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

Illustrations may show optional equipment not supplied with standard unit.
If you require a copy of this document in your native language please contact your dealer or Great Plains.

Požadujete-li kopii tohoto dokumentu ve svém rodném jazyce, obrat'te se prosím na svého prodejce nebo na společnost Great Plains.

Ha szeretné ezt a leírást magyarul is megkapni, kérjük, értesítse a forgalmazóját vagy a Great Plains-t.

Pour obtenir un exemplaire du présent document dans la langue de votre choix, veuillez contacter votre représentant ou Great Plains.

Jei prireiktų šio dokumento kopijos Jūsų gimtaja kalba, kreipkitės į savo platintoją arba į „Great Plains“.

Ако ви е необходимо копие на този документ на родния ви език, моля да се обърнете към вашия дилър или към Great Plains.

Dacă aveți nevoie de o copie a acestui document în limba dumneavoastră natală vă rugăm să vă contactați dealerul sau Great Plains.

Чтобы получить копию данного документа на вашем родном языке, обратитесь к своему дилеру или в компанию «Great Plains»

Wenn Sie ein Exemplar dieses Dokuments in Ihrer Muttersprache brauchen, dann wenden Sie sich bitte an Ihren Händler oder an die Great Plains.
DECLARATION OF CONFORMITY

Simba International Limited hereby declare that the Great Plains Simba X-Press, as defined by the Serial Number attached to the Machine Chassis, conforms with the following Directives and Regulations, and has been certified accordingly.

EC Machinery Directive 2006/42/EC.

The Supply of Machinery (Safety) Regulations 2008.


Specifically related harmonised standards are:

EN ISO 12100-1: 2003 (Safety of Machinery).


THE MANUFACTURER:

Simba International Limited
Woodbridge Road
Sleaford
Lincolnshire
NG34 7EW
England

Telephone (+44) (0)1529 304654.

CERTIFIED ON BEHALF OF SIMBA INTERNATIONAL LIMITED:

Colin Adams
Managing Director
WARRANTY

TERMS AND CONDITIONS

In this warranty Simba International Ltd., is referred to as “the Company”.

1. Subject to the provisions of this warranty the Company warrants each new machine sold by it to be sold free from any defect in material or workmanship for a period of 12 months from date of installation with the end-user.

Some specific items have additional warranty over and above the standard 12 months. Details of these can be obtained upon request directly from the distributor or Simba International Ltd.

2. If the machine or part thereof supplied by the Company is not in accordance with the warranty given in clause 1 the Company will at its option:

(a) make good the machine or part thereof at the Company’s expense, or
(b) make an allowance to the purchaser against the purchase price of the machine or part thereof, or
(c) accept the return of the machine and at the buyer’s option either:
   I) repay or allow the buyer the invoice price of the machine or part thereof, or
   II) replace the machine or part thereof as is reasonably practical.

3. This warranty shall not oblige the Company to make any payment in respect of loss of profit or other consequential loss or contingent liability of the Purchaser alleged to arise from any defect in the machine or impose any liability on the Company other than that contained in clause 2.

4. Any claim under this warranty must be notified to the Company in writing specifying the matters complained of within 14 days from the date of repair.

5. Any claim under this warranty must be made by the original purchaser of the machine and is not assignable to any third party.

6. If the purchaser hires out the machine to any third party the warranty shall apply only to matters notified to the Company in writing within 90 days of the date of delivery and clause 1 shall be read as if the period of 90 days were substituted for the period of 12 months.

7. The warranty will cease to apply if:

(a) any parts not made, supplied or approved in writing by the Company are fitted to the machine or any repair is carried out to the machine other than by or with the express written approval of the Company or
(b) any alterations not expressly authorized by the Company in writing are made to the machine or
(c) the machine is damaged by accident or
(d) the machine is abused or overloaded or used for a purpose or load beyond its design capabilities, or used in conjunction with a tractor whose power output capability exceeds the stated implement power requirement by more than 40%. For the purpose of these terms and conditions, “stated implement power requirement” refers to wheeled tractors unless specifically stated. These power requirements should be reduced by 20% when used in conjunction with tracked tractors.
(e) the machine is operated as part of a ‘cultivation train’ where more than one implement is being towed, without the express written approval of Simba International Ltd.
(f) any maintenance is not carried out in accordance with the service schedules in the operator’s manual.
(h) the Installation and Warranty Registration Certificate is not received by Simba International Ltd., Service Dept., Woodbridge Road, Sleaford, Lincolnshire, England, NG34 7EW, within 7 days of installing a new machine.
Machine Identification

Enter the relevant data in the following list upon acceptance of the machine:

<table>
<thead>
<tr>
<th>Serial Number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Machine</td>
<td></td>
</tr>
<tr>
<td>Machine Width</td>
<td></td>
</tr>
<tr>
<td>Year of Construction</td>
<td></td>
</tr>
<tr>
<td>Delivery Date</td>
<td></td>
</tr>
<tr>
<td>First Operation</td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td></td>
</tr>
</tbody>
</table>

**Dealer Address:**
- Name: __________________________________________________________
- Street: __________________________________________________________
- Place: __________________________________________________________
- Tel.: ____________________________________________________________

Dealer’s Customer No.: __________________________________________

**Great Plains Address:**
- Great Plains Simba
- Woodbridge Road Ind. Est.
- Sleaford
- Lincolnshire
- NG34 7EW

- Tel.: +44 (0) 1529 304654
- Fax: +44 (0) 1529 413468
- E-Mail: simba@greatplainsmfg.com

Great Plains Customer No.: ________________________________
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Introduction

Foreword
Make sure you have read and follow the Operating Instructions carefully before using the machine. By doing so, you will avoid accidents, reduce repair costs and downtime and increase the reliability and service life of your machine. Pay attention to the safety instructions!

Great Plains will not accept any responsibility for any damage or malfunctions resulting from failure to comply with the Operating Instructions.

These Operating Instructions will assist you in getting to know your machine and in using it correctly for its intended purposes. First, you are given general instructions in handling the machine. This is followed by sections on servicing, maintenance and the action to be taken should a malfunction occur.

These operating instructions are to be read and followed by all persons working on or with the machine, e.g.:

- Operation (including preparation, remedying of faults in the operating sequence and servicing).
- Maintenance (maintenance and inspection)
- Transportation.

Together with the Operating Instructions, you receive a Spare Parts List and a Machine Registration form. Field service technicians will instruct you in the operation and servicing of your machine. Following this, the Machine Registration form is to be returned to your dealer. This confirms your formal acceptance of the machine. The warranty period begins on the date of delivery.

We reserve the right to alter illustrations as well as technical data and weights contained in these Operating Instructions for the purpose of improving the machine.

Warranty Guidelines
The period of liability for material defects (warranty) relating to our products is 12 months. In the case of written deviations from the statutory provisions, these agreements shall apply.

They shall become effective upon installation of the machine with the end customer. All wear parts are excluded from the warranty.

All warranty claims must be submitted to Great Plains via your dealer.
1. Safety Data

The following warnings and safety instructions apply to all sections of these Operating Instructions.

1.1 Safety Symbols

On the machine

- Parts may fly off during operation. Keep a safe distance away from the machine!
- Read and observe the Operating Instructions before starting up the machine!
- Keep clear of the working range of foldable machine components!
- Watch out for escaping pressurised fluids! Follow the instructions in the Operating Instructions!
- No passengers are allowed on the machine!
- Never reach into areas where there is a danger of being crushed by moving parts!
- Never reach into any revolving parts!
Refer to Operating Instructions before attempting maintenance.

**Operating Instructions:**

The Operating Instructions distinguish between three different types of warning and safety instructions. The following graphic symbols are used:

- **Important!**
- **Risk of injury!**
- **Risk of fatal and serious injuries!**

It is important that all the safety instructions contained in these Operating Instructions and all the warning signs on the machine are read carefully.

Ensure that the warning signs are legible. Replace any signs that are missing or damaged.

These instructions must be followed in order to prevent accidents. Inform other users of the warnings and safety instructions.

Do not carry out any operations which may affect safe use of the machine.

All references to left and right in this manual are made from the rear of the machine, facing the direction of travel (unless otherwise stated).
1.2 Use for the Intended Purpose

The Great Plains Simba X-Press is built using the latest technology and in accordance with the relevant recognised safety regulations. However, risks of injury for the operator or third parties and impairment of the machine or other tangible assets can arise during use.

The machine is only to be operated when in a technically perfect condition and for the intended purpose, taking into consideration safety and risks and following the Operating Instructions. In particular, faults that can impair safety are to be remedied immediately.

Original parts and accessories from Great Plains have been specially designed for this machine. Spare parts and accessories not supplied by us have not been tested or authorised. Installation or use of non-original Great Plains products may have a detrimental effect on specific design features of the machine and affect the safety of machine operators and the machine itself. Great Plains will accept no liability for damage resulting from the use of non-original parts or accessories.

The Great Plains Simba X-Press is designed solely as a cultivation implement. Use for any other purpose, e.g., as a means of transport, will be deemed to be improper use. Great Plains will accept no liability for damage resulting from improper use. The risk will be borne solely by the operator.

Use of the Simba X-Press behind high power tractors (in excess of 40% above the maximum recommended) can lead to high loads and stresses which can cause long term structural damage to the chassis and key components. Such overloading can compromise safety and is to be avoided.

1.3 Operational Safety

The machine is to be put in operation only after instruction has been provided by an employee of the authorised dealer or an employee of Great Plains. The “Machine Registration” form is to be completed and returned to your dealer.

All protective and safety equipment, such as removable protective equipment, must be in place and functioning reliably before the machine is put in use.

- Check screws and bolts regularly for tightness and retighten if necessary.
- In the event of malfunctions, stop and secure the machine immediately.
- Ensure that any faults are remedied immediately.

1.4 No Liability for Consequential Damage

The X-Press has been manufactured with great care. However, problems may still occur when it is used for the intended purpose. These may include:

- Worn wearing parts.
- Damage caused by external factors.
- Incorrect driving speeds.
- Incorrect setting of the unit (incorrect attachment, non-adherence to the Setting instructions).

Therefore, it is crucial to always check your machine before and during operation for correct operation and adequate application accuracy.

Compensation claims for damage which has not occurred to the machine is excluded. This includes any consequential damage resulting from incorrect operation.
1.5 Road Traffic Safety

When driving on public roads, tracks and areas, it is important to observe the relevant road traffic laws as well as the specific regulations relating to this machine.

Pay attention to the permitted axle loads, tyre carrying capacity, and total weight in order to maintain adequate braking and steerability (these figures are shown on the serial plate).

Passengers on the machine are strictly forbidden!

Max. road transport speed 16mph (25km/h).

1.6 Accident Prevention

In addition to the Operating Instructions, it is important to observe the accident prevention regulations specified by agricultural trade associations. It is the Operator’s responsibility to ensure that all other persons are excluded from the danger zones surrounding or on the machine during its operation.

It is the Owner’s responsibility to ensure:

- the Operator is trained and competent to use the machine & tractor,
- the tractor is suitable for the machine
- adequate Risk and COSHH assessments have been undertaken regarding the machine’s use. Specifically, these include issues concerning contact with the soil, dust, crop residues, chemicals, lubricants and other compounds during operation or maintenance, and the possibility of stones being ejected at high speed during work.

1.6.1 Hitching-up the machine

There is a risk of injury when hitching/unhitching the machine. Observe the following:

- Secure the machine against rolling.
- Take special care when reversing the tractor!
- There is a risk of being crushed between the machine and the tractor!
- Park the machine on firm, level ground.

1.6.2 On the Hydraulic System

Do not connect the hydraulic lines to the tractor until both hydraulic systems (machine and tractor) are depressurised.

Any hydraulic system containing an accumulator can remain under pressure permanently (even after following manual depressurisation procedures with a tractor / implement combination). It is therefore important to check all lines, pipes, and screw connections regularly for leaks and any recognisable external damage.

The hydraulic circuit contains specialised fittings which should not be tampered with under any circumstances. Do not attempt to modify hose routings or hose clamping arrangements, doing so may cause serious damage to the machine and/or injury.
Only use appropriate aids when checking for leaks. Repair any damage immediately. Spurting oil can cause injuries and fires!

In case of injury, contact a doctor immediately.

The socket and plugs for the hydraulic connections between the tractor and the machine should be colour-coded in order to avoid incorrect use.

![Fig. 1.01: HydraulicTaps](image)

### 1.6.3 Changing Equipment
- Secure the machine to prevent it from accidentally rolling away!
- Use suitable supports to secure any raised frame sections suspended above you!
- Caution! Risk of injury due to projecting parts!

Never climb on to rotating parts such as the roll unit. These parts may rotate causing you to slip and suffer serious injury!

Removing components during maintenance may affect the stability of the machine. Ensure it is fully supported in case of unexpected weight shifts.

### 1.6.4 During Operation
Ensure that the working range and the area around the machine are clear (children!) before operating the machine.

Always ensure adequate visibility!

Do not stand on the machine while it is in operation!

Operators must have a valid driving licence in order to drive on public roads. In the operating area, the operator is responsible for third parties.

The person in charge must:

- provide the operator with a copy of the Operating Instructions, and
- ensure that the operator has read and understood the instructions.
- make sure that the operator is aware of the specific regulations relating to the machine when driving on public roads.

### 1.7 Servicing & Maintenance

Ensure that regular checks and inspections are always carried out within the periods required by law or specified in these Operating Instructions.

When carrying out service and maintenance work always:

- switch off the tractor engine and remove the ignition key.
- wait until all the machine parts have stopped moving.
- depressurise the hydraulic system.

Many hydraulic circuits contain lock or overcentre valves which can retain pressure in the lines even after depressurising the tractor side of these circuits. If in doubt, consult trained personnel (such as your local Great Plains Dealer) to ensure such valves are depressurised to the correct procedure before removing or servicing any parts connected downstream of these valves.
Check all hydraulic lines for leaks, loose connections, chafe marks and damage. Remedy any deficiencies immediately! Pay particular attention to hose renewal intervals as outlined in the specific sections which follow. ALL hydraulic hoses have a safe maximum working life of 6 (SIX) years from date of installation, provided they remain in a safe condition. Hoses which exceed 6 years of age should be replaced, or inspected and certified by a suitably qualified person to have an extended life period which should be recorded.

Pay particular attention to those items which require specialist service tools or training to be carried out by qualified personnel. Do not attempt to service these items yourself! These include items retaining pressure (e.g. accumulator circuits), or force (e.g. spring tines), and DD Rolls of any type.

Prior to performing maintenance and servicing work, ensure that the machine is positioned on solid, level ground and is secured to prevent it rolling away. Do not use any parts to climb on to the machine unless they are specifically designed for this purpose.

Before cleaning the machine with water, steam jets (high-pressure cleaning apparatus) or other cleaning agents, cover all openings into which, for reasons of safety or operation, no water, steam or cleaning agents are to penetrate (bearings, for instance).

Lubricate all the lubricating points to force out any trapped water.

When carrying out servicing and maintenance work, retighten any loose screw connections.

When servicing the machine take precautions against soil, dust, seed coatings, oil or any other hazardous substances that you might encounter.

On a new machine tighten all nuts and bolts after 5 hours work and again after 15 hours. This also applies to parts that have been moved or replaced. After the initial 15 hours of work a once a week check should be sufficient depending on daily work rates.

1.8 Operating Areas
The operating areas include the drawbar, hydraulic connections and depth adjustment equipment as well as all operating points requiring maintenance.

All operating areas will be specified and described in detail in the following chapters on servicing and maintenance.

Observe all safety regulations included in the section dealing with Safety, and in the subsequent sections.

1.9 Authorised Operators
Only those persons who have been authorised and instructed by the operator may operate the machine. The operator must be at least 16 years of age.

1.10 Protective Equipment
For operation and maintenance, you require:

- Tight fitting clothing.
- Strong protective gloves (to provide protection against sharp-edged machine components).
- Protective goggles (to stop dirt getting into your eyes).
2. Transportation and Installation

Transportation and initial installation of the machine are described in this chapter.

2.1 Delivery

The machine is normally delivered, fully assembled.

- The machine can be lifted off with a crane or other suitable lifting equipment.
- The machine should be hitched to a tractor and driven off a low-loader.

2.2 Transportation

The Simba X-Press can be transported on public roads by hitching it up to a tractor or on a low-loader.

- It is important to observe the permitted dimensions and weights when transporting the machine.
- If the machine is transported on a trailer or a low-loader, it must be secured using straps or other devices.
- Before transporting the machine on public roads, it must be adjusted to its transportation position and the stipulations relating to road transportation fulfilled.

The transportation width can vary according to the adjustment of working parts (eg. discs, roll, etc). It may be necessary to adjust these elements in order to achieve the minimum transport width.

Adjustments, including the attachment of transport devices, should be made at ground level; lowering the machine may be necessary to achieve this.

- The maximum permissible speed is 25 km/h.

2.3 Installation

When carrying out installation and maintenance work there is a higher risk of injury. It is important that you familiarise yourself with the machine and read the Operating Instructions beforehand.

Operator instruction and initial installation of the machine are carried out by our service technicians or authorised distributors.

The machine must not be used in any way beforehand! The machine can only be released for operation after instructions have been provided by our service technicians or authorised distributors.

- If any modules or parts have been removed for transportation, these shall be mounted by our service technicians/authorised dealers before the instruction takes place.
- Check all important screw connections!
- Lubricate all nipples and joints!
- Check all hydraulic connections and lines for damage.
2.4 Hitching Up

2.4.1 Hitching up a Tractor to the Simba X-Press / Preparing for Transport

When hitching-up the machine, ensure that no-one is between the tractor and the machine.

When the Simba X-Press is parked for extended periods of time it should ideally be left in the unfolded, i.e. work, position for stability, safety and ease of access for maintenance. However, parking the X-Press in the folded position (using the parking stands provided) is acceptable in the normal course of operation.

**Tractor Oil Flow Adjustment:**

As a general rule the tractor oil flow rate should be set in the lowest setting before starting. This can then be increased to allow the desired rate of operation as applicable. This will minimise excessive oil flow and consequent power usage and heat generation.

1. Ensure the tractor hydraulics are depressurised and in the locked or closed (not float) setting.

2. Ensure the rear axle taps are locked to avoid high pressure at the quick release couplings.

3. Couple the hydraulic hoses to the tractor ensuring that the two wing hoses (yellow) are together and the two drawbar cylinder hoses (red) are together.

4. Use the hydraulics to raise or lower the height of the shackle before hitching up to the tractor drawbar clevis.

5. Open the rear axle taps

6. Carefully operate the hydraulics to lower the drawbar and tilt the X-Press onto the road transport wheels. Fully extend the drawbar and axle cylinders.

7. If the machine is unfolded then operate the fold circuit and fold the machine. Fit the wing strap to tie the two wing sections together.

The machine should be lowered so that the transport strap can be fitted from the ground. Do not climb on the machine.

8. Ensure that parking stands are locked up in their work positions.
2.5 Folding and Unfolding

2.5.1 Unfolding into the Work Position

1. Ensure that the taps on the rear axle cylinder (Fig. 2.01, taps A and B) are in the open position (ie. in line with flow).

2. Remove the transport strap from the rear wing cylinders. Do not climb on the machine to remove the transport strap.

3. Lift the machine clear of the ground ready for unfolding.

4. Operate the hydraulics to fully unfold the wings.

When wings are fully lowered they will appear to be lower at the wingtips. This is to enable the machine to ‘float’ over uneven ground in work and is normal.

5. Ensure that the parking stands are in the fully raised position.

6. Lower the machine to the ground until the drawbar cylinders touch the depth stops.

7. Retract the rear axle cylinders completely.

8. Close the taps on the rear axle to lock the wheels clear of the ground during work.

9. Check the wing pressure on the gauge (shown in Fig. 2.02). If this is above or below the desired value then pressurise the wings to fold which will zero the setting. Increase the pressure on the cylinder side by adjusting the valve (Fig. 2.02, valve 3) clockwise.

By rotating anticlockwise the pressure will be reduced (see page 34 for more details). Pressurise to unfold until the required pressure is achieved.

10. Draw the X-Press into work then set the desired pitch of the machine by adding or removing shims from the drawbar cylinder or disc frame adjusters. The chassis should ideally be set to run slightly nose high. The drawbar hydraulics may be worked in float if desired.

2.5.2 Folding into the Transport Position

1. Open the axle taps (Fig. 2.01, taps A and B).

2. Operate the hydraulics to fully raise the machine.

3. Fold the machine fully.

4. Lower the machine to maximise stability while ensuring adequate clearance for road transport.

5. Close the taps on the rear axle. Fit the transport strap for transport safety. The strap should be fitted from the ground. Do not climb on the machine.

6. The machine is ready for transport. If the X-Press is to be unhitched from the tractor in the folded position the parking stands should be lowered.

Fig. 2.03 Folded Machine
2.5.3 Following Harrow Operation

Into Work:

1. Arrive in field and unfold machine according to operating instructions

2. Whilst at rear of machine closing axle taps move Pins (qty 2) from front most holes (by lug) to rear hole.

3. Remove pin on outer quadrant plate and re-position in the highest possible hole for storage.

4. Driving forward will flip the harrow out into a work position

5. When turning in work, tip the machine rearwards into the roll. Reversing the machine in this position allows the harrow to flip temporarily into the transport position. Driving forwards again flips the harrow back into work.

Turning in work must only be on the DD700 rear roll. Attempting to lower the transport axle with the harrow in the work position will seriously damage the following harrow components.

Into Transport:

1. Tilt the Simba X-Press onto the rear roll and reverse the machine slightly as if performing a headland turn.

2. Whilst at the rear of the machine opening the transport axle taps, move the harrow clamp pins (qty 2) from the front holes to the rear holes by the lugs.

3. Use the pin in the outer quadrant plate to the lowest position permitted that it will lock the harrow arm down.

4. Continue folding the X-Press in accordance with the operating instructions.

2.6 Air Brake Coupling Procedure

Please refer to the following procedure when coupling or decoupling any item of Great Plains machinery fitted with an AIR brake or AIR and HYDRAULIC brake system. Please note that this procedure does not apply to any machines fitted with a HYDRAULIC system ONLY.

2.6.1 When Coupling

1. Reverse up to the machine and connect the machine to the tractor as instructed to in Section 2.4.1.

2. With the machine connected couple the air lines. When coupling ensure the yellow line is attached first followed by the red line.

3. Your brake hoses are now attached and are ready for operation.

4. Continue with the coupling process as instructed in Section 2.4.1.

2.6.2 When De-coupling

1. Bring the machine to the parking position as instructed to in Section 2.9.

2. With the machine still connected to the tractor remove the red brake line followed by the yellow line.
3. Your brakes will now be ON and will hold, ensuring they have been adjusted and maintained correctly, the machine in position. (note: if the machine's tank is drained of air once all lines have been detached the brakes will come off (same situation as pushing the shunt valve).

4. Continue de-coupling the machine until it is fully disconnected.

By following the above instructions you will see that at NO point in the coupling or decoupling process has the red line been left in the tractor on its own. This is intentional and should be considered the 'rule' to coupling the hoses.

2.7 Preceding & Trailing Implements

2.7.1 Hitching a Disc Harrow to the Simba X-Press

1. Remove the transport straps from the disc harrow, exercise great CARE when extending the axle cylinder.

2. Reverse the disc harrow up to the X-Press drawbar ensuring that the two drawbars are aligned allowing a slight clearance to enable the machines to be coupled together.

3. Lower the disc harrow to the ground.

4. Connect the four hydraulic hoses from the X-Press into the disc harrow rear outlets ensuring that the two wing hoses are together and the two drawbar cylinder hoses are together. Ensure that the folding circuits and lift drawbar circuits are coupled correctly.

5. Raise the X-Press drawbar above the disc drawbar (200mm approx.).

6. Raise the disc harrow to the same height as the X-Press drawbar then reverse the disc harrow to couple the two machines together. A pair of additional taps (P00774) may be required in the lift circuit of the disc harrow or the X-Press. This will isolate the drawbar circuit.

7. Operate the hydraulics to lower the rear axle and drawbar, tilting the X-Press onto the road transport wheels. Fully extend the drawbar cylinders.

8. Operate the hydraulics to fold the wings.

9. Operate the hydraulics to lift the disc harrow into the transport position.

10. Fit the disc harrow transport straps.

11. Fit the X-Press wing transport strap to tie the two wing sections together.

12. Ensure that parking stands are locked up in their work position.

When the X-Press is used in tandem with a disc harrow the disc should be set to the operators manual i.e. front disc gang to be 50mm closer to the ground than the corresponding disc blade on the rear gang.

With both machines in the transport position i.e. raised and folded, the top frame of the disc harrow should be slightly nose down or horizontal even when the downward load from the X-Press is applied to the drawbar of the disc harrow.

The frame may be levelled by altering the rearward tilt of the X-Press to increase or reduce the loading on the disc rear drawbar.
2.7.2 Transporting an X-Press Towed Behind a Disc Harrow

With both machines in the transport position i.e. raised and folded, the top frame of the disc harrow should be slightly nose down or horizontal even when the downward load from the Simba X-Press is applied to the drawbar of the disc harrow. The top frame should NEVER be tail low in transport as this will give a high negative loading on the tractor which could lead to loss of traction to the rear wheels.

Extreme caution must be taken when the Simba X-Press is transported up steep gradients and across side slopes. On the wide models, higher drawbar loading can be achieved by shortening the drawbar cylinder. Prior to leaving the field to travel on a public highway ensure that any clods of soil are removed from the machine to prevent them from fouling the road.

MAXIMUM ROAD TRANSPORT SPEED 16 MPH (25 KPH).

2.7.3 Changing from Work to Road Transport (X-Press Towed Behind a Disc Harrow)

1. Remove the disc harrow wing locking bolts.
2. Operate the hydraulics to raise the disc and X-Press.
3. Operate the hydraulics to fold the wings on both the disc harrow and the X-Press.
4. Fit the transport straps to both machines.
5. Couple the rear roll wing (fold) circuit to the wing (fold) circuit of the X-Press.
6. Fully raise the X-Press and the roll clear of the ground.
7. Check that all transport straps / devices are fitted.

Shortening the Simba X-Press drawbar cylinder will increase the loading on the rear of the disc frame. If necessary this can be used to level the disc top frame for road transport.

2.7.4 Hitching a Rear Roll to the Simba X-Press

Follow procedure 2.4 (page 16) to couple a tractor to the X-Press. Once the tractor is safely connected to the implement and in its folded setting, raise the machine fully clear of the ground.

1. Reverse the X-Press up to the roller.
2. Align the X-Press and roller drawbars, lower the X-Press to the ground and depressurise the lift hydraulics.
3. Raise / lower the axle as required to align the respective machines' drawbars and couple together.
4. Couple the rear roll to the lift circuit of the X-Press, ensuring that the hoses are connected to the corresponding circuit on the trailing machine.
5. Couple the rear roll wing (fold) circuit to the wing (fold) circuit of the X-Press.
6. Fully raise the X-Press and the roll clear of the ground.
7. Check that all transport straps / devices are fitted.
2.8 When driving on the road

When driving on the road the machine must be converted to the transportation position.

⚠️ When driving on the road, raise the machine completely to prevent the working elements dragging on the ground.

2.9 Parking the machine

In order to avoid damage as a result of moisture, the machine should be parked, if possible, indoors or under cover.

⚠️ When manoeuvring the machine, pay attention to your surroundings. Ensure that nobody is in the manoeuvring area (watch for children!).

- Park the machine on level and solid ground.
- Fit wheel chocks.
- With the machine raised move the parking stands into position.
- Lower the machine onto the parking stands ensuring that it is stable.
- Remove the drawbar pin and drive forward slowly until hitch is clear of tractor drawbar.
- Lower the drawbar to the ground.
- Switch off the tractor.
- Disconnect hydraulic lines from the tractor.

Fig. 2.04. Wheel chocks
3. Technical Data Simba X-Press

<table>
<thead>
<tr>
<th></th>
<th>4.6m</th>
<th>5.5m</th>
<th>6.6m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working Width</strong></td>
<td>4600mm</td>
<td>5500mm</td>
<td>6600mm</td>
</tr>
<tr>
<td><strong>Transport Width</strong></td>
<td>2950mm</td>
<td>2950mm</td>
<td>2950mm</td>
</tr>
<tr>
<td><strong>Transport Height</strong></td>
<td>2790mm</td>
<td>2790mm</td>
<td>2790mm</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>6700mm</td>
<td>6700mm</td>
<td>6700mm</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>5540Kg</td>
<td>6350Kg</td>
<td>7570Kg</td>
</tr>
<tr>
<td>**Tractor Power Required *</td>
<td>140-150Hp</td>
<td>160-180Hp</td>
<td>200-220Hp</td>
</tr>
<tr>
<td>**Drawbar Load **</td>
<td>1350Kg</td>
<td>1680Kg</td>
<td>2050Kg</td>
</tr>
<tr>
<td><strong>Axle Load</strong></td>
<td>4010Kg</td>
<td>4670Kg</td>
<td>5520Kg</td>
</tr>
<tr>
<td>**Centre of Gravity ***</td>
<td>4536mm</td>
<td>4536mm</td>
<td>4536mm</td>
</tr>
</tbody>
</table>

* It is important to correctly match your implement to your tractor for optimum performance.
** Varies with lift, tilt and options.
*** Dimension from hitch in road transport.
4. Adjustment/Operation

4.1 Description

Fig. 4.01: Great Plains Simba X-Press

1. Drawbar
2. Parking Stands
3. Discs
4. DD700 Roll
5. Disc Angle Adjusters
6. Disc Frame Pitch Adjusters
7. Rear Drawbar
8. Wheel Chocks
9. Transport Wheels
The Great Plains Simba X-Press is a versatile implement designed to perform an excellent shallow cultivation combined with effective consolidation.

It can be used in reduced tillage systems to incorporate stubble or to work down ploughing on lighter soil types. Like all Great Plains machines it features the latest innovations which combine to give an efficient, well-built unit with unrivalled reliability.

Consolidation is key to most operations. The design of the Simba X-Press ensures that this is not compromised during use. This is because the penetration of the front discs is achieved by angling the disc gangs and not by transferring weight from the rear roller onto the discs. The in line rear roller ensures uniform consolidation is achieved across the field.

The Simba X-Press can operate in situations where high levels of surface trash exist. This is possible because of the massive clearance within the machine. The front and rear disc gangs are 1050mm (42") apart and the distance between the rear gang and the roller is another 815mm (33").

The Simba X-Press is designed for high speed operation at 8-12kph. The in-built weight of around 1 tonne per metre ensures that the desired depth is maintained at the optimal forward speed.

Movement from field to field or along the road is safe and simple. The Simba X-Press wings fold vertically whilst the main frame raises parallel to the ground giving minimal height and width for transport. An optional rear drawbar allows a following implement (such as a Cambridge Roll) to be used and towed in tandem with the Simba X-Press.
4.2 Disc Units

The Simba X-Press features two rows of discs which chop and mix the crop residue. A disc spacing of 250mm ensures a fine tilth and being arranged in a symmetrical format around the centre line of the machine, crabbing is eliminated, leaving the machine to pull straight making the most efficient use of the power available.

The discs fitted to the Simba X-Press are 500mm in diameter (20") and 6mm thick. They are manufactured from heat treated chrome boron steel which ensures excellent wear resistance and enhanced working life.

Each disc is mounted on a Pro-Active sprung leaf linked to a track rod system. Gang angles can be varied with ease and accuracy using a graduated adjuster.

Sprung Pro-Active leaves offer protection against damage as well as offering a degree of contour following as they flex up and down in work.

The centre disc unit can be adjusted independently of all other disc units to ensure a level finish across the machine width.

Adjustable angling of the discs (between 10°-25°) ensures penetration and stubble mixing are achieved in one pass. Working depth can be varied simply via shimmed adjusters. All this is achieved without compromise to consolidation.

A level, evenly cultivated finish is maintained by adjusting the balance of soil throw between the front and rear disc.
4.3 Double Disc Roller
The standard DD700 roller is made up of individual Double Disc (patented) Ring segments.

The DD rings are designed to consolidate the soil whilst cutting and crushing any clods.

Even in heavy, wet soils it can easily be operated with minimal blockages occurring.

The rear DD roller carries a proportion of the machine’s weight to ensure consolidation. It also regulates the depth of the disc units. The corrugated surface left by the roller is weatherproof both for wet or dry situations.

4.4 DD Light Roller
The DD Light roller is made up of individual Double Disc (patented) Ring segments.

The DD Light roll is designed to consolidate the soil whilst cutting and crushing any clods.

Even in heavy, wet soils it can easily be operated with minimal blockages occurring.

The rear DD Light roller carries a proportion of the machine’s weight to ensure consolidation. It also regulates the depth of the disc units. The corrugated surface left by the roller is weatherproof both for wet or dry situations.
4.5 Work Settings

In work the wing cylinders should be fully extended. The gangs are able to float over any undulations on the ground due to their floating frames. A simple pressurised hydraulic circuit automatically sets itself as the wings are unfolded.

Optimum performance has been found to be achieved when the press roll rings have worn away the painted finish leaving a smooth shiny surface. When the press roll rings are new or rusty, soil may tend to pick up on the surface and blockage may occur, this will reduce when the rings are shiny again.

The Simba X-Press should be run with the chassis slightly nose high by extending the drawbar cylinders to the necessary position. In practice it is possible to use the X-Press on ground conditions that are unsuitable to achieve the desired effect, and it is usually possible to operate the press without regular blockage under such unsuitable conditions, assuming that the axles are tight and rings smooth. As such, especially under wet conditions, it is advisable to check on the cultivation effect of the machine.

On machines fitted with a DD700 roll it is not necessary to tilt the X-Press onto the transport wheels during headland turns whether the machine is used independently or in tandem with a disc harrow. The X-Press can be tilted onto the DD700 roll until the discs clear the ground (at which point the rear axle wheels will still be clear of ground contact). On machines fitted with a DD Light roll the machine should be turned on the transport wheels to avoid damage to the roll (ensure that the DD Light roll is clear of the ground when turning).

General Rules when Setting the Simba X-Press

- The lighter the land conditions the less the disc angle required and the forward speed can be increased.
- The wetter the land conditions the less the disc angle required and the forward speed will need to be decreased.
- Heavier land will require more of a disc angle and a slower forward speed.
- The more the trash the less the angle on the discs and forward speed will have to be decreased.
- On ploughed land reduce the disc angle to give a cutting/chopping action.
- In hard conditions increase the disc angle to increase penetration.

Disc Angle Setting

INCREASE DISC ANGLE

DECREASE DISC ANGLE
4.6 Using Shims

Before using shims to alter machine settings ensure the machine is stationary and the tractor is turned off with the keys out. Ensure that all operators are clear of the machine and that no load is being held on any existing shims in the cylinder / depth control rod.

To fit the shims hold them by the handle and, using a firm action, clip them onto the rod as shown in Fig. 4.05. They are removed by using a finger to pull firmly on the handle.

- Check the cylinder / depth control rod for damage and debris before fitting shims.
- Only attempt to add or remove shims using the handle. Trying to manipulate shims using the jaws could result in injury.
- When changing machine settings ensure both sides of the machine mirror each other. The left hand cylinder should contain the same amount of shims as the right, for example. Failure to do this could result in damage to the machine.

![Fig. 4.05: Shims](image)

4.7 Starting Settings

The following pages detail the recommended starting settings for the X-Press. These settings can then be used as a base for further adjustment in order to get the optimum performance from your machine.

Ensure all settings from the left and right hand sides of the machine mirror each other.

**Drawbar Cylinder**

The drawbar cylinder shim settings are subject to the tractor drawbar height. As such, the shim settings shown above are intended as a suggestion only. The machine should be set to run with the chassis level to nose high depending upon working depth.
Disc Frame Pitch

The centres of the adjuster should be factory set to 640mm when the machine is received. This is an ideal starting point before beginning to add shims to set the disc pitch.

Disc Angle Adjustment Jacks

Front Gang

Rear Gang

4.7.1 Variation of Settings

If working conditions change (for example, from dry to wet conditions) then the following table should be consulted as a rough guide.

<table>
<thead>
<tr>
<th>VARIATION IN CONDITION</th>
<th>SETTING REVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FROM HARD/DRY TO LOOSE/WET</td>
<td>REDUCE DISC ANGLE</td>
</tr>
<tr>
<td>FROM STUBBLES TO HIGHER TRASH (TO INCREASE INCORPORATION)</td>
<td>INCREASE DISC ANGLE</td>
</tr>
<tr>
<td></td>
<td>REDUCE SPEED</td>
</tr>
<tr>
<td></td>
<td>INCREASE DRAWBAR SHIMS</td>
</tr>
<tr>
<td>FROM SHALLOW TO DEEP (NOTE 75-100mm MAX WORKING DEPTH)</td>
<td>DECREASE DISC FRAME PITCH &amp; DRAWBAR SHIM LENGTH (RATIO 2 DRAWBAR : 1 DISC PITCH)</td>
</tr>
<tr>
<td></td>
<td>INCREASE DISC ANGLE</td>
</tr>
<tr>
<td></td>
<td>REDUCE SPEED</td>
</tr>
</tbody>
</table>
4.8 Adjusting Disc Frame Depth

Adjustment of the disc frame depth is achieved by lengthening or shortening the adjusters as required in combination with raising or lowering the disc frames relative to the DD roller by adding or removing drawbar shims (for example, to increase disc depth remove drawbar shims and adjust the turnbuckle as required). Once set, the adjusters should be locked by adding shims to the lower end thread and tightening.

To change the settings it is advisable to lift the disc frames just clear of the ground so that the adjusters can be lengthened enough to fit the amount of shims required. When the shims have been fitted the machine can be lowered, making it easier to tighten the adjuster against the shims.

4.9 Work Instructions

Driving speed

The Simba X-Press can be driven at speeds of up to 12 km/h.

This depends on the field conditions (type of soil, surface trash, etc.).

Drive more slowly if the conditions are difficult or a firmer finish is required.

Turning:

Before turning, on machines fitted with a standard DD700 roll, the machine should be eased out of work onto the rear roll while driving and should be eased back into work once the turn has been completed. On machines fitted with a DD Light roll the machine should be eased out of work onto the transport wheels before turning. Under no circumstances should the DD Light roll be in contact with the soil whilst turning the machine.

Parking the Machine

In order to avoid damage as a result of moisture, the machine should be parked, if possible, indoors or under cover.

When manoeuvring the machine, pay attention to your surroundings. Ensure that nobody (children!) is in the manoeuvring area.

• Park the machine on level and solid ground.
• Fit wheel chocks.
• With the machine raised move the parking stands into position.
• Lower the machine onto the parking stands ensuring that it is stable.
• Remove the drawbar pin and drive forward slowly until hitch is clear of tractor drawbar.
• Lower the drawbar to the ground.
• Switch off the tractor.
• Disconnect hydraulic lines from the tractor.

4.10 Checks

The working quality depends on the adjustments and checks made prior to and during work, as well as on regular servicing and maintenance of the machine.

Before beginning work it is therefore important to carry out any necessary servicing and to lubricate the machine as required.

Checks prior to, and during work:

• Is the machine correctly hitched up and the coupling device locked?
• Have the hydraulic lines been connected according to the colour coding?
• Is the machine in a level operating position and the working depth set correctly?

Working Elements

• Are the discs and other cultivation tools in a serviceable condition?
• Are the scrapers still operable, so that the rolls do not jam?
5. Servicing and Maintenance

Follow the safety instructions for servicing and maintenance.

5.1 Servicing
Your machine has been designed and constructed for maximum performance, operational efficiency and operator friendliness under a wide variety of operating conditions.

Prior to delivery, your machine has been checked at the factory and by your authorised dealer to ensure that you receive a machine in optimum condition.

To ensure trouble-free operation, it is important that servicing and maintenance work is performed at the recommended intervals.

5.2 Cleaning
In order to ensure that the machine is always in operating condition and to achieve optimum performance, perform the cleaning and servicing work at regular intervals.

Avoid cleaning the roll / disc bearings with a high-pressure hose or a direct water jet. The housing, screwed connections and ball bearings are not watertight.

5.3 Disc Hub Maintenance

Grease every disc hub until grease shows from the seals according to the lubricating intervals outlined on page 36.

Check disc hubs regularly for tightness.

Regularly examine hub caps, seals and pivot bolts and all tracking bolts for tightness and effectiveness twice weekly or every 50 working hours (whichever is more frequent).

5.3.1 Tightening Disc Hubs
1. Ensure that the bearing seal is in the correct orientation when replacing / assembling components.
2. Ensure that the stub axle is free from dirt and the nut and outer bearing can easily slide on it.
3. Tighten the crown nut with a hand spanner (a torque wrench is not required) while turning the hub clockwise until the bearing drags slightly (you feel the hub turning heavily). Some resistance will be due to friction from the seal.
4. Turn back the crown nut to the next locking position. Even if the tightening of the nut has reached an exact fixing position, turn it back.
5. Insert the retaining pin.
6. Try to shake/rock the outer edge of the hub/spindle: play of 0.1 / 0.2mm will not reduce the bearings’ life and, in addition, prevents overheating. If the adjustment is correct the hub should turn freely with the only friction being from the seal.

Fig. 5.01: Checking Disc Bearing Adjustment
5.3.2 Bearing Seals

It is important when replacing the labyrinth type bearing seals in disc hubs that the seal is fitted the right way round. The chamfered lip side should be at the outside of the bearing housing, nearest the disc arm (see Fig. 5.02). This chamfered lip prevents dirt ingress into the housing and also allows grease to be flushed though when greasing.

![Chamfered Seal](image)

5.5 Double Disc Axles

The axles on this roller are tensioned by the main axle through the centre of the rings and bearings.

Specialist equipment is required for the disassembly of Double Disc axles. Please consult your dealer under any circumstances that require disassembly of these axles.

Maintenance of these rollers is limited to daily greasing of the bearings to flush out dirt, and regular inspection to ensure the assemblies are tight, and scrapers are correctly set. The axles can be tightened provided the bearing pillar ‘U’ bolts are loosened to avoid preloading the bearings as they move sideways to each other. Ensure the bearing pillars are re-tightened to the mainframe after this.

5.6 DD Light Roll

The spacers and rings on the DD Light Roll are held under tension by the end plates at the outer ends of the roll tube.

Specialist equipment is required for the disassembly of DD Light rollers. Please consult your dealer under any circumstances that require disassembly of these rollers.

Maintenance of these rollers is limited to yearly/end of season greasing of the bearings and regular inspection to ensure the assemblies are tight, and scrapers are correctly set.

The scraper is intended to clear dirt from blocking between adjacent DD rings. If adjustment to the scrapers is required ensure that the scraper cannot contact the spacer even under load. Regularly inspect the spacers for signs of wear and adjust any scrapers to ensure no contact can be made.

5.4 Brakes & Wheel Hubs

The brakes should be tested before using for the first time and after the first laden journey.

Check that the road and parking brakes operate and release correctly before using the machine.

Check for hydraulic fluid and air leaks.

Brake and hub maintenance and servicing should be carried out by an authorised Great Plains dealer.
5.7 To Adjust the System Pressure

A low oil flow should be used, i.e., tractor tickover or low flow selected.

The wing circuit is controlled by an overcentre valve contained within the manifold block which positively locks oil flow until pressurised by the tractor. System pressure can be retained in the circuit *even after depressurisation* of the tractor quick release couplings.

Exercise extreme care when checking the valve or circuits, and *under no circumstances* attempt to adjust or loosen fittings without prior reference to your authorised Great Plains dealer, and detailed maintenance instructions.

It is normal to operate at 10-20 bar. This can be increased to 40-50 bar max, or reduced to 5 bar as conditions determine. Higher pressure will cause the wing tips to dig in causing the centre of the machine to lift it out. Too little pressure will cause the wing tips to lift out & the centre of the machine to dig in. When towing another implement behind the Simba X-Press, the pressure may need increasing to compensate.

In all cases the normal adjustment method is to minimise system pressure and then increase by adjusting the pressure valve until the desired pressure is achieved.

In all cases, regardless of tractor make, adjustment should start from zero (minimum pressure) and gradually increase up to desired pressure value.

With the machine off the ground,

1. Pressurise the wings to unfold. As the unfolding begins the pressure reading on the gauge will drop. When the wings have fully unfolded the pressure reading will start to climb. Keep pressurising the wings until the gauge has stabilised at the pre-set pressure. The standard factory setting is 15 bar.

2. If the system needs adjusting:- Partially fold the wings & hold them in this position. To adjust the pressure utilise valve 3 (shown in Fig. 5.03). Unscrew the adjusting screw until no resistance can be felt (almost fully unscrewed position). Unfold the wings fully as before, checking the gauge reading. Maintain hydraulic pressure unfolding wings & adjust the screw whilst pressurising.

   - Turning adjuster clockwise increases pressure.
   - Turning adjuster anti-clockwise decreases pressure.

Once the desired pressure is achieved lock the valve. As a check, partially fold the wings, stop, and then unfold again maintaining pressure until the gauge stabilises at your desired setting.

![Fig. 5.03: Manifold Block](image)
5.8 Preparation for Storage

If you need to store the machine for a longer period, observe the following points:

- Park the machine undercover if possible.
- Protect the roll / discs against rust. If you need to spray the implements with oil, use light biologically degradable oils, e.g. rape oil.

Cover any rubber sections before using oil sprays. These sections must not be oiled. Remove any traces of oil with a suitable cleaning agent.

5.9 Operator Support

If you have a problem, please contact your dealer. They will endeavour to solve any problems which may occur and provide you with support at all times.

In order to enable your dealer to deal with problems as quickly as possible, it helps if you can provide them with the following data. Always state the:

- Customer Number
- Name and Address
- Machine Model
- Serial Number of Machine
- Date of Purchase and Operating Hours
- Type of Problem

Avoid sharp-edged and pointed parts (disc blades, etc.) when working on the machine.

Place the machine on suitable supports when working underneath! Do not work under a machine which is not supported!

On a new machine tighten all nuts and bolts after 5 hours work and again after 15 hours. This also applies to parts that have been moved or replaced. After the initial 15 hours of work a once a week check should be sufficient depending on daily work rates.

5.10 Maintenance Intervals

Apart from daily maintenance, the maintenance intervals are based on the number of operating hours and time data.

Keep a record of your operating hours to ensure that the specified maintenance intervals are adhered to as closely as possible.

Never use a machine that is due for maintenance. Ensure that all deficiencies found during regular checks are remedied immediately.
5.11 Maintenance Overview

- **Key**
  - Inspect
  - Grease
- **Load binder**
  - Before Each Use
- **Lights**
  - Before Each Use
- **Parking Stand**
  - Before Each Use
- **All Hydraulics**
  - Before Each Use

- **Drawbar / Axle Cylinder**
  - 50 Hours
- **Wing / Drawbar Pivots**
  - 50 Hours
- **DD Light Roll Bearings**
  - 200 Hours
- **DD700 Roll Bearings**
  - 10 Hours
- **Scrapers**
  - 10 Hours
- **Hubs**
  - 600 Hours
- **Disc Hubs**
  - 200 Hours
- **Disc Angle Adjusters**
  - 200 Hours
- **Wheel Nut Torque:**
  - 270Nm
- **Tyres:**
  - 500x/50-17 14 Ply
- **Max Tyre Pressure:**
  - 50psi / 3.5bar

- **10 Hours**
- **50 Hours**
- **200 Hours**
- **600 Hours**

- **Settings**
  - 10 Hours
5.12 Lubricating the Machine
Please read the section entitled “Using Lubricants” carefully before lubricating the machine. The machine must be lubricated regularly in order for it to remain serviceable. Regular lubrication also contributes towards extending the service life of your machine. The recommended lubricating intervals are specified in “Inspection” and “Maintenance Intervals”.

After it has been washed using a high-pressure hose or steam cleaned, the machine should always be lubricated using a grease gun.

5.13 Handling of Lubricants
Please ensure that you read the following instructions as well as the relevant information. This also applies to any of your employees who handle lubricants.

Hygiene
Lubricants do not present a health hazard provided they are used for their specified purpose.

In the case of prolonged skin contact, lubricants - especially low-viscosity oils - may remove the natural layer of fat contained in the skin, resulting in dryness and possible irritation.

It is important to take extreme care when handling waste oil as it may contain other irritants.

Vapours given off by cleaning agents and oils are also a potential health hazard. You should therefore not carry any oily cloths around. Change soiled work clothing as soon as possible.

Always exercise extreme care and observe the recommended hygiene rules when handling mineral oil products. Details of these handling regulations can be found in information provided by the health authorities.

Storage and Handling
• Always store lubricants where they cannot be accessed by children.
• Never store lubricants in open or unlabelled containers.

Fresh Oil
• Apart from taking the usual care and observing hygiene rules, there is no need to take any special precautions when handling fresh oil.

Waste Oil
• Waste oil can contain harmful contaminants which may cause skin cancer, allergies and other illnesses.

Attention!
Oil is a toxic substance. Should you swallow any oil, do not try to vomit. Contact a doctor immediately. Protect your hands with barrier cream or wear gloves to avoid contact with the skin. Wash off any traces of oil thoroughly with soap and hot water.

• Wash your skin thoroughly with soap and water.
• Use special cleaning agents to clean any dirt off your hands.
• Never wash oil residue from your skin with petrol, diesel fuel or paraffin.
• Avoid skin contact with any oily clothing.
• Do not keep any oily rags in your pockets.
• Wash soiled clothing before wearing it again.
• Ensure that any oily footwear is disposed of in the proper manner.
5. Servicing and Maintenance

5.14 Lubricants & Hydraulic Oil

Hydraulic System
The hydraulic fluid from the tractor is mixed with the hydraulic fluid from the machine.

The supplied machine hydraulic system contains Total AZOLLA ZS 32 oil.

Lubricants
Great Plains strongly recommend the use of Lithium Complex EP2 Grease in the disc and wheel hubs of your X-Press. This grease is a Lithium Complex soap dispersed in a mineral oil and is interpreted by IARC as being non-carcinogenic. Grease cartridges are available from Great Plains. Using this grease in combination with the labyrinth type seal it is permissible to lengthen the greasing interval on the disc hubs to 200 hours. If using a standard agricultural grease the disc hubs should be lubricated every 50 hours.

Advantages of Lithium Complex EP2 Grease

- Excellent mechanical stability.
- Excellent load carrying properties.
- Wide temperature range.
- Excellent oxidation stability.
- Excellent water resistance.
- Compatibility with other greases.

All other lubricating points on the machine can be lubricated with multigrade lubricating grease as specified in DIN 51825 KP/2K - 40.
# 6. Faults and Remedies

<table>
<thead>
<tr>
<th>Simba X-Press Troubleshooting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fault</strong></td>
</tr>
<tr>
<td>Wings riding up at outside of machine.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Centre section riding up.</td>
</tr>
<tr>
<td>Machine ‘bouncing’ in work.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>DD Roll blocks regularly.</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Space for Notes:
Great Plains Simba
Woodbridge Road, Sleaford
Lincolnshire, NG34 7EW
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