

Operator's/Parts Manual

6100/5100 White Planters
Seed-Lok

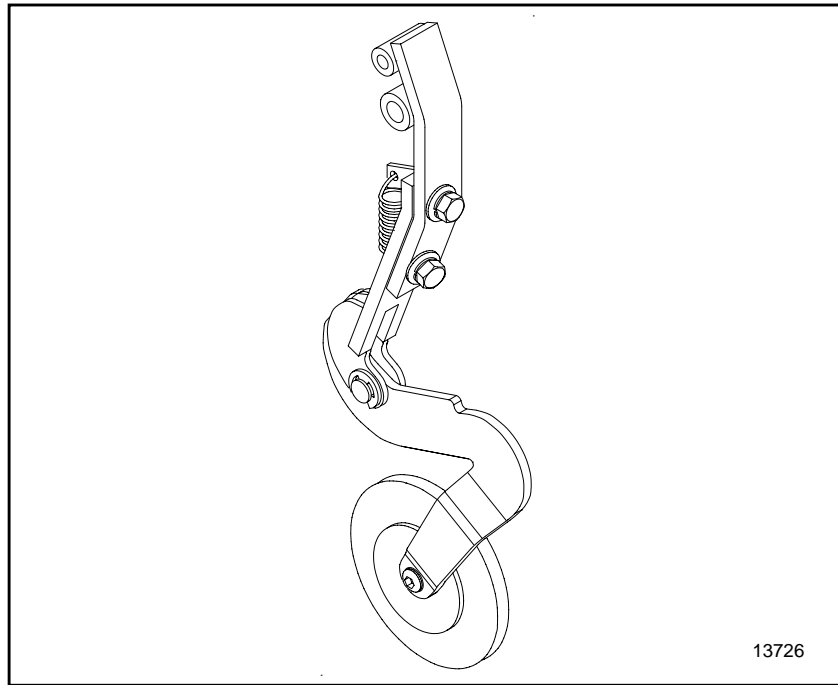


Great Plains

Planting Components



Read the operator's 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!



13726

Cover illustration may show optional equipment not supplied with standard unit.



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General Information

Important Notice

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Printed in the United States of America.

For your convenience, record your Model and the Date Purchased on page 4. Have this information before you when calling a Great Plains Authorized Dealer.

This Operator’s Manual applies to the Product Name listed below:

Seed-Lok



Introduction

Great Plains welcomes you to its growing family of new product owners. This Seed-Lok has been designed with care and built by skilled workers using quality materials. Proper setup, maintenance and safe operating practices will help you get years of satisfactory use from the machine.

Description of Unit

The parts on your Seed-Lok have been specially designed and should only be replaced with genuine **Great Plains** parts. Therefore, should your Seed-Lok require replacement parts go to your **Great Plains** Dealer.

Using This Manual

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

The information in this manual is current at printing. Some parts may change to assure top performance.

Definitions

The following terms are used throughout this manual.

Right-hand and left-hand as used in this manual are determined by facing the direction the machine will travel while in use unless otherwise stated.

IMPORTANT: A crucial point of information related to the preceding topic. For safe and correct operation, read and follow the directions provided before continuing.

NOTE: Useful information related to the preceding topic.



Important Safety Information

Look for Safety Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Be Aware of Signal Words

Signal words designate a degree or level of hazard seriousness.

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.





Owner Assistance

If you need customer service or repair parts, contact a **Great Plains** dealer. They have trained personnel, repair parts and equipment specially designed for **Great Plains** products.

Your machine's parts were specially designed and should only be replaced with **Great Plains** parts. Always use the model number when ordering parts from your **Great Plains** dealer.

Record your Model and Date Purchased here for quick reference:

Model: _____

Date Purchased: _____

Your **Great Plains** dealer wants you to be satisfied with your new machine. If you do not understand any part of this manual or are not satisfied with the service received, please take the following actions.

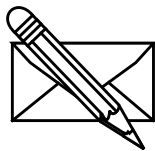
1. Discuss the matter with your dealership service manager. Make sure they are aware of any problems so they can assist you.
2. If you are still unsatisfied, seek out the owner or general manager of the dealership.
3. For further assistance write to:

Product Support

Great Plains Mfg. Inc., Service Department

PO Box 5060

Salina, KS 67402-5060





Operating and Assembly Instructions

Most accidents are the result of negligence and carelessness, usually caused by failure of the operator to follow simple but necessary safety precautions. The following safety precautions are suggested to help prevent such accidents. The safe operation of any machinery is a big concern to consumers and manufactures. Your Seed-Lok has been designed with many built-in safety features. However, no one should operate this product before carefully reading this Operators Manual.

General Operation & Repair

1. Make sure safety rules are understood before operating machinery or tractor.
2. Never permit any persons other than the operator to ride on the tractor.
3. Never permit any persons to ride on or stand near the planter while it is in operation.
4. Regulate your speed to the field conditions, maintaining complete control at all times.
5. After repairing or adjusting, make sure all tools and parts are removed from the implement before attempting to operate it.
6. Do not grease or oil machine while it is in operation.
7. Loose fitting clothing should not be worn as it may catch in moving parts.
8. Never dismount from a moving tractor.
9. Do not leave the tractor or the implement unattended with the engine running.
10. Do not stand between the tractor and the implement during hitching.
11. Detach and store implements in an area where children normally do not play. Stabilize implements by using suitable supports and block wheels.

Transporting

1. Use good judgement when transporting tractor and implements on the highway. Always maintain complete control of the machine.
2. Always make sure flashing safety lights, "Slow Moving Vehicle" emblem, and reflectors are in place and visible prior to transporting the machine on public roads.
3. Know your state and local laws concerning highway safety and regulations. Comply with these laws when transporting machinery.
4. Use warning flags or approved warning lights at night and during other periods of poor visibility. Do your best to prevent highway accidents.

Seed-Lok Mounting Instructions for 6100 White Planters

Consult page 8, Parts Section, for all part (#) references:

1. Remove depth control gauge wheel from one side.
2. Remove all scraper bolts from planter unit.
3. Bolt the seed-lok wheel and arm to the mounting bracket (#4) with the 2- 3/8" x 1" bolts (#1), lock washer (#2) and washer (#3).
4. Slide the assembly up into the planter unit and align tubes with holes. Bolt the mounting bracket to the planter frame using the existing 1/2" bolt and the 5/16" x 2" bolt (#6) provided. Install scrapers using the bolts that hold the seed-lok mounting bracket.
5. Follow the instructions in "The Adjustments" section to initially set your seed-lok wheels.
6. Reinstall gauge wheels and press wheel.



CAUTION

Do not run infurrow fertilizers in front of the seed-lok due to possible bearing problems.

Seed-Lok Mounting Instructions for 5100 White Planters

Consult page 10, Parts Section, for all part (#) references:

1. Remove the rear press wheel and both depth control gauge wheels from planter unit.
2. The flat area behind the inside disk scrapers between the upright frame support must be ground out up to the scrapers to allow room for the seed-lok. (Refer to Figure 2-1) This area contains a bolt hole for the infurrow insecticide tube.
3. Remove all scraper bolts from planter unit.
4. Remove 1/2" bolt that holds the press wheel spring.
5. Bolt the seed-lok wheel and arm to the mounting bracket (#4) with the 2- 3/8" x 1" bolts (#1), lock washer (#2) and washer (#3).
6. Catch the press wheel spring in the loop on the mounting bracket (#4) and slide up into planter unit and align tubes with holes. Bolt the mounting bracket to the planter frame using the existing 1/2" bolt and the 5/16" x 2" bolt (#6) provided. Rotary scrapers may be installed using the bolts holding the seed-lok mounting bracket.
7. Follow the instructions in "The Adjustments" section to initially set your seed-lok wheels.
8. Reinstall gauge wheels and press wheel.



CAUTION

Do not run infurrow fertilizers in front of the seed-lok due to possible bearing problems.

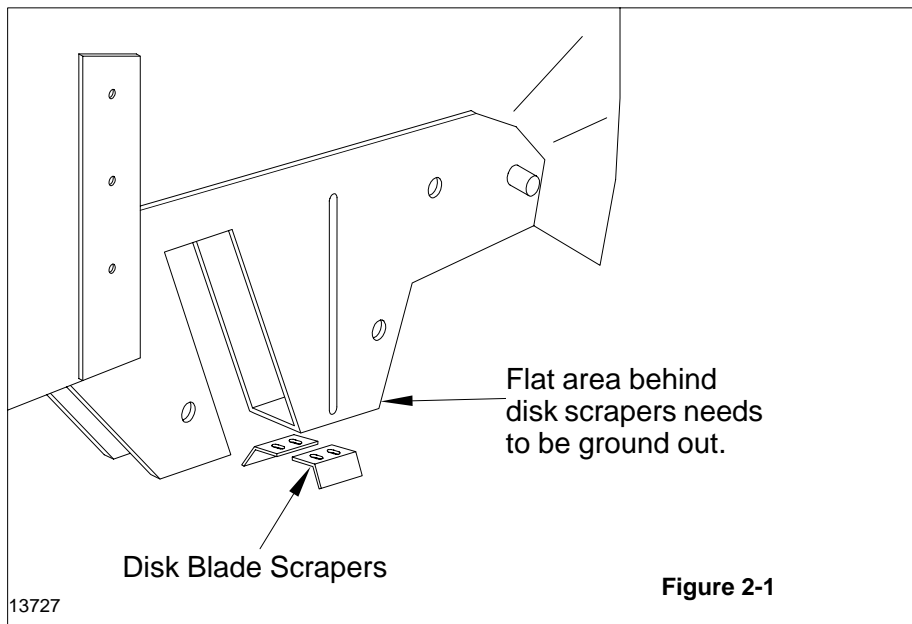


Figure 2-1

Mounting Instructions for 5100 White Planters Without Rotary Scrapers

Consult page 10, Parts Section, for all part (#) references:

1. Remove the rear press wheel and both depth control gauge wheels from planter unit.
2. The flat area behind the inside disk scrapers between the upright frame support must be ground out up to the scrapers to allow room for the seed-lok (Figure 2-1). This area contains a bolt hole for the in-furrow insecticide tube.
3. Remove 1/2" bolt that holds the press wheel spring. Line up 1/2" hole in template on page 12, with this bolt hole and rotate till the top side of the template comes against the gauge wheel arm stop. The 5/16" hole should be above the 1/2" hole on the planter unit. Mark 5/16" hole and drill to 11/32".
4. Either line up the template as in (#3) on the other side or line up the seed-lok mount with both holes and drill through.
5. Bolt the seed-lok wheel and arm to the mounting bracket (#4) with the 2- 3/8" x 1" bolts (#1), lock washer (#2) and washer (#3).
6. Catch the press wheel spring in the loop on the mounting bracket (#4) and slide up into planter unit and align tubes with holes. Bolt the mounting bracket to the planter frame using the existing 1/2" bolt and 5/16" x 2" bolt (#6) provided.
7. Follow the instructions in "The Adjustments" section to initially set your seed-lok wheels.
8. Reinstall gauge wheels and press wheel.

CAUTION

Do not run in-furrow fertilizers in front of the seed-lok due to possible bearing problems.

Adjustments

Adjustments

Consult page 8 or page 10, Parts Section, for all part (#) references:

Your Seed-lok has 1/4" vertical adjustment. This adjustment is provided for 2 reasons: First, to initially and uniformly set the Seed-Lok wheel in relationship to the opener blades. Secondly, the down pressure can be adjusted slightly by moving the wheel assembly up or down. The **Seed-Lok Wheel** may pick up soil if conditions are too wet regardless of wheel pressure.

To Adjust or Set the Seed-Lok Height:

1. Lower planter to rest on a flat surface so row units are parallel with the ground.
2. Remove 1 gauge wheel. Take note of the spacers located on the spindle to ensure the wheel is correctly remounted.
3. Loosen the 2 bolts (#1) holding the Seed-Lok to the mounting bracket (#4).
4. Raise the wheel assembly to its top position and then lower the assembly until the **Seed-Lok Wheel** just touches the ground. Center the **Seed-Lok Wheel** between the opener blades by pulling or pushing on the side of the wheel. To check the centering look from the back of the planter through the closing wheels. Repeat steps 1-4 for each row unit. This setting is a good starting point and in most cases a suitable running position.

5. If desired, the running pressure can be increased by loosening the 2 bolts (#1) holding the Seed-Lok mount and sliding the seed-lok arm (#7) to its lowest position. The reverse holds for decreasing the pressure. Loosen the 4 bolts (#1), then raise the assembly to its highest position.
6. Tighten bolts (#1) and remount the gauge wheels.

IMPORTANT: Check the clearance between the Seed-Lok assembly and the feeder tube through its range of motion. Improper positioning may damage the feeder tube.

Maintenance

Proper servicing and adjustment is the key to the long life of any farm implement. With careful and systematic inspection, you can avoid costly maintenance, time and repair.

1. After using your Seed-Lok for several hours, check all bolts to be sure they are tight.

Storage

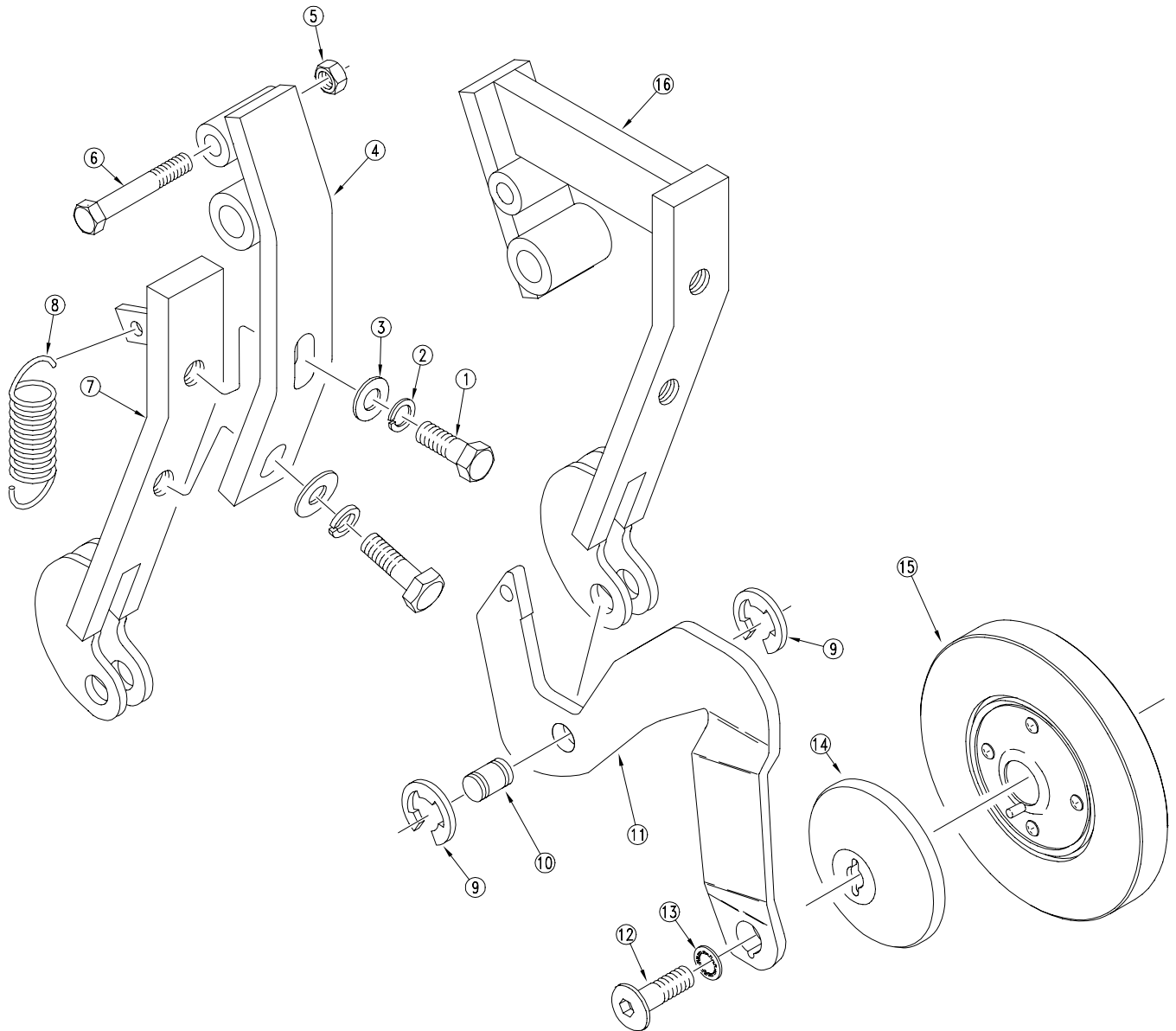
1. Clean the Seed-Lok as necessary.
2. Store the Seed-Lok inside if possible for longer Seed-Lok life.

Lubrication

Your Great Plains Seed-Lok Wheel comes equipped with a sealed bearing that will not require any additional lubrication.

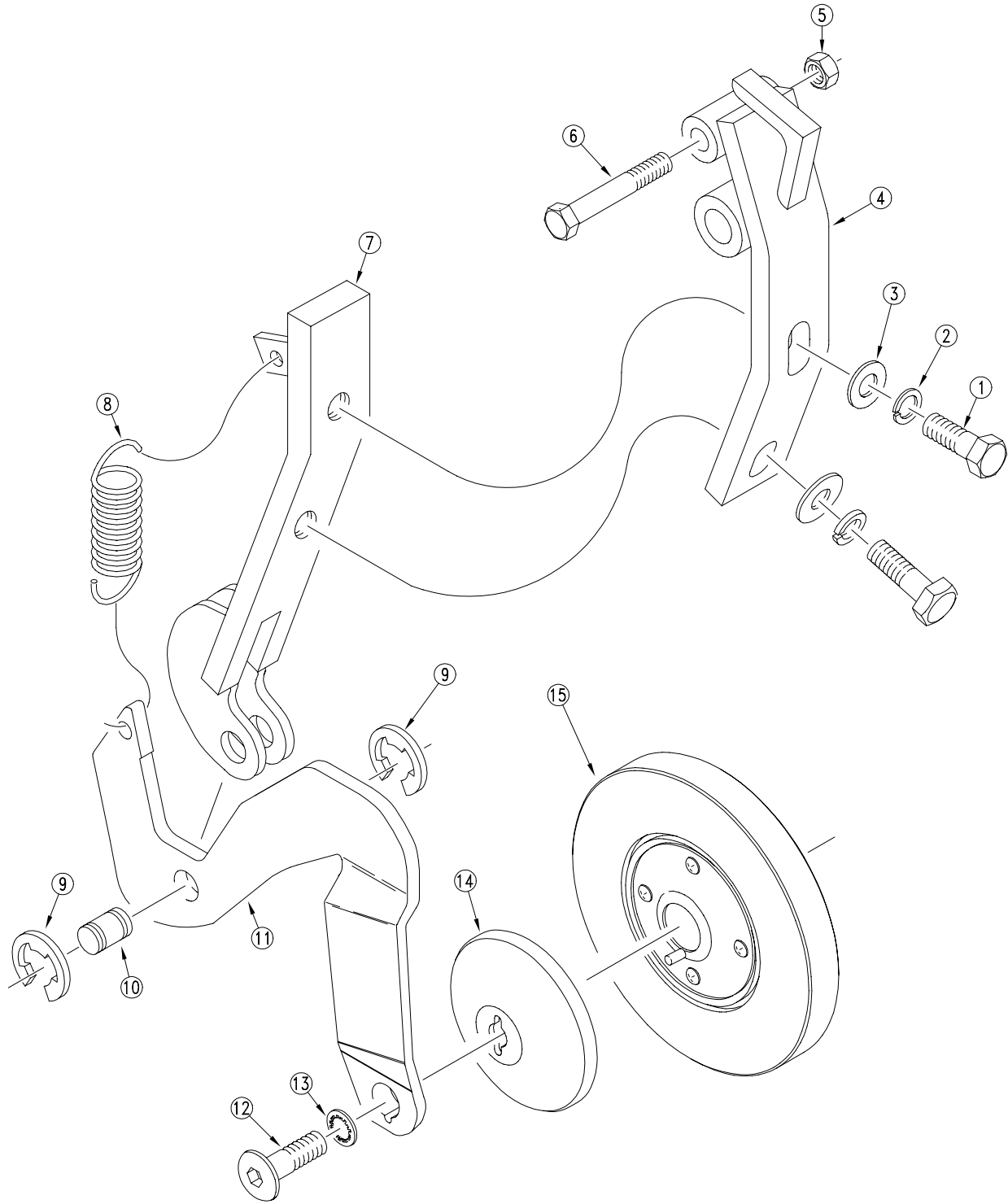
Parts

Seed-Lok Assembly 6100



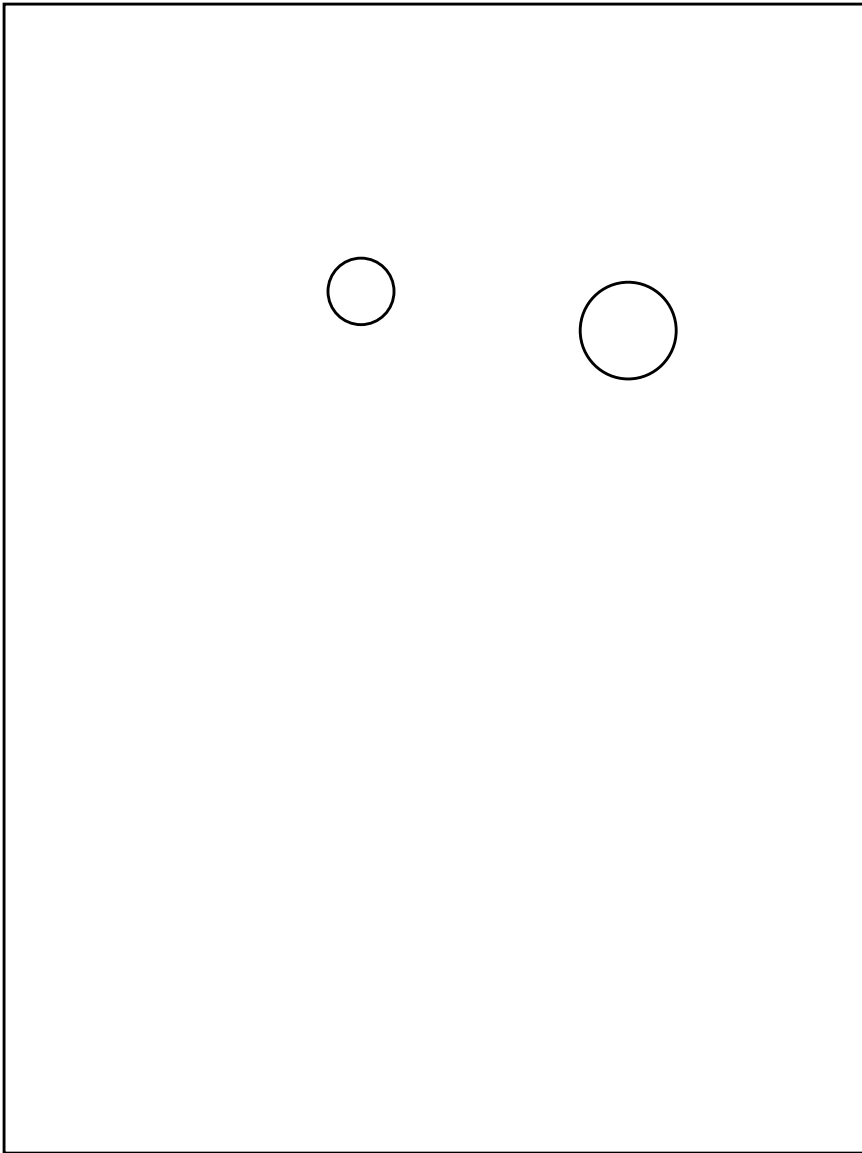
Ref.	Part No.	Description
1.	802-017C	HHCS 3/8-16X1 GR5
2.	804-013C	WASHER LOCK SPRING 3/8 PLT
3.	804-012C	WASHER FLAT 3/8 SAE PLT
4.	206-015H	6100 WHITE SEED LOK MOUNT
5.	803-084C	NUT HEX NYLOCK 5/16-18 PLT
6.	802-115C	HHCS 5/16-18X2 GR5
7.	122-173H	SS RMVBL SD-LOK MNT WLDMT
8.	807-101C	SPRING, 1 O.D.X.125WIREX 3 1/2
9.	800-093C	SNAP RING EXT E 1/2
10.	122-120D	5 SEED-LOK WHL ARM PIVOT PIN
11.	122-151D	SEED-LOK ARM (1994)
12.	801-078C	SCR HX SKT BUT CP 3/8-16X3/4
13.	804-078C	WASHER INTERNAL STAR 3/8 PLT.
14.	206-021D	SEED LOK WHEEL CAP (LONG)
15.	122-201S	SD-LK 203 BEARING WHEEL ASSY
16.	890-532C	6100 WHITE SEED LOK MOUNT

Seed-Lok Assembly 5100



Ref.	Part No.	Description
1.	802-017C	HHCS 3/8-16X1 GR5
2.	804-013C	WASHER LOCK SPRING 3/8 PLT
3.	804-012C	WASHER FLAT 3/8 SAE PLT
4.	206-016H	5100 WHITE SEED LOK MOUNT
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14.	206-021D	SEED LOK WHEEL CAP (LONG)
15.	122-201S	SD-LK 203 BEARING WHEEL ASSY

Template



Note: It may be more desirable to make a card board template from this illustration for multiple use, or photo copy for each time it would be used.



Appendix

Torque Values Chart

Bolt Size (Inches)	Bolt Head Identification					
	Grade 2		Grade 5		Grade 8	
	N · m ²	ft-lb ³	N · m	ft-lb	N · m	ft-lb
in-tpi ¹						
1/4" - 20	7.4	5.6	11	8	16	12
1/4" - 28	8.5	6	13	10	18	14
5/16" - 18	15	11	24	17	33	25
5/16" - 24	17	13	26	19	37	27
3/8" - 16	27	20	42	31	59	44
3/8" - 24	31	22	47	35	67	49
7/16" - 14	43	32	67	49	95	70
7/16" - 20	49	36	75	55	105	78
1/2" - 13	66	49	105	76	145	105
1/2" - 20	75	55	115	85	165	120
9/16" - 12	95	70	150	110	210	155
9/16" - 18	105	79	165	120	235	170
5/8" - 11	130	97	205	150	285	210
5/8" - 18	150	110	230	170	325	240
3/4" - 10	235	170	360	265	510	375
3/4" - 16	260	190	405	295	570	420
7/8" - 9	225	165	585	430	820	605
7/8" - 14	250	185	640	475	905	670
1" - 8	340	250	875	645	1230	910
1" - 12	370	275	955	705	1350	995
1-1/8" - 7	480	355	1080	795	1750	1290
1 1/8" - 12	540	395	1210	890	1960	1440
1 1/4" - 7	680	500	1520	1120	2460	1820
1 1/4" - 12	750	555	1680	1240	2730	2010
1 3/8" - 6	890	655	1990	1470	3230	2380
1 3/8" - 12	1010	745	2270	1670	3680	2710
1 1/2" - 6	1180	870	2640	1950	4290	3160
1 1/2" - 12	1330	980	2970	2190	4820	3560

Bolt Size (Metric)	Bolt Head Identification					
	Class 5.8		Class 8.8		Class 10.9	
	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb
mm x pitch ⁴						
M 5 X 0.8	4	3	6	5	9	7
M 6 X 1	7	5	11	8	15	11
M 8 X 1.25	17	12	26	19	36	27
M 8 X 1	18	13	28	21	39	29
M10 X 1.5	33	24	52	39	72	53
M10 X 0.75	39	29	61	45	85	62
M12 X 1.75	58	42	91	67	125	93
M12 X 1.5	60	44	95	70	130	97
M12 X 1	90	66	105	77	145	105
M14 X 2	92	68	145	105	200	150
M14 X 1.5	99	73	155	115	215	160
M16 X 2	145	105	225	165	315	230
M16 X 1.5	155	115	240	180	335	245
M18 X 2.5	195	145	310	230	405	300
M18 X 1.5	220	165	350	260	485	355
M20 X 2.5	280	205	440	325	610	450
M20 X 1.5	310	230	650	480	900	665
M24 X 3	480	355	760	560	1050	780
M24 X 2	525	390	830	610	1150	845
M30 X 3.5	960	705	1510	1120	2100	1550
M30 X 2	1060	785	1680	1240	2320	1710
M36 X 3.5	1730	1270	2650	1950	3660	2700
M36 X 2	1880	1380	2960	2190	4100	3220

¹ in-tpi = nominal thread diameter in inches-threads per inch

² N · m = newton-meters

³ ft-lb = foot pounds

⁴ mm x pitch = nominal thread diameter in millimeters x thread pitch

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.

Warranty

Great Plains Manufacturing, Incorporated warrants to the original purchaser that this seeding equipment will be free from defects in material and workmanship for a period of one year from the date of original purchase when used as intended and under normal service and conditions for personal use; 90 days for commercial or rental purposes. This Warranty is limited to the replacement of any defective part by Great Plains Manufacturing, Incorporated and the installation by the dealer of any such replacement part. Great Plains reserves the right to inspect any equipment or part which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Great Plains' judgement shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. This Warranty shall not apply if the product is towed at a speed in excess of 20 miles per hour.

Claims under this Warranty must be made to the dealer which originally sold the product and all warranty adjustments must be made through such dealer. Great Plains reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Great Plains liable for damages of any kind, direct, consequential, or contingent, to property. Furthermore, Great Plains shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, losses caused by harvest delays or any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

This Warranty is not valid unless registered with Great Plains Manufacturing, Incorporated within 10 days from the date of original purchase.

Great Plains Manufacturing, Inc.

Corporate Office: PO. Box 5060
Salina, Kansas 67402-5060 USA
