



PARA-LIFT SEEDER OPERATOR'S MANUAL

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1. Welcome

Congratulations on your purchase of a BOSS Agriculture Para-lift Seeder.

The BOSS journey began when four founders, each with a unique blend of engineering, manufacturing and hands-on farming experience came together with a shared goal – to create better, more specialised solutions for growers. Their complementary skills and unwavering drive to solve real on-farm challenges became the foundation of BOSS Agriculture, and that spirit of innovation continues to shape everything we do today.

Proudly Australian, BOSS designs, engineers, and manufactures every machine in our cutting-edge 30,000m²+ facility in Inverell, NSW. Here, innovation meets craftsmanship to create equipment built for the toughest Australian conditions. When you choose BOSS, you're supporting local jobs, local expertise, and a legacy of quality and support that you can trust season after season.

At BOSS, our Grower's Loop is the foundation of how we work — a continuous cycle of listening, partnering, and acting. We stay connected to growers, understanding their challenges and goals, and using that insight to design and engineer solutions that deliver real on-farm results. It's a two-way partnership that never stops, with the grower at the centre of everything we do.

Please use this comprehensive resource to gain a full understanding of your equipment, and don't hesitate to contact us for further information.

James Haarhoff
CEO
BOSS Agriculture

2. General Features

The BOSS range of Para-Lift Trailing Seeders are built for growers who want strength, simplicity and efficient performance in flatter country.

With the pull fixed directly to the main frame, the Para-Lift design eliminates the need for front castor wheels, reduces dead weight and transfers useful weight onto the tractor drawbar for improved traction and better use of available horsepower.

Built tough from heavy-duty RHS with plated joints for added durability, the frame delivers excellent service access, high lift clearance and flexible row spacing options.

Available in 12m/40ft single fold and 18m/60ft double fold configurations, the Para-Lift can be matched with a range of row units to suit your farming system.

General Features:

- 100 x 100 x 9 mm RHS frame construction.
- 5-tonne hubs fitted throughout.
- High-lift frame design for service access.
- Walking depth-gauge wheels fitted to the centre section.
- Hydraulic hoses protected with spiral wrap in high-wear areas and supported by hose saddles.
- Hydraulic hoses identified at the drawbar and fitted with hose keepers for unhitching.
- Replaceable spherical ball pivots fitted throughout.
- Provision for air seeder hose saddles.
- Adjustable drawbar tongue.
- 2-stage parking jack and parking stands.
- Safety fold pins fitted.
- Frame wheel mud scrapers fitted.
- Optional toolbox, handwash tank, drawbar basket, liquid tank and Hypro pump.
- Australian designed, made and owned.

3. Safety Information



This Safety Alert Symbol identifies important safety messages.

When this symbol appears:

- Carefully read and understand the message that follows
- Be alert to the risk of personal injury or death.

Signal Words

The following signal words are used throughout this manual:



- **⚠ DANGER** - Indicates a hazardous situation which **will** result in death or serious injury if not avoided
- **⚠ WARNING** - Indicates a hazardous situation which **could** result in death or serious injury if not avoided
- **⚠ CAUTION** - Indicates a hazardous situation which **may** result in minor or moderate injury if not avoided
- **NOTE** - Indicates important information not related to a hazard.

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- | | |
|--|---|
| <ul style="list-style-type: none"> • Read and understand the Operator's Manual before using this equipment. • Ensure safety stands are in place before working under implement. • Ensure the tractor is shut down and the key removed before working on implement. • Be aware of pinch points on the row units and planter frame. • Ensure the implement is securely chocked when unhooking to prevent the implement from rolling. • Do not disconnect hydraulic breakaway couplings while the hydraulic system is under pressure. • Inspect for hydraulic leaks and replace hoses if required. Do not inspect for oil leaks with bare hands, as small invisible high pressure oil leaks can penetrate the skin and require treatment. • Pressurised hydraulic oil can harm or kill. • Never ride on implement when operating. • Do not let children climb or play on implement. | <ul style="list-style-type: none"> • Ensure safety pins are in place when the implement is in the folded position. • Ensure the tractor is ballast correctly for linkage machines. • Be aware of overhead powerlines when transporting a folded implement. • Width and height restrictions may apply when travelling on public roads, consult your local transport regulator for specific requirements in your area. • Max travelling speed is 20km/h. • Ensure tyres are inflated to the correct pressure as recommended. • Inspect the implement regularly for loose bolts, damaged or worn components and replace as required. • Inspect and keep wheel studs tight. • Do not stand between the tractor and implement while coupling the implement up. • Ensure all safety signs are in place and replace if damaged. • Ensure all safety guards are in place. • No persons within 50 metres when the implement is operating. |
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4. Road and Field Travel

⚠ WARNING: BOSS planters are designed primarily for in-field operation. Tyre selection and position is designed for optimum in-field use. Continuous high speed road travel is not recommended.

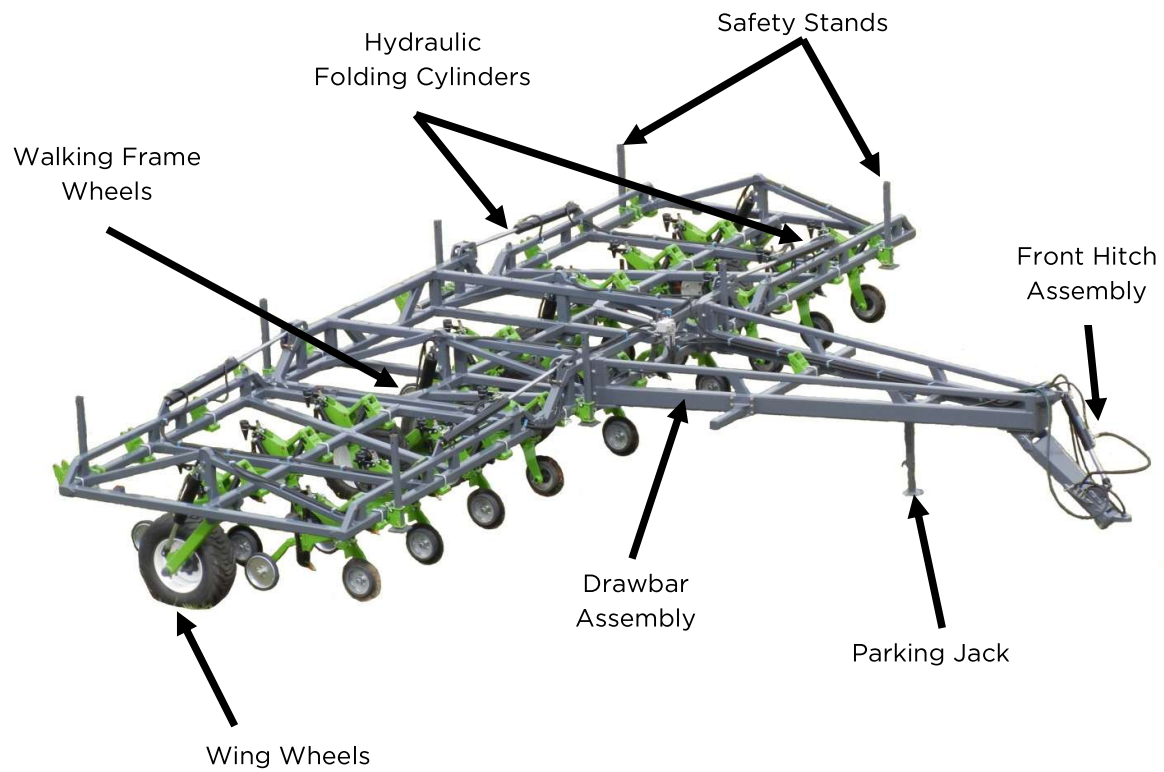
We understand road travel may be required from time to time, and as such certain steps and guidelines need to be considered for personal and public safety, and to avoid tyre damage.

- Always use an agricultural tractor large enough and with sufficient braking capacity to stop the combined unit quickly and safely.
- Make sure tyre pressures are correct as per operator's manual or inflation stickers located on the rim.
- Ensure all wheel nuts are present and tight as per operator's manual or wheel nut torque stickers located on the rim.
- Make sure connection pin and hitch components are in good order with no possibility of the implement coming unhooked.
- Travel Speed should not exceed 20km per hour.
- Machines are often oversize and as such follow local laws regarding excess dimension transport requirements.
- Exercise caution when transporting BOSS Planters on public roads in poor visibility, or when road conditions are wet as stopping capability may be reduced.
- Be aware of overhead powerlines at all times.
- Do not allow anyone to ride on the implement at any time.
- High road temperatures significantly reduce tyre carrying capacity, stop and check tyres regularly and allow to cool before continuing.
- Ensure fold safety pins are in place and any components fitted to the implement cannot fall off during transport.
- Know the machines limitations when negotiating changes in road conditions. Reduce speed over uneven or rough terrain, and be aware of hazards such as bridges, trees, fences, power lines and other road users.



BOSS Planters are not intended for frequent, high-speed, or long-distance road transport. Road travel should be limited to essential, infrequent, short-distance movements and undertaken at reduced speeds in accordance with the guidelines set out above.

5. Parts Familiarisation



6. Hook-Up

⚠ DANGER: Ensure no-one is at risk of being crushed or trapped before commencing hook-up of the implement and tractor.

Steps:

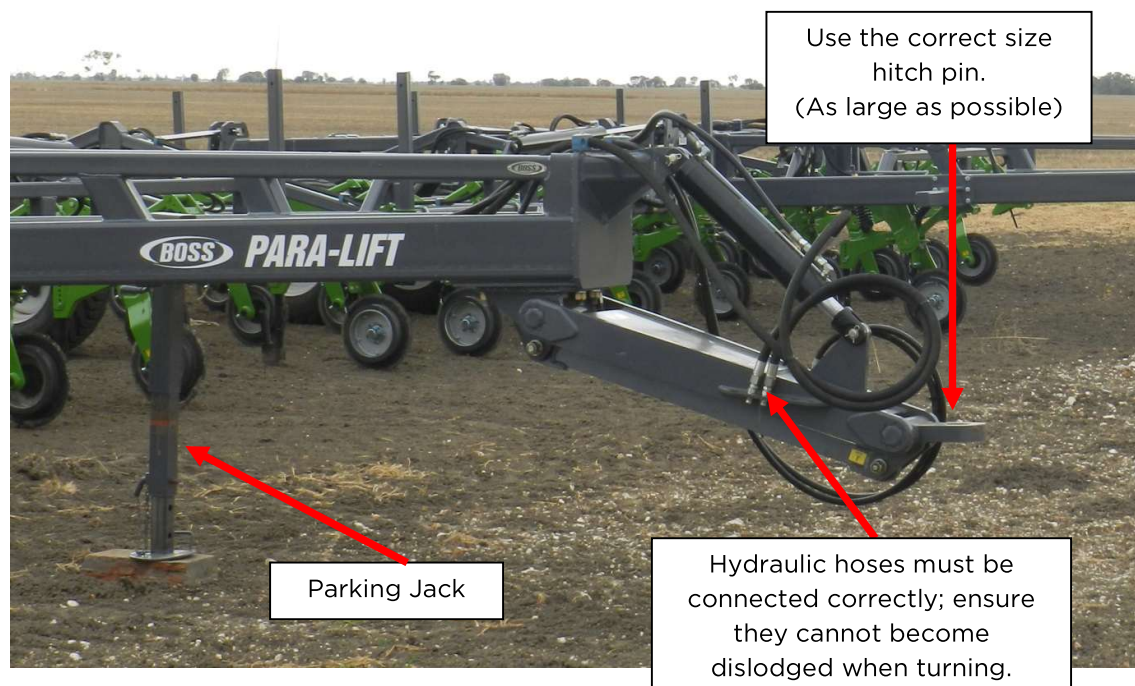
Use the mechanical parking jack stand to set the drawbar pull to the correct height before reversing.

Connect all hydraulic lines making sure all hydraulic fittings are clean prior to connection. All hydraulic dump lines are required to be connected correctly to avoid damage to the implement, row units or air seeder. BOSS dump lines are generally labelled, however, ensure you have an understanding of the machines operation and connect hydraulic lines accordingly.

Connect electrical wiring harnesses (if applicable).

The main hitch pin should be the correct size for both the implement and the tractor (use as large a pin as possible). The pin should be undamaged and in good condition.

Once the tractor and implement are connected remove the parking jack and place in the storage position.



7. Setting Frame Operating Height

⚠ WARNING: The ram stops MUST be adjusted EVENLY! If they are not adjusted evenly the cylinder rod can become fatigued and fail.

The operating height is set by adjusting the ram stops located on the centre section cylinders. The precise operating height is determined by the row unit that is fitted to the frame; refer to the row unit operating manual for instruction on frame height.

Tools Required:

- $\frac{3}{4}$ " spanner, Metal ruler

Steps:

1. Using a $\frac{3}{4}$ spanner, loosen the locating bolts on all four ram stops (2 on each cylinder. See Figure 1).
2. Using a ruler (see Figure 1), adjust all four ram stops to achieve the required under-bar operating height.
3. Once all stops are evenly adjusted, tighten the locating bolts.



Using a $\frac{3}{4}$ spanner loosen the ram stop bolts and adjust both stops equally. The safest way is to use a ruler so all 4 stops (2 on each cylinder on the centre lift wheels) are equal.

Figure 1: Ram stops

8. Levelling the Frame

Your Para-lift Frame will be levelled in the factory however if in-field adjustments are required they can be carried out using the following two adjustments.

8.1. Adjusting Lift-Wheel Ram Stops

This adjustment raises or lowers the rear of the frame. This adjustment can also be used when deep sowing if the wing sections appear to nosedive in the front corners of the toolbar. If this occurs you can assist by screwing in the adjuster bolts on the centre section only, which will lower the centre rear frame and at the same time pick up the front of the outer wings.

Tools required:

- 1 ½" spanner

Lower all frame safety stands and gently lower the implement, so the frame weight is just supported to make adjusting the bolt easier. Undo the locknut and adjust the bolt inwards to lower the rear of the frame or adjust outwards to raise the rear of the frame. All adjustments must be made equally to each section ie. Centre section, Inner Wing Sections or Outer Wing Sections.

If adjusting the bolt outwards, ensure there is enough bolt remaining inside the thread otherwise damage may occur. The front hydraulic drawbar cylinder may also need to be adjusted if you are unable to achieve your desired settings on the lift wheels.

Lift wheel ram adjusters are located on the top of all hydraulic lift wheel cylinders.

Before adjusting, lower all frame stands and support the weight of the machine to make adjusting easier.

Using a 1½" spanner undo the locknut and make your required adjustments.



Levelling the Frame (Con't)

8.2. Adjusting Hydraulic Drawbar Cylinder

⚠ WARNING: Before adjusting, chock the implement wheels and lower all frame stands. Unhook the implement from the tractor.

This adjustment raises or lowers the front of the implement.

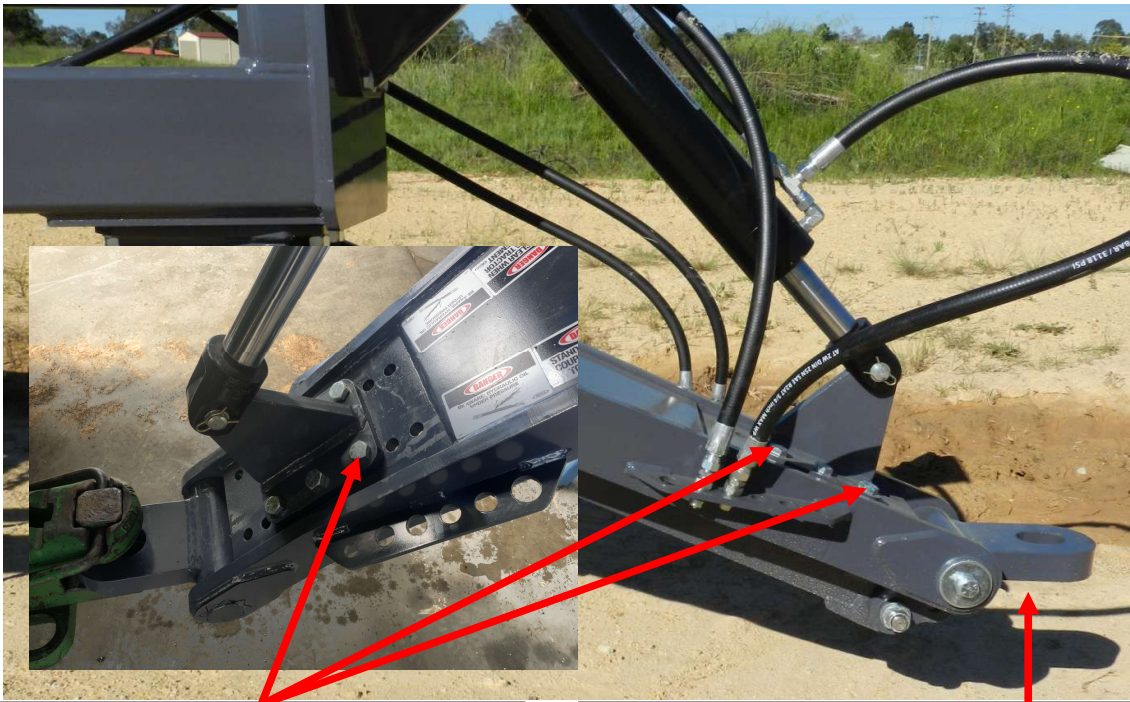
Tools required:

- 15-tonne jack
- 1½" spanner

Support the weight of the drawbar tongue with the 15-tonne jack.

Using 1½" spanners, undo the locating mounting bolts and remove so the cylinder mount assembly can move. Use the jack to raise or lower the drawbar, so the cylinder mount assembly can be relocated into the required position until bolt holes are aligned. Replace the locating bolts and tighten. Raising the cylinder mount position will lift the front of the implement.

Before adjusting, lower all frame stands and unhook the machine from the tractor.



Using 1½" spanners undo the cylinder mount locating bolts and reposition the cylinder mount as required.

Moving the cylinder mount position up will lift the front of the frame.

Using a suitable 15 tonne jack support the weight of the drawbar.

When adjuster bolts have been removed raise or lower the jack until required position is achieved and the mounting bolts can be aligned.

9. Folding & Unfolding Procedure

**DANGER:**

Be aware of the height of the frame when working around power lines.

Ensure no-one is under the wing sections at any time.

Prior to folding the implement, ensure the lift cylinders are phased correctly and the frame is level. To phase the cylinders, fully raise the frame and hold levers on momentarily, then lower slightly and repeat to allow the oil to fill lines and cylinders completely to ensure phasing poppets are correctly seated.

When folding the implement, a tractor must be hooked up and the terrain must be level and safe. Ensure the area is clear of power lines, trees and people in the vicinity of the implement are far enough away to be safe.

Ensure fold safety pins are in the storage position so no damage can occur to fold cylinders when operating.

Before folding, raise the implement so the row units are off the ground and ensure the row units do not drag across the ground as the wings are coming up. The wings should operate together, and both should come up evenly. If the wings are not coming up together do not continue to fold and contact a BOSS representative for instruction. Once the implement is fully folded the safety fold pins should be placed in the transport position (located on inner wings only).

Unfolding

When unfolding the Para-lift frame remove the safety fold pins and ensure the area is clear and safe. Once the implement has been unfolded continue to extend fold cylinders until they are all the way out (approx. halfway in the operating slot). This will allow the wing sections to float up or down and follow ground contours without damaging hydraulic cylinders. It is advisable to leave your folding cylinders in the float position on the hydraulics for cylinder protection.



Folding Procedure (Cont.)



Ensure tyre pressures are correct (see Section 12.2 and the area is clear before folding.



When unfolding the machine hold the hydraulics on until all fold cylinders are completely extended. They should be approx. halfway in the operating slot.

To avoid damage before folding check the fold safety pins are in the storage position as shown.



Once the machine is folded move the safety fold pins to the lockout position for machine transport or storage.

10. Adjusting the Mud Scrapers

Your BOSS Para-lift Frame is fitted with mud scrapers for operating in wet conditions. Sometimes a combination of the mud scrapers and lower tyre pressures can improve your frames performance in difficult conditions. Tyre pressures however need to be accurate during any transport for safety and longevity.

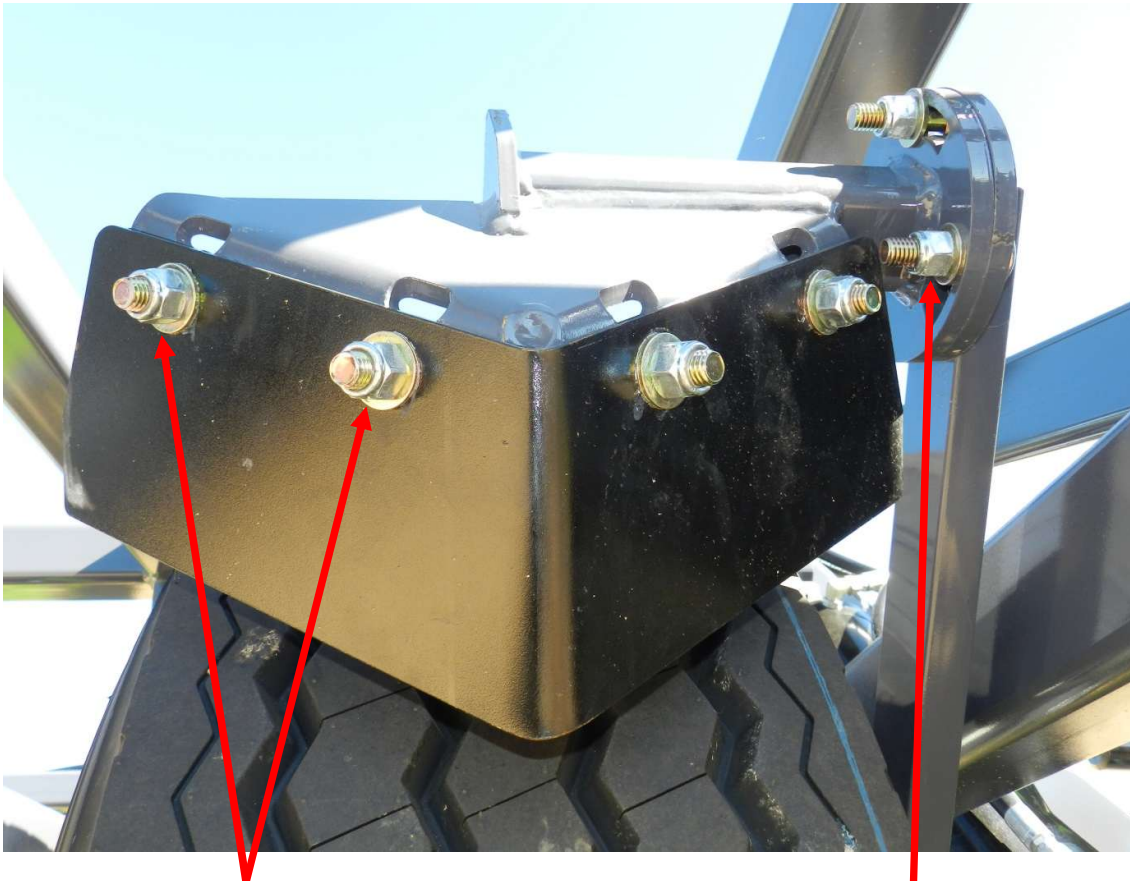
Tools required:

- $\frac{3}{4}$ " spanner

10.1. Adjusting the Centre-Section Walking-Frame Wheel Scrapers

The mud scrapers on the centre-section, walking-frame wheels, have two adjustment options; the angle and inward/outward.

Use a $\frac{3}{4}$ " spanner and loosen the adjustment bolts on the mount to adjust the blade angle. Alternatively, the actual blade can be moved in or out as required.



The mud scraper blade can be adjusted in and out as required using a $\frac{3}{4}$ " spanner.

On the centre frame wheels, the mud scraper blade angle can be adjusted by loosening the adjustment bolts and position as required.

Adjusting the Mud Scrapers (Con't)

10.2. Adjusting the Wing-Wheel Scrapers

The mud scrapers on the wing wheels can be adjusted in or out (no angle adjustment).

To preserve the tyre, we recommend keeping the scraper blade a minimum of 25mm off the tyres. This will allow a layer of mud to form on the tyre so the scraper does not accelerate tyre wear.



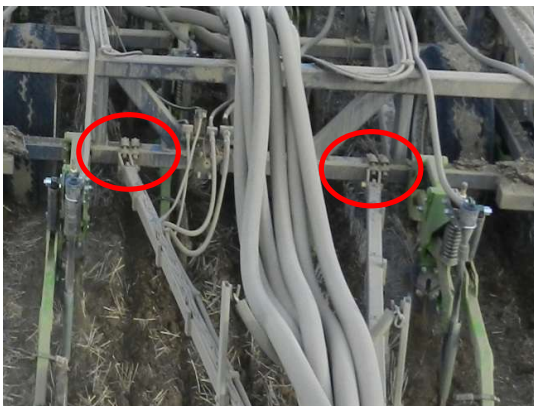
The wing frame wheels mud scraper blade can be adjusted in and out as required using a $\frac{1}{4}$ " spanner. The minimum distance from the tyre should be approx. 25mm for tyre longevity.

11.Important Bolts to Check

All drawbar mounting bolts through to the front hitch bolts.



All wheel nuts



Air Cart pull bolts

12. Maintenance

Before Servicing:



- Shut off the tractor engine
- Remove keys from ignition
- Check that all moving parts have stopped prior to servicing
- Make sure all safety stands and safety pins are in place
- Never place hands or feet under row units.

Your BOSS Para-lift Frame requires minimal maintenance to keep in good shape. Below is a guide to maintain the implement. All maintenance procedures may vary depending on ground/soil conditions and the amount of use your implement does both in-field and on-road.

12.1. Wheel Nut Torque

8 Stud	400ft-lb
10 Stud	500ft-lb

12.2. Recommended Tyre Pressure

Super Singles	100psi (maximum)
Floataction Tyres	62psi (maximum)

Maintenance (Con't)

12.3. After First 5 hours:

- Check all wheel nuts.
- Check drawbar mounting bolts through to the front hitch.
- Check Air Seeder pull bolts.
- Check wheel bearing preload.
- Check for hydraulic leaks.

12.4. Daily Maintenance:

- Periodically check all wheel nut tension throughout the first days after delivery until wheel nut tension is maintained. (See Section 12.1)
- Grease frame pivots with 1-2 pumps grease.
- Check for hydraulic leaks.
- Check tyres are inflated correctly. (See Section 12.2)
- Check hydraulic pins are secure with end clips in place.
- Check hitch pins are in place and secure.

12.5. Weekly Maintenance:

- Check all wheel nut tension. (See Section 12.1)
- Check for any loose or damaged bolts and replace if necessary.
- Check for hydraulic leaks and repair if necessary.
- Check tyres are inflated correctly. (See Section 12.2)
- Check drawbar mounting bolts through to the front hitch bolts are tight.
- Check Air Seeder pull bolts are tight.
- Check hydraulic fold rams and lifting rams are in good condition with all mounting pins secure with safety clips or end bolts in place.
- Check safety stands and safety decals are in place.
- Visually check bearings in fold pivots, ensure the circlips are in place and bearings are retained properly in the housing.
- Check main frame wheel axle retaining bolts are tight and the axle has not moved.

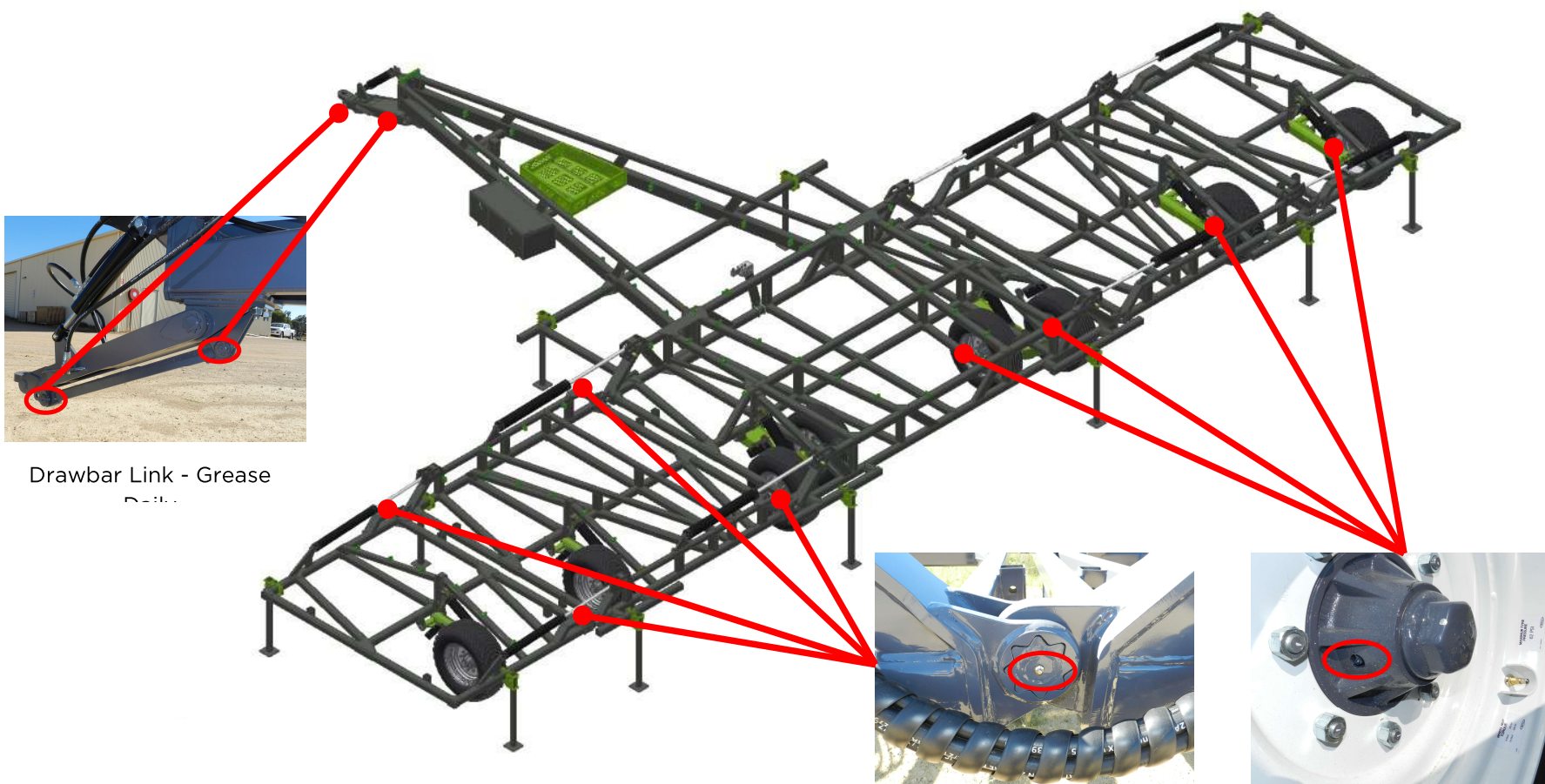
Maintenance (Con't)

12.6. Annual Maintenance:

- Check all wheel nut tension. (See Section 12.1)
- Check for any loose or damaged bolts and tighten or replace if necessary.
- Check for hydraulic leaks and repair if necessary.
- Check hydraulic hoses are in good condition and replace if necessary.
- Grease wheel bearings. (bearings are fitted with purge seals however always ensure the seal is seated correctly after greasing)
- Check wheel bearing preload and adjust as necessary.
- Check tyres are in good operating condition.
- Check tyres are inflated correctly. (See Section 12.2)
- Check drawbar mounting bolts through to the front hitch bolts are tight.
- Check Air Seeder pull bolts are tight.
- Grease frame pivots with 1 to 2 pumps grease.
- Check hydraulic fold rams and lifting rams are in good condition with all mounting pins secure with safety clips or end bolts in place.
- Check safety stands and safety decals are in place.
- Visually check bearings in fold pivots, ensure the circlips are in place and bearings are retained properly in the housing.
- Check frame wheel axle retaining bolts are tight and the axle has not moved.
- Check all pins and bushes for wear and replace as required.
- Clean and wash the implement down touching up any areas where paint has been removed.

NOTE: Some hydraulic components such as hydraulic cylinders depend on oil residue for rust protection; avoid using any harsh cleaning products during wash-down.

12.7. Service Information - Grease Points



Drawbar Link - Grease Points

Frame Pivots - Grease

Grease Seasonally

NOTES:

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