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 provided in the Specifications & Capacities Section of this manual 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>Delivery Date</td>
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<td>First Operation</td>
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<tr>
<td>Accessories</td>
<td></td>
</tr>
</tbody>
</table>

Dealer Contact Information

Name: ________________________________
Street: ______________________________
City/State: __________________________
Telephone: __________________________
Email: ______________________________

⚠️ WARNING: Cancer and reproductive harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)
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Land Pride provides this publication “as is” without warranty of any kind, either expressed or implied. While every precaution has been taken in the preparation of this manual, Land Pride assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein, Land Pride reserves the right to revise and improve its products as it sees fit. This publication describes the state of this product at the time of its publication, and may not reflect the product in the future.

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Printed in the United States of America.
Important Safety Information

These are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Thorougly read and understand the instructions given in this manual before operation. Refer to the “Safety Label” section, read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

▲ The operator must not use drugs or alcohol as they can change the alertness or coordination of that person while operating equipment. The operator should, if taking over-the-counter drugs, seek medical advice on whether he/she can safely operate the equipment.

▲ Operator should be familiar with all functions of the tractor and attachments, and be able to handle emergencies quickly.

▲ Make sure all guards and shields are in place and secured before operating implement.

▲ Keep all bystanders away from equipment and work area.

▲ Operator must start tractor and operate controls from the driver’s seat only. Never from the ground.

▲ Do not leave tractor or implement unattended with engine running.

▲ Dismounting from a moving tractor can cause serious injury or death.

▲ Do not allow anyone to stand between tractor and implement while backing up to implement.

▲ Keep hands, feet, and clothing away from power-driven parts.

▲ Watch out for fences, trees, rocks, wires, etc., while operating and transporting implement.

▲ Turning tractor too tight may cause hitched machinery to ride up on wheels. This could result in injury or equipment damage.

Look For The Safety Alert 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

A Signal word designates a degree or level of hazard seriousness. The signal words are:

▲ 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.

For Your Protection

▲ Thoroughly read and understand the “Safety Label” section, read all instructions noted on them.

Tractor Shutdown & Storage

▲ If engaged, disengage PTO.

▲ Lower attached implement to ground, put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.

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

▲ Detach and store implement in an area where children normally do not play. Secure implement using blocks and supports.

Parts Manual QR Locator

The QR (Quick Reference) code on the cover and to the left will take you to the Parts Manual for this equipment. Download the appropriate App on your smart phone, open the App, point your phone on the QR code and take a picture.

Dealer QR Locator

The QR code on the left will link you to available dealers for Land Pride products. Refer to Parts Manual QR Locator on this page for detailed instructions.

12/03/15
HRS3025 Hydraulic Reservoir System   316-271M 1
These are common practices that may or may not be applicable to the products described in this manual.

Use Safety Lights and Devices
▲ Slow moving tractors, skid steers, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
▲ Flashing warning lights and turn signals are recommended whenever driving on public roads.

Transport Machinery Safely
▲ Comply with state and local laws.
▲ Use towing vehicle and trailer of adequate size and capacity.
▲ Secure equipment towed on a trailer with tie downs and chains.
▲ Sudden braking can cause a trailer to swerve and upset. Reduce speed if trailer is not equipped with brakes.
▲ Avoid contact with any over head utility lines or electrically charged conductors.
▲ Engage park brake when stopped on an incline.
▲ Maximum transport speed for an attached implement is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrains require a slower speed.
▲ As a guideline, use the following maximum speed weight ratios for an attached implement:
  - 20 mph when weight of attached implement is less than or equal to the weight of machine towing the implement.
  - 10 mph when weight of attached implement exceeds weight of machine towing implement but not more than double the weight.
▲ IMPORTANT: Do not tow a load that is more than double the weight of the machine towing the load.

Use A Safety Chain
▲ A safety chain will help control drawn machinery should it separate from the tractor drawbar.
▲ Use a chain with the strength rating equal to or greater than the gross weight of the towed machinery.
▲ Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
▲ Do not use safety chain for towing.

Practice Safe Maintenance
▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
▲ Work in a clean dry area.
▲ Lower attached implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
▲ Allow implement to cool before working on it.
▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on implement.
▲ Do not grease or oil implement while it is in operation.
▲ Inspect all parts. Make certain parts are in good condition & installed properly.
▲ Replace parts on this machine with genuine Land Pride parts only. Do not alter this machine in a way which will adversely affect its performance.
▲ Remove buildup of grease, oil, or debris.
▲ Remove all tools and unused parts from implement before operation.
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.

Avoid Underground Utilities
▲ Dig Safe, Call 811.
Always contact your local utility companies (electrical, telephone, gas, water, sewer, and others) before digging so that they may mark the location of any underground services in the area.
▲ Be sure to ask how close you can work to the marks they positioned.

Avoid High Pressure Fluids Hazard
▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines or performing work on the system.
▲ Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
▲ 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.
▲ DO NOT DELAY. If an accident occurs, see a doctor familiar with this type of injury immediately. Any fluid injected into the skin or eyes must be treated within a few hours or gangrene may result.

Wear Protective Equipment
▲ Wear protective clothing and equipment appropriate for the job such as safety shoes, safety glasses, hard hat, and ear plugs.
▲ Clothing should fit snug without fringes and pull strings to avoid entanglement with moving parts.
▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
▲ Operating equipment safely requires the operator's full attention. Avoid wearing radio headphones while operating machinery.

Use Seat Belt and ROPS
▲ Operate only tractors and skid steers equipped with a Roll-Over Protective Structure (ROPS) and seat belt.
▲ Keep folding ROPS in the "locked up" position at all times.
▲ Fasten seat belt snugly and securely to help protect against serious injury or death from falling and machine overturn.
▲ Wear protective equipment such as a hard hat, safety shoes, safety glasses, and ear plugs.

Keep Riders Off Machinery
▲ Never carry riders or use machinery as a person lift.
▲ Riders obstruct operator's view.
▲ Riders could be struck by foreign objects or thrown from the machine.
▲ Never allow children to operate equipment.

These are common practices that may or may not be applicable to the products described in this manual.
Safety Labels

Your Hydraulic Reservoir comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. Keep all safety labels clean and legible.
2. Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Land Pride dealer. To find your nearest dealer, visit our dealer locator at www.landpride.com.
3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.
4. Refer to this section for proper label placement.
   To install new labels:
   a. Clean surface area where label is to be placed.
   b. Spray soapy water onto the cleaned area.
   c. Peel backing from label and press label firmly onto the surface.
   d. Squeeze out air bubbles with edge of a credit card or with a similar type of straight edge.

818-831C
Warning: High-Pressure Fluid Hazard

818-859C
Danger: Crushing Hazard

818-859C
Danger: Crushing Hazard
**Important Safety Information**

---

**WARNING**

To prevent serious injury or death:

- Do not permit riders on the tractor, skid steer or implement. Never carry children or tractor/skid steer seat.
- Do not allow children to operate implement.
- Operate only with guards installed and in good condition.
- Keep hands, feet, hair and clothing away from moving parts. Never place, set or lock to discharge material.
- Operate only with tractor or skid steer equipped with ROPS and seatbelts.
- Before operating, clear debris from working area.
- Do not operate in the raised position.
- Stop engine, set brake and wait for all moving parts to stop before dismounting.
- Support implement securely before working beneath unit.
- Transport with clear reflectors, SMV and working lights as required by federal, state, and local laws.
- Stand clear when implement is in operation.

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**818-858C**

Warning: List of general warnings

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**818-388C**

Important - Valve must be open

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**818-003C**

SMV: Slow Moving Vehicle

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12/03/15

HRS3025 Hydraulic Reservoir System 316-271M
Owner Assistance
The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service. The parts on your Hydraulic Reservoir have been specially designed by Land Pride and should only be replaced with genuine Land Pride parts. Contact a Land Pride dealer if customer service or repair parts are required. Your Land Pride dealer has trained personnel, repair parts, and equipment needed to service the implement.

Serial Number
Model No. _____________Serial No. ______________
For quick reference and prompt service, record model number and serial number in the spaces provided above and again on warranty page 33. Always provide model number and serial number when ordering parts and in all correspondences with your Land Pride dealer. Refer to Figure 1 for location of your serial number plate.

Further Assistance
Your dealer wants you to be satisfied with your new Hydraulic Reservoir System. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:
1. Discuss the matter with your dealership service manager making sure that person is aware of any problems you may have and has had the opportunity to assist you.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem, and request assistance.
3. For further assistance write to:

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060
E-mail address
lpservicedept@landpride.com
**Tractor Requirements**

Tractor horsepower should be within the range noted below. Tractors outside the horsepower range must not be used.

Minimum Horsepower Rating ............... 52 hp
3-Point Hitch Category ................. Cat. I or Cat II
Rear PTO Speed ....................... 540 rpm
PTO Shaft Type ................. 1 3/8"-6 Spline
Tractor Weight .............. See Important Note Below

**IMPORTANT:** You could lose steering control if your tractor is too light. Refer to your tractor’s manual to determine if additional ballast is needed.

**Dealer Preparations**

Read and understand the Operator’s Manual. An understanding of how it works will aid in the assembly and setup. Go through the Pre-Assembly Checklist before assembling the Hydraulic Reservoir System. Speed up your assembly task and make the job safer by having all needed parts and equipment readily at hand.

**Assembly Checklist**

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<tr>
<th>✓</th>
<th>Check</th>
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<tr>
<td></td>
<td>Have a fork lift or loader with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.</td>
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<tr>
<td></td>
<td>Have a minimum of two people available during assembly.</td>
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<tr>
<td></td>
<td>Check to see if auxiliary tractor weights are needed.</td>
<td></td>
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<tr>
<td></td>
<td>See Specifications on page 29 for unit weights.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Make sure all major components and loose parts are shipped with the machine.</td>
<td>Operator’s Manual</td>
</tr>
<tr>
<td></td>
<td>Double check to make sure all parts are installed in the correct location. Refer to the Parts Manual if unsure. <strong>NOTE:</strong> All assembled hardware from the factory has been installed in the correct location. Remember location of a part if removed during assembly. Keep parts separated.</td>
<td>Operator’s Manual 316-191M</td>
</tr>
<tr>
<td></td>
<td>Make sure working parts move freely and bolts are tight.</td>
<td>Operator’s Manual</td>
</tr>
<tr>
<td></td>
<td>Make sure all grease fittings are lubricated.</td>
<td>Page 28</td>
</tr>
<tr>
<td></td>
<td>35 Gallons of Hydraulic Fluid are needed for the hydraulic reservoir. Use any high quality mineral based hydraulic fluid such as Mobil Fluid 424 with a viscosity rating of 10W-30. (See <a href="http://www.mobil.com">www.mobil.com</a> for alternate fluids)</td>
<td>Page 28</td>
</tr>
<tr>
<td></td>
<td>Make sure all safety labels are correctly located and legible. Replace if damaged.</td>
<td>Pages 4 &amp; 5</td>
</tr>
</tbody>
</table>

**Torque Requirements**

Refer to “Torque Values Chart for Common Bolt Sizes” on page 32 to determine correct torque values when tightening hardware.

**CAUTION**

Handle pump carefully. Pump weight is approximately 50 lbs. and can be damaged or cause bodily injury if dropped.

---

**Uncrating**

1. Located inside the enclosed shipping container are components to be assembled to the Hydraulic Reservoir System. Pry off lid and remove components. Verify all components are present by using the parts list included with components.

2. Disassemble frame around Hydraulic Reservoir by cutting it apart or prying the boards apart.

Refer to Figure 1-1:

3. Be sure to remove hold-down boards positioned on top of the parking stand feet before lifting the unit off the crate floor.

**Assembly Checklist**

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<tbody>
<tr>
<td></td>
<td>Remove Parking Stand Hold-Down Boards</td>
<td>Figure 1-1</td>
</tr>
</tbody>
</table>

Refer to Figure 1-2:

4. Lift Hydraulic Reservoir with either a tractor’s 3-point lift system or a fork lift until reservoir is high enough to lower parking stands to hole “B”. Make sure forks will not damage reservoir or reservoir ports.

5. Remove wire retaining pins (#3) and slide all four parking stands (#1) down until hole “B” in stands align with hole in support tubes (#2). Reinsert wire retaining pins and hook wire snaps over end of pins.

**NOTE:** Hole “A” in the parking stands is used when operating or transporting the Hydraulic Reservoir.

---

**Parking Stand Installation**

Figure 1-2
Pump & Gearbox Assembly

Refer to Figure 1-3:

The pump, capable of 25 gpm @ 540 rpm, is mounted under the reservoir tank and connected to tractor PTO shaft with a driveline.

1. Separate pump rear guard (#3) from high speed pump mount (#2).
2. Verify gearbox (#12) is full of oil.
   a. Rotate high speed pump mount (#2) onto its right side plate “D”.
   b. View sight glass in gearbox (#12). Oil should be visible in sight glass. Some tipping of unit and a flashlight may be needed to see oil line.
   c. If low or out of oil, remove sight glass and add recommended gearbox oil provided under “Lubrication Points” on page 28.
3. Screw 1 5/16" MJIC x 1 5/16" MORB elbow (#17) to “OUT” port of hydraulic pump (#11) until snug.
4. Screw 1 5/8" MORB x 1 1/4" HB elbow (#15) to the “IN” port of hydraulic pump (#10) until tight.
5. Center hydraulic hose (#1) in slot “D” and screw hydraulic hose to elbow (#17) as follows:
   • No valve Option: Screw 1" x 40" long hydraulic hose (#1) to elbow (#17) until tight.
   • Manual & Solenoid Valve Option: Screw 1" x 34" long hydraulic hose (#1) to elbow (#17) until tight.
6. With hydraulic hose (#1) centered in slot “D”, tighten elbow (#17) to hydraulic pump (#11).
7. Attach high speed pump mount (#2) to reservoir tank with 1/2"-13 x 1 1/2" GR5 cap screws (#6), spring lock washers (#10), and hex nuts (#8). Tighten nuts to the correct torque.
8. Remove cap from nipple “B” and apply teflon tape to nipple. Screw ball valve (#13) to pipe nipple “B” until tight with control lever on top.
9. Apply teflon tape to elbow (#14) and screw elbow onto ball valve (#13) until tight with elbow turned down as shown.
10. Attach suction hose (#16) to elbow (#15) with worm drive clamp (#4) and tighten.
11. Attach suction hose (#16) to elbow (#14) with worm drive clamp (#4). Make sure suction hose passes through slot “C” and tighten worm drive clamp (#4).
12. Tighten elbow (#15) to hydraulic pump (#11).

13. Attach pump rear guard (#3) to high speed pump mount (#2) with 3/8"-16 x 1 1/4" GR5 hex head cap screws (#5), spring lock washers (#9), and nuts (#7). Tighten nuts to the correct torque.
No Valve No Cooler Option

Refer to Figure 1-4:

14. Apply Teflon tape to pipe threads on 1 5/16" MORB x 1" MNPT adapter (#19).
15. Remove plug from pipe nipple “A” and screw adapter fitting (#19) to pipe nipple “A” until tight.
16. Screw spin-on filter head (#27) to adapter (#19) until snug. Position filter head facing back as shown and tighten adapter (#19) against filter head (#27).
17. Apply oil to both sides of square shoulder ring (#29). Screw filter (#28) and shoulder ring (#29) onto filter head (#27) until snug. Hand tighten filter 1/2 turn.
18. Screw O-ring end of 1 5/16" MJIC x 1 5/16" MJIC x 1 5/16" MORB tee (#21) to filter head (#27) until snug.
19. Attach 1 1/16" MORB plug (#26) to top side of pressure relief valve (#18) and tighten.
20. Attach 1 1/16" MORB x 1 5/16" MJIC adapter (#24) to underside of pressure relief valve (#18) and tighten.
21. Screw tee (#25) to adapter (#24) until snug.
22. Attach mounting bracket (#1) to pressure relief valve (#18) with 1/4"-20 x 1 3/4" GR5 cap screws (#7), flat washers (#13), lock washers (#12), and hex nuts (#8). Tighten nuts to the correct torque.
23. Attach mounting bracket (#1) to reservoir tank with 3/8"-16 x 1" GR5 cap screws (#5), flat washers (#15), spring lock washers (#16), and hex nuts (#11). Draw hex nuts up snug.
24. Rotate tee (#25) until facing right as shown and tighten against adapter (#24).
25. Screw hydraulic hose (#22) to pressure relief valve (#18) until tight.
26. Adjust mounting bracket (#1) as needed and screw hydraulic hose (#22) to tee fitting (#21) until tight.
27. Tighten tee (#21) to filter head (#27).
28. Screw 1 5/16" FJIC x 1 5/16" MJIC elbow (#20) to tee (#21). Rotate elbow in the direction shown and tighten.
29. Tighten mounting bracket nuts (#11) to the correct torque.
30. Screw hydraulic hose (#23) to tee (#25) until tight.
31. Attach hose clamp mount (#2) to reservoir with 5/16"-18 x 3/4" GR5 cap screws (#4), flat washers (#17), lock washers (#14), and hex nuts (#9). Tighten nuts to the correct torque.
32. Attach hydraulic hose clamps (#3) to hose clamp mount (#2) with 5/16"-18 x 2 1/2" GR5 bolts (#6) and lock nuts (#10). Screw on lock nuts only 2 or 3 full turns. Do not tighten until after hydraulic hoses are mounted in the clamps. See “Hydraulic Hose Hook-up to Reservoir” on page 17.
Oil Cooler

Refer to Figure 1-5:
The oil cooler is not a stand alone option. It is included with “No Valve With Cooler Option”, “Manual Valve With Oil Cooler Option”, and “Solenoid Valve Option W/ Cooler”. The oil cooler must be installed first per the instructions below before installing any of the above options.

1. Attach oil cooler mount (#1) to reservoir with 5/16"-18 x 3/4" GR5 hex head cap screws (#2), flat washers (#5), spring lock washers (#4), and hex head nuts (#3). Draw nuts up snug, do not tighten until after a hydraulic hose is attached to port (#8) and filter base (not shown).

2. Attach oil cooler (#6) to oil cooler mount (#1) with 5/16"-18 x 3/4" GR5 hex head cap screws (#2), spring lock washers (#4), and hex head nuts (#3). Tighten nuts to the correct torque.

3. Screw 1 5/16” MJIC x 1 5/16” MORB elbow (#7) to oil cooler until snug. Do not tighten until after hydraulic hose is attached to elbow (#7).
No Valve With Cooler Option

The Hydraulic Reservoir System is supplied with one of three valve options. See “Valve Options” on page 20 for complete description of valve options.

Refer to Figure 1-6:

1. Install oil cooler using instructions on page 10.
2. Rotate elbow (#14) forward as shown and tighten.
3. Apply Teflon tape to pipe threads on 1 5/16” MORB x 1” MNPT adapter (#13).
4. Remove plug from pipe nipple “A” and screw adapter fitting (#13) to pipe nipple “A” until tight.
5. Screw spin-on filter head (#23) to adapter (#13) until snug. Position filter head facing back as shown and tighten adapter (#13) against filter head (#23).
6. Apply oil to both sides of square shoulder ring (#25). Screw oil filter (#24) and shoulder ring (#25) onto filter head (#23) until snug. Continue tighten oil filter past snug by hand tightening filter 1/2 more of a turn.
7. Screw O-ring end of 1 5/16” MJIC x 1 5/16” MJIC x 1 5/16” MORB tee (#16) to filter head (#23) until snug.
8. Attach 1 1/16” MORB plug (#22) to top side of pressure relief valve (#12) and tighten.
9. Attach 1 1/16” MORB x 1 5/16” MJIC adapter (#20) to underside of pressure relief valve (#12) and tighten.
10. Screw tee (#21) to adapter (#20) until snug.
11. Attach mounting bracket (#1) to pressure relief valve (#12) with 1/4”-20 x 1 3/4” GR5 cap screws (#4), flat washers (#8), lock washers (#7), and hex nuts (#5). Tighten hex nuts to the correct torque.
12. Attach mounting bracket (#1) to reservoir tank with 3/8”-16 x 1” GR5 cap screws (#3), flat washers (#9), spring lock washers (#10), and hex nuts (#6). Draw hex nuts up snug.
13. Rotate tee (#21) until facing right as shown and tighten against adapter (#20).
14. Screw hydraulic hose (#17) to pressure relief valve (#12) until tight.
15. Adjust mounting bracket (#1) as needed and screw hydraulic hose (#17) to tee fitting (#16) until tight.
16. Tighten mounting nuts (#6) to the correct torque.
17. Screw hydraulic hose (#18) to tee (#21) until tight.
18. Tighten tee (#16) to filter head (#23).
19. Screw 1 5/16” FJIC x 1 5/16” MJIC elbow (#15) to tee (#16) until snug.
20. Screw 1” x 21” long hydraulic hose (#19) to elbow (#15) until tight.
21. Loosen oil cooler bolts (#2) and adjust cooler as need to attach hydraulic hose (#19) to oil cooler port (#11). Tighten hose (#19) to port (#11).
22. Tighten elbow (#15) to tee (#16).
23. Tighten oil cooler bolts (#2) to the correct torque.

No Valve With Oil Cooler Assembly

Figure 1-6
Section 1: Assembly & Set-up

Manual Valve With Oil Cooler Option
Refer to Figure 1-7:

1. Install oil cooler using instructions on page 10.
2. Attach manual valve (#8) to upper slots in mounting plate. with 3/8"-16 x 2" GR5 cap screws (#1), flat washers (#4), lock washers (#5), and hex nuts (#3). Draw nuts up snug, do not tighten.
3. Screw 1 1/16" MORB x 1 5/16" MJIC 45° elbow (#14) to top side of manual valve (#8). Do not tighten.
4. Screw three 1 1/16" MORB x 1 5/16" MJIC adapter fittings (#6A & #6B) to manual valve (#8) until tight.
5. Attach hydraulic hose (#11) to oil cooler elbow (#10). Draw up snug, do not tighten.
6. Adjust manual valve in mounting slots as needed and attach hydraulic hose (#11) to 45° elbow (#14).
7. Tighten elbow (#10) to oil cooler, elbow (#14) to manual valve, and hose (#11) to elbows (#10 & #14).
8. Tighten 3/8"-16 x 2" GR5 cap screws (#1) to the correct torque.
9. Attach hydraulic hose (#13) to adapter fitting (#6B) and tighten.
10. Apply Teflon tape to the pipe threads on the 1 5/16" MORB x 1" MNPT adapter (#9).
11. Remove plug from pipe nipple “A” and screw adapter fitting (#9) to pipe nipple “A” until tight.
12. Screw spin-on filter head (#15) to adapter (#9) until snug. Position filter head facing back as shown and tighten adapter (#9) against filter head (#15).
13. Apply oil to both sides of square shoulder ring (#17). Screw filter (#16) and shoulder ring (#17) onto filter head (#15) until snug. Continue tighten the filter past snug by hand tightening it 1/2 more of a turn.
14. Screw O-ring end of 1 5/16" MORB x 1 5/16" MJIC 90° elbow (#10) to spin-on filter head until snug.
15. Attach O-ring end of 1" x 21" long hydraulic hose (#12) to oil cooler port (#7) and tighten.
16. Loosen oil cooler bolts (#2) and adjust oil cooler mount in its slots as need to attach hose (#12) to elbow (#10). Tighten hose (#12) to elbow (#10).
17. Tighten elbow (#10) to spin-on filter head (#15).
18. Tighten oil cooler bolts (#2) to the correct torque.

Solenoid Valve W/ Oil Cooler Option
Refer to Figure 1-9 on page 13:

1. Install oil cooler using instructions on page 10.
2. Attach solenoid valve (#9) to upper slots in mounting plate with 3/8"-16 x 2" GR5 cap screws (#3), flat washers (#5), lock washers (#6), and hex nuts (#4). Draw nuts up snug, do not tighten.
3. Remove plug (#1) and screw 3/4" MORB x 7/16" MJIC elbow (#11) to reservoir tank until snug.
4. Screw 1 1/16" MORB x 1 5/16" MJIC 45° elbow (#16) to top side of solenoid (#9). Do not tighten.
5. Screw three 1 1/16" MORB x 1 5/16" MJIC adapter fittings (#7) to solenoid valve (#9) until tight.
6. Apply Teflon tape to one end of elbow fittings (#20) and attach to both ends of solenoid valve (#9). Tighten elbows until oriented as shown.
7. Screw 1/4" x 9 1/2" lg. hydraulic hose (#21) to elbow fitting (#20). Do not tighten.
Refer to Figure 1-9:

14. Attach 1" x 40" long hydraulic hose (#13) to oil cooler elbow (#12). Draw up snug, do not tighten.

15. Adjust solenoid in upper mounting slots as needed and attach hydraulic hose (#13) to 45° elbow (#16).

16. Tighten 90° elbow (#12) to oil cooler, 45° elbow (#16) to solenoid, and hose (#13) to elbows (#12 & #16).

17. Tighten 3/8"-16 x 2" GR5 cap screws (#3) to the correct torque.

18. Attach 1" x 34" long hydraulic hose (#15) to adapter fitting (#7B) and tighten.

19. Apply Teflon tape to the pipe threads on the 1 5/16" MORB x 1" MNPT adapter (#10).

20. Remove plug from pipe nipple "A" and screw adapter fitting (#10) to pipe nipple "A" until tight.

21. Screw spin-on filter head (#17) to adapter (#10) until snug. Position filter head facing back as shown and tighten adapter (#10) against filter head (#17).

22. Apply oil to both sides of square shoulder ring (#19). Screw filter (#18) and shoulder ring (#19) onto filter head (#17) until snug. Continue tighten the filter past snug by hand tightening it 1/2 more of a turn.

23. Screw O-ring end of 1 5/16" MORB x 1 5/16" MJIC elbow (#12) to filter head (#17) until snug.

24. Attach 1" x 21" long hydraulic hose (#14) to oil cooler port (#8) and tighten.

25. Loosen oil cooler bolts (#2) and adjust oil cooler mount in its slots as need to attach hose (#14) to elbow (#12). Tighten hose (#14) to elbow (#12).

26. Tighten elbow (#12) to spin-on filter head (#17).

27. Tighten oil cooler bolts (#2) to the correct torque.
3-Point Hook-up
Refer to Figure 2-1 & Figure 2-2:

⚠️ **DANGER**
A Crushing Hazard exists when hooking-up equipment to a tractor. Do not allow anyone to stand between tractor and implement while backing up to implement. Do not operate hydraulic 3-point lift controls while someone is directly behind the tractor or near the implement.

**NOTE:** Land Pride’s Quick Hitch can be attached to the tractor to provide quick and easy 3-point hook-up and detachment. See your nearest Land Pride dealer to purchase a Quick-Hitch.

A 3-point Category I or Category II hitch is required. The lower 3-point arms of the 3-point hitch must be stabilized to prevent side-to-side movement. Most tractors have sway blocks or adjustable chains for this purpose.

1. Slowly back tractor to the Hydraulic Reservoir while using tractor’s 3-point hydraulic controls to align lower lift arm hitch holes with reservoir clevis lug holes.
2. Engage tractor park brake, shut tractor engine off, and remove key before dismounting from tractor.
3. With tractor’s lower hitch arms aligned and positioned in the clevises, insert lower 3-point hitch pins through clevis lugs and lower arm holes. Secure hitch pins with linchpins.
4. Connect top center link to top center clevis lugs using clevis pin and hairpin cotter.
5. Ensure that the lower hitch arms are blocked to prevent excessive side movement.
6. Using tractor’s 3-point lift, raise reservoir up until parking stands are 1" or 2" off the ground.
7. Remove wire retaining pins and raise parking stands fully up. Re-insert wire retaining pins and secure by making sure wire retainers are caught over the pins.

8. Return to the tractor and slowly operate controls up and down to check for clearance. Make certain tractor tires and drawbar do not interfere. Move or remove drawbar if it interferes with reservoir.
9. Adjust 3-point arms and center link to level reservoir. For detailed instructions, see “Leveling Adjustments” on page 23.

### Driveline Installation

⚠️ **DANGER**
Do not operate a broken or bent driveline. Such drivelines can break apart while rotating at high speeds causing serious injury or death. Always remove Hydraulic Reservoir from service until the driveline can be repaired or replaced.

⚠️ **WARNING**
Do not use a PTO adapter. A PTO adapter will increase strain on the tractor’s PTO shaft resulting in possible damage to shaft and driveline. It will also defeat the purpose of the tractor’s master shield and could cause bodily injury or death.

⚠️ **CAUTION**
Tractor PTO shield and all Hydraulic Reservoir guards must be in place at all times during operation!

⚠️ **CAUTION**
Always engage parking brake, shut off tractor, and remove key before dismounting from tractor.
Section 2: Tractor Hook-up to Reservoir

Table of Contents

Check Driveline Collapsible Length
Refer to Figure 2-4:

IMPORTANT: A driveline that is too long can bottom out causing structural damage to the tractor and reservoir. Always check driveline collapsed length during initial setup, when connecting to a different tractor, and when alternating between using a quick hitch and a standard 3-point hitch. More than one driveline may be required to fit all applications.

1. Make sure driveline is installed properly before checking driveline collapsed length. Refer to “Driveline Installation” instructions on page 14.
2. Measure from universal joint shield to end of outer driveline shield ("B" dimension). If measurement is less than 1", then shorten driveline using instructions provided on page 15.

Shorten Driveline Length
Refer to Figure 2-4:
First check driveline collapsed length as instructed above. If required, shorten driveline as follows:

1. Unhook driveline from tractor PTO shaft and pull outer and inner drivelines apart.
2. Reattach outer driveline to tractor PTO shaft. Pull on inner and outer drivelines to be sure universal joints are properly secured.
3. Hold inner and outer drivelines parallel to each other:
   a. Measure 1" ("B" dimension) back from outer driveline universal joint shield and make a mark at this location on the inner driveline shield.
   b. Measure 1" ("B" dimension) back from the inner driveline universal joint shield and make a mark at this location on the outer driveline shield.
4. Remove driveline from tractor and reservoir.
5. Measure from end of inner shield to scribed mark ("X" dimension). Cut off inner shield at the mark. Cut same amount off the inner shaft ("X1" dimension).
6. Measure from end of outer shield to scribed mark ("Y" dimension). Cut off outer shield at the mark. Cut same amount off the outer shaft ("Y1" dimension).
7. Remove all burrs and cuttings.

IMPORTANT: An additional driveline may be required if the reservoir is to be used on more than one tractor, especially if a quick hitch is used.

IMPORTANT: The driveline must be lubricated before it is put into service. For detailed instructions, see “Lubrication Points” on page 28.

IMPORTANT: Some tractors are equipped with multispeed PTO ranges. Be certain your tractor’s PTO is set for 540 rpm.

IMPORTANT: The tractor’s PTO shaft and reservoir gearbox shaft must be level with each other during installation of driveline.

IMPORTANT: A driveline that is too long can bottom out causing structural damage to the tractor and reservoir. Always check driveline collapsed length during initial setup, when connecting to a different tractor, and when alternating between using a quick hitch and a standard 3-point hitch. More than one driveline may be required to fit all applications.

1. Make sure driveline is installed properly before checking driveline collapsed length. Refer to “Driveline Installation” instructions on page 14.
2. Measure from universal joint shield to end of outer driveline shield (“B” dimension). If measurement is less than 1”, then shorten driveline using instructions provided on page 15.

IMPORTANT:

An additional driveline may be required if the reservoir is to be used on more than one tractor, especially if a quick hitch is used.

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IMPORTANT: The tractor’s PTO shaft and reservoir gearbox shaft must be level with each other during installation of driveline.

IMPORTANT:

A driveline that is too long can bottom out causing structural damage to the tractor and reservoir. Always check driveline collapsed length during initial setup, when connecting to a different tractor, and when alternating between using a quick hitch and a standard 3-point hitch. More than one driveline may be required to fit all applications.
Check Driveline Maximum Length

Refer to Figure 2-5:

The driveline maximum allowable length must, when fully extended, have a minimum overlap of the profile tubes by not less than 1/2 the free length with both inner and outer profile tubes being of equal length.

1. Apply multi-purpose grease to the inside of the outer shaft and reassemble the driveline.
2. Assemble the two driveline profiles together with just 1/2 overlapping of the profile tubes as shown below. Once assembled, measure, and record the maximum allowable length for future reference. Record maximum allowable length here: __________

Refer to Figure 2-5:

Driveline Maximum Length

3. Reattach driveline to tractor PTO and gearbox shaft following steps 4 to 7 on page 15.
4. Continue with “Check Driveline Interference” below.

Check Driveline Interference

1. Start tractor and raise Hydraulic Reservoir just enough to remove support blocks from under reservoir.
2. Slowly engage tractor hydraulic 3-point control lever to lower reservoir while checking for sufficient drawbar clearance. Move drawbar ahead, aside, or remove if required.

Refer to Figure 2-6:

IMPORTANT: Avoid premature driveline breakdown. A driveline that is operating must not exceed an angle of 25 degrees up or down while operating.

3. With PTO off, raise implement fully up to make the following checks below. If driveline exceeds any of the limits listed, set tractor 3-point lift limiter at a height that will keep the driveline within its lift limits and to avoid premature driveline breakdown.
   • Driveline does not exceed 25° up or down.
   • Driveline does not exceed maximum allowable length recorded in step 2 under “Check Driveline Maximum Length”.

Hydraulic Hose Assembly

DANGER

Hydraulic fluid under high pressure can penetrate the skin. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for hydraulic leaks. If hydraulic fluid is injected into the skin or eyes, it must be treated by a doctor familiar with this type of injury within a few hours or gangrene may result. DO NOT DELAY.

Refer to Figure 2-7:

There are two 23'-9" long hydraulic hoses (#6) for connecting reservoir hydraulics to implement hydraulics. The optional large flat face couplers (#4 & #5) or optional small flat face couplers (#1 & #2) will need to be attached to hydraulic hoses (#6).

Large Face Coupler Option

1. Screw male coupler (#5) to one of the two hydraulic hoses (#6) until tight.
2. Screw female coupler (#4) to the other hydraulic hose (#6) until tight.

Small face Coupler Option

1. Screw adapters (#3) to hydraulic hoses (#6) until tight.
2. Screw male coupler (#1) to one of the two adapters (#3) until tight.
3. Screw female coupler (#2) to the other adapter (#3) until tight.
Hydraulic Hose Hook-up to Reservoir

Review Figures 2-8, 2-9 & 2-10 to determine which figure represents the valve arrangement your Hydraulic Reservoir is set-up with.

No Valve No Oil Cooler Option
Refer to Figure 2-8:

a. Determine which line on your implement is the pressure line. Select the hydraulic hose with the coupling that mates with the implement pressure line coupling.
b. Screw that hydraulic hose to tee “A” on the reservoir until tight.
c. Screw remaining hydraulic hose to elbow “B” at the oil filter until tight.
d. Route both hydraulic hoses through hose clamps “C” & “D” and tighten 5/16” lock nuts “E”.

No Valve With Oil Cooler Option
Refer to Figure 2-9:

a. Determine which hydraulic line on your implement is the pressure line. Select the hydraulic hose with the coupling that mates with the implement pressure line coupling.
b. Screw that hydraulic hose to tee “A” on the reservoir until tight.
c. Screw remaining hydraulic hose to elbow “B” at the oil cooler until tight.

Manual Valve & Solenoid Valve Options
Refer to Figures 2-10:

NOTE: The manual and solenoid valves can deliver pressure to either port “A” or “B”. The operation of your implement will determine which port each hose is attached to.

a. Screw hydraulic hoses (#6) shown in Figure 2-7 to adapter fittings (“A” & “B”) at the manual valve or solenoid until tight.
Hose Hook-up to Implement

**DANGER**
Make sure hydraulic hoses are properly routed without twists to prevent becoming pinched or kinked while operating. A pinched or kinked hose can burst and leak hydraulic fluid.

1. Route hydraulic hoses to the attached implement.
2. Connect male and female couplers to the implement couplers. Pull on couplers to make sure they are securely locked.
3. Secure hydraulic hoses along the route with ties provided by the customer. Make sure all kinks, twists, and pinch points are removed.

**Case Drain Option**

Refer to Figure 2-11:
A 3/4”-16 UNF port (#5) is available for implements requiring a case drain line.

**NOTE:** Solenoid valve option will need a customer supplied adapter to use solenoid valve drain and case drain.

1. Screw 3/4” FORB x 9/16” FJIC elbow (#2) to case drain hose (#4) until tight.
2. Screw 3/4” FORB flat face QD coupler to case drain hose (#4) until tight.
3. Remove plug (#1) and store in a safe location.
4. Route optional case drain line to the implement alongside main lead hoses.
5. Screw 3/4” MORB x 9/16” MJIC elbow (#2) to port (#5) until tight.
6. Secure case drain line with ties provided by the customer. Make sure all kinks, twists, and pinch points are removed.

Fill Reservoir With Hydraulic Fluid

Refer to Figure 2-12:
The unit is shipped without hydraulic fluid.

1. Make sure all four parking stands are properly pinned at the same height and properly support the tank on a hard level surface. Make sure bottom drain plug (#1) is screwed in tight and ball valve lever (#3) is turned off (90° to the valve).

**NOTE:** Any high quality mineral based hydraulic fluid such as Mobil Fluid 424 with a viscosity rating of 10W-30 is acceptable. See www.mobil.com for alternate fluids.

2. Remove fill cap (#7) and add 35 gallons of Mobil 424 with viscosity rating of 10W-30 to the empty hydraulic reservoir. Use care to ensure that dust or other foreign particles do not contaminate the fluid.
3. Remove filler cap with dipstick (#3) from reservoir and wipe clean. Fully insert filler cap with dipstick and remove. Check oil level on dipstick.
4. Fill with recommended oil to full mark if low. Replace filler cap and dipstick.

**IMPORTANT:** Ball valve (#3) must be open as shown during pump operation or damage will occur.
Control Box Hook-up

Refer to Figure 2-13:

If Hydraulic Reservoir System is equipped with a solenoid valve or oil cooler, then an electrical control box with wiring harness is included. Make sure the control box wiring is connected to a 12 volt electrical system.

The center red toggle switch turns power to the unit on when pushed and off when pulled to neutral position. A red lamp below the switch illuminates when switch is on.

The blue toggle switch is for continuous operation such as a hydraulic motor. Push on the toggle switch to run a hydraulic motor in one direction and pull to run the motor in the opposite direction. Return switch to center position to stop motor operation. A red lamp below the switch illuminates while toggle switch is on.

The yellow toggle switch on the control box is for momentary operation such as a hydraulic cylinder. Push and hold the toggle switch to move the cylinder rod. Release the toggle switch to stop movement. Push and hold toggle switch in the other direction to reverse cylinder rod movement.

The oil cooler is equipped with an oil temperature sensing switch that turns on the fan when oil temperatures reach 140°F.

Two of the weather proof terminals on the wiring harness are for connecting to the solenoid and the other weather proof terminal is for connecting to the oil cooler.

1. Locate and mount control box in a convenient location for the operator.

2. Route wiring harness with ring terminals to a 12 volt battery. Secure wiring harness with ties. Make sure harness will not become pinched along the route.
   a. Connect red terminal ring to the 12 volt positive post (+) on the battery.
   b. Connect black terminal ring to ground.

3. Route wiring harness with three weather proof terminals to the solenoid valve and/or oil cooler. Secure wiring harness with ties. Make sure harness will not become pinched along the route.
   a. Attach black and white weather proof terminal to one of the solenoid’s terminals and black and red weather proof terminal to the other solenoid terminal. The terminals can be switched if toggle switches operate opposite of what is desired. If there is no solenoid valve, wrap terminals with electrical tape to keep moisture and dust out.
   b. Attach black and green weather proof terminal to the oil cooler. If an oil cooler is not included, wrap terminal with electrical tape to protect it.
Valve Options

The Hydraulic Reservoir System can be set-up with one of three different valve arrangements. Because each arrangement operates a little differently, it is important to know how they operate and which arrangement is best for the work at hand. See your nearest Land Pride dealer should you want to change your valve set-up.

No Valve No Cooler Option
316-250A  No Valve & No Cooler Option

Refer to Figure 3-1:
This arrangement is recommended for snow blowers only and can over heat from continuous use in warm temperatures.

This option powers hydraulic motors by turning the PTO shaft on and off at the tractor controls. Flow to the hydraulic motor is one direction only; meaning the motor cannot be run in reverse. A pressure relief valve is provided to protect the pump and lines from high pressures.

This arrangement is not good for operating hydraulic cylinders as they are bi-directional.

No Valve With Cooler Option
316-281A  No Valve & No Cooler Option

Refer to Figure 3-1:
This option powers hydraulic motors by turning the PTO shaft on and off at the tractor controls. Flow to the hydraulic motor is one direction only meaning the motor cannot be run in reverse. A pressure relief valve is provided to protect the pump and lines from high pressures.

An oil cooler with a temperature switch that turns the cooler on when oil temperature reaches 140° F is included to protect against overheating.

This arrangement is not good for operating hydraulic cylinders as they are bi-directional.
Manual Valve Option With Cooler
316-282A Manual Valve Option With Cooler

Refer to Figure 3-3:
The manual valve is equipped with a spring return lever for changing flow through the hydraulic lines that are attached to the implement. With this arrangement, the tractor PTO can remain running. The valve, when in neutral, dumps hydraulic fluid back to the tank allowing the pump to run continuously. It also opens when the pressure becomes too high dumping fluid back into the tank.

An oil cooler with a temperature switch that turns the cooler on when oil temperature reaches 140°F is included to protect against overheating. The control box will power the oil cooler.

This valve is particularly good for hydraulic cylinders on equipment such as log splitters. It is not recommended for operating equipment designed for continuous operation such as hydraulic motors.

Solenoid Valve Option W/ Cooler
316-280A Solenoid Valve Option With Cooler

Refer to Figure 3-4:
The solenoid valve is electrically activated from a control box mounted near the operator or remotely located for operating while standing near the equipment.

An oil cooler with a temperature switch that turns the cooler on when oil temperature reaches 140°F is included to protect against overheating.

The control box has one toggle switch for power on, one for momentary operation, and one for continuous operation.

Push and hold the yellow toggle switch to move a hydraulic cylinder rod. Pull and hold the toggle switch to move the cylinder rod in the opposite direction. Release the toggle switch to stop cylinder rod movement.

Push blue toggle switch on to run hydraulic motor in one direction. Pull blue toggle switch on to run hydraulic motor in the opposite direction. Manually return toggle switch to neutral (center) position to stop hydraulic motor operation. The solenoid valve, when in neutral, dumps hydraulic fluid back to the tank allowing the pump to run continuously. It also opens when pressure becomes too high dumping fluid back into the tank.
Small Flat Face Couplers
316-290A Small Flat Face Couplers

Refer to Figure 3-5:
These couplers with adapter are designed to attach to hoses with 1 5/16" threads and have 1/2" body size. They are not available for “No Valve No Cooler Option”.

Large Flat Face Couplers
316-289A Large Flat Face Couplers

Refer to Figure 3-6:
These couplers are designed to attach to hoses with 1 5/16" threads and have 3/4" body size.

Case Drain Kit With Coupler
316-291A CASE DRAIN KIT W/ COUPLER

Refer to Figure 3-7:
Case drain hose is complete with 3/4" MORB x 9/16" MJIC elbow, 23'-9" of 3/8" hydraulic hose, and one 3/8" body flat face low spill quick coupler male tip. Attach the elbow end of the hose to the reservoir tank and coupler end to the equipment’s case drain coupler.
Parking Stands
Refer to Figure 4-1:

**WARNING**
Be careful not to pinch fingers or hand while raising and lowering parking stands. Hands and fingers can become pinched in the slide tubes or caught between the reservoir tank and stands.

The four parking stands (#1) should be fully raised for working and while transporting. Make sure wire retaining pins (#2) are fully inserted in hole (A) and wire retainers are caught over the pins.

The four parking stands (#1) should be lowered and pinned with the wire retaining pins (#2) when unhooking for storage. Because the unit contains 35 gallons of hydraulic fluid, it is best to secure parking stands in hole “B”. The unit will be more stable in this hole. If this height is too low for unhooking and re-hooking, then use holes “C” or “D” as needed. Make sure hitch pins are in the same holes on all four legs.

---

**Leveling Adjustments**
Refer to Figure 4-2:

**CAUTION**
Always keep your feet and legs out from under the Hydraulic Reservoir System. Never work under the Hydraulic Reservoir System without properly blocking the reservoir up.

Check for levelness by parking tractor on a level surface. Lowering Hydraulic Reservoir down until unit is 2 to 3 feet off the ground. Place tractor in park or set park brake, shut tractor off, and remove switch key.

1. Place a level across the reservoir tank. Manually adjust one of the two lower lift arms up or down to level the Hydraulic Reservoir from left to right.
2. Rotate level 90 degrees. Manually adjust the length of the top center 3-point link to level the Hydraulic Reservoir from front to rear.
Section 5: Operating Procedures

Startup Checklist
Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training involved in the operation, transport, storage, and maintenance of the Hydraulic Reservoir System. Therefore, it is absolutely essential that no one operates the Hydraulic Reservoir System without first having read, fully understood, and become totally familiar with the Operator’s Manual. Make sure the operator has completed the Operating Checklist below.

Operating Checklist

<table>
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<th>Page No.</th>
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<tr>
<td>Read and follow all Safety Rules carefully. Refer to “Important Safety Information”.</td>
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<tr>
<td>Make sure all guards and shields are in place. Refer to “Important Safety Information”.</td>
<td>Page 1</td>
</tr>
<tr>
<td>Read and follow hook-up instructions. Refer to “Section 1: Assembly &amp; Set-up”.</td>
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<td>Read and make all required adjustments. Refer to “Section 4: Adjustments”.</td>
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<td>Read and follow all operating procedures. Refer to “Section 5: Operating Procedures”.</td>
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<tr>
<td>Make sure there are no hydraulic leaks on the unit. Refer to “Important Safety Information”.</td>
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<td>Read and follow all lubrication instructions. Refer to “Lubrication Points”.</td>
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<tr>
<td>Check Hydraulic reservoir initially and periodically for loose bolts and pins. Refer to “Torque Values Chart”.</td>
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Operating Safety

DANGER
Do not engage tractor PTO while hooking-up and unhooking the pump or driveline to tractor PTO shaft. Do not stand near a rotating driveline. A person’s clothing can become entangled in rotating components resulting in serious injury or death.

DANGER
Make sure hydraulic hoses are properly routed without twists to prevent becoming pinched or kinked while operating. A pinched or kinked hose can burst and leak hydraulic fluid.

DANGER
Make sure when hooking up to non reversing equipment that the hoses are properly connected and that the hydraulic controls are toggled in the correct direction. Running non reversing implements in reverse can damage the equipment and cause injury.

DANGER
Never carry a person on the reservoir. A person can fall and be run over by the tractor causing serious injury or death.

WARNING
Do not use a PTO adapter. A PTO adapter will increase strain on the tractor’s PTO shaft resulting in possible damage to shaft and driveline. It will also defeat the purpose of the tractor’s master shield and could cause bodily injury or death.

WARNING
Do not use the reservoir for pulling fence posts, stumps, etc., lifting objects, carrying objects, or towing other equipment. Any of the above can damage the unit and cause serious bodily injury or death.

WARNING
Do not operate Hydraulic Reservoir System without first hooking the unit to a tractor. Hydraulic Reservoir System can become unstable if not properly secured to a tractor during operation.

WARNING
Do not use the reservoir for pulling fence posts, stumps, etc., lifting objects, carrying objects, or towing other equipment. Any of the above can damage the unit and cause serious bodily injury or death.

CAUTION
Always disengage PTO, engage parking brake, shut tractor engine off, remove switch key, and wait for the attachment to come a complete stop before dismounting from tractor.

CAUTION
Always keep your feet and legs out from under the Hydraulic Reservoir System. Never work under the Hydraulic Reservoir System without properly blocking the reservoir up.

Transporting

CAUTION
When traveling on public roads at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Comply with all federal, state, and local laws.

CAUTION
Avoid catching the hydraulic hoses on brush, posts, stumps, and other protrusions that could damage and/or break them.

1. Always raise parking stands and insert wire retaining pins before traveling.
2. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
3. Select a safe ground speed when transporting from one area to another.
4. Reduce tractor ground speed when turning and leave enough clearance so the equipment does not contact obstacles such as buildings, trees, or fences.
5. Shift to a lower gear when traveling over rough or hilly terrain.
Operating Safety Continued

- Follow all directions on the safety labels.
- Do not allow anyone to operate the reservoir who has not been properly trained in its safe operation.
- Use this Hydraulic Reservoir System only with equipment that matches its rated hydraulic flow and pressure. Damage may occur to the unit and to the equipment it is powering.
- Contact your local utility services before working any soil with an attached implement and ask them to mark location of any underground utility services in the area. Be sure to ask how close you can work to the marks or flags they positioned.
- Do not alter the Hydraulic Reservoir System in a way which will adversely affect its performance or reliability or use the Hydraulic Reservoir System for a purpose for which it was not designed.

IMPORTANT: Ball valve (#3) as shown in Figure 6-1 on page 26 must be open during pump operation or damage will occur.

General Operating Instructions

This system is specifically intended to provide hydraulic operating capability to hydraulic driven attachments on tractors that do not having enough hydraulic system capacity to drive those attachments.

By now you should have thoroughly read your Operator’s Manual, properly installed your Hydraulic Reservoir System onto your tractor, fully opened the ball valve, and performed your pre-start and operational running checklist. Make sure you have reviewed safety and operating instructions for the attachment you are about to operate, you have made appropriate hydraulic connections to the mating attachment, fully opened the ball valve, and the attachment you will be driving or powering is in a position to run in static mode without causing damage.

Once you are ready to begin, you will want to increase the tractor’s engine rpm to about mid range. With the tractor in neutral gear and the park brake in the on position, engage the 540 rpm rear PTO while carefully observing for hydraulic leaks, safety hazards, or obstructions to normal implement operation. If any such malfunctions do occur, disengage the PTO, turn off the tractor, and take appropriate corrective action. If no malfunctions are observed, engage PTO and increase engine rpm to normal PTO speed and again observe for proper operating function. If everything is operating properly, you may commence with normal operation of your implement or attachment. Disengage the PTO immediately if at any time a malfunction of the attachment is observed.

The HRS3025 with 3000 psi at 25 gpm and 35 gallon self contained hydraulic reservoir is designed to provide plenty of clean hydraulic flow for just about any attachment in these operating ranges. With a little practice, you will very soon learn how user friendly Land Pride’s Hydraulic Reservoir System is to operate.

See Features and Benefits section for additional information.
Proper servicing and adjustments are key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly downtime and repair. Check all bolts for tightness after using unit for several hours. Replace worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride dealer.

**CAUTION**
Do not alter Land Pride equipment or replace parts with other brands. Doing so can cause equipment to perform improperly and may lead to breakage that can cause bodily injury. Replace parts only with genuine Land Pride parts.

### Hydraulic Fluid Maintenance

**Refer to Figure 6-1:**

One of the most important things you can do to prevent hydraulic system problems is to ensure that your hydraulic oil reservoir remains free of dirt and other contaminations. The following will go a long way to prevent occurrence of pump, motor, and valve problems.

**Check Fluid Level**

Check fluid level every 8 hours or when a leak or spill has occurred.

1. Level Hydraulic Reservoir.
2. Clean dirt from around fill cap (#7) and remove twist lock filler cap. Fluid level is OK if oil shows on the dipstick. Also decal (#2) Indicates oil level when full.
3. Add Mobil Fluid 424 to the reservoir until oil shows on filler cap dipstick. See Important Note above.

**Replace Filter Element**

Replace filter element (#8) after every 75 hours of operating or if contamination occurs.

1. Place a drip pan under drain plug (#1).
2. Remove drain plug and fill cap (#7).
3. Allow hydraulic fluid to completely drain from unit and then replace drain plug. Tighten plug.
4. Fill reservoir with 35 gallons of Mobil Fluid 424. See Important Note on left side of this page.
5. When full, replace fill cap (#7) and tighten.

**Operate Hydraulic Pump**

**DANGER**

Hydraulic fluid under high pressure can penetrate the skin. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for hydraulic leaks. If hydraulic fluid is injected into the skin or eyes, it must be treated by a doctor familiar with this type of injury within a few hours or gangrene may result. **DO NOT DELAY.**

1. Always use a clean cloth to wipe couplers (#4 & #5) and implement couplers (not shown) clean before attaching hydraulic hoses to the implement.
2. Make sure lever on ball valve (#3) is **OPEN** (handle turned in-line with valve as shown).
Section 6: Maintenance & Lubrication

1. Operate hydraulic pump at full 540 rpm and check oil filter, hose connections, and hoses for leaks. Never check high pressure leaks with hands or other body parts. Use cardboard or wood to check leaks.
2. If oil filter has a slight leak, shutdown system and then tighten oil filter (#8) an additional 1/4 turn.
3. Make necessary repairs before putting Hydraulic Reservoir System into operation.

Long Term Storage
Clean, inspect, service, and make necessary repairs to the Hydraulic Reservoir System when parking it for long periods and when parking it at the end of a working season. This will help ensure that the reservoir is ready for use the next time you hook-up to it.

! CAUTION
Park Hydraulic Reservoir on a solid hard level surface. Surfaces that are soft or prone to becoming soft from moisture or from sun heat can allow the unit to tip over causing damage to the unit and injury.

1. Park unit on a solid level surface. Make sure the surface will remain solid and not become soft from moisture or heat. Asphalt has a tendency to become soft from being heated by the sun.
2. Make sure parking stands are secured with wiring retaining pins before unhooking.
3. Clean off any dirt and grease that may have accumulated on the reservoir. Wash surface thoroughly with a garden hose.
4. Inspect for loose, damaged, or worn parts and adjust or replace as needed.
5. Lubricate as noted in “Lubrication Points” starting on page 28.
6. Replace all damaged or missing decals.
7. Store Hydraulic Reservoir System on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer life.
8. Follow all unhooking instructions on this page when disconnecting tractor from the Hydraulic Reservoir System.
9. Repaint parts where paint is worn or scratched to prevent rust.

Unhooking Hydraulic Reservoir
1. See “Long Term Storage” on this page if unit is to be stored for a long time.
2. Park tractor on a level hard surface. Raise reservoir up, place tractor gear selector in park, set park brake, shut tractor engine off and remove switch key.
3. Adjust parking stands to the minimum height available that will allow the tractor to unhook from the unit. For detailed instructions, see “Parking Stands” on page 23.
4. Without starting the tractor, lower 3-point arms down until parking stands are supporting the unit.

NOTE: Leave the 23'-9" long hydraulic hoses attached to the reservoir. Disconnect them at the implement end only.

5. Unhook hydraulic hoses from implement and coil on storage hooks located on the back of the reservoir.
6. Pull back on driveline pull collar and hold while pulling driveline yoke from tractor PTO shaft.
7. Collapse driveline by pushing tractor end of driveline towards the reservoir.
8. Support collapsed driveline off the ground to keep dirt away from driveline pull collars and bearings.
9. Remove top center hitch pin keeper and hitch pin. If provided, place center 3-point link in tractor’s holding clip.
10. Remove linchpins and hitch pins from lower 3-point lift arms.
11. Restart tractor and drive forward several feet while making sure lower 3-point arms do not catch on implement while pulling away.
12. Place gear selector in park or set park brake, shut tractor engine off, remove switch key, and dismount tractor.
13. Reinstall hitch pins, linchpins, and hair pin cotters in the Hydraulic Reservoir hitch for safe keeping.
Lubrication Points

**Gearbox**

**NOTE:** Check oil if gearbox is leaking. Do not overfill! Gearbox should be oriented as shown when checking oil. Always check oil level when gearbox is cold.

If oil is below bottom of site gauge/plug hole (See arrow), remove site gauge/oil plug and add recommended gear lube through plug hole until oil flows out of plug hole. Reinstall and tighten site/gauge/oil plug.

Type of lubrication: 80-90W EP gear lube
Quantity = Fill until oil begins to flow out of plug hole.

---

**Driveline Shaft U-Joints**

Type of lubrication: Multi-purpose grease
Quantity - 4 to 8 Pumps

---

**Driveline Profiles**

Type of lubrication: Multi-purpose grease
Quantity - Clean & coat inner profile tube of driveline with a light film of grease and then reassemble.

---

**Inner Tube Bearings**

Type of lubrication: Multi-purpose grease
Quantity - As Required

---

**Lubrication Points**

<table>
<thead>
<tr>
<th>Legend</th>
<th>50 Hrs</th>
<th>25 Hours</th>
<th>25 Hours</th>
<th>As Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-purpose spray lube</td>
<td>Multi-purpose grease lube</td>
<td>Multi-purpose oil lube</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

"DO NOT OVERFILL!" When checking oil, gearbox should be oriented with flat side down as shown. Unbolt speed pump mount from reservoir frame and rotate gearbox down to check oil level.

---

"DO NOT OVERFILL!" When checking oil, gearbox should be oriented with flat side down as shown. Unbolt speed pump mount from reservoir frame and rotate gearbox down to check oil level.
## HRS3025

### Specifications & Capacities

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum tractor horsepower</td>
<td>52 hp</td>
</tr>
<tr>
<td>Maximum hydraulic horsepower output</td>
<td>43 hp</td>
</tr>
<tr>
<td>Pump capacity</td>
<td>Approx. 25 gpm @ 540 rpm at 3000 PSI</td>
</tr>
<tr>
<td>PTO input speed</td>
<td>540 rpm</td>
</tr>
<tr>
<td>Hydraulic fluid type</td>
<td>Mobil Fluid 424 (See <a href="http://www.mobil.com">www.mobil.com</a> for alternate fluids)</td>
</tr>
<tr>
<td>Reservoir capacity</td>
<td>35 Gallons</td>
</tr>
<tr>
<td>Filter type</td>
<td>LE 10 Micron filter</td>
</tr>
<tr>
<td>Oil level check</td>
<td>Oil fill cap with dipstick</td>
</tr>
<tr>
<td>Overload protection</td>
<td>Hydraulic relief valve</td>
</tr>
<tr>
<td>Hitch</td>
<td>3-Point Cat. I &amp; II with clevis style lower hitch, Quick hitch adaptable</td>
</tr>
<tr>
<td>Driveline</td>
<td>ASAE Category 2</td>
</tr>
<tr>
<td>Pressure &amp; return hose lengths</td>
<td>24 Feet each</td>
</tr>
<tr>
<td>Case drain port</td>
<td>3/4&quot;-16 UNF</td>
</tr>
</tbody>
</table>

### Optional & Accessory Equipment

<table>
<thead>
<tr>
<th>Option</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow control</td>
<td>No Valve No Cooler (Pressure relief valve provided for protection)</td>
</tr>
<tr>
<td></td>
<td>No Valve With Cooler (Pressure relief valve provided for protection)</td>
</tr>
<tr>
<td></td>
<td>Manual Operated Valve With Oil Cooler (Pressure relief is built into the valve)</td>
</tr>
<tr>
<td></td>
<td>Solenoid Operated Valve With Oil Cooler (Pressure relief is built into the valve)</td>
</tr>
<tr>
<td>Small flat face couplers</td>
<td>1/2&quot; body size (Includes adapter for attaching to hoses with 1 5/16&quot; threads)</td>
</tr>
<tr>
<td>Large flat face couplers</td>
<td>3/4&quot; body size (Attach to hoses with 1 5/16&quot; threads)</td>
</tr>
<tr>
<td>Case drain kit</td>
<td>Complete with 3/4&quot; MORB x 9/16&quot; MJIC elbow, 23'-9&quot; of 3/8&quot; hydraulic hose, and one 3/8&quot; body flat face low spill quick coupler male tip</td>
</tr>
</tbody>
</table>

### Diagram

- Dimensions: 21 3/4" x 25 3/16" x 42 1/2" MIN. 48 1/4" MAX. x 14 1/8" MIN. 29 7/8" MAX. x 46"
## HRS3025

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>540 rpm Cat I &amp; II three-point mounting</td>
<td>Adapted for service on a wide range of tractors.</td>
</tr>
<tr>
<td>Low horsepower requirements</td>
<td>52 Horsepower requirement for approximately 25 gpm @ 3000 PSI and 540 rpm</td>
</tr>
<tr>
<td>35 Gallon self contained reservoir with 10 micron filter</td>
<td>Provides more than ample amounts of clean and cool hydraulic fluid for even the most demanding applications.</td>
</tr>
<tr>
<td>Steel construction on Hydraulic Tank</td>
<td>Provides for long service life in harsh environments.</td>
</tr>
<tr>
<td>Standard reversing solenoid</td>
<td>Allows powered implements, motors, and cylinders to be reversed for expanded range of performance capabilities.</td>
</tr>
<tr>
<td>Standard pressure relief valve</td>
<td>Protects hydraulic system from overloads or unanticipated stalls.</td>
</tr>
<tr>
<td>Standard case drain port</td>
<td>Enables attachment and usage with implements equipped with and requiring case drain return lines.</td>
</tr>
<tr>
<td>Standard compliment of hydraulic fittings &amp; two 23'-9&quot; of hydraulic hoses supplied</td>
<td>Enables ready attachment and adaptation to a wide range of tractors and applications.</td>
</tr>
<tr>
<td>Multi-functional electronic remote tether control</td>
<td>Enables forward and reverse continuous flow or intermittent forward or reverse flow from the tractor seat or on the ground.</td>
</tr>
<tr>
<td>Driveline connected</td>
<td>Easy hook-up to rear PTO tractor shaft.</td>
</tr>
<tr>
<td>Oil cooler</td>
<td>For oil cooling when necessary. Included with hand valve &amp; solenoid valve options. Optional with no valve option.</td>
</tr>
<tr>
<td>Integral storage stands</td>
<td>Provides for easy installation and removal from the tractor and clean and convenient long term storage.</td>
</tr>
</tbody>
</table>
## Troubleshooting Chart

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hydraulic fluid is operating at too high a temperature.</strong></td>
<td>One or more hydraulic hoses are twisted, kinked, or pinched.</td>
<td>Locate twist, kink, or pinch points and remove.</td>
</tr>
<tr>
<td></td>
<td>Reservoir does not have an oil cooler.</td>
<td>Add a Land Pride oil cooling system to the reservoir.</td>
</tr>
<tr>
<td></td>
<td>The power on/off red toggle switch at the control box is not turned on.</td>
<td>Turn power toggle switch on.</td>
</tr>
<tr>
<td></td>
<td>Temperature switch for the oil cooler is malfunctioning.</td>
<td>Replace temperature switch.</td>
</tr>
<tr>
<td></td>
<td>Fan motor is malfunctioning.</td>
<td>Replace fan motor.</td>
</tr>
<tr>
<td><strong>Hydraulic Reservoir System does not develop enough oil pressure to power implement.</strong></td>
<td>Implement requires more than 43 horsepower to operate.</td>
<td>Only use with implements not requiring more than 43 horsepower to operate.</td>
</tr>
<tr>
<td></td>
<td>Tractor PTO is not operating at 540 rpm.</td>
<td>Increase PTO speed to 540 rpm.</td>
</tr>
<tr>
<td></td>
<td>One or more hydraulic hoses are twisted, kinked, or pinched.</td>
<td>Locate twist, kink, and/or pinch points and remove.</td>
</tr>
<tr>
<td></td>
<td>Oil filter is plugged.</td>
<td>Replace oil filter.</td>
</tr>
<tr>
<td></td>
<td>Hydraulic pump is worn.</td>
<td>Replace hydraulic pump.</td>
</tr>
<tr>
<td></td>
<td>Implement requires more than 3,000 PSI to operate.</td>
<td>Do not use Implements with an operating pressure rating exceeding 3,000 PSI.</td>
</tr>
<tr>
<td><strong>Hydraulic hose leaks oil.</strong></td>
<td>Fittings are not tight.</td>
<td>Tighten fittings.</td>
</tr>
<tr>
<td></td>
<td>Hydraulic hose has developed a pin hole or has become damaged from being twisted, kinked, or pinched.</td>
<td>Replace hydraulic hose and make sure hose cannot become twisted, kinked, or pinched.</td>
</tr>
<tr>
<td><strong>Hydraulic motor at the implement runs backwards.</strong></td>
<td>Manual valve lever is activated in the wrong direction.</td>
<td>Activate manual valve lever in the other direction.</td>
</tr>
<tr>
<td></td>
<td>Wiring at the solenoid is hooked up backwards.</td>
<td>Switch connections at the solenoid terminals.</td>
</tr>
<tr>
<td></td>
<td>No control valve &amp; no oil cooler: Pressure hose from implement is not connected to reservoir tee below relief valve.</td>
<td>Reconnect pressure hose from implement to reservoir tee just below the pressure relief valve and return line to oil filter elbow. Refer to page 9.</td>
</tr>
<tr>
<td></td>
<td>No control valve &amp; with oil cooler: Pressure hose from implement is not connected to reservoir tee below relief valve.</td>
<td>Reconnect pressure hose from implement to reservoir tee below pressure relief valve and return line to oil cooler elbow. Refer to page 11.</td>
</tr>
<tr>
<td><strong>Hydraulic cylinder at the implement operates backwards.</strong></td>
<td>Wiring at the solenoid is hooked up backwards.</td>
<td>Switch connections at the solenoid terminals.</td>
</tr>
<tr>
<td></td>
<td>Manual valve lever is activated in the wrong direction.</td>
<td>Activate manual valve lever in the other direction.</td>
</tr>
<tr>
<td><strong>Hydraulic cylinder operates only in one direction.</strong></td>
<td>System is not set-up with a manual operated valve or a solenoid operated valve.</td>
<td>Add a manual operated or solenoid operated valve to the hydraulic reservoir.</td>
</tr>
<tr>
<td><strong>PTO Driveline is bent. Tractor PTO shaft should be repaired or replaced if bent.</strong></td>
<td>Driveline is contacting draw bar or is bottoming out.</td>
<td>Reposition drawbar. Replace driveline profiles and cut profiles to correct length.</td>
</tr>
<tr>
<td><strong>Pump oil seal leaking.</strong></td>
<td>Hydraulic hose between pump and attached implement has been pinched or is collapsed.</td>
<td>Replace lower seal of pump. Check hydraulic hose for twists, kinks, pinch points, or collapsed condition.</td>
</tr>
<tr>
<td><strong>Tractor battery discharges electricity when switch key is turned off.</strong></td>
<td>Toggle Switches on the control box are not in neutral position (off).</td>
<td>Turn all toggle switches at the control box to neutral position (off).</td>
</tr>
<tr>
<td></td>
<td>Electrical wiring harness has a short.</td>
<td>Repair wiring harness or replace.</td>
</tr>
</tbody>
</table>
# Torque Values Chart for Common Bolt Sizes

<table>
<thead>
<tr>
<th>Bolt Size (inches)</th>
<th>Bolt Head Identification</th>
<th>Bolt Size (Metric)</th>
<th>Bolt Head Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade 2</td>
<td>Grade 5</td>
<td>Grade 8</td>
</tr>
<tr>
<td>in-tpi</td>
<td>N · m</td>
<td>ft-lb</td>
<td>N · m</td>
</tr>
<tr>
<td>1/4&quot; - 20</td>
<td>7.4</td>
<td>5.6</td>
<td>11</td>
</tr>
<tr>
<td>1/4&quot; - 28</td>
<td>8.5</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>5/16&quot; - 18</td>
<td>15</td>
<td>11</td>
<td>24</td>
</tr>
<tr>
<td>5/16&quot; - 24</td>
<td>17</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>3/8&quot; - 16</td>
<td>27</td>
<td>20</td>
<td>42</td>
</tr>
<tr>
<td>3/8&quot; - 24</td>
<td>31</td>
<td>22</td>
<td>47</td>
</tr>
<tr>
<td>7/16&quot; - 14</td>
<td>43</td>
<td>32</td>
<td>67</td>
</tr>
<tr>
<td>7/16&quot; - 20</td>
<td>49</td>
<td>36</td>
<td>75</td>
</tr>
<tr>
<td>1/2&quot; - 13</td>
<td>66</td>
<td>49</td>
<td>105</td>
</tr>
<tr>
<td>1/2&quot; - 20</td>
<td>75</td>
<td>55</td>
<td>115</td>
</tr>
<tr>
<td>9/16&quot; - 12</td>
<td>95</td>
<td>70</td>
<td>150</td>
</tr>
<tr>
<td>9/16&quot; - 20</td>
<td>105</td>
<td>79</td>
<td>165</td>
</tr>
<tr>
<td>5/8&quot; - 11</td>
<td>130</td>
<td>97</td>
<td>205</td>
</tr>
<tr>
<td>5/8&quot; - 18</td>
<td>150</td>
<td>110</td>
<td>230</td>
</tr>
<tr>
<td>3/4&quot; - 10</td>
<td>235</td>
<td>170</td>
<td>360</td>
</tr>
<tr>
<td>3/4&quot; - 16</td>
<td>260</td>
<td>190</td>
<td>405</td>
</tr>
<tr>
<td>7/8&quot; - 9</td>
<td>225</td>
<td>165</td>
<td>585</td>
</tr>
<tr>
<td>7/8&quot; - 14</td>
<td>250</td>
<td>185</td>
<td>640</td>
</tr>
<tr>
<td>1&quot; - 8</td>
<td>340</td>
<td>250</td>
<td>875</td>
</tr>
<tr>
<td>1&quot; - 12</td>
<td>370</td>
<td>275</td>
<td>955</td>
</tr>
<tr>
<td>1-1/8&quot; - 7</td>
<td>480</td>
<td>355</td>
<td>1080</td>
</tr>
<tr>
<td>1-1/8&quot; - 12</td>
<td>540</td>
<td>395</td>
<td>1210</td>
</tr>
<tr>
<td>1-1/4&quot; - 7</td>
<td>680</td>
<td>500</td>
<td>1520</td>
</tr>
<tr>
<td>1-1/4&quot; - 12</td>
<td>750</td>
<td>555</td>
<td>1680</td>
</tr>
<tr>
<td>1-3/8&quot; - 6</td>
<td>890</td>
<td>655</td>
<td>1990</td>
</tr>
<tr>
<td>1-3/8&quot; - 12</td>
<td>1010</td>
<td>745</td>
<td>2270</td>
</tr>
<tr>
<td>1-1/2&quot; - 6</td>
<td>1180</td>
<td>870</td>
<td>2640</td>
</tr>
<tr>
<td>1-1/2&quot; - 12</td>
<td>1330</td>
<td>980</td>
<td>2970</td>
</tr>
</tbody>
</table>

1. in-tpi = nominal thread diameter in inches-threads per inch
2. N · m = newton-meters
3. ft-lb = foot pounds
4. mm x pitch = nominal thread diameter in millimeters x thread pitch

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

Land Pride warrants to the original purchaser that this Land Pride product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Driveline: One year Parts and Labor.

Hydraulic Cylinder: One year Parts and Labor.

Hoses and seals: Considered wear items.

Hydraulic Pump: Two years Parts and Labor.

Solenoid Controlled Valves: One year Parts and Labor.

This Warranty is limited to the repair or replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride’s 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. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Land Pride dealer. Land Pride 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 Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, 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 Land Pride within 30 days from the date of purchase by the end user.

IMPORTANT: The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

Model Number ____________________ Serial Number ____________________