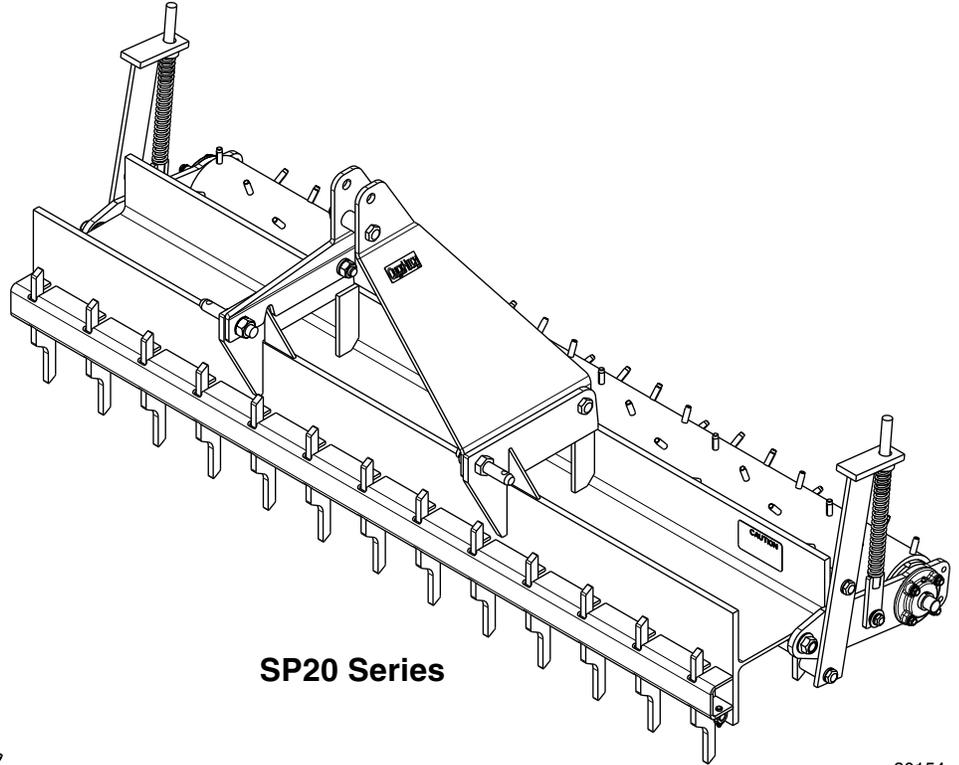


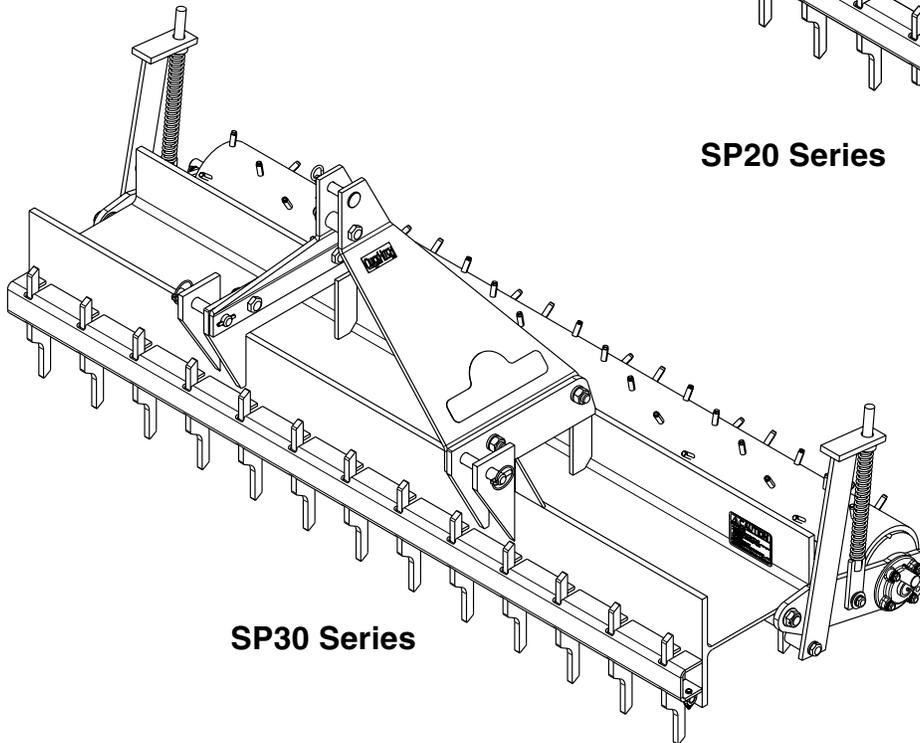
# Soil Pulverizers

SP2060, SP2072, SP3072 & SP3084



SP20 Series

30154



SP30 Series

30155

## 307-099M Operator's Manual



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.*





## 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.

<b>Model Number</b>	
<b>Serial Number</b>	
<b>Machine Height</b>	
<b>Machine Length</b>	
<b>Machine Width</b>	
<b>Machine Weight</b>	
<b>Delivery Date</b>	
<b>First Operation</b>	
<b>Accessories</b>	<hr/> <hr/> <hr/>

## Dealer Contact Information

**Name:** \_\_\_\_\_

**Street:** \_\_\_\_\_

**City/State:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**Email:** \_\_\_\_\_

### California Proposition 65

 **WARNING:** Handling passenger or off-highway motor vehicle parts can expose you to chemicals such as phthalates and lead, which can cause cancer and reproductive harm. To minimize exposure, service the vehicle in a well-ventilated area, wear gloves, and wash your hands. For more information see [www.P65Warnings.ca.gov/motor-vehicle-parts](http://www.P65Warnings.ca.gov/motor-vehicle-parts).



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Printed in the United States of America.



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See previous page for Table of Contents.



### **Parts Manual QR Locator**

The QR (Quick Reference) code on the left will take you to the Parts Manual for this equipment. Download the appropriate app on your smart phone. Scan 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 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 your 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 the 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 the implement and tractor while backing up to the implement.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ While transporting and operating equipment, watch out for objects overhead and along the sides 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 a safe and secure area where children normally do not play. When needed, secure implement against falling with support blocks.



### Look for the Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety and extra precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. 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. They 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.

### Be Aware of Special Notices

Special notices are intended to point out important and helpful information that should be followed. They are usually placed inside a box. They are:

- ▲ **IMPORTANT:** Indicates that equipment or property damage could result if instructions are not followed.
- ▲ **NOTE:** Indicates supplementary explanations that will be helpful when using the equipment.

### 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

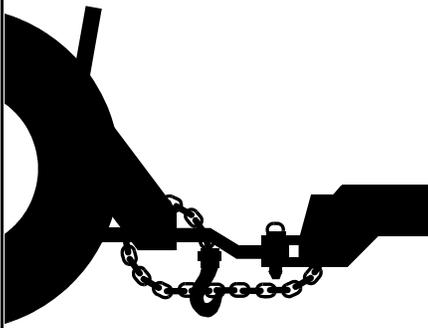
- ▲ If engaged, disengage power take-off.
- ▲ Park on solid, level ground and lower implement to ground or onto support blocks.
- ▲ Put tractor in park or set park brake.
- ▲ Turn off engine and remove ignition key to prevent unauthorized starting.
- ▲ Relieve all hydraulic pressure to auxiliary hydraulic 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.



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

### 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 to tow the implement.



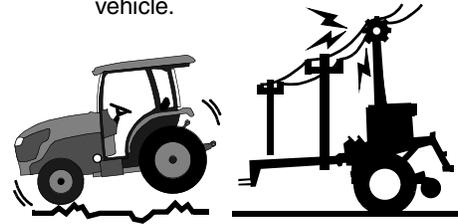
### Towing Safely

- ▲ Comply with federal, state, and local laws.
- ▲ Use towing vehicle and trailer of adequate size and capacity. Secure equipment towed on a trailer with chocks, tie downs, and chains.
- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of the vehicle towing the load.
- ▲ Sudden braking can cause a towed trailer to swerve unexpectedly. Reduce speed if trailer is not equipped with brakes.



### Transport Safely

- ▲ Comply with federal, state, and local laws.
- ▲ Avoid contact with any overhead utility lines or electrically charged conductors.
- ▲ Engage park brake when stopped on an incline.
- ▲ Maximum transport speed for an implement is 20 mph (32 km/h). **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. Sudden braking can cause a towed load to swerve and upset.
- ▲ Do not tow an implement that, when fully loaded, weighs more than 1.5 times the weight of towing vehicle.



### Tire Safety

- ▲ Tire changing can be dangerous and must be performed by trained personnel using the correct tools and equipment.
- ▲ Always properly match the wheel size to the properly sized tire.
- ▲ 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.



### Practice Safe Maintenance

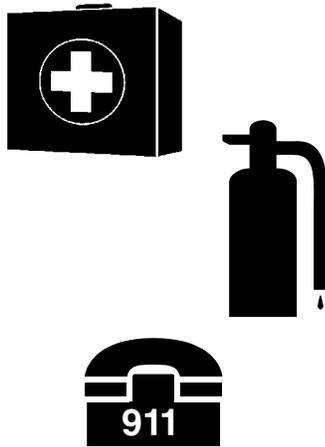
- ▲ Understand procedure before doing work. Refer to the Operator's Manual for additional information.
- ▲ Work on a level surface in a clean dry area that is well-lit.
- ▲ Lower implement to the ground and follow all shutdown procedures before leaving the operator's seat to perform maintenance.
- ▲ Do not work under any hydraulically 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 from equipment before operation.
- ▲ Do not weld or torch on galvanized metal as it will release toxic fumes.



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 the phone.



**Wear Personal Protective Equipment (PPE)**

- ▲ Wear protective clothing and equipment appropriate for the job such as safety shoes, safety glasses, hard hat, dust mask, 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 a machine safely requires the operator's full attention. Avoid wearing headphones while operating equipment.



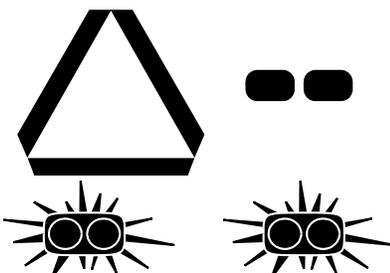
**Avoid High Pressure Fluids**

- ▲ Escaping fluid under pressure will penetrate the skin or eyes causing serious injury.
- ▲ Relieve all residual pressure before disconnecting hydraulic lines or performing work on the hydraulic system.
- ▲ Make sure all hydraulic fluid connections are properly tightened/torqued 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, seek immediate emergency medical care or gangrene may result.



**Use Safety Lights and Devices**

- ▲ A slow moving power machine 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.
- ▲ For tractors and other agriculture equipment, a Slow Moving Vehicle (SMV) sign is required when traveling on public roads.



**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 the 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 the tractor or implement to lift or transport riders.



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

**Avoid Crystalline Silica (Quartz) Dust**

Because crystalline silica is a basic component of sand and granite, many activities at construction sites produce dust containing crystalline silica. Trenching, sawing, and boring of material containing crystalline silica can produce dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis).

There are guidelines which should be followed if crystalline silica (quartz) is present in the dust.



- ▲ Be aware of and follow OSHA (or other local, State, or Federal) guidelines for exposure to airborne crystalline silica.
- ▲ Know the work operations where exposure to crystalline silica may occur.
- ▲ Participate in air monitoring or training programs offered by the employer.
- ▲ Be aware of and use optional equipment controls such as water sprays, local exhaust ventilation, and enclosed cabs with positive pressure air conditioning if the machine has such equipment. Otherwise respirators shall be worn.
- ▲ Where respirators are required, wear a respirator approved for protection against crystalline silica containing dust. Do not alter respirator in any way. Workers who use tight-fitting respirators can not have beards/mustaches which interfere with the respirator seal to the face.
- ▲ If possible, change into disposable or washable work clothes at the work site; shower and change into clean clothing before leaving the work site.
- ▲ Do not eat, drink, use tobacco products, or apply cosmetics in areas where there is dust containing crystalline silica.
- ▲ Store food, drink, and personal belongings away from the work area.
- ▲ Wash hands and face before eating, drinking, smoking, or applying cosmetics after leaving the exposure area.

**Handle Chemicals Properly**

- ▲ Protective clothing should be worn.
- ▲ Handle all chemicals with care.
- ▲ Follow instructions on container label.
- ▲ Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil, and property.
- ▲ Inhaling smoke from any type of chemical fire can be a serious health hazard.
- ▲ Store or dispose of unused chemicals as specified by the chemical manufacturer.



**Dig Safe - Avoid Underground Utilities**

- ▲ USA: Call 811  
CAN:  
<http://www.clickbeforeyoudig.com>
- ▲ 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.





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## Important Safety Information

### Safety Labels

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

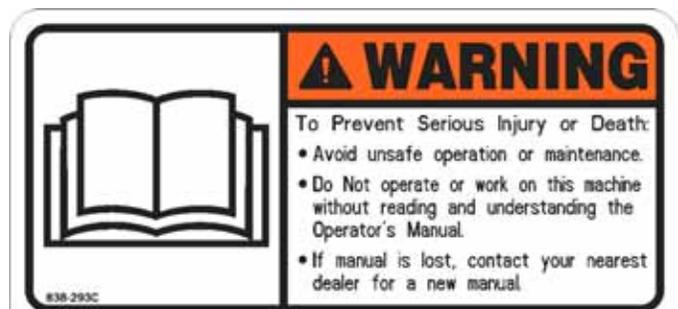
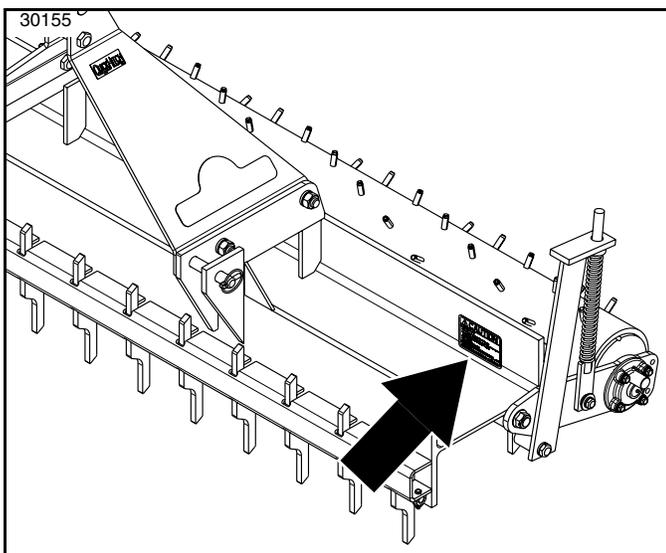
1. Keep all safety labels clean and legible.
2. Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Land Pride dealer. To find your nearest dealer, visit our dealer locator at [www.landpride.com](http://www.landpride.com).
3. Some 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.



**838-293C**

Warning: Read Operator's Manual

1 Place:



## Introduction

Land Pride welcomes you to the growing family of new product owners. This Soil Pulverizer 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 machine.

## Application

The SP20 and SP30 Soil Pulverizers are designed and built by Land Pride to loosen, pulverize, and level packed or encrusted soils in preparation for seeding or laying of new sod. Both the 20 and 30 Series Pulverizers are adapted for Category 1 three-point hitch mounting. The 20 series has a minimum 35 hp tractor requirement while the 30 Series has a minimum 50 hp requirement.

Land Pride Soil Pulverizers come in 60", 72", and 84" (152 cm, 183 cm, & 213 cm) working widths making them well suited for use by landscapers, rental yards, construction contractors, and professional turf managers. Applications include golf courses, housing developments, athletic fields, nurseries, sod farms, transportation right-of-ways, and park systems.

See “**Specifications & Capacities**” on page 15 and “**Features & Benefits**” on page 16 for additional information and performance enhancing options.

## Using This Manual

- This Operator’s Manual is designed to help familiarize you 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](http://www.landpride.com).

## Terminology

“Right” or “Left” as used in this manual is determined by the direction the operator faces while sitting in the operator’s seat looking forward unless otherwise stated.

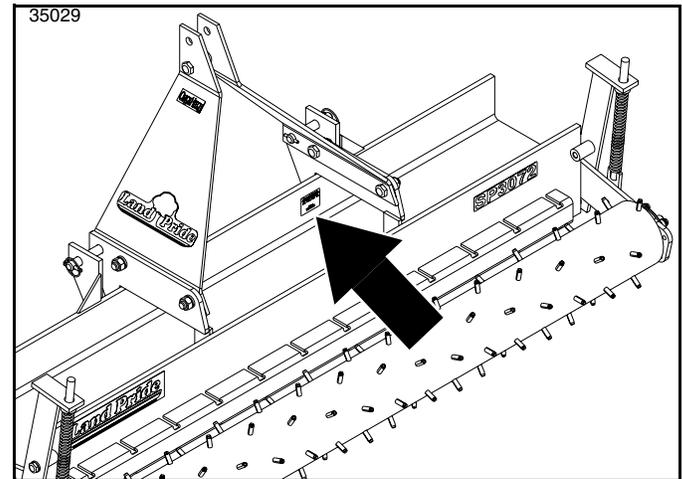
## Owner Assistance

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 Soil Pulverizer 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.



**Serial Number Plate Location**  
Figure 1

## Further Assistance

Your dealer wants you to be satisfied with your new Soil Pulverizer. 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 question/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  
[lpSERVICE@landpride.com](mailto:lpSERVICE@landpride.com)

## Section 1: Assembly & Set-Up

### Tractor Requirements

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

Horsepower Rating	
SP20 .....	25-35 hp (19-26 kW)
SP30 .....	30-50 hp (22-37 kW)
Hitch Type .....	Cat I
Tractor Weight .....	See Warning below

### 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 weight requirements and maximum limitations.

### Dealer Preparations

### WARNING!

To avoid serious injury or death:

Never allow anyone under unit while unloading.

Using a lifting device of adequate size to remove crate from flat bed. Place on a smooth flat work surface and uncrate unit. This unit is shipped partially assembled. It is the dealership's responsibility to finish assembly of the unit. This section covers the proper way for the Land Pride dealer to assembly the pulverizer.

### Assembly Instructions

Review all safety instructions printed in this manual before assembling the pulverizer.

**NOTE:** Do not tighten hardware until assembly is complete.

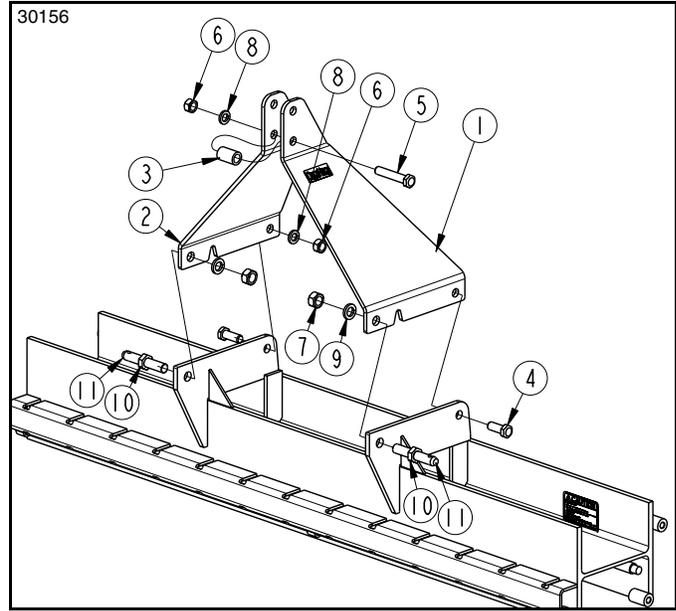
### Torque Requirements

Refer to "Torque Values Chart" on page 18 to determine correct torque values when tightening hardware.

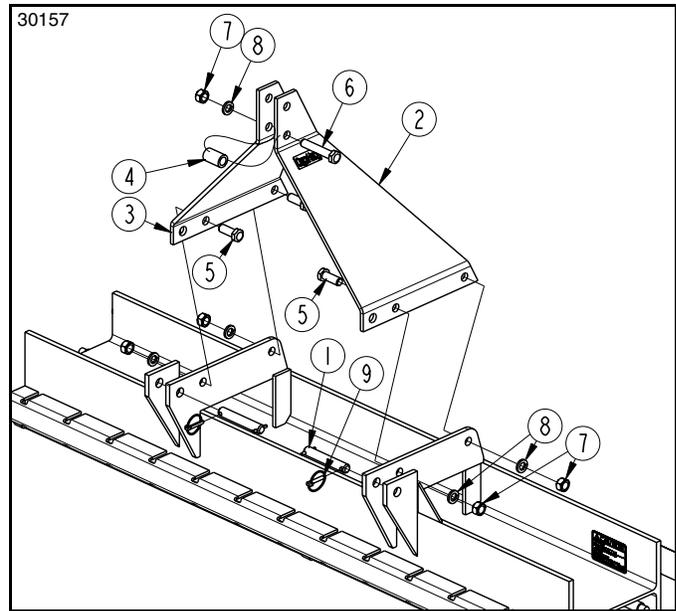
### SP20 Hitch Assembly

Refer to Figure 1-1:

1. Install upper hitch plates (#1 & #2) inside mounting bracket plates with 3/4"-10 x 2" GR5 cap screws (#4), lock washers (#8), and hex nuts (#6).
2. Insert spacer (#3) between upper hitch plates, install 3/4"-10 x 4" GR5 cap screw (#5), lock washers (#8), and hex nut (#6).
3. Make sure 3/4" hex jam nuts (#10) is screwed fully onto lower hitch pins (#11).
4. Install lower 3-point hitch pins (#11) to the pulverizer frame with 7/8" lock washers (#9) and hex nuts (#7).
5. Tighten all Hardware to the proper torque values.



Hitch Assembly  
Figure 1-1



Hitch Assembly  
Figure 1-2

### Hitch Assembly

Refer to Figure 1-2:

1. Install upper hitch plates (#2 & #3) inside mounting brackets with 3/4"-10 x 2" GR5 cap screws (#5), lock washers (#8), and hex nuts (#7).
2. Insert spacer (#4) between upper hitch plates. Install 3/4"-10 x 4" GR5 cap screw (#6), lock washer (#8), and hex nut (#7).
3. Insert lower 3-point hitch pins (#9) into clevis lugs. Secure hitch pins with linchpins (#9).
4. Tighten all Hardware to the proper torque values.



Section 2: Operating

**Operator’s Responsibilities**

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 Soil Pulverizer. Therefore, it is absolutely essential that no one operates the Soil Pulverizer unless they have read, fully understood, and are totally familiar with the Operator’s Manual.

Perform the following inspections before using your Soil Pulverizer.

**Operating Checklist**

✓	Check	Ref.
	Inspect tractor safety equipment to make sure it is in good working condition.	Tractor Manual
	Read and follow all Safety Rules carefully. Refer to “Important Safety Information”.	Page 1
	Make sure all safety labels are in their proper location and in good readable condition.	Page 6
	Check 3-Point hook-up procedure. Be sure all pins have been installed and are secured.	Page 8
	Read and follow all operating instructions. Refer to “Section 2: Operating”.	Page 9
	Make all required adjustments. Refer to “Section 3: Adjustments”.	Page 12
	Read and follow all Maintenance Instructions. See “Section 4: Maintenance & Lubrication”.	Page 13
	Check initially and periodically for loose bolts and pins. Refer to “Torque Values Chart”.	Page 18

**Safety First**



**DANGER!**

To avoid serious injury or death:

- Keep bystanders and animals away from machinery while in operation. They can become entangled in the equipment, pinched, hit by throwing objects, ran over, etc.
- 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 the hydraulics is off.



**WARNING!**

To avoid serious injury or death:

- Never carry riders on the implement or tractor. Riders can obstruct the operator’s view, interfere with controls, be pinched by moving components, become entangled in rotating components, struck by objects, thrown about, fall off and be run over, etc.
- Always keep your body extremities out from under the shanks while adjusting them. It is possible for the shanks to fall causing injury to your feet and/or legs.
- 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.

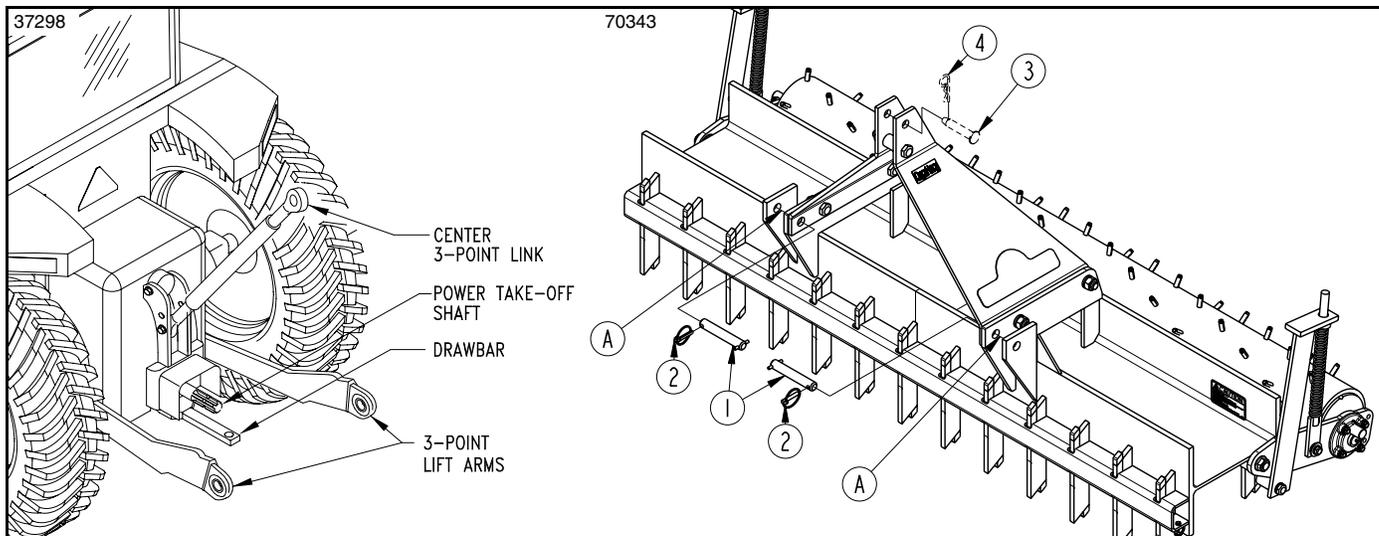
- Allow only persons to operate this implement who have fully read and comprehended this manual, and who are properly trained in the safe operation of this implement.
- Use the implement for its intended purpose only.
- Do not use implement to lift objects; to pull objects such as fence posts, stumps, etc; or to push objects. The unit is not designed or guarded for these uses.
- Do not use implement to tow other equipment unless it is designed with a tow hitch. Doing so can result in loss of control and damage the equipment.
- 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. Always call 811 (USA) or local utility companies 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.
- Avoid exposure to dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis). Because crystalline silica is a basic component of sand and granite, many activities at construction sites produce dust containing crystalline silica. Trenching, sawing, and boring of material containing crystalline silica can produce dust containing crystalline silica.

**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 until it is flat on the ground or on non-concrete support blocks.
4. Put tractor in park or set park brake, turn off engine, and remove ignition 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.

## Section 2: Operating



**Tractor Hook-Up**  
Figure 2-1

### Tractor Hook-Up

Refer to Figure 2-1:

#### **! DANGER!**

To avoid serious injury or death:

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

1. Slowly back tractor up to the Soil Pulverizer and use tractor's 3-point hydraulic control to align hitch holes in the 3-point lift arms with clevis lug holes (A) on the Soil Pulverizer.
2. Engage tractor park brake, shut tractor engine off and remove key before dismounting from tractor.
3. With tractor's lower 3-point lift arms aligned and positioned in the clevises, attach lower arms to the clevises with hitch pins (#1) and secure with linchpins (#2).
4. Connect top center 3-point link to the upper center hitch clevis with top clevis pin (#3) and secure with keeper (#4). Clevis pin (#3) and keeper (#4) are supplied by the customer.
5. Return to the tractor and slowly operate the tractor's 3-Point hydraulic control up and down to check for clearance between the tires, frame, drawbar etc. Move or remove drawbar if it interferes with the Soil Pulverizer.

6. Shut the tractor down before dismounting to level the pulverizer. Refer to "Tractor Shutdown Procedure" on page 9.

**NOTE:** A level placed on the unit can be used to check for levelness.

7. Manually adjust one of the two lower 3-point lift arms up or down to level the Soil Pulverizer from left to right.
8. Manually adjust the length of the top center 3-point link to level the Soil Pulverizer from front to rear.

## Section 2: Operating

### Transporting

#### **WARNING!**

To avoid serious injury or death:

- When traveling on public roadways, travel in such a way that faster moving vehicles may pass safely. Use hazard 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.
  - Select a safe ground speed that will allow adequate control of steering and stopping. Never exceed 20 mph (32 km/h) with attached equipment. Rough terrain requires a slower speed.
  - Reduce ground speed when turning and leave enough clearance to avoid making contact with obstacles such as buildings, trees, fences, etc.
  - Make sure implement does not block tractor's Slow Moving Vehicle (SMV) sign when transporting on a public road. If operators in vehicles approaching from the back cannot easily see the sign, then install one on the implement that is visible to warn of your presence.
1. Be sure to reduce tractor ground speed when turning; and leave enough clearance so the Soil Pulverizer does not contact obstacles such as buildings, trees, or fences.
  2. Select a safe ground travel speed when transporting from one area to another.
  3. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
  4. When traveling over rough or hilly terrain, shift tractor to a lower gear.

#### **Add Weight**

Up to 400 lbs (181 kg) of weight may be applied by installing bricks or blocks in frame for additional weight if required by ground conditions.

### General Operating Instructions

#### **WARNING!**

To avoid serious injury or death:

- Operate only power machines equipped with a certified Roll-Over Protective Structure (ROPS) and seat belt. Keep folding ROPS in the "locked up" position when appropriate. 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.
- Speeds in excess of 5 mph (8 km/h) can damage the frame and or shanks

**IMPORTANT: Do Not** turn tractor with pulverizer shanks in the ground. Damage to shanks will occur.

Before putting your Land Pride Pulverizer into service you must thoroughly review the Operator's Manual. Once you have read the Operator's Manual and properly mounted the pulverizer on your tractor, you should be ready to head for the work site. You should have already removed any sizable sticks, rocks, or extraneous debris from this area. Do not attempt to rip up concrete, black top, asphalt, or large rocks.

With tractor stopped, lower 3-point of tractor down until all weight is off the tractor. Pull ahead slowly to get the shanks to start digging. Scarifying and pulverizing action will commence as soon as the rear roller touches the ground and begins to roll. Increase ground speed once shanks and roller have entered the ground. Do not exceed 5 mph (8 km/h) and make straight passes only. When you reach the end of a pass, raise tractor's 3-point up before turning. Trying to turn with unit in the ground will damage the scarifier shanks and can damage the pulverizer roller.

If ground conditions are extremely hard and the scarifier shanks are not achieving adequate penetration, you may need to add additional weight to the top frame. Up to 400 lbs (181 kg) can be added to this area.

If the pulverizing roller is bouncing and not staying in uniform contact with the ground, the down pressure of the roller can be adjusted by the spring tensioners located at both ends of the pulverizer.

If you are getting a build-up on the rear roller, pulverizing operations should be discontinued until the ground is dry enough to work. If the ground needs more cultivation than can be accomplished in one pass, continue to make additional passes until the desired finish is achieved. Owners of the Model 30 Series Land Pride Pulverizers can attach an additional optional rear mounted pulverizer roller to achieve a more professional finish in less time.

Once you are finished using your pulverizer, park it on a dry and level surface, clean it, and make it ready for the next use. With a little practice you will be able to achieve professional results from your Land Pride Pulverizer.

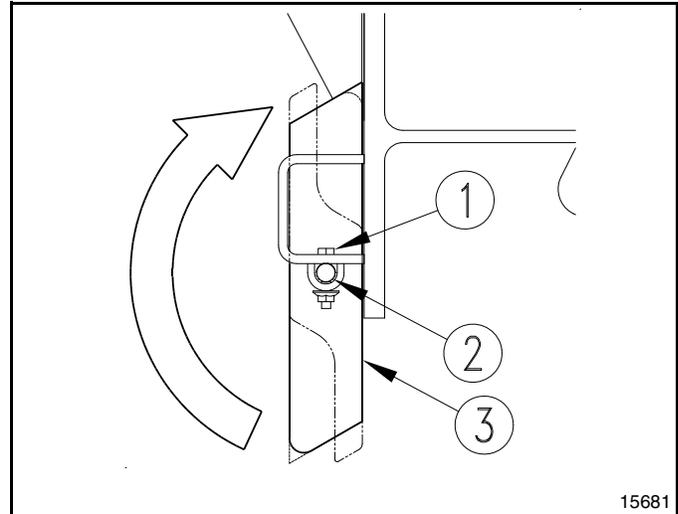
Section 3: Adjustments

**Shanks**

**Refer to Figure 3-1:**

Shanks can be removed and installed upside down to give dual life to shanks.

5. Remove cotter pin (#1) from one end of pulverizer.
6. Pull rod (#2) from channel.
7. Flip shanks (#3) over and reinstall rod (#2).
8. Reinstall cotter pin (#1).



**Shanks  
Figure 3-1**



Section 4: Maintenance & Lubrication

**Maintenance**

Proper servicing and adjustment is the key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly down time and repair.

Check all bolts after using unit for several hours to be sure they are tight. Replace any worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride Dealer.

The parts on your Soil Pulverizer have been specially designed and should only be replaced with genuine Land Pride parts. Do not alter the pulverizer in a way which will adversely affects its performance.

**! 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 the hydraulics is off.*

**! WARNING!**

*To avoid serious injury or death:*

- *Make sure controls are all in the neutral position or park before starting the power machine.*
- *Allow only persons to perform maintenance on this implement who have been properly trained in its safe operation.*
- *Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting the implement back into service.*
- *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. Land Pride*
- *Always keep your body extremities out from under the shanks and cutting blades while removing, installing, and adjusting them. It is possible for the cutting blades and/or shanks to fall causing injury to your body.*

**Long Term Storage**

Clean, inspect, service, and make necessary repairs to the implement when storing it for long periods and at the end of the season. This will help to ensure the unit 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 pulverizer and moving parts. Scrape off compacted dirt and then wash surface thoroughly with a garden hose. A coating of oil may be applied to the wear areas to minimize oxidation.
2. Check shanks a for wear and replace if necessary. See “**Shanks**” on page 12.
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.

Land Pride Touch-up Paint	
Part No.	Part Description
821-011C	PAINT LP BEIGE SPRAY CAN
821-066C	PAINT ORANGE SPRAY CAN
821-070C	PAINT GP GLOSS BLACK SPRAY CAN

4. Replace all damaged or missing decals.
5. Lubricate as noted below.
6. Store pulverizer on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer pulverizer life.

**Ordering Replacement Parts**

Land Pride offers equipment in factory standard Beige with black highlights. This implement is also available in Orange.

When ordering an optional color, the suffix number corresponding to the color must be added at the end of the part number. Parts ordered without the suffix number will be supplied in factory standard colors.

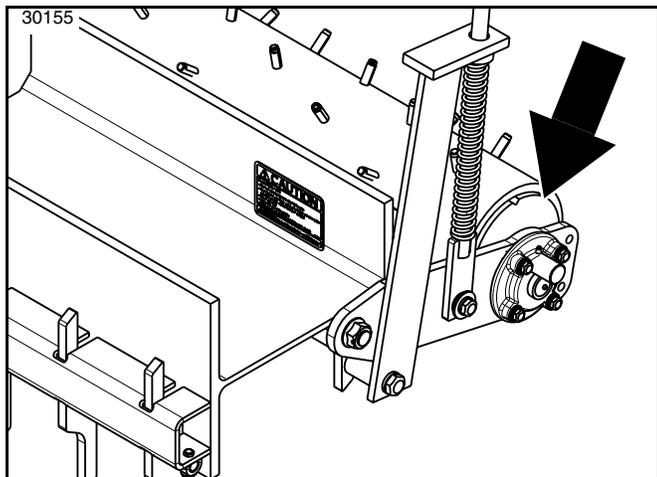
**82 . . . . . Orange      85 . . . . . Black**

For example, if you are ordering a replacement part with part number 555-555C and the existing part is orange, then add the suffix 82 to the end of the number to make the part number read 555-555C82.

## Section 4: Maintenance & Lubrication

### Lubrication Points

<b>Lubrication Legend</b>	 Multi-purpose spray lube	 Multi-purpose grease lube	 Multi-purpose oil lube	 50 Hrs	Intervals in hours at which lubrication is required



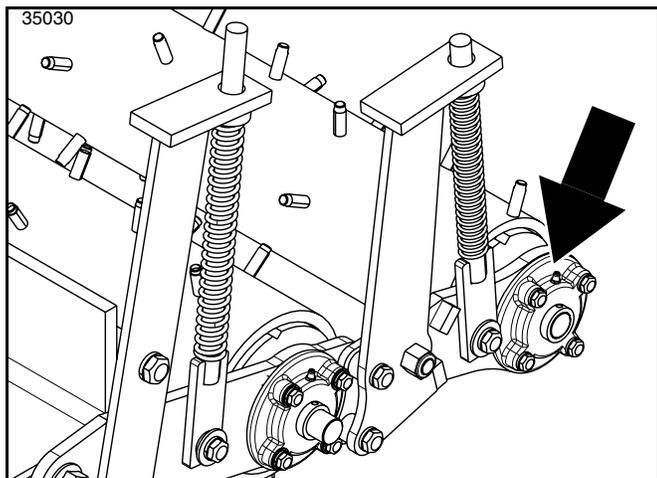
	 10 Hours
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#### Rear Roller Bearing

Both ends

Type of Lubrication: Multi-purpose grease lube

Quantity = As Required



	 10 Hours
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#### SP30 Double Rear Roller Bearing

Both ends

Type of Lubrication: Multi-purpose grease lube

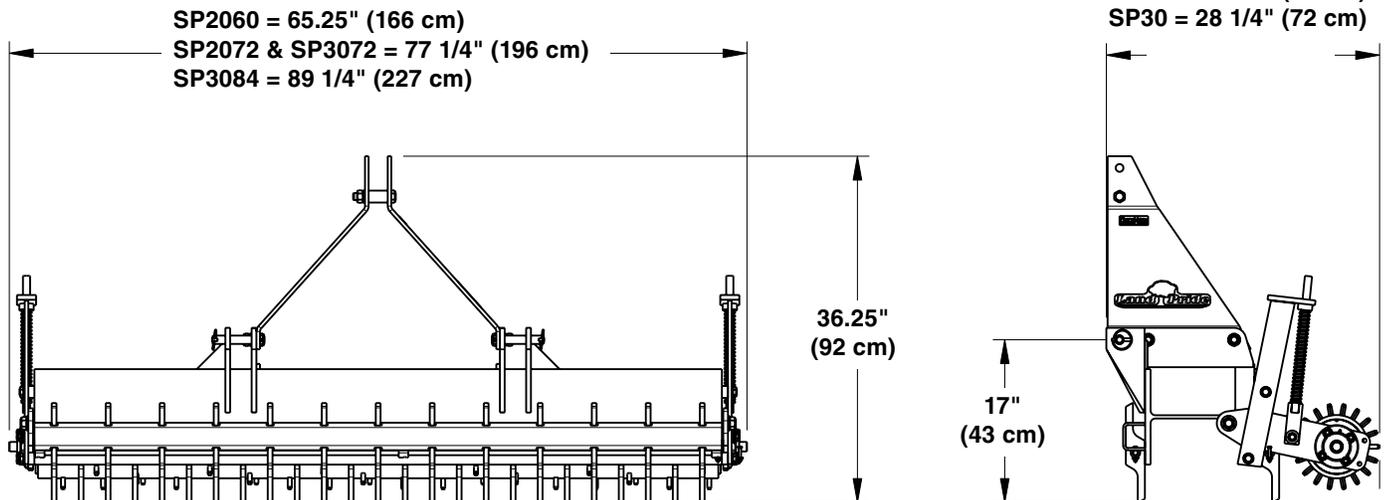
Quantity = As Required



### SP2060, SP2072, SP3072 & SP3084

	SP2060	SP2072	SP3072	SP3084
<b>Working Width</b>	60" (152 cm)	72" (183 cm)		84" (213 cm)
<b>Overall Width</b>	65 1/4" (166 cm)	77 1/4" (196 cm)		89 1/4" (227 cm)
<b>Weight (With Single Roller)</b>	491 lb (223 kg)	561 (255 kg)	671 (304 kg)	721 (327 kg)
<b>Max Engine Hp.</b>	35 hp (26 kW)	35 hp (26 kW)	50 hp (37 kW)	50 hp (37 kW)
<b>Number Of Shanks</b>	21	25	25	29
<b>Number Of Spikes - Single Roller</b>	86	103	103	116
<b>Number Of Spikes - Double Roller</b>	N/A	N/A	206	232
<b>Height</b>	36 1/2"		36 1/2"	
<b>Front To Back Length Single Roller</b>	25 1/2" (65 cm)		28 1/4" (72 cm)	
<b>Front To Back Length Double Roller</b>	N/A		35 1/4"	
<b>Shank Spacing</b>	2 13/16" (7 cm)		2 13/16" (7 cm)	
<b>Spiked Roller Tube Diameter</b>	5 9/16" (14 cm) O.D.		6 5/8" (17 cm) O.D. Optional Second Roller 5 9/16" (14 cm)	
<b>H-Beam</b>	10" (25.4 cm)		12" (30.5 cm)	
<b>A-Frame</b>	3/8" Plate			
<b>Springs-Front Roller</b>	32 lbs./inch (5.71 kg/cm)		32 lbs./inch (5.71 kg/cm)	
<b>Springs - Rear Roller</b>	N/A	N/A	15 lbs./inch (2.67 kg/cm)	
<b>Spike Material</b>	3/8" x 1 1/4" Steel, Replaceable Heat Treated Sleeves		3/8" x 1 1/4" Steel, Replaceable Heat Treated Sleeves	
<b>Hitch</b>	Cat. 1 Fits Land Pride Quick Hitch		Cat. 1 Fits Land Pride Quick Hitch	

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## SP20 & SP30 Series Soil Pulverizers

Features	Benefits
<b>Working widths</b>	20 Series: 60" (152 cm), 72" (183 cm); 30 Series: 72" (183 cm), 84" (213 cm)
<b>Horsepower Range</b>	20 Series: 25-35 horsepower (19-26 kW); 30 Series: 30-50 horsepower (22-37 kW)
<b>Replaceable heat-treated sleeves</b>	Heat-treated replaceable sleeves on roller protect spike. Easily replace the sleeve when worn vs. replacing entire spike.
<b>3/8" Steel spikes welded to the roller's surface</b>	Spikes are welded to the roller's surface rather than to a hole. Damaged spikes can be cut off and replaced.
<b>Self-aligning bearings with double lip seals on rear roller</b>	Self-aligning bearings conform to the roller and shafts.
<b>1" Diameter shaft in roller</b>	Heavy shaft can handle the shock loads from the roller.
<b>Roller has high number of steel spikes</b>	Better pulverization, more spikes than most competitors
<b>H Beam</b>	20 Series: H Beam-10" (25.4 cm); 30 Series: H Beam-12" (30.5 cm)
<b>10 ½" x 2" x 2½" Scarifier teeth</b>	Scarifier teeth are heat-treated for long life and can be reversed when one side wears down.
<b>Warranty</b>	One year parts and labor
<b>Fits Land Pride Quick Hitch</b>	Cat. 1 3-point fits Land Pride Quick Hitch for easy on-off with one person.



### Troubleshooting Chart

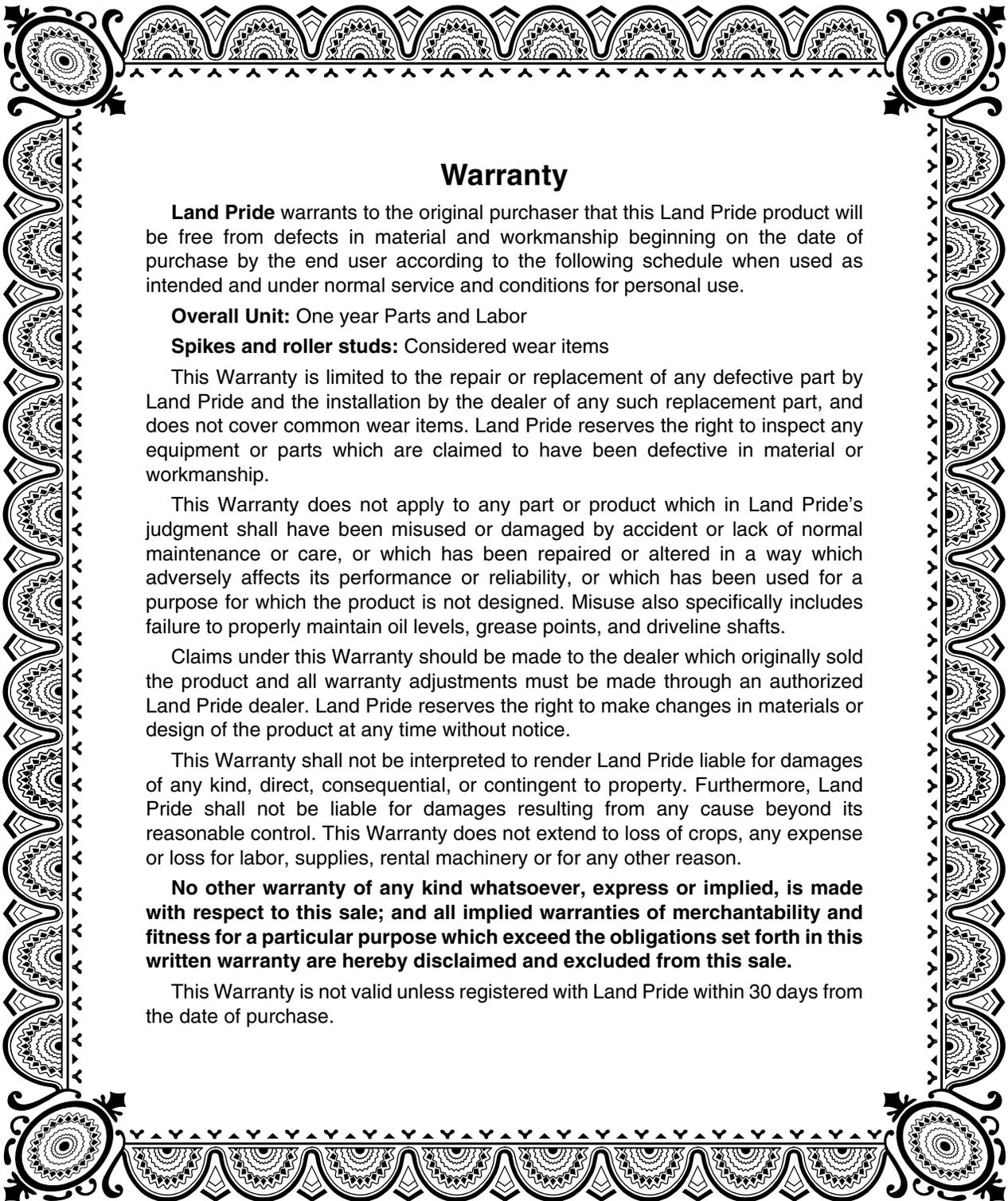
Problem	Solution
<b>Roller or Rollers not staying on ground, Bouncing.</b>	Adjust spring tension
<b>Shanks bending sideways.</b>	Lift shanks out of ground while turning
<b>Bending frame and or shanks</b>	Do not rip up concrete, asphalt, or blacktop. Do not hit solid objects.
<b>Shanks won't go into ground</b>	3-point has not been lowered
	weight may need to be added to frame (refer to adding weight in operating instructions).
	<b>Do not</b> rip up concrete, asphalt, or blacktop



Torque Values Chart for Common Bolt Sizes													
Bolt Size (inches)	Bolt Head Identification						Bolt Size (Metric)	Bolt Head Identification					
	Grade 2		Grade 5		Grade 8			Class 5.8		Class 8.8		Class 10.9	
in-tpi <sup>1</sup>	N · m <sup>2</sup>	ft-lb <sup>3</sup>	N · m	ft-lb	N · m	ft-lb	mm x pitch <sup>4</sup>	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16" - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1-1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1-1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1-1/4" - 12	750	555	1680	1240	2730	2010							
1-3/8" - 6	890	655	1990	1470	3230	2380							
1-3/8" - 12	1010	745	2270	1670	3680	2710							
1-1/2" - 6	1180	870	2640	1950	4290	3160							
1-1/2" - 12	1330	980	2970	2190	4820	3560							

<sup>1</sup> in-tpi = nominal thread diameter in inches-threads per inch  
<sup>2</sup> N · m = newton-meters  
<sup>3</sup> ft-lb = foot pounds  
<sup>4</sup> 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.  
 All locknuts or lubricated fasteners: Use 75% of torque value. (i.e. 1/2"-13 GR5 = 76 ft-lb; 75% of 76 or .75 x 76 = 57 ft-lb)



## 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

**Spikes and roller studs:** 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** \_\_\_\_\_



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