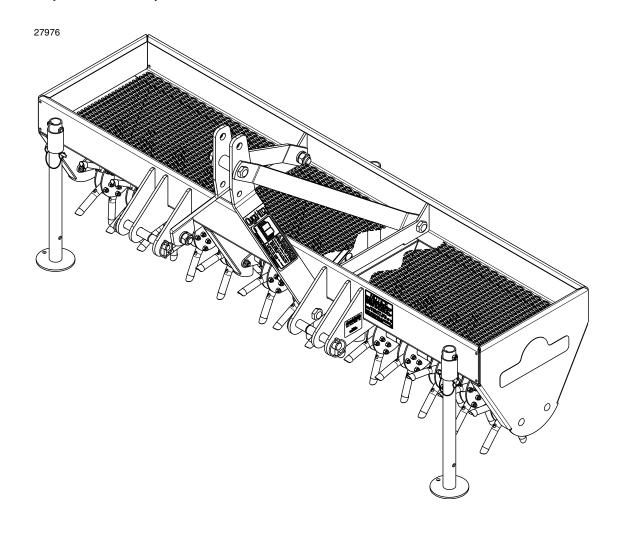
# **Core Aerators**

## CA1548, CA1556, CA1564 & CA1572



## 325-091M 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.

Model Number	
Serial Number	
Machine Height	
Machine Length	
Machine Width	
Machine Weight	
Delivery Date	
First Operation	
Accessories	

#### **Dealer Contact Information**

#### 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.



Important Safety Information 1
Safety at All Times
Look for the Safety Alert Symbol
Be Aware of Signal Words
Be Aware of Special Notices
Safety Labels
Introduction
Application
Using This Manual
Terminology
Owner Assistance
Serial Number
Further Assistance
Section 1: Assembly & Set-Up 8
Tractor Requirements
Before You Start
Unloading Instructions
Torque Requirements
Tractor Shutdown Procedure
Tractor Hook-Up
·
Section 2: Adjustments
Park Stands
Storage Position
Leveling Adjustments
Weight Tray
Section 3: Operating Instructions 12
Startup Checklist
Equipment Safety
Transporting
Unhook Core Aerator
General Operation Instructions
Section 4: Maintenance & Lubrication 15
Maintenance
Clean Spoons
Long Term Storage
Lubrication Points
Poter 16

Section 5: Specifications & Capacities	17
Section 6: Features & Benefits	18
Section 7: Troubleshooting	19
Section 8: Torque Values Chart	20
Section 9: Warranty	21



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Printed in the United States of America.



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, 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.



## 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.

**A** 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.

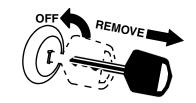
## Safety Precautions for Children

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

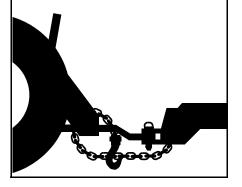
- ▲ If engaged, disengage power take-off.
- ▲ Park on solid, level ground and lower implement to ground or onto support blocks.
- ▲ Put tractor in park or set park brake.
- ▲ Turn off engine and remove ignition key to prevent unauthorized starting.
- ▲ Relieve all hydraulic pressure to auxiliary hydraulic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





#### **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**

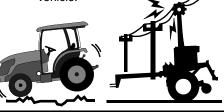
- ▲ Comply with federal, state, and local laws.
- ▲ Use towing vehicle and trailer of adequate size and capacity. Secure equipment towed on a trailer with chocks, tie downs, and chains.
- ▲ IMPORTANT: Do not tow a load that is more than double the weight of the vehicle towing the load.
- ▲ Sudden braking 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, weights 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 of.
- ▲ Remove all tools and unused parts from equipment before operation.
- Do not weld or torch on galvanized metal as it will release toxic fumes.

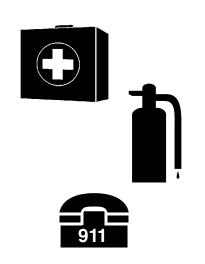






#### **Prepare for Emergencies**

- ▲ 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.

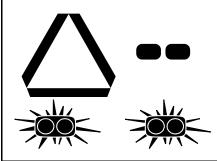


## Avoid High Pressure Fluids

- ▲ 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 the operator against serious injury or death from falling and/or 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.





## 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
- ▲ 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.



## Important Safety Information



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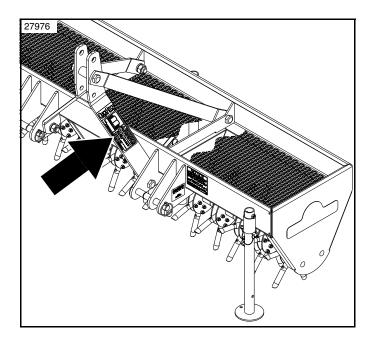


## Safety Labels

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

- 1. Keep all safety labels clean and legible.
- 2. Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Land Pride dealer. To find your nearest dealer, visit our dealer locator at www.landpride.com.
- 3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as

- specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.
- 4. Refer to this section for proper label placement. To install new labels:
  - a. Clean surface area where label is to be placed.
  - b. Spray soapy water onto the cleaned area.
  - c. Peel backing from label and press label firmly onto the surface.
  - d. Squeeze out air bubbles with edge of a credit card or with a similar type of straight edge.





838-293C

Warning: Read Operator's Manual

1 Place



Land Pride welcomes you to the growing family of new product owners. This Core Aerator 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 implement.

## **Application**

The Land Pride CA15 Series Core Aerators come in 48", 56", 64" and 72" (123 cm, 143 cm, 163 cm, & 184 cm) working widths. They are designed to attach to the tractor's 3-Point Category 0, 1 and 1 limited hitches and are compatible with Land Pride's QH05 and QH16 Quick Hitches. The tractor's 3-point hitch system must be capable of lifting 300 lbs (136 kg) 24" back from the hitch when connected to models CA1548 and CA1556 and 400 lbs (181 kg) with models CA1564 and CA1572.

The CA15 Series Core Aerators are designed to relieve soil compaction and allow air circulation in grassy surfaces such as lawns, soccer fields, football fields, baseball fields, municipal parks, and golf course fairways. They utilize replaceable hardened spring steel spoons mounted on rotating discs. These spoons pull cores up to 3" (7.6 cm) in length from the soil profile every 6 3/16" (16 cm) of forward travel. The gangs are spaced apart between 4 1/4" (11 cm) and 4 5/8" (12 cm) with 5 1/2" to 6 1/4" (14 to 16 cm) spacing at the rotary support hangers. Pulled cores are deposited on the surface for subsequent drying, pulverization, or removal. Weight can be added to the weight tray to help achieve maximum spoon penetration.

When your turf begins to suffer the effects of compaction and wear, such as shallow root zones, thatch build-up, worn pathways, rock hard ground, poor surface percolation, or water stands, a Land Pride CA15 Series Core Aerator will provide immediate seasonal relief.

Refer to "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 the direction the operator faces while sitting in the operator's seat looking forward unless otherwise stated.

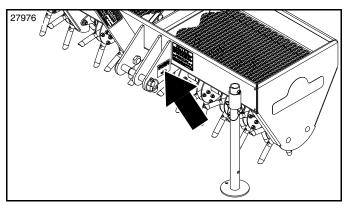
#### **Owner Assistance**

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 Core Aerator 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 correspondence with your Land Pride dealer. For location of your serial number plate, Refer to Figure 1.



Serial Number Plate Location Figure 1

#### **Further Assistance**

Your dealer wants you to be satisfied with your new Core Aerator. 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



## **Tractor Requirements**

The CA15 Series Core Aerators are designed for a three-point Category 0, 1, and 1 limited hitch. Tractors outside the three-point lift capacity must not be used.

3-Point Hitch	
3-Point Lift Capacity a	at 24" (61 cm) back
CA1548 & CA1556	300 lbs (136 kg)
CA1564 & CA1572	400 lbs (181 kg)



## WARNING

To avoid serious iniury 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.

### **Before You Start**

This Core Aerator has been partially assembled at the factory. Some additional preparations will be necessary to finish assembling the implement and to attach it to the customer's tractor. Make sure the intended tractor conforms to "Tractor Requirements" above.

An understanding of how this implement works will aid in final assembly and setup. Read and understand the Operator's Manual. Go through the "Pre-Assembly Checklist" below. To speed up the assembly task and make the job safer, have all needed parts and equipment readily at hand.

#### **Pre-Assembly Checklist**

/	Check	Page						
	Have a forklift or hoist with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.							
	Have a minimum of 2 people on hand while ass	embling.						
	Make sure all major components and loose par shipped with the machine. Refer to this manual	ts are if unsure.						
	Make sure working parts move freely, bolts are cotter pins are spread. Refer to this Operator's I							
	Double check to make sure all fasteners and pir installed correctly. Use Parts Manual 325-091P Refer to "Using This Manual" on page 7 for instructions on how to order or download a Part NOTE: Small hardware shipped loose from the contained in a bag. Larger parts are attached to shipping crate. All factory assembled hardware statements.	if unsure. s Manual. factory is the						
	installed in their correct location. Remember the location if removed. Keep removed parts separa							
	Make sure all safety labels are correctly located and legible. Replace all missing and damaged safety labels.	Page 6						
	Make sure all grease fittings are in place and lubricated. Refer to Lubrication Points.	Page 16						

## **Unloading Instructions**



## **CAUTION**

To avoid minor or moderate injury:

Never allow anyone under the unit while unloading.

Remove crated Aerator from the flat bed trailer with a lifting device designed for handling the load. Gently set the crate down on a smooth, flat surface. Carefully uncrate the unit to protect the finish.

## **Torque Requirements**

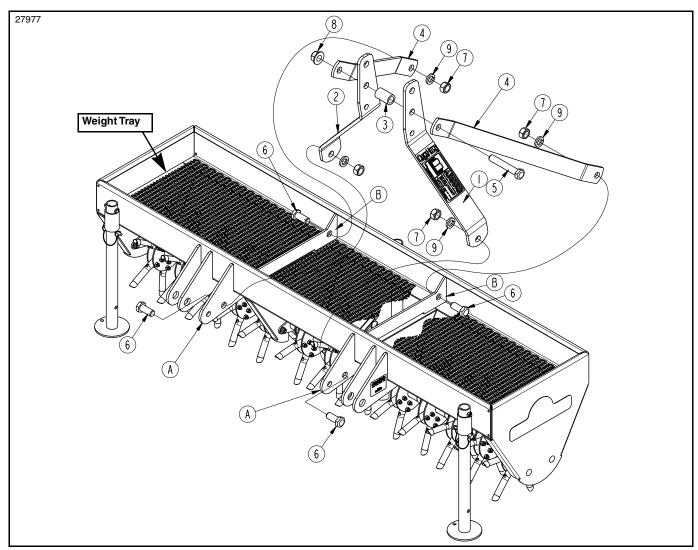
Refer to "Torque Values Chart for Common Bolt Sizes" on page 20 to determine correct torque values when tightening hardware.

#### 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.

- Reduce engine speed and shut-off all power to the attachment.
- 2. Park tractor and attachment on solid, level ground.
- 3. Lower attachment 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.
- Relieve all hydraulic pressure to auxiliary hydraulic lines
- 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.





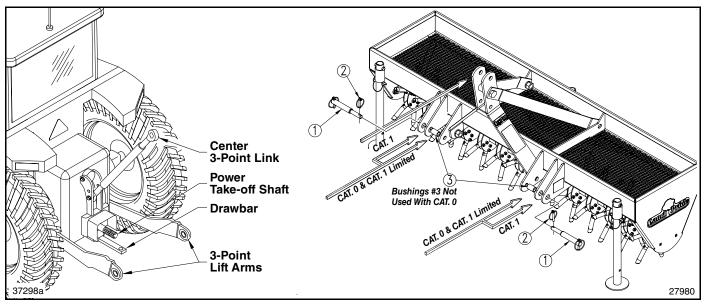
Hitch Assembly Figure 1-1

## **Hitch Assembly**

#### Refer to Figure 1-1:

- Attach hitch top strap (#1 & #2) to clevis plates "A" with 3/4"-10 x 1 3/4" cap screws (#6), spring lock washers (#9) and hex nuts (#7). Do not tighten.
- 2. Attach hitch brace straps (#4) to gusset "B" with 3/4"-10 x 1 3/4" cap screws (#6), spring lock washers (#9) and hex nuts (#7). Do not tighten.
- 3. Rotate hitch top straps and hitch brace straps up to align holes as shown. Insert spacer (#3) between hitch top straps and secure with 3/4"-10 x 4 1/2" cap screw (#5) and hex flange top locknut (#8).
- 4. Tighten all hardware to the correct torque.





Tractor Hook-Up Figure 1-2

## **Tractor Hook-Up**



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.
- 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.



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.

#### Refer to Figure 1-2:

- If installed, remove 3-Point stabilizing equipment to allow Aerator to float over the ground and to help reduce side loading on the spoons.
- 2. Move drawbar fully forward. (Towards front of tractor)
- Slowly back tractor up to Core Aerator until tractor's lower 3-Point lift arms are aligned with Aerator's lower hitch clevises.
- Without changing tractor 3-point lift height, shut tractor down according to "Tractor Shutdown Procedure" on page 8.

Attach tractor's 3-point lower links to the Core Aerator's hitch clevises as follows:

#### 3-Point Hitch (Category 0)

Remove bushing (#3) and store for safe keeping. Position lower arm hitch holes between the two inside clevis plates and in line with hitch pin holes. Insert hitch pins (#1) through all three clevis plates and lower arm hitch holes. Secure hitch pins with linchpins (#2).

#### 3-Point Hitch (Category 1 limited)

Insert bushings (#3) in the 3-Point lower arm hitch holes. Position lower arm hitch holes with bushings between the two inside clevis plates. Insert hitch pins (#1) through all three clevis plates and bushings (#3). Secure hitch pins with linchpins (#2).

#### 3-Point Hitch (Category 1)

Position lower 3-point arms between the two outside clevis plates and in line with hitch pin holes. Insert hitch pins (#1) through all three clevis plates and lower arm hitch holes. Secure hitch pins with linchpins (#2).

- 6. Connect center 3-point link to the upper hitch holes using customer supplied hitch pin and linchpin.
- 7. With the 3-Point control lever, raise Core Aerator up just far enough to hold the park stands off the floor.
- 8. Without changing the height of the lower 3-point arms, shut tractor down according to "Tractor Shutdown Procedure" on page 8.
- 9. Raise park stands up and secure in working position. Refer to "**Park Stands**" on page 11.
- Return to the tractor and slowly operate controls up and down to check for clearance between Core Aerator, tractor tires, frame, and drawbar. Move or remove drawbar if it interferes with Aerator.



## Park Stands Storage Position

#### Refer to Figure 2-1:

Park stands may be adjusted fully down so that the Core Aerator spoons are supported just above ground as shown in Figure 2-1. Use this position when parking the Core Aerator.

### **Working Position**

#### Refer to Figure 2-2:

The three park stands should be fully raised for working and while transporting. Be sure to secure park stands in the up position with wire retaining pins.

## **Leveling Adjustments**

#### Refer to Figure 2-2:

Check for levelness by parking tractor on a level surface and lowering Aerator down until unit is approximately 1 to 2 inches (2.5 to 5 cm) off the ground with park stand up in the working position.

Without changing the height of the lower 3-point arms, shut tractor down according to "Tractor Shutdown Procedure" on page 8.

**NOTE:** Refer to the Tractor Operator's Manual for 3-Point arms and top center link adjustments.

- Place a level on the mainframe. Level mainframe from left to right by adjusting one of the tractor's lower 3-Point arms up or down.
- Start tractor and lower tractor's 3-Point hitch until the Aerator's weight is off the tractor.
- Rotate level 90 degrees and place across mainframe. Adjust tractor's top center link until mainframe is level from front to back.

## Weight Tray Refer to Figure 2-1:

## **A** WARNING

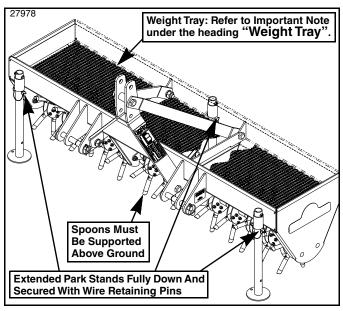
To avoid serious injury or death:

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.

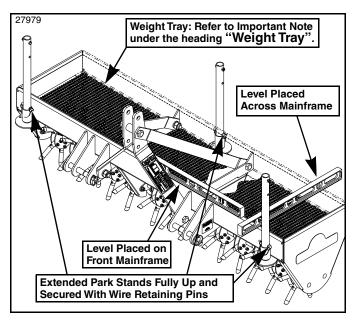
**IMPORTANT:** DO NOT support added weight by the expanded metal guard. Only support added weight by the outer edge of the weight tray, distributed evenly over the frame, and secured in place.

Additional weights may be added to the weight tray frame (Not expanded metal guard). Do not exceed the maximum allowable added weights listed below.

CA1548 & CA1556 . . . . . . . . 400 lbs (181 kg) Max. CA1564 & CA1572 . . . . . . . 500 lbs (227 kg) Max.



Park Stand Un-hooked Position without added weights Figure 2-1



Park Stand Working Position Figure 2-2



## 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 Core Aerator. Therefore, it is absolutely essential that no one operates the Aerator unless they have read, fully understood, and are totally familiar with the Operator's Manual. Make sure the operator has paid particular attention to:

Perform the following inspections before using your Core Aerator.

### **Operating Checklist**

~	Check	Page
	Read and follow all safety rules carefully. Refer to "Important Safety Information".	1
	Read and follow dealer assembly instructions. Refer to "Section 1: Assembly & Set-Up".	8
	Read and make all required adjustments. Refer to "Section 2: Adjustments".	11
	Read and follow hook-up instructions. Refer to "Tractor Hook-Up".	11
	Read and follow operating procedures. Refer to "Section 3: Operating Instructions".	12
	Read and follow all maintenance instructions. Refer to "Section 4: Maintenance & Lubrication".	15
	Read and follow all lubrication Instructions. Refer to "Lubrication Points".	16
	Check Aerator initially and periodically for loose bolts and pins. Refer to "Torque Values Chart" for torque values of common bolt.	20

## **Operating Safety**



To avoid serious injury or death:

- Operator must wear a seat belt at all times. Without being seat belted, the operator could fall off and be ran over by the Aerator and its sharp spoons.
- 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 keep your feet and legs out from under the Core Aerator and never work under the unit without properly blocking it up. The Aerator could drop instantly resulting in bodily injury or death.
- Be on the watch for and keep away from ditches, retaining walls, drop-offs, holes, rocks, stumps, tree roots, and other hidden hazards that can cause the tractor to shift suddenly and/or roll 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 the hydraulics is off.

## A WARNING

To avoid serious injury or death:

- Do not use implement as a man lift, work platform, or as a wagon to carry objects. It is not properly designed or guarded for this use.
- 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.
- Never carry riders on the equipment or power machine. 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.
- 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 operate and/or travel across inclines where the tractor and/or implement can rollover. Consult your tractor's manual for acceptable inclines the tractor is capable of traveling across.
- Do not exceed tractor's 3-Point lift capacity. Exceeding tractor lift capacity can cause the 3-Point arms to drop the Aerator suddenly, loose steering control, and/or over load tractor tires. Consult tractor Operator's manual for maximum rated 3-Point lift capacity. Tractor rated lifting capacity must be 750lbs or greater.
- 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.



## **Equipment Safety**

- Use Core Aerator for its intended purpose only. Never use it as a wagon to carry things. Never pull or tow other equipment or objects. Never pull post, stumps, or other objects. Misuse of the Core Aerator can break the unit.
- Mark underground water piping, sprinkler heads, sizable rocks and other objects that can be damage or cause damage to the Aerator with small warning flags so they can be avoided.
- 3. Do not exceed the weight tray weight limit. Exceeding the limit can damage the spoons, tires and Aerator frame. Refer to "Weight Tray" on page 11.
- 4. Make gradual turns with spoons in the ground. Too sharp a turn can break the spoons.
- 5. Do not turn tractor tires into the tongue, spoons, or frame. Slow down and watch tractor tires carefully when forced to make sharp turns.
- Working speeds in excess of 5 mph can damage the spoons and frame.
- Do not use spoons to tear up asphalt or for anything other than to aerate soil.
- 8. Do not alter Core Aerator in a way which will adversely affect its performance or reliability or use the unit for a purpose for which it was not designed.

## **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.
- Reduce ground speed when turning and leave enough clearance to avoid making contact with obstacles such as buildings, trees, fences, etc.
- When implement is wider than the tractor, take care to make sure it does not make contact with oncoming traffic and roadside obstructions.
- Select a safe ground speed when transporting from one area to another.
- Be sure to reduce tractor ground speed when turning and leave enough clearance so the equipment does not contact obstacles such as buildings, trees, or fences.
- 3. Always raise Core Aerator up before traveling on public roadways.
- 4. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
- 5. Shift to a lower gear when traveling over rough or hilly terrain.

#### **Unhook Core Aerator**

The following steps should be done when un-hooking the Core Aerator from the tractor:

- Park tractor and Core Aerator on a solid level surface.
   Lower Aerator approximately 6" off the ground.
- Without changing the height of the lower 3-point arms, shut tractor down according to "Tractor Shutdown Procedure" on page 8
- 3. Refer to "**Park Stands**" on page 11 for information on adjusting them to the correct height. Lower park stands to the correct height and make sure wire retaining pins are secured in place.
- Lower tractor's 3-Point hitch until all weight is off of tractor.
- Remove top center hitch pin and store in a safe location for reuse.
- Remove lower 3-Point arm hitch pins and bushings. Store hitch pins and bushings in lower clevises for reuse.
- 7. Be sure implement is clear of tractor and then drive tractor away from implement.



## **General Operation Instructions**

By now you should have read your Operator's Manual and properly installed your Land Pride 15 Series Core Aerator on your tractor. If you haven't, please do so now.

Using a core type Aerator is a fairly simple task but there are a few things you need to consider before beginning. If you are aerating in an area that uses a sprinkler system, you will need to mark the sprinkler heads with small warning flags so they can be avoided. You will also need to be aware of and mark any shallow buried telephone, TV, or electrical cables, or gas lines. Also you will want to avoid any sizable rocks or foreign material that might be embedded in the soil that could cause damage to the aerating spoons.

Now that you know where you are going to aerate and what precautions need to be taken, it is time to start the tractor and travel to the site where you intend to aerate. It is best to start in the middle of the field and gradually work your way to the outer perimeter with each pass. This will help keep you from compressing freshly pulled cores.

Begin by lowering the three-point hitch until the Aerator is fully on the ground with all the weight off of the tractor. Put the three-point in float position and pull ahead slowly to get the spoons into the ground. Gradually increase ground speed to approximately 5mph. Do not make sharp turns with the Aerator in the ground as equipment damage may result. At the end of each pass, lift the Aerator out and off of the ground until you have realigned the tractor for the next pass. Look back often to observe your pattern and to make sure you are getting good soil penetration. If you aren't achieving the desired penetration, you may need to add more weight or wait until after a rain or after irrigation has been applied to soften the ground.

Usually allow about twelve to twenty-four hours after pulling the cores before pulverizing the solid parts left on the ground with a drag mat. The pulverizing action of the drag mat breaks up the soil portion of the core which is redistributed into the undisturbed thatch layer setting off a microbial action that accelerates thatch breakdown. The vegetation portion of the core remains on the surface for debris collection or destruction by a mulching mower.

With very little practice you should become very proficient and effective with your Land Pride 15 Series Core Aerator.

At the completion of the aeration task the Aerator should be washed, cleaned, and lubricated. Any lodged cores should be cleaned out of the spoons. Units being put up for the winter should be stored in a dry and well drained area with the storage stands down.



#### **Maintenance**

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 after using the 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 CA15 Series Core Aerator have been specially designed and should only be replaced with genuine Land Pride parts. Do not alter the equipment in a way which adversely affect its performance or reliability.



## **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.
- Always shut tractor down using "Tractor Shutdown Procedure" provided in this manual before servicing, adjusting, cleaning, or maintaining this implement.
- 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.

## **Clean Spoons**

The core Aerator efficiency is greatly reduced when the spoons become plugged with dirt and debris. Remove dirt and debris with a tool such as a screw driver or any other hard pointed object. To make the job easier, clean spoons immediately after operation. If needed, soak spoons in water to soften the dirt and debris.

## **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 ensure the unit is ready for field use the next time you hook-up to it.

- Remove any dirt and grease that may have accumulated on the Aerator and moving parts.
   Remove dirt and debris that become plugged in the spoons with a screw driver or any hard pointed object.
- 2. Wash Core Aerator surfaces thoroughly with a garden hose.
- Inspect Aerator for loose, damaged, or worn parts and adjust or replace as needed.

Repaint parts where paint is worn or scratched to prevent rust. Ask your Land Pride dealer for aerosol touch-up paint. Paint is 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.

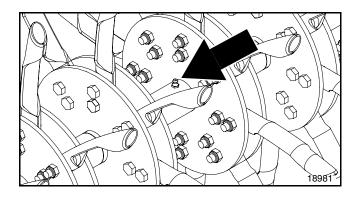
Land Pride Touch-up Paint							
Part No. Part Description							
821-011C	PAINT LP BEIGE SPRAY CAN						
821-066C	PAINT ORANGE SPRAY CAN						
821-070C	PAINT GP GLOSS BLACK SPRAY CAN						

- 4. Replace all damaged or missing decals.
- Lubricate as noted in "Lubrication Points" on page 16. A coating of oil may also be applied to unpainted areas to minimize oxidation.
- Store Aerator on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer life.
- 7. Follow all unhooking instructions on page 13 when disconnecting tractor from the Aerator.



### **Lubrication Points**







#### **Rotor**

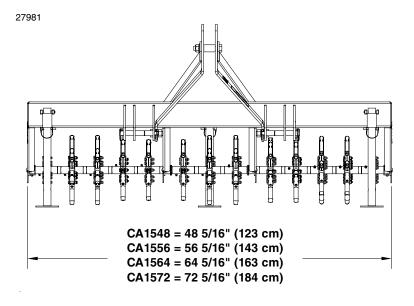
One zerk per rotor

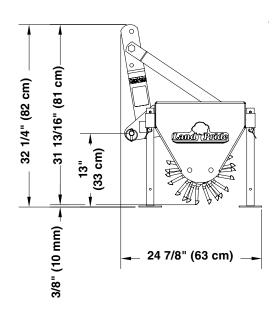
Type of Lubrication: multi-purpose grease lube Quantity = As Required



#### **CA15 Series**

Specifications & Capacities									
Model No.	CA1548	CA1556	CA1564	CA1572					
Working Width	41" (104 cm)	50" (127 cm)	58" (147 cm)	66" (168 cm)					
Overall Width	48 5/16" (123 cm)	56 5/16" (143 cm)	64 5/16" (163 cm)	72 5/16" (184 cm)					
Overall Length		24 7/8"	(63 cm)						
Overall Height (With support stands up)	31 13/16" (81 cm)								
Weight	156 lbs (71 kg)	170 lbs (77 kg)	184 lbs (84 kg)	208 lbs (94 kg)					
Max. allowable added weight in Weight Tray	400 lbs (181 kg)	400 lbs (181 kg)	500 lb (227 kg)	500 lbs (227 kg)					
Number Of Spoons	54	66	78	90					
Spoon Material	16 ga (4.9mm) hardened spring steel, Replaceable.								
Spoon Spacing in forward travel		6 3/16"	(16 cm)						
Spoon Penetration	3" (7.6 cm)	Depending on groun	d conditions and add	ed weights.					
Plug Size		1/2" (13 mr	n) Diameter						
Gang spacing		4 1/2" (	11.4 cm)						
Number of Gangs	9 11 13 15								
Frame Construction	Channel Formed 10 ga (3.4 mm) sheet								
Hitch	Cat. 0, Cat. 1 & Cat. 1 limited								
Quick Hitch	Fits Land Pride's Quick Hitch Models QH05 and QH16								
Number of Support Stands	3								







## **CA15 Series**

Features	Benefits						
Cat. 0, Cat. 1 and Cat. 1 Limited Hitch	Fits many of the smaller tractors and fits Land Pride Quick Hitch						
4 Sizes 48", 56", 64" & 72" (123 cm, 143 cm, 163 cm, & 174 cm)	Great sizes for small landscapers, golf courses, campuses, and cities.						
Formed 10 ga (3.4 mm) mainframe and rotary supports	Formed 10 Ga. plates offers good strength and appearance.						
Expanded metal in weight tray	Adds safety over spoon area, doesn't allow foreign weight object to fall into spoon area, keeps cores from being thrown forward.						
16 ga x 1/2" I.D. harden spring steel spoons with beveled edge	Penetrates the ground easier than spoons constructed of a heaver gage material and/or larger diameter bodies.						
Individual Spoon Replacement	Requires removal of only two bolts to replace a worn-out spoon. Don't have to disassemble the whole rotary section to get to the spoons.						
4 1/2" (11.4 mm)Gang spacing	Offers optimum core pulling pattern.						
Spoon gangs	Spoon gangs are independent of each other allowing for less side load torque on each gang and tearing of the turf during turns.						
Spoon gang greasing	Each gang has a grease zerk for smooth rotation.						
3 - Storage stands	Keeps the spoons off the ground while in storage and aids in hooking-up to the tractor.						
6 3/16" (16 cm) Spoon spacing – forward travel	Offers optimum aeration.						
48" = 4.5 Aeration cores per sq. ft. 56" = 4.7 Aeration cores per Sq. ft. 64" = 4.8 Aeration cores per Sq. ft. 72" = 5.0 Aeration cores per Sq. ft.	Provides good aeration per square foot.						
Weight tray	Additional weight can be easily added to the aerator.						



## **CA15 Series Troubleshooting Chart**

Problem	Solution						
Spoons bending sideways.	Raise the Core Aerator so the spoons are not engaged in the ground before attempting to turn						
Bending frame and or spoons	Do not operate the Core Aerator on concrete, asphalt, or blacktop. Do not run over solid objects such as tree stumps, rocks, curbs, etc.						
	Make sure the 3-Point has not been properly lowered to the ground.						
Spoons won't go into ground	Extra weight may need to be added to the weight tray (Refer to instructions for the "Weight Tray" on page 11). Do not allow Riders for extra weight!						
Spoons won't go into ground	There may not be enough moisture in the ground. Wait for rain or irrigate the field.						
	The spoons may be clogged due to improper cleaning from the previous use. Refer to "Clean Spoons" on page 15.						
Tractor's 3-point hitch system cannot lift the Aerator	Remove an equal amount of weight from each weight tray until the tractor's three-point system is capable of easily lifting the Aerator.						

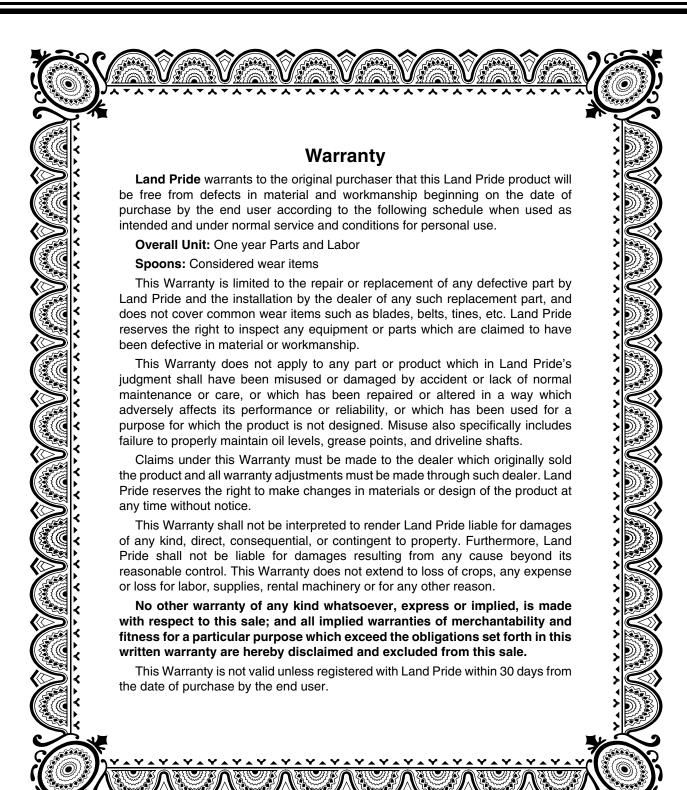


Torque Values Chart for Common Bolt Sizes													
		Bolt	Head Id	dentifica	ation			Bolt Head Identification					
Bolt Size (inches)	Gra	de 2	Gra	de 5	Gra	<b>de 8</b>	Bolt Size (Metric)	\ \_	.8 s 5.8	_	.8 s 8.8	Class	_/
in-tpi <sup>1</sup>	N·m²	ft-lb <sup>3</sup>	N·m	ft-lb	N·m	ft-lb	mm x pitch 4	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	38	72	53
3/8" - 24	31	22	47	35	67	49	M10 X 1.25	35	26	53	39	76	56
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	<sup>1</sup> in-tpi = nomi			ter in ind	ches-thre	eads pei	rinch
1-3/8" - 6	890	655	1990	1470	3230	2380	<sup>2</sup> N⋅ m = newto	n-meters	3				
1-3/8" - 12	1010	745	2270	1670	3680	2710	<sup>3</sup> ft-lb= foot po						
1-1/2" - 6	1180	870	2640	1950	4290	3160	$  ^4$ mm x pitch = nominal thread diameter in millimeters x thread						
1-1/2" - 12	1330	980	2970	2190	4820	3560	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)





**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.

Madal Massalaas	Onwind Normalina
Model Number	Serial Number



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