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

Dealer Contact Information

Name: ________________________________
Street: ______________________________
City/State: __________________________
Telephone: ___________________________
Email: ______________________________
Dealer’s Customer No.: __________________________

⚠️ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov
To our customer:

Congratulations on the purchase of your Name of Company product. Name of Company welcomes you to its growing family of new product owners. Your product has been designed and built by skilled workers using quality materials.

Your dealer has performed the necessary pre-delivery service to your machine, and will advise you of the proper maintenance and operating practices that will give you long, satisfactory use of your machine. Do not hesitate to contact your dealer when you have a question related to your machine.

Your machine has been designed to run efficiently in most operating conditions, and will perform relative to the service it receives. If you need customer service or repair parts, contact your dealer who has trained personnel, repair parts, and equipment specially designed for Name of Company products.

Read this manual carefully before using the machine. It will familiarize you with safety, operation, adjustments, and maintenance of your new equipment. This manual must always be kept with your machine.

Name of Company wants you to be satisfied with your product. 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 he is aware of any problems so he 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, USA 67402-5060

Great Plains reserves the right to revise and improve its products at any time. This publication describes the state of this product at the time of its publication, and may not reflect the product in the future. The content of this publication may be changed without notice.
# Table of Contents

- Introduction ........................................... 1
- Safety Information ................................. 3
  - Before Getting Started .......................... 3
  - Operation ......................................... 3
    - Handling and Disposing of Chemicals ........... 4
    - Operation Noise Hazard ....................... 4
    - PTO ........................................... 4
  - Maintenance ....................................... 4
    - Tire Safety .................................... 4
    - High Pressure Fluids ......................... 6
  - Transporting ..................................... 6
    - Safety Chain .................................. 7
    - Safety Lights and Devices .................... 7
  - Shutdown and Storage ......................... 7
  - Proper Waste Disposal ....................... 7
- Safety Decals ........................................ 9
- Preparation and Setup ............................ 11
- Operation .......................................... 13
- Maintenance ........................................ 15
- Specifications ..................................... 17
- Warranty .......................................... 19
  - Warranty ....................................... 20
  - Warranty ....................................... 22
Introduction

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

Description of Unit

The 12 and 16 Row Yield-Pro® Planters are a pull-type planting implement for use in conventional till, minimum-till or light no-till conditions. The 12 and 16 Row Yield-Pro® Planters can be outfitted with optional unit mounted coulters. The unit mounted coulters make it suitable for light to moderate no-till conditions only. The 12 and 16 Row Yield-Pro® Planters are outfitted with 25 series, side-depth-control row-units. The 12 and 16 Row Yield-Pro® Planters fold for transport.

Intended Usage

Use the planter to seed production-agriculture crops only. Do not modify the planter for use with attachments other than Great Plains options and accessories specified for use with the planter.

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.

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 specified.

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
Salina, KS 67402-5060

Unloading

1. Un-bolt pull bars from the upper rack weldment and remove from top of rack.
2. Secure the weight of each row unit then un-bolt them from the upper rack weldment, remove from rack using forklift or overhead hoist with straps.
3. Un-bolt and remove large tires
4. Un-bolt and remove large sub-weldment from the base rack.
5. Remove cardboard cartons, fertilizer tanks, markers, press wheels, and other small components from the bottom of the rack.
6. Mainframe: On each pivot weldment, remove the U-bolt holding the unit in rotated position and secure the weight of the unit with forklift or overhead hoist.
7. Lift entire unit so that it rotates about the 3 pivot weldments, use the (2) u-bolts that were just removed to hold the pivot weldments in place to secure, leaving the unit parallel with the ground.
8. With the weight of the unit secured each wing frame should be un-bolted. The Wings must be lifted-up, individually, and placed in the U-plate hanger provided. (this U-plate supports the wing frames from falling to the ground until the front Caster wheels can be installed.
9. Install hitch.
10. The mainframe can then be unbolted from the three pivot weldments and can be lifted-up, off of the rack.
Safety Information

The safety symbol indicates a potential safety hazard to persons operating or near the machine and advises on how to avoid it.

The notice symbol indicates a potential for machine or property damage from operator error and advises on how to avoid misuse.

The information symbol indicates useful - but not crucial - information for machine operation, assembly, or adjustment.

Before Getting Started

1. Read this manual in its entirety before attempting to start and operate the machine.
2. Only use operators that are thoroughly trained by the owner or trained by someone with the owner’s consent. The operator must be familiar with all functions of the tractor and attachments, and be able to handle emergencies quickly.
3. Maintain attention on operation at all times. Do not operate if using a smart phone, tablet, or similar electronic device, and never operate machine while impaired by alcohol, medication, any controlled substance, or while fatigued.
4. Do not ever allow passengers to ride the machine at any time, for any reason.
5. Before operation, make sure that all tractor cab levers are in their neutral positions and that the parking brake is engaged.
6. Check brakes, link pins, and other mechanical parts for wear before using machine.
7. Never wear loose or bulky clothing around machine. Use additional safety equipment, such as hard hats, eye and ear protection, safety boots, etc., as needed.
8. Do not modify the machine. Unauthorized modification can result in unsafe conditions that lead to machine damage or personal injury.

Operation

1. Always stop the tractor, put in Park and turn off engine before leaving the cab. Dismounting from a moving tractor can cause serious injury or death.
2. Consider turning radius of tractor and implement in the field. Turning tractor too tight can cause hitched implement to ride up on wheels which can result in injury or equipment damage.
3. Pull machine only from the hitch at the end of the tongue. Never pull from jack stand, safety chain, or any point other than the hitch.
4. Never leave the tractor cab unattended while the implement is running. Remove key and turn off tractor before exiting the tractor cab.
5. Watch your surroundings at all times. Do not operate with bystanders nearby, and avoid contacting overhead obstructions.
6. Check that all guards and shields are undamaged, installed, and secure before operating implement.
7. Keep children out of the work area. Do not operate or turn on machine while children are in the area.
8. Do not operate near ditches, holes, steep slopes, embankments, or other surfaces which may collapse under the machine's weight or tip the machine over.
9. Never stand between tractor and implement unless parking brake is applied.
Handling and Disposing of Chemicals

Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil and property.

1. Read chemical manufacturer’s instructions carefully, and then take appropriate precautions before use.
2. Wear protective clothing.
3. Wash hands and face before eating after working with chemicals. Shower as soon as application is completed for the day.
4. Apply only with acceptable wind conditions. Make sure wind drift of chemicals will not affect any surrounding land, people or animals.
5. Dispose of unused chemicals and chemical waste as specified by the manufacturer. Observe all the local ordinances and regulations in your area.

Operation Noise Hazard

1. Use proper ear protection like headphones or earplugs while working.

PTO

1. Wait until all moving components have completely stopped before adjusting, cleaning, or servicing any PTO driven equipment.
2. Before installing or using PTO driven equipment, read the tractor manual and review the safety labels attached to the equipment.
3. When operating stationary PTO driven equipment, always apply the parking brake and place chocks behind wheels.
4. Stay clear of and never step over any rotating parts.

Maintenance

1. Understand procedure before doing work. Use proper tools and equipment.
2. Work in a clean, dry area.
3. Lower the implement. Put tractor in Park, turn off engine. To prevent unauthorized starting, remove key before performing maintenance or service work.
4. If work must be performed with wings raised, set the wing tilt locks to the road position.
5. Make sure all moving parts have stopped and all system pressure is relieved.
6. Relieve hydraulic pressure before disconnecting hydraulic lines or performing any work on the system.
7. Do not work underneath any hydraulically supported components. Hydraulics can settle, leak, or be accidentally lowered. If working underneath hydraulically supported components is necessary, secure implement with stands or suitable blocking beforehand.
8. Disconnect electronic monitor and lighting harness from the tractor before servicing or adjusting electrical systems.
10. Remove buildup of grease, oil, or debris.
11. Check and replace worn brake lines as needed.
12. Remove all tools and unused parts from implement before operation.

Tire Safety

1. Check tires for cuts, bulges, and correct pressure. Replace worn or damaged tires.
2. Tire changing can be hazardous and must be performed by trained personnel using correct tools and equipment.
3. Tire explosion and/or serious injury can result from over inflation. Do not exceed tire inflation pressures.
4. When removing and installing wheels, use wheel-handling equipment adequate for weight involved.
5. Tighten wheel bolts only to the specified torque.
High Pressure Fluids

1. Escaping fluid from holes in hydraulic lines is difficult to spot. Do not use your hands or bare skin to search for suspected leaks; instead, use a piece of cardboard or wood. If injured by escaping hydraulic fluid, see a medical professional immediately. Exposure can result in gangrene or severe allergic reaction.

2. Check that hydraulic fittings are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.

3. Wear protective gloves and safety glasses or goggles when working with hydraulic systems.

Transporting

1. As with transporting any piece of heavy machinery, comply with all local laws and regulations before and during transport process.

2. Transport only at recommended transport speed for implement. Some rough terrains require a slower speed. Sudden braking can cause a towed load to swerve and upset.

3. Before towing implement on roads, make sure to empty out all material from the hoppers or boxes.

4. Know transport height and width of implement.

5. Do not tow an implement that, when fully loaded, weighs more than 1.5 times the weight of towing vehicle.

6. Keep clear of overhead power lines and other obstructions when transporting.

7. Do not fold or unfold the implement while the tractor is moving.

8. Reduce speed when turning, and make as wide a turn as possible. Turning tractor too tight can cause implement to tip over.

9. When towing on a trailer, secure implement with tie downs and chains.

10. When towing on a trailer, sudden braking can cause a trailer to swerve and upset. Reduce speed if trailer is not equipped with brakes.

Safety Chain

1. Use a chain with a strength rating equal to or greater than the gross weight of towed machinery.

2. Replace chain if any links or end fittings are broken, stretched or damaged.

3. Do not use safety chain for towing.

Safety Lights and Devices

1. Always use safety lighting. Slow-moving tractors and towed machinery can create a hazard when driven on public roads. They are difficult to see, especially at night.

2. If equipped, use flashing warning lights and turn signals whenever driving on public roads.

3. Use safety devices provided with implement.

4. Keep safety lights and signs clean and visible from front and rear of machine.

5. Keep lights in operating condition.

Shutdown and Storage

1. Park the tractor and implement on a solid, level surface where children normally do not play.

2. Fold and tilt wings.

3. Put tractor in park or set the parking brake. Turn off engine and remove switch key to prevent unauthorized starting.

4. Wait for all components to come to a complete stop before leaving the operator’s seat.

5. Turn lockout valve and wing lock levers to locked position to prevent the wings from lowering.

6. Detach the tractor. Secure the implement using blocks.

Proper Waste Disposal

1. Dispose of waste properly to avoid threatening the environment and ecology. Potential harmful waste includes oil, fuel, filters, and batteries.

2. Use a leak-proof container for draining fluids. Do not use a food or beverage container that may be mistaken for a consumable product.

3. Do not drain or pour waste onto the ground, down a drain, or into any water source.

4. Contact your local environmental or recycling center for the proper way to recycle or dispose of waste.
Assembly

Follow each step to make the job as quick and safe as possible and produce a properly working machine.

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 Yield-Pro® Planter is on the truck.

**Tools Required**
- Basic Hand Tools
- Forklift or other lifting implement

**Pre-Assembly Checklist**
2. Have at least two people on hand while assembling.
3. Make sure 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 Yield-Pro® Planter.
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 located correctly and legible. Replace if improperly located or damaged. Refer to “Safety Decals” in the operator’s manual.
10. Inflate tires to recommended pressure as listed on the “Tire Inflation Chart,” page 44. Tighten wheel bolts as specified on “Torque Values Chart,” page 44.

**Unload Machine from Rack**

Unload all small loose pieces from rack.

**Pull Bars**

Using forklift or other implement, remove pull bars from top of rack.

**Center Frame Tires**

Remove bolts securing planter tire to rack. Once bolts are removed, remove bar securing tire. Carefully roll tire from rack. After removal, secure tires in a safe place.

**Tire Weight**

Tires are extremely heavy. It may take more than one or two people to move each tire. Use extreme caution.
Opener Rack Using Forklift

Attach lift straps to top portion of rack. Remove bolts securing top portion of rack to bottom of rack. Obey all safety instructions from lifting equipment manufacturer. Be sure lift straps are securely attached before lifting. Using forklift, carefully lift top of rack from rack.

Dual Hopper

Remove dual hopper from rack using forklift or other lifting implement. Carefully set dual hopper aside. It will be attached to planter later during assembly process.

Planter Frame

Once hopper is removed from rack, begin loosening bolts securing planter frame to rack.

Keep Bolts Inserted

Do NOT completely remove bolts. Bolts will hold frame in place until frame is removed from rack.

Using a pair of folk lifts, begin attaching lift straps to planter frame. Make sure both sets of lift straps are securely attached to the frame.

If not already done, finish loosening bolts securing planter frame to rack.

Heavy Machinery Requirement

To avoid damage to the implement, it will be necessary to use a third forklift or tractor to steady frame.

Secure Lift Straps

Obey all safety instructions from lifting equipment manufacturer. Be sure lift straps are securely attached to implement before lifting.

Pin tongue of planter frame to third forklift. Raise tongue slightly so tongue is level with planter frame. Carefully raise planter frame from rack. Frame should be level with the ground.

While frame is raised, use a tractor or other implement to pull rack out from under frame. Keep frame raised while attaching planter tires and parking stand.
Planter Tires
Remove wheel lugs from planter tire hub assembly.

Insert and attach spindle and hub assembly into frame axle. Secure hub assembly to frame axle with crossbolt (1).

Attach half of wheel trigger sensor plate to hub assembly.

Check Measurements
One measurement will be considerably less than the other.

Parking Stand
Remove pin rolls, pin lynch, and flat washers from parking support pin. Remove parking support pin from parking stand. Keep all pieces for reuse.

Align holes in parking stands with bottom hole in planter tongue.

Once parking stand and tongue are aligned, insert parking support pin along with washers as shown below.

Fully Install Components
Spindle and hub assembly are shown not fully installed. Be sure to slide spindle in and secure with crossbolt.

Insert pin rolls and pin lynch into parking support pin. Remove pin securing planter tongue to forklift. Remove lift strips from around the frame.
Gauge Wheel Tires
Attach lift straps to right-hand wing frame. Be sure lift straps are attached securely to frame and weight is evenly distributed.
Unlock wing frames from tongue assembly.
Using forklift or other implement, carefully pull right-hand wing frame away from planter main frame.
Locate right-hand parallel arm assembly.

Guide Block Placement
Parallel arm assemblies come in a right-hand and left-hand set. Each assembly has guide blocks that hold the tongue in transport. Guide blocks go towards center of planter.
Attach lift straps to right-hand parallel arm assembly.
Remove caster swivel pivot pin from parallel arm assembly. Keep all pieces for reuse.

Wing Joint
1. Align holes in caster (3) with hole in wing frame.
2. Insert caster swivel pivot pin (7) through top of caster (3) and through wing frame.
3. Slide washer (2) between bottom of wing frame and bottom of caster (3).
4. Continue inserting caster swivel pivot pin (7) through washer (2) and bottom of caster (3). Attach washer (5), lock washer (4), and hex nut (6) to bottom of caster swivel pivot pin (7). Tighten hex nut (6).
5. Secure caster swivel pivot pin (7) to caster (3) using bolt (1) and nut (8).

Remove wheel lugs from hub assembly.
Attach gauge wheel tire to lower caster weldment so that wheel's caster vertical shaft is centered over gauge wheel tire.

Secure gauge wheel tire to lower caster weldment using wheel lugs.
Repeat steps 1-14 on opposite wing frame to complete gauge wheel tire installation.
**Pullbar Weldments**

Locate pullbar weldment. Position pullbar weldment on forklift to make pullbar assembly easier.

1. Align hole in adjustable end of pullbar weldment with hole in wing frame.
2. Attach pullbar weldment to wing frame using pin.
3. Slide washer (3) on to bottom of pin (2). Cover bottom of pin with hose support weldment (1).
4. Secure hose support weldment (1) to pin (2) with cotter pin (4).

6. Align hole in pullbar weldment with hole in tongue.
7. Secure pullbar to tongue using pin, washer, and pin roll.
8. Remove forklift from under pullbar.

**Hydraulic Cylinders**

Attach base end of hydraulic cylinder (3) to wing frame (1). Attach rod end of hydraulic cylinder to gauge wheel caster mount. Complete both steps to install hydraulic cylinders on both sides.

Do not remove pullbar weldment from forklift.

**Route Hoses and Wires**

At this point in assembly, pull hoses and wires through pullbars. Be sure to get all hoses, point row clutch wires, and lighting wires together and pull all at once. Route lines through hose support shown in Figure 43. Cover hoses with protective wrap on each end of pullbar.

5. Attach other end of pullbar weldment to tongue.
Seed Delivery Tubes
Attach seed delivery tubes to air system standoff brackets using bolt, washer, and hex nut.

Air Hose Support
Remove hardware on left-hand toolbar.
Keep all pieces for reuse.
Determine which is left-hand air hose support.

Determine Correct Hosing
The air hose support comes in a left-hand and right-hand pair. Air hose support will not attach to toolbar if trying to install right-hand air hose support to left-hand toolbar.

Attach air hose support to toolbar.
Secure air hose support to toolbar with previously removed hardware.

Contact Drive Wheel
1. Unscrew bolts from both sets of clamps. Remove nuts, washers, and bolts. Keep all pieces for reuse.
2. Locate contact drive wheel assembly.
3. Attach lift strap to contact wheel drive assembly.
4. Carefully raise contact wheel drive assembly to be attach to planter frame.
5. Secure end of contact wheel drive assembly to planter frame using clamp and hardware removed in step 1.
6. Finish attaching contact drive wheel assembly to planter frame. Use clamp and hardware removed in step 1.
7. Remove lift straps from contact drive wheel assembly.
8. Flip contact drive wheel upright.
9. Attach link rod to contact drive wheel. Use clevis pin to secure link rod to contact drive wheel.
   Secure clevis pin with cotter pin.
10. Attach spring to contact drive wheel using clevis pin to secure spring to contact drive wheel.
    Secure clevis pin with cotter pin.

To make adjustments to the contact drive wheel after installation, refer to your operator manual.
### Lights
1. Locate and remove bolts on left-hand side light bracket that will secure lights to planter frame.

NOTE: Lights come in a pair of left-hand and right-hand lights.

2. Determine which light is left-hand light. Left-hand light will attach to planter with amber light toward the front and red and amber lights toward the rear.

3. Attach light to light bracket.


5. Complete steps 1-4 on opposite side of planter.

### Seed Tube Support Weldment
Remove hardware from seed tube support bracket.

Attach seed tube support weldment to planter main frame.

Secure seed tube support weldment to planter main frame using hardware removed in step 1.
**Hopper**

Using forklift or other implement, place hopper (1) and support frame in rear axle frame.

Secure hopper and support frame to rear axle frame using supplied u-bolts.

**Walkboard Ladder**

1. Locate walkboard ladder. Remove u-bolts and hardware from ladder.
2. Keep all pieces for reuse.
3. Attach walkboard ladder to left-hand side of walkboard support weldment.
4. Use previously remove u-bolts and hardware to secure ladder to weldment.
5. Remove pin wire snap lock from walkboard ladder.

1. Using forklift or other implement, carefully raise walkboard.
2. Remove marker pivot pin and hardware from walkboard.
3. Keep all pieces for reuse.
4. Using forklift or other implement, carefully raise walkboard.
5. Slide walkboard onto walkboard support weldment.
6. Replace marker pivot pin and hardware.
7. Secure walkboard to walkboard ladder by replacing pin wire snap lock.
8. Assemble walkboard handrails as shown in Figure 84.
9. Handrails secure to walkboard as shown in Figure 83. Use bolts and nuts to secure.
10. Use bolts and nuts to secure pieces of walkboard handrails to each other.

**NOTE:** Be sure that top movable center rail is installed with brackets as shown. Verify that latch pin fully engages in lock plate when up.
## Openers

*NOTE: The YP Planter comes with twelve standard opener mounts and four special opener mounts to be mounted on the frame.*

1. Locate all openers and hardware. Determine which openers are standard. *NOTE: Standard opener mount is shown in Figure 87.*

*NOTE: Before attaching openers to wing frames, note the chart below. This chart maps out the location for each row unit. Use this chart when attaching openers to wing frames.*

2. To attach openers, start at pin center on each wing frame and measure the distance for each opener.

*NOTE: When attaching LH offset opener and RH offset opener, the straight side plate is toward the outside and the jogged side plate goes toward the inside.*

**IMPORTANT:** To correctly position the two innermost openers, start at pin center on each wing frame and measure in towards the center.

*NOTE: When attaching the fifth opener from the center on each wing frame, it will be necessary to cut a notch so that the openers clear the air pipe support brackets.*

3. Attach openers to planter wing frames. Use u-bolts and hardware to secure openers to wing frames.

## Markers

1. Attach first section of marker arm (5) to wing frame (7). *NOTE: First section marker arms come in a pair of left and right. When the correct marker arm has been attached to the correct corresponding wing frame, marker shear bolt (8) will go toward planter center.*

Use bolts (6) and hardware to secure marker arm to frame.

6. Secure hydraulic cylinder (4) to wing frame (7) with cylinder pin and cotter pin.

7. Attach second section marker arm to first section marker arm. *NOTE: Second section marker arms come in a pair of left and right. When the correct marker arm has been attached to the correct corresponding wing frame, marker shear bolt (8) will go toward planter center.*

2. Partially insert second section into first section marker arm.

3. Align holes in first and second section marker arms.

4. Insert marker shear pivot pin through holes. Slide washer over pivot pin and secure with cotter pin.

5. Slide washer up from bottom of marker shear pivot pin and secure with cotter pin.

6. Secure first section marker to second section marker arm using shear bolt and hardware.

7. Attach marker extension tube (1) with disc to marker arm second section.

## Air Hoses

*NOTE: To install air hoses, planter must be completely folded up.*

1. Attach seed hose to airbox.

2. Attach 1 1/4 air hoses to aluminum seed tubes using supplied couplers.

3. Use 1 large cable tie to loosely hold the 1 1/4 air hoses together. *NOTE: It must be loose enough to let them slide against each other.*

4. Use 1 smaller tie to secure the large tie in place by hooking it to one 1 1/2 hose. Large tie should
be 28” up from end of black plastic tubing from manifold.

5. Guide hoses through air hose support.

6. Attach two air hoses to the planter y-transition assembly located on the air hose support.

7. Attach remaining air hoses to seed delivery tubes located on the wing frame.

NOTE: Be sure all hoses are securely attached using hose clamps.
Setup

Hydraulic Hose Hookup
Great Plains hydraulic hoses are color coded to help you hook up hoses to your tractor outlets. Hoses that go to the same remote valve are marked with the same color.

<table>
<thead>
<tr>
<th>Color</th>
<th>Hydraulic Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Fold/Marker</td>
</tr>
<tr>
<td>Blue</td>
<td>Lift</td>
</tr>
<tr>
<td>Orange</td>
<td>Fan</td>
</tr>
<tr>
<td>Yellow</td>
<td>Hydraulic Drive</td>
</tr>
</tbody>
</table>

To distinguish hoses on the same hydraulic circuit, refer to plastic hose label. Hose under extended-cylinder symbol feeds cylinder base ends. Hose under retracted-cylinder symbol feeds cylinder rod ends.
Index

C
chemicals .............................................4

E
earplugs ................................................4

H
headphones ..........................................4
hydraulic fluid .......................................5

L
lights .....................................................5

M
maintenance safety ..............................4

P
Plastic hose label
   See Hydraulic, hose hookup

S
shutdown ..............................................5
storage ..................................................5

T
tire safety ..............................................4
transport speed ....................................5

W
waste disposal ........................................5