Ripper Shanks
RS15 & RS20

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!

Cover photo may show optional equipment not supplied with standard unit.
For an Operator’s Manual and Decal Kit in French Language, please see your Land Pride dealer.

Printed 11/28/18
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>
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<tr>
<th>Model Number</th>
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Dealer Contact Information

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

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California Proposition 65

⚠️ WARNING: Cancer and reproductive harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)
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**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.
Listed below are common practices that may or may not be applicable to the products described in this manual.

**Safety at All Times**

Careful operation is your best assurance against an accident.

All operators, no matter how much experience they may have, should carefully read this manual and other related manuals, or have the manuals read to them, before operating the power machine and this implement.

▲ Thoroughly read and understand the “Safety Label” section. Read all instructions noted on them.
▲ Do not operate the equipment while under the influence of drugs or alcohol as they impair the ability to safely and properly operate the equipment.
▲ The operator should be familiar with all functions of the tractor and attached implement and be able to handle emergencies quickly.
▲ Make sure all guards and shields appropriate for the operation are in place and secured before operating implement.
▲ Keep all bystanders away from equipment and work area.
▲ Start tractor from the driver’s seat with hydraulic controls in neutral.
▲ Operate tractor and controls from the driver’s seat only.
▲ Never dismount from a moving tractor or leave tractor unattended with engine running.
▲ 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.
▲ While transporting and operating equipment, watch out for objects overhead and along side such as fences, trees, buildings, wires, etc.
▲ Do not turn tractor so tight as to cause hitched implement to ride up on the tractor’s rear wheel.
▲ Store implement in an area where children normally do not play. When needed, secure attachment against falling with support blocks.

**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 a hazardous situation that, if not avoided, will result in death or serious injury.

[WARNING]

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

[CAUTION]

Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

**Safety Precautions for Children**

Tragedy can occur if the operator is not alert to the presence of children. Children generally are attracted to implements and their work.

▲ Never assume children will remain where you last saw them.
▲ Keep children out of the work area and under the watchful eye of a responsible adult.
▲ Be alert and shut the implement and tractor down if children enter the work area.
▲ Never carry children on the tractor or implement. There is not a safe place for them to ride. They may fall off and be run over or interfere with the control of the power machine.
▲ Never allow children to operate the power machine, even under adult supervision.
▲ Never allow children to play on the power machine or implement.
▲ Use extra caution when backing up. Before the tractor starts to move, look down and behind to make sure the area is clear.

**Tractor Shutdown & Storage**

▲ If engaged, disengage power take-off.
▲ Park on solid, level ground and lower implement to ground or onto support blocks.
▲ Put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.
▲ Relieve all hydraulic pressure to auxiliary hydraulic lines.
▲ Wait for all components to stop before leaving operator’s seat.
▲ Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.
▲ Detach and store implement in an area where children normally do not play. Secure implement using blocks and supports.
Listed below are common practices that may or may not be applicable to the products described in this manual.

**Tire Safety**
- Tire changing can be dangerous and must be performed by trained personnel using the correct tools and equipment.
- Always maintain correct tire pressure. Do not inflate tires above recommended pressures shown in the Operator’s Manual.
- When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- Securely support the implement when changing a wheel.
- When removing and installing wheels, use wheel handling equipment adequate for the weight involved.
- Make sure wheel bolts have been tightened to the specified torque.

**Transport Safely**
- Comply with federal, 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 towed trailer to swerve and upset. Reduce speed if towed trailer is not equipped with brakes.
- Avoid contact with any overhead utility lines or electrically charged conductors.
- Always drive with load on end of loader arms low to the ground.
- Always drive straight up and down steep inclines with heavy end of a tractor with loader attachment on the “uphill” side.
- Engage park brake when stopped on an incline.
- Maximum transport speed for an attached equipment 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 attached equipment:
  - 20 mph when weight of attached equipment is less than or equal to the weight of machine towing the equipment.
  - 10 mph when weight of attached equipment exceeds weight of machine towing equipment but not more than double the weight.
- IMPORTANT: Do not tow a load that is more than double the weight of the vehicle 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 implement.
- Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
- Always hitch the implement to the machine towing it. Do not use the safety chain tow the implement.

**Practice Safe Maintenance**
- Understand procedure before doing work. Refer to the Operator’s Manual for additional information.
- Work on a level surface in a clean dry area that is well-lit.
- Lower implement to the ground and follow all shutdown procedures before leaving the operator’s seat to perform maintenance.
- Do not work under any hydraulic supported equipment. It can settle, suddenly leak down, or be lowered accidentally. If it is necessary to work under the equipment, securely support it with stands or suitable blocking beforehand.
- Use properly grounded electrical outlets and tools.
- Use correct tools and equipment for the job that are in good condition.
- Allow equipment to cool before working on it.
- Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on implement.
- Inspect all parts. Make certain parts are in good condition & installed properly.
- Replace parts on this implement with genuine Land Pride parts only. Do not alter this implement in a way which will adversely affect its performance.
- Do not grease or oil implement while it is in operation.
- Remove buildup of grease, oil, or debris.
- Always make sure any material and waste products from the repair and maintenance of the implement are properly collected and disposed.
- Remove all tools and unused parts before operation.
- Do not weld or torch on galvanized metal as it will release toxic fumes.
Important Safety Information

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

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.

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

Avoid Underground Utilities
- Dig Safe, Call 811 (USA).
  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.

Wear Personal Protective Equipment (PPE)
- 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 headphones while operating equipment.

Avoid High Pressure Fluids Hazard
- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Before disconnecting hydraulic lines or performing work on the hydraulic system, be sure to release all residual pressure.
- 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.

Use Seat Belt and ROPS
- Land Pride recommends the use of a CAB or roll-over-protective-structures (ROPS) and seat belt in almost all power machines. Combination of a CAB or ROPS and seat belt will reduce the risk of serious injury or death if the power machine should be upset.
- If ROPS is in the locked-up position, fasten seat belt snugly and securely to help protect against serious injury or death from falling and machine overturn.

Keep Riders Off Machinery
- Never carry riders on tractor or implement.
- Riders obstruct operator’s view and interfere with the control of the power machine.
- Riders can be struck by objects or thrown from the equipment.
- Never use tractor or implement to lift or transport riders.
Safety Labels

Your Ripper Shank comes equipped with all safety labels in place. They are 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.

**WARNING**

**UNDERGROUND UTILITIES HAZARD**

CALL BEFORE YOU DIG
Call 811 (U.S. only)
or
Call Local Utilities

**CAUTION**

To prevent injury or death:
- Read and understand Operator’s Manual before using.
- Lower implement, stop tractor engine, set park brake and remove ignition key before servicing, adjusting, repairing or unplugging.
- Do not allow riders.
- Keep others away during operation.
- Safely support and secure implement before repairs are made.

858-237C
Warning Underground Utilities

818-719C
Caution to Prevent Injury or Death
Land Pride welcomes you to the growing family of new product owners. This Ripper Shank has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this product.

Application
The **RS15 & RS20 Ripper Shanks** are designed to break up the hardpan and break small tree roots. Vertically breaking up the soil allows for better water absorption and crop production.

Ripper Shanks are adapted for category I and II 3-point hitch attachment on tractors in the 35-85 horsepower range for the RS15, and 70-110 hp range for the RS20. Ripper Shanks are Quick Hitch compatible.

The RS Series Ripper Shanks have applications in commercial landscaping, construction, farms, ranches, and municipal maintenance programs.

See “Specifications & Capacities” on page 17 and “Features & Benefits” on page 18 for additional information and performance enhancing options.

Using This Manual
- This Operator’s Manual is designed to help familiarize the operator with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator’s or Parts Manual, contact your authorized dealer. Manuals can also be downloaded, free-of-charge, from our website at www.landpride.com

Terminology
“Right” or “Left” as used in this manual is determined by facing forward in the direction the machine will operate while in use unless otherwise stated.

Definitions

**IMPORTANT:** A special point of information related to the following topic. Land Pride’s intention is this information must be read & noted before continuing.

**NOTE:** A special point of information that the operator should be aware of before continuing.

Owner Assistance
The dealer should complete the Online Warranty Registration at the time of purchase. This information is necessary to provide you with quality customer service.

The parts on your Ripper Shank 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
For quick reference and prompt service, record model and serial number on the inside cover page and again on the warranty page. Always provide model number and serial number when ordering parts and in all correspondences with your Land Pride dealer. For location of your serial number plate, see Figure 1.

Further Assistance
Your dealer wants you to be satisfied with your new Ripper Shank. 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 any problems you have with your implement with your dealership service personnel so they can address the problem.
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
lp servicedept@landpride.com
Tractor Requirements
The RS15 & RS20 Ripper Shanks are designed for Category I and II 3-point hitches and are Quick Hitch compatible. Tractor horsepower ratings for the Ripper Shanks are 35-85 hp for the RS15 and 70-110 hp for the RS20. No tractor weight requirements, however weights may be added to the tractor for better traction.

WARNING
To avoid serious injury or death:
Lightweight tractors with rear attached implements may need weights added to the front to maintain steering control. Consult your tractor Operator’s Manual to determine proper weight requirements and maximum weight limitations.

Before You Start
Read and understand the Operator’s Manual for your Ripper Shank. An understanding of how it works will aid in the assembly and setup of your Ripper Shank.

It is best to go through the Assembly Checklist below before assembling the Ripper Shank. Speed up your assembly task and make the job safer by having all needed parts and equipment readily at hand.

Torque Requirements
See “Torque Values Chart” page 20 to determine correct torque values when tightening hardware.

<table>
<thead>
<tr>
<th>Check</th>
<th>Reference</th>
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<tr>
<td>□ Have a fork lift or hoist with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.</td>
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<tr>
<td>□ Have a minimum of two people available during assembly.</td>
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<tr>
<td>□ Make sure all major components and loose parts are shipped with the machine.</td>
<td>Operator’s Manual</td>
</tr>
<tr>
<td>□ Double check to make sure all parts, fasteners and pins are installed in the correct location to lessen the chance of using a bolt incorrectly. Refer to the Parts Manual if unsure.</td>
<td>Operator’s Manual 307-232M Parts Manual 307-232P</td>
</tr>
<tr>
<td>□ Make sure working parts move freely, bolts are tight &amp; cotter pins are spread.</td>
<td>Operator’s Manual</td>
</tr>
<tr>
<td>□ Make sure all safety labels are correctly located and legible. Replace if damaged.</td>
<td>Page 4</td>
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Tractor Shutdown Procedure
The following are basic tractor shutdown procedures. Follow these procedures and any additional shutdown procedures provided in your tractor Operator’s Manual before leaving the operator’s seat.

1. Reduce engine speed and disengage power take-off if engaged.
2. Park tractor and implement on level, solid ground.
3. Lower implement to ground or onto non-concrete support blocks.
4. Put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.
5. Relieve all hydraulic pressure to auxiliary hydraulic lines.
6. Wait for all components to come to a complete stop before leaving the operator’s seat.
7. Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.
RS20 Assembly

**WARNING**

To avoid serious injury or death:

Have a secure grip on the shank while assembling it. Keep feet and other bodily extremities out from under the shank. The shank is very heavy and could fall.

Refer to Figure 1-1:

1. Use hoist or suitable lifting device to support mainframe off of the ground.
2. Remove 3/4-10x4 GR8 bolt (#5) flat washers (#4) spacer bushings (#3) and locknut (#6) from shank mount (#1) and set to the side. Remove 5/8-11x4 GR5 bolt (#7) and locknut (#8) from the shank mount (#1) and set to the side.
3. Attach a shank (#2) to large holes of shank mount (#1) using 3/4-10x4 GR8 bolt (#5) flat washers (#4) spacer bushings (#3) and locknut (#6). Use 5/8-11x4 GR5 bolt (#7) and locknut (#8) in small holes.
4. Tighten locknuts (#6) and (#8) to correct torque.
5. Repeat steps 1-4 for the second shank assembly.

**NOTE:** Shank mounts may be adjusted to desired spacing as long as they are equally spaced from center.

6. Install hitch pin (#13) through hitch lugs (#15) as shown and fasten with linchpin (#14). Repeat this step for second hitch pin.
7. Install spacer tube (#12) as shown and fasten with 3/4-10x4 1/2 GR5 bolt (#9) lock washer (#10) and hex nut (#11). Tighten nut to correct torque.

Refer to Figure 1-2:

8. Run the park stand (#1) up through the mounting tube (#4).
9. Secure park stand in mounting tube (#4) with wire retaining pin (#2).
10. Drive a 3/8" x 2 1/2" roll pin (#3) through the top holes of the park stand (#1) to prevent the park stand from sliding all the way out of the mounting tube (#4).
RS15 Assembly

**WARNING**

To avoid serious injury or death:

Have a secure grip on the shank while assembling it. Keep feet and other bodily extremities out from under the shank. The shank is very heavy and could fall.

Refer to Figure 1-3:

1. Remove 3/4"-10x4 GR8 bolt (#1), 3/4” flat washers (#2), spacer bushings (#3) and locknut (#4) from the shank mount (#12). Remove 5/8"-11x4 GR5 bolt (#5) and locknut (#6) from the shank mount (#12) and set to the side.

2. Slide the shank (#8) up through the shank mount (#12) and attach by using a 3/4"-10x4 GR8 bolt (#1) through hole (A) with 3/4” flat washers (#2), spacer bushings (#3) and locknut (#4).

3. Attach 5/8"-11x4 GR5 bolt (#5) through hole B, and a 5/8" locknut (#6).

4. Tighten locknuts (#4) & (#6) to correct torque.

5. Run a park stand (#9) up through one of the mounting tubes (#7).


7. Drive a 3/8" x 2 1/2" roll pin (#10) through the top holes in the park stand (#9) to prevent the park stand from sliding all the way out of the mounting tube (#7).

8. Repeat steps 5-7 for the second park stand.

Refer to Figure 1-4:

9. Install hitch pin (#5) through hitch lugs (#7) as shown and fasten with linchpin (#6). Repeat this step for second hitch pin.

10. Install spacer tube (#4) as shown and fasten with 3/4-10x4 1/2 GR5 bolt (#1) lock washer (#2) and hex nut (#3). Tighten nut to correct torque.
3-Point Hook-up to Implement

Refer to Figure 1-5:

**DANGER**

To avoid serious injury or death:

A crushing hazard exists while hooking-up and unhooking implement. Keep people and animals away while backing-up to implement or pulling away from implement. Do not operate hydraulic controls while a person or animal is directly behind the power machine or near the implement.

NOTE: Hitch pin (#3) and hair pin cotter (#4) are supplied by the customer.

1. Slowly back tractor up to the Ripper Shank while using tractor’s 3-point control lever to align lower 3-point hitch holes with clevis lug holes on the Ripper Shank.
   - Cat. I hook-up: Align lift arms with inside clevises.
   - Cat. II hook-up: Align lift arms with outside clevises.

2. Put tractor gear selector in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting before dismounting tractor.

3. Attach lower 3-point arms to the clevises with hitch pins (#1). Secure hitch pins with linchpins (#2).

4. Connect top center 3-point link to the upper hitch with customer supplied hitch pin (#3). Secure hitch pin with customer supplied hairpin cotter (#4).

**IMPORTANT:** Park stand(s) can be damaged if not raised before transporting.

5. Raise the Ripper Shanks park stand (#5) to its highest position and secure with wire retaining pin (#6). See “Park Stand Adjustment RS20” on page 10 or “Park Stand Adjustment RS15” on page 11.

6. Ensure lower 3-point lift arms are blocked to prevent excessive side-to-side movement. Consult your tractor operator’s manual for instructions on how to stabilize the lower 3-point arms.

7. Return to the tractor and slowly operate tractor 3-point hydraulic control lever to slowly raise and lower the Ripper Shank while checking for clearance between tractor tires, drawbar, and Ripper Shank. Move or remove drawbar if it interferes with the Ripper Shank.

8. Manually adjust one of the two lower lift arms up or down to level the Ripper Shank from left to right.

9. Manually adjust the length of the top center link to level the Ripper Shank from front to rear.

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.
Section 2: Adjustments

**DANGER**
To avoid serious injury or death:
Make adjustments to the Ripper Shank after it has been properly attached to a tractor and secured with solid (non-concrete) supports. Never work around equipment supported by hydraulics. Hydraulics can drop equipment instantly if controls are actuated or if hydraulic lines burst even when power to hydraulics is shut off.

**WARNING**
To avoid serious injury or death:
Have a secure grip on the shank while assembling it. Keep feet and other bodily extremities out from under the shank. The shank is very heavy and could fall.

Shank Adjustment RS20

Refer to Figure 2-1:
The RS20 Ripper Shank can be adjusted higher or lower by 3". Always adjust both shanks to same depth setting.

1. Loosen and remove 3/4" locknut (#4) & 5/8" lock nut (#6) for one of the two shanks.
2. Remove 3/4" bolt (#1), 3/4" flat washers (#2) and spacer bushings (#3) from hole A.
3. Support shank from falling and remove 5/8" bolt (#5) from hole B.
4. Adjust shank (#7) up or down to the desired hole location A or B.
5. Repeat steps 1-4 for the second shank.

Park Stand Adjustment RS20

Refer to Figure 2-2:
The RS20 Ripper Shank park stand has 2 height settings so it can sit level when parked. It also has an operating setting so that the park stand isn’t damaged while operating Ripper Shank.

1. Adjust park stand (#1) as follows:
   a. Adjust park stand (#1) to hole A or B that will support the Ripper Shank level while resting on its shanks (#4).
   b. When operating the Ripper Shank, adjust park stand (#1) to hole C.
2. Secure park stand in mounting tube with wire retaining pin (#2).
DANGER
To avoid serious injury or death:
Make adjustments to the Ripper Shank after it has been properly attached to a tractor and secured with solid (non-concrete) supports. Never work around equipment supported by hydraulics. Hydraulics can drop equipment instantly if controls are actuated or if hydraulic lines burst even when power to hydraulics is shut off.

WARNING
To avoid serious injury or death:
Have a secure grip on the shank while assembling it. Keep feet and other bodily extremities out from under the shank. The shank is very heavy and could fall.

Shank Adjustment RS15
Refer to Figure 2-3:
The RS15 Ripper Shank can be adjusted higher or lower by 3

1. Loosen & remove 3/4" nut (#4) & 5/8" nut (#6).
2. Remove 3/4" bolt (#1), 3/4" flat washers (#2) & spacer bushings (#3) from hole A.
3. Remove 5/8" bolt (#5) from hole B.
4. Adjust shank (#7) up or down to the desired hole location.

Park Stand Adjustment RS15
Refer to Figure 2-4:
The the RS15 Ripper Shank park stands have 2 height settings so it can sit level when parked. It also has an operating setting so that the park stand isn't damaged while operating the Ripper Shank.

1. Adjust park stands (#1) as follows:
   a. Adjust park stands (#1) to holes A or B that will support the Ripper Shank level while resting on its shank (#3).
   b. When operating the Ripper Shank, adjust park stands (#1) to hole C.
2. Secure park stand in mounting tube with wire retaining pin (#2).
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 Ripper Shank. Therefore, it is absolutely essential that no one operates the Ripper Shank without first having read, fully understood, and become totally familiar with the Operator’s Manual. Make sure the operator has paid particular attention to:

- **Important Safety Information**, page 1
- **Section 1: Assembly & Set-up**, page 6
- **Section 2: Adjustments**, page 10
- **Section 3: Operating Procedures**, page 12
- **Section 4: Maintenance**, page 15

Perform the following inspections before using your Ripper Shank.

### Operating Checklist

<table>
<thead>
<tr>
<th>Check</th>
<th>Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow hook-up instructions. Refer to “Section 1: Assembly &amp; Set-up”.</td>
<td>Page 6</td>
</tr>
<tr>
<td>All adjustments have been made and secured. Refer to “Section 2: Adjustments”.</td>
<td>Page 10</td>
</tr>
<tr>
<td>Operator has read and understands how to operate the Ripper Shank. Refer to “Section 3: Operating Procedures”.</td>
<td>Page 12</td>
</tr>
<tr>
<td>Required maintenance has been completed. Refer to “Section 4: Maintenance” on page 15.</td>
<td>Page 15</td>
</tr>
<tr>
<td>Check initially and periodically for loose bolts and pins. Refer to “Torque Values Chart”.</td>
<td>Page 20</td>
</tr>
</tbody>
</table>

### Operator’s Responsibilities

#### DANGER
To avoid serious injury or death:

- Do not allow anyone near the tractor or implement while operating. Stop operation if bystanders are too close. They can be hit by flying projectiles, become entangled in the equipment, or ran over.
- Always secure equipment with solid, non-concrete supports before working under it. Never go under equipment supported by concrete blocks or hydraulics. Concrete can break, hydraulic lines can burst, and/or hydraulic controls can be actuated even when power to hydraulics is off.

#### WARNING
To avoid serious injury or death:

- Do not use implement to lift objects; to pull objects such as fence posts, stumps, etc; or to push objects. The unit is not designed or guarded for these uses.
- Always shut tractor down using “Tractor Shutdown Procedure” provided in this manual before dismounting tractor.
- Never carry riders on the implement or tractor. Riders can obstruct the operator’s view, interfere with control of the equipment, be pinched by moving components, become entangled in rotating components, be struck by objects, be thrown or fall from the equipment, etc.
- Make sure safety labels are in their proper location and are in good condition before operating the attached implement. Read and obey all instructions on the labels.
- Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting implement back into service. Serious breakdowns can result in injury or death.
- Do not alter implement or replace parts on the implement with other brands. Other brands may not fit properly or meet OEM (Original Equipment Manufacturer) specifications. They can weaken the integrity and impair the safety, function, performance, and life of the implement. Replace parts only with genuine OEM parts.
- Never make contact with underground utilities such as electrical power lines, gas lines, phone lines, etc. They can cause serious injury or death from electrocution, explosion, or fire. If in doubt, call 811 (USA) before digging so that they can mark the location of underground services in the area. For contact information, see Dig Safe in the “Important Safety Information” starting on page 1.

**IMPORTANT:** The RS15 is designed to be used with 35-85 hp tractors and the RS20 with 70-110 hp tractors. Other power equipment such as skid steers can damage the machine.
Transporting

WARNING
To avoid serious injury or death:

1. Select a safe ground speed when transporting. Never travel at a speed which does not allow adequate control of steering and stopping, and never exceed 20 mph (32.2 km/h) with attached equipment. Rough terrain requires a slower speed.

2. When traveling on public roadways, travel in such a way that faster moving vehicles may pass safely. Use accessory lights, clean reflectors, and a slow moving vehicle sign that is visible from the back to warn operators in other vehicles of your presence. Always comply with all federal, state, and local laws.

3. Take care in turning and leaving enough clearance so the Ripper Shank does not contact obstacles such as buildings, trees, or fences.

4. Always raise park stand(s) before transporting the Ripper Shank.

5. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.

6. Shift tractor to a lower gear when traveling over rough or hilly terrain.

Unhook Ripper Shank
Refer to Figure 3-1:

1. See “Long-Term Storage” on page 16 if parking Ripper Shank for long periods and end of season.

2. Park the Ripper Shank on a level, hard surface. Place tractor gear selector in park or in neutral and set park brake.

3. Shut tractor engine off and remove switch key before dismounting from tractor.

4. Adjust park stand(s) (#5) down to a height that will support the Ripper Shank level while resting on its shank(s). Lower the Ripper Shank to the ground.

5. Remove hairpin cotter (#4) and hitch pin (#3). If provided, place center 3-point link in tractor’s holding clip.

6. Replace hitch pin (#3) and hairpin cotter (#4) in the upper center clevis.

7. Remove linchpins (#2) and hitch pin (#1).

8. Start tractor and drive tractor slowly forward several feet while watching to make sure no components are still hooked to the tractor.

9. Shut tractor down properly before dismounting. Refer to “Tractor Shutdown Procedure”.

10. Replace hitch pins (#1) in clevis and secure with linchpins (#2).
General Operating Instruction

By now you should have thoroughly read your Operator's Manual and properly installed your Land Pride Ripper Shank to your tractor. Before you begin operating the Ripper Shank, you should visually survey the work site to make sure it is safe and free of foreign objects. Also, make certain that all irrigation heads, utility outlets, and other obstacles are properly marked.

Make certain you are not working over underground wiring, pipes, or other obstructions. If there is doubt, contact your local utility services so that they may mark the location of all underground utilities in the area. Be sure to ask how close you can work to the marks or flags they positioned.

Please stop and do the above checks and preparations if you have not yet done so before you begin ripping. This is a must for your safety and for the safety of others.

Now that you are properly briefed, your Ripper Shank is properly installed, and you have properly checked out your work site, it is time to begin ripping. When transporting or traveling to and from work sites, make sure that the Ripper Shank is in the fully raised position and not in contact with the ground. Smaller tractors may require shank(s) to be raised to the upper mounting holes before transporting. Select a safe speed and transport to your work site in such a manner that faster moving vehicles can pass you safely. A slow moving vehicle sign should be employed if you are using a public road or right-of-way.

Once you have safely arrived at your work site and are ready to begin ripping, lower your Ripper Shank with the 3-point hitch control lever so that Ripper Shank is resting on the ground. When using the Ripper Shank, you should be able to rip and loosen soil to the depth you can sink the shank tips and still maintain forward pulling momentum. The more compacted the soil, the more horsepower it will take to get the job done. In any case, you will want to use a lower gear selection and you may need to make more than one pass. Progressive lowering of the shanks with 3-point hydraulic control lever and multiple passes may be required to achieve the maximum depth. If shank(s) are mounted in the upper holes, they can be adjusted down 3" to achieve maximum depth. Never try to rip in reverse and at the end of each pass, pick up the unit before turning.

With a little practice you should begin to consistently achieve the desired results. Always keep safety uppermost in your mind and remember that before dismounting the tractor you must always set the park brake, lower your 3-point attachment to the ground, turn off the tractor and remove the ignition key. If you must park on a hillside you should always chock the tractor wheels for an extra measure of safety.

See “Product Specifications” on page 17 and “Features and Benefits” on page 18 for additional information.
General Maintenance 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 and pins after using the Ripper Shank for several hours and on a regular basis thereafter to ensure they are tight and secured. Replace worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride dealer.

**DANGER**
To avoid serious injury or death:
Always secure equipment with solid, non-concrete supports before working under it. Never go under equipment supported by concrete blocks or hydraulics. Concrete can break, hydraulic lines can burst, and/or hydraulic controls can be actuated even when power to hydraulics is off.

**WARNING**
To avoid serious injury or death:
- Allow only persons to perform maintenance on this implement who have been properly trained in its safe operation.
- Always shut tractor down using “Tractor Shutdown Procedure” provided in this manual before dismounting tractor.
- Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting implement back into service. Serious breakdowns can result in injury or death.
- Do not alter implement or replace parts on the implement with other brands. Other brands may not fit properly or meet OEM (Original Equipment Manufacturer) specifications. They can weaken the integrity and impair the safety, function, performance, and life of the implement. Replace parts only with genuine OEM parts.

**Shank Tip Replacement**
Refer to Figure 5-1:
1. Remove 1/2"-13X2 1/2" GR5 bolt (#4), washers (#3), and locknut (#2).
2. Pull the shank tip (#1) off of the shank (#5).
3. Inspect bolt, nut, and washers and replace if needed.
4. Insert new shank tip (#1) on to shank (#5).
5. Fasten shank tip (#1) to the shank (#5) with 1/2"-13X2 1/2" GR5 bolt (#4), 1/2" washers (#3), and 1/2"-13 locknut (#2). Draw locknut up snug, do not tighten.

**Shear Bolt Protection**
Refer to Figure 2-1 on page 10 and Figure 2-3 on page 11

**IMPORTANT:** Shank will swing freely if shear bolt is missing or sheared. Replace shearbolt as soon as possible to protect the shank.

The Ripper Shank is equipped with shear bolt (#5) to help protect the Ripper Shank from damage caused by large rocks, large tree roots and other underground obstructions.

Always determine the cause of the problem and fix it before putting the Ripper Shank back into service. See your Land Pride dealer when replacing shear bolts.

**Land Pride Shear Bolt Part No.**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>802-060C</td>
<td>HHCS 5/8-11X4 GR5</td>
</tr>
<tr>
<td>803-019C</td>
<td>NUT LOCK 1/2-13 PLT</td>
</tr>
<tr>
<td>804-016C</td>
<td>WASHER FLAT 1/2 SAE PLT</td>
</tr>
</tbody>
</table>
Long-Term Storage

Clean, inspect, service, and make necessary repairs to the Ripper Shank when parking it for long periods and when parking it at the end of a working season. This will help ensure the Ripper Shank is ready for field use the next time you hook-up to it.

1. Clean off any dirt and grease that may have accumulated on the Ripper Shank and. Scrape off compacted dirt and then wash surface thoroughly with a garden hose.
2. Inspect for loose, damaged, or worn parts and adjust or replace as needed.
3. Repaint parts where paint is worn or scratched to prevent rust. Ask your Land Pride dealer for aerosol touch-up paint. They are also available in touch-up bottles with brush, quarts, and gallon sizes by adding TU, QT, or GL to the end of the aerosol part number.
4. Replace all damaged or missing decals.
5. A coating of oil may also be applied to the unpainted area to minimize oxidation.
6. Store Ripper Shank on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer Ripper Shank life.
7. Follow all unhooking instructions on page 13 when disconnecting tractor from Ripper Shank.

<table>
<thead>
<tr>
<th>Land Pride Touch-up Paint</th>
<th>Part No.</th>
<th>Part Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>821-066C</td>
<td>PAINT ORANGE SPRAY CAN</td>
<td></td>
</tr>
<tr>
<td>821-070C</td>
<td>PAINT GP GLOSS BLACK SPRAY CAN</td>
<td></td>
</tr>
</tbody>
</table>
## RS15 & RS20 Series Ripper Shanks

### Specifications & Capacities

<table>
<thead>
<tr>
<th>Model Number</th>
<th>RS15</th>
<th>RS20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ripper Shank Width</td>
<td>40 5/8&quot;</td>
<td>49&quot;</td>
</tr>
<tr>
<td>Working Width</td>
<td>2&quot;</td>
<td>42&quot;</td>
</tr>
<tr>
<td>Approximate Weight/LBS.</td>
<td>210</td>
<td>332</td>
</tr>
<tr>
<td>Horsepower Rating</td>
<td>35-85 hp</td>
<td>70-110 hp</td>
</tr>
<tr>
<td>Hitch Category</td>
<td>Cat I &amp; II 3-point (Quick Hitch Compatible)</td>
<td></td>
</tr>
<tr>
<td>Number of Shanks</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Ripping Depth</td>
<td></td>
<td>24&quot;-27&quot;</td>
</tr>
<tr>
<td>Park Stand</td>
<td>Standard</td>
<td></td>
</tr>
</tbody>
</table>

### RS15 & RS20 Diagrams

- **RS15**: Ripper Shank Width 40 5/8", Working Width 2", approximate weight 210 LBS., horsepower rating 35-85 hp, hitch category Cat I & II 3-point (Quick Hitch Compatible), number of shanks 1, ripping depth 24"-27", park stand standard.
- **RS20**: Ripper Shank Width 49", Working Width 42", approximate weight 332 LBS., horsepower rating 70-110 hp, hitch category Cat I & II 3-point (Quick Hitch Compatible), number of shanks 2, ripping depth 24"-27", park stand standard.
## RS15 & RS20 Series Ripper Shanks

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>35-85 Tractor Horsepower Range (RS15)</td>
<td>Fits many tractors with a Cat. I or Cat. II 3-point hitch.</td>
</tr>
<tr>
<td>70-110 Tractor Horsepower Range (RS20)</td>
<td>Fits many tractors with a Cat. I or Cat. II 3-point hitch.</td>
</tr>
<tr>
<td>Quick Hitch Compatible</td>
<td>Fits Land Pride Quick Hitch for a quick and easy one person hook-up.</td>
</tr>
<tr>
<td>Shanks</td>
<td>1 1/4&quot; wide parabolic shank with shear bolt protection.</td>
</tr>
<tr>
<td>Shank Tips</td>
<td>2&quot; wide x 11 1/2&quot; long ripper point with double chrome caps.</td>
</tr>
<tr>
<td>Multiple Shank Height Mount Options</td>
<td>24&quot; and 27&quot; from lower 3-point mount - this helps large tractors go deep and smaller tractors get more transport clearance.</td>
</tr>
</tbody>
</table>
## Troubleshooting Chart

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bent park stand</td>
<td>Traveling with park stand down.</td>
<td>Replace park stand. Secure park stand in raised position before traveling.</td>
</tr>
<tr>
<td></td>
<td>Wire retaining pin fell out.</td>
<td>Replace park stand. Make sure wire retainer is caught over end of pin.</td>
</tr>
<tr>
<td>Bent Shank(s)</td>
<td>Ripper is not leveled left to right.</td>
<td>Level Ripper left to right by adjusting one of the lower 3-point arms up or down.</td>
</tr>
<tr>
<td></td>
<td>Turning with shank(s) in the ground.</td>
<td>Raise Ripper up before turning.</td>
</tr>
<tr>
<td>Shank(s) move on frame</td>
<td>U-bolts are loose.</td>
<td>Tighten U-bolts.</td>
</tr>
<tr>
<td>Shank(s) pivot back and come out of</td>
<td>Shank(s) hit a solid object and broke the shear</td>
<td>Replace shear bolt, washers and locknut. Remove solid object or avoid hitting solid object.</td>
</tr>
<tr>
<td>the ground</td>
<td>bolt.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shear bolt is missing.</td>
<td>Replace shear bolt, washers and locknut.</td>
</tr>
<tr>
<td>Shank tip(s) wont go in the ground</td>
<td>Shank tip in worn.</td>
<td>Replace shank tip.</td>
</tr>
<tr>
<td></td>
<td>Ripper is not level front to back.</td>
<td>Level Ripper front to back by adjusting top center 3-point link. Shorten center link to increase draft angle for digging.</td>
</tr>
<tr>
<td>Broken Shank(s) or Shank(s) bent</td>
<td>Shear bolt is torqued tight.</td>
<td>Replace damaged Shank(s). Draw Locknut on shear bolt up snug, do not tighten.</td>
</tr>
<tr>
<td>backwards.</td>
<td></td>
<td></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>Grade 2</th>
<th>Grade 5</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>in-tpi 1</td>
<td>N · m 2</td>
<td>ft-lb 3</td>
<td>N · m</td>
<td>ft-lb</td>
</tr>
<tr>
<td>1/4&quot; - 20</td>
<td>7.4</td>
<td>5.6</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>1/4&quot; - 28</td>
<td>8.5</td>
<td>6</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>5/16&quot; - 18</td>
<td>15</td>
<td>11</td>
<td>24</td>
<td>17</td>
</tr>
<tr>
<td>5/16&quot; - 24</td>
<td>17</td>
<td>13</td>
<td>26</td>
<td>19</td>
</tr>
<tr>
<td>3/8&quot; - 16</td>
<td>27</td>
<td>20</td>
<td>42</td>
<td>31</td>
</tr>
<tr>
<td>3/8&quot; - 24</td>
<td>31</td>
<td>22</td>
<td>47</td>
<td>35</td>
</tr>
<tr>
<td>7/16&quot; - 14</td>
<td>43</td>
<td>32</td>
<td>67</td>
<td>49</td>
</tr>
<tr>
<td>7/16&quot; - 20</td>
<td>49</td>
<td>36</td>
<td>75</td>
<td>55</td>
</tr>
<tr>
<td>1/2&quot; - 13</td>
<td>66</td>
<td>49</td>
<td>105</td>
<td>76</td>
</tr>
<tr>
<td>1/2&quot; - 20</td>
<td>75</td>
<td>55</td>
<td>115</td>
<td>85</td>
</tr>
<tr>
<td>9/16&quot; - 12</td>
<td>95</td>
<td>70</td>
<td>150</td>
<td>110</td>
</tr>
<tr>
<td>9/16&quot; - 18</td>
<td>105</td>
<td>79</td>
<td>165</td>
<td>120</td>
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<tr>
<td>5/8&quot; - 11</td>
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<td>97</td>
<td>205</td>
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<td>5/8&quot; - 18</td>
<td>150</td>
<td>110</td>
<td>230</td>
<td>170</td>
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<td>3/4&quot; - 10</td>
<td>235</td>
<td>170</td>
<td>360</td>
<td>265</td>
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<tr>
<td>3/4&quot; - 16</td>
<td>260</td>
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<td>405</td>
<td>295</td>
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<td>7/8&quot; - 9</td>
<td>225</td>
<td>165</td>
<td>585</td>
<td>430</td>
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<td>7/8&quot; - 14</td>
<td>250</td>
<td>185</td>
<td>640</td>
<td>475</td>
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<td>1&quot; - 8</td>
<td>340</td>
<td>250</td>
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<td>1&quot; - 12</td>
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<td>275</td>
<td>955</td>
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<td>355</td>
<td>1080</td>
<td>795</td>
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<td>395</td>
<td>1210</td>
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<td>500</td>
<td>1520</td>
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<tr>
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<td>1680</td>
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<tr>
<td>1-3/8&quot; - 6</td>
<td>890</td>
<td>655</td>
<td>1990</td>
<td>1470</td>
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<tr>
<td>1-3/8&quot; - 12</td>
<td>1010</td>
<td>745</td>
<td>2270</td>
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<td>1-1/2&quot; - 6</td>
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<td>870</td>
<td>2640</td>
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<td>1-1/2&quot; - 12</td>
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<td>980</td>
<td>2970</td>
<td>2190</td>
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</table>

<table>
<thead>
<tr>
<th>Bolt Size (Metric)</th>
<th>Bolt Head Identification</th>
<th>5.8</th>
<th>8.8</th>
<th>10.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm x pitch 4</td>
<td>N · m</td>
<td>ft-lb</td>
<td>N · m</td>
<td>ft-lb</td>
</tr>
<tr>
<td>M 5 X 0.8</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>M 6 X 1</td>
<td>7</td>
<td>5</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>M 8 X 1.25</td>
<td>17</td>
<td>12</td>
<td>26</td>
<td>19</td>
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<td>M 8 X 1</td>
<td>18</td>
<td>13</td>
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<td>21</td>
</tr>
<tr>
<td>M10 X 1.5</td>
<td>33</td>
<td>24</td>
<td>52</td>
<td>39</td>
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<tr>
<td>M10 X 0.75</td>
<td>39</td>
<td>29</td>
<td>61</td>
<td>45</td>
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<td>M12 X 1.75</td>
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<td>91</td>
<td>67</td>
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<td>M12 X 1.5</td>
<td>60</td>
<td>44</td>
<td>95</td>
<td>70</td>
</tr>
<tr>
<td>M12 X 1</td>
<td>90</td>
<td>66</td>
<td>105</td>
<td>77</td>
</tr>
<tr>
<td>M14 X 2</td>
<td>92</td>
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<td>145</td>
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<td>M16 X 2</td>
<td>145</td>
<td>105</td>
<td>225</td>
<td>165</td>
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<td>M16 X 1.5</td>
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<td>240</td>
<td>180</td>
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<td>310</td>
<td>230</td>
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<td>350</td>
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<td>1380</td>
<td>2960</td>
<td>2190</td>
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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: One year Parts and Labor
Shanks and Shank Tips: Considered wear items.

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.

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 ____________________