

Predelivery Instructions

CPH
Center Pivot Hitch

Great Plains

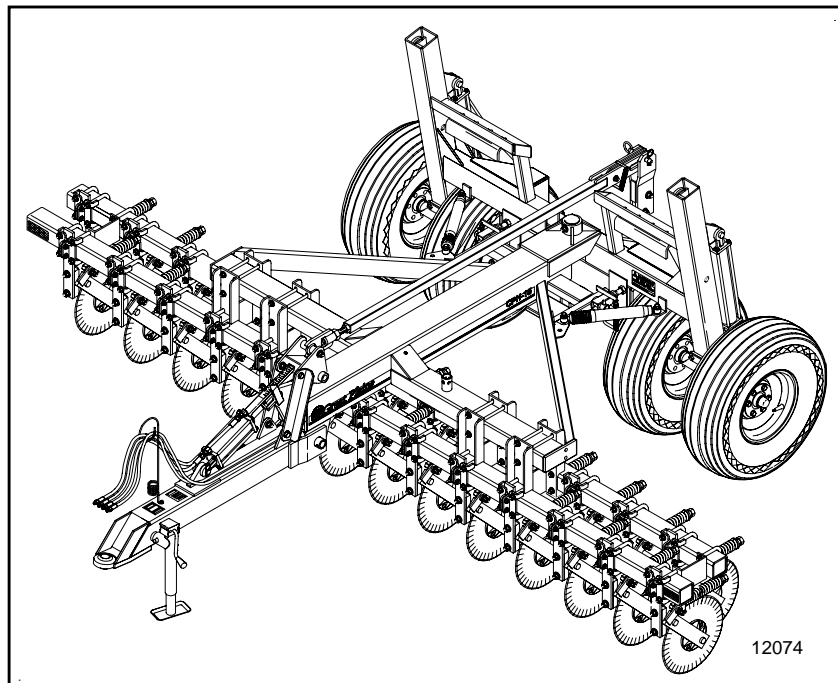
Manufacturing, Inc.

P.O. Box 5060 • Salina, Kansas 67402-5060



Read this 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!

Great Plains



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

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Important Safety Information

For your safety, thoroughly read “**Important Safety Information**” and “**Operating Instructions**” in the operator’s manual before proceeding.

Safety Notations

The SAFETY ALERT SYMBOL indicates that there is a potential hazard to personal safety involved and extra safety precautions 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.

Watch for the following safety notations throughout this manual.

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.

WARNING!

Indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.

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.

Safety Rules

Most accidents are the result of negligence, carelessness or failure to follow safety precautions. Though your implement is designed with many built-in safety features, safety precautions are mandatory to prevent accidents.

Introduction

Great Plains Manufacturing wants you to be satisfied with any new machine delivered by the Great Plains Trucking network. To ease the assembly task and produce a properly working machine, read this entire manual before assembling or setting up new equipment.

Description of Unit

The center pivot hitch is a pull-type tillage implement designed to tow a Great Plains three-point drill. No-till coulters are mounted on the hitch. Each coulters is aligned with a drill opener. Each coulters tills a strip for a drill opener. The hitch has two hydraulic circuits: one for raising and lowering the coulters and one for raising and lowering the drill.

Intended Usage

Use the center pivot hitch in no-till field conditions. Use the hitch only with a Great Plains three-point drill. Do not modify the hitch for use with drills or attachments other than those specified by Great Plains.

Using This Manual

This manual was written to help you assemble and prepare the new machine for the customer. The manual includes instructions for assembly and setup. Read this manual and follow the recommendations for safe, efficient and proper assembly and setup.

An operator's manual is also provided with the new machine. Read and understand "**Important Safety Information**" and "**Operating Instructions**" in the operator's manual before assembling the machine. As a reference, keep the operator's manual on hand while assembling.

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

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

Definitions

The following terms are used throughout this manual.

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

NOTE: Useful information about the preceding topic.

Assembly and Setup Assistance

To order additional copies of predelivery instructions or operator's and parts manuals, write to the following address. Include model numbers in all correspondence.

If you do not understand any part of this manual or have other assembly or setup questions, assistance is available. Contact

Product Support

Great Plains Mfg. Inc., Service Department

P.O. Box 5060

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Section 1 Assembly

The following headings are step-by-step instructions for assembling the center pivot hitch. Begin with *Tools Required* and *Pre-Assembly Checklist* to make sure you have all necessary parts and equipment. Then proceed with *Assembling Center Pivot Hitch*. Follow each step to make the job as quick and safe as possible and produce a properly working machine.

The center pivot hitch is shipped via flat bed truck. It is the dealer's responsibility to unload the new machine. Unload all equipment before beginning assembly. Do not attempt any assembly work while the center pivot hitch is on the truck.

Tools Required

- Forklift or overhead hoist
- General hand tools

Pre-Assembly Checklist

1. Read and understand "**Important Safety Information**" on page 1 before assembling.
2. Have at least two people on hand while assembling.
3. Make sure the assembly area is level and free of obstructions (preferably an open concrete area).
4. Have all major components.

5. Have all fasteners and pins shipped with the hitch.

IMPORTANT: If a pre-assembled part or fastener is temporarily removed, remember where it goes. Keep the parts separated.

6. Have a copy of the parts manual on hand. If unsure of proper placement or use of any part or fastener, refer to the parts manual.
7. Check that all working parts are moving freely, bolts are tight, and cotter pins are spread.
8. Check for proper tension and alignment on all drive chains.
9. Check that all safety decals and reflectors are correctly located and legible. Replace if improperly located or damaged. Refer to *Safety Decals*, "**Important Safety Information**" in the operator's manual.
10. Inflate tires to recommended pressure as listed on the *Tire Inflation Chart* on the "**Appendix**" on page 7. Tighten wheel bolts as specified on *Torque Values Chart* on the "**Appendix**" on page 7.

Section 1 Assembly

Assembling Center Pivot Hitch

Refer to Figure 1.

1. Unstrap the transport tires (1) from hitch. Assemble tires to outer hubs with 1/2-by-1-inch lug bolts (2).
2. Center coulters toolbar assembly (3) under hitch (4) and fasten to upper coulters-toolbar support with 5/8-by-8-inch bolts (5), flat washers (6), lock washers (7) and nuts (8).

NOTE: Use extra care when assembling coulters toolbar to hitch. It is critical that coulters are centered under center pivot hitch for proper tracking with drill. A 12-foot hitch with 7 1/2-inch row spacing is the only unit with a coulters toolbar at the center of hitch. All other coulters toolbars will have a gap at the center of hitch.

3. Bolt hose loop (9) onto a coupler nut welded near front of hydraulic tongue (10). Use a 1/2-by-1-inch bolt (11), two flat washers (12) and a lock washer (13).

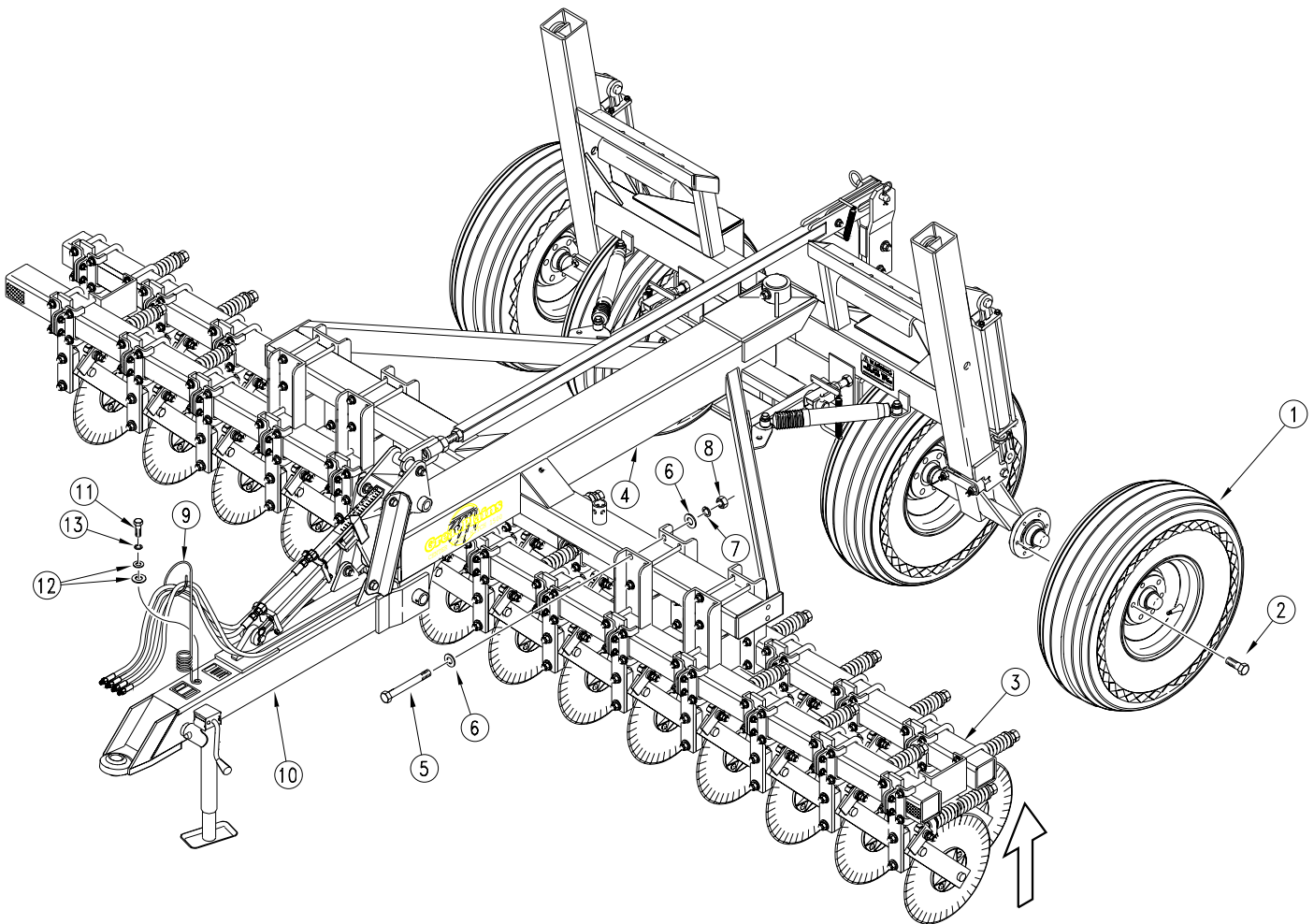


Figure 1
Center Pivot Hitch

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Section 2 Setup

This section covers hitching the center pivot hitch to a tractor and bleeding the hitch hydraulics.

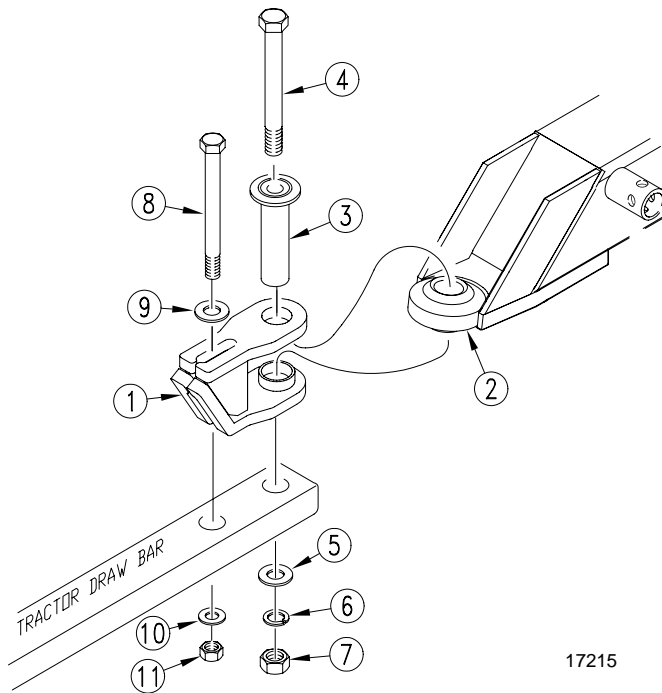
Hitching Tractor to CPH



DANGER!

You may be severely injured or killed by being crushed between the tractor and drill. Do not stand or place any part of your body between drill and moving tractor. Stop tractor engine and set park brake before installing the hitch pin.

1. Place hitch weldment (1) over ball swivel on hitch tongue (2). Hold hitch weldment in place by inserting spacer tube (3) through hitch clevis and ball swivel.
2. Back tractor up to hitch and bolt hitch weldment to tractor drawbar using 1-by-10-inch bolt (4), large flat washer (5), lock washer (6), and nut (7).
3. Use 3/4-by-9-inch bolt (8) to bolt hitch weldment through its slotted hole and onto secondary hole of tractor drawbar. Install a 3/4-inch flat washer (9) next to top slotted hole and fasten with a lock washer (10) and nut (11). Tighten both bolts.



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Figure 2-1
Drawbar Assembly Illustration

4. Securely attach safety chain to tractor-drawbar frame.
5. Remove jack from stob on side of hitch tongue and place in transport position on frame brace. See Figure 2-2.

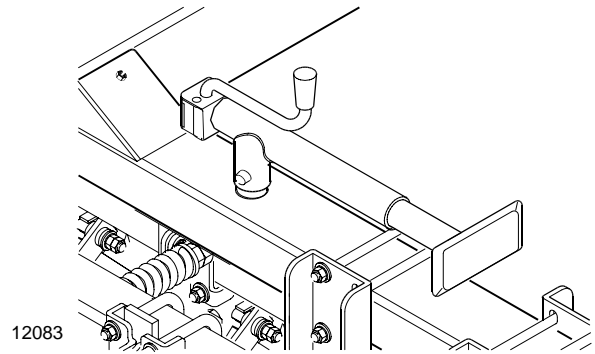


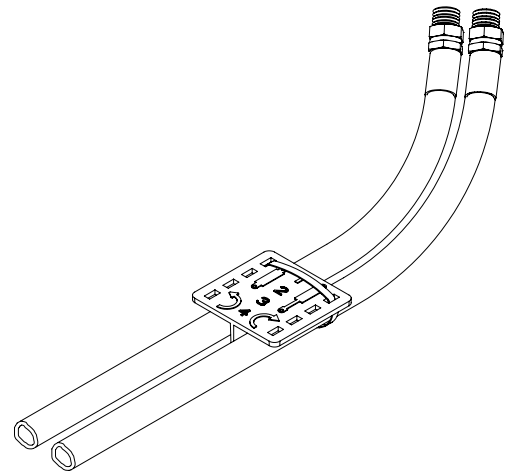
Figure 2-2
Jack in Transport

Hydraulic Hose Hookup

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

	Hydraulic Function
Red	Tongue Cylinders
Blue	Transport Lift Cylinders
Orange	Marker Cylinders

To distinguish hoses on the same hydraulic circuit, refer to plastic hose holder. See Figure 2-3. Hose under extend-cylinder symbol feeds cylinder base ends. Hose under retracted-cylinder symbol feeds cylinder rod ends.



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Figure 2-3
Hydraulic Hose Color Ties

Connect hydraulic hoses from tongue cylinder to one set of tractor outlets. Connect hoses from transport-lift cylinders to another set of tractor outlets.

Bleeding the Hydraulics



WARNING!

Escaping fluid under pressure can have sufficient force to penetrate the skin. Check all hydraulic lines and hoses before applying pressure. Fluid escaping from a very small hole can be almost invisible. Use paper or cardboard, not body parts, to check for suspected leaks. If injured, seek medical assistance from a doctor that is familiar with this kind of injury. Foreign fluids in the tissue must be surgically removed within a few hours or gangrene will result.

Hydraulics must be bled of air before hitch operation. Bleed hydraulics during initial hitch setup. If the hydraulics are not bled, the cylinders will move with jerky, uneven motions.

Bleeding Tongue Cylinder

1. Check hydraulic fluid in tractor reservoir and fill to proper level. Add fluid to system as needed. Tongue cylinder capacity is one-half gallon (1.89 liters).
2. Raise and safely support hitch, transport frame and front tongue.
3. Unpin rod end of tongue cylinder. Block, wire or otherwise safely support cylinder so when rod end is fully extended it does not contact anything.
4. Cycle cylinder completely in and out at least three times to purge air from cylinder and hoses.
5. Fully extend cylinder and repin rod end.
6. Recheck tractor reservoir and fill to proper level.

Bleeding Transport Lift Cylinders

The transport-lift cylinders are rephasing cylinders and require a special procedure for bleeding air from the circuit. Read and follow procedure carefully. Cylinders will not function properly with air in the hydraulic circuit.

1. Check hydraulic fluid in tractor reservoir and fill to proper level. Add fluid to system as needed. Transport-lift-cylinder capacity is about 2 gallons (7.57 liters).
2. Jack up and support hitch frame.
3. Remove 1/2-inch nylock nuts on spring side of cylinder-support brace. Unpin cylinders. Do not alter position of jam nuts on center of support-brace bolts.
4. Turn cylinders to a position where rod ends are higher than base ends. Support cylinders in a safe location.
5. Start tractor and run engine at idle speed. With rod ends higher than base ends, hydraulically extend cylinders. After cylinder rods are fully extended, continue to hold control lever for one minute before hydraulically retracting cylinders.

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