Read the operator 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 alternate spacings and/or optional equipment not supplied with standard unit.
Machine Identification

Record your machine details in the log below. If you replace this manual, be sure to transfer this information to the new manual.

If you or the dealer have added options not originally ordered with the machine, or removed options that were originally ordered, the weights and measurements are no longer accurate for your machine. Update the record by adding the machine weight and measurements with the option(s) weight and measurements.

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

Dealer Contact Information

Name: ____________________________________________
Street: _________________________________________
City/State: _____________________________________
Telephone: _____________________________________
Email: _________________________________________
Dealer’s Customer No.: __________________________

⚠️ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov
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Printed in the United States of America

2018-08-15
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.

Prepare for Emergencies

▲ Be prepared if a fire starts.
▲ Keep a first aid kit and fire extinguisher handy.
▲ Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.

Be Familiar with Safety Decals

▲ Read and understand “Safety Decals” on page 4, thoroughly.
▲ Read all instructions noted on the decals.
▲ Keep decals clean. Replace damaged, faded and illegible decals.

Wear Protective Equipment

▲ Wear clothing and equipment appropriate for the job.
▲ Prolonged exposure to loud noise can cause hearing impairment or loss. Wear suitable hearing protection such as earmuffs or earplugs.
▲ Avoid wearing entertainment headphones while operating machinery. Operating equipment safely requires the full attention of the operator.
Avoid High Pressure Fluids

Escaping fluid under pressure can penetrate the skin, causing serious injury.

▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines.
▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
▲ If an accident occurs, seek immediate medical assistance from a physician familiar with this type of injury.

Use Safety Lights and Devices

Slow-moving tractors and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.

▲ Use flashing warning lights and turn signals whenever driving on public roads.

Use lights and devices provided with implement.

Keep Riders Off Machinery

Riders obstruct the operator’s view. Riders could be struck by foreign objects or thrown from the machine.

▲ Never allow children to operate equipment.
▲ Keep all bystanders away from machine during operation.

Transport Machinery Safely

Maximum transport speed for implement is 20 mph (32 km/h). Some rough terrains require a slower speed. Sudden braking can cause a towed load to swerve and upset.

▲ Do not exceed 20 mph (32 km/h). Never travel at a speed which does not allow adequate control of steering and stopping. Reduce speed if towed load is not equipped with brakes.
▲ Comply with state and local laws.
▲ Do not tow an implement unless the towing vehicle is rated for, and ballasted for, the weight of the implement.
▲ Carry reflectors or flags to mark implement in case of breakdown on the road.
▲ Do not fold or unfold the implement while the tractor is moving.
Check for Overhead Lines
The implement requires at least 14 feet (4.3 m) vertical clearance in transport. Contacting overhead electrical lines can introduce lethal voltage levels on implement and tractor frames. A person touching almost any metal part can complete the circuit to ground, resulting in serious injury or death. At higher voltages, electrocution can occur without direct line or body contact.
▲ Avoid overhead lines during folding, unfolding, transport and parking.

Shutdown and Storage
▲ Lower implement, put tractor in park, turn off engine, and remove the key.
▲ Secure implement using blocks and supports provided.
▲ Detach and store implement in an area where children normally do not play.

Practice Safe Maintenance
▲ Understand procedure before doing work. Use proper tools and equipment. Refer to this manual for additional information.
▲ Work in a clean, dry area.
▲ Lower the implement, put tractor in park, turn off engine, and remove key before performing maintenance.
▲ Make sure all system pressure is relieved.
▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on implement.
▲ Inspect all parts. Make sure parts are in good condition and installed properly.
▲ Remove buildup of grease, oil or debris.
▲ Remove all tools and unused parts from implement before operation.
Safety At All Times

Thoroughly read and understand the instructions in this manual before operation. Read all instructions noted on the safety decals.

▲ Be familiar with all implement functions.
▲ Operate machinery from the driver’s seat only.
▲ Do not leave implement unattended with tractor engine running.
▲ Do not dismount a moving tractor. Dismounting a moving tractor could cause serious injury or death.
▲ Do not stand between the tractor and implement during hitching.
▲ Keep hands, feet and clothing away from moving parts.
▲ Watch out for wires, trees, etc., when folding and raising implement. Make sure all persons are clear of working area.

Safety Decals

Safety Reflectors and Decals

Your implement comes equipped with all lights, safety reflectors and decals in place. They were designed to help you safely operate your implement.

▲ Read and follow decal directions.
▲ Keep lights in operating condition.
▲ Keep all safety decals clean and legible.
▲ Replace all damaged or missing decals. Order new decals from your Great Plains dealer. Refer to this section for proper decal placement.
▲ When ordering new parts or components, also request corresponding safety decals.

Slow Moving Vehicle Reflector

818-055C

On center rear face of center frame tie tube; 1 total

To install new decals:
1. Clean the area on which the decal is to be placed.
2. Peel backing from decal. Press firmly on surface, being careful not to cause air bubbles under decal.
838-266C
Red Reflectors; LC25 S/N C1010X- and LC40 S/N C1165Q-

On rear face of lighting bracket, at each outboard end, one rear of wing tool bars, one each outboard end; 4 total

838-266C
Red Reflectors; LC25 S/N C1011X+

On rear face of four reflector brackets mounted on lighting brackets, outboard of daytime reflectors; 4 total

838-266C
Red Reflectors; LC40 S/N C1166Q+

On rear face of four reflector brackets mounted on lighting brackets, outboard of daytime reflectors; 4 total
838-267C
Daytime Reflectors; LC25 S/N C1010X- and LC40 S/N C1165Q-

On rear face of light bracket mount tube, inboard of red reflectors; 2 total

838-267C
Daytime Reflectors; LC25 S/N C1011X+

On rear face of four reflector brackets mounted on lighting brackets, inboard of red reflectors; 4 total

838-267C
Daytime Reflectors; LC40 S/N C1166Q+

On rear face of four reflector brackets mounted on lighting brackets, inboard of red reflectors; 4 total
838-265C
Amber Reflectors; LC25 S/N C1010X- and LC40 S/N C1165Q-

On outboard sides of vertical sections of light bracket mount tubes, on front face of wing tool bars at outboard ends; 4 total

838-265C
Amber Reflectors; LC25 S/N C1011X+

On front and outboard sides of four reflector brackets mounted, on outboard lighting brackets; 4 total

838-265C
Amber Reflectors; LC40 S/N C1166Q+

On front and outboard sides of four reflector brackets mounted, on outboard lighting brackets; 4 total
818-557C
Danger (in Spanish):

Advising non-English readers to seek translation
On front face of hitch tube, just left of center;
1 total

818-590C
Danger: Hitch Crush

On front face of hitch tube, each end;
2 total

838-599C
Danger: Electrocution

On front face of center frame tie tube, left of center;
1 total
858-097C
Danger: Tip Over / Crushing Hazard

On front face of center frame tie tube, left and right of center;
2 total
See page 20 and page 25 for more detail on this hazard.

818-045C
Warning: Pinch/Crush

On front face of center frame outer pivot plates;
2 total

818-188C
Warning: Speed

On front face of wing flex base lug;
1 total
**818-339C**

**Warning: High Pressure Fluid Hazard**

![Warning: High Pressure Fluid Hazard](image)

On front face of hitch tube, just right of center; 1 total

---

**818-579C**

**Warning: Pinching or Crushing**

![Warning: Pinching or Crushing](image)

On front face of outer wing pivot plates; 2 total

---

**818-587C**

**Caution: General Instructions**

![Caution: General Instructions](image)

On front face of hitch tube, just left of center; 1 total
Introduction

Great Plains welcomes you to its growing family of new product owners. The 25 and 40 Foot Lister Cultivator (LC25/40) 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 LC25/40 Lister / Cultivator is a 3-point mounted soil preparation implement for use in bedded conditions. The LC25 tool bar has a working width of 21 feet 3 inches to 27 feet 11 inches. The LC40 three section stack-folding tool bar has a working width of 40 feet (12.2 m). Both accept:

- short or long lister row units, or
- cultivator row units, with optional barring-off discs.

Row units may be converted between lister and cultivator functions by exchanging components.

Multiple points of adjustment are provided.

Intended Usage

Use the LC25/40 Lister / Cultivator for building and maintaining beds in conventionally tilled ground. Do not modify the lister / cultivator for use with attachments other than Great Plains options and accessories specified for use with the LC40.

Models Covered

LC25-0830  25-foot, 8-row (9-unit), 30 inch spacing
LC25-0870  25-foot, 8-row (9-unit), 70 cm spacing
LC25-0875  25-foot, 8-row (9-unit), 75 cm spacing
LC25-0836  25-foot, 8-row (9-unit), 36 inch spacing
LC25-0838  25-foot, 8-row (9-unit), 38 inch spacing
LC25-0840  25-foot, 8-row (9-unit), 40 inch spacing
LC25-081M  25-foot, 8-row (9-unit), 1 m spacing
LC40-1236  40-foot, 12-row (13-unit), 36 inch spacing
LC40-1238  40-foot, 12-row (13-unit), 38 inch spacing
LC40-1240  40-foot, 12-row (13-unit), 40 inch spacing
LC40-1630  40-foot, 16-row (17-unit), 30 inch spacing

Using This Manual

This manual will familiarize you with safety, assembly, operation, adjustments, troubleshooting, 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. An orientation rose in some line art illustrations shows the directions of: Up, Back, Left, Down, Front, Right.

Document Family

591-049M  Owner’s Manual (this document)
591-049P  Parts Manual (LC40)
591-074P  Parts Manual (LC25)

A crucial point of information related to the current topic. Read and follow the directions to remain safe, avoid serious damage to equipment and ensure desired field results.

Useful information related to the preceding topic.

2013- refers to implements manufactured in 2013 or earlier.

2014+ refers to implements manufactured in 2014 or later.
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.

Refer to Figure 2

Your machine’s parts were specially designed and should only be replaced with Great Plains parts. Always use the serial and model number when ordering parts from your Great Plains dealer. The serial-number plate is located on front face of the main tool bar truss.

Record your LC25/40 Lister / Cultivator model and serial number here for quick reference:

Model Number: __________________________
Serial Number: __________________________

Further Assistance

Great Plains Manufacturing, Inc. and your Great Plains dealer want you to be satisfied with your new implement. If for any reason you do not understand any part of this manual or are otherwise dissatisfied, please take the following actions first:

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.

If your dealer is unable to resolve the problem or the issue is parts related, please contact:

Great Plains Service Department
1525 E. North St.
P.O. Box 5060
Salina, KS 67402-5060

Or go to www.greatplainsag.com and follow the contact information at the bottom of your screen for our service department.
Preparation and Setup

This section helps you prepare your tractor and LC25/40 Lister / Cultivator for use. You must level the implement, hook up the implement hydraulics to the tractor, and check that the hydraulics have been bled.

Post-Delivery/Seasonal Setup

On initial delivery, use with a new tractor, and seasonally, check and as necessary, complete these items before continuing to the routine setup items:

- Bleed hydraulic fold system (page 39).
- Wing leveling and alignment (page 18).
- De-grease exposed cylinder rods if so protected at last storage.

Pre-Planting Setup

Complete this checklist before routine setup:

- Read and understand “Important Safety Information” starting on page 1.
- Check that all working parts are moving freely, bolts are tight, and cotter pins are spread.
- Check that all grease fittings are in place and lubricated. See “Lubrication” on page 40.
- Check that all safety decals and reflectors are correctly located and legible. Replace if damaged. See “Safety Decals” on page 4.
Hitching Tractor to Implement

This page applies to: LC40 models only.

Check/Change Hitch Configuration 2013-

These instructions apply to LC40 models manufactured in 2013. For 2014+ see page 15.

Choose a hitch option that is compatible with your tractor 3-point. The LC40 has two ASABE S217 / ISO 730-1 hitch configurations:

Category 3 (80 to 225 hp / 60 to 168 kW)
Category 4 (180 to 400 hp / 135 to 300 kW)

Changing between categories requires exchanging pins and bushings at the implement hitch.

Refer to Figure 3 (showing only the hitch plates; depicting Category 3 arm pins and bushings installed, and Category 3 link pin stored)

Category 3 Hitch Pins

1. Remove the Category 3 link (upper) pin 38 from the upper rear storage hole. Relocate it to the lower holes 1 of the upper hitch plates. The upper Category 4 link pin 42 may be left in the upper plates.

2. At the rear of the lower hitch plates, remove two: 40 805-168C PIN HTCH 1.44X8.38 USBL These are the smaller of the lower hitch pins.

3. Also remove four sets:
   38 803-027C NUT HEX 3/4-10 PLT
   36 804-023C WASHER LOCK SPRING 3/4 PLT
   26 802-086C HHCS 3/4-10X2 3/4 GR5
   14 591-031H CAT 3 WIDE BUSHING WELDMNT
   The bushings are required to reduce the hole sizes at the lower forward pin holes.

4. Remove the Category 4 arm pins 23 from the forward holes of the lower hitch plates. Store them in the rear holes of the plates.

5. Mount the bushings 14 on the outside faces a of the inner hitch plates, using the bolts 26, lock washers 27 and nuts 22.

Category 4 Hitch Pins

1. Remove the Category 3 link (upper) pin 38 from lower holes 1 of the upper hitch plates. Relocate it to the upper rear storage hole. The upper Category 4 link pin 42 should already be in place in the upper plates.

2. At the rear of the lower hitch plates, remove two: 23 591-127D PIN 2 X 10 7/8 USABLE 1045
   These are the larger of the lower hitch pins.

3. At the forward holes of the lower hitch plates, remove the two Category 3 hitch pins 40. Relocate the bushings 14 to the lower rear holes, and secure with bolts 26, lock washers 27 and nuts 22.

---

a. Or as needed to accommodate the spacing of the tractor lift arms.
Check/Change Hitch Configuration 2014+

These instructions apply to: LC25 models and LC40 models manufactured in 2014 or later.

Choose a hitch option compatible with the tractor 3-point. The LC25/40 has three ASABE S217 / ISO 730-1 hitch configurations:
- Category 3N (narrow, 80 to 225 hp / 60 to 168 kW)
- Category 3W (wide, 80 to 225 hp / 60 to 168 kW)
- Category 4 (N or W, 180 to 400 hp / 135 to 300 kW)

Changing between categories requires exchanging pins and bushings at the implement hitch.

2014+ Top Link

Refer to Figure 4

For all hitch categories, this pin:
- 805-291C PIN CLVS 1.75X4.38 USBL is left in place in the top front center holes.

For Category 4, move (as needed) this pin:
- 805-119C PIN HTCH 1.25X4.50 USBL to the top rear center holes.

For Category 3, move (as needed) this pin:
- 805-119C PIN HTCH 1.25X4.50 USBL to the front mid center holes.

2014+ Lower Links

Refer to Figure 5

To change the lower links, remove all pins, bushings and spacers at the bottom front 2-point locations.

For Category 3N, relocate:
- 591-031H CAT 3 WIDE BUSHING WELDMENT to the inside face of the inside plates of the bottom front 2-point holes. Relocate
- 591-057H CAT 3 HITCH PIN SUPPORT SPACER to the inside face of the outside plates of the bottom front 2-point holes. Secure each with 2 bolts. Relocate
- 805-518C PIN HTCH 1.44X8.88 USBL to the bottom front 2-point holes. Store the removed parts in the lower rear holes.

For Category 3W, relocate:
- 591-031H CAT 3 WIDE BUSHING WELDMENT to the outside face of the outside plates of the bottom front 2-point holes. Relocate
- 591-057H CAT 3 HITCH PIN SUPPORT SPACER to the outside face of the inside plates of the bottom front 2-point holes. Secure each with 2 bolts. Relocate
- 805-518C PIN HTCH 1.44X8.88 USBL to the bottom front 2-point holes. Store any removed Category 4 parts in the lower rear holes.

For Category 4, relocate the following parts from the rear storage holes to the bottom front 2-point holes:
- 591-032H PIN HITCH 2 X 12 7/8 PLT
- 591-058H CAT 4N LOWER HITCH PIN SPACER

Store the removed Cat 3 parts in the lower rear holes.
Hitch Tractor (LC40 only)

⚠️ **DANGER**

**Crushing Hazard:**
Do not stand or place any part of your body between the implement and moving tractor. You may be severely injured or killed by being crushed between the tractor and implement. Stop tractor engine and set parking brake before installing the hitch pins.

4. Connect the tractor lift arms to the lower hitch pins. If using a quick hitch, ensure that the pins lock securely.

5. Connect the top link to the upper hitch pin. Front-to-back leveling is performed in later steps.

**Hydraulic Hose Hookup**

⚠️ **WARNING**

**High Pressure Fluid Hazard:**
Only trained personnel should work on system hydraulics! Check all hydraulic lines and fittings before applying pressure. Relieve pressure before disconnecting hydraulic lines. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Fluid escaping from a very small hole can be almost invisible. Use paper or cardboard, NOT BODY PARTS, to check for leaks. Escaping fluid under pressure can have sufficient pressure to penetrate the skin causing serious injury. If hydraulic fluid is injected into the skin or eyes, seek immediate medical assistance from a physician familiar with this type of injury. Within a few hours gangrene can start to develop. **DO NOT DELAY.**

**Refer to Figure 6**

Great Plains hydraulic hoses have color coded handle grips to help you hookup hoses to your tractor outlets. Hoses that go to the same remote valve are marked with the same color.

**Color Coded Hose Handles**

<table>
<thead>
<tr>
<th>Color</th>
<th>Hydraulic Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray</td>
<td>2013- Combined Fold Cylinders</td>
</tr>
<tr>
<td></td>
<td>2014+ Left Wing Fold Cylinders</td>
</tr>
<tr>
<td>Green</td>
<td>2014+ Right Wing Fold Cylinders</td>
</tr>
</tbody>
</table>

To distinguish hoses on the same hydraulic circuit, refer to the symbol molded into the handle grip. Hoses with an extended-cylinder symbol feed cylinder base ends. Hoses with a retracted-cylinder symbol feed cylinder rod ends.

Connect fold hoses to suitable tractor remote valves.
Electrical Hookup (LC25/40)
Plug implement electrical lead in tractor seven-pin connector. If your tractor is not equipped with a seven-pin connector, contact your dealer for installation. Plug in any optional connectors or aftermarket connectors, such as an implement-mounted GPS receiver. For future reference, list any optional connectors on this checklist.
- Lighting connector (standard)
- __________________________
- __________________________

Raise Parking Stands
Refer to Figure 8
1. Use the tractor 3-point hitch to raise the implement just enough to relieve weight on the parking stands ①.
2. Remove pin ② securing the stand.
3. Raise the stand using the welded loop ③.
4. Re-insert the pin in through the lower hole of the frame tube, and the lowest hole of the stand. Secure pin with hairpin cotter.
Leveling the Implement

Center Frame L/R Leveling (LC25/40)
1. Hitch the lister / cultivator to a tractor (page 14).
2. Raise the implement. Unfold it (page 21).

Refer to Figure 9
3. Adjust the tractor 2-point lift arms so that the center section tool bar is level.

Wing Leveling (LC40 only)

Refer to Figure 10
4. Check wing for level at the top of the tool bar.

Refer to Figure 11
To adjust wing level:
5. Loosen the jam nut ① at the upper link arm adjuster.
6. Remove and save the fasteners ② securing the clip lock ③.
7. Rotate the adjust nut ④ until the wing is level.
8. Reinstall the clip lock. Secure the jam nut.

Front-to-Back Leveling (LC25/40)

See “Front-to-Back Leveling” on page 27. This adjustment needs to be completed in field conditions.
Operating Instructions

This section covers general operating procedures. Experience, machine familiarity, and the following information will lead to efficient operation and good working habits. Always operate farm machinery with safety in mind.

Pre-Start Checklist

Perform the following steps before transporting the LC25/40 Lister / Cultivator to the field.

- Carefully read “Important Safety Information” on page 1.
- Lubricate implement as indicated under “Lubrication” on page 40.
- Check all tires for proper inflation. See “Specifications and Capacities LC40” on page 46.
- Check all bolts, pins, and fasteners. Torque as shown in “Fan Hydraulics (S/N C1004K+)” on page 54.
- Check implement for worn or damaged parts. Repair or replace parts before going to the field.
- Check hydraulic hoses, fittings, and cylinders for leaks. Repair or replace before going to the field.
- Perform all beginning-of-season and daily service items under “Maintenance” on page 38.

Wing Lock Pins (LC40 only)

Refer to Figure 12

Two lock pins 1, one each wing, are provided for unusual situations. Normally, these are not used, and are stored in upper holes 2 of the wing weldments.

WARNING

High Pressure Fluid Hazard:
Only trained personnel should work on system hydraulics! Check all hydraulic lines and fittings before applying pressure. Relieve pressure before disconnecting hydraulic lines. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Fluid escaping from a very small hole can be almost invisible. Use paper or cardboard, NOT BODY PARTS, to check for leaks. Escaping fluid under pressure can have sufficient pressure to penetrate the skin causing serious injury. If hydraulic fluid is injected into the skin or eyes, seek immediate medical assistance from a physician familiar with this type of injury. Within a few hours gangrene can start to develop. DO NOT DELAY

Figure 12
Wing Lock Pin
Folding (LC40 only)

Fold the implement for movements on public roads and between fields with narrow clearances. Do not use the folded configuration for parking or storage.

⚠️ DANGER

**Tip Over / Crushing Hazard and Equipment Damage Risk:**
Never unhitch a folded implement. A folded implement could topple backward or forward, causing serious injury or death, and certain severe equipment damage. When unhitched, the implement is supported at the rear only by row unit tools and spring tension. Slopes, soft soils, and soils later softened by rain are particularly dangerous.

⚠️ DANGER

**Electrocution Hazard:**
Avoid overhead lines when folding and transporting. When folded and lifted, the implement requires clearance of at least 14 feet (4.3 m), which is high enough to contact low-hanging lines. Touching the implement or tractor completes a circuit to ground, and can result in serious injury or death. At higher voltages, shock can occur without direct contact.

⚠️ WARNING

**Crushing Hazard:**
Bystanders could be crushed between the folding implement wings and the implement center frame, or caught in the folding mechanism. To avoid serious injury or death, keep all bystanders well away during implement operation.

1. Hitch tractor (page 14).
2. Move to level ground. Be aware of vertical clearance needed to fold implement.
3. Put tractor in Park with parking brake engaged.
4. Verify that the wing lock pins are not installed in the lower lock holes (page 19).
5. Clear all persons from on or near the implement.

Refer to Figure 13

6. Use the tractor 3-point hitch to raise the implement slightly (so that the rear of the row units are off the ground).
7. Slowly move fold circuit lever(s)a to Retract. Observe the fold operation.
8. Wait for both wings to reach the fully folded position. Set tractor remote(s) to Neutral to hold at folded.

---

a. 2014+ models have separate circuits for left and right wing fold. 2013- models have a combined circuit.
Unfolding (LC40 only)

**WARNING**

**Crushing Hazard:**
Bystanders could be crushed under the wings or caught in the wing fold mechanisms. To avoid serious injury or death, keep all persons well away during implement unfold.

Unfold the implement for adjustments, field operations, maintenance, parking and storage.

1. Unless the implement was folded, with the currently hitched tractor, only a short time ago, check for evidence of oil leaks. Check the ground at hitch connections, hose fittings and under cylinders.
2. Be aware of vertical and horizontal clearances needed to unfold the implement.
3. Put tractor in Park with parking brake engaged.
4. Verify that the wing lock pins are not installed in the lower lock holes (page 19).
5. Clear all persons from on or near the implement.
6. Use the tractor 3-point hitch to raise the implement so that the rear of the center row units are off the ground.

Refer to Figure 14

7. Slowly move fold circuit lever(s)\(^a\) to Extend. Observe the unfold operation.
8. Wait for both wings to reach the fully unfolded position. Set tractor remote(s) to Neutral to lock at unfolded.

2014+ Independent Fold

LC40 models manufactured in 2014 or later have independent left and right fold circuits. In the field, one wing may be partially or completely folded to clear obstacles or perform point row operations.

**DANGER**

**Tipping Hazard:**
Never unhitch, park or store a partially folded implement. A partially folded implement could topple backward or forward immediately or at some later time, causing serious injury or death, and certain severe equipment damage. When unhitched, the implement is supported at the rear only by row unit tools and spring tension. Slopes, soft soils, and soils later softened by rain are particularly dangerous.

Do not transport partially folded. Clearance is insufficient and steering may be unstable due to reduced tire traction on one side.

---

\( ^a\) 2014+ models have separate circuits for left and right wing fold. 2013- models have a combined circuit.
Transporting the Lister / Cultivator

**DANGER**

**Loss of Control Hazard:**

Ensure that the towing vehicle is adequate for the task. Using an inadequate tow vehicle is extremely unsafe, and can result in loss of control, serious injury and death. To reduce the hazard, use only a 3-point towing vehicle that is both rated for the implement load, and properly ballasted for the load.

Refer to the table at right for typical weights of LC40 configurations. Center of gravity ranges from 21 to 27 inches (53 to 69 cm) behind the center-line of the lower 3-point hitch pins.

If your towing vehicle is marginal for the upper end of the weight range, have your implement weighed at a scale.

**DANGER**

**Electrocution Hazard:**

Avoid overhead lines transporting. When folded and lifted, the implement requires clearance of at least 14 feet (4.3 m), which is high enough to contact low-hanging lines. Touching the implement or tractor completes a circuit to ground, and can result in serious injury or death. At higher voltages, shock can occur without direct contact.

**CAUTION**

**Braking and Loss of Control Hazard:**

Do not exceed 20 mph (32 km/h) when driving straight.

Do not exceed 13 mph (21 km/h) in turns. The weight of the implement can cause under-steer, and the height of the implement is a tipping hazard.

**Transport Checklist**

Before transporting the implement check the following items.

- Transport only with a tractor of proper size and adequate ballast. See “Specifications and Capacities LC40” on page 46.
- Hitch implement securely to tractor. See “Hitching Tractor to Implement” on page 14.
- Plug implement safety lights into tractor seven-pin connector.
- Make sure implement is folded properly. See “Folding (LC40 only)” on page 20. Raise the implement for adequate ground clearance.
- Comply with all national, regional and local safety laws when traveling on public roads.
- Travel with caution.

<table>
<thead>
<tr>
<th>Implement Model</th>
<th>Weight Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC40-1236</td>
<td>11,000 to 13,000 pounds (5000 to 5900 kg)</td>
</tr>
<tr>
<td>LC40-1238</td>
<td>11,000 to 13,000 pounds (5000 to 5900 kg)</td>
</tr>
<tr>
<td>LC40-1240</td>
<td>11,000 to 13,000 pounds (5000 to 5900 kg)</td>
</tr>
<tr>
<td>LC40-1630</td>
<td>13,000-15,500 lb (5900 to 7000 kg)</td>
</tr>
<tr>
<td>LC25-0830</td>
<td>5,750 to 7,050 pounds (2608 to 3198 kg)</td>
</tr>
<tr>
<td>LC25-0870</td>
<td>5,750 to 7,050 pounds (2608 to 3198 kg)</td>
</tr>
<tr>
<td>LC25-0875</td>
<td>5,750 to 7,050 pounds (2608 to 3198 kg)</td>
</tr>
<tr>
<td>LC25-0836</td>
<td>6,000 to 7,300 pounds (2722 to 3583 kg)</td>
</tr>
<tr>
<td>LC25-0838</td>
<td>6,000 to 7,300 pounds (2722 to 3583 kg)</td>
</tr>
<tr>
<td>LC25-0840</td>
<td>6,000 to 7,300 pounds (2722 to 3583 kg)</td>
</tr>
<tr>
<td>LC25-081M</td>
<td>6,000 to 7,300 pounds (2722 to 3583 kg)</td>
</tr>
</tbody>
</table>

**SPEED LIMIT**

20 AT ALL TIMES

32 IN TURNS

13 IN TURNS
Field Operations (LC25/40)

After unfolding at the field, leave the fold circuit(s) in Neutral to lock the wings at unfolded. To more firmly lock the wings at level, use the wing lock pins (page 19). Do not use lock pins if your practice is to fold slightly at turn lifts.

The lister and cultivator row units have a generous array of adjustments, some of which interact with each other. If you do not already have a preferred practice, the following topic provide a general outline of row setup.

Configure Lister Rows

Refer to Figure 16

1. Set the height of the lister assembly to fully elevated in the row frame (details on page 33).
2. Adjust the coulter/tire height to maintain the lister shovel depth (details on page 30).
3. Adjust the height of the tractor 3-point hitch so that the row unit arms are parallel to the ground with the lister shovel at the desired soil depth.
4. Adjust the furrower discs for the desired bed profile (details on page 32).
5. Individual rows in tire tracks may require spring adjustment.

Configure Cultivator Rows

Refer to Figure 17

1. Adjust cultivator height (page 35) to $10^{\frac{1}{2}}$ inches (factory setting) unless conditions require variation.
2. Adjust coulter height (page 30) to maintain desired cultivation depth.
3. Adjust height of tractor 3-point hitch so that row unit arms are parallel to the ground with the cultivator at desired depth.
4. Adjust deflector shields for desired throw (details on page 35).
5. Adjust barring-off discs for desired bedding edge cultivation and profile (details on page 32).
6. Individual rows in tire tracks may require spring adjustment.
Operations Checklists

Hitching
- Match hitch Category to tractor (page 14).
- Hitch tractor 3-point, lower arms first (page 16).
- Hookup hydraulic hoses (page 16).
- Hookup electrical connections (page 17).

Transport
- If the towing vehicle has not been previously used with this implement, check its rated list and towing capacity vs. the implement weight (page 22). Ballast as required.
- If implement is unfolded:
  - Check that wing lock pins are not in lock configuration (page 19).
  - Fold implement (page 20).
- Raise parking stands (page 17).
- Check the lights are working.
- Raise implement to a height providing adequate transport clearance. Set lift circuit to Neutral.
- Travel with caution (page 22).

Field Start (wings/folding LC40 only)
- Check that wing lock pins are not in lock position (page 19).
- Unfold the implement (page 21).
- Lock wings if field work requires it (page 19).
- Set up row tools (page 26).
- Check levels (page 18 and page 27).
- Position rows inside field edge. Lower tool bar to preset height. Pull forward.

Field Turns
- Lift implement.
- Fold wings up slightly if turn clearance requires it, and wing lock pins are not installed.
- Make turn.
- Unfold.
- Lower and pull forward.

End Field Work
- Lift implement.
- If employed, move lock pins from lower locking holes to upper storage holes (page 19).
- Fold implement.
- Travel with caution (page 22).
Parking
For long-term parking, see also “Storage” below.

1. Choose a parking location that has room for unfolding, is level, has firm soil and is unlikely to develop soft soil in rain. With the implement still hitched, maneuver it to the parking location.

   If the implement must be parked folded (LC40 only), leave it hitched to the tractor. Skip steps 2, 4 and 7.

2. Unfold (LC40 only) the implement (page 21).
   Set the fold circuit(s) to Float.

3. Lower the implement to just above ground level at the rear of the row units. Set the tractor remote to Neutral to hold at slight lift. Shut off the tractor and remove the key.

Refer to Figure 18

4. Unplug implement hydraulic (LC40 only) hoses and electrical lines from tractor.

5. Remove the hairpin cotter at a stand pin ①.
   Support a stand at its grip handle ②.
   Remove the pin.
   Lower the stand until the top holes are aligned with the top holes of the frame tube.
   Re-insert the main pin and secure with cotter.
   Repeat for the other wing.

6. Start the tractor.
   Lower the 3-point hitch until the implement is supported by stands and row units.

7. Disconnect the hitch arms and link.

Storage
Store the lister / cultivator where children do not play. If possible, store the implement inside for longer life.

1. Thoroughly clean implement.
2. Park the implement at the storage location as per “Parking” above.
3. Lubricate areas noted under “Lubrication” beginning on page 40. Apply heavy grease to exposed cylinder rods.
4. Inspect implement for worn or damaged parts. Make repairs and service during the off season.
5. Use spray paint to cover scratches, chips and worn areas on the implement to protect the metal.
6. Cover with a tarp if stored outside.

Tip Over Crushing Hazard and Equipment Damage Risk:
Never unhitch, park or store a folded implement. A folded implement could topple backward or forward immediately or at some later time, causing serious injury or death, and certain severe equipment damage. When unhitched, the implement is supported at the rear only by row unit tools and spring tension. Slopes, soft soils, and soils later softened by rain are particularly dangerous.
To get full performance from your lister / cultivator, you need an understanding of all component operations, and many provide adjustments for optimal field results.

The Model LC25/40 has straight-blade depth-band coulters mounted on floating opener frames. Dual springs provide the down pressure necessary to hold the row tools at the height set. Individual openers can be adjusted to account for tire tracks.

Lister configurations include a height-adjustable shovel, and adjustable furrower discs.

Cultivator configurations include a height-adjustable shank, width-adjustable soil deflectors, and optional barring-off discs.

**Plowing/Cultivating Depth**

Setting nominal depth, and achieving it consistently, is affected by multiple adjustable implement functions, from greatest to least effect they are:

- Lister Shovel or Cultivator Height,
- Coulter Depth,
- Implement Tool Bar Height (hitch set), and;
- Row Unit Down-Force.

<table>
<thead>
<tr>
<th>Adjustment</th>
<th>Page</th>
<th>The Adjustment Affects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hitching Tractor to Implement</td>
<td>14</td>
<td>Safe and stable implement operation</td>
</tr>
<tr>
<td>Check/Change Hitch Configuration 2013- (LC40 only)</td>
<td>14</td>
<td>Safe and stable implement operation</td>
</tr>
<tr>
<td>Frame Adjustments</td>
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<tr>
<td>Center Frame L/R Leveling (LC25/40)</td>
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<td>Consistent result across all rows</td>
</tr>
<tr>
<td>Wing Leveling (LC40 only)</td>
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<td>Consistent result across all rows</td>
</tr>
<tr>
<td>Front-to-Back Leveling</td>
<td>27</td>
<td>Correct row unit operation</td>
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<tr>
<td>Row Unit Adjustments (LC25/40)</td>
<td>28</td>
<td>Summary</td>
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<tr>
<td>Row Unit Down Pressure (Springs)</td>
<td>29</td>
<td>Penetration for rows in tire tracks</td>
</tr>
<tr>
<td>Coulter Adjustments (LC25/40)</td>
<td>30</td>
<td>Setting tool bar height</td>
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<td>Barring-Off Adjustments (LC25/40)</td>
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<td>Lister Adjustments (LC25/40)</td>
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<td>Furrow depth</td>
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<tr>
<td>Furrower Disc Adjustments (LC25/40)</td>
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<td>Furrow width and bed profile</td>
</tr>
<tr>
<td>Cultivator Adjustments (LC25/40)</td>
<td>35</td>
<td>Furrow cultivation and bed shoulder maintenance</td>
</tr>
<tr>
<td>Shield Adjustments (LC25/40)</td>
<td>36</td>
<td>Protects plants from being covered by dirt</td>
</tr>
</tbody>
</table>
Frame Adjustments (LC25/40)
Front-to-Back Leveling

For the rows to run level at the design down-force, the tool bar must be level with the ground at the desired tool height. Perform this adjustment on level ground in field conditions.

Refer to Figure 19

1. Adjust the row unit components (summary on page 28) for desired tool running depth relative to ground level ①.
2. Adjust the tractor three-point hitch height so that the row unit parallel arms ② are parallel to the ground.
3. Adjust the tractor upper link ③ until the top of the tool bar ④ is level.
4. Re-check all settings and adjustments. Set a lower stop for the 3-point hitch.
Row Unit Adjustments (LC25/40)

Refer to Figure 20 (depicting an extended row unit populated with all components, some not used simultaneously)

From top front to bottom back, an LC40 row unit can include the following capabilities (some optional):

1. Dual Down Pressure Springs: standard
   Each row unit is mounted on the frame via parallel arms which allow the row unit to independently move up and down while remaining level with the ground. These springs are normally adjusted only for rows in tire tracks. See “Row Unit Down Pressure (Springs)” on page 29.

2. Coulter Depth: standard
   This jackscrew (crank and scale provided) adjusts the depth of the coulter blade relative to the row. See “Coulter or Tire Height” on page 30.

3. Coulter Disc Scraper (not visible): standard
   This adjustment needs to be made when a coulter disc is replaced, and checked periodically. See “Coulter Scraper Adjustment (LC25/40)” on page 31.

4. Barring-Off Disc Height: option
   This adjustment sets the vertical depth of cultivation at the bed shoulders. See “Barring-Off Disc Height” on page 32.

5. Barring-Off Disc Width: option
   This adjustment sets the horizontal width of cultivation at the bed shoulders. See “Barring-Off Width” on page 32.

6. Lister Height: Option 10 or 20
   This adjustment sets the depth of the furrow relative to the tool bar. See “Lister Adjustments (LC25/40)” on page 33.

7. Furrower Disc Height and Angle: Option 10 or 20
   This adjustment controls bed shoulder shaping. See “Furrower Disc Adjustments (LC25/40)” on page 34.

8. Cultivator Height: Option 30
   This adjustment sets the depth of furrow cultivation relative to the tool bar. See “Cultivator Height” on page 35.

9. Cultivator Deflector Angle: Option 30
   This adjustment sets the width of furrow cultivation. See “Cultivator Deflector Height and Angle” on page 35.

NOTICE

Equipment Damage Risk:
Do not back up with row units in the ground. To do so may cause tool damage.
Row Unit Down Pressure (Springs)

For working in tire tracks you can increase spring down pressure at individual rows.

Refer to Figure 21

This table provides the down-force values with tool bar and parallel arms level with the ground.

<table>
<thead>
<tr>
<th>Down Force</th>
<th>Bolt Reveal ①</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pounds</td>
<td>kg</td>
</tr>
<tr>
<td>350</td>
<td>160</td>
</tr>
<tr>
<td>390</td>
<td>175</td>
</tr>
<tr>
<td>450</td>
<td>205</td>
</tr>
<tr>
<td>490</td>
<td>220</td>
</tr>
<tr>
<td>540</td>
<td>245</td>
</tr>
</tbody>
</table>

a. Factory setting.

To adjust spring pressure:

1. Measure the current bolt reveal ① at each spring. Measure from the top of the cast spring plug to the bottom of the bolt head (top of washer).
2. Determine the current row force from the table above. Select the new down-force desired.
3. Loosen the jam nut ② at the cast plug.
4. Turn the bolt head ③ to obtain the new reveal value. Make the same adjustment to both springs.

**NOTICE**

*Equipment Damage Risks:*
Adjusting pressure at the springs for all rows is not recommended. Row tool damage may result and/or tractor rear wheels may slip. Reducing spring pressure below factory values may result in bolt thread stripping.
Coulter Adjustments (LC25/40)

Coulter or Tire Height

Refer to Figure 22 (a cutaway view of the coulter row)

Coulter or tire height ① is the adjustment for tool depth (lister shovel or cultivator).

A crank ②, found on a stob at the rear center of the tool bar, is provided to make the adjustment.

A scale bar ③ provides reference graduations. The front edge of the bar has major graduation reference marks “1” to “5”, with an edge notch every 1/2 graduation. The rear edge of the bar has notches at the 1/4 graduations, but no reference marks. The reference point for the scale is the top face of the pivot plate ④.

Each 1/2 number graduation represents approximately 1 inch (2.5 cm) of vertical coulter movement. “1” is deepest. “5” is shallowest.

Never adjust the coulter beyond mark “5”. The adjuster separates at settings shallower than “5”.

The coulter/tire arm adjustment plates ⑤ have two pivot holes, providing an additional range of adjustment.

To adjust coulter/tire height:

1. Raise the implement. Coulter/tire adjustment can be made with the implement lowered, but requires more effort. Release the crank from storage.

2. At a row, note the current setting on the scale ③. Each 1/2 number graduation represents approximately 1 inch (2.5 cm) of vertical coulter movement.

3. Remove the wire-retained pin ⑥.

4. Place the crank on the threaded rod ⑦. Rotate the crank until the desired scale value appears at the top face of the pivot plate ④. Adjust crank to align the pin hole in the thread rod with the slot in the scale.

5. Re-install the wire-retained pin.

6. Re-check tool depth, arm parallelism and hitch height, then repeat step 3 through step 5 for all rows.

The threaded rod may only be pinned at half turns (180°). Each half turn is 1/12 of a major graduation (full turns per major graduation).

Equipment Damage Risk:
Do not use scale values below “1” or above “5”, or pin and/or scale damage may result.
Coulter Scraper Adjustment (LC25/40)

This adjustment needs to be made as scrapers wear, and when they are replaced.

**CAUTION**

**Sharp Object Hazard:**
Be cautious when working near the coulter disc. The edge may be sharp.

Refer to Figure 23 (gap exaggerated for clarity)
1. At each row, check the gaps 1 (both sides) between the lower edges of the scrapers and the coulter depth band. The factory setting is: 
\[ \frac{3}{32} \text{ inch (0.9 inch, 2.4 mm)} \]

To adjust the scraper:
2. Loosen the nuts 2 at the slots.
3. Slide the scraper down until the correct gap is achieved. Keep it centered on the coulter blade. Tighten the nuts.

If the scraper reaches the end of its slots, and the gap 1 is larger than \[ \frac{3}{32} \text{ inch (2.4 mm)} \], the scraper is worn out and must be replaced.

Figure 23
Coulter Scraper Adjustment
**Barring-Off Adjustments (LC25/40)**

These instructions apply only to implements in Cultivator configuration, and equipped with the optional 591-034A Barring-Off accessory.

Typically these adjustments are made after setting cultivator depth, coulter height and hitch height.

**CAUTION**

*Sharp Object Hazard:*
*Be cautious when working near the barring-off discs. The edges may be sharp.*

**Barring-Off Width**

*Refer to Figure 24 (depicting unequal extensions for clarity)*

Sliding tubes and bent pins provide a choice of widths (measured at the disc bottom edges), ranging from:
- 11.3 inches (28.7 cm) minimum, to
- 31.3 inches (79.5 cm) maximum

By alternating tube and sleeve holes, total width may be adjusted in increments of:

\[
\frac{5}{8} \text{ inches (16 mm)}.
\]

To adjust:
1. Raise the implement slightly.
2. Remove the hairpin cotter 1 and each bent pin 2.
3. Slide the disc mounting tubes 3 in or out.
4. Re-secure with bent pin and cotter.

**NOTICE**

*Equipment Damage Risks:*
*Always have at least two of the holes of the disc mounting tube 3 inside the attachment mounting tube 4, or tube damage may result.*

*Refer to Figure 25*

- If a cap 7 is present, do not mount a barring-off tube in that receiver tube. Leave the cap in place. These caps are found at the inside end of the front receiver tube of the inside wing row unit. In current row spacings, a barring-off disc installed in this tube would strike other implement parts during fold.

**Barring-Off Disc Height**

*Refer to Figure 24*

To adjust the disc height, loosen the nuts 5 at the clamp. Slide the mounting bar 6 up or down. Re-secure the nuts.

Set both disc heights the same on each row. The bar top must be flush with or above the top of the clamps.
Lister Adjustments (LC25/40)

These instructions apply only to implements in Lister configuration.

Typically the lister shovel adjustment is the first made, followed by coulter height and hitch height. Furrower disc adjustment may be made at any time.

**CAUTION**

*Sharp Object Hazard:*

*Be cautious when working near the lister. The edges of the furrower discs may be sharp.*

**Lister Shovel Adjustment**

*Refer to Figure 26 (furrower partially exploded)*

Unless your circumstances dictate otherwise, Great Plains recommends operating with the lister shovel fully raised.

To adjust the shovel height:

1. Loosen the nuts on the lower shear bolts and the lock nut on the top pivot bolt. Slide the mounting bar up or down. Tighten the nuts to snug.

   ⚠️ If a lower shear bolt is ever failed by a field obstruction, replace it with an identical:

   802-720C HHCS 7/16-14X3 1/2 GR5 PLT

   Do not use a higher grade bolt, or equipment damage may result. Using a lower grade bolt may result in nuisance shears. The front 7/16-14 bolt may be moved to the rear position until a 802-720C replacement bolt is obtained.

2. Tighten all three nuts to 7/16-14 Grade 5 torque specification (50 foot-pounds, 67 N-m).

3. Re-check coulter height (page 30), and hitch height.

4. Set all rows identically, perhaps excepting rows in tire tracks.
Furrower Disc Adjustments (LC25/40)
Adjustments are provided for disc height, spread, angle and cant.

**CAUTION**

*Sharp Object Hazard:*
*Be cautious when working near the lister. The edges of the furrower discs may be sharp.*

*Refer to Figure 27 and Figure 28*

**Furrower Disc Angle**
This setting needs to be adjusted for your furrow profile and conditions. The other furrower adjustments are often satisfactory at their factory settings.
Loosen the nuts at the slot bolts ① and the pivot bolts ②, top and bottom (8 fasteners total).
Set the disc angle as desired. Re-tighten nuts.

**Furrower Disc Height**
The factory default setting is notches ③ up, anchor weldment-low (mounting bolts in upper holes of anchor weldment ④), and channels ⑤/disc-mounts ⑥ centered on each other.
If it is necessary to change the furrower height, first see if the channel/mount adjustment suffices. Loosen both nuts ⑦ on one disc side. Slide the mount ⑤ up or down on the channel ⑥. Re-tighten.
To adjust up to 1/2 inch (2.5 cm) lower, dismount the anchor weldment ④ and invert it (notches ③ down).
If it is necessary to move the anchor weldment, it may also be necessary to disturb the angle adjustments to gain access to the mounting nuts ⑦ and bolts.

**Furrower Disc Spread and Cant**
In addition to height, loosing the nuts ⑦ for the channels ⑤/disc-mount ⑥ connection also provides adjustment for spread (distance between discs) and cant (vertical disc angle). Be sure to note and restore the height set at this interface.
Cultivator Adjustments (LC25/40)
These instructions apply only to implements in Cultivator configuration.
These adjustments are typically made after setting coulter height.

**CAUTION**

*Sharp Object Hazard:*
Be cautious when working near the cultivator. The edges of the cultivator deflector blades may be sharp.

**Refer to Figure 30**

**Cultivator Height**
1. Loosen the nuts ① at the lower shear bolts, and the lock nut ② at the upper pivot bolt.
2. Slide the shank ③ up or down to the desired height. The factory setting is 10 1/2 inches (26.7 cm), measured from the bottom of the row unit frame to the top of the sweep shank weldment.
3. Tighten the lower nuts and upper lock nut to 50 foot-pounds (67 N-m).

If a lower shear bolt is ever failed by a field obstruction, replace it with an identical:
802-720C HHCS 7/16-14X3 1/2 GR5 PLT
Do not use a higher grade bolt, or equipment damage may result. Using a lower grade bolt may result in nuisance shears.

**Cultivator Pitch Angle**
The upper cultivator mounting bolt ④ passes through a slot in the shank, allowing some pitch angle adjustment. The factory setting is maximum nose up.
Loosen both the upper ④ and lower ⑥ nuts. Adjust the pitch angle. Secure both nuts.

**Cultivator Deflector Height and Angle**
The deflectors ⑥ are adjustable for height and angle.
To adjust the angle, loosen the nuts ⑦ at the curved slots. Move the deflector shields ⑧ to the desired angle. Re-tighten the nuts.
To adjust the height, loosen the nuts ⑧ at the mount. Slide the mount ⑨ (which is slotted) up or down. Re-secure the nuts.
To obtain further lowering, the shield mount ⑩ may be inverted.
Shield Adjustments (LC25/40)

The shields protect the plants from dirt blow back from the cultivator by helping keep off the dirt. Adjust so that the shields are even in front and from side to back.

⚠️ **CAUTION**

*Sharp Object Hazard:*
Be cautious when working near the cultivator. The edges of the cultivator deflector blades may be sharp.

*Refer to Figure 31*

**Inward/Outward Adjustments**
For different row spacings, loosen the two bolts ① that clamp the tubes to adjust the shields ② inward/outward.

**Forward/Rear Adjustments**
To move shields forward or backward, loosen U-bolts ⑤ on clamp bar ⑤ and slide shields.

**Vertical Adjustments**
To adjust the shields ② vertically there are three holes ③ approximately 3 inches apart.

**Height Adjustments**
The chain ④ length can be adjusted for fine tuning height.
## Troubleshooting

### General Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furrows too shallow</td>
<td>Parallel arms not level</td>
<td>Adjust hitch height.</td>
</tr>
<tr>
<td></td>
<td>Coulters set too shallow</td>
<td>Adjust coulter deeper (page 30).</td>
</tr>
<tr>
<td>Coulter not turning freely</td>
<td>Damaged or mis-adjusted scraper</td>
<td>Adjust or replace scraper (page 31).</td>
</tr>
<tr>
<td></td>
<td>Failed disk bearings</td>
<td>Replace disk bearings.</td>
</tr>
<tr>
<td></td>
<td>Bent or twisted opener frame</td>
<td>Replace opener frame.</td>
</tr>
<tr>
<td>Mud build-up on coulter</td>
<td>Damaged or mis-adjusted scraper</td>
<td>Adjust or replace scraper (page 31).</td>
</tr>
<tr>
<td></td>
<td>Conditions too wet</td>
<td>Wait for drier conditions.</td>
</tr>
<tr>
<td>Rows running too deep</td>
<td>Lister shovel or cultivator set too deep</td>
<td>Raise tool. Check tool angle.</td>
</tr>
<tr>
<td>(Bulldozing)</td>
<td>Coulters set too deep</td>
<td>Adjust coulter shallower (page 30).</td>
</tr>
<tr>
<td>Lister plugging with trash</td>
<td>Lister too close to coulter</td>
<td>Install lister body extension.</td>
</tr>
<tr>
<td>Too much dirt blow back on</td>
<td>Shields not adjusted low enough</td>
<td>Adjust vertical adjustment on shields (page 36). Slide shields back on clamp bar.</td>
</tr>
<tr>
<td>plants</td>
<td>Shield too far forward, ahead of cultivator</td>
<td></td>
</tr>
<tr>
<td>Shields dragging too much</td>
<td>Shields too low</td>
<td>Raise shields so barely touching ground (page 36).</td>
</tr>
</tbody>
</table>
Maintenance and Lubrication

Maintenance

Proper servicing and maintenance is the key to long implement life. With careful and systematic inspection, you can avoid costly maintenance, downtime, and repair. Always turn off and remove the tractor key before making any adjustments or performing any maintenance.

**WARNING**

**Crushing Hazard:**
Always have transport locks in place and frame sufficiently blocked up when working on implement. You may be severely injured or killed by being crushed under the falling implement.

**WARNING**

**High Pressure Fluid Hazard:**
Only trained personnel should work on system hydraulics! Check all hydraulic lines and fittings before applying pressure. Relieve pressure before disconnecting hydraulic lines. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Fluid escaping from a very small hole can be almost invisible. Use paper or cardboard, NOT BODY PARTS, to check for leaks. Escaping fluid under pressure can have sufficient pressure to penetrate the skin causing serious injury. If hydraulic fluid is injected into the skin or eyes, seek immediate medical assistance from a physician familiar with this type of injury. Within a few hours gangrene can start to develop. DO NOT DELAY.

1. After using your implement for several hours, check all bolts to be sure they are tight.
2. Keep disk scrapers properly adjusted.
3. Clean implement on a regular basis. Regular and thorough cleaning will lengthen equipment life and reduce maintenance and repair.
4. Lubricate areas listed under “Lubrication” on page 40.
5. Replace any worn, damaged, or illegible safety labels by obtaining new labels from your Great Plains dealer.
Bleeding Fold Hydraulics (LC40 only)

To function properly, the hydraulics must be free of air. If hydraulics have not been bled, they will operate with jerky, uneven motions and could cause wings to drop rapidly during folding or unfolding. If hydraulics were not bled during initial implement setup or if you replace a part in hydraulic system during the life of the implement, complete the following procedures.

**Unfolded Bleeding**

*Refer to Figure 32*

1. Check hydraulic fluid level in tractor reservoir and fill to proper level. Add fluid to system as needed.
2. With implement unfolded and fold cylinders completely extended, disconnect rod end pins and swing the cylinders so they will not contact anything when extended.
3. Loosen rod end hose fittings at a JIC connection. Do not loosen an O-ring boss (ORB) connection for bleeding. Bleeding at an ORB damages the seal.
4. Slowly supply oil to rod end of fold cylinders until oil appears at loosened hose fitting. Tighten fitting and completely retract fold cylinders.
5. With cylinders completely retracted, loosen base end hose fittings at JIC connection.
6. Slowly supply oil to base end of fold cylinders until oil appears at loosened hose fitting. Tighten base end hose fitting and cycle fold cylinders in and out several times.
7. Re-pin cylinder rod clevises.

**WARNING**

*High Pressure Fluid Hazard:*

Only trained personnel should work on system hydraulics! Check all hydraulic lines and fittings before applying pressure. Relieve pressure before disconnecting hydraulic lines. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Fluid escaping from a very small hole can be almost invisible. Use paper or cardboard, NOT BODY PARTS, to check for leaks. Escaping fluid under pressure can have sufficient pressure to penetrate the skin causing serious injury. If hydraulic fluid is injected into the skin or eyes, seek immediate medical assistance from a physician familiar with this type of injury. Within a few hours gangrene can start to develop. DO NOT DELAY.
Row Unit Parallel

Arm Pivots (LC25/40)
Four grease fittings each row; 52 or 68 total
Type of Lubrication: Grease
Quantity: Until Grease emerges

Cultivator Shields (LC25/40)
Four grease fittings each row; 52 or 68 total
Type of Lubrication: Grease
Quantity: Until Grease emerges
Coulter Disc Scrapers (LC25/40)

One each row;
0, 13 or 17 total
See page 31 for alignment specifications.

Cylinder Base Pins (LC40 only)

One each wing;
2 total
Type of Lubrication: Grease
Quantity: Until Grease emerges

Wing Flex Link Bottom Pivots (LC40 only)

One grease fitting each wing;
2 total
Type of Lubrication: Grease
Quantity: Until Grease emerges
Wing Lower Link Arm Inner Pivots (LC40 only)

One grease fitting each wing; 2 total
Type of Lubrication: Grease
Quantity: Until Grease emerges

Wing Lower Link Arm Outer Pivots (LC40 only)

One grease fitting each wing; 2 total
Type of Lubrication: Grease
Quantity: Until Grease emerges

Wing Upper Link Arm Inner Pivots (LC40 only)

One grease fitting each wing; 2 total
Type of Lubrication: Grease
Quantity: Until Grease emerges
Wing Upper Link Arm Outer Pivots (LC40 only)

One grease fitting each wing; 2 total
Type of Lubrication: Grease
Quantity: Until Grease emerges

Coulter/Tire Jackscrew and Upper Pivot (LC25/40)

One grease fitting each row; 13 or 17 total
Type of Lubrication: Grease
Quantity: Until Grease emerges

Coulter/Tire Pivots (LC25/40)

One grease fitting each row; 13 or 17 total
Type of Lubrication: Grease
Quantity: Until Grease emerges

Coulter hubs (standard), Furrower disc hubs (option), and Barring-off disc hubs (option) are permanently lubricated.
Options

Row Unit Options
One of the following row Options must be specified with the original implement order.

<table>
<thead>
<tr>
<th>Row Type</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lister, Standard Length</td>
<td>10</td>
</tr>
<tr>
<td>Lister, Extended Length</td>
<td>20</td>
</tr>
<tr>
<td>Cultivator, Extended Length</td>
<td>30</td>
</tr>
<tr>
<td>Cultivator, Standard Length</td>
<td>40</td>
</tr>
<tr>
<td>Cultivator, Ext. Length, w/Tire</td>
<td>50</td>
</tr>
<tr>
<td>Cultivator, Std. Length, w/Tire</td>
<td>60</td>
</tr>
</tbody>
</table>

Kits are not presently available for converting a lister to/from a cultivator.

Barring-Off Discs
These discs cultivate and shape bed shoulders. They are intended for use only with (Option 30, 40, 50 or 60) cultivator rows. Order one per row (13 or 17 total).

<table>
<thead>
<tr>
<th>Description</th>
<th>Option</th>
<th>Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(B) Barring-Off Disc</td>
<td>-</td>
<td>591-034A</td>
</tr>
</tbody>
</table>

See “Barring-Off Adjustments (LC25/40)” on page 32.
Shields

Shields protect plants by throwing off extra dirt while cultivating.

<table>
<thead>
<tr>
<th>Description</th>
<th>Option</th>
<th>Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivator Shield Assembly</td>
<td>-</td>
<td>591-075A</td>
</tr>
</tbody>
</table>

See “Shield Adjustments (LC25/40)” on page 36.
## Appendix A - Reference Information

### Specifications and Capacities LC40

<table>
<thead>
<tr>
<th>Model</th>
<th>LC40-1236</th>
<th>LC40-1238</th>
<th>LC40-1240</th>
<th>LC40-1630 60 inch (152.4 CM) Bed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row Count</td>
<td>12 Rows (13 Row Units)</td>
<td>16 Rows (17 Row Units)</td>
<td>8 Rows (9 Row Units)</td>
<td></td>
</tr>
<tr>
<td>Row Spacing</td>
<td>36 inches (91.4 cm)</td>
<td>38 inches (96.5 cm)</td>
<td>40 inches (101.6 cm)</td>
<td>30 inches (76.2 CM)</td>
</tr>
<tr>
<td>Working (Frame) Width</td>
<td></td>
<td></td>
<td></td>
<td>41 feet 0 inches (12.5 M)</td>
</tr>
<tr>
<td>Swath</td>
<td>432 inches (1097.3 cm)</td>
<td>456 inches (1158.2 cm)</td>
<td>480 inches (1219.2 cm)</td>
<td>480 inches (1219.2 cm)</td>
</tr>
<tr>
<td>Transport width</td>
<td>26 feet 0 inches (7.92 m)</td>
<td>24 feet 8 inches (7.52 m)</td>
<td>24 feet 8 inches (7.52 m)</td>
<td>26 feet 0 inches (7.92 m)</td>
</tr>
<tr>
<td>Working Length (Maximum)</td>
<td></td>
<td></td>
<td></td>
<td>55.5 to 90.5 inches (141.0 to 229.9 cm)</td>
</tr>
<tr>
<td>Working Height</td>
<td></td>
<td></td>
<td></td>
<td>6 feet 2 inches (188.0 cm)</td>
</tr>
<tr>
<td>Transport Height</td>
<td></td>
<td></td>
<td></td>
<td>14 feet 8 inches (4.47 m) with 8 inches (20 cm) coulter clearance in transport</td>
</tr>
<tr>
<td>Minimum Tractor Rating</td>
<td>250 hp (125 kW)</td>
<td></td>
<td></td>
<td>320 hp (140 kW)</td>
</tr>
<tr>
<td>Hitch</td>
<td>3-Point Category III Wide or IV (N or W)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tool Bar</td>
<td>7 x 7 x 1/2 inches (18 x 18 x 1 cm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulic Circuits</td>
<td>Closed- or Open-Center, 1 Remote</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydraulic Power Required</td>
<td>2250 psi, 2 gal/min (155 bar, 8 litres/min)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight Range</td>
<td>11,000 to 13,000 pounds (5000 to 5900 kg)</td>
<td></td>
<td></td>
<td>13,000 to 15,500 lb (5900 to 7000 kg)</td>
</tr>
<tr>
<td>Row Down Pressure</td>
<td></td>
<td></td>
<td></td>
<td>350 to 540 pounds (159 to 245 kg)</td>
</tr>
<tr>
<td>Row Travel (Up - Down)</td>
<td>4 inches up; 2(\frac{3}{4}) inches down (+10 cm; -7 cm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coulter Depth</td>
<td>4.0+ (\frac{1}{2}) inch (10.2 + 13 mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Specifications and Capacities LC25

<table>
<thead>
<tr>
<th>Model</th>
<th>-0830</th>
<th>-0870</th>
<th>-0875</th>
<th>-0836</th>
<th>-0838</th>
<th>-0840</th>
<th>-08100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row Count</td>
<td>8 Rows (9 Row Units)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row Spacing</td>
<td>30 inches (76.2 cm)</td>
<td>70 cm</td>
<td>75 cm</td>
<td>36 inches (91.4 cm)</td>
<td>38 inches (96.5 cm)</td>
<td>40 inches (101.6 cm)</td>
<td>1 meter</td>
</tr>
<tr>
<td>Working (Frame) Width</td>
<td>21 feet 3 inches (6.5m)</td>
<td></td>
<td></td>
<td>27 feet 11 inches (8.5m)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swath</td>
<td>240 inches</td>
<td>560 cm</td>
<td>600 cm</td>
<td>288 inches</td>
<td>304 inches</td>
<td>320 inches</td>
<td>800 cm</td>
</tr>
<tr>
<td>Transport Width</td>
<td>21 feet 3 inches (6.5m)</td>
<td></td>
<td></td>
<td>27 feet 11 inches (8.5m)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Length</td>
<td>55 1/2 inches to 90 feet 1/2 inches (141 to 230 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Height</td>
<td>5 feet 4 1/2 inches (1.6m)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport Height</td>
<td>6 feet 4 1/2 inches (1.8m) with 8 inch ground clearance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Tractor Required</td>
<td>170 hp (125 kW)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hitch</td>
<td>3-Point Category III Wide or IV (N or W)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toolbar</td>
<td>7 x 7 x 3/8 inch (18 x 18 x 1cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight Range</td>
<td>5750 - 7050 pounds (2608 - 3198 kg)</td>
<td></td>
<td></td>
<td>6000 - 7300 pounds (2722 - 3583 kg)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row Unit Down Pressure</td>
<td>350 to 540 pounds (159 to 245 kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Row Travel (Up - Down)</td>
<td>4 inches up; 2 3/4 inches down (+10 cm; -7 cm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coulter Depth</td>
<td>4.0 ± 1/2 inch (10.2 ± 13 mm)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Tire Inflation Chart (LC25/40)

<table>
<thead>
<tr>
<th>Wheel</th>
<th>Tire Size</th>
<th>Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 50 or 60 Row</td>
<td>20.5X8.0-10</td>
<td>90 psi (620 kPa)</td>
</tr>
</tbody>
</table>

### Tire Warranty Information

All tires are warranted by the original manufacturer of the tire. Tire warranty information is found in the brochures included with your Operator’s and Parts Manuals or online at the manufacturer’s web sites listed below. For assistance or information, contact your nearest Authorized Farm Tire Retailer.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Web site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firestone</td>
<td><a href="http://www.firestoneag.com">www.firestoneag.com</a></td>
</tr>
<tr>
<td>Gleason</td>
<td><a href="http://www.gleasonwheel.com">www.gleasonwheel.com</a></td>
</tr>
<tr>
<td>Titan</td>
<td><a href="http://www.titan-intl.com">www.titan-intl.com</a></td>
</tr>
</tbody>
</table>
Dimensions (Field) LC25

Field Length
55.5 to 90.5 in
(141 to 229.9 cm)

Field Height
5 feet 4.5 inches
(1.6 m)

NARROW
30”, 70cm, 75cm
Field Width
21 feet 3 inches
(6.5 m)

WIDE
36, 38, 40, 1M
Field Width
27 feet 11 inches
(8.5 m)
Dimensions (Field) LC40

Field Width
41 feet 0 inches
(12.5 m)

Field Length
55.5 to 90.5 in
(141 to 229.9 cm)

Field Height
6 feet 2 inches
(188 cm)
Dimensions (Transport) LC40

Transport Length
55.5 to 90.5 in
(141 to 229.9 cm)

Transport Width
24 feet 8 inches or 26 feet 0 inches
(7.92 m or 8.13 m)

Transport Height
13 feet 4 inches
(4.06 m)
at zero clearance
Hydraulic Diagram LC40
## Torque Values Chart

<table>
<thead>
<tr>
<th>Bolt Size</th>
<th>Bolt Head Identification</th>
<th>Bolt Head Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade 2</td>
<td>Grade 5</td>
</tr>
<tr>
<td>in-tpi&lt;sup&gt;a&lt;/sup&gt;</td>
<td>N-m&lt;sup&gt;b&lt;/sup&gt; ft-lb&lt;sup&gt;d&lt;/sup&gt;</td>
<td>N-m</td>
</tr>
<tr>
<td>3/4 - 20</td>
<td>7.4 5.6</td>
<td>11 8</td>
</tr>
<tr>
<td>7/16 - 28</td>
<td>8.5 6</td>
<td>13 10</td>
</tr>
<tr>
<td>1/2 - 18</td>
<td>15 11</td>
<td>24 17</td>
</tr>
<tr>
<td>5/16 - 24</td>
<td>17 13</td>
<td>26 19</td>
</tr>
<tr>
<td>5/8 - 16</td>
<td>27 20</td>
<td>42 31</td>
</tr>
<tr>
<td>3/8 - 24</td>
<td>31 22</td>
<td>47 35</td>
</tr>
<tr>
<td>7/16 - 14</td>
<td>43 32</td>
<td>67 49</td>
</tr>
<tr>
<td>7/16 - 20</td>
<td>49 36</td>
<td>75 55</td>
</tr>
<tr>
<td>3/4 - 13</td>
<td>66 49</td>
<td>105 76</td>
</tr>
<tr>
<td>1/2 - 20</td>
<td>105 79</td>
<td>165 120</td>
</tr>
<tr>
<td>5/8 -11</td>
<td>130 97</td>
<td>205 150</td>
</tr>
<tr>
<td>5/8 - 18</td>
<td>150 110</td>
<td>230 170</td>
</tr>
<tr>
<td>3/4 - 10</td>
<td>235 170</td>
<td>360 265</td>
</tr>
<tr>
<td>3/4 - 16</td>
<td>260 190</td>
<td>405 295</td>
</tr>
<tr>
<td>7/8 - 9</td>
<td>225 165</td>
<td>585 430</td>
</tr>
<tr>
<td>7/8 - 14</td>
<td>250 185</td>
<td>640 475</td>
</tr>
<tr>
<td>1 - 8</td>
<td>340 250</td>
<td>875 645</td>
</tr>
<tr>
<td>1 - 12</td>
<td>370 275</td>
<td>955 705</td>
</tr>
<tr>
<td>1 1/4 - 7</td>
<td>480 355</td>
<td>1080 795</td>
</tr>
<tr>
<td>1 1/8 - 12</td>
<td>540 395</td>
<td>1210 890</td>
</tr>
<tr>
<td>1 1/4 - 7</td>
<td>680 500</td>
<td>1520 1120</td>
</tr>
<tr>
<td>1 1/4 - 12</td>
<td>750 555</td>
<td>1680 1240</td>
</tr>
<tr>
<td>1 3/8 - 6</td>
<td>890 655</td>
<td>1990 1470</td>
</tr>
<tr>
<td>1 3/16 - 12</td>
<td>1010 745</td>
<td>2270 1670</td>
</tr>
<tr>
<td>1 1/2 - 6</td>
<td>1180 870</td>
<td>2640 1950</td>
</tr>
<tr>
<td>1 1/2 - 12</td>
<td>1330 980</td>
<td>2970 2190</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>mm x pitch&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Class 5.8</th>
<th>Class 8.8</th>
<th>Class 10.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>in-tpi&lt;sup&gt;a&lt;/sup&gt;</td>
<td>N-m ft-lb</td>
<td>N-m ft-lb</td>
<td>N-m ft-lb</td>
</tr>
<tr>
<td>M 5 X 0.8</td>
<td>4 3</td>
<td>6 5</td>
<td>9 7</td>
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a. in-tpi = nominal thread diameter in inches-threads per inch
b. N·m = newton-meters
c. mm x pitch = nominal thread diameter in mm x thread pitch
d. ft-lb = foot pounds

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

Great Plains Manufacturing, Incorporated warrants to the original purchaser that this tillage 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 under normal service conditions for personal use. 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. 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’ judgment 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. Soils containing rocks, stumps or obstructions may void the warranty in its entirety.

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.

Warranty does not cover damage caused by acts of God or accidents.

Warranty does not cover units with excess use or units used to custom farm.
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