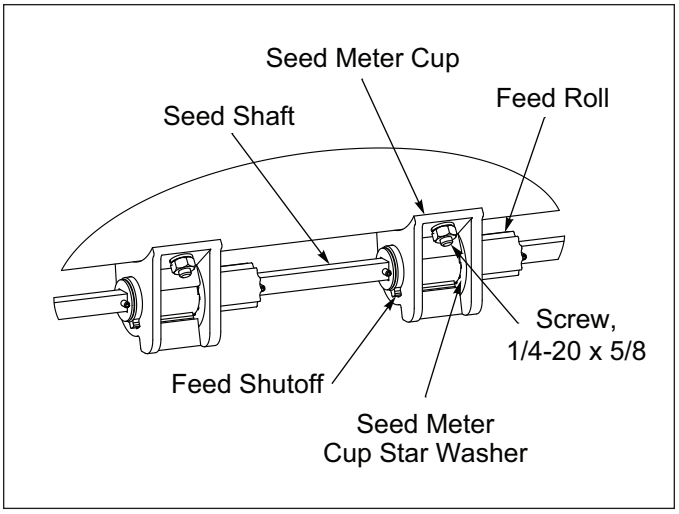


Figure 4-5: Feed Shutoff

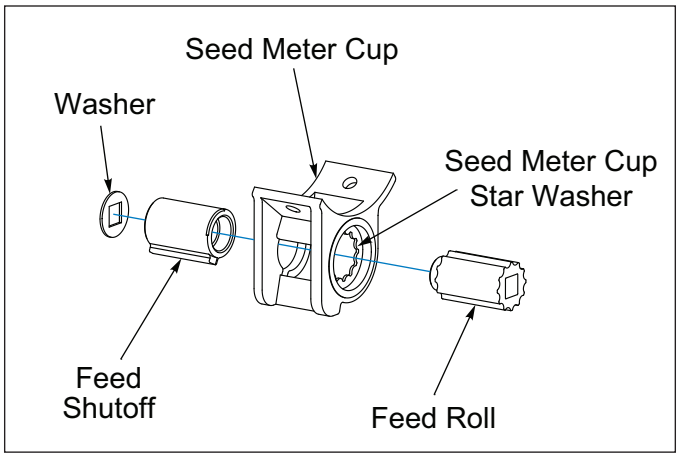


Figure 4-6: Small Seed Meter

The Pointer should point to the Seed Shaft Extension hex groove marked “0” when all the Seed Meters are closed. **See Figure 4-7.**

1. If it does not, loosen both of the 5/8-11 Adjusting Hex Nuts on each side of the bearing.
2. Loosen the Seed Shaft Extension Set Screw.
3. Turn Seed Shaft Extension on the Seed Shaft until the Pointer is aligned with the hex groove marked “0”.
4. Align the Seed Shaft Extension Set Screw against the flat side of the Seed Shaft and tighten.
5. Tighten both of the 5/8-11 Adjusting Hex Nuts on each side of the bearing.

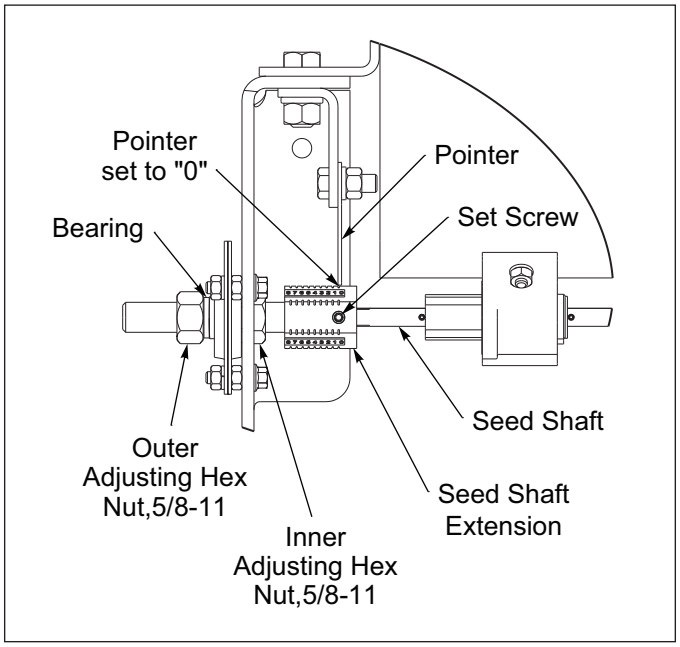


Figure 4-7: Pointer at "0"

Agitator Box Slide Adjustment

When the Agitator Box Slide is properly adjusted, the following should occur.

- When the Shifter Handle is set to “0” (closed), the Agitator Box bottom opening end edge is aligned with the Slide opening end edge. **See Figure 4-8.**

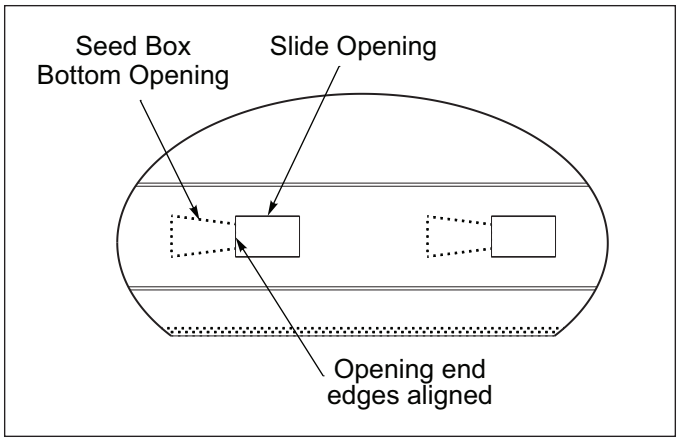


Figure 4-8: Shifter Handle Set at “0”

- When the Shifter Handle is set to “6” (open), the Agitator Box bottom opening end edges are aligned with the Slide opening end edges. Agitator Box bottom opening is completely visible. **See Figure 4-9.**

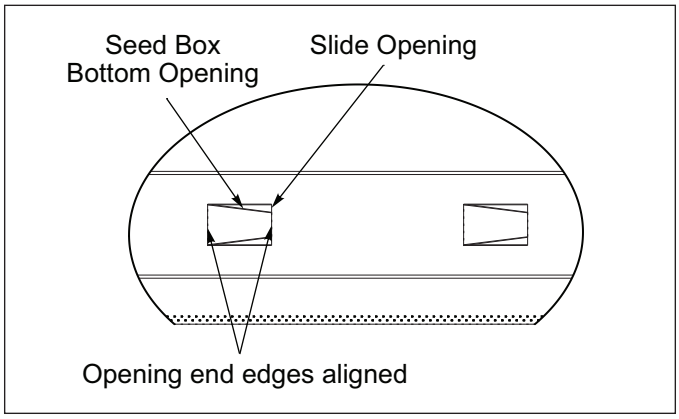


Figure 4-9: Shifter Handle Set at “6”

Adjusting the Agitator Box Slide

1. Loosen the Shifter Handle Wing Nut and move the Shifter Handle until the Slide opening edge is aligned with the Agitator Box bottom opening edge. The Agitator Box opening should be completely closed.
2. The Shifter Handle should be at “0” and the opening in the bottom of the Agitator Box should be completely closed. If not, loosen the hardware that attaches the Shifter Plate to the Agitator Box. Move the Shifter Plate slightly until the Shifter Handle reads “0” in the triangular cutout.
3. Re-tighten the Shifter Plate Hardware.
4. Check that the Shifter Handle functions properly in relationship with the Shifter Plate.
   - Shift the Shifter Handle to “0”. The Agitator Box bottom opening should be fully closed. **See Figure 4-10.**
   - Shift the Shifter Handle to “6”. The Agitator Box bottom opening should be completely open. **See Figure 4-11.**
5. Set the Shifter Handle to “0”. Tighten Shifter Handle Wing Nut.

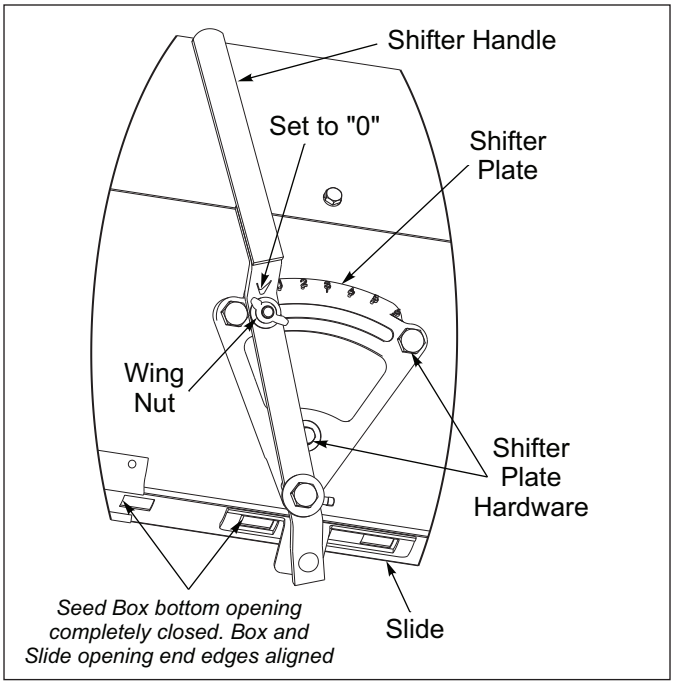


Figure 4-10: Shifter Handle Position at "0"

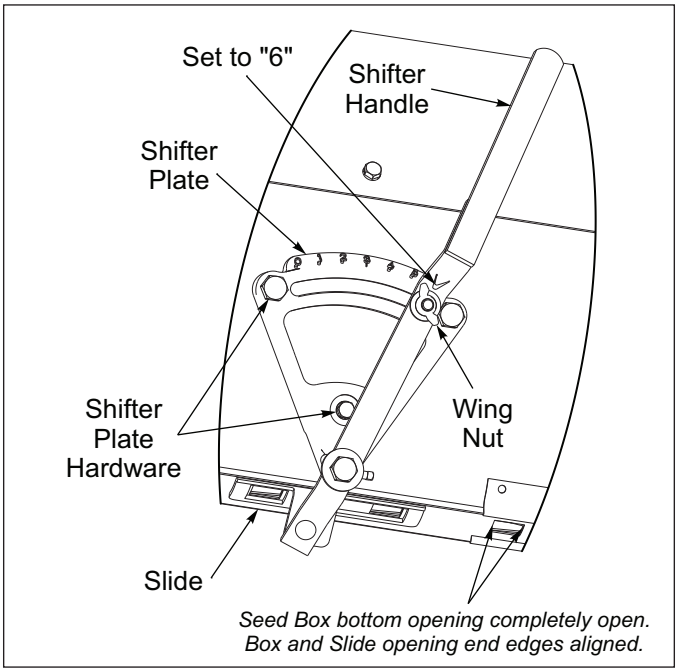


Figure 4-11: Shifter Handle Position at "6"

Acre Meter Troubleshooting

IMPORTANT

Acre Meter is dust and splash resistant, under no circumstances should this unit be submerged in any conductive, corrosive, or flammable liquid. At no time use high pressure water or air to clean it, as this can damage the unit. See Figure 4-12.

Figure 4-12: High Pressure Warning

NOTE

The ground wire is for static discharge protection and has no effect on the ability of the sensor to function properly under normal conditions.

The battery operated Acre Meter uses 3 AA batteries. The Acre Meter will display **"LObat"** when the batteries require replacement. Remove the Acre Meter from the machine and then the 4 Screws on the back of the case. **See Figure 3-18.** Separate the housing from the rear plate. Replace with 3 quality AA batteries.

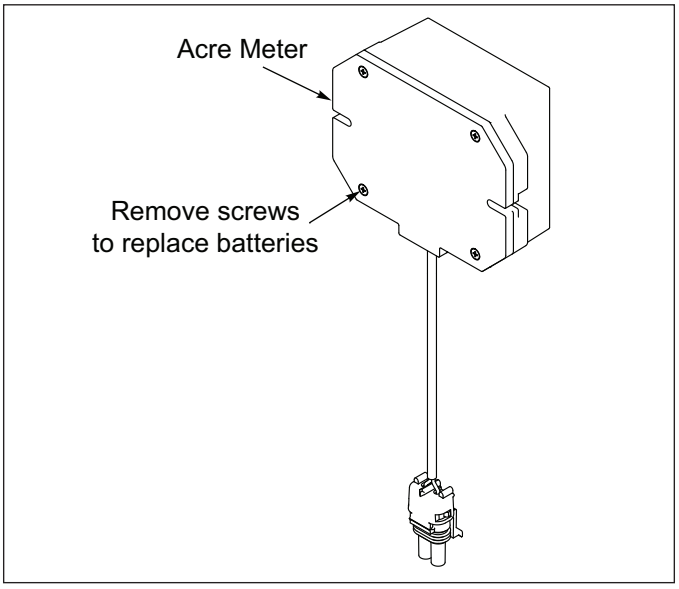


Figure 4-13: Battery Replacement

Acre Meter does not count pulses during calibration or does not count acres during operation.

1. Check the position of the Magnet Wheel Assembly and Pick-Up Switch against the set-up instructions in this manual. **See "Acre Meter Kit - Optional" on Page 2-8.**
2. Verify that the magnet in the Magnet Wheel Assembly has not come out.
3. Place the Acre Meter display in "Calibrate" mode by pressing the ***(FUNC)** key until the **"P-Word"** indicator is lit and then press the up/down arrow keys until the display shows 0 and the LED is blinking. Break the connection between the display and the Pick-Up Switch and short between pins A and B on the display harness connector. You should see the display increment +1 with each contact of the connector terminals.
4. If Step 3 works then wave a magnet in front of the Pick-Up Switch face with it re-connected to the display and see if the display increments up. If not, put an ohm meter or continuity tester on the contacts of the Pick-Up Switch harness and place a magnet in front of the Pick-Up Switch face. The Pick-Up Switch should show continuity or near zero ohms resistance.

Acre Meter cannot change the width or pulse count settings or clear the field and total acres.

1. Check to see if a password needs to be entered by pressing the ***(FUNC)** key until the **"P-Word"** indicator LED is lit. If **"dIS"** is displayed (password disabled) no password is set.
2. If **"Ent"** is displayed a password must be entered to change the settings or the password must be disabled as instructed in the setup section of this manual.

Storage

1. The service life of the Seeder will be extended by proper off-season storage practices. Prior to storing the unit, complete the following procedures:
   - Clean all seed out of the Front and Rear Seed Boxes including Micro-Meters.
   - Completely clean the unit.
   - Inspect the machine for worn or defective parts. Replace as needed.
   - Repaint all areas where the original paint is worn off.
   - Lubricate the machine as stated in **"Lubrication Maintenance" on Page 4-3.**
2. Store the unit in a shed or under a tarpaulin to protect it from the weather. The ground engaging components should rest on boards, or some other object, to keep them off the ground.
3. Raise the S-Tines.
4. Raise Rear Coil Tine Drag if applicable.
5. Lower Seeder on a flat or even surface. Chock or block Rear Roller before unhitching from Tractor.

Chapter 5

Specifications

Product Attributes	FPSB-6
Approximate Weight	1,389 lbs. (625 kg)
Working Width	6 ft. 0 in. (1.8 m)
Overall Width	6 ft. 10 in. (2.05 m)
Overall Transport Height	Dependent Upon Tractor
Overall Height (Working)	3 ft. 5 in. (1.03 m)
Overall Length	5 ft. 8 in. (1.7 m)
Disc Assembly	
Blade Spacing	7.5 in. (191 mm)
Blade Size (Main)	18 in. (457 mm) x 9 ga.
Blade Size (End)	16 in. (406 mm) x 11 ga.
Arbor Bolt	1.125 in. (28.6 mm) Square
Gang Bearings	1.125 in. (28.6 mm) Greaseable
Angle of Operation	10 or 15 Degrees
Harrow Assembly	
Tooth Bars	2
Type of Teeth	10 in. Mini S-Tines with Reversible Points
Tooth Spacing	Nominal 7.5 in. (191 mm)
Tooth Depth of Operation	0 to 3 in. (76.2 mm) in 1 in. (25.4 mm) Increments
Under Bar Clearance	11.5 in. (292 mm)
Seeder Assembly	
Seed Box Type	All Steel Construction with Cover
Seed Box Capacity	2.625 bu. Each Box
Seed Metering System	"Micro-Meter" / 8-Row Brush Agitator
Seed Meter Drive	Positive Ground Driven with Disconnect
Seed Meter / Agitator Opening Spacing	6 in. (152 mm) / 4 in. (102 mm)
Seed Delivery	Broadcast with Wind Deflector Tray
Pulverizer Assembly	
Working Width of Pulverizer	6 ft. 0 in. (1.8 m)
Pulverizer Wheels	9.5 in. (241 mm) Gray Cast Iron
Number of Wheels	31
Pulverizer Scraper	Standard
Pulverizer Axle Bearings	1.5 in. (38.1 mm) Greaseable
Axle Size	1.75 in. (44.5 mm)
Floating Hitch	Cat. 1, 2 Free Link; Cat. 1, 2 Quick Coupler Hitch
Micro-Meter Seed Box	Standard
8-Row Brush Agitator Seed Box	Standard
Coil Tine Drag	Optional
Cargo / Rock Box Kit	Optional
Posi-Drive Pulverizer Roller	Optional (In Lieu of Standard Pulverizer Roller)
Powder Coat Paint, Red	Standard
Horsepower Requirements	35 HP (26.88 kW) and up
Recommended Operating Speed	3 to 5 MPH (5 to 8.3 km/h)

Specifications subject to change with or without notice.

Figure 5-1: Model Specifications

Table provided for general use.

NOTES:

Document Control Revision Log:

Date	Form #	Improvement(s): Description and Comments
07/07/2008	205rev7-7-08	Initial Release
09/15/2011	2P102-0911	(205rev0911) ECN 35017, 35166 - Improved improved pictures and drawings.
03/18/2012	2P102-0312	(205rev0312) ECN 35504. Corrected Planting Rate Values.
05/2024	2P102-2405	ECN 49704 - Landoll P/N, Decals, Acre Meter etc. *Revision Format “Year/Month” Updated ISO logos to ISO 9001:2015

Equipment from Landoll Company, LLC is built to exacting standards ensured by ISO 9001:2015 registration at all Landoll manufacturing facilities.

Food Plot Seeder
Model FPSB-6
Operator's Manual

Re-Order Part Number 2P102

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