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

Illustrations may show optional equipment not supplied with standard unit.
Table of Contents

Important Safety Information ............................................. 1
Introduction ............................................................................. 4
  Description of Unit .............................................................. 4
  Models Covered .................................................................... 4
  Document Family ............................................................... 4
  Tools Required ................................................................. 4
  Pre-assembly Checklist ...................................................... 4
  Using This Manual ............................................................ 5
    Definitions ........................................................................ 5
    Shipping .......................................................................... 6
    Unloading ......................................................................... 6
      Unload Smaller Items First ............................................. 6
      Unload Plains Plow ......................................................... 6
      Unpacking Boxes .......................................................... 6
      Further Assistance ....................................................... 6
Assembly .................................................................................. 7
  9322 Hitch Assembly ............................................................. 7
  9326-9756 Hitch Assembly ...................................................... 8
    Depth Stop Tube Assembly ............................................... 9
    Wheel/Tire & Frog Assembly .............................................. 9
    Sweep Assembly .............................................................. 10
    SMV Assembly ............................................................... 10
    Hydraulic Hose Hookup ................................................... 11
    Hose Handles .................................................................... 11
    Treader Gang Assembly (optional) .................................... 12
  Install Rear Hitch (optional) ................................................ 14
    Extended Rear Hitch ....................................................... 14
    A-Frame Hitch .................................................................. 14
    Rear Stand ....................................................................... 15
Appendix - Reference Information ........................................ 16
  Torque Values Chart ........................................................... 16
  Tire Inflation Chart ............................................................ 17
  Hydraulic Connectors and Torque ...................................... 17
  9322-9326 Hydraulic Lift Layout ......................................... 18
  9533-9540 Hydraulic Lift Layout ........................................ 19
  9744-9756 Hydraulic Lift Layout ........................................ 20
  9744-9756 Hydraulic Lift Layout ........................................ 21
  9326-9326 Hydraulic Fold Layout ....................................... 22
  9533-9540 Hydraulic Fold Layout ....................................... 23
  9744-9756 Hydraulic Lift Layout ........................................ 24
  9744-9756 Hydraulic Lift Layout ........................................ 25
  9322 Machine Layout ......................................................... 26
  9326 Machine Layout .......................................................... 27
  9533 Machine Layout .......................................................... 28
  9533 Machine Layout .......................................................... 29
  9540 Machine Layout .......................................................... 30
  9540 Machine Layout .......................................................... 31
  9744 Machine Layout .......................................................... 32
  9744 Machine Layout .......................................................... 33
  9748 Machine Layout .......................................................... 34
  9748 Machine Layout .......................................................... 35
  9752 Machine Layout .......................................................... 36
  9752 Machine Layout .......................................................... 37
  9756 Machine Layout .......................................................... 38
  9756 Machine Layout .......................................................... 39
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.

Use Adequate Lifting Means

The frame sections and gangs of this machine are extremely heavy. If using multiple lifters, make sure each is rated for at least its share of the load.

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 the “Safety Decals” section of the Operators Manual.
- Read all instructions noted on the decals.
- Keep decals clean. Replace damaged, faded and illegible decals.

Wear Protective Equipment
- Wear protective clothing and equipment.
- Wear clothing and equipment appropriate for the job. Avoid loose-fitting clothing.
- Because prolonged exposure to loud noise can cause hearing impairment or hearing loss, wear suitable hearing protection such as earmuffs or earplugs.
- Because operating equipment safely requires your full attention, avoid wearing entertainment headphones while operating machinery.

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.

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

Tire changing can be dangerous and should be performed by trained personnel using correct tools and equipment.

▲ When inflating tires, use a clip-on chuck and extension hose long enough for you to stand to one side—not in front of or over tire assembly. Use a safety cage if available.
▲ When removing and installing wheels, use wheel-handling equipment adequate for weight involved.

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 machine functions.
▲ Operate machinery from the driver’s seat only.
▲ Do not leave machine unattended with tractor engine running.
▲ Do not stand between the tractor and machine during hitching.
▲ Keep hands, feet and clothing away from power-driven parts.
▲ Wear snug-fitting clothing to avoid entanglement with moving parts.
▲ Watch out for wires, trees, etc., when folding and raising machine. Make sure all persons are clear of working area.
Introduction

The Plains Plow has been designed with care and built by skilled workers using quality materials. Proper setup, maintenance, and safe operating practices will help the customer get years of satisfactory use from the machine.

Description of Unit

The Plains Plow is a three, five or seven-section V-Blade undercutting tillage tool. Working width ranges from 22 to 56 feet. The implement is designed to undercut, kill weeds, apply fertilizers, break up hardpan, manage residue for greater moisture retention and wind erosion protection.

Models Covered

9322PP  22-Foot  3-section
9326PP  26-Foot  3-section
9533PP  33-Foot  5-section
9540PP  40-Foot  5-section
9744PP  44-Foot  7-section
9748PP  48-Foot  7-section
9752PP  52-Foot  7-section
9756PP  56-Foot  7-section

Document Family

580-043Q  Pre-Delivery Manual (this document)
580-043M  Operator Manual
580-043P  Parts Manual

Tools Required

• Basic Hand Tools
• Torque Wrench
• Fork Truck, Overhead Hoist or Loader

Pre-assembly Checklist

1. Before assembling, read and understand “Important Safety Information” in front part of this manual.
2. Have at least two people on hand while assembling.
3. Make sure area is level and free of obstructions (preferably an open concrete area).
4. Have all major componets
5. Have all fasteners and pins shipped with machine.
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 and parts 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. Refer to the parts manual for proper part’s identification. As a reference, keep the operator’s and part’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.

**NOTICE**

*A crucial point of information related to the preceding 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.

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.
Shipping
Refer to Figure 3

- The Plains Plow will be shipped partially pre-assembled. All models will be shipped with hydraulics fully charged and hoses and wiring harness will be rolled up on center frame. The hitches will be shipped pre-assembled but will need to be installed on machines.
- Finishing attachments (if equipped), will be shipped with mounted brackets assembled, reel assemblies assembled and all bolts will be in a box.
- The shipping stand bolts are not used in the assembly of unit.
- The shipping stands do not need to be returned to Great Plains.

Unloading
Be sure the truck is on level ground, preferably concrete.

**CAUTION**

**Centering components:**
Be sure and center fork truck or chains (overhead hoist) on components so they won’t slide and cause injury.

Unloading Smaller Items First
Unloading the Plains Plow is a potentially dangerous operation.
Reduce risk and complications by first unloading
1. Hitch assembly and finishing attachments
2. misc. boxes
3. Plains Plow (described in the next section)

Unload Plains Plow
4. Place these components well out of the maneuvering area needed for unloading the Plains Plow.
5. Double-check that all chains and tie-down straps have been released and stowed.
6. Set parking brake on trailer tractor.
7. If there is no access to large enough fork lifts, the hitch may need installed and pulled off side of truck. See hitch assembly for install hitch.
8. If you do have two large fork lifts, slowly lift the Plains Plow off trailer bed.
9. Stop lifting about 12” above the bed.
10. Have the truck driver slowly pull the trailer straight out from under the Plains Plow.
11. Making sure to keep level from front to back and side to side, slowly lower the Plains Plow.
12. Lower the Plains Plow down until the shipping stands are about 12” off ground.
13. Remove shipping stands.
14. Slowly lower Plains Plow until it is resting on the center transport tires.

Unpacking Boxes
- Position boxes in area that you can maneuver components up to machine to assembly.
15. Carefully remove banding from boxes.
16. Carefully remove banding from gangs and finishing reels.
17. Locate and identify all components before assembling.

Further Assistance
Great Plains Manufacturing, Inc. wants you to be satisfied with your new Turbo Chisel Narrow. If for any reason you do not understand any part of this manual or are otherwise dissatisfied with the product please contact:

**Great Plains Service Department**
1525 E. North St.
PO 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.
The center frame and wings (2) will be shipped all assembled and hydraulics all hooked up and charged. The hitch assembly (1) will be shipped with all components installed. The hitch assembly (1) may need bolted to center frame assembly (2), hydraulics hooked to tractor and pulled off side of truck if two heavy fork lifts are not available to unload, as machines are very heavy.

18. Remove 1 x 6 hex bolts (3) from center frame assembly (2). Carefully align holes of hitch assembly (1) to center frame assembly (2), as shown and re-install the 1 x 6 hex bolts (3), secure with the 1 lock nuts.

19. Remove jack (4) from center frame stub (5) and pin to left side of hitch assembly (1) as shown.

20. Tighten all lock nuts snug but do not torque.

21. Unroll hoses and light harness that is on center frame, route under wing stop through hose support (6) on front of tractor. There should be about 3’ of hose in front of hitch clevis to hook to tractor. The machine may now be pinned to tractor and hydraulic hoses attached, See “Hydraulic Hose Hookup” on page 11 to make rest of assembly easier to fold or unfold wings or to raise and lower lift cylinders as needed.
9326-9756 Hitch Assembly

Refer to Figure 5

The center frame and wings (2) will be shipped all assembled and hydraulics all hooked up and charged. The hitch assembly (1) will shipped with all components installed. The hitch assembly (1) may need bolted to center frame assembly (2), hydraulics hooked to tractor and pulled off side of truck if two heavy fork lifts are not available to unload, as machines are very heavy.

23. Remove jack (5) from center frame stub (6) and pin to left side of hitch assembly (1) as shown.

24. Tighten all bolts with lock nuts snug but do not torque, Tighten all other bolts to specs, See “Torque Values Chart” on page 16.

25. Unroll hoses and light harness that is on center frame route under wing stop through hose support (7) on front of tractor. There should be about 3’ of hose in front of hitch clevis to hook to tractor. The machine may now be pinned to tractor and hydraulic hoses attached, See “Hydraulic Hose Hookup” on page 11 to make rest of assembly easier to fold or unfold wings or to raise and lower lift cylinders as needed.

Figure 5
9326-9756 Hitch Assembly
**Depth Stop Tube Assembly**

The depth stop tube assembly (3) will be banded to the rear tube of center frame. Carefully remove banding from depth stop tube assembly.

*Refer to Figure 6*

26. Remove the $\frac{1}{2} \times 2\frac{1}{2}$ hex bolts (3) from the depth stop assembly (2).

27. Slide the depth stop tube assembly (3), from rear, through the square hole of slide tube (4) in orientation shown. Remove $1 \times 3\frac{3}{8}$ pin (5) from rear of depth stop tube assembly (3) and re-install pin through aligned holes of torque tube ear (6) and ear of depth stop tube assembly (3). Install the $1.5 \times 1.00 \times 0.075$ flat washer (7) and $3\frac{1}{16} \times 2$ cotter pin. Bend cotter pin over to secure.

28. Re-attach the depth stop assembly (2) to the front of depth stop tube assembly (3) in orientation shown. Secure with the $\frac{1}{2} \times 2\frac{1}{2}$ hex bolts (1), $\frac{1}{2}$ lock washers and $\frac{1}{2}$ nuts.

29. Bolt may be tightened to specs, See “Torque Values Chart” on page 16.

**Wheel/Tire & Frog Assembly**

*Refer to Figure 7*

Models 9533, 9744 & 9748 the outside wing frogs and wheel/tire will not be installed.

30. Remove bolts (3) and (4) from outside wing frame. Unfold outside wing and lower machine down to just above the frog (1). Align holes in top plate of frog (1) and holes in outside wing frame (2). Install the 1 flat washers (5) between frog plate and bottom of wing frame (all three holes). Re-install the front 1” hex bolt (3), (bolt length will depend on location and tube size) secure with the 1 lock nut. Re-install the $\frac{3}{4} \times 6$ hex bolts (4), secure with the $\frac{3}{4}$ lock washers and $\frac{3}{4}$ nuts.

31. Remove the lug nuts (8) from spindle/hub assembly (7). Install the wheel/tire assembly (6) to spindle/hub assembly (7). Secure with the lug nuts (8).

32. Tighten lock nuts snug but do not torque. The rest of bolts may be tightened to specs, See “Torque Values Chart” on page 16.
Sweep Assembly

Refer to Figure 8

- When installing bolts to sweeps, start at the front and work towards the rear. Do not tighten until all bolts are installed.

33. Remove the plow bolts (3) from the sweeps (1). Attach sweeps (1) to top of frog (2) with the plow bolts (3), 7/16 flat washers (4) and 7/16 lock nuts.

34. Tighten bolts snug, do not torque.

SMV Assembly

Refer to Figure 9

35. Carefully un-band smv assembly (1) from rear of center frame.

36. Slide smv assembly (1) into smv bracket (2) on rear of machine.
Hydraulic Hose Hookup

37. 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.

<table>
<thead>
<tr>
<th>Color</th>
<th>Hydraulic Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Lift (2 hoses)</td>
</tr>
<tr>
<td>Green</td>
<td>Fold (2 hoses)</td>
</tr>
<tr>
<td>Yellow</td>
<td>Fold (2 hoses) (Models 9744-9756 center right)</td>
</tr>
</tbody>
</table>

Refer to Figure 10

Hose Handles

38. To distinguish hoses on the same hydraulic circuit, refer to hose handles. The hose under an extended-cylinder symbol feeds a cylinder base end. The hose under a retracted-cylinder symbol feeds a cylinder rod end.

39. Once all hoses are tightened, hook hoses to tractor

**WARNING**

High Pressure Fluid Hazard:
Relieve pressure before disconnecting hydraulic lines. Use paper or cardboard, NOT BODY PARTS, to check for leaks. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Escaping fluid under pressure can have sufficient pressure to penetrate the skin causing serious injury. If an accident occurs, seek immediate medical assistance from a physician familiar with this type of injury. Only trained personnel should work on system hydraulics.
Treader Gang Assembly (optional)

For treader gang placement see “Layout Section” of this manual. For complete parts breakdown see “Attachment Section” of Parts Manual.

Refer to Figure 11

40. Install mounting bracket (1) with \( \frac{3}{4} \times 4\frac{1}{32} \times 5\frac{3}{8} \) u-bolts (2), \( \frac{3}{4} \) lock washers and \( \frac{3}{4} \) nuts.

41. On models 9744-9756 the treader spacer (3) and treader spacer plate (4) will need installed on center section between mounting bracket (1) and rear tube of center frame. Secure with \( \frac{3}{4} \times 10 \) hex bolts (5), \( \frac{3}{4} \) lock washers and \( \frac{3}{4} \) nuts.

42. Attach treader mount brackets (6) to mounting brackets (1) (2nd hole from bottom) with \( \frac{3}{4} \times 5\frac{1}{2} \) hex bolts (7), secure with \( \frac{3}{4} \) lock washers and \( \frac{3}{4} \) nuts.

43. Remove 1 nylon lock nut (10) from clevis bolt assembly (11). Slide clevis bolt assembly (11) through uniball of heavy fold bracket (1). Secure 1 flat washer (8) (one each side of upper spring (9)), secure with 1 nylon lock nut (10). Tighten 1 nylon lock nut (10) down to where there is about 2 threads showing above nut. Slide collar (18) up on clevis bolt assembly (11) until lower spring (19) is snug against bottom of uniball but do not compress spring and tighten set screw in collar to secure.

44. Remove the \( \frac{3}{4} \times 2\frac{1}{2} \) clevis pin (12) from clevis bolt assembly (11). Attach clevis bolt assembly (11) to treader mount brackets (6) (3rd hole from front) with the \( \frac{3}{4} \times 2\frac{1}{2} \) clevis pin (12), \( \frac{3}{4} \) flat washer (13) and \( \frac{1}{8} \times 1 \) cotter pin. Bend cotter pin to secure.

45. Slide treader mount (14) (with hole position and angled plate orientation shown in layout drawings), secure with \( \frac{3}{4} \times 4 \) hex bolts (15), secure with \( \frac{3}{4} \) lock washers and \( \frac{3}{4} \) nuts.

46. Attach treader gang assembly (16) to treader mount (14) with \( \frac{3}{4} \times 4 \) hex bolts (15), \( \frac{3}{4} \) flat washers (17) (one on top and one on bottom of plates, secure with \( \frac{3}{4} \) lock washers and \( \frac{3}{4} \) nuts.

47. When all rolling harrow assemblies are bolted up to drag frame, position as shown in “Layout Section” of this manual and tighten all bolts to specs. See “Torque Values Chart” on page 16.
Figure 11
Treader Gang

3" TREADER SPACER
SEE LAYOUT DRAWINGS
FOR CORRECT LOCATIONS
Install Rear Hitch (optional)

The rear tow hitch will be shipped with big components banded together and bolts will be in a box. Carefully un-band the components. There are two different types of rear hitches, rear hitch extended or a-frame style. See appropriate mounting directions listed below. Do not tighten any bolts until everything is installed.

Extended Rear Hitch

*Refer to Figure 12*

48. Attach front plates of rear hitch arms (1) to rear tube of center frame with \( \frac{3}{4} \times 4' \times \frac{1}{32} \times 5\frac{3}{8} \) u-bolts (2), \( \frac{3}{4} \) lock washers and \( \frac{3}{4} \) nuts.

49. Attach 46" cross arm (3) to bottom side of rear hitch arm plates with \( \frac{5}{8} \times 3' \times \frac{1}{32} \times 4\frac{1}{2} \) u-bolts (4), secure with \( \frac{5}{8} \) lock washers and \( \frac{5}{8} \) nuts.

50. The bolt on sleeve assembly with rigid (5) or flex slide (6) may be fastened to 46" cross arm (3) using \( \frac{5}{8} \times 3' \times \frac{1}{32} \times 4\frac{1}{2} \) u-bolt (4), secure with \( \frac{5}{8} \) lock washers and \( \frac{5}{8} \) nuts.

51. Tighten all bolts to specs, See "Torque Values Chart" on page 16.

A-Frame Hitch

*Refer to Figure 13*

52. Attach a-frame hitch (1) to rear of center frame with \( \frac{5}{8} \times 3' \times \frac{1}{32} \times 5\frac{1}{2} \) u-bolts (2), \( \frac{5}{8} \) lock washers and \( \frac{5}{8} \) nuts.

53. Hitch will have either the flex slide assembly (3) or the rigid slide assembly (4). There will be a \( \frac{3}{4} \times 1\frac{1}{2} \) hex bolt (5) and \( \frac{3}{4} \) jam nut in front hole of assembly to keep the slide assembly from sliding clear out.

54. Tighten all bolts to specs, See "Torque Values Chart" on page 16.
Rear Stand
Refer to Figure 14

**NOTICE**

If machine is equipped with a rear attachment, be sure you install the rear jack stand so machine doesn’t tip backwards when unhooking machine from tractor.

55. Attach the rear stand bracket (1) to the center of, the rear tube of the drag frame as close to center of machine as possible with 5/8 x 4 x 5 1/2 u-bolts (2), 5/8 lock washers and 5/8 nuts.

56. Slide the rear stand (3) through the rear stand bracket (1), secure with the 3/4 x 4 1/2 pin rear stand bracket (4) and retainer.

57. Once the options are installed, fold the Plains Plow to check for clearance and interferences, also watch that hoses do not get pinched.

Double check that all bolts are tightened to specs, See “Torque Values Chart” on page 16. Consult the “Operator’s Manual”, for the first time field adjustments before going to the field.

![Figure 14 Rear Stand](image-url)
## Torque Values Chart

<table>
<thead>
<tr>
<th>Bolt Size</th>
<th>Bolt Head Identification</th>
<th>5.8</th>
<th>8.8</th>
<th>10.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>in-tpia</td>
<td>Class 5.8</td>
<td>Class 8.8</td>
<td>Class 10.9</td>
<td></td>
</tr>
<tr>
<td>mm x pitch</td>
<td>ft-lb</td>
<td>ft-lb</td>
<td>ft-lb</td>
<td></td>
</tr>
<tr>
<td>N-m</td>
<td>N-m</td>
<td>N-m</td>
<td>N-m</td>
<td>N-m</td>
</tr>
<tr>
<td>1/5-20</td>
<td>7.4</td>
<td>5.6</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>1/4-28</td>
<td>8.5</td>
<td>6</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>5/16-18</td>
<td>15</td>
<td>11</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>5/16-24</td>
<td>17</td>
<td>13</td>
<td>26</td>
<td>19</td>
</tr>
<tr>
<td>5/8-16</td>
<td>27</td>
<td>20</td>
<td>42</td>
<td>31</td>
</tr>
<tr>
<td>3/8-24</td>
<td>31</td>
<td>22</td>
<td>47</td>
<td>35</td>
</tr>
<tr>
<td>7/16-14</td>
<td>43</td>
<td>32</td>
<td>67</td>
<td>49</td>
</tr>
<tr>
<td>7/16-20</td>
<td>49</td>
<td>36</td>
<td>75</td>
<td>55</td>
</tr>
<tr>
<td>1/2-13</td>
<td>66</td>
<td>49</td>
<td>105</td>
<td>76</td>
</tr>
<tr>
<td>5/8-20</td>
<td>75</td>
<td>55</td>
<td>115</td>
<td>85</td>
</tr>
<tr>
<td>9/16-12</td>
<td>95</td>
<td>70</td>
<td>150</td>
<td>110</td>
</tr>
<tr>
<td>9/16-18</td>
<td>105</td>
<td>79</td>
<td>165</td>
<td>120</td>
</tr>
<tr>
<td>5/8-11</td>
<td>130</td>
<td>97</td>
<td>205</td>
<td>150</td>
</tr>
<tr>
<td>5/8-18</td>
<td>150</td>
<td>110</td>
<td>230</td>
<td>170</td>
</tr>
<tr>
<td>3/4-10</td>
<td>235</td>
<td>170</td>
<td>360</td>
<td>265</td>
</tr>
<tr>
<td>3/4-16</td>
<td>260</td>
<td>190</td>
<td>405</td>
<td>295</td>
</tr>
<tr>
<td>7/8-9</td>
<td>225</td>
<td>165</td>
<td>585</td>
<td>430</td>
</tr>
<tr>
<td>7/8-14</td>
<td>250</td>
<td>185</td>
<td>640</td>
<td>475</td>
</tr>
<tr>
<td>1-8</td>
<td>340</td>
<td>250</td>
<td>875</td>
<td>645</td>
</tr>
<tr>
<td>1-12</td>
<td>370</td>
<td>275</td>
<td>955</td>
<td>705</td>
</tr>
<tr>
<td>1/2-7</td>
<td>480</td>
<td>355</td>
<td>1080</td>
<td>795</td>
</tr>
<tr>
<td>1/2-12</td>
<td>540</td>
<td>395</td>
<td>1210</td>
<td>890</td>
</tr>
<tr>
<td>1/2-4</td>
<td>680</td>
<td>500</td>
<td>1520</td>
<td>1120</td>
</tr>
<tr>
<td>1/2-12</td>
<td>750</td>
<td>555</td>
<td>1680</td>
<td>1240</td>
</tr>
<tr>
<td>1/2-6</td>
<td>890</td>
<td>655</td>
<td>1990</td>
<td>1470</td>
</tr>
<tr>
<td>3/8-12</td>
<td>1010</td>
<td>745</td>
<td>2270</td>
<td>1670</td>
</tr>
<tr>
<td>5/8-6</td>
<td>1180</td>
<td>870</td>
<td>2640</td>
<td>1950</td>
</tr>
<tr>
<td>5/8-12</td>
<td>1330</td>
<td>980</td>
<td>2970</td>
<td>2190</td>
</tr>
</tbody>
</table>

- **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.

---

**Wheel Bolt Torque Values**

- 1/2"-20 (75-85ft-lbs)
- 9/16"-18 (80-90ft-lbs)
- 5/8"-18 (85-100ft-lbs)
Tire Inflation Chart

<table>
<thead>
<tr>
<th>Wheel</th>
<th>Tire Size</th>
<th>Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauge Wheel</td>
<td>9.5Lx15&quot; 8-Ply</td>
<td>44 psi 303 kPa</td>
</tr>
<tr>
<td>Transport/ Wing</td>
<td>11L x 15 8-Ply</td>
<td>36 psi 248 kPa</td>
</tr>
<tr>
<td>Transport/</td>
<td>11Lx15&quot; 12-Ply</td>
<td>52 psi 359 kPa</td>
</tr>
<tr>
<td>Transport/</td>
<td>11Lx15&quot; Load F</td>
<td>90 psi 621 kPa</td>
</tr>
</tbody>
</table>

Hydraulic Connectors and Torque

Refer to Figure 15 (a hypothetical fitting)
Leave any protective caps in place until immediately prior to making a connection.

NPT - National Pipe Thread
Note tapered threads, no cone/flare, and no O-ring.

1. Apply liquid pipe sealant for hydraulic applications.
2. Do not use tape sealant, which can clog a filter and/or plug an orifice.

JIC - Joint Industry Conference (SAE J514)
1. Note straight threads ② and the 37° cone ⑤ on “M” fittings (or 37° flare on “F” fittings).
2. Use no sealants (tape or liquid) on JIC fittings.

ORB - O-Ring Boss (SAE J514)
1. Note straight threads ⑧ and elastomer O-Ring ⑨.
2. Prior to installation, to prevent abrasion during tightening, lubricate O-Ring with clean hydraulic fluid.
3. Use no sealants (tape or liquid) on ORB fittings.

ORB fittings that need orientation, such as the ell depicted, also have a washer ⑥ and jam nut ⑤ (“adjustable thread port stud”). Back jam nut away from washer. Thread fitting into receptacle until O-Ring contacts seat. Unscrew fitting to desired orientation. Tighten jam nut to torque specification.

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.

Manufacturer Web site
- Firestone  www.firestoneag.com
- Gleason  www.gleasonwheel.com
- Titan  www.titan-intl.com
- Galaxy  www.atgtire.com
- BKT  www.bkt-tire.com

---

<table>
<thead>
<tr>
<th>Gauge Size</th>
<th>Dash Size</th>
<th>Fitting</th>
<th>N-m</th>
<th>Ft-Lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>1/4&quot;-18 NPT</td>
<td>1.5-3.0 turns past finger tight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-5</td>
<td>1/2&quot;-20 JIC</td>
<td>19-20</td>
<td>14-15</td>
<td></td>
</tr>
<tr>
<td>-5</td>
<td>1/2&quot;-20 ORB w/jam nut</td>
<td>12-16</td>
<td>9-12</td>
<td></td>
</tr>
<tr>
<td>-5</td>
<td>1/2&quot;-20 ORB straight</td>
<td>19-26</td>
<td>14-19</td>
<td></td>
</tr>
<tr>
<td>-6</td>
<td>9/16&quot;-18 JIC</td>
<td>24-27</td>
<td>18-20</td>
<td></td>
</tr>
<tr>
<td>-6</td>
<td>9/16&quot;-18 ORB w/jam nut</td>
<td>16-22</td>
<td>12-16</td>
<td></td>
</tr>
<tr>
<td>-6</td>
<td>9/16&quot;-18 ORB straight</td>
<td>24-33</td>
<td>18-24</td>
<td></td>
</tr>
<tr>
<td>-8</td>
<td>3/4&quot;-16 ORB w/jam nut</td>
<td>27-41</td>
<td>20-30</td>
<td></td>
</tr>
<tr>
<td>-8</td>
<td>3/4&quot;-16 ORB straight</td>
<td>37-58</td>
<td>27-43</td>
<td></td>
</tr>
</tbody>
</table>
9322-9326 Hydraulic Lift Layout
9533-9540 Hydraulic Lift Layout
9744-9756 Hydraulic Lift Layout
9744-9756 Hydraulic Lift Layout
9322-9326 Hydraulic Fold Layout
9533-9540 Hydraulic Fold Layout
9744-9756 Hydraulic Lift Layout
9744-9756 Hydraulic Lift Layout
9322 Machine Layout

These settings show treaders in the 15° position. If set in the 20° (more aggressive) position, some alterations may be necessary.
9326 Machine Layout

These settings show treadsers in the 15 position. If set in the 20 (more aggressive) position, some alterations may be necessary.
9533 Machine Layout
9533 Machine Layout

These settings show treaders in the 15° position. If set in the 20° (more aggressive) position, some alterations may be necessary.
9540 Machine Layout
9540 Machine Layout

THESE SETTINGS SHOW TREADERS IN THE 15 POSITION. IF SET IN THE 20 (MORE AGGRESSIVE) POSITION, SOME ALTERATIONS MAY BE NECESSARY.
9744 Machine Layout
9748 Machine Layout
9748 Machine Layout

These settings show treaders in the 15 position if set in the 20 (more aggressive) position. Some alterations may be necessary.
9752 Machine Layout

These settings show treadsers in the 15° position. If set in the 20° (more aggressive) position, some alterations may be necessary.
9756 Machine Layout
These settings show treads in the 15 position. If set in the 20 (more aggressive) position, some alterations may be necessary.
Index

A
address, Great Plains .................. 6

B
banding ................................... 6

C
CAUTION, defined ....................... 1
center transport tires .................. 6
chains and tie-downs .................. 6
children ..................... 2
clothing ....... 2
color code, hose ..................... 11
components ............... 6
contact Great Plains ............... 6
covered models ....... 4

D
DANGER, defined ....................... 1
decals ........................................ 2
definitions ......................... 5
directions ..................... 5, 6

E
electrical hookup ..................... 7

F
finishing attachments ............... 6
fire ........................................... 1
fork truck ..................... 6

H
headphones ............... 2
hearing .................................. 2
high pressure fluids ............... 2
hose handles ............. 11
hydraulic connectors .......... 17
hydraulic hoses ............. 11
hydraulic safety .......... 2

I
IMPORTANT!, defined ................. 5
inflation ......................... 17

J
JIC ............................................. 17
Joint Industry Conference ............ 17
J514 ............................................. 17

K
kPa ............................................. 17

L
layout
9322-9756PP

9322-9756 Hydraulic Fold ............. 24, 25
9322-9756 Hydraulic Lift ............. 20, 21
9744 Machine ..................... 32, 33
9744-9756 Hydraulic Fold ......... 24, 25
9744-9756 Hydraulic Lift ......... 20, 21
9748 Machine ..................... 34, 35
9752 machine ..................... 36, 37
9756 machine ..................... 38, 39
Leaks ........................................ 2
left-hand, defined ..................... 5
level ........................................ 6
lifters ........................................ 1
lights ........................................ 2
medical assistance ................. 2, 11
misc boxes ......................... 6

N
National Pipe Thread ................. 17
Note, defined ......................... 5
NPT ............................................ 17

O
ORB ............................................ 17
orientation rose ..................... 5, 6
O-Ring Boss ...................... 17

P
parking brakes ......................... 6
protective equipment .............. 2
psi ............................................ 17
rear tow hitch ......................... 14
riders ...................................... 2
right-hand, defined ................. 5
rose, orientation ..................... 5, 6

S
SAE J514 .................................. 17
safety symbol ......................... 1
shipping stands .................... 6
shutdown .................................. 2
storage .................................... 2
symbol, safety ....................... 1

T
tables
document family ..................... 4
fittings torque ..................... 17
hose color code ..................... 11
models covered ..................... 4
torque values ..................... 16
tire inflation ......................... 17
tires ......................................... 3
torque value chart ............. 16
torque values chart (wheel bolts) ............. 16
trailer bed ......................... 6
truck driver ......................... 6

U
URLs, tires ......................... 17

W
WARNING, defined ................. 1
warranty ...................... 17, 39

www ............................................ 17

Numerics
580-043M, manual ............... 4
580-043P, manual ............... 4
580-043Q, manual ............... 4

Great Plains | 580-043Q | 01/24/2019